

Happening now...

Expedition 402: Tyrrhenian Continent-Ocean Transition

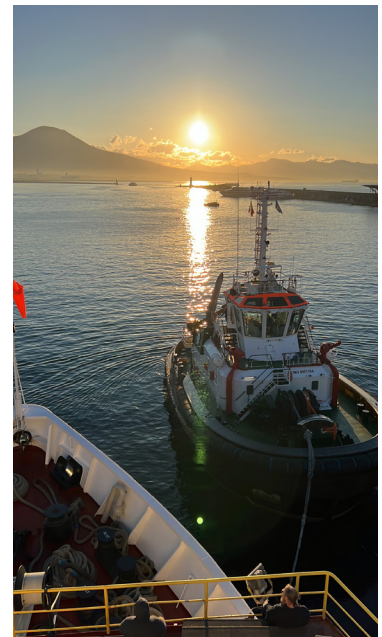
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So far, during Expedition 402...



LEFT: Expedition 402 participants feast at an Italian restaurant after a long day of onboarding (Credit: Tessa Peixoto). BELOW: Tugboats led the *JOIDES Resolution* out of port on a sunny morning (Credit: Tessa Peixoto & IODP).



The *JOIDES Resolution* was in dock for about five days, and in that time the crew of Expedition 401 disembarked, the ship was cleaned bow to stern, visited by four separate groups of in-person tours led by two Italian scientists (both sailed with Expedition 393, and one now currently works as a marine technician on board), and had the new Expedition 402 crew board.

The 402 science party unpacked and immediately went into onboarding meetings where we each got our shipboard emails. The first email I got was the Lead Laboratory Officer's list of best restaurants near port, which is useful because after eight hours of onboarding, we welcomed the idea of eating in town.

The ship departed Naples, Italy on February 14th, bright and early alongside the sunrise. The weather was warm and the seas were calm. We sailed away from Mt. Vesuvius to our first drilling location in the Vavilov Basin.

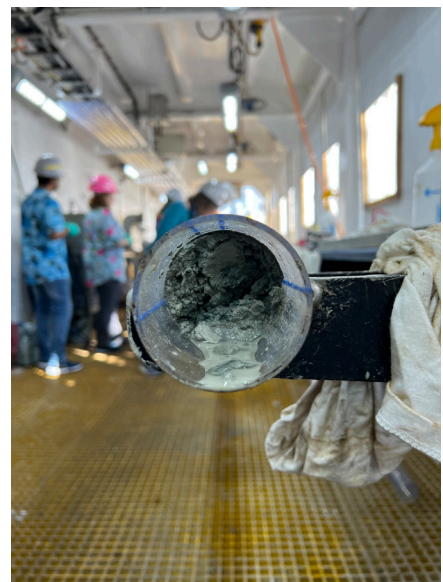
Fast-forward to the present, and we have already visited two different drilling sites, and are at our third location. We are ahead of schedule, but only due to the fact that our first drilling site did not go according to plan. After drilling for three days, the drill string got stuck in the borehole so we had to sever the pipe and move on. The collected samples from the first and second drilling sites are already telling an interesting story, and [surprising the scientists](#).

The second drilling site proved prosperous for sediment, so much so that we pulled new sediment cores every 45 minutes, which really tested our sedimentology team's efficiency at describing core in a short time span. Nevertheless, after all that sediment collection we did hit hard rock and the formations are not what we expected. Thanks to our understanding of formations on land we are using the terrestrial exposures to help us understand how far back in time we actually ended up drilling! We do know that one of our sediment cores contained some gypsum crystals, which correlates that layer to the Messinian Salinity Crisis.

The science team and crew are settling into the groove of ship life. They already are getting familiar with the JR's many amenities including the ice cream machine as well as the gym. But the best part is that during the first week and half we had beautiful sunshine warm enough to bask while on Steel Beach.

When the sun goes down the science party also is getting quite good at Ping Pong. Some of them are even thinking of starting their own professional team on the side if we don't find more hard rock soon. Scientists always have a Plan A, B, and C!

At the time of writing, we have about 45 days left in the expedition. Wish us smooth sailing and good core recovery, and don't forget to follow along through our [Expedition 402 blog](#)!



TOP: Expedition Program Manager Emily Estes facilitates a crossover meeting between shifts (Credit: Tessa Peixoto & IODP). MIDDLE: Freshly recovered sediment still in the core liner (Credit: Tessa Peixoto & IODP). BOTTOM: Expedition 402 scientists spend their down time enjoying the warm sunshine on the "steel beach" above the bridge deck (Credit: Tessa Peixoto & IODP).