

Name _____ P _____ Date _____

The last 10,000 years in Earth's history are known as the Holocene Epoch. During this time in Earth's history climatologists, scientists who study weather patterns, have found the oceans have had little change in their sea surface temperatures. Graph the sea surface temperatures from three locations in the North Atlantic Ocean (NA). Then answer the questions that follow.

kya = thousand years ago
SST = sea surface temperature

Laurentian Fan	
Age (kya)	SST (°C)
0.6	11.2
1.4	11.1
2.7	11.4
3.6	11.7
4.4	11.9
5.7	12.0
6.6	12.5
7.5	12.2
8.4	13.0

Scotian Margin	
Age (kya)	SST (°C)
0.0	8.0
1.1	9.5
2.6	10.6
3.6	11.0
4.7	11.7
5.5	12.4
6.6	13.6
7.6	15.0
8.6	14.5
9.5	14.7

Virginia Slope	
Age (kya)	SST (°C)
0.7	14.4
1.4	15.1
2.6	16.0
3.5	16.3
4.7	17.0
5.8	17.7
6.9	18.0
7.7	17.8
8.9	18.1
9.6	18.0

Does the data provided support or refute the relative stability of sea surface temperatures in the Holocene Epoch?

Compare and contrast the NA Holocene Climate graph to the Global Holocene climate graph.

Similarities	Differences

What do you think happens when scientists are presented with data that appears to be collected accurately but does not match with other pieces of data?

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Caribbean Sea	
Age (kya)	SST (°C)
0.3	28
1.5	28.2
2.4	28.1
3.6	28.2
4.5	28
5.6	27.9
6.5	27.6
7.5	27.6
8.6	27.6
9.5	27

Arabian Sea	
Age (kya)	SST (°C)
0.2	27.3
1.6	27.1
2.7	27.0
3.5	26.9
4.8	27.1
5.9	27.2
6.6	26.7
7.3	26.8
8.7	26.7
9.9	26.7

South Atlantic Ocean	
Age (kya)	SST (°C)
0	24.3
1.6	24.46
2.6	24.4
3.4	24.2
4.6	24.1
5.3	24.3
6.2	24.5
7.5	24.1
8.5	23.8
9.6	23.5

South China Sea	
Age (kya)	SST (°C)
0.2	27.1
1.7	27.0
2.6	26.5
3.8	26.6
4.8	26.8
5.8	26.8
6.6	26.3
7.4	26.3
8.6	25.9
9.4	25.6

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