

Optical observation of the oxygen ion using the extreme ultraviolet sensor (XUV) on board the sounding rocket SS-520-2

Atsushi Yamazaki[1], Shinichi Tashiro[2], Masato Nakamura[3], Wataru Miyake[2], Ichiro Yoshikawa[4], Yoshiyuki Takizawa[5]

[1] Univ. of Tokyo, [2] CRL, [3] Earth and Planetary Sci, Univ. Tokyo, [4] ISAS, [5] RIKEN

We have built the extreme ultraviolet sensor (XUV) for the sounding rocket SS-520-2 which is launched from the Svalbard Rocket Experiment Site, Ny Aalesund in Norway. The sensor is sensitive to the O II 83.4-nm emission and used the thick In filter as the bandpass filter in order to eliminate the H Lyman- α 121.6-nm emission. The preliminary result of the sensor is seemed to consist of two components, which are originated from the oxygen ions in the ionosphere and the outward flowing ions in its polar region.