

# EarthCARE Workshop 2014

National Museum of Emerging Science and Innovation (Miraikan)  
17th September - 19th September, 2014

17 Sep 2014 (Wed)		First Day			
start	end	title	speaker		time
9:30	~ 10:30	Registration			1:00
Welcome Session			Chair: Eiichi Tomita		
10:30	~ 10:40	Welcome and Opening from JAXA	Shizuo	Yamamoto	0:10
10:40	~ 10:50	Welcome and Opening from ESA	Philippe	Goudy	0:10
Session 1 EarthCARE Mission			Chair: Hajime Okamoto		
10:50	~ 11:05	EarthCARE science towards understanding nature of clouds, aerosols, radiation and cloud motion	Hajime	Okamoto	0:15
11:05	~ 11:20	EarthCARE Science Overview in Europe	Anthony	Illingworth	0:15
11:20	~ 11:40	EarthCARE Mission Overview and Satellite Status	Alain	Lefebvre	0:20
11:40	~ 11:55	Development Status of the EarthCARE Cloud Profiling Radar	Eiichi	Tomita	0:15
11:55	~ 12:25	EarthCARE/ATLID/MSI/BBR Status	Arnaud	Heliere	0:30
12:25	~ 12:40	The EarthCARE Platform – Design Solutions for a Challenging Mission	Klaus	Kruse	0:15
12:40	~ 14:10	Lunch			1:30
14:10	~ 14:25	EarthCARE JAXA Products	Riko	Oki	0:15
14:25	~ 14:40	EarthCARE ESA Products	Tobias	Wehr	0:15
14:40	~ 14:55	EarthCARE JAXA Ground Segment Overview and Status	Tomomi	Nio	0:15
14:55	~ 15:10	EarthCARE ESA Ground Segment Status and Data Distribution	Michael	Eisinger	0:15
Session 2 Heritage from A-Train			Chair: Anthony Illingworth		
15:10	~ 15:25	A-Train Science highlights emphasizing the value of synergistic observations	Graeme L.	Stephens	0:15
15:25	~ 15:40	Outlook for the performance of the CloudSat Cloud Profiling Radar in the timeframe of the EarthCARE mission	Deborah	Vane	0:15
15:40	~ 15:55	What Types of High Clouds Matter to the Tropical Radiation Budget? A Focus on SE Asian Summer Monsoon	Jay	Mace	0:15
15:55	~ 16:10	CALIPSO, EarthCARE, and Climate Data Records	David M	Winker	0:15
16:10	~ 16:30	Coffee Break			0:20
Session 3 Advances in Active and Passive Geophysical Retrievals			Chair: David Donovan		
16:30	~ 16:45	Doppler velocity error correction caused by inhomogeneous reflectivity	Yuichi	Ohno	0:15
16:45	~ 17:00	EarthCARE L2 algorithm development for cloud microphysics	Kaori	Sato	0:15
17:00	~ 17:15	Correspondence of CPR radar reflectivity with the variation in water cloud properties over the mid-latitude	Kazuaki	Kawamoto	0:15
17:15	~ 17:25	Photo Session			0:10
18:00	~ 20:00	Gala Dinner			

18 Sep 2014 (Thurs)		Second Day			
start	end	title	speaker		time
Session 3 Advances in Active and Passive Geophysical Retrievals (Continue)			Chair: David Donovan		
9:30	~ 9:45	The Performance of the EarthCARE Cloud Profiling Radar in Marine Stratiform Clouds	Pavlos	Kollias	0:15
9:45	~ 10:00	DARDAR products improvements, EarthCARE products preparation	Marie	Ceccaldi	0:15
10:00	~ 10:15	The impact of Multiple Scattering on ATLID Signals.	David Patrick	Donovan	0:15
10:15	~ 10:30	Aerosol and cloud retrieval algorithms from ATLID and MSI measurements	Tomoaki	Nishizawa	0:15
10:30	~ 10:45	Aerosol classification based on ATLID-like observations of lidar ratio and linear depolarization ratio at 355 nm	Ulla	Wandinger	0:15
10:45	~ 11:05	Coffee Break			0:20
11:05	~ 11:20	Aerosol optical properties for EarthCARE/ATLID retrievals using clustering method of AERONET measurements	Eiji	Oikawa	0:15
11:20	~ 11:35	LIVAS: a 3D multi-wavelength aerosol/cloud global climatology based on CALIPSO and EARLINET	Vassilis	Amiridis	0:15
11:35	~ 11:50	Building a 13 to 16 years cloud climatology using lidar in space observations: CALIOP and CloudSat now, EarthCARE next.	Mathieu	Reverdy	0:15
11:50	~ 12:05	Evaluation of the AATSR-MERIS FAME-C cloud algorithm for the years 2007-2009	Juergen	Fischer	0:15
12:05	~ 13:30	Lunch			1:25
Session 4 Advances in Radiative Transfer Simulation and Atmospheric Energy Budget			Chair: Teruyuki Nakajima		
13:30	~ 13:45	EarthCARE BBR shortwave flux retrieval	Carlos	Domenech	0:15
13:45	~ 14:00	EarthCARE BBR longwave flux retrieval	Nicolas	Clerbaux	0:15
14:00	~ 14:15	The status of the JAXA's EarthCARE four sensor algorithm for radiative budget evaluation	Teruyuki	Nakajima	0:15
14:15	~ 14:30	A study of the earth radiation budget using a 3D Monte-Carlo radiative transfer code for EarthACRE mission	Megumi	Okata	0:15
14:30	~ 14:45	Implementation of Unified atmospheric Scattering Processes in radiative transfer models	Miho	Sekiguchi	0:15
14:45	~ 15:00	Evaluation of a 3D scene construction algorithm used for shortwave radiation computations	Seiji	Kato	0:15
15:00	~ 16:00	Poster View			1:00
Session 5 Cloud/Aerosol/Precipitation Process			Chair: Takashi Nakajima		
16:00	~ 16:15	Cloud observations from EarthCARE/MSI; Algorithm development and Sciences	Takashi Y.	Nakajima	0:15
16:15	~ 16:30	Southern Ocean Supercooled Liquid Water Cloud and Its Link to Ice Nucleation and Cold Rain Process	Yongxiang	Hu	0:15
16:30	~ 16:45	Characteristics of anvil cloud in the lower stratosphere	Suginori	Iwasaki	0:15
16:45	17:00	Atmospheric aerosols measured at Phimai, Thailand ---Long range transport of dust aerosols from west Asia---	Haruo	Tsuruta	0:15
Session 6 Calibration and Validation			Chair: Yasushi Fujiyoshi		
17:00	~ 17:15	ATLID/MSI/BBR Calibration	Michael	Eisinger	0:15
17:15	~ 17:30	Calibration Concept of EarthCARE Cloud Profiling Radar	Hirota	Nakatsuka	0:15

19 Sep 2014 (Fri)		Thrid Day			
start	end	title	speaker		time
Session 6 Calibration and Validation (Continue)			Chair: Yasushi Fujiyoshi		
9:30	~ 9:45	Ground-based Cloud Radar Development for EarthCARE/CPR Calibration and Evaluation	Hiroaki	Horie	0:15
9:45	~ 10:00	Validation of Scientific Data Products from EarthCARE's Cloud Profiling Radar through datasets obtained by CloudSat, airborne radars and model-based simulations	Simone	Tanelli	0:15
10:00	~ 10:15	Validation of EarthCARE product using vertical wind measurement by wind profiler radars	Masayuki	Yamamoto	0:15
10:15	~ 10:30	Development of a signal processing method for vertical wind velocity measurement by wind profiler radars	Tong	Gan	0:15
10:30	~ 10:45	Validation methods for the EarthCARE ATLID products and ATLID-CPR and ATLID-MSI synergy products using ground-based lidar networks and radiometer networks	Nobuo	Sugimoto	0:15
10:45	~ 11:00	EarthCare Preparation, Calibration and Validation: Airborne Tandem System	Julien	Delanoe	0:15
11:00	~ 11:20	Coffee Break			0:20
11:20	~ 11:35	Application of the NASA Langley Airborne Multiwavelength HSRL for ATLID Validation	Chris A	Hostetler	0:15
11:35	~ 11:50	NARVAL Next-generation Aircraft Remote Sensing for Validation Studies	Silke	Gross	0:15
11:50	~ 12:05	Validation of gaseous and particulate matters observed by EarthCARE sensors using ROSHYDROMET aircraft data	Ryoichi	Imasu	0:15
12:05	~ 12:20	Trial to identify cloud boundary based on glider observation	Yasushi	Fujiyoshi	0:15
12:20	~ 12:35	Characterizing Ice and Rain Microphysics Through the Melting Layer	Andrew Joel	Heymsfield	0:15
12:35	~ 12:50	Using Ground Observations to Evaluate Assumptions in Satellite Retrieval Algorithms	Christopher R.	Williams	0:15
12:50	~ 14:15	Lunch			1:25
Session 7 Global Model Evaluation and Data Assimilation			Chair: Masaki Satoh		
14:15	~ 14:30	Evaluation of precipitating hydrometeor parameterizations in a single-moment bulk microphysics scheme for deep convective systems	Woosub	Roh	0:15
14:30	~ 14:45	Global evaluation of ice cloud microphysics using A-Train satellite observations and a satellite simulator	Tatsuya	Seiki	0:15
14:45	~ 15:00	Cloud-microphysical analysis of the observational data from satellite measurements	Naomi	Kuba	0:15
15:00	~ 15:15	Application of EarthCARE data in climate models for studies on climate change and air pollution by aerosols	Toshihiko	Takemura	0:15
15:15	~ 15:35	Coffee Break			0:20
15:35	~ 15:50	The GEOS - 5 Aerosol Forecasting and Data Assimilation System	Arlindo M.	da Silva	0:15
15:50	~ 16:05	Use of space-borne cloud radar and lidar observations for experimental assimilation at ECMWF	Marta	Janiskova	0:15
16:05	~ 16:20	Evaluation and improvement of clouds simulated by the global nonhydrostatic model NICAM using the Joint Simulator for Satellite	Masaki	Satoh	0:15
Session 8 Future Missions			Chair: Riko Oki		
16:20	~ 16:35	Status of GCOM-C Science Mission	Hiroshi	Murakami	0:15
16:35	~ 16:50	Status and plans of Next Generation Japanese Geostationary Meteorological Satellites Himawari-8/9	Daisaku	Uesawa	0:15
16:50	~ 17:05	METimage Cloud Detection and the role of Cloud and Aerosol Profiling Observations	Pepe Louise	Phillips	0:15
17:05	~ 17:20	Conceptual study on the spaceborne W-band scanning radar for ISS/JEM	Nobuhiro	Takahashi	0:15
17:20	~ 17:30	Closing			0:10