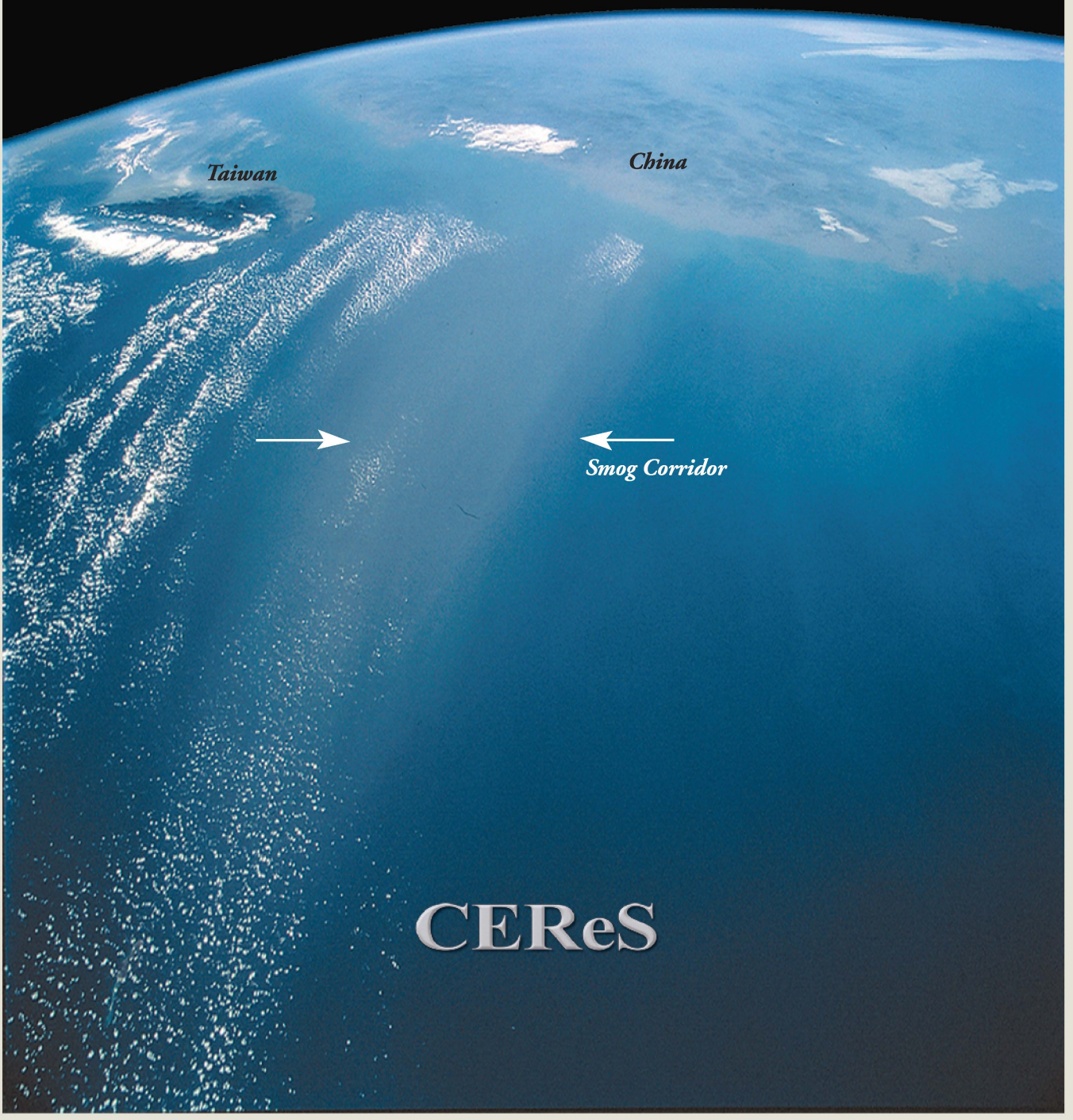
Proceedings of
The CEReS International Symposium on Radiation Budget and Atmospheric Parameters Studied by Satellite and Ground Observation Data—Toward the Understanding of Long Term Trend in Asia

February 17 - 18, 2005
Chiba University, Japan



CEReS

Published by Center for Environmental Remote Sensing,
Chiba University,
1-33 Yayoi-cho, Inage, Chiba, 263-8522 Japan

Cover layout by T. Ishiyama
and cover image was provided by NASA-JSC

当シンポジウムの開催資金の一部は
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CEReS International Symposium 2005

CEReS International Symposium on

Radiation Budget and Atmospheric Parameters
Studied by Satellite and Ground Observation Data
— Toward the Understanding of Long Term Trend in Asia

February 17 (Thur.) & 18 (Fri.), 2005

Keyaki-Hall, Chiba University, Chiba, Japan

Editors
N.Takeuchi, T.Takamura and H. Kuze

Hosted by
CEReS, Chiba University
http://www.cr.chiba-u.jp/

CEReS Symposium Program

CEReS International Symposium on
Radiation Budget and Atmospheric Parameters Studied by Satellite and Ground Observation Data
— Toward the Understanding of Long Term Trend in Asia
February 17 (Thu) and 18 (Fri), 2005,
Keyaki-Hall, Chiba University, Japan

February 17
9:30-9:40
Opening Remark Nobuo Takeuchi

9:40-10:10
Keynote Talk
Invited (30) Teruyuki Nakajima
On the recent progress of atmospheric satellite remote sensing and radiation budget studies

Session 1
Long-term trend in the radiation budget and atmospheric parameters from satellite observations

10:10-10:40
1-1. *Invited* (30) Yuanchong Zhang, William B. Rossow and Paul W. Stackhouse Jr.
ISCCP-FD's surface radiation flux datasets: characteristics and comparison with GEWEX SRB

10:40-11:00
1-2. (20) Yuichiro Oku, Hirohiko Ishikawa and Zhongbo Su
Estimation of land surface energy fluxes over the Tibetan Plateau using GMS data

11:00-11:20 BREAK

11:20-11:40
1-3. (20) Jules R. Dim, Tamio Takamura, Itaru Okada, Hideaki Takenaka
Comparative Study of cloud parameters derived from Terra-MODIS and GMS-VISSR

11:40-12:00
1-4. (20) Kun Yang, Toshio Koike
Development and validation of a general model for estimating global solar radiation from hourly, daily and monthly surface meteorological data

12:00-12:20
1-5. (20) Takashi Y. Nakajima, Teruyuki Nakajima, Shuichiro Katagiri
The characteristics of the cloud properties retrieved from Global Imager aboard the ADEOS-II (Midori-II) Earth observation satellite

12:20-13:30 LUNCH BREAK

Session 2
Interpretation of satellite data for atmospheric analysis and meteorological applications

13:30-14:00
2-1. *Invited* (30) Ehrhard Raschke, Makoto Wada and Takashi Yamanouchi
Measurement of clouds, and radiation from space for climate studies

14:00-14:20
2-2. (20) Y. Kawata , T. Umeki and K. Takemata
Reflectance band ratios in Japan using satellite and sky observation data

14:20-14:40
2-3. (20) Katsutoshi Kozai, Anna Sasaki
SeaWiFS and MODIS-derived product verification using normalized water-leaving radiance model in the western equatorial Pacific Ocean

14:40-15:00
2-4. (20) Hideaki Takenaka, Tamio Takamura
Uncertainty in cloud optical thickness estimation from GMS-5 VISSR algorithm, explained by quantization noise and, it's Influence on the estimated radiative budget

15:00-15:20
2-5. (20) Mitsuo Minomura, Yoshiyasu Todate, Hiroaki Kuze, Nobuo Takeuchi
Retrieval of aerosol optical properties over Chiba land area from Landsat/TM imagery
— Part I: Determination of spatial distribution of aerosol optical thickness

BREAK 15:20-15:30

CEReS Projects

15:30-15:45
Project-1 (15) Ryutaro Tateishi
Monitoring and analysis of global surface environmental changes by satellite data

15:45-16:00
Project-2 (15) Yoshiaki Honda and Koji Kajiwara
Study on earth surface, vegetation and land cover change with changing of surface 3D structure on Eurasian continent and satellite data analysis, processing method, development of data verification methods

16:00-16:15
Project-3 (15) Hiroaki Kuze
Evaluation of radiation budget on the basis of satellite data and ground observation network, and study of long-term changes in atmospheric parameters

16:15-16:30
Project-4 (15) Akihiko Kondoh
Application of remote sensing methods to local communities — enlightenment activities by means of the synergy effect of various spatial data

BREAK 16:30-16:40

16:40-17:40
Poster Session

P-1. Hiroshi Okayama
Laboratory test of atmospheric turbulence and its implication in the satellite observations

P-2. Hu Bo, Wang Yuesi, Liu Guangren, Ma Zhiqiang
Comprehensive study on photosynthetically active radiation in Beijing

P-3. Shunsuke Fukagawa, Ikue Kouga, Hiroaki Kuze, Nobuo Takeuchi, Makoto Sasaki, Yoichi Asaoka, , Satoru Ogawa
Environmental application of the all-sky survey high-resolution air-shower(ASHRA) telescope — aerosol distribution measurement using a bistatic, imaging lidar

P-4. Gerry Bagtasa, Nofel Lagrosas, Hiroaki Kuze, Nobuo Takeuchi, Shunsuke Fukagawa, Yotsumi Yoshii, Suekazu Naito, Masanori Yabuki
Mie-scattering simulation and measurement of mass extinction efficiency from portable automated lidar and suspended particulate matter measurements

P-5. J. Batbayar, S.Tuya, N. Tugjsuren
Net radiation estimation using MODIS-TERRA data for clear sky days over homogeneous areas in Mongolia

P-6. Toru Kimura, Toyofumi Umekawa, Si Fuqi, Hiroaki Kuze, Nobuo Takeuchi
Measurement of NO_2, SO_2, O_3, H_2O and aerosol in the troposphere using differential optical absorption spectroscopy (DOAS)

P-7. Dodi Sudiana, Mitsuo Minomura, Hiroaki Kuze, Nobuo Takeuchi
Analysis of the Asian dust aerosol optical properties over the ocean

P-8. Koji Asakuma, Mitsuo Minomura, Hiroaki Kuze, Nobuo Takeuchi
Retrieval of aerosol optical properties over land in Chiba area from Landsat/TM imagery — Part II: Determination of aerosol size distribution

P-9. Jin-jia Guo, Zhi-shen Liu, Zhao-ai Yan
Micro Pulse Lidar Observation of Low Relative Humidity Layer

P-10 Nobuhiro Kikuchi, Hiroshi Kumagai, Hiroshi Kuroiwa, Teruyuki Nakajima, Akihide Kamei, Ryosuke Nakamura
Cloud optical thickness and effective particle radius derived from transmitted solar radiation measurements: Comparison with cloud radar observations

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February 18

Session 3
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Characters of marine atmospheric boundary layer structure and aerosol profile observed by HSRL

9:30-9:50
3-2. (20) Toshiyuki Murayama, Miho Sekiguchi, Detlef Mueller, Katsuya Wada, and Yasuharu Saito
Characterization of Asian tropospheric aerosols with multi-wavelength Mie-Raman lidar and skyradiometer

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3-3. *Invited* (30) Qiu Jinhuan
A study of optical properties of urban aerosols in China

10:20-10:40
3-4. (20) M. Shiobara, M. Yabuki, H. Kobayashi, and K. Hara
Optical, physical and chemical properties of aerosols around Japan based on the R/V Shirase shipboard measurements

BREAK 10:40-10:50

10:50-11:10
3-5. (20) Pradeep Khatri, Yutaka Ishizaka, and Tamio Takamura
Observation on radiative properties of aerosol particles over the urban area of Nagoya

11:10-11:30
3-6. (20) Jugder Dulam and Erdenetsetseg Baasandai
Dust storm observations in Mongolia in spring 2004

Session 4
Network observation of the atmosphere

11:30-12:00
4-1. *Invited* (30) Yuesi Wang
The radiation monitoring network of Chinese ecosystem research: (CERN)
LUNCH BREAK 12:00-13:00

13:00-13:30
4-2. *Invited* (30) Ulla Wandinger
EARLINET: the first continental-scale lidar network for vertical aerosol profiling

13:30-13:50
4-3. (20) Pinhua Xie, Yihuai Lu, Yujun Zhang, Ang Li, Jianguo Liu and Wenqing Liu
Ultraviolet radiation measurement in the south of Sinkiang using a compact zenith-sky spectrometer

Session 5
Improved determination of radiation and atmospheric parameters from satellite and ground observations

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5-1. *Invited* (30) Rachel Pinker
Progress and outstanding challenges in estimating surface radiation budgets by methods of remote sensing

14:20-14:50
5-2. *Invited* (30) Tadahiro Hayasaka, Kazuaki Kawamoto, Jianqing Xu and Guangyu Shi
Seasonal and long-term variations of shortwave radiation in China

14:50-15:10
5-3. (20) Kisei Kinoshita, Hiroyuki Kikukawa, Naoko Iino, Wang Ning, Zhang Gang, Jugder Dulam, Tsatsaral Batmunkh, and Satoshi Hamada
Properties of long-time digital camera records in Changchun and Ulaanbaatar

BREAK 15:10-15:20

15:20-15:40
5-4. (20) D. Rajan and GR. Iyengar
Analysis and impact study of global positioning system radio occultation precipitable water vapor obtained from Chiba University over East Asia region

15:40-16:00
5-5. (20) Shoji Asano, Masaya Kojima, Tamio Takamura
Optical and microphysical properties of the 2003 Yamase clouds estimated from satellite remote sensing and shipboard observation

16:00-16:20
5-6. (20) Nick Schutgens, Hiroshi Kumagai
Improving along-beam spatial resolution of radar measurements

16:20-16:40
5-7. (20) Itaru Sano, Sonoyo Mukai
Aerosol properties over Asia with ADEOS-1 & -2/POLDER

16:40-17:00
5-8. (20) Toshiaki Takano, Ken-ichi Akita, Hiroshi Kubo, Youhei Kawamura, Hiroshi Kumagai, Tamio Takamura, Yuji Nakanishi and Teruyuki Nakajima
Observations of cloud properties using the developed millimeter-wave FM-CW radar at 95 GHz

17:00-17:20
5-9. (20) Makoko Kuji, Nobuyuki Kikuchi and Akihiro Uchiyama
Retrieval of precipitable water using ADEOS-II / GLI near infrared data

CLOSING REMARK Tamio Takaumura

CEReS Symposium Contents

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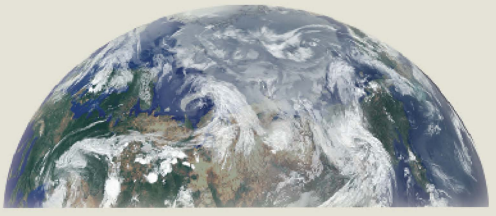
Session 5

Improved determination of radiation and atmospheric parameters from satellite and ground observations

Poster Session



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