

### Collaborative Research based on MU Radar and Equatorial Atmosphere Radar in December 2021-May 2022

Project No.	Reception No.	PI	Affiliation	Research Title
L38	C03	K. Sato	Univ. of Tokyo	Simultaneous observation campaign with worldwide MST/IS radar network
F39	G36	Y. Maekawa	Osaka E.-C. Univ.	A study on the effects of precipitating clouds on the propagation paths of satellite communications
F40	G04	K. Shiokawa	Nagoya Univ.	Cooperative observation of the upper atmosphere using the Optical Mesosphere Thermosphere Imagers, EAR, and the MU radar
A41	G35	K. Nishimura	Kyoto Univ.	Renewing the Observation and Analysis Methods based on the Spectral Inverse Scattering Theory
A42	G33	T. Matsuda	Kyoto Univ.	Development of MIMO radar techniques using the MU radar
A43	G25	M. Kohma	Univ. of Tokyo	Validation of the turbulence energy dissipation rates estimated from radiosondes based on MU radar observations
A44	G31	H. Hashiguchi	Kyoto Univ.	Development of MU Radar Real-time Processing System with Adaptive Clutter Rejection
A45	G37	T. Shimomai	Shimane Univ.	Observations of small scale atmospheric waves by all sky cameras at Shigaraki
A46	G26	M. Yabuki	Kyoto Univ.	Development of a compact rotational Raman lidar for temperature measurements
A47	G11	T. Yoshihara	ENRI	Quality evaluation and new utilization of meteorological observational information derived from broadcasted messages by aircraft onboard transponders
A48	G21	Y. Shibagaki	Osaka E.-C. Univ.	Studies on Development and Organization of Frontal Disturbances with MU and Meteorological Radars
A49	G18	M. Yabuki	Kyoto Univ.	Validation of air quality measurement techniques through combinations of remote-sensing and in-situ instruments
A50	G23	E. Nakakita	Kyoto Univ.	Hydrologic Cycle Analysis on Forest Watershed Using Forest Tower Observation, and Feasibility of Observation by Remote Sensing Technique for Validation
A51	G24	S. Mori	JAMSTEC	Maritime Continent automatic dependent Air-sea observation Network (MaCAN)
A52		RISH		Middle Atmosphere Standard Observation with the MU Radar (GRATMAC)
B53	C02	Jenn-Shyong Chen	China Medical Univ.	Measurement of aspect sensitivity of field-aligned plasma irregularities using the radar imaging technique based on multireceiver and multifrequency observation
B54	G30	K. Hosokawa	Univ. of Electro-Communications	Integrated observations of sporadic E with MU radar and HF Doppler sounder
B55	G28	S. Saito	ENRI	Validation and improvement of real-time ionospheric 3-D tomography
B56		RISH		Ionospheric Standard Observation with the MU Radar
C57	G27	H. Hashiguchi	Kyoto Univ.	Development of real-time ray-tracing and wind correction methods for EAR-RASS
C58	G29	S. Mori	JAMSTEC	Temporal modulation of eastward moving convective intraseasonal variation (ISV) passing over the Indonesian maritime continent
C59	G12	R. Wilson	LATMOS	EAR Observations in Support of Strateole-2 (EAROS2)
C60	G22	Y. Shibagaki	Osaka E.-C. Univ.	Multi-scale structure of convective systems in Indonesian Maritime Continent
C61	G06	M. Abo	Tokyo Metro. Univ.	Monitoring of the tropospheric and stratospheric aerosols by the equatorial lidar
C62	G01	Y. Shibata	Tokyo Metro. Univ.	Observations of vertical haze profile using polarized lidar over equatorial Indonesia
C63	G08	H. Hashiguchi	Kyoto Univ.	Observational study on fine structure of clear air turbulence in the tropical troposphere
C64	G13	H. Hashiguchi	Kyoto Univ.	Development of an EAR multi-channel receiving system using digital receivers
C65	G20	T. Shimomai	Shimane Univ.	Observation of small scale atmospheric waves by an all sky camera at Kototabang
C66	G16	H. Hashiguchi	Kyoto Univ.	Observations of GNSS-PWV and GNSS-TEC at the EAR observatory
D67	G32	Y. Otsuka	Nagoya Univ.	Radar observations of the field-aligned irregularities in the ionosphere in Indonesia
D68	G15	S. Saito	ENRI	Studies of spatial gradient in TEC and plasma bubble monitoring for GNSS
D69	G02	M. Nishioka	NICT	Observation of plasma bubble using data of EAR, SEALION and ground-based GPS receivers
D70	G14	M. Yamamoto	Kyoto Univ.	Study of equatorial Spread-F with satellite-ground beacon experiment and the Equatorial Atmosphere Radar
E71	G34	H. Hashiguchi	Kyoto Univ.	Development of MU radar phase calibration system
FD72	D03	M. Kohma	Univ. of Tokyo	A study of the climatological characteristics of turbulent energy dissipation rates based on the MU radar, Equatorial Atmosphere Radar, and PANSY radar observations
CD73	D04	S. Shige	Kyoto Univ.	Study on Stratiform Precipitation Processes
CD74	D06	Marzuki	Andalas Univ.	Variability of rain drop size distribution at Kototabang and Sicincin
DD75	D05	Martiningrum Dyah Rahayu	LAPAN	A Multi-instruments and Multi-scales Study of Ionospheric Irregularities over South-East Asia as a Part of Space Situational Awareness
BD76	D02	M. Yamamoto	Kyoto Univ.	Evaluation of GPS ionosphere tomography analysis by using MU radar observation database
CD77	D01	Findy Renggono	BPPT	Study on drop size distributions based on Equatorial Atmosphere Radar observations

Reception No. CXX: 2021-RISH-MU/EAR-Campaign-000XX  
GXX: 2021-RISH-MU/EAR-General-000XX  
DXX: 2021-RISH-MU/EAR-Database-000XX