



International Civil Aviation Organization

**THE TWELFTH MEETING OF ASIA/PACIFIC ROBEX
WORKING GROUP (ROBEX WG/12)**

ICAO Regional Sub-Office, Beijing China

17 – 19 March 2014

**Agenda Item Conjoint Session 2 a) SIGMET Test
(Activity 3 – ROBEX WG; Activity 1 – MET/H TF)**

REVIEW OF WS SIGMET TEST 9

(Presented by Singapore RODB)

SUMMARY

This paper analyses the data collected during WS SIGMET Test 9 carried out on 26 November 2013.

1. INTRODUCTION

1.1 The MET Divisional Meeting (2002) formulated Recommendation 1/12 b), *Implementation of SIGMET requirements*, which called, *inter alia*, for the relevant Planning and Implementation Regional Groups (PIRGs) to conduct periodic tests of the issuance and reception of SIGMET messages, especially those for volcanic ash.

1.2 Information on the requirements for the dissemination and exchange of SIGMET is published in the Asia/Pacific Regional SIGMET Guide (4th edition 2007, amended 14 November 2013). This document also outlines the procedures for conducting SIGMET tests. The test procedures encompass all the three types of SIGMET, as follows:

- SIGMET for volcanic ash (WV SIGMET)
- SIGMET for tropical cyclones (WC SIGMET)
- SIGMET for other weather phenomena (WS SIGMET)

2. DISCUSSION

2.1 WS SIGMET TEST DATA

2.1.1 All five RODBs in the Region, Bangkok, Brisbane, Tokyo, Singapore and Nadi provided summaries of the reception of the WS SIGMET tests to the focal point for the WS SIGMET Tests in the Asia/Pacific region. An overview of the data reception is shown in Appendix 1.

2.1.2 The Regional OPMET Centre (ROC) Vienna also provided a summary report on the reception of the WS SIGMET test messages in the EUR region. SIGEMT Tests received from the EUR region is shown in Appendix 2.

2.2 DATA ANALYSIS for SIGMET TEST 9

2.2.1 State and MWO Issuance

- A total of 19 of the possible 29 States listed in the Asia/Pacific SIGMET Guide participated in SIGMET Test 9.
- A total of 5 States (Afghanistan, Nauru, Papua New Guinea, Solomon Islands and Sri Lanka) have not participated in any of the SIGMET test conducted. One of the non-participating States, Papua New Guinea, has responsibility for SIGMET issuance on behalf of Nauru and the Solomon Islands.
- A total of 12 of the possible 51 MWOs did not issue a test WS SIGMET for at least one of their FIRs, 5 of these did not participate in any of the nine tests (with bold indicating in the Table 1).

1	Afghanistan, Kabul (OAKB)
2	Australia, Cairns (YBCS) for YBBB FIR
3	Fiji, Nadi (NFFN)
4	Lao PDR, Vientiane (VLVT)
5	Mongolia, Ulaanbaatar (ZMUB)
6	Myanmar, Yangon (VYYY)
7	Nauru, by Port Moresby (AYPY)
8	Papua New Guinea, Port Moresby (AYPY)
9	Solomon Islands, by Port Moresby (AYPY)
10	Sri Lanka, Colombo (VCBI)
11	DPR Korea, Sunan (ZKPY)
12	United States, Kansas City (KKCI)

Table 1: States/MWOs did not participate in WS SIGMET Test 9

2.2.2 RODB Reception

- The summary of Asia Pacific RODB Reception for SIGMET Test 9 is listed below:

SIGMET Test 9	RODB Reception	Bangkok RODB	Brisbane RODB	Singapore RODB	Tokyo RODB	Nadi RODB
Test 9	245	48 of 50	49 of 50	50 of 50	50 of 50	48 of 50
(Nov 2013)	98%	96%	98%	100%	100%	96%

Table 2: RODB Reception of WS SIGMET Test 9

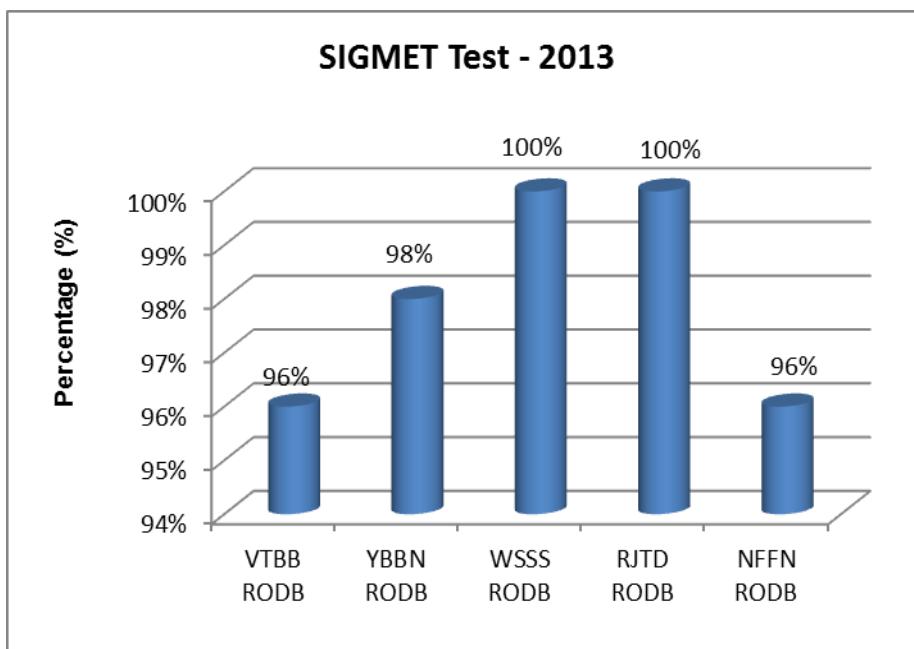


Figure 1: WAFC and RODB Reception of 2013 SIGMET Test

2.2.3 EUR ROCs, RODB and SADIS User Reception

- The Regional OPMET Centre (ROC) Vienna provided a summary report on the reception of the WS SIGMET Test 9 to the focal point for the WS SIGMET Tests in the Asia/Pacific region.
- The WS SIGMET Test result was collected from ROCs, Vienna, London and Toulouse, RODB Brussels and De Bilt (EHDB), The Netherlands as a SADIS User. An overview of the data reception is shown in Appendix 2.
- Summary of the WS SIGMET Test results in the EUR region:

ROC, RODB and SADIS User reception of SIGMET Test 9

SIGMET Test 9	ROC Reception	LOWM ROC	LFPW ROC	EGGY ROC	EHDB SADIS	EBBR RODB
Test 9	220	45 of 50	44 of 50	47 of 50	40 of 50	44 of 50
(Nov 2013)	91%	90%	88%	94%	80%	88%

Table 3: EUR ROC, RODB and SADIS User Reception of WS SIGMET Test 9

- Comparison of the WS SIGMET TEST reception between AP RODB and EUR ROC

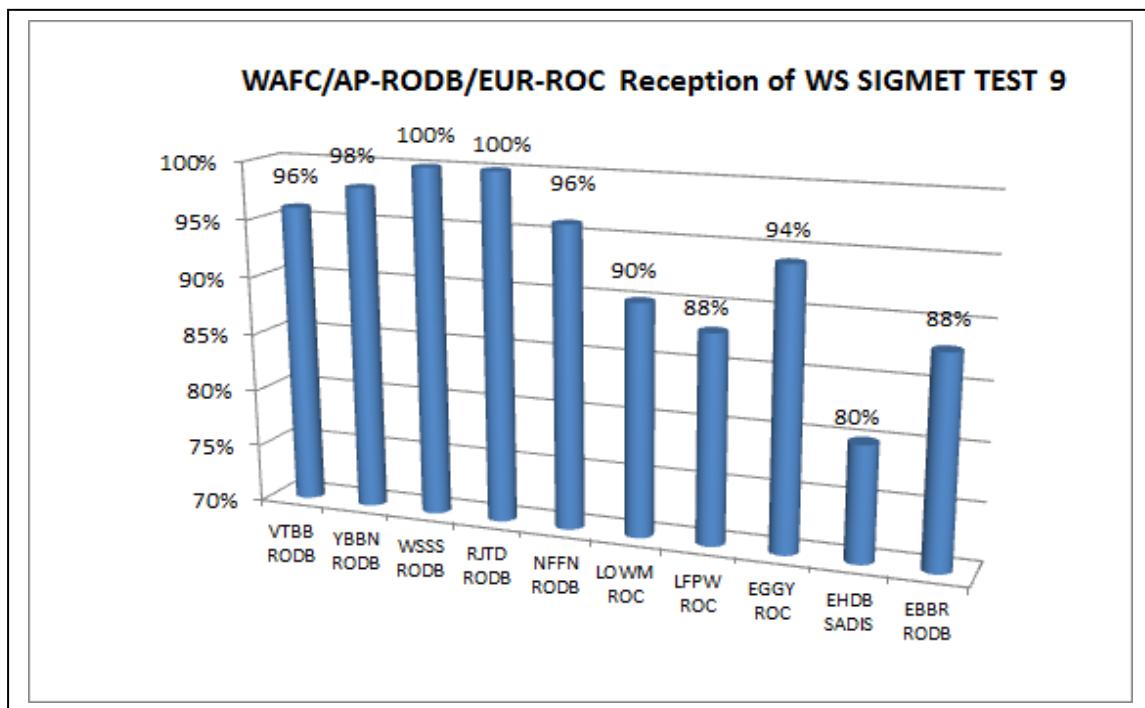


Figure 2: Comparison of WS SIGMET Test Reception

2.2.4 Additional WS SIGMET Test Messages received from AFI MWOs

The following test messages were received between 0845 and 1035 UTC, 26 Nov 13:

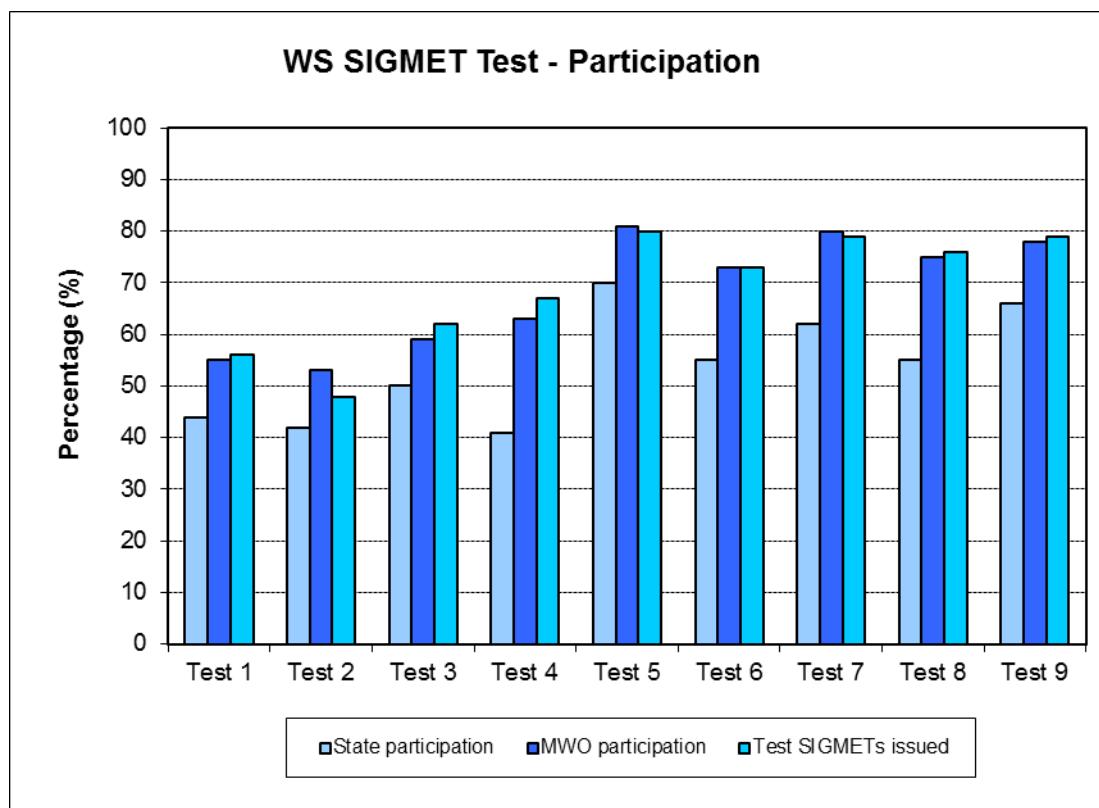
TTAAii	CCCC	YYGGgg	MWO	FIR / UIR
WSZA31	FAOR	260853	FAJA	FAOR
WSMG31	FMMI	260854	FMMI	FMMM
WSMA31	FIMP	261025	FIMM	FIMP
WSMA31	FIMP	261030	FIMM	FIMP
WSZB31	FLKK	260905	FLFI	FLKK
WSZB31	FLKK	261200	FWLL	FLKK
WSZB31	FLKK	261240	FWLL	FLKK
WSZB31	FLKK	261320	FWLL	FLKK

Participation of WS SIGMET Test 1-9

2.3.1 States and MWOs

SIGMET Test 1-9		State participation	MWO participation	Test SIGMETs issued
Test 1	(Feb 2006)	44%	55%	56%
Test 2	(Feb 2007)	42%	53%	48%
Test 3	(Jan 2008)	50%	59%	62%
Test 4	(Feb 2009)	41%	63%	67%
Test 5	(Nov 2009)	70%	81%	80%
Test 6	(Nov 2010)	55%	73%	73%
Test 7	(Nov 2011)	62%	80%	79%
Test 8	(Nov 2012)	55%	75%	76%
Test 9	(Nov 2013)	66%	78%	79%

Table 4: Participation (States & MWOs) in SIGMET Test 1-9



Figures 3: States/MWOs Participation in the WS SIGMET Test 9

2.3.2 Asia Pacific RODB Reception of the WS SIGMET Test 1-9

SIGMET Test 1-9	RODB Reception	Bangkok RODB	Brisbane RODB	Singapore RODB	Tokyo RODB	Nadi RODB
Test 1 (Feb 2006)	75%	45%	90%	80%	85%	
Test 2 (Feb 2007)	84%	68%	90%	94%	84%	
Test 3 (Jan 2008)	91%	76%	95%	100%	92%	
Test 4 (Feb 2009)	93%	86%	93%	100%	93%	
Test 5 (Nov 2009)	90%	82%	90%	98%	90%	
Test 6 (Nov 2010)	90%	87%	98%	100%	98%	67%
Test 7 (Nov 2011)	89%	84%	90%	100%	94%	76%
Test 8 (Nov 2012)	91%	92%	94%	100%	79%	90%
Test 9 (Nov 2013)	98%	96%	98%	100%	100%	96%

Table 5: RODB Reception of SIGMET Test 1-9

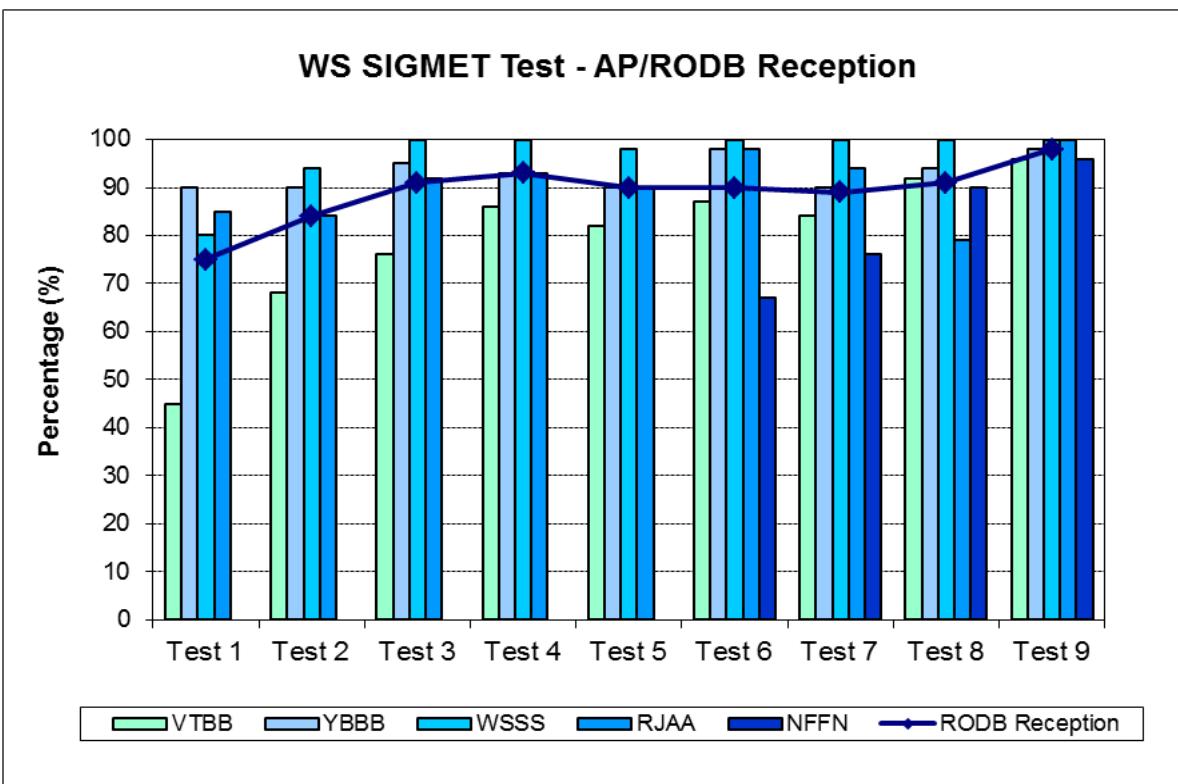


Figure 4: RODB Reception of WS SIGMET TEST 1-9

2.4 FORMATTING ERRORS in WS SIGMET TEST 9

2.4.1 Headers - Received one SIGMET test message with invalid DTG in the WMO Heading:

State, MWOs (FIR)	DTG (YYGGgg)	Received DTG
French Polynesia, TAHITI/Faaa	260200	<p>Invalid DTG : 260128 (Time received: 26/0200)</p> <p>Message content: GG WSSSYMYX 260200 NTAAYMYX WSPF21 NTAA 260128 NTTT SIGMET Z99 VALID 260200/260210 NTAA- NTTT TAHITI FIR THIS IS A TEST SIGMET, PLEASE DISREGARD =</p>

2.4.2 Priorities

- The priorities of aviation weather messages are indicated by the use of DD, FF and GG, where the priority for SIGMET should be FF.
- The results for WS SIGMET Test 9 revealed that incorrect message priorities were used by the following MWOs.

MWO Location	FIR	Priority	Message Content
TAHITI/Faaa	NTTT	GG	GG WSSSYMYX 260200 NTAAYMYX WSPF21 NTAA 260128 NTTT SIGMET Z99 VALID 260200/260210 NTAA- NTTT TAHITI FIR THIS IS A TEST SIGMET, PLEASE DISREGARD
LAHORE/Allama Iqbal Intl	OPLR	GG	GG WSSSYMYX 260205 OPLAYFYX WSPK31 OPLA 260205 OPLR SIGMET Z99 VALID 260205/260215 OPLA- THIS IS A TEST SIGMET. PLEASE DIREGARD (.) TEST WS ADVISORY NUMBER 01 RECEIVED AT 260200Z=
KARACHI/Jinnah Intl	OPKR	GG	GG WSSSYMYX 260158 OPKCYMYA WSPK31 OPKC 260200 OPKC SIGMET Z99 VALID 260200/260210 OPKC- THIS IS A TEST SIGMET, PLEASE DISREGARD=
MALE/Intl	VRMF	DD	DD WSSSYMYX 260200 VRMMYMYX WSMV31 VRMM 260200 VRMF SIGMET Z99 VALID 260200/260210 VRMM- THIS IS A TEST SIGMET, PLEASE DISREGARD=
ADELAIDE/Adelaide BRISBANE/Brisbane DARWIN/Darwin HOBART/Hobart MELBOURNE/Melbourne MELBOURNE/World Met. Centre PERTH/Perth	YMMM YBBB	DD GG	GG WSSSYMYX 260159 YPRFYMYX WSAU21 APRF 260159 YBBB SIGMET Z99 VALID 260200/260210 YPRF - YBBB BRISBANE FIR THIS IS A TEST SIGMET PLEASE DISREGARD= GG WSSSYMYX 260200 YSRFYMYX

SYDNEY/Sydney			<p>WSAU21 ASRF 260159 YBBB SIGMET Z99 VALID 260200/260210 YSRF -</p> <p>GG WSSSYMYX 260200 YMMCYMYX WSAU21 AMMC 260201 YBBB SIGMET Z99 VALID 260220/260230 YMMC- THIS IS A TEST SIGMET PLEASE DISREGARD=</p> <p>DD WSSSYMYX 260204 YMRFYMYX WSAU21 AMRF 260204 YBBB SIGMET Z99 VALID 260205/260215 YMRF - YBBB BRISBANE FIR THIS IS A TEST SIGMET PLEASE DISREGARD=</p> <p>DD WSSSYMYX 260217 YPRMYMYX WSAU21 APRM 260217 YMMM SIGMET C01 VALID 260215/260225 YPRM - YMMM MELBOURNE FIR THIS IS A TEST SIGMET PLEASE DISREGARD=</p>
SHANGHAI/Hongqiao	ZSHA	DD	<p>GG WSSSYMYX 260159 ZSSSYMYX WSCI34 ZSSS 260205 ZSHA SIGMET Z99 VALID 260205/260215 ZSSS- THIS IS A TEST SIGMET, PLEASE DISREGARD=</p>
URUMQI/Diwopu	ZWUQ	GG	<p>GG WSSSYMYX 260202 ZWWWYZYX WSCI39 ZWWW 260201 ZWUQ SIGMET Z99 VALID 260205/260215 ZWWW- THIS IS A TEST SIGMET, PLEASE DISREGARD=</p>
WUHAN/Tianhe	ZHWH	GG	<p>GG WSSSYMYX 260200 ZHHHYMYX WSCI45 ZHHH 260205 ZHWH SIGMET Z99 VALID 260205/260210 ZHHH- THIS IS A TEST SIGMET, PLEASE DISREGARD=</p>

2.4.3 Sequence Numbers

- A maximum of 3 characters is allowed for the SIGMET sequence numbers. Most of MWOs used the Z99 as sequence number for their WS test messages.
- WS SIGMETs issued by MWO Honolulu Intl had incorrect sequence number.

MWO Location	MWO	Incorrect Sequence No.	Message Content
HONOLULU/Honolulu Intl	PHFO	NOVEMBER 1	<p>WSPA01 PHFO 260200 SIGPAN KZAK SIGMET <u>NOVEMBER 1</u> VALID 260200/260215 PHFO- OAKLAND OCEANIC FIR. THIS IS A TEST SIGMET. PLEASE DISREGARD.</p>

2.4.4 Other formatting errors

Invalid FIR Identifier	Karachi FIR & SRR	GG WSSSYMYX 260158 OPKCYMYA WSPK31 OPKC 260200 OPKC SIGMET Z99 VALID 260200/260210 OPKC- THIS IS A TEST SIGMET, PLEASE DISREGARD=
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2.5 CONCLUSION

2.5.1 The participation for State and MWO in WS SIGMET Test 9 increased 3 to 9 percent compared to the previous test (States: 66% vs 55% ; MWOs: 78% vs 75%). This is due to State Bangladesh and Nepal participated in the SIGMET Test 9.

2.5.2 The average reception for five RODB also increased by 7 percent compared to 2012 result. (2012: 91% ; 2013: 98%).

2.5.3 It is very pleasing to see three EUR ROCs scored high rate of reception in Test 9 (ROC average 2012: 88% ; 2013: 91%).

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the results of the WS SIGMET test presented above and discuss future improvement of the WS SIGMET exchange in the region, especially any strategies that could be deployed to increase the participation of States.

APPENDIX 1 – Summary of WS SIGMET Test Results received from AP/RODBs

State	Meteorological Watch Office (MWO)			Area Served	SIGMET Guide			Transmitted Header						RODB Reception					Remarks					
	Location		MWO		Name	TTAAii	CCCC	FIR	Priority	TTAAii	CCCC	YYGGgg	MWO	FIR / UIR	VTBB	YBBN	WSSS	RJTD	NFFN					
Afghanistan	KABUL AD		OAKB	Kabul FIR and SSR	WSAH31	OAKB	OAKX			WSAU21	APRM	YMMM	DD	WSAU21	APRM	260217	APRM	YMMM	02:18	02:17	02:18	02:18	02:17	Not in Asia/Pac Region
Australia	ADELAIDE/Adeelaide		YPRM	Melbourne FIR	WSAU21	APRM	YMMM	DD	WSAU21	ABRF	YBBB	GG	WSAU21	ABRF	260201	ABRF	YBBB	02:04	02:01	02:05	02:04	02:01		
	BRISBANE/Brisbane		YBRF	Brisbane FIR	WSAU21	ABRF	YBBB	GG	WSAU21	ABRF	YMMM	FF	WSAU21	ABRF	260211	ABRF	YMMM	02:12	02:11	02:12	02:12	02:11		
	BRISBANE/Brisbane		YBRF	Melbourne FIR	WSAU21	ABRF	YMMM	FF	WSAU21	ABRF	YBBB													
	CAIRNS/Cairns Intl		YBCS	Brisbane FIR	WSAU21	ABCS	YBBB																	
	DARWIN/Darwin		YPDM	Brisbane FIR	WSAU21	ADRM	YBBB	GG	WSAU21	ADRM	YBBB		WSAU21	ADRM	260202	ADRM	YBBB	02:05	02:02	02:05	02:05	02:02		
	DARWIN/Darwin		YPDM	Melbourne FIR	WSAU21	ADRM	YMMM	GG	WSAU21	ADRM	YBBB		WSAU21	ADRM	260203	ADRM	YMMM	02:06	02:03	02:07	02:06	02:03		
	HOBART/Hobart		YMFH	Melbourne FIR	WSAU21	AMHF	YMMM	GG	WSAU21	AMHF	YBBB	DD	WSAU21	AMRF	260204	AMRF	YBBB	02:04	02:01	02:04	02:04	02:01		
	MELBOURNE/Melbourne		YMRF	Brisbane FIR	WSAU21	AMRF	YBBB	DD	WSAU21	AMRF	YMMM	DD	WSAU21	AMRF	260205	AMRF	YMMM	02:06	02:05	02:06	02:06	02:04		
	MELBOURNE/Melbourne		YMRF	Melbourne FIR	WSAU21	AMRF	YMMM	DD	WSAU21	AMRF	YBBB		WSAU21	AMRF	260201	AMMC	YBBB	02:03	02:00	02:03	02:03	02:00		
	MELBOURNE/World Met. Centre		YMMC	Brisbane FIR	WSAU21	AMMC	YBBB	GG	WSAU21	AMMC	YBBB		WSAU21	AMMC	260201	AMMC	YBBB	02:03	02:00	02:03	02:03	02:00		
	MELBOURNE/World Met. Centre		YMMC	Melbourne FIR	WSAU21	AMMC	YMMM	GG	WSAU21	AMMC	YBBB		WSAU21	AMMC	260201	AMMC	YMMM	02:03	02:00	02:04	02:03	02:00		
	PERTH/Perth		YPRF	Brisbane FIR	WSAU21	APRF	YBBB	GG	WSAU21	APRF	YBBB	FF	WSAU21	APRF	260159	APRF	YBBB	02:02	01:59	02:02	02:02	01:59		
	PERTH/Perth		YPRF	Melbourne FIR	WSAU21	APRF	YMMM	GG	WSAU21	APRF	YBBB		WSAU21	APRF	260159	APRF	YMMM	02:00	01:59	02:00	02:00	01:59		
	SYDNEY/Sydney		YSRF	Brisbane FIR	WSAU21	ASRF	YBBB	GG	WSAU21	ASRF	YBBB		WSAU21	ASRF	260159	ASRF	YBBB	02:02	01:59	02:03	02:02	01:59		
	SYDNEY/Sydney		YSRF	Melbourne FIR	WSAU21	ASRF	YMMM	GG	WSAU21	ASRF	YBBB		WSAU21	ASRF	260159	ASRF	YMMM	02:01	02:00	02:01	02:01	02:00		
Bangladesh	DHAKA/Zia Intl		VGHS	Dhaka FIR & SRR	WSBW20	VGHS	VGFR	FF	WSBW20	VGHS	VGFR		260200	VGHS	VGFR	01:59	02:00	01:59	02:03	02:00				
Cambodia	CHENGDU/Shuangliu for PHNOM-PENH (VDPP)		ZUUU	Phnom-Penh FIR & SRR	WSKP31	ZUUU	VDPP	FF	WSKP31	ZUUU	VDPP		260204	ZUUU	VDPP	02:04	02:02	02:04	02:04	02:02				
China	BEIJING/Capital		ZBAA	Beijing FIR & SRR	WSC33	ZBAA	ZBPE	FF	WSC33	ZBAA	ZBPE		260205	ZBAA	ZBPE	02:01	02:01	02:01	02:01	02:00				
	GUANGZHOU/Baiyan		ZGGG	Guangzhou FIR & SRR	WSC35	ZGGG	ZGZU	FF	WSC35	ZGGG	ZGZU		260205	ZGGG	ZGZU	02:00	02:00	02:01	02:01	02:00				
	CHENGDU/Shuangliu		ZUUU	Kunming FIR & SRR	WSC36	ZUUU	ZPKM	FF	WSC36	ZUUU	ZPKM		260202	ZUUU	ZPKM	02:02	02:01	02:02	02:02	02:01				
	XIAN/Xianyang		ZLXY	Lanzhou FIR and SRR	WSC37	ZLXY	ZLHW	FF	WSC37	ZLXY	ZLHW		260203	ZLXY	ZLHW	02:01	02:02	02:04	02:04	02:02				
	HAIKOU/Meilan		ZJHK	Sanya FIR & SRR	WSC35	ZJHK	ZJSA	FF	WSC35	ZJHK	ZJSA		260210	ZJHK	ZJSA	02:25	02:41	02:25	02:25	02:41				
	SHANGHAI/Hongqiao		ZSSS	Shanghai FIR & SRR	WSC34	ZSSS	ZSHA	GG	WSC34	ZSSS	ZSHA		260205	ZSSS	ZSHA	02:00	01:59	02:00	02:00	01:59				
	SHENYANG/Taoxian		ZYTX	Shenyang FIR & SRR	WSC38	ZYTX	ZYSH	FF	WSC38	ZYTX	ZYSH		260205	ZYTX	ZYSH	02:01	02:00	02:01	02:01	02:01				
	TAIPEI/Taipei Intl		RCTP	Taipei FIR & SRR	WSC31	RCTP	RCAA	FF	WSC31	RCTP	RCAA		260200	RCTP	RCAA	02:00	02:00	02:01	02:00	02:00				
	URUMQI/Diw opu		ZWWW	Urumqi FIR & SRR	WSC39	ZWWW	ZWUQ	GG	WSC39	ZWWW	ZWUQ		260201	ZWWW	ZWUQ	02:01	02:02	02:01	02:01	02:02				
	WUHAN/Tianhe		ZHHH	Wuhan FIR & SRR	WSC45	ZHHH	ZHWH	GG	WSC45	ZHHH	ZHWH		260205	ZHHH	ZHWH	02:01	02:00	02:07	02:01	02:00				
	HONG KONG/Hong Kong Intl		VHHH	Hong Kong FIR & SRR	WSSS20	VHHH	VHHK	FF	WSSS20	VHHH	VHHK		260200	VHHH	VHHF	02:01	02:00	02:01	02:01	02:00				
DPR Korea	SUNAN		ZKPY	Pyongyang FIR & SRR	WSKR31	ZKPY	ZKKP																	
Fiji	NADI/Nadi Intl		NFFN	Nadi FIR & SRR	WSFJ01,02..	NFFN	NFFF																02:57/current	
French Polynesia	TAHITI/Faaa		NTAA	Tahiti FIR & SRR	WSPF21,22	NTAA	NTTT	GG	WSPF21	NTAA	260128	NTAA	NTTT	02:00	02:00	02:00	02:00	02:00	02:00	02:00	02:00	02:00	incorrect DTG	
India	CHENNAI/Chennai		VOMM	Chennai FIR & SRR	WSIN31	VOMM	VOMF	FF	WSIN31	VOMM	260205	VOMM	VOMF	02:06	02:04	02:06	02:06	02:04	02:04	02:06	02:06	02:04		
	DELHI/Indira Ghandi Intl		VIDP	Delhi FIR & SRR	WSIN31	VIDP	VIDF	FF	WSIN31	VIDP	260206	VIDP	VIDF	02:05	02:03	02:05	02:05	02:07	02:03	02:05	02:05	02:03		
	KOLKATA		VECC	Kolkata FIR & SRR	WSIN31	VECC	VECF	FF	WSIN31	VECC	260205	VECC	VECF	02:05	02:05	02:06	02:07	02:05	02:05	02:06	02:06	02:05		
	MUMBAI/Chhatrapati Shivaji Intl.		VABB	Mumbai FIR & SRR	WSIN31	VABB	VABF	FF	WSIN31	VABB	260205	VABB	VABF	01:55	02:01	01:56	02:02	02:01	02:01	01:56	02:02	02:01		
Indonesia	JAKARTA/Soekarno-Hatta		WIII	Jakarta FIR/UR & SRR	WSID20	WIII	WIIF	FF	WSID20	WIII	260210	WIII	WIIF	02:08	02:05	02:18	02:08	02:05	02:08	02:08	02:05			
	UJUNG PANDANG/Hasanuddin		WAAA	Ujung Pandang FIR/UR & SRR	WSID21	WAAA	WAAC	FF	WSID21	WAAA	260229	WAAA	WAAC	02:26	02:26	02:33	02:26	02:26	02:26	02:26	02:33			
Japan	TOKYO (CITY)		RJTD	Fukuoka FIR & Tokyo SRR	WSJP31	RJTD	RJJJ	FF	WSJP31	RJTD	260205	RJTD	RJJJ	02:05	02:05	02:05	02:05	02:05	02:05	02:05	02:05			
Lao PDR	VIENTIANE/Wattay		VLVT	Vientiane FIR & SRR	WSLA31	VLVT	VLVT																	
Malaysia	SEPANG/KL International Airport		WMKK	Kota Kinabalu FIR & SRR	WSMS31	WMKK	WBFC	FF	WSMS31	WMKK	260200	WMKK	WBFC	02:00	02:00	02:00	02:00	02:01	02:00	02:00	02:00			
	SEPANG/KL International Airport		WMKK	Kuala Lumpur FIR & SRR	WSMS31	WMKK	WMFC	FF	WSMS31	WMKK	260200	WMKK	WMKC	02:02	02:02	02:02	02:02	02:02	02:02	02:02	02:01			
Maldives	MALE/Intl		VRMM	Male FIR & SRR	WSMV31	VRMM	VRMF	DD	WSMV31	VRMM	260200	VRMM	VRMF	02:00	02:00	02:00	02:00	02:00	02:00	02:00	02:00			
Mongolia	ULAANBAATAR		ZMUB	Ulaanbaatar FIR & SRR	WSMO31	ZMUB	ZMUB																	
Myanmar	YANGON/Yangon International		VYYY	Yangon FIR & SRR	WSBM31	VYYY	VYYY																	
Nauru	PORT MORESBY on behalf of NAURU (ANYN)		AYPY	Nauru FIR & SRR	WSNW20	AYPY	ANAU																	
Nepal	KATHMANDU		VNKT	Kathmandu FIR & SRR	WSNP31	VNKT	VNSM	FF	WSNP31	VNKT	260205	VNKT	VNSM	02:05	02:05	02:05	02:05	02:05	02:05	02:05	02:05			
New Zealand	WELLINGTON (Aviation Weather Centre)		NZKL	New Zealand FIR & SRR	WSNZ21	NZKL	NZZC	FF	WSNZ21	NZKL	260219	NZKL	NZZC	02:20	02:19	02:20	02:20	02:20	02:19	02:20	02:19			
	WELLINGTON (Aviation Weather Centre)		NZKL	Auckland Oceanic FIR & SRR	WSPS21	NZKL	NZZO	FF	WSPS21	NZKL	260220	NZKL	NZZO	02:20	02:20	02:20	02:20	02:20	02:20	02:20	02:20			
Pakistan	KARACHI/Jinnah Intl		OPKC	Karachi FIR & SRR	WSPK31	OPKC	OPKR	GG</																

APPENDIX 2 – Summary of WS SIGMET Results received from EUR ROC, RODB and SADIS

State	Meteorological Watch Office (MWO)		Area Served	SIGMET Guide			Transmitted Header					EUR ROC, RODB & SADIS Reception					Remarks	
	Location	MWO		Name	TTAAii	CCCC	FIR	Priority	TTAAii	CCCC	YYGGgg	MWO	FIR / UIR	LOWM	LFPW	EGGY	EHDB	EBBR
Afghanistan	KABUL AD	OAKB	Kabul FIR and SSR	WSAH31	OAKB	OAKX												Not in Asia/Pac Region
Australia	ADELAIDE/Adelaide	YPRM	Melbourne FIR	WSAU21	APRM	YMMM	DD	WSAU21	APRM	260217	APRM	YMMM	02:18	02:18	02:18	02:18	02:18	
	BRISBANE/Brisbane	YBRF	Brisbane FIR	WSAU21	ABRF	YBBB	GG	WSAU21	ABRF	260201	ABRF	YBBB	02:05	02:05	02:05	02:05	02:05	
	BRISBANE/Brisbane	YBRF	Melbourne FIR	WSAU21	ABRF	YMMM	FF	WSAU21	ABRF	260211	ABRF	YMMM	02:12	02:12	02:12	02:12	02:12	
	CAIRNS/Cairns Intl	YBCS	Brisbane FIR	WSAU21	ABCs	YBBB												
	DARWIN/Darwin	YPDM	Brisbane FIR	WSAU21	ADRM	YBBB	GG	WSAU21	ADRM	260202	ADRM	YBBB	02:05	02:05	02:05	02:05	02:05	
	DARWIN/Darwin	YPDM	Melbourne FIR	WSAU21	ADRM	YMMM	GG	WSAU21	ADRM	260203	ADRM	YMMM	02:07	02:05	02:05	02:05	02:05	
	HOBART/Hobart	YMHF	Melbourne FIR	WSAU21	AMHF	YMMM	GG	WSAU21	AMHF	260201	AMHF	YMMM	02:04	02:04	02:04	02:04	02:04	
	MELBOURNE/Melbourne	YMRF	Brisbane FIR	WSAU21	AMRF	YBBB	DD	WSAU21	AMRF	260204	AMRF	YBBB	02:06	02:06	02:06	02:06	02:06	
	MELBOURNE/Melbourne	YMRF	Melbourne FIR	WSAU21	AMRF	YMMM	DD	WSAU21	AMRF	260205	AMRF	YMMM	02:06	02:06	02:06	02:07	02:06	
	MELBOURNE/World Met. Centre	YMMC	Brisbane FIR	WSAU21	AMMC	YBBB	GG	WSAU21	AMMC	260201	AMMC	YBBB	02:03	02:04	02:03	02:04	02:03	
	MELBOURNE/World Met. Centre	YMMC	Melbourne FIR	WSAU21	AMMC	YMMM	GG	WSAU21	AMMC	260201	AMMC	YMMM	02:03	02:04	02:03	02:05	02:03	
	PERTH/Perth	YPRF	Brisbane FIR	WSAU21	APRF	YBBB	GG	WSAU21	APRF	260159	APRF	YBBB	02:00	02:00	02:00	02:03	02:00	
	PERTH/Perth	YPRF	Melbourne FIR	WSAU21	APRF	YMMM	GG	WSAU21	APRF	260159	APRF	YMMM	02:02	02:02	02:02	02:01	02:02	
	SYDNEY/Sydney	YSRF	Brisbane FIR	WSAU21	ASRF	YBBB	GG	WSAU21	ASRF	260159	ASRF	YBBB	02:01	02:03	02:01	02:01	02:01	
	SYDNEY/Sydney	YSRF	Melbourne FIR	WSAU21	ASRF	YMMM	GG	WSAU21	ASRF	260159	ASRF	YMMM	02:03	02:03	02:01	02:04	02:01	
Bangladesh	DHAKA/Zia Intl	VGHS	Dhaka FIR & SRR	WSBW20	VGHS	VGFR	FF	WSBW20	VGHS	260200	VGHS	VGFR	01:59	01:59	01:59	01:59	01:59	
Cambodia	CHENGDU/Shuangliu for PHNOM-PENH (VDP)	ZUUU	Phnom-Penh FIR & SRR	WSKP31	ZUUU	VDP	FF	WSKP31	ZUUU	260204	ZUUU	VDP	02:04	02:04	02:04	02:05	02:04	
China	BEIJING/Capital	ZBAA	Beijing FIR & SRR	WSC33	ZBAA	ZBPE	FF	WSC33	ZBAA	260205	ZBAA	ZBPE	02:01	02:01	02:01	02:02	02:01	
	GUANGZHOU/Baiyan	ZGGG	Guangzhou FIR & SRR	WSC35	ZGGG	ZGZU	FF	WSC35	ZGGG	260205	ZGGG	ZGZU	02:01	02:01	02:01	02:01	02:01	
	CHENGDU/Shuangliu	ZUUU	Kunming FIR & SRR	WSC36	ZUUU	ZPKM	FF	WSC36	ZUUU	260202	ZUUU	ZPKM	02:02	02:01	02:02	02:03	02:02	
	XIAN/Xianyang	ZLXY	Lanzhou FIR and SRR	WSC37	ZLXY	ZLHW	FF	WSC37	ZLXY	260203	ZLXY	ZLHW			02:04			
	HAIKOU/Meilan	ZJHK	Sanya FIR & SRR	WSC35	ZJHK	ZJSA	FF	WSC35	ZJHK	260210	ZJHK	ZJSA	02:43	02:43	02:25	02:25	02:25	
	SHANGHAI/Hongqiao	ZSSS	Shanghai FIR & SRR	WSC34	ZSSS	ZSHA	GG	WSC34	ZSSS	260205	ZSSS	ZSHA	02:00	02:01	02:00	02:00	02:00	
	SHENYANG/Taoxian	ZYTX	Shenyang FIR & SRR	WSC38	ZYTX	ZYSH	FF	WSC38	ZYTX	260205	ZYTX	ZYSH	02:00		02:01	02:01	02:01	
	TAIPEI/Taipei Intl	RCTP	Taipei FIR & SRR	WSC31	RCTP	RCAA	FF	WSC31	RCTP	260200	RCTP	RCAA	02:01	02:01	02:01	02:01	02:01	
	URUMQI/Diw opu	ZWWW	Urumqi FIR & SRR	WSC39	ZWWW	ZWUQ	GG	WSC39	ZWWW	260201	ZWWW	ZWUQ	02:01	02:01	02:01	02:01	02:01	
	WUHAN/Tianhe	ZHHH	Wuhan FIR & SRR	WSC45	ZHHH	ZWHH	GG	WSC45	ZHHH	260205	ZHHH	ZWHH	02:04	02:04	02:04	02:04	02:04	
	HONG KONG/Hong Kong Intl	VHHH	Hong Kong FIR & SRR	WSSS20	VHHH	VHHK	FF	WSSS20	VHHH	260200	VHHH	VHHF	02:01	02:01	02:01	02:01	02:01	
DPR Korea	SUNAN	ZKPY	Fyongyang FIR & SRR	WSKR31	ZKPY	ZKKP												
Fiji	NADI/Nadi Intl	NNFN	Nadi FIR & SRR	WSFJ01,02..	NNFN	NNFF	FF	WSFJ03	NNFN	260000	NNFN	NNFF						02:57/current,
French Polynesia	TAHITI/Faaa	NTAA	Tahiti FIR & SRR	WSPF21,22	NTAA	NTTT	GG	WSPF21	NTAA	260128	NTAA	NTTT	02:00	02:00		02:02		incorrect DTG
India	CHENNAI/Chennai	VOMM	Chennai FIR & SRR	WSIN31	VOMM	VOMF	FF	WSIN31	VOMM	260205	VOMM	VOMF	02:06	02:08	02:06	02:06	02:06	
	DELHI/Indira Ghandi Intl	VIDP	Delhi FIR & SRR	WSIN31	VIDP	VIDF	FF	WSIN31	VIDP	260206	VIDP	VIDF	02:04	02:04	02:04	02:04	02:04	
	KOLKATA	VECC	Kolkata FIR & SRR	WSIN31	VECC	VECF	FF	WSIN31	VECC	260205	VECC	VECF	02:05	01:33	02:05	02:06	01:33	
	MUMBAI/Chhatrapati Shivaji Intl.	VABB	Mumbai FIR & SRR	WSIN31	VABB	VABF	FF	WSIN31	VABB	260205	VABB	VABF	01:55	01:55	01:55	01:55	01:55	
Indonesia	JAKARTA/Soekarno-Hatta	WIII	Jakarta FIR/UJR & SRR	WSID20	WIII	WIIF	FF	WSID20	WIII	260210	WIII	WIIF	04:45	04:55	02:08	01:01	01:01	
	UJUNG PANDANG/Hasanuddin	WAAA	Ujung Pandang FIR/UJR & SRR	WSID21	WAAA	WAAF	FF	WSID21	WAAA	260229	WAAA	WAAF						
Japan	TOKYO (CITY)	RJTD	Fukuoka FIR & Tokyo SRR	WSJP31	RJTD	RJJ	FF	WSJP31	RJTD	260205	RJTD	RJJ	02:05	02:05	02:05	02:05	02:05	
Lao PDR	VIENTIANE/Wattay	VLVT	Vientiane FIR & SRR	WSLA31	VLVT	VLVT												
Malaysia	SEPANG/KL International Airport	WMKK	Kota Kinabalu FIR & SRR	WSMS31	WMKK	WBFC	FF	WSMS31	WMKK	260200	WMKK	WBFC	02:00	02:00	02:00	02:01	02:00	
	SEPANG/KL International Airport	WMKK	Kuala Lumpur FIR & SRR	WSMS31	WMKK	WMFC	FF	WSMS31	WMKK	260200	WMKK	WMKC	02:02	02:02	02:02	02:02	02:02	
Maldives	MALE/Intl	VRMM	Male FIR & SRR	WSMV31	VRMM	VRMF	DD	WSMV31	VRMM	260200	VRMM	VRMF	02:00	02:00	02:00	02:01	02:00	
Mongolia	ULAANBAATAR	ZMUB																