M18c FREQUENCY DOMAIN FILTERING OF HINODE SOT MOVIES OF THE CHROMOSPHERE IN CA II

○ Bart DePontieu and Scott McIntosh (SWRC and HAO/NCAR), SOT team

Hinode SOT movies taken in the core of the Ca II H line at 396.8 nm show the solar chromosphere near and above the limb, with little photospheric contamination due to the filter's narrow spectral width, 0.2 nm. These time series have good photometric accuracy and superb image quality and stability; some have cadence as short as 5 seconds. We present results of filtering them in the time domain for various frequency ranges, from 3 to 50 mHz. Both quiet sun and active region data have been analyzed, and simultaneous TRACE results will be shown if available. Propagating power in the 3-5 mHz range is seen in many structures above the limb; higher frequencies are also seen. We give interpretations of the type of wave modes observed in various features and present evidence that at least two qualitatively different types of structures are seen.