Collaborative Research based on MU Radar and Equatorial Atmosphere Radar in December 2017-May 2018

| NT.        |                     |                            | arch based on MU Radar and Equatorial Atmosphere Radar in December 2017-May 2018  |
|------------|---------------------|----------------------------|---|
| No.<br>L52 | PI<br>K. Sato       | Affiliation Univ. of Tokyo | Research Title Simultaneous observation campaign with worldwide MST/IS radar network  |
| F53        | Y. Maekawa          | Osaka EC. Univ.            | A study on the effects of precipitating clouds on the propagation paths of satellite communications   |
|            |                     | Kyoto Univ.                | Development and test of digital receiver system for new satellite-ground beacon experiment  |
|            | K. Shiokawa         | Nagoya Univ.               | Cooperative observation of the upper atmosphere using the Optical Mesosphere Thermosphere Imagers, EAR, and the MU radar  |
|            | H. Hashiguchi       | Kyoto Univ.                | Development of MU Radar Real-time Processing System with Adaptive Clutter Rejection   |
|            |                     | Kyoto Univ.                | Development of imaging wind profiler radar and measurement of fine-scale turbulence in the lower atmosphere   |
| A59        | M. Yabuki           | Kyoto Univ.                | Development of a compact rotational Raman lidar for temperature measurements  |
| A60        | T. Yoshihara        | ENRI                       | Quality evaluation and new utilization of horizontal winds derived from SSR mode S messages broadcasted by aircraft onboard transponders  |
| A61        | Y. Shibagaki        | Osaka EC. Univ.            | Studies on Development and Organization of Frontal Disturbances with MU and Meteorological Radars   |
| A62        | T. Shimomai         | Shimane Univ.              | DSD estimation by using the MU radar, BLR, MRR  |
| A63        | M. Yabuki           | Kyoto Univ.                | Validation of air quality measurement techniques through combinations of remote-sensing and in-situ instruments   |
| A64        | M. Yabuki           | Kyoto Univ.                | A study on radio-optical atmospheric probing techniques for spatiotemporal distributions of water vapor   |
| A65        | E. Nakakita         | Kyoto Univ.                | Hydrologic Cycle Analysis on Forest Watershed Using Forest Tower Observation, and Feasibility of Observation by Remote Sensing Technique for Validation   |
| A66        | RISH                |                            | Middle Atmosphere Standard Observation with the MU Radar (GRATMAC)  |
| B67        | H. Yamakawa         | Kyoto Univ.                | Shape Estimation and Orbit Determination of Space Debris Using MU Radar   |
| B68        | Jenn-Shyong<br>Chen | China Medical Univ.        | Three-dimensional radar imaging of field-aligned irregularities with multireceiver and multifrequency techniques  |
| B69        | S. Saito            | ENRI                       | Validation of real-time ionospheric 3-D tomography  |
| B70        | Johan Kero          | IRF                        | Common volume MU radar and Kiso Observatory Tomo-e telescopic meteor observations   |
| B71        | A. Abe              | Nihon Univ.                | Simultaneous Ultra-faint Meteor Observation using MU Radar and Kiso Schmidt Telescope with Tomo-e GOZEN Camera  |
| B72        | Sergii Panasenko    | Institute of<br>Ionosphere | Coordinated observations of light ions and TIDs with Shigaraki MU and Kharkiv IS radars   |
| B73        | T. Iyemori          | Kyoto Univ.                | Effects of ionospheric E-fields, winds and lower atmospheric disturbances on geomagnetic variations   |
| B74        | RISH                |                            | Ionospheric Standard Observation with the MU Radar  |
| C75        | Ina Juaeni          | LAPAN                      | Life cycle of thermal convection: Observation and Numerical Simulation  |
| C76        | Marzuki             | Andalas Univ.              | Improvement of vertical profiles of raindrop size distribution from MRR using Parsivel measurements   |
|            | Marzuki             | Andalas Univ.              | Variability of rain drop size distribution at Kototabang and Padang   |
| C78        | Marzuki             | Andalas Univ.              | Long-Term Observation of Vertical Profile of Raindrop Size Distribution over Sumatra  |
|            | S. Mori             | JAMSTEC                    | Temporal modulation of eastward moving convective intraseasonal variation (ISV) passing over the Indonesian maritime continent  |
| C80        | Y. Shibagaki        | Osaka EC. Univ.            | Multi-scale structure of convective systems in Indonesian Maritime Continent  |
| C81        | M. Abo              | Tokyo Metro. Univ.         | Observation of atmospheric wave propagation from troposphere to mesosphere at equatorial region   |
| C82        | Y. Shibata          | Tokyo Metro. Univ.         | Lidar observation of the equatorial ozone in the tropopause region  |
| _          | H. Hashiguchi       | Kyoto Univ.                | Observational study on fine structure of clear air turbulence in the tropical troposphere   |
|            | H. Hashiguchi       | Kyoto Univ.                | Development of an EAR multi-channel receiving system using digital receivers  |
|            | T. Shimomai         | Shimane Univ.              | Observation of small scale atmospheric waves by an all sky camera at Kototabang   |
| C86        | T. Shimomai         | Shimane Univ.              | Evaluation of GPM-DPR observation data at Kototabang  |
|            |                     | Kyoto Univ.                | Overseas field training in Equatorial Atmosphere Observatory  |
|            | Y. Otsuka           | Nagoya Univ.               | Radar observations of the field-aligned irregularities in the ionosphere in Indonesia   |
| D89        | S. Saito            | ENRI                       | Studies of spatial gradient in TEC and plasma bubble monitoring for GNSS  Study on the onset and propagation mechanism of equatorial spread E with EAP. NICT ionospheric observation network, and           |
|            | T. Yokoyama         | NICT                       | Study on the onset and propagation mechanism of equatorial spread F with EAR, NICT ionospheric observation network, and GPS receiver network  |
|            | M. Yamamoto         | Kyoto Univ.                | Study of equatorial Spread-F with satellite-ground beacon experiment and the Equatorial Atmosphere Radar  |
| CD92       | Findy Renggono      | ВРРТ                       | Study on drop size distributions based on Equatorial Atmosphere Radar observations  Correlation Studies of Wind Potterns at multiple Leastions to Model Climate and its significance for the Projections of |
|            | Swati Sinha         | BITS Pilani                | Correlation Studies of Wind Patterns at multiple Locations to Model Climate and its significance for the Projections of Continental Weather Changes   |
| C94        | T. Tsuda            | Kyoto Univ.                | Observations of GNSS-PWV and GNSS-TEC at the EAR observatory  |