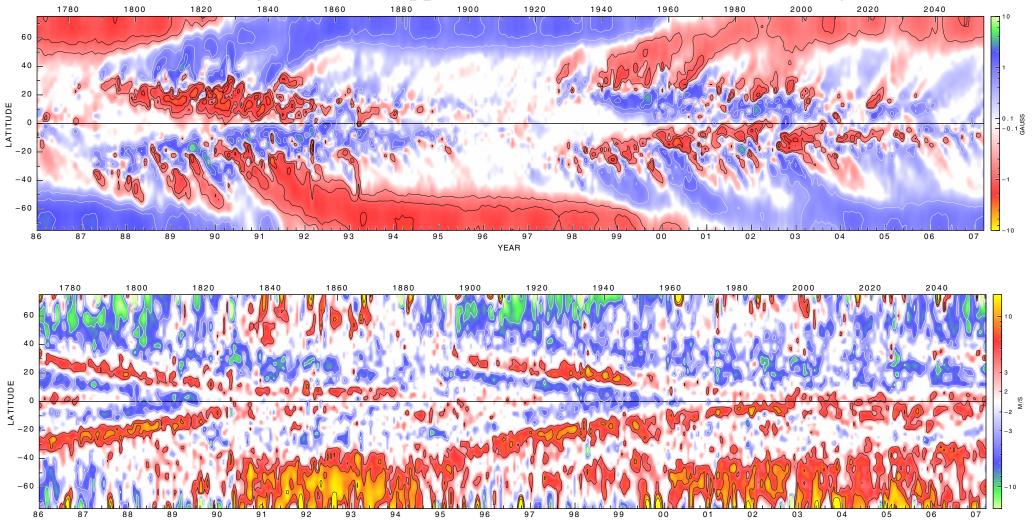
MWO Magnetic and Doppler Fields; R. K. Ulrich and J. E. Boyden



The top figure shows the one rotation averages of the meridional magnetic field. The bottom figure shows the one rotation averages of the zonal velocity (torsional oscillations). Solar cycle 23 is clearly not yet wound down with new activity still appearing in the southern hemisphere. The slower than average velocity in the southern hemisphere has just started to make an appearance. In cycles 21 and 22 when this phase of the torsional oscillation was near the equator, the activity was also absent near the equator. These factors seem to suggest that it will still be a while before we reach solar minimum. The polar field has been consistently weaker in cycle 22 than it was in cycle 21. We still seem to be at least a year away from minimum and with the polar fields being weak I suspect the coming cycle will be also. The stronger speedup in the south suggests the solar activity will be stronger in that hemisphere.