



ADEOS-II Science and utilization Project Update (EORC)

Masato Yamanashi
6th, September, 2006
Sea Lodge Hotel, San Diego

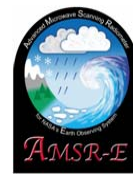


Events after last January (Symposium & Workshop) and Schedules in this fiscal year

- We held the AMSR· AMSR-E/GLI symposium for domestic people on 23rd January, about 100 people attended and completed successfully, thanks for US team's cooperation.
- Version up of products, based on the discussion at the workshop, in Tokyo. (Both AMSR/AMSR-E, higher products)
- Continue science activities by PI and JAXA
- EORC will move Harumi to Tsukuba on November, accompanied with this moving, replace UNIX systems to LINUX system
- Workshop around the end of next January



Version up of products



- Since March, 15th, we have released the following higher products (version 4.), based on the discussion at the workshop, in Tokyo.
 - Water Vapor, • Precipitation, • SST, • SSW,
 - Snow Depth, • Soil Moisture

Presentation materials of the workshop can be accessed in the following URL.

<http://sharaku.eorc.jaxa.jp/AMSR/ws2006/index.html>

- L1 was not updated.
- Reprocessing (Higher products only)
- ✓ AMSR: completed by 13th, April
- ✓ AMSR-E: completed by the end of July

- Plan of version up in this fiscal year
 - ✓ L1 will not be revised
 - ✓ The following algorithms will be revised next March
 - SST, -Soil Moisture, -Sea Ice (if possible)



Science activities by PIs



➤ Domestic PIs (14)

· Validation&Field Experiments

- ✓ Dr. Koike : Conducts Soil moisture and snow depth in Siberia, Hokkaido, Tanashi in Tokyo.
- ✓ Dr. Kaihotsu : Conducts Soil Moisture in Mongolia -> Detail will be presented in this meeting.

· Standard Algorithms

- ✓ Dr. Koike : Soil Moisture and Snow Depth
- ✓ Dr. Aonashi : Precipitation,
- ✓ Dr. Takeuchi & Dr. Sato & Dr. Tauchi : Water Vapor
- ✓ Dr. Cho : Sea Ice
- ✓ Dr. Ebuchi : Wind Speed using SeaWinds
- ✓ Dr. Konda : Relation between Tb36 and Wind Speed

· Another Researches

- ✓ Dr. Enomoto : Monitor the Antarctic region
- ✓ Dr. Kutsuwada & Dr. Kubota : Construct the Girded surface wind/and wind-stress and estimate global latent heat flux.
- ✓ Dr. Tateyama : Develop the Sea Ice monitor system in Okhotsk Sea
- ✓ Dr. Sato : Numerical Prediction Model using AMSR-E data -> Detail will be presented in this meeting.

➤ Foreign PIs except US (3)

- ✓ Dr. Mitnik (Russia) : Disaster Mitigation (Typhoon monitor, Sea Ice monitor in Okhotsk)
- ✓ Dr. Heygster (Germany) : Develop the Sea Ice algorithm
- ✓ Dr. Paloscia (Italy) : Develop the Soil Moisture algorithm in European region.

➤ US PIs (10) Dr Comiso, Dr. Cavalierie, Dr.Njoku, Dr. Laksmi, Dr.Jackson, Dr. Liu, Dr. Petty, Meeting



JAXA's Science activities



- Long term monitoring

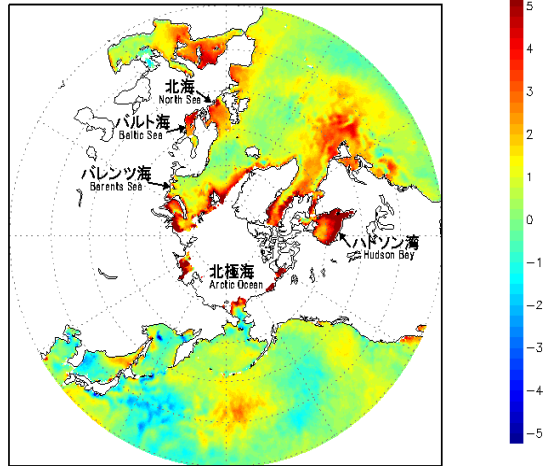
- ✓ The time of snow melting in Siberia area
using 36G Brightness temperature Products
- ✓ SST anomaly in northern hemisphere
using SST products
- ✓ El nino watch
<http://sharaku.eorc.jaxa.jp/cgi-bin/amsr/elni/elni.cgi?lang=j>

- Disaster Mitigation

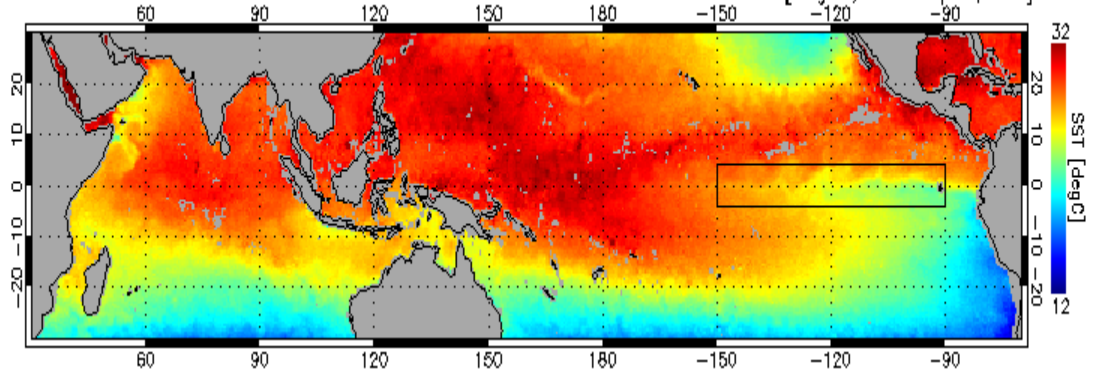
- ✓ Monitor global wind speed and estimate the typhoon center
Using Seasurface Wind product
http://sharaku.eorc.jaxa.jp/cgi-bin/amsr/ocean_wind/ocean_wind.cgi?&LANG=1
-> Saitoh-san will present in this meeting.
- ✓ Typhoon homepage
Using Tb, Precipitation, Water Vapor products
<http://sharaku.eorc.jaxa.jp/cgi-bin/adeos2/typhoon/typhoon.cgi?mode=view>
- ✓ Sea Ice monitor
Using Sea Ice product
<http://sharaku.eorc.jaxa.jp/cgibin/adeos2/seaice/seaice.cgi?lang=j&mode=large>

Examples

SST Anomaly(AMSRE-Climatology) [deg C]
200607



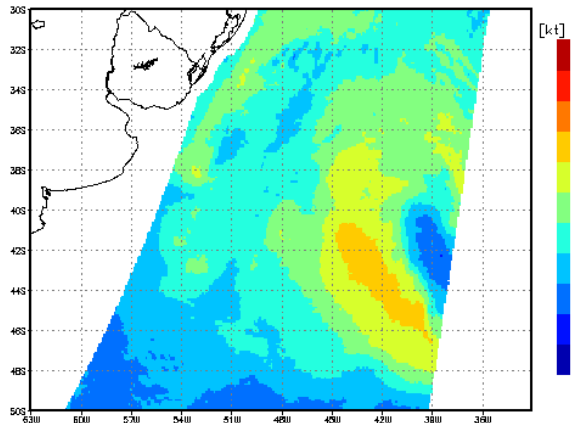
AMSRE SST [Aug 30,2006 - Sep 03,2006]



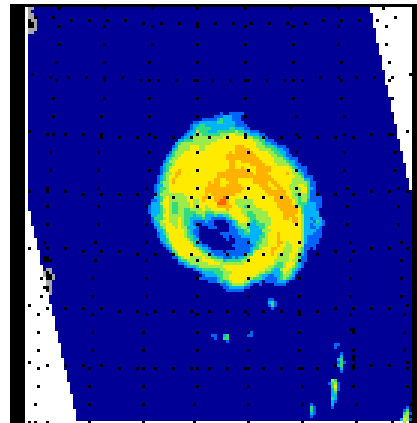
El nino watch (SST at 2006/09/03)

SST anomaly in northern hemisphere

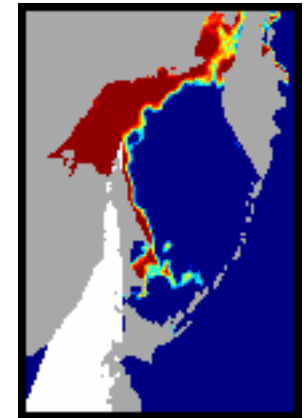
AMSRE-Aqua Des.(Night) Ocean Wind Speed (0 - 90 kt)
2006/09/04 04:11:21(UT) Path:216 Lat:S50-S30 Ave.Max= 67.8[kt](point=119)



JAXA/EORC
Monitor global wind speed



Typhoon homepage
(Sept,4th,2006 12:17
Typhoon No12,loke)



Sea Ice monitor
Homepage
(Mar.30th.2006)



Replace UNIX system

- EORC will move Harumi to Tsukuba on November, accompanied with this moving, start to replace UNIX systems to LINUX systems.

Schedules

Within this fiscal year

Detail Design

Coding

next April,07 to September

Integration Test

From October '07

Operational

- The products provided by EORC will be made by LINUX version from October,2007, HDF library will cover this modification, we think no problems happen

-> Please keep your mind

- We need codes of standard algorithms for LINUX at the end of this fiscal year. Could the following PIs provide codes of standard algorithms tested in LINUX to us? In this meeting I will ask individually after my presentation.

Liu-san, Petty-san, Comiso-san, Cavalierie-san, Njoku-san, Jackson-san, Kelly-san

-> This is not compulsory, if you could not, our colleague will convert.



Hereafter and prospect next year

- Workshop this fiscal year

- ✓ Date : 2.5 days, the end of next January

- ✓ Place : **Atami** or **Tsukuba** or Yokohama or Tokyo

- Prospect of next year

We will continue the following science activities one more year
(We will continue the contract by 3rd RA, one more year.)

- ✓ Version up products

- Improve Standard algorithms

- Validation filed experiment

- ✓ other science activities

- ✓ Workshops

- ✓ Higher product processing system of LINUX will be operational from October, 2007



Status of GCOM-W1



GCOM-W1 will load AMSR2, the successor of AMSR-E, will be launched in winter, 2010.

Status

- This early summer, from June to July, JAXA's GCOM-W1 plan was reviewed by the board of Space Development (one of the governmental committee) and approved. (but GCOM-C1, which will load SGLI wasn't approved)
- The review meeting to set up 'GCOM-W1 project' will be held at the end of this month, September and if it is approved, the project will start from next JFY.

-> Imaoka-san will present the details.

