

SERPENT scene

The Newsletter of the SERPENT Project



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SERPENT continues on the road with Oceans on Wheels, visiting Queen Marys College and the Times Cheltenham Science Festival

Piglet Squid gets its own page at last!

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Editorial

The second quarter of 2009 has already seen lots of activity by SERPENT around the world. Chris (Nickolai) Roterman, SERPENT Research Assistant braved the elements and undertook his first mission in Arctic waters on the Leiv Eiriksson as a guest of Shell at the Gro 6603 site offshore Norway. He has made some exciting observations already, and is currently back on board for mission 2 to do further research on his findings. We'll keep you posted on what he finds. Daniel Jones took a trip to Nigeria in May to step foot for the first time on the drillship Jack Ryan courtesy of Total at the Akpo field and Andrew Gates simultaneously visited Acergy Petrel at the Morvin site, also offshore Norway.

Among other outreach activities, Rob Curry visited Queen Mary's College and Rob and Andy presented at the bustling and exciting Times Cheltenham Science Festival.

Rob

Recent Missions Listing:

Rig/Vessel	Field	Location	Month/Days	SERPENT Rep	Cruise Report	Visit Type
Leiv Eiriksson	Gro 6603	Norway	April 30 - May 07	Christopher Roterman	Yes	Science
Jack Ryan	Akpo	Nigeria	May 01 - 06	Daniel Jones	Yes	Science
Acergy Petrel	Morvin	Norway	May 02 - 07	Andrew Gates	Yes	Science



New Stena Carron mission images

The Oceanering ROV in use on the Stena Carron was equipped with a state of the art High Definition (HD) video camera system, which has allowed us to capture very clear images from video screen grabs. Top left: An Arctic Rockling (*Gaidropsarus*) swims lazily away as the ROV approaches. Right: A curious Dumbo Squid (*Cirrotheuthidae*) watches us as we follow its progress across the seafloor.



Send us your stories!

Do you have any questions, interesting stories, images or videos? Share them with us! Email r.curry@noc.soton.ac.uk



Gulf SERPENT updates

Oceaneering ROV Supervisor Training

Oceaneering runs regular monthly courses for new or existing ROV Supervisors. These classes are run at the Northwest Forest Conference Center in Houston. At the invitation of Joe Gelpi who coordinates the course, the Gulf SERPENT program has, and will continue to present an overview of our project during each class. Three courses have already been briefed on the project and our next presentation is scheduled for May. This is a great way to familiarize ROV Supervisors with our project goals and survey protocols.

Canyon Offshore

Last November, we received a video of this unusual cephalopod that was collected by a Canyon Offshore ROV at EI330. The animal turned out to be a blanket octopod. – the first one we've seen. It also opened a dialog with Canyon Offshore about the Gulf SERPENT Project. We recently



A blanket octopod (*Tremoctopus*) observed last October by Canyon Offshore at Eugene Island 330.

visited Houston at the invitation of Ian Edmonstone (General Manager) to brief Canyon Offshore personnel on the Gulf SERPENT Project. During a lunch and learn seminar, it was clear that Canyon would be a valuable partner in the project. We are currently planning mechanisms to involve Canyon Offshore ROVs in Gulf SERPENT data collection. Stay tuned for developments.

Visit to the Discoverer Deep Seas

In January the Discoverer Deep Seas hosted a Gulf SERPENT site visit. The Deep Seas is under contract for Chevron and the Hercules ROV is operated by Subsea7. Joe Nowak (ROV Supervisor), Terry Todd, and Dave Smith provided outstanding support while we worked through the SERPENT water column survey protocols. We look forward to regular data collection by the ROV on the Deep Seas. They are working in deep water (>6100 feet) and it's a very interesting region of the Gulf.

Recent Sightings

In our last newsletter we showcased a whale shark that was observed beneath Holstein in late December. We just



Top Row (Left to Right): ctenophore (*Thalassocalyce*), jellyfish (*Periphyllopsis braueri*), ctenophore (*Thalassocalyce*), pyrosoma (*Pyrosoma atlanticum*); Bottom Row (Left to Right): jellyfish (*Solmissus*), jellyfish (*Periphylla periphylla*), viperfish (*Chauliodus sloani*), tomopterid polychaete worm.

received another sighting from Holstein. In April, Jon Schuler, a BP Mechanic on Holstein, sent us these pictures. We don't know if it's the same shark as the one seen in December or a regular associate of the spar.



Creature Feature (Hyperiid Amphipods)

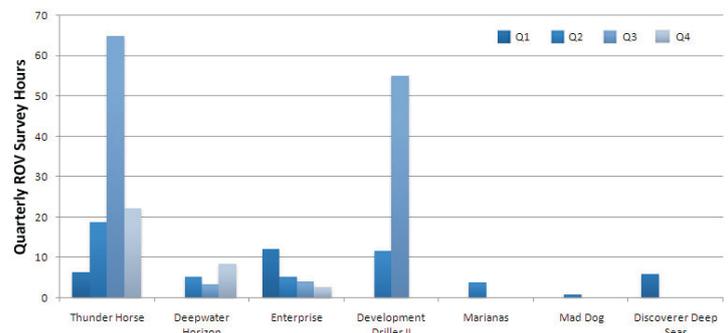
In the last newsletter we introduced the dinner plate jellyfish (*Solmissus*). A recent video sent to us by the ROV Team aboard the Discoverer Enterprise (Millennium 7) included very nice footage of *Solmissus* and another organism – a small crustacean called a hyperiid amphipod. Hyperiids (high - peer - ee - ids) are frequently associated with jellyfish and other gelatinous organisms. They appear to use the jellies to hitch a ride and may also slowly eat their larger companions. What made the observation from the Enterprise so interesting was that the jellyfish had turned the tables and caught the hyperiid with one of its tentacles. When you hang out in a dangerous neighborhood, these sorts of events are bound to happen. We've also received very nice footage of solitary hyperiids from the DD2.



Left and Center: A hyperiid amphipod snagged by one of the tentacles of a *Solmissus* jellyfish below the Discoverer Enterprise this year. Right: a larger solitary hyperiid imaged beneath the DD2 last summer.

Quarterly ROV Survey Summary 2008

We've completed our tally of ROV hours supporting SERPENT for 2008. We want to thank everyone for their participation and are particularly appreciative of four sites: Thunder Horse PDQ, Discoverer Enterprise, Deepwater Horizon and the DD2 have provided the majority of our data. While operations during Q4 made it difficult for some sites to collect regular survey data, preliminary totals from Q1 in 2009 indicate that both Enterprise and Thunder Horse have been conducting regular surveys. The success of this project depends on regular surveys. Please conduct SERPENT dives whenever time permits.



UK SERPENT Missions Update

Daniel Jones visits Total's Akpo field, Nigeria

After his recent trip to the Stena Carron in the cold environment of the Faroe-Shetland Channel, Daniel took a rather longer (and much warmer!) journey in early May to West Africa to board the drill ship "Jack Ryan" offshore Nigeria at the Akpo field as a guest of Total. The deep-waters off Nigeria are an exciting new area for SERPENT. We aim to carry out novel deep-water science through collaboration with a variety of offshore oil and service companies. This visit to Jack Ryan was the first visit of its type in Nigeria and the most comprehensive visit undertaken by SERPENT in Africa. Our aim for the visit was to make an initial assessment of Nigerian deep-water biodiversity. To achieve this we collected both images and actual creatures. As we know very little about the animals to be found in Nigerian deep-waters, we will need to investigate the samples very closely to determine the kinds of species living there so that we have a good idea of the biodiversity of the area. This will help us to identify and assess changes that occur in this fascinating and mysterious deep-water environment.

Overview of Activities

That the visit was very successful is down to the staff of the Jack Ryan who were extremely helpful and accommodating. In particular the Oceanering ROV team (Phil Aylwin, Jackie Stewart, Maurice Onuoha, Brett Illich, Graeme Yates and Eric Monaigha) really made the visit a great success. 7 dives were made with the ROV in total and the ROV team were involved in SERPENT activities for approximately 72 hours! We were fortunate that the visit came at a time when there was no operational work for the ROV.

Dr Andy Gates at Morvin for StatoilHydro

Andy Gates visited the Acergy Petrel at the Morvin Prospect offshore Norway in early May. This visit was an unusual opportunity to revisit a site which we had visited previously in 2006 to monitor the changes that had occurred in the intervening period. The mission report is currently being compiled and will be available soon. Watch this space!

Christopher Roterman with Shell at Gro

Chris tackled his first visit to Arctic waters when he boarded a helicopter bound for the Liev Eriksson in the Gro prospect off the coast of Norway. He soon made some very interesting discoveries on the sea bed that has excited senior scientists at the National Oceanography Centre. We'll have to keep you in suspense for a little while longer as Chris investigates further.



Creatures from the Akpo Field offshore Nigeria
 Top: A swimming sea cucumber, *Peniagone* sp.
 Bottom, clockwise from top left: A jelly fish of the Scyphomedusae species; Another medusa jellyfish of the same species; the sea cucumber *Eynphiastes* sp. feeding on the sea floor; a sea anemone, *Edwardsia* sp.

News Bites...

SERPENT continues tour with Oceans on Wheels Roadshow

The Oceans on Wheels Roadshow rolled into two more venues in April and June. On 21 April, the SERPENT Deep Seas Simulator using the Marine Simulation LLC ROVsim® simulation software was enjoyed by 200+ Sixth Form students at Queen Mary's College in Basingstoke, UK when the Oceans on Wheels Roadshow visited on the 21 April. The students were very interested in the project and asked some great questions about its role in deep sea research.

SERPENT goes down well at Cheltenham Described as a "Mind-tingling feast of debate and entertainment", the highly publicised Times Cheltenham Science Festival was the latest venue to experience the SERPENT simulator. For three days between the 5 – 7 June, SERPENT once more displayed its exciting Deep Sea Simulator as part of the Oceans on Wheels Roadshow organised by the University of Southampton. Despite the many other very interesting displays on offer, hundreds of children and adults queued up each day to have a go at collecting sea creatures from the seafloor with virtual ROV courtesy of Marine Simulation LLC's ROVsim® simulator.

Latest SERPENT Annual Report available online

A new electronic version of the SERPENT Annual Report for 2008 is already available online prior to its hardcopy release. Visit the publications page at http://www.serpentproject.com/pubs_downloads.php to view the interactive Report.

Piglet squid gets its own page

The images of the piglet squid (*Helicocranchia* sp) on the SERPENT web site have arguably proved to be some of the most popular in the SERPENT Media Archive. Because of this, we felt it only right that the little creature had a page to itself. Find out more about the piglet squid page at http://www.serpentproject.com/piglet_squid.php

Breaking news

SERPENT is currently in negotiations with the UK's Natural History Museum and Subsea7 to support the development of an exhibit in their new deep sea exhibition that will showcase for three months in 2010. Stay tuned to SERPENT Scene for more details as they unfold.

The SERPENT project recently spent a week at the Royal Society Summer Science Exhibition in London - more details in our next Newsletter.



Top to bottom: Students at Queen Marys College look on as Claudia Alt helps out a budding ROV pilot; The Times Cheltenham Science Festival was a resounding success for the SERPENT project; A piglet squid (*Helicocranchia* sp) bathed in unfamiliar light looks on quizzically as the Triton XLS ROV films it beneath the Normand Progress offshore Nigeria.

