

Log 12 Tuesday

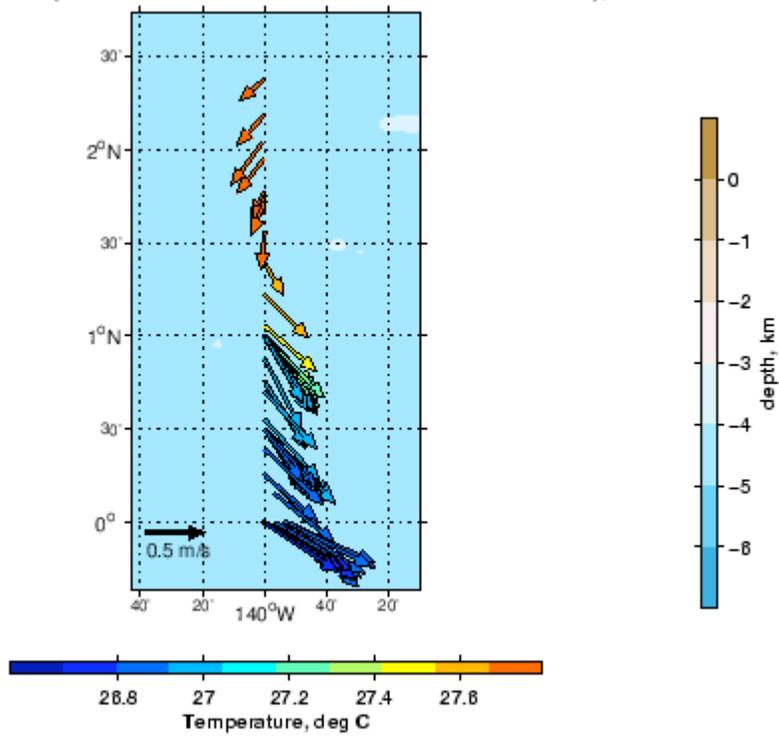
1. 132100Z September 2005
2. Position: Lat: 0-00.0N LONG 140-00.0W
3. Course: On station
4. Speed: 0 kts
5. Distance: 38.4 NM
6. Steaming Time: 4H 00M
7. Station Time: 20H 00M
8. Fuel: 2213 gals
9. Sky: Ptly Cldy; Cu
10. Wind: 110-T, 12 kts
11. Sea: 110-T, 2-3 ft
12. Swell: 110-T, 3-5 ft
13. Barometer: 1012.7 mb
14. Temperature: Air: 27.2 C, Sea: 25.6 C
15. Equipment Status: No change.
16. Comments: On station #9.

MASTER, R/V ROGER REVELLE

We are on the equator and sampling all the time. We did 4 trace metal casts today.
So what do the currents here look like?

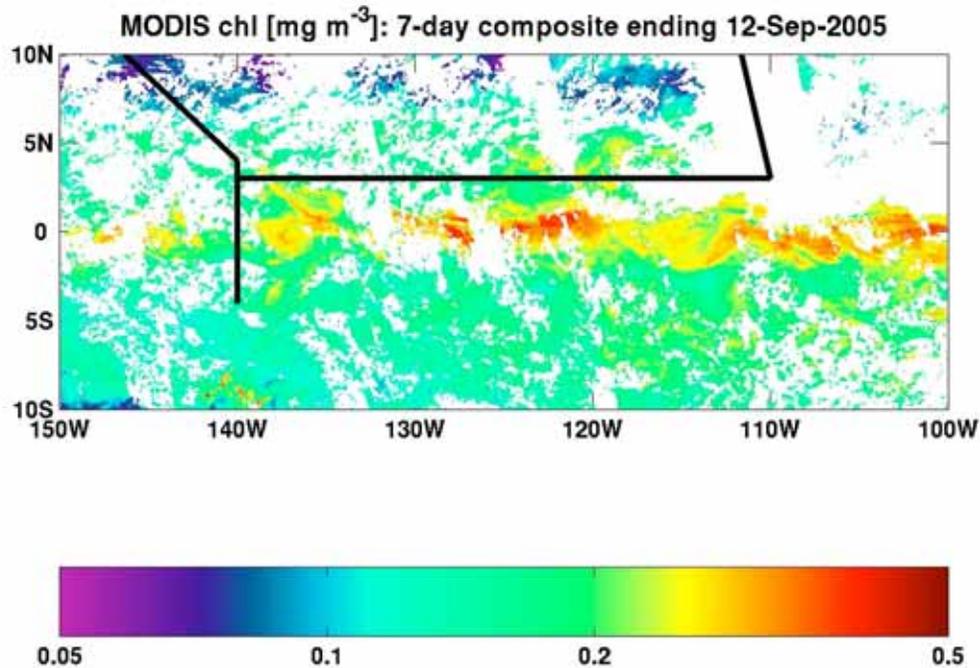
Here is the ADCP profile for today:

ZHNG10RR nb150 (2005/09/10 23:26:54 to 2005/09/13 23:24:00 UTC), 63–100m



2005/09/13 23:53:33 preliminary ADCP processing, U niv. Hawaii

You can see that at the equator the surface currents are quite a bit colder than they are farther north.



Looking at the chlorophyll data from today you can see that we are still right in the upwelling zone.

Grazing by zooplankton is the main process removing phytoplankton from the surface waters, and one of the important processes driving export of POC (Particulate Organic Carbon) to the deep sea. Zooplankton grazing must be considered along with growth, community structure and elemental composition of phytoplankton in order to understand how the carbon cycle of the upper ocean are regulated. JGOFS provided evidence that micro zooplankton are the main grazers in the EEP (East Equatorial Pacific), consuming 65-70% of the primary production under normal upwelling conditions and virtually 100% during El Nino (Landry et al. 1997)

In this cruise we have three components: meridional transects crossing the equatorial upwelling zone (that's what we are doing now!) , sampling and measuring biological variability resulting from the Tropical Instability Wave (TIW) and conducting nutrient perturbation experiments to examine competition among phytoplankton functional groups under 6 different combinations of Fe and SI availability.

As we visit each one of the lab groups we will discuss what they are specifically looking at and how it fits into the big picture.

So after the Big Fish Slaughter of 05' yesterday, we look forward to Dinner!!!!



The big cleaning assembly line!



Our fabulous chefs; Pete , Jay and Chief Mate Ian Lawrence and the beautiful sushi they made!!!!



Sushi Feast!