Our work on this project included a report give at the recent SHINE 2006 meeting in Utah. We investigated the center to limb dependence of the magnetic fields measured by MDI using both tracked, larger regions and by examining the distribution function at fixed central meridian angle and latitude over periods of a year. We determine that the surface field averages to being essentially radial but that any individual observation includes the contribution of a transverse field having an amplitude about 60 percent of the radial field. This random transverse field does not contribute to the average. However, it is incorrect to take any individual observation and estimate the radial field by using a secant(center-to-limb angle) correction since the line of sight field near the limb is mostly a result of the random transverse field and not the projection of the radial field. This discussion was given at the SHINE meeting as a poster contribution.

Roger Ulrich, Aug 2006