

Data set description

Background: The data set was acquired with a diagnostic setup at NSO/DKIST, built in collaboration with the Max Planck Institut für Sonnensystemforschung in Göttingen, Germany. The setup was temporarily installed in front of the Visible Spectro-Polarimeter's spectrograph entry slit, and removed at the end of the data acquisition for the diagnostic test.

Acquisition parameters:

- Observed wavelength: 416 nm
- Filter bandpass: 0.5 nm (FWHM)
 - Specifics available here:
<https://alluxa.com/optical-filter-catalog/ultra-narrow-bandpass/416-06-0-5-od6-ultra-narrow-bandpass/>
- Field of view: $\sim 8 \times 6$ arcsec
- Pixel scale: ~ 0.00825 arcsec
- Acquisition frame rate: 740 Hz
- 2000 frames result in one reconstructed frame
 - MFBF reconstructions were computed for mutually exclusive sets of 2000 frames
 - Speckle reconstructions were computed for sets of 2000 frames that overlapped by 1000 frames, leading to (pseudo-)increased cadence. The additional frames are provided as convenience.
- Exposure time: 100 μ s
- Duration: ~ 3 minutes

Related DKIST data acquired time near:

- VBI red (alternating, each ~ 6.5 sec cadence)
 - H-alpha (656 nm)
 - Red continuum (668 nm)
- DL-NIRSP (spectro-polarimetric map)
 - Ca II IR (854 nm)
 - Fe I (1565 nm)

Questions & Credit

Friedrich Wöger, National Solar Observatory

Michiel van Noort, Max Planck Institut für Sonnensystemforschung