

**Collaborative Research based on MU Radar and Equatorial Atmosphere Radar in June 2024-November 2024**

No.	PI	Affiliation	Research Title
L01	S. Shige	Kyoto Univ.	Observation of precipitating ice particles in regions of stratiform precipitation
F02	Y. Maekawa	Osaka E.-C. Univ.	A study on the effects of precipitating clouds on the propagation paths of satellite communications
F03	K. Shiokawa	Nagoya Univ.	Cooperative observation of the upper atmosphere using the Optical Mesosphere Thermosphere Imagers, EAR, and the MU radar
F04	Guozhu Li	IGGCAS	Study on the generation and evolution of equatorial plasma bubbles over East/Southeast Asia using VHF and HF radars, and GNSS receiver network observations
A05	H. Hashiguchi	Kyoto Univ.	Development of MIMO radar techniques using the MU radar
A06	T. Yoshihara	ENRI	Development and application of wind information derived from aircraft surveillance systems
A07	Y. Shibagaki	Osaka E.-C. Univ.	Studies on Development and Organization of Frontal Disturbances with MU and Meteorological Radars
A08	M. Kohma	Univ. of Tokyo	Estimation of turbulent energy dissipation rates based on radiosonde observations and its validation by MU radar
A09	M. Yabuki	Kyoto Univ.	Feasibility study for smart agriculture applications using a vehicle lidar
A10	T. Sakazaki	Kyoto Univ.	Laboratory Work in Earth & Planetary Sciences DD
A11	H. Hashiguchi	Kyoto Univ.	Field Laboratories in Multi-scale Earth Dynamics II
A12	M. Okazaki	Kyoto Univ.	Three-dimensional temporal evolution of drop size distributions in a mixed stratiform and convective precipitation system
A13	K. Nishijima	Kyoto Univ.	Study of the microscale structure of atmospheric boundary layer using the small high-resolution Doppler LiDAR
A14	H. Hashiguchi	Kyoto Univ.	Development of Real-time Processing System with Adaptive Clutter Rejection for the MU Radar and LQ-7
A15	T. Hashimoto	NIPR	Data quality evaluation of the SSR meteorological observation system
A16	T. Shimomai	Shimane Univ.	Observations of small scale atmospheric waves by all sky cameras at Shigaraki
A17	M. Yabuki	Kyoto Univ.	Research on advanced technology for temperature and water vapor Raman lidar
A18	L. Nofel	Kyushu Univ.	Quantification of Nighttime Cloud Coverage in Japan Using Continuously Operated Cameras
A19	H. Hashiguchi	Kyoto Univ.	Observational study of three-dimensional structure near Typhoon center
A20	RISH		Middle Atmosphere Standard Observation with the MU Radar (GRATMAC)
B21	H. Takasaki	Kyoto Univ.	High Accuracy Orbit Determination Method with MU Radar
B22	Zhen-Xiong You	China Medical Univ.	Measurement of aspect sensitivity of F region FAIs using multiple receiver technique
B23	S. Saito	ENRI	Validation and improvement of real-time ionospheric 3-D tomography
B24	RISH		Ionospheric Standard Observation with the MU Radar
C25	Y. Shibagaki	Osaka E.-C. Univ.	Multi-scale structure of convective systems in Indonesian Maritime Continent
C26	Trismidianto	PRIMA, BRIN	Study of The Coastal Mesoscale Convective Complex as Triggering Deep Convective Initiation over West Sumatra using EAR, Observation and Numerical Simulation
C27	Listi Restu Triani	PRIMA, BRIN	Exploration of Retrieval Approach for Radiosonde Vertical Velocity utilizing EAR Data as Reference
C28	M. Abo	Tokyo Metro. Univ.	Monitoring of the tropospheric and stratospheric aerosols by the equatorial lidar
C29	Y. Shibata	Tokyo Metro. Univ.	Haze profile measurement over Sumatra Island Indonesia using polarization lidar
C30	T. Shimomai	Shimane Univ.	Observations of small scale atmospheric waves by all sky cameras at Kototabang
C31	H. Hashiguchi	Kyoto Univ.	Observations of GNSS-PWV and GNSS-TEC at the EAR observatory
C32	H. Hashiguchi	Kyoto Univ.	Development of EAR-RASS using Post Beam Steering technique
D33	M. Yamamoto	Kyoto Univ.	Study of equatorial Spread-F with satellite-ground beacon experiment and the Equatorial Atmosphere Radar
D34	Y. Otsuka	Nagoya Univ.	Radar observations of the field-aligned irregularities in the ionosphere in Indonesia
D35	S. Saito	ENRI	Studies of spatial gradient in TEC and plasma bubble monitoring for GNSS
D36	M. Nishioka	NICT	Observation of plasma bubble using data of EAR, SEALION and ground-based GPS receivers
E37	H. Hashiguchi	Kyoto Univ.	Development of MU radar phase calibration system
FD38	S. Shige	Kyoto Univ.	Estimation of vertical air motion within precipitating clouds and its application to the study of precipitation processes
BD39	T. Yokoyama	Kyoto Univ.	Construction of MU radar ionospheric observation database to contribute to IRI model
BD40	H. Hashiguchi	Kyoto Univ.	Study of Ionospheric Structure and Dynamics in the F Region Using MU Radar and Ionosonde Data
CD41	Marzuki	Andalas Univ.	Variability of rain drop size distribution at Kototabang and Sicincin
CD42	Marzuki	Andalas Univ.	Variability of Tropospheric Wind and Cloud Layer at Kototabang for each Madden–Julian Oscillation (MJO) phase from Equatorial Atmospheric Radar Observation, ERA-5 and Ceilometer Data
CD43	Findy Renggono	PRIMA, BRIN	Study on drop size distributions based on Equatorial Atmosphere Radar observations
CD44	Noersomadi	PRIMA, BRIN	Study on Equatorial Troposphere-Stratosphere Variability using EAR-RASS Observation, Radiosonde and GNSS Radio Occultation
A45	K. Yorozu	Kyoto Univ.	Hydrologic Cycle Analysis on Forest Watershed Using Forest Tower and UAV Observation, and Feasibility of Observation by Remote Sensing Technique for Validation