



International Civil Aviation Organization

**SIXTEENTH MEETING OF THE
COMMUNICATIONS/NAVIGATION/SURVEILLANCE AND
METEOROLOGY SUB-GROUP (CNS/MET SG/16) OF APANPIRG**

Bangkok, Thailand, 23 – 27 July 2012

Agenda Item 11: Meteorological advisories and warnings

PROGRESS WITH SIGMET TESTS – WC AND WV

(Presented by Japan)

SUMMARY

This paper presents the results of the ASIA/PAC SIGMET test conducted in November 2011 for TC and VA

This paper relates to –

Strategic Objectives

A: Safety - Enhance global civil aviation safety

C: Environmental Protection and Sustainable Development of Air Transport - Foster harmonized and economically viable development of international civil aviation that does not unduly harm the environment

Global Plan Initiatives:

GPI-19 Meteorological Systems

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 OPMET Management Task Force (OPMET/M TF) 9th meeting reviewed the results of SIGMET tests in the Asia/Pac Region held in November 2010. The meeting decided that the WC, WV and WS SIGMET tests would be conducted on 08, 15 and 22 November 2011, respectively.

1.3 The Regional SIGMET tests were conducted as follows.

	2005	2006	2007	2008	2009	2009	2010	2011
SIGMET for volcanic ash	1/18	1/19	1/22	1/22	2/17	11/17	11/17	11/15
SIGMET for tropical cyclone	2/18	1/26	1/15	1/15	2/10	11/10	11/10	11/08

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1.4 ICAO APAC Office sent a state letter, *Schedule for SIGMET tests in the Asia/Pacific Region – November 2011*, which notified the schedule and the procedure of the regional SIGMET tests as follows

- Test for SIGMET for tropical cyclones (WC SIGMET) – 08 November 2011, start time (time of issuance of triggering tropical cyclone advisory by the TCACs concerned) 0200 UTC;
 - Note that for TCAC New Delhi, test tropical cyclone advisories will be issued at 0200 UTC for the ASIA/PAC Region and 0800 UTC for the MID Region
- Test for SIGMET for volcanic ash (WV SIGMET) – 15 November 2011, start time (time of issuance of the triggering volcanic ash advisory by the VAACs concerned) 0200 UTC;
- Test for SIGMET for other weather phenomena (WS SIGMET) – 22 November 2011, start time 0200 UTC

2. Test results and analysis

2.1 Four RODBs in the Region sent the summary of the reception of the TC and VA tests to Japan, Rapporteur of the SIGMET test. The combined information of the reception of the bulletins during the test on TC and VA is shown in the Appendix A and B, respectively. In this paper, the overall availability means that the test bulletin which was received at least one RODB is regarded as available.

2.2 Summary of WC SIGMET test

2.2.1 Total number of WC SIGMET bulletins expected to be reported during the test from ASIA/PAC States was 46 and that received during the WC SIGMET test was 29, although there were some bulletins with incorrect formats or WMO headings. The overall availability of the test WC SIGMET from ASIA/PAC States was about 63%. The availability was almost the same as that of the SIGMET test in 2010. Compared with the result in 2010, bulletins from OPKC and RKSI were newly appeared in this WC SIGMET test.

2.2.2 The Appendix A is the summary of the WC SIGMET test. The format of the received time of WSSS and RJTD is “GG:gg:ss” where GG, gg and ss are hour, minute and second, respectively. That of YBBN, VTBB and NFFN is “YYGGgg” where YY, GG and gg are date, hour and minute, respectively (same format as the WMO header). Yellow colored cell indicates incorrect headers. The key issue related to incorrect WMO heading, especially for TT (WS, WC or WV), remains unchanged. The states which have not participated in the WC SIGMET test were almost unchanged compared with the result in 2010.

2.2.3 The figure 1 shows the availability of the WC SIGMET test at each RODB since 2008. The availability of the SIGMET test in 2011 is almost same as that in 2010.

2.3 Summary of WV SIGMET test

2.3.1 Total number of WV SIGMET bulletins expected to be reported during the test from ASIA/PAC States was 49. RODB Tokyo relayed the 9 Russian WV SIGMETs (UELL, UEST, UHHH, UHMAs, UHMM, UHPP, UIAA and UIII). Therefore the total number of WV SIGMET bulletins expected to be reported during the WV SIGMET test was 58. The total number of WV SIGMET bulletins received during the test from ASIA/PAC and from Russia was 33 and 9, respectively. The availability in the ASIA/PAC region was 67% which was almost the same as that of the SIGMET test in 2010.

2.3.2 2.4.2 The Appendix B is the summary of the WV SIGMET test. The format of the received time and the mean of the yellow colored cell are the same as those of the Appendix A. The incorrect WMO heading is also for TT.

2.3.3 The figure 2 shows the availability of the WV SIGMET test at each RODB since 2008. The availability of the SIGMET test in 2011 is almost same as that in 2010.

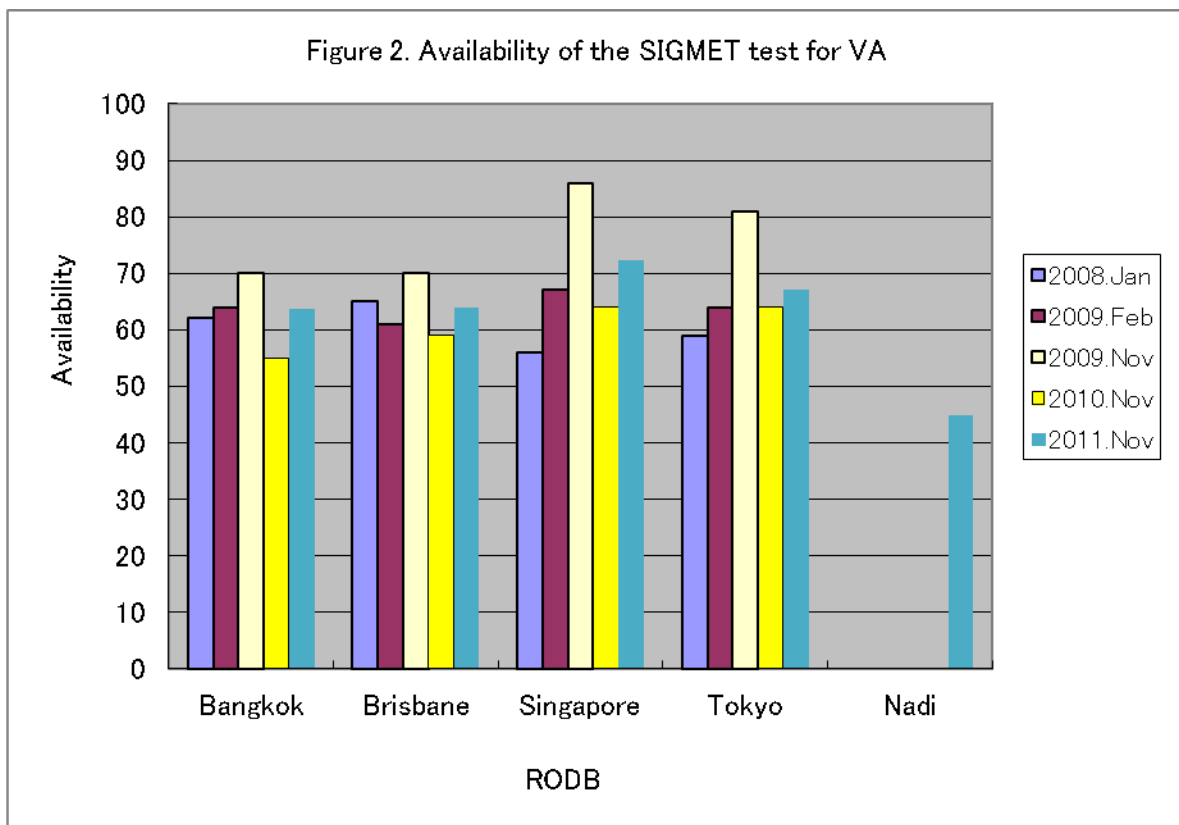
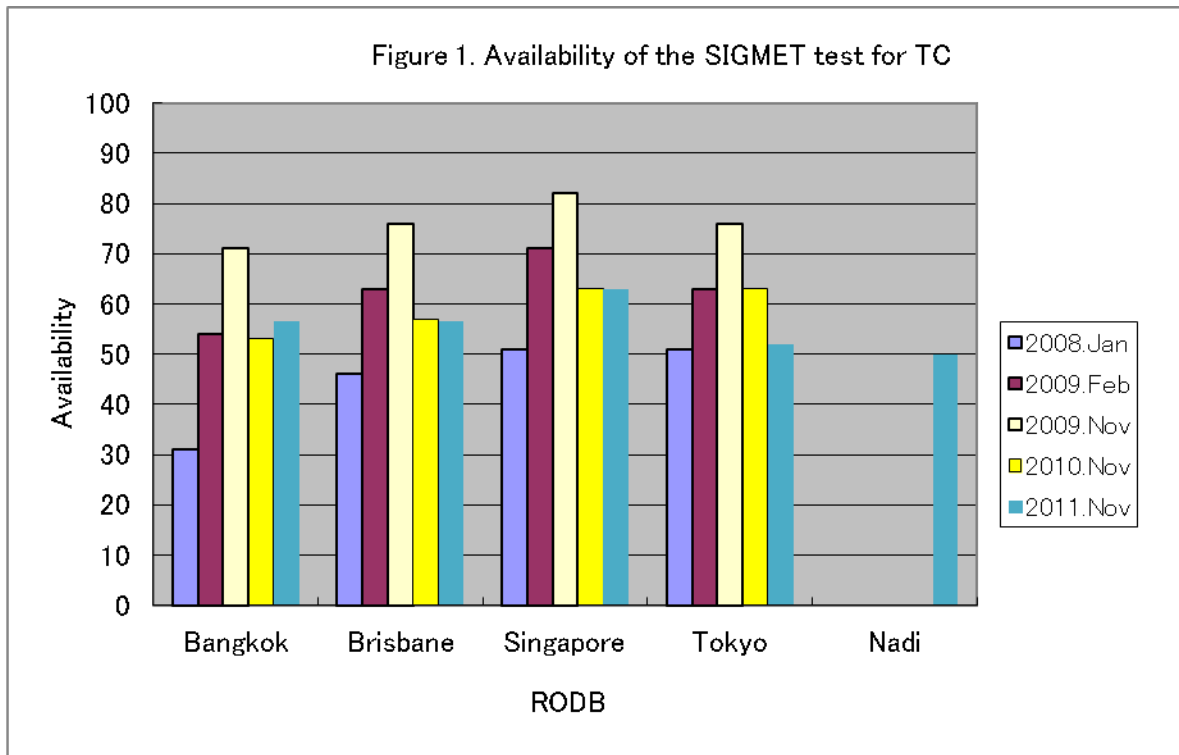
2.4 Summary of SIGMET test

2.4.1 Some MWOs might not issue test bulletin because there was a valid bulletin in order not to overwrite it (ex. RJTD did not issue WV SIGMET bulletin). The actual availability may be slightly higher than the result shown in this paper. In the current procedure, as “Z99” is used as the SIGMET sequence number, it would be possible to issue SIGMET test bulletin without overwriting the valid SIGMET during the SIGMET test

3. Action by the Meeting

3.1 The meeting is invited to:

- a) The meeting is invited to note the results of the SIGMET tests presented above and discuss on the future improvement of the SIGMET exchange in the region; and
- b) The meeting is also invited to discuss, if necessary, revision of the test procedure.



Appendix A
 Summary of the WC SIGMET test results

Header According to SIGMET Guide				Test Result					Received Time(UTC)				
MWO	TTAAii	CCCC	FIR	TTAAii	CCCC	YYGGgg	MWO	FIR	YBBN	WSSS	VTBB	NFFN	RJTD
AYPY	WCNW20	AYPY	ANAU										
AYPY	WCNG20	AYPY	AYPY										
AYPY	WCSO20	AYPY	AGGG										
KKCI	WCPN01-13	KKCI	KZAK	WCPN01	KKCI	080200	KKCI	KZAK		02:03:24			02:01:38
NFFN	WCFJ01	NFFN	NFFF	WCFJ01	NFFN	080000	NFFN	NFFF	080205	02:05:05	080205	080205	02:05:13
NTAA	WCPF21	NTAA	NITT										
NZKL	WCNZ21	NZKL	NZZC										
NZKL	WCPS21	NZKL	NZZO	WCPS21	NZKL	080204	NZKL	NZZO	080204	02:04:28	080204	080204	02:04:39
OPKC	WCPK31	OPKC	OPKR	WCPK30	OPKC	080205	OPKC	OPKC	080210	02:10:43	080213	080212	02:10:50
OPLA	WCPK31	OPLA	OPLR										
PAWU	WCAK01-09	PAWU	PAZA										
PHFO	WCPA01-13	PHFO	KZAK	WCPA01	PHFO	080201	PHFO	KZAK	080201	02:03:23			02:01:18
RCTP	WCCI31	RCTP	RCAA	WCCI31	RCTP	080211	RCTP	RCAA	080211	02:11:17	080211	080211	02:11:02
RJTD	WCJP31	RJTD	RJJJ	WCJP31	RJTD	080205	RJTD	RJJJ	080205	02:05:11	080205		02:05:13
RKSI	WCKO31	RKSI	RKRR	WCKO31	RKSI	080205		RKSI	080204	02:04:09	080204	080204	
RPLL	WCPH31	RPLL	RPHI										
VABB	WCIN31	VABB	VABF	WCIN31	VABB	080800	VABB	VABF	080758	07:58:04	080758		
VCBI	WCSB31	VCBI	VCBI										
VECC	WCIN31	VECC	VECF	WSIN31	VECC	081000	VECC	VECF	080201	10:11:21			
VGHS	WCBW20	VGHS	VGFR										
VHHH	WCSS20	VHHH	VHHK	WCSS20	VHHH	080205	VHHH	VHHK	080207	02:07:45	080207	080207	02:07:44
VIDP	WCIN31	VIDP	VIDF	WCIN31	VIDP	080200	VIDP	VIDF	080214	02:14:32	080213	080222	02:10:07
VLVT	WCLA31	VLVT	VLVT										
VOMM	WCIN31	VOMM	VOMF	WCIN31	VOMM	080200	VOMM	VOMF	080804	02:01:51	080202	080201	02:01:44
VRMM	WCMV31	VRMM	VRMF	WCMV31	VRMM	080205	VRMM	VRMF	080204	02:04:36	080204	080204	02:04:48
VTBS	WCTH31	VTBS	VTBB	WCTH31	VTBS	080208	VTBS	VTBB	080233	02:33:30	080233	0802033	02:33:32
VVGL	WCVS31	VVGL	VVNB	WCVS31	VVGL	080201	VVGL	VVNB	080201	02:02:02	080202	080201	02:01:52
VVGL	WCVS31	VVGL	VVTS	WCVS31	VVGL	080202	VVGL	VVTS		02:03:50	080203	080203	02:03:21
VYYY	WCBM31	VYYY	VYYY										
WAAA	WCID21	WAAA	WAAZ										
WIII	WCID20	WIII	WIIZ										
WMKK	WCMS31	WMKK	WBFC	WCMS31	WMKK	080205	WBKK	WBFC		02:06:49	080207		02:06:32
WMKK	WCMS31	WMKK	WMFC	WCMS31	WMKK	080205	WMKK	WMFC	080205	02:06:48	080210	080206	02:06:42
WSSS	WCSR20	WSSS	WSJC	WCSR20	WSSS	080205	WSSS	WSJC	080205	02:05:34	080206	080205	02:05:35
YBRF	WCAU01	ABRF	YBBB	WCAU01	ABRF	080400	YBRF	YBBB	080400	04:00:18	080204	080400	
YBRF	WCAU01	ABRF	YMMM										
YDRM	WCAU01	ADRM	YBBB	WCAU01	ADRM	080207	YPDM	YBBB	080207	02:07:32	080207	080207	
YDRM	WCAU01	ADRM	YMMM										
YPRF	WCAU01	APRF	YBBB	WCAU01	APRF	080212	YPRF	YBBB	080212	02:12:12	080212	080212	02:12:18
YPRF	WCAU01	APRF	YMMM	WCAU01	APRF	080214	YPRF	YMMM	080214	02:14:24	080214	080214	02:14:26
ZBAA	WCCI33	ZBAA	ZBPE	WCCI33	ZBAA	080205	ZBAA	ZBPE	080202	02:02:07	080202	080202	02:02:03
ZGGG	WCCI35	ZGGG	ZGZU	WCCI35	ZGGG	080205	ZGGG	ZGZU	080205	02:06:31	080206	080206	02:08:12
ZJHK	WCCI35	ZJHK	ZJSA	WCCI35	ZJHK	080200	ZJHK	ZJSA	080225	02:25:00	080225	080225	02:26:12
ZKPY	WCKR31	ZKPY	ZKKP										
ZSSS	WCCI34	ZSSS	ZSHA	WCCI34	ZSSS	080214	ZSSS	ZSHA	080216	02:16:57	080217	080217	02:16:57
ZUUU	WCKP31	ZUUU	VDPP	WCKP31	ZUUU	080200	ZUUU	VDPP	080205	02:06:30	080206	080206	02:05:55

Appendix B
 Summary of the WV SIGMET test results

Header According to SIGMET Guide				Test Result					Received Time(UTC)				
MWO	TTAAii	CCCC	FIR	TTAAii	CCCC	YYGGgg	MWO	FIR	YBBN	WSSS	VTBB	NFFN	RJTD
AYPY	WVNW20	AYPY	ANAU										
AYPY	WVNG20	AYPY	AYPY										
AYPY	WVSO20	AYPY	AGGG										
KKCI	WVFN01-13	KKCI	KZAK	WVFN01	KKCI	150200	KKCI	KZAK		02:13:31			02:10:33
NFFN	WVFN01-13	NFFN	NFFF	WVFN01	NFFN	150000	NFFN	NFFF	150203	02:02:58	150205	150203	02:03:04
NTAA	WVFP21	NTAA	NTTT										
NZKL	WVNZ21	NZKL	NZZC	WVNZ21	NZKL	150201	NZKL	NZZC	150201	02:02:00	150202	150201	02:02:12
NZKL	WVPS21	NZKL	NZZO	WVPS21	NZKL	150201	NZKL	NZZO	150202	02:02:05	150202	150202	02:02:13
OAKB	WVAH31	OAKB	OAKX										
OPKC	WVPK31	OPKC	OPKR	WVPK31	OPKC	150205	OPKC	OPKR	150208	02:06:27	150208		02:07:36
OPLA	WVPK31	OPLA	OPLR										
PAWU	WVAK01-09	PAWU	PAZA	WVAK05	PAWU	150205	PAWU	PAZA		02:05:29			02:05:29
PHFO	WVPA01-13	PHFO	KZAK	WVPA01	PHFO	150221	PHFO	KZAK		02:23:16			02:21:30
RCTP	WVCI31	RCTP	RCAA	WVCI31	RCTP	150205	RCTP	RCAA	150204	02:04:26	150204	150204	02:04:35
RJTD	WVJP31	RJTD	RJJJ										
RKSI	WVKO31	RKSI	RKRR	WVKO31	RKSI	150205	RKSI	RKRR	150202	02:12:14	150202		02:12:13
RPLL	WVPH31	RPLL	RPHI	WCPH31	RPLL	150200	RPLL	RPHI	150203	02:04:06	150204		
UELL	WVRA32	RUYK	UELL	WVRA32	RUYK	150201	UELL	UELL	150203	02:03:18	150205	150203	02:04:29
UEST	WVRA38	RUYK	UEST	WVRA38	RUYK	150211	UEST	UEST	150216	02:16:13	150215		02:13:33
UHMH	WVRA31	RUHB	UHMH	WVRA31	RUHB	150203	UHMH	UHMH	150203	02:03:38	150205	150203	02:04:09
UHMA	WVRA31	RUPV	UHMP	WVRA31	RUPV	150200	UHMP	UHMP	150207	02:07:34	150207		02:06:26
UHMA	WVRA32	RUPV	UHMA	WVRA32	RUPV	150200	UHMA	UHMA		02:06:44	150207	150206	02:06:03
UHMM	WVRA31	RUMG	UHMM	WVRA31	RUMG	150205	UHMM	UHMM	150207	02:07:16		150207	02:07:12
UHPP	WVRA31	RUPK	UHPP	WVRA31	RUPK	150204	UHPP	UHPP	150206	02:06:03	150204	150206	02:05:55
UIAA	WVRA31	RUCH	UIAA	WVRA31	RUCH	150205	UIAA	UIAA	150206	02:06:11	150207	150206	02:06:10
UIII	WVRA31	RUIR	UIII	WVRA31	RUIR	150201	UIII	UIII	150202	02:02:03	150202	150202	02:01:57
VABB	WVIN31	VABB	VABF										
VCBI	WVSB31	VCBI	VCBI										
VECC	WVIN31	VECC	VECF										
VGHS	WVBW20	VGHS	VGFR										
VHHH	WVSS20	VHHH	VHHK	WVSS20	VHHH	150203	VHHH	VHHK	150204	02:04:26	150204		02:26:05
VIDP	WVIN31	VIDP	VIDF										
VLVT	WVLA31	VLVT	VLVT										
VOMM	WVIN31	VOMM	VOMF	WVIN31	VOMM	150217	VOMM	VOMF	150218	02:18:15	150218		02:18:08
VRMM	WVMV31	VRMM	VRMF	WSXX99	VRMM	150213	VRMM	VRMF	150213	02:13:05	150213		
VTBS	WVTH31	VTBS	VTBB	WVTH31	VTBS	150202	VTBS	VTBB	150203	02:03:07	150202	150203	02:02:58
VVGL	WVVS31	VVGL	VVNB	WVVS31	VVGL	150205	VVGL	VVNB	150203	02:03:38	150203	150203	02:02:30
VVGL	WVVS31	VVGL	VVTS	WVVS31	VVGL	150204	VVGL	VVTS	150202	02:02:36	150202		02:03:31
VYYY	WVBM31	VYYY	VYYY										
WAAA	WVID21	WAAA	WAAZ	WVID21	WAAA	150200	WAAA	WAAZ	150201	02:01:22			
WIII	WVID20	WIII	WIIZ	WVID20	WIII	150200	WIII	WIIZ	150204	02:13:59	150204		02:14:00
WMKK	WVMS31	WMKK	WBFC	WVMS31	WMKK	150201	WMKK	WBFC	150201	02:01:50	150201	150201	02:01:57
WMKK	WVMS31	WMKK	WMFC	WVMS31	WMKK	150205	WMKK	WMKC	150206	02:06:27	150206	150206	02:06:34
WSSS	WVSR20	WSSS	WSJC	WVSR20	WSSS	150205	WSSS	WSJC	150205	02:05:40	150206	150205	02:05:57
YDRM	WVAU01	ADRM	YBBB	WVAU01	ADRM	150203	YPDM	YBBB	150203	02:03:25	150203	150203	02:03:35
YDRM	WVAU01	ADRM	YMMM	WVAU01	ADRM	150207	YPDM	YMMM	150207	02:07:20	150207	150207	02:07:56
ZBAA	WVCI33	ZBAA	ZBPE	WVCI33	ZBAA	150205	ZBAA	ZBPE	150202	02:02:22	150202	150202	02:02:21
ZGGG	WVCI35	ZGGG	ZGZU	WVCI35	ZGGG	150205	ZGGG	ZGZU	150203	02:03:52	150203	150203	02:04:04
ZHHH	WVCI45	ZHHH	ZHWH	WVCI45	ZHHH	150205	ZHHH	ZHWH	150213	02:13:52	150213		02:10:17
ZJHK	WVCI35	ZJHK	ZJSA	WVCI35	ZJHK	150205	ZJHK	ZJSA	150203	02:03:52	150203	150203	02:03:00
ZKPY	WVKR31	ZKPY	ZKKP										
ZLXY	WVCI37	ZLXY	ZLHW	WVCI37	ZLXY	150209	ZLXY	ZLHW		02:11:59	150212		02:11:57
ZMUB	WVMO31	ZMUB	ZMUB										
ZSSS	WVCI34	ZSSS	ZSHA	WVCI34	ZSSS	150205	ZSSS	ZSHA	150203	02:04:08	150205	150203	02:03:29
ZUUU	WVCP31	ZUUU	VDPP	WVCP31	ZUUU	150206	ZUUU	VDPP	150208	02:08:25	150208	150208	02:08:24
ZUUU	WVCI36	ZUUU	ZPKM	WVCI36	ZUUU	150205	ZUUU	ZPKM	150207	02:07:02	150207	150207	02:07:22
ZWWW	WVCI39	ZWWW	ZWUQ	WVCI39	ZWWW	150210	ZWWW	ZWUQ	150212	02:12:51	150213		02:12:50
ZYTX	WVCI38	ZYTX	ZYSH	WVCI38	ZYTX	150205	ZYTX	ZYSH	150202	02:02:15	150202	150202	02:02:16