

The aim of the Union Session "Developing the Road Map for Earth and Planetary Research

*Ryoichi Fujii¹, Hodaka Kawahata², Eiichi Tajika³, Shigeko Haruyama⁴

1. Research Organization of Information and Systems, 2. Atmosphere Ocean Research Institute, the University of Tokyo, 3. Department of Earth and Planetary Science, Graduate School of Science, The University of Tokyo, 4. Department of Environmental Science, Graduate School of Bioresources, Mie University

The aim of this session is to offer an opportunity for scientists from across the country to discuss what it takes to advance earth and planetary science research. In order to advance earth and planetary science studies, it is essential to have an action plan that provides the framework for building upon basic and applied research work by individual scientists to further expand the scopes of the studies. Thus, this session aims to engender discussions and ideas that would help further flesh out the “Dream Roadmap for Science and Engineering Research” (“roadmap”) particularly for Earth and Planetary Science Research in accordance with its progress /development. Cognizant of the importance of defining steps to reach its goals, the Science Council of Japan has created the “Masterplan for Advancing Major Academic Research” (“masterplan”). The “masterplan” provides an overview of the entire field of science and sets a direction for the country’ s large-scale research projects, which the “roadmap” should include. The “masterplan” was developed in 2010, followed by revisions in 2011, 2014 and 2017. In the meantime, the Council introduced the “roadmap” in 2011 and revised in 2014. These two have thus been revised over the years to adjust to each other so they can together help promote the advancement of the research in the field. In earth and planetary sciences, there is a separate roadmap for each of the following major research areas: Space and planetary science; hydrospheric atmospheric science; human geosciences; solid earth sciences; and earth life sciences. This segmentation corresponds with how the Japan Geoscience Union subdivides the field. This Union Session, in closer collaboration of the Council with JpGU, particularly with the five science sections, kicks off the project to take a close look at the changes that occurred in the field of earth and planetary sciences since 2014 and update each of those “roadmaps” with the nuts and bolts. The new “roadmaps” should reflect the large-scale projects being considered in each research segment as well as cross-segment projects. The session is going to spur ambitious proposals and active discussions about the future of earth and planetary sciences and "roadmaps" for research in all of the five segments as well as cross-segment research.

Keywords: earth and planetary sciences, Dream Roadmap for Science and Engineering Research by the Science Council of Japan, JpGU science sections, Masterplan for Advancing Major Academic Research