

PROD POSITIONING REPORT

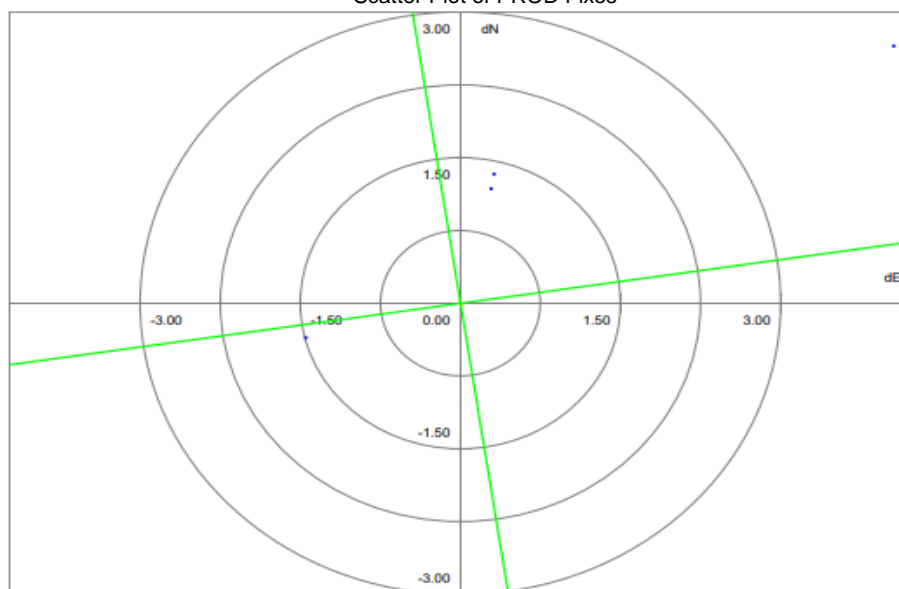
Revision 0 Approved by Sahril Hasin
Date 30/9/2023

Project Details			
Position Fix Date	30/9/2023	Project	IODP Exp. 389: Hawaiian Drowned Reefs
Vessel	MMA Valour	MMA Project ID	13415
Client	Benthic USA LLC	Location ID	KAW-07Aa

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;14.15762 N	Latitude	20;08;14.708 N
Longitude	156;04;45.62776 W	Longitude	156;04;45.351 W
Easting (m)	178045.900	Easting (m)	178054.26 SD 5.80
Northing (m)	2229651.800	Northing (m)	2229668.59 SD 4.60
Water Depth (MSL) (m)	988.0	Water Depth (MSL) (m)	983.40 ± 5.12
		Water Depth (LAT) (m)	982.90 ± 5.12
Difference (From Proposed to Surveyed)			
Easting (m)	8.360	Range (m)	18.756
Northing (m)	16.790	Grid bearing	317.920
Water Depth (m)	-4.600		

Scatter Plot of PROD Fixes



Observational Summary			
No of Position Processed	100	Start Logging (Local)	8:34:31
No of Position Accepted	39	End Logging (Local)	8:36:10
Percentage of Accepted	39%	Logging Duration	0:01:39

Comments
Position acquired at 1 sec interval. Vessel was moved 15m at 020° from original location. PROD off seabed during fix and not stable. Water depth from USBL observations.