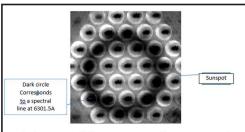


U R Rao Satellite Centre Indian Space Research Organisation



Imaging Spectro-polarimeter in the visible and NIR band

U R Rao Satellite Centre (URSC) of Indian Space Research Organization (ISRO) has developed a novel design by combining Fabry-perot and lens-let arrays which can provide a single shot 2D spectroscopy of region-of-interest on the Sun.



Multiple image of the same FOV (of a Sunspot) with a lenslet and Fabry-perot combination. The central dark circle corresponds to an absorption line from the Sun at 630.15nm. In a single shot both the 2D image of FOV as well as the spectral information captured.

Salient Features

- + Compact System without any moving elements.
- + Provides single shot high resolution spectroscopy of identified FOV.
- + Optimized for Solar Spectroscopy.

Major Specifications

- → Combining Lenslet array and Fabry-perot etalon, a single shot 2D imaging spectroscopy was achieved without any tuning/movable elements.
- ★ Field of View of the region ~ 1 arcmin.
- → Spectral resolution with single Fabry-Perot > 30000 at 600.0nm.
- **→** Spectral range with 7 X 7 lenslet ~ 0.1nm.
- → The FOV and spectral range can be varied with appropriate lenses.

Technology Transfer

Technology TransferURSC/ISRO offers to transfer this technology of Imaging Spectropolarimeter in the visible and NIR band developed by URSC to industries in India with adequate experience and facilities. Industries interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities.

