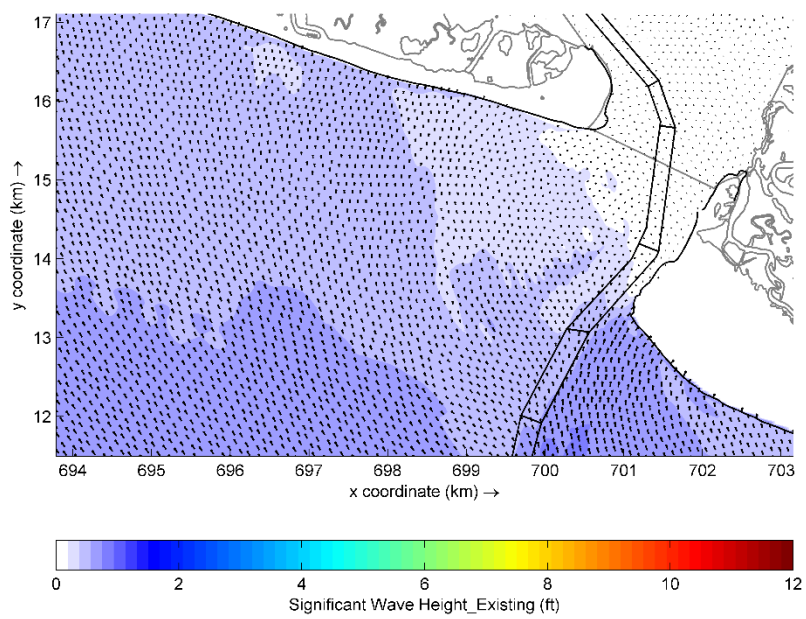
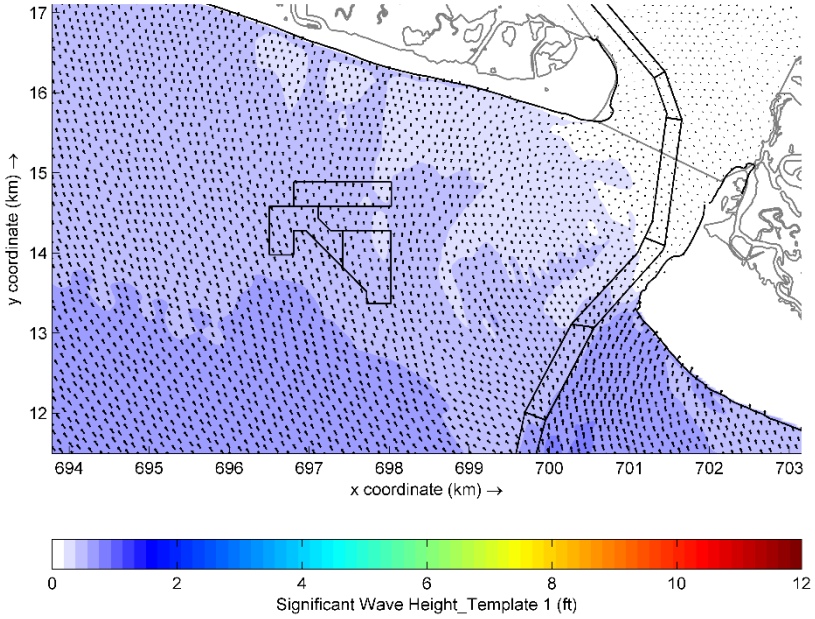
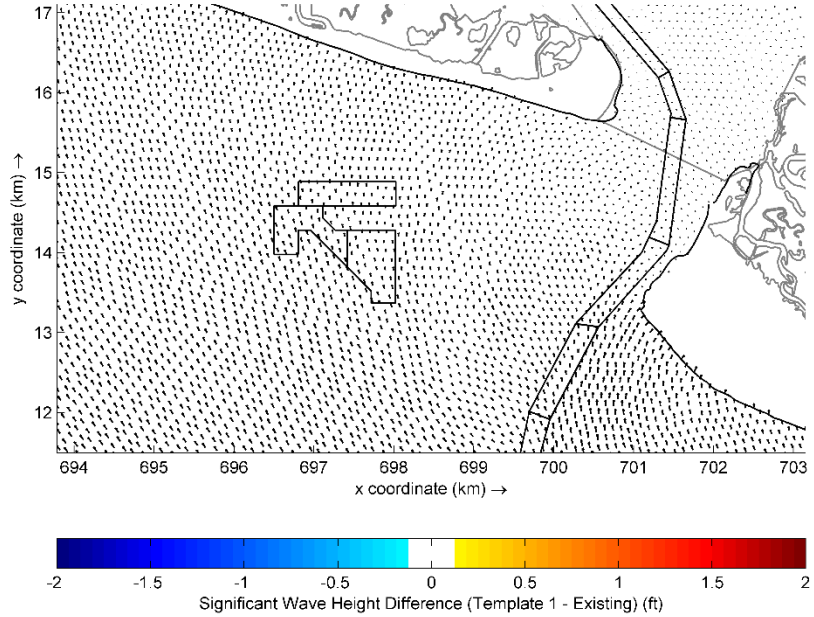
APPENDIX C1

Predicted wave fields for Existing and after-dredge bathymetric conditions and changes in wave height caused by after-dredge bathymetric condition

Template 1



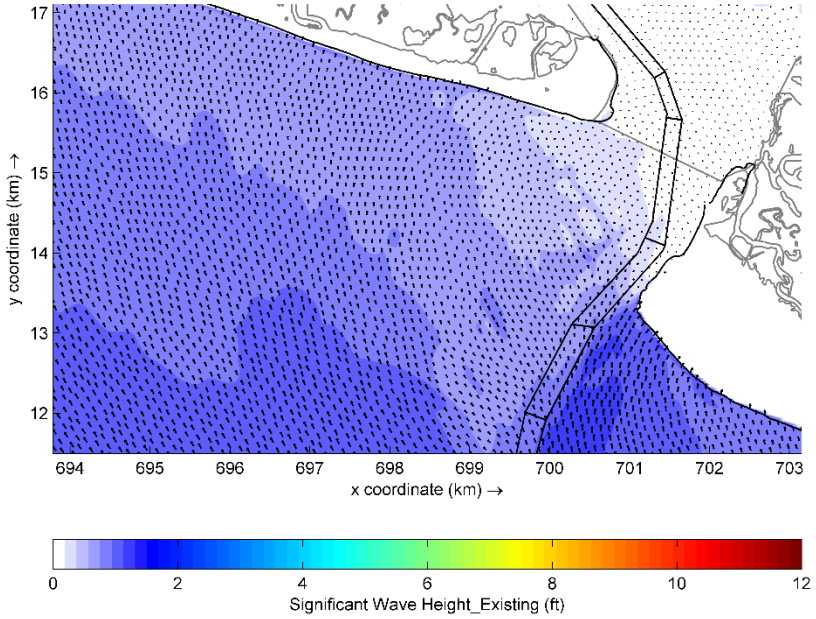


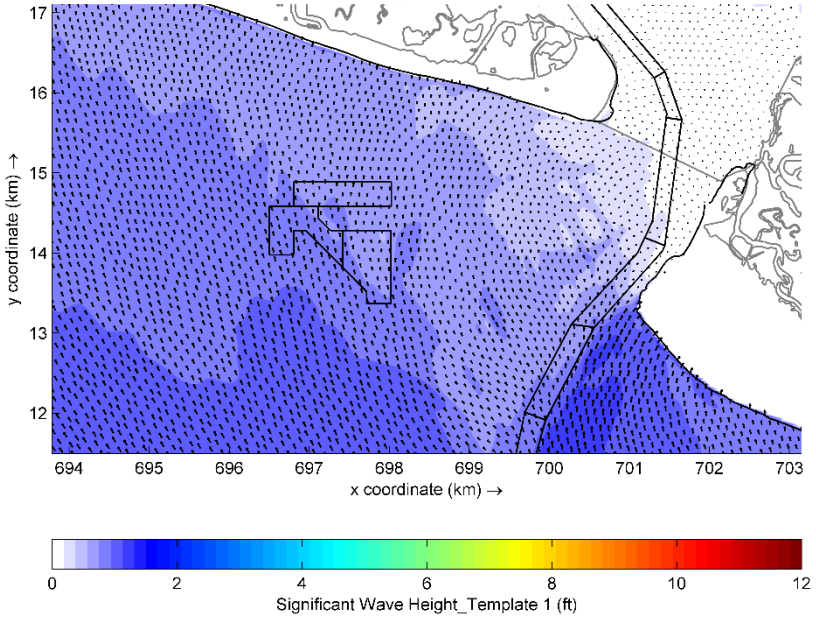


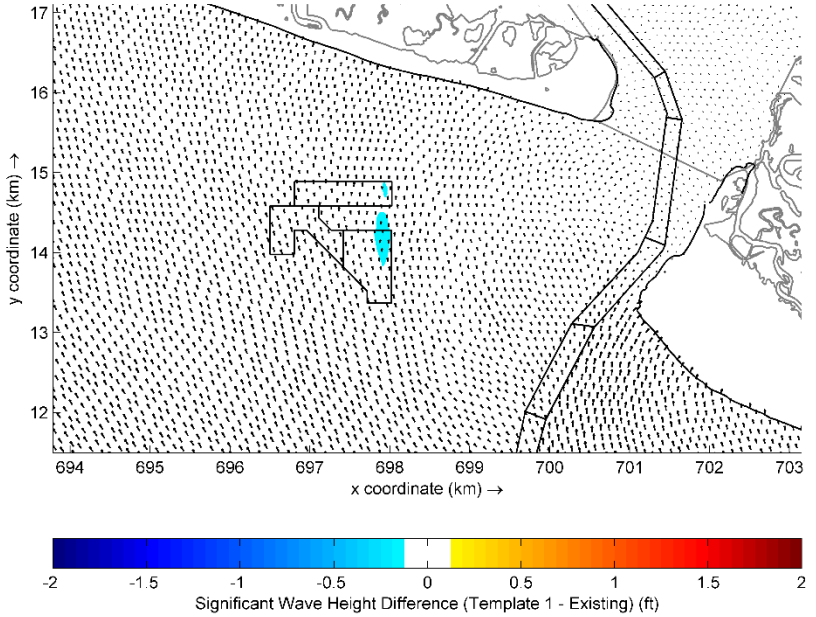
Offshore Wave Case01:

H_s = 2.5 ft, T_p = 9.0 s, Dir = 97.7 degN
Percent Occurrence = 4.854%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



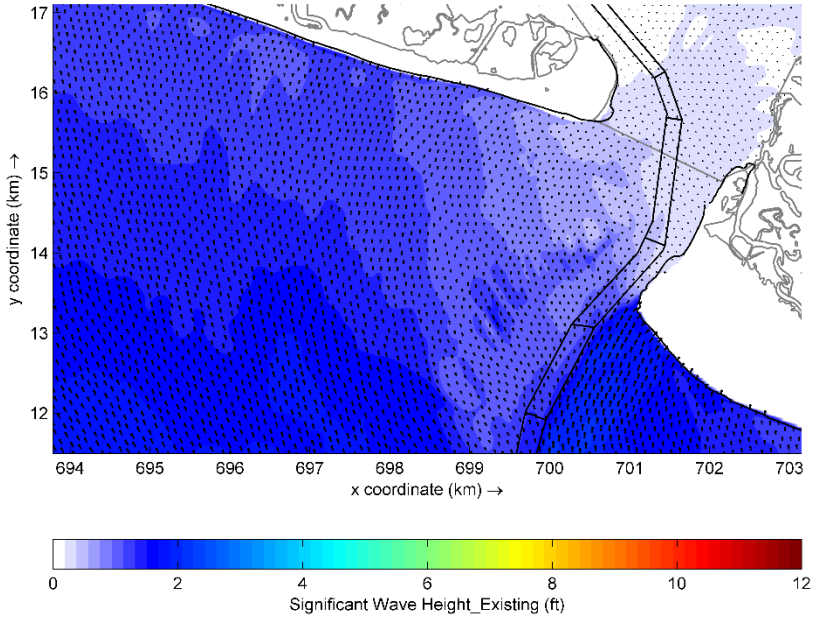


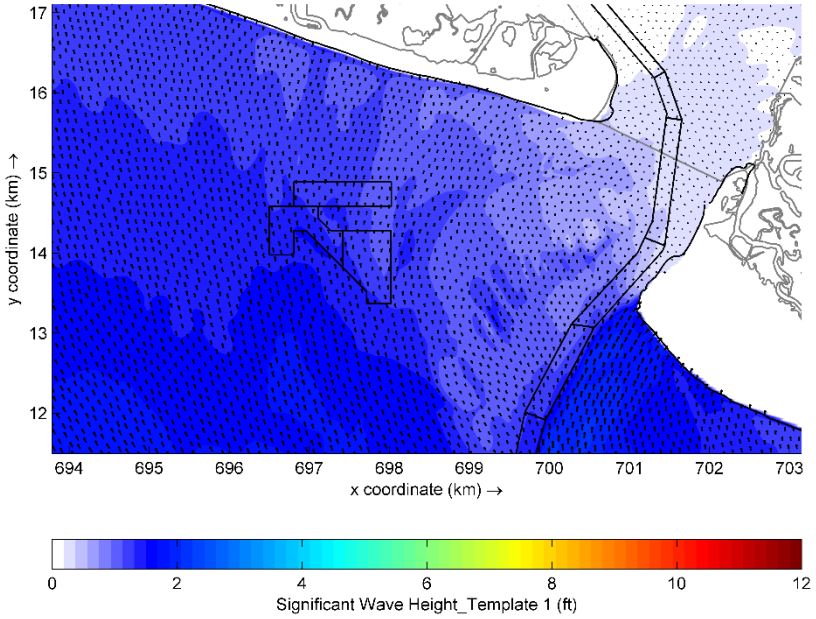


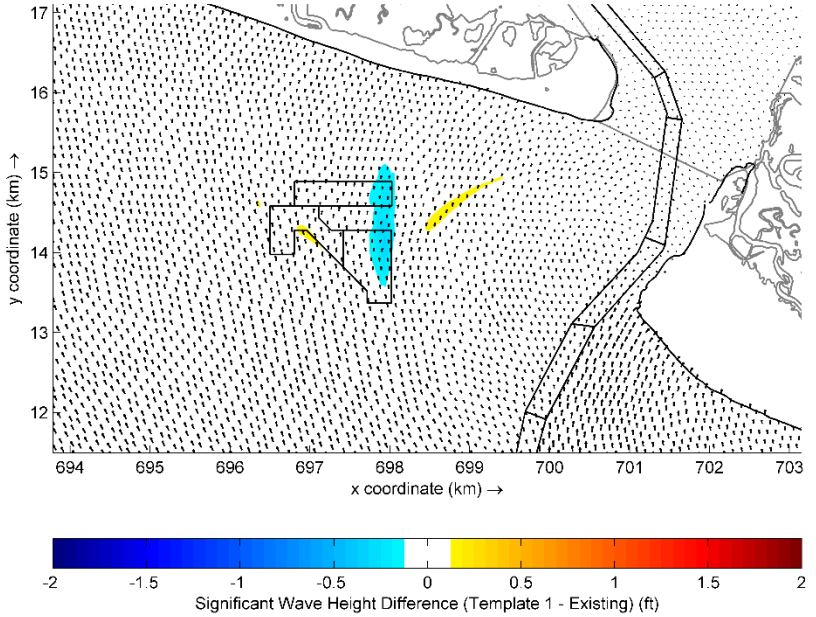
Offshore Wave Case02:

H_s = 4.4 ft, T_p = 9.5 s, Dir = 98.0 degN
Percent Occurrence = 3.973%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



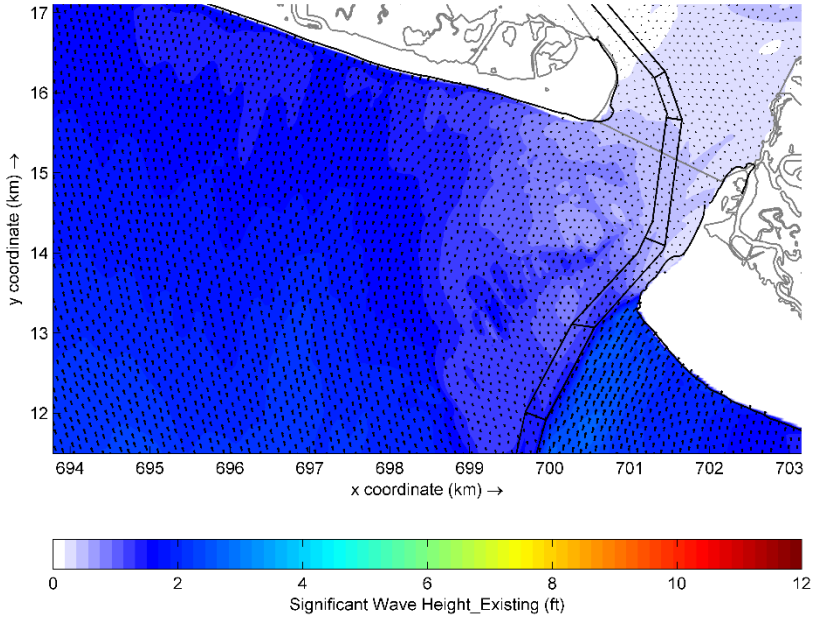


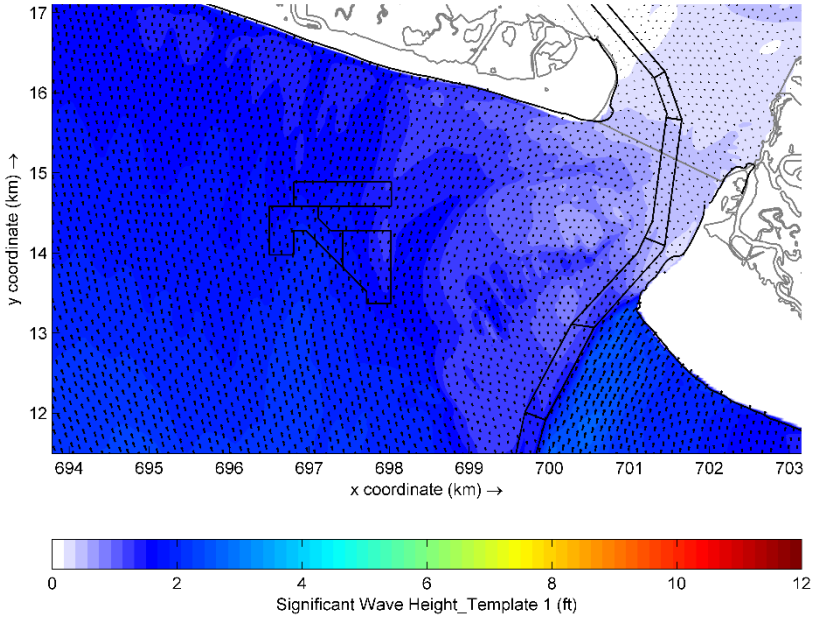


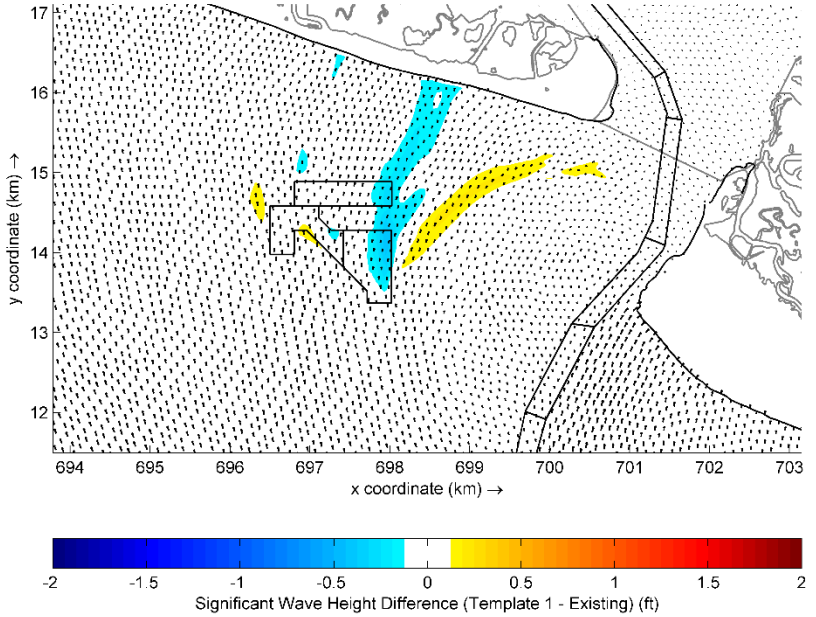
Offshore Wave Case03:

H_s = 7.8 ft, T_p = 10.1 s, Dir = 97.3 degN
Percent Occurrence = 0.635%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



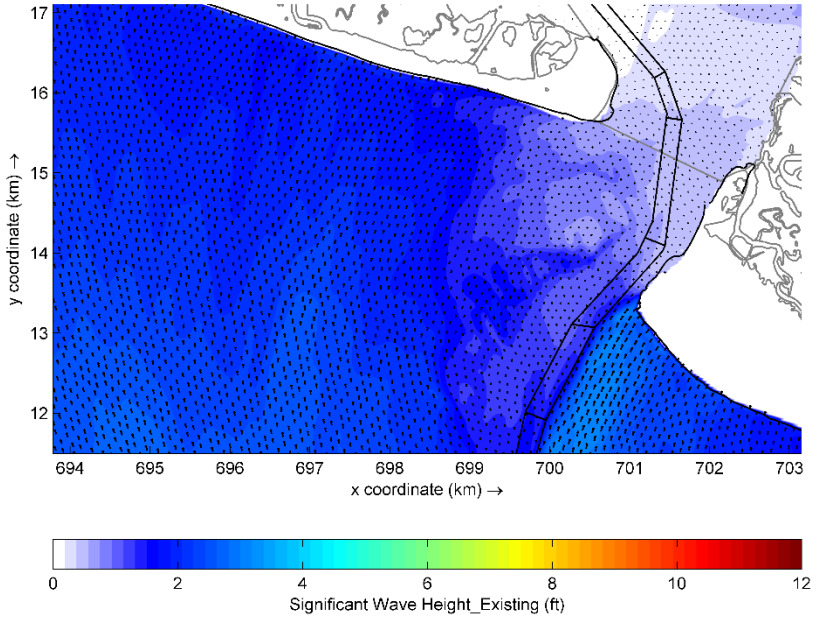


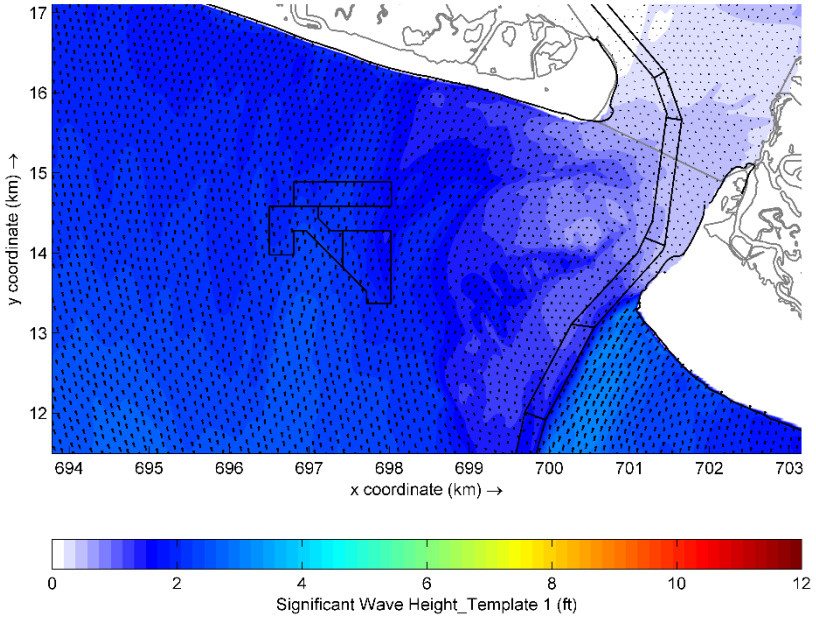


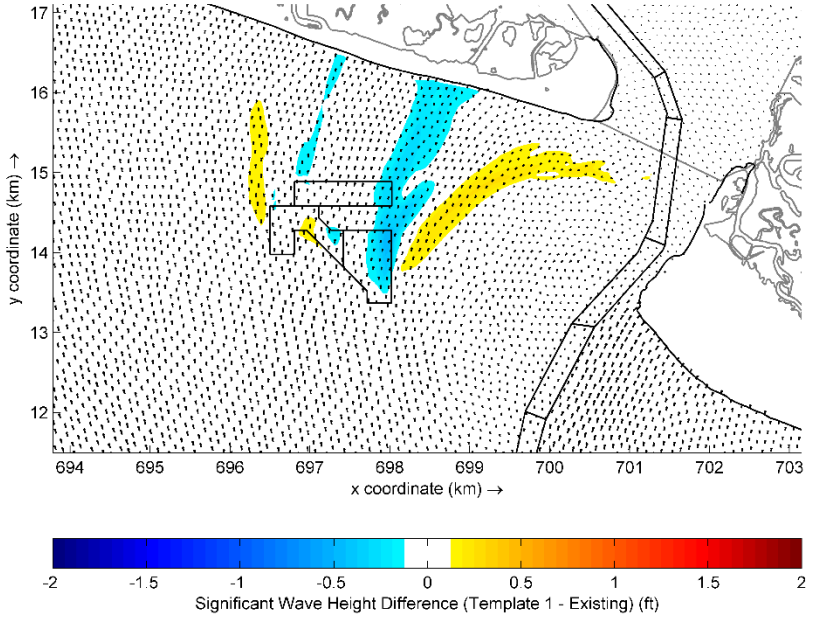
Offshore Wave Case04:

H_s = 11.3 ft, T_p = 11.8 s, Dir = 97.1 degN
Percent Occurrence = 0.164%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



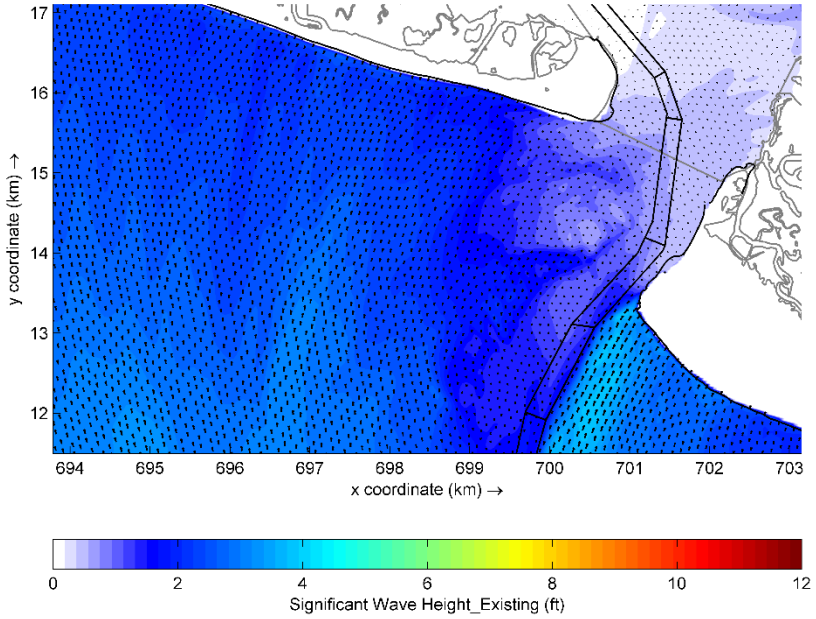


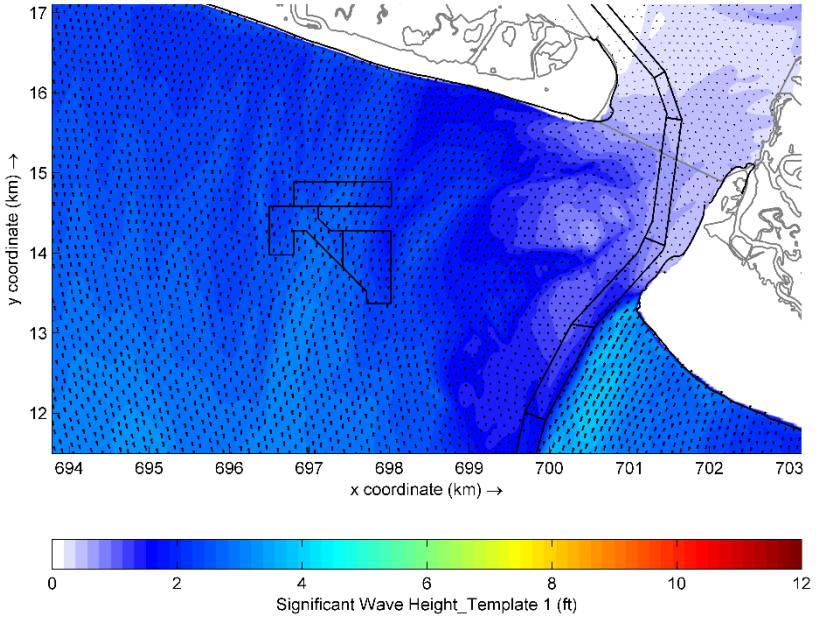


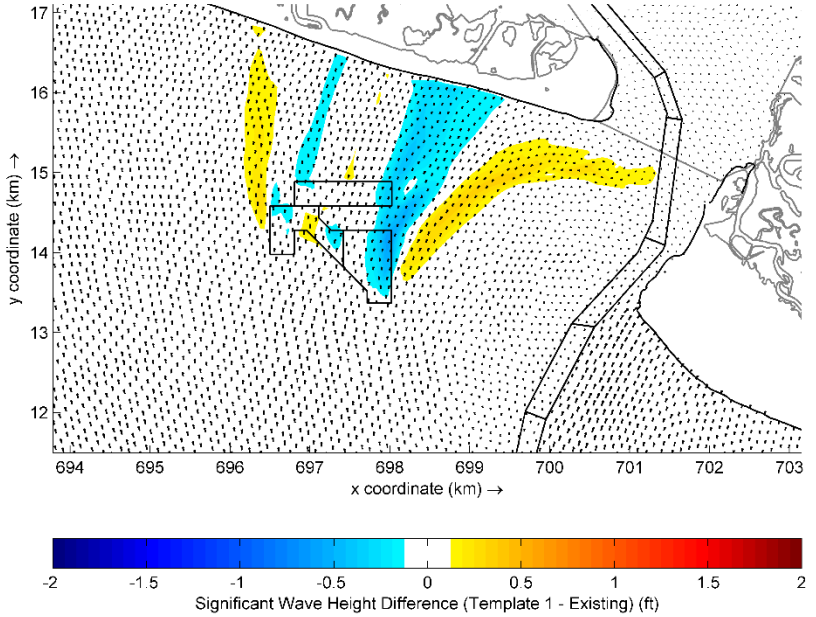
Offshore Wave Case05:

H_s = 14.2 ft, T_p = 12.4 s, Dir = 98.0 degN
Percent Occurrence = 0.054%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



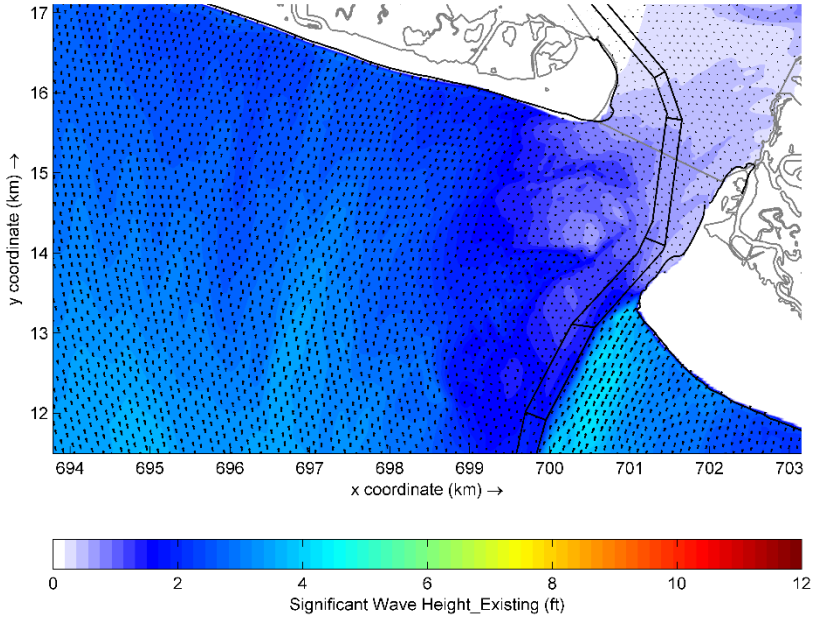


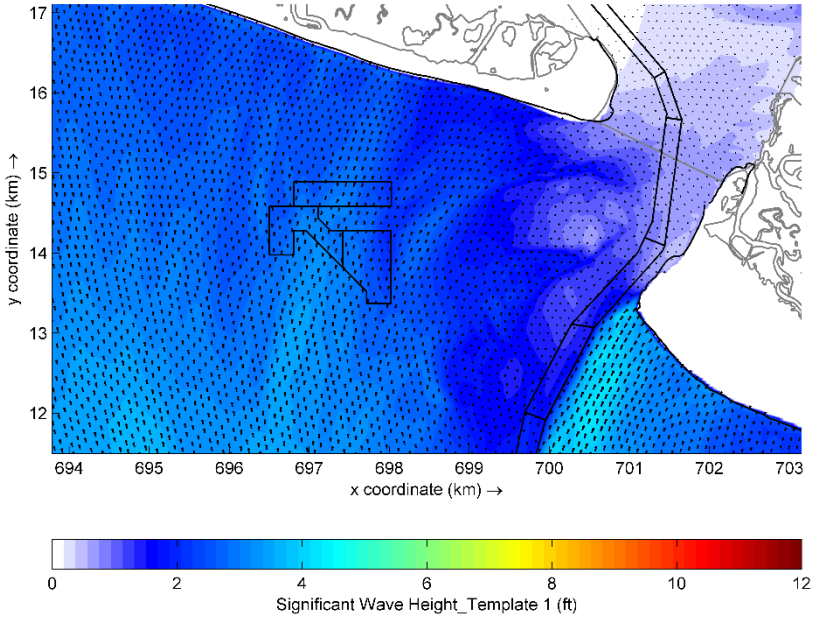


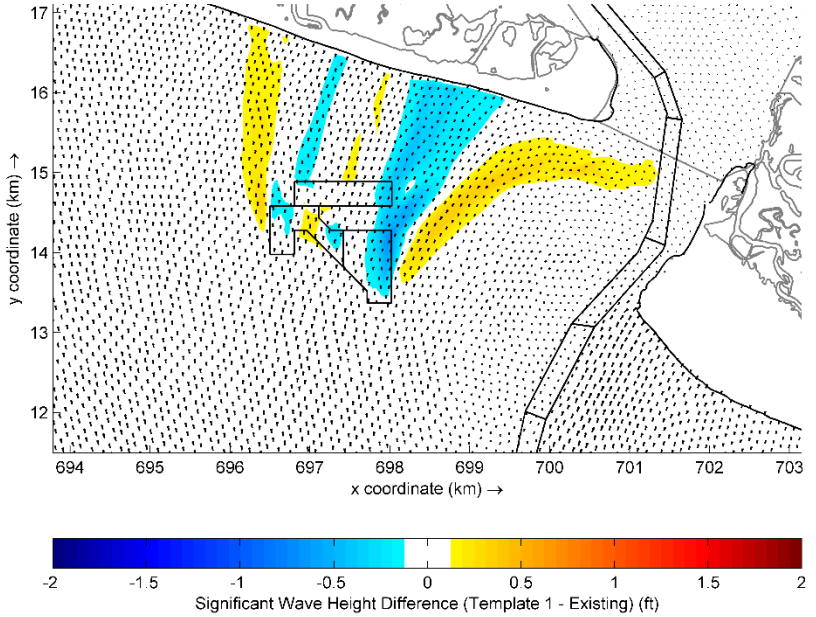
Offshore Wave Case06:

H_s = 17.5 ft, T_p = 13.9 s, Dir = 99.0 degN
Percent Occurrence = 0.016%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



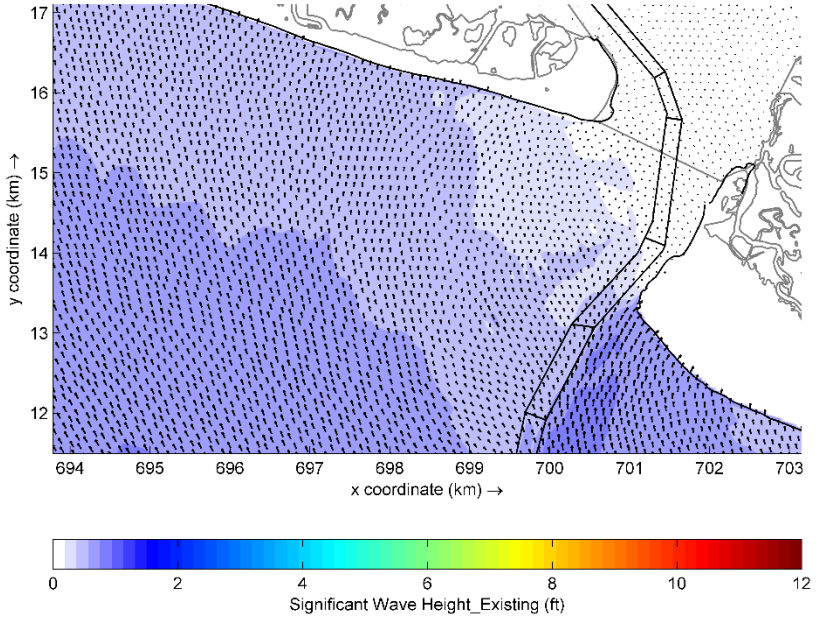


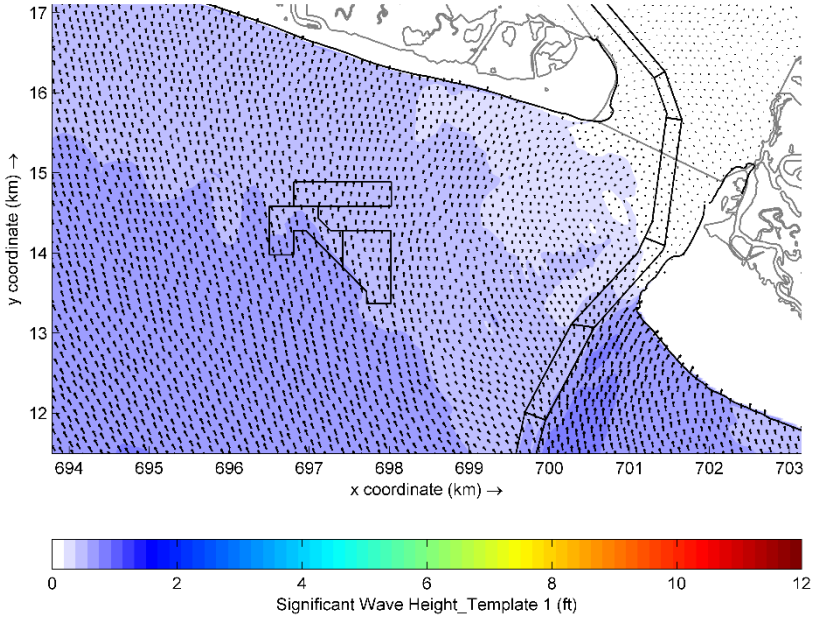


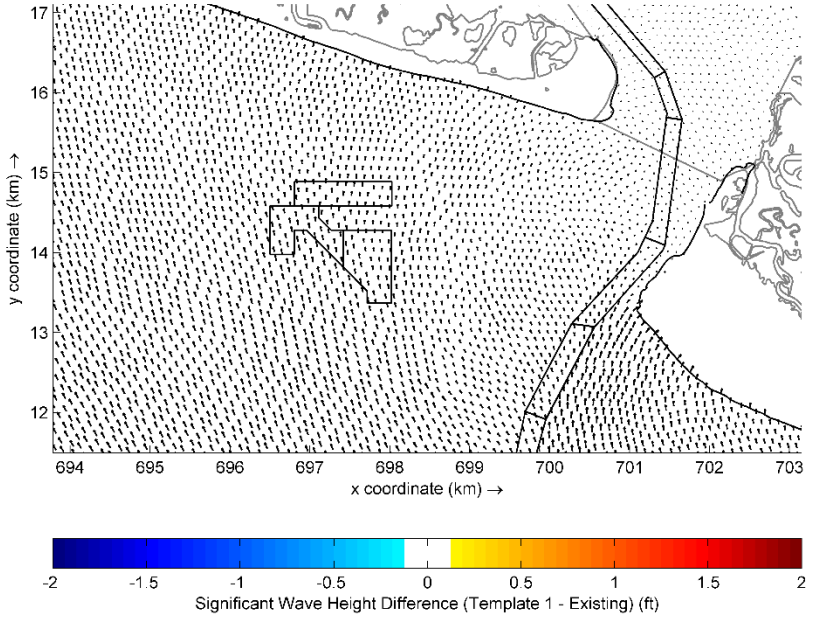
Offshore Wave Case07:

H_s = 20.7 ft, T_p = 13.1 s, Dir = 98.0 degN
Percent Occurrence = 0.002%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



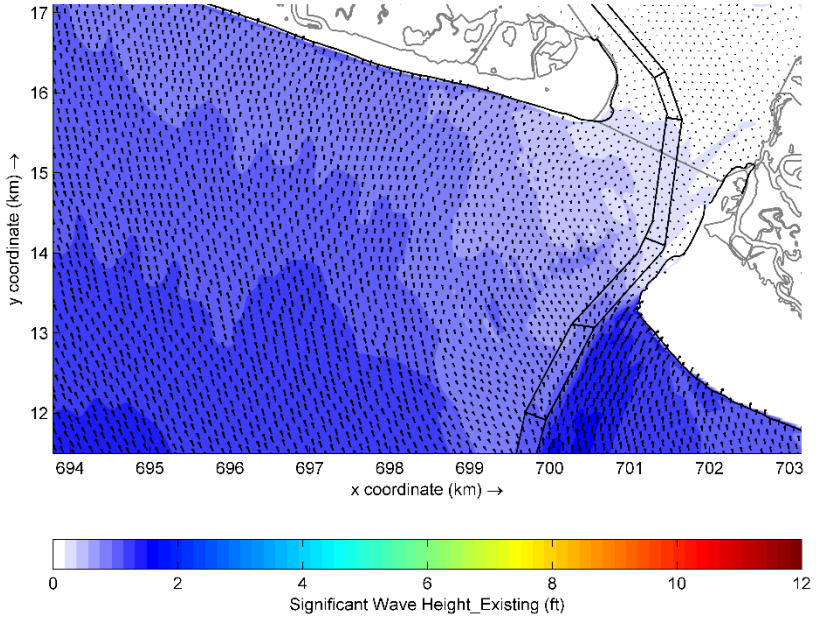


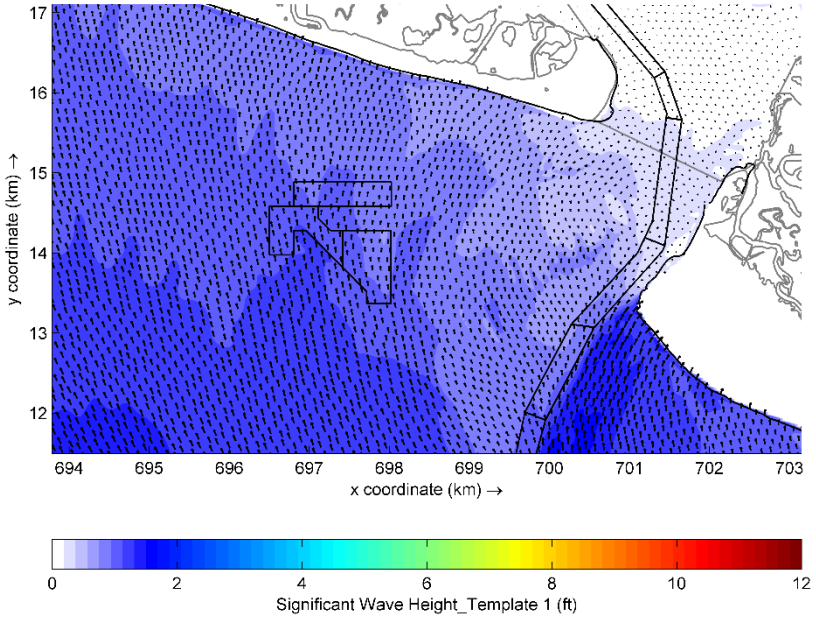


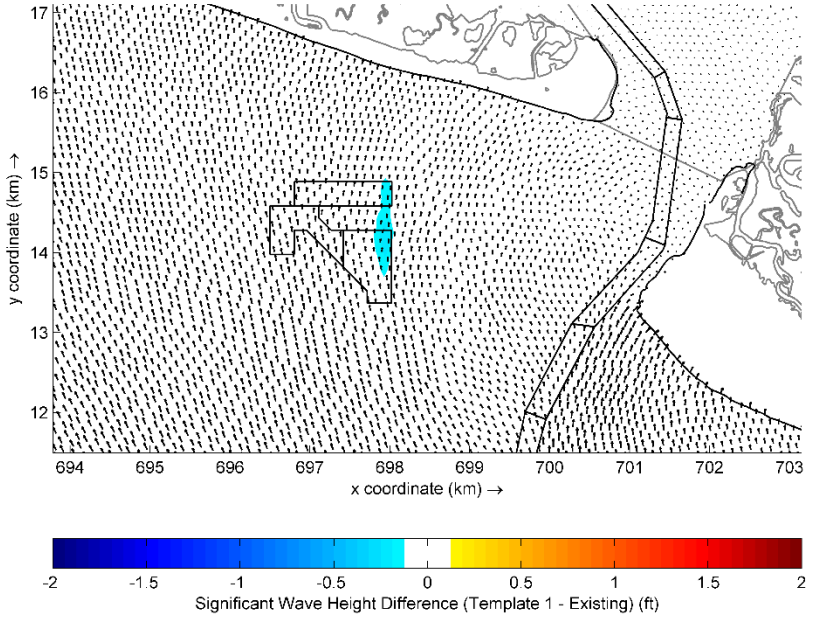
Offshore Wave Case08:

H_s = 2.4 ft, T_p = 8.9 s, Dir = 112.5 degN
Percent Occurrence = 6.297%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



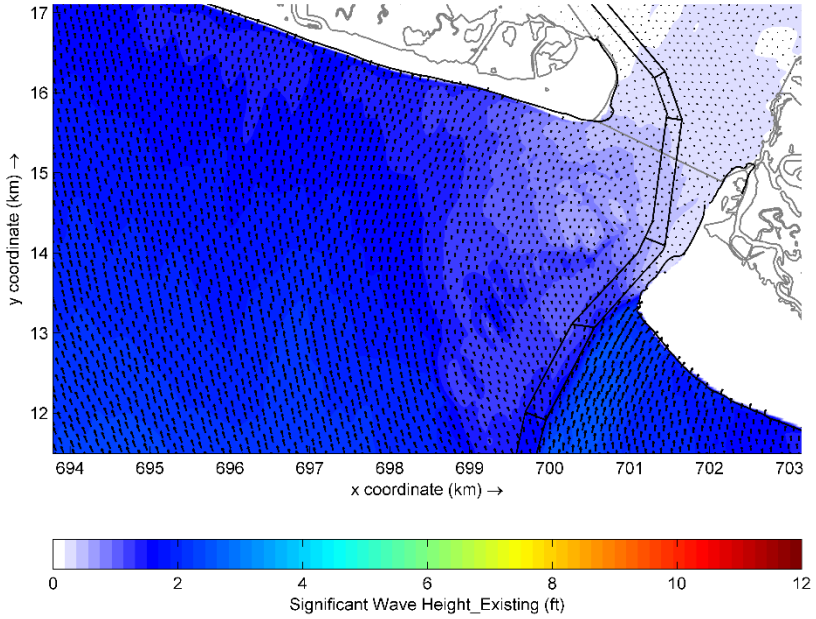


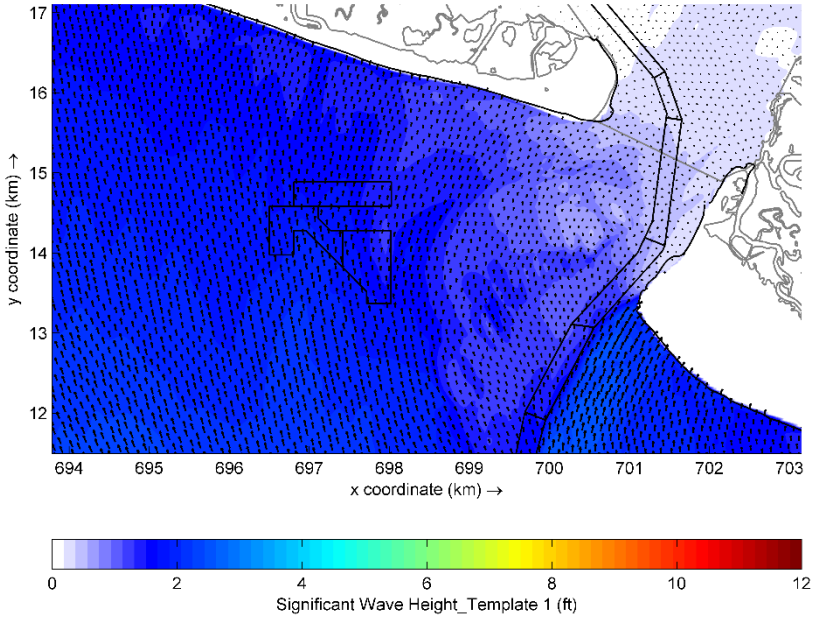


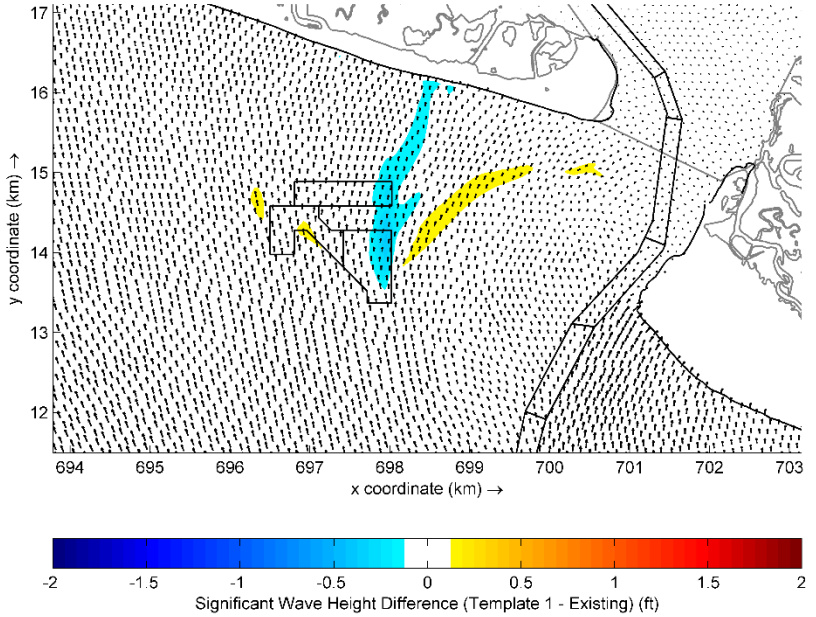
Offshore Wave Case09:

H_s = 4.4 ft, T_p = 9.4 s, Dir = 112.4 degN
Percent Occurrence = 5.030%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



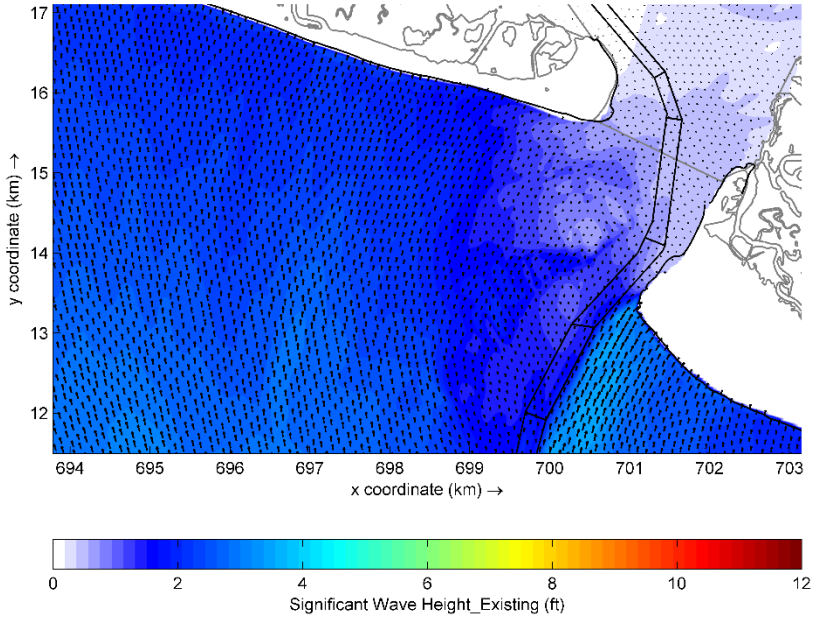


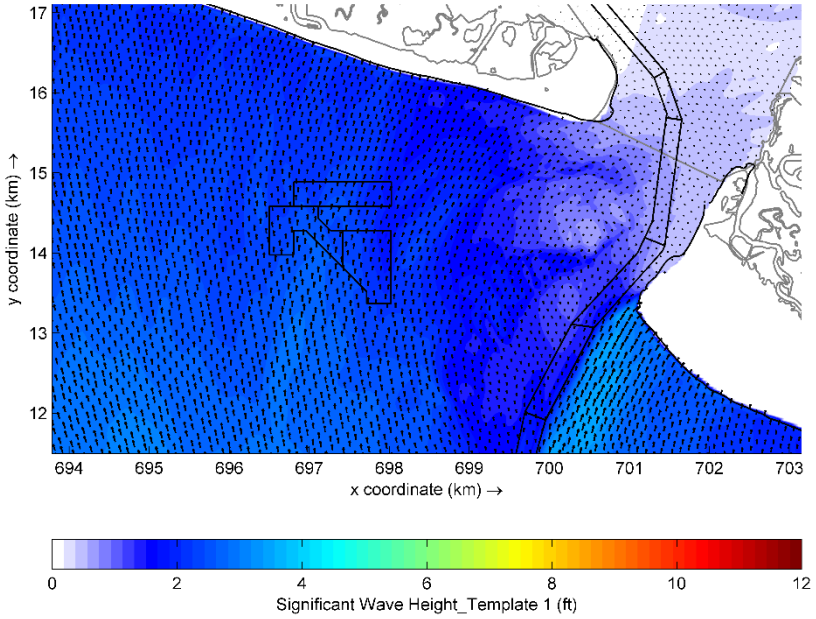


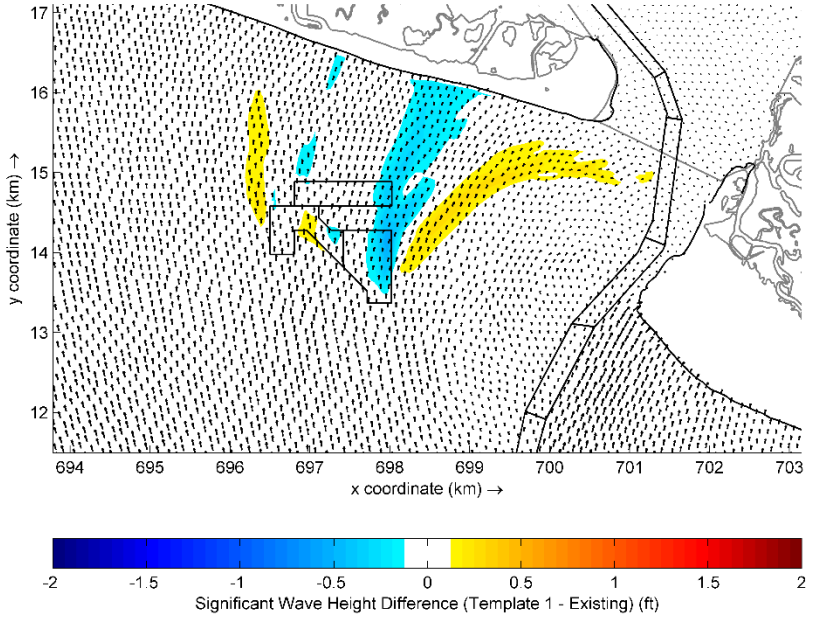
Offshore Wave Case10:

H_s = 7.7 ft, T_p = 9.6 s, Dir = 112.8 degN
Percent Occurrence = 0.714%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



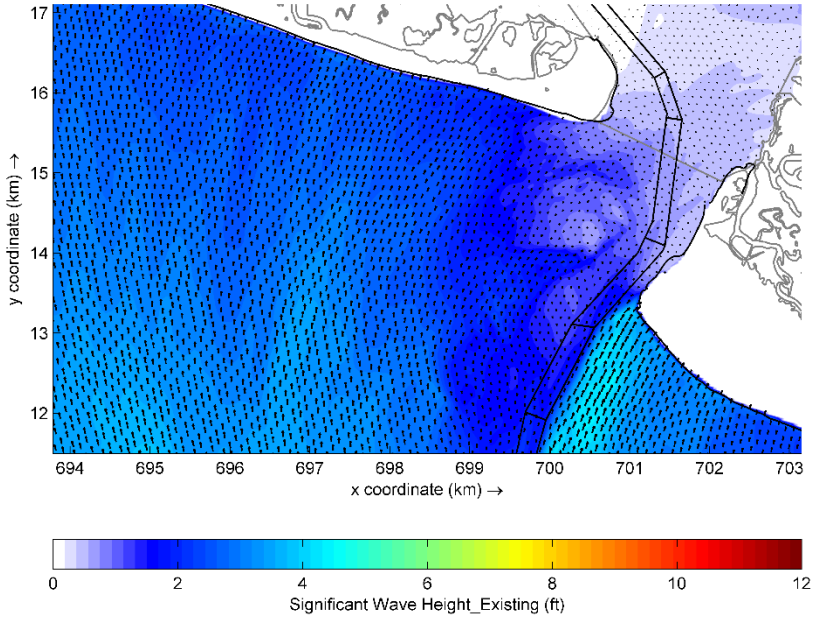


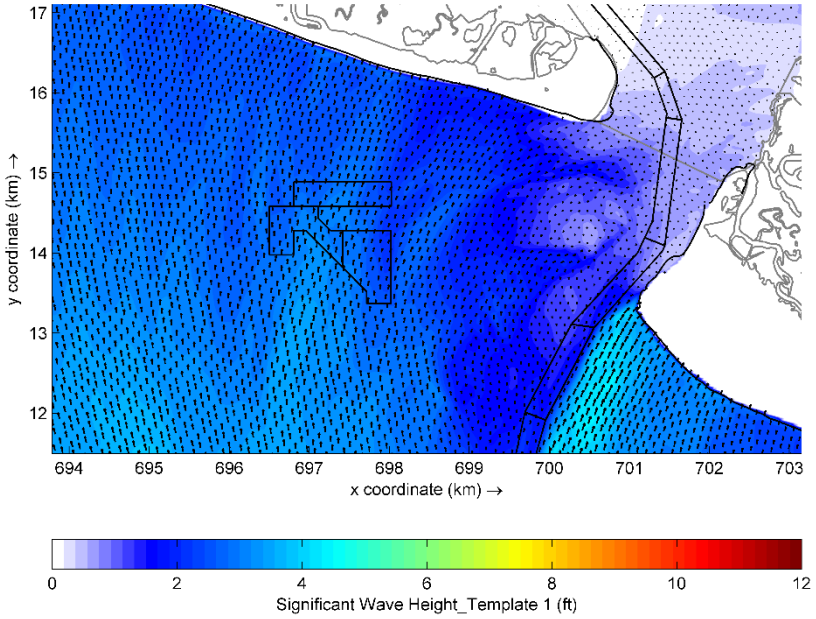


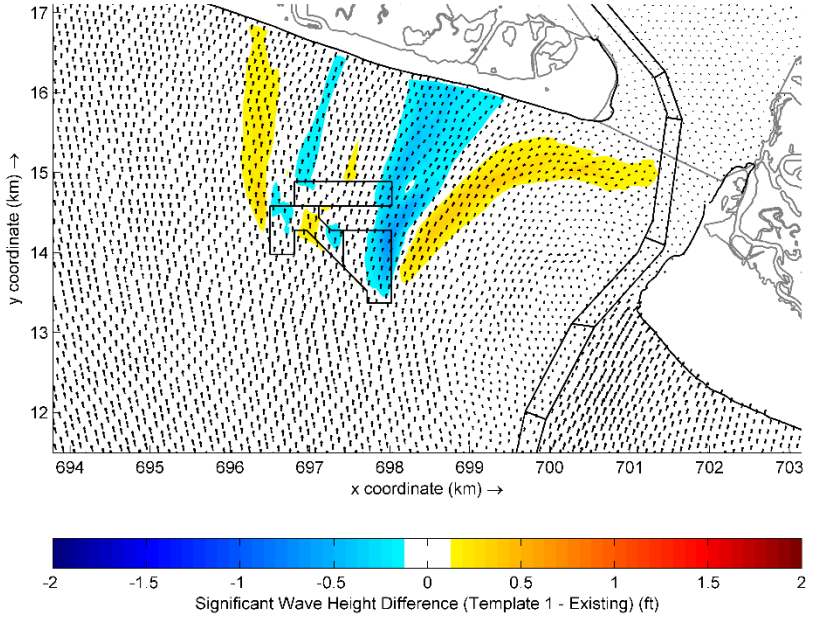
Offshore Wave Case11:

H_s = 11.3 ft, T_p = 10.9 s, Dir = 112.2 degN
Percent Occurrence = 0.129%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



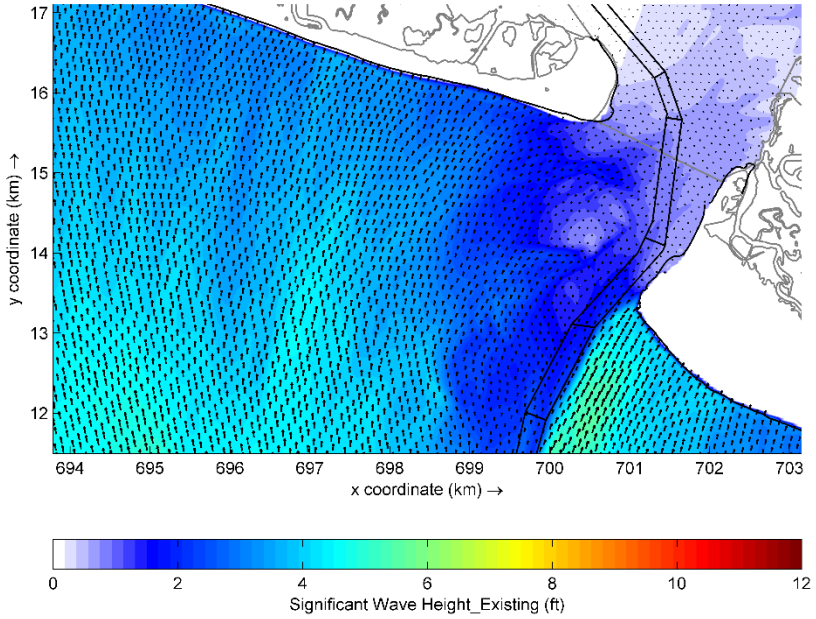


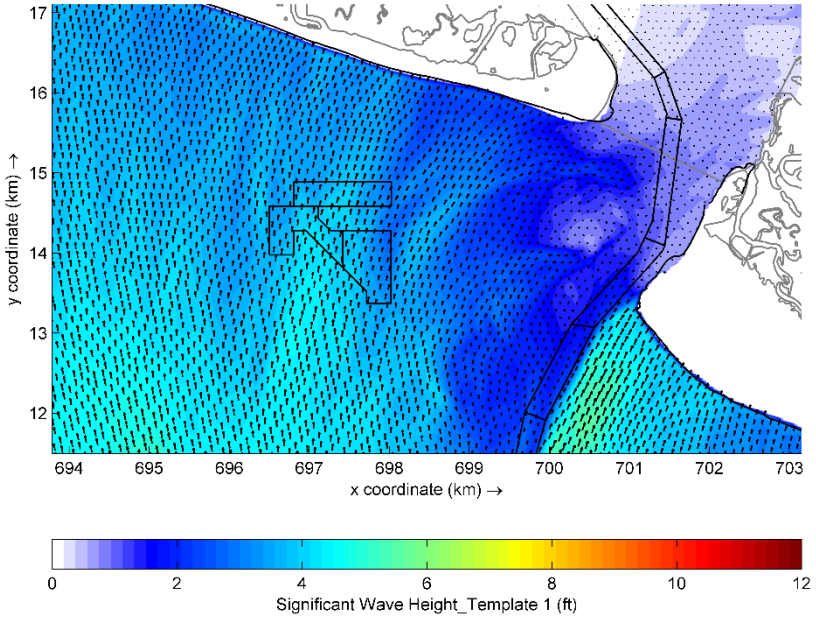


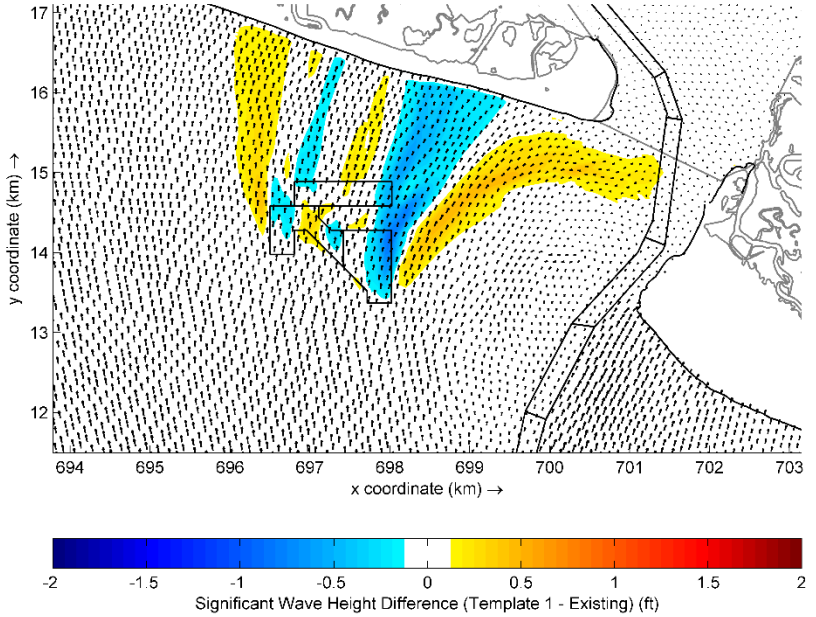
Offshore Wave Case12:

H_s = 14.1 ft, T_p = 12.2 s, Dir = 112.0 degN
Percent Occurrence = 0.038%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



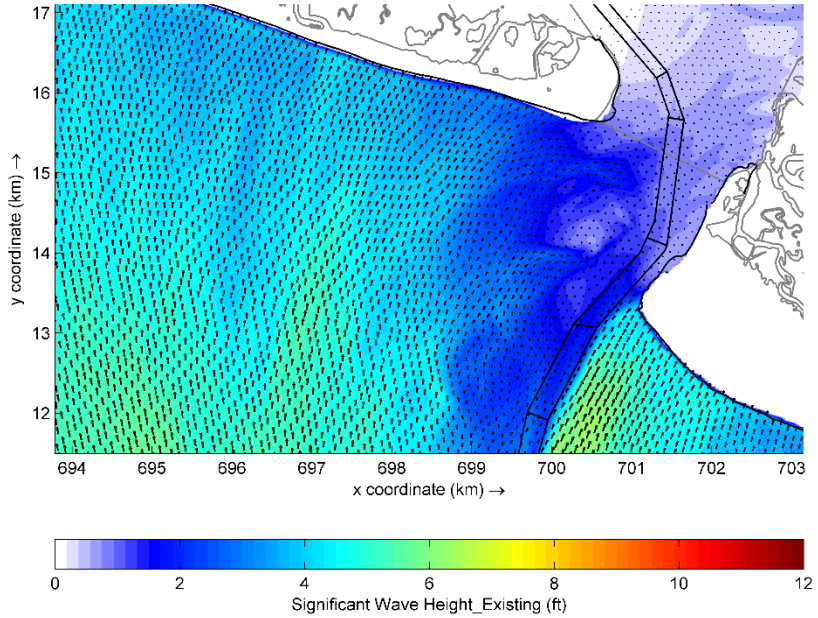


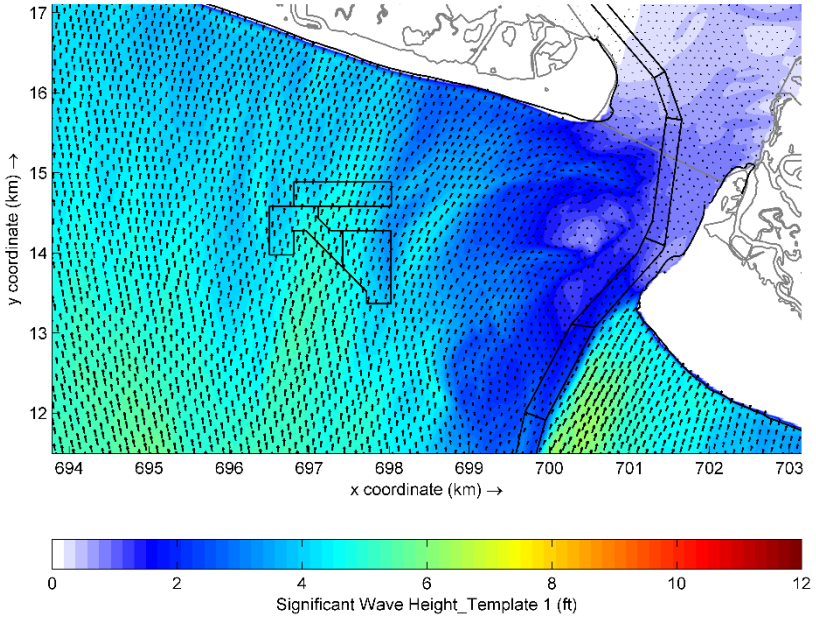


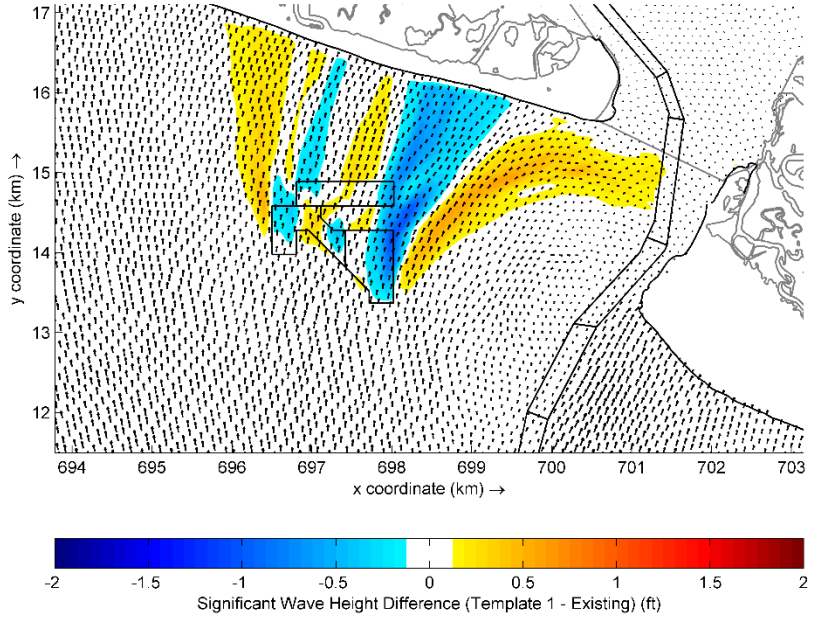
Offshore Wave Case13:

H_s = 17.6 ft, T_p = 11.2 s, Dir = 115.9 degN
Percent Occurrence = 0.005%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



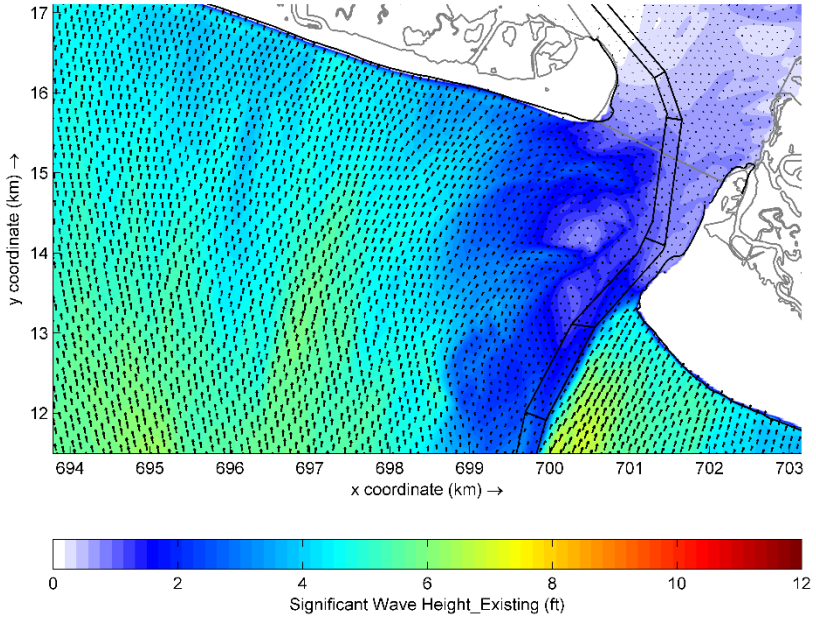


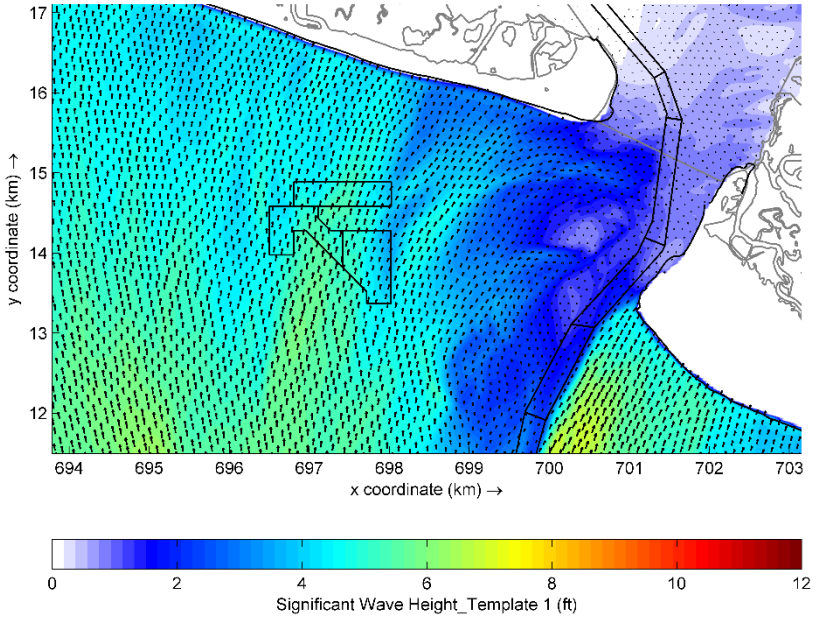


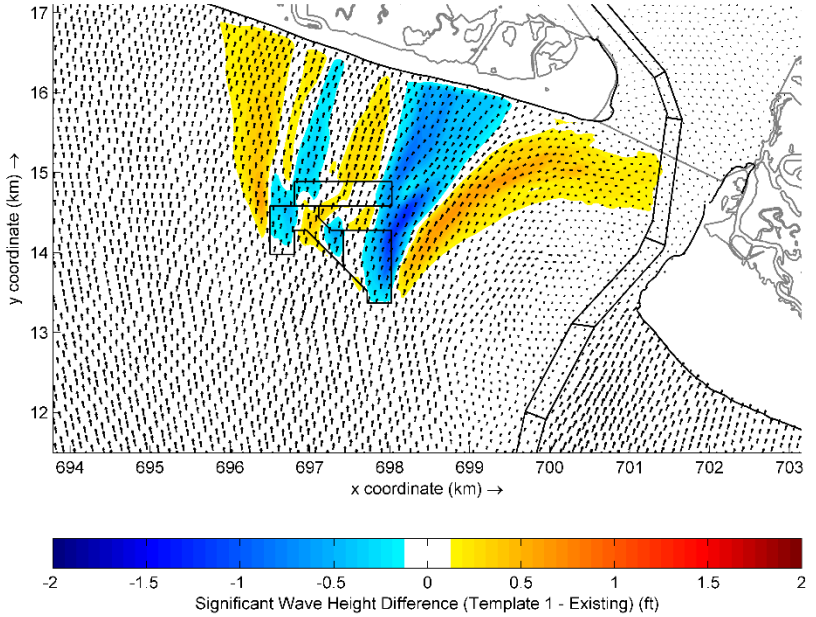
Offshore Wave Case14:

H_s = 20.7 ft, T_p = 12.3 s, Dir = 115.8 degN
Percent Occurrence = 0.002%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



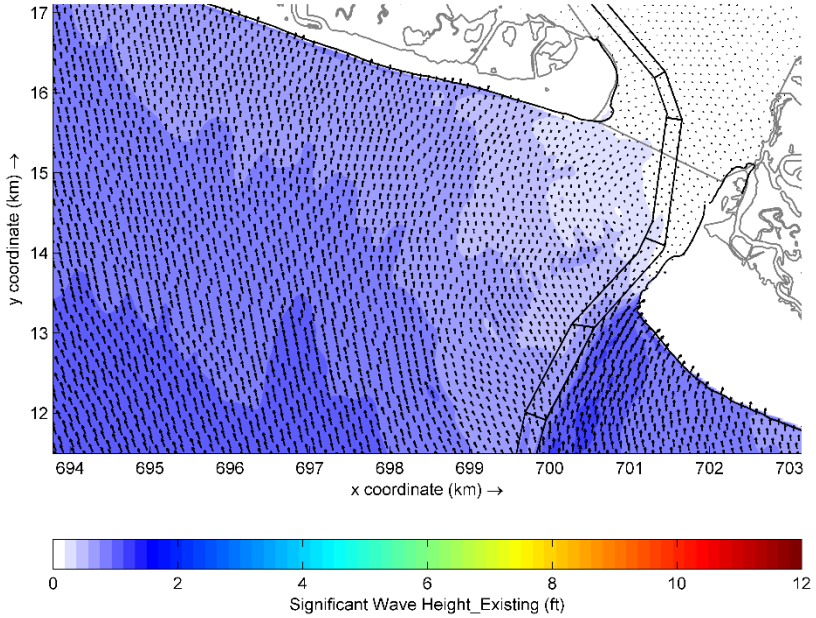


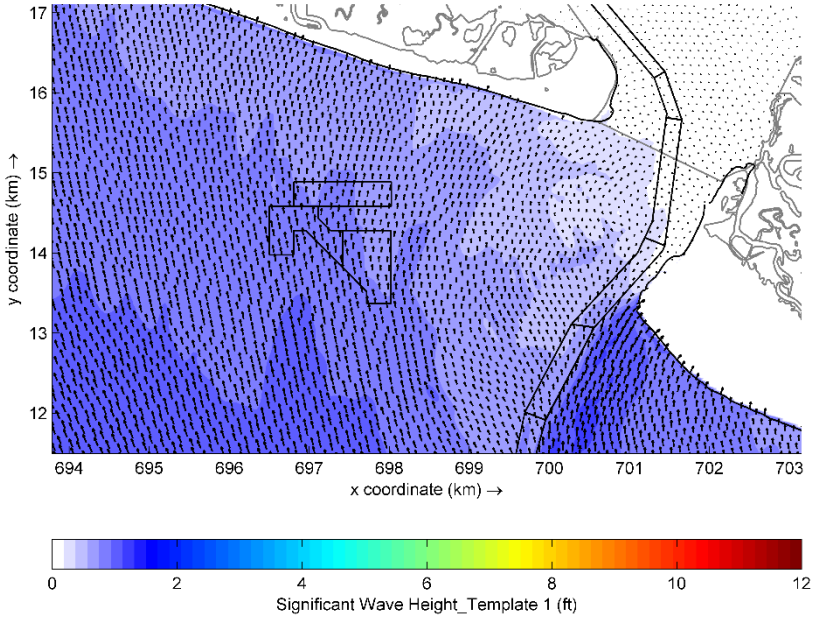


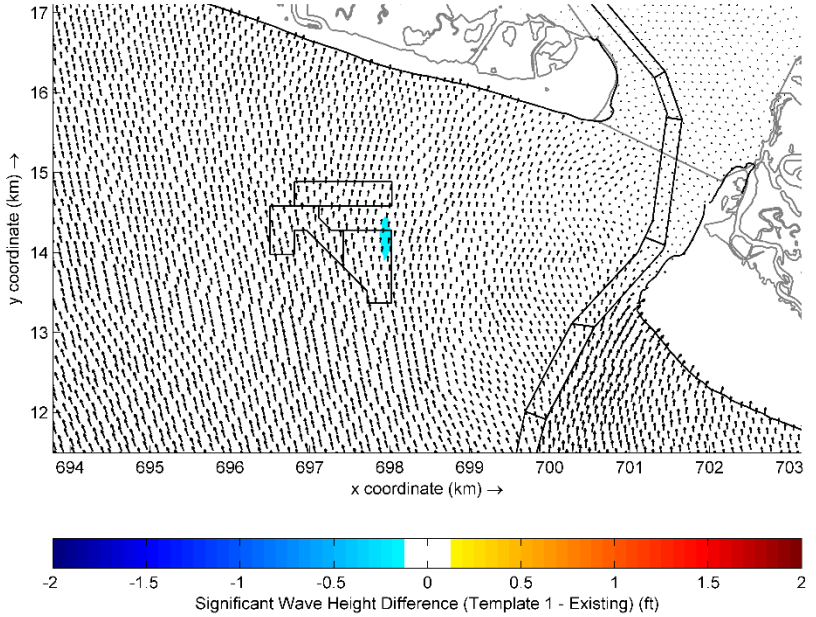
Offshore Wave Case15:

H_s = 23.3 ft, T_p = 15.3 s, Dir = 115.1 degN
Percent Occurrence = 0.002%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



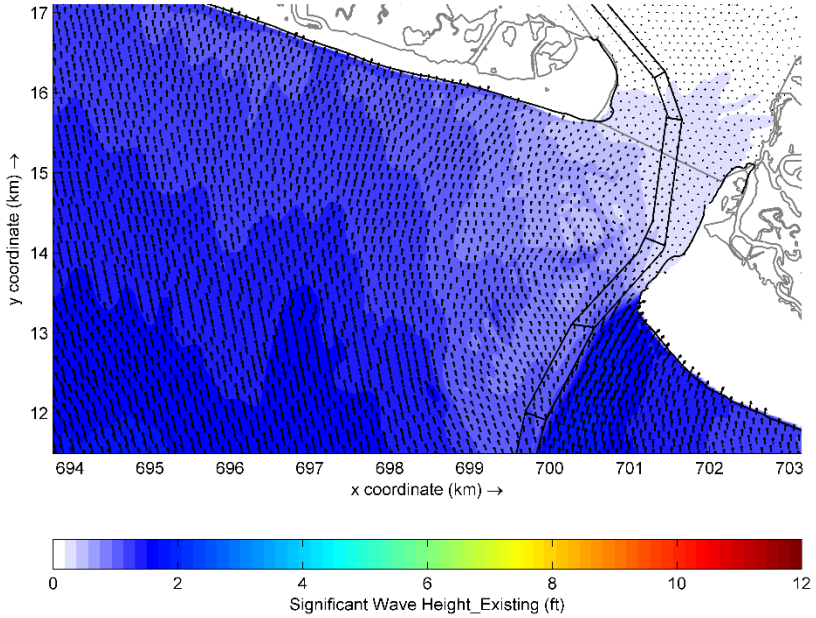


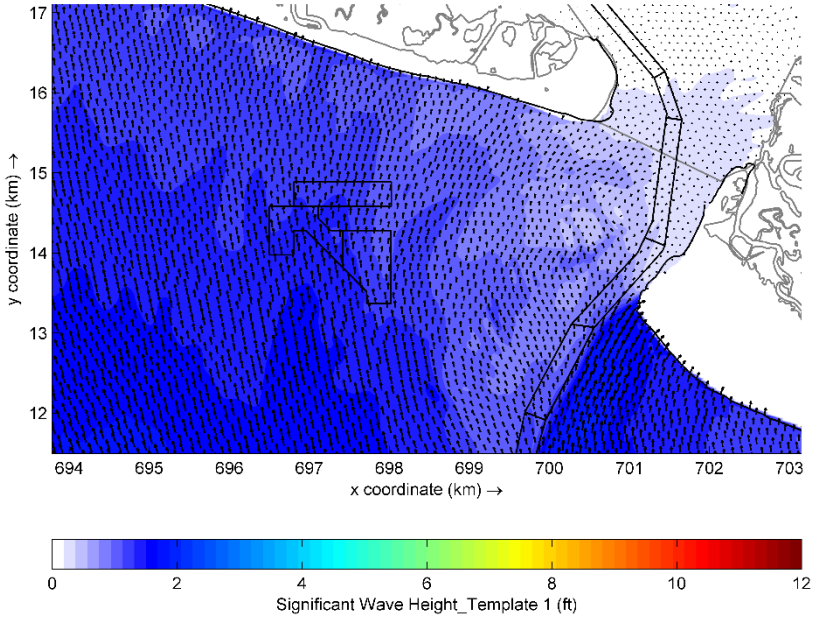


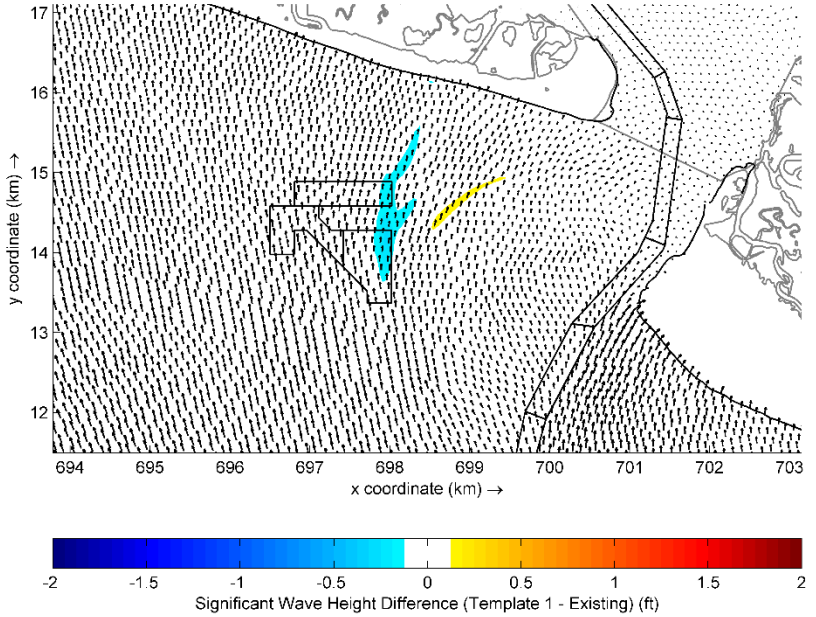
Offshore Wave Case16:

H_s = 2.5 ft, T_p = 8.6 s, Dir = 126.91 degN
Percent Occurrence = 5.573%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



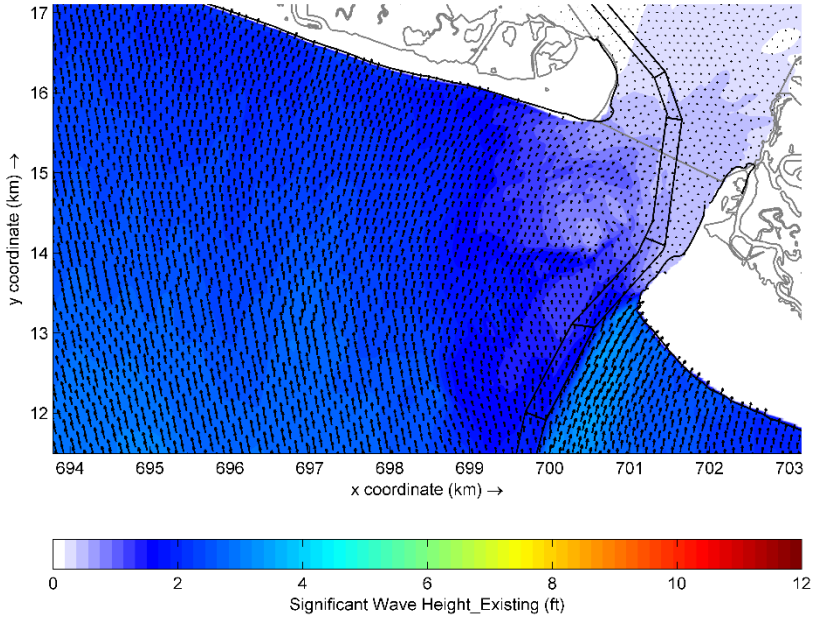


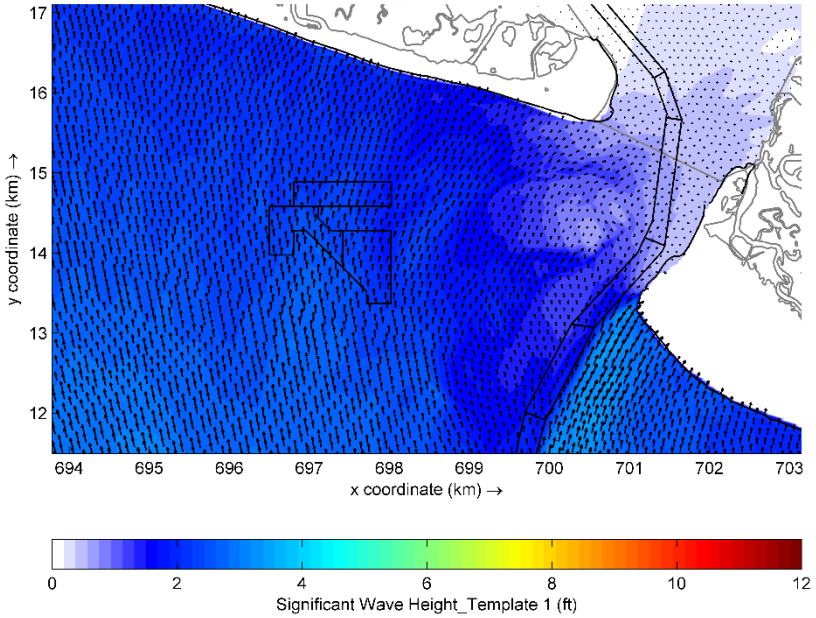


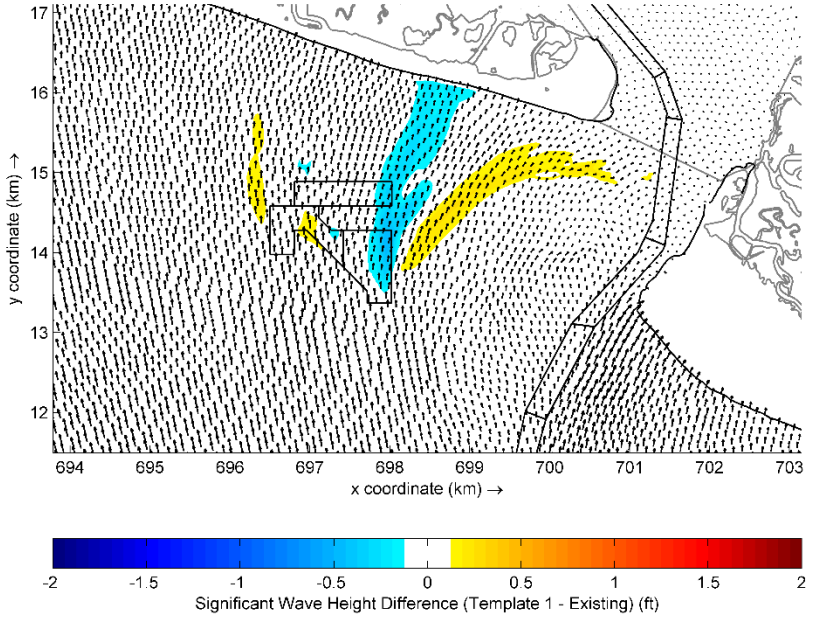
Offshore Wave Case17:

H_s = 4.4 ft, T_p = 9.0 s, Dir = 127.3 degN
Percent Occurrence = 4.728%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



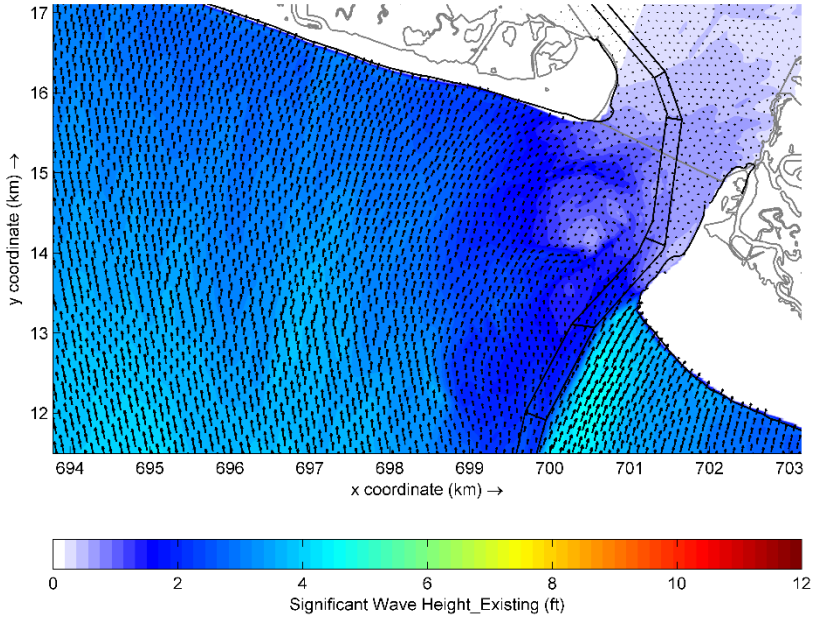


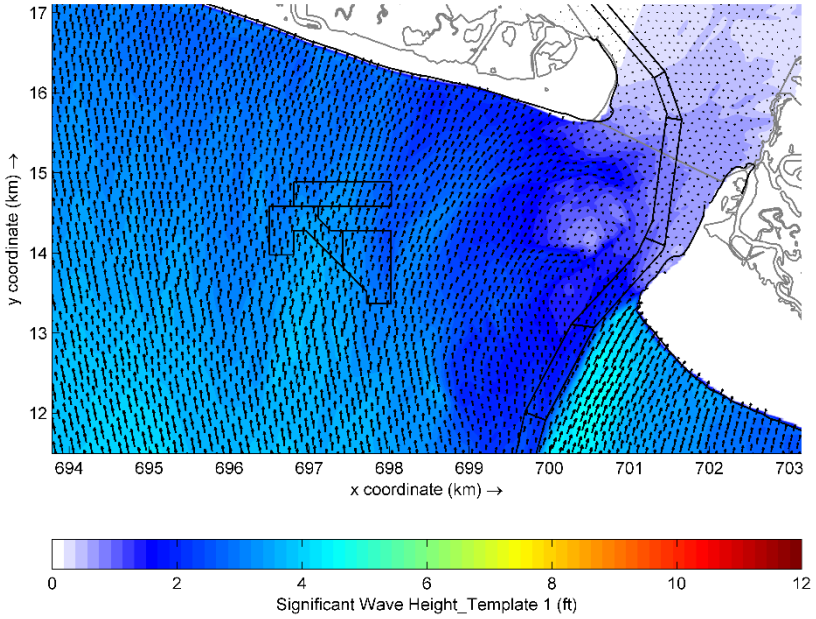


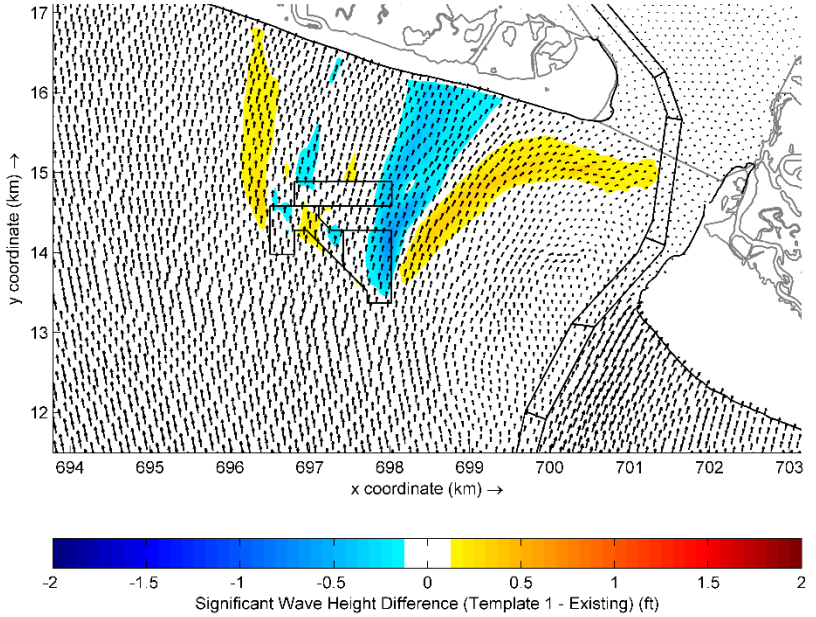
Offshore Wave Case18:

H_s = 7.7 ft, T_p = 9.6 s, Dir = 127.1 degN
Percent Occurrence = 0.789%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



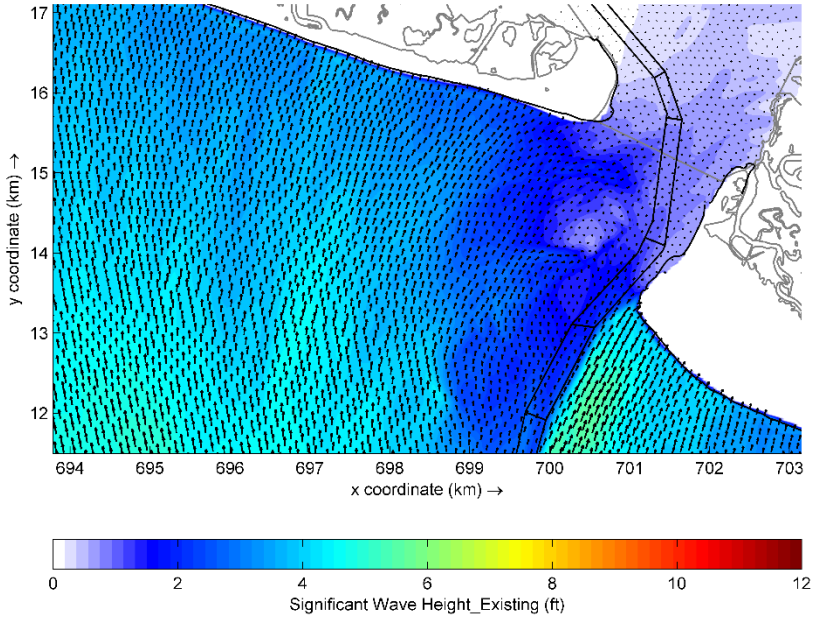


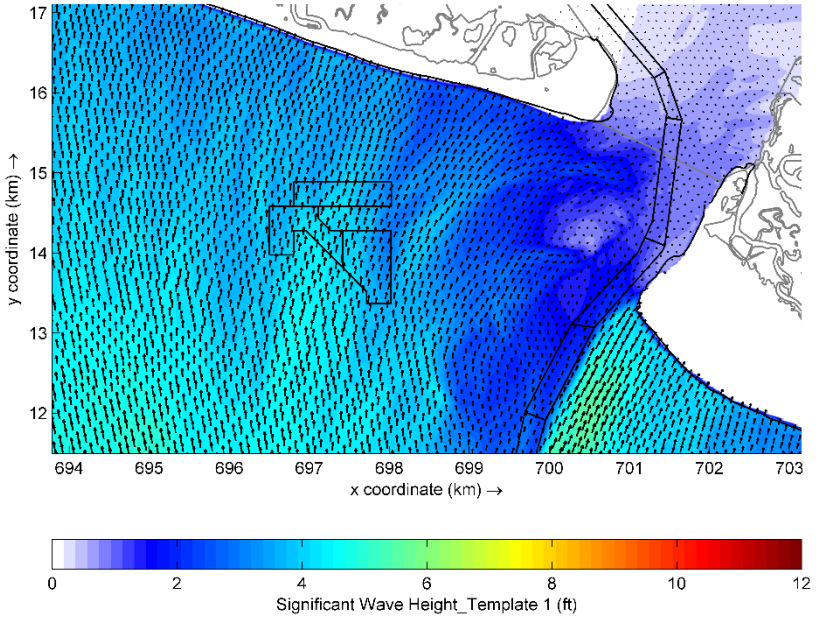


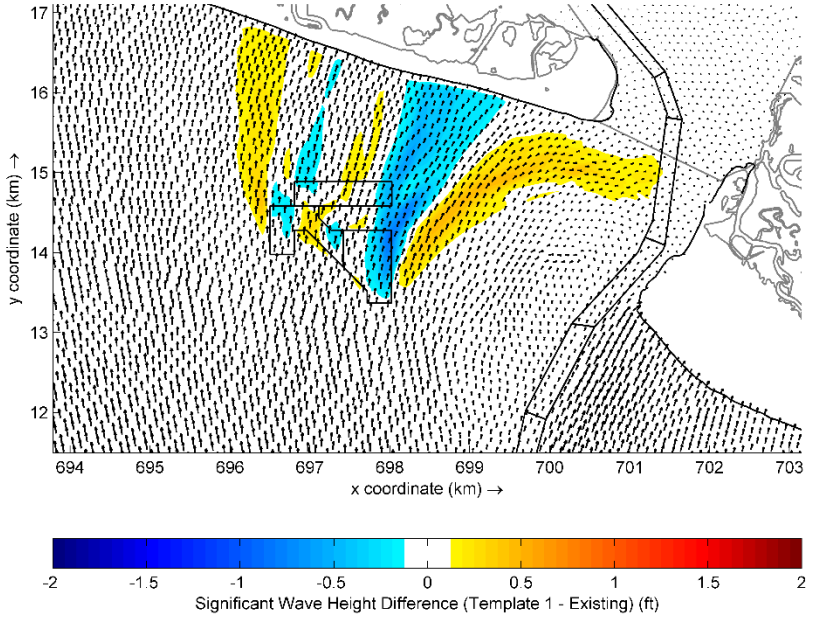
Offshore Wave Case19:

H_s = 11.1 ft, T_p = 10.1 s, Dir = 128.1 degN
Percent Occurrence = 0.135%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



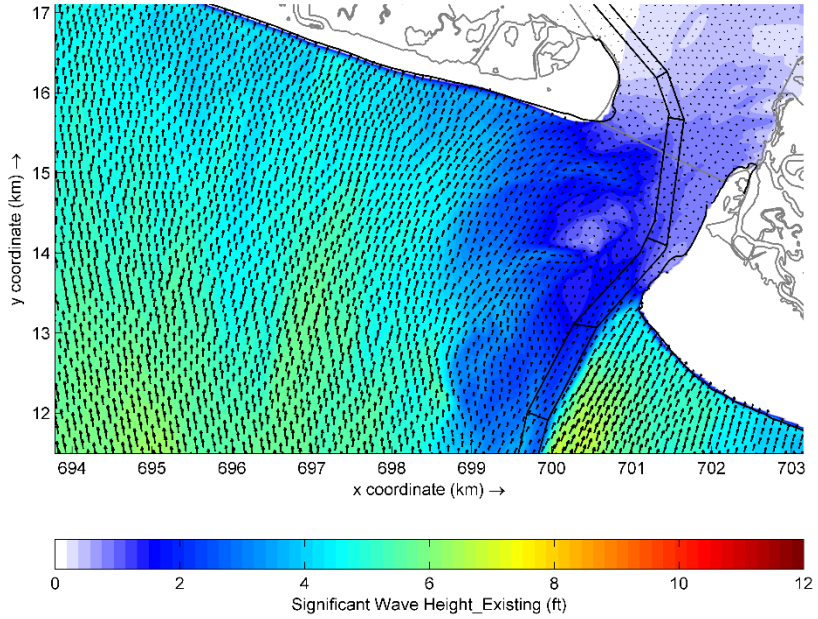


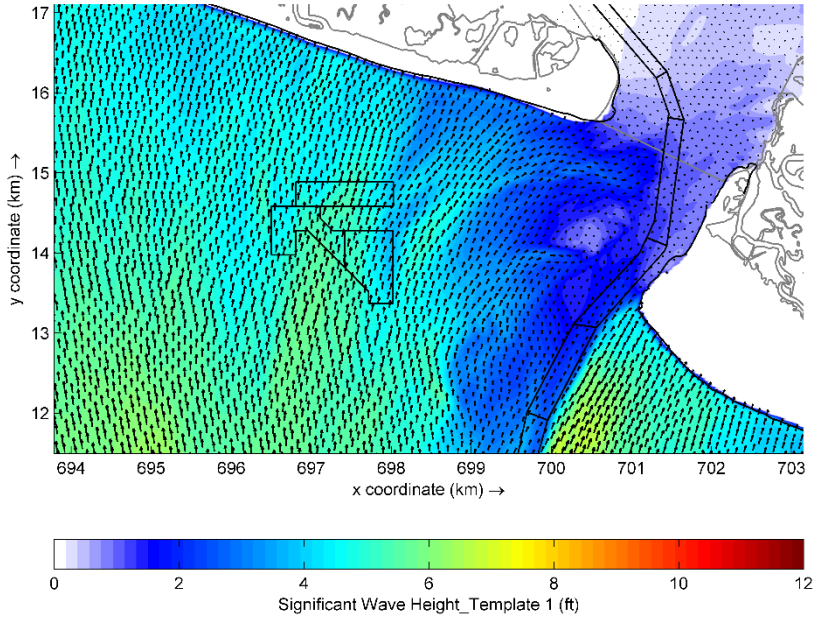


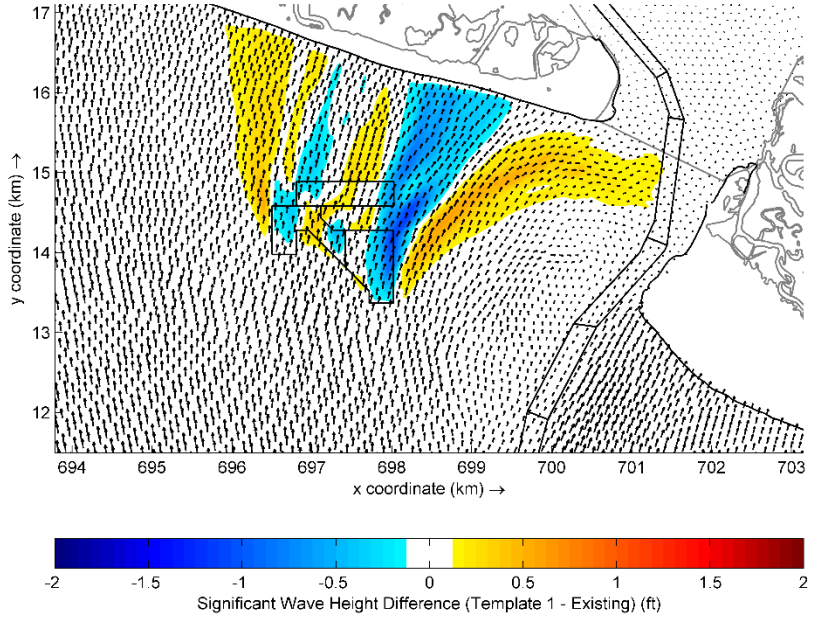
Offshore Wave Case20:

H_s = 14.4 ft, T_p = 10.2 s, Dir = 126.9 degN
Percent Occurrence = 0.035%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



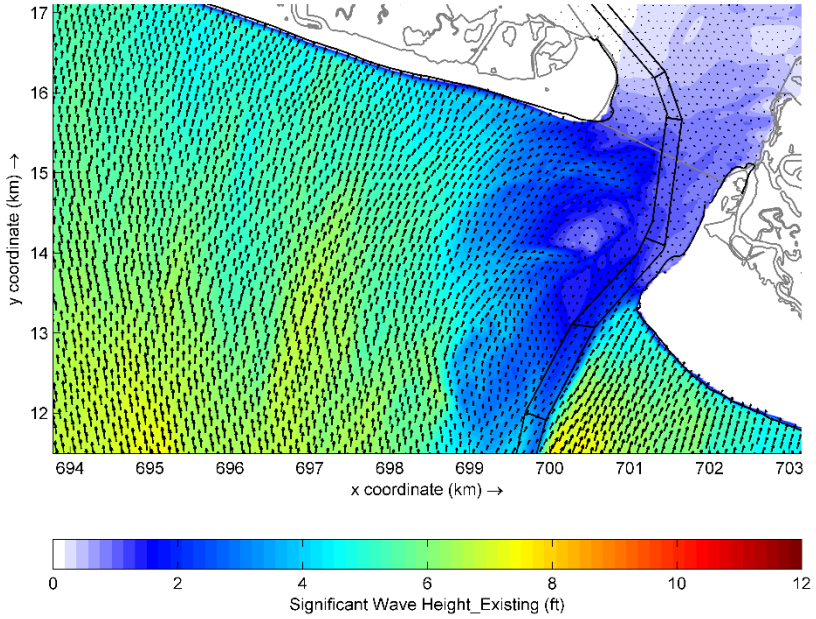


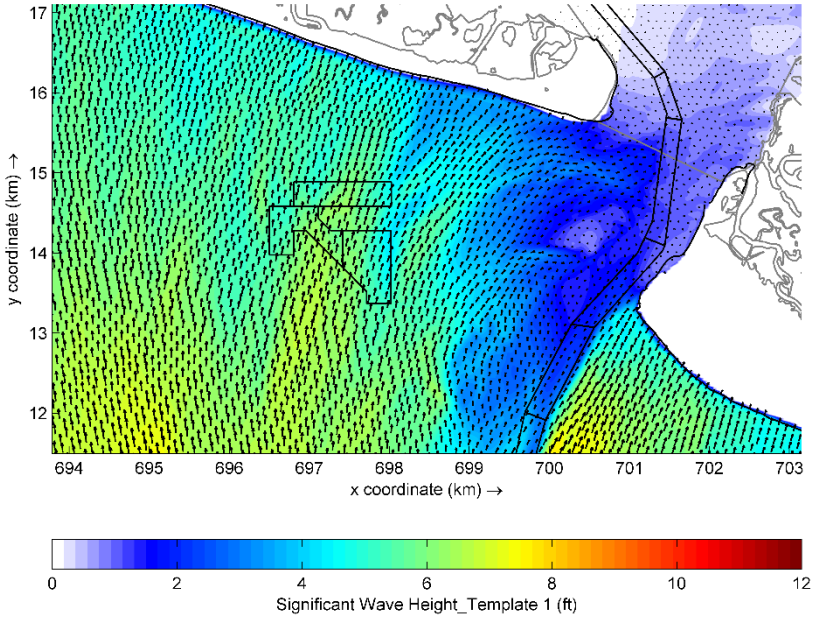


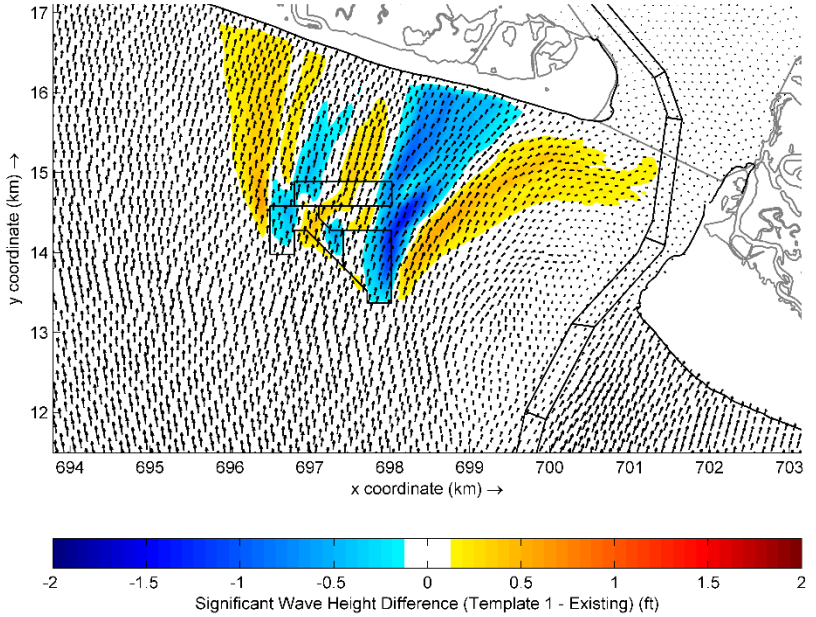
Offshore Wave Case21:

H_s = 18.0 ft, T_p = 11.3 s, Dir = 128.7 degN
Percent Occurrence = 0.010%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



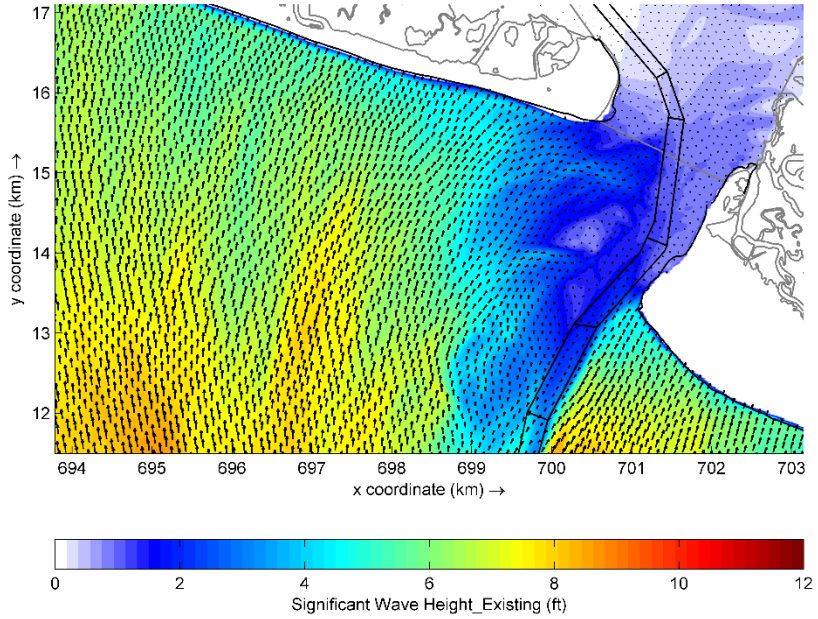


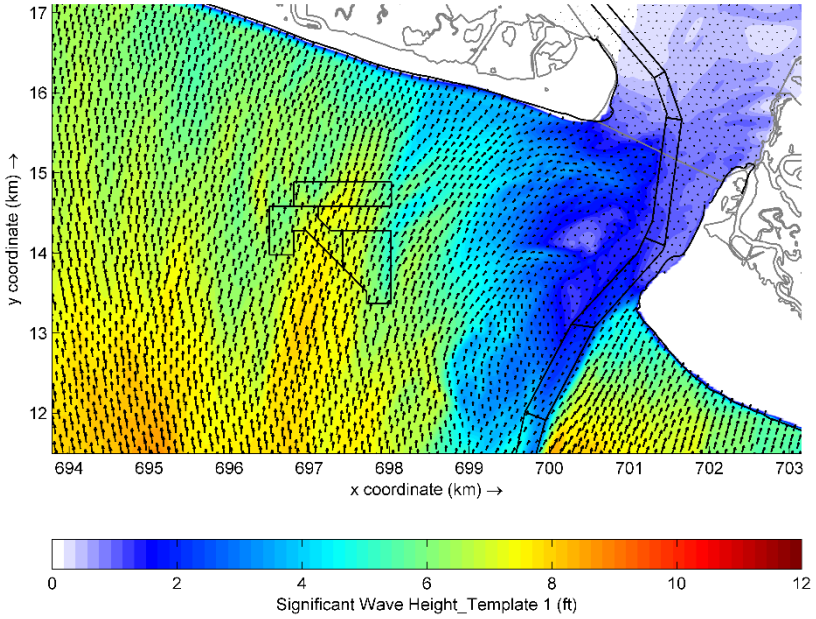


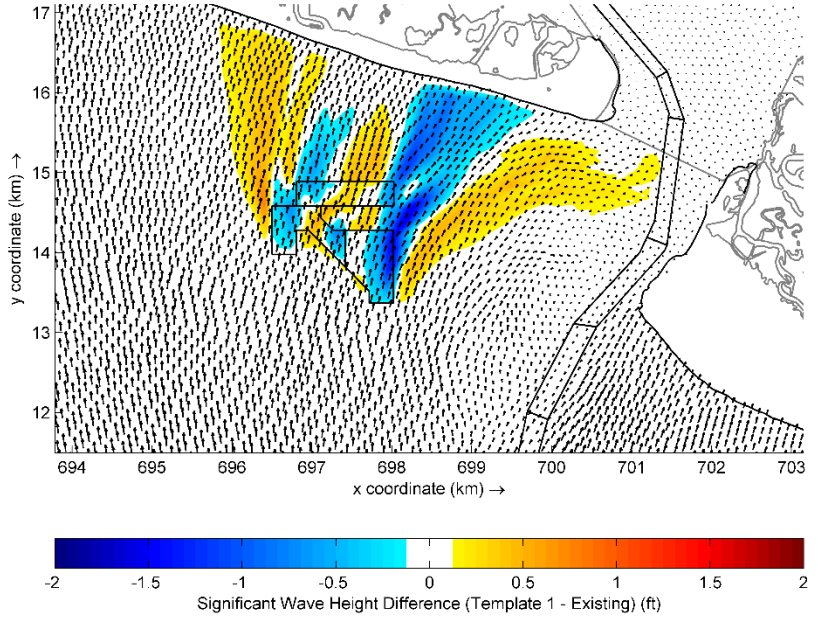
Offshore Wave Case22:

H_s = 20.2 ft, T_p = 12.2 s, Dir = 130.1 degN
Percent Occurrence = 0.002%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



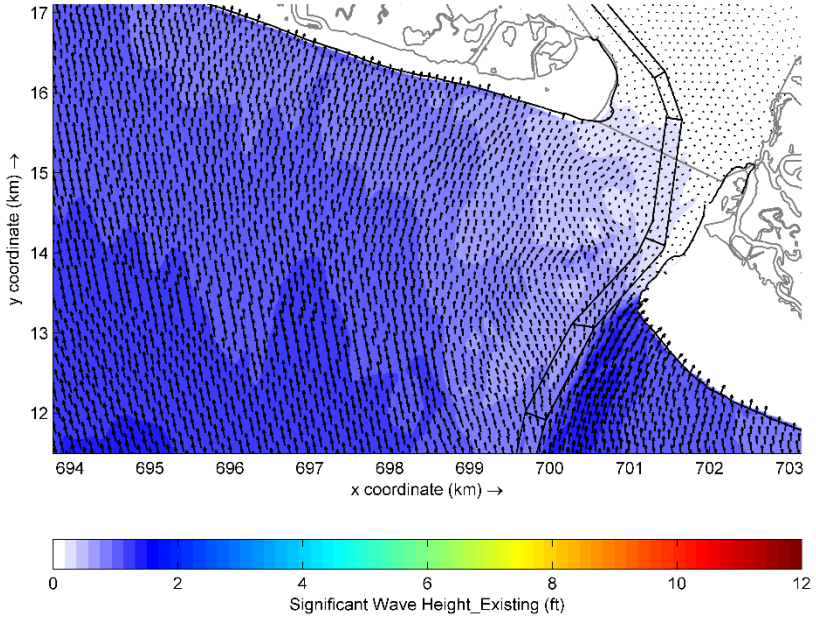


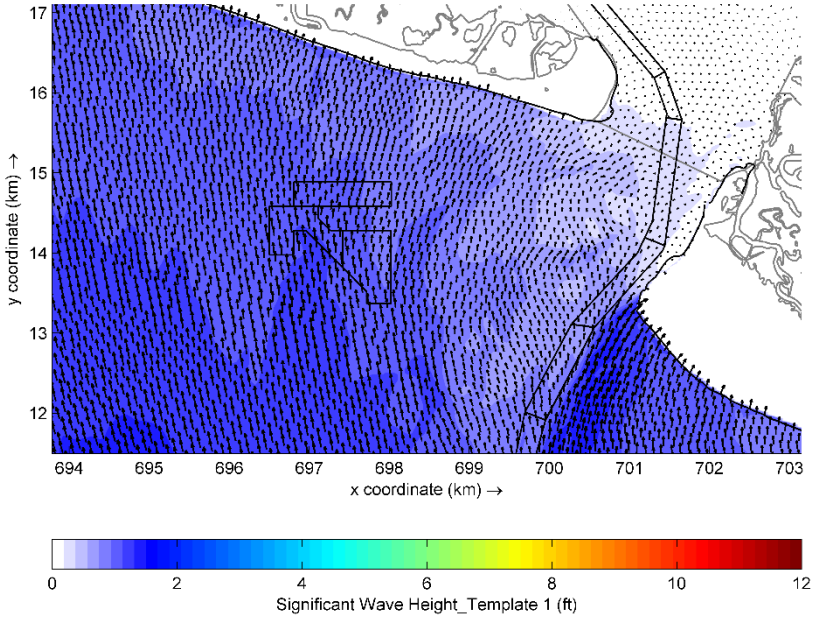


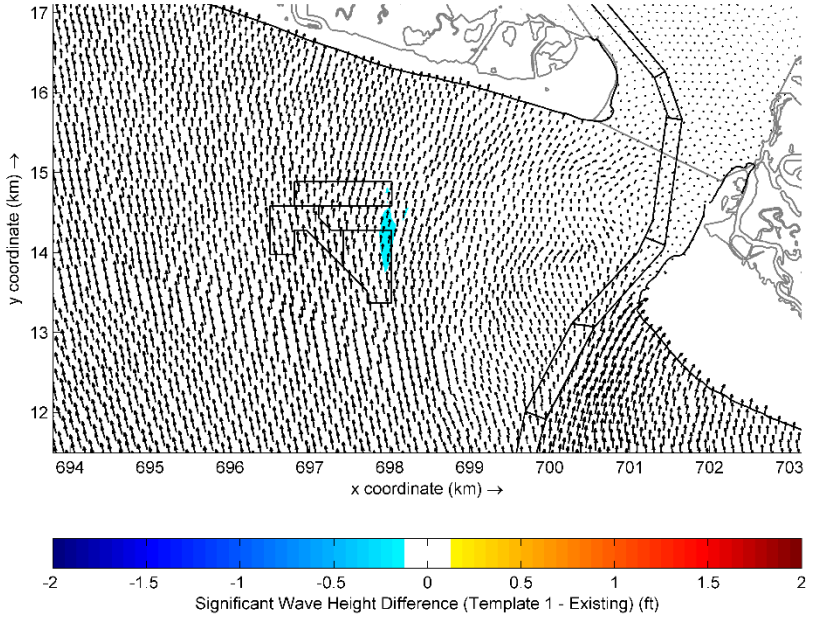
Offshore Wave Case23:

H_s = 26.8 ft, T_p = 14.8 s, Dir = 128.6 degN
Percent Occurrence = 0.002%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



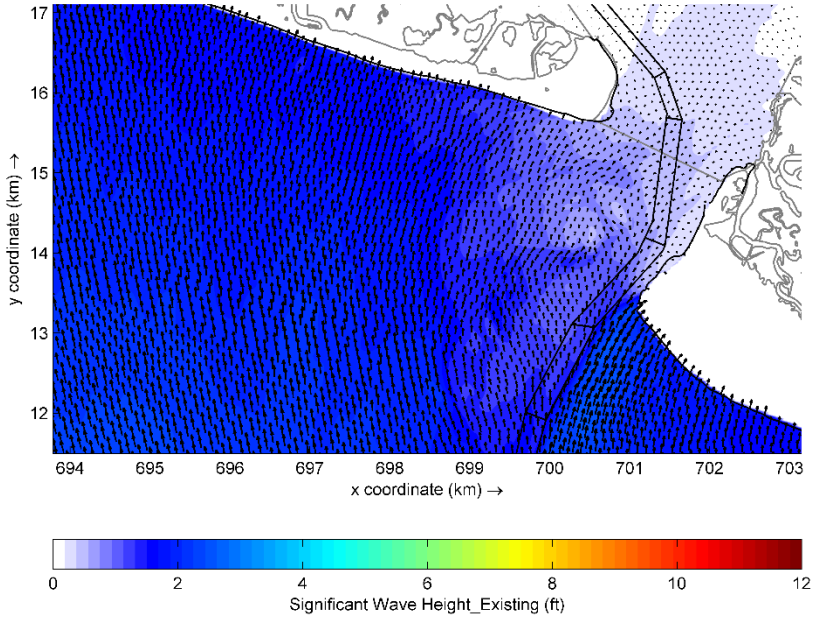


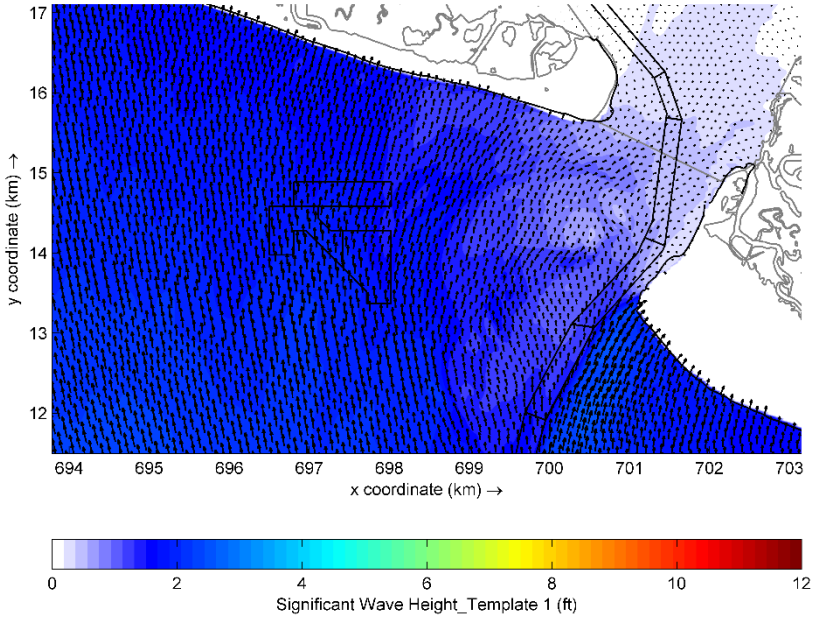


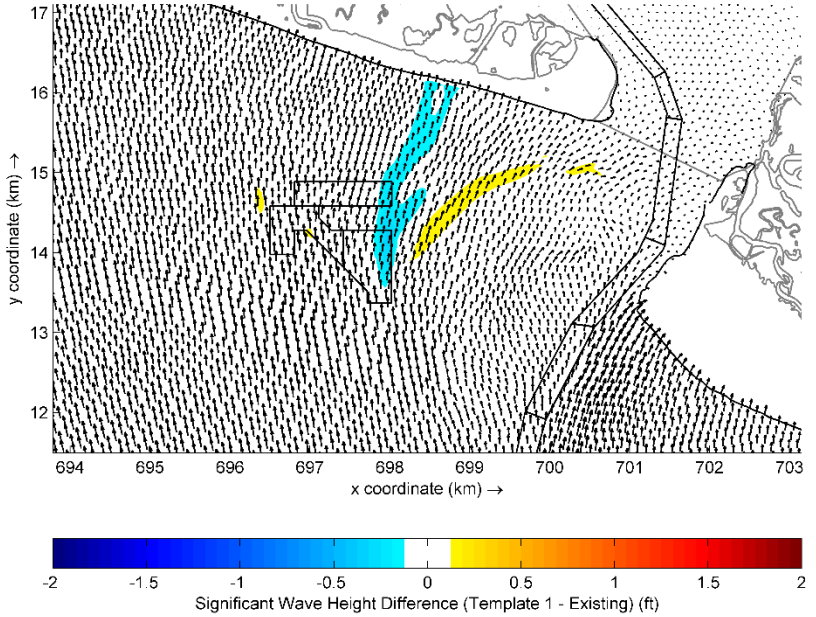
Offshore Wave Case24:

H_s = 2.5 ft, T_p = 8.0 s, Dir = 141.6 degN
Percent Occurrence = 3.391%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



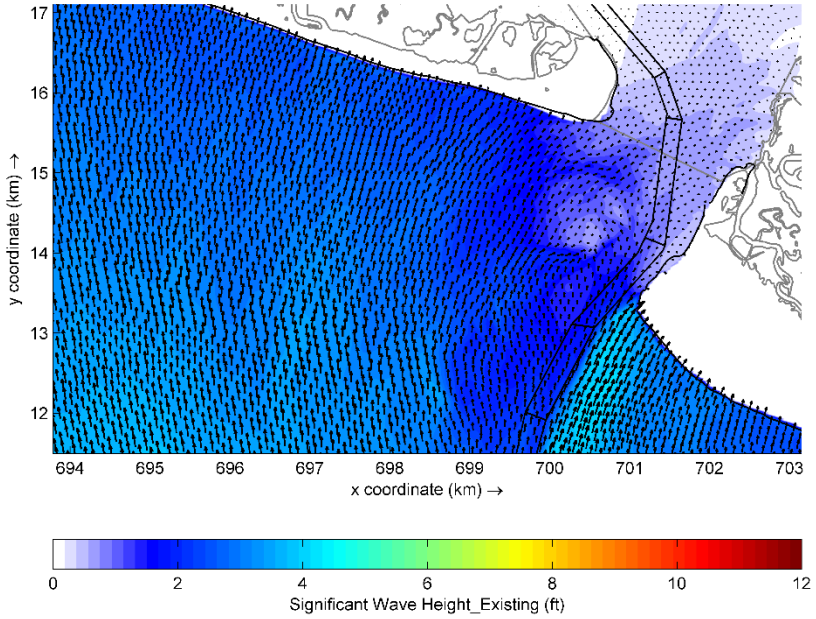


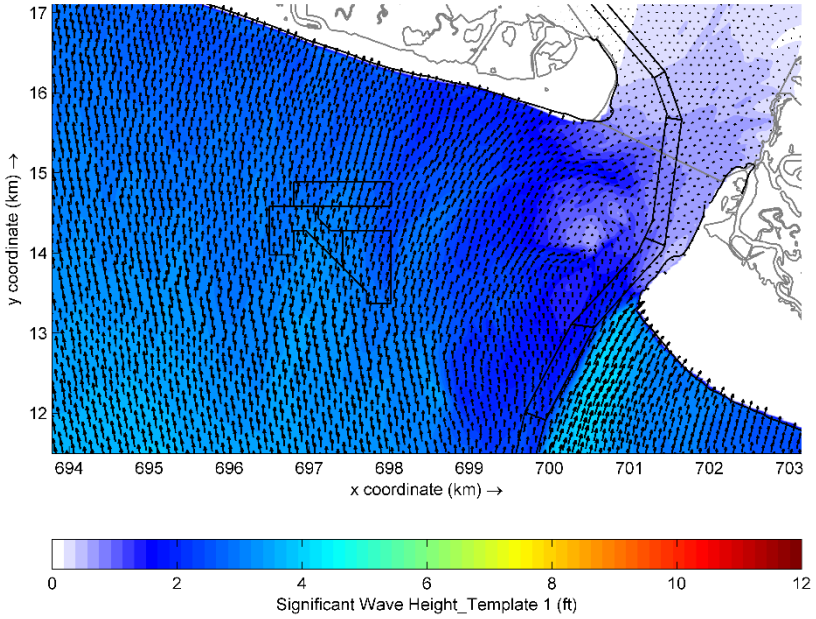


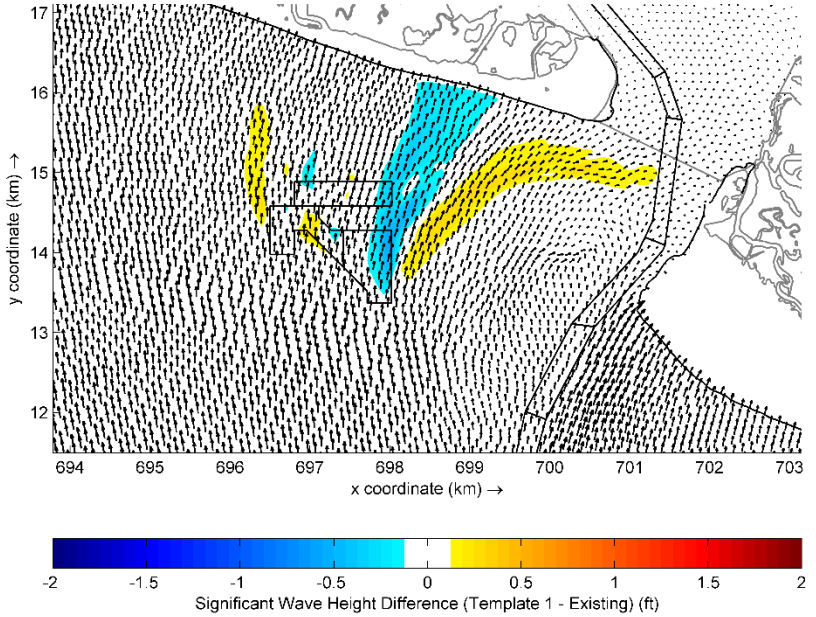
Offshore Wave Case25:

H_s = 4.5 ft, T_p = 8.3 s, Dir = 142.0 degN
Percent Occurrence = 3.696%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



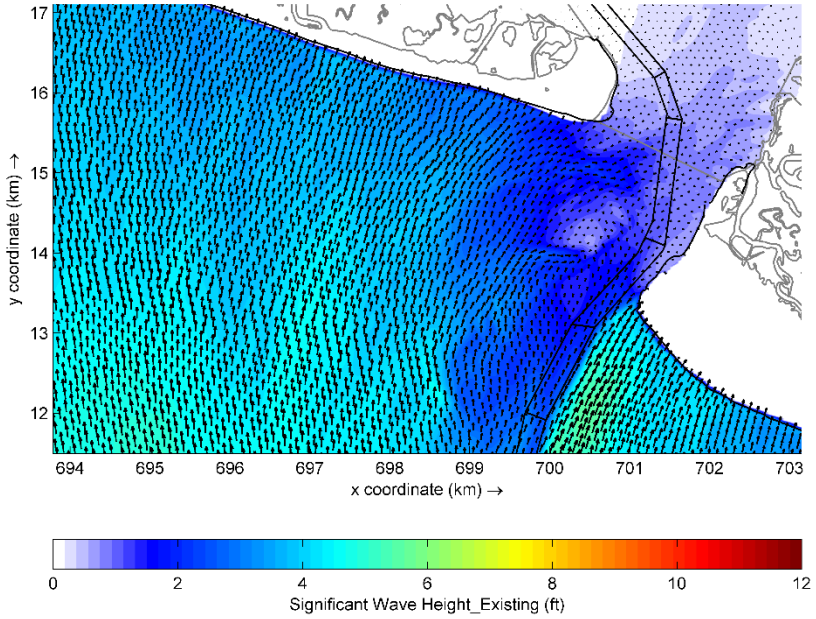


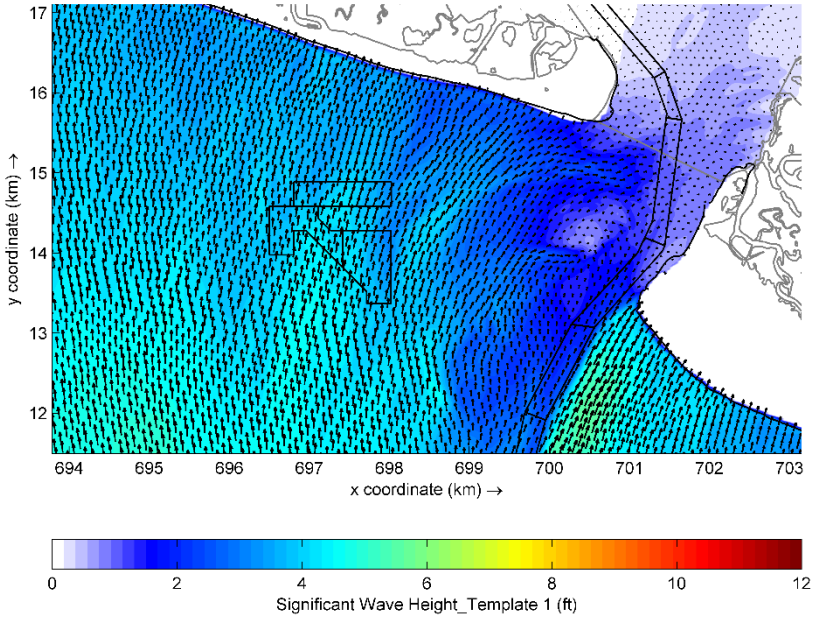


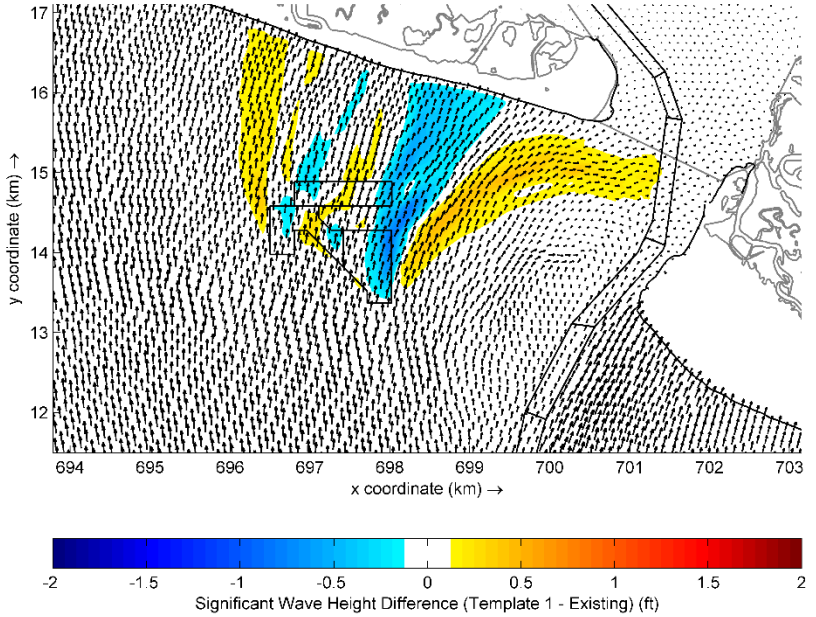
Offshore Wave Case26:

H_s = 7.8 ft, T_p = 8.9 s, Dir = 142.5 degN
Percent Occurrence = 0.646%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



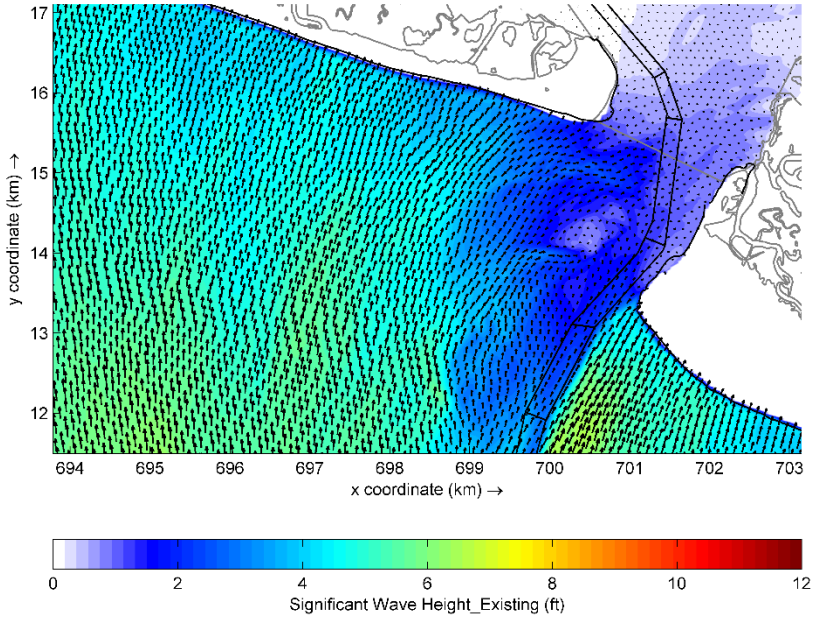


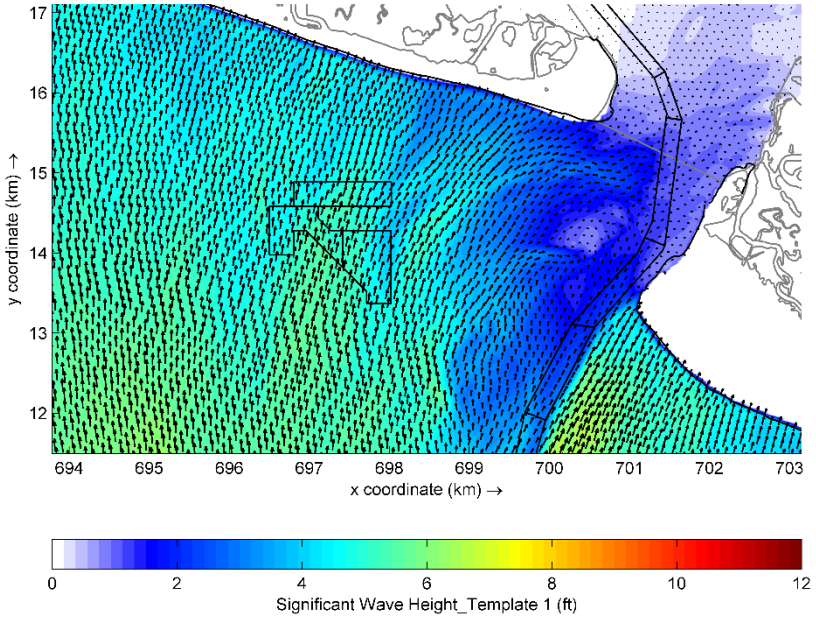


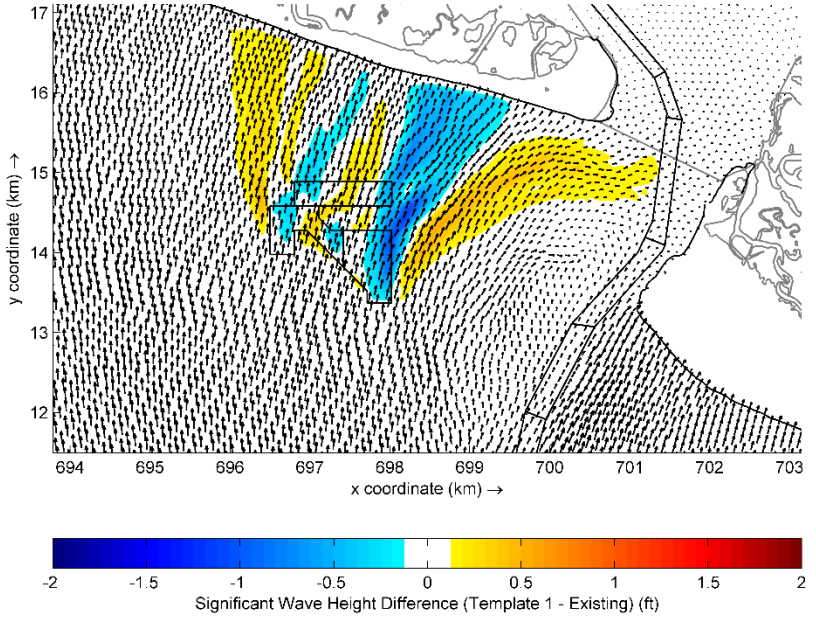
Offshore Wave Case27:

H_s = 11.3 ft, T_p = 9.9 s, Dir = 142.2 degN
Percent Occurrence = 0.193%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



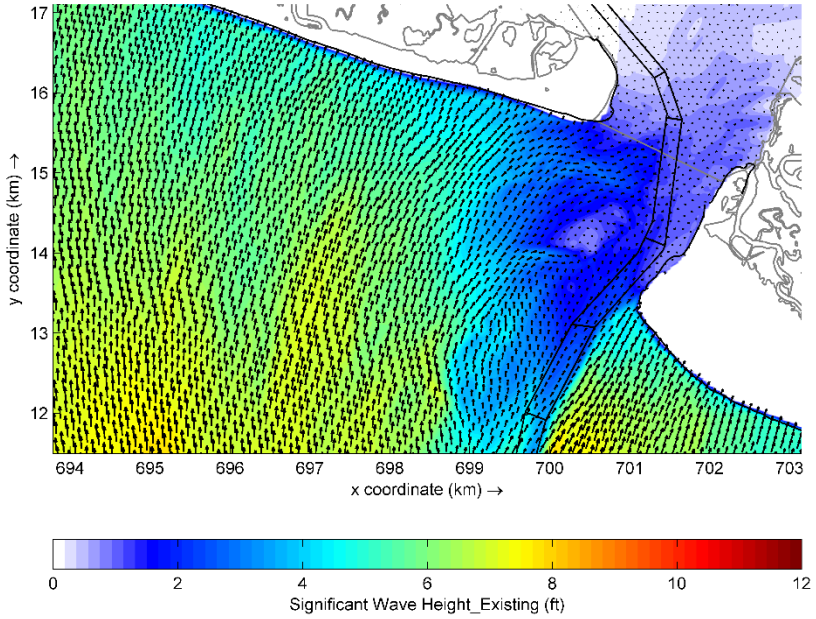


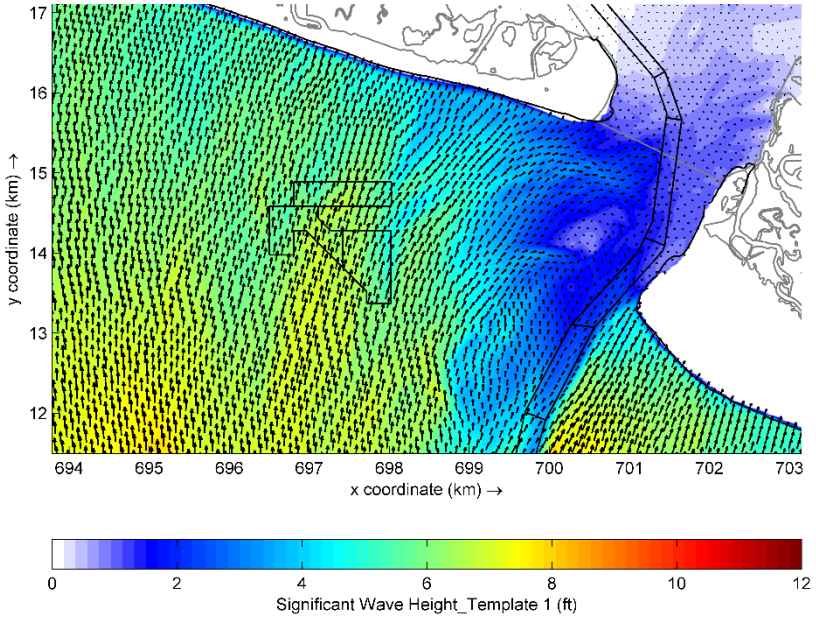


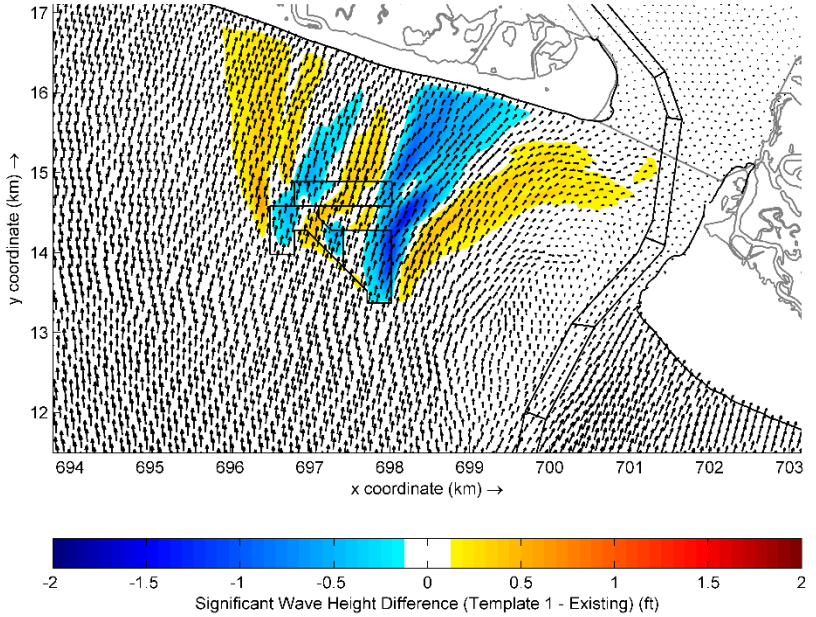
Offshore Wave Case28:

H_s = 14.1 ft, T_p = 10.4 s, Dir = 142.1 degN
Percent Occurrence = 0.054%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



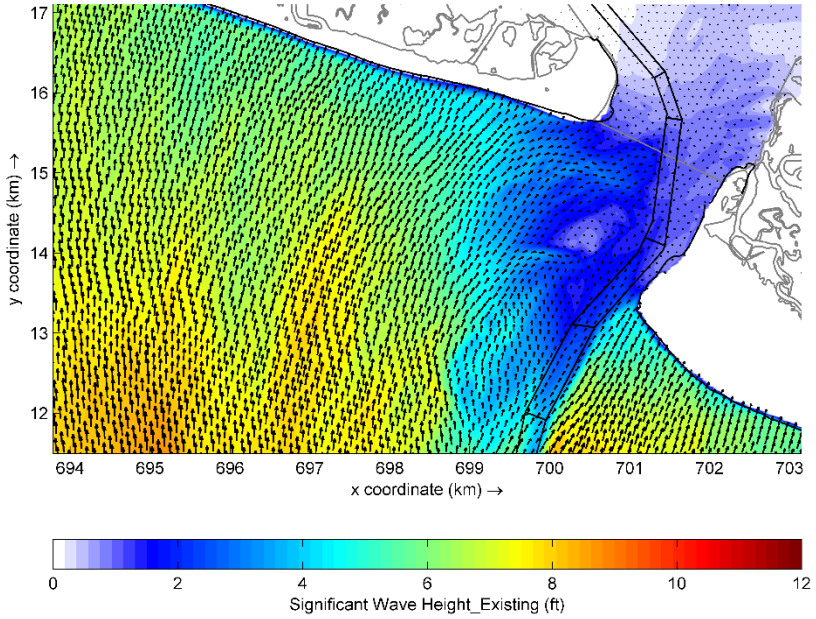


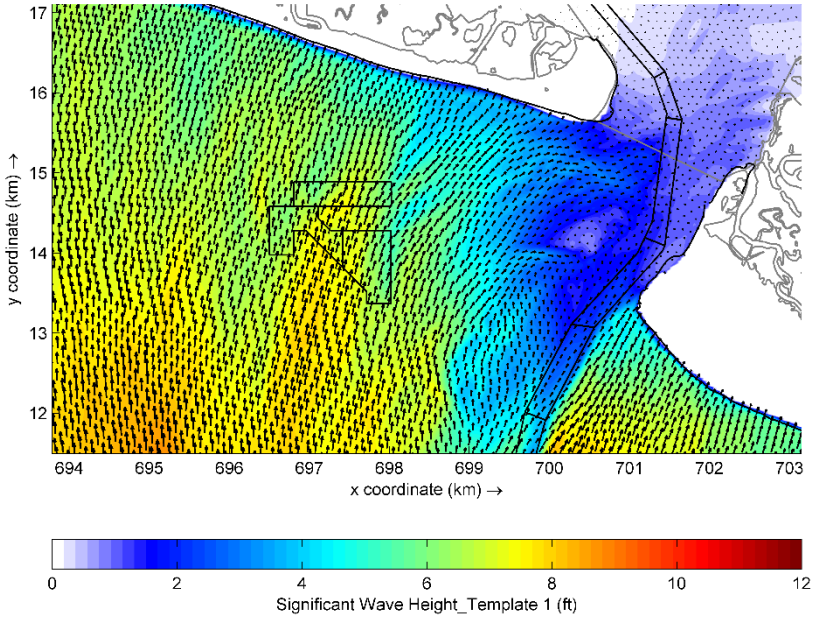


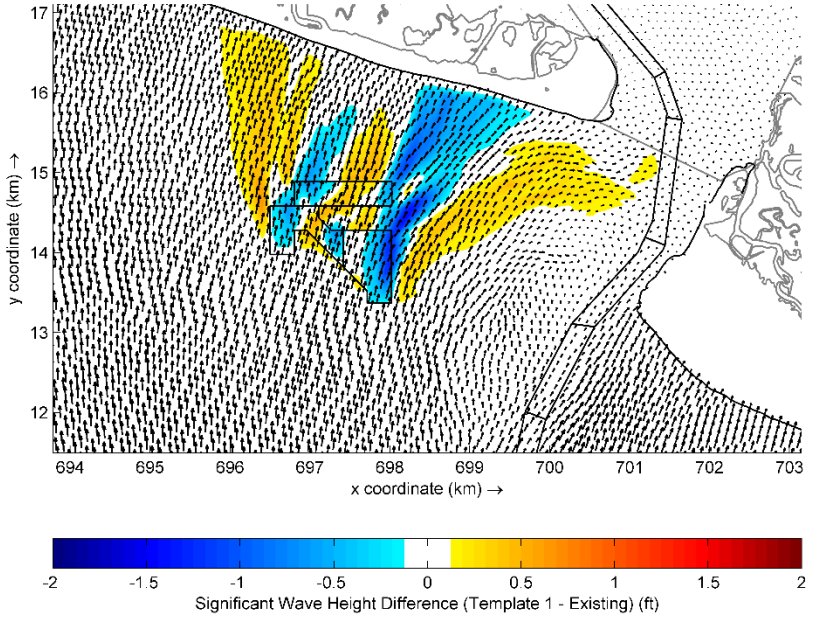
Offshore Wave Case29:

H_s = 18.3 ft, T_p = 11.1 s, Dir = 142.9 degN
Percent Occurrence = 0.011%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



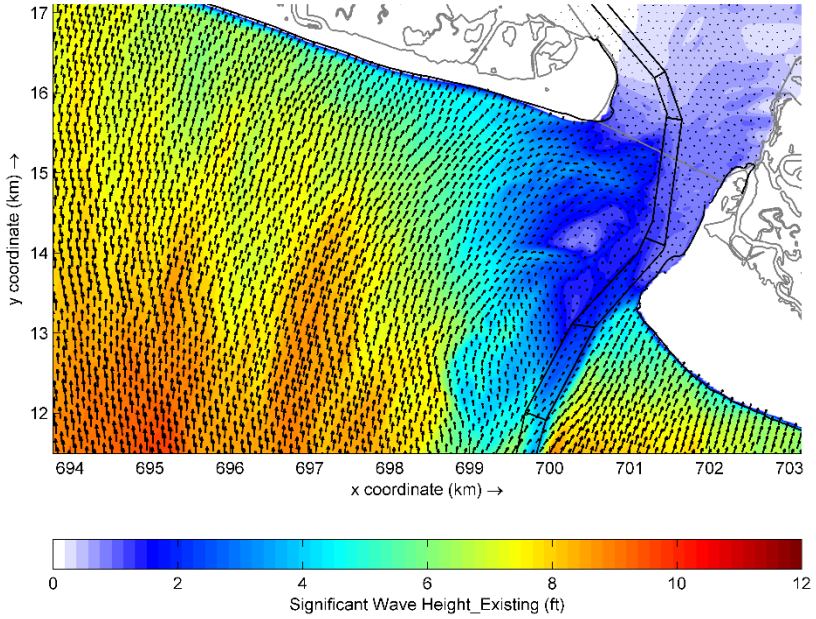


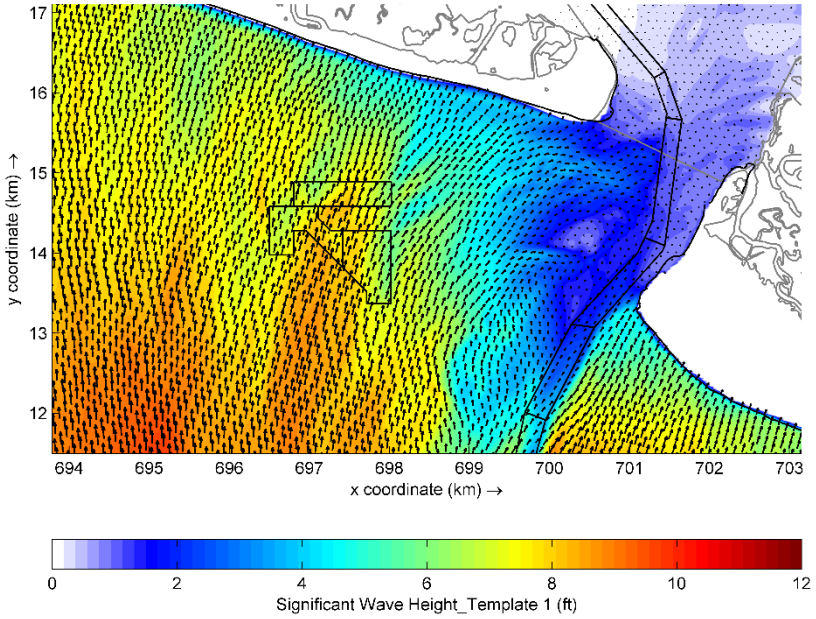


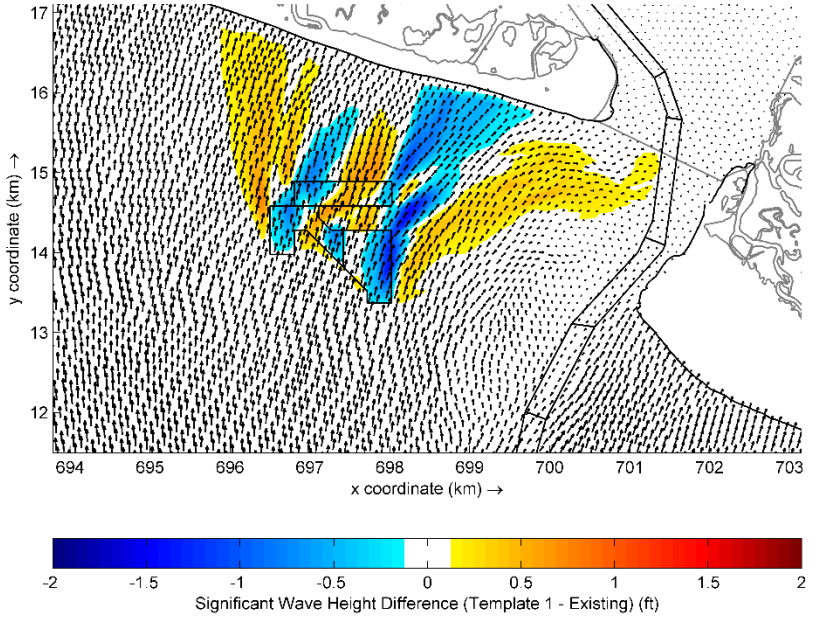
Offshore Wave Case30:

H_s = 20.2 ft, T_p = 12.3 s, Dir = 142.6 degN
Percent Occurrence = 0.003%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



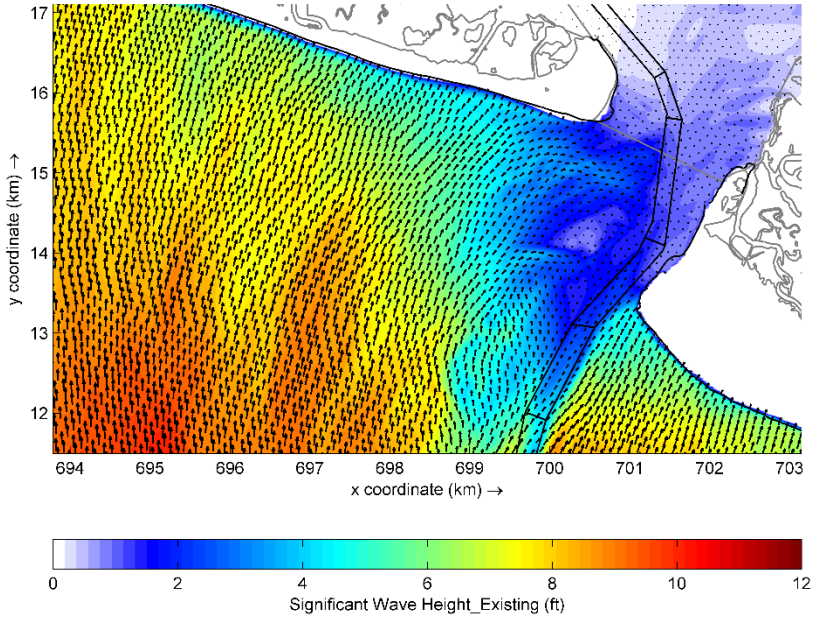


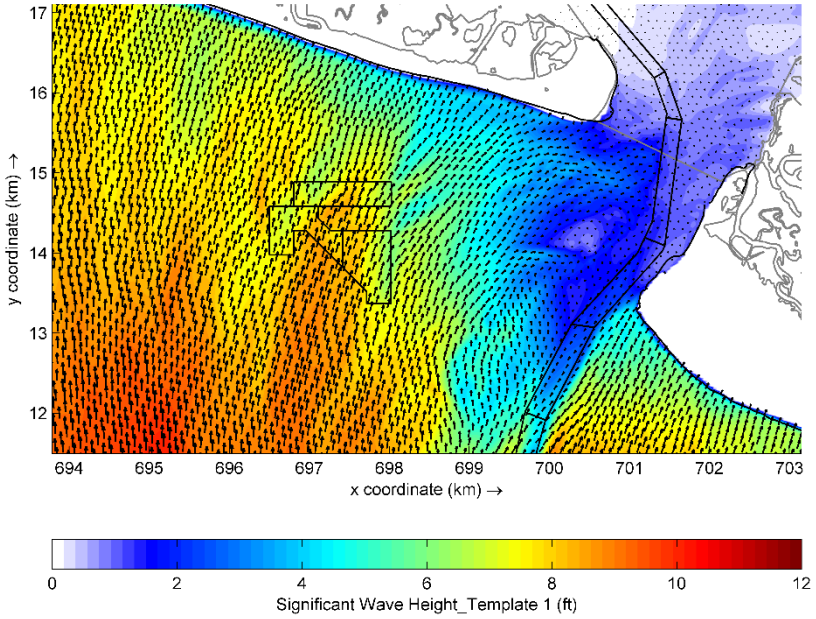


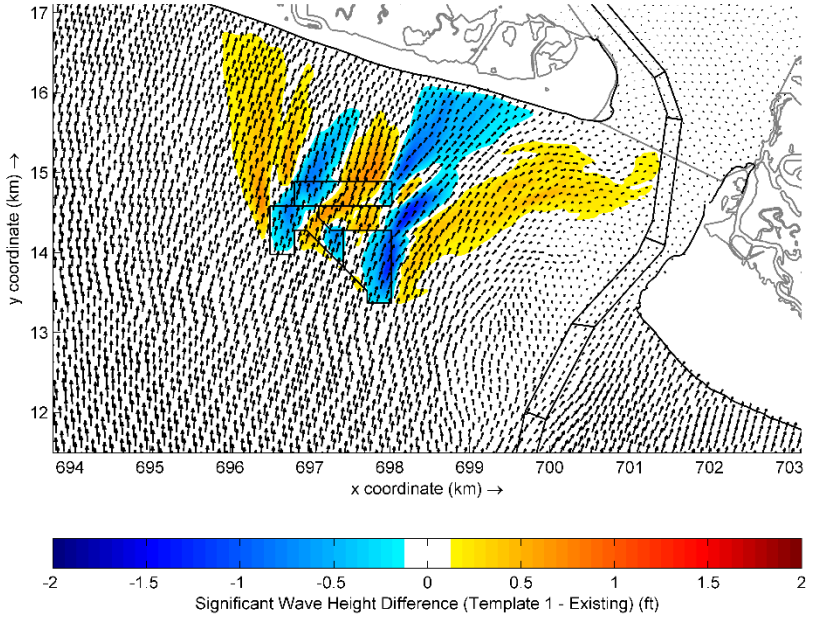
Offshore Wave Case31:

H_s = 25.2 ft, T_p = 15.9 s, Dir = 141.2 degN
Percent Occurrence = 0.002%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



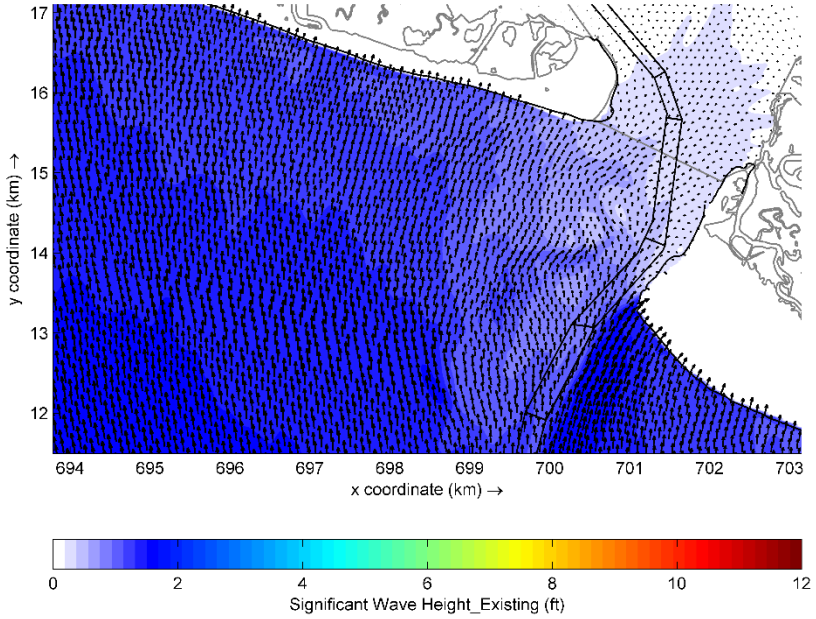


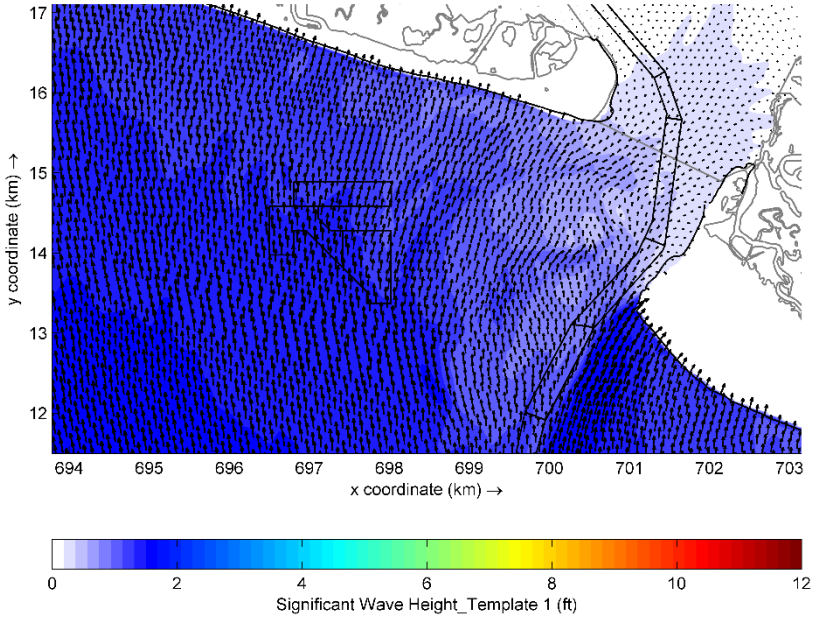


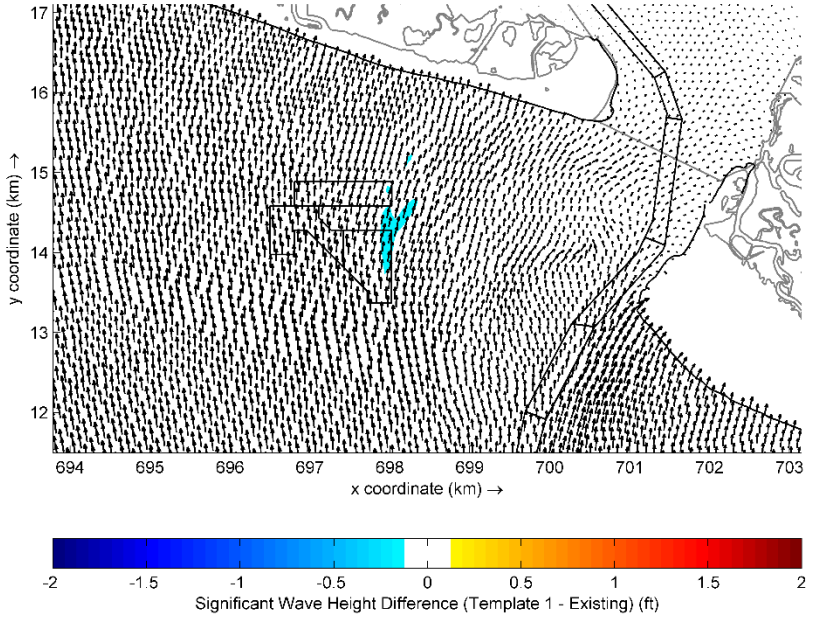
Offshore Wave Case32:

H_s = 27.6 ft, T_p = 14.8 s, Dir = 143.3 degN
Percent Occurrence = 0.001%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



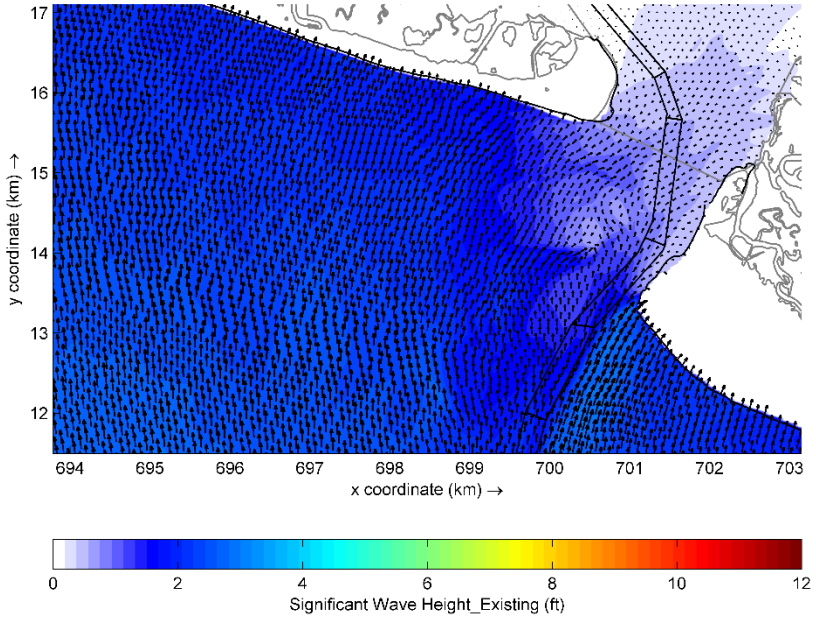


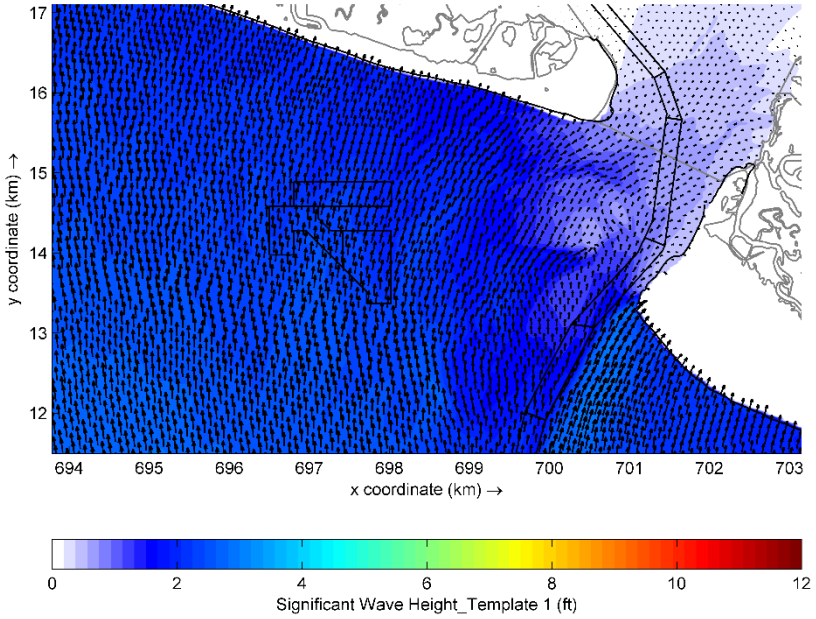


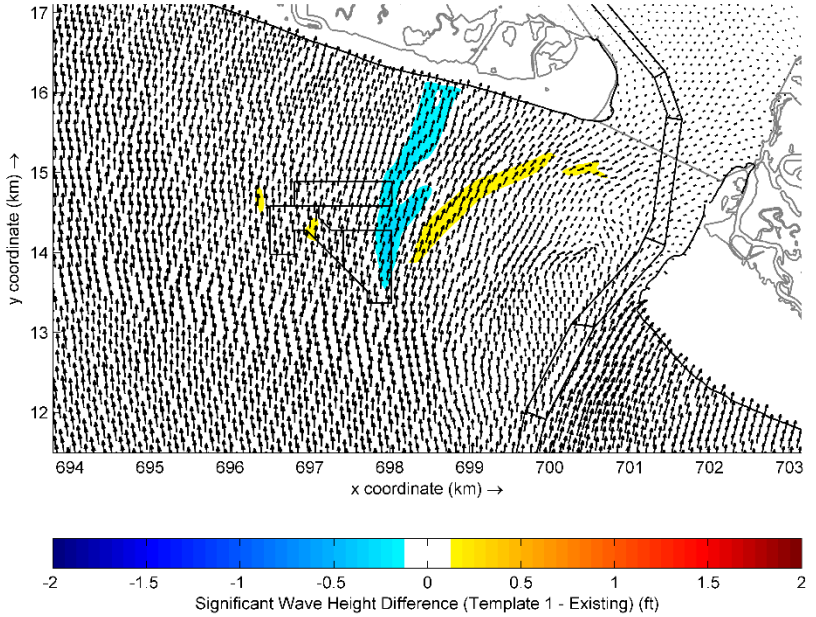
Offshore Wave Case33:

H_s = 2.6 ft, T_p = 7.1 s, Dir = 156.91 degN
Percent Occurrence = 2.225%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



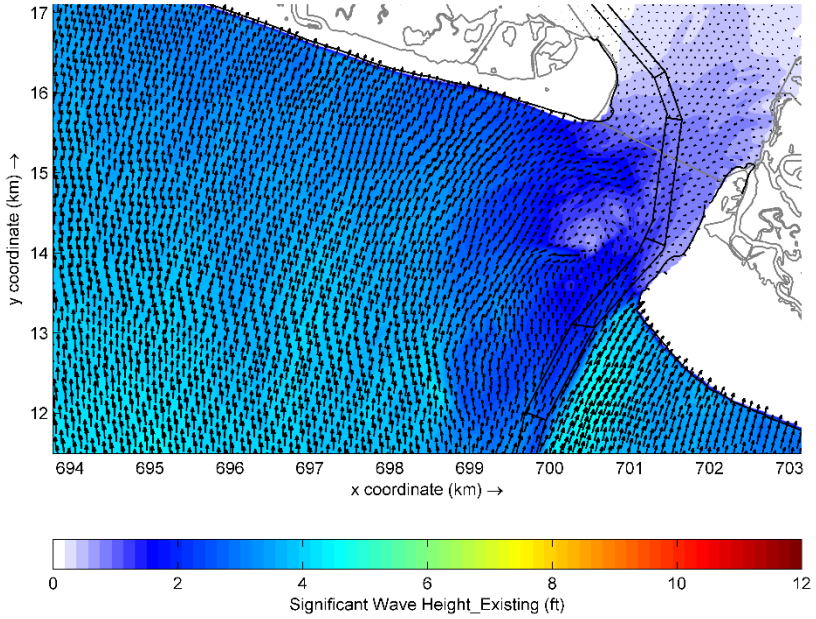


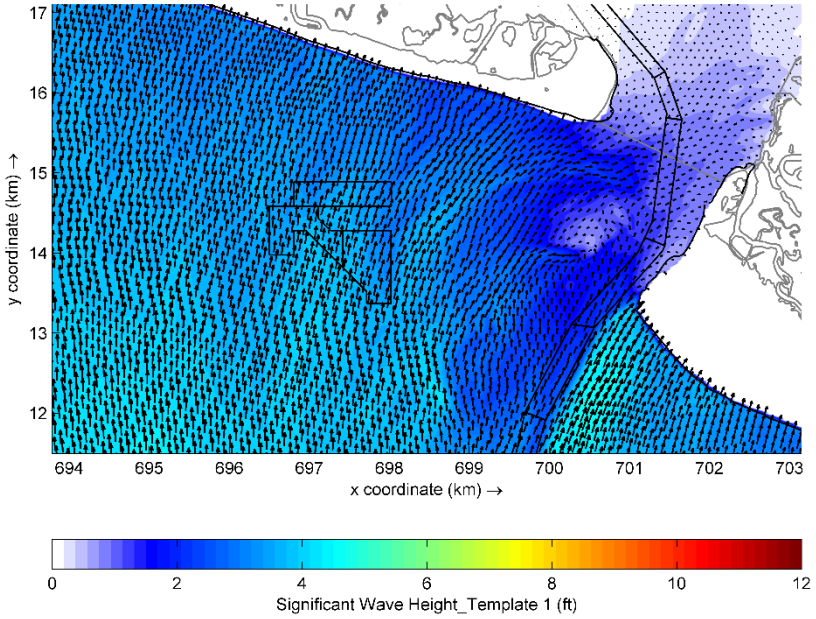


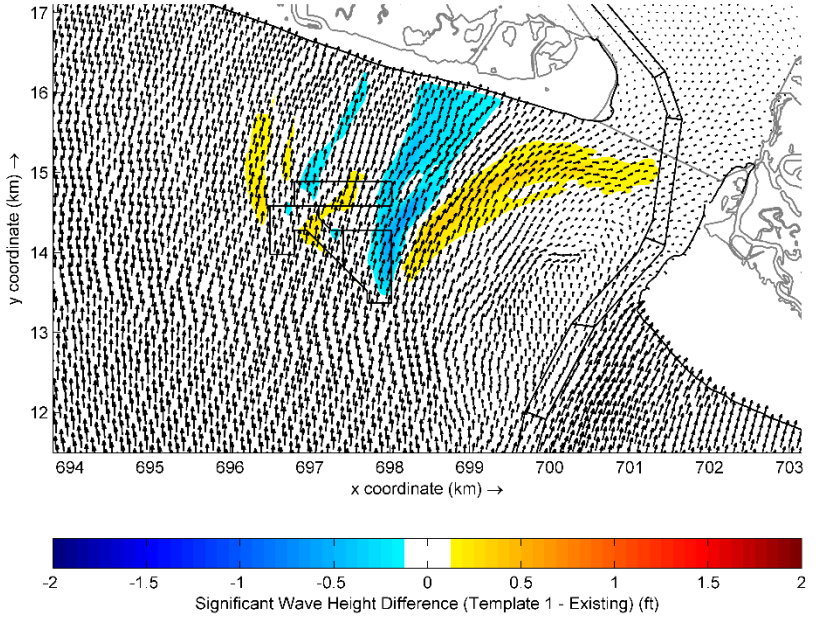
Offshore Wave Case34:

H_s = 4.6 ft, T_p = 7.4 s, Dir = 157.3 degN
Percent Occurrence = 2.810%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



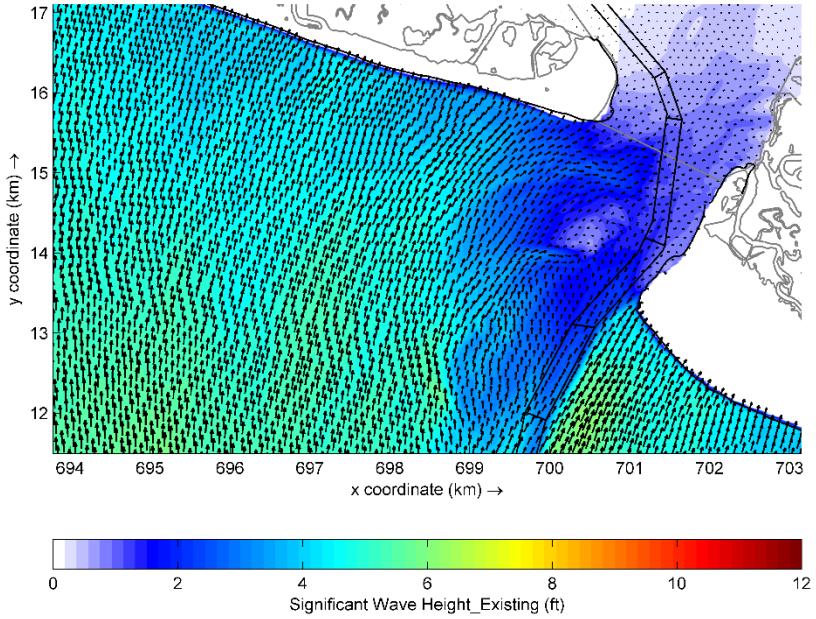


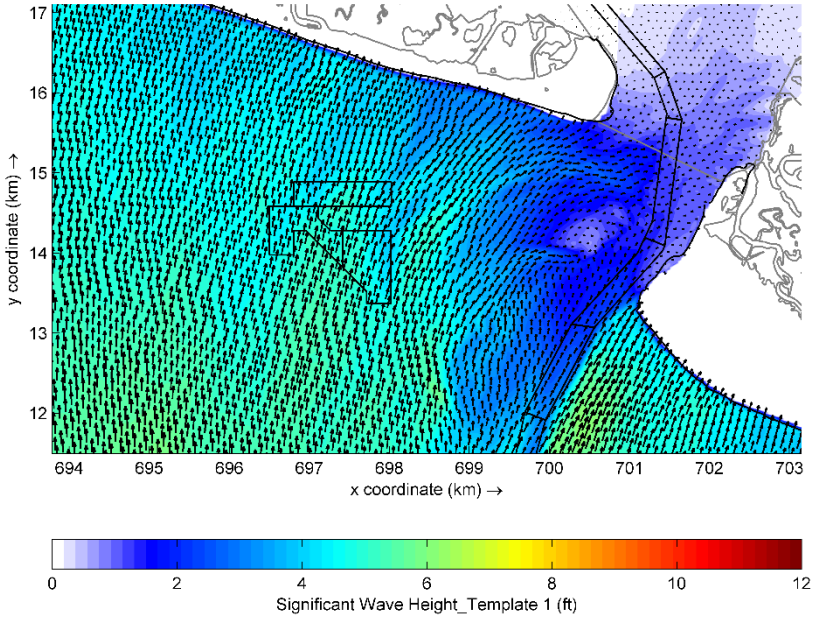


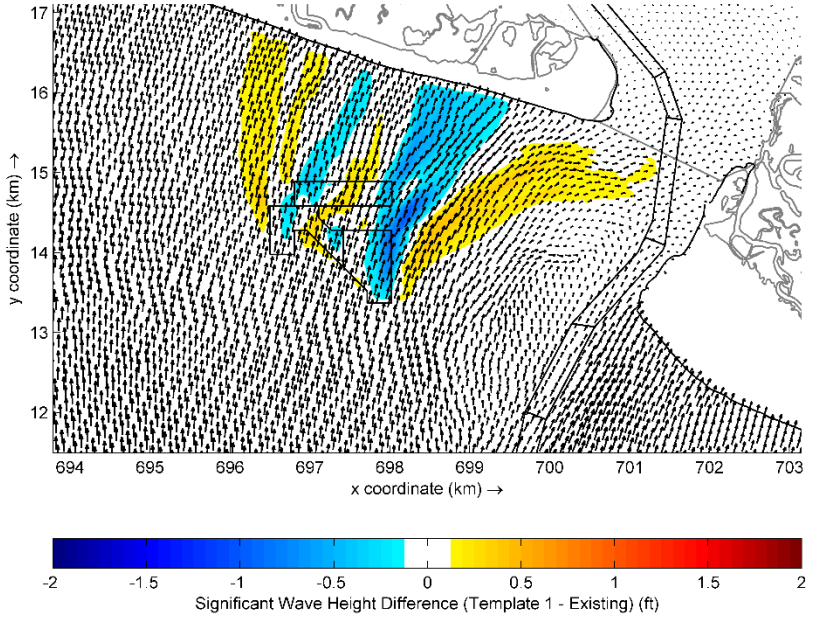
Offshore Wave Case35:

H_s = 7.8 ft, T_p = 8.1 s, Dir = 157.7 degN
Percent Occurrence = 0.739%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



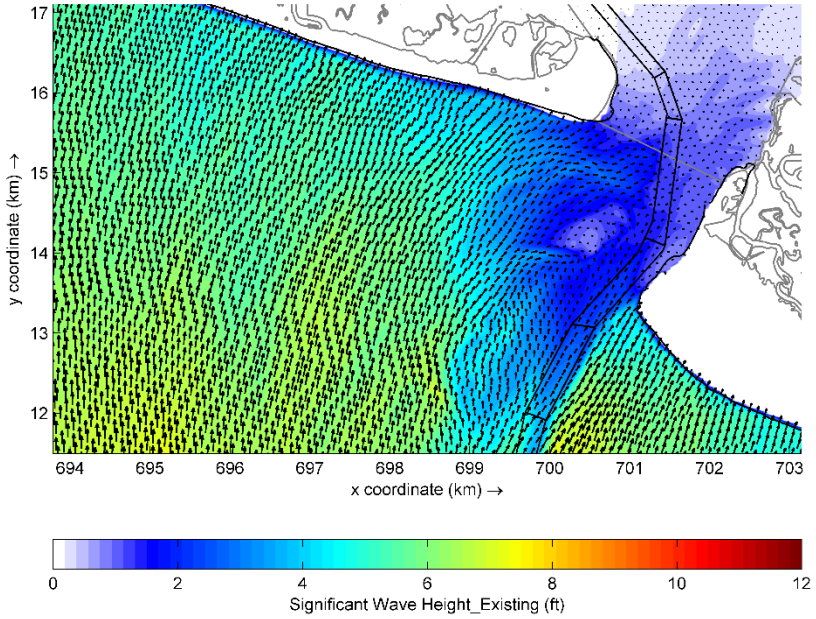


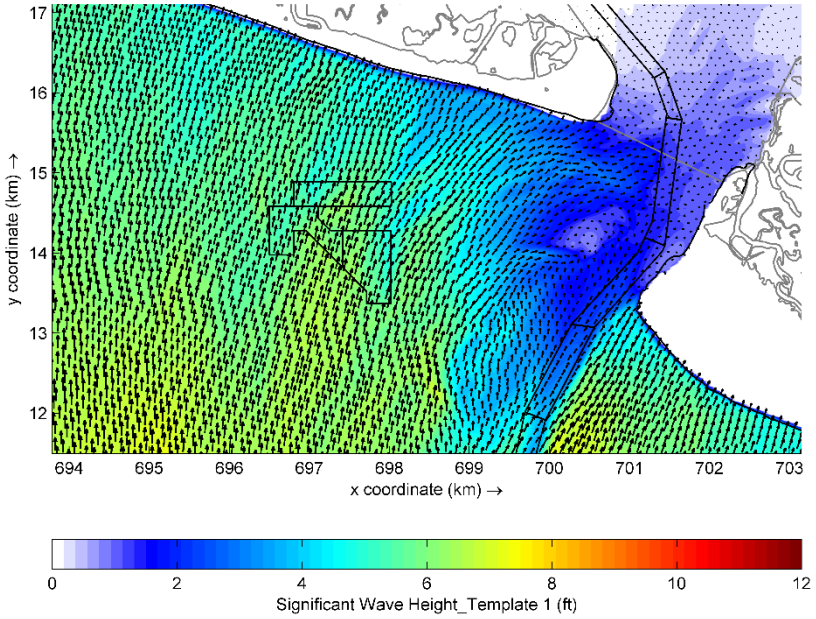


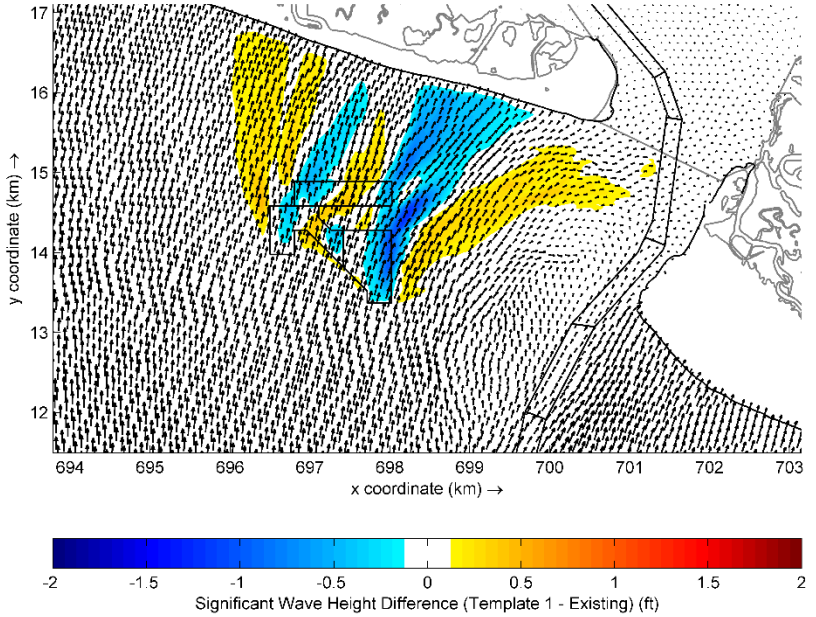
Offshore Wave Case36:

H_s = 11.0 ft, T_p = 9.2 s, Dir = 157.3 degN
Percent Occurrence = 0.174%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



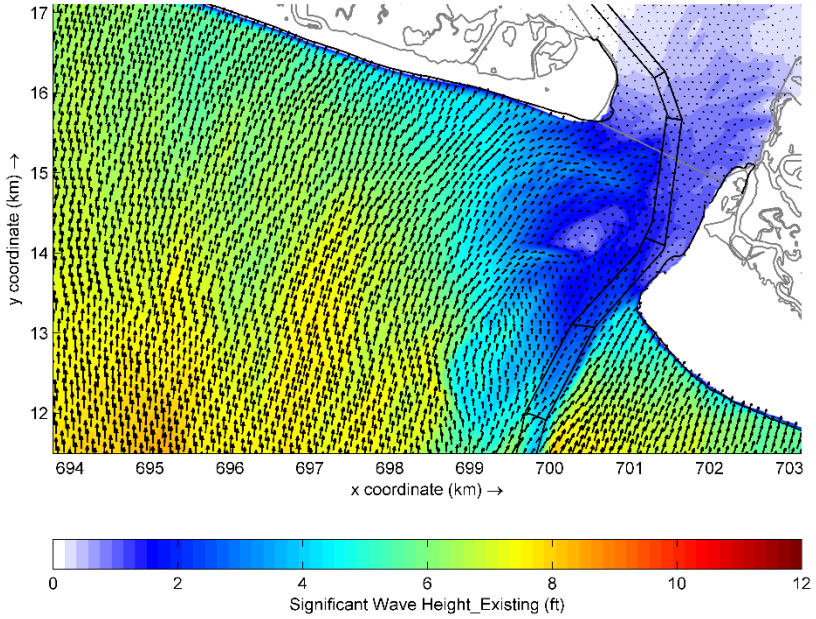


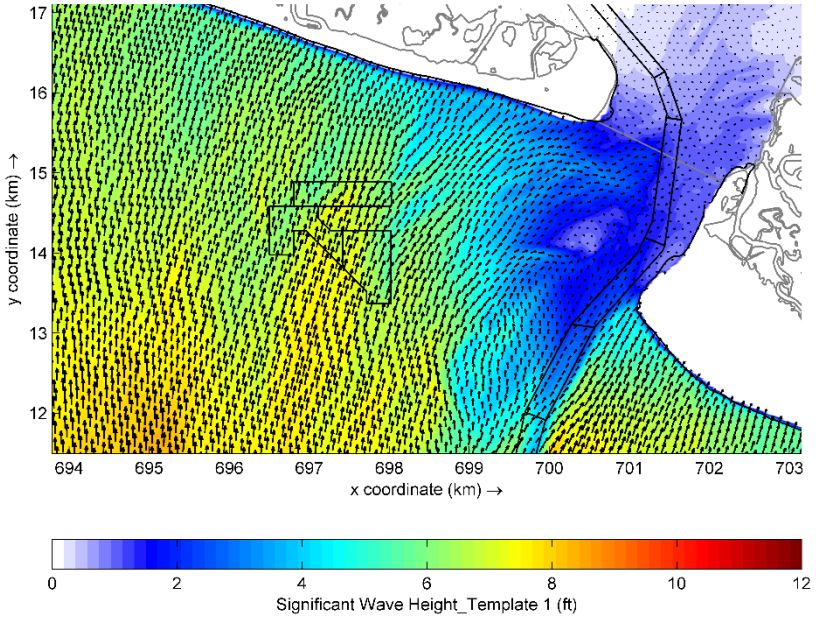


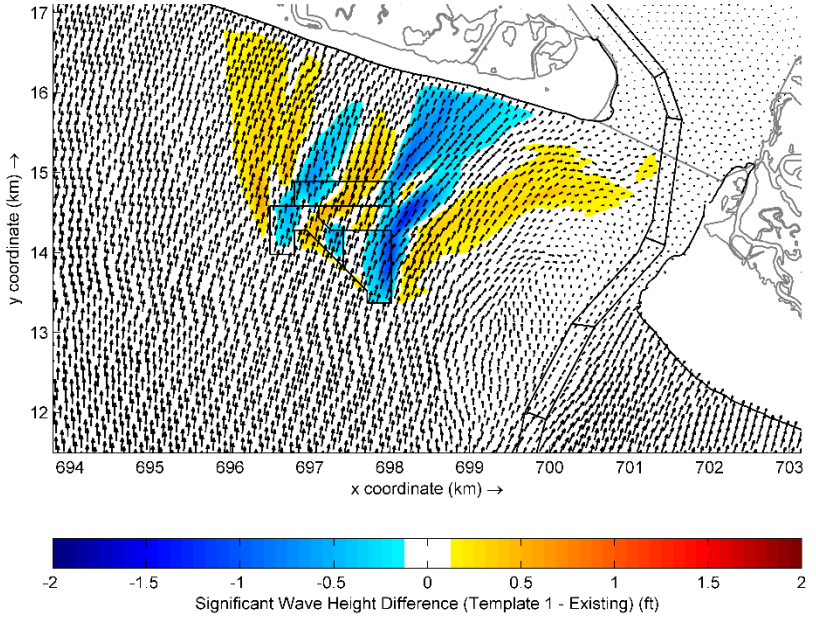
Offshore Wave Case37:

H_s = 14.6 ft, T_p = 9.7 s, Dir = 157.6 degN
Percent Occurrence = 0.035%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



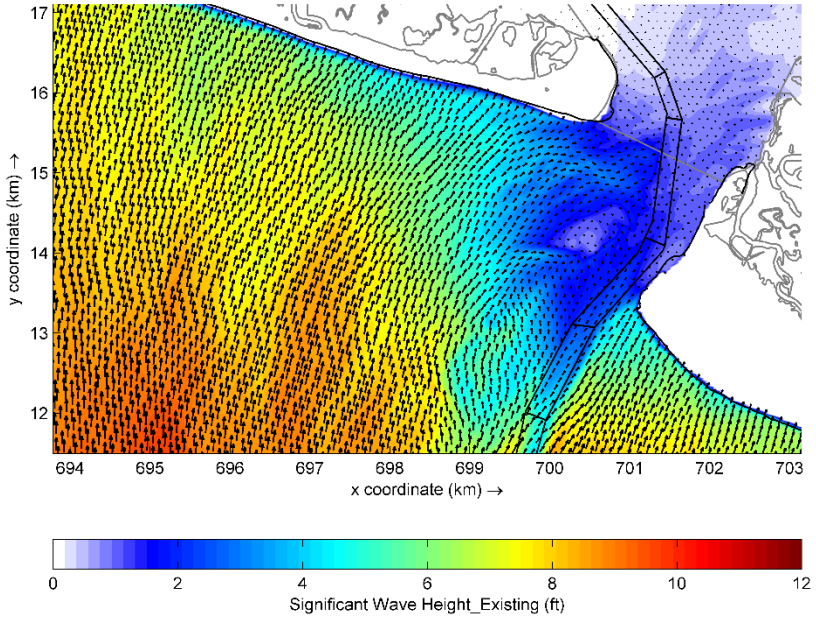


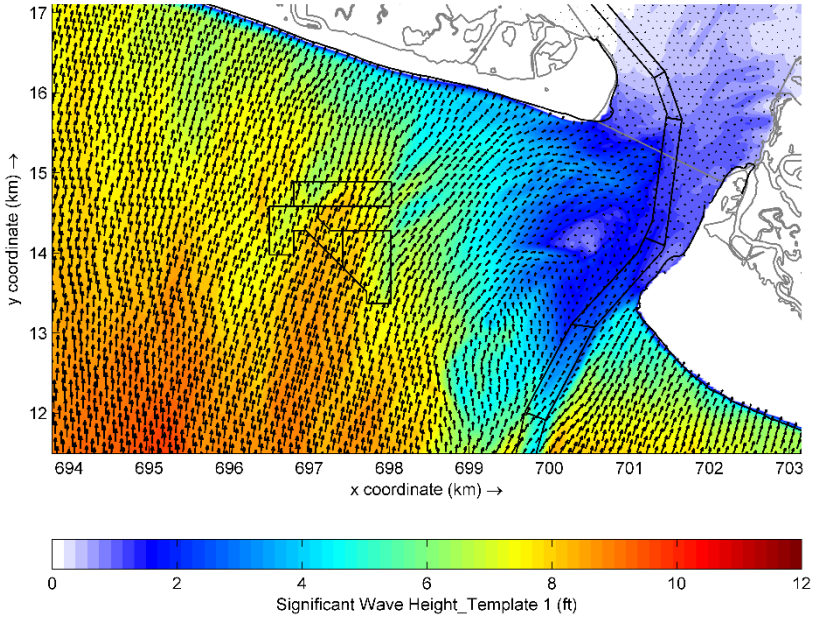


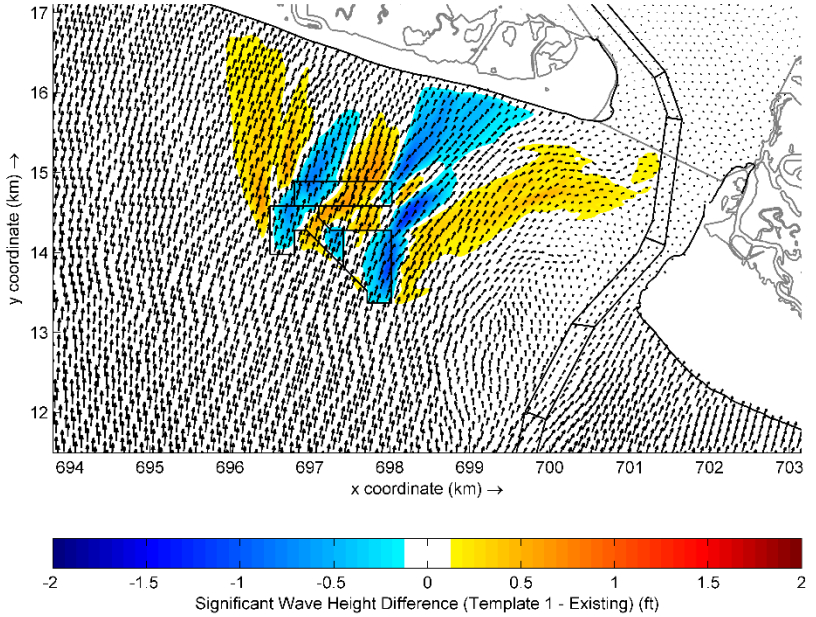
Offshore Wave Case38:

H_s = 17.4 ft, T_p = 11.1 s, Dir = 154.1 degN
Percent Occurrence = 0.007%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



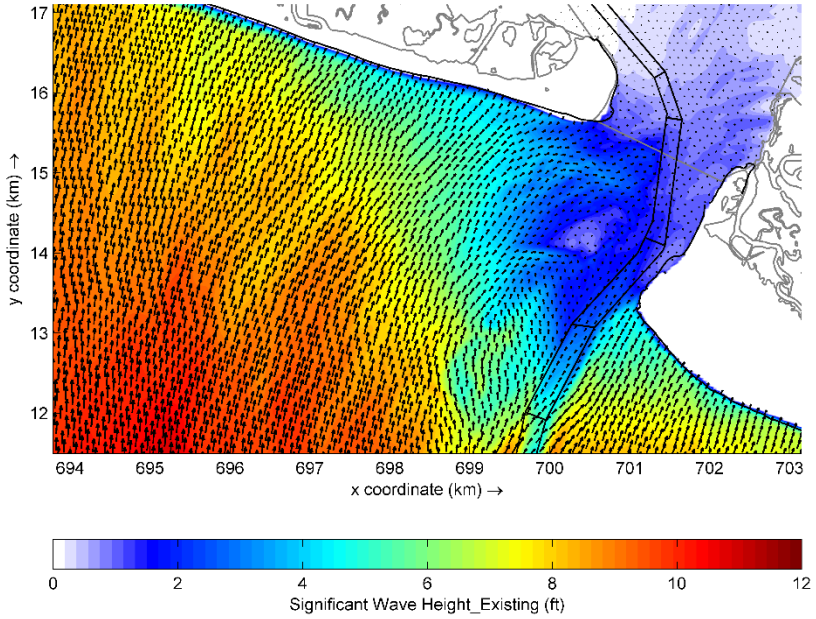


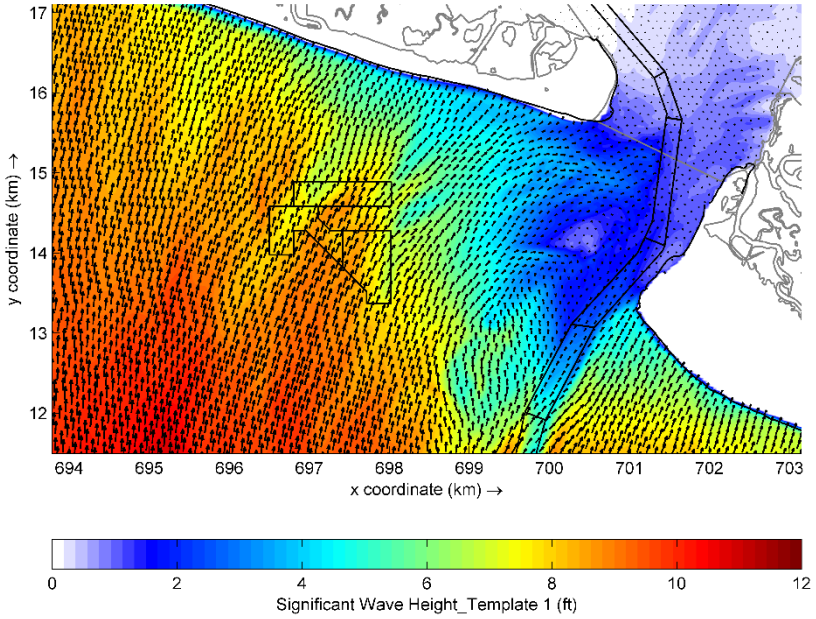


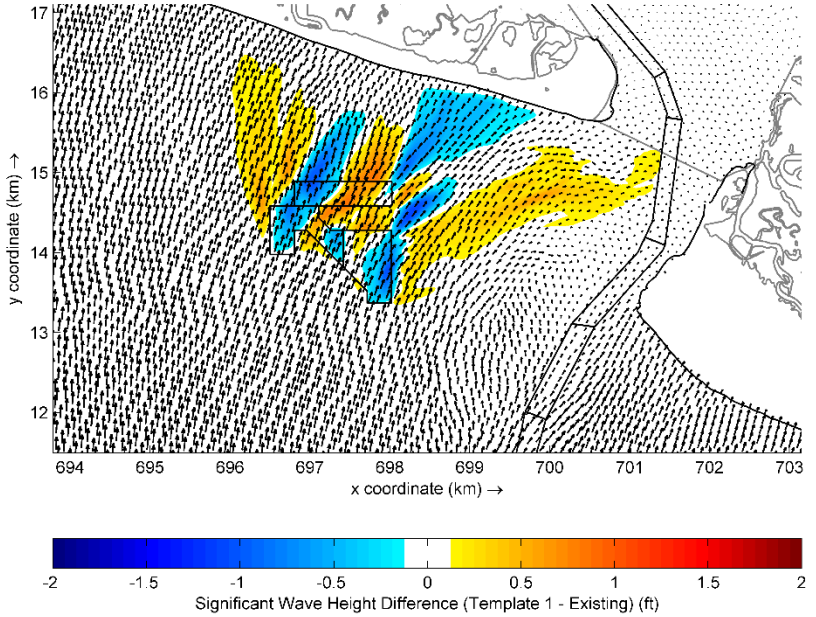
Offshore Wave Case39:

H_s = 20.5 ft, T_p = 11.9 s, Dir = 154.8 degN
Percent Occurrence = 0.003%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



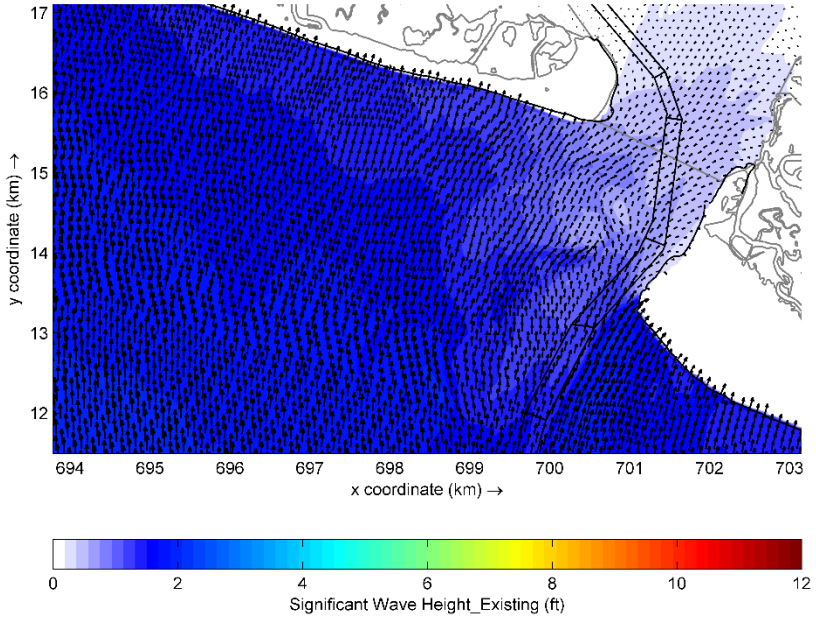


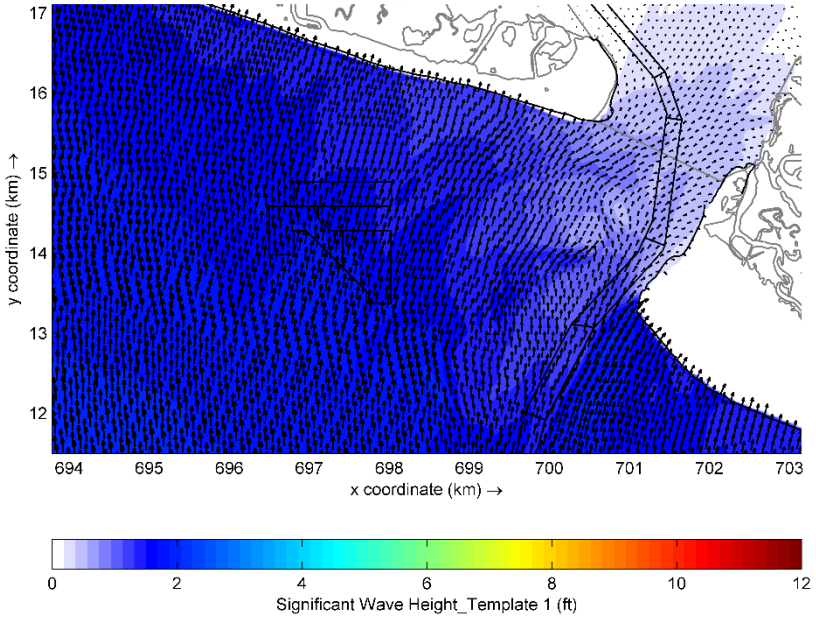


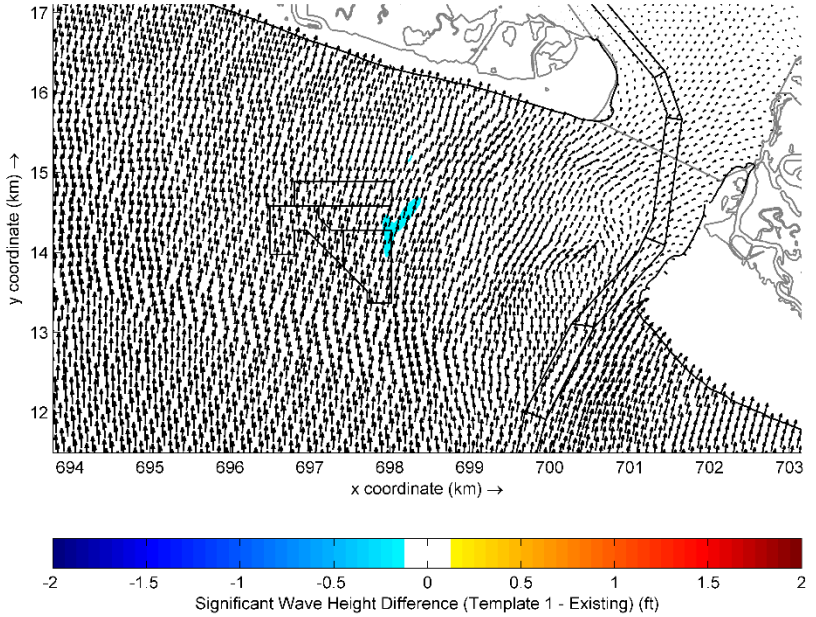
Offshore Wave Case40:

H_s = 23.9 ft, T_p = 13.0 s, Dir = 159.0 degN
Percent Occurrence = 0.001%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



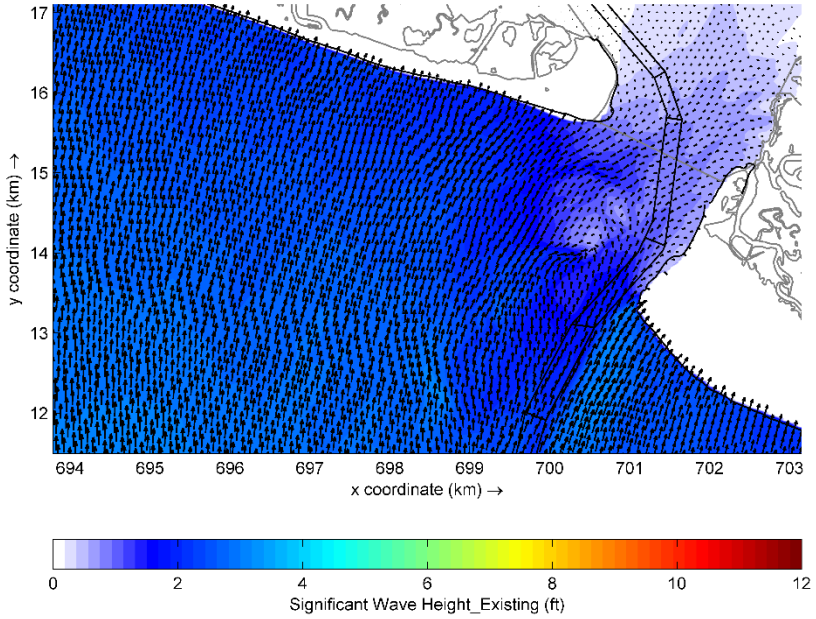


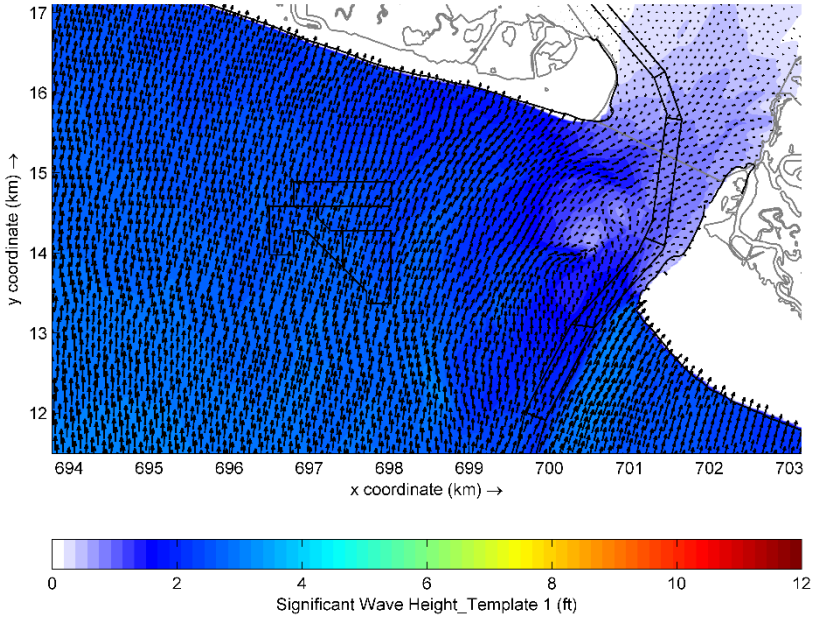


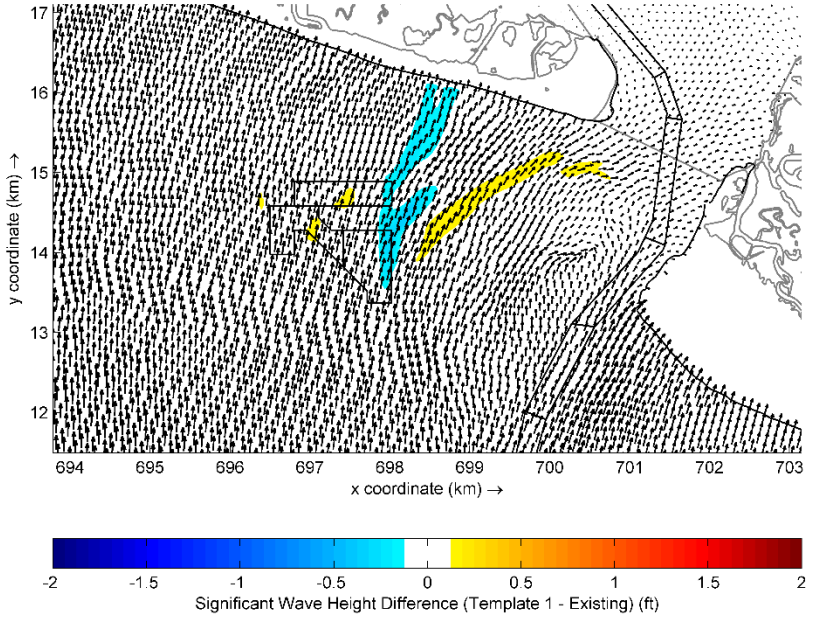
Offshore Wave Case41:

H_s = 2.7 ft, T_p = 6.1 s, Dir = 172.3 degN
Percent Occurrence = 1.770%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



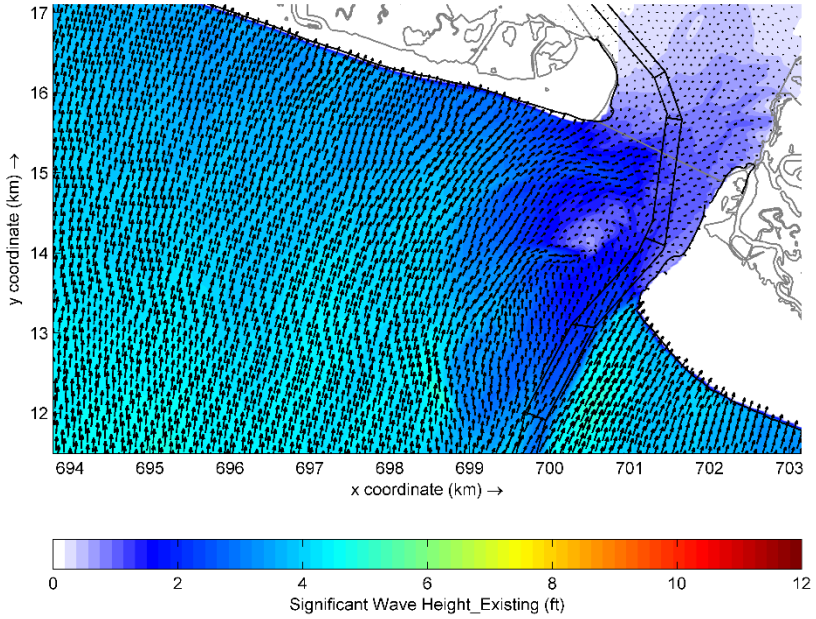


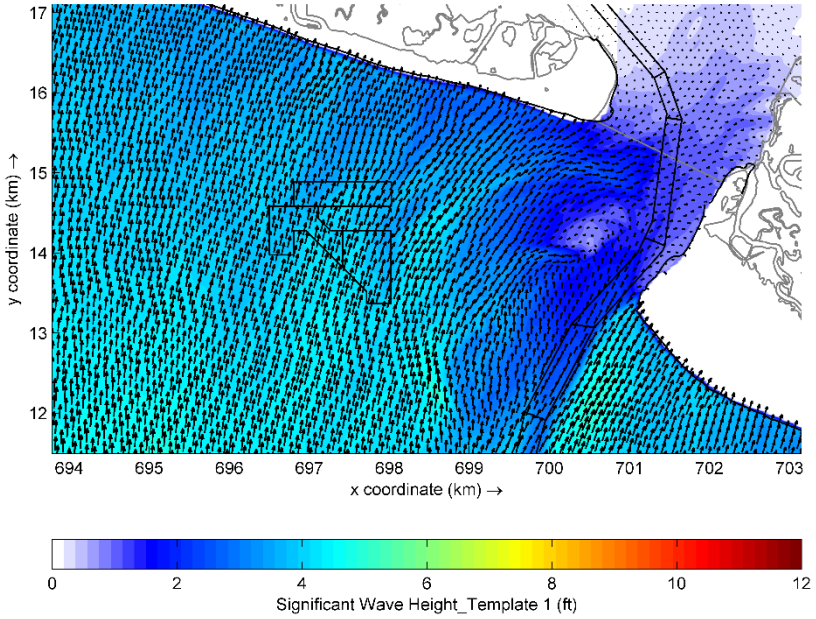


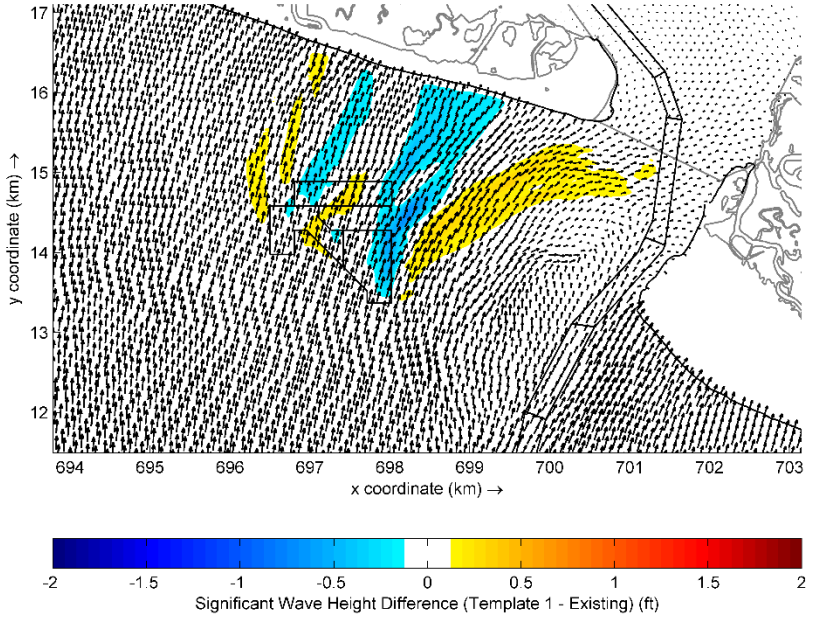
Offshore Wave Case42:

H_s = 4.6 ft, T_p = 6.7 s, Dir = 172.6 degN
Percent Occurrence = 3.194%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



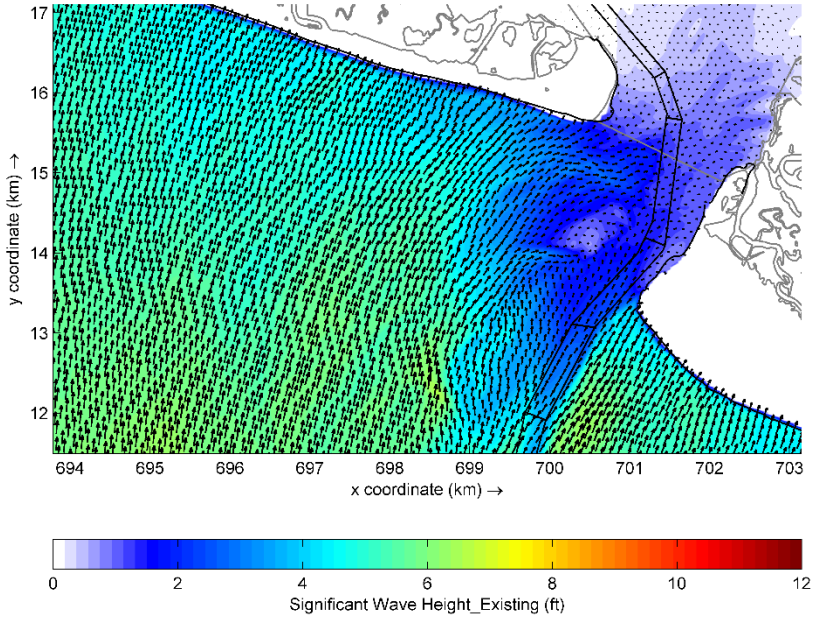


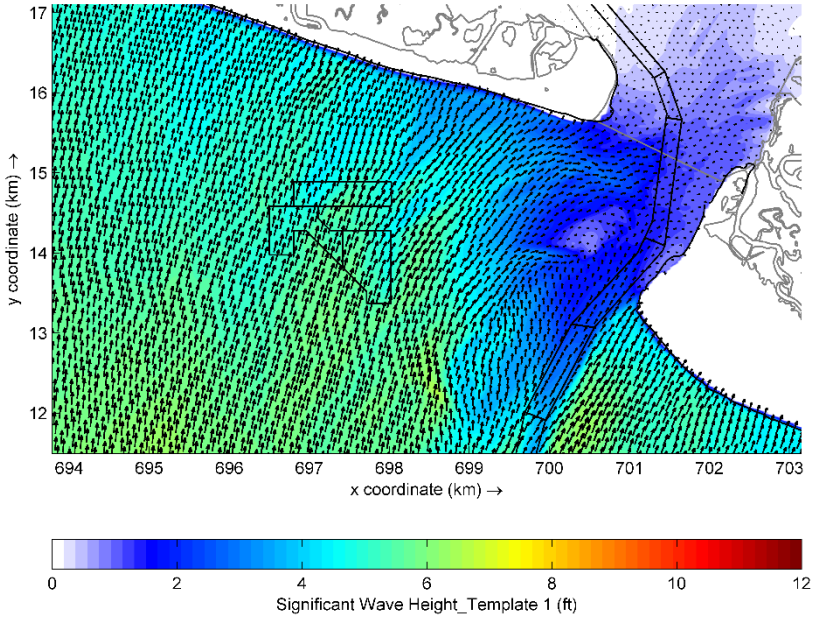


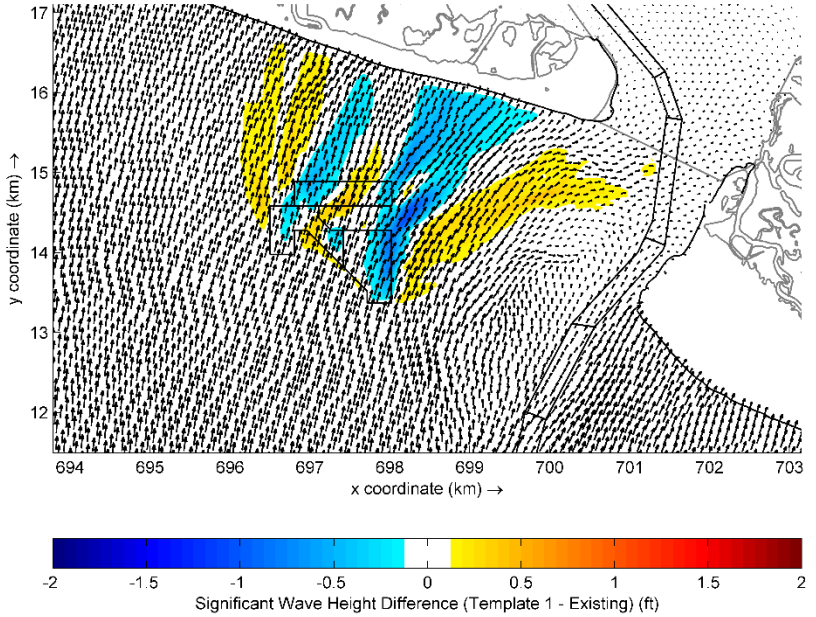
Offshore Wave Case43:

H_s = 7.8 ft, T_p = 8.0 s, Dir = 172.5 degN
Percent Occurrence = 1.012%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



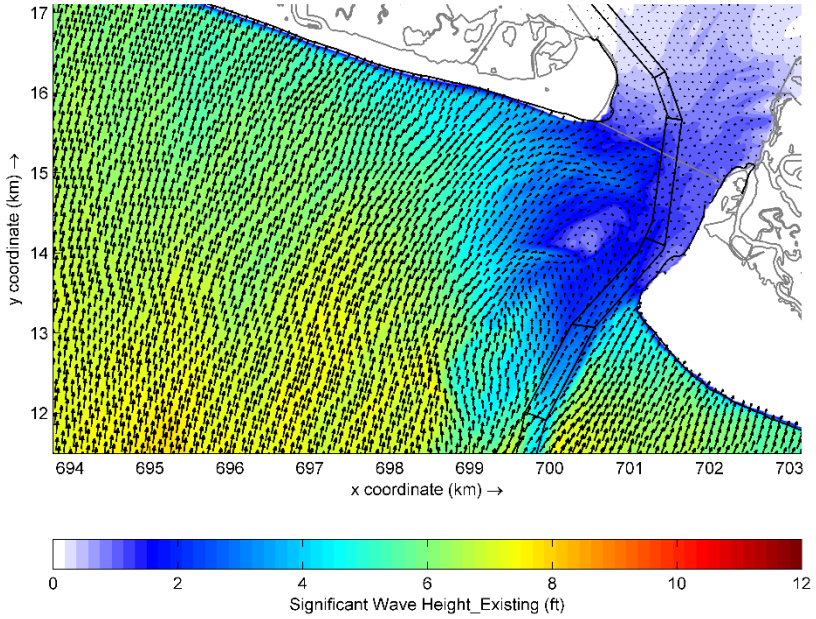


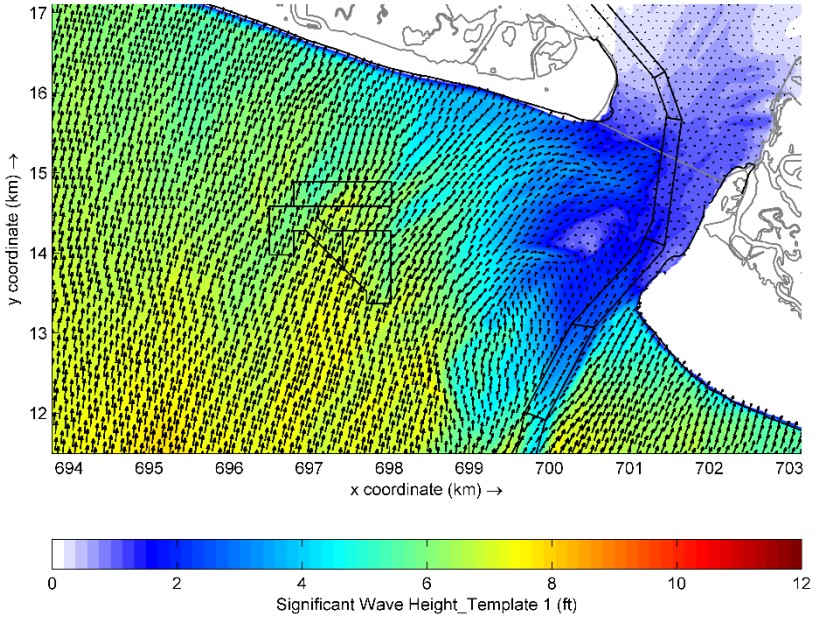


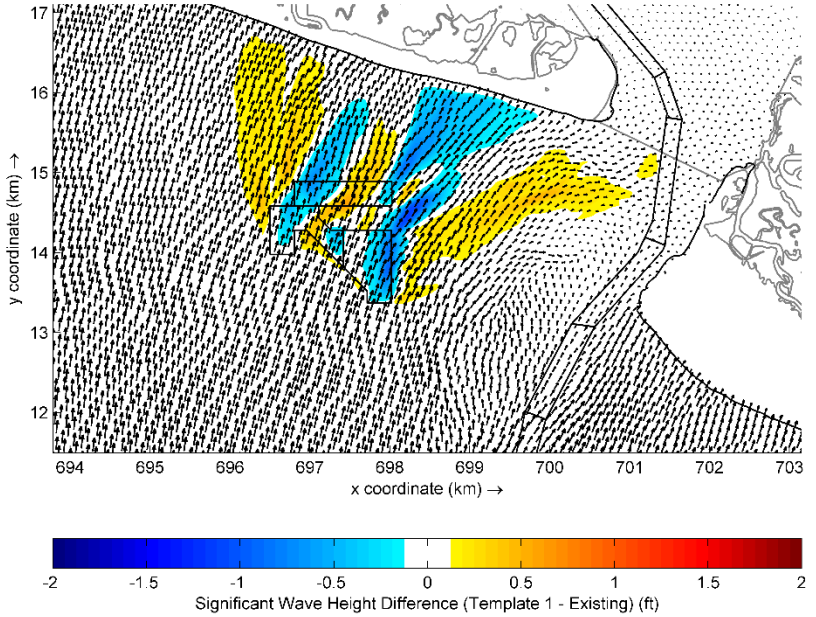
Offshore Wave Case44:

H_s = 11.1 ft, T_p = 9.0 s, Dir = 172.9 degN
Percent Occurrence = 0.204%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



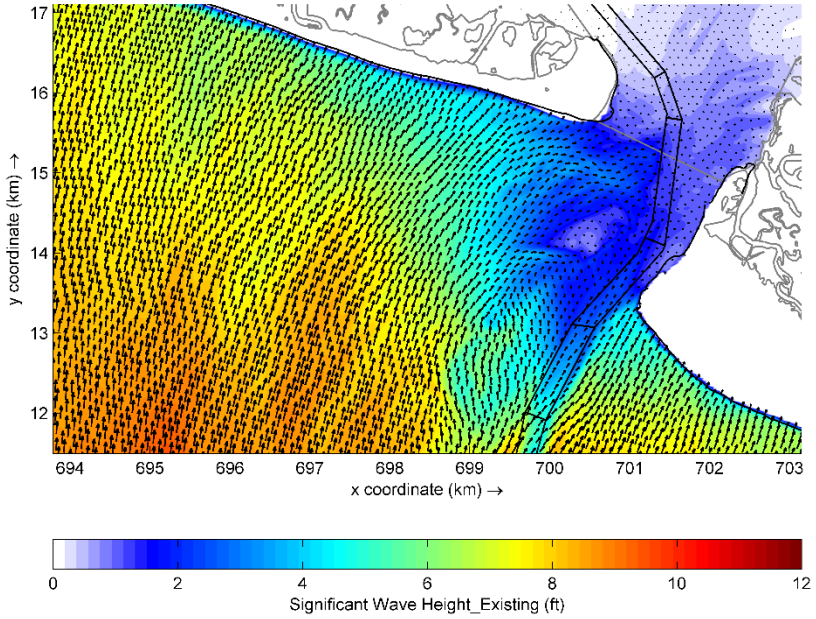


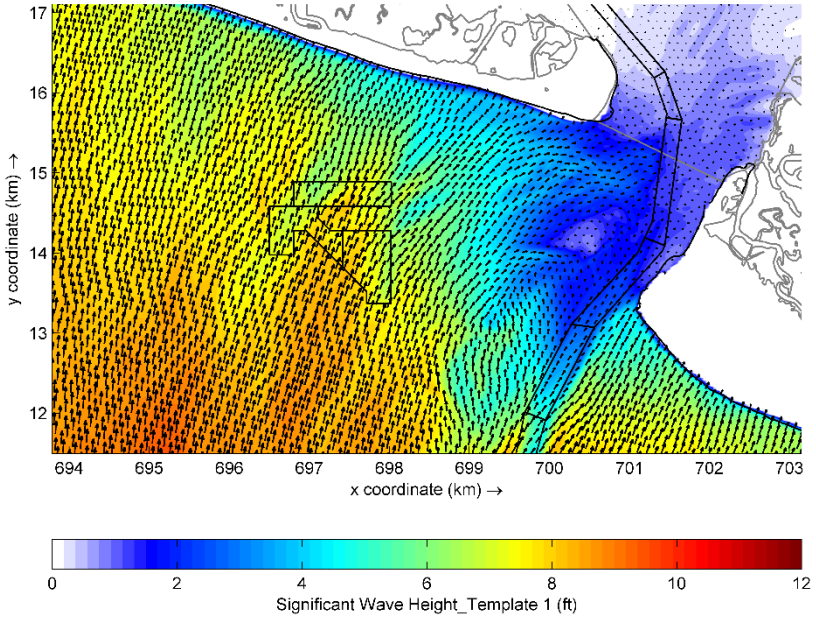


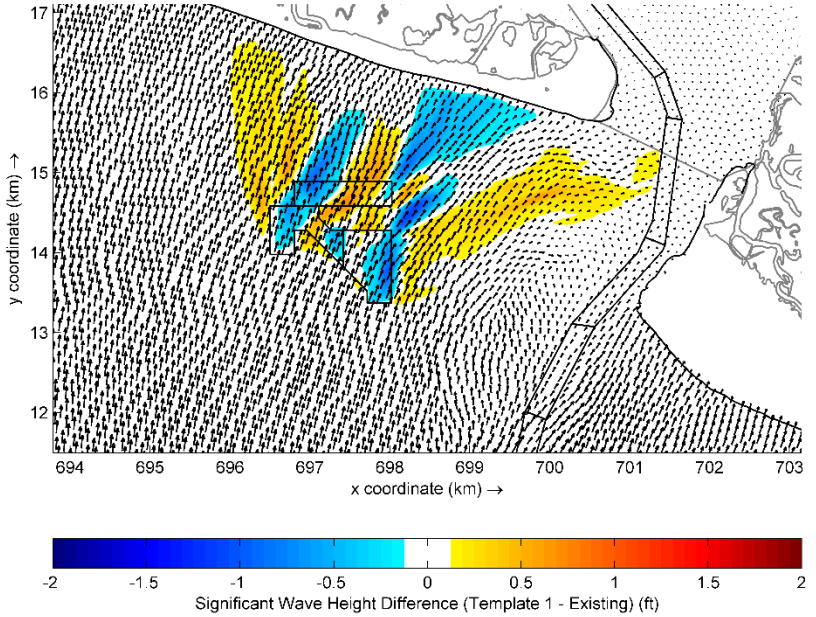
Offshore Wave Case45:

H_s = 14.3 ft, T_p = 9.6 s, Dir = 173.7 degN
Percent Occurrence = 0.029%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



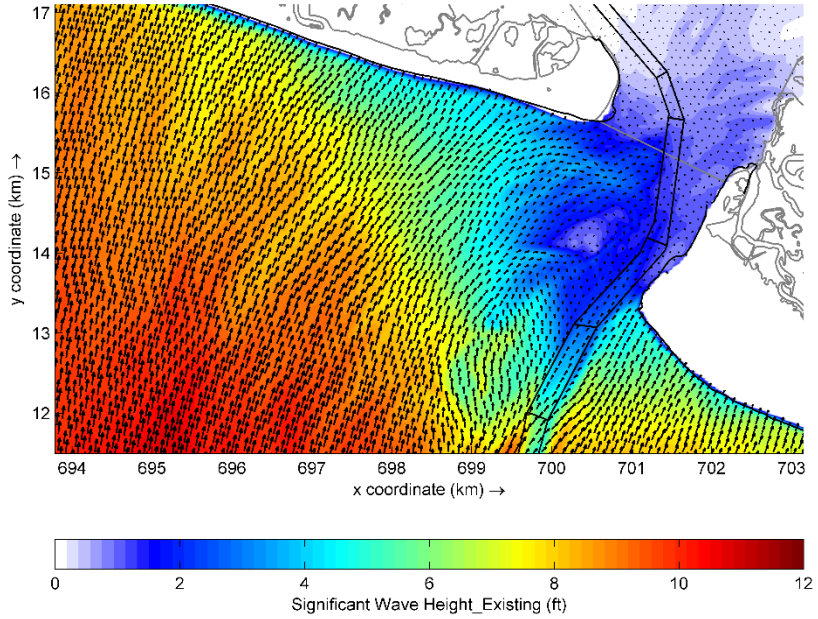


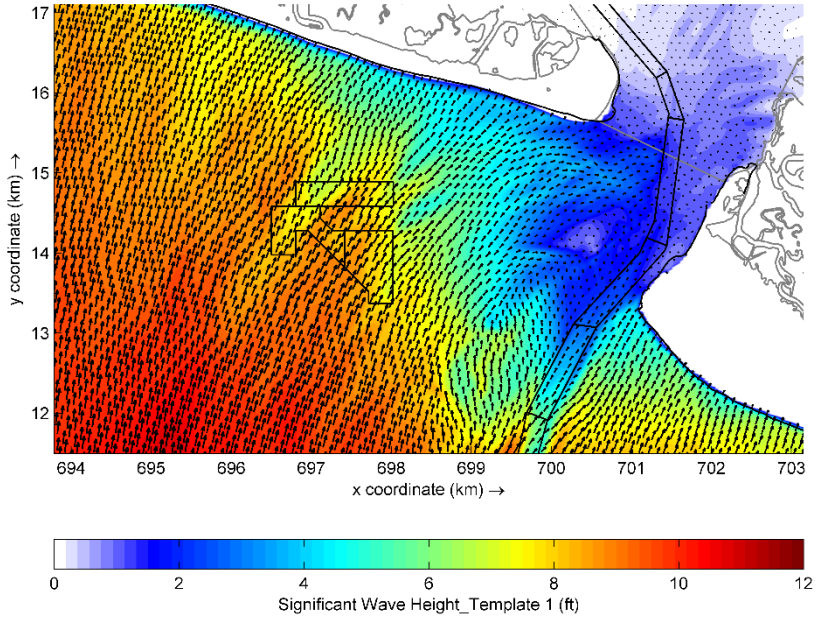


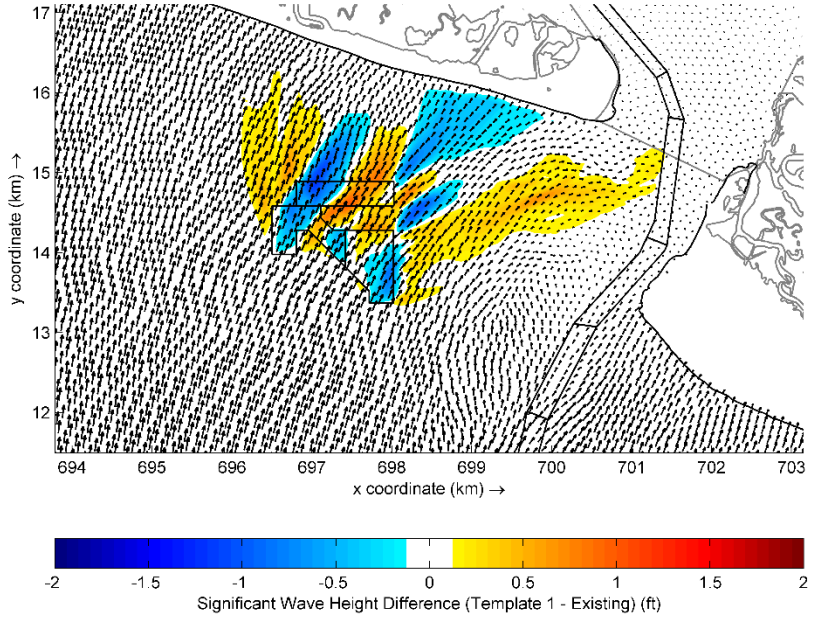
Offshore Wave Case46:

H_s = 17.6 ft, T_p = 11.2 s, Dir = 169.7 degN
Percent Occurrence = 0.004%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



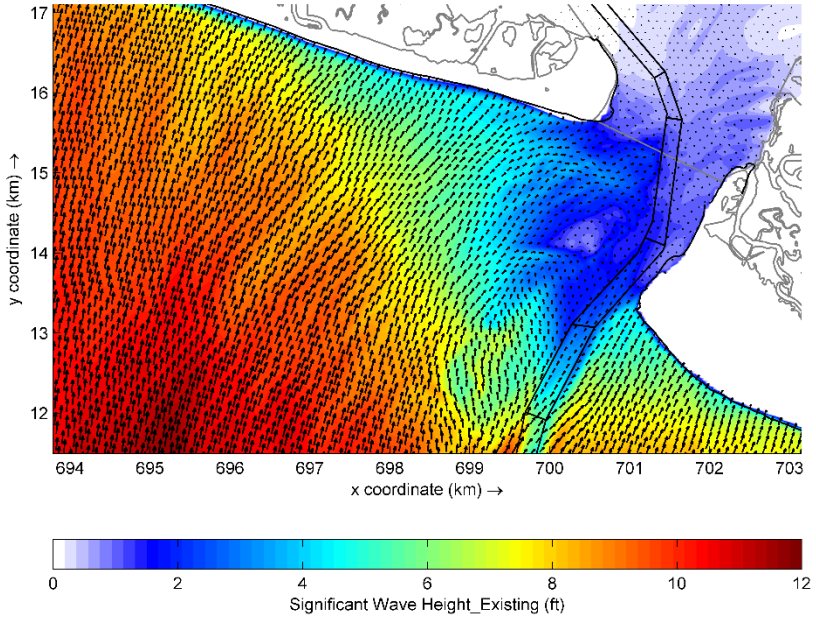


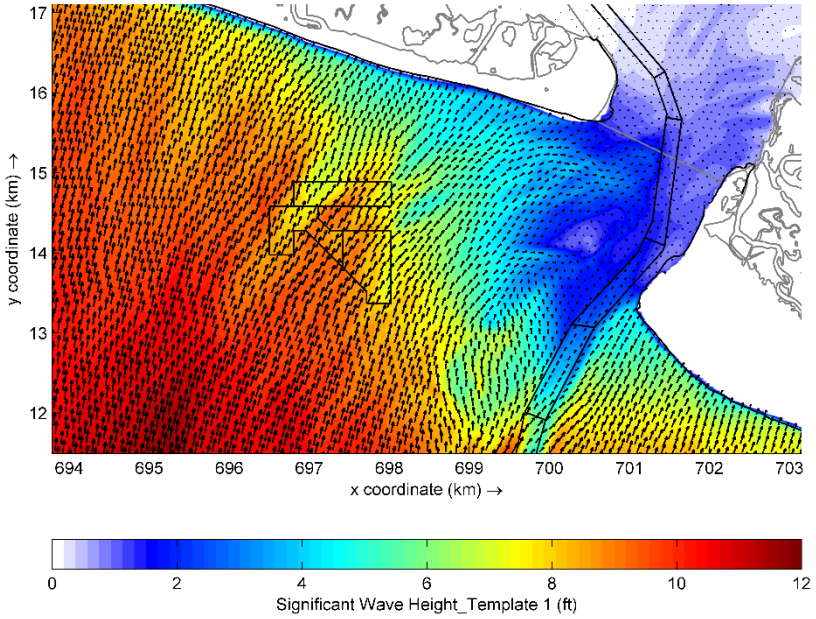


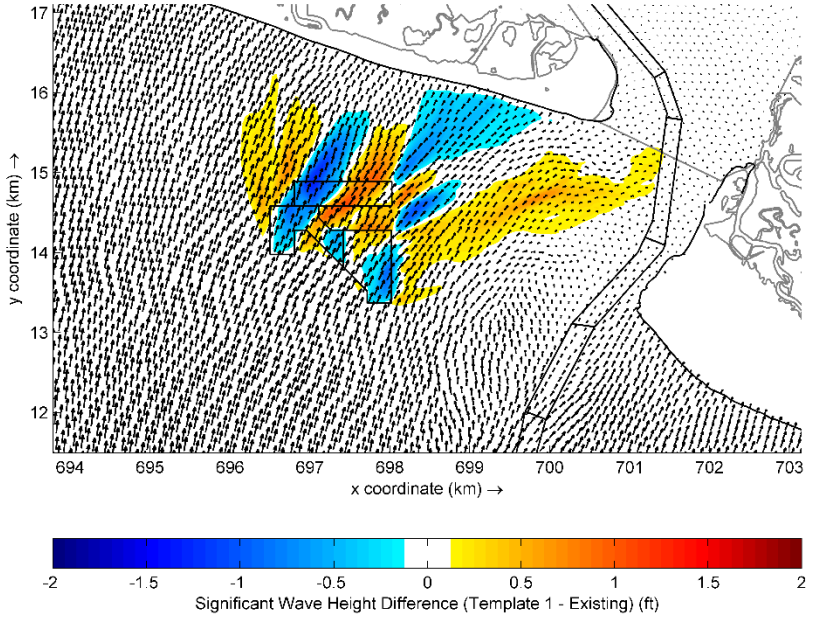
Offshore Wave Case47:

H_s = 20.7 ft, T_p = 12.0 s, Dir = 175.7 degN
Percent Occurrence = 0.004%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



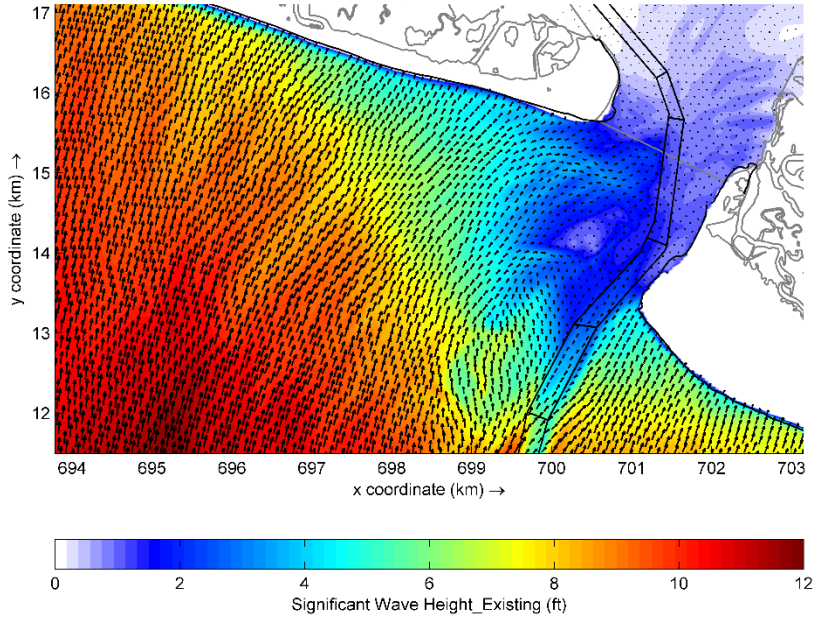


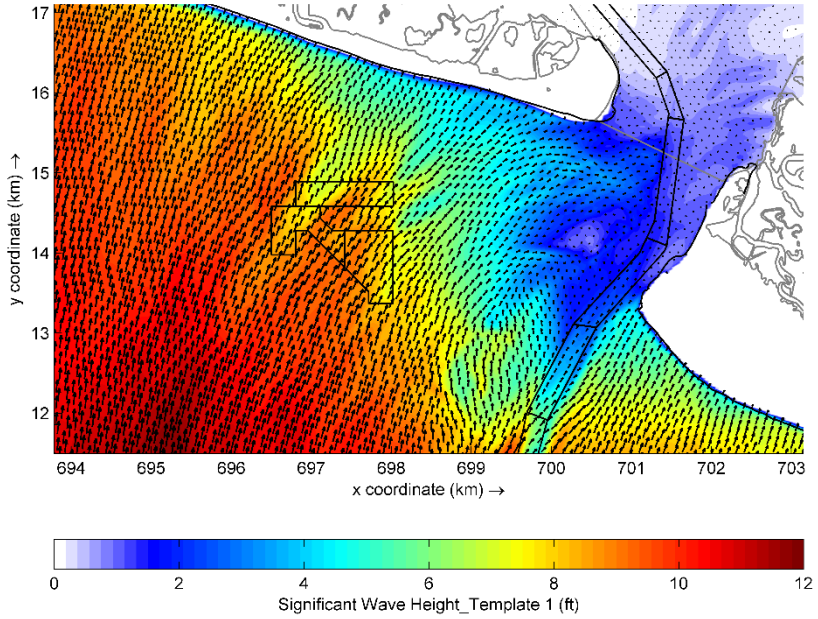


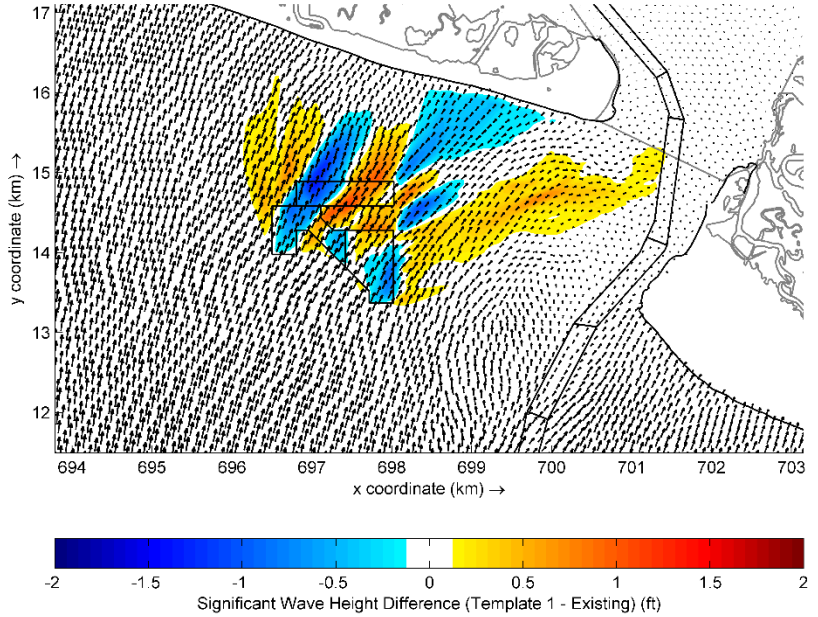
Offshore Wave Case48:

H_s = 25.8 ft, T_p = 13.8 s, Dir = 169.7 degN
Percent Occurrence = 0.002%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



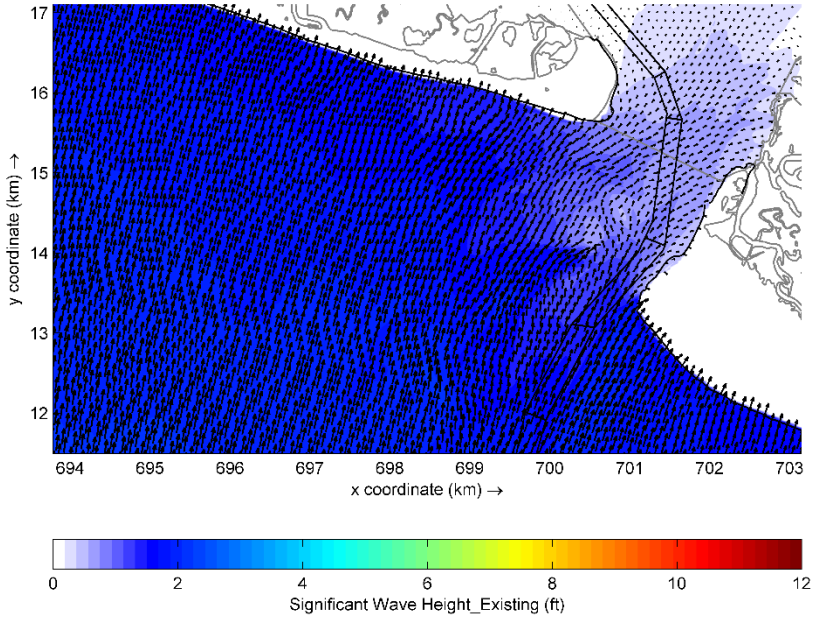


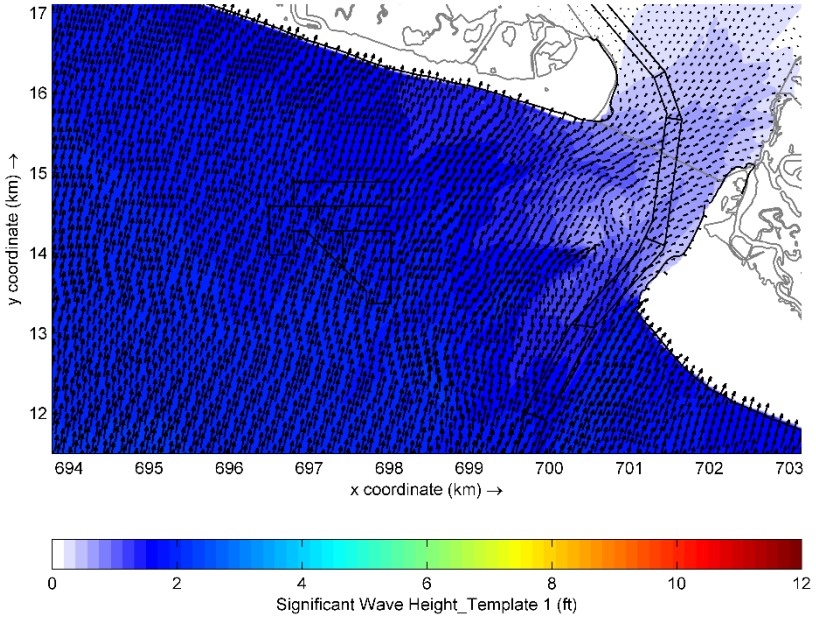


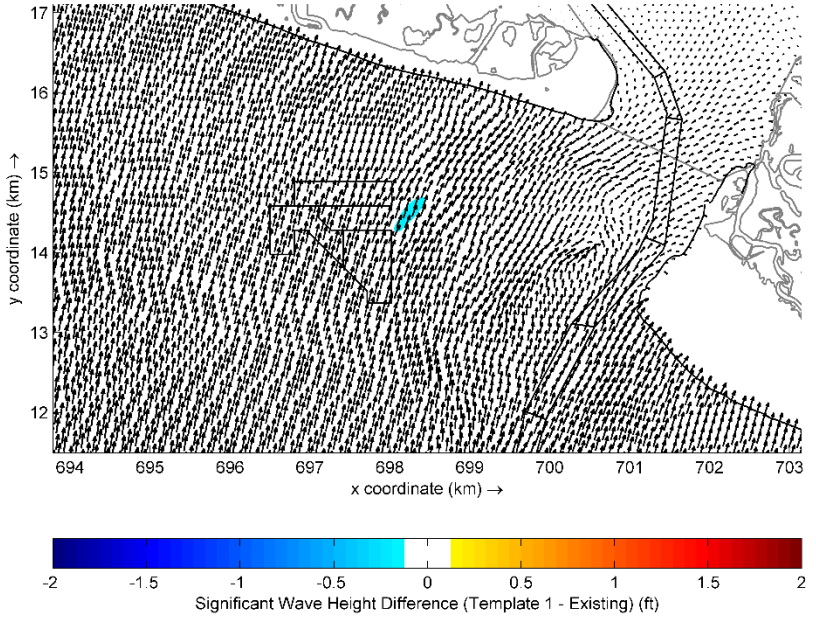
Offshore Wave Case49:

H_s = 26.8 ft, T_p = 14.2 s, Dir = 170.8 degN
Percent Occurrence = 0.002%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



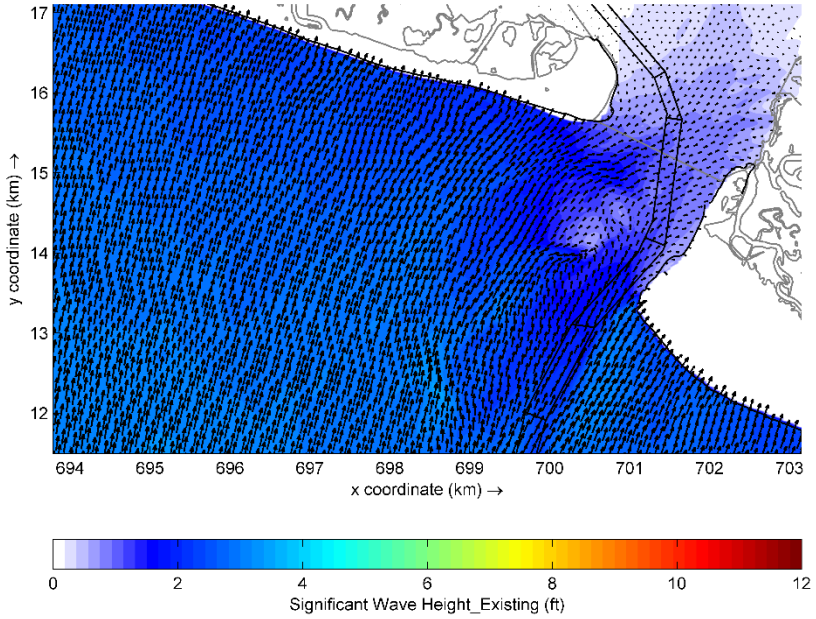


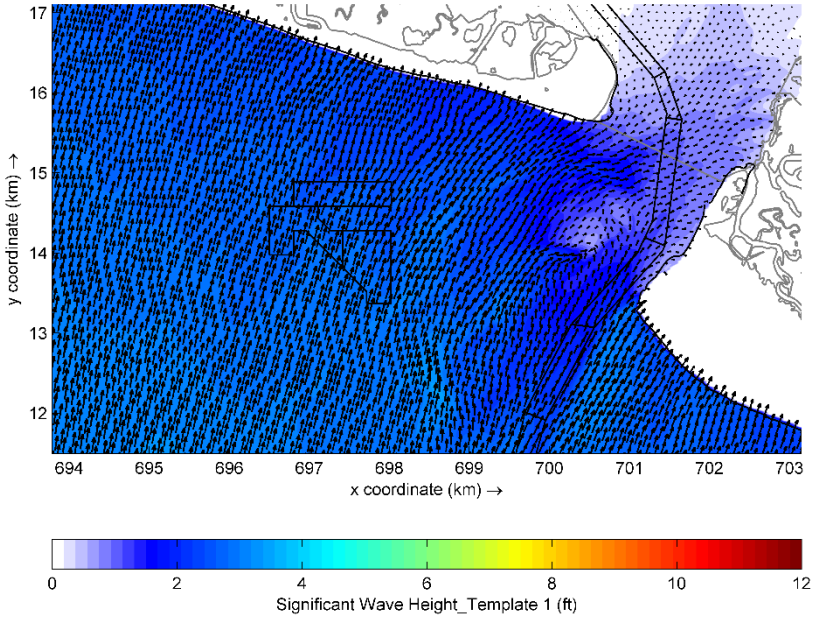


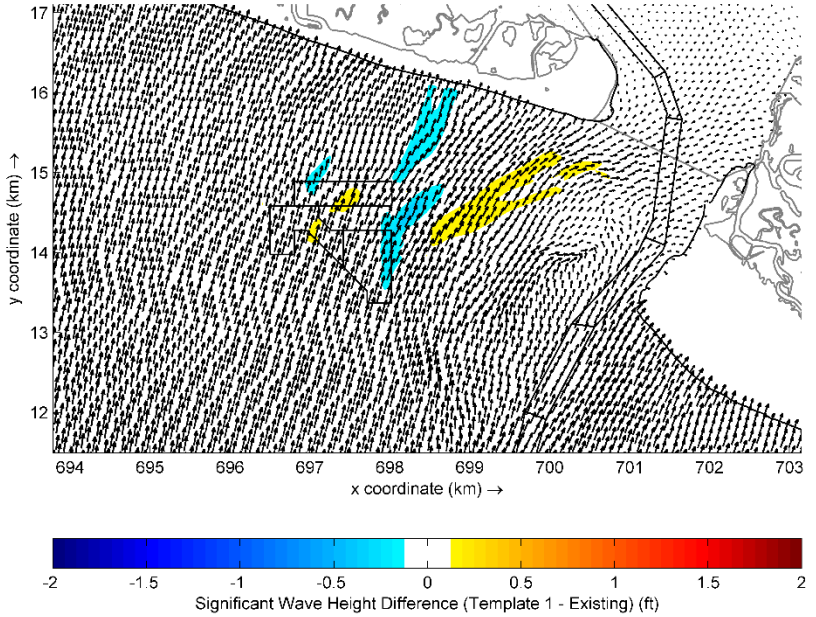
Offshore Wave Case50:

H_s = 2.7 ft, T_p = 5.5 s, Dir = 187.0 degN
Percent Occurrence = 1.607%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



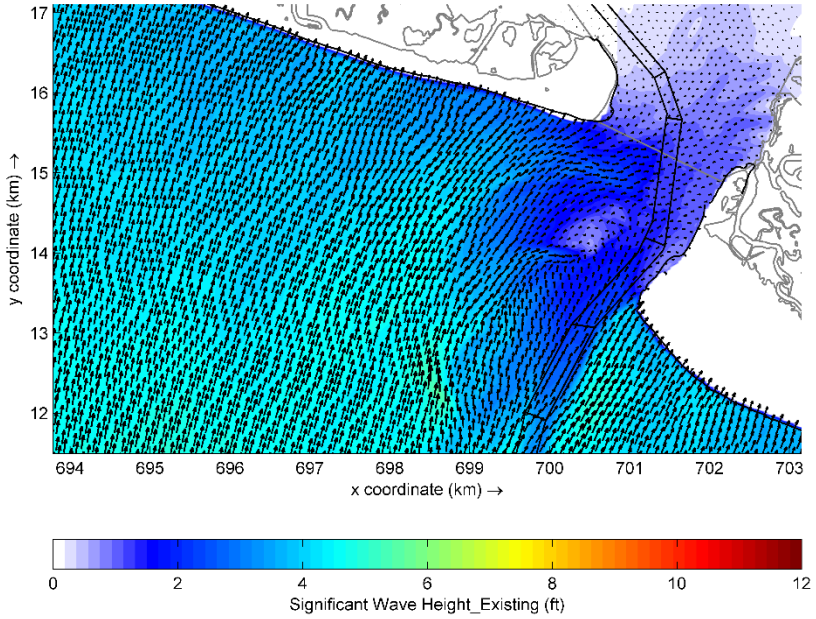


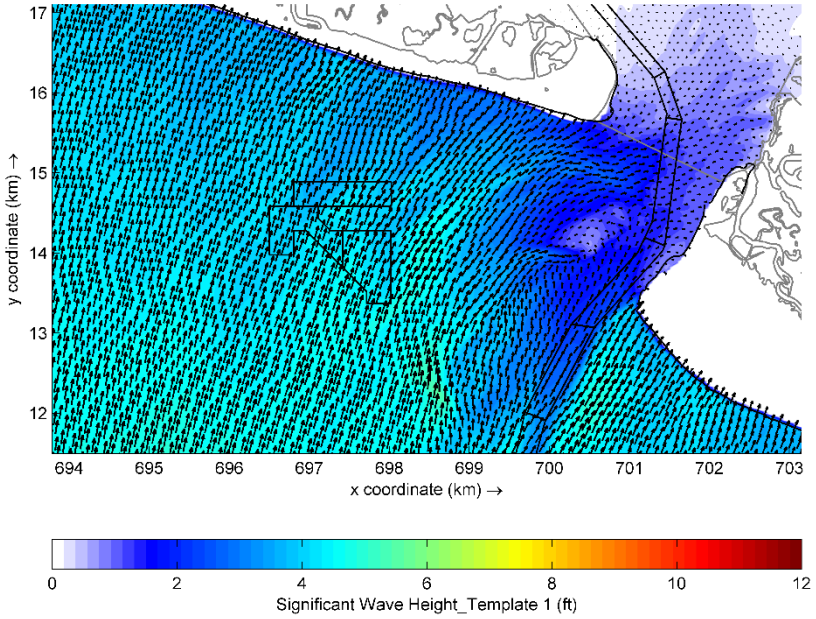


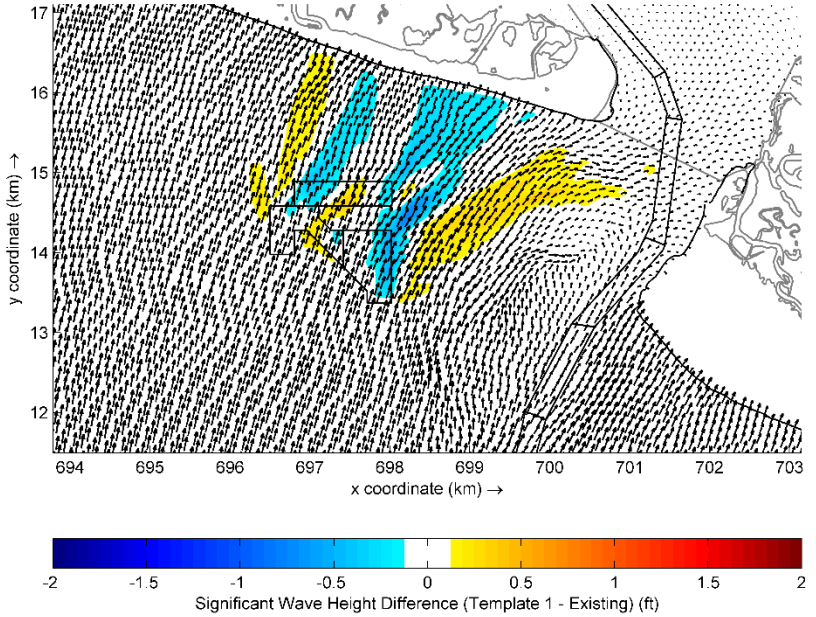
Offshore Wave Case51:

H_s = 4.5 ft, T_p = 6.4 s, Dir = 187.2 degN
Percent Occurrence = 3.474%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



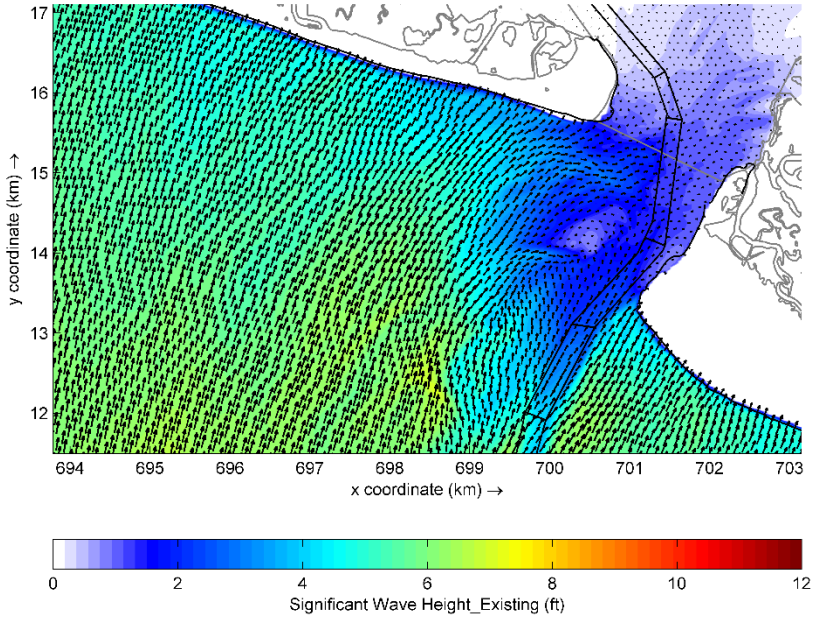


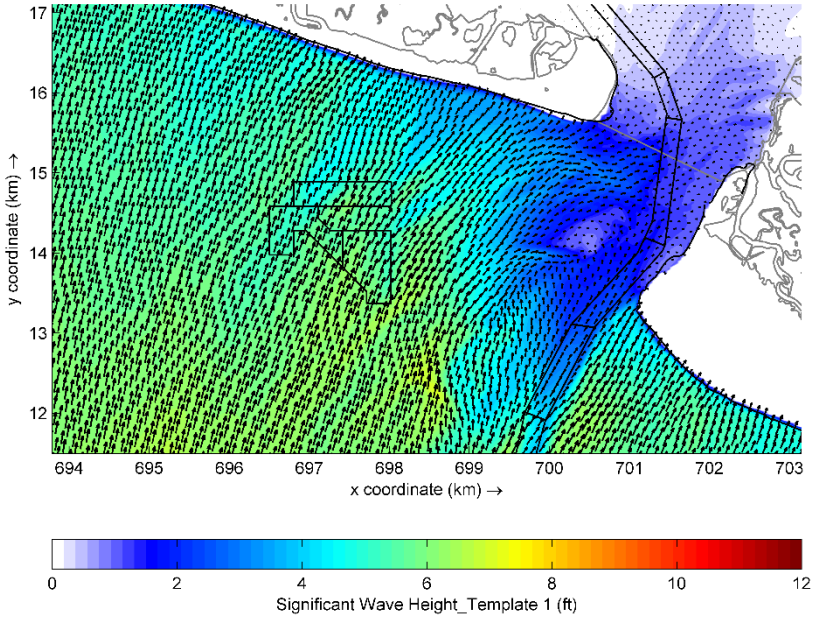


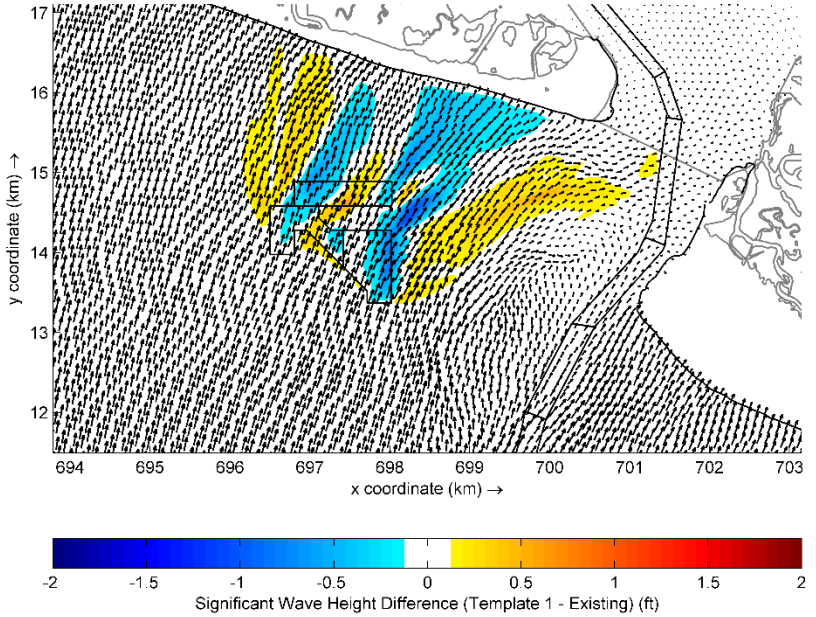
Offshore Wave Case52:

H_s = 7.9 ft, T_p = 8.0 s, Dir = 186.7 degN
Percent Occurrence = 1.063%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



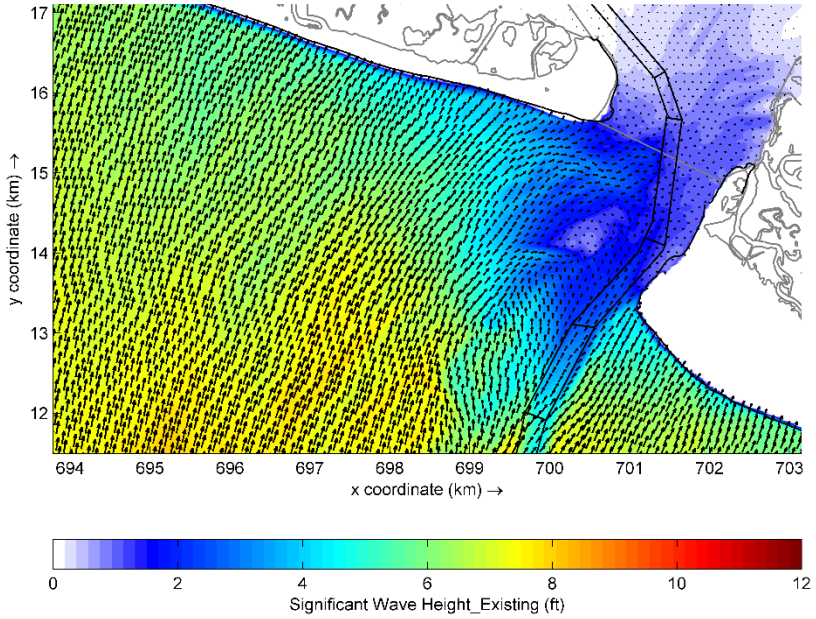


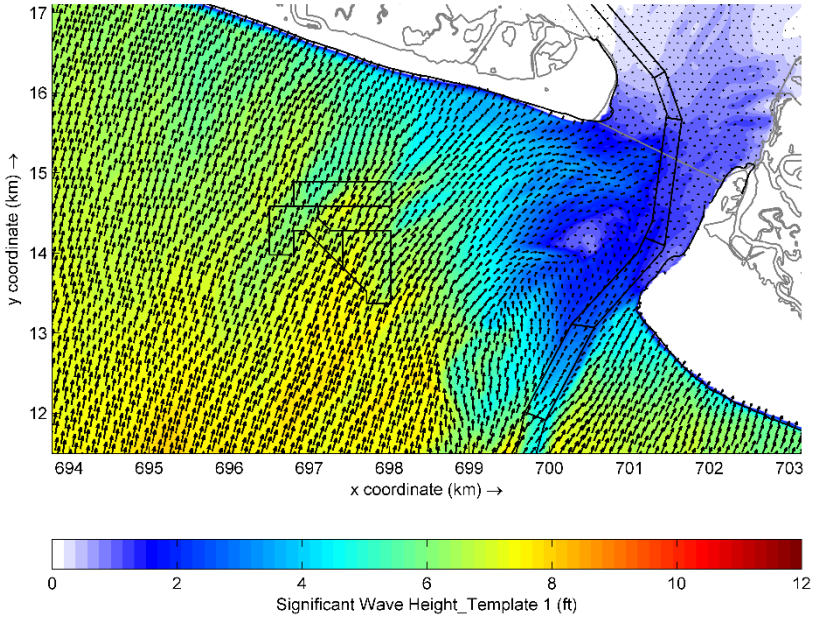


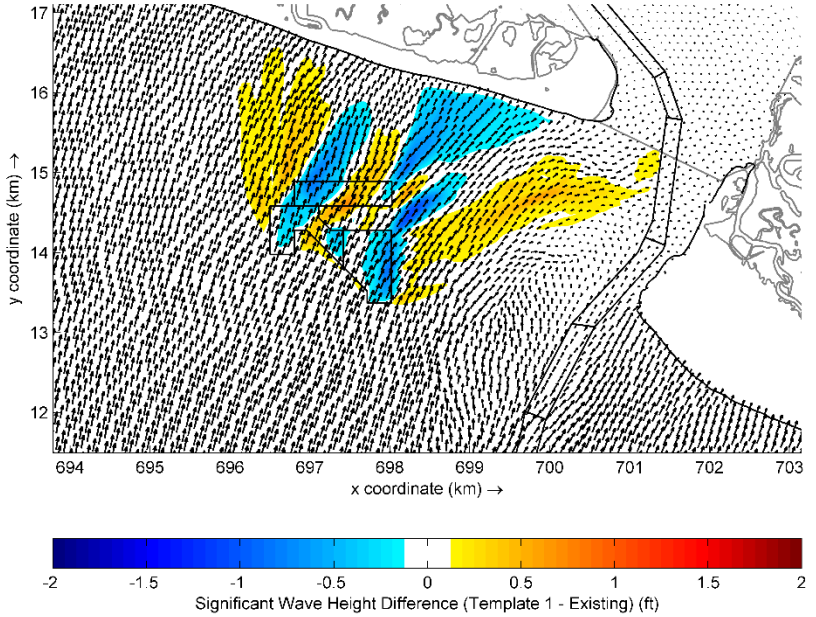
Offshore Wave Case53:

H_s = 11.2 ft, T_p = 9.2 s, Dir = 186.9 degN
Percent Occurrence = 0.232%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



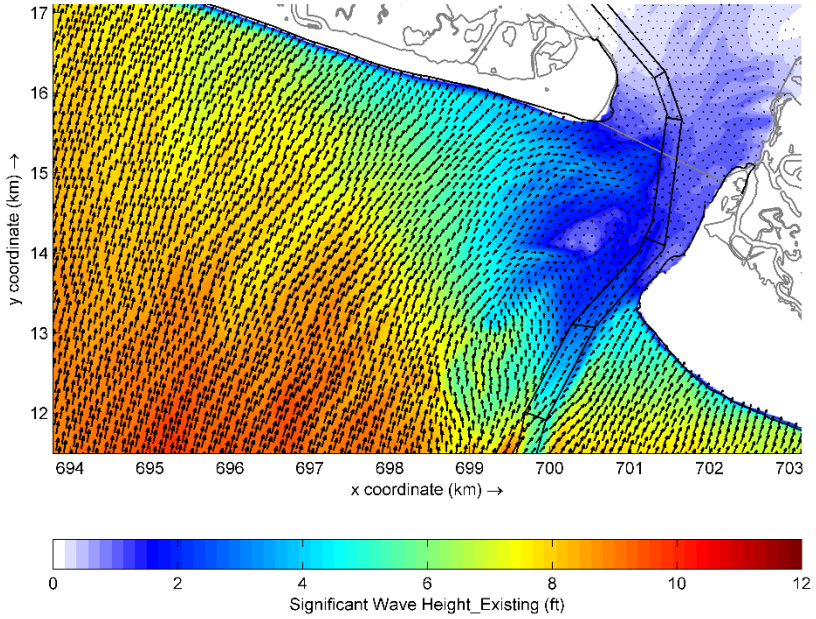


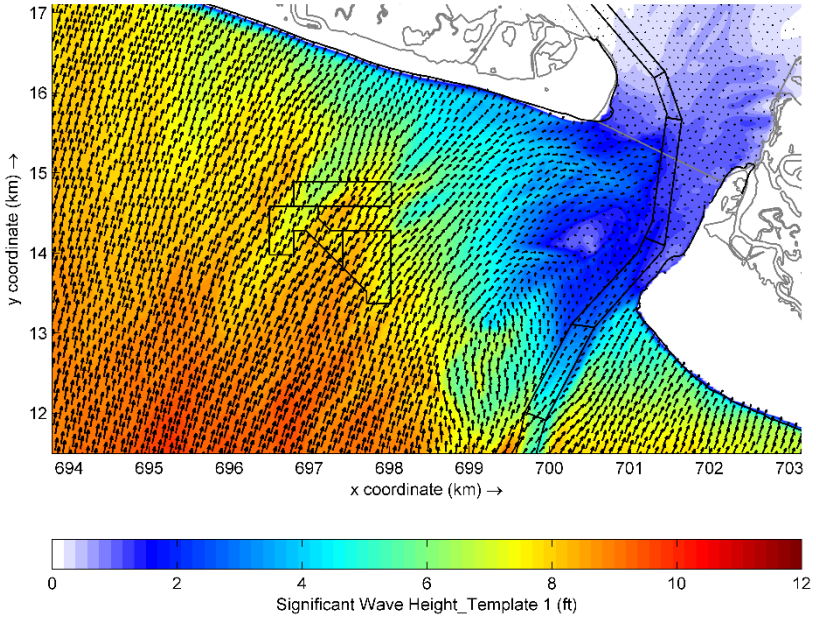


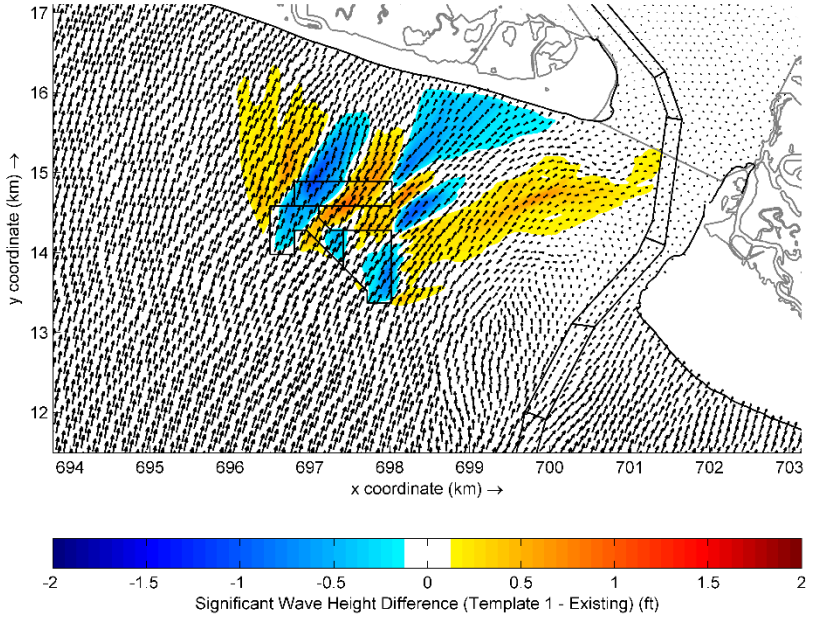
Offshore Wave Case54:

H_s = 14.2 ft, T_p = 10.0 s, Dir = 186.9 degN
Percent Occurrence = 0.050%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



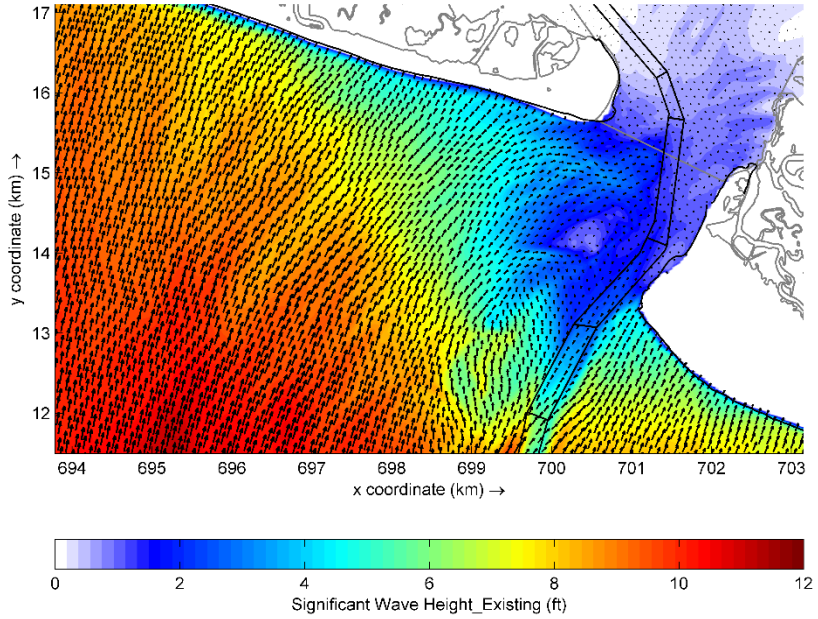


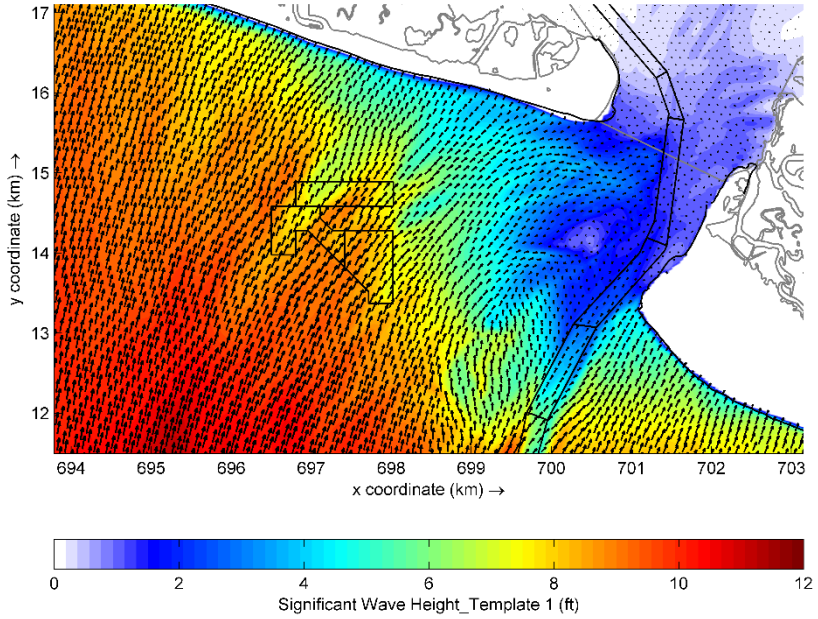


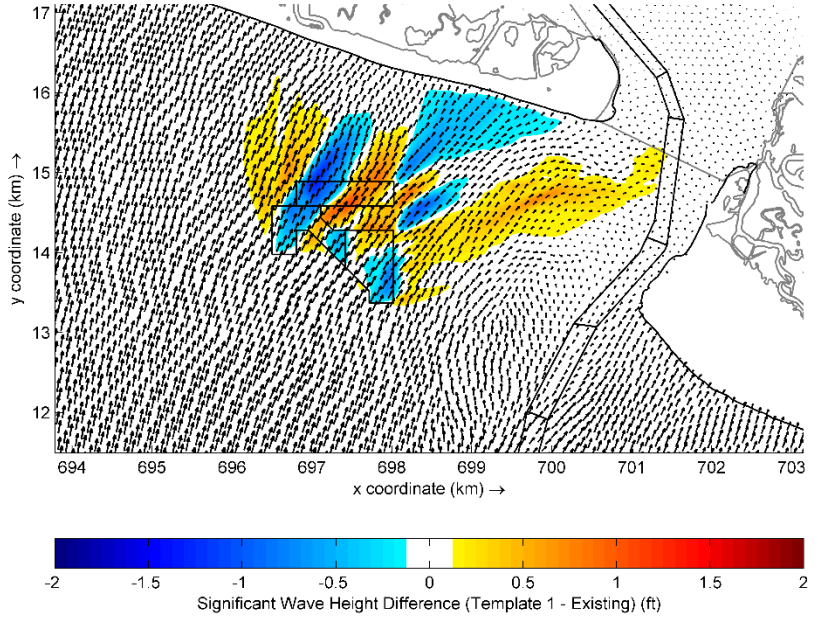
Offshore Wave Case55:

H_s = 17.6 ft, T_p = 11.2 s, Dir = 186.6 degN
Percent Occurrence = 0.005%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



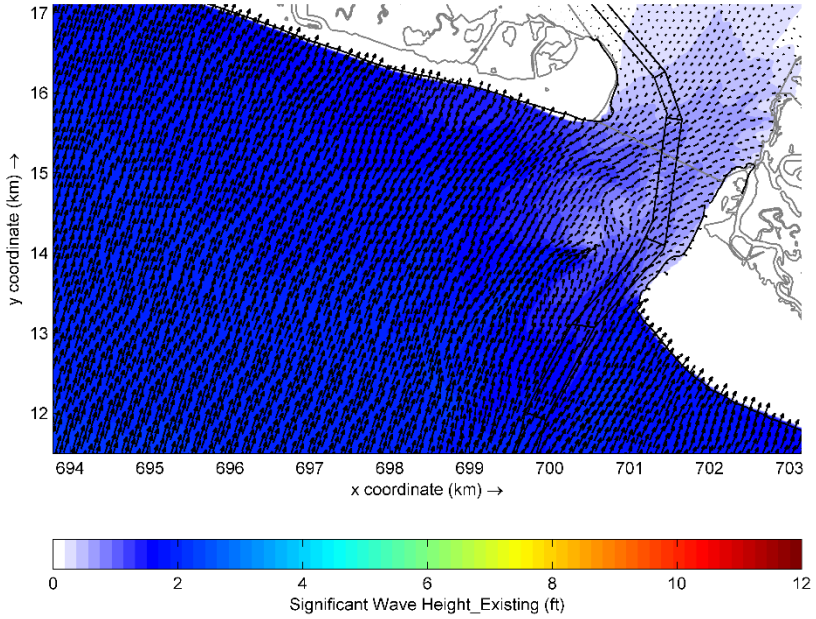


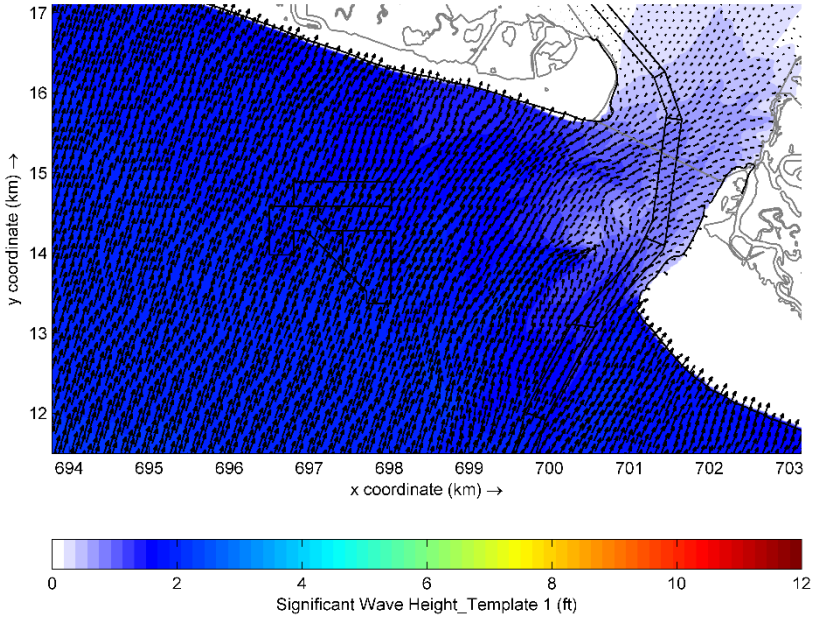


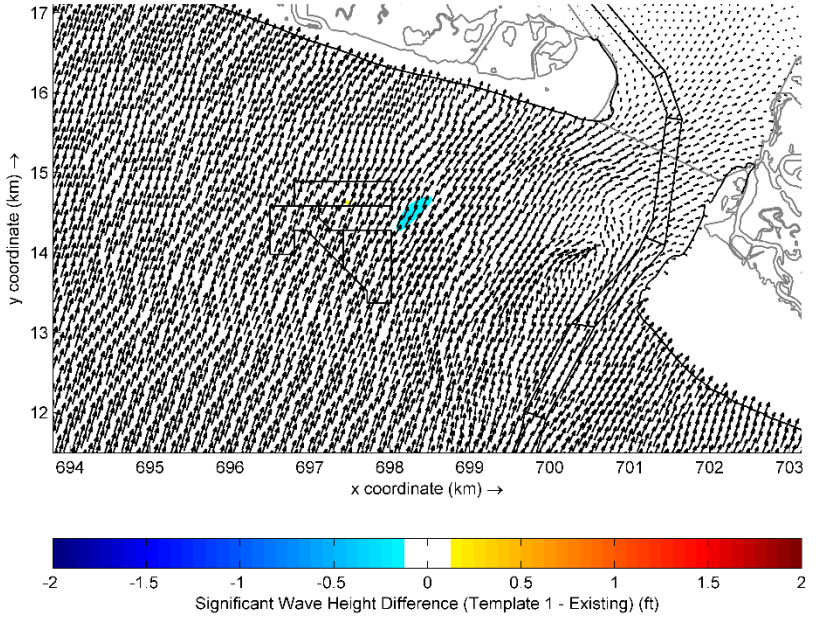
Offshore Wave Case56:

H_s = 20.2 ft, T_p = 12.8 s, Dir = 183.0 degN
Percent Occurrence = 0.001%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



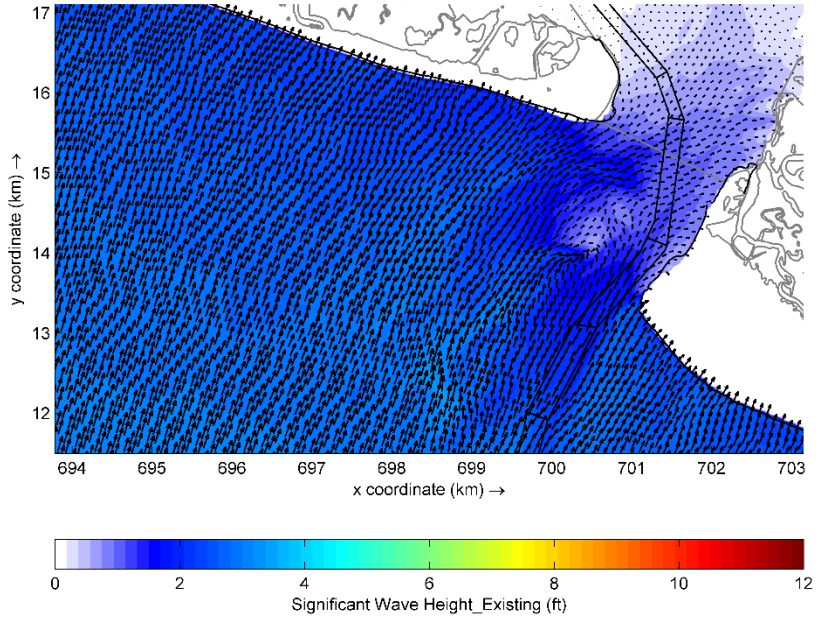


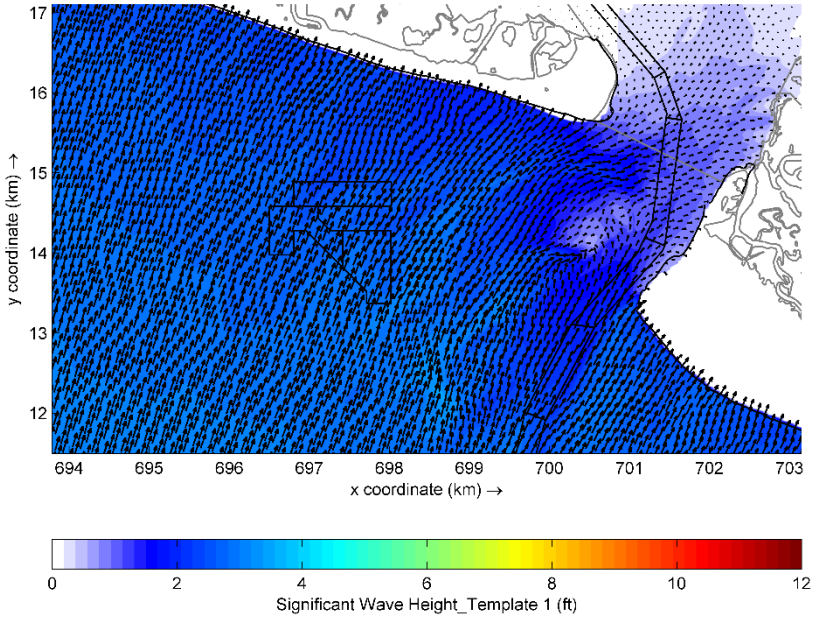


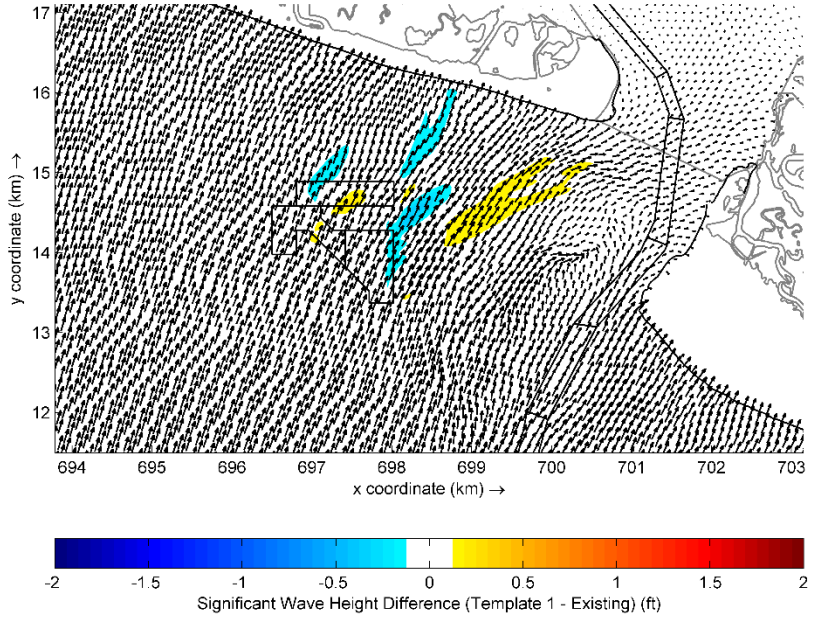
Offshore Wave Case57:

H_s = 2.7 ft, T_p = 5.1 s, Dir = 202.1 degN
Percent Occurrence = 1.613%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



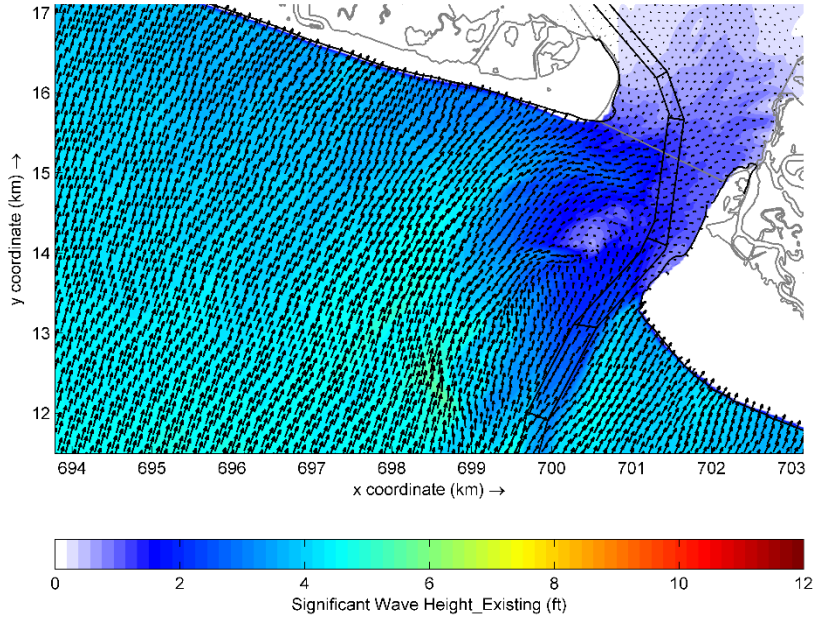


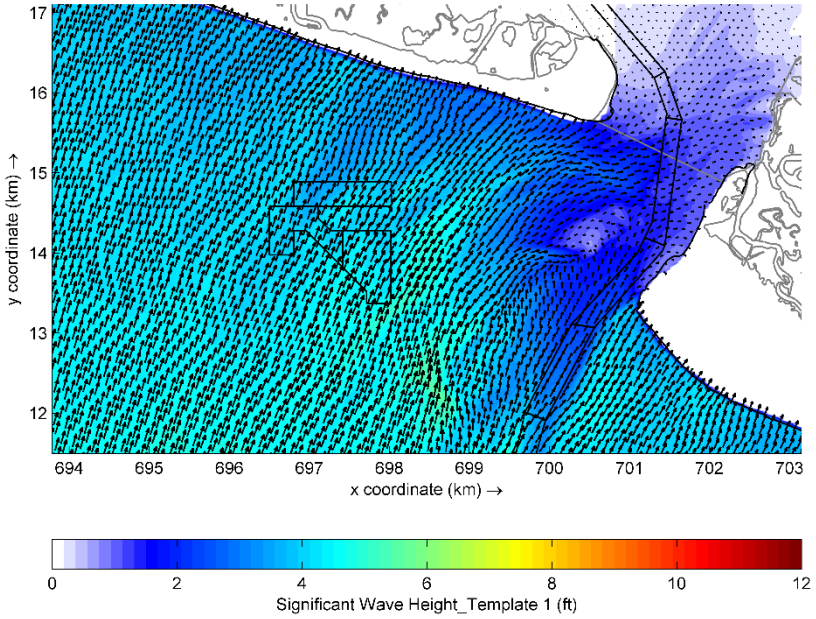


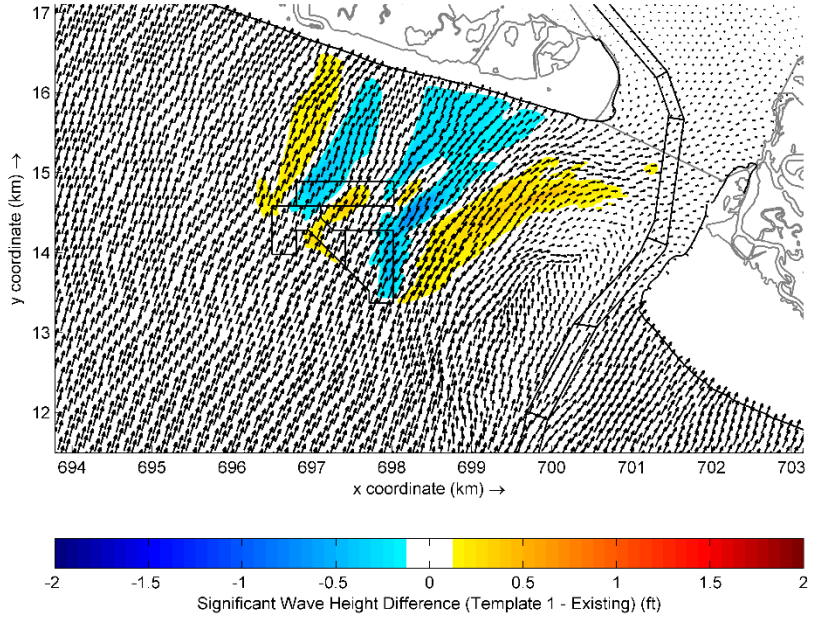
Offshore Wave Case58:

H_s = 4.5 ft, T_p = 6.0 s, Dir = 202.4 degN
Percent Occurrence = 3.239%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



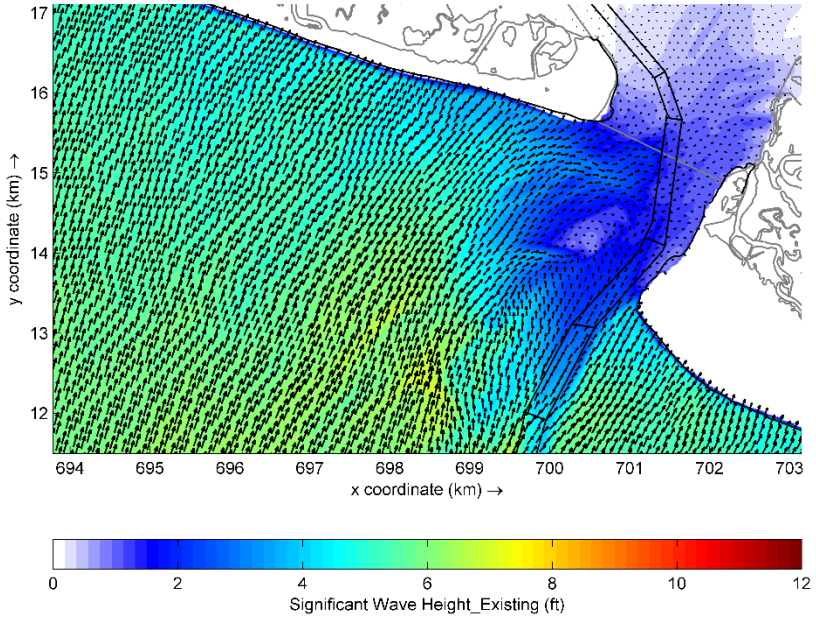


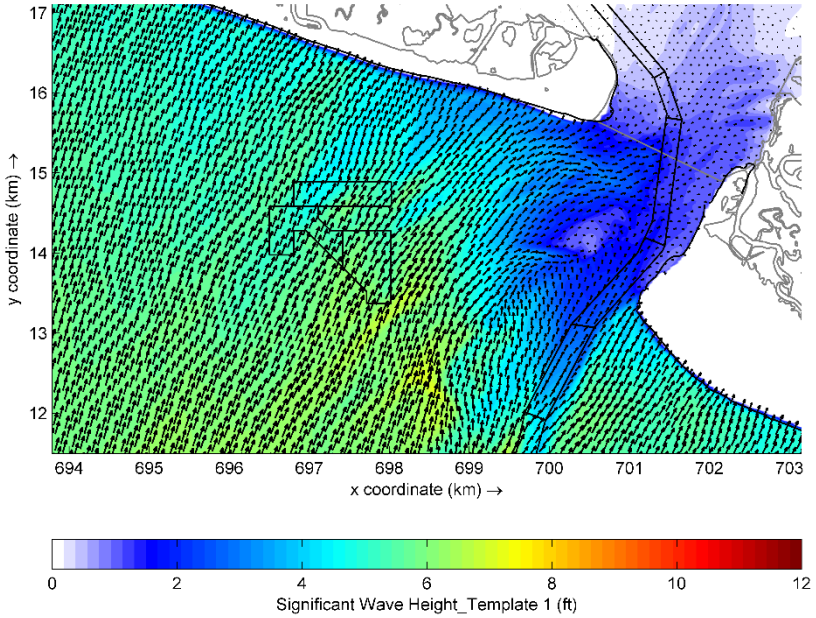


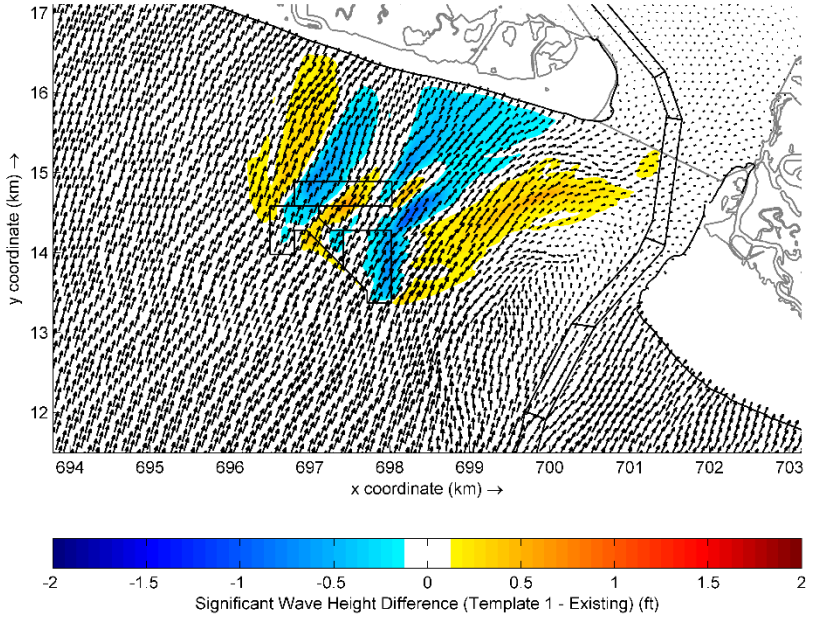
Offshore Wave Case59:

H_s = 7.8 ft, T_p = 7.6 s, Dir = 201.7 degN
Percent Occurrence = 0.727%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



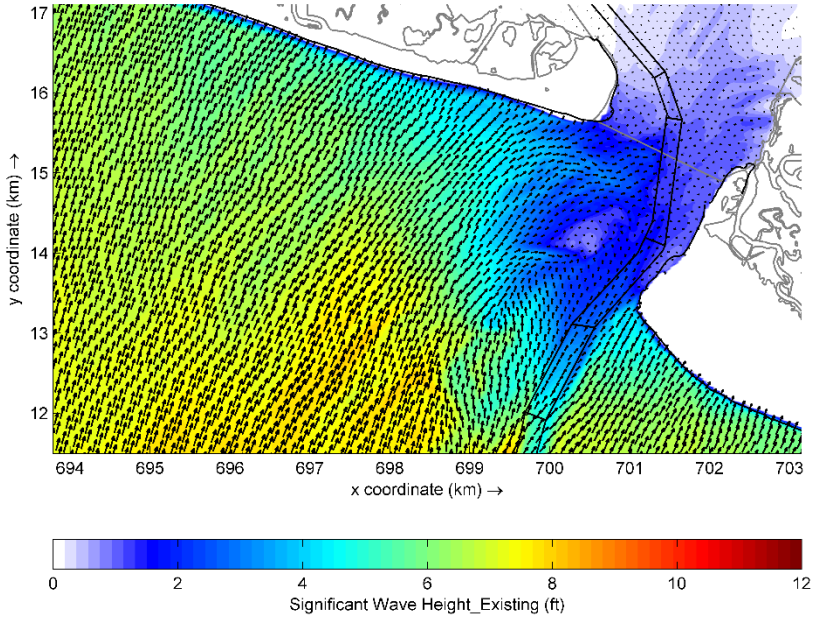


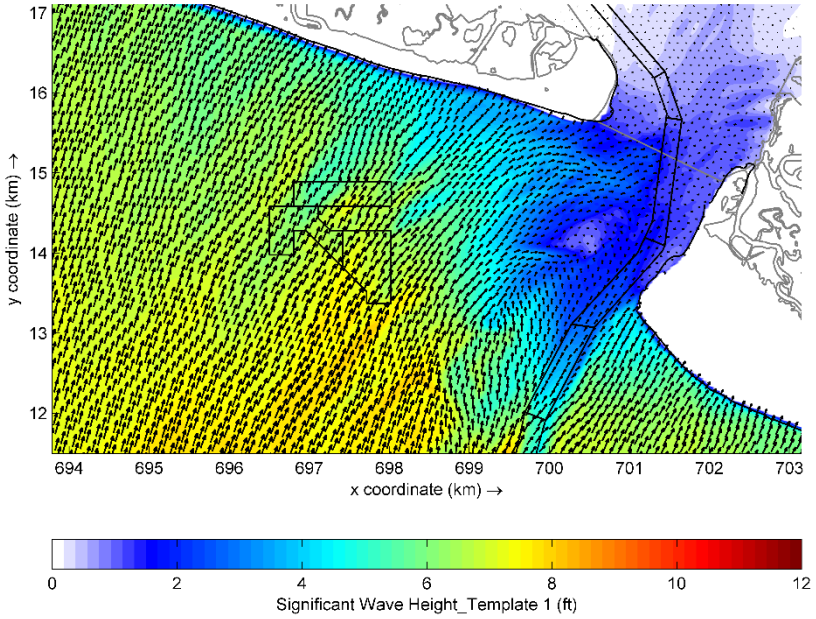


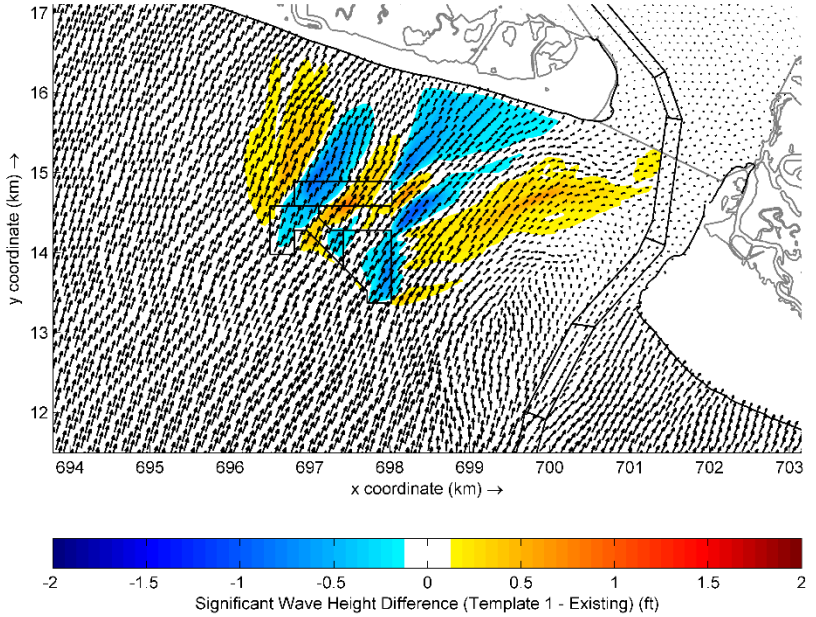
Offshore Wave Case60:

H_s = 11.1 ft, T_p = 8.9 s, Dir = 201.9 degN
Percent Occurrence = 0.189%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



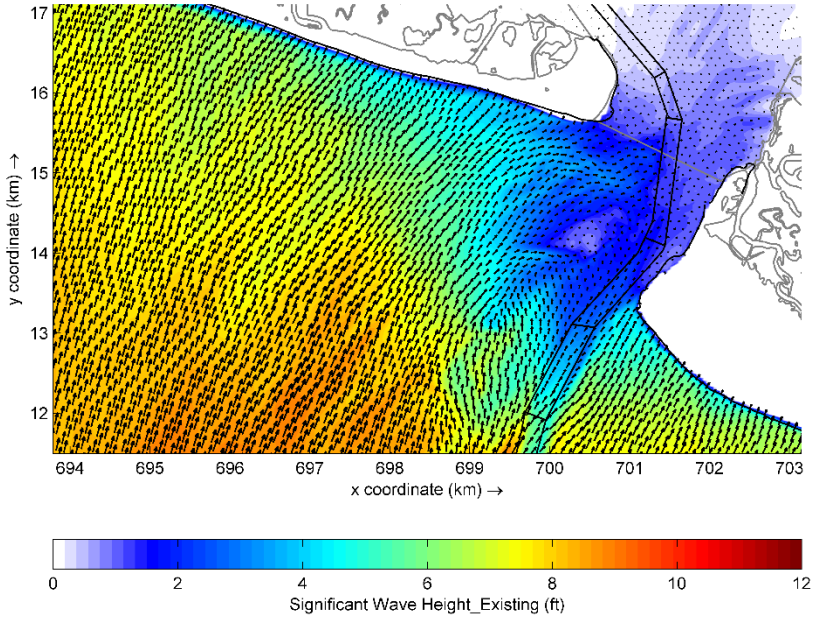


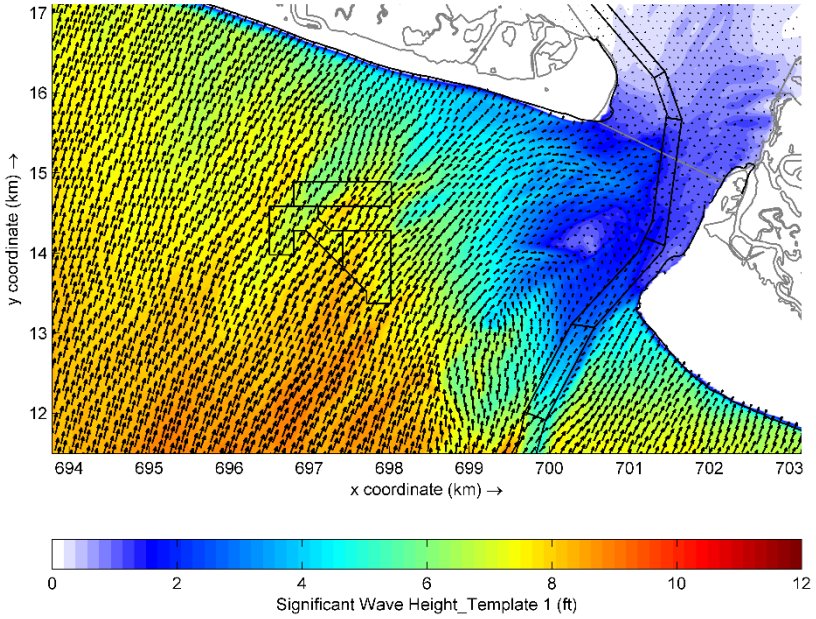


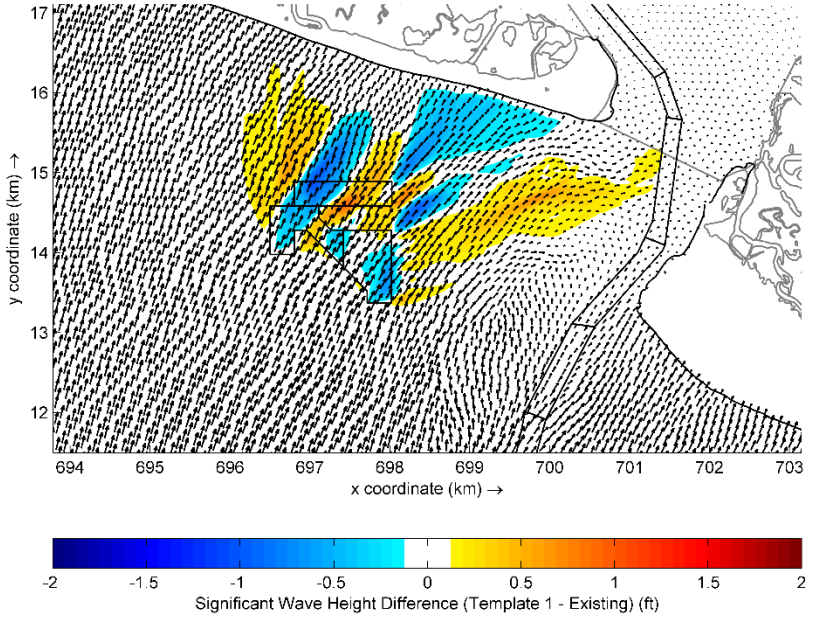
Offshore Wave Case61:

H_s = 14.3 ft, T_p = 9.4 s, Dir = 201.9 degN
Percent Occurrence = 0.040%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



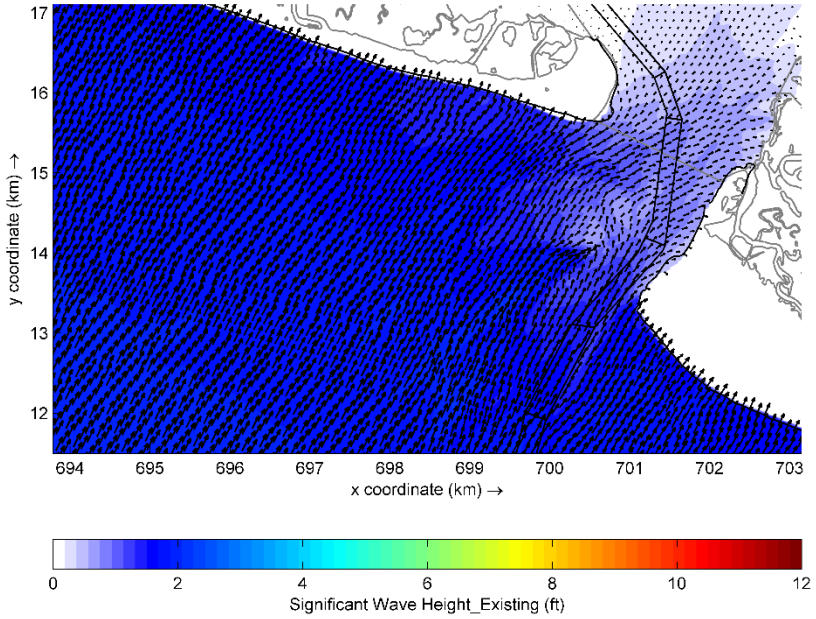


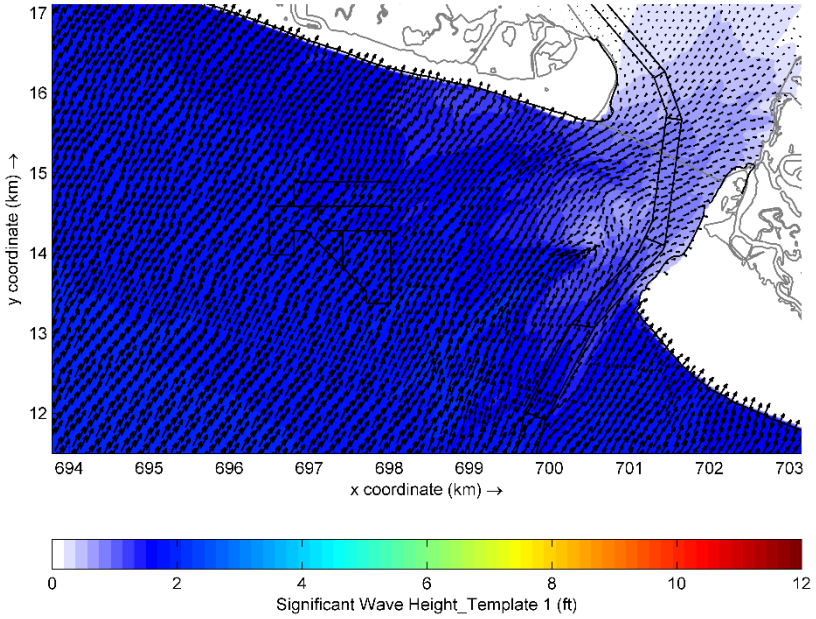


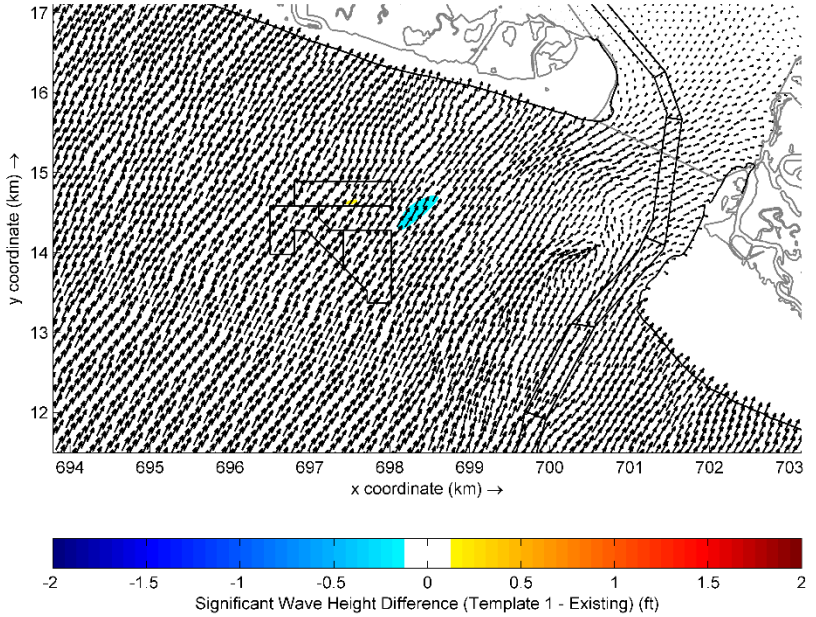
Offshore Wave Case62:

H_s = 17.0 ft, T_p = 10.0 s, Dir = 199.6 degN
Percent Occurrence = 0.003%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



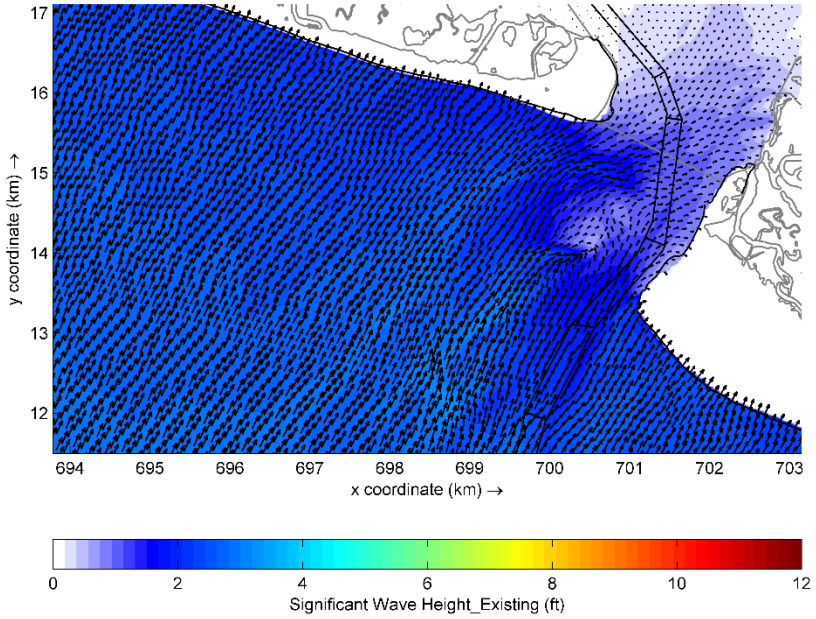


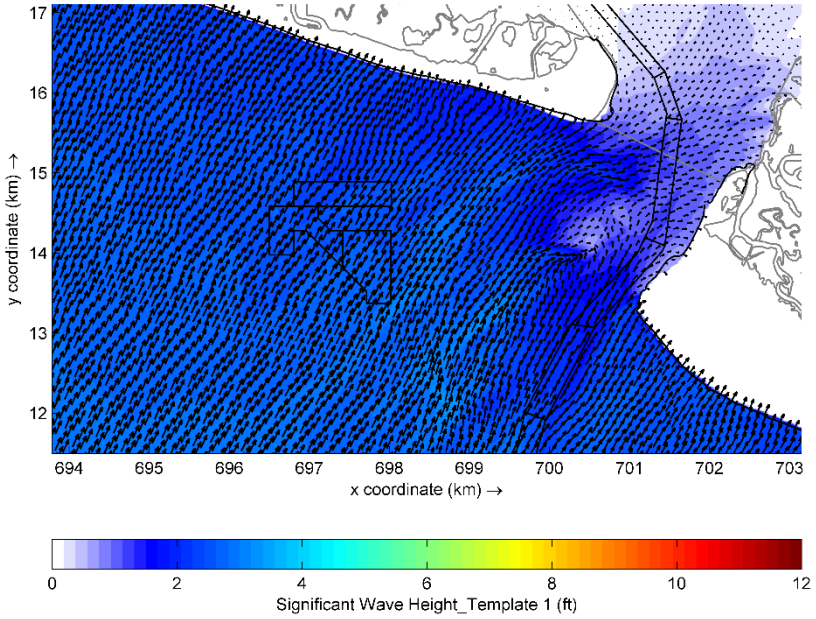


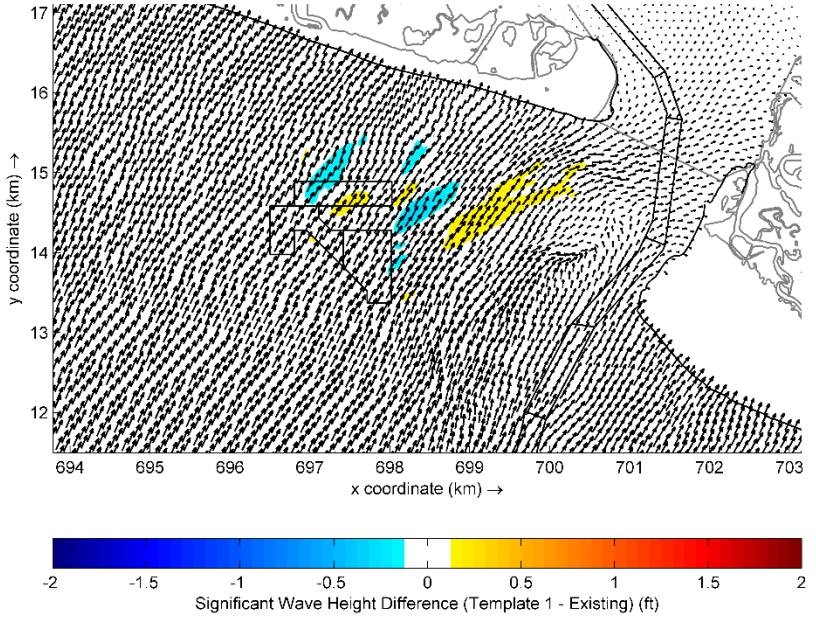
Offshore Wave Case63:

H_s = 2.7 ft, T_p = 4.9 s, Dir = 216.8 degN
Percent Occurrence = 1.319%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



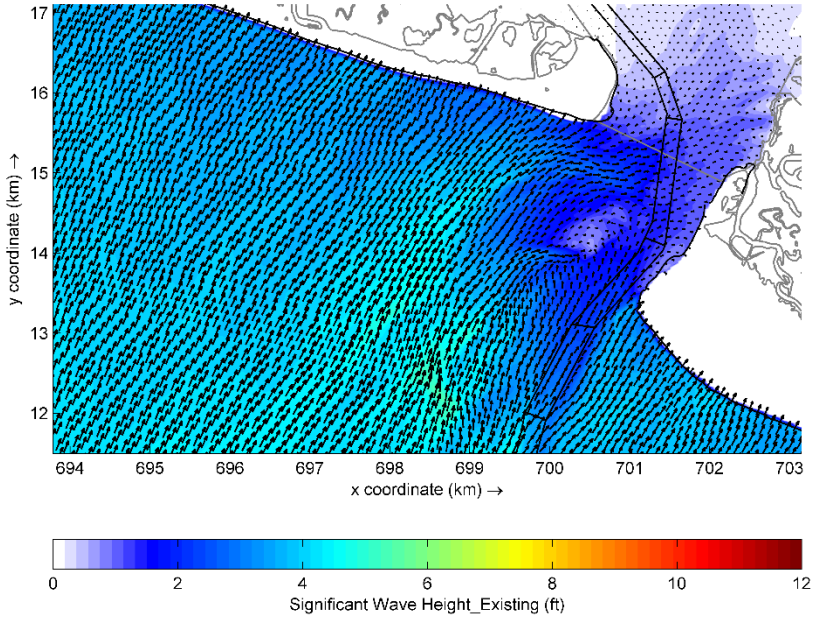


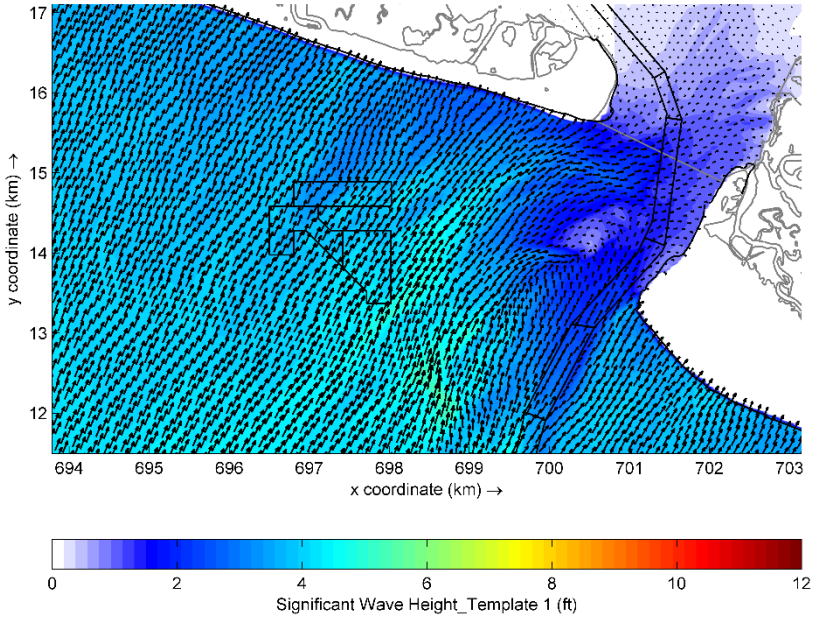


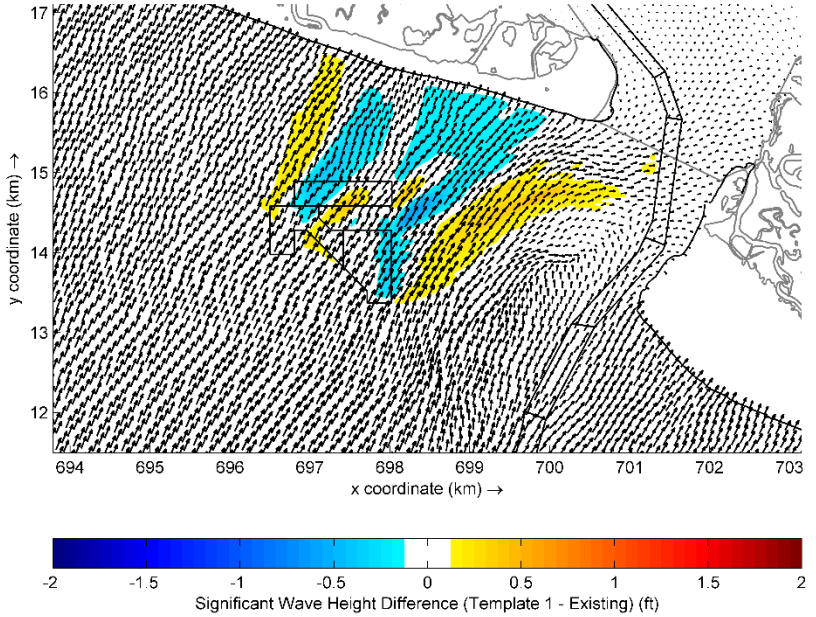
Offshore Wave Case64:

H_s = 4.6 ft, T_p = 5.8 s, Dir = 217.1 degN
Percent Occurrence = 3.141%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



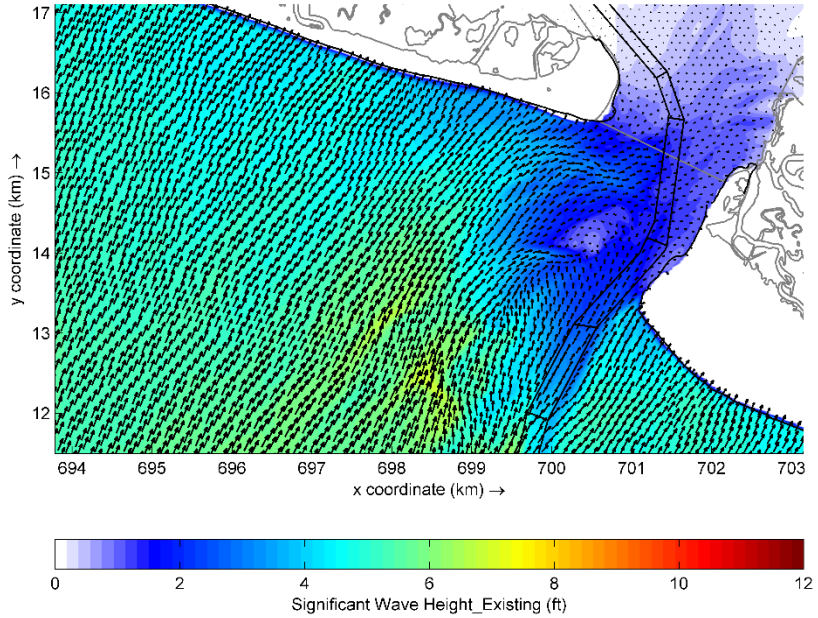


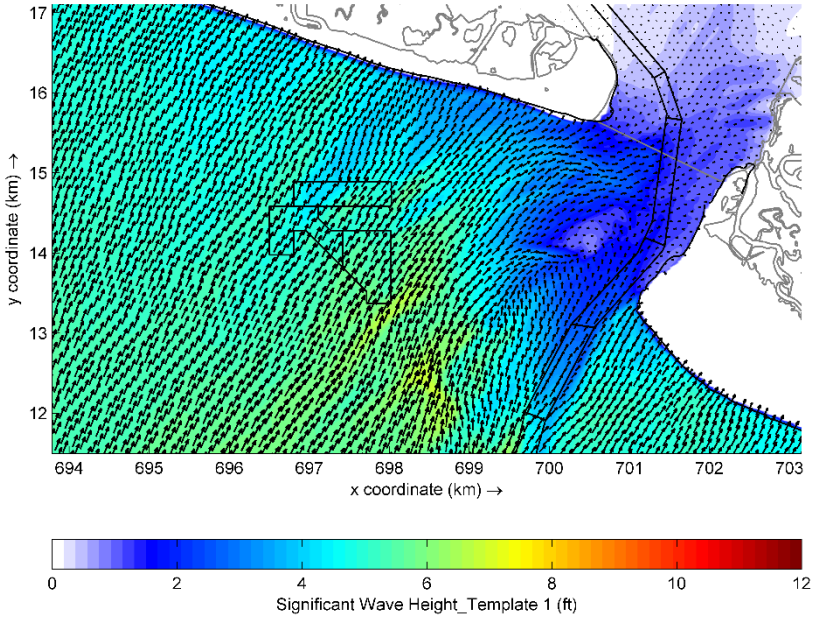


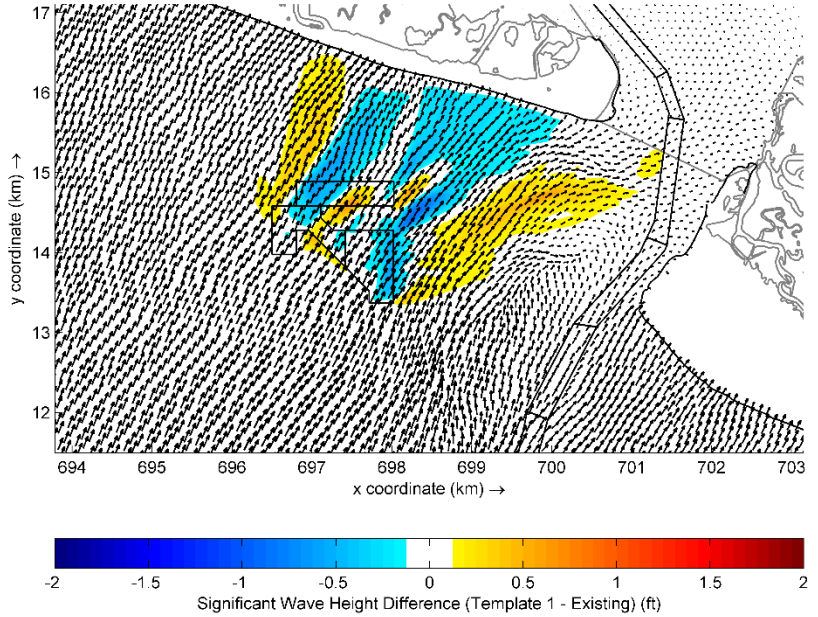
Offshore Wave Case65:

H_s = 7.7 ft, T_p = 7.2 s, Dir = 217.4 degN
Percent Occurrence = 0.666%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



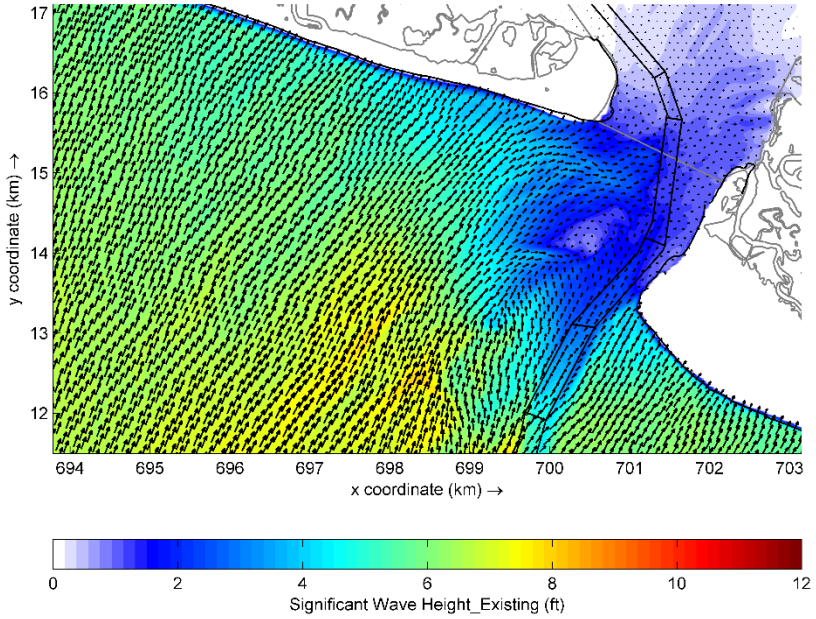


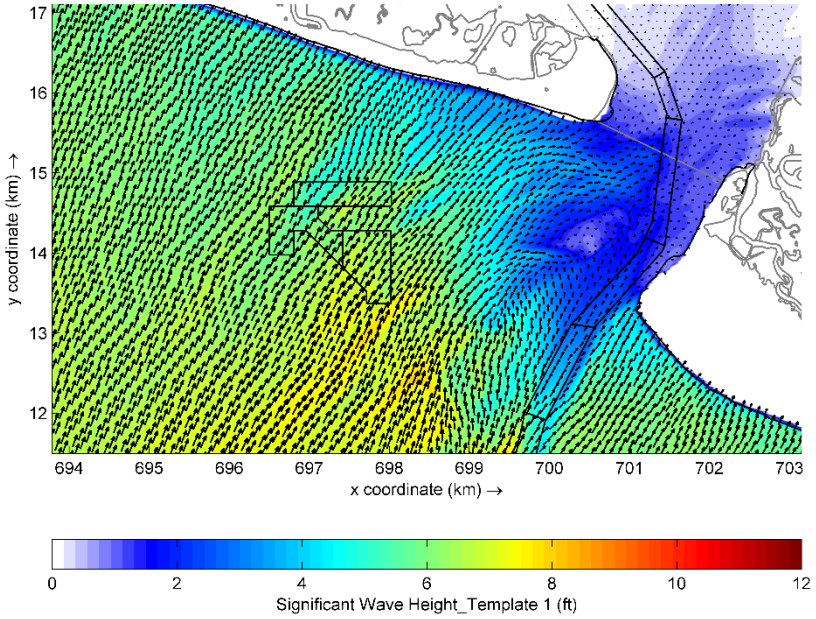


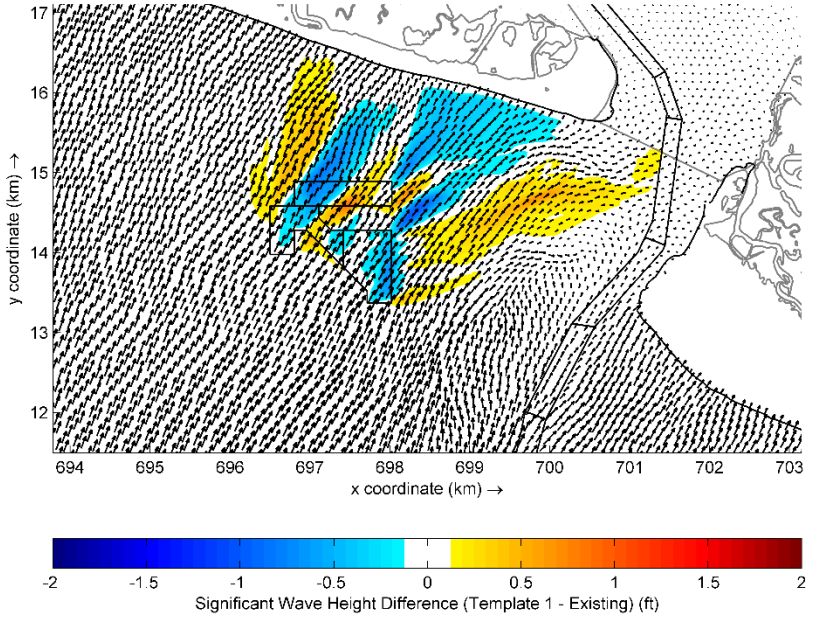
Offshore Wave Case66:

H_s = 11.0 ft, T_p = 8.3 s, Dir = 217.9 degN
Percent Occurrence = 0.115%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



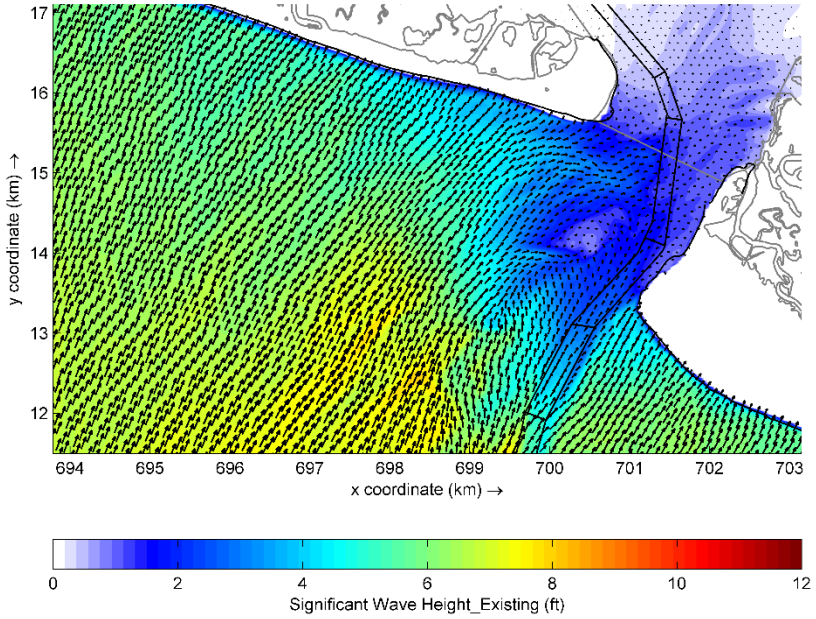


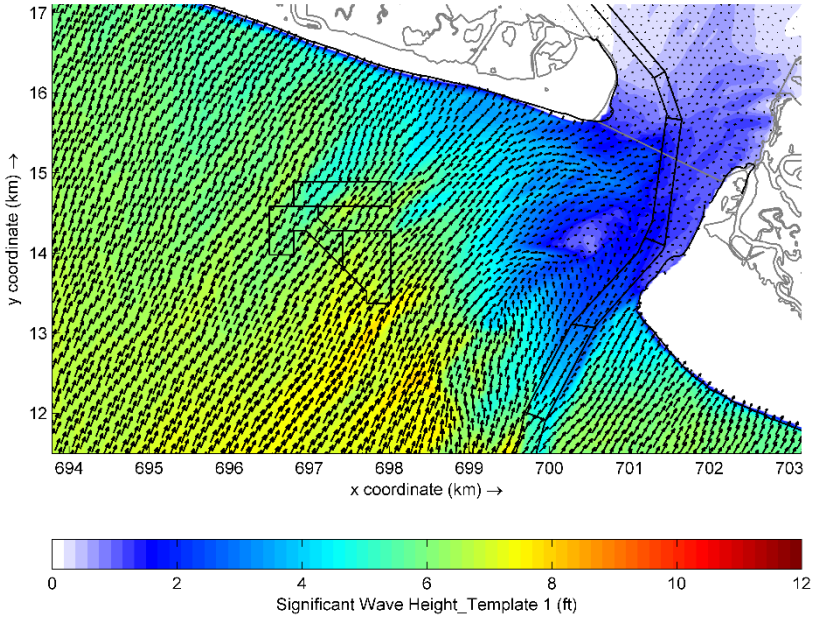


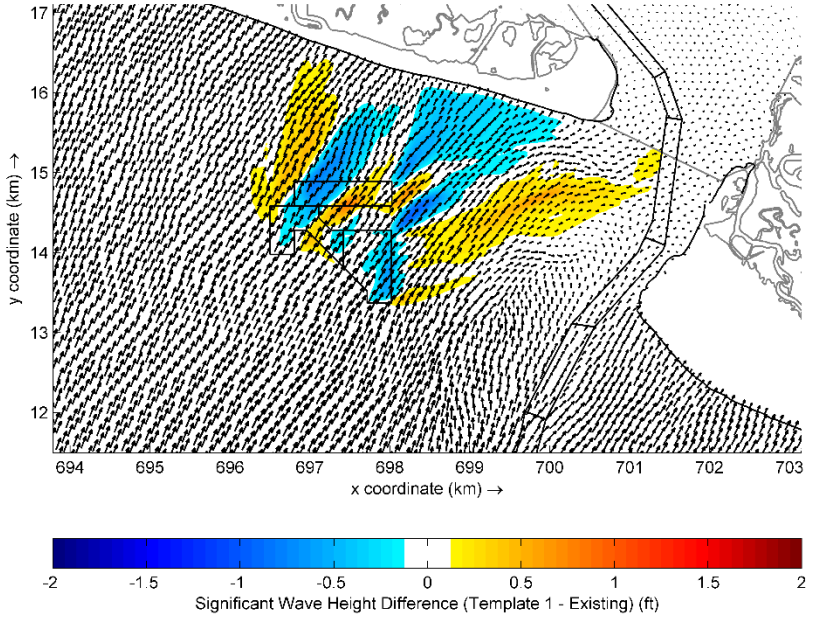
Offshore Wave Case67:

H_s = 14.2 ft, T_p = 9.2 s, Dir = 215.3 degN
Percent Occurrence = 0.015%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



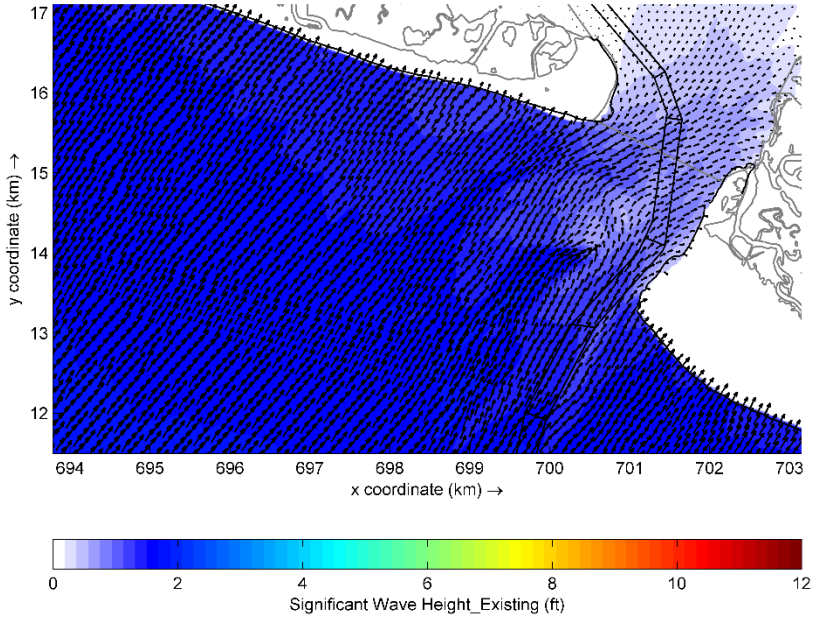


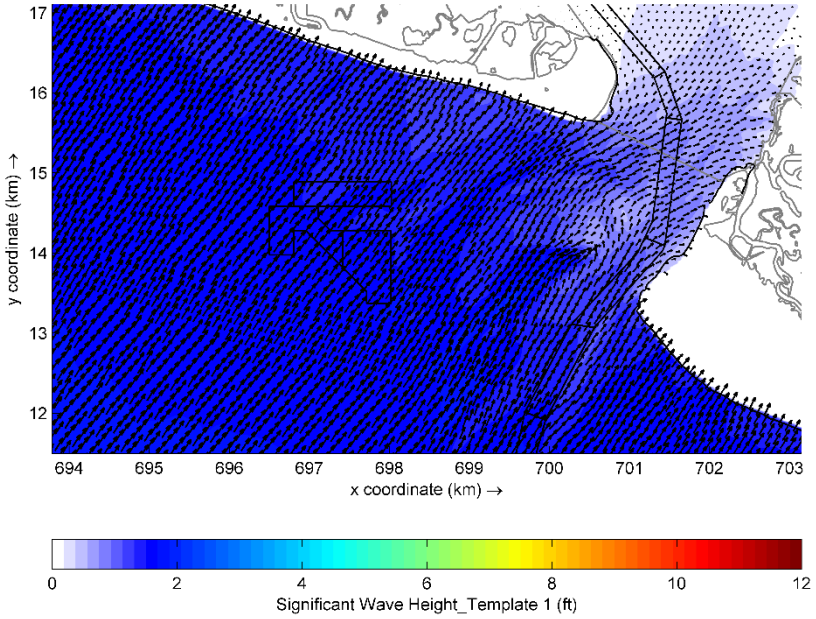


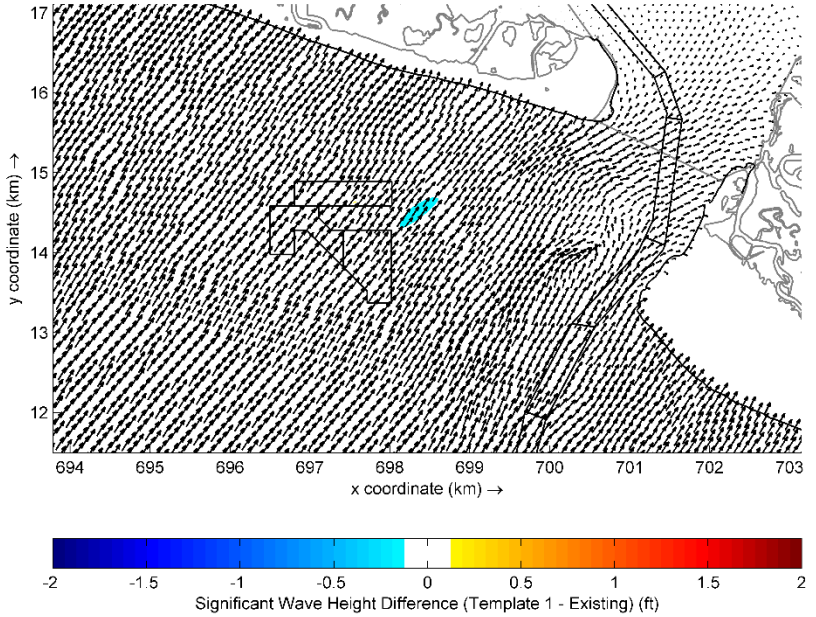
Offshore Wave Case68:

H_s = 16.8 ft, T_p = 8.3 s, Dir = 219.7 degN
Percent Occurrence = 0.001%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



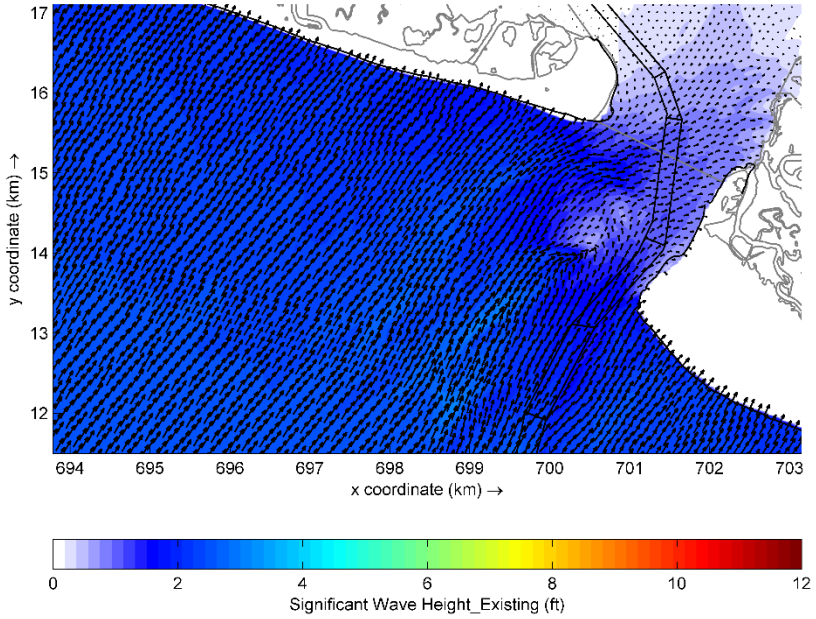


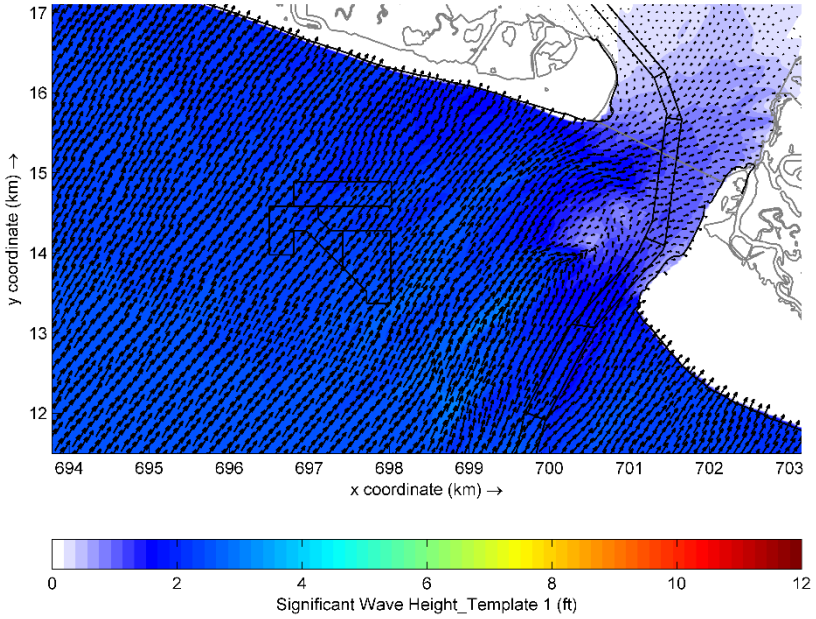


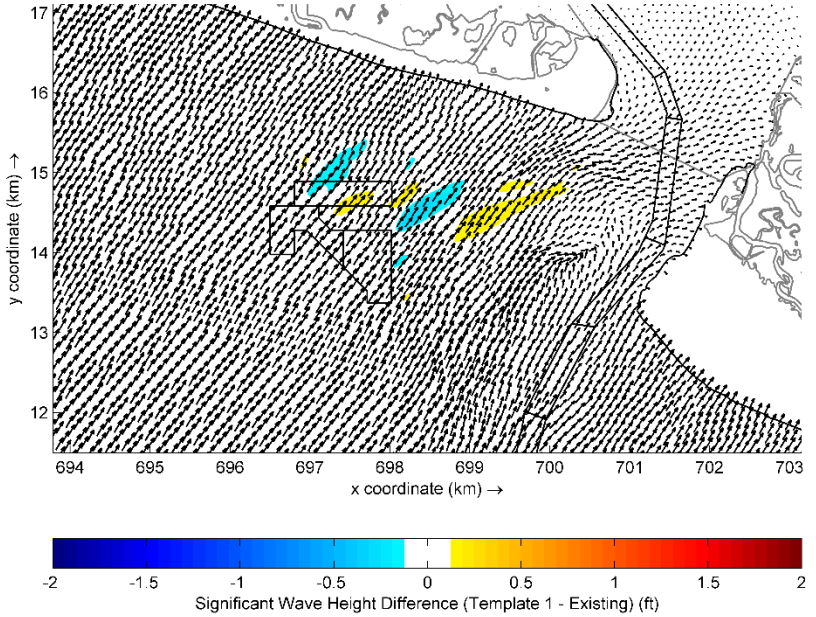
Offshore Wave Case69:

H_s = 2.6 ft, T_p = 4.6 s, Dir = 231.3 degN
Percent Occurrence = 0.688%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



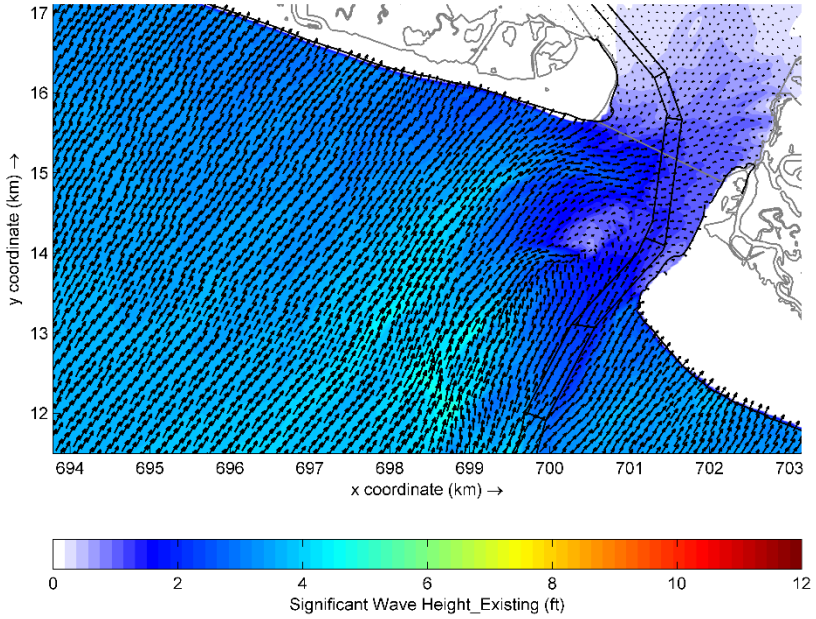


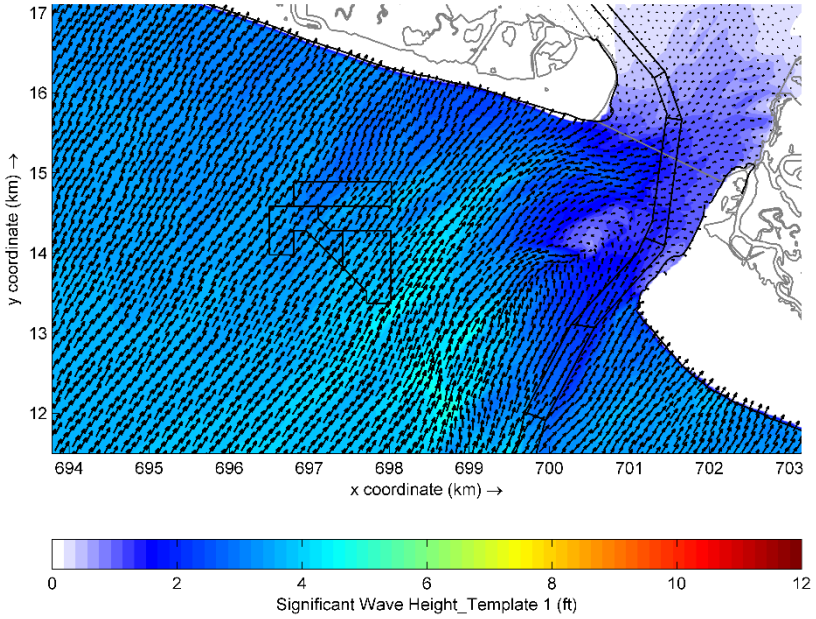


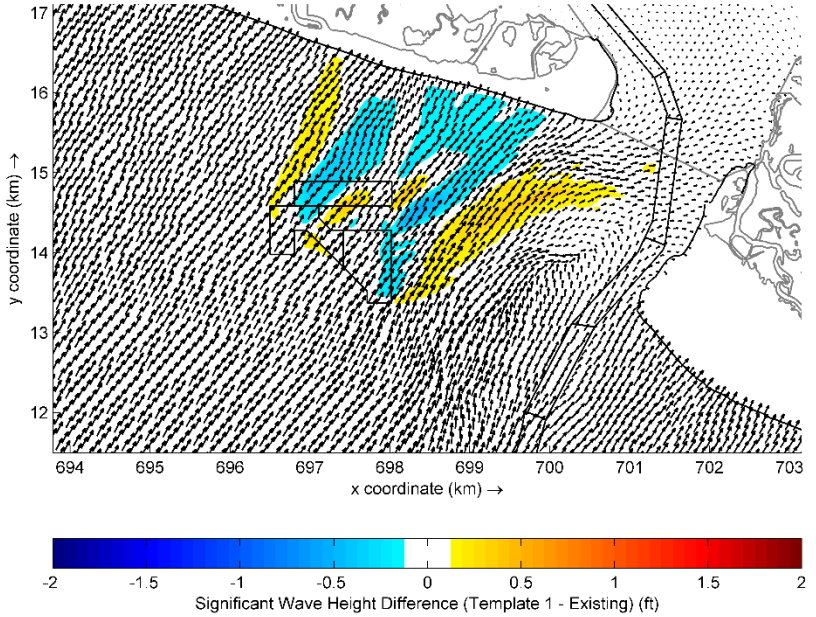
Offshore Wave Case70:

H_s = 4.6 ft, T_p = 5.5 s, Dir = 230.8 degN
Percent Occurrence = 1.609%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



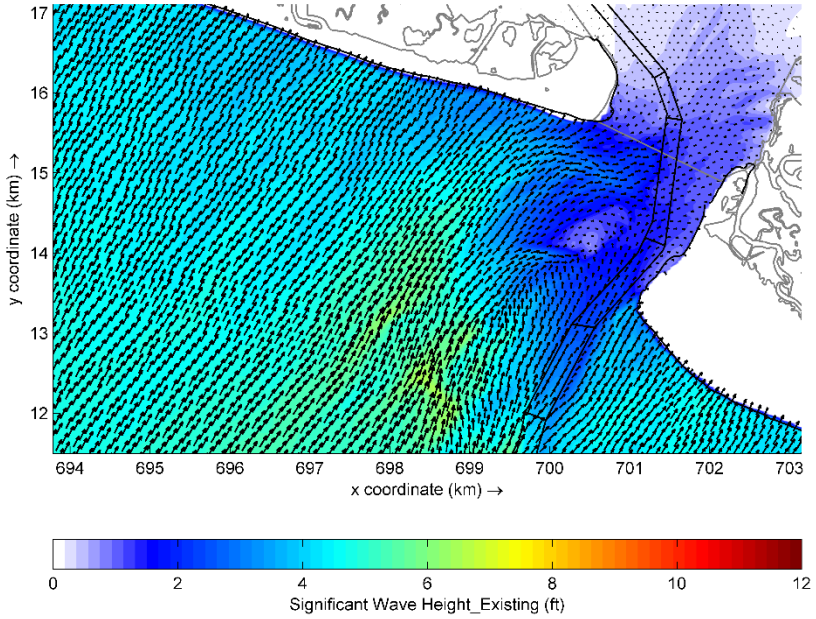


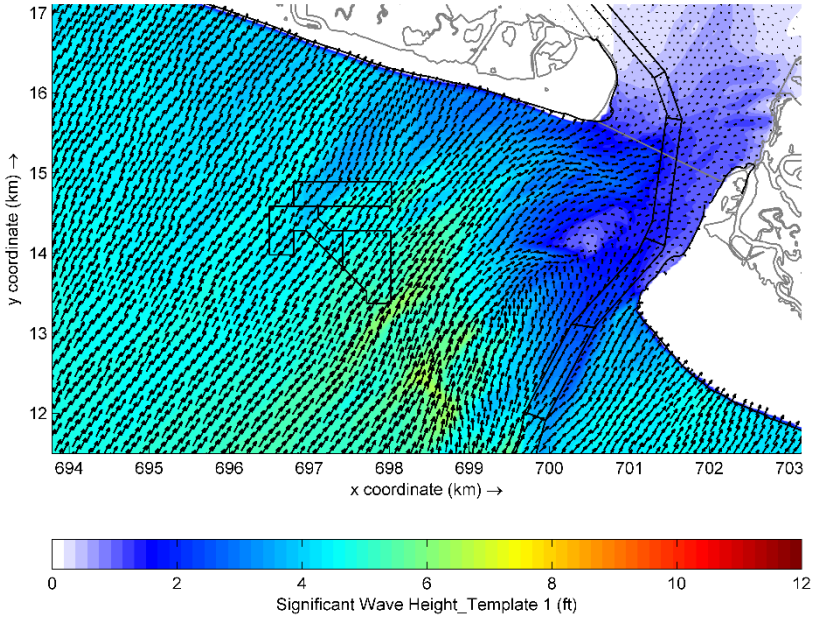


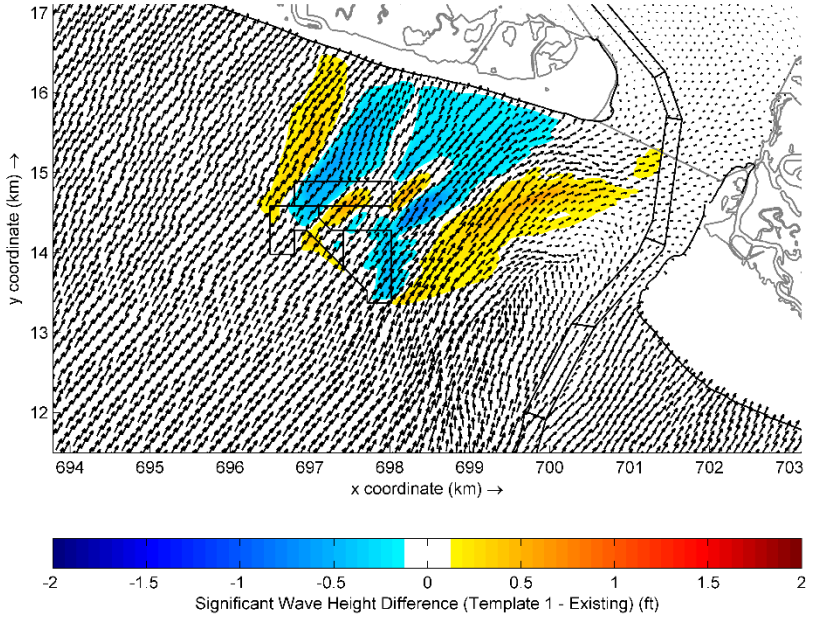
Offshore Wave Case71:

H_s = 7.8 ft, T_p = 7.0 s, Dir = 231.2 degN
Percent Occurrence = 0.367%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



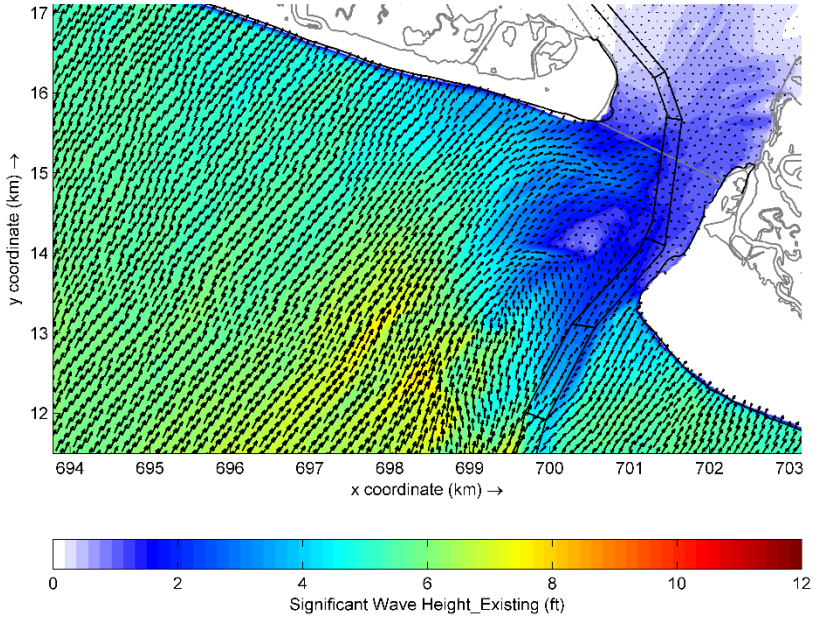


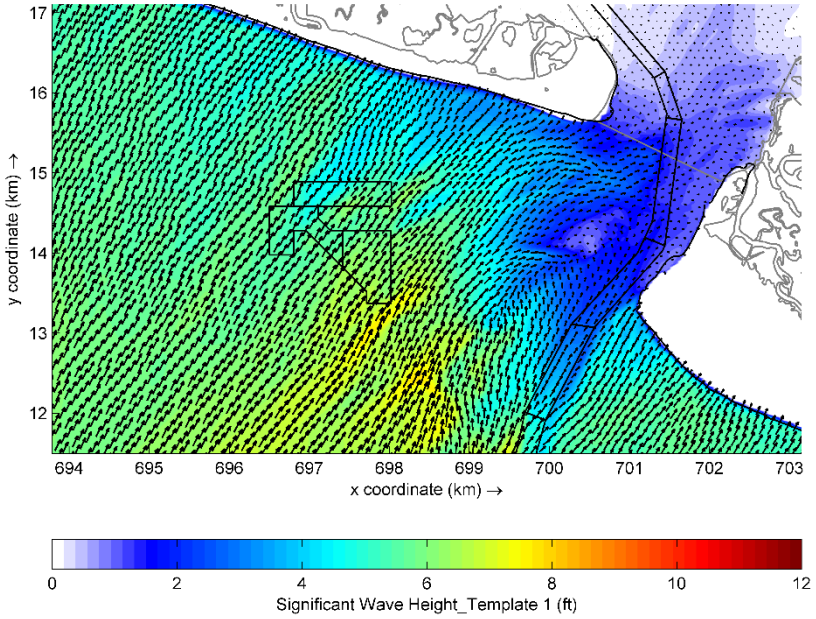


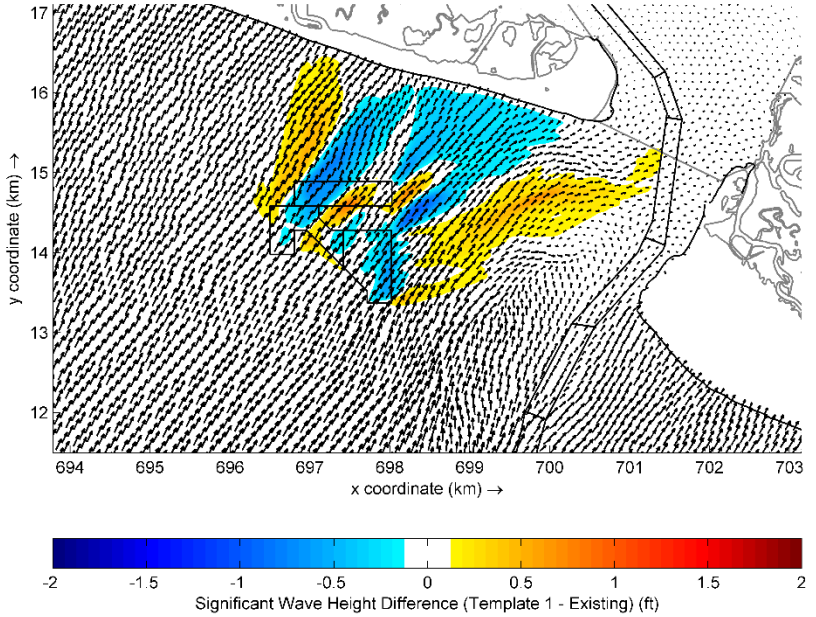
Offshore Wave Case72:

H_s = 10.8 ft, T_p = 8.3 s, Dir = 231.0 degN
Percent Occurrence = 0.071%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



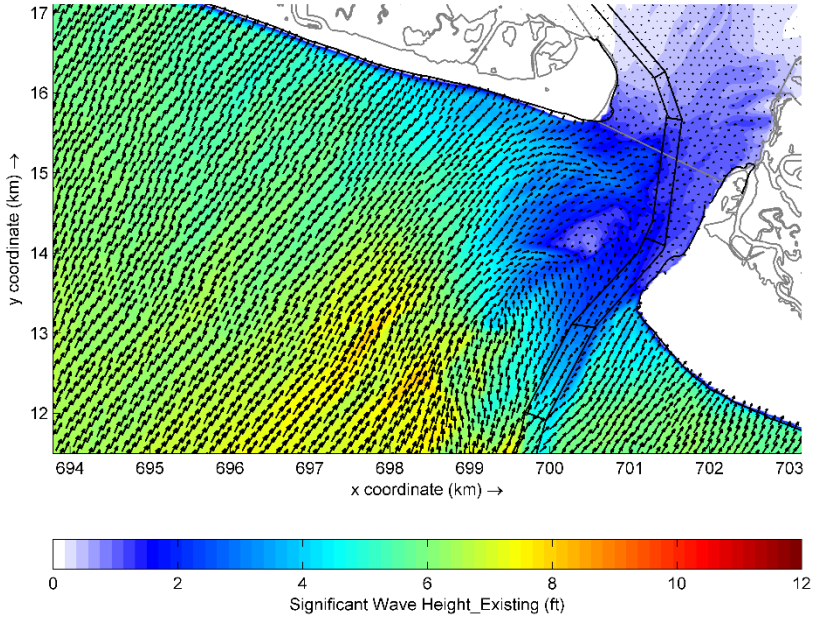


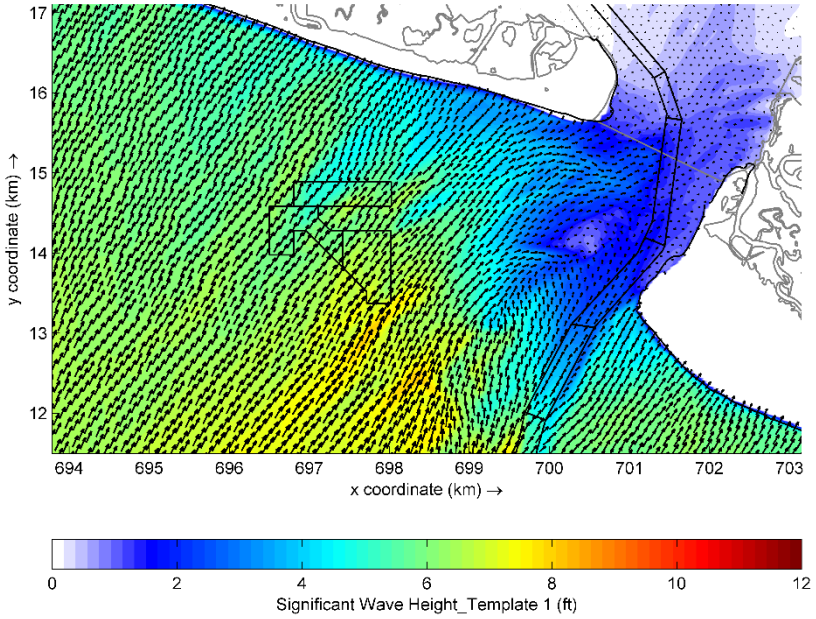


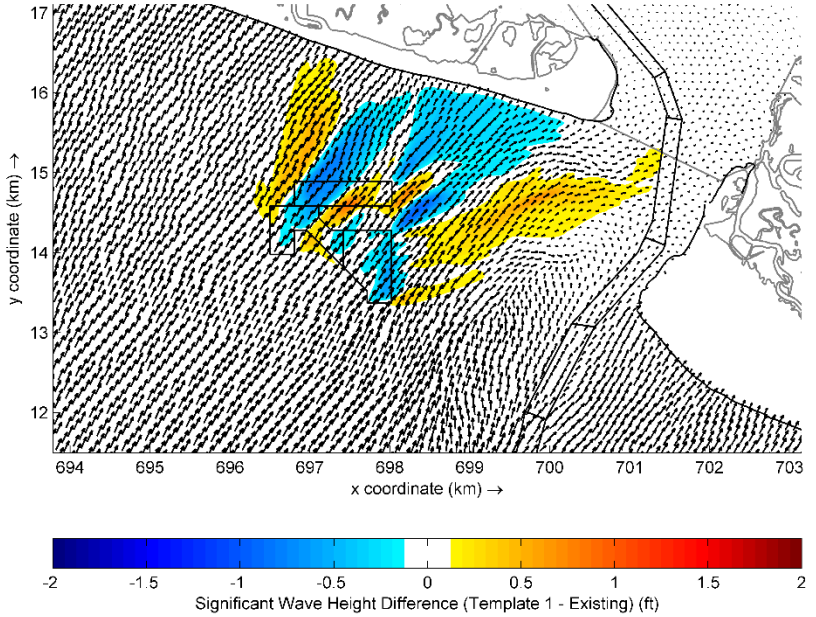
Offshore Wave Case73:

H_s = 14.2 ft, T_p = 9.2 s, Dir = 228.9 degN
Percent Occurrence = 0.007%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



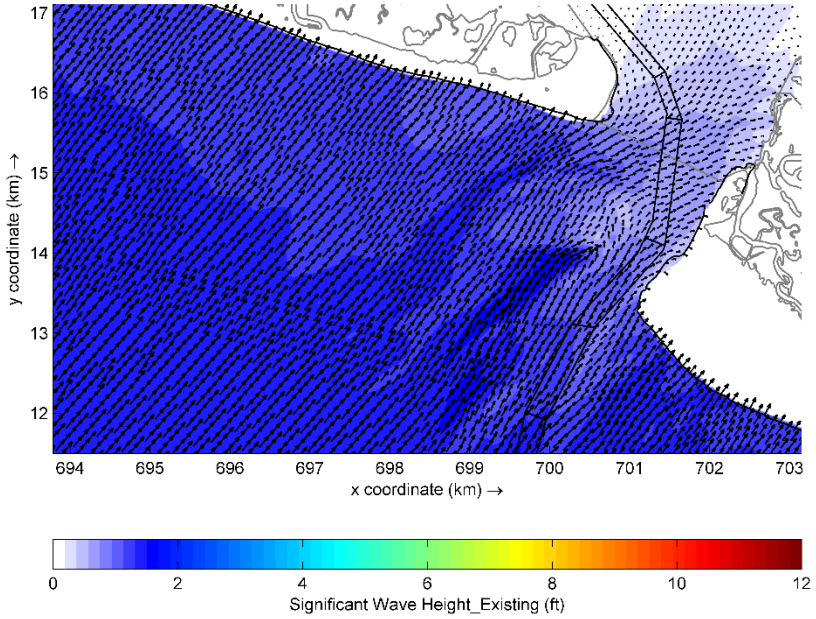


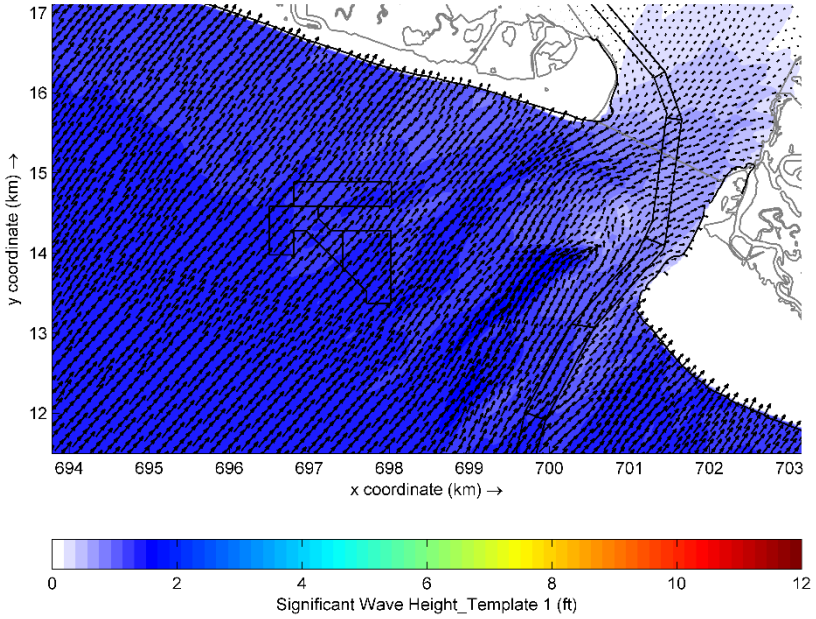


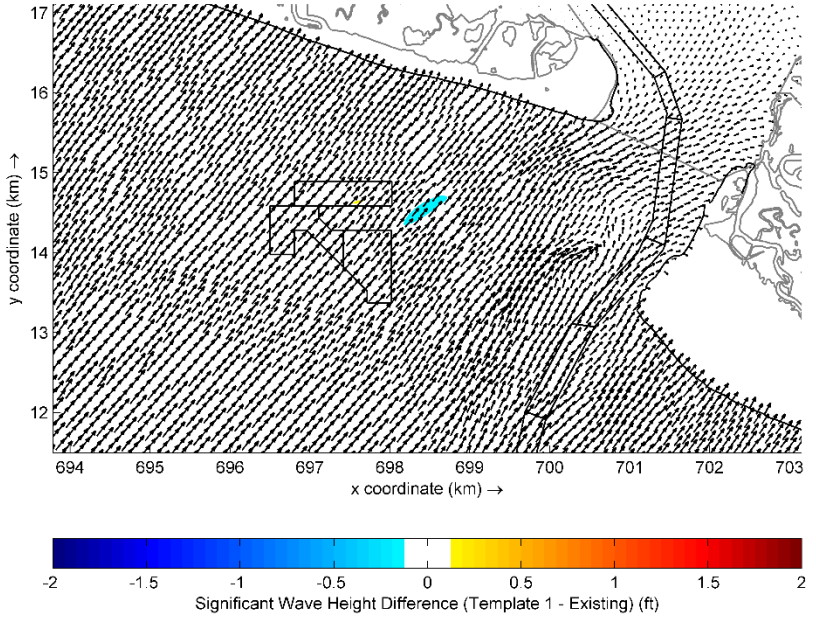
Offshore Wave Case74:

H_s = 17.4 ft, T_p = 8.8 s, Dir = 231.2 degN
Percent Occurrence = 0.005%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



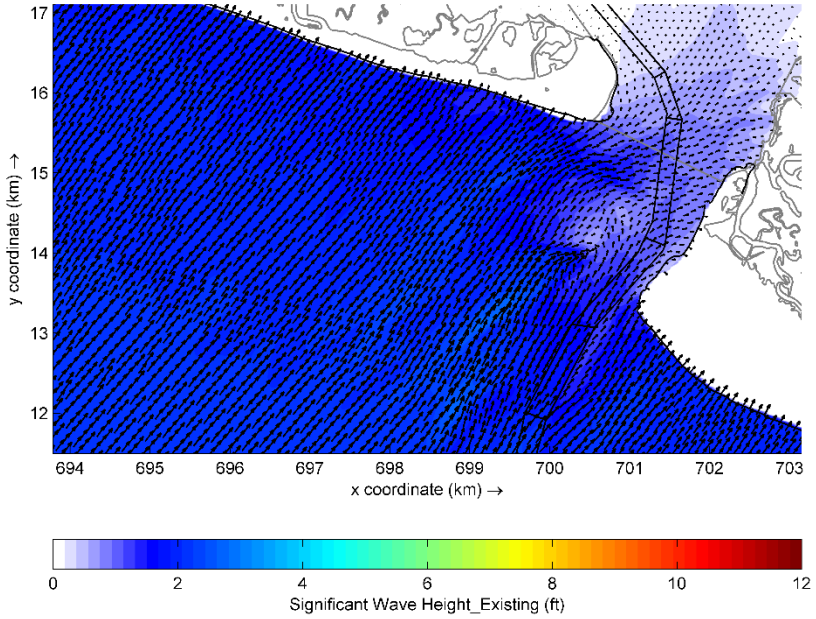


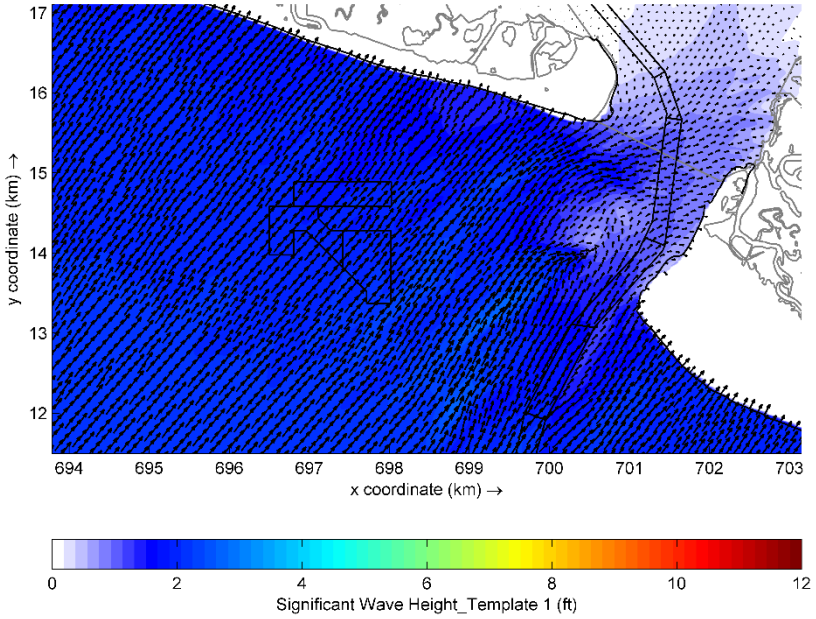


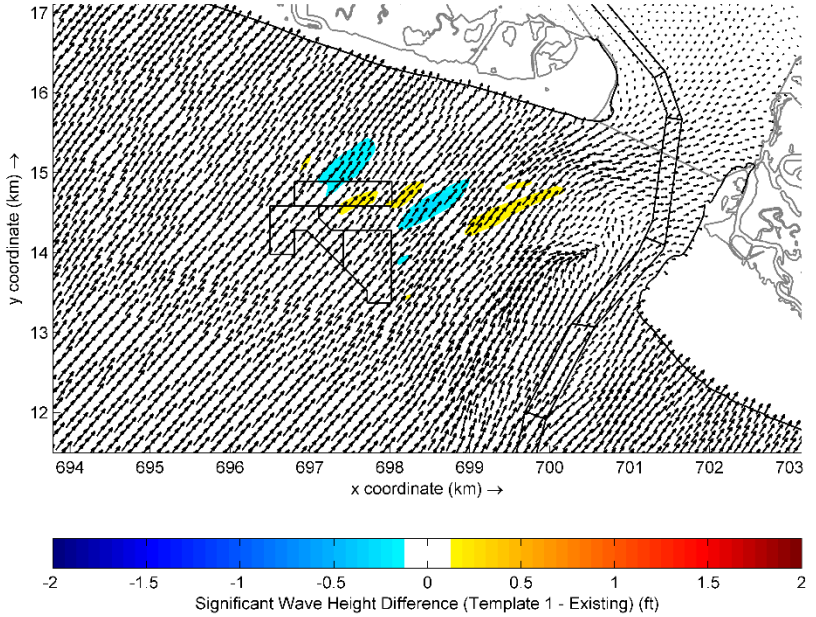
Offshore Wave Case75:

H_s = 2.6 ft, T_p = 4.9 s, Dir = 246.5 degN
Percent Occurrence = 0.301%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



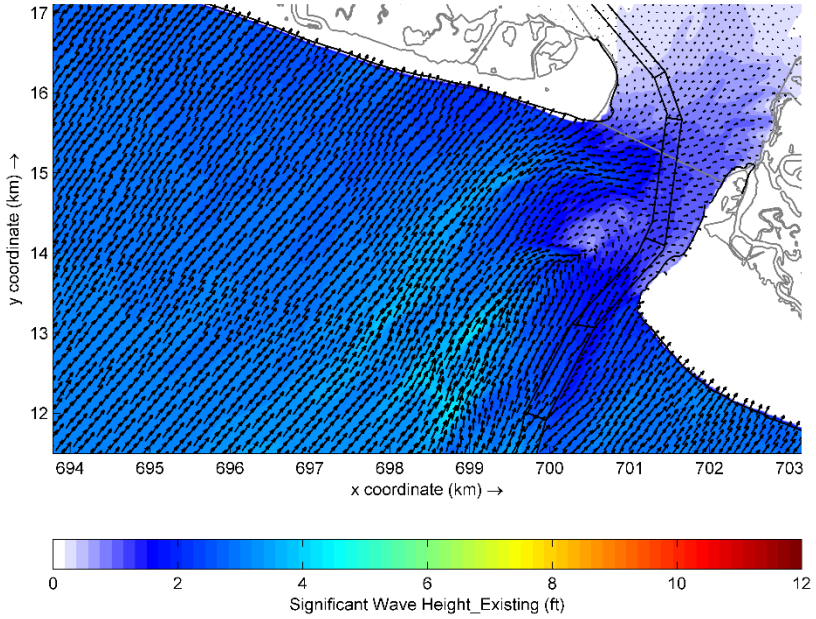


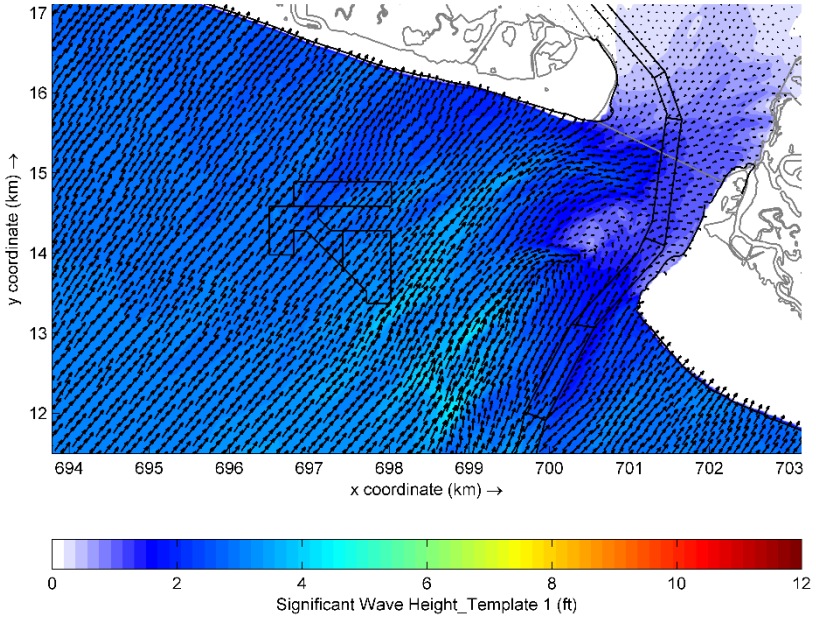


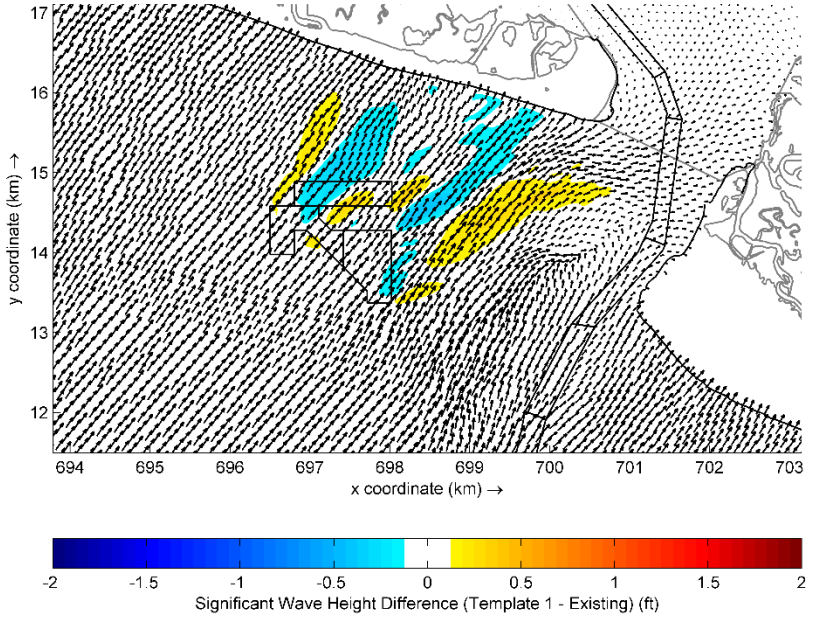
Offshore Wave Case76:

H_s = 4.7 ft, T_p = 5.5 s, Dir = 246.3 degN
Percent Occurrence = 0.539%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



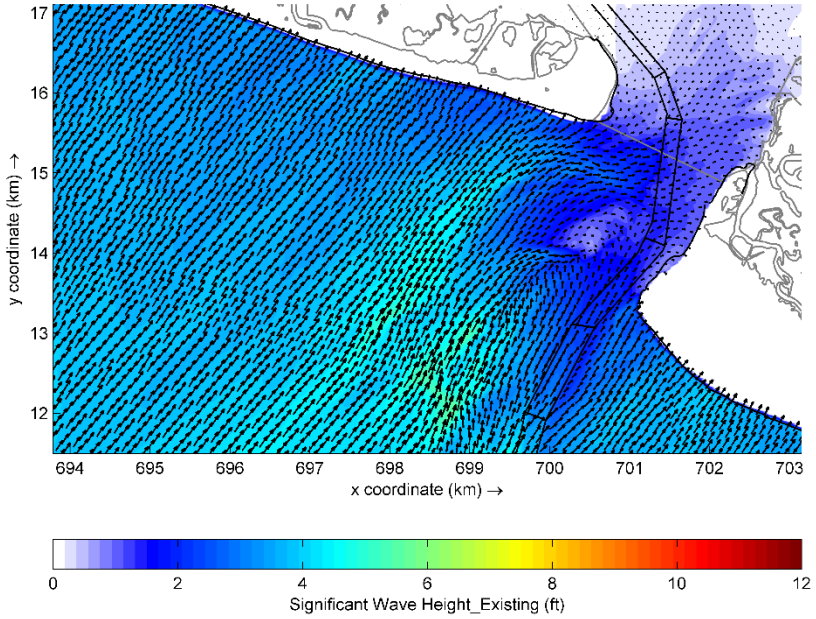


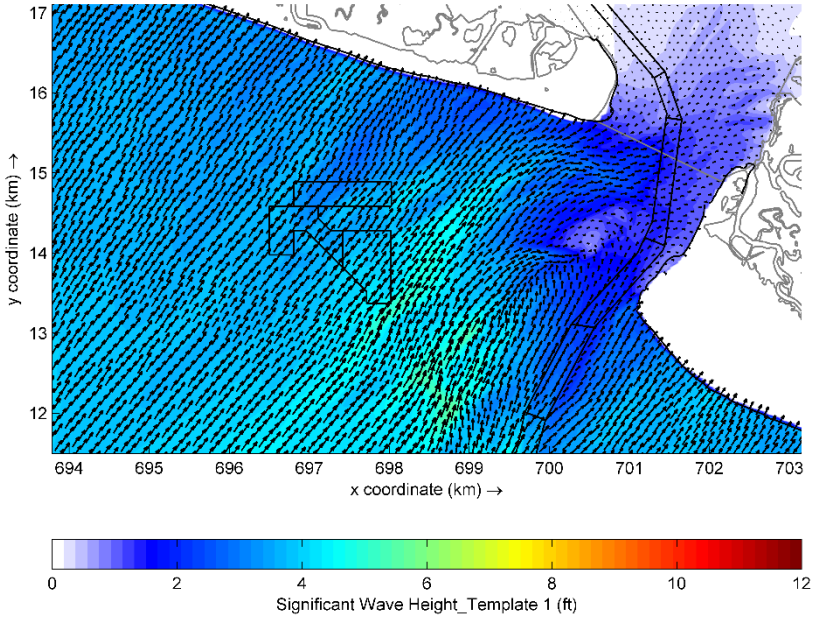


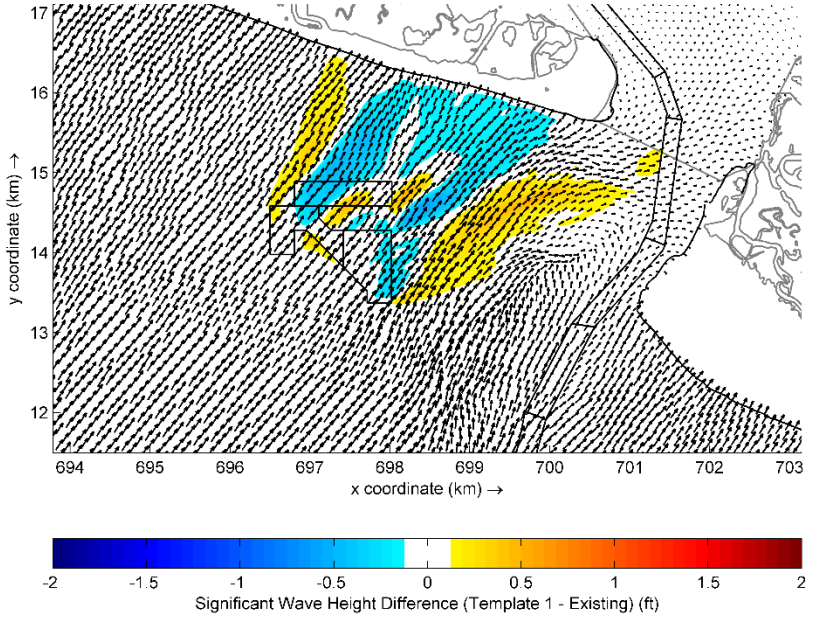
Offshore Wave Case77:

H_s = 7.9 ft, T_p = 6.7 s, Dir = 246.4 degN
Percent Occurrence = 0.190%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



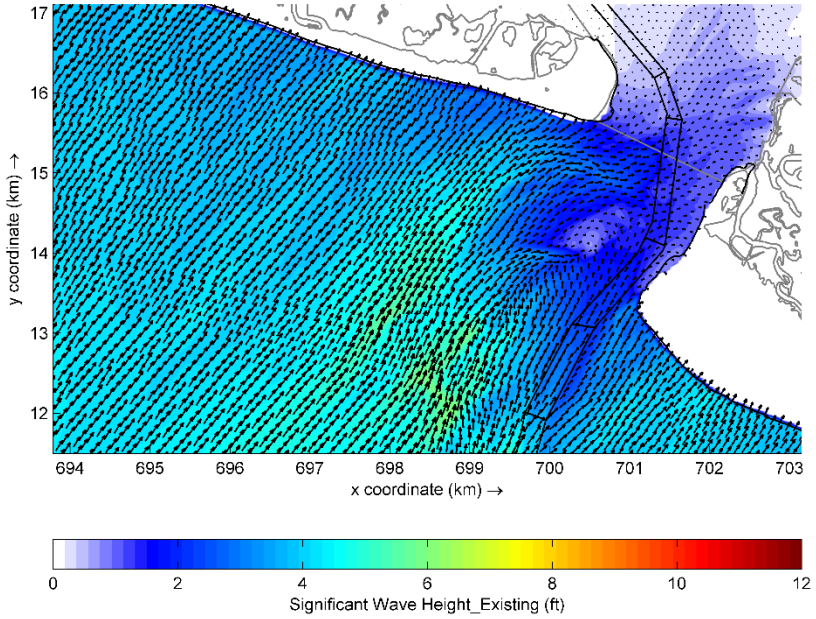


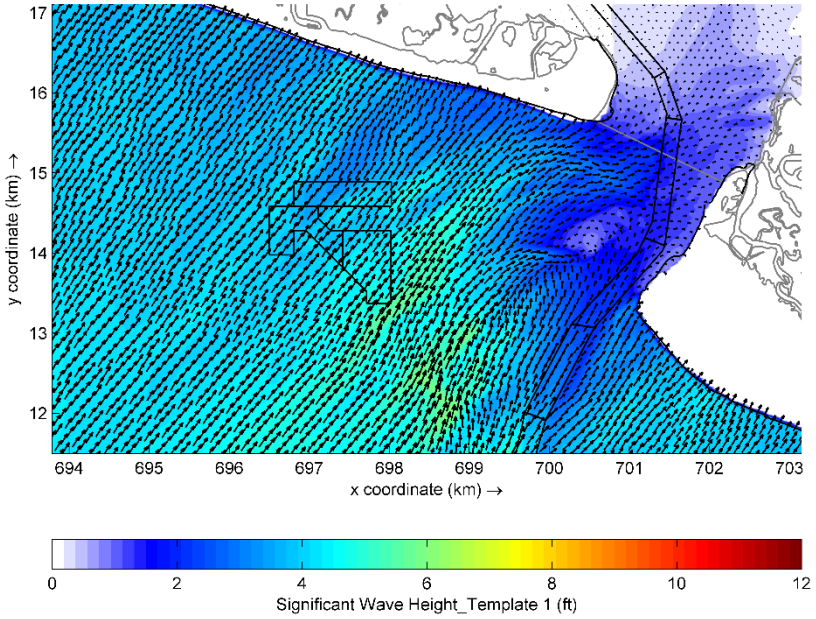


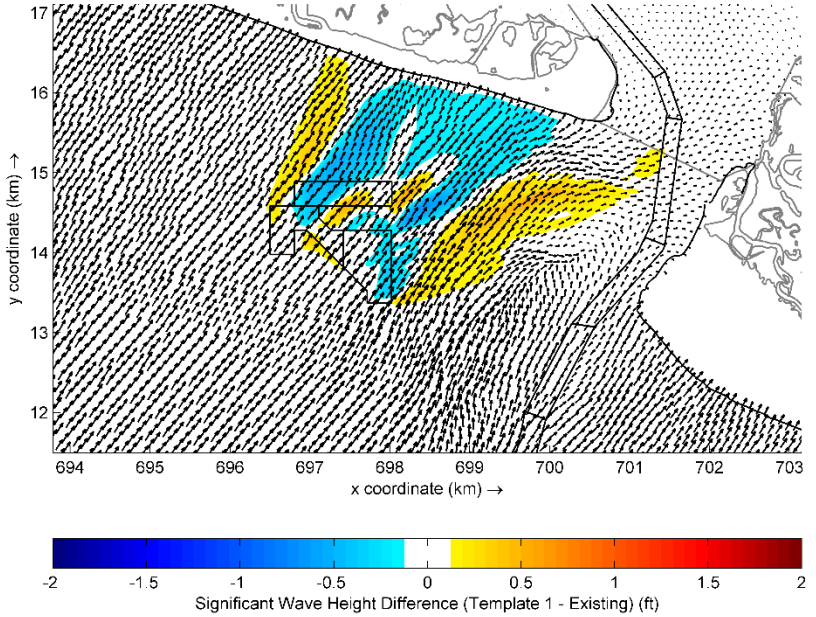
Offshore Wave Case78:

H_s = 10.8 ft, T_p = 7.4 s, Dir = 246.9 degN
Percent Occurrence = 0.039%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



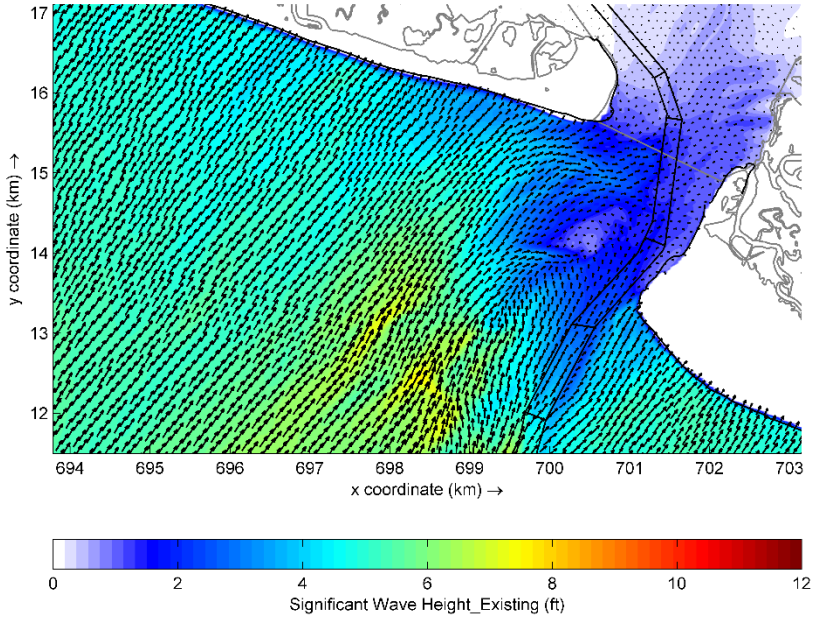


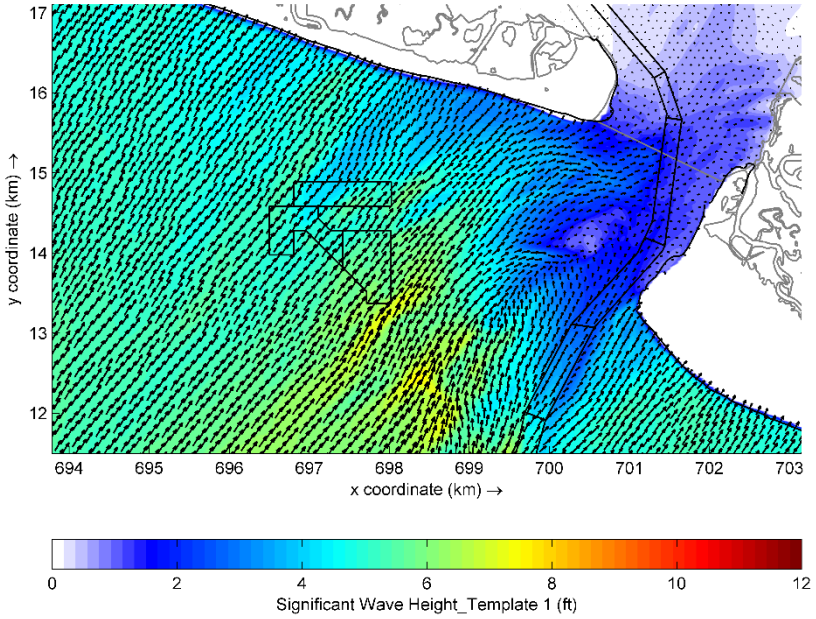


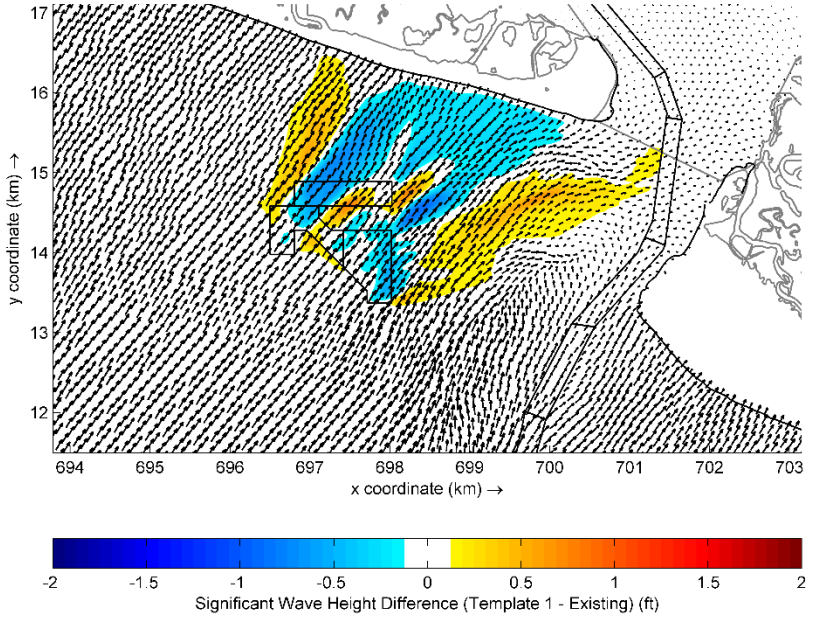
Offshore Wave Case79:

H_s = 13.5 ft, T_p = 7.5 s, Dir = 249.3 degN
Percent Occurrence = 0.002%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



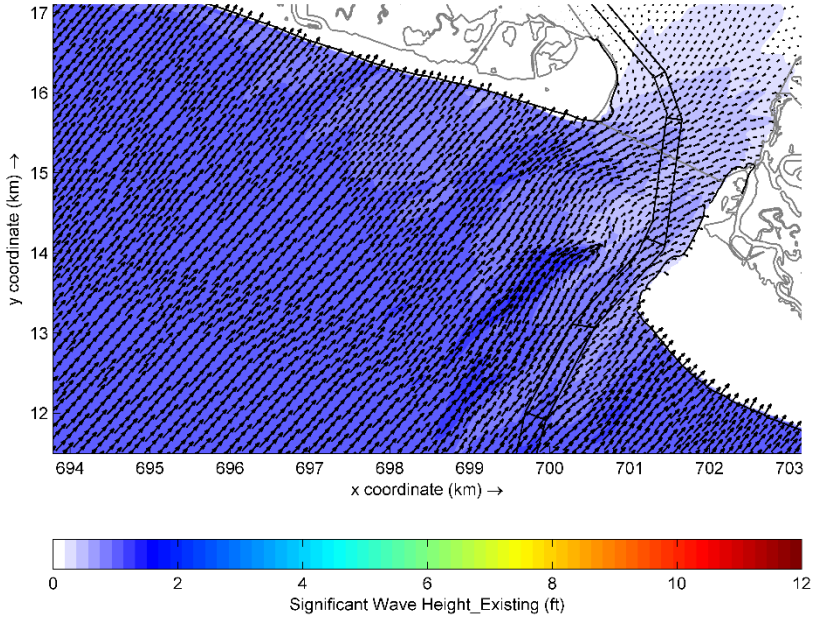


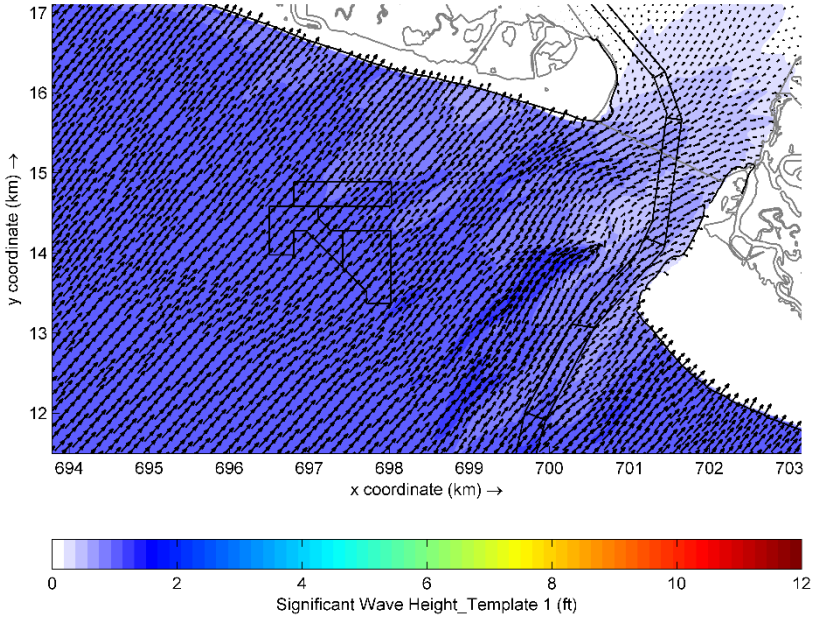


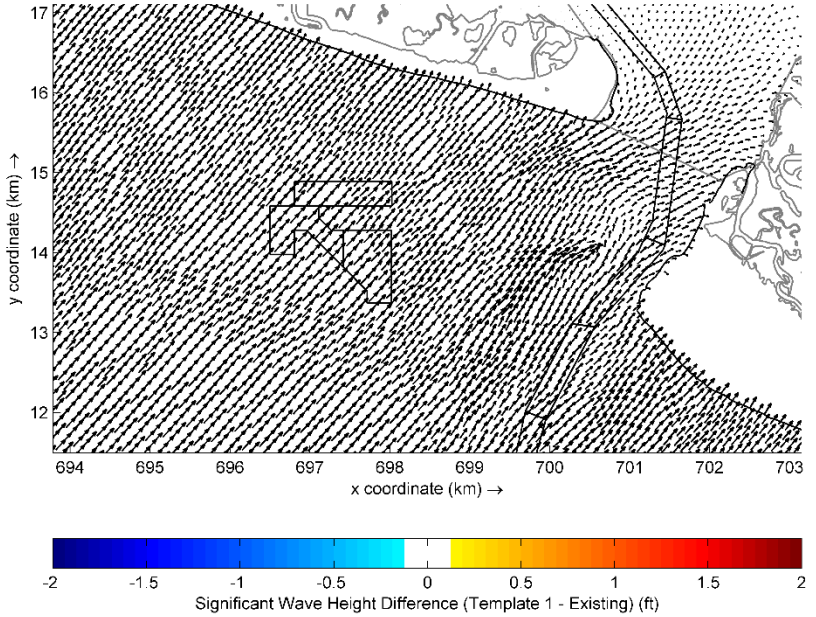
Offshore Wave Case80:

H_s = 17.8 ft, T_p = 8.6 s, Dir = 248.0 degN
Percent Occurrence = 0.001%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



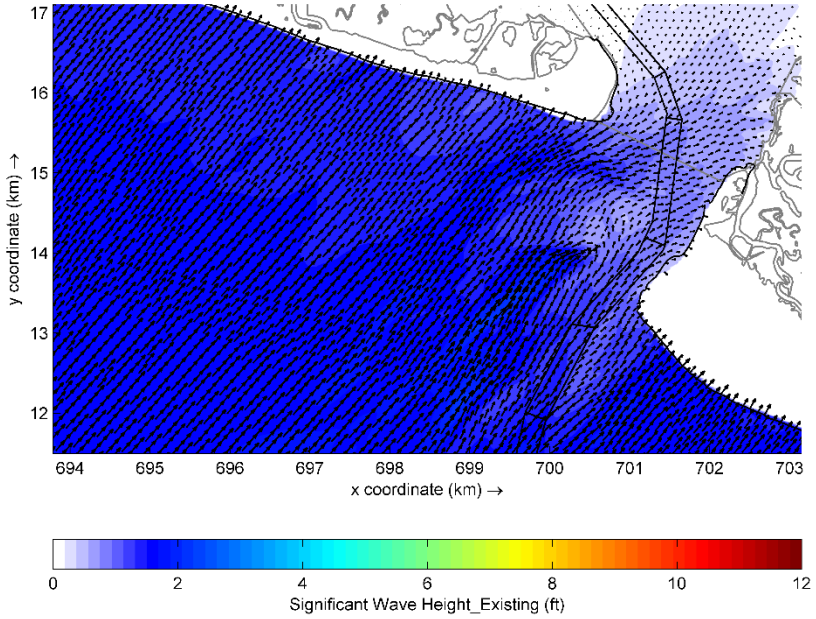


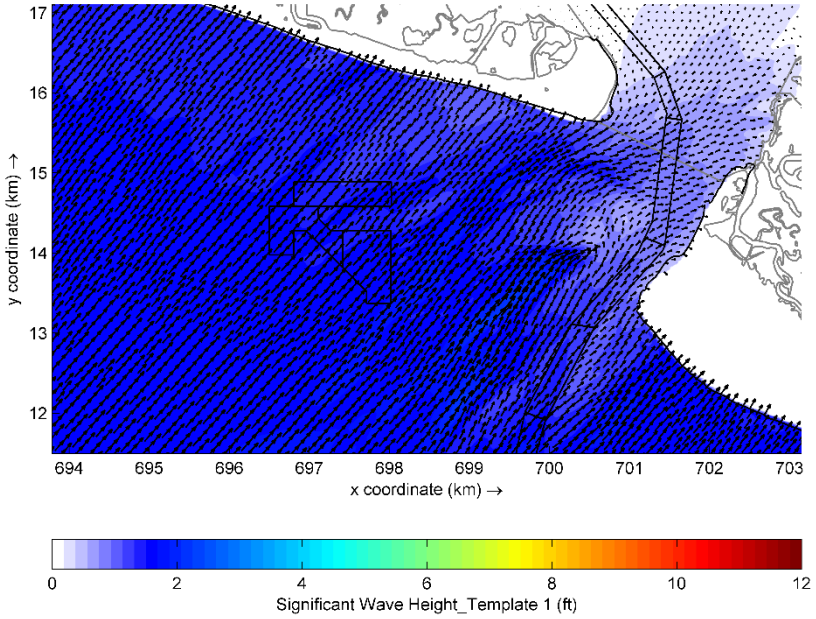


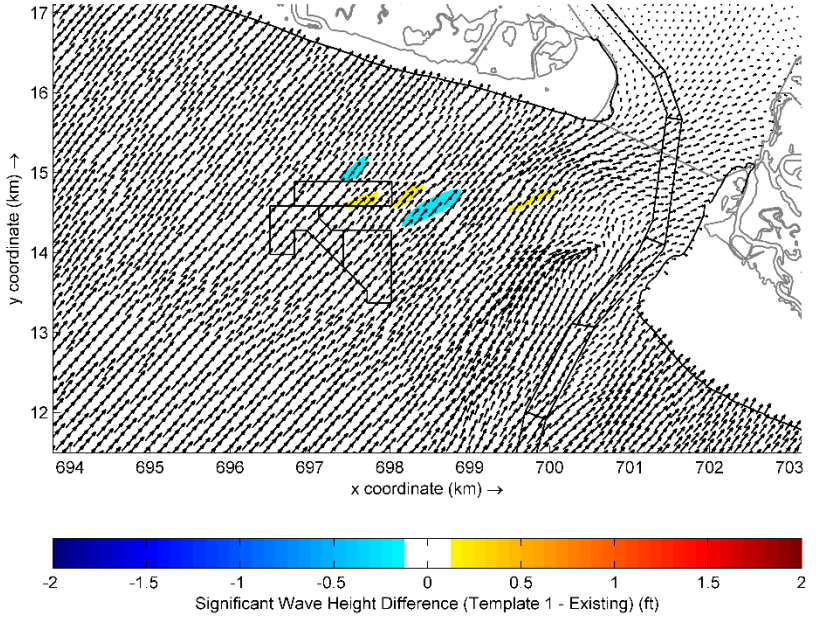
Offshore Wave Case81:

H_s = 2.6 ft, T_p = 4.8 s, Dir = 261.3 degN
Percent Occurrence = 0.169%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



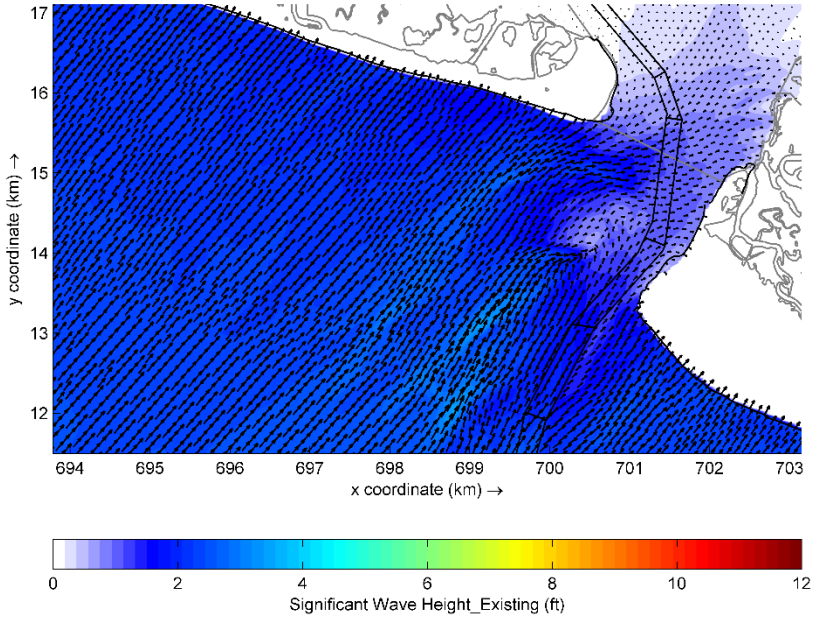


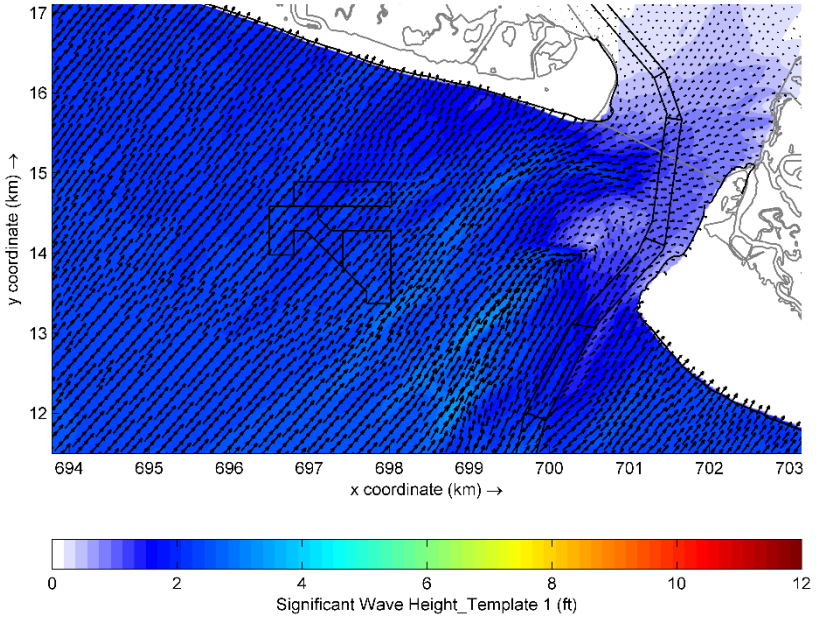


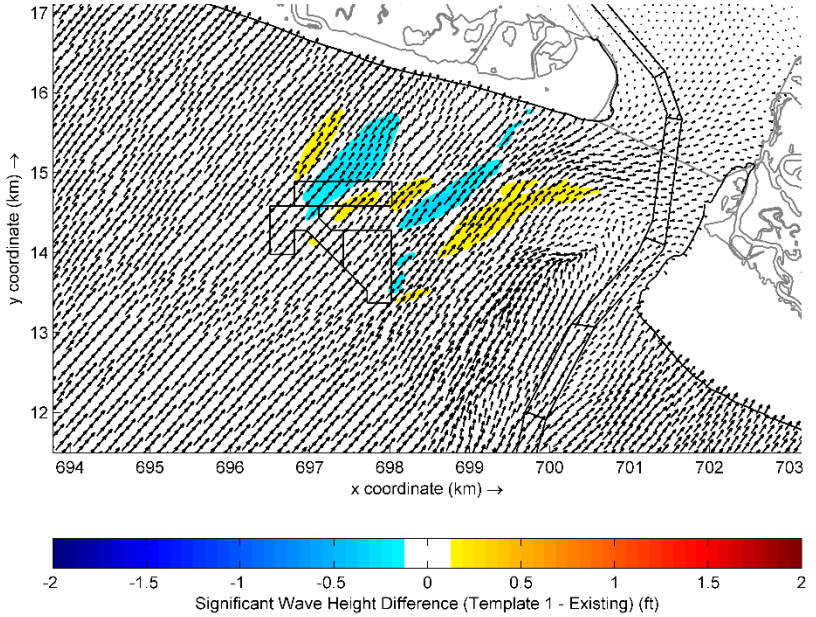
Offshore Wave Case82:

H_s = 4.7 ft, T_p = 5.4 s, Dir = 262.0 degN
Percent Occurrence = 0.321%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



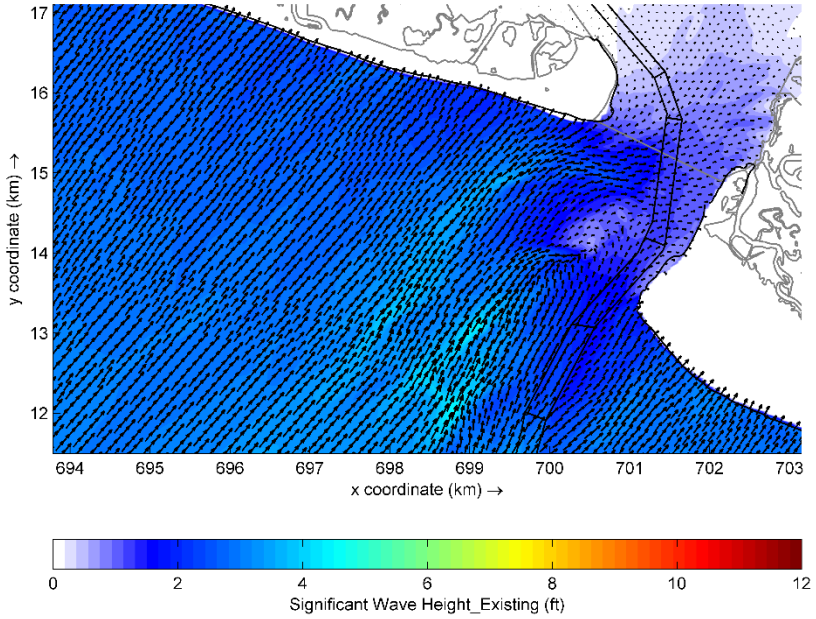


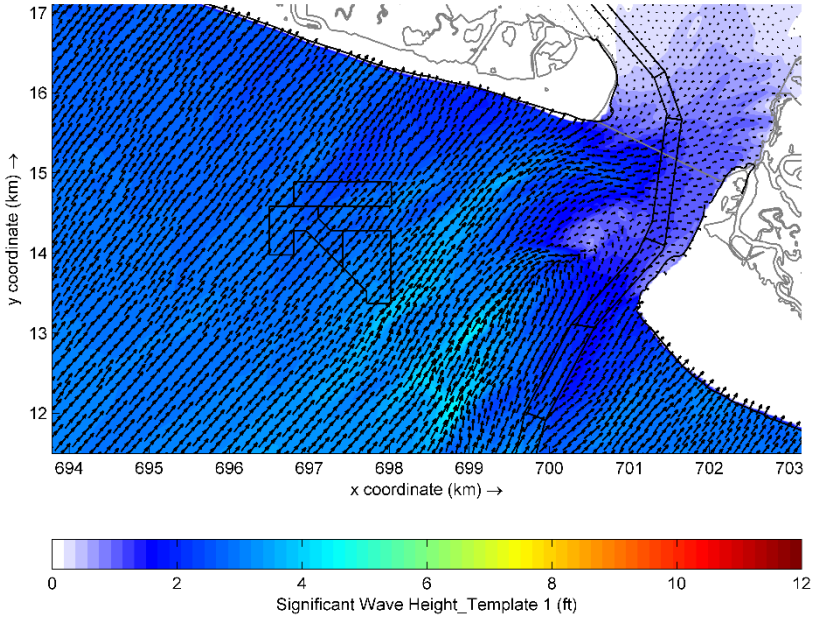


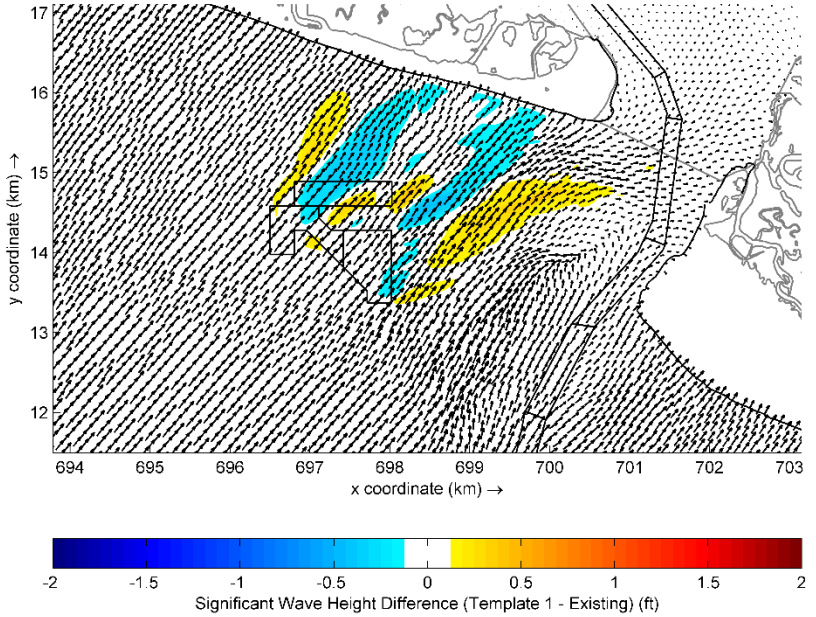
Offshore Wave Case83:

H_s = 7.8 ft, T_p = 6.3 s, Dir = 262.3 degN
Percent Occurrence = 0.168%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



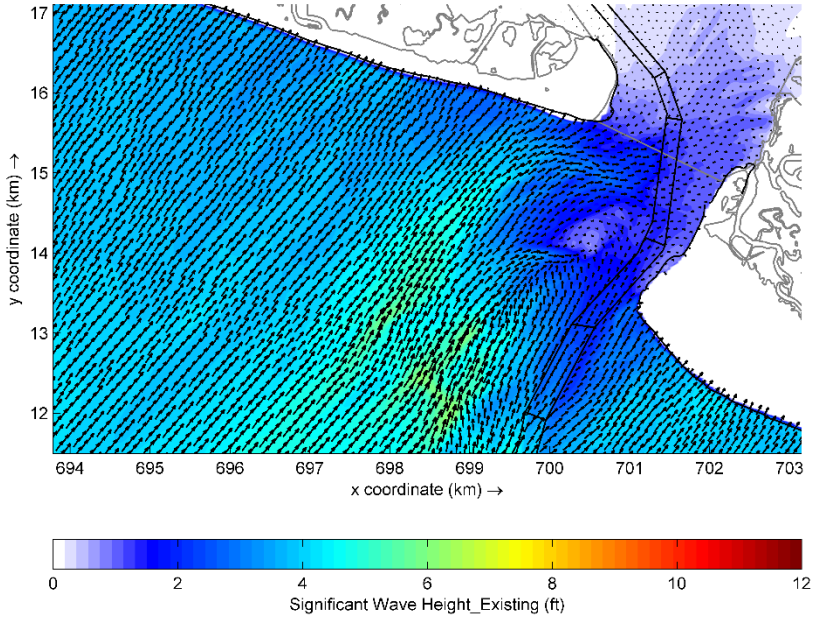


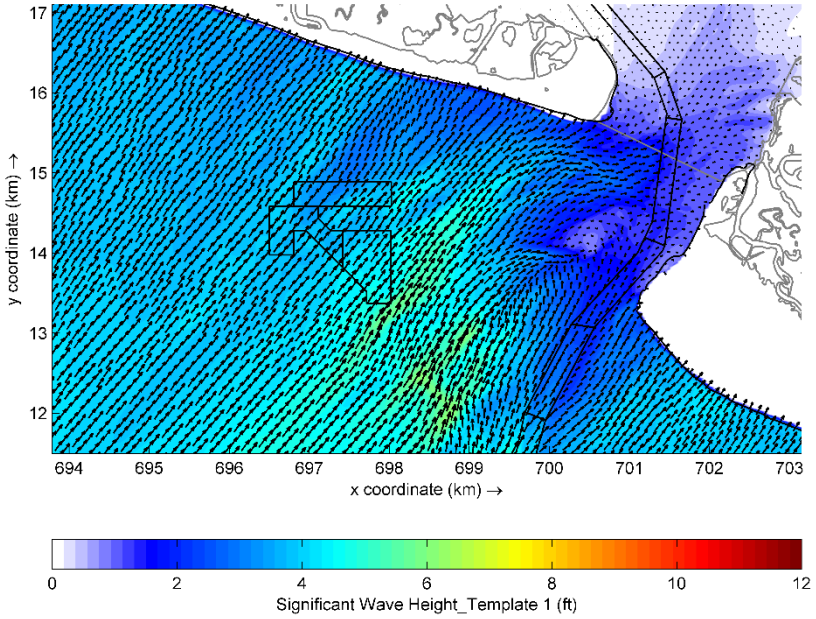


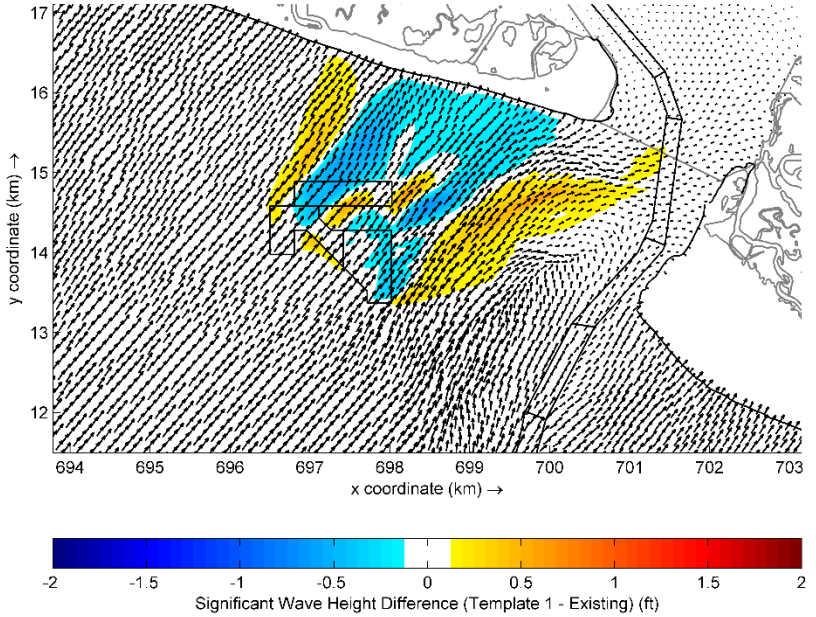
Offshore Wave Case84:

H_s = 10.7 ft, T_p = 6.9 s, Dir = 261.3 degN
Percent Occurrence = 0.040%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)



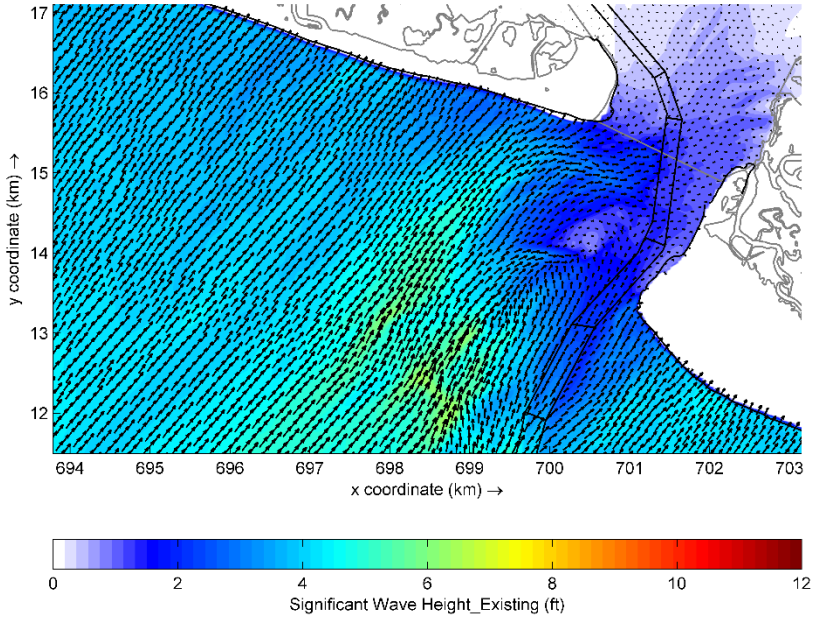


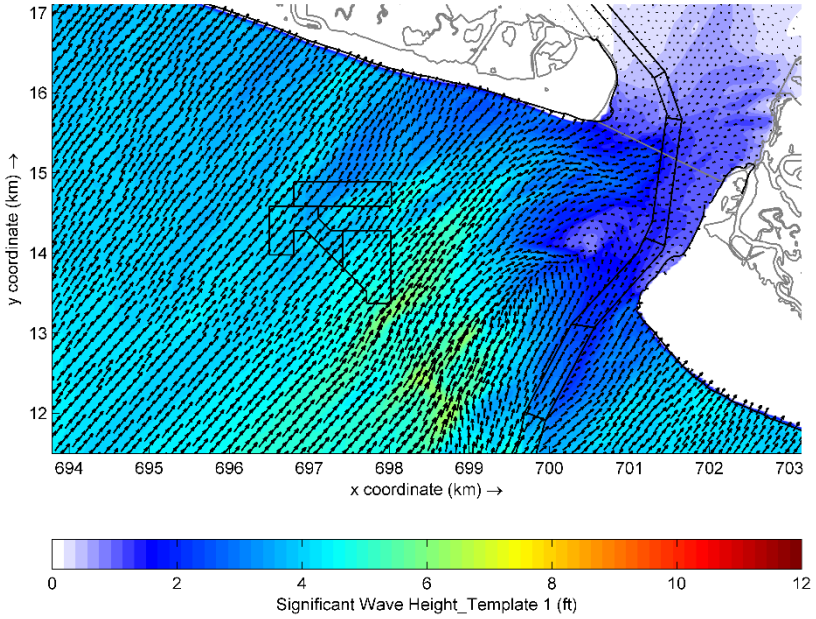


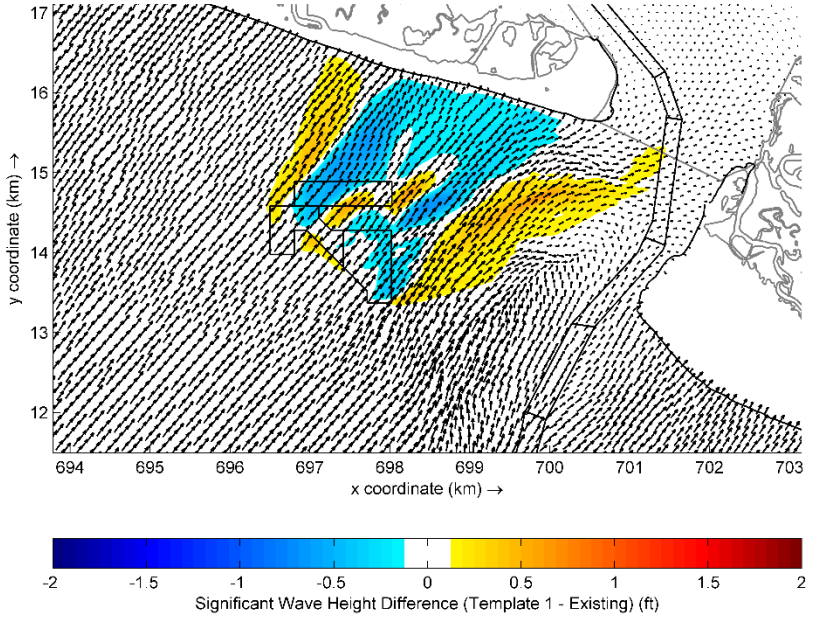
Offshore Wave Case85:

H_s = 15.0 ft, T_p = 8.2 s, Dir = 259.0 degN
Percent Occurrence = 0.002%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)







Offshore Wave Case86:

H_s = 17.9 ft, T_p = 8.3 s, Dir = 263.5 degN
Percent Occurrence = 0.002%
From left to right and top to bottom:

- Wave under Existing condition (Existing)
- Wave under After-Dredge condition (Template 1)
- Changes in wave height (Template 1 – Existing)