

EXPORTS NE Pacific Context Situational Awareness

Date: Sunday- July 22, 2018 - JD 203
Creators: Dave Siegel & Erik Fields & Andy Thompson

Weather Summary:

Tomorrow (7/23) will be cloudy and cool. 60% chance of rain 0-.1"(3h rate). Winds are ~15kts from the S. SWHs are ~1.4m with swell from the SW.

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. 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("3h)	URL	predictability
Mon 7/23	15S	14	1.4SW	100	0.0-0.1	july23 forecast URL	high
Tue 7/24	21SW	14	1.3SW	100	0.2-0.4	july24 forecast URL	high
Wed 7/25	22SW	15	1.2SSW	100	0.2-0.4	july25 forecast URL	very low
Thu 7/26	17S	15	1.3SSW	93	--	july26 forecast URL	low
Fri 7/27	14S	15	1.4SSW	33	--	july27 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 2017-07-22](#)

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