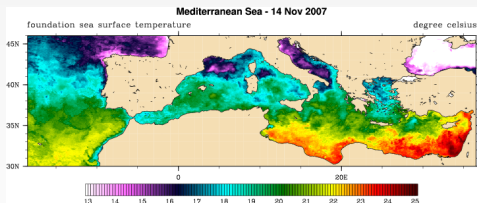


STATUS OF MEDSPIRATION SYSTEM

Jeff Piollé

CERSAT/Laboratoire d'Océanographie Spatiale
Ifremer-Centre de Brest

Joint GlobCOLOUR 2nd/Medspiration 5th user consultation meeting, Oslo,
Norway, 20-22 December 2007



medspiration

EUROPEAN NODE | | | | |

FOR SEA SURFACE TEMPERATURE

OUTLINE

1 OPERATION STATUS

- Products and services
- Data production
- Match-up database status
- Service performances

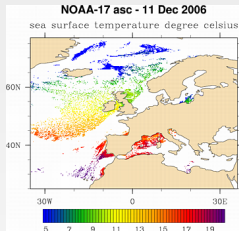
2 DATA DISSEMINATION

- Dissemination statistics
- Other dissemination

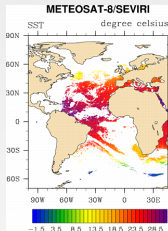
3 FUTURE PLANS

- System upgrades

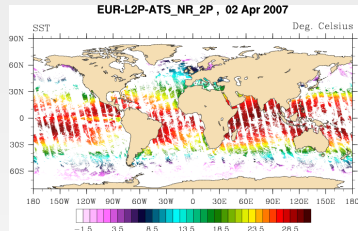
L2P PRODUCTS



NAR17/NAR18



SEVIRI

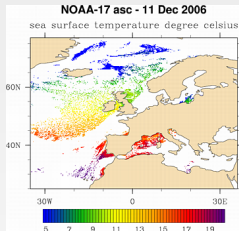


AATSR

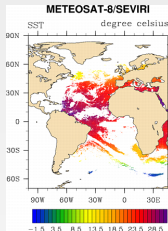
SOME PRODUCTS NO MORE SUPPORTED

- AVHRR GAC and LAC products
- AMSRE
- TMI

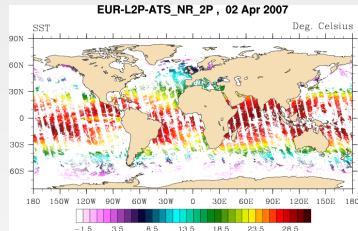
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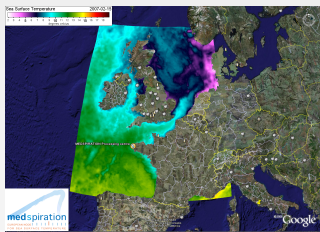
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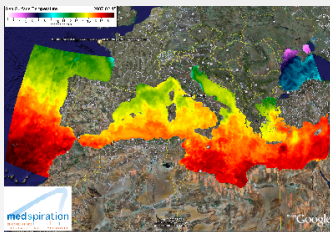
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MULTI-SENSOR HIGH RESOLUTION PRODUCTS

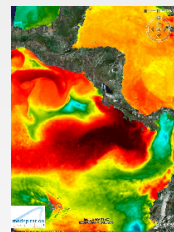
- foundation sea surface temperature, daily, 2km resolution



North-western shelves



Mediterranean sea

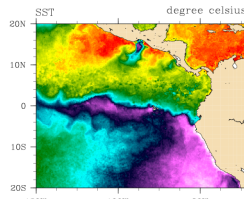


Galapagos

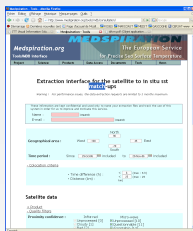
NEW PRODUCTS

- Galapagos and Coco Islands (March 2007) to support ESA/DIVERSITY project
- Extended to full south-east America (20S-20N) since Nov 2007
- Others windows may be opened in future

East Central and South America - 18 Nov 2007

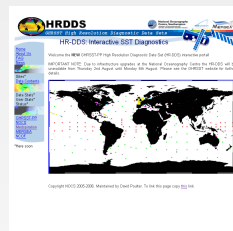


Match-up database [Ifremer]



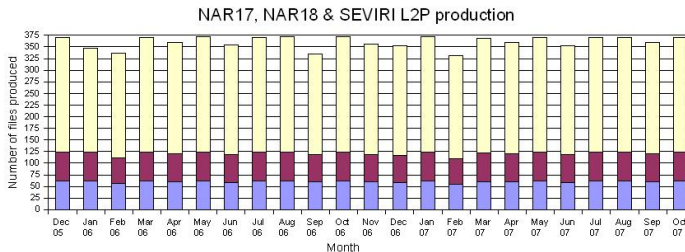
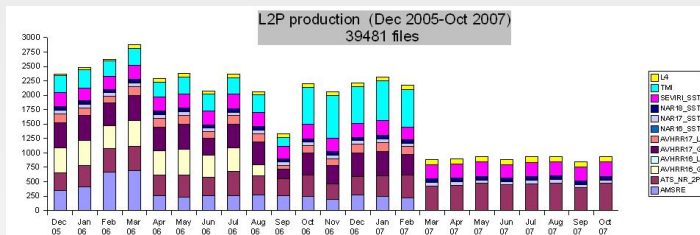
- colocation satellite/in situ
- used for product error statistics estimation
- only Medspiration products considered
- user interface for extraction or netcdf files
- two applications in the last months
 - AATSR confidence and SSES definition
 - Ifremer ODYSSEA SST analysis (AATSR correction statistical model)

HR-DDS system [NOCS]

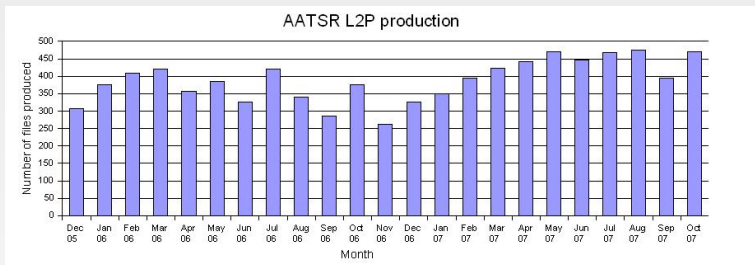


- satellite extractions at predefined locations
- used for product comparisons, diurnal warming,...
- includes additional data to Medspiration (analyses,...)
- browsing interface

L2P PRODUCTION



L2P PRODUCTION



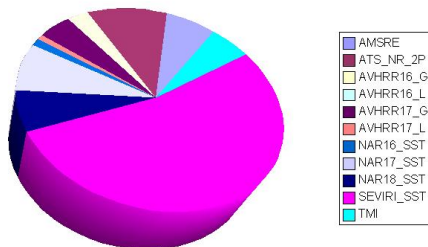
- production is much more stable since March 2007
- all orbits are caught
- improvement of rolling archive, sustained instrument availability (but September [Kiruna processor])
- relaxation of time cut-off, less problems with AATSR chain on Ifremer side

MDB PRODUCTION

MDB CONTENT

- 4.1 million match-ups (since June 2005)
- 90000 "profiler" data, 4000000 "surface" data
- largest database (real-time and delayed-mode data)
- some operability issues (Coriolis)

Match-ups per sensor



PRODUCTION RATE AND TIMELINESS

- everything available within three days is processed
- errors are recovered
- L2P timeliness (6 hours after download) : 94.93%
- L4 timeliness (6 :00 UTC) : 95.52%
- operationality usually defines target as 97%
- Moving forward to more operational services
 - AATSR processing chain to be consolidated
 - new cluster to replace old one : more efficient (CPU power * 100) and less failure
 - dissemination facilities to be under control and monitoring of dedicated operational team
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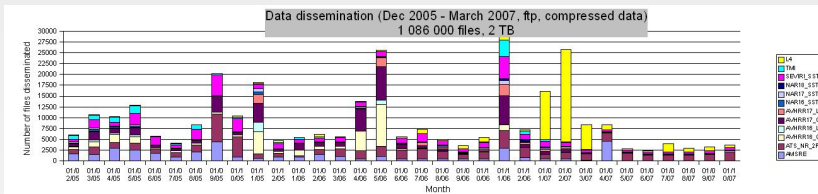
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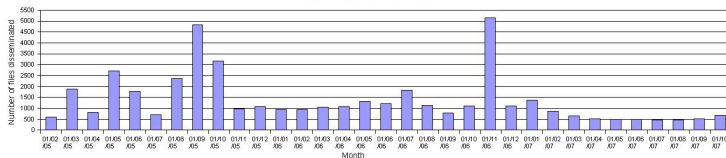
L2P DISSEMINATION



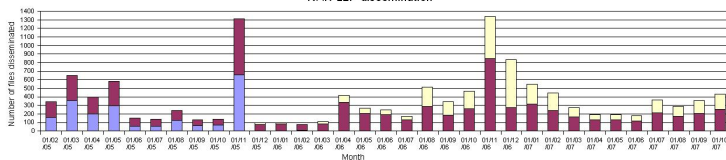
- ftp dissemination only (*real-time data*)
- one to three months of data online
- miss some other access means
- Medspiration repository only

L2P DISSEMINATION

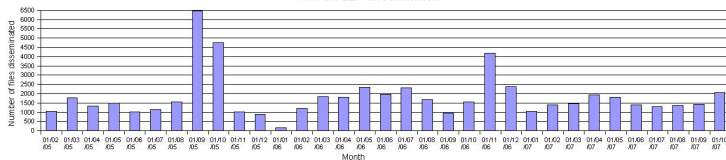
SEVIRI L2P dissemination



NAR L2P dissemination

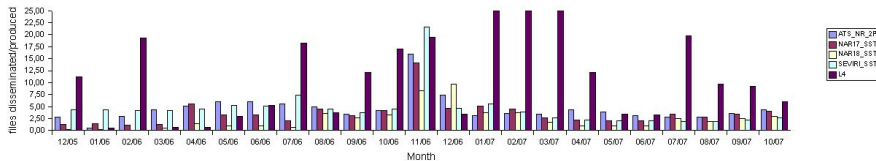


AATSR L2P dissemination

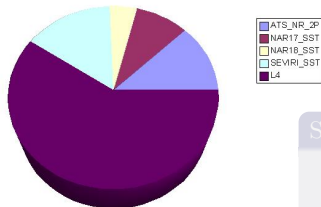


DISSEMINATION/PRODUCTION RATIO

Data dissemination/production ratio (Dec 2005 - Oct 2007), ftp
mean : 7.83



Dissemination/Production ratio

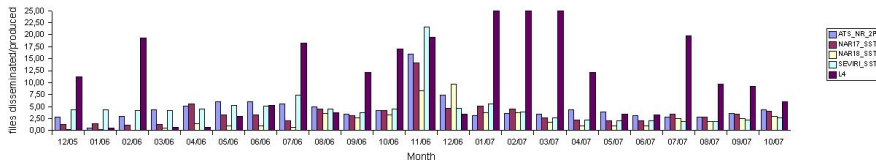


SIGNIFICANT L2P/L4 DIFFERENCE

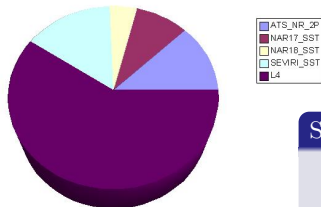
- easier, compact and gap free product
- full history online

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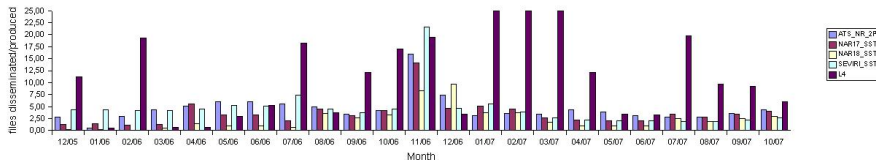


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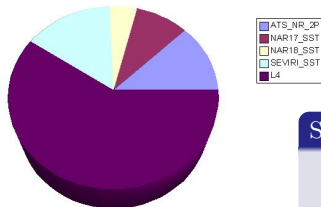
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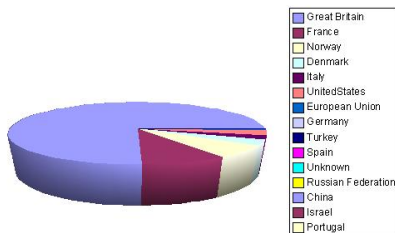


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USER DISTRIBUTION

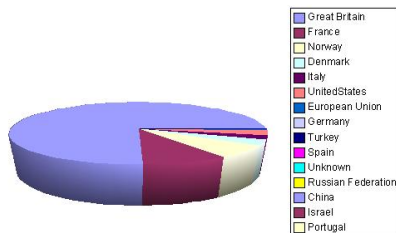
Data volume disseminated by country



- same pool of operational users : UKMetOffice, MetNo, DMI, Meteo-France,...
- used routinely in the following operational analysis :
 - ODYSSEA (Ifremer) - Global
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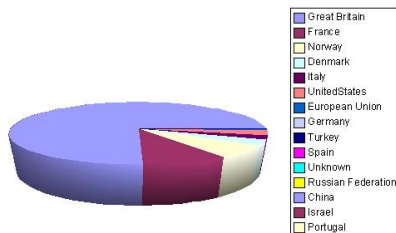
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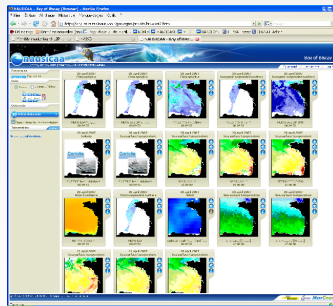
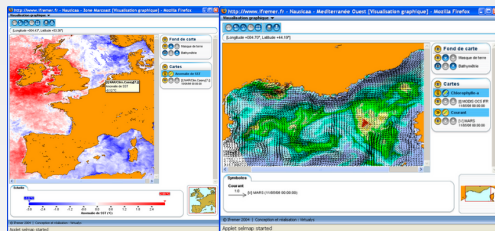
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NAUSICAA IMAGE BROWSER

- 450 users registered (240 at UM4, 300 at GHRSSST)
- interest for long time series, easy access and data integration
- data integration hides providers



AATSR PROCESSING CHAIN

- a new processing scheme to be implemented for estimation of confidence value and SSES (bias/standard deviation) - Talk by Gary Corlett
- possibly additional fields to be added (to be discussed during meeting)
- processing chain to be revisited for better integration in Ifremer system and re-use in European GDAC
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 - monitoring tools
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- other windows may be opened in future (on ESA demand) – SMOS,...

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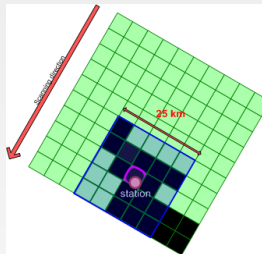
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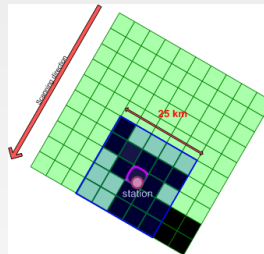
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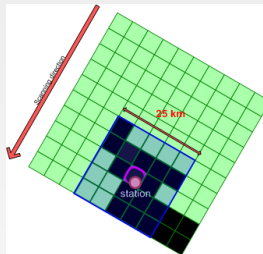
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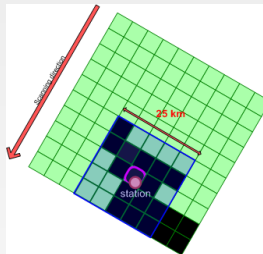
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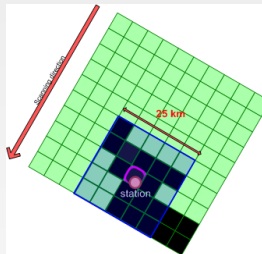
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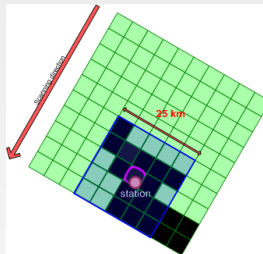
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