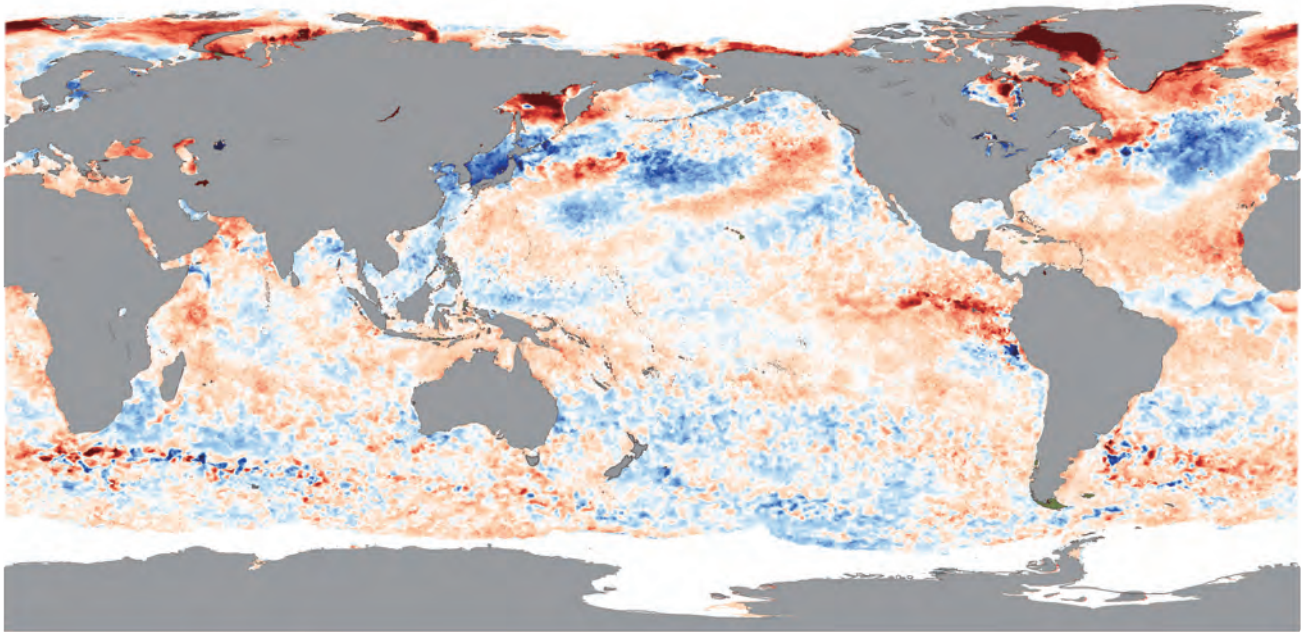


SEA SURFACE TEMPERATURE

エルニーニョ

El Niño Conditions Set in Across Pacific Ocean



Sea Surface Temperature Anomaly (°C)



《2009年7月26日の海面温度》と《1985年から1997年の平均海面温度》との比較

In July 2009, the NOAA Climate Prediction Center reported that ocean temperatures in the central and eastern Pacific had shifted into El Niño -anomalously warm- conditions. El Niño conditions are evident in this sea surface temperature anomaly image based on data from the Advanced Microwave Scanning Radiometer for EOS (AMSR-E) on NASA's Aqua satellite on July 26. The current data are compared to long-term average temperatures (1985-1997) measured by the AVHRR that have flown on several NOAA missions. Places where temperatures

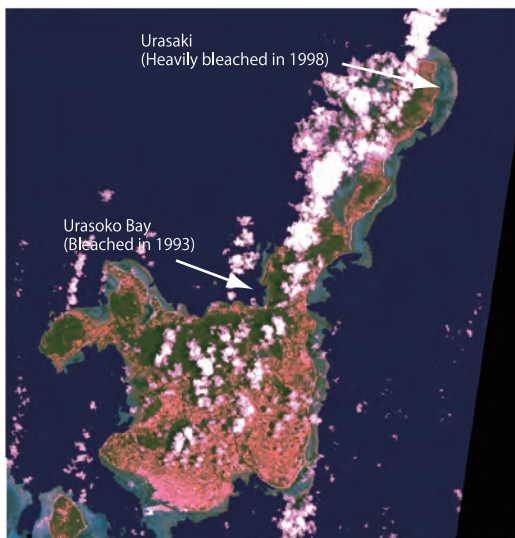
were near normal are cream-colored, places where temperatures were warmer than normal are red, and places where temperatures were cooler than normal are blue. An area of dark red occupies the eastern Pacific off the coast of Peru and Ecuador (north of Peru), indicating temperatures were much warmer than average. Meanwhile, across the Pacific, ocean temperatures around Indonesia were slightly cooler (light blue) than usual.

石垣島の珊瑚礁の白化

近年、サンゴ礁は急激な環境変化によって世界的に衰退しています。一つの原因は、地球温暖化によるとされる高水温がもたらすサンゴの白化現象です。1998年夏に、石垣島では大規模な白化現象が起きました。この白化現象により、サンゴの被度は白化前に比べて3分の1に減少しました。



Location of Ishigaki Island in Japan



石垣島のサンゴの白化現象 (Landsat TM/ 1998.8.15)
Landsat TM image of Ishigaki Island obtained on 15 August 1998, when the severe bleaching event occurred, and validation sites.

Coral bleaching in Ishigaki Island, southwestern part of Okinawa, Japan

Recently, coral reefs are suffering and declining worldwide due to rapid environmental changes. One of the biggest issues is coral bleaching caused by anomalously high sea surface temperatures, possibly due to global warming.

In the summer of 1998, severe bleaching occurred at Ishigaki Island. The living coral cover has decreased to one third of that prior to the bleaching at Ishigaki Island.



健康なサンゴ
Healthy corals



白化したサンゴ
Bleached corals