

# Welcome Speech

Riko Oki JAXA/EORC

## JAXA EarthCARE Science Team



#### **Vertical**

Cloud, Aerosol, Drizzle, Vertical Velocity

~from CPR&ATLID~

H. Okamoto (Kyusyu Univ., Project Scientist), Y. Ohno (NICT), T. Nishizawa (NIES)



## Horizontal

Cloud, Aerosol ~from MSI~

T. Y. Nakajima (Tokai Univ.)



#### 3 Dimention

Cloud, Aerosol, Radiative Flux



Radiative Flux ~from BBR~

#### Satellite Data Simulator



## 6 Algorithm PIs 14 Validation Pls



## **Application in Models**

- Model Validation
- •Model Improvement
  - Data Assimilation



Improvement of physical process related to cloud, aerosol and radiation in climate models

#### Validation team

Y. Fujiyoshi (Hokkaido Univ., Validation leader), M. Hayashi (Fukuoka Univ.), A. Heymsfield (UCAR), M. Koike (Univ. of Tokyo), T. Ohigashi (Nagoya Univ.), Itaru Sano (Kinki Univ.), K. Sato (Univ. of Tokyo), M. Shiobara (NIPR), Nobuo Sugimoto (NIES), Toshiaki Takano (Chiba Univ.), Simone Tanelli (NASA/JPL), M. Yamamoto (Kyoto Univ.), Kazuaki Yasunaga (Toyama Univ.), David Winker (NASA)

# Science team status

- Earth CARE
  Earth Cloud, Aerosol and Radiation Explorer
  Cesa NICT LAXA
- Started 3-year research by 1st Research Announcement (Algorithm) from FY2012
  - The main objective of this 3-year research is to develop pre-launch algorithm and satellite data simulator (Joint-Simulator)
    - Algorithm Ver. 0.15 (with output toolkit implemented) were submitted by algorithm PIs on March 2013 and Algorithm Ver. 0.16 (under the algorithm development guideline) will be submitted on March 2014.
    - Joint-Simulator released Ver. 1 to registered users from the EORC/EarthCARE homepage on Oct. 2012 and has been improved during FY2013. Algorithm evaluations using the Joint-Simulator started from FY2013.
- Started 2-year research by the by 1st Research Announcement (Validation) from FY2013
  - The main objective of this 2-year period is to prepare the implementation plan for the validation activity after launch
    - "Validation Rehearsal" which is an evaluation of EarthCARE-like satellite data (A-train, etc.) processed by the JAXA EarthCARE algorithms is underway.
    - The **validation implementation plan** will be described based upon experience of the Validation Rehearsal.