

LRAUV publications review

- Vehicle design and performance

1. Bellingham et al, “[Efficient Propulsion for the Tethys Long-Range Autonomous Underwater Vehicle](#),” *Proc. IEEE AUV’2010*, pp. 1-6, Monterey, CA, U.S.A., September 2010.
2. Hobson et al., “[Tethys-Class Long Range AUVs – Extending the Endurance of Propeller-Driven Cruising AUVs from Days to Weeks](#),” *Proc. IEEE AUV’2012*, pp. 1-8, Southampton, U.K., September 2012.
3. Stanway et al., “[White Shark Strike on a Long-Range AUV in Monterey Bay](#)”, *Proc. IEEE Oceans’15*, pp. 1-7, Genova, Italy. May 2015.

- Software architecture

Godin et al., “[Scripting language for state configured layered control of the Tethys long range autonomous underwater vehicle](#),” *Proc. MTS/IEEE Oceans’10*, pp. 1–7, Seattle, September 2010.

- Fault detection and diagnosis

1. Kieft et al., “[Fault Detection and Failure Prevention on the Tethys Long-Range Autonomous Underwater Vehicle](#),” *Proc. International Symposium on Unmanned Untethered Submersible Technology*, pp. 1-6, August 2011.
2. Raanan et al., “[A Real-time Vertical Plane Flight Anomaly Detection System for a Long Range Autonomous Underwater Vehicle](#),” *Proc. MTS/IEEE Oceans '15*, pp. 1-6, Washington, D.C., U.S.A., October 2015.

- Acoustic tracking

Stanway et al., “[Acoustic Tracking and Homing with a Long-Range AUV](#)”, *Proc. MTS/IEEE Oceans '14*, pp. 1-7, St. John's, Newfoundland, Canada. September 2014.

■ Targeted sampling and scientific applications

1. Godin et al., “[Phytoplankton Bloom Patch Center Localization by the Tethys Autonomous Underwater Vehicle](#),” *Proc. MTS/IEEE Oceans '11*, pp. 1-6, Kona, HI, September 2011.
2. Zhang et al., “[Using an Autonomous Underwater Vehicle to Track the Thermocline Based on Peak-Gradient Detection](#),” *IEEE Journal of Oceanic Engineering*, Vol. 37, No. 3, pp. 544-553, July 2012
3. Zhang et al., “[Using an Autonomous Underwater Vehicle to Track a Coastal Upwelling Front](#),” *IEEE Journal of Oceanic Engineering*, Vol. 37, No. 3, pp. 338-347, July 2012
4. Zhang et al., “[Autonomous 4-D Mapping and Tracking of a Coastal Upwelling Front by an Autonomous Underwater Vehicle](#),” *Journal of Field Robotics*, Vol. 33, No. 1, pp. 67-81, January 2016
5. Zhang et al., “[Tracking and Sampling of a Phytoplankton Patch by an Autonomous Underwater Vehicle in Drifting Mode](#),” *Proc. MTS/IEEE Oceans '15*, pp. 1-5, Washington, D.C., U.S.A., October 2015.
6. Zhang et al., “[Isothermal Tracking by an Autonomous Underwater Vehicle in Drifting Mode](#),” *IEEE Journal of Oceanic Engineering*, in review.
7. Zhang et al., “[Evolution of a physical and biological front from upwelling to relaxation](#),” *Continental Shelf Research*, Vol. 108, pp. 55-64, October 2015