



OAR NORTHWEST: EDUCATION

CWF Africa to the Americas Expedition 2013

Expedition Report Week 8 – Module 4.2

Route so far:



Narrative summary of week prior:

<http://oarnorthwest.com/blog/>

Day 52: Even dead fish are camera shy

Whale? Or shadow... life beneath the ocean rowboat James Robert Hanssen

For the last few days in a row, we have been visited by two or three large whales. They have large, coal-colored bodies and a small fin on the back well behind their blowhole. They appear, give a deep intake of air, almost industrial in sound, and expose at least thirty feet of their body and it's obvious that there is far more beneath the surface. It's overwhelming, gentle power.

It's also elusive. Out of nowhere this leviathan appears and takes a deep breath, blows us away, and then gone. We stand with cameras half-pulled out of dry bags, mouths agape, or standing in

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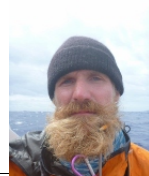
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concentration on the surrounding water that, even with polarized glasses at mid day, is impossible to see through more than thirty feet from our boat ... and we wait. Those beasts take breaths for real. One breath and, as far as I can tell, that's all they need to get far enough away from our boat that they are invisible (this would be about a mile or two).



Check out the blog and read more!

Photos from this week on the Boat:





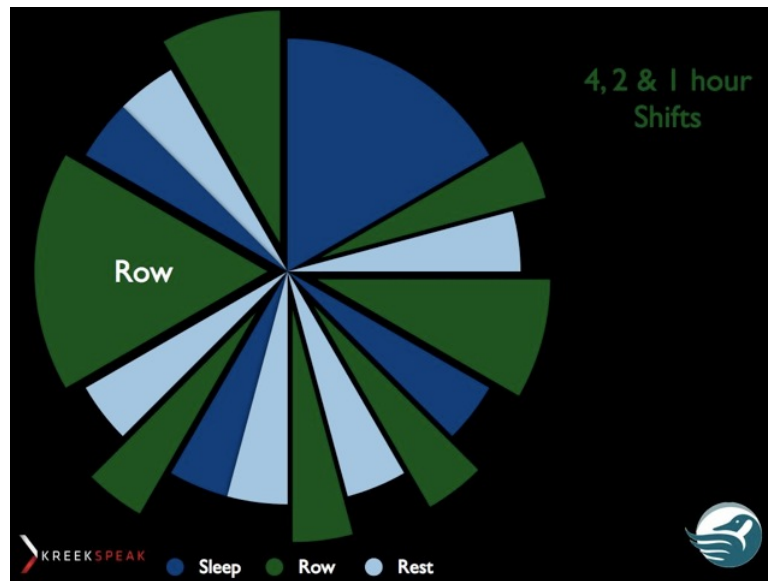
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Lesson 4.2 The Body: ZZZZZZZZZZZ's

The four engines of the JRH (Jordan, Markus, Pat, and Adam) need fuel, as we looked at last week. And they also need sleep and rest. They crew has a sophisticated schedule that they have planned in order to balance their rest and sleep with the rigorous rowing they engage in week after week. The crew gets a little bit of a mix during the day, and also when on sea anchor. In this lesson we'll take a look at how this works, and try to keep up!



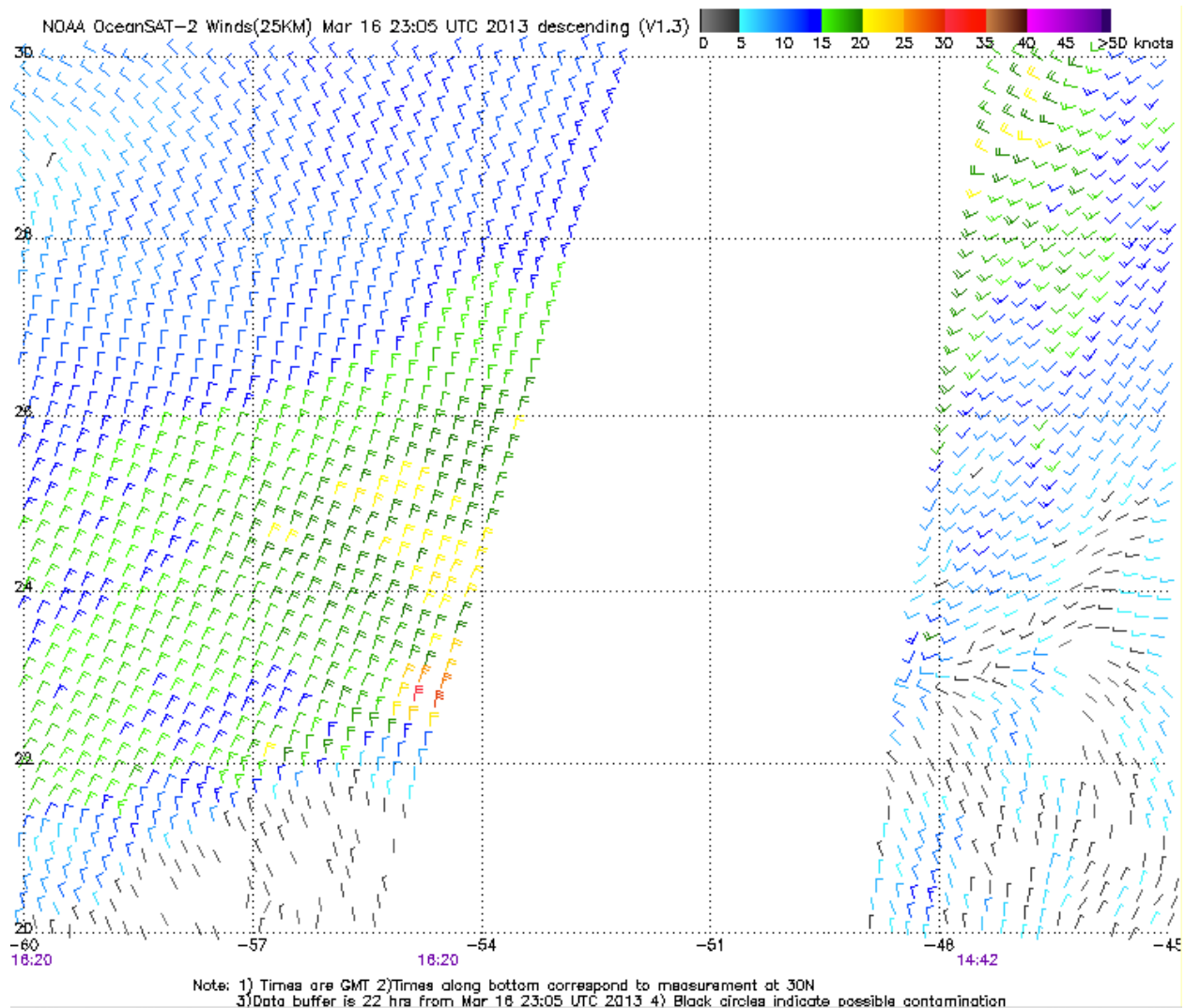


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Navigation Forecast:

Navigation and weather forecast imagery can be found at David Burch's site <http://www.starpath.com/oarnw/> anytime. Some highlights from the last week are included below.



The forecast team at UW writes on their blog: <http://uwams.wordpress.com/>
FORECAST FOR 3/17/13

Current Conditions: Based on satellite imagery it appears that you are under partly sunny skies with increasing cloud cover. A region of thicker and more stratiform cloud cover is just to your west. These clouds appear to be dissipating and are rather stationary. Additionally, a band of frontal clouds is further west and is oriented SW to NE through the Bahamas and is moving eastward. This is a very long cold front, whose associated cyclone is currently

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located north of Maine. Based on ASCAT it appears that your winds have diminished over the last day or so and are now approximately 15-18 kts from the N. Your pressure continues to be around 1014 mb.

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Short-term Forecast (0-48 hrs): It appears that a very small, weak anticyclone will pass over your region in the next day or two. However, this will quickly move off and another cold front will be just reaching you at the end of this forecast period (two days from now). The winds in ECMWF and GFS are slightly lower than your observations and ASCAT so I think you will have slightly higher winds than they forecast. The winds during this time will slightly weaker than the last few days and have a northerly component. Given the stratiform cloud cover to your west I think you will experience increasing cloud cover. Over the next two days ROTFS is consistently showing weak currents that will probably be between 0.5-1 kt and their directly looks to be quite variable. The currents may weaken slightly at the end of this forecast period. It looks like the waves will slightly decrease over the next day or so and will come more from the NE. Prior to the front the period of the waves will increase.

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Long-term Forecast (48-72 hrs): By this time I expect you will be feeling the effects of the next cold front. However, ECMWF and GFS are suggesting that the front will weaken as it approaches you. This is a really tricky time for the winds. Two days from now the winds will rapidly swing around and come from the N and NE and increase in speed and be near 15-18 kts. It appears that you will be entering a regime with winds from the NE after this front. Given that the front is supposed weaken as it approaches you I do not expect you will experience strong winds from the SW. However, similar to the last front a band of clouds will pass overhead with the next front. However, it should be relatively narrow and not last too long. As the front passes I expect the waves to return to 2-3 m and 11-12 s. It also looks like the waves will turn and come from the N and then the NW by the beginning of next week.

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Current Conditions (00 UTC March 15):

Pressure: 1014 mb

Winds: 15 kts from N but highly variable

Currents: 0.5-1 kts

Waves: 2-3 m, 12-13 s from NNE

Clouds: Partly – Mostly Cloudy (50-70%)

~ 12 hr Forecast (12 UTC March 15):

Pressure: 1015 mb

Winds: 10-12 kts from N but highly variable

Currents: 0.5-1 kts

Waves: 2-3 m, 11-12 s from NNE

Clouds: Partly-Mostly Cloudy (50-70 %)

~ 24 hr Forecast (00 UTC March 16):

Pressure: 1015 mb

Winds: 12-15 kts from N or NW

Currents: 0.25-0.5 kts



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Waves: 1.5-2.5 m, 12-13 s from NE

Clouds: Partly Cloudy (40-60 %)

~ 36 hr Forecast (12 UTC March 16):

Pressure: 1016 mb

Winds: 10-12 kts from N or NW

Currents: 0.25-0.5 kts

Waves: 1.5-2.5 m, 13-14 s from NE

Clouds: Partly Cloudy (40-60 %)

~ 48 hr Forecast (00 UTC March 17):

Pressure: 1016 mb

Winds: 10-12 kts from NW

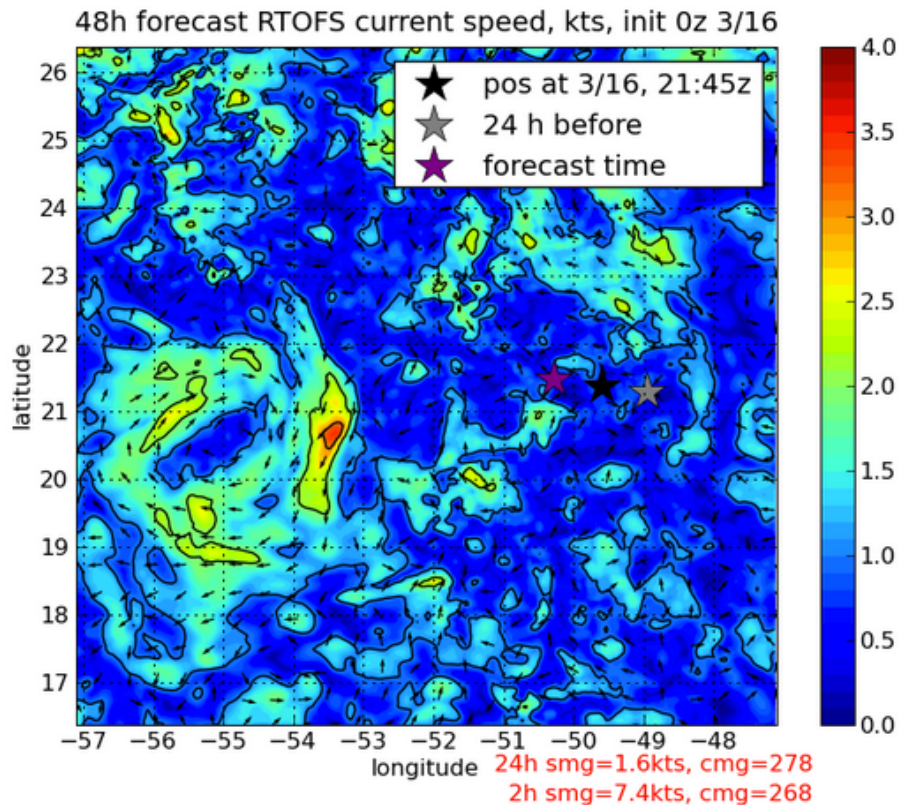
Currents: 0.25-0.5 kts

Waves: 1.5-2 m, 12-13 s from NE

Clouds: Mostly Cloudy (50-70%)

Wave data can be observed on Angie Pendergrass' (Expedition Scientist) site <http://oarnw-currents.blogspot.com/>

This is a 48-hour forecast, the 'warmer' the color, the higher the speed of the current in knots.



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