

REGIONAL EXAMINATION OF SEDIMENTS



REGIONAL SEDIMENTS ITEMS FOR DISCUSSION

- OBJECTIVES
- METHODS
- RESULTS
- RELATIONSHIPS TO
ABUNDANCE & METAL
CONTENT



OBJECTIVES

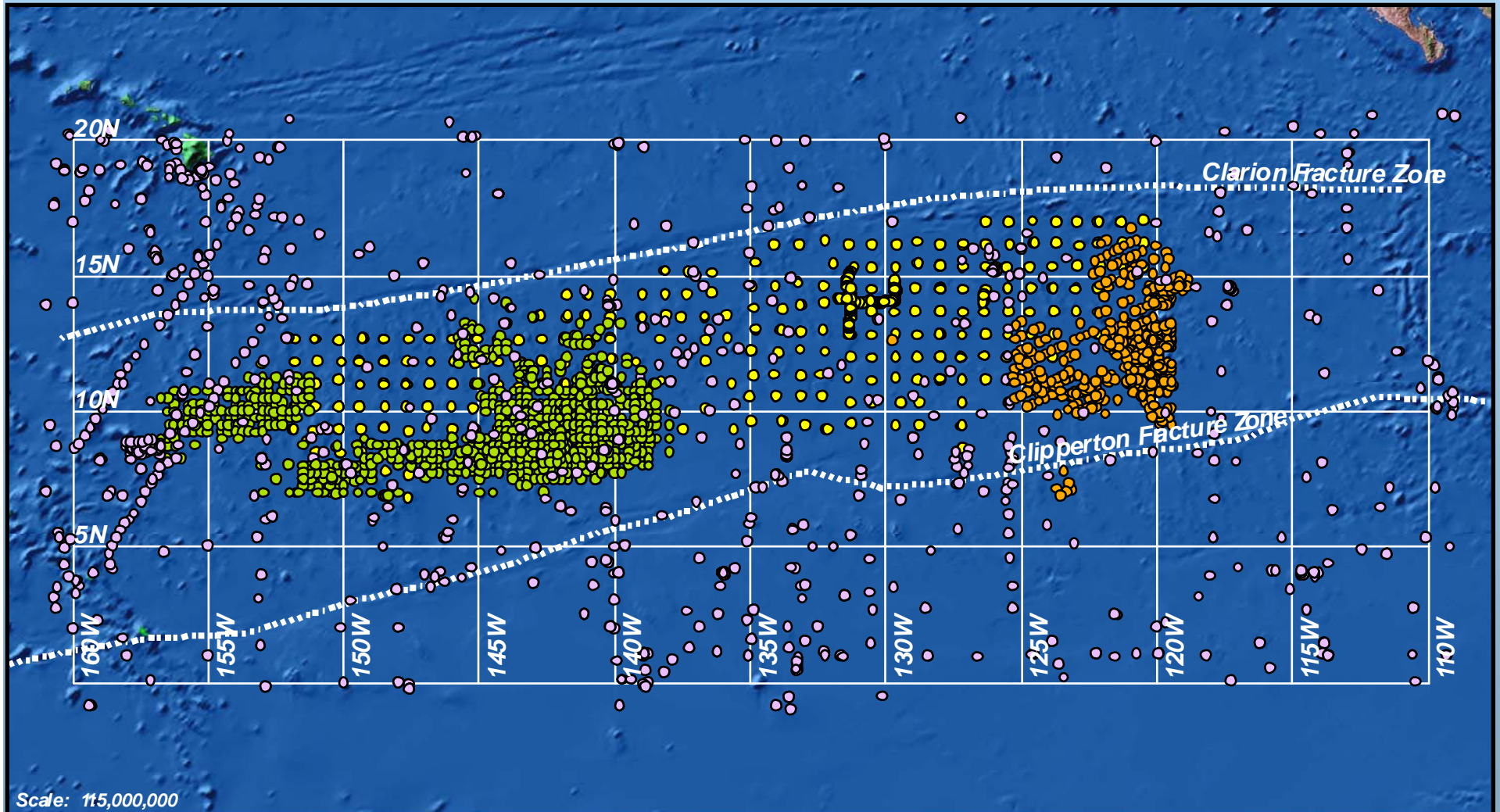
- **ASSEMBLE AVAILABLE DATA FROM CONTRACTORS & PUBLIC SOURCES**
- **INTEGRATE DATA INTO COMMON FORMAT**
- **EXAMINE RELATIONSHIPS WITH ABUNDANCE & METAL CONTENT**
- **GENERATE MAPS FOR POSTER DISPLAY**



AVAILABLE DATA

Source	File Names	N
Afernod	Sed-stations20-28.xls Sed-frotis20-28.xls	1,750
COMRA	China sediments type.xls	951
IOM	Depth,nod.abund and sediments(230 stations).xls depth,nodtype and sediment(310 stations).xls	540
NGDC	ArcIMS [®] ArcView [®] shape files	1,443
	Total	4,684

AVAILABLE DATA



Scale: 1:15,000,000



Source

- | | |
|---------|------|
| AFERNOD | IOM |
| COMRA | NGDC |

**Sediment Sample
Stations Used
in the Study**

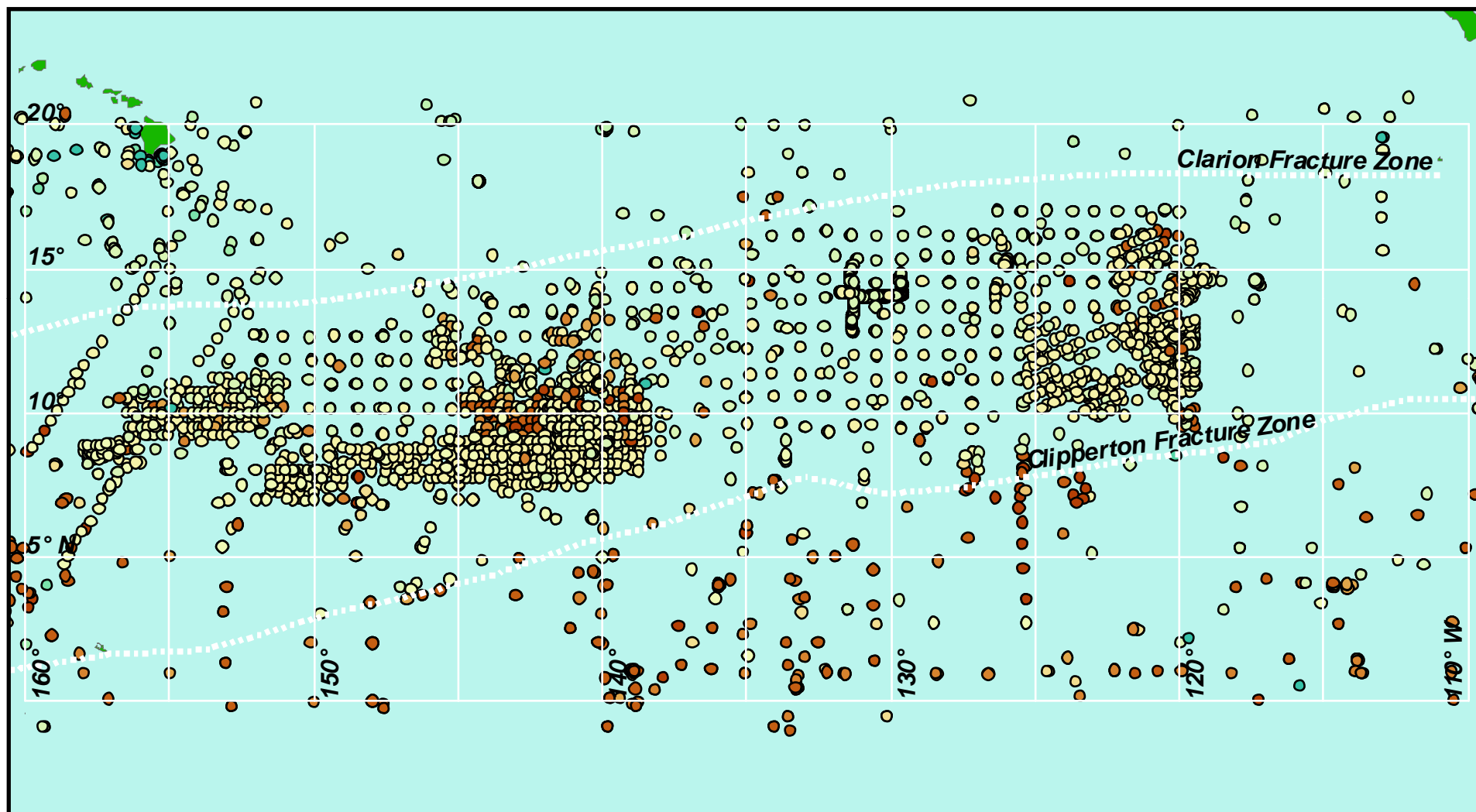
CLASSIFICATION METHOD

Code	Dominant Constituents	Criteria (when available)
1	Ooze, Calcareous	Dominant Biogenic Carbonate
2	Mud, Calcareous	Mud \geq 25%; Biogenic Carbonate \geq 25%
3	Ooze, Calcareous, Siliceous	Dominant Biogenic Carbonates & Bio. Silica; Ca>Si
4	Mud, Calcareous, Siliceous	Mud \geq 25%; Silica \geq 25%; Carbonate \geq 25%; Ca>Si
5	Mud, Siliceous, Calcareous	Mud \geq 25%; Silica \geq 25%; Carbonate \geq 25%; Si>Ca
6	Ooze, Siliceous, Calcareous	Dominant Biogenic Silica & Carbonates; Si>Ca
7	Mud, Siliceous	Mud \geq 25%; Biogenic Silica \geq 25%
8	Ooze, Siliceous	Dominant Biogenic Silica
9	Mud	Grain size < 0.004 mm
10	Mud, Volcanic	Mud \geq 25%; Volcanic debris \geq 25%
11	Silt	Grain size 0.004 mm – 0.063 mm
12	Sand	Grain size 0.063 mm – 2.00 mm
13	Gravel	Grain size > 2.00 mm
14	Large rock or no recovery	


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DISTRIBUTION OF SAMPLES



The International Seabed Authority



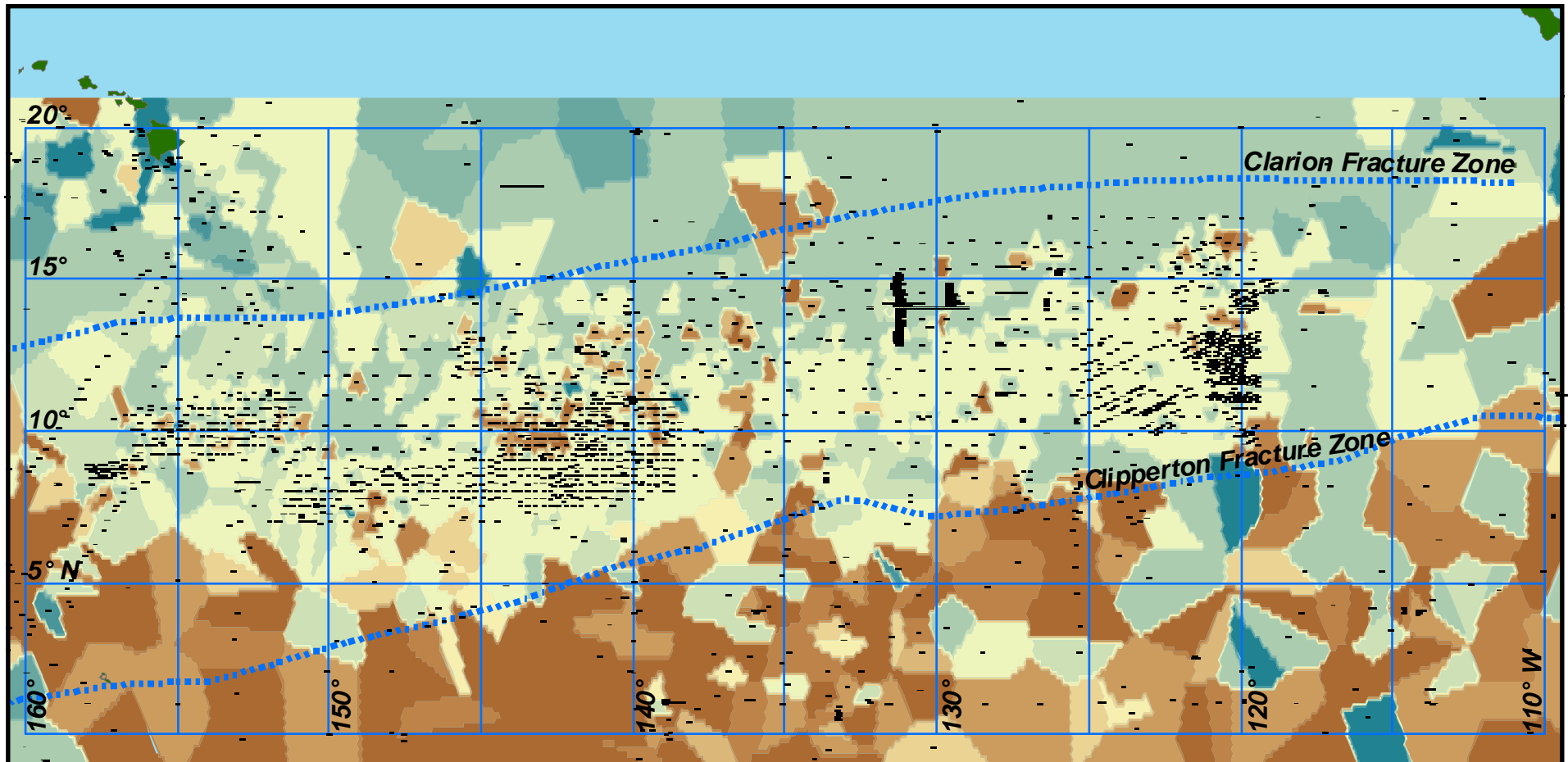
Sediment Code

● 1	● 5	● 9	● 13
● 2	● 6	● 10	● 14
● 3	● 7	● 11	
● 4	● 8	● 12	

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2	Mud, Calcareous	6	Ooze, Siliceous, Calcareous	10	Mud, Volcanic	14	Large rockmorecovery
3	Ooze, Calcareous, Siliceous	7	Mud, Siliceous	11	Silt		
4	Mud, Calcareous, Siliceous	8	Ooze, Siliceous	12	Sand		

Station Sediment Classifications

NEAREST NEIGHBOR EXTRAPOLATION



Scale: 1:14,000,000



Sample Station

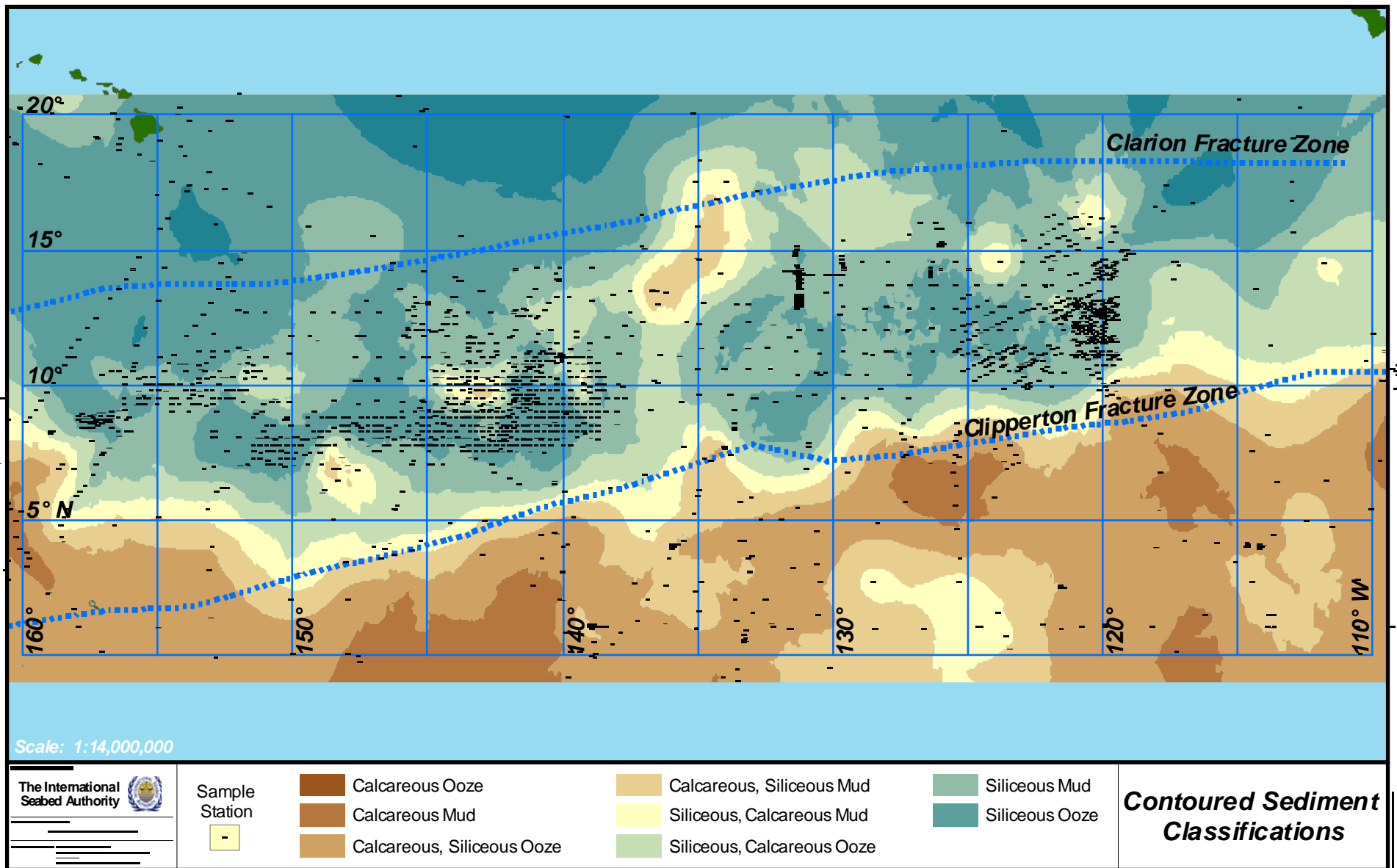
Sediment Code

● 1	● 5	○ 9	● 13
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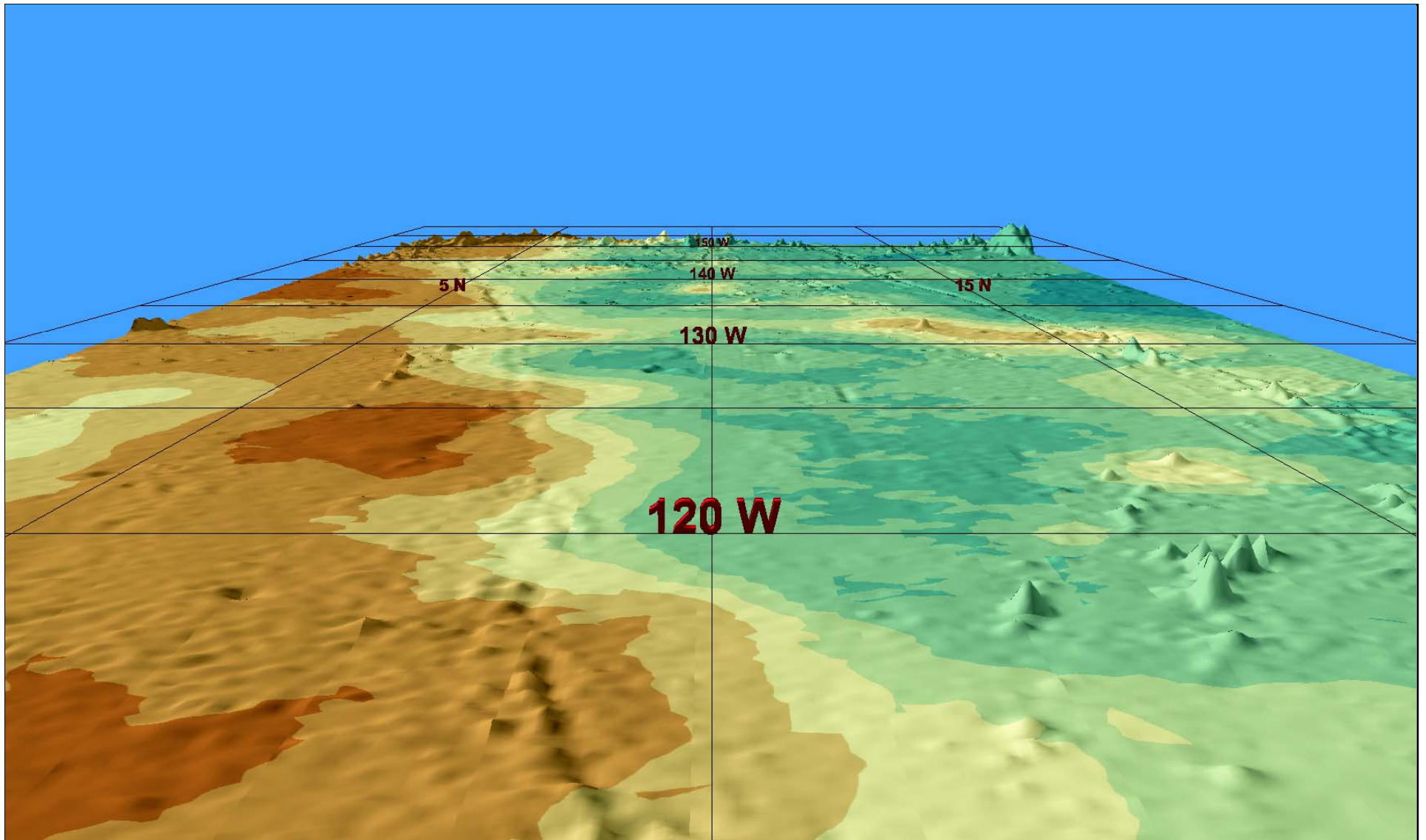
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4	Mud, Calcareous, Siliceous	8	Coze, Siliceous	12	Sand		

**Nearest Station
Sediment
Classifications**

CONTOUR OF FINE-GRAINED SEDIMENTS

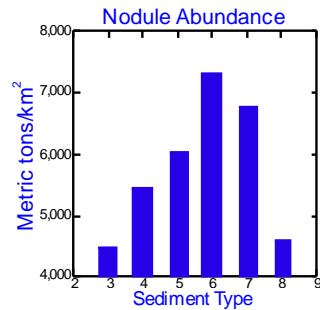
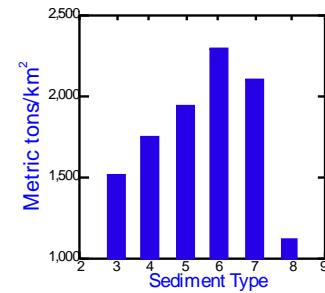
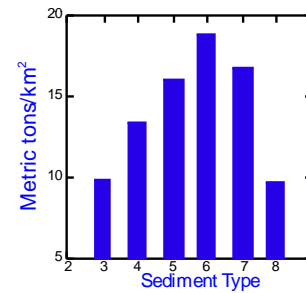
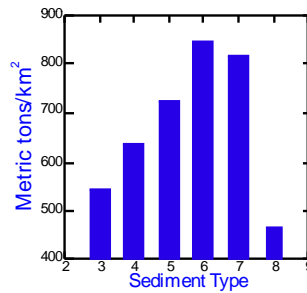
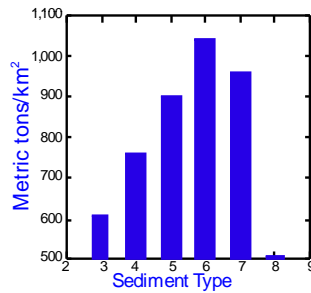
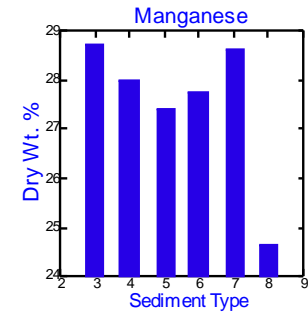
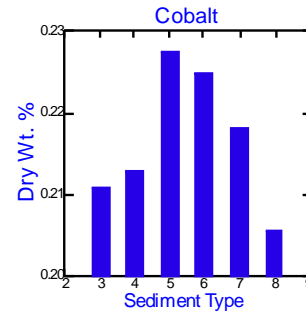
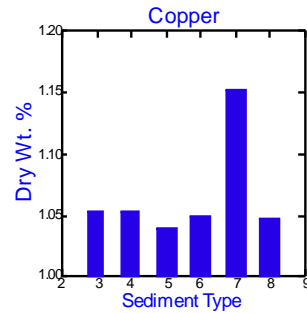
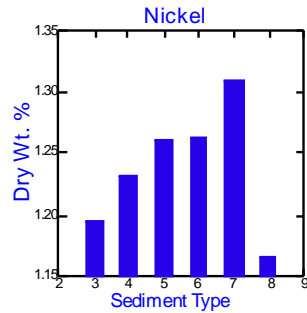


3D SEDIMENTS ON BATHYMETRY



	Calcareous Ooze	Calcareous, Siliceous Mud	Siliceous Mud
	Calcareous Mud	Siliceous, Calcareous Mud	Siliceous Ooze
	Calcareous, Siliceous Ooze	Siliceous, Calcareous Ooze	
Sediment Type on Bathymetry			

SEDIMENTS VS NODULES



Legend

- 3. Calcareous, Siliceous Ooze
- 4. Calcareous, Siliceous Mud
- 5. Siliceous, Calcareous Mud
- 6. Siliceous, Calcareous Ooze
- 7. Siliceous Mud
- 8. Siliceous Ooze



**Metal Content & Abundance
vs
Sediment Type**

SUMMARY

- ***SUBSTANTIAL DATA ASSEMBLED***
- ***SOME LIMITATIONS FROM INTEGRATION***
- ***VARIETY OF PRESENTATION GRAPHICS AVAILABLE***
- ***CONFIRM CLASSIC ASSOCIATION WITH BIOSILICA***

