

International Civil Aviation Organization



**FOURTEENTH MEETING OF THE ASIA/PACIFIC
METEOROLOGICAL INFORMATION EXCHANGE WORKING
GROUP (MET/IE WG/14) and SIXTH MEETING OF THE
ASIA/PACIFIC METEOROLOGICAL SERVICES WORKING
GROUP (MET/S WG/6)**

Bangkok, Thailand, 9 March 2016

**Agenda Item (conjoint session) 2: SIGMET and (volcanic ash and tropical cyclone) advisory
information (including SIGMET tests)**

REVIEW OF WS SIGMET TEST 11

(Presented by Singapore RODB)

SUMMARY

This paper analyses the data collected during WS SIGMET Test 11 conducted on 18 November 2015.

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 on the issuance and reception of SIGMET messages, in particular 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 (5th edition October 2015). 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. SIGMET Results received from the EUR region is shown in Appendix 2.

2.2 DATA ANALYSIS for SIGMET TEST 11

2.2.1 State and MWO Issuance

- A total of 21 of the possible 29 States listed in the Asia/Pacific SIGMET Guide participated in SIGMET Test 11.
- A total of 2 States (Afghanistan and Papua New Guinea (for Port Moresby FIR)) did not participate in any of the SIGMET test conducted.
- A total of 11 of the possible 52 MWOs did not issue a test WS SIGMET for at least one of their FIRs, 2 of these did not participate in any of the 11 tests (as shown in bold in Table 1).

1	Afghanistan, Kabul (OAKB)
2	China, Taibei (RCTP)
3	Democratic People’s Republic of Korea, Sunan (ZKPY)
4	French Polynesia, Tahiti (NTAA)
5	Maldives, Male (VRMM)
6	Nauru, Port Moresby on behalf of Nauru (ANYN)
7	Papua New Guinea, Port Moresby (AOPY)
8	Republic of Korea, Incheon (RKSI)
9	Sri Lanka, Colombo (VCBI)
10	United States, Anchorage (PAWU)
11	United States, Kansas City (KKCI)

Table 1: States/MWOs did not participate in WS SIGMET Test 11

2.2.2 RODB Reception

- The summary of Asia Pacific RODB Reception for SIGMET Test 11 is listed below:

SIGMET Test	RODB Reception	Bangkok RODB	Brisbane RODB	Singapore RODB	Tokyo RODB	Nadi RODB
Test 11	243	48 of 51	49 of 51	51 of 51	48 of 51	47 of 51
(Nov 2015)	95%	94%	96%	100%	94%	92%

Table 2: RODB Reception of WS SIGMET Test 11

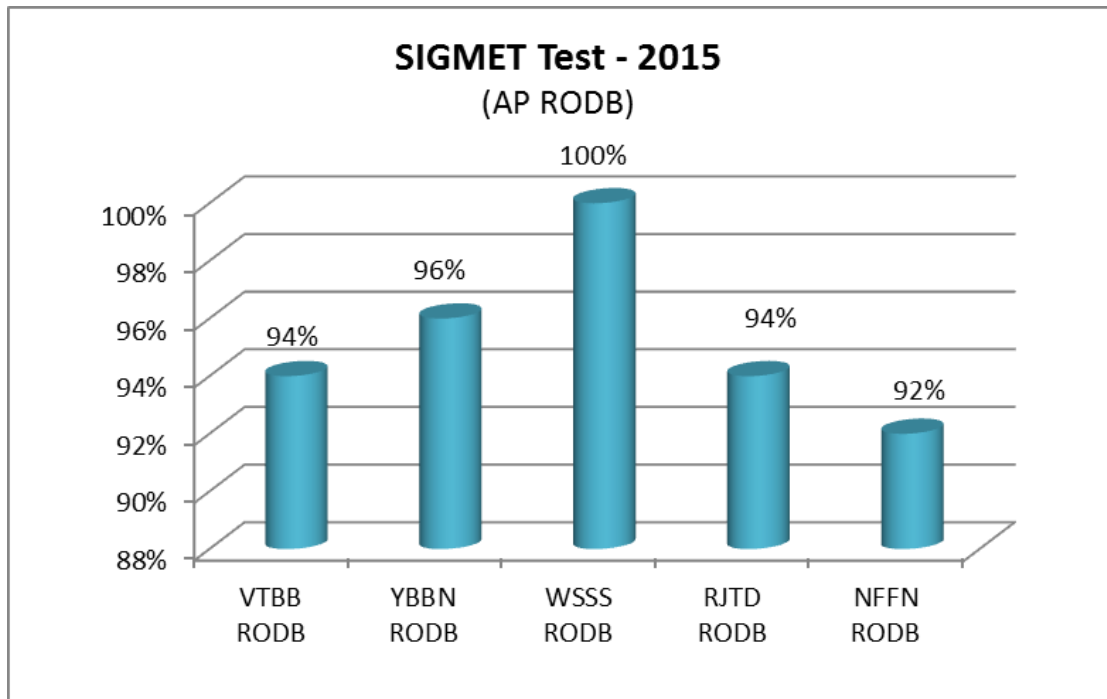


Figure 1: RODB Reception of 2015 SIGMET Test

2.2.3 EUR ROCs and RODB Reception

- The Regional OPMET Centre (ROC) Vienna provided a summary report on the reception of the WS SIGMET Test 11 to the focal points for the WS SIGMET Tests in the Asia/Pacific region.
- The WS SIGMET Test results were collected from ROCs, Vienna and London, and from RODB Brussels. An overview of the data reception is shown in Appendix 2.
- A summary of the WS SIGMET Test results in the EUR region is shown in Table 3 below:

SIGMET Test	ROC Reception	LOWM ROC	EGGY ROC	EBBR RODB
Test 11	92	46 of 51	46 of 51	40 of 51
(Nov 2015)	90%	90%	90%	78%

Table 3: EUR ROC and RODB Reception of WS SIGMET Test 11

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

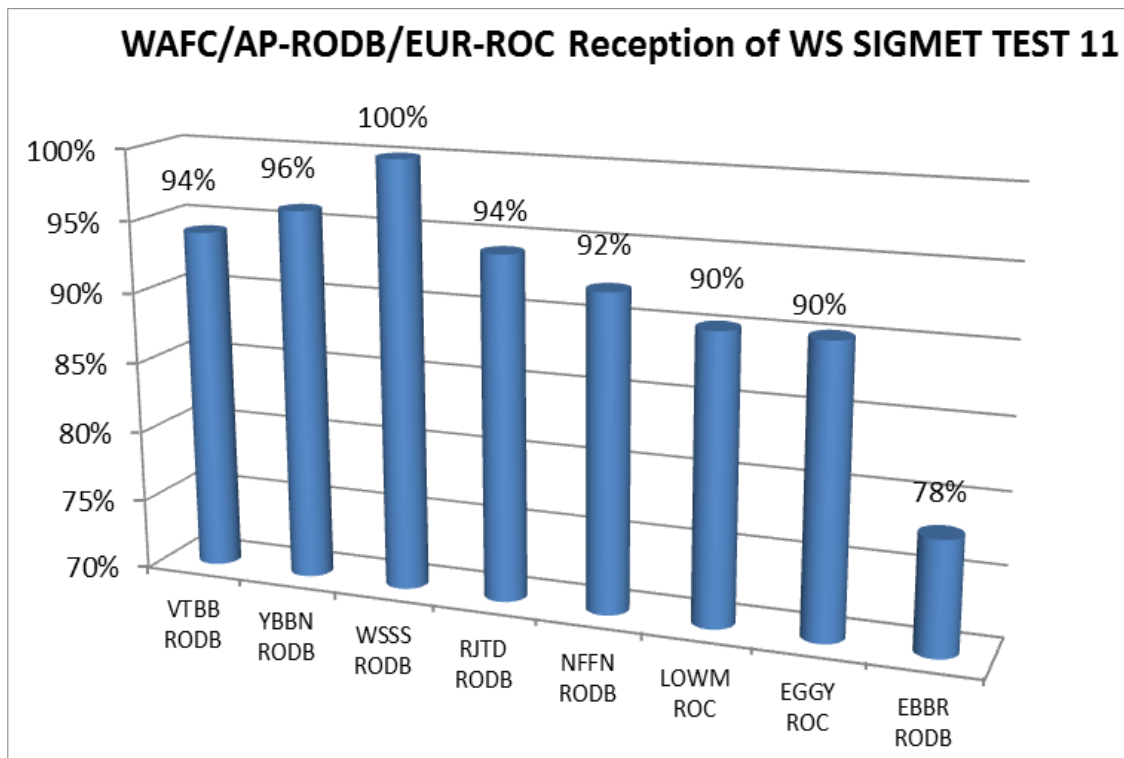


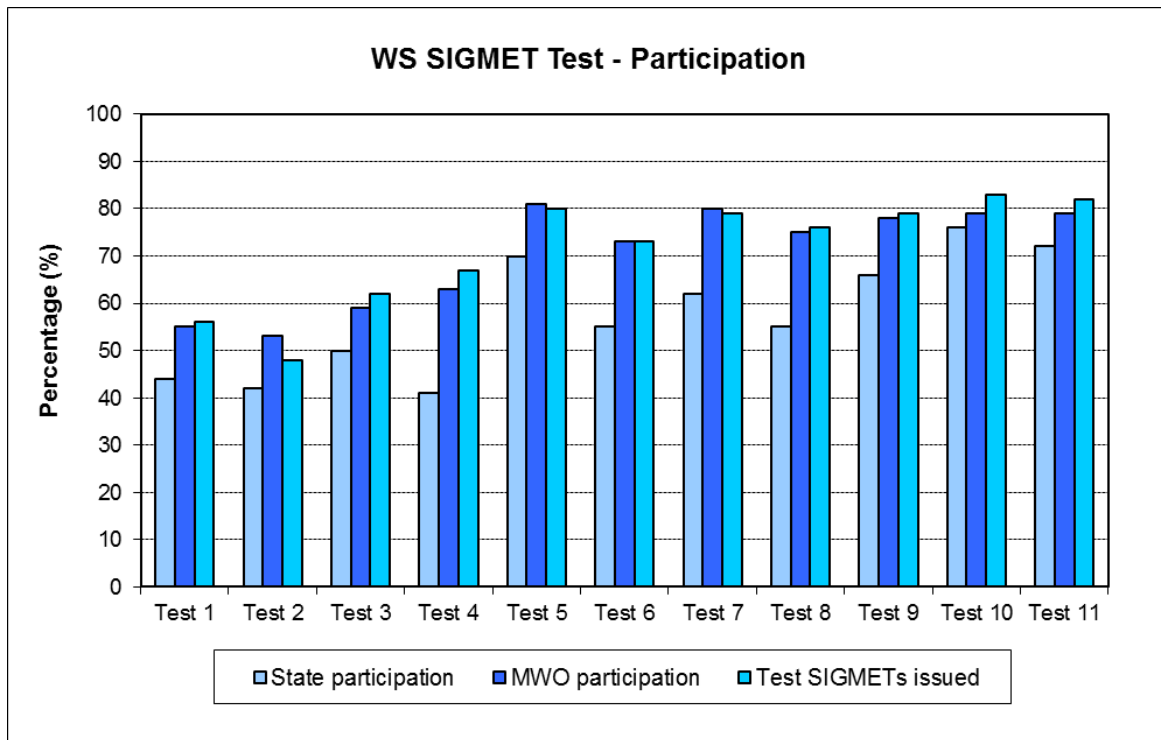
Figure 2: Comparison of WS SIGMET Test Reception

2.3 Participation of WS SIGMET Test 1-11

2.3.1 States and MWOs

SIGMET Test 1-11		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%
Test 10	(Nov 2014)	76%	79%	83%
Test 11	(Nov 2015)	72%	79%	82%

Table 4: Participation (States & MWOs) in SIGMET Test 1- 11



Figures 3: States/MWOs Participation in the WS SIGMET Test 11

2.3.2 Asia Pacific RODB Reception of the WS SIGMET Test 1-11

SIGMET Test	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%
Test 10 (Nov 2014)	92%	88%	90%	100%	94%	87%
Test 11 (Nov 2015)	95%	94%	96%	100%	94%	92%

Table 5: RODB Reception of SIGMET Test 1-11

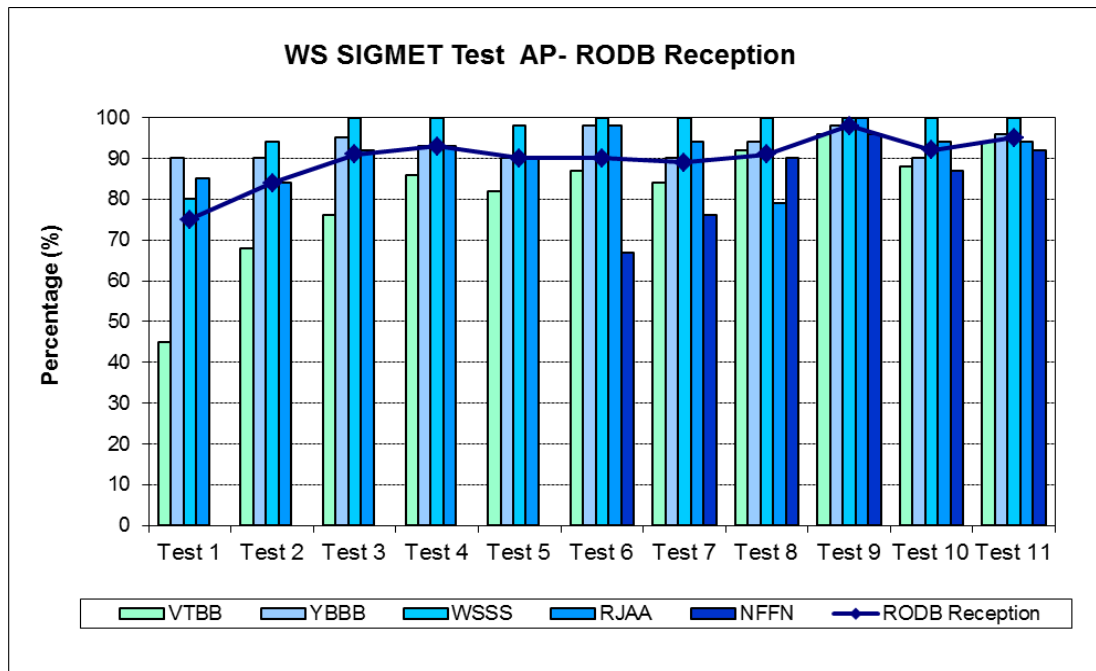


Figure 4: RODB Reception of WS SIGMET TEST 1-11

2.4 FORMATTING ERRORS in WS SIGMET TEST 11

2.4.1 Message Headers - Received SIGMET test message with invalid WMO Heading:

State, MWOs (FIR)	Invalid group	Message Content
New Zealand WELLINGTON (Aviation Weather Center)	Invalid DTG – 180037 (Time received: 18/0200)	FF WSSSYZYX 180200 NZKLYMYX WSNZ21 NZKL 180037 NZZC SIGMET Z99 VALID 180200/180210 NZKL- NZZC NEW ZEALAND FIR THIS IS A TEST SIGMET, PLEASE DISREGARD= FF WSSSYZYX 180200 NZKLYMYX WSPS21 NZKL 180037 NZZO SIGMET Z99 VALID 180200/180210 NZKL- NZZO AUCKLAND OCEANIC FIR THIS IS A TEST SIGMET, PLEASE DISREGARD=
Fiji NADI	Invalid DTG – 180000 (Time received: 18/0202)	FF WSSSYMYX 180202 NFFNYMYX WSFJ01 NFFN 180000 NFFF SIGMET Z99 VALID 180200/180210 NFFN- NFFF NADI FIR THIS IS A TEST SIGMET, PLEASE DISREGARD=
Pakistan KARACHI	Using WW AHL WWPK31	GG WSSSYMYX WSSSYZYX 180200 OPKCYNIA

		WWPK31 OPKC 180159 OPKC WS WRNGZ99 VALID 180200/180210 OPKR KARACHI FIR THIS IS A TEST SIGMENT, PLEASE DISREGARD=
Solomon Islands HONIARA	Incorrect ICAO Location Indicator (CCCC) AGGG (AGGH)	FF WSSSYZYX 180217 AGGHYOYX WSSO20 AGGG 180214 AGGH SIGMET Z99 VALID 180205/180215 AGGG- 180205 SIGMET Z99 VALID 180205/180215 RJTD- THIS IS A TEST SIGMET, PLEASE DISREGARD=

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 11 revealed that incorrect message priorities were used by the following MWOs.

MWO Location	FIR	Priority	Message Content
KARACHI/Jinnah Intl	OPKR	GG	GG WSSSYZYX 180205 OPLAYMYX WSPK31 OPLA 180205 OPLA SIGMET Z99 VALID 180205/180215 OPLA- OPLR LAHORE FIR THIS IS A TEST SIGMET. PLEASE DISREGARD=
LAHORE/Allama Iqbal Intl	OPLR	GG	GG WSSSYMYX WSSSYZYX 180200 OPKCYNIA WWPK31 OPKC 180159 OPKC WS WRNGZ99 VALID 180200/180210 OPKR KARACHI FIR THIS IS A TEST SIGMENT, PLEASE DISREGARD=

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	WSPA01 PHFO 180158 SIGPAN KZAK SIGMET NOVEMBER 1 VALID 180200/180215 PHFO-OAKLAND OCEANIC FIR. THIS IS A TEST SIGMET. PLEASE DISREGARD.

2.4.4 Receive incorrect FIR Identifier

MWO Location	MWO	FIR	Message Content
UJUNG PANDANG/Hasanuddin	WAAA	WAAA (WAAF)	FF WSSSYMYX 180200 WAAAYMYX WSID21 WAAA 180200 WAAA SIGMET Z99 VALID 180200/180210 WAAA- THIS IS A TEST SIGMET, PLEASE DISREGARD=
HONIARA/Henderson	AGGH	AGGH (AGGG)	FF WSSSYZYX 180217 AGGHYOYX WSSO20 AGGG 180214 AGGH SIGMET Z99 VALID 180205/180215 AGGG- 180205 SIGMET Z99 VALID 180205/180215 RJTD- THIS IS A TEST SIGMET, PLEASE DISREGARD=

2.5 CONCLUSION

2.5.1 The participation for States in WS SIGMET Test 11 decreased by four percent compared with the previous test No 10 (States: 72% vs 76%). Four States, namely DPR Korea, Maldives, Republic of Korea and Sri Lanka, did not participate in the SIGMET Test 11.

2.5.2 Of the 52 WMOs, the participation for MWOs was maintained at 79% in 2015.

2.5.3 The average reception for five RODB is increased by 3 percent compared with 2014 result. (2015: 95%; 2014: 92%)

2.5.4 Two EUR ROCs scored average 90% reception in SIGMET Test 11. (2015: 90%; 2014: 85%)

3. ACTION BY THE MEETING

3.1 The meeting is invited discuss the following:

- a) the results of the WS SIGMET test presented above;
- b) a review of the existing test procedures in accordance with the issues identified in paragraph 2.4 if needed; and
- c) the necessary follow-up issues arising from SIGMET TEST 11.

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	YGGgg	MWO	FIR / UIR	VTBB	YBBN	WSSS	RJTD		NFFN
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	FF	WSAU21	APRM	180200	YPRM	YMMM	02:04	02:00	02:04	02:04	02:00	
	BRISBANE/Brisbane	YBRF	Brisbane FIR	WSAU21	ABRF	YBBB	FF	WSAU21	ABRF	180202	YBRF	YBBB	02:05	02:02	02:04	02:04	02:02	
	BRISBANE/Brisbane	YBRF	Melbourne FIR	WSAU21	ABRF	YMMM	FF	WSAU21	ABRF	180202	YBRF	YMMM	02:05	02:02	02:05	02:05	02:02	
	DARWIN/Darwin	YPDM	Brisbane FIR	WSAU21	ADRM	YBBB	FF	WSAU21	ADRM	180203	YPDM	YBBB	02:05	02:03	02:05	02:05	02:03	
	DARWIN/Darwin	YPDM	Melbourne FIR	WSAU21	ADRM	YMMM	FF	WSAU21	ADRM	180204	YPDM	YMMM	02:06	02:03	02:06	02:06	02:04	
	HOBART/Hobart	YMHF	Melbourne FIR	WSAU21	AMHF	YMMM	FF	WSAU21	AMHF	180204	YMHF	YMMM	02:06	02:04	02:06	02:06	02:04	
	MELBOURNE/Melbourne	YMRF	Brisbane FIR	WSAU21	AMRF	YBBB	FF	WSAU21	AMRF	180200	YMRF	YBBB	02:04	02:00	02:04	02:04	02:00	
	MELBOURNE/Melbourne	YMRF	Melbourne FIR	WSAU21	AMRF	YMMM	FF	WSAU21	AMRF	180200	YMRF	YMMM	02:04	02:00	02:04	02:04	02:00	
	MELBOURNE/World Met. Centre	YMMC	Brisbane FIR	WSAU21	AMMC	YBBB	FF	WSAU21	AMMC	180200	YMMC	YBBB	02:03	02:00	02:03	02:03	02:00	
	MELBOURNE/World Met. Centre	YMMC	Melbourne FIR	WSAU21	AMMC	YMMM	FF	WSAU21	AMMC	180200	YMMC	YMMM	02:04	02:00	02:04	02:04	02:00	
	PERTH/Perth	YPRF	Brisbane FIR	WSAU21	APRF	YBBB	FF	WSAU21	APRF	180205	YPRF	YBBB	02:07	02:05	02:07	02:07	02:05	
	PERTH/Perth	YPRF	Melbourne FIR	WSAU21	APRF	YMMM	FF	WSAU21	APRF	180205	YPRF	YMMM	02:06	02:05	02:06	02:07	02:05	
	SYDNEY/Sydney	YSRF	Brisbane FIR	WSAU21	ASRF	YBBB	FF	WSAU21	ASRF	180200	YSRF	YBBB	02:02	02:00	02:02	02:02	02:00	
	SYDNEY/Sydney	YSRF	Melbourne FIR	WSAU21	ASRF	YMMM	FF	WSAU21	ASRF	180200	YSRF	YMMM	02:03	02:00	02:03	02:03	02:00	
Bangladesh	DHAKA/Zia Intl	VGHS	Dhaka FIR & SRR	WSBW20	VGHS	VGFR	FF	WSBW20	VGHS	180200	VGHS	VGFR	02:00	02:00	02:00	02:00	02:00	
Cambodia	CHENGDU/Shuangliu for PHNOM-PENH (VDPP)	ZUUU	Phnom-Penh FIR & SRR	WSKP31	ZUUU	VDPP	FF	WSKP31	ZUUU	180200	ZUUU	VDPP	02:04	02:01	02:04	02:04	02:01	
China	BEIJING/Capital	ZBAA	Beijing FIR & SRR	WSCI33	ZBAA	ZBPE	FF	WSCI33	ZBAA	180200	ZBAA	ZBPE	02:00	02:00	02:00	02:00	02:00	
	GUANGZHOU/Baiyan	ZGGG	Guangzhou FIR & SRR	WSCI35	ZGGG	ZGZU	FF	WSCI35	ZGGG	180205	ZGGG	ZGZU	02:01	02:01	02:01	02:01	02:01	
	CHENGDU/Shuangliu	ZUUU	Kunming FIR & SRR	WSCI36	ZUUU	ZPKM	FF	WSCI36	ZUUU	180200	ZUUU	ZPKM	02:02	02:01	02:02	02:03	02:01	
	XIAN/Xianyang	ZLXY	Lanzhou FIR and SRR	WSCI37	ZLXY	ZLHW	FF	WSCI37	ZLXY	180200	ZLXY	ZLHW	02:01	02:00	02:01	02:00	02:00	
	HAIKOU/Meilan	ZJHK	Sanya FIR & SRR	WSCI35	ZJHK	ZJSA	FF	WSCI35	ZJHK	180202	ZJHK	ZJSA	02:01	02:01	02:01	02:01	02:01	
	SHANGHAI/Hongqiao	ZSSS	Shanghai FIR & SRR	WSCI34	ZSSS	ZSHA	FF	WSCI34	ZSSS	180205	ZSSS	ZSHA	02:10	02:04	02:10	02:10	02:04	
	SHENYANG/Taoxian	ZYTX	Shenyang FIR & SRR	WSCI38	ZYTX	ZYSH	FF	WSCI38	ZYTX	180201	ZYTX	ZYSH	02:02	01:48	02:02	02:02	01:48	
	TAIPEI/Taipei Intl	RCTP	Taipei FIR & SRR	WSCI31	RCTP	RCAA												
	URUMQI/Dw opu	ZWWW	Urumqi FIR & SRR	WSCI39	ZWWW	ZWUQ	FF	WSCI39	ZWWW	180200	ZWWW	ZWUQ	02:00	02:00	02:01	02:00	02:00	
	WUHAN/Tianhe	ZHHH	Wuhan FIR & SRR	WSCI45	ZHHH	ZHWH	FF	WSCI45	ZHHH	180205	ZHHH	ZHWH	02:04	02:05	02:04	02:04	02:05	
	HONG KONG/Hong Kong Intl	VHHH	Hong Kong FIR & SRR	WSSS20	VHHH	VHHK	FF	WSSS20	VHHH	180200	VHHH	VHHK	02:00	02:00	02:00	02:00	02:00	
DPR Korea	SUNAN	ZKPY	Pyongyang FIR & SRR	WSKR31	ZKPY	ZKKP												
Fiji	NADI/Nadi Intl	NFFN	Nadi FIR & SRR	WSFJ01,02...	NFFN	NFFF	FF	WSFJ01	NFFN	180000	NFFN	NFFF	02:02	02:03	02:02	02:02	02:02	DTG in AHL shall read as 180200
French Polynesia	TAHITI/Faaa	NTAA	Tahiti FIR & SRR	WSPF21,22	NTAA	NTTT												
India	CHENNAI/Chennai	VOMM	Chennai FIR & SRR	WSIN31	VOMM	VOMF	FF	WSIN31	VOMM	180200	VOMM	VOMF	02:00	02:00	02:01	02:00	02:01	
	DELHI/Indira Gandhi Intl	VIDP	Delhi FIR & SRR	WSIN31	VIDP	VIDF	FF	WSIN31	VIDP	180205	VIDP	VIDF	02:05	02:01	02:05	02:05	02:06	
	KOLKATA	VECC	Kolkata FIR & SRR	WSIN31	VECC	VECF	FF	WSIN31	VECC	180200	VECC	VECF	02:01	01:46	02:01	02:01	02:03	
	MUMBAI/Chhatrapati Shivaji Intl.	VABB	Mumbai FIR & SRR	WSIN31	VABB	VABF	FF	WSIN31	VABB	180205	VABB	VABF	01:57	02:01	01:57	01:57	01:58	
Indonesia	JAKARTA/Soekamo-Hatta	WIII	Jakarta FIR/UIR & SRR	WSID20	WIII	WIIF	FF	WSID20	WIII	180200	WIII	WIIF	02:01	01:58	02:01	02:01	01:58	
	UJUNG PANDANG/Hasanuddin	WAAA	Ujung Pandang FIR/UIR & SRR	WSID21	WAAA	WAAF	FF	WSID21	WAAA	180200	WAAA	WAAA	02:00	02:00	02:00	02:00	02:00	FIR ID shall be WAAF
Japan	TOKYO (CITY)	RJTD	Fukuoka FIR & Tokyo SRR	WSJP31	RJTD	RJJJ	FF	WSJP31	RJTD	180205	RJTD	RJJJ	02:05	02:05	02:05	02:05	02:05	
Lao PDR	VIENTIANE/Wattay	VLVT	Vientiane FIR & SRR	WSLA31	VLVT	VLVT	FF	WSLA31	VLVT	180200	VLVT	VLVT	02:07	02:00	02:07	02:07	02:00	
Malaysia	SEPANG/KL International Airport	WMKK	Kota Kinabalu FIR & SRR	WSMS31	WMKK	WBFC	FF	WSMS31	WMKK	180205	WMKK	WBFC	02:05	02:04	02:05	02:05	02:04	
	SEPANG/KL International Airport	WMKK	Kuala Lumpur FIR & SRR	WSMS31	WMKK	WMFC	FF	WSMS31	WMKK	180205	WMKK	WMFC	02:06	02:05	02:06	02:06	02:05	
Maldives	MALE/Intl	VRMM	Male FIR & SRR	WSMV31	VRMM	VRMF												
Mongolia	ULAANBAATAR	ZMUB	Ulaanbaatar FIR & SRR	WSMO31	ZMUB	ZMUB	FF	WSMO31	ZMUB	180210	ZMUB	ZMUB	02:10	02:10	02:10	02:10	02:10	
Myanmar	YANGON/Yangon International	VYYY	Yangon FIR & SRR	WSBM31	VYYY	VYYY	FF	WSBM31	VYYY	180200	VYYY	VYYY	01:53	01:55	01:53	01:53	01:53	
Nauru	PORT MORESBY on behalf of NAURU (ANYN)	ANYN	Nauru FIR & SRR	WSNW20	ANYN	ANAU												
Nepal	KATHMANDU	VNKT	Kathmandu FIR & SRR	WSNP31	VNKT	VNSM	FF	WSNP31	VNKT	180202	VNKT	VNSM	02:03	02:02	02:03	02:03	02:02	
New Zealand	WELLINGTON (Aviation Weather Centre)	NZKL	New Zealand FIR & SRR	WSNZ21	NZKL	NZZC	FF	WSNZ21	NZKL	180037	NZKL	NZZC	02:00	02:00	02:01	02:00	02:00	incorrect DTG, SIGMET VALID 180200/180210
	WELLINGTON (Aviation Weather Centre)	NZKL	Auckland Oceanic FIR & SRR	WSPS21	NZKL	NZZO	FF	WSPS21	NZKL	180236	NZKL	NZZO	02:00	02:00	02:41	02:00	02:00	2nd copy received at 0241 with AHL WSPS21 NZKL 180236 ✓
Pakistan	KARACHI/Jinnah Intl	OPKC	Karachi FIR & SRR	WSPK31	OPKC	OPKR	GG	WSPK31	OPKC	180159	OPKC	OPKR	02:00	02:00	02:00	02:00	02:00	Using 'WW' for WS SIGMET Test and invalid WS message format
	LAHORE/Allama Iqbal Intl	OPLA	Lahore FIR & SRR	WSPK31	OPLA	OPLR	GG	WSPK31	OPLA	180205	OPLA	OPLR	02:05	02:05	02:05	02:05	02:09	
Papua New Guinea	PORT MORESBY/Intl	AYPY	Port Moresby FIR & SRR	WSNG20	AYPY	AYPY												
Philippines	MANILA/Ninoy Aquino Intl, Pasay City, Metro Manila	RPLL	Manila FIR & SRR	WSPH31	RPLL	RPHI	FF	WSPH31	RPLL	180200	RPLL	RPHI	02:00	02:00	02:01	02:00	02:00	
Republic of Korea	INCHEON	RKSI	Incheon FIR & SRR	WSKO31	RKSI	RKRR												
Singapore	SINGAPORE/Changi	WSSS	Singapore FIR & SRR	WSSR20	WSSS	WSJC	FF	WSSR20	WSSS	180205	WSSS	WSJC	02:05	02:05	02:05	02:05	02:05	
Solomon Islands	PORT MORESBY on behalf of HONIARA (Henderson - AGGH)	AGGH	Honiara FIR & SRR	WSSO20	AGGH	AGGG	FF	WSSO20	AGGG	180214	AGGG	AGGH	02:17	02:17	02:17	02:17	02:17	incorrect ICAO location indicator (CCCC) and the name of the FIR/CTA
Sri Lanka	COLOMBO/Bandaranaika Intl Airport Colombo	VCBI	Colombo FIR & SRR	WSSB31	VCBI	VCBI												
Thailand	BANGKOK/Suvarnabhumi Intl Airport	VTBS	Bangkok FIR & SRR	WSTH31	VTBS	VTBB	FF	WSTH31	VTBS	180200	VTBS	VTBB	02:01	02:03	02:01	02:01	02:03	
United States	ANCHORAGE/Anchorage Intl	PAWU	Anchorage FIR	WSPK01-09	PAWU	PAZA												
	HONOLULU/Honolulu Intl	PHFO	Oakland Oceanic & Honolulu SRR	WSPA01-13	PHFO	KZAK	FF	WSPA01	PHFO	180211	PHFO	KZAK	02:11	02:15	02:11	02:15	02:11	
	KANSAS CITY	KKCI	Oakland Oceanic FIR	WSPN01-13	KKCI	KZAK												
Vietnam	Gia Lam	VVGL	Hanoi FIR & SRR	WSVS31	VVGL	VVNB	FF	WSVS31	VVGL	180201	VVGL	VVNB	02:05	02:05	02:05	02:05	02:05	
	Gia Lam	VVGL	Ho-Chi-Minh FIR & SRR	WSVS31	VVGL	VVTS	FF	WSVS31	VVGL	180201	VVGL	VVTS	02:05	02:05	02:05	02:05	02:05	

APPENDIX 2 – Summary of WS SIGMET Results received from EUR ROCs and RODB

State	Meteorological Watch Office (MWO)		Area Served	SIGMET Guide			Transmitted Header					EUR ROC and RODB Reception			
	Location	MWO	Name	TAAii	CCCC	FIR	Priority	TAAii	CCCC	YYGGgg	MWO	FIR / UIR	LOWM	EGGY	EBBR
Afghanistan	KABUL AD	OAKB	Kabul FIR and SSR	WSAH31	OAKB	OAKX									
Australia	ADELAIDE/Adelaide	YPRM	Melbourne FIR	WSAU21	APRM	YMMM	FF	WSAU21	APRM	180200	YPRM	YMMM	02:04	02:04	02:05
	BRISBANE/Brisbane	YBRF	Brisbane FIR	WSAU21	ABRF	YBBB	FF	WSAU21	ABRF	180202	YBRF	YBBB	02:04	02:04	
	BRISBANE/Brisbane	YBRF	Melbourne FIR	WSAU21	ABRF	YMMM	FF	WSAU21	ABRF	180202	YBRF	YMMM	02:05	02:05	02:06
	DARWIN/Darwin	YPDM	Brisbane FIR	WSAU21	ADRM	YBBB	FF	WSAU21	ADRM	180203	YPDM	YBBB	02:06	02:06	02:07
	DARWIN/Darwin	YPDM	Melbourne FIR	WSAU21	ADRM	YMMM	FF	WSAU21	ADRM	180204	YPDM	YMMM	02:06	02:06	02:08
	HOBART/Hobart	YMHF	Melbourne FIR	WSAU21	AMHF	YMMM	FF	WSAU21	AMHF	180204	YMHF	YMMM	02:06	02:06	02:07
	MELBOURNE/Melbourne	YMRF	Brisbane FIR	WSAU21	AMRF	YBBB	FF	WSAU21	AMRF	180200	YMRF	YBBB	02:04	02:04	
	MELBOURNE/Melbourne	YMRF	Melbourne FIR	WSAU21	AMRF	YMMM	FF	WSAU21	AMRF	180200	YMRF	YMMM	02:04	02:04	02:06
	MELBOURNE/World Met. Centre	YMMC	Brisbane FIR	WSAU21	AMMC	YBBB	FF	WSAU21	AMMC	180200	YMMC	YBBB	02:03	02:03	
	MELBOURNE/World Met. Centre	YMMC	Melbourne FIR	WSAU21	AMMC	YMMM	FF	WSAU21	AMMC	180200	YMMC	YMMM	02:04	02:04	02:04
	PERTH/Perth	YPRF	Brisbane FIR	WSAU21	APRF	YBBB	FF	WSAU21	APRF	180205	YPRF	YBBB	02:06	02:06	
	PERTH/Perth	YPRF	Melbourne FIR	WSAU21	APRF	YMMM	FF	WSAU21	APRF	180205	YPRF	YMMM	02:07	02:07	02:08
	SYDNEY/Sydney	YSRF	Brisbane FIR	WSAU21	ASRF	YBBB	FF	WSAU21	ASRF	180200	YSRF	YBBB	02:02	02:02	
	SYDNEY/Sydney	YSRF	Melbourne FIR	WSAU21	ASRF	YMMM	FF	WSAU21	ASRF	180200	YSRF	YMMM	02:03	02:03	02:04
Bangladesh	DHAKA/Zia Intl	VGHS	Dhaka FIR & SRR	WSBW20	VGHS	VGFR	FF	WSBW20	VGHS	180200	VGHS	VGFR	02:00	02:00	02:01
Cambodia	CHENGDU/Shuangliu for PHNOM-PENH (VDPP)	ZUUU	Phnom-Penh FIR & SRR	WSKP31	ZUUU	VDPP	FF	WSKP31	ZUUU	180200	ZUUU	VDPP	02:04	02:04	02:06
China	BEIJING/Capital	ZBAA	Beijing FIR & SRR	WSCB3	ZBAA	ZBPE	FF	WSCB3	ZBAA	180200	ZBAA	ZBPE	02:00	02:00	02:01
	GUANGZHOU/Baiyan	ZGGG	Guangzhou FIR & SRR	WSCB5	ZGGG	ZGZU	FF	WSCB5	ZGGG	180205	ZGGG	ZGZU	02:01	02:01	02:03
	CHENGDU/Shuangliu	ZUUU	Kunming FIR & SRR	WSCB6	ZUUU	ZPKM	FF	WSCB6	ZUUU	180200	ZUUU	ZPKM	02:02	02:02	02:04
	XIAN/Xianyang	ZLXY	Lanzhou FIR and SRR	WSCB7	ZLXY	ZLHW	FF	WSCB7	ZLXY	180200	ZLXY	ZLHW	02:01	02:01	02:02
	HAIKOU/Meilan	ZJHK	Sanya FIR & SRR	WSCB5	ZJHK	ZJSA	FF	WSCB5	ZJHK	180202	ZJHK	ZJSA	02:01	02:01	02:03
	SHANGHAI/Hongqiao	ZSSS	Shanghai FIR & SRR	WSCB4	ZSSS	ZSHA	FF	WSCB4	ZSSS	180205	ZSSS	ZSHA	02:10	02:10	02:12
	SHENYANG/Taoxian	ZYTX	Shenyang FIR & SRR	WSCB8	ZYTX	ZYSH	FF	WSCB8	ZYTX	180201	ZYTX	ZYSH	02:02	02:02	02:03
	TAIBEI/Taipei Intl	RCTP	Taipei FIR & SRR	WSCB1	RCTP	RCAA									
	URUMQI/Div opu	ZWWW	Urumqi FIR & SRR	WSCB9	ZWWW	ZWUQ	FF	WSCB9	ZWWW	180200	ZWWW	ZWUQ	02:00	02:00	02:02
	WUHAN/Tianhe	ZHHH	Wuhan FIR & SRR	WSC45	ZHHH	ZHWH	FF	WSC45	ZHHH	180205	ZHHH	ZHWH	02:04	02:04	02:06
	HONG KONG/Hong Kong Intl	VHHH	Hong Kong FIR & SRR	WSSS20	VHHH	VHHK	FF	WSSS20	VHHH	180200	VHHH	VHHK	02:00	02:00	02:01
DPR Korea	SUNAN	ZKPY	Pyongyang FIR & SRR	WSKR31	ZKPY	ZKKP									
Fiji	NADI/Nadi Intl	NFFN	Nadi FIR & SRR	WSFJ01,02..	NFFN	NFFF	FF	WSFJ01	NFFN	180000	NFFN	NFFF	02:02	02:02	02:04
French Polynesia	TAHITI/Faaa	NTAA	Tahiti FIR & SRR	WSPF21,22	NTAA	NTTT									
India	CHENNAI/Chennai	VOMM	Chennai FIR & SRR	WSIN31	VOMM	VOMF	FF	WSIN31	VOMM	180200	VOMM	VOMF	02:00	02:00	02:02
	DELHI/Indira Gandhi Intl	VIDP	Delhi FIR & SRR	WSIN31	VIDP	VIDF	FF	WSIN31	VIDP	180205	VIDP	VIDF	02:05	02:05	02:07
	KOLKATA	VECC	Kolkata FIR & SRR	WSIN31	VECC	VECF	FF	WSIN31	VECC	180200	VECC	VECF	02:01	02:01	02:01
	MUMBAI/Chhatrapati Shivaji Intl.	VABB	Mumbai FIR & SRR	WSIN31	VABB	VABF	FF	WSIN31	VABB	180205	VABB	VABF	01:59	01:59	02:00
Indonesia	JAKARTA/Soekamo-Hatta	WIII	Jakarta FIR/UIR & SRR	WSID20	WIII	WIIF	FF	WSID20	WIII	180200	WIII	WIIF	02:00	02:00	02:02
	UJUNG PANDANG/Hasanuddin	WAAA	Ujung Pandang FIR/UIR & SRR	WSID21	WAAA	WAAF	FF	WSID21	WAAA	180200	WAAA	WAAA			
Japan	TOKYO (CITY)	RJTD	Fukuoka FIR & Tokyo SRR	WSJP31	RJTD	RJJJ	FF	WSJP31	RJTD	180205	RJTD	RJJJ	02:05	02:05	02:06
Lao PDR	VIENTIANE/Wattay	VLVT	Vientiane FIR & SRR	WSLA31	VLVT	VLVT	FF	WSLA31	VLVT	180200	VLVT	VLVT			
Malaysia	SEPANG/KL International Airport	WMKK	Kota Kinabalu FIR & SRR	WSMS31	WMKK	WBFC	FF	WSMS31	WMKK	180205	WMKK	WBFC	02:05	02:05	02:06
	SEPANG/KL International Airport	WMKK	Kuala Lumpur FIR & SRR	WSMS31	WMKK	WMFC	FF	WSMS31	WMKK	180205	WMKK	WMFC	02:06	02:06	02:06
Maldives	MALE/Intl	VRMM	Male FIR & SRR	WSMV31	VRMM	VRMF									
Mongolia	ULAANBAATAR	ZMUB	Ulaanbaatar FIR & SRR	WSMO31	ZMUB	ZMUB	FF	WSMO31	ZMUB	180210	ZMUB	ZMUB	02:15	02:11	02:16
Myanmar	YANGON/Yangon International	VYYY	Yangon FIR & SRR	WSBM31	VYYY	VYYY	FF	WSBM31	VYYY	180200	VYYY	VYYY	01:53	01:53	01:54
Nauru	PORT MORESBY on behalf of NAURU (ANYN)	ANYN	Nauru FIR & SRR	WSNW20	ANYN	ANAU									
Nepal	KATHMANDU	VNKT	Kathmandu FIR & SRR	WSNP31	VNKT	VNSM	FF	WSNP31	VNKT	180202	VNKT	VNSM	02:03	02:03	02:04
New Zealand	WELLINGTON (Aviation Weather Centre)	NZKL	New Zealand FIR & SRR	WSNZ21	NZKL	NZZC	FF	WSNZ21	NZKL	180037	NZKL	NZZC	02:00	02:00	02:02
	WELLINGTON (Aviation Weather Centre)	NZKL	Auckland Oceanic FIR & SRR	WSPS21	NZKL	NZZO	FF	WSPS21	NZKL	180236	NZKL	NZZO	02:00	02:00	02:01
Pakistan	KARACHI/Jinnah Intl	OPKC	Karachi FIR & SRR	WSPK31	OPKC	OPKR	GG	WWPK31	OPKC	180159	OPKC	OPKR			
	LAHORE/Allama Iqbal Intl	OPLA	Lahore FIR & SRR	WSPK31	OPLA	OPLR	GG	WSPK31	OPLA	180205	OPLA	OPLR			
Papua New Guinea	PORT MORESBY/Intl	AYPY	Port Moresby FIR & SRR	WSNG20	AYPY	AYPY									
Philippines	MANILA/Ninoy Aquino Intl, Pasay City, Metro Manila	RPLL	Manila FIR & SRR	WSPH31	RPLL	RPHI	FF	WSPH31	RPLL	180200	RPLL	RPHI	02:00	02:01	02:01
Republic of Korea	INCHEON	RKSI	Incheon FIR & SRR	WSKO31	RKSI	RKRR									
Singapore	SINGAPORE/Changi	WSSS	Singapore FIR & SRR	WSSR20	WSSS	WSJC	FF	WSSR20	WSSS	180205	WSSS	WSJC	02:05	02:05	02:06
Solomon Islands	PORT MORESBY on behalf of HONIARA (Henderson - AGGH)	AGGH	Honiara FIR & SRR	WSSO20	AGGH	AGGG	FF	WSSO20	AGGG	180214	AGGG	AGGH			
Sri Lanka	COLOMBO/Bandaranaike Intl Airport Colombo	VCBI	Colombo FIR & SRR	WSSB31	VCBI	VCBI									
Thailand	BANGKOK/Suvarnabhumi Intl Airport	VTBS	Bangkok FIR & SRR	WSTH31	VTBS	VTBB	FF	WSTH31	VTBS	180200	VTBS	VTBB	02:01	02:01	02:03
United States	ANCHORAGE/Anchorage Intl	PAWU	Anchorage FIR	WSAK01-09	PAWU	PAZA									
	HONOLULU/Honolulu Intl	PHFO	Oakland Oceanic & Honolulu SRR	WSPA01-13	PHFO	KZAK	FF	WSPA01	PHFO	180211	PHFO	KZAK	02:11	02:11	02:05
	KANSAS CITY	KKCI	Oakland Oceanic FIR	WSPN01-13	KKCI	KZAK									
Vietnam	Gia Lam	VVGL	Hanoi FIR & SRR	WSVS31	VVGL	VVNB	FF	WSVS31	VVGL	180201	VVGL	VVNB	02:05	02:05	
	Gia Lam	VVGL	Ho-Chi-Minh FIR & SRR	WSVS31	VVGL	VVTS	FF	WSVS31	VVGL	180201	VVGL	VVTS	02:05	02:05	02:06