

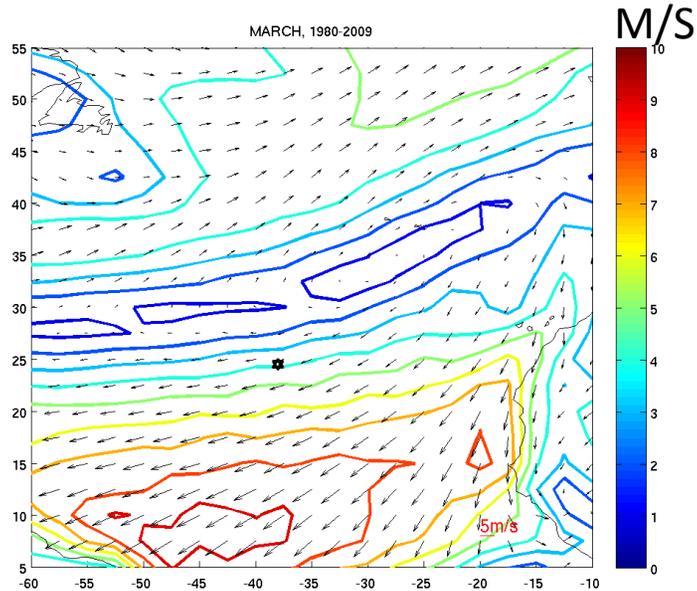
# **A Climatological Perspective for SPURS Sampling during the 2013 March-April Field Expedition**

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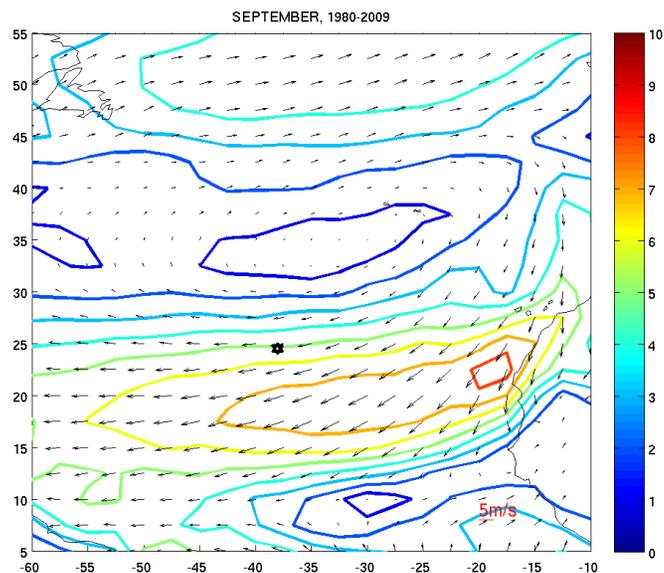
Jet Propulsion Laboratory

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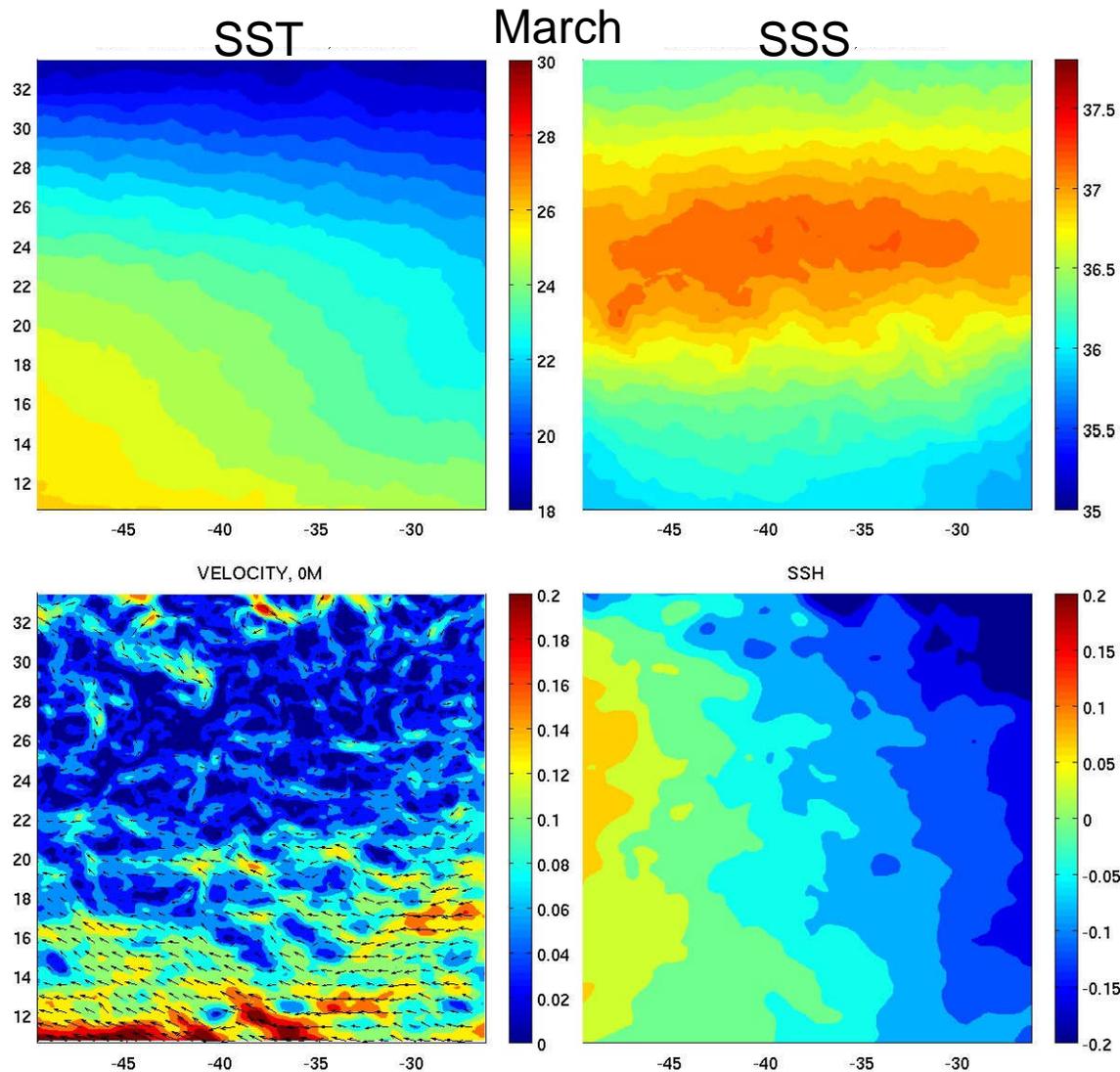
# Climatological Surface Winds of March



- At the location of the flux mooring, the wind has a speed of 4-5 m/s
- The wind speeds increase towards south, which may impact drifter release in the southern SPURS area as Luca suggested.

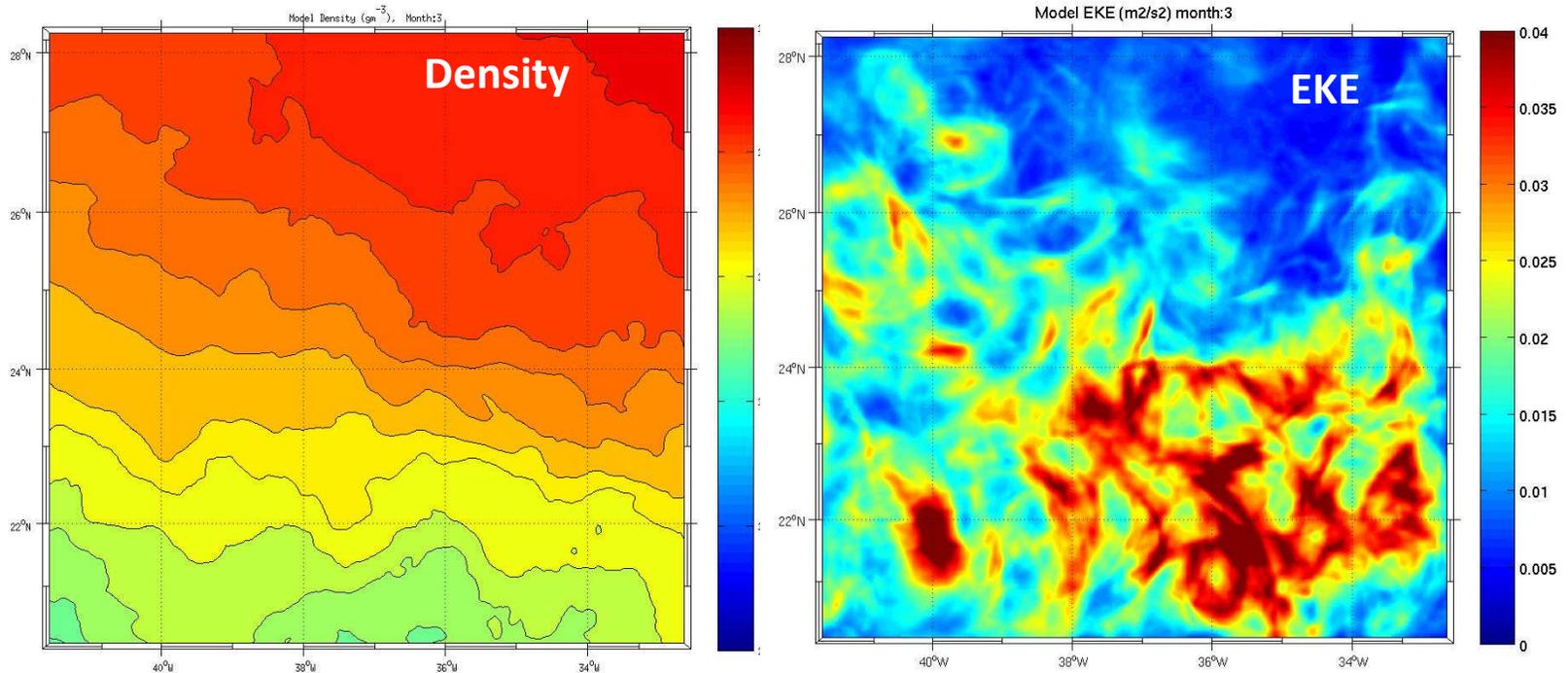


# Ocean Conditions in March



- Ocean currents are stronger in March than those in September, in particular in the area south of the flux mooring
- Ocean currents are driven by winds, and also geostrophic balance that leads a northward component in the SPURS area

# Density Fronts and Eddy Kinetics Energy



- The strong meridional density gradients (fronts) are localized between 22°N -24°N
- Fronts incline to be east-west oriented
- Strong EKEs are associated with the strong density gradients and located south of 24°N

## Suggestions

1. A survey between 22-26N (or 21-25N) suggested by Arnold is desirable for sampling active eddies, although it may be challenging for drifters.
2. An elongated box in longitude suggested by Gille is desirable for a better estimate of meridional eddy fluxes, which should be of particular importance because of the strong meridional density gradients. If possible, it is better to have 75 nm or larger in longitude, since my impression is that eddies in the area often have a size larger than 60 nm.