

The IBIS Mosaic

¹Gianna Cauzzi, ²Kevin Reardon (¹*INAF - Osservatorio di Arcetri*, ²*INAF - Osservatorio di Arcetri*)

gcauzzi@gmail.com

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Existing and planned instrumentation for large solar telescopes is tailored to exploit the high spatial resolution affordable with such facilities. However, the typical instrumental tradeoffs restrict the field-of-view accessible at once to rather small areas (well below 100" diameter): this represents a serious impediment for study of the active Sun, where large scale magnetic connectivity is of much relevance.

Mosaicking offers a possibility to obtain high-resolution observations over a large FOV, but the technique has been only sparsely utilized at ground-based, optical telescopes. In this poster we report on an investigation of the feasibility and utility of mosaic observations with a state-of-the-art facility, the Interferometric BIdimensional Spectrometer instrument (IBIS) installed at the Dunn Solar Telescope (NSO). We obtained a 3 x 3 mosaic, covering the full AR NOAA 11092 for a total field in excess of 4' x 4', sampling both photospheric and chromospheric lines. We report on the methods utilized for observation and assembly of the data cubes, and some preliminary comparisons with simultaneous observations from other instruments.