The CARICOOS Wave Model v8.0

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The CARICOOS Wave Model is an operational wave model with nested grids at a spatial resolution ranging from 1.1 km to 30 meters. In FY15 the model was upgraded to include WRF wind forcing and improved spectral dynamics. Improvement to the CWM in FY16 include:

• Implementation of 2D spectral partitioning capabilities
• Improvements to several grids (USVI HR, etc.)
• Improvements in graphical output and a new web interface

Time step	Frequency bins	f_{max}	f_{min}	Directional resolution
30 min	36	1 Hz (T = 1s)	0.0455 Hz (T = 22 s)	10 degrees (36 bins)
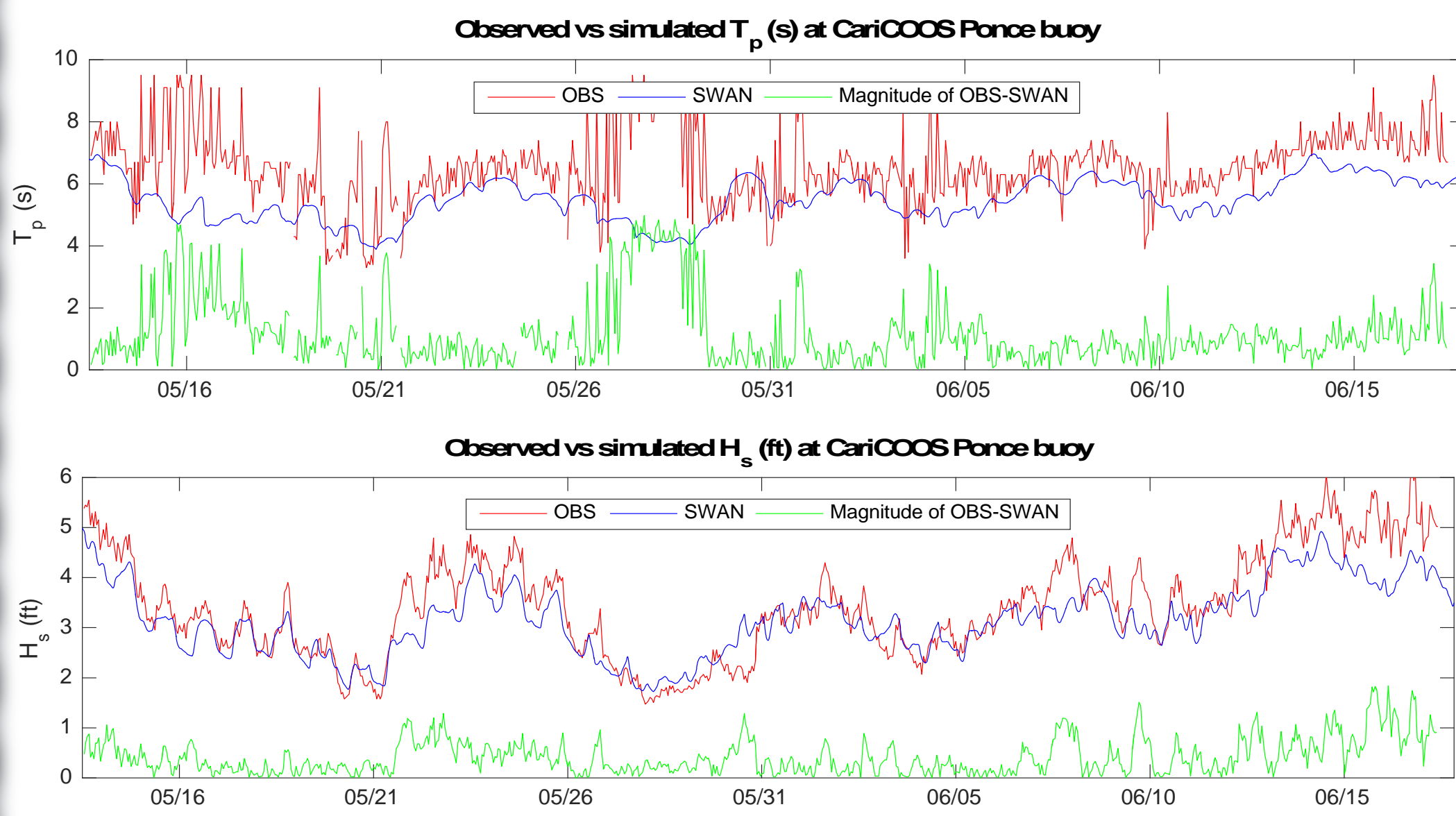
[Above] SWAN Model validation with Ponce buoy to quantify model performance in wind-dominated sea states with 2 km WRF surface boundary conditions.
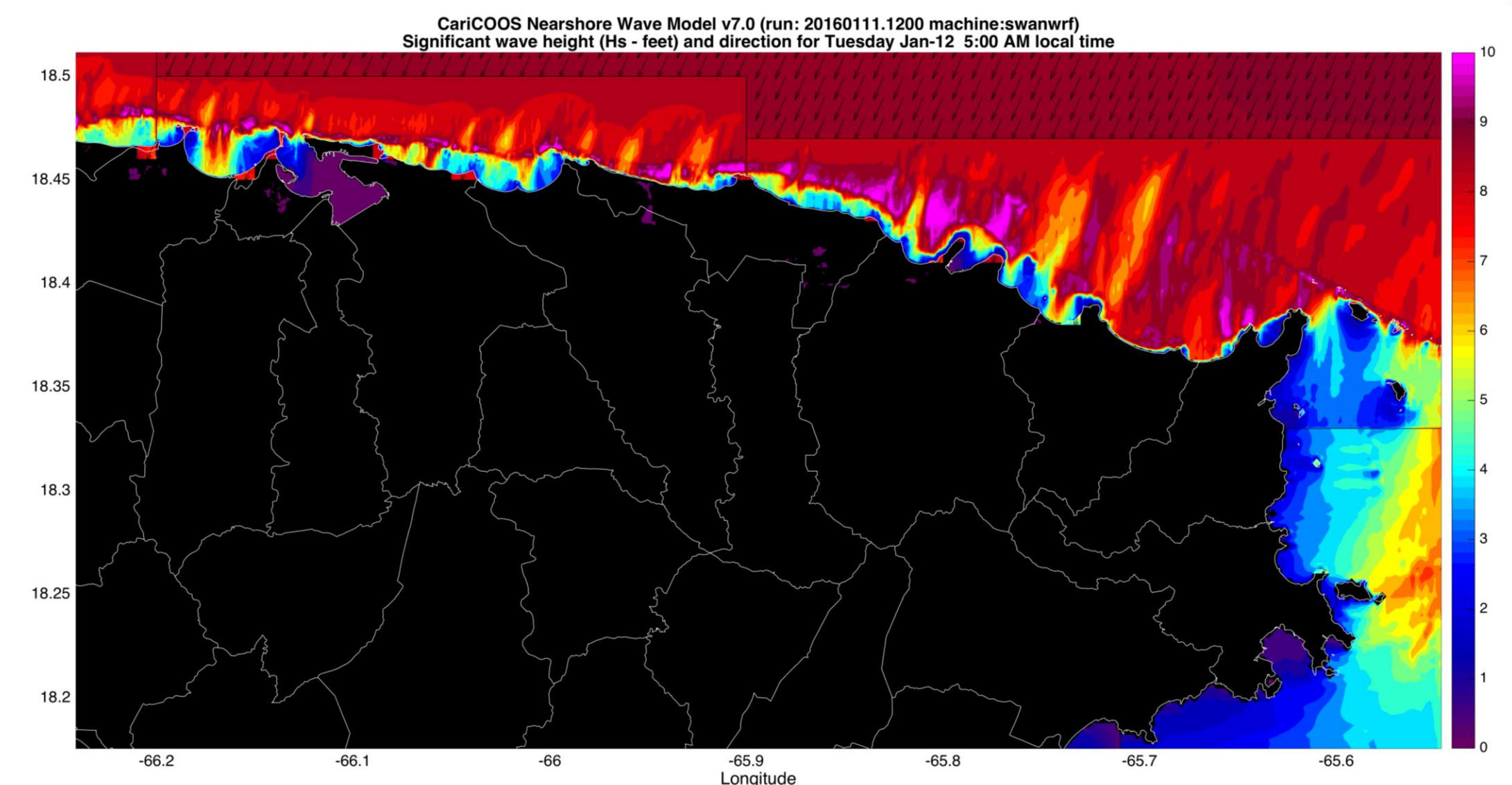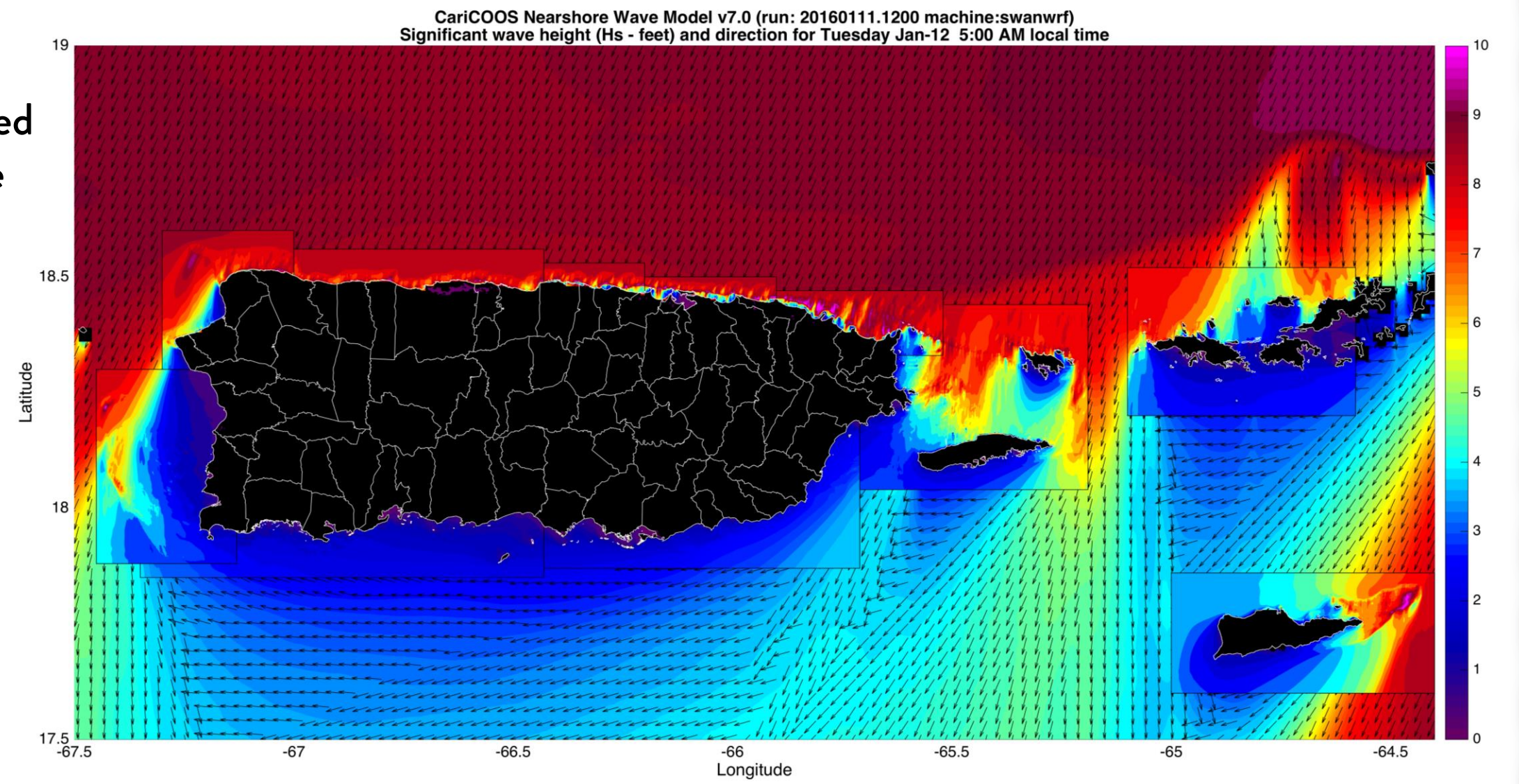
[Above] The high-resolution grids and new spectral discretization allow for improved representation of the wave field in the nearshore region.
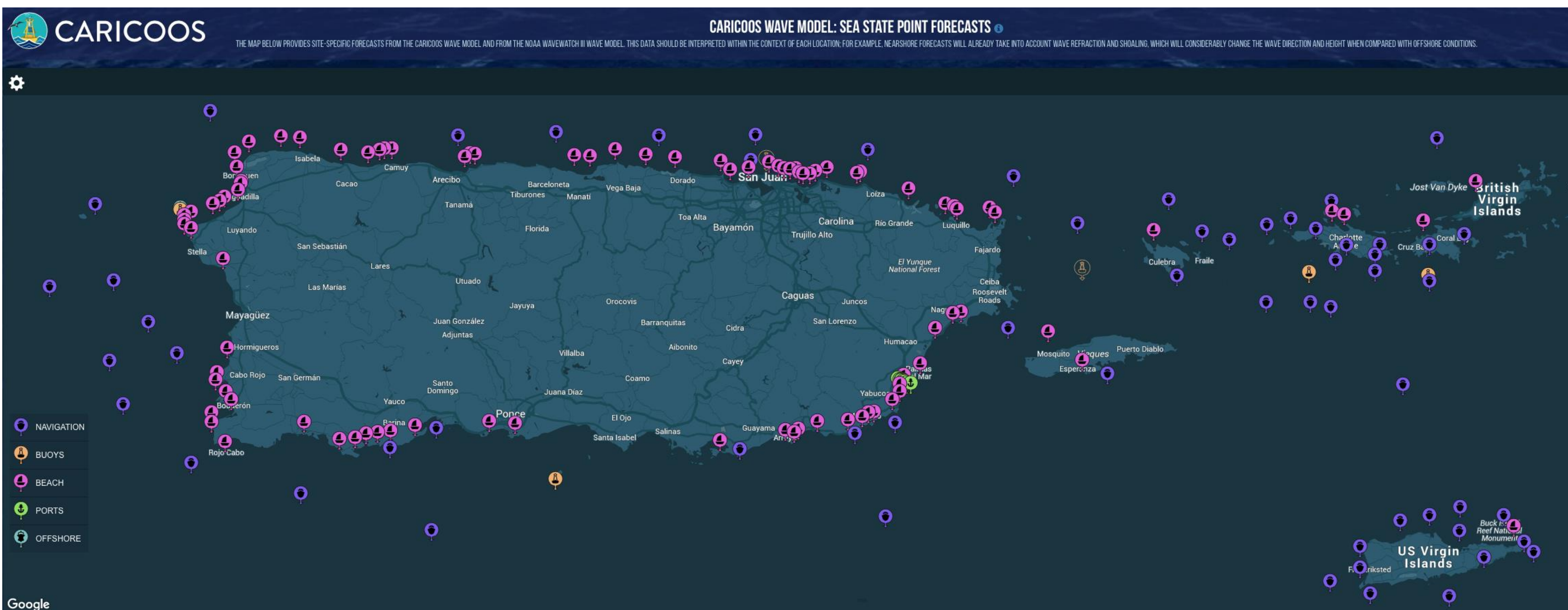
[Left] In response to stakeholder needs we provide over 200 point forecasts within the CariCOOS Nearshore Wave Model. Please let us know if you are interested in a free custom point forecast for the location of your choosing.

[Below] A new web interface provides a zoomable view of the wave height contour maps.

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