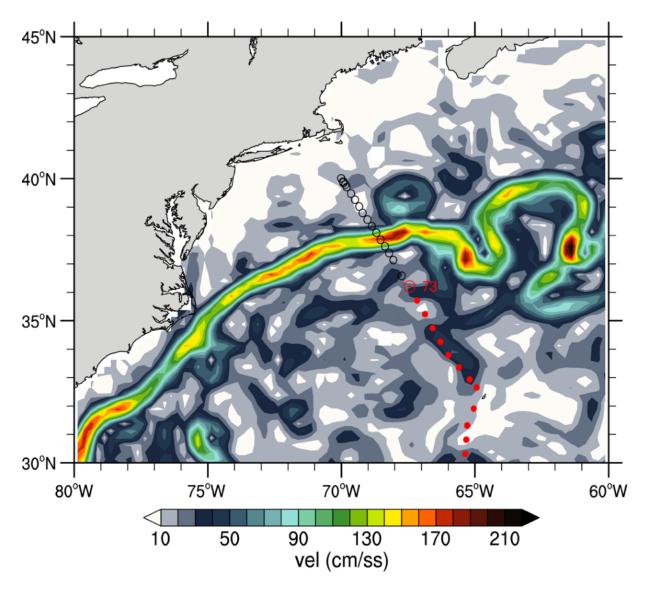
Week 3 - May 4 to 10 May 11, 2021

A22 CRUISE WEEKLY REPORT

We have just finished our third week at sea. Four days ago, we crossed the eastern side of Bermuda, and now we are occupying the famous line-W, from Bermuda to Woods Hole. In these three weeks, we completed 73 of 90 planned stations. We are just six days from shore! But, the hardest part is still to be done, as the day before yesterday showed us. After incredible weather, we experienced our first weather system. High waves and strong winds put operations on hold for one day. We resumed CTD casts around 7 am yesterday and now sailing full speed towards the Gulf Stream, where closed-space stations wait for us. The latest altimetry map shows speeds around 1.7 m/s, which is slightly lower than a few days ago (2.2 m/s). We don't expect any weather systems in our way, but as you can guess, weather is always hard to forecast.



Geostrophic velocity from altimetry - May 11. Figure: Viviane Menezes

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RAFOS float deployment. These floats are ballasted to 4000 m. The deployment during the A22 is at-sea test for the Deep Madagascar Basin Experiment next year. Observe our flat sea. Photo: Mike Wazowski

With sea treating us unbelievable well, our CTD casts and float deployments occurred without significant problems. Our only "issue" has been who will make dinner on time. No incident or drama to report, just tiredness started to pick up. Some of us boarded in February in Miami and March in Woods Hole and have been at sea for more than two months, besides the two-week isolation onshore.

After three weeks, our CTD watchstanders have taken more and more responsibilities in the cruise as they felt more comfortable with life at sea. Now they can run the show without much help. Last week, some of them started to analyze the data we collected so far, and we hope we can show some of their analyses in the report next week.



Bonnie Chang (CFC; left) and new cop Holly Olivarez (CTD watchstander; right). Photo: Viviane Menezes

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Besides the CTD casts (every 30 nm), we have deployed our latest float batch: two Argo, two Go-BGC, and two RAFOS. Caitlyn Webster, a research technician at Scripps and fantastic illustrator, has been carefully decorating the Go-BGC floats as part of the adopt-a-float program.

We are also having fun helping the marine technicians dropping at sea several solar-powered spotter buoys. These buoys measure wave, wind, and sea surface temperature. At the Gulf Stream, we will deploy ten of these little buoys. The integration between science party and crew has been the highest point in this cruise!



Ali Siddiqui (CTD watchstander) deploying a spotter. Photo: Mike Wazowski

With land on the horizon, our conversation is increasingly about the demobilization and all the work that will take. We hope to arrive at WHOI with things more or less ready to disembark (if the weather allows), as we will take our second vaccine shots at the pier.

Best, now from the Gulf Stream,

Viviane Menezes (Chief Scientist)

Jesse Anderson (co-Chief Scientist) & A22 team

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