



Compendium of Survey of Navigable Passes

Mauritius



2023

Published by:

**MAURITIUS HYDROGRAPHIC SERVICE
MINISTRY OF HOUSING AND LAND USE PLANNING**

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About the Document

This document is a compilation of various surveys of known navigable passes around Mauritius undertaken by this Office. Since the establishment of Mauritius Hydrographic Service, initially known as Hydrographic Unit, the ardent task of surveying the waters around Mauritius has been a continuous and challenging process. The data collected has been of significant importance to various stakeholders for implementing projects of national importance.

The document is a compendium of hydrographic data of navigable passes available with the Office including the features of importance at sea and in coastal areas. The data is also available on the official MSDI website 'Ocean Observatory E- platform' maintained by the department of CSMZAE.

It is to be noted that several factors contribute to the dynamic nature of the coastal areas including sea-level fluctuations, such as the effects of erosion/ accretion, the shape and orientation of the coastline relative to the direction of the prevailing wind/wave, and the type and structure of rocks.

Hydrographic surveys are thus a recurring continuous process and the frequency of repeating the survey of an area depends on the severity of the above conditions. Hence, the data depicted/ presented on any of the deliverables, is subject to dynamic changes over period of time.



CONTENTS

<u>SL</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
1.	Introduction	5
2.	Layout of Navigable Passes Around Mauritius Island	6
3.	Approximate Coordinates of the Passes of Mauritius	7-10
4.	List of Completed Surveys of Navigable Passes	11-12
5.	Metadata of Phase I Survey	13-17
6.	Metadata of Phase II Survey	18-22
7.	Metadata of Phase III Survey	23-26
8.	Metadata of Phase IV Survey	27-30
9.	Metadata of Phase V Survey	31-33
10.	Metadata of Phase VI Survey	34-36
11.	Metadata of Phase VII Survey	37-39
12.	Metadata of Phase VIII Survey	40-41

INTRODUCTION

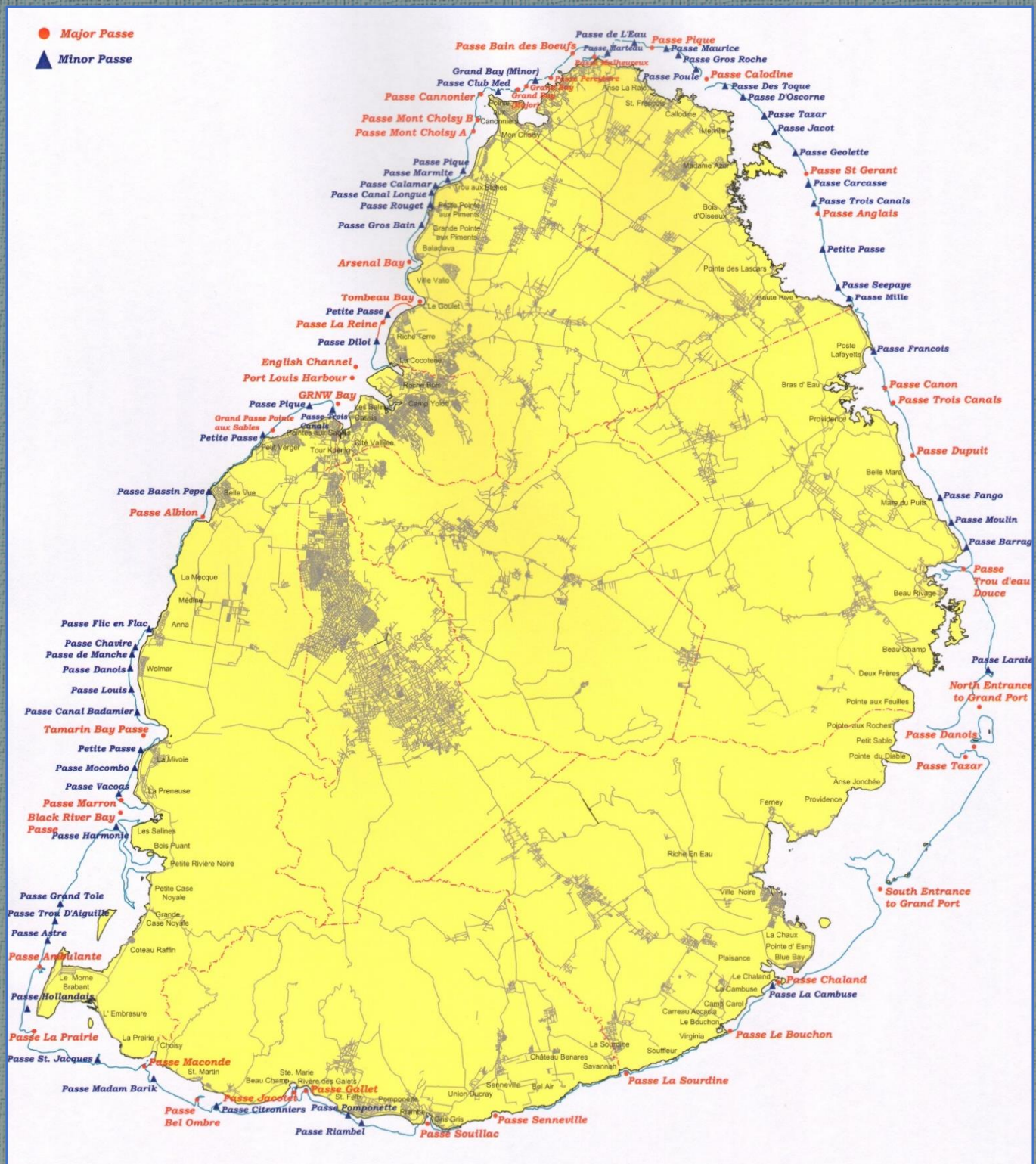
Aerial View of a Navigable Pass



Navigable Pass

The Island of Mauritius is approximately 2040 Km² and its coastline is fringed mostly with sandy beaches. Except for short stretches of the coastline on the West Coast and on the southern coast, the Island is surrounded by fringing coral reefs enclosing a shallow lagoon. There are breaks in these fringing reefs, some of which are navigable, known as navigable passes. A total of 96 navigable passes have been identified across the Island which are grouped into 42 major and 54 minor navigable passes.

LAYOUT OF NAVIGABLE PASSES AROUND MAURITIUS



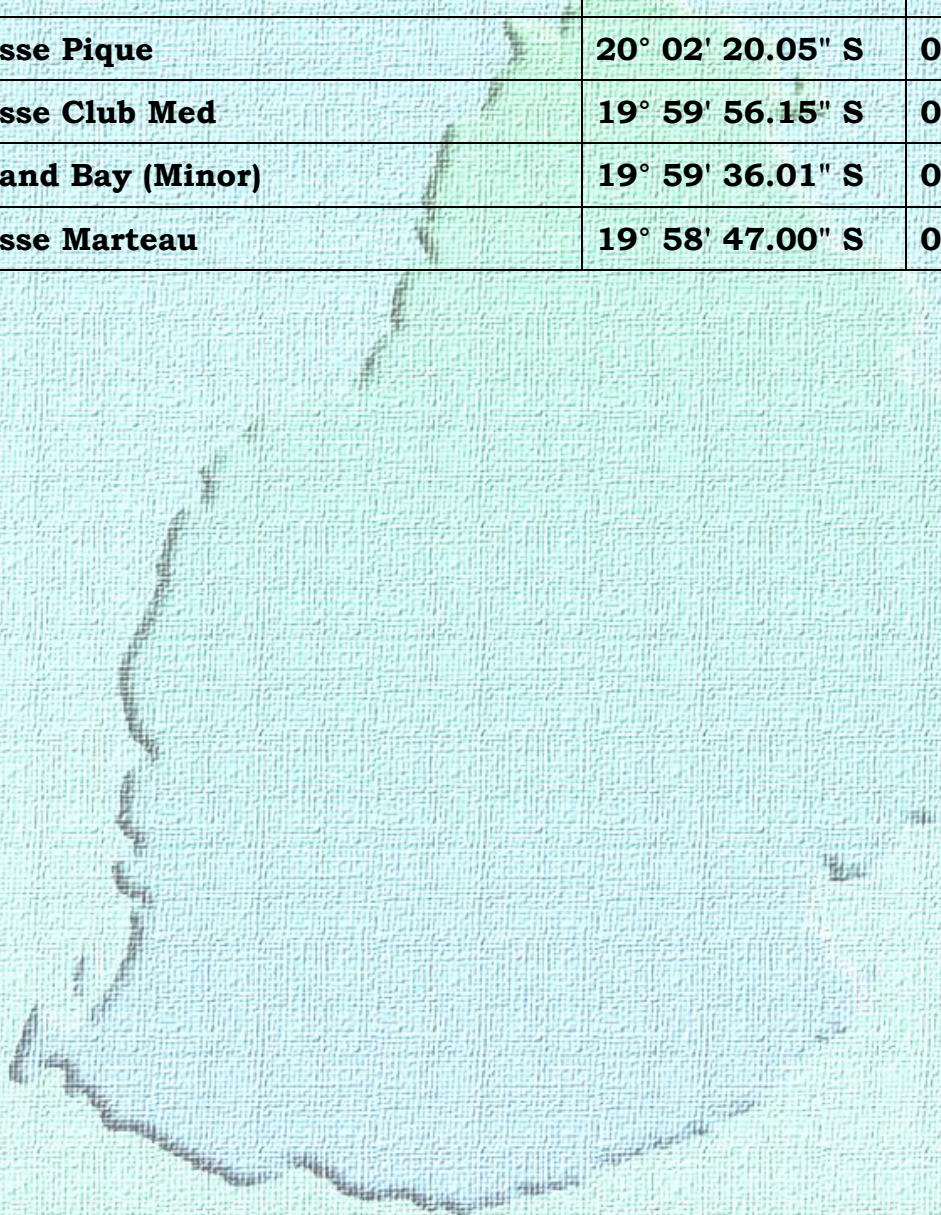
APPROXIMATE COORDINATES OF THE PASSES OF MAURITIUS

Sl	<u>Name</u>	<u>Latitude</u> (WGS 84 Datum)	<u>Longitude</u> (WGS 84 Datum)
Major Passes			
1	Passe Bain des Boeufs	19° 58' 45.83" S	057° 35' 49.92" E
2	Passe Malheureux	19° 58' 52.32" S	057° 36' 31.68" E
3	Passe Pique	19° 58' 35.40" S	057° 38' 23.28" E
4	Passe Calodine	19° 59' 31.92" S	057° 40' 09.11" E
5	Passe St Gerant	20° 02' 23.99" S	057° 43' 22.44" E
6	Passe Anglais	20° 03' 37.08" S	057° 43' 44.39" E
7	Passe Canon	20° 08' 57.83" S	057° 45' 54.00" E
8	Passe Trois Canals	20° 09' 24.48" S	057° 46' 09.83" E
9	Passe Dupuit	20° 10' 59.87" S	057° 46' 47.63" E
10	Passe Trou d'Eau Douce	20° 14' 27.23" S	057° 48' 26.64" E
11	North Entrance to Grand Port	20° 18' 37.80" S	057° 48' 57.95" E
12	Passe Danois	20° 19' 50.87" S	057° 48' 47.87" E
13	Passe Tazar	20° 20' 09.59" S	057° 48' 31.32" E
14	South Entrance to Grand Port	20° 24' 10.07" S	057° 45' 46.79" E
15	Passe Chaland	20° 27' 02.16" S	057° 42' 29.88" E
16	Passe Le Bouchon	20° 28' 29.27" S	057° 40' 56.27" E
17	Passe La Sourdine	20° 29' 47.40" S	057° 37' 34.68" E
18	Passe Senneville	20° 31' 05.16" S	057° 33' 20.52" E
19	Passe Souillac	20° 31' 20.28" S	057° 31' 08.76" E
20	Passe Gallet	20° 30' 19.44" S	057° 27' 11.87" E
21	Passe Jacotet	20° 30' 22.31" S	057° 26' 49.55" E
22	Passe Bel Ombre	20° 30' 35.63" S	057° 23' 41.27" E
23	Passe Maconde	20° 29' 34.07" S	057° 21' 58.31" E
24	Passe La Prairie	20° 28' 29.64" S	057° 18' 24.48" E
25	Passe Ambulante	20° 26' 33.35" S	057° 18' 35.28" E
26	Black River Bay	20° 21' 51.12" S	057° 21' 12.24" E
27	Passe Marron	20° 21' 28.80" S	057° 21' 14.04" E

Sl	Name	Latitude (WGS 84 Datum)	Longitude (WGS 84 Datum)
28	Tamarin Bay	20° 19' 30.71" S	057° 21' 56.88" E
29	Passe Albion	20° 12' 51.12" S	057° 23' 52.07" E
30	Grande Passe Pointe aux Sables	20° 10' 14.87" S	057° 26' 07.44" E
31	GRNW Bay	20° 09' 26.99" S	057° 28' 13.43" E
32	Port Louis Harbour	20° 08' 39.48" S	057° 28' 41.15" E
33	English Channel	20° 08' 18.96" S	057° 28' 47.99" E
34	Passe La Reine	20° 06' 57.59" S	057° 29' 40.55" E
35	Tombeau Bay	20° 06' 20.15" S	057° 30' 52.56" E
36	Arsenal Bay	20° 05' 06.72" S	057° 30' 32.75" E
37	Passe Mont Choisy A	20° 01' 06.23" S	057° 32' 37.32" E
38	Passe Mont Choisy B	20° 00' 45.71" S	057° 32' 45.59" E
39	Passe Canonnier	19° 59' 59.28" S	057° 32' 51.71" E
40	Grand Bay (Major)	19° 59' 51.35" S	057° 34' 03.35" E
41	Grand Bay	19° 59' 45.59" S	057° 34' 19.55" E
42	Passe Pereybere	19° 59' 30.12" S	057° 35' 07.43" E
Minor Passes			
43	Passe de L'Eau	19° 58' 27.88" S	057° 37' 49.11" E
44	Passe Maurice	19° 58' 38.15" S	057° 38' 50.84" E
45	Passe Gros Roche	19° 58' 50.52" S	057° 39' 14.43" E
46	Passe Poule	19° 59' 15.70" S	057° 39' 48.94" E
47	Passe Deux Toque	19° 59' 46.05" S	057° 40' 45.22" E
48	Passe D'Oscorne	20° 00' 05.77" S	057° 41' 19.86" E
49	Passe Tazar	20° 00' 38.82" S	057° 42' 01.18" E
50	Passe Jacot	20° 01' 07.58" S	057° 42' 20.55" E
51	Passe Geolette	20° 01' 46.11" S	057° 43' 01.03" E
52	Passe Carcasse	20° 02' 44.94" S	057° 43' 26.00" E
53	Passe Trois Canals	20° 03' 20.34" S	057° 43' 37.28" E
54	Petite Passe	20° 04' 44.50" S	057° 43' 54.25" E
55	Passe Seepaye	20° 05' 53.00" S	057° 44' 24.57" E
56	Passe Mille	20° 06' 14.63" S	057° 44' 44.85" E

S1	Name	Latitude (WGS 84 Datum)	Longitude (WGS 84 Datum)
57	Passe Francois	20° 07' 51.62" S	057° 45' 32.35" E
58	Passe Fango	20° 12' 17.54" S	057° 47' 41.07" E
59	Passe Moulin	20° 13' 02.59" S	057° 48' 02.94" E
60	Passe Barrage	20° 13' 47.73" S	057° 48' 32.55" E
61	Passe Laraie	20° 17' 31.58" S	057° 49' 14.48" E
62	Passe La Cambuse	20° 27' 09.37" S	057° 42' 18.37" E
63	Passe Riambel	20° 31' 20.51" S	057° 29' 00.43" E
64	Passe Pomponette	20° 31' 05.68" S	057° 28' 34.49" E
65	Passe Citronniers	20° 30' 49.06" S	057° 24' 18.64" E
66	Passe Madame Barik	20° 29' 57.96" S	057° 22' 16.73" E
67	Passe St. Jacques	20° 29' 22.95" S	057° 20' 27.60" E
68	Passe Hollandais	20° 27' 51.00" S	057° 18' 12.08" E
69	Passe Astre	20° 25' 46.20" S	057° 18' 51.08" E
70	Passe Trou d'Aiguille	20° 25' 11.10" S	057° 19' 05.68" E
71	Passe Grand Tole	20° 24' 38.18" S	057° 19' 15.78" E
72	Passe Harmonie	20° 22' 17.26" S	057° 21' 03.89" E
73	Passe Vacoas	20° 21' 17.85" S	057° 21' 09.15" E
74	Passe Mocombo	20° 20' 31.91" S	057° 21' 39.66" E
75	Petite Passe	20° 19' 58.28" S	057° 21' 51.51" E
76	Passe Canal Badamier	20° 18' 49.41" S	057° 21' 45.29" E
77	Passe Louis	20° 18' 07.09" S	057° 21' 34.02" E
78	Passe Danois	20° 17' 28.20" S	057° 21' 31.06" E
79	Passe de Manche	20° 17' 03.69" S	057° 21' 34.34" E
80	Passe Chavire	20° 16' 51.17" S	057° 21' 41.12" E
81	Passe Flic en Flac	20° 16' 18.05" S	057° 22' 07.52" E
82	Passe Bassin Pepe	20° 12' 06.71" S	057° 24' 03.98" E
83	Petite Passe	20° 10' 24.61" S	057° 25' 47.99" E
84	Passe Pique	20° 09' 32.46" S	057° 27' 18.16" E
85	Passe Trois Canals	20° 09' 40.02" S	057° 28' 02.21" E
86	Passe Diloï	20° 07' 33.38" S	057° 29' 28.50" E

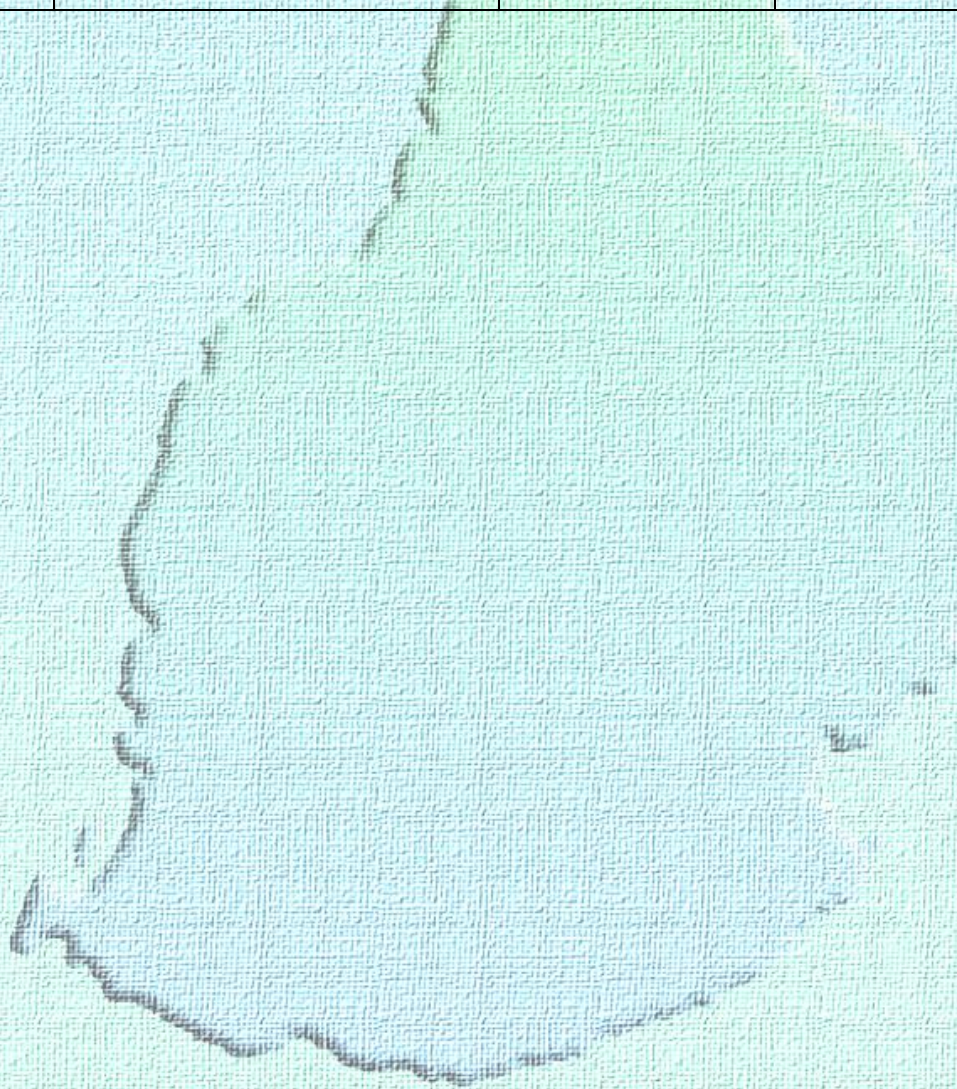
<u>SL</u>	<u>NAME</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>
87	Petite Passe	20° 06' 44.82" S	057° 29' 49.64" E
88	Passe Gros Bain	20° 04' 00.28" S	057° 30' 56.68" E
89	Passe Rouget	20° 03' 23.10" S	057° 31' 13.01" E
90	Passe Canal Longue	20° 03' 00.43" S	057° 31' 15.96" E
91	Passe Calamar	20° 02' 47.73" S	057° 31' 23.29" E
92	Passe Marmite	20° 02' 36.90" S	057° 31' 47.11" E
93	Passe Pique	20° 02' 20.05" S	057° 32' 17.36" E
94	Passe Club Med	19° 59' 56.15" S	057° 33' 25.68" E
95	Grand Bay (Minor)	19° 59' 36.01" S	057° 34' 37.52" E
96	Passe Marteau	19° 58' 47.00" S	057° 36' 57.09" E



LIST OF SURVEYED NAVIGABLE PASSES

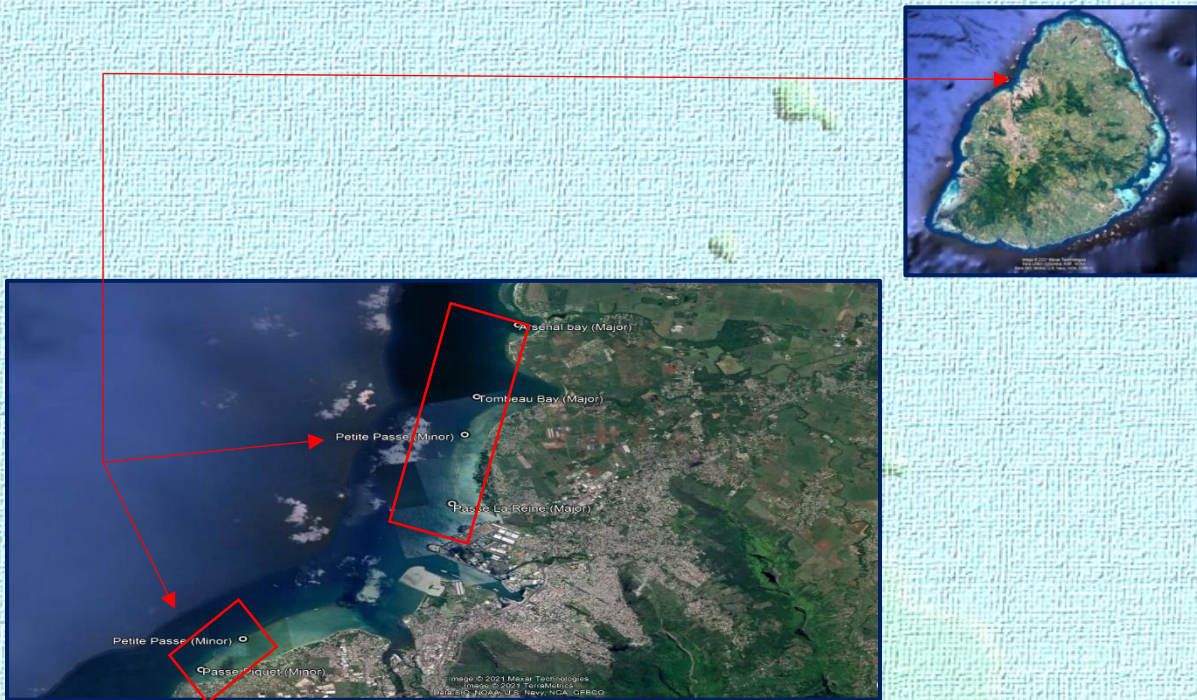
Sl	Phase	Navigable Pass	Region	Scale of Survey/ Scale of Plotting
1	I	Arsenal Bay (Major)	Baie Aux Tortues	1 : 5,000 / 1 : 2,000
2		Tombeau Bay/Grand Passe (Major)	Baie Du Tombeau	
3		Le Goulet Passe		
4		Petite Passe (Minor)		
5		Passe La Reine (Major)	Pointe Aux Sables	
6		Passe Piquet (Minor)		
7		Petite Passe (Minor)		
8	II	Passe Flic En Flac (Minor)	Flic-en-Flac	1 : 5,000 / 1 : 2,000
9		Passe Albion (Major)	Albion	
10		Tamarin Bay Passe (Major)	Tamarin/Wolmar	1 : 5,000 / 1 : 2,500
11		Passe Marron (Major)	La Preneuse	1 : 5,000 / 1 : 5,000
12		Black River Bay Grande Passe (Major)	Black River	
13		Passe Harmonie (Minor)	Petite Riviere Noire	1 : 5,000 / 1 : 5,000 (Entrance to Harmonie Passe) 1 : 5,000 / 1 : 7,500 (Harmonie Passe)
14	III	Passe Marmite (Minor)	Trou aux Biches	1 : 5,000 / 1 : 5,000
15		Passe Mon Choisy A (Major)	Mon Choisy	
16		Passe Mon Choisy B (Major)	Mon Choisy	
17		Passe Cannoniers / Esnouf (Major)	Pointe aux Cannoniers	
18		Grand Bay (Major)		
19	IV	Passe Pereybere (Major)	Pereybere	1 : 5,000 / 1 : 5,000
20		Passe Bain des Boeufs (Major)	Cap Malheureux	
21		Passe Malheureux (Major)	Cap Malheureux	
22	V	Passe Canon (Major)	Poste de Flacq	1 : 5,000 / 1 : 5,000
23	VI	Passe Poule	Grand Gaube	1 : 5,000 / 1 : 5,000
24		Passe Calodine (Major)		

25		Passe Des Toque		
26		Passe D'Oscorne		
27	VII	Passe Jacot	Poudre d'Or	1 : 5,000 / 1 : 10,000
28		Passe St Gerant (Major)		
29		Passe Carcasse		
30		Passe Trois Canals		
31		Passe Dupuit (Major)	Belle Mare	1 : 5,000 / 1 : 2,500
32	VIII	Passe Trou d'Eau Douce (Major)	Trou d'Eau Douce	1 : 5,000 / 1 : 3,000



PHASE I SURVEY

PICTORIAL VIEW / GEOGRAPHICAL INFORMATION / METADATA



	Name of Passe	≈ Position (Lat & Long)
Description	Arsenal Bay	20° 05' 09.75" S, 057° 30' 39.80" E
	Tombeau Bay / Grand Passe	20° 06' 58.80" S, 057° 29' 41.45" E
	Petite Passe (Tombeau Bay)	20° 06' 52.50" S, 057° 29' 45.86" E
	Passe La Reine	20° 07' 58.60" S, 057° 29' 26.75" E
	Passe Piquet	20° 10' 15.07" S, 057° 26' 07.88" E
	La Pointe Passe/Petite Passe (Point Aux Sables)	20° 09' 49.54" S, 057° 26' 41.18" E
Region/Area	North West Coast - Mauritius	
Hydrographic Instructions	HI/HU/06/2014-15 – Phase I	
IHO Order	Order - 1b, SP-44 (5 th Edition)	
Survey Commence Date	30 November 2015	
Survey End Date	21 January 2016	
Horizontal Control	Ebene Tower Roof Top Position : 20°14' 43.45069" S 057° 29' 24.64884" E Ellipsoidal Height : 346.913 Metres	
Vertical Control	All soundings reduced to chart datum 2.199 m below bench mark at Port Louis. Tidal data observed every 15 Min at Trou Fanfaron Jetty, Port Louis for processing the collected data.	
Survey Coverage	47 Nautical Miles (87 km)	
Seafloor Characterization	Coral and Fine Sand	

ARSENAL BAY

<u>METADATA</u>		
Survey Area	Arsenal Bay Passe	
Region	Baie aux Tortues, North West Coast - Mauritius	
IHO Order	Order 1b as per IHO standards for Hydrographic Surveys, SP-44 (5 th Edition)	
Scale of Survey	1 : 5,000	
Scale of Plotting	1 : 2,000	
Datum	World Geodetic System (WGS 84)	
Projection	Transverse Mercator (Central Meridian : 057° 30' 45.9" E)	
Depth Range	0.6 to 15.8 Meters (w.r.t Chart Datum)	
Ancillary Observations	Sound Velocity Observation	
Hydrographic Data Acquisition Systems	Automatic Data Logging System	HYPACK 2010 (Software)
	Position	DGPS Hemisphere R-131 with Satellite Based Augmentation System (SBAS) Correction
	Depth/Sounding	Single Beam Echo Sounder - Atlas Deso 30 & Precision Depth Recorder (PDR) 601

TOMBEAU BAY (GRAND PASSE AND PETITE PASSE)

<u>METADATA</u>		
Survey Area	Tombeau Bay (Grand Passe and Petite Passe)	
Region	Baie du Tombeau, North West Coast - Mauritius	
IHO Order	Order 1b as per IHO standards for Hydrographic Surveys, SP-44 (5 th Edition)	
Scale of Survey	1 : 5,000	
Scale of Plotting	1 : 2,000	
Datum	World Geodetic System (WGS 84)	
Projection	Transverse Mercator (Central Meridian : 057° 29' 42.6" E)	
Depth Range	0.3 to 16 Metres (w.r.t Chart Datum)	
Ancillary Observations	Sound Velocity Observation	
Hydrographic Data Acquisition Systems	Automatic Data Logging System	HYPACK 2010 (Software)
	Position	DGPS Hemisphere R-131 with Satellite Based augmentation System (SBAS) Correction
	Depth/Sounding	Single Beam Echo Sounder - Atlas Deso 30 & Precision Depth Recorder (PDR) 601

PASSE LA REINE

<u>METADATA</u>		
Survey Area	Passe La Reine	
Region	Baie du Tombeau, North West Coast - Mauritius	
IHO Order	Order 1b as per IHO standards for Hydrographic Surveys, SP-44 (5 th Edition)	
Scale of Survey	1 : 5,000	
Scale of Plotting	1 : 2,000	
Datum	World Geodetic System (WGS 84)	
Projection	Transverse Mercator (Central Meridian : 057° 29' 41.4" E)	
Depth Range	0.3 to 7.5 Metres (w.r.t Chart Datum)	
Ancillary Observations	Sound Velocity Observation	
Hydrographic Data Acquisition Systems	Automatic Data Logging System	HYPACK 2010 (Software)
	Position	DGPS Hemisphere R-131 with Satellite Based Augmentation System (SBAS) Correction
	Depth/Sounding	Single Beam Echo Sounder - Atlas Deso 30 & Precision Depth Recorder (PDR) 601

PASSE PIQUET

<u>METADATA</u>		
Survey Area	Passe Piquet	
Region	Pointe aux Sables, North West Coast - Mauritius	
IHO Order	Order 1b as per IHO Standards for Hydrographic Surveys, SP-44 (5 th Edition)	
Scale of Survey	1 : 5,000	
Scale of Plotting	1 : 2,000	
Datum	World Geodetic System (WGS 84)	
Projection	Transverse Mercator (Central Meridian : 057° 26' 3.6" E)	
Depth Range	0.4 to 20.6 Metres (w.r.t Chart Datum)	
Ancillary Observations	Sound Velocity Observation	
Hydrographic Data Acquisition Systems	Automatic Data Logging System	HYPACK 2010 (Software)
	Position	DGPS Hemisphere R-131 with Satellite Based augmentation System (SBAS) Correction
	Depth/Sounding	Single Beam Echo Sounder - Atlas Deso 30 & Precision Depth Recorder (PDR) 601

PETITE PASSE

METADATA

Survey Area	Petite Passe	
Region	Pointe aux Sables, North West Coast - Mauritius	
IHO Order	Order 1b as per IHO standards for Hydrographic Surveys, SP-44 (5 th Edition)	
Scale of Survey	1 : 5,000	
Scale of Plotting	1 : 2,000	
Datum	World Geodetic System (WGS 84)	
Projection	Transverse Mercator (Central Meridian : 057° 26' 46.8" E)	
Depth Range	0.3 to 16.9 Metres (w.r.t Chart Datum)	
Ancillary Observations	Sound Velocity Observation	
Hydrographic Data Acquisition Systems	Automatic Data Logging System	HYPACK 2010 (Software)
	Position	DGPS Hemisphere R-131 with Satellite Based Augmentation System (SBAS) Correction
	Depth/Sounding	Single Beam Echo Sounder - Atlas Deso 30 & Precision Depth Recorder (PDR) 601



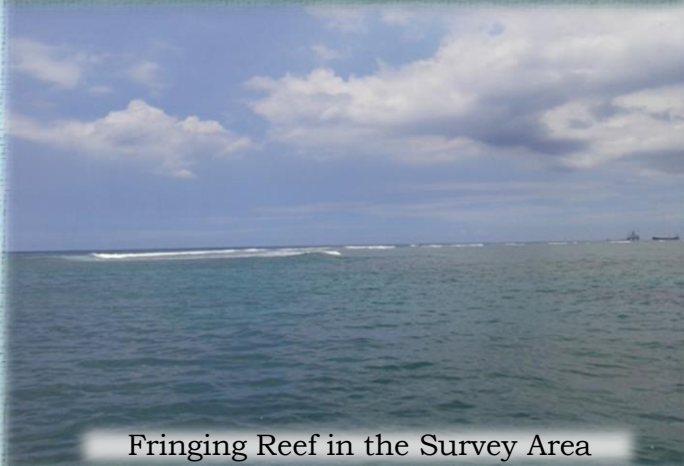
GLIMPSES OF SURVEY AREA AND PEOPLE AT WORK



Seaward View of Survey Area-Pointe aux Sables



Submerged rocks near shore in Survey Area Pointe aux Sables



Fringing Reef in the Survey Area



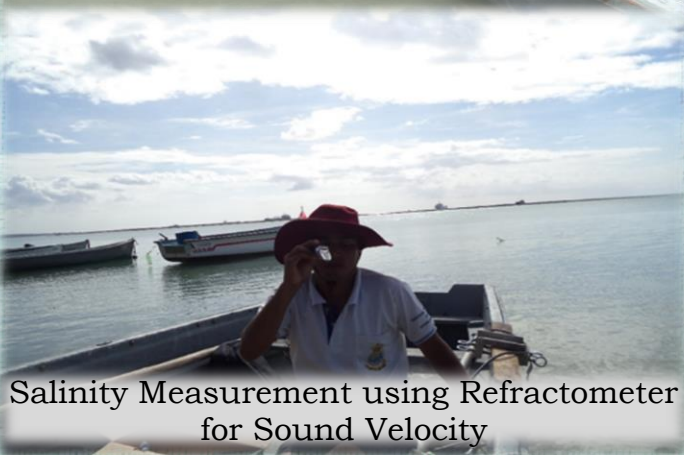
Southern View of Arsenal Bay



Preparation of Skiff for Sounding Operation



Data Acquisition in Progress

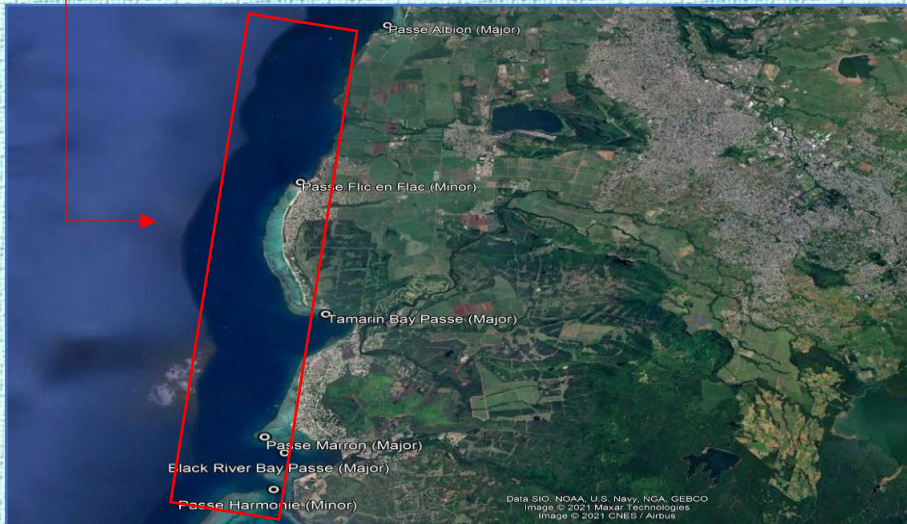


Salinity Measurement using Refractometer for Sound Velocity



Levelling in Progress

PHASE II SURVEY
PICTORIAL VIEW / GEOGRAPHICAL INFORMATION / METADATA



	<u>Name of Passe</u>	<u>≈ Position (Lat & Long)</u>
Description	Passe Flic-en-Flac	20° 16' 20.17" S, 057° 22' 09.65" E
	Passe Albion	20° 12' 51.38" S, 057° 23' 52.56" E
	Tamarin Bay Passe	20° 19' 11.15" S, 057° 22' 18.70" E
	Passe Marron	20° 21' 27.73" S, 057° 21' 13.90" E
	Black River Bay Grande Passe	20° 21' 47.70" S, 057° 21' 29.75" E
	Passe Harmonie	20° 22' 27.03" S, 057° 21' 17.30" E
Region/Area	South West Coast - Mauritius	
Hydrographic Instructions	HI/HU/06/2014-15 – Phase II	
IHO Order	Order – 1b, SP-44 (5 th Edition)	
Survey Commence Date	15 March 2016	
Survey End Date	03 Aug 2016	
Horizontal Control	Ebene Tower Roof Top Position : 20° 14' 43.45069" S 057° 29' 24.64884" E Ellipsoidal Height : 346.913 Meters	
Vertical Control	All soundings reduced to Chart Datum 2.199 m below bench mark at Port Louis. Tidal data observed every 15 Min at Trou Fanfaron Jetty, Port Louis and Angler's Club Jetty, Grande Riviere Noire bay for processing the collected data.	
Survey Coverage	221 Nautical Miles (410 km)	
Seafloor Characterization	Coral and Coral Sand	

PASSE FLIC EN FLAC

METADATA		
Survey Area	Passe Flic En Flac	
Region	Flic En Flac, South West Coast - Mauritius	
IHO Order	Order 1b as per IHO standards for Hydrographic Surveys, SP-44 (5th Edition)	
Scale of Survey	1 : 5,000	
Scale of Plotting	1 : 2,000	
Datum	World Geodetic System (WGS) 1984	
Projection	Transverse Mercator (Central Meridian : 57° 22' 12" E)	
Depth Range	0.3 to 17.3 Metres (w.r.t Chart Datum)	
Ancillary Observations	Sound Velocity Observation	
Hydrographic Data Acquisition Systems	Automatic Data Logging System	HYPACK 2010 (Software)
	Position	DGPS Hemisphere R-131 with Satellite Based Augmentation System (SBAS) Mode (GAGAN)
	Depth/Sounding	Single Beam Echo Sounder - Precision Depth Recorder (PDR) 601

PASSE ALBION

METADATA		
Survey Area	Passe Albion	
Region	Albion, South West Coast - Mauritius	
IHO Order	Order 1b as per IHO standards for Hydrographic Surveys, SP-44 (5th Edition)	
Scale of Survey	1 : 5,000	
Scale of Plotting	1 : 2,500	
Datum	World Geodetic System (WGS 84)	
Projection	Transverse Mercator (Central Meridian : 057° 23' 51.5" E)	
Depth Range	0.3 to 31 Metres (w.r.t Chart Datum)	
Ancillary Observations	Sound Velocity Observation	
Hydrographic Data Acquisition Systems	Automatic Data Logging System	HYPACK 2010 (Software)
	Position	DGPS Hemisphere R-131 with Satellite Based Augmentation System (SBAS) Mode (GAGAN)
	Depth/Sounding	Single Beam Echo Sounder - Precision Depth Recorder (PDR) 601

WOLMAR (TAMARIN BAY) PASSE

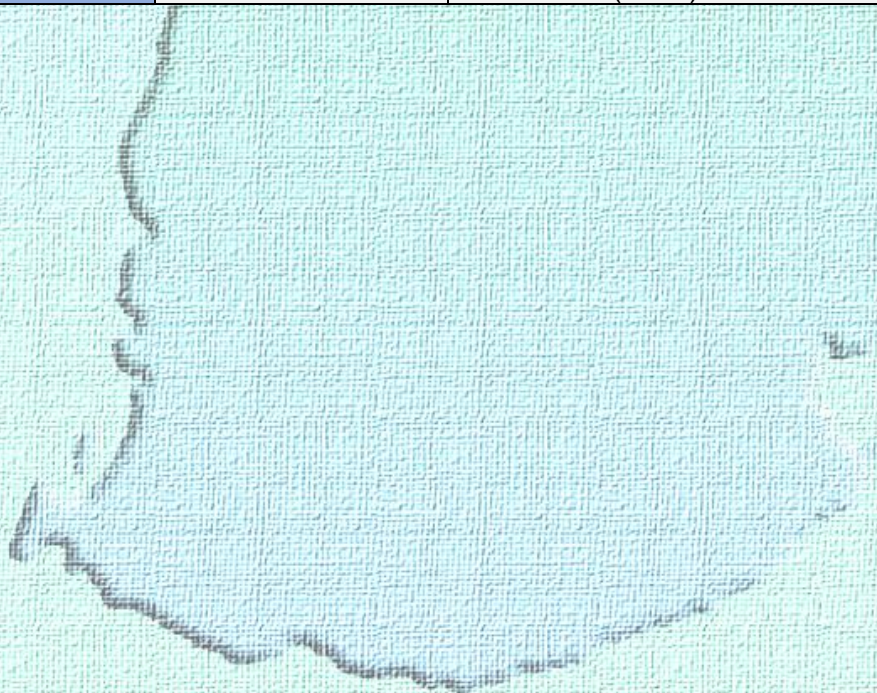
<u>METADATA</u>		
Survey Area	Wolmar (Tamarin Bay) Passe	
Region	Tamarin/ Wolmar, South West Coast - Mauritius	
IHO Order	Order 1b as per IHO Standards for Hydrographic Surveys, SP-44 (5 th Edition)	
Scale of Survey	1 : 5,000	
Scale of plotting	1 : 2,500	
Datum	World Geodetic System (WGS 84)	
Projection	Transverse Mercator (Central Meridian : 057° 22' 21" E)	
Depth Range	0.5 to 14.9 Metres (w.r.t Chart Datum)	
Ancillary Observations	Sound Velocity Observation	
Hydrographic Data Acquisition Systems	Automatic Data Logging System	HYPACK 2010 (Software)
	Position	DGPS Hemisphere R-131 with Satellite Based Augmentation System (SBAS) Mode (GAGAN)
	Depth/Sounding	Single Beam Echo Sounder - Precision Depth Recorder (PDR) 601

PASSE MARRON AND BLACK RIVER BAY GRANDE PASSE

<u>METADATA</u>		
Survey Area	Passe Marron and Black River Bay Grande Passe	
Region	La Preneuse, South West Coast - Mauritius	
IHO Order	Order 1b as per IHO standards for Hydrographic Surveys, SP-44 (5 th Edition)	
Scale of Survey	1 : 5,000	
Scale of Plotting	1 : 5,000	
Datum	World Geodetic System (WGS 84)	
Projection	Transverse Mercator (Central Meridian : 057° 21' 33" E)	
Depth Range	0.2 to 25.7 Metres (w.r.t Chart Datum)	
Ancillary Observations	Sound Velocity Observation	
Hydrographic Data Acquisition Systems	Automatic Data Logging System	HYPACK 2010 (Software)
	Position	DGPS Hemisphere R-131 with Satellite Based Augmentation System (SBAS) Mode (GAGAN)
	Depth/Sounding	Single Beam Echo Sounder - Precision Depth Recorder (PDR) 601

PASSE HARMONIE AND ENTRANCE TO PASSE HARMONIE

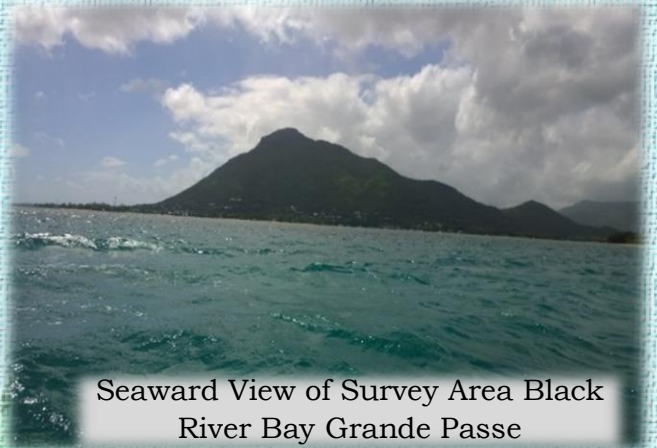
METADATA		
Survey Area	Passe Harmonie and Entrance to Passe Harmonie	
Region	Petite Riviere Noire, South West Coast - Mauritius	
IHO Order	Order 1b as per IHO standards for Hydrographic Surveys, SP-44 (5 th Edition)	
Scale of Survey	1 : 5,000	
Scale of Plotting	1 : 5,000 (for Entrance to Passe Harmonie) 1 : 7,500 (for Passe Harmonie)	
Datum	World Geodetic System (WGS 84)	
Projection	Transverse Mercator (Central Meridian : 57° 21' 54.5" E - for Harmony Passe) (Central Meridian : 57° 21' 14.5" E - for Entrance to Harmony Passe)	
Depth Range	0.3 to 33 Metres (for Harmony Passe) (w.r.t Chart Datum) 0.3 to 40 Metres (for Entrance to Harmony Passe) (w.r.t Chart Datum)	
Ancillary Observations	Sound Velocity Observation	
Hydrographic Data Acquisition Systems	Automatic Data Logging System	HYPACK 2010 (Software)
	Position	DGPS Hemisphere R-131 with Satellite Based Augmentation System (SBAS) Mode (GAGAN)
	Depth/Sounding	Single Beam Echo Sounder - Precision Depth Recorder (PDR) 601



GLIMPSES OF SURVEY AREA AND PEOPLE AT WORK



Eastern View of Survey Area Black River Bay Grande Passe



Seaward View of Survey Area Black River Bay Grande Passe



Pleasure Crafts Anchored in Survey



Seaward View of Survey Area Passe



Data Acquisition in Progress



Preparation of Skiff for Sounding Operation



Setting Up Tide



Levelling in Progress at Grande Riviere Noire Bay

PHASE III SURVEY

PICTORIAL VIEW / GEOGRAPHICAL INFORMATION / METADATA



	<u>Name of Passe</u>	<u>≈ Position (Lat & Long)</u>
Description	Passe Marmite	20° 02' 22.15" S, 057° 32' 17.80" E
	Passe Mon Choisy 'A'	20° 01' 06.00" S, 057° 32' 39.00" E
	Passe Mon Choisy 'B'	20° 00' 44.00" S, 057° 32' 46.00" E
	Passe Cannoniers	19° 59' 52.00" S, 057° 33' 12.00" E
	Grand Bay	19° 59' 47.58" S, 057° 34' 00.74" E
Region/Area	North Coast - Mauritius	
Hydrographic Instructions	HI/HU/06/2014-15 – Phase III	
IHO Order	Order – 1b, SP-44 (5 th Edition)	
Survey Commence Date	18 July 2016	
Survey End Date	19 May 2017	
Horizontal Control	Ebene Tower Roof Top Position : 20° 14' 04.45069" S 57° 29' 24.64884" E Ellipsoidal Height : 346.913 Meters	
Vertical Control	All soundings reduced to Chart Datum 2.199 m below bench mark at Port Louis. Tidal data of Port Louis ATG was downloaded from the website http://www.ioc-sealevelmonitoring.org/ for processing the collected data.	
Survey Coverage	243 Nautical Miles (450 km)	
Seafloor Characterization	Coral, Coral Sand and Fine Sand	

PASSE MARMITE

<u>METADATA</u>		
Survey Area	Passe Marmite	
Region	Trou aux Biches, North Coast - Mauritius	
IHO Order	Order 1b as per IHO standards for Hydrographic Surveys, SP-44 (5 th Edition)	
Scale of Survey	1 : 5,000	
Scale of Plotting	1 : 5,000	
Datum	World Geodetic System (WGS 84)	
Projection	Transverse Mercator (Central Meridian : 57° 32' 35" E)	
Depth range	-0.2 to 46 Metres (w.r.t Chart Datum)	
Ancillary observations	Sound Velocity Observation	
Hydrographic Data Acquisition Systems	Automatic Data Logging System	HYPACK 2010 (Software)
	Position	DGPS Hemisphere R-131 with Satellite Based Augmentation System (SBAS) Mode (GAGAN)
	Depth/Sounding	Single Beam Echo Sounder – NAVISOUND 215 & Precision Depth Recorder (PDR) 601

PASSE MON CHOISY 'A'

<u>METADATA</u>		
Survey Area	Passe Mon Choisy 'A'	
Region	Mon Choisy, North Coast - Mauritius	
IHO Order	Order 1b as per IHO standards for Hydrographic Surveys, SP-44 (5 th Edition)	
Scale of Survey	1 : 5,000	
Scale of Plotting	1 : 5,000	
Datum	World Geodetic System (WGS 84)	
Projection	Transverse Mercator (Central Meridian : 57° 32' 44" E)	
Depth Range	0.6 to 38 Metres (w.r.t Chart Datum)	
Ancillary Observations	Sound Velocity Observation	
Hydrographic Data Acquisition Systems	Automatic Data Logging System	HYPACK 2010 (Software)
	Position	DGPS Hemisphere R-131 with Satellite Based Augmentation System (SBAS) Mode (GAGAN)
	Depth/Sounding	Single Beam Echo Sounder – NAVISOUND 215 & Precision Depth Recorder (PDR) 601

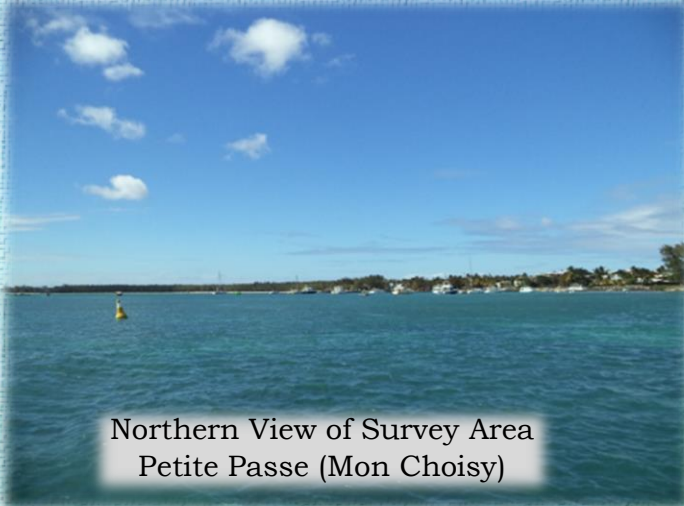
PASSE MON CHOISY 'B' AND PASSE CANNONIERS (ESNOUF)

<u>METADATA</u>		
Survey Area	Passé Mon Choisy 'B' and Passé Cannoniers (Esnouf)	
Region	Mon Choisy, North Coast - Mauritius	
IHO order	Order 1b as per IHO standards for Hydrographic Surveys, SP-44 (5 th Edition)	
Scale of Survey	1 : 5,000	
Scale of Plotting	1 : 5,000	
Datum	World Geodetic System (WGS 84)	
Projection	Transverse Mercator (Central Meridian : 57° 32' 53" E)	
Depth Range	-0.2 to 99 Metres (w.r.t Chart Datum)	
Ancillary Observations	Sound Velocity Observation	
Hydrographic Data Acquisition Systems	Automatic Data Logging System	HYPACK 2010 (Software)
	Position	DGPS Hemisphere R-131 with Satellite Based Augmentation System (SBAS) Mode (GAGAN)
	Depth/Sounding	Single Beam Echo Sounder – NAVISOUND 215 & Precision Depth Recorder (PDR) 601

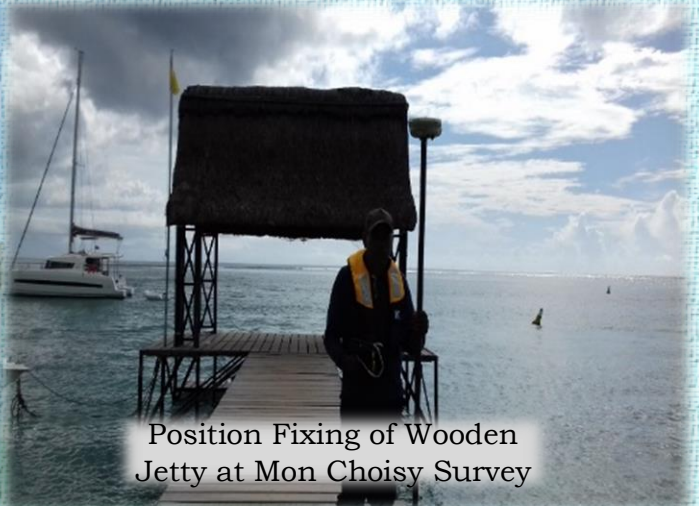
GRAND BAY

<u>METADATA</u>		
Survey Area	Grand Bay	
Region	Pte aux Cannoniers, North Coast - Mauritius	
IHO Order	Order 1b as per IHO standards for Hydrographic Surveys, SP-44 (5 th Edition)	
Scale of Survey	1 : 5,000	
Scale of Plotting	1 : 5,000	
Datum	World Geodetic System (WGS 84)	
Projection	Transverse Mercator (Central Meridian : 57° 33' 44.5" E)	
Depth Range	-0.1 to 12.9 Metres (w.r.t Chart Datum)	
Ancillary Observations	Sound Velocity Observation	
Hydrographic Data Acquisition Systems	Automatic Data Logging System	HYPACK 2010 (Software)
	Position	DGPS Hemisphere R-131 with Satellite Based Augmentation System (SBAS) Mode (GAGAN)
	Depth/Sounding	Single Beam Echo Sounder – NAVISOUND 215 & Precision Depth Recorder (PDR) 601

GLIMPSES OF SURVEY AREA AND PEOPLE AT WORK



Northern View of Survey Area
Petite Passe (Mon Choisy)



Position Fixing of Wooden
Jetty at Mon Choisy Survey



Swimming Zone in Petite Passe
(Mon Choisy) Area



Submerged Rock in Survey Area
(Grand Major Passe)



Sounding Operation using FPS Skiff



Data Acquisition in Progress



Position Fixing of Buoy in Mon Choisy



Western View of Survey Area Petite Passe

PHASE IV SURVEY

PICTORIAL VIEW / GEOGRAPHICAL INFORMATION / METADATA



	Name of Passe	≈ Position (Lat & Long)
Description	Passe Pereybere	19° 59' 29.00" S, 057° 35' 11.00" E
	Passe Bain des Boeufs	19° 59' 17.00" S, 057° 35' 25.00" E
	Passe Malheureux	19° 58' 53.00" S, 057° 36' 30.00" E
Region	North Coast - Mauritius	
Hydrographic Instructions	HI/HU/06/2014-15 - Phase IV	
IHO Order	Order - 1b, SP-44 (5 th Edition)	
Survey Commence Date	31 May 2017	
Survey End Date	15 December 2017	
Horizontal Control	Ebene Tower Roof Top Position : 20°14' 43.45069" S 57° 29' 24.64884" E Ellipsoidal Height : 346.913 Meters	
Vertical Control	All soundings reduced to Chart Datum 2.199 m below bench mark at Port Louis. Tidal data of Port Louis ATG was downloaded from the website http://www.ioc-sealevelmonitoring.org/ for processing the collected data.	
Survey Coverage	254 Nautical Miles (470 km)	
Seafloor Characterization	Coral and Coral Sand	

PASSE PEREYBERE

METADATA		
Survey Area	Passe Pereybere	
Region	Pereybere, North Coast - Mauritius	
IHO Order	Order 1b as per IHO standards for Hydrographic Surveys, SP-44 (5 th Edition)	
Scale of Survey	1 : 5,000	
Scale of Plotting	1 : 5,000	
Datum	World Geodetic System (WGS 84)	
Projection	Transverse Mercator (Central Meridian : 57° 34' 45" E)	
Depth Range	0.6 to 104 Metres (w.r.t Chart Datum)	
Ancillary Observations	Sound Velocity Observation	
Hydrographic Data Acquisition Systems	Automatic Data Logging System	HYPACK 2010 (Software)
	Position	DGPS Hemisphere R-131 with Satellite Based Augmentation System (SBAS) Mode (GAGAN)
	Depth/Sounding	Single Beam Echo Sounder – Precision Depth Recorder (PDR) 601

PASSE BAIN DES BŒUFS

METADATA		
Survey Area	Passe Bain des Boeufs	
Region	Cap Malheureux, North Coast - Mauritius	
IHO Order	Order 1b as per IHO standards for Hydrographic Surveys, SP-44 (5 th Edition)	
Scale of Survey	1 : 5,000	
Scale of Plotting	1 : 5,000	
Datum	World Geodetic System (WGS 84)	
Projection	Transverse Mercator (Central Meridian : 57° 35' 29" E)	
Depth Range	0.5 to 44 Metres (w.r.t Chart Datum)	
Ancillary Observations	Sound Velocity Observation	
Hydrographic Data Acquisition Systems	Automatic Data Logging System	HYPACK 2010 (Software)
	Position	DGPS Hemisphere R-131 with Satellite Based Augmentation System (SBAS) Mode (GAGAN)
	Depth/Sounding	Single Beam Echo Sounder – Precision Depth Recorder (PDR) 601

PASSE MALHEUREUX

METADATA		
Survey Area	Passe Malheureux	
Region	Cap Malheureux, North Coast - Mauritius	
IHO Order	Order 1b as per IHO standards for Hydrographic Surveys, SP-44 (5 th Edition)	
Scale of Survey	1 : 5,000	
Scale of Plotting	1 : 5,000	
Datum	World Geodetic System (WGS 84)	
Projection	Transverse Mercator (Central Meridian : 57° 36' 41" E)	
Depth Range	0.5 to 36 Metres (w.r.t Chart Datum)	
Ancillary Observations	Sound Velocity Observation	
Hydrographic Data Acquisition Systems	Automatic Data Logging System	HYPACK 2010 (Software)
	Position	DGPS Hemisphere R-131 with Satellite Based Augmentation System (SBAS) Mode (GAGAN)
	Depth/Sounding	Single Beam Echo Sounder – Precision Depth Recorder (PDR) 601



GLIMPSES OF SURVEY AREA AND PEOPLE AT WORK



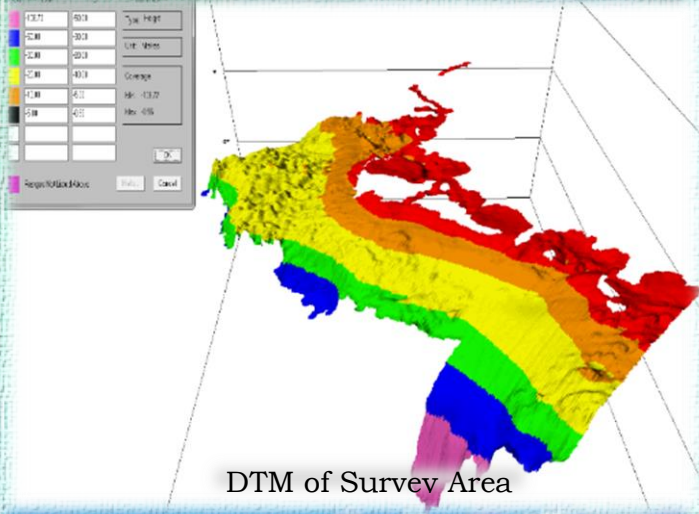
Landward View of Survey Area



Seaward View of Survey Area



Jetty in survey area
(Pereybere Passe)



DTM of Survey Area



Survey using RIB



Data acquisition using Skiff



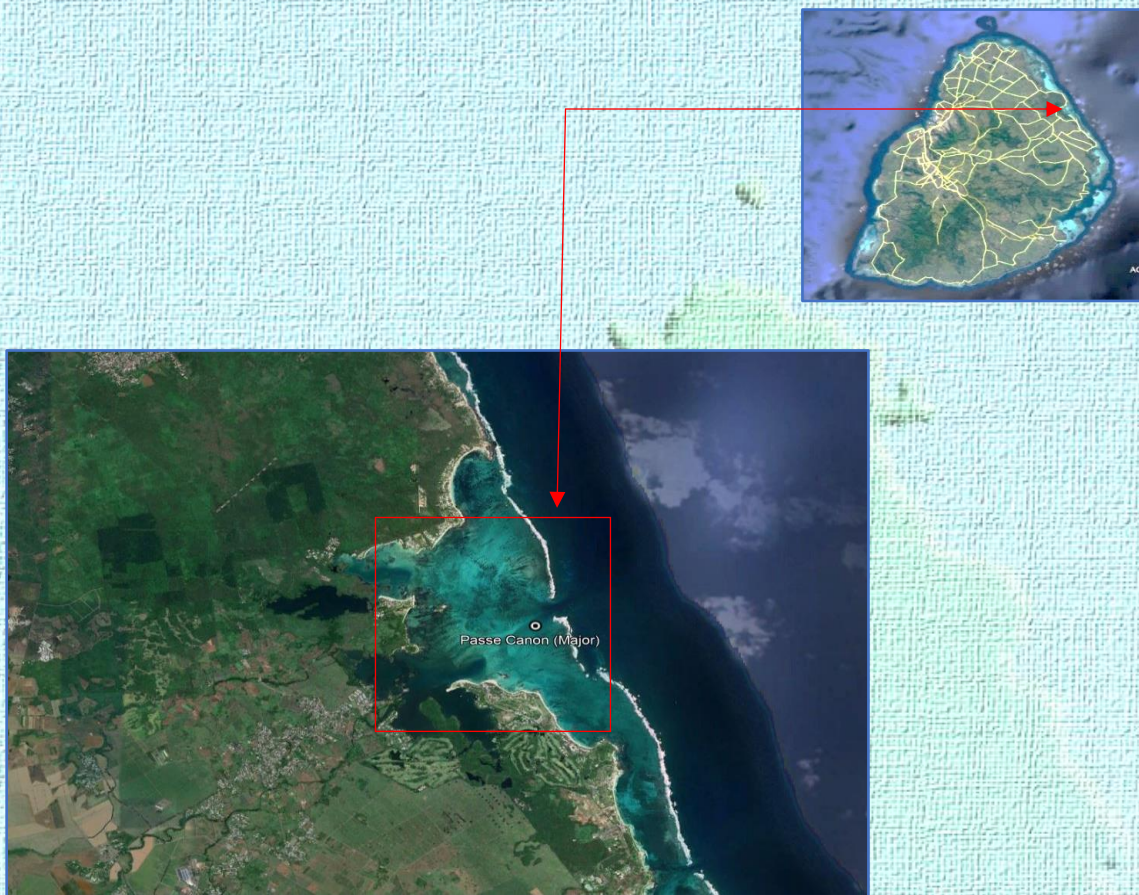
Setting up transducer and antenna in HDB



Fixing of Coastline

PHASE V SURVEY

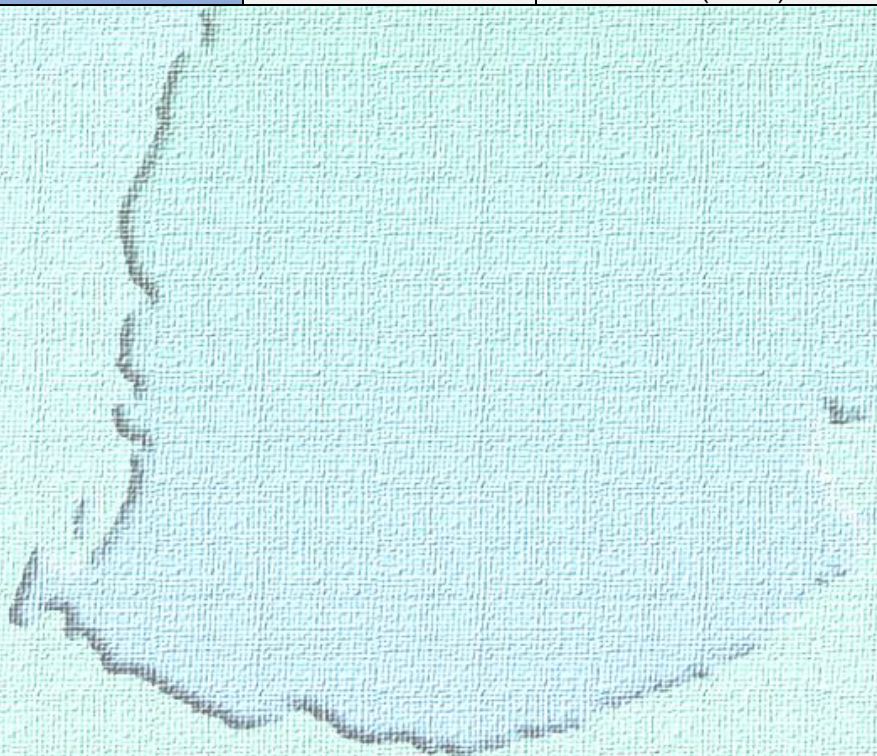
PICTORIAL VIEW / GEOGRAPHICAL INFORMATION / METADATA



Description	Name of Passe	≈ Position (Lat & Long)
	Passe Canon	20° 08' 59.54" S, 057° 45' 51.27" E
Region/Area	Canon, North East Coast - Mauritius	
Hydrographic Instructions	HI/HU/06/2014-15 - Phase V	
IHO Order	Order – 1b, SP-44 (5 th Edition)	
Scale of Survey	1 : 5,000	
Scale of Plotting	1 : 5,000	
Survey Commence Date	30 October 2019	
Survey End Date	04 March 2020	
Horizontal Control	Ebene Tower Roof Top Position : 20° 14' 43.45069" S 57° 29' 24.64884" E Ellipsoidal Height : 346.913 Meters	
Vertical Control	All soundings reduced to Chart Datum 2.199 m below bench mark at Port Louis. Tidal data of Port Louis ATG was downloaded from the website http://www.ioc-sealevelmonitoring.org/ for processing the collected data.	
Survey Coverage	81 Nautical Miles (150 km)	
Seafloor Characterization	Coral Sand, Soft Mud and Coral with Broken Shells	

PASSE CANON

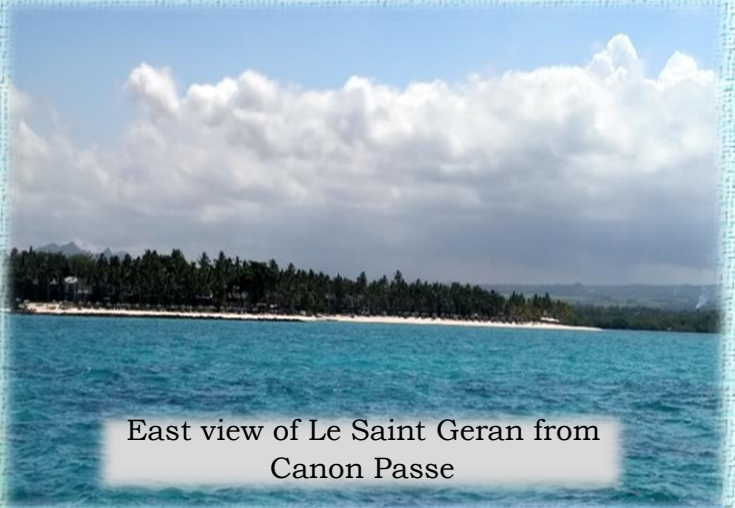
METADATA		
Survey Area	Passe Canon	
Region	Poste de Flacq, North East Coast - Mauritius	
IHO Order	Order 1b as per IHO standards for Hydrographic Surveys, SP-44 (5 th Edition)	
Scale of Survey	1 : 5,000	
Scale of Plotting	1 : 5,000	
Datum	World Geodetic System (WGS 84)	
Projection	Transverse Mercator (Central Meridian : 57° 45' 19")	
Depth Range	- 0.5 to 16.45 Metres (w.r.t Chart Datum)	
Ancillary Observations	Sound Velocity Observation	
Hydrographic Data Acquisition Systems	Automatic Data Logging System	HYPACK 2010 (Software)
	Position	DGPS Hemisphere R-330 with L-Band Differential Mode Corrections
	Depth/Sounding	Single Beam Echo Sounder - Odom Hydrotrac II & Precision Depth Recorder (PDR) 601



GLIMPSES OF SURVEY AREA AND PEOPLE AT WORK



North view of Survey Area



East view of Le Saint Geran from Canon Passe



Swimming Zone East off Le Saint Geran Hotel



Jetty / Swimming Zone West of Le Saint Geran



Sounding using Skiff from FPS



Deployment of Current Meter



Sound Velocity Cast



Bottom Sample Cast

PHASE VI SURVEY

PICTORIAL VIEW / GEOGRAPHICAL INFORMATION / METADATA



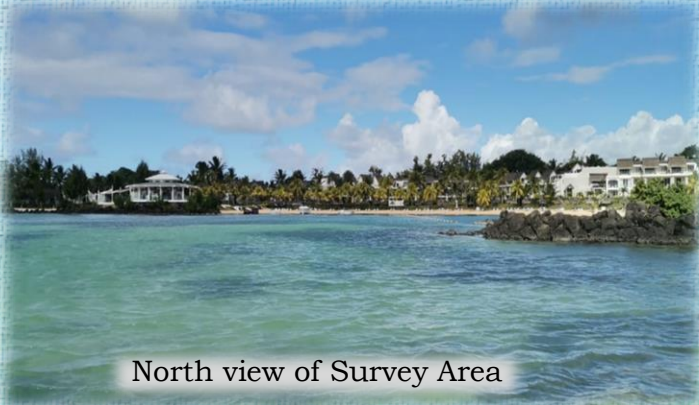
	<u>Name of Passe</u>	<u>≈ Position (Lat & Long)</u>
Description	Passe Poule	19° 59' 16.53" S, 057° 39' 48.70" E
	Passe Calodine	19° 59' 23.97" S, 057° 40' 01.98" E
	Passe Deux Toque	19° 59' 46.10" S, 057° 40' 36.02" E
	Passe D'Oscorne	20° 00' 07.18" S, 057° 41' 17.87" E
Region/Area	Grand Gaube, North East Coast - Mauritius	
Hydrographic Instructions	HI/HU/06/2014-15 - Phase VI	
IHO Order	Order - 1b, SP-44 (5 th Edition)	
Scale of Survey	1: 5,000	
Survey Commence Date	29 June 2021	
Survey End Date	17 May 2022	
Horizontal Control	Ebene Tower Roof Top Position: 20° 14' 43.45069" S 57° 29' 24.64884" E Ellipsoidal Height: 346.913 Meters	
Vertical Control	All soundings reduced to Chart Datum 2.199 m below bench mark at Port Louis. Tidal data of Port Louis ATG was downloaded from the website http://www.ioc-sealevelmonitoring.org/ for processing the collected data.	
Survey Coverage	126 Nautical Miles (233 km)	
Seafloor Characterization	Coral Sand, Soft Mud, Seagrass and Coral with Broken Shells	

PASSE POULE, PASSE CALODINE, PASSE DEUX TOQUE & PASSE D'OSCORNE

<u>METADATA</u>		
Survey Area	Passe Poule, Passe Calodine, Passe Deux Toque & Passe D'Oscorne	
Region	Grand Gaube, North East Coast - Mauritius	
IHO Order	Order 1b as per IHO standards for Hydrographic Surveys, SP-44 (5 th Edition)	
Scale of Survey	1: 5,000	
Datum	World Geodetic System (WGS 84)	
Projection	Universal Transverse Mercator (Central Meridian: 57° 00' 00")	
Depth Range	- 0.30 to 14.50 Metres (w.r.t Chart Datum)	
Ancillary Observations	Sound Velocity Observation	
Hydrographic Data Acquisition Systems	Automatic Data Logging System	HYPACK 2019 (Software)
	Position	DGPS Hemisphere R-330 with SBAS Differential Mode Corrections
	Depth/Sounding	Single Beam Echo Sounder - Atlas Deso-30



GLIMPSES OF SURVEY AREA AND PEOPLE AT WORK



North view of Survey Area



Grand Gaube Public Beach



Grand Gaube Fish Aggregating Device



Seabed Sample in Progress



Deployment of Sound Velocity Profile



Pole Sounding in Survey Area



Boat Sounding in Survey Area



Fixing of Spar in Survey Area

PHASE VII SURVEY
PICTORIAL VIEW / GEOGRAPHICAL INFORMATION / METADATA



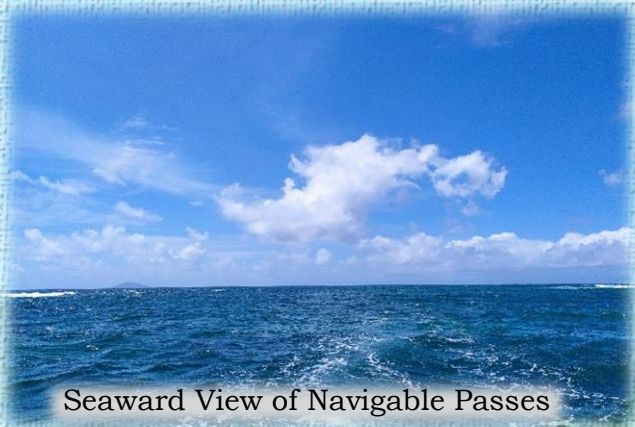
Description	Name of Passe	≈ Position (Lat & Long)
	Passe Jacot	20° 01' 07.58" S, 057° 42' 20.55" E
	Passe St Gerant	20° 02' 23.99" S, 057° 43' 22.44" E
	Passe Carcasse	20° 03' 04.04" S, 057° 43' 30.35" E
	Passe Trois Canals	20° 03' 29.18" S, 057° 43' 30.32" E
Region/Area	Poudre d'Or, North East Coast - Mauritius	
Hydrographic Instructions	HI/HU/06/2014-15 - Phase VII	
IHO Order	Order - 1b, SP-44 (5 th Edition)	
Scale of Survey	1: 5,000	
Scale of Plotting	1: 10,000	
Survey Commence Date	04 April 2022	
Survey End Date	11 April 2022	
Horizontal Control	Ebene Tower Roof Top Position: 20° 14' 43.45069" S 57° 29' 24.64884" E Ellipsoidal Height: 346.913 Meters	
Vertical Control	All soundings reduced to Chart Datum 2.199 m below bench mark at Port Louis. Tidal data of Port Louis ATG was downloaded from the website http://www.ioc-sealevelmonitoring.org/ for processing the collected data.	
Survey Coverage	25 Nautical Miles (46 km)	
Seafloor Characterization	Coral Sand, Soft Mud, Sand and Coral with Broken Shells	

PASSE JACOT, PASSE ST GERAN, PASSE CARCASSE & PASSE TROIS CANALS

<u>METADATA</u>		
Survey Area	Passe Jacot, Passe St Geran, Passe Carcasse & Passe Trois Canals	
Region	Poudre d'Or, North East Coast - Mauritius	
IHO Order	Order 1b as per IHO standards for Hydrographic Surveys, SP-44 (5 th Edition)	
Scale of Survey	1: 5,000	
Scale of Plotting	1:10,000	
Datum	World Geodetic System (WGS 84)	
Projection	Universal Transverse Mercator (Central Meridian: 57° 00' 00")	
Depth Range	- 0.20 to 10.20 Metres (w.r.t Chart Datum)	
Ancillary Observations	Sound Velocity Observation	
Hydrographic Data Acquisition Systems	Automatic Data Logging System	HYPACK 2019 (Software)
	Position	DGPS Hemisphere R-330 with SBAS Differential Mode Corrections
	Depth/Sounding	Single Beam Echo Sounder - Atlas Deso-30



GLIMPSES OF SURVEY AREA AND PEOPLE AT WORK



Seaward View of Navigable Passes



Coral Reef near Navigable Passes



Boat Sounding in Survey Area



Navigational Buoy near Passes



Assistance by local fishermen in Survey Area



Seabed Sampling in Survey Area

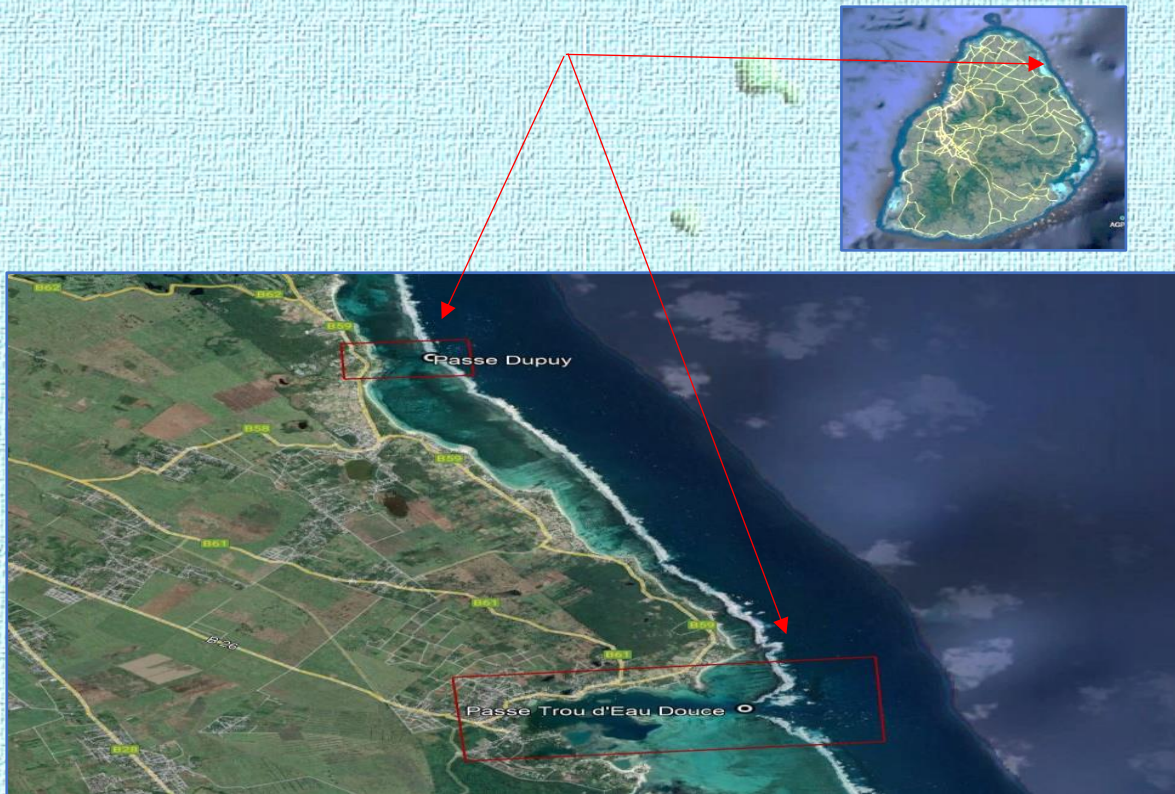


Deployment of Sound Velocity Profile



Boat Sounding with FPS Staff

PHASE VIII SURVEY
PICTORIAL VIEW / GEOGRAPHICAL INFORMATION / METADATA



	Name of Passe	≈ Position (Lat & Long)
Description	Passe Dupuy	20° 10' 59.87" S, 057° 46' 47.63" E
	Passe Trou d'Eau Douce	20° 14' 27.23" S, 057° 48' 26.64" E
Region/Area	Belle Mare & Trou d'Eau Douce, East Coast - Mauritius	
Hydrographic Instructions	HI/HU/06/2014-15 - Phase VIII	
IHO Order	Order - 1b, SP-44 (5 th Edition)	
Scale of Survey	1: 5,000	
Scale of Plotting	1: 3,000	
Survey Commence Date	16 August 2022	
Survey End Date	15 September 2022	
Horizontal Control	Ebene Tower Roof Top Position: 20° 14' 43.45069" S 57° 29' 24.64884" E Ellipsoidal Height: 346.913 Meters	
Vertical Control	All soundings reduced to Chart Datum 2.199 m below bench mark at Port Louis. Tidal data of Port Louis ATG was downloaded from the website http://www.ioc-sealevelmonitoring.org/ for processing the collected data.	
Survey Coverage	14 Nautical Miles (25 km)	
Seafloor Characterization	Coral Sand, Soft Mud, Sand and Coral with Broken Shells	

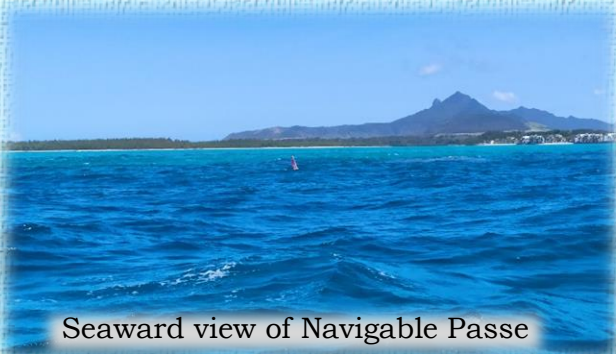
PASSE DUPUY

<u>METADATA</u>		
Survey Area	Passe Dupuy	
Region	Belle Mare, East Coast - Mauritius	
IHO Order	Order 1b as per IHO standards for Hydrographic Surveys, SP-44 (5 th Edition)	
Scale of Survey	1: 5,000	
Scale of Plotting	1:2,500	
Datum	World Geodetic System (WGS 84)	
Projection	Universal Transverse Mercator (Central Meridian: 57° 00' 00")	
Depth Range	-0.10 to 14.50 Metres (w.r.t Chart Datum)	
Ancillary Observations	Sound Velocity Observation	
Hydrographic Data Acquisition Systems	Automatic Data Logging System	HYPACK 2019 (Software)
	Position	DGPS Hemisphere R-330 with SBAS Differential Mode Corrections
	Depth/Sounding	Single Beam Echo Sounder - Atlas Deso-30

PASSE TROU D'EAU DOUCE

<u>METADATA</u>		
Survey Area	Passe Trou d'Eau Douce	
Region	Trou d'Eau Douce, East Coast - Mauritius	
IHO Order	Order 1b as per IHO standards for Hydrographic Surveys, SP-44 (5 th Edition)	
Scale of Survey	1: 5,000	
Scale of Plotting	1: 3,000	
Datum	World Geodetic System (WGS 84)	
Projection	Universal Transverse Mercator (Central Meridian: 57° 00' 00")	
Depth Range	-0.70 to 18.50 Metres (w.r.t Chart Datum)	
Ancillary Observations	Sound Velocity Observation	
Hydrographic Data Acquisition Systems	Automatic Data Logging System	HYPACK 2019 (Software)
	Position	DGPS Hemisphere R-330 with SBAS Differential Mode Corrections
	Depth/Sounding	Single Beam Echo Sounder - Atlas Deso-30

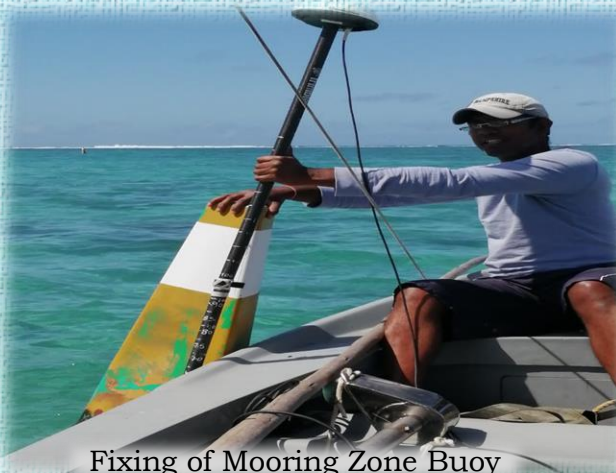
GLIMPES OF SURVEY AREA AND PEOPLE AT WORK



Seaward view of Navigable Passe



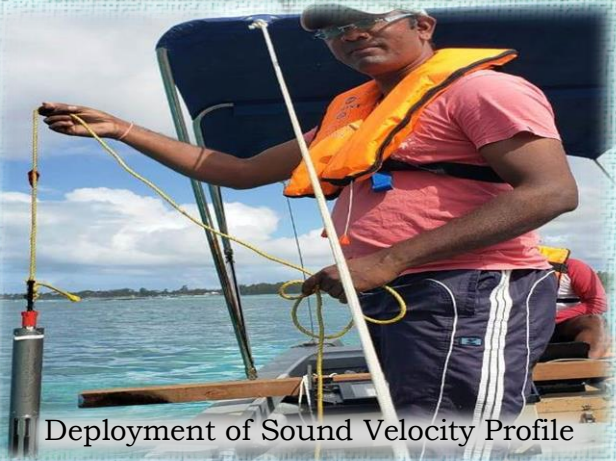
Boat Sounding in Survey Area



Fixing of Mooring Zone Buoy



Seabed Sample in Survey Area



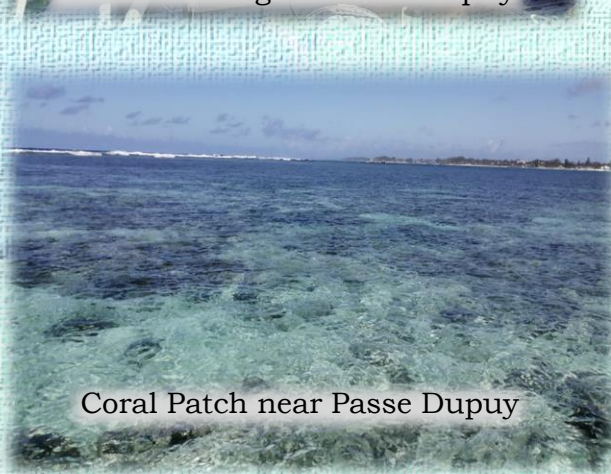
Deployment of Sound Velocity Profile



Boat Sounding for Passe Dupuy



Fixing of Conspicuous Object in Survey Area



Coral Patch near Passe Dupuy