

**Collaborative Research based on Equatorial Atmosphere Radar (EAR) in FY2006**

| No.      | PI            | Affiliation        | Research Title  |
|----------|---------------|--------------------|---|
| 2006-E01 | S. Mori       | JAMSTEC            | Understanding on multi-scale structures of tropical convective systems over the Indonesian maritime continent and validation of TRMM PRH (PR Heating) algorithm                                 |
| 2006-E02 | M. Fujiwara   | Hokkaido Univ.     | Research on the transport processes in the Tropical Tropopause Layer over the eastern Indian Ocean by simultaneous sonde observations at R/V Mirai and at the Equatorial Atmosphere Observatory |
| 2006-E03 | Findy R.      | BPPT               | Study on drop size distributions based on Equatorial Atmosphere Radar observations  |
| 2006-E04 | T.H. Seto     | BPPT               | Study on convection over Sumatra Indonesia in relation to large-scale disturbances  |
| 2006-E05 | M.K. Yamamoto | Kyoyo Univ.        | Simultaneous observation of aerosol and vertical wind in the lower stratosphere by Equatorial Atmosphere Radar  |
| 2006-E06 | N. Nishi      | Kyoto Univ.        | An observational study on the fine-scale distribution of vertical wind in/around the stratiform cloud in the tropical upper troposphere   |
| 2006-E07 | K. Yasunaga   | JAMSTEC            | Investigations on the mechanisms of production, maintenance, and dissipation of the thin cloud layers at the middle troposphere in the tropics  |
| 2006-E08 | C. Nagasawa   | Tokyo Metro. Univ. | Study on temperature and composition structures in the equatorial mesopause region  |
| 2006-E09 | M. Ishii      | NICT               | Study on the onset mechanism of equatorial spread F with EAR and NICT ionospheric observation network   |
| 2006-E10 | T. Ogawa      | Nagoya Univ.       | Study on equatorial ionosphere and thermosphere   |
| 2006-E11 | Y. Otsuka     | Nagoya Univ.       | Observations of the field-aligned irregularities in the E and F regions using the EAR and 30MHz radar   |
| 2006-E12 | Gernot H.     | Kyoto Univ.        | Search for active instability regions in the upper troposphere, TTL, and lower stratosphere regions using high time-resolution multi-frequency interferometry (FII)                             |
| 2006-E13 | T. Tsuda      | Kyoto Univ.        | Detailed Monitoring of Humidity and Temperature Profiles with the EAR-RASS Observation  |
| 2006-E14 | T. Shimomai   | Shimane Univ.      | High time resolution observation of water vapor profiles in the equatorial region   |
| 2006-E15 | T. Kozu       | Shimane Univ.      | Evolution convective clouds, and their coupling with meso- to large-scale precipitation systems   |
| 2006-E16 | H. Hashiguchi | Kyoto Univ.        | Study on intra-seasonal oscillation based on radar network over maritime continent  |
| 2006-E17 | K.K. Reddy    | JAMSTEC            | Characterization of the planetary boundary layer, cloud and precipitation over maritime continent region  |
| 2006-E18 | M. Abo        | Tokyo Metro. Univ. | Study on atmospheric structure in the equatorial troposphere  |
| 2006-E19 | Y. Maekawa    | Osaka E.-C. Univ.  | A study on the distribution of precipitating clouds on the propagation paths of satellite communications in the equatorial region   |
| 2006-E20 | Y. Shibagaki  | Osaka E.-C. Univ.  | Multi-scale structure of convective systems in Indonesian maritime continent  |
| 2006-E21 | M. Fujiwara   | Hokkaido Univ.     | Transport and dehydration processes in the Tropical Tropopause Layer  |
| 2006-E22 | T. Sato       | Kyoyo Univ.        | Functional expansion of the Equatorial Atmosphere Radar with digital receiver arrays  |

**Database**

| No.       | PI            | Affiliation | Research Title  |
|-----------|---------------|-------------|---|
| 2006-ED01 | Asril         | BPPT        | The preliminary study of use of a remote control aircraft in cloud seeding by studying the properties of the seedable   |
| 2006-ED02 | Eddy H.       | LAPAN       | Characteristics and Mechanism of Madden-Julian Oscillation (MJO) Related to the Rainfall Anomalies with the Equatorial Atmosphere Radar (EAR), Boundary Layer Radar (BLR) and Satellite Data Analysis |
| 2006-ED03 | S. Fukao      | Kyoyo Univ. | Observation campaign of tropical cirrus by VHF-band Doppler radar, cloud radar, lidar, weather radar, and   |
| 2006-ED04 | N. Nishi      | Kyoto Univ. | An observational study on the fine-scale distribution of vertical wind in/around the stratiform cloud in the tropical upper troposphere   |
| 2006-ED05 | M.K. Yamamoto | Kyoyo Univ. | Simultaneous observation of aerosol and vertical wind in the lower stratosphere by Equatorial Atmosphere Radar  |