

## Examination of the instruments to observe the interaction between the Martian atmosphere and solar wind

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Mars has been explored by many US and European satellites in these ten years. In Japan, the Nozomi satellite was launched in 1998 to investigate the interaction between the solar wind and Martian atmosphere. However, it could not be inserted into the orbit around Mars, and the Nozomi project was terminated in December 2003. After that we do not have any project in which the solar wind - atmosphere interaction is principally aimed to be investigated. Meanwhile recent Martian missions have brought new information about the distributions of water and carbon dioxide on Mars. The scientific objectives for next Martian exploration project should be defined based on these recent results.

The specific method to study the interesting scientific topics presented in this session has been examined. The sorts and performance of scientific instruments as well as the requirements to the satellite system and schedule should be defined. The collaboration with the activities other than the Martian plasma study and abroad activities has been examined.