

EXPLORE



NOAA Office of Ocean Exploration Quick Look Report

Expedition Title: Operation Deep-Scope 2005: _____

| Results (please check all disciplines in which this cruise collected data) | Details (please describe any novel discoveries in the discipline, answers such as “possible, awaiting data analysis” and “no apparent discoveries” are acceptable) |
|---|---|
| Bathymetric Mapping <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| New Species Discovered <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Possible new species of deep-sea squid, or verification of new species discovered on Deep-Scope 2004, with Eye in the Sea Camera |
| Bio-prospecting <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| Habitat Range Extended <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Possible extension of range of deep-sea squid discovered on Deep-Scope 2004 |
| Chemical Processes <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| Geologic Processes <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| Physical Processes <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| Sub/ROV/AUV Dives <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Johnson-Sea-Link Submersible |
| New Technology <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | New techniques for recovering deep-sea benthic species with intact photoreceptors; CLAM on Eye-in-the-Sea |
| Maritime Cultural Heritage <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| Outreach <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | OE signature expedition, with daily updates on OE webpage and ask a scientist forum; HBO I @sea webpage with daily updates; participation in Deep-Scope 2005 expedition professional development workshop |
| Students Involved <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Graduate students Erika Heine and Karen Breitlow |
| Multidisciplinary <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Underwater imaging; fluorescence studies; polarization studies; visual ecology studies; non-obtrusive observations of behavioral interactions of deep-sea mobile predators with Eye-in-the-Sea camera |
| Exploration of New Regions <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |

* Biological processes was left out of the check-off sheet. We are all biologists, so the majority of our discoveries were biological in nature.

1) previously unknown fluorescence of deep-sea species; 2) schooling behavior in deep-sea sharks 3) camouflage in deep-sea species not apparently as effective as in shallow water species; 4) UV photosensitivity in deep-sea crab