



# SAFNWC/MSG User Survey Results & WORKSHOP DISCUSSION AND OUTPUT

18th October 2005

Madrid

Marcelino Manso Rejón

Instituto Nacional de Meteorología

#### **NWCSAF** Users and Platforms

#### **According with the last OPS Report:**

- NWCSAF Licensed Users : ~ 30
- Platforms used for SAFNWC/MSG:
  - Linux : 11
  - SUN : 9
  - SGI: 2



#### **USER SURVEY RESULTS & WORKSHOP DISCUSSION**

• SOFTWARE, ENGINEERING

USER SERVICES

• PGE'S





## PGEs USER SURVEY RESULTS & WORKSHOP DISCUSSION

- PRESENTATION AND DISCUSSION BY GROUP OF PRODUCTS:
  - MSG CLOUDS: CMa, CT, CTTH
  - PPS CLOUDS
  - PRECIPITATION: PC, CRR, PC-PPS
  - CLEAR AIR: TPW, LPW, SAI
  - WINDS: HRW
  - THUNDERSTOMS: RDT
  - WEATHER ANALYSIS: ASII, AMA



#### **Survey Results**

#### **Total Replies : 15**

- NWCSAF/MSG v1.0 :
  - Downloaded: 11; Installed: 10; Running: 3
  - SUN: 8; Linux: 1
- NWCSAF/MSG v1.1:
  - Downloaded : 12; Installed : 11; Running : 5
  - SUN : 7; Linux : 3
- NWCSAF/MSG v1.2:
  - Downloaded: 14; Installed: 12; Running: 12
  - SUN: 9; Linux: 4



## **Survey Results**

1 Current environment			
v1.0	Downloaded	11 (73%)	SUN platform 8
	Installed	10 (67%)	Linux platform 1
	Running	3 (20%)	
v1.1	Downloaded	12 (80%)	SUN platform 7
	Installed	11 (73%)	Linux platform 3
	Running	5 (33 %)	
v1.2	Downloaded	14 (93%)	SUN platform 9
	Installed	12 (80%)	Linux platform 4
	Running	12 (80%)	





#### **Engineering – Installation & Compilation**

- Experiences : Nothing to Remark
- Problems : Minor problems
- Suggestions : See below
- Synthesis of results and comments:
  - Compilation rather easy.
  - Minor problems with compilation flags in different environments. Solved by each user.
  - Regions installation procedure for PGE01-02-03 is not easy to find.
  - The swap utility for little endian environment should not overwrite the data files in case of problems during the processing.



#### **Engineering – Monitoring & Control**

- Experiences : Nothing to Remark
- Problems : Log problems (too much information)
- Suggestions : Improve log messages
- Synthesis of results and comments:
  - Some users have found problems identifying the source of the error analysing the information provided in the messages. It is expected a better (more intuitive) identification of errors.



#### **Engineering – Integration: (Input data – SEVIRI)**

- Experiences : Nothing to Remark
- Problems : Processing old events with UMARF
- Suggestions : See below
- Synthesis of results and comments:
  - It is not possible to reprocess old event as the UMARF only deliver native format
  - To eliminate the need for full segment as input (at least for the reprocessing with NWCSAF/MSG)



#### **Engineering – Integration: (Input data – NWP)**

- Experiences : Nothing to Remark
- Problems : Availability of NWP parameters
- Suggestions : See below
- Synthesis of results and comments:
  - To use climatological data when no NWP data are available
  - To use different NWP models at once
  - Log messages responding to NWP missing parameters shouldn't be reported as errors
  - Difficult to understand the reported errors
  - Problems finding information about the NWP fields



#### **Engineering – Integration: (Input, Lightning)**

- Experiences : Better results in RDT using lightning data
- Problems : None
- Suggestions : See below
- Synthesis of results and comments:
  - Data exchange
  - Since these data are not mandatory, the log message "Input lightning data not found" should not be designated as an error



#### **Engineering – Integration: (Output data – HDF5)**

- Experiences : Nothing to remark
- Problems : Conversion to GIF
- Suggestions : See below
- Synthesis of results and comments:
  - Problems using hdf2gif conversion tool provided in the HDF 3rd party Software
  - DMI suggests to provide a projection tool with the package, but this is considered out of the scope of the application, because it is not an exploitation tool.
  - ARPAL asks for the products in GRIB format



#### **Engineering – Integration: (Output data – BUFR)**

- Experiences : Nothing to remark
- Problems : Can not be visualised
- Suggestions : See below
- Synthesis of results and comments:
  - BUFR products converted to HDF5 to be managed.
  - PGE10 and PGE12 use an old version of BUFR format. Use the latest definition of BUFR files.
  - Quite slow to read RDT files before visualisation, because of time series, a lot of previous RDT output must be read as well.



#### **WORKSHOP OUTPUT (Engineering, Software)**

1.- Confirmation/Update of User Survey Results

2.- Requested Improvements. Ideas, suggestions.



#### **User Services – Documentation**

- SW, Installation, configuration and execution docs:
  - Comprehensive documentation. It is considered enough, but a few users point out the difficulty to find some information due to the amount of data.
  - It is a good idea to have all the information in the same document.
- Scientific docs and reports:
  - More information on how to use quality information in the products as well as on error characteristics, is desirable.
  - It is expected a list of product changes (including calibration time interval, change in thresholds) between versions.
  - Some scientific documents are very short, some are very detailed.



#### **User Services – Help Desk**

- Experiences : Very positive
- Problems : Low downloading
- Suggestions : See below
- Synthesis of results and comments:
  - Fast and effective answers
  - Download process seems to be very slow
  - It could be useful to have the Software and the Scientific documentation in different sections
  - Update the FAQs section
  - It should be available the track of changes between SW versions.



#### **User Services – User Interaction**

- Synthesis of results and comments:
  - 8 users have made specific comments about the user interaction.
  - Summarising:
    - Good to Very Good interactions (Help Desk and Workshops)
    - Fast answer / Quick response (Help Desk)



#### **User Services – Intended Cooperation**

- Synthesis of results and comments:
  - 4 users have expressed their will to cooperate with the NWCSAF in the framework of VSA programme.
  - Summarising the areas of interest:
    - Validation activities and local tuning:
      - Precipitation products (comparison with Radar and rain gauges measurements
      - Fog
      - Separation of stratiform cumuliform clouds
      - Storm related products: SAI, CRR, LPW, RDT
    - Use of products in operational forecasting (i.e RDT)



### **WORKSHOP OUTPUT (User Services)**

1.- Confirmation/Update of User Survey Results

2.- Requested Improvements. Ideas, suggestions.



#### **USER SURVEY RESULTS - PGEs**

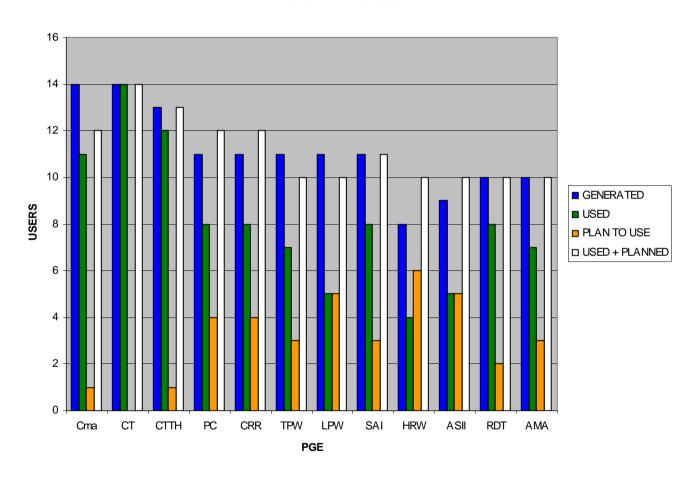


- 1.- Generation & Exploitation of the PGE
  - Number of Users running the PGE
  - Number of Users exploiting the PGE Outputs
  - Parameters Used
  - Processing Areas
  - NWP model used as input



#### **PGE Generation & Use**

#### **PGE GENERATION & USE**





- 2.- PGE Quality Analysis (by the users)
  - Number of Users that had performed quality studies
    - Objectively (with report)
    - Subjectively (with report)
  - Synthesis of results and comments



- 3.- PGE Applicability Assessment (by the users) -1/2
  - Meet Expected Requirements
    - Yes
    - No
    - No Answer
  - Synthesis of results and comments





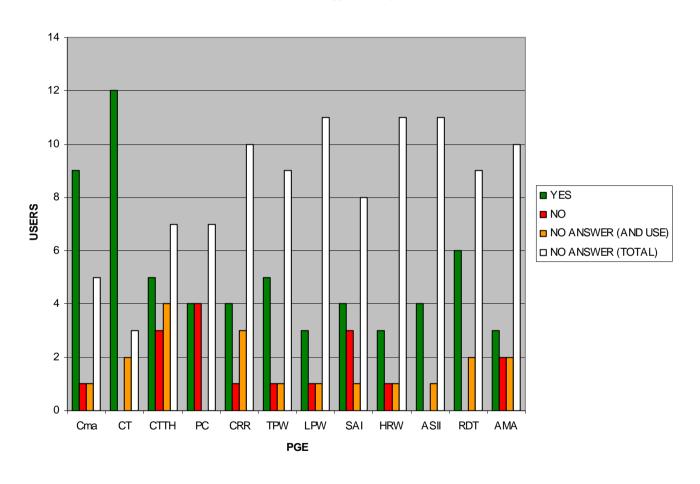
- 3.- PGE Applicability Assessment (by the users) -2/2
  - Current Appplications
  - Planned Applications
- If Not Used, Why?
  - No any application using PGE output
  - Quality does not meet requirements
  - Not used now, But planning to Use in a future
  - Other reasons or factors limiting the use
  - Comments





### **Meet Expected Requirements?**

#### MEET REQUIREMENTS ?





4.- Improvements and Modifications to PGE requested/suggested by Users

• 5.- Other Specific Aspects for PGE, collected from the User Survey, but not covered in previous sections

6.- Additional



#### **WORKSHOP DISCUSSION AND OUTPUT**

1.- Confirmation/Update of User Survey Results

- 2.- Requested Improvements. Ideas, suggestions.
  - DISCUSSIONS LEAD BY LOCAL MANAGERS/DEVELOPERS

