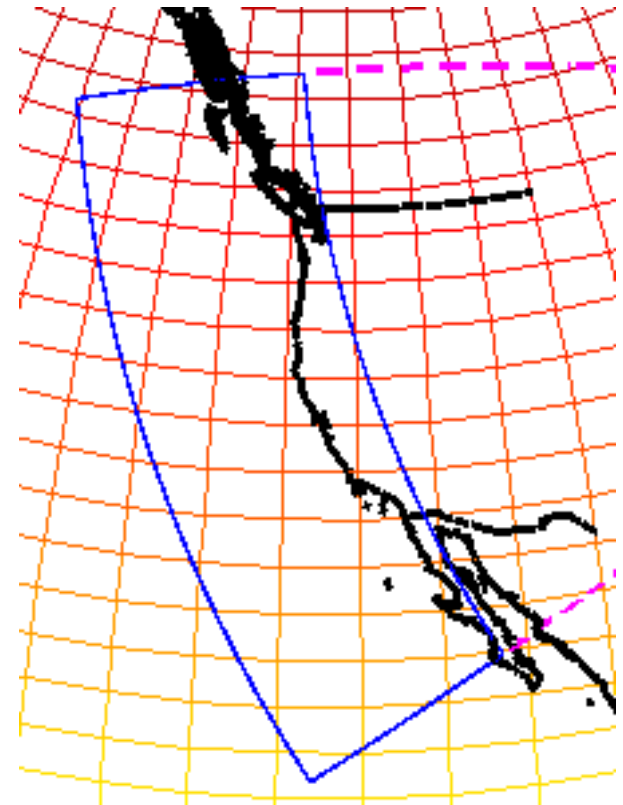


ACSPO VIIRS L3U SST assimilation in the US West Coast Ocean Forecast System (WCOFS)

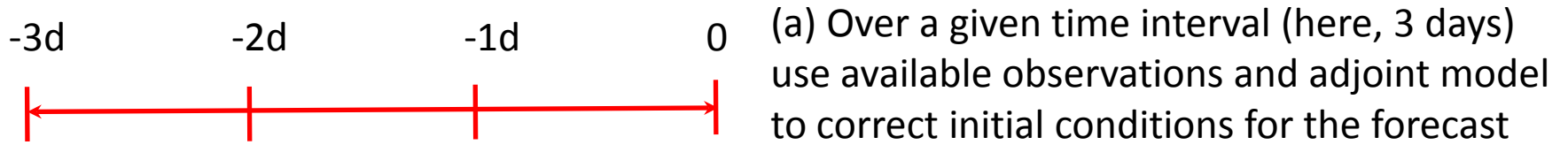
A. Kurapov, Oregon State University
E. Bayler, E. Myers, NOAA

WCOFS:

- Under development at NOAA (jointly NOS, NESDIS, JCSDA), 2-km horizontal res.
- Will provide short-term (3-7 day) forecasts of oceanic T, S, currents, sea level (for navigation, oil spill response, fisheries, etc.)
- Initial assimilation tests: use JPSS VIIRS L3U, in the Central CA subdomain



Assimilation methodology, 4DVAR:



(b) Run the model forecast using improved initial conditions

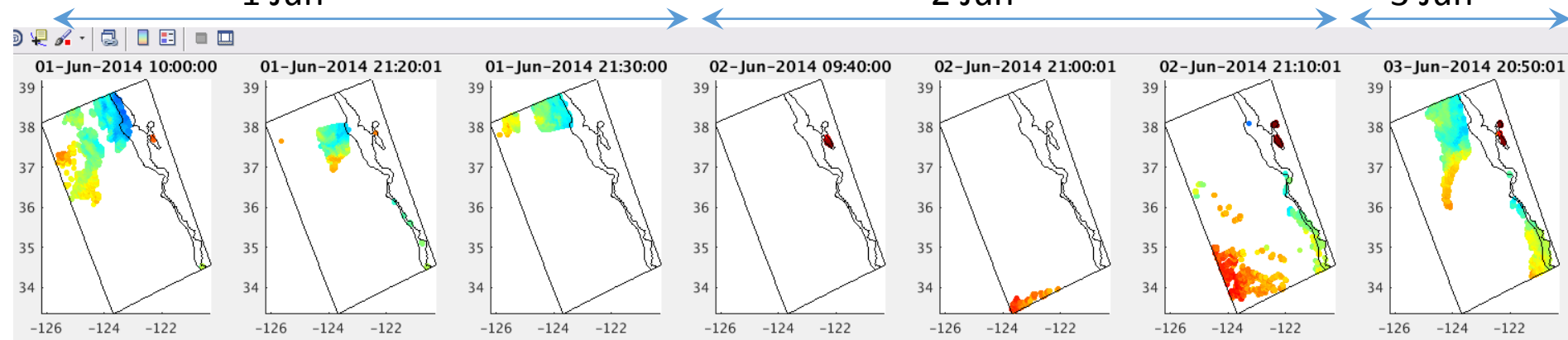


Example of SST coverage: JPSS L3U, in central CA, Jun 1-3 2014

1 Jun

2 Jun

3 Jun

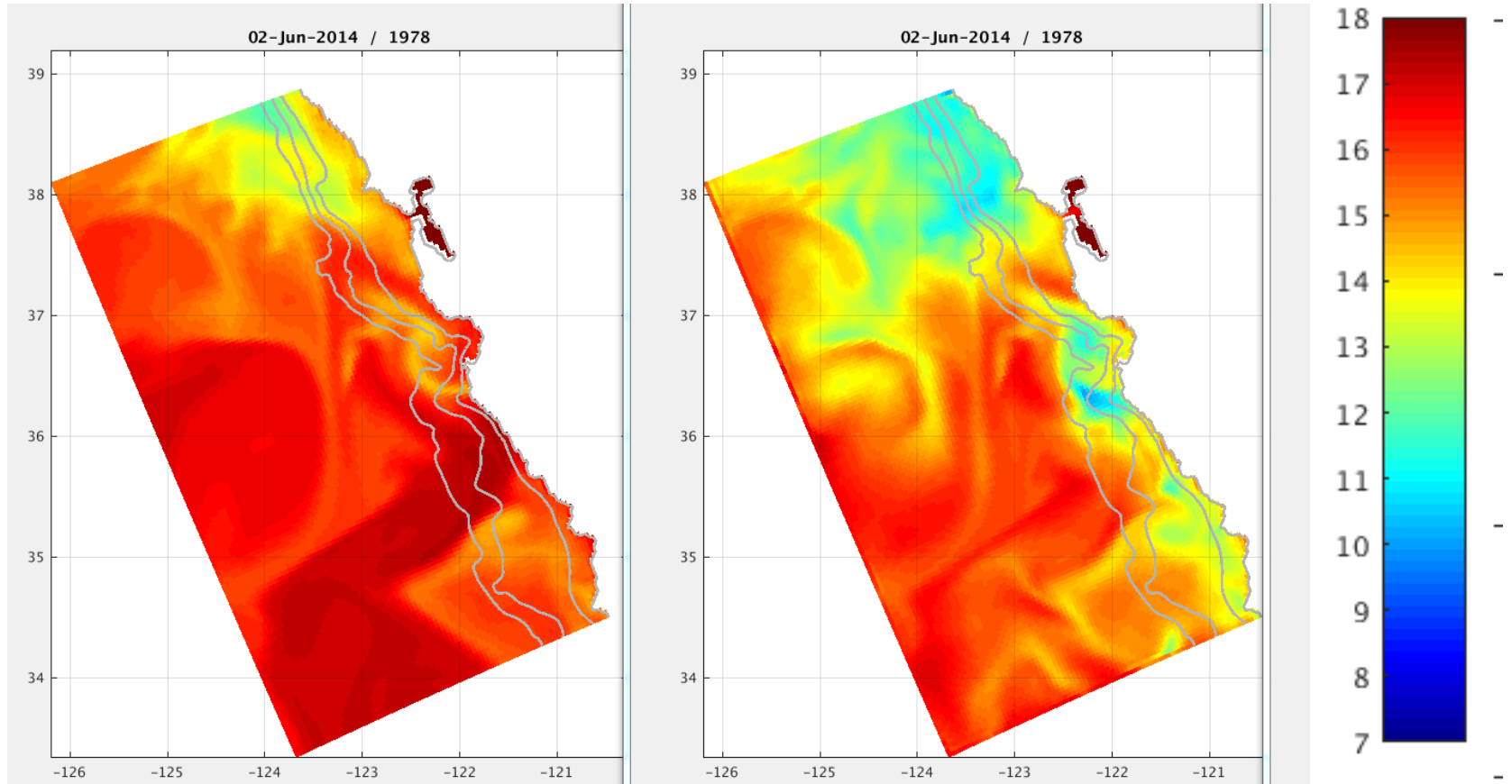


DA: **Dynamically based time-space interpolator** fills between gaps, facilitates accurate forecasts

The effect of SST assimilation on model SST:

06/02/16, 00:00:00 UTC

Model before assimilation / after assimilation



Preliminary analyses are encouraging and more analyses are underway