

Freediving in Scientific Data Collection

Scientific diving data collection using scuba or blended gases with all the necessary gear is often costly and time-consuming. Freediving can solve many situations, but it is rarely used!

Some of the advantages of freediving:

- Vertical agility: Communicating with the surface, handing over samples, etc.
- Horizontal agility: Quick bursts to get a photo or tag an object.
- No total dive time limit.
- Less intrusive (no bubbles/noise)
- Less and lighter gear to travel to remote places.
- Reduced surface support infrastructure: No compressors or tanks.
- No no-fly limit after diving

To get involved in these forms of scientific data collection, you need solid freediving skills. But you do not need to be a champion-level freediver!

What does it take? Next to an **advanced freediving certification**, a set of specific in-water data collection skills is needed to be a comfortable data collector:

- Buddy procedures up in near-zero visibility
- Adapt freediving safety equipment to unusual situations: Floats, lines, bottom weights, etc.
- Deal with beach entry and freediving in the surf, and negotiate breaks and currents.
- Water sampling at depths of 20m with minimum equipment.
- Photography at depth with one-handed camera operation.
- Video shooting at depth with action cameras (GoPro).

There are also a few out-of-water skills to cover, such as:

- Trip leading: Define a schedule, communicate with the boat captain, establish safety procedures with the crew, etc.
- Navigation, marine safety, and teamwork
- Learn how to check your insurance and fill in any gaps.

How can you get involved?

- Are you a university that collects underwater data? We arrange a camp on your campus and train your staff and students!
- Are you collecting data on a commercial basis? Join our bi-annual boot camp!
- Do you need trained collectors to get a job done? We organize a crew for you!

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