**Method for collecting ROV GPS Data:**

Step 1: ROV is equipped with a tracking beacon that transmits a signal to a transponder on the support vessel. This allows the Trackpoint III software to estimate the position of the ROV, relative to the ship. The GPS of the ship’s location is also recorded and used to convert the ROV’s position relative to the ship to GPS coordinates.

Step 2: These coordinates are then smoothed using an algorithm accounting for bearing, speed, and location.

Step 3: The result is a location (x,y-coordinate) for each second that the ROV is on transect. The date/time of each location are then matched with the observation of fishes, invertebrates, and habitats for various spatial analyses.

**Methods for collecting transects data:**

Step 1: The beginning and ending time for each video transect were recorded.

Step 2: Transects are divided into 4 categories, based on study objectives:

- **Normal**: Transects maintain a consistent depth and follow along or over a habitat feature or features.
- **Vertical**: Transects are conducted up a slope, beginning in deeper waters and ending in shallower.
- **Elevator**: Transects are conducted up a wall of a canyon (La Jolla site only)
- **North-South**: Transects are conducted perpendicularly to Normal transects to look at onshore-offshore changes because other transects were only conducted perpendicular to shore (Catalina site only).