EXPORTS NE Pacific Context Situational Awareness

Date: **Wednesday- Aug 1, 2018 - JD 213**
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Weather Forecast Summary:
Tomorrow (Thurs 8/2) will be cloudy, humid, cool (14°C), with ~15kt winds from the SW. Forecasted winds will increase after Wed reaching a maximum on Saturday (35 kts). Rain is forecasted friday, and some rain possible after Thurs. SWH are moderate (1-2 m) on Thursday through Friday increasing to > 4 m on Saturday.

Oceanography Summary:
Ocean Color: Last reasonable Chl image - July 3 - see below.
SST: Merged SST imagery available. Strong SST gradients persist to the east and south of PAPA; these have strengthened over the past few days. The large-scale NW (cold) to SE (warm) gradient are breaking up with a warm filament extending to the west and north of PAPA. PAPA is now located near the center of a low SST anomaly. This is a large feature, at least a couple hundred km's across, perhaps too large to be a single mesoscale eddy. The Mercator SST does show warmer water moving to the north to the west of PAPA, but PAPA is not located in the center of the temperature minimum.

Sea Level: Both dynamic topography and sea level anomaly show PAPA sitting on the northern edge of a large, coherent mesoscale anti-cyclone. The geostrophic velocity associated with this feature is still fairly weak, ~5 km/d, but amongst the strongest velocities in the region. An anti-cyclonic feature is located to the NE of PAPA and a smaller cyclonic feature is located to the SE of PAPA. Both features are over 100 km away and unlikely to affect the area immediately around PAPA. There is a signature of an anticyclonic eddy immediate south of PAPA in the Mercator products.

Currents: Surface currents at Station P are ~5 km/d; PAPA sits right at the northern edge of the anti-cyclone. Altimetric and Mercator products are fairly similar in terms of patter, but Mercator products show currents that about two times larger, ~10km/d at PAPA.

Weather forecast details
ECMWF,GFS,NEMS summary
sea state summary (wavewatch3 22km)
sea state summary (ECMWF WAM 13km)

Date	Wind(kn)	Tair(°C)	SWH(m)	Clouds(%)	Precip(")	URL	predictability
Thu 8/02	15SW	14	1.4W	100	--	aug2 forecast URL	high
Fri 8/03	25WNW	14	2-3WNW	100	0.4-0.8	aug3 forecast URL	high
Sat 8/04	25NW	14	3-4WNW	93	0.0-0.1	aug 4 forecast URL	medium
Sun 8/05	20N	14	1.7-2WNW	87	0.1-0.2	aug 5 forecast URL	medium
Mon 8/06	23N	14	2N	60	--	aug 6 forecast URL	high

Comparison of weather forecasts at Station P of 7 different model runs - 6 day forecast model comparison

Glider219- Real time depth profiles
  Dive 29 - 1-Aug 11:21 to 16:37   Lat lon 50.15N 145.12W to 50.13N 145.11W
        location
         chlor_a
        %PAR(0)
        fraction of saturated O2
        Temperature
        Salinity
        Sigma0
        Optical Backscatter
            Note: all NRT glider data are using manufacturers offsets / cal constants

PMEL mooring
Last week of hourly air temp, wind, current, sss,sst - PMEL stack time series plot
        Note - air pressure seems too high…

Satellite Imagery:
        Last good Chl image: July 3 - JD 184 - Aqua - URL corresponding sst
        Microwave SST: URL_10_deg & URL_5_deg
        Microwave+IR SST: URL 10 deg & URL 5 deg

Merged Satellite Altimetry:
        Absolute Sea Level & Geostrophic Velocity - 10 degree box & 5 degree box
        Sea level anom & anom currents - 10 degree box & 5 degree box

Mercator Ocean Products:
        Surface currents, SST & SSH: 10_degree & 5_degree
        95 m currents & salinity: 10_degree & 5_degree

Link to Situational Awareness data stockpiled for today on the google drive sitAware for 2017-08-01

EXPORTS NRT Platform positions in graphic and tex format.