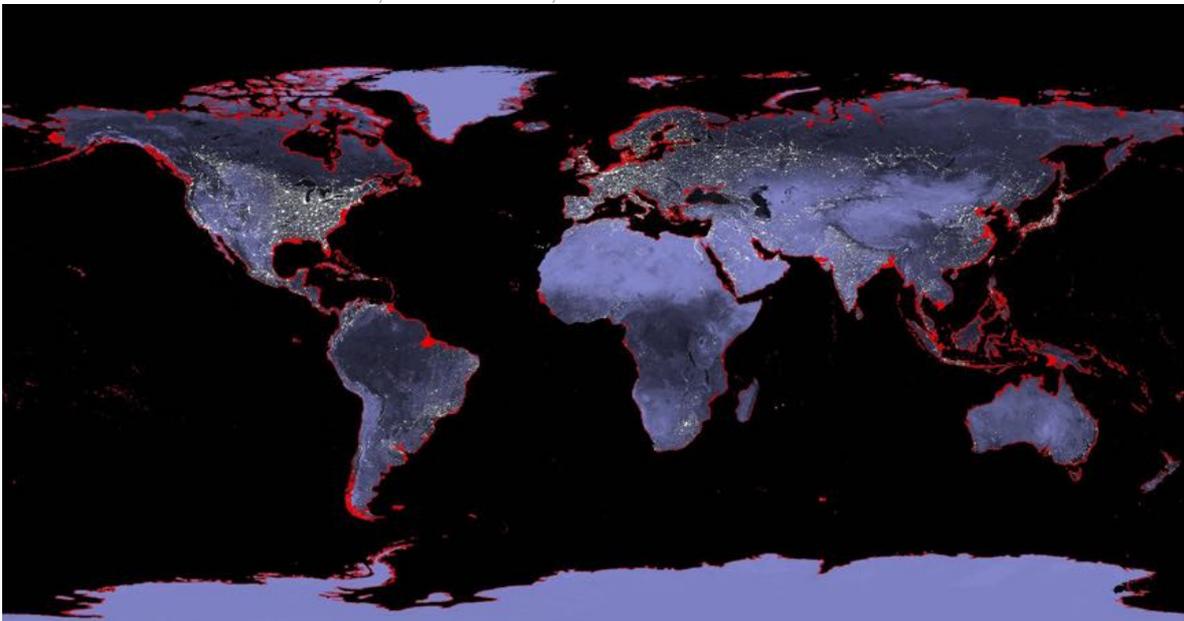


Earth's last major warm period was as hot as today

At peak of previous interglacial interval, sea levels were 6 to 9 meters higher

BY **THOMAS SUMNER** 2:00PM, JANUARY 19, 2017



HISTORIC HEAT Sea levels were 6 to 9 meters higher than present-day levels the last time Earth's climate was this warm, new research suggests. Similar sea level rise today would submerge many coastal areas (red).

JOHN C. KOSTELNICK (DATA), GSFC/NASA (VISUALIZATION)

The last time Earth's thermostat was cranked as high as it is today, sea levels were high enough to completely drown New

Orleans (had it existed at the time), new research suggests.

Ocean surface temperatures around 125,000 years ago were comparable to those today, researchers report in the Jan. 20 *Science*. Previous estimates suggested that this period, the height of the last warm phase in the ongoing ice age, was as much as 2 degrees Celsius warmer.

Climate scientists often use the last interglacial period as a reference point for predicting how rising temperatures will affect sea levels. The new results, the researchers write, will help scientists better predict how Earth's oceans and climate will respond to modern warming. Warming 125,000 years ago raised sea levels 6 to 9 meters above present-day levels.

The global scale of that warming has been difficult to estimate. Chemical clues inside dozens of seafloor sediment samples collected from around the world provide only regional snapshots of the ancient climate. Combining 104 of these dispersed data points, climate scientist Jeremy Hoffman of Oregon State University in Corvallis and colleagues pieced together a global climate picture.

Average global sea surface temperatures around 125,000 years ago were indistinguishable from the 1995 to 2014 average, the researchers estimate.

Citations

J.S. Hoffman et al. **Regional and global sea-surface temperatures during the last interglaciation**. *Science*. Vol. 355, January 20, 2017, p. 276. doi: 10.1126/science.aai8464.

Further Reading

T. Sumner. **For three years in a row, Earth breaks heat record**. Science News Online, January 18, 2017.

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T. Sumner. **2015 smashed heat records**. *Science News*. Vol. 189, February 20, 2016, p. 13.