



المركز الوطني للأرصاد الجوية والزلازل
أرصاد الطيران
National Center of Meteorology & Seismology
Aviation Meteorology












METEOROLOGICAL FORECAST FOLDER

FLIGHT NUMBER:	<input type="text"/>
ROUTE FROM:	<input type="text"/>
DESTINATION:	<input type="text"/>
DATE:	<input type="text"/>
TIME OF DEPARTURE:	<input type="text"/> UTC

FLIGHT BRIEFING NOTES:

SURFACE WIND:	_____ ° / _____ KT
TEMPERATURE:	_____ ° C
PRESSURE (QNH):	_____ Hpa
1000 Ft WIND:	_____ ° / _____ KT
1000 Ft TEMP:	_____ ° C

SIGNIFICANT WEATHER SYMBOLS

	Tropical cyclone	,	Drizzle		
	Severe squall line*	//// ////	Rain		
	Moderate turbulence	*	Snow		
	Severe turbulence	▽	Shower	△	Hail
	Mountain waves	↑	Widespread blowing snow		
	Moderate aircraft icing	S	Severe sand or dust haze		
	Severe aircraft icing	S	Widespread sandstorm or dust storm		
	Widespread fog	∞	Widespread haze		
	Radioactive materials in the atmosphere**	≡	Widespread mist		
	Volcanic eruption***	~	Widespread smoke		
	Mountain obscuration	~	Freezing precipitation ****		

INTENSITY

(-) LIGHT (No Qualifier) MODERATE (+) HEAVY

DESCRIPTORS

MI - Shallow	FZ – Freezing (Supercooled)
BC - Patches	SH - Showers
VC – In the Vicinity	TS - Thunderstorm
PR - Partial	DR – Low Drifting
BL- Blowing	RE- Recent

WEATHER PHENOMENA

DZ - Drizzle	FU - Smoke
RA - Rain	VA – Volcanic Ash
SN - Snow	DU – Widespread dust
SG – Snow Grains	SA - Sand
IC – Ice Crystals(Diamond Dust)	HZ - Haze
PL – Ice Pellets	PO – Dust/sand whirls (dust devils)
GR – Hail	SQ - Squall
GS – Small hail and/or snow pellets	FC –Funnel clouds (Tornado or waterspout)
BR – Mist	SS - Sandstorm
FG – Fog	DS - Duststorm

EXAMPLES: +SHRA – Heavy shower of rain. TSSN – Thunderstorm with moderate snow
 FZDZ – Moderate freezing drizzle. SNRA – Moderate snow and rain.
 +TSSNGR – Thunderstorm with heavy snow and hail

FRONTS AND OTHER SYMBOLS











	Cold front at the surface		Position, speed and level of max. wind
	Warm front at the surface		Convergence line
	Occluded front at the surface		Freezing level
	Quasi-stationary front at the surface		Intertropical convergence zone
	Tropopause High		State of the sea
	Tropopause Low		Sea-surface temperature
	Tropopause Level		Widespread strong surface wind *
<p>Wind arrows indicate the maximum wind in jet and the flight level at which it occurs. If the maximum wind speed is 240 km/h (120 kt) or more, the flight levels between which winds are greater than 160 km/h (80 kt) is placed below the maximum wind level. In the example, winds are greater than 160 km/h (80 kt) between FL 220 and FL 400.</p> <p>The heavy line delineating the jet axis begins/ends at the points where a wind speed of 160 km/h (80 kt) is forecast.</p> <p>* This symbol refers to widespread surface wind speeds exceeding 60 km/h (30 kt).</p>			

KILOMETER(km) to KNOTS (KT) CONVERSION

knots	0	1	2	3	4	5	6	7	8	9
Kilometres per hour										
00	0	1.85	3.70	5.56	7.41	9.26	11.11	12.96	14.82	16.67
10	18.52	20.37	22.22	24.08	25.93	27.78	29.63	31.48	33.34	35.19
20	37.04	38.89	40.74	42.60	44.45	46.30	48.15	50.00	51.86	53.71
30	55.56	57.41	59.26	61.12	62.97	64.82	66.67	68.52	70.38	72.23
40	74.08	75.93	77.78	79.64	81.49	83.34	85.19	87.04	88.90	90.75
50	92.60	94.45	96.30	98.16	100.01	101.86	103.71	105.56	107.42	109.27
60	111.12	112.97	114.82	116.68	118.53	120.38	122.23	124.08	125.94	127.79
70	129.64	131.49	133.34	135.20	137.05	138.90	140.75	142.60	144.46	146.31
80	148.16	150.01	151.86	153.72	155.57	157.42	159.27	161.12	162.98	164.83
90	166.68	168.53	170.38	172.24	174.09	175.94	177.79	179.64	181.50	183.35
100	185.20	187.05	188.90	190.76	192.61	194.46	196.31	198.16	200.02	201.87
110	203.72	205.57	207.42	209.28	211.13	212.98	214.83	216.68	218.54	220.39
120	222.24	224.09	225.94	227.80	229.65	231.50	233.35	235.20	237.06	238.91
130	240.76	242.61	244.46	246.32	248.17	250.02	251.87	253.72	255.58	257.43
140	259.28	261.13	262.98	264.84	266.69	268.54	270.39	272.24	274.10	275.95
150	277.80	279.65	281.50	283.36	285.21	287.06	288.91	290.76	292.62	294.47
160	296.32	298.17	300.02	301.88	303.73	305.58	307.43	309.28	311.14	312.99
170	314.84	316.69	318.54	320.40	322.25	324.10	325.95	327.80	329.66	331.51
180	333.36	335.21	337.06	338.92	340.77	342.62	344.47	346.32	348.18	350.03
190	351.88	353.73	355.58	357.44	359.29	361.14	362.99	364.84	366.70	368.55











1 KNOT=1.852 kilometers per hour

ARROWS AND FEATHERS

 Calm	18-22 knots(21-25 mph) 
1-2 knots (1-2 mph) 	23-27 knots(26-31 mph) 
3-7 knots(3-8 mph) 	48-52 knots(55-60 mph) 
8-12 knots(9-14 mph) 	73-77 knots(84-89 mph) 
13-17 knots(15-20 mph) 	103-107 knots(119-123 mph) 

STANDARD HEIGHT OF ISOBARIC SURFACES

700mb = 9,900 ft	200mb = 38,700 ft
500mb = 18,300 ft	150mb = 44,600 ft
400mb = 23,600 ft	100mb = 53,100 ft
300mb = 30,100 ft	70mb = 60,500 ft
250mb = 34,000 ft	50mb = 67,500 ft

CLOUD TYPES		CLOUD AMOUNT	
CI - Cirrus			Sky Clear
CC- Cirrocumulus			FEW (1/8-2/8)
CS- Cirrostratus			Scattered SCT (3/8-4/8)
AC- Altocumulus			3/8
AS- Altostratus			4/8
NS- Nimbostratus			Broken BKN (5/8-7/8)
SC- Stratocumulus			6/8
ST- Stratus			7/8
CU- Cumulus			Overcast
TCU- Towering Cumulus			Obscured
CB- Cumulonimbus			ISOL-Individual CBs(Isolated)
			OCNL-Well separated CBs (Occasional)
			FRO-CBs w/ little or no separation (frequent)
			EMDB-CBs embedded in layers of other clouds or concealed by haze (Embedded)

ICAO THREE AND FOUR LETTER INDICATOR DECODES											
MIDDLE EAST											
ABU DHABI	OMAA	AUH	AL-AIN	OMAL	ANN	DUBAI	OMDB	DXB	SHARJAH	OMSJ	SHJ
SIR BANI YAS	OMBY		RAS AL KHAIMAH	OMRK	RKT	FUJEIRAH	OMFJ	FJR	AL BATEEN	OMAD	
ABADAN	OIAA	ABD	ADEN	OYAA	ADE	BAHRAIN	OBBI	BAH	BANDAR ABBAS	OIKB	BND
DAMMAM	OEDF	KFA	DHAHRAN	OEDR	DHR	DOHA	OTBD	DOH	JEDDAH	OEJN	JED
KISH	OIBK	KIS	KUWAIT	OKBK	KWI	MEDINA	OEMA	MED	MUSCAT	OOMS	MCT
RIYADH	OERK	KIA	RIYAN	OYRN	RIY	SALALAH	OOSA	SLL	SANAA	OYSN	SAH
SAYUN	OYSY		SHIRAZ	OISS	SYZ	TAIF	OETF	TIF	TEHRAN	OIII	THR
EAST											
AHMEDABAD	VAAH	AMD	BALI INTL	WADD	DPS	BANGLORE	VOBG	BLR	BANGKOK	VTBD	BKK
BEIJING	ZBAA	BJS	MUMBAI	VABB	BOM	BRUNEI	WBSB	BWN	KOLKOTA	VECC	CCU
CALICUT	VOCL	CCJ	CHIANG MAI	VTCC	CNX	CHITAGONG	VGEC		COLOMBO	VCBI	CMB
DHAKA	VGZR	DAC	DELHI	VIDP	DEL	FUKUOKA	RJFF	FUK	GAOXIONG	RCKH	
GOA	VAGO	GOI	GUANGZHOU	ZGGG	CAN	HANG ZHOU	ZSHC	HGH	HANOI/NOIBAI	VVNB	HAN
HO CHI MINH	VVTS	SGN	HONG KONG	VHHH	HKG	HYDERABAD	VOHY	HYD	HALIM	WIHH	HLP
SOEKARNO	WIII	JKT	KABUL	OAKB	KBL	KAGOSHIMA	RJFK	KOJ	KANSAI	RJBB	KIX
KARACHI	OPKC	KHI	KATMANDU	VNKT	KTM	KOTA KINABALU	WBKK	BKI	KUALA LUMPUR	WMKK	KUL
KUCHING	WBGG	KHC	KUNMING	ZPPP	KMG	LAHORE	OPLA	LHE	LUCKNOW	VILK	LNO
MACAU	VMMC	MFM	CHENNAI	VOMM	MAA	MALE	VRMM	MLE	MANILA	RPLL	MNL
MEDAN	WIMM	MES	NAGASAKI	RJFU	NSG	NAGPUR	VANP	NAG	NAHA	ROAH	AHA
NAWABSHAH	OPNH	WNS	OSAKA	RJOO	OSA	PENANG	WMKP	PEN	PESHAWAR	OPPS	PEW
PHUKET	VTSP	HKT	RAWALPINDI	OPRN	ISB	SEOUL	RKSS	SEL	SHANGHAI	ZSPD	PVG

SINGAPORE	WSSS	SIN	SONGKHIA	VTSS	SGZ	SURABAYA	WARR	SUB	TAIPEI	RCTP	TPE
TOKYO/NARITA	RJAA	NRT	TOKYO INTL.	RJTT	TYO	TRIVANDRUM	VOTV	TRV	UTAPAO	VTBU	UTP
YANGON/INTL.	YVYY	RGN									
AUSTRALIA											
ADELAIDE	YPAD	ADE	ALICE SPRINGS	YBAS	ASP	BRISBANE	YBBN	BNE	CAIRNS	YBCS	CNS
DARWIN	YPDN	DRW	MELBOURNE	YMML	MEL	PERTH	YPPH	PER	PORT HEDLAND	YPPD	PHE
SYDNEY	YSSY	SYD									
WEST											
AKTYUBINSK	UATT	AKX	ALEXANDRIA	HEAX	ALY	ALGIERS	DAAG	ALG	ALMA-ATA	UAAA	ALA
AMMAN/MARKA	OJAM	AMM	AMMAN/Q.ALIA	OJAI	ADJ	AMSTERDAM	EHAM	AMS	ANDRAVIDA	LGAD	PYR
ANKARA	LTAC	ANK	ASKHABAD	UTAA	ASB	ASTANA	UACC	TSE	ATHENS	LGAV	ATH
BAKU	UBBB	BAK	BASEL	LFBS	MLH	BEIRUT	OLBA	BEY	BELGRADE	LYBE	BEG
BENGHAZI	HLLB	BEN	BERLIN/SCHON	EDDB	SXF	BERLIN/TEGEL	EDDT	TXL	BERLIN/TEMP	EDDI	RHF
BILLUND	EKBI	BLL	BIRMINGHAM	EGBB	BHX	BISHKEK	UAFM	FRU	BRATISLAVA	LZIB	BTS
BRUSSELS	EBBR	BRU	BUCHAREST	LROP	BUH	BUDAPEST	LHBP	BUD	CAIRO	HECA	CAI
CATANIA	LICC	CTA	COLOGNE/BONN	EDDK	CGN	COPENHAGEN	EKCH	CPH	DAMASCUS	OSDI	DAM
DUSSELDORF	EDDL	DUS	FRANKFURT	EDDF	FRA	GENEVA	LSGG	GVA	GLASGOW	EGPF	GGW
GOTEBORG	ESGG	GOT	HAMBURG	EDDH	HAM	HELSINKI	EFHK	HEL	IRAKLION	LGIR	HER
ISTANBUL	LTBA	IST	IZMIR	LTBJ	IZM	KHARTOUM	HSSS	KRT	KIEV	UKBB	IEV
LARNACA	LCLK	LCA	LIVERPOOL	EGGP	LPL	GATWICK	EGKK	LGW	HEATHROW	EGLL	LHR
LUXEMBOURG	ELLX	LUX	LUXOR	HELX	LXR	LYON	LFLL	LYN	MAASTRICHT	EHBK	MST
MALTA	LMLL	MLA	MANCHESTER	EGCC	MAN	MARSEILLE	LFML	MRS	MILAN	LIMC	MIL
MINSK	UMMM	MSQ	MOACOW	UUEE	MOW	MUNICH	EDDM	MUC	NAPLES	LIRN	NAP
NATALYA	LTAI	AYT	NICE	LFMN	NCE	PARIS/DEGAULLE	LFPG	CDG	PARIS/ORLY	LFPO	ORY
PISA	LIRP	PSA	PRAGUE	LKPR	PRG	PRESTWICK	EGPK	PIK	RABAT	GMME	RBA
RIGA	LFLL	LYN	RODOS	LGRP	RHO	ROME/CIAMPINO	LIRA	CIA	ROME/FLUMICINO	LIRF	FCO
ROTTERDAM	EHRD	RTM	SOFIA	LBSF	SOF	ST PETERSBURG	ULLI	LED	STANSTED	EGSS	STN
STOCKHOLM	ESSA	ARN	STUTTART	EDDS	STR	TASHKENT	UTTTT	TAS	THESSAIONIKI	LGTS	SGK
TRIPOLI	HLLT	TIP	TUNIS	DTTA	TUN	TURIN	LIML	TRN	VARNA	LBWN	VAR
VIENNA	LOWW	VIE	WARSAW	EPWA	WAW	ZAGREB	LDZA	ZAG	ZURICH	LSZH	ZRH
SOUTH											
ABUJA	DNAA	ABV	ADDIS ABABA	HAAB	ADD	ALEXANDRA	HEAX	ALY	ANTANANARIVO	FMMI	TNR
ASMARA	HAAS	ASM	ASWAN	HESN	ASW	BLOEMFONTEIN	FABL	BFN	DJIBOUTI	HDAM	JIB
DURBAN	FADN	DUR	ELDORET	HKEL	EDL	ENTEBBE	HUEN	EBB	GABORONE	FBSK	GBE
HARARE	FVHA	HRE	JOHANNESBURG	FAJS	JNB	KANO	DNKN	KAN	KIGALI	HRYR	KGL
KILIMANJARO	HTKJ	JRO	LAGOS	DNMM	LOS	LILONGWE	FWKI	LLW	LUSAKA	FLLS	LUN
MAJUNGA	FMNM	MJN	MAURITIUS	FIMP	MRU	MMABATHO	FAMM	MBD	MOGADISHU	HCMM	MGQ
MOMBASSA	HKMO	MBA	MORONI	FMCH	YVA	NAIROBI	HKJK	NBO	N'DJAMENA	FTTJ	NDJ
PORT SUDAN	HSSP	PZU	REUNION	FMEE	RUN	SEYCHELLES	FSIA	SEZ	ZANZIBAR	HTZA	ZNZ
CANADA & NORTH AMERICA											
GOOSE BAY	CYR	YR	GANDER/ INTL.	CYQX	YQX	FROBISHER/IQALUI	CYFB	YFB	SAINT JOHN'S APT.	CYYT	YYT
SEPT ILES	CYZV	YZV	HALIFAX INTL.	CYHZ	YHZ	GREENWOOD	CYZX	YZX	MONCTON	CYQM	YQM
FREDERICTON	CYFC	YFC	SAINT JOHN	CYSJ	YSJ	QUEBEC	CYQB	YQB	MONTREAL/DORVAL	CYUL	YUL
OTTAWA INTL.	CYOW	YOW	NORTH BAY	CYYB	YYB	WINNIPEG INTL.	CYWG	YWG	EDMONTON INTL.	CYEG	YEG
CALGARY INTL.	CYYC	YYC	VANCOUVER INTL.	CYVR	YVR	TORONTO/PEARSON	CYYZ	YYZ	PENTICTON	CYYF	YYF
PORTLAND	KPD	PDX	BOSTON	KBOS	BOS	NYC/JFK ARPT	KJFK	JFK	NYC/LA GUARDIA	KLGA	LGA
NEWARK	KEWR	EWR	PHILADELPHIA	KPHL	PHL	BALTO/WASH INTL.	KBWI	BWI	WASHINGTON/NATL	KBWA	DCA
BANGOR	KBGR	BGR									