

**Collaborative Research based on MU Radar and Equatorial Atmosphere Radar in December 2012-May 2013**

No.	PI	Affiliation	Research Title
F01	K. Shiokawa	Nagoya Univ.	Cooperative observation of the upper atmosphere using the Optical Mesosphere Thermosphere Imagers, EAR, and the MU radar
F02	S. Sridharan	NARL	Simultaneous observations of quasiperiodic echoes at Shigaraki, Koto Tabang and Gadanki
F03	A. K. Patra	NARL	Role of the mid-latitude processes on the formation and evolution of equatorial plasma bubble
F04	A. K. Patra	NARL	Estimation of turbulence parameters using MUR and EAR observations
F05	A. Saito	Kyoto Univ.	Coordinated observation of the MU radar and EAR with the ISS-IMAP mission
F06	Y. Maekawa	Osaka E.-C. Univ.	A study on the effects of precipitating clouds on the propagation paths of satellite communications
F07	J. Furumoto	Kyoto Univ.	Global Radar network for the validation of precipitation data obtained by GPM satellite
A08	H. Hashiguchi	Kyoto Univ.	Study of heavy thunderstorms and snowstorms affecting highway maintenance
A09	M.K. Yamamoto	Kyoto Univ.	Development of imaging wind profiler radar and measurement of fine-scale turbulence in the boundary layer
A10	M. Yabuki	Kyoto Univ.	Development of advanced technologies of a lidar system
A11	K. Takahashi	Kyoto Univ.	Characterization of surface air quality through measurements of trace gases and aerosol particles
A12	T. Nakajo	Fukui Univ. of Tech.	Detailed observation of vertical structure of atmospheric boundary layer by using range-imaging wind profiler radars
A13	Y. Shibagaki	Osaka E.-C. Univ.	Studies on Development and Organization of Frontal Disturbances with MU and Meteorological Radars
A14	K. Yamaguchi	Kyoto Univ.	3D Modeling of Precipitation Process Based on the Direct-Observation of the Vertical Profile of Raindrop Size Distribution
A15	E. Nakakita	Kyoto Univ.	Hydrologic Cycle Analysis on Forest Watershed Using Forest Tower Observation, and Feasibility of Observation by Remote Sensing Technique for Validation
A16	T. Shimomai	Shimane Univ.	DSD estimation by using the MU radar, BLR, MRR
A17	J. Furumoto	Kyoto Univ.	Detailed cloud dynamics observed by the MU radar in sample shift mode and phased-array meteorological radar
A18	J. Furumoto	Kyoto Univ.	Low noise RASS system for L-band wind profiling radar by using the high directional horn speaker
A19	H. Seko	MRI	Estimation of the ground-level humidity variation by detecting transmitted radio-wave from LQ-7
A20	RISH		Middle Atmosphere Standard Observation with the MU Radar (GRATMAC)
B21	T. Iyemori	Kyoto Univ.	Effects of ionospheric E-fields, winds and lower atmospheric disturbances on geomagnetic variations
B22	Y. Otsuka	Nagoya Univ.	MU radar, KASI 40.8-MHz radar and satellite observations of the ionospheric irregularities
B23	M. Abo	Tokyo Metro. Univ.	MU Radar observation of Geminids
B24	Ralph Latteck	Rostock Univ.	Test of the incoherent scatter capability of the MAARSY radar using its system parameters with experiments of the MU radar
B25	M. Yamamoto	Kyoto Univ.	Simultaneous observation of ionosphere E- and F-region irregularity between MU radar and satellite/rocket
B26	M. Yamamoto	Kyoto Univ.	Validation observation for ionosphere tomography with GEONET and satellite beacon experiment
B27	T. Nakamura	NIPR	Observation of metallic ion flux due to meteor shower
B28	T. Nakamura	NIPR	Observation of meteor flux, orbits and interaction with atmosphere by meteor head echo mode with the new MU radar
B29	RISH		Ionospheric Standard Observation with the MU Radar
C30	C. Nagasawa	Tokyo Metro. Univ.	Lidar observation of the equatorial ozone in the tropopause region
C31	M. Abo	Tokyo Metro. Univ.	Observation of atmospheric wave propagation from troposphere to mesosphere at equatorial region
C32	H. Hashiguchi	Kyoto Univ.	Observational study on vertical characteristics of precipitation in the tropics
C33	H. Hashiguchi	Kyoto Univ.	Study on intra-seasonal oscillation based on radar network over maritime continent
C34	Findy Renggono	BPPT	Study on drop size distributions based on Equatorial Atmosphere Radar observations
C35	Y. Shibagaki	Osaka E.-C. Univ.	Multi-scale structure of convective systems in Indonesian Maritime Continent
C36	T. Shimomai	Shimane Univ.	Study on water vapor transport and rainfall based on the radiometer, the EAR and the X band radar observations
D37	Y. Otsuka	Nagoya Univ.	Observations of the field-aligned irregularities in the ionosphere using the EAR and 30.8 MHz radar
D38	M. Yamamoto	Kyoto Univ.	Study of equatorial Spread-F with satellite-ground beacon experiment and the Equatorial Atmosphere Radar
D39	M. Yamamoto	Kyoto Univ.	Research Enhancement and System Establishment for Space Weather in Indonesia
D40	T. Nagatsuma	NICT	Study on the onset and propagation mechanism of equatorial spread F with EAR, NICT ionospheric observation network, and GPS receiver network
A41	J.-S. Chen	Chienkuo Tech. Univ.	Applications of multiple-beam coherent radar imaging to aspect sensitivity and angular structure of the atmosphere