



EOC Data User Services

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Earth Observation Center (EOC) / NASDA

November 14, 2001





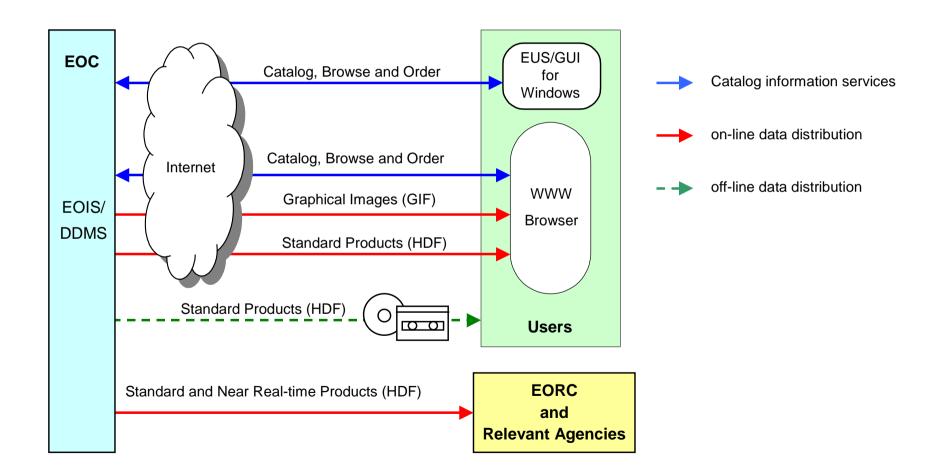
EOC systems for user services

- The Earth Observation Center (EOC) receives, processes, archives and retrieves ADEOS-II earth observation data
- EOC user services are provided from EOIS/DDMS*
 * EOIS : NASDA Earth Observation data and Information System
 DDMS : Data Distribution and Management System
- EOIS/DDMS is infrastructure facility to archive, manage and distribute earth observation data and information
- Objects of EOIS are all satellite and sensor data, and enhancements for ADEOS-II products has been finished this September





EOIS user services overview







User services from EOIS

EOIS user services at EOC are categorized as :

1. Catalogue information services

- Catalogue search
- Browse search
- Product order

2. Off-line data distribution service (on media)

- Scene orders
- Standing orders

3. On-line data distribution service (via network)

- Graphical images (GIF data) on the WWW
- Standard products via the internet
- Data transmission to relevant agencies





Catalog information

Using the EUS*, users can access catalog information service * EUS : EOIS user interface software

• EUS/GUI

- Application software for Windows 95 /98 /NT4.0
 (Operation on Windows XP / 2000 / Me are not confirmed yet)
- For PIs and relevant agencies only (user registration is necessary)

EUS/WWW Gateway

- Information service available via WWW browser software
- Catalog and browse search are available for all users
- Ordering interface is only for PIs (user registration is necessary)
- The following is URL :

http://www.eoc.nasda.go.jp/catalogue/catalogue_e.html





Preparation for EUS

What is necessary before use the EUS?

- Software download (EUS/GUI)
 - EUS/GUI download is available from the following site:
 - URL : http://www.eoc.nasda.go.jp/~eusadmin/homepage.html
 - user name : eusadmin
 - password : dontaku

• User registration (EUS/GUI and EUS/WWW)

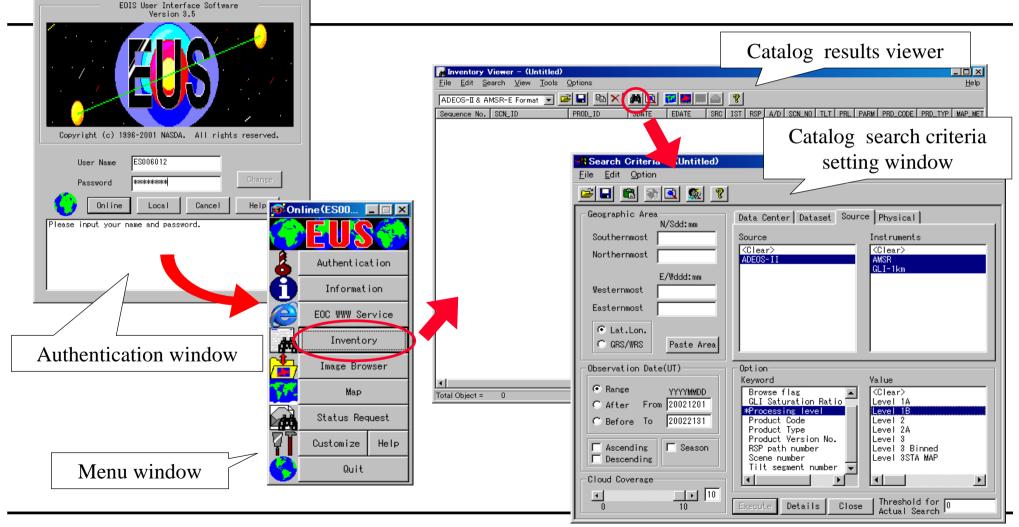
- Contact point for PIs will be set up at EORC order desk
 - e-mail : orderdesk@eorc.nasda.go.jp
 - Tel: 813-5561-8767
 - Fax : 813-5561-9542



User Authentication



How to use EUS/GUI



ADEOS-II GLI Workshop, Nov. 14, 2001 @ Harumi, Tokyo

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Catalog and browse search by **EUS/GUI**

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ADE	DS-II GLI W	orksho	op, No	ov. 14	, 20	001	@ H	arui	mi, '	Toky	/0	(sai	mple of AMSR L3 SSW)



Products ordering by EUS/GUI



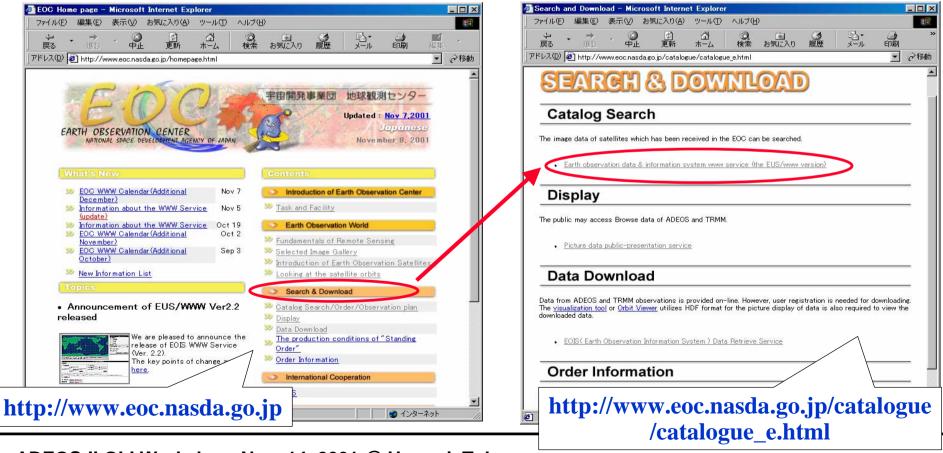
Product Request (To EOIS) - (Untitled) <u>F</u> ile <u>E</u> dit <u>O</u> ption	
User Code Order Request Rest/Limit Number	r
User Tel.#	Product Selection
Application Field Select	Sequence No. SCN_ID PROD_ID SDATE EDATE SRC IST RSP A/D SCN INV00187 A2GL100050815160D1 PM1B0000000 A2 GL1 15 D 16
Delivery Flag Applied Addres Desired Delivery Date [YYYYMMDD]	Data Parameter Patterns © Data Specific Parameter [Dataset Default] © All Parameter Delete
INV00186 HEOC GLI-1km Level 1B MTIR A2GL1000 INV00187 HEOC GLI-1km Level 1B MTIR A2GL1000 INV00198 HEOC AMSR Level 1B A2AMS000!	Major Parameter Media Processing Level Product Code for ADEOS-II/AMSF 8mm Tape IM :Mapped Data CLFLG_p:Cloud flags(Level-
×	Product List 8mm Cartrige Tape 2.5GB UNIX-Tar HDF 8mm Cartrige Tape 5GB UNIX-Tar HDF
Select Product Details	Product Parameter Setting Keyword Value Clear> Cubic Convolution Paste Area
Product request window	<clear> Cubic Convolution Paste Area Map Projection Method Nearest Neighbor *Resampling Method Bilinear Direction of Map Projection Base Latitude</clear>
	Quantity 1
Parameter selection window	OK. Cancel





How to access the EUS/WWW

EOC Homepage > Search & Download > Catalog Search



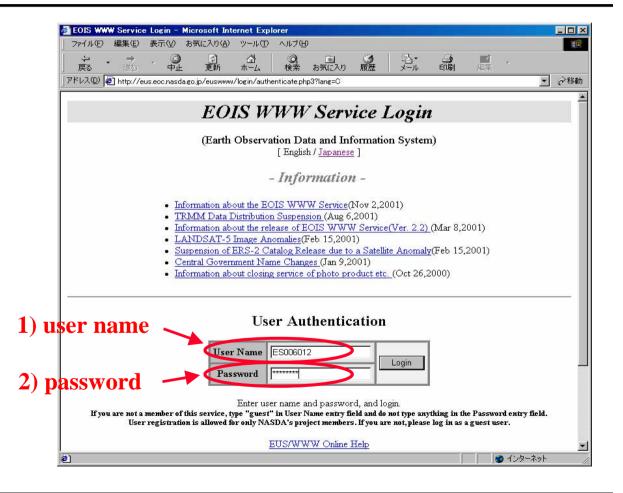




Login for EUS/WWW

Service login

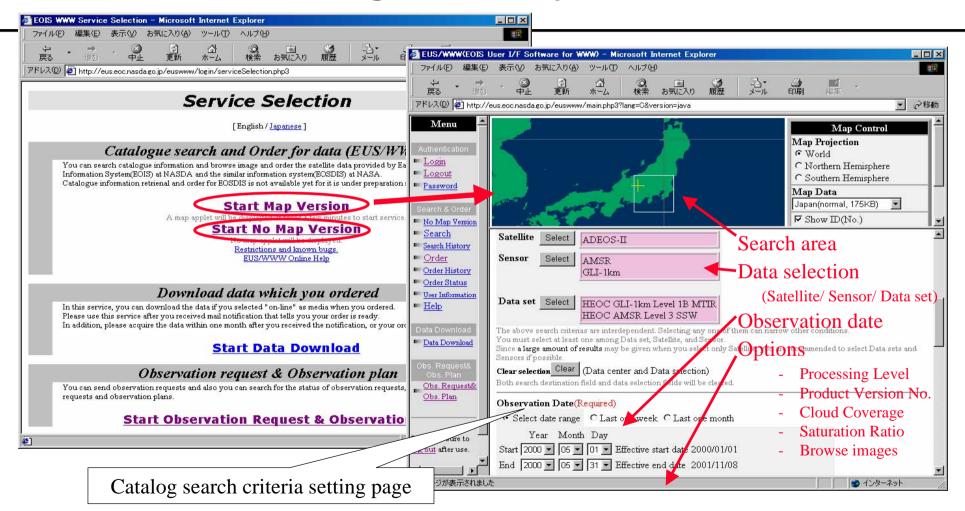
- Public users can login with
 - 1) user name "guest" and
 - 2) no password
- Registered users login with
 - 1) their own user name and
 - 2) assigned password







Catalog search by EUS/WWW







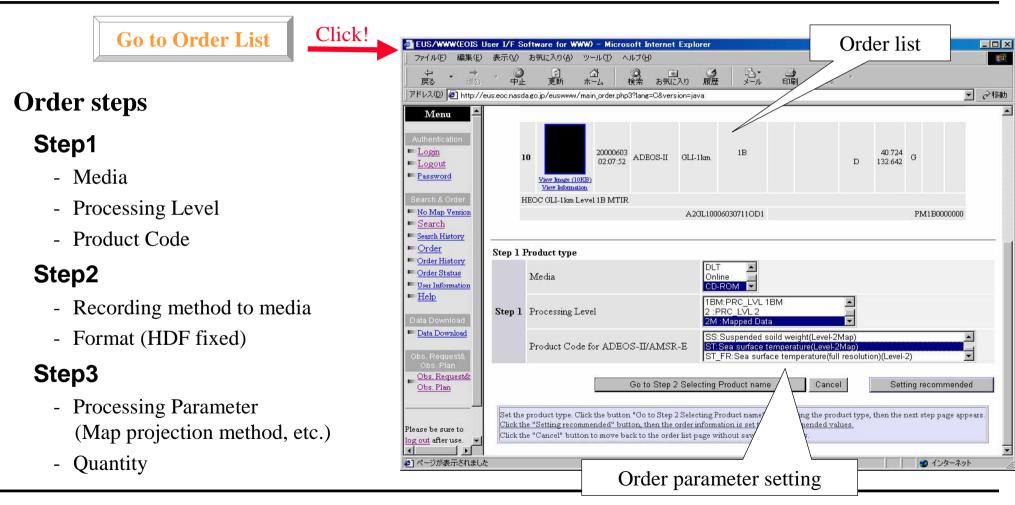
Catalog search result on EUS/WWW

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Catalog search result (text format)	Product request pa (next page)	<u> </u>	Bit per pixel 8 GLI Saturation Ratio(Band30) 0.00 GLI Saturation Ratio(Band31) 0.00 ページが表示されました	٧Þ
	— •		Detail information page	





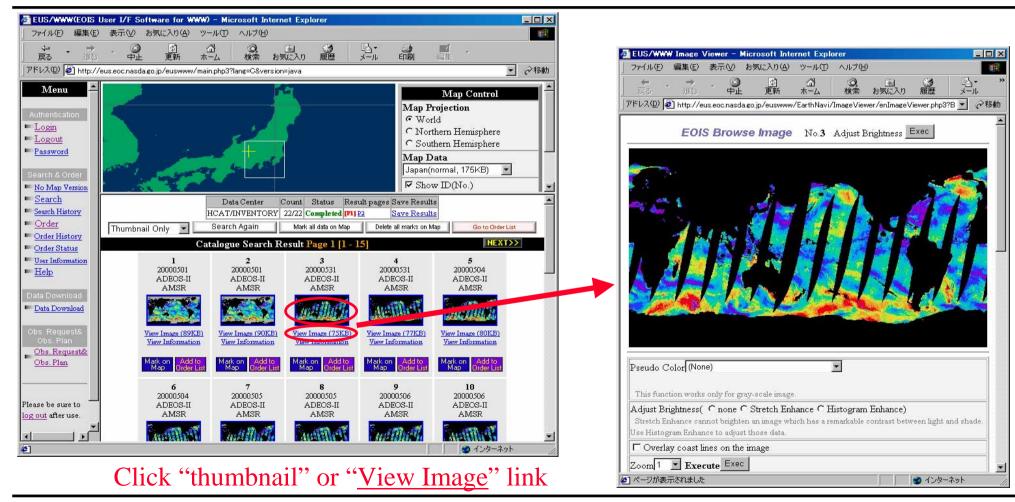
Products ordering by EUS/WWW







Browse image on EUS/WWW (sample of AMSR Level3)







Catalog Information

- All of standard products processed at the EOC according to the observation plan will be available in the catalog search :
 - AMSR Level 1A, 1B
 - AMSR Level 2
 - AMSR Level 3
 - GLI-1km Level 1A, 1B
 - GLI-1km Level 2A
 - GLI-1km Level 2
 - GLI-1km Level 3 Binned
 - GLI-1km Level 3 STA Map
 - GLI-250m Level 1A, 1B





Browse search

- Browse data of the following products are available via the EUS

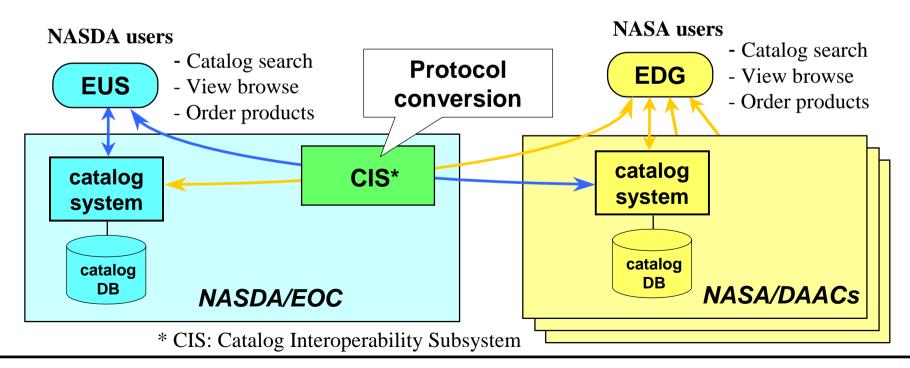
		• •			
- A	MSR	Level 3 (daily)	Brightness Temperature 6.9 GHz V (A/D)		
- A	MSR	Level 3 (daily)	Brightness Temperature 36.5 GHz V (A/D)		
- A	MSR	Level 3 (daily)	Brightness Temperature 89.0 GHz V (A/D)		
- A	MSR	Level 3 (daily, monthly)	Water Vapor (A/D)		
- A	MSR	Level 3 (daily, monthly)	Cloud Liquid Water (A/D)		
- A	MSR	Level 3 (daily, monthly)	Amount of Precipitation (A/D)		
- A	MSR	Level 3 (daily, monthly)	Sea Surface Wind speed (A/D)		
- A	MSR	Level 3 (daily, monthly)	Sea Surface Temperature (A/D)		
- A	MSR	Level 3 (daily, monthly)	Soil Moisture (A/D)		
- A	MSR	Level 3 (daily, monthly)) Ice Concentration (A/D)		
- A	MSR	Level 3 (daily, monthly)	y) Snow Water Equivalence (A/D)		
- G	LI-1km	Level 1B	VNIR (R:ch.13, G:ch.8, B:ch.5)		
- G	LI-1km	Level 1B	SWIR (ch.26)		
- G	LI-1km	Level 1B	MTIR (ch.35)		
- G	LI-1km	Level 2	All products processed according to plan		
			(except for CLFLG_p and PGCP)		
- G	LI-1km	Level 3 STA Map	All products		
- G	LI-250m	Level 1B	(R:ch.22, G:ch.21, B:ch.20)		





Catalog interoperability with NASA

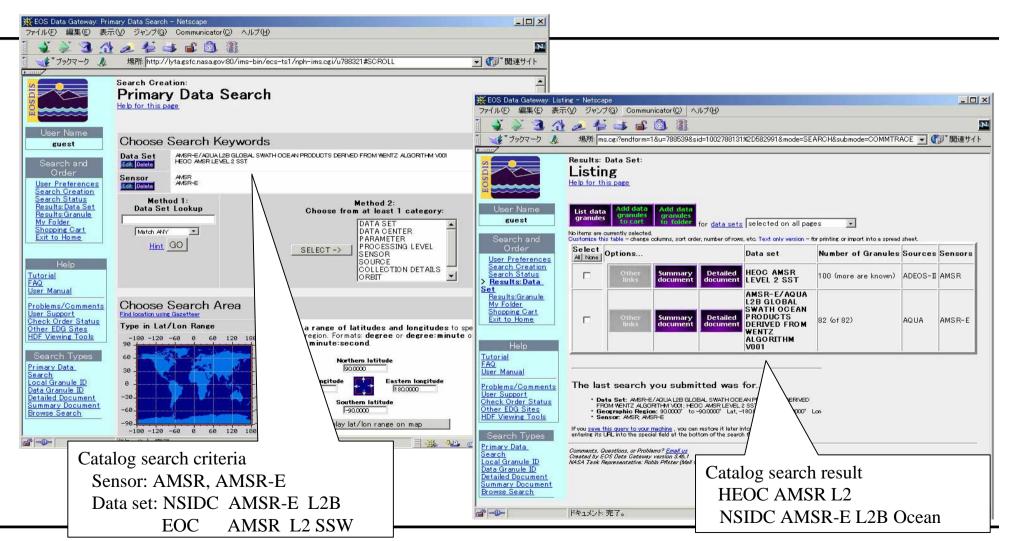
- Both NASDA and NASA PIs can access ADEOS-II information service from NASDA and NASA data center using each client system provided each agencies





Catalog interoperability (access from NASA/EDG)

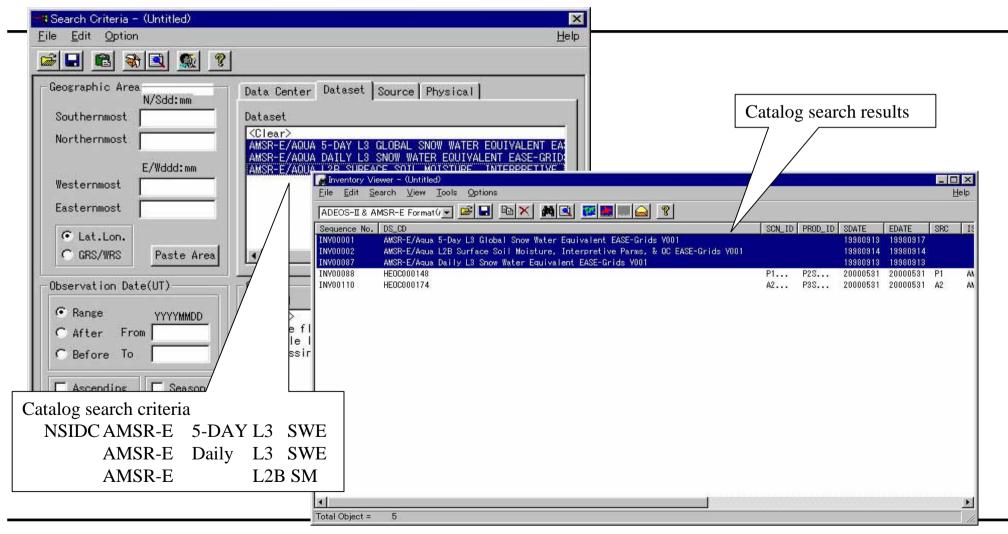






Catalog interoperability (access from NASDA EUS/GUI)









Off-line data distribution

There are two ways of off-line data distribution

- 1. Standard product orders (Scene orders)
 - Distribution of each products identified in catalog searches
 - All standard products processed at the EOC are available
 - Ordering : both on-line by EUS and off-line by order sheet are available
- 2. Standing orders
 - Periodical distribution of products according to the requirements from users submitted beforehand
 - The following products, generated according to sensor observation plans, are available :

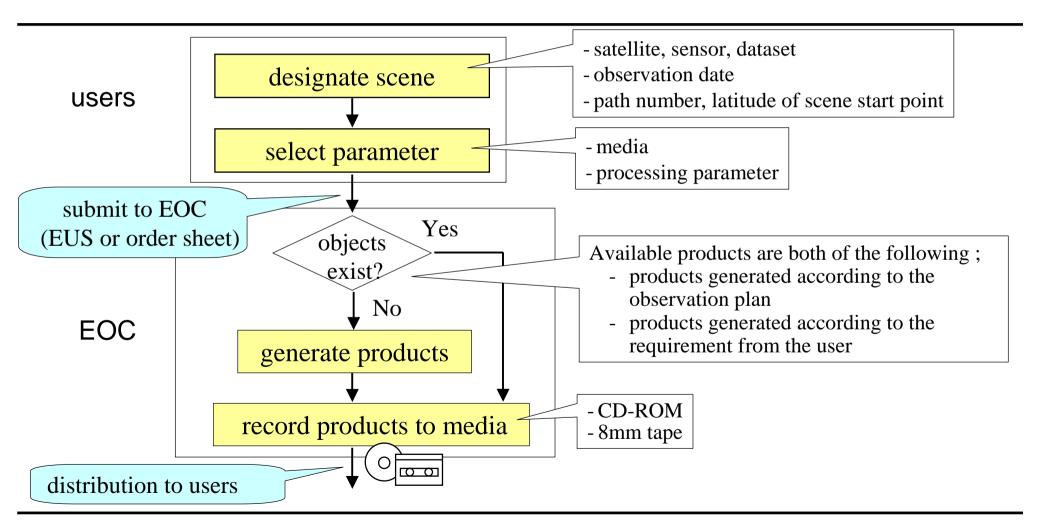
AMSRLevel 1A, 1B, 2, 3GLI-1kmLevel 1A, 1B, 2, 3 Binned, 3 STA MapGLI-250mLevel 1A, 1B

- Ordering : off-line interface only (contact point will be EORC order desk)
- Standing order service is provided only to PIs and relevant agencies





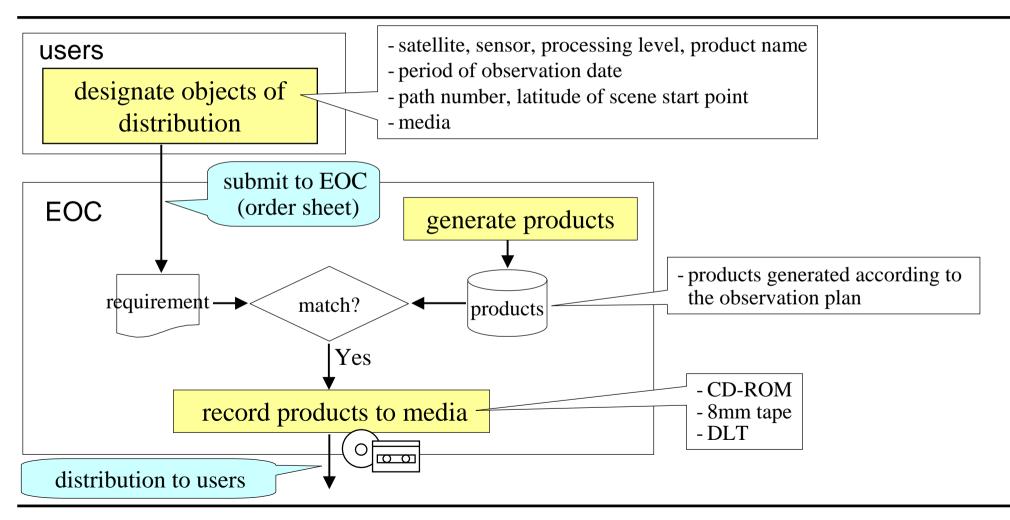
Procedure of scene order method







Procedure of standing order method







Media and format

	Scene order	
	CD-ROM	8mm tape
Capacity	650 MB	5 GB
Recording Format	Joliet*	tar
Data Format	NCSA-HDF	NCSA-HDF

* Enhancement format of ISO9660, long file name is available

Standing order

	CD-ROM	8mm tape	DLT
Capacity	650 MB	5 GB	35 GB
Recording Format	Joliet*	tar**	tar**
Data Format	NCSA-HDF	NCSA-HDF	NCSA-HDF

** Every file is archived by "tar command" and added to the media

- DVD will be available after the increase of distribution capacity

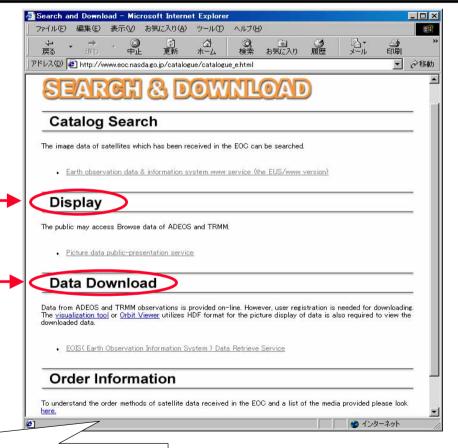




On-line data distribution

There are three services in online data distribution

- 1. Exhibition of graphical images on the WWW > "Display"
- 2. Distribution of standard products via the internet > "Data Download" —
- 3. Data transmission to relevant agencies

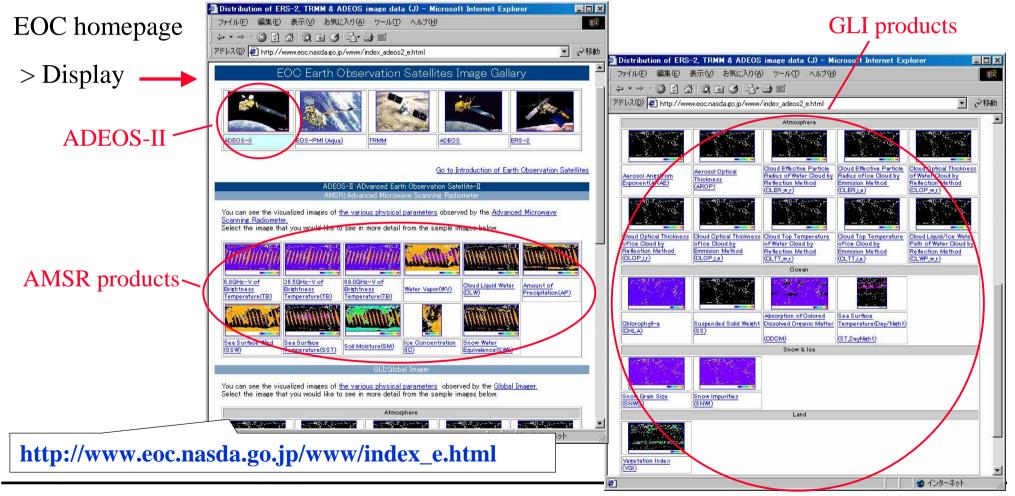


http://www.eoc.nasda.go.jp/catalogue/catalogue_e.html





Top page of graphical image sevice







Graphical images (sample of GLI-1km)

_ 🗆 × 🚰 http://www.eoc.nasda.go.jp/www/guide/gazou_frame_ADEOS_OSW_e.html - Microsoft Internet Explorer ファイル(E) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルブ(H) の検索 <u>歯</u> お気に入り ED刷 の歴 中止 ホーム 更る アドレス(D) 🝘 http://www.eoc.nasda.go.jp/www/guide/gazou_frame_ADEOS_OSW_e.html EOC Earth Observation Satellites Image ADEOS-II Observation Date(start) Data File Sensor Produc Sensor: GLI Level-3 STA Man Data (CHLA) Date: 2000/06/01 Choose Satellite Choose Sensor product Choose Observation Date(year) Choose Observation Date(month) Choose Observation Date (start day) Тор Home Choose Data Equi-Rectangular インターネット (2) ページが表示されました

Users choose :

- satellite
- sensor
- product name
- observation date
- processing period
- (8days, 16days, 1month)
- map projection





Graphical images (sample of AMSR)

- 🗆 × 🚰 http://www.eoc.nasda.go.jp/www/guide/gazou_frame_ADEOS_OSW_e.html - Microsoft Internet Explorer ファイル(E) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルブ(H) の検索 **国*** ED刷 夏る ホーム アドレス(D) 🙋 http://www.eoc.nasda.go.jp/www/guide/gazou_frame_ADEOS_OSW_e.html • 🔗移動 EOC Earth Observation Satellites Image ADEOS-II Observation Date(start) Data File Sensor: AMSR L3 (Sea surface wind speed) Date: 2000/06/01 Choose Satellite Choose Sensor product Choose Observation Date(year) Choose Observation Date (month) Choose Observation Date (start day) Top Home Choose Data Equ<u>i-Rectangular(Ascending)</u> Equi-Rectangular (Ascending) Equi-Rectangular (Descending) Equi-Rectangular (Descending) 1.5-17.5(m AMSR image, processed by NASDA/EOC 4 ∅] ページが表示されました インターネット

Users choose :

- satellite
- sensor
- product name
- observation date
- processing period (day / month)
- map projection
- orbit direction (Ascending / Descending)





Available products of graphical images (AMSR)

- Graphical images (GIF) of the following products are available on the WWW:

- AMSR	Level 3 (daily)	Brightness Temperature 6.9 GHz V (A/D)
- AMSR	Level 3 (daily)	Brightness Temperature 36.5 GHz V (A/D)
- AMSR	Level 3 (daily)	Brightness Temperature 89.0 GHz V (A/D)
- AMSR	Level 3 (daily, monthly)	Water Vapor (A/D)
- AMSR	Level 3 (daily, monthly)	Cloud Liquid Water (A/D)
- AMSR	Level 3 (daily, monthly)	Amount of Precipitation (A/D)
- AMSR	Level 3 (daily, monthly)	Sea Surface Wind speed (A/D)
- AMSR	Level 3 (daily, monthly)	Sea Surface Temperature (A/D)
- AMSR	Level 3 (daily, monthly)	Soil Moisture (A/D)
- AMSR	Level 3 (daily, monthly)	Ice Concentration (A/D)
- AMSR	Level 3 (daily, monthly)	Snow Water Equivalence (A/D)
		A : Ascending





Available products of graphical images (GLI)

- Graphical images (GIF) of the following GLI-1km products are available on the WWW:

- GLI-1km	Level 3 STA Map (16days, 1month)	ARAE (16days, 1 month)	
- GLI-1km	Level 3 STA Map (16days, 1month)	AROP (16days, 1 month)	
- GLI-1km	Level 3 STA Map (16days, 1month)	CLER_w_r, CLER_i_e	A 4
- GLI-1km	Level 3 STA Map (16days, 1month)	CLOP_w_r, CLOP_i_r, CLOP_i_e	Atmosphere
- GLI-1km	Level 3 STA Map (16days, 1month)	CLTT_w_r, CLTT_i_e	
- GLI-1km	Level 3 STA Map (16days, 1month)	CLWP_w_r)
- GLI-1km	Level 3 STA Map (8days, 1month)	CHLA	
- GLI-1km	Level 3 STA Map (8days, 1month)	SS	> Ocean
- GLI-1km	Level 3 STA Map (8days, 1month)	CDOM	Ocean
- GLI-1km	Level 3 STA Map (8days, 1month)	ST_DayNight	
- GLI-1km	Level 3 STA Map (16days)	VGI	- Land
- GLI-1km	Level 3 STA Map (16days, 1month)	SNWG	Cryosphere
- GLI-1km	Level 3 STA Map (16days, 1month)	SNWI	Cryosphere

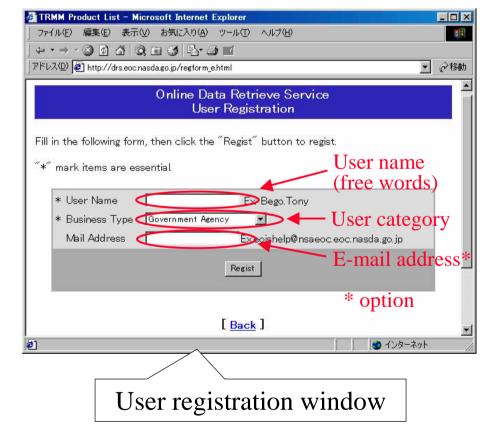




On-line data distribution (Data Download)

Standard products distribution

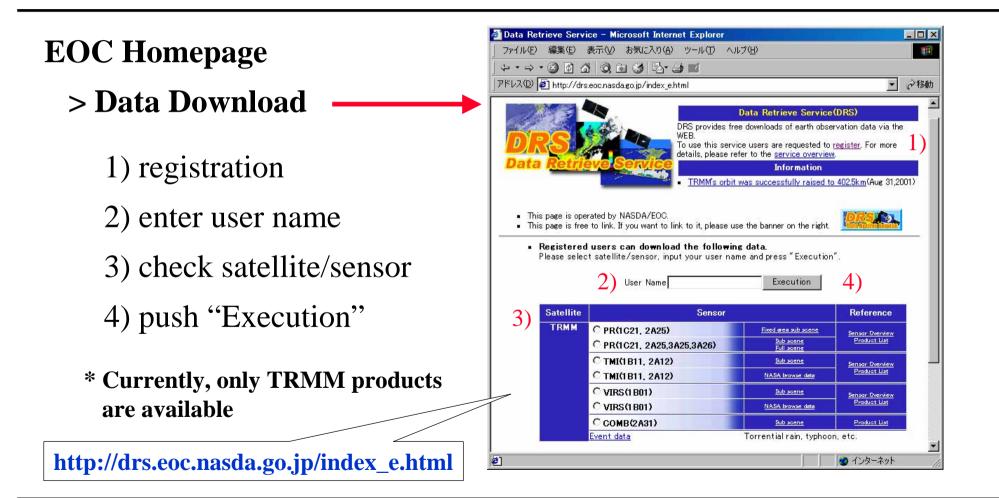
- The following products are available via the internet during the most recent 6 months
 - All of AMSR Level 3 products
 - All of GLI-1km Level 3 STA Map products
 - (except for NW, LA, K490, ST_DayNight, because of the large file size)
- This service is available to all registered users, including PIs
- User account will be issued immediately







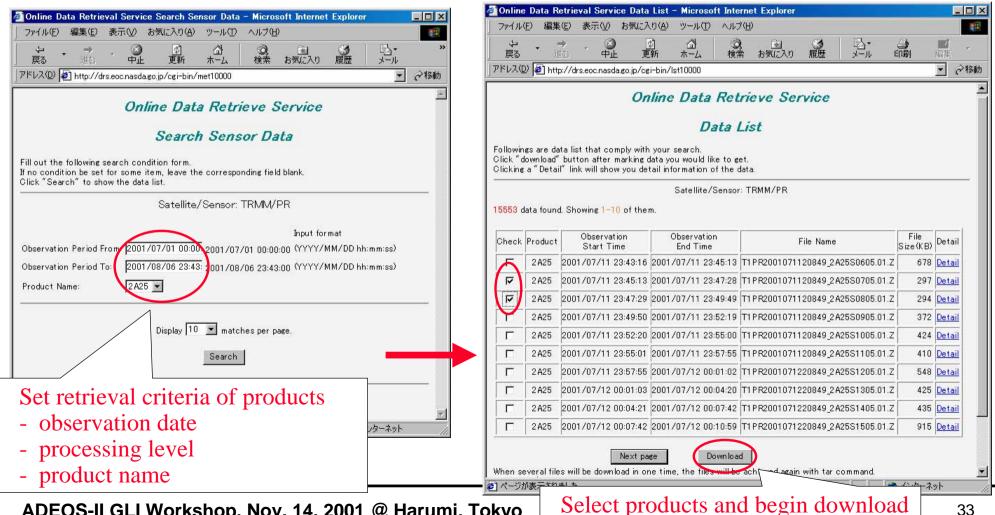
Top page of data download service







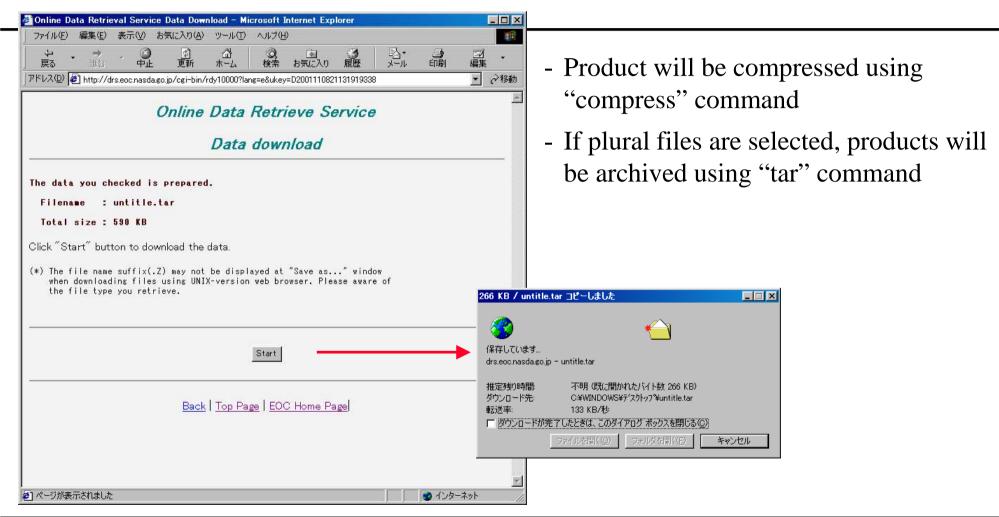
Selection of download products







Format of download data

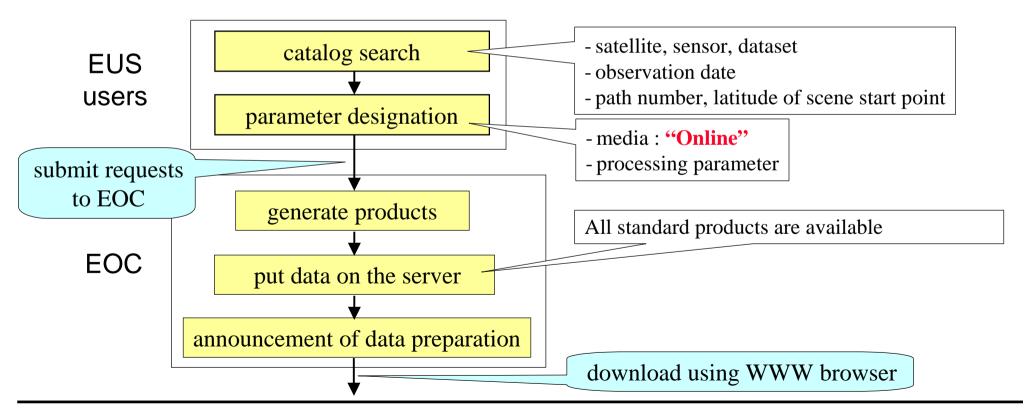






On-line distribution according to the scene order

- Designating the "on-line" option, <u>EUS users</u> are able to receive every standard products via the internet (<u>only for PIs</u>)

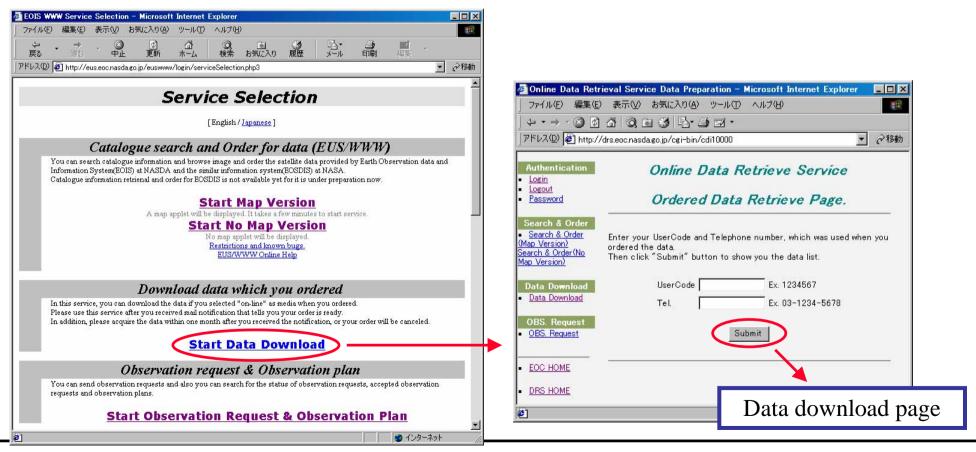






Ordered data retrieve

EOC Homepage > Search & Download > Catalog Search (EOIS WWW Service Login) >







Ordered data download page

ファイル(E) 編集(E) ↓ ↓ → 」 戻る 進む	ieval Service Data Preparation - Microsoft Internet Explorer 表示(公) お気に入り(A) ツール(①) ヘルブ(H) - ② ② A】 ③ ③ ③ ⑤ ③ ⑤ ③ 中止 更新 ホーム 検索 お気に入り 履歴 メール 印刷 drs.eoc.nasda.go.jp/cgi-bin/cdi10000	_□× 図 編集 ✓ ∂移動	- Products will be archived using "compress" and "tar"
Authentication Login	Online Data Retrieve Service		
Logout Password	Ordered Data List		val Service Data Preparation - Microsoft Internet Explorer
Search & Order • Search & Order (Map Version) Search & Order(No Map Version)	Followings are data list you ordered. Click "Download" button after marking data you would like to get. Clicking a "Detail" link will show you detail information of the data.	サ・ 戻る・進む 」アドレス(型) € http://drs	〇 〇 〇 回 〇<
Data Download <u>Data Download</u> OBS. Request	1 data found. Check Satellite Sensor Product Order No. Order No. Order No. Other No. Start Time Size (KB) ADEOS OCTS 3M L0100442 001 1997/03/02 00:000 3,293	- Password	Online Data Retrieve Service Data download
OBS. Request EOC HOME	Download	Search & Order • Search & Order (Map Version) Search & Order(No Map Version)	he data you checked is prepared. Filename : A10CT1997030200414110_3W1LGWLN5400.tar.Z Total size : 3,293 KB
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<u>Astrono</u>		OBS. Request (• <u>OBS. Request</u>	*) The file name suffix(.Z) may not be displayed at "Save as" window when downloading files using UNIX-version web browser. Please aware of the file type you retrieve.
		EOC HOME	
		DRS HOME	Start
		ℰ」ページが表示されました	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □





On-line data transmission

Near real-time data transmission

- The following data processed at the EOC are transmitted to relevant agencies immediately

- AMSR Level 1A :	JPL/PO.DAAC
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- AMSR Level 1B : EORC, JMA
- AMSR Level 2 : EORC , JMA , JAFIC
- GLI-1km Level 1B : EORC*, NOAA, JMA
- GLI-1km Level 2 : EORC , JMA
- GLI-1km Level 2 Map : EORC, JMA, JAFIC
 - * until the start of transmission to the JMA





Availability of each services

	Services	PIs	the Public
EUS/GUI	Catalog and Browse	Available	N/A
	Scene Order	Available	N/A
EUS/WWW	Catalog and Browse	Available	Available
	Scene Order	Available	N/A
Standing Order	•	Available	N/A
Graphical imag	ges on the WWW	Available	Available
Data Download	1	Available	Available
Ordered Data I	Download	Available	N/A





Data distribution schedule from EOC

