

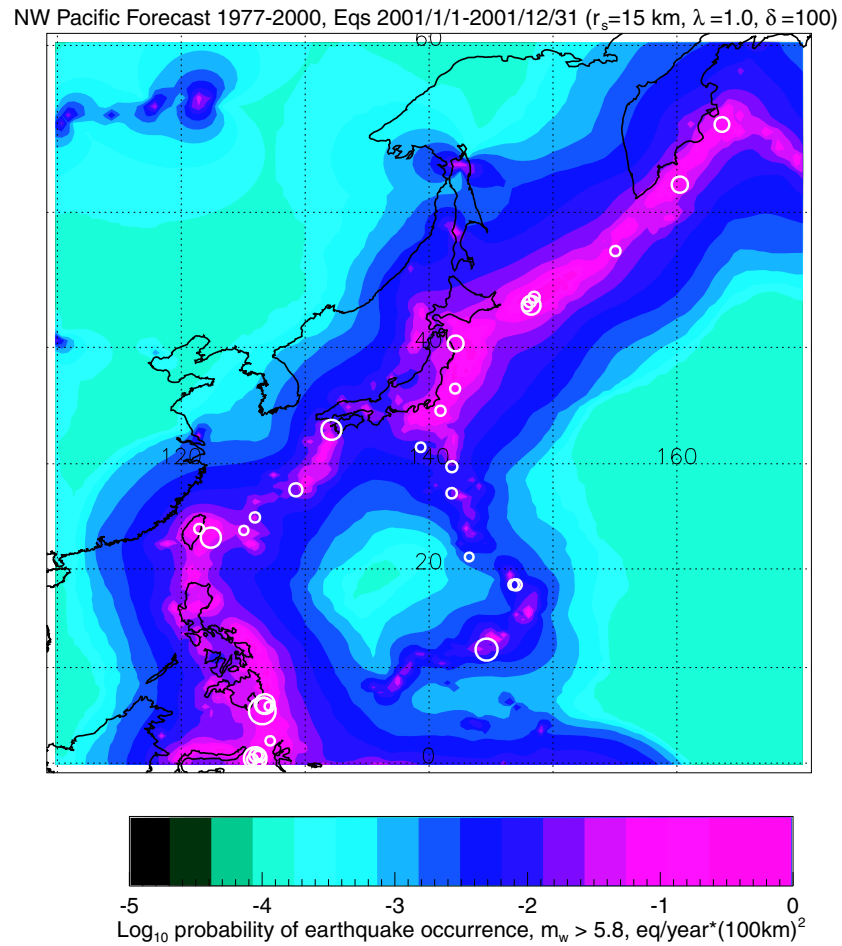


Figure 1: Color tones show the probability of earthquake occurrence calculated using the Harvard 1977-2000 catalogue; earthquakes 2001 are shown in white. Northwest Pacific long-term seismicity forecast: latitude limits from 0.25°S to 60.25°N, longitude limits from 109.75°E to 170.25°E.

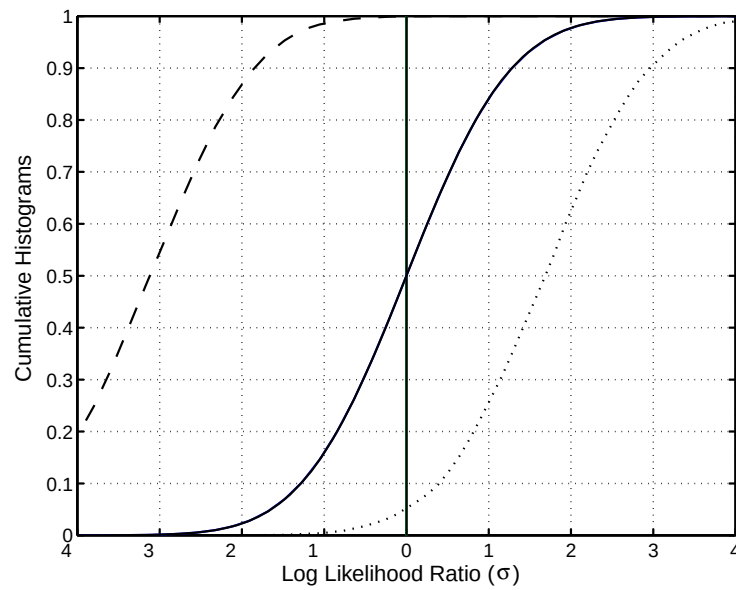


Figure 2: We use earthquakes from 1977 to 2000 as a control set. The solid line is the best Gaussian curve, having the same standard deviation as simulations. The dashed curve corresponds to simulation distributions for the NW-Pacific; the dotted curve to the SW-Pacific. Curves on the right from the Gaussian curve correspond to simulations worse than a real earthquake distribution; curves on the left correspond to simulations better than a real earthquake distribution.

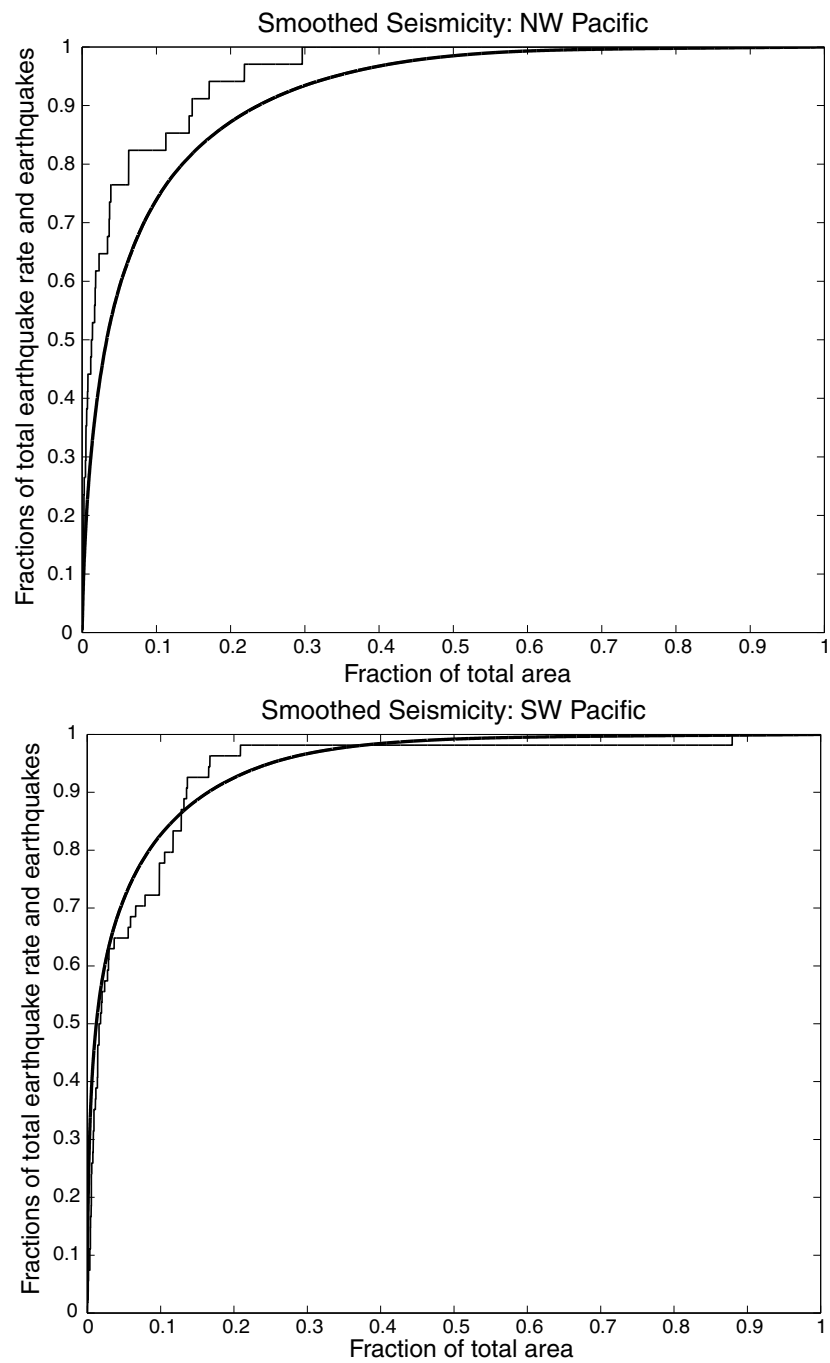


Figure 3: Concentration diagrams for forecast probability and earthquakes occurring in 2001. Solid line – probability distribution, thin line – earthquakes. (top) NW Pacific; (bottom) SW Pacific.

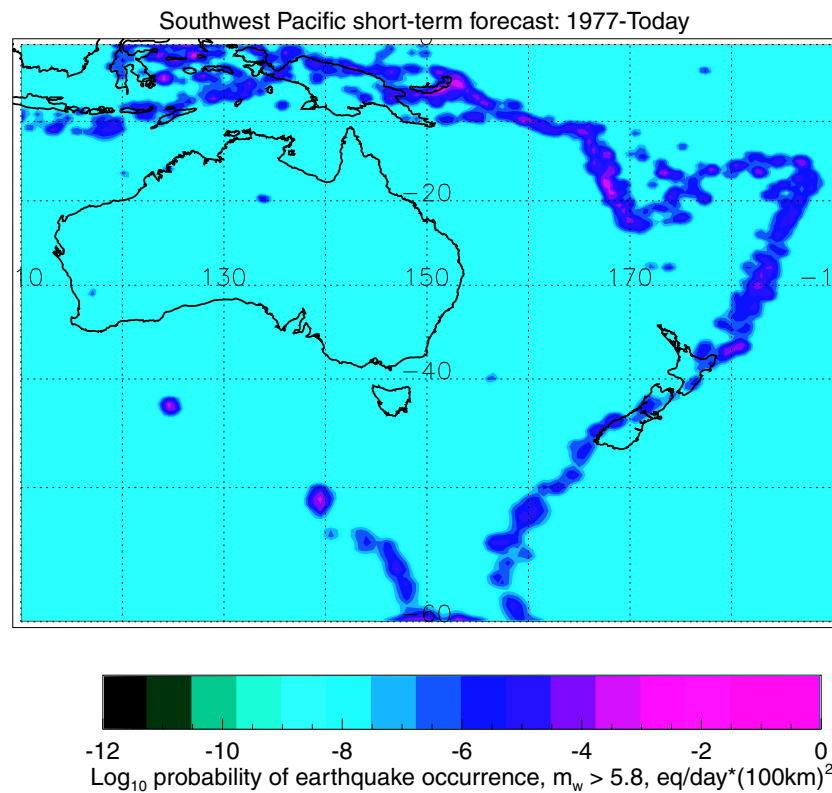


Figure 4: Short-term seismicity forecast for southwest Pacific. Color tones show the probability of earthquake occurrence calculated using the Harvard catalogue starting with January 1, 1977. This forecast as well as the forecast for the northwest Pacific is updated every day. The updated plots are available from <http://scec.ess.ucla.edu/~ykagan/predictions.index.html/>.

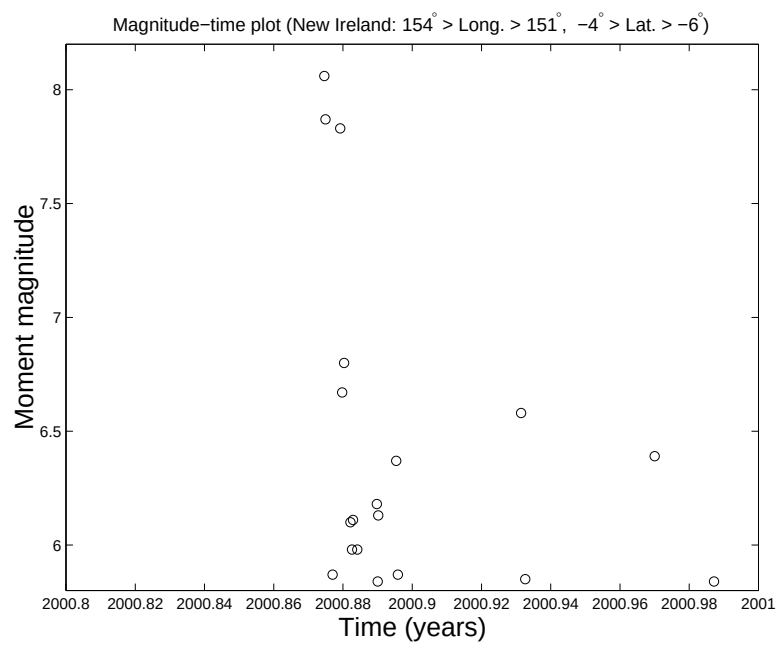


Figure 5: Time-magnitude plot for the New Ireland region.

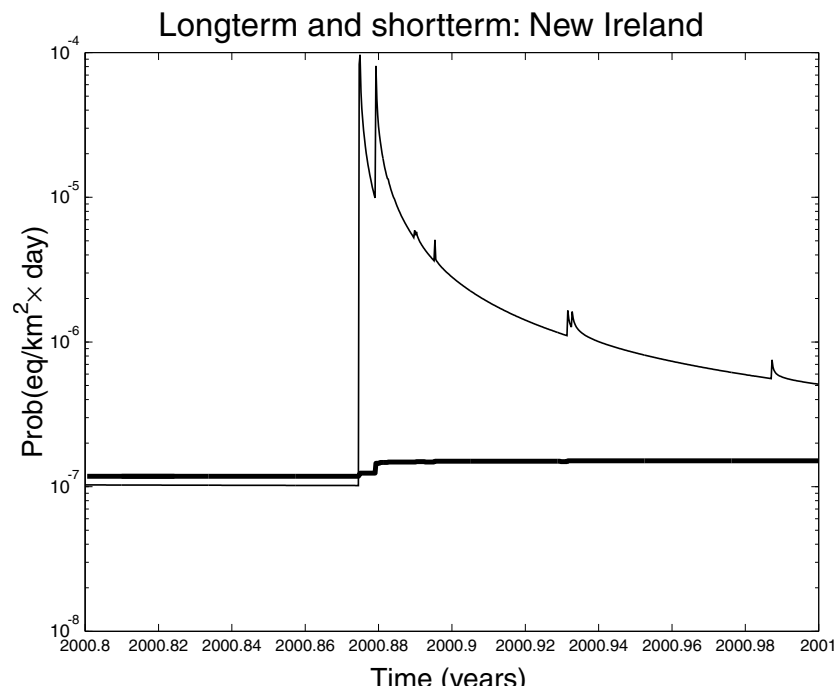


Figure 6: Time history of long-term and hybrid (short-term plus $0.8 \times$ long-term) forecast for a point at 5.0° N, 152.5° E. Dark line is the long-term forecast; lighter line is the hybrid forecast.

New Ireland Forecast 1977-99, Eqs 2000/1/1-2001/05/02 ($r_s=2.5$ km, $\lambda=1.0$, $\delta=25$)

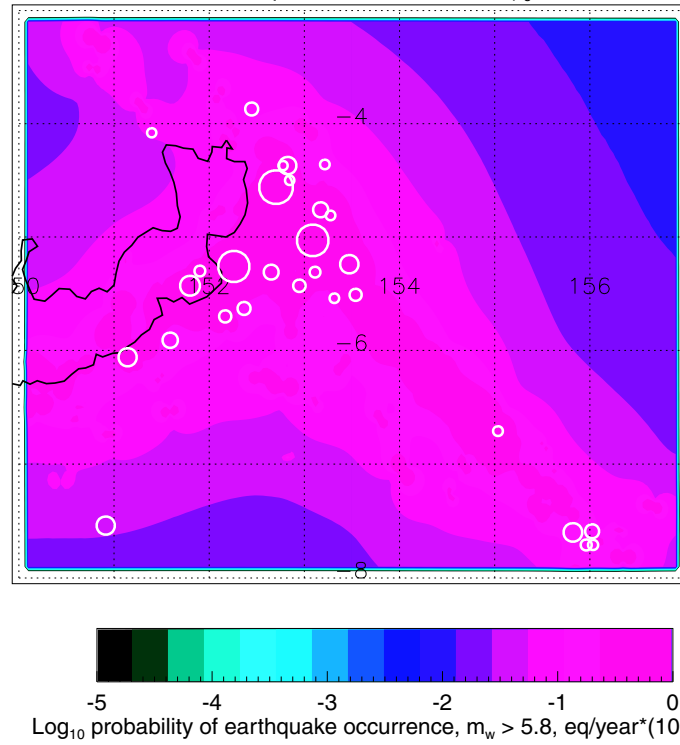


Figure 7: New Ireland region long-term seismicity forecast: color shows the rate-density of earthquake occurrence calculated using the Harvard 1977–1999 catalogue. Latitude limits are 3° to 8° South; longitude limits 150° to 157° West. Earthquakes in 2000 and 2001 (after the time of the forecast) are shown as white circles, with radius proportional to magnitude.

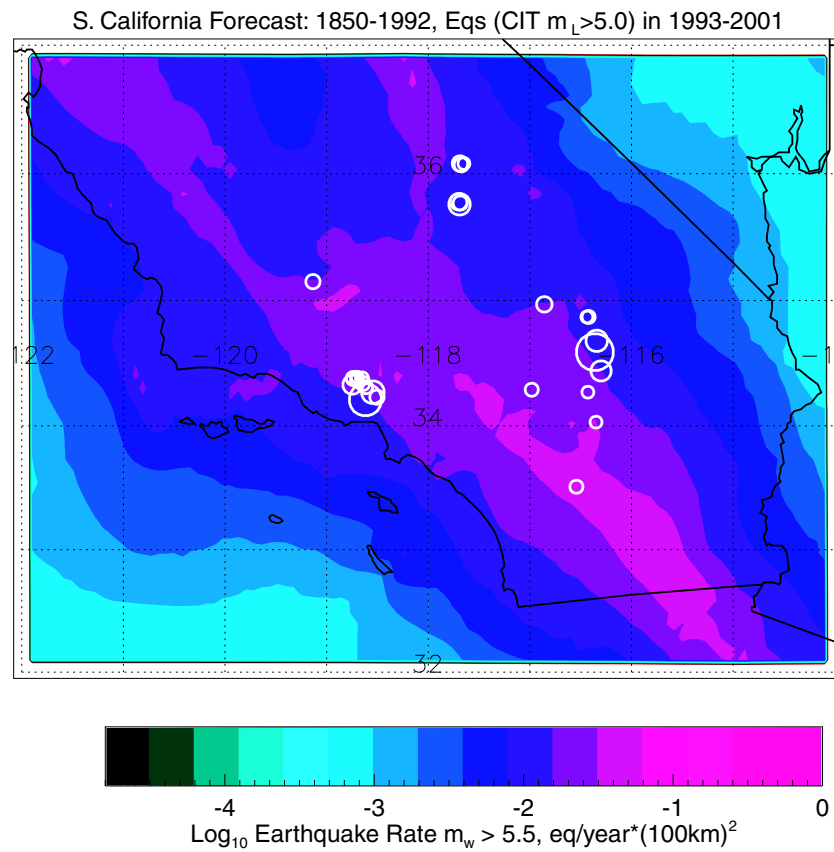


Figure 8: Long-term seismicity forecast for southern California: Latitude limits 32.0-37.0°N, longitude limits 114.0-122.0°W. Earthquakes after December 31, 1992 are shown in white. The size of circles is proportional to earthquake magnitude. Color scale shows the long-term probability of earthquake occurrence calculated with the historical and Harvard 1977–1992 catalogue.

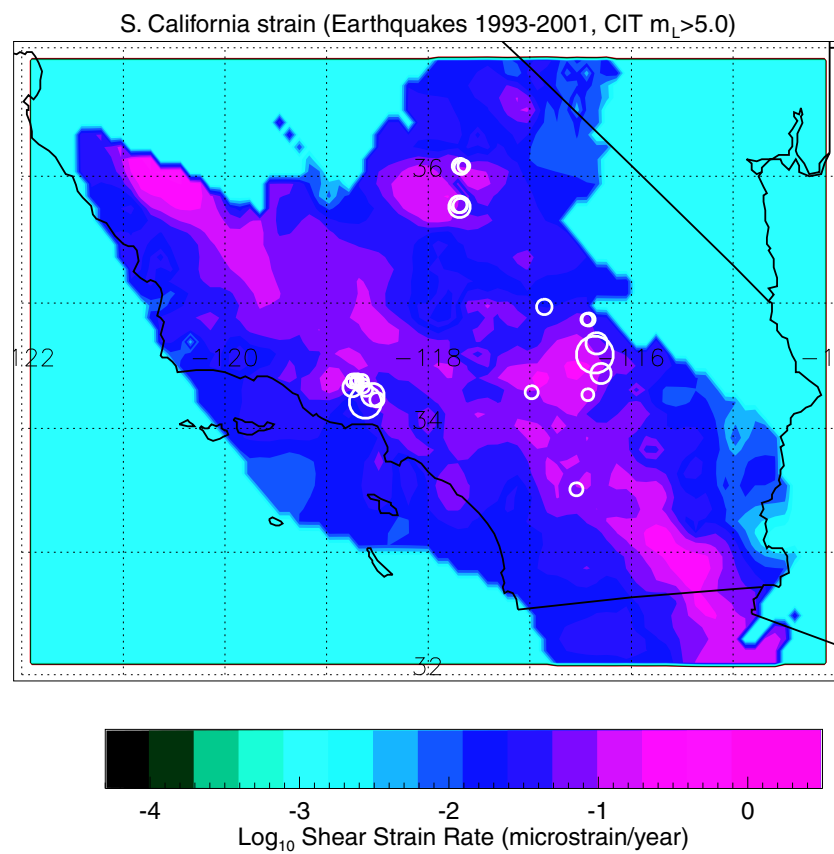


Figure 9: Same as figure 8 except that color scale tones show the long-term probability of earthquake occurrence calculated using strain map.