

# Quantifying the biological, chemical, and physical linkages between chemosynthetic communities and the surrounding deep sea

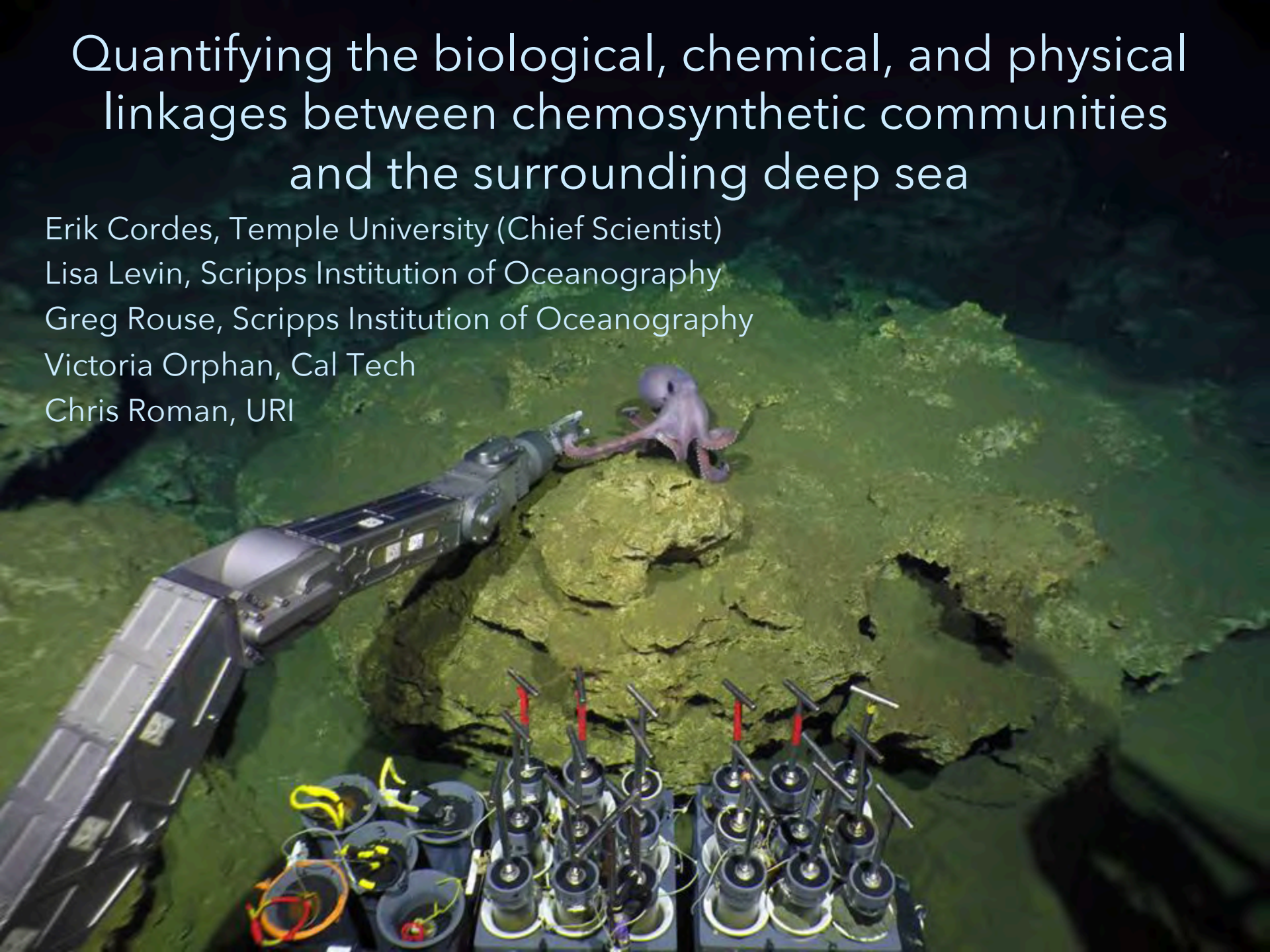
Erik Cordes, Temple University (Chief Scientist)

Lisa Levin, Scripps Institution of Oceanography

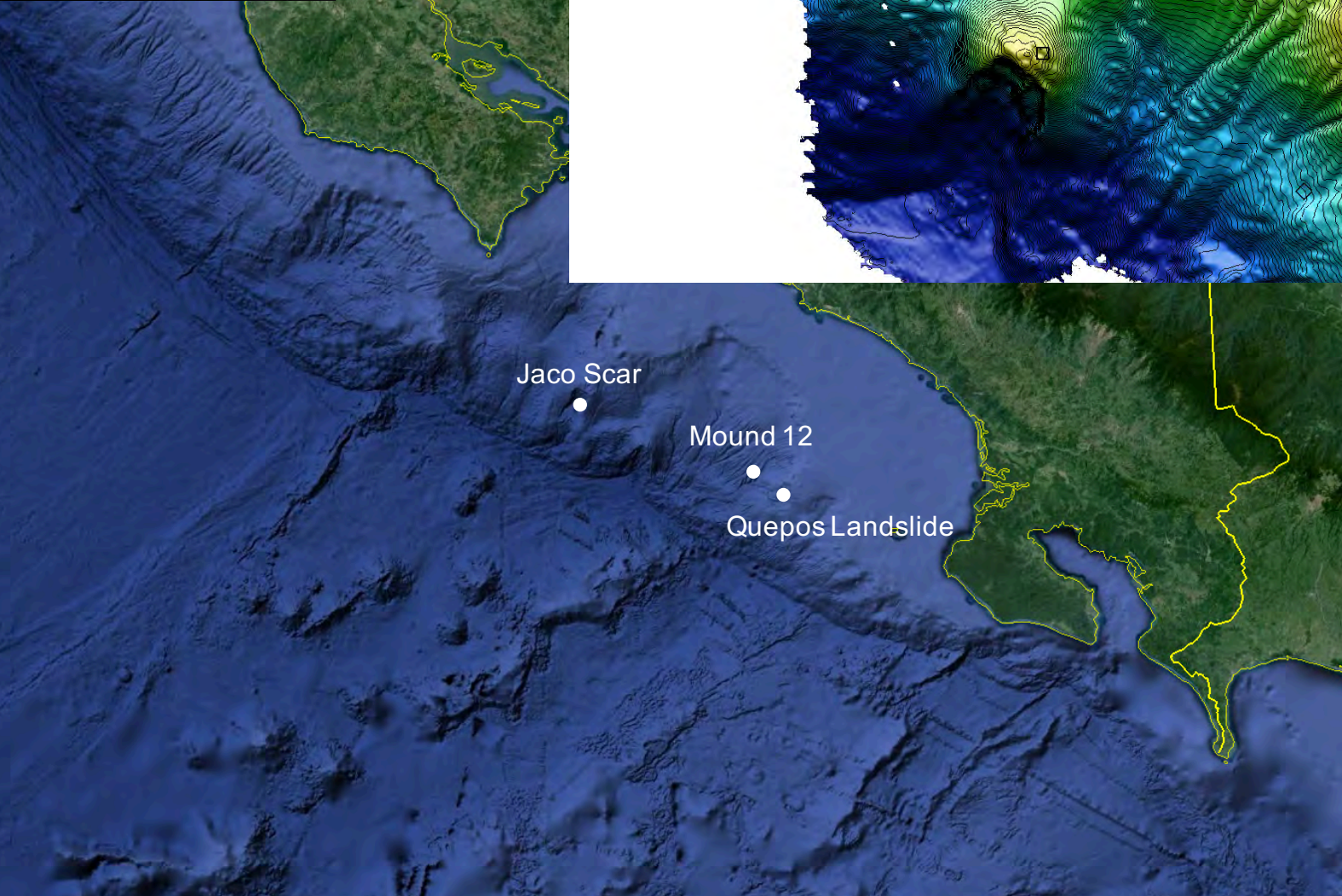
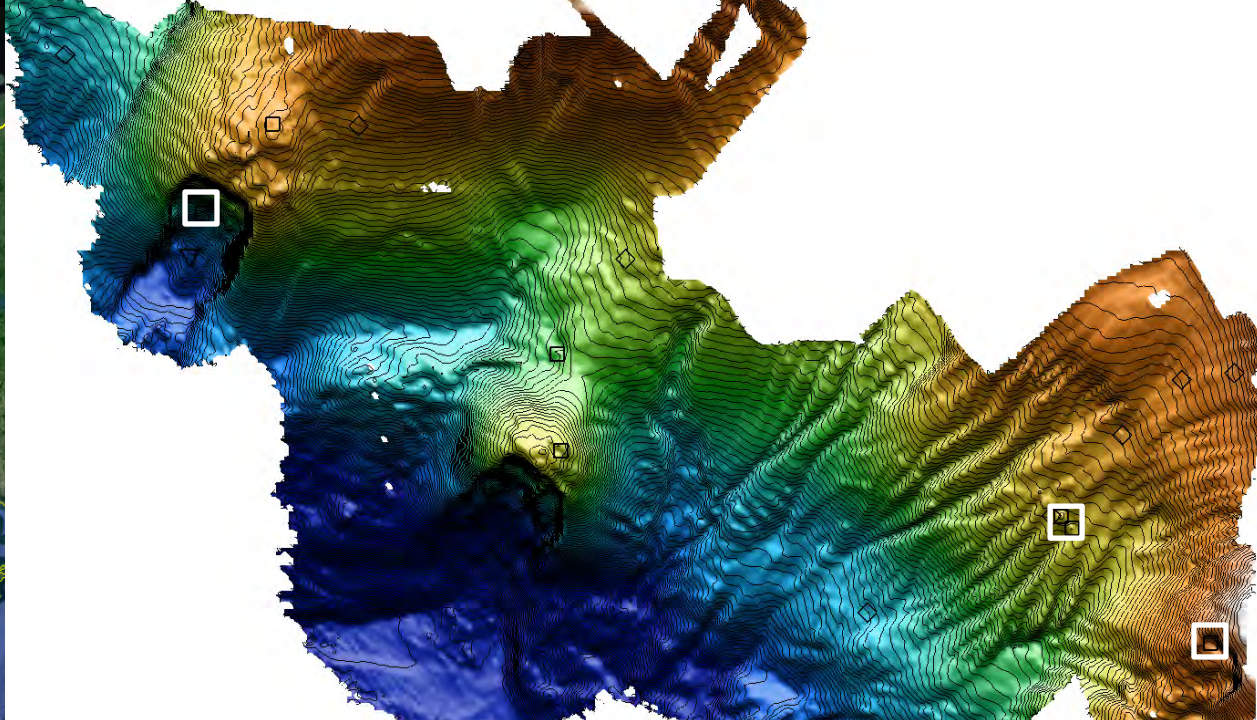
Greg Rouse, Scripps Institution of Oceanography

Victoria Orphan, Cal Tech

Chris Roman, URI











| date   | Alvin dive | site          | lat     | long      | depth  | night ops                             |
|--------|------------|---------------|---------|-----------|--------|---------------------------------------|
| 21-May | 4906       | Mound 12      | 8.93042 | -84.31263 | 1000m  | Sentry 429 @ Mound 12 engineering     |
| 22-May | 4907       | Mound 12      | 8.93042 | -84.31263 | 1000m  | Sentry 430 @ Mound 12 engineering     |
| 23-May | 4908       | Mound 12      | 8.93042 | -84.31263 | 1000m  | Sentry 431 @ Mound 12 bathy + photo   |
| 24-May | 4909       | Mound 12      | 8.93042 | -84.31263 | 1000m  | Sentry 432 @ Mound 12 low chem survey |
| 25-May | 4910       | Mound 12      | 8.93042 | -84.31263 | 1000m  | Wire Flyer (postponed)                |
| 26-May | 4911       | Jaco Scar     | 9.11737 | -84.8397  | 1795m  | Sentry 433 @ Jaco Scar                |
| 27-May | 4912       | Jaco Scar     | 9.11737 | -84.8397  | 1795m  | Wire Flyer (partial survey)           |
| 28-May | 4913       | Jaco Scar     | 9.11737 | -84.8397  | 1795m  | Sentry 434 @ Jaco East                |
| 29-May | 4914       | Jaco Scar     | 9.11737 | -84.8397  | 1795m  | Sentry 435 @ Jaco curve               |
| 30-May | 4915       | Jaco Scar     | 9.11737 | -84.8397  | 1795m  | Sentry 436 @ Jaco Scar                |
| 31-May | 4916       | Jaco Scar     | 9.11737 | -84.8397  | 1795m  | Wire Flyer                            |
| 1-Jun  | 4917       | Mound 12      | 8.93042 | -84.31263 | 1000m  | Sentry 437 @ Quepos Slide NW          |
| 2-Jun  | 4918       | Quepos slide  | 8.85237 | -84.21706 | 400m   | Sentry 438 @ Quepos Slide SE          |
| 3-Jun  | 4919       | Quepos slide  | 8.85237 | -84.21706 | 400m   | Wire Flyer                            |
| 4-Jun  | 4920-21    | Quepos slide  | 8.85237 | -84.21706 | 400m   | Sentry 439 @ Mount Quepos             |
| 5-Jun  | 4922       | Mound 12      | 8.93042 | -84.31263 | 1000m  | Seamount Multibeam                    |
| 6-Jun  | 4923       | Mount Parrita | 8.97592 | -84.62384 | 1090 m | Sentry 440 @ Seamount 1               |
| 7-Jun  | 4924       | Parrita Seep  | 9.03179 | -84.62117 | 1400 m | Sentry 441 @ Seamount 2               |
| 8-Jun  | 4925       | Seamount 1    | 8.86235 | -85.13304 | 1640 m | Wire Flyer                            |
| 9-Jun  | 4926       | Seamount 2    | 8.80056 | -85.18945 | 1850 m | Wire Flyer                            |
| 10-Jun | 4927       | Seamount 1    | 8.86235 | -85.13304 | 1640 m | CTD then transit home                 |





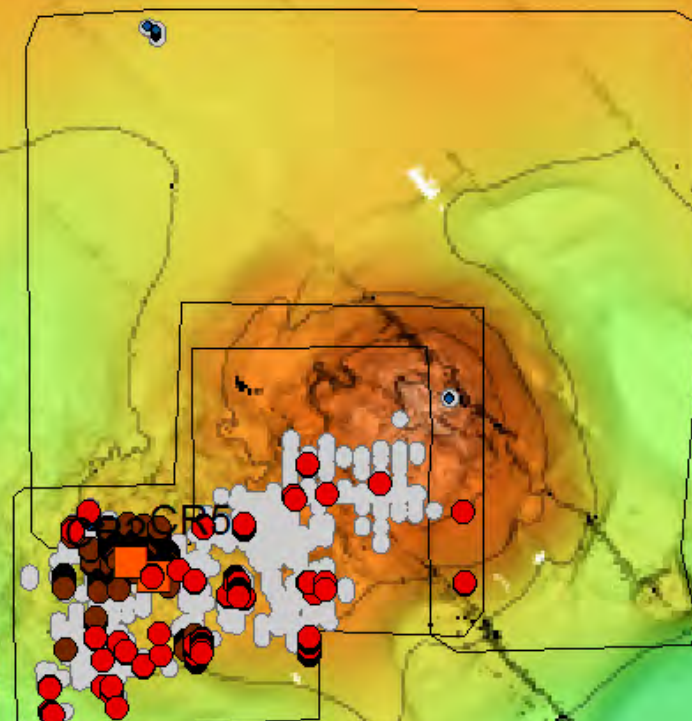


# Mound 12

0 200 400 800 Meters

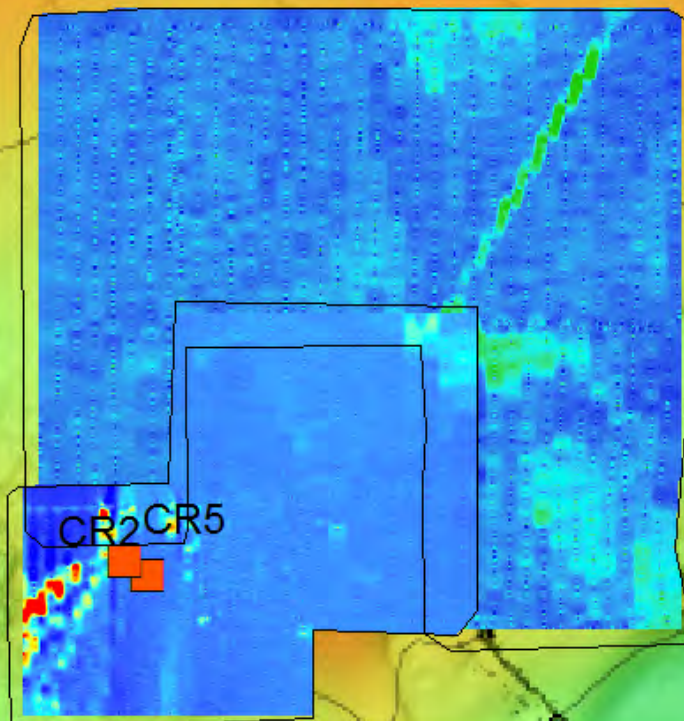
## Photo Features

- Tubeworms
- Mussels
- Markers
- Rocky Substrate

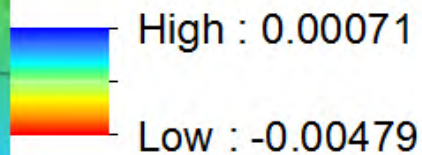


# Mound 12

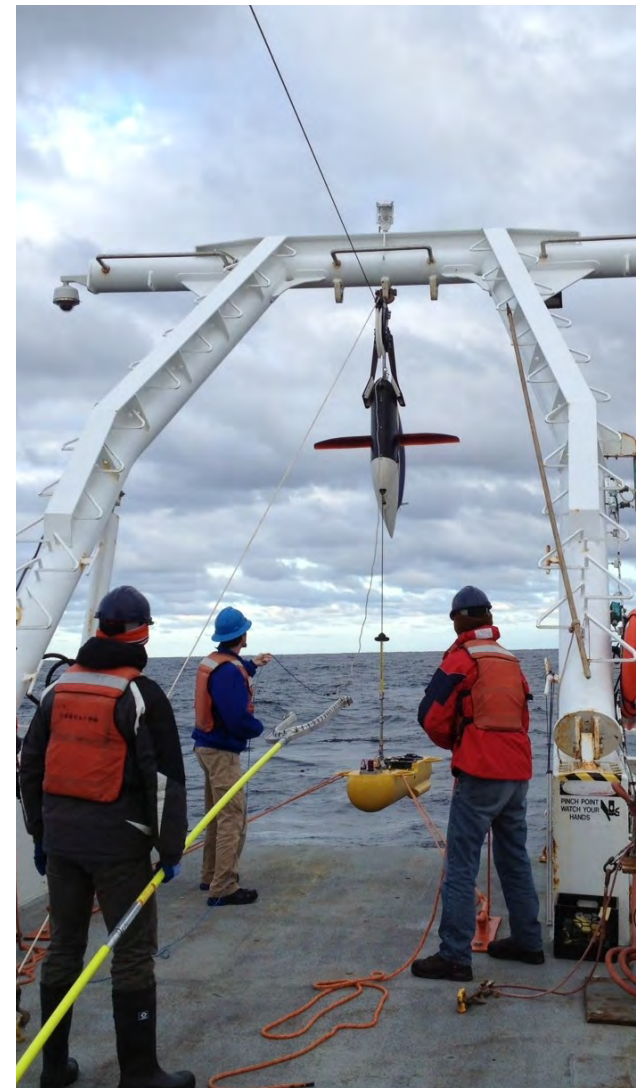
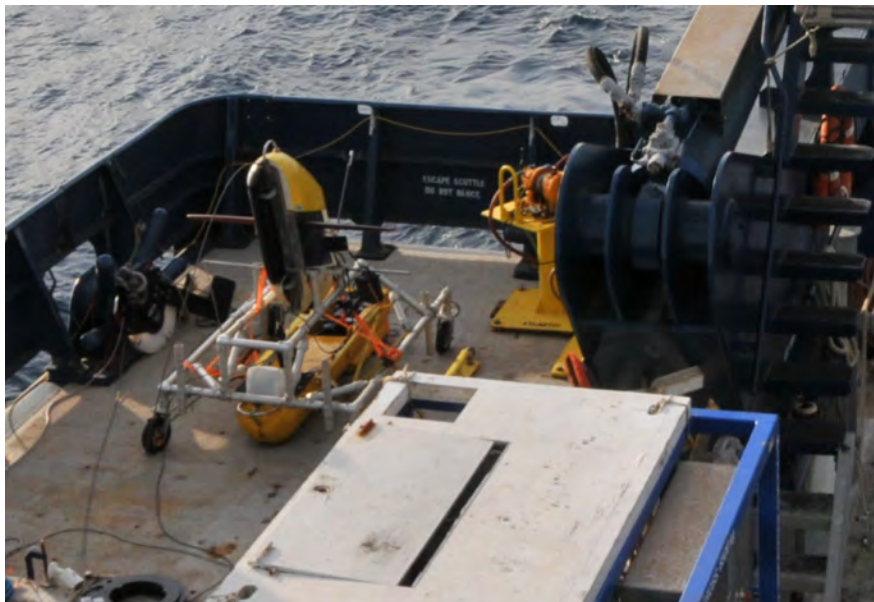
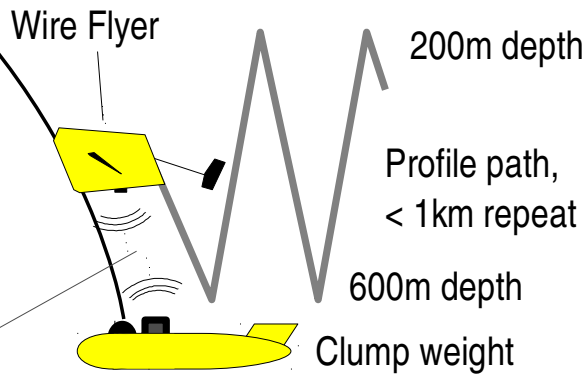
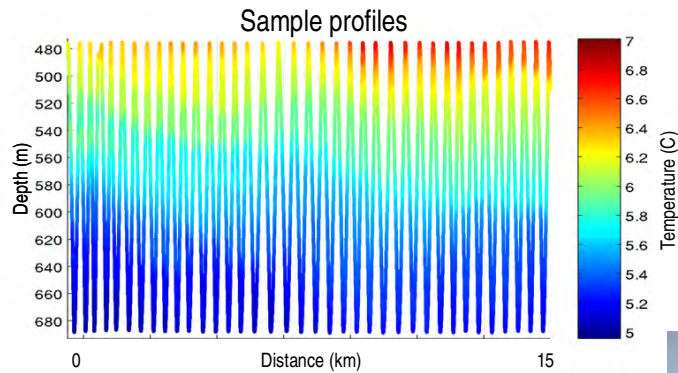
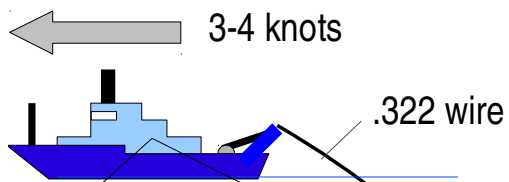
0 200 400 800 Meters



**Oxidation Reduction Potential**



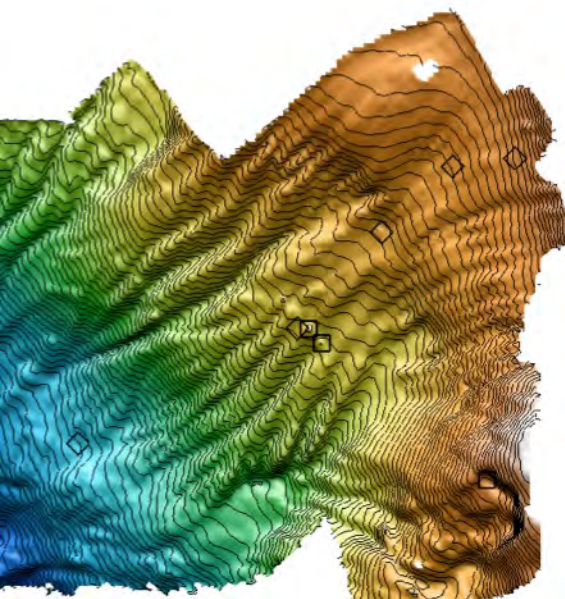
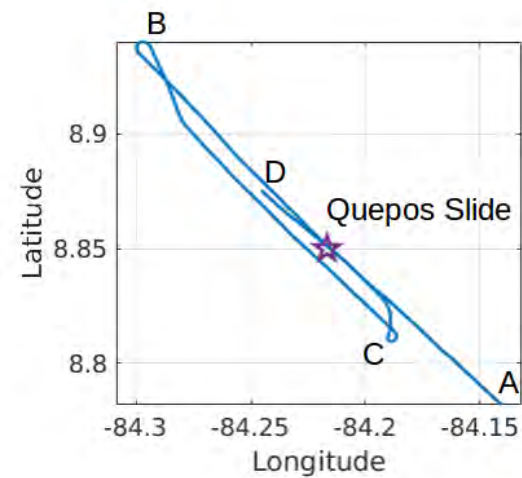




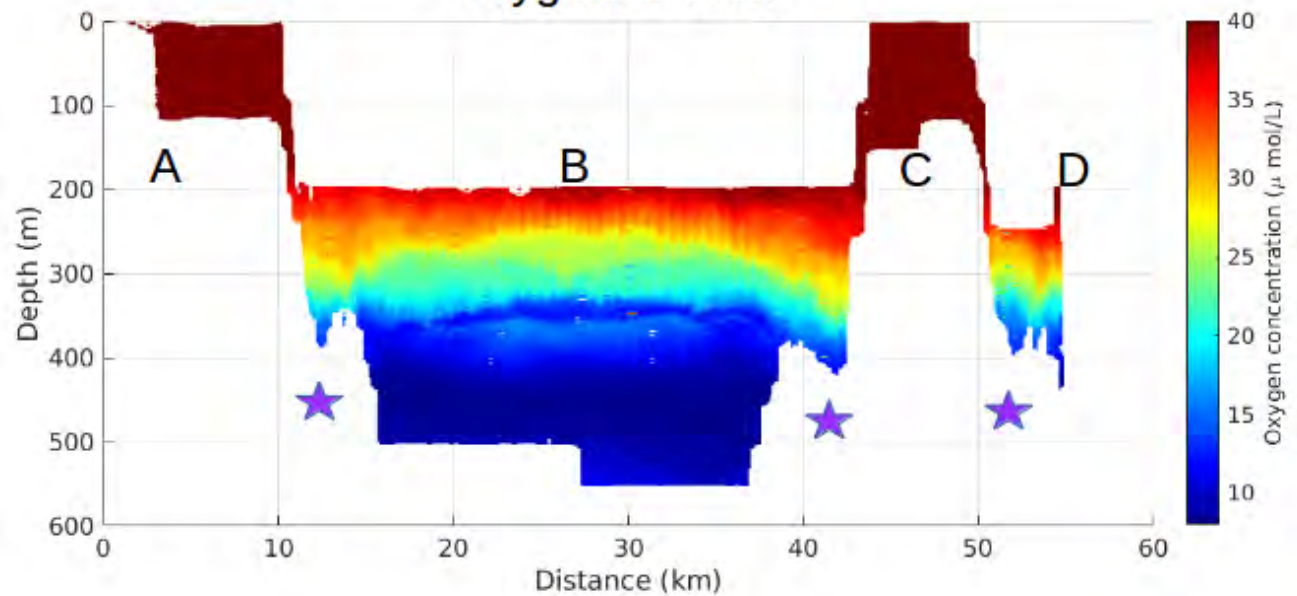








Oxygen section



Turbidity section

