

DINA
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(NASA)

Bulletins émis par le CMRS de La Réunion

*Bulletins issued by the RSMC
of La Réunion*

Stage de formation sur les cyclones tropicaux
OMM/Météo-France oct–nov 2013
Training course on tropical cyclones oct-nov 2013

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METEO FRANCE
Toujours un temps d'avance

Avis/Bulletins émis par le CMRS

RSMC Advisories/Bulletins

Bulletins		Entête <i>Headline</i>	Heure de diffusion <i>Issuance Hours</i>
Bulletin technique de suivi quotidien (ZCIT) <i>Daily Tropical Weather Outlook (ITCZ)</i>	Français	AWIO21	SMT 12 UTC
	<i>English</i>	<i>AWIO20</i>	
Avis spécialisé pour la marine (BMS) <i>Marine warning</i>	Français	WTIO21	SMT 00, 06, 12, 18 UTC
	<i>English</i>	<i>WTIO20, 22, 24, 26</i>	
Bulletin technique d'analyse et de prévision cyclonique CMRS <i>RSMC Tropical Cyclone Analysis and Forecast Bulletin</i>	Français	WTIO31	SMT 00, 06, 12, 18 UTC
	<i>English</i>	<i>WTIO30</i>	
Avis consultatif pour l'aéronautique (OACI) <i>Aviation Tropical Cyclone Advisory (ICAO)</i>	<i>English</i>	<i>FKIO20</i>	RSFTA 00, 06, 12, 18 UTC SMT 00, 06, 12, 18 UTC
Bulletin « BUFR » <i>BUFR bulletin</i>	-	ATIO01	SMT 00, 06, 12, 18 UTC
Bulletin "Best track" <i>"Best track" bulletin</i>	-	AXIO20	SMT moins d'un mois après la fin de l'épisode cyclonique <i>Less than one month after the end of the system</i>

Bulletin sur l'activité cyclonique (ZCIT) *Cyclone activity bulletin (ITCZ)*

AWIO20 FMEE 020959

BULLETIN FOR CYCLONIC ACTIVITY AND SIGNIFICANT TROPICAL WEATHER IN
THE SOUTHWEST INDIAN OCEAN

DATE: 2010/02/02 AT 1200 UTC

PART 1 :

WARNING SUMMARY :

Warning nr 03/11 related to the moderate tropical storm FAMI,
issued at 0600Z

Next warning at 1200Z

PART 2 :

TROPICAL WEATHER DISCUSSION :

Transequatorial monsoon flow is moderate to rather strong between
African coastline and 55E and extends up to 18S.

Poleward, a broad talweg extends to 73E and due to the lack of
trade winds flow, ITCZ is only sustained equatorward.

Over the Mozambique Channel,
at the rear of a trough passing to
the South, the associated southerly flow and the monsoon flow feed
the moderate tropical storm FAMI (named at 0600Z).

Over the Indian Ocean, deep convective activity is scattered and
fluctuating between equator and 10S,
east of 63E.

System n 11 :

The system has landed at about 0900Z on the Malagasy west coast in
the vicinity of Belo.

Located at 0930Z, near 20.9S et 43.9E, movement East at 7 kt.

MSLP estimated at 992 hPa.

Max average wind speed (10 min) 45 kt.

Elsewhere there is no other suspect area.

For further details, see warnings n 03/11 and followings

For the next 48 hours, there is no potential for development
of an other tropical depression

•Emis avant 12 TU

•*issued before 12 UTC*

•Bulletin technique pour les
services météo de la zone

•*Technical bulletin for
meteorological services of the
area*

Description de l'activité
convective au sein de la ZCIT, des
minima et de leur potentiel de
développement en dépression
tropicale ($C_i \geq 2.5$)

*Description of the ITCZ
convective activity, the observed
lows and their potential for
development as a tropical
depression ($C_i \geq 2.5$)*



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Avis pour la Marine BMS

Marine warning

Système Mondial de Détresse et de Sécurité en Mer (SMDSM)

Global Maritime Distress and Safety System (GMDSS)

- Emis toutes les 6 heures à 00, 06, 12, 18 TU / *Issued every 6 hours*
- A destination des bateaux / *For boats*
- Prévisions jusqu'à 24h
- *24 hours forecasts*

Avertissement *Warning* (<28kt)

Grand frais *near gale* (28-33kt)

Coup de vent *gale* (34-47kt)

Tempête *storm* (48-63kt)

Ouragan *hurricane* (>64kt)

Précision de la position *Location accuracy* : de 20 MN à 90 MN

WTIO20 FMEE 190015

PAN PAN

HURRICANE WARNING FOR METAREA VIII (S)

ISSUED BY METEO-FRANCE/TROPICAL CYCLONE CENTRE/LA REUNION 19/02/2010 AT 0000 UTC.

WARNING NUMBER: 016/12 (SOUTH-WEST INDIAN OCEAN)

10 MINUTES AVERAGE WIND SPEED IN KNOTS (KT)

(WIND GUSTS AT SEA MAY BE ABOUT 40% STRONGER THAN THE AVERAGED WIND).

MINIMUM SEA LEVEL PRESSURE IN HECTOPASCALS (HPA)

(INDICATIVE FIGURE).

HURRICANE WARNING

BEGINNING OF VALIDITY: FRIDAY 19/02/2010 AT 0000 UTC.

PHENOMENON: TROPICAL CYCLONE 12 (GELANE) 968 HPA

POSITION: 16.3S / 62.3E

(SIXTEEN DECIMAL THREE DEGREES SOUTH AND SIXTY TWO DECIMAL THREE DEGREES

DEGREES

EAST) AT 0000 UTC

MOVEMENT: SOUTH 6 KT

THREAT AREAS:

SQUALLY WEATHER EXISTS WITHIN 70 NM RADIUS FROM THE CENTRE , EXTENDING UP TO 200 NM IN THE SOUTHERN SEMI-CERCLE.

HURRICANE FORCE WINDS 65/75 KT AND VERY HIGH TO PHENOMENAL SEAS WITHIN 10 NM RADIUS OF THE CENTER.

STORM FORCE WINDS 50/60 KT AND HIGH TO VERY HIGH SEAS WITHIN 15 NM RADIUS OF THE CENTER EXTENDING UP TO 25 NM IN THE SOUTHERN SEMI-CIRCLE.

GALE FORCE WINDS 35/45 KT AND VERY ROUGH TO HIGH SEAS WITHIN 30 NM RADIUS OF THE CENTER EXTENDING UP TO 60 NM IN THE SOUTHWESTERN SEMI-CIRCLE.

NEAR GALE FORCE WINDS 30KT AND ROUGH TO VERY ROUGH SEAS WITHIN 50 NM RADIUS OF THE CENTER , 150 NM IN THE SOUTHERN SEMI-CERCLE.

STRONG GUSTS UNDER SQUALLS.

FORECAST POSITION AND INTENSITY:

12H, VALID 2010/02/19 AT 12 UTC:

17.5S / 61.8E, MAX WIND = 75 KT, TROPICAL CYCLONE.

24H, VALID 2010/02/20 AT 00 UTC:

18.5S / 61.1E, MAX WIND = 65 KT, TROPICAL CYCLONE.

OTHER INFORMATION:

THE INTENSITY OF THE SYSTEM HAS SLIGHTLY INCREASE DURING THE LAST HOURS. IT TRACKS VERY SLOWLY SOUTHWARDS, BUT IS EXPECTED TO RECURVE PROGRESSIVELY SOUTH-SOUTHWESTWARDS THEN SOUTHWESTWARDS .



METEO FRANCE
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Bulletin CMRS

RSMC tropical cyclone advisory

- Emis toutes les 6 heures à 00, 06, 12, 18 TU
- issued every 6 hours at 00, 06, 12, 18 UTC*
- Bulletin technique pour les services météo de la zone
- Technical bulletin for meteorological services of the area*
- Prévisions toutes les 12h jusqu'à 120h
- Forecasts each 12 h up to 120 h*

Précision de la position *Location accuracy* : de 20 MN à 90 MN

Analyse Dvorak *Dvorak analysis*

D : Developing
S : Stationary
W : Weakening

Extension des vents *Extension of winds*

Force du grand frais *Gale force winds (ref. 30kt)*
Force de la tempête *Storm force winds (ref. 50kt)*

WTIO30 FMEE 190015

RSMC / TROPICAL CYCLONE CENTRE / LA REUNION
TROPICAL CYCLONE TECHNICAL BULLETIN (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER : 16/12/20092010

1.A TROPICAL CYCLONE 12 (GELANE)

2.A POSITION 2010/02/19 AT 0000 UTC :

16.3S / 62.3E

(SIXTEEN DECIMAL THREE DEGREES SOUTH AND SIXTY TWO DECIMAL THREE DEGREES EAST)

MOVEMENT : SOUTH 6 KT

3.A DVORAK ANALYSIS : 5.0/5.0 /D

4.A CENTRAL PRESSURE : 968 HPA

5.A MAX AVERAGE WIND SPEED (10 MN) : 75 KT

RADIUS OF MAXIMUM WINDS (RMW) : 15 KM

6.A EXTENSION OF WINDS BY QUADRANTS (KM):

30 KT	NE: 080	SE: 280	SO: 200	NO: 080
50 KT	NE: 030	SE: 040	SO: 040	NO: 030

7.A FIRST CLOSED ISOBARE (PRESSURE / AVERAGE DIAM): 1010 HPA / 400 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS:

12H: 2010/02/19 12 UTC: 17.5S/61.8E, MAX WIND=075KT, TROPICAL CYCLONE.

24H: 2010/02/20 00 UTC: 18.5S/61.1E, MAX WIND=065KT, TROPICAL CYCLONE.

36H: 2010/02/20 12 UTC: 19.4S/60.6E, MAX WIND=050KT, SEVERE TROP. STORM.

48H: 2010/02/21 00 UTC: 19.8S/60.2E, MAX WIND=035KT, MODERATE TROP. STORM

60H: 2010/02/21 12 UTC: 20.5S/59.6E, MAX WIND=030KT, TROP. DEPRESSION.

72H: 2010/02/22 00 UTC: 21.2S/58.9E, MAX WIND=025KT, TROP. DISTURBANCE.

2.B OTHER INFORMATION:

T=5.0-; CI=5.0-

SYSTEM REACHED AGAIN THE STAGE OF TROPICAL CYCLONE AND THE SYSTEM HAS

SLIGHTLY INTENSIFY, (COLDER CDO). ACCORDING TO ASCAT DATA AT 1756Z AND MW

SSMIS AT 1519Z, GELANE IS CALLED A MIDGET AND MW AQUA AT 2131Z SHOWS A

LITTLE TILD BETWEEN 37 AND 85 CHANNELS.

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FORECAST POSITIIONS BEYOND TAU 72H:

096H: 2010/02/23 00 UTC: 23.8S/56.0E, MAX WIND=025KT, TROPICAL DIST.

120H: 2010/02/24 00 UTC: 25.7S/52.2E, MAX WIND=025KT, TROPICAL DIST.

Avis consultatif pour l'aéronautique (OACI)
Cyclone advisory for aeronautical purpose

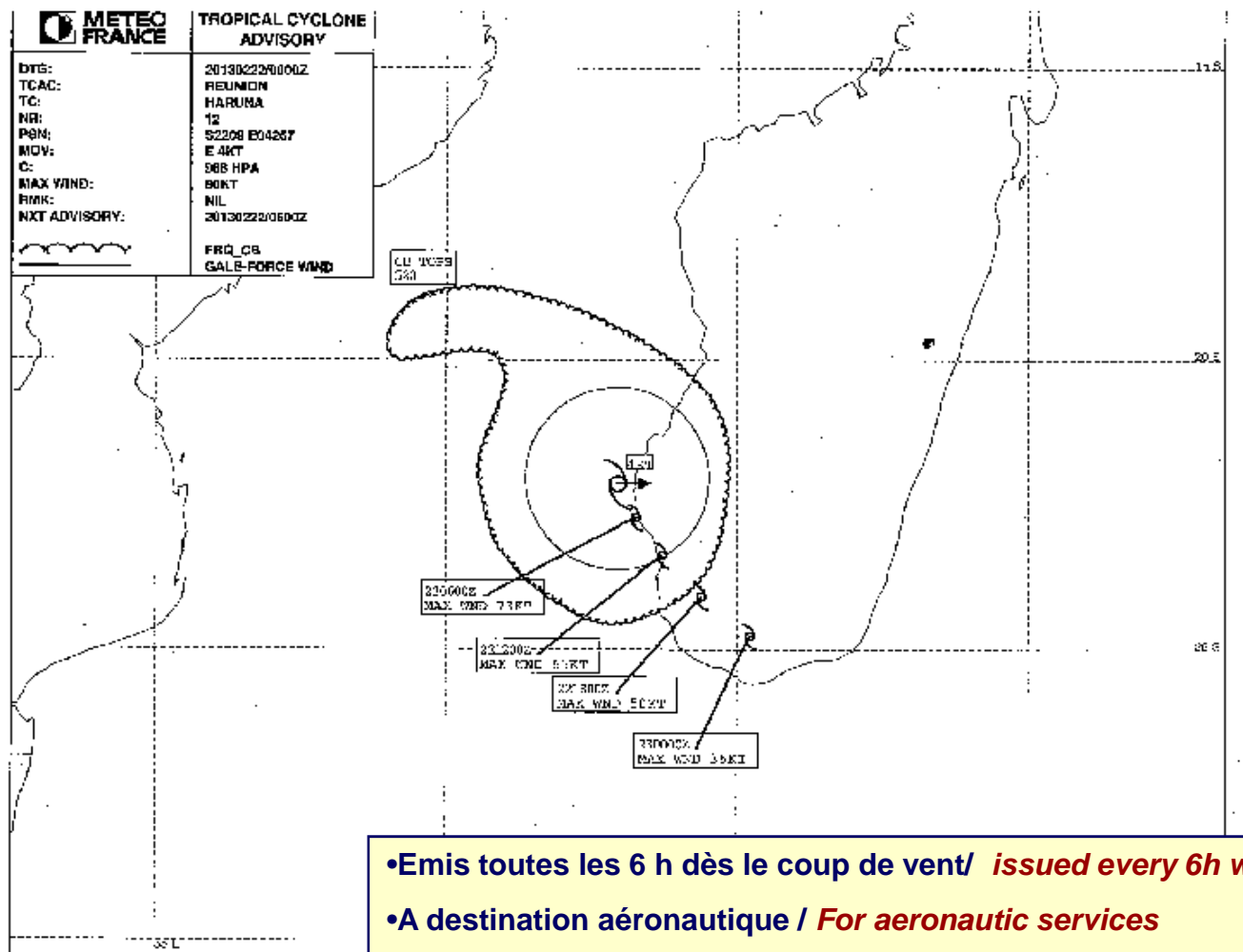
- Centre Consultatif pour les Cyclones Tropicaux dans la région AFI (OACI)
•***Regional Tropical Cyclone Advisory Center designated by ICAO***

- Emis toutes les 6 h dès le coup de vent / ***issued every 6h when gale winds***
- A destination aéronautique / ***For aeronautic services***
- Prévisions toutes les 6h de 12h à 24h / ***Forecasts every 6h from 12h to 24h.***

FKIO20 FMEE 220013
TC ADVISORY
DTG: 20130222/0000Z
TCAC: REUNION
TC:HARUNA
NR:12
PSN: S2209 E04257
MOV: E 04 KT
C: 968 HPA
MAX WIND: 80 KT
FCST PSN +06HR: 22/0600Z S2244 E04316
FCST MAX WIND +06HR: 73 KT
FCST PSN +12HR: 22/1200Z S2323 E04343
FCST MAX WIND +12HR: 65 KT
FCST PSN +18HR: 22/1800Z S2406 E04423
FCST MAX WIND +18HR: 50 KT
FCST PSN +24HR: 23/0000Z S2446 E04514
FCST MAX WIND +24HR: 35 KT
RMK : NIL.
NXT MSG: 20130222/0600Z



Avis consultatif graphique pour l'aéronautique (OACI) Tropical Cyclone Advisory Graph for aeronautical purpose



- Emis toutes les 6 h dès le coup de vent/ *issued every 6h when gale winds*
- A destination aéronautique / *For aeronautic services*
- Prévisions toutes les 6h de 12h à 24h / *Forecasts every 6h from 12h to 24h.*

Messages pour les Centres de prévision numérique (BUFR) *Technical messages for NWP centres*

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BUFR3 9 0 0 25 7 0 03 10 02 00 0 1 10 42 0
001033 001025 001027 3010 11 301012 301023 008012 002041 0 1900 1 202129 20113 1 019005 201000 202000 0 19006 019008
008005 010051 008005 010051 0 19007 008005 00802 1 202129 201129 011042 201000 202000 0 19007 008005 109000 031001
202129 201129 0 19003 201000 202000 103004 005021 005021 0 19009 205082
001033 1 25
001025 2 01S
001027 2 ABAIMBA
00400 1 1 2003
004002 1 10
004003 1 02
004004 1 00
004005 1 00
005002 1 -05.2
006002 1 067.0
008012 1 1
00204 1 10
I
(.....)

00502 1 1 360
0 19009 1 200000
0 19003 1 24.5
00502 1 1 0
00502 1 1 90
0 19009 1 4095000
00502 1 1 90
00502 1 1 180
0 19009 1 4095000
00502 1 1 180
00502 1 1 270
0 19009 1 4095000
00502 1 1 270
00502 1 1 360
0 19009 1 4095000
205082 2 BUFR/REUNION/ANAL YSE/CYCLONE ABAIMBA 02/10/2003 0000 UTC TEMPETE TROPICALE MODERE
1
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- **Emis toutes les 6 heures / *issued every 6 hours***

- **A destination des modèles numériques pour initialisation (BKNL, Arpège, Aladin) / *Destinated to NWP models (BKNL...) for their bogus***

- **Analyse du système avec extension des vents de 30kt et 50kt par quadrant, pas de prévision / *Only analyse (no forecast) with winds of 30kt and 50kt for each quadrant***

- **Contrôle des prévisions / *Forecast verifications***

WEBCMRS

http://www.meteo.fr/temps/domtom/La_Reunion/webcmrs9.0/

Site internet du CMRS La Réunion (accès libre) *RSMC La Reunion Internet web site (free access)*

Le système d'alerte à La Réunion

Pré-alerte cyclonique : mise en garde contre le péril cyclonique.

Une perturbation tropicale évolue dans la zone et représente une menace potentielle pour La Réunion dans les jours qui viennent (au-delà de 24 h).

Alerte orange: la menace cyclonique se précise.

Il peut y avoir danger pour le département dans les 24 heures à venir.

Les établissements scolaires et les crèches ferment, mais la vie économique continue.

Alerte rouge: le danger cyclonique est imminent.

Le phénomène affectera La Réunion dans les heures qui viennent.

Il est alors interdit de circuler.

Le passage en alerte rouge est annoncé avec un préavis de 3 heures pour permettre à la population de se mettre à l'abri.

Phase de prudence: la menace cyclonique est écartée, mais des dangers subsistent

Etablissements scolaires et crèches restent fermés,
mais la vie économique reprend.

The Alert system in Reunion Island

Cyclonic pre-alert : warning for cyclone risk

A tropical depression exists in the area and can be a potential threat for Reunion Island during the next days (beyond 24 hours)

Orange alert : the cyclonic threat is more precise

There can be a danger for the department within the next 24 hours. Schools and nurseries are closed, but economic life continues.

Red alert: imminent danger

La Reunion Island will be touched within next hours. It is forbidden to move in roads, people have to stay where they are.

Announced 3 hours before, to allow people to take shelter.

Prudence phase: there is no cyclonic threat anymore, but it remains some dangers.

Schools and nurseries remain closed, but economic life can start again.