# sured

GPS satellites, whose signals may be used to measure ionospheric characteristics to aid in forecasting earthquakes.



Official earthquake forecast registered by the Research Center for Earth Operative Monitoring with the Russian Expert Council on Earthquake Forecasting and Evaluation of Seismic Dangers.

### ERICE SEMINAR ON 'EARTHQUAKE EARLY WARNING FROM SPACE'

On October 21-24, 2012, the "Ettore Majorana" Foundation and Center for Scientific Culture (EMFCSC) in Erice, Italy, hosted a seminar on "Earthquake Early Warning from Space." Although earthquake forecasting is still an emerging field, the benefits of space-based observation provide great advantages towards its realization. Because the entire planet can be continuously measured from space, large data sets of atmospheric and ionospheric conditions

can be gathered and analyzed, helping to identify even weak interactions between the Earth's crust and the upper layers of the atmosphere and the ionosphere, interactions which can be signs of an oncoming seismic event.

The seminar was directed by Roberto Battison (University of Perugia) and Shen Xuhui (China Earthquake Administration), and featured some of the key figures in the international community of researchers in earthquake precursors and earthquake forecasting. The EMFCSC itself, run by scientist Antonino Zichichi, is also known for its series of International Seminars on Nuclear War (and on "Planetary Emergencies"), which included the 1983 conference on "Technological Bases for Peace" where Edward Teller, Lowell Wood, and U.S. President Ronald Reagan (by personal message) made a major intervention for the Strategic Defense Initiative (SDI) at the time.



# RUSSIAN CENTER ISSUES FIFTH SUCCESSFUL EARTHQUAKE FORECAST

On December 3rd, Russia's Research Center for Earth Operative Monitoring issued another successful earthquake forecast. Their release (in Russian) describes the forecast they issued, warning of a magnitude 7.2 ( $\pm$  0.2) earthquake, in the Japan region, on either December 7th or 14th ( $\pm$  2 days). The U.S. Geological Survey website confirms that there was indeed a a 7.3 earthquake off the Pacific coast of Japan on December 7th — four days after their warning, and matching their forecast. According to their release, this marks the fifth successful forecast of the Center, which is focusing on large earthquakes in the Japan/Kamchatka Pacific region for a trial run of their earthquake forecasting program. The initial successes of the program, as well as their forecasting methods and the parameters they monitored, were elaborated by representatives of the center in two presentations at the September 2012 IGMASS conference, "Space and Global Security of Humanity," held in Yevpatoria, Ukraine, as discussed more fully in this issue, in the article on page 26.

### BRAZILIAN SCIENTISTS ARE PLANNING A MISSION TO AN ASTEROID

"Going Where No One Has Gone Before," is the cover story on the November 2012 issue of the magazine Ciencia Hoje, published by the Brazilian Society for the Advancement of Science, which describes the proposed "Aster Project," to travel to and land on the largest of a triple-body asteroid, named 2001-SN263. The mission is being designed by three Brazilian and one Russian scientist, with a proposed launch date in 2017. Brazil's National Space Research Institute, and Russia's premier Institute of Space Research, are the responsible institutions for the mission, with the spacecraft to be provided by Russia, and an ion propulsion system and scientific instruments to be provided by Brazil. It would be Brazil's first mission in to deep space.

As the magazine article relates, "If all goes according to plan, this daring deed will secure Brazil a place in the history of aerospace engineering and science. Few nations, until now, have carried out anything like it." Learning as much as possible, as quickly as possible, about these wanderers in the Earth's neighborhood, is urgently necessary, to be able to protect our planet from any possible collisions.

Brazil has had an active space applications program for many years, most notably as a leader in Ibero-America in Earth remote sensing technology. The nation plans to complete the reconstruction of the near-equatorial Alcantara launch facility, to be able to build and launch its own spacecraft in the future.

## MINISTERS MEET IN DOHA TO, ONCE AGAIN, SQUEEZE MOONBEAMS FROM CUCUMBERS

From November 26 through December 8, leaders of almost every nation on the planet assembled in Doha, Qatar for the 2012 UN Climate Change Conference. The mission of the subdued meeting was to secure legally binding agreements by all nations to limit their carbon dioxide emissions, with the purported goal of preventing the Earth from heating by more than 2 degrees Celsius over the next few decades, while ignoring the fact that carbon emissions may not even significantly affect global temperature, and that significant research into other areas of climate science is routinely rejected out of hand by the Intergovernmental Panel on Climate Change.

One goal of the conference, to replace the expiring Kyoto Protocol, failed, as only 37 of the 195 parties to the UN Framework Convention on Climate Change supported the proposed new treaty, with the notable lack of support from the US, Russia, China, India, Japan, Canada, and Brazil. All told, the remaining backers of the initiative account for only about 15% of emissions, and the treaty as it stands has no enforceable emissions limits anyway. About \$100 billion in future aid was planned for developing nations for "adaptation and mitigation" of climate change.

A dose of reality was finally presented near the end of the conference by climate realist Lord Monckton, who posed as a Burmese delegate and took the microphone for a short period to explain that there has been absolutely no warming for over 16 years, even though carbon dioxide has increased, and that attempting to limit those emissions would cost more than possible remediation later. Instead, he insisted, we should review the science, to make sure we are not simply being swindled into destroying our industries. Monckton's intervention led to his ejection from the country, but he reported that he was happy to have had a chance to speak the truth. Official earthquake forecast registered by the Research Center for Earth Operative Monitoring with the Russian Expert Council on Earthquake Forecasting and Evaluation of Seismic Dangers.



Christopher Monckton interviewing greens at a climate conference in Berlin in 2009.