Comparing Hinode SOT/NFI observations with numerical simulations

Bernhard Fleck

ESA

Thomas Straus INAF/OAC

Mats Carlsson

ITA Oslo

Giuseppe Severino

INAF/OAC

Theodore Tarbell

LMSAL

Abstract. In our efforts to study the dynamics and energetics of acoustic-gravity waves in the solar atmosphere we have acquired high-resolution, high-cadence time series with Hinode SOT/NFI at two different levels in the Mg b2 or Na D1 lines. To guide our interpretation of these observations, we compare them to numerical simulations of the solar atmosphere as seen through the Hinode narrow band filters. Two simulations are studied, one using the CO5BOLD code with line formation in LTE, the other one using the Oslo Stagger code with line formation in NLTE. The implications are discussed.