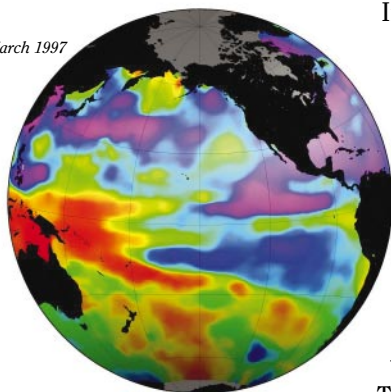


Keeping an eye on El Niño

El Niño is an irregular climatic event occurring every two to seven years that has a serious impact on the economy and populations of affected countries. Thanks to TOPEX/POSEIDON, we have been able to monitor the evolution of El Niño in near real time. Now, Jason-1 is keeping watch over the oceans to detect the early warning signs of this kind of event.

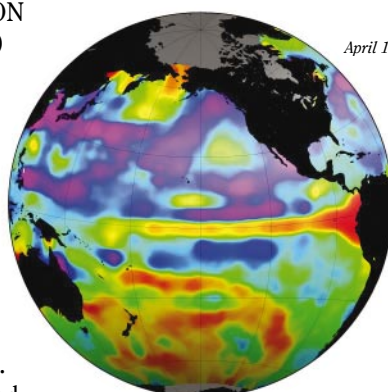
1997 - Here comes El Niño!

March 1997



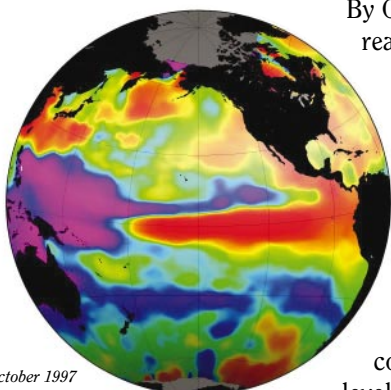
In March 1997, TOPEX/POSEIDON detected a rise in sea level of 20 centimeters (shown in red) in the Western Tropical Pacific, the result of a build-up of warmer water pushed by the tradewinds. In April, the normal easterly tradewinds slackened and the warmer water worked its way back along the Equator towards the American continent. The resulting heat transfer affected climate worldwide.

April 1997



1998 - And now La Niña!

October 1997



By October-November 1997, El Niño had reached its peak. A belt of warm water reaching from the middle of the Pacific Ocean basin to the coast of South America is straddling the Equator, bringing rain and storms. But by February 1999, a cold La Niña event had set in. A strengthening of the tradewinds pushed upwelling colder waters westward, causing sea level to drop by 20 centimeters (shown in mauve) along the Equator.

February 1999

