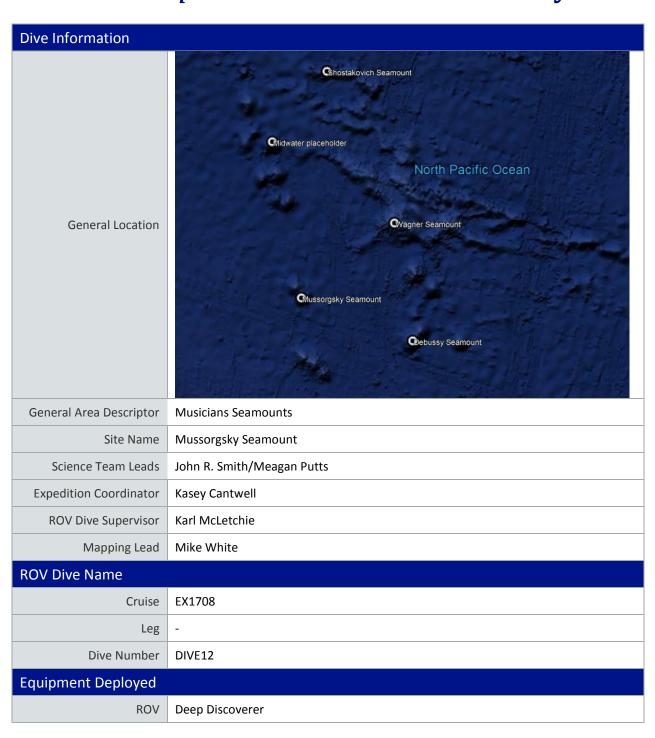


Okeanos Explorer ROV Dive Summary



Camera Platform	Seirios				
ROV Measurements	⊠ CTD		□ Depth	Altitude	
	Scanning Sonar		USBL Position	Heading	
	Negative Pitch		⊠ Roll	HD Camera 1	
	HD Camera 2		Low Res Cam 1	Low Res Cam 2	
	Low Res Cam 3		☑ Low Res Cam 4	∑ Low Res Cam 5	
Equipment Malfunctions	DO sensor had an error, readings might be off.				
	Dive Summary: EX1708_DIVE12				
ROV Dive Summary (from processed ROV data)	۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸۸				
			2017-09-18T18:24:59.548000 30°, 26.471' N ; 164°, 00.912' W		
			2017-09-19T02:30:02.395000 N/A ; N/A		
			2017-09-19T01:21:39.374000 30°, 26.159' N ; 164°, 00.769' W		
			2017-09-18T19:41:26.503000 30°, 26.418' N ; 164°, 00.818' W		
	Dive duration:		8:5:2		
	Bottom Time:		5:40:12		
	Max. depth:		2058.6 m		
	Wax deptin		2030.0 111		
Special Notes					
	Name	Email		Affiliation	
Scientists Involved (please provide name, location, affiliation, email)				Planetary Exploration	
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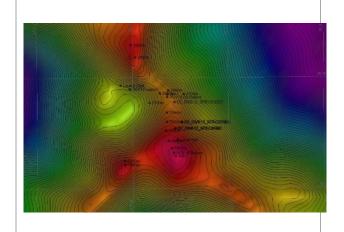
primnoid and bamboo corals abounded. An *Acanthogorgia* sp. coral was collected at 1982 m near a lava flow edge. A third coral, *Narella* sp., was also collected from the

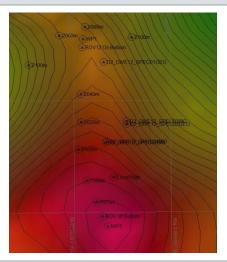


same site. Low relief flows continued up the ~30° slope with little talus and occasional flow fronts/edges exposed. A series of lava morphology contacts were observed as follows: pillow flow edge (1974 m), lobate flow front (1965 m), slope change to 40-45° and smoother flows at 1966 m. At this point (1957 m), D2 was running along the narrow ridge crest and could pan to both sides and see the slopes of each without moving the vehicle laterally. The summit was nearly flat (1957 m) and was composed of a mix of low relief pillows, talus, and sediment. Many corals but no sponges were present here. No black coral or mushroom corals were observed on this dive. A blaze-orange Nemertean ribbon worm swam up from the seafloor into D2's main camera view at time 01:11 (1952 m). The final WP2 on the summit was reached and D2 left bottom at time 01:20 from 1954 m. The pilots reported that the current was low and approximately from the south near the end of the dive.

Overall Map of the ROV Dive Area

Close-up Map of Main Dive Site





Representative Photos of the Dive





Antimora mircolepis codling fish on pillow lavas and talus

Large Corbitellinae sponge, *Paragorgia* sp. coral and Primnoidae coral on intact low relief lava flows







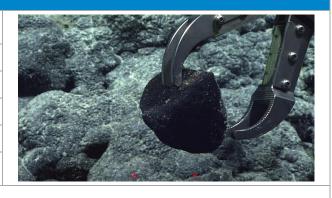
Numerous octocorals positioned on the leading edge of a massive lava flow outcrop

Large *Paracalyptrophora* sp. primnoid coral fan on intact lava flow

Samples Collected

Sample

Sample ID	EX1708_D2_DIVE12_SPEC01G EO	
Date (UTC)	9/18/2017	
Time (UTC)	20:52	
Depth (m)	2036.2	
Temperature (°C)	1.9	
Field ID(s)	Mn-crusted basalt pillow toe talus from base of outcrop	
Commensal ID and		



Sample

Field Identification

Comments

Sample ID	EX1708_D2_DIVE12_SPEC02G EO	
Date (UTC)	9/18/2017	
Time (UTC)	22:55	
Depth (m)	1991.2	
Temperature (°C)	1.8	
Field ID(s)	Mn-crusted in place rectangular basalt slab	
Commensal ID and		



Sample

Field Identification

Comments



Sample ID	EX1708_D2_DIVE12_SPEC03BI O				
Date (UTC)	9/18/2017				
Time (UTC)	23:07				
Depth (m)	1991.2				
Temperature (°C)	1.8				
Field ID(s)	Hemicorallium sp.				
Commensal ID and	EX1708_D2_DIVE12_SPEC03BIO_A01 Asteroschema sp.				
Field Identification	EX1708_D2_DIVE12_SPEC03BIO_A02 Zoantharia				
Comments					
Sample					
Sample ID	EX1708_D2_DIVE12_SPEC04BI O				
Date (UTC)	9/18/2017				
Time (UTC)	23:58				
Depth (m)	1982.7				
Temperature (°C)	1.9				
Field ID(s)	Acanthogorgia sp.?	***************************************			
Commensal ID and Field Identification					
Comments					
Sample					
Sample ID	EX1708_D2_DIVE12_SPEC05BI O				
Date (UTC)	9/19/2017				
Time (UTC)	00:05				
Depth (m)	1982.6				
Temperature (°C)	1.9				
Field ID(s)	Narella sp.				
Commensal ID and Field Identification	EX1708_D2_DIVE12_SPEC05BIO	_A01 Crinoid yellow			
Comments					



Please direct inquiries to:

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