

国際宇宙ステーション搭載・宇宙環境計測装置による宇宙環境の観測

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Space Environment Data Acquisition with KIBO Exposed Facility on International Space Station (ISS)

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It is very important to acquire space environmental data about space radiation degradation of space parts & materials and space craft anomalies for space craft design and manned space activity. The Space Environment Data Acquisition equipment (SEDA) will be launched by NASA's Space Shuttle and will be attached to the KIBO Exposed Facility on the International Space Station (ISS) early next year. It will measure space environment data at 400km altitude above the ground. SEDA has eight measurement units as following,

- (1) Neutron Monitor
- (2) Heavy Ion Telescope
- (3) Plasma Monitor
- (4) Standard Dose Monitor
- (5) Atomic Oxygen Monitor
- (6) Electronic Device Evaluation Equipment
- (7) Micro-Particles Capture
- (8) Space Environment Exposure Device.

The on-orbit experiment by each sensor will be conducted simultaneously for approximately 3 years. All the space environment data, which include the data of SEDA, are opened to the public by Space Environment & Effect System (SEES; <http://sees.tksc.jaxa.jp>) and will be used widely by academic and industrial users in laboratories, universities, and JEM experiment investigators, etc. in spacecraft operation, engineering field and scientific research.