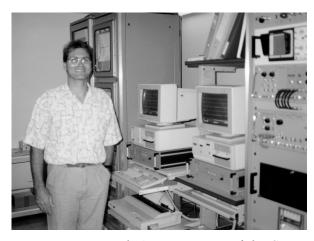*Igor Kuz'minykh, ITSU National Contact for the Russian Federation, examines a tsunami travel time map on a wall behind some of the communications equipment at the Petropavlovsk-Kamchatskiy Tsunami Warning Center.*

Dominique Reymond, Acting Director of the Centre Polynésien de Prévention des Tsunamis, standing next to TREMORS and other seismic monitoring equipment at the Centre in Papeete, Tahiti.

The Russian Federation Tsunami Warning Centers

The Russian Federation (formerly the USSR) began implementation of its tsunami warning system after the 1952 Kamchatka earthquake that generated a Pacific-wide tsunami. Three regional centers were established, at Petropavlovsk-Kamchatskiy, Kurilskiye, and Sakhalinsk, with access to data from a number of seismic and tidal stations. Overall responsibility for the centers belongs to the Russian Hydrometeorological Service, with assistance from the Russian Academy of Sciences and several other institutions. Each center has full authority to issue a warning in case of a tsunami threat, and appropriate local authorities are advised when it is necessary to evacuate potentially affected population centers. Special instruments are in operation to detect earthquakes having magnitudes of 7 or greater at distances between 150 and 2000 km offshore, and to also detect any tsunami waves that may result. Tsunami travel time charts and historical data are used in the warning process. Communication with the rest of the Pacific is facilitated through a Khabarovsk-Tokyo cable link.

The French Polynesia Tsunami Warning Center (Centre Polynésien de Prévention des Tsunamis - CPPT)

The French Polynesia system has been in operation since 1965, as a consequence of the 1964 tsunami from Alaska. The system, located at Papeete, Tahiti, makes use of information obtained from 8 short-period seismic stations, 3 long-period seismic stations, and 3 tide gauges operated by Reseau Sismique Polynesien. Data from five of these stations is telemetered to the Papeete Center, as well as data from one three-component broadband seismic station and one tide station. Use is also made of information obtained from the Pacific Tsunami Warning Center in Ewa Beach, Hawaii. The CPPT uses a system it developed called **TREMORS** (**T**sunami **R**isk **E**valuation through seismic **MO**ment from a **R**eal-time **S**ystem) to automatically detect and locate an earthquake, and then compute its seismic moment from the mantle magnitude (Mm) which is based on long-period Rayleigh and Love waves. The center disseminates tsunami warnings with five risk levels, based principally on the seismic moment of the earthquake.