

EXPORTS NE Pacific Context Situational Awareness

Date: Monday- July 24, 2018 - JD 205
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Weather Summary:

Tomorrow (7/25) will be cloudy and cool. 90% chance of rain 0.4-0.8" in early morning hours. Winds are ~21kts from the SW and decreasing to ~17 kts from S on Fri. SWHs are ~1.5m with swell from the S increasing to 2.5mSW on Fri.

Oceanography Summary:

Ocean Color: No clear sky imagery at Station P - Last reasonable Chl image - July 3 - see below.

SST: Merged SST imagery provides higher resolution than microwave. A NW (cold) to SE (warm) gradient dominates the pattern with a change of roughly 6 degrees over the 10° domain. There appear to be strongest gradients to the north and west of PAPA. In the high resolution images, the isotherms are meandering indicating mesoscale eddies. Mercator products show a similar large-scale gradient. The Mercator SST shows a strong SST front at PAPA that is not in the merged SST data.

Sea Level: Altimetry shows a N-to-NE flow at PAPA with anticyclones located ~50 km S of PAPA and ~100 km NE of PAPA. While these features are relatively weak, they establish a region of larger lateral shear to the E of PAPA.

Currents: Surface currents at StaP are ~5km/d to the N-NE according to altimetry with hints of anticyclonic features NE and S of Station P. Mercator predicts larger surface currents (~15 km/d) just to the west and north of PAPA.

Weather forecast details

Date	Wind(kn)	Tair(°C)	SWH(m)	Clouds(%)	Precip(“)	URL	predictability
Wed 7/25	21SW	15	1.5S->1.8S	100	0.4-0.8	july25 forecast URL	high
Thu 7/26	20S	15	1.9S->2.4S	100	--	july26 forecast URL	high
Fri 7/27	16S	15	2.5SW	100	--	july27 forecast URL	very high
Sat 7/28	17S	15	2.5SW	80	--	july28 forecast URL	high
Sun 7/29	12NE	15	2.4SSW	100	--	july29 forecast URL	high

Comparison of weather forecasts at Station P of 7 different model runs - [6 day forecast model comparison](#)

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 2017-07-24](#)

EXPORTS NRT Platform positions in [graphic](#) and [tex](#) formats