WETS Layout

80m

Waverider

Waverider

60m

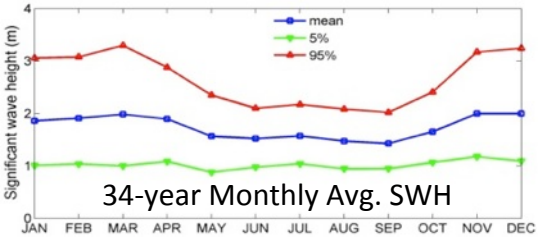
30m

Bunker

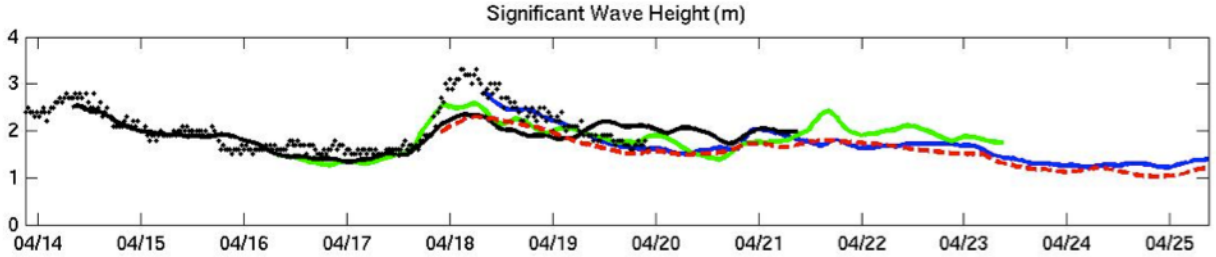
Cable Capacity
30m Berth – 250kW
60/80m Berths – 1MW

HNEI WEC Device Performance Studies

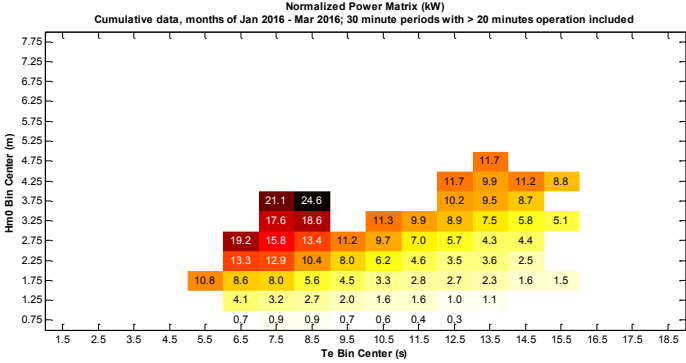
- Wave Regime Characterization
  - WETS Waverider #1 deployed Oct 2012, #2 coming soon, ADCP
  - Daily 7.5-day High-res Wave Forecast
    - High-resolution forcing/100-m grid for windward Oahu
  - 34-year hindcast database

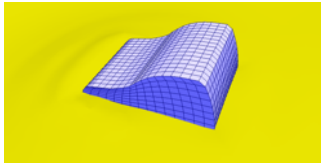


34-year Monthly Avg. SWH



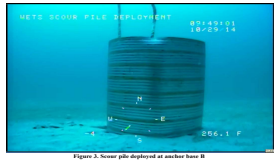
- Device Performance
  - Development of measured power matrices
  - ROV and diver-based device and mooring inspections
- Numerical Modeling
  - Mid-fidelity: WECSIM, WAVEDYN, WAMIT
  - High-fidelity: FLOW-3D, OpenFOAM

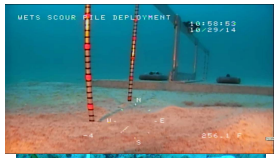


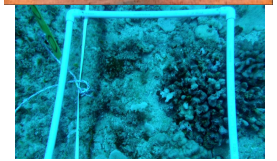


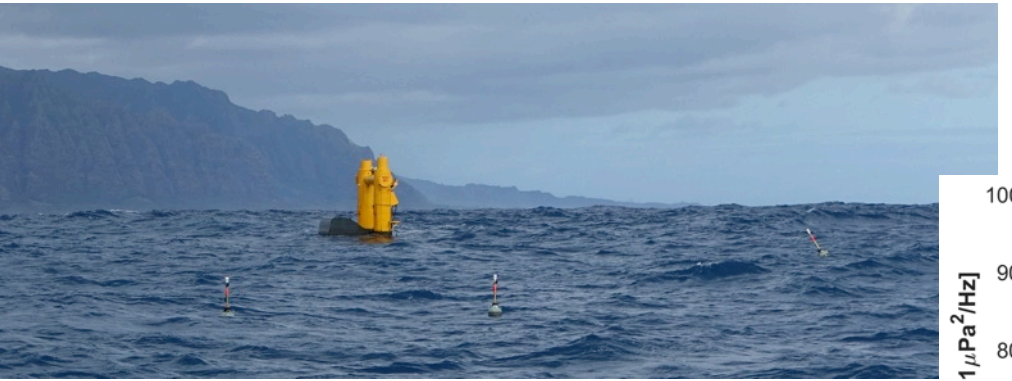
HNEI Environmental Data Collection and O&M

- Sediment transport
- Ecological surveys and water chemistries
- Protected marine species monitoring
- Device and Ambient Acoustics
  - Fixed and drifting systems for temporal/spatial variability









- Site-dedicated Vessel
  - 85’ LOA, adding 8’ beam
  - 10-ton lift
  - Dive/ROV support
- Limited Device Maint $