AUV stands for Autonomous Underwater Vehicle. AUVs are unoccupied, untethered, battery-powered vehicles used to collect data for underwater research.

**WHAT ARE AUVs USED FOR?**
- Creating maps of the ocean floor
- Recording data on biological, chemical, and physical ocean conditions
- Identifying hazards to navigation
- Exploring geological formations
- Documenting shipwrecks

**HOW DO AUVs WORK?**
- Route and sampling protocol are pre-programmed by an operator on vessel or on land
- Data collected by cameras, sonar, chemical sensors, and/or other water property sensors
- Can accommodate a variety of sensors depending on the research needs
- Depending on the model, AUVs can glide at the surface, dive deep, or even hover
- Powered by onboard batteries
- Stores images and other sensor data on onboard computers until the AUV can be retrieved after a dive

**AUV FUN FACTS**
- **SMALLEST AUV:** about the size of a coffee table
- **LARGEST AUV:** about the size of a bus
- **DEPTH RANGE:** Can travel to the full depth of the ocean and through shallow water ecosystems that would be difficult for large boats or ROVs to navigate.
- **LONGEST DIVE:** missions can last weeks with a recharging plan in place, but dives can typically run ~24 hours

**ADDITIONAL RESOURCES**
- **AUV FACTS** [https://oceanexplorer.noaa.gov/facts/auv.html](https://oceanexplorer.noaa.gov/facts/auv.html)
- **FREQUENTLY ASKED QUESTIONS** [https://schmidtocean.org/technology/robotic-platforms/autonomous-underwater-vehicle-auv/](https://schmidtocean.org/technology/robotic-platforms/autonomous-underwater-vehicle-auv/)