



**NOAA Teacher at Sea
Elsa Stuber
Onboard NOAA Ship McARTHUR II
June 4 – 9, 2007**

NOAA Teacher at Sea: Elsa Stuber

NOAA Ship MCARTHUR II Cruise S307

Mission: Collecting Time Series of physical, chemical and biological data to document spatial and temporal pattern in the California Current System

DAY 6 Friday, June 8, 2007 at sea

Visibility: clear

Wind direction 282 NW

Wind speed: 18.9 knots

Sea wave height: 3-5 feet

Sea temperature: 10.5 C

Air temperature: 13.5 C

Sea level pressure: 1013.36

Cloud cover: 100 % status clouds

Science and Technology Log

Wind woke me up at 06:00, boat rolling.

Early morning 03:00—05:00 winds were 30 knots.

Casts 31, 32, and 33 processed by other teams.

Cast 34 @ 09:24 Station H3 Latitude 36.44117 N Longitude 122.01108 W Cast depth 1000 meters

CTD cylinders tripped at 1000, 200, 150, 100, 80, 60, 40, 30, 20, 10, 5, 0 meters

Samples processed and stored. Data for cast is Table 16 at the end of the report.

Worked on chlorophyll analysis with flurometer.

Cast 35 @ 11:47 Station C1 Latitude 36.478487N Longitude 121.508392 W Cast depth 225 meters

CTD cylinders tripped at 225, 200, 150, 100, 80, 60, 40, 30, 20, 10, 5, 0 meters

Samples processed and stored. Data for cast is Table 17 at the end of the report.

I worked on chlorophyll analysis off and on throughout the day.

The HyperPro instrument to measure light up to 40 meters depth in the water has been tested at mid-day each day. One tube is pointed down and opposite tube is pointed up sensing light levels. A third tube is strapped to the railing registering light levels at all times. Seechi was used during the daylight hours as well

MBARI staff gave us some Styrofoam cups, two sizes, to decorate as we wanted using different permanent colored markers. We put all of them in a mesh laundry bag and attached it to a 1000-meter depth cast. When they came back up they had shrunk to 1/6th of the original size. It demonstrates the amount of air in the Styrofoam, which should be a good illustration for my students.

Wildlife observations: humpback whales, dolphins, sea gulls, cormorants, sooty shearwaters, and albatross. Kathryn said the sooty shearwater cannot take off from the ground very well. This bird will climb up the trunk of a tree a ways and take off from there. They will wear the bark down going up a path on the tree. She hoped we would see a Yaeger bird, a bird that chases other birds that have been feeding, making them drop their food. That's how the Yaeger feeds. It is very aggressive she said in pursuing other birds.

Moved to an area in Monterey Bay where whales had been sighted. Saw five at a distance of half a mile, sometimes a fin, but mostly the whale's spout from the blowhole.

Packing up equipment so ready to unload early tomorrow in San Francisco.

Each day the plan of the day is posted by the FOO. I include an example at the end of the report.

We did extra stations as we are ahead of schedule.

Cast 36 @23:58 nutrients only. Final station done by Troy, nutrients only at 03:00 June 9, 2007

Bed at 01:00 June 9th