

## The East/central Pacific International Campaign

**Lead Science:** This cruise was funded by JAMSTEC and organized jointly through JAMSTEC (Dr. Dhugal Lindsey), University of Texas Brownsville (Dr. Erin Easton), and Universidad Católica del Norte (Dr. Javier Sellanes).

**Bursary Recipient:** The support of the Inter Ridge Travel Bursary made it possible for the participation of Nicole Morgan, a Ph.D. candidate from Florida State University.



The East/central Pacific International Campaign (EPIC) cruise took place on board the JAMSTEC vessel *R/V Mirai* from January 26<sup>th</sup> through March 2<sup>nd</sup>, 2019. The focus of this cruise was to characterize undersampled oligotrophic waters of the South Pacific. We covered over 7,000 km sampling 10 stations; 8 stations were focused on chemical and biological data in the near and inside the South Pacific Gyre, and included in these sites were seamounts of the Salas y Gomez Ridge. Two stations focused on geological sampling near French Polynesia. The sampling strategy was highly interdisciplinary with chemical and biological sampling covering both pelagic and benthic areas through the use of CTD rosettes, IONESS plankton nets, a multicorer, the Deep Tow towed camera system, and an Agassiz trawl. Nicole Morgan focused on samples from

the Deep Tow and the Agassiz trawl. Over 30TB of imagery of both the water column and seafloor was collected with the Deep Tow system, and includes 8k resolution of seamount fauna. Approximately 400 biological samples were collected by the trawl, and a large percentage of them were species new to science. The most exciting benthic result included finding photosynthetic red-algae over 250 m deep, much deeper than previously reported.

This cruise provided Nicole with an incomparable opportunity to learn about benthic communities in the South Pacific. Researchers from Chile, Colombia, Uruguay, Australia, the United States, and Japan were involved in this campaign, which just as importantly provided numerous opportunities to learn from the cultures of the highly diverse teams involved in this research.