

International Civil Aviation Organization



ICAO

WORKING PAPER

**Conjoint session
Nineteenth Meeting of the Meteorological Information
Exchange Working Group (MET/IE WG/19)
and
Eleventh Meeting of the Meteorological Services
Working Group (MET/S WG/11)**

Virtual meeting, 24 March 2021

Agenda Item 2 (conjoint session): SIGMET tests

RESULTS OF SIGMET TESTS 2020 – WC and WV

(Presented by Japan)

SUMMARY

This paper presents the results of the ASIA/PAC SIGMET tests conducted in December 2020 for tropical cyclone and volcanic ash.

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 The Regional SIGMET tests were conducted on the following dates (month/date) for the last 5 years:

SIGMET for	2016	2017	2018	2019	2020
WC	11/02	11/01	11/07	11/13	12/02
WV	11/09	11/08	11/14	11/20	12/09

2. DISCUSSION

Schedule and procedure of SIGMET tests

2.1 In its State letter dated 2 November 2020 on the schedule for SIGMET tests in the Asia/Pacific Region – December 2020, the ICAO Asia Pacific Regional Office notified the following schedule and the procedure of the regional SIGMET tests:

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02 December 2020 - [WC] SIGMET test for tropical cyclone

Action required by participating units:

1. TCAC issues a tropical cyclone advisory test message at 0200 UTC, 0500 UTC or 0800 UTC (according to the detailed procedures for conducting the regional SIGMET tests);
2. MWO issues a [WC] SIGMET test message on receipt* of the triggering advisory test message issued by its associated TCAC (at 0200 UTC, 0500 UTC or 0800 UTC, as specified above); and
3. RODB and WAFC records all incoming advisory and SIGMET test messages and sends a SIGMET test summary table to the APAC SIGMET test focal points.

09 December 2020 - [WV] SIGMET test for volcanic ash

Action required by participating units:

1. VAAC issues a volcanic ash advisory test message at 0200 UTC;
2. MWO issues a [WV] SIGMET test message on receipt* of the triggering advisory test message issued by its associated V AAC (at 0200 UTC); and
3. RODB and W AFC records all incoming advisory and SIGMET test messages and sends a SIGMET test summary table to the APAC SIGMET test focal points.

*Note: If a participating MWO does not receive the advisory test message from its associated TCAC/V AAC within 30-minutes of the scheduled time for issuance of the tropical cyclone/volcanic ash advisory test message, the MWO should then issue a SIGMET test message indicating that the relevant advisory test message was not received.

Test result and analysis

2.2 Four RODBs (Bangkok, Brisbane, Singapore and Nadi) and WAFC London sent the summary of bulletins received during the tests to Tokyo, the rapporteur. The combined information on the reception of the bulletins during the test for each TC and VA is shown in the Appendix 5 and 6, respectively. In this paper, the overall availability is represented by the rate of test bulletins received at least at one RODB(s) over all those expected to be reported.

2.3 Tropical cyclone and volcanic ash advisories issued at the test are shown in Appendix 1.

Summary of WC SIGMET test

2.4 The total number of WC test bulletins expected to be reported during test was 49 and that received during the test was 40. The overall availability of WC test bulletins was 81.6%, which was better than that of 2019 (72.0%). Appendix 3 shows the availability of WC test bulletins at each RODB and the total since 2009.

2.5 India and Sri Lanka notified that the tropical cyclone "BUREVI" had an impact on issuance of test messages. Sri Lanka sent a SIGMET test message to the SIGMET test focal point by email.

2.6 TCAC Tokyo was not able to issue a tropical cyclone advisory test message due to a system trouble. Australia issued a test SIGMET with an incorrect CCCC (YMRF). Subsequently, TCAC Tokyo issued a test advisory on 16 December and Australia re-issued the test SIGMET with a correct CCCC (YMMC) in response to the advisory of TCAC Tokyo. The result of the re-issuance is included in the result of the WC SIGMET test on 2 December.

2.7 WC test bulletins not issued in the WC SIGMET test are shown in Appendix 2.

Summary of WV SIGMET test

2.8 The total number of WV test bulletins expected to be reported during the test was 56 including 6 Russian WV SIGMETs (UIII, UHHH, UNKL, UHMM, UEEE and UHPP). The total number of WV test bulletins received during the test was 51. The overall availability of WV test bulletins was 91.1%, which was better than that of 2019 (84.7%). Appendix 4 shows the availability of WV test bulletins at each RODB and the total since 2009.

2.9 WV test bulletins not issued in the WV SIGMET test are shown in Appendix 2.

3. CONCLUSION

3.1 The availability of WC test bulletins was better than in the test in 2019 and that of WV was the same in the test in 2019. It seems to be still difficult for some States to issue the test bulletins.

3.2 Both in the WC and WV SIGMET test, there were still incorrect use of the priority and simple errors in the text.

3.3 Some of WC and WV test bulletins were duplicated or issued by different Date Time Group (DTG) with the same contents.

3.4 Some of WC and WV test bulletins were not received by all RODBs in ASIA/PAC region. Participating States should send the test message to all RODBs and WAFCS.

4. ACTION BY THE MEETING

4.1 The meeting is invited to:

- a) Note the result of the SIGMET tests presented above;
- b) Discuss on the future importance of the SIGMET exchange in the region; and
- c) Discuss, if necessary, revision of the test procedure.

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Appendix 1: TCA and VAA test bulletins

TCA test bulletins

TCAC	PI	TTAAii	CCCC	YYGGgg	Received Time(UTC)					
					VTBB	WSSS	YBBB	NFFN	RJTD	EUR
NEW DELHI	FF	FKIN20	VIDP	020200	2:00	2:00	2:02	2:00	2:01	2:01
	FF	FKIN21	VIDP	020800	8:01	8:01	8:03	8:01	8:02	8:02
DARWIN	FF	FKAU05	ADRM	020200	2:00	2:00	2:03		2:01	2:01
	FF	FKAU03	ADRM	020205	2:05	2:05	2:07		2:05	2:05
NADI	GG	FKPS01	NFFN	020205	2:57	2:57	2:58	2:57	2:57	2:58
REUNION	FF	FKIO20	FMEE	020606		6:11	6:13		6:11	6:12
TOKYO	FF	FKPQ30	RJTD	160200		2:00	2:00		2:00	2:00

VAA test bulletins

VAAC	PI	TTAAii	CCCC	YYGGgg	Received Time(UTC)					
					VTBB	WSSS	YBBB	NFFN	RJTD	EUR
TOULOUSE	FF	FVXX04	LFPW	090200	2:00	2:00	2:02	2:00	2:00	2:00
ANCHORAGE	GG	FVAK21	PAWU	090200		2:00			2:00	2:05
DARWIN	FF	FVAU03	ADRM	090000	2:01	2:00	2:02	2:01	2:01	2:01
WASHINGTON	GG	FVXX27	KNES	090200		2:00	2:02		2:01	2:01
WELLINGTON	GG	FVPS01	NZKL	090203	2:03	2:03	2:05	2:03	2:03	2:03
TOKYO	FF	FVFE01	RJTD	090200	2:00	2:00	2:01	2:00	2:00	2:00

Appendix 2: WC and WV test bulletins not issued during the test period

WC test bulletins not issued on the test

State	MWO	TTAAii	CCCC	FIR
MALDIVES	MALE	WCMV31	VRMM	VRMF
NAURU	NAURU	WCNW20	ANYN	ANAU
PAPUA NEW GUINEA	PORT MORESBY	WCNG20	AYPY	AYPY
UNITED STATES	ANCHORAGE	WCAK01-09	PAWU	PAZA
	KANSAS CITY	WCNT01-13	KKCI	KZNY, KZMA, KZHU, TJZU
UNITED ARAB EMIRATES	ABU DHABI	WCAE20	OMAA	OMAE
YEMEN	SANNA	WCYE31	OYSN	OYSC

WV test bulletins not issued on the test

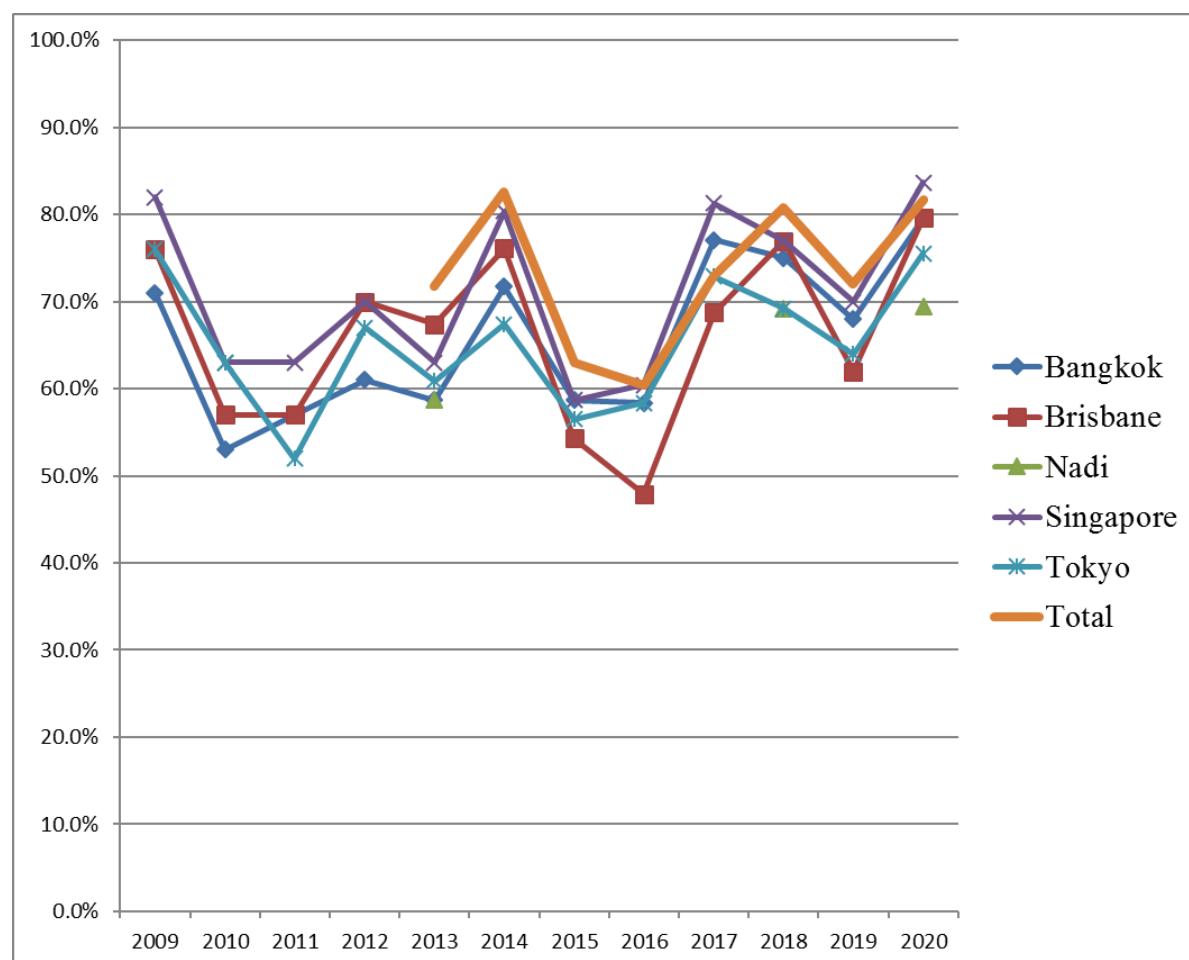
State	MWO	TTAAii	CCCC	FIR
AFGHANISTAN	KABUL	WVAH31	OAKB	OAKX
FRENCH POLYNESIA	TAHITI	WVPF21,22	NTAA	NTTT
NAURU	NAURU	WVNW20	ANYN	ANAU
NEPAL	KATHMANDU	WVNP31	VNKT	VNSM
PAPUA NEW GUINEA	PORT MORESBY	WVNG20	AYPY	AYPY
UNITED ARAB EMIRATES	ABU DHABI	WVAE20	OMAA	OMAE
OMAN	MUSCAT	WVOM20	OOMS	OOMM
KUWAIT	KUWAIT	WVKW10	OKBK	OKAC

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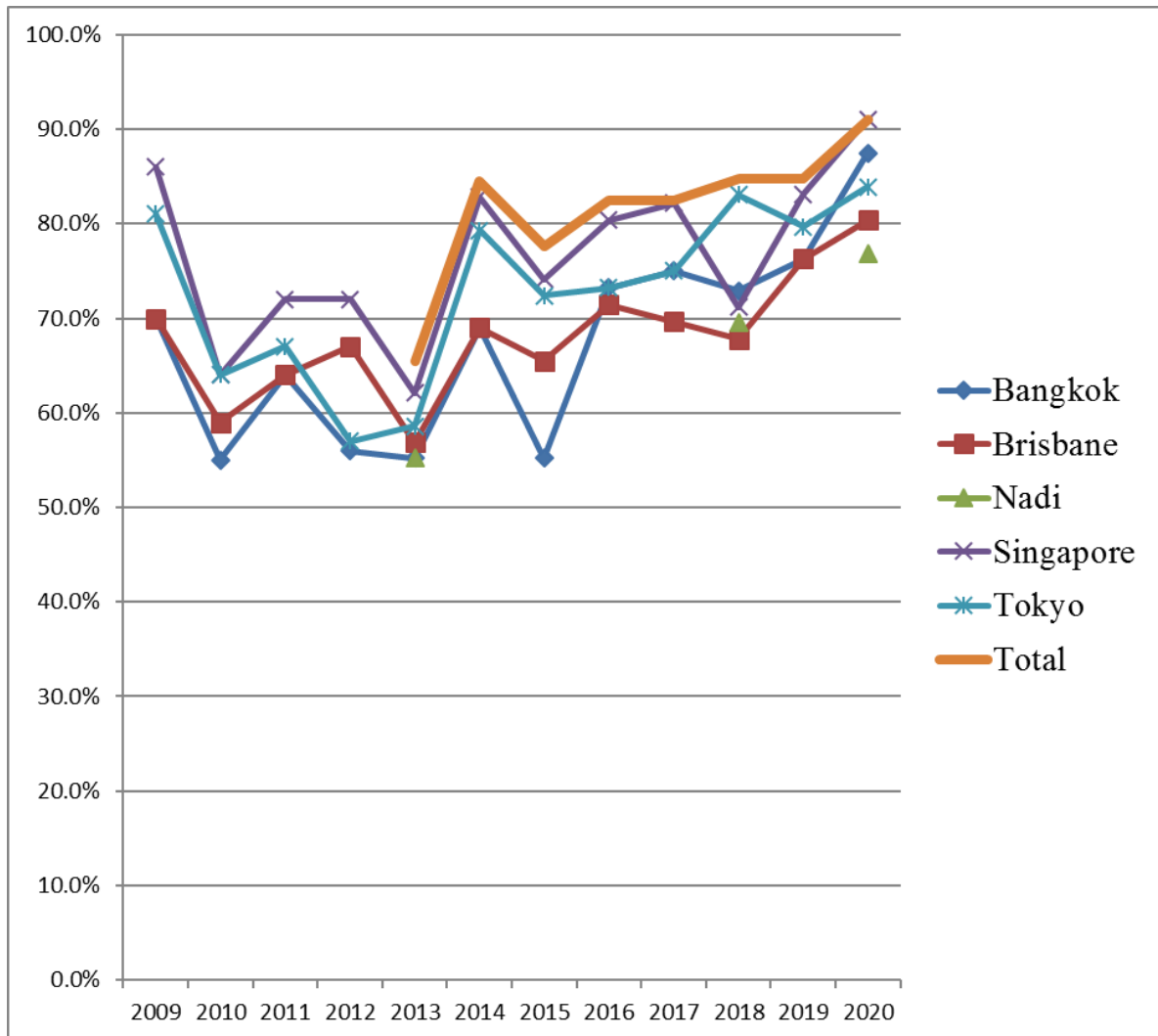
Appendix 3: Availability of the WC SIGMET test

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Bangkok	71.0%	53.0%	57.0%	61.0%	58.7%	71.7%	58.7%	58.3%	77.1%	75.0%	68.0%	79.6%
Brisbane	76.0%	57.0%	57.0%	70.0%	67.4%	76.1%	54.3%	47.9%	68.8%	76.9%	62.0%	79.6%
Nadi					58.7%					69.2%		69.4%
Singapore	82.0%	63.0%	63.0%	70.0%	63.0%	80.4%	58.7%	60.4%	81.3%	76.9%	70.0%	83.7%
Tokyo	76.0%	63.0%	52.0%	67.0%	60.9%	67.4%	56.5%	58.3%	72.9%	69.2%	64.0%	75.5%
Total					71.7%	82.6%	63.0%	60.4%	72.9%	80.8%	72.0%	81.6%



Appendix 4: Availability of the WV SIGMET test

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Bangkok	70.0%	55.0%	64.0%	56.0%	55.2%	69.0%	55.2%	73.2%	75.0%	72.9%	76.3%	87.5%
Brisbane	70.0%	59.0%	64.0%	67.0%	56.9%	69.0%	65.5%	71.4%	69.6%	67.8%	76.3%	80.4%
Nadi					55.2%					69.5%		76.8%
Singapore	86.0%	64.0%	72.0%	72.0%	62.1%	82.8%	74.1%	80.4%	82.1%	71.2%	83.1%	91.1%
Tokyo	81.0%	64.0%	67.0%	57.0%	58.6%	79.3%	72.4%	73.2%	75.0%	83.1%	79.7%	83.9%
Total					65.5%	84.5%	77.6%	82.5%	82.5%	84.7%	84.7%	91.1%



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Appendix 5: Table of WC SIGMET test

MWO details in APEC Regional SIGMET TEST Procedures 2020 / SIGMET Guide												Test Result						Remarks	
State	MWO name	MWO	TTAAii	CCCC	FIR	PI	TTAAii	CCCC	YYGGgg	MWO	FIR	TCAC	Received Time(UTC)						
													VTBB	WSSS	YBBB	NFFN	RJTD		EUR
AUSTRALIA	MELBOURNE	YMMC	WCAU01	YMMC	YBBB	FF	WCAU01	YMMC	160232	YMMC	YBBB	Tokyo	2:12	2:33	2:32	2:33	2:33	2:34	Tested on 16 Dec 2020
					YMMM	FF	WCAU01	YMMC	160233	YMMC	YMMM	Tokyo	2:11	2:34	2:34	2:34	2:34	2:35	Tested on 16 Dec 2020
BANGLADESH	DHAKA	VGHS	WCBW20	VGHS	VGFR	FF	WCBW20	VGHS	020230	VGHS	VGFR	-	2:30	2:30	2:31	2:30	2:30	2:30	
CAMBODIA	PHNOM PENH	VDPP	WCKP31	VDPP	VDPP	FF	WCKP31	VDPP	020205	VDPP	VDPP	-	2:05	2:05	3:44	3:42			
CHINA	BEIJING	ZBAA	WCCI33	ZBAA	ZBPE														
	CHENGDU	ZUUU	WCCI36	ZUUU	ZPKM	FF	WCCI36	ZUUU	020232	ZUUU	ZPKM	-	2:33	2:32	2:33	2:32	2:32	2:32	
	GUANGZHOU	ZGGG	WCCI35	ZGGG	ZGZU	FF	WCCI35	ZGGG	020205	ZGGG	ZGZU	New Delhi	2:11	2:11	2:13	2:35	2:11	2:12	
	HAIKOU	ZJHK	WCCI35	ZJHK	ZJSA	FF	WCCI35	ZJHK	020231	ZJHK	ZJSA	-	2:32	2:32	2:33	2:32	2:32	2:32	
	HONG KONG	VHHH	WCSS20	VHHH	VHHK	FF	WCSS20	VHHH	020230	VHHH	VHHK	-	2:31	2:31	2:32		2:30	2:31	
	SHANGHAI	ZSSS	WCCI34	ZSSS	ZSHA	FF	WCCI34	ZSSS	020207	ZSSS	ZSHA	-	2:08	2:08	2:10	2:37	2:08	2:09	
	TAIBEI	RCTP	WCCI31	RCTP	RCAA	FF	WCCI31	RCTP	020230	RCTP	RCAA	-	2:30	2:30	2:31	2:30	2:30	2:31	
DPR KOREA	SUNAN	ZKPY	WCKR31	ZKPY	ZKKP	FF	WCKR31	ZKPY	020230	ZKPY	ZKKP	-	2:31	2:31	2:33	2:31	2:31	2:32	
FIJI	NADI	NFFN	WCFJ01,02,...	NFFN	NFFF	FF	WCFJ01	NFFN	020205	NFFN	NFFF	Nadi	2:58	2:58	2:59	2:58	2:58	2:59	
FRENCH POLYNESIA	TAHITI	NTAA	WCPF21	NTAA	NTTT	FF	WCPF21	NTAA	020237	NTAA	NTTT	Nadi	2:39	2:39	2:40	2:39	2:39	2:40	
INDIA	CHENNAI	VOMM	WCIN31	VOMM	VOMF	FF	WCIN31	VOMM	020201	VOMM	VOMF	New Delhi	2:14	2:14	2:15	2:13	2:14	2:15	
	MUMBAI	VABB	WCIN31	VABB	VABF	FF	WCIN31	VABB	020205	VABB	VABF	New Delhi	2:05	2:05	2:07		2:05	2:06	
	NEW DELHI	VIDP	WCIN31	VIDP	VIDF	FF	WCIN31	VIDP	020200	VIDP	VIDF	New Delhi	2:02	2:02	2:04	8:00	2:02	2:03	
	KOLKATA	VECC	WCIN31	VECC	VECF	FF	WCIN31	VECC	020205	VECC	VECF	New Delhi	2:07	2:05	2:08		2:06	2:07	
INDONESIA	JAKARTA	WIII	WCID20	WIII	WIIZ	FF	WCID20	WIII	020208	WIII	WIIZ	Darwin/New Delhi	2:09	2:09	2:10	2:19	2:09	2:09	
	MAKASSAR	WAAA	WCID21	WAAA	WAAZ	FF	WCID21	WAAA	020230	WAAA	WAAZ	-		2:51		2:32		2:09	
JAPAN	TOKYO	RJTD	WCJP31	RJTD	RJJJ	FF	WCJP31	RJTD	020230	RJTD	RJJJ	-	2:30	2:30	2:31	2:30	2:30	2:31	
LAO PDR	VIENTIANE	VLVT	WCLA31	VLVT	VLVT	FF	WCLA31	VLVT	020200	VLVT	VLVT	Tokyo	1:59	1:59	2:00		1:59	2:00	
MALAYSIA	KUALA LUMPUR	WMKK	WCMS31	WMKK	WMFC	FF	WCMS31	WMKK	020205	WMKK	WMFC	New Delhi	2:13	2:13	2:15	2:13	2:13	2:14	
	KOTA KINABALU				WBFC	FF	WCMS31	WMKK	020244	WBKK	WBFC	-	2:45	2:44	2:46	2:44	2:45	2:45	
MALDIVES	MALE	VRMM	WCMV31	VRMM	VRMF														
MYANMAR	YANGON	VYYY	WCBM31	VYYY	VYYF	FF	WCBM31	VYYY	020800	VYYY	VYYF	-	8:01	8:00	8:02	8:00	8:00	8:01	
NAURU	NAURU	ANYN	WCNW20	ANYN	ANAU														
NEW ZEALAND	WELLINGTON	NZKL	WCNZ21	NZKL	NZZC	FF	WCNZ21	NZKL	020233	NZKL	NZZC	-	2:34	2:33	2:35	2:33	2:33	2:34	
		NZKL	WCPS21	NZKL	NZZO	FF	WCPS21	NZKL	020230	NZKL	NZZO	-	2:32	2:32	2:34	2:32	2:32	2:33	
PAKISTAN	KARACHI	OPKC	WCPK31	OPKC	OPKR	FF	WCPK31	OPKC	020215	OPKC	OPKR	New Delhi	2:19	2:19	2:20	2:18	2:19	2:19	
PAPUA NEW GUINEA	PORT MORESBY	AYPY	WCNG20	AYPY	AYPY														
PHILIPPINES	MANILA	RPLL	WCPH31	RPLL	RPHI	FF	WCPH31	RPLL	020230	RPLL	RPHI	-		2:31	2:32	2:30		2:31	
REPUBLIC OF KOREA	INCHEON	RKSI	WCKO31	RKSI	RKRR	FF	WCKO31	RKSI	020230	RKSI	RKRR	-	2:29	2:29	2:31	2:29	2:29	2:30	
SINGAPORE	SHINGAPORE	WSSS	WCSR20	WSSS	WSJC	FF	WCSR20	WSSS	020235	WSSS	WSJC	-	2:35	2:35	2:36	2:35	2:35	2:36	
SOLOMON ISLANDS	HONIARA	AGGH	WCSO20	AGGH	AGGG	FF	WCSO20	AGGH	020215	AGGH	AGGG	New Delhi	2:24	2:24	2:25	2:23	2:23	2:24	
SRI LANKA	COLOMBO	VCBI	WCSB31	VCBI	VCCF	-	WCSB31	VCBI	020205	VCBI	VCCF	New Delhi/Darwin	-	-	-	-	-	-	Reported by email
THAILAND	BANGKOK	VTBS	WCTH31	VTBS	VTBB	FF	WCTH31	VTBS	020230	VTBS	VTBB	-	2:30	2:30	2:31	2:30	2:30	2:31	
VIET NAM	GIA LAM	VVGL	WCVS31	VVGL	VVHM	FF	WCVS31	VVGL	020232	VVGL	VVHM	-	2:32	2:32	2:34	2:32	2:32	2:33	
					VVHN	FF	WCVS31	VVGL	020230	VVGL	VVHN	-	2:31	2:31	2:32	2:31	2:31	2:32	
UNITED STATES	HONOLULU	PHFO	WCPA01-13	PHFO	KZAK	GG	WCPA01	PHFO	020200	PHFO	KZAK	-	2:01	2:01	2:02		2:01	2:03	Incorrect priority 'GG'
	ANCHORAGE	PAWU	WCAK01-09	PAWU	PAZA														
	KANSAS CITY	KKCI	WCNT01-13	KKCI	KZAK	DD	WCPN01,02	KKCI	020205	KKCI	KZAK	CPHC	2:05	2:04	2:06	2:18	2:04	2:05	Incorrect priority 'DD'
BAHRAIN	BAHRAIN	OBBI	WCBN31	OBBI	OBBS														
IRAN	TEHRAN	OIII	WCIR31	OIII	OIIX	DD	WCIR31	OIII	020836	OIII	OIIX	-	8:37	8:37	8:39	8:36	8:37	8:41	Incorrect priority 'DD'
KUWAIT	KUWAIT	OKBK	WCKW10	OKBK	OKAC	GG	WCKW10	OKBK	020811	OKBK	OKBK		8:13	8:12				8:12	Incorrect FIR
OMAN	MUSCAT	OOMS	WCOM31	OOMS	OOMM	FF	WCOM31	OOMS	020738	OOMS	OOMM	-	7:38	7:38	7:39	8:00	7:38	7:40	Incorrect test message
SAUDI ARABIA	JEDDAH	OEJN	WCSD20	OEJD	OEJD	GG	WCSD20	OEJD	020800	OEJD	OEJD	New Delhi	8:00	8:00	8:01		8:00	8:00	Incorrect priority 'GG'
UNITED ARAB EMIRATES	ABU DHABI	OMAA	WCAE20	OMAA	OMAE														
YEMEN	SANNA	OYSN	WCYE31	OYSN	OYSC														TCA reception by email

Not listed in SIGMET GUIDE

MADAGASCAR	ANTANANARIVO	-	-	-	-	FF	WCMG20	FMMI	020615	FMMI	FMMM	-	6:19						6:16
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Appendix 6: Table of WV SIGMET test

MWO details in APEC Regional SIGMET TEST Procedures 2020 / SIGMET Guide												Test Result						Remarks		
State	MWO name	MWO	TTAAii	CCCC	FIR	PI	TTAAii	CCCC	YYGGgg	MWO	FIR	VAAC	Received Time(UTC)							
													VTBB	WSSS	YBBB	NFFN	RJTD		EUR	
AFGHANISTAN	KABUL	OAKB	WVAH31	OAKB	OAKX															
AUSTRALIA	MELBOURNE	YMMC	WVAU01	YMMC	YMMM	FF	WVAU01	YMMC	090206	YMMC	YMMM	Darwin	2:06	2:06	2:07	2:06	2:06	2:06		
				YBBB	YBBB	FF	WVAU01	YMMC	090208	YMMC	YBBB	Darwin	2:08	2:08	2:09	2:08	2:08	2:08		
BANGLADESH	DHAKA	VGHS	WVBW20	VGHS	VGFR	FF	WVBW20	VGHS	090205	VGHS	VGFR	Toulouse	2:05	2:05	2:06	2:05	2:05	2:06		
CAMBODIA	PHNOM PENH	ZUUU	WVKP31	VDPP	VDPP	GG	WVKP31	VDPP	200205	VDPP	VDPP	-	2:05	2:05						2:12
CHINA	BEIJING	ZBAA	WVCI33	ZBAA	ZBPE	FF	WVCI33	ZBAA	090205	ZBAA	ZBPE	Tokyo	2:02	2:01	2:02	2:01	2:01	2:02		
	CHENGDU	ZUUU	WVCI36	ZUUU	ZPKM	FF	WVCI36	ZUUU	090205	ZUUU	ZPKM	Tokyo	2:04	2:02	2:04	2:02	2:03	2:04		
	GUANGZHOU	ZGGG	WVCI35	ZGGG	ZGZU	FF	WVCI35	ZGGG	090205	ZGGG	ZGZU	Tokyo	2:06	2:06	2:08	2:06	2:06	2:07		
	HAIKOU	ZJHK	WVCI35	ZJHK	ZJSA	FF	WVCI35	ZJHK	090205	ZJHK	ZJSA	Tokyo/Anchorage	2:05	2:05	2:07	2:05	2:05	2:06		
	HONG KONG	VHHH	WVSS20	VHHH	VHHK	FF	WVSS20	VHHH	090202	VHHH	VHHK	Tokyo	2:03	2:03	2:04	2:02	2:03	2:03		
	SHANGHAI	ZSSS	WVCI34	ZSSS	ZSHA	FF	WVCI34	ZSSS	090202	ZSSS	ZSHA	Tokyo	2:04	2:02	2:04	2:02	2:02	2:03		
	SHENYANG	ZYTX	WVCI38	ZYTX	ZYSH	FF	WVCI38	ZYTX	090244	ZYTX	ZYSH	Tokyo	2:48	2:48	2:49		2:48	2:49		
	TAIBEI	RCTP	WVCI31	RCTP	RCAA	FF	WVCI31	RCTP	090220	RCTP	RCAA	Tokyo	2:20	2:20	2:22	2:20	2:20	2:21		
	URUMQI	ZWWW	WVCI39	ZWWW	ZWUQ	FF	WVCI39	ZWWW	090205	ZWWW	ZWUQ	Tokyo/Toulouse	2:06	2:06	2:07	2:04	2:06	2:07		
	WUHAN	ZHHH	WVCI45	ZHHH	ZHWH	FF	WVCI45	ZHHH	090202	ZHHH	ZHWH	Tokyo	2:04	2:04	2:06	2:02		2:06		
	XI'AN	ZLXY	WVCI37	ZLXY	ZLHW	FF	WVCI37	ZLXY	090200	ZLXY	ZLHW	Tokyo	2:06	2:05	2:07		2:05	2:06		
DPR KOREA	SUNAN	ZKPY	WVKR31	ZKPY	ZKKP	FF	WVKR31	ZKPY	090205	ZKPY	ZKKP	Tokyo	2:08	2:06	2:08	2:07	2:06	2:07		
FIJI	NADI	NFFN	WVFI01,02,...	NFFN	NFFF	FF	WVFI01	NFFN	090205	NFFN	NFFF	Wellington	2:05	2:05	2:07	2:05	2:05	2:06		
FRENCH POLYNESIA	TAHITI	NTAA	WVPI21,22	NTAA	NTTT															
INDIA	CHENNAI	VOMM	WVIN31	VOMM	VOMF	FF	WVIN31	VOMM	090215	VOMM	VOMF	Darwin	2:22	2:21	2:23	2:21	2:22	2:23		
	KOLKATA	VECC	WVIN31	VECC	VECF	FF	WVIN31	VECC	090210	VECC	VECF	Toulouse	2:10	2:10	2:12	2:10	2:10	2:11		
	MUMBAI	VABB	WVIN31	VABB	VABF	FF	WVIN31	VABB	090230	VABB	VABF	-	2:35	2:35	2:36		2:35	2:35		
	NEW DELHI	VIDP	WVIN31	VIDP	VIDF	FF	WVIN31	VIDP	090200	VIDP	VIDF	Toulouse	2:04	2:04	2:05	2:03	2:04	2:05		
INDONESIA	JAKARTA	WIII	WVID20	WIII	WIIZ	FF	WVID20	WIII	090205	WIII	WIIZ	Darwin	2:05	2:05	2:07	2:05	2:05	2:06		
	MAKASSAR	WAAA	WVID21	WAAA	WAAZ	FF	WVID21	WAAA	090203	WAAA	WAAZ	Darwin	2:05	2:04	2:06	2:04	2:04	2:06		
JAPAN	TOKYO	RJTD	WVJP31	RJTD	RJJJ	FF	WVJP31	RJTD	090205	RJTD	RJJJ	Tokyo	2:05	2:05	2:06	2:05	2:05	2:06		
LAO PDR	VIENTIANE	VLVT	WVLA31	VLVT	VLVT	FF	WVLA31	VLVT	090200	VLVT	VLVT	Tokyo	2:00	2:00	2:01	2:00	2:00	2:01		
MALAYSIA	KUALA LUMPUR	WMKK	WVMS31	WMKK	WMFC	FF	WVMS31	WMKK	090207	WMKK	WMFC	Darwin	2:07	2:06	2:08	2:06	2:06	2:07		
					WBFC	FF	WVMS31	WMKK	090205	WBKK	WBFC	Darwin	2:05	2:05	2:06	2:05	2:05	2:06		
MALDIVES	MALE	VRMM	WVMV31	VRMM	VRMF	FF	WVMV31	VRMM	090205	VRMM	VRMF	Toulouse	2:05	2:05	2:07	2:04	2:05	2:06		
MONGOLIA	ULAANBAATAR	ZMUB	WVMO31	ZMUB	ZMUB	FF	WVMO31	ZMUB	090220	ZMUB	ZMUB	Tokyo	2:23	2:23	2:24		2:24			
MYANMAR	YANGON	VYYY	WVBM31	VYYY	VYYF	FF	WVBM31	VYYY	090205	VYYY	VYYF	Darwin	2:04	2:04	2:06		2:04	2:06		
NAURU	NAURU	ANYN	WVNW20	ANYN	ANAU															
NEPAL	KATHMANDU	VNKT	WVNP31	VNKT	VNSM															
NEW ZEALAND	WELLINGTON	NZKL	WVNZ21	NZKL	NZZC	FF	WVNZ21	NZKL	090209	NZKL	NZZC	Wellington	2:10	2:10	2:12	2:10	2:10	2:11		
		NZKL	WVPS21	NZKL	NZZO	FF	WVPS21	NZKL	090205	NZKL	NZZO	Wellington	2:09	2:09	2:10	2:09	2:09	2:09		
PAKISTAN	KARACHI	OPKC	WVPK31	OPKC	OPKR	FF	WVPK31	OPKC	090210	OPKC	OPKR	Toulouse	2:17	2:17	2:18	2:10	2:17	2:18		
	LAHORE	OPLA	WVPK31	OPLA	OPLR	FF	WVPK31	OPLA	090206	OPLA	OPLR	Toulouse	2:17	2:10	2:12	2:10	2:10	2:11		
PAPUA NEW GUINEA	PORT MORESBY	AYPY	WVNG20	AYPY	AYPY															
PHILIPPINES	MANILA	RPLL	WVPH31	RPLL	RPHI	FF	WVPH31	RPLL	090215	RPLL	RPHI	Tokyo/Darwin	2:26	2:33	2:17	2:15	2:45	2:26		
REPUBLIC OF KOREA	INCHEON	RKSI	WVKO31	RKSI	RKRR	FF	WVKO31	RKSI	090200	RKSI	RKRR	Tokyo	2:02	2:02	2:03	2:02	2:02	2:03		
SINGAPORE	SHINGAPORE	WSSS	WVSR20	WSSS	WSJC	FF	WVSR20	WSSS	090205	WSSS	WSJC	Darwin	2:05	2:05	2:06	2:05	2:05	2:05		
SOLOMON ISLANDS	HONIARA	AGGH	WVSO20	AGGH	AGGG	FF	WVSO20	AGGG	090211	AGGG	AGGG	Wellington/Darwin	2:12	2:12	2:14	2:12	2:12	2:13	Incorrect MWO	
SRI LANKA	COLOMBO	VCBI	WVSB31	VCBI	VCCF	FF	WVSB31	VCBI	090210	VCBI	VCCF	Darwin	2:20	2:20	2:22	2:20	2:20			
THAILAND	BANGKOK	VTBS	WVTH31	VTBS	VTBB	FF	WVTH31	VTBS	090204	VTBS	VTBB	Tokyo/Darwin	2:05	2:05	2:06	2:05	2:05	2:06		
VIET NAM	GIA LAM	VVGL	WVVS31	VVGL	VVHM	FF	WVVS31	VVGL	090202	VVGL	VVHM	Tokyo	2:03	2:02	2:04	2:02	2:03	2:03		
					VVHN	FF	WVVS31	VVGL	090202	VVGL	VVHN	Tokyo	2:02	2:02	2:04	2:02	2:02	2:03		
UNITED STATES	HONOLULU	PHFO	WVPA01-13	PHFO	KZAK	GG	WVPA01	PHFO	090201	PHFO	KZAK	Washington	2:02	2:01		2:01	2:01	2:02	Incorrect priority 'GG'	
	ANCHORAGE	PAWU	WVAK01-09	PAWU	PAZA	DD	WVAK05	PAWU	090202	PANC	PAZA	Anchorage	2:03	2:10		2:02	2:02	2:04	Incorrect priority 'DD'	
	KANSAS CITY	KKCI	WVPA01-13	KKCI	KZAK	DD	WVPA01	KKCI	090205	KKCI	KZAK	Anchorage/Wellington	2:06	2:05		2:05	2:05	2:06	Incorrect priority 'DD'	
	IRKUTSK	UIII	WVRA31	RUIR	UIII	FF	WVRA31	RUIR	090200	UIII	UIII	Tokyo	2:05	2:01	2:03	2:01	2:03	2:02		
	KHABAROVSK/NOVY	UHMH	WVRA31	RUIR	UHMH	FF	WVRA31	RUIR	090203	UHMH	UHMH	Tokyo	2:04	2:03	2:05	2:03	2:03	2:04		
	KRASNOYARSK	UNKL	WVRA31	RUKR	UNKL	FF	WVRA31	RUKR	090201	UNKL	UNKL	Tokyo		2:02				2:03		
	MAGADAN/SOKOL	UHMM	WVRA31	RUMG	UHMM	FF	WVRA31	RUMG	090206	UHMM	UHMM	Tokyo	2:07	2:07	2:08	2:06	2:07	2:08		
	YAKUTSK	UEEE	WVRA31	RUYK	UEEE	FF	WVRA31	RUYK	090203	UEEE	UEEE	Tokyo		2:05				2:05		
	YELIZOV/PETROPAVLOVSK-KAMCHATSKY	UHPP	WVRA31	RUPK	UHPP	FF	WVRA31	RUPK	090202	UHPP	UHPP	Tokyo	2:03	2:03	2:06	2:03	2:03	2:03		
UNITED ARAB EMIRATES	ABU DHABI	OMAA	WVAE20	OMAA	OMAE															
OMAN	MUSCAT	OOMS	WVOM20	OOMS	OOMM															
KUWAIT	KUWAIT	OKBK	WVKW10	OKBK	OKAC															
Not listed in SIGMET GUIDE																				
SAUDI ARABIA	JEDDAH	-	-	-	-	GG	WVSD20	OEJD	090200	OEJD	OEJD	New Delhi	2:07	2:00	2:01			2:00	2:01	
MADAGASCAR	ANTANANARIVO	-	-	-	-	FF	WVMG20	FMMI	090229	FMMI	FMMM	Toulouse	2:30	2:31	2:31				2:30	