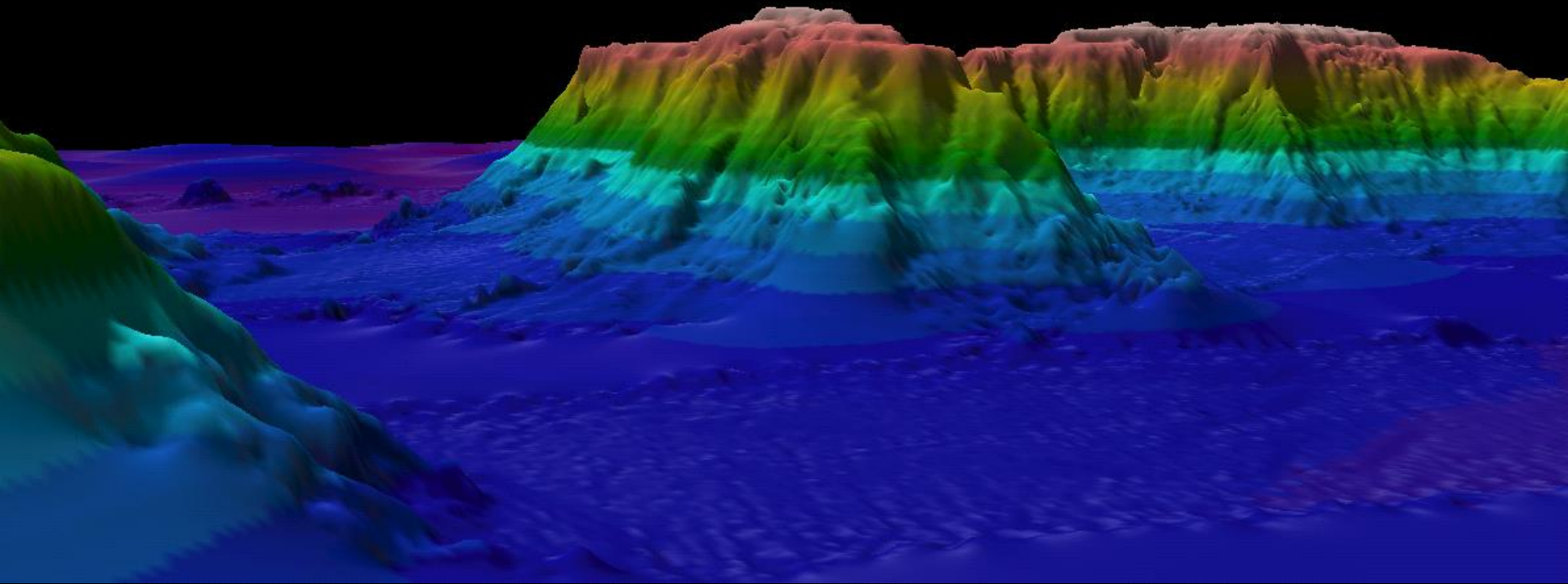
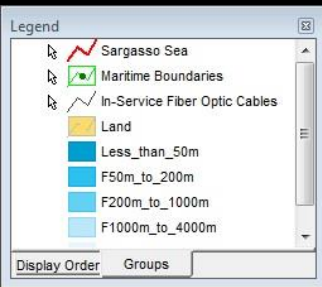


Seamounts of the Sargasso Sea Commission Area

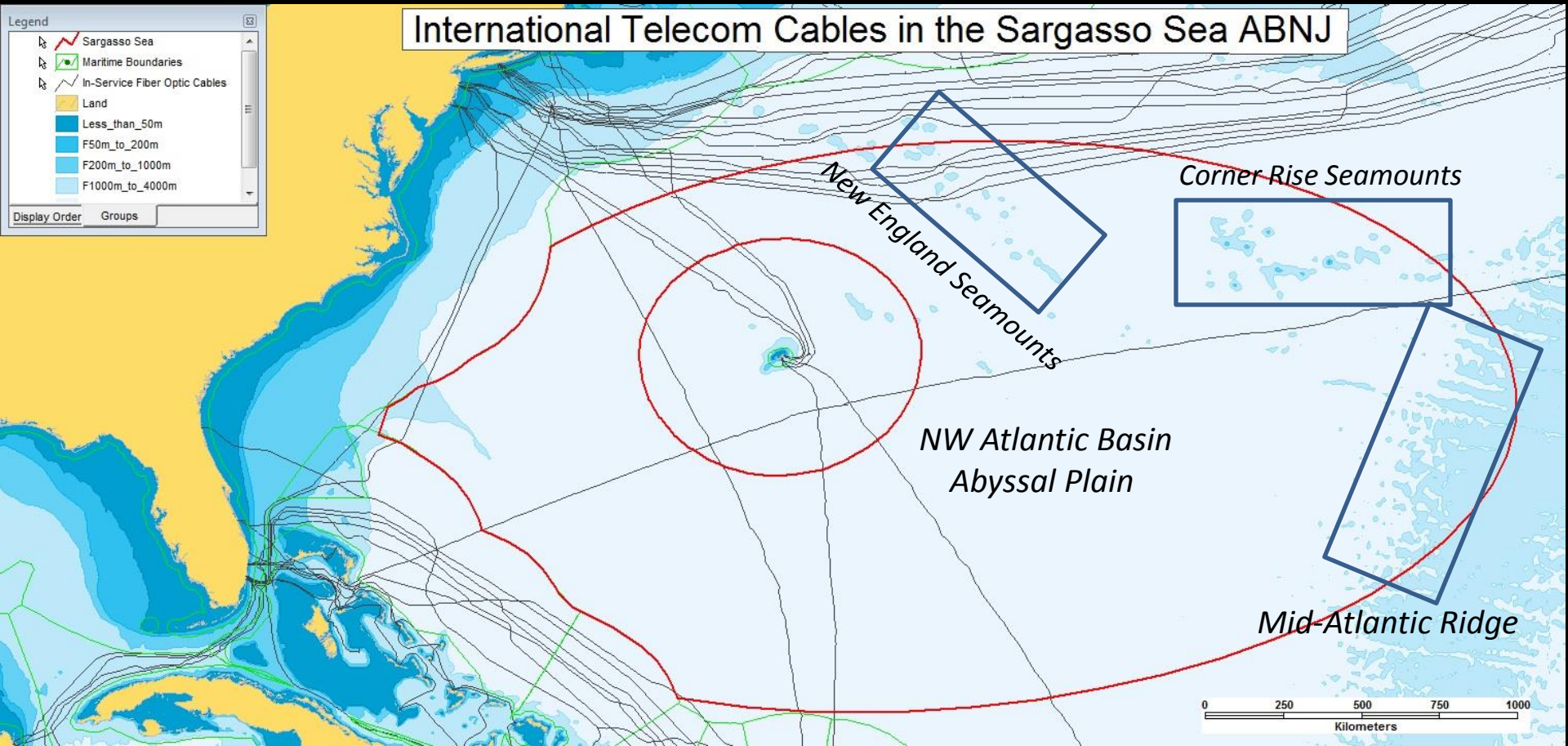
Les Watling
Department of Biology
University of Hawaii at Mānoa



Submarine Geography of the Sargasso Sea Commission Area



International Telecom Cables in the Sargasso Sea ABNJ

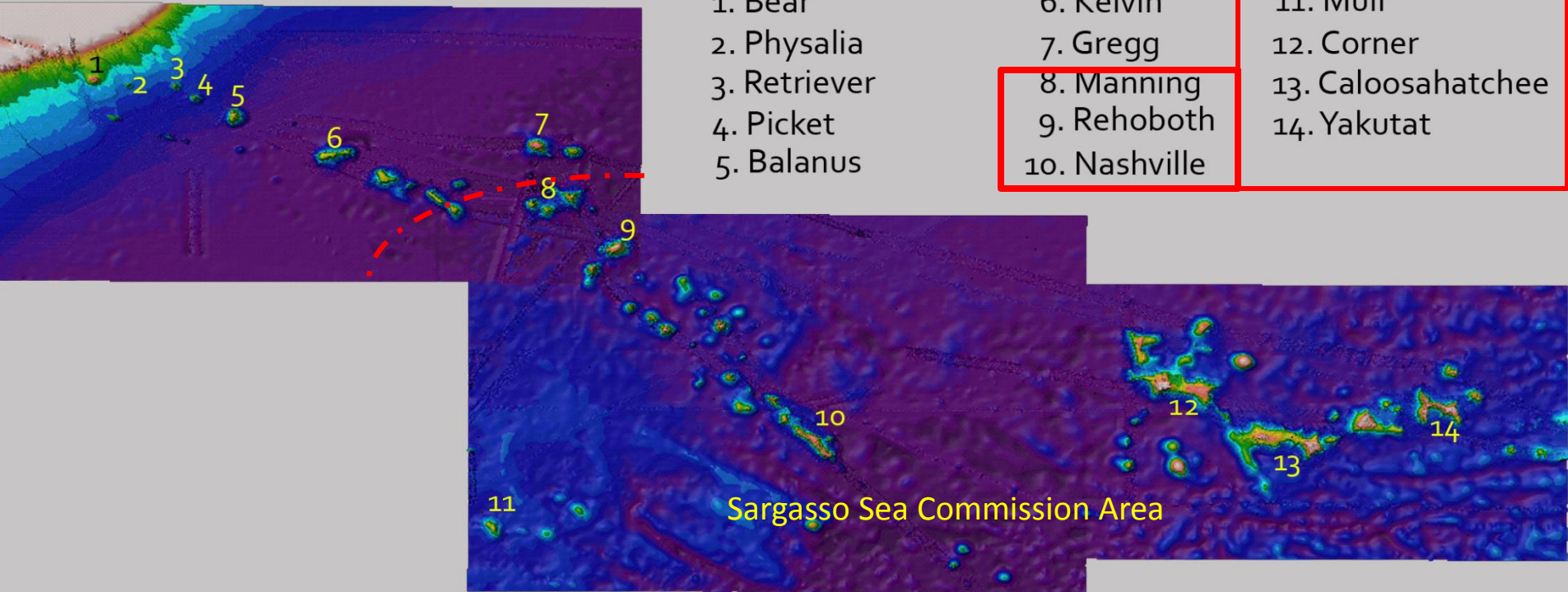


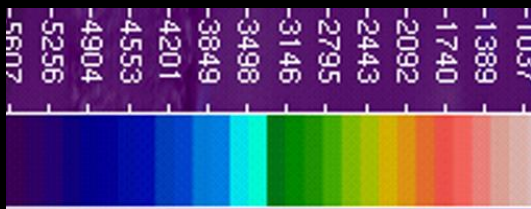
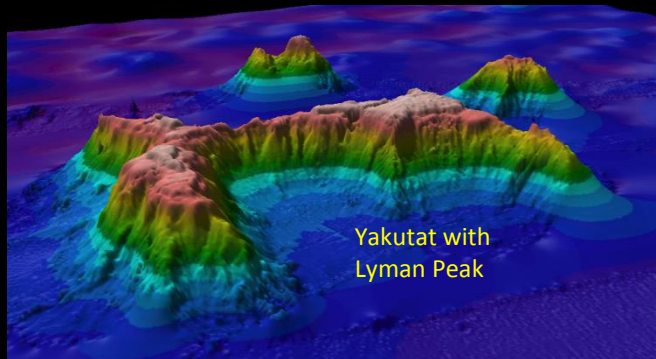
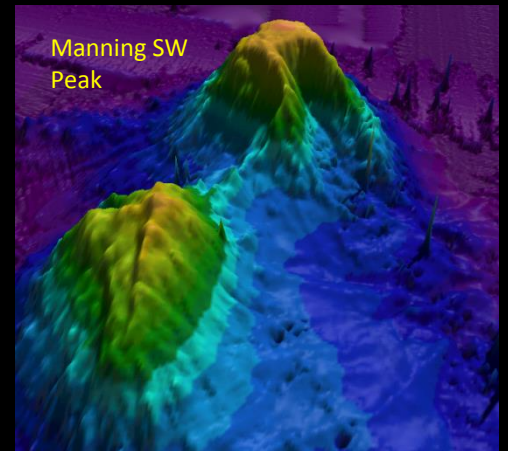
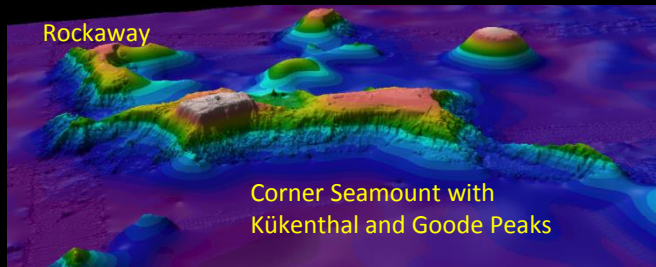
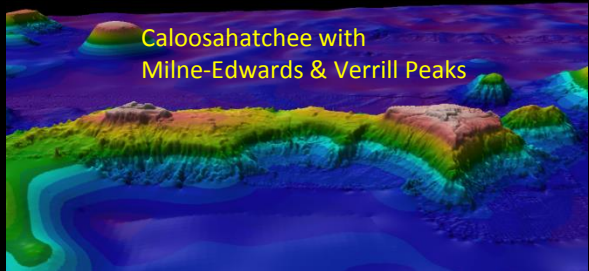
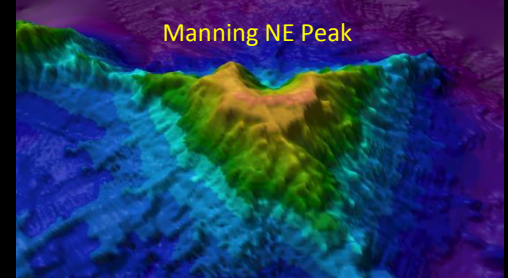
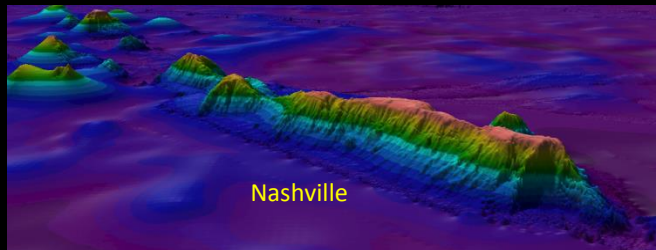
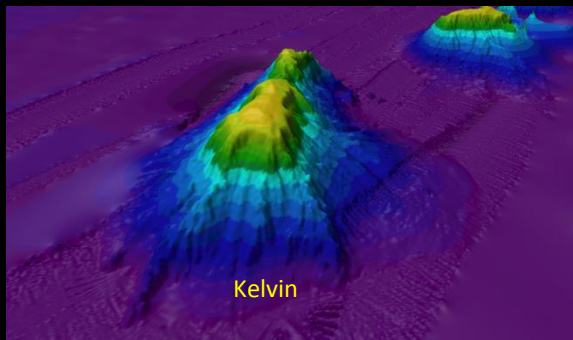
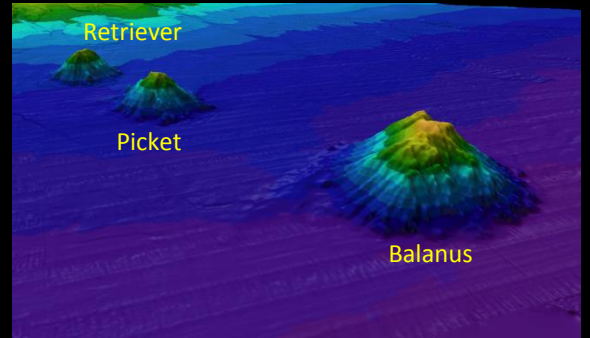
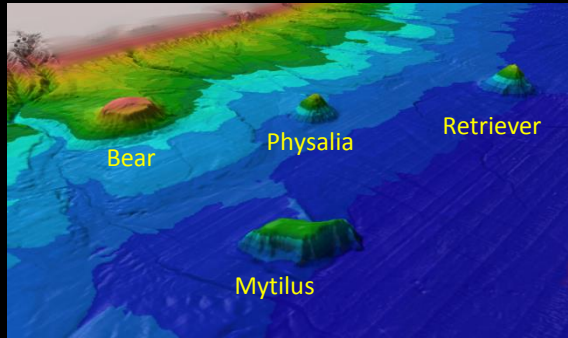
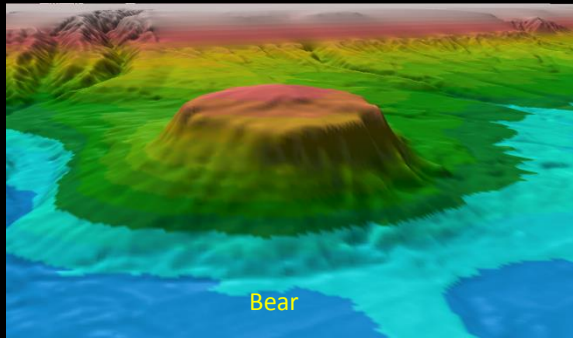
New England and Corner Rise Seamounts

1. Bear
2. Physalia
3. Retriever
4. Picket
5. Balanus

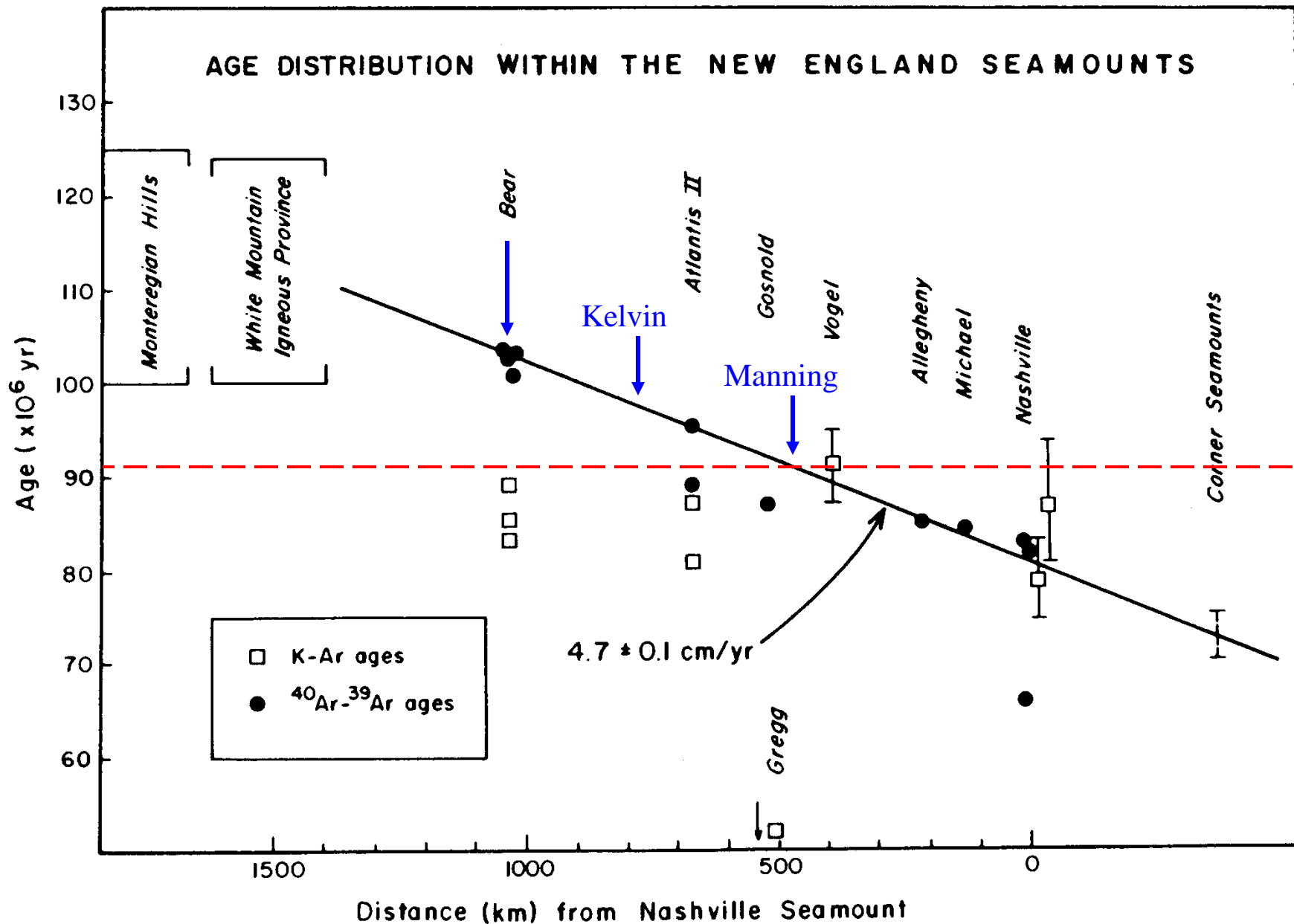
6. Kelvin
7. Gregg
8. Manning
9. Rehoboth
10. Nashville

11. Muir
12. Corner
13. Caloosahatchee
14. Yakutat





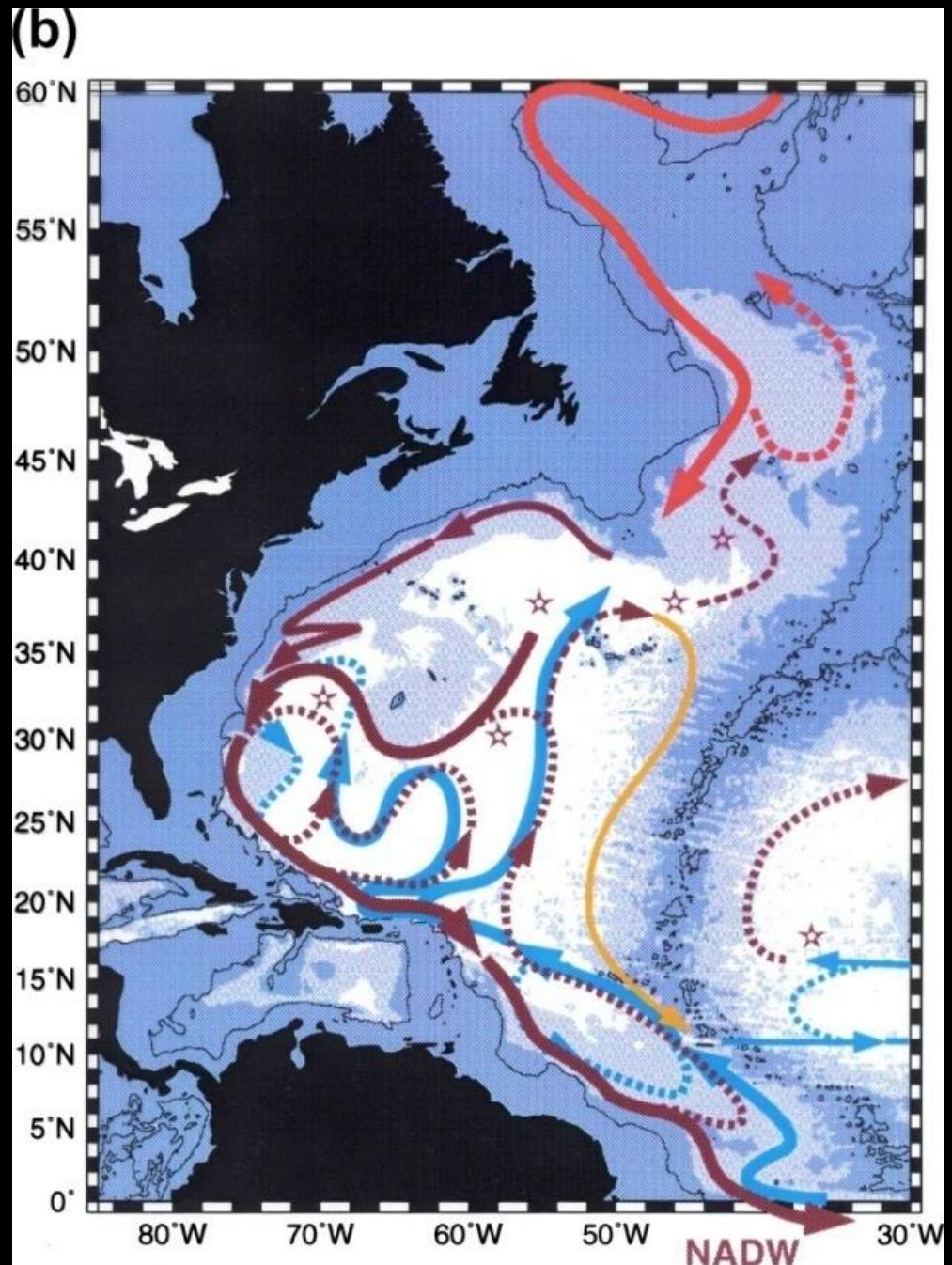
AGE DISTRIBUTION WITHIN THE NEW ENGLAND SEAMOUNTS



Water Mass Distribution Determines Species Present

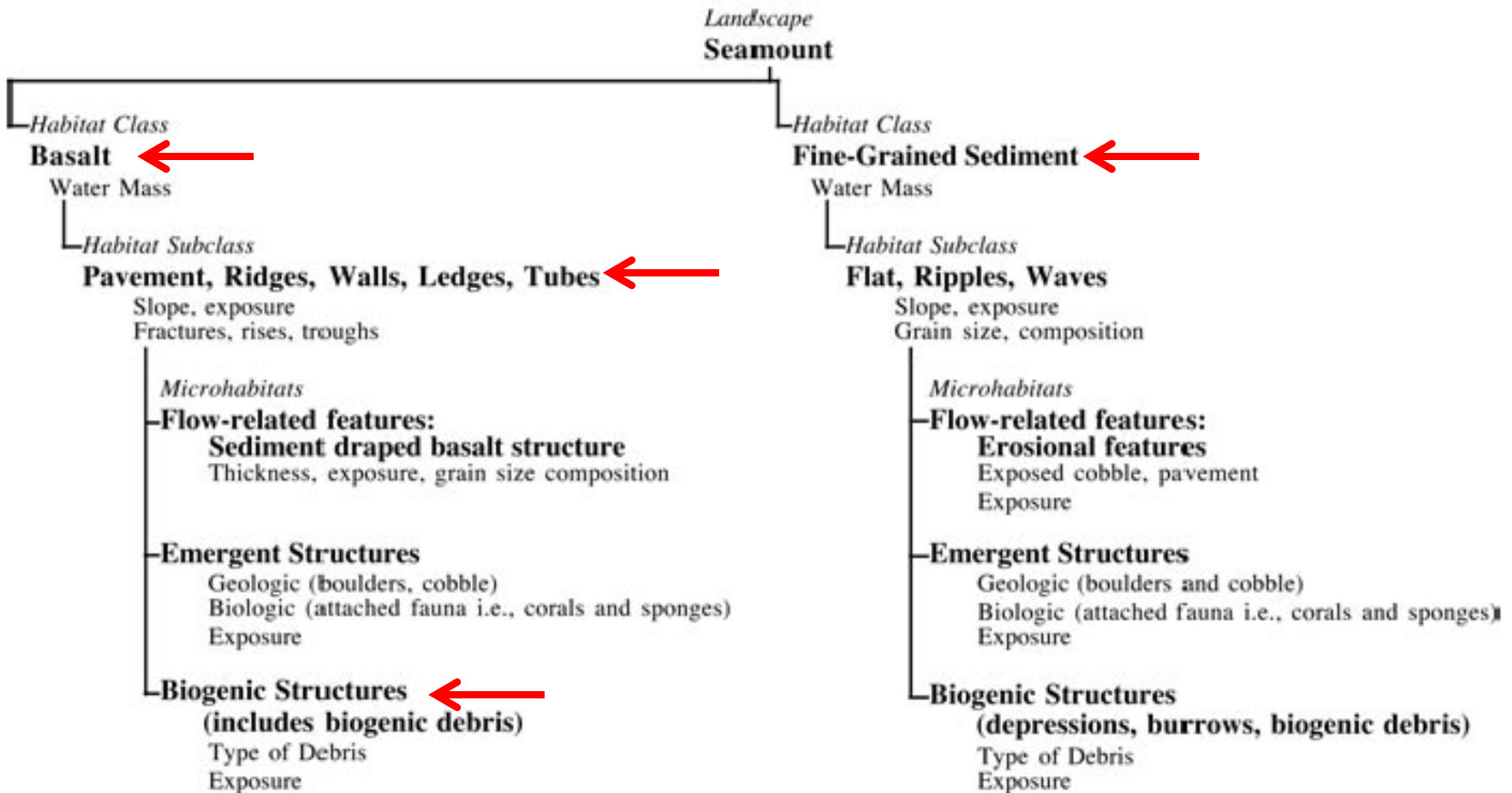
(b) Deep circulation pathways emphasizing DWBCs (solid) and their recirculations (dashed). Red: NSOW. Brown: NADW. Blue: AABW. (M.S. McCartney, personal communication, 2009.)

From: Talley, L.D. et al. (2011). Descriptive Physical Oceanography, an Introduction. Elsevier.

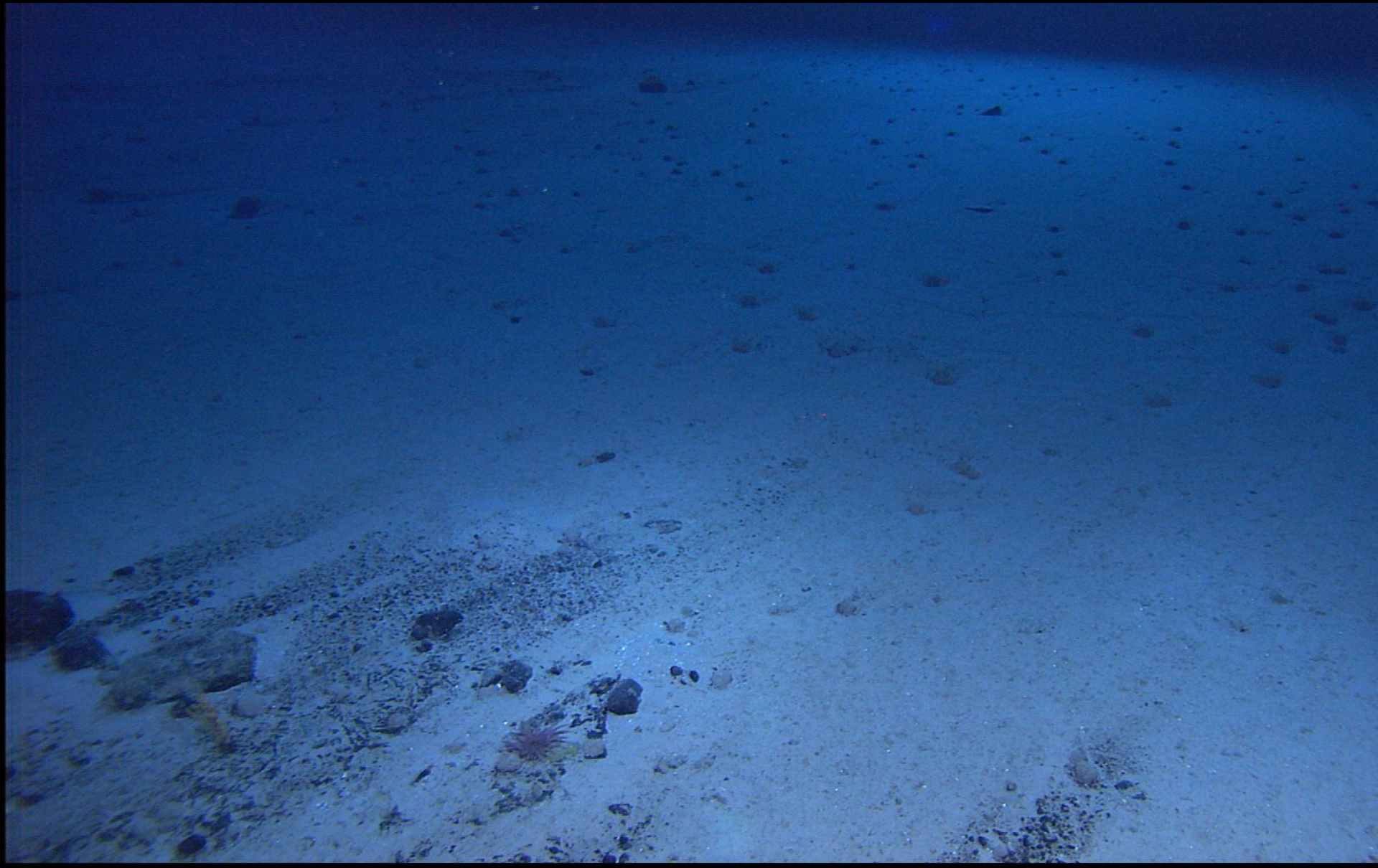


Seamounts Are Not All Rock

Table 1 Habitat classification scheme for seamount landscapes

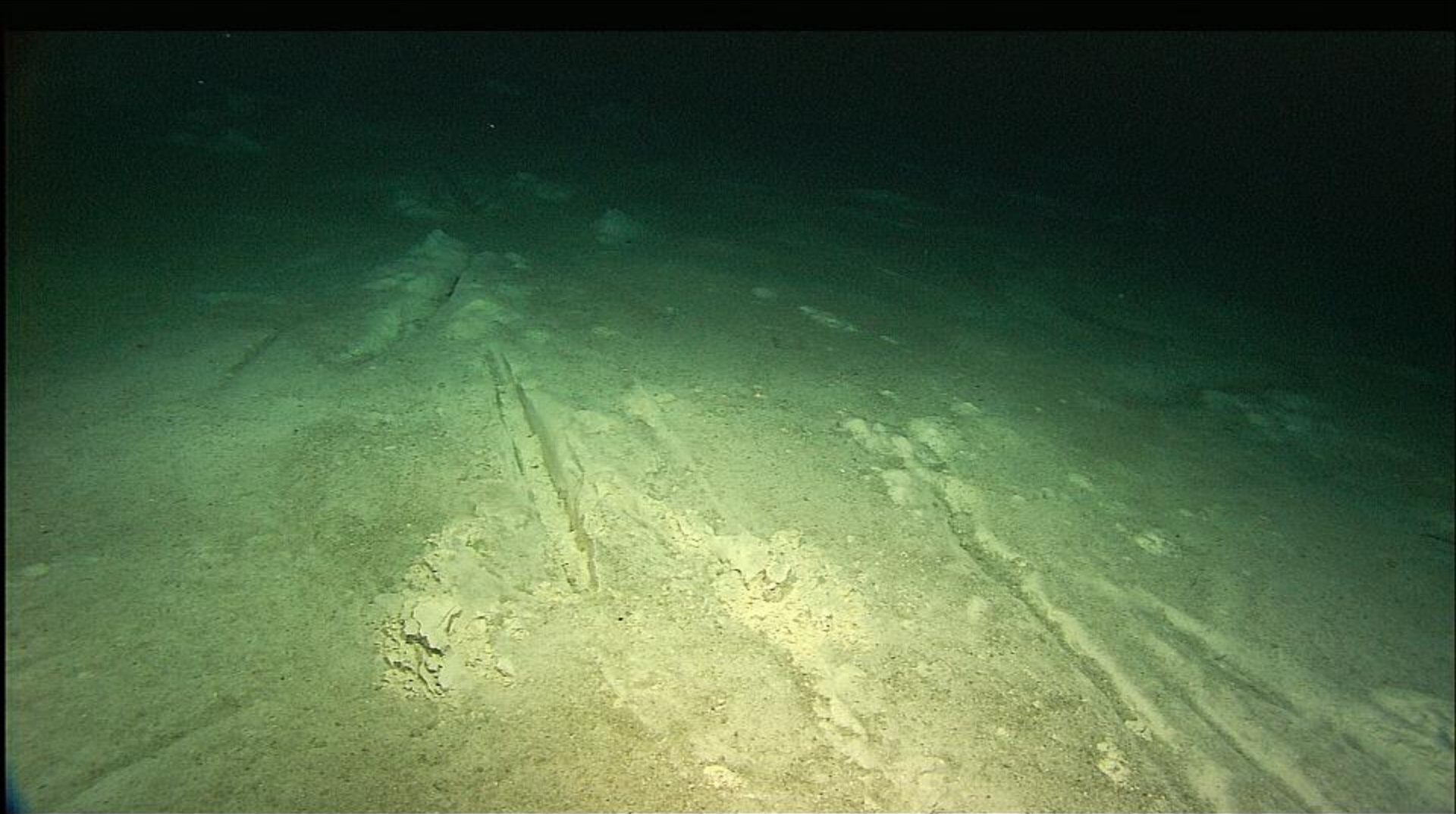


Fine grained sediment, flat, with flow related features

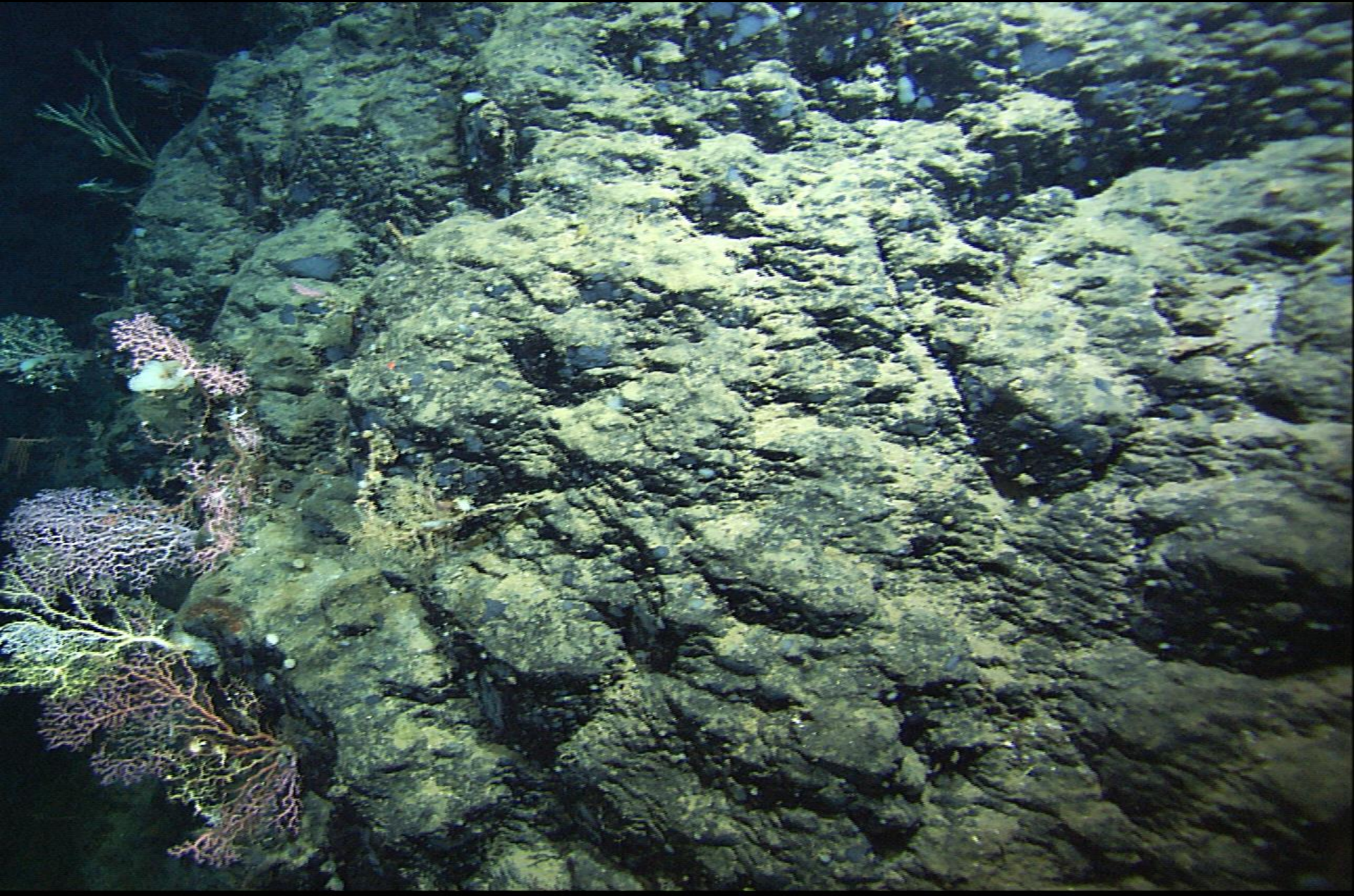


Beaked Whale Feeding Marks?

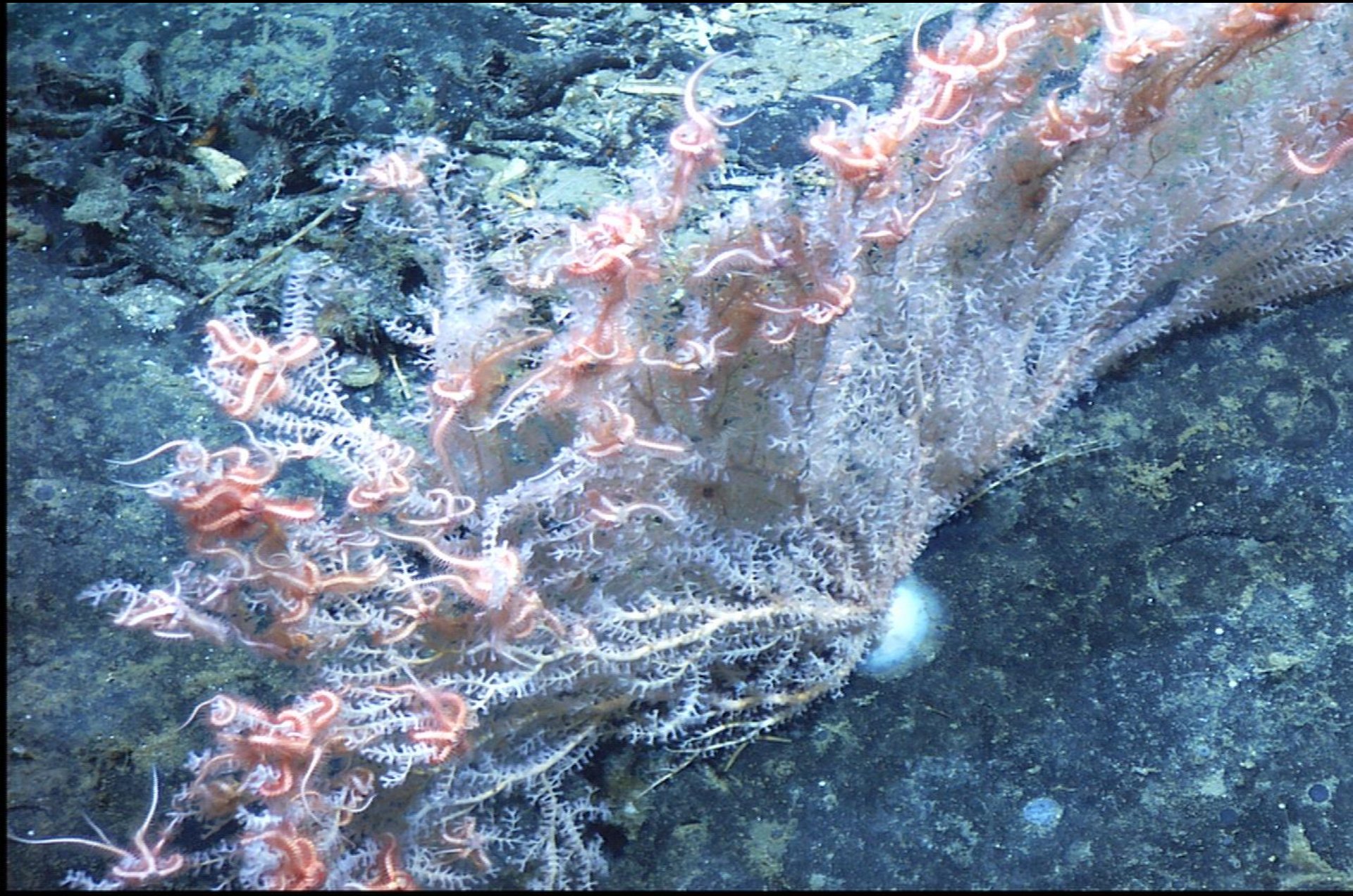
Kukenthal Peak, 1800 m



Basalt wall

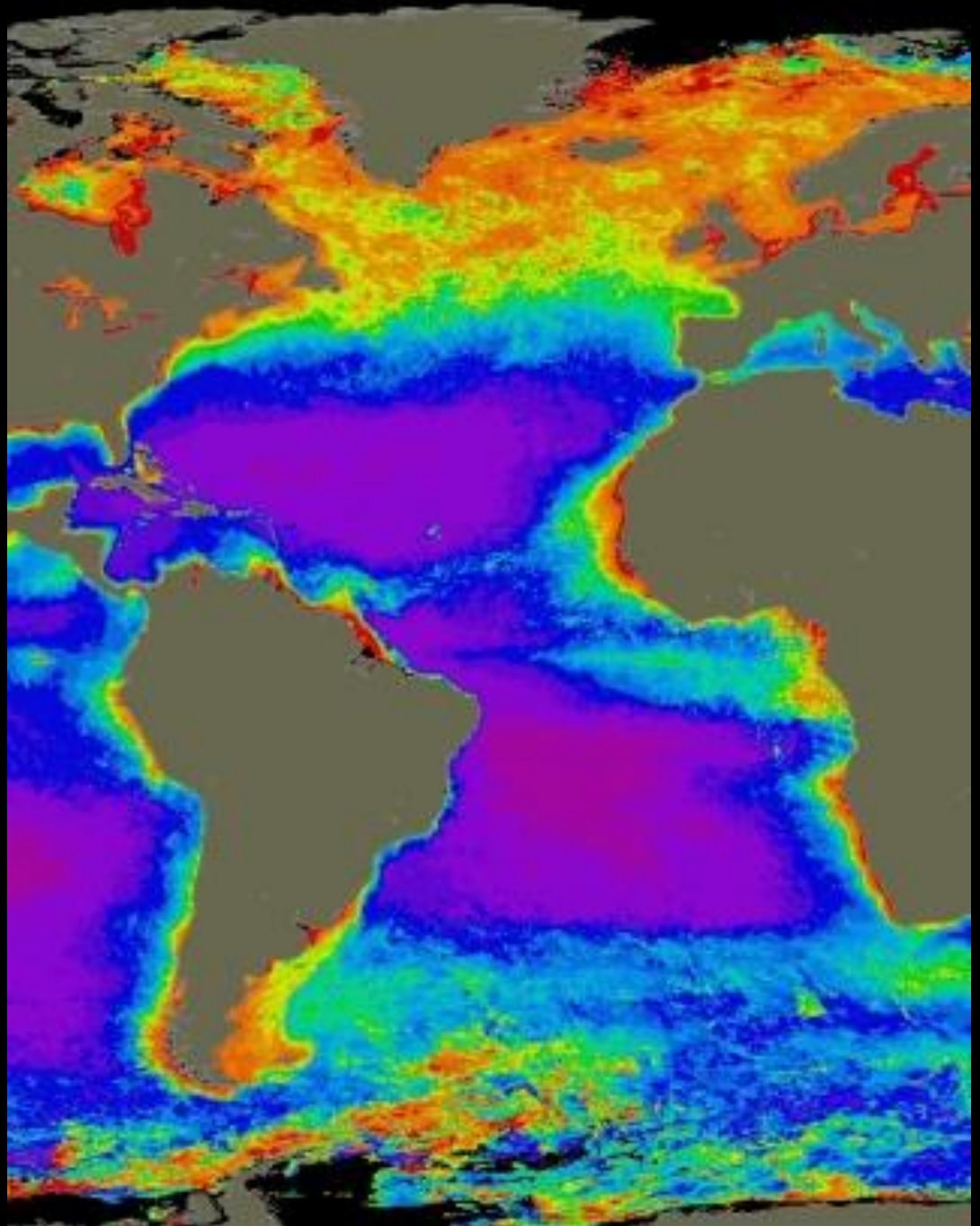


Biogenic Substrates Increase Diversity

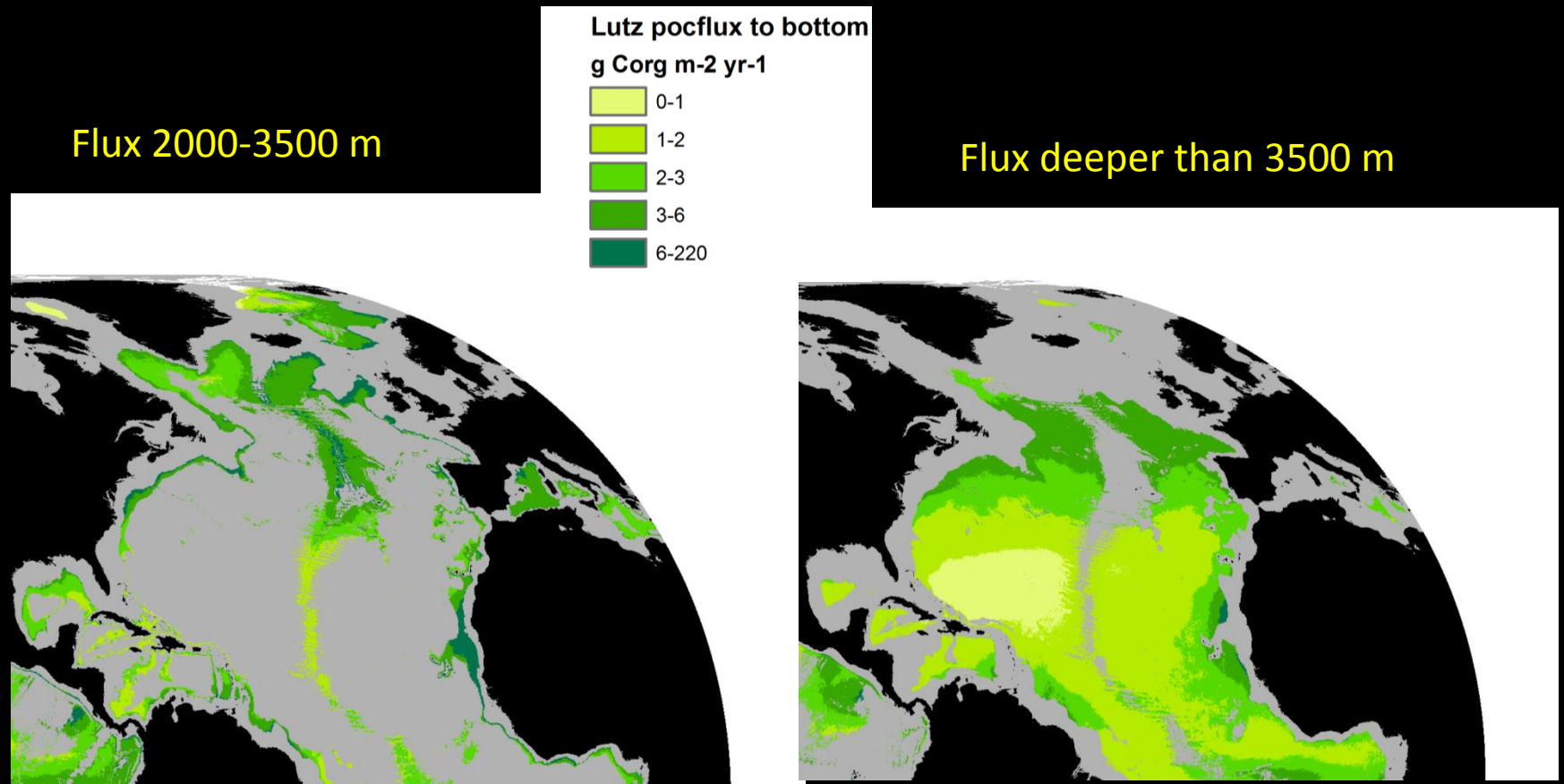


In the deep sea, food comes from above (except at vents and seeps)

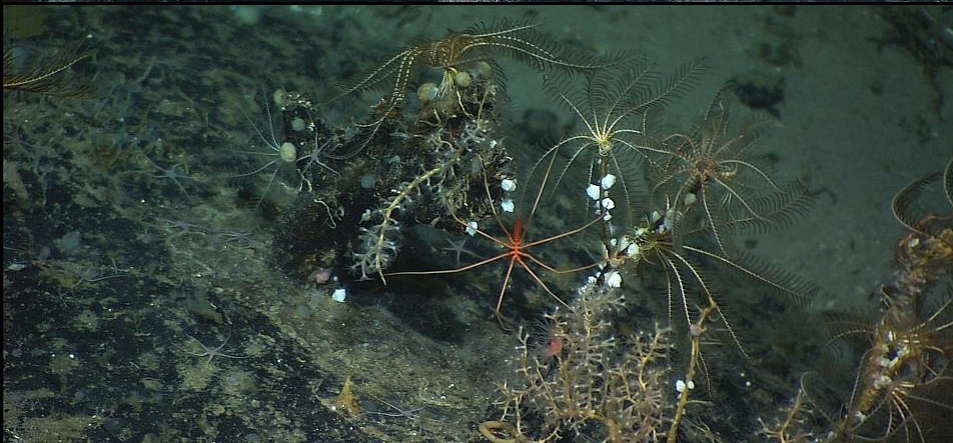
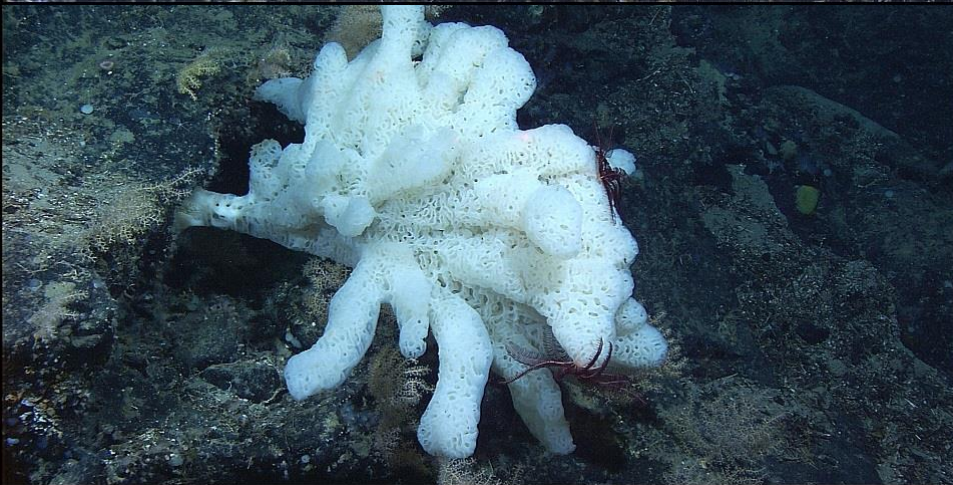
In the North Atlantic food is produced primarily during the spring bloom



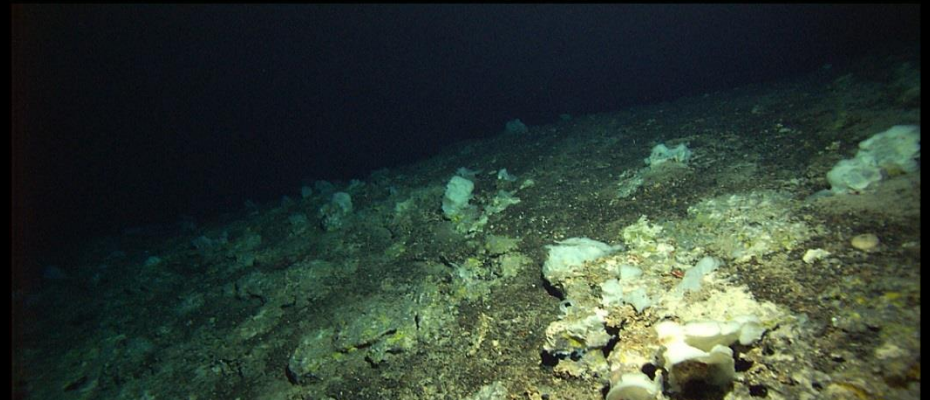
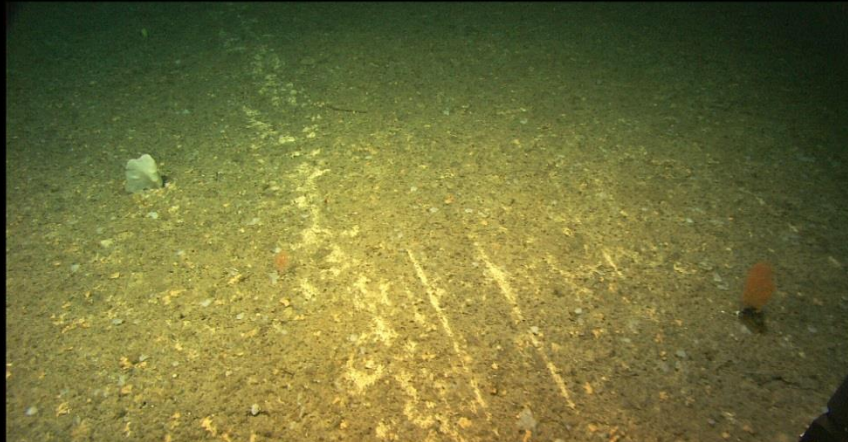
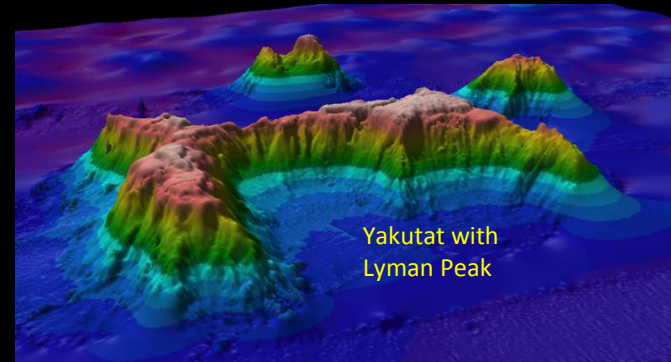
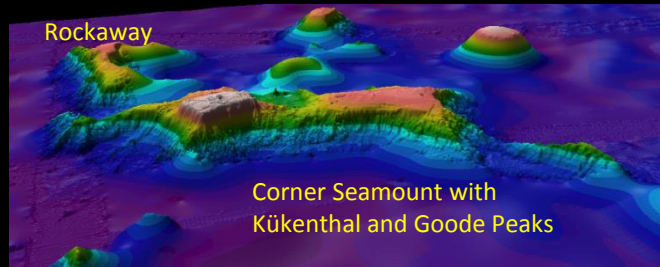
Food Delivery Varies With Depth and Latitude



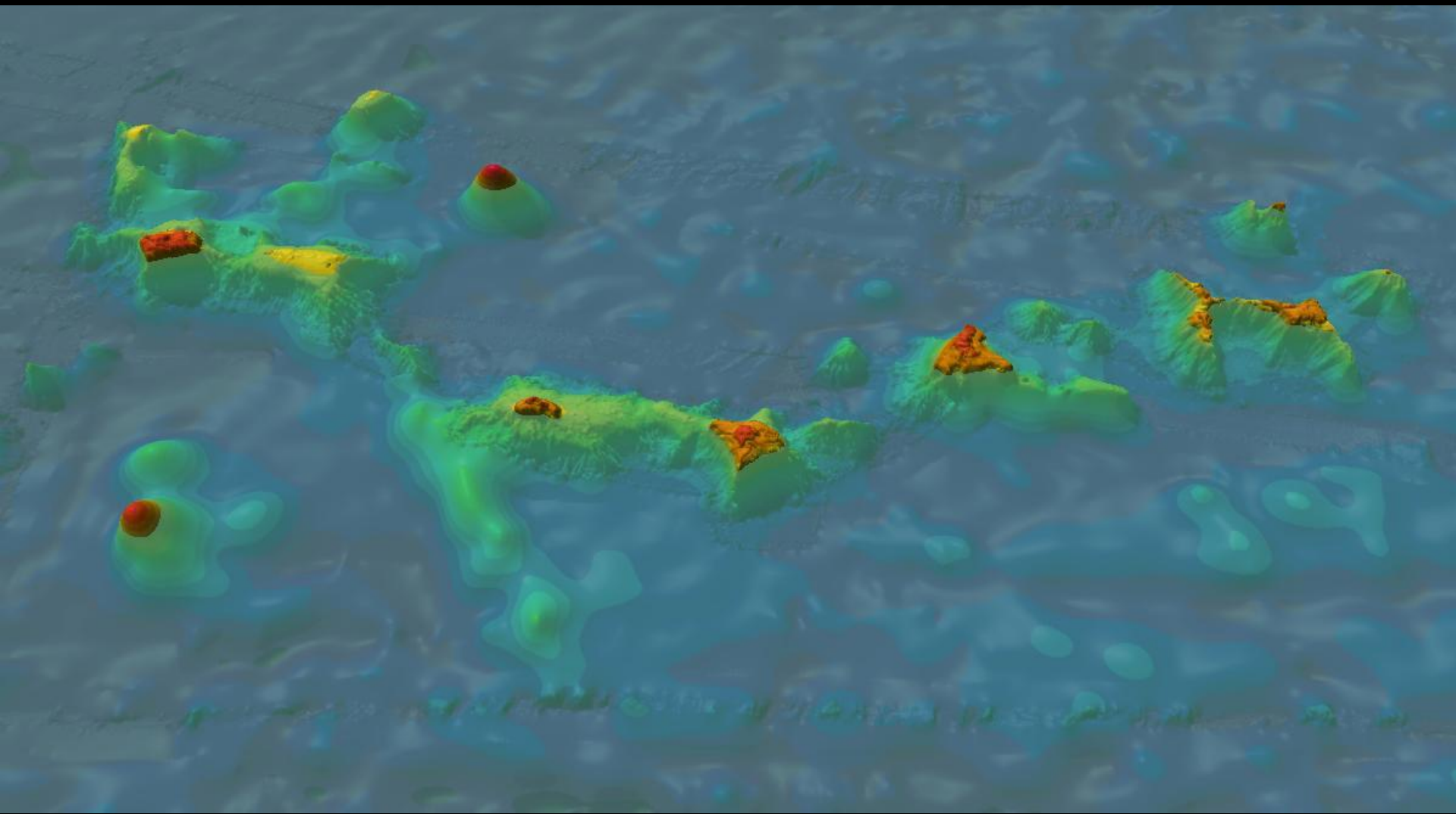
And has consequences for the deep-dwelling species



Threats: Trawling on shallow seamount summits



Corner Rise showing fishable seamount summits (<1800 m)



Threats: Climate Change

Warming of the deep waters will take some time

But changes to surface circulation can affect the deep

- altered food supply
- lowered deep ocean flushing, loss of oxygen

Threats: Trans-Atlantic Cables

???

