

Session 1

## **Spectro-polarimetric capability of SUNRISE III SCIP**

Y. Katsukawa<sup>[1]</sup>, M. Kubo<sup>[1]</sup>, Y. Kawabata<sup>[1]</sup>, T. Oba<sup>[1]</sup>, T. Matsumoto<sup>[2]</sup>,  
R. T. Ishikawa<sup>[1]</sup>, H. Hara<sup>[1]</sup>, T. Shimizu<sup>[3]</sup>, F. Uraguchi<sup>[1]</sup>, T. Tsuzuki<sup>[1]</sup>, Y. Nodomi<sup>[1]</sup>,  
K. Shinoda<sup>[1]</sup>, T. Tamura<sup>[1]</sup>, Y. Suematsu<sup>[1]</sup>, C. Quintero Noda<sup>[4]</sup>,  
J. C. del Toro Inesta<sup>[5]</sup>, A. Sánchez Gómez<sup>[6]</sup>, D. Hernández Expósito<sup>[4]</sup>,  
D. Orozco Suárez<sup>[6]</sup>, M. Balaguer Jiménez<sup>[6]</sup>, E. Bailón Martínez<sup>[6]</sup>,  
J. M. Morales Fernández<sup>[6]</sup>, A. Moreno Mantas<sup>[6]</sup>, S. Solanki<sup>[7]</sup>, A. Lagg<sup>[7]</sup>,  
A. Gandorfer<sup>[7]</sup>, A. Feller<sup>[7]</sup>

<sup>[1]</sup> NAOJ, <sup>[2]</sup> Nagoya U., <sup>[3]</sup> ISAS/JAXA, <sup>[4]</sup> IAC, <sup>[5]</sup> IAA-CSC, <sup>[6]</sup> IAA-CSIC, <sup>[7]</sup> MPS

For the third flight of the international balloon project SUNRISE, the team led by NAOJ provides the near-infrared spectro-polarimeter (SCIP) through international collaboration with the Spanish and German teams. By combining the 1-meter aperture telescope, SCIP will simultaneously obtain spectro-polarimetric data of many spectral lines including Ca II 854.2 nm and 849.8 nm, K I D1/D2 lines, and Fe I 846.8 nm with a resolution higher than that of the HINODE Solar Optical Telescope. The observation will allow us to observe the three-dimensional magnetic field structure and its time evolution from the photosphere to the chromosphere and clarify the transport and dissipation processes of magnetic energies. We present here the capability of SCIP along with calibration results obtained from ground tests.