

In which We Linger in Port
April 22-29, 2022

This is third of what was intended as two P02/Leg 1 weekly reports sent out prior to the R/V Revelle's departure from Guam. Held up by the lack of a key crew member, we now have a sailing date – this Saturday, April 30th (Fig. 1).

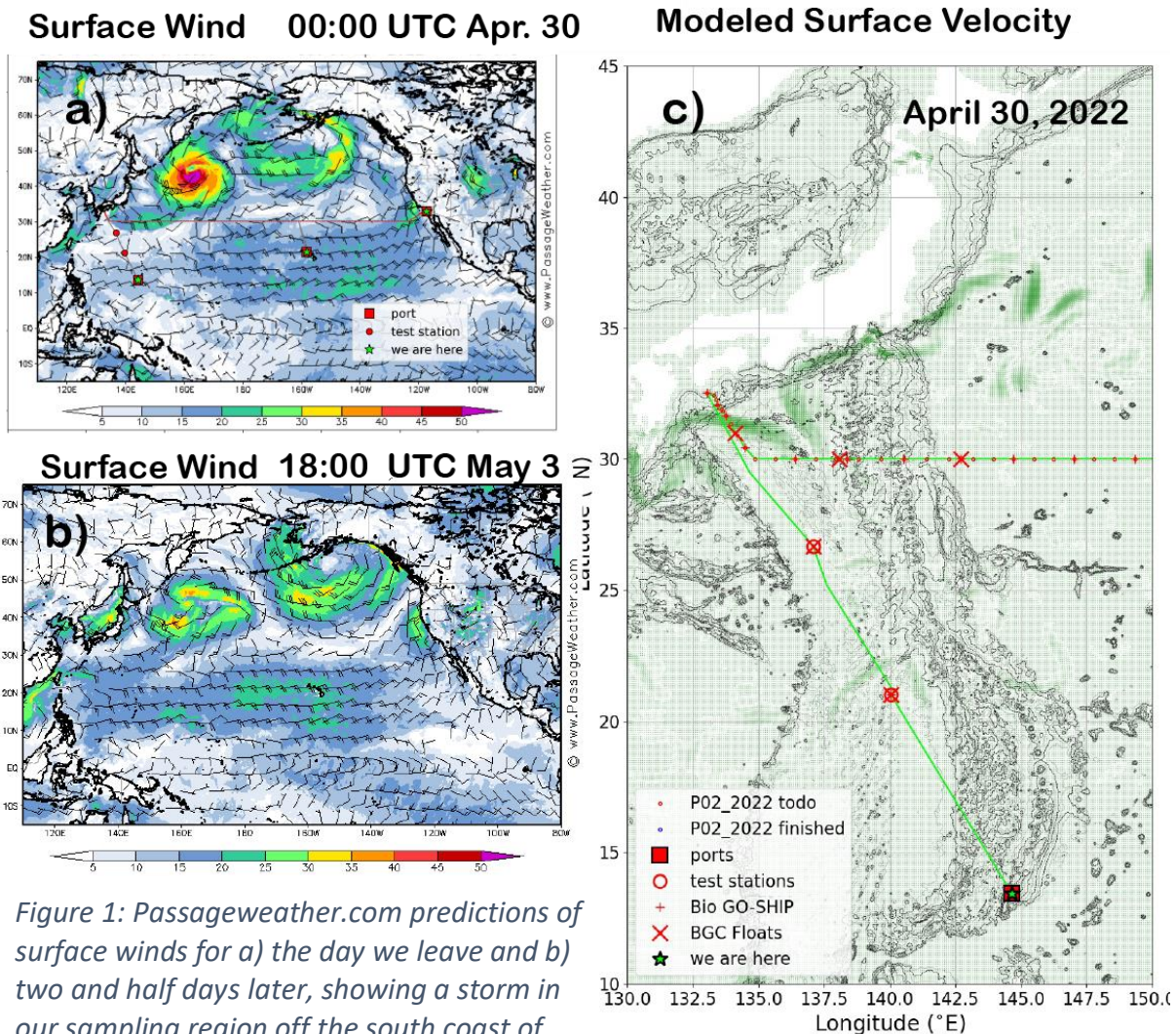


Figure 1: Passageweather.com predictions of surface winds for a) the day we leave and b) two and half days later, showing a storm in our sampling region off the south coast of Japan that moves off to the east. The right-hand panel c) shows our track and the Copernicus physical assimilation forecast (<https://marine.copernicus.eu/>) for surface velocities on the day we leave. Note, the large meander may allow us to sample the Kuroshio more than once, depending on how many stations we need to cut to make it out of the Japanese waters by our

This past week a great deal of in-person and email discussion has occurred about how best to handle not only the loss of 8 days at sea, but also the loss of more than half of our requested

timeframe for sampling in Japanese waters. I am grateful to the PO2 PIs and GO-SHIP Executive Council members who have been incredibly responsive and supportive in their email communications, and to the members of our science party for their creative thinking and willingness to compromise. We have a plan.

- While there has been discussion amongst science and ship members here in Guam, our colleagues on Leg 2, and Ship Scheduling about extensions, they don't appear to be viable at this juncture. They also represent a personal hardship for those who have already put 3 weeks into this lengthy cruise but have yet to leave port. Therefore, currently, we are not counting on getting any of these sea days back. A request is being considered for us to come into Honolulu later in the day.
- A request has also been made to extend our clearance for sampling in Japanese waters by 6 days. Here, tremendous thanks goes out to Hannah Delapp at UCSD Ship Scheduling for her late night efforts in getting this request through the right channels and to State Department personnel both here and in Japan who are trying to make this happen for us. Chances are not great as time is now quite short, but the request is in.
- There are three ways to speed up our operations: spreading out the station spacing (i.e., few observations, Fig. 1c), taking less time on station, and steaming more quickly. All three will be employed. In particular, within the Japan EEZ on stations with bottom depths shallower than 5000 m we will be combining our core sampling with the new Bio-sampling in a single 36 bottle cast. Once out of the EEZ, we will take stock and decide whether to continue in this fashion or go back to separate Bio and core casts. We are aware, that our choice may set precedence for future cruises with a 36-bottle rosette.

Other news: Our blog is being updated every few days (you can find it here <https://www.go-bgc.org/expedition/north-pacific-2022/p02-introduction>). All 10 of the Leg 1 GO-BGC floats are now decorated (Fig. 2). Our first float will be deployed on Monday at our not-so "test" station and our second on Tuesday on a slow flyby (Fig. 1c). Earlier in the week, we enjoyed the welcome relief of an evening on the pier (next to the ship, Fig. 3) and couple of days ago we had a quick jaunt back onto the dock when a fire bell was set off accidentally. Every day we have been holding all-hands science meetings to keep everyone up to date with the unfolding plans and we have now started holding TEDD (Technology, Entertainment, Design at the Dock) Talks after these meetings. Our first was Aaron Mau (ODF Data Analyst) presenting on the mysteries hydrothermal vents and coming up soon will be our DOC Analyst, Abby Tinari who has told us she will talking about "sharks not chemistry".

On Saturday, we will be reunited with our Co-Chief, Shuwen Tan and will get to finally meet in person our Bio Analyst from the University of Guam, Star Dressler. The pair of them have been confined to their hotel rooms for the duration of our delay, but on Saturday once we are out of the Navy Base harbor, they will be brought to the ship via launch. Then we will be underway.

Looking forward to reporting from sea next week

Alison Macdonald and Shuwen Tan

2022 P02/Leg 1 (soon to be33RR20220430) Chief and co-Chief Scientists



Figure 2: Right - The last two GO-BGC floats being decorated for outreach to K-12 schools. Left – The turtle who has been paying us regular visits entertaining the milling crowd not directly participating in the decorating. Photo credit: Alison Macdonald



Figure 3: Right - An evening on the pier. Left – crescent moon, Jupiter and Venus seen in the morning by some of us attempting to change our shifts. Mars and Saturn were also visible but declined to show up in the image. Photo credit: Alison Macdonald