

APPENDIX C

AOOS MODEL PRODUCT DATA INVENTORY (JUNE 30, 2016)

AOOS Data System model outputs and brief description of the output and run periods.

Type of Model	Brief Description
Alaska Region Digital Elevation Model v2.0	bathymetric digital elevation model (DEM) with nominal 1-km grid, many regions 1 km not resolved
Alaska Region Digital Elevation Model v2.0 - Continental Shelf Stretch	
ARSC High Resolution Rapid Refresh (HRRR)	Model forecasting was suspended on 12 April 2015 while software was transitioned to new compute infrastructure. No new forecasts have been made.
Bering Sea Regional Ocean Modeling System (ROMS) Hindcast	1/5/1990-10/13/2004, Lots of stuff, Sea Surface Height, Velocity, Si, Ammonium, Detritus, DO, plankton, ice velocity etc.
CLIVAR Co-ordinated Ocean-Ice Reference Experiments (CORE) Climate Model	1/19/1969-01/02/2005, lots, benthic detritus, infauna, velocity, eupausiids, ice phytoplankton, Sea Surface Temperature, etc.
Coastal Observing Research and Development Center (CORDC) Alaska Coast HF Radar Derived Surface Currents	HF radar-derived surface current dataset provides nearshore sea surface velocity measurements
Extratropical Storm Surge Water Level Guidance for Alaska V2.0 (current Year only)	ETSS 2.0 surge model grid provides estimate of relative water levels attributed to storms
Extratropical Storm Surge Water Level Guidance for Alaska V2.1	ETSS 2.1 surge model grids provide estimates of both relative WLs from storms and absolute WLs caused by both storm and tide.
HYCOM West Coast US Forecast (1/12°) (HYCOM Consortium for Data Assimilative Modeling)	Salinity (surface, subsurface), Sea Surf Height, Velocity (surf, subsurface), temp (surf, subsurface)
National Weather Service (NWS) Sea Ice	five-day sea ice forecasts throughout the year
NCEP Climate Forecast System Reanalysis (CFS-R) Climate Model	12/29/2002-12/30/2012, lots, benthic detritus, infauna, euphausiids, temp, etc.
NCEP Reanalysis Daily Averages Surface Flux	12/31/1947-present Surface Flux: Skin Temperature

Type of Model	Brief Description
NCEP Global Forecast System GFS Model	09/04/2015-present, ice cover or water surf, pressure at ground or water surf, etc.
NOAA Coastal Survey Development Lab (CSDL) Regional Ocean Modeling System (ROMS)	01/06/2008-02/05/2008, Sea Surface Height, sea water velocity in Cook Inlet and Shelikof Straits
NOAA Coastal Survey Development Lab (CSDL) Shelikof Straits and Cook Inlet Digital Elevation Model (DEM)	Static layer DEM for Cook Inlet and Shelikof Straits
North American Mesoscale (NAM-12) Forecast for Alaska	02/26/2016-01/16/2016
NWS National Digital Forecast Database (NDFD) for Alaska	1/25/2011- present, T, Hum, Sig wind wave ht, Cloud cover, Precipitation, snow accumulation, wind, wind gust
PMEL CCCma Climate Model	01/26/2003 - 01/01/2040, lots benthic detritus, infauna, velocity, etc.
PMEL ECHO-G Climate Model	01/29/2002-12/04/2039, lots (see above)
PMEL FORECAST	10/19/2013-08/03/2014, lots (see above)
PMEL MIROC Climate Model	12/29/2002-12/04/2039, lots (see above)
Polar Data Catalogue Metadata Repository	12/29/2002-12/04/2039, lots (see above)
Prince William Sound (PWS) Regional Ocean Modeling System (ROMS) Forecast - 1-km Resolution	velocity, salinity, Sea Surface Height (SSHt), temp
Prince William Sound (PWS) Regional Ocean Modeling System (ROMS) Forecast - 3-km Resolution	velocity, salinity, SSHt, temp
Prince William Sound (PWS) Regional Ocean Modeling System (ROMS) Forecast - 9-km Resolution	velocity, salinity, SSHt, temp
Prince William Sound (WPS) Regional Ocean Modeling System (ROMS) Nowcast - 1-km Resolution	velocity, salinity, SSHt, temp
Shell Sea Ice	operation-driven sea ice forecasts for Shell management, historical back to 2010
SNAP Climate Projections AR5, RCP 6.0	01/01/2006-12/31/2100, projected air T, Projected near surface winds
SNAP Climate Projections AR5, RCP 8.5	01/01/2006-12/31/2100, projected air T, Projected near surface winds
SNAP Historical Climate Models AR5	01/01/1958-12/31/2005, mod historical Air Temperature, Wind
SNAP Historical Estimates and Projections of Sea Ice Concentration AR5	01/15/1860-12/15/2100, Mod Sea Ice Concentrations

Type of Model	Brief Description
SNAP Scenario Climate Projections	12/31/1979-11/30/2099, different scenarios of monthly average air Temperature and monthly total precipitation
Texas A&M Prince William Sound (PWS) Wave Simulation	12/16/2011-09/13/2013, peak wave periods, sig wave heights, Stokes drift directions (on site for archival purpose)
Wave Watch III (NMWW3)	2/3/2011-present, swell direction, period, sig swell wave height, wind, wind wave direction, etc.
Wave Watch III (WW3)	
Weather Research and Forecasting (WRF) for Prince William Sound and Cook Inlet from AEFF	11/15/2010-03/02/2013. Air Temp, hourly accumulation precipitation, hourly accumulation snow/ice, physical snow depth, etc.
Weather Research and Forecasting (WRF) for South Central Alaska (12 km) from AEFF	11/15/2010-03/02/2013. Air Temp, hourly accumulation, precipitation, hourly accumulation, snow/ice, physical snow depth, etc.
Weather Research and Forecasting (WRF) model for Southcentral Alaska (3km) from AEFF	10/25/2012-06/08/2014, Air T, Hourly accumulated precipitation, SST, wind
NOAA Coastal Survey Development Lab (CSDL) Shelikof Straits and Cook Inlet Digital Elevation Model (DEM)	Static layer DEM for Cook Inlet and Shelikof Straits