

PROD POSITIONING REPORT

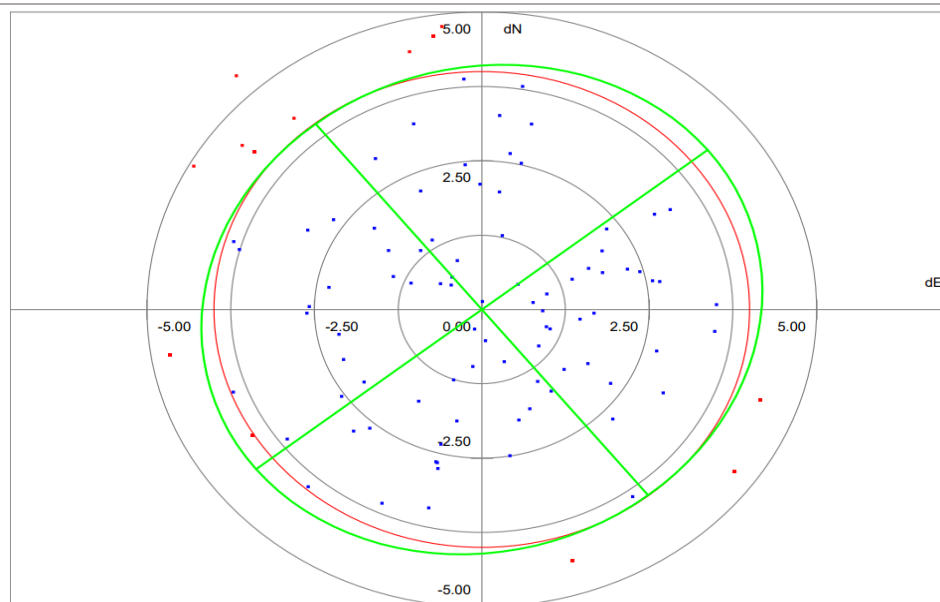
Revision 0 Approved by Sahril Hasin
Date 1/10/2023

Project Details			
Position Fix Date	1/10/2023	Project	IODP Exp. 389: Hawaiian Drowned Reefs
Vessel	MMA Valour	MMA Project ID	13415
Client	Benthic USA LLC	Location ID	KAW-07Ab

Geodetic Parameters			
Datum	World Geodetic System 1984 (WGS84)	Projection	UTM Zone 5N
Spheroid	WGS84	Latitude of Origin	0°
Semi Major Axis	6378137 m	Longitude of Origin	153°W (-153°)
1/f	298.2572236	False Easting	500 000m
Units	Meter	False Northing	0m
		Scale Factor	0.9996

Position Summary			
Proposed Position (P)		Surveyed Position (S)	
Latitude	20;08;15.09344 N	Latitude	20;08;15.383 N
Longitude	156;04;44.67260 W	Longitude	156;04;44.787 W
Easting (m)	178074.190	Easting (m)	178071.040 SD 1.71
Northing (m)	2229680.080	Northing (m)	2229689.060 SD 1.68
Water Depth (MSL) (m)	988.0	Water Depth (MSL) (m)	998.000 ± 5.19
		Water Depth (LAT) (m)	997.400 ± 5.19
Difference (From Proposed to Surveyed)			
Easting (m)	-3.150	Range (m)	9.516
Northing (m)	8.980	Grid bearing	317.920
Water Depth (m)	10.000		

Scatter Plot of PROD Fixes



Observational Summary			
No of Position Processed	100	Start Logging (Local)	0:32:08
No of Position Accepted	87	End Logging (Local)	0:59:03
Percentage of Accepted	87%	Logging Duration	0:26:55

Comments
Position acquired at 1 USBL update intervals. Water depth averaged from USBL observations.