

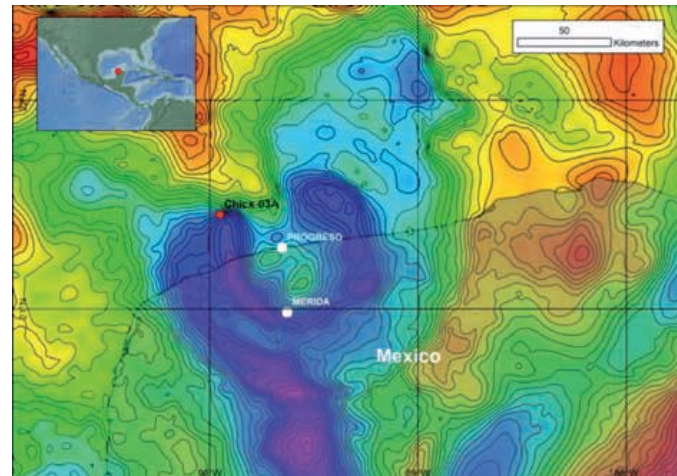
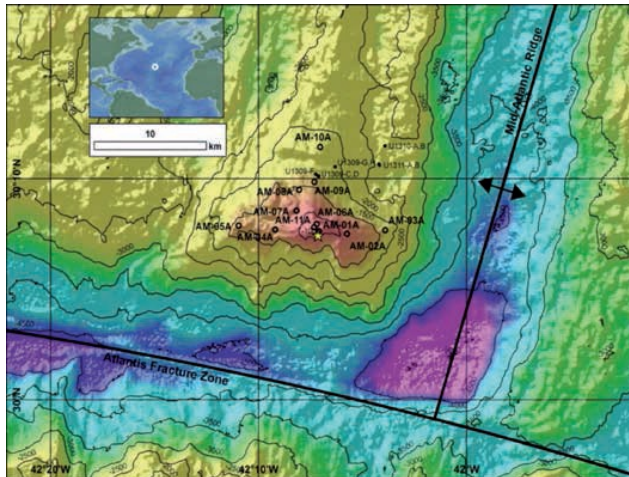
ECORD/ESO Outreach Activities



Albert Gerdes
Patricia Maruéjol
Alan Stevenson

Outreach Activities MSP Expeditions

- Exp. 357 Atlantis Massif Serpentinization & Life
- Exp. 364 Chicxulub K-Pg Impact Crater



Outreach Activities MSP Expeditions

- Communication within the IODP community
- Communication to external audiences like media & general public



Outreach Atlantis Massif

- Communication Plan distributed
- Expedition flyer + logo prepared
- Banners, T-shirts, caps, mugs, memory sticks, overalls available on James Cook



Outreach Atlantis Massif

Communication within the IODP community

- Science Party members encouraged to make contact with the communications specialists at their universities
- US & Japanese outreach colleagues informed



Outreach Atlantis Massif

Communication to the outside world

Media briefing London, October 22nd



Outreach Atlantis Massif

Communication to the outside world

Media briefing Southampton, October 23rd



Plus media release

Outreach Atlantis Massif

Results internal communication 1:

- IODP + JAMSTEC websites



Outreach Atlantis Massif

Results internal communication 2:

- Bigelow + Univ. of Colorado, Washington, South Carolina, Hawaii, Plymouth, ANU



Bigelow | Laboratory for Ocean Sciences

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International Atlantis Massif Expedition Underway

On October 26th, an international team of scientists sailed from Southampton, UK, on board the British Royal Research Vessel *James Cook*. During a 6-week expedition in the Atlantic Ocean the team will explore the Atlantis Massif, a prominent, nearly 4,000 meter high underwater mountain in which is part of the world's longest mountain chain.

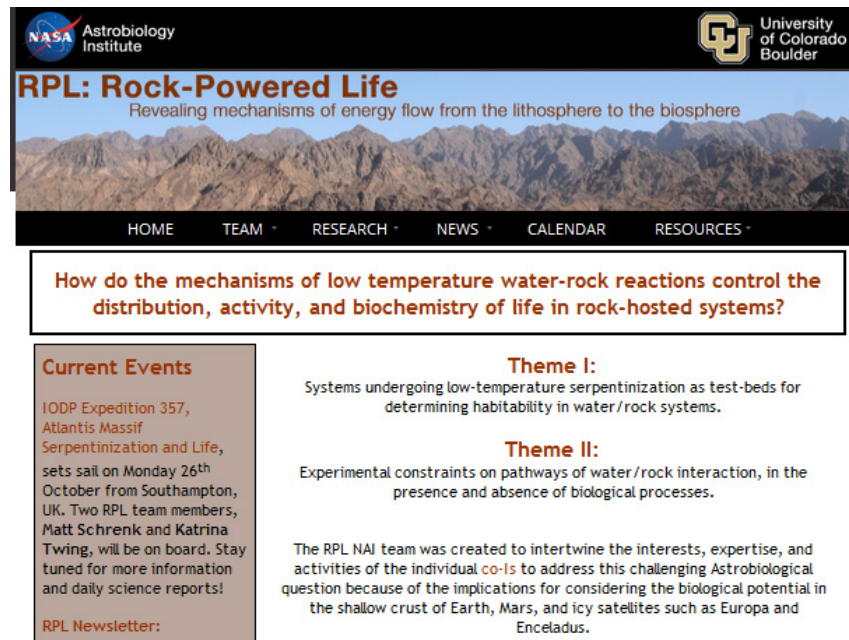
Led by Co-Chief Scientist Gretchen Früh-Green, ETH Zurich, Switzerland, and Beth Orcutt, Bigelow Laboratory for Ocean Sciences, USA, the team will collect cores of rocks using seabed rock drills. The plan is to drill at six sites in water depths of 750 to 4,770 meters and to recover cores between 50 and 70 meters in length.

"Scientifically the sea bed is remarkable because the Atlantis Massif is made up of rocks from the Earth's mantle", says marine geologist Gretchen Früh-Green, who explored this remarkable sub-sea-floor region already during expeditions in 2003 and 2005. "In the presence of seawater these rocks produce the greenhouse gas methane, hydrogen and heat, among other things." Such rock reactions excite scientists because they represent possible sources to fuel life in the absence of sunlight and may be analogous to conditions found on other planets, or early in Earth's history.

"Among other things we hope to learn more about what kind of life exists on and within rocks at the Atlantis Massif", says marine microbiologist Beth Orcutt. "Moreover we shall investigate the fate of carbon. Do the reactions between rocks and seawater lead to carbon storage in the seafloor? And does this process impact the global carbon cycle and our climate?"

Overall the expedition aims to study

- how mantle rocks are brought up to the seafloor,
- how the rocks react with seawater,
- how carbon is cycled during this process,



NASA Astrobiology Institute | University of Colorado Boulder

RPL: Rock-Powered Life

Revealing mechanisms of energy flow from the lithosphere to the biosphere

HOME TEAM RESEARCH NEWS CALENDAR RESOURCES

How do the mechanisms of low temperature water-rock reactions control the distribution, activity, and biochemistry of life in rock-hosted systems?

Current Events

IODP Expedition 357, Atlantis Massif Serpentinization and Life, sets sail on Monday 26th October from Southampton, UK. Two RPL team members, Matt Schrenk and Katrina Twing, will be on board. Stay tuned for more information and daily science reports!

RPL Newsletter:

Theme I:

Systems undergoing low-temperature serpentinization as test-beds for determining habitability in water/rock systems.

Theme II:

Experimental constraints on pathways of water/rock interaction, in the presence and absence of biological processes.

The RPL NAI team was created to intertwine the interests, expertise, and activities of the individual co-Is to address this challenging Astrobiological question because of the implications for considering the biological potential in the shallow crust of Earth, Mars, and icy satellites such as Europa and Enceladus.

Outreach Atlantis Massif

Results external communication 1:

Several BBC channels + follow-ups

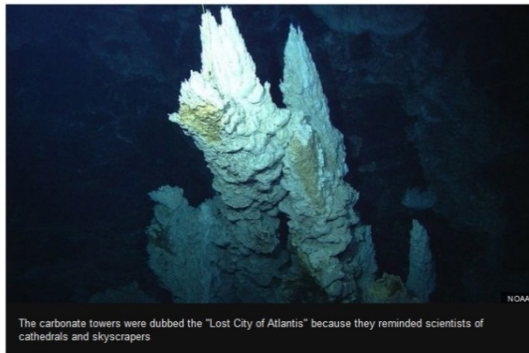


Science & Environment

Expedition seeks Atlantis microbes

By Jonathan Amos
BBC Science Correspondent

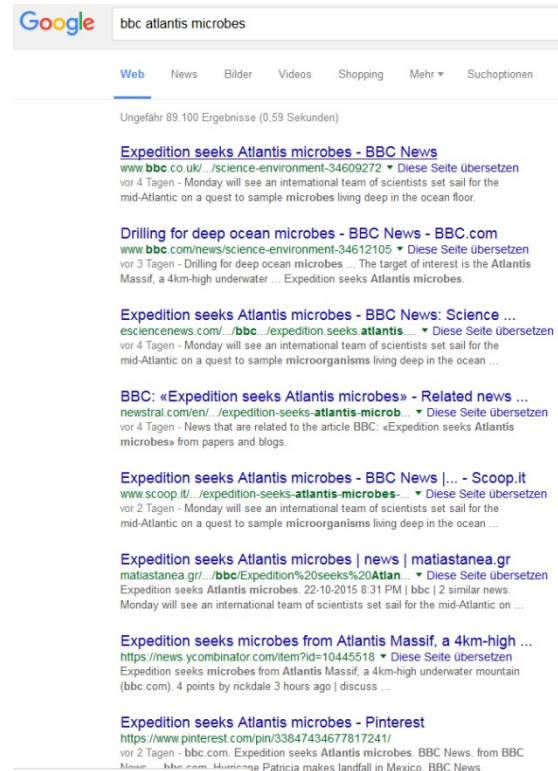
22 October 2015 | Science & Environment



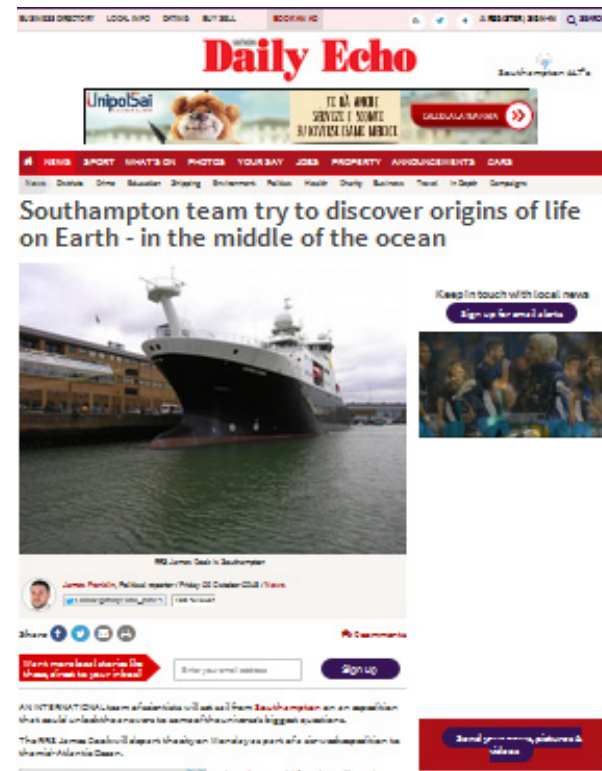
The carbonate towers were dubbed the "Lost City of Atlantis" because they reminded scientists of cathedrals and skyscrapers

Monday will see an international team of scientists set sail for the mid-Atlantic on a quest to sample microbes living deep in the ocean floor.

The expedition will use new types of rock drill developed in the UK and Germany to retrieve cores from up to 80m below the seabed.



Finland biggest newspaper + local UK media + social media



Chicxulub Impact Crater

- Regular discussions with Co-chief Scientists
- Alan Stevenson member of ESO delegation to Mexico end of March: Chicxulub Drilling Workshop



Chicxulub Impact Crater

Media conference and
press release (Spanish + English):

- permitting process, relations with the Yucatan government, environment ministry, national institute of ecology, contribution from the Secretary of Education



Chicxulub Impact Crater Expedition

- Outreach contacts
- Museo del Mundo Maya in Merida



