



**Tradewind VA**



**Flight Briefing Package**

**TCC215C KMSP-WSSS**

**14-Sep-2019 #5**

RELEASE #5

MINNEAPOLIS-ST PAUL INTL/WOLD-  
(UNITED STATES)

-

CHANGI  
(SINGAPORE)

PREPARED BY CHRISTIAN BREUER (TCA2984)

CHRISTIAN@TCA-CHARTER.DE

14 SEP 1416 UTC

<b>Fuel Planning (kg)</b>	<b>EU-OPS</b>	<b>Fuel</b>	<b>Time</b>
TRIP		138.512	17:59
CONT 5%		6.926	01:07
HOLD	WSSS	2.057	00:20
ALTN	WMKK	4.726	00:38
FINAL RESV		3.085	00:30
ADD FUEL		1.999	00:20
MIN T/O		157.305	20:54
EXTRA		1.543	00:15
TAXI		832	00:16
RELEASE	KMSP	159.680	21:25
ARR FUEL	WSSS	19.712	02:58

<b>Load Planning (kg)</b>	<b>PJTGE</b>	<b>Plan</b>	<b>Limit</b>
Empty Weight		156.146	
Payload	264+0 Pax	24.816	
Zero Fuel Weight		180.962	209.106
Fuel		159.680	162.613
Ramp Weight		340.642	348.359
Take-Off Weight KMSP	Limit	339.810	341.290
Landing Weight WSSS		201.298	223.167
Underload		1.480	Lim TOW

<b>Cost Planning</b>		
Flight Time	17:59\$	98.718
Fuel	139.968\$	108.995
Delay	00:40\$	1.911
Total		\$ 209.624
Per Pax		\$ 794
Per 5.000 kg Payload		\$ 42.236

CREW INFO TEMPLATES CAN BE CREATED IN THE  
<DOCUMENTS>\PFPX DATA\CREWINFOTEMPLATES  
FOLDER

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F O R I N F O R M A T I O N O N L Y

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TRADEWIND CARIBBEAN FLIGHTPLAN - IFR TCC215C PJTGE KMSP-WSSS

ALL WEIGHTS IN KILOGRAMS (KG) STD 14SEP/1645Z

OPF 5 - PREPARED 14SEP/1416Z BY CHRISTIAN BREUER (TCA2984) CHRISTIAN@TCA-CHARTER.DE

TR215C/TCC215C PJTGE/B777-2LR GE SEL/EGAP ROUTE: KMSPWSSS01

DEP: KMSP/MSP 12R ELEV 842 FT COST INDEX: 250 TTL G/C DIST: 7893 NM
ARR: WSSS/SIN 02C ELEV 22 FT INIT ALT: FL300 TTL F/P DIST: 8268 NM
FUEL BIAS: 100.5% TTL AIR DIST: 8717 NM
AVG WIND CMP: HD025 KT

ALT: WMKK/KUL 14L ELEV 69 FT 183 NM

Table with columns: CONFIG, DOW, PAX, CARGO, TOTAL, ULOAD LIM, ZFW, TOW, LDW. Rows include STANDARD, MAX, PLN, ACT.

\*\* TAKE-OFF DATA KMSP 30L \*\*

COND: 339810 KG // RWY DRY // +15.C Q1013 CALM // LMT: FIELD
CONFIG: FLAPS 15 // TO // A/I OFF/AUTO // A/C ON
SPEEDS: V1=164 VR=170 V2=176
ENG OUT: NONE

Table with columns: TRIP, FUEL, CORR, ENDUR. Includes rows for CONT 5%, ALTN WMKK, FINAL RESV, HOLD, ADD FUEL, MIN T/O, EXTRA, TAXI, RELEASE, ARR FUEL. Includes CAPTAINS SIGNATURE and I ACCEPT THIS OPF AND I AM FAMILIAR WITH THE PLANNED ROUTE AND AERODROMES.

FUEL TANK CAP 162613 KG / MAX EXTRA FUEL 3023 KG LIM BY ENRTE
TRIP CORR FOR 5000 KG TOW INCR: N/A KG / 5000 KG TOW DECR: -563 KG
2000 FT LOWER: +1597 KG / EET 17:47 CLB: 250/310/84 DES: 84/320/250

Table with columns: Airport, STD, ETD, ACT, EST T/O, ACT T/O, EST LDG, ACT LDG, SKD, PLN, TTL BLCK, EST FLT, TTL FLT.

\*\*\*\*\* 120 MIN ETOPS CRITICAL FUEL SUMMARY \*\*\*\*\*

NON-ICING CONDITIONS - INCLUDING FUEL FOR ONE MISSED APPROACH

Table with columns: ETOPS ENTRY/EXIT (PAFA), Distance, Altitude, Wind, EET.

**ETOPS ALTNS WX/NOTAM SUITABILITY PERIOD**

PAFA (22:10-00:52)

-----  
**ONE ENGINE OUT CRP 1 FOR PAFA** N70 28.0 W172 47.5 EET 05:55  
 1E084/320 DESC TO FL210 CRUISE AT 1E0320 253 NM BEFORE ARLIM  
 PLN FUEL OVER CRP 103600 CRP FUEL REQ 17761 DIV TIME 01:40  
 CRP TO PAFA (N64 48.9 W147 51.4) DIST 657 NM WC HD026 TT 109  
 \*\*\* FUEL DUMP REQUIRED \*\*\*

**ONE ENGINE OUT DECOMP CRP 1 FOR PAFA** N70 28.0 W172 47.5 EET 05:55  
 84/320/250 DESC TO FL100 CRUISE AT 1E0320 253 NM BEFORE ARLIM  
 PLN FUEL OVER CRP 103600 CRP FUEL REQ 18121 DIV TIME 01:56  
 CRP TO PAFA (N64 48.9 W147 51.4) DIST 657 NM WC HD026 TT 109  
 \*\*\* FUEL DUMP REQUIRED \*\*\*

**ALL ENGINE DECOMP CRP 1 FOR PAFA** N70 28.0 W172 47.5 EET 05:55  
 84/320/250 DESC TO FL100 CRUISE AT AE320 253 NM BEFORE ARLIM  
 PLN FUEL OVER CRP 103600 CRP FUEL REQ 17244 DIV TIME 01:56  
 CRP TO PAFA (N64 48.9 W147 51.4) DIST 657 NM WC HD026 TT 109  
 \*\*\* FUEL DUMP REQUIRED \*\*\*

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**ATC ROUTE:** N0495F300 KBREW1 FAR J515 YWG J596 YQD DCT YSF NCA23 HARUN/N0492F320  
 NCA23 ADREW NCA80 LISKI N738 BEKMI/N0488F340 N738 NERPA A965 ODANA  
 N620 NALEB/N0484F360 G494 SIMLI/K0898S1100 A588 CHI W107  
 SANKO/K0906S1070 A326 OBDIS/K0897S1130 A326 IKADI/K0901S1100 A326  
 SURAK/K0907S1070 A326 AKARA/K0900S1130 A326 MIGOL/K0902S1100 B591  
 KASKA/N0487F360 B591 BERBA L2 DRAKE/N0485F380 L2 TINHO B591  
 HCN/N0488F360 N892 MAVRA/N0485F390 N892 MABAL MABA2A

**ALTERNATE PLANNING**

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**ALTN/RWY DIST ALT/FL MSA COMP TIME FUEL DIFF ROUTE**  
 WMKK/14L 183 10000 054 HD024 00:38 4726 - MASB2A MASBO A457 SAPAT

MOST CRITICAL MORA 15100 FT AT POLKA

AWY -FIR	WAYPOINT NAME	MT	ALT ISA	MSA WIND/SPD	FREQ GS	TAS GS	LEG REM	FUEL POSITION	REM / USED	LEG ETO / ATO	ACC
	<b>KMSP/12R</b>		842	036				158.8 / 0.8			
	MINNEAPOLIS-ST PAUL					8268		N4453.3 W09314.1	...../.....		
KBREW1	<b>GEP</b>	339	*CLB	036	<b>117.30</b>		20	156.3 / 2.9	05 00.05		
	GOPHER MINNEAPOLIS		M00	335/025		8249		N4508.7 W09322.4	...../.....		
KBREW1	<b>HRBEK</b>	299	*CLB	036			21	155.4 / 3.9	03 00.08		
			M00	298/025		8228		N4518.9 W09348.4	...../.....		
KBREW1	<b>HOMUR</b>	298	*CLB	036			13	154.9 / 4.4	02 00.10		
			M00	298/025		8215		N4525.1 W09404.6	...../.....		
KBREW1	<b>KBREW</b>	298	*CLB	034			21	154.1 / 5.1	03 00.13		
			P00	298/025		8194		N4535.1 W09430.9	...../.....		
KBREW1	<b>*TOC</b>	306	FL300	034		495	10	154.2 / 5.5	01 00.14		
			M00	306/025		470	8183	N4541.3 W09442.9	...../.....		
KBREW1	<b>FAR</b>	305	FL300	037	<b>116.20</b>	496	110	152.0 / 7.7	14 00.28		

	FARGO		M00	305/025	471	8074	N4645.2	W09651.1	...../.....
	<b>CYWG</b>	352	FL300	037		1	152.0 /	7.7	00 00.28
			M00	360/025		8073	N4646.2	W09651.2	...../.....
J515	<b>HML</b>	352	FL300	043	<b>112.40</b>	496	127	149.4 /	10.3 17 00.45
	HUMBOLDT		M00	355/025	471	7946	N4852.2	W09707.0	...../.....
J515	<b>ZOMTA</b>	353	FL300	041		496	8	149.2 /	10.5 01 00.46
-CZWG			M00	355/025	471	7938	N4900.0	W09707.9	...../.....
J515	<b>YWG</b>	353	FL300	030	<b>115.50</b>	496	56	148.1 /	11.6 07 00.53
	WINNIPEG		M00	355/025	471	7882	N4955.7	W09714.4	...../.....
J596	<b>YQD</b>	328	FL300	034	<b>113.60</b>	496	282	142.5 /	17.2 36 01.29
	THE PAS		M00	328/025	471	7600	N5358.4	W10106.0	...../.....
	<b>CYOD</b>	330	FL300	030			27	141.9 /	17.7 03 01.32
			M00	360/025		7574	N5423.0	W10125.1	...../.....
DCT	<b>*BDRY</b>	329	FL300	031		496	143	139.1 /	20.5 18 01.50
-CZEG			M00	335/025	471	7430	N5632.1	W10312.6	...../.....
	<b>CYZF</b>	326	FL300	036			177	135.7 /	24.0 23 02.13
			M00	360/025		7254	N5909.8	W10544.1	...../.....
DCT	<b>YSF</b>	322	FL300	032	<b>287.0</b>	497	7	135.6 /	24.1 01 02.14
	STONY RAPIDS		M00	331/025	472	7247	N5915.3	W10549.9	...../.....
NCA23	<b>ALSAB</b>	310	FL300	033		497	184	132.0 /	27.6 23 02.37
			M00	316/025	472	7063	N6130.9	W11000.0	...../.....
NCA23	<b>BILSI</b>	302	FL300	032		497	250	127.3 /	32.4 32 03.09
			M00	310/025	472	6813	N6419.5	W11645.2	...../.....
NCA23	<b>HARUN</b>	292	*CLB	038			252	122.6 /	37.1 32 03.41
			M00	301/025		6560	N6646.5	W12500.0	...../.....
----- ETOPS ENTRY (CYZF) 0185 NM BEFORE YEV EET 03:45 -----									
----- ETOPS EXIT (PAFA) 0008 NM BEFORE YEV EET 04:08 -----									
NCA23	<b>YEV</b>	271	FL320	026	<b>112.50</b>	492	217	118.4 /	41.3 28 04.09
	INUUVIK		M00	291/025	467	6344	N6818.5	W13332.9	...../.....
NCA23	<b>ADREW</b>	271	FL320	097		493	170	115.3 /	44.4 22 04.31
-PAZA			M00	285/025	468	6173	N6910.2	W14100.2	...../.....
----- ETOPS ENTRY (PAFA) 0226 NM BEFORE LISKI EET 05:16 -----									
NCA80	<b>LISKI</b>	261	FL320	016		493	580	105.0 /	54.7 0114 05.45
-UHMM			M00	265/025	468	5593	N7024.3	W16858.4	...../.....
	<b>*CFP 1</b>	267	FL320	010		493	77	103.6 /	56.1 10 05.55
	PAFA		M00	360/025	468	5516	N7028.0	W17247.5	...../.....
----- ETOPS EXIT (UHMA) 0253 NM BEFORE ARLIM EET 05:55 -----									
	<b>UHKM</b>	265	FL320	033			130	101.3 /	58.4 17 06.12
			M00	360/025		5386	N7023.3	W17916.7	...../.....
N738	<b>ARLIM</b>	263	FL320	033		494	123	99.2 /	60.5 15 06.27
			M00	259/025	469	5263	N7006.3	E17444.5	...../.....

N738	BEKMI	260	*CLB 052	88	97.7 / 62.0	11	06.38
			M00 255/025	5175	N6947.0 E17035.9	...../.....	
N738	RESBU	260	FL340 042	488 49	96.7 / 63.0	07	06.45
			P00 255/025	463 5126	N6934.9 E16819.2	...../.....	
N738	IDARI	258	FL340 073	488 50	95.9 / 63.8	06	06.51
-UEEE			P00 253/025	463 5076	N6920.2 E16602.0	...../.....	
N738	RKN CHERSKY	258	FL340 075	115.80 488 107	94.0 / 65.6	14	07.05
			P00 248/025	463 4969	N6844.4 E16120.2	...../.....	
N738	OLMIN	257	FL340 051	488 187	90.9 / 68.8	24	07.29
			P00 242/025	463 4782	N6728.0 E15343.2	...../.....	
	UHMM	252	FL340 040	115	88.9 / 70.8	15	07.44
			P00 360/025	4667	N6628.3 E14930.2	...../.....	
N738	LIRTA	250	FL340 078	489 38	88.3 / 71.4	05	07.49
			P00 235/025	464 4628	N6607.5 E14812.3	...../.....	
N738	LUMON	249	FL340 119	489 111	86.5 / 73.2	15	08.04
			P00 233/025	464 4517	N6503.0 E14434.3	...../.....	
N738	DIRKI	246	FL340 105	489 10	86.3 / 73.4	01	08.05
			P00 231/025	464 4507	N6456.7 E14415.3	...../.....	
N738	RITUR	246	FL340 100	489 9	86.1 / 73.5	01	08.06
			P00 231/025	464 4499	N6451.3 E14359.3	...../.....	
N738	NERPA	246	FL340 100	489 29	85.7 / 74.0	04	08.10
			P00 230/025	464 4469	N6432.9 E14306.3	...../.....	
	UEEE	246	FL340 101	37	85.0 / 74.6	05	08.15
			P00 360/025	4433	N6409.5 E14200.1	...../.....	
A965	LUTOL	245	FL340 101	489 6	85.0 / 74.7	00	08.15
			P00 230/025	464 4427	N6406.1 E14150.9	...../.....	
A965	RINDU	245	FL340 101	489 26	84.5 / 75.1	04	08.19
			P00 230/025	464 4401	N6349.4 E14106.0	...../.....	
A965	RURIS	244	FL340 107	490 77	83.3 / 76.4	10	08.29
			P00 227/025	465 4324	N6258.6 E13858.1	...../.....	
A965	GIREN	243	FL340 107	490 42	82.6 / 77.1	05	08.34
			P00 226/025	465 4282	N6229.9 E13751.0	...../.....	
A965	LUNEG	242	FL340 089	490 73	81.4 / 78.3	09	08.43
			P00 225/025	465 4209	N6139.1 E13559.9	...../.....	
A965	TIPOT	240	FL340 046	490 103	79.7 / 80.0	14	08.57
			P00 222/025	465 4107	N6025.1 E13333.6	...../.....	
A965	ODANA	238	FL340 089	490 134	77.5 / 82.1	17	09.14
-UELL			P00 220/025	465 3973	N5845.0 E13039.1	...../.....	
N620	OGTIN	224	FL340 089	490 39	76.9 / 82.8	05	09.19
			P00 208/025	465 3935	N5811.3 E13003.6	...../.....	
N620	IDORA	223	FL340 105	490 94	75.4 / 84.3	12	09.31
			P00 207/025	465 3840	N5648.1 E12841.3	...../.....	
N620	BAMGA	222	FL340 098	490 23	75.0 / 84.6	03	09.34

				P00	207/025	465	3817	N5627.6	E12822.1	...../.....
N620	RONET	221	FL340	098		491	10	74.9 /	84.8	01 09.35
				P00	207/025	466	3807	N5618.8	E12814.0	...../.....
	UHBB	222	FL340	098			2	74.8 /	84.8	01 09.36
				P00	360/025		3805	N5616.7	E12811.9	...../.....
N620	OLOTO	222	FL340	098		491	24	74.5 /	85.2	03 09.39
				P00	207/025	466	3781	N5555.5	E12752.1	...../.....
N620	ARKOD	220	FL340	085		491	40	73.8 /	85.9	05 09.44
				P00	206/025	466	3741	N5519.5	E12720.9	...../.....
N620	LALIR	199	FL340	085		491	31	73.3 /	86.4	04 09.48
-UHSH				P00	185/025	466	3710	N5448.6	E12715.9	...../.....
N620	NALEB	199	*CLB	073			68	72.2 /	87.4	09 09.57
				P00	185/025		3642	N5341.5	E12705.4	...../.....
G494	SOVIK	181	FL360	073		484	62	71.2 /	88.5	08 10.05
				P00	168/025	459	3580	N5240.9	E12726.4	...../.....
G494	NINON	181	FL360	027		485	42	70.5 /	89.2	05 10.10
				P00	168/025	460	3538	N5200.0	E12740.1	...../.....
G494	BANIR	193	FL360	030		485	41	69.9 /	89.8	05 10.15
				P00	179/025	460	3498	N5119.5	E12740.1	...../.....
G494	RUNET	202	FL360	030		485	26	69.5 /	90.2	04 10.19
				P00	189/025	460	3472	N5054.2	E12733.4	...../.....
G494	BLG	202	FL360	030	<b>113.60</b>	485	31	69.0 /	90.7	04 10.23
	BLAGOVESHCHENSK			P00	189/025	460	3441	N5023.6	E12725.6	...../.....
G494	SIMLI	212	*CLB	030			7	68.9 /	90.8	01 10.24
-ZYSH				P00	199/025		3434	N5017.4	E12722.1	...../.....
A588	HEK	209	FL361	030	<b>114.00</b>	485	8	68.8 /	90.9	01 10.25
	HEIHE			P00	197/025	460	3427	N5010.1	E12718.6	...../.....
A588	BUBDI	201	FL361	040		485	223	65.3 /	94.4	29 10.54
				P00	188/025	460	3203	N4629.9	E12627.2	...../.....
	ZYTX	200	FL361	023			40	64.7 /	95.0	05 10.59
				P00	360/025		3163	N4549.7	E12618.3	...../.....
A588	HRB	200	FL361	023	<b>112.50</b>	485	13	64.5 /	95.2	02 11.01
	HARBIN			P00	188/025	460	3150	N4537.6	E12615.6	...../.....
A588	PABKI	200	FL361	038		485	54	63.6 /	96.0	07 11.08
				P00	188/025	460	3096	N4443.9	E12603.6	...../.....
A588	ISBOP	199	FL361	038		485	16	63.4 /	96.3	02 11.10
				P00	188/025	460	3080	N4428.5	E12600.2	...../.....
A588	NULRA	199	FL361	040		485	32	62.9 /	96.8	04 11.14
				P00	188/025	460	3048	N4357.0	E12553.3	...../.....
A588	LJB	199	FL361	040	<b>115.90</b>	485	11	62.8 /	96.9	01 11.15
	WANZHANG			P00	188/025	460	3038	N4346.4	E12551.1	...../.....
A588	LEMOT	218	FL361	056		485	64	61.8 /	97.9	09 11.24
				P00	207/025	460	2974	N4249.5	E12511.0	...../.....



A588	NUBKI	217	FL361	058	486	57	60.9 / 98.8	07	11.31	
			P00	206/025	461	2917	N4158.8 E12435.9	...../.....		
A588	BIDIB	219	FL361	058	486	40	60.3 / 99.4	05	11.36	
			P00	209/025	461	2877	N4124.4 E12409.8	...../.....		
A588	ISKEM	218	FL361	058	486	39	59.7 / 100.0	05	11.41	
			P00	208/025	461	2838	N4050.0 E12345.0	...../.....		
A588	TOSID	218	FL361	054	486	17	59.5 / 100.2	03	11.44	
			P00	208/025	461	2820	N4034.9 E12334.0	...../.....		
A588	NODAL	218	FL361	054	486	37	58.9 / 100.8	05	11.49	
			P00	208/025	461	2784	N4002.8 E12310.7	...../.....		
A588	CHI CHANGHAI	218	FL361	054	116.80	486	54	58.1 / 101.6	06	11.55
			P00	208/025	461	2730	N3916.0 E12237.0	...../.....		
W107 -ZSHA	SANKO	196	*DES	046		62	57.2 / 102.5	09	12.04	
			P00	187/025		2668	N3815.0 E12227.2	...../.....		
A326	OBDIS	142	*CLB	010		13	57.0 / 102.7	01	12.05	
			P00	134/025		2655	N3805.9 E12239.0	...../.....		
A326	DONVO	142	FL371	032	485	46	56.2 / 103.4	06	12.11	
			P00	134/025	460	2610	N3734.0 E12320.0	...../.....		
A326	IKEKA	187	FL371	010	485	44	55.6 / 104.1	06	12.17	
			P00	178/025	460	2566	N3649.9 E12321.3	...../.....		
A326	OMLIB	187	FL371	010	485	25	55.2 / 104.5	03	12.20	
			P00	178/025	460	2540	N3624.7 E12322.0	...../.....		
	ZSPD	186	FL371	010		5	55.1 / 104.6	01	12.21	
			P00	360/025		2535	N3618.9 E12322.2	...../.....		
A326	DOPNO	186	FL371	010	485	79	53.9 / 105.7	10	12.31	
			P00	178/025	460	2456	N3500.0 E12324.3	...../.....		
A326	IVPIP	183	FL371	010	485	11	53.8 / 105.9	02	12.33	
			P00	176/025	460	2445	N3449.2 E12325.2	...../.....		
A326	IKADI	183	*DES	010		44	53.1 / 106.5	05	12.38	
			P00	175/025		2401	N3405.5 E12329.0	...../.....		
A326	SURAK	187	*DES	010		139	51.1 / 108.6	19	12.57	
			P00	179/025		2262	N3146.4 E12329.5	...../.....		
A326	AKARA	185	*CLB	010		16	50.9 / 108.8	02	12.59	
			P00	178/025		2245	N3130.0 E12330.0	...../.....		
A326	TONIX	174	FL370	010	486	10	50.7 / 109.0	01	13.00	
			P00	167/025	461	2235	N3119.9 E12332.6	...../.....		
A326	MIGOL	173	*DES	015		35	50.2 / 109.5	05	13.05	
			P00	167/025		2200	N3045.8 E12341.7	...../.....		
B591 -RCAA	KASKA	186	*DES	015		124	48.4 / 111.3	16	13.21	
			P00	180/025		2076	N2842.0 E12341.7	...../.....		
B591	EMRET	186	FL360	010	488	42	47.8 / 111.9	05	13.26	
			P00	179/025	463	2034	N2800.1 E12341.7	...../.....		

B591	DUBAN	186	FL360	010	488	4	47.7 / 112.0	01	13.27
			P00	179/025	463	2030	N2756.3 E12341.7	...../.....	
	RCTP	221	FL360	010		-0	47.7 / 112.0	00	13.27
			P00	360/025		2030	N2756.2 E12341.5	...../.....	
B591	BERBA	221	FL360	010	488	64	46.8 / 112.9	08	13.35
			P00	215/025	463	1966	N2704.7 E12300.0	...../.....	
L2	AROMA	205	FL360	010	488	23	46.4 / 113.2	03	13.38
			P00	199/025	463	1944	N2643.3 E12251.3	...../.....	
L2	DRAKE	218	*CLB	015		79	45.3 / 114.4	10	13.48
			P00	212/025		1865	N2536.9 E12204.7	...../.....	
L2	KUDOS	194	FL380	050	485	29	44.8 / 114.9	04	13.52
			P00	189/025	460	1835	N2507.9 E12159.5	...../.....	
L2	POLKA	182	FL380	151	485	28	44.4 / 115.3	04	13.56
			P00	177/025	460	1807	N2439.6 E12200.8	...../.....	
L2	TINHO	182	FL380	019	485	18	44.1 / 115.6	02	13.58
			P00	177/025	460	1789	N2421.2 E12201.7	...../.....	
B591	TOTEM	201	FL380	151	485	18	43.9 / 115.8	02	14.00
			P00	196/025	460	1771	N2404.0 E12156.1	...../.....	
B591	PEIPU	201	FL380	151	485	4	43.8 / 115.9	01	14.01
			P00	196/025	460	1767	N2400.6 E12155.0	...../.....	
B591	TITUS	201	FL380	151	485	12	43.6 / 116.0	01	14.02
			P00	196/025	460	1756	N2349.6 E12151.4	...../.....	
B591	FOPIN	201	FL380	151	486	13	43.5 / 116.2	02	14.04
			P00	196/025	461	1743	N2337.1 E12147.4	...../.....	
B591	WAGON	201	FL380	151	486	2	43.4 / 116.2	00	14.04
			P00	196/025	461	1741	N2335.2 E12146.8	...../.....	
B591	JICHI	201	FL380	151	486	11	43.3 / 116.4	02	14.06
			P00	196/025	461	1729	N2324.6 E12143.4	...../.....	
B591	DONNA	201	FL380	151	486	15	43.1 / 116.6	02	14.08
			P00	196/025	461	1714	N2310.2 E12138.7	...../.....	
B591	TACLE	201	FL380	151	486	11	42.9 / 116.8	01	14.09
			P00	196/025	461	1703	N2259.6 E12135.3	...../.....	
B591	DULAN	201	FL380	111	486	16	42.7 / 117.0	02	14.11
			P00	196/025	461	1687	N2244.2 E12130.4	...../.....	
B591	GID LUDAO	200	FL380	111	<b>116.90</b>	486	42.6 / 117.1	01	14.12
			P00	196/025	461	1683	N2240.4 E12129.2	...../.....	
B591	LATIS	223	FL380	111	486	20	42.3 / 117.3	02	14.14
			P00	218/025	461	1663	N2224.9 E12115.8	...../.....	
B591	TUNNY	223	FL380	111	486	4	42.3 / 117.4	01	14.15
			P00	218/025	461	1659	N2221.6 E12112.9	...../.....	
B591	ORRIS	223	FL380	111	486	7	42.2 / 117.5	01	14.16
			P00	218/025	461	1652	N2216.1 E12108.2	...../.....	
B591	BUSBY	223	FL380	125	486	16	42.0 / 117.7	02	14.18

				P00	218/025	461	1636	N2203.7	E12057.5	...../.....
B591	HCN	222	*DES	125	<b>113.70</b>		10	41.8 / 117.9	01	14.19
	HENGCHUN			P00	218/025		1626	N2155.7	E12050.6	...../.....
N892	KABAM	228	FL360	024		488	78	40.8 / 118.9	10	14.29
-RPHI				P00	223/025	463	1548	N2100.0	E11952.8	...../.....
	RPLL	229	FL360	010			100	39.3 / 120.3	13	14.42
				P00	360/025		1449	N1949.2	E11837.2	...../.....
N892	MIKIN	228	FL360	010		488	41	38.7 / 120.9	05	14.47
				P00	224/025	463	1407	N1920.1	E11806.6	...../.....
N892	MUMOT	228	FL360	010		489	26	38.4 / 121.3	04	14.51
				P00	224/025	464	1381	N1901.7	E11747.4	...../.....
N892	MAVRA	227	FL360	010		489	105	36.9 / 122.8	13	15.04
				P00	224/025	464	1276	N1746.7	E11630.1	...../.....
	VVCR	227	FL390	010			164	34.5 / 125.2	22	15.26
				P00	360/025		1112	N1548.2	E11431.3	...../.....
N892	MIGUG	225	FL390	010		486	44	33.8 / 125.8	05	15.31
-ZJSA				P00	223/025	461	1068	N1516.4	E11400.0	...../.....
N892	MONBO	217	FL390	010		486	57	33.1 / 126.6	08	15.39
-VVTS				P00	215/025	461	1011	N1430.0	E11325.7	...../.....
N892	MESOX	217	FL390	010		486	38	32.5 / 127.1	05	15.44
				P00	215/025	461	972	N1358.8	E11302.7	...../.....
N892	MUGAN	217	FL390	010		486	119	30.9 / 128.8	15	15.59
				P00	215/025	461	853	N1222.0	E11152.3	...../.....
N892	MIMUX	217	FL390	010		487	78	29.9 / 129.8	11	16.10
				P00	215/025	462	775	N1118.3	E11106.2	...../.....
N892	MAPNO	216	FL390	010		487	80	28.8 / 130.9	10	16.20
				P00	214/025	462	696	N1013.1	E11020.1	...../.....
N892	OSIXA	216	FL390	017		487	51	28.1 / 131.6	06	16.26
				P00	214/025	462	645	N0931.3	E10950.6	...../.....
N892	MOXON	215	FL390	017		487	51	27.4 / 132.3	07	16.33
				P00	214/025	462	594	N0849.5	E10921.3	...../.....
N892	MELAS	215	FL390	010		487	127	25.7 / 134.0	17	16.50
-WSJC				P00	214/025	462	467	N0705.3	E10809.2	...../.....
	WSSS	215	FL390	010			64	24.9 / 134.8	08	16.58
				P00	360/025		404	N0612.8	E10732.7	...../.....
N892	MABLI	215	FL390	010		487	141	23.0 / 136.7	18	17.16
				P00	214/025	462	263	N0417.3	E10612.8	...../.....
N892	MUMSO	231	FL390	032		487	52	22.3 / 137.4	07	17.23
				P00	230/025	462	210	N0344.3	E10532.2	...../.....
N892	MABAL	231	FL390	032		487	25	22.0 / 137.7	03	17.26
				P00	230/025	462	185	N0328.4	E10512.6	...../.....
MABA2A	KILOT	231	FL390	032		487	42	21.4 / 138.2	06	17.32
				P00	230/025	462	144	N0302.3	E10440.4	...../.....

MABA2A	<b>*BDRY</b>	227	FL390	047	487	16	21.2 / 138.4	02	17.34
-WMFC				P00	226/025	128	N0251.7 E10429.1	...../.....	
MABA2A	<b>*TOD</b>	227	FL390	047	487	11	21.1 / 138.6	01	17.35
				P00	226/025	117	N0244.4 E10421.3	...../.....	
MABA2A	<b>PIBAP</b>	227		*DES	047	21	21.1 / 138.6	03	17.38
-WSJC				M00	226/025	97	N0230.4 E10406.3	...../.....	
MABA2A	<b>PASPU</b>	180		*DES	047	31	21.0 / 138.7	04	17.42
				M00	179/025	66	N0159.3 E10406.3	...../.....	
MABA2A	<b>NYLON</b>	180		*DES	024	22	20.9 / 138.8	04	17.46
				P00	179/025	43	N0137.0 E10406.4	...../.....	
MABA2A	<b>POSUB</b>	171		*DES	024	10	20.8 / 138.9	02	17.48
				P00	171/025	34	N0127.4 E10407.8	...../.....	
MABA2A	<b>*BDRY</b>	203		*DES	024	7	20.8 / 138.9	01	17.49
				P00	202/025	27	N0120.9 E10405.1	...../.....	
MABA2A	<b>SANAT</b>	203		*DES	034	14	20.7 / 139.0	04	17.53
				M00	202/025	12	N0107.8 E10359.5	...../.....	
MABA2A	<b>WSSS/02C</b>	358	22	034		12	20.3 / 139.3	06	17.59
CHANGI							N0119.7 E10359.1	...../.....	

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WIND INFORMATION - OBS N/A

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NO WIND DATA AVAILABLE

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END FLIGHTPLAN 03431 TCC215C PJTGE KMSP-WSSS 14SEP2019

[ATC FLIGHTPLAN]

(FPL-TCC215C-IS  
-B77L/H-SDE1FGHIJ1J5M1RWXY/LB2  
-KMSP1645  
-N0495F300 KBREW1 FAR J515 YWG J596 YQD DCT YSF NCA23  
HARUN/N0492F320 NCA23 ADREW NCA80 LISKI N738 BEKMI/N0488F340  
N738 NERPA A965 ODANA N620 NALEB/N0484F360 G494 SIMLI/K0898S1100  
A588 CHI W107 SANKO/K0906S1070 A326 OBDIS/K0897S1130 A326  
IKADI/K0901S1100 A326 SURAK/K0907S1070 A326 AKARA/K0900S1130  
A326 MIGOL/K0902S1100 B591 KASKA/N0487F360 B591 BERBA L2  
DRAKE/N0485F380 L2 TINHO B591 HCN/N0488F360 N892 MAVRA/N0485F390  
N892 MABAL MABA2A  
-WSS51759 WMKK  
-PBN/A1B1C1D1L101S2 NAV/RNVD1E2A1 DOF/190914 REG/PJTGE  
EET/CZWG0046 CZEG0150 PAZA0431 UHMM0545 UEEE0651 UELL0914  
UHHH0948 ZYSH1024 ZSHA1204 RCAA1321 RPHI1429 ZJSA1531 VVTS1539  
WSJC1650 WMFC1734 WSJC1749  
SEL/EGAP CODE/484DC7 RVR/75 OPR/TRADEWIND CARIBBEAN  
ORGN/TNCCTCAP PER/C  
RALT/PAFA  
RMK/TCAS  
-E/2109)

[PLANNING WEATHER]

ORIGIN: KMSP/MSP (MINNEAPOLIS-ST PAUL INTL/WOLD-, UNITED STATES) UTC -05:00

NO WX DATA AVAILABLE

DESTINATION: WSSS/SIN (CHANGI, SINGAPORE) UTC +08:00

NO WX DATA AVAILABLE

ALTERNATE: WMKK/KUL (KUALA LUMPUR INTL - SEPANG, MALAYSIA) UTC +08:00

NO WX DATA AVAILABLE

EDTO AIRPORT: PAFA/FAI (FAIRBANKS INTL, ALASKA) UTC -08:00

NO WX DATA AVAILABLE

ADEQUATE: UHMM/GDX (SOKOL, RUSSIAN FEDERATION) UTC +11:00

NO WX DATA AVAILABLE

ADEQUATE: UEEE/YKS (YAKUTSK, RUSSIAN FEDERATION) UTC +09:00

NO WX DATA AVAILABLE

UELL/NER (CHULMAN, RUSSIAN FEDERATION) UTC +09:00

NO WX DATA AVAILABLE

UHMH/KHV (NOVY, RUSSIAN FEDERATION) UTC +10:00

NO WX DATA AVAILABLE

VVTS/SGN (TAN SON NHAT INTL, VIETNAM) UTC +07:00

NO WX DATA AVAILABLE

ADEQUATE: CYWG/YWG (RICHARDSON INTL, CANADA) UTC -05:00

NO WX DATA AVAILABLE

ADEQUATE: CYOD/YOD (GROUP CAPTAIN R.W. MCNAIR, CANADA) UTC -06:00

NO WX DATA AVAILABLE

ADEQUATE: CYZF/YZF (YELLOWKNIFE, CANADA) UTC -06:00

NO WX DATA AVAILABLE

**ADEQUATE: CYXY/YXY (WHITEHORSE NIELSEN INTL, CANADA) UTC -07:00**

NO WX DATA AVAILABLE

**ADEQUATE: UHMA/DYR (UGOLNY, RUSSIAN FEDERATION) UTC +12:00**

NO WX DATA AVAILABLE

**ADEQUATE: UHMK/KPW (KEPERVEYEM, RUSSIAN FEDERATION) UTC +12:00**

NO WX DATA AVAILABLE

**ADEQUATE: UHBB/BQS (IGNATYEVO, RUSSIAN FEDERATION) UTC +09:00**

NO WX DATA AVAILABLE

**ADEQUATE: ZYTX/SHE (TAOXIAN, CHINA) UTC +08:00**

NO WX DATA AVAILABLE

**ADEQUATE: ZSPD/PVG (PUDONG, CHINA) UTC +08:00**

NO WX DATA AVAILABLE

**ADEQUATE: RCTP/TPE (TAIWAN TAOYUAN INTL, TAIWAN) UTC +08:00**

NO WX DATA AVAILABLE

**ADEQUATE: RPLL/MNL (NINYOY AQUINO INTL, PHILIPPINES) UTC +08:00**

NO WX DATA AVAILABLE

**ADEQUATE: VVCR/CXR (CAM RANH INTL, VIETNAM) UTC +07:00**

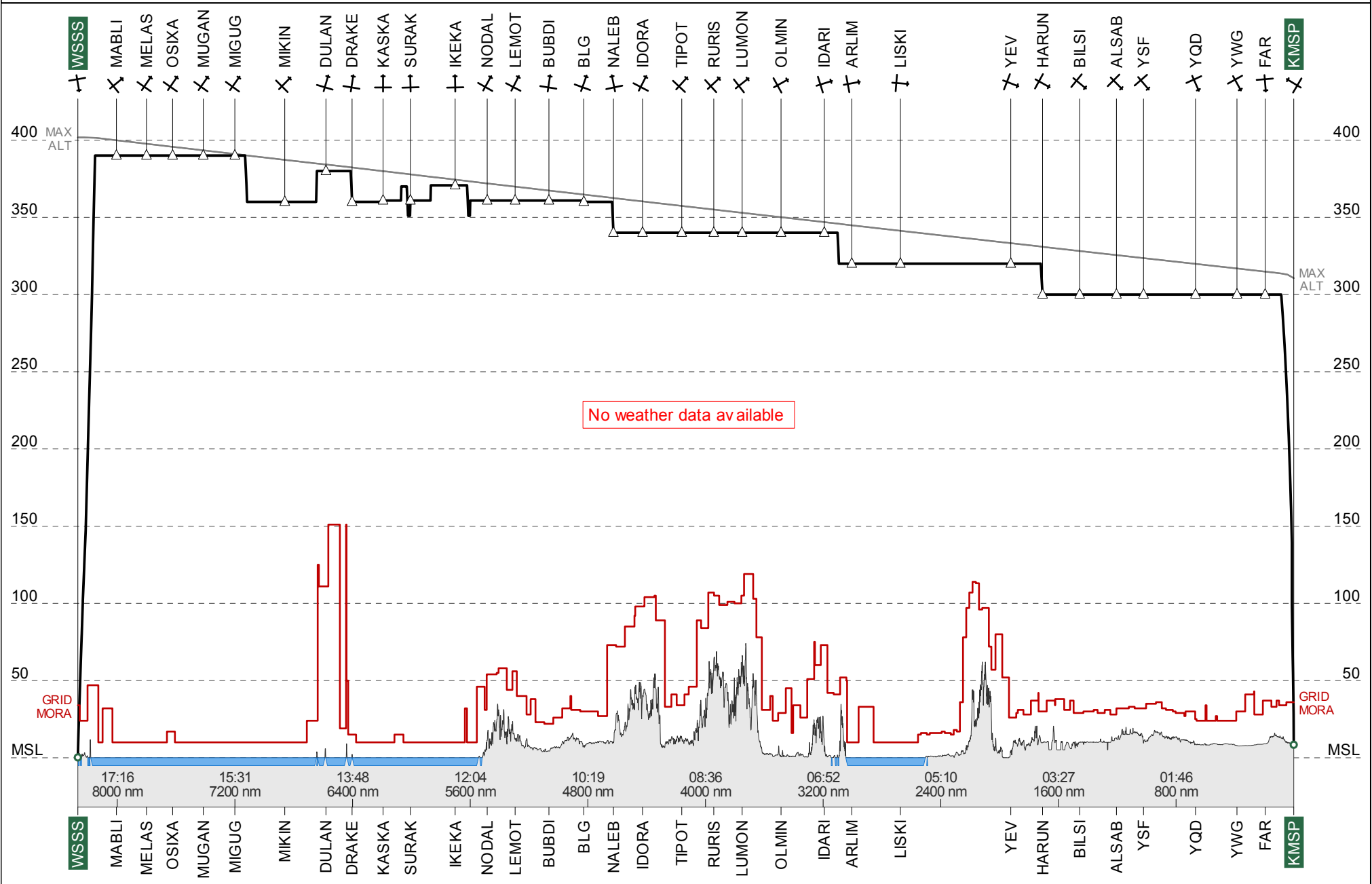
NO WX DATA AVAILABLE



# TR215C #5

## WSSS ← — KMSPP

ETD 14 Sep 16:45z  
PJTGE B77L

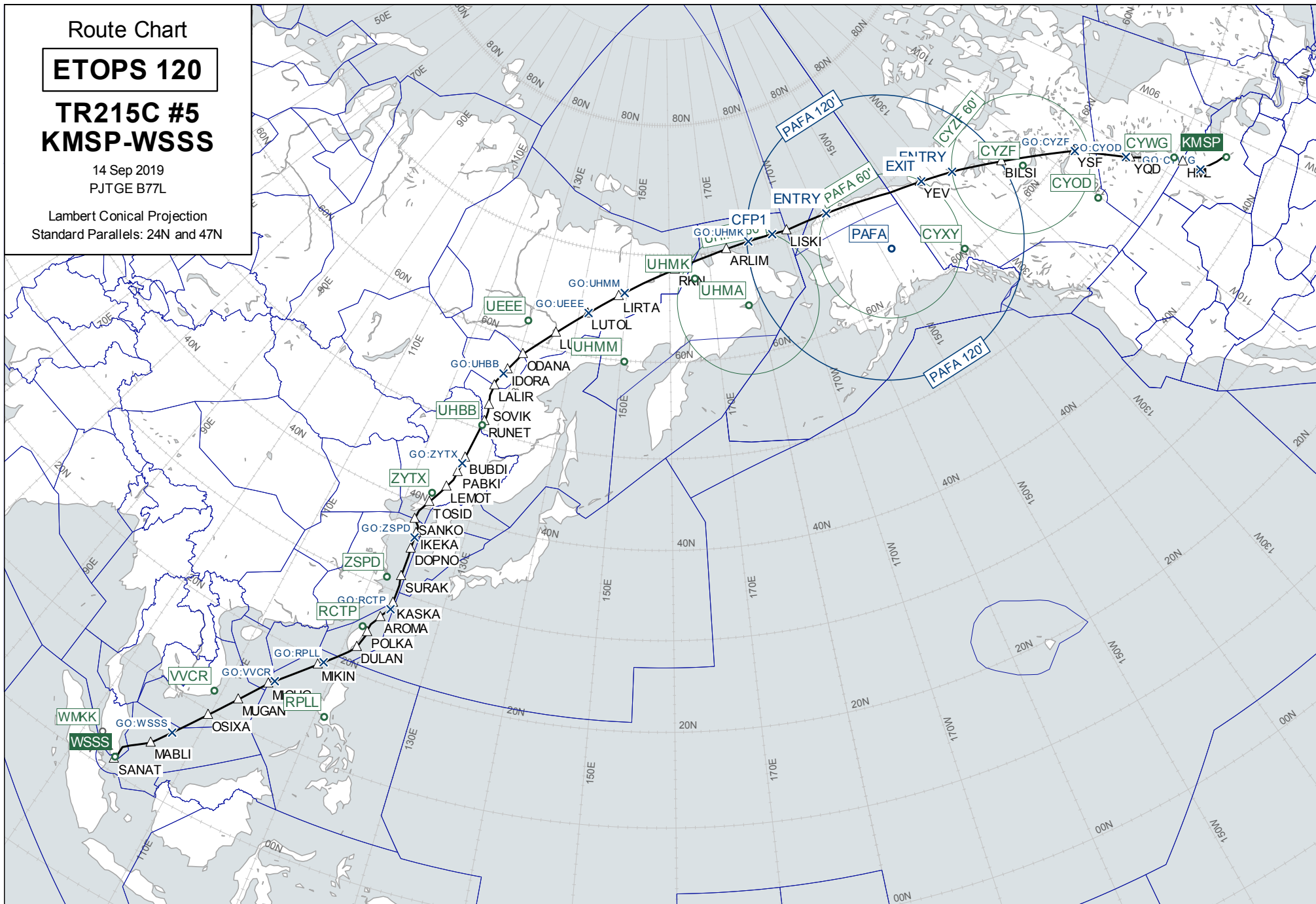


Route Chart

**ETOPS 120**  
**TR215C #5**  
**KMSP-WSSS**

14 Sep 2019  
PJTGE B77L

Lambert Conical Projection  
Standard Parallels: 24N and 47N



Wind Chart

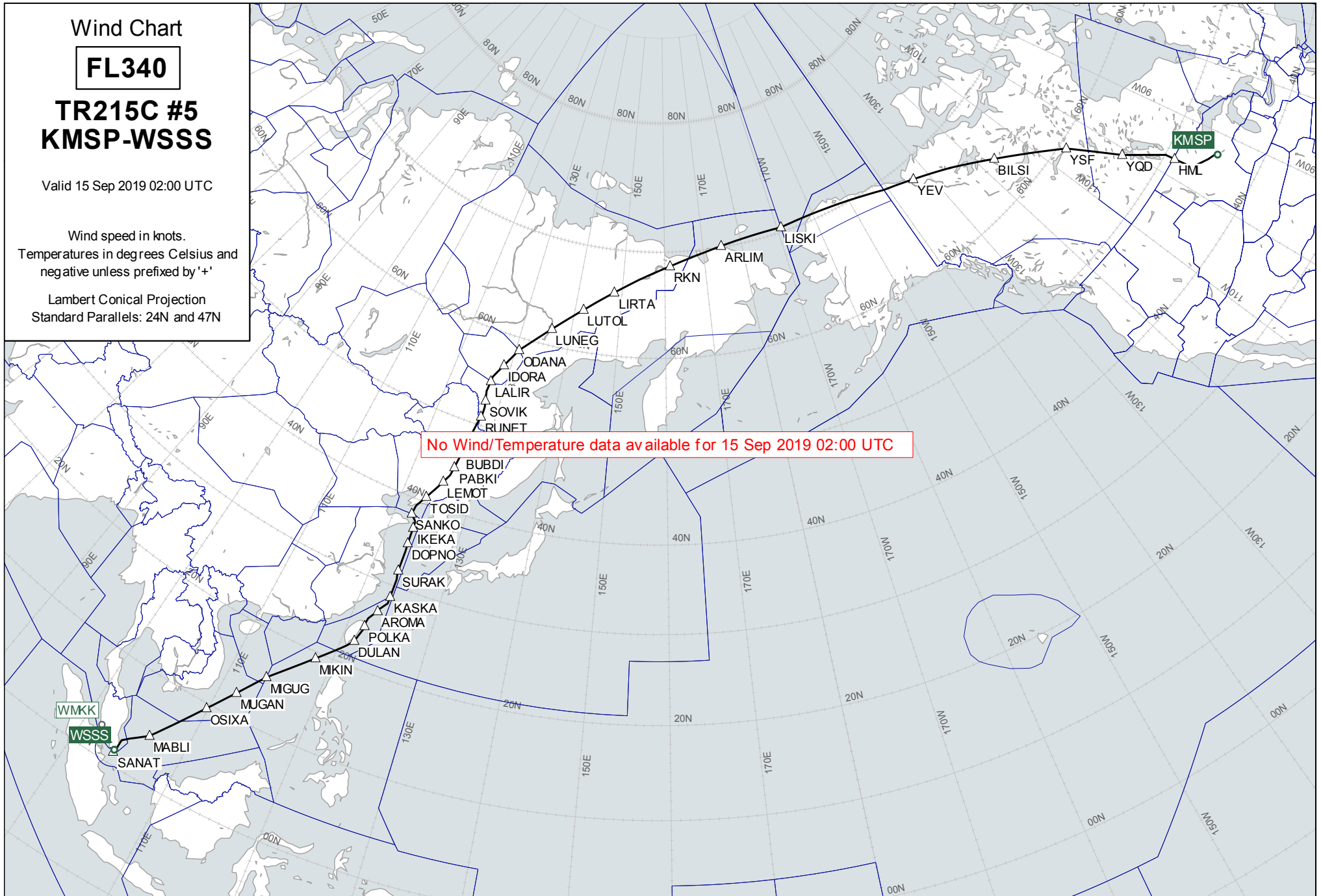
**FL340**

**TR215C #5  
KMSP-WSSS**

Valid 15 Sep 2019 02:00 UTC

Wind speed in knots.  
Temperatures in degrees Celsius and  
negative unless prefixed by '+'

Lambert Conical Projection  
Standard Parallels: 24N and 47N



No Wind/Temperature data available for 15 Sep 2019 02:00 UTC

Wind Chart

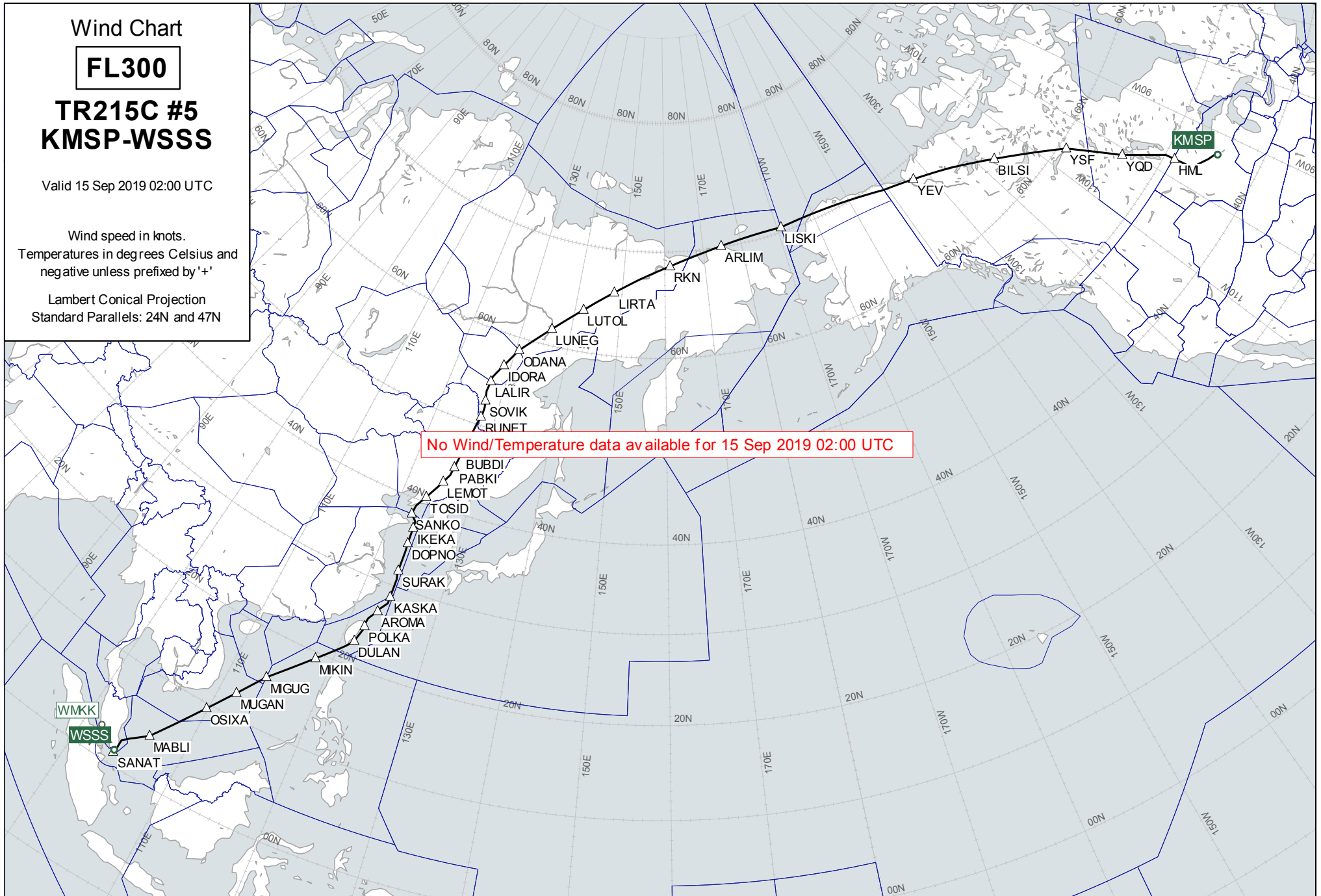
**FL300**

**TR215C #5  
KMSP-WSSS**

Valid 15 Sep 2019 02:00 UTC

Wind speed in knots.  
Temperatures in degrees Celsius and  
negative unless prefixed by '+'

Lambert Conical Projection  
Standard Parallels: 24N and 47N



No Wind/Temperature data available for 15 Sep 2019 02:00 UTC



Wind Chart

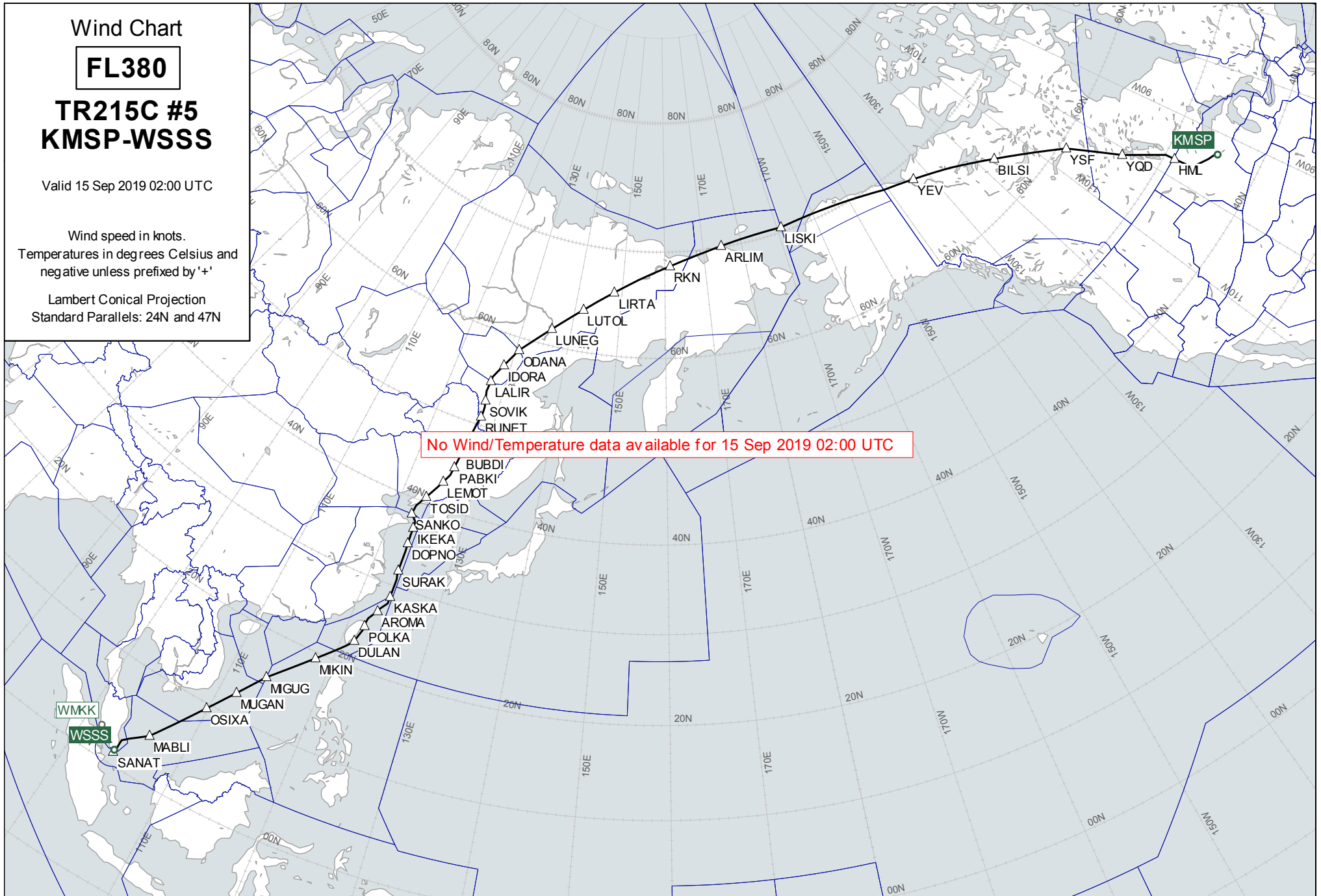
**FL380**

**TR215C #5  
KMSP-WSSS**

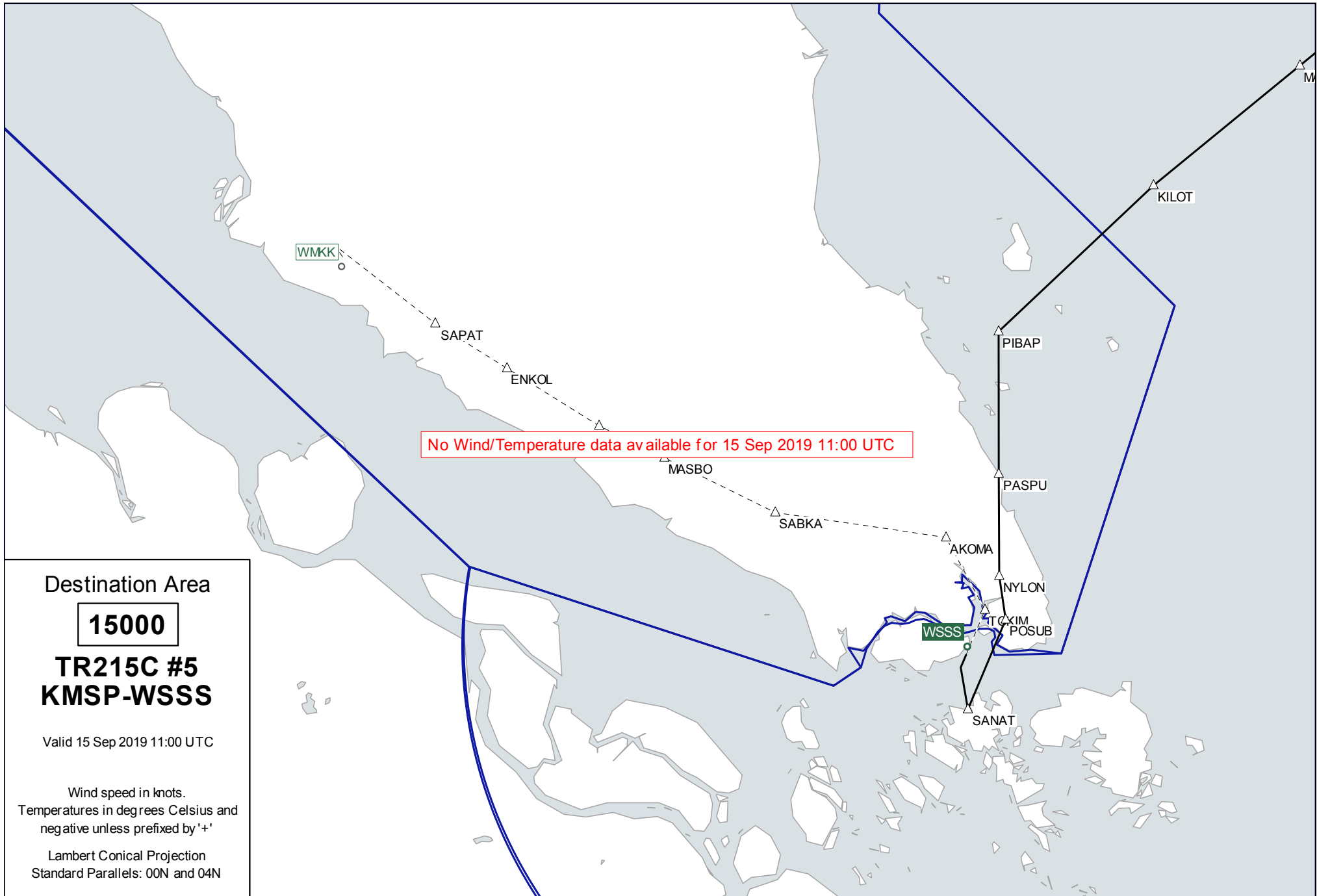
Valid 15 Sep 2019 02:00 UTC

Wind speed in knots.  
Temperatures in degrees Celsius and  
negative unless prefixed by '+'

Lambert Conical Projection  
Standard Parallels: 24N and 47N



No Wind/Temperature data available for 15 Sep 2019 02:00 UTC



Destination Area

**15000**

**TR215C #5  
KMSP-WSSS**

Valid 15 Sep 2019 11:00 UTC

Wind speed in knots.  
Temperatures in degrees Celsius and  
negative unless prefixed by '+'

Lambert Conical Projection  
Standard Parallels: 00N and 04N