

# NWC SAF CDOP Operations Report 2008-02 Rolling User Survey

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### 1.1 ROLLING USER SURVEY

The results from the last User Survey distributed early July 2008 are displayed at the previous Operations Report document SAF/NWC/CDOP/INM/MGT/OPS/RP/03, available in the NWC SAF WEB site (<a href="http://www.nwcsaf.org">http://www.nwcsaf.org</a> -> documents).

In order to homogenise the results presentation with older Operations Reports, a summary of these results is displayed in the following sections. Please note that the colour code applied to the SW Use and SW Benefits tables has been changed according to the following action raised at the 2<sup>nd</sup> CDOP Steering Group meeting:

**Action CDOP-SG02-14:** Leading Entity (OPS) to change colour code for product classification in the Operations Report: Operational, green; Research, blue; distributed?

The user comments and requests were also analysed and presented in section 1.1.4.



# 1.1.1 SW Status and platforms characteristics

The platform characteristics and the version currently running at the users' sites are displayed in Table 1 and Table 2. Please note that SAFNWC/MSG v2008 was mandatory to be installed due to the new Radiances definition for SEVIRI data.

ORGANIZATION	COUNTRY	PLATFORM 1	PLATFORM 2	PLATFORM 3	SW version
University of Bonn	Germany	Fedora core 6 intel			v2008
RMIB	Belgium	HP-UNIX; memory 4 GB - 1,8 Ghz			√2008
University of Cologne	Germany				√2008
ZAMG	Austria				√2008
SMHI	Sweden	RHEL 5 - Two Quad core CPU 2.33GHz Intel Xeon - cpu-family=6, model=15			√2008
SMFAI	Italy	SUN Blade 2000 2 CPU: Ultra SPARC III Cu 900 MHz - 2 GB RAM			√2008
KNMI	Netherlands	sun4u sparc SUNW,Sun-Fire-V440	sun4u sparc SUNW,Sun-Fire-V440		v2008
BGIO	Germany	Sun/Solaris 8 (SPARC Processor)	Intel/Fedora Core6		√2008
AEMet	Spain	Sun OS 5.8 Generic_108528-20 sun 4u sparc SUNW, Sun-Fire-480R, Clock 900 MHz, 4 GB RAM.	Sun OS 5.8 Generic_114018-01 sun4u sparc SUNW, Sun-blade-1000, Clock 900 MHz, 1 GB RAM.		v2008
ARS0	Slovenia				
EUMETSAT	Germany	Sun/Linux			v2008
EMHI	Estonia				
SHMU	Slovakia				√2008
HMS	Hungary	Sun Blade 2000			v2008
IM	Portugal	Linux Fedora Core 7, 3.2 GHz, 4 Gb Ram, 250 Gb disk, Fortran PGI v7.1_4, gcc v4.1.2	Linux Fedora Core 6, 3.2 GHz, 2 Gb Ram, 160 Gb disk, Fortran PGI v5.1, gcc v4.1.1		v2008
PCRM	Italy	Intel Linux Gentoo			v2008
DWD	Germany	AIX 5.3	SuSE Linux 10.0	SuSE Linux 9.0	v2008
ENAV SpA	Italy	SUN ULTRA 25 WORKSTATION 2GB RAM - SUN OS REL. 5.10			v2008
DMN	Morocco				
RHMS	Serbia				v2008
Meteo-France	France				v2008
ARPA-SIM	Italy	Intel/linux 32 bit, pgi fortran compiler			v2008
CMR	Croatia				
FMI	Finland				
DMI	Denmark	Sun OS 5.8 Generic_117350-11 sun 4u sparc SUNW, Sun-Fire-V210			v2008

Table 1:Platform characteristics for SAFNWC/MSG v2008

ORGANIZATION	COUNTRY	PLATFORM 1	PLATFORM 2	SW version
University of Bonn	Germany			
RMIB	Belgium	HP-UNIX; memory 4 GB - 1,8 Ghz		∨2.0
University of Cologne	Germany			
ZAMG	Austria			
SMHI	Sweden	RHEL 5 Two Quad Core CPUs 2.33 GHz Intel Xeon, cpu-family=6, spu-model=15, RAM=12Gb		√2008
SMFAI	Italy			
KNMI	Netherlands			
BGI0	Germany	Sun/Solaris		∨2.0
AEMet	Spain			
ARSO	Slovenia			
EUMETSAT	Germany			
EMHI	Estonia			
SHMU	Slovakia			
HMS	Hungary			
IM	Portugal	Linux Red Hat Enterprise 3, 3.0 GHz, 1 Gb Ram, 80 Gb disk, PGI v7.0, gcc v3.2.3		∨2.0
PCRM	Italy			
DWD	Germany	SuSE Linux 10.0	IBM AIX 5.3	∨2008, ∨1.1
ENAV SpA	Italy			
DMN	Morocco			
RHMS	Serbia			
Meteo-France	France			
ARPA-SIM	Italy			
CMR	Croatia	Rocks 4.3 (cluster)	FC6 64 bit	√2008
FMI	Finland	Linux		∨1.1
DMI	Denmark	Linux 2.6.17.6-dapper #1 SMP i686 GNU/Linux , Hardware: Dell PowerEdge 2950		∨2.0

Table 2:Platform characteristics for SAFNWC/PPS



### 1.1.2 SW Use

The aim of Table 3 and Table 4 is to inform on the PGEs being used, whether their use is operational for forecasting and/or for research/study purposes and whether if products are input for other products.

SW use			0->0	Oper	atior	ıs	R	->R€	sear	ch	ļ.	>Inp	ut otl	ner p	orodu	icts			N->	Not	used				
ORGANIZATION	COUNTRY	PG	E01	PG	E02	PG	E03	PG	E04	PG	E05	PC	3E06	PG	E07	PG	E08	PG	E09	P(	3E10	PG	E11	PG	E12
University of Bonn	Germany		R		R		R		Ν		R		N		N		N		N		N		N		N
RMIB	Belgium	o		0		0		0					N		N		N		R	0			R		N
University of Cologne	Germany		Ν		N		R		Ν		R		N		N		N		N		N		R		N
ZAMG	Austria		N	_		ō		_		_			N		N		R		N	0			R		R
SMHI	Sweden	_		0		o		0			N		N		N		N		N		N		N		N
SMFAI	Italy	οI		01		0		0		0		0		0		0			N		N		N		N
KNMI	Netherlands	_	R	0		0			R		R		R		R		R		R	0		0			N
BGIO	Germany		N	0		0		0		o		0		0		0		0		0		0			N
AEMet	Spain	- 1		01		ОΙ		0		0		0	R	0	R	0	R	0			R	0			R
ARSO	Slovenia																								
EUMETSAT	Germany		R		R		R		Z		R		N		R		N		R		N		N		N
EMHI	Estonia																								
SHMU	Slovakia	οI	R	0	R	0	R		R	ō	R		N	- 1	R		N		N		N		N		N
HMS	Hungary	0	R	ОΙ	R	ō	R		Я		R		N		N		N	0		0			R	0	
IM	Portugal	ОΙ		0		ОΙ		0		0			R		R		R		N		N	0			N
PCRM	Italy	0		0		0		0		0		0		0		0		0		0		0		0	
DWD	Germany	_		ОΙ		οI		0		0			N		N		N		N		N	0			N
ENAV SpA	Italy		R		R		R		R		R		R		R		R		R		R		R		R
DMN	Могоссо																								
RHMS	Serbia		R		R		R		N		R		R		R		R		R		R		R		R
Meteo-France	France		N		N		N		N		N		N		N		N		N		N	01	R		N
ARPA-SIM	Italy	П		0	R	0	R	0			N	0		0		0		0		0		0		0	$\neg$
CMR	Croatia																								
FMI	Finland																								$\neg$
DMI	Denmark	П	R	Т	R	I	R	- 1	R		N		N		N		N		N		N		N		N

Table 3: SAFNWC/MSG v2008 SW Use



SW Use	0->Operations	R->Resea	arch I->Inp	ut o.prod.	N->Not used		
ORGANIZATION	COUNTRY	PGE01	PGE02	PGE03	PGE04		
University of Bonn	Germany						
RMIB	Belgium		1	N	1		
University of Cologne	Germany						
ZAMG	Austria						
SMHI	Sweden		0	0	0		
SMFAI	Italy						
KNMI	Netherlands						
BGIO	Germany	N	0	0	0		
AEMet	Spain						
ARSO	Slovenia						
EUMETSAT	Germany						
EMHI	Estonia						
SHMU	Slovakia						
HMS	Hungary						
IM	Portugal		N	N	N		
PCRM	Italy						
DWD	Germany		I R		R		
ENAV SpA	Italy						
DMN	Могоссо						
RHMS	Serbia						
Meteo-France	France						
ARPA-SIM	Italy						
CMR	Croatia	R	R	N	N		
FMI	Finland	N	N	N	N		
DMI	Denmark	0	0	0	0		

Table 4: SAFNWC/PPS SW Use



### 1.1.3 SW Benefits

The information concerning the benefits of the SAFNWC SW packages provides on the users operational tasks is displayed in Table 5 and Table 6.

SW Benefits	1->No impact	2->	No rele	vant im	pact	3-> Rela	evant im	pact	4->	Fully u	sed & ta	sks imp	roved
ORGANIZATION	COUNTRY	PGE01	PGE02	PGE03	PGE04	PGE05	PGE06	PGE07	PGE08	PGE09	PGE10	PGE11	PGE12
University of Bonn	Germany	4	4	3	1	3	1	1	1	1	1	1	1
RMIB	Belgium	3	3	3	1	1	2	1	1	2	3	2	1
University of Cologne	Germany	1	1	3	1	4	1	1	1	1	1	3	1
ZAMG	Austria	1	4	3	3	3	1	1	1	1	4	1	1
SMHI	Sweden	2	4	4	2								
SMFAI	Italy	4	4	3	3	2	2	2	2	1	1	1	1
KNMI	Netherlands	4	4	4	1	1	3	1	1	1	1	4	1
BGIO	Germany	1	4	4	3	2	2	2	2	2	3	3	1
AEMet	Spain	3	4	4	3	3	4	4	3	3	2	3	2
ARSO	Slovenia												
EUMETSAT	Germany												
EMHI	Estonia												
SHMU	Slovakia	4	4	3	3	3	3	3	1	1	1	1	1
HMS	Hungary	3	3	3									
IM	Portugal	4	4	2	3	4	3	3	3	1	1	4	1
PCRM	Italy	1	1	1	3	з	1		1	1	ფ	2	1
DWD	Germany	4	4	4	2	з	1	1	1	1	2	3	1
ENAV SpA	Italy	1	1	1	1	1	1	1	1	1	1	1	1
DMN	Morocco												
RHMS	Serbia												
Meteo-France	France												
ARPA-SIM	Italy	4	4	3	2	1	2	2	2	4	2	2	2
CMR	Croatia												
FMI	Finland												
DMI	Denmark	4	4	4	4	1	1	1	1	1	1	1	1

Table 5: SAFNWC/MSG v2008 SW Benefits



SW Benefits	1->No impact	2-> No relevant	impact	3-> Rel. impact	4->Fully used	
ORGANIZATION	COUNTRY	PGE01	PGE02	PGE03	PGE04	
University of Bonn	Germany					
RMIB	Belgium	1	1	1	1	
University of Cologne	Germany					
ZAMG	Austria					
SMHI	Sweden	2	4	4	3	
SMFAI	Italy					
KNMI	Netherlands					
BGIO	Germany	1	4	4	3	
AEMet	Spain					
ARSO	Slovenia					
EUMETSAT	Germany					
EMHI	Estonia					
SHMU	Slovakia					
HMS	Hungary					
IM	Portugal	4				
PCRM	Italy					
DWD	Germany	4	4	4	1	
ENAV SpA	Italy					
DMN	Могоссо					
RHMS	Serbia					
Meteo-France	France					
ARPA-SIM	Italy					
CMR	Croatia	3	3			
FMI	Finland					
DMI	Denmark	4	3	3	3	

Table 6: SAFNWC/PPS SW Benefits

### 1.1.4 Analysis of the Survey Results

The Operations Review Board and the Steering Group recommended to the Project Team to analyse the survey to identify:

- A) What could be implemented during CDOP I.
- B) What could be put in the repository of ideas for CDOP II.
- C) What should be low priority.

Based on the comments provided by the users, the NWC SAF Project Team classified the requests as follows:

A) To be implemented during CDOP I

### Comments applying to SAFNWC/MSG SW package

- It would be useful to supply some test data with relative output images, in order to make sure that everything runs correctly: It is being done from the past v2008.
- Documentation on ECMWF data difficult to understand. An example MARS work-order would be helpful: To include an annex in the SUM with the relevant information for v2009 onwards.





- It would be useful to provide and support a visualization tool: There is a Work Package for visualisation tool but the activity is currently delayed by manpower reasons.
- The problem is as follows: when your first compilation fails for any reason, the second automatically fails because although the "make" done its job well (compile only programs that have been modified or for which objects files not exist) the link editor do not work properly: indeed, it does not add all the objects to the libraries, by consequence it generates a linking error. The solution is simple: you have to delete all files objects. An automatic solution will prevent the user to have this kind of problem. The ideal is to launch the link editor with an update option (add to the libraries the new object files, replace those that are modified and keep intact those present and which are not modified), or implement the trivial solution (but by an automatic way this time) that consists of removing all object files (or at least those of the party causing such problems): To add a comment in the SUM recommending to reinstall and recompile the full package in case of errors during installation.
- To provide PGE08/SAI-equivalent products less ground-dependent: It is understood that the SAFNWC/MSG plans for air-mass physical retrieval will widely enlarge possibilities in this way.
- PGE02/CT not yet providing cumuliform/stratiform distinction, neither liquid/solid water phase distinction which is very useful information for aviation (icing conditions): Liquid/solid phase as defined in the corresponding CDOP Work Package.
- To provide inter-comparison among convection/precipitation products PGE04/PC, 05/CRR and 11/RDT generated fully independently: To compare PC and CRR by means of a Visiting Scientist Activity.

### Comments applying to Help Desk

- The rights of non-LE developers may be improved, e.g. 1) other consortium partners should not be allowed to answer mails assigned to ZAMG; 2) if I have done a mistake in uploading documentation (e.g. wrong document title), I should be able to correct it online myself without the need to contact the Help Desk admin. To make a general upgrade of the Help Desk.
- The pages with general documentation and (VSA-study) reports, is grossly outdated, and not kept alive very well. One should either skip it or keep it up to date and in balance: To update news and VSA pages

## B) To be implemented during CDOP II

Comments applying to SAFNWC/MSG SW package





- It would be useful to provide and support a visualization tool. The visualisation tool can be escalated to exploitation tool.
- PGE02/CT not yet providing cumuliform/stratiform distinction, neither liquid/solid water phase distinction which is a very useful information for aviation (icing conditions). It is suggested that other microphysical cloud products could be generated for this purpose. Cumuliform stratiform distinction and other microphysical cloud products as a new requirement.
- To consider analysis of HRV as a way to improve broken cloudiness information in CT and PGE03/CTTH product As a new requirement.
- To evaluate the maturity for inclusion of other products potentially useful for Nowcasting, for example, those on initiation and characterization of convection shown at the recent workshop on convection sponsored by EUMETSAT. As a new requirement.

### C) Low priority

### Comment applying to SAFNWC/PPS SW package

• Currently the PPS v2.0 is being run at the Portuguese Met. Service only by the Land SAF system. For the purpose of the Land SAF, which was to generate a cloud mask product each 3 minutes, in satellite projection, it was not possible to use the PPS task manager. The Land SAF team has prepared a set of scripts that launch the main PPS scripts from the crontab. I'm glad that it is made easier to swap between satellites in 2008. Task Manager is not adapted to run with EUMETCast, but not resources have to devote to this issue.

### Comment applying to SAFNWC/MSG SW package

• To provide inter-comparison among convection/precipitation products PGE04/PC, 05/CRR and 11/RDT generated fully independently. No resources for PGE04/PC and PGE05/CRR comparison with PGE11/RDT.

### Comments applying to Help Desk

 A nice exchange of technical questions but less information on the scientific background and practically no information on the use and the validation by users

Yes, a User Forum seems to be a good idea.

No, a User Forum is not needed

We really never needed to access the forum until now.

Yes, searchable Usenet group (something like comp.soft-sys.matlab for matlab).

User Forum was rejected by the users in 2006 after a hacker attack.