

EFFECTIVE DATE: 31 MARCH 2016

KNMI

Meteorological Services Information for TNCB, TNCE and TNCS

Page: GEN 2.7-1

Sunrise / sunset tables

1. The tables on the following pages have been prepared by the Meteorological Department Curaçao (MDC), Meteorological Department St. Maarten (MDS) and KNMI and are reproduced here with their permission. The tables include five (5) public airports and aerodromes in that part of the High Sea, which is being served by the Curaçao FIR and St. Maarten TMA its air traffic services.

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Meteorological services

1. Responsible service

MDC

The Meteorological Department Curaçao (MDC) is designated as the meteorological service provider for international air navigation in the Curaçao FIR and Curaçao.

Meteorological Department Curaçao

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The service is provided by officers of MDC within:

Meteorological Watch Office (MWO) MWO maintains watch over meteorological conditions affecting flight operations in the Curaçao FIR, and prepares and disseminates SIGMET information in relation to this area.

Meteorological office (MO) providing a range of forecasting functions for international air navigation for Curaçao.

Aeronautical Meteorological Stations (AMS) designated to maintain the observations for Curaçao; use in international air navigation.

in accordance with the provisions contained in the following ICAO-documents:

ICAO Annex 3 - Meteorological Service for International Air Navigation;
ICAO Doc 7030 - Regional Supplementary Procedures, Part 3;
ICAO Doc 8733 - Regional Air Navigation Plan - Caribbean and South American Regions.

KNMI

The Royal Netherlands Meteorological Institute (KNMI) is designated as the meteorological service provider for international air navigation for Bonaire, St. Eustatius and Saba.

KNMI Aviation Services is the subdivision of the Institute charged with the provision of meteorological information.

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3730 AE De Bilt
The Netherlands
Tel: +31 (0) 30-220-6721
Telefax: +31 (0) 30-221-1371
AFS: EHDBYZYX
e-mail: aviation@knmi.nl
URL: <http://www.knmi.nl>

Note: consult paragraph 4 for requests by telephone about meteorological information.

The service is provided by officers of KNMI within:

Meteorological office (MO) providing a range of forecasting functions for international air navigation for Bonaire.

Aeronautical Meteorological Stations (AMS) designated to maintain the observations for Bonaire for use in international air navigation.

in accordance with the provisions contained in the following ICAO-documents:

ICAO Annex 3 - Meteorological Service for International Air Navigation;
ICAO Doc 7030 - Regional Supplementary Procedures, Part 3;
ICAO Doc 8733 - Regional Air Navigation Plan - Caribbean and South American Regions.

MWO San Juan FIR,
Aviation Weather Center
7720 NW 101st Terrace
Kansas City, MO 64154
United States of America

MDS

Furthermore, the Meteorological Department St. Maarten (MDS) is responsible for providing all meteorological information for air navigation for St. Maarten. The MDS can be contacted:

Meteorological Department St. Maarten
Airport Road #69
Simpson Bay
St. Maarten N.A
Tel: +1 (721) 545-4226/2024
Telefax: +1 (721) 5452998
Email: meteo@sintmaartengov.org

2. Area of responsibility

The area of responsibility of MDC covers the Curaçao FIR, including the specific territories Curaçao. The area of responsibility of KNMI covers the specific territories Bonaire, and the territories St. Eustatius and Saba within other FIRs (San Juan FIR and the TMA of St. Maarten).

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3. Meteorological observations and reports

Name of station/ Location Indicator	Type & frequency of observation/ automatic observing	Types of MET reports & Supplementary Information included	Observation Systems & sites	Hours of operation	Climatological information
1	2	3	4	5	6
BONAIRE/ Flamingo Airport TNCB	Routine (hourly) and special observations	METAR SPECI	Cup anemometer, wind vane and barometer 115 m from center line and 450 m from threshold RWY10. Thermometer (1,5 m and 0,1 m), psychrometer, and rain gauge 165 m from centerline and 450 m from THR RWY10 Ceilometer 160 m from centerline Forward scatter sensor 105 m from centerline	1030-0130	Climatological tables and summaries available

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<p>ST. EUSTATIUS/ F.D. Roosevelt Airport TNCE</p>	<p>Routine (hourly) and special observations/ NIL</p>	<p><u>NIL</u></p>	<p>Cup anemometer, windvane and barometer 125 m from centerline RWY 06 and 325 m from threshold RWY 06 Thermometer (1,5 m and 0,1 m) 100 m from centerline, Psychrometer and rain gauge 135 m from centerline and 325 m from threshold RWY06</p>	<p><u>NIL</u></p>	<p>Climatological tables and summaries available</p>
<p>SABA/ Juancho Yrausquin Airport TNCS</p>	<p>Routine (hourly) and special observations/ NIL</p>	<p>NIL</p>	<p>NIL</p>	<p>NIL</p>	<p>Climatological tables will be build up as from January 1st, 2016</p>

4. Types of services provided

Briefing and Consultation

Personal briefing and consultation is available at the Air Traffic Service Reporting Office (ARO) located at Hato Curaçao International Airport and through telephone, e-mail, telex communication and closed circuit TV.

Briefing and consultation for Bonaire, St. Eustatius and Saba is provided by KNMI through telephone and internet (www.knmidc.org). See the Dutch Caribbean AIP, Chapter AD 2, table #2.11 for telephone number.

Personal briefing and consultation at Princess Juliana Airport, St. Maarten is provided by the MET office at the airport.

For all other aerodromes briefing and consultation is available from MDC: see AD 2 chapters #2.11 for telephone numbers.

Flight documentation

Flight documentation is normally not provided for flights between the Dutch Caribbean islands. For international flights within the Caribbean Area, this product is issued three times a day and comprises of a significant weather chart, upper wind and upper temperature chart and the latest available aerodrome forecast for the destination and if required, for its alternate aerodrome and is available on MDC's website under aviation and through email. To receive this product through email, a request should be send to forecaster@meteo.cw to be added on the list.

Flights to destinations outside the Caribbean Area will normally be provided with a prognostic upper-air chart for a standard level near the flight level, a significant weather chart and the latest available aerodrome forecasts for flights to Western Europe, North America, Brazil, Colombia and Suriname.

Flight documentation for Caribbean Netherlands is issued three times a day by KNMI and comprises of a significant weather chart, upper wind and upper temperature chart and the latest available aerodrome forecast for the destination and if required, for its alternate aerodrome and is available on KNMI's website under aviation (www.knmidc.org).

Flight documents for the Caribbean and European flights are also issued three times daily at the Meteorological Department St. Maarten (MDS) and can be found on the website at www.meteosxm.com.

Routine and Special reports

Hourly routine reports (METAR) are available for **Hato Curaçao International Airport (Curaçao) and Princess Juliana Airport (St. Maarten)** 24 hrs. a day.

If warranted, special reports (SPECI) will be issued for both Hato Curaçao International Airport and Princess Juliana Airport during these hours.

Hourly routine reports ((AUTO)METAR) are available for **Flamingo Airport (Bonaire)** 24 hrs. a day. If warranted, special reports (SPECI) will be issued during opening hours of the airport.

General Aviation Forecast

For the CUR/FIR SE a daily General Aviation Forecast (GAF ABC) is produced and made available on the website www.meteo.cw under aviation and through email. To receive this product through email, a request should be send to forecaster@meteo.cw to be added on the list. The validity period is 1200-2400 Z. (Levels of Coverage: MSL to FL100).

A General Aviation Forecast (GAF) is produced by the MDS for the St. Maarten TMA, and made available on the website www.meteosxm.com under aviation and through email. To receive this product through email, a request should be send to forecastersxm@gmail.com to be added on the list. The validity period is 1200-2400 Z. (Levels of Coverage: MSL to FL100).

Aerodrome Forecast (TAF)

Aerodrome forecasts are issued, for Curaçao with a validity of 24 hrs., starting from 00-06-12-and 18 UTC.

Aerodrome forecasts are issued, for Bonaire, with a validity of 30 hrs., starting from 00-06-12 and 18 UTC.

Amendments thereto are issued as necessary, when changes are expected during the period of validity of a given forecast.

Aerodrome Forecasts for St. Maarten are issued by San Juan and are valid for 24 hrs. and updated when necessary.

Trend Forecast

Trend forecasts are prepared and disseminated for Curaçao a validity of 2 hrs.

Trend forecasts are prepared and disseminated for St. Maarten with a validity of 2 hrs.

Aerodrome warnings

Aerodrome warnings are issued for Curaçao and Bonaire, for all aircraft, aerodrome facilities and services on that specific aerodrome for the following conditions:

- Tropical cyclone conditions (10 minutes mean surface winds are 34 kts or higher);
- Thunderstorms;

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- Gusts reaching 35 kts or higher;
- Crosswinds making runway unusable;
- Heavy showers with rainfall amounts affecting ground operations adversely;
- Squall lines;
- Volcanic ash;
- Tsunami;
- Dust storms or rising dust causing visibility of less than 5000 meters.

The information for Curaçao is made available on the website www.meteo.cw and through email to ATS units, and made available on the meteorological briefing display at the aerodrome. For Bonaire the aerodrome warnings are made available to BIA tower by telephone and through e-mail to ATS units.

5. Climatological information

Statistics of the observations made at the airports of Curaçao, Bonaire, St. Eustatius are issued annually. Climatological normals over a 30 year period are also available for Curaçao, Bonaire and St. Eustatius.

Climatological summaries of the observations made at the abovementioned airports may be requested at the following address:

Director Meteorological Department Curaçao
Meteorological Department
Kaya Afido z/n
Seru Mahuma
Curaçao

For St. Maarten, climatological summaries are issued monthly and annually and can be requested by email to meteo@sintmaartengov.org

6. Differences from ICAO Standards and Recommended Practices and Procedures

Instrument observations of low-level vertical wind shear are not available.
Runway Visual Range is not issued.

Local routine reports and local special reports are issued to ATS units (TWR, Area Control, ARO/AIS).

Local routine and local special reports are not issued for Bonaire.

METAR/SPECI and meteorological sensor information is available for aerodrome and ATC.

This AIP AIRAC Supplement will remain in force until the above mentioned information has been incorporated in the AIP. NOTAM will be published in due time.

Any questions and/or remarks, please contact the DC-ANSP AIS department Curaçao as soon as possible via above mentioned email address (aipaim@dc-ansp.org).