

**Stevenson:** Because the sulfur aerosols get into the stratosphere, and they form a layer. They fall very, very slowly. They are not chemically reactive with anything in the stratosphere at 26 km, and so they stay there. In fact right now, there is a strong layer of aerosols between 12 and 26 km, and this clearly came from the eruptions of the Kamchatka volcanos in 1994 and the volcanoes that have erupted and are continuing to erupt in Papua New Guinea in the past two and a half years.

So, El Niños can't be predicted, and they very clearly are a reaction to volcano activity.

**EIR:** That's not mentioned in the current El Niño stories. . . .

**Stevenson:** That I understand, because the meteorologists and the climatologists absolutely do not want anybody to understand that, because of course they can't model it. There was a meeting in 1992 in Hilo, Hawaii, on the effects of volcanic activity on the environment and the atmosphere, and so on. Nearly 40% of the papers were on the influence of volcanic eruptions on weather systems, on the ocean, changes in ocean temperature, and on medium-term influence on climate. Those papers were never published, and the final report that was put out by American Geophysical Meeting—it was their meeting, a Chapman Physical Conference, which they

run—never mentioned any of those papers, or any one of the scientists who gave those papers.

The climatologists don't like this.

**EIR:** What about the interaction with the atmosphere? The global warming and ozone-hole proponents are adamant in saying that the chlorine and other gases from the oceans don't reach the stratosphere, or are not important. What's the real picture?

**Stevenson:** Chlorine and everything else from the ocean gets into the stratosphere in great volumes every day from these towering cumulus, which are like chimneys, that punch right through the tropopause into the stratosphere. There are about 10,000 of these structures going on all the time. There have even been reports from people who send up these balloons with devices that try to screen particles out of the atmosphere, that they have even found portions of microorganisms from the ocean up in the stratosphere. So, don't tell me that chlorine doesn't get up there.

**EIR:** But the ozone hoaxsters say that natural chlorine doesn't get up there.

**Stevenson:** They say that the chlorine is hydroscopic, that it hooks up with the water, and rains out before it gets to the

## The ocean seen from space

Scientists are using a number of satellites to look at the Pacific Ocean, to examine El Niño.

The latest addition is the SeaStar spacecraft, launched in August by the Orbital Sciences Corp. Onboard SeaStar is the Sea-viewing Wide Field-of-View Sensor developed by NASA. By observing the changes in color in the Pacific Ocean, SeaWiFS will be able to measure the amount of phytoplankton and dissolved organic matter and suspended sediments. Scientists plan to use the data to assess the global impact of El Niño on marine ecosystems, including the coastal waters of the Pacific Ocean.

An older member of the fleet is the Topex/Poseidon satellite, launched in 1992. It is collecting data on ocean topography, including the features of ocean circulation that produce hills and valleys in the sea surface. Topex/Poseidon's radar altimeter studies ocean currents and sea level, and is able to map global sea circulation with an accuracy of 1.8 inches. Every ten days, scientists are able to produce a complete map of global ocean topography, and calculate the speed and direction of worldwide ocean currents.—*Marsha Freeman*



Artist's rendering of TOPEX/Poseidon satellite.