

### Collaborative Research based on MU Radar and Equatorial Atmosphere Radar in June-November 2023

No.	PI	Affiliation	Research Title
L01	S. Shige	Kyoto Univ.	Observation of precipitating ice particles in regions of stratiform precipitation
L02	H. Luce	Kyoto Univ.	Turbulence observation campaign with the MU radar and HYFLITS balloons
L03	H. Luce	Kyoto Univ.	A multi-instrument measurement campaign to evaluate models used to retrieve turbulence parameters in the boundary layer
F04	K. Shiokawa	Nagoya Univ.	Cooperative observation of the upper atmosphere using the Optical Mesosphere Thermosphere Imagers, EAR, and the MU radar
F05	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
F06	Y. Maekawa	Osaka E.-C. Univ.	A study on the effects of precipitating clouds on the propagation paths of satellite communications
A07	K. Nishimura	Kyoto Univ.	Renewing the Observation and Analysis Methods based on the Spectral Inverse Scattering Theory
A08	T. Matsuda	Kyoto Univ.	Development of MIMO radar techniques using the MU radar
A09	H. Hashiguchi	Kyoto Univ.	Observational study of three-dimensional structure near Typhoon center
A10	M. Okazaki	Kyoto Univ.	Elucidation of the formation process of drop size distributions based on Lagrangian time evolution of cloud water
A11	T. Yoshihara	ENRI	Development and application of wind information derived from aircraft surveillance systems
A12	Y. Shibagaki	Osaka E.-C. Univ.	Studies on Development and Organization of Frontal Disturbances with MU and Meteorological Radars
A13	E. Nakakita	Kyoto Univ.	Hydrologic Cycle Analysis on Forest Watershed Using Forest Tower Observation, and Feasibility of Observation by Remote Sensing Technique for Validation
A14	M. Yabuki	Kyoto Univ.	Validation of air quality measurement techniques through combinations of remote-sensing and in-situ instruments
A15	T. Sakazaki	Kyoto Univ.	Laboratory Work in Earth & Planetary Sciences DD
A16	H. Hashiguchi	Kyoto Univ.	Development of MU Radar Real-time Processing System with Adaptive Clutter Rejection
A17	T. Shimomai	Shimane Univ.	Observations of small scale atmospheric waves by all sky cameras at Shigaraki
A18	M. Yabuki	Kyoto Univ.	Research on advanced technology for temperature and water vapor Raman lidar
A19	L. Nofel	Chiba Univ.	Quantification of Nighttime Cloud Coverage in Japan Using Continuously Operated Cameras
A20	RISH		Middle Atmosphere Standard Observation with the MU Radar (GRATMAC)
B21	Jenn-Shyong Chen	China Medical Univ.	Aspect sensitivity of E region FAIs in Doppler spectral domain using multiple receiver technique
B22	S. Saito	ENRI	Validation of real-time ionospheric 3-D tomography
B23	RISH		Ionospheric Standard Observation with the MU Radar
C24	H. Hashiguchi	Kyoto Univ.	Development of EAR-RASS using Post Beam Steering technique
C25	Y. Shibagaki	Osaka E.-C. Univ.	Multi-scale structure of convective systems in Indonesian Maritime Continent
C26	Ina Juaeni	PRIMA, BRIN	Examination of 3-6 day disturbances at Kototabang (West Sumatera, Indonesia) based on Equatorial Atmospheric Radar Observation
C27	M. Abo	Tokyo Metro. Univ.	Monitoring of the tropospheric and stratospheric aerosols by the equatorial lidar
C28	Y. Shibata	Tokyo Metro. Univ.	Haze profile measurement over Sumatra Island Indonesia using polarization lidar
C29	H. Hashiguchi	Kyoto Univ.	Development of an EAR multi-channel receiving system using digital receivers
C30	H. Hashiguchi	Kyoto Univ.	Observations of GNSS-PWV and GNSS-TEC at the EAR observatory
C31	P. Anis	BRIN	The Utilization of Ceilometer for Analyzing Convective Activity Initiation and Moisture Budget during MJO over Kototabang
D32	S. Saito	ENRI	Studies of spatial gradient in TEC and plasma bubble monitoring for GNSS
D33	M. Nishioka	NICT	Observation of plasma bubble using data of EAR, SEALION and ground-based GPS receivers
D34	M. Yamamoto	Kyoto Univ.	Study of equatorial Spread-F with satellite-ground beacon experiment and the Equatorial Atmosphere Radar
D35	Y. Otsuka	Nagoya Univ.	Radar observations of the field-aligned irregularities in the ionosphere in Indonesia
E36	H. Hashiguchi	Kyoto Univ.	Development of MU radar phase calibration system
FD37	S. Shige	Kyoto Univ.	Estimation of vertical air motion within precipitating clouds and its application to the study of precipitation processes
FD38	S. Shige	Kyoto Univ.	Study on Stratiform Precipitation Processes
BD39	T. Takami	Osaka E.-C. Univ.	Big Data Processing and Data Visualization Using Ionospheric IS Observation Data
BD40	T. Yokoyama	Kyoto Univ.	Construction of MU radar ionospheric observation database to contribute to IRI model
BD41	H. Hashiguchi	Kyoto Univ.	Study of Ionospheric Structure and Dynamics in the F Region Using MU Radar and Ionosonde Data
BD42	H. Takasaki	Kyoto Univ.	Development of Orbital Prediction Model for LEO Debris and Satellites by Using the MU Radar Data
CD43	Wendi Harjupa	PRIMA, BRIN	Study of Orographic enhancement mechanism during MJO over Sumatera Islands Using EAR, XDR and ERA5 Data
CD44	Didi Satiadi	PRIMA, BRIN	Investigation of Convective Trigger Criteria Based on Observation at Kototabang Station
CD45	Findy Renggono	PRIMA, BRIN	Study on drop size distributions based on Equatorial Atmosphere Radar observations
CD46	Noersomadi	PRIMA, BRIN	Study on Equatorial Troposphere-Stratosphere Variability using EAR-RASS Observation, Radiosonde and GNSS Radio Occultation
CD47	Marzuki	Andalas Univ.	Variability of rain drop size distribution at Kototabang and Sicincin
CD48	Marzuki	Andalas Univ.	Variability of Tropospheric Wind and Cloud Layer at Kototabang for each Madden Julian Oscillation phase
DD49	Yuanlin Jia	Wuhan Univ.	Study of irregularities in the F layer at midnight