

## SATELLITE DISTRIBUTION SYSTEM OPERATIONS GROUP (SADISOPSG)

#### THIRTEENTH MEETING

Dakar, Senegal, 27 to 29 May 2008

**Agenda Item 4: Operation of the SADIS** 

4.3: Operational efficacy of the SADIS

# EVALUATION OF ACCESS STATISTICS OF WAFS SIGWX CHARTS ON THE SADIS FTP SERVICE

(Presented by the SADIS Provider State)

#### **SUMMARY**

This information paper presents an evaluation on the use of WAFS SIGWX charts in the PNG format by end-users, based upon access statistics on the SADIS FTP service.

#### 1. INTRODUCTION

- 1.1 The group's attention is drawn to WAFSOPSG Conclusion 3/9, whereby the WAFC Provider States were invited to continue with the issuance and provision of WAFS SIGWX forecasts in the portable network graphics (PNG) chart form, as a backup to the BUFR-coded SIGWX forecasts. Furthermore, Conclusion 3/9 noted that the provision of the PNG charts is expected to continue at least until 2010.
- 1.2 Accordingly, high- and medium-level WAFS SIGWX products, in the PNG chart form, have continued to be produced and disseminated by the WAFC Provider States on the SADIS and ISCS broadcast systems. In the case of the SADIS service, the PNG SIGWX products (from both WAFCs) are available via satellite link (SADIS 1G and SADIS 2G) and a dedicated SADIS FTP service.
- 1.3 In order to evaluate the current use of the WAFS SIGWX products, the SADIS Provider has undertaken a brief study based on PNG SIGWX access logs on the SADIS FTP service. The current use of the WAFC SIGWX products in the BUFR-code form was not part of this study.

#### 2. **DISCUSSION**

- 2.1 Due to the one-way nature of the SADIS 1G and SADIS 2G broadcast systems, it is impossible to evaluate the use of WAFS SIGWX products over this medium. The SADIS Provider State is merely able to ascertain which States have approved user access to all of the WAFS data on the satellite broadcasts i.e. GRIB, OPMET and SIGWX (PNG and BUFR) data. They are not able to determine which specific data types (such as PNG SIGWX) are being utilised by particular users.
- 2.2 The internet, however, affords service providers tremendous opportunity to identify *who* is accessing the service and *what data types* are being accessed. SADIS FTP, as a dedicated internet service, is no different. The UK Met Office, as the SADIS Provider, is able to determine which users have accessed SADIS FTP over a 7-day (archived) period, and which products the users have accessed.
- 2.3 The Met Office assessed two independent 7-day periods to evaluate access attempts of the WAFS SIGWX forecasts. Statistics derived from access logs allowed the Met Office to evaluate what the most, and least, frequently accessed chart areas were for high- and medium-level SIGWX forecasts.
- 2.4 In total, 72 WAFS SIGWX products were evaluated this accounts for the 4 chart validity times per day (0000, 0600, 1200 and 1800 UTC) of the 18 WAFS SIGWX products issued by WAFC London and WAFC Washington per valid time (14 SWH and 4 SWM).

#### 3. **RESULTS OF THE STUDY**

- 3.1 The first 7-day period of evaluation was 3 to 9 September 2007 inclusive, whilst the second 7-day period was 24 to 30 December 2007 inclusive. The appendix to this information paper provides tables of the results, with a ranking assigned to each of the 18 WAFS SIGWX chart areas.
- 3.2 For ease of viewing, the top three most accessed SIGWX products on SADIS FTP are highlighted in yellow.
- 3.3 For both evaluation periods, the top three most accessed products were identical i.e. the SWH MID chart (PGCE05 EGRR) was in 1<sup>st</sup> place, followed by the SWH EURAFI chart (PGRE05 EGRR) in second place, followed by the SWM EUR chart (PGDE14 EGRR) in third place.
- 3.4 The three least accessed products across the two evaluation periods were similar, but not identical. During the first evaluation period, the SWH PACIFIC, AMERICAS-AFI, and AMERICAS charts were the least accessed; whilst during the second evaluation, the SWH AMERICAS-AFI, SOUTH POLAR and PACIFIC charts were the least accessed. This result is in no way a reflection on the quality of the products themselves (all produced by WAFC Washington), but is more a reflection on the fact that they represent geographical areas that many of the SADIS users would be unlikely to request on a regular basis as alluded to in 4.3 below.

# 4. **CONCLUSIONS**

4.1 The consistency of the results across these two evaluation periods would suggest that similar findings may be determined even if alternative time periods had been selected.

- 4.2 The medium-level European (SWM EUR) chart is the third most accessed product on SADIS FTP, and ahead of many of the SWH chart areas. Feedback received from users has consistently suggested that the EUR SIGWX chart is one of the most heavily used products amongst SADIS users.
- 4.3 Understandably, the primary user base of the SADIS FTP service is the SADIS user community (based in Europe, Africa, the Middle East and Asia) as opposed to the ISCS user community (based in the Americas and Pacific region). Therefore, the most frequently accessed SIGWX products on SADIS FTP tended to be those produced by WAFC London (with EGRR headers). Similarly, the least frequently accessed SIGWX products on SADIS FTP tended to be those produced by WAFC Washington (with KKCI headers).

#### 5. ACTION BY THE SADISOPSG

5.1 The group is invited to note the information contained in this information paper.

\_\_\_\_\_

### **APPENDIX**

Table 1. SADIS FTP evaluation period 3 to 9 September 2007 inclusive

(Sample size: 9626 accesses across 18 products and 4 validity periods)

	Chart area	Regional Area	TTAAii	CCCC	Percentages	Rank
SWH	A	AMERICAS	PGEE05	KKCI	4.24%	16
	В	EURSAM	PGSE05	EGRR	4.99%	12
	B1	AMERICAS-AFI	PGIE05	KKCI	4.08%	17
	C	EURAFI	PGRE05	EGRR	8.08%	1
	D	EURASIA	PGZE05	EGRR	6.67%	4
	E	INDOC	PGGE05	EGRR	6.65%	5
	F	PACIFIC	PGGE05	KKCI	4.00%	18
	G	MID	PGCE05	EGRR	7.48%	2
	Н	NAT	PGAE05	EGRR	6.30%	6
	Н	NAT	PGAE05	KKCI	5.73%	7
	I	PACIFIC	PGBE05	KKCI	4.34%	13
	J	SOUTH POLAR	PGJE05	KKCI	4.29%	14
	K	SIO	PGKE05	EGRR	5.08%	11
	M	NORTH PACIFIC	PGDE29	KKCI	4.27%	15
SWM	Н	NAT	PGNE14	KKCI	5.56%	9
	EUR	EUR	PGDE14	EGRR	7.33%	3
	MEA	MID	PGCE14	EGRR	5.61%	8
	ASIA S	ASIA SOUTH	PGZE14	EGRR	5.30%	10

Total = 100.00%

 $\it Note.- The top three most accessed WAFS SIGWX products on SADIS FTP are highlighted in yellow.$ 

Table 2. SADIS FTP Evaluation period 24 to 30 December 2007

(Sample size: 8050 accesses across 18 products and 4 validity periods)

	Chart area	Regional Area	TTAAii	CCCC	Percentages	Rank
SWH	A	AMERICAS	PGEE05	KKCI	3.78%	13
	В	EURSAM	PGSE05	EGRR	4.80%	12
	B1	AMERICAS-AFI	PGIE05	KKCI	3.60%	18
	C	EURAFI	PGRE05	EGRR	8.42%	2
	D	EURASIA	PGZE05	EGRR	6.66%	6
	E	INDOC	PGGE05	EGRR	6.88%	4
	F	PACIFIC	PGGE05	KKCI	3.70%	16
	G	MID	PGCE05	EGRR	8.65%	1
	Н	NAT	PGAE05	EGRR	6.78%	5
	Н	NAT	PGAE05	KKCI	5.66%	8
	I	PACIFIC	PGBE05	KKCI	3.74%	15
	J	SOUTH POLAR	PGJE05	KKCI	3.68%	17
	K	SIO	PGKE05	EGRR	5.28%	10
	M	NORTH PACIFIC	PGDE29	KKCI	3.75%	14
SWM	Н	NAT	PGNE14	KKCI	5.71%	7
	EUR	EUR	PGDE14	EGRR	8.10%	3
	MEA	MID	PGCE14	EGRR	5.57%	9
	ASIA S	ASIA SOUTH	PGZE14	EGRR	5.24%	11

Total = 100.00%

 ${\it Note.} - {\it The top three most accessed WAFS SIGWX products on SADIS\ FTP\ are\ highlighted\ in\ yellow.}$