

# CONSENSUS STATEMENT OF THE SOLAR CYCLE 24 PREDICTION PANEL

**March 20, 2007**

The Solar Cycle 24 Prediction Panel anticipates the solar minimum marking the onset of Cycle 24 will occur in March, 2008 ( $\pm 6$  months). The panel reached this conclusion due to the absence of expected signatures of minimum-like conditions on the Sun at the time of the panel meeting in March, 2007: there have been no high-latitude sunspots observed with the expected Cycle 24 polarity; the configuration of the large scale white-light corona has not yet relaxed to a simple dipole; the heliospheric current sheet has not yet flattened; and activity measures, such as cosmic ray flux, radio flux, and sunspot number, have not yet reached typical solar minimum values.

In light of the expected long interval until the onset of Cycle 24, the Prediction Panel has been unable to resolve a sufficient number of questions to reach a single, consensus prediction for the amplitude of the cycle. The deliberations of the panel supported two possible peak amplitudes for the smoothed International Sunspot Number ( $R_i$ ):  $R_i = 140 \pm 20$  and  $R_i = 90 \pm 10$ . Important questions to be resolved in the year following solar minimum will lead to a consensus decision by the panel.

The panel agrees solar maximum will occur near October, 2011 for the large cycle ( $R_i=140$ ) case and August, 2012 for the small cycle ( $R_i=90$ ) prediction.