

Explanatory Notes

1. Introduction

The Japan Meteorological Agency (JMA) has published *The Aerodrome Climatological Summary* annually since 1997 in line with [C.3.2.] AERONAUTICAL CLIMATOLOGY of the Technical Regulations (WMO-No.49) Volume II - Meteorological Service for International Air Navigation. The aerodrome climatological tables are provided as CSV text files as well as in PDF format to facilitate the use of the data with spreadsheet software.

2. Airports

This material includes aerodrome climatological tables for all airports where JMA has conducted observations for more than five years. Table 1 shows a list of the airports included in this 2013 edition. The statistical time period covers the recent five-year span from 2009 to 2013.

3. Meteorological Elements and Observation Instruments

- Atmospheric pressure: Electrostatic capacity barometer or electronic resonator barometer
The data are adjusted to values equivalent to those found at a height three meters above the runway. The observation site locations are shown in Table 2.
- Air temperature: Electrical resistance thermometer
- Relative humidity and vapor pressure: Electrostatic capacity hygrometer or dew point hygrometer
- Wind direction and speed: Propeller anemometer
The observation site locations are shown in Table 3.
- Visibility: Prevailing visibility identified using eyes.
- Height of cloud base: Identified using eyes. (a pulse-beam ceilometer is used for reference)
The observation site locations are shown in Table 4.

- Runway visual range: Runway visual range observation equipment (forward scatter meter)
The observation site locations are shown in Table 5.
- Precipitation: Tipping bucket rain gauge
- Depth of snowfall (the depth of fresh snow on a flat wooden board): Ruler or snow-depth meter
- Depth of snow cover: Ruler or snow-depth meter

Previous changes to the above instrumentation are shown in the Annex.

4. Description of Aerodrome Climatological Tables

This material includes aerodrome climatological tables (1) to (8) as follows. Tables (1), (2), (3), (4) and (5) are respectively based on the tabular forms of Models A, B, C, D and E defined in [C.3.2.] of the Technical Regulations (WMO-No.49) Volume II, while tables (6), (7) and (8) are originally provided by JMA. The former five tables or the latter three tables are not available for airports where some of the necessary observations were not conducted. These airports are marked with a “*2 or *3” in Table 1.

(1) MODEL A

The tables show the five-year averages of frequencies (in per cent) for the occurrence of runway visual range/visibility (in meters) or height (in feet) of the base of the lowest BKN* or OVC** cloud layer whose extent was below the specified thresholds. The values are rounded to the nearest integer. The values in the “MEAN” line are determined from the average of 24 hourly values for the day. RVR, VIS and Hs indicate the runway visual range, the visibility and the height of the cloud layer’s base respectively.

BKN* (broken): Cloud covering more than 4/8 and less than 8/8 of the sky

OVC** (overcast): Cloud covering 8/8 of the sky

(2) MODEL B

The tables show the five-year averages of frequencies (in per cent) for visibility (in meters) below the specified thresholds.

(3) MODEL C

The tables show the five-year averages of frequencies (in per cent) for the height (in feet) of the base of the lowest BKN or OVC cloud layer whose extent was below the specified thresholds.

(4) MODEL D

The tables show the five-year averages of frequencies (in per cent) of the occurrence of concurrent wind direction (in 30-degree sectors) and speed (in knots) within the specified ranges.

(5) MODEL E

The tables show the five-year average of frequencies (in per cent) of the surface temperature in the specified ranges of 5°C.

(6) Monthly Data

(a) Monthly means

The five-year averages of the monthly/annual means of daily mean/maximum/minimum temperatures are listed.

(b) Monthly totals

The five-year averages of the monthly/annual amount of precipitation¹ and snowfall² are listed. The daily total depth of snowfall is the sum of the three values observed at 09, 15 and 21 JST (JST: Japan Standard Time, nine hours ahead of UTC (Coordinated Universal Time)).

(c) Monthly extremes

The monthly/annual absolute minimum pressures, maximum/minimum temperatures, maximum daily/hourly/ten-minute precipitation totals¹, maximum daily snowfall totals², maximum snow cover depth, maximum wind speed and peak gust speed are listed.

(d) Number of days in the month with parameters beyond certain thresholds

The five-year averages for the number of days in the month with parameters (mean/maximum/minimum temperature, precipitation¹, daily snowfall total², snow depth, maximum wind speed) within the specified ranges are listed.

¹ Monthly precipitation statistics on Jan to Apr and Nov to Dec and annual one are not available at the airport that precipitation observation is stopped on those months.

² Snowfall statistics are available for airports where snowfall observation is conducted three times (at 09, 15 and 21 JST (JST: Japan Standard Time, nine hours ahead of UTC (Coordinated Universal Time))) for statistical time period.

(7) Monthly/annual means at specified times

The five-year averages of the monthly/annual values are listed. The most frequent wind directions (36 dir.) are computed as follows:

- (i) The wind direction with the most frequent occurrence is determined by counting the number of times each value (from 1 to 36) occurs.
- (ii) If two or more directions are given as the most frequent wind direction, the one for which adjacent directions occur more frequently is selected.
- (iii) If two or more values remain, the one nearest to 36 is selected as the most frequent

wind direction.

(8) Smoothed daily mean temperatures

Smoothed daily mean values for the daily mean, maximum and minimum temperatures are listed. Smoothed daily mean temperatures are computed as follows:

- (i) The value for a certain calendar day is determined as a moving average of nine daily values (i.e. the current day and the four days before and after it). The smoothed daily mean value for the current day is obtained by repeating this process three times.
- (ii) The value for 29th February is the average of the values for 28th February and 1st March.

5. Symbols in Aerodrome Climatological Tables

- (1) "-": no relevant phenomenon
- (2) "×": value absent because more than 20% of the data are missing or were not operationally observed
- (3) Blank: no observation
- (4) Values with ")": normal, but computed from data lacking up to 20% of values that are missing or were not operationally observed
- (5) Values with "*": extreme values that appear twice or more, or the most frequent wind directions when other wind directions occurs at the same frequency

The changing history of observing instruments within a statistic period (1/5)

Location Indicator/Aerodrome	Date	Outline of change
RJAA/NARITA International	21-Oct-09	Moved the Runway Visual Range (RVR) of the RWY16L with extension of runway.
	05-Nov-09	Moved the anemometer of the RWY16L with extension of runway.
	12-Dec-12	Moved the ceilometer of the RWY34L.
RJAF/MATSUMOTO	-	-
RJAN/NIJIMA	-	-
RJAZ/KOZUSHIMA	26-Feb-10	Revised the ceilometer location, because of recalculated a plan made in Nov 2003. (400m → 407m)
RJBB/KANSAI International	-	-
RJBE/KOBE	03-Dec-09	Changed the height of the electrical barometer. (height:11.6m → 11.4m)
	16-Dec-10	Changed the height of the electrical barometer. (height:11.4m → 11.3m)
	24-Apr-12	Changed the height of the electrical barometer. (height:11.3m → 11.2m)
	07-Jun-13	Changed the height of the electrical barometer. (height:11.2m → 11.1m)
RJBD/NANKI-SHIRAHAMA	-	-
RJCB/OBIHIRO	-	-
RJCC/NEW CHITOSE	30-Nov-10	The 03-type aerodrome regular observing and reporting equipment stopped using. Surface observation System for Aviation Weather(08AMOS) started to use.
RJCH/HAKODATE	16-Mar-09	Replaced the ceilometer. (89-type → CL31-type)
RJCK/KUSHIRO	-	-
RJCM/MEMANBETSU	-	-
RJCN/NAKASHIBETSU	-	-
RJCW/WAKKANAI	18-Mar-09	Replaced the ceilometer(89-type → CL31-type). Moved the ceilometer (1,123m inside from the RWY26 THR → 1,323m inside from the RWY26 THR).
	13-Nov-09	Moved the anemometer of the RWY26. (295m inside from the RWY26 THR → 374m inside from the RWY26 THR)
RJDB/IKI	-	-
RJDC/YAMAGUCHI-UBE	15-Feb-12	Relocation of the observatory. Changed the height of the barometer and moved it. (height:7.6m → 8.5m)
RJDK/KAMIGOTO	-	-
RJDO/OJIKA	-	-
RJDT/TSUSHIMA	-	-

The changing history of observing instruments within a statistic period (2/5)

Location Indicator/Aerodrome	Date	Outline of change
RJEB/MONBETSU	27-Feb-09	Surface observation System for Aviation Weather(08AMOSOS) started to use. Changed the height of the barometer. (height:20.2m→20.5m)
RJEC/ASAHIKAWA	-	-
RJEO/OKUSHIRI	-	-
RJER/RISHIRI	18-Mar-13	Replaced the ceilometer. (89-type→CT25-type)
RJFC/YAKUSHIMA	21-Jan-09	Changed the height of the electrical barometer. (height:81.2m→81.1m)
RJFE/FUKUE		
RJFF/FUKUOKA		
RJFG/TANEGASHIMA		
RJFK/KAGOSHIMA	26-Feb-09	Surface observation System for Aviation Weather(08AMOS) started to use. Changed the height of the electrical barometer. (height:288.2m→288.6m)
RJFM/MIYAZAKI	-	-
RJFO/OITA	-	-
RJFR/KITAKYUSHU	-	-
RJFS/SAGA	-	-
RJFT/KUMAMOTO	-	-
RJFU/NAGASAKI	15-Dec-11	RWY A started to use as OomuraAirport(RJDU).
RJGG/CHUBU CENTRAIR International	-	-
RJKA/AMAMI	-	-
RJKB/OKIERABU	-	-

The changing history of observing instruments within a statistic period (3/5)

Location Indicator/Aerodrome	Date	Outline of change
RJKI/KIKAI	-	-
RJKN/TOKUNOSHIMA	-	-
RJNF/FUKUI	-	-
RJNO/OKI	-	-
RJNT/TOYAMA	-	-
RJNW/NOTO	-	-
RJOA/HIROSHIMA	-	-
RJOB/OKAYAMA	-	-
RJOC/IZUMO	-	-
RJOK/KOCHI	-	-
RJOM/MATSUYAMA	-	-
RJOO/OSAKA International	03-Feb-09	Surface observation System for Aviation Weather(08AMOS) started to use. Changed the height of the barometer. (height:47.8m→48.2m)
RJOR/TOTTORI	-	-
RJOT/TAKAMATSU	-	-
RJOW/IWAMI	02-Feb-09	Changed the height of the barometer. (height:56.7m→52.9m)
	31-Mar-09	Surface observation System for Aviation Weather(08AMOSOS) started to use.

The changing history of observing instruments within a statistic period (4/5)

Location Indicator/Aerodrome	Date	Outline of change
RJOY/YAO	-	-
RJSA/AOMORI	-	-
RJSC/YAMAGATA	-	-
RJSF/FUKUSHIMA	-	-
RJSI/HANAMAKI	-	-
RJSK/AKITA	-	-
RJSN/NIIGATA	12-Mar-10	Surface observation System for Aviation Weather (08AMOS) started to use. Changed the height of the barometer. (height:10.5m → 10.8m)
RJSR/ODATE-NOSHIRO	27-Mar-09	Surface observation System for Aviation Weather (08AMOSOS) started to use.
RJSS/SENDAI	18-Dec-09	Surface observation System for Aviation Weather(08AMOS) started to use.
	22-May-12	Moved the anemometer of the RWY09. (300m inside from the RWY09 THR → 400m inside from the RWY09 THR), changed the height. (height:9.9m → 9.7m)
	23-May-12	Moved the ceilometer (near the middle of the RWY09/27 → 370m inside from the RWY27 THR)
	24-May-12	Changed the height of the anemometer of the RWYMID. (height:8.2m → 9.7m), Moved the observation field. (the rain gauge and the
RJSY/SHONAI	-	-
RJTH/HACHIJOJIMA	01-Apr-13	Changed the height of the barometer. (height:95.9m → 91.8m)
RJTO/OSHIMA	-	-
RJTQ/MIYAKEJIMA	09-Apr-09	Anemometer (MID) start of operation
RJTT/TOKYO International	03-Sep-09	Moved the anemometer of the RWY16R.(450m → 490m) Changed the height of the anemometer of the RWY16R.(height:10.0m → 11.3m) Seted up observation instruments, because of D RWY (RWY23,RWY05) started to use.
	21-Oct-10	Surface observation System for Aviation Weather (08AMOS) started to use. Changed the height of the barometer. (height:42.7m → 42.8m)

The changing history of observing instruments within a statistic period (5/5)

Location Indicator/Aerodrome	Date	Outline of change
ROAH/NAHA	-	-
ROKJ/KUMEJIMA	01-Dec-09	Surface observation System for Aviation Weather(08AMOSOS) started to use.
	13-Dec-11	Changed the height of the barometer. (height:12.4m→12.3m)
ROMD/MINAMI DAITO	22-Mar-11	Replaced the ceilometer. (89-type→CL31-type)
ROMY/MIYAKO	-	-
RORA/AGUNI	10-Mar-11	Replaced the ceilometer. (89-type→CL31-type)
RORH/HATERUMA	-	-
RORK/KITADAITO	24-Mar-11	Replaced the ceilometer. (89-type→CL31-type)
RORS/SHIMOJISHIMA	-	-
RORT/TARAMA	-	-
RORY/YORON	-	-
ROYN/YONAGUNI	25-Oct-11	Replaced the ceilometer. (89-type→CL31-type)

Table2 List of Aerodromes and Elevation of barometer (1/2)

Aerodrome	Location indicator	Latitude	Longitude	Elevation above mean sea level (ft)	Elevation of barometer (m)
NARITA International	RJAA	35 ° 45.9'N	140 ° 23.1'E	135	86.6
MATSUMOTO	RJAF	36 ° 10.0'N	137 ° 55.4'E	2,157	668.2
NIJIMA	RJAN	34 ° 22.2'N	139 ° 16.1'E	94	28.6
KOZUSHIMA	RJAZ	34 ° 11.4'N	139 ° 08.0'E	454	139.1
KANSAI International	RJBB	34 ° 26.1'N	135 ° 14.0'E	17	39.0
NANKI-SHIRAHAMA	RJBD	33 ° 39.7'N	135 ° 21.9'E	293	99.2
KOBE	RJBE	34 ° 37.6'N	135 ° 13.3'E	22	11.2
OBIHIRO	RJCB	42 ° 44.0'N	143 ° 13.0'E	490	153.7
NEW CHITOSE	RJCC	42 ° 46.5'N	141 ° 41.6'E	70	43.3
HAKODATE	RJCH	41 ° 46.2'N	140 ° 49.3'E	112	37.5
KUSHIRO	RJCK	43 ° 02.5'N	144 ° 11.6'E	311	104.6
MEMANBETSU	RJCM	43 ° 52.8'N	144 ° 09.9'E	109	35.4
NAKASHIBETSU	RJCN	43 ° 34.7'N	144 ° 57.6'E	214	67.5
WAKKANAI	RJCW	45 ° 24.3'N	141 ° 48.1'E	27	10.4
IKI	RJDB	33 ° 45.0'N	129 ° 47.2'E	41	14.0
YAMAGUCHI-UBE	RJDC	33 ° 55.8'N	131 ° 16.7'E	15	8.5
KAMIGOTO	RJDK	33 ° 00.8'N	129 ° 11.6'E	263	82.8
OJIKA	RJDO	33 ° 11.5'N	129 ° 05.4'E	25	14.1
TSUSHIMA	RJDT	34 ° 17.1'N	129 ° 19.8'E	207	63.1
MONBETSU	RJEB	44 ° 18.3'N	143 ° 24.3'E	58	20.5
ASAHIKAWA	RJEC	43 ° 40.3'N	142 ° 26.9'E	690	209.2
OKUSHIRI	RJEO	42 ° 04.3'N	139 ° 26.0'E	161	54.0
RISHIRI	RJER	45 ° 14.5'N	141 ° 11.3'E	99	28.4
YAKUSHIMA	RJFC	30 ° 23.1'N	130 ° 39.6'E	122	38.0
FUKUE	RJFE	32 ° 40.0'N	128 ° 50.0'E	251	81.1
FUKUOKA	RJFF	33 ° 35.1'N	130 ° 27.1'E	30	28.4
TANEGASHIMA	RJFG	30 ° 36.2'N	130 ° 59.3'E	768	240.0
KAGOSHIMA	RJFK	31 ° 48.2'N	130 ° 43.2'E	892	288.6
MIYAZAKI	RJFM	31 ° 52.6'N	131 ° 26.9'E	19	7.1
OITA	RJFO	33 ° 28.8'N	131 ° 44.2'E	17	14.7
KITAKYUSHU	RJFR	33 ° 50.7'N	131 ° 02.1'E	21	10.9
SAGA	RJFS	33 ° 09.0'N	130 ° 18.1'E	6	10.9
KUMAMOTO	RJFT	32 ° 50.2'N	130 ° 51.3'E	632	207.9
NAGASAKI	RJFU	32 ° 55.0'N	129 ° 54.8'E	8	12.1
CHUBU CENTRAIR International	RJGG	34 ° 51.5'N	136 ° 48.3'E	12	24.5
AMAMI	RJKA	28 ° 25.9'N	129 ° 42.8'E	14	6.1
OKIERABU	RJKB	27 ° 25.9'N	128 ° 42.3'E	88	29.6
KIKAI	RJKI	28 ° 19.3'N	129 ° 55.7'E	15	6.3
TOKUNOSHIMA	RJKN	27 ° 50.2'N	128 ° 52.9'E	8	3.4
FUKUI	RJNF	36 ° 08.6'N	136 ° 13.4'E	18	10.7
OKI	RJNO	36 ° 10.7'N	133 ° 19.4'E	262	81.5
TOYAMA	RJNT	36 ° 38.9'N	137 ° 11.3'E	77	33.3
NOTO	RJNW	37 ° 17.6'N	136 ° 57.7'E	718	224.4
HIROSHIMA	RJOA	34 ° 26.2'N	132 ° 55.2'E	1,086	340.0
OKAYAMA	RJOB	34 ° 45.4'N	133 ° 51.3'E	785	241.4
IZUMO	RJOC	35 ° 24.8'N	132 ° 53.4'E	6	6.9
KOCHI	RJOK	33 ° 32.8'N	133 ° 40.2'E	29	11.3
MATSUYAMA	RJOM	33 ° 49.6'N	132 ° 42.0'E	13	8.6
OSAKA International	RJOO	34 ° 47.1'N	135 ° 26.4'E	39	48.2
TOTTORI	RJOR	35 ° 31.8'N	134 ° 09.9'E	48	23.1

· Latitude and Longitude of the Aerodrome Reference point (ARP) are based on the World Geodetic System (WGS84).

· The listed contents are the information as of the final year of a statistics period.

Table2 List of Aerodromes and Elevation of barometer (2/2)

Aerodrome	Location indicator	Latitude	Longitude	Elevation above mean sea level (ft)	Elevation of barometer (m)
TAKAMATSU	RJOT	34 ° 12.9'N	134 ° 00.9'E	607	192.3
IWAMI	RJOW	34 ° 40.6'N	131 ° 47.4'E	177	52.9
YAO	RJOY	34 ° 35.8'N	135 ° 36.0'E	33	12.6
AOMORI	RJSA	40 ° 44.0'N	140 ° 41.3'E	650	199.2
YAMAGATA	RJSC	38 ° 24.7'N	140 ° 22.3'E	345	102.3
FUKUSHIMA	RJSF	37 ° 13.7'N	140 ° 25.7'E	1,220	379.6
HANAMAKI	RJSI	39 ° 25.7'N	141 ° 08.1'E	294	92.2
AKITA	RJSK	39 ° 36.9'N	140 ° 13.1'E	305	97.9
NIIGATA	RJSN	37 ° 57.4'N	139 ° 06.7'E	5	10.8
ODATE-NOSHIRO	RJSR	40 ° 11.5'N	140 ° 22.3'E	276	90.7
SENDAI	RJSS	38 ° 08.4'N	140 ° 55.0'E	6	12.1
SHONAI	RJSY	38 ° 48.7'N	139 ° 47.2'E	72	32.3
HACHIJOJIMA	RJTH	33 ° 06.9'N	139 ° 47.2'E	301	91.8
OSHIMA	RJTO	34 ° 46.9'N	139 ° 21.6'E	124	42.6
MIYAKEJIMA	RJTQ	34 ° 04.4'N	139 ° 33.6'E	65	20.4
TOKYO International	RJTT	35 ° 33.2'N	139 ° 46.9'E	21	42.8
NAHA	ROAH	26 ° 11.8'N	127 ° 38.8'E	11	32.7
KUMEJIMA	ROKJ	26 ° 21.8'N	126 ° 42.8'E	23	12.3
MINAMI DAITO	ROMD	25 ° 50.8'N	131 ° 15.8'E	159	53.3
MIYAKO	ROMY	24 ° 47.0'N	125 ° 17.7'E	140	47.8
AGUNI	RORA	26 ° 35.6'N	127 ° 14.4'E	38	14.2
HATERUMA	RORH	24 ° 03.5'N	123 ° 48.2'E	43	16.3
KITADAITO	RORK	25 ° 56.7'N	131 ° 19.6'E	71	21.5
SHIMOJISHIMA	RORS	24 ° 49.6'N	125 ° 08.7'E	25	12.1
TARAMA	RORT	24 ° 39.2'N	124 ° 40.5'E	34	15.4
YORON	RORY	27 ° 02.6'N	128 ° 24.1'E	47	13.7
YONAGUNI	ROYN	24 ° 28.1'N	122 ° 58.8'E	49	16.8

· Latitude and Longitude of the Aerodrome Reference point (ARP) are based on the World Geodetic System (WGS84).

· The listed contents are the information as of the final year of a statistics period.

Table3 Observation site of anemometer (1/3)

Aerodrome	Location indicator	Primary point (Used for Statistics)	Observation site	Hight of anemometer above ground (m)
NARITA International	RJAA	○	280m inside fm the RWY34L THR	11.1
			359m inside fm the RWY16R THR	9.6
			415m inside fm the RWY34R THR	12.1
			485m inside fm the RWY16L THR	12.1
MATSUMOTO	RJAF	○	410m inside fm the RWY18 THR	9.0
			170m inside fm the RWY36 THR	9.0
NIIJIMA	RJAN	○	30m outside fm the RWY11 THR	6.0
			76m outside fm the RWY29 THR	6.9
KOZUSHIMA	RJAZ	○	25m inside fm the RWY11 THR	9.5
			64m outside fm the RWY29 THR	2.5
KANSAI International	RJBB	○	425m inside fm the RWY06R THR	10.2
			475m inside fm the RWY24L THR	10.2
			449m inside fm the RWY06L THR	10.0
			499m inside fm the RWY24R THR	10.0
NANKI-SHIRAHAMA	RJBD	○	250m inside fm the RWY15 THR	8.2
			300m inside fm the RWY33 THR	8.2
KOBE	RJBE	○	415m inside fm the RWY09 THR	10.0
			343m inside fm the RWY27 THR	10.0
OBIHIRO	RJCB	○	300m inside fm the RWY35 THR	9.9
			310m inside fm the RWY17 THR	7.9
NEW CHITOSE	RJCC	○	350m inside fm the RWY19R THR	9.8
			588m inside fm the RWY01L THR	10.0
			315m inside fm the RWY19L THR	9.9
			365m inside fm the RWY01R THR	9.9
HAKODATE	RJCH	○	261m inside fm the RWY12 THR	9.9
			188m inside fm the RWY30 THR	9.9
KUSHIRO	RJCK	○	270m inside fm the RWY17 THR	9.4
			315m inside fm the RWY35 THR	10.1
MEMANBETSU	RJCM	○	263m inside fm the RWY18 THR	8.6
			305m inside fm the RWY36 THR	8.6
NAKASHIBETSU	RJCN	○	331m inside fm the RWY08 THR	9.6
			313m inside fm the RWY26 THR	9.2
WAKKANAI	RJCW	○	374m inside fm the RWY26 THR	8.0
			250m inside fm the RWY08 THR	8.5
IKI	RJDB	○	near the middle of the RWY	10.2
YAMAGUCHI-UBE	RJDC	○	319m inside fm the RWY07 THR	9.8
			319m inside fm the RWY25 THR	9.8
KAMIGOTO	RJDK	○	the RWY17 side of the apron	7.0
OJIKA	RJDO	○	the RWY03 side of the apron	6.4
TSUSHIMA	RJDT	○	369m inside fm the RWY32 THR	10.2
			277m inside fm the RWY14 THR	8.2
MONBETSU	RJEB	○	295m inside fm the RWY32 THR	10.4
			300m inside fm the RWY14 THR	9.6
ASAHIKAWA	RJEC	○	430m inside fm the RWY34 THR	9.4
			300m inside fm the RWY16 THR	11.3
OKUSHIRI	RJEO	○	310m inside fm the RWY31 THR	10.4
			350m inside fm the RWY13 THR	10.4
RISHIRI	RJER	○	300m inside fm the RWY25 THR	7.6
			310m inside fm the RWY07 THR	7.6
YAKUSHIMA	RJFC	○	12m outside fm the RWY32 THR	7.0
			20m inside fm the RWY14 THR	10.0
FUKUE	RJFE	○	289m inside fm the RWY03 THR	8.0
			243m inside fm the RWY21 THR	8.0
FUKUOKA	RJFF	○	340m inside fm the RWY16 THR	8.0
			20m inside fm the RWY34 THR	8.7
TANEGASHIMA	RJFG	○	225m inside fm the RWY31 THR	8.0
			202m inside fm the RWY13 THR	8.0
KAGOSHIMA	RJFK	○	538m inside fm the RWY34 THR	8.0
			449m inside fm the RWY16 THR	8.0

・The listed contents are the information as of the final year of a statistics period.

・The distance in the observation site is represented in integer and the height is to the first decimal place.

Table3 Observation site of anemometer (2/3)

Aerodrome	Location indicator	Primary point (Used for Statistics)	Observation site	Hight of anemometer above ground (m)
MIYAZAKI	RJFM	○	290m inside fm the RWY27 THR	7.6
			275m inside fm the RWY09 THR	7.6
OITA	RJFO	○	270m inside fm the RWY01 THR	8.0
			360m inside fm the RWY19 THR	8.0
KITAKYUSHU	RJFR	○	405m inside fm the RWY18 THR	8.1
			200m inside fm the RWY36 THR	8.1
SAGA	RJFS	○	434m inside fm the RWY29 THR	8.5
			165m inside fm the RWY11 THR	8.5
KUMAMOTO	RJFT	○	428m inside fm the RWY07 THR	7.5
			170m inside fm the RWY25 THR	8.0
NAGASAKI	RJFU	○	near the RWY32 THR	9.9
			near the RWY14 THR	9.9
CHUBU CENTRAIR International	RJGG	○	387m inside fm the RWY36 THR	10.0
			385m inside fm the RWY18 THR	10.0
AMAMI	RJKA	○	332m inside fm the RWY03 THR	9.8
			318m inside fm the RWY21 THR	9.8
OKIERABU	RJKB	○	260m inside fm the RWY22 THR	10.1
			310m inside fm the RWY04 THR	10.1
KIKAI	RJKI	○	425m inside fm the RWY07 THR	10.1
TOKUNOSHIMA	RJKN	○	88m inside fm the RWY01 THR	6.4
			260m inside fm the RWY19 THR	7.0
FUKUI	RJNF	○	78m toward the MET office fm the RWY centerline	6.0
OKI	RJNO	○	303m inside fm the RWY08 THR	10.0
			405m inside fm the RWY26 THR	10.0
TOYAMA	RJNT	○	190m south fm the RWY20 THR and	8.6
			130m east fm the RWY centerline	
			240m north fm the RWY02 THR and	5.0
NOTO	RJNW	○	145m east fm the RWY centerline	
			300m inside fm the RWY25 THR	12.0
HIROSHIMA	RJOA	○	305m inside fm the RWY07 THR	10.0
			380m inside fm the RWY10 THR	10.2
OKAYAMA	RJOB	○	330m inside fm the RWY28 THR	10.2
			300m inside fm the RWY07 THR	7.2
IZUMO	RJOC	○	300m inside fm the RWY25 THR	10.2
			300m inside fm the RWY07 THR	8.5
KOCHI	RJOK	○	300m inside fm the RWY25 THR	8.5
			296m inside fm the RWY32 THR	8.3
MATSUYAMA	RJOM	○	200m inside fm the RWY14 THR	8.3
			300m inside fm the RWY14 THR	10.2
OSAKA International	RJOO	○	317m inside fm the RWY32 THR	6.7
			670m inside fm the RWY32L THR	10.0
TOTTORI	RJOR	○	450m inside fm the RWY14R THR	6.0
			300m inside fm the RWY10 THR	10.2
TAKAMATSU	RJOT	○	300m inside fm the RWY28 THR	10.2
			340m inside fm the RWY26 THR	10.2
IWAMI	RJOW	○	300m inside fm the RWY08 THR	10.2
			380m inside fm the RWY11 THR	10.2
YAO	RJOY	○	330m inside fm the RWY29 THR	10.2
			400m inside fm the RWY27 THR	7.0
AOMORI	RJSA	○	250m inside fm the RWY09 THR	6.7
			354m inside fm the RWY24 THR	10.0
YAMAGATA	RJSC	○	377m inside fm the RWY06 THR	10.0
			173m inside fm the RWY01 THR	8.0
FUKUSHIMA	RJSF	○	33m outside fm the RWY19 THR	8.0
			230m inside fm the RWY01 THR	10.0
			290m inside fm the RWY19 THR	10.0

・The listed contents are the information as of the final year of a statistics period.

・The distance in the observation site is represented in integer and the height is to the first decimal place.

Table3 Observation site of anemometer (3/3)

Aerodrome	Location indicator	Primary point (Used for Statistics)	Observation site	Hight of anemometer above ground (m)
HANAMAKI	RJSI	○	357m inside fm the RWY20 THR 300m inside fm the RWY02 THR	8.0 10.0
AKITA	RJSK	○	457m inside fm the RWY28 THR 355m inside fm the RWY10 THR	10.0 10.0
NIIGATA	RJSN	○	450m inside fm the RWY28 THR 330m inside fm the RWY10 THR	8.4 8.0
ODATE-NOSHIRO	RJSR	○	310m inside fm the RWY11 THR 300m inside fm the RWY29 THR	9.3 9.3
SENDAI	RJSS	○	near the middle of the RWY12/30 385m inside fm the RWY27 THR 400m inside fm the RWY09 THR	9.7 9.7 9.7
SHONAI	RJSY	○	378m inside fm the RWY09 THR 340m inside fm the RWY27 THR	10.0 10.0
HACHIJOJIMA	RJTH	○	near the middle of the RWY 326m inside fm the RWY08 THR 326m inside fm the RWY26 THR	8.8 8.7 10.3
OSHIMA	RJTO	○	494m inside fm the RWY03 THR 290m inside fm the RWY21 THR	9.0 9.0
MIYAKEJIMA	RJTQ	○	326m inside fm the RWY02 THR 180m toward the MET office fm the RWY centerline 25m inside fm the RWY20 THR	6.5 5.9 5.8
TOKYO International	RJTT	○	350m inside fm the RWY16L THR 350m inside fm the RWY34R THR 490m inside fm the RWY16R THR 280m inside fm the RWY34L THR 450m inside fm the RWY22 THR 319m inside fm the RWY23 THR 381m inside fm the RWY05 THR	10.0 10.0 11.3 10.0 10.0 11.6 11.6
NAHA	ROAH	○	375m inside fm the RWY36 THR 400m inside fm the RWY18 THR	7.0 7.0
KUMEJIMA	ROKJ	○	264m inside fm the RWY03 THR 286m inside fm the RWY21 THR	6.9 6.9
MINAMI DAITO	ROMD	○	near the middle of the RWY	7.0
MIYAKO	ROMY	○	near the RWY22 THR near the RWY04 THR	9.8 9.8
AGUNI	RORA	○	near the middle of the RWY	6.5
HATERUMA	RORH	○	350m inside fm the RWY02 THR	9.6
KITADAITO	RORK	○	near the middle of the RWY	7.1
SHIMOJISHIMA	RORS	○	243m inside fm the RWY17 THR 242m inside fm the RWY35 THR	9.7 9.7
TARAMA	RORT	○	213m inside fm the RWY36 THR 201m inside fm the RWY18 THR	9.8 9.8
YORON	RORY	○	455m inside fm the RWY14 THR	7.6
YONAGUNI	ROYN	○	70m inside fm the RWY26 THR 120m inside fm the RWY08 THR	6.5 9.9

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Table4 Observation site of Ceilometer (1/2)

Aerodrome	Location Indicator	Observation site
NARITA International	RJAA	756m outside fm the RWY34L THR
		825m outside fm the RWY16R THR
		255m outside fm the RWY34R THR
		235m outside fm the RWY16L THR
MATSUMOTO	RJAF	544m inside fm the RWY36 THR
NIIJIMA	RJAN	405m inside fm the RWY11 THR
KOZUSHIMA	RJAZ	407m inside fm the RWY11 THR
KANSAI International	RJBB	360m outside fm the RWY06R THR
		458m outside fm the RWY24L THR
		340m outside fm the RWY06L THR
		355m outside fm the RWY24R THR
NANKI-SHIRAHAMA	RJBD	707m inside fm the RWY15 THR
KOBE	RJBE	80m outside fm the RWY09 THR
OBIHIRO	RJCB	1,054m inside fm the RWY17 THR
NEW CHITOSE	RJCC	1,426m inside fm the RWY01L THR
		375m inside fm the RWY01R THR
HAKODATE	RJCH	1,250m inside fm the RWY12 THR
KUSHIRO	RJCK	49m outside fm the RWY17 THR
MEMANBETSU	RJCM	246m inside fm the RWY18 THR
NAKASHIBETSU	RJCN	916m inside fm the RWY08 THR
WAKKANAI	RJCW	1,323m inside fm the RWY26 THR
IKI	RJDB	near the middle of the RWY
YAMAGUCHI-UBE	RJDC	648m inside fm the RWY07 THR
KAMIGOTO	RJDK	the RWY17 side of the apron
OJIKI	RJDO	the RWY03 side of the apron
TSUSHIMA	RJDT	377m inside fm the RWY14 THR
MONBETSU	RJEB	283m inside fm the RWY32 THR
ASAHIKAWA	RJEC	450m inside fm the RWY34 THR
OKUSHIRI	RJEO	713m inside fm the RWY31 THR
RISHIRI	RJER	798m inside fm the RWY25 THR
YAKUSHIMA	RJFC	near the middle of the RWY
FUKUE	RJFE	near the middle of the RWY
FUKUOKA	RJFF	near the middle of the RWY
TANEGASHIMA	RJFG	960m inside fm the RWY31 THR
KAGOSHIMA	RJFK	1,215m inside fm the RWY34 THR
MIYAZAKI	RJFM	76m toward the RWY09 fm the middle of RWY
OITA	RJFO	near the middle of the RWY
KITAKYUSHU	RJFR	1,480m inside fm the RWY18 THR
SAGA	RJFS	832m inside fm the RWY11 THR
KUMAMOTO	RJFT	42m outside fm the RWY07 THR
NAGASAKI	RJFU	458m inside fm the RWY32 THR
CHUBU CENTRAIR International	RJGG	246m outside fm the RWY36 THR
		246m outside fm the RWY18 THR
AMAMI	RJKA	840m inside fm the RWY21 THR
OKIERABU	RJKB	610m inside fm the RWY04 THR
KIKAI	RJKI	430m inside fm the RWY07 THR
TOKUNOSHIMA	RJKN	677m inside fm the RWY01 THR
FUKUI	RJNF	129m toward the MET office fm the RWY centerline
OKI	RJNO	1,315m inside fm the RWY08 THR
TOYAMA	RJNT	the west of the MET office
NOTO	RJNW	near 1,075m inside fm the RWY25 THR
HIROSHIMA	RJOA	near the middle of the RWY
OKAYAMA	RJOB	1,360m inside fm the RWY07 THR

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Table4 Observation site of Ceilometer (2/2)

Aerodrome	Location Indicator	Observation site
IZUMO	RJOC	498m inside fm the RWY07 THR
KOCHI	RJOK	810m inside fm the RWY32 THR
MATSUYAMA	RJOM	928m inside fm the RWY14 THR
OSAKA International	RJOO	640m inside fm the RWY32L THR
TOTTORI	RJOR	1,009m inside fm the RWY10 THR
TAKAMATSU	RJOT	near the middle of the RWY
IWAMI	RJOW	near the middle of the RWY
YAO	RJOY	near the MET office
AOMORI	RJSA	77m outside fm the RWY24 THR
YAMAGATA	RJSC	near the middle of the RWY
FUKUSHIMA	RJSF	near the middle of the RWY
HANAMAKI	RJSI	1,125m inside fm the RWY20 THR
AKITA	RJSK	900m inside fm the RWY28 THR
NIIGATA	RJSN	738m inside fm the RWY10 THR
ODATE-NOSHIRO	RJSR	observation field (near the middle of the RWY11/29)
SENDAI	RJSS	370m inside fm the RWY27 THR
SHONAI	RJSY	near the middle of the RWY
HACHIJOJIMA	RJTH	near the middle of the RWY
OSHIMA	RJTO	near the middle of the RWY
MIYAKEJIMA	RJTQ	near the middle of the RWY
TOKYO International	RJTT	591m outside fm the RWY34R THR
		65m inside fm the RWY34L THR
		260m outside fm the RWY22 THR
		297m outside fm the RWY23 THR
NAHA	ROAH	near the middle of the RWY
KUMEJIMA	ROKJ	1,064m inside fm the RWY03 THR
MINAMI DAITO	ROMD	near the middle of the RWY
MIYAKO	ROMY	near the middle of the RWY
AGUNI	RORA	near the middle of the RWY
HATERUMA	RORH	120m toward west direction fm the middle of the RWY
KITADAITO	RORK	near the middle of the RWY
SHIMOJISHIMA	RORS	70m toward RWY17 , 156m toward west direction fm the middle of the RWY
TARAMA	RORT	near the middle of the RWY
YORON	RORY	490m inside fm the RWY14 THR
YONAGUNI	ROYN	65m outside toward the RWY26 THR fm near the middle of the RWY

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Table5 Observation site of Runway Visual Range (1/3)

Aerodrome	Location Indicator	Used for Statistics	Kind of RVR	Observation site
NARITA International	RJAA	○	Forward Scattermeter	351m inside fm the RWY34L THR
		○	Forward Scattermeter	389m inside fm the RWY16R THR
		○	Forward Scattermeter	near the middle of RWY A
			Forward Scattermeter	390m inside fm the RWY34R THR
			Forward Scattermeter	410m inside fm the RWY16L THR
MATSUMOTO	RJAF			None
NIJIMA	RJAN			None
KOZUSHIMA	RJAZ			None
KANSAI International	RJBB	○	Forward Scattermeter	420m inside fm the RWY06R THR
		○	Forward Scattermeter	470m inside fm the RWY24L THR
			Forward Scattermeter	near the middle of RWY 06R/24L
			Forward Scattermeter	445m inside fm the RWY06L THR
			Forward Scattermeter	495m inside fm the RWY24R THR
NANKI-SHIRAHAMA	RJBD			None
KOBE	RJBE	○	Forward Scattermeter	415m inside fm the RWY09 THR
OBIHIRO	RJCB	○	Forward Scattermeter	311m inside fm the RWY35 THR
NEW CHITOSE	RJCC	○	Forward Scattermeter	358m inside fm the RWY19R THR
		○	Forward Scattermeter	550m inside fm the RWY01L THR
		○	Forward Scattermeter	370m inside fm the RWY01R THR
			Forward Scattermeter	1421m inside fm the RWY01L THR
HAKODATE	RJCH	○	Forward Scattermeter	262m inside fm the RWY12 THR
KUSHIRO	RJCK	○	Forward Scattermeter	300m inside fm the RWY17 THR
			Forward Scattermeter	1 048m inside fm the RWY35 THR
			Forward Scattermeter	315m inside fm the RWY35 THR
MEMANBETSU	RJCM	○	Forward Scattermeter	290m inside fm the RWY18 THR
			Forward Scattermeter	290m inside fm the RWY36 THR
NAKASHIBETSU	RJCN	○	Forward Scattermeter	336m inside fm the RWY08 THR
WAKKANAI	RJCW	○	Forward Scattermeter	300m inside fm the RWY08 THR
IKI	RJDB			None
YAMAGUCHI-UBE	RJDC	○	Forward Scattermeter	287m inside fm the RWY07 THR
KAMIGOTO	RJDK			None
OJIKI	RJDO			None
TSUSHIMA	RJDT			None
MONBETSU	RJEB	○	Forward Scattermeter	300m inside fm the RWY32 THR
ASAHIKAWA	RJEC	○	Forward Scattermeter	408m inside fm the RWY34 THR
OKUSHIRI	RJEO			None
RISHIRI	RJER			None
YAKUSHIMA	RJFC			None
FUKUE	RJFE			None
FUKUOKA	RJFF	○	Forward Scattermeter	366m inside fm the RWY16 THR
			Forward Scattermeter	325m inside fm the RWY34 THR
TANEGASHIMA	RJFG	○	Forward Scattermeter	295m inside fm the RWY31 THR
KAGOSHIMA	RJFK	○	Forward Scattermeter	300m inside fm the RWY34 THR
MIYAZAKI	RJFM	○	Forward Scattermeter	300m inside fm the RWY27 THR
OITA	RJFO	○	Forward Scattermeter	280m inside fm the RWY01 THR
KITAKYUSHU	RJFR	○	Forward Scattermeter	319m inside fm the RWY18 THR
SAGA	RJFS	○	Forward Scattermeter	429m inside fm the RWY29 THR
KUMAMOTO	RJFT	○	Forward Scattermeter	319m inside fm the RWY07 THR
			Forward Scattermeter	1 490m inside fm the RWY25 THR
			Forward Scattermeter	300m inside fm the RWY25 THR
NAGASAKI	RJFU	○	Forward Scattermeter	458m inside fm the RWY32 THR
CHUBU CENTRAIR International	RJGG	○	Forward Scattermeter	377m inside fm the RWY36 THR
			Forward Scattermeter	15m toward north fm the aerodrome reference point
			Forward Scattermeter	375m inside fm the RWY18 THR

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Table5 Observation site of Runway Visual Range (2/3)

Aerodrome	Location Indicator	Used for Statistics	Kind of RVR	Observation site
AMAMI	RJKA	○	Forward Scattermeter	297m inside fm the RWY03 THR
OKIERABU	RJKB			None
KIKAI	RJKI			None
TOKUNOSHIMA	RJKN			None
FUKUI	RJNF			None
OKI	RJNO			None
TOYAMA	RJNT			None
NOTO	RJNW	○	Forward Scattermeter	300m inside fm the RWY25 THR
HIROSHIMA	RJOA	○	Forward Scattermeter	320m inside fm the RWY10 THR
			Forward Scattermeter	1,500m inside fm the RWY10 THR
			Forward Scattermeter	330m inside fm the RWY28 THR
OKAYAMA	RJOB	○	Forward Scattermeter	300m inside fm the RWY07 THR
IZUMO	RJOC			None
KOCHI	RJOK	○	Forward Scattermeter	296m inside fm the RWY32 THR
MATSUYAMA	RJOM	○	Forward Scattermeter	300m inside fm the RWY14 THR
OSAKA International	RJOO	○	Forward Scattermeter	370m fm the RWY32R THR
		○	Forward Scattermeter	350m fm the RWY32L THR
TOTTORI	RJOR	○	Forward Scattermeter	300m inside fm the RWY10 THR
TAKAMATSU	RJOT	○	Forward Scattermeter	330m inside fm the RWY26 THR
IWAMI	RJOW	○	Forward Scattermeter	380m inside fm the RWY11 THR
YAO	RJOY			None
AOMORI	RJSA	○	Forward Scattermeter	357m inside fm the RWY24 THR
			Forward Scattermeter	1,420m inside fm the RWY06 THR
			Forward Scattermeter	387m inside fm the RWY06 THR
YAMAGATA	RJSC	○	Forward Scattermeter	335m inside fm the RWY01 THR
FUKUSHIMA	RJSF	○	Forward Scattermeter	240m inside fm the RWY01 THR
HANAMAKI	RJSI	○	Forward Scattermeter	352m inside fm the RWY20 THR
AKITA	RJSK	○	Forward Scattermeter	300m inside fm the RWY28 THR
NIIGATA	RJSN	○	Forward Scattermeter	458m inside fm the RWY28 THR
ODATE-NOSHIRO	RJSR	○	Forward Scattermeter	300m inside fm the RWY11 THR
SENDAI	RJSS	○	Forward Scattermeter	360m inside fm the RWY27 THR
SHONAI	RJSY	○	Forward Scattermeter	373m inside fm the RWY09 THR
HACHIJOJIMA	RJTH			None
OSHIMA	RJTO			None
MIYAKEJIMA	RJTQ			None
TOKYO International	RJTT	○	Forward Scattermeter	375m inside fm the RWY16L THR
		○	Forward Scattermeter	350m inside fm the RWY34R THR
			Forward Scattermeter	1,500m inside fm the RWY16L THR
			Forward Scattermeter	270m inside fm the RWY34L THR
		○	Forward Scattermeter	450m inside fm the RWY22 THR
NAHA	ROAH		Forward Scattermeter	319m inside fm the RWY23 THR
		○	Forward Scattermeter	370m inside fm the RWY36 THR
KUMEJIMA	ROKJ			None
MINAMI DAITO	ROMD			None
MIYAKO	ROMY	○	Forward Scattermeter	310m inside fm the RWY22 THR
AGUNI	RORA			None
HATERUMA	RORH			None
KITADAITO	RORK			None

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Table5 Observation site of Runway Visual Range (3/3)

Aerodrome	Location Indicator	Used for Statistics	Kind of RVR	Observation site
SHIMOJISHIMA	RORS	○	Forward Scattermeter	119m inside fm the RWY17 THR
		○	Forward Scattermeter	117m inside fm the RWY35 THR
TARAMA	RORT			None
YORON	RORY			None
YONAGUNI	ROYN			None

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