Exercise 5

<u>Inversion of quiet-Sun internetwork.</u>

Hinode/SP observations at disk center, integrated for 6 min, SNR~10^5, still high spatial resolution.
Two lines Fe I 630.1 and 630.2 nm
Extremely weak signals, but linear polarization clearly seen.
Large asymmetries.

1. What kind of model would you use to invert them?
2. Use three cycles with increasing number of nodes.
3. Invert stray-light fraction, microturbulence (flat stratification).
4. Interpret resulting model .

No need for macroturbulence when high-resolution data are inverted using telescope PSF
Use following weights: 1,4,4,4