

2,200,000,000
years ago

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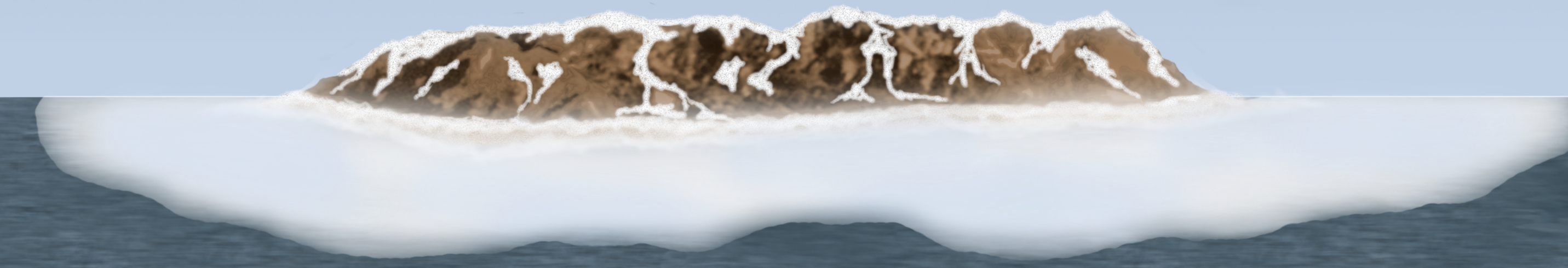
Making Oxygen

As photosynthesizing organisms pumped oxygen into Earth's atmosphere and ocean, the oxygen reacted with dissolved iron in the oceans and formed massive rock deposits called "banded iron formations." Once the dissolved iron was used in chemical reactions, oxygen began to increase in the atmosphere. Much of the iron used in industry today originated at this time.



Oxygen Increases in the Atmosphere

As oxygen, primarily from photosynthesis, became more abundant, and the dissolved iron was depleted through chemical reactions to produce banded iron formations, oxygen in the atmosphere increased from less than 0.1% to more than 10%. Oxygen eventually formed ozone in the upper atmosphere; ozone shields Earth from tissue-damaging ultraviolet light.



2200 million years ago

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Phanerozoic

PRECAMBRIAN