Summary

Cruise: AT-41

Pilot: Jefferson Dive: A4963 Stbd Observer: Kaitlin Kovacs

Date: 8/24/2018 **Site:** Stetson Deep **Port Observer:** Sandra Brooke

Alvin arrived on bottom at 13:00 UTC at a depth of ~850 m, approximately mid-way between Target 1 and 2. Bottom type was coral rubble, visibility was good (clear within light range), currents minimal, and temperature ~5°C. We began transiting east, upslope towards Target 2, and ran across rubble with sparse live *Lophelia* colonies, which became larger and more abundant as we moved up moderately steep slope. Currents were manageable and we stopped to sample Lophelia and fire niskins periodically. Approximately halfway up the slope, we stopped to deploy the coral units, next to a large colony of *Lophelia* on a flat area of low relief rubble (31 59.06N; -77 24.6893). Alvin requested a fix from the surface as 'coral experiment'. We sampled a Paragorgia johnsonii colony next to the experiment and continued to move upslope towards Target 3. The top of the mound was covered in Lophelia and we completed our quiver samples and placed a large Lophelia colony in the starboard biobox for live experiments. As we moved to the southeastern quadrant of the mound, the habitat changed to a flat area dominated by small white octocorals, Enallopsammia and Madrepora colonies. The port arm pressure compensator disconnected so we finished coral sampling and collected 3 pushcores with the starboard arm and left bottom at 17:30