

# International SKYNET Workshop 2013 (and the 19<sup>th</sup> CEReS International Symposium on Remote Sensing)

July 04 - 05, 2013

Multi-media Conference Room  
Graduate School of Humanities and Social Sciences  
Chiba University, 1-33 Yayoicho, Inage-ku, Chiba 263-8522, Japan

## ■ Day 1, July 04, 2013 (Thu)

09:00-09:30 Arrival, Registration

09:30 Opening/Welcome, **H. Kuze** (Chiba Univ.)

09:40 Logi, etc., **H. Irie** (Chiba Univ.)

(Group photo)

### Administration Session 1 [Chair: **K. Aoki** (Univ. Toyama)]

10:00 Thoughts for Skynet system development – toward future- & Proposal on administration and strategy of the SKYNET as a GAW contributing network, **T. Nakajima** (Univ. of Tokyo)

10:20 About WMO/GAW, **N. Sugimoto** (NIES)

10:30 Status in Japan, Thai, and Mongolia, **T. Takamura** (Chiba Univ.), **T. Boossarasiri** (Chulalongkorn Univ.), and **N. Tugjsuren** (Mongolian Univ. of S&T)

10:50 Status in China, **H. Che** (CAMS/CMA)

11:00 Status in Korea, **S.-W. Kim** (SNU) (on behalf of B.-J. Sohn)

11:10 Current status and future of the European Skynet Radiometers network, **V. Estellés** (Univ. of València) (on behalf of M. Campanelli)

11:20 Skynet-India: Preliminary results from Skyradiometer network of India Meteorological Department, **V. K. Soni** (IMD)

11:30 *Lunch break*

(A meeting of country/region representatives)

### Administration Session 2

13:00 Discussion about the proposal, led by **T. Nakajima** (Univ. of Tokyo)

14:45 *Coffee break*

15:15 Concluding remarks, **T. Nakajima** (Univ. of Tokyo)

### Science Session – Algorithm 1 [Chair: **T. Nishizawa** (NIES)]

15:30 Aerosol optical properties retrieved by SKYRAD.pack Version5 based on skyradiometer measurements of Beijing, China, **H. Che** (CAMS/CMA)

15:45 An estimation of single scattering albedo retrieved from SKYNET sky radiometer data and development of a quality control algorithm for the SKYNET data analysis, **M. Hashimoto** (Univ. of Tokyo)

16:00 Use of 315nm channel of sky radiometer to retrieve columnar ozone amount, **P. Khatri** (Chiba Univ.)

- 16:15 Column water vapor retrievals from skyradiometer (POM-02) 940nm channel data, **A. Uchiyama** (MRI)
- 16:30 Retrieval of calibration parameters for ground based Sun-Sky radiometric measurements of columnar water vapor using operational surface meteorological measurements, **V. Estellés** (Univ. of València) (on behalf of M. Campanelli)
- 16:45 An improved cloud screening algorithm for skyradiometer measurement analysis and application to Asian dust detection, **H.-J. Song** (SNU) (on behalf of B.-J. Sohn)
- 17:00 Combined use of SKYNET observations for retrieving microphysical properties, **S. Katagiri** (Tohoku Univ.)
- 17:15 Development of a SKYNET based methodology for the CIMEL CE318 radiometer in the frame of the ESR network, **V. Estellés** (Univ. of València)
- 18:00 *Party at Restaurant CORZA*

## ■ Day 2, July 05, 2013 (Fri)

### Science Session – Algorithm 2 [Chair: K. Aoki (Univ. Toyama)]

- 08:30 Ground-based lidar network observation of aerosols and clouds in AD-Net, **T. Nishizawa** (NIES)
- 08:45 Development of an algorithm to estimate the aerosol vertical profile from Sky radiometer and Lidar measurements, **R. Kudo** (MRI)

### Science Session – Cal/Val/Comparison [Chair: K. Aoki (Univ. Toyama)]

- 09:00 Calibration and performance of Prede Skyradiometer, **S. S. Ningombam** (Indian Institute of Astrophysics)
- 09:15 Comparison of aerosol optical properties between CE 318-1 of AERONET and POM-02 of SKYNET, **Y. Choi** (Hankuk Univ. of Foreign Studies)
- 09:30 The validation and comparison of aerosol properties retrieved by CARSNET algorithm with the AERONET, **H. Che** (Institute of Atmospheric Composition, CAMS/CMA)
- 09:45 Comparison of CALIPSO aerosol optical depth retrievals to sky radiometer and space-based passive measurements, and characteristics of the lidar ratio, **S.-W. Kim** (SNU)

10:00 *Coffee break*

### Science Session – General 1 [Chair: R. Kudo (MRI)]

- 10:15 Aerosol variations in urban atmosphere: case studies in Beijing and Dunhuang, **B. Chen** (IAP/CAS)
- 10:30 Ground-based remote sensing of aerosol seasonal character over Hefei in East China, **Z. Wang** (AIOFM/CAS)
- 10:45 Sun-sky radiometer study of monsoon activity over Pune, India, **P.C.S. Devara** (Indian Institute of Tropical Meteorology)
- 11:00 Identification of aerosol types over the Indo-Gangetic Basin using ground-based sunphotometer measurements, **A. K. Srivastava** (Indian Institute of Tropical Meteorology)
- 11:15 Optical and chemical properties of atmospheric aerosols at Phimai in Thailand by surface measurements, CALIOP data, and the SPRINTARS model, **H. Tsuruta** (Univ. of Tokyo)

11:30 *Lunch break*

### Science Session – General 2 [Chair: M. Kuji (Nara Women's Univ.)]

- 13:00 Sky-radiometer measurements for monitoring the aerosol optical properties in the Arctic and Antarctica, **M. Shiobara** (NIPR)

- 13:15 One year of measurements with a POM02 sun-sky radiometer at an Alpine Euroskyrad station, **H. Diémoz** (ARPA Valle d'Aosta)
- 13:30 Continuous ground-based observation of aerosol optical properties in Tsukuba, Japan, **A. Uchiyama** (MRI)
- 13:45 Characterization of atmospheric phenomena with SKYNET aerosol properties at Fukue-jima and Amami-Oshima islands, **S. Kitakoga** (Nara Women's Univ.)
- 14:00 Optical and in-situ measurements of aerosol, nitrogen dioxide, and water vapor in relation to weather and sky radiation conditions in Chiba, **H. Saito** (Chiba Univ.)

14:15 *Coffee break*

**Science Session – Climate 1 [Chair: P. Khatri (Chiba Univ.)]**

- 14:45 A study of vertical profiles of aerosol radiative parameters and aerosol direct effects over the East China Sea region using a combination of aircraft and ground based observation data, **P. Khatri** (Chiba Univ.)
- 15:00 Investigate the single scattering albedo of dust aerosols and their impact on climate in Northwest China, **J. Bi** (Lanzhou Univ.)
- 15:15 Cirrus clouds measurement by a three-wavelength lidar over Hefei in China, **D. Liu** (AIOFM/CAS)

15:30 *Coffee break*

**Science Session – Climate 2 [Chair: P. Khatri (Chiba Univ.)]**

- 16:00 Surface aerosol radiative forcing at the Observatory for Atmospheric Research, Thailand during 2009-2011, **T. Boossarasir** (Chulalongkorn Univ.)
- 16:15 Climate change trends and desertification in Mongolia, **N. Tugjsuren** (Mongolian Univ. of Science and Technology)
- 16:30 Cloud Radiative Effect on the Earth's Surface, **K. Yamada** (Tohoku Univ.)
- 16:45 The research on global anthropogenic heat release, **B. Chen** (Institute of Remote Sensing and Digital Earth, CAS)
- 17:00 Closing remarks, **T. Takamura** (Chiba Univ.)