

Figure 6.18 – Amplitude of Free Surface Elevation for  $\omega=\omega_n=1.25$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ )

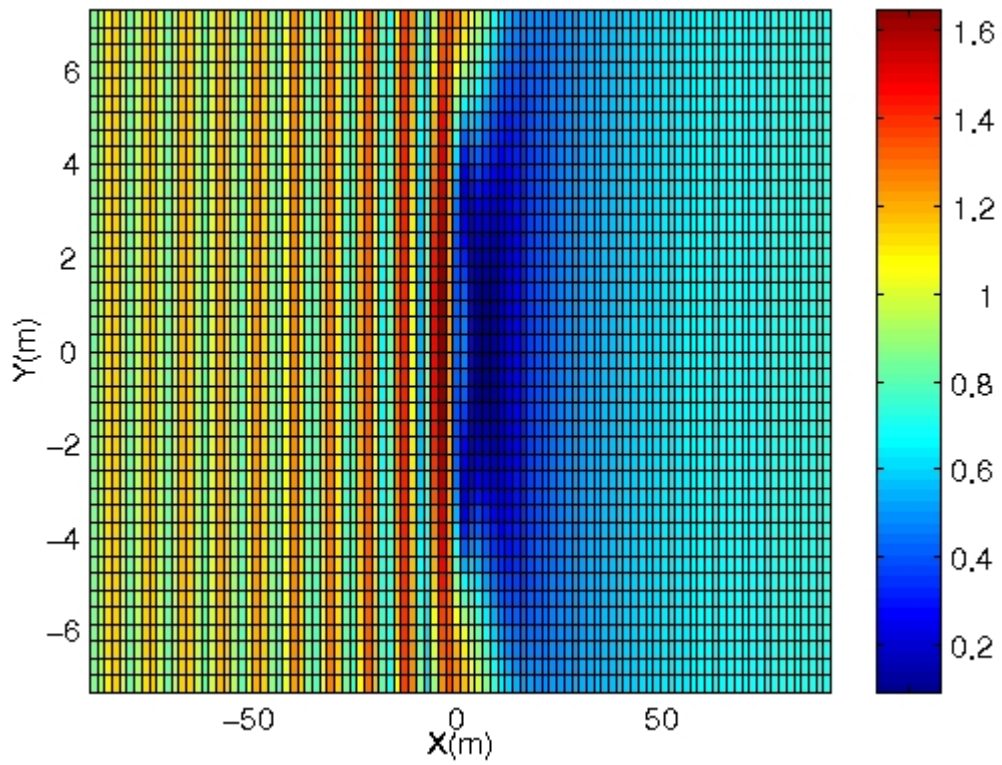


Figure 6.19 – Amplitude of Free Surface Elevation for  $\omega=1.85$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ )

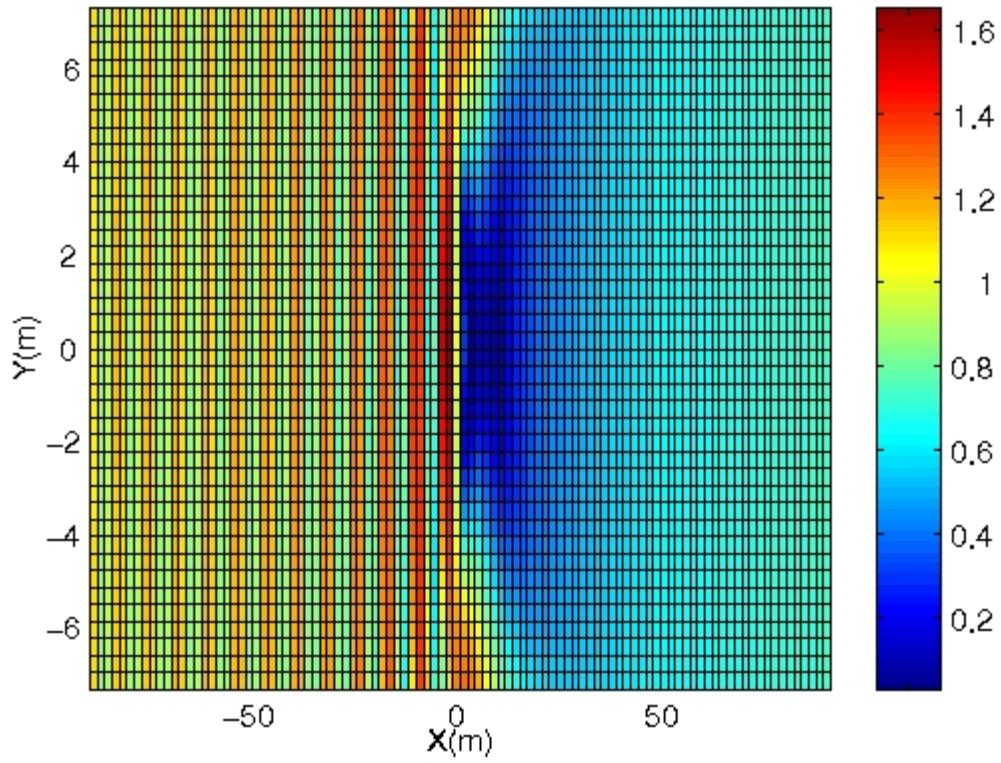


Figure 6.20 – Amplitude of Free Surface Elevation for  $\omega=2.05$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ )

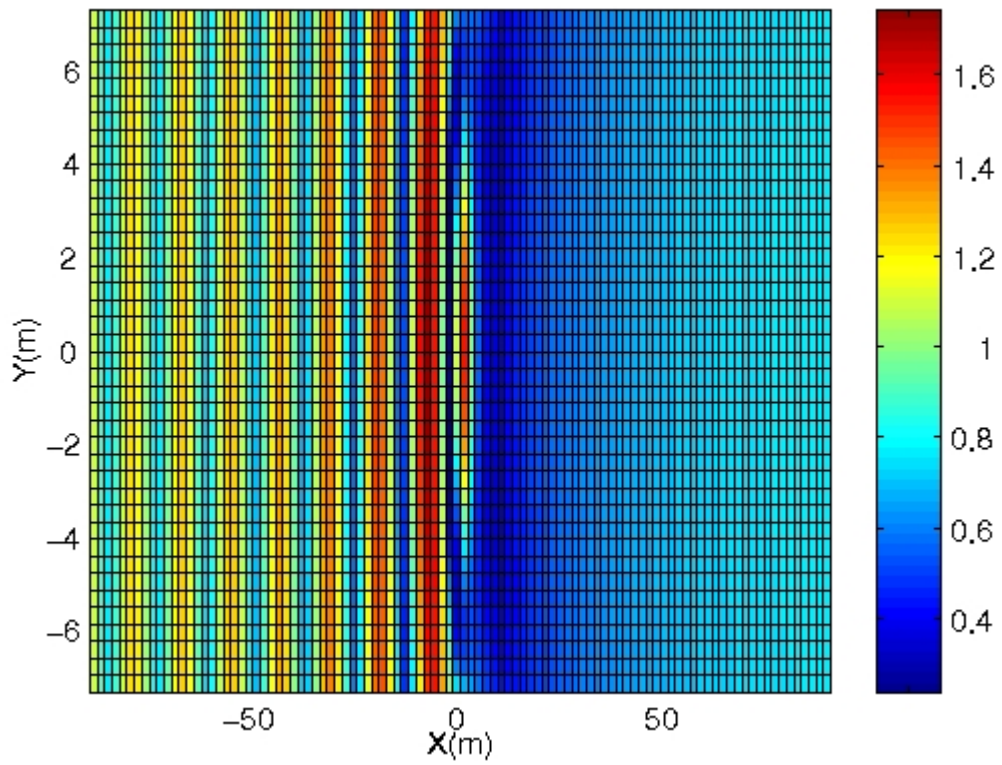


Figure 6.21 – Amplitude of Free Surface Elevation for  $\omega=\pi/2$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ )

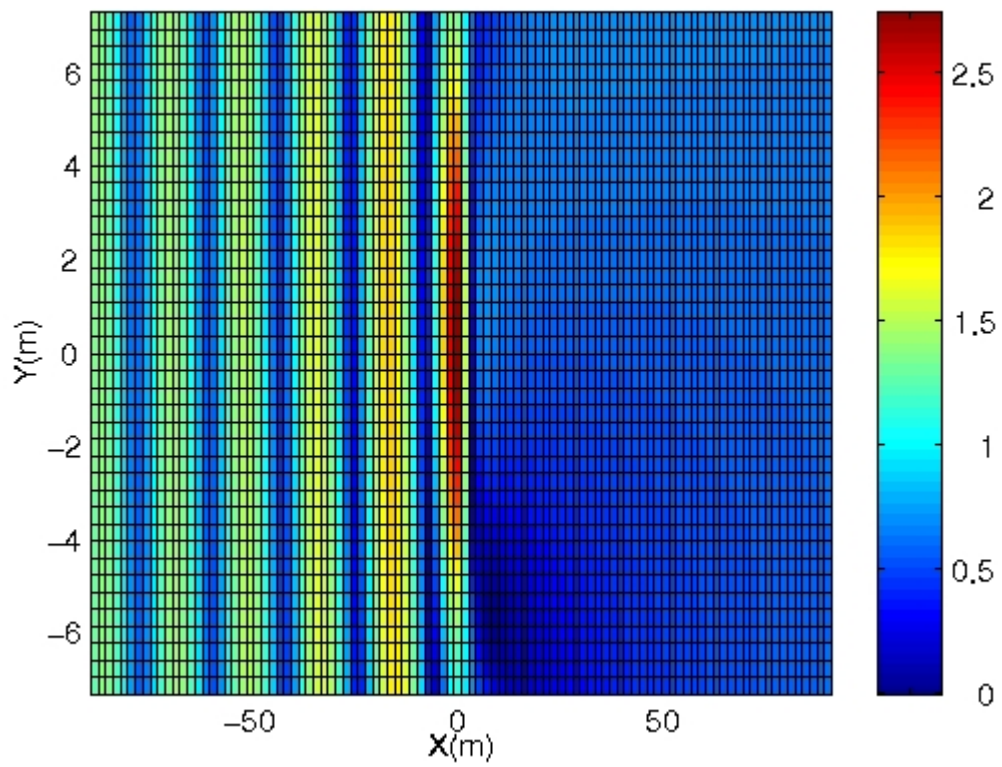


Figure 6.22 – Amplitude of Free Surface Elevation for  $\omega=\omega_n=1.25$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ )

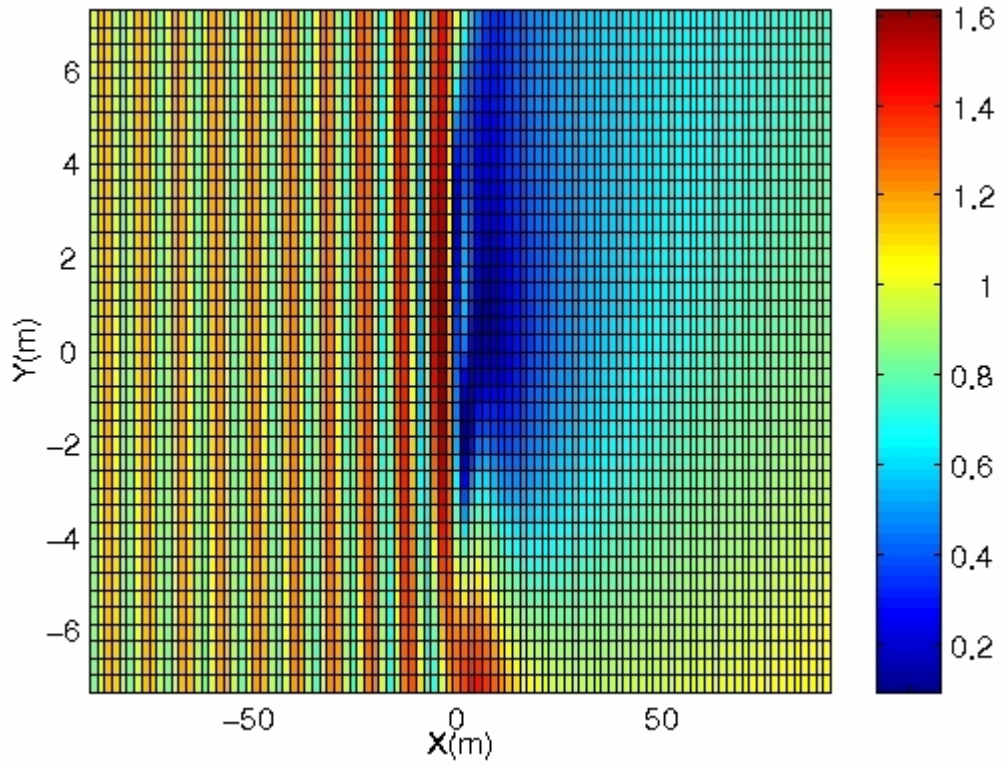


Figure 6.23 – Amplitude of Free Surface Elevation for  $\omega=1.85$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ )

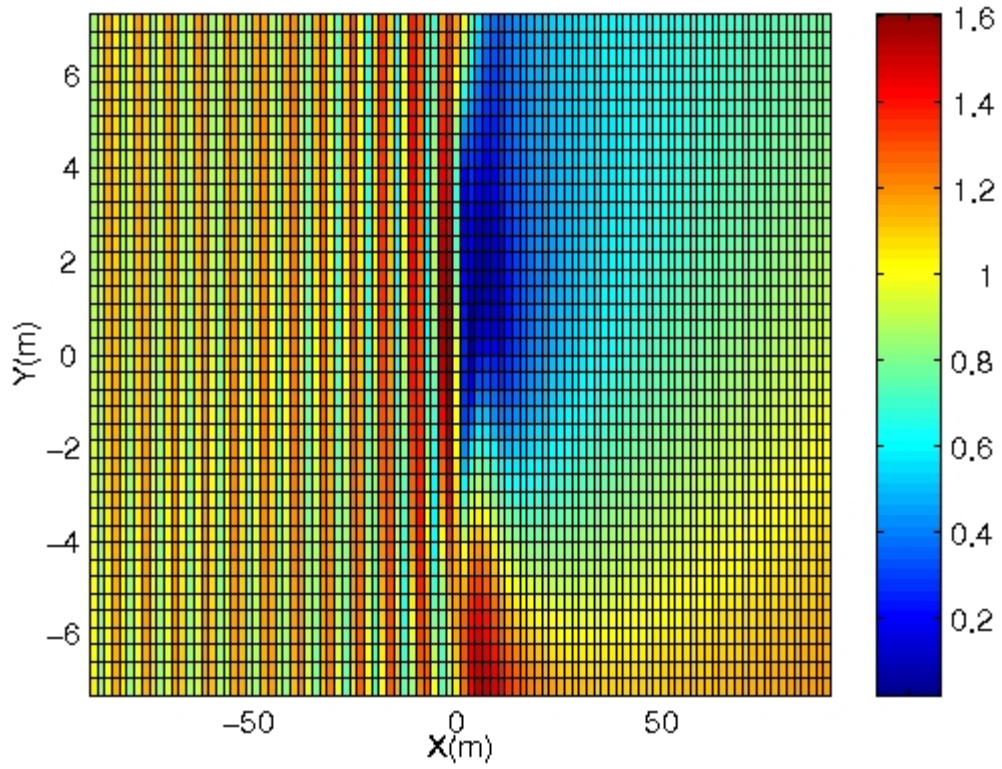


Figure 6.24 – Amplitude of Free Surface Elevation for  $\omega=2.05$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ )

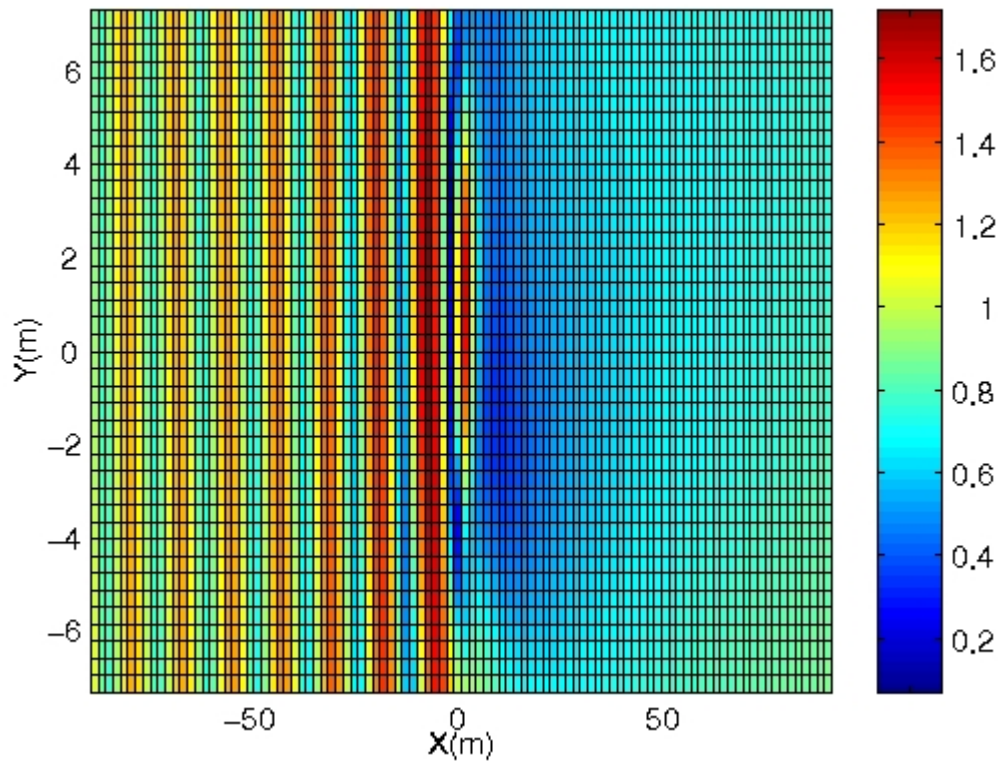


Figure 6.25 – Amplitude of Free Surface Elevation for  $\omega=\pi/2$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ )



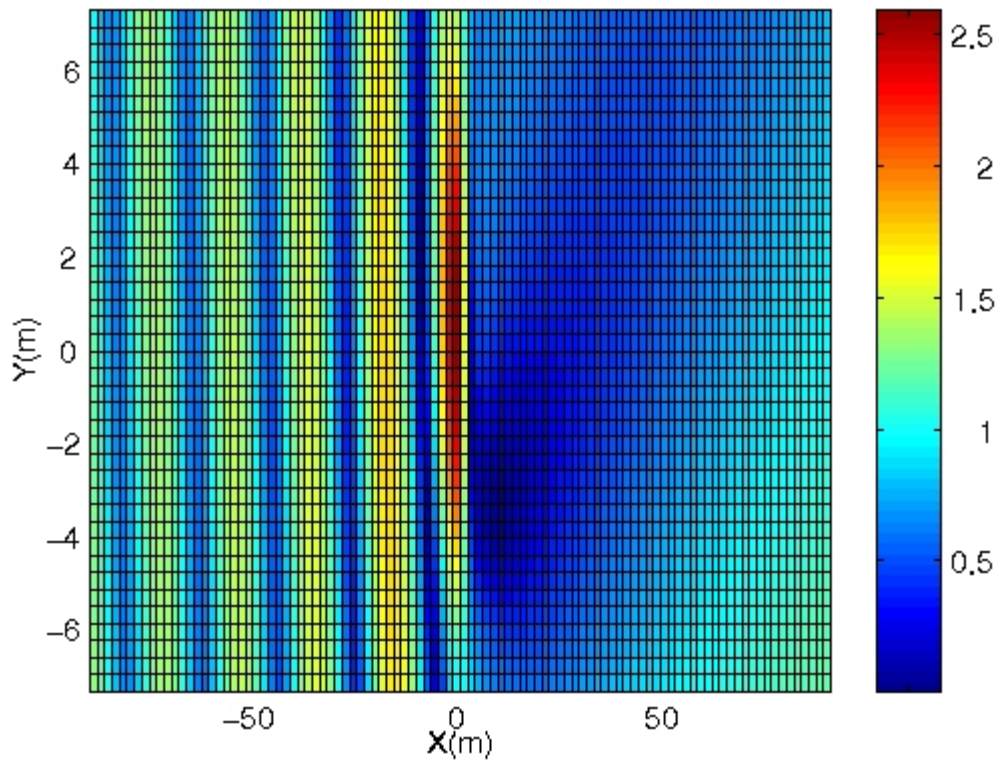


Figure 6.26 – Amplitude of Free Surface Elevation for  $\omega=\omega_n=1.25$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ )

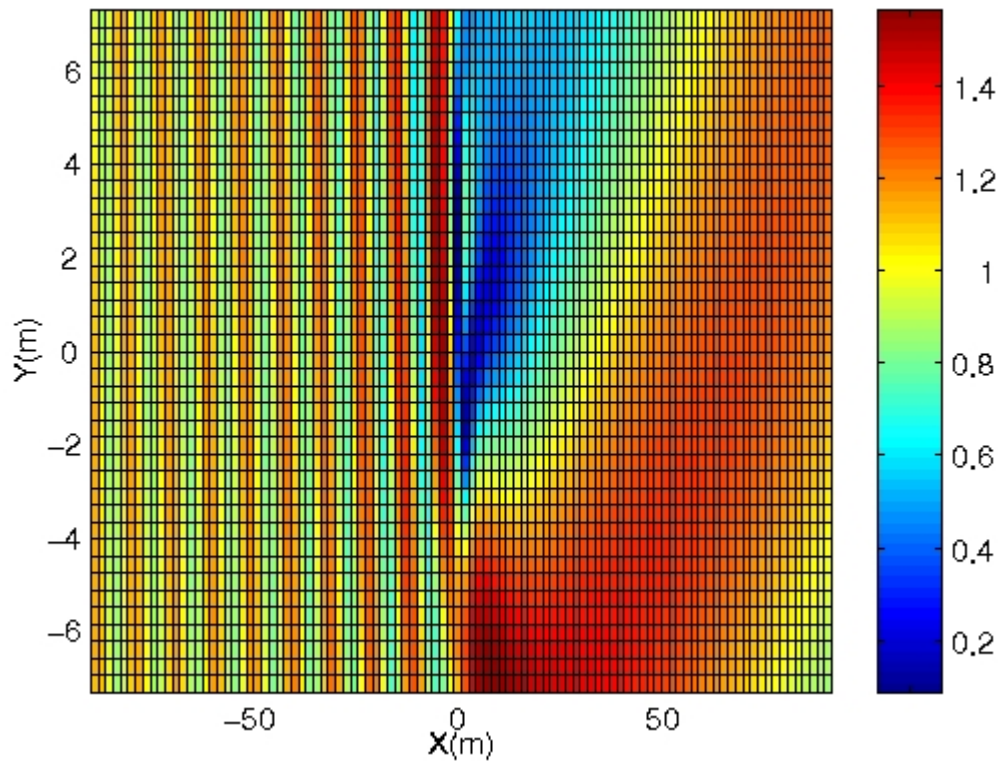


Figure 6.27 – Amplitude of Free Surface Elevation for  $\omega=1.85$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ )

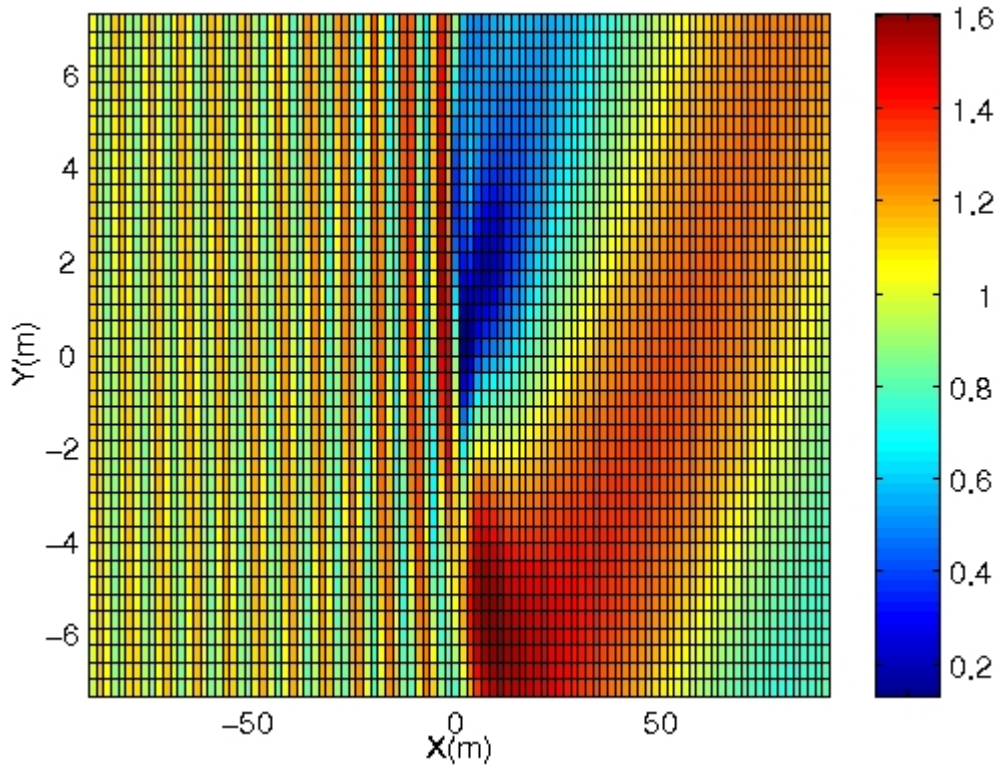


Figure 6.28 – Amplitude of Free Surface Elevation for  $\omega=2.05$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ )

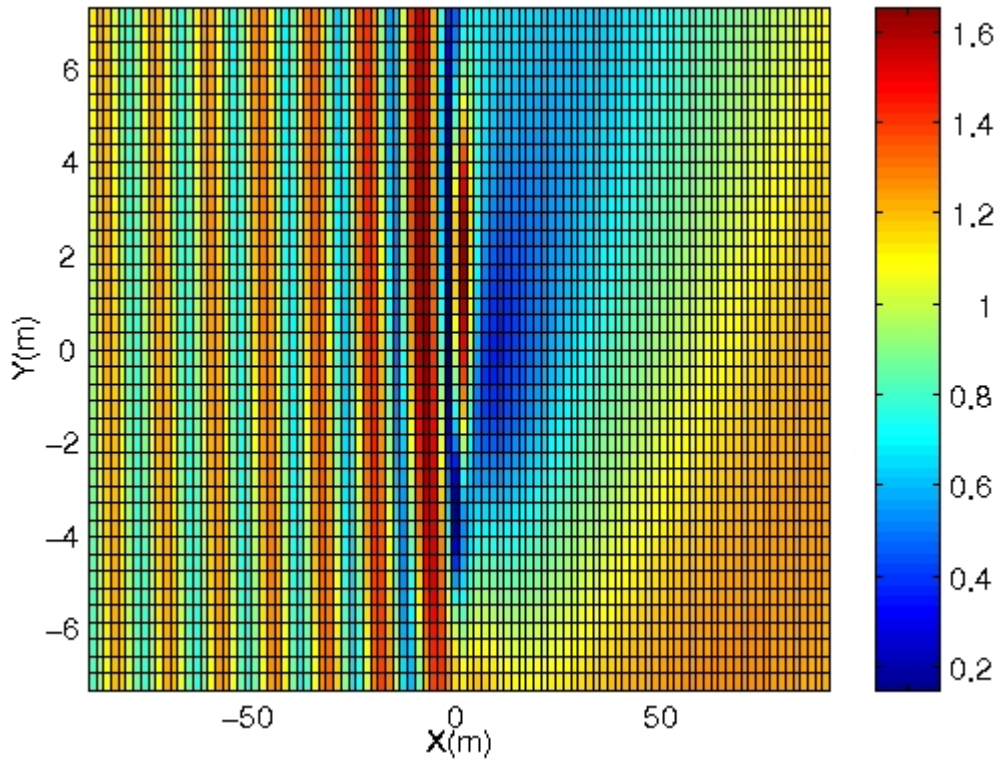


Figure 6.29 – Amplitude of Free Surface Elevation for  $\omega=\pi/2$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ )

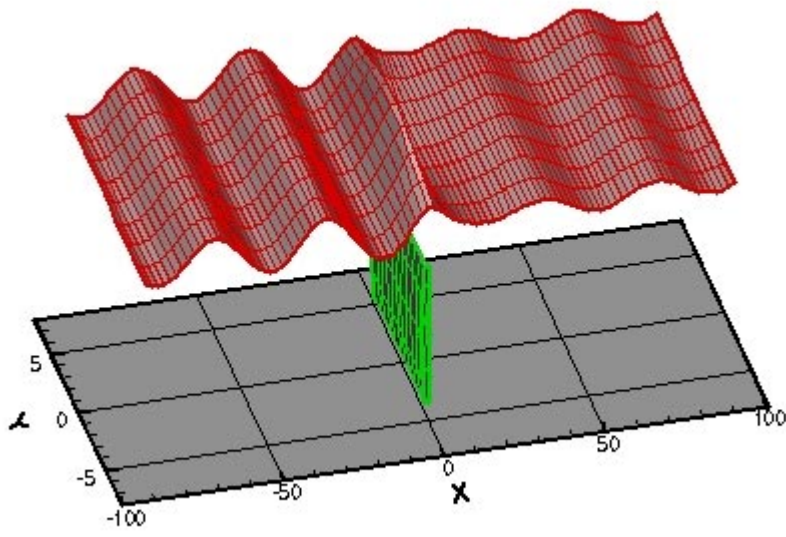


Figure 6.30 (a) – Free Surface Elevation for  $\omega=\omega_n=1.25$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=0$ )

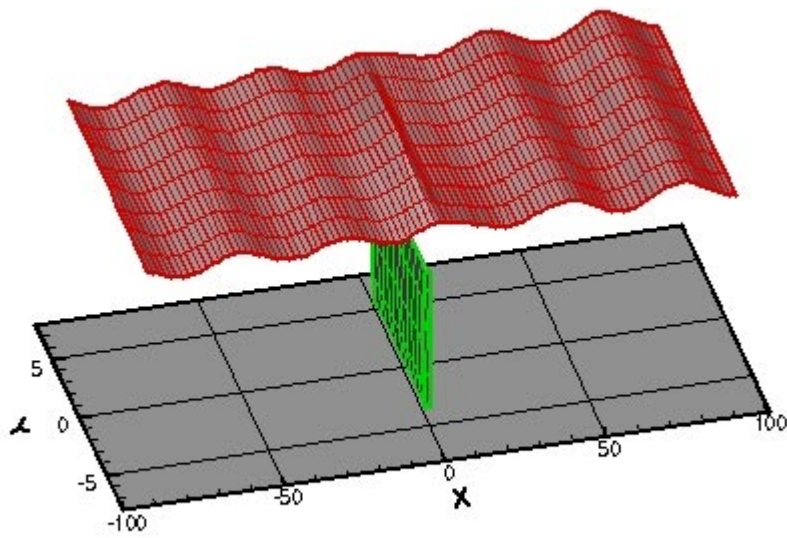


Figure 6.30 (b) – Free Surface Elevation for  $\omega=\omega_n=1.25$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=0.2T$ )

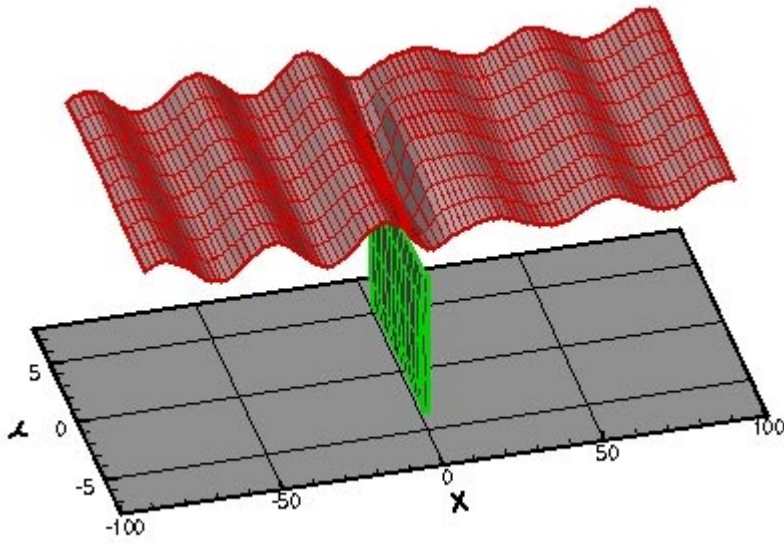


Figure 6.30 (c) – Free Surface Elevation for  $\omega=\omega_n=1.25$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=0.4T$ )

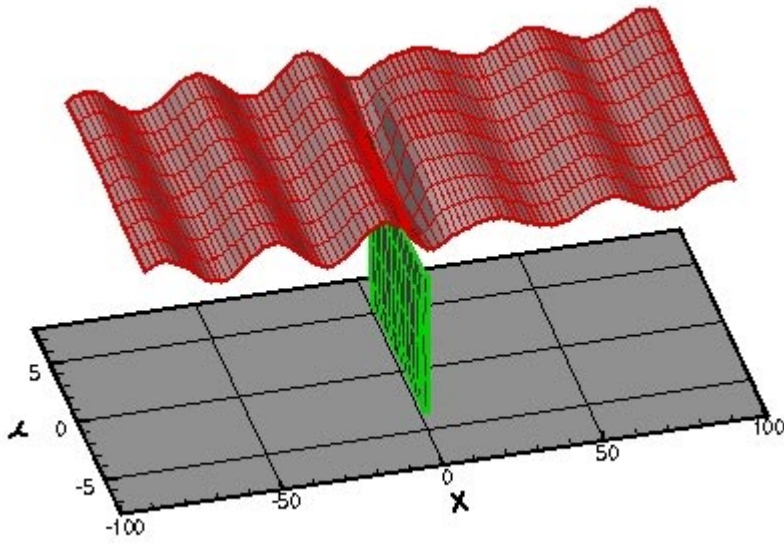


Figure 6.30 (d) – Free Surface Elevation for  $\omega=\omega_n=1.25$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=0.6T$ )



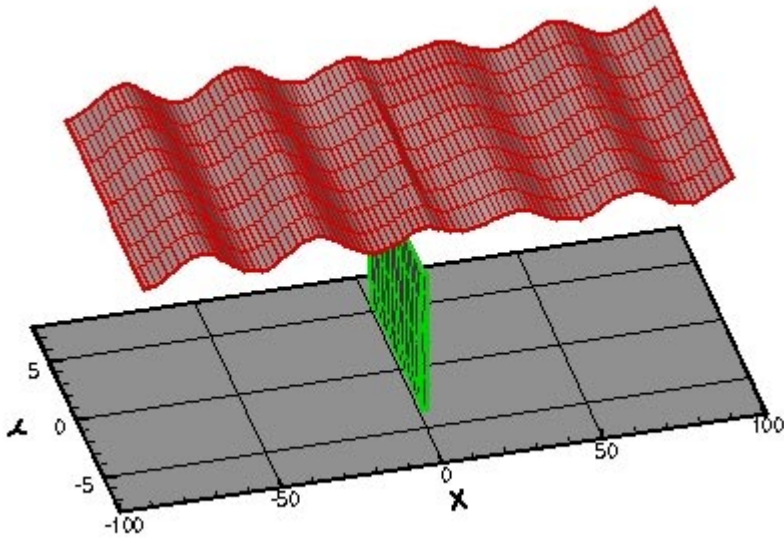


Figure 6.30 (e) – Free Surface Elevation for  $\omega=\omega_n=1.25$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=0.8T$ )

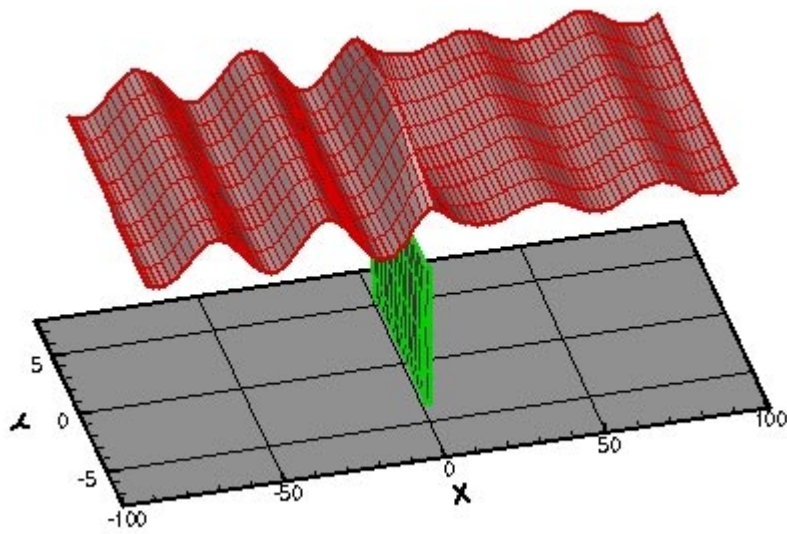


Figure 6.30 (f) – Free Surface Elevation for  $\omega=\omega_n=1.25$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=1.0T$ )

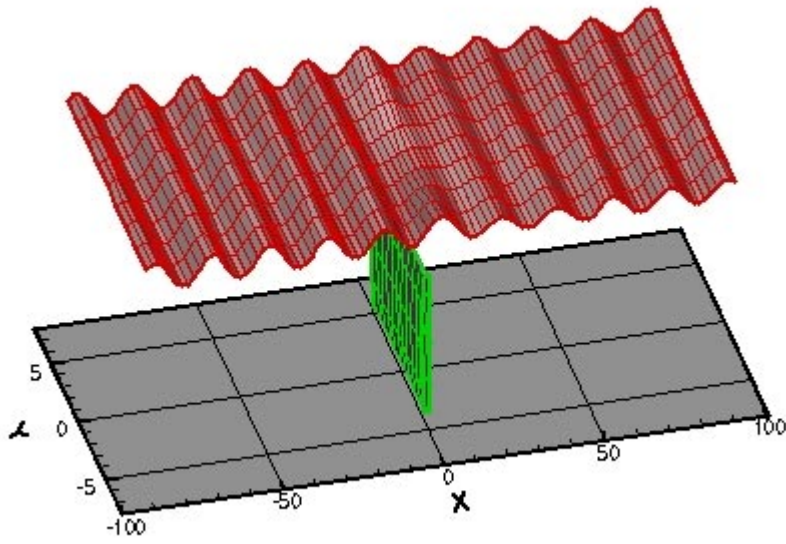


Figure 6.31 (a) – Free Surface Elevation for  $\omega=1.85$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=0$ )

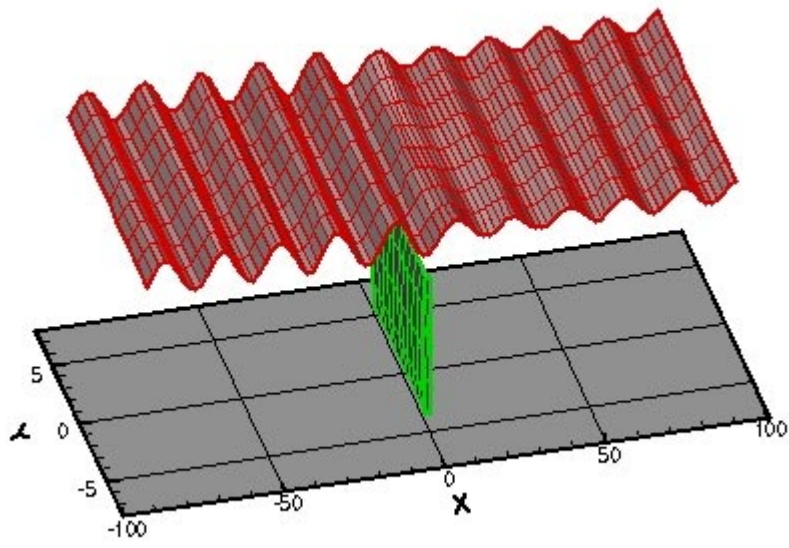


Figure 6.31 (b) – Free Surface Elevation for  $\omega=1.85$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=0.2T$ )

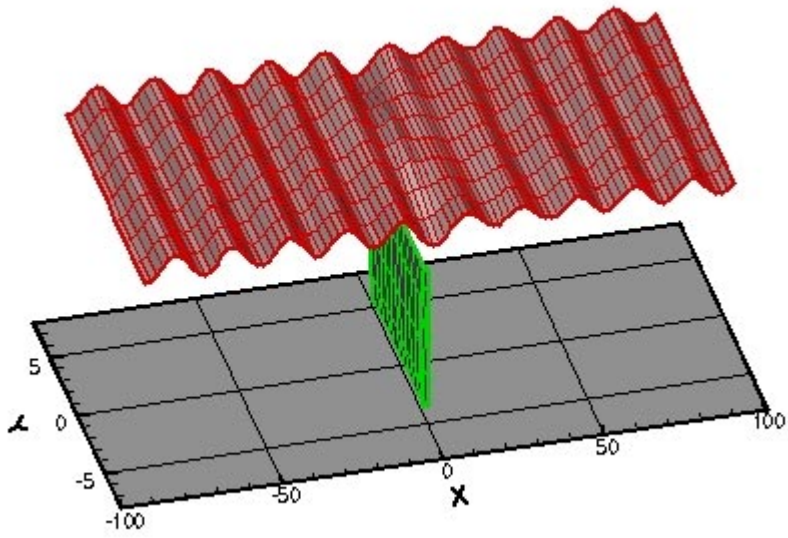


Figure 6.31 (c) – Free Surface Elevation for  $\omega=1.85$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=0.4T$ )

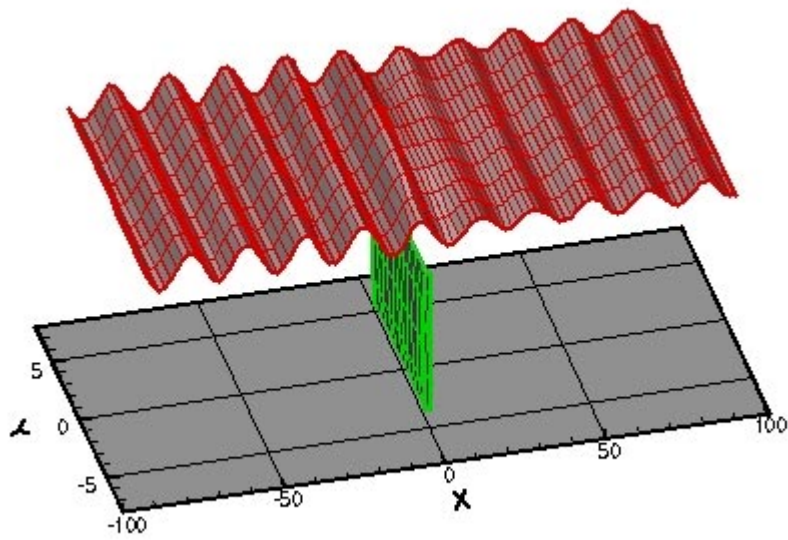


Figure 6.31 (d) – Free Surface Elevation for  $\omega=1.85$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=0.6T$ )

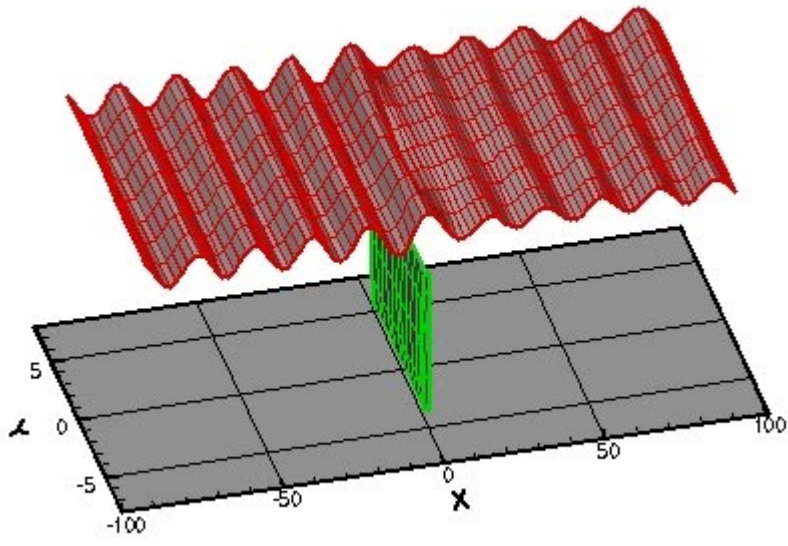


Figure 6.31 (e) – Free Surface Elevation for  $\omega=1.85$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=0.8T$ )

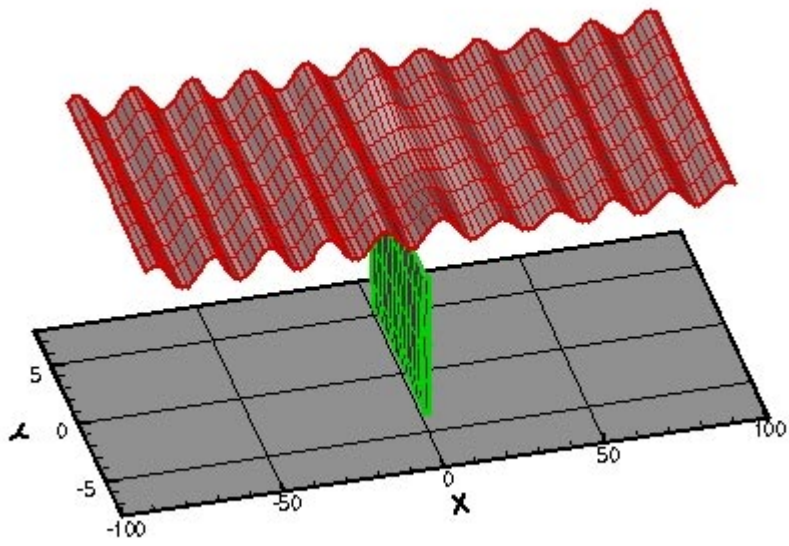


Figure 6.31 (f) – Free Surface Elevation for  $\omega=1.85$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=1.0T$ )



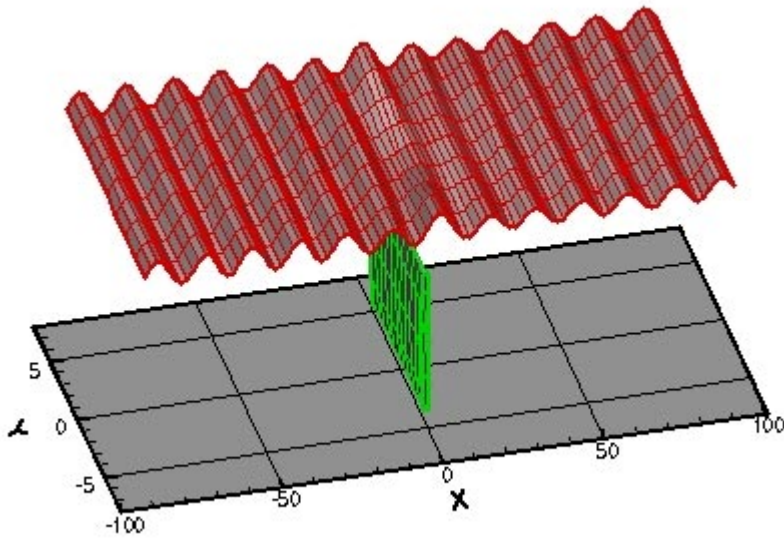


Figure 6.32 (a) – Free Surface Elevation for  $\omega=2.05$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=0$ )

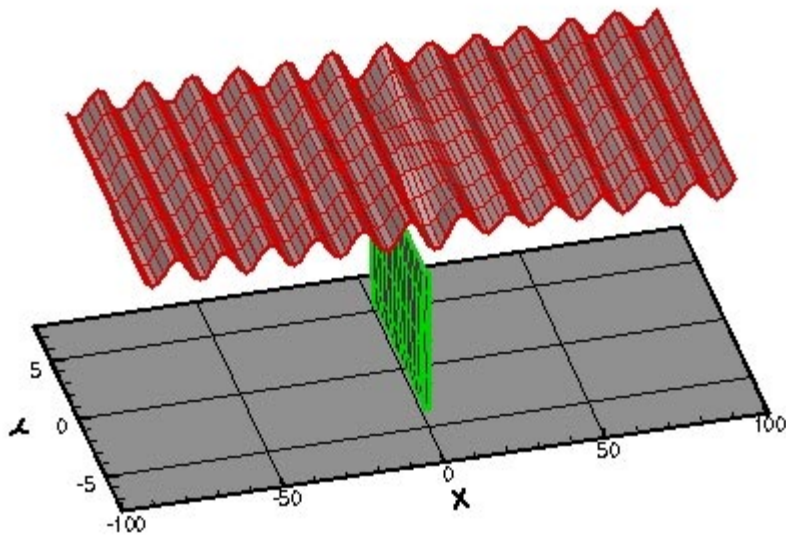


Figure 6.32 (b) – Free Surface Elevation for  $\omega=2.05$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=0.2T$ )

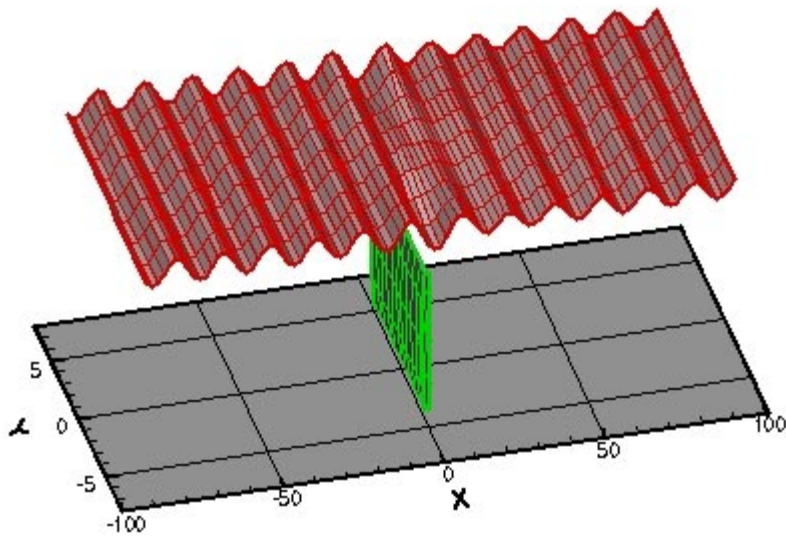


Figure 6.32 (c) – Free Surface Elevation for  $\omega=2.05$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=0.4T$ )

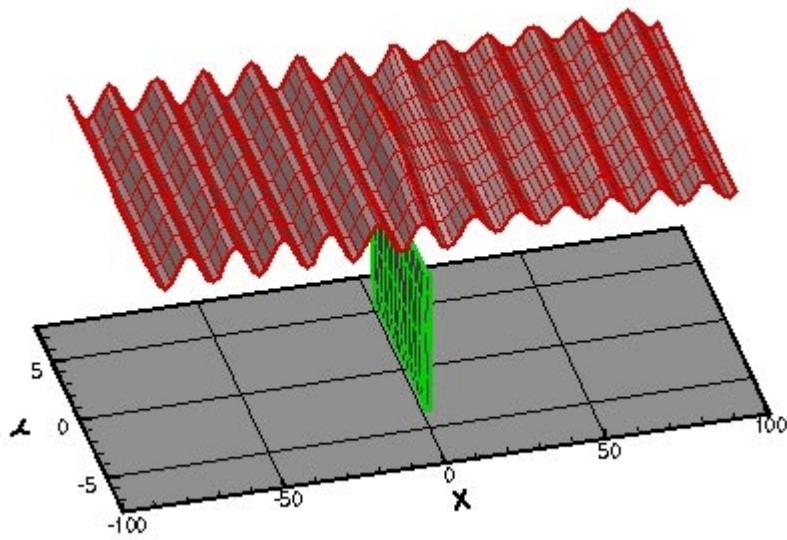


Figure 6.32 (d) – Free Surface Elevation for  $\omega=2.05$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=0.6T$ )

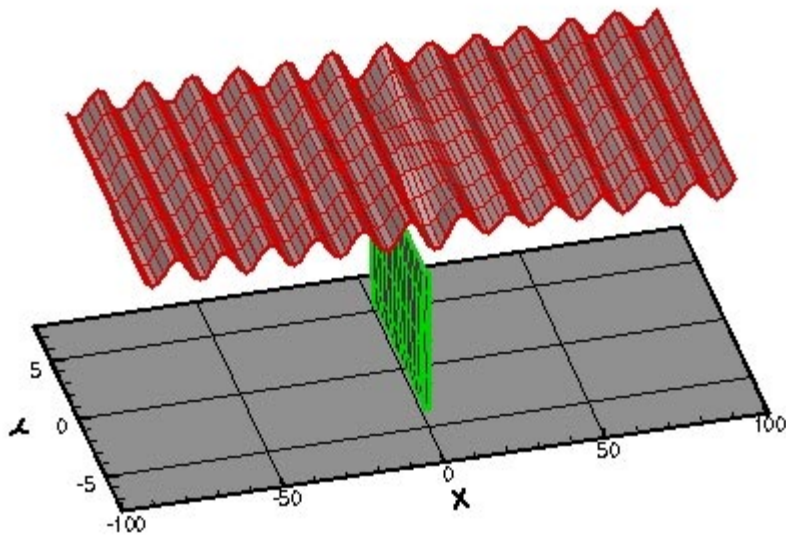


Figure 6.32 (e) – Free Surface Elevation for  $\omega=2.05$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=0.8T$ )

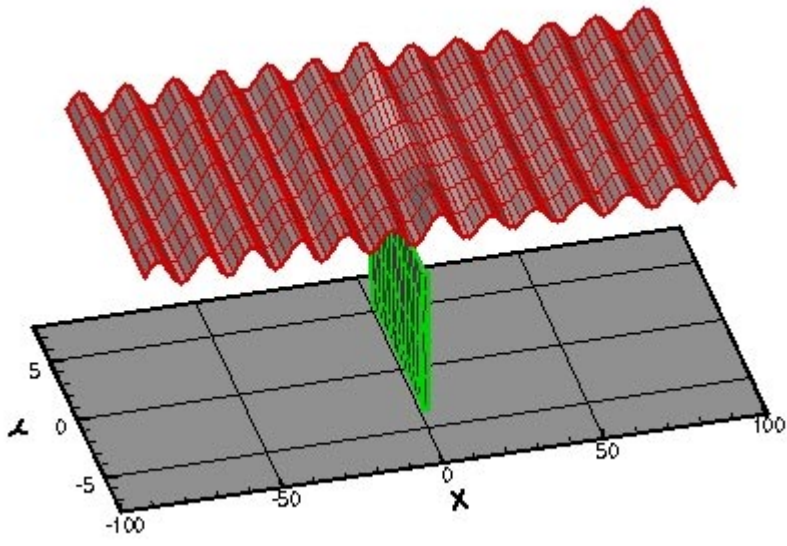


Figure 6.32 (f) – Free Surface Elevation for  $\omega=2.05$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=1.0T$ )

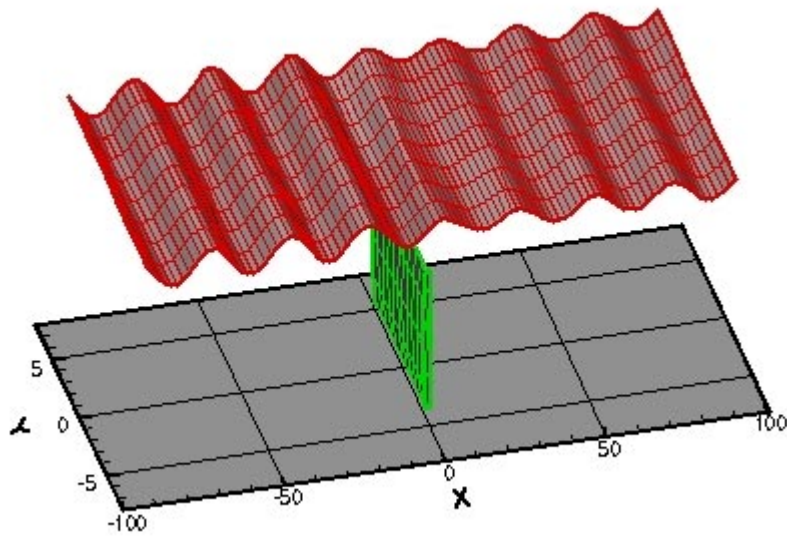


Figure 6.33 (a) – Free Surface Elevation for  $\omega=\pi/2$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=0$ )

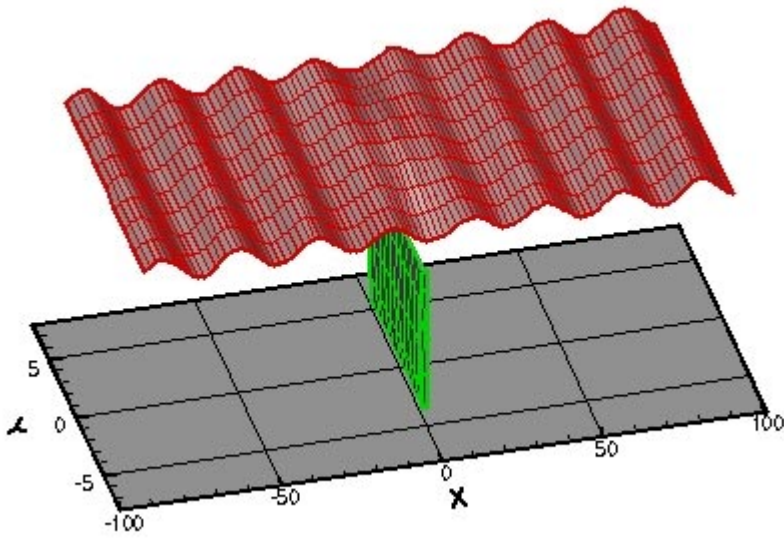


Figure 6.33 (b) – Free Surface Elevation for  $\omega=\pi/2$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=0.2T$ )



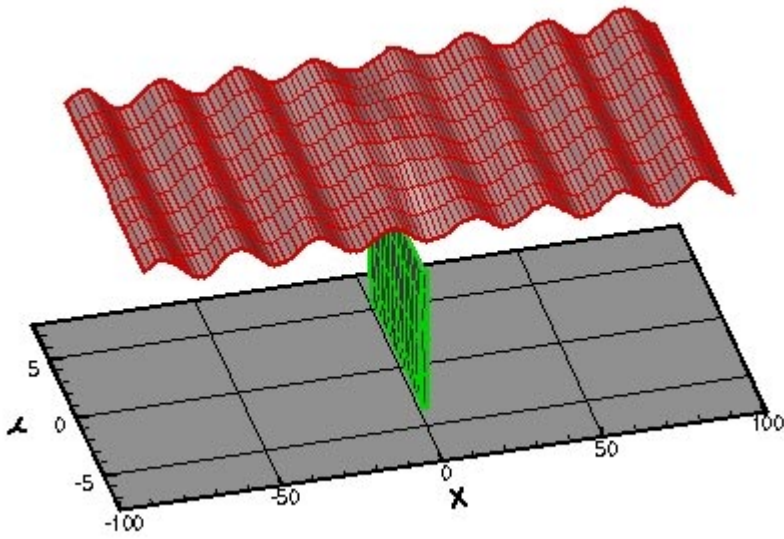


Figure 6.33 (c) – Free Surface Elevation for  $\omega=\pi/2$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=0.4T$ )

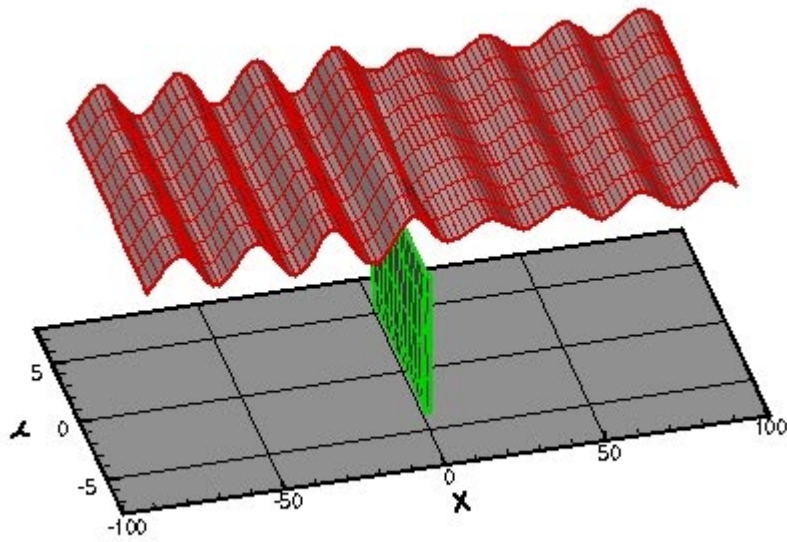


Figure 6.33 (d) – Free Surface Elevation for  $\omega=\pi/2$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=0.6T$ )

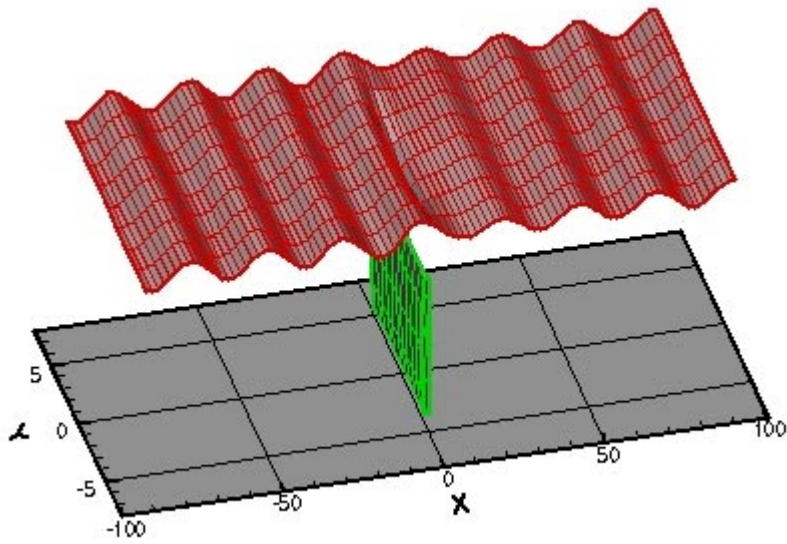


Figure 6.33 (e) – Free Surface Elevation for  $\omega=\pi/2$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=0.8T$ )

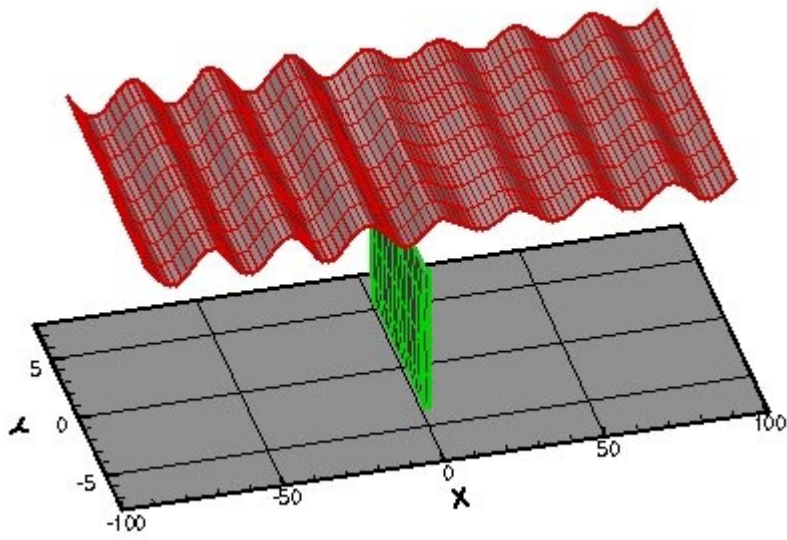


Figure 6.33 (f) – Free Surface Elevation for  $\omega=\pi/2$  rad/s  
(9.144 m Breakwater,  $\beta=0^\circ$ ,  $t=1.0T$ )

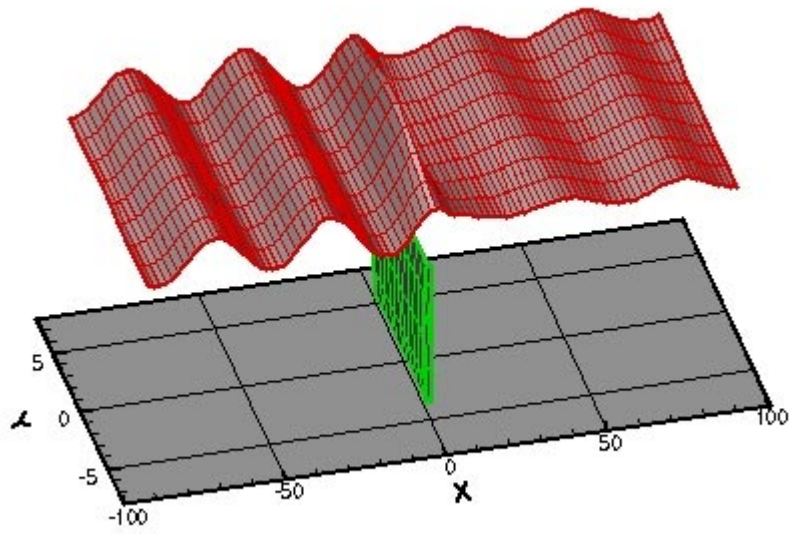


Figure 6.34 (a) – Free Surface Elevation for  $\omega=\omega_n=1.25$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=0$ )

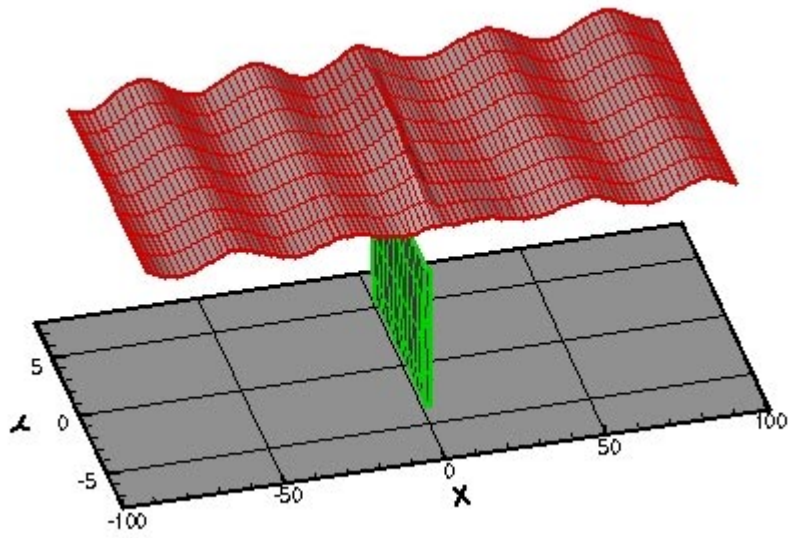


Figure 6.34 (b) – Free Surface Elevation for  $\omega=\omega_n=1.25$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=0.2T$ )

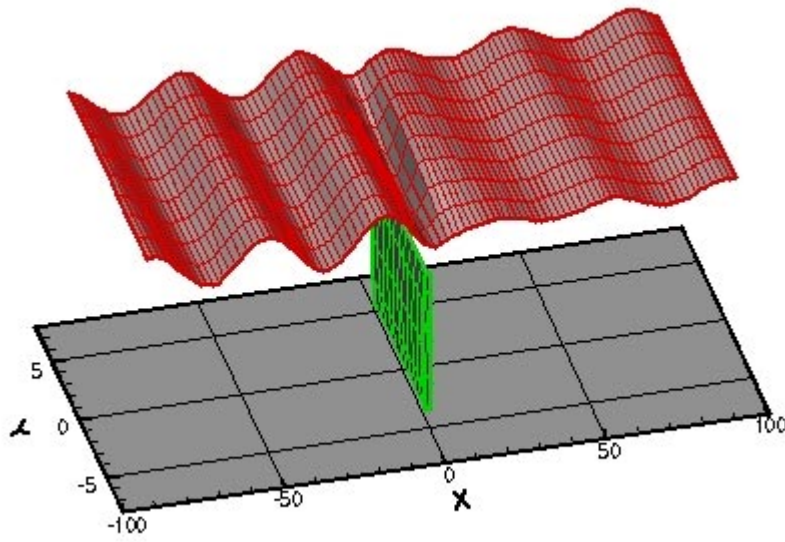


Figure 6.34 (c) – Free Surface Elevation for  $\omega=\omega_n=1.25$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=0.4T$ )

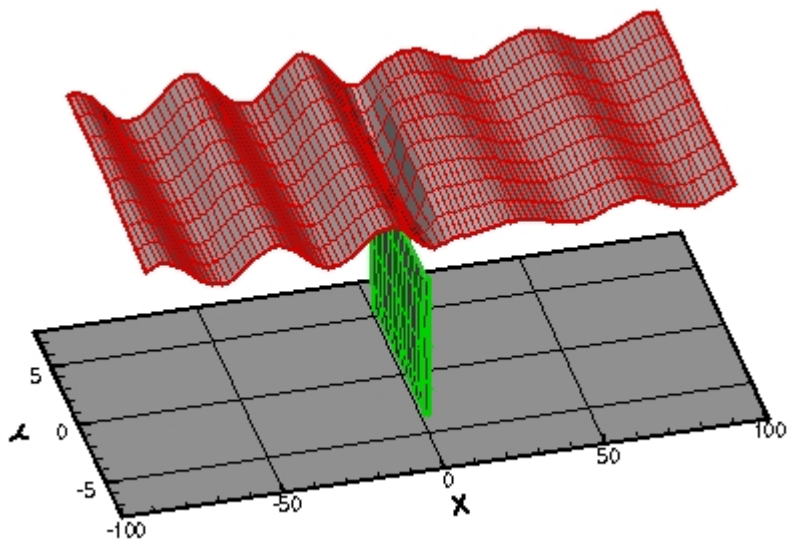


Figure 6.34 (d) – Free Surface Elevation for  $\omega=\omega_n=1.25$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=0.6T$ )



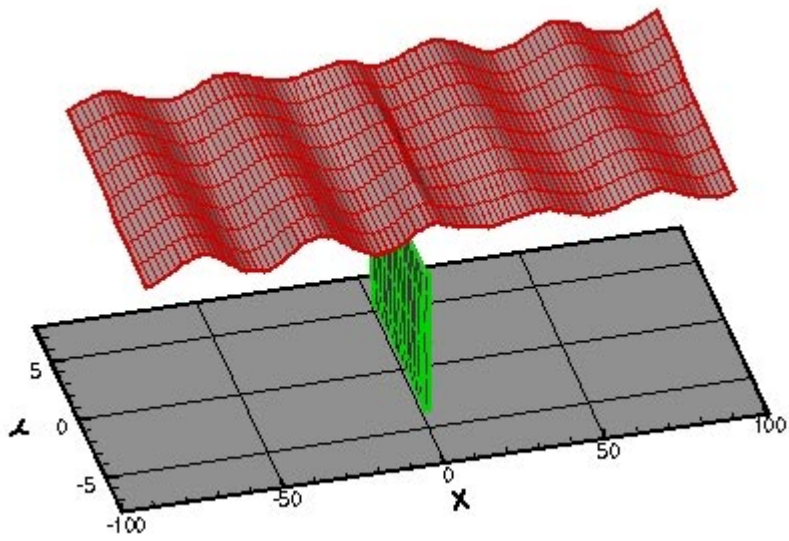


Figure 6.34 (e) – Free Surface Elevation for  $\omega=\omega_n=1.25$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=0.8T$ )

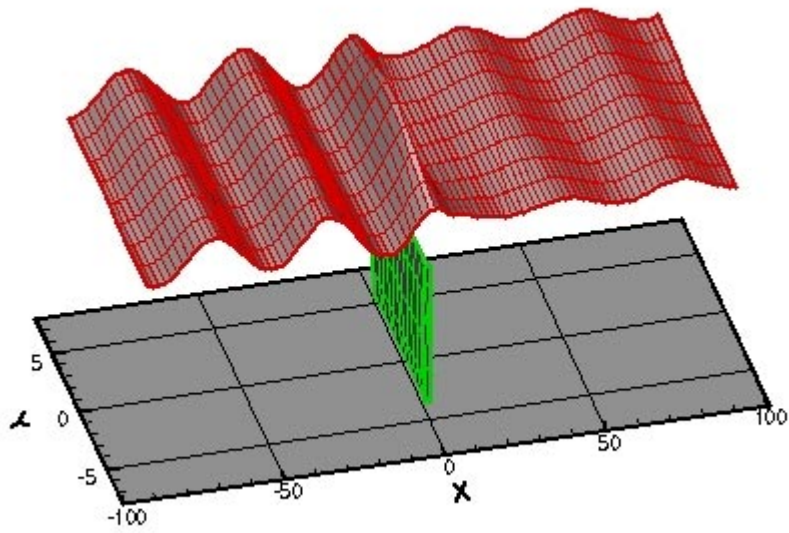


Figure 6.34 (f) – Free Surface Elevation for  $\omega=\omega_n=1.25$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=1.0T$ )

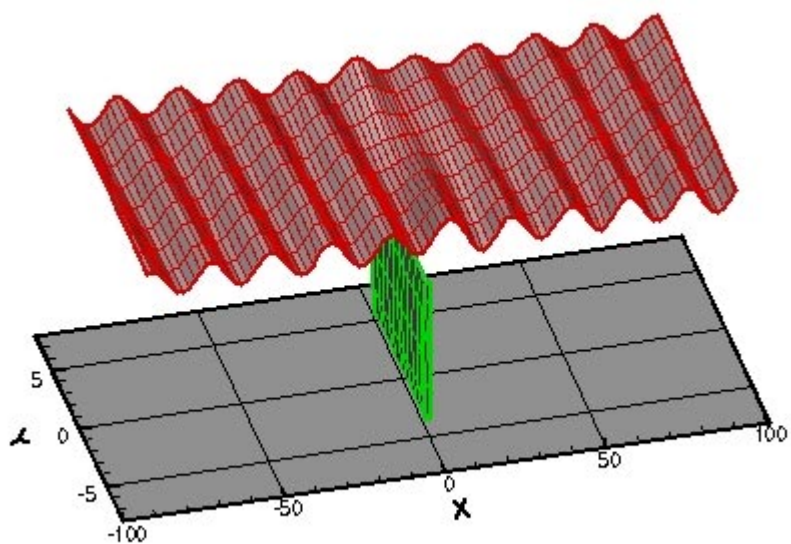


Figure 6.35 (a) – Free Surface Elevation for  $\omega=1.85$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=0$ )

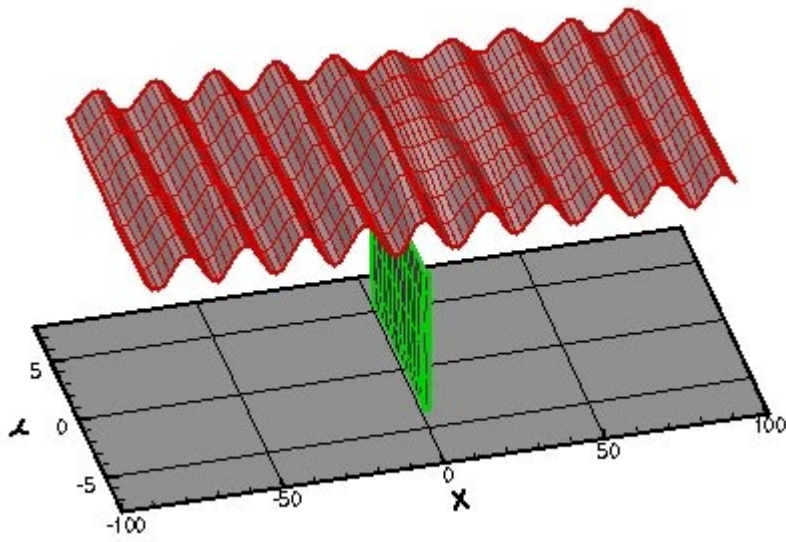


Figure 6.35 (b) – Free Surface Elevation for  $\omega=1.85$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=0.2T$ )

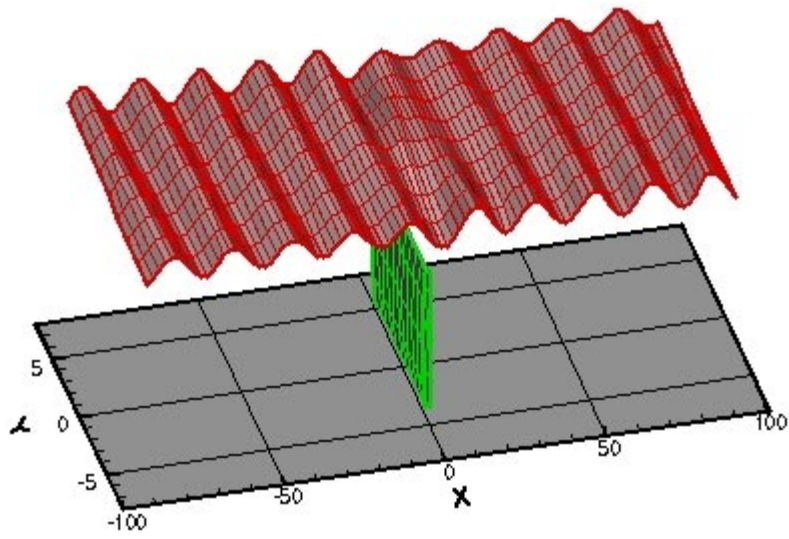


Figure 6.35 (c) – Free Surface Elevation for  $\omega=1.85$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=0.4T$ )

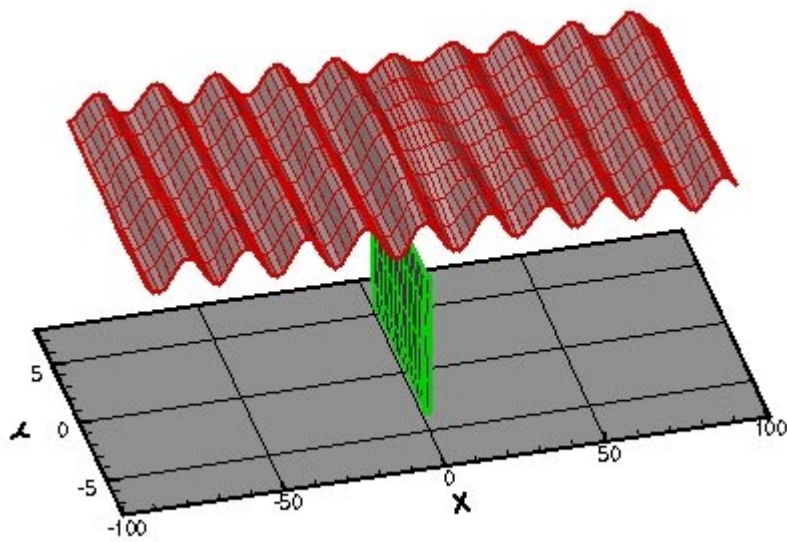


Figure 6.35 (d) – Free Surface Elevation for  $\omega=1.85$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=0.6T$ )

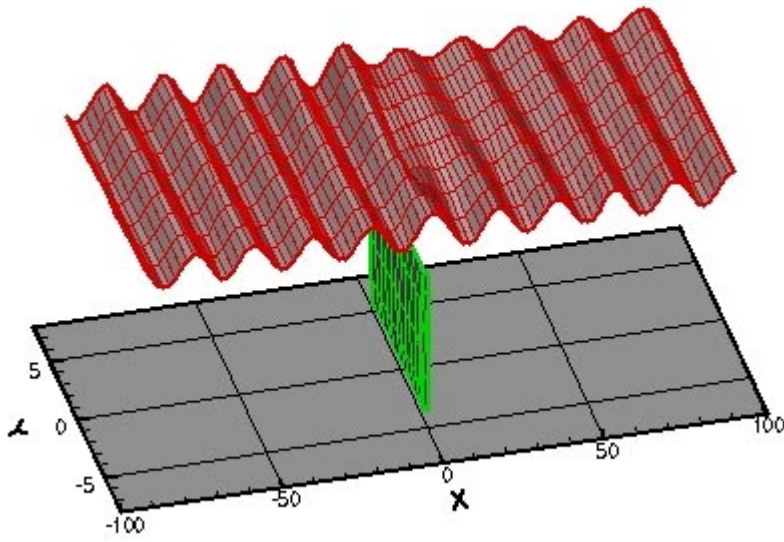


Figure 6.35 (e) – Free Surface Elevation for  $\omega=1.85$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=0.8T$ )

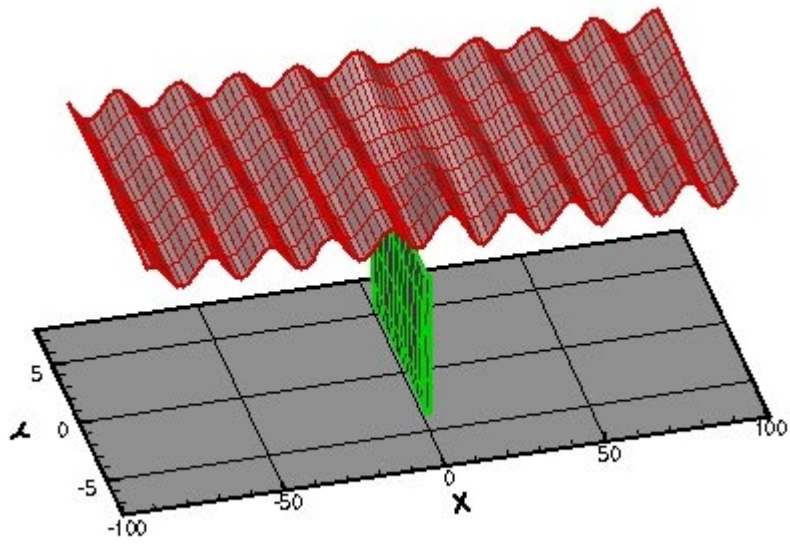


Figure 6.35 (f) – Free Surface Elevation for  $\omega=1.85$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=1.0T$ )



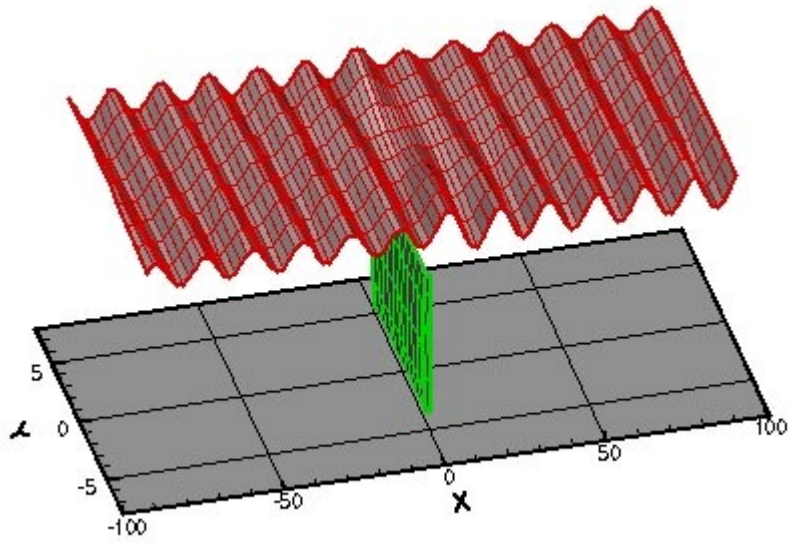


Figure 6.36 (a) – Free Surface Elevation for  $\omega=2.05$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=0$ )

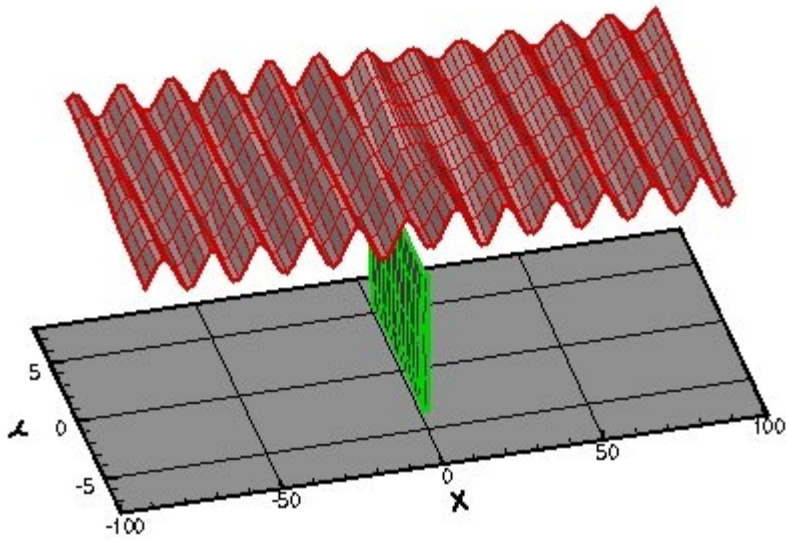


Figure 6.36 (b) – Free Surface Elevation for  $\omega=2.05$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=0.2T$ )

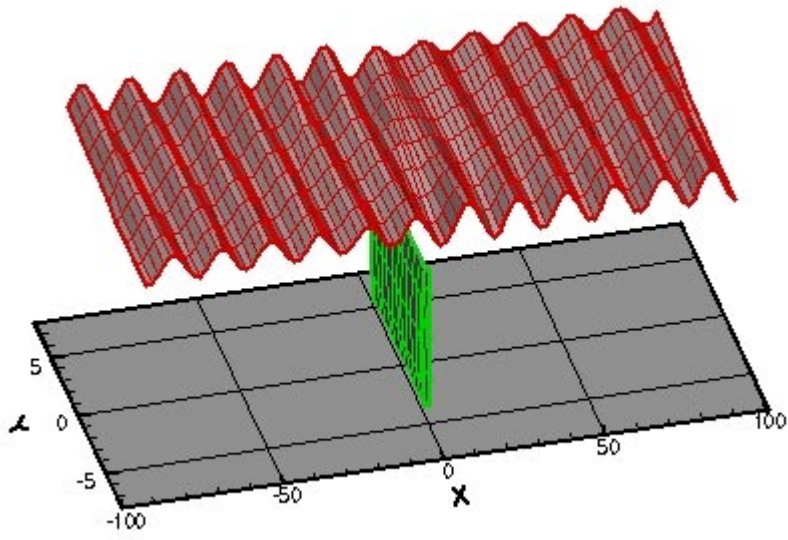


Figure 6.36 (c) – Free Surface Elevation for  $\omega=2.05$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=0.4T$ )

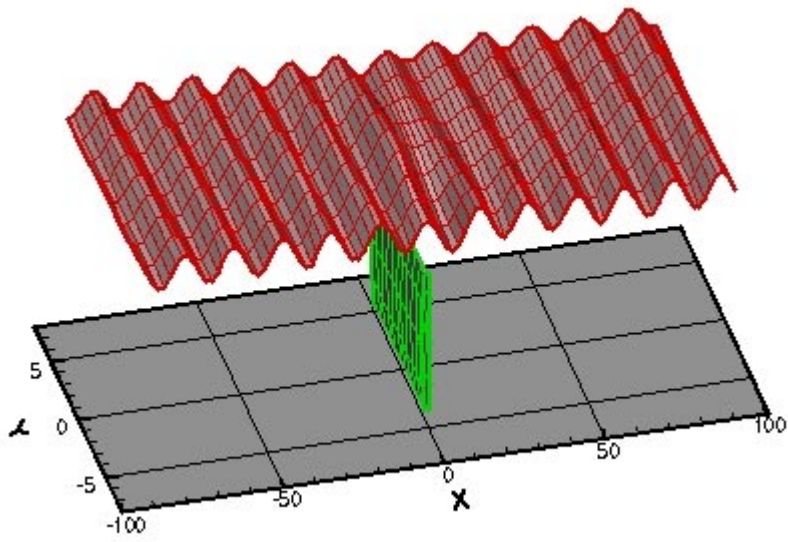


Figure 6.36 (d) – Free Surface Elevation for  $\omega=2.05$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=0.6T$ )

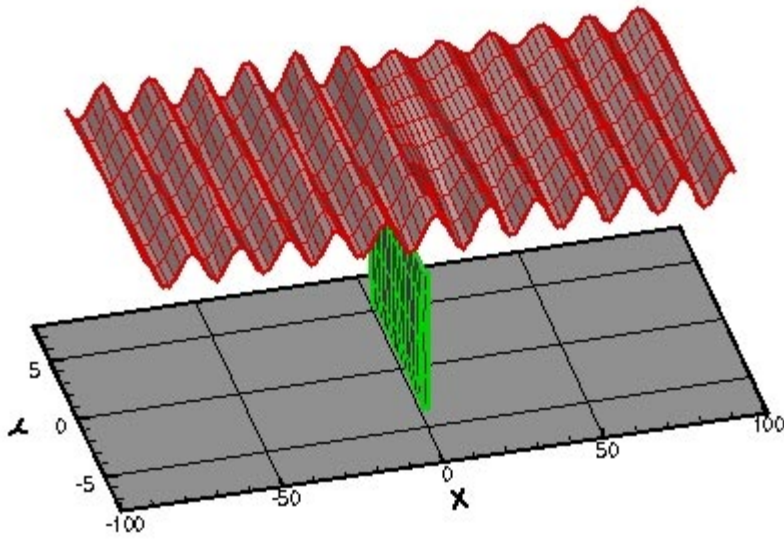


Figure 6.36 (e) – Free Surface Elevation for  $\omega=2.05$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=0.8T$ )

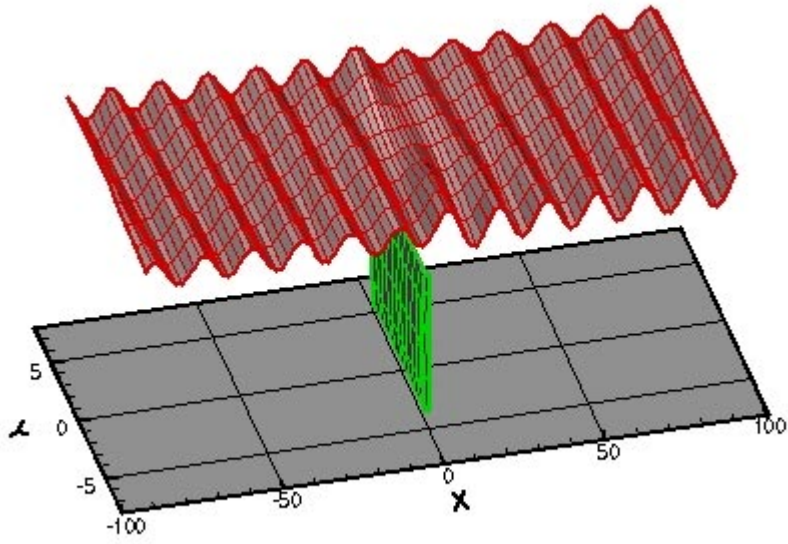


Figure 6.36 (f) – Free Surface Elevation for  $\omega=2.05$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=1.0T$ )

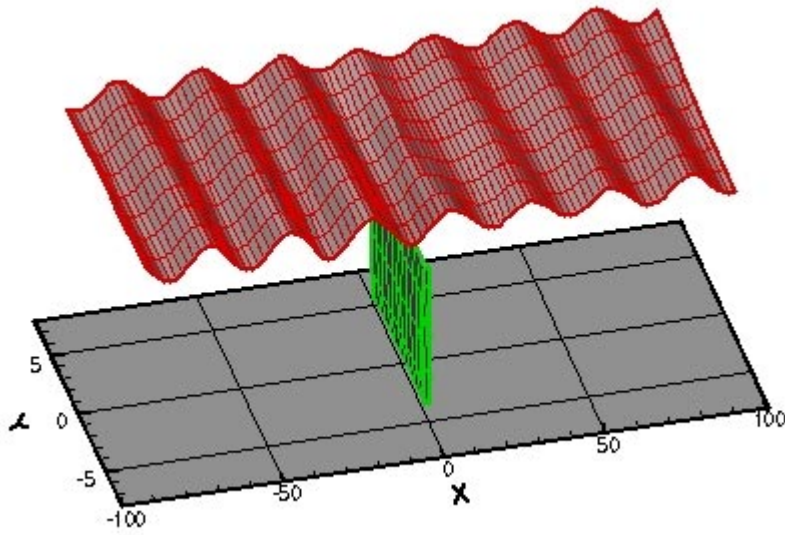


Figure 6.37 (a) – Free Surface Elevation for  $\omega=\pi/2$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=0$ )

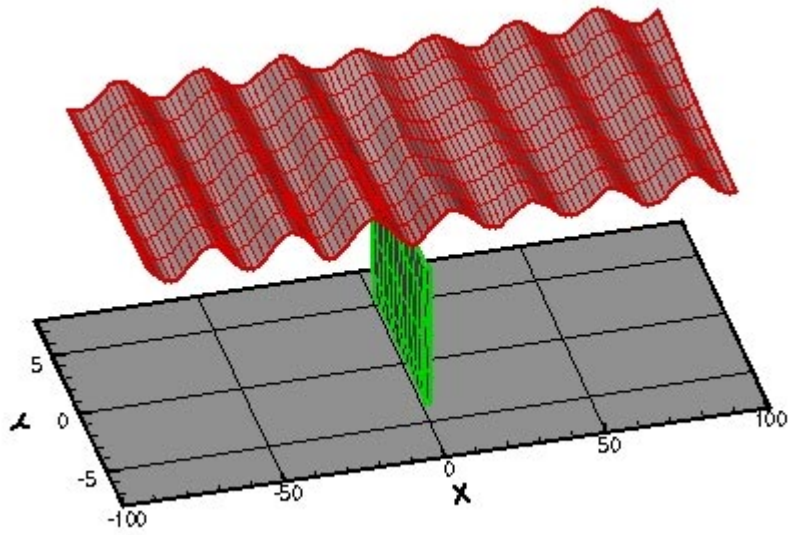


Figure 6.37 (b) – Free Surface Elevation for  $\omega=\pi/2$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=0.2T$ )



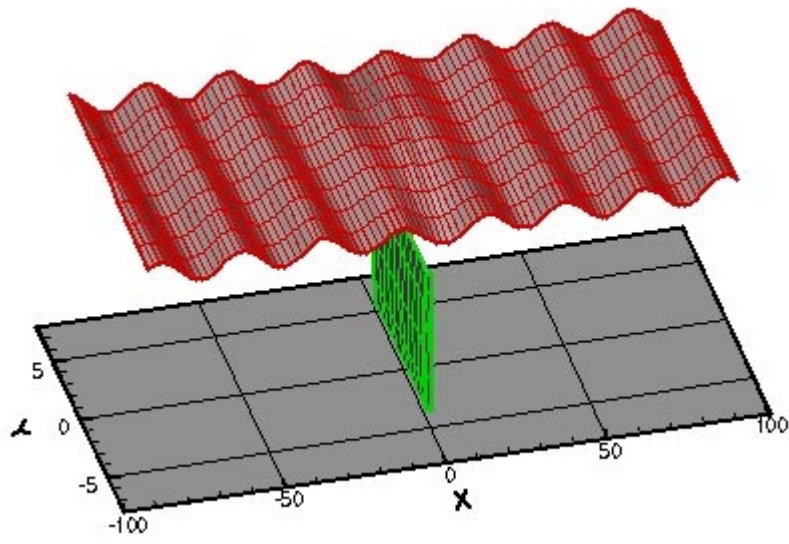


Figure 6.37 (c) – Free Surface Elevation for  $\omega=\pi/2$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=0.4T$ )

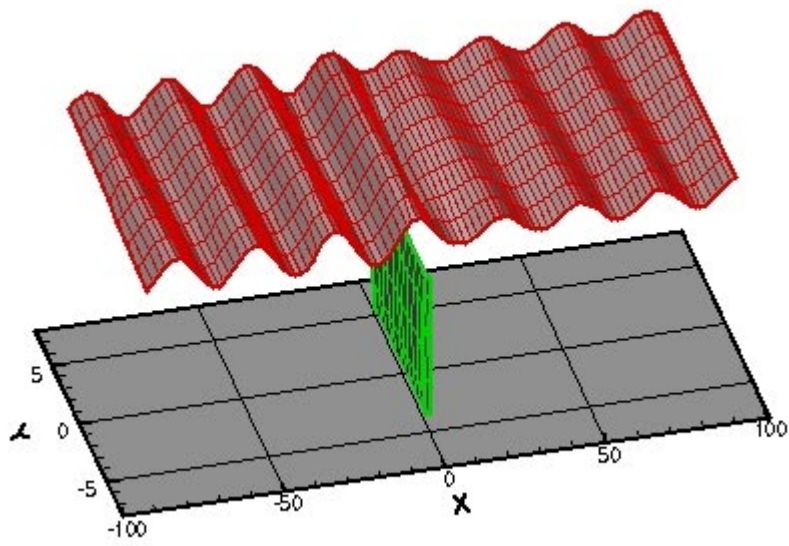


Figure 6.37 (d) – Free Surface Elevation for  $\omega=\pi/2$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=0.6T$ )

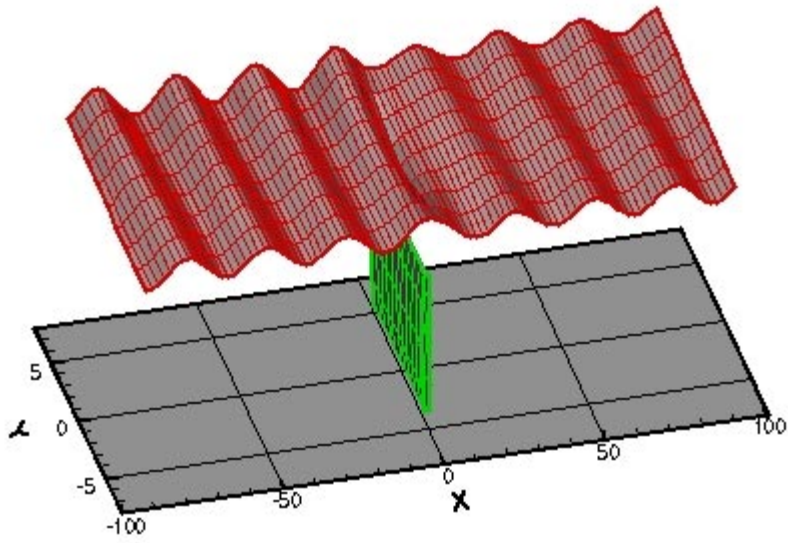


Figure 6.37 (e) – Free Surface Elevation for  $\omega=\pi/2$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=0.8T$ )

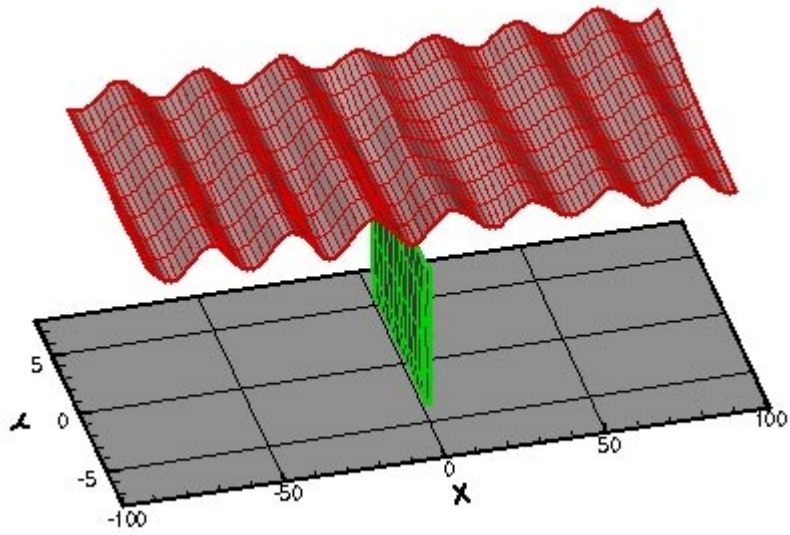


Figure 6.37 (f) – Free Surface Elevation for  $\omega=\pi/2$  rad/s  
(9.144 m Breakwater,  $\beta=15^\circ$ ,  $t=1.0T$ )

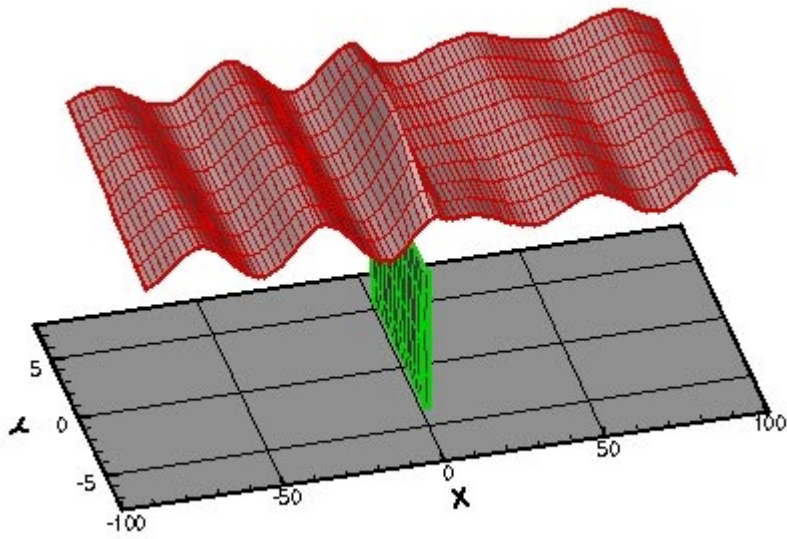


Figure 6.38 (a) – Free Surface Elevation for  $\omega=\omega_n=1.25$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=0$ )

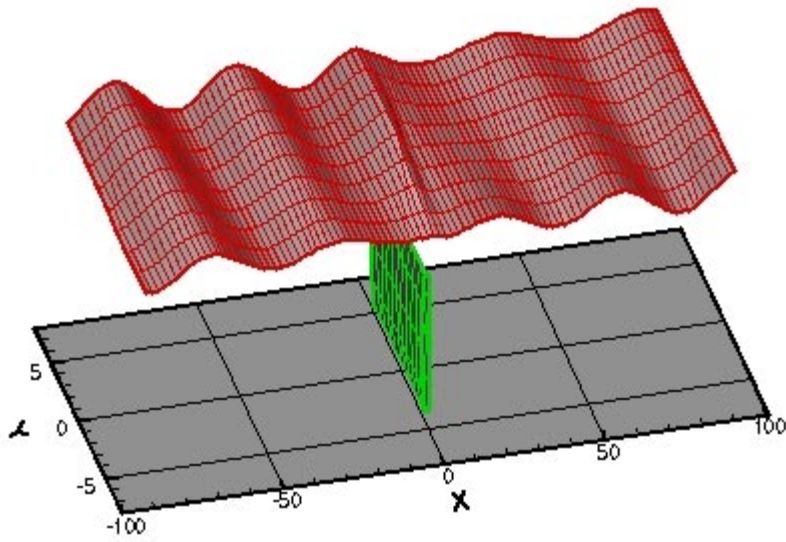


Figure 6.38 (b) – Free Surface Elevation for  $\omega=\omega_n=1.25$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=0.2T$ )

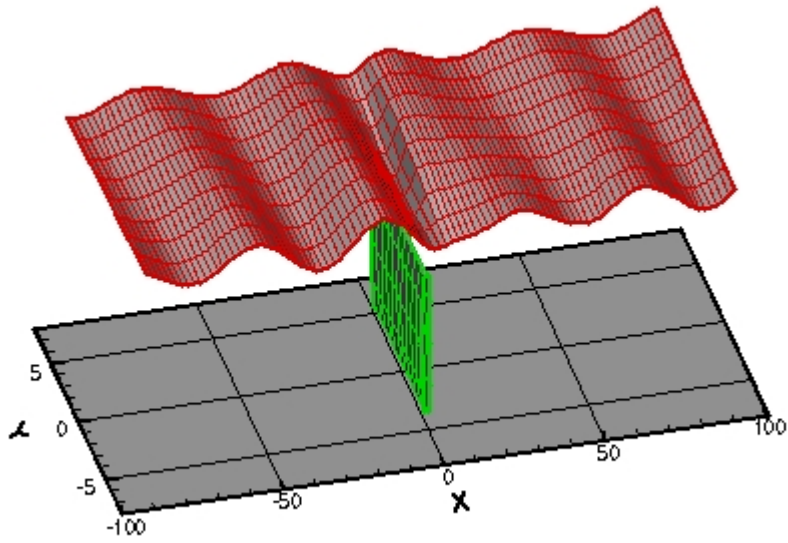


Figure 6.38 (c) – Free Surface Elevation for  $\omega=\omega_n=1.25$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=0.4T$ )

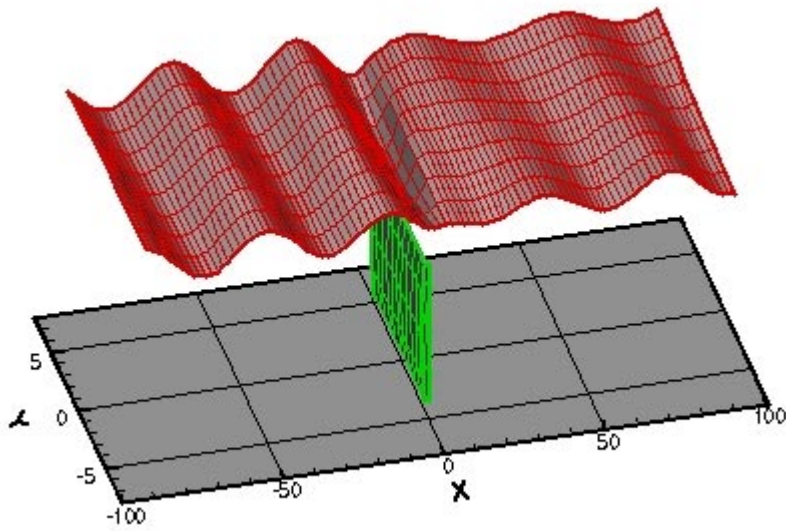


Figure 6.38 (d) – Free Surface Elevation for  $\omega=\omega_n=1.25$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=0.6T$ )



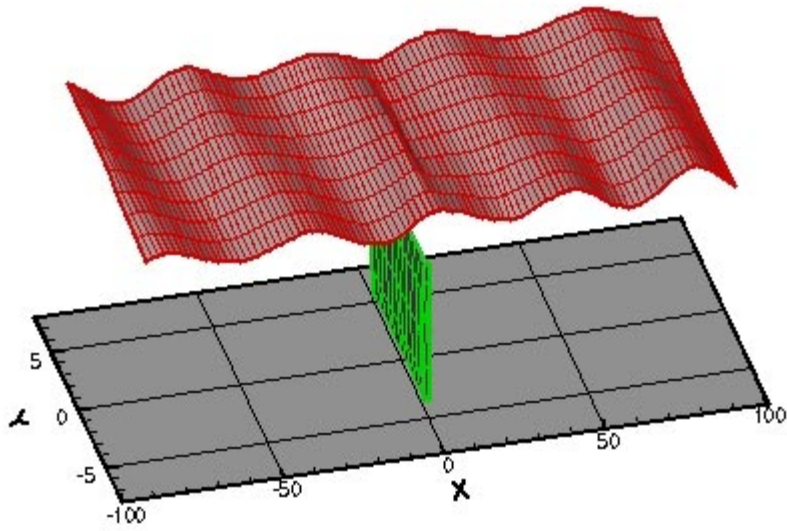


Figure 6.38 (e) – Free Surface Elevation for  $\omega=\omega_n=1.25$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=0.8T$ )

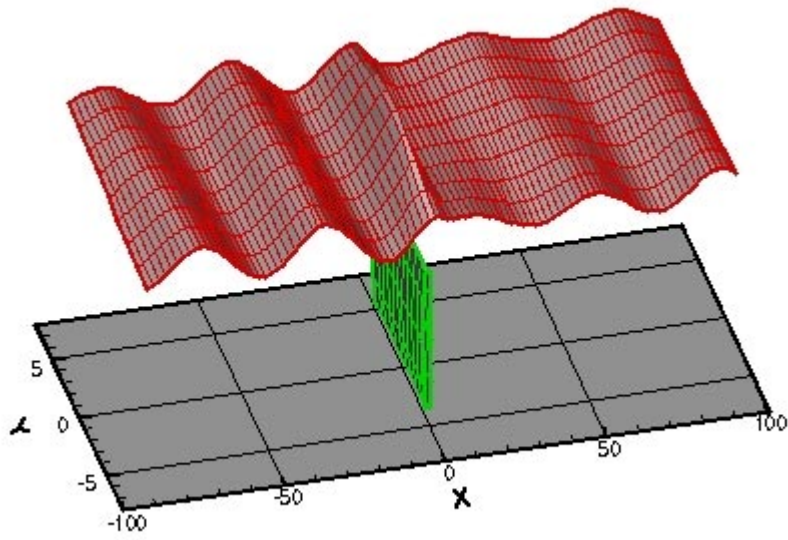


Figure 6.38 (f) – Free Surface Elevation for  $\omega=\omega_n=1.25$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=1.0T$ )

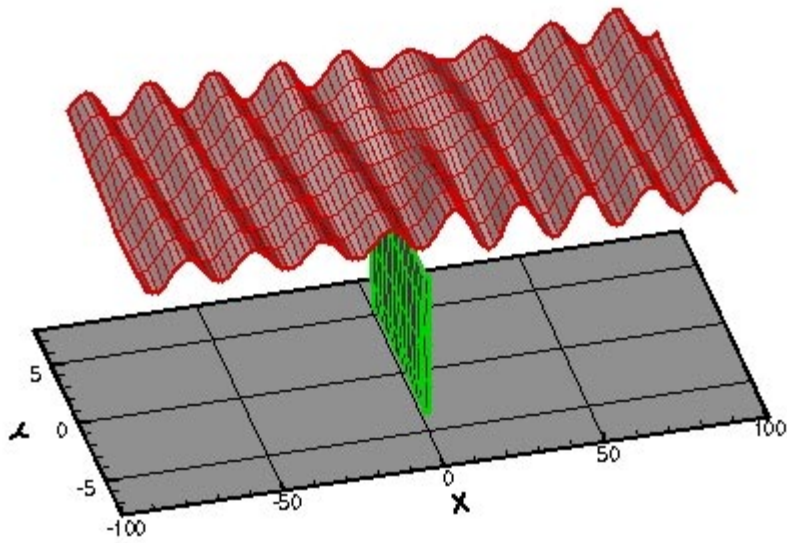


Figure 6.39 (a) – Free Surface Elevation for  $\omega=1.85$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=0$ )

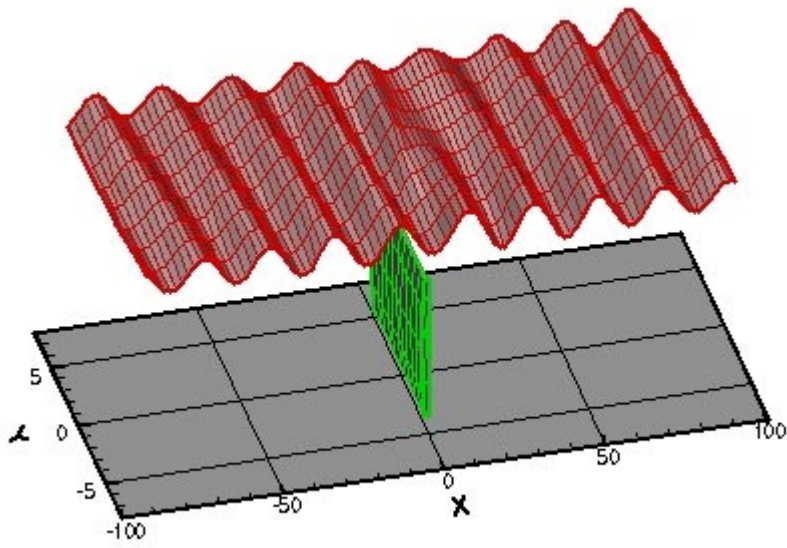


Figure 6.39 (b) – Free Surface Elevation for  $\omega=1.85$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=0.2T$ )

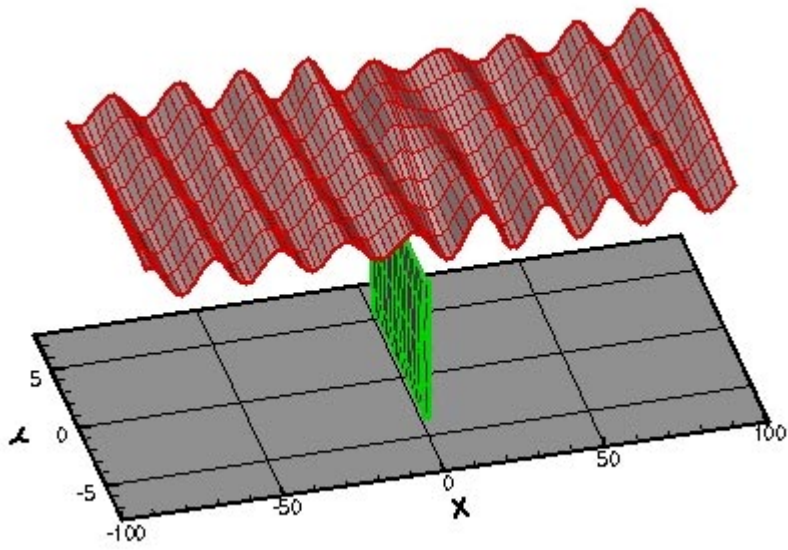


Figure 6.39 (c) – Free Surface Elevation for  $\omega=1.85$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=0.4T$ )

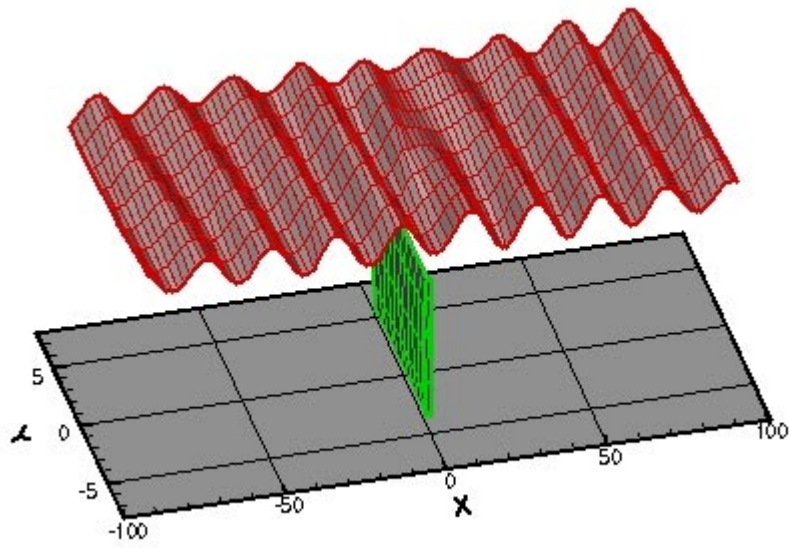


Figure 6.39 (d) – Free Surface Elevation for  $\omega=1.85$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=0.6T$ )

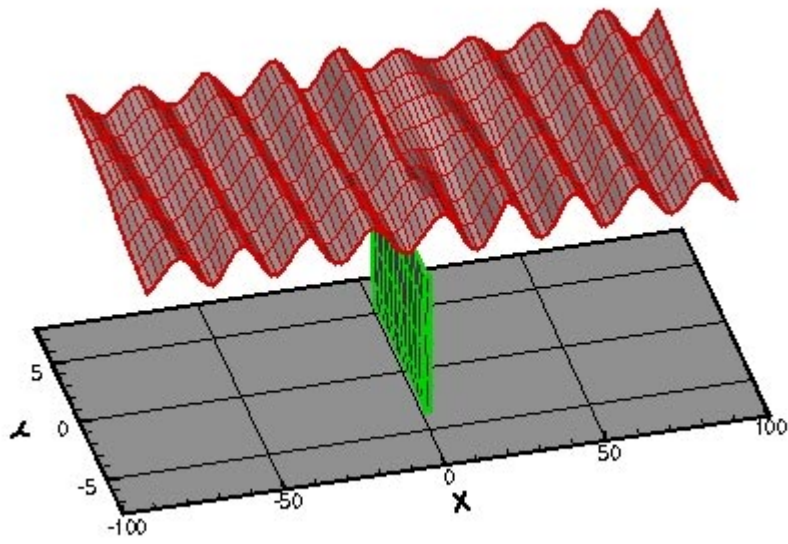


Figure 6.39 (e) – Free Surface Elevation for  $\omega=1.85$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=0.8T$ )

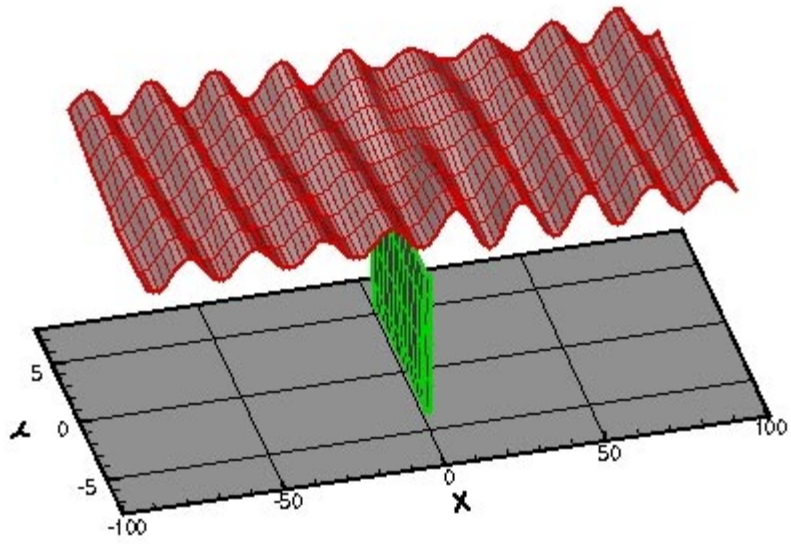


Figure 6.39 (f) – Free Surface Elevation for  $\omega=1.85$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=1.0T$ )



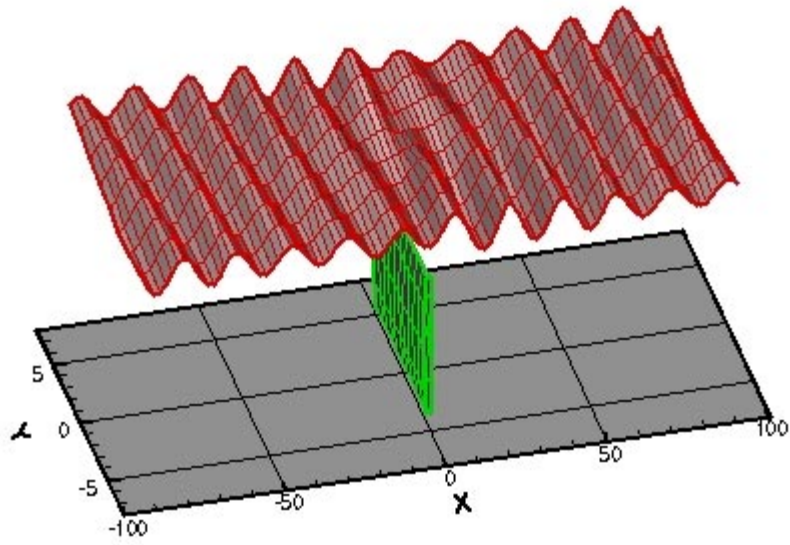


Figure 6.40 (a) – Free Surface Elevation for  $\omega=2.05$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=0$ )

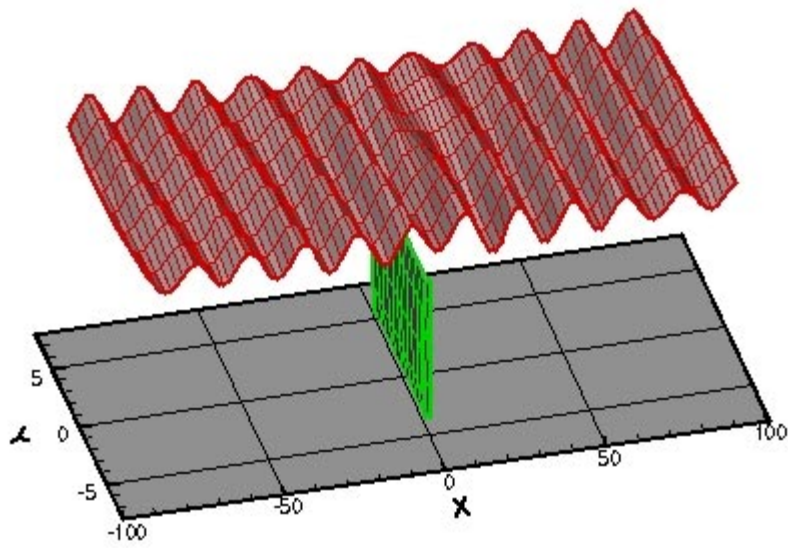


Figure 6.40 (b) – Free Surface Elevation for  $\omega=2.05$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=0.2T$ )

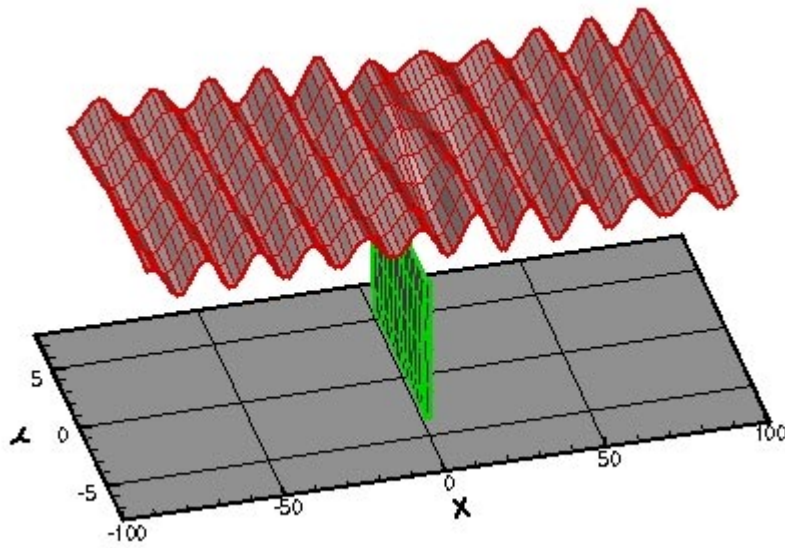


Figure 6.40 (c) – Free Surface Elevation for  $\omega=2.05$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=0.4T$ )

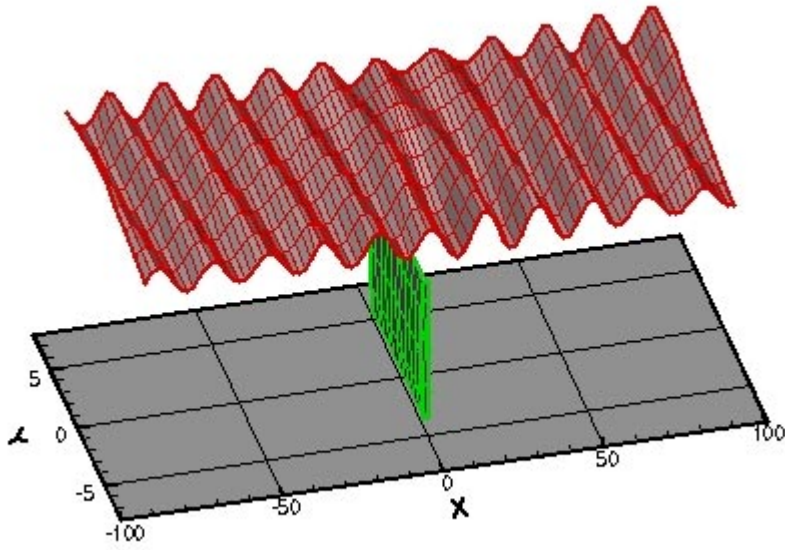


Figure 6.40 (d) – Free Surface Elevation for  $\omega=2.05$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=0.6T$ )

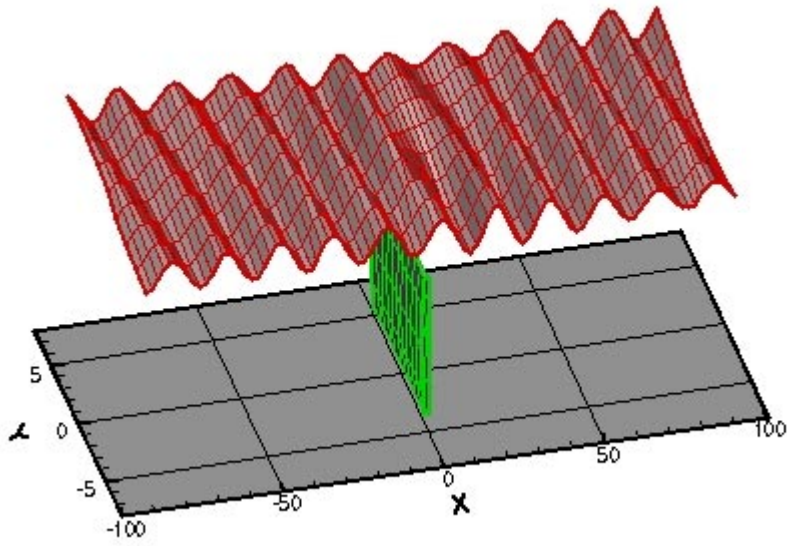


Figure 6.40 (e) – Free Surface Elevation for  $\omega=2.05$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=0.8T$ )

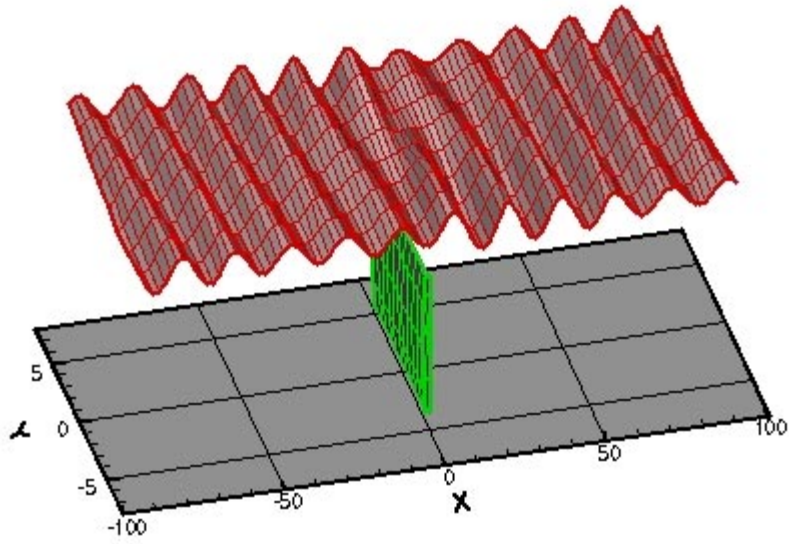


Figure 6.40 (f) – Free Surface Elevation for  $\omega=2.05$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=1.0T$ )

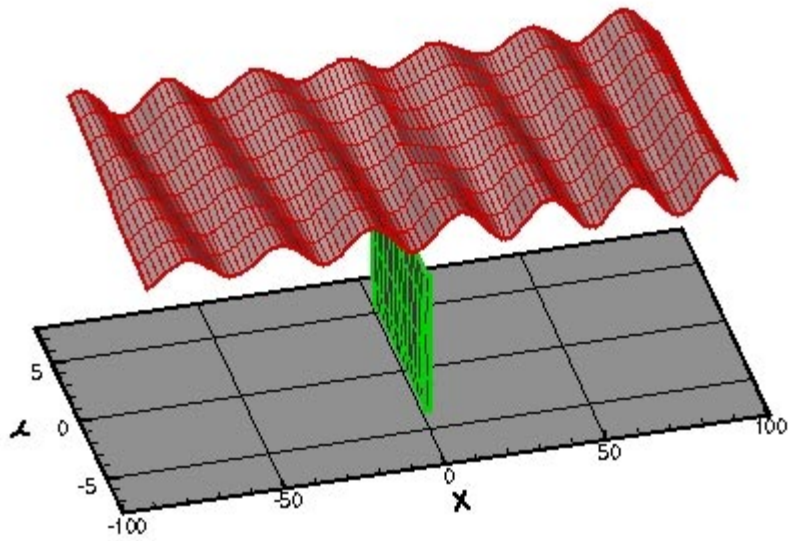


Figure 6.41 (a) – Free Surface Elevation for  $\omega=\pi/2$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=0$ )

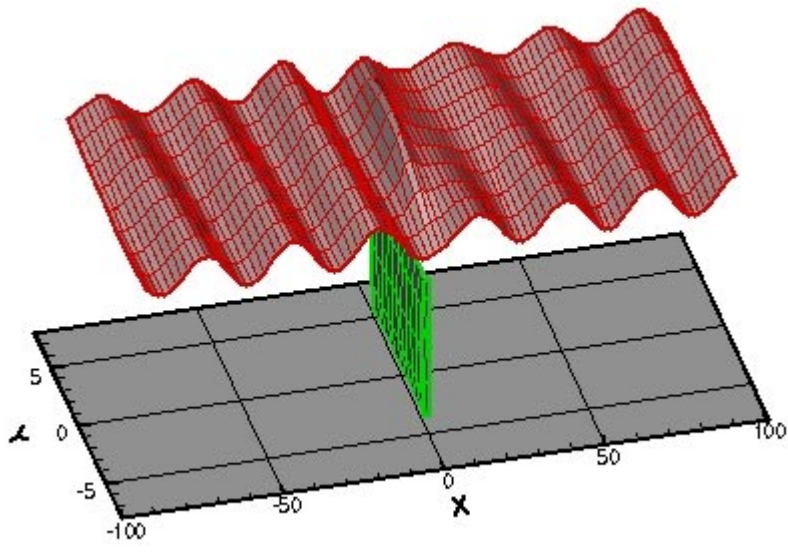


Figure 6.41 (b) – Free Surface Elevation for  $\omega=\pi/2$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=0.2T$ )



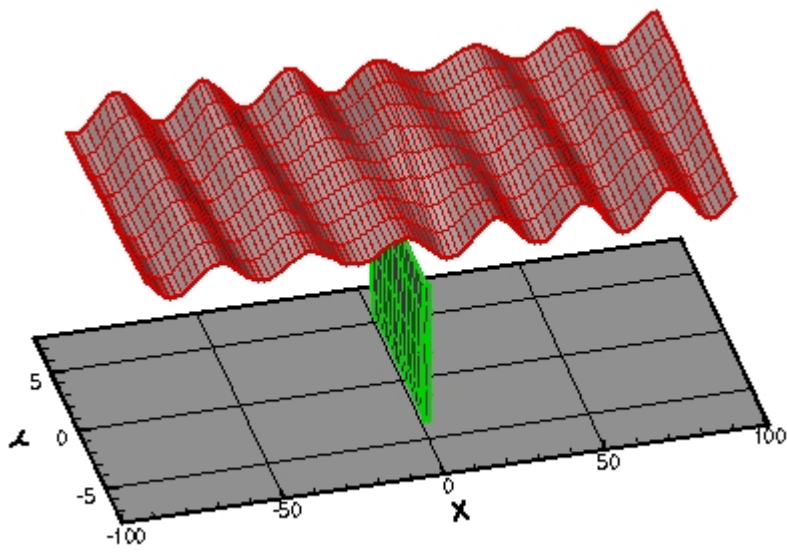


Figure 6.41 (c) – Free Surface Elevation for  $\omega=\pi/2$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=0.4T$ )

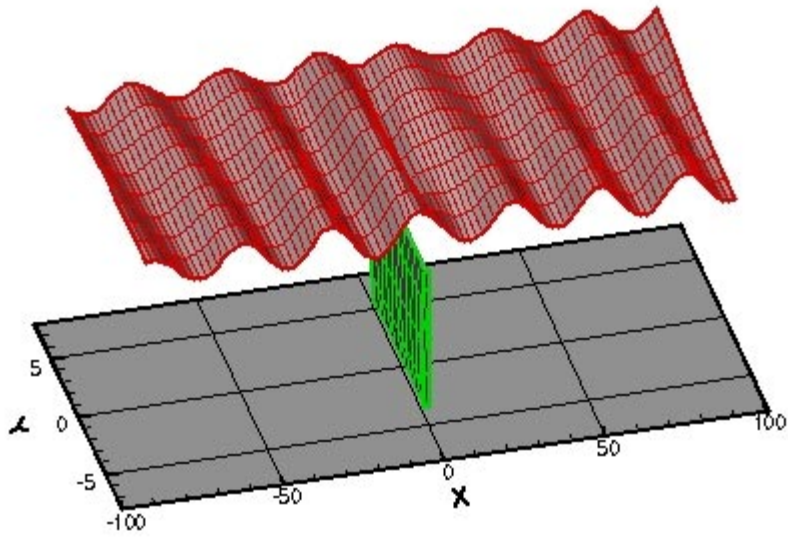


Figure 6.41 (d) – Free Surface Elevation for  $\omega=\pi/2$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=0.6T$ )

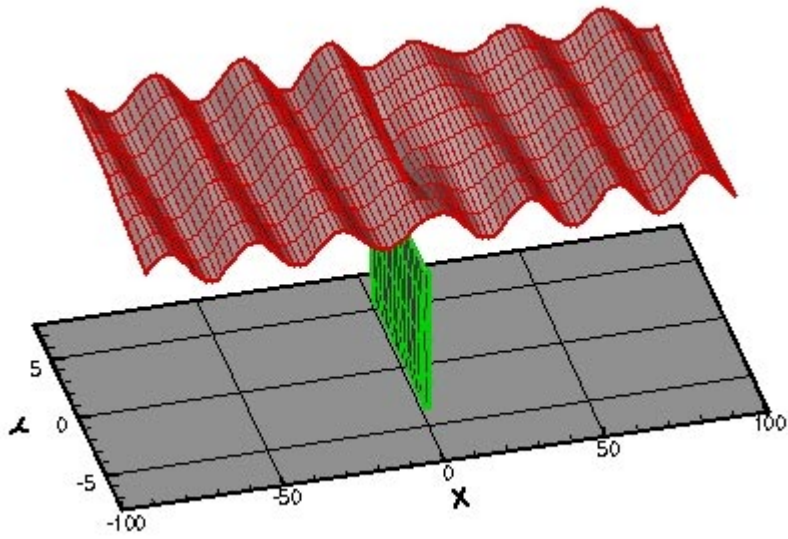


Figure 6.41 (e) – Free Surface Elevation for  $\omega=\pi/2$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=0.8T$ )

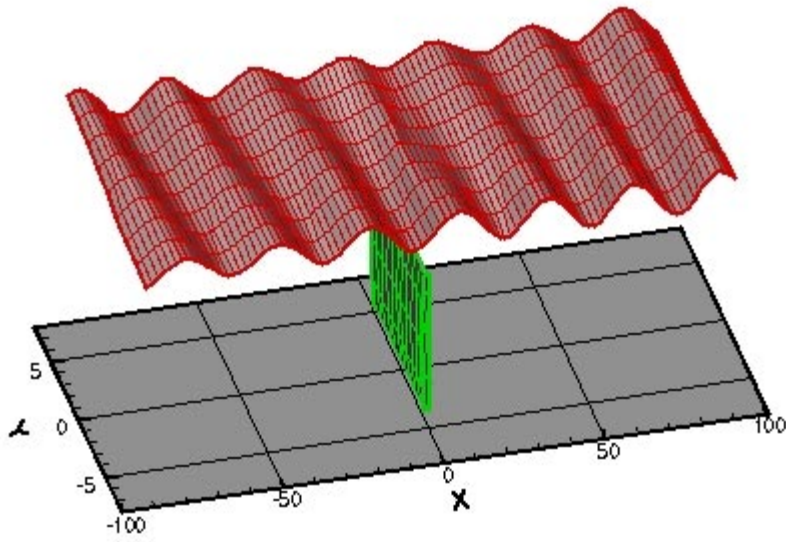


Figure 6.41 (f) – Free Surface Elevation for  $\omega=\pi/2$  rad/s  
(9.144 m Breakwater,  $\beta=30^\circ$ ,  $t=1.0T$ )