Rates and dates: Evaluating rhythmicity and cyclicity in sedimentary and biomineral records

Troy Anthony Dexter

Dissertation submitted to the faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of

Doctor of Philosophy
In
Geosciences

Michał Kowalewski
Shuhai Xiao
J. Fred Read
Kenneth A. Eriksson

April 26, 2011
Blacksburg, VA

Keywords: Amino Acid Racemization, Bivalves, Growth Rates, Periodicity, Parametric Bootstrap, Rhythmicity

Rates and dates: Evaluating rhythmicity and cyclicity in sedimentary and biomineral records

Troy Anthony Dexter

ABSTRACT

It is important to evaluate periodic fluctuations in environment or climate recorded through time to better understand the nature of Earth's history as well as to develop ideas about what the future may hold. There exist numerous proxies by which these environmental patterns can be demonstrated and analyzed through various time scales; from sequence stratigraphic bundles of transgressive-regressive cycles that demonstrate eustatic changes in global sea level, to the geochemical composition of a skeleton that records fluctuations in ocean temperature through the life of the biomineralizing organism. This study examines some of the methods by which we can analyze environmental fluctuations recorded at different time scales. The first project examines the methods by which extrabasinal orbital forcing (i.e. Milankovitch cycles) can be tested in the rock record. In order to distinguish these patterns, computer generated carbonate rock records were simulated with the resulting outcrops tested using common methods. These simulations were built upon eustatic sea level fluctuations with periods similar to what has been demonstrated in the rock record, as well as maintaining the many factors that affect the resultant rock composition such as tectonics, subsidence, and erosion. The result demonstrated that substantially large sea level fluctuations, such as those that occur when the planet is in an icehouse condition, are necessary to produce recognizable and preservable patterns that are otherwise overwhelmed by other depositional factors. The second project examines the temporal distribution of the bivalve *Semele casali* from Ubatuba Bay, Brazil by using amino acid racemization (AAR) calibrated with ^{14}C radiometric dates. This data set is one of the largest ever compiled and demonstrates that surficial shell assemblages in the area have very long residence times extending back in time 10,000 years. The area has had very little change in sea level and the AAR ratios which are highly temperature dependent could be calibrated across sites varying from 10 to 53 meters in water depth. Long time scales of dated shells provide us with an opportunity to study climate fluctuations such as El Nińo southern oscillation. The third project describes a newly developed method for estimating growth rates in organisms using closely related species from similar environments statistically analyzed for error using a jackknife corrected parametric bootstrap. As geochemical analyses get more precise while using less material, data can be collected through the skeleton of a biomineralizing organism, thus revealing information about environmental shifts at scales shorter than a year. For such studies, the rate of growth of an organism has substantial effects on the interpretation of results, and such rates of growth are difficult to ascertain, particularly in fossilized specimens. This method removes the need for direct measures of growth rates and even the most conservative estimates of growth rates are useful in constraining the age ranges of geochemical intra-skeletal studies, thus elucidating the likely time period under analysis. This study assesses the methods by which periodic environmental fluctuations at greatly varying time scales can be used to evaluate our understanding of earth processes using rigorous quantitative strategies.

Dedication

I dedicate this dissertation to my family, all of whom graciously tolerated my many years in school without too much complaint.

Acknowledgements

This research was funded by National Science Foundation, Petroleum Research Fund (American Chemical Society), the Geological Society of America Graduate Student Research Grant, the Virginia Tech Department of Geosciences Alumni Research Award, the Virginia Tech Department of Geosciences Byron Cooper Graduate Research Award, and Virginia Tech Graduate Research and Development Program Grant. I am very grateful for everything that Mike Kowalewski has done for me; not only for his guidance with the projects that compose my dissertation, but also for the many wonderful opportunities he has presented to me over the years (as I write this from Bologna, Italy). I would like to thank my committee members, Shuhai, Fred, and Ken, for their support and guidance on these and many other projects. I also wish to acknowledge all of my friends who have been there for me over the years to provide me with both personal and professional support. I particularly appreciate the guidance and substantial assistance provided to me by Dr. James D. Schiffbauer, who was always there to discuss research and project ideas.

Attributions

Chapter Two was published as “Dexter, Troy A., Michal Kowalewski, and J. Fred Read. 2009. Distinguishing Milankovitch–driven processes in the rock record from stochasticity using computer–simulated stratigraphy. Journal of Geology 117:349-361.” It is reprinted here with permission from Troy A. Dexter. Troy A. Dexter (Department of Geosciences, Virginia Tech) collected data, analyzed the data, and wrote the manuscript. J. Fred Read (Department of Geosciences, Virginia Tech) provided the computer modeling software, data sources, and aided in manuscript preparation. Michal Kowalewski (Department of Geosciences, Virginia Tech) wrote SAS codes for data analysis and aided in manuscript preparation.

Chapter Three is in the final stages of preparation for submission to Quaternary Geology as “Dexter, Troy A., Darrell S. Kaufman, Richard A. Krause, Susan L. Barbour Wood, Marcello G. Simões, John W. Huntley, Yurena Yanes, Christopher S. Romanek and Michal Kowalewski. A geochronological study of the bivalve *Semele casali* from Ubatuba bay, Brazil, employing amino acid racemization dating.” Troy A. Dexter (Department of Geosciences, Virginia Tech) prepared samples for chemical analyses, conducted the statistical analyses and wrote the paper. M arcello G. Simões (Instituto de Biociências, Universidade Estadual Paulista, São Paulo, Brazil) collected the material. Richard A. Krause (Department of Geology & Geophysics, Yale University), Susan L. Barbour Wood (Department of Geosciences and Natural Resources Management, Western Carolina University), John W. Huntley (Friedrich Alexander Universität, Erlangen-Nürnberg, Germany) and Yurena Yanes (Universidad de Grenada, Spain) contributed additional geochemical data to the project. Darrell S. Kaufman (Department of Geology, Northern Arizona University) and Christopher S. Romanek (Department of Earth & Environmental Sciences, University of Kentucky) performed chemical analyses. M. J. Kowalewski aided in manuscript preparation.

Chapter Four is in the final stages of preparation for submission to Ecology as “Dexter, Troy A., and Michal Kowalewski. Indirect estimates of growth rates in extant and fossil organisms: a jackknife-corrected bootstrap of nearest living relatives.” Troy A. Dexter (Department of Geosciences, Virginia Tech) collected the data, conducted the statistical analyses, and wrote the paper. Michal Kowalewski (Department of Geosciences, Virginia Tech) wrote the bootstrap module for SAS and aided in manuscript preparation.

Table of contents

List of Figures

Chapter 2

Chapter 3

Chapter 4

List of Tables

Chapter 2

Chapter 3

Chapter 1

Overview

Periodic patterns in nature such as environmental fluctuations over time that can be recorded in the geologic record occur at vastly different time scales; from the enormous amount of time recorded by supercontinent formation and breakup (occurring at a rate of approximately 500 million years) to the geologically instantaneous tidal rhythmites (a record that can capture two cycles a day). These fluctuationsprovide an important record regarding the nature of earth's processes. The rock record can capture many of these large cycles, including climatic shifts over time brought about by Milankovitch orbital forcing (which relates how the orbit and angle of the earth relative to the sun affects the long term weather patterns and global sea levels). However, for many of the shorter periodic cycles occurring over the course of days to years or even centuries, the rock record's preservational scale presents too coarse a resolution to capture these events. In such cases, biomineralizing organisms, such as corals, bivalves, or even vertebrates, present a potential proxy for recording environmental changes at a much finer scale. As these individuals grow and develop their skeletal structures, geochemical signals about the environments in which they are growing can be recorded within their hard parts. Whole skeletons can be measured which record the environment at the time the organism was alive, whereas the microsampling methods of geochemical analyses have allowed for multiple samples to be taken along the growth direction of skeletons thus bringing the resolution to detect changes down to sub-annual or seasonal environmental fluctuations.

These rates occurring at vastly different time scales are analyzed in the three following chapters; a long term scale of orbital forcing using a computer simulated rock record (a range of 800,000 years with periods of 19,000 years or greater), a multi-century scale record of the bivalve *Semele casali* from Brazil dated using amino acid racemization (ranging from modern to 10,000 years ago), and a short term sub-decadal measure of growth rates using multiple families of bivalves (whose time of measured growth in the study was limited to two years). Each of the three projects looks at different aspects of these temporal scales, however all three are related in that they improve the methods upon which temporal patterns can be detected.

Chapter two, entitled "Distinguishing Milankovitch–driven processes in the rock record from stochasticity using computer–simulated stratigraphy," investigates our ability to detect Milankovitch driven extrabasinal forcing and its effect on sea level eustacy. The rock record by its nature does not keep a complete record, and often what appears to be a random association may have indeed been climactically driven periodic record. Further, when rock associations appear to demonstrate a periodic pattern, the driver may have been intrabasinal in origin or there may have been no driving force at all (random or stochastic in origin); neither of which actually record the effect of orbital forcing. Distinguishing between drivers of the rock record is difficult since all measures are indirect (i.e. the rock record itself provides the data but is built upon the effect of these environmental fluctuations rather than showing recording the environmental fluctuations themselves). In order to test some of the methods that have been suggested to test the rock record for periodicity versus stochasticity, a computer model was developed in which Milankovitch driven orbital forcing was simulated to create a likely preserved rock

record. Since the mechanism behind the resultant rock record is known from the start, the methods that look for patterns in the rock record could be tested for their efficacy.

Our computer generated model was designed to simulate shallow water carbonate facies with periodic sea level fluctuation from both icehouse and greenhouse time periods. Numerous factors affect the preserved appearance of the rock record, including erosion, sediment type, depositional rates, tectonics and subsidence rates; all of which can act to mask the repetitive patterns of facies brought about by orbitally force eustatic sea level change. Our computer generated rock record accounts for these numerous factors in order to provide a rock record approximating what would be measured in the field. Further, these factors can be manipulated in the model to determine how great an effect they have on the resultant rock record. A method for comparing thickness distributions to those predicted for Poisson processes (stochastic), which are not driven by cyclical sea level changes was tested against our models. The results suggest that periodic processes were not detectable even though such processes form the basis of our simulations except under unusually high-magnitude sea level fluctuations. Similarly, autocorrelation fails to correctly recognize cyclic patterns in such simulated records. Models with high-magnitude sea level fluctuations (icehouse conditions) had thickness frequencies that are suggestive of orbital forcing whereas low magnitude sea level fluctuations (greenhouse conditions) appeared independent even though they were modeled using a cyclic driver. Because these statistical approaches fail to recognize the Milankovitch periodicity in these simulated records, it can be inferred that the independence detected in real stratigraphy from orbital forcing is not always a valid refutation of orbitally driven eustatic sea level change.

Chapter three, entitled “A geochronological study of the bivalve *Semele casali* from Ubatuba bay, Brazil, employing amino acid racemization dating,” looks at the pattern of preservation of biominerals and the amount of time that can be recorded in a sample of sub-fossil bivalve shells from a sediment-starved shallow water embayment. In order to look at cyclic patterns occurring at multi-year to multi-decadal scales, such as climactic patterns like the El Nińo southern oscillation, a complete record through time must be preserved by the selected geochemical proxy, which in this case is the infaunal bivalve *Semele casali*.

The valves collected from surficial sediment samples from Ubatuba Bay, a shallow sub-tropical marine setting, in the state of Sao Paola, Brazil, were dated using amino acid racemization. This method relies on the racemization rate of organic amino acids as they switch from dextrorotatory to levorotatory. Living organisms have all their amino acids in the levorotatory position, and after death the amino acids randomly switch back and forth approaching a one to one equilibrium. The rate of switching is thermodynamically driven, and thus different for every environment dependent upon the thermal history of that area, so a number of our specimens were dated using the more costly carbon 14 radiometric dating in order to calibrate the amino acid racemization rate.

A total of 275 valves of *Semele casali* were analyzed using amino acid racemization, and 35 of those valves were dated using carbon 14 resulting in one of the largest AAR datasets ever compiled. The calibrated shell ages range in age from modern to a maximum age of ~10,500 years. The distribution of the ages tapers off further back in time, however a number of specimens are still preserved from far back in the earliest Holocene indicating that these valves have long residence times around the sediment

surface. Although racemization rates are temperature dependent and should vary based on water depth, the rates estimated were similar across all sites varying in depth from 10 to 57 meters. This suggests that in the study area water depth had a limited effect on long-term average seafloor temperature and that, a single calibration formula, combining radiocarbon dates from all sampled sites, can be applied to all specimens. For each site, the shell age distribution provides a continuous centennial-resolution record for the last 1000 years, and when all data are combined, the dated specimens provide nearly continuous millennial-resolution record for the entire Holocene. With a nearly complete record through the past 10,000 years, it is then possible to analyzethe geochemistry of specimens through time to determine if these multi-decadal cyclic patterns (such as the El Niño southern oscillation) have changed in rate or intensity through these geologic time intervals.

Chapter four, entitled “Indirect Estimates of Growth Rates in Extant and Fossil Organisms: A Jackknife-Corrected Bootstrap of Nearest Living Relatives,” describes a method developed to determine the rate of growth of an unknown species by using statistically analyzed growth rates from close relatives. This method can be applied to benefit numerous geochemical studies of short-term annual to seasonal environmental fluctuations. Since technology has improved to the point where smaller and smaller sample sizes are necessary to accurately analyze geochemical composition, multiple samples can be taken from within a single biomineralized skeletal structure through the entire life span of the organism. This allows one to track environmental changes recorded indirectly by the geochemical composition of skeletal material at a resolution of months or finer. At such small scales, the rate of growth of the individual becomes more

important in order to determine the actual measurable resolution based on the size of the individual. Differences between what could be a season of growth and what could be multiple years of growth have a large effect on the interpretation of results.

Measures of growth rates needed to calibrate these geochemical studies are often difficult and time consuming to directly assess, and impossible to directly quantify on fossilized specimens (although indirect proxies do exist). To this end, a new method of estimating growth rates for species of which they are unknown was developed using closely related species growing in similar environments. Growth rates from bivalves were collected for three separate clades to determine a likely (arithmetic mean) rate of growth for the family. These estimates were then tested for a range of error using a statistical parametric bootstrap. A more conservative estimate of error was determined using a statistical test called a jackknife corrected parametric bootstrap in which a specimen from the clade was iteratively removed and the likely clade growth rate was recalculated. By iteratively removing a specimen, each sample acted as an "unknown" by which it could be tested against the remaining "known" specimens and a range of error determined. Even the most conservative estimates with the widest range of error demonstrates that families are highly similar in their growth rates and that these estimates can work as excellent predictors of species with unknown growth rates. This method was then applied to an intra-skeletal stable isotope study of a bivalve with unknown growth rate to demonstrate how its application improved the interpretation of a selected stable isotope data set and limited the duration the skeleton occupied to less than a year (a single growth season).

Chapter Five provides a summary for the results of the chapters of this dissertation as well as concluding remarks.

Chapter 2

Distinguishing Milankovitch–Driven Processes in the Rock Record from Stochasticity Using Computer–Simulated Stratigraphy

By Troy A. Dexter, Michal Kowalewski, and J. Fred Read

Published in 2009, Journal of Geology 117:349-361

Abstract

Repetitive patterns of facies recurrence are frequently reported from the shallow water sedimentary rock record and postulated to have been driven by orbital forcing on eustatic sea level. Consequently, multiple statistical techniques have been developed to evaluate whether patterns of stratigraphic succession are more consistent with a periodic sea level signal or are stochastic. Previous studies focused on development and/or application of such methods to test empirical geological records. However, the character of such records cannot be known *a priori*, as deposition, erosion, and preservation influence the resultant composition, nor can those records be readily manipulated to explore the sensitivity, robustness, and overall validity of statistical methods. Here we simulate carbonate layers using computer-modeled successions generated by periodic sea level changes. The resulting stratigraphic records were then evaluated statistically. Thickness distributions of simulated lithofacies were compared to distributions predicted for Poisson processes, which by definition are not driven by cyclical sea level changes. Our results suggest that periodic processes produce stratigraphic thickness frequencies that are difficult to distinguish from random, except under high-magnitude sea level fluctuations. Similarly, autocorrelation fails to correctly recognize cyclic patterns in such simulated records.

Models with high-magnitude sea level fluctuations (icehouse conditions) had thickness frequencies that are suggestive of orbital forcing whereas low magnitude sea level fluctuations (greenhouse conditions) appeared independent even though they were modeled using Milankovitch orbital forcing. The increasing evidence based on spectral data from real rock successions suggests that a Milankovitch driver is common. Because statistical approaches are unsuccessful in recognizing the cyclic driver of these simulated records, we infer that it is difficult to disprove independence from real stratigraphy even when orbital forcing is controlling the rock composition. The numerous factors involved in depositing stratigraphic successions work to complicate or mask any periodic signal, thus generating the appearance of stochasticity in some successions.

Introduction

The idea that changes in earth's orbital parameters could not only affect climate change but also the succession of sedimentary facies dates back to the mid–nineteenth century (Adhémar 1842; Croll 1864, 1867). Nearly a century later, Milankovitch (1941) refined the concept of how orbital forcing affected climate. Sedimentary rock layers are often believed to be deposited in a manner suggestive of periodic changes in sea level or lake level (Fischer 1964; Van Houten 1964; Goodwin and Anderson 1985; Grotzinger 1986; Goldhammer et al. 1987; Elrick and Read 1991; Balog et al. 1997; Meyers 2008). Deeper water pelagic deposits have also been used to track climatic changes thought to be associated with Milankovitch orbital forcing (Broecker et al. 1968; Fischer et al. 1991; Sageman et al. 1997). A number of methods (e.g. autocorrelation, average spectral misfit, Fischer plots, frequency modulation analysis, layer thickness inventory plots, Markov chain analysis, thickness frequency distribution) have been developed for examining the

presence or absence of a cyclic driver in the rock record (e.g. Wilkinson et al. 1996; Hinnov and Park 1998; Hinnov 2000; Bailey and Smith 2005, 2008; Meyers 2008). Much debate remains as to whether periodic signals are preserved in the shallow water sedimentary record of carbonate platforms (Algeo and Wilkinson 1988; Wilkinson et al. 1996, 2003; Diedrich and Wilkinson 1999). On the other hand, orbitally derived cycles have been used as a means to improve the resolution of the geologic time scale (Hinnov and Ogg 2007).

If the rock record is dependent upon orbital forcing, then a cyclic, repetitive pattern should be incorporated into the stratigraphy. Otherwise, the record must be considered independent of orbital forcing. Some investigators have suggested that such independence should produce a frequency distribution that conforms to a Poisson distribution and that correlation of real stratigraphic lithofacies to this theoretical distribution then determines the probability that the composition of facies succession cannot be distinguished from independence (Diedrich and Wilkinson 1999; Wilkinson et al. 2003). Autocorrelation has also been used as a means to demonstrate order in the lithofacies thicknesses that would be expected when a cyclic driver is controlling stratigraphic successions. However, the sensitivity of correlating lithofacies thicknesses to a Poisson distribution or using autocorrelation of lithofacies thicknesses have not been tested against rock layers on shallow platforms which are known to have been driven by Milankovitch cyclicity.

Here we employ simulated stratigraphic successions generated under conditions of periodically changing sea level and evaluate if such records can be recognized as non-random via these statistical approaches. Moreover, by modifying simulation parameters,

the performance of statistical methods can be evaluated under varying circumstances. Real rock layers that have been examined for a correlation to the Poisson exponential distribution have shown that some are confidently correlated while others are likely not independent (Burgess 2008). Thus, computer-generated stratigraphic layers not only can evaluate the overall sensitivity of the statistical approach, but also assess which environmental conditions are required to preserve a recognizable signature of a Milankovitch driver in the rock record and which conditions tend to appear independent of any periodic driver.

Methodology

The stratigraphic columns were simulated using the process-based program PHIL® 1.5 Basin Analysis software developed by Scott Bowman of PetroDynamics Incorporated (Houston, TX, USA) (Fig. 2.1). The program creates a two dimensional platform based on input variables specified by the user and is designed to reveal the processes that control the deposition of real rock records (Goldhammer et al. 1990; Vail et al. 1991; Bowman and Vail 1999). The program was selected because all the input variables can be manipulated allowing for any type of situation to be modeled (including unrealistic models such as depth invariant carbonate production) and it has been tested in the past as a means of mimicking real rock records (Bowman and Vail 1999; Schiebner et al. 2003). The software allows the user to extract individual stratigraphic columns from any location along the outcrop (Fig. 2.1). The simulations are determinant in that each combination of parameters had only one possible outcome (i.e., there was no randomness in any simulation that would allow for different results from the same input parameters). The program models carbonate platform deposition (input data in Table 2.1) by assigning

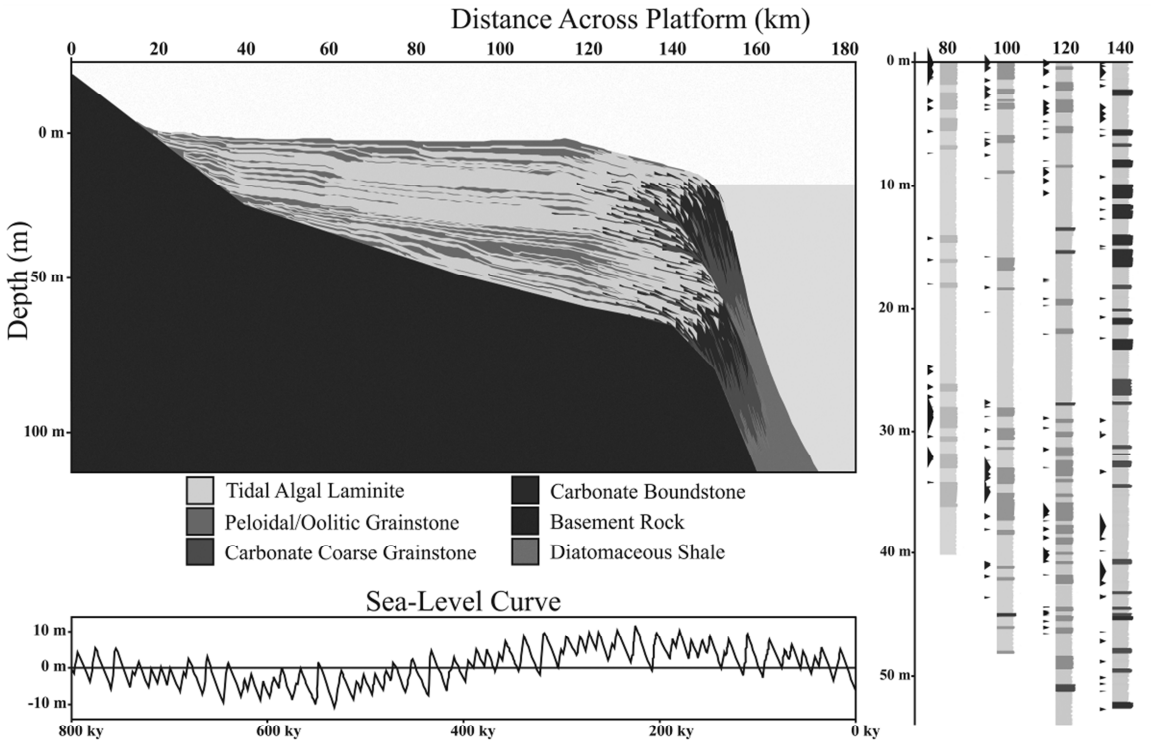

Figure 2.1. Image of the model outcrop, lithologic unit key, sea-level curve, and constituent stratigraphic columns for the greenhouse model simulated using PHIL® 1.5 Basin Analysis software by Scott Bowman of PetroDynamics, Incorporated (Houston, TX, USA) and modified from the software's output graphics. Slopes on the platforms are highly exaggerated and never exceeded 1° in angle. Lithologies are determined in the simulation by water depth and bathymetric province (tidal flat, lagoon, reef, etc.). The stratigraphic columns were extracted from the simulation at increasing distance along the platform using the software. The triangles beside the stratigraphic columns are representative of missing time, with larger triangles equivalent to a greater amount of time missing. The sea-level curve shows the change in water depth throughout the model's entire simulation run starting at 800 kiloyears.

Table 2.1. Input parameters used to model the simulations in PHIL® 1.5 Basin Analysis software. The variable model parameters were used to create distinct simulations. The static model parameters were unchanged throughout all simulations (see text for further parameter explanations).

Variable Model Parameters													
	Sea Level Magnitude (m)						Maximum	Biogenic Production on Shelf Margin			Biogenic Production on Shelf		
Model Type	19 ky*	23 ky*	40 ky	100 ky*	400 ky	800 ky	Pelagic Sed. Rate (cm/ky)	Max. Sed. Rate (cm/ky)	Width of Function (m)	Depth of Max. Production (m)	Max. Sed. Rate (cm/ky)	Width of Function (m)	Depth of Max.
19 ky Greenhouse	6	0	1	2	2	10	1	50	40	5	15	20	2
19 & 23 ky Greenhouse	6	6	1	2	2	10	1	50	40	5	15	20	2
100 ky Greenhouse	6	6	1	7	2	10	1	50	40	5	15	20	2
High Magnitude Greenhouse	6	6	1	7	5	10	1	50	40	5	15	20	2
Low Magnitude Greenhouse	5	5	1	3	3	10	1	50	40	5	15	20	2
Icehouse	7	7	10	60	5	10	0.25	70	40	5	30	40	2
Depth Invariant Icehouse	7	7	10	60	5	10	0.25	70	300	200	30	300	200
Depth Invariant Greenhouse	6	6	1	7	5	10	1	50	300	200	15	300	200

* Periods use saw-tooth pattern set at 15% to 85% ratio

Static Model Parameters		Initial Bathymetry		Subsidence		Carbonate Sediment Profile	
		Distance	Depth	Distance	Rate		
Profile Parameters	Value	(km)	(m)	(km)	(cm/ky)	Location	Degrees (°)
Total Time Setting	800 ky	0	-45	40	0	Sabkha	0.023
Profile Width	200 km	40	-20	80	0	Tidal Flat	0.115
Number of Cells	320	80	-12	120	1.5	Lagoon	0.023
Tidal Range	2 m	120	-10	160	2	Back Reef	0.006
Offlap Break	10 m	130	-8	200	3	Foreslope	2.29
Offlap Rollover Width	100 m	140	-5				
Effective Lithosphere Thickness	22.68 km	150	10				
		160	45				
		180	100				
		200	115				

cells to the initial platform, which was defined on the basis of the model's profile width and number of cells. It used a driving (tectonic) subsidence rate assigned to key cells (and interpolated to intervening cells), and which is set to increase across the platform (Table 2.1). Initial bathymetry is also specified for key cells and interpolated for the intervening cells (Table 2.1). The initial bathymetry defines a depositional profile on which sediment is deposited as the model runs (Fig. 2.1). The platform morphology used in the model was a low gradient ramp, which steepened slightly seaward of 140 km offshore; slopes were all below 1 degree (Fig. 2.1).

Calculations of all the variables for each cell are done for each time slice according to a user–defined time–step to allow modeling of Milankovitch band sea level fluctuations, the smallest of which were 19 kiloyears (ky). The model calculates the various parameters in the simulation for each cell during each time step. As sea level rises and falls, the program determines the water depth for each cell (based on both the water level and the amount of sediment already built up at that location) and inputs the rate of sedimentation based on the parameters set for carbonate deposition rate (Fig. 2.2). Simulations were run for 800 kiloyears in time–steps of 2.5 k.y. The program used a sea level curve defined by periods and magnitude of sea level fluctuation assumed to be typical of a greenhouse or icehouse world, with periods of 19, 23, 40, 100, 400 kiloyears (k.y.) (Table 2.1). A low magnitude 800 k.y. period was also used in all models to create the typical low stand, transgressive, and high stand systems tracts (Fig. 2.1). Some sea level curves in the model used a saw-toothed pattern of sea level rise and fall while others used a sinusoidal pattern (Table 2.1). The saw-toothed pattern splits the period allowing for a rapid rise followed by a slower fall in sea level. The saw-toothed patterns used 15%

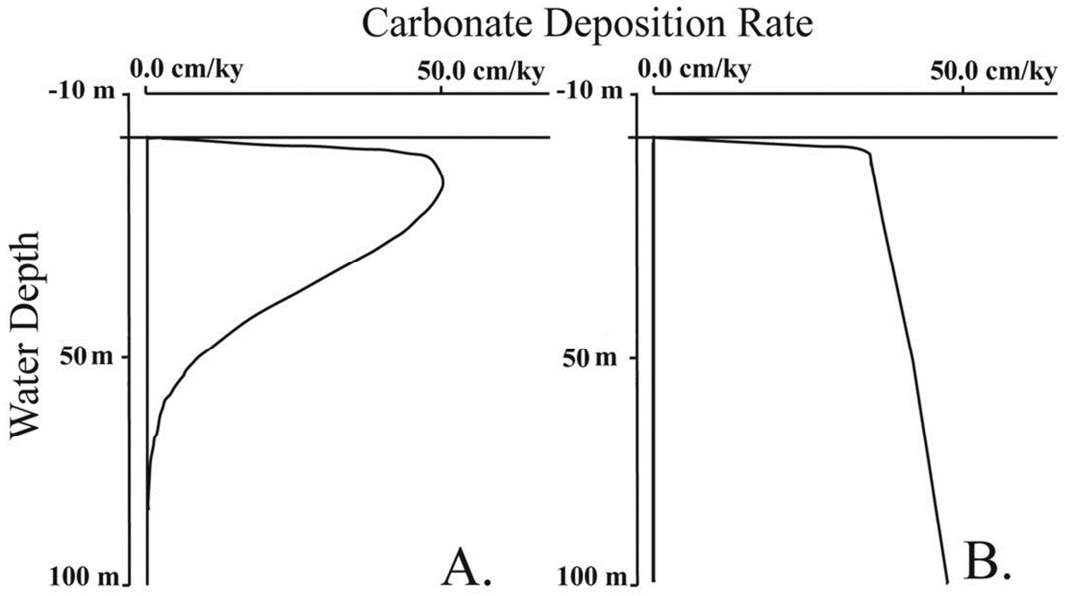

Figure 2.2. The carbonate production curves modeled by PHIL® 1.5 Basin Analysis software from PetroDynamics Incorporated (Houston, TX, USA). Curves are calculated by the parameters "Width of function", "Depth of maximum production", and "Maximum sedimentation rate" (see Table 2.1). These are the actual functions used by the software in all the simulations. A) Basic carbonate production curve dependent on water depth. B) Carbonate production curve modified to be nearly independent of water depth for depth invariant simulations.

of the period set for the rise with 85% of the period set to fall, simulating the rapid sea level rise from deglaciation followed by slow sea level drop from glacial build up. All of the magnitudes and periods in an individual simulation were summed together to create a sea level curve that determined sea level position at each time step.

Sediment (color-coded according to lithology) was added to each cell below sea level using a sediment production function (Fig. 2.1 and Table 2.1). This sediment production function was an exponential function centered about a designated water depth (the depth of this center being the so-called "width" of the production function, with rate falling off into the tidal zone, and rapidly falling off into deeper water), and was

additionally defined by maximum production rate and the water depth of maximum production (Fig. 2.2 and Table 2.1). The width of the function determined where the production curve reached zero deposition above and below the water depth of maximum production, and the depth of maximum production for the shelf margin was set at 5 m (Broecker and Takahashi 1966). The maximum sedimentation rate was set at a value similar in magnitude to the subsidence rate to prevent too much or too little accumulation throughout the history of the simulation. For a subset of simulations, in order to compare the effects of rapidly changing sediment production with depth, some runs were done with carbonate production kept relatively constant (with respect to the shallow platform). These depth invariant models were created by changing the carbonate production function "width" to 300 m (compared to 50 m for the other models) and the depth of maximum production to 200 m (compared to 5 m for the shelf margin previously) (Fig. 2.2 B). This kept the carbonate production on the shallow platform relatively constant with the exception of the very rapid increase in sedimentation rate for the tidal to subtidal transition (Fig. 2.2 B). Deep sea pelagic sediment was input as a rate dependent on thickness of the water column. Subsidence related to sediment- and water-loading was calculated using a flexural beam model dependent on the thickness of the lithosphere (Table 2.1). The shape of the carbonate profile of the platform was determined by using user–defined gradients for each of the bathymetric provinces (e.g. tidal flats, lagoon, back reef, slope) (Table 2.1). Any sediment deposited above the slope of the stable profile for that particular bathymetric province was redeposited seaward to the next cell (and so forth until reaching a cell whose surface was below the stable slope profile). Missing time is denoted visually in the stratigraphic columns as triangles (see Figure 2.1) and digitally

as time–steps with layers of zero thickness. These periods of missing sediment deposition occur whenever the cell was brought above sea level or when the critical slope angle for the stable profile was exceeded and sediment was transported downslope (Table 2.1). The sediment deposited at each time step was given a lithologic type determined by the water depth and the province to which it was deposited (e.g. algal laminites in the tidal flats, carbonate boundstone in the fore reef, etc.) (Fig. 2.1).

The model output was in the form of stratigraphic cross sections, from which stratigraphic columns from designated cells can be extracted. Data for the stratigraphic columns were taken along the depositional gradient of the simulated shelf at 100, 120, 140 km from the shore. When the model generated a cyclic stratigraphic record further seaward (as was the case in the icehouse models), data were also taken at 160 km from the shore. The lithofacies thickness data (based on the thickness of an individual lithology, typically consisting of several time–steps) were extracted from these columns. PHIL® 1.5 Utility software used the model data from the PHIL® Analysis software to create digital output for each stratigraphic column at every time step and this was imported into Microsoft® Office Excel 2003. The output recorded the simulation's data for a selected column, including the age, sediment type (lithology), water depth, position of sea level, and the thickness of each layer. In the simulations, the thickness of each lithofacies was measured to generate the data sets for the statistical analyses from each simulated stratigraphic column. Lithofacies thicknesses are expressed in meters and are the sum of sediment deposition plus sediment transported into the cell minus subaerial erosion (when applicable). The digital output is arranged in time–steps, one or more often spanning a single lithofacies. Where a lithofacies spanned several time–steps, the

individual thicknesses of each time–step were summed to obtain the lithologic layer thickness. Similar lithofacies were only split when the unit was separated by an unconformity (marked by periods of erosion or breaks in sediment deposition). This allowed the resulting data on lithofacies thicknesses to be equivalent to those measured by geologists in real stratigraphic successions.

Stratigraphic column data were entered into SAS® 9.1 and all time–steps with zero sediment deposition (zero thickness) were deleted leaving a data matrix containing only the sediment layers present in the stratigraphic column. To evaluate the distribution of facies in the simulated records in terms of a periodic driver, the following methods have been employed:

1. A theoretical independent distribution (F) equivalent to a Poisson process was calculated using the lithofacies thickness frequencies of the simulated records according to the following formula derived by Diedrich and Wilkinson (1999) and Wilkinson et al. (2003):

$$F = Binsize * \frac{N^2}{L} * e^{(-t*(N/L))}$$

In this formula, N is the total number of lithologic units or layers in the simulation, L is the total thickness of the stratigraphic section, and t is the range of lithofacies thicknesses up to the thickest layer size in the section. Bin size determines the width of each frequency bin and is predefined. The thickness frequencies of the simulated data were then compared to this theoretical distribution using Pearson's product-moment correlation.

2. An autocorrelation analysis was run on the lithofacies thicknesses for individual simulations to locate repeated patterns of sedimentation rate. Autocorrelation correlates time series data to itself in order to test if patterns are repeated (producing a sine wave appearance). The expectation of the autocorrelation analysis is that cyclically driven deposition should have repetitive thickness patterns in which similar repeated thicknesses should be highly positively correlated (and dissimilar thicknesses that should be highly negatively correlated). The preserved lithofacies thicknesses of the simulated successions were analyzed in SAS® using an IML code that reproduced the column and compared it to the original column. The reproduced column was then shifted a step to align the next layer with the previous and the columns were compared again. This procedure was iterated until only five layers were left for the comparison (i.e., too few layers were left for a robust statistical test). The columns were compared using Pearson's product moment correlation and Spearman rank correlation, and the correlation was recorded at each iterative step. Significance was evaluated at $\alpha=0.05$ using the sample size N based on the number of layers under comparison for each iteration step.

3. Autocorrelation was also conducted on the lithology of each layer (boundstone, coarse grainstone, etc.) in an individual simulation with the expectation that these rock types should be repeated if the data are periodically produced. The PHIL® Analysis software output gave the lithology of each layer (based on bathymetric province and water depth) as well as numerically coding each lithology for water–depth and location. The numeric coding used the likely water depth of the facies in order to rank the different facies in order from shallowest to deepest as well as the likely distance from shore. Autocorrelation was then run in SAS® on these numeric values to look for repetitive

patterns. Spearman rank correlation was used to compare the layer lithologies at each iterative step and significance was evaluated at $\alpha=0.05$ Spearman rank correlation coefficient was the appropriate test because the numeric values used as a proxy for lithology were not continuous variables but rather ranks based on the likely water depth.

Results

Eight simulations were conducted with data collected on three extracted stratigraphic columns from each of the stratigraphic simulations. Six simulations were modeled using greenhouse world conditions, and two were modeled representing icehouse worlds (Table 2.1). Various periods in the greenhouse simulations were selected to have dominant magnitudes to determine if this influenced the result; a 19 k.y. dominant model, a 19 and 23 k.y. dominant model, and a 100 k.y. dominant model. One greenhouse simulation had all periods with high magnitudes and one had periods with all low magnitudes (Table 2.1). The icehouse simulations had high magnitudes for 40 and 100 k.y. periods. Two depth invariant simulation were conducted; one for a greenhouse world and one for an icehouse world (Table 2.1). All of the results presented herein use bin sizes for the thickness frequencies that allow for a minimum of 5 filled bins in order to compute the Pearson's product moment correlated to the theoretical distribution. The maximum number of filled bins for the frequency calculation of a simulated column was 22 and the average number of filled bins for all the simulations was 9.

All the greenhouse simulations were significantly correlated to values predicted by the theoretical distribution for independence; in other words, they appeared random (Fig. 2.3 and Table 2.2). The location of the simulated stratigraphic columns relative to the shoreline had no effect on the greenhouse simulations and all columns were

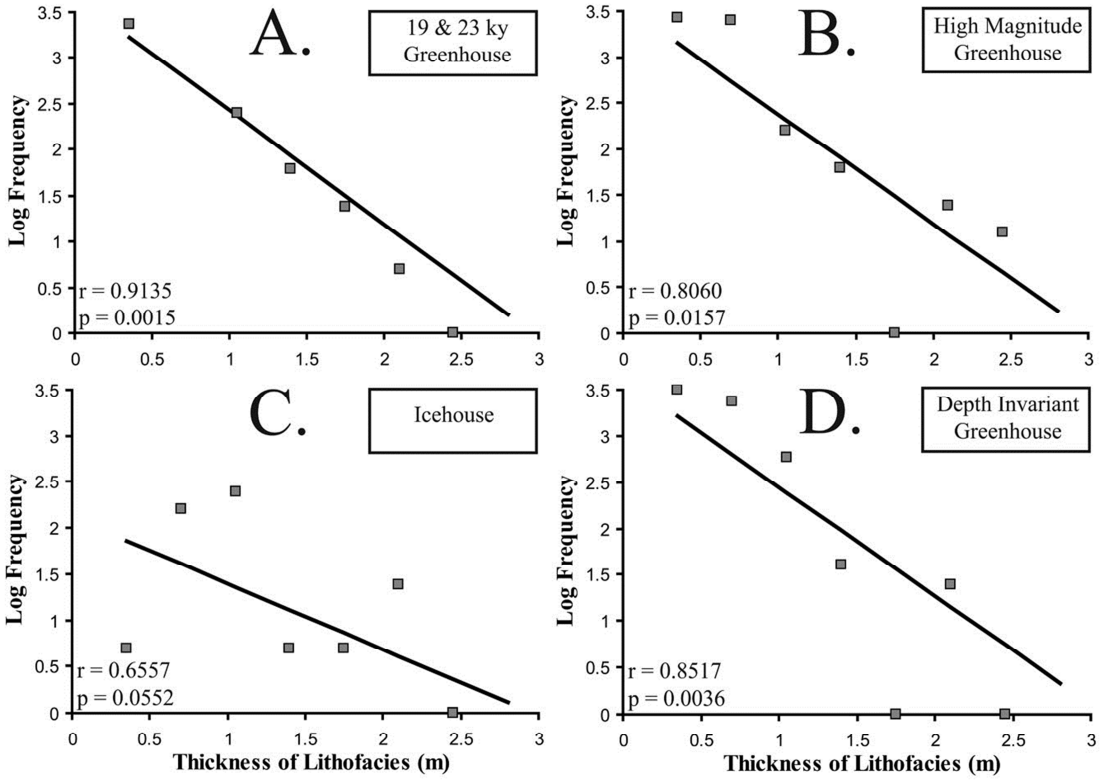

Figure 2.3. Simulated carbonate stratigraphic thickness frequencies compared to a theoretical distribution of independent thicknesses. The dark lines are the expected distribution of thicknesses if they are independent of extrabasinal forcing and the points are the actual layer thickness frequencies of the simulated columns. All graphs were composed from stratigraphic columns taken at 120 km into the basin except the icehouse simulation which was taken at 140 km. All graphs were calculated using a bin size of 0.35 meters. Note that all graphs are highly correlated to the theoretical distribution except the icehouse simulation.

significantly correlated to the theoretical distribution for independence or randomness (Table 2.2). In most cases, the icehouse simulations were not significantly correlated to a Poisson distribution and could not be considered independent from periodic drivers (Fig. 2.3 and Table 2.2). The distance from the shoreline appears to have a discernible effect on the outcome of the icehouse simulations, where the more offshore, rapidly subsiding areas (160 km distance onto the platform) correlate to the distribution expected for

Table 2.2. Correlation of the simulations to a theoretical distribution indicative of independence from cyclicity. Simulated stratigraphic columns were analyzed at varying distance into the basin. Thickness frequency distributions were tested over a range of bin sizes, and those values that were not significantly correlated to the stochastic distribution are indicated by an asterisk. Values were not reported (N/A) if less than 5 frequency bins were filled when calculating the correlation.

	Distance	Bin Size Selected for Calculating Distribution (m)										
Model Type	(km)	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.55	0.60
19 ky Greenhouse	100	0.6015	0.7072	0.6980	0.8626	0.9023	0.9747	0.9718	0.9732	0.9811	N/A	N/A
"	120	0.7278	0.7373	0.8879	0.8920	0.9352	0.9290	0.9254	0.9917	0.9542	N/A	N/A
"	140	0.6153	0.7281	0.8401	0.9155	0.9154	0.9057	0.9691	0.9799	0.9646	N/A	N/A
19 & 23 ky Greenhouse	100	0.7680	0.7853	0.8242	0.8417	0.8587	0.9067	0.8919	0.9370	0.9199	N/A	N/A
"	120	0.7889	0.8498	0.8688	0.8498	0.8778	0.9135	0.9025	0.9405	0.9090	N/A	N/A
"	140	0.7054	0.8139	0.8778	0.9053	0.9003	0.8866	0.9681	0.9605	0.9709	N/A	N/A
100 ky Greenhouse	100	0.5982	0.7263	0.7125	0.8200	0.8313	0.8181	0.8019	0.8513	0.7883	N/A	N/A
"	120	0.6191	0.7148	0.7130	0.7128	0.7855	0.7476	0.7709	0.7707	0.7867	N/A	N/A
"	140	0.6880	0.8407	0.8827	0.9063	0.9072	0.9450	0.9653	0.9510	0.9494	N/A	N/A
High Magnitude Greenhouse	100	0.5111	0.5912	0.6800	0.7312	0.7014	0.8628	0.7687	0.7357	0.8268	N/A	N/A
"	120	0.6699	0.7731	0.7855	0.8320	0.8592	0.8060	0.9052	0.8889	0.9428	N/A	N/A
"	140	0.8192	0.8540	0.8975	0.8036	0.9056	0.8702	0.9416	0.8347	0.9382	N/A	N/A
Low Magnitude Greenhouse	100	0.6661	0.8159	0.8104	0.8790	0.8228	0.8718	0.8809	0.8902	0.9384	N/A	N/A
"	120	0.7743	0.8219	0.8449	0.8613	0.9123	0.8403	0.9183	0.8983	0.9596	N/A	N/A
"	140	0.7843	0.8516	0.9392	0.8973	0.9698	0.8880	0.9508	0.9807	0.9943	N/A	N/A
Depth Invariant Greenhouse	100	0.7254	0.7529	0.8640	0.8717	0.8952	0.9015	0.8864	0.8872	0.8738	N/A	N/A
"	120	0.7297	0.7516	0.7898	0.8244	0.8978	0.8517	0.8854	0.9208	0.8866	N/A	N/A
"	140	0.6838	0.6725	0.6612	0.6463	0.7275	0.8005	0.8005	0.8050	0.8701	N/A	N/A
Icehouse	120	N/A	N/A	***0.5394****	***0.4976****	***0.5425****	***0.5681****	***0.5732****	0.8171	0.6899	0.8402	0.8573
"	140	N/A	N/A	***0.4173****	0.6458	***0.5550****	***0.6557****	***0.6060****	0.7779	0.8397	0.8098	0.9067
"	160	N/A	N/A	0.6782	0.5151	0.6828	0.7235	0.7716	0.5353	0.5616	0.6856	0.6444
Depth Invariant Icehouse	120	N/A	N/A	***0.4303****	***0.6213****	***0.6165****	***0.6790****	0.7647	0.7567	0.8320	***0.7621****	***0.8070****
"	140	N/A	N/A	***0.4387****	0.9459	***0.6863****	***0.6326****	***0.5649****	0.8183	0.9316	0.8496	0.9491
"	160	N/A	N/A	***0.4016****	***0.4371****	0.5364	***0.5082****	0.5599	0.6779	0.8031	0.8451	0.7992

* Indicates value is *not* significantly correlated to a stochastic distribution at α=0.06

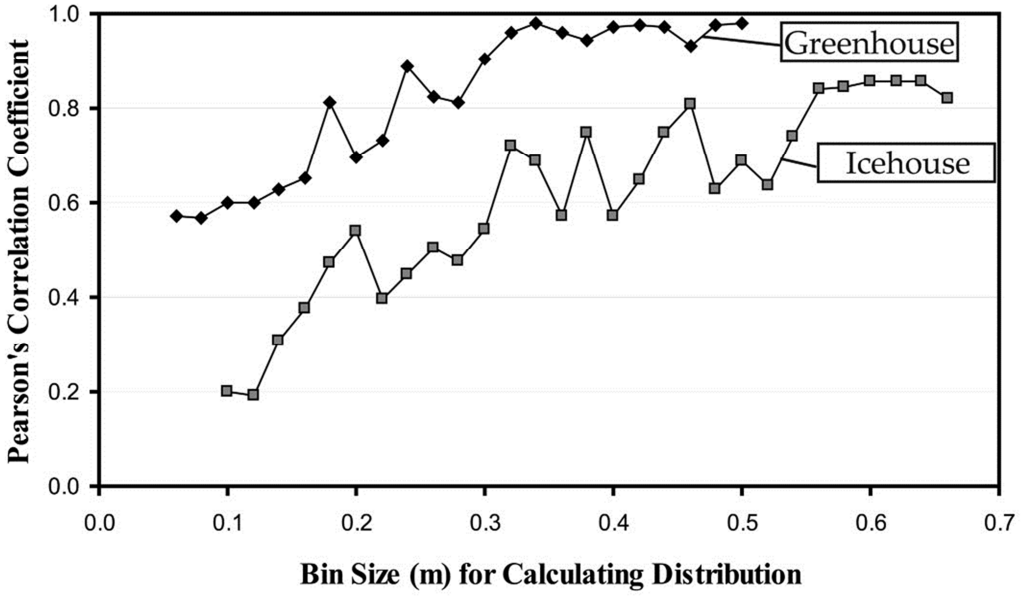

Figure 2.4. Effect of bin size on the calculated Pearson's correlation for the 19 k.y. greenhouse simulation and icehouse simulation. The X axis is the bin sizes that were selected for the formula in order to calculate the theoretical independent distributions and compare them to the simulated frequency thicknesses. The greenhouse simulation was caluclulated using a stratigraphic column at 100 km into the basin while the icehouse simulation was from 120 km. By altering the bin size in the formula, the Pearson's correlation ranges from 0.5678 to 0.9811 for the greenhouse simulation and 0.1940 to 0.8573 for the icehouse simulation. All samples had at least five filled frequency bins in order to run the correlation statistic. All values for the greenhouse simulation were significantly correlated to the theoretical distribution. For the icehouse simulation, 12 out of 30 were significantly correlated to the theoretical distribution. As the formula bin size was increased, the number of filled frequency bins decreased, which brought about an increase in the statistical correlation.

independence (that is, they appear random). One of the issues with carbonate facies that may act to mask cyclicity from periodic forcing is the dependence of depositional rate on water depth. In order to explore the effect of depth dependence on carbonate depositional rates, simulations were run holding carbonate deposition relatively invariant to water depth (Fig. 2.2 B). When carbonate deposition was nearly depth invariant, the greenhouse simulation remained relatively unchanged and again all correlated to the theoretical

independent distribution mimicking randomness (Table 2.2). However, the depth-invariant icehouse simulation appeared even less correlated to the independent distribution than the depth-variant icehouse simulation suggesting the involvement of a periodic driver (Table 2.2). The depth-invariant icehouse simulation was not correlated at greater water depths (160 m out onto the platform) unlike the depth-dependent icehouse simulation.

One of the previously under-explored effects on the outcome of the test was the effect of the somewhat arbitrary choice of bin size used to compute thickness frequencies for the comparison to the corresponding Poisson distribution for that bin size. In the case of the data simulated here, altering the bin size resulted in substantial changes in the Pearson's product moment correlation [r] used to measure the fit of the simulated data to theoretical independent distribution. Namely, varying bin size within a reasonable range (note that at least 5 frequency bins with data were used as an acceptable minimum here) produced a range of outcomes where r for the same simulated data with different bin size changed by as much as 0.66 (Fig. 2.4). Consequently, the change of bin size can change the statistical decision from significant to insignificant and *vice versa*. When a range of bin sizes (0.1 to 0.6 meters) was used for the greenhouse simulation, all values were significantly correlated with the theoretical independent distribution (Fig. 2.4). When this range was used for the icehouse simulation, five selected bin sizes were *not* significantly correlated to the independent distribution (Fig. 2.4).

Autocorrelation was conducted on the layer thicknesses of each simulation to evaluate whether repeated patterns in sedimentation rate existed (Fig. 2.5 A–F). Cyclically repeated data analyzed by autocorrelation should possess high positive and

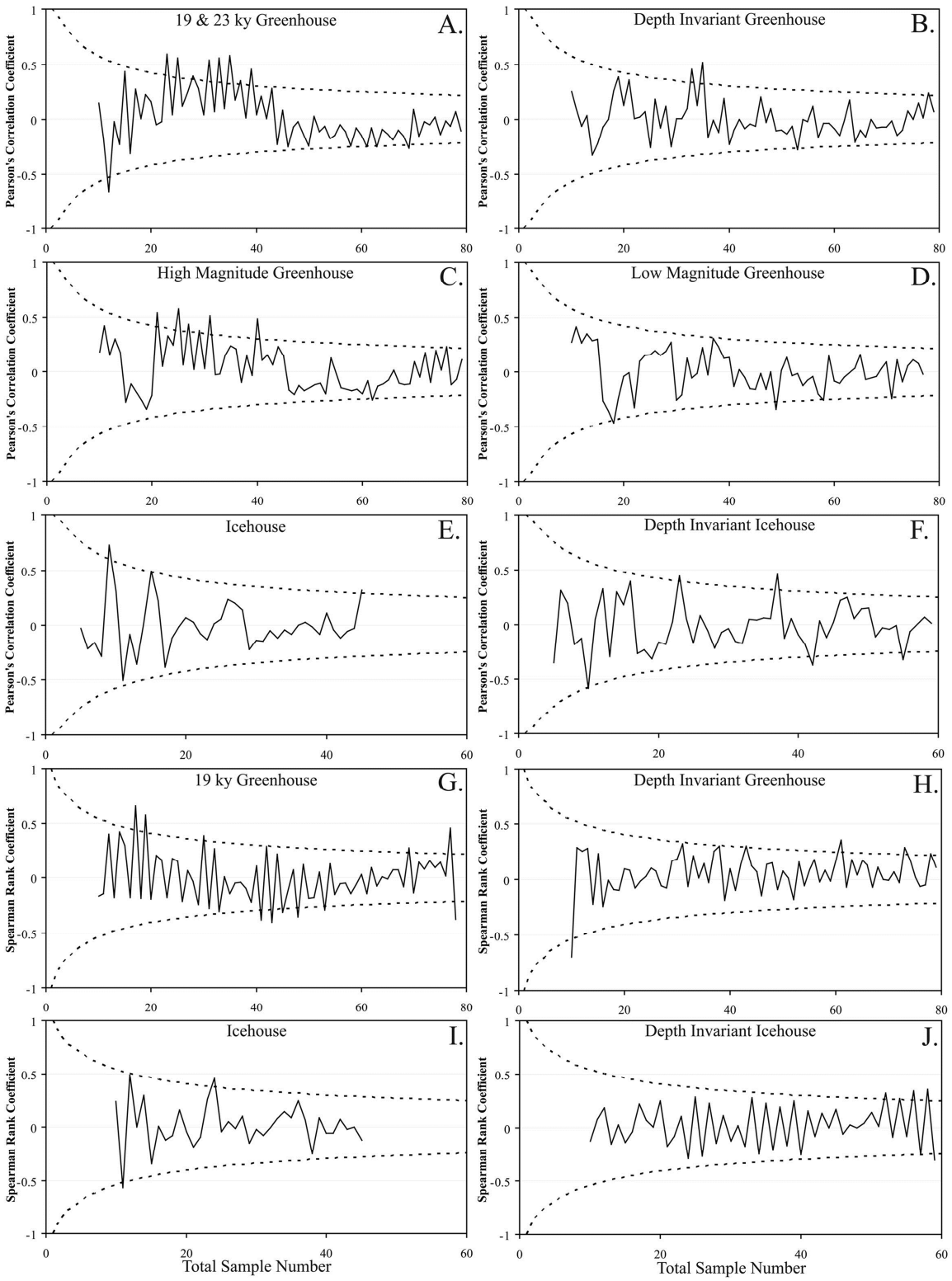

Figure 2.5. Autocorrelation analysis of the lithologic unit thicknesses and lithologic type for the stratigraphic columns. A–F) Graphs of the autocorrelation on the unit thicknesses using Pearson's product moment correlation. G–J) Graphs of the autocorrelation for the

type of lithology in the stratigraphic column (numerically ranked for water–depth and the distance of the bathymetric province from shore) using Spearman rank correlation. Graphs A–D and G–H were calculated using stratigraphic columns taken at 120 kilometers along the platform. Graphs E–F and I–J were calculated using stratigraphic columns taken at 160 km along the platform. Total sample number is the number of layers being compared to one another at each iterative step. The solid line is the Pearson's correlation coefficient or Spearman correlation coefficient at each iterative step. The dashed line is the significance level at ά of 0.05 as determined by the number of layers under comparison at each iterative step.

high negative correlations (as similar and dissimilar patterns are compared) producing an output with a sine wave appearance. When autocorrelation was conducted on the layer thicknesses, it was difficult to distinguish any pattern that would be distinct from noise (Fig. 2.5 A–F). Only a small number of peaks could be considered significantly correlated at an α of 0.05, with the 19 and 23 k.y. greenhouse simulation having the highest number of significant peaks (Fig. 2.5 A–F). When sedimentation rate was kept depth invariant, there appeared to be little difference in the results from the autocorrelation analysis and few peaks reach statistically significant correlation values (Fig. 2.5 B and F). When autocorrelation was conducted on the lithology of each unit (ranked numerically on the basis of probable water depth rank and distance from shore), the pattern produced was no different from that measured using layer thicknesses (Fig. 2.5 G vs. J). The outcomes of depth-invariant simulations also remained unchanged when lithology (water depth rank) was used instead of lithologic thickness (Fig. 2.5 H vs. J).

Discussion

These stratigraphic simulations indicate that thicknesses of lithofacies units produced synthetically to simulate periodic change in sea level create a pattern that was difficult to distinguish from lithologic successions due to random changes when using the thickness frequencies and autocorrelation methods. The modeling software has been

previously demonstrated to approximate real stratigraphy and the simulations for this project were specifically designed to represent actual carbonate successions (Bowman and Vail 1999; Schiebner et al. 2003). Thus, using these tests, actual shallow water carbonate successions that accumulated under periodic sea level changes may appear to have formed under the influence of a non-periodic driver. The most apparent difference in the simulated frequency distributions exists between greenhouse (low, precessionally dominated magnitudes) and icehouse (high 100 k.y. magnitude) simulations. Greenhouse simulations were exponentially-distributed (which would be expected if they were independent of orbital forcing) whereas icehouse simulations were distinctly different and suggest a periodic driver. This indicates that when using autocorrelation and thickness frequency distributions, the influence of high magnitude sea level changes in periodically driven carbonate successions are potentially recognizable; this influence is greater where rates of carbonate accumulation were unrelated to water depth. The offshore columns of the icehouse simulations tended to correlate to the Poisson distribution unlike the columns near shore. The more rapid subsidence of these locations prevented subaerial exposure and they possessed the widest range in lithofacies thicknesses (from 0.41 to 11.48 meters in the 160 km column of the icehouse simulation). This lack of subaerial exposure allowed for the preservation of a greater number of thin lithofacies and relatively few thick lithofacies, which produced a distribution that had a significant fit to the exponential Poisson distribution. Thus, even with high magnitude sea level fluctuations, a periodic driver of sediment deposition can be concealed.

These simulations closely resemble real shallow water carbonate successions. Resulting exponential thickness frequencies are similar to those reported from many

actual carbonate successions which have been interpreted as reflecting an absence of unimodal or polymodal thickness frequencies that would result from periodic forcing (e.g. Diedrich and Wilkinson 1999). Given that our simulations do indeed incorporate periodic changes in sea level, one might expect that resulting thickness frequencies would not be exponential. In all likelihood, the complexity of the simulations (e.g. a complex sea level signal composed of one or more periods and magnitudes, differential subsidence across the shelf, seaward sediment transport, depth dependent carbonate production rates, and cessation of accumulation during exposure) may serve to distort the periodic sea level signal except in those incorporating the high magnitudes of sea level change. Indeed, simpler models incorporating uniform subsidence, one or two cycles of sea level variation, and no sediment transport or erosion yield thickness frequencies that are easily differentiated from exponential Poisson distributions. In addition, the thickness frequency distributions are strongly dependent on choice of bin size (Fig. 2.4)

This study focuses on whether a Poisson distribution of lithofacies thickness frequencies or autocorrelation of lithofacies provide rigorous tests of stochasticity versus periodic sea level drivers in cyclic successions. Real stratigraphic successions appear to have a depositional and preservational bias that can distort the original cyclic signal produced from orbital forcing. This signal loss is further demonstrated by the autocorrelation tests. Few of the peaks are significantly correlated above an α of 0.05 for the autocorrelation of layer thicknesses, and the results appear very noisy (Fig. 2.5 A–F).

The autocorrelation of lithofacies thicknesses appeared to capture a second overlapping frequency for the 19 and 23 k.y. greenhouse simulation which starts negative, rises to positive, and falls again to negative values (Fig. 2.5 A). This may

represent the overarching 800 k.y. period with its depositional pattern of low stand, transgressive, and high stand systems tracts (Fig. 2.5 A). This same 800 k.y. pattern was likely stifled by the magnitudes of the other periods in the other simulations. For time series analyses, there can be no missing time steps but in the autocorrelation of stratigraphic units, missing time is an unknown. With simulations, it is possible to track the missing time and to leave them in the analyses (as zero thicknesses in the simulation's output file). But the unrealistic inclusion of zero thickness units in the analyses still failed to produce a more significant pattern.

The autocorrelation of the water depth ranked lithology would be expected to have a stronger signal than the thickness of each layer since multiple additional factors may be involved in controlling layer thickness. But this analysis also failed to detect any pattern distinguishable from noise (Fig. 2.5 G–J). The simulations themselves are determinant and produced by a periodic driver, so one would not expect much noise in the autocorrelation. However, the lithologic record resulting from these simulations was extremely noisy which masked the original cyclic driver. The lack of significance in the autocorrelation of layer thickness and lithology seems to indicate that autocorrelation is too crude a method to analyze for cyclic drivers in carbonate successions.

The incompleteness of the carbonate stratigraphic record may act to conceal cyclic driving forces, in turn making it difficult to assess the quality of methods developed to measure cyclicity; spectral analysis on such computer simulations also produces a "noisy" record with numerous peaks in which the main driving frequencies are still recognizable (Balog et al. 1997). The methods for testing the presence or absence of a Milankovitch driver in ancient successions must demonstrate patterns that are

distinct from what would be expected if the rocks were deposited independent of orbital forcing. One of the problems with many of the methods for detecting cyclicity is that they test a single series (e.g. a stratigraphic column). This tends to miss lateral substitution of facies that occur at similar water depths in real settings. The benefit of using simulations is their ability to capture information such as periods of no deposition or gaps in deposition from erosion that would otherwise be difficult to quantify in real successions. These simulations can be applied to test many of the other methods used in the past that do appear to find instances of periodic deposition, including Markov chain analysis and Fischer plots, and spectral analysis.

The method of analyzing lithofacies frequencies developed by Wilkinson et al. (1996, 2003) and Diedrich and Wilkinson (1999) which suggests that stratigraphic packages are independent of orbital forcing has sparked an enormous amount of research in stratigraphy. New methods are continually being developed to test for periodic drivers in the rock record (Bailey and Smith 2005, 2008; Meyers 2008). Such methods include bilogarithmic thickness/frequency plots of layer thickness inventories (LTI) of Bailey and Smith (2008) and the average spectral misfit (ASM) of Meyers (2008). The method using LTI plots posits that stratigraphy independent of orbital forcing should illustrate a power-law relationship and in periodically deposited stratigraphy this power-law relationship is absent (Bailey and Smith 2008). Average spectral misfit is another method which utilizes the null hypothesis that layers are independent of periodicity and quantifies the probability of rejecting this hypothesis (demonstrating that real rock packages often reject the hypothesis of independence) (Meyers 2008). Testing for cyclic drivers in the rock record is of great importance because, if present, it provides a predictive tool in

stratigraphy. If the sedimentary successions are indeed stochastically formed, then their predictability is negligible.

Conclusions

The simulations used a cyclic Milankovitch driver to produce cyclic stratigraphy, but the lithofacies thickness frequencies and autocorrelation methods used to analyze the resultant rock successions found that these records often appeared independent of periodic orbital forcing. This indicates that the factors involved in depositing cyclic sedimentary layers, as simulated in the model, tend to mask the original periodic signal (such as Milankovitch orbital forcing) and produce the appearance of independence or stochasticity. The hypothesis is that the rocks are independent of extrabasinal forcing, and these simulations indicate how difficult it is to disprove such independence. Real rock successions are very likely to have been historically more complex than our simulations governed by merely a few basic parameters. This poses a challenge to even most cleverly designed quantitative methods used to test for stratigraphic patterns, with their statistical outcomes being inherently ambiguous: does a given outcome indicate that the record was not formed in a cyclic fashion or does it merely reflect the fact that an original cyclic driver has been masked by the complexity of depositional processes? It is therefore important to have controls by which these methods can be tested. The use of simulations can provide such controls by producing synthetic data with known Milankovitch cyclic drivers and thus providing an independent assessment of statistical methods applied to test real empirical records.

Acknowledgements

This work was made possible by support from the Byron Cooper Geosciences Graduate Student Research Award and the Leonard and Melva Harris Graduate Student Award. The authors would like to thank James D. Schiffbauer, Peter J. Voice and John W. Huntley for their comments on early drafts. The authors would also like to thank Bruce Wilkinson whose generous and extensive input greatly improved quality of this project. The authors also wish to thank Scott Bowman who developed the modeling software that made this project possible.

References

Adhémar, J. 1842. Révolutions de la mer, déluges périodiques. Paris, Carilian-Goeury et V. Dalmont, 184 p.

Algeo, T. J., and Wilkinson, B. H. 1988. Periodicity of Phanerozoic sedimentary cycles and the role of Milankovitch orbital modulation. J. Geol. 88:313–322.

Bailey, R. J., and Smith, D. G. 2005. Quantitative evidence for the fractal nature of the stratigraphic record: results and implications. P. Geologist. Assoc. 116:129–138.

Bailey, R. J., and Smith, D. G. 2008. Quantitative tests for stratigraphic cyclicity. Geol. J. 43:431–446.

Balog, A.; Haas, J.; Read, J. F.; and Coruh, C. 1997. Shallow marine record of orbitally forced cyclicity in a Late Triassic carbonate platform, Hungary. J. Sediment. Res. 67:661–675.

Bowman, S. A. 1989. PHIL User Manual. Marco Polo Software (PetroDynamics, Incoporated), Houston, Texas, USA, 97 p.

Bowman, S. A. and Vail, P. R. 1999. Interpreting the stratigraphy of the Baltimore Canyon section, offshore New Jersey with Phil, a stratigraphic simulator. *in* J. W. Harbaugh, W. L. Watney, E. C. Rankey, R. Slingerland, R. H. Goldstein, and E. K. Franseen (*eds.*), Numerical experiments in stratigraphy: Recent advances in stratigraphic and sedimentologic computer simulations. SEPM Spec. Publ. 62: 117–138.

Broecker, W. S and Takahasi, T. 1966. Calcium carbonate precipitation on the Bahama Banks. J. Geophys. Res. 71:1575–1602.

Broecker, W. S.; Thurber, D. L.; Goddard, J.; Ku, T.; Matthews, R. K.; and Mesolella, K. J. 1968. Milankovitch hypothesis supported by precise dating of coral reefs and deep-sea sediments. Science 159:297–300.

Burgess, P. M. 2008. The nature of shallow-water carbonate lithofacies thickness distributions. Geology 36:235–238.

Croll, J. 1864. On the physical cause of the change of climate during geological epochs. Philos. Mag. 28:121–137.

Croll, J. 1867. On the change in the obliquity of the ecliptic, it's influence on the climate of the polar regions and on the level of the sea. Philos. Mag. 33:426–445.
Diedrich, N. W., and Wilkinson, B. H. 1999. Depositional cyclicity in the Lower Devonian Helderburg Group of New York State. J. Geol. 107:643–658.
Elrick, M., and Read, J. F. 1991. Cyclic Ramp-to-Basin Carbonate Deposits, Lower Mississippian, Wyoming and Montana: A Combined Field and Computer Modeling Study. J. Sediment. Petrol. 61:1194–1224.
Fischer, A. G. 1964. The lofer cyclothems of the Alpine Triassic. Kansas Geol. Surv. Bull. 169:107–149.
Fischer, A. G.; Herbert, T. D.; Napoleone, G.; Silva, I. P.; and Ripepe, M. 1991. Albian pelagic rhythms (Piobbico-core). J. Sediment. Petrol. 61:1164–1172.
Goldhammer, R. K.; Dunn, P. A.; and Hardie, L. A. 1987. High frequency glacioeustatic sea level oscillations with Milankovitch characteristics recorded in middle Triassic platform carbonates in northern Italy. Am. J. Sci. 287:853–892.
Goldhammer, R. K.; Dunn, P. A.; and Hardie, L. A. 1990. Depositional cycles, composite sea-level changes, cycle stacking patterns, and the hierarchy of stratigraphic forcing: Examples from Alpine Triassic platform carbonates. Geol. Soc. Am. Bull. 102:535–562.
Goodwin, P. W., and Anderson, E. J. 1985. Punctuated aggradational cycles; a general hypothesis of episodic stratigraphic accumulation. J. Geol. 93:515–533.
Grotzinger, J. P. 1986. Cyclicity and paleoenvironmental dynamics, Rocknest platform, northwest Canada. Geol. Soc. Am. Bull. 97:1208–1231.
Hinnov, L. A. 2000. New perspectives on orbitally forced stratigraphy. Annu. Rev. Earth Planet. Sci. 28:419–475.
Hinnov, L. A., and Ogg, J. G. 2007. Cyclostratigraphy and the Astronomical Time Scale. Stratigraphy 4:239–251.
Hinnov, L. A., and Park, J. 1998. Detection of astronomical cycles in the stratigraphic record by frequency modulation (FM) analysis. J. Sediment. Res. 68:524–539.
Koerschner, W.F. III and Read, J.F. 1989. Field and modeling studies of Cambrian carbonate cycles, Virginia Appalachians. Jour. Sed. Pet. 59:654–687.
Meyers, S. R. 2008. Resolving Milankovitchian controversies: The Triassic Latemar Limestone and the Eocene Green River Formation. Geology 36:319–322.
Milankovitch, M. 1941. Canon of Insolation and the Ice-Age Problem. Belgrade, Serbian Academy of Sciences and Arts, Special Publication 132 (Israel Program for Scientific Translations, Jerusalem, 1969), 634 p.
Sageman, B. B.; Rich, J.; Arthur, M. A.; Birchfield, G. E.; and Dean, W. E. 1997. Evidence for Milankovitch Periodicities in Cenomanian-Turonian Lithologic and Geochemical Cycles, Western Interior U.S.A. J. Sediment. Res. 67:286–302.
Scheibner, C.; Kuss, J.; and Speijer, R. P. 2003. Stratigraphic modelling of carbonate platform-to-basin sediments (Maastrichtian to Paleocene) in the Eastern Desert, Egypt. Palaeogeogr Palaeocl 200:163–185.
Vail, P. R.; Audemard, F.; Bowman, S. A.; Eisner, P. N.; and Perez-Cruz, C. 1991. The stratigraphic signatures of tectonics, eustacy and sedimentology – an overview. *in* Cycles and Events in Stratigraphy, G. Einsele, W. Ricken, and A. Seilacher (*eds*.) Springer-Verlag, Berlin Germany, 955 p.

Van Houten, F. B. 1964. Cyclic lacustrine sedimentation, Upper Triassic Lockatong Formation, central New Jersey and adjacent areas. Kansas Geol. Surv. Bull. 169:497–531.
Wilkinson, B. H.; Diedrich, N. W.; and Drummond, C. N. 1996. Facies successions in peritidal carbonate sequences. J. Sediment. Res. 66:1065–1078.
Wilkinson, B. H.; Merrill, G. K.; and Kivett, S. J. 2003. Stratal order in Pennsylvanian cyclothems. Geol. Soc. Am. Bull. 1115:1068–1087.

Chapter 3

A Geochronological Study of the Bivalve *Semele casali* from Ubatuba Bay, Brazil, Employing Amino Acid Racemization Dating

By Troy A. Dexter, Darrell S. Kaufman, Richard A. Krause, Susan L. Barbour Wood, Marcello G. Simões, John W. Huntley, Yurena Yanes, Christopher S. Romanek and Michal Kowalewski

Chapter will be submitted for publication in Quaternary Geology in 2011

Abstract

Amino acid racemization [AAR] methods, calibrated against radiocarbon dates, were used to determine the age distribution of shells of the infaunal bivalve *Semele casali*. The shells were collected from surficial sediments at multiple sites in the Ubatuba Bay area (São Paulo State, Brazil), a shallow sub-tropical marine setting. A total of 275 valves of *Semele casali* were analyzed using amino acid racemization, and 35 of those valves were dated using carbon 14. The results represent one of the largest AAR datasets ever compiled. The calibrated shell ages of the shells range in age from modern to a maximum age of ~10,500 years. The distribution of the ages is right skewed with a long tail that slowly tapers off, but nonetheless includes multiple specimens from previous millennia extending back in time to the earliest Holocene. The presence of old shells as well as their completeness through time indicates a long residence time at (or near) the sediment surface and suggests that sedimentation rates during the Holocene must have been limited in the study area and that total accumulation of sediment was close to zero. Racemization rates estimated via radiocarbon were similar across all sites, which varied in depth from 10 to 57 meters. The absence of notable bathymetric variation in racemization rates,

which are highly dependent on thermal histories of dated specimens, suggests that water depth had a limited effect on long-term average seafloor temperature. Consequently, a single calibration formula, combining radiocarbon dates from all sampled sites, is applicable in the study area for all *Semele casali* specimens. This allows for a much more robust estimate of racemization rates (based on 35 radiocarbon dates) and for using the resulting calibration for specimens collected from other sites in the study area. Moreover, the age distributions do not change notably when different calibration models and different dating assumption (e.g., the value of reservoir effect) are applied to derive shell ages. For each site, the shell age distribution provides a continuous centennial-resolution record for the last 1000 years, and when all data are combined, the dated specimens provide nearly continuous millennial-resolution record for the entire Holocene. Long time series of AAR-dated shells can be derived from surficial sediments and should provide another important source of historical data (e.g., stable isotopes, trace elements, and other specimen-based information) for reconstructing environmental and ecological changes in marine settings through the Holocene.

Introduction

Biomineralized structures, such as bivalves, brachiopods, and forams, collected within or at the sediment surface represent wide ranges in time when directly dated (Flessa et al. 1993; Wehmiller et al. 1995; Martin et al. 1996; Meldahl et al. 1997; Anderson et al. 1997; Flessa 1998; Kowalewski et al. 1998; Carroll et al. 2003). Studies of dated specimens provide information on taphonomic, sedimentary, and climatic processes, and as such underline the value of collecting numerous age dates. As advancements continue to be made to our technological instrumentation, it is becoming

increasingly easier to gather large data sets and analyze the age structure of a region with these efficient and cost-effective dating methods. This study presents the results of a large dated data set of the bivalve *Semele casali*, in which valves were dated using amino acid racemization rates calibrated against radiocarbon.

In this study, 275 sub-fossil to Recent shells of the bivalve species *Semele casali* collected from Ubatuba Bay, Sao Paulo, Brazil, were analyzed for their amino acid racemization [AAR] ratios to date the specimens and determine the age structure of local shell assemblages. The specimens were collected at multiple water depths from numerous sites throughout the area. Rates of amino acid racemization have been used as a dating method for many different biogenic materials in numerous studies focused primarily on time-averaging in shell accumulations (Flessa et al. 1993; Wehmiller et al. 1995; Goodfriend and Stanley 1996; Martin et al. 1996; Anderson et al. 1997; Meldahl et al. 1997; Flessa 1998; Kowalewski et al. 1998; Carroll et al. 2003; Kidwell et al. 2005; Kosnik et al., 2007). Amino acid racemization allows for a rapid and cost effective means of determining the ages of large numbers of specimens. Usually, the rates of racemization are calibrated using carbon 14 radiometric dating of a subset of the specimens.

Our effort builds on two previous studies focused on dating of the bivalve *S. casali* in the study area (Barbour Wood et al., 2006; Krause et al., 2010). Whereas these previous studies included a combined total of 75 AAR dated specimens, we report here results that add additional 200 specimens, substantially augmenting our estimates of age distributions. Also, 23 new radiocarbon dates are included here allowing us to revise the calibration (originally based on 12 dates only) and estimate the methodological volatility of our results as the dataset grows. In addition, the much larger dataset provides powerful

insights into the temporal structure of the sampled shell assemblages. Finally, by combining the data of specimens from multiple sites throughout an area, local stochastic variation, which potentially has a large effect on the temporal distribution of specimens (Krause et al. 2010), can be minimalized to reveal larger scale patterns.

Methods

The studied specimen, *Semele casali* is a small, relatively thin-shelled infaunal deposit feeding bivalve ranging from 20-35° South latitude at water depths ranging from 10 to 180 meters (Narchi and Domaneschi 1977). Ubatuba Bay is a humid, tropical area at 23° south latitude off the east coast of São Paulo state in Brazil. Specimens of *Semele casali* come from the shallow inner shelf of the Southeast Brazilian Bight marine province. The South Brazilian current is the primary water mass, providing the area with warm, saline waters that have an average annual surface temperature of 24°C and a salinity of 34–35‰ (Campos et al. 1999, Krause et al. 2010). The area is composed primarily of terriginous siliciclastics ranging in size from coarse sands to gravel in shallow water sites and from medium to coarse sands in deeper collection sites (Campos et al. 1999).

Shells were collected by dredging, with a van Veen grab, or with a box corer from 14 different sites within the area of Ubatuba Bay, Brazil. Samples were collected at 10, 15, 20, 25, 30, 35, 45, and 57 meters water depth. Sediment collected from these sites was wet sieved and specimens of the bivalve *Semele casali* were removed for analysis. Specimen numbers from each site ranged from a single collected valve (at two of the sites) to 63 collected valves. Samples included numerous disarticulated, unfragmented

valves ranging in size from 10 to 20 mm. Specimens were cleaned with a Dremel® Multi-Pro™ Model 395 to remove encrusting epibionts and authigenic minerals.

The external shell layer was removed from the anterior end and less than 1 mg of material was sampled from this area on each of the specimens for amino acid racemization dating. Ratios of D/L were measured for serine, alanine, aspartic acid, and glutamic acid. Aspartic acid was the amino acid chosen to date the specimens. Aspartic and glutamic acid ratios were compared to one another as part of a screening process. Although racemization rates vary across amino acids, when comparing the ratios for two amino acids derived for the same set of samples, the values are expected to correlate. This occurs because all the amino acids within the same specimen have been racemizing for the same amount of time. Substantial outliers are likely to represent errors in the analysis and any outliers indicative of the sampling error were removed from the study. The screening process for outliers was done through visual inspection (see Results). This screening process was conducted only for shells analyzed in this study because previously analyzed specimens had been already pre-screened (see Barbour Wood et al., 2006; Krause et al., 2010).

The amino acid racemization ratios were analyzed at two facilities over the course of this project. 75 specimens were analyzed at the University of Delaware in a previous study (Barbour Wood et al. 2006) using an Agilent 6890 Gas Chromatograph. The remaining 200 specimens were analyzed at Northern Arizona University using reverse phase liquid chromatography with a Hewlett-Packard HP1100 liquid chromatograph and an HP1046A programmable fluorescence detector (Kaufman and Manly 1998). Analyses on 33 specimens were conducted at both facilities to ensure that the results attained at

both facilities were similar and due to concerns about overheating in the method effecting racemization ratios (see Krause et al. 2010 for an explanation on how the two data sets were combined).

Of the 275 *Semele casali* shells analyzed for amino acids ratios, 35 were sent for ^{14}C dating (Table 3.1). A previous study (Barbour Wood et al. 2006) reported ten valves dated at the National Ocean Sciences Accelerator Mass Spectrometry Facility (NOSAMS) at Woods Hole Oceanographic Institute. The other 25 valves (two from the study by Krause et al. 2010 and 23 new dates reported here) were dated by the Keck Carbon Cycle Accelerator Mass Spectrometry Facility at the University of California-Irvine (UCI-KCCAMS).

Radiometric ages were calibrated with CALIB version 5.0 (Stuiver et al., 2005) using the databases SHCal04 (Southern Hemisphere) and marine04.14c (Hughen et al., 2004; McCormac et al., 2004). A mean marine reservoir age of 408 ± 18 yr (ΔR 8 ± 17) was assumed as established by Angulo et al. (2005). A 2-sigma age range around the median probability age was also determined to account for reservoir effect (Table 3.1). Ages are calibrated relative to 1950 AD (1950 AD = 0 BP).

Amino acid racemization values were power transformed in order to calculate the formula for the conversion of AAR ratios to years as determined by carbon 14 radiometric dating. The power transformation was determined by iterative increasing the power of the function and calculating the r-squared until reaching the best fit (see method by Barbour Wood et al. 2006). Major axis regression using the linear function was conducted in PAST version 2.04 to account for error on the x axis.

Table 3.1. AMS ^{14}C dates used to calibrate aspartic acid D/L ratios. Data were collected using two radiometric laboratories (National Ocean Sciences Accelerator Mass Spectrometry Facility and Keck Carbon Cycle Accelerator Mass Spectrometry Facility). AMS ^{14}C ages were calibrated using CALIB version 5.0 (Stuiver et al. 2005).

Specimen Number	14C Lab	14C Lab Number	Specimen Depth (m)	Fraction Modern	14C Age	Calibrated age	2σ (lower bound)	2σ (upper bound)	D/L Asp	References
91071	NOSAMS	OS-42389	10	1.11	>Modern	0	.	.	0.071	Barbour-Wood et al. 2006
91062	NOSAMS	OS-39672	10	0.91	745 ±35	378	292	462	0.160	Barbour-Wood et al. 2006
91075	NOSAMS	OS-42453	10	0.71	2770 ±30	2484	2347	2615	0.246	Barbour-Wood et al. 2006
91077	NOSAMS	OS-43397	10	0.90	855 ±50	474	352	552	0.143	Barbour-Wood et al. 2006
13077	NOSAMS	OS-39670	30	0.95	375 ±35	0	.	.	0.072	Barbour-Wood et al. 2006
13081	NOSAMS	OS-42384	30	0.93	555 ±30	183	64	274	0.083	Barbour-Wood et al. 2006
13087	NOSAMS	OS-42385	30	0.93	590 ±25	222	127	290	0.111	Barbour-Wood et al. 2006
13088	NOSAMS	OS-39671	30	0.87	1130 ±30	676	621	746	0.173	Barbour-Wood et al. 2006
13075	NOSAMS	OS-43396	30	0.85	1350 ±50	883	750	1002	0.160	Barbour-Wood et al. 2006
13071	NOSAMS	OS-39673	30	0.68	3050 ±35	2808	2730	2913	0.273	Barbour-Wood et al. 2006
91050	UCI-KCCAMS	29524	10	0.82	1595 ±15	1151	1065	1227	0.228	Krause et al. 2010
13050	UCI-KCCAMS	29522	30	0.85	1315 ±25	851	766	922	0.188	Krause et al. 2010
182531	UCI-KCCAMS	62185	25	0.95	435 ±20	0	.	.	0.088	Current Study
182542	UCI-KCCAMS	62187	25	0.93	585 ±20	217	130	282	0.129	Current Study
182517	UCI-KCCAMS	62184	25	0.86	1210 ±20	738	670	814	0.154	Current Study
182551	UCI-KCCAMS	62190	25	0.86	1250 ±20	782	708	879	0.178	Current Study
182537	UCI-KCCAMS	62186	25	0.84	1370 ±20	911	819	974	0.206	Current Study
182558	UCI-KCCAMS	62192	25	0.76	2160 ±20	1747	1657	1837	0.229	Current Study
182502	UCI-KCCAMS	62183	25	0.65	3465 ±20	3341	3253	3414	0.269	Current Study
182544	UCI-KCCAMS	62188	25	0.45	6450 ±20	6929	6833	7023	0.301	Current Study
182556	UCI-KCCAMS	62191	25	0.44	6545 ±20	7057	6963	7147	0.330	Current Study
182550	UCI-KCCAMS	62189	25	0.39	7480 ±20	7936	7858	7997	0.377	Current Study
182528	UCI-KCCAMS	63897	25	0.78	2040 ±15	1597	1525	1682	0.212	Current Study
182535	UCI-KCCAMS	63898	25	0.88	1070 ±20	634	557	674	0.167	Current Study
182541	UCI-KCCAMS	63899	25	0.79	1925 ±15	1461	1383	1532	0.189	Current Study
182557	UCI-KCCAMS	63900	25	0.91	785 ±25	425	324	484	0.140	Current Study
182560	UCI-KCCAMS	63901	25	0.78	2005 ±15	1558	1485	1656	0.218	Current Study
451002	UCI-KCCAMS	63902	10	0.83	1540 ±20	1089	996	1169	0.195	Current Study
451012	UCI-KCCAMS	63903	10	0.51	5375 ±25	5730	5640	5848	0.406	Current Study
451013	UCI-KCCAMS	63904	10	0.53	5045 ±20	5383	5305	5459	0.346	Current Study
451021	UCI-KCCAMS	63905	10	0.58	4410 ±20	4553	4437	4655	0.324	Current Study
451022	UCI-KCCAMS	63906	10	0.67	3175 ±20	2958	2857	3060	0.269	Current Study
451005	UCI-KCCAMS	72302	10	0.70	2820 ±15	2574	2459	2682	0.279	Current Study
182510	UCI-KCCAMS	72303	25	0.57	4510 ±15	4714	4604	4803	0.273	Current Study
182505	UCI-KCCAMS	72304	25	0.51	5415 ±15	5787	5705	5873	0.313	Current Study

Results

This study analyzed 200 specimens for amino acid racemization ratios and 23 for ^{14}C radiometric dates. Barbour Wood et al. (2006) analyzed 9 bivalves for amino acid ratios and carbon 14 radiometric dates. Krause et al. (2010) analyzed 65 bivalves for amino acid ratios and 2 additional bivalves for ^{14}C radiometric dates. Further, a single specimen was analyzed in both studies for amino acid ratios and ^{14}C. A total of 275 amino acid analyses and 35 ^{14}C analyses were collected from all the studies combined. The analyzed specimens were collected from 15 different sites from Ubatuba Bay. Some sites had the same water depth, and specimens from the combined studies were collected at 8 different water depths; 10, 15, 20, 25, 30, 35, 45, and 57 meters.

Ratios of aspartic acid and glutamic acid of the individual specimens were compared against one another for the 200 specimens analyzed in this study to detect any measurement error in the analysis of the amino acids (Fig. 3.1). This is a one of the screening methods used to detect machine error; others include serine contamination and measurement repetition (Kosnik and Kaufman 2007). There was one noticeable outlier in the dataset that was removed from the study. Reported aspartic acid values from the two previous studies were taken as is and used in concordance with the new amino acid ratios, giving a total of 274 specimens analyzed for the age structure of the region.

A linear regression calibration model was established using 35 ^{14}C ages and the corresponding aspartic acid ratios estimated for the same specimens to develop a conversion formula (Fig. 3.2). The aspartic acid ratios were power transformed to linearize the data and it was determined that aspartic acid ratios had the best fit when raised to the power of 1.9. This is a common practice of AAR studies to linearize the data. Major axis regression was conducted on the power transformed data which produced a regression with the following formula (Fig. 3.2):

$$Age = (Asp^{1.9} - 0.01841)/1.905 * 10^{-5}$$

This major axis regression returned a calculated r^2 value of 0.8477. The standard error of estimate from this formula is ±882 years. This combined-data conversion formula was used to date all 274 specimens; including recalibrating the previously dated aspartic acid ratios from the previous studies to this new, more robust formula (Fig. 3.3). The distribution was right skewed with a calculated skewness statistic of +1.97 and the distribution had a range of about 10,598 years. Out of 274 specimens, only 69 (25%) are considered to be modern (existing at or after 1950) with 74 specimens occurring within

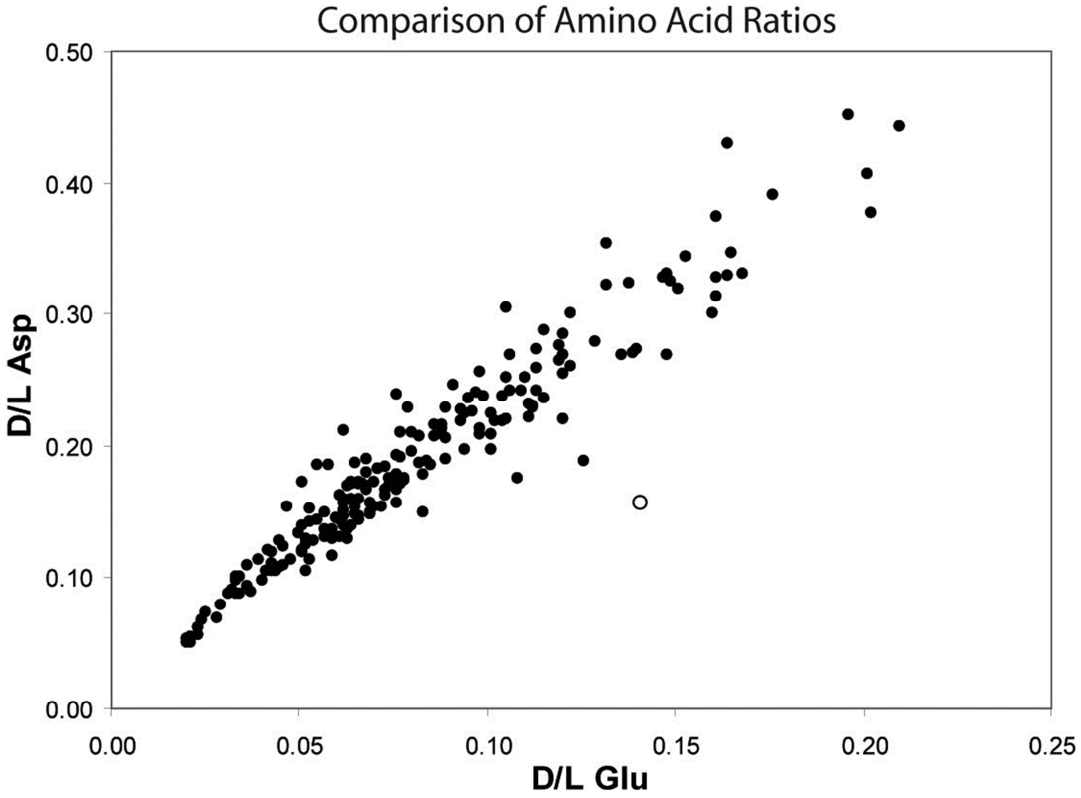

Figure 3.1. Comparison of the D/L ratios between aspartic and glutamic amino acids. Although the racemization rates differ between amino acids, the amount of time each represents in a single specimen is the same. Therefore any outliers when comparing the two amino acids to one another is likely indicative of a bad analysis. A single specimen (open circle on graph) was considered an outlier and removed from the study.

the last century. The distribution had 108 specimens (39%) occurring within the last 500 years. Half of the specimens are less than 1,000 years old; with an arithmetic mode of 865 years. With the sample size from this study, the age distribution shows a nearly complete centennial record (92.5% of the centuries with recorded dates) as far back as 4,000 years, with only three bins incomplete. At a bin size of 500 years, the record is complete for 7,500 years before present (Fig. 3.3).

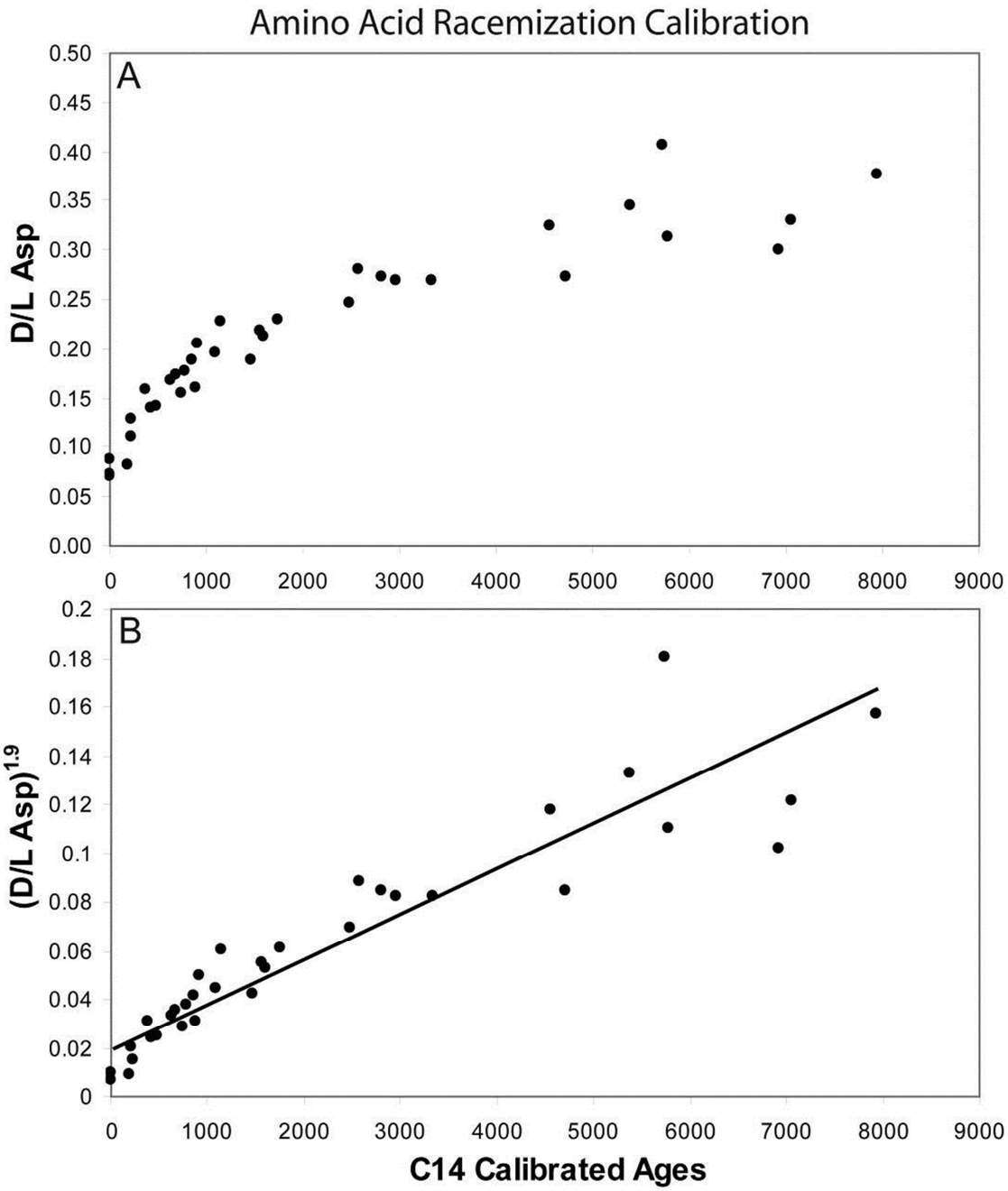

Figure 3.2. Comparison of amino acid ratios and ^{14}C ages. A: 35 specimens analyzed for both aspartic acid D/L ratios and carbon 14 radiometric ages. B: Power transformation of aspartic acid D/L ratios compared to calibrated C14 ages. Major axis regression (solid line) was conducted to calculate the conversion formula.

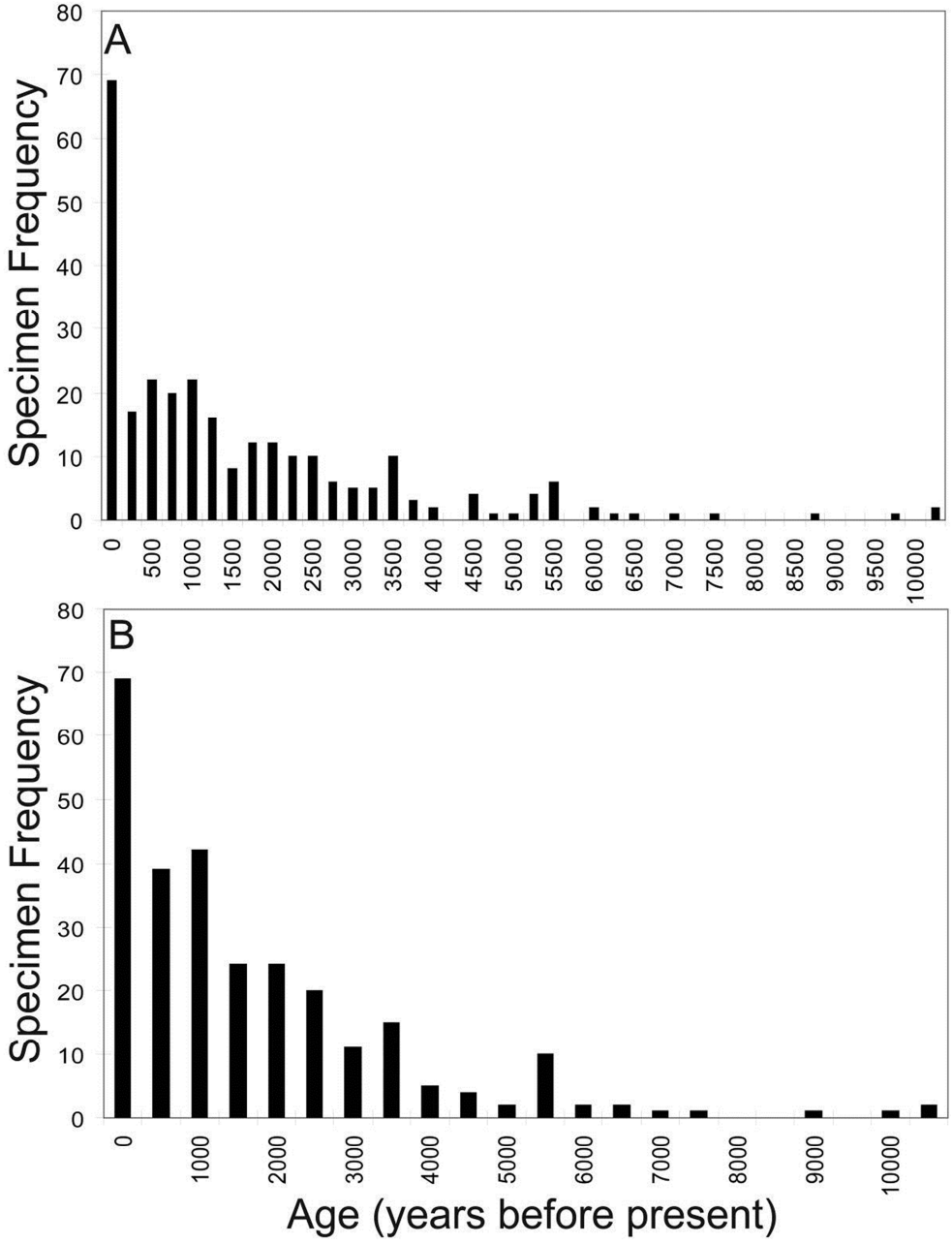

Figure 3.3. Age frequency of the 274 analyzed specimens of *Semele casali*. Ages were determined through a single calibration formula calculated using 35 C14 radiometric dates. Specimens range in age from modern to over 10,000 years. Specimens were grouped into two different bin sizes; 250 year intervals (A) and 500 year intervals (B). The structure of the age frequency is maintained when the bin size is varied, showing this continuous distribution through time.

As additional ^{14}C radiometric dates were collected, the formula for conversion was updated resulting in different ages when the AAR rates were converted (Table 3.2). In order to determine how great an effect the additional ^{14}C data had on the calculated temporal distribution of specimens, the separate published conversion formulas were compared to one another. The published conversion formulas were depth specific and only specimens from 10 meters and 30 meters had been analyzed, so in order to compare the current conversion formula to previous results, all samples from 10 and 30 meters were used to make comparisons between the two previously reported conversion formulas (Fig. 3.4). The distribution of ages for the previously published conversion formulas and the current formula are displayed along with the cumulative frequencies of all three formulas (Fig. 3.4). The calculated temporal range is lowest for the conversion formula with the least data (Fig. 3.4, C and F). The temporal range is extended with additional data, but the structure remains comparable. There is little difference between the formulae reported by Krause et al. (2010) and the current study as both have similar structure and temporal range (Fig. 3.4).

Discussion

The valves of *Semele casali* are small, thin shells that are quite fragile, and yet the amino acid racemization data has a temporal distribution that demonstrates these shells have a long residency time in the sediment (Fig. 3.3). The level of completeness acquired by such a large sample size suggests the sedimentary processes involved in burial and preservation remain relatively unchanged through time in this area. Age frequency distributions of valves from other localities show a rapidly tapering off tail with only

Table 3.2. Evolution of the calibration formula. The formulae were originally separated by depth, however as additional data was collected the formulae were modified and a single formula was developed. The aspartic acid D/L ratios were power transformed, and the power was determined by iteratively raising to the best fit.

Study	Depth (m)	N	Asp Power	Slope	Intercept
Barbour-Wood et al. 2006	10	3	3.1	1.137E-05	0.00014
Barbour-Wood et al. 2006	30	6	3.1	6.440E-06	0.00065
Krause et al. 2010	10	5	2.9	6.700E-06	0.00050
Krause et al. 2010	30	7	2.9	8.800E-06	0.00030
Current Study	All	35	1.9	1.905E-05	0.01841

spotty occurrences of samples farther back in time, even when a substantial number of valves have been dated (Kowalewski et al. 1998 [n=165]; Kosnik et al. 2007 [n=250]). Conversely, age frequency distributions of the brachiopod *Buchardia rossea* from the same area demonstrate a similar age structure that slowly tapers off through time, although with the smaller sample size (n=103) the maximum age range is less than in this study (Carroll et al. 2003; Krause et al. 2010). It is unlikely that the valves themselves have a greater potential for long term preservation since they are thin and fragile; and because a similar age distribution occurs with valves from a completely different phylum (Carroll et al. 2003; Krause et al. 2010). So intrinsic factors about the locality must be responsible for the unique preservation potential of specimens.

The additional ^{14}C radiometric dates used to calibrate the amino acid racemization data had values that tended to fall along the same curve independent of locality or water depth which suggested that a single calibration formula could be used for the entire region (Fig. 3.2 A). Having multiple sites and multiple depths compared concurrently rather than separately allows for a larger, regional perspective and would not be possible if the thermal history between localities was substantially different. This suggests that

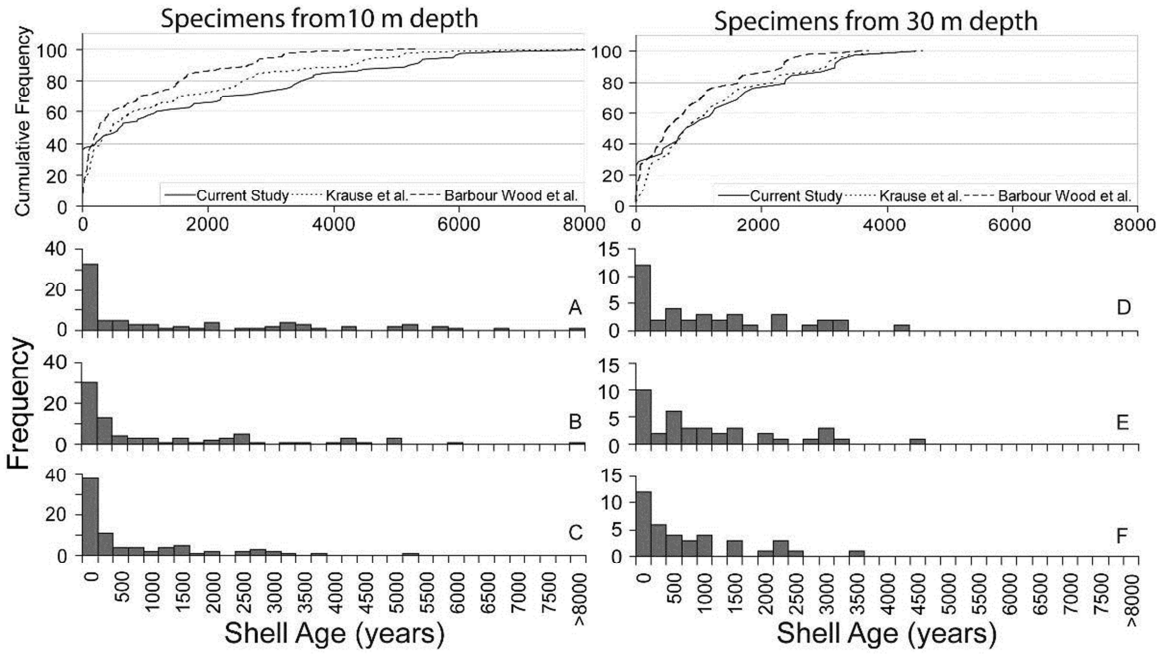

Figure 3.4. Comparison of the different formulae used to calibrate amino acid racemization rates into ages. Specimens from 10 meters water depth (n=81, graphs on left) and 30 meters water depth (n=38, graphs on right) were used since previous reported calibrations were specific to those depths. The cumulative frequency of ages at the top show the three formula with the solid line representing the current study using a single calibration formula for all depths and the dashed and dotted lines showing the previous studies specific to those depths. Graphs A and D show the age frequency of specimens from 10 meters and 30 meters water depth respectively and were calculated using the single calibration formula from this study. Graph B and E use the formulae reported by Krause et al. (2010) for 10 and 30 meters water depth (see Table 3.2). Graph C and F use the formulae reported by Barbour Wood et al. (2006) for 10 and 30 meters water depth (see Table 3.2). The additional calibration data from this study allow for a single formula that can be applied to specimens of different depths without compromising the overall structure as evidenced by comparison to the depth specific formulae.

there was a homogenous thermal history through time in this region and that the area was never sub-aerially exposed.

The Holocene sediments in this area are typically barrier sands of approximately 8 to 21 meters thick overlaying thick (<29 meters) organic rich muds that are interpreted to be estuarine in origin (Lessa et al. 2000). Previous studies have determined that the sea

level in this region has remained relatively unchanged for the past 5,000 years with as little as 3.5 meters of sea level fall since the Holocene maximum (Angulo et al. 1999, 2004; Martin et al. 1996; Angula and Lessa 1997; Lessa et al. 2000; Baker et al. 2001). About 1.5 meters of sea level fall occurred within the last 1,000 years with progradation of the sediments into the shelf following this fall (Lessa et al. 2000). These sea level fluctuations have magnitudes too low to expose our most shallow sampling sites. Having the locality consistently submerged underwater would buffer the samples from the more extreme temperature fluctuations (and taphonomically destructive conditions) of subaerial exposure and are certainly a necessary requirement for the calibration of amino acid racemization rates across extensive areas as well as for the long term preservation of specimens.

Conclusions

This study analyzed the age-frequency distribution of 275 *Semele casali* valves from 15 different sites (8 distinct water depths) within Ubatuba Bay, Sao Paulo, Brazil using amino acid racemization calibrated with ^{14}C radiometric dates collected on 35 of the valves. A single calibration formula could be applied to all sites independent of water depth suggesting that the thermal history of the locality was spatially consistent. By having a spatially extensive area under consideration, regional patterns in sedimentation rates, taphonomic processes, and sea level variation can be analyzed where they would otherwise be overwhelmed by local site-to-site extrinsic variation. Samples range in age from modern to 10,500 years before present. The age distribution of the samples had a very long tail that slowly tapered off and the preserved age record was nearly complete. This is far different from other studies with frequency distributions that possess short,

rapidly falling off tails and suggests that the limited fluctuation of water level and slow sedimentation rates allow valves, once buried in the sediment, to remain unaltered for long periods of time. In such localities it is possible to use fewer ^{14}C radiometric dates than in localities with higher taphonomic degradation in order to calibrate amino acid racemization rates. Further, localities with high preservation potential through time such as this represent excellent candidates for geochemical studies of biomineralized materials, such as stable isotopes or trace elements, since the completeness of the record can allow comparisons about environmental conditions through time.

Acknowledgements

This study was supported by National Science Foundation grants OCE-0602375 (Virginia Tech, Savannah River Ecology Laboratory of the University of Georgia, and Northern Arizona University) and EAR-0125149 (Virginia Tech, George Washington University, and University of Delaware), the Petroleum Research Fund of the American Chemical Society (40735-AC2) and the São Paulo State Science Foundation [FAPESP] (00/12659-7, São Paulo State University). Funding was also provided from the Department of Geosciences at Virginia Tech (for TAD, RAK, SLBW, and JWH).

References

Anderson, L.C., B.K. Sen Gupta, R.A. McBride, and M.R. Byrnes. 1997. Reduced seasonality of Holocene climate and pervasive mixing of Holocene marine section: Northeastern Gulf of Mexico shelf. Geology 25: 127–130.

Angulo, R. J., P. C. F. Giannini, K. Suguio, and L. C. R. Pessenda. 1999. Relative sea-level changes in the last 5500 years in southern Brazil (Laguna-Imbituba region, Santa Catarina State) based on vermetid 14C ages. Marine Geology 159:323-339.

Angulo, R. J.and J. C. Lessa. 1997. The Brazilian sea-level curves: A critical review with emphasis on the curves from the Paranguá and Cananéia regions. Marine Geology 140:141–166.

Angulo, R. J., J. C. Lessa, and M. C. de Souza. 2004. A critical review of mid- to late-Holocene sea-level fluctuations on the eastern Brazilian coastline. Quaternary Science Reviews 25:486–506.

Angulo, R. J., M. C. de Souza, P. J. Reimer, and S. K. Sasaoka. 2005. Reservoir effect of the Southern and Southeastern Brazillian Coast. Radiocarbon 47: 67–73.

Barbour Wood, S. L., R.A. Krause Jr., M. Kowalewski, J. Wehmiller, and M. G. Simões. 2006. Aspartic acid racemization dating of Holocene brachiopods and bivalves from the southern Brazilian shelf, South Atlantic. Quaternary Research 66: 323–331.

Baker, R.G.V., R. J. Haworth, and P. G. Flood. 2001. Warmer or cooler late Holocene marine palaeoenvironments? Interpreting southeast Australian and Brazilian sea-level changes using fixed biological indicators and their $\delta^{18}O$ composition. Palaeogeography, Palaeoclimatology, Palaeoecology 168, 249–272.

Campos, E.J.D., C.A.D. Lentini, J.L. Miller, and A.R. Piola. 1999. Interannual variability of the sea surface temperature in the South Brazil Bight. Geophysical Research Letters 26(14): 2061–2064.

Carroll, M., M. Kowalewski, M. G. Simoes, and G. A. Goodfriend. 2003. Quantitative estimates of time-averaging in brachiopod shell accummulations from a modern tropical shelf. Paleobiology 29(3):381–402.

Flessa, K. W., A. H. Cutler, and K. H. Meldahl. 1993. Time and taphonomy: quantitative estimates of time -averaging and stratigraphic disorder in a shallow marine habitat. Paleobiology 19:266–286.

Flessa, K. W. 1998. Well-traveled cockles: Shell transport during the Holocene transgression of the southern North Sea. Geology 26: 187–190.

Goodfriend, G. A., and D. J. Stanley. 1996. Reworking and discontinuities in Holocene sedimentation in the Nile Delta: documentation from amino acid racemization and stable isotopes in mollusk shells. 823 . Marine Geology 129: 271–283.

Hughen, K. A., M. G. L. Baillie, E. Bard, A. Bayliss, C. J. H. Bertrand, P. G. Blackwell, C. E. Buck, G. S. Burr, K. B. Cutler, P. E. Damon, R. L. Edwards, R. G. Fairbanks, M. Friedrich, T. P. Guilderson, B. Kromer, F. G. McCormac, S. W. Manning, C. Bronk Ramsey, P. J. Reimer, R. W. Reimer, S. Remmele, J. R. Southon, M. Stuvier, S. Talamo, F. W. Taylor, J. van der Plicht, and C. E. Weyhenmeyer. 2004. Marine04 marine radiocarbon age calibration, 26-0 ka BP. Radiocarbon 46:1059–1086.

Kaufman, D. S. and W. F. Manley. 1998. A new procedure for determining DL amino acid ratios in fossils using reverse phase liquid chromatography. Quaternary Science Reviews 17:987-1000.

Kidwell, S. M., M. M. R. Best, and D. S. Kaufman. 2005. Taphonomic trade-offs in tropical marine death assemblages: Differential time averaging, shell loss, and probable bias in siliciclastic vs. carbonate facies. Geology 33: 729–732.

Kosnik, M.A., Q. Hua, G.E. Jacobsen, D.S. Kaufman, R. A. Wüst. 2007. Sediment mixing and stratigraphic disorder revealed by the age-structure of *Tellina* shells in Great Barrier Reef sediment. Geoogy 35: 811–814.

Kowalewski, M., G. A. Goodfriend, and K. W. Flessa. 1998. High-resolution estimates of temporal mixing within shell beds: the evils and virtues of time-averaging. Paleobiology 24(3):287–304.

Krause Jr., R.A., S.L. Barbour Wood, M. Kowalewski, D.S. Kaufman, C. S. Romanek, M. G. Simões, and J. F. Wehmiller. 2010. Quantitative comparisons and models of time-averaging in bivalve and brachiopod shell accumulations. Paleobiology, 36:428–452.

Lessa, G.C., R. J. Angulo, P. C. Giannini, and A. D. Araujo. 2000, Stratigraphy and Holocene evolution of a regressive barrier in South Brazil. Marine Geology 165:87–108.

McCormac, F. G., A. G. Hogg, P. G. Blackwell, C. E. Buck, T. F. G. Higham, and P. J. Reimer. 2004. SHCal04 Southern hemisphere calibration 0-11.0 cal kyr BP. Radiocarbon 46:1087–1092.

Martin, L. K., Suguio, J. M. Flexor, M. L. Dominguez, and C. S. P. Bittencourt. 1996. Quaternary sea-level history and variation in dynamics along the central Brazilian coast: consequences on coastal plain construction. Anais de Academia Barsileira de Ciencias 68:303–354.

Martin, R. E., J. F. Wehmiller, M. S. Harris, and W. D. Liddel. 1996. Comparative taphonomy of bivalves and foraminifera from Holocene tidal flat sediments, Bahia la Choya, Sonora, Mexico (northern Gulf of California): taphonomic grades and temporal resolution. Paleobiology 22:80–90.

Meldahl, K. H., K. W. Flessa, and A. H. Cutler. 1997. Time averaging and postmortem skeletal survival in benthis fossil assemblages: quantitative comparisons among Holocene environments. Paleobiology 23:207–229.

Narchi, W., and O. Domaneschi. 1977. Semele casali – Jurado, 1949 (Mollusca, Bivalvia) in the Brazilian littoral. Studies on Neotropical Fauna and Environment 12:263–272.

Stuiver, M., P. J. Reimer, and R. W. Reimer. 2005. CALIB 5.0.2, Radiocarbon calibration program, http://calib.qub.ac.uk/calib/.

Wehmiller, J. F., L. L. York, and M. L. Bart. 1995. Amino-acid racemization geochronology of reworked Quaternary mollusks on U.S. Atlantic coast beaches: implications for chronostratigraphy, taphonomy, and coastal sediment transport. Marine Geology 124:303–337.

Chapter 4

Indirect Estimates of Growth Rates in Extant and Fossil Organisms: A Jackknife-Corrected Bootstrap Of Nearest Living Relatives

By Troy A. Dexter and Michal Kowalewski

Chapter will be submitted for publication in Ecology in 2011

Abstract

Quantitative estimates of growth rates can augment biological and non-biological applications of body-size data. However, in contrast with body-size estimates, assessing growth rates is often time-consuming, expensive, or unattainable. We propose an indirect approach, a jackknife-corrected parametric bootstrap, for efficient approximation of growth rates using nearest living relatives with known age-size relationships. Using marine bivalves, we illustrate a four-step protocol applicable to diverse organisms, including fossil groups with extant relatives, as long as sufficient growth rate data of closely related species already exist. By statistically bracketing the possible age ranges of an organism as a function of its body size, a temporal context of body size data can be estimated thus allowing for improved evaluation of many questions, from maximum sustainable rates of shellfish harvesting to climatic interpretations of stable isotope proxies extracted from fossil skeletons.

Introduction

Body size is one of the most fundamental biological variables that can be estimated quantitatively for most organisms, both extant and fossil, using direct measurements. In contrast, comparably fundamental biological parameters – age of individuals and growth rates controlling age-size relationships within populations – are

more difficult to estimate. Moreover, because growth rates vary within and across species, estimating growth rates for any given population may require new field or laboratory data, even for extant groups with distinct morphogenetic phases for which pre-existing growth-rate estimates are available in the literature. Estimating age-size relationships is even more challenging for organisms with indeterminate growth, and especially, for all fossil groups. We propose an indirect method for estimating age and growth rates of individuals and populations for which direct field or laboratory data are not available. In this approach, growth-size relationships for individuals and populations of interest are approximated indirectly, by applying a statistically conservative resampling approach to literature growth rate estimates reported for populations of nearest living relatives inhabiting comparable environments.

A two-pronged rationale motivates this study. First, estimates of growth rates in individuals and populations have wide applications within biological sciences and beyond. For example, in applied and environmental contexts, from conservation biology to the aquaculture industry, even an approximate knowledge of growth rates can help to assess short-term ecological changes, recovery times from environmental disturbances and pollution, or maximum sustainable yields in food sources (Beverton and Holt 1957; Chapman 1961; Saucedo and Monteforte 1997; Arneri et al. 1998; Gaspar et al. 1999; Melchor-Aragón et al. 2002; Laudien et al. 2003; de Nóbrega and Lessa 2009). There are also multiple non-biological applications of growth rate estimates. For example, in geochemical and paleoclimatologic studies biomineralized skeletons (e.g., mollusk shells) are sampled to obtain diverse geochemical proxies of various environmental and climatic parameters (Romanek and Grossman 1989; Ivany et al. 2000; Goodwin et al.

2003; Dettman et al. 2004; Carré et al. 2005; Carroll et al. 2006; Riascos 2006). Such geochemical data often represent a spatial series of microsamples collected along the growth axis of the skeleton. Consequently, an understanding of skeletal growth rates can be critical for interpreting extracted patterns (e.g., do environmental fluctuations suggested by changes in geochemical proxies record subseasonal, multi-seasonal, or multi-decadal records?). Another obvious application of indirect growth rate estimates involves paleontological samples. In such cases, growth estimates cannot be directly measured and only rarely can be inferred using other approaches such as stable isotope sclerochronology, an indirect approach that requires substantial lab work (e.g., Steuber 1996; Kirby et al. 1998).

The second rationale for this study is the fact that even for cases where direct growth estimates are obtainable, the indirect method proposed here does not require substantial data collecting. This is a key advantage when growth rate estimates are needed but do not represent the primary research target and can be applied when direct techniques are not applicable (e.g., the fossil record). Admittedly, the indirect method proposed here is much less precise and accurate than direct methods such as notching, tag/recapture, and other techniques (see methods in Pearson and Munro 1991; Mitchell et al. 2000; Melchor-Aragón et al. 2002). However, these direct approaches are typically major undertakings that are not only time-demanding and field-intensive, but also ecologically invasive. Our approach, on the other hand, requires only limited data harvesting and analytical time while providing growth rate estimates that may be adequate for many biological and non-biological applications.

To demonstrate and evaluate our approach, we will focus here on marine bivalves. There is a sizeable collection of published data available on the growth rates of bivalves, due in large part to the numerous practiced methods of ascertaining age and growth rate from their valves. Bivalves grow through the accretion of biominerals along the shell edge. This type of development can result in internally and externally discernible growth bands in the shell that can be calibrated by the rate of growth to determine specimen age. Bivalve shells can also be notched or tagged to determine growth rates while effectively leaving the examined specimen unharmed. Another reason for the abundance of published bivalve growth rate data is the wide range of fields to which this information is applicable, including marine biology, ecology, paleontology, geochemistry, paleoclimatology and the shellfish industry.

The reliability and robustness of the indirect approach proposed here is evaluated for three families of marine mollusk bivalves. In addition, the applicability of the resulting estimates is illustrated using geochemical data obtained for a species representing one of the three targeted bivalve group.

Indirect Resampling Approach for Estimating Growth Rates

Generalized Protocol

We propose a four-step protocol for indirectly estimating growth rate of a specimen (or a monospecific sample of specimens) with unknown age-size relationship using nearest living relatives for which growth rates are available:

1. Empirical growth rates reported previously for the same or closely related species (preferably congeneric or confamilial species) are compiled from the literature. These estimates should represent comparable environmental

settings to those from which the examine sample was collected and should thus be evaluated for extrinsic sources of variation, such as temperature and nutrient levels. The resulting dataset provides a sample of empirical growth curves for nearest living relatives of the species that is being estimated.

2. An average growth curve of nearest living relatives is computed using some measure of central tendency applied to empirical growth-size data. Here, parametric approximations (3-parameter von Bertalanffy growth functions) are used to summarize growth curves and compute average curves (see below).
3. A resampling strategy is applied to nearest living relatives to estimate standard errors and confidence bands around the average growth curve obtained in Step 2. A parametric bootstrap (based on resampling of von Bertalanffy parameters) is used to estimate an expected sampling distribution of growth curves. In addition, a "leave-one-out" (jackknife-style) correction is applied to provide more realistic error rate estimates.
4. The jackknife-corrected bootstrap estimates are then applied to the sample of interest to convert size data into age data. We recommend (conservatively) that 2.5^{th} and 97.5^{th} percentiles of jackknife-corrected sampling distributions be applied to derive estimates of minimum and maximum growth rates for specimen(s) of interest.

The proposed four-step protocol assumes that the empirically estimated growth rates of nearest living relatives and the unknown growth rates of the species of interest came from the same underlying population of growth rates. The jackknife correction, by

evaluating each species/sites with known growth rates as if it were unknown, provides more conservative estimates of growth rate errors.

In practice, the generalized protocol outlined above will vary in detail when applied to specific datasets. In particular, decisions have to be made regarding: (1) the method of measuring growth rates; (2) an appropriate estimate of central tendency; and (3) practical details of resampling procedure. Below, we discuss those decisions in the context of organisms targeted here: mollusk bivalves characterized by accretionary skeletons and indeterministic growth.

Measuring Growth Rates

Whereas direct empirical curves can be generated in many cases to describe the relation between age and size of specimens, researchers frequently use parametric approximations (or growth functions) that provide a continuous representation of growth rates and can be summarized in terms of a few parameters. These parametric measures of growth rates are often reported in individual studies and facilitate comparisons across studies (especially when considering that empirical methods of deriving growth rates vary across studies even for closely related taxa). Also, the parametric functions provide an attractive system for developing statistical estimates of growth rates, as outlined above.

Numerous procedures have been developed to determine a specimen's age at a given body size, including tag/recapture, length/frequency population distributions, and skeletal component measurements (e.g., growth banding of mollusk shells or inner ear fish otoliths). The tag/recapture approach measures the rate of growth directly against empirically established population age data. Length/frequency distributions are collected

periodically through the year, and because spawning tends to occur at the same season, the mean body length of the samples will shift through the year allowing a rate of growth to be estimated. Skeletal components often develop in pulses that leave behind traces (banding) that can then be correlated to seasonal fluctuations. Data collected on the age/body size from these procedures can then be fit to a given growth rate model to parameterize the species general growth rate.

Numerous models have been developed to determine relationships between ontogenetic age and size of organisms (Ricker 1979). These models represent a wide range of mathematical functions, from linear to logistic, applied to fit various age-size relationships observed in macroscopic life. Among others, they include the isometric growth model of Huxley and Tessier (1936) and the asymptotic growth model of von Bertalanffy (1938, 1951). For most organisms, a maximum biological limit on size imposes a boundary condition that can often be approximated efficiently using logistic models, such as those of Blumberg (1968), Gompertz (1825), Richards (1959), or von Bertalanffy (1938; see also Rickers 1975; Schnute 1981; Tsoularis 2001). These models are often manipulated or redesigned to fit a particular organism or to dynamically model time for seasonal or periodic growth; a growth pattern common to many organisms (Pitcher and MacDonald 1973; Cloern and Nichols 1978; Fontoura and Agostinho 1996).

The von Bertalanffy growth function (further referred to as VBF) was selected in this study as a means of relating age and size of targeted organisms (i.e., bivalve mollusks), though other growth models would still be applicable. This model was selected for multiple reasons. First, it has been used widely by mollusk researchers (i.e., a wealth of growth rate data reported in terms of VBF parameters is available in the

literature). This practical criterion is particularly important: the efficacy of the proposed method and the statistical quality of resulting estimates improves with the availability of applicable literature datasets for closely related sets of species. Second, the model is easy to implement into resampling algorithms because it represents a 3-parameter function (see below); note here that a variety of programs are available to fit collected growth rate data to the VBF model (as well as other models) and then calculate these defining parameters. Third, and most importantly, VBF provides an excellent approximation of empirical growth curves for bivalve mollusks (as demonstrated below). As organisms with indeterminate growth, bivalve mollusks have a relatively rapid rate of shell accretion early in their ontogeny, followed by a tapering off of accretion later in ontogeny as an increasingly larger volume of shell material is required for an equivalent change in length. This pattern of growth fits the asymptotic VBF model as rate of growth slows while moving toward the parameterized maximum length.

The von Bertalanffy growth rates are modeled using three variables; L_∞, K, and t_0, where L_∞ is the asymptotic maximum length (in mm), K is the growth constant (per year), and t_0 is the age at zero length (in years). These three variables allow one to determine the expected length at a given time (L_t):

$$L_t = L_\infty \left(1 - e^{-K(t-t_0)}\right)$$

To calculate these von Bertalanffy growth rate parameters, many authors use ELEFAN (electronic length frequency analysis) software (Pauly and David 1981) which is particularly appropriate since length frequency data is a method commonly used to estimate rate of growth. Other authors have developed their own software packages to

conduct nonlinear regressions of their data in order to calculate VBF variables or other growth model parameters.

For this project, time was converted from years to months, as the asymptotic growth of the bivalve species targeted here achieves maximum length after at most only a few years. The previous formula was also reformulated to estimate the expected age (t) as a function of a given length (L_t):

$$t = [\frac{\ln(1 - (L_t / L_\infty))}{-K}] + t_0$$

The reliability of our parametric estimates provided by the variant of the 3-parameter VBF function, in the specific context of the data presented in this study, is further evaluated below.

Estimating Central Tendency for Sets of Growth Rates

When estimating an average curve from a set of growth functions, two approaches can be employed: (1) an average VBF function can be computed by averaging the three VBF parameters (or alternative model parameters) across all included species (i.e., L_∞, K, and t_0 are estimated as arithmetic means or medians of L_∞, K, and t_0 of the nearest living relative species used in a given model); (2) an average growth curve can be calculated incrementally for each size class, with average body length calculated at discrete time steps. That is, in the case of bivalves, species-level curves can be plotted in terms of shell length in mm vs. time expressed in month (Fig. 4.1A–C). The average curve can then be computed by averaging shell length values across curves at monthly increments for a relevant time span of growth (36 months in the case of data analyzed here). For both those approaches averaging can be performed by using various descriptors of central

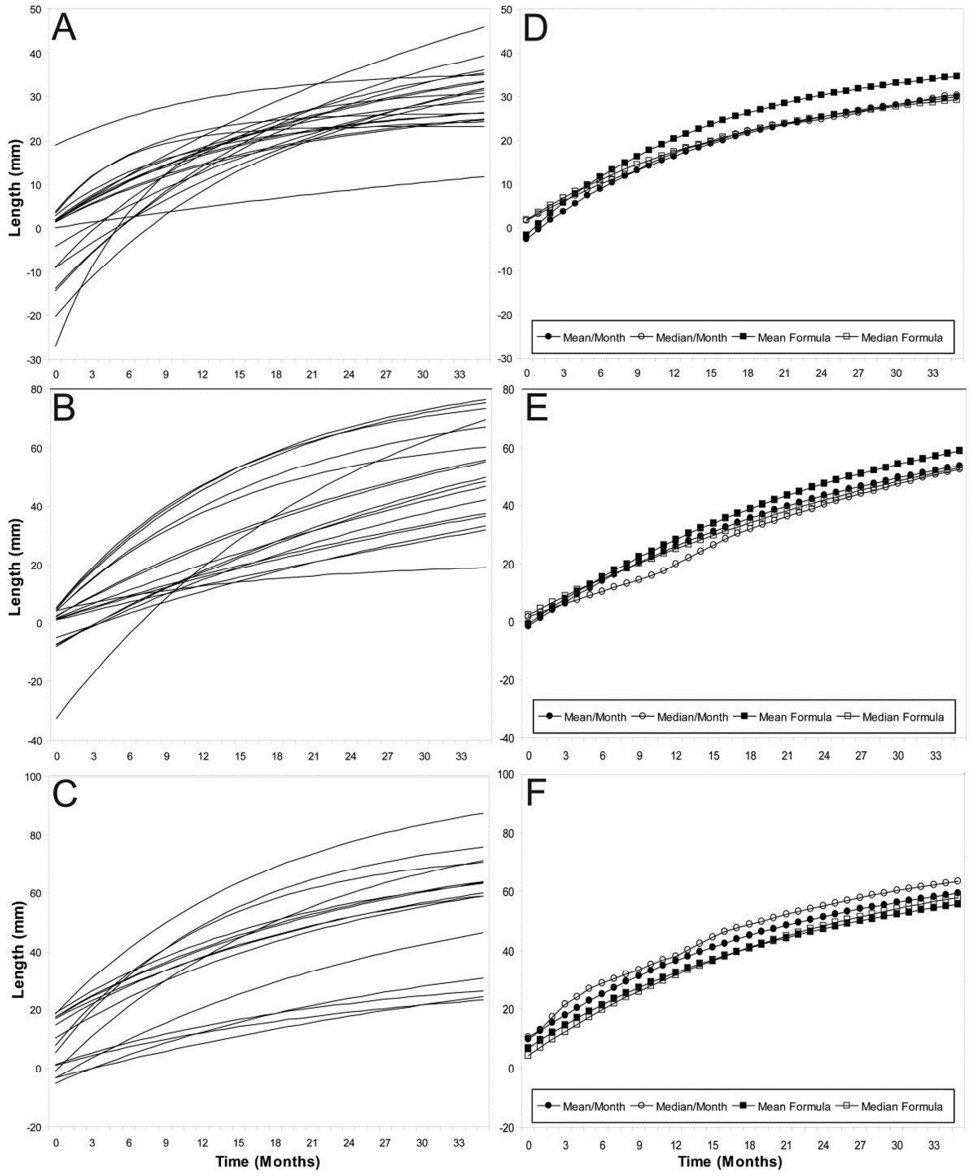

Figure 4.1. Growth rate curves and calculated average curves. A, B, and C show growth rate curves calculated from the von Bertalanffy growth functions for three families of bivalve species. D, E, and F show the four different ways that the averages of the three families of growth rate curves were calculated. Mean/month and median/month were calculated by determining the expected length of each of the growth curves for each month and taking the mean and median length of those curves. Mean/formula and median/formula were calculated by taking the mean and median of the variables ($L\infty$, K, and t_0) for all of the von Bertalanffy growth functions within that family and creating a new average VBF formula by which the lengths could then be calculated by month. A and D are the family Donacidae, B and E and the family Semelidae, and C and F are the family Mactridae.

tendency. Here, initially, we use two different common metrics: the arithmetic mean and the median (Fig. 4.1 D–F).

The four resulting proxies of central tendencies provided remarkably consistent results as exemplified by three families of bivalve mollusks analyzed in this study (Fig. 4.1 D–F) suggesting that specific datasets analyzed here are reasonably insensitive to the way in which the average curve is estimated. However, the first method is far simpler to apply: it simply involves computing arithmetic mean (or median) for each of the three VBF parameters. The simplicity of this parametric approach is particularly attractive when implementing iterative resampling techniques (note that the application of the second approach in resampling simulations would require modeling average growth curves by incremental averaging at each month time step, adding computational time, discretizing rate estimates, and introducing additional error by back estimating the VBF parameters from the curve generated using the second approach. Though more complicated, the second method can be applied to models that lack a simple set of descriptive parameters or can be applied in situations where growth rates are given as a direct measure of body size to age (raw data) rather than being fit to a model. Because the two approaches yielded very similar results for all three bivalve groups in this study (for both arithmetic mean and the median) only the first approach (based on direct averaging of the VBF parameters) was used in the simulations. Also, because the arithmetic mean and the median yield consistent estimates of the average VBF curves (Fig. 4.1D-F), and because the arithmetic mean tends to behave more smoothly in resampling simulations (e.g., Kowalewski and Novack-Gottsahll, 2010), we employ the arithmetic mean in all subsequent analyses.

Resampling Procedure

A parametric bootstrap analysis was employed by iterative resampling from the population of curves in the growth rate models to determine the range of possible variation in the data and the range of error of estimates. The average, minimum, and maximum ages and standard deviation of ages is recorded at each length increment.

A jackknife corrected parametric bootstrap was then conducted by iteratively removing one of the curves from the group and then conducting a parametric bootstrap on the remaining curves. The removed curve is representative of an unknown species, with indirect estimates calculated from the remaining parameters of "known" species. For example, when the mean is calculated for a group of five species and one of the extreme curves is removed as our "unknown species", the mean is no longer pulled toward the extreme curve. This is inherently biased because the mean is initially closer to the extreme and decreases the error unless the mean is recalculated without replacement, as is the case with the jackknife statistic. This allows the mean to be calculated on the remaining curves (our "known" specimens), and is more conservative in its estimate giving larger error values on extreme specimens. This also eliminates the small bias that would occur when specimens close to the mean are removed, which would still have a small pull on the mean away from the removed specimen. The average, minimum, and maximum ages are recorded for each specimen that was removed from the sample, and were then calculated from all iterations at each length increment, with each iteration corresponding to removal of one of the species.

Material and Methods

A literature search was conducted to assemble papers on marine bivalve growth rates for sets of closely related species. Following the search, three monophyletic families of bivalves (Donacidae, Mactridae, and Semelidae) were targeted because the published data for each of those groups included estimates for multiple species from similar environmental settings. Some of the compiled studies included multiple sites sampled and analyzed separately for the same species, thus providing multiple rate estimates within species. Occasionally in the literature, different methods were used to analyze the age or the same age data was fit to different growth models, and an average VBF growth rate was reported from these different methods. In these cases, our study utilized only the authors' average VBF growth rate rather than one or more of the separate rates reported using the different methods.

For each site, the following variables were recorded: species, genus, family, site latitude, site longitude, water depth, three VBF parameters, method of collecting growth/age data, method of fitting data to a VBF model, and environmental conditions (including independently acquired data on seawater chemistry and mean ocean temperatures downloaded from the National Oceanic and Atmospheric Administration's National Oceanographic Data Center 2005 World Ocean Atlas, http://www.nodc.noaa.gov/OC5/WOA05/pr_woa05.html).

Three families of bivalves were analyzed: Donacidae, Mactridae, and Semilidae. Often multiple growth rate estimates were reported for a single species, due either to the use of different growth rate measuring methods or modeling analyses conducted on the same data. Since one species often had more than one reported growth rate, the number

of VBF growth estimates compiled here exceeds the total number of species included in the dataset. Because numerous studies reported on the growth rate for *Donax*, the donacidae were analyzed at the genus level. Family level analyses were implemented for the other two groups, mactrids and semelids. The three groups are likely to be meaningful phylogenetically because their monophyly is well supported by recent molecular data of Taylor et al. (2007).

For Donacidae, our data includes 20 reported growth rates for the following species of *Donax*: *D. denticulatus*, *D. dentifer*, *D. hanleyanus*, *D. serra*, *D. striatus*, and *D. trunculus*. Although Donacidae may represent a paraphyletic genus, it likely includes species that are monophyletic at a family level (see Taylor et al. 2007, their figure 3). For Mactridae, three genera (*Mactra*, *Mesodesma*, and *Spisula*), all of which are tightly related according to molecular data (Taylor et al. 2007), were included producing 15 growth rates for the following species: *Mactra discors*, *Mactra murchisoni*, *Mesodesma mactroides*, *Spisula subtruncata*, and *Spisula solida*. For Semelidae, three monophyletic (Taylor et al., 2007) genera (*Gari*, *Semele*, and *Abra*) yielded 17 growth rates for: *Gari solida*, *Semele solida*, and *Abra alba*.

The parametric bootstrap and jackknife corrected simulations were conducted separately for each of the three families using the protocol described above. The simulations were defined by a length range of 5–20 mm of shell growth at 0.5 mm increments. The statistics were replicated 1000 times at each length increment and each time a species was removed from the total sample for the jackknife corrected parametric bootstrap. The frequency of all the iterations was binned by one month increments.

Results

This method requires that genetic controls on growth rate are superlative to any extrinsic environmental factors. A number of environmental conditions from the sample locations were recorded, including temperature and salinity, and these conditions were compared against an estimate of individual growth rate. Estimated individual growth rates were calculated as the deviation in length from average (mean) length at 6 months and 12 months. A linear regression was conducted comparing the environmental conditions and individuals estimated growth rates and r^2 was recorded. No significant correlation exists between species growth rates and the environmental indicators (temperature, salinity, dissolved oxygen). This would indicate that familial affiliation has a stronger control on growth rate than the environment to which these organisms are growing.

A total of 20,000 iterations were simulated for each length increment with Donacidae, 17,000 for Semelidae at each length increment, and 15,000 for Mactridae (based on number of published formulae: 20 for Donacidae, 17 for Semelidae, and 15 for Mactridae). Both the parametric bootstrap and jackknife corrected parametric bootstrap had similar averages to our estimated mean VBF for each of the analyzed families (Fig. 4.2). The minimum and maximum range for the parametric bootstrap was smaller than that of the jackknife corrected parametric bootstrap (Fig. 4.2). The minimum age ranges for Semelidae were close, but the parametric bootstrap is still slightly narrower than the jackknife corrected simulation range (Fig. 4.2B).

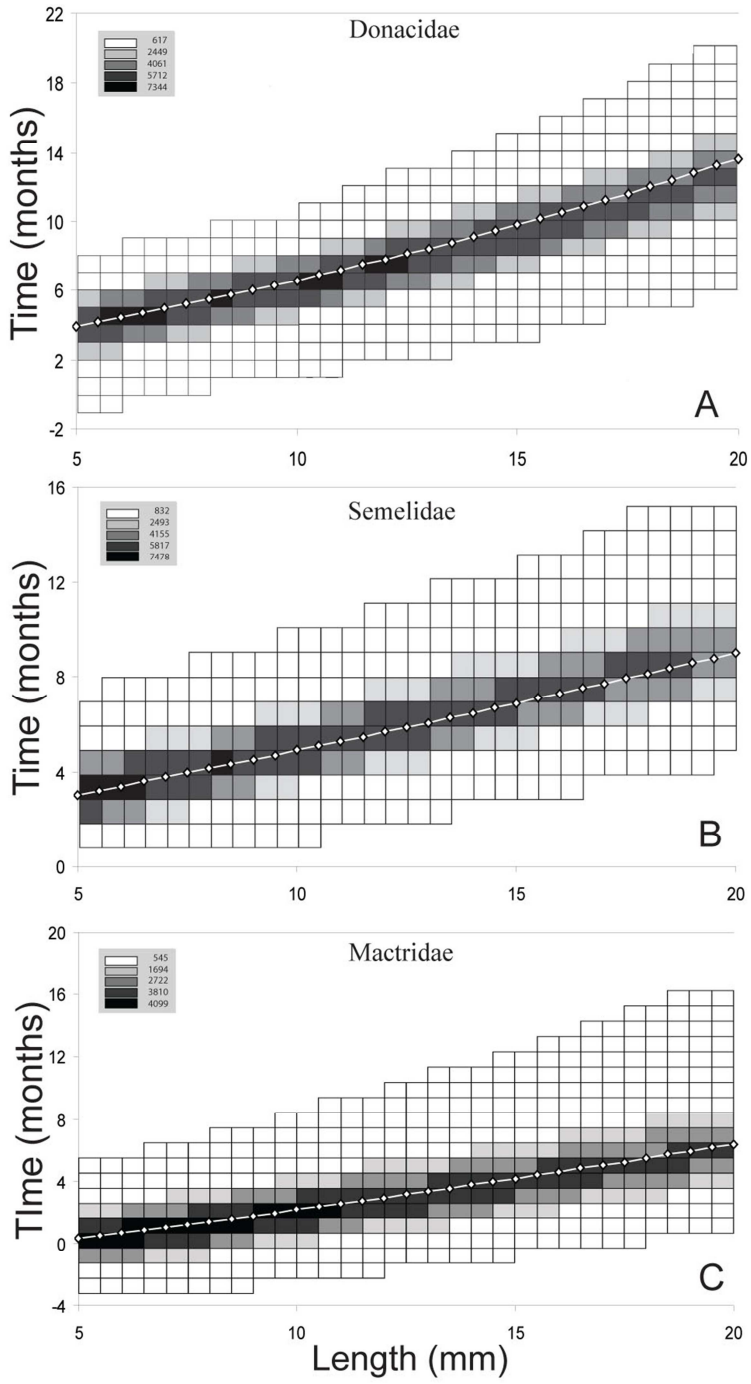

Figure 4.2. Average, minimum, and maximum age values for the statistical tests at given lengths. The dark squares are the means calculated from the VBF formulae for each family. The open circles are the means calculated from the iterations of the parametric bootstrap statistic. The grey triangles are the average of the jackknife corrected mean ages. The dashed lines are the minimum and maximum values calculated from the parametric bootstrap statistic. The solid lines are the minimum and maximum values calculated from the jackknife corrected parametric bootstrap (the most conservative of the statistical tests). A is Donacidae, B is Semelidae, and C is Mactridae.

The maximum range of months that the simulations occupied at each increment for the jackknife corrected parametric bootstrap was 14 for Donacidae, 10 for Semelidae, and 14 for Mactridae, as determined by the difference between the minimum and maximum ages at each increment. It is important to note that, in all three families, only one simulation represented the extreme month of each range (out of a minimum of 15,000 simulations). For all simulations, 90% of the simulation runs fell within a 6 month range or less when the first and last 5% of simulation frequencies are removed. The spread of frequencies and thus the range of time that they occupy increases as the distance from the umbo increases, i.e. as the bivalve is older. In all cases, the 20 mm increment had the greatest range of months.

The scatter of frequencies for the jackknife simulations fall around the growth rate calculated using the mean of the formula (Fig. 4.3). Further, the highest frequencies of the simulations fall directly upon the average growth rate line. Although the spread of frequencies is wide, very few samples fall within the age extremities.

As an example of the utility of this method, carbon and oxygen stable isotope ratios of were collected along the valve of the bivalve *Semele casali*; a species with no published growth rate information. By application of this method, a time component could be added to assist in the interpretation of the collected data. As a result, the data can now be interpreted as an annual cycle induced by temperature fluctuations based off of our estimated age ranges (Fig. 4.4). Additionally, a range of minimum and maximum possible ages could be calculated based off of the jackknife corrected parametric bootstrap (the most conservative estimates from our study). Even at its widest, this

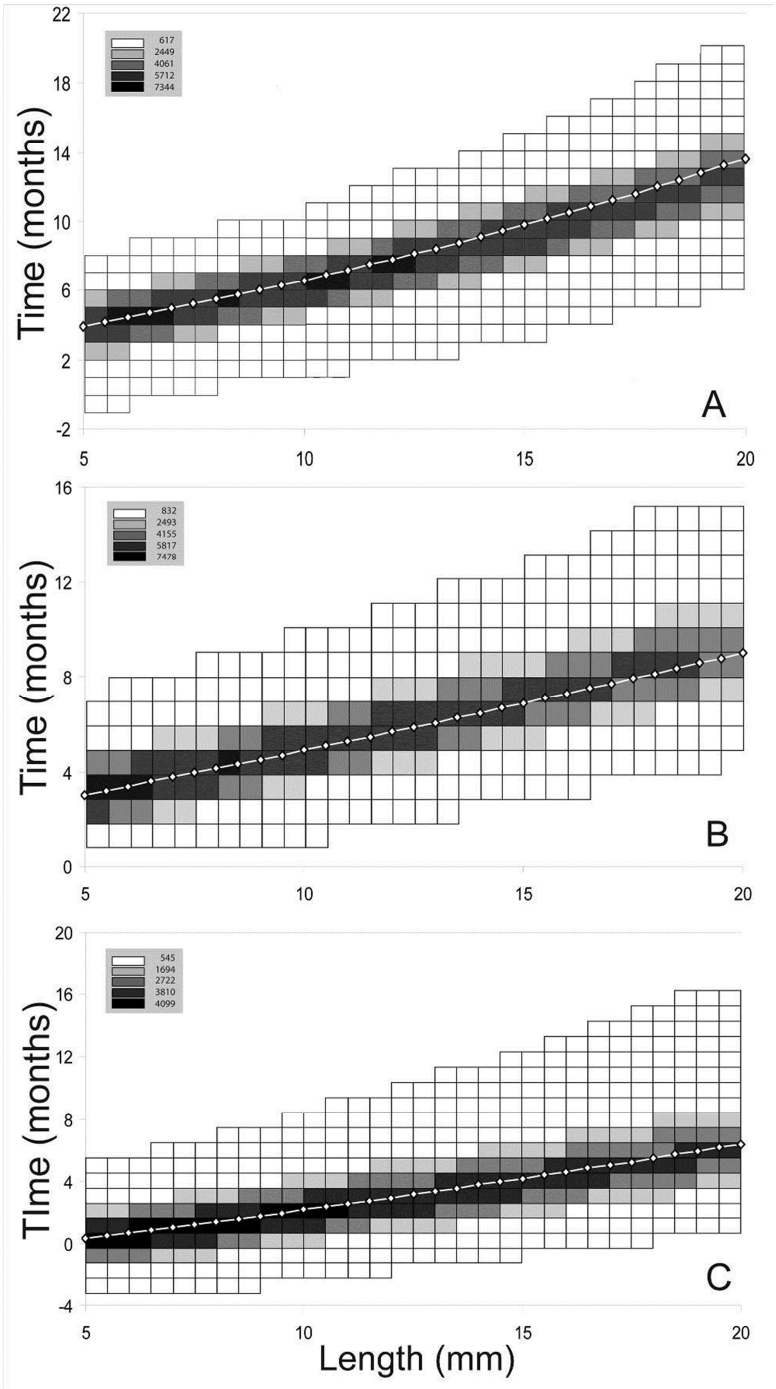

Figure 4.3.Frequency plots for the jackknife corrected parametric bootstrap. These graphs show the frequency that a given age will be calculated from each curve created by the parametric bootstrap iterations for a given length. The darker the box, the more frequently that age result occurred (see the legend in the top left corner of each graph). A is based on the VBF variables for donacids, B shows the semelids, and C shows the mactrids. The solid white line shows the average curve for the specific family based on the mean of the variables for all the formulae within the group. In all cases, our calculated mean curve falls in the center of the distribution of all possible curves.

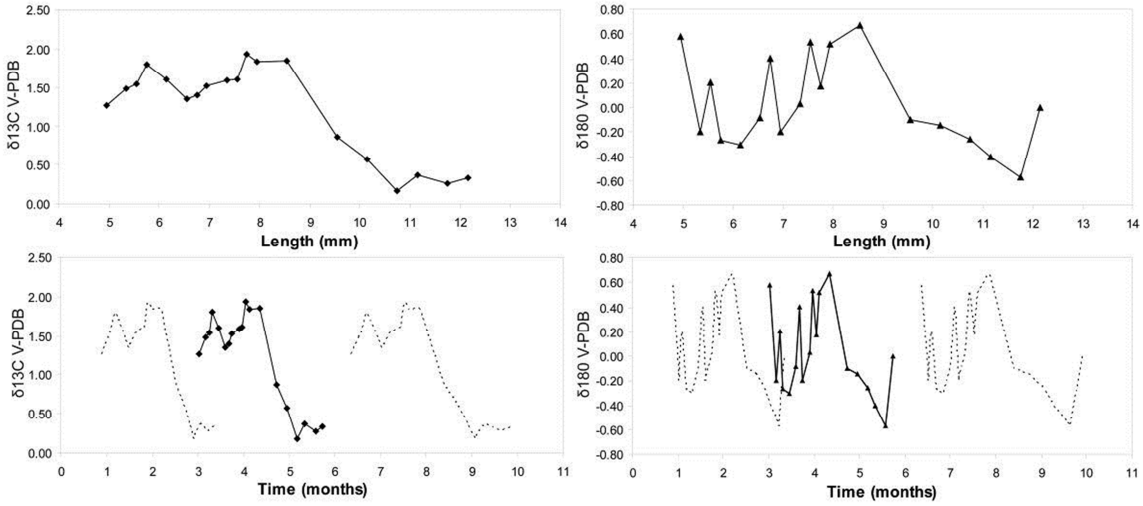

Figure 4.4. Conversion of valve length to time using semelidae for stable isotope profiles. Carbon and oxygen stable isotopes ratios (Vienna PDB) were acquired along the valve of *Semele casali*, a bivalve with unknown rate of growth. Length is a measure of distance from the umbo (or time zero). Using the growth rates recorded from the closely related species within the family Semelidae, an estimate of how much time these analyses occupy could be acquired. The solid line represents the time in months based on the mean growth rate from this group. The dashed lines to either side represent the minimum and maximum time range that our unknown species may occupy based upon the minimum and maximum estimates of the jackknife corrected parametric bootstrap. The longest estimated time frame is still less than a year, indicating these analyses record less than a single season of growth.

example specimen is constrained within a nine month range and could not be showing more than a season of growth (Fig. 4.4).

Discussion and Conclusions

The means calculated by the parametric bootstrap and jackknife corrected parametric bootstrap simulations match the growth rate modeled from the arithmetic mean of the VBF parameters. For Donacidae, there is a tight overlap between the two simulated means (parametric bootstrap and jackknife corrected) and the calculated VBF mean (Fig. 4.2 A). These means exhibit a slightly wider range in Semelidae, and spread

even further in Mactridae (Fig. 4.2 B and C). Donacidae had the most VBF variables available for this study while Mactridae had the least. But more importantly, the growth rates for Donacidae were much closer to one another, likely as they are all from the same genus, than were the growth rates for either Semelidae or Mactridae (Fig. 4.1 A–C). Even with fewer specimens, such as Mactridae, or a more diverse phylogenetic range of specimens, such as Semelidae, the growth rates track close to one another. Any of the calculated means (from either simulation or from the arithmetic mean of the VBF parameters) would be appropriate for estimating a growth rate for a closely related but uncalibrated species.

Geochemical proxies such as stable isotopes are often used to track temperature fluctuations recorded in the biomineralized structures of many different organisms. When conducting geochemical microanalyses along valves as a proxy for paleoenvironmental conditions, it is important to have an idea of how much time is occupied in the hard parts of the specimen. Often the results can be interpreted as recording sub-seasonal to multi-annual fluctuations; and either interpretation can have large consequences on the conclusions of the given study. By using known growth rates as an estimate, one can eliminate some of the potential timing issues and be more certain in the results of the study.

The example shows that our method can benefit studies of extant species where determining growth rate would be inconvenient at best (Fig. 4.4). But the applications to the field of paleontology holds far more potential since there are often extinct specimens where there is no way to directly measure the rate of growth. Even when indirect proxies of age are utilized, such as testing for seasonal patterns in biominerals with stable

isotopes, this method allows for a secondary means of testing age interpretations by estimating the rate of growth based on related species. An average growth rate formula was calculated from published von Bertalanffy growth rates from each of three families of extant marine bivalves. This method defines boundaries on the range of time that an individual specimen existed, which can be widely applicable and broadly applied to fields of research, both academic and industrial, where constraining the timing of skeletal growth is imperative, such as marine biology, ecology, paleontology, geochemistry, fisheries resources, and oil exploration.

Acknowledgments

This study was supported by grants from the National Science Foundation [EAR-0125149 (Virginia Tech, George Washington University, and University of Delaware), OCE-0602375 (Virginia Tech, Savannah River Ecology Laboratory of the University of Georgia, and Northern Arizona University)]. Additional support was also provided to by the Department of Geosciences at Virginia Tech and by F. Dexter. The authors would like to thank J. Huntley, D. Kaufman, R. Krause, C. Romanek, M. Simões, S. Barbour Wood, and Y. Yanes for making this study necessary. The authors would like to thank N. Chassot for help with data collection and J. D. Schiffbauer for reading and revising early drafts of the paper.

References

Arneri, E, G. Giannetti, and B. Antolini.1998. Age determination and growth of *Venus verrucosa* L. (Bivalvia: Veneridae) in the southern Adriatic and the Aegean Sea. Fisheries Research 38:193–198.

Beverton, R. J. H. and S. J. Holt. 1957. On the Dynamics of Exploited Fish Populations. In Fishery Investigations Series 2 Volume 19, Ministry of Agriculture, Fisheries and Food, 533 p.

Blumberg, A. A. 1968. Logistic growth rate functions. Journal of Theoretical Biology 21:42–44.

Bodoy, A. 1982. Croissance saisonnie`re du bivalve *Donax trunculus* (L.) en Méditerranée nordoccidentale (France). Malacologia 22:353–358.

Cardoso, J. F. M. F., J. I. J. Witte, and H. W. van der Veer. 2007. Growth and reproduction of the bivalve *Spisula subtruncata* (da Costa) in Dutch coastal waters. Journal of Sea Research 57:316–324.

Carré M. , I. Bentaleb, D. Blamart, M. Fontugne, N. Ogle, R. M. Kalin, F. Cardenas, S. Zevallos, L. Ortlieb. 2005. Stable isotopes and sclerochronology of the bivalve Mesodesma donacium: Potential application to Peruvian paleoceanographic reconstructions. Palaeogeography, Palaeoclimatology, Palaeoecology 228:4–25.

Carroll M., C. S. Romanek, and L. Paddock. 2006. The relationship between the hydrogen and oxygen isotopes of freshwater bivalve shells and their home streams. Chemical Geology 234:211–222.

Chapman, D. G. 1961. Statistical Problems in Dynamics of Exploited Fisheries Populations. Proceedings from the Fourth Berkeley Symposium on Mathematics, Statistics and Probability 4:153–168.

Cloern, J. E. and Nichols, F. H. 1978. Von Bertalanffy growth model with a seasonally varying coefficient. Bulletin of the Fisheries Research Board of Canada 35:1479–1482.

Cranfield, H. J., K. P. Michael, and R. I. C. C. Francis. 1996. Growth Rates of Five Species of Subtidal Clam on a Beach in the South Island, New Zealand. Marine and Freshwater Research 47:773–784.

Defeo, O., F. Arreguín-Sánchez, and J. Sánchez. 1992a. Growth study of the yellow clam *Mesodesma mactroides*: a comparative analysis of three length-based methods. Scientia Marina 56:53–59.

Defeo, O., E. Ortiz, and J. C. Castilla.1992b. Growth, mortality and recruitment of the yellow clam *Mesodesma mactroides* on Uruguayan beaches. Marine Biology 114: 429–437.

De Nóbrega, M. F. and Lessa, R. P. 2009. Age and growth of the king mackerel (*Scomberomorus cavalla*) off the northeastern coast of Brazil. Brazilian Journal of Oceanography, 57:273–285.

Fiori, S. M., and E. M. Morsán. 2004. Age and individual growth of *Mesodesma mactroides* (Bivalvia) in the southernmost range of its distribution. Journal of Marine Science 61:1253–1259.

Fontoura N.F. and A. A. Agostinho. 1996. Growth with seasonally varying temperatures: an expansion of the von Bertalanffy growth model. Journal of Fish Biology 48:569–584.

García, N., A. Prieto, R. Alzola, and C. Lodeiros. 2003. Growth and size distribution of *Donax denticulatus* (Mollusca: Donacidae) in Playa Brava, Península de Araya, Sucre State, Venezuela. Revista Científica 13:464–470.

Gaspar, M.B., R. Ferreira, and C. C. Monteiro. 1999.Growth and reproductive cycle of *Donax trunculus* L.,(Mollusca: Bivalvia) off Faro, southern Portugal. Fisheries Research 41:309–316.

Gompertz, B. 1825. On the nature of the function expressive of the law of human mortality, and on a new method of determining the value of life contingencies. Philosophical Transactions of the Royal Society:513-585.

Goodwin D.H., B. R. Schone, D. L. Dettman. 2003. Resolution and fidelity of oxygen isotopes as paleotemperature proxies in bivalve mollusk shells: Models and observations. Palaios 18:110-125.

Guillou, J. and Y. Le Ḿoal. 1980. Apsects de la dynamique des populations de *Donax vittatus* et *Donax trunculus* en Baie De Douarnenez. Annales de l'Institut Océanographique (Paris) 56:55–64.

Herrmann, M., D. Carstensen, S. Fischer, J. Laudien, P. E. Penchaszadeh, and W. E. Arntz. 2009. Population structure, growth, and production of the wedge clam *Donax hanleyanus* (Bivalvia: Donacidae) from northern Argentinean beaches. Journal of Shellfish Research 28:511–526.

Huxley, J. S. and G. Teissier. 1936. Terminology of relative growth. Nature 137:780–781.

Ivany, L. C., W. P. Patterson, and K. C. Lohmann. 2000. Cooler winters as a possible cause of mass extinctions at the Eocene/Oligocene boundary. Nature 407:887–890.

Kirby, M.X., T. M. Soniat, and H. J. Spero. 1998. Stable isotope sclerochronology of Pleistocene and recent oyster shells (*Crassostrea virginica*). Palaios 13:560–569.

Kowalewski, M., and P. Novack-Gottshall. 2010. Resampling methods in paleontology. In: Alroy, J., and Hunt, G., eds., Quantitative Methods in Paleobiology. Paleontological Society Special Papers 16: 315 p.

Laudien, J. T. Brey, and W. E. Arntz. 2003. Population structure, growth and production of the surf clam Donax serra (Bivalvia, Donacidae) on two Namibian sandy beaches. Estuarine, Coastal and Shelf Science 58:105–115.

Maze, R. A., and A. J. LaBorda. 1998. Some aspects of the population dynamics of *Donax trunculus* L. (Bivalvia: Donacidae) in EL Barquero Bay (Lugo, NW Spain). Investigacion Pesqueras, Barcelona 52:299–312.

Melchor-Aragón, J. M., A. Ruiz-Luna, R. Terrazas-Gaxiola, and C. Acosta-Castañeda. 2002. Mortality and growth of the rock oyster, *Crassostrea iridescens* (Hanley, 1854), at San Ignacio, Sinaloa, Mexico. Ciencias Marinas 28:125–132.

Mitchell, I. M., C. M. Crawford, and M. J. Rushton. 2000. Flat oyster (*Ostrea angasi*) growth and survival rates at Georges Bay, Tasmania (Australia). Aquaculture 191:309–321.

Pauly, D., and N. David. 1981. ELEFAN I, a BASIC program for the objective extraction of growth parameters from length-frequency data. Meeresforschung - Reports on Marine Research 28:205–211.

Pearson, R. G., and J. L. Munro. 1991. Growth, mortality and recruitment rates of the giant clams, *Tridacna gigas* and *T. derasa*, at the Michaelmas Reef, central Great Barrier Reef, Australia. Australian Journal of Marine and Freshwater Research 42:241–262.

Pitcher, T. J. and P. D. M. Macdonald. 1973. Two Models for Seasonal Growth in Fishes. Journal of Applied Ecology 10:599–606.

Ramon, M., P. Abello & C. A. Richardson. 1995. Population structure and growth of Donax trunculus (Bivalvia: Donacidae) in the western Mediterranean. Marine Biology 121:665–671.

Riascos, J. M. 2006. Effects of El Niño-Southern oscillation on the population dynamics of the tropical bivalve *Donax dentifer* from Málaga bay, Colombian Pacific. Marine Biology 148:1283–1293.

Riascos, J. M. and H. J. Urban. 2002. Dinámica poblacional de *Donax dentifer* (Veneroida: Donacidae) en Bahía Málaga, Pacífico colombiano durante el fenómeno "El Niño" 1997/1998. Revista de Biologia Tropical 50:1113–1123.

Richards, F. J. 1959. A flexible growth function for empirical use. Journal of Experimental Botany 10:290–301.

Ricker, W.E. 1975. Computation and interpretation of biological statistics of fish populations. Bulletin of the Fisheries Research Board of Canada 191.

Ricker, W.E. 1979. Growth rates and models. Pages 677–743 *in* W. S. Hoar, D. J. Randall & J. R. Brett editors. Fish Physiology Volume VIII, Academic Press, New York.

Rocha-Barreira de Almeida, C., W. F. Batista, D. O. Monteiro, and W. Franklin-Junior. 2002. Aspectos da estrutura populacional de *Donax striatus* (Linnaeus, 1758) (Mollusca: Donacidae) na praia do Futuro, Fortaleza. Arquivos de Ciencias do Mar 35:51–55.

Romanek C.S. and E. L. Grossman. 1989. Stable isotope profiles of Tridacna maxima as environmental indicators. Palaios 4:402-413.

Saucedo, P. and M. Monteforte. 1997. In situ growth of pearl oysters *Pinctada mazatlantica* (Hanley 1856) and *Pteria sterna* (Gould 1851) under repopulation conditions at Bahia de La Paz, Baja California Sur, Mexico. Aquaculture Research 28:367–378.

Shnute, J. 1981. A versatile growth model with statistically stable parameters. Canadian Journal of Fisheries and Aquatic Sciences 38:1128–1140.

Stueber, T. 1996. Stable isotope sclerochronology of rudist bivalves: growth rates and Late Cretaceous seasonality. Geology 24:315–318.

Taylor, J. D., S. T. Williams, E. A.Glover, and P. Dyal. 2007. A molecular phylogeny of heterodont bivalves (Mollusca: Bivalvia: Heterodonta): new analyses of 18S and 28S rRNA genes. Zoologica Scripta 36:587–606.

Thippeswamy, S. And M. M. Joseph. 1991. Population selection strategies in the wedge clam, *Donax incarnatus* (Gmelin) from Panambur beach, Mangalore. Indian Journal of Marine Scences 20:147–151.

Tsoularis. A. 2001. Analysis of logistic growth models. Research Letters in Information and Mathematical Sciences 2:23–46.

Urban, H. J. 1991. Preliminary estimates of growth parameters for three commercial bivalve species of Peru (*Gari solida*, *Aulacomya ater* and *Semele solida*). Fishbyte 9:4–6.

Urban, H. J. 1998. Description and management of a clam fishery (Gari solida, Psammobiidae) from Bahía Independencia, Peru (14°S). Fisheries Research 35:199–207.

Urban, H. J. and B. Campos. 1994. Population dynamics of the bivalves *Gari solida*, *Semele solida* and *Protothaca thaca* from a small bay in Chile at 36° S. Marine Ecology Progress Series 115:93–102.

Von Bertalanffy, L. 1938. A quantitative theory of organic growth. Human Biology 10: 181–213.

Von Bertalanffy, L. 1957. Quantitative laws in metabolism and growth. Quarterly Review of Biology 32:217–231.

Chapter 5

Closing Thoughts

In this study, the methods by which periodic climate or environmental fluctuations at varying time scales were assessed to improve how these patterns can be recognized in the rock record and how such information can improve our understanding of earth processes. These periodic patterns in environmental fluctuations recorded in the geologic record occur at time scales ranging from the nearly instantaneous seasonal temperature changes recorded within the geochemical composition of a bivalve shell over months of the specimen's existence to the enormous amount of time encompassed by eustatic sea level fluctuations brought about by climate changes affected by the Earth's relationship to the sun over millions of years.

In chapter two, methods of examining extrabasinal orbital forcing (i.e. Milankovitch cycles) were tested using computer generated simulations. Over long periods of time, the earth's orbit, axial tilt, and axial precession fluctuate, which causes long term fluctuations in climate that effect glacial build up and thus eustatic sea level. These long term patterns can be recorded in the ensuing sedimentary rock record. In order to distinguish these patterns, computer generated simulations were developed with these orbital parameters to determine the resultant pattern preserved in the rock record. These simulations were then used as a test for detecting periodic patterns in the rock record since all the original driving factors were known (a situation impossible for real rock records).

Even though an orbital (Milankovitch) driver was used to produce cyclic stratigraphy, the methods of lithofacies thickness frequencies and autocorrelation found

that these records appear independent of periodic forcing, even when controlled for factors such as keeping carbonate depositional rate independent of water depth. Only simulations with the most extreme fluctuations in sea level (icehouse conditions) could be demonstrated as separate from independent (stochastic). Thus the numerous depositional factors involved in the development and preservation of cyclic sedimentary layers tend to mask the original periodic signal. It is difficult to disprove the rock sequences from independence even though the simulations were entirely dependent on orbital forcing. This indicates that real rock successions, even when produced by Milankovitch driven forcing, are likely to have that pattern masked by their complex depositional history and incomplete preservation.

In chapter three, the temporal distribution of the bivalve *Semele casali* from Ubatuba Bay, in the state of São Paolo, Brazil was analyzed. Amino acid racemization (AAR) ratios were collected on 275 valves and the rates of racemization were calibrated using 35 ^{14}C radiometric dates. AAR rates are highly temperature dependent, however the calibration of the rates from the different sites, ranging in water depth from 10 to 53 meters, all fell along the same curve. This suggested that a single calibration formula could be used to calibrate all of the specimens, and that the area had very little change in temperature through time. The area could not have been subaerially exposed (and this has been demonstrated from sea level curves analyzed in other studies). The specimens have a range greater than 10,000 years with an age-frequency distribution that slowly tapers off through time. The range is also nearly complete through time, and its pattern one that is not seen from age-frequency distributions of other mollusks from other areas. The area is low energy and sediment starved, which may explain the long residence times and the

completeness through time of the specimens in this area. The area is periodically affected by deep water upwelling as well as climactically driven fresh water continental run-off from El Nińo southern isolation (ENSO). This exceptional preservation through time is necessary for geochemical studies that attempt to measure multi-year to multi-decadal climate fluctuations such as ENSO.

In chapter four, a new method for estimating growth rates in organisms using closely related species from similar environments was developed to improve studies that sub-sample biominerals within organisms for geochemical analyses. The estimates were statistically analyzed using a parametric bootstrap, which iteratively sampled growth rate parameters from within the clade to determine the possible range of rates for the population. This method was furthered improved by using a jackknife corrected parametric bootstrap, which iteratively removed a growth curve from the population and analyzed the remaining curves, producing a more conservative range of possible growth rates.

As technology improves the capability of collecting geochemical analyses such as stable isotopes or trace elements data with less and less material, sub-sampling within the skeleton of a biomineralizing organism produces environmental proxies for environment at scales of years to months. This has substantial effects on the interpretation of results, as the time range under study may represents a few months to a multiple years depending upon the rate of growth of the species. As growth rates are generally secondary to the main focus of these projects, and collecting the rate are costly, time consuming, and in many cases direct measures are not even possible such as in fossilized specimens, this method allows for a rapid approach that can greatly improve the results. As validated in

Figure 4.4., the results of a geochemical analysis on an extant species were not easily interpretable without knowing the rate of growth of the specimen. Even with the most conservative range of possible ages, the rate of growth was constrained to a level necessary for interpretation. But the applications to the field of paleontology holds far more potential since there are often extinct specimens where is no way to directly measure the rate of growth. Even when indirect proxies of age are utilized, such as testing for seasonal patterns in biominerals with stable isotopes, this method allows for a secondary means of testing age interpretations by estimating the rate of growth based on related species.

This volume examines patterns of periodic environmental fluctuation recorded in both the rock record and in the biomineralized skeletal structures of organisms. The focus of this project was to examine or improve the methods by which such patterns can be analyzed to improve our understanding of earth processes through time.

Appendix A: Lithologic data of computer generated stratigraphy.

Model Simulation Type	Distance from shore (m)	Interval Number	Age (Mya)	Water Depth (m)	Sea Level (m)	Layer Thickness (m)
19 ky Greenhouse	100	322	0	-7.469	-6.498	0
19 ky Greenhouse	100	321	0.002	-6.663	-5.658	0
19 ky Greenhouse	100	320	0.005	-5.803	-4.782	0
19 ky Greenhouse	100	319	0.007	-4.849	-3.822	0
19 ky Greenhouse	100	318	0.01	-3.848	-2.822	0
19 ky Greenhouse	100	317	0.012	-2.76	-1.747	0
19 ky Greenhouse	100	316	0.015	-1.593	-0.602	0
19 ky Greenhouse	100	315	0.017	-3.978	-2.699	0
19 ky Greenhouse	100	314	0.02	-6.751	-5.195	0
19 ky Greenhouse	100	313	0.022	-5.512	-3.966	0
19 ky Greenhouse	100	312	0.025	-4.295	-2.765	0
19 ky Greenhouse	100	311	0.027	-3.089	-1.58	0
19 ky Greenhouse	100	310	0.03	-1.993	-0.503	0
19 ky Greenhouse	100	309	0.032	-0.986	0.501	0.212
19 ky Greenhouse	100	308	0.035	-0.068	1.434	0
19 ky Greenhouse	100	307	0.037	-5.332	-3.469	0
19 ky Greenhouse	100	306	0.04	-5.841	-3.865	0
19 ky Greenhouse	100	305	0.042	-5.005	-3.014	0
19 ky Greenhouse	100	304	0.045	-4.133	-2.135	0
19 ky Greenhouse	100	303	0.047	-3.167	-1.171	0
19 ky Greenhouse	100	302	0.05	-2.165	-0.167	0
19 ky Greenhouse	100	301	0.052	-1.067	0.912	0
19 ky Greenhouse	100	300	0.055	-2.056	0.112	0
19 ky Greenhouse	100	299	0.057	-6.352	-3.756	0
19 ky Greenhouse	100	298	0.06	-5.103	-2.523	0
19 ky Greenhouse	100	297	0.062	-3.846	-1.289	0
19 ky Greenhouse	100	296	0.065	-2.609	-0.083	0
19 ky Greenhouse	100	295	0.067	-1.394	1.107	0
19 ky Greenhouse	100	294	0.07	-0.315	2.19	0.154
19 ky Greenhouse	100	293	0.072	0.935	3.198	0.375
19 ky Greenhouse	100	292	0.075	-2.848	-0.289	0.436
19 ky Greenhouse	100	291	0.077	-4.379	-2.007	0
19 ky Greenhouse	100	290	0.08	-3.529	-1.15	0
19 ky Greenhouse	100	289	0.082	-2.676	-0.294	0
19 ky Greenhouse	100	288	0.085	-1.802	0.592	0
19 ky Greenhouse	100	287	0.087	-1.26	1.169	0
19 ky Greenhouse	100	286	0.09	-0.674	1.789	0.123
19 ky Greenhouse	100	285	0.092	-0.778	1.723	0
19 ky Greenhouse	100	284	0.095	-6.707	-3.654	0
19 ky Greenhouse	100	283	0.097	-6.043	-2.963	0
19 ky Greenhouse	100	282	0.1	-5.206	-2.113	0
19 ky Greenhouse	100	281	0.102	-3.943	-0.878	0
19 ky Greenhouse	100	280	0.105	-2.713	0.332	0
19 ky Greenhouse	100	279	0.107	-1.489	1.527	0
19 ky Greenhouse	100	278	0.11	-0.397	2.614	0.135
19 ky Greenhouse	100	277	0.112	-2.834	0.386	0
19 ky Greenhouse	100	276	0.115	-6.067	-2.49	0
19 ky Greenhouse	100	275	0.117	-5.155	-1.572	0
19 ky Greenhouse	100	274	0.12	-4.301	-0.713	0
19 ky Greenhouse	100	273	0.122	-3.443	0.146	0
19 ky Greenhouse	100	272	0.125	-2.552	1.033	0
19 ky Greenhouse	100	271	0.127	-1.574	2.004	0

19 ky Greenhouse	100	270	0.13	-0.564	3.014	0.098
19 ky Greenhouse	100	269	0.132	-5.678	-1.619	0
19 ky Greenhouse	100	268	0.135	-5.966	-1.806	0
19 ky Greenhouse	100	267	0.137	-4.691	-0.559	0
19 ky Greenhouse	100	266	0.14	-3.416	0.678	0
19 ky Greenhouse	100	265	0.142	-2.15	1.915	0.657
19 ky Greenhouse	100	264	0.145	-0.395	3.122	0
19 ky Greenhouse	100	263	0.147	1.01	4.313	0.375
19 ky Greenhouse	100	262	0.15	0.032	3.343	0.232
19 ky Greenhouse	100	261	0.152	-4.274	-0.655	0
19 ky Greenhouse	100	260	0.155	-3.329	0.282	0
19 ky Greenhouse	100	259	0.157	-2.41	1.193	0
19 ky Greenhouse	100	258	0.16	-1.562	2.045	0
19 ky Greenhouse	100	257	0.162	-0.714	2.896	0.335
19 ky Greenhouse	100	256	0.165	0.209	3.774	0
19 ky Greenhouse	100	255	0.167	1.547	4.734	0.374
19 ky Greenhouse	100	254	0.17	-2.342	1.203	0
19 ky Greenhouse	100	253	0.172	-4.042	-0.251	0
19 ky Greenhouse	100	252	0.175	-2.868	0.89	0
19 ky Greenhouse	100	251	0.177	-1.606	2.123	0
19 ky Greenhouse	100	250	0.18	-0.354	3.346	0.145
19 ky Greenhouse	100	249	0.182	1.124	4.567	1.115
19 ky Greenhouse	100	248	0.185	2.95	5.759	0
19 ky Greenhouse	100	247	0.187	3.011	5.673	0
19 ky Greenhouse	100	246	0.19	-3.356	0.206	0
19 ky Greenhouse	100	245	0.192	-2.837	0.756	0
19 ky Greenhouse	100	244	0.195	-2.34	1.284	0
19 ky Greenhouse	100	243	0.197	-1.919	1.756	0
19 ky Greenhouse	100	242	0.2	-1.519	2.212	0
19 ky Greenhouse	100	241	0.202	-0.706	3.036	0.066
19 ky Greenhouse	100	240	0.205	0.206	3.89	0.271
19 ky Greenhouse	100	239	0.207	-2.21	1.648	0.403
19 ky Greenhouse	100	238	0.21	-5.114	-1.26	0
19 ky Greenhouse	100	237	0.212	-4.051	-0.214	0
19 ky Greenhouse	100	236	0.215	-2.908	0.9	0
19 ky Greenhouse	100	235	0.217	-1.714	2.064	0.344
19 ky Greenhouse	100	234	0.22	-0.272	3.295	0
19 ky Greenhouse	100	233	0.222	1.201	4.486	0.745
19 ky Greenhouse	100	232	0.225	2.981	5.645	0
19 ky Greenhouse	100	231	0.227	-2.343	1.126	0.543
19 ky Greenhouse	100	230	0.23	-2.301	0.757	0
19 ky Greenhouse	100	229	0.232	-1.346	1.71	0.54
19 ky Greenhouse	100	228	0.235	-0.418	2.592	0
19 ky Greenhouse	100	227	0.237	0.546	3.417	0
19 ky Greenhouse	100	226	0.24	1.753	4.236	1.118
19 ky Greenhouse	100	225	0.242	3.02	5.026	0
19 ky Greenhouse	100	224	0.245	1.653	3.881	0
19 ky Greenhouse	100	223	0.247	-2.993	-0.353	0.144
19 ky Greenhouse	100	222	0.25	-1.873	0.61	0
19 ky Greenhouse	100	221	0.252	-0.864	1.615	0.315
19 ky Greenhouse	100	220	0.255	0.266	2.687	0
19 ky Greenhouse	100	219	0.257	1.776	3.81	1.471
19 ky Greenhouse	100	218	0.26	3.58	4.996	0
19 ky Greenhouse	100	217	0.262	5.347	6.143	0
19 ky Greenhouse	100	216	0.265	1.035	2.825	0
19 ky Greenhouse	100	215	0.267	-0.538	1.293	0.459
19 ky Greenhouse	100	214	0.27	0.583	2.279	0

19 ky Greenhouse	100	213	0.272	1.901	3.187	1.827
19 ky Greenhouse	100	212	0.275	3.227	4.022	0
19 ky Greenhouse	100	211	0.277	4.515	4.826	0
19 ky Greenhouse	100	210	0.28	5.722	5.572	0
19 ky Greenhouse	100	209	0.282	5.873	5.554	0
19 ky Greenhouse	100	208	0.285	-0.861	0.181	0.698
19 ky Greenhouse	100	207	0.287	-0.612	0.478	0
19 ky Greenhouse	100	206	0.29	-0.088	0.974	0
19 ky Greenhouse	100	205	0.292	0.651	1.543	0
19 ky Greenhouse	100	204	0.295	1.653	2.178	1.501
19 ky Greenhouse	100	203	0.297	2.806	2.887	0
19 ky Greenhouse	100	202	0.3	3.966	3.6	0
19 ky Greenhouse	100	201	0.302	1.288	1.466	0
19 ky Greenhouse	100	200	0.305	-1.648	-1.296	0
19 ky Greenhouse	100	199	0.307	-0.606	-0.251	0.412
19 ky Greenhouse	100	198	0.31	0.441	0.688	0
19 ky Greenhouse	100	197	0.312	1.669	1.55	1.459
19 ky Greenhouse	100	196	0.315	2.928	2.339	0
19 ky Greenhouse	100	195	0.317	4.145	3.095	0
19 ky Greenhouse	100	194	0.32	5.282	3.795	0
19 ky Greenhouse	100	193	0.322	-0.93	-1.205	0.012
19 ky Greenhouse	100	192	0.325	-1.737	-1.843	0
19 ky Greenhouse	100	191	0.327	-0.966	-1.044	0.188
19 ky Greenhouse	100	190	0.33	-0.136	-0.202	0
19 ky Greenhouse	100	189	0.332	1.031	0.712	1.405
19 ky Greenhouse	100	188	0.335	2.52	1.693	0
19 ky Greenhouse	100	187	0.337	4.151	2.76	0
19 ky Greenhouse	100	186	0.34	2.992	1.796	0
19 ky Greenhouse	100	185	0.342	-1.755	-2.179	0.779
19 ky Greenhouse	100	184	0.345	-0.14	-1.151	0
19 ky Greenhouse	100	183	0.347	1.124	-0.146	2.336
19 ky Greenhouse	100	182	0.35	2.494	0.756	0
19 ky Greenhouse	100	181	0.352	3.792	1.58	0
19 ky Greenhouse	100	180	0.355	4.988	2.334	0
19 ky Greenhouse	100	179	0.357	6.124	3.054	0
19 ky Greenhouse	100	178	0.36	1.309	-0.772	0
19 ky Greenhouse	100	177	0.362	-0.712	-2.673	0.304
19 ky Greenhouse	100	176	0.365	0	-1.982	0
19 ky Greenhouse	100	175	0.367	1.023	-1.215	1.872
19 ky Greenhouse	100	174	0.37	2.291	-0.403	0
19 ky Greenhouse	100	173	0.372	3.692	0.483	0
19 ky Greenhouse	100	172	0.375	5.189	1.438	0
19 ky Greenhouse	100	171	0.377	5.674	1.658	0
19 ky Greenhouse	100	170	0.38	-0.714	-3.447	0.361
19 ky Greenhouse	100	169	0.382	0.275	-2.508	0
19 ky Greenhouse	100	168	0.385	1.726	-1.469	2.379
19 ky Greenhouse	100	167	0.387	2.678	-0.906	0
19 ky Greenhouse	100	166	0.39	3.543	-0.412	0
19 ky Greenhouse	100	165	0.392	4.306	0.007	0
19 ky Greenhouse	100	164	0.395	4.988	0.366	0
19 ky Greenhouse	100	163	0.397	1.154	-2.629	0
19 ky Greenhouse	100	162	0.4	-2.47	-6.135	0
19 ky Greenhouse	100	161	0.402	-1.86	-5.488	0
19 ky Greenhouse	100	160	0.405	-1.191	-4.784	0
19 ky Greenhouse	100	159	0.407	-0.492	-4.048	0.454
19 ky Greenhouse	100	158	0.41	0.415	-3.243	0
19 ky Greenhouse	100	157	0.412	1.706	-2.363	0.757

19 ky Greenhouse	100	156	0.415	3.225	-1.381	0
19 ky Greenhouse	100	155	0.417	-2.272	-6.132	0
19 ky Greenhouse	100	154	0.42	-2.649	-6.398	0
19 ky Greenhouse	100	153	0.422	-1.62	-5.362	0.708
19 ky Greenhouse	100	152	0.425	-0.396	-4.32	0
19 ky Greenhouse	100	151	0.427	0.731	-3.364	0
19 ky Greenhouse	100	150	0.43	2.09	-2.475	1.114
19 ky Greenhouse	100	149	0.432	3.374	-1.66	0
19 ky Greenhouse	100	148	0.435	1.814	-2.975	0
19 ky Greenhouse	100	147	0.437	-2.888	-7.257	0
19 ky Greenhouse	100	146	0.44	-2.248	-6.592	0
19 ky Greenhouse	100	145	0.442	-1.621	-5.926	0
19 ky Greenhouse	100	144	0.445	-0.933	-5.207	0.191
19 ky Greenhouse	100	143	0.447	-0.216	-4.456	0
19 ky Greenhouse	100	142	0.45	0.828	-3.634	0.748
19 ky Greenhouse	100	141	0.452	2.206	-2.735	0
19 ky Greenhouse	100	140	0.455	-1.814	-6.285	0.464
19 ky Greenhouse	100	139	0.457	-3.051	-7.764	0
19 ky Greenhouse	100	138	0.46	-2.001	-6.705	0
19 ky Greenhouse	100	137	0.462	-0.941	-5.644	0.263
19 ky Greenhouse	100	136	0.465	0.127	-4.576	0
19 ky Greenhouse	100	135	0.467	1.47	-3.593	1.101
19 ky Greenhouse	100	134	0.47	2.875	-2.676	0
19 ky Greenhouse	100	133	0.472	3.284	-2.513	0
19 ky Greenhouse	100	132	0.475	-3.062	-8.052	0
19 ky Greenhouse	100	131	0.477	-2.418	-7.365	0
19 ky Greenhouse	100	130	0.48	-1.754	-6.667	0
19 ky Greenhouse	100	129	0.482	-1.082	-5.967	0
19 ky Greenhouse	100	128	0.485	-0.377	-5.213	0.376
19 ky Greenhouse	100	127	0.487	0.095	-4.812	0
19 ky Greenhouse	100	126	0.49	0.774	-4.342	0.374
19 ky Greenhouse	100	125	0.492	-1.992	-6.944	0
19 ky Greenhouse	100	124	0.495	-5.629	-10.212	0
19 ky Greenhouse	100	123	0.497	-4.981	-9.535	0
19 ky Greenhouse	100	122	0.5	-4.296	-8.825	0
19 ky Greenhouse	100	121	0.502	-3.213	-7.732	0.385
19 ky Greenhouse	100	120	0.505	-1.705	-6.62	0
19 ky Greenhouse	100	119	0.507	-0.683	-5.594	0.322
19 ky Greenhouse	100	118	0.51	0.345	-4.634	0
19 ky Greenhouse	100	117	0.512	-4.926	-9.535	0
19 ky Greenhouse	100	116	0.515	-5.463	-9.957	0
19 ky Greenhouse	100	115	0.517	-4.715	-9.187	0
19 ky Greenhouse	100	114	0.52	-3.992	-8.444	0
19 ky Greenhouse	100	113	0.522	-3.283	-7.698	0
19 ky Greenhouse	100	112	0.525	-2.495	-6.895	0
19 ky Greenhouse	100	111	0.527	-1.669	-6.061	0
19 ky Greenhouse	100	110	0.53	-2.973	-7.118	0
19 ky Greenhouse	100	109	0.532	-7.508	-11.23	0
19 ky Greenhouse	100	108	0.535	-6.418	-10.139	0
19 ky Greenhouse	100	107	0.537	-5.298	-9.024	0
19 ky Greenhouse	100	106	0.54	-4.157	-7.877	0.372
19 ky Greenhouse	100	105	0.542	-2.59	-6.727	0
19 ky Greenhouse	100	104	0.545	-1.404	-5.566	0
19 ky Greenhouse	100	103	0.547	-0.338	-4.492	0.14
19 ky Greenhouse	100	102	0.55	-4.094	-7.934	0
19 ky Greenhouse	100	101	0.552	-5.993	-9.607	0
19 ky Greenhouse	100	100	0.555	-5.107	-8.711	0

19 ky Greenhouse	100	99	0.557	-4.304	-7.895	0
19 ky Greenhouse	100	98	0.56	-3.546	-7.104	0.759
19 ky Greenhouse	100	97	0.562	-2.551	-6.312	0
19 ky Greenhouse	100	96	0.565	-1.181	-5.462	0
19 ky Greenhouse	100	95	0.567	-1.18	-5.375	0
19 ky Greenhouse	100	94	0.57	-6.94	-10.567	0
19 ky Greenhouse	100	93	0.572	-6.045	-9.66	0
19 ky Greenhouse	100	92	0.575	-4.899	-8.522	0
19 ky Greenhouse	100	91	0.577	-3.74	-7.363	0
19 ky Greenhouse	100	90	0.58	-2.536	-6.173	0
19 ky Greenhouse	100	89	0.582	-1.309	-4.98	0
19 ky Greenhouse	100	88	0.585	-0.1	-3.775	0.153
19 ky Greenhouse	100	87	0.587	-2.878	-6.329	0
19 ky Greenhouse	100	86	0.59	-6.37	-9.448	0
19 ky Greenhouse	100	85	0.592	-5.818	-8.861	0
19 ky Greenhouse	100	84	0.595	-5.322	-8.326	0
19 ky Greenhouse	100	83	0.597	-4.899	-7.86	0
19 ky Greenhouse	100	82	0.6	-4.505	-7.421	0
19 ky Greenhouse	100	81	0.602	-3.709	-6.598	0.168
19 ky Greenhouse	100	80	0.605	-2.655	-5.71	0
19 ky Greenhouse	100	79	0.607	-8.016	-10.562	0
19 ky Greenhouse	100	78	0.61	-8.421	-10.866	0
19 ky Greenhouse	100	77	0.612	-7.362	-9.803	0
19 ky Greenhouse	100	76	0.615	-6.221	-8.669	0
19 ky Greenhouse	100	75	0.617	-4.971	-7.441	0
19 ky Greenhouse	100	74	0.62	-3.739	-6.219	0.303
19 ky Greenhouse	100	73	0.622	-2.18	-4.996	0
19 ky Greenhouse	100	72	0.625	-3.072	-5.714	0
19 ky Greenhouse	100	71	0.627	-7.468	-9.678	0
19 ky Greenhouse	100	70	0.63	-6.391	-8.602	0
19 ky Greenhouse	100	69	0.632	-5.389	-7.601	0
19 ky Greenhouse	100	68	0.635	-4.457	-6.668	0
19 ky Greenhouse	100	67	0.637	-3.569	-5.759	0.575
19 ky Greenhouse	100	66	0.64	-2.579	-4.908	0
19 ky Greenhouse	100	65	0.642	-1.347	-4.056	0
19 ky Greenhouse	100	64	0.645	-5.269	-7.576	0
19 ky Greenhouse	100	63	0.647	-7.178	-9.269	0
19 ky Greenhouse	100	62	0.65	-6.176	-8.263	0
19 ky Greenhouse	100	61	0.652	-5.088	-7.181	0
19 ky Greenhouse	100	60	0.655	-3.918	-6.029	0
19 ky Greenhouse	100	59	0.657	-2.654	-4.784	0
19 ky Greenhouse	100	58	0.66	-1.385	-3.547	0
19 ky Greenhouse	100	57	0.662	-0.971	-3.054	0
19 ky Greenhouse	100	56	0.665	-6.526	-7.989	0
19 ky Greenhouse	100	55	0.667	-5.5	-6.965	0
19 ky Greenhouse	100	54	0.67	-4.399	-5.878	0
19 ky Greenhouse	100	53	0.672	-3.392	-4.866	0.301
19 ky Greenhouse	100	52	0.675	-2.07	-3.924	0
19 ky Greenhouse	100	51	0.677	-1.148	-3.006	0
19 ky Greenhouse	100	50	0.68	-0.331	-2.147	0.089
19 ky Greenhouse	100	49	0.682	-2.977	-4.52	0
19 ky Greenhouse	100	48	0.685	-6.289	-7.459	0
19 ky Greenhouse	100	47	0.687	-5.743	-6.879	0
19 ky Greenhouse	100	46	0.69	-5.15	-6.257	0
19 ky Greenhouse	100	45	0.692	-4.482	-5.56	0.44
19 ky Greenhouse	100	44	0.695	-3.302	-4.794	0
19 ky Greenhouse	100	43	0.697	-2.459	-3.947	0

19 ky Greenhouse	100	42	0.7	-1.608	-3.097	0
19 ky Greenhouse	100	41	0.702	-6.635	-7.581	0
19 ky Greenhouse	100	40	0.705	-6.858	-7.711	0
19 ky Greenhouse	100	39	0.707	-5.685	-6.553	0
19 ky Greenhouse	100	38	0.71	-4.542	-5.431	0
19 ky Greenhouse	100	37	0.712	-3.536	-4.42	0.251
19 ky Greenhouse	100	36	0.715	-2.339	-3.478	0
19 ky Greenhouse	100	35	0.717	-1.446	-2.591	0
19 ky Greenhouse	100	34	0.72	-2.856	-3.769	0
19 ky Greenhouse	100	33	0.722	-7.479	-7.908	0
19 ky Greenhouse	100	32	0.725	-6.604	-7.024	0
19 ky Greenhouse	100	31	0.727	-5.668	-6.087	0
19 ky Greenhouse	100	30	0.73	-4.616	-5.048	0
19 ky Greenhouse	100	29	0.732	-3.51	-3.966	0
19 ky Greenhouse	100	28	0.735	-2.339	-2.815	0
19 ky Greenhouse	100	27	0.737	-1.093	-1.611	0
19 ky Greenhouse	100	26	0.74	-4.869	-4.888	0
19 ky Greenhouse	100	25	0.742	-6.351	-6.163	0
19 ky Greenhouse	100	24	0.745	-5.118	-4.958	0
19 ky Greenhouse	100	23	0.747	-3.937	-3.806	0
19 ky Greenhouse	100	22	0.75	-2.8	-2.689	0
19 ky Greenhouse	100	21	0.752	-1.786	-1.684	1.202
19 ky Greenhouse	100	20	0.755	-0.086	-0.749	0
19 ky Greenhouse	100	19	0.757	0.21	-0.563	0
19 ky Greenhouse	100	18	0.76	-5.713	-6.026	0
19 ky Greenhouse	100	17	0.762	-4.891	-5.196	0
19 ky Greenhouse	100	16	0.765	-4.012	-4.317	0
19 ky Greenhouse	100	15	0.767	-3.071	-3.386	0
19 ky Greenhouse	100	14	0.77	-2.024	-2.352	0
19 ky Greenhouse	100	13	0.772	-0.932	-1.275	0.903
19 ky Greenhouse	100	12	0.775	0.287	-0.129	0
19 ky Greenhouse	100	11	0.777	-1.837	-2.113	0
19 ky Greenhouse	100	10	0.78	-4.228	-4.72	0
19 ky Greenhouse	100	9	0.782	-2.977	-3.491	0
19 ky Greenhouse	100	8	0.785	-1.755	-2.291	1.106
19 ky Greenhouse	100	7	0.787	-0.629	-1.525	0
19 ky Greenhouse	100	6	0.79	0.145	-0.815	0
19 ky Greenhouse	100	5	0.792	0.999	-0.203	0
19 ky Greenhouse	100	4	0.795	1.902	0.34	0.373
19 ky Greenhouse	100	3	0.797	-3.83	-4.842	0
19 ky Greenhouse	100	2	0.8	-4.805	-5.77	0
19 ky Greenhouse	100	1	1.6	-4.805	-5.755	0
19 ky Greenhouse	120	322	0	-8.38	-6.498	0.334
19 ky Greenhouse	120	321	0.002	-7.486	-5.658	0
19 ky Greenhouse	120	320	0.005	-6.339	-4.782	0
19 ky Greenhouse	120	319	0.007	-5.36	-3.822	0
19 ky Greenhouse	120	318	0.01	-4.33	-2.822	0
19 ky Greenhouse	120	317	0.012	-3.208	-1.747	0
19 ky Greenhouse	120	316	0.015	-2.001	-0.602	0
19 ky Greenhouse	120	315	0.017	-4.532	-2.699	0
19 ky Greenhouse	120	314	0.02	-7.463	-5.195	0
19 ky Greenhouse	120	313	0.022	-6.185	-3.966	0
19 ky Greenhouse	120	312	0.025	-4.929	-2.765	0
19 ky Greenhouse	120	311	0.027	-3.682	-1.58	0
19 ky Greenhouse	120	310	0.03	-2.55	-0.503	0
19 ky Greenhouse	120	309	0.032	-1.506	0.501	0
19 ky Greenhouse	120	308	0.035	-0.559	1.434	0.099

19 ky Greenhouse	120	307	0.037	-6.243	-3.469	0
19 ky Greenhouse	120	306	0.04	-6.798	-3.865	0
19 ky Greenhouse	120	305	0.042	-5.941	-3.014	0
19 ky Greenhouse	120	304	0.045	-5.048	-2.135	0
19 ky Greenhouse	120	303	0.047	-4.053	-1.171	0
19 ky Greenhouse	120	302	0.05	-3.017	-0.167	0.905
19 ky Greenhouse	120	301	0.052	-1.497	0.912	0
19 ky Greenhouse	120	300	0.055	-2.559	0.112	0
19 ky Greenhouse	120	299	0.057	-6.575	-3.756	0
19 ky Greenhouse	120	298	0.06	-5.286	-2.523	0
19 ky Greenhouse	120	297	0.062	-3.985	-1.289	0
19 ky Greenhouse	120	296	0.065	-2.705	-0.083	0
19 ky Greenhouse	120	295	0.067	-1.442	1.107	0
19 ky Greenhouse	120	294	0.07	-0.321	2.19	0.152
19 ky Greenhouse	120	293	0.072	0.963	3.198	0.375
19 ky Greenhouse	120	292	0.075	-3.042	-0.289	0.176
19 ky Greenhouse	120	291	0.077	-4.957	-2.007	0
19 ky Greenhouse	120	290	0.08	-4.085	-1.15	0
19 ky Greenhouse	120	289	0.082	-3.209	-0.294	0
19 ky Greenhouse	120	288	0.085	-2.307	0.592	0.171
19 ky Greenhouse	120	287	0.087	-1.585	1.169	0
19 ky Greenhouse	120	286	0.09	-0.987	1.789	0.003
19 ky Greenhouse	120	285	0.092	-1.192	1.723	0
19 ky Greenhouse	120	284	0.095	-7.506	-3.654	0
19 ky Greenhouse	120	283	0.097	-6.829	-2.963	0
19 ky Greenhouse	120	282	0.1	-5.971	-2.113	0
19 ky Greenhouse	120	281	0.102	-4.665	-0.878	0
19 ky Greenhouse	120	280	0.105	-3.388	0.332	0.765
19 ky Greenhouse	120	279	0.107	-1.797	1.527	0
19 ky Greenhouse	120	278	0.11	-0.362	2.614	0
19 ky Greenhouse	120	277	0.112	-2.956	0.386	0
19 ky Greenhouse	120	276	0.115	-6.379	-2.49	0
19 ky Greenhouse	120	275	0.117	-5.441	-1.572	0
19 ky Greenhouse	120	274	0.12	-4.565	-0.713	0
19 ky Greenhouse	120	273	0.122	-3.683	0.146	0
19 ky Greenhouse	120	272	0.125	-2.766	1.033	0
19 ky Greenhouse	120	271	0.127	-1.756	2.004	0.439
19 ky Greenhouse	120	270	0.13	-0.404	3.014	0
19 ky Greenhouse	120	269	0.132	-5.785	-1.619	0
19 ky Greenhouse	120	268	0.135	-6.108	-1.806	0
19 ky Greenhouse	120	267	0.137	-4.788	-0.559	0
19 ky Greenhouse	120	266	0.14	-3.467	0.678	0
19 ky Greenhouse	120	265	0.142	-2.15	1.915	0.311
19 ky Greenhouse	120	264	0.145	-0.633	3.122	0
19 ky Greenhouse	120	263	0.147	0.772	4.313	0.375
19 ky Greenhouse	120	262	0.15	-0.282	3.343	0.161
19 ky Greenhouse	120	261	0.152	-4.928	-0.655	0
19 ky Greenhouse	120	260	0.155	-3.955	0.282	0
19 ky Greenhouse	120	259	0.157	-3.008	1.193	0
19 ky Greenhouse	120	258	0.16	-2.134	2.045	0.861
19 ky Greenhouse	120	257	0.162	-0.73	2.896	0
19 ky Greenhouse	120	256	0.165	0.222	3.774	0
19 ky Greenhouse	120	255	0.167	1.594	4.734	0.374
19 ky Greenhouse	120	254	0.17	-2.522	1.203	0
19 ky Greenhouse	120	253	0.172	-4.337	-0.251	0
19 ky Greenhouse	120	252	0.175	-3.122	0.89	0
19 ky Greenhouse	120	251	0.177	-1.807	2.123	0.419

19 ky Greenhouse	120	250	0.18	-0.249	3.346	0
19 ky Greenhouse	120	249	0.182	1.305	4.567	0.897
19 ky Greenhouse	120	248	0.185	3.152	5.759	0
19 ky Greenhouse	120	247	0.187	3.2	5.673	0
19 ky Greenhouse	120	246	0.19	-3.685	0.206	0
19 ky Greenhouse	120	245	0.192	-3.16	0.756	0
19 ky Greenhouse	120	244	0.195	-2.658	1.284	0
19 ky Greenhouse	120	243	0.197	-2.233	1.756	0.766
19 ky Greenhouse	120	242	0.2	-1.2	2.212	0
19 ky Greenhouse	120	241	0.202	-0.361	3.036	0
19 ky Greenhouse	120	240	0.205	0.662	3.89	0.375
19 ky Greenhouse	120	239	0.207	-1.81	1.648	0.081
19 ky Greenhouse	120	238	0.21	-5.236	-1.26	0
19 ky Greenhouse	120	237	0.212	-4.139	-0.214	0
19 ky Greenhouse	120	236	0.215	-2.955	0.9	0
19 ky Greenhouse	120	235	0.217	-1.714	2.064	0.462
19 ky Greenhouse	120	234	0.22	-0.13	3.295	0
19 ky Greenhouse	120	233	0.222	1.427	4.486	0.743
19 ky Greenhouse	120	232	0.225	3.228	5.645	0
19 ky Greenhouse	120	231	0.227	-2.343	1.126	0.159
19 ky Greenhouse	120	230	0.23	-2.736	0.757	0
19 ky Greenhouse	120	229	0.232	-1.746	1.71	1.17
19 ky Greenhouse	120	228	0.235	-0.225	2.592	0
19 ky Greenhouse	120	227	0.237	0.815	3.417	0
19 ky Greenhouse	120	226	0.24	2.078	4.236	1.114
19 ky Greenhouse	120	225	0.242	3.356	5.026	0
19 ky Greenhouse	120	224	0.245	1.934	3.881	0
19 ky Greenhouse	120	223	0.247	-2.993	-0.353	0.316
19 ky Greenhouse	120	222	0.25	-1.67	0.61	0
19 ky Greenhouse	120	221	0.252	-0.615	1.615	0.45
19 ky Greenhouse	120	220	0.255	0.62	2.687	0
19 ky Greenhouse	120	219	0.257	2.259	3.81	1.461
19 ky Greenhouse	120	218	0.26	4.089	4.996	0
19 ky Greenhouse	120	217	0.262	5.871	6.143	0
19 ky Greenhouse	120	216	0.265	1.426	2.825	0
19 ky Greenhouse	120	215	0.267	-0.262	1.293	0.541
19 ky Greenhouse	120	214	0.27	0.967	2.279	0
19 ky Greenhouse	120	213	0.272	2.342	3.187	1.569
19 ky Greenhouse	120	212	0.275	3.681	4.022	0
19 ky Greenhouse	120	211	0.277	4.977	4.826	0
19 ky Greenhouse	120	210	0.28	6.095	5.572	0
19 ky Greenhouse	120	209	0.282	6.174	5.554	0
19 ky Greenhouse	120	208	0.285	-0.9	0.181	0.654
19 ky Greenhouse	120	207	0.287	-0.661	0.478	0
19 ky Greenhouse	120	206	0.29	-0.136	0.974	0
19 ky Greenhouse	120	205	0.292	0.612	1.543	0
19 ky Greenhouse	120	204	0.295	1.622	2.178	1.399
19 ky Greenhouse	120	203	0.297	2.784	2.887	0
19 ky Greenhouse	120	202	0.3	3.954	3.6	0
19 ky Greenhouse	120	201	0.302	1.081	1.466	0
19 ky Greenhouse	120	200	0.305	-2.05	-1.296	1.055
19 ky Greenhouse	120	199	0.307	-0.327	-0.251	0
19 ky Greenhouse	120	198	0.31	0.822	0.688	0
19 ky Greenhouse	120	197	0.312	2.031	1.55	1.323
19 ky Greenhouse	120	196	0.315	3.271	2.339	0
19 ky Greenhouse	120	195	0.317	4.463	3.095	0
19 ky Greenhouse	120	194	0.32	5.566	3.795	0

19 ky Greenhouse	120	193	0.322	-0.915	-1.205	1.3
19 ky Greenhouse	120	192	0.325	-1.731	-1.843	0
19 ky Greenhouse	120	191	0.327	-0.223	-1.044	0
19 ky Greenhouse	120	190	0.33	0.802	-0.202	0
19 ky Greenhouse	120	189	0.332	2.185	0.712	1.418
19 ky Greenhouse	120	188	0.335	3.697	1.693	0
19 ky Greenhouse	120	187	0.337	5.346	2.76	0
19 ky Greenhouse	120	186	0.34	4.145	1.796	0
19 ky Greenhouse	120	185	0.342	-0.812	-2.179	0.309
19 ky Greenhouse	120	184	0.345	0.291	-1.151	0
19 ky Greenhouse	120	183	0.347	1.691	-0.146	2.11
19 ky Greenhouse	120	182	0.35	3.083	0.756	0
19 ky Greenhouse	120	181	0.352	4.394	1.58	0
19 ky Greenhouse	120	180	0.355	5.602	2.334	0
19 ky Greenhouse	120	179	0.357	6.757	3.054	0
19 ky Greenhouse	120	178	0.36	1.574	-0.772	0
19 ky Greenhouse	120	177	0.362	-0.595	-2.673	0.326
19 ky Greenhouse	120	176	0.365	0.154	-1.982	0
19 ky Greenhouse	120	175	0.367	1.214	-1.215	1.761
19 ky Greenhouse	120	174	0.37	2.482	-0.403	0
19 ky Greenhouse	120	173	0.372	3.876	0.483	0
19 ky Greenhouse	120	172	0.375	5.366	1.438	0
19 ky Greenhouse	120	171	0.377	5.821	1.658	0
19 ky Greenhouse	120	170	0.38	-0.826	-3.447	0.277
19 ky Greenhouse	120	169	0.382	0.163	-2.508	0
19 ky Greenhouse	120	168	0.385	1.608	-1.469	2.178
19 ky Greenhouse	120	167	0.387	2.552	-0.906	0
19 ky Greenhouse	120	166	0.39	3.403	-0.412	0
19 ky Greenhouse	120	165	0.392	4.149	0.007	0
19 ky Greenhouse	120	164	0.395	4.811	0.366	0
19 ky Greenhouse	120	163	0.397	0.821	-2.629	0
19 ky Greenhouse	120	162	0.4	-3.141	-6.135	0
19 ky Greenhouse	120	161	0.402	-2.519	-5.488	0.85
19 ky Greenhouse	120	160	0.405	-1.627	-4.784	0
19 ky Greenhouse	120	159	0.407	-0.622	-4.048	0
19 ky Greenhouse	120	158	0.41	0.267	-3.243	0
19 ky Greenhouse	120	157	0.412	1.535	-2.363	0.74
19 ky Greenhouse	120	156	0.415	3.065	-1.381	0
19 ky Greenhouse	120	155	0.417	-2.707	-6.132	0.41
19 ky Greenhouse	120	154	0.42	-2.716	-6.398	0
19 ky Greenhouse	120	153	0.422	-1.65	-5.362	0.728
19 ky Greenhouse	120	152	0.425	-0.363	-4.32	0
19 ky Greenhouse	120	151	0.427	0.801	-3.364	0
19 ky Greenhouse	120	150	0.43	2.18	-2.475	1.111
19 ky Greenhouse	120	149	0.432	3.478	-1.66	0
19 ky Greenhouse	120	148	0.435	1.842	-2.975	0
19 ky Greenhouse	120	147	0.437	-3.128	-7.257	0
19 ky Greenhouse	120	146	0.44	-2.477	-6.592	0
19 ky Greenhouse	120	145	0.442	-1.836	-5.926	0.529
19 ky Greenhouse	120	144	0.445	-0.838	-5.207	0
19 ky Greenhouse	120	143	0.447	-0.077	-4.456	0
19 ky Greenhouse	120	142	0.45	1.021	-3.634	0.746
19 ky Greenhouse	120	141	0.452	2.422	-2.735	0
19 ky Greenhouse	120	140	0.455	-1.814	-6.285	0.048
19 ky Greenhouse	120	139	0.457	-3.577	-7.764	0
19 ky Greenhouse	120	138	0.46	-2.491	-6.705	0.468
19 ky Greenhouse	120	137	0.462	-1.129	-5.644	0

19 ky Greenhouse	120	136	0.465	-0.033	-4.576	0
19 ky Greenhouse	120	135	0.467	1.306	-3.593	1.112
19 ky Greenhouse	120	134	0.47	2.735	-2.676	0
19 ky Greenhouse	120	133	0.472	3.135	-2.513	0
19 ky Greenhouse	120	132	0.475	-3.526	-8.052	0
19 ky Greenhouse	120	131	0.477	-2.867	-7.365	1.067
19 ky Greenhouse	120	130	0.48	-2.006	-6.667	0
19 ky Greenhouse	120	129	0.482	-0.929	-5.967	0
19 ky Greenhouse	120	128	0.485	-0.185	-5.213	0
19 ky Greenhouse	120	127	0.487	0.332	-4.812	0
19 ky Greenhouse	120	126	0.49	1.071	-4.342	0.376
19 ky Greenhouse	120	125	0.492	-1.868	-6.944	0.02
19 ky Greenhouse	120	124	0.495	-5.693	-10.212	0
19 ky Greenhouse	120	123	0.497	-5.034	-9.535	0
19 ky Greenhouse	120	122	0.5	-4.337	-8.825	0
19 ky Greenhouse	120	121	0.502	-3.213	-7.732	0.069
19 ky Greenhouse	120	120	0.505	-1.989	-6.62	0
19 ky Greenhouse	120	119	0.507	-0.928	-5.594	0
19 ky Greenhouse	120	118	0.51	0.084	-4.634	0.236
19 ky Greenhouse	120	117	0.512	-5.526	-9.535	0
19 ky Greenhouse	120	116	0.515	-6.111	-9.957	0
19 ky Greenhouse	120	115	0.517	-5.347	-9.187	0
19 ky Greenhouse	120	114	0.52	-4.609	-8.444	0
19 ky Greenhouse	120	113	0.522	-3.883	-7.698	0.283
19 ky Greenhouse	120	112	0.525	-2.792	-6.895	0
19 ky Greenhouse	120	111	0.527	-1.943	-6.061	0
19 ky Greenhouse	120	110	0.53	-3.315	-7.118	0.431
19 ky Greenhouse	120	109	0.532	-7.649	-11.23	0
19 ky Greenhouse	120	108	0.535	-6.528	-10.139	0
19 ky Greenhouse	120	107	0.537	-5.374	-9.024	0
19 ky Greenhouse	120	106	0.54	-4.189	-7.877	0.559
19 ky Greenhouse	120	105	0.542	-2.93	-6.727	0
19 ky Greenhouse	120	104	0.545	-1.205	-5.566	0
19 ky Greenhouse	120	103	0.547	-0.103	-4.492	0.184
19 ky Greenhouse	120	102	0.55	-4.04	-7.934	0
19 ky Greenhouse	120	101	0.552	-6.058	-9.607	0
19 ky Greenhouse	120	100	0.555	-5.148	-8.711	0
19 ky Greenhouse	120	99	0.557	-4.326	-7.895	0
19 ky Greenhouse	120	98	0.56	-3.544	-7.104	0.405
19 ky Greenhouse	120	97	0.562	-2.552	-6.312	0
19 ky Greenhouse	120	96	0.565	-1.486	-5.462	0
19 ky Greenhouse	120	95	0.567	-1.505	-5.375	0
19 ky Greenhouse	120	94	0.57	-7.587	-10.567	0.088
19 ky Greenhouse	120	93	0.572	-6.564	-9.66	0
19 ky Greenhouse	120	92	0.575	-5.382	-8.522	0
19 ky Greenhouse	120	91	0.577	-4.181	-7.363	0.63
19 ky Greenhouse	120	90	0.58	-2.832	-6.173	0
19 ky Greenhouse	120	89	0.582	-1.032	-4.98	0
19 ky Greenhouse	120	88	0.585	0.21	-3.775	0.198
19 ky Greenhouse	120	87	0.587	-2.7	-6.329	0
19 ky Greenhouse	120	86	0.59	-6.395	-9.448	0
19 ky Greenhouse	120	85	0.592	-5.837	-8.861	0
19 ky Greenhouse	120	84	0.595	-5.336	-8.326	0
19 ky Greenhouse	120	83	0.597	-4.914	-7.86	0
19 ky Greenhouse	120	82	0.6	-4.521	-7.421	0
19 ky Greenhouse	120	81	0.602	-3.701	-6.598	0.328
19 ky Greenhouse	120	80	0.605	-2.461	-5.71	0

19 ky Greenhouse	120	79	0.607	-8.116	-10.562	0
19 ky Greenhouse	120	78	0.61	-8.56	-10.866	0
19 ky Greenhouse	120	77	0.612	-7.471	-9.803	0
19 ky Greenhouse	120	76	0.615	-6.295	-8.669	0
19 ky Greenhouse	120	75	0.617	-5.003	-7.441	0
19 ky Greenhouse	120	74	0.62	-3.723	-6.219	0.456
19 ky Greenhouse	120	73	0.622	-2.373	-4.996	0
19 ky Greenhouse	120	72	0.625	-3.333	-5.714	0
19 ky Greenhouse	120	71	0.627	-7.567	-9.678	0
19 ky Greenhouse	120	70	0.63	-6.458	-8.602	0
19 ky Greenhouse	120	69	0.632	-5.427	-7.601	0
19 ky Greenhouse	120	68	0.635	-4.469	-6.668	0
19 ky Greenhouse	120	67	0.637	-3.546	-5.759	0.442
19 ky Greenhouse	120	66	0.64	-2.571	-4.908	0
19 ky Greenhouse	120	65	0.642	-1.372	-4.056	0
19 ky Greenhouse	120	64	0.645	-5.596	-7.576	0
19 ky Greenhouse	120	63	0.647	-7.62	-9.269	0
19 ky Greenhouse	120	62	0.65	-6.59	-8.263	0
19 ky Greenhouse	120	61	0.652	-5.468	-7.181	0
19 ky Greenhouse	120	60	0.655	-4.259	-6.029	0
19 ky Greenhouse	120	59	0.657	-2.946	-4.784	0.418
19 ky Greenhouse	120	58	0.66	-1.168	-3.547	0
19 ky Greenhouse	120	57	0.662	-0.765	-3.054	0
19 ky Greenhouse	120	56	0.665	-6.615	-7.989	0
19 ky Greenhouse	120	55	0.667	-5.558	-6.965	0
19 ky Greenhouse	120	54	0.67	-4.421	-5.878	0
19 ky Greenhouse	120	53	0.672	-3.377	-4.866	0
19 ky Greenhouse	120	52	0.675	-2.348	-3.924	0.6
19 ky Greenhouse	120	51	0.677	-0.889	-3.006	0
19 ky Greenhouse	120	50	0.68	-0.037	-2.147	0
19 ky Greenhouse	120	49	0.682	-2.838	-4.52	0.205
19 ky Greenhouse	120	48	0.685	-6.141	-7.459	0
19 ky Greenhouse	120	47	0.687	-5.588	-6.879	0
19 ky Greenhouse	120	46	0.69	-4.986	-6.257	0
19 ky Greenhouse	120	45	0.692	-4.301	-5.56	0.633
19 ky Greenhouse	120	44	0.695	-3.473	-4.794	0
19 ky Greenhouse	120	43	0.697	-2.039	-3.947	0
19 ky Greenhouse	120	42	0.7	-1.163	-3.097	0
19 ky Greenhouse	120	41	0.702	-6.479	-7.581	0
19 ky Greenhouse	120	40	0.705	-6.735	-7.711	0
19 ky Greenhouse	120	39	0.707	-5.523	-6.553	0
19 ky Greenhouse	120	38	0.71	-4.342	-5.431	0
19 ky Greenhouse	120	37	0.712	-3.298	-4.42	0.672
19 ky Greenhouse	120	36	0.715	-2.019	-3.478	0
19 ky Greenhouse	120	35	0.717	-0.845	-2.591	0
19 ky Greenhouse	120	34	0.72	-2.239	-3.769	0
19 ky Greenhouse	120	33	0.722	-7.125	-7.908	0
19 ky Greenhouse	120	32	0.725	-6.227	-7.024	0
19 ky Greenhouse	120	31	0.727	-5.264	-6.087	0
19 ky Greenhouse	120	30	0.73	-4.177	-5.048	0
19 ky Greenhouse	120	29	0.732	-3.034	-3.966	0
19 ky Greenhouse	120	28	0.735	-1.817	-2.815	0.429
19 ky Greenhouse	120	27	0.737	-0.194	-1.611	0
19 ky Greenhouse	120	26	0.74	-4.06	-4.888	0
19 ky Greenhouse	120	25	0.742	-5.64	-6.163	0
19 ky Greenhouse	120	24	0.745	-4.365	-4.958	0
19 ky Greenhouse	120	23	0.747	-3.142	-3.806	0

19 ky Greenhouse	120	22	0.75	-1.962	-2.689	1.085
19 ky Greenhouse	120	21	0.752	-0.513	-1.684	0
19 ky Greenhouse	120	20	0.755	0.497	-0.749	0
19 ky Greenhouse	120	19	0.757	0.825	-0.563	0
19 ky Greenhouse	120	18	0.76	-5.444	-6.026	0
19 ky Greenhouse	120	17	0.762	-4.48	-5.196	0
19 ky Greenhouse	120	16	0.765	-3.576	-4.317	0
19 ky Greenhouse	120	15	0.767	-2.606	-3.386	0
19 ky Greenhouse	120	14	0.77	-1.521	-2.352	0.462
19 ky Greenhouse	120	13	0.772	-0.059	-1.275	0
19 ky Greenhouse	120	12	0.775	1.335	-0.129	0.307
19 ky Greenhouse	120	11	0.777	-0.917	-2.113	0
19 ky Greenhouse	120	10	0.78	-4.167	-4.72	1.45
19 ky Greenhouse	120	9	0.782	-2.487	-3.491	0
19 ky Greenhouse	120	8	0.785	-0.46	-2.291	0
19 ky Greenhouse	120	7	0.787	0.398	-1.525	0
19 ky Greenhouse	120	6	0.79	1.412	-0.815	1.074
19 ky Greenhouse	120	5	0.792	2.393	-0.203	0
19 ky Greenhouse	120	4	0.795	3.286	0.34	0
19 ky Greenhouse	120	3	0.797	-2.817	-4.842	0
19 ky Greenhouse	120	2	0.8	-3.805	-5.77	0
19 ky Greenhouse	120	1	1.6	-3.805	-5.755	0
19 ky Greenhouse	140	322	0	-1.98	-6.498	0.049
19 ky Greenhouse	140	321	0.002	-1.087	-5.658	0
19 ky Greenhouse	140	320	0.005	-0.145	-4.782	0
19 ky Greenhouse	140	319	0.007	0.881	-3.822	0
19 ky Greenhouse	140	318	0.01	1.958	-2.822	0
19 ky Greenhouse	140	317	0.012	3.133	-1.747	0
19 ky Greenhouse	140	316	0.015	4.4	-0.602	0.307
19 ky Greenhouse	140	315	0.017	2.024	-2.699	0
19 ky Greenhouse	140	314	0.02	-1.077	-5.195	0.033
19 ky Greenhouse	140	313	0.022	0.295	-3.966	0
19 ky Greenhouse	140	312	0.025	1.613	-2.765	0
19 ky Greenhouse	140	311	0.027	2.92	-1.58	0.356
19 ky Greenhouse	140	310	0.03	4.106	-0.503	0
19 ky Greenhouse	140	309	0.032	5.206	0.501	0
19 ky Greenhouse	140	308	0.035	6.559	1.434	0.346
19 ky Greenhouse	140	307	0.037	0.791	-3.469	0.004
19 ky Greenhouse	140	306	0.04	0.198	-3.865	0
19 ky Greenhouse	140	305	0.042	1.095	-3.014	0
19 ky Greenhouse	140	304	0.045	2.03	-2.135	0.377
19 ky Greenhouse	140	303	0.047	3.072	-1.171	0
19 ky Greenhouse	140	302	0.05	4.165	-0.167	0
19 ky Greenhouse	140	301	0.052	5.361	0.912	0
19 ky Greenhouse	140	300	0.055	4.597	0.112	0
19 ky Greenhouse	140	299	0.057	-0.194	-3.756	0.014
19 ky Greenhouse	140	298	0.06	1.168	-2.523	0
19 ky Greenhouse	140	297	0.062	2.537	-1.289	2.24
19 ky Greenhouse	140	296	0.065	3.883	-0.083	0
19 ky Greenhouse	140	295	0.067	5.215	1.107	0
19 ky Greenhouse	140	294	0.07	6.719	2.19	0
19 ky Greenhouse	140	293	0.072	8.29	3.198	0
19 ky Greenhouse	140	292	0.075	4.128	-0.289	0
19 ky Greenhouse	140	291	0.077	1.913	-2.007	0
19 ky Greenhouse	140	290	0.08	2.828	-1.15	0
19 ky Greenhouse	140	289	0.082	3.748	-0.294	0
19 ky Greenhouse	140	288	0.085	4.703	0.592	0

19 ky Greenhouse	140	287	0.087	5.287	1.169	0
19 ky Greenhouse	140	286	0.09	6.275	1.789	0
19 ky Greenhouse	140	285	0.092	6.404	1.723	0
19 ky Greenhouse	140	284	0.095	0.081	-3.654	0.009
19 ky Greenhouse	140	283	0.097	0.792	-2.963	0
19 ky Greenhouse	140	282	0.1	1.692	-2.113	0.728
19 ky Greenhouse	140	281	0.102	3.067	-0.878	0
19 ky Greenhouse	140	280	0.105	4.42	0.332	0
19 ky Greenhouse	140	279	0.107	5.766	1.527	0
19 ky Greenhouse	140	278	0.11	7.325	2.614	0
19 ky Greenhouse	140	277	0.112	4.771	0.386	0
19 ky Greenhouse	140	276	0.115	1.144	-2.49	0
19 ky Greenhouse	140	275	0.117	2.123	-1.572	0
19 ky Greenhouse	140	274	0.12	3.04	-0.713	0
19 ky Greenhouse	140	273	0.122	3.963	0.146	0.511
19 ky Greenhouse	140	272	0.125	4.927	1.033	0
19 ky Greenhouse	140	271	0.127	5.996	2.004	0
19 ky Greenhouse	140	270	0.13	7.263	3.014	0
19 ky Greenhouse	140	269	0.132	1.769	-1.619	0
19 ky Greenhouse	140	268	0.135	1.41	-1.806	0
19 ky Greenhouse	140	267	0.137	2.788	-0.559	0
19 ky Greenhouse	140	266	0.14	4.174	0.678	0
19 ky Greenhouse	140	265	0.142	5.558	1.915	0
19 ky Greenhouse	140	264	0.145	6.909	3.122	1.203
19 ky Greenhouse	140	263	0.147	8.604	4.313	0
19 ky Greenhouse	140	262	0.15	7.688	3.343	0
19 ky Greenhouse	140	261	0.152	2.964	-0.655	0
19 ky Greenhouse	140	260	0.155	3.982	0.282	0
19 ky Greenhouse	140	259	0.157	4.965	1.193	0
19 ky Greenhouse	140	258	0.16	5.876	2.045	0
19 ky Greenhouse	140	257	0.162	6.798	2.896	1.209
19 ky Greenhouse	140	256	0.165	7.801	3.774	0
19 ky Greenhouse	140	255	0.167	9.276	4.734	0
19 ky Greenhouse	140	254	0.17	5.399	1.203	0
19 ky Greenhouse	140	253	0.172	3.45	-0.251	0
19 ky Greenhouse	140	252	0.175	4.701	0.89	0
19 ky Greenhouse	140	251	0.177	6.068	2.123	0
19 ky Greenhouse	140	250	0.18	7.424	3.346	0
19 ky Greenhouse	140	249	0.182	8.833	4.567	0.858
19 ky Greenhouse	140	248	0.185	11.318	5.759	0.863
19 ky Greenhouse	140	247	0.187	11.556	5.673	0
19 ky Greenhouse	140	246	0.19	4.553	0.206	0
19 ky Greenhouse	140	245	0.192	5.08	0.756	0
19 ky Greenhouse	140	244	0.195	5.581	1.284	0
19 ky Greenhouse	140	243	0.197	6.01	1.756	0
19 ky Greenhouse	140	242	0.2	6.424	2.212	0
19 ky Greenhouse	140	241	0.202	7.284	3.036	0.856
19 ky Greenhouse	140	240	0.205	8.51	3.89	0
19 ky Greenhouse	140	239	0.207	6.172	1.648	0
19 ky Greenhouse	140	238	0.21	2.434	-1.26	0
19 ky Greenhouse	140	237	0.212	3.558	-0.214	0
19 ky Greenhouse	140	236	0.215	4.799	0.9	0
19 ky Greenhouse	140	235	0.217	6.083	2.064	0
19 ky Greenhouse	140	234	0.22	7.45	3.295	0
19 ky Greenhouse	140	233	0.222	8.835	4.486	0.71
19 ky Greenhouse	140	232	0.225	11.131	5.645	0.364
19 ky Greenhouse	140	231	0.227	5.347	1.126	0

19 ky Greenhouse	140	230	0.23	4.721	0.757	0
19 ky Greenhouse	140	229	0.232	5.732	1.71	0
19 ky Greenhouse	140	228	0.235	6.658	2.592	0
19 ky Greenhouse	140	227	0.237	7.542	3.417	0
19 ky Greenhouse	140	226	0.24	8.437	4.236	1.694
19 ky Greenhouse	140	225	0.242	9.692	5.026	0
19 ky Greenhouse	140	224	0.245	8.667	3.881	0
19 ky Greenhouse	140	223	0.247	3.834	-0.353	0
19 ky Greenhouse	140	222	0.25	4.849	0.61	0
19 ky Greenhouse	140	221	0.252	5.928	1.615	0
19 ky Greenhouse	140	220	0.255	7.106	2.687	0
19 ky Greenhouse	140	219	0.257	8.412	3.81	0.306
19 ky Greenhouse	140	218	0.26	10.341	4.996	0.741
19 ky Greenhouse	140	217	0.262	12.524	6.143	0.312
19 ky Greenhouse	140	216	0.265	7.968	2.825	1.631
19 ky Greenhouse	140	215	0.267	6.221	1.293	0
19 ky Greenhouse	140	214	0.27	7.324	2.279	0
19 ky Greenhouse	140	213	0.272	8.365	3.187	0
19 ky Greenhouse	140	212	0.275	9.423	4.022	0
19 ky Greenhouse	140	211	0.277	11.549	4.826	1.077
19 ky Greenhouse	140	210	0.28	12.968	5.572	0
19 ky Greenhouse	140	209	0.282	13.023	5.554	0
19 ky Greenhouse	140	208	0.285	5.759	0.181	0
19 ky Greenhouse	140	207	0.287	5.969	0.478	0
19 ky Greenhouse	140	206	0.29	6.426	0.974	0
19 ky Greenhouse	140	205	0.292	6.989	1.543	0
19 ky Greenhouse	140	204	0.295	7.64	2.178	0.885
19 ky Greenhouse	140	203	0.297	8.657	2.887	0
19 ky Greenhouse	140	202	0.3	10.239	3.6	0.73
19 ky Greenhouse	140	201	0.302	7.769	1.466	0.353
19 ky Greenhouse	140	200	0.305	4.444	-1.296	0
19 ky Greenhouse	140	199	0.307	5.589	-0.251	0
19 ky Greenhouse	140	198	0.31	6.631	0.688	0
19 ky Greenhouse	140	197	0.312	7.602	1.55	0.919
19 ky Greenhouse	140	196	0.315	8.826	2.339	0
19 ky Greenhouse	140	195	0.317	10.348	3.095	0.718
19 ky Greenhouse	140	194	0.32	11.866	3.795	0.279
19 ky Greenhouse	140	193	0.322	5.151	-1.205	0
19 ky Greenhouse	140	192	0.325	4.19	-1.843	0
19 ky Greenhouse	140	191	0.327	5.01	-1.044	0
19 ky Greenhouse	140	190	0.33	5.888	-0.202	0
19 ky Greenhouse	140	189	0.332	6.914	0.712	0
19 ky Greenhouse	140	188	0.335	8.061	1.693	1.774
19 ky Greenhouse	140	187	0.337	9.83	2.76	0
19 ky Greenhouse	140	186	0.34	8.927	1.796	0
19 ky Greenhouse	140	185	0.342	4.267	-2.179	0
19 ky Greenhouse	140	184	0.345	5.386	-1.151	0
19 ky Greenhouse	140	183	0.347	6.549	-0.146	0
19 ky Greenhouse	140	182	0.35	7.604	0.756	0.944
19 ky Greenhouse	140	181	0.352	8.825	1.58	0
19 ky Greenhouse	140	180	0.355	10.436	2.334	0.791
19 ky Greenhouse	140	179	0.357	12.058	3.054	0.298
19 ky Greenhouse	140	178	0.36	6.758	-0.772	0.336
19 ky Greenhouse	140	177	0.362	4.453	-2.673	0
19 ky Greenhouse	140	176	0.365	5.158	-1.982	0
19 ky Greenhouse	140	175	0.367	6.002	-1.215	1.102
19 ky Greenhouse	140	174	0.37	7.203	-0.403	0

19 ky Greenhouse	140	173	0.372	8.45	0.483	0
19 ky Greenhouse	140	172	0.375	10.269	1.438	0.702
19 ky Greenhouse	140	171	0.377	11.09	1.658	0.381
19 ky Greenhouse	140	170	0.38	4.305	-3.447	0
19 ky Greenhouse	140	169	0.382	5.307	-2.508	0
19 ky Greenhouse	140	168	0.385	6.514	-1.469	1.888
19 ky Greenhouse	140	167	0.387	7.397	-0.906	0
19 ky Greenhouse	140	166	0.39	8.193	-0.412	0
19 ky Greenhouse	140	165	0.392	8.965	0.007	0
19 ky Greenhouse	140	164	0.395	10.263	0.366	0.717
19 ky Greenhouse	140	163	0.397	6.562	-2.629	0.339
19 ky Greenhouse	140	162	0.4	2.345	-6.135	0
19 ky Greenhouse	140	161	0.402	2.989	-5.488	0
19 ky Greenhouse	140	160	0.405	3.7	-4.784	0
19 ky Greenhouse	140	159	0.407	4.442	-4.048	1.499
19 ky Greenhouse	140	158	0.41	5.571	-3.243	0
19 ky Greenhouse	140	157	0.412	6.955	-2.363	0
19 ky Greenhouse	140	156	0.415	8.505	-1.381	0
19 ky Greenhouse	140	155	0.417	2.663	-6.132	0
19 ky Greenhouse	140	154	0.42	2.208	-6.398	0
19 ky Greenhouse	140	153	0.422	3.326	-5.362	0
19 ky Greenhouse	140	152	0.425	4.441	-4.32	2.058
19 ky Greenhouse	140	151	0.427	5.773	-3.364	0
19 ky Greenhouse	140	150	0.43	7.16	-2.475	0
19 ky Greenhouse	140	149	0.432	8.441	-1.66	0
19 ky Greenhouse	140	148	0.435	7.207	-2.975	0
19 ky Greenhouse	140	147	0.437	1.95	-7.257	0
19 ky Greenhouse	140	146	0.44	2.626	-6.592	0
19 ky Greenhouse	140	145	0.442	3.297	-5.926	0
19 ky Greenhouse	140	144	0.445	4.035	-5.207	1.484
19 ky Greenhouse	140	143	0.447	5.151	-4.456	0
19 ky Greenhouse	140	142	0.45	6.463	-3.634	0
19 ky Greenhouse	140	141	0.452	7.905	-2.735	0
19 ky Greenhouse	140	140	0.455	3.482	-6.285	0
19 ky Greenhouse	140	139	0.457	1.571	-7.764	0
19 ky Greenhouse	140	138	0.46	2.716	-6.705	3.794
19 ky Greenhouse	140	137	0.462	3.899	-5.644	0
19 ky Greenhouse	140	136	0.465	5.095	-4.576	0
19 ky Greenhouse	140	135	0.467	6.637	-3.593	0
19 ky Greenhouse	140	134	0.47	8.116	-2.676	0
19 ky Greenhouse	140	133	0.472	8.553	-2.513	0
19 ky Greenhouse	140	132	0.475	1.788	-8.052	0
19 ky Greenhouse	140	131	0.477	2.486	-7.365	0
19 ky Greenhouse	140	130	0.48	3.199	-6.667	0
19 ky Greenhouse	140	129	0.482	4.127	-5.967	0
19 ky Greenhouse	140	128	0.485	5.275	-5.213	0
19 ky Greenhouse	140	127	0.487	5.989	-4.812	0
19 ky Greenhouse	140	126	0.49	6.799	-4.342	0
19 ky Greenhouse	140	125	0.492	3.665	-6.944	0
19 ky Greenhouse	140	124	0.495	-0.041	-10.212	0
19 ky Greenhouse	140	123	0.497	0.645	-9.535	0
19 ky Greenhouse	140	122	0.5	1.371	-8.825	0
19 ky Greenhouse	140	121	0.502	2.559	-7.732	1.08
19 ky Greenhouse	140	120	0.505	3.785	-6.62	0
19 ky Greenhouse	140	119	0.507	5.273	-5.594	0
19 ky Greenhouse	140	118	0.51	6.687	-4.634	0
19 ky Greenhouse	140	117	0.512	0.864	-9.535	0.001

19 ky Greenhouse	140	116	0.515	0.238	-9.957	0
19 ky Greenhouse	140	115	0.517	1.036	-9.187	0.001
19 ky Greenhouse	140	114	0.52	1.806	-8.444	0
19 ky Greenhouse	140	113	0.522	2.571	-7.698	0
19 ky Greenhouse	140	112	0.525	3.416	-6.895	0.846
19 ky Greenhouse	140	111	0.527	4.673	-6.061	0
19 ky Greenhouse	140	110	0.53	3.6	-7.118	0
19 ky Greenhouse	140	109	0.532	-1.339	-11.23	0.043
19 ky Greenhouse	140	108	0.535	-0.125	-10.139	0
19 ky Greenhouse	140	107	0.537	1.086	-9.024	0
19 ky Greenhouse	140	106	0.54	2.337	-7.877	0.956
19 ky Greenhouse	140	105	0.542	3.6	-6.727	0
19 ky Greenhouse	140	104	0.545	5.127	-5.566	0
19 ky Greenhouse	140	103	0.547	6.664	-4.492	0
19 ky Greenhouse	140	102	0.55	2.643	-7.934	0
19 ky Greenhouse	140	101	0.552	0.508	-9.607	0.004
19 ky Greenhouse	140	100	0.555	1.463	-8.711	0.749
19 ky Greenhouse	140	99	0.557	2.327	-7.895	0
19 ky Greenhouse	140	98	0.56	3.157	-7.104	0
19 ky Greenhouse	140	97	0.562	3.993	-6.312	0
19 ky Greenhouse	140	96	0.565	4.912	-5.462	0
19 ky Greenhouse	140	95	0.567	5.248	-5.375	0
19 ky Greenhouse	140	94	0.57	-0.798	-10.567	0.023
19 ky Greenhouse	140	93	0.572	0.181	-9.66	0
19 ky Greenhouse	140	92	0.575	1.423	-8.522	0
19 ky Greenhouse	140	91	0.577	2.689	-7.363	1.463
19 ky Greenhouse	140	90	0.58	4.005	-6.173	0
19 ky Greenhouse	140	89	0.582	5.714	-4.98	0
19 ky Greenhouse	140	88	0.585	7.432	-3.775	0
19 ky Greenhouse	140	87	0.587	4.463	-6.329	0
19 ky Greenhouse	140	86	0.59	0.916	-9.448	0
19 ky Greenhouse	140	85	0.592	1.496	-8.861	0
19 ky Greenhouse	140	84	0.595	2.015	-8.326	0.369
19 ky Greenhouse	140	83	0.597	2.454	-7.86	0
19 ky Greenhouse	140	82	0.6	2.86	-7.421	0
19 ky Greenhouse	140	81	0.602	3.727	-6.598	0
19 ky Greenhouse	140	80	0.605	4.684	-5.71	0
19 ky Greenhouse	140	79	0.607	-0.933	-10.562	0
19 ky Greenhouse	140	78	0.61	-1.409	-10.866	0.026
19 ky Greenhouse	140	77	0.612	-0.248	-9.803	0
19 ky Greenhouse	140	76	0.615	0.99	-8.669	0
19 ky Greenhouse	140	75	0.617	2.344	-7.441	0
19 ky Greenhouse	140	74	0.62	3.695	-6.219	0
19 ky Greenhouse	140	73	0.622	5.062	-4.996	0.479
19 ky Greenhouse	140	72	0.625	4.4	-5.714	0
19 ky Greenhouse	140	71	0.627	-0.387	-9.678	0.01
19 ky Greenhouse	140	70	0.63	0.78	-8.602	0
19 ky Greenhouse	140	69	0.632	1.863	-7.601	0.38
19 ky Greenhouse	140	68	0.635	2.868	-6.668	0
19 ky Greenhouse	140	67	0.637	3.848	-5.759	0
19 ky Greenhouse	140	66	0.64	4.761	-4.908	0
19 ky Greenhouse	140	65	0.642	5.684	-4.056	0
19 ky Greenhouse	140	64	0.645	1.616	-7.576	0
19 ky Greenhouse	140	63	0.647	-0.528	-9.269	0.024
19 ky Greenhouse	140	62	0.65	0.567	-8.263	0
19 ky Greenhouse	140	61	0.652	1.75	-7.181	0
19 ky Greenhouse	140	60	0.655	3.018	-6.029	0

19 ky Greenhouse	140	59	0.657	4.403	-4.784	0.715
19 ky Greenhouse	140	58	0.66	5.802	-3.547	0
19 ky Greenhouse	140	57	0.662	6.63	-3.054	0
19 ky Greenhouse	140	56	0.665	0.821	-7.989	0.005
19 ky Greenhouse	140	55	0.667	1.933	-6.965	0
19 ky Greenhouse	140	54	0.67	3.124	-5.878	1.423
19 ky Greenhouse	140	53	0.672	4.231	-4.866	0
19 ky Greenhouse	140	52	0.675	5.261	-3.924	0
19 ky Greenhouse	140	51	0.677	6.633	-3.006	0
19 ky Greenhouse	140	50	0.68	7.935	-2.147	0
19 ky Greenhouse	140	49	0.682	5.2	-4.52	0
19 ky Greenhouse	140	48	0.685	1.781	-7.459	0
19 ky Greenhouse	140	47	0.687	2.356	-6.879	0
19 ky Greenhouse	140	46	0.69	2.983	-6.257	0
19 ky Greenhouse	140	45	0.692	3.703	-5.56	0.735
19 ky Greenhouse	140	44	0.695	4.513	-4.794	0
19 ky Greenhouse	140	43	0.697	5.432	-3.947	0
19 ky Greenhouse	140	42	0.7	6.714	-3.097	0
19 ky Greenhouse	140	41	0.702	1.444	-7.581	0
19 ky Greenhouse	140	40	0.705	1.165	-7.711	0
19 ky Greenhouse	140	39	0.707	2.437	-6.553	0
19 ky Greenhouse	140	38	0.71	3.674	-5.431	0.733
19 ky Greenhouse	140	37	0.712	4.788	-4.42	0
19 ky Greenhouse	140	36	0.715	5.827	-3.478	0
19 ky Greenhouse	140	35	0.717	7.157	-2.591	0
19 ky Greenhouse	140	34	0.72	5.899	-3.769	0
19 ky Greenhouse	140	33	0.722	0.729	-7.908	0
19 ky Greenhouse	140	32	0.725	1.667	-7.024	0
19 ky Greenhouse	140	31	0.727	2.676	-6.087	0.404
19 ky Greenhouse	140	30	0.73	3.819	-5.048	0
19 ky Greenhouse	140	29	0.732	5.028	-3.966	0
19 ky Greenhouse	140	28	0.735	6.329	-2.815	0
19 ky Greenhouse	140	27	0.737	7.713	-1.611	0
19 ky Greenhouse	140	26	0.74	3.871	-4.888	0
19 ky Greenhouse	140	25	0.742	2.18	-6.163	0
19 ky Greenhouse	140	24	0.745	3.506	-4.958	0
19 ky Greenhouse	140	23	0.747	4.778	-3.806	0
19 ky Greenhouse	140	22	0.75	6.014	-2.689	0
19 ky Greenhouse	140	21	0.752	7.124	-1.684	0
19 ky Greenhouse	140	20	0.755	8.15	-0.749	0.945
19 ky Greenhouse	140	19	0.757	8.553	-0.563	0
19 ky Greenhouse	140	18	0.76	2.304	-6.026	0
19 ky Greenhouse	140	17	0.762	3.155	-5.196	0
19 ky Greenhouse	140	16	0.765	4.069	-4.317	0
19 ky Greenhouse	140	15	0.767	5.052	-3.386	0
19 ky Greenhouse	140	14	0.77	6.161	-2.352	0
19 ky Greenhouse	140	13	0.772	7.328	-1.275	0
19 ky Greenhouse	140	12	0.775	8.595	-0.129	0.479
19 ky Greenhouse	140	11	0.777	6.555	-2.113	0
19 ky Greenhouse	140	10	0.78	3.2	-4.72	0
19 ky Greenhouse	140	9	0.782	4.569	-3.491	0
19 ky Greenhouse	140	8	0.785	5.914	-2.291	0
19 ky Greenhouse	140	7	0.787	6.724	-1.525	0
19 ky Greenhouse	140	6	0.79	7.486	-0.815	0
19 ky Greenhouse	140	5	0.792	8.136	-0.203	0
19 ky Greenhouse	140	4	0.795	8.701	0.34	0
19 ky Greenhouse	140	3	0.797	1.933	-4.842	0

19 ky Greenhouse	140	2	0.8	0.945	-5.77	0
19 ky Greenhouse	140	1	1.6	0.945	-5.755	0
100 ky Greenhouse	100	322	0	-11.938	-6.498	0
100 ky Greenhouse	100	321	0.002	-10.329	-4.904	0
100 ky Greenhouse	100	320	0.005	-8.673	-3.267	0
100 ky Greenhouse	100	319	0.007	-6.879	-1.521	0
100 ky Greenhouse	100	318	0.01	-5.048	0.24	0
100 ky Greenhouse	100	317	0.012	-3.117	2.076	0
100 ky Greenhouse	100	316	0.015	-1.096	3.982	0
100 ky Greenhouse	100	315	0.017	-2.663	2.67	0
100 ky Greenhouse	100	314	0.02	-5.619	0.064	0
100 ky Greenhouse	100	313	0.022	-9.029	-3.02	0
100 ky Greenhouse	100	312	0.025	-8.2	-2.171	0
100 ky Greenhouse	100	311	0.027	-6.152	-0.2	0
100 ky Greenhouse	100	310	0.03	-4.224	1.639	0
100 ky Greenhouse	100	309	0.032	-2.371	3.403	0
100 ky Greenhouse	100	308	0.035	-0.593	5.098	0.091
100 ky Greenhouse	100	307	0.037	-5.175	0.98	0
100 ky Greenhouse	100	306	0.04	-4.86	1.345	0
100 ky Greenhouse	100	305	0.042	-3.178	2.957	0.001
100 ky Greenhouse	100	304	0.045	-6.825	-0.285	0
100 ky Greenhouse	100	303	0.047	-7.371	-0.712	0
100 ky Greenhouse	100	302	0.05	-5.532	1.053	0
100 ky Greenhouse	100	301	0.052	-3.594	2.893	0
100 ky Greenhouse	100	300	0.055	-3.726	2.855	0
100 ky Greenhouse	100	299	0.057	-7.19	-0.228	0
100 ky Greenhouse	100	298	0.06	-5.097	1.767	0
100 ky Greenhouse	100	297	0.062	-2.997	3.762	0.913
100 ky Greenhouse	100	296	0.065	-0.597	5.729	0
100 ky Greenhouse	100	295	0.067	-2.869	3.721	0
100 ky Greenhouse	100	294	0.07	-3.819	2.49	0
100 ky Greenhouse	100	293	0.072	-1.961	4.26	0
100 ky Greenhouse	100	292	0.075	-5.07	1.533	0.296
100 ky Greenhouse	100	291	0.077	-5.874	0.601	0
100 ky Greenhouse	100	290	0.08	-4.193	2.219	0
100 ky Greenhouse	100	289	0.082	-2.495	3.837	0
100 ky Greenhouse	100	288	0.085	-0.766	5.483	0.463
100 ky Greenhouse	100	287	0.087	0.737	6.846	0
100 ky Greenhouse	100	286	0.09	-0.842	5.307	0
100 ky Greenhouse	100	285	0.092	-4.718	1.863	0
100 ky Greenhouse	100	284	0.095	-9.776	-2.753	0
100 ky Greenhouse	100	283	0.097	-8.275	-1.275	0
100 ky Greenhouse	100	282	0.1	-6.625	0.335	0
100 ky Greenhouse	100	281	0.102	-4.533	2.331	0
100 ky Greenhouse	100	280	0.105	-2.44	4.303	0
100 ky Greenhouse	100	279	0.107	-0.341	6.283	0.148
100 ky Greenhouse	100	278	0.11	2.034	8.132	0.373
100 ky Greenhouse	100	277	0.112	-1.807	4.807	0
100 ky Greenhouse	100	276	0.115	-9.727	-2.382	0
100 ky Greenhouse	100	275	0.117	-8.123	-0.805	0
100 ky Greenhouse	100	274	0.12	-6.454	0.815	0
100 ky Greenhouse	100	273	0.122	-4.767	2.435	0
100 ky Greenhouse	100	272	0.125	-3.051	4.083	0.388
100 ky Greenhouse	100	271	0.127	-0.839	5.84	0
100 ky Greenhouse	100	270	0.13	1.178	7.611	0.375
100 ky Greenhouse	100	269	0.132	-3.08	3.739	0
100 ky Greenhouse	100	268	0.135	-3.414	3.518	0

100 ky Greenhouse	100	267	0.137	-7.007	0.313	0
100 ky Greenhouse	100	266	0.14	-6.035	1.285	0
100 ky Greenhouse	100	265	0.142	-3.93	3.283	0
100 ky Greenhouse	100	264	0.145	-1.847	5.252	1.114
100 ky Greenhouse	100	263	0.147	0.642	7.229	0
100 ky Greenhouse	100	262	0.15	0.599	7.019	0
100 ky Greenhouse	100	261	0.152	-2.806	3.782	0
100 ky Greenhouse	100	260	0.155	-1.019	5.481	0
100 ky Greenhouse	100	259	0.157	0.795	7.177	0.375
100 ky Greenhouse	100	258	0.16	-2.768	3.82	0
100 ky Greenhouse	100	257	0.162	-3.385	3.344	0
100 ky Greenhouse	100	256	0.165	-1.668	4.983	0
100 ky Greenhouse	100	255	0.167	0.184	6.729	0.266
100 ky Greenhouse	100	254	0.17	-2.78	3.959	0
100 ky Greenhouse	100	253	0.172	-3.636	3.266	0
100 ky Greenhouse	100	252	0.175	-1.612	5.168	0
100 ky Greenhouse	100	251	0.177	0.569	7.187	0.352
100 ky Greenhouse	100	250	0.18	3.411	9.171	0.743
100 ky Greenhouse	100	249	0.182	0.99	7.246	0
100 ky Greenhouse	100	248	0.185	-0.227	6.047	0.549
100 ky Greenhouse	100	247	0.187	0.657	6.747	0
100 ky Greenhouse	100	246	0.19	-4.387	2.041	0
100 ky Greenhouse	100	245	0.192	-3.029	3.352	0
100 ky Greenhouse	100	244	0.195	-1.686	4.641	0
100 ky Greenhouse	100	243	0.197	-0.425	5.875	0.129
100 ky Greenhouse	100	242	0.2	1.056	7.116	1.117
100 ky Greenhouse	100	241	0.202	3.367	8.702	0
100 ky Greenhouse	100	240	0.205	1.869	7.472	0
100 ky Greenhouse	100	239	0.207	-4.403	1.777	0
100 ky Greenhouse	100	238	0.21	-6.797	-0.346	0
100 ky Greenhouse	100	237	0.212	-4.914	1.462	0
100 ky Greenhouse	100	236	0.215	-2.952	3.337	0
100 ky Greenhouse	100	235	0.217	-0.916	5.263	0.019
100 ky Greenhouse	100	234	0.22	1.368	7.279	1.267
100 ky Greenhouse	100	233	0.222	4.233	9.23	0
100 ky Greenhouse	100	232	0.225	7.089	11.151	0
100 ky Greenhouse	100	231	0.227	0.014	5.611	0.228
100 ky Greenhouse	100	230	0.23	-5.201	0.79	0
100 ky Greenhouse	100	229	0.232	-3.452	2.466	0
100 ky Greenhouse	100	228	0.235	-1.719	4.108	0
100 ky Greenhouse	100	227	0.237	-0.062	5.695	0.21
100 ky Greenhouse	100	226	0.24	1.987	7.299	1.101
100 ky Greenhouse	100	225	0.242	4.312	8.85	0
100 ky Greenhouse	100	224	0.245	3.952	8.467	0
100 ky Greenhouse	100	223	0.247	-0.34	4.994	0.523
100 ky Greenhouse	100	222	0.25	0.709	5.859	0
100 ky Greenhouse	100	221	0.252	-2.795	2.552	0
100 ky Greenhouse	100	220	0.255	-2.075	3.283	0
100 ky Greenhouse	100	219	0.257	-0.09	5.167	0.204
100 ky Greenhouse	100	218	0.26	2.436	7.138	3.665
100 ky Greenhouse	100	217	0.262	5.264	9.046	0
100 ky Greenhouse	100	216	0.265	1.909	6.489	0
100 ky Greenhouse	100	215	0.267	1.156	5.743	0
100 ky Greenhouse	100	214	0.27	3.694	7.49	0
100 ky Greenhouse	100	213	0.272	6.193	9.159	0
100 ky Greenhouse	100	212	0.275	1.823	5.869	0
100 ky Greenhouse	100	211	0.277	1.293	5.286	0

100 ky Greenhouse	100	210	0.28	3.497	6.793	0
100 ky Greenhouse	100	209	0.282	4.706	7.536	0
100 ky Greenhouse	100	208	0.285	-0.959	2.924	0.264
100 ky Greenhouse	100	207	0.287	0.136	4.006	0
100 ky Greenhouse	100	206	0.29	1.809	5.264	1.836
100 ky Greenhouse	100	205	0.292	3.812	6.593	0
100 ky Greenhouse	100	204	0.295	5.923	7.99	0
100 ky Greenhouse	100	203	0.297	2.661	5.505	0
100 ky Greenhouse	100	202	0.3	0.755	3.899	0
100 ky Greenhouse	100	201	0.302	-0.63	2.526	0.083
100 ky Greenhouse	100	200	0.305	-2.863	0.525	0
100 ky Greenhouse	100	199	0.307	-0.944	2.356	0.013
100 ky Greenhouse	100	198	0.31	0.944	4.056	1.772
100 ky Greenhouse	100	197	0.312	3.309	5.678	0
100 ky Greenhouse	100	196	0.315	5.631	7.228	0
100 ky Greenhouse	100	195	0.317	7.94	8.77	0
100 ky Greenhouse	100	194	0.32	6.077	7.325	0
100 ky Greenhouse	100	193	0.322	-4.092	-1.066	0
100 ky Greenhouse	100	192	0.325	-4.043	-0.944	0
100 ky Greenhouse	100	191	0.327	-2.403	0.641	0.412
100 ky Greenhouse	100	190	0.33	-0.456	2.243	0
100 ky Greenhouse	100	189	0.332	1.579	3.919	1.781
100 ky Greenhouse	100	188	0.335	4.152	5.661	0
100 ky Greenhouse	100	187	0.337	6.892	7.513	0
100 ky Greenhouse	100	186	0.34	6.824	7.31	0
100 ky Greenhouse	100	185	0.342	0.476	2.261	0.331
100 ky Greenhouse	100	184	0.345	-2.965	-1.023	0
100 ky Greenhouse	100	183	0.347	-1.265	0.617	0
100 ky Greenhouse	100	182	0.35	0.493	2.28	0.335
100 ky Greenhouse	100	181	0.352	2.718	3.865	2.219
100 ky Greenhouse	100	180	0.355	4.986	5.38	0
100 ky Greenhouse	100	179	0.357	7.241	6.886	0
100 ky Greenhouse	100	178	0.36	3.203	3.82	0
100 ky Greenhouse	100	177	0.362	1.835	2.68	0
100 ky Greenhouse	100	176	0.365	2.962	3.369	0
100 ky Greenhouse	100	175	0.367	-1.35	-0.315	0
100 ky Greenhouse	100	174	0.37	-0.887	0.2	0.4
100 ky Greenhouse	100	173	0.372	0.945	1.847	0
100 ky Greenhouse	100	172	0.375	3.44	3.562	0.725
100 ky Greenhouse	100	171	0.377	5.005	4.568	0
100 ky Greenhouse	100	170	0.38	-0.497	0.224	0.113
100 ky Greenhouse	100	169	0.382	1.574	1.923	1.507
100 ky Greenhouse	100	168	0.385	4.26	3.748	0
100 ky Greenhouse	100	167	0.387	6.268	5.072	0
100 ky Greenhouse	100	166	0.39	1.453	1.399	0
100 ky Greenhouse	100	165	0.392	0.423	0.448	0.319
100 ky Greenhouse	100	164	0.395	2.065	1.593	0.37
100 ky Greenhouse	100	163	0.397	-0.52	-0.641	0.104
100 ky Greenhouse	100	162	0.4	-3.533	-3.386	0
100 ky Greenhouse	100	161	0.402	-2.088	-1.978	0
100 ky Greenhouse	100	160	0.405	-0.557	-0.489	0.099
100 ky Greenhouse	100	159	0.407	1.243	1.008	1.108
100 ky Greenhouse	100	158	0.41	3.559	2.574	0
100 ky Greenhouse	100	157	0.412	0.762	0.358	0
100 ky Greenhouse	100	156	0.415	-0.747	-1.076	0.056
100 ky Greenhouse	100	155	0.417	-5.148	-5.066	0
100 ky Greenhouse	100	154	0.42	-4.709	-4.571	0

100 ky Greenhouse	100	153	0.422	-2.852	-2.773	0.327
100 ky Greenhouse	100	152	0.425	-0.679	-0.946	0
100 ky Greenhouse	100	151	0.427	1.358	0.771	1.443
100 ky Greenhouse	100	150	0.43	3.783	2.421	0
100 ky Greenhouse	100	149	0.432	6.12	3.996	0
100 ky Greenhouse	100	148	0.435	1.539	0.518	0
100 ky Greenhouse	100	147	0.437	-6.849	-7.112	0
100 ky Greenhouse	100	146	0.44	-5.411	-5.686	0
100 ky Greenhouse	100	145	0.442	-3.947	-4.259	0
100 ky Greenhouse	100	144	0.445	-2.398	-2.755	0.486
100 ky Greenhouse	100	143	0.447	-0.463	-1.243	0
100 ky Greenhouse	100	142	0.45	1.479	0.341	1.013
100 ky Greenhouse	100	141	0.452	3.909	2	0
100 ky Greenhouse	100	140	0.455	0.346	-0.764	0
100 ky Greenhouse	100	139	0.457	-2.413	-3.36	0
100 ky Greenhouse	100	138	0.46	-6.044	-6.613	0
100 ky Greenhouse	100	137	0.462	-4.271	-4.899	0
100 ky Greenhouse	100	136	0.465	-2.344	-3.046	0.74
100 ky Greenhouse	100	135	0.467	-0.023	-1.301	0
100 ky Greenhouse	100	134	0.47	2.225	0.376	0.887
100 ky Greenhouse	100	133	0.472	3.7	1.3	0
100 ky Greenhouse	100	132	0.475	-1.852	-3.453	0
100 ky Greenhouse	100	131	0.477	-0.364	-2.005	0.438
100 ky Greenhouse	100	130	0.48	0.396	-1.352	0
100 ky Greenhouse	100	129	0.482	-3.454	-4.965	0
100 ky Greenhouse	100	128	0.485	-3.164	-4.604	0
100 ky Greenhouse	100	127	0.487	-1.986	-3.442	0
100 ky Greenhouse	100	126	0.49	-0.732	-2.211	0.044
100 ky Greenhouse	100	125	0.492	-2.825	-4.053	0
100 ky Greenhouse	100	124	0.495	-5.622	-6.535	0
100 ky Greenhouse	100	123	0.497	-4.153	-5.096	0
100 ky Greenhouse	100	122	0.5	-2.633	-3.626	0
100 ky Greenhouse	100	121	0.502	-0.685	-1.772	0.018
100 ky Greenhouse	100	120	0.505	-4.174	-4.846	0
100 ky Greenhouse	100	119	0.507	-4.589	-5.146	0
100 ky Greenhouse	100	118	0.51	-2.788	-3.425	0
100 ky Greenhouse	100	117	0.512	-7.367	-7.541	0
100 ky Greenhouse	100	116	0.515	-7.083	-7.201	0
100 ky Greenhouse	100	115	0.517	-5.507	-5.67	0
100 ky Greenhouse	100	114	0.52	-3.959	-4.165	0
100 ky Greenhouse	100	113	0.522	-2.387	-2.658	0
100 ky Greenhouse	100	112	0.525	-0.722	-1.07	0.58
100 ky Greenhouse	100	111	0.527	-3.429	-3.386	0
100 ky Greenhouse	100	110	0.53	-7.095	-6.829	0
100 ky Greenhouse	100	109	0.532	-10.388	-10.18	0
100 ky Greenhouse	100	108	0.535	-8.468	-8.302	0
100 ky Greenhouse	100	107	0.537	-6.539	-6.426	0
100 ky Greenhouse	100	106	0.54	-4.545	-4.518	0
100 ky Greenhouse	100	105	0.542	-2.54	-2.607	0.648
100 ky Greenhouse	100	104	0.545	-0.039	-0.66	0
100 ky Greenhouse	100	103	0.547	2.39	1.175	0.362
100 ky Greenhouse	100	102	0.55	-3.932	-4.363	0
100 ky Greenhouse	100	101	0.552	-9.533	-9.476	0
100 ky Greenhouse	100	100	0.555	-7.818	-7.794	0
100 ky Greenhouse	100	99	0.557	-6.199	-6.217	0
100 ky Greenhouse	100	98	0.56	-4.593	-4.665	0
100 ky Greenhouse	100	97	0.562	-2.991	-3.111	0.83

100 ky Greenhouse	100	96	0.565	-0.858	-1.475	0
100 ky Greenhouse	100	95	0.567	0.021	-0.627	0
100 ky Greenhouse	100	94	0.57	-4.65	-5.058	0
100 ky Greenhouse	100	93	0.572	-4.883	-5.192	0
100 ky Greenhouse	100	92	0.575	-8.547	-8.508	0
100 ky Greenhouse	100	91	0.577	-6.589	-6.604	0
100 ky Greenhouse	100	90	0.58	-4.551	-4.653	0
100 ky Greenhouse	100	89	0.582	-2.498	-2.698	0
100 ky Greenhouse	100	88	0.585	-0.39	-0.708	0.203
100 ky Greenhouse	100	87	0.587	-2.303	-2.5	0
100 ky Greenhouse	100	86	0.59	-4.997	-4.858	0
100 ky Greenhouse	100	85	0.592	-3.618	-3.51	0
100 ky Greenhouse	100	84	0.595	-3.262	-3.102	0
100 ky Greenhouse	100	83	0.597	-7.558	-6.95	0
100 ky Greenhouse	100	82	0.6	-7.499	-6.82	0
100 ky Greenhouse	100	81	0.602	-5.863	-5.236	0
100 ky Greenhouse	100	80	0.605	-4.113	-3.562	0
100 ky Greenhouse	100	79	0.607	-8.642	-7.653	0
100 ky Greenhouse	100	78	0.61	-8.232	-7.196	0
100 ky Greenhouse	100	77	0.612	-6.343	-5.372	0
100 ky Greenhouse	100	76	0.615	-4.369	-3.476	0
100 ky Greenhouse	100	75	0.617	-2.246	-1.462	0.232
100 ky Greenhouse	100	74	0.62	-5.358	-4.413	0
100 ky Greenhouse	100	73	0.622	-5.596	-4.554	0
100 ky Greenhouse	100	72	0.625	-5.633	-4.51	0
100 ky Greenhouse	100	71	0.627	-9.144	-7.688	0
100 ky Greenhouse	100	70	0.63	-7.257	-5.851	0
100 ky Greenhouse	100	69	0.632	-5.427	-4.088	0
100 ky Greenhouse	100	68	0.635	-3.669	-2.394	0.623
100 ky Greenhouse	100	67	0.637	-1.255	-0.7	0
100 ky Greenhouse	100	66	0.64	0.451	0.913	0.326
100 ky Greenhouse	100	65	0.642	-1.927	-1.354	0
100 ky Greenhouse	100	64	0.645	-8.494	-7.292	0
100 ky Greenhouse	100	63	0.647	-9.539	-8.198	0
100 ky Greenhouse	100	62	0.65	-7.73	-6.431	0
100 ky Greenhouse	100	61	0.652	-5.833	-4.588	0
100 ky Greenhouse	100	60	0.655	-3.822	-2.675	0
100 ky Greenhouse	100	59	0.657	-1.674	-0.644	0.01
100 ky Greenhouse	100	58	0.66	0.523	1.354	0.714
100 ky Greenhouse	100	57	0.662	2.314	2.608	0
100 ky Greenhouse	100	56	0.665	-5.546	-4.391	0
100 ky Greenhouse	100	55	0.667	-8.245	-6.814	0
100 ky Greenhouse	100	54	0.67	-6.345	-4.966	0.221
100 ky Greenhouse	100	53	0.672	-4.272	-3.193	0
100 ky Greenhouse	100	52	0.675	-2.496	-1.489	0.874
100 ky Greenhouse	100	51	0.677	-0.046	0.214	0
100 ky Greenhouse	100	50	0.68	2.022	1.835	0.408
100 ky Greenhouse	100	49	0.682	0.283	0.224	0.309
100 ky Greenhouse	100	48	0.685	-1.965	-1.954	0
100 ky Greenhouse	100	47	0.687	-2.706	-2.524	0
100 ky Greenhouse	100	46	0.69	-6.828	-6.216	0
100 ky Greenhouse	100	45	0.692	-5.383	-4.806	0
100 ky Greenhouse	100	44	0.695	-3.799	-3.279	0
100 ky Greenhouse	100	43	0.697	-2.096	-1.646	0
100 ky Greenhouse	100	42	0.7	-0.408	-0.035	0.133
100 ky Greenhouse	100	41	0.702	-4.499	-3.758	0
100 ky Greenhouse	100	40	0.705	-3.893	-3.125	0

100 ky Greenhouse	100	39	0.707	-1.872	-1.207	0
100 ky Greenhouse	100	38	0.71	-0.831	-0.18	0.038
100 ky Greenhouse	100	37	0.712	-4.553	-3.483	0
100 ky Greenhouse	100	36	0.715	-3.98	-2.883	0
100 ky Greenhouse	100	35	0.717	-2.244	-1.234	0
100 ky Greenhouse	100	34	0.72	-2.771	-1.626	0
100 ky Greenhouse	100	33	0.722	-6.56	-5.004	0
100 ky Greenhouse	100	32	0.725	-4.852	-3.358	0
100 ky Greenhouse	100	31	0.727	-3.07	-1.66	0
100 ky Greenhouse	100	30	0.73	-1.143	0.164	0
100 ky Greenhouse	100	29	0.732	0.908	2.008	0.375
100 ky Greenhouse	100	28	0.735	-2.313	-0.982	0
100 ky Greenhouse	100	27	0.737	-2.616	-1.173	0
100 ky Greenhouse	100	26	0.74	-5.442	-3.664	0
100 ky Greenhouse	100	25	0.742	-6.091	-4.178	0
100 ky Greenhouse	100	24	0.745	-4.036	-2.211	0
100 ky Greenhouse	100	23	0.747	-2.02	-0.298	0.551
100 ky Greenhouse	100	22	0.75	0.291	1.604	0
100 ky Greenhouse	100	21	0.752	2.667	3.371	1.098
100 ky Greenhouse	100	20	0.755	5.116	5.067	0
100 ky Greenhouse	100	19	0.757	1.517	2.166	0
100 ky Greenhouse	100	18	0.76	-7.122	-5.721	0
100 ky Greenhouse	100	17	0.762	-5.491	-4.13	0
100 ky Greenhouse	100	16	0.765	-3.791	-2.49	0
100 ky Greenhouse	100	15	0.767	-2.025	-0.798	0.514
100 ky Greenhouse	100	14	0.77	0.181	1.022	0
100 ky Greenhouse	100	13	0.772	2.623	2.86	0.938
100 ky Greenhouse	100	12	0.775	5.328	4.768	0
100 ky Greenhouse	100	11	0.777	3.871	3.545	0
100 ky Greenhouse	100	10	0.78	-1.91	-1.234	0.548
100 ky Greenhouse	100	9	0.782	-3.797	-3.345	0
100 ky Greenhouse	100	8	0.785	-1.734	-1.383	0.575
100 ky Greenhouse	100	7	0.787	0.198	0.144	0
100 ky Greenhouse	100	6	0.79	2.18	1.64	1.083
100 ky Greenhouse	100	5	0.792	4.154	3.013	0
100 ky Greenhouse	100	4	0.795	6.064	4.317	0
100 ky Greenhouse	100	3	0.797	0.559	-0.103	0.35
100 ky Greenhouse	100	2	0.8	0.719	-0.27	0
100 ky Greenhouse	100	1	1.6	0.719	-0.231	0
100 ky Greenhouse	120	322	0	-12.684	-6.498	0
100 ky Greenhouse	120	321	0.002	-11.024	-4.904	0
100 ky Greenhouse	120	320	0.005	-9.312	-3.267	0.532
100 ky Greenhouse	120	319	0.007	-6.919	-1.521	0
100 ky Greenhouse	120	318	0.01	-5.016	0.24	0
100 ky Greenhouse	120	317	0.012	-3.005	2.076	0
100 ky Greenhouse	120	316	0.015	-0.893	3.982	0.184
100 ky Greenhouse	120	315	0.017	-2.542	2.67	0
100 ky Greenhouse	120	314	0.02	-5.517	0.064	0
100 ky Greenhouse	120	313	0.022	-9.115	-3.02	0
100 ky Greenhouse	120	312	0.025	-8.266	-2.171	0
100 ky Greenhouse	120	311	0.027	-6.137	-0.2	0
100 ky Greenhouse	120	310	0.03	-4.13	1.639	0
100 ky Greenhouse	120	309	0.032	-2.196	3.403	0.447
100 ky Greenhouse	120	308	0.035	-0.093	5.098	0
100 ky Greenhouse	120	307	0.037	-4.84	0.98	0
100 ky Greenhouse	120	306	0.04	-4.531	1.345	0
100 ky Greenhouse	120	305	0.042	-2.778	2.957	0.157

100 ky Greenhouse	120	304	0.045	-6.484	-0.285	0
100 ky Greenhouse	120	303	0.047	-7.078	-0.712	0
100 ky Greenhouse	120	302	0.05	-5.166	1.053	0
100 ky Greenhouse	120	301	0.052	-3.146	2.893	0
100 ky Greenhouse	120	300	0.055	-3.307	2.855	0
100 ky Greenhouse	120	299	0.057	-6.974	-0.228	0
100 ky Greenhouse	120	298	0.06	-4.794	1.767	0
100 ky Greenhouse	120	297	0.062	-2.597	3.762	0.711
100 ky Greenhouse	120	296	0.065	-0.151	5.729	0
100 ky Greenhouse	120	295	0.067	-2.469	3.721	0
100 ky Greenhouse	120	294	0.07	-3.771	2.49	0
100 ky Greenhouse	120	293	0.072	-1.83	4.26	0.653
100 ky Greenhouse	120	292	0.075	-5.07	1.533	0
100 ky Greenhouse	120	291	0.077	-5.65	0.601	0
100 ky Greenhouse	120	290	0.08	-3.902	2.219	0
100 ky Greenhouse	120	289	0.082	-2.136	3.837	0
100 ky Greenhouse	120	288	0.085	-0.324	5.483	0.152
100 ky Greenhouse	120	287	0.087	1.343	6.846	0.375
100 ky Greenhouse	120	286	0.09	-0.351	5.307	0.146
100 ky Greenhouse	120	285	0.092	-4.351	1.863	0
100 ky Greenhouse	120	284	0.095	-9.678	-2.753	0
100 ky Greenhouse	120	283	0.097	-8.127	-1.275	0
100 ky Greenhouse	120	282	0.1	-6.415	0.335	0
100 ky Greenhouse	120	281	0.102	-4.237	2.331	0
100 ky Greenhouse	120	280	0.105	-2.052	4.303	0
100 ky Greenhouse	120	279	0.107	0.147	6.283	0.257
100 ky Greenhouse	120	278	0.11	2.696	8.132	0.371
100 ky Greenhouse	120	277	0.112	-1.335	4.807	0.091
100 ky Greenhouse	120	276	0.115	-9.589	-2.382	0
100 ky Greenhouse	120	275	0.117	-7.929	-0.805	0
100 ky Greenhouse	120	274	0.12	-6.198	0.815	0
100 ky Greenhouse	120	273	0.122	-4.444	2.435	0
100 ky Greenhouse	120	272	0.125	-2.651	4.083	0.504
100 ky Greenhouse	120	271	0.127	-0.349	5.84	0
100 ky Greenhouse	120	270	0.13	1.863	7.611	0.374
100 ky Greenhouse	120	269	0.132	-2.647	3.739	0
100 ky Greenhouse	120	268	0.135	-3.021	3.518	0
100 ky Greenhouse	120	267	0.137	-6.822	0.313	0
100 ky Greenhouse	120	266	0.14	-5.821	1.285	0
100 ky Greenhouse	120	265	0.142	-3.627	3.283	0
100 ky Greenhouse	120	264	0.145	-1.447	5.252	0.961
100 ky Greenhouse	120	263	0.147	0.979	7.229	0
100 ky Greenhouse	120	262	0.15	0.903	7.019	0
100 ky Greenhouse	120	261	0.152	-2.715	3.782	0
100 ky Greenhouse	120	260	0.155	-0.844	5.481	0.035
100 ky Greenhouse	120	259	0.157	1.092	7.177	0.375
100 ky Greenhouse	120	258	0.16	-2.706	3.82	0
100 ky Greenhouse	120	257	0.162	-3.378	3.344	0
100 ky Greenhouse	120	256	0.165	-1.585	4.983	0.432
100 ky Greenhouse	120	255	0.167	0.458	6.729	0
100 ky Greenhouse	120	254	0.17	-2.645	3.959	0
100 ky Greenhouse	120	253	0.172	-3.569	3.266	0
100 ky Greenhouse	120	252	0.175	-1.456	5.168	0
100 ky Greenhouse	120	251	0.177	0.83	7.187	0.375
100 ky Greenhouse	120	250	0.18	3.752	9.171	0.741
100 ky Greenhouse	120	249	0.182	1.252	7.246	0
100 ky Greenhouse	120	248	0.185	-0.064	6.047	0.585

100 ky Greenhouse	120	247	0.187	0.876	6.747	0
100 ky Greenhouse	120	246	0.19	-4.482	2.041	0
100 ky Greenhouse	120	245	0.192	-3.073	3.352	0
100 ky Greenhouse	120	244	0.195	-1.678	4.641	0
100 ky Greenhouse	120	243	0.197	-0.355	5.875	0.145
100 ky Greenhouse	120	242	0.2	1.2	7.116	0.882
100 ky Greenhouse	120	241	0.202	3.547	8.702	0
100 ky Greenhouse	120	240	0.205	2	7.472	0
100 ky Greenhouse	120	239	0.207	-4.862	1.777	0
100 ky Greenhouse	120	238	0.21	-7.398	-0.346	0
100 ky Greenhouse	120	237	0.212	-5.44	1.462	0
100 ky Greenhouse	120	236	0.215	-3.391	3.337	0.561
100 ky Greenhouse	120	235	0.217	-0.749	5.263	0
100 ky Greenhouse	120	234	0.22	1.679	7.279	1.069
100 ky Greenhouse	120	233	0.222	4.589	9.23	0
100 ky Greenhouse	120	232	0.225	7.475	11.151	0
100 ky Greenhouse	120	231	0.227	-0.003	5.611	0.532
100 ky Greenhouse	120	230	0.23	-5.534	0.79	0
100 ky Greenhouse	120	229	0.232	-3.407	2.466	0
100 ky Greenhouse	120	228	0.235	-1.601	4.108	0
100 ky Greenhouse	120	227	0.237	0.136	5.695	0.255
100 ky Greenhouse	120	226	0.24	2.308	7.299	1.095
100 ky Greenhouse	120	225	0.242	4.664	8.85	0
100 ky Greenhouse	120	224	0.245	4.283	8.467	0
100 ky Greenhouse	120	223	0.247	-0.182	4.994	0.559
100 ky Greenhouse	120	222	0.25	0.937	5.859	0
100 ky Greenhouse	120	221	0.252	-2.798	2.552	0
100 ky Greenhouse	120	220	0.255	-2.061	3.283	0
100 ky Greenhouse	120	219	0.257	0.024	5.167	0.23
100 ky Greenhouse	120	218	0.26	2.67	7.138	3.656
100 ky Greenhouse	120	217	0.262	5.535	9.046	0
100 ky Greenhouse	120	216	0.265	2.096	6.489	0
100 ky Greenhouse	120	215	0.267	1.289	5.743	0
100 ky Greenhouse	120	214	0.27	3.879	7.49	0
100 ky Greenhouse	120	213	0.272	6.405	9.159	0
100 ky Greenhouse	120	212	0.275	1.93	5.869	0
100 ky Greenhouse	120	211	0.277	1.349	5.286	0
100 ky Greenhouse	120	210	0.28	3.599	6.793	0
100 ky Greenhouse	120	209	0.282	4.815	7.536	0
100 ky Greenhouse	120	208	0.285	-1.08	2.924	0
100 ky Greenhouse	120	207	0.287	0.061	4.006	0.238
100 ky Greenhouse	120	206	0.29	1.772	5.264	1.821
100 ky Greenhouse	120	205	0.292	3.806	6.593	0
100 ky Greenhouse	120	204	0.295	5.943	7.99	0
100 ky Greenhouse	120	203	0.297	2.6	5.505	0
100 ky Greenhouse	120	202	0.3	0.605	3.899	0
100 ky Greenhouse	120	201	0.302	-0.892	2.526	0.636
100 ky Greenhouse	120	200	0.305	-3.33	0.525	0
100 ky Greenhouse	120	199	0.307	-0.761	2.356	0
100 ky Greenhouse	120	198	0.31	1.258	4.056	1.759
100 ky Greenhouse	120	197	0.312	3.673	5.678	0
100 ky Greenhouse	120	196	0.315	6.024	7.228	0
100 ky Greenhouse	120	195	0.317	8.355	8.77	0
100 ky Greenhouse	120	194	0.32	6.441	7.325	0
100 ky Greenhouse	120	193	0.322	-4.143	-1.066	0
100 ky Greenhouse	120	192	0.325	-4.112	-0.944	0
100 ky Greenhouse	120	191	0.327	-2.403	0.641	0.157

100 ky Greenhouse	120	190	0.33	-0.596	2.243	0
100 ky Greenhouse	120	189	0.332	1.483	3.919	1.42
100 ky Greenhouse	120	188	0.335	4.097	5.661	0
100 ky Greenhouse	120	187	0.337	6.874	7.513	0
100 ky Greenhouse	120	186	0.34	6.733	7.31	0
100 ky Greenhouse	120	185	0.342	-0.107	2.261	1.333
100 ky Greenhouse	120	184	0.345	-3.899	-1.023	0
100 ky Greenhouse	120	183	0.347	-1.785	0.617	0
100 ky Greenhouse	120	182	0.35	0.511	2.28	0
100 ky Greenhouse	120	181	0.352	2.801	3.865	2.153
100 ky Greenhouse	120	180	0.355	5.1	5.38	0
100 ky Greenhouse	120	179	0.357	7.382	6.886	0
100 ky Greenhouse	120	178	0.36	3.181	3.82	0
100 ky Greenhouse	120	177	0.362	1.761	2.68	0
100 ky Greenhouse	120	176	0.365	2.897	3.369	0
100 ky Greenhouse	120	175	0.367	-1.626	-0.315	0.411
100 ky Greenhouse	120	174	0.37	-0.787	0.2	0
100 ky Greenhouse	120	173	0.372	1.144	1.847	1.038
100 ky Greenhouse	120	172	0.375	3.69	3.562	0
100 ky Greenhouse	120	171	0.377	5.238	4.568	0
100 ky Greenhouse	120	170	0.38	-0.485	0.224	0.116
100 ky Greenhouse	120	169	0.382	1.661	1.923	1.404
100 ky Greenhouse	120	168	0.385	4.39	3.748	0
100 ky Greenhouse	120	167	0.387	6.386	5.072	0
100 ky Greenhouse	120	166	0.39	1.372	1.399	0
100 ky Greenhouse	120	165	0.392	0.278	0.448	0.287
100 ky Greenhouse	120	164	0.395	1.925	1.593	0.367
100 ky Greenhouse	120	163	0.397	-0.79	-0.641	0.047
100 ky Greenhouse	120	162	0.4	-4.049	-3.386	0
100 ky Greenhouse	120	161	0.402	-2.547	-1.978	0.51
100 ky Greenhouse	120	160	0.405	-0.535	-0.489	0
100 ky Greenhouse	120	159	0.407	1.331	1.008	1.078
100 ky Greenhouse	120	158	0.41	3.672	2.574	0
100 ky Greenhouse	120	157	0.412	0.763	0.358	0
100 ky Greenhouse	120	156	0.415	-0.839	-1.076	0.033
100 ky Greenhouse	120	155	0.417	-5.519	-5.066	0
100 ky Greenhouse	120	154	0.42	-5.076	-4.571	0.51
100 ky Greenhouse	120	153	0.422	-2.852	-2.773	0
100 ky Greenhouse	120	152	0.425	-0.682	-0.946	0
100 ky Greenhouse	120	151	0.427	1.418	0.771	1.494
100 ky Greenhouse	120	150	0.43	3.88	2.421	0
100 ky Greenhouse	120	149	0.432	6.246	3.996	0
100 ky Greenhouse	120	148	0.435	1.533	0.518	0
100 ky Greenhouse	120	147	0.437	-7.221	-7.112	0
100 ky Greenhouse	120	146	0.44	-5.732	-5.686	0.203
100 ky Greenhouse	120	145	0.442	-4.011	-4.259	0
100 ky Greenhouse	120	144	0.445	-2.398	-2.755	0.18
100 ky Greenhouse	120	143	0.447	-0.645	-1.243	0
100 ky Greenhouse	120	142	0.45	1.301	0.341	0.92
100 ky Greenhouse	120	141	0.452	3.766	2	0
100 ky Greenhouse	120	140	0.455	0.093	-0.764	0
100 ky Greenhouse	120	139	0.457	-2.931	-3.36	0.394
100 ky Greenhouse	120	138	0.46	-6.374	-6.613	0
100 ky Greenhouse	120	137	0.462	-4.534	-4.899	0
100 ky Greenhouse	120	136	0.465	-2.522	-3.046	0.455
100 ky Greenhouse	120	135	0.467	-0.298	-1.301	0
100 ky Greenhouse	120	134	0.47	1.903	0.376	0.697

100 ky Greenhouse	120	133	0.472	3.338	1.3	0
100 ky Greenhouse	120	132	0.475	-2.594	-3.453	0.366
100 ky Greenhouse	120	131	0.477	-0.823	-2.005	0
100 ky Greenhouse	120	130	0.48	-0.181	-1.352	0
100 ky Greenhouse	120	129	0.482	-4.428	-4.965	0
100 ky Greenhouse	120	128	0.485	-4.141	-4.604	0.762
100 ky Greenhouse	120	127	0.487	-2.581	-3.442	0
100 ky Greenhouse	120	126	0.49	-0.853	-2.211	0
100 ky Greenhouse	120	125	0.492	-3.136	-4.053	0.092
100 ky Greenhouse	120	124	0.495	-5.999	-6.535	0
100 ky Greenhouse	120	123	0.497	-4.474	-5.096	0.29
100 ky Greenhouse	120	122	0.5	-2.852	-3.626	0
100 ky Greenhouse	120	121	0.502	-0.567	-1.772	0
100 ky Greenhouse	120	120	0.505	-4.291	-4.846	0
100 ky Greenhouse	120	119	0.507	-4.75	-5.146	0
100 ky Greenhouse	120	118	0.51	-2.875	-3.425	0
100 ky Greenhouse	120	117	0.512	-7.849	-7.541	0
100 ky Greenhouse	120	116	0.515	-7.571	-7.201	0
100 ky Greenhouse	120	115	0.517	-5.937	-5.67	0
100 ky Greenhouse	120	114	0.52	-4.328	-4.165	0.565
100 ky Greenhouse	120	113	0.522	-1.984	-2.658	0
100 ky Greenhouse	120	112	0.525	-0.245	-1.07	0.195
100 ky Greenhouse	120	111	0.527	-3.029	-3.386	0
100 ky Greenhouse	120	110	0.53	-7.098	-6.829	0
100 ky Greenhouse	120	109	0.532	-10.872	-10.18	0
100 ky Greenhouse	120	108	0.535	-8.883	-8.302	0
100 ky Greenhouse	120	107	0.537	-6.879	-6.426	0.364
100 ky Greenhouse	120	106	0.54	-4.441	-4.518	0
100 ky Greenhouse	120	105	0.542	-2.345	-2.607	0.52
100 ky Greenhouse	120	104	0.545	0.152	-0.66	0
100 ky Greenhouse	120	103	0.547	2.624	1.175	0.271
100 ky Greenhouse	120	102	0.55	-4.116	-4.363	0.29
100 ky Greenhouse	120	101	0.552	-9.724	-9.476	0
100 ky Greenhouse	120	100	0.555	-7.95	-7.794	0
100 ky Greenhouse	120	99	0.557	-6.271	-6.217	0
100 ky Greenhouse	120	98	0.56	-4.604	-4.665	0
100 ky Greenhouse	120	97	0.562	-2.933	-3.111	0.536
100 ky Greenhouse	120	96	0.565	-0.736	-1.475	0
100 ky Greenhouse	120	95	0.567	0.101	-0.627	0
100 ky Greenhouse	120	94	0.57	-5.073	-5.058	0
100 ky Greenhouse	120	93	0.572	-5.339	-5.192	0
100 ky Greenhouse	120	92	0.575	-9.204	-8.508	0
100 ky Greenhouse	120	91	0.577	-7.171	-6.604	0.551
100 ky Greenhouse	120	90	0.58	-4.499	-4.653	0
100 ky Greenhouse	120	89	0.582	-2.356	-2.698	0.654
100 ky Greenhouse	120	88	0.585	0.062	-0.708	0
100 ky Greenhouse	120	87	0.587	-1.984	-2.5	0
100 ky Greenhouse	120	86	0.59	-4.61	-4.858	0
100 ky Greenhouse	120	85	0.592	-3.175	-3.51	0.102
100 ky Greenhouse	120	84	0.595	-2.719	-3.102	0
100 ky Greenhouse	120	83	0.597	-7.401	-6.95	0
100 ky Greenhouse	120	82	0.6	-7.36	-6.82	0
100 ky Greenhouse	120	81	0.602	-5.662	-5.236	0
100 ky Greenhouse	120	80	0.605	-3.842	-3.562	0
100 ky Greenhouse	120	79	0.607	-8.622	-7.653	0
100 ky Greenhouse	120	78	0.61	-8.212	-7.196	0
100 ky Greenhouse	120	77	0.612	-6.249	-5.372	0

100 ky Greenhouse	120	76	0.615	-4.192	-3.476	0.584
100 ky Greenhouse	120	75	0.617	-1.245	-1.462	0
100 ky Greenhouse	120	74	0.62	-4.93	-4.413	0
100 ky Greenhouse	120	73	0.622	-5.201	-4.554	0
100 ky Greenhouse	120	72	0.625	-5.261	-4.51	0
100 ky Greenhouse	120	71	0.627	-8.965	-7.688	0
100 ky Greenhouse	120	70	0.63	-7.007	-5.851	0
100 ky Greenhouse	120	69	0.632	-5.104	-4.088	0
100 ky Greenhouse	120	68	0.635	-3.269	-2.394	0.74
100 ky Greenhouse	120	67	0.637	-0.977	-0.7	0
100 ky Greenhouse	120	66	0.64	0.81	0.913	0
100 ky Greenhouse	120	65	0.642	-1.682	-1.354	0
100 ky Greenhouse	120	64	0.645	-8.532	-7.292	0
100 ky Greenhouse	120	63	0.647	-9.646	-8.198	0
100 ky Greenhouse	120	62	0.65	-7.77	-6.431	0
100 ky Greenhouse	120	61	0.652	-5.797	-4.588	0.177
100 ky Greenhouse	120	60	0.655	-3.526	-2.675	0
100 ky Greenhouse	120	59	0.657	-1.274	-0.644	0.145
100 ky Greenhouse	120	58	0.66	1.158	1.354	0.543
100 ky Greenhouse	120	57	0.662	3.029	2.608	0
100 ky Greenhouse	120	56	0.665	-5.468	-4.391	0
100 ky Greenhouse	120	55	0.667	-8.32	-6.814	0
100 ky Greenhouse	120	54	0.67	-6.345	-4.966	0.065
100 ky Greenhouse	120	53	0.672	-4.353	-3.193	0
100 ky Greenhouse	120	52	0.675	-2.496	-1.489	0.592
100 ky Greenhouse	120	51	0.677	-0.21	0.214	0
100 ky Greenhouse	120	50	0.68	1.893	1.835	0.35
100 ky Greenhouse	120	49	0.682	-0.02	0.224	0.469
100 ky Greenhouse	120	48	0.685	-2.517	-1.954	0
100 ky Greenhouse	120	47	0.687	-3.231	-2.524	0
100 ky Greenhouse	120	46	0.69	-7.552	-6.216	0
100 ky Greenhouse	120	45	0.692	-5.924	-4.806	0
100 ky Greenhouse	120	44	0.695	-4.278	-3.279	0
100 ky Greenhouse	120	43	0.697	-2.503	-1.646	0.493
100 ky Greenhouse	120	42	0.7	-0.387	-0.035	0
100 ky Greenhouse	120	41	0.702	-4.725	-3.758	0
100 ky Greenhouse	120	40	0.705	-4.107	-3.125	0
100 ky Greenhouse	120	39	0.707	-1.996	-1.207	0.735
100 ky Greenhouse	120	38	0.71	-0.333	-0.18	0
100 ky Greenhouse	120	37	0.712	-4.17	-3.483	0
100 ky Greenhouse	120	36	0.715	-3.589	-2.883	0
100 ky Greenhouse	120	35	0.717	-1.78	-1.234	0
100 ky Greenhouse	120	34	0.72	-2.358	-1.626	0
100 ky Greenhouse	120	33	0.722	-6.367	-5.004	0
100 ky Greenhouse	120	32	0.725	-4.592	-3.358	0
100 ky Greenhouse	120	31	0.727	-2.735	-1.66	0
100 ky Greenhouse	120	30	0.73	-0.716	0.164	0.064
100 ky Greenhouse	120	29	0.732	1.489	2.008	0.374
100 ky Greenhouse	120	28	0.735	-1.943	-0.982	0
100 ky Greenhouse	120	27	0.737	-2.285	-1.173	0
100 ky Greenhouse	120	26	0.74	-5.282	-3.664	0
100 ky Greenhouse	120	25	0.742	-5.983	-4.178	0.956
100 ky Greenhouse	120	24	0.745	-3.496	-2.211	0
100 ky Greenhouse	120	23	0.747	-0.815	-0.298	0
100 ky Greenhouse	120	22	0.75	1.383	1.604	1.357
100 ky Greenhouse	120	21	0.752	3.923	3.371	0
100 ky Greenhouse	120	20	0.755	6.379	5.067	0

100 ky Greenhouse	120	19	0.757	2.576	2.166	0
100 ky Greenhouse	120	18	0.76	-6.571	-5.721	0
100 ky Greenhouse	120	17	0.762	-4.877	-4.13	0.791
100 ky Greenhouse	120	16	0.765	-2.958	-2.49	0
100 ky Greenhouse	120	15	0.767	-0.536	-0.798	0
100 ky Greenhouse	120	14	0.77	1.586	1.022	1.306
100 ky Greenhouse	120	13	0.772	4.187	2.86	0
100 ky Greenhouse	120	12	0.775	6.923	4.768	0
100 ky Greenhouse	120	11	0.777	5.369	3.545	0
100 ky Greenhouse	120	10	0.78	-0.618	-1.234	0.673
100 ky Greenhouse	120	9	0.782	-3.141	-3.345	0
100 ky Greenhouse	120	8	0.785	-0.472	-1.383	0
100 ky Greenhouse	120	7	0.787	1.32	0.144	1.685
100 ky Greenhouse	120	6	0.79	3.462	1.64	0
100 ky Greenhouse	120	5	0.792	5.461	3.013	0
100 ky Greenhouse	120	4	0.795	7.375	4.317	0
100 ky Greenhouse	120	3	0.797	1.572	-0.103	0
100 ky Greenhouse	120	2	0.8	1.719	-0.27	0
100 ky Greenhouse	120	1	1.6	1.719	-0.231	0
100 ky Greenhouse	140	322	0	-4.92	-6.498	0
100 ky Greenhouse	140	321	0.002	-3.18	-4.904	0
100 ky Greenhouse	140	320	0.005	-1.381	-3.267	0.108
100 ky Greenhouse	140	319	0.007	0.673	-1.521	0
100 ky Greenhouse	140	318	0.01	2.681	0.24	0
100 ky Greenhouse	140	317	0.012	4.796	2.076	0.476
100 ky Greenhouse	140	316	0.015	7.027	3.982	0
100 ky Greenhouse	140	315	0.017	5.6	2.67	0
100 ky Greenhouse	140	314	0.02	2.407	0.064	0
100 ky Greenhouse	140	313	0.022	-1.397	-3.02	0.12
100 ky Greenhouse	140	312	0.025	-0.415	-2.171	0
100 ky Greenhouse	140	311	0.027	1.849	-0.2	0
100 ky Greenhouse	140	310	0.03	3.959	1.639	0.721
100 ky Greenhouse	140	309	0.032	6.001	3.403	0
100 ky Greenhouse	140	308	0.035	8.262	5.098	0
100 ky Greenhouse	140	307	0.037	3.445	0.98	0
100 ky Greenhouse	140	306	0.04	3.758	1.345	0
100 ky Greenhouse	140	305	0.042	5.601	2.957	0.147
100 ky Greenhouse	140	304	0.045	1.668	-0.285	0
100 ky Greenhouse	140	303	0.047	1.032	-0.712	0
100 ky Greenhouse	140	302	0.05	3.041	1.053	0.129
100 ky Greenhouse	140	301	0.052	5.177	2.893	0
100 ky Greenhouse	140	300	0.055	5.092	2.855	0
100 ky Greenhouse	140	299	0.057	1.235	-0.228	0
100 ky Greenhouse	140	298	0.06	3.528	1.767	0
100 ky Greenhouse	140	297	0.062	5.847	3.762	0.457
100 ky Greenhouse	140	296	0.065	8.188	5.729	0
100 ky Greenhouse	140	295	0.067	5.955	3.721	0
100 ky Greenhouse	140	294	0.07	4.298	2.49	0
100 ky Greenhouse	140	293	0.072	6.334	4.26	0
100 ky Greenhouse	140	292	0.075	2.835	1.533	0
100 ky Greenhouse	140	291	0.077	1.545	0.601	0
100 ky Greenhouse	140	290	0.08	3.382	2.219	0
100 ky Greenhouse	140	289	0.082	5.214	3.837	0
100 ky Greenhouse	140	288	0.085	7.125	5.483	0
100 ky Greenhouse	140	287	0.087	8.786	6.846	1.099
100 ky Greenhouse	140	286	0.09	7.4	5.307	0
100 ky Greenhouse	140	285	0.092	3.369	1.863	0

100 ky Greenhouse	140	284	0.095	-2.26	-2.753	0
100 ky Greenhouse	140	283	0.097	-0.631	-1.275	0
100 ky Greenhouse	140	282	0.1	1.128	0.335	0
100 ky Greenhouse	140	281	0.102	3.379	2.331	0
100 ky Greenhouse	140	280	0.105	5.662	4.303	0
100 ky Greenhouse	140	279	0.107	8.017	6.283	0.378
100 ky Greenhouse	140	278	0.11	10.812	8.132	0.518
100 ky Greenhouse	140	277	0.112	6.771	4.807	0.018
100 ky Greenhouse	140	276	0.115	-2.027	-2.382	0
100 ky Greenhouse	140	275	0.117	-0.283	-0.805	0
100 ky Greenhouse	140	274	0.12	1.462	0.815	0
100 ky Greenhouse	140	273	0.122	3.306	2.435	0
100 ky Greenhouse	140	272	0.125	5.198	4.083	0
100 ky Greenhouse	140	271	0.127	7.214	5.84	0
100 ky Greenhouse	140	270	0.13	9.369	7.611	0.828
100 ky Greenhouse	140	269	0.132	5.189	3.739	0
100 ky Greenhouse	140	268	0.135	4.744	3.518	0
100 ky Greenhouse	140	267	0.137	0.679	0.313	0
100 ky Greenhouse	140	266	0.14	1.728	1.285	0
100 ky Greenhouse	140	265	0.142	4.002	3.283	0
100 ky Greenhouse	140	264	0.145	6.299	5.252	0
100 ky Greenhouse	140	263	0.147	8.663	7.229	0.819
100 ky Greenhouse	140	262	0.15	8.608	7.019	0
100 ky Greenhouse	140	261	0.152	4.898	3.782	0
100 ky Greenhouse	140	260	0.155	6.841	5.481	0
100 ky Greenhouse	140	259	0.157	8.81	7.177	0.632
100 ky Greenhouse	140	258	0.16	5.112	3.82	0
100 ky Greenhouse	140	257	0.162	4.349	3.344	0
100 ky Greenhouse	140	256	0.165	6.24	4.983	0
100 ky Greenhouse	140	255	0.167	8.244	6.729	0.367
100 ky Greenhouse	140	254	0.17	5.071	3.959	0
100 ky Greenhouse	140	253	0.172	4.022	3.266	0
100 ky Greenhouse	140	252	0.175	6.243	5.168	0
100 ky Greenhouse	140	251	0.177	8.602	7.187	0.321
100 ky Greenhouse	140	250	0.18	11.636	9.171	0.224
100 ky Greenhouse	140	249	0.182	8.956	7.246	1.858
100 ky Greenhouse	140	248	0.185	8.025	6.047	0
100 ky Greenhouse	140	247	0.187	8.932	6.747	0
100 ky Greenhouse	140	246	0.19	3.772	2.041	0
100 ky Greenhouse	140	245	0.192	5.187	3.352	0
100 ky Greenhouse	140	244	0.195	6.581	4.641	0
100 ky Greenhouse	140	243	0.197	7.903	5.875	0
100 ky Greenhouse	140	242	0.2	9.28	7.116	0.442
100 ky Greenhouse	140	241	0.202	12.066	8.702	0.162
100 ky Greenhouse	140	240	0.205	10.296	7.472	0.614
100 ky Greenhouse	140	239	0.207	3.541	1.777	0
100 ky Greenhouse	140	238	0.21	0.855	-0.346	0
100 ky Greenhouse	140	237	0.212	2.798	1.462	0
100 ky Greenhouse	140	236	0.215	4.841	3.337	0
100 ky Greenhouse	140	235	0.217	6.974	5.263	0
100 ky Greenhouse	140	234	0.22	9.311	7.279	0.557
100 ky Greenhouse	140	233	0.222	12.95	9.23	0.449
100 ky Greenhouse	140	232	0.225	15.747	11.151	0
100 ky Greenhouse	140	231	0.227	8.012	5.611	0.377
100 ky Greenhouse	140	230	0.23	2.311	0.79	0
100 ky Greenhouse	140	229	0.232	4.154	2.466	0
100 ky Greenhouse	140	228	0.235	5.996	4.108	0

100 ky Greenhouse	140	227	0.237	7.789	5.695	0
100 ky Greenhouse	140	226	0.24	9.717	7.299	0.613
100 ky Greenhouse	140	225	0.242	12.582	8.85	0.551
100 ky Greenhouse	140	224	0.245	12.118	8.467	0
100 ky Greenhouse	140	223	0.247	7.447	4.994	0
100 ky Greenhouse	140	222	0.25	8.41	5.859	0.091
100 ky Greenhouse	140	221	0.252	4.191	2.552	0
100 ky Greenhouse	140	220	0.255	4.822	3.283	0
100 ky Greenhouse	140	219	0.257	7.025	5.167	0
100 ky Greenhouse	140	218	0.26	9.355	7.138	0.346
100 ky Greenhouse	140	217	0.262	12.544	9.046	0.159
100 ky Greenhouse	140	216	0.265	8.875	6.489	0.846
100 ky Greenhouse	140	215	0.267	8.383	5.743	0
100 ky Greenhouse	140	214	0.27	10.778	7.49	0.599
100 ky Greenhouse	140	213	0.272	13.382	9.159	0
100 ky Greenhouse	140	212	0.275	8.698	5.869	1.388
100 ky Greenhouse	140	211	0.277	8.42	5.286	0
100 ky Greenhouse	140	210	0.28	11.028	6.793	0.706
100 ky Greenhouse	140	209	0.282	12.364	7.536	0
100 ky Greenhouse	140	208	0.285	6.17	2.924	0
100 ky Greenhouse	140	207	0.287	7.331	4.006	0
100 ky Greenhouse	140	206	0.29	8.82	5.264	0.373
100 ky Greenhouse	140	205	0.292	10.978	6.593	0.654
100 ky Greenhouse	140	204	0.295	13.233	7.99	0
100 ky Greenhouse	140	203	0.297	9.703	5.505	1.4
100 ky Greenhouse	140	202	0.3	8.154	3.899	0
100 ky Greenhouse	140	201	0.302	6.751	2.526	0
100 ky Greenhouse	140	200	0.305	4.129	0.525	0
100 ky Greenhouse	140	199	0.307	6.241	2.356	0
100 ky Greenhouse	140	198	0.31	8.311	4.056	0.162
100 ky Greenhouse	140	197	0.312	10.584	5.678	0.72
100 ky Greenhouse	140	196	0.315	13.32	7.228	0.676
100 ky Greenhouse	140	195	0.317	15.569	8.77	0
100 ky Greenhouse	140	194	0.32	13.519	7.325	0
100 ky Greenhouse	140	193	0.322	2.463	-1.066	0
100 ky Greenhouse	140	192	0.325	2.461	-0.944	0
100 ky Greenhouse	140	191	0.327	4.249	0.641	0
100 ky Greenhouse	140	190	0.33	6.097	2.243	0
100 ky Greenhouse	140	189	0.332	8.2	3.919	0.584
100 ky Greenhouse	140	188	0.335	11.063	5.661	1.043
100 ky Greenhouse	140	187	0.337	14.04	7.513	0
100 ky Greenhouse	140	186	0.34	13.816	7.31	0
100 ky Greenhouse	140	185	0.342	6.781	2.261	0.007
100 ky Greenhouse	140	184	0.345	2.578	-1.023	0
100 ky Greenhouse	140	183	0.347	4.435	0.617	0
100 ky Greenhouse	140	182	0.35	6.373	2.28	0
100 ky Greenhouse	140	181	0.352	8.402	3.865	0.414
100 ky Greenhouse	140	180	0.355	10.776	5.38	0.685
100 ky Greenhouse	140	179	0.357	13.12	6.886	0
100 ky Greenhouse	140	178	0.36	8.859	3.82	1.598
100 ky Greenhouse	140	177	0.362	7.593	2.68	0
100 ky Greenhouse	140	176	0.365	8.701	3.369	0
100 ky Greenhouse	140	175	0.367	4.364	-0.315	0
100 ky Greenhouse	140	174	0.37	4.858	0.2	0
100 ky Greenhouse	140	173	0.372	6.814	1.847	1.25
100 ky Greenhouse	140	172	0.375	9.249	3.562	0
100 ky Greenhouse	140	171	0.377	11.544	4.568	0.44

100 ky Greenhouse	140	170	0.38	5.801	0.224	0.501
100 ky Greenhouse	140	169	0.382	7.978	1.923	0
100 ky Greenhouse	140	168	0.385	10.803	3.748	0.88
100 ky Greenhouse	140	167	0.387	13.067	5.072	0
100 ky Greenhouse	140	166	0.39	7.969	1.399	1.851
100 ky Greenhouse	140	165	0.392	6.825	0.448	0
100 ky Greenhouse	140	164	0.395	8.611	1.593	0
100 ky Greenhouse	140	163	0.397	5.998	-0.641	0
100 ky Greenhouse	140	162	0.4	2.612	-3.386	0
100 ky Greenhouse	140	161	0.402	4.213	-1.978	0
100 ky Greenhouse	140	160	0.405	5.939	-0.489	0
100 ky Greenhouse	140	159	0.407	7.797	1.008	0
100 ky Greenhouse	140	158	0.41	10.174	2.574	0.682
100 ky Greenhouse	140	157	0.412	7.54	0.358	0.356
100 ky Greenhouse	140	156	0.415	5.849	-1.076	0
100 ky Greenhouse	140	155	0.417	0.871	-5.066	0
100 ky Greenhouse	140	154	0.42	1.337	-4.571	0.014
100 ky Greenhouse	140	153	0.422	3.395	-2.773	0.418
100 ky Greenhouse	140	152	0.425	5.533	-0.946	0
100 ky Greenhouse	140	151	0.427	7.688	0.771	0
100 ky Greenhouse	140	150	0.43	10.195	2.421	0.735
100 ky Greenhouse	140	149	0.432	12.977	3.996	0.33
100 ky Greenhouse	140	148	0.435	8.179	0.518	0.425
100 ky Greenhouse	140	147	0.437	-1.032	-7.112	0.039
100 ky Greenhouse	140	146	0.44	0.574	-5.686	0
100 ky Greenhouse	140	145	0.442	2.168	-4.259	0.703
100 ky Greenhouse	140	144	0.445	3.872	-2.755	0
100 ky Greenhouse	140	143	0.447	5.596	-1.243	0
100 ky Greenhouse	140	142	0.45	7.821	0.341	0
100 ky Greenhouse	140	141	0.452	10.402	2	0.776
100 ky Greenhouse	140	140	0.455	7.093	-0.764	0.348
100 ky Greenhouse	140	139	0.457	4.029	-3.36	0
100 ky Greenhouse	140	138	0.46	-0.025	-6.613	0.006
100 ky Greenhouse	140	137	0.462	1.907	-4.899	0
100 ky Greenhouse	140	136	0.465	4.015	-3.046	0
100 ky Greenhouse	140	135	0.467	5.997	-1.301	0.915
100 ky Greenhouse	140	134	0.47	8.453	0.376	0
100 ky Greenhouse	140	133	0.472	10.2	1.3	0.682
100 ky Greenhouse	140	132	0.475	4.394	-3.453	0.742
100 ky Greenhouse	140	131	0.477	6.071	-2.005	0
100 ky Greenhouse	140	130	0.48	7.099	-1.352	0
100 ky Greenhouse	140	129	0.482	2.814	-4.965	0
100 ky Greenhouse	140	128	0.485	3.116	-4.604	0
100 ky Greenhouse	140	127	0.487	4.4	-3.442	0.961
100 ky Greenhouse	140	126	0.49	6.059	-2.211	0
100 ky Greenhouse	140	125	0.492	4	-4.053	0
100 ky Greenhouse	140	124	0.495	1.191	-6.535	0
100 ky Greenhouse	140	123	0.497	2.798	-5.096	1.094
100 ky Greenhouse	140	122	0.5	4.465	-3.626	0
100 ky Greenhouse	140	121	0.502	6.982	-1.772	0
100 ky Greenhouse	140	120	0.505	3.393	-4.846	0
100 ky Greenhouse	140	119	0.507	2.901	-5.146	0
100 ky Greenhouse	140	118	0.51	4.879	-3.425	0
100 ky Greenhouse	140	117	0.512	0.131	-7.541	0.037
100 ky Greenhouse	140	116	0.515	0.432	-7.201	0
100 ky Greenhouse	140	115	0.517	2.169	-5.67	0
100 ky Greenhouse	140	114	0.52	3.864	-4.165	0.775

100 ky Greenhouse	140	113	0.522	5.611	-2.658	0
100 ky Greenhouse	140	112	0.525	7.829	-1.07	0
100 ky Greenhouse	140	111	0.527	5.152	-3.386	0
100 ky Greenhouse	140	110	0.53	0.834	-6.829	0
100 ky Greenhouse	140	109	0.532	-3.241	-10.18	0
100 ky Greenhouse	140	108	0.535	-1.153	-8.302	0.028
100 ky Greenhouse	140	107	0.537	0.991	-6.426	0
100 ky Greenhouse	140	106	0.54	3.17	-4.518	0
100 ky Greenhouse	140	105	0.542	5.382	-2.607	0.37
100 ky Greenhouse	140	104	0.545	7.668	-0.66	0
100 ky Greenhouse	140	103	0.547	10.387	1.175	0.768
100 ky Greenhouse	140	102	0.55	3.842	-4.363	0.017
100 ky Greenhouse	140	101	0.552	-2.372	-9.476	0
100 ky Greenhouse	140	100	0.555	-0.51	-7.794	0.036
100 ky Greenhouse	140	99	0.557	1.29	-6.217	0
100 ky Greenhouse	140	98	0.56	3.04	-4.665	0.856
100 ky Greenhouse	140	97	0.562	4.824	-3.111	0
100 ky Greenhouse	140	96	0.565	6.736	-1.475	0
100 ky Greenhouse	140	95	0.567	8.032	-0.627	0
100 ky Greenhouse	140	94	0.57	2.828	-5.058	0
100 ky Greenhouse	140	93	0.572	2.54	-5.192	0
100 ky Greenhouse	140	92	0.575	-1.544	-8.508	0.179
100 ky Greenhouse	140	91	0.577	0.762	-6.604	0
100 ky Greenhouse	140	90	0.58	3.004	-4.653	1.142
100 ky Greenhouse	140	89	0.582	5.277	-2.698	0
100 ky Greenhouse	140	88	0.585	7.984	-0.708	0
100 ky Greenhouse	140	87	0.587	5.967	-2.5	0
100 ky Greenhouse	140	86	0.59	3.287	-4.858	0
100 ky Greenhouse	140	85	0.592	4.8	-3.51	0.333
100 ky Greenhouse	140	84	0.595	5.201	-3.102	0
100 ky Greenhouse	140	83	0.597	0.697	-6.95	0
100 ky Greenhouse	140	82	0.6	0.73	-6.82	0
100 ky Greenhouse	140	81	0.602	2.513	-5.236	0
100 ky Greenhouse	140	80	0.605	4.425	-3.562	0
100 ky Greenhouse	140	79	0.607	-0.629	-7.653	0.011
100 ky Greenhouse	140	78	0.61	-0.192	-7.196	0
100 ky Greenhouse	140	77	0.612	1.871	-5.372	0
100 ky Greenhouse	140	76	0.615	4.041	-3.476	0.023
100 ky Greenhouse	140	75	0.617	6.392	-1.462	0
100 ky Greenhouse	140	74	0.62	2.659	-4.413	0
100 ky Greenhouse	140	73	0.622	2.363	-4.554	0
100 ky Greenhouse	140	72	0.625	2.291	-4.51	0
100 ky Greenhouse	140	71	0.627	-1.623	-7.688	0.077
100 ky Greenhouse	140	70	0.63	0.513	-5.851	0
100 ky Greenhouse	140	69	0.632	2.506	-4.088	0
100 ky Greenhouse	140	68	0.635	4.438	-2.394	0
100 ky Greenhouse	140	67	0.637	6.4	-0.7	0.776
100 ky Greenhouse	140	66	0.64	8.52	0.913	0
100 ky Greenhouse	140	65	0.642	6.053	-1.354	0
100 ky Greenhouse	140	64	0.645	-1.283	-7.292	0
100 ky Greenhouse	140	63	0.647	-2.465	-8.198	0
100 ky Greenhouse	140	62	0.65	-0.494	-6.431	0
100 ky Greenhouse	140	61	0.652	1.577	-4.588	0
100 ky Greenhouse	140	60	0.655	3.745	-2.675	0
100 ky Greenhouse	140	59	0.657	6.09	-0.644	0
100 ky Greenhouse	140	58	0.66	8.46	1.354	0.567
100 ky Greenhouse	140	57	0.662	10.696	2.608	0.536

100 ky Greenhouse	140	56	0.665	2.152	-4.391	0.011
100 ky Greenhouse	140	55	0.667	-0.894	-6.814	0
100 ky Greenhouse	140	54	0.67	1.133	-4.966	0
100 ky Greenhouse	140	53	0.672	3.134	-3.193	0
100 ky Greenhouse	140	52	0.675	5.096	-1.489	0
100 ky Greenhouse	140	51	0.677	7.034	0.214	1.851
100 ky Greenhouse	140	50	0.68	9.326	1.835	0
100 ky Greenhouse	140	49	0.682	8.049	0.224	0
100 ky Greenhouse	140	48	0.685	5.6	-1.954	0
100 ky Greenhouse	140	47	0.687	4.969	-2.524	0
100 ky Greenhouse	140	46	0.69	0.379	-6.216	0.017
100 ky Greenhouse	140	45	0.692	1.969	-4.806	0.018
100 ky Greenhouse	140	44	0.695	3.716	-3.279	0
100 ky Greenhouse	140	43	0.697	5.587	-1.646	0.418
100 ky Greenhouse	140	42	0.7	7.509	-0.035	0
100 ky Greenhouse	140	41	0.702	3.126	-3.758	0
100 ky Greenhouse	140	40	0.705	3.772	-3.125	0
100 ky Greenhouse	140	39	0.707	5.998	-1.207	0.579
100 ky Greenhouse	140	38	0.71	7.368	-0.18	0
100 ky Greenhouse	140	37	0.712	3.495	-3.483	0
100 ky Greenhouse	140	36	0.715	4.1	-2.883	0
100 ky Greenhouse	140	35	0.717	6.001	-1.234	0.077
100 ky Greenhouse	140	34	0.72	5.459	-1.626	0
100 ky Greenhouse	140	33	0.722	1.199	-5.004	0
100 ky Greenhouse	140	32	0.725	3.047	-3.358	0
100 ky Greenhouse	140	31	0.727	4.979	-1.66	0
100 ky Greenhouse	140	30	0.73	7.086	0.164	0
100 ky Greenhouse	140	29	0.732	9.281	2.008	0.924
100 ky Greenhouse	140	28	0.735	6.337	-0.982	0
100 ky Greenhouse	140	27	0.737	5.936	-1.173	0
100 ky Greenhouse	140	26	0.74	2.763	-3.664	0
100 ky Greenhouse	140	25	0.742	2.018	-4.178	0
100 ky Greenhouse	140	24	0.745	4.223	-2.211	0
100 ky Greenhouse	140	23	0.747	6.403	-0.298	0
100 ky Greenhouse	140	22	0.75	8.655	1.604	0
100 ky Greenhouse	140	21	0.752	10.973	3.371	0.296
100 ky Greenhouse	140	20	0.755	13.535	5.067	0.093
100 ky Greenhouse	140	19	0.757	9.415	2.166	1.055
100 ky Greenhouse	140	18	0.76	0.477	-5.721	0
100 ky Greenhouse	140	17	0.762	2.26	-4.13	0
100 ky Greenhouse	140	16	0.765	4.071	-2.49	0
100 ky Greenhouse	140	15	0.767	5.981	-0.798	0
100 ky Greenhouse	140	14	0.77	8.128	1.022	0
100 ky Greenhouse	140	13	0.772	10.484	2.86	0.819
100 ky Greenhouse	140	12	0.775	13.865	4.768	0.516
100 ky Greenhouse	140	11	0.777	12.217	3.545	0
100 ky Greenhouse	140	10	0.78	5.932	-1.234	0
100 ky Greenhouse	140	9	0.782	3.128	-3.345	0
100 ky Greenhouse	140	8	0.785	5.328	-1.383	0
100 ky Greenhouse	140	7	0.787	7.042	0.144	0
100 ky Greenhouse	140	6	0.79	8.83	1.64	0
100 ky Greenhouse	140	5	0.792	10.805	3.013	0.387
100 ky Greenhouse	140	4	0.795	12.822	4.317	0.143
100 ky Greenhouse	140	3	0.797	6.672	-0.103	0
100 ky Greenhouse	140	2	0.8	6.469	-0.27	0
100 ky Greenhouse	140	1	1.6	6.469	-0.231	0
High Amplitude	100	322	0	-15.897	-6.498	0

Greenhouse						
High Amplitude Greenhouse	100	321	0.002	-14.133	-4.76	0
High Amplitude Greenhouse	100	320	0.005	-12.316	-2.977	0
High Amplitude Greenhouse	100	319	0.007	-10.368	-1.08	0
High Amplitude Greenhouse	100	318	0.01	-8.388	0.827	0
High Amplitude Greenhouse	100	317	0.012	-6.305	2.809	0
High Amplitude Greenhouse	100	316	0.015	-4.126	4.86	0
High Amplitude Greenhouse	100	315	0.017	-5.507	3.7	0
High Amplitude Greenhouse	100	314	0.02	-8.294	1.239	0
High Amplitude Greenhouse	100	313	0.022	-11.536	-1.7	0
High Amplitude Greenhouse	100	312	0.025	-10.549	-0.704	0
High Amplitude Greenhouse	100	311	0.027	-8.34	1.417	0
High Amplitude Greenhouse	100	310	0.03	-6.253	3.402	0
High Amplitude Greenhouse	100	309	0.032	-4.225	5.312	0
High Amplitude Greenhouse	100	308	0.035	-2.261	7.153	0
High Amplitude Greenhouse	100	307	0.037	-6.773	3.186	0
High Amplitude Greenhouse	100	306	0.04	-6.298	3.697	0
High Amplitude Greenhouse	100	305	0.042	-4.451	5.455	0.99
High Amplitude Greenhouse	100	304	0.045	-6.963	2.358	0
High Amplitude Greenhouse	100	303	0.047	-7.346	2.082	0
High Amplitude Greenhouse	100	302	0.05	-5.339	3.993	0
High Amplitude Greenhouse	100	301	0.052	-3.236	5.979	0
High Amplitude Greenhouse	100	300	0.055	-3.209	6.086	0
High Amplitude Greenhouse	100	299	0.057	-6.537	3.155	0
High Amplitude Greenhouse	100	298	0.06	-4.266	5.295	0
High Amplitude Greenhouse	100	297	0.062	-1.98	7.436	0.461
High Amplitude Greenhouse	100	296	0.065	0.449	9.549	0
High Amplitude Greenhouse	100	295	0.067	-1.512	7.691	0
High Amplitude Greenhouse	100	294	0.07	-2.847	6.606	0.107
High Amplitude Greenhouse	100	293	0.072	-0.742	8.522	0
High Amplitude Greenhouse	100	292	0.075	-3.697	5.941	0
High Amplitude Greenhouse	100	291	0.077	-4.662	5.16	0
High Amplitude Greenhouse	100	290	0.08	-2.793	6.923	0.135
High Amplitude Greenhouse	100	289	0.082	-0.813	8.687	0
High Amplitude Greenhouse	100	288	0.085	1.311	10.479	0.748

High Amplitude Greenhouse	100	287	0.087	2.233	11.014	0
High Amplitude Greenhouse	100	286	0.09	-0.634	8.647	0.082
High Amplitude Greenhouse	100	285	0.092	-5.463	4.377	0
High Amplitude Greenhouse	100	284	0.095	-11.454	-1.065	0
High Amplitude Greenhouse	100	283	0.097	-10.861	-0.441	0
High Amplitude Greenhouse	100	282	0.1	-10.098	0.342	0
High Amplitude Greenhouse	100	281	0.102	-7.872	2.476	0
High Amplitude Greenhouse	100	280	0.105	-5.636	4.594	0
High Amplitude Greenhouse	100	279	0.107	-3.367	6.725	0.704
High Amplitude Greenhouse	100	278	0.11	-0.603	8.719	0
High Amplitude Greenhouse	100	277	0.112	-4.201	5.54	0
High Amplitude Greenhouse	100	276	0.115	-11.928	-1.503	0
High Amplitude Greenhouse	100	275	0.117	-10.156	0.224	0
High Amplitude Greenhouse	100	274	0.12	-8.334	1.99	0
High Amplitude Greenhouse	100	273	0.122	-6.495	3.756	0
High Amplitude Greenhouse	100	272	0.125	-4.605	5.55	0
High Amplitude Greenhouse	100	271	0.127	-2.581	7.457	0.731
High Amplitude Greenhouse	100	270	0.13	-0.016	9.375	0
High Amplitude Greenhouse	100	269	0.132	-4.099	5.649	0
High Amplitude Greenhouse	100	268	0.135	-4.272	5.574	0
High Amplitude Greenhouse	100	267	0.137	-7.706	2.519	0
High Amplitude Greenhouse	100	266	0.14	-6.578	3.637	0
High Amplitude Greenhouse	100	265	0.142	-4.3	5.781	0
High Amplitude Greenhouse	100	264	0.145	-2.041	7.895	0.928
High Amplitude Greenhouse	100	263	0.147	0.501	10.023	0
High Amplitude Greenhouse	100	262	0.15	0.616	9.959	0
High Amplitude Greenhouse	100	261	0.152	-2.68	6.868	0
High Amplitude Greenhouse	100	260	0.155	-0.705	8.712	0.066
High Amplitude Greenhouse	100	259	0.157	1.419	10.56	0.374
High Amplitude Greenhouse	100	258	0.16	-2.1	7.348	0
High Amplitude Greenhouse	100	257	0.162	-2.567	7.018	0
High Amplitude Greenhouse	100	256	0.165	-0.661	8.803	0.076
High Amplitude Greenhouse	100	255	0.167	1.576	10.7	0.374
High Amplitude Greenhouse	100	254	0.17	-1.339	8.075	0
High Amplitude Greenhouse	100	253	0.172	-2.074	7.528	1.106

High Amplitude Greenhouse	100	252	0.175	0.919	9.577	0
High Amplitude Greenhouse	100	251	0.177	3.944	11.746	1.798
High Amplitude Greenhouse	100	250	0.18	7.102	13.875	0
High Amplitude Greenhouse	100	249	0.182	4.758	12.096	0
High Amplitude Greenhouse	100	248	0.185	3.462	11.043	0
High Amplitude Greenhouse	100	247	0.187	3.462	10.914	0
High Amplitude Greenhouse	100	246	0.19	-2.951	5.381	0
High Amplitude Greenhouse	100	245	0.192	-2.501	5.865	0
High Amplitude Greenhouse	100	244	0.195	-2.088	6.328	0
High Amplitude Greenhouse	100	243	0.197	-1.74	6.735	0.696
High Amplitude Greenhouse	100	242	0.2	-0.774	7.123	0
High Amplitude Greenhouse	100	241	0.202	1.182	8.847	0.375
High Amplitude Greenhouse	100	240	0.205	0.104	7.763	0.248
High Amplitude Greenhouse	100	239	0.207	-5.899	2.214	0
High Amplitude Greenhouse	100	238	0.21	-8.114	0.242	0
High Amplitude Greenhouse	100	237	0.212	-6.081	2.195	0
High Amplitude Greenhouse	100	236	0.215	-3.959	4.216	0
High Amplitude Greenhouse	100	235	0.217	-1.752	6.287	0
High Amplitude Greenhouse	100	234	0.22	0.596	8.454	0.358
High Amplitude Greenhouse	100	233	0.222	3.418	10.552	0.713
High Amplitude Greenhouse	100	232	0.225	6.467	12.618	0
High Amplitude Greenhouse	100	231	0.227	-0.321	7.224	0.152
High Amplitude Greenhouse	100	230	0.23	-5.423	2.554	0
High Amplitude Greenhouse	100	229	0.232	-3.526	4.375	0
High Amplitude Greenhouse	100	228	0.235	-1.628	6.164	0
High Amplitude Greenhouse	100	227	0.237	0.208	7.896	0.271
High Amplitude Greenhouse	100	226	0.24	2.481	9.651	1.089
High Amplitude Greenhouse	100	225	0.242	4.958	11.348	0
High Amplitude Greenhouse	100	224	0.245	4.797	11.111	0
High Amplitude Greenhouse	100	223	0.247	0.688	7.783	0.375
High Amplitude Greenhouse	100	222	0.25	2.157	8.8	0.373
High Amplitude Greenhouse	100	221	0.252	-1.299	5.638	0
High Amplitude Greenhouse	100	220	0.255	-0.433	6.515	0.127
High Amplitude Greenhouse	100	219	0.257	1.982	8.544	6.114
High Amplitude Greenhouse	100	218	0.26	4.998	10.667	0

High Amplitude Greenhouse	100	217	0.262	8.035	12.72	0
High Amplitude Greenhouse	100	216	0.265	4.813	10.309	0
High Amplitude Greenhouse	100	215	0.267	4.166	9.713	0
High Amplitude Greenhouse	100	214	0.27	6.974	11.606	0
High Amplitude Greenhouse	100	213	0.272	9.817	13.421	0
High Amplitude Greenhouse	100	212	0.275	5.543	10.277	0
High Amplitude Greenhouse	100	211	0.277	5.107	9.844	0
High Amplitude Greenhouse	100	210	0.28	7.581	11.497	0
High Amplitude Greenhouse	100	209	0.282	8.973	12.387	0
High Amplitude Greenhouse	100	208	0.285	2.919	7.92	0
High Amplitude Greenhouse	100	207	0.287	3.448	8.174	0
High Amplitude Greenhouse	100	206	0.29	4.219	8.605	0
High Amplitude Greenhouse	100	205	0.292	5.091	9.108	0
High Amplitude Greenhouse	100	204	0.295	6.052	9.678	0
High Amplitude Greenhouse	100	203	0.297	1.703	6.34	0
High Amplitude Greenhouse	100	202	0.3	-0.929	3.907	0.016
High Amplitude Greenhouse	100	201	0.302	-2.38	2.67	0
High Amplitude Greenhouse	100	200	0.305	-4.506	0.816	0
High Amplitude Greenhouse	100	199	0.307	-2.415	2.796	0
High Amplitude Greenhouse	100	198	0.31	-0.471	4.642	0.119
High Amplitude Greenhouse	100	197	0.312	1.623	6.41	1.465
High Amplitude Greenhouse	100	196	0.315	4.077	8.107	0
High Amplitude Greenhouse	100	195	0.317	6.6	9.799	0
High Amplitude Greenhouse	100	194	0.32	4.977	8.499	0
High Amplitude Greenhouse	100	193	0.322	-4.675	0.254	0
High Amplitude Greenhouse	100	192	0.325	-4.466	0.523	0
High Amplitude Greenhouse	100	191	0.327	-2.661	2.258	0
High Amplitude Greenhouse	100	190	0.33	-0.825	4.006	0.039
High Amplitude Greenhouse	100	189	0.332	1.228	5.827	1.42
High Amplitude Greenhouse	100	188	0.335	3.936	7.716	0
High Amplitude Greenhouse	100	187	0.337	6.89	9.718	0
High Amplitude Greenhouse	100	186	0.34	6.966	9.661	0
High Amplitude Greenhouse	100	185	0.342	0.54	4.758	0.346
High Amplitude Greenhouse	100	184	0.345	-2.77	1.62	0
High Amplitude Greenhouse	100	183	0.347	-0.89	3.411	0.025

High Amplitude Greenhouse	100	182	0.35	1.131	5.219	2.498
High Amplitude Greenhouse	100	181	0.352	3.634	6.95	0
High Amplitude Greenhouse	100	180	0.355	6.108	8.611	0
High Amplitude Greenhouse	100	179	0.357	8.575	10.267	0
High Amplitude Greenhouse	100	178	0.36	4.659	7.348	0
High Amplitude Greenhouse	100	177	0.362	3.461	6.353	0
High Amplitude Greenhouse	100	176	0.365	4.794	7.188	0
High Amplitude Greenhouse	100	175	0.367	0.282	3.654	0.288
High Amplitude Greenhouse	100	174	0.37	1.236	4.315	4.311
High Amplitude Greenhouse	100	173	0.372	3.849	6.108	0
High Amplitude Greenhouse	100	172	0.375	6.6	7.969	0
High Amplitude Greenhouse	100	171	0.377	8.831	9.125	0
High Amplitude Greenhouse	100	170	0.38	3.164	4.927	0
High Amplitude Greenhouse	100	169	0.382	5.889	6.773	0
High Amplitude Greenhouse	100	168	0.385	8.789	8.748	0
High Amplitude Greenhouse	100	167	0.387	9.599	9.246	0
High Amplitude Greenhouse	100	166	0.39	3.497	4.746	0
High Amplitude Greenhouse	100	165	0.392	1.29	2.969	0
High Amplitude Greenhouse	100	164	0.395	1.867	3.26	0
High Amplitude Greenhouse	100	163	0.397	-1.496	0.2	0
High Amplitude Greenhouse	100	162	0.4	-5.493	-3.371	0
High Amplitude Greenhouse	100	161	0.402	-3.907	-1.835	0
High Amplitude Greenhouse	100	160	0.405	-2.193	-0.195	0
High Amplitude Greenhouse	100	159	0.407	-0.48	1.448	0.117
High Amplitude Greenhouse	100	158	0.41	1.539	3.16	0.374
High Amplitude Greenhouse	100	157	0.412	-0.69	1.09	0.07
High Amplitude Greenhouse	100	156	0.415	-2.134	-0.194	0
High Amplitude Greenhouse	100	155	0.417	-6.411	-4.038	0
High Amplitude Greenhouse	100	154	0.42	-5.808	-3.397	0
High Amplitude Greenhouse	100	153	0.422	-3.794	-1.454	0
High Amplitude Greenhouse	100	152	0.425	-1.704	0.524	0
High Amplitude Greenhouse	100	151	0.427	0.265	2.387	0.284
High Amplitude Greenhouse	100	150	0.43	2.72	4.183	0.726
High Amplitude Greenhouse	100	149	0.432	5.272	5.904	0
High Amplitude Greenhouse	100	148	0.435	0.941	2.577	0.375

High Amplitude Greenhouse	100	147	0.437	-7.099	-4.908	0
High Amplitude Greenhouse	100	146	0.44	-5.499	-3.336	0
High Amplitude Greenhouse	100	145	0.442	-3.872	-1.763	0
High Amplitude Greenhouse	100	144	0.445	-2.138	-0.109	0
High Amplitude Greenhouse	100	143	0.447	-0.414	1.55	0.131
High Amplitude Greenhouse	100	142	0.45	1.704	3.279	1.111
High Amplitude Greenhouse	100	141	0.452	4.364	5.084	0
High Amplitude Greenhouse	100	140	0.455	1.004	2.471	0
High Amplitude Greenhouse	100	139	0.457	-1.607	0.021	0.539
High Amplitude Greenhouse	100	138	0.46	-4.575	-3.087	0
High Amplitude Greenhouse	100	137	0.462	-2.646	-1.227	0
High Amplitude Greenhouse	100	136	0.465	-0.536	0.777	0.104
High Amplitude Greenhouse	100	135	0.467	1.715	2.667	1.108
High Amplitude Greenhouse	100	134	0.47	4.38	4.491	0
High Amplitude Greenhouse	100	133	0.472	6.027	5.56	0
High Amplitude Greenhouse	100	132	0.475	0.115	0.958	0.25
High Amplitude Greenhouse	100	131	0.477	2.235	2.552	0.765
High Amplitude Greenhouse	100	130	0.48	3.504	3.351	0
High Amplitude Greenhouse	100	129	0.482	-0.624	-0.116	0.601
High Amplitude Greenhouse	100	128	0.485	-0.083	0.395	0
High Amplitude Greenhouse	100	127	0.487	0.385	0.737	0
High Amplitude Greenhouse	100	126	0.49	1.044	1.141	0.375
High Amplitude Greenhouse	100	125	0.492	-1.749	-1.527	0
High Amplitude Greenhouse	100	124	0.495	-5.501	-4.862	0
High Amplitude Greenhouse	100	123	0.497	-4.919	-4.25	0
High Amplitude Greenhouse	100	122	0.5	-4.301	-3.606	0
High Amplitude Greenhouse	100	121	0.502	-2.221	-1.629	0
High Amplitude Greenhouse	100	120	0.505	-5.515	-4.553	0
High Amplitude Greenhouse	100	119	0.507	-5.766	-4.707	0
High Amplitude Greenhouse	100	118	0.51	-3.815	-2.84	0
High Amplitude Greenhouse	100	117	0.512	-8.196	-6.806	0
High Amplitude Greenhouse	100	116	0.515	-7.755	-6.32	0
High Amplitude Greenhouse	100	115	0.517	-6.031	-4.643	0
High Amplitude Greenhouse	100	114	0.52	-4.32	-2.992	0
High Amplitude Greenhouse	100	113	0.522	-2.608	-1.339	0

High Amplitude Greenhouse	100	112	0.525	-0.776	0.4	0.05
High Amplitude Greenhouse	100	111	0.527	-3.226	-1.771	0
High Amplitude Greenhouse	100	110	0.53	-6.899	-5.067	0
High Amplitude Greenhouse	100	109	0.532	-10.397	-8.273	0
High Amplitude Greenhouse	100	108	0.535	-8.326	-6.244	0
High Amplitude Greenhouse	100	107	0.537	-6.239	-4.223	0
High Amplitude Greenhouse	100	106	0.54	-4.087	-2.169	0
High Amplitude Greenhouse	100	105	0.542	-1.901	-0.111	0
High Amplitude Greenhouse	100	104	0.545	0.345	1.986	0.302
High Amplitude Greenhouse	100	103	0.547	3.05	3.967	0.37
High Amplitude Greenhouse	100	102	0.55	-3.136	-1.425	0
High Amplitude Greenhouse	100	101	0.552	-8.606	-6.392	0
High Amplitude Greenhouse	100	100	0.555	-6.727	-4.56	0
High Amplitude Greenhouse	100	99	0.557	-4.954	-2.836	0.56
High Amplitude Greenhouse	100	98	0.56	-2.635	-1.138	0
High Amplitude Greenhouse	100	97	0.562	-0.85	0.561	0.034
High Amplitude Greenhouse	100	96	0.565	1.142	2.348	0.746
High Amplitude Greenhouse	100	95	0.567	2.625	3.342	0
High Amplitude Greenhouse	100	94	0.57	-2.207	-0.943	0
High Amplitude Greenhouse	100	93	0.572	-2.285	-0.932	0
High Amplitude Greenhouse	100	92	0.575	-5.856	-4.097	0
High Amplitude Greenhouse	100	91	0.577	-3.702	-2.047	0
High Amplitude Greenhouse	100	90	0.58	-1.467	0.05	0
High Amplitude Greenhouse	100	89	0.582	0.826	2.151	0.375
High Amplitude Greenhouse	100	88	0.585	3.809	4.291	0.366
High Amplitude Greenhouse	100	87	0.587	0.651	1.675	0.375
High Amplitude Greenhouse	100	86	0.59	-2.709	-1.509	0
High Amplitude Greenhouse	100	85	0.592	-2.224	-0.988	0
High Amplitude Greenhouse	100	84	0.595	-2.811	-1.434	0
High Amplitude Greenhouse	100	83	0.597	-8.003	-6.109	0
High Amplitude Greenhouse	100	82	0.6	-8.83	-6.806	0
High Amplitude Greenhouse	100	81	0.602	-7.068	-5.092	0
High Amplitude Greenhouse	100	80	0.605	-5.168	-3.268	0
High Amplitude Greenhouse	100	79	0.607	-9.507	-7.213	0
High Amplitude Greenhouse	100	78	0.61	-8.941	-6.61	0

High Amplitude Greenhouse	100	77	0.612	-6.903	-4.64	0
High Amplitude Greenhouse	100	76	0.615	-4.765	-2.598	0
High Amplitude Greenhouse	100	75	0.617	-2.478	-0.433	0.113
High Amplitude Greenhouse	100	74	0.62	-5.54	-3.239	0
High Amplitude Greenhouse	100	73	0.622	-5.618	-3.234	0
High Amplitude Greenhouse	100	72	0.625	-5.496	-3.044	0
High Amplitude Greenhouse	100	71	0.627	-8.84	-6.071	0
High Amplitude Greenhouse	100	70	0.63	-6.797	-4.089	0
High Amplitude Greenhouse	100	69	0.632	-4.807	-2.18	0
High Amplitude Greenhouse	100	68	0.635	-2.867	-0.34	0
High Amplitude Greenhouse	100	67	0.637	-0.912	1.505	0.02
High Amplitude Greenhouse	100	66	0.64	1.043	3.264	0.375
High Amplitude Greenhouse	100	65	0.642	-1.181	1.143	0
High Amplitude Greenhouse	100	64	0.645	-7.634	-4.649	0
High Amplitude Greenhouse	100	63	0.647	-8.528	-5.405	0
High Amplitude Greenhouse	100	62	0.65	-6.55	-3.492	0
High Amplitude Greenhouse	100	61	0.652	-4.475	-1.503	0.153
High Amplitude Greenhouse	100	60	0.655	-2.129	0.556	0
High Amplitude Greenhouse	100	59	0.657	0.226	2.738	0.275
High Amplitude Greenhouse	100	58	0.66	3.02	4.882	0.727
High Amplitude Greenhouse	100	57	0.662	5.104	6.282	0
High Amplitude Greenhouse	100	56	0.665	-3.024	-0.571	0
High Amplitude Greenhouse	100	55	0.667	-5.62	-2.844	0
High Amplitude Greenhouse	100	54	0.67	-3.535	-0.85	0.912
High Amplitude Greenhouse	100	53	0.672	-0.666	1.069	0
High Amplitude Greenhouse	100	52	0.675	1.442	2.919	1.799
High Amplitude Greenhouse	100	51	0.677	3.996	4.773	0
High Amplitude Greenhouse	100	50	0.68	6.572	6.539	0
High Amplitude Greenhouse	100	49	0.682	4.732	5.074	0
High Amplitude Greenhouse	100	48	0.685	2.291	3.042	0
High Amplitude Greenhouse	100	47	0.687	0.815	1.644	0.375
High Amplitude Greenhouse	100	46	0.69	-3.985	-2.875	0
High Amplitude Greenhouse	100	45	0.692	-3.44	-2.292	0
High Amplitude Greenhouse	100	44	0.695	-2.755	-1.591	0
High Amplitude Greenhouse	100	43	0.697	-1.98	-0.812	0

High Amplitude Greenhouse	100	42	0.7	-1.2	-0.028	0
High Amplitude Greenhouse	100	41	0.702	-5.255	-3.613	0
High Amplitude Greenhouse	100	40	0.705	-4.489	-2.835	0
High Amplitude Greenhouse	100	39	0.707	-2.296	-0.77	0
High Amplitude Greenhouse	100	38	0.71	-1.084	0.407	0
High Amplitude Greenhouse	100	37	0.712	-4.687	-2.75	0
High Amplitude Greenhouse	100	36	0.715	-3.965	-2.004	0.036
High Amplitude Greenhouse	100	35	0.717	-2.03	-0.209	0
High Amplitude Greenhouse	100	34	0.72	-2.39	-0.45	0
High Amplitude Greenhouse	100	33	0.722	-6.028	-3.683	0
High Amplitude Greenhouse	100	32	0.725	-4.156	-1.891	0
High Amplitude Greenhouse	100	31	0.727	-2.203	-0.047	0
High Amplitude Greenhouse	100	30	0.73	-0.109	1.928	0.2
High Amplitude Greenhouse	100	29	0.732	2.382	3.918	0.372
High Amplitude Greenhouse	100	28	0.735	-0.795	1.073	0.065
High Amplitude Greenhouse	100	27	0.737	-0.914	1.029	0
High Amplitude Greenhouse	100	26	0.74	-3.584	-1.312	0
High Amplitude Greenhouse	100	25	0.742	-4.083	-1.68	0
High Amplitude Greenhouse	100	24	0.745	-1.837	0.433	0
High Amplitude Greenhouse	100	23	0.747	0.389	2.492	0.312
High Amplitude Greenhouse	100	22	0.75	3.124	4.545	1.356
High Amplitude Greenhouse	100	21	0.752	5.835	6.457	0
High Amplitude Greenhouse	100	20	0.755	8.519	8.3	0
High Amplitude Greenhouse	100	19	0.757	4.881	5.544	0
High Amplitude Greenhouse	100	18	0.76	-4.129	-2.193	0
High Amplitude Greenhouse	100	17	0.762	-2.317	-0.456	0
High Amplitude Greenhouse	100	16	0.765	-0.419	1.331	0.13
High Amplitude Greenhouse	100	15	0.767	1.832	3.169	0.996
High Amplitude Greenhouse	100	14	0.77	4.581	5.139	0
High Amplitude Greenhouse	100	13	0.772	7.434	7.123	0
High Amplitude Greenhouse	100	12	0.775	10.322	9.177	0.207
High Amplitude Greenhouse	100	11	0.777	8.878	8.1	3.927
High Amplitude Greenhouse	100	10	0.78	3.607	3.471	0
High Amplitude Greenhouse	100	9	0.782	1.294	1.507	0
High Amplitude Greenhouse	100	8	0.785	4.205	3.614	0

High Amplitude Greenhouse	100	7	0.787	5.342	4.331	0
High Amplitude Greenhouse	100	6	0.79	6.379	4.974	0
High Amplitude Greenhouse	100	5	0.792	7.282	5.52	0
High Amplitude Greenhouse	100	4	0.795	8.086	5.997	0
High Amplitude Greenhouse	100	3	0.797	1.388	0.75	0
High Amplitude Greenhouse	100	2	0.8	0.719	-0.244	0
High Amplitude Greenhouse	100	1	1.6	0.719	-0.231	0
High Amplitude Greenhouse	120	322	0	-13.957	-6.498	0
High Amplitude Greenhouse	120	321	0.002	-12.134	-4.76	0
High Amplitude Greenhouse	120	320	0.005	-10.252	-2.977	0
High Amplitude Greenhouse	120	319	0.007	-8.233	-1.08	0
High Amplitude Greenhouse	120	318	0.01	-6.175	0.827	0
High Amplitude Greenhouse	120	317	0.012	-4.005	2.809	0
High Amplitude Greenhouse	120	316	0.015	-1.727	4.86	0
High Amplitude Greenhouse	120	315	0.017	-3.205	3.7	0
High Amplitude Greenhouse	120	314	0.02	-6.16	1.239	0
High Amplitude Greenhouse	120	313	0.022	-9.581	-1.7	0
High Amplitude Greenhouse	120	312	0.025	-8.566	-0.704	0
High Amplitude Greenhouse	120	311	0.027	-6.268	1.417	0
High Amplitude Greenhouse	120	310	0.03	-4.092	3.402	0
High Amplitude Greenhouse	120	309	0.032	-1.976	5.312	0
High Amplitude Greenhouse	120	308	0.035	0.079	7.153	0.242
High Amplitude Greenhouse	120	307	0.037	-4.461	3.186	0
High Amplitude Greenhouse	120	306	0.04	-3.981	3.697	0
High Amplitude Greenhouse	120	305	0.042	-2.051	5.455	0.204
High Amplitude Greenhouse	120	304	0.045	-5.556	2.358	0
High Amplitude Greenhouse	120	303	0.047	-5.98	2.082	0
High Amplitude Greenhouse	120	302	0.05	-3.888	3.993	0
High Amplitude Greenhouse	120	301	0.052	-1.689	5.979	0.207
High Amplitude Greenhouse	120	300	0.055	-1.476	6.086	0
High Amplitude Greenhouse	120	299	0.057	-5.004	3.155	0
High Amplitude Greenhouse	120	298	0.06	-2.633	5.295	0
High Amplitude Greenhouse	120	297	0.062	-0.236	7.436	0.171
High Amplitude Greenhouse	120	296	0.065	2.342	9.549	0.372
High Amplitude Greenhouse	120	295	0.067	0.288	7.691	0.5

High Amplitude Greenhouse	120	294	0.07	-0.847	6.606	0
High Amplitude Greenhouse	120	293	0.072	1.519	8.522	0.374
High Amplitude Greenhouse	120	292	0.075	-1.311	5.941	0
High Amplitude Greenhouse	120	291	0.077	-2.35	5.16	0
High Amplitude Greenhouse	120	290	0.08	-0.393	6.923	0.136
High Amplitude Greenhouse	120	289	0.082	1.722	8.687	1.466
High Amplitude Greenhouse	120	288	0.085	4.258	10.479	0
High Amplitude Greenhouse	120	287	0.087	5.173	11.014	0
High Amplitude Greenhouse	120	286	0.09	2.169	8.647	0
High Amplitude Greenhouse	120	285	0.092	-2.666	4.377	0
High Amplitude Greenhouse	120	284	0.095	-8.98	-1.065	0
High Amplitude Greenhouse	120	283	0.097	-8.378	-0.441	0
High Amplitude Greenhouse	120	282	0.1	-7.598	0.342	0
High Amplitude Greenhouse	120	281	0.102	-5.28	2.476	0
High Amplitude Greenhouse	120	280	0.105	-2.947	4.594	0
High Amplitude Greenhouse	120	279	0.107	-0.567	6.725	0.097
High Amplitude Greenhouse	120	278	0.11	1.783	8.719	0.374
High Amplitude Greenhouse	120	277	0.112	-1.759	5.54	0
High Amplitude Greenhouse	120	276	0.115	-9.896	-1.503	0
High Amplitude Greenhouse	120	275	0.117	-8.059	0.224	0
High Amplitude Greenhouse	120	274	0.12	-6.168	1.99	0
High Amplitude Greenhouse	120	273	0.122	-4.254	3.756	0
High Amplitude Greenhouse	120	272	0.125	-2.284	5.55	0
High Amplitude Greenhouse	120	271	0.127	-0.162	7.457	0.188
High Amplitude Greenhouse	120	270	0.13	2.182	9.375	0.373
High Amplitude Greenhouse	120	269	0.132	-2.013	5.649	0
High Amplitude Greenhouse	120	268	0.135	-2.217	5.574	0
High Amplitude Greenhouse	120	267	0.137	-5.85	2.519	0
High Amplitude Greenhouse	120	266	0.14	-4.684	3.637	0
High Amplitude Greenhouse	120	265	0.142	-2.305	5.781	0
High Amplitude Greenhouse	120	264	0.145	0.065	7.895	0
High Amplitude Greenhouse	120	263	0.147	2.493	10.023	0.743
High Amplitude Greenhouse	120	262	0.15	2.617	9.959	0
High Amplitude Greenhouse	120	261	0.152	-0.894	6.868	0.024
High Amplitude Greenhouse	120	260	0.155	1.2	8.712	0.674

High Amplitude Greenhouse	120	259	0.157	3.661	10.56	0
High Amplitude Greenhouse	120	258	0.16	-0.09	7.348	0.204
High Amplitude Greenhouse	120	257	0.162	-0.401	7.018	0
High Amplitude Greenhouse	120	256	0.165	1.6	8.803	0.708
High Amplitude Greenhouse	120	255	0.167	4.204	10.7	0
High Amplitude Greenhouse	120	254	0.17	1.1	8.075	0
High Amplitude Greenhouse	120	253	0.172	0.31	7.528	0
High Amplitude Greenhouse	120	252	0.175	2.688	9.577	0
High Amplitude Greenhouse	120	251	0.177	5.427	11.746	2.173
High Amplitude Greenhouse	120	250	0.18	8.608	13.875	0
High Amplitude Greenhouse	120	249	0.182	6.648	12.096	0
High Amplitude Greenhouse	120	248	0.185	5.302	11.043	0
High Amplitude Greenhouse	120	247	0.187	5.276	10.914	0
High Amplitude Greenhouse	120	246	0.19	-1.491	5.381	0
High Amplitude Greenhouse	120	245	0.192	-1.038	5.865	0
High Amplitude Greenhouse	120	244	0.195	-0.619	6.328	0.269
High Amplitude Greenhouse	120	243	0.197	-0.181	6.735	0
High Amplitude Greenhouse	120	242	0.2	0.332	7.123	0
High Amplitude Greenhouse	120	241	0.202	2.329	8.847	0.372
High Amplitude Greenhouse	120	240	0.205	1.162	7.763	0
High Amplitude Greenhouse	120	239	0.207	-5.446	2.214	0
High Amplitude Greenhouse	120	238	0.21	-7.791	0.242	0
High Amplitude Greenhouse	120	237	0.212	-5.677	2.195	0
High Amplitude Greenhouse	120	236	0.215	-3.465	4.216	0
High Amplitude Greenhouse	120	235	0.217	-1.158	6.287	0
High Amplitude Greenhouse	120	234	0.22	1.308	8.454	0
High Amplitude Greenhouse	120	233	0.222	3.875	10.552	0.705
High Amplitude Greenhouse	120	232	0.225	6.962	12.618	0
High Amplitude Greenhouse	120	231	0.227	-0.084	7.224	0
High Amplitude Greenhouse	120	230	0.23	-5.641	2.554	0
High Amplitude Greenhouse	120	229	0.232	-3.666	4.375	0.856
High Amplitude Greenhouse	120	228	0.235	-0.829	6.164	0
High Amplitude Greenhouse	120	227	0.237	1.102	7.896	0
High Amplitude Greenhouse	120	226	0.24	3.197	9.651	1.074
High Amplitude Greenhouse	120	225	0.242	5.723	11.348	0

High Amplitude Greenhouse	120	224	0.245	5.539	11.111	0
High Amplitude Greenhouse	120	223	0.247	1.256	7.783	0
High Amplitude Greenhouse	120	222	0.25	2.4	8.8	0.328
High Amplitude Greenhouse	120	221	0.252	-1.321	5.638	0.016
High Amplitude Greenhouse	120	220	0.255	-0.4	6.515	0
High Amplitude Greenhouse	120	219	0.257	2	8.544	6.361
High Amplitude Greenhouse	120	218	0.26	5.018	10.667	0
High Amplitude Greenhouse	120	217	0.262	8.09	12.72	0
High Amplitude Greenhouse	120	216	0.265	4.804	10.309	0
High Amplitude Greenhouse	120	215	0.267	4.13	9.713	0
High Amplitude Greenhouse	120	214	0.27	6.973	11.606	0
High Amplitude Greenhouse	120	213	0.272	9.696	13.421	0
High Amplitude Greenhouse	120	212	0.275	5.37	10.277	0
High Amplitude Greenhouse	120	211	0.277	4.915	9.844	0
High Amplitude Greenhouse	120	210	0.28	7.418	11.497	0
High Amplitude Greenhouse	120	209	0.282	8.823	12.387	0
High Amplitude Greenhouse	120	208	0.285	3.093	7.92	0
High Amplitude Greenhouse	120	207	0.287	3.616	8.174	0
High Amplitude Greenhouse	120	206	0.29	4.39	8.605	0
High Amplitude Greenhouse	120	205	0.292	5.264	9.108	0
High Amplitude Greenhouse	120	204	0.295	6.227	9.678	0
High Amplitude Greenhouse	120	203	0.297	1.747	6.34	0
High Amplitude Greenhouse	120	202	0.3	-1.056	3.907	0
High Amplitude Greenhouse	120	201	0.302	-2.626	2.67	0
High Amplitude Greenhouse	120	200	0.305	-4.885	0.816	0
High Amplitude Greenhouse	120	199	0.307	-2.704	2.796	0
High Amplitude Greenhouse	120	198	0.31	-0.665	4.642	0.075
High Amplitude Greenhouse	120	197	0.312	1.476	6.41	1.422
High Amplitude Greenhouse	120	196	0.315	3.987	8.107	0
High Amplitude Greenhouse	120	195	0.317	6.543	9.799	0
High Amplitude Greenhouse	120	194	0.32	4.854	8.499	0
High Amplitude Greenhouse	120	193	0.322	-5.254	0.254	0
High Amplitude Greenhouse	120	192	0.325	-5.055	0.523	0
High Amplitude Greenhouse	120	191	0.327	-3.172	2.258	0.549
High Amplitude Greenhouse	120	190	0.33	-0.756	4.006	0

High Amplitude Greenhouse	120	189	0.332	1.408	5.827	1.775
High Amplitude Greenhouse	120	188	0.335	4.183	7.716	0
High Amplitude Greenhouse	120	187	0.337	7.176	9.718	0
High Amplitude Greenhouse	120	186	0.34	7.237	9.661	0
High Amplitude Greenhouse	120	185	0.342	0.622	4.758	0
High Amplitude Greenhouse	120	184	0.345	-2.889	1.62	0
High Amplitude Greenhouse	120	183	0.347	-0.919	3.411	0.018
High Amplitude Greenhouse	120	182	0.35	1.196	5.219	2.514
High Amplitude Greenhouse	120	181	0.352	3.756	6.95	0
High Amplitude Greenhouse	120	180	0.355	6.262	8.611	0
High Amplitude Greenhouse	120	179	0.357	8.757	10.267	0
High Amplitude Greenhouse	120	178	0.36	4.778	7.348	0
High Amplitude Greenhouse	120	177	0.362	3.539	6.353	0
High Amplitude Greenhouse	120	176	0.365	4.882	7.188	0
High Amplitude Greenhouse	120	175	0.367	0.215	3.654	0.273
High Amplitude Greenhouse	120	174	0.37	1.176	4.315	4.333
High Amplitude Greenhouse	120	173	0.372	3.84	6.108	0
High Amplitude Greenhouse	120	172	0.375	6.63	7.969	0
High Amplitude Greenhouse	120	171	0.377	8.412	9.125	0
High Amplitude Greenhouse	120	170	0.38	2.628	4.927	0
High Amplitude Greenhouse	120	169	0.382	5.397	6.773	0
High Amplitude Greenhouse	120	168	0.385	8.341	8.748	0
High Amplitude Greenhouse	120	167	0.387	9.178	9.246	0
High Amplitude Greenhouse	120	166	0.39	3.394	4.746	0
High Amplitude Greenhouse	120	165	0.392	1.107	2.969	0
High Amplitude Greenhouse	120	164	0.395	1.682	3.26	0
High Amplitude Greenhouse	120	163	0.397	-1.887	0.2	0
High Amplitude Greenhouse	120	162	0.4	-6.113	-3.371	0
High Amplitude Greenhouse	120	161	0.402	-4.467	-1.835	0
High Amplitude Greenhouse	120	160	0.405	-2.684	-0.195	0
High Amplitude Greenhouse	120	159	0.407	-0.891	1.448	0.024
High Amplitude Greenhouse	120	158	0.41	1.119	3.16	0.375
High Amplitude Greenhouse	120	157	0.412	-1.247	1.09	0
High Amplitude Greenhouse	120	156	0.415	-2.865	-0.194	0
High Amplitude Greenhouse	120	155	0.417	-7.38	-4.038	0.511

High Amplitude Greenhouse	120	154	0.42	-6.71	-3.397	0
High Amplitude Greenhouse	120	153	0.422	-4.352	-1.454	0
High Amplitude Greenhouse	120	152	0.425	-1.977	0.524	0
High Amplitude Greenhouse	120	151	0.427	0.087	2.387	0.244
High Amplitude Greenhouse	120	150	0.43	2.569	4.183	1.102
High Amplitude Greenhouse	120	149	0.432	5.16	5.904	0
High Amplitude Greenhouse	120	148	0.435	0.698	2.577	0
High Amplitude Greenhouse	120	147	0.437	-7.795	-4.908	0
High Amplitude Greenhouse	120	146	0.44	-6.135	-3.336	0.479
High Amplitude Greenhouse	120	145	0.442	-3.967	-1.763	0
High Amplitude Greenhouse	120	144	0.445	-2.162	-0.109	0
High Amplitude Greenhouse	120	143	0.447	-0.352	1.55	0.145
High Amplitude Greenhouse	120	142	0.45	1.86	3.279	1.11
High Amplitude Greenhouse	120	141	0.452	4.563	5.084	0
High Amplitude Greenhouse	120	140	0.455	1.094	2.471	0
High Amplitude Greenhouse	120	139	0.457	-1.685	0.021	0.985
High Amplitude Greenhouse	120	138	0.46	-5.249	-3.087	0
High Amplitude Greenhouse	120	137	0.462	-3.037	-1.227	0
High Amplitude Greenhouse	120	136	0.465	-0.334	0.777	0
High Amplitude Greenhouse	120	135	0.467	2.054	2.667	0.931
High Amplitude Greenhouse	120	134	0.47	4.768	4.491	0
High Amplitude Greenhouse	120	133	0.472	6.366	5.56	0
High Amplitude Greenhouse	120	132	0.475	0.145	0.958	0.257
High Amplitude Greenhouse	120	131	0.477	2.337	2.552	0.607
High Amplitude Greenhouse	120	130	0.48	3.621	3.351	0
High Amplitude Greenhouse	120	129	0.482	-0.858	-0.116	0.408
High Amplitude Greenhouse	120	128	0.485	-0.365	0.395	0
High Amplitude Greenhouse	120	127	0.487	0.036	0.737	0
High Amplitude Greenhouse	120	126	0.49	0.618	1.141	0.363
High Amplitude Greenhouse	120	125	0.492	-2.378	-1.527	0
High Amplitude Greenhouse	120	124	0.495	-6.35	-4.862	0
High Amplitude Greenhouse	120	123	0.497	-5.759	-4.25	0
High Amplitude Greenhouse	120	122	0.5	-5.131	-3.606	0
High Amplitude Greenhouse	120	121	0.502	-2.96	-1.629	0.384
High Amplitude Greenhouse	120	120	0.505	-6.065	-4.553	0

High Amplitude Greenhouse	120	119	0.507	-6.349	-4.707	0
High Amplitude Greenhouse	120	118	0.51	-4.319	-2.84	0
High Amplitude Greenhouse	120	117	0.512	-8.936	-6.806	0.079
High Amplitude Greenhouse	120	116	0.515	-8.416	-6.32	0
High Amplitude Greenhouse	120	115	0.517	-6.628	-4.643	0
High Amplitude Greenhouse	120	114	0.52	-4.85	-2.992	0
High Amplitude Greenhouse	120	113	0.522	-3.065	-1.339	0.619
High Amplitude Greenhouse	120	112	0.525	-0.619	0.4	0
High Amplitude Greenhouse	120	111	0.527	-3.193	-1.771	0
High Amplitude Greenhouse	120	110	0.53	-7.076	-5.067	0
High Amplitude Greenhouse	120	109	0.532	-10.756	-8.273	0
High Amplitude Greenhouse	120	108	0.535	-8.607	-6.244	0.046
High Amplitude Greenhouse	120	107	0.537	-6.393	-4.223	0
High Amplitude Greenhouse	120	106	0.54	-4.152	-2.169	0
High Amplitude Greenhouse	120	105	0.542	-1.87	-0.111	0
High Amplitude Greenhouse	120	104	0.545	0.484	1.986	0.333
High Amplitude Greenhouse	120	103	0.547	3.3	3.967	0.368
High Amplitude Greenhouse	120	102	0.55	-3.216	-1.425	0
High Amplitude Greenhouse	120	101	0.552	-8.981	-6.392	0
High Amplitude Greenhouse	120	100	0.555	-7.03	-4.56	0.443
High Amplitude Greenhouse	120	99	0.557	-4.954	-2.836	0
High Amplitude Greenhouse	120	98	0.56	-2.983	-1.138	0
High Amplitude Greenhouse	120	97	0.562	-1.04	0.561	0
High Amplitude Greenhouse	120	96	0.565	1.009	2.348	0.747
High Amplitude Greenhouse	120	95	0.567	2.526	3.342	0
High Amplitude Greenhouse	120	94	0.57	-2.587	-0.943	0
High Amplitude Greenhouse	120	93	0.572	-2.691	-0.932	0
High Amplitude Greenhouse	120	92	0.575	-6.469	-4.097	0.695
High Amplitude Greenhouse	120	91	0.577	-3.53	-2.047	0
High Amplitude Greenhouse	120	90	0.58	-1.195	0.05	0
High Amplitude Greenhouse	120	89	0.582	1.208	2.151	0.738
High Amplitude Greenhouse	120	88	0.585	4.278	4.291	0
High Amplitude Greenhouse	120	87	0.587	0.962	1.675	0.5
High Amplitude Greenhouse	120	86	0.59	-2.624	-1.509	0
High Amplitude Greenhouse	120	85	0.592	-2.008	-0.988	0

High Amplitude Greenhouse	120	84	0.595	-2.65	-1.434	0
High Amplitude Greenhouse	120	83	0.597	-8.132	-6.109	0
High Amplitude Greenhouse	120	82	0.6	-9.019	-6.806	0
High Amplitude Greenhouse	120	81	0.602	-7.191	-5.092	0
High Amplitude Greenhouse	120	80	0.605	-5.215	-3.268	0
High Amplitude Greenhouse	120	79	0.607	-9.789	-7.213	0
High Amplitude Greenhouse	120	78	0.61	-9.216	-6.61	0
High Amplitude Greenhouse	120	77	0.612	-7.098	-4.64	0
High Amplitude Greenhouse	120	76	0.615	-4.871	-2.598	0
High Amplitude Greenhouse	120	75	0.617	-2.478	-0.433	0.04
High Amplitude Greenhouse	120	74	0.62	-5.803	-3.239	0
High Amplitude Greenhouse	120	73	0.622	-5.906	-3.234	0
High Amplitude Greenhouse	120	72	0.625	-5.798	-3.044	0
High Amplitude Greenhouse	120	71	0.627	-9.327	-6.071	0
High Amplitude Greenhouse	120	70	0.63	-7.204	-4.089	0.493
High Amplitude Greenhouse	120	69	0.632	-4.639	-2.18	0
High Amplitude Greenhouse	120	68	0.635	-2.618	-0.34	0
High Amplitude Greenhouse	120	67	0.637	-0.573	1.505	0.096
High Amplitude Greenhouse	120	66	0.64	1.546	3.264	0.374
High Amplitude Greenhouse	120	65	0.642	-0.838	1.143	0.036
High Amplitude Greenhouse	120	64	0.645	-7.617	-4.649	0
High Amplitude Greenhouse	120	63	0.647	-8.574	-5.405	0
High Amplitude Greenhouse	120	62	0.65	-6.518	-3.492	0.392
High Amplitude Greenhouse	120	61	0.652	-4.075	-1.503	0
High Amplitude Greenhouse	120	60	0.655	-1.671	0.556	0
High Amplitude Greenhouse	120	59	0.657	0.8	2.738	0.285
High Amplitude Greenhouse	120	58	0.66	3.71	4.882	0.717
High Amplitude Greenhouse	120	57	0.662	5.827	6.282	0
High Amplitude Greenhouse	120	56	0.665	-2.708	-0.571	0
High Amplitude Greenhouse	120	55	0.667	-5.462	-2.844	0.769
High Amplitude Greenhouse	120	54	0.67	-2.735	-0.85	0
High Amplitude Greenhouse	120	53	0.672	-0.493	1.069	0
High Amplitude Greenhouse	120	52	0.675	1.747	2.919	1.698
High Amplitude Greenhouse	120	51	0.677	4.388	4.773	0
High Amplitude Greenhouse	120	50	0.68	7.01	6.539	0

High Amplitude Greenhouse	120	49	0.682	5.008	5.074	0
High Amplitude Greenhouse	120	48	0.685	2.445	3.042	0
High Amplitude Greenhouse	120	47	0.687	0.856	1.644	0.375
High Amplitude Greenhouse	120	46	0.69	-4.248	-2.875	0
High Amplitude Greenhouse	120	45	0.692	-3.693	-2.292	0.161
High Amplitude Greenhouse	120	44	0.695	-2.831	-1.591	0
High Amplitude Greenhouse	120	43	0.697	-2.036	-0.812	0
High Amplitude Greenhouse	120	42	0.7	-1.234	-0.028	0.187
High Amplitude Greenhouse	120	41	0.702	-5.343	-3.613	0
High Amplitude Greenhouse	120	40	0.705	-4.558	-2.835	0
High Amplitude Greenhouse	120	39	0.707	-2.268	-0.77	0
High Amplitude Greenhouse	120	38	0.71	-1.008	0.407	0.237
High Amplitude Greenhouse	120	37	0.712	-4.747	-2.75	0
High Amplitude Greenhouse	120	36	0.715	-3.965	-2.004	0
High Amplitude Greenhouse	120	35	0.717	-1.864	-0.209	0
High Amplitude Greenhouse	120	34	0.72	-2.266	-0.45	0
High Amplitude Greenhouse	120	33	0.722	-6.117	-3.683	0
High Amplitude Greenhouse	120	32	0.725	-4.168	-1.891	0
High Amplitude Greenhouse	120	31	0.727	-2.131	-0.047	0
High Amplitude Greenhouse	120	30	0.73	0.07	1.928	0.24
High Amplitude Greenhouse	120	29	0.732	2.702	3.918	0.371
High Amplitude Greenhouse	120	28	0.735	-0.673	1.073	0.121
High Amplitude Greenhouse	120	27	0.737	-0.785	1.029	0
High Amplitude Greenhouse	120	26	0.74	-3.594	-1.312	0
High Amplitude Greenhouse	120	25	0.742	-4.139	-1.68	0.335
High Amplitude Greenhouse	120	24	0.745	-1.458	0.433	0
High Amplitude Greenhouse	120	23	0.747	0.882	2.492	0
High Amplitude Greenhouse	120	22	0.75	3.405	4.545	2.169
High Amplitude Greenhouse	120	21	0.752	6.187	6.457	0
High Amplitude Greenhouse	120	20	0.755	8.916	8.3	0
High Amplitude Greenhouse	120	19	0.757	5.92	5.544	0
High Amplitude Greenhouse	120	18	0.76	-3.498	-2.193	0
High Amplitude Greenhouse	120	17	0.762	-1.607	-0.456	0.772
High Amplitude Greenhouse	120	16	0.765	0.8	1.331	0
High Amplitude Greenhouse	120	15	0.767	3.371	3.169	1.326

High Amplitude Greenhouse	120	14	0.77	6.191	5.139	0
High Amplitude Greenhouse	120	13	0.772	9.123	7.123	0
High Amplitude Greenhouse	120	12	0.775	12.39	9.177	0.547
High Amplitude Greenhouse	120	11	0.777	10.957	8.1	0
High Amplitude Greenhouse	120	10	0.78	4.676	3.471	3.06
High Amplitude Greenhouse	120	9	0.782	2.22	1.507	0
High Amplitude Greenhouse	120	8	0.785	5.198	3.614	0
High Amplitude Greenhouse	120	7	0.787	6.313	4.331	0
High Amplitude Greenhouse	120	6	0.79	7.317	4.974	0
High Amplitude Greenhouse	120	5	0.792	8.177	5.52	0
High Amplitude Greenhouse	120	4	0.795	8.934	5.997	0
High Amplitude Greenhouse	120	3	0.797	2.428	0.75	0
High Amplitude Greenhouse	120	2	0.8	1.719	-0.244	0
High Amplitude Greenhouse	120	1	1.6	1.719	-0.231	0
High Amplitude Greenhouse	140	322	0	-6.306	-6.498	0
High Amplitude Greenhouse	140	321	0.002	-4.393	-4.76	0
High Amplitude Greenhouse	140	320	0.005	-2.418	-2.977	0
High Amplitude Greenhouse	140	319	0.007	-0.295	-1.08	0
High Amplitude Greenhouse	140	318	0.01	1.792	0.827	0
High Amplitude Greenhouse	140	317	0.012	4.033	2.809	0
High Amplitude Greenhouse	140	316	0.015	6.41	4.86	0.155
High Amplitude Greenhouse	140	315	0.017	5.121	3.7	0
High Amplitude Greenhouse	140	314	0.02	1.958	1.239	0
High Amplitude Greenhouse	140	313	0.022	-1.659	-1.7	0
High Amplitude Greenhouse	140	312	0.025	-0.596	-0.704	0
High Amplitude Greenhouse	140	311	0.027	1.822	1.417	0
High Amplitude Greenhouse	140	310	0.03	4.11	3.402	0
High Amplitude Greenhouse	140	309	0.032	6.233	5.312	0
High Amplitude Greenhouse	140	308	0.035	8.351	7.153	0.597
High Amplitude Greenhouse	140	307	0.037	4.092	3.186	0
High Amplitude Greenhouse	140	306	0.04	4.59	3.697	0
High Amplitude Greenhouse	140	305	0.042	6.626	5.455	0
High Amplitude Greenhouse	140	304	0.045	2.49	2.358	0
High Amplitude Greenhouse	140	303	0.047	2.035	2.082	0
High Amplitude Greenhouse	140	302	0.05	4.235	3.993	0

High Amplitude Greenhouse	140	301	0.052	6.553	5.979	0
High Amplitude Greenhouse	140	300	0.055	6.084	6.086	0
High Amplitude Greenhouse	140	299	0.057	2.352	3.155	0
High Amplitude Greenhouse	140	298	0.06	4.847	5.295	0
High Amplitude Greenhouse	140	297	0.062	7.377	7.436	0
High Amplitude Greenhouse	140	296	0.065	9.91	9.549	0.628
High Amplitude Greenhouse	140	295	0.067	8.259	7.691	0
High Amplitude Greenhouse	140	294	0.07	7.171	6.606	0
High Amplitude Greenhouse	140	293	0.072	9.306	8.522	0.741
High Amplitude Greenhouse	140	292	0.075	6.797	5.941	0
High Amplitude Greenhouse	140	291	0.077	5.686	5.16	0
High Amplitude Greenhouse	140	290	0.08	7.443	6.923	0
High Amplitude Greenhouse	140	289	0.082	9.345	8.687	0.058
High Amplitude Greenhouse	140	288	0.085	12.141	10.479	0.204
High Amplitude Greenhouse	140	287	0.087	12.844	11.014	0
High Amplitude Greenhouse	140	286	0.09	9.474	8.647	1.086
High Amplitude Greenhouse	140	285	0.092	5.062	4.377	0
High Amplitude Greenhouse	140	284	0.095	-1.61	-1.065	0
High Amplitude Greenhouse	140	283	0.097	-0.982	-0.441	0.039
High Amplitude Greenhouse	140	282	0.1	-0.126	0.342	0
High Amplitude Greenhouse	140	281	0.102	2.313	2.476	0
High Amplitude Greenhouse	140	280	0.105	4.768	4.594	0
High Amplitude Greenhouse	140	279	0.107	7.281	6.725	0
High Amplitude Greenhouse	140	278	0.11	9.325	8.719	0
High Amplitude Greenhouse	140	277	0.112	5.279	5.54	0
High Amplitude Greenhouse	140	276	0.115	-3.316	-1.503	0
High Amplitude Greenhouse	140	275	0.117	-1.385	0.224	0
High Amplitude Greenhouse	140	274	0.12	0.604	1.99	0
High Amplitude Greenhouse	140	273	0.122	2.616	3.756	0
High Amplitude Greenhouse	140	272	0.125	4.688	5.55	0
High Amplitude Greenhouse	140	271	0.127	6.93	7.457	0
High Amplitude Greenhouse	140	270	0.13	9.2	9.375	0.264
High Amplitude Greenhouse	140	269	0.132	4.88	5.649	0
High Amplitude Greenhouse	140	268	0.135	4.657	5.574	0
High Amplitude Greenhouse	140	267	0.137	0.814	2.519	0

High Amplitude Greenhouse	140	266	0.14	2.039	3.637	0
High Amplitude Greenhouse	140	265	0.142	4.543	5.781	0
High Amplitude Greenhouse	140	264	0.145	7.046	7.895	0
High Amplitude Greenhouse	140	263	0.147	9.6	10.023	1.456
High Amplitude Greenhouse	140	262	0.15	10.802	9.959	0.875
High Amplitude Greenhouse	140	261	0.152	7.589	6.868	0
High Amplitude Greenhouse	140	260	0.155	9.531	8.712	0.486
High Amplitude Greenhouse	140	259	0.157	12.513	10.56	0.267
High Amplitude Greenhouse	140	258	0.16	8.467	7.348	0.498
High Amplitude Greenhouse	140	257	0.162	8.076	7.018	0
High Amplitude Greenhouse	140	256	0.165	9.92	8.803	0
High Amplitude Greenhouse	140	255	0.167	12.883	10.7	0.068
High Amplitude Greenhouse	140	254	0.17	9.339	8.075	1.217
High Amplitude Greenhouse	140	253	0.172	9.269	7.528	0
High Amplitude Greenhouse	140	252	0.175	12.225	9.577	1.403
High Amplitude Greenhouse	140	251	0.177	15.37	11.746	0
High Amplitude Greenhouse	140	250	0.18	18.414	13.875	0
High Amplitude Greenhouse	140	249	0.182	15.84	12.096	0
High Amplitude Greenhouse	140	248	0.185	14.372	11.043	0
High Amplitude Greenhouse	140	247	0.187	14.26	10.914	0
High Amplitude Greenhouse	140	246	0.19	7.079	5.381	0
High Amplitude Greenhouse	140	245	0.192	7.493	5.865	0
High Amplitude Greenhouse	140	244	0.195	7.878	6.328	0
High Amplitude Greenhouse	140	243	0.197	8.2	6.735	0
High Amplitude Greenhouse	140	242	0.2	8.473	7.123	0
High Amplitude Greenhouse	140	241	0.202	10.412	8.847	0.158
High Amplitude Greenhouse	140	240	0.205	9.364	7.763	0.884
High Amplitude Greenhouse	140	239	0.207	3.269	2.214	0
High Amplitude Greenhouse	140	238	0.21	0.463	0.242	0
High Amplitude Greenhouse	140	237	0.212	2.688	2.195	0
High Amplitude Greenhouse	140	236	0.215	5.016	4.216	0
High Amplitude Greenhouse	140	235	0.217	7.443	6.287	0
High Amplitude Greenhouse	140	234	0.22	10.042	8.454	0.823
High Amplitude Greenhouse	140	233	0.222	13.852	10.552	0.247
High Amplitude Greenhouse	140	232	0.225	16.758	12.618	0

High Amplitude Greenhouse	140	231	0.227	9.287	7.224	0.552
High Amplitude Greenhouse	140	230	0.23	3.966	2.554	0
High Amplitude Greenhouse	140	229	0.232	6.048	4.375	0
High Amplitude Greenhouse	140	228	0.235	7.894	6.164	0
High Amplitude Greenhouse	140	227	0.237	9.934	7.896	0.353
High Amplitude Greenhouse	140	226	0.24	12.71	9.651	0.262
High Amplitude Greenhouse	140	225	0.242	15.177	11.348	0
High Amplitude Greenhouse	140	224	0.245	14.641	11.111	0
High Amplitude Greenhouse	140	223	0.247	9.853	7.783	0.332
High Amplitude Greenhouse	140	222	0.25	11.425	8.8	0.622
High Amplitude Greenhouse	140	221	0.252	7.809	5.638	0
High Amplitude Greenhouse	140	220	0.255	8.62	6.515	0
High Amplitude Greenhouse	140	219	0.257	10.968	8.544	0.81
High Amplitude Greenhouse	140	218	0.26	14.875	10.667	1.339
High Amplitude Greenhouse	140	217	0.262	17.865	12.72	0
High Amplitude Greenhouse	140	216	0.265	14.354	10.309	0
High Amplitude Greenhouse	140	215	0.267	13.51	9.713	0
High Amplitude Greenhouse	140	214	0.27	16.214	11.606	0
High Amplitude Greenhouse	140	213	0.272	18.739	13.421	0
High Amplitude Greenhouse	140	212	0.275	14.129	10.277	0
High Amplitude Greenhouse	140	211	0.277	13.458	9.844	0
High Amplitude Greenhouse	140	210	0.28	15.771	11.497	0
High Amplitude Greenhouse	140	209	0.282	16.949	12.387	0
High Amplitude Greenhouse	140	208	0.285	10.431	7.92	1.461
High Amplitude Greenhouse	140	207	0.287	11.54	8.174	0
High Amplitude Greenhouse	140	206	0.29	12.481	8.605	0.552
High Amplitude Greenhouse	140	205	0.292	13.225	9.108	0
High Amplitude Greenhouse	140	204	0.295	14.027	9.678	0
High Amplitude Greenhouse	140	203	0.297	9.284	6.34	1.083
High Amplitude Greenhouse	140	202	0.3	7.048	3.907	0
High Amplitude Greenhouse	140	201	0.302	5.379	2.67	0
High Amplitude Greenhouse	140	200	0.305	2.985	0.816	0
High Amplitude Greenhouse	140	199	0.307	5.214	2.796	0
High Amplitude Greenhouse	140	198	0.31	7.294	4.642	0
High Amplitude Greenhouse	140	197	0.312	9.356	6.41	0.918

High Amplitude Greenhouse	140	196	0.315	12.706	8.107	0.623
High Amplitude Greenhouse	140	195	0.317	15.177	9.799	0
High Amplitude Greenhouse	140	194	0.32	13.307	8.499	0
High Amplitude Greenhouse	140	193	0.322	2.62	0.254	0
High Amplitude Greenhouse	140	192	0.325	2.823	0.523	0
High Amplitude Greenhouse	140	191	0.327	4.741	2.258	0
High Amplitude Greenhouse	140	190	0.33	6.705	4.006	0
High Amplitude Greenhouse	140	189	0.332	8.848	5.827	0.694
High Amplitude Greenhouse	140	188	0.335	12.204	7.716	0.745
High Amplitude Greenhouse	140	187	0.337	15.148	9.718	0
High Amplitude Greenhouse	140	186	0.34	15.098	9.661	0
High Amplitude Greenhouse	140	185	0.342	8.281	4.758	0.064
High Amplitude Greenhouse	140	184	0.345	4.26	1.62	0
High Amplitude Greenhouse	140	183	0.347	6.296	3.411	0
High Amplitude Greenhouse	140	182	0.35	8.476	5.219	0
High Amplitude Greenhouse	140	181	0.352	10.772	6.95	0.648
High Amplitude Greenhouse	140	180	0.355	13.602	8.611	0.829
High Amplitude Greenhouse	140	179	0.357	16.017	10.267	0
High Amplitude Greenhouse	140	178	0.36	11.894	7.348	0
High Amplitude Greenhouse	140	177	0.362	10.645	6.353	0.791
High Amplitude Greenhouse	140	176	0.365	12.433	7.188	0.289
High Amplitude Greenhouse	140	175	0.367	7.601	3.654	0.632
High Amplitude Greenhouse	140	174	0.37	8.408	4.315	0
High Amplitude Greenhouse	140	173	0.372	11.289	6.108	0.658
High Amplitude Greenhouse	140	172	0.375	14.073	7.969	0
High Amplitude Greenhouse	140	171	0.377	15.721	9.125	0
High Amplitude Greenhouse	140	170	0.38	9.7	4.927	0.733
High Amplitude Greenhouse	140	169	0.382	12.87	6.773	0.665
High Amplitude Greenhouse	140	168	0.385	15.743	8.748	0
High Amplitude Greenhouse	140	167	0.387	16.477	9.246	0
High Amplitude Greenhouse	140	166	0.39	10.081	4.746	0.743
High Amplitude Greenhouse	140	165	0.392	8.129	2.969	1.131
High Amplitude Greenhouse	140	164	0.395	8.727	3.26	0
High Amplitude Greenhouse	140	163	0.397	5.348	0.2	0
High Amplitude Greenhouse	140	162	0.4	0.876	-3.371	0

High Amplitude Greenhouse	140	161	0.402	2.604	-1.835	0
High Amplitude Greenhouse	140	160	0.405	4.48	-0.195	0.717
High Amplitude Greenhouse	140	159	0.407	6.38	1.448	0
High Amplitude Greenhouse	140	158	0.41	8.503	3.16	0
High Amplitude Greenhouse	140	157	0.412	6.313	1.09	0
High Amplitude Greenhouse	140	156	0.415	4.588	-0.194	0
High Amplitude Greenhouse	140	155	0.417	-0.182	-4.038	0
High Amplitude Greenhouse	140	154	0.42	0.446	-3.397	0
High Amplitude Greenhouse	140	153	0.422	2.642	-1.454	0
High Amplitude Greenhouse	140	152	0.425	4.912	0.524	0
High Amplitude Greenhouse	140	151	0.427	7.054	2.387	0
High Amplitude Greenhouse	140	150	0.43	9.284	4.183	0.841
High Amplitude Greenhouse	140	149	0.432	12.549	5.904	0.322
High Amplitude Greenhouse	140	148	0.435	7.98	2.577	0.417
High Amplitude Greenhouse	140	147	0.437	-0.948	-4.908	0.069
High Amplitude Greenhouse	140	146	0.44	0.866	-3.336	0
High Amplitude Greenhouse	140	145	0.442	2.638	-1.763	0.698
High Amplitude Greenhouse	140	144	0.445	4.543	-0.109	0
High Amplitude Greenhouse	140	143	0.447	6.487	1.55	0
High Amplitude Greenhouse	140	142	0.45	8.699	3.279	0
High Amplitude Greenhouse	140	141	0.452	11.67	5.084	0.367
High Amplitude Greenhouse	140	140	0.455	8.152	2.471	0.991
High Amplitude Greenhouse	140	139	0.457	5.268	0.021	0
High Amplitude Greenhouse	140	138	0.46	1.349	-3.087	0
High Amplitude Greenhouse	140	137	0.462	3.49	-1.227	0
High Amplitude Greenhouse	140	136	0.465	5.87	0.777	0
High Amplitude Greenhouse	140	135	0.467	8.269	2.667	0
High Amplitude Greenhouse	140	134	0.47	11.105	4.491	0.616
High Amplitude Greenhouse	140	133	0.472	12.804	5.56	0
High Amplitude Greenhouse	140	132	0.475	6.436	0.958	1.181
High Amplitude Greenhouse	140	131	0.477	8.573	2.552	0
High Amplitude Greenhouse	140	130	0.48	10.55	3.351	0.537
High Amplitude Greenhouse	140	129	0.482	6.226	-0.116	2.036
High Amplitude Greenhouse	140	128	0.485	7.088	0.395	0
High Amplitude Greenhouse	140	127	0.487	7.734	0.737	0

High Amplitude Greenhouse	140	126	0.49	8.479	1.141	0
High Amplitude Greenhouse	140	125	0.492	5.495	-1.527	0
High Amplitude Greenhouse	140	124	0.495	1.645	-4.862	0
High Amplitude Greenhouse	140	123	0.497	2.259	-4.25	0
High Amplitude Greenhouse	140	122	0.5	2.913	-3.606	0
High Amplitude Greenhouse	140	121	0.502	5.2	-1.629	0.203
High Amplitude Greenhouse	140	120	0.505	1.71	-4.553	0
High Amplitude Greenhouse	140	119	0.507	1.401	-4.707	0
High Amplitude Greenhouse	140	118	0.51	3.536	-2.84	0.003
High Amplitude Greenhouse	140	117	0.512	-1.338	-6.806	0.09
High Amplitude Greenhouse	140	116	0.515	-0.79	-6.32	0
High Amplitude Greenhouse	140	115	0.517	1.031	-4.643	0
High Amplitude Greenhouse	140	114	0.52	2.899	-2.992	0
High Amplitude Greenhouse	140	113	0.522	4.791	-1.339	0
High Amplitude Greenhouse	140	112	0.525	6.807	0.4	0.294
High Amplitude Greenhouse	140	111	0.527	4.331	-1.771	0
High Amplitude Greenhouse	140	110	0.53	0.22	-5.067	0
High Amplitude Greenhouse	140	109	0.532	-3.667	-8.273	0
High Amplitude Greenhouse	140	108	0.535	-1.406	-6.244	0.026
High Amplitude Greenhouse	140	107	0.537	0.901	-4.223	0
High Amplitude Greenhouse	140	106	0.54	3.263	-2.169	0.625
High Amplitude Greenhouse	140	105	0.542	5.678	-0.111	0
High Amplitude Greenhouse	140	104	0.545	8.197	1.986	0
High Amplitude Greenhouse	140	103	0.547	11.325	3.967	0.382
High Amplitude Greenhouse	140	102	0.55	4.527	-1.425	0
High Amplitude Greenhouse	140	101	0.552	-1.574	-6.392	0
High Amplitude Greenhouse	140	100	0.555	0.479	-4.56	0
High Amplitude Greenhouse	140	99	0.557	2.419	-2.836	0
High Amplitude Greenhouse	140	98	0.56	4.346	-1.138	0
High Amplitude Greenhouse	140	97	0.562	6.3	0.561	0
High Amplitude Greenhouse	140	96	0.565	8.428	2.348	0.516
High Amplitude Greenhouse	140	95	0.567	10.19	3.342	0.743
High Amplitude Greenhouse	140	94	0.57	5.201	-0.943	0.296
High Amplitude Greenhouse	140	93	0.572	5.378	-0.932	0
High Amplitude Greenhouse	140	92	0.575	1.378	-4.097	0

High Amplitude Greenhouse	140	91	0.577	3.732	-2.047	0
High Amplitude Greenhouse	140	90	0.58	6.183	0.05	0
High Amplitude Greenhouse	140	89	0.582	8.698	2.151	0.67
High Amplitude Greenhouse	140	88	0.585	12.174	4.291	0.285
High Amplitude Greenhouse	140	87	0.587	8.676	1.675	1.429
High Amplitude Greenhouse	140	86	0.59	5.252	-1.509	0
High Amplitude Greenhouse	140	85	0.592	6.107	-0.988	0
High Amplitude Greenhouse	140	84	0.595	5.759	-1.434	0
High Amplitude Greenhouse	140	83	0.597	-0.051	-6.109	0
High Amplitude Greenhouse	140	82	0.6	-0.994	-6.806	0
High Amplitude Greenhouse	140	81	0.602	0.927	-5.092	0
High Amplitude Greenhouse	140	80	0.605	3.004	-3.268	0
High Amplitude Greenhouse	140	79	0.607	-1.831	-7.213	0
High Amplitude Greenhouse	140	78	0.61	-1.234	-6.61	0
High Amplitude Greenhouse	140	77	0.612	0.993	-4.64	0
High Amplitude Greenhouse	140	76	0.615	3.32	-2.598	0
High Amplitude Greenhouse	140	75	0.617	5.83	-0.433	0
High Amplitude Greenhouse	140	74	0.62	2.253	-3.239	0
High Amplitude Greenhouse	140	73	0.622	2.136	-3.234	0
High Amplitude Greenhouse	140	72	0.625	2.241	-3.044	0
High Amplitude Greenhouse	140	71	0.627	-1.49	-6.071	0
High Amplitude Greenhouse	140	70	0.63	0.745	-4.089	0
High Amplitude Greenhouse	140	69	0.632	2.911	-2.18	0
High Amplitude Greenhouse	140	68	0.635	5.025	-0.34	0
High Amplitude Greenhouse	140	67	0.637	7.167	1.505	0
High Amplitude Greenhouse	140	66	0.64	9.256	3.264	1.204
High Amplitude Greenhouse	140	65	0.642	7.356	1.143	0
High Amplitude Greenhouse	140	64	0.645	0.494	-4.649	0
High Amplitude Greenhouse	140	63	0.647	-0.524	-5.405	0
High Amplitude Greenhouse	140	62	0.65	1.641	-3.492	0
High Amplitude Greenhouse	140	61	0.652	3.89	-1.503	0
High Amplitude Greenhouse	140	60	0.655	6.258	0.556	0
High Amplitude Greenhouse	140	59	0.657	8.823	2.738	0.792
High Amplitude Greenhouse	140	58	0.66	12.454	4.882	0.512
High Amplitude Greenhouse	140	57	0.662	14.538	6.282	0

High Amplitude Greenhouse	140	56	0.665	5.525	-0.571	0
High Amplitude Greenhouse	140	55	0.667	2.612	-2.844	0
High Amplitude Greenhouse	140	54	0.67	4.88	-0.85	0
High Amplitude Greenhouse	140	53	0.672	7.085	1.069	0
High Amplitude Greenhouse	140	52	0.675	9.251	2.919	0.793
High Amplitude Greenhouse	140	51	0.677	12.541	4.773	0.698
High Amplitude Greenhouse	140	50	0.68	15.108	6.539	0
High Amplitude Greenhouse	140	49	0.682	13.053	5.074	0
High Amplitude Greenhouse	140	48	0.685	10.288	3.042	0.625
High Amplitude Greenhouse	140	47	0.687	8.875	1.644	0.802
High Amplitude Greenhouse	140	46	0.69	3.894	-2.875	0
High Amplitude Greenhouse	140	45	0.692	4.476	-2.292	0.357
High Amplitude Greenhouse	140	44	0.695	5.209	-1.591	0
High Amplitude Greenhouse	140	43	0.697	6.044	-0.812	0
High Amplitude Greenhouse	140	42	0.7	6.89	-0.028	0
High Amplitude Greenhouse	140	41	0.702	2.691	-3.613	0
High Amplitude Greenhouse	140	40	0.705	3.509	-2.835	0
High Amplitude Greenhouse	140	39	0.707	5.918	-0.77	0
High Amplitude Greenhouse	140	38	0.71	7.247	0.407	0.323
High Amplitude Greenhouse	140	37	0.712	3.541	-2.75	0
High Amplitude Greenhouse	140	36	0.715	4.312	-2.004	0
High Amplitude Greenhouse	140	35	0.717	6.379	-0.209	0
High Amplitude Greenhouse	140	34	0.72	5.92	-0.45	0
High Amplitude Greenhouse	140	33	0.722	1.848	-3.683	0
High Amplitude Greenhouse	140	32	0.725	3.872	-1.891	0
High Amplitude Greenhouse	140	31	0.727	6.018	-0.047	0
High Amplitude Greenhouse	140	30	0.73	8.343	1.928	0.262
High Amplitude Greenhouse	140	29	0.732	11.169	3.918	0.704
High Amplitude Greenhouse	140	28	0.735	7.969	1.073	0.325
High Amplitude Greenhouse	140	27	0.737	8.061	1.029	0
High Amplitude Greenhouse	140	26	0.74	5.077	-1.312	0
High Amplitude Greenhouse	140	25	0.742	4.428	-1.68	0
High Amplitude Greenhouse	140	24	0.745	6.818	0.433	0
High Amplitude Greenhouse	140	23	0.747	9.284	2.492	0.576
High Amplitude Greenhouse	140	22	0.75	12.623	4.545	0.755

High Amplitude Greenhouse	140	21	0.752	15.438	6.457	0
High Amplitude Greenhouse	140	20	0.755	18.013	8.3	0
High Amplitude Greenhouse	140	19	0.757	14.038	5.544	0
High Amplitude Greenhouse	140	18	0.76	3.935	-2.193	0
High Amplitude Greenhouse	140	17	0.762	5.819	-0.456	0
High Amplitude Greenhouse	140	16	0.765	7.792	1.331	0
High Amplitude Greenhouse	140	15	0.767	9.877	3.169	0.507
High Amplitude Greenhouse	140	14	0.77	13.375	5.139	0.205
High Amplitude Greenhouse	140	13	0.772	16.109	7.123	0
High Amplitude Greenhouse	140	12	0.775	18.902	9.177	0
High Amplitude Greenhouse	140	11	0.777	17.2	8.1	0
High Amplitude Greenhouse	140	10	0.78	10.513	3.471	0.907
High Amplitude Greenhouse	140	9	0.782	8.545	1.507	0.146
High Amplitude Greenhouse	140	8	0.785	11.402	3.614	0.527
High Amplitude Greenhouse	140	7	0.787	12.736	4.331	0.517
High Amplitude Greenhouse	140	6	0.79	13.587	4.974	0
High Amplitude Greenhouse	140	5	0.792	14.286	5.52	0
High Amplitude Greenhouse	140	4	0.795	14.889	5.997	0
High Amplitude Greenhouse	140	3	0.797	7.525	0.75	0
High Amplitude Greenhouse	140	2	0.8	6.469	-0.244	0
High Amplitude Greenhouse	140	1	1.6	6.469	-0.231	0
High Amplitude Greenhouse	100	322	0	-14.435	-7.998	0
High Amplitude Greenhouse	100	321	0.002	-12.733	-6.318	0
High Amplitude Greenhouse	100	320	0.005	-10.982	-4.593	0
High Amplitude Greenhouse	100	319	0.007	-9.098	-2.757	0
High Amplitude Greenhouse	100	318	0.01	-7.18	-0.907	0
High Amplitude Greenhouse	100	317	0.012	-5.155	1.017	0
High Amplitude Greenhouse	100	316	0.015	-3.038	3.012	0
High Amplitude Greenhouse	100	315	0.017	-4.485	1.793	0
High Amplitude Greenhouse	100	314	0.02	-7.338	-0.724	0
High Amplitude Greenhouse	100	313	0.022	-10.637	-3.718	0
High Amplitude Greenhouse	100	312	0.025	-9.71	-2.777	0
High Amplitude Greenhouse	100	311	0.027	-7.562	-0.711	0
High Amplitude Greenhouse	100	310	0.03	-5.531	1.221	0
High Amplitude Greenhouse	100	309	0.032	-3.579	3.08	0.396

High Amplitude Greenhouse	100	308	0.035	-1.275	4.87	0
High Amplitude Greenhouse	100	307	0.037	-5.836	0.853	0
High Amplitude Greenhouse	100	306	0.04	-5.414	1.316	0
High Amplitude Greenhouse	100	305	0.042	-3.627	3.027	0.025
High Amplitude Greenhouse	100	304	0.045	-7.146	-0.115	0
High Amplitude Greenhouse	100	303	0.047	-7.578	-0.436	0
High Amplitude Greenhouse	100	302	0.05	-5.621	1.433	0
High Amplitude Greenhouse	100	301	0.052	-3.559	3.378	0
High Amplitude Greenhouse	100	300	0.055	-3.573	3.446	0
High Amplitude Greenhouse	100	299	0.057	-6.928	0.477	0
High Amplitude Greenhouse	100	298	0.06	-4.704	2.582	0
High Amplitude Greenhouse	100	297	0.062	-2.47	4.689	0.938
High Amplitude Greenhouse	100	296	0.065	0.249	6.77	0
High Amplitude Greenhouse	100	295	0.067	-1.739	4.882	0
High Amplitude Greenhouse	100	294	0.07	-2.921	3.77	0
High Amplitude Greenhouse	100	293	0.072	-0.905	5.66	0.021
High Amplitude Greenhouse	100	292	0.075	-3.893	3.056	0
High Amplitude Greenhouse	100	291	0.077	-4.87	2.253	0
High Amplitude Greenhouse	100	290	0.08	-3.024	3.997	0
High Amplitude Greenhouse	100	289	0.082	-1.164	5.744	0
High Amplitude Greenhouse	100	288	0.085	0.795	7.521	0.749
High Amplitude Greenhouse	100	287	0.087	1.664	8.042	0
High Amplitude Greenhouse	100	286	0.09	-0.973	5.666	0.006
High Amplitude Greenhouse	100	285	0.092	-5.834	1.388	0
High Amplitude Greenhouse	100	284	0.095	-11.797	-4.061	0
High Amplitude Greenhouse	100	283	0.097	-11.212	-3.44	0
High Amplitude Greenhouse	100	282	0.1	-10.453	-2.658	0
High Amplitude Greenhouse	100	281	0.102	-8.237	-0.523	0
High Amplitude Greenhouse	100	280	0.105	-6.007	1.598	0
High Amplitude Greenhouse	100	279	0.107	-3.753	3.735	0.465
High Amplitude Greenhouse	100	278	0.11	-1.14	5.737	0
High Amplitude Greenhouse	100	277	0.112	-4.773	2.568	0
High Amplitude Greenhouse	100	276	0.115	-12.445	-4.462	0
High Amplitude Greenhouse	100	275	0.117	-10.664	-2.72	0
High Amplitude Greenhouse	100	274	0.12	-8.83	-0.936	0

High Amplitude Greenhouse	100	273	0.122	-6.981	0.849	0
High Amplitude Greenhouse	100	272	0.125	-5.078	2.664	0
High Amplitude Greenhouse	100	271	0.127	-3.021	4.595	0
High Amplitude Greenhouse	100	270	0.13	-0.935	6.538	0.015
High Amplitude Greenhouse	100	269	0.132	-5.152	2.839	0
High Amplitude Greenhouse	100	268	0.135	-5.29	2.794	0
High Amplitude Greenhouse	100	267	0.137	-8.667	-0.229	0
High Amplitude Greenhouse	100	266	0.14	-7.502	0.923	0
High Amplitude Greenhouse	100	265	0.142	-5.201	3.102	0
High Amplitude Greenhouse	100	264	0.145	-2.897	5.254	0
High Amplitude Greenhouse	100	263	0.147	-0.564	7.421	0.187
High Amplitude Greenhouse	100	262	0.15	-0.603	7.398	0
High Amplitude Greenhouse	100	261	0.152	-4.044	4.349	0
High Amplitude Greenhouse	100	260	0.155	-2.036	6.237	0.63
High Amplitude Greenhouse	100	259	0.157	0.129	8.131	0
High Amplitude Greenhouse	100	258	0.16	-3.338	4.966	0
High Amplitude Greenhouse	100	257	0.162	-3.496	4.683	0
High Amplitude Greenhouse	100	256	0.165	-1.53	6.518	0
High Amplitude Greenhouse	100	255	0.167	0.608	8.467	0.361
High Amplitude Greenhouse	100	254	0.17	-2.133	5.894	0
High Amplitude Greenhouse	100	253	0.172	-2.784	5.399	0
High Amplitude Greenhouse	100	252	0.175	-0.522	7.501	0.107
High Amplitude Greenhouse	100	251	0.177	2.179	9.727	1.842
High Amplitude Greenhouse	100	250	0.18	5.391	11.911	0
High Amplitude Greenhouse	100	249	0.182	3.158	10.188	0
High Amplitude Greenhouse	100	248	0.185	2.002	9.192	0
High Amplitude Greenhouse	100	247	0.187	2.113	9.121	0
High Amplitude Greenhouse	100	246	0.19	-4.034	3.646	0
High Amplitude Greenhouse	100	245	0.192	-3.539	4.188	0.546
High Amplitude Greenhouse	100	244	0.195	-2.847	4.709	0
High Amplitude Greenhouse	100	243	0.197	-2.09	5.174	0
High Amplitude Greenhouse	100	242	0.2	-1.68	5.622	0
High Amplitude Greenhouse	100	241	0.202	0.235	7.405	0.32
High Amplitude Greenhouse	100	240	0.205	-0.809	6.379	0
High Amplitude Greenhouse	100	239	0.207	-6.955	0.888	0

High Amplitude Greenhouse	100	238	0.21	-9.112	-1.024	0
High Amplitude Greenhouse	100	237	0.212	-7.011	0.987	0
High Amplitude Greenhouse	100	236	0.215	-4.821	3.064	0
High Amplitude Greenhouse	100	235	0.217	-2.544	5.193	0
High Amplitude Greenhouse	100	234	0.22	-0.152	7.417	0.19
High Amplitude Greenhouse	100	233	0.222	2.605	9.57	0.723
High Amplitude Greenhouse	100	232	0.225	5.707	11.691	0
High Amplitude Greenhouse	100	231	0.227	-0.973	6.351	0.006
High Amplitude Greenhouse	100	230	0.23	-6.185	1.734	0
High Amplitude Greenhouse	100	229	0.232	-4.216	3.607	0
High Amplitude Greenhouse	100	228	0.235	-2.254	5.446	0
High Amplitude Greenhouse	100	227	0.237	-0.364	7.228	0.143
High Amplitude Greenhouse	100	226	0.24	1.91	9.032	1.097
High Amplitude Greenhouse	100	225	0.242	4.43	10.776	0
High Amplitude Greenhouse	100	224	0.245	4.338	10.584	0
High Amplitude Greenhouse	100	223	0.247	0.21	7.3	0.272
High Amplitude Greenhouse	100	222	0.25	1.69	8.36	0.374
High Amplitude Greenhouse	100	221	0.252	-1.81	5.239	0
High Amplitude Greenhouse	100	220	0.255	-0.894	6.155	0.024
High Amplitude Greenhouse	100	219	0.257	1.547	8.221	6.496
High Amplitude Greenhouse	100	218	0.26	4.637	10.38	0
High Amplitude Greenhouse	100	217	0.262	7.724	12.467	0
High Amplitude Greenhouse	100	216	0.265	4.554	10.088	0
High Amplitude Greenhouse	100	215	0.267	3.953	9.522	0
High Amplitude Greenhouse	100	214	0.27	6.799	11.442	0
High Amplitude Greenhouse	100	213	0.272	9.531	13.283	0
High Amplitude Greenhouse	100	212	0.275	5.297	10.162	0
High Amplitude Greenhouse	100	211	0.277	4.895	9.752	0
High Amplitude Greenhouse	100	210	0.28	7.4	11.424	0
High Amplitude Greenhouse	100	209	0.282	9.323	12.33	0
High Amplitude Greenhouse	100	208	0.285	3.267	7.878	0
High Amplitude Greenhouse	100	207	0.287	3.818	8.145	0
High Amplitude Greenhouse	100	206	0.29	4.605	8.586	0
High Amplitude Greenhouse	100	205	0.292	5.486	9.098	0
High Amplitude Greenhouse	100	204	0.295	6.455	9.673	0

High Amplitude Greenhouse	100	203	0.297	2.041	6.339	0
High Amplitude Greenhouse	100	202	0.3	-0.798	3.907	0.08
High Amplitude Greenhouse	100	201	0.302	-2.252	2.669	0
High Amplitude Greenhouse	100	200	0.305	-4.369	0.811	0
High Amplitude Greenhouse	100	199	0.307	-2.281	2.786	1.085
High Amplitude Greenhouse	100	198	0.31	0.437	4.624	0
High Amplitude Greenhouse	100	197	0.312	2.897	6.382	1.4
High Amplitude Greenhouse	100	196	0.315	5.39	8.066	0
High Amplitude Greenhouse	100	195	0.317	7.888	9.743	0
High Amplitude Greenhouse	100	194	0.32	6.203	8.426	0
High Amplitude Greenhouse	100	193	0.322	-3.822	0.162	0
High Amplitude Greenhouse	100	192	0.325	-3.637	0.409	0
High Amplitude Greenhouse	100	191	0.327	-1.848	2.12	0
High Amplitude Greenhouse	100	190	0.33	-0.041	3.843	0.215
High Amplitude Greenhouse	100	189	0.332	2.339	5.637	1.759
High Amplitude Greenhouse	100	188	0.335	5.073	7.495	0
High Amplitude Greenhouse	100	187	0.337	7.978	9.466	0
High Amplitude Greenhouse	100	186	0.34	7.999	9.375	0
High Amplitude Greenhouse	100	185	0.342	1.377	4.436	0
High Amplitude Greenhouse	100	184	0.345	-2.157	1.262	0
High Amplitude Greenhouse	100	183	0.347	-0.319	3.012	0.153
High Amplitude Greenhouse	100	182	0.35	1.96	4.78	7.338
High Amplitude Greenhouse	100	181	0.352	4.46	6.47	0
High Amplitude Greenhouse	100	180	0.355	6.873	8.086	0
High Amplitude Greenhouse	100	179	0.357	9.266	9.696	0
High Amplitude Greenhouse	100	178	0.36	5.282	6.73	0
High Amplitude Greenhouse	100	177	0.362	4.016	5.688	0
High Amplitude Greenhouse	100	176	0.365	5.278	6.473	0
High Amplitude Greenhouse	100	175	0.367	0.57	2.888	0
High Amplitude Greenhouse	100	174	0.37	1.553	3.497	0
High Amplitude Greenhouse	100	173	0.372	4.128	5.237	0
High Amplitude Greenhouse	100	172	0.375	6.8	7.045	0
High Amplitude Greenhouse	100	171	0.377	9.171	8.145	0
High Amplitude Greenhouse	100	170	0.38	3.446	3.892	0
High Amplitude Greenhouse	100	169	0.382	6.091	5.681	0

High Amplitude Greenhouse	100	168	0.385	8.911	7.598	0
High Amplitude Greenhouse	100	167	0.387	9.649	8.039	0
High Amplitude Greenhouse	100	166	0.39	3.468	3.481	0
High Amplitude Greenhouse	100	165	0.392	1.151	1.646	0
High Amplitude Greenhouse	100	164	0.395	1.651	1.878	0
High Amplitude Greenhouse	100	163	0.397	-1.878	-1.241	0
High Amplitude Greenhouse	100	162	0.4	-5.939	-4.87	0
High Amplitude Greenhouse	100	161	0.402	-4.417	-3.392	0
High Amplitude Greenhouse	100	160	0.405	-2.784	-1.812	0
High Amplitude Greenhouse	100	159	0.407	-1.131	-0.228	0
High Amplitude Greenhouse	100	158	0.41	0.723	1.426	0.375
High Amplitude Greenhouse	100	157	0.412	-1.59	-0.701	0
High Amplitude Greenhouse	100	156	0.415	-3.169	-2.044	0
High Amplitude Greenhouse	100	155	0.417	-7.503	-5.945	0.326
High Amplitude Greenhouse	100	154	0.42	-6.64	-5.36	0
High Amplitude Greenhouse	100	153	0.422	-4.692	-3.471	0.48
High Amplitude Greenhouse	100	152	0.425	-2.202	-1.55	0
High Amplitude Greenhouse	100	151	0.427	-0.316	0.26	0.154
High Amplitude Greenhouse	100	150	0.43	1.925	2.003	0.735
High Amplitude Greenhouse	100	149	0.432	4.397	3.673	0
High Amplitude Greenhouse	100	148	0.435	0.049	0.293	0.235
High Amplitude Greenhouse	100	147	0.437	-8.068	-7.241	0
High Amplitude Greenhouse	100	146	0.44	-6.518	-5.717	0
High Amplitude Greenhouse	100	145	0.442	-4.948	-4.191	0
High Amplitude Greenhouse	100	144	0.445	-3.273	-2.583	0
High Amplitude Greenhouse	100	143	0.447	-1.594	-0.968	0.816
High Amplitude Greenhouse	100	142	0.45	0.645	0.719	0
High Amplitude Greenhouse	100	141	0.452	3.202	2.484	0.369
High Amplitude Greenhouse	100	140	0.455	-0.05	-0.17	0.213
High Amplitude Greenhouse	100	139	0.457	-2.71	-2.657	0
High Amplitude Greenhouse	100	138	0.46	-6.228	-5.8	0
High Amplitude Greenhouse	100	137	0.462	-4.343	-3.973	0
High Amplitude Greenhouse	100	136	0.465	-2.279	-2.002	0.495
High Amplitude Greenhouse	100	135	0.467	-0.034	-0.141	0
High Amplitude Greenhouse	100	134	0.47	2.325	1.655	0.715

High Amplitude Greenhouse	100	133	0.472	3.919	2.699	0
High Amplitude Greenhouse	100	132	0.475	-1.652	-1.927	0
High Amplitude Greenhouse	100	131	0.477	-0.009	-0.355	0.216
High Amplitude Greenhouse	100	130	0.48	1.028	0.424	0.447
High Amplitude Greenhouse	100	129	0.482	-2.682	-3.059	0
High Amplitude Greenhouse	100	128	0.485	-2.229	-2.564	0
High Amplitude Greenhouse	100	127	0.487	-1.958	-2.234	0
High Amplitude Greenhouse	100	126	0.49	-1.615	-1.84	0
High Amplitude Greenhouse	100	125	0.492	-4.682	-4.516	0
High Amplitude Greenhouse	100	124	0.495	-8.404	-7.858	0
High Amplitude Greenhouse	100	123	0.497	-7.829	-7.249	0
High Amplitude Greenhouse	100	122	0.5	-7.216	-6.606	0
High Amplitude Greenhouse	100	121	0.502	-5.144	-4.628	0
High Amplitude Greenhouse	100	120	0.505	-8.4	-7.548	0
High Amplitude Greenhouse	100	119	0.507	-8.64	-7.697	0
High Amplitude Greenhouse	100	118	0.51	-6.697	-5.822	0
High Amplitude Greenhouse	100	117	0.512	-11.018	-9.777	0
High Amplitude Greenhouse	100	116	0.515	-10.566	-9.279	0
High Amplitude Greenhouse	100	115	0.517	-8.838	-7.587	0
High Amplitude Greenhouse	100	114	0.52	-7.122	-5.919	0
High Amplitude Greenhouse	100	113	0.522	-5.387	-4.247	0
High Amplitude Greenhouse	100	112	0.525	-3.554	-2.486	0
High Amplitude Greenhouse	100	111	0.527	-6.014	-4.633	0
High Amplitude Greenhouse	100	110	0.53	-9.62	-7.904	0
High Amplitude Greenhouse	100	109	0.532	-13.064	-11.082	0
High Amplitude Greenhouse	100	108	0.535	-10.963	-9.024	0
High Amplitude Greenhouse	100	107	0.537	-8.856	-6.97	0
High Amplitude Greenhouse	100	106	0.54	-6.697	-4.883	0
High Amplitude Greenhouse	100	105	0.542	-4.493	-2.79	0
High Amplitude Greenhouse	100	104	0.545	-2.217	-0.655	0
High Amplitude Greenhouse	100	103	0.547	-0.049	1.365	0.214
High Amplitude Greenhouse	100	102	0.55	-5.952	-3.986	0
High Amplitude Greenhouse	100	101	0.552	-11.332	-8.912	0
High Amplitude Greenhouse	100	100	0.555	-9.415	-7.034	0
High Amplitude Greenhouse	100	99	0.557	-7.592	-5.265	0

High Amplitude Greenhouse	100	98	0.56	-5.773	-3.521	0
High Amplitude Greenhouse	100	97	0.562	-3.95	-1.774	0
High Amplitude Greenhouse	100	96	0.565	-1.999	0.064	0.677
High Amplitude Greenhouse	100	95	0.567	-0.391	1.108	0
High Amplitude Greenhouse	100	94	0.57	-5.104	-3.125	0
High Amplitude Greenhouse	100	93	0.572	-5.122	-3.061	0
High Amplitude Greenhouse	100	92	0.575	-8.592	-6.171	0
High Amplitude Greenhouse	100	91	0.577	-6.394	-4.067	0
High Amplitude Greenhouse	100	90	0.58	-4.126	-1.914	0
High Amplitude Greenhouse	100	89	0.582	-1.816	0.242	0
High Amplitude Greenhouse	100	88	0.585	0.644	2.441	0.394
High Amplitude Greenhouse	100	87	0.587	-2.131	-0.118	0
High Amplitude Greenhouse	100	86	0.59	-5.706	-3.245	0
High Amplitude Greenhouse	100	85	0.592	-5.156	-2.666	0
High Amplitude Greenhouse	100	84	0.595	-5.671	-3.052	0
High Amplitude Greenhouse	100	83	0.597	-10.759	-7.668	0
High Amplitude Greenhouse	100	82	0.6	-11.519	-8.307	0
High Amplitude Greenhouse	100	81	0.602	-9.713	-6.535	0
High Amplitude Greenhouse	100	80	0.605	-7.758	-4.65	0
High Amplitude Greenhouse	100	79	0.607	-12.012	-8.537	0
High Amplitude Greenhouse	100	78	0.61	-11.386	-7.877	0
High Amplitude Greenhouse	100	77	0.612	-9.294	-5.849	0
High Amplitude Greenhouse	100	76	0.615	-7.102	-3.75	0
High Amplitude Greenhouse	100	75	0.617	-4.746	-1.527	0
High Amplitude Greenhouse	100	74	0.62	-7.846	-4.277	0
High Amplitude Greenhouse	100	73	0.622	-7.864	-4.216	0
High Amplitude Greenhouse	100	72	0.625	-7.682	-3.971	0
High Amplitude Greenhouse	100	71	0.627	-10.959	-6.944	0
High Amplitude Greenhouse	100	70	0.63	-8.861	-4.908	0
High Amplitude Greenhouse	100	69	0.632	-6.816	-2.948	0
High Amplitude Greenhouse	100	68	0.635	-4.823	-1.057	0
High Amplitude Greenhouse	100	67	0.637	-2.818	0.838	2.334
High Amplitude Greenhouse	100	66	0.64	0.082	2.645	0
High Amplitude Greenhouse	100	65	0.642	-2.183	0.571	0
High Amplitude Greenhouse	100	64	0.645	-7.428	-5.176	0

High Amplitude Greenhouse	100	63	0.647	-8.272	-5.887	0
High Amplitude Greenhouse	100	62	0.65	-6.246	-3.932	0
High Amplitude Greenhouse	100	61	0.652	-4.129	-1.902	0
High Amplitude Greenhouse	100	60	0.655	-1.896	0.196	0
High Amplitude Greenhouse	100	59	0.657	0.499	2.416	0.336
High Amplitude Greenhouse	100	58	0.66	3.402	4.595	0.721
High Amplitude Greenhouse	100	57	0.662	5.532	6.028	0
High Amplitude Greenhouse	100	56	0.665	-2.587	-0.793	0
High Amplitude Greenhouse	100	55	0.667	-5.148	-3.036	0
High Amplitude Greenhouse	100	54	0.67	-3.031	-1.014	0.483
High Amplitude Greenhouse	100	53	0.672	-0.586	0.931	0
High Amplitude Greenhouse	100	52	0.675	1.586	2.804	2.375
High Amplitude Greenhouse	100	51	0.677	4.202	4.68	0
High Amplitude Greenhouse	100	50	0.68	6.811	6.466	0
High Amplitude Greenhouse	100	49	0.682	5.214	5.017	0
High Amplitude Greenhouse	100	48	0.685	2.712	3	0
High Amplitude Greenhouse	100	47	0.687	1.244	1.615	0
High Amplitude Greenhouse	100	46	0.69	-3.577	-2.894	0
High Amplitude Greenhouse	100	45	0.692	-3.022	-2.302	0
High Amplitude Greenhouse	100	44	0.695	-2.33	-1.596	0
High Amplitude Greenhouse	100	43	0.697	-1.551	-0.813	0
High Amplitude Greenhouse	100	42	0.7	-0.771	-0.028	0.051
High Amplitude Greenhouse	100	41	0.702	-4.778	-3.614	0
High Amplitude Greenhouse	100	40	0.705	-4.015	-2.839	0
High Amplitude Greenhouse	100	39	0.707	-1.827	-0.78	0
High Amplitude Greenhouse	100	38	0.71	-0.622	0.389	0.085
High Amplitude Greenhouse	100	37	0.712	-4.142	-2.778	0
High Amplitude Greenhouse	100	36	0.715	-3.422	-2.045	0
High Amplitude Greenhouse	100	35	0.717	-1.548	-0.265	0
High Amplitude Greenhouse	100	34	0.72	-1.928	-0.524	0
High Amplitude Greenhouse	100	33	0.722	-5.598	-3.775	0
High Amplitude Greenhouse	100	32	0.725	-3.749	-2.005	0
High Amplitude Greenhouse	100	31	0.727	-1.822	-0.184	0
High Amplitude Greenhouse	100	30	0.73	0.25	1.765	0.281
High Amplitude Greenhouse	100	29	0.732	2.78	3.727	0.371

High Amplitude Greenhouse	100	28	0.735	-0.438	0.853	0.235
High Amplitude Greenhouse	100	27	0.737	-0.515	0.777	0
High Amplitude Greenhouse	100	26	0.74	-3.13	-1.598	0
High Amplitude Greenhouse	100	25	0.742	-3.664	-2.001	0
High Amplitude Greenhouse	100	24	0.745	-1.472	0.074	0
High Amplitude Greenhouse	100	23	0.747	0.709	2.094	0.375
High Amplitude Greenhouse	100	22	0.75	3.446	4.106	1.367
High Amplitude Greenhouse	100	21	0.752	6.11	5.976	0
High Amplitude Greenhouse	100	20	0.755	8.694	7.775	0
High Amplitude Greenhouse	100	19	0.757	5.086	4.974	0
High Amplitude Greenhouse	100	18	0.76	-3.972	-2.811	0
High Amplitude Greenhouse	100	17	0.762	-2.212	-1.122	0
High Amplitude Greenhouse	100	16	0.765	-0.385	0.615	0.138
High Amplitude Greenhouse	100	15	0.767	1.787	2.403	1.128
High Amplitude Greenhouse	100	14	0.77	4.445	4.32	0
High Amplitude Greenhouse	100	13	0.772	7.219	6.252	0
High Amplitude Greenhouse	100	12	0.775	10.156	8.252	0.329
High Amplitude Greenhouse	100	11	0.777	8.764	7.121	0.685
High Amplitude Greenhouse	100	10	0.78	2.7	2.435	0
High Amplitude Greenhouse	100	9	0.782	0.372	0.415	0.308
High Amplitude Greenhouse	100	8	0.785	3.109	2.466	1.789
High Amplitude Greenhouse	100	7	0.787	4.169	3.125	0
High Amplitude Greenhouse	100	6	0.79	5.131	3.709	0
High Amplitude Greenhouse	100	5	0.792	5.965	4.197	0
High Amplitude Greenhouse	100	4	0.795	6.702	4.616	0
High Amplitude Greenhouse	100	3	0.797	0.08	-0.689	0.242
High Amplitude Greenhouse	100	2	0.8	-0.781	-1.742	0
High Amplitude Greenhouse	100	1	1.6	-0.781	-1.731	0
High Amplitude Greenhouse	120	322	0	-13.588	-7.998	0
High Amplitude Greenhouse	120	321	0.002	-11.831	-6.318	0
High Amplitude Greenhouse	120	320	0.005	-10.02	-4.593	0
High Amplitude Greenhouse	120	319	0.007	-8.067	-2.757	0
High Amplitude Greenhouse	120	318	0.01	-6.074	-0.907	0
High Amplitude Greenhouse	120	317	0.012	-3.964	1.017	0
High Amplitude Greenhouse	120	316	0.015	-1.752	3.012	0.083

High Amplitude Greenhouse	120	315	0.017	-3.217	1.793	0
High Amplitude Greenhouse	120	314	0.02	-6.243	-0.724	0
High Amplitude Greenhouse	120	313	0.022	-9.721	-3.718	0
High Amplitude Greenhouse	120	312	0.025	-8.77	-2.777	0
High Amplitude Greenhouse	120	311	0.027	-6.536	-0.711	0
High Amplitude Greenhouse	120	310	0.03	-4.421	1.221	0
High Amplitude Greenhouse	120	309	0.032	-2.379	3.08	0.498
High Amplitude Greenhouse	120	308	0.035	-0.092	4.87	0
High Amplitude Greenhouse	120	307	0.037	-4.72	0.853	0
High Amplitude Greenhouse	120	306	0.04	-4.297	1.316	0
High Amplitude Greenhouse	120	305	0.042	-2.427	3.027	0.126
High Amplitude Greenhouse	120	304	0.045	-6.056	-0.115	0
High Amplitude Greenhouse	120	303	0.047	-6.53	-0.436	0
High Amplitude Greenhouse	120	302	0.05	-4.493	1.433	0
High Amplitude Greenhouse	120	301	0.052	-2.341	3.378	0
High Amplitude Greenhouse	120	300	0.055	-2.378	3.446	0
High Amplitude Greenhouse	120	299	0.057	-5.932	0.477	0
High Amplitude Greenhouse	120	298	0.06	-3.612	2.582	0
High Amplitude Greenhouse	120	297	0.062	-1.27	4.689	0.186
High Amplitude Greenhouse	120	296	0.065	1.259	6.77	0.375
High Amplitude Greenhouse	120	295	0.067	-0.779	4.882	0.688
High Amplitude Greenhouse	120	294	0.07	-2.093	3.77	0
High Amplitude Greenhouse	120	293	0.072	0.282	5.66	0
High Amplitude Greenhouse	120	292	0.075	-2.629	3.056	0
High Amplitude Greenhouse	120	291	0.077	-3.681	2.253	0
High Amplitude Greenhouse	120	290	0.08	-1.756	3.997	0
High Amplitude Greenhouse	120	289	0.082	0.188	5.744	0.267
High Amplitude Greenhouse	120	288	0.085	2.504	7.521	0.74
High Amplitude Greenhouse	120	287	0.087	3.381	8.042	0
High Amplitude Greenhouse	120	286	0.09	0.571	5.666	0.353
High Amplitude Greenhouse	120	285	0.092	-4.233	1.388	0
High Amplitude Greenhouse	120	284	0.095	-10.511	-4.061	0
High Amplitude Greenhouse	120	283	0.097	-9.918	-3.44	0
High Amplitude Greenhouse	120	282	0.1	-9.142	-2.658	0
High Amplitude Greenhouse	120	281	0.102	-6.838	-0.523	0

High Amplitude Greenhouse	120	280	0.105	-4.514	1.598	0
High Amplitude Greenhouse	120	279	0.107	-2.153	3.735	0.257
High Amplitude Greenhouse	120	278	0.11	0.103	5.737	0
High Amplitude Greenhouse	120	277	0.112	-3.505	2.568	0
High Amplitude Greenhouse	120	276	0.115	-11.575	-4.462	0
High Amplitude Greenhouse	120	275	0.117	-9.73	-2.72	0
High Amplitude Greenhouse	120	274	0.12	-7.829	-0.936	0
High Amplitude Greenhouse	120	273	0.122	-5.906	0.849	0
High Amplitude Greenhouse	120	272	0.125	-3.924	2.664	0
High Amplitude Greenhouse	120	271	0.127	-1.777	4.595	0
High Amplitude Greenhouse	120	270	0.13	0.406	6.538	0.316
High Amplitude Greenhouse	120	269	0.132	-3.767	2.839	0
High Amplitude Greenhouse	120	268	0.135	-3.934	2.794	0
High Amplitude Greenhouse	120	267	0.137	-7.505	-0.229	0
High Amplitude Greenhouse	120	266	0.14	-6.301	0.923	0
High Amplitude Greenhouse	120	265	0.142	-3.9	3.102	0
High Amplitude Greenhouse	120	264	0.145	-1.492	5.254	0
High Amplitude Greenhouse	120	263	0.147	0.955	7.421	0.375
High Amplitude Greenhouse	120	262	0.15	1.167	7.398	0.375
High Amplitude Greenhouse	120	261	0.152	-2.209	4.349	0
High Amplitude Greenhouse	120	260	0.155	-0.104	6.237	0.201
High Amplitude Greenhouse	120	259	0.157	2.233	8.131	0.373
High Amplitude Greenhouse	120	258	0.16	-1.338	4.966	0.14
High Amplitude Greenhouse	120	257	0.162	-1.649	4.683	0
High Amplitude Greenhouse	120	256	0.165	0.406	6.518	0.316
High Amplitude Greenhouse	120	255	0.167	2.964	8.467	0.37
High Amplitude Greenhouse	120	254	0.17	0.042	5.894	0.234
High Amplitude Greenhouse	120	253	0.172	-0.435	5.399	0
High Amplitude Greenhouse	120	252	0.175	1.946	7.501	0
High Amplitude Greenhouse	120	251	0.177	4.655	9.727	1.787
High Amplitude Greenhouse	120	250	0.18	7.9	11.911	0
High Amplitude Greenhouse	120	249	0.182	5.615	10.188	0
High Amplitude Greenhouse	120	248	0.185	4.394	9.192	0
High Amplitude Greenhouse	120	247	0.187	4.475	9.121	0
High Amplitude Greenhouse	120	246	0.19	-2.048	3.646	0

High Amplitude Greenhouse	120	245	0.192	-1.539	4.188	0.562
High Amplitude Greenhouse	120	244	0.195	-0.847	4.709	0
High Amplitude Greenhouse	120	243	0.197	-0.233	5.174	0
High Amplitude Greenhouse	120	242	0.2	0.35	5.622	0
High Amplitude Greenhouse	120	241	0.202	2.357	7.405	0.372
High Amplitude Greenhouse	120	240	0.205	1.327	6.379	0
High Amplitude Greenhouse	120	239	0.207	-5.219	0.888	0
High Amplitude Greenhouse	120	238	0.21	-7.505	-1.024	0
High Amplitude Greenhouse	120	237	0.212	-5.318	0.987	0
High Amplitude Greenhouse	120	236	0.215	-3.032	3.064	0
High Amplitude Greenhouse	120	235	0.217	-0.653	5.193	0
High Amplitude Greenhouse	120	234	0.22	1.865	7.417	0
High Amplitude Greenhouse	120	233	0.222	4.537	9.57	0.695
High Amplitude Greenhouse	120	232	0.225	7.68	11.691	0
High Amplitude Greenhouse	120	231	0.227	0.725	6.351	0
High Amplitude Greenhouse	120	230	0.23	-4.798	1.734	0
High Amplitude Greenhouse	120	229	0.232	-2.746	3.607	0
High Amplitude Greenhouse	120	228	0.235	-0.697	5.446	0
High Amplitude Greenhouse	120	227	0.237	1.291	7.228	0
High Amplitude Greenhouse	120	226	0.24	3.5	9.032	1.065
High Amplitude Greenhouse	120	225	0.242	6.073	10.776	0
High Amplitude Greenhouse	120	224	0.245	5.954	10.584	0
High Amplitude Greenhouse	120	223	0.247	1.66	7.3	0
High Amplitude Greenhouse	120	222	0.25	2.91	8.36	0
High Amplitude Greenhouse	120	221	0.252	-1.166	5.239	0.478
High Amplitude Greenhouse	120	220	0.255	0.27	6.155	0
High Amplitude Greenhouse	120	219	0.257	2.789	8.221	0
High Amplitude Greenhouse	120	218	0.26	5.578	10.38	2.173
High Amplitude Greenhouse	120	217	0.262	8.695	12.467	0
High Amplitude Greenhouse	120	216	0.265	5.896	10.088	0
High Amplitude Greenhouse	120	215	0.267	5.257	9.522	0
High Amplitude Greenhouse	120	214	0.27	8.131	11.442	0
High Amplitude Greenhouse	120	213	0.272	10.9	13.283	0.431
High Amplitude Greenhouse	120	212	0.275	6.713	10.162	1.231
High Amplitude Greenhouse	120	211	0.277	6.278	9.752	0

High Amplitude Greenhouse	120	210	0.28	8.8	11.424	0
High Amplitude Greenhouse	120	209	0.282	10.439	12.33	0.334
High Amplitude Greenhouse	120	208	0.285	4.288	7.878	2.123
High Amplitude Greenhouse	120	207	0.287	4.828	8.145	0
High Amplitude Greenhouse	120	206	0.29	5.612	8.586	0
High Amplitude Greenhouse	120	205	0.292	6.489	9.098	0
High Amplitude Greenhouse	120	204	0.295	7.452	9.673	0
High Amplitude Greenhouse	120	203	0.297	2.916	6.339	0
High Amplitude Greenhouse	120	202	0.3	-0.064	3.907	0.285
High Amplitude Greenhouse	120	201	0.302	-1.452	2.669	0
High Amplitude Greenhouse	120	200	0.305	-3.666	0.811	0
High Amplitude Greenhouse	120	199	0.307	-1.481	2.786	0.088
High Amplitude Greenhouse	120	198	0.31	0.663	4.624	0
High Amplitude Greenhouse	120	197	0.312	2.87	6.382	1.402
High Amplitude Greenhouse	120	196	0.315	5.403	8.066	0
High Amplitude Greenhouse	120	195	0.317	7.932	9.743	0
High Amplitude Greenhouse	120	194	0.32	6.207	8.426	0
High Amplitude Greenhouse	120	193	0.322	-4.233	0.162	0
High Amplitude Greenhouse	120	192	0.325	-4.06	0.409	0
High Amplitude Greenhouse	120	191	0.327	-2.191	2.12	0.648
High Amplitude Greenhouse	120	190	0.33	0.359	3.843	0
High Amplitude Greenhouse	120	189	0.332	2.596	5.637	1.772
High Amplitude Greenhouse	120	188	0.335	5.374	7.495	0
High Amplitude Greenhouse	120	187	0.337	8.316	9.466	0
High Amplitude Greenhouse	120	186	0.34	8.323	9.375	0
High Amplitude Greenhouse	120	185	0.342	1.558	4.436	0
High Amplitude Greenhouse	120	184	0.345	-2.178	1.262	0.766
High Amplitude Greenhouse	120	183	0.347	0.243	3.012	0
High Amplitude Greenhouse	120	182	0.35	2.722	4.78	1.058
High Amplitude Greenhouse	120	181	0.352	5.26	6.47	0
High Amplitude Greenhouse	120	180	0.355	7.698	8.086	0
High Amplitude Greenhouse	120	179	0.357	10.111	9.696	0.258
High Amplitude Greenhouse	120	178	0.36	5.988	6.73	4.393
High Amplitude Greenhouse	120	177	0.362	4.673	5.688	0
High Amplitude Greenhouse	120	176	0.365	5.942	6.473	0

High Amplitude Greenhouse	120	175	0.367	1.098	2.888	0
High Amplitude Greenhouse	120	174	0.37	2.114	3.497	0
High Amplitude Greenhouse	120	173	0.372	4.728	5.237	0
High Amplitude Greenhouse	120	172	0.375	7.435	7.045	0
High Amplitude Greenhouse	120	171	0.377	9.11	8.145	0
High Amplitude Greenhouse	120	170	0.38	3.556	3.892	0
High Amplitude Greenhouse	120	169	0.382	6.24	5.681	0
High Amplitude Greenhouse	120	168	0.385	9.093	7.598	0
High Amplitude Greenhouse	120	167	0.387	10.1	8.039	0.274
High Amplitude Greenhouse	120	166	0.39	3.761	3.481	1.092
High Amplitude Greenhouse	120	165	0.392	1.344	1.646	0
High Amplitude Greenhouse	120	164	0.395	1.839	1.878	0
High Amplitude Greenhouse	120	163	0.397	-1.881	-1.241	0
High Amplitude Greenhouse	120	162	0.4	-6.175	-4.87	0
High Amplitude Greenhouse	120	161	0.402	-4.597	-3.392	0
High Amplitude Greenhouse	120	160	0.405	-2.896	-1.812	0.455
High Amplitude Greenhouse	120	159	0.407	-0.767	-0.228	0
High Amplitude Greenhouse	120	158	0.41	1.21	1.426	0.375
High Amplitude Greenhouse	120	157	0.412	-1.242	-0.701	0
High Amplitude Greenhouse	120	156	0.415	-2.929	-2.044	0
High Amplitude Greenhouse	120	155	0.417	-7.503	-5.945	0.963
High Amplitude Greenhouse	120	154	0.42	-6.895	-5.36	0
High Amplitude Greenhouse	120	153	0.422	-4.692	-3.471	0
High Amplitude Greenhouse	120	152	0.425	-2.521	-1.55	0
High Amplitude Greenhouse	120	151	0.427	-0.088	0.26	0
High Amplitude Greenhouse	120	150	0.43	2.271	2.003	0.656
High Amplitude Greenhouse	120	149	0.432	4.741	3.673	0
High Amplitude Greenhouse	120	148	0.435	0.208	0.293	0.271
High Amplitude Greenhouse	120	147	0.437	-8.323	-7.241	0
High Amplitude Greenhouse	120	146	0.44	-6.719	-5.717	0
High Amplitude Greenhouse	120	145	0.442	-5.091	-4.191	0
High Amplitude Greenhouse	120	144	0.445	-3.349	-2.583	0
High Amplitude Greenhouse	120	143	0.447	-1.594	-0.968	0.445
High Amplitude Greenhouse	120	142	0.45	0.413	0.719	0
High Amplitude Greenhouse	120	141	0.452	2.968	2.484	0.31

High Amplitude Greenhouse	120	140	0.455	-0.482	-0.17	0.326
High Amplitude Greenhouse	120	139	0.457	-3.416	-2.657	0
High Amplitude Greenhouse	120	138	0.46	-6.926	-5.8	0
High Amplitude Greenhouse	120	137	0.462	-4.963	-3.973	1.307
High Amplitude Greenhouse	120	136	0.465	-2.279	-2.002	0
High Amplitude Greenhouse	120	135	0.467	0.321	-0.141	0
High Amplitude Greenhouse	120	134	0.47	2.778	1.655	0.612
High Amplitude Greenhouse	120	133	0.472	4.338	2.699	0
High Amplitude Greenhouse	120	132	0.475	-1.534	-1.927	0.528
High Amplitude Greenhouse	120	131	0.477	0.461	-0.355	0
High Amplitude Greenhouse	120	130	0.48	1.556	0.424	0.297
High Amplitude Greenhouse	120	129	0.482	-2.54	-3.059	0.654
High Amplitude Greenhouse	120	128	0.485	-1.57	-2.564	0
High Amplitude Greenhouse	120	127	0.487	-1.165	-2.234	0
High Amplitude Greenhouse	120	126	0.49	-0.825	-1.84	0.079
High Amplitude Greenhouse	120	125	0.492	-4.004	-4.516	0
High Amplitude Greenhouse	120	124	0.495	-7.937	-7.858	0
High Amplitude Greenhouse	120	123	0.497	-7.355	-7.249	0
High Amplitude Greenhouse	120	122	0.5	-6.732	-6.606	0
High Amplitude Greenhouse	120	121	0.502	-4.575	-4.628	0
High Amplitude Greenhouse	120	120	0.505	-8.016	-7.548	0
High Amplitude Greenhouse	120	119	0.507	-8.289	-7.697	0
High Amplitude Greenhouse	120	118	0.51	-6.27	-5.822	0
High Amplitude Greenhouse	120	117	0.512	-10.818	-9.777	0
High Amplitude Greenhouse	120	116	0.515	-10.364	-9.279	0
High Amplitude Greenhouse	120	115	0.517	-8.575	-7.587	0
High Amplitude Greenhouse	120	114	0.52	-6.796	-5.919	0
High Amplitude Greenhouse	120	113	0.522	-4.993	-4.247	0
High Amplitude Greenhouse	120	112	0.525	-3.078	-2.486	0.277
High Amplitude Greenhouse	120	111	0.527	-5.667	-4.633	0
High Amplitude Greenhouse	120	110	0.53	-9.213	-7.904	0
High Amplitude Greenhouse	120	109	0.532	-12.829	-11.082	0
High Amplitude Greenhouse	120	108	0.535	-10.655	-9.024	0
High Amplitude Greenhouse	120	107	0.537	-8.47	-6.97	0
High Amplitude Greenhouse	120	106	0.54	-6.223	-4.883	0.359

High Amplitude Greenhouse	120	105	0.542	-3.566	-2.79	0
High Amplitude Greenhouse	120	104	0.545	-1.187	-0.655	0
High Amplitude Greenhouse	120	103	0.547	1.086	1.365	0.375
High Amplitude Greenhouse	120	102	0.55	-5.008	-3.986	0.417
High Amplitude Greenhouse	120	101	0.552	-10.252	-8.912	0
High Amplitude Greenhouse	120	100	0.555	-8.266	-7.034	0
High Amplitude Greenhouse	120	99	0.557	-6.373	-5.265	0
High Amplitude Greenhouse	120	98	0.56	-4.481	-3.521	0
High Amplitude Greenhouse	120	97	0.562	-2.577	-1.774	0.718
High Amplitude Greenhouse	120	96	0.565	-0.343	0.064	0
High Amplitude Greenhouse	120	95	0.567	0.914	1.108	0
High Amplitude Greenhouse	120	94	0.57	-3.851	-3.125	0
High Amplitude Greenhouse	120	93	0.572	-3.891	-3.061	0
High Amplitude Greenhouse	120	92	0.575	-7.56	-6.171	0
High Amplitude Greenhouse	120	91	0.577	-5.272	-4.067	0
High Amplitude Greenhouse	120	90	0.58	-2.901	-1.914	0.815
High Amplitude Greenhouse	120	89	0.582	0.087	0.242	0
High Amplitude Greenhouse	120	88	0.585	2.909	2.441	0.101
High Amplitude Greenhouse	120	87	0.587	-0.326	-0.118	0.21
High Amplitude Greenhouse	120	86	0.59	-3.983	-3.245	0
High Amplitude Greenhouse	120	85	0.592	-3.367	-2.666	0
High Amplitude Greenhouse	120	84	0.595	-3.931	-3.052	0
High Amplitude Greenhouse	120	83	0.597	-9.296	-7.668	0
High Amplitude Greenhouse	120	82	0.6	-10.112	-8.307	0
High Amplitude Greenhouse	120	81	0.602	-8.236	-6.535	0.397
High Amplitude Greenhouse	120	80	0.605	-5.808	-4.65	0
High Amplitude Greenhouse	120	79	0.607	-10.287	-8.537	0
High Amplitude Greenhouse	120	78	0.61	-9.651	-7.877	0
High Amplitude Greenhouse	120	77	0.612	-7.479	-5.849	0
High Amplitude Greenhouse	120	76	0.615	-5.197	-3.75	0
High Amplitude Greenhouse	120	75	0.617	-2.737	-1.527	0
High Amplitude Greenhouse	120	74	0.62	-6.022	-4.277	0
High Amplitude Greenhouse	120	73	0.622	-6.062	-4.216	0
High Amplitude Greenhouse	120	72	0.625	-5.891	-3.971	0
High Amplitude Greenhouse	120	71	0.627	-9.347	-6.944	0

High Amplitude Greenhouse	120	70	0.63	-7.168	-4.908	0
High Amplitude Greenhouse	120	69	0.632	-5.04	-2.948	0
High Amplitude Greenhouse	120	68	0.635	-2.962	-1.057	0
High Amplitude Greenhouse	120	67	0.637	-0.861	0.838	0.031
High Amplitude Greenhouse	120	66	0.64	1.216	2.645	0.375
High Amplitude Greenhouse	120	65	0.642	-1.072	0.571	0
High Amplitude Greenhouse	120	64	0.645	-7.819	-5.176	0
High Amplitude Greenhouse	120	63	0.647	-8.724	-5.887	0
High Amplitude Greenhouse	120	62	0.65	-6.618	-3.932	0
High Amplitude Greenhouse	120	61	0.652	-4.411	-1.902	0.381
High Amplitude Greenhouse	120	60	0.655	-1.821	0.196	0
High Amplitude Greenhouse	120	59	0.657	0.8	2.416	0
High Amplitude Greenhouse	120	58	0.66	3.492	4.595	0.719
High Amplitude Greenhouse	120	57	0.662	5.659	6.028	0
High Amplitude Greenhouse	120	56	0.665	-2.854	-0.793	0
High Amplitude Greenhouse	120	55	0.667	-5.571	-3.036	0.906
High Amplitude Greenhouse	120	54	0.67	-3.031	-1.014	0
High Amplitude Greenhouse	120	53	0.672	-0.425	0.931	0
High Amplitude Greenhouse	120	52	0.675	1.88	2.804	1.852
High Amplitude Greenhouse	120	51	0.677	4.577	4.68	0
High Amplitude Greenhouse	120	50	0.68	7.232	6.466	0
High Amplitude Greenhouse	120	49	0.682	5.237	5.017	0
High Amplitude Greenhouse	120	48	0.685	2.441	3	0
High Amplitude Greenhouse	120	47	0.687	0.864	1.615	0
High Amplitude Greenhouse	120	46	0.69	-4.262	-2.894	0
High Amplitude Greenhouse	120	45	0.692	-3.696	-2.302	0.459
High Amplitude Greenhouse	120	44	0.695	-2.53	-1.596	0
High Amplitude Greenhouse	120	43	0.697	-1.73	-0.813	0
High Amplitude Greenhouse	120	42	0.7	-0.929	-0.028	0.016
High Amplitude Greenhouse	120	41	0.702	-5.211	-3.614	0
High Amplitude Greenhouse	120	40	0.705	-4.43	-2.839	0
High Amplitude Greenhouse	120	39	0.707	-2.145	-0.78	0
High Amplitude Greenhouse	120	38	0.71	-0.893	0.389	0.024
High Amplitude Greenhouse	120	37	0.712	-4.691	-2.778	0
High Amplitude Greenhouse	120	36	0.715	-3.954	-2.045	0

High Amplitude Greenhouse	120	35	0.717	-1.997	-0.265	0.084
High Amplitude Greenhouse	120	34	0.72	-2.335	-0.524	0
High Amplitude Greenhouse	120	33	0.722	-6.218	-3.775	0.278
High Amplitude Greenhouse	120	32	0.725	-4.015	-2.005	0
High Amplitude Greenhouse	120	31	0.727	-2.006	-0.184	0
High Amplitude Greenhouse	120	30	0.73	0.17	1.765	0.263
High Amplitude Greenhouse	120	29	0.732	2.783	3.727	0.371
High Amplitude Greenhouse	120	28	0.735	-0.635	0.853	0.132
High Amplitude Greenhouse	120	27	0.737	-0.779	0.777	0
High Amplitude Greenhouse	120	26	0.74	-3.622	-1.598	0
High Amplitude Greenhouse	120	25	0.742	-4.205	-2.001	0
High Amplitude Greenhouse	120	24	0.745	-1.913	0.074	0.82
High Amplitude Greenhouse	120	23	0.747	1.2	2.094	1.906
High Amplitude Greenhouse	120	22	0.75	3.698	4.106	0
High Amplitude Greenhouse	120	21	0.752	6.427	5.976	0
High Amplitude Greenhouse	120	20	0.755	9.098	7.775	0
High Amplitude Greenhouse	120	19	0.757	5.655	4.974	0
High Amplitude Greenhouse	120	18	0.76	-3.698	-2.811	0
High Amplitude Greenhouse	120	17	0.762	-1.863	-1.122	1.023
High Amplitude Greenhouse	120	16	0.765	0.794	0.615	0
High Amplitude Greenhouse	120	15	0.767	3.204	2.403	1.176
High Amplitude Greenhouse	120	14	0.77	5.983	4.32	0
High Amplitude Greenhouse	120	13	0.772	8.854	6.252	0
High Amplitude Greenhouse	120	12	0.775	11.822	8.252	0.613
High Amplitude Greenhouse	120	11	0.777	10.351	7.121	0
High Amplitude Greenhouse	120	10	0.78	4.061	2.435	2.334
High Amplitude Greenhouse	120	9	0.782	1.585	0.415	0
High Amplitude Greenhouse	120	8	0.785	4.471	2.466	0
High Amplitude Greenhouse	120	7	0.787	5.52	3.125	0
High Amplitude Greenhouse	120	6	0.79	6.461	3.709	0
High Amplitude Greenhouse	120	5	0.792	7.263	4.197	0
High Amplitude Greenhouse	120	4	0.795	7.957	4.616	0
High Amplitude Greenhouse	120	3	0.797	0.986	-0.689	0.349
High Amplitude Greenhouse	120	2	0.8	0.219	-1.742	0
High Amplitude Greenhouse	120	1	1.6	0.219	-1.731	0

High Amplitude Greenhouse	140	322	0	-6.112	-7.998	0
High Amplitude Greenhouse	140	321	0.002	-4.269	-6.318	0
High Amplitude Greenhouse	140	320	0.005	-2.368	-4.593	0.08
High Amplitude Greenhouse	140	319	0.007	-0.236	-2.757	0
High Amplitude Greenhouse	140	318	0.01	1.859	-0.907	0
High Amplitude Greenhouse	140	317	0.012	4.073	1.017	0
High Amplitude Greenhouse	140	316	0.015	6.402	3.012	0.253
High Amplitude Greenhouse	140	315	0.017	5.016	1.793	0
High Amplitude Greenhouse	140	314	0.02	1.811	-0.724	0
High Amplitude Greenhouse	140	313	0.022	-1.866	-3.718	0
High Amplitude Greenhouse	140	312	0.025	-0.87	-2.777	0.111
High Amplitude Greenhouse	140	311	0.027	1.591	-0.711	0.001
High Amplitude Greenhouse	140	310	0.03	3.818	1.221	0
High Amplitude Greenhouse	140	309	0.032	5.973	3.08	0.396
High Amplitude Greenhouse	140	308	0.035	8.085	4.87	0
High Amplitude Greenhouse	140	307	0.037	3.358	0.853	0
High Amplitude Greenhouse	140	306	0.04	3.795	1.316	0
High Amplitude Greenhouse	140	305	0.042	5.771	3.027	0
High Amplitude Greenhouse	140	304	0.045	1.749	-0.115	0
High Amplitude Greenhouse	140	303	0.047	1.239	-0.436	0
High Amplitude Greenhouse	140	302	0.05	3.327	1.433	0
High Amplitude Greenhouse	140	301	0.052	5.59	3.378	0
High Amplitude Greenhouse	140	300	0.055	5.483	3.446	0
High Amplitude Greenhouse	140	299	0.057	1.66	0.477	0
High Amplitude Greenhouse	140	298	0.06	4.038	2.582	0
High Amplitude Greenhouse	140	297	0.062	6.511	4.689	0
High Amplitude Greenhouse	140	296	0.065	8.908	6.77	0.642
High Amplitude Greenhouse	140	295	0.067	7.202	4.882	0
High Amplitude Greenhouse	140	294	0.07	5.844	3.77	0
High Amplitude Greenhouse	140	293	0.072	8.045	5.66	0.409
High Amplitude Greenhouse	140	292	0.075	5.091	3.056	0
High Amplitude Greenhouse	140	291	0.077	3.936	2.253	0
High Amplitude Greenhouse	140	290	0.08	5.959	3.997	0
High Amplitude Greenhouse	140	289	0.082	7.988	5.744	0.073
High Amplitude Greenhouse	140	288	0.085	10.261	7.521	0.856

High Amplitude Greenhouse	140	287	0.087	11.646	8.042	0.281
High Amplitude Greenhouse	140	286	0.09	8.617	5.666	0.647
High Amplitude Greenhouse	140	285	0.092	3.815	1.388	0
High Amplitude Greenhouse	140	284	0.095	-2.818	-4.061	0
High Amplitude Greenhouse	140	283	0.097	-2.199	-3.44	0
High Amplitude Greenhouse	140	282	0.1	-1.388	-2.658	0
High Amplitude Greenhouse	140	281	0.102	1.036	-0.523	0
High Amplitude Greenhouse	140	280	0.105	3.45	1.598	0
High Amplitude Greenhouse	140	279	0.107	5.944	3.735	0
High Amplitude Greenhouse	140	278	0.11	8.292	5.737	0.432
High Amplitude Greenhouse	140	277	0.112	4.694	2.568	0
High Amplitude Greenhouse	140	276	0.115	-3.828	-4.462	0
High Amplitude Greenhouse	140	275	0.117	-1.89	-2.72	0
High Amplitude Greenhouse	140	274	0.12	0.108	-0.936	0
High Amplitude Greenhouse	140	273	0.122	2.045	0.849	0
High Amplitude Greenhouse	140	272	0.125	4.057	2.664	0
High Amplitude Greenhouse	140	271	0.127	6.314	4.595	0
High Amplitude Greenhouse	140	270	0.13	8.543	6.538	0.339
High Amplitude Greenhouse	140	269	0.132	4.365	2.839	0
High Amplitude Greenhouse	140	268	0.135	4.181	2.794	0
High Amplitude Greenhouse	140	267	0.137	0.403	-0.229	0
High Amplitude Greenhouse	140	266	0.14	1.493	0.923	0
High Amplitude Greenhouse	140	265	0.142	4.019	3.102	0
High Amplitude Greenhouse	140	264	0.145	6.422	5.254	0
High Amplitude Greenhouse	140	263	0.147	8.886	7.421	0
High Amplitude Greenhouse	140	262	0.15	8.997	7.398	0.785
High Amplitude Greenhouse	140	261	0.152	5.953	4.349	0
High Amplitude Greenhouse	140	260	0.155	8.112	6.237	0
High Amplitude Greenhouse	140	259	0.157	10.285	8.131	0.581
High Amplitude Greenhouse	140	258	0.16	6.854	4.966	0
High Amplitude Greenhouse	140	257	0.162	6.309	4.683	0
High Amplitude Greenhouse	140	256	0.165	8.429	6.518	0.584
High Amplitude Greenhouse	140	255	0.167	11.469	8.467	0.392
High Amplitude Greenhouse	140	254	0.17	8.401	5.894	0.454
High Amplitude Greenhouse	140	253	0.172	8.099	5.399	0

High Amplitude Greenhouse	140	252	0.175	10.503	7.501	0.82
High Amplitude Greenhouse	140	251	0.177	14.248	9.727	1.032
High Amplitude Greenhouse	140	250	0.18	17.385	11.911	0
High Amplitude Greenhouse	140	249	0.182	14.892	10.188	0
High Amplitude Greenhouse	140	248	0.185	13.505	9.192	0
High Amplitude Greenhouse	140	247	0.187	13.453	9.121	0
High Amplitude Greenhouse	140	246	0.19	6.469	3.646	0
High Amplitude Greenhouse	140	245	0.192	6.977	4.188	0
High Amplitude Greenhouse	140	244	0.195	7.474	4.709	0
High Amplitude Greenhouse	140	243	0.197	7.927	5.174	0.044
High Amplitude Greenhouse	140	242	0.2	8.434	5.622	0
High Amplitude Greenhouse	140	241	0.202	10.538	7.405	0.691
High Amplitude Greenhouse	140	240	0.205	9.772	6.379	0.678
High Amplitude Greenhouse	140	239	0.207	3.535	0.888	0
High Amplitude Greenhouse	140	238	0.21	1.115	-1.024	0
High Amplitude Greenhouse	140	237	0.212	3.417	0.987	0
High Amplitude Greenhouse	140	236	0.215	5.823	3.064	0
High Amplitude Greenhouse	140	235	0.217	8.214	5.193	0
High Amplitude Greenhouse	140	234	0.22	10.873	7.417	0.759
High Amplitude Greenhouse	140	233	0.222	14.511	9.57	0.03
High Amplitude Greenhouse	140	232	0.225	17.368	11.691	0
High Amplitude Greenhouse	140	231	0.227	9.834	6.351	1.062
High Amplitude Greenhouse	140	230	0.23	4.873	1.734	0
High Amplitude Greenhouse	140	229	0.232	7.005	3.607	0
High Amplitude Greenhouse	140	228	0.235	9.43	5.446	0
High Amplitude Greenhouse	140	227	0.237	11.418	7.228	1.235
High Amplitude Greenhouse	140	226	0.24	15.05	9.032	0.077
High Amplitude Greenhouse	140	225	0.242	17.388	10.776	0
High Amplitude Greenhouse	140	224	0.245	16.883	10.584	0
High Amplitude Greenhouse	140	223	0.247	12.08	7.3	0.458
High Amplitude Greenhouse	140	222	0.25	13.937	8.36	0.041
High Amplitude Greenhouse	140	221	0.252	9.733	5.239	0.258
High Amplitude Greenhouse	140	220	0.255	11.004	6.155	1.165
High Amplitude Greenhouse	140	219	0.257	14.786	8.221	2.758
High Amplitude Greenhouse	140	218	0.26	17.894	10.38	0

High Amplitude Greenhouse	140	217	0.262	20.791	12.467	0
High Amplitude Greenhouse	140	216	0.265	17.262	10.088	0
High Amplitude Greenhouse	140	215	0.267	16.374	9.522	0
High Amplitude Greenhouse	140	214	0.27	19.045	11.442	0
High Amplitude Greenhouse	140	213	0.272	21.576	13.283	0
High Amplitude Greenhouse	140	212	0.275	16.982	10.162	0
High Amplitude Greenhouse	140	211	0.277	16.335	9.752	0
High Amplitude Greenhouse	140	210	0.28	18.688	11.424	0
High Amplitude Greenhouse	140	209	0.282	19.931	12.33	0
High Amplitude Greenhouse	140	208	0.285	13.517	7.878	0
High Amplitude Greenhouse	140	207	0.287	13.93	8.145	0
High Amplitude Greenhouse	140	206	0.29	14.561	8.586	0
High Amplitude Greenhouse	140	205	0.292	15.297	9.098	0
High Amplitude Greenhouse	140	204	0.295	16.144	9.673	0
High Amplitude Greenhouse	140	203	0.297	11.466	6.339	0
High Amplitude Greenhouse	140	202	0.3	8.406	3.907	0.568
High Amplitude Greenhouse	140	201	0.302	7.288	2.669	0
High Amplitude Greenhouse	140	200	0.305	4.862	0.811	0
High Amplitude Greenhouse	140	199	0.307	7.117	2.786	0
High Amplitude Greenhouse	140	198	0.31	9.233	4.624	0.583
High Amplitude Greenhouse	140	197	0.312	12.193	6.382	0.826
High Amplitude Greenhouse	140	196	0.315	14.736	8.066	0
High Amplitude Greenhouse	140	195	0.317	17.119	9.743	0
High Amplitude Greenhouse	140	194	0.32	15.191	8.426	0
High Amplitude Greenhouse	140	193	0.322	4.209	0.162	0
High Amplitude Greenhouse	140	192	0.325	4.384	0.409	0
High Amplitude Greenhouse	140	191	0.327	6.357	2.12	0
High Amplitude Greenhouse	140	190	0.33	8.307	3.843	0
High Amplitude Greenhouse	140	189	0.332	10.505	5.637	0.63
High Amplitude Greenhouse	140	188	0.335	13.751	7.495	0.39
High Amplitude Greenhouse	140	187	0.337	16.529	9.466	0
High Amplitude Greenhouse	140	186	0.34	16.326	9.375	0
High Amplitude Greenhouse	140	185	0.342	9.255	4.436	0.744
High Amplitude Greenhouse	140	184	0.345	5.716	1.262	0
High Amplitude Greenhouse	140	183	0.347	7.699	3.012	0

High Amplitude Greenhouse	140	182	0.35	9.838	4.78	0.89
High Amplitude Greenhouse	140	181	0.352	13.126	6.47	1.481
High Amplitude Greenhouse	140	180	0.355	15.519	8.086	0
High Amplitude Greenhouse	140	179	0.357	17.847	9.696	0
High Amplitude Greenhouse	140	178	0.36	13.619	6.73	0
High Amplitude Greenhouse	140	177	0.362	12.206	5.688	0
High Amplitude Greenhouse	140	176	0.365	13.421	6.473	0
High Amplitude Greenhouse	140	175	0.367	8.407	2.888	1.173
High Amplitude Greenhouse	140	174	0.37	9.252	3.497	0
High Amplitude Greenhouse	140	173	0.372	12.522	5.237	2.456
High Amplitude Greenhouse	140	172	0.375	15.179	7.045	0
High Amplitude Greenhouse	140	171	0.377	16.793	8.145	0
High Amplitude Greenhouse	140	170	0.38	10.77	3.892	0
High Amplitude Greenhouse	140	169	0.382	13.63	5.681	0
High Amplitude Greenhouse	140	168	0.385	16.45	7.598	0
High Amplitude Greenhouse	140	167	0.387	17.15	8.039	0
High Amplitude Greenhouse	140	166	0.39	10.74	3.481	0
High Amplitude Greenhouse	140	165	0.392	8.37	1.646	1.126
High Amplitude Greenhouse	140	164	0.395	8.873	1.878	0
High Amplitude Greenhouse	140	163	0.397	5.37	-1.241	0
High Amplitude Greenhouse	140	162	0.4	0.824	-4.87	0
High Amplitude Greenhouse	140	161	0.402	2.478	-3.392	0
High Amplitude Greenhouse	140	160	0.405	4.271	-1.812	0
High Amplitude Greenhouse	140	159	0.407	6.082	-0.228	1.165
High Amplitude Greenhouse	140	158	0.41	8.412	1.426	0
High Amplitude Greenhouse	140	157	0.412	6.01	-0.701	0
High Amplitude Greenhouse	140	156	0.415	4.536	-2.044	0
High Amplitude Greenhouse	140	155	0.417	-0.303	-5.945	0
High Amplitude Greenhouse	140	154	0.42	0.27	-5.36	0
High Amplitude Greenhouse	140	153	0.422	2.408	-3.471	0
High Amplitude Greenhouse	140	152	0.425	4.611	-1.55	0
High Amplitude Greenhouse	140	151	0.427	6.694	0.26	0
High Amplitude Greenhouse	140	150	0.43	8.883	2.003	0.879
High Amplitude Greenhouse	140	149	0.432	12.004	3.673	0.342
High Amplitude Greenhouse	140	148	0.435	7.404	0.293	0.346

High Amplitude Greenhouse	140	147	0.437	-1.542	-7.241	0.106
High Amplitude Greenhouse	140	146	0.44	0.244	-5.717	0
High Amplitude Greenhouse	140	145	0.442	1.959	-4.191	0.404
High Amplitude Greenhouse	140	144	0.445	3.798	-2.583	0
High Amplitude Greenhouse	140	143	0.447	5.669	-0.968	0
High Amplitude Greenhouse	140	142	0.45	7.668	0.719	0
High Amplitude Greenhouse	140	141	0.452	10.311	2.484	0.734
High Amplitude Greenhouse	140	140	0.455	7.195	-0.17	0.344
High Amplitude Greenhouse	140	139	0.457	4.317	-2.657	0
High Amplitude Greenhouse	140	138	0.46	0.378	-5.8	0
High Amplitude Greenhouse	140	137	0.462	2.435	-3.973	0
High Amplitude Greenhouse	140	136	0.465	4.698	-2.002	0
High Amplitude Greenhouse	140	135	0.467	6.832	-0.141	1.224
High Amplitude Greenhouse	140	134	0.47	9.306	1.655	0
High Amplitude Greenhouse	140	133	0.472	11.696	2.699	0.316
High Amplitude Greenhouse	140	132	0.475	5.631	-1.927	2.916
High Amplitude Greenhouse	140	131	0.477	7.708	-0.355	0
High Amplitude Greenhouse	140	130	0.48	8.904	0.424	0
High Amplitude Greenhouse	140	129	0.482	5.172	-3.059	0
High Amplitude Greenhouse	140	128	0.485	6.027	-2.564	0
High Amplitude Greenhouse	140	127	0.487	6.67	-2.234	0
High Amplitude Greenhouse	140	126	0.49	7.384	-1.84	0
High Amplitude Greenhouse	140	125	0.492	4.282	-4.516	0
High Amplitude Greenhouse	140	124	0.495	0.116	-7.858	0
High Amplitude Greenhouse	140	123	0.497	0.722	-7.249	0
High Amplitude Greenhouse	140	122	0.5	1.371	-6.606	0
High Amplitude Greenhouse	140	121	0.502	3.639	-4.628	0
High Amplitude Greenhouse	140	120	0.505	-0.006	-7.548	0
High Amplitude Greenhouse	140	119	0.507	-0.302	-7.697	0
High Amplitude Greenhouse	140	118	0.51	1.82	-5.822	0
High Amplitude Greenhouse	140	117	0.512	-2.984	-9.777	0
High Amplitude Greenhouse	140	116	0.515	-2.514	-9.279	0
High Amplitude Greenhouse	140	115	0.517	-0.636	-7.587	0
High Amplitude Greenhouse	140	114	0.52	1.234	-5.919	0
High Amplitude Greenhouse	140	113	0.522	3.129	-4.247	0

High Amplitude Greenhouse	140	112	0.525	5.15	-2.486	0
High Amplitude Greenhouse	140	111	0.527	2.392	-4.633	0
High Amplitude Greenhouse	140	110	0.53	-1.629	-7.904	0
High Amplitude Greenhouse	140	109	0.532	-5.445	-11.082	0
High Amplitude Greenhouse	140	108	0.535	-3.163	-9.024	0
High Amplitude Greenhouse	140	107	0.537	-0.867	-6.97	0.028
High Amplitude Greenhouse	140	106	0.54	1.538	-4.883	0
High Amplitude Greenhouse	140	105	0.542	3.938	-2.79	0
High Amplitude Greenhouse	140	104	0.545	6.421	-0.655	1.021
High Amplitude Greenhouse	140	103	0.547	8.94	1.365	0
High Amplitude Greenhouse	140	102	0.55	3.052	-3.986	0
High Amplitude Greenhouse	140	101	0.552	-2.924	-8.912	0
High Amplitude Greenhouse	140	100	0.555	-0.836	-7.034	0.079
High Amplitude Greenhouse	140	99	0.557	1.232	-5.265	0
High Amplitude Greenhouse	140	98	0.56	3.208	-3.521	0
High Amplitude Greenhouse	140	97	0.562	5.202	-1.774	0
High Amplitude Greenhouse	140	96	0.565	7.325	0.064	1.016
High Amplitude Greenhouse	140	95	0.567	8.763	1.108	0
High Amplitude Greenhouse	140	94	0.57	4.107	-3.125	0
High Amplitude Greenhouse	140	93	0.572	4.063	-3.061	0
High Amplitude Greenhouse	140	92	0.575	0.199	-6.171	0
High Amplitude Greenhouse	140	91	0.577	2.607	-4.067	0.492
High Amplitude Greenhouse	140	90	0.58	5.14	-1.914	0
High Amplitude Greenhouse	140	89	0.582	7.736	0.242	0
High Amplitude Greenhouse	140	88	0.585	10.846	2.441	0.647
High Amplitude Greenhouse	140	87	0.587	8.001	-0.118	0.414
High Amplitude Greenhouse	140	86	0.59	4.397	-3.245	0
High Amplitude Greenhouse	140	85	0.592	4.963	-2.666	0
High Amplitude Greenhouse	140	84	0.595	4.342	-3.052	0
High Amplitude Greenhouse	140	83	0.597	-1.329	-7.668	0
High Amplitude Greenhouse	140	82	0.6	-2.197	-8.307	0
High Amplitude Greenhouse	140	81	0.602	-0.221	-6.535	0
High Amplitude Greenhouse	140	80	0.605	1.899	-4.65	0
High Amplitude Greenhouse	140	79	0.607	-2.834	-8.537	0
High Amplitude Greenhouse	140	78	0.61	-2.17	-7.877	0

High Amplitude Greenhouse	140	77	0.612	0.113	-5.849	0
High Amplitude Greenhouse	140	76	0.615	2.495	-3.75	0
High Amplitude Greenhouse	140	75	0.617	5.083	-1.527	0
High Amplitude Greenhouse	140	74	0.62	1.606	-4.277	0
High Amplitude Greenhouse	140	73	0.622	1.556	-4.216	0
High Amplitude Greenhouse	140	72	0.625	1.728	-3.971	0
High Amplitude Greenhouse	140	71	0.627	-1.926	-6.944	0
High Amplitude Greenhouse	140	70	0.63	0.367	-4.908	0
High Amplitude Greenhouse	140	69	0.632	2.579	-2.948	0
High Amplitude Greenhouse	140	68	0.635	4.73	-1.057	0
High Amplitude Greenhouse	140	67	0.637	6.903	0.838	0
High Amplitude Greenhouse	140	66	0.64	8.984	2.645	0.887
High Amplitude Greenhouse	140	65	0.642	7.195	0.571	0
High Amplitude Greenhouse	140	64	0.645	0.181	-5.176	0
High Amplitude Greenhouse	140	63	0.647	-0.78	-5.887	0
High Amplitude Greenhouse	140	62	0.65	1.434	-3.932	0
High Amplitude Greenhouse	140	61	0.652	3.762	-1.902	0
High Amplitude Greenhouse	140	60	0.655	6.184	0.196	0
High Amplitude Greenhouse	140	59	0.657	8.811	2.416	0.584
High Amplitude Greenhouse	140	58	0.66	12.228	4.595	0.513
High Amplitude Greenhouse	140	57	0.662	14.36	6.028	0
High Amplitude Greenhouse	140	56	0.665	5.376	-0.793	0
High Amplitude Greenhouse	140	55	0.667	2.504	-3.036	0
High Amplitude Greenhouse	140	54	0.67	4.801	-1.014	0
High Amplitude Greenhouse	140	53	0.672	7.03	0.931	0
High Amplitude Greenhouse	140	52	0.675	9.248	2.804	0.738
High Amplitude Greenhouse	140	51	0.677	12.534	4.68	0.718
High Amplitude Greenhouse	140	50	0.68	15.136	6.466	0
High Amplitude Greenhouse	140	49	0.682	13.105	5.017	0
High Amplitude Greenhouse	140	48	0.685	10.344	3	0.587
High Amplitude Greenhouse	140	47	0.687	8.904	1.615	0.866
High Amplitude Greenhouse	140	46	0.69	3.971	-2.894	0
High Amplitude Greenhouse	140	45	0.692	4.564	-2.302	0.79
High Amplitude Greenhouse	140	44	0.695	5.31	-1.596	0
High Amplitude Greenhouse	140	43	0.697	6.157	-0.813	0

High Amplitude Greenhouse	140	42	0.7	7.011	-0.028	0
High Amplitude Greenhouse	140	41	0.702	2.816	-3.614	0
High Amplitude Greenhouse	140	40	0.705	3.639	-2.839	0
High Amplitude Greenhouse	140	39	0.707	6.057	-0.78	0
High Amplitude Greenhouse	140	38	0.71	7.397	0.389	0
High Amplitude Greenhouse	140	37	0.712	3.715	-2.778	0
High Amplitude Greenhouse	140	36	0.715	4.479	-2.045	0
High Amplitude Greenhouse	140	35	0.717	6.535	-0.265	0
High Amplitude Greenhouse	140	34	0.72	6.063	-0.524	0
High Amplitude Greenhouse	140	33	0.722	1.959	-3.775	0
High Amplitude Greenhouse	140	32	0.725	3.953	-2.005	0
High Amplitude Greenhouse	140	31	0.727	6.063	-0.184	0
High Amplitude Greenhouse	140	30	0.73	8.361	1.765	0.318
High Amplitude Greenhouse	140	29	0.732	11.193	3.727	0.704
High Amplitude Greenhouse	140	28	0.735	7.947	0.853	0.302
High Amplitude Greenhouse	140	27	0.737	7.992	0.777	0
High Amplitude Greenhouse	140	26	0.74	4.953	-1.598	0
High Amplitude Greenhouse	140	25	0.742	4.275	-2.001	0
High Amplitude Greenhouse	140	24	0.745	6.635	0.074	0
High Amplitude Greenhouse	140	23	0.747	9.021	2.094	0.146
High Amplitude Greenhouse	140	22	0.75	11.863	4.106	0.664
High Amplitude Greenhouse	140	21	0.752	14.952	5.976	0.465
High Amplitude Greenhouse	140	20	0.755	17.476	7.775	0
High Amplitude Greenhouse	140	19	0.757	13.454	4.974	0
High Amplitude Greenhouse	140	18	0.76	3.346	-2.811	0
High Amplitude Greenhouse	140	17	0.762	5.184	-1.122	0
High Amplitude Greenhouse	140	16	0.765	7.114	0.615	0
High Amplitude Greenhouse	140	15	0.767	9.241	2.403	0.198
High Amplitude Greenhouse	140	14	0.77	12.169	4.32	0.465
High Amplitude Greenhouse	140	13	0.772	14.95	6.252	0
High Amplitude Greenhouse	140	12	0.775	17.68	8.252	0
High Amplitude Greenhouse	140	11	0.777	15.931	7.121	0
High Amplitude Greenhouse	140	10	0.78	9.277	2.435	0.975
High Amplitude Greenhouse	140	9	0.782	6.869	0.415	0
High Amplitude Greenhouse	140	8	0.785	9.313	2.466	0

High Amplitude Greenhouse	140	7	0.787	10.665	3.125	0.949
High Amplitude Greenhouse	140	6	0.79	12.235	3.709	0.459
High Amplitude Greenhouse	140	5	0.792	12.916	4.197	0
High Amplitude Greenhouse	140	4	0.795	13.438	4.616	0
High Amplitude Greenhouse	140	3	0.797	6.086	-0.689	0
High Amplitude Greenhouse	140	2	0.8	4.969	-1.742	0
High Amplitude Greenhouse	140	1	1.6	4.969	-1.731	0
Low Amplitude Greenhouse	100	322	0	-10.833	-6.998	0
Low Amplitude Greenhouse	100	321	0.002	-9.51	-5.673	0
Low Amplitude Greenhouse	100	320	0.005	-8.133	-4.306	0
Low Amplitude Greenhouse	100	319	0.007	-6.639	-2.84	0
Low Amplitude Greenhouse	100	318	0.01	-5.106	-1.349	0
Low Amplitude Greenhouse	100	317	0.012	-3.476	0.217	0
Low Amplitude Greenhouse	100	316	0.015	-1.763	1.852	0
Low Amplitude Greenhouse	100	315	0.017	-3.013	0.818	0.775
Low Amplitude Greenhouse	100	314	0.02	-4.638	-1.293	0
Low Amplitude Greenhouse	100	313	0.022	-7.425	-3.801	0
Low Amplitude Greenhouse	100	312	0.025	-6.684	-3.035	0
Low Amplitude Greenhouse	100	311	0.027	-4.937	-1.342	0
Low Amplitude Greenhouse	100	310	0.03	-3.306	0.228	0
Low Amplitude Greenhouse	100	309	0.032	-1.76	1.724	0
Low Amplitude Greenhouse	100	308	0.035	-0.288	3.151	0.16
Low Amplitude Greenhouse	100	307	0.037	-4.004	-0.275	0
Low Amplitude Greenhouse	100	306	0.04	-3.755	0.031	0
Low Amplitude Greenhouse	100	305	0.042	-2.374	1.376	0
Low Amplitude Greenhouse	100	304	0.045	-5.411	-1.319	0
Low Amplitude Greenhouse	100	303	0.047	-5.861	-1.657	0
Low Amplitude Greenhouse	100	302	0.05	-4.313	-0.157	0
Low Amplitude Greenhouse	100	301	0.052	-2.67	1.418	0
Low Amplitude Greenhouse	100	300	0.055	-2.734	1.44	0
Low Amplitude Greenhouse	100	299	0.057	-5.553	-1.063	0
Low Amplitude Greenhouse	100	298	0.06	-3.75	0.669	0
Low Amplitude Greenhouse	100	297	0.062	-1.944	2.401	0
Low Amplitude Greenhouse	100	296	0.065	-0.174	4.107	0.185
Low Amplitude Greenhouse	100	295	0.067	-1.891	2.493	0

Low Amplitude Greenhouse	100	294	0.07	-3.072	1.514	0
Low Amplitude Greenhouse	100	293	0.072	-1.495	3.024	0
Low Amplitude Greenhouse	100	292	0.075	-4.065	0.777	0
Low Amplitude Greenhouse	100	291	0.077	-4.981	0.016	0
Low Amplitude Greenhouse	100	290	0.08	-3.578	1.377	0
Low Amplitude Greenhouse	100	289	0.082	-2.165	2.737	0
Low Amplitude Greenhouse	100	288	0.085	-0.726	4.127	0.34
Low Amplitude Greenhouse	100	287	0.087	0.237	5.031	0
Low Amplitude Greenhouse	100	286	0.09	-1.333	3.529	0
Low Amplitude Greenhouse	100	285	0.092	-4.822	0.454	0
Low Amplitude Greenhouse	100	284	0.095	-9.259	-3.586	0
Low Amplitude Greenhouse	100	283	0.097	-8.229	-2.544	0
Low Amplitude Greenhouse	100	282	0.1	-7.058	-1.38	0
Low Amplitude Greenhouse	100	281	0.102	-5.247	0.364	0
Low Amplitude Greenhouse	100	280	0.105	-3.442	2.086	0
Low Amplitude Greenhouse	100	279	0.107	-1.629	3.809	0.287
Low Amplitude Greenhouse	100	278	0.11	0.089	5.408	0
Low Amplitude Greenhouse	100	277	0.112	-2.854	2.685	0
Low Amplitude Greenhouse	100	276	0.115	-9.406	-3.269	0
Low Amplitude Greenhouse	100	275	0.117	-8.053	-1.925	0
Low Amplitude Greenhouse	100	274	0.12	-6.65	-0.55	0
Low Amplitude Greenhouse	100	273	0.122	-5.234	0.825	0
Low Amplitude Greenhouse	100	272	0.125	-3.777	2.229	0
Low Amplitude Greenhouse	100	271	0.127	-2.216	3.734	0.889
Low Amplitude Greenhouse	100	270	0.13	0.025	5.263	0
Low Amplitude Greenhouse	100	269	0.132	-3.362	2.102	0
Low Amplitude Greenhouse	100	268	0.135	-3.567	1.995	0
Low Amplitude Greenhouse	100	267	0.137	-6.469	-0.586	0
Low Amplitude Greenhouse	100	266	0.14	-5.571	0.318	0
Low Amplitude Greenhouse	100	265	0.142	-3.732	2.076	0
Low Amplitude Greenhouse	100	264	0.145	-1.925	3.806	0
Low Amplitude Greenhouse	100	263	0.147	-0.117	5.537	0.385
Low Amplitude Greenhouse	100	262	0.15	-0.167	5.432	0
Low Amplitude Greenhouse	100	261	0.152	-3.022	2.792	0
Low Amplitude Greenhouse	100	260	0.155	-1.495	4.254	0

Low Amplitude Greenhouse	100	259	0.157	0.01	5.706	0.227
Low Amplitude Greenhouse	100	258	0.16	-2.963	2.942	0
Low Amplitude Greenhouse	100	257	0.162	-3.455	2.578	0
Low Amplitude Greenhouse	100	256	0.165	-1.999	3.982	0
Low Amplitude Greenhouse	100	255	0.167	-0.432	5.487	0.127
Low Amplitude Greenhouse	100	254	0.17	-2.916	3.237	0
Low Amplitude Greenhouse	100	253	0.172	-3.566	2.732	0
Low Amplitude Greenhouse	100	252	0.175	-1.81	4.401	0
Low Amplitude Greenhouse	100	251	0.177	0.085	6.179	0.244
Low Amplitude Greenhouse	100	250	0.18	2.489	7.93	0.372
Low Amplitude Greenhouse	100	249	0.182	0.632	6.424	0.823
Low Amplitude Greenhouse	100	248	0.185	-0.266	5.518	0
Low Amplitude Greenhouse	100	247	0.187	0.259	5.927	0
Low Amplitude Greenhouse	100	246	0.19	-4.236	1.818	0
Low Amplitude Greenhouse	100	245	0.192	-3.337	2.711	0
Low Amplitude Greenhouse	100	244	0.195	-2.468	3.573	0
Low Amplitude Greenhouse	100	243	0.197	-1.67	4.381	0.821
Low Amplitude Greenhouse	100	242	0.2	-0.245	5.182	0
Low Amplitude Greenhouse	100	241	0.202	1.447	6.534	0.374
Low Amplitude Greenhouse	100	240	0.205	0.425	5.547	0.32
Low Amplitude Greenhouse	100	239	0.207	-4.638	0.847	0
Low Amplitude Greenhouse	100	238	0.21	-6.582	-0.863	0
Low Amplitude Greenhouse	100	237	0.212	-4.952	0.712	0
Low Amplitude Greenhouse	100	236	0.215	-3.234	2.355	0
Low Amplitude Greenhouse	100	235	0.217	-1.439	4.048	0
Low Amplitude Greenhouse	100	234	0.22	0.467	5.825	0.329
Low Amplitude Greenhouse	100	233	0.222	2.83	7.543	0.725
Low Amplitude Greenhouse	100	232	0.225	5.359	9.231	0
Low Amplitude Greenhouse	100	231	0.227	-0.394	4.692	0.136
Low Amplitude Greenhouse	100	230	0.23	-4.74	0.741	0
Low Amplitude Greenhouse	100	229	0.232	-3.233	2.189	0
Low Amplitude Greenhouse	100	228	0.235	-1.757	3.598	0
Low Amplitude Greenhouse	100	227	0.237	-0.361	4.949	0.143
Low Amplitude Greenhouse	100	226	0.24	1.308	6.311	1.114
Low Amplitude Greenhouse	100	225	0.242	3.246	7.626	0

Low Amplitude Greenhouse	100	224	0.245	3.019	7.333	0
Low Amplitude Greenhouse	100	223	0.247	-0.4	4.474	0.473
Low Amplitude Greenhouse	100	222	0.25	0.505	5.241	0
Low Amplitude Greenhouse	100	221	0.252	-2.347	2.542	0
Low Amplitude Greenhouse	100	220	0.255	-1.696	3.218	0.566
Low Amplitude Greenhouse	100	219	0.257	0.303	4.863	0
Low Amplitude Greenhouse	100	218	0.26	2.634	6.588	3.646
Low Amplitude Greenhouse	100	217	0.262	5.12	8.255	0
Low Amplitude Greenhouse	100	216	0.265	2.459	6.197	0
Low Amplitude Greenhouse	100	215	0.267	1.912	5.638	0
Low Amplitude Greenhouse	100	214	0.27	4.149	7.143	0
Low Amplitude Greenhouse	100	213	0.272	6.307	8.57	0
Low Amplitude Greenhouse	100	212	0.275	2.711	5.851	0
Low Amplitude Greenhouse	100	211	0.277	2.262	5.378	0
Low Amplitude Greenhouse	100	210	0.28	4.173	6.64	0
Low Amplitude Greenhouse	100	209	0.282	5.213	7.265	0
Low Amplitude Greenhouse	100	208	0.285	0.291	3.43	0.29
Low Amplitude Greenhouse	100	207	0.287	1.256	4.087	1.838
Low Amplitude Greenhouse	100	206	0.29	2.513	4.903	0
Low Amplitude Greenhouse	100	205	0.292	3.915	5.789	0
Low Amplitude Greenhouse	100	204	0.295	5.404	6.742	0
Low Amplitude Greenhouse	100	203	0.297	2.447	4.462	0
Low Amplitude Greenhouse	100	202	0.3	0.67	2.923	0.516
Low Amplitude Greenhouse	100	201	0.302	-0.374	1.835	0
Low Amplitude Greenhouse	100	200	0.305	-2.123	0.221	0
Low Amplitude Greenhouse	100	199	0.307	-0.485	1.79	0.116
Low Amplitude Greenhouse	100	198	0.31	1.208	3.236	1.791
Low Amplitude Greenhouse	100	197	0.312	3.204	4.604	0
Low Amplitude Greenhouse	100	196	0.315	5.163	5.899	0
Low Amplitude Greenhouse	100	195	0.317	7.1	7.176	0
Low Amplitude Greenhouse	100	194	0.32	5.567	5.958	0
Low Amplitude Greenhouse	100	193	0.322	-2.902	-1.049	0
Low Amplitude Greenhouse	100	192	0.325	-2.901	-0.958	0
Low Amplitude Greenhouse	100	191	0.327	-1.548	0.359	0
Low Amplitude Greenhouse	100	190	0.33	-0.179	1.702	0.184

Low Amplitude Greenhouse	100	189	0.332	1.633	3.117	2.111
Low Amplitude Greenhouse	100	188	0.335	3.843	4.599	0
Low Amplitude Greenhouse	100	187	0.337	6.199	6.181	0
Low Amplitude Greenhouse	100	186	0.34	6.308	6.053	0
Low Amplitude Greenhouse	100	185	0.342	1.019	1.885	0
Low Amplitude Greenhouse	100	184	0.345	-1.862	-0.816	0
Low Amplitude Greenhouse	100	183	0.347	-0.437	0.576	0.126
Low Amplitude Greenhouse	100	182	0.35	1.26	1.974	2.6
Low Amplitude Greenhouse	100	181	0.352	3.205	3.295	0
Low Amplitude Greenhouse	100	180	0.355	5.105	4.543	0
Low Amplitude Greenhouse	100	179	0.357	6.968	5.774	0
Low Amplitude Greenhouse	100	178	0.36	3.621	3.191	0
Low Amplitude Greenhouse	100	177	0.362	2.464	2.211	0
Low Amplitude Greenhouse	100	176	0.365	3.402	2.76	0
Low Amplitude Greenhouse	100	175	0.367	-0.375	-0.328	0.39
Low Amplitude Greenhouse	100	174	0.37	0.112	0.095	0
Low Amplitude Greenhouse	100	173	0.372	1.973	1.473	1.076
Low Amplitude Greenhouse	100	172	0.375	4.137	2.919	0
Low Amplitude Greenhouse	100	171	0.377	5.499	3.784	0
Low Amplitude Greenhouse	100	170	0.38	0.791	0.194	0.361
Low Amplitude Greenhouse	100	169	0.382	2.915	1.64	2.285
Low Amplitude Greenhouse	100	168	0.385	5.199	3.186	0
Low Amplitude Greenhouse	100	167	0.387	6.521	4.045	0
Low Amplitude Greenhouse	100	166	0.39	2.294	0.728	0
Low Amplitude Greenhouse	100	165	0.392	1.054	-0.332	0
Low Amplitude Greenhouse	100	164	0.395	2.136	0.332	0
Low Amplitude Greenhouse	100	163	0.397	-0.381	-1.818	0.132
Low Amplitude Greenhouse	100	162	0.4	-3.184	-4.4	0
Low Amplitude Greenhouse	100	161	0.402	-2.044	-3.266	0
Low Amplitude Greenhouse	100	160	0.405	-0.814	-2.056	0.357
Low Amplitude Greenhouse	100	159	0.407	0.512	-0.83	0
Low Amplitude Greenhouse	100	158	0.41	2.379	0.465	0.354
Low Amplitude Greenhouse	100	157	0.412	0.135	-1.378	0.48
Low Amplitude Greenhouse	100	156	0.415	-1.133	-2.557	0
Low Amplitude Greenhouse	100	155	0.417	-4.883	-5.858	0

Low Amplitude Greenhouse	100	154	0.42	-4.212	-5.416	0
Low Amplitude Greenhouse	100	153	0.422	-2.646	-3.888	0.652
Low Amplitude Greenhouse	100	152	0.425	-0.518	-2.339	0
Low Amplitude Greenhouse	100	151	0.427	1.197	-0.89	1.529
Low Amplitude Greenhouse	100	150	0.43	3.264	0.49	0
Low Amplitude Greenhouse	100	149	0.432	5.246	1.798	0
Low Amplitude Greenhouse	100	148	0.435	1.475	-1.118	0
Low Amplitude Greenhouse	100	147	0.437	-5.448	-7.502	0
Low Amplitude Greenhouse	100	146	0.44	-4.28	-6.343	0
Low Amplitude Greenhouse	100	145	0.442	-3.102	-5.183	0
Low Amplitude Greenhouse	100	144	0.445	-1.853	-3.954	0
Low Amplitude Greenhouse	100	143	0.447	-0.588	-2.707	0.117
Low Amplitude Greenhouse	100	142	0.45	0.957	-1.389	0.812
Low Amplitude Greenhouse	100	141	0.452	3.059	0.006	0
Low Amplitude Greenhouse	100	140	0.455	0.289	-2.272	0.318
Low Amplitude Greenhouse	100	139	0.457	-1.904	-4.401	0
Low Amplitude Greenhouse	100	138	0.46	-4.916	-7.072	0
Low Amplitude Greenhouse	100	137	0.462	-3.404	-5.602	0
Low Amplitude Greenhouse	100	136	0.465	-1.767	-4.019	0
Low Amplitude Greenhouse	100	135	0.467	-0.246	-2.536	0.172
Low Amplitude Greenhouse	100	134	0.47	1.585	-1.118	0.752
Low Amplitude Greenhouse	100	133	0.472	2.826	-0.341	0
Low Amplitude Greenhouse	100	132	0.475	-1.82	-4.304	0
Low Amplitude Greenhouse	100	131	0.477	-0.609	-3.109	0.306
Low Amplitude Greenhouse	100	130	0.48	-0.05	-2.579	0
Low Amplitude Greenhouse	100	129	0.482	-3.331	-5.603	0
Low Amplitude Greenhouse	100	128	0.485	-3.104	-5.31	0
Low Amplitude Greenhouse	100	127	0.487	-2.41	-4.597	0
Low Amplitude Greenhouse	100	126	0.49	-1.642	-3.815	0
Low Amplitude Greenhouse	100	125	0.492	-3.691	-5.58	0
Low Amplitude Greenhouse	100	124	0.495	-6.281	-7.873	0
Low Amplitude Greenhouse	100	123	0.497	-5.303	-6.881	0.291
Low Amplitude Greenhouse	100	122	0.5	-4.199	-5.856	0
Low Amplitude Greenhouse	100	121	0.502	-2.324	-4.258	0
Low Amplitude Greenhouse	100	120	0.505	-5.168	-6.761	0

Low Amplitude Greenhouse	100	119	0.507	-5.473	-6.963	0
Low Amplitude Greenhouse	100	118	0.51	-3.962	-5.491	0.291
Low Amplitude Greenhouse	100	117	0.512	-7.453	-8.892	0
Low Amplitude Greenhouse	100	116	0.515	-7.212	-8.593	0
Low Amplitude Greenhouse	100	115	0.517	-5.907	-7.309	0
Low Amplitude Greenhouse	100	114	0.52	-4.621	-6.049	0
Low Amplitude Greenhouse	100	113	0.522	-3.34	-4.787	0
Low Amplitude Greenhouse	100	112	0.525	-1.958	-3.451	0
Low Amplitude Greenhouse	100	111	0.527	-4.175	-5.359	0.194
Low Amplitude Greenhouse	100	110	0.53	-7.141	-8.192	0
Low Amplitude Greenhouse	100	109	0.532	-10.145	-10.936	0
Low Amplitude Greenhouse	100	108	0.535	-8.501	-9.308	0
Low Amplitude Greenhouse	100	107	0.537	-6.826	-7.673	0
Low Amplitude Greenhouse	100	106	0.54	-5.098	-6.005	0
Low Amplitude Greenhouse	100	105	0.542	-3.369	-4.333	0.082
Low Amplitude Greenhouse	100	104	0.545	-1.504	-2.633	0
Low Amplitude Greenhouse	100	103	0.547	0.177	-1.036	0.178
Low Amplitude Greenhouse	100	102	0.55	-4.879	-5.594	0.31
Low Amplitude Greenhouse	100	101	0.552	-9.204	-9.81	0
Low Amplitude Greenhouse	100	100	0.555	-7.746	-8.372	0
Low Amplitude Greenhouse	100	99	0.557	-6.38	-7.03	0
Low Amplitude Greenhouse	100	98	0.56	-5.032	-5.715	0
Low Amplitude Greenhouse	100	97	0.562	-3.69	-4.396	0
Low Amplitude Greenhouse	100	96	0.565	-2.241	-3.002	0
Low Amplitude Greenhouse	100	95	0.567	-1.55	-2.257	0
Low Amplitude Greenhouse	100	94	0.57	-5.703	-5.898	0
Low Amplitude Greenhouse	100	93	0.572	-5.841	-5.945	0
Low Amplitude Greenhouse	100	92	0.575	-8.824	-8.628	0
Low Amplitude Greenhouse	100	91	0.577	-7.103	-6.955	0
Low Amplitude Greenhouse	100	90	0.58	-5.317	-5.237	0
Low Amplitude Greenhouse	100	89	0.582	-3.514	-3.515	0
Low Amplitude Greenhouse	100	88	0.585	-1.668	-1.765	0
Low Amplitude Greenhouse	100	87	0.587	-3.648	-3.436	0
Low Amplitude Greenhouse	100	86	0.59	-6.133	-5.591	0.224
Low Amplitude Greenhouse	100	85	0.592	-4.916	-4.669	0

Low Amplitude Greenhouse	100	84	0.595	-4.873	-4.55	0
Low Amplitude Greenhouse	100	83	0.597	-8.695	-7.978	0
Low Amplitude Greenhouse	100	82	0.6	-8.905	-8.096	0
Low Amplitude Greenhouse	100	81	0.602	-7.529	-6.747	0
Low Amplitude Greenhouse	100	80	0.605	-6.05	-5.313	0
Low Amplitude Greenhouse	100	79	0.607	-9.77	-8.674	0
Low Amplitude Greenhouse	100	78	0.61	-9.378	-8.234	0
Low Amplitude Greenhouse	100	77	0.612	-7.743	-6.642	0
Low Amplitude Greenhouse	100	76	0.615	-6.017	-4.978	0
Low Amplitude Greenhouse	100	75	0.617	-4.168	-3.204	0
Low Amplitude Greenhouse	100	74	0.62	-6.846	-5.566	0
Low Amplitude Greenhouse	100	73	0.622	-6.951	-5.585	0
Low Amplitude Greenhouse	100	72	0.625	-6.894	-5.455	0
Low Amplitude Greenhouse	100	71	0.627	-9.745	-8.017	0
Low Amplitude Greenhouse	100	70	0.63	-8.106	-6.414	0
Low Amplitude Greenhouse	100	69	0.632	-6.541	-4.885	0.666
Low Amplitude Greenhouse	100	68	0.635	-4.925	-3.425	0
Low Amplitude Greenhouse	100	67	0.637	-2.87	-1.974	0
Low Amplitude Greenhouse	100	66	0.64	-1.437	-0.596	0
Low Amplitude Greenhouse	100	65	0.642	-3.626	-2.452	0.871
Low Amplitude Greenhouse	100	64	0.645	-8.191	-7.363	0
Low Amplitude Greenhouse	100	63	0.647	-9.026	-8.071	0
Low Amplitude Greenhouse	100	62	0.65	-7.468	-6.541	0
Low Amplitude Greenhouse	100	61	0.652	-5.822	-4.936	0
Low Amplitude Greenhouse	100	60	0.655	-4.091	-3.261	0
Low Amplitude Greenhouse	100	59	0.657	-2.224	-1.476	0.642
Low Amplitude Greenhouse	100	58	0.66	0.041	0.282	0
Low Amplitude Greenhouse	100	57	0.662	1.561	1.42	0.374
Low Amplitude Greenhouse	100	56	0.665	-4.778	-4.324	0
Low Amplitude Greenhouse	100	55	0.667	-6.971	-6.263	0
Low Amplitude Greenhouse	100	54	0.67	-5.312	-4.658	0
Low Amplitude Greenhouse	100	53	0.672	-3.719	-3.127	0
Low Amplitude Greenhouse	100	52	0.675	-2.208	-1.666	0.349
Low Amplitude Greenhouse	100	51	0.677	-0.464	-0.215	0
Low Amplitude Greenhouse	100	50	0.68	1.179	1.161	0.417

Low Amplitude Greenhouse	100	49	0.682	-0.169	-0.158	0.257
Low Amplitude Greenhouse	100	48	0.685	-2.026	-1.945	0
Low Amplitude Greenhouse	100	47	0.687	-2.903	-2.643	0
Low Amplitude Greenhouse	100	46	0.69	-6.604	-5.931	0
Low Amplitude Greenhouse	100	45	0.692	-5.626	-4.956	0
Low Amplitude Greenhouse	100	44	0.695	-4.524	-3.872	0
Low Amplitude Greenhouse	100	43	0.697	-3.336	-2.699	0
Low Amplitude Greenhouse	100	42	0.7	-2.133	-1.533	0
Low Amplitude Greenhouse	100	41	0.702	-5.569	-4.556	0
Low Amplitude Greenhouse	100	40	0.705	-4.995	-3.953	0
Low Amplitude Greenhouse	100	39	0.707	-3.252	-2.287	0
Low Amplitude Greenhouse	100	38	0.71	-2.331	-1.376	0
Low Amplitude Greenhouse	100	37	0.712	-5.429	-4.088	0
Low Amplitude Greenhouse	100	36	0.715	-4.935	-3.559	0
Low Amplitude Greenhouse	100	35	0.717	-3.484	-2.167	0
Low Amplitude Greenhouse	100	34	0.72	-3.921	-2.48	0
Low Amplitude Greenhouse	100	33	0.722	-7.094	-5.283	0.39
Low Amplitude Greenhouse	100	32	0.725	-5.283	-3.896	0
Low Amplitude Greenhouse	100	31	0.727	-3.786	-2.457	0
Low Amplitude Greenhouse	100	30	0.73	-2.161	-0.901	0.433
Low Amplitude Greenhouse	100	29	0.732	-0.235	0.682	0
Low Amplitude Greenhouse	100	28	0.735	-2.89	-1.752	0
Low Amplitude Greenhouse	100	27	0.737	-3.084	-1.845	0
Low Amplitude Greenhouse	100	26	0.74	-5.377	-3.848	0
Low Amplitude Greenhouse	100	25	0.742	-5.861	-4.207	0
Low Amplitude Greenhouse	100	24	0.745	-4.09	-2.504	0.298
Low Amplitude Greenhouse	100	23	0.747	-2.067	-0.855	0
Low Amplitude Greenhouse	100	22	0.75	-0.351	0.774	0.146
Low Amplitude Greenhouse	100	21	0.752	1.476	2.275	1.116
Low Amplitude Greenhouse	100	20	0.755	3.549	3.706	0
Low Amplitude Greenhouse	100	19	0.757	0.661	1.295	0
Low Amplitude Greenhouse	100	18	0.76	-6.432	-5.275	0
Low Amplitude Greenhouse	100	17	0.762	-5.08	-3.948	0
Low Amplitude Greenhouse	100	16	0.765	-3.667	-2.576	0
Low Amplitude Greenhouse	100	15	0.767	-2.193	-1.151	1.078

Low Amplitude Greenhouse	100	14	0.77	0.245	0.391	0
Low Amplitude Greenhouse	100	13	0.772	2.287	1.961	1.201
Low Amplitude Greenhouse	100	12	0.775	4.62	3.599	0
Low Amplitude Greenhouse	100	11	0.777	3.597	2.638	0
Low Amplitude Greenhouse	100	10	0.78	-0.891	-1.281	0.175
Low Amplitude Greenhouse	100	9	0.782	-2.712	-2.978	0
Low Amplitude Greenhouse	100	8	0.785	-0.944	-1.287	0.296
Low Amplitude Greenhouse	100	7	0.787	0.182	-0.222	0
Low Amplitude Greenhouse	100	6	0.79	1.549	0.795	1.107
Low Amplitude Greenhouse	100	5	0.792	2.913	1.703	0
Low Amplitude Greenhouse	100	4	0.795	4.205	2.542	0
Low Amplitude Greenhouse	100	3	0.797	-0.499	-1.399	0.112
Low Amplitude Greenhouse	100	2	0.8	-0.826	-1.8	0
Low Amplitude Greenhouse	100	1	1.6	-0.826	-1.776	0
Low Amplitude Greenhouse	120	322	0	-11.074	-6.998	0
Low Amplitude Greenhouse	120	321	0.002	-9.711	-5.673	0
Low Amplitude Greenhouse	120	320	0.005	-8.291	-4.306	0
Low Amplitude Greenhouse	120	319	0.007	-6.745	-2.84	0
Low Amplitude Greenhouse	120	318	0.01	-5.155	-1.349	0
Low Amplitude Greenhouse	120	317	0.012	-3.463	0.217	0
Low Amplitude Greenhouse	120	316	0.015	-1.679	1.852	0
Low Amplitude Greenhouse	120	315	0.017	-3.013	0.818	0.151
Low Amplitude Greenhouse	120	314	0.02	-5.41	-1.293	0
Low Amplitude Greenhouse	120	313	0.022	-8.354	-3.801	0
Low Amplitude Greenhouse	120	312	0.025	-7.598	-3.035	0
Low Amplitude Greenhouse	120	311	0.027	-5.785	-1.342	0
Low Amplitude Greenhouse	120	310	0.03	-4.091	0.228	0
Low Amplitude Greenhouse	120	309	0.032	-2.48	1.724	0.361
Low Amplitude Greenhouse	120	308	0.035	-0.66	3.151	0
Low Amplitude Greenhouse	120	307	0.037	-4.691	-0.275	0
Low Amplitude Greenhouse	120	306	0.04	-4.451	0.031	0
Low Amplitude Greenhouse	120	305	0.042	-3.016	1.376	0.203
Low Amplitude Greenhouse	120	304	0.045	-6.031	-1.319	0
Low Amplitude Greenhouse	120	303	0.047	-6.524	-1.657	0
Low Amplitude Greenhouse	120	302	0.05	-4.918	-0.157	0

Low Amplitude Greenhouse	120	301	0.052	-3.21	1.418	0
Low Amplitude Greenhouse	120	300	0.055	-3.3	1.44	0
Low Amplitude Greenhouse	120	299	0.057	-6.287	-1.063	0
Low Amplitude Greenhouse	120	298	0.06	-4.412	0.669	0
Low Amplitude Greenhouse	120	297	0.062	-2.529	2.401	1.05
Low Amplitude Greenhouse	120	296	0.065	-0.292	4.107	0
Low Amplitude Greenhouse	120	295	0.067	-2.159	2.493	0
Low Amplitude Greenhouse	120	294	0.07	-3.347	1.514	0
Low Amplitude Greenhouse	120	293	0.072	-1.278	3.024	0
Low Amplitude Greenhouse	120	292	0.075	-4.008	0.777	0
Low Amplitude Greenhouse	120	291	0.077	-4.993	0.016	0
Low Amplitude Greenhouse	120	290	0.08	-3.538	1.377	0
Low Amplitude Greenhouse	120	289	0.082	-2.071	2.737	0
Low Amplitude Greenhouse	120	288	0.085	-0.571	4.127	0.424
Low Amplitude Greenhouse	120	287	0.087	0.463	5.031	0
Low Amplitude Greenhouse	120	286	0.09	-1.175	3.529	0
Low Amplitude Greenhouse	120	285	0.092	-4.873	0.454	0
Low Amplitude Greenhouse	120	284	0.095	-9.549	-3.586	0
Low Amplitude Greenhouse	120	283	0.097	-8.49	-2.544	0
Low Amplitude Greenhouse	120	282	0.1	-7.283	-1.38	0
Low Amplitude Greenhouse	120	281	0.102	-5.4	0.364	0
Low Amplitude Greenhouse	120	280	0.105	-3.522	2.086	0
Low Amplitude Greenhouse	120	279	0.107	-1.629	3.809	0.483
Low Amplitude Greenhouse	120	278	0.11	0.313	5.408	0
Low Amplitude Greenhouse	120	277	0.112	-2.772	2.685	0
Low Amplitude Greenhouse	120	276	0.115	-9.677	-3.269	0
Low Amplitude Greenhouse	120	275	0.117	-8.279	-1.925	0
Low Amplitude Greenhouse	120	274	0.12	-6.828	-0.55	0
Low Amplitude Greenhouse	120	273	0.122	-5.36	0.825	0
Low Amplitude Greenhouse	120	272	0.125	-3.847	2.229	0
Low Amplitude Greenhouse	120	271	0.127	-2.216	3.734	0.44
Low Amplitude Greenhouse	120	270	0.13	-0.283	5.263	0
Low Amplitude Greenhouse	120	269	0.132	-3.959	2.102	0
Low Amplitude Greenhouse	120	268	0.135	-4.197	1.995	0
Low Amplitude Greenhouse	120	267	0.137	-7.27	-0.586	0

Low Amplitude Greenhouse	120	266	0.14	-6.347	0.318	0
Low Amplitude Greenhouse	120	265	0.142	-4.433	2.076	0
Low Amplitude Greenhouse	120	264	0.145	-2.545	3.806	0.912
Low Amplitude Greenhouse	120	263	0.147	-0.118	5.537	0
Low Amplitude Greenhouse	120	262	0.15	-0.198	5.432	0
Low Amplitude Greenhouse	120	261	0.152	-3.25	2.792	0
Low Amplitude Greenhouse	120	260	0.155	-1.66	4.254	0.483
Low Amplitude Greenhouse	120	259	0.157	0.141	5.706	0
Low Amplitude Greenhouse	120	258	0.16	-3.001	2.942	0
Low Amplitude Greenhouse	120	257	0.162	-3.542	2.578	0
Low Amplitude Greenhouse	120	256	0.165	-2.025	3.982	0.516
Low Amplitude Greenhouse	120	255	0.167	-0.08	5.487	0
Low Amplitude Greenhouse	120	254	0.17	-2.653	3.237	0
Low Amplitude Greenhouse	120	253	0.172	-3.36	2.732	0
Low Amplitude Greenhouse	120	252	0.175	-1.527	4.401	0.744
Low Amplitude Greenhouse	120	251	0.177	0.827	6.179	0
Low Amplitude Greenhouse	120	250	0.18	3.415	7.93	0.742
Low Amplitude Greenhouse	120	249	0.182	1.491	6.424	0
Low Amplitude Greenhouse	120	248	0.185	0.515	5.518	0.34
Low Amplitude Greenhouse	120	247	0.187	1.216	5.927	0.375
Low Amplitude Greenhouse	120	246	0.19	-3.468	1.818	0
Low Amplitude Greenhouse	120	245	0.192	-2.542	2.711	0
Low Amplitude Greenhouse	120	244	0.195	-1.647	3.573	0
Low Amplitude Greenhouse	120	243	0.197	-0.821	4.381	0.27
Low Amplitude Greenhouse	120	242	0.2	0.026	5.182	0
Low Amplitude Greenhouse	120	241	0.202	1.84	6.534	0.374
Low Amplitude Greenhouse	120	240	0.205	0.737	5.547	0.375
Low Amplitude Greenhouse	120	239	0.207	-4.583	0.847	0
Low Amplitude Greenhouse	120	238	0.21	-6.647	-0.863	0
Low Amplitude Greenhouse	120	237	0.212	-4.955	0.712	0
Low Amplitude Greenhouse	120	236	0.215	-3.167	2.355	0
Low Amplitude Greenhouse	120	235	0.217	-1.295	4.048	0
Low Amplitude Greenhouse	120	234	0.22	0.699	5.825	0.375
Low Amplitude Greenhouse	120	233	0.222	3.182	7.543	0.72
Low Amplitude Greenhouse	120	232	0.225	5.738	9.231	0

Low Amplitude Greenhouse	120	231	0.227	-0.22	4.692	0.175
Low Amplitude Greenhouse	120	230	0.23	-4.792	0.741	0
Low Amplitude Greenhouse	120	229	0.232	-3.226	2.189	0
Low Amplitude Greenhouse	120	228	0.235	-1.691	3.598	0
Low Amplitude Greenhouse	120	227	0.237	-0.229	4.949	0.173
Low Amplitude Greenhouse	120	226	0.24	1.532	6.311	1.11
Low Amplitude Greenhouse	120	225	0.242	3.512	7.626	0
Low Amplitude Greenhouse	120	224	0.245	3.265	7.333	0
Low Amplitude Greenhouse	120	223	0.247	-0.311	4.474	0.53
Low Amplitude Greenhouse	120	222	0.25	0.644	5.241	0
Low Amplitude Greenhouse	120	221	0.252	-2.365	2.542	0
Low Amplitude Greenhouse	120	220	0.255	-1.696	3.218	0.564
Low Amplitude Greenhouse	120	219	0.257	0.375	4.863	0
Low Amplitude Greenhouse	120	218	0.26	2.8	6.588	3.639
Low Amplitude Greenhouse	120	217	0.262	5.319	8.255	0
Low Amplitude Greenhouse	120	216	0.265	2.585	6.197	0
Low Amplitude Greenhouse	120	215	0.267	2.003	5.638	0
Low Amplitude Greenhouse	120	214	0.27	4.277	7.143	0
Low Amplitude Greenhouse	120	213	0.272	6.457	8.57	0
Low Amplitude Greenhouse	120	212	0.275	2.775	5.851	0
Low Amplitude Greenhouse	120	211	0.277	2.294	5.378	0
Low Amplitude Greenhouse	120	210	0.28	4.233	6.64	0
Low Amplitude Greenhouse	120	209	0.282	5.278	7.265	0
Low Amplitude Greenhouse	120	208	0.285	0.193	3.43	0.268
Low Amplitude Greenhouse	120	207	0.287	1.154	4.087	1.839
Low Amplitude Greenhouse	120	206	0.29	2.436	4.903	0
Low Amplitude Greenhouse	120	205	0.292	3.852	5.789	0
Low Amplitude Greenhouse	120	204	0.295	5.357	6.742	0
Low Amplitude Greenhouse	120	203	0.297	2.318	4.462	0
Low Amplitude Greenhouse	120	202	0.3	0.443	2.923	0.384
Low Amplitude Greenhouse	120	201	0.302	-0.731	1.835	0
Low Amplitude Greenhouse	120	200	0.305	-2.686	0.221	0
Low Amplitude Greenhouse	120	199	0.307	-0.968	1.79	0.007
Low Amplitude Greenhouse	120	198	0.31	0.687	3.236	1.805
Low Amplitude Greenhouse	120	197	0.312	2.732	4.604	0

Low Amplitude Greenhouse	120	196	0.315	4.721	5.899	0
Low Amplitude Greenhouse	120	195	0.317	6.683	7.176	0
Low Amplitude Greenhouse	120	194	0.32	5.111	5.958	0
Low Amplitude Greenhouse	120	193	0.322	-3.709	-1.049	1.279
Low Amplitude Greenhouse	120	192	0.325	-3.559	-0.958	0
Low Amplitude Greenhouse	120	191	0.327	-1.919	0.359	0
Low Amplitude Greenhouse	120	190	0.33	0.142	1.702	0
Low Amplitude Greenhouse	120	189	0.332	2.089	3.117	1.769
Low Amplitude Greenhouse	120	188	0.335	4.334	4.599	0
Low Amplitude Greenhouse	120	187	0.337	6.721	6.181	0
Low Amplitude Greenhouse	120	186	0.34	6.668	6.053	0
Low Amplitude Greenhouse	120	185	0.342	1.03	1.885	0
Low Amplitude Greenhouse	120	184	0.345	-2.037	-0.816	0.729
Low Amplitude Greenhouse	120	183	0.347	-0.032	0.576	0
Low Amplitude Greenhouse	120	182	0.35	1.823	1.974	2.429
Low Amplitude Greenhouse	120	181	0.352	3.808	3.295	0
Low Amplitude Greenhouse	120	180	0.355	5.712	4.543	0
Low Amplitude Greenhouse	120	179	0.357	7.584	5.774	0
Low Amplitude Greenhouse	120	178	0.36	4.07	3.191	0
Low Amplitude Greenhouse	120	177	0.362	2.849	2.211	0
Low Amplitude Greenhouse	120	176	0.365	3.772	2.76	0
Low Amplitude Greenhouse	120	175	0.367	-0.179	-0.328	0.448
Low Amplitude Greenhouse	120	174	0.37	0.347	0.095	0
Low Amplitude Greenhouse	120	173	0.372	2.292	1.473	1.023
Low Amplitude Greenhouse	120	172	0.375	4.468	2.919	0
Low Amplitude Greenhouse	120	171	0.377	5.823	3.784	0
Low Amplitude Greenhouse	120	170	0.38	0.961	0.194	0.354
Low Amplitude Greenhouse	120	169	0.382	3.117	1.64	2.083
Low Amplitude Greenhouse	120	168	0.385	5.432	3.186	0
Low Amplitude Greenhouse	120	167	0.387	6.777	4.045	0
Low Amplitude Greenhouse	120	166	0.39	2.253	0.728	0
Low Amplitude Greenhouse	120	165	0.392	0.943	-0.332	0
Low Amplitude Greenhouse	120	164	0.395	2.024	0.332	0
Low Amplitude Greenhouse	120	163	0.397	-0.623	-1.818	0.077
Low Amplitude Greenhouse	120	162	0.4	-3.66	-4.4	0

Low Amplitude Greenhouse	120	161	0.402	-2.478	-3.266	0.862
Low Amplitude Greenhouse	120	160	0.405	-0.733	-2.056	0
Low Amplitude Greenhouse	120	159	0.407	0.652	-0.83	0
Low Amplitude Greenhouse	120	158	0.41	2.587	0.465	0.359
Low Amplitude Greenhouse	120	157	0.412	0.247	-1.378	0.351
Low Amplitude Greenhouse	120	156	0.415	-1.059	-2.557	0
Low Amplitude Greenhouse	120	155	0.417	-4.995	-5.858	0
Low Amplitude Greenhouse	120	154	0.42	-4.522	-5.416	0.438
Low Amplitude Greenhouse	120	153	0.422	-2.649	-3.888	0
Low Amplitude Greenhouse	120	152	0.425	-0.802	-2.339	0
Low Amplitude Greenhouse	120	151	0.427	0.878	-0.89	1.512
Low Amplitude Greenhouse	120	150	0.43	2.953	0.49	0
Low Amplitude Greenhouse	120	149	0.432	4.941	1.798	0
Low Amplitude Greenhouse	120	148	0.435	1.043	-1.118	0
Low Amplitude Greenhouse	120	147	0.437	-6.213	-7.502	0
Low Amplitude Greenhouse	120	146	0.44	-5.008	-6.343	0
Low Amplitude Greenhouse	120	145	0.442	-3.792	-5.183	0
Low Amplitude Greenhouse	120	144	0.445	-2.497	-3.954	0.274
Low Amplitude Greenhouse	120	143	0.447	-0.9	-2.707	0
Low Amplitude Greenhouse	120	142	0.45	0.576	-1.389	0.674
Low Amplitude Greenhouse	120	141	0.452	2.635	0.006	0
Low Amplitude Greenhouse	120	140	0.455	-0.303	-2.272	0.706
Low Amplitude Greenhouse	120	139	0.457	-2.823	-4.401	0
Low Amplitude Greenhouse	120	138	0.46	-5.567	-7.072	0
Low Amplitude Greenhouse	120	137	0.462	-3.873	-5.602	0
Low Amplitude Greenhouse	120	136	0.465	-2.169	-4.019	0.287
Low Amplitude Greenhouse	120	135	0.467	-0.387	-2.536	0
Low Amplitude Greenhouse	120	134	0.47	1.413	-1.118	0.66
Low Amplitude Greenhouse	120	133	0.472	2.619	-0.341	0
Low Amplitude Greenhouse	120	132	0.475	-2.292	-4.304	1.286
Low Amplitude Greenhouse	120	131	0.477	-0.554	-3.109	0
Low Amplitude Greenhouse	120	130	0.48	-0.015	-2.579	0
Low Amplitude Greenhouse	120	129	0.482	-3.534	-5.603	0
Low Amplitude Greenhouse	120	128	0.485	-2.751	-5.31	0
Low Amplitude Greenhouse	120	127	0.487	-2.041	-4.597	0

Low Amplitude Greenhouse	120	126	0.49	-1.251	-3.815	0
Low Amplitude Greenhouse	120	125	0.492	-3.504	-5.58	0
Low Amplitude Greenhouse	120	124	0.495	-6.251	-7.873	0
Low Amplitude Greenhouse	120	123	0.497	-5.236	-6.881	0
Low Amplitude Greenhouse	120	122	0.5	-4.134	-5.856	0.265
Low Amplitude Greenhouse	120	121	0.502	-2.349	-4.258	0
Low Amplitude Greenhouse	120	120	0.505	-5.126	-6.761	0
Low Amplitude Greenhouse	120	119	0.507	-5.469	-6.963	0
Low Amplitude Greenhouse	120	118	0.51	-3.896	-5.491	0.109
Low Amplitude Greenhouse	120	117	0.512	-7.782	-8.892	0
Low Amplitude Greenhouse	120	116	0.515	-7.551	-8.593	0
Low Amplitude Greenhouse	120	115	0.517	-6.202	-7.309	0
Low Amplitude Greenhouse	120	114	0.52	-4.871	-6.049	0
Low Amplitude Greenhouse	120	113	0.522	-3.541	-4.787	0.626
Low Amplitude Greenhouse	120	112	0.525	-1.682	-3.451	0
Low Amplitude Greenhouse	120	111	0.527	-4.11	-5.359	0
Low Amplitude Greenhouse	120	110	0.53	-7.174	-8.192	0
Low Amplitude Greenhouse	120	109	0.532	-10.338	-10.936	0
Low Amplitude Greenhouse	120	108	0.535	-8.639	-9.308	0
Low Amplitude Greenhouse	120	107	0.537	-6.904	-7.673	0
Low Amplitude Greenhouse	120	106	0.54	-5.109	-6.005	0
Low Amplitude Greenhouse	120	105	0.542	-3.302	-4.333	0.326
Low Amplitude Greenhouse	120	104	0.545	-1.115	-2.633	0
Low Amplitude Greenhouse	120	103	0.547	0.616	-1.036	0.18
Low Amplitude Greenhouse	120	102	0.55	-4.706	-5.594	0.011
Low Amplitude Greenhouse	120	101	0.552	-9.58	-9.81	0
Low Amplitude Greenhouse	120	100	0.555	-8.073	-8.372	0
Low Amplitude Greenhouse	120	99	0.557	-6.66	-7.03	0
Low Amplitude Greenhouse	120	98	0.56	-5.265	-5.715	0
Low Amplitude Greenhouse	120	97	0.562	-3.871	-4.396	0.858
Low Amplitude Greenhouse	120	96	0.565	-1.507	-3.002	0
Low Amplitude Greenhouse	120	95	0.567	-0.815	-2.257	0
Low Amplitude Greenhouse	120	94	0.57	-5.242	-5.898	0.608
Low Amplitude Greenhouse	120	93	0.572	-4.688	-5.945	0
Low Amplitude Greenhouse	120	92	0.575	-7.84	-8.628	0

Low Amplitude Greenhouse	120	91	0.577	-6.055	-6.955	0
Low Amplitude Greenhouse	120	90	0.58	-4.199	-5.237	0
Low Amplitude Greenhouse	120	89	0.582	-2.321	-3.515	0
Low Amplitude Greenhouse	120	88	0.585	-0.391	-1.765	0.377
Low Amplitude Greenhouse	120	87	0.587	-2.374	-3.436	0
Low Amplitude Greenhouse	120	86	0.59	-4.933	-5.591	0
Low Amplitude Greenhouse	120	85	0.592	-3.799	-4.669	0
Low Amplitude Greenhouse	120	84	0.595	-3.776	-4.55	0
Low Amplitude Greenhouse	120	83	0.597	-7.817	-7.978	0
Low Amplitude Greenhouse	120	82	0.6	-8.057	-8.096	0
Low Amplitude Greenhouse	120	81	0.602	-6.634	-6.747	0
Low Amplitude Greenhouse	120	80	0.605	-5.1	-5.313	0
Low Amplitude Greenhouse	120	79	0.607	-9.027	-8.674	0
Low Amplitude Greenhouse	120	78	0.61	-8.636	-8.234	0
Low Amplitude Greenhouse	120	77	0.612	-6.941	-6.642	0
Low Amplitude Greenhouse	120	76	0.615	-5.148	-4.978	0
Low Amplitude Greenhouse	120	75	0.617	-3.218	-3.204	0.174
Low Amplitude Greenhouse	120	74	0.62	-5.885	-5.566	0
Low Amplitude Greenhouse	120	73	0.622	-6.016	-5.585	0
Low Amplitude Greenhouse	120	72	0.625	-5.978	-5.455	0
Low Amplitude Greenhouse	120	71	0.627	-8.988	-8.017	0.321
Low Amplitude Greenhouse	120	70	0.63	-6.969	-6.414	0
Low Amplitude Greenhouse	120	69	0.632	-5.341	-4.885	0.816
Low Amplitude Greenhouse	120	68	0.635	-3.725	-3.425	0
Low Amplitude Greenhouse	120	67	0.637	-2.056	-1.974	0
Low Amplitude Greenhouse	120	66	0.64	-0.208	-0.596	0
Low Amplitude Greenhouse	120	65	0.642	-2.226	-2.452	0
Low Amplitude Greenhouse	120	64	0.645	-8.094	-7.363	0
Low Amplitude Greenhouse	120	63	0.647	-8.987	-8.071	0
Low Amplitude Greenhouse	120	62	0.65	-7.376	-6.541	0
Low Amplitude Greenhouse	120	61	0.652	-5.665	-4.936	0
Low Amplitude Greenhouse	120	60	0.655	-3.758	-3.261	0.881
Low Amplitude Greenhouse	120	59	0.657	-1.233	-1.476	0
Low Amplitude Greenhouse	120	58	0.66	0.767	0.282	0
Low Amplitude Greenhouse	120	57	0.662	2.379	1.42	0.263

Low Amplitude Greenhouse	120	56	0.665	-4.438	-4.324	0
Low Amplitude Greenhouse	120	55	0.667	-6.764	-6.263	0
Low Amplitude Greenhouse	120	54	0.67	-5.042	-4.658	0
Low Amplitude Greenhouse	120	53	0.672	-3.386	-3.127	0
Low Amplitude Greenhouse	120	52	0.675	-1.808	-1.666	0.645
Low Amplitude Greenhouse	120	51	0.677	0.216	-0.215	0
Low Amplitude Greenhouse	120	50	0.68	2.001	1.161	0.365
Low Amplitude Greenhouse	120	49	0.682	0.5	-0.158	0.426
Low Amplitude Greenhouse	120	48	0.685	-1.328	-1.945	0
Low Amplitude Greenhouse	120	47	0.687	-2.273	-2.643	0
Low Amplitude Greenhouse	120	46	0.69	-6.289	-5.931	0
Low Amplitude Greenhouse	120	45	0.692	-5.282	-4.956	0
Low Amplitude Greenhouse	120	44	0.695	-4.144	-3.872	0
Low Amplitude Greenhouse	120	43	0.697	-2.908	-2.699	0.763
Low Amplitude Greenhouse	120	42	0.7	-0.8	-1.533	0
Low Amplitude Greenhouse	120	41	0.702	-4.481	-4.556	0
Low Amplitude Greenhouse	120	40	0.705	-3.898	-3.953	0
Low Amplitude Greenhouse	120	39	0.707	-2.082	-2.287	0.037
Low Amplitude Greenhouse	120	38	0.71	-1.056	-1.376	0
Low Amplitude Greenhouse	120	37	0.712	-4.461	-4.088	0
Low Amplitude Greenhouse	120	36	0.715	-3.963	-3.559	0
Low Amplitude Greenhouse	120	35	0.717	-2.455	-2.167	0
Low Amplitude Greenhouse	120	34	0.72	-2.938	-2.48	0
Low Amplitude Greenhouse	120	33	0.722	-6.294	-5.283	0
Low Amplitude Greenhouse	120	32	0.725	-4.736	-3.896	0.088
Low Amplitude Greenhouse	120	31	0.727	-3.058	-2.457	0
Low Amplitude Greenhouse	120	30	0.73	-1.361	-0.901	0.681
Low Amplitude Greenhouse	120	29	0.732	0.641	0.682	0
Low Amplitude Greenhouse	120	28	0.735	-1.946	-1.752	0
Low Amplitude Greenhouse	120	27	0.737	-2.172	-1.845	0
Low Amplitude Greenhouse	120	26	0.74	-4.608	-3.848	0
Low Amplitude Greenhouse	120	25	0.742	-5.137	-4.207	0
Low Amplitude Greenhouse	120	24	0.745	-3.29	-2.504	0.461
Low Amplitude Greenhouse	120	23	0.747	-1.425	-0.855	0
Low Amplitude Greenhouse	120	22	0.75	0.447	0.774	0

Low Amplitude Greenhouse	120	21	0.752	2.525	2.275	0.965
Low Amplitude Greenhouse	120	20	0.755	4.599	3.706	0
Low Amplitude Greenhouse	120	19	0.757	1.478	1.295	0
Low Amplitude Greenhouse	120	18	0.76	-6.053	-5.275	0
Low Amplitude Greenhouse	120	17	0.762	-4.651	-3.948	1.052
Low Amplitude Greenhouse	120	16	0.765	-2.788	-2.576	0
Low Amplitude Greenhouse	120	15	0.767	-0.62	-1.151	0
Low Amplitude Greenhouse	120	14	0.77	1.129	0.391	1.23
Low Amplitude Greenhouse	120	13	0.772	3.295	1.961	0
Low Amplitude Greenhouse	120	12	0.775	5.637	3.599	0
Low Amplitude Greenhouse	120	11	0.777	4.442	2.638	0
Low Amplitude Greenhouse	120	10	0.78	-0.437	-1.281	0.863
Low Amplitude Greenhouse	120	9	0.782	-2.54	-2.978	0
Low Amplitude Greenhouse	120	8	0.785	-0.028	-1.287	0
Low Amplitude Greenhouse	120	7	0.787	1.296	-0.222	1.305
Low Amplitude Greenhouse	120	6	0.79	2.784	0.795	0
Low Amplitude Greenhouse	120	5	0.792	4.141	1.703	0
Low Amplitude Greenhouse	120	4	0.795	5.405	2.542	0
Low Amplitude Greenhouse	120	3	0.797	0.383	-1.399	0.243
Low Amplitude Greenhouse	120	2	0.8	0.174	-1.8	0
Low Amplitude Greenhouse	120	1	1.6	0.174	-1.776	0
Low Amplitude Greenhouse	140	322	0	-4.267	-6.998	0
Low Amplitude Greenhouse	140	321	0.002	-2.84	-5.673	0.243
Low Amplitude Greenhouse	140	320	0.005	-1.15	-4.306	0
Low Amplitude Greenhouse	140	319	0.007	0.511	-2.84	0
Low Amplitude Greenhouse	140	318	0.01	2.183	-1.349	0.369
Low Amplitude Greenhouse	140	317	0.012	3.964	0.217	0
Low Amplitude Greenhouse	140	316	0.015	5.844	1.852	0
Low Amplitude Greenhouse	140	315	0.017	4.789	0.818	0
Low Amplitude Greenhouse	140	314	0.02	2.095	-1.293	0
Low Amplitude Greenhouse	140	313	0.022	-1.021	-3.801	0.041
Low Amplitude Greenhouse	140	312	0.025	-0.198	-3.035	0
Low Amplitude Greenhouse	140	311	0.027	1.714	-1.342	0.587
Low Amplitude Greenhouse	140	310	0.03	3.497	0.228	0
Low Amplitude Greenhouse	140	309	0.032	5.199	1.724	0

Low Amplitude Greenhouse	140	308	0.035	7.018	3.151	0
Low Amplitude Greenhouse	140	307	0.037	3.015	-0.275	0
Low Amplitude Greenhouse	140	306	0.04	3.263	0.031	0
Low Amplitude Greenhouse	140	305	0.042	4.782	1.376	0
Low Amplitude Greenhouse	140	304	0.045	1.399	-1.319	0
Low Amplitude Greenhouse	140	303	0.047	0.868	-1.657	0
Low Amplitude Greenhouse	140	302	0.05	2.554	-0.157	0
Low Amplitude Greenhouse	140	301	0.052	4.348	1.418	0.001
Low Amplitude Greenhouse	140	300	0.055	4.246	1.44	0
Low Amplitude Greenhouse	140	299	0.057	1.083	-1.063	0.004
Low Amplitude Greenhouse	140	298	0.06	3.057	0.669	0.486
Low Amplitude Greenhouse	140	297	0.062	5.047	2.401	0
Low Amplitude Greenhouse	140	296	0.065	7.004	4.107	0
Low Amplitude Greenhouse	140	295	0.067	5.202	2.493	0
Low Amplitude Greenhouse	140	294	0.07	4.004	1.514	0
Low Amplitude Greenhouse	140	293	0.072	5.721	3.024	0.346
Low Amplitude Greenhouse	140	292	0.075	3.177	0.777	0
Low Amplitude Greenhouse	140	291	0.077	2.134	0.016	0
Low Amplitude Greenhouse	140	290	0.08	3.662	1.377	1.203
Low Amplitude Greenhouse	140	289	0.082	5.217	2.737	0
Low Amplitude Greenhouse	140	288	0.085	6.825	4.127	0
Low Amplitude Greenhouse	140	287	0.087	8.203	5.031	0
Low Amplitude Greenhouse	140	286	0.09	6.559	3.529	0
Low Amplitude Greenhouse	140	285	0.092	2.991	0.454	0
Low Amplitude Greenhouse	140	284	0.095	-1.951	-3.586	0
Low Amplitude Greenhouse	140	283	0.097	-0.841	-2.544	0.069
Low Amplitude Greenhouse	140	282	0.1	0.494	-1.38	0
Low Amplitude Greenhouse	140	281	0.102	2.466	0.364	0
Low Amplitude Greenhouse	140	280	0.105	4.441	2.086	0
Low Amplitude Greenhouse	140	279	0.107	6.429	3.809	0.776
Low Amplitude Greenhouse	140	278	0.11	8.522	5.408	0
Low Amplitude Greenhouse	140	277	0.112	5.495	2.685	0
Low Amplitude Greenhouse	140	276	0.115	-1.792	-3.269	0
Low Amplitude Greenhouse	140	275	0.117	-0.325	-1.925	0.018
Low Amplitude Greenhouse	140	274	0.12	1.211	-0.55	0

Low Amplitude Greenhouse	140	273	0.122	2.757	0.825	0
Low Amplitude Greenhouse	140	272	0.125	4.345	2.229	0.386
Low Amplitude Greenhouse	140	271	0.127	6.081	3.734	0
Low Amplitude Greenhouse	140	270	0.13	7.848	5.263	0
Low Amplitude Greenhouse	140	269	0.132	4.143	2.102	0
Low Amplitude Greenhouse	140	268	0.135	3.881	1.995	0
Low Amplitude Greenhouse	140	267	0.137	0.627	-0.586	0.008
Low Amplitude Greenhouse	140	266	0.14	1.603	0.318	0
Low Amplitude Greenhouse	140	265	0.142	3.616	2.076	0
Low Amplitude Greenhouse	140	264	0.145	5.61	3.806	1.214
Low Amplitude Greenhouse	140	263	0.147	7.627	5.537	0
Low Amplitude Greenhouse	140	262	0.15	7.695	5.432	0
Low Amplitude Greenhouse	140	261	0.152	4.636	2.792	0
Low Amplitude Greenhouse	140	260	0.155	6.326	4.254	0
Low Amplitude Greenhouse	140	259	0.157	8.058	5.706	0
Low Amplitude Greenhouse	140	258	0.16	4.853	2.942	0
Low Amplitude Greenhouse	140	257	0.162	4.25	2.578	0
Low Amplitude Greenhouse	140	256	0.165	5.832	3.982	0
Low Amplitude Greenhouse	140	255	0.167	7.546	5.487	0.282
Low Amplitude Greenhouse	140	254	0.17	4.937	3.237	0
Low Amplitude Greenhouse	140	253	0.172	4.16	2.732	0
Low Amplitude Greenhouse	140	252	0.175	6.09	4.401	0
Low Amplitude Greenhouse	140	251	0.177	8.203	6.179	0.374
Low Amplitude Greenhouse	140	250	0.18	10.841	7.93	0.355
Low Amplitude Greenhouse	140	249	0.182	8.875	6.424	1.603
Low Amplitude Greenhouse	140	248	0.185	8.008	5.518	0
Low Amplitude Greenhouse	140	247	0.187	8.735	5.927	0
Low Amplitude Greenhouse	140	246	0.19	4.127	1.818	0
Low Amplitude Greenhouse	140	245	0.192	5.049	2.711	0
Low Amplitude Greenhouse	140	244	0.195	5.933	3.573	0
Low Amplitude Greenhouse	140	243	0.197	6.739	4.381	0
Low Amplitude Greenhouse	140	242	0.2	7.51	5.182	0
Low Amplitude Greenhouse	140	241	0.202	9.038	6.534	1.151
Low Amplitude Greenhouse	140	240	0.205	8.462	5.547	0
Low Amplitude Greenhouse	140	239	0.207	3.023	0.847	0

Low Amplitude Greenhouse	140	238	0.21	0.836	-0.863	0
Low Amplitude Greenhouse	140	237	0.212	2.559	0.712	0
Low Amplitude Greenhouse	140	236	0.215	4.438	2.355	0
Low Amplitude Greenhouse	140	235	0.217	6.356	4.048	0
Low Amplitude Greenhouse	140	234	0.22	8.417	5.825	0.441
Low Amplitude Greenhouse	140	233	0.222	11.178	7.543	0.717
Low Amplitude Greenhouse	140	232	0.225	13.887	9.231	0
Low Amplitude Greenhouse	140	231	0.227	7.663	4.692	0
Low Amplitude Greenhouse	140	230	0.23	2.595	0.741	0
Low Amplitude Greenhouse	140	229	0.232	4.24	2.189	0
Low Amplitude Greenhouse	140	228	0.235	5.775	3.598	0
Low Amplitude Greenhouse	140	227	0.237	7.247	4.949	0
Low Amplitude Greenhouse	140	226	0.24	8.836	6.311	0.166
Low Amplitude Greenhouse	140	225	0.242	10.914	7.626	0.738
Low Amplitude Greenhouse	140	224	0.245	11.041	7.333	0.48
Low Amplitude Greenhouse	140	223	0.247	7.464	4.474	0
Low Amplitude Greenhouse	140	222	0.25	8.284	5.241	0
Low Amplitude Greenhouse	140	221	0.252	4.735	2.542	0
Low Amplitude Greenhouse	140	220	0.255	5.439	3.218	0
Low Amplitude Greenhouse	140	219	0.257	7.228	4.863	0
Low Amplitude Greenhouse	140	218	0.26	9.284	6.588	0.135
Low Amplitude Greenhouse	140	217	0.262	11.873	8.255	0.14
Low Amplitude Greenhouse	140	216	0.265	8.895	6.197	0.894
Low Amplitude Greenhouse	140	215	0.267	8.716	5.638	0
Low Amplitude Greenhouse	140	214	0.27	10.762	7.143	0.373
Low Amplitude Greenhouse	140	213	0.272	12.98	8.57	0.091
Low Amplitude Greenhouse	140	212	0.275	9.007	5.851	1.769
Low Amplitude Greenhouse	140	211	0.277	8.931	5.378	0
Low Amplitude Greenhouse	140	210	0.28	11.516	6.64	0.615
Low Amplitude Greenhouse	140	209	0.282	12.571	7.265	0
Low Amplitude Greenhouse	140	208	0.285	7.287	3.43	0
Low Amplitude Greenhouse	140	207	0.287	7.984	4.087	0
Low Amplitude Greenhouse	140	206	0.29	8.891	4.903	0.848
Low Amplitude Greenhouse	140	205	0.292	10.861	5.789	0.673
Low Amplitude Greenhouse	140	204	0.295	12.488	6.742	0

Low Amplitude Greenhouse	140	203	0.297	9.266	4.462	1.418
Low Amplitude Greenhouse	140	202	0.3	7.963	2.923	0
Low Amplitude Greenhouse	140	201	0.302	6.818	1.835	0
Low Amplitude Greenhouse	140	200	0.305	4.664	0.221	0
Low Amplitude Greenhouse	140	199	0.307	6.456	1.79	0
Low Amplitude Greenhouse	140	198	0.31	8.166	3.236	0
Low Amplitude Greenhouse	140	197	0.312	9.851	4.604	0.757
Low Amplitude Greenhouse	140	196	0.315	12.348	5.899	0.774
Low Amplitude Greenhouse	140	195	0.317	14.268	7.176	0
Low Amplitude Greenhouse	140	194	0.32	12.571	5.958	0
Low Amplitude Greenhouse	140	193	0.322	3.344	-1.049	0
Low Amplitude Greenhouse	140	192	0.325	3.293	-0.958	0
Low Amplitude Greenhouse	140	191	0.327	4.752	0.359	0
Low Amplitude Greenhouse	140	190	0.33	6.26	1.702	0
Low Amplitude Greenhouse	140	189	0.332	8.003	3.117	0.297
Low Amplitude Greenhouse	140	188	0.335	10.29	4.599	0.687
Low Amplitude Greenhouse	140	187	0.337	13.035	6.181	0.535
Low Amplitude Greenhouse	140	186	0.34	12.934	6.053	0
Low Amplitude Greenhouse	140	185	0.342	7.135	1.885	0
Low Amplitude Greenhouse	140	184	0.345	3.51	-0.816	0
Low Amplitude Greenhouse	140	183	0.347	5.064	0.576	0
Low Amplitude Greenhouse	140	182	0.35	6.756	1.974	0
Low Amplitude Greenhouse	140	181	0.352	8.42	3.295	0.489
Low Amplitude Greenhouse	140	180	0.355	10.54	4.543	0.579
Low Amplitude Greenhouse	140	179	0.357	12.457	5.774	0
Low Amplitude Greenhouse	140	178	0.36	8.813	3.191	1.721
Low Amplitude Greenhouse	140	177	0.362	7.893	2.211	0
Low Amplitude Greenhouse	140	176	0.365	8.785	2.76	0
Low Amplitude Greenhouse	140	175	0.367	5.122	-0.328	0
Low Amplitude Greenhouse	140	174	0.37	5.495	0.095	0
Low Amplitude Greenhouse	140	173	0.372	7.204	1.473	1.268
Low Amplitude Greenhouse	140	172	0.375	9.264	2.919	0
Low Amplitude Greenhouse	140	171	0.377	11.387	3.784	0.435
Low Amplitude Greenhouse	140	170	0.38	6.552	0.194	1.085
Low Amplitude Greenhouse	140	169	0.382	8.805	1.64	0

Low Amplitude Greenhouse	140	168	0.385	11.479	3.186	0.797
Low Amplitude Greenhouse	140	167	0.387	12.966	4.045	0
Low Amplitude Greenhouse	140	166	0.39	8.402	0.728	1.548
Low Amplitude Greenhouse	140	165	0.392	7.103	-0.332	0
Low Amplitude Greenhouse	140	164	0.395	8.229	0.332	0
Low Amplitude Greenhouse	140	163	0.397	5.55	-1.818	0
Low Amplitude Greenhouse	140	162	0.4	2.605	-4.4	0
Low Amplitude Greenhouse	140	161	0.402	3.851	-3.266	0
Low Amplitude Greenhouse	140	160	0.405	5.199	-2.056	1.5
Low Amplitude Greenhouse	140	159	0.407	6.739	-0.83	0
Low Amplitude Greenhouse	140	158	0.41	8.678	0.465	0
Low Amplitude Greenhouse	140	157	0.412	6.632	-1.378	0
Low Amplitude Greenhouse	140	156	0.415	5.329	-2.557	0
Low Amplitude Greenhouse	140	155	0.417	1.174	-5.858	0
Low Amplitude Greenhouse	140	154	0.42	1.573	-5.416	0
Low Amplitude Greenhouse	140	153	0.422	3.294	-3.888	0
Low Amplitude Greenhouse	140	152	0.425	5.064	-2.339	0
Low Amplitude Greenhouse	140	151	0.427	6.781	-0.89	1.246
Low Amplitude Greenhouse	140	150	0.43	8.856	0.49	0
Low Amplitude Greenhouse	140	149	0.432	11.46	1.798	0.419
Low Amplitude Greenhouse	140	148	0.435	7.559	-1.118	0.353
Low Amplitude Greenhouse	140	147	0.437	-0.165	-7.502	0.009
Low Amplitude Greenhouse	140	146	0.44	1.104	-6.343	0
Low Amplitude Greenhouse	140	145	0.442	2.372	-5.183	0
Low Amplitude Greenhouse	140	144	0.445	3.727	-3.954	0
Low Amplitude Greenhouse	140	143	0.447	5.115	-2.707	0
Low Amplitude Greenhouse	140	142	0.45	6.658	-1.389	1.591
Low Amplitude Greenhouse	140	141	0.452	8.672	0.006	0
Low Amplitude Greenhouse	140	140	0.455	6.341	-2.272	0
Low Amplitude Greenhouse	140	139	0.457	3.893	-4.401	0
Low Amplitude Greenhouse	140	138	0.46	0.527	-7.072	0
Low Amplitude Greenhouse	140	137	0.462	2.173	-5.602	0
Low Amplitude Greenhouse	140	136	0.465	3.968	-4.019	0
Low Amplitude Greenhouse	140	135	0.467	5.641	-2.536	2.582
Low Amplitude Greenhouse	140	134	0.47	7.741	-1.118	0

Low Amplitude Greenhouse	140	133	0.472	8.936	-0.341	0
Low Amplitude Greenhouse	140	132	0.475	4.4	-4.304	0
Low Amplitude Greenhouse	140	131	0.477	6.09	-3.109	0
Low Amplitude Greenhouse	140	130	0.48	6.951	-2.579	0
Low Amplitude Greenhouse	140	129	0.482	3.397	-5.603	0
Low Amplitude Greenhouse	140	128	0.485	3.62	-5.31	1.447
Low Amplitude Greenhouse	140	127	0.487	4.728	-4.597	0
Low Amplitude Greenhouse	140	126	0.49	5.92	-3.815	0
Low Amplitude Greenhouse	140	125	0.492	3.96	-5.58	0
Low Amplitude Greenhouse	140	124	0.495	1.416	-7.873	0
Low Amplitude Greenhouse	140	123	0.497	2.488	-6.881	0
Low Amplitude Greenhouse	140	122	0.5	3.6	-5.856	0.563
Low Amplitude Greenhouse	140	121	0.502	5.545	-4.258	0
Low Amplitude Greenhouse	140	120	0.505	2.705	-6.761	0
Low Amplitude Greenhouse	140	119	0.507	2.336	-6.963	0
Low Amplitude Greenhouse	140	118	0.51	3.998	-5.491	0
Low Amplitude Greenhouse	140	117	0.512	-0.147	-8.892	0
Low Amplitude Greenhouse	140	116	0.515	0.028	-8.593	0
Low Amplitude Greenhouse	140	115	0.517	1.443	-7.309	0
Low Amplitude Greenhouse	140	114	0.52	2.838	-6.049	0
Low Amplitude Greenhouse	140	113	0.522	4.247	-4.787	0
Low Amplitude Greenhouse	140	112	0.525	5.765	-3.451	0.315
Low Amplitude Greenhouse	140	111	0.527	3.638	-5.359	0
Low Amplitude Greenhouse	140	110	0.53	0.105	-8.192	0
Low Amplitude Greenhouse	140	109	0.532	-3.238	-10.936	0
Low Amplitude Greenhouse	140	108	0.535	-1.454	-9.308	0.26
Low Amplitude Greenhouse	140	107	0.537	0.622	-7.673	0
Low Amplitude Greenhouse	140	106	0.54	2.512	-6.005	0
Low Amplitude Greenhouse	140	105	0.542	4.421	-4.333	0.924
Low Amplitude Greenhouse	140	104	0.545	6.392	-2.633	0
Low Amplitude Greenhouse	140	103	0.547	8.643	-1.036	0
Low Amplitude Greenhouse	140	102	0.55	3.333	-5.594	0
Low Amplitude Greenhouse	140	101	0.552	-1.873	-9.81	0.154
Low Amplitude Greenhouse	140	100	0.555	-0.104	-8.372	0
Low Amplitude Greenhouse	140	99	0.557	1.393	-7.03	0

Low Amplitude Greenhouse	140	98	0.56	2.856	-5.715	0
Low Amplitude Greenhouse	140	97	0.562	4.326	-4.396	0.74
Low Amplitude Greenhouse	140	96	0.565	5.929	-3.002	0
Low Amplitude Greenhouse	140	95	0.567	7.081	-2.257	0
Low Amplitude Greenhouse	140	94	0.57	2.812	-5.898	0
Low Amplitude Greenhouse	140	93	0.572	2.631	-5.945	0
Low Amplitude Greenhouse	140	92	0.575	-0.704	-8.628	0.044
Low Amplitude Greenhouse	140	91	0.577	1.215	-6.955	0
Low Amplitude Greenhouse	140	90	0.58	3.165	-5.237	0
Low Amplitude Greenhouse	140	89	0.582	5.141	-3.515	1.103
Low Amplitude Greenhouse	140	88	0.585	7.564	-1.765	0
Low Amplitude Greenhouse	140	87	0.587	5.708	-3.436	0
Low Amplitude Greenhouse	140	86	0.59	3.276	-5.591	0
Low Amplitude Greenhouse	140	85	0.592	4.267	-4.669	0.356
Low Amplitude Greenhouse	140	84	0.595	4.642	-4.55	0
Low Amplitude Greenhouse	140	83	0.597	0.361	-7.978	0
Low Amplitude Greenhouse	140	82	0.6	0.099	-8.096	0
Low Amplitude Greenhouse	140	81	0.602	1.593	-6.747	0
Low Amplitude Greenhouse	140	80	0.605	3.203	-5.313	0
Low Amplitude Greenhouse	140	79	0.607	-0.955	-8.674	0
Low Amplitude Greenhouse	140	78	0.61	-0.55	-8.234	0
Low Amplitude Greenhouse	140	77	0.612	1.23	-6.642	0
Low Amplitude Greenhouse	140	76	0.615	3.114	-4.978	0
Low Amplitude Greenhouse	140	75	0.617	5.15	-3.204	0
Low Amplitude Greenhouse	140	74	0.62	2.138	-5.566	0
Low Amplitude Greenhouse	140	73	0.622	1.991	-5.585	0
Low Amplitude Greenhouse	140	72	0.625	2.023	-5.455	0
Low Amplitude Greenhouse	140	71	0.627	-1.159	-8.017	0.004
Low Amplitude Greenhouse	140	70	0.63	0.644	-6.414	0
Low Amplitude Greenhouse	140	69	0.632	2.355	-4.885	0
Low Amplitude Greenhouse	140	68	0.635	4.003	-3.425	0
Low Amplitude Greenhouse	140	67	0.637	5.657	-1.974	0.357
Low Amplitude Greenhouse	140	66	0.64	7.24	-0.596	0
Low Amplitude Greenhouse	140	65	0.642	5.138	-2.452	0
Low Amplitude Greenhouse	140	64	0.645	-0.926	-7.363	0.075

Low Amplitude Greenhouse	140	63	0.647	-1.798	-8.071	0
Low Amplitude Greenhouse	140	62	0.65	-0.105	-6.541	0
Low Amplitude Greenhouse	140	61	0.652	1.68	-4.936	0
Low Amplitude Greenhouse	140	60	0.655	3.564	-3.261	0
Low Amplitude Greenhouse	140	59	0.657	5.603	-1.476	0
Low Amplitude Greenhouse	140	58	0.66	7.62	0.282	1.095
Low Amplitude Greenhouse	140	57	0.662	9.276	1.42	0
Low Amplitude Greenhouse	140	56	0.665	2.75	-4.324	0
Low Amplitude Greenhouse	140	55	0.667	0.288	-6.263	0
Low Amplitude Greenhouse	140	54	0.67	2.083	-4.658	0
Low Amplitude Greenhouse	140	53	0.672	3.802	-3.127	0
Low Amplitude Greenhouse	140	52	0.675	5.438	-1.666	0
Low Amplitude Greenhouse	140	51	0.677	7.052	-0.215	2.721
Low Amplitude Greenhouse	140	50	0.68	8.947	1.161	0
Low Amplitude Greenhouse	140	49	0.682	8.214	-0.158	0
Low Amplitude Greenhouse	140	48	0.685	6.256	-1.945	0
Low Amplitude Greenhouse	140	47	0.687	5.6	-2.643	0
Low Amplitude Greenhouse	140	46	0.69	1.708	-5.931	0
Low Amplitude Greenhouse	140	45	0.692	2.768	-4.956	0
Low Amplitude Greenhouse	140	44	0.695	3.968	-3.872	0
Low Amplitude Greenhouse	140	43	0.697	5.277	-2.699	0
Low Amplitude Greenhouse	140	42	0.7	6.59	-1.533	0
Low Amplitude Greenhouse	140	41	0.702	3.08	-4.556	0
Low Amplitude Greenhouse	140	40	0.705	3.687	-3.953	0
Low Amplitude Greenhouse	140	39	0.707	5.6	-2.287	0.542
Low Amplitude Greenhouse	140	38	0.71	6.805	-1.376	0
Low Amplitude Greenhouse	140	37	0.712	3.66	-4.088	0
Low Amplitude Greenhouse	140	36	0.715	4.177	-3.559	0
Low Amplitude Greenhouse	140	35	0.717	5.761	-2.167	0
Low Amplitude Greenhouse	140	34	0.72	5.229	-2.48	0
Low Amplitude Greenhouse	140	33	0.722	1.673	-5.283	0
Low Amplitude Greenhouse	140	32	0.725	3.217	-3.896	0
Low Amplitude Greenhouse	140	31	0.727	4.841	-2.457	0
Low Amplitude Greenhouse	140	30	0.73	6.631	-0.901	0
Low Amplitude Greenhouse	140	29	0.732	8.454	0.682	0.664

Low Amplitude Greenhouse	140	28	0.735	5.993	-1.752	0
Low Amplitude Greenhouse	140	27	0.737	5.713	-1.845	0
Low Amplitude Greenhouse	140	26	0.74	3.075	-3.848	0
Low Amplitude Greenhouse	140	25	0.742	2.452	-4.207	0
Low Amplitude Greenhouse	140	24	0.745	4.342	-2.504	0
Low Amplitude Greenhouse	140	23	0.747	6.19	-0.855	0
Low Amplitude Greenhouse	140	22	0.75	8.041	0.774	0
Low Amplitude Greenhouse	140	21	0.752	9.772	2.275	0.569
Low Amplitude Greenhouse	140	20	0.755	12.549	3.706	0.206
Low Amplitude Greenhouse	140	19	0.757	9.257	1.295	0.731
Low Amplitude Greenhouse	140	18	0.76	1.668	-5.275	0
Low Amplitude Greenhouse	140	17	0.762	3.087	-3.948	0
Low Amplitude Greenhouse	140	16	0.765	4.578	-2.576	0
Low Amplitude Greenhouse	140	15	0.767	6.149	-1.151	0
Low Amplitude Greenhouse	140	14	0.77	7.899	0.391	0
Low Amplitude Greenhouse	140	13	0.772	9.719	1.961	0.559
Low Amplitude Greenhouse	140	12	0.775	12.696	3.599	0.615
Low Amplitude Greenhouse	140	11	0.777	11.452	2.638	0
Low Amplitude Greenhouse	140	10	0.78	6.41	-1.281	0
Low Amplitude Greenhouse	140	9	0.782	4.098	-2.978	0
Low Amplitude Greenhouse	140	8	0.785	5.987	-1.287	0
Low Amplitude Greenhouse	140	7	0.787	7.131	-0.222	0
Low Amplitude Greenhouse	140	6	0.79	8.267	0.795	0
Low Amplitude Greenhouse	140	5	0.792	9.268	1.703	0
Low Amplitude Greenhouse	140	4	0.795	10.31	2.542	0.36
Low Amplitude Greenhouse	140	3	0.797	5.376	-1.399	0
Low Amplitude Greenhouse	140	2	0.8	4.924	-1.8	0
Low Amplitude Greenhouse	140	1	1.6	4.924	-1.776	0
Icehouse	120	322	0	-58.129	-12.498	0
Icehouse	120	321	0.002	-56.375	-10.702	0
Icehouse	120	320	0.005	-54.31	-8.607	0
Icehouse	120	319	0.007	-51.605	-5.891	0
Icehouse	120	318	0.01	-48.259	-2.559	0
Icehouse	120	317	0.012	-44.137	1.523	0
Icehouse	120	316	0.015	-39.297	6.3	0
Icehouse	120	315	0.017	-37.736	7.9	0
Icehouse	120	314	0.02	-37.569	8.152	0
Icehouse	120	313	0.022	-37.974	7.85	0
Icehouse	120	312	0.025	-33.891	11.889	0

Icehouse	120	311	0.027	-28.858	16.846	0
Icehouse	120	310	0.03	-24.706	20.949	0
Icehouse	120	309	0.032	-21.322	24.303	0
Icehouse	120	308	0.035	-18.659	26.965	0
Icehouse	120	307	0.037	-23.514	22.375	0
Icehouse	120	306	0.04	-23.222	22.749	0
Icehouse	120	305	0.042	-21.421	24.577	0
Icehouse	120	304	0.045	-25.232	20.992	0
Icehouse	120	303	0.047	-25.125	21.188	0
Icehouse	120	302	0.05	-21.744	24.54	0
Icehouse	120	301	0.052	-17.584	28.643	0
Icehouse	120	300	0.055	-15.051	31.169	0
Icehouse	120	299	0.057	-15.616	30.722	0
Icehouse	120	298	0.06	-9.77	36.362	0
Icehouse	120	297	0.062	-3.736	42.007	0
Icehouse	120	296	0.065	2.386	47.371	5.268
Icehouse	120	295	0.067	3.32	47.711	0
Icehouse	120	294	0.07	4.502	48.256	0
Icehouse	120	293	0.072	9.328	51.642	0
Icehouse	120	292	0.075	6.544	49.171	0
Icehouse	120	291	0.077	5.93	48.326	0
Icehouse	120	290	0.08	8.8	50.189	0
Icehouse	120	289	0.082	11.813	52.052	1.382
Icehouse	120	288	0.085	15.103	54.2	0
Icehouse	120	287	0.087	3.791	45.219	0.744
Icehouse	120	286	0.09	-9.068	33.53	0
Icehouse	120	285	0.092	-23.023	20.284	0
Icehouse	120	284	0.095	-37.658	6.285	0
Icehouse	120	283	0.097	-44.669	-0.387	0
Icehouse	120	282	0.1	-50.969	-6.379	0
Icehouse	120	281	0.102	-45.283	-0.799	0
Icehouse	120	280	0.105	-39.771	4.605	0
Icehouse	120	279	0.107	-34.649	9.634	0
Icehouse	120	278	0.11	-30.409	13.806	0
Icehouse	120	277	0.112	-33.122	11.283	0
Icehouse	120	276	0.115	-41.139	3.641	0
Icehouse	120	275	0.117	-39.037	5.759	0
Icehouse	120	274	0.12	-37.157	7.661	0
Icehouse	120	273	0.122	-35.282	9.562	0
Icehouse	120	272	0.125	-33.105	11.748	0
Icehouse	120	271	0.127	-30.279	14.559	0
Icehouse	120	270	0.13	-26.813	17.986	0
Icehouse	120	269	0.132	-29.496	15.493	0
Icehouse	120	268	0.135	-27.125	17.874	0
Icehouse	120	267	0.137	-27.767	17.354	0
Icehouse	120	266	0.14	-23.165	21.869	0
Icehouse	120	265	0.142	-17.314	27.585	0
Icehouse	120	264	0.145	-11.75	33.02	0
Icehouse	120	263	0.147	-6.448	38.079	0
Icehouse	120	262	0.15	-4.616	39.884	0
Icehouse	120	261	0.152	-7.358	37.496	0
Icehouse	120	260	0.155	-4.473	40.254	0
Icehouse	120	259	0.157	-2.062	42.544	0
Icehouse	120	258	0.16	-6.566	38.67	0
Icehouse	120	257	0.162	-7.262	38.155	0
Icehouse	120	256	0.165	-4.963	40.361	0
Icehouse	120	255	0.167	-1.932	43.189	0

Icehouse	120	254	0.17	-4.216	41.345	0
Icehouse	120	253	0.172	-2.966	42.588	0
Icehouse	120	252	0.175	2.685	47.473	0.747
Icehouse	120	251	0.177	10.343	53.074	3.218
Icehouse	120	250	0.18	18.535	58.794	0
Icehouse	120	249	0.182	20.489	59.956	0
Icehouse	120	248	0.185	23.266	61.717	0
Icehouse	120	247	0.187	12.851	54.002	0
Icehouse	120	246	0.19	-4.917	39.363	0
Icehouse	120	245	0.192	-14.118	31.083	0
Icehouse	120	244	0.195	-23.616	22.164	0
Icehouse	120	243	0.197	-33.58	12.71	0
Icehouse	120	242	0.2	-44.163	2.642	0
Icehouse	120	241	0.202	-42.364	4.458	0
Icehouse	120	240	0.205	-43.635	3.33	0
Icehouse	120	239	0.207	-49.842	-2.545	0
Icehouse	120	238	0.21	-51.021	-3.588	0
Icehouse	120	237	0.212	-46.779	0.582	0
Icehouse	120	236	0.215	-41.815	5.443	0
Icehouse	120	235	0.217	-36.292	10.836	0
Icehouse	120	234	0.22	-30.267	16.706	0
Icehouse	120	233	0.222	-24.42	22.396	0
Icehouse	120	232	0.225	-18.856	27.799	0
Icehouse	120	231	0.227	-22.902	24.035	0
Icehouse	120	230	0.23	-26.633	20.556	0
Icehouse	120	229	0.232	-23.217	23.918	0
Icehouse	120	228	0.235	-20.473	26.627	0
Icehouse	120	227	0.237	-18.296	28.797	0
Icehouse	120	226	0.24	-16.364	30.728	0
Icehouse	120	225	0.242	-14.501	32.588	0
Icehouse	120	224	0.245	-14.77	32.44	0
Icehouse	120	223	0.247	-18.342	29.15	0
Icehouse	120	222	0.25	-15.877	31.584	0
Icehouse	120	221	0.252	-17.886	29.776	0
Icehouse	120	220	0.255	-14.273	33.292	0
Icehouse	120	219	0.257	-8.643	38.623	0
Icehouse	120	218	0.26	-2.271	44.427	0
Icehouse	120	217	0.262	4.382	50.05	3.563
Icehouse	120	216	0.265	5.079	50.214	0
Icehouse	120	215	0.267	8	52.102	0
Icehouse	120	214	0.27	15.246	56.191	4.52
Icehouse	120	213	0.272	20.211	59.527	0
Icehouse	120	212	0.275	16.291	56.462	0
Icehouse	120	211	0.277	16.142	56.086	0
Icehouse	120	210	0.28	18.968	57.877	0
Icehouse	120	209	0.282	20.538	58.773	0
Icehouse	120	208	0.285	13.842	53.668	0
Icehouse	120	207	0.287	2.19	44.411	0.748
Icehouse	120	206	0.29	-6.891	36.028	0
Icehouse	120	205	0.292	-15.183	28.389	0
Icehouse	120	204	0.295	-22.605	21.439	0
Icehouse	120	203	0.297	-34.538	10.176	0
Icehouse	120	202	0.3	-44.809	0.458	0
Icehouse	120	201	0.302	-43.176	2.11	0
Icehouse	120	200	0.305	-42.45	2.897	0
Icehouse	120	199	0.307	-37.449	7.764	0
Icehouse	120	198	0.31	-33.343	11.773	0

Icehouse	120	197	0.312	-30.019	15.028	0
Icehouse	120	196	0.315	-27.431	17.584	0
Icehouse	120	195	0.317	-25.348	19.658	0
Icehouse	120	194	0.32	-27.21	17.976	0
Icehouse	120	193	0.322	-37.586	8.187	0
Icehouse	120	192	0.325	-37.273	8.576	0
Icehouse	120	191	0.327	-34.654	11.165	0
Icehouse	120	190	0.33	-31.384	14.369	0
Icehouse	120	189	0.332	-27.33	18.318	0
Icehouse	120	188	0.335	-22.548	22.956	0
Icehouse	120	187	0.337	-17.017	28.3	0
Icehouse	120	186	0.34	-13.842	31.405	0
Icehouse	120	185	0.342	-16.625	28.858	0
Icehouse	120	184	0.345	-17.498	28.122	0
Icehouse	120	183	0.347	-12.721	32.742	0
Icehouse	120	182	0.35	-8.625	36.682	0
Icehouse	120	181	0.352	-5.25	39.871	0
Icehouse	120	180	0.355	-2.612	42.361	0
Icehouse	120	179	0.357	-0.472	44.369	0.314
Icehouse	120	178	0.36	-4.447	40.774	0
Icehouse	120	177	0.362	-6.103	39.42	0
Icehouse	120	176	0.365	-5.089	40.446	0
Icehouse	120	175	0.367	-9.184	36.864	0
Icehouse	120	174	0.37	-7.199	38.776	0
Icehouse	120	173	0.372	-2.971	42.67	0
Icehouse	120	172	0.375	2.261	47.256	2.2
Icehouse	120	171	0.377	8.309	51.591	0
Icehouse	120	170	0.38	6.493	49.847	0
Icehouse	120	169	0.382	13.983	55.158	1.977
Icehouse	120	168	0.385	21.653	60.459	0
Icehouse	120	167	0.387	12.305	53.39	0
Icehouse	120	166	0.39	-4.09	39.878	0
Icehouse	120	165	0.392	-16.223	28.881	0
Icehouse	120	164	0.395	-26.452	19.367	0
Icehouse	120	163	0.397	-40.903	5.773	0
Icehouse	120	162	0.4	-56.176	-8.672	0
Icehouse	120	161	0.402	-54.793	-7.256	0
Icehouse	120	160	0.405	-52.831	-5.29	0
Icehouse	120	159	0.407	-50.368	-2.85	0
Icehouse	120	158	0.41	-47.175	0.282	0
Icehouse	120	157	0.412	-47.923	-0.337	0
Icehouse	120	156	0.415	-46.97	0.663	0
Icehouse	120	155	0.417	-48.736	-0.925	0
Icehouse	120	154	0.42	-44.734	2.975	0
Icehouse	120	153	0.422	-39.119	8.401	0
Icehouse	120	152	0.425	-33.624	13.708	0
Icehouse	120	151	0.427	-28.852	18.316	0
Icehouse	120	150	0.43	-24.795	22.235	0
Icehouse	120	149	0.432	-21.523	25.407	0
Icehouse	120	148	0.435	-25.156	22.084	0
Icehouse	120	147	0.437	-34.436	13.418	0
Icehouse	120	146	0.44	-32.793	15.062	0
Icehouse	120	145	0.442	-31.154	16.703	0
Icehouse	120	144	0.445	-29.144	18.696	0
Icehouse	120	143	0.447	-26.628	21.165	0
Icehouse	120	142	0.45	-23.369	24.328	0
Icehouse	120	141	0.452	-19.302	28.243	0

Icehouse	120	140	0.455	-19.973	27.704	0
Icehouse	120	139	0.457	-20.018	27.758	0
Icehouse	120	138	0.46	-20.603	27.301	0
Icehouse	120	137	0.462	-15.001	32.648	0
Icehouse	120	136	0.465	-9.344	38.006	0
Icehouse	120	135	0.467	-4.292	42.666	0
Icehouse	120	134	0.47	0.123	46.64	0.667
Icehouse	120	133	0.472	3.584	49.075	0.745
Icehouse	120	132	0.475	-1.691	44.289	0
Icehouse	120	131	0.477	0.417	46.237	0.75
Icehouse	120	130	0.48	1.883	47.003	0.749
Icehouse	120	129	0.482	-2.559	42.789	0
Icehouse	120	128	0.485	-1.934	43.472	0
Icehouse	120	127	0.487	-12.269	34.417	0
Icehouse	120	126	0.49	-21.448	25.978	0
Icehouse	120	125	0.492	-33.658	14.618	0
Icehouse	120	124	0.495	-46.238	2.857	0
Icehouse	120	123	0.497	-53.141	-3.571	0
Icehouse	120	122	0.5	-59.684	-9.703	0
Icehouse	120	121	0.502	-54.251	-4.435	0
Icehouse	120	120	0.505	-54.732	-4.796	0
Icehouse	120	119	0.507	-52.403	-2.492	0
Icehouse	120	118	0.51	-48.214	1.563	0
Icehouse	120	117	0.512	-51.892	-1.817	0
Icehouse	120	116	0.515	-50.774	-0.665	0
Icehouse	120	115	0.517	-48.678	1.41	0
Icehouse	120	114	0.52	-46.884	3.199	0
Icehouse	120	113	0.522	-45.09	4.986	0
Icehouse	120	112	0.525	-42.917	7.13	0
Icehouse	120	111	0.527	-45.083	5.184	0
Icehouse	120	110	0.53	-47.987	2.536	0
Icehouse	120	109	0.532	-50.074	0.658	0
Icehouse	120	108	0.535	-44.953	5.59	0
Icehouse	120	107	0.537	-39.405	10.915	0
Icehouse	120	106	0.54	-33.538	16.536	0
Icehouse	120	105	0.542	-27.65	22.168	0
Icehouse	120	104	0.545	-21.854	27.692	0
Icehouse	120	103	0.547	-16.784	32.512	0
Icehouse	120	102	0.55	-21.594	28.121	0
Icehouse	120	101	0.552	-26.569	23.565	0
Icehouse	120	100	0.555	-23.704	26.34	0
Icehouse	120	99	0.557	-21.503	28.491	0
Icehouse	120	98	0.56	-19.603	30.356	0
Icehouse	120	97	0.562	-17.707	32.218	0
Icehouse	120	96	0.565	-15.42	34.441	0
Icehouse	120	95	0.567	-13.623	36.207	0
Icehouse	120	94	0.57	-17.78	32.427	0
Icehouse	120	93	0.572	-15.844	34.321	0
Icehouse	120	92	0.575	-17.13	33.214	0
Icehouse	120	91	0.577	-11.444	38.589	0
Icehouse	120	90	0.58	-5.238	44.275	0
Icehouse	120	89	0.582	1.244	49.97	1.497
Icehouse	120	88	0.585	8.884	55.556	0
Icehouse	120	87	0.587	-3.638	44.962	0
Icehouse	120	86	0.59	-16.904	33.071	0
Icehouse	120	85	0.592	-25.862	24.84	0
Icehouse	120	84	0.595	-37.013	14.554	0

Icehouse	120	83	0.597	-53.498	-0.839	0
Icehouse	120	82	0.6	-65.229	-11.847	0
Icehouse	120	81	0.602	-63.532	-10.137	0
Icehouse	120	80	0.605	-61.239	-7.866	0
Icehouse	120	79	0.607	-65.544	-11.858	0
Icehouse	120	78	0.61	-63.62	-9.933	0
Icehouse	120	77	0.612	-59.312	-5.752	0
Icehouse	120	76	0.615	-54.248	-0.874	0
Icehouse	120	75	0.617	-48.408	4.722	0
Icehouse	120	74	0.62	-48.547	4.685	0
Icehouse	120	73	0.622	-45.194	7.93	0
Icehouse	120	72	0.625	-41.875	11.141	0
Icehouse	120	71	0.627	-42.969	10.207	0
Icehouse	120	70	0.63	-38.582	14.417	0
Icehouse	120	69	0.632	-34.978	17.877	0
Icehouse	120	68	0.635	-32.115	20.642	0
Icehouse	120	67	0.637	-29.755	22.936	0
Icehouse	120	66	0.64	-27.799	24.862	0
Icehouse	120	65	0.642	-30.695	22.257	0
Icehouse	120	64	0.645	-37.925	15.616	0
Icehouse	120	63	0.647	-38.326	15.339	0
Icehouse	120	62	0.65	-34.738	18.776	0
Icehouse	120	61	0.652	-30.345	22.961	0
Icehouse	120	60	0.655	-25.201	27.84	0
Icehouse	120	59	0.657	-19.282	33.435	0
Icehouse	120	58	0.66	-13.207	39.149	0
Icehouse	120	57	0.662	-8.011	43.996	0
Icehouse	120	56	0.665	-13.623	38.965	0
Icehouse	120	55	0.667	-13.815	38.882	0
Icehouse	120	54	0.67	-9.346	43.076	0
Icehouse	120	53	0.672	-5.619	46.518	0
Icehouse	120	52	0.675	-2.613	49.263	0
Icehouse	120	51	0.677	-0.106	51.536	0.531
Icehouse	120	50	0.68	2.534	53.441	0.748
Icehouse	120	49	0.682	0.8	51.57	0.22
Icehouse	120	48	0.685	-1.861	49.285	0
Icehouse	120	47	0.687	-14.632	38.082	0
Icehouse	120	46	0.69	-30.128	23.9	0
Icehouse	120	45	0.692	-38.39	16.33	0
Icehouse	120	44	0.695	-45.828	9.508	0
Icehouse	120	43	0.697	-52.87	3.023	0
Icehouse	120	42	0.7	-59.355	-2.968	0
Icehouse	120	41	0.702	-60.613	-4.058	0
Icehouse	120	40	0.705	-56.642	-0.223	0
Icehouse	120	39	0.707	-51.544	4.647	0
Icehouse	120	38	0.71	-48.148	7.92	0
Icehouse	120	37	0.712	-50.941	5.401	0
Icehouse	120	36	0.715	-49.524	6.822	0
Icehouse	120	35	0.717	-47.306	8.99	0
Icehouse	120	34	0.72	-47.919	8.513	0
Icehouse	120	33	0.722	-52.261	4.546	0
Icehouse	120	32	0.725	-50.074	6.688	0
Icehouse	120	31	0.727	-47.325	9.353	0
Icehouse	120	30	0.73	-43.704	12.825	0
Icehouse	120	29	0.732	-39.374	16.947	0
Icehouse	120	28	0.735	-40.452	16.041	0
Icehouse	120	27	0.737	-37.513	18.872	0

Icehouse	120	26	0.74	-37.063	19.385	0
Icehouse	120	25	0.742	-34.241	22.101	0
Icehouse	120	24	0.745	-28.568	27.459	0
Icehouse	120	23	0.747	-23.442	32.288	0
Icehouse	120	22	0.75	-18.919	36.548	0
Icehouse	120	21	0.752	-15.358	39.91	0
Icehouse	120	20	0.755	-12.54	42.578	0
Icehouse	120	19	0.757	-16.122	39.407	0
Icehouse	120	18	0.76	-26.291	30.155	0
Icehouse	120	17	0.762	-24.439	31.958	0
Icehouse	120	16	0.765	-22.248	34.068	0
Icehouse	120	15	0.767	-19.484	36.702	0
Icehouse	120	14	0.77	-15.835	40.144	0
Icehouse	120	13	0.772	-11.441	44.239	0
Icehouse	120	12	0.775	-6.197	49.026	0
Icehouse	120	11	0.777	-4.496	50.632	0
Icehouse	120	10	0.78	-7.113	48.454	0
Icehouse	120	9	0.782	-6.299	49.287	0
Icehouse	120	8	0.785	-0.259	54.619	0.441
Icehouse	120	7	0.787	-7.646	47.954	0
Icehouse	120	6	0.79	-16.498	40.139	0
Icehouse	120	5	0.792	-25.791	31.807	0
Icehouse	120	4	0.795	-35.762	22.781	0
Icehouse	120	3	0.797	-53.37	6.606	0
Icehouse	120	2	0.8	-65.237	-4.867	0
Icehouse	120	1	1.6	-65.237	-5.187	0
Icehouse	140	322	0	-56.301	-12.498	0
Icehouse	140	321	0.002	-54.51	-10.702	0
Icehouse	140	320	0.005	-52.398	-8.607	0
Icehouse	140	319	0.007	-49.62	-5.891	0
Icehouse	140	318	0.01	-46.179	-2.559	0
Icehouse	140	317	0.012	-41.933	1.523	0
Icehouse	140	316	0.015	-36.944	6.3	0
Icehouse	140	315	0.017	-35.344	7.9	0
Icehouse	140	314	0.02	-35.186	8.152	0
Icehouse	140	313	0.022	-35.621	7.85	0
Icehouse	140	312	0.025	-31.411	11.889	0
Icehouse	140	311	0.027	-26.218	16.846	0
Icehouse	140	310	0.03	-21.936	20.949	0
Icehouse	140	309	0.032	-18.445	24.303	0
Icehouse	140	308	0.035	-15.703	26.965	0
Icehouse	140	307	0.037	-20.746	22.375	0
Icehouse	140	306	0.04	-20.457	22.749	0
Icehouse	140	305	0.042	-18.606	24.577	0
Icehouse	140	304	0.045	-22.567	20.992	0
Icehouse	140	303	0.047	-22.472	21.188	0
Icehouse	140	302	0.05	-18.983	24.54	0
Icehouse	140	301	0.052	-14.689	28.643	0
Icehouse	140	300	0.055	-12.077	31.169	0
Icehouse	140	299	0.057	-12.679	30.722	0
Icehouse	140	298	0.06	-6.607	36.362	0
Icehouse	140	297	0.062	-0.288	42.007	0.424
Icehouse	140	296	0.065	6.571	47.371	2.207
Icehouse	140	295	0.067	7.481	47.711	0
Icehouse	140	294	0.07	8.649	48.256	0
Icehouse	140	293	0.072	13.641	51.642	0.69
Icehouse	140	292	0.075	10.696	49.171	2.069

Icehouse	140	291	0.077	10	48.326	0
Icehouse	140	290	0.08	13.563	50.189	1.962
Icehouse	140	289	0.082	16.488	52.052	0
Icehouse	140	288	0.085	19.806	54.2	0
Icehouse	140	287	0.087	7.988	45.219	0.723
Icehouse	140	286	0.09	-5.621	33.53	0
Icehouse	140	285	0.092	-20.136	20.284	0
Icehouse	140	284	0.095	-35.318	6.285	0
Icehouse	140	283	0.097	-42.593	-0.387	0
Icehouse	140	282	0.1	-49.132	-6.379	0
Icehouse	140	281	0.102	-43.26	-0.799	0
Icehouse	140	280	0.105	-37.565	4.605	0
Icehouse	140	279	0.107	-32.273	9.634	0
Icehouse	140	278	0.11	-27.892	13.806	0
Icehouse	140	277	0.112	-30.716	11.283	0
Icehouse	140	276	0.115	-39.032	3.641	0
Icehouse	140	275	0.117	-36.868	5.759	0
Icehouse	140	274	0.12	-34.934	7.661	0
Icehouse	140	273	0.122	-33.007	9.562	0
Icehouse	140	272	0.125	-30.764	11.748	0
Icehouse	140	271	0.127	-27.847	14.559	0
Icehouse	140	270	0.13	-24.268	17.986	0
Icehouse	140	269	0.132	-27.06	15.493	0
Icehouse	140	268	0.135	-24.62	17.874	0
Icehouse	140	267	0.137	-25.3	17.354	0
Icehouse	140	266	0.14	-20.54	21.869	0
Icehouse	140	265	0.142	-14.486	27.585	0
Icehouse	140	264	0.145	-8.726	33.02	0
Icehouse	140	263	0.147	-3.197	38.079	0
Icehouse	140	262	0.15	-1.295	39.884	0
Icehouse	140	261	0.152	-4.2	37.496	0
Icehouse	140	260	0.155	-1.186	40.254	0
Icehouse	140	259	0.157	1.337	42.544	0.749
Icehouse	140	258	0.16	-2.689	38.67	0
Icehouse	140	257	0.162	-3.443	38.155	0
Icehouse	140	256	0.165	-1.043	40.361	0
Icehouse	140	255	0.167	2.135	43.189	0.748
Icehouse	140	254	0.17	0.449	41.345	0.75
Icehouse	140	253	0.172	2.495	42.588	0
Icehouse	140	252	0.175	8.431	47.473	0.751
Icehouse	140	251	0.177	16.375	53.074	1.201
Icehouse	140	250	0.18	24.702	58.794	0
Icehouse	140	249	0.182	26.6	59.956	0.983
Icehouse	140	248	0.185	29.33	61.717	0
Icehouse	140	247	0.187	18.63	54.002	0.63
Icehouse	140	246	0.19	-0.04	39.363	0.571
Icehouse	140	245	0.192	-9.159	31.083	0
Icehouse	140	244	0.195	-19.067	22.164	0
Icehouse	140	243	0.197	-29.425	12.71	0
Icehouse	140	242	0.2	-40.419	2.642	0
Icehouse	140	241	0.202	-38.567	4.458	0
Icehouse	140	240	0.205	-39.898	3.33	0
Icehouse	140	239	0.207	-46.35	-2.545	0
Icehouse	140	238	0.21	-47.587	-3.588	0
Icehouse	140	237	0.212	-43.201	0.582	0
Icehouse	140	236	0.215	-38.065	5.443	0
Icehouse	140	235	0.217	-32.346	10.836	0

Icehouse	140	234	0.22	-26.104	16.706	0
Icehouse	140	233	0.222	-20.044	22.396	0
Icehouse	140	232	0.225	-14.273	27.799	0
Icehouse	140	231	0.227	-18.493	24.035	0
Icehouse	140	230	0.23	-22.381	20.556	0
Icehouse	140	229	0.232	-18.845	23.918	0
Icehouse	140	228	0.235	-16.003	26.627	0
Icehouse	140	227	0.237	-13.752	28.797	0
Icehouse	140	226	0.24	-11.754	30.728	0
Icehouse	140	225	0.242	-9.825	32.588	0
Icehouse	140	224	0.245	-10.124	32.44	0
Icehouse	140	223	0.247	-13.86	29.15	0
Icehouse	140	222	0.25	-11.305	31.584	0
Icehouse	140	221	0.252	-13.412	29.776	0
Icehouse	140	220	0.255	-9.659	33.292	0
Icehouse	140	219	0.257	-3.778	38.623	0
Icehouse	140	218	0.26	2.923	44.427	0
Icehouse	140	217	0.262	9.9	50.05	1.866
Icehouse	140	216	0.265	10.999	50.214	0
Icehouse	140	215	0.267	13.977	52.102	4.767
Icehouse	140	214	0.27	19.993	56.191	0
Icehouse	140	213	0.272	24.998	59.527	0
Icehouse	140	212	0.275	20.931	56.462	0
Icehouse	140	211	0.277	20.71	56.086	0
Icehouse	140	210	0.28	23.533	57.877	0
Icehouse	140	209	0.282	25.069	58.773	0
Icehouse	140	208	0.285	18.157	53.668	0
Icehouse	140	207	0.287	6	44.411	0.659
Icehouse	140	206	0.29	-3.719	36.028	0
Icehouse	140	205	0.292	-12.409	28.389	0
Icehouse	140	204	0.295	-20.154	21.439	0
Icehouse	140	203	0.297	-32.587	10.176	0
Icehouse	140	202	0.3	-43.276	0.458	0
Icehouse	140	201	0.302	-41.592	2.11	0
Icehouse	140	200	0.305	-40.851	2.897	0
Icehouse	140	199	0.307	-35.665	7.764	0
Icehouse	140	198	0.31	-31.407	11.773	0
Icehouse	140	197	0.312	-27.96	15.028	0
Icehouse	140	196	0.315	-25.279	17.584	0
Icehouse	140	195	0.317	-23.123	19.658	0
Icehouse	140	194	0.32	-25.072	17.976	0
Icehouse	140	193	0.322	-35.882	8.187	0
Icehouse	140	192	0.325	-35.567	8.576	0
Icehouse	140	191	0.327	-32.855	11.165	0
Icehouse	140	190	0.33	-29.464	14.369	0
Icehouse	140	189	0.332	-25.257	18.318	0
Icehouse	140	188	0.335	-20.289	22.956	0
Icehouse	140	187	0.337	-14.541	28.3	0
Icehouse	140	186	0.34	-11.245	31.405	0
Icehouse	140	185	0.342	-14.157	28.858	0
Icehouse	140	184	0.345	-15.078	28.122	0
Icehouse	140	183	0.347	-10.111	32.742	0
Icehouse	140	182	0.35	-5.845	36.682	0
Icehouse	140	181	0.352	-2.313	39.871	0
Icehouse	140	180	0.355	0.451	42.361	0.75
Icehouse	140	179	0.357	3.443	44.369	0.745
Icehouse	140	178	0.36	-0.357	40.774	0.382

Icehouse	140	177	0.362	-1.742	39.42	0
Icehouse	140	176	0.365	-0.692	40.446	0.183
Icehouse	140	175	0.367	-4.839	36.864	0
Icehouse	140	174	0.37	-2.766	38.776	0
Icehouse	140	173	0.372	1.676	42.67	1.472
Icehouse	140	172	0.375	7.931	47.256	0
Icehouse	140	171	0.377	14.172	51.591	2.001
Icehouse	140	170	0.38	12.225	49.847	0
Icehouse	140	169	0.382	19.916	55.158	0
Icehouse	140	168	0.385	27.681	60.459	0.496
Icehouse	140	167	0.387	18.019	53.39	0.638
Icehouse	140	166	0.39	0.8	39.878	0.711
Icehouse	140	165	0.392	-11.25	28.881	0
Icehouse	140	164	0.395	-21.951	19.367	0
Icehouse	140	163	0.397	-37.028	5.773	0
Icehouse	140	162	0.4	-52.938	-8.672	0
Icehouse	140	161	0.402	-51.517	-7.256	0
Icehouse	140	160	0.405	-49.491	-5.29	0
Icehouse	140	159	0.407	-46.943	-2.85	0
Icehouse	140	158	0.41	-43.634	0.282	0
Icehouse	140	157	0.412	-44.426	-0.337	0
Icehouse	140	156	0.415	-43.447	0.663	0
Icehouse	140	155	0.417	-45.298	-0.925	0
Icehouse	140	154	0.42	-41.145	2.975	0
Icehouse	140	153	0.422	-35.31	8.401	0
Icehouse	140	152	0.425	-29.597	13.708	0
Icehouse	140	151	0.427	-24.633	18.316	0
Icehouse	140	150	0.43	-20.41	22.235	0
Icehouse	140	149	0.432	-17.005	25.407	0
Icehouse	140	148	0.435	-20.811	22.084	0
Icehouse	140	147	0.437	-30.506	13.418	0
Icehouse	140	146	0.44	-28.804	15.062	0
Icehouse	140	145	0.442	-27.106	16.703	0
Icehouse	140	144	0.445	-25.02	18.696	0
Icehouse	140	143	0.447	-22.407	21.165	0
Icehouse	140	142	0.45	-19.015	24.328	0
Icehouse	140	141	0.452	-14.776	28.243	0
Icehouse	140	140	0.455	-15.489	27.704	0
Icehouse	140	139	0.457	-15.548	27.758	0
Icehouse	140	138	0.46	-16.17	27.301	0
Icehouse	140	137	0.462	-10.324	32.648	0
Icehouse	140	136	0.465	-4.411	38.006	0
Icehouse	140	135	0.467	0.894	42.666	0
Icehouse	140	134	0.47	5.542	46.64	5.314
Icehouse	140	133	0.472	9.2	49.075	0
Icehouse	140	132	0.475	3.759	44.289	0
Icehouse	140	131	0.477	6.715	46.237	0
Icehouse	140	130	0.48	8.189	47.003	0
Icehouse	140	129	0.482	3.424	42.789	0
Icehouse	140	128	0.485	4.814	43.472	0
Icehouse	140	127	0.487	-5.359	34.417	0
Icehouse	140	126	0.49	-14.988	25.978	0
Icehouse	140	125	0.492	-27.763	14.618	0
Icehouse	140	124	0.495	-40.909	2.857	0
Icehouse	140	123	0.497	-48.123	-3.571	0
Icehouse	140	122	0.5	-54.949	-9.703	0
Icehouse	140	121	0.502	-49.311	-4.435	0

Icehouse	140	120	0.505	-49.827	-4.796	0
Icehouse	140	119	0.507	-47.413	-2.492	0
Icehouse	140	118	0.51	-43.058	1.563	0
Icehouse	140	117	0.512	-46.908	-1.817	0
Icehouse	140	116	0.515	-45.756	-0.665	0
Icehouse	140	115	0.517	-43.583	1.41	0
Icehouse	140	114	0.52	-41.724	3.199	0
Icehouse	140	113	0.522	-39.864	4.986	0
Icehouse	140	112	0.525	-37.608	7.13	0
Icehouse	140	111	0.527	-39.881	5.184	0
Icehouse	140	110	0.53	-42.924	2.536	0
Icehouse	140	109	0.532	-45.114	0.658	0
Icehouse	140	108	0.535	-39.783	5.59	0
Icehouse	140	107	0.537	-34.003	10.915	0
Icehouse	140	106	0.54	-27.888	16.536	0
Icehouse	140	105	0.542	-21.748	22.168	0
Icehouse	140	104	0.545	-15.698	27.692	0
Icehouse	140	103	0.547	-10.401	32.512	0
Icehouse	140	102	0.55	-15.447	28.121	0
Icehouse	140	101	0.552	-20.663	23.565	0
Icehouse	140	100	0.555	-17.677	26.34	0
Icehouse	140	99	0.557	-15.385	28.491	0
Icehouse	140	98	0.56	-13.406	30.356	0
Icehouse	140	97	0.562	-11.43	32.218	0
Icehouse	140	96	0.565	-9.045	34.441	0
Icehouse	140	95	0.567	-7.173	36.207	0
Icehouse	140	94	0.57	-11.535	32.427	0
Icehouse	140	93	0.572	-9.518	34.321	0
Icehouse	140	92	0.575	-10.872	33.214	0
Icehouse	140	91	0.577	-4.924	38.589	0
Icehouse	140	90	0.58	1.6	44.275	1.241
Icehouse	140	89	0.582	8.926	49.97	0
Icehouse	140	88	0.585	16.855	55.556	0.653
Icehouse	140	87	0.587	3.6	44.962	0.124
Icehouse	140	86	0.59	-10.249	33.071	0
Icehouse	140	85	0.592	-19.646	24.84	0
Icehouse	140	84	0.595	-31.336	14.554	0
Icehouse	140	83	0.597	-48.573	-0.839	0
Icehouse	140	82	0.6	-60.82	-11.847	0
Icehouse	140	81	0.602	-59.068	-10.137	0
Icehouse	140	80	0.605	-56.693	-7.866	0
Icehouse	140	79	0.607	-61.193	-11.858	0
Icehouse	140	78	0.61	-59.205	-9.933	0
Icehouse	140	77	0.612	-54.729	-5.752	0
Icehouse	140	76	0.615	-49.459	-0.874	0
Icehouse	140	75	0.617	-43.373	4.722	0
Icehouse	140	74	0.62	-43.529	4.685	0
Icehouse	140	73	0.622	-40.038	7.93	0
Icehouse	140	72	0.625	-36.58	11.141	0
Icehouse	140	71	0.627	-37.734	10.207	0
Icehouse	140	70	0.63	-33.157	14.417	0
Icehouse	140	69	0.632	-29.397	17.877	0
Icehouse	140	68	0.635	-26.41	20.642	0
Icehouse	140	67	0.637	-23.948	22.936	0
Icehouse	140	66	0.64	-21.913	24.862	0
Icehouse	140	65	0.642	-24.956	22.257	0
Icehouse	140	64	0.645	-32.537	15.616	0

Icehouse	140	63	0.647	-32.967	15.339	0
Icehouse	140	62	0.65	-29.219	18.776	0
Icehouse	140	61	0.652	-24.629	22.961	0
Icehouse	140	60	0.655	-19.25	27.84	0
Icehouse	140	59	0.657	-13.056	33.435	0
Icehouse	140	58	0.66	-6.694	39.149	0
Icehouse	140	57	0.662	-1.243	43.996	0
Icehouse	140	56	0.665	-7.153	38.965	0
Icehouse	140	55	0.667	-7.363	38.882	0
Icehouse	140	54	0.67	-2.677	43.076	0
Icehouse	140	53	0.672	1.238	46.518	0
Icehouse	140	52	0.675	4.4	49.263	0.75
Icehouse	140	51	0.677	7.057	51.536	0
Icehouse	140	50	0.68	10	53.441	1.417
Icehouse	140	49	0.682	8.8	51.57	0.796
Icehouse	140	48	0.685	6.543	49.285	0
Icehouse	140	47	0.687	-6.938	38.082	0
Icehouse	140	46	0.69	-23.214	23.9	0
Icehouse	140	45	0.692	-31.885	16.33	0
Icehouse	140	44	0.695	-39.688	9.508	0
Icehouse	140	43	0.697	-47.069	3.023	0
Icehouse	140	42	0.7	-53.86	-2.968	0
Icehouse	140	41	0.702	-55.186	-4.058	0
Icehouse	140	40	0.705	-51.052	-0.223	0
Icehouse	140	39	0.707	-45.733	4.647	0
Icehouse	140	38	0.71	-42.191	7.92	0
Icehouse	140	37	0.712	-45.124	5.401	0
Icehouse	140	36	0.715	-43.653	6.822	0
Icehouse	140	35	0.717	-41.343	8.99	0
Icehouse	140	34	0.72	-41.995	8.513	0
Icehouse	140	33	0.722	-46.549	4.546	0
Icehouse	140	32	0.725	-44.272	6.688	0
Icehouse	140	31	0.727	-41.407	9.353	0
Icehouse	140	30	0.73	-37.625	12.825	0
Icehouse	140	29	0.732	-33.1	16.947	0
Icehouse	140	28	0.735	-34.24	16.041	0
Icehouse	140	27	0.737	-31.172	18.872	0
Icehouse	140	26	0.74	-30.71	19.385	0
Icehouse	140	25	0.742	-27.762	22.101	0
Icehouse	140	24	0.745	-21.825	27.459	0
Icehouse	140	23	0.747	-16.457	32.288	0
Icehouse	140	22	0.75	-11.716	36.548	0
Icehouse	140	21	0.752	-7.984	39.91	0
Icehouse	140	20	0.755	-5.031	42.578	0
Icehouse	140	19	0.757	-8.808	39.407	0
Icehouse	140	18	0.76	-19.497	30.155	0
Icehouse	140	17	0.762	-17.562	31.958	0
Icehouse	140	16	0.765	-15.271	34.068	0
Icehouse	140	15	0.767	-12.377	36.702	0
Icehouse	140	14	0.77	-8.552	40.144	0
Icehouse	140	13	0.772	-3.94	44.239	0
Icehouse	140	12	0.775	1.577	49.026	0
Icehouse	140	11	0.777	3.358	50.632	0
Icehouse	140	10	0.78	0.582	48.454	0
Icehouse	140	9	0.782	1.428	49.287	0
Icehouse	140	8	0.785	7.789	54.619	0
Icehouse	140	7	0.787	-0.487	47.954	0

Icehouse	140	6	0.79	-9.835	40.139	0
Icehouse	140	5	0.792	-19.629	31.807	0
Icehouse	140	4	0.795	-30.125	22.781	0
Icehouse	140	3	0.797	-48.619	6.606	0
Icehouse	140	2	0.8	-60.487	-4.867	0
Icehouse	140	1	1.6	-60.487	-5.187	0
Icehouse	160	322	0	-51.259	-12.498	0
Icehouse	160	321	0.002	-49.417	-10.702	0
Icehouse	160	320	0.005	-47.238	-8.607	0
Icehouse	160	319	0.007	-44.363	-5.891	0
Icehouse	160	318	0.01	-40.792	-2.559	0
Icehouse	160	317	0.012	-36.377	1.523	0
Icehouse	160	316	0.015	-31.186	6.3	0
Icehouse	160	315	0.017	-29.533	7.9	0
Icehouse	160	314	0.02	-29.386	8.152	0
Icehouse	160	313	0.022	-29.857	7.85	0
Icehouse	160	312	0.025	-25.476	11.889	0
Icehouse	160	311	0.027	-20.067	16.846	0
Icehouse	160	310	0.03	-15.608	20.949	0
Icehouse	160	309	0.032	-11.974	24.303	0
Icehouse	160	308	0.035	-9.124	26.965	0
Icehouse	160	307	0.037	-14.414	22.375	0
Icehouse	160	306	0.04	-14.13	22.749	0
Icehouse	160	305	0.042	-12.21	24.577	0
Icehouse	160	304	0.045	-16.368	20.992	0
Icehouse	160	303	0.047	-16.285	21.188	0
Icehouse	160	302	0.05	-12.653	24.54	0
Icehouse	160	301	0.052	-8.178	28.643	0
Icehouse	160	300	0.055	-5.461	31.169	0
Icehouse	160	299	0.057	-6.109	30.722	0
Icehouse	160	298	0.06	0.249	36.362	0
Icehouse	160	297	0.062	6.89	42.007	0.73
Icehouse	160	296	0.065	14.343	47.371	5.058
Icehouse	160	295	0.067	15.205	47.711	0
Icehouse	160	294	0.07	16.334	48.256	0
Icehouse	160	293	0.072	21.362	51.642	0
Icehouse	160	292	0.075	18.231	49.171	0
Icehouse	160	291	0.077	17.413	48.326	0
Icehouse	160	290	0.08	20.335	50.189	0
Icehouse	160	289	0.082	23.238	52.052	0
Icehouse	160	288	0.085	26.524	54.2	0.514
Icehouse	160	287	0.087	14.295	45.219	0.683
Icehouse	160	286	0.09	-0.06	33.53	0
Icehouse	160	285	0.092	-15.293	20.284	0
Icehouse	160	284	0.095	-31.196	6.285	0
Icehouse	160	283	0.097	-38.823	-0.387	0
Icehouse	160	282	0.1	-45.677	-6.379	0
Icehouse	160	281	0.102	-39.557	-0.799	0
Icehouse	160	280	0.105	-33.616	4.605	0
Icehouse	160	279	0.107	-28.096	9.634	0
Icehouse	160	278	0.11	-23.527	13.806	0
Icehouse	160	277	0.112	-26.497	11.283	0
Icehouse	160	276	0.115	-35.21	3.641	0
Icehouse	160	275	0.117	-32.962	5.759	0
Icehouse	160	274	0.12	-30.954	7.661	0
Icehouse	160	273	0.122	-28.955	9.562	0
Icehouse	160	272	0.125	-26.622	11.748	0

Icehouse	160	271	0.127	-23.584	14.559	0
Icehouse	160	270	0.13	-19.853	17.986	0
Icehouse	160	269	0.132	-22.788	15.493	0
Icehouse	160	268	0.135	-20.252	17.874	0
Icehouse	160	267	0.137	-20.979	17.354	0
Icehouse	160	266	0.14	-16.01	21.869	0
Icehouse	160	265	0.142	-9.686	27.585	0
Icehouse	160	264	0.145	-3.668	33.02	0
Icehouse	160	263	0.147	2.134	38.079	0
Icehouse	160	262	0.15	4.122	39.884	0.743
Icehouse	160	261	0.152	1.781	37.496	0
Icehouse	160	260	0.155	4.943	40.254	1.628
Icehouse	160	259	0.157	8.328	42.544	0
Icehouse	160	258	0.16	4	38.67	0
Icehouse	160	257	0.162	3.352	38.155	0
Icehouse	160	256	0.165	5.866	40.361	0
Icehouse	160	255	0.167	9.2	43.189	1.629
Icehouse	160	254	0.17	7.6	41.345	0
Icehouse	160	253	0.172	9.606	42.588	1.592
Icehouse	160	252	0.175	17.386	47.473	0.646
Icehouse	160	251	0.177	25.446	53.074	1.642
Icehouse	160	250	0.18	33.779	58.794	0
Icehouse	160	249	0.182	35.564	59.956	0
Icehouse	160	248	0.185	38.189	61.717	0
Icehouse	160	247	0.187	27.26	54.002	0.503
Icehouse	160	246	0.19	7.792	39.363	0
Icehouse	160	245	0.192	-2.438	31.083	0
Icehouse	160	244	0.195	-12.86	22.164	0
Icehouse	160	243	0.197	-23.728	12.71	0
Icehouse	160	242	0.2	-35.258	2.642	0
Icehouse	160	241	0.202	-33.332	4.458	0
Icehouse	160	240	0.205	-34.742	3.33	0
Icehouse	160	239	0.207	-41.512	-2.545	0
Icehouse	160	238	0.21	-42.823	-3.588	0
Icehouse	160	237	0.212	-38.247	0.582	0
Icehouse	160	236	0.215	-32.883	5.443	0
Icehouse	160	235	0.217	-26.907	10.836	0
Icehouse	160	234	0.22	-20.381	16.706	0
Icehouse	160	233	0.222	-14.043	22.396	0
Icehouse	160	232	0.225	-8.002	27.799	0
Icehouse	160	231	0.227	-12.444	24.035	0
Icehouse	160	230	0.23	-16.531	20.556	0
Icehouse	160	229	0.232	-12.838	23.918	0
Icehouse	160	228	0.235	-9.869	26.627	0
Icehouse	160	227	0.237	-7.52	28.797	0
Icehouse	160	226	0.24	-5.436	30.728	0
Icehouse	160	225	0.242	-3.424	32.588	0
Icehouse	160	224	0.245	-3.755	32.44	0
Icehouse	160	223	0.247	-7.693	29.15	0
Icehouse	160	222	0.25	-5.023	31.584	0
Icehouse	160	221	0.252	-7.251	29.776	0
Icehouse	160	220	0.255	-3.32	33.292	0
Icehouse	160	219	0.257	2.857	38.623	0
Icehouse	160	218	0.26	9.901	44.427	3.197
Icehouse	160	217	0.262	20.351	50.05	1.76
Icehouse	160	216	0.265	20.91	50.214	0
Icehouse	160	215	0.267	23.842	52.102	0

Icehouse	160	214	0.27	29.851	56.191	3.068
Icehouse	160	213	0.272	34.778	59.527	0
Icehouse	160	212	0.275	30.528	56.462	0
Icehouse	160	211	0.277	30.166	56.086	0
Icehouse	160	210	0.28	32.892	57.877	0
Icehouse	160	209	0.282	34.312	58.773	0
Icehouse	160	208	0.285	27.182	53.668	0
Icehouse	160	207	0.287	14.578	44.411	0.68
Icehouse	160	206	0.29	4.358	36.028	0
Icehouse	160	205	0.292	-4.804	28.389	0
Icehouse	160	204	0.295	-12.954	21.439	0
Icehouse	160	203	0.297	-26.019	10.176	0
Icehouse	160	202	0.3	-37.245	0.458	0
Icehouse	160	201	0.302	-35.493	2.11	0
Icehouse	160	200	0.305	-34.731	2.897	0
Icehouse	160	199	0.307	-29.305	7.764	0
Icehouse	160	198	0.31	-24.851	11.773	0
Icehouse	160	197	0.312	-21.246	15.028	0
Icehouse	160	196	0.315	-18.444	17.584	0
Icehouse	160	195	0.317	-16.193	19.658	0
Icehouse	160	194	0.32	-18.252	17.976	0
Icehouse	160	193	0.322	-29.611	8.187	0
Icehouse	160	192	0.325	-29.293	8.576	0
Icehouse	160	191	0.327	-26.461	11.165	0
Icehouse	160	190	0.33	-22.913	14.369	0
Icehouse	160	189	0.332	-18.509	18.318	0
Icehouse	160	188	0.335	-13.305	22.956	0
Icehouse	160	187	0.337	-7.279	28.3	0
Icehouse	160	186	0.34	-3.829	31.405	0
Icehouse	160	185	0.342	-6.901	28.858	0
Icehouse	160	184	0.345	-7.88	28.122	0
Icehouse	160	183	0.347	-2.673	32.742	0
Icehouse	160	182	0.35	1.803	36.682	0
Icehouse	160	181	0.352	5.51	39.871	0
Icehouse	160	180	0.355	8.412	42.361	0.72
Icehouse	160	179	0.357	11.478	44.369	0.858
Icehouse	160	178	0.36	7.554	40.774	0.774
Icehouse	160	177	0.362	6.4	39.42	0
Icehouse	160	176	0.365	7.54	40.446	0
Icehouse	160	175	0.367	2.96	36.864	0
Icehouse	160	174	0.37	5.131	38.776	0
Icehouse	160	173	0.372	9.801	42.67	0.931
Icehouse	160	172	0.375	16.488	47.256	1.828
Icehouse	160	171	0.377	22.839	51.591	0
Icehouse	160	170	0.38	20.723	49.847	0
Icehouse	160	169	0.382	28.48	55.158	0.848
Icehouse	160	168	0.385	36.229	60.459	0
Icehouse	160	167	0.387	26.313	53.39	0.517
Icehouse	160	166	0.39	8.366	39.878	0
Icehouse	160	165	0.392	-5.092	28.881	0
Icehouse	160	164	0.395	-16.368	19.367	0
Icehouse	160	163	0.397	-32.225	5.773	0
Icehouse	160	162	0.4	-48.943	-8.672	0
Icehouse	160	161	0.402	-47.471	-7.256	0
Icehouse	160	160	0.405	-45.362	-5.29	0
Icehouse	160	159	0.407	-42.704	-2.85	0
Icehouse	160	158	0.41	-39.246	0.282	0

Icehouse	160	157	0.412	-40.091	-0.337	0
Icehouse	160	156	0.415	-39.078	0.663	0
Icehouse	160	155	0.417	-41.035	-0.925	0
Icehouse	160	154	0.42	-36.69	2.975	0
Icehouse	160	153	0.422	-30.574	8.401	0
Icehouse	160	152	0.425	-24.585	13.708	0
Icehouse	160	151	0.427	-19.379	18.316	0
Icehouse	160	150	0.43	-14.95	22.235	0
Icehouse	160	149	0.432	-11.379	25.407	0
Icehouse	160	148	0.435	-15.395	22.084	0
Icehouse	160	147	0.437	-25.602	13.418	0
Icehouse	160	146	0.44	-23.824	15.062	0
Icehouse	160	145	0.442	-22.05	16.703	0
Icehouse	160	144	0.445	-19.868	18.696	0
Icehouse	160	143	0.447	-17.132	21.165	0
Icehouse	160	142	0.45	-13.574	24.328	0
Icehouse	160	141	0.452	-9.125	28.243	0
Icehouse	160	140	0.455	-9.885	27.704	0
Icehouse	160	139	0.457	-9.959	27.758	0
Icehouse	160	138	0.46	-10.623	27.301	0
Icehouse	160	137	0.462	-4.481	32.648	0
Icehouse	160	136	0.465	1.739	38.006	0
Icehouse	160	135	0.467	7.315	42.666	0
Icehouse	160	134	0.47	12.192	46.64	1.368
Icehouse	160	133	0.472	15.929	49.075	0
Icehouse	160	132	0.475	10	44.289	3.456
Icehouse	160	131	0.477	15.77	46.237	1.314
Icehouse	160	130	0.48	17.213	47.003	0
Icehouse	160	129	0.482	12.125	42.789	0.705
Icehouse	160	128	0.485	13.501	43.472	0.691
Icehouse	160	127	0.487	2.696	34.417	0
Icehouse	160	126	0.49	-7.462	25.978	0
Icehouse	160	125	0.492	-20.92	14.618	0
Icehouse	160	124	0.495	-34.762	2.857	0
Icehouse	160	123	0.497	-42.362	-3.571	0
Icehouse	160	122	0.5	-49.544	-9.703	0
Icehouse	160	121	0.502	-43.643	-4.435	0
Icehouse	160	120	0.505	-44.2	-4.796	0
Icehouse	160	119	0.507	-41.68	-2.492	0
Icehouse	160	118	0.51	-37.115	1.563	0
Icehouse	160	117	0.512	-41.177	-1.817	0
Icehouse	160	116	0.515	-39.98	-0.665	0
Icehouse	160	115	0.517	-37.709	1.41	0
Icehouse	160	114	0.52	-35.768	3.199	0
Icehouse	160	113	0.522	-33.824	4.986	0
Icehouse	160	112	0.525	-31.463	7.13	0
Icehouse	160	111	0.527	-33.867	5.184	0
Icehouse	160	110	0.53	-37.078	2.536	0
Icehouse	160	109	0.532	-39.393	0.658	0
Icehouse	160	108	0.535	-33.8	5.59	0
Icehouse	160	107	0.537	-27.732	10.915	0
Icehouse	160	106	0.54	-21.31	16.536	0
Icehouse	160	105	0.542	-14.86	22.168	0
Icehouse	160	104	0.545	-8.5	27.692	0
Icehouse	160	103	0.547	-2.929	32.512	0
Icehouse	160	102	0.55	-8.255	28.121	0
Icehouse	160	101	0.552	-13.757	23.565	0

Icehouse	160	100	0.555	-10.623	26.34	0
Icehouse	160	99	0.557	-8.217	28.491	0
Icehouse	160	98	0.56	-6.142	30.356	0
Icehouse	160	97	0.562	-4.07	32.218	0
Icehouse	160	96	0.565	-1.566	34.441	0
Icehouse	160	95	0.567	0.398	36.207	0
Icehouse	160	94	0.57	-4.206	32.427	0
Icehouse	160	93	0.572	-2.089	34.321	0
Icehouse	160	92	0.575	-3.524	33.214	0
Icehouse	160	91	0.577	2.735	38.589	0
Icehouse	160	90	0.58	9.6	44.275	0.657
Icehouse	160	89	0.582	17.417	49.97	1.176
Icehouse	160	88	0.585	25.476	55.556	0
Icehouse	160	87	0.587	11.582	44.962	3.558
Icehouse	160	86	0.59	0.41	33.071	0.41
Icehouse	160	85	0.592	-9.093	24.84	0
Icehouse	160	84	0.595	-21.42	14.554	0
Icehouse	160	83	0.597	-39.573	-0.839	0
Icehouse	160	82	0.6	-52.461	-11.847	0
Icehouse	160	81	0.602	-50.638	-10.137	0
Icehouse	160	80	0.605	-48.159	-7.866	0
Icehouse	160	79	0.607	-52.902	-11.858	0
Icehouse	160	78	0.61	-50.831	-9.933	0
Icehouse	160	77	0.612	-46.142	-5.752	0
Icehouse	160	76	0.615	-40.614	-0.874	0
Icehouse	160	75	0.617	-34.223	4.722	0
Icehouse	160	74	0.62	-34.398	4.685	0
Icehouse	160	73	0.622	-30.734	7.93	0
Icehouse	160	72	0.625	-27.105	11.141	0
Icehouse	160	71	0.627	-28.329	10.207	0
Icehouse	160	70	0.63	-23.521	14.417	0
Icehouse	160	69	0.632	-19.569	17.877	0
Icehouse	160	68	0.635	-16.432	20.642	0
Icehouse	160	67	0.637	-13.848	22.936	0
Icehouse	160	66	0.64	-11.714	24.862	0
Icehouse	160	65	0.642	-14.927	22.257	0
Icehouse	160	64	0.645	-22.923	15.616	0
Icehouse	160	63	0.647	-23.385	15.339	0
Icehouse	160	62	0.65	-19.445	18.776	0
Icehouse	160	61	0.652	-14.617	22.961	0
Icehouse	160	60	0.655	-8.957	27.84	0
Icehouse	160	59	0.657	-2.438	33.435	0
Icehouse	160	58	0.66	4.261	39.149	0
Icehouse	160	57	0.662	10	43.996	8.086
Icehouse	160	56	0.665	11.847	38.965	11.467
Icehouse	160	55	0.667	17.482	38.882	0
Icehouse	160	54	0.67	28.019	43.076	3.11
Icehouse	160	53	0.672	35.246	46.518	0.704
Icehouse	160	52	0.675	38.941	49.263	0
Icehouse	160	51	0.677	42.027	51.536	1.135
Icehouse	160	50	0.68	44.623	53.441	0
Icehouse	160	49	0.682	42.156	51.57	0
Icehouse	160	48	0.685	39.242	49.285	0
Icehouse	160	47	0.687	25.368	38.082	0.555
Icehouse	160	46	0.69	8.755	23.9	0
Icehouse	160	45	0.692	-0.392	16.33	0
Icehouse	160	44	0.695	-8.625	9.508	0

Icehouse	160	43	0.697	-16.409	3.023	0
Icehouse	160	42	0.7	-23.571	-2.968	0
Icehouse	160	41	0.702	-24.978	-4.058	0
Icehouse	160	40	0.705	-20.641	-0.223	0
Icehouse	160	39	0.707	-15.051	4.647	0
Icehouse	160	38	0.71	-11.333	7.92	0
Icehouse	160	37	0.712	-14.431	5.401	0
Icehouse	160	36	0.715	-12.892	6.822	0
Icehouse	160	35	0.717	-10.469	8.99	0
Icehouse	160	34	0.72	-11.166	8.513	0
Icehouse	160	33	0.722	-15.971	4.546	0
Icehouse	160	32	0.725	-13.584	6.688	0
Icehouse	160	31	0.727	-10.576	9.353	0
Icehouse	160	30	0.73	-6.601	12.825	0
Icehouse	160	29	0.732	-1.841	16.947	0
Icehouse	160	28	0.735	-3.051	16.041	0
Icehouse	160	27	0.737	0.173	18.872	0
Icehouse	160	26	0.74	0.651	19.385	0
Icehouse	160	25	0.742	3.75	22.101	0
Icehouse	160	24	0.745	9.999	27.459	2.764
Icehouse	160	23	0.747	18.416	32.288	4.148
Icehouse	160	22	0.75	27.555	36.548	0.934
Icehouse	160	21	0.752	32.418	39.91	1.232
Icehouse	160	20	0.755	35.965	42.578	0
Icehouse	160	19	0.757	32.343	39.407	0
Icehouse	160	18	0.76	21.488	30.155	1.101
Icehouse	160	17	0.762	24.621	31.958	1.507
Icehouse	160	16	0.765	27.597	34.068	0
Icehouse	160	15	0.767	31.139	36.702	0
Icehouse	160	14	0.77	35.607	40.144	2.701
Icehouse	160	13	0.772	40.836	44.239	0
Icehouse	160	12	0.775	46.938	49.026	0
Icehouse	160	11	0.777	49.025	50.632	0
Icehouse	160	10	0.78	46.299	48.454	0
Icehouse	160	9	0.782	47.411	49.287	0
Icehouse	160	8	0.785	54.294	54.619	0
Icehouse	160	7	0.787	46.166	47.954	0
Icehouse	160	6	0.79	36.537	40.139	0
Icehouse	160	5	0.792	26.555	31.807	0.514
Icehouse	160	4	0.795	15.984	22.781	1.72
Icehouse	160	3	0.797	-1.819	6.606	0
Icehouse	160	2	0.8	-13.687	-4.867	0
Icehouse	160	1	1.6	-13.687	-5.187	0
Depth Invariant Icehouse	120	322	0	-52.949	-12.498	0
Depth Invariant Icehouse	120	321	0.002	-51.227	-10.702	0
Depth Invariant Icehouse	120	320	0.005	-49.206	-8.607	0
Depth Invariant Icehouse	120	319	0.007	-46.565	-5.891	0
Depth Invariant Icehouse	120	318	0.01	-43.307	-2.559	0
Depth Invariant Icehouse	120	317	0.012	-39.299	1.523	0
Depth Invariant Icehouse	120	316	0.015	-34.596	6.3	0
Depth Invariant Icehouse	120	315	0.017	-33.071	7.9	0
Depth Invariant Icehouse	120	314	0.02	-32.894	8.152	0
Depth Invariant Icehouse	120	313	0.022	-33.27	7.85	0
Depth Invariant Icehouse	120	312	0.025	-29.305	11.889	0
Depth Invariant Icehouse	120	311	0.027	-24.422	16.846	0
Depth Invariant Icehouse	120	310	0.03	-20.394	20.949	0
Depth Invariant Icehouse	120	309	0.032	-17.115	24.303	0

Depth Invariant Icehouse	120	308	0.035	-14.51	26.965	0
Depth Invariant Icehouse	120	307	0.037	-19.256	22.375	0
Depth Invariant Icehouse	120	306	0.04	-18.957	22.749	0
Depth Invariant Icehouse	120	305	0.042	-17.204	24.577	0
Depth Invariant Icehouse	120	304	0.045	-20.879	20.992	0
Depth Invariant Icehouse	120	303	0.047	-20.758	21.188	0
Depth Invariant Icehouse	120	302	0.05	-17.475	24.54	0
Depth Invariant Icehouse	120	301	0.052	-13.356	28.643	0
Depth Invariant Icehouse	120	300	0.055	-10.797	31.169	0
Depth Invariant Icehouse	120	299	0.057	-11.381	30.722	0
Depth Invariant Icehouse	120	298	0.06	-5.393	36.362	0
Depth Invariant Icehouse	120	297	0.062	0.943	42.007	0.486
Depth Invariant Icehouse	120	296	0.065	7.926	47.371	1.887
Depth Invariant Icehouse	120	295	0.067	8.631	47.711	0
Depth Invariant Icehouse	120	294	0.07	9.6	48.256	0
Depth Invariant Icehouse	120	293	0.072	14.708	51.642	1.033
Depth Invariant Icehouse	120	292	0.075	11.687	49.171	0
Depth Invariant Icehouse	120	291	0.077	10.843	48.326	0.511
Depth Invariant Icehouse	120	290	0.08	13.558	50.189	1.573
Depth Invariant Icehouse	120	289	0.082	16.305	52.052	0
Depth Invariant Icehouse	120	288	0.085	19.468	54.2	0
Depth Invariant Icehouse	120	287	0.087	7.829	45.219	0.501
Depth Invariant Icehouse	120	286	0.09	-5.826	33.53	0
Depth Invariant Icehouse	120	285	0.092	-19.889	20.284	0
Depth Invariant Icehouse	120	284	0.095	-33.972	6.285	0
Depth Invariant Icehouse	120	283	0.097	-40.718	-0.387	0
Depth Invariant Icehouse	120	282	0.1	-46.784	-6.379	0
Depth Invariant Icehouse	120	281	0.102	-41.279	-0.799	0
Depth Invariant Icehouse	120	280	0.105	-35.949	4.605	0
Depth Invariant Icehouse	120	279	0.107	-30.995	9.634	0
Depth Invariant Icehouse	120	278	0.11	-26.897	13.806	0
Depth Invariant Icehouse	120	277	0.112	-29.495	11.283	0
Depth Invariant Icehouse	120	276	0.115	-37.211	3.641	0
Depth Invariant Icehouse	120	275	0.117	-35.168	5.759	0
Depth Invariant Icehouse	120	274	0.12	-33.34	7.661	0
Depth Invariant Icehouse	120	273	0.122	-31.513	9.562	0
Depth Invariant Icehouse	120	272	0.125	-29.401	11.748	0
Depth Invariant Icehouse	120	271	0.127	-26.665	14.559	0
Depth Invariant Icehouse	120	270	0.13	-23.312	17.986	0
Depth Invariant Icehouse	120	269	0.132	-25.88	15.493	0
Depth Invariant Icehouse	120	268	0.135	-23.573	17.874	0
Depth Invariant Icehouse	120	267	0.137	-24.167	17.354	0
Depth Invariant Icehouse	120	266	0.14	-19.72	21.869	0
Depth Invariant Icehouse	120	265	0.142	-13.945	27.585	0
Depth Invariant Icehouse	120	264	0.145	-8.269	33.02	0
Depth Invariant Icehouse	120	263	0.147	-2.801	38.079	0
Depth Invariant Icehouse	120	262	0.15	-0.889	39.884	0.116
Depth Invariant Icehouse	120	261	0.152	-3.755	37.496	0
Depth Invariant Icehouse	120	260	0.155	-0.741	40.254	0
Depth Invariant Icehouse	120	259	0.157	1.896	42.544	0.488
Depth Invariant Icehouse	120	258	0.16	-2.396	38.67	0
Depth Invariant Icehouse	120	257	0.162	-3.147	38.155	0
Depth Invariant Icehouse	120	256	0.165	-0.748	40.361	0.079
Depth Invariant Icehouse	120	255	0.167	2.544	43.189	0.489
Depth Invariant Icehouse	120	254	0.17	0.597	41.345	0.485
Depth Invariant Icehouse	120	253	0.172	2.391	42.588	1.373
Depth Invariant Icehouse	120	252	0.175	8.8	47.473	0

Depth Invariant Icehouse	120	251	0.177	16.782	53.074	1.067
Depth Invariant Icehouse	120	250	0.18	24.843	58.794	0
Depth Invariant Icehouse	120	249	0.182	26.71	59.956	1.098
Depth Invariant Icehouse	120	248	0.185	29.419	61.717	0
Depth Invariant Icehouse	120	247	0.187	19.009	54.002	0.53
Depth Invariant Icehouse	120	246	0.19	0.527	39.363	0.485
Depth Invariant Icehouse	120	245	0.192	-8.623	31.083	0
Depth Invariant Icehouse	120	244	0.195	-18.295	22.164	0
Depth Invariant Icehouse	120	243	0.197	-27.982	12.71	0
Depth Invariant Icehouse	120	242	0.2	-38.125	2.642	0
Depth Invariant Icehouse	120	241	0.202	-36.383	4.458	0
Depth Invariant Icehouse	120	240	0.205	-37.586	3.33	0
Depth Invariant Icehouse	120	239	0.207	-43.534	-2.545	0
Depth Invariant Icehouse	120	238	0.21	-44.652	-3.588	0
Depth Invariant Icehouse	120	237	0.212	-40.557	0.582	0
Depth Invariant Icehouse	120	236	0.215	-35.77	5.443	0
Depth Invariant Icehouse	120	235	0.217	-30.452	10.836	0
Depth Invariant Icehouse	120	234	0.22	-24.658	16.706	0
Depth Invariant Icehouse	120	233	0.222	-18.944	22.396	0
Depth Invariant Icehouse	120	232	0.225	-13.341	27.799	0
Depth Invariant Icehouse	120	231	0.227	-17.446	24.035	0
Depth Invariant Icehouse	120	230	0.23	-21.169	20.556	0
Depth Invariant Icehouse	120	229	0.232	-17.773	23.918	0
Depth Invariant Icehouse	120	228	0.235	-15.017	26.627	0
Depth Invariant Icehouse	120	227	0.237	-12.808	28.797	0
Depth Invariant Icehouse	120	226	0.24	-10.849	30.728	0
Depth Invariant Icehouse	120	225	0.242	-8.945	32.588	0
Depth Invariant Icehouse	120	224	0.245	-9.235	32.44	0
Depth Invariant Icehouse	120	223	0.247	-12.92	29.15	0
Depth Invariant Icehouse	120	222	0.25	-10.413	31.584	0
Depth Invariant Icehouse	120	221	0.252	-12.483	29.776	0
Depth Invariant Icehouse	120	220	0.255	-8.786	33.292	0
Depth Invariant Icehouse	120	219	0.257	-2.944	38.623	0
Depth Invariant Icehouse	120	218	0.26	3.781	44.427	0.492
Depth Invariant Icehouse	120	217	0.262	11.204	50.05	0.604
Depth Invariant Icehouse	120	216	0.265	11.776	50.214	4.787
Depth Invariant Icehouse	120	215	0.267	14.523	52.102	0
Depth Invariant Icehouse	120	214	0.27	20.275	56.191	0
Depth Invariant Icehouse	120	213	0.272	25.11	59.527	0
Depth Invariant Icehouse	120	212	0.275	21.143	56.462	0
Depth Invariant Icehouse	120	211	0.277	20.883	56.086	0
Depth Invariant Icehouse	120	210	0.28	23.59	57.877	0
Depth Invariant Icehouse	120	209	0.282	25.08	58.773	0
Depth Invariant Icehouse	120	208	0.285	18.362	53.668	0
Depth Invariant Icehouse	120	207	0.287	6.462	44.411	0.498
Depth Invariant Icehouse	120	206	0.29	-3.345	36.028	0
Depth Invariant Icehouse	120	205	0.292	-11.978	28.389	0
Depth Invariant Icehouse	120	204	0.295	-19.529	21.439	0
Depth Invariant Icehouse	120	203	0.297	-31.367	10.176	0
Depth Invariant Icehouse	120	202	0.3	-41.167	0.458	0
Depth Invariant Icehouse	120	201	0.302	-39.589	2.11	0
Depth Invariant Icehouse	120	200	0.305	-38.877	2.897	0
Depth Invariant Icehouse	120	199	0.307	-34.084	7.764	0
Depth Invariant Icehouse	120	198	0.31	-30.153	11.773	0
Depth Invariant Icehouse	120	197	0.312	-26.875	15.028	0
Depth Invariant Icehouse	120	196	0.315	-24.295	17.584	0
Depth Invariant Icehouse	120	195	0.317	-22.221	19.658	0

Depth Invariant Icehouse	120	194	0.32	-24.088	17.976	0
Depth Invariant Icehouse	120	193	0.322	-34.326	8.187	0
Depth Invariant Icehouse	120	192	0.325	-34.014	8.576	0
Depth Invariant Icehouse	120	191	0.327	-31.484	11.165	0
Depth Invariant Icehouse	120	190	0.33	-28.257	14.369	0
Depth Invariant Icehouse	120	189	0.332	-24.218	18.318	0
Depth Invariant Icehouse	120	188	0.335	-19.447	22.956	0
Depth Invariant Icehouse	120	187	0.337	-13.865	28.3	0
Depth Invariant Icehouse	120	186	0.34	-10.632	31.405	0
Depth Invariant Icehouse	120	185	0.342	-13.505	28.858	0
Depth Invariant Icehouse	120	184	0.345	-14.41	28.122	0
Depth Invariant Icehouse	120	183	0.347	-9.541	32.742	0
Depth Invariant Icehouse	120	182	0.35	-5.301	36.682	0
Depth Invariant Icehouse	120	181	0.352	-1.81	39.871	0
Depth Invariant Icehouse	120	180	0.355	0.949	42.361	0.486
Depth Invariant Icehouse	120	179	0.357	3.681	44.369	0.492
Depth Invariant Icehouse	120	178	0.36	-0.367	40.774	0.199
Depth Invariant Icehouse	120	177	0.362	-1.931	39.42	0
Depth Invariant Icehouse	120	176	0.365	-0.903	40.446	0.031
Depth Invariant Icehouse	120	175	0.367	-5.196	36.864	0
Depth Invariant Icehouse	120	174	0.37	-3.15	38.776	0
Depth Invariant Icehouse	120	173	0.372	1.265	42.67	0.986
Depth Invariant Icehouse	120	172	0.375	7.217	47.256	0
Depth Invariant Icehouse	120	171	0.377	13.103	51.591	0.517
Depth Invariant Icehouse	120	170	0.38	11.077	49.847	0.512
Depth Invariant Icehouse	120	169	0.382	18.383	55.158	0.528
Depth Invariant Icehouse	120	168	0.385	25.874	60.459	0.544
Depth Invariant Icehouse	120	167	0.387	16.513	53.39	0.524
Depth Invariant Icehouse	120	166	0.39	-0.37	39.878	0.198
Depth Invariant Icehouse	120	165	0.392	-12.796	28.881	0
Depth Invariant Icehouse	120	164	0.395	-23.176	19.367	0
Depth Invariant Icehouse	120	163	0.397	-37.609	5.773	0
Depth Invariant Icehouse	120	162	0.4	-52.247	-8.672	0
Depth Invariant Icehouse	120	161	0.402	-50.905	-7.256	0
Depth Invariant Icehouse	120	160	0.405	-49.014	-5.29	0
Depth Invariant Icehouse	120	159	0.407	-46.648	-2.85	0
Depth Invariant Icehouse	120	158	0.41	-43.591	0.282	0
Depth Invariant Icehouse	120	157	0.412	-44.284	-0.337	0
Depth Invariant Icehouse	120	156	0.415	-43.359	0.663	0
Depth Invariant Icehouse	120	155	0.417	-45.022	-0.925	0
Depth Invariant Icehouse	120	154	0.42	-41.213	2.975	0
Depth Invariant Icehouse	120	153	0.422	-35.7	8.401	0
Depth Invariant Icehouse	120	152	0.425	-30.23	13.708	0
Depth Invariant Icehouse	120	151	0.427	-25.474	18.316	0
Depth Invariant Icehouse	120	150	0.43	-21.412	22.235	0
Depth Invariant Icehouse	120	149	0.432	-18.125	25.407	0
Depth Invariant Icehouse	120	148	0.435	-21.807	22.084	0
Depth Invariant Icehouse	120	147	0.437	-31.108	13.418	0
Depth Invariant Icehouse	120	146	0.44	-29.477	15.062	0
Depth Invariant Icehouse	120	145	0.442	-27.85	16.703	0
Depth Invariant Icehouse	120	144	0.445	-25.851	18.696	0
Depth Invariant Icehouse	120	143	0.447	-23.344	21.165	0
Depth Invariant Icehouse	120	142	0.45	-20.081	24.328	0
Depth Invariant Icehouse	120	141	0.452	-15.992	28.243	0
Depth Invariant Icehouse	120	140	0.455	-16.694	27.704	0
Depth Invariant Icehouse	120	139	0.457	-16.758	27.758	0
Depth Invariant Icehouse	120	138	0.46	-17.371	27.301	0

Depth Invariant Icehouse	120	137	0.462	-11.695	32.648	0
Depth Invariant Icehouse	120	136	0.465	-5.87	38.006	0
Depth Invariant Icehouse	120	135	0.467	-0.629	42.666	0.117
Depth Invariant Icehouse	120	134	0.47	4.089	46.64	2.47
Depth Invariant Icehouse	120	133	0.472	7.437	49.075	0
Depth Invariant Icehouse	120	132	0.475	1.75	44.289	0
Depth Invariant Icehouse	120	131	0.477	4.412	46.237	0
Depth Invariant Icehouse	120	130	0.48	5.641	47.003	0
Depth Invariant Icehouse	120	129	0.482	0.777	42.789	0.486
Depth Invariant Icehouse	120	128	0.485	1.89	43.472	0
Depth Invariant Icehouse	120	127	0.487	-8.801	34.417	0
Depth Invariant Icehouse	120	126	0.49	-18.212	25.978	0
Depth Invariant Icehouse	120	125	0.492	-30.492	14.618	0
Depth Invariant Icehouse	120	124	0.495	-43.058	2.857	0
Depth Invariant Icehouse	120	123	0.497	-49.879	-3.571	0
Depth Invariant Icehouse	120	122	0.5	-56.154	-9.703	0
Depth Invariant Icehouse	120	121	0.502	-50.942	-4.435	0
Depth Invariant Icehouse	120	120	0.505	-51.407	-4.796	0
Depth Invariant Icehouse	120	119	0.507	-49.137	-2.492	0
Depth Invariant Icehouse	120	118	0.51	-45.008	1.563	0
Depth Invariant Icehouse	120	117	0.512	-48.645	-1.817	0
Depth Invariant Icehouse	120	116	0.515	-47.542	-0.665	0
Depth Invariant Icehouse	120	115	0.517	-45.473	1.41	0
Depth Invariant Icehouse	120	114	0.52	-43.695	3.199	0
Depth Invariant Icehouse	120	113	0.522	-41.915	4.986	0
Depth Invariant Icehouse	120	112	0.525	-39.76	7.13	0
Depth Invariant Icehouse	120	111	0.527	-41.919	5.184	0
Depth Invariant Icehouse	120	110	0.53	-44.812	2.536	0
Depth Invariant Icehouse	120	109	0.532	-46.875	0.658	0
Depth Invariant Icehouse	120	108	0.535	-41.8	5.59	0
Depth Invariant Icehouse	120	107	0.537	-36.28	10.915	0
Depth Invariant Icehouse	120	106	0.54	-30.426	16.536	0
Depth Invariant Icehouse	120	105	0.542	-24.54	22.168	0
Depth Invariant Icehouse	120	104	0.545	-18.739	27.692	0
Depth Invariant Icehouse	120	103	0.547	-13.626	32.512	0
Depth Invariant Icehouse	120	102	0.55	-18.528	28.121	0
Depth Invariant Icehouse	120	101	0.552	-23.543	23.565	0
Depth Invariant Icehouse	120	100	0.555	-20.687	26.34	0
Depth Invariant Icehouse	120	99	0.557	-18.498	28.491	0
Depth Invariant Icehouse	120	98	0.56	-16.61	30.356	0
Depth Invariant Icehouse	120	97	0.562	-14.712	32.218	0
Depth Invariant Icehouse	120	96	0.565	-12.417	34.441	0
Depth Invariant Icehouse	120	95	0.567	-10.618	36.207	0
Depth Invariant Icehouse	120	94	0.57	-14.888	32.427	0
Depth Invariant Icehouse	120	93	0.572	-12.952	34.321	0
Depth Invariant Icehouse	120	92	0.575	-14.295	33.214	0
Depth Invariant Icehouse	120	91	0.577	-8.519	38.589	0
Depth Invariant Icehouse	120	90	0.58	-2.168	44.275	0
Depth Invariant Icehouse	120	89	0.582	4.48	49.97	0.494
Depth Invariant Icehouse	120	88	0.585	11.924	55.556	0.514
Depth Invariant Icehouse	120	87	0.587	-1.04	44.962	0
Depth Invariant Icehouse	120	86	0.59	-14.646	33.071	0
Depth Invariant Icehouse	120	85	0.592	-23.699	24.84	0
Depth Invariant Icehouse	120	84	0.595	-34.91	14.554	0
Depth Invariant Icehouse	120	83	0.597	-51.384	-0.839	0
Depth Invariant Icehouse	120	82	0.6	-62.968	-11.847	0
Depth Invariant Icehouse	120	81	0.602	-61.294	-10.137	0

Depth Invariant Icehouse	120	80	0.605	-59.033	-7.866	0
Depth Invariant Icehouse	120	79	0.607	-63.27	-11.858	0
Depth Invariant Icehouse	120	78	0.61	-61.373	-9.933	0
Depth Invariant Icehouse	120	77	0.612	-57.124	-5.752	0
Depth Invariant Icehouse	120	76	0.615	-52.125	-0.874	0
Depth Invariant Icehouse	120	75	0.617	-46.332	4.722	0
Depth Invariant Icehouse	120	74	0.62	-46.482	4.685	0
Depth Invariant Icehouse	120	73	0.622	-43.154	7.93	0
Depth Invariant Icehouse	120	72	0.625	-39.85	11.141	0
Depth Invariant Icehouse	120	71	0.627	-40.963	10.207	0
Depth Invariant Icehouse	120	70	0.63	-36.587	14.417	0
Depth Invariant Icehouse	120	69	0.632	-32.995	17.877	0
Depth Invariant Icehouse	120	68	0.635	-30.142	20.642	0
Depth Invariant Icehouse	120	67	0.637	-27.795	22.936	0
Depth Invariant Icehouse	120	66	0.64	-25.846	24.862	0
Depth Invariant Icehouse	120	65	0.642	-28.78	22.257	0
Depth Invariant Icehouse	120	64	0.645	-36.05	15.616	0
Depth Invariant Icehouse	120	63	0.647	-36.47	15.339	0
Depth Invariant Icehouse	120	62	0.65	-32.897	18.776	0
Depth Invariant Icehouse	120	61	0.652	-28.514	22.961	0
Depth Invariant Icehouse	120	60	0.655	-23.377	27.84	0
Depth Invariant Icehouse	120	59	0.657	-17.458	33.435	0
Depth Invariant Icehouse	120	58	0.66	-11.348	39.149	0
Depth Invariant Icehouse	120	57	0.662	-6.077	43.996	0
Depth Invariant Icehouse	120	56	0.665	-11.842	38.965	0
Depth Invariant Icehouse	120	55	0.667	-12.076	38.882	0
Depth Invariant Icehouse	120	54	0.67	-7.564	43.076	0
Depth Invariant Icehouse	120	53	0.672	-3.803	46.518	0
Depth Invariant Icehouse	120	52	0.675	-0.775	49.263	0.071
Depth Invariant Icehouse	120	51	0.677	1.816	51.536	1.214
Depth Invariant Icehouse	120	50	0.68	4.439	53.441	0
Depth Invariant Icehouse	120	49	0.682	2.4	51.57	0
Depth Invariant Icehouse	120	48	0.685	-0.315	49.285	0.216
Depth Invariant Icehouse	120	47	0.687	-13.045	38.082	0
Depth Invariant Icehouse	120	46	0.69	-28.664	23.9	0
Depth Invariant Icehouse	120	45	0.692	-36.968	16.33	0
Depth Invariant Icehouse	120	44	0.695	-44.435	9.508	0
Depth Invariant Icehouse	120	43	0.697	-51.493	3.023	0
Depth Invariant Icehouse	120	42	0.7	-57.972	-2.968	0
Depth Invariant Icehouse	120	41	0.702	-59.233	-4.058	0
Depth Invariant Icehouse	120	40	0.705	-55.287	-0.223	0
Depth Invariant Icehouse	120	39	0.707	-50.21	4.647	0
Depth Invariant Icehouse	120	38	0.71	-46.83	7.92	0
Depth Invariant Icehouse	120	37	0.712	-49.639	5.401	0
Depth Invariant Icehouse	120	36	0.715	-48.239	6.822	0
Depth Invariant Icehouse	120	35	0.717	-46.038	8.99	0
Depth Invariant Icehouse	120	34	0.72	-46.669	8.513	0
Depth Invariant Icehouse	120	33	0.722	-51.026	4.546	0
Depth Invariant Icehouse	120	32	0.725	-48.855	6.688	0
Depth Invariant Icehouse	120	31	0.727	-46.125	9.353	0
Depth Invariant Icehouse	120	30	0.73	-42.521	12.825	0
Depth Invariant Icehouse	120	29	0.732	-38.21	16.947	0
Depth Invariant Icehouse	120	28	0.735	-39.314	16.041	0
Depth Invariant Icehouse	120	27	0.737	-36.391	18.872	0
Depth Invariant Icehouse	120	26	0.74	-35.967	19.385	0
Depth Invariant Icehouse	120	25	0.742	-33.167	22.101	0
Depth Invariant Icehouse	120	24	0.745	-27.505	27.459	0

Depth Invariant Icehouse	120	23	0.747	-22.397	32.288	0
Depth Invariant Icehouse	120	22	0.75	-17.888	36.548	0
Depth Invariant Icehouse	120	21	0.752	-14.346	39.91	0
Depth Invariant Icehouse	120	20	0.755	-11.542	42.578	0
Depth Invariant Icehouse	120	19	0.757	-15.187	39.407	0
Depth Invariant Icehouse	120	18	0.76	-25.433	30.155	0
Depth Invariant Icehouse	120	17	0.762	-23.605	31.958	0
Depth Invariant Icehouse	120	16	0.765	-21.439	34.068	0
Depth Invariant Icehouse	120	15	0.767	-18.702	36.702	0
Depth Invariant Icehouse	120	14	0.77	-15.077	40.144	0
Depth Invariant Icehouse	120	13	0.772	-10.7	44.239	0
Depth Invariant Icehouse	120	12	0.775	-5.475	49.026	0
Depth Invariant Icehouse	120	11	0.777	-3.804	50.632	0
Depth Invariant Icehouse	120	10	0.78	-6.461	48.454	0
Depth Invariant Icehouse	120	9	0.782	-5.683	49.287	0
Depth Invariant Icehouse	120	8	0.785	0.34	54.619	0
Depth Invariant Icehouse	120	7	0.787	-7.533	47.954	0
Depth Invariant Icehouse	120	6	0.79	-16.421	40.139	0
Depth Invariant Icehouse	120	5	0.792	-25.745	31.807	0
Depth Invariant Icehouse	120	4	0.795	-35.743	22.781	0
Depth Invariant Icehouse	120	3	0.797	-53.37	6.606	0
Depth Invariant Icehouse	120	2	0.8	-65.237	-4.867	0
Depth Invariant Icehouse	120	1	1.6	-65.237	-5.187	0
Depth Invariant Icehouse	140	322	0	-49.242	-12.498	0
Depth Invariant Icehouse	140	321	0.002	-47.521	-10.702	0
Depth Invariant Icehouse	140	320	0.005	-45.501	-8.607	0
Depth Invariant Icehouse	140	319	0.007	-42.86	-5.891	0
Depth Invariant Icehouse	140	318	0.01	-39.603	-2.559	0
Depth Invariant Icehouse	140	317	0.012	-35.596	1.523	0
Depth Invariant Icehouse	140	316	0.015	-30.894	6.3	0
Depth Invariant Icehouse	140	315	0.017	-29.369	7.9	0
Depth Invariant Icehouse	140	314	0.02	-29.192	8.152	0
Depth Invariant Icehouse	140	313	0.022	-29.569	7.85	0
Depth Invariant Icehouse	140	312	0.025	-25.605	11.889	0
Depth Invariant Icehouse	140	311	0.027	-20.723	16.846	0
Depth Invariant Icehouse	140	310	0.03	-16.695	20.949	0
Depth Invariant Icehouse	140	309	0.032	-13.417	24.303	0
Depth Invariant Icehouse	140	308	0.035	-10.822	26.965	0
Depth Invariant Icehouse	140	307	0.037	-15.641	22.375	0
Depth Invariant Icehouse	140	306	0.04	-15.344	22.749	0
Depth Invariant Icehouse	140	305	0.042	-13.596	24.577	0
Depth Invariant Icehouse	140	304	0.045	-17.279	20.992	0
Depth Invariant Icehouse	140	303	0.047	-17.159	21.188	0
Depth Invariant Icehouse	140	302	0.05	-13.874	24.54	0
Depth Invariant Icehouse	140	301	0.052	-9.685	28.643	0
Depth Invariant Icehouse	140	300	0.055	-7.039	31.169	0
Depth Invariant Icehouse	140	299	0.057	-7.67	30.722	0
Depth Invariant Icehouse	140	298	0.06	-1.412	36.362	0
Depth Invariant Icehouse	140	297	0.062	5.247	42.007	0.495
Depth Invariant Icehouse	140	296	0.065	12.518	47.371	5.239
Depth Invariant Icehouse	140	295	0.067	13.225	47.711	0
Depth Invariant Icehouse	140	294	0.07	14.206	48.256	0
Depth Invariant Icehouse	140	293	0.072	19.071	51.642	0
Depth Invariant Icehouse	140	292	0.075	15.932	49.171	0
Depth Invariant Icehouse	140	291	0.077	15.031	48.326	0
Depth Invariant Icehouse	140	290	0.08	17.812	50.189	0
Depth Invariant Icehouse	140	289	0.082	20.618	52.052	0

Depth Invariant Icehouse	140	288	0.085	23.843	54.2	0
Depth Invariant Icehouse	140	287	0.087	11.81	45.219	0
Depth Invariant Icehouse	140	286	0.09	-2.571	33.53	0
Depth Invariant Icehouse	140	285	0.092	-17.18	20.284	0
Depth Invariant Icehouse	140	284	0.095	-31.269	6.285	0
Depth Invariant Icehouse	140	283	0.097	-38.016	-0.387	0
Depth Invariant Icehouse	140	282	0.1	-44.083	-6.379	0
Depth Invariant Icehouse	140	281	0.102	-38.578	-0.799	0
Depth Invariant Icehouse	140	280	0.105	-33.249	4.605	0
Depth Invariant Icehouse	140	279	0.107	-28.296	9.634	0
Depth Invariant Icehouse	140	278	0.11	-24.199	13.806	0
Depth Invariant Icehouse	140	277	0.112	-26.797	11.283	0
Depth Invariant Icehouse	140	276	0.115	-34.514	3.641	0
Depth Invariant Icehouse	140	275	0.117	-32.471	5.759	0
Depth Invariant Icehouse	140	274	0.12	-30.644	7.661	0
Depth Invariant Icehouse	140	273	0.122	-28.817	9.562	0
Depth Invariant Icehouse	140	272	0.125	-26.706	11.748	0
Depth Invariant Icehouse	140	271	0.127	-23.97	14.559	0
Depth Invariant Icehouse	140	270	0.13	-20.618	17.986	0
Depth Invariant Icehouse	140	269	0.132	-23.187	15.493	0
Depth Invariant Icehouse	140	268	0.135	-20.88	17.874	0
Depth Invariant Icehouse	140	267	0.137	-21.475	17.354	0
Depth Invariant Icehouse	140	266	0.14	-17.025	21.869	0
Depth Invariant Icehouse	140	265	0.142	-11.137	27.585	0
Depth Invariant Icehouse	140	264	0.145	-5.228	33.02	0
Depth Invariant Icehouse	140	263	0.147	0.503	38.079	0.473
Depth Invariant Icehouse	140	262	0.15	2.969	39.884	0.49
Depth Invariant Icehouse	140	261	0.152	0.369	37.496	0.431
Depth Invariant Icehouse	140	260	0.155	3.953	40.254	4.013
Depth Invariant Icehouse	140	259	0.157	7.112	42.544	0
Depth Invariant Icehouse	140	258	0.16	2.546	38.67	0
Depth Invariant Icehouse	140	257	0.162	2.215	38.155	0
Depth Invariant Icehouse	140	256	0.165	5.208	40.361	0
Depth Invariant Icehouse	140	255	0.167	9.061	43.189	0
Depth Invariant Icehouse	140	254	0.17	6.998	41.345	0
Depth Invariant Icehouse	140	253	0.172	8.849	42.588	0
Depth Invariant Icehouse	140	252	0.175	15.539	47.473	1.061
Depth Invariant Icehouse	140	251	0.177	23.39	53.074	0
Depth Invariant Icehouse	140	250	0.18	31.619	58.794	1.682
Depth Invariant Icehouse	140	249	0.182	33.509	59.956	0
Depth Invariant Icehouse	140	248	0.185	36.251	61.717	0
Depth Invariant Icehouse	140	247	0.187	25.644	54.002	0.544
Depth Invariant Icehouse	140	246	0.19	6.4	39.363	0.441
Depth Invariant Icehouse	140	245	0.192	-3.35	31.083	0
Depth Invariant Icehouse	140	244	0.195	-13.513	22.164	0
Depth Invariant Icehouse	140	243	0.197	-23.364	12.71	0
Depth Invariant Icehouse	140	242	0.2	-33.507	2.642	0
Depth Invariant Icehouse	140	241	0.202	-31.765	4.458	0
Depth Invariant Icehouse	140	240	0.205	-32.969	3.33	0
Depth Invariant Icehouse	140	239	0.207	-38.918	-2.545	0
Depth Invariant Icehouse	140	238	0.21	-40.037	-3.588	0
Depth Invariant Icehouse	140	237	0.212	-35.942	0.582	0
Depth Invariant Icehouse	140	236	0.215	-31.156	5.443	0
Depth Invariant Icehouse	140	235	0.217	-25.838	10.836	0
Depth Invariant Icehouse	140	234	0.22	-20.046	16.706	0
Depth Invariant Icehouse	140	233	0.222	-14.239	22.396	0
Depth Invariant Icehouse	140	232	0.225	-8.422	27.799	0

Depth Invariant Icehouse	140	231	0.227	-12.727	24.035	0
Depth Invariant Icehouse	140	230	0.23	-16.628	20.556	0
Depth Invariant Icehouse	140	229	0.232	-13.126	23.918	0
Depth Invariant Icehouse	140	228	0.235	-10.276	26.627	0
Depth Invariant Icehouse	140	227	0.237	-7.988	28.797	0
Depth Invariant Icehouse	140	226	0.24	-5.96	30.728	0
Depth Invariant Icehouse	140	225	0.242	-3.984	32.588	0
Depth Invariant Icehouse	140	224	0.245	-4.317	32.44	0
Depth Invariant Icehouse	140	223	0.247	-8.208	29.15	0
Depth Invariant Icehouse	140	222	0.25	-5.606	31.584	0
Depth Invariant Icehouse	140	221	0.252	-7.801	29.776	0
Depth Invariant Icehouse	140	220	0.255	-3.946	33.292	0
Depth Invariant Icehouse	140	219	0.257	2.188	38.623	1.429
Depth Invariant Icehouse	140	218	0.26	9.737	44.427	0
Depth Invariant Icehouse	140	217	0.262	17.881	50.05	1.589
Depth Invariant Icehouse	140	216	0.265	18.354	50.214	0
Depth Invariant Icehouse	140	215	0.267	21.173	52.102	0
Depth Invariant Icehouse	140	214	0.27	27.068	56.191	3.312
Depth Invariant Icehouse	140	213	0.272	31.991	59.527	0
Depth Invariant Icehouse	140	212	0.275	27.937	56.462	0
Depth Invariant Icehouse	140	211	0.277	27.66	56.086	0
Depth Invariant Icehouse	140	210	0.28	30.417	57.877	0
Depth Invariant Icehouse	140	209	0.282	31.933	58.773	0
Depth Invariant Icehouse	140	208	0.285	25.076	53.668	1.059
Depth Invariant Icehouse	140	207	0.287	12.747	44.411	0
Depth Invariant Icehouse	140	206	0.29	2.4	36.028	0.312
Depth Invariant Icehouse	140	205	0.292	-6.408	28.389	0
Depth Invariant Icehouse	140	204	0.295	-14.333	21.439	0
Depth Invariant Icehouse	140	203	0.297	-26.589	10.176	0
Depth Invariant Icehouse	140	202	0.3	-36.395	0.458	0
Depth Invariant Icehouse	140	201	0.302	-34.817	2.11	0
Depth Invariant Icehouse	140	200	0.305	-34.106	2.897	0
Depth Invariant Icehouse	140	199	0.307	-29.313	7.764	0
Depth Invariant Icehouse	140	198	0.31	-25.406	11.773	0
Depth Invariant Icehouse	140	197	0.312	-22.047	15.028	0
Depth Invariant Icehouse	140	196	0.315	-19.384	17.584	0
Depth Invariant Icehouse	140	195	0.317	-17.245	19.658	0
Depth Invariant Icehouse	140	194	0.32	-19.209	17.976	0
Depth Invariant Icehouse	140	193	0.322	-29.781	8.187	0
Depth Invariant Icehouse	140	192	0.325	-29.471	8.576	0
Depth Invariant Icehouse	140	191	0.327	-26.943	11.165	0
Depth Invariant Icehouse	140	190	0.33	-23.638	14.369	0
Depth Invariant Icehouse	140	189	0.332	-19.458	18.318	0
Depth Invariant Icehouse	140	188	0.335	-14.512	22.956	0
Depth Invariant Icehouse	140	187	0.337	-8.702	28.3	0
Depth Invariant Icehouse	140	186	0.34	-5.338	31.405	0
Depth Invariant Icehouse	140	185	0.342	-8.376	28.858	0
Depth Invariant Icehouse	140	184	0.345	-9.348	28.122	0
Depth Invariant Icehouse	140	183	0.347	-4.268	32.742	0
Depth Invariant Icehouse	140	182	0.35	0.169	36.682	0
Depth Invariant Icehouse	140	181	0.352	3.826	39.871	0.958
Depth Invariant Icehouse	140	180	0.355	7.2	42.361	0
Depth Invariant Icehouse	140	179	0.357	9.999	44.369	0.971
Depth Invariant Icehouse	140	178	0.36	6.166	40.774	1.489
Depth Invariant Icehouse	140	177	0.362	4.773	39.42	0
Depth Invariant Icehouse	140	176	0.365	6.323	40.446	0
Depth Invariant Icehouse	140	175	0.367	2.224	36.864	0

Depth Invariant Icehouse	140	174	0.37	4.353	38.776	0
Depth Invariant Icehouse	140	173	0.372	8.981	42.67	0.937
Depth Invariant Icehouse	140	172	0.375	15.622	47.256	1.589
Depth Invariant Icehouse	140	171	0.377	21.713	51.591	0
Depth Invariant Icehouse	140	170	0.38	19.597	49.847	0
Depth Invariant Icehouse	140	169	0.382	27.118	55.158	1.11
Depth Invariant Icehouse	140	168	0.385	34.77	60.459	0
Depth Invariant Icehouse	140	167	0.387	25.18	53.39	0.543
Depth Invariant Icehouse	140	166	0.39	7.571	39.878	0.5
Depth Invariant Icehouse	140	165	0.392	-5.245	28.881	0
Depth Invariant Icehouse	140	164	0.395	-16.15	19.367	0
Depth Invariant Icehouse	140	163	0.397	-31.225	5.773	0
Depth Invariant Icehouse	140	162	0.4	-45.98	-8.672	0
Depth Invariant Icehouse	140	161	0.402	-44.639	-7.256	0
Depth Invariant Icehouse	140	160	0.405	-42.748	-5.29	0
Depth Invariant Icehouse	140	159	0.407	-40.383	-2.85	0
Depth Invariant Icehouse	140	158	0.41	-37.327	0.282	0
Depth Invariant Icehouse	140	157	0.412	-38.021	-0.337	0
Depth Invariant Icehouse	140	156	0.415	-37.097	0.663	0
Depth Invariant Icehouse	140	155	0.417	-38.76	-0.925	0
Depth Invariant Icehouse	140	154	0.42	-34.986	2.975	0
Depth Invariant Icehouse	140	153	0.422	-29.322	8.401	0
Depth Invariant Icehouse	140	152	0.425	-23.65	13.708	0
Depth Invariant Icehouse	140	151	0.427	-18.715	18.316	0
Depth Invariant Icehouse	140	150	0.43	-14.495	22.235	0
Depth Invariant Icehouse	140	149	0.432	-11.08	25.407	0
Depth Invariant Icehouse	140	148	0.435	-14.959	22.084	0
Depth Invariant Icehouse	140	147	0.437	-24.691	13.418	0
Depth Invariant Icehouse	140	146	0.44	-23.012	15.062	0
Depth Invariant Icehouse	140	145	0.442	-21.337	16.703	0
Depth Invariant Icehouse	140	144	0.445	-19.276	18.696	0
Depth Invariant Icehouse	140	143	0.447	-16.682	21.165	0
Depth Invariant Icehouse	140	142	0.45	-13.294	24.328	0
Depth Invariant Icehouse	140	141	0.452	-9.038	28.243	0
Depth Invariant Icehouse	140	140	0.455	-9.801	27.704	0
Depth Invariant Icehouse	140	139	0.457	-9.894	27.758	0
Depth Invariant Icehouse	140	138	0.46	-10.563	27.301	0
Depth Invariant Icehouse	140	137	0.462	-4.633	32.648	0
Depth Invariant Icehouse	140	136	0.465	1.473	38.006	0
Depth Invariant Icehouse	140	135	0.467	6.971	42.666	0
Depth Invariant Icehouse	140	134	0.47	11.783	46.64	1.034
Depth Invariant Icehouse	140	133	0.472	15.25	49.075	0
Depth Invariant Icehouse	140	132	0.475	9.266	44.289	0.938
Depth Invariant Icehouse	140	131	0.477	12.46	46.237	1.033
Depth Invariant Icehouse	140	130	0.48	13.717	47.003	0
Depth Invariant Icehouse	140	129	0.482	8.574	42.789	0.502
Depth Invariant Icehouse	140	128	0.485	9.703	43.472	1.355
Depth Invariant Icehouse	140	127	0.487	-0.257	34.417	0
Depth Invariant Icehouse	140	126	0.49	-10.185	25.978	0
Depth Invariant Icehouse	140	125	0.492	-23.058	14.618	0
Depth Invariant Icehouse	140	124	0.495	-36.188	2.857	0
Depth Invariant Icehouse	140	123	0.497	-43.301	-3.571	0
Depth Invariant Icehouse	140	122	0.5	-49.663	-9.703	0
Depth Invariant Icehouse	140	121	0.502	-44.428	-4.435	0
Depth Invariant Icehouse	140	120	0.505	-44.935	-4.796	0
Depth Invariant Icehouse	140	119	0.507	-42.625	-2.492	0
Depth Invariant Icehouse	140	118	0.51	-38.359	1.563	0

Depth Invariant Icehouse	140	117	0.512	-42.173	-1.817	0
Depth Invariant Icehouse	140	116	0.515	-41.062	-0.665	0
Depth Invariant Icehouse	140	115	0.517	-38.936	1.41	0
Depth Invariant Icehouse	140	114	0.52	-37.107	3.199	0
Depth Invariant Icehouse	140	113	0.522	-35.275	4.986	0
Depth Invariant Icehouse	140	112	0.525	-33.053	7.13	0
Depth Invariant Icehouse	140	111	0.527	-35.325	5.184	0
Depth Invariant Icehouse	140	110	0.53	-38.36	2.536	0
Depth Invariant Icehouse	140	109	0.532	-40.525	0.658	0
Depth Invariant Icehouse	140	108	0.535	-35.267	5.59	0
Depth Invariant Icehouse	140	107	0.537	-29.533	10.915	0
Depth Invariant Icehouse	140	106	0.54	-23.446	16.536	0
Depth Invariant Icehouse	140	105	0.542	-17.321	22.168	0
Depth Invariant Icehouse	140	104	0.545	-11.276	27.692	0
Depth Invariant Icehouse	140	103	0.547	-5.937	32.512	0
Depth Invariant Icehouse	140	102	0.55	-11.115	28.121	0
Depth Invariant Icehouse	140	101	0.552	-16.395	23.565	0
Depth Invariant Icehouse	140	100	0.555	-13.432	26.34	0
Depth Invariant Icehouse	140	99	0.557	-11.168	28.491	0
Depth Invariant Icehouse	140	98	0.56	-9.217	30.356	0
Depth Invariant Icehouse	140	97	0.562	-7.253	32.218	0
Depth Invariant Icehouse	140	96	0.565	-4.873	34.441	0
Depth Invariant Icehouse	140	95	0.567	-3.013	36.207	0
Depth Invariant Icehouse	140	94	0.57	-7.533	32.427	0
Depth Invariant Icehouse	140	93	0.572	-5.53	34.321	0
Depth Invariant Icehouse	140	92	0.575	-6.972	33.214	0
Depth Invariant Icehouse	140	91	0.577	-0.929	38.589	0
Depth Invariant Icehouse	140	90	0.58	5.739	44.275	0
Depth Invariant Icehouse	140	89	0.582	12.707	49.97	1.049
Depth Invariant Icehouse	140	88	0.585	20.422	55.556	0
Depth Invariant Icehouse	140	87	0.587	6.834	44.962	0.499
Depth Invariant Icehouse	140	86	0.59	-7.051	33.071	0
Depth Invariant Icehouse	140	85	0.592	-16.584	24.84	0
Depth Invariant Icehouse	140	84	0.595	-28.366	14.554	0
Depth Invariant Icehouse	140	83	0.597	-45.598	-0.839	0
Depth Invariant Icehouse	140	82	0.6	-57.662	-11.847	0
Depth Invariant Icehouse	140	81	0.602	-55.951	-10.137	0
Depth Invariant Icehouse	140	80	0.605	-53.629	-7.866	0
Depth Invariant Icehouse	140	79	0.607	-58.039	-11.858	0
Depth Invariant Icehouse	140	78	0.61	-56.095	-9.933	0
Depth Invariant Icehouse	140	77	0.612	-51.711	-5.752	0
Depth Invariant Icehouse	140	76	0.615	-46.539	-0.874	0
Depth Invariant Icehouse	140	75	0.617	-40.527	4.722	0
Depth Invariant Icehouse	140	74	0.62	-40.708	4.685	0
Depth Invariant Icehouse	140	73	0.622	-37.261	7.93	0
Depth Invariant Icehouse	140	72	0.625	-33.836	11.141	0
Depth Invariant Icehouse	140	71	0.627	-35.026	10.207	0
Depth Invariant Icehouse	140	70	0.63	-30.477	14.417	0
Depth Invariant Icehouse	140	69	0.632	-26.744	17.877	0
Depth Invariant Icehouse	140	68	0.635	-23.784	20.642	0
Depth Invariant Icehouse	140	67	0.637	-21.354	22.936	0
Depth Invariant Icehouse	140	66	0.64	-19.341	24.862	0
Depth Invariant Icehouse	140	65	0.642	-22.446	22.257	0
Depth Invariant Icehouse	140	64	0.645	-30.093	15.616	0
Depth Invariant Icehouse	140	63	0.647	-30.562	15.339	0
Depth Invariant Icehouse	140	62	0.65	-26.847	18.776	0
Depth Invariant Icehouse	140	61	0.652	-22.283	22.961	0

Depth Invariant Icehouse	140	60	0.655	-16.927	27.84	0
Depth Invariant Icehouse	140	59	0.657	-10.751	33.435	0
Depth Invariant Icehouse	140	58	0.66	-4.362	39.149	0
Depth Invariant Icehouse	140	57	0.662	1.159	43.996	0
Depth Invariant Icehouse	140	56	0.665	-4.953	38.965	0
Depth Invariant Icehouse	140	55	0.667	-5.233	38.882	0
Depth Invariant Icehouse	140	54	0.67	-0.514	43.076	0
Depth Invariant Icehouse	140	53	0.672	3.419	46.518	0
Depth Invariant Icehouse	140	52	0.675	6.579	49.263	0
Depth Invariant Icehouse	140	51	0.677	9.2	51.536	0.768
Depth Invariant Icehouse	140	50	0.68	12.175	53.441	0.514
Depth Invariant Icehouse	140	49	0.682	10	51.57	1.54
Depth Invariant Icehouse	140	48	0.685	8.4	49.285	0.507
Depth Invariant Icehouse	140	47	0.687	-4.789	38.082	0
Depth Invariant Icehouse	140	46	0.69	-21.234	23.9	0
Depth Invariant Icehouse	140	45	0.692	-29.973	16.33	0
Depth Invariant Icehouse	140	44	0.695	-37.826	9.508	0
Depth Invariant Icehouse	140	43	0.697	-45.239	3.023	0
Depth Invariant Icehouse	140	42	0.7	-52.032	-2.968	0
Depth Invariant Icehouse	140	41	0.702	-53.371	-4.058	0
Depth Invariant Icehouse	140	40	0.705	-49.28	-0.223	0
Depth Invariant Icehouse	140	39	0.707	-44.001	4.647	0
Depth Invariant Icehouse	140	38	0.71	-40.493	7.92	0
Depth Invariant Icehouse	140	37	0.712	-43.459	5.401	0
Depth Invariant Icehouse	140	36	0.715	-42.022	6.822	0
Depth Invariant Icehouse	140	35	0.717	-39.748	8.99	0
Depth Invariant Icehouse	140	34	0.72	-40.437	8.513	0
Depth Invariant Icehouse	140	33	0.722	-45.021	4.546	0
Depth Invariant Icehouse	140	32	0.725	-42.778	6.688	0
Depth Invariant Icehouse	140	31	0.727	-39.951	9.353	0
Depth Invariant Icehouse	140	30	0.73	-36.206	12.825	0
Depth Invariant Icehouse	140	29	0.732	-31.72	16.947	0
Depth Invariant Icehouse	140	28	0.735	-32.908	16.041	0
Depth Invariant Icehouse	140	27	0.737	-29.875	18.872	0
Depth Invariant Icehouse	140	26	0.74	-29.462	19.385	0
Depth Invariant Icehouse	140	25	0.742	-26.558	22.101	0
Depth Invariant Icehouse	140	24	0.745	-20.651	27.459	0
Depth Invariant Icehouse	140	23	0.747	-15.323	32.288	0
Depth Invariant Icehouse	140	22	0.75	-10.619	36.548	0
Depth Invariant Icehouse	140	21	0.752	-6.93	39.91	0
Depth Invariant Icehouse	140	20	0.755	-4.013	42.578	0
Depth Invariant Icehouse	140	19	0.757	-7.886	39.407	0
Depth Invariant Icehouse	140	18	0.76	-18.689	30.155	0
Depth Invariant Icehouse	140	17	0.762	-16.803	31.958	0
Depth Invariant Icehouse	140	16	0.765	-14.56	34.068	0
Depth Invariant Icehouse	140	15	0.767	-11.719	36.702	0
Depth Invariant Icehouse	140	14	0.77	-7.944	40.144	0
Depth Invariant Icehouse	140	13	0.772	-3.372	44.239	0
Depth Invariant Icehouse	140	12	0.775	2.099	49.026	0
Depth Invariant Icehouse	140	11	0.777	3.824	50.632	0
Depth Invariant Icehouse	140	10	0.78	0.978	48.454	0
Depth Invariant Icehouse	140	9	0.782	1.759	49.287	0
Depth Invariant Icehouse	140	8	0.785	8.074	54.619	0
Depth Invariant Icehouse	140	7	0.787	-0.277	47.954	0
Depth Invariant Icehouse	140	6	0.79	-9.689	40.139	0
Depth Invariant Icehouse	140	5	0.792	-19.541	31.807	0
Depth Invariant Icehouse	140	4	0.795	-30.088	22.781	0

Depth Invariant Icehouse	140	3	0.797	-48.619	6.606	0
Depth Invariant Icehouse	140	2	0.8	-60.487	-4.867	0
Depth Invariant Icehouse	140	1	1.6	-60.487	-5.187	0
Depth Invariant Icehouse	160	322	0	-43.697	-12.498	0
Depth Invariant Icehouse	160	321	0.002	-41.976	-10.702	0
Depth Invariant Icehouse	160	320	0.005	-39.956	-8.607	0
Depth Invariant Icehouse	160	319	0.007	-37.315	-5.891	0
Depth Invariant Icehouse	160	318	0.01	-34.058	-2.559	0
Depth Invariant Icehouse	160	317	0.012	-30.05	1.523	0
Depth Invariant Icehouse	160	316	0.015	-25.349	6.3	0
Depth Invariant Icehouse	160	315	0.017	-23.824	7.9	0
Depth Invariant Icehouse	160	314	0.02	-23.647	8.152	0
Depth Invariant Icehouse	160	313	0.022	-24.024	7.85	0
Depth Invariant Icehouse	160	312	0.025	-20.06	11.889	0
Depth Invariant Icehouse	160	311	0.027	-15.177	16.846	0
Depth Invariant Icehouse	160	310	0.03	-11.15	20.949	0
Depth Invariant Icehouse	160	309	0.032	-7.872	24.303	0
Depth Invariant Icehouse	160	308	0.035	-5.299	26.965	0
Depth Invariant Icehouse	160	307	0.037	-10.211	22.375	0
Depth Invariant Icehouse	160	306	0.04	-9.915	22.749	0
Depth Invariant Icehouse	160	305	0.042	-8.173	24.577	0
Depth Invariant Icehouse	160	304	0.045	-11.865	20.992	0
Depth Invariant Icehouse	160	303	0.047	-11.745	21.188	0
Depth Invariant Icehouse	160	302	0.05	-8.457	24.54	0
Depth Invariant Icehouse	160	301	0.052	-4.181	28.643	0
Depth Invariant Icehouse	160	300	0.055	-1.424	31.169	0
Depth Invariant Icehouse	160	299	0.057	-2.112	30.722	0
Depth Invariant Icehouse	160	298	0.06	4.458	36.362	0.494
Depth Invariant Icehouse	160	297	0.062	11.92	42.007	2.111
Depth Invariant Icehouse	160	296	0.065	19.427	47.371	0
Depth Invariant Icehouse	160	295	0.067	20.14	47.711	0
Depth Invariant Icehouse	160	294	0.07	21.136	48.256	0
Depth Invariant Icehouse	160	293	0.072	26.098	51.642	0.545
Depth Invariant Icehouse	160	292	0.075	22.887	49.171	1.616
Depth Invariant Icehouse	160	291	0.077	21.955	48.326	0
Depth Invariant Icehouse	160	290	0.08	24.79	50.189	0
Depth Invariant Icehouse	160	289	0.082	27.644	52.052	1.103
Depth Invariant Icehouse	160	288	0.085	30.915	54.2	0
Depth Invariant Icehouse	160	287	0.087	18.622	45.219	0.529
Depth Invariant Icehouse	160	286	0.09	3.603	33.53	0.492
Depth Invariant Icehouse	160	285	0.092	-11.179	20.284	0
Depth Invariant Icehouse	160	284	0.095	-25.274	6.285	0
Depth Invariant Icehouse	160	283	0.097	-32.021	-0.387	0
Depth Invariant Icehouse	160	282	0.1	-38.088	-6.379	0
Depth Invariant Icehouse	160	281	0.102	-32.583	-0.799	0
Depth Invariant Icehouse	160	280	0.105	-27.254	4.605	0
Depth Invariant Icehouse	160	279	0.107	-22.3	9.634	0
Depth Invariant Icehouse	160	278	0.11	-18.203	13.806	0
Depth Invariant Icehouse	160	277	0.112	-20.801	11.283	0
Depth Invariant Icehouse	160	276	0.115	-28.518	3.641	0
Depth Invariant Icehouse	160	275	0.117	-26.475	5.759	0
Depth Invariant Icehouse	160	274	0.12	-24.648	7.661	0
Depth Invariant Icehouse	160	273	0.122	-22.822	9.562	0
Depth Invariant Icehouse	160	272	0.125	-20.711	11.748	0
Depth Invariant Icehouse	160	271	0.127	-17.975	14.559	0
Depth Invariant Icehouse	160	270	0.13	-14.623	17.986	0
Depth Invariant Icehouse	160	269	0.132	-17.191	15.493	0

Depth Invariant Icehouse	160	268	0.135	-14.885	17.874	0
Depth Invariant Icehouse	160	267	0.137	-15.48	17.354	0
Depth Invariant Icehouse	160	266	0.14	-11.025	21.869	0
Depth Invariant Icehouse	160	265	0.142	-4.992	27.585	0
Depth Invariant Icehouse	160	264	0.145	1.2	33.02	0.075
Depth Invariant Icehouse	160	263	0.147	7.291	38.079	0
Depth Invariant Icehouse	160	262	0.15	9.36	39.884	0.526
Depth Invariant Icehouse	160	261	0.152	6.613	37.496	0
Depth Invariant Icehouse	160	260	0.155	9.901	40.254	1.334
Depth Invariant Icehouse	160	259	0.157	13.996	42.544	0.519
Depth Invariant Icehouse	160	258	0.16	9.2	38.67	1.903
Depth Invariant Icehouse	160	257	0.162	9.2	38.155	0
Depth Invariant Icehouse	160	256	0.165	12.82	40.361	2.624
Depth Invariant Icehouse	160	255	0.167	16.816	43.189	0
Depth Invariant Icehouse	160	254	0.17	14.628	41.345	0
Depth Invariant Icehouse	160	253	0.172	16.536	42.588	0
Depth Invariant Icehouse	160	252	0.175	23.416	47.473	0
Depth Invariant Icehouse	160	251	0.177	31.445	53.074	2.85
Depth Invariant Icehouse	160	250	0.18	39.784	58.794	0
Depth Invariant Icehouse	160	249	0.182	41.693	59.956	0
Depth Invariant Icehouse	160	248	0.185	44.459	61.717	0
Depth Invariant Icehouse	160	247	0.187	33.748	54.002	0
Depth Invariant Icehouse	160	246	0.19	13.94	39.363	0.518
Depth Invariant Icehouse	160	245	0.192	3.728	31.083	0.492
Depth Invariant Icehouse	160	244	0.195	-6.534	22.164	0
Depth Invariant Icehouse	160	243	0.197	-16.603	12.71	0
Depth Invariant Icehouse	160	242	0.2	-26.746	2.642	0
Depth Invariant Icehouse	160	241	0.202	-25.004	4.458	0
Depth Invariant Icehouse	160	240	0.205	-26.207	3.33	0
Depth Invariant Icehouse	160	239	0.207	-32.157	-2.545	0
Depth Invariant Icehouse	160	238	0.21	-33.275	-3.588	0
Depth Invariant Icehouse	160	237	0.212	-29.181	0.582	0
Depth Invariant Icehouse	160	236	0.215	-24.395	5.443	0
Depth Invariant Icehouse	160	235	0.217	-19.077	10.836	0
Depth Invariant Icehouse	160	234	0.22	-13.286	16.706	0
Depth Invariant Icehouse	160	233	0.222	-7.357	22.396	0
Depth Invariant Icehouse	160	232	0.225	-1.27	27.799	0
Depth Invariant Icehouse	160	231	0.227	-5.822	24.035	0
Depth Invariant Icehouse	160	230	0.23	-9.96	20.556	0
Depth Invariant Icehouse	160	229	0.232	-6.317	23.918	0
Depth Invariant Icehouse	160	228	0.235	-3.348	26.627	0
Depth Invariant Icehouse	160	227	0.237	-0.966	28.797	0
Depth Invariant Icehouse	160	226	0.24	1.143	30.728	0
Depth Invariant Icehouse	160	225	0.242	3.2	32.588	0.343
Depth Invariant Icehouse	160	224	0.245	3.164	32.44	0
Depth Invariant Icehouse	160	223	0.247	-0.965	29.15	0.022
Depth Invariant Icehouse	160	222	0.25	1.771	31.584	0
Depth Invariant Icehouse	160	221	0.252	-0.57	29.776	0
Depth Invariant Icehouse	160	220	0.255	3.465	33.292	0
Depth Invariant Icehouse	160	219	0.257	9.9	38.623	0.764
Depth Invariant Icehouse	160	218	0.26	18.016	44.427	0.528
Depth Invariant Icehouse	160	217	0.262	25.952	50.05	5.617
Depth Invariant Icehouse	160	216	0.265	26.426	50.214	0
Depth Invariant Icehouse	160	215	0.267	29.301	52.102	0
Depth Invariant Icehouse	160	214	0.27	35.296	56.191	0
Depth Invariant Icehouse	160	213	0.272	40.277	59.527	0
Depth Invariant Icehouse	160	212	0.275	36.181	56.462	0

Depth Invariant Icehouse	160	211	0.277	35.902	56.086	0
Depth Invariant Icehouse	160	210	0.28	38.699	57.877	0
Depth Invariant Icehouse	160	209	0.282	40.243	58.773	0
Depth Invariant Icehouse	160	208	0.285	33.327	53.668	0
Depth Invariant Icehouse	160	207	0.287	20.706	44.411	0.533
Depth Invariant Icehouse	160	206	0.29	9.901	36.028	1.795
Depth Invariant Icehouse	160	205	0.292	2.06	28.389	0
Depth Invariant Icehouse	160	204	0.295	-6.31	21.439	0
Depth Invariant Icehouse	160	203	0.297	-19.098	10.176	0
Depth Invariant Icehouse	160	202	0.3	-28.907	0.458	0
Depth Invariant Icehouse	160	201	0.302	-27.33	2.11	0
Depth Invariant Icehouse	160	200	0.305	-26.618	2.897	0
Depth Invariant Icehouse	160	199	0.307	-21.826	7.764	0
Depth Invariant Icehouse	160	198	0.31	-17.954	11.773	0
Depth Invariant Icehouse	160	197	0.312	-14.494	15.028	0
Depth Invariant Icehouse	160	196	0.315	-11.722	17.584	0
Depth Invariant Icehouse	160	195	0.317	-9.502	19.658	0
Depth Invariant Icehouse	160	194	0.32	-11.585	17.976	0
Depth Invariant Icehouse	160	193	0.322	-22.588	8.187	0
Depth Invariant Icehouse	160	192	0.325	-22.28	8.576	0
Depth Invariant Icehouse	160	191	0.327	-19.76	11.165	0
Depth Invariant Icehouse	160	190	0.33	-16.356	14.369	0
Depth Invariant Icehouse	160	189	0.332	-11.994	18.318	0
Depth Invariant Icehouse	160	188	0.335	-6.827	22.956	0
Depth Invariant Icehouse	160	187	0.337	-0.738	28.3	0
Depth Invariant Icehouse	160	186	0.34	2.78	31.405	0
Depth Invariant Icehouse	160	185	0.342	-0.45	28.858	0
Depth Invariant Icehouse	160	184	0.345	-1.501	28.122	0
Depth Invariant Icehouse	160	183	0.347	3.824	32.742	0
Depth Invariant Icehouse	160	182	0.35	8.47	36.682	0
Depth Invariant Icehouse	160	181	0.352	12.286	39.871	3.121
Depth Invariant Icehouse	160	180	0.355	15.792	42.361	0
Depth Invariant Icehouse	160	179	0.357	18.719	44.369	0
Depth Invariant Icehouse	160	178	0.36	14.22	40.774	0
Depth Invariant Icehouse	160	177	0.362	12.735	39.42	0
Depth Invariant Icehouse	160	176	0.365	14.331	40.446	0
Depth Invariant Icehouse	160	175	0.367	10	36.864	3.711
Depth Invariant Icehouse	160	174	0.37	15.916	38.776	1.058
Depth Invariant Icehouse	160	173	0.372	21.257	42.67	0
Depth Invariant Icehouse	160	172	0.375	27.686	47.256	3.395
Depth Invariant Icehouse	160	171	0.377	33.932	51.591	0
Depth Invariant Icehouse	160	170	0.38	31.765	49.847	0
Depth Invariant Icehouse	160	169	0.382	39.444	55.158	0
Depth Invariant Icehouse	160	168	0.385	47.207	60.459	0
Depth Invariant Icehouse	160	167	0.387	37.489	53.39	0
Depth Invariant Icehouse	160	166	0.39	19.343	39.878	0.53
Depth Invariant Icehouse	160	165	0.392	5.881	28.881	0
Depth Invariant Icehouse	160	164	0.395	-5.638	19.367	0
Depth Invariant Icehouse	160	163	0.397	-21.526	5.773	0
Depth Invariant Icehouse	160	162	0.4	-36.435	-8.672	0
Depth Invariant Icehouse	160	161	0.402	-35.094	-7.256	0
Depth Invariant Icehouse	160	160	0.405	-33.203	-5.29	0
Depth Invariant Icehouse	160	159	0.407	-30.838	-2.85	0
Depth Invariant Icehouse	160	158	0.41	-27.782	0.282	0
Depth Invariant Icehouse	160	157	0.412	-28.476	-0.337	0
Depth Invariant Icehouse	160	156	0.415	-27.552	0.663	0
Depth Invariant Icehouse	160	155	0.417	-29.215	-0.925	0

Depth Invariant Icehouse	160	154	0.42	-25.493	2.975	0
Depth Invariant Icehouse	160	153	0.422	-19.629	8.401	0
Depth Invariant Icehouse	160	152	0.425	-13.701	13.708	0
Depth Invariant Icehouse	160	151	0.427	-8.542	18.316	0
Depth Invariant Icehouse	160	150	0.43	-4.127	22.235	0
Depth Invariant Icehouse	160	149	0.432	-0.558	25.407	0
Depth Invariant Icehouse	160	148	0.435	-4.674	22.084	0
Depth Invariant Icehouse	160	147	0.437	-14.934	13.418	0
Depth Invariant Icehouse	160	146	0.44	-13.196	15.062	0
Depth Invariant Icehouse	160	145	0.442	-11.461	16.703	0
Depth Invariant Icehouse	160	144	0.445	-9.32	18.696	0
Depth Invariant Icehouse	160	143	0.447	-6.62	21.165	0
Depth Invariant Icehouse	160	142	0.45	-3.081	24.328	0
Depth Invariant Icehouse	160	141	0.452	1.375	28.243	0
Depth Invariant Icehouse	160	140	0.455	0.541	27.704	0
Depth Invariant Icehouse	160	139	0.457	0.413	27.758	0
Depth Invariant Icehouse	160	138	0.46	-0.32	27.301	0
Depth Invariant Icehouse	160	137	0.462	5.9	32.648	0
Depth Invariant Icehouse	160	136	0.465	12.302	38.006	0.515
Depth Invariant Icehouse	160	135	0.467	18.552	42.666	1.07
Depth Invariant Icehouse	160	134	0.47	24.069	46.64	0
Depth Invariant Icehouse	160	133	0.472	27.635	49.075	0.548
Depth Invariant Icehouse	160	132	0.475	21.426	44.289	1.076
Depth Invariant Icehouse	160	131	0.477	24.281	46.237	0
Depth Invariant Icehouse	160	130	0.48	25.567	47.003	0.544
Depth Invariant Icehouse	160	129	0.482	20.204	42.789	1.067
Depth Invariant Icehouse	160	128	0.485	21.361	43.472	0
Depth Invariant Icehouse	160	127	0.487	10	34.417	3.775
Depth Invariant Icehouse	160	126	0.49	3.278	25.978	0
Depth Invariant Icehouse	160	125	0.492	-10.304	14.618	0
Depth Invariant Icehouse	160	124	0.495	-24.13	2.857	0
Depth Invariant Icehouse	160	123	0.497	-31.62	-3.571	0
Depth Invariant Icehouse	160	122	0.5	-38.102	-9.703	0
Depth Invariant Icehouse	160	121	0.502	-32.835	-4.435	0
Depth Invariant Icehouse	160	120	0.505	-33.4	-4.796	0
Depth Invariant Icehouse	160	119	0.507	-31.036	-2.492	0
Depth Invariant Icehouse	160	118	0.51	-26.592	1.563	0
Depth Invariant Icehouse	160	117	0.512	-30.637	-1.817	0
Depth Invariant Icehouse	160	116	0.515	-29.52	-0.665	0
Depth Invariant Icehouse	160	115	0.517	-27.319	1.41	0
Depth Invariant Icehouse	160	114	0.52	-25.426	3.199	0
Depth Invariant Icehouse	160	113	0.522	-23.529	4.986	0
Depth Invariant Icehouse	160	112	0.525	-21.222	7.13	0
Depth Invariant Icehouse	160	111	0.527	-23.636	5.184	0
Depth Invariant Icehouse	160	110	0.53	-26.851	2.536	0
Depth Invariant Icehouse	160	109	0.532	-29.145	0.658	0
Depth Invariant Icehouse	160	108	0.535	-23.653	5.59	0
Depth Invariant Icehouse	160	107	0.537	-17.655	10.915	0
Depth Invariant Icehouse	160	106	0.54	-11.281	16.536	0
Depth Invariant Icehouse	160	105	0.542	-4.863	22.168	0
Depth Invariant Icehouse	160	104	0.545	1.473	27.692	0
Depth Invariant Icehouse	160	103	0.547	7.069	32.512	0
Depth Invariant Icehouse	160	102	0.55	1.577	28.121	0
Depth Invariant Icehouse	160	101	0.552	-4.016	23.565	0
Depth Invariant Icehouse	160	100	0.555	-0.926	26.34	0
Depth Invariant Icehouse	160	99	0.557	1.428	28.491	0
Depth Invariant Icehouse	160	98	0.56	3.452	30.356	0

Depth Invariant Icehouse	160	97	0.562	5.489	32.218	2.829
Depth Invariant Icehouse	160	96	0.565	7.97	34.441	0
Depth Invariant Icehouse	160	95	0.567	9.9	36.207	0
Depth Invariant Icehouse	160	94	0.57	7.921	32.427	0
Depth Invariant Icehouse	160	93	0.572	9.999	34.321	2.66
Depth Invariant Icehouse	160	92	0.575	11.105	33.214	5.747
Depth Invariant Icehouse	160	91	0.577	22.53	38.589	0
Depth Invariant Icehouse	160	90	0.58	30.161	44.275	0.553
Depth Invariant Icehouse	160	89	0.582	37.951	49.97	1.154
Depth Invariant Icehouse	160	88	0.585	45.897	55.556	0
Depth Invariant Icehouse	160	87	0.587	31.85	44.962	0.557
Depth Invariant Icehouse	160	86	0.59	17.241	33.071	2.444
Depth Invariant Icehouse	160	85	0.592	9.6	24.84	0.603
Depth Invariant Icehouse	160	84	0.595	-2.248	14.554	0
Depth Invariant Icehouse	160	83	0.597	-20.411	-0.839	0
Depth Invariant Icehouse	160	82	0.6	-33.102	-11.847	0
Depth Invariant Icehouse	160	81	0.602	-31.342	-10.137	0
Depth Invariant Icehouse	160	80	0.605	-28.941	-7.866	0
Depth Invariant Icehouse	160	79	0.607	-33.579	-11.858	0
Depth Invariant Icehouse	160	78	0.61	-31.571	-9.933	0
Depth Invariant Icehouse	160	77	0.612	-27.008	-5.752	0
Depth Invariant Icehouse	160	76	0.615	-21.612	-0.874	0
Depth Invariant Icehouse	160	75	0.617	-15.326	4.722	0
Depth Invariant Icehouse	160	74	0.62	-15.545	4.685	0
Depth Invariant Icehouse	160	73	0.622	-11.95	7.93	0
Depth Invariant Icehouse	160	72	0.625	-8.377	11.141	0
Depth Invariant Icehouse	160	71	0.627	-9.661	10.207	0
Depth Invariant Icehouse	160	70	0.63	-4.903	14.417	0
Depth Invariant Icehouse	160	69	0.632	-1.003	17.877	0
Depth Invariant Icehouse	160	68	0.635	2.084	20.642	0
Depth Invariant Icehouse	160	67	0.637	4.612	22.936	0
Depth Invariant Icehouse	160	66	0.64	6.699	24.862	0
Depth Invariant Icehouse	160	65	0.642	3.394	22.257	0
Depth Invariant Icehouse	160	64	0.645	-4.696	15.616	0
Depth Invariant Icehouse	160	63	0.647	-5.222	15.339	0
Depth Invariant Icehouse	160	62	0.65	-1.34	18.776	0
Depth Invariant Icehouse	160	61	0.652	3.437	22.961	0
Depth Invariant Icehouse	160	60	0.655	9.048	27.84	0
Depth Invariant Icehouse	160	59	0.657	15.525	33.435	3.45
Depth Invariant Icehouse	160	58	0.66	25.676	39.149	0.567
Depth Invariant Icehouse	160	57	0.662	32.022	43.996	0.557
Depth Invariant Icehouse	160	56	0.665	26.104	38.965	1.091
Depth Invariant Icehouse	160	55	0.667	26.317	38.882	0
Depth Invariant Icehouse	160	54	0.67	31.8	43.076	4.023
Depth Invariant Icehouse	160	53	0.672	36.455	46.518	0
Depth Invariant Icehouse	160	52	0.675	40.299	49.263	0
Depth Invariant Icehouse	160	51	0.677	43.578	51.536	0
Depth Invariant Icehouse	160	50	0.68	46.42	53.441	0
Depth Invariant Icehouse	160	49	0.682	44.189	51.57	0
Depth Invariant Icehouse	160	48	0.685	41.462	49.285	0
Depth Invariant Icehouse	160	47	0.687	27.606	38.082	0.548
Depth Invariant Icehouse	160	46	0.69	10.778	23.9	3.295
Depth Invariant Icehouse	160	45	0.692	4.829	16.33	0
Depth Invariant Icehouse	160	44	0.695	-3.48	9.508	0
Depth Invariant Icehouse	160	43	0.697	-11.318	3.023	0
Depth Invariant Icehouse	160	42	0.7	-18.494	-2.968	0
Depth Invariant Icehouse	160	41	0.702	-19.931	-4.058	0

Depth Invariant Icehouse	160	40	0.705	-15.66	-0.223	0
Depth Invariant Icehouse	160	39	0.707	-10.135	4.647	0
Depth Invariant Icehouse	160	38	0.71	-6.474	7.92	0
Depth Invariant Icehouse	160	37	0.712	-9.628	5.401	0
Depth Invariant Icehouse	160	36	0.715	-8.147	6.822	0
Depth Invariant Icehouse	160	35	0.717	-5.785	8.99	0
Depth Invariant Icehouse	160	34	0.72	-6.543	8.513	0
Depth Invariant Icehouse	160	33	0.722	-11.4	4.546	0
Depth Invariant Icehouse	160	32	0.725	-9.071	6.688	0
Depth Invariant Icehouse	160	31	0.727	-6.126	9.353	0
Depth Invariant Icehouse	160	30	0.73	-2.214	12.825	0
Depth Invariant Icehouse	160	29	0.732	2.479	16.947	0
Depth Invariant Icehouse	160	28	0.735	1.193	16.041	0
Depth Invariant Icehouse	160	27	0.737	4.355	18.872	0
Depth Invariant Icehouse	160	26	0.74	4.756	19.385	0
Depth Invariant Icehouse	160	25	0.742	7.782	22.101	0
Depth Invariant Icehouse	160	24	0.745	13.973	27.459	3.32
Depth Invariant Icehouse	160	23	0.747	22.874	32.288	0.561
Depth Invariant Icehouse	160	22	0.75	28.358	36.548	1.109
Depth Invariant Icehouse	160	21	0.752	32.761	39.91	0
Depth Invariant Icehouse	160	20	0.755	36.357	42.578	0.566
Depth Invariant Icehouse	160	19	0.757	32.802	39.407	0.559
Depth Invariant Icehouse	160	18	0.76	21.931	30.155	0.559
Depth Invariant Icehouse	160	17	0.762	24.442	31.958	1.645
Depth Invariant Icehouse	160	16	0.765	27.311	34.068	0
Depth Invariant Icehouse	160	15	0.767	30.816	36.702	0
Depth Invariant Icehouse	160	14	0.77	35.315	40.144	5.348
Depth Invariant Icehouse	160	13	0.772	40.659	44.239	0
Depth Invariant Icehouse	160	12	0.775	46.956	49.026	0
Depth Invariant Icehouse	160	11	0.777	49.315	50.632	0
Depth Invariant Icehouse	160	10	0.78	46.875	48.454	0
Depth Invariant Icehouse	160	9	0.782	48.243	49.287	0
Depth Invariant Icehouse	160	8	0.785	57.266	54.619	0
Depth Invariant Icehouse	160	7	0.787	47.071	47.954	0
Depth Invariant Icehouse	160	6	0.79	37.699	40.139	0
Depth Invariant Icehouse	160	5	0.792	27.836	31.807	0.316
Depth Invariant Icehouse	160	4	0.795	17.217	22.781	0.548
Depth Invariant Icehouse	160	3	0.797	-1.819	6.606	0
Depth Invariant Icehouse	160	2	0.8	-13.687	-4.867	0
Depth Invariant Icehouse	160	1	1.6	-13.687	-5.187	0
Depth Invariant Greenhouse	100	322	0	-11.515	-7.998	0
Depth Invariant Greenhouse	100	321	0.002	-9.827	-6.318	0
Depth Invariant Greenhouse	100	320	0.005	-8.088	-4.593	0
Depth Invariant Greenhouse	100	319	0.007	-6.206	-2.757	0
Depth Invariant Greenhouse	100	318	0.01	-4.289	-0.907	0
Depth Invariant Greenhouse	100	317	0.012	-2.281	1.017	0
Depth Invariant Greenhouse	100	316	0.015	-0.162	3.012	0.114
Depth Invariant Greenhouse	100	315	0.017	-1.52	1.793	0
Depth Invariant Greenhouse	100	314	0.02	-4.389	-0.724	0
Depth Invariant Greenhouse	100	313	0.022	-7.719	-3.718	0
Depth Invariant	100	312	0.025	-6.805	-2.777	0

Greenhouse						
Depth Invariant Greenhouse	100	311	0.027	-4.655	-0.711	0
Depth Invariant Greenhouse	100	310	0.03	-2.629	1.221	0
Depth Invariant Greenhouse	100	309	0.032	-0.66	3.08	0.046
Depth Invariant Greenhouse	100	308	0.035	1.354	4.87	0.243
Depth Invariant Greenhouse	100	307	0.037	-3.111	0.853	0.055
Depth Invariant Greenhouse	100	306	0.04	-2.654	1.316	0
Depth Invariant Greenhouse	100	305	0.042	-0.846	3.027	0.021
Depth Invariant Greenhouse	100	304	0.045	-4.427	-0.115	0
Depth Invariant Greenhouse	100	303	0.047	-4.883	-0.436	0
Depth Invariant Greenhouse	100	302	0.05	-2.927	1.433	0
Depth Invariant Greenhouse	100	301	0.052	-0.852	3.378	0.039
Depth Invariant Greenhouse	100	300	0.055	-0.863	3.446	0
Depth Invariant Greenhouse	100	299	0.057	-4.263	0.477	0
Depth Invariant Greenhouse	100	298	0.06	-2.029	2.582	0
Depth Invariant Greenhouse	100	297	0.062	0.253	4.689	0.17
Depth Invariant Greenhouse	100	296	0.065	2.971	6.77	0.245
Depth Invariant Greenhouse	100	295	0.067	0.592	4.882	0.266
Depth Invariant Greenhouse	100	294	0.07	-0.63	3.77	0
Depth Invariant Greenhouse	100	293	0.072	1.571	5.66	0.243
Depth Invariant Greenhouse	100	292	0.075	-1.41	3.056	0
Depth Invariant Greenhouse	100	291	0.077	-2.429	2.253	0.631
Depth Invariant Greenhouse	100	290	0.08	-0.07	3.997	0
Depth Invariant Greenhouse	100	289	0.082	2.051	5.744	0.982
Depth Invariant Greenhouse	100	288	0.085	4.526	7.521	0
Depth Invariant Greenhouse	100	287	0.087	5.317	8.042	0
Depth Invariant Greenhouse	100	286	0.09	2.174	5.666	0
Depth Invariant Greenhouse	100	285	0.092	-2.712	1.388	0
Depth Invariant Greenhouse	100	284	0.095	-8.757	-4.061	0
Depth Invariant Greenhouse	100	283	0.097	-8.182	-3.44	0
Depth Invariant Greenhouse	100	282	0.1	-7.432	-2.658	0
Depth Invariant Greenhouse	100	281	0.102	-5.2	-0.523	0
Depth Invariant Greenhouse	100	280	0.105	-2.96	1.598	0
Depth Invariant Greenhouse	100	279	0.107	-0.663	3.735	0.046
Depth Invariant Greenhouse	100	278	0.11	1.644	5.737	0.244

Depth Invariant Greenhouse	100	277	0.112	-1.959	2.568	0
Depth Invariant Greenhouse	100	276	0.115	-9.742	-4.462	0
Depth Invariant Greenhouse	100	275	0.117	-7.961	-2.72	0
Depth Invariant Greenhouse	100	274	0.12	-6.122	-0.936	0
Depth Invariant Greenhouse	100	273	0.122	-4.255	0.849	0
Depth Invariant Greenhouse	100	272	0.125	-2.346	2.664	0.214
Depth Invariant Greenhouse	100	271	0.127	-0.17	4.595	0
Depth Invariant Greenhouse	100	270	0.13	2.206	6.538	0.244
Depth Invariant Greenhouse	100	269	0.132	-2.081	2.839	0
Depth Invariant Greenhouse	100	268	0.135	-2.248	2.794	0
Depth Invariant Greenhouse	100	267	0.137	-5.702	-0.229	0
Depth Invariant Greenhouse	100	266	0.14	-4.533	0.923	0
Depth Invariant Greenhouse	100	265	0.142	-2.206	3.102	0
Depth Invariant Greenhouse	100	264	0.145	0.152	5.254	0.157
Depth Invariant Greenhouse	100	263	0.147	2.923	7.421	0.49
Depth Invariant Greenhouse	100	262	0.15	2.969	7.398	0
Depth Invariant Greenhouse	100	261	0.152	-0.753	4.349	0.034
Depth Invariant Greenhouse	100	260	0.155	1.435	6.237	0.489
Depth Invariant Greenhouse	100	259	0.157	4.056	8.131	0
Depth Invariant Greenhouse	100	258	0.16	0.032	4.966	0.236
Depth Invariant Greenhouse	100	257	0.162	-0.293	4.683	0
Depth Invariant Greenhouse	100	256	0.165	1.933	6.518	0.734
Depth Invariant Greenhouse	100	255	0.167	4.647	8.467	0
Depth Invariant Greenhouse	100	254	0.17	1.285	5.894	0
Depth Invariant Greenhouse	100	253	0.172	0.76	5.399	0.243
Depth Invariant Greenhouse	100	252	0.175	3.594	7.501	1.509
Depth Invariant Greenhouse	100	251	0.177	6.726	9.727	0
Depth Invariant Greenhouse	100	250	0.18	9.837	11.911	0
Depth Invariant Greenhouse	100	249	0.182	7.52	10.188	0
Depth Invariant Greenhouse	100	248	0.185	6.209	9.192	0
Depth Invariant Greenhouse	100	247	0.187	6.182	9.121	0
Depth Invariant Greenhouse	100	246	0.19	-0.868	3.646	0.277
Depth Invariant Greenhouse	100	245	0.192	-0.34	4.188	0
Depth Invariant Greenhouse	100	244	0.195	0.242	4.709	0
Depth Invariant Greenhouse	100	243	0.197	0.84	5.174	0.977

Depth Invariant Greenhouse	100	242	0.2	1.499	5.622	0
Depth Invariant Greenhouse	100	241	0.202	3.955	7.405	0
Depth Invariant Greenhouse	100	240	0.205	2.649	6.379	0
Depth Invariant Greenhouse	100	239	0.207	-3.809	0.888	0
Depth Invariant Greenhouse	100	238	0.21	-6.038	-1.024	0
Depth Invariant Greenhouse	100	237	0.212	-3.915	0.987	0
Depth Invariant Greenhouse	100	236	0.215	-1.66	3.064	0
Depth Invariant Greenhouse	100	235	0.217	0.76	5.193	1.23
Depth Invariant Greenhouse	100	234	0.22	3.767	7.417	0
Depth Invariant Greenhouse	100	233	0.222	6.797	9.57	0
Depth Invariant Greenhouse	100	232	0.225	9.815	11.691	0
Depth Invariant Greenhouse	100	231	0.227	2.538	6.351	0
Depth Invariant Greenhouse	100	230	0.23	-2.993	1.734	0
Depth Invariant Greenhouse	100	229	0.232	-0.928	3.607	0.01
Depth Invariant Greenhouse	100	228	0.235	1.209	5.446	4.031
Depth Invariant Greenhouse	100	227	0.237	3.659	7.228	0
Depth Invariant Greenhouse	100	226	0.24	6.206	9.032	0
Depth Invariant Greenhouse	100	225	0.242	8.69	10.776	0
Depth Invariant Greenhouse	100	224	0.245	8.8	10.584	0
Depth Invariant Greenhouse	100	223	0.247	4.573	7.3	0
Depth Invariant Greenhouse	100	222	0.25	6.1	8.36	0
Depth Invariant Greenhouse	100	221	0.252	1.953	5.239	0
Depth Invariant Greenhouse	100	220	0.255	3.249	6.155	0
Depth Invariant Greenhouse	100	219	0.257	6.148	8.221	0
Depth Invariant Greenhouse	100	218	0.26	9.2	10.38	0
Depth Invariant Greenhouse	100	217	0.262	12.94	12.467	0.314
Depth Invariant Greenhouse	100	216	0.265	9.757	10.088	1.387
Depth Invariant Greenhouse	100	215	0.267	9.7	9.522	0
Depth Invariant Greenhouse	100	214	0.27	12.664	11.442	1.575
Depth Invariant Greenhouse	100	213	0.272	15.316	13.283	0
Depth Invariant Greenhouse	100	212	0.275	11.055	10.162	0
Depth Invariant Greenhouse	100	211	0.277	10.563	9.752	0
Depth Invariant Greenhouse	100	210	0.28	12.962	11.424	0
Depth Invariant Greenhouse	100	209	0.282	14.295	12.33	0
Depth Invariant Greenhouse	100	208	0.285	8.18	7.878	1.019

Depth Invariant Greenhouse	100	207	0.287	8.592	8.145	0
Depth Invariant Greenhouse	100	206	0.29	9.248	8.586	0
Depth Invariant Greenhouse	100	205	0.292	10.348	9.098	0.456
Depth Invariant Greenhouse	100	204	0.295	11.196	9.673	0
Depth Invariant Greenhouse	100	203	0.297	6.632	6.339	0.676
Depth Invariant Greenhouse	100	202	0.3	3.326	3.907	0
Depth Invariant Greenhouse	100	201	0.302	1.796	2.669	0
Depth Invariant Greenhouse	100	200	0.305	-0.383	0.811	0.084
Depth Invariant Greenhouse	100	199	0.307	1.998	2.786	1.408
Depth Invariant Greenhouse	100	198	0.31	4.522	4.624	0
Depth Invariant Greenhouse	100	197	0.312	7.006	6.382	0
Depth Invariant Greenhouse	100	196	0.315	9.302	8.066	0
Depth Invariant Greenhouse	100	195	0.317	12.207	9.743	0.467
Depth Invariant Greenhouse	100	194	0.32	10.437	8.426	0
Depth Invariant Greenhouse	100	193	0.322	-0.464	0.162	0.177
Depth Invariant Greenhouse	100	192	0.325	-0.233	0.409	0
Depth Invariant Greenhouse	100	191	0.327	1.865	2.12	1.416
Depth Invariant Greenhouse	100	190	0.33	4.214	3.843	0
Depth Invariant Greenhouse	100	189	0.332	6.667	5.637	0
Depth Invariant Greenhouse	100	188	0.335	9.18	7.495	0
Depth Invariant Greenhouse	100	187	0.337	12.595	9.466	0.538
Depth Invariant Greenhouse	100	186	0.34	12.554	9.375	0
Depth Invariant Greenhouse	100	185	0.342	5.836	4.436	1.184
Depth Invariant Greenhouse	100	184	0.345	1.691	1.262	0
Depth Invariant Greenhouse	100	183	0.347	4.071	3.012	0
Depth Invariant Greenhouse	100	182	0.35	6.552	4.78	0
Depth Invariant Greenhouse	100	181	0.352	8.933	6.47	0
Depth Invariant Greenhouse	100	180	0.355	11.21	8.086	0.438
Depth Invariant Greenhouse	100	179	0.357	13.483	9.696	0
Depth Invariant Greenhouse	100	178	0.36	9.41	6.73	2.142
Depth Invariant Greenhouse	100	177	0.362	8.615	5.688	0
Depth Invariant Greenhouse	100	176	0.365	9.809	6.473	0
Depth Invariant Greenhouse	100	175	0.367	5.036	2.888	0
Depth Invariant Greenhouse	100	174	0.37	5.938	3.497	0
Depth Invariant Greenhouse	100	173	0.372	8.392	5.237	0

Depth Invariant Greenhouse	100	172	0.375	10.941	7.045	0.514
Depth Invariant Greenhouse	100	171	0.377	12.535	8.145	0
Depth Invariant Greenhouse	100	170	0.38	6.759	3.892	0.872
Depth Invariant Greenhouse	100	169	0.382	9.308	5.681	0
Depth Invariant Greenhouse	100	168	0.385	12.379	7.598	0.559
Depth Invariant Greenhouse	100	167	0.387	13.084	8.039	0
Depth Invariant Greenhouse	100	166	0.39	6.912	3.481	0.76
Depth Invariant Greenhouse	100	165	0.392	4.488	1.646	0
Depth Invariant Greenhouse	100	164	0.395	4.888	1.878	0
Depth Invariant Greenhouse	100	163	0.397	0.861	-1.241	0.249
Depth Invariant Greenhouse	100	162	0.4	-3.098	-4.87	0
Depth Invariant Greenhouse	100	161	0.402	-1.57	-3.392	0
Depth Invariant Greenhouse	100	160	0.405	0.078	-1.812	0.154
Depth Invariant Greenhouse	100	159	0.407	2.071	-0.228	0.754
Depth Invariant Greenhouse	100	158	0.41	4.371	1.426	0
Depth Invariant Greenhouse	100	157	0.412	1.641	-0.701	0
Depth Invariant Greenhouse	100	156	0.415	0.099	-2.044	0.155
Depth Invariant Greenhouse	100	155	0.417	-4.168	-5.945	0
Depth Invariant Greenhouse	100	154	0.42	-3.631	-5.36	0
Depth Invariant Greenhouse	100	153	0.422	-1.659	-3.471	0.248
Depth Invariant Greenhouse	100	152	0.425	0.456	-1.55	0
Depth Invariant Greenhouse	100	151	0.427	2.811	0.26	1.001
Depth Invariant Greenhouse	100	150	0.43	5.24	2.003	0
Depth Invariant Greenhouse	100	149	0.432	7.603	3.673	0
Depth Invariant Greenhouse	100	148	0.435	3.102	0.293	0
Depth Invariant Greenhouse	100	147	0.437	-5.484	-7.241	0
Depth Invariant Greenhouse	100	146	0.44	-3.923	-5.717	0
Depth Invariant Greenhouse	100	145	0.442	-2.347	-4.191	0
Depth Invariant Greenhouse	100	144	0.445	-0.659	-2.583	0.05
Depth Invariant Greenhouse	100	143	0.447	1.192	-0.968	0.994
Depth Invariant Greenhouse	100	142	0.45	3.484	0.719	0
Depth Invariant Greenhouse	100	141	0.452	5.955	2.484	0
Depth Invariant Greenhouse	100	140	0.455	2.475	-0.17	0
Depth Invariant Greenhouse	100	139	0.457	-0.488	-2.657	0.073
Depth Invariant Greenhouse	100	138	0.46	-4.014	-5.8	0

Depth Invariant Greenhouse	100	137	0.462	-2.102	-3.973	0
Depth Invariant Greenhouse	100	136	0.465	0.01	-2.002	0.142
Depth Invariant Greenhouse	100	135	0.467	2.351	-0.141	0.753
Depth Invariant Greenhouse	100	134	0.47	4.833	1.655	0
Depth Invariant Greenhouse	100	133	0.472	6.335	2.699	0
Depth Invariant Greenhouse	100	132	0.475	0.347	-1.927	0.188
Depth Invariant Greenhouse	100	131	0.477	2.383	-0.355	0.5
Depth Invariant Greenhouse	100	130	0.48	3.501	0.424	0
Depth Invariant Greenhouse	100	129	0.482	-0.725	-3.059	0.727
Depth Invariant Greenhouse	100	128	0.485	-0.235	-2.564	0
Depth Invariant Greenhouse	100	127	0.487	0.137	-2.234	0
Depth Invariant Greenhouse	100	126	0.49	0.664	-1.84	0
Depth Invariant Greenhouse	100	125	0.492	-2.116	-4.516	0
Depth Invariant Greenhouse	100	124	0.495	-5.899	-7.858	0
Depth Invariant Greenhouse	100	123	0.497	-5.327	-7.249	0
Depth Invariant Greenhouse	100	122	0.5	-4.716	-6.606	0
Depth Invariant Greenhouse	100	121	0.502	-2.629	-4.628	0
Depth Invariant Greenhouse	100	120	0.505	-5.94	-7.548	0
Depth Invariant Greenhouse	100	119	0.507	-6.194	-7.697	0
Depth Invariant Greenhouse	100	118	0.51	-4.235	-5.822	0
Depth Invariant Greenhouse	100	117	0.512	-8.619	-9.777	0
Depth Invariant Greenhouse	100	116	0.515	-8.173	-9.279	0
Depth Invariant Greenhouse	100	115	0.517	-6.436	-7.587	0
Depth Invariant Greenhouse	100	114	0.52	-4.71	-5.919	0
Depth Invariant Greenhouse	100	113	0.522	-2.974	-4.247	0
Depth Invariant Greenhouse	100	112	0.525	-1.11	-2.486	0
Depth Invariant Greenhouse	100	111	0.527	-3.629	-4.633	0
Depth Invariant Greenhouse	100	110	0.53	-7.293	-7.904	0
Depth Invariant Greenhouse	100	109	0.532	-10.78	-11.082	0
Depth Invariant Greenhouse	100	108	0.535	-8.673	-9.024	0
Depth Invariant Greenhouse	100	107	0.537	-6.556	-6.97	0
Depth Invariant Greenhouse	100	106	0.54	-4.381	-4.883	0
Depth Invariant Greenhouse	100	105	0.542	-2.165	-2.79	0.556
Depth Invariant Greenhouse	100	104	0.545	0.49	-0.655	0
Depth Invariant Greenhouse	100	103	0.547	3.134	1.365	0.197

Depth Invariant Greenhouse	100	102	0.55	-3.128	-3.986	0.504
Depth Invariant Greenhouse	100	101	0.552	-8.071	-8.912	0
Depth Invariant Greenhouse	100	100	0.555	-6.147	-7.034	0
Depth Invariant Greenhouse	100	99	0.557	-4.323	-5.265	0
Depth Invariant Greenhouse	100	98	0.56	-2.506	-3.521	0
Depth Invariant Greenhouse	100	97	0.562	-0.655	-1.774	0.069
Depth Invariant Greenhouse	100	96	0.565	1.443	0.064	0.534
Depth Invariant Greenhouse	100	95	0.567	2.89	1.108	0
Depth Invariant Greenhouse	100	94	0.57	-1.978	-3.125	0
Depth Invariant Greenhouse	100	93	0.572	-2.009	-3.061	0
Depth Invariant Greenhouse	100	92	0.575	-5.533	-6.171	0
Depth Invariant Greenhouse	100	91	0.577	-3.327	-4.067	0
Depth Invariant Greenhouse	100	90	0.58	-1.025	-1.914	0
Depth Invariant Greenhouse	100	89	0.582	1.364	0.242	0.763
Depth Invariant Greenhouse	100	88	0.585	4.314	2.441	0
Depth Invariant Greenhouse	100	87	0.587	1.141	-0.118	0
Depth Invariant Greenhouse	100	86	0.59	-2.306	-3.245	0
Depth Invariant Greenhouse	100	85	0.592	-1.761	-2.666	0
Depth Invariant Greenhouse	100	84	0.595	-2.296	-3.052	0
Depth Invariant Greenhouse	100	83	0.597	-7.466	-7.668	0
Depth Invariant Greenhouse	100	82	0.6	-8.247	-8.307	0
Depth Invariant Greenhouse	100	81	0.602	-6.418	-6.535	0
Depth Invariant Greenhouse	100	80	0.605	-4.448	-4.65	0
Depth Invariant Greenhouse	100	79	0.607	-8.766	-8.537	0
Depth Invariant Greenhouse	100	78	0.61	-8.145	-7.877	0
Depth Invariant Greenhouse	100	77	0.612	-6.04	-5.849	0
Depth Invariant Greenhouse	100	76	0.615	-3.838	-3.75	0
Depth Invariant Greenhouse	100	75	0.617	-1.46	-1.527	0
Depth Invariant Greenhouse	100	74	0.62	-4.612	-4.277	0
Depth Invariant Greenhouse	100	73	0.622	-4.641	-4.216	0
Depth Invariant Greenhouse	100	72	0.625	-4.469	-3.971	0
Depth Invariant Greenhouse	100	71	0.627	-7.8	-6.944	0
Depth Invariant Greenhouse	100	70	0.63	-5.693	-4.908	0
Depth Invariant Greenhouse	100	69	0.632	-3.634	-2.948	0
Depth Invariant Greenhouse	100	68	0.635	-1.634	-1.057	0

Depth Invariant Greenhouse	100	67	0.637	0.403	0.838	0.191
Depth Invariant Greenhouse	100	66	0.64	2.699	2.645	0.243
Depth Invariant Greenhouse	100	65	0.642	0.236	0.571	0.168
Depth Invariant Greenhouse	100	64	0.645	-6.094	-5.176	0
Depth Invariant Greenhouse	100	63	0.647	-6.966	-5.887	0
Depth Invariant Greenhouse	100	62	0.65	-4.928	-3.932	0
Depth Invariant Greenhouse	100	61	0.652	-2.789	-1.902	0
Depth Invariant Greenhouse	100	60	0.655	-0.546	0.196	0.062
Depth Invariant Greenhouse	100	59	0.657	2.046	2.416	0.744
Depth Invariant Greenhouse	100	58	0.66	5.009	4.595	0
Depth Invariant Greenhouse	100	57	0.662	7.037	6.028	0
Depth Invariant Greenhouse	100	56	0.665	-1.483	-0.793	0
Depth Invariant Greenhouse	100	55	0.667	-4.09	-3.036	0
Depth Invariant Greenhouse	100	54	0.67	-1.952	-1.014	0.524
Depth Invariant Greenhouse	100	53	0.672	0.473	0.931	0
Depth Invariant Greenhouse	100	52	0.675	2.861	2.804	1.528
Depth Invariant Greenhouse	100	51	0.677	5.427	4.68	0
Depth Invariant Greenhouse	100	50	0.68	7.954	6.466	0
Depth Invariant Greenhouse	100	49	0.682	6.078	5.017	0
Depth Invariant Greenhouse	100	48	0.685	3.472	3	0
Depth Invariant Greenhouse	100	47	0.687	1.779	1.615	0
Depth Invariant Greenhouse	100	46	0.69	-3.276	-2.894	0
Depth Invariant Greenhouse	100	45	0.692	-2.727	-2.302	0
Depth Invariant Greenhouse	100	44	0.695	-2.051	-1.596	0.785
Depth Invariant Greenhouse	100	43	0.697	-0.811	-0.813	0
Depth Invariant Greenhouse	100	42	0.7	0.015	-0.028	0
Depth Invariant Greenhouse	100	41	0.702	-3.844	-3.614	0
Depth Invariant Greenhouse	100	40	0.705	-3.094	-2.839	0
Depth Invariant Greenhouse	100	39	0.707	-0.907	-0.78	0.192
Depth Invariant Greenhouse	100	38	0.71	0.317	0.389	0
Depth Invariant Greenhouse	100	37	0.712	-3.171	-2.778	0
Depth Invariant Greenhouse	100	36	0.715	-2.466	-2.045	0
Depth Invariant Greenhouse	100	35	0.717	-0.593	-0.265	0.062
Depth Invariant Greenhouse	100	34	0.72	-0.948	-0.524	0
Depth Invariant Greenhouse	100	33	0.722	-4.647	-3.775	0

Depth Invariant Greenhouse	100	32	0.725	-2.799	-2.005	0
Depth Invariant Greenhouse	100	31	0.727	-0.879	-0.184	0.016
Depth Invariant Greenhouse	100	30	0.73	1.337	1.765	0.499
Depth Invariant Greenhouse	100	29	0.732	3.933	3.727	0
Depth Invariant Greenhouse	100	28	0.735	0.417	0.853	0.38
Depth Invariant Greenhouse	100	27	0.737	0.376	0.777	0
Depth Invariant Greenhouse	100	26	0.74	-2.265	-1.598	0
Depth Invariant Greenhouse	100	25	0.742	-2.822	-2.001	0
Depth Invariant Greenhouse	100	24	0.745	-0.608	0.074	0.053
Depth Invariant Greenhouse	100	23	0.747	1.777	2.094	1.381
Depth Invariant Greenhouse	100	22	0.75	4.455	4.106	0
Depth Invariant Greenhouse	100	21	0.752	7.058	5.976	0
Depth Invariant Greenhouse	100	20	0.755	9.615	7.775	0
Depth Invariant Greenhouse	100	19	0.757	5.947	4.974	0
Depth Invariant Greenhouse	100	18	0.76	-3.394	-2.811	0
Depth Invariant Greenhouse	100	17	0.762	-1.627	-1.122	0.327
Depth Invariant Greenhouse	100	16	0.765	0.408	0.615	0
Depth Invariant Greenhouse	100	15	0.767	2.698	2.403	0.691
Depth Invariant Greenhouse	100	14	0.77	5.269	4.32	0
Depth Invariant Greenhouse	100	13	0.772	7.922	6.252	0
Depth Invariant Greenhouse	100	12	0.775	10.704	8.252	0.264
Depth Invariant Greenhouse	100	11	0.777	9.25	7.121	0.847
Depth Invariant Greenhouse	100	10	0.78	3.443	2.435	0
Depth Invariant Greenhouse	100	9	0.782	0.982	0.415	0.243
Depth Invariant Greenhouse	100	8	0.785	3.682	2.466	1.264
Depth Invariant Greenhouse	100	7	0.787	4.631	3.125	0
Depth Invariant Greenhouse	100	6	0.79	5.485	3.709	0
Depth Invariant Greenhouse	100	5	0.792	6.217	4.197	0
Depth Invariant Greenhouse	100	4	0.795	6.862	4.616	0
Depth Invariant Greenhouse	100	3	0.797	0.164	-0.689	0.158
Depth Invariant Greenhouse	100	2	0.8	-0.781	-1.742	0
Depth Invariant Greenhouse	100	1	1.6	-0.781	-1.731	0
Depth Invariant Greenhouse	120	322	0	-12.126	-7.998	0
Depth Invariant Greenhouse	120	321	0.002	-10.393	-6.318	0
Depth Invariant Greenhouse	120	320	0.005	-8.603	-4.593	0

Depth Invariant Greenhouse	120	319	0.007	-6.66	-2.757	0
Depth Invariant Greenhouse	120	318	0.01	-4.675	-0.907	0
Depth Invariant Greenhouse	120	317	0.012	-2.588	1.017	0.438
Depth Invariant Greenhouse	120	316	0.015	-0.121	3.012	0
Depth Invariant Greenhouse	120	315	0.017	-1.586	1.793	0
Depth Invariant Greenhouse	120	314	0.02	-4.582	-0.724	0
Depth Invariant Greenhouse	120	313	0.022	-8.107	-3.718	0
Depth Invariant Greenhouse	120	312	0.025	-7.177	-2.777	0
Depth Invariant Greenhouse	120	311	0.027	-4.948	-0.711	0
Depth Invariant Greenhouse	120	310	0.03	-2.844	1.221	0.293
Depth Invariant Greenhouse	120	309	0.032	-0.562	3.08	0
Depth Invariant Greenhouse	120	308	0.035	1.54	4.87	0.243
Depth Invariant Greenhouse	120	307	0.037	-3.202	0.853	1.778
Depth Invariant Greenhouse	120	306	0.04	-2.637	1.316	0
Depth Invariant Greenhouse	120	305	0.042	-0.563	3.027	0
Depth Invariant Greenhouse	120	304	0.045	-4.329	-0.115	0
Depth Invariant Greenhouse	120	303	0.047	-4.77	-0.436	0
Depth Invariant Greenhouse	120	302	0.05	-2.491	1.433	0
Depth Invariant Greenhouse	120	301	0.052	0.329	3.378	0
Depth Invariant Greenhouse	120	300	0.055	0.446	3.446	0
Depth Invariant Greenhouse	120	299	0.057	-2.995	0.477	0
Depth Invariant Greenhouse	120	298	0.06	-0.667	2.582	0.045
Depth Invariant Greenhouse	120	297	0.062	1.76	4.689	0.735
Depth Invariant Greenhouse	120	296	0.065	4.62	6.77	0
Depth Invariant Greenhouse	120	295	0.067	2.123	4.882	0
Depth Invariant Greenhouse	120	294	0.07	0.822	3.77	0.243
Depth Invariant Greenhouse	120	293	0.072	3.298	5.66	0.245
Depth Invariant Greenhouse	120	292	0.075	0.122	3.056	0.221
Depth Invariant Greenhouse	120	291	0.077	-0.829	2.253	0
Depth Invariant Greenhouse	120	290	0.08	1.169	3.997	1.231
Depth Invariant Greenhouse	120	289	0.082	3.479	5.744	0
Depth Invariant Greenhouse	120	288	0.085	5.99	7.521	0
Depth Invariant Greenhouse	120	287	0.087	6.77	8.042	0
Depth Invariant Greenhouse	120	286	0.09	3.517	5.666	0
Depth Invariant Greenhouse	120	285	0.092	-1.665	1.388	0.054

Depth Invariant Greenhouse	120	284	0.095	-7.999	-4.061	0
Depth Invariant Greenhouse	120	283	0.097	-7.425	-3.44	0
Depth Invariant Greenhouse	120	282	0.1	-6.667	-2.658	0
Depth Invariant Greenhouse	120	281	0.102	-4.351	-0.523	0
Depth Invariant Greenhouse	120	280	0.105	-2.018	1.598	0.602
Depth Invariant Greenhouse	120	279	0.107	0.743	3.735	0
Depth Invariant Greenhouse	120	278	0.11	3.332	5.737	0.245
Depth Invariant Greenhouse	120	277	0.112	-0.504	2.568	0.067
Depth Invariant Greenhouse	120	276	0.115	-8.653	-4.462	0
Depth Invariant Greenhouse	120	275	0.117	-6.816	-2.72	0
Depth Invariant Greenhouse	120	274	0.12	-4.914	-0.936	0
Depth Invariant Greenhouse	120	273	0.122	-2.978	0.849	0
Depth Invariant Greenhouse	120	272	0.125	-0.992	2.664	0.001
Depth Invariant Greenhouse	120	271	0.127	1.171	4.595	0.489
Depth Invariant Greenhouse	120	270	0.13	3.759	6.538	0
Depth Invariant Greenhouse	120	269	0.132	-0.788	2.839	0.892
Depth Invariant Greenhouse	120	268	0.135	-0.964	2.794	0
Depth Invariant Greenhouse	120	267	0.137	-4.63	-0.229	0
Depth Invariant Greenhouse	120	266	0.14	-2.572	0.923	0
Depth Invariant Greenhouse	120	265	0.142	-0.148	3.102	0.116
Depth Invariant Greenhouse	120	264	0.145	2.431	5.254	3.542
Depth Invariant Greenhouse	120	263	0.147	5.372	7.421	0
Depth Invariant Greenhouse	120	262	0.15	5.39	7.398	0
Depth Invariant Greenhouse	120	261	0.152	1.472	4.349	0
Depth Invariant Greenhouse	120	260	0.155	3.953	6.237	0
Depth Invariant Greenhouse	120	259	0.157	6.619	8.131	0
Depth Invariant Greenhouse	120	258	0.16	2.416	4.966	0
Depth Invariant Greenhouse	120	257	0.162	2.142	4.683	0
Depth Invariant Greenhouse	120	256	0.165	4.59	6.518	0
Depth Invariant Greenhouse	120	255	0.167	7.345	8.467	0
Depth Invariant Greenhouse	120	254	0.17	3.856	5.894	0
Depth Invariant Greenhouse	120	253	0.172	3.271	5.399	0
Depth Invariant Greenhouse	120	252	0.175	6.175	7.501	0
Depth Invariant Greenhouse	120	251	0.177	9.345	9.727	0
Depth Invariant Greenhouse	120	250	0.18	12.57	11.911	0.79

Depth Invariant Greenhouse	120	249	0.182	10.227	10.188	0
Depth Invariant Greenhouse	120	248	0.185	9.099	9.192	2.948
Depth Invariant Greenhouse	120	247	0.187	9.134	9.121	0
Depth Invariant Greenhouse	120	246	0.19	2.343	3.646	0
Depth Invariant Greenhouse	120	245	0.192	3.1	4.188	0
Depth Invariant Greenhouse	120	244	0.195	3.835	4.709	0
Depth Invariant Greenhouse	120	243	0.197	4.505	5.174	0
Depth Invariant Greenhouse	120	242	0.2	5.159	5.622	0
Depth Invariant Greenhouse	120	241	0.202	7.661	7.405	0
Depth Invariant Greenhouse	120	240	0.205	6.322	6.379	0
Depth Invariant Greenhouse	120	239	0.207	-0.432	0.888	0.406
Depth Invariant Greenhouse	120	238	0.21	-2.734	-1.024	0
Depth Invariant Greenhouse	120	237	0.212	-0.291	0.987	0
Depth Invariant Greenhouse	120	236	0.215	2.16	3.064	0.716
Depth Invariant Greenhouse	120	235	0.217	4.925	5.193	0
Depth Invariant Greenhouse	120	234	0.22	8.008	7.417	0
Depth Invariant Greenhouse	120	233	0.222	11.051	9.57	0.571
Depth Invariant Greenhouse	120	232	0.225	14.143	11.691	0
Depth Invariant Greenhouse	120	231	0.227	6.708	6.351	0.256
Depth Invariant Greenhouse	120	230	0.23	0.877	1.734	0.243
Depth Invariant Greenhouse	120	229	0.232	3.276	3.607	0.656
Depth Invariant Greenhouse	120	228	0.235	5.724	5.446	0
Depth Invariant Greenhouse	120	227	0.237	8.122	7.228	0
Depth Invariant Greenhouse	120	226	0.24	10.71	9.032	0.859
Depth Invariant Greenhouse	120	225	0.242	13.246	10.776	0
Depth Invariant Greenhouse	120	224	0.245	13.05	10.584	0
Depth Invariant Greenhouse	120	223	0.247	8.517	7.3	0.273
Depth Invariant Greenhouse	120	222	0.25	10.074	8.36	0.593
Depth Invariant Greenhouse	120	221	0.252	6.132	5.239	0.554
Depth Invariant Greenhouse	120	220	0.255	7.459	6.155	0
Depth Invariant Greenhouse	120	219	0.257	10.435	8.221	4.405
Depth Invariant Greenhouse	120	218	0.26	13.604	10.38	0
Depth Invariant Greenhouse	120	217	0.262	16.615	12.467	0
Depth Invariant Greenhouse	120	216	0.265	13.314	10.088	0
Depth Invariant Greenhouse	120	215	0.267	12.577	9.522	0

Depth Invariant Greenhouse	120	214	0.27	15.351	11.442	0
Depth Invariant Greenhouse	120	213	0.272	18.019	13.283	0
Depth Invariant Greenhouse	120	212	0.275	13.668	10.162	0
Depth Invariant Greenhouse	120	211	0.277	13.149	9.752	0
Depth Invariant Greenhouse	120	210	0.28	15.573	11.424	0
Depth Invariant Greenhouse	120	209	0.282	16.919	12.33	0
Depth Invariant Greenhouse	120	208	0.285	10.694	7.878	0
Depth Invariant Greenhouse	120	207	0.287	11.129	8.145	0
Depth Invariant Greenhouse	120	206	0.29	11.812	8.586	0
Depth Invariant Greenhouse	120	205	0.292	12.596	9.098	0
Depth Invariant Greenhouse	120	204	0.295	13.473	9.673	0
Depth Invariant Greenhouse	120	203	0.297	8.843	6.339	1.884
Depth Invariant Greenhouse	120	202	0.3	5.488	3.907	0
Depth Invariant Greenhouse	120	201	0.302	3.852	2.669	0
Depth Invariant Greenhouse	120	200	0.305	1.513	0.811	0
Depth Invariant Greenhouse	120	199	0.307	4.13	2.786	0
Depth Invariant Greenhouse	120	198	0.31	6.705	4.624	0
Depth Invariant Greenhouse	120	197	0.312	9.243	6.382	0
Depth Invariant Greenhouse	120	196	0.315	11.825	8.066	0.803
Depth Invariant Greenhouse	120	195	0.317	14.244	9.743	0
Depth Invariant Greenhouse	120	194	0.32	12.446	8.426	0
Depth Invariant Greenhouse	120	193	0.322	1.228	0.162	1.232
Depth Invariant Greenhouse	120	192	0.325	1.613	0.409	0
Depth Invariant Greenhouse	120	191	0.327	3.92	2.12	0
Depth Invariant Greenhouse	120	190	0.33	6.322	3.843	0
Depth Invariant Greenhouse	120	189	0.332	8.88	5.637	0
Depth Invariant Greenhouse	120	188	0.335	11.531	7.495	0.762
Depth Invariant Greenhouse	120	187	0.337	14.355	9.466	0
Depth Invariant Greenhouse	120	186	0.34	14.274	9.375	0
Depth Invariant Greenhouse	120	185	0.342	7.378	4.436	0.863
Depth Invariant Greenhouse	120	184	0.345	3.053	1.262	0
Depth Invariant Greenhouse	120	183	0.347	5.458	3.012	0
Depth Invariant Greenhouse	120	182	0.35	7.94	4.78	0
Depth Invariant Greenhouse	120	181	0.352	10.319	6.47	0.877
Depth Invariant Greenhouse	120	180	0.355	12.612	8.086	0

Depth Invariant Greenhouse	120	179	0.357	14.898	9.696	0
Depth Invariant Greenhouse	120	178	0.36	10.73	6.73	0
Depth Invariant Greenhouse	120	177	0.362	9.27	5.688	0.628
Depth Invariant Greenhouse	120	176	0.365	10.798	6.473	0.234
Depth Invariant Greenhouse	120	175	0.367	5.805	2.888	1.011
Depth Invariant Greenhouse	120	174	0.37	6.669	3.497	0
Depth Invariant Greenhouse	120	173	0.372	9.129	5.237	0
Depth Invariant Greenhouse	120	172	0.375	12.042	7.045	0.489
Depth Invariant Greenhouse	120	171	0.377	13.628	8.145	0
Depth Invariant Greenhouse	120	170	0.38	7.691	3.892	0.214
Depth Invariant Greenhouse	120	169	0.382	10.214	5.681	0.689
Depth Invariant Greenhouse	120	168	0.385	12.932	7.598	0
Depth Invariant Greenhouse	120	167	0.387	13.577	8.039	0
Depth Invariant Greenhouse	120	166	0.39	7.197	3.481	0.569
Depth Invariant Greenhouse	120	165	0.392	4.63	1.646	0
Depth Invariant Greenhouse	120	164	0.395	4.945	1.878	0
Depth Invariant Greenhouse	120	163	0.397	0.68	-1.241	0.145
Depth Invariant Greenhouse	120	162	0.4	-3.64	-4.87	0
Depth Invariant Greenhouse	120	161	0.402	-2.06	-3.392	0.692
Depth Invariant Greenhouse	120	160	0.405	0.217	-1.812	0
Depth Invariant Greenhouse	120	159	0.407	2.242	-0.228	0.616
Depth Invariant Greenhouse	120	158	0.41	4.533	1.426	0
Depth Invariant Greenhouse	120	157	0.412	1.633	-0.701	0
Depth Invariant Greenhouse	120	156	0.415	-0.071	-2.044	1.178
Depth Invariant Greenhouse	120	155	0.417	-4.676	-5.945	0
Depth Invariant Greenhouse	120	154	0.42	-4.052	-5.36	0
Depth Invariant Greenhouse	120	153	0.422	-1.841	-3.471	0
Depth Invariant Greenhouse	120	152	0.425	0.939	-1.55	0
Depth Invariant Greenhouse	120	151	0.427	3.375	0.26	0.974
Depth Invariant Greenhouse	120	150	0.43	5.811	2.003	0
Depth Invariant Greenhouse	120	149	0.432	8.171	3.673	0
Depth Invariant Greenhouse	120	148	0.435	3.51	0.293	0
Depth Invariant Greenhouse	120	147	0.437	-5.504	-7.241	0.128
Depth Invariant Greenhouse	120	146	0.44	-3.765	-5.717	0
Depth Invariant Greenhouse	120	145	0.442	-2.134	-4.191	0.852

Depth Invariant Greenhouse	120	144	0.445	0.316	-2.583	0
Depth Invariant Greenhouse	120	143	0.447	2.34	-0.968	0.886
Depth Invariant Greenhouse	120	142	0.45	4.657	0.719	0
Depth Invariant Greenhouse	120	141	0.452	7.135	2.484	0
Depth Invariant Greenhouse	120	140	0.455	3.494	-0.17	0
Depth Invariant Greenhouse	120	139	0.457	0.322	-2.657	0.153
Depth Invariant Greenhouse	120	138	0.46	-3.353	-5.8	0
Depth Invariant Greenhouse	120	137	0.462	-1.367	-3.973	0.356
Depth Invariant Greenhouse	120	136	0.465	1.189	-2.002	1.519
Depth Invariant Greenhouse	120	135	0.467	3.683	-0.141	0
Depth Invariant Greenhouse	120	134	0.47	6.183	1.655	0
Depth Invariant Greenhouse	120	133	0.472	7.662	2.699	0
Depth Invariant Greenhouse	120	132	0.475	1.401	-1.927	0
Depth Invariant Greenhouse	120	131	0.477	3.51	-0.355	0
Depth Invariant Greenhouse	120	130	0.48	4.592	0.424	0
Depth Invariant Greenhouse	120	129	0.482	0.097	-3.059	0.278
Depth Invariant Greenhouse	120	128	0.485	0.643	-2.564	0
Depth Invariant Greenhouse	120	127	0.487	1.055	-2.234	0.415
Depth Invariant Greenhouse	120	126	0.49	1.589	-1.84	0
Depth Invariant Greenhouse	120	125	0.492	-1.566	-4.516	0
Depth Invariant Greenhouse	120	124	0.495	-5.583	-7.858	0
Depth Invariant Greenhouse	120	123	0.497	-5.012	-7.249	0
Depth Invariant Greenhouse	120	122	0.5	-4.399	-6.606	0
Depth Invariant Greenhouse	120	121	0.502	-2.23	-4.628	0.019
Depth Invariant Greenhouse	120	120	0.505	-5.729	-7.548	0
Depth Invariant Greenhouse	120	119	0.507	-6.027	-7.697	0
Depth Invariant Greenhouse	120	118	0.51	-3.996	-5.822	0
Depth Invariant Greenhouse	120	117	0.512	-8.634	-9.777	0
Depth Invariant Greenhouse	120	116	0.515	-8.196	-9.279	0
Depth Invariant Greenhouse	120	115	0.517	-6.403	-7.587	0
Depth Invariant Greenhouse	120	114	0.52	-4.618	-5.919	0
Depth Invariant Greenhouse	120	113	0.522	-2.817	-4.247	0.55
Depth Invariant Greenhouse	120	112	0.525	-0.7	-2.486	0
Depth Invariant Greenhouse	120	111	0.527	-3.363	-4.633	0
Depth Invariant Greenhouse	120	110	0.53	-6.885	-7.904	0

Depth Invariant Greenhouse	120	109	0.532	-10.565	-11.082	0
Depth Invariant Greenhouse	120	108	0.535	-8.39	-9.024	0
Depth Invariant Greenhouse	120	107	0.537	-6.199	-6.97	0
Depth Invariant Greenhouse	120	106	0.54	-3.939	-4.883	0.399
Depth Invariant Greenhouse	120	105	0.542	-1.36	-2.79	0
Depth Invariant Greenhouse	120	104	0.545	1.169	-0.655	0.402
Depth Invariant Greenhouse	120	103	0.547	3.862	1.365	0
Depth Invariant Greenhouse	120	102	0.55	-2.74	-3.986	0.141
Depth Invariant Greenhouse	120	101	0.552	-8.354	-8.912	0
Depth Invariant Greenhouse	120	100	0.555	-6.366	-7.034	0
Depth Invariant Greenhouse	120	99	0.557	-4.477	-5.265	0.677
Depth Invariant Greenhouse	120	98	0.56	-2.406	-3.521	0
Depth Invariant Greenhouse	120	97	0.562	-0.091	-1.774	0
Depth Invariant Greenhouse	120	96	0.565	2.118	0.064	0.454
Depth Invariant Greenhouse	120	95	0.567	3.544	1.108	0
Depth Invariant Greenhouse	120	94	0.57	-1.653	-3.125	0.17
Depth Invariant Greenhouse	120	93	0.572	-1.611	-3.061	0
Depth Invariant Greenhouse	120	92	0.575	-5.292	-6.171	0
Depth Invariant Greenhouse	120	91	0.577	-2.999	-4.067	0.691
Depth Invariant Greenhouse	120	90	0.58	-0.045	-1.914	0
Depth Invariant Greenhouse	120	89	0.582	2.58	0.242	0.985
Depth Invariant Greenhouse	120	88	0.585	5.613	2.441	0
Depth Invariant Greenhouse	120	87	0.587	2.307	-0.118	0
Depth Invariant Greenhouse	120	86	0.59	-1.194	-3.245	0
Depth Invariant Greenhouse	120	85	0.592	-0.658	-2.666	0
Depth Invariant Greenhouse	120	84	0.595	-1.321	-3.052	0
Depth Invariant Greenhouse	120	83	0.597	-6.796	-7.668	0
Depth Invariant Greenhouse	120	82	0.6	-7.646	-8.307	0
Depth Invariant Greenhouse	120	81	0.602	-5.756	-6.535	0
Depth Invariant Greenhouse	120	80	0.605	-3.715	-4.65	0
Depth Invariant Greenhouse	120	79	0.607	-8.283	-8.537	0
Depth Invariant Greenhouse	120	78	0.61	-7.662	-7.877	0
Depth Invariant Greenhouse	120	77	0.612	-5.481	-5.849	0
Depth Invariant Greenhouse	120	76	0.615	-3.193	-3.75	0.207
Depth Invariant Greenhouse	120	75	0.617	-0.436	-1.527	0

Depth Invariant Greenhouse	120	74	0.62	-4.001	-4.277	0
Depth Invariant Greenhouse	120	73	0.622	-4.063	-4.216	0
Depth Invariant Greenhouse	120	72	0.625	-3.913	-3.971	0
Depth Invariant Greenhouse	120	71	0.627	-7.445	-6.944	0
Depth Invariant Greenhouse	120	70	0.63	-5.262	-4.908	0.167
Depth Invariant Greenhouse	120	69	0.632	-2.749	-2.948	0
Depth Invariant Greenhouse	120	68	0.635	-0.669	-1.057	0
Depth Invariant Greenhouse	120	67	0.637	1.37	0.838	0.317
Depth Invariant Greenhouse	120	66	0.64	3.723	2.645	0
Depth Invariant Greenhouse	120	65	0.642	1.08	0.571	0.144
Depth Invariant Greenhouse	120	64	0.645	-5.66	-5.176	0
Depth Invariant Greenhouse	120	63	0.647	-6.607	-5.887	0.198
Depth Invariant Greenhouse	120	62	0.65	-4.296	-3.932	0
Depth Invariant Greenhouse	120	61	0.652	-2.073	-1.902	0.365
Depth Invariant Greenhouse	120	60	0.655	0.632	0.196	0
Depth Invariant Greenhouse	120	59	0.657	3.252	2.416	0.996
Depth Invariant Greenhouse	120	58	0.66	6.289	4.595	0
Depth Invariant Greenhouse	120	57	0.662	8.394	6.028	0
Depth Invariant Greenhouse	120	56	0.665	-0.308	-0.793	0
Depth Invariant Greenhouse	120	55	0.667	-3.29	-3.036	0.24
Depth Invariant Greenhouse	120	54	0.67	-0.622	-1.014	0
Depth Invariant Greenhouse	120	53	0.672	1.471	0.931	2.037
Depth Invariant Greenhouse	120	52	0.675	3.923	2.804	0
Depth Invariant Greenhouse	120	51	0.677	6.491	4.68	0
Depth Invariant Greenhouse	120	50	0.68	8.951	6.466	0
Depth Invariant Greenhouse	120	49	0.682	7.446	5.017	0
Depth Invariant Greenhouse	120	48	0.685	4.715	3	0
Depth Invariant Greenhouse	120	47	0.687	2.924	1.615	0
Depth Invariant Greenhouse	120	46	0.69	-2.338	-2.894	0
Depth Invariant Greenhouse	120	45	0.692	-1.789	-2.302	0.077
Depth Invariant Greenhouse	120	44	0.695	-1.052	-1.596	0
Depth Invariant Greenhouse	120	43	0.697	-0.329	-0.813	0.481
Depth Invariant Greenhouse	120	42	0.7	0.536	-0.028	0
Depth Invariant Greenhouse	120	41	0.702	-3.696	-3.614	0
Depth Invariant Greenhouse	120	40	0.705	-2.914	-2.839	0

Depth Invariant Greenhouse	120	39	0.707	-0.34	-0.78	0
Depth Invariant Greenhouse	120	38	0.71	0.887	0.389	0
Depth Invariant Greenhouse	120	37	0.712	-3.064	-2.778	0.369
Depth Invariant Greenhouse	120	36	0.715	-2.261	-2.045	0
Depth Invariant Greenhouse	120	35	0.717	-0.127	-0.265	0
Depth Invariant Greenhouse	120	34	0.72	-0.488	-0.524	0
Depth Invariant Greenhouse	120	33	0.722	-4.356	-3.775	0
Depth Invariant Greenhouse	120	32	0.725	-2.44	-2.005	0.432
Depth Invariant Greenhouse	120	31	0.727	-0.008	-0.184	0
Depth Invariant Greenhouse	120	30	0.73	2.22	1.765	0.484
Depth Invariant Greenhouse	120	29	0.732	4.816	3.727	0
Depth Invariant Greenhouse	120	28	0.735	1.022	0.853	0
Depth Invariant Greenhouse	120	27	0.737	0.942	0.777	0.002
Depth Invariant Greenhouse	120	26	0.74	-2.07	-1.598	1.358
Depth Invariant Greenhouse	120	25	0.742	-2.276	-2.001	0
Depth Invariant Greenhouse	120	24	0.745	0.79	0.074	0
Depth Invariant Greenhouse	120	23	0.747	3.403	2.094	0.667
Depth Invariant Greenhouse	120	22	0.75	6.136	4.106	0
Depth Invariant Greenhouse	120	21	0.752	8.739	5.976	0
Depth Invariant Greenhouse	120	20	0.755	11.257	7.775	0.188
Depth Invariant Greenhouse	120	19	0.757	7.351	4.974	0.138
Depth Invariant Greenhouse	120	18	0.76	-2.617	-2.811	0.763
Depth Invariant Greenhouse	120	17	0.762	-0.108	-1.122	0
Depth Invariant Greenhouse	120	16	0.765	1.958	0.615	1.279
Depth Invariant Greenhouse	120	15	0.767	4.346	2.403	0
Depth Invariant Greenhouse	120	14	0.77	6.971	4.32	0
Depth Invariant Greenhouse	120	13	0.772	9.675	6.252	0
Depth Invariant Greenhouse	120	12	0.775	12.861	8.252	0.528
Depth Invariant Greenhouse	120	11	0.777	11.342	7.121	0
Depth Invariant Greenhouse	120	10	0.78	4.969	2.435	1.835
Depth Invariant Greenhouse	120	9	0.782	2.349	0.415	0
Depth Invariant Greenhouse	120	8	0.785	5.117	2.466	0
Depth Invariant Greenhouse	120	7	0.787	6.051	3.125	0
Depth Invariant Greenhouse	120	6	0.79	6.883	3.709	0
Depth Invariant Greenhouse	120	5	0.792	7.582	4.197	0

Depth Invariant Greenhouse	120	4	0.795	8.181	4.616	0
Depth Invariant Greenhouse	120	3	0.797	1.118	-0.689	0
Depth Invariant Greenhouse	120	2	0.8	0.219	-1.742	0
Depth Invariant Greenhouse	120	1	1.6	0.219	-1.731	0
Depth Invariant Greenhouse	140	322	0	-5.33	-7.998	0
Depth Invariant Greenhouse	140	321	0.002	-3.525	-6.318	0
Depth Invariant Greenhouse	140	320	0.005	-1.657	-4.593	0.153
Depth Invariant Greenhouse	140	319	0.007	0.518	-2.757	0
Depth Invariant Greenhouse	140	318	0.01	2.602	-0.907	0.568
Depth Invariant Greenhouse	140	317	0.012	4.797	1.017	0
Depth Invariant Greenhouse	140	316	0.015	7.159	3.012	0
Depth Invariant Greenhouse	140	315	0.017	5.723	1.793	0
Depth Invariant Greenhouse	140	314	0.02	2.73	-0.724	0
Depth Invariant Greenhouse	140	313	0.022	-1.002	-3.718	0.076
Depth Invariant Greenhouse	140	312	0.025	0.038	-2.777	0
Depth Invariant Greenhouse	140	311	0.027	2.362	-0.711	0
Depth Invariant Greenhouse	140	310	0.03	4.548	1.221	0
Depth Invariant Greenhouse	140	309	0.032	6.659	3.08	0.854
Depth Invariant Greenhouse	140	308	0.035	8.966	4.87	0
Depth Invariant Greenhouse	140	307	0.037	4.442	0.853	0
Depth Invariant Greenhouse	140	306	0.04	4.843	1.316	0
Depth Invariant Greenhouse	140	305	0.042	6.8	3.027	0.235
Depth Invariant Greenhouse	140	304	0.045	2.992	-0.115	0
Depth Invariant Greenhouse	140	303	0.047	2.434	-0.436	0
Depth Invariant Greenhouse	140	302	0.05	4.56	1.433	0
Depth Invariant Greenhouse	140	301	0.052	6.817	3.378	0.83
Depth Invariant Greenhouse	140	300	0.055	6.98	3.446	0
Depth Invariant Greenhouse	140	299	0.057	3.371	0.477	0
Depth Invariant Greenhouse	140	298	0.06	5.815	2.582	0
Depth Invariant Greenhouse	140	297	0.062	8.328	4.689	0
Depth Invariant Greenhouse	140	296	0.065	11.317	6.77	0.286
Depth Invariant Greenhouse	140	295	0.067	8.777	4.882	0.822
Depth Invariant Greenhouse	140	294	0.07	7.741	3.77	0
Depth Invariant Greenhouse	140	293	0.072	10.278	5.66	0.67
Depth Invariant Greenhouse	140	292	0.075	7.357	3.056	0.822

Depth Invariant Greenhouse	140	291	0.077	6.422	2.253	0
Depth Invariant Greenhouse	140	290	0.08	8.429	3.997	0
Depth Invariant Greenhouse	140	289	0.082	11.154	5.744	0.51
Depth Invariant Greenhouse	140	288	0.085	13.957	7.521	0.958
Depth Invariant Greenhouse	140	287	0.087	14.778	8.042	0
Depth Invariant Greenhouse	140	286	0.09	11.524	5.666	0
Depth Invariant Greenhouse	140	285	0.092	6.172	1.388	0
Depth Invariant Greenhouse	140	284	0.095	-0.6	-4.061	0
Depth Invariant Greenhouse	140	283	0.097	-0.013	-3.44	0
Depth Invariant Greenhouse	140	282	0.1	0.761	-2.658	0
Depth Invariant Greenhouse	140	281	0.102	3.182	-0.523	0
Depth Invariant Greenhouse	140	280	0.105	5.637	1.598	0.34
Depth Invariant Greenhouse	140	279	0.107	8.169	3.735	0
Depth Invariant Greenhouse	140	278	0.11	10.937	5.737	0.49
Depth Invariant Greenhouse	140	277	0.112	7.137	2.568	0.002
Depth Invariant Greenhouse	140	276	0.115	-1.553	-4.462	0
Depth Invariant Greenhouse	140	275	0.117	0.366	-2.72	0
Depth Invariant Greenhouse	140	274	0.12	2.354	-0.936	0
Depth Invariant Greenhouse	140	273	0.122	4.37	0.849	0
Depth Invariant Greenhouse	140	272	0.125	6.452	2.664	0.664
Depth Invariant Greenhouse	140	271	0.127	8.731	4.595	0
Depth Invariant Greenhouse	140	270	0.13	11.802	6.538	0.365
Depth Invariant Greenhouse	140	269	0.132	7.144	2.839	0.062
Depth Invariant Greenhouse	140	268	0.135	6.975	2.794	0
Depth Invariant Greenhouse	140	267	0.137	3.044	-0.229	0
Depth Invariant Greenhouse	140	266	0.14	4.225	0.923	0
Depth Invariant Greenhouse	140	265	0.142	6.762	3.102	0
Depth Invariant Greenhouse	140	264	0.145	9.255	5.254	0.385
Depth Invariant Greenhouse	140	263	0.147	12.591	7.421	0.456
Depth Invariant Greenhouse	140	262	0.15	12.574	7.398	0
Depth Invariant Greenhouse	140	261	0.152	8.481	4.349	0
Depth Invariant Greenhouse	140	260	0.155	10.795	6.237	0.477
Depth Invariant Greenhouse	140	259	0.157	13.726	8.131	0.138
Depth Invariant Greenhouse	140	258	0.16	9.283	4.966	1.279
Depth Invariant Greenhouse	140	257	0.162	9.327	4.683	0

Depth Invariant Greenhouse	140	256	0.165	12.275	6.518	0.504
Depth Invariant Greenhouse	140	255	0.167	15.097	8.467	0
Depth Invariant Greenhouse	140	254	0.17	11.492	5.894	0.912
Depth Invariant Greenhouse	140	253	0.172	11.004	5.399	0
Depth Invariant Greenhouse	140	252	0.175	14.243	7.501	1.184
Depth Invariant Greenhouse	140	251	0.177	17.39	9.727	0
Depth Invariant Greenhouse	140	250	0.18	20.492	11.911	0
Depth Invariant Greenhouse	140	249	0.182	18.011	10.188	0
Depth Invariant Greenhouse	140	248	0.185	16.565	9.192	0
Depth Invariant Greenhouse	140	247	0.187	16.434	9.121	0
Depth Invariant Greenhouse	140	246	0.19	8.853	3.646	0.76
Depth Invariant Greenhouse	140	245	0.192	9.743	4.188	0
Depth Invariant Greenhouse	140	244	0.195	10.631	4.709	0.914
Depth Invariant Greenhouse	140	243	0.197	11.971	5.174	1.292
Depth Invariant Greenhouse	140	242	0.2	12.85	5.622	0
Depth Invariant Greenhouse	140	241	0.202	15.427	7.405	0
Depth Invariant Greenhouse	140	240	0.205	14.034	6.379	0
Depth Invariant Greenhouse	140	239	0.207	6.91	0.888	0
Depth Invariant Greenhouse	140	238	0.21	4.367	-1.024	0
Depth Invariant Greenhouse	140	237	0.212	6.679	0.987	0.462
Depth Invariant Greenhouse	140	236	0.215	9.162	3.064	0
Depth Invariant Greenhouse	140	235	0.217	12.238	5.193	1.462
Depth Invariant Greenhouse	140	234	0.22	15.457	7.417	0
Depth Invariant Greenhouse	140	233	0.222	18.564	9.57	0
Depth Invariant Greenhouse	140	232	0.225	21.651	11.691	0
Depth Invariant Greenhouse	140	231	0.227	14.137	6.351	0
Depth Invariant Greenhouse	140	230	0.23	8.083	1.734	0
Depth Invariant Greenhouse	140	229	0.232	10.316	3.607	0.608
Depth Invariant Greenhouse	140	228	0.235	13.21	5.446	6.365
Depth Invariant Greenhouse	140	227	0.237	15.757	7.228	0
Depth Invariant Greenhouse	140	226	0.24	18.344	9.032	0
Depth Invariant Greenhouse	140	225	0.242	20.857	10.776	0
Depth Invariant Greenhouse	140	224	0.245	20.615	10.584	0
Depth Invariant Greenhouse	140	223	0.247	15.979	7.3	0
Depth Invariant Greenhouse	140	222	0.25	17.516	8.36	0

Depth Invariant Greenhouse	140	221	0.252	13.142	5.239	0
Depth Invariant Greenhouse	140	220	0.255	14.446	6.155	0
Depth Invariant Greenhouse	140	219	0.257	17.386	8.221	0
Depth Invariant Greenhouse	140	218	0.26	20.469	10.38	0
Depth Invariant Greenhouse	140	217	0.262	23.457	12.467	0
Depth Invariant Greenhouse	140	216	0.265	20.075	10.088	0
Depth Invariant Greenhouse	140	215	0.267	19.279	9.522	0
Depth Invariant Greenhouse	140	214	0.27	22.027	11.442	0
Depth Invariant Greenhouse	140	213	0.272	24.665	13.283	0
Depth Invariant Greenhouse	140	212	0.275	20.221	10.162	0
Depth Invariant Greenhouse	140	211	0.277	19.642	9.752	0
Depth Invariant Greenhouse	140	210	0.28	22.034	11.424	0
Depth Invariant Greenhouse	140	209	0.282	23.336	12.33	0
Depth Invariant Greenhouse	140	208	0.285	16.994	7.878	0
Depth Invariant Greenhouse	140	207	0.287	17.376	8.145	0
Depth Invariant Greenhouse	140	206	0.29	18.008	8.586	0
Depth Invariant Greenhouse	140	205	0.292	18.742	9.098	0
Depth Invariant Greenhouse	140	204	0.295	19.571	9.673	0
Depth Invariant Greenhouse	140	203	0.297	14.84	6.339	0
Depth Invariant Greenhouse	140	202	0.3	11.414	3.907	0
Depth Invariant Greenhouse	140	201	0.302	9.727	2.669	0.851
Depth Invariant Greenhouse	140	200	0.305	7.858	0.811	0
Depth Invariant Greenhouse	140	199	0.307	10.351	2.786	0.67
Depth Invariant Greenhouse	140	198	0.31	13.384	4.624	1.344
Depth Invariant Greenhouse	140	197	0.312	15.912	6.382	0
Depth Invariant Greenhouse	140	196	0.315	18.347	8.066	0
Depth Invariant Greenhouse	140	195	0.317	20.784	9.743	0
Depth Invariant Greenhouse	140	194	0.32	18.967	8.426	0
Depth Invariant Greenhouse	140	193	0.322	7.514	0.162	0.744
Depth Invariant Greenhouse	140	192	0.325	7.664	0.409	0
Depth Invariant Greenhouse	140	191	0.327	9.714	2.12	0
Depth Invariant Greenhouse	140	190	0.33	12.704	3.843	1.433
Depth Invariant Greenhouse	140	189	0.332	15.292	5.637	0
Depth Invariant Greenhouse	140	188	0.335	17.953	7.495	0
Depth Invariant Greenhouse	140	187	0.337	20.778	9.466	0

Depth Invariant Greenhouse	140	186	0.34	20.666	9.375	0
Depth Invariant Greenhouse	140	185	0.342	13.656	4.436	0
Depth Invariant Greenhouse	140	184	0.345	9.228	1.262	0.669
Depth Invariant Greenhouse	140	183	0.347	12.125	3.012	5.879
Depth Invariant Greenhouse	140	182	0.35	14.744	4.78	0
Depth Invariant Greenhouse	140	181	0.352	17.189	6.47	0
Depth Invariant Greenhouse	140	180	0.355	19.542	8.086	0
Depth Invariant Greenhouse	140	179	0.357	21.893	9.696	0
Depth Invariant Greenhouse	140	178	0.36	17.733	6.73	0
Depth Invariant Greenhouse	140	177	0.362	16.319	5.688	0
Depth Invariant Greenhouse	140	176	0.365	17.508	6.473	0
Depth Invariant Greenhouse	140	175	0.367	12.499	2.888	0
Depth Invariant Greenhouse	140	174	0.37	13.436	3.497	0
Depth Invariant Greenhouse	140	173	0.372	15.955	5.237	0
Depth Invariant Greenhouse	140	172	0.375	18.576	7.045	0
Depth Invariant Greenhouse	140	171	0.377	20.198	8.145	0
Depth Invariant Greenhouse	140	170	0.38	14.214	3.892	0
Depth Invariant Greenhouse	140	169	0.382	16.818	5.681	0
Depth Invariant Greenhouse	140	168	0.385	19.616	7.598	0
Depth Invariant Greenhouse	140	167	0.387	20.33	8.039	0
Depth Invariant Greenhouse	140	166	0.39	13.952	3.481	0
Depth Invariant Greenhouse	140	165	0.392	11.471	1.646	0
Depth Invariant Greenhouse	140	164	0.395	11.954	1.878	0
Depth Invariant Greenhouse	140	163	0.397	7.693	-1.241	0.926
Depth Invariant Greenhouse	140	162	0.4	3.245	-4.87	0
Depth Invariant Greenhouse	140	161	0.402	4.903	-3.392	0
Depth Invariant Greenhouse	140	160	0.405	6.723	-1.812	0
Depth Invariant Greenhouse	140	159	0.407	8.807	-0.228	0
Depth Invariant Greenhouse	140	158	0.41	11.403	1.426	0.382
Depth Invariant Greenhouse	140	157	0.412	8.598	-0.701	0.67
Depth Invariant Greenhouse	140	156	0.415	7.028	-2.044	0
Depth Invariant Greenhouse	140	155	0.417	2.305	-5.945	0
Depth Invariant Greenhouse	140	154	0.42	2.839	-5.36	0
Depth Invariant Greenhouse	140	153	0.422	4.974	-3.471	0
Depth Invariant Greenhouse	140	152	0.425	7.206	-1.55	0

Depth Invariant Greenhouse	140	151	0.427	9.452	0.26	0.778
Depth Invariant Greenhouse	140	150	0.43	12.545	2.003	0.462
Depth Invariant Greenhouse	140	149	0.432	14.934	3.673	0
Depth Invariant Greenhouse	140	148	0.435	10.167	0.293	0.643
Depth Invariant Greenhouse	140	147	0.437	1.051	-7.241	0
Depth Invariant Greenhouse	140	146	0.44	2.72	-5.717	0
Depth Invariant Greenhouse	140	145	0.442	4.414	-4.191	0
Depth Invariant Greenhouse	140	144	0.445	6.243	-2.583	0
Depth Invariant Greenhouse	140	143	0.447	8.19	-0.968	0.393
Depth Invariant Greenhouse	140	142	0.45	10.732	0.719	0.425
Depth Invariant Greenhouse	140	141	0.452	13.437	2.484	0.203
Depth Invariant Greenhouse	140	140	0.455	9.691	-0.17	1.302
Depth Invariant Greenhouse	140	139	0.457	6.954	-2.657	0
Depth Invariant Greenhouse	140	138	0.46	3.143	-5.8	0
Depth Invariant Greenhouse	140	137	0.462	5.224	-3.973	0
Depth Invariant Greenhouse	140	136	0.465	7.531	-2.002	0
Depth Invariant Greenhouse	140	135	0.467	10.112	-0.141	0.647
Depth Invariant Greenhouse	140	134	0.47	13.067	1.655	0.646
Depth Invariant Greenhouse	140	133	0.472	14.638	2.699	0
Depth Invariant Greenhouse	140	132	0.475	8.327	-1.927	0.362
Depth Invariant Greenhouse	140	131	0.477	10.636	-0.355	0.518
Depth Invariant Greenhouse	140	130	0.48	12.033	0.424	0.287
Depth Invariant Greenhouse	140	129	0.482	7.432	-3.059	1.916
Depth Invariant Greenhouse	140	128	0.485	8.132	-2.564	0
Depth Invariant Greenhouse	140	127	0.487	8.618	-2.234	0
Depth Invariant Greenhouse	140	126	0.49	9.282	-1.84	0
Depth Invariant Greenhouse	140	125	0.492	6.546	-4.516	0
Depth Invariant Greenhouse	140	124	0.495	2.531	-7.858	0
Depth Invariant Greenhouse	140	123	0.497	3.111	-7.249	0
Depth Invariant Greenhouse	140	122	0.5	3.734	-6.606	0
Depth Invariant Greenhouse	140	121	0.502	6.001	-4.628	0.153
Depth Invariant Greenhouse	140	120	0.505	2.425	-7.548	0
Depth Invariant Greenhouse	140	119	0.507	2.08	-7.697	0
Depth Invariant Greenhouse	140	118	0.51	4.202	-5.822	0
Depth Invariant Greenhouse	140	117	0.512	-0.72	-9.777	0.011

Depth Invariant Greenhouse	140	116	0.515	-0.254	-9.279	0
Depth Invariant Greenhouse	140	115	0.517	1.604	-7.587	0
Depth Invariant Greenhouse	140	114	0.52	3.466	-5.919	0
Depth Invariant Greenhouse	140	113	0.522	5.364	-4.247	0.279
Depth Invariant Greenhouse	140	112	0.525	7.401	-2.486	0
Depth Invariant Greenhouse	140	111	0.527	4.834	-4.633	0
Depth Invariant Greenhouse	140	110	0.53	0.703	-7.904	0
Depth Invariant Greenhouse	140	109	0.532	-3.199	-11.082	0
Depth Invariant Greenhouse	140	108	0.535	-0.926	-9.024	0
Depth Invariant Greenhouse	140	107	0.537	1.367	-6.97	0
Depth Invariant Greenhouse	140	106	0.54	3.728	-4.883	0
Depth Invariant Greenhouse	140	105	0.542	6.14	-2.79	0
Depth Invariant Greenhouse	140	104	0.545	8.66	-0.655	0.602
Depth Invariant Greenhouse	140	103	0.547	11.837	1.365	0.289
Depth Invariant Greenhouse	140	102	0.55	4.998	-3.986	0
Depth Invariant Greenhouse	140	101	0.552	-1.115	-8.912	0
Depth Invariant Greenhouse	140	100	0.555	0.964	-7.034	0
Depth Invariant Greenhouse	140	99	0.557	2.923	-5.265	0
Depth Invariant Greenhouse	140	98	0.56	4.876	-3.521	0
Depth Invariant Greenhouse	140	97	0.562	6.853	-1.774	0.971
Depth Invariant Greenhouse	140	96	0.565	9.252	0.064	0
Depth Invariant Greenhouse	140	95	0.567	11.329	1.108	0.362
Depth Invariant Greenhouse	140	94	0.57	6	-3.125	0.142
Depth Invariant Greenhouse	140	93	0.572	6	-3.061	0
Depth Invariant Greenhouse	140	92	0.575	2.078	-6.171	0
Depth Invariant Greenhouse	140	91	0.577	4.481	-4.067	0
Depth Invariant Greenhouse	140	90	0.58	6.939	-1.914	0.829
Depth Invariant Greenhouse	140	89	0.582	9.696	0.242	0
Depth Invariant Greenhouse	140	88	0.585	13.243	2.441	0.214
Depth Invariant Greenhouse	140	87	0.587	9.735	-0.118	1.601
Depth Invariant Greenhouse	140	86	0.59	6.404	-3.245	0
Depth Invariant Greenhouse	140	85	0.592	7.221	-2.666	0
Depth Invariant Greenhouse	140	84	0.595	6.832	-3.052	0
Depth Invariant Greenhouse	140	83	0.597	1.283	-7.668	0
Depth Invariant Greenhouse	140	82	0.6	0.365	-8.307	0

Depth Invariant Greenhouse	140	81	0.602	2.339	-6.535	0
Depth Invariant Greenhouse	140	80	0.605	4.472	-4.65	0
Depth Invariant Greenhouse	140	79	0.607	-0.373	-8.537	0
Depth Invariant Greenhouse	140	78	0.61	0.262	-7.877	0
Depth Invariant Greenhouse	140	77	0.612	2.542	-5.849	0
Depth Invariant Greenhouse	140	76	0.615	4.938	-3.75	0.024
Depth Invariant Greenhouse	140	75	0.617	7.535	-1.527	0
Depth Invariant Greenhouse	140	74	0.62	3.987	-4.277	0
Depth Invariant Greenhouse	140	73	0.622	3.899	-4.216	0
Depth Invariant Greenhouse	140	72	0.625	4.035	-3.971	0
Depth Invariant Greenhouse	140	71	0.627	0.286	-6.944	0
Depth Invariant Greenhouse	140	70	0.63	2.515	-4.908	0
Depth Invariant Greenhouse	140	69	0.632	4.674	-2.948	0
Depth Invariant Greenhouse	140	68	0.635	6.851	-1.057	0
Depth Invariant Greenhouse	140	67	0.637	8.958	0.838	0.427
Depth Invariant Greenhouse	140	66	0.64	11.862	2.645	0.178
Depth Invariant Greenhouse	140	65	0.642	9.052	0.571	0.749
Depth Invariant Greenhouse	140	64	0.645	2.516	-5.176	0
Depth Invariant Greenhouse	140	63	0.647	1.497	-5.887	0
Depth Invariant Greenhouse	140	62	0.65	3.671	-3.932	0
Depth Invariant Greenhouse	140	61	0.652	5.999	-1.902	0
Depth Invariant Greenhouse	140	60	0.655	8.426	0.196	0.506
Depth Invariant Greenhouse	140	59	0.657	11.719	2.416	0.867
Depth Invariant Greenhouse	140	58	0.66	14.883	4.595	0
Depth Invariant Greenhouse	140	57	0.662	16.954	6.028	0
Depth Invariant Greenhouse	140	56	0.665	7.78	-0.793	0
Depth Invariant Greenhouse	140	55	0.667	4.806	-3.036	0
Depth Invariant Greenhouse	140	54	0.67	7.073	-1.014	0
Depth Invariant Greenhouse	140	53	0.672	9.287	0.931	0.62
Depth Invariant Greenhouse	140	52	0.675	12.395	2.804	1.365
Depth Invariant Greenhouse	140	51	0.677	15.084	4.68	0
Depth Invariant Greenhouse	140	50	0.68	17.649	6.466	0
Depth Invariant Greenhouse	140	49	0.682	15.648	5.017	0
Depth Invariant Greenhouse	140	48	0.685	12.872	3	0
Depth Invariant Greenhouse	140	47	0.687	11.039	1.615	0.444

Depth Invariant Greenhouse	140	46	0.69	5.556	-2.894	0
Depth Invariant Greenhouse	140	45	0.692	6.104	-2.302	0
Depth Invariant Greenhouse	140	44	0.695	6.801	-1.596	0
Depth Invariant Greenhouse	140	43	0.697	7.601	-0.813	0.464
Depth Invariant Greenhouse	140	42	0.7	8.528	-0.028	0
Depth Invariant Greenhouse	140	41	0.702	4.265	-3.614	0
Depth Invariant Greenhouse	140	40	0.705	5.02	-2.839	0
Depth Invariant Greenhouse	140	39	0.707	7.382	-0.78	0
Depth Invariant Greenhouse	140	38	0.71	8.65	0.389	0.494
Depth Invariant Greenhouse	140	37	0.712	5.096	-2.778	0
Depth Invariant Greenhouse	140	36	0.715	5.818	-2.045	0
Depth Invariant Greenhouse	140	35	0.717	7.862	-0.265	0
Depth Invariant Greenhouse	140	34	0.72	7.372	-0.524	0
Depth Invariant Greenhouse	140	33	0.722	3.135	-3.775	0
Depth Invariant Greenhouse	140	32	0.725	5.06	-2.005	0
Depth Invariant Greenhouse	140	31	0.727	7.065	-0.184	0
Depth Invariant Greenhouse	140	30	0.73	9.328	1.765	0.316
Depth Invariant Greenhouse	140	29	0.732	12.463	3.727	0.226
Depth Invariant Greenhouse	140	28	0.735	8.567	0.853	0.76
Depth Invariant Greenhouse	140	27	0.737	8.797	0.777	0
Depth Invariant Greenhouse	140	26	0.74	5.84	-1.598	0
Depth Invariant Greenhouse	140	25	0.742	5.086	-2.001	0
Depth Invariant Greenhouse	140	24	0.745	7.41	0.074	0
Depth Invariant Greenhouse	140	23	0.747	9.761	2.094	0.377
Depth Invariant Greenhouse	140	22	0.75	13.033	4.106	0.791
Depth Invariant Greenhouse	140	21	0.752	15.641	5.976	0
Depth Invariant Greenhouse	140	20	0.755	18.163	7.775	0
Depth Invariant Greenhouse	140	19	0.757	14.188	4.974	0
Depth Invariant Greenhouse	140	18	0.76	3.868	-2.811	0
Depth Invariant Greenhouse	140	17	0.762	5.704	-1.122	0
Depth Invariant Greenhouse	140	16	0.765	7.668	0.615	0
Depth Invariant Greenhouse	140	15	0.767	9.755	2.403	0.175
Depth Invariant Greenhouse	140	14	0.77	12.697	4.32	0.55
Depth Invariant Greenhouse	140	13	0.772	15.343	6.252	0
Depth Invariant Greenhouse	140	12	0.775	18.098	8.252	0

Depth Invariant Greenhouse	140	11	0.777	16.415	7.121	0
Depth Invariant Greenhouse	140	10	0.78	9.744	2.435	1.404
Depth Invariant Greenhouse	140	9	0.782	7.5	0.415	0
Depth Invariant Greenhouse	140	8	0.785	9.95	2.466	0
Depth Invariant Greenhouse	140	7	0.787	11.474	3.125	0.322
Depth Invariant Greenhouse	140	6	0.79	12.39	3.709	0.402
Depth Invariant Greenhouse	140	5	0.792	12.988	4.197	0
Depth Invariant Greenhouse	140	4	0.795	13.475	4.616	0
Depth Invariant Greenhouse	140	3	0.797	6.086	-0.689	0
Depth Invariant Greenhouse	140	2	0.8	4.969	-1.742	0
Depth Invariant Greenhouse	140	1	1.6	4.969	-1.731	0

Appendix B: Amino Acid Racemization data.

Station Number	Depth (m)	Shell Number	AAR Lab Number	D/L Asp Ratio	D/L Glu Ratio	Calibrated age
6	20	620001	7292 A	0.121	0.042	0
6	20	620002	7292 B	0.327	0.161	5311.881
6	20	620003	7292 C	0.242	0.106	2577.261
6	20	620004	7292 D	0.090	0.032	0
4	25	425001	7293 A	0.193	0.076	1339.102
4	25	425002	7293 B	0.128	0.045	90.21779
4	25	425003	7293 C	0.237	0.099	2439.447
4	25	425004	7293 D	0.210	0.077	1740.186
4	25	425005	7293 E	0.187	0.065	1204.833
4	25	425006	7293 F	0.323	0.138	5166.769
4	25	425007	7293 G	0.163	0.061	706.1035
4	25	425008	7293 H	0.354	0.132	6333.312
4	25	425009	7293 I	0.171	0.064	865.5008
4	25	425010	7293 J	0.287	0.115	3933.382
4	25	425011	7293 K	0.190	0.068	1271.49
35	30	3530001	7294 A	0.185	0.058	1160.925
35	30	3530002	7294 B	0.154	0.047	535.0179
13	45	1345001	7295 A	0.212	0.088	1789.371
13	45	1345002	7295 B	0.219	0.093	1964.819
43	15	4315001	7297	0.188	0.126	1226.946
44	10	44100001	7298 A	0.111	0.043	0
44	10	44100002	7298 B	0.087	0.033	0
44	10	44100003	7298 C	0.171	0.067	865.5008
44	10	44100004	7298 D	0.098	0.033	0
44	10	44100005	7298 E	0.258	0.113	3035.624
44	10	44100006	7298 F	0.151	0.062	479.9355
44	10	44100007	7298 G	0.068	0.024	0
44	10	44100008	7298 H	0.251	0.105	2831.842
44	10	44100009	7298 I	0.159	0.064	628.9862
44	10	44100010	7298 J	0.172	0.070	885.9082
44	10	44100011	7298 K	0.265	0.119	3244.443
44	10	44100012	7298 L	0.073	0.025	0
44	10	44100013	7298 M	0.109	0.036	0
44	10	44100014	7298 N	0.101	0.034	0
44	10	44100015	7298 O	0.124	0.046	28.36751
44	10	44100016	7298 P	0.053	0.020	0
44	10	44100017	7298 Q	0.149	0.057	443.7561
44	10	44100018	7298 R	0.114	0.039	0
44	10	44100019	7298 S	0.133	0.050	170.0112
44	10	44100020	7298 T	0.139	0.051	269.3875
14	35	1435001	7299 A	0.160	0.066	648.1038
14	35	1435002	7299 B	0.101	0.033	0
14	35	1435003	7299 C	0.191	0.077	1293.922
14	35	1435004	7299 D	0.087	0.031	0
14	35	1435005	7299 E	0.053	0.020	0
14	35	1435006	7299 F	0.169	0.063	825.0075

14	35	1435007	7299 G	0.152	0.053	498.1879
14	35	1435008	7299 H	0.235	0.095	2385.047
14	35	1435009	7299 I	0.062	0.023	0
14	35	1435010	7299 J	0.051	0.021	0
14	35	1435011	7299 K	0.173	0.066	906.4227
14	35	1435012	7299 L	0.055	0.021	0
14	35	1435013	7299 M	0.182	0.071	1095.86
14	35	1435014	7299 N	0.178	0.076	1010.599
14	35	1435015	7299 O	0.050	0.021	0
14	35	1435016	7299 P	0.090	0.032	0
14	35	1435017	7299 Q	0.051	0.020	0
14	35	1435018	7299 R	0.069	0.028	0
14	35	1435019	7299 S	0.256	0.098	2976.886
14	35	1435020	7299 T	0.160	0.062	648.1038
14	35	1435021	7299 U	0.130	0.059	121.8049
14	35	1435022	7299 V	0.119	0.043	0
14	35	1435023	7299 W	0.143	0.055	337.8268
14	35	1435024	7299 X	0.145	0.060	372.7011
16	15	1615001	7300 A	0.260	0.122	3094.773
16	15	1615002	7300 B	0.170	0.068	845.2005
16	15	1615003	7300 C	0.220	0.105	1990.301
16	15	1615004	7300 D	0.237	0.104	2439.447
16	15	1615005	7300 E	0.241	0.113	2549.491
16	15	1615006	7300 F	0.220	0.120	1990.301
16	15	1615007	7300 G	0.157	0.141	591.0747
16	15	1615008	7300 H	0.207	0.082	1667.195
16	15	1615009	7300 I	0.236	0.115	2412.195
16	15	1615010	7300 J	0.227	0.093	2171.601
16	15	1615011	7300 K	0.163	0.073	706.1035
16	15	1615012	7300 L	0.254	0.120	2918.559
16	15	1615013	7300 M	0.242	0.109	2577.261
16	15	1615014	7300 N	0.252	0.110	2860.645
16	15	1615015	7300 O	0.176	0.108	968.6078
16	15	1615016	7300 P	0.172	0.064	885.9082
16	15	1615017	7300 Q	0.166	0.068	765.072
16	15	1615018	7300 R	0.215	0.086	1863.935
16	15	1615019	7300 S	0.232	0.111	2304.225
16	15	1615020	7300 T	0.224	0.094	2093.275
16	15	1615021	7300 U	0.187	0.082	1204.833
16	15	1615022	7300 V	0.219	0.104	1964.819
16	15	1615023	7300 W	0.154	0.070	535.0179
16	15	1615024	7300 X	0.157	0.062	591.0747
16	15	1615025	7300 Y	0.105	0.052	0
16	15	1615026	7300 Z	0.215	0.088	1863.935
16	15	1615027	7300 AA	0.197	0.101	1430.733
16	15	1615028	7300 BB	0.225	0.096	2119.279
16	15	1615029	7300 CC	0.117	0.059	0
16	15	1615030	7300 DD	0.129	0.063	105.9563
16	15	1615031	7300 EE	0.114	0.053	0
16	15	1615032	7300 FF	0.109	0.046	0

16	15	1615033	7300 GG	0.207	0.086	1667.195
16	15	1615034	7300 HH	0.157	0.076	591.0747
16	15	1615035	7300 II	0.208	0.088	1691.42
7612	57	76125701	7301 A	0.185	0.055	1160.925
7612	57	76125702	7301 B	0.451	0.196	10598.28
7612	57	76125703	7301 C	0.173	0.051	906.4227
7612	57	76125704	7301 D	0.142	0.053	320.5532
7612	57	76125705	7301 E	0.430	0.164	9596.631
7612	57	76125706	7301 F	0.211	0.062	1764.726
7612	57	76125707	7301 G	0.305	0.105	4533.696
7612	57	76125708	7301 H	0.443	0.210	10211.63
7612	57	76125709	7301 I	0.239	0.076	2494.262
45	10	4510001	7302 A	0.210	0.080	1740.186
45	10	4510002	7302 B	0.195	0.080	1384.706
45	10	4510003	7302 C	0.184	0.073	1139.13
45	10	4510004	7302 D	0.285	0.120	3868.711
45	10	4510005	7302 E	0.279	0.129	3677.142
45	10	4510006	7302 F	0.268	0.106	3335.476
45	10	4510007	7302 G	0.328	0.147	5348.411
45	10	4510008	7302 H	0.276	0.119	3582.734
45	10	4510009	7302 I	0.179	0.068	1031.754
45	10	4510010	7302 J	0.229	0.079	2224.338
45	10	4510011	7302 K	0.322	0.132	5130.742
45	10	4510012	7302 L	0.406	0.201	8504.652
45	10	4510013	7302 M	0.346	0.165	6023.07
45	10	4510014	7302 N	0.330	0.148	5421.77
45	10	4510015	7302 O	0.273	0.113	3489.246
45	10	4510016	7302 P	0.343	0.153	5908.376
45	10	4510017	7302 Q	0.176	0.074	968.6078
45	10	4510018	7302 R	0.186	0.085	1182.826
45	10	4510019	7302 S	0.228	0.089	2197.917
45	10	4510020	7302 T	0.300	0.122	4363.648
45	10	4510021	7302 U	0.324	0.149	5202.896
45	10	4510022	7302 V	0.269	0.120	3366.025
45	10	4510023	7302 W	0.136	0.057	219.2061
27	20	2720001	7303 A	0.329	0.164	5385.04
18	25	1825001	7304 A	0.079	0.029	0
18	25	1825002	7304 B	0.269	0.136	3366.025
18	25	1825003	7304 C	0.176	0.078	968.6078
18	25	1825004	7304 D	0.119	0.051	0
18	25	1825005	7304 E	0.313	0.161	4811.029
18	25	1825006	7304 F	0.245	0.091	2661.192
18	25	1825007	7304 G	0.131	0.057	137.7637
18	25	1825008	7304 H	0.319	0.151	5023.265
18	25	1825009	7304 I	0.188	0.084	1226.946
18	25	1825010	7304 J	0.273	0.140	3489.246
18	25	1825011	7304 K	0.121	0.051	0
18	25	1825012	7304 L	0.268	0.148	3335.476
18	25	1825013	7304 M	0.089	0.037	0
18	25	1825014	7304 N	0.144	0.061	355.2095

18	25	1825015	7304 O	0.136	0.063	219.2061
18	25	1825016	7304 P	0.140	0.064	286.3335
18	25	1825017	7304 Q	0.154	0.072	535.0179
18	25	1825018	7304 R	0.150	0.069	461.7915
18	25	1825019	7304 S	0.270	0.139	3396.677
18	25	1825020	7304 T	0.136	0.063	219.2061
18	25	1825021	7304 U	0.171	0.077	865.5008
18	25	1825022	7305 A	0.093	0.036	0
18	25	1825023	7305 B	0.240	0.097	2521.825
18	25	1825024	7305 C	0.209	0.098	1715.75
18	25	1825025	7305 D	0.137	0.059	235.8237
18	25	1825026	7305 E	0.108	0.045	0
18	25	1825027	7305 F	0.105	0.044	0
18	25	1825028	7305 G	0.212	0.098	1789.371
18	25	1825029	7305 H	0.148	0.069	425.8292
18	25	1825030	7305 I	0.174	0.078	927.0441
18	25	1825031	7305 J	0.088	0.034	0
18	25	1825032	7305 K	0.166	0.073	765.072
18	25	1825033	7305 L	0.209	0.101	1715.75
18	25	1825034	7305 M	0.146	0.066	390.3017
18	25	1825035	7305 N	0.167	0.076	784.9431
18	25	1825036	7305 O	0.221	0.111	2015.888
18	25	1825037	7305 P	0.206	0.089	1643.075
18	25	1825038	7305 Q	0.105	0.043	0
18	25	1825039	7305 R	0.125	0.052	43.66436
18	25	1825040	7305 S	0.146	0.062	390.3017
18	25	1825041	7305 T	0.189	0.089	1249.165
18	25	1825042	7305 U	0.129	0.052	105.9563
18	25	1825043	7306 A	0.171	0.066	865.5008
18	25	1825044	7306 B	0.301	0.160	4397.455
18	25	1825045	7306 C	0.156	0.069	572.281
18	25	1825046	7306 D	0.105	0.041	0
18	25	1825047	7306 E	0.170	0.074	845.2005
18	25	1825048	7306 F	0.128	0.054	90.21779
18	25	1825049	7306 G	0.171	0.076	865.5008
18	25	1825050	7306 H	0.377	0.202	7260.718
18	25	1825051	7306 I	0.178	0.083	1010.599
18	25	1825052	7306 J	0.230	0.112	2250.863
18	25	1825053	7306 K	0.113	0.048	0
18	25	1825054	7306 L	0.148	0.065	425.8292
18	25	1825055	7306 M	0.224	0.101	2093.275
18	25	1825056	7306 N	0.330	0.168	5421.77
18	25	1825057	7306 O	0.140	0.062	286.3335
18	25	1825058	7306 P	0.229	0.112	2224.338
18	25	1825059	7306 Q	0.149	0.069	443.7561
18	25	1825060	7306 R	0.218	0.102	1939.441
18	25	1825061	7306 S	0.097	0.040	0
18	25	1825062	7306 T	0.154	0.065	535.0179
18	25	1825063	7306 U	0.169	0.076	825.0075
18	25	1825064	7306 V	0.131	0.061	137.7637

18	25	1825065	7306 W	0.144	0.066	355.2095
18	25	1825066	7306 X	0.056	0.023	0
18	25	1825067	7306 Y	0.150	0.083	461.7915
18	25	1825068	7306 Z	0.197	0.094	1430.733
1	30	13050	2004113	0.188		1226.946
1	30	13051	2003116	0.235		2385.047
1	30	13052	2003117	0.238		2466.803
1	30	13053	2003118	0.101		0
1	30	13054	2003119	0.177667		1003.571
1	30	13055	2003120	0.124		28.36751
1	30	13056	2003121	0.1635		715.8644
1	30	13059	2003122	0.2145		1851.442
1	30	13060	2004122	0.185		1160.925
1	30	13061	2003084	0.048		0
1	30	13062	2003083	0.3025		4448.356
1	30	13063	2003123	0.098		0
1	30	13064	2003124	0.147		408.0111
1	30	13065	2003125	0.255		2947.671
1	30	13066	2004097	0.263		3184.267
1	30	13067	2003081	0.112		0
1	30	13068	2003085	0.2095		1727.955
1	30	13069	2003126	0.262		3154.333
1	30	13070	2003127	0.266		3274.685
1	30	13071	2003082	0.272667		3478.915
1	30	13072	2003128	0.1675		794.919
1	30	13073	2003129	0.207		1667.195
1	30	13074	2003130	0.2345		2371.512
1	30	13075	2003131	0.16		648.1038
1	30	13076	2003132	0.1085		0
1	30	13077	2003086	0.072		0
1	30	13078	2003133	0.1975		1442.305
1	30	13079	2003087	0.101		0
1	30	13080	2003134	0.137		235.8237
1	30	13081	2003088	0.083		0
1	30	13082	2003135	0.161		667.3293
1	30	13083	2003136	0.1895		1260.314
1	30	13084	2004120	0.11		0
1	30	13085	2003137	0.2045		1607.092
1	30	13086	2003089	0.1475		416.9066
1	30	13087	2003138	0.110667		0
1	30	13088	2003139	0.173333		913.2846
9	10	91042	2004096	0.045		0
9	10	91043	2004095	0.068		0
9	10	91044	2004104	0.11		0
9	10	91045	2004101	0.366		6810.623
9	10	91046	2004099	0.059		0
9	10	91047	2004112	0.329		5385.04
9	10	91048	2004100	0.208		1691.42
9	10	91049	2004124	0.279		3677.142
9	10	91050	2004102	0.228		2197.917

9	10	91051	2004121	0.135	202.6981
9	10	91052	2003100	0.109333	0
9	10	91053	2004107	0.109	0
9	10	91054	2003101	0.103	0
9	10	91055	2003102	0.117333	0
9	10	91056	2004116	0.088	0
9	10	91057	2004111	0.047	0
9	10	91058	2003103	0.118	0
9	10	91059	2004114	0.121	0
9	10	91060	2004115	0.155	553.5954
9	10	91061	2004119	0.111667	0
9	10	91062	2003104	0.1595	638.5315
9	10	91063	2004108	0.046	0
9	10	91064	2004117	0.2115	1777.035
9	10	91065	2004103	0.045	0
9	10	91066	2003105	0.156	572.281
9	10	91067	2004110	0.271	3427.431
9	10	91068	2004098	0.225	2119.279
9	10	91069	2004109	0.157	591.0747
9	10	91070	2004118	0.344	5946.507
9	10	91071	2003106	0.071	0
9	10	91072	2003107	0.074	0
9	10	91073	2004105	0.141	303.3887
9	10	91074	2003140	0.117	0
9	10	91075	2003141	0.2455	2675.271
9	10	91076	2003108	0.087	0
9	10	91077	2003142	0.1425	329.1764
9	10	91078	2003143	0.304	4499.484
9	10	91079	2003144	0.0945	0

Appendix C: Bivalve growth rate data.

Species Name	Von Bertallanffy Parameters:			Location	Reference
	L_{inf} (mm)	K (year^{-1})	t_0 (yr^{-1})		
Donax denticulatus	31.47	1.48	0.5	Atlantic, Venezuela	Garcia et al., 2003
Donax dentifer	29.3	0.62	0	Pacific, Columbia	Riascos and Urban, 2002
Donax dentifer	23.4	2.122	0	Pacific, Columbia	Riascos, 2006
Donax dentifer	26.3	1.761	0	Pacific, Columbia	Riascos, 2006
Donax dentifer	28.6	0.84	0	Pacific, Columbia	Riascos, 2006
Donax dentifer	29	0.656	0	Pacific, Columbia	Riascos, 2006
Donax dentifer	31.6	0.819	0	Pacific, Columbia	Riascos, 2006
Donax dentifer	29.1	0.785	0	Pacific, Columbia	Riascos, 2006
Donax hanleyanus	44	0.47	0	Pacific, Argentina	Herrmann et al., 2009
Donax hanleyanus	44	0.48	0	Pacific, Argentina	Herrmann et al., 2009
Donax incarnatus	30.94	0.1612	0.04	Indian Ocean, India	Thippeswamy and Joseph, 1991
Donax serra	82	0.274	0	Atlantic, Namibia	Laudien et al., 2003
Donax striatus	25.1	1.16	-0.028	Atlantic, Brazil	Rocha-Barreira et al. 2002
Donax striatus	38	0.68	0.71	Atlantic, France	Guillou and Le Moal, 1980
Donax trunculus	47.3	0.58	0.52	Atlantic, Faro, Portugal	Gaspar et al, 1999
Donax trunculus	50.4	0.4	0.49	Atlantic, Faro, Portugal	Gaspar et al, 1999
Donax trunculus	48.9	0.38	0.29	Atlantic, France	Guillou and Le Moal, 1980
Donax trunculus	52.8	0.55	0.52	Atlantic, Spain	Maze and LaBorda, 1988
Donax trunculus	35.99	0.96	-0.699	Mediterranean, France	Bodoy, 1982
Donax trunculus	41.8	0.71	0.35	Mediterranean, Spain	Ramón et al., 1995
Mactra discors	68	0.41	0.2	Pacific, New Zealand	Cranfield et al., 1996
Mactra murchisoni	88	0.57	0.1	Pacific, New Zealand	Cranfield et al., 1996
Mesodesma mactroides	83	0.82	0	Pacific, Urugauy	(Marine Biology)
Mesodesma mactroides	75.47	0.9	-0.04	Pacific, Urugauy	Defeo et al., 1992b
Mesodesma mactroides	100	0.64	-0.24	Pacific, Urugauy	Defeo et al., 1992a
Mesodesma mactroides	74.66	0.48	-0.23	Pacific, Argentina	Fiori and Morsan, 2004
Mesodesma mactroides	70.42	0.54	-0.36	Pacific, Argentina	Fiori and Morsan, 2004
Mesodesma mactroides	78.42	0.49	-0.44	Pacific, Argentina	Fiori and Morsan, 2004
Mesodesma mactroides	72.77	0.59	-0.43	Pacific, Argentina	Fiori and Morsan, 2004
Mesodesma mactroides	77.73	0.42	-0.51	Pacific, Argentina	Fiori and Morsan, 2004
Mesodesma mactroides	79.13	0.47	-0.45	Pacific, Argentina	Fiori and Morsan, 2004
Spisula subtruncata	31.12	0.46	0	North Sea, Netherlands	Cardoso et al., 2007
Spisula subtruncata	33.48	0.52	0	North Sea, Netherlands	Cardoso et al., 2007
Gari solida	89.6	0.307	0.354	Pacific, Chile	Urban and Campos, 1994
Gari solida	86.1	0.349	0	Pacific, Chile	Urban and Campos, 1994
Gari solida	106.3	0.193	0	Pacific, Chile	Urban and Campos, 1994
Gari solida	89.6	0.319	0	Pacific, Chile	Urban and Campos, 1994
Gari solida	89.6	0.295	0.354	Pacific, Chile	Urban and Campos, 1994
Gari solida	86	0.7	0	Pacific, Peru	Urban, 1991
Gari solida	86	0.73	0	Pacific, Peru	Urban, 1991
Gari solida	80	0.83	0	Pacific, Peru	Urban, 1991

Gari solida	101.6	0.49	0.651	Pacific, Peru	Urban, 1998
Gari solida	77.5	0.67	0	Pacific, Peru	Urban, 1998
Semele solida	78	0.297	0.374	Pacific, Chile	Urban and Campos, 1994
Semele solida	85.3	0.187	0	Pacific, Chile	Urban and Campos, 1994
Semele solida	100.6	0.127	0	Pacific, Chile	Urban and Campos, 1994
Semele solida	78	0.219	0	Pacific, Chile	Urban and Campos, 1994
Semele solida	78	0.213	0.374	Pacific, Chile	Urban and Campos, 1994
Semele solida	67	0.77	0	Pacific, Peru	Urban, 1991