

## Call for Papers: Autonomous Underwater Vehicles Lead to Discoveries in the Oceanic Wilderness

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Exploration of the vast oceans calls for underwater robots to free people from laborious and risky adventures on the sea. Autonomous underwater vehicles (AUVs) are unmanned, untethered robots that carry a suite of physical, chemical, and biological sensors to measure water properties and investigate dynamic ocean processes. Deep-rated AUVs can approach the seafloor to map geological features. Intelligent algorithms enable AUVs to achieve scientific goals that are beyond the capabilities of traditional means. For our third quarterly theme, we'll look at how AUVs are leading to discoveries in the deep. This theme seeks articles describing contemporary issues in the field of AUVs, development and applications.



The Dorado Gulper AUV being deployed from R/V Rachel Carson. Image Credit: MBARI

Specific topics of interest for this theme include (but are not limited to):

- AUVs for ecological monitoring in oceans and lakes
- AUVs in marine geophysical and geological surveys
- AUVs in offshore oil and gas facilities inspections
- AUVs in deep-sea archaeological expeditions
- AUVs' role in disaster response and homeland security
- AUV autonomy
- Sensors and power systems for AUVs
- Educational AUV competitions.

We seek contributions from relevant disciplines and all regions of the globe. These can address current and emerging research and development issues, approaches, techniques or applications; community, state, and/or international initiatives; and other topics related to regional and global science, impacts, adaptation and policy. Authors may consider submitting:

- Original research (to be peer-reviewed)
- Feature articles about programs, events, and activities designed to raise awareness or actions related to AUVs
- News briefs on any topic related to the theme
- Interviews with leaders who are working on sustainability matters
- Photographic essays on environmental change captured by AUVs
- Book, exhibition, and art reviews focusing on theme
- First-person narratives about working with AUVs, operating systems or data management.

**Important dates:** Submissions for the AUVs theme will be accepted until Nov. 30, 2017. Submit articles to Kelley Christensen, science editor, at [kjhchristensen@earthzine.org](mailto:kjhchristensen@earthzine.org).

**Publication:** All accepted contributions will undergo review by subject-matter experts, be published online at Earthzine.org, and be freely accessible to the public. IEEE Earthzine does not charge authors for publishing.

Please consult our [Writer Guidelines](#) for further information and to access an article template. Submissions should include two to three visuals relevant to the content. Visuals may be graphs, charts, photographs or other appropriate images, with caption and credit information included.

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