Geophysical Research Abstracts, Vol. 9, 04819, 2007 SRef-ID: 1607-7962/gra/EGU2007-A-04819 © European Geosciences Union 2007



OLA inversion of helioseismic traveltimes

L. Gizon (1) and J. Jackiewicz (1)

(1) Max Planck Institute for Solar System Research, 37191 Katlenburg-Lindau, Germany

Helioseismic traveltimes contain the signature of solar subsurface inhomogeneities and plasma flows. Here we present a consistent methodology for the measurement, interpretation and inversion of f-mode traveltimes. The inversion method that we use is an Optimally Localized Averaging (OLA) procedure. Using SOHO-MDI observations, we infer flows in the near surface layers with a horizontal spatial resolution comparable to the average wavelength of the solar waves that contribute to the traveltime measurements.