

S1 Table: Summary of all the dives

Dive ID	Max Depth	Gripper 1	Gripper 2	Sample	Grasping purpose	Grasp Success
SB0067	N/A	3 fingers	5 fingers	N/A	N/A	N/A
SB0068	2021m	3 fingers	5 fingers	N/A	N/A	N/A
SB0069	2294m	3 fingers	5 fingers	N/A	N/A	N/A
SB0070	1189m	3 fingers	5 fingers	N/A	N/A	N/A
SB0071	1725m	3 fingers	5 fingers	N/A	N/A	N/A
SB0072	1430m	5 fingers 5 fingers	N/A N/A	Deep sea Anemone Sea cucumber (Holothuria)	Catch-and-release Catch-and-release	No No
SB0073	2440m	5 fingers 5 fingers	N/A N/A	Sea cucumber (Holothuria) Deep sea Anemone	Catch-and-release Catch-and-release	Yes No
SB0074	1361m	Experimental gripper #1	N/A	N/A	N/A	N/A
SB0075	643m	4 fingers 4 fingers	N/A N/A	Coral rubble Coral	Post-study Post-study	Yes No
SB0076	1517m	N/A	N/A	N/A	N/A	N/A
SB0077	1424m	3 fingers	none	Coral rubble	Post-study	Yes
SB0078	1378m	Experimental gripper #1 Experimental gripper #1 Experimental gripper #1 Experimental gripper #1	3 fingers 3 fingers 3 fingers 3 fingers	Hard coral Sponge Crinoid Sponge	Post-study Post-study Catch-and-release Catch-and-release	No Yes No No
SB0079	1958m	3 fingers 3 fingers	Experimental gripper #2 Experimental gripper #2	Acorn worm Coral	Post-study Post-study	No No
SB0080	829m	3 fingers	Experimental gripper #2	Fossil shelves	Post-study	Yes
SB0081	1028m	3 fingers 3 fingers 3 fingers 3 fingers	Experimental gripper #1 Experimental gripper #1 Experimental gripper #1 Experimental gripper #1	Crinoid Anemone Shrimp Rock	Catch-and-release Catch-and-release Catch-and-release Post-study	No Partial No Partial
SB0082	241m	-	-	-	-	-
SB0083	1473m	3D printed manipulator 3D printed manipulator 3D printed manipulator 3D printed manipulator	2 fingers adapted 2 fingers adapted 2 fingers adapted 2 fingers adapted	Sea star (Asteroidea) Sea cucumber (Holothuria) Sea cucumber (Holothuria) Hexactinellid sponge	Post-study Catch-and-release Catch-and-release Catch-and-release	Yes Yes Yes Yes

- ”# fingers” grippers denotes silicone based actuators fabricated in laboratory.
- The manipulator in use for a sampling is indicated in bold.
- A partial grasp success indicates that the sample was successfully grasped but fell during the transport to the biobox/quiver. In most of the cases it could be recovered later on.
- A post-study grasping purpose indicates that the sample is intended to be taken back to the surface for further biological study.