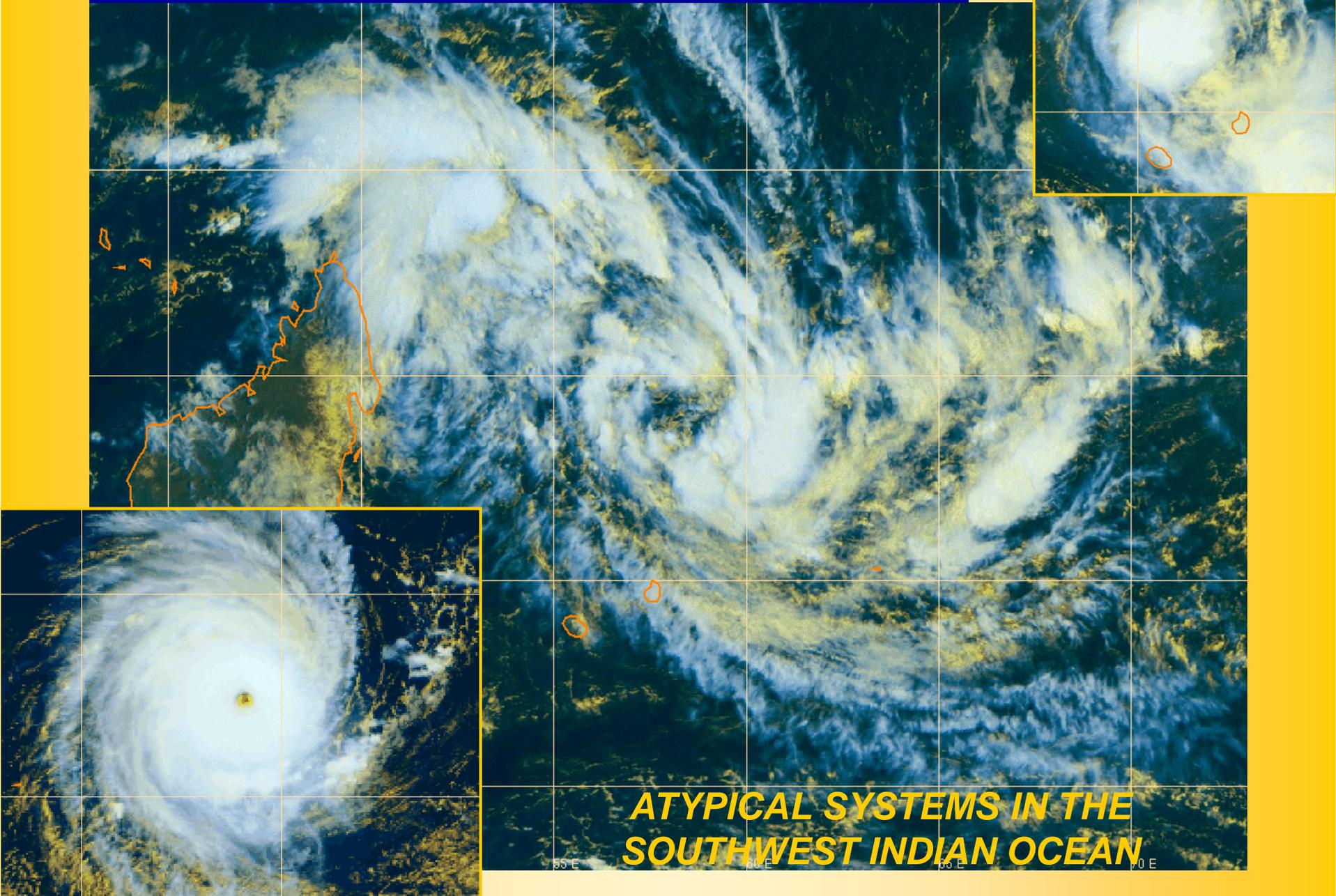


SYSTEMES DEPRESSIONNAIRES ATYPIQUES DANS LE SUD-OUEST DE L'OCEAN INDIEN



**ATYPICAL SYSTEMS IN THE
SOUTHWEST INDIAN OCEAN**

Une **dépression de mousson** est un vortex cyclonique se développant au sein du talweg de mousson et caractérisé par :

A monsoon depression is a tropical cyclonic vortex characterized by :

(1) *its large size, the outer-most closed isobar may have a diameter on the order of 600 nm (1000 km)*

une **extension importante**, avec un diamètre de la première isobare fermée de l'ordre de 1000 km.

(2) *a loosely-organized cluster of deep convective elements*

des **éléments convectifs** présents sous forme d'amas de convection profonde généralement **peu ou mal organisés**, mais formant assez fréquemment une bande allongée de convection dans le demi-cercle est de la circulation nuageuse.

(3) *a low-level wind distribution which features a 100 nm diameter light-wind core which may be partially surrounded by a band of gales (gale force winds > 33 kt)*

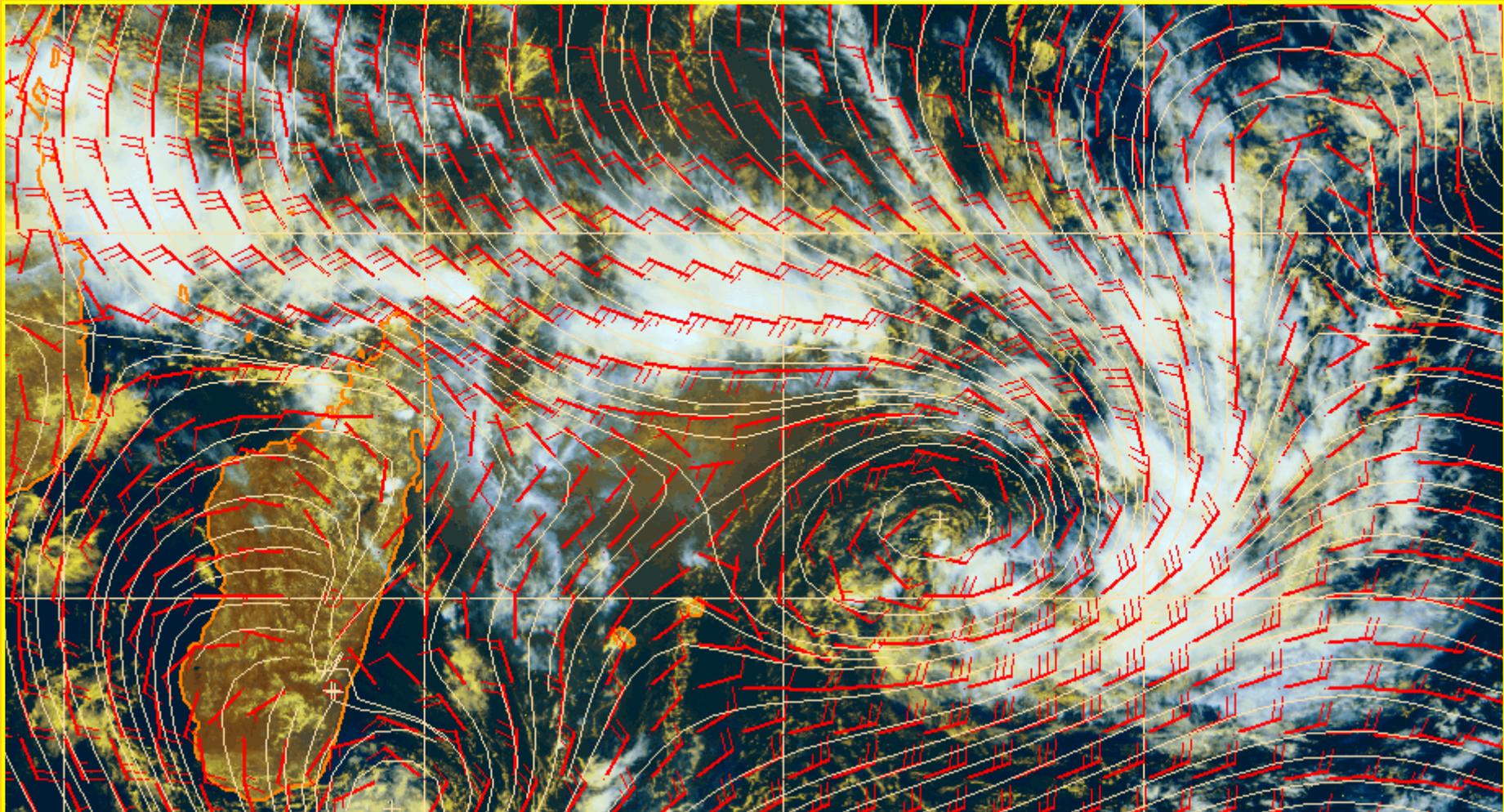
un champ de vent en surface et dans les basses couches de l'atmosphère présentant un **coeur central de vent faibles** faisant typiquement de 150 à 200 km de diamètre et généralement **partiellement entouré par une bande de vents forts** (grand frais à coup de vent), avec une structure très asymétrique.

(4) *a lack of a distinct cloud system centre.*

l'absence d'un centre du système nuageux clairement identifié.

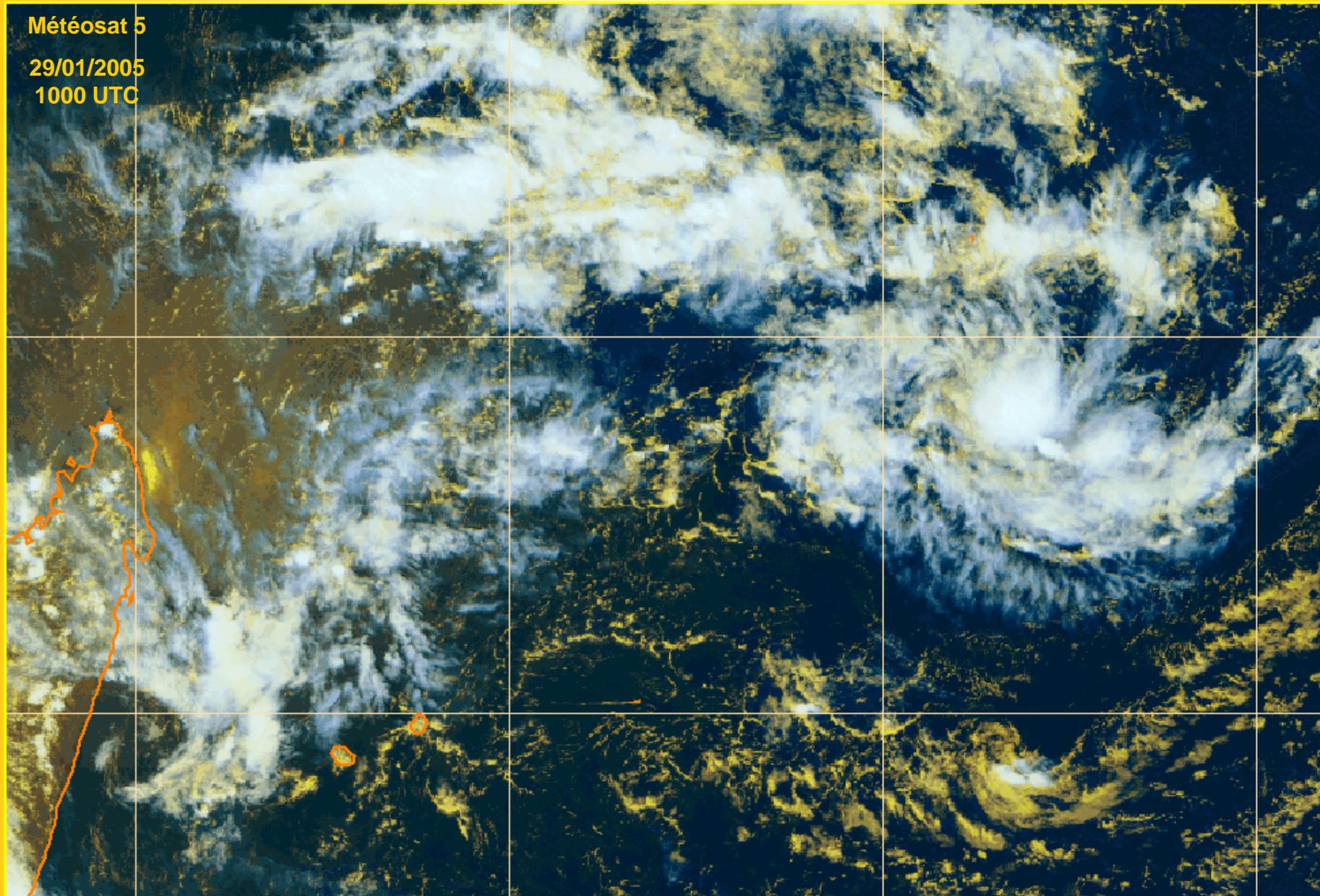
Nombre de ces dépressions de mousson finissent par développer un noyau central persistant de convection profonde et par évoluer en système dépressionnaire classique.

DEPRESSIONS DE MOUSSON : l'exemple de GERARD

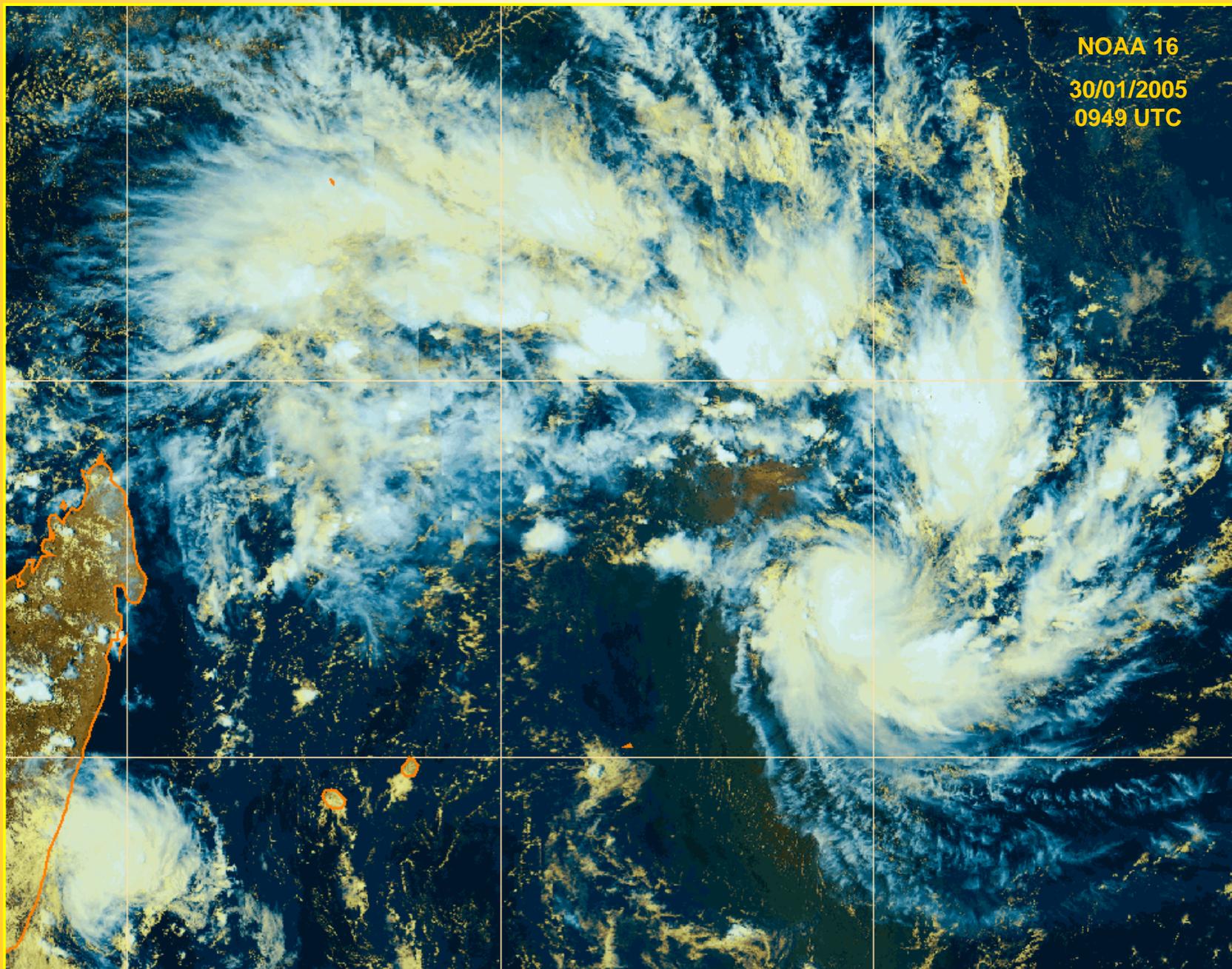


Champ de vents à 925 hPa superposé à l'image Météosat 5 du 01/02/2005 à 0930 utc.

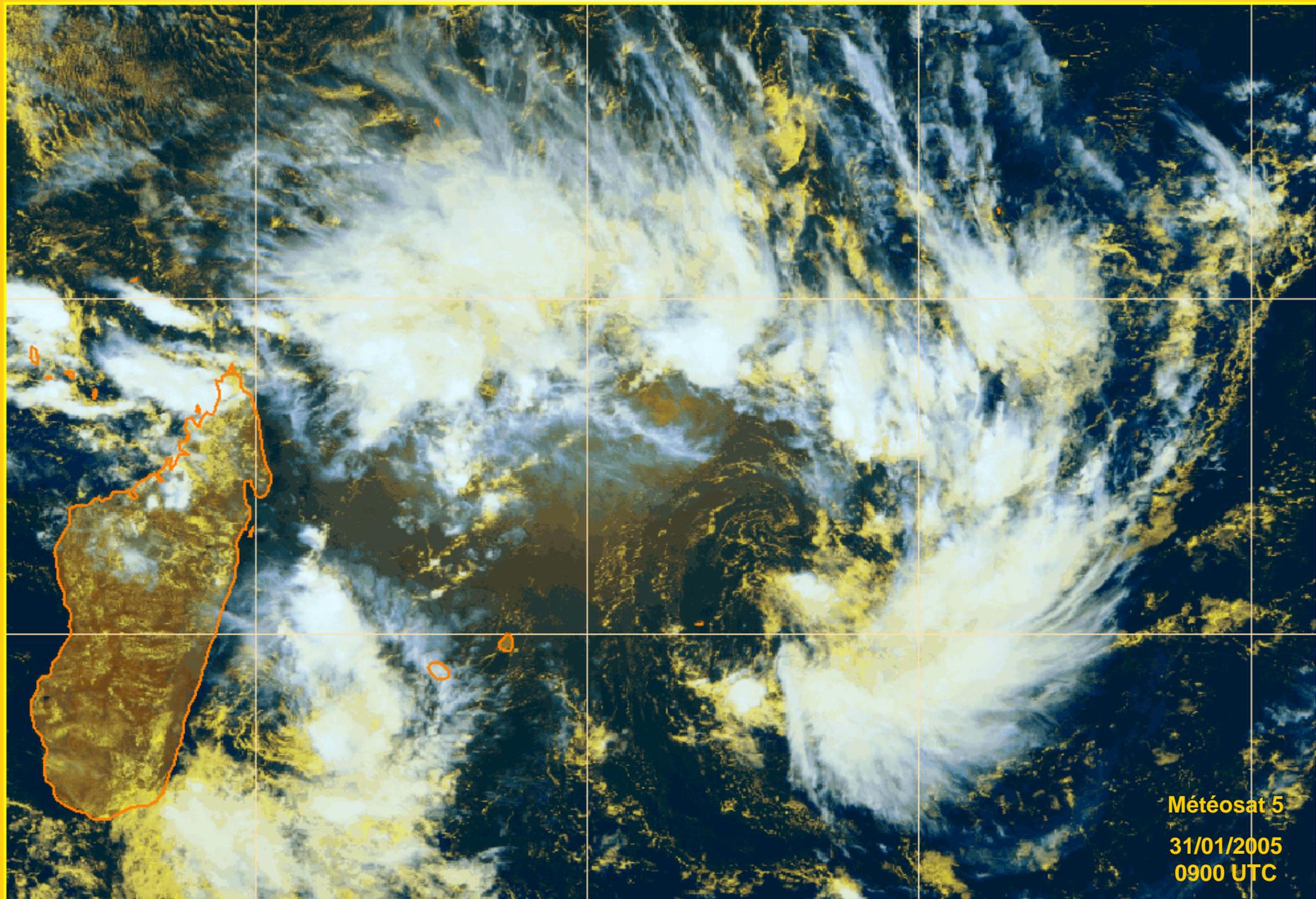
MONSOON DEPRESSIONS : the case of to-be GERARD

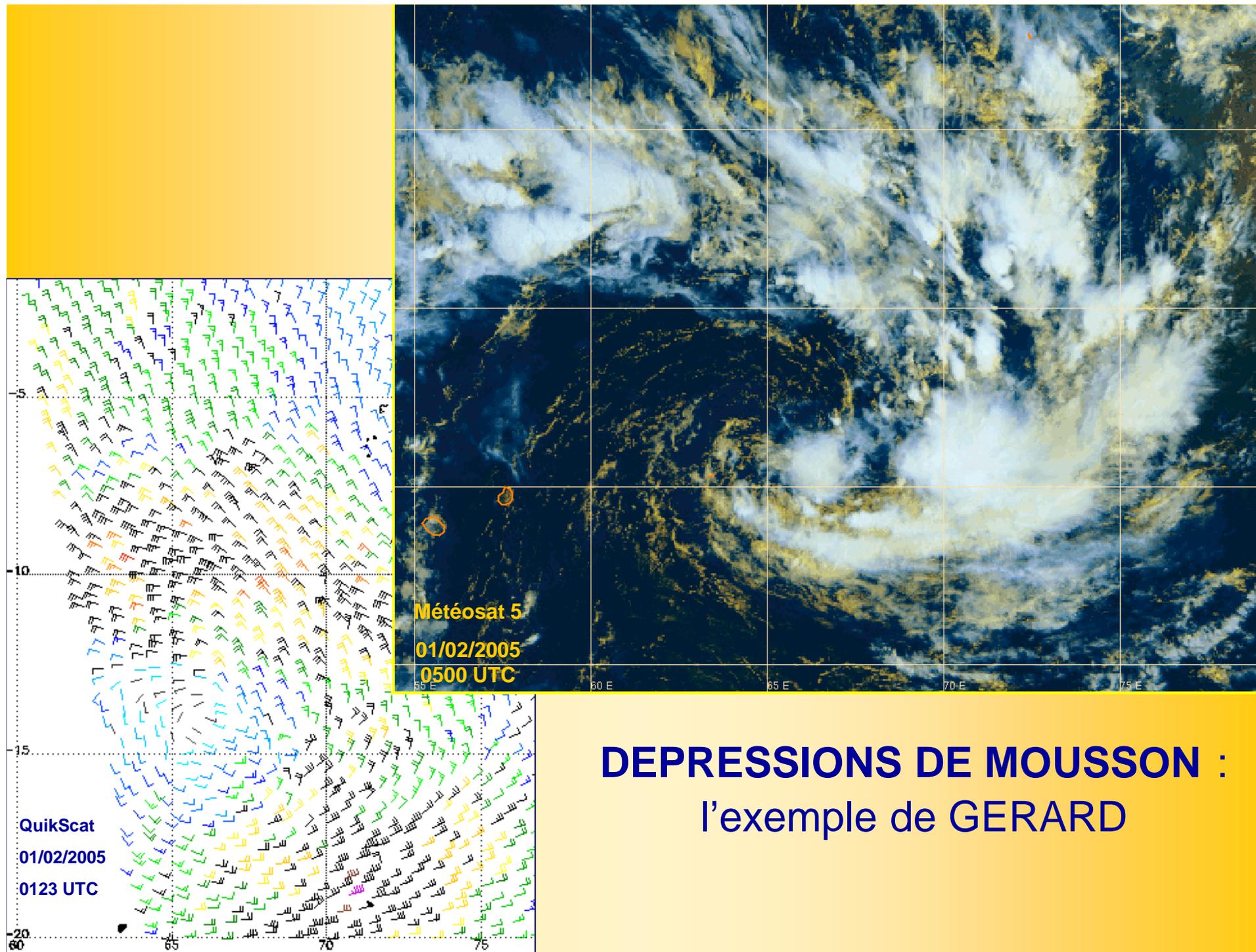


DEPRESSIONS DE MOUSSON : l'exemple de GERARD

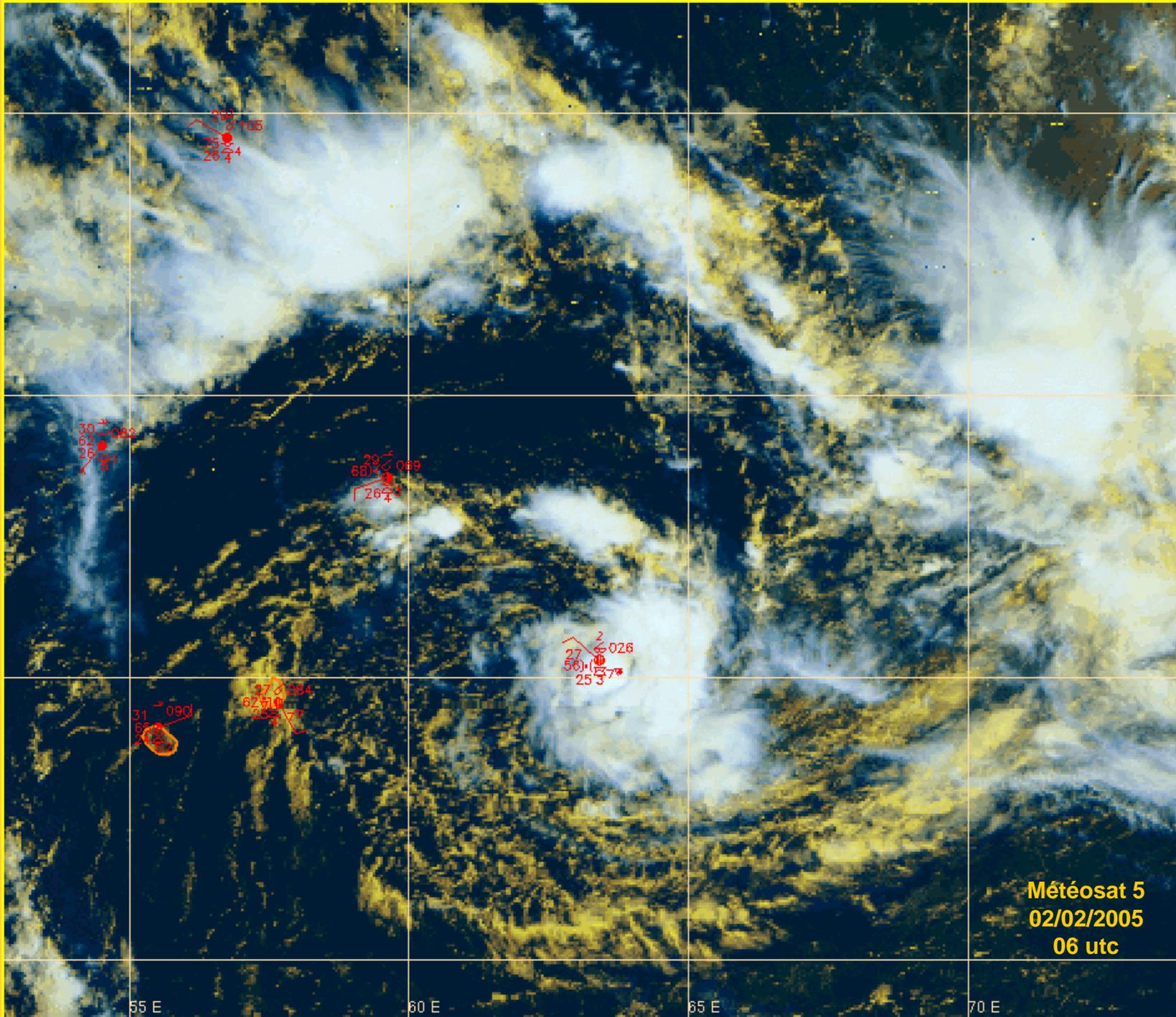


MONSOON DEPRESSIONS : the case of to-be GERARD





DEPRESSIONS DE MOUSSON : l'exemple de GERARD



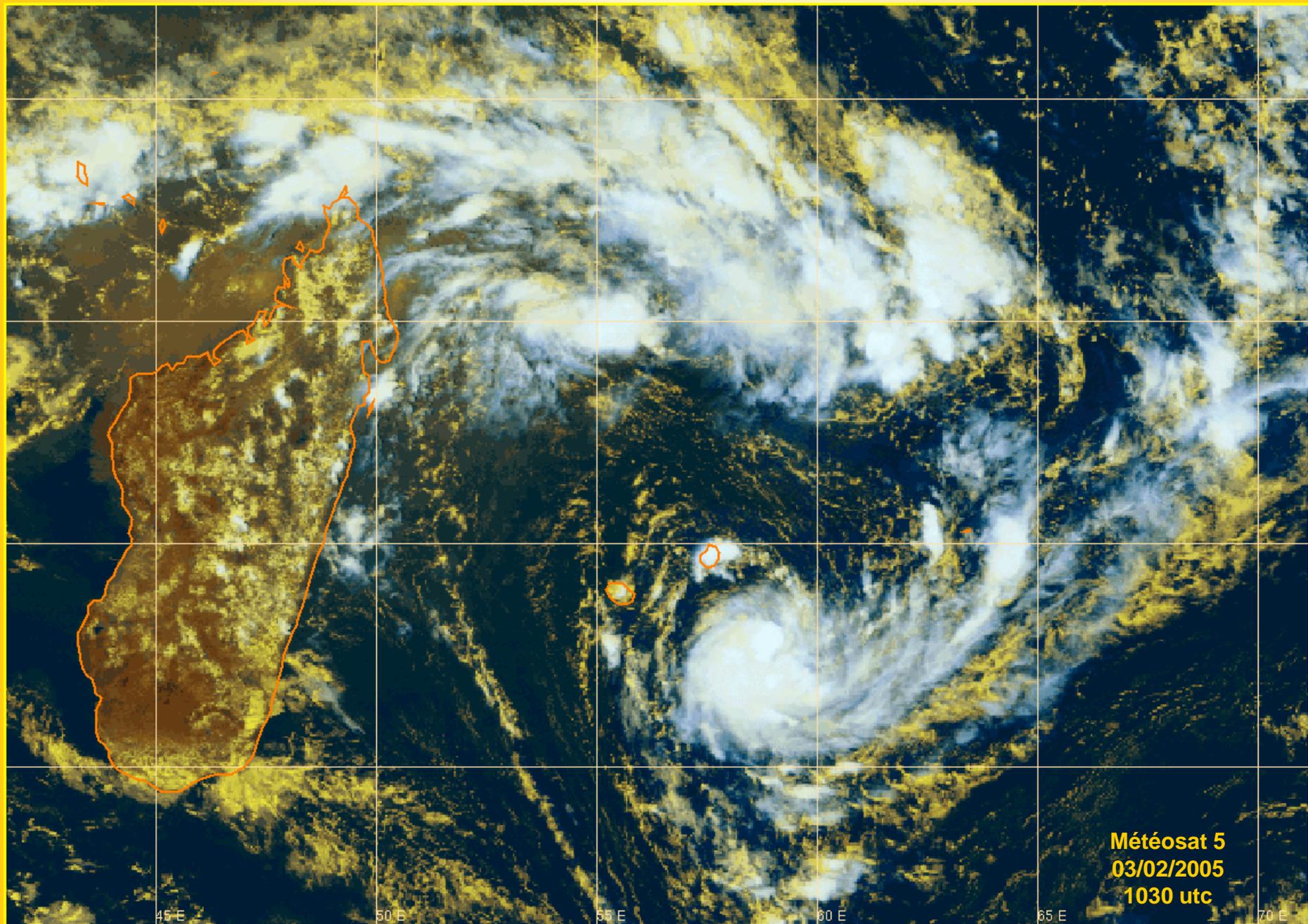
Météosat 5
02/02/2005
06 utc

55 E

60 E

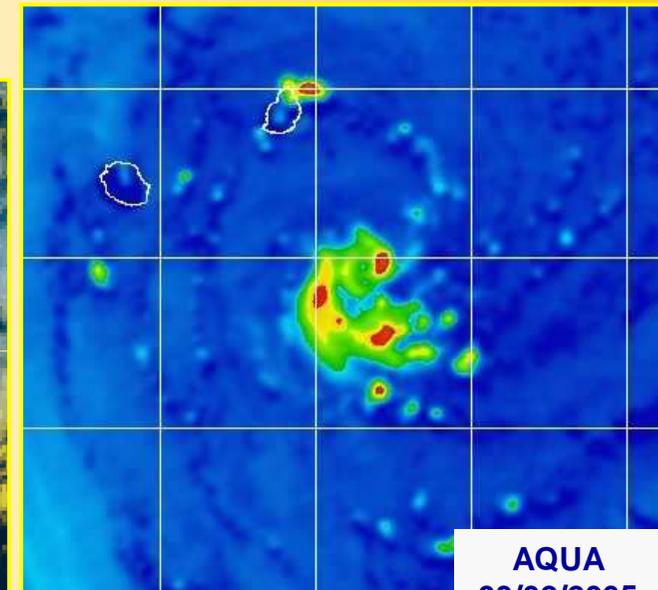
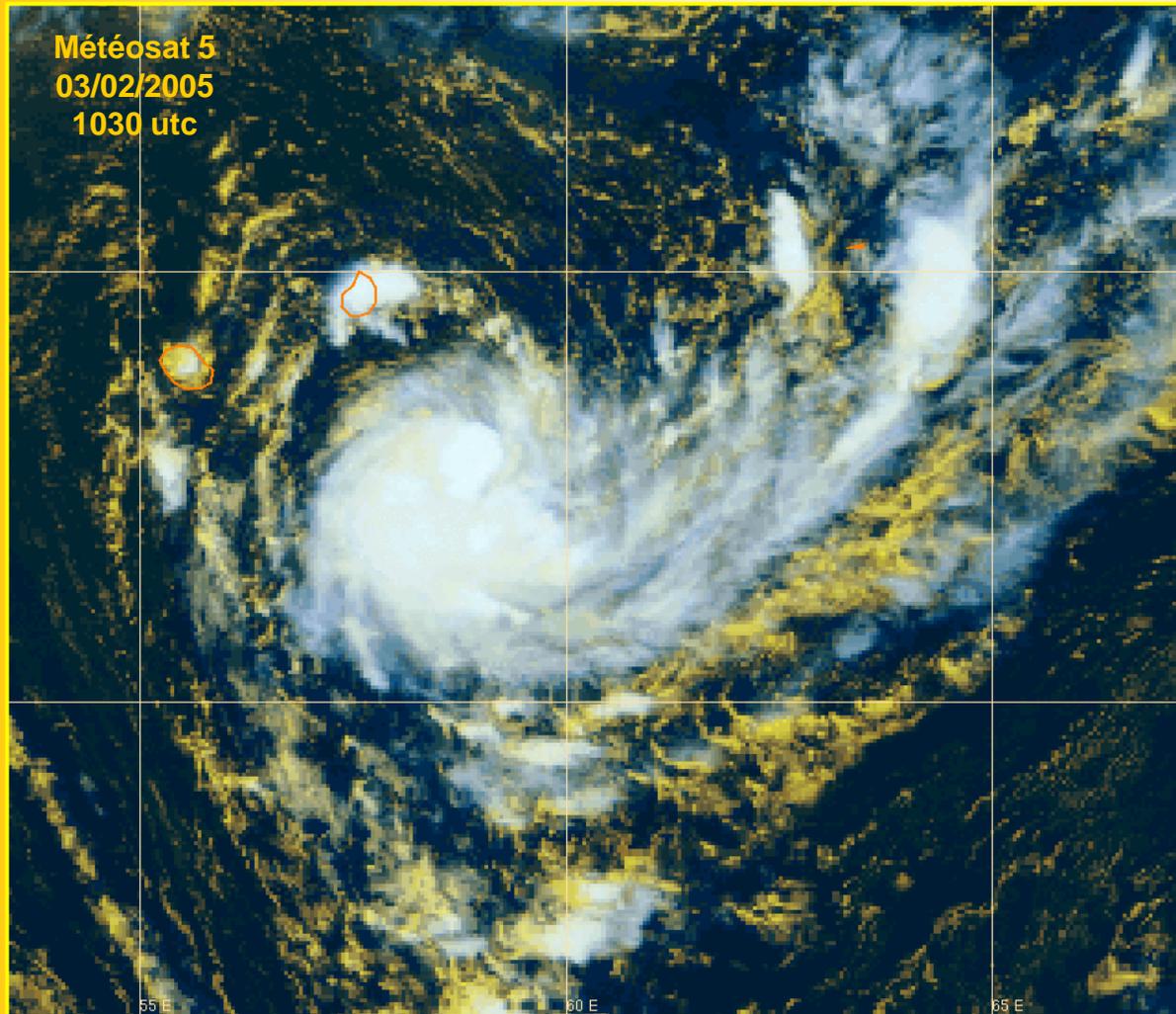
65 E

70 E

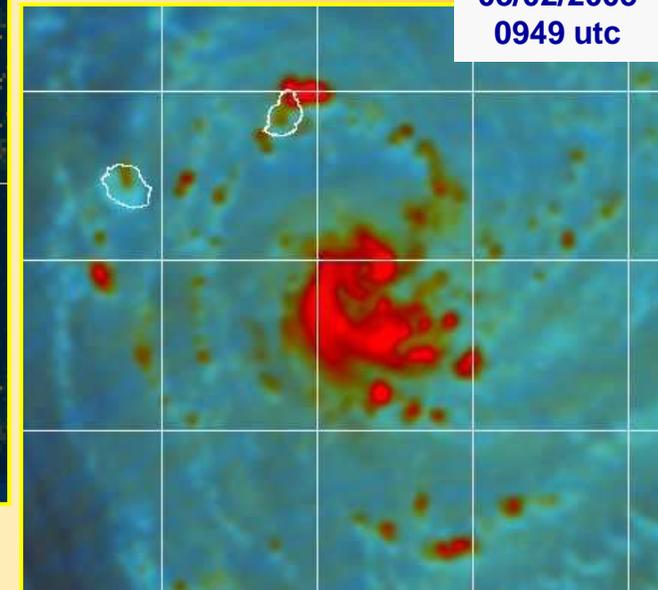


Genèse de GERARD à proximité sud de l'archipel des Mascareignes.

DEPRESSIONS DE MOUSSON : l'exemple de GERARD

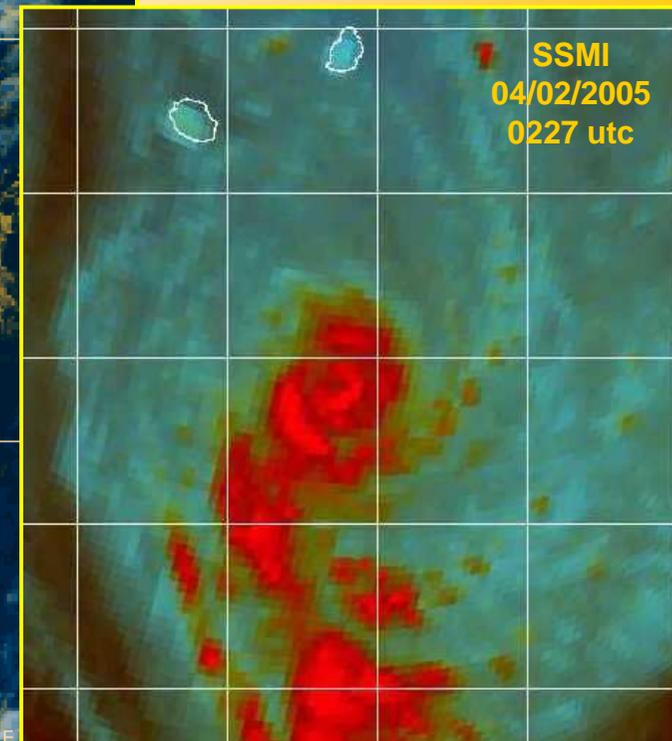
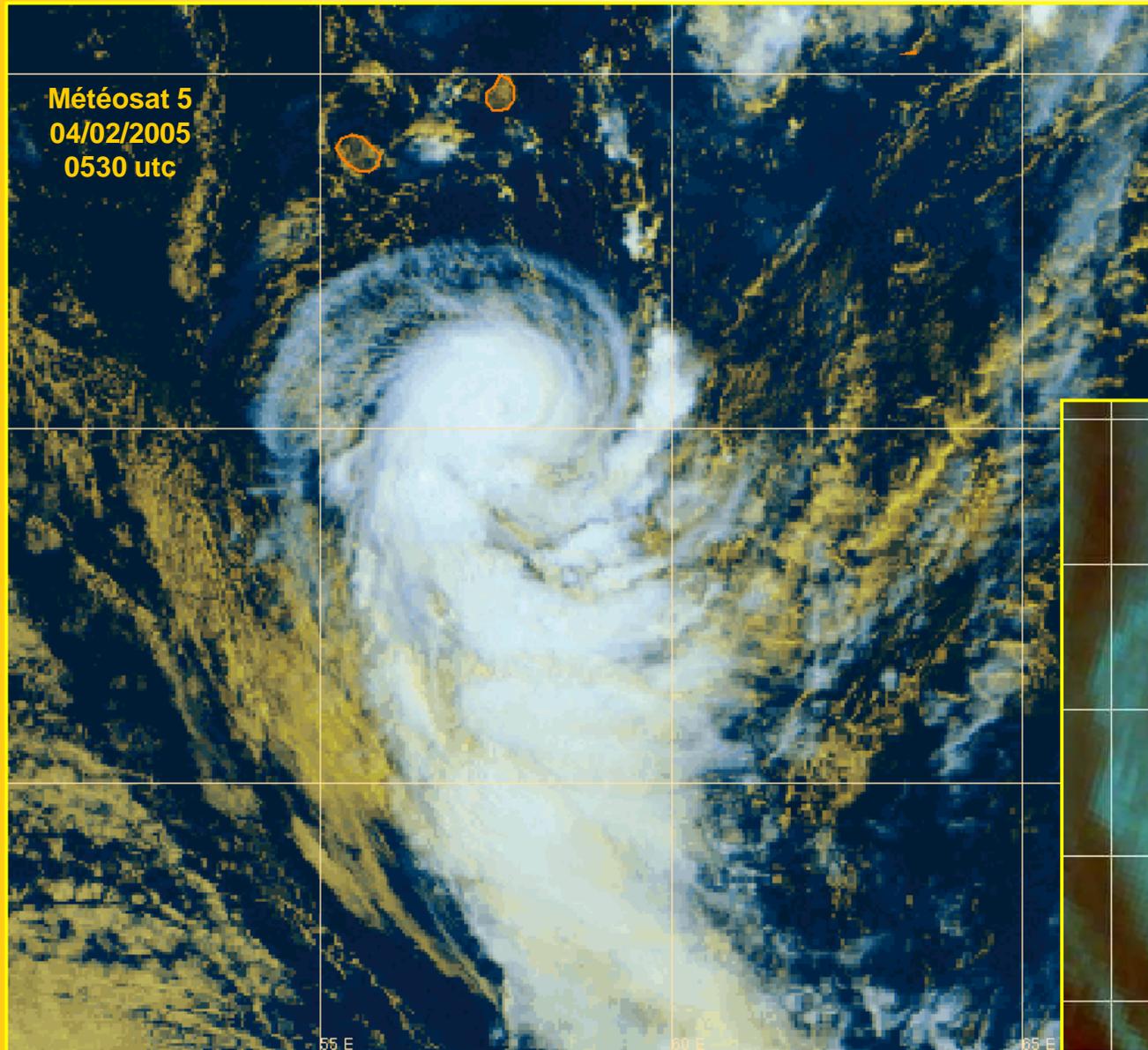


AQUA
03/02/2005
0949 utc



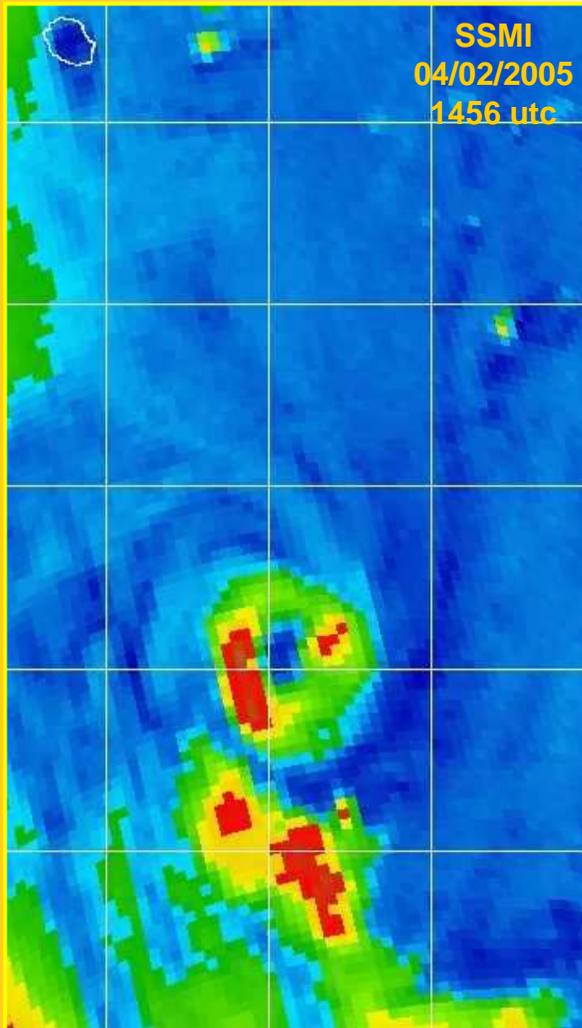
Genesis of GERARD nearby to the south of the Mascarene Archipelago : Dvorak intensity Ci = 2.5

MONSOON DEPRESSIONS : the case of GERARD

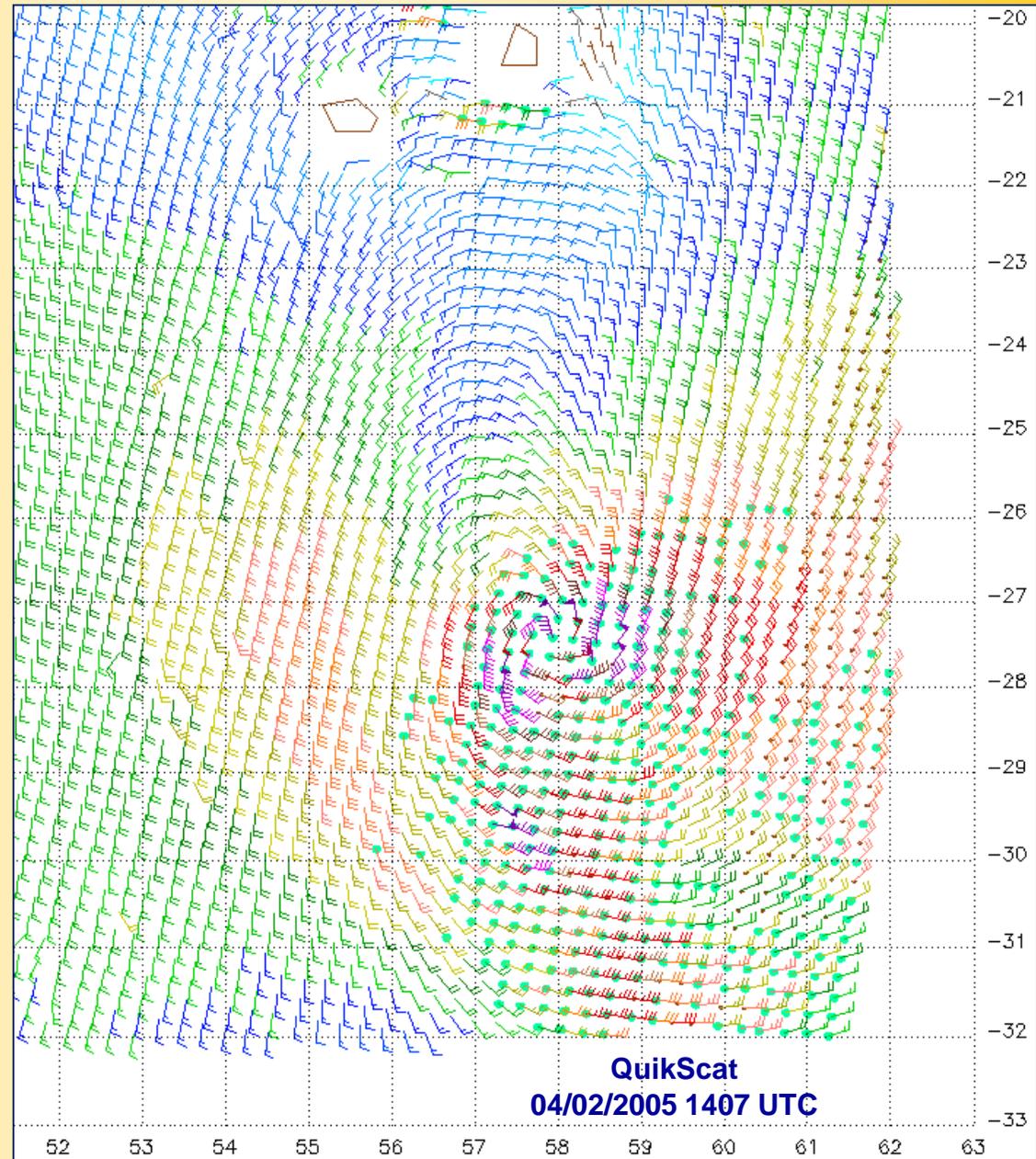


GERARD forte tempête tropicale : intensité Ci = 4.0

DEPRESSIONS DE MOUSSON : l'exemple de GERARD

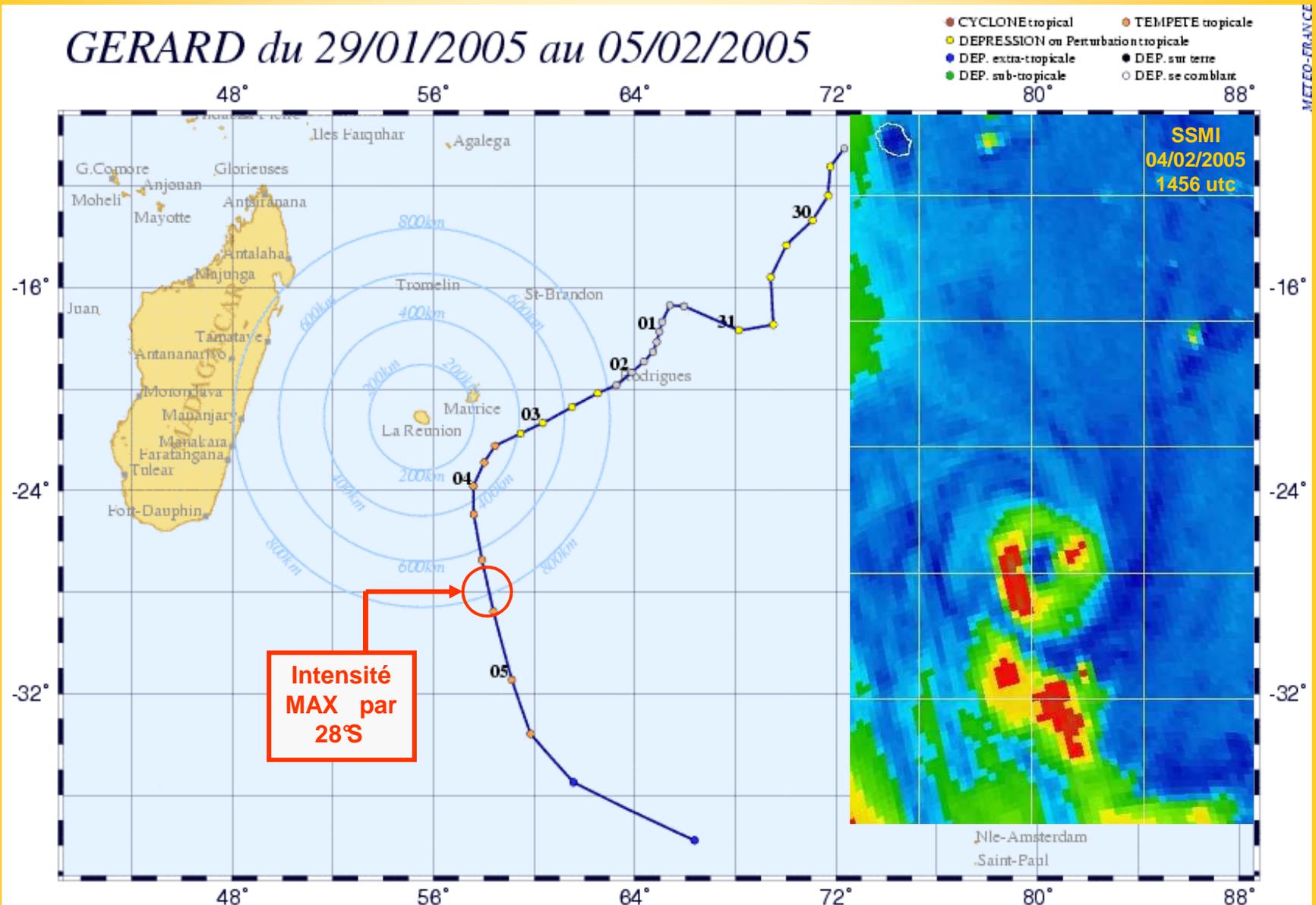


**GERARD à son maximum
d'intensité : Ci = 4.5-**



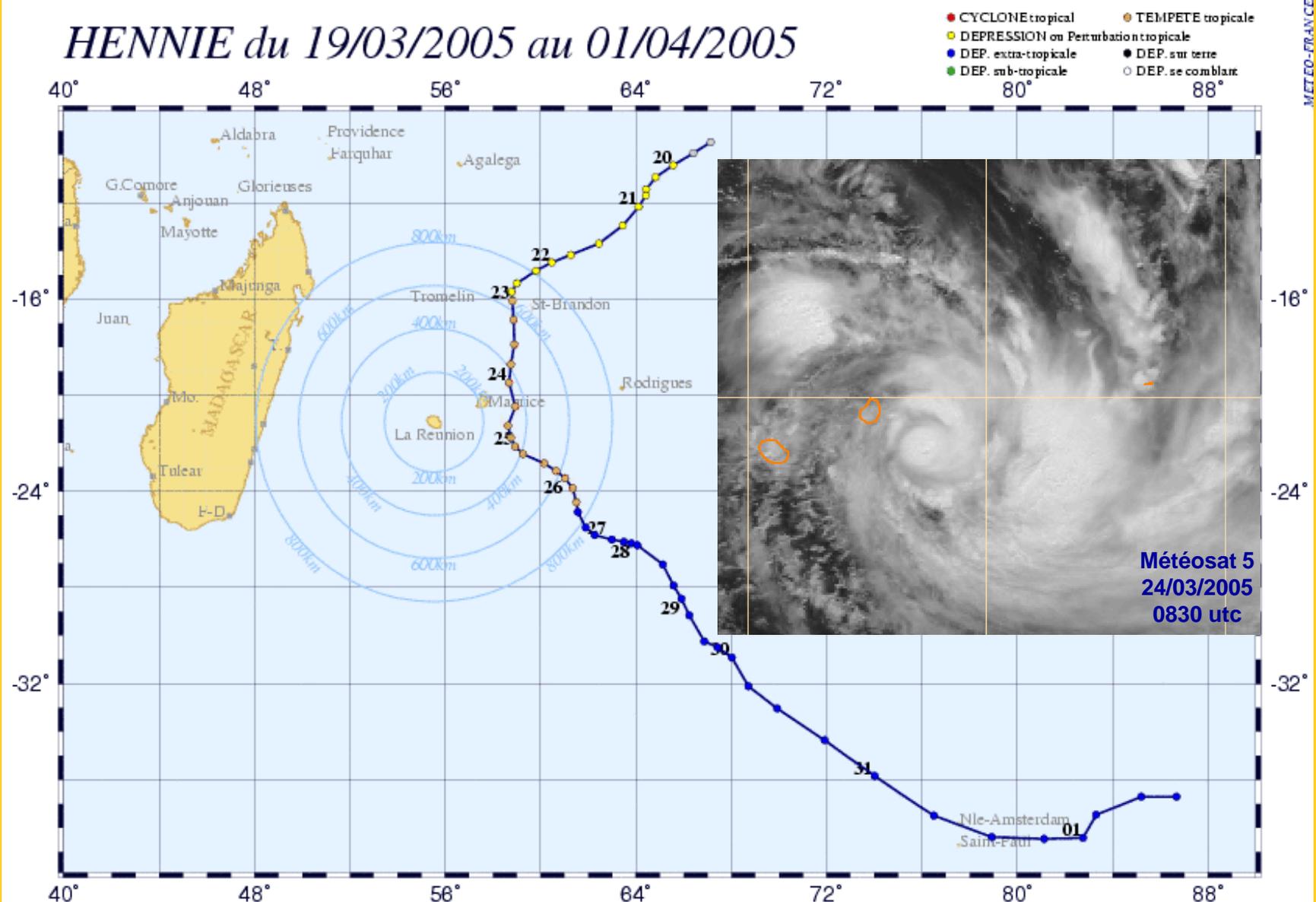
DEPRESSIONS DE MOUSSON : l'exemple de GERARD

GERARD du 29/01/2005 au 05/02/2005



DEPRESSIONS DE MOUSSON : l'exemple d'HENNIE

HENNIE du 19/03/2005 au 01/04/2005

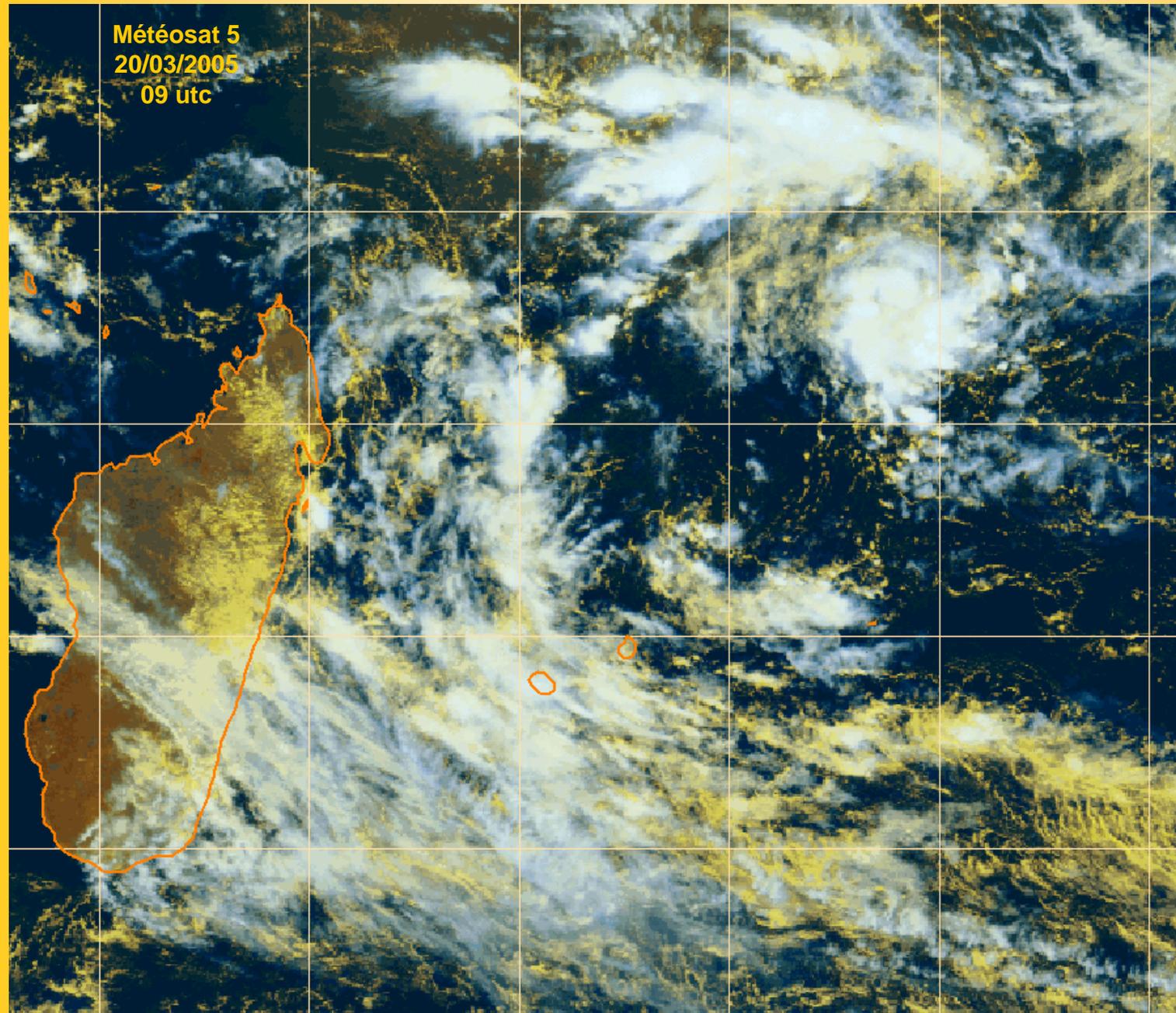


HENNIE, peu après son passage au plus près de l'île Maurice au stade de forte tempête tropicale.

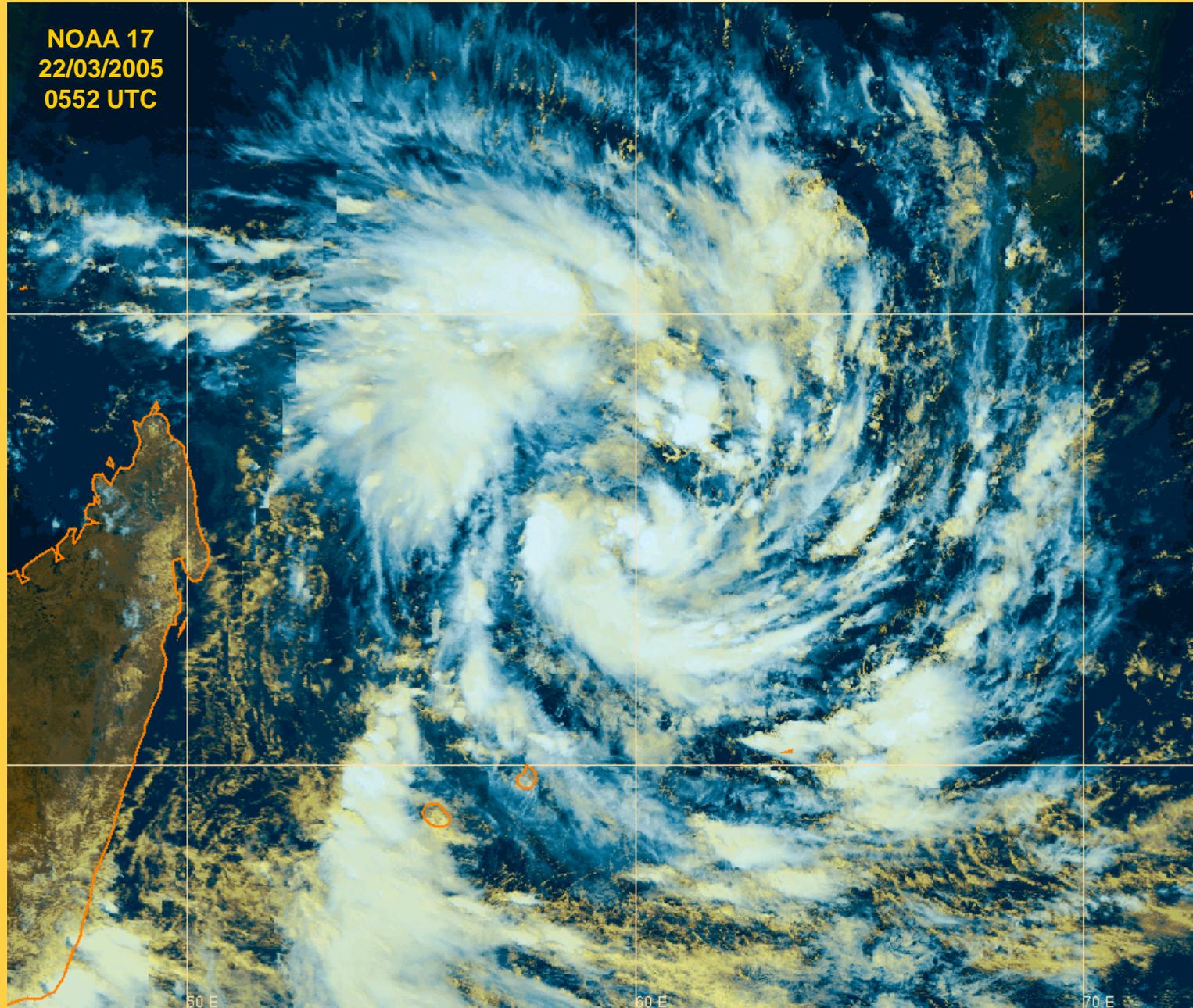
(UTC = 04 h A LA REUNION)

METEO FRANCE

DEPRESSIONS DE MOUSSON : l'exemple d'HENNIE

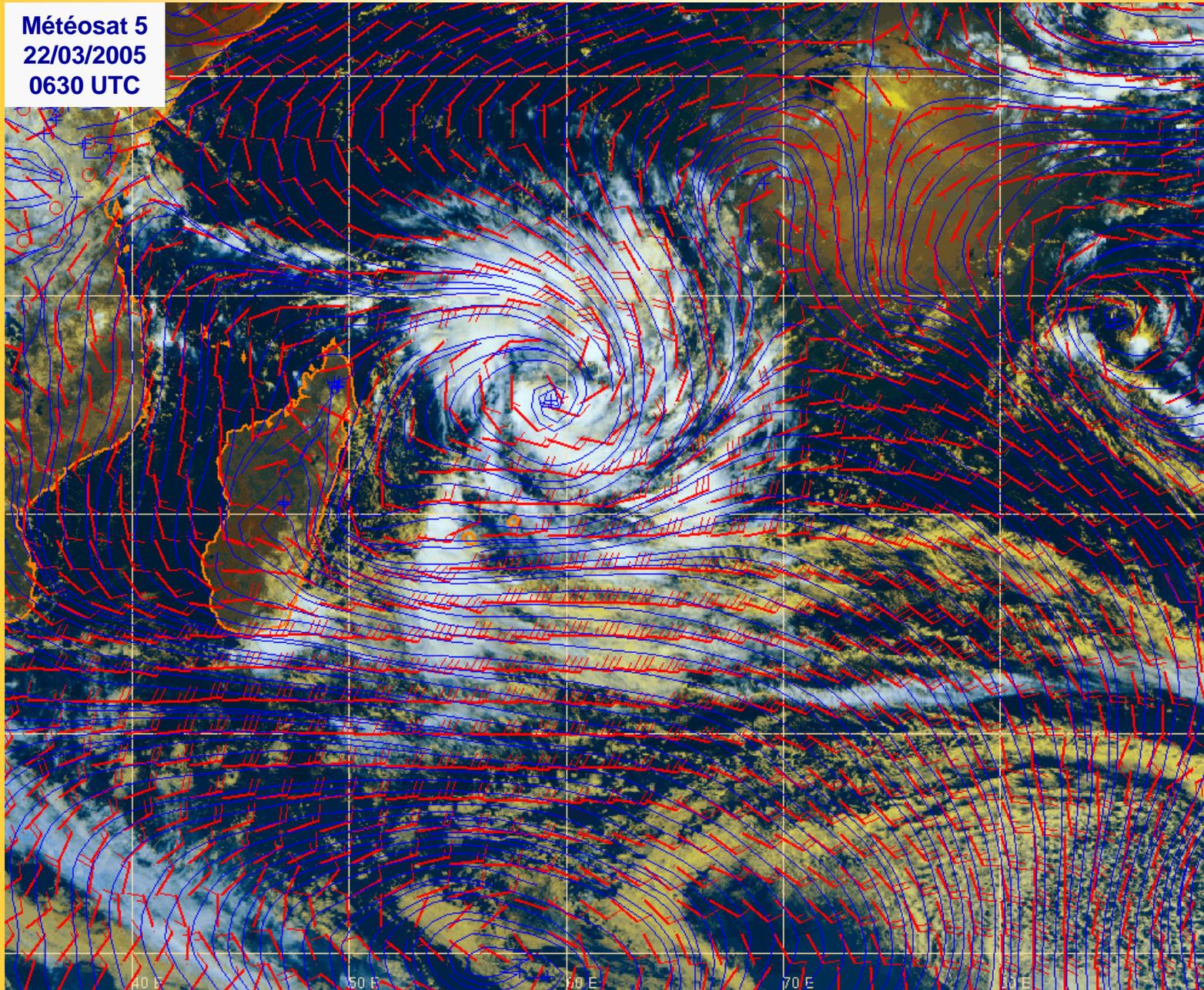


DEPRESSIONS DE MOUSSON : l'exemple d'HENNIE

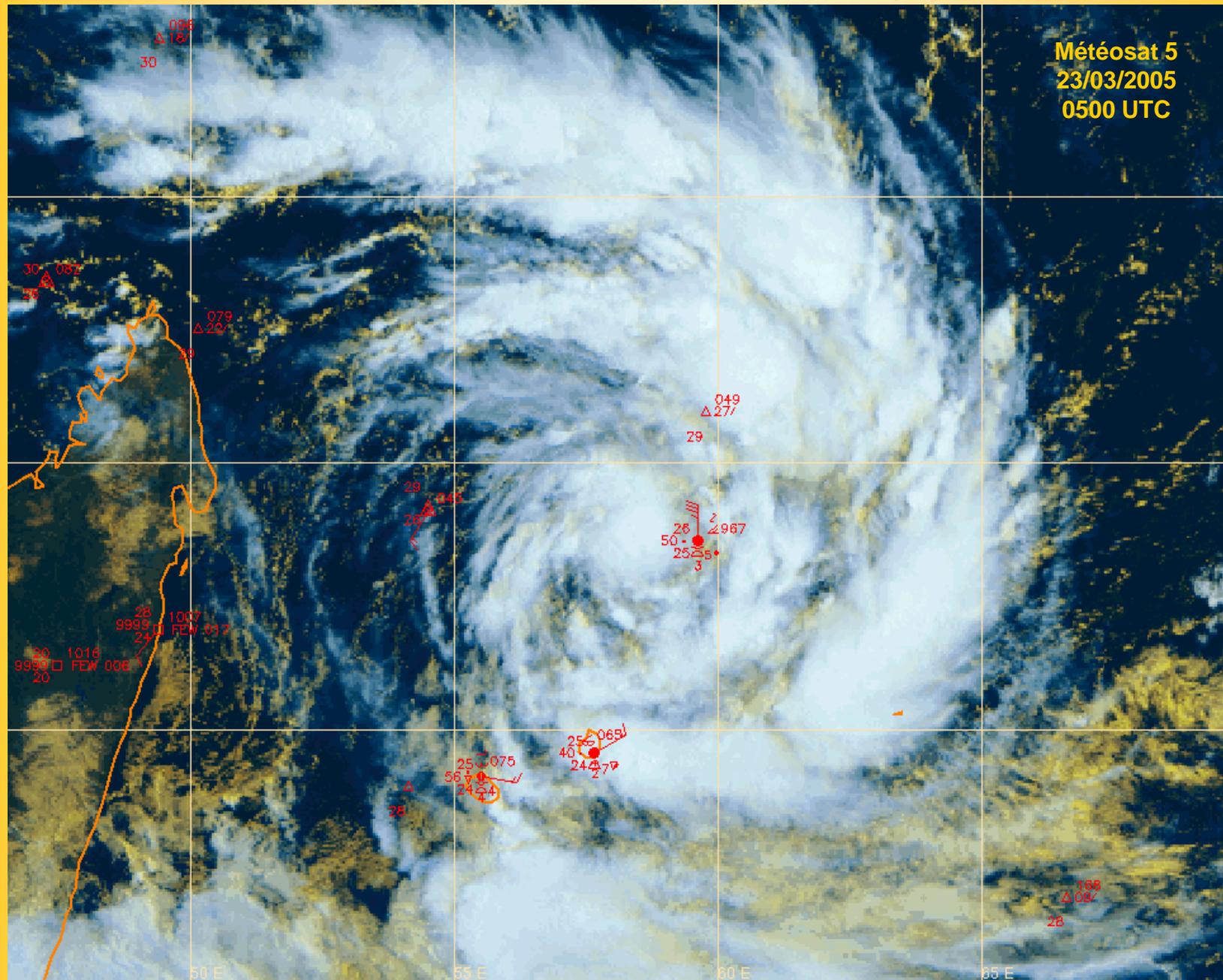


DEPRESSIONS DE MOUSSON : l'exemple d'HENNIE

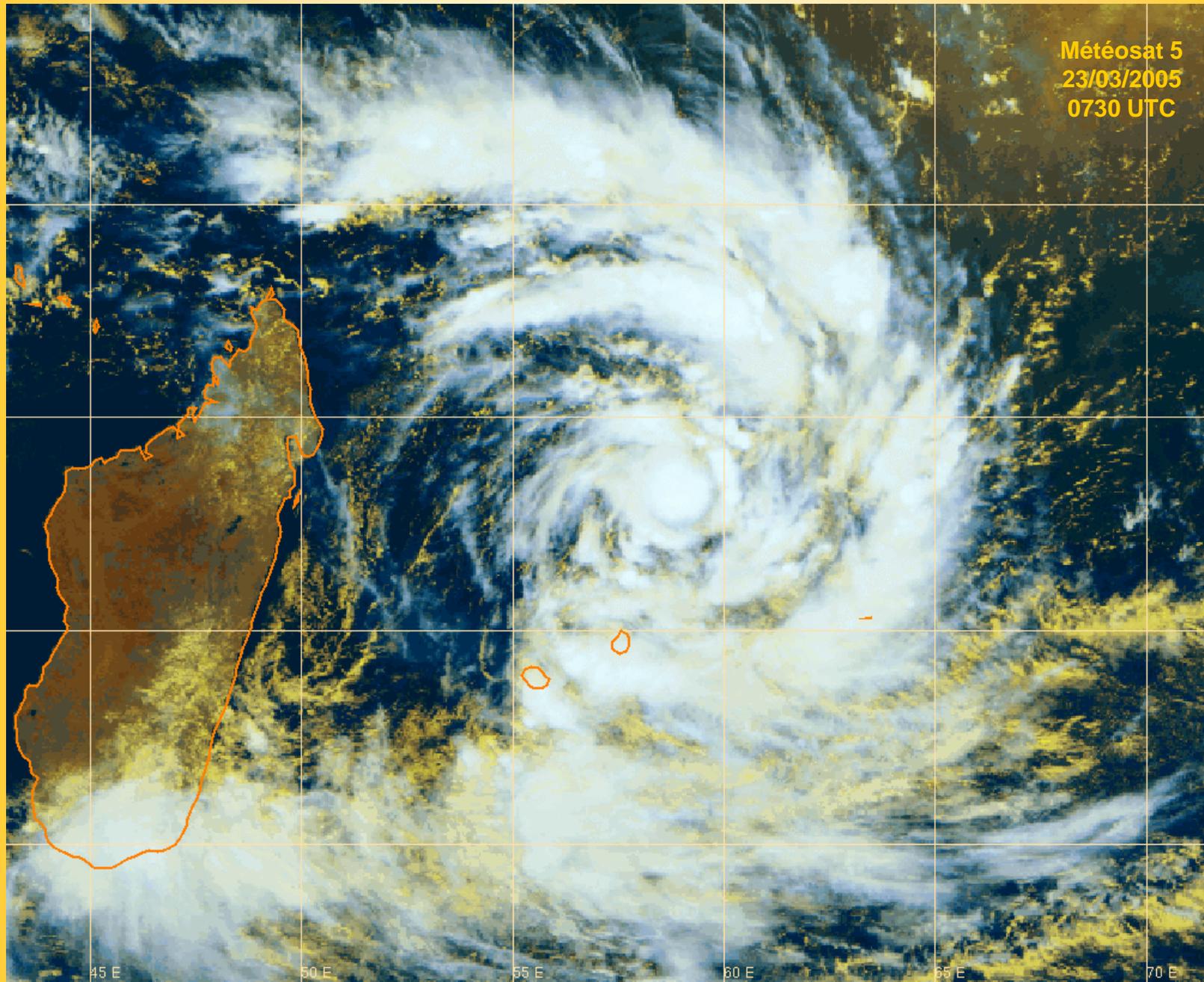
Météosat 5
22/03/2005
0630 UTC



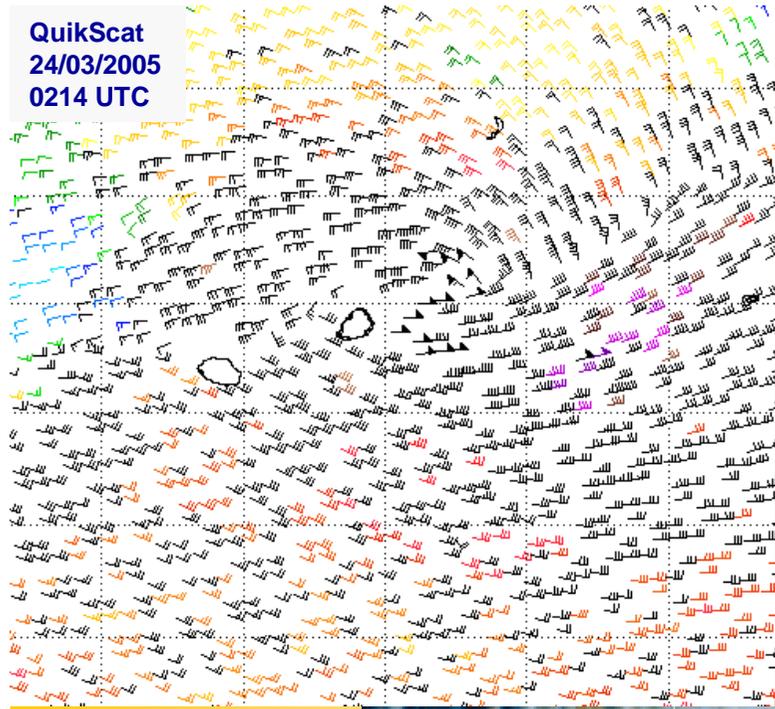
DEPRESSIONS DE MOUSSON : l'exemple d'HENNIE



DEPRESSIONS DE MOUSSON : l'exemple d'HENNIE

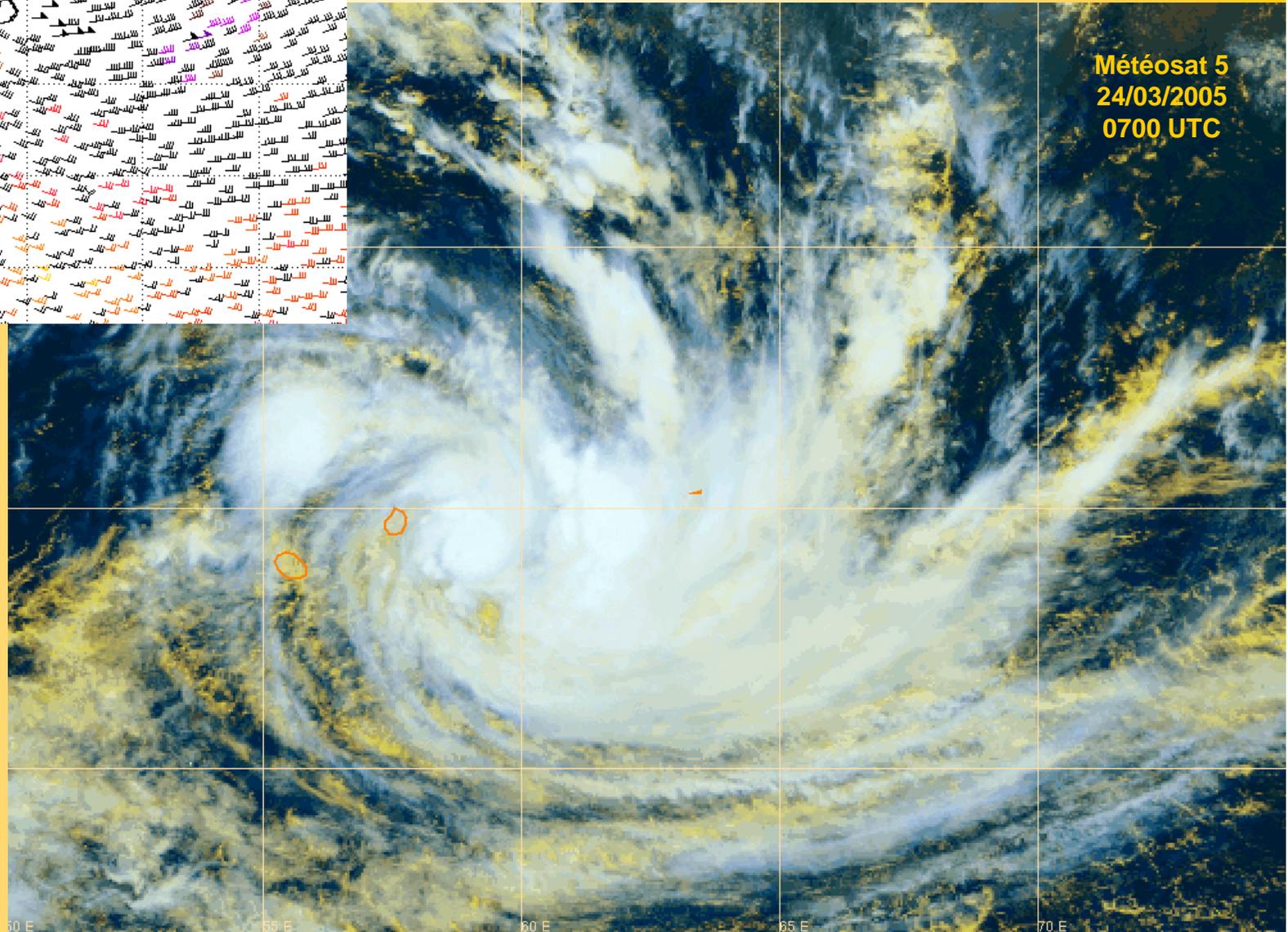


QuikScat
24/03/2005
0214 UTC

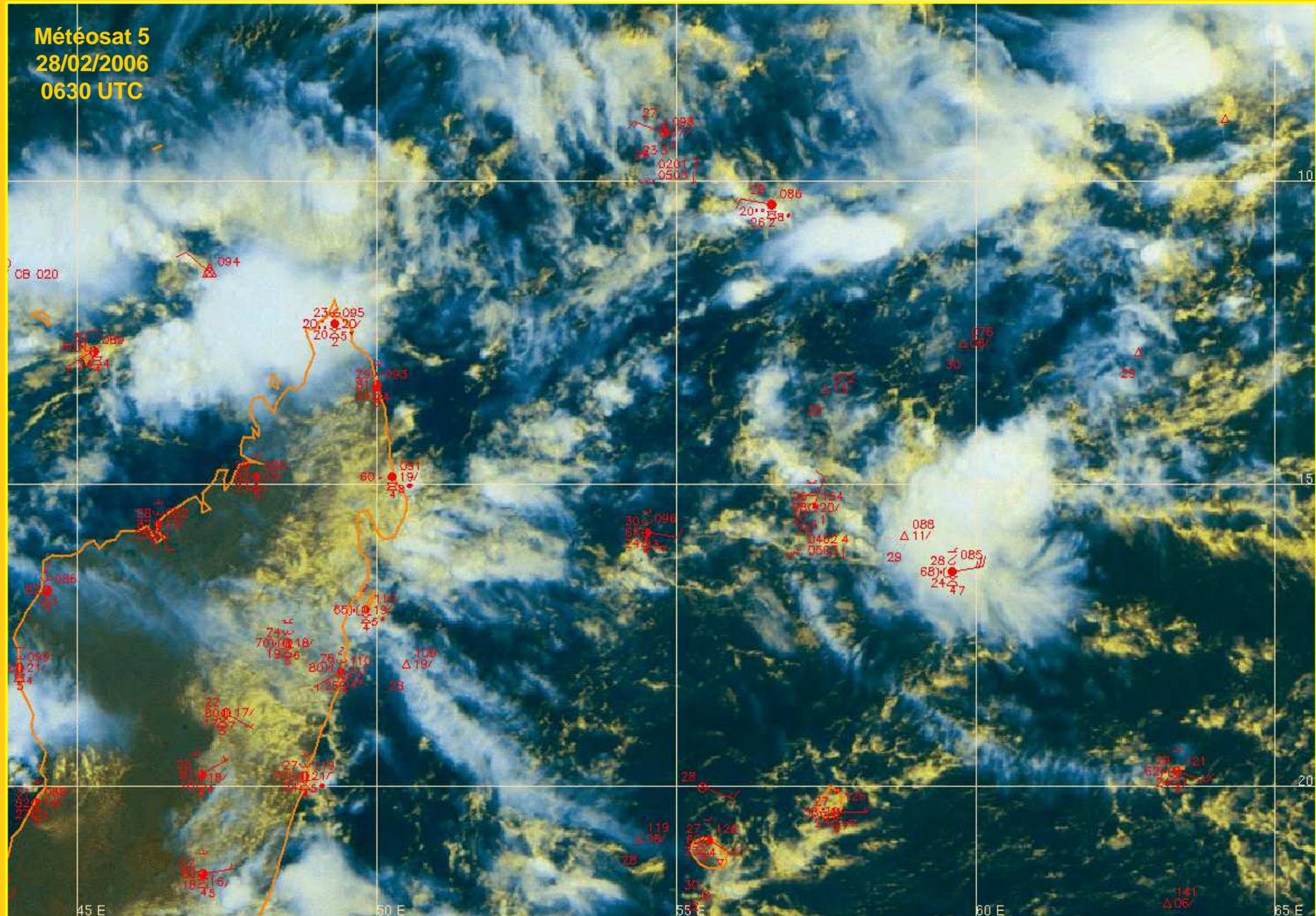


DEPRESSIONS DE MOUSSON : l'exemple d'HENNIE

Météosat 5
24/03/2005
0700 UTC

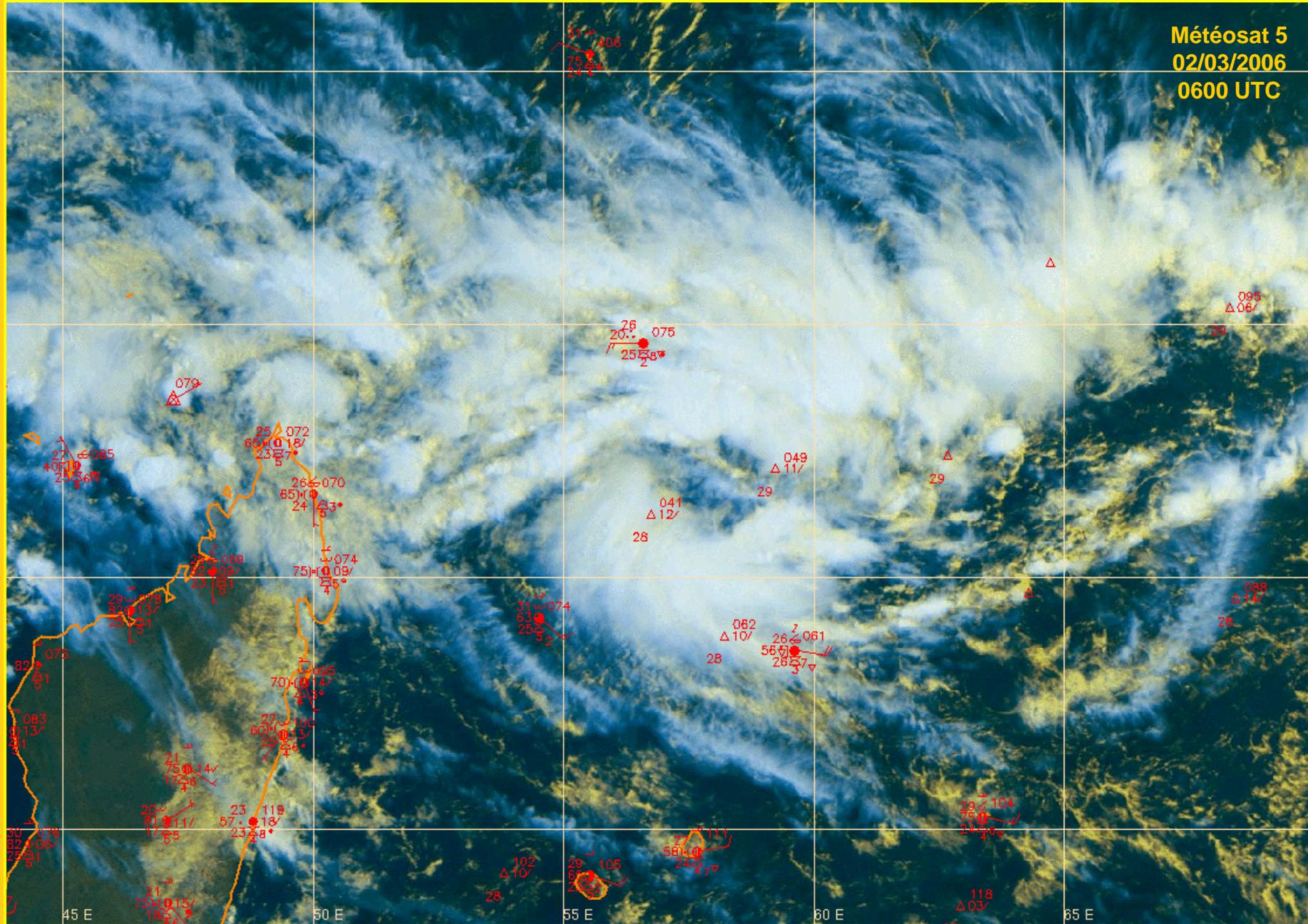


DEPRESSIONS DE MOUSSON : l'exemple de DIWA

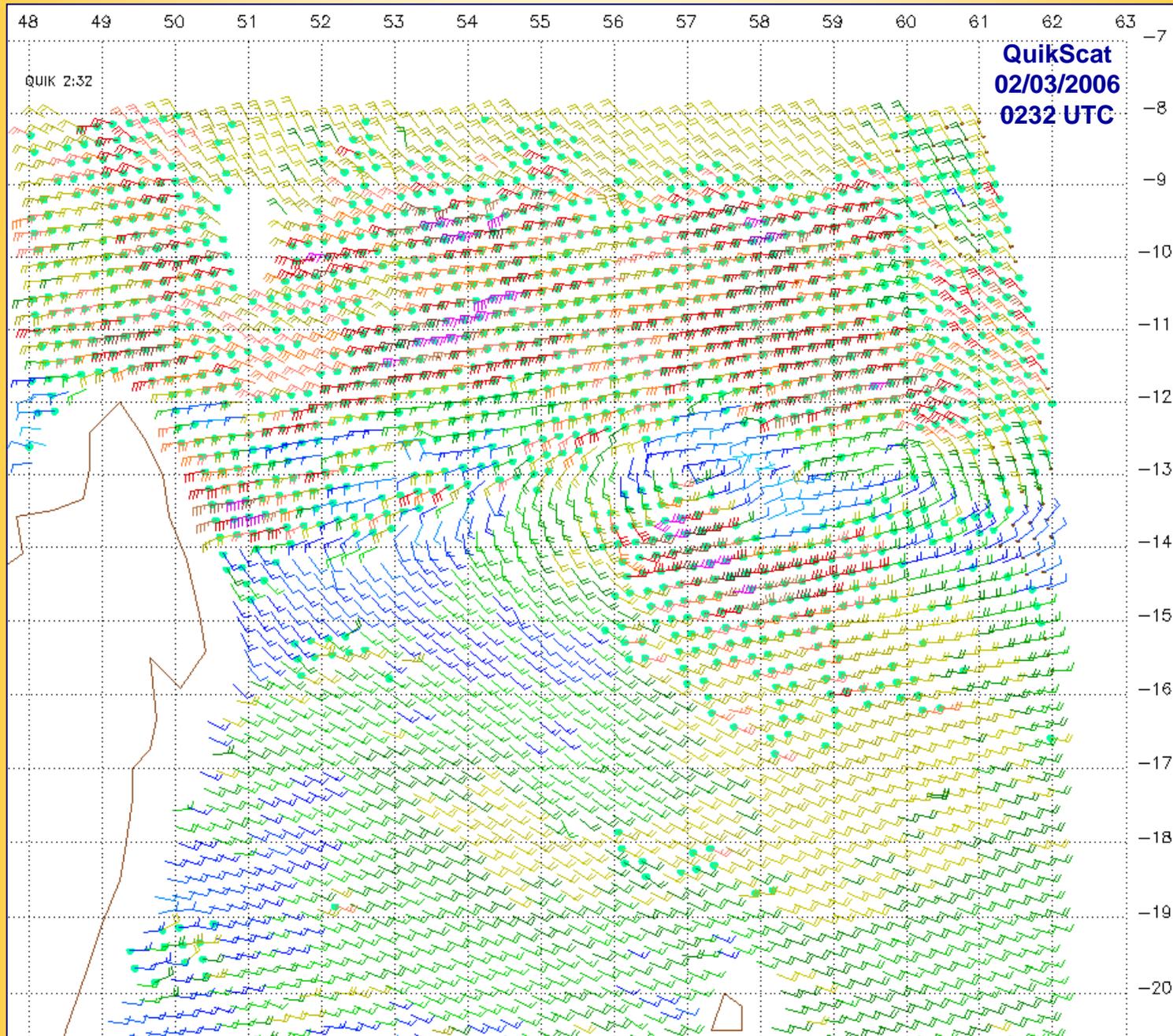


DEPRESSIONS DE MOUSSON : l'exemple de DIWA

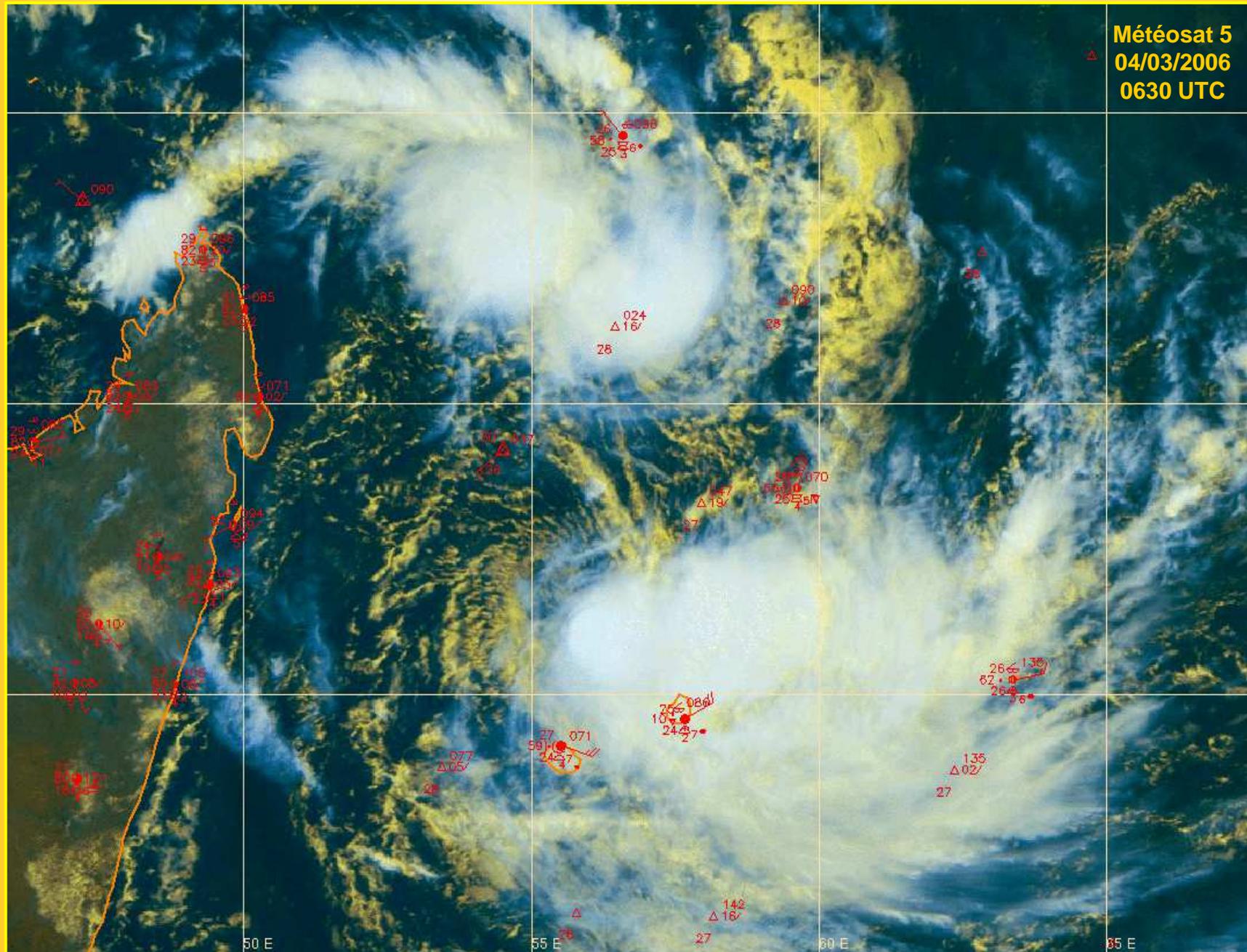
Météosat 5
02/03/2006
0600 UTC



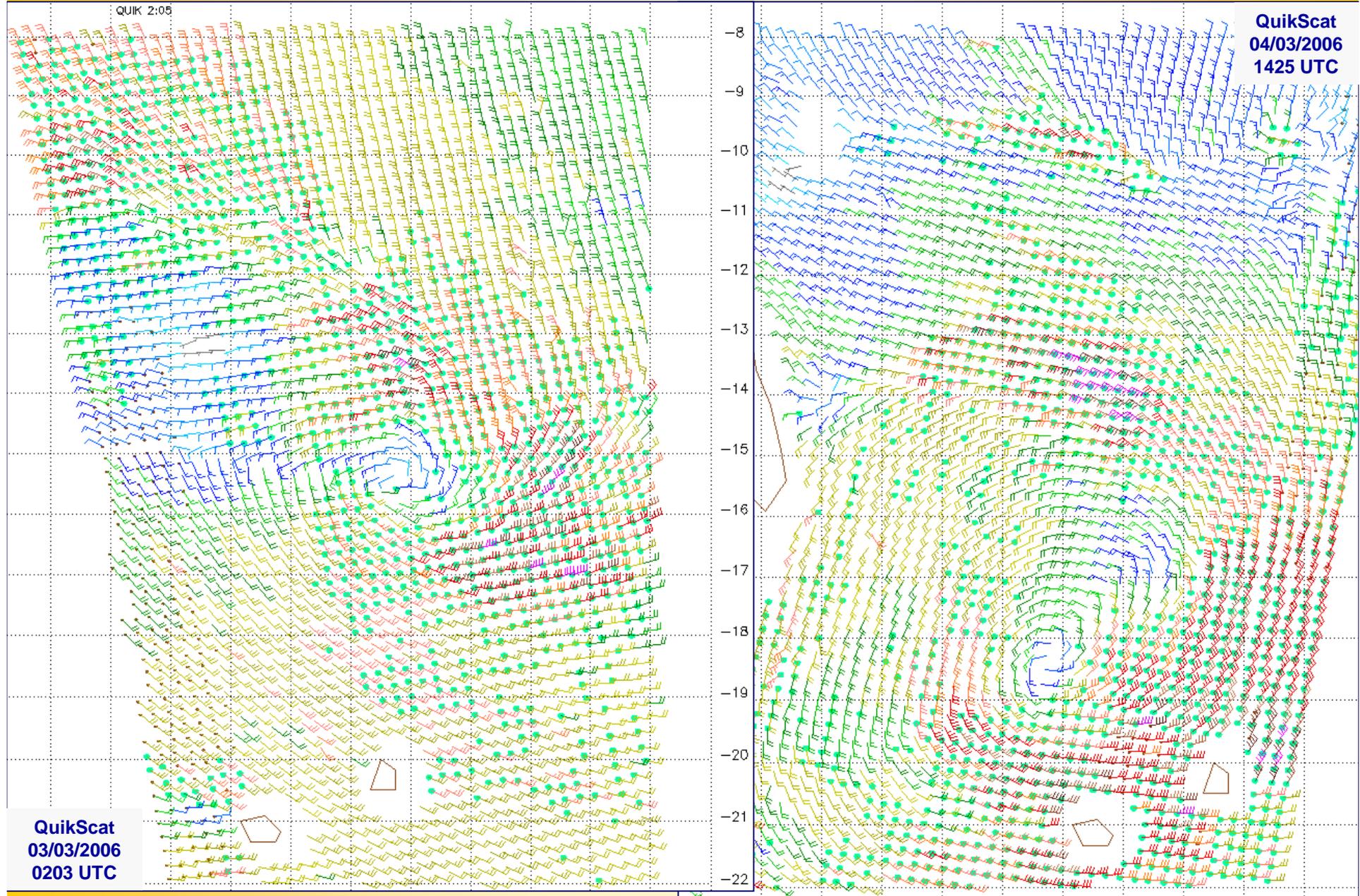
MONSOON DEPRESSIONS : the case of to-be DIWA



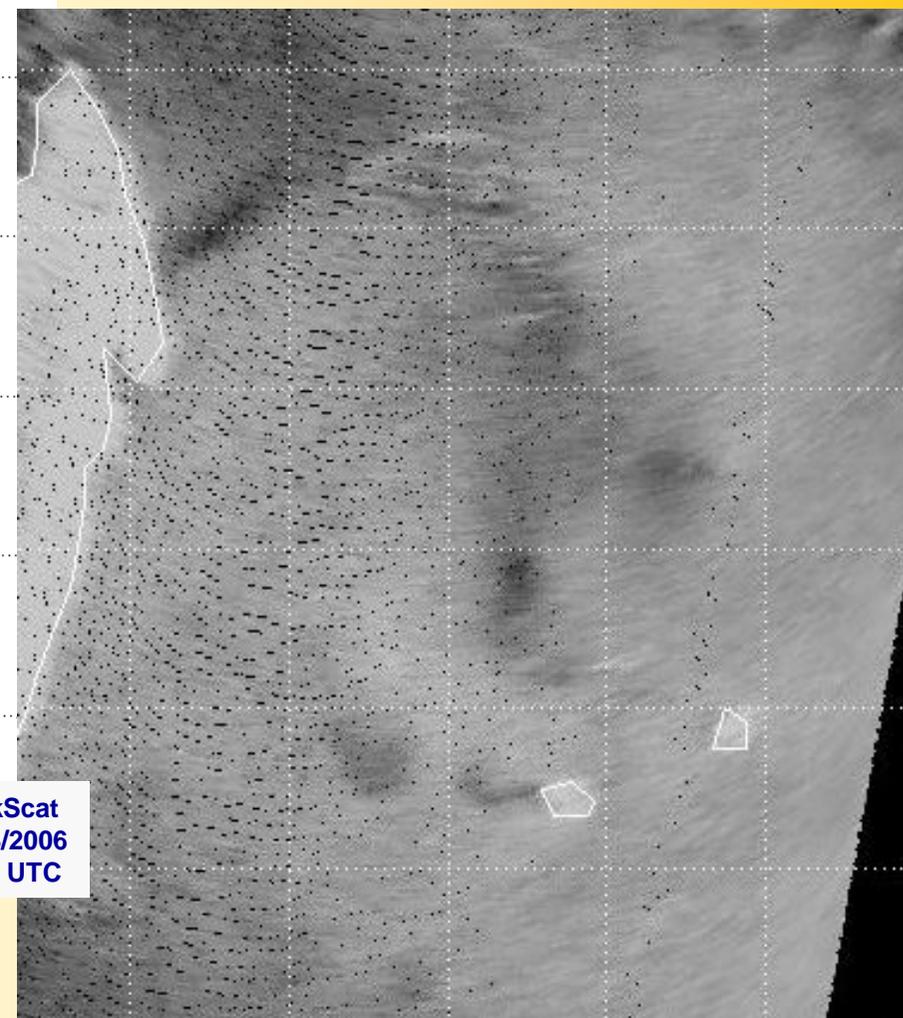
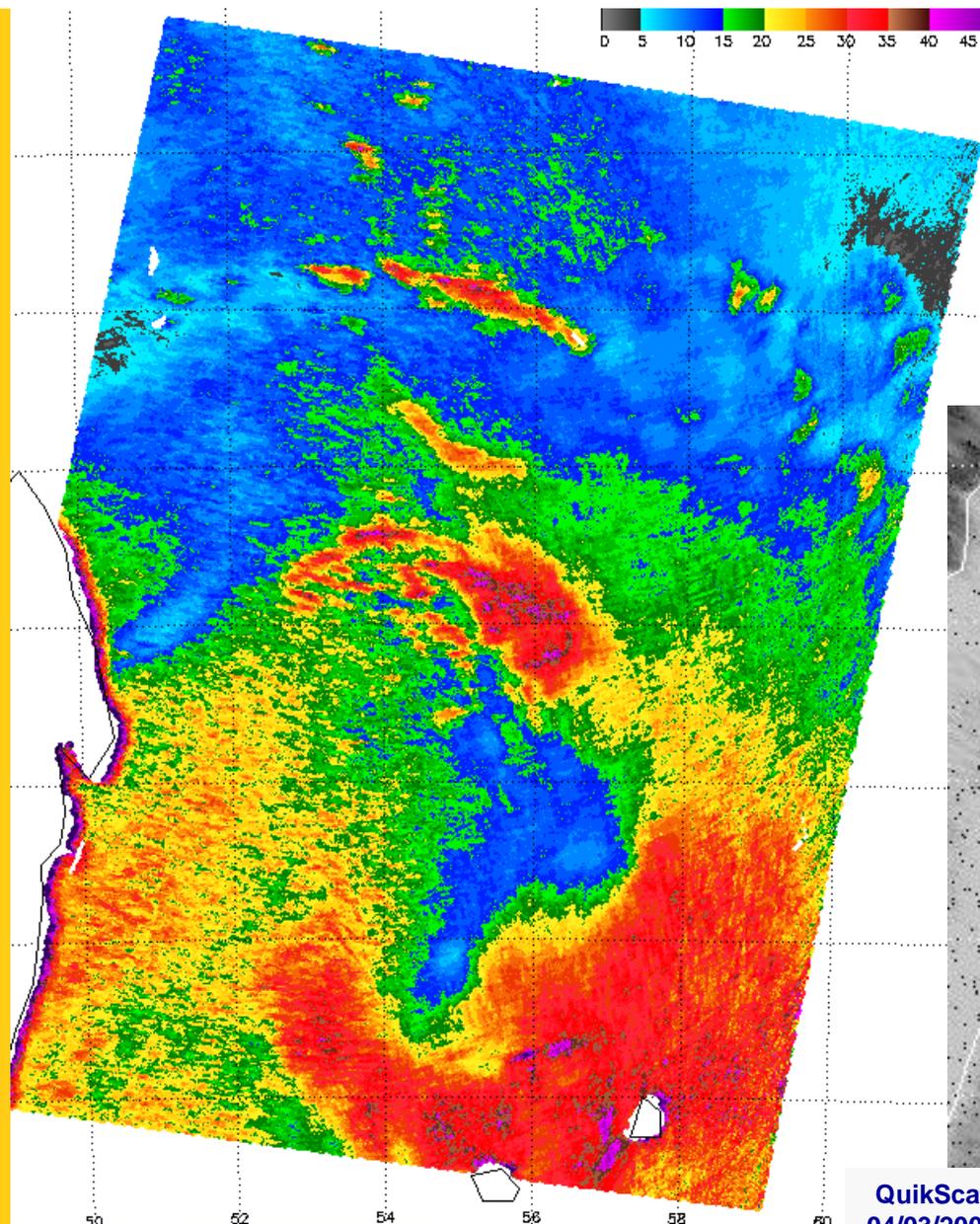
MONSOON DEPRESSIONS : the case of to-be DIWA



DEPRESSIONS DE MOUSSON : l'exemple de DIWA

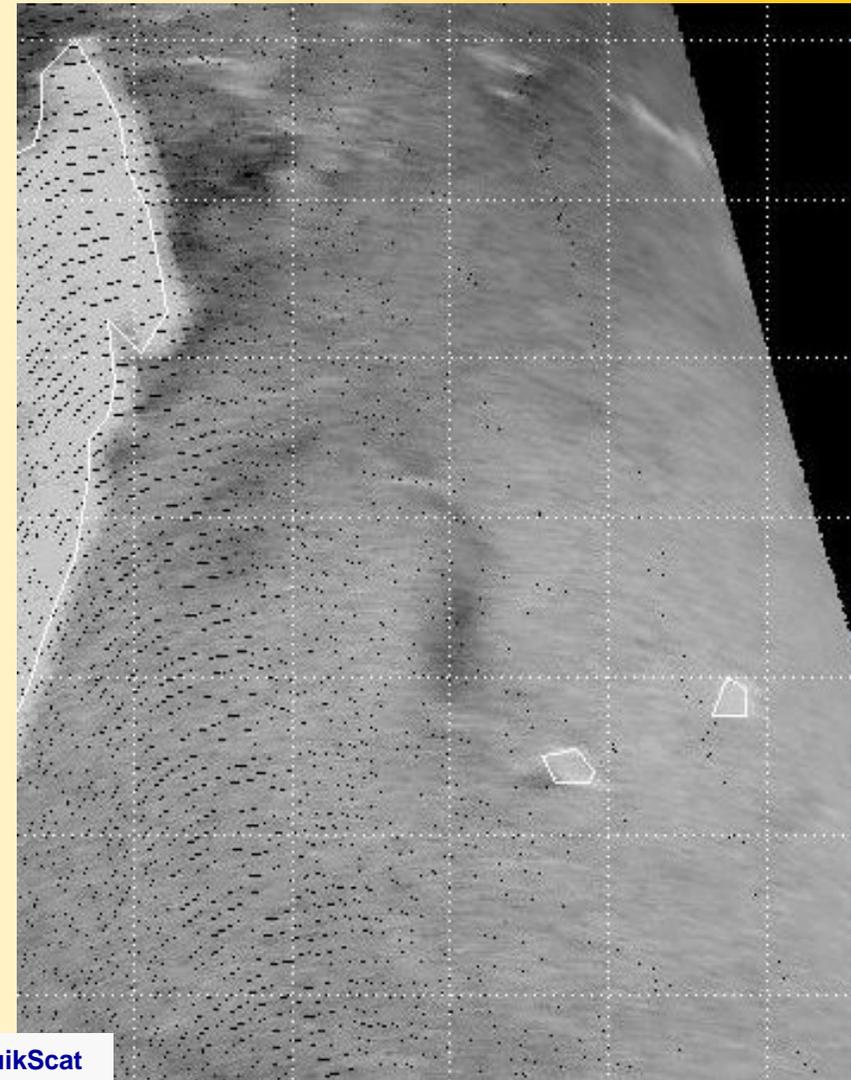
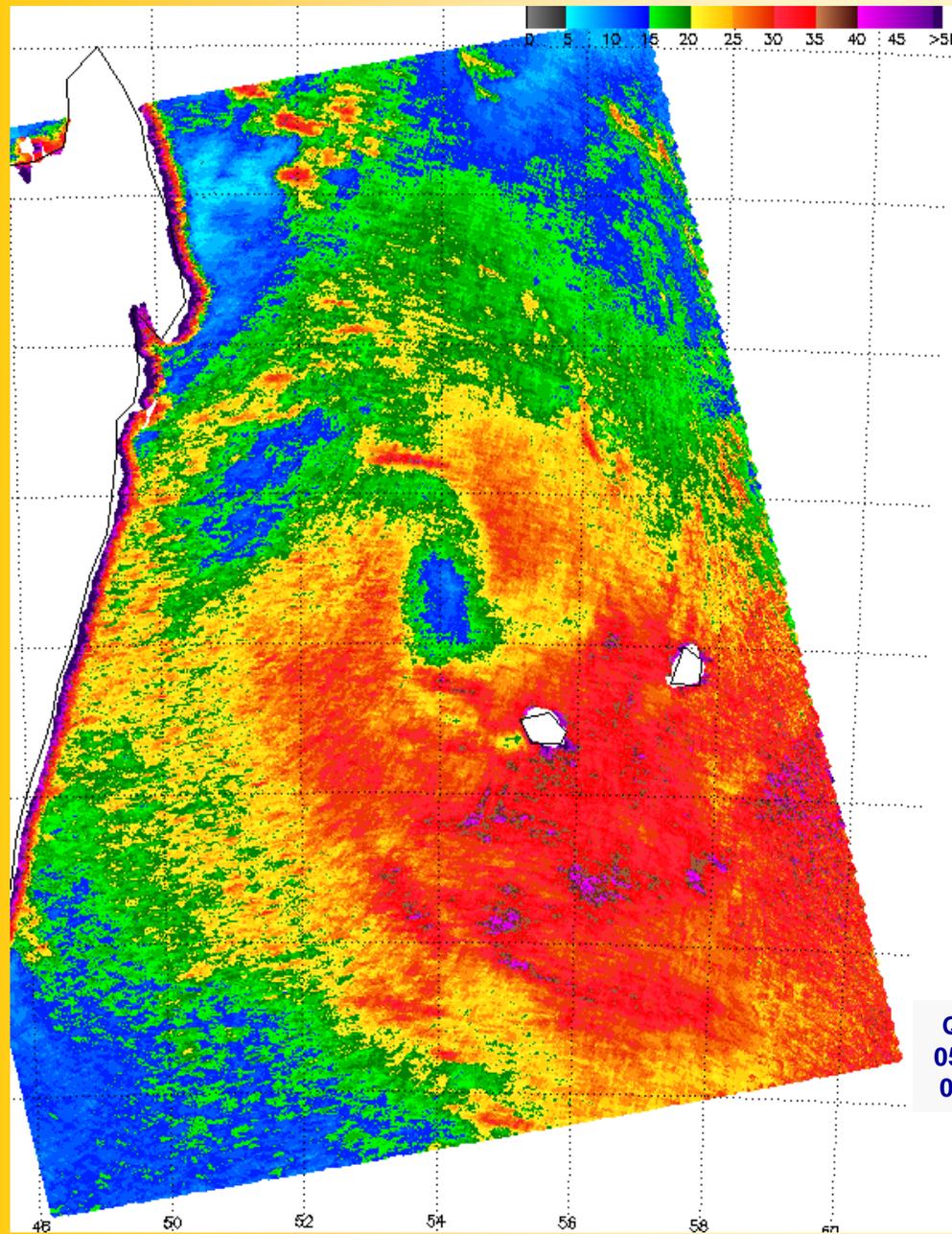


DEPRESSIONS DE MOUSSON : l'exemple de DIWA



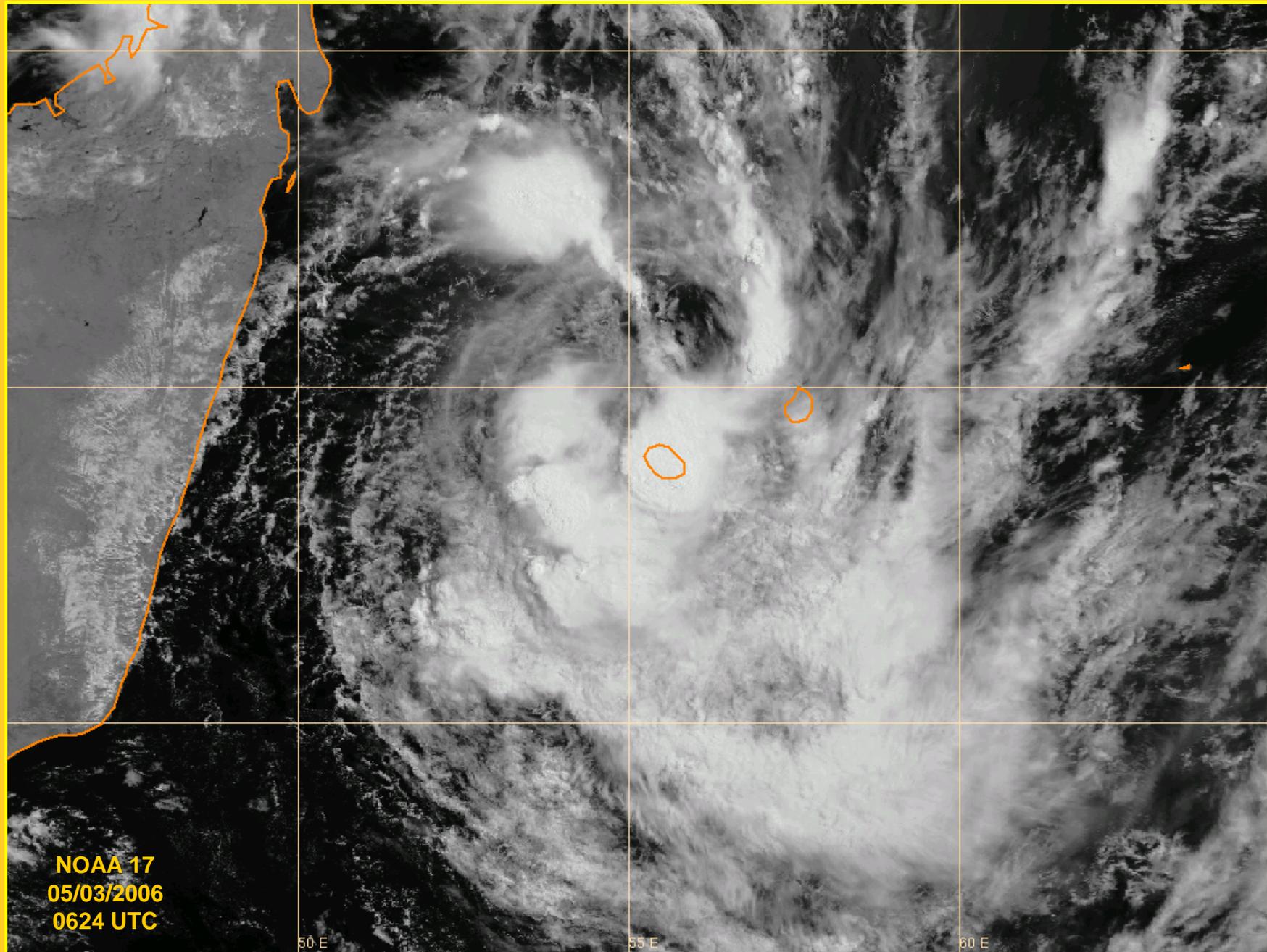
QuikScat
04/03/2006
1425 UTC

MONSOON DEPRESSIONS : the case of DIWA

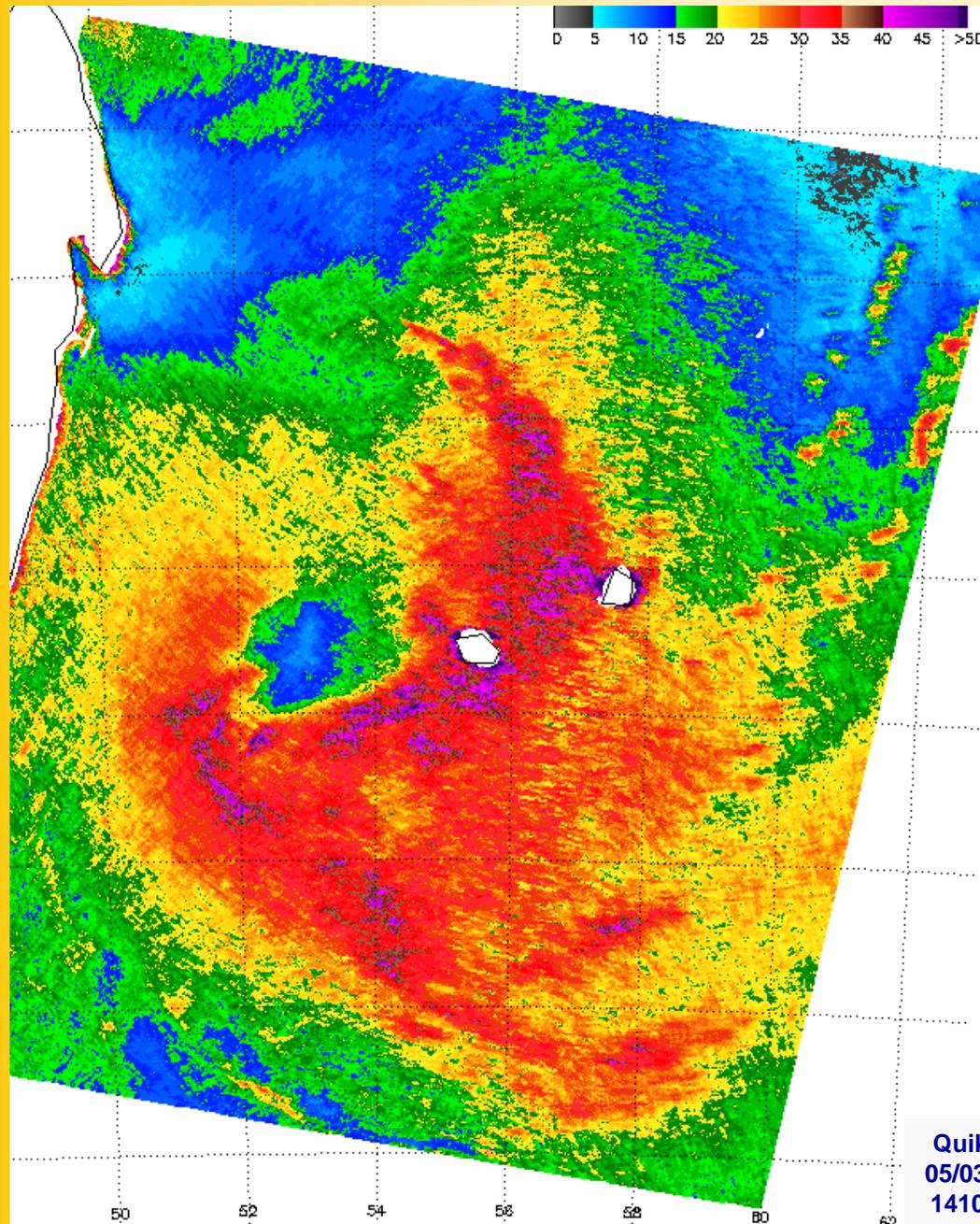


QuikScat
05/03/2006
0225 UTC

DEPRESSIONS DE MOUSSON : l'exemple de DIWA

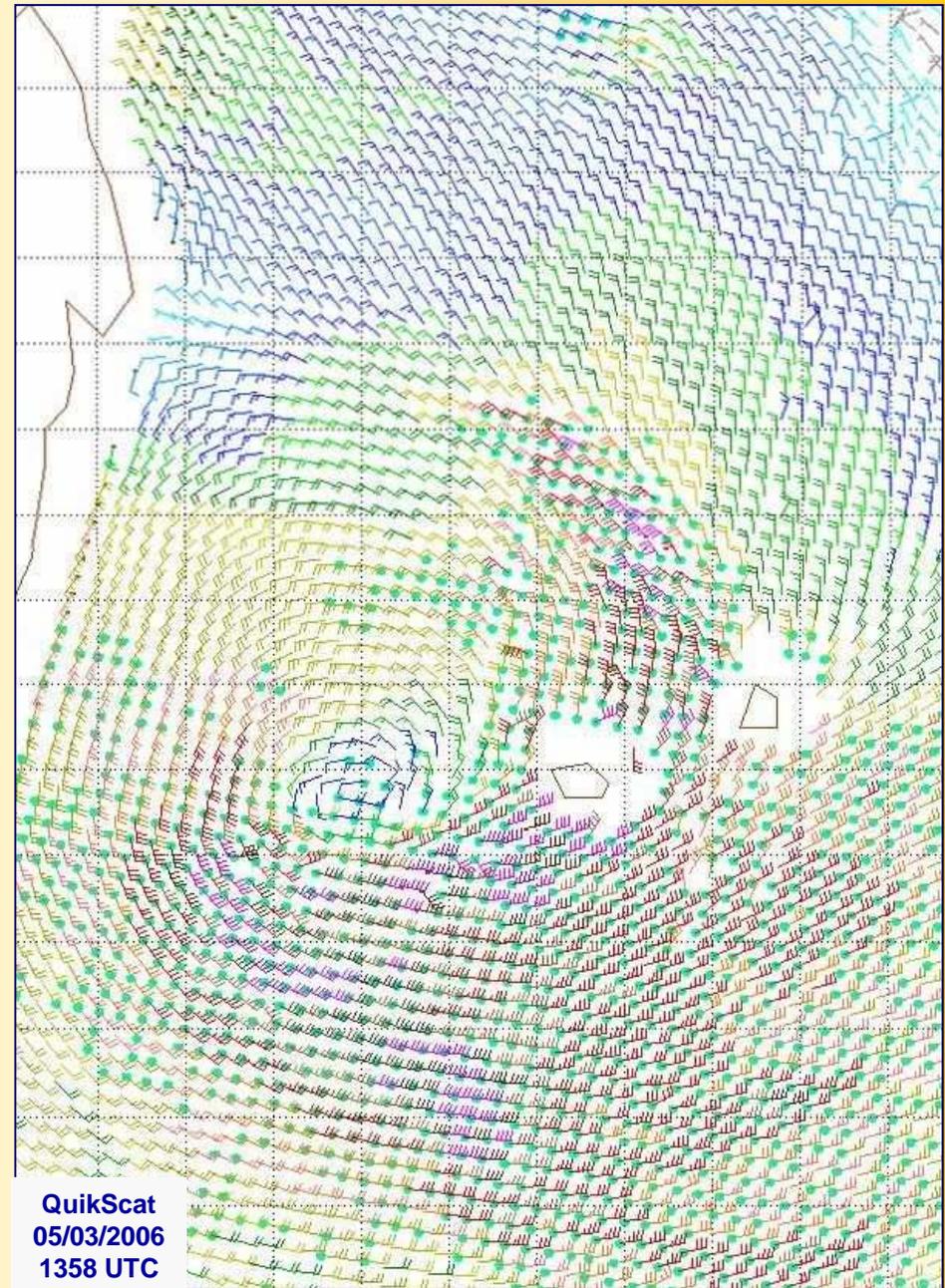
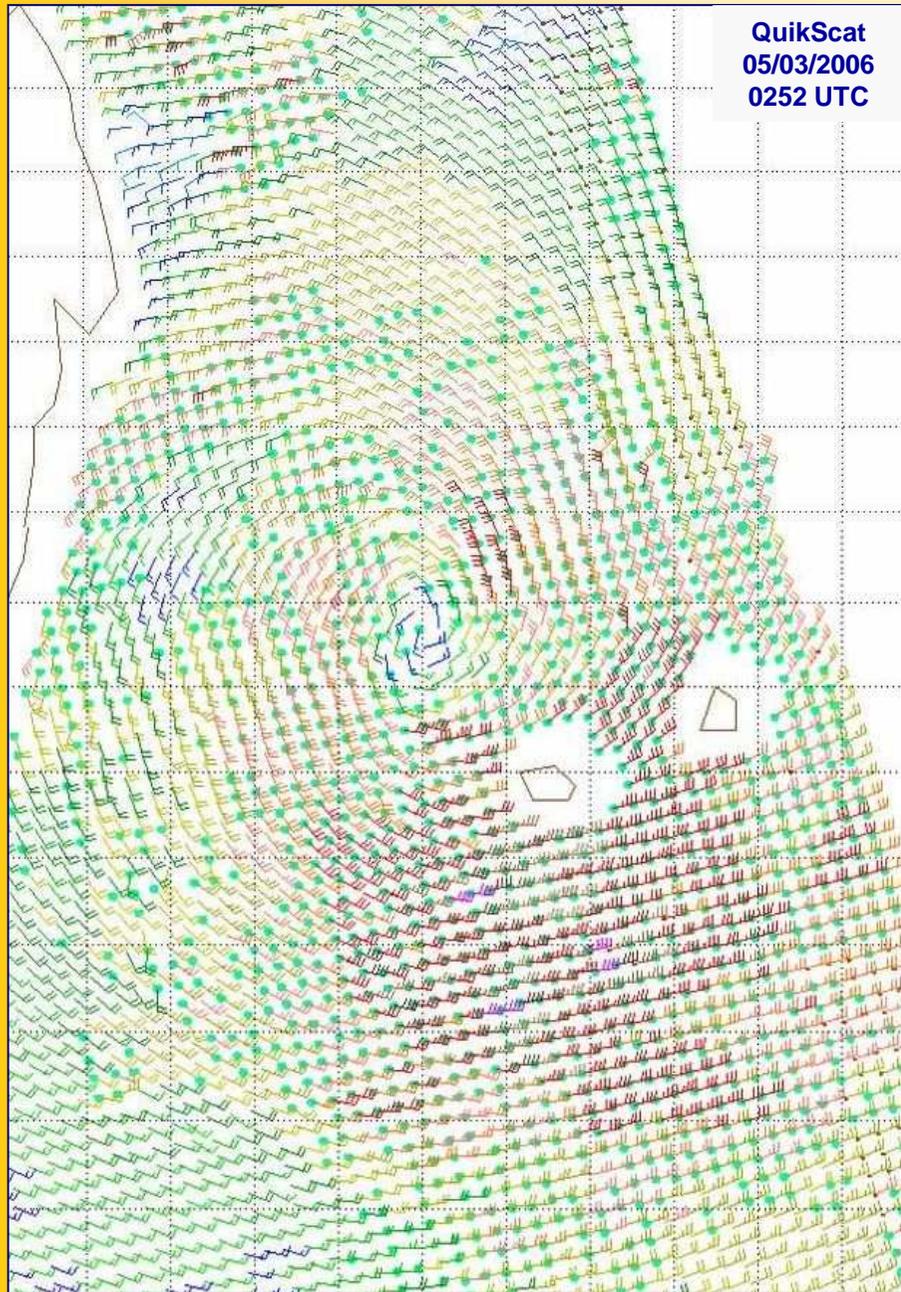


DEPRESSIONS DE MOUSSON : l'exemple de DIWA

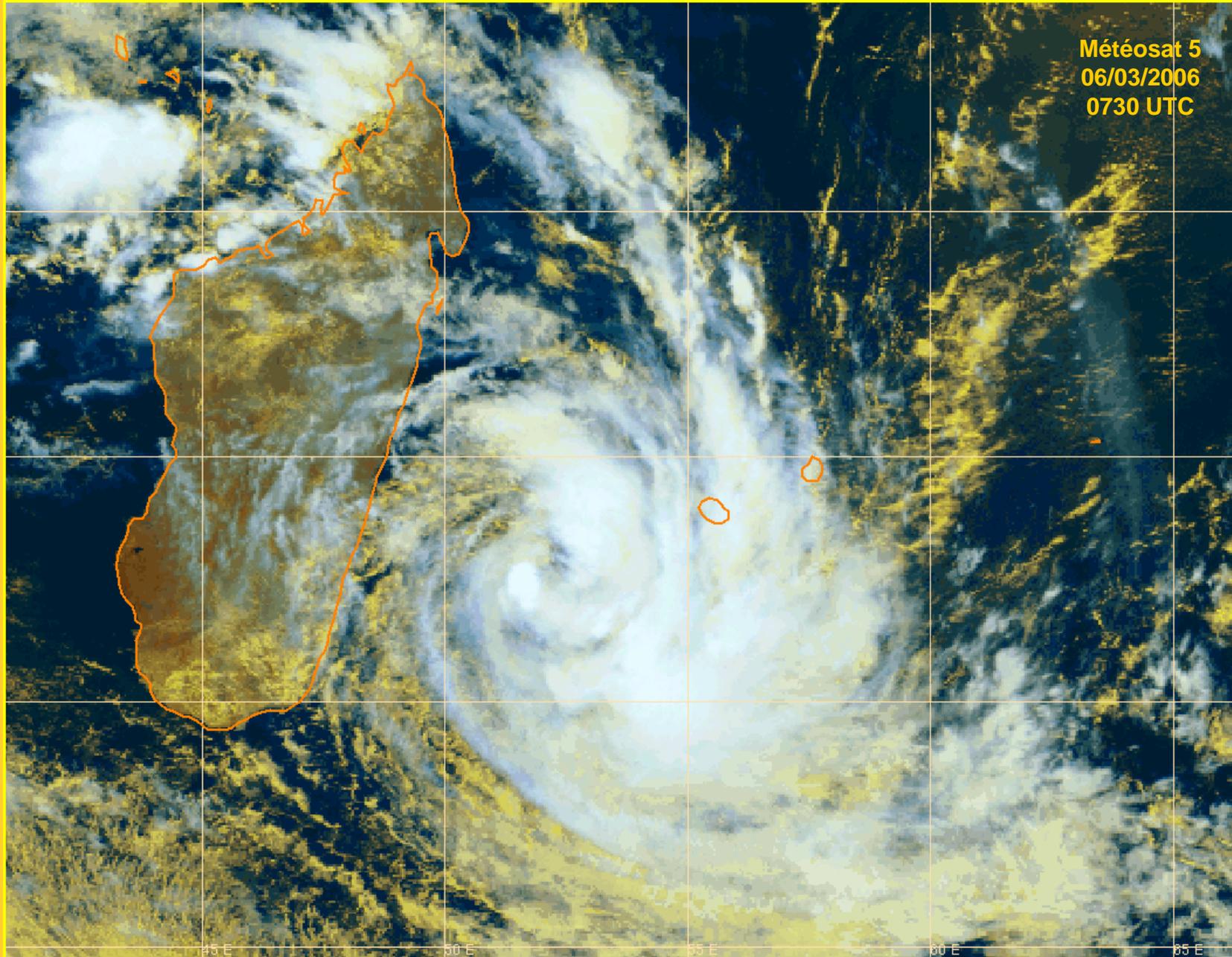


QuikScat
05/03/2006
1410 UTC

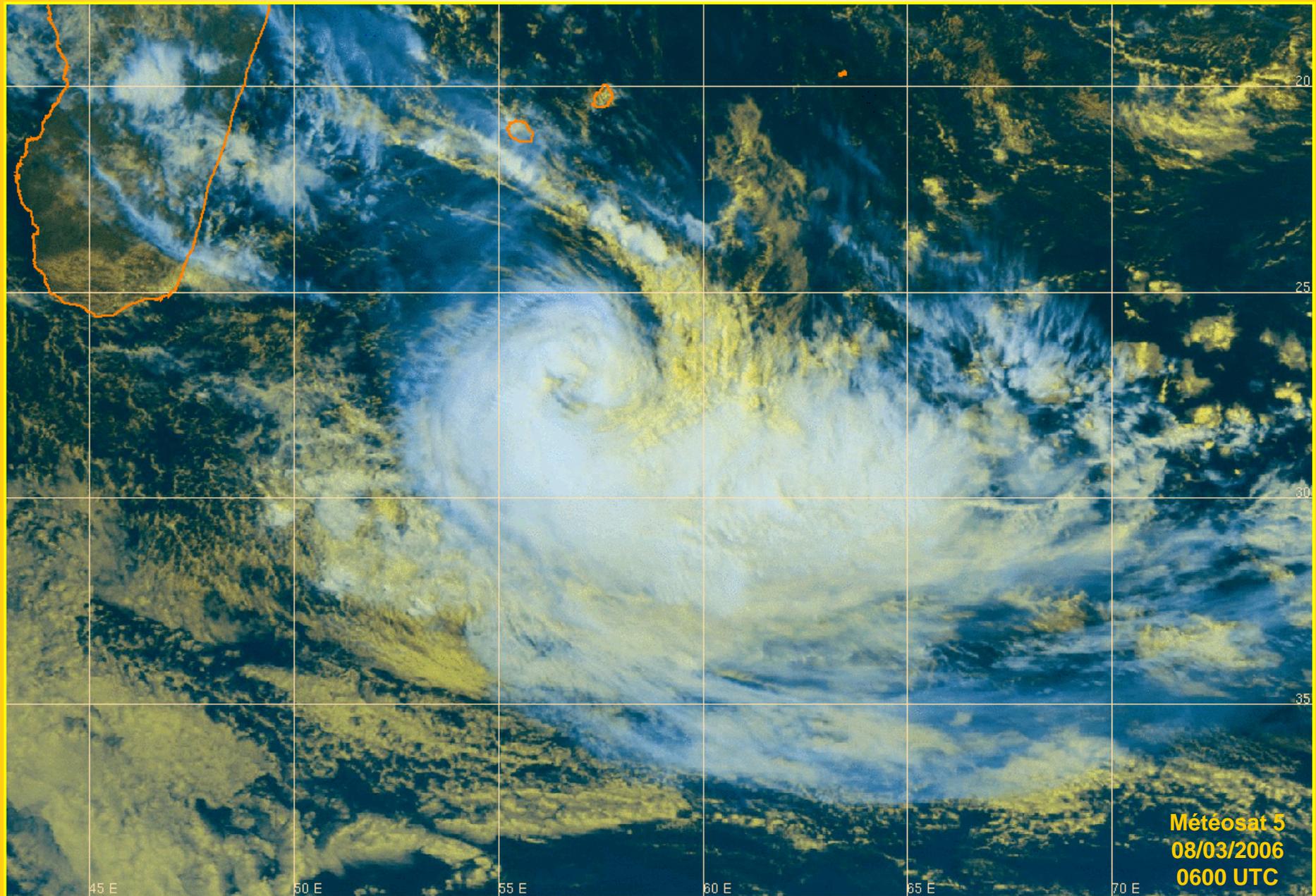
MONSOON DEPRESSIONS : the case of DIWA



DEPRESSIONS DE MOUSSON : l'exemple de DIWA

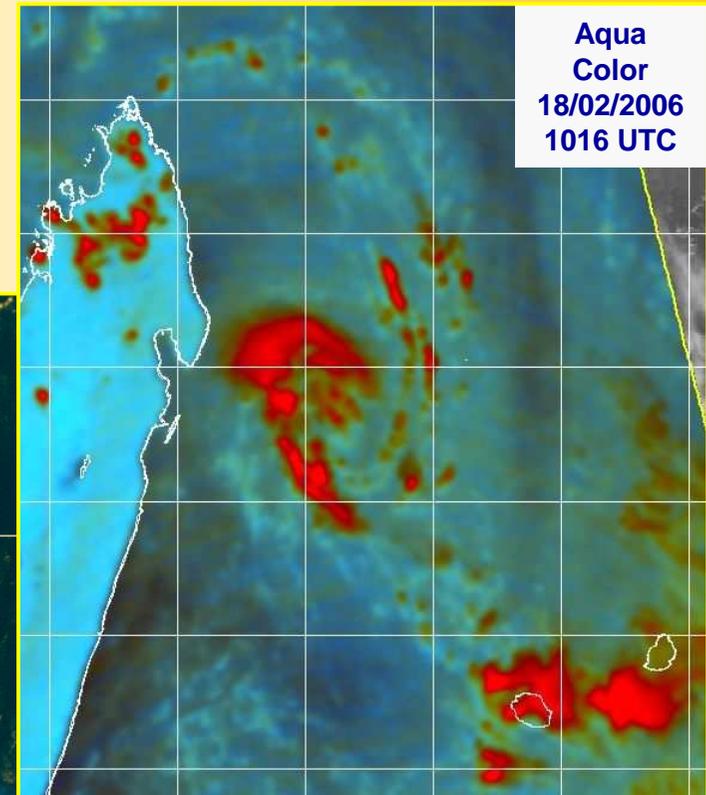
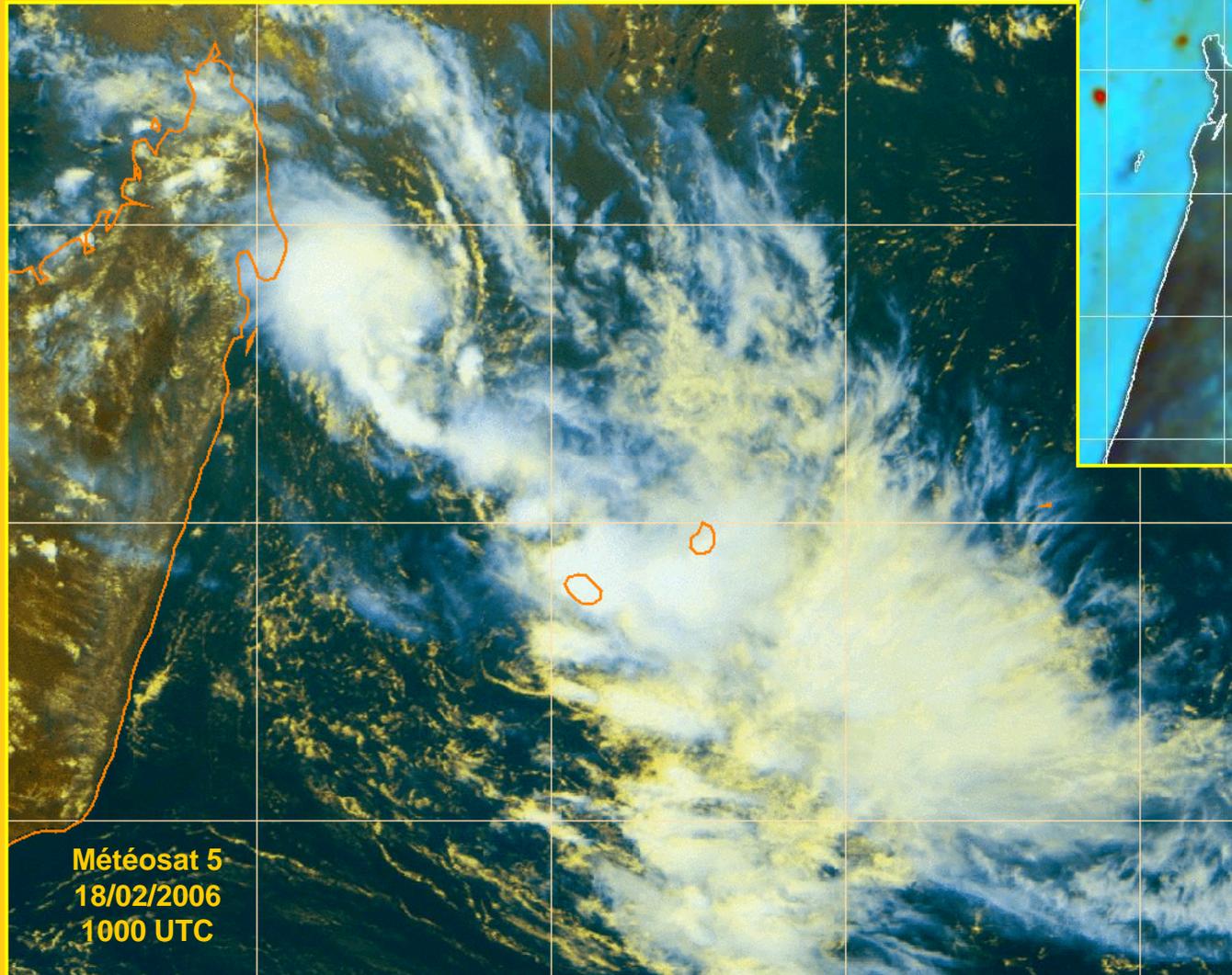


MONSOON DEPRESSIONS : the case of DIWA



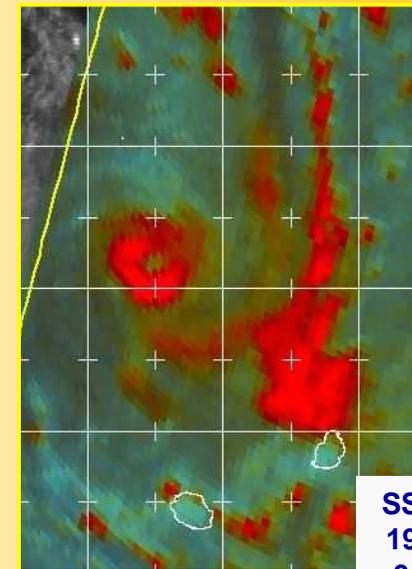
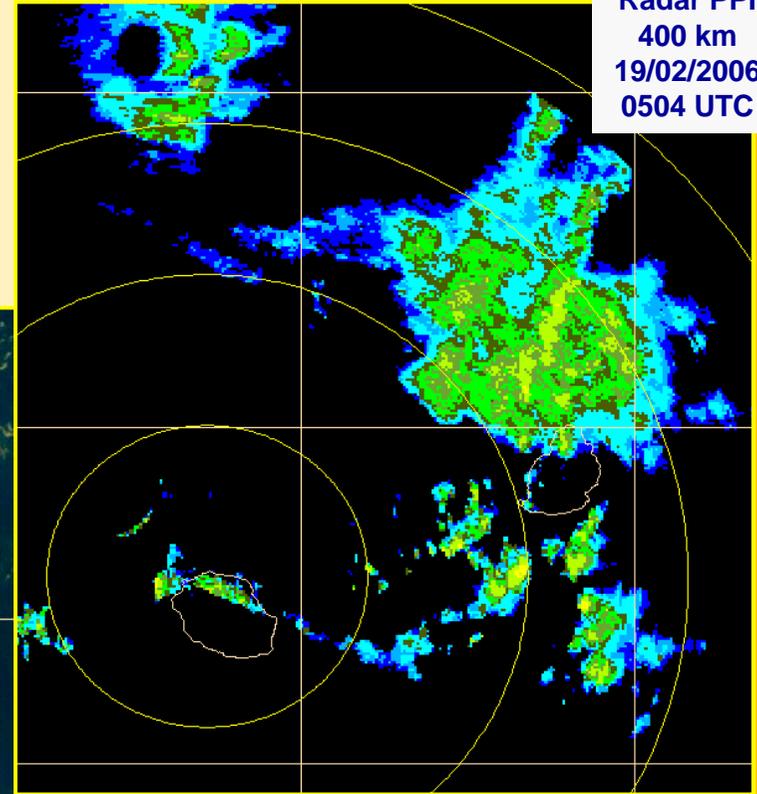
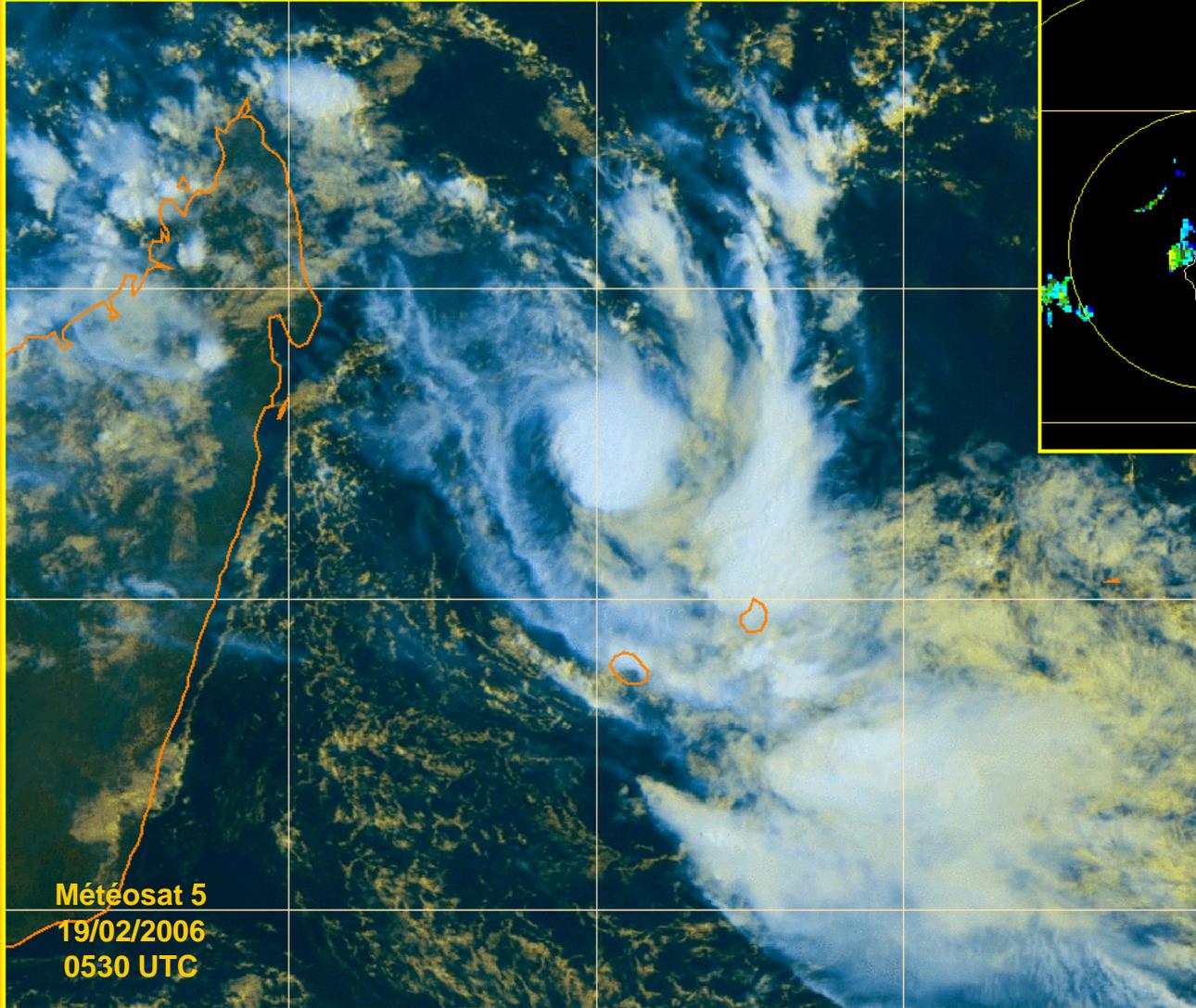
MIDGET STORMS :

l'exemple du système
09-20052006

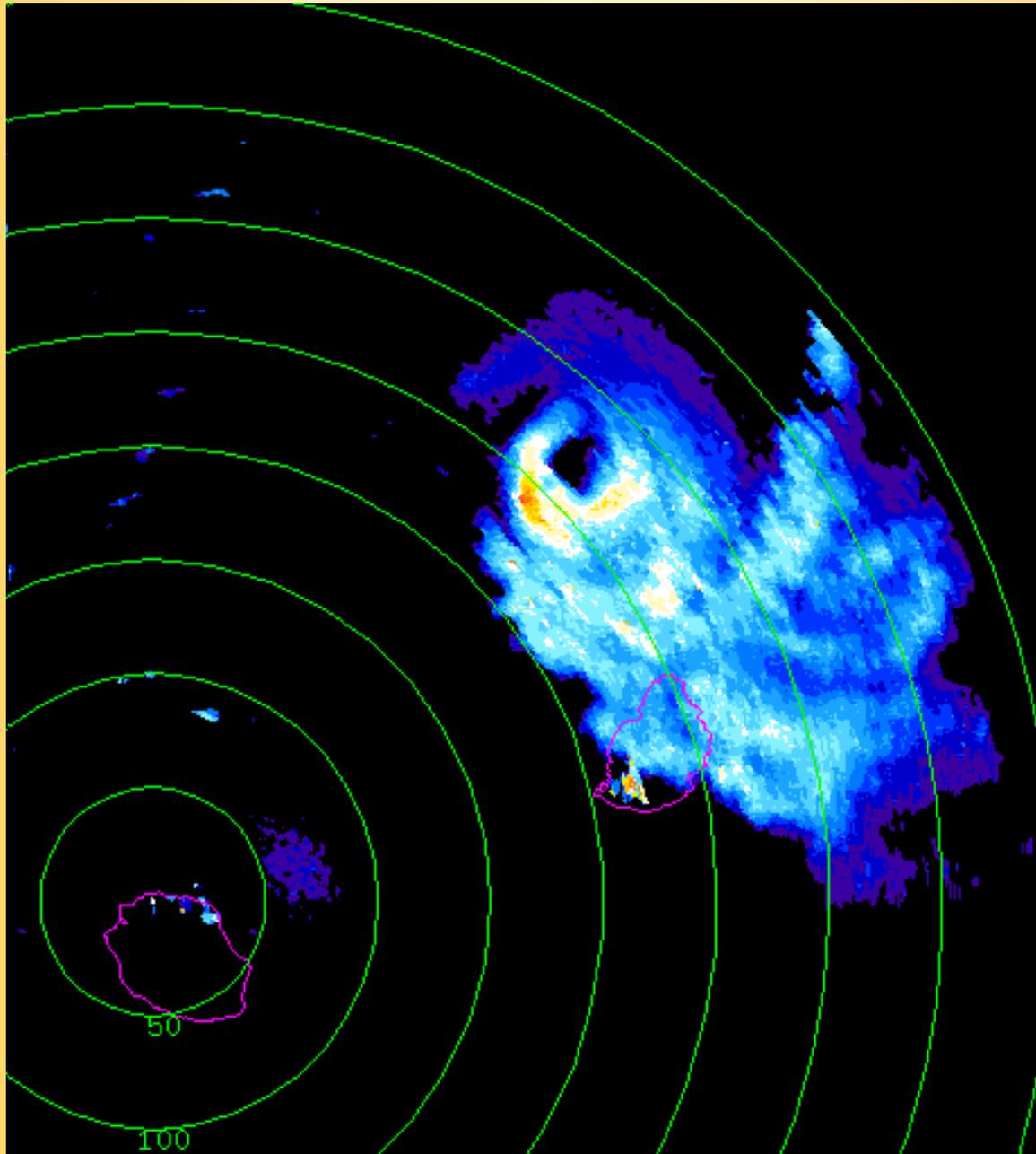


MIDGET STORMS :

l'exemple du système
09-20052006

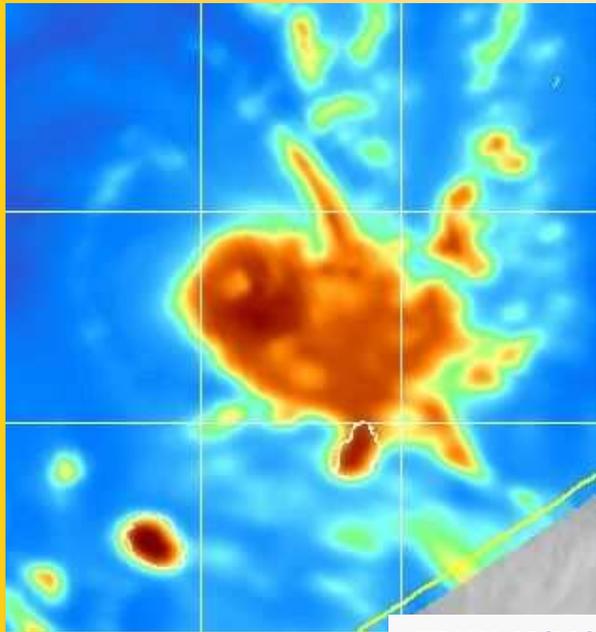


MIDGET STORMS : l'exemple du système 09-20052006

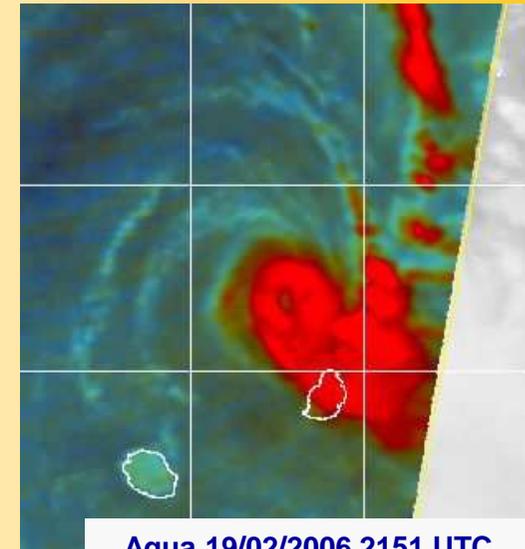
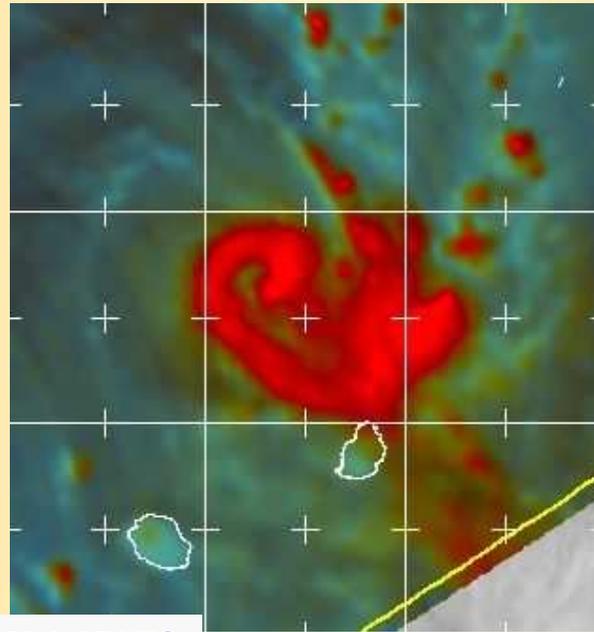


Images radar
PPI 400 km
toutes les
90 minutes
le 19/02/2006
de 0919 UTC
à 2249 UTC.

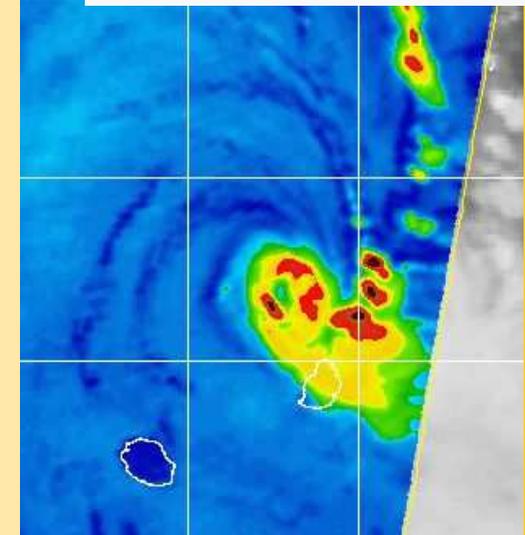
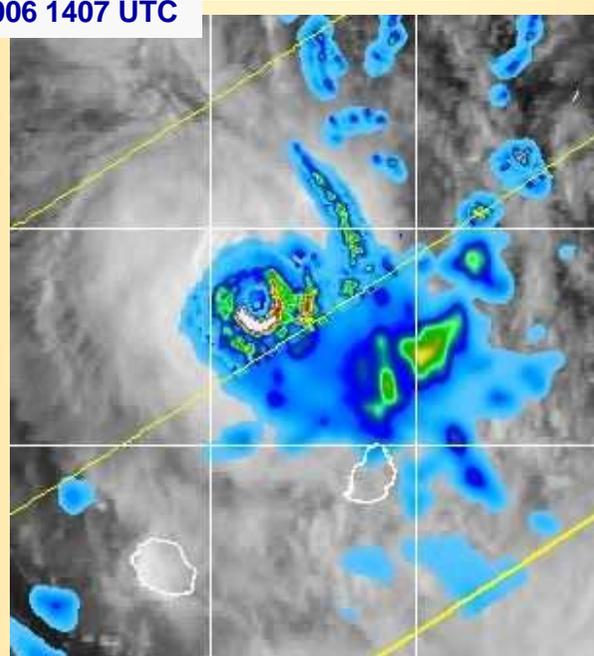
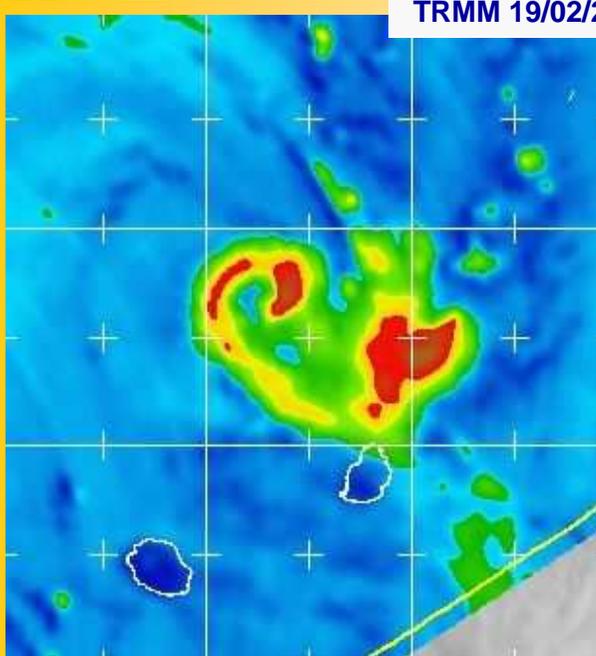
MIDGET STORMS : l'exemple du système 09-20052006



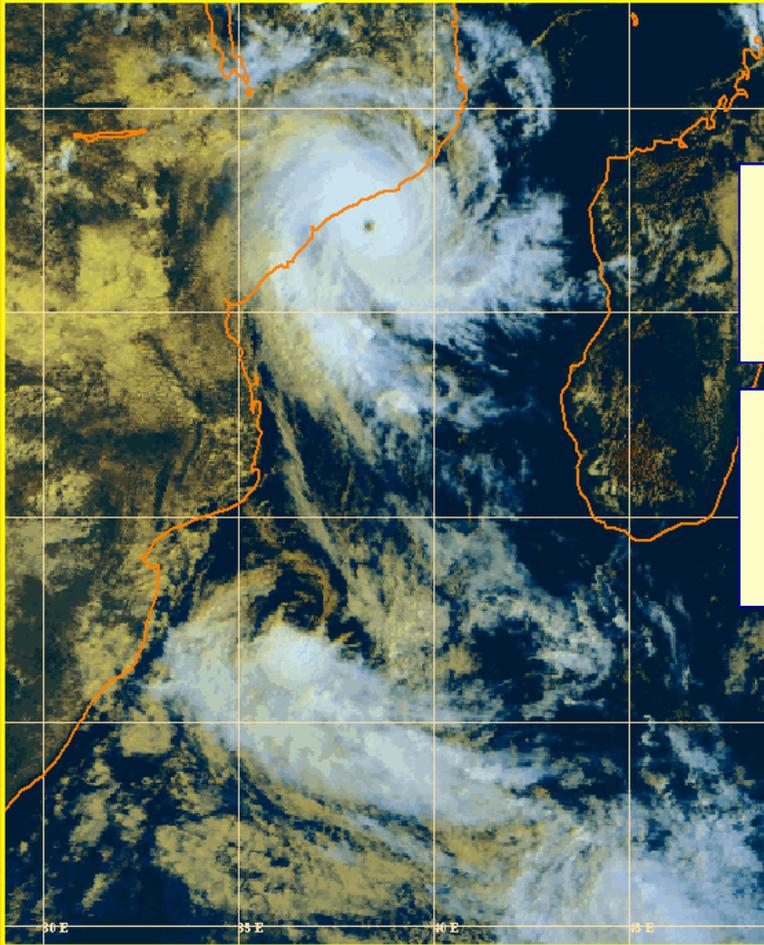
TRMM 19/02/2006 1407 UTC



Aqua 19/02/2006 2151 UTC



Les dépressions subtropicales *Subtropical depressions*

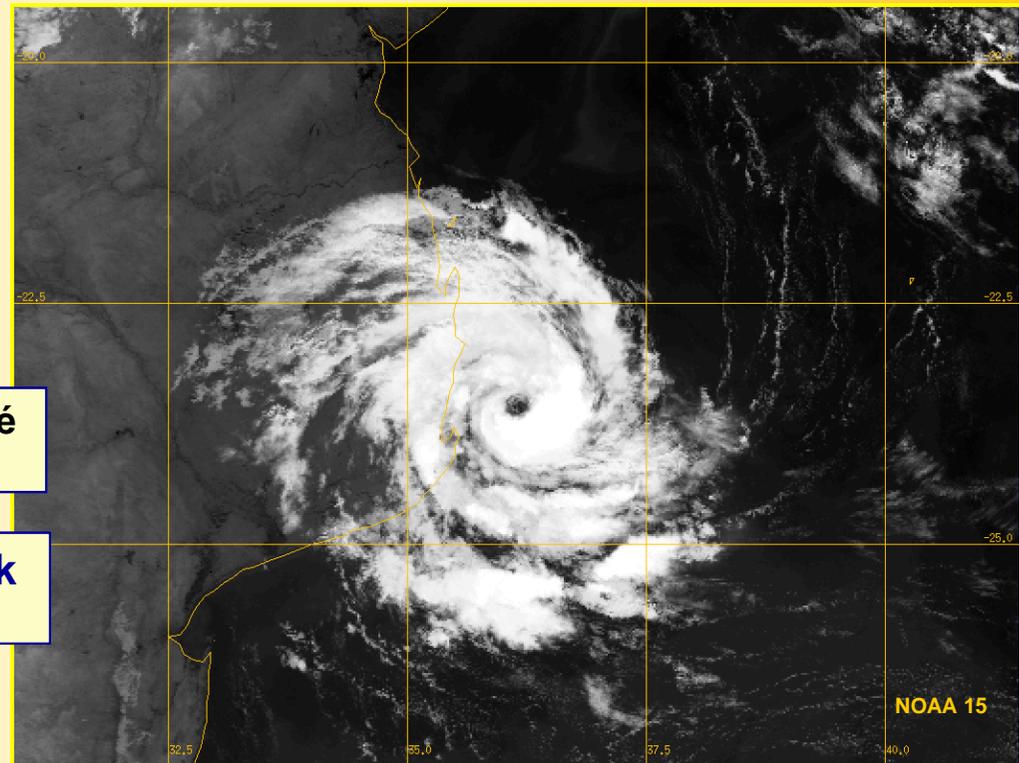


La dépression subtropicale n°13,
en début de vie, le 07 avril 2000 à 13 UTC.
(Au nord, HUDAH est en passe d'atterrir sur le MOZAMBIQUE)

**Subtropical depression N°13 at incipient stage
(07/04/2000 at 13 UTC).**
(To the north, TC HUDAH is on its way to make landfall on the
Mozambique coast)

N°13 à son maximum d'intensité
(le 12 avril 2000 à 1708 UTC).

**N°13 at intensity peak
(12/04/2000 at 1708 UTC).**



20/06/2001 0900 UTC.

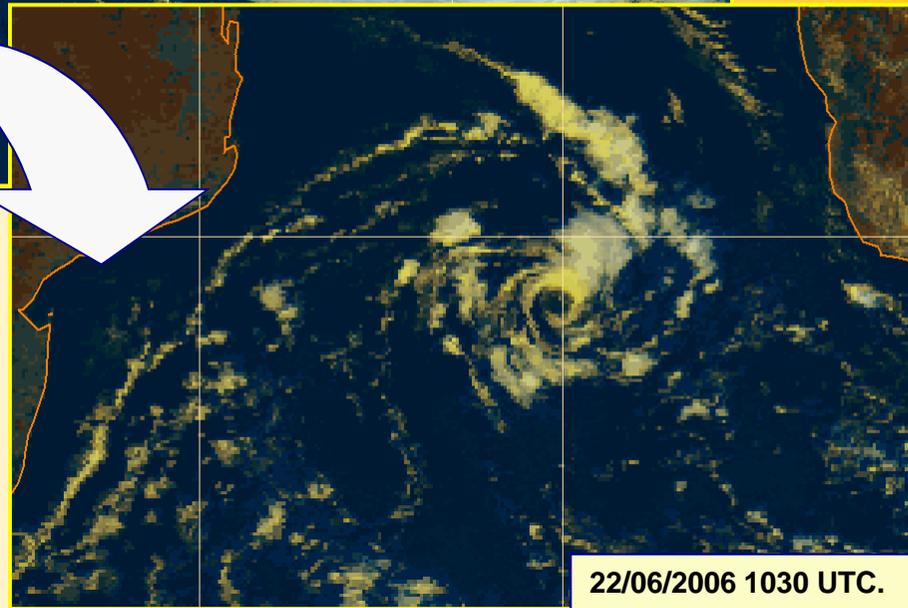
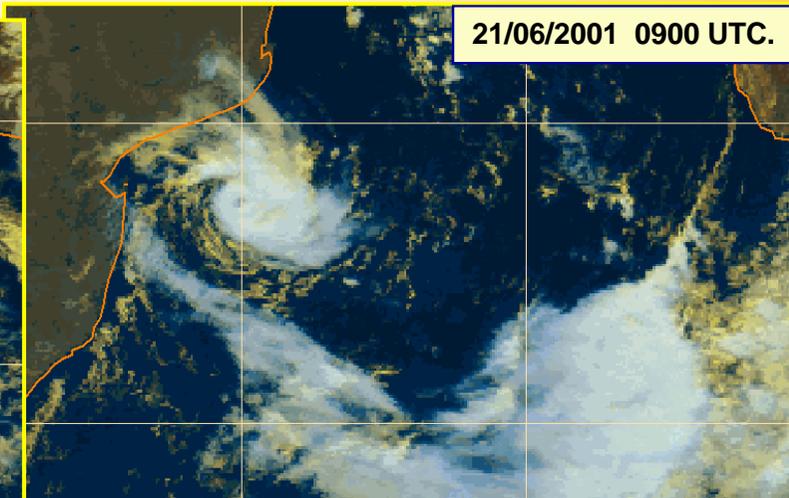
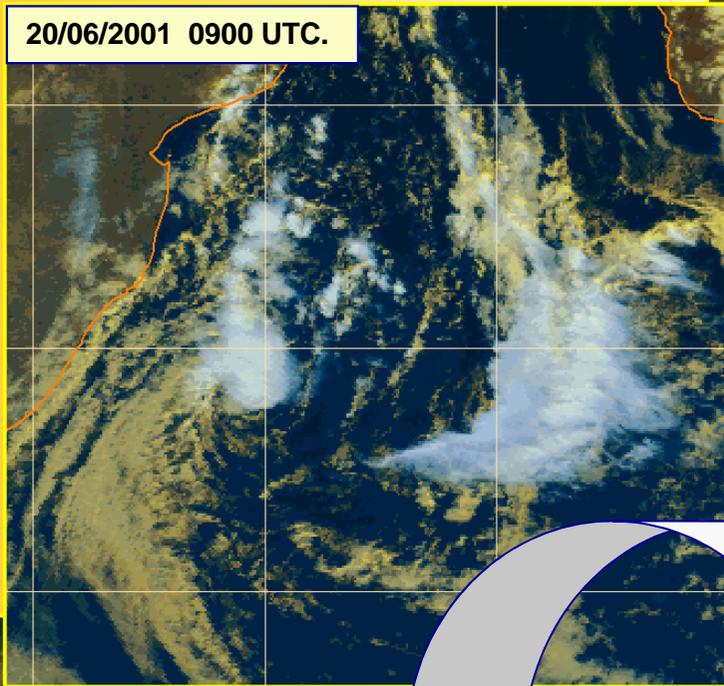
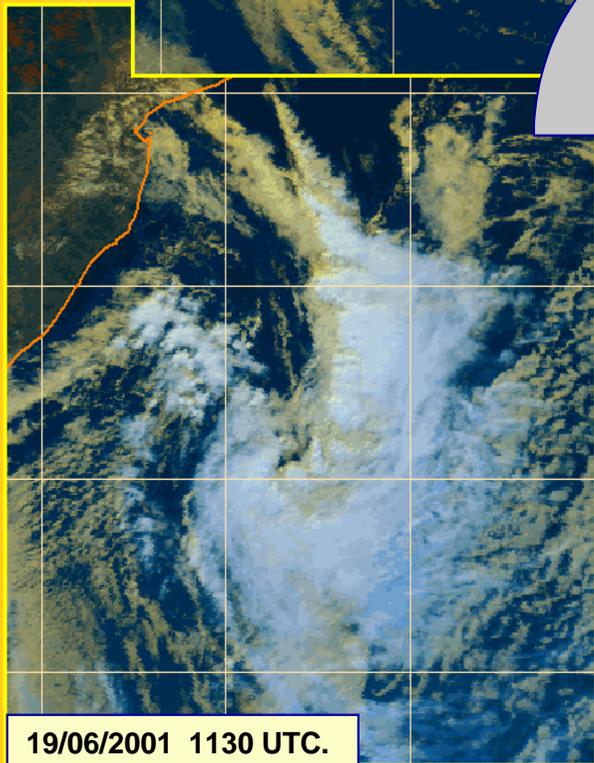
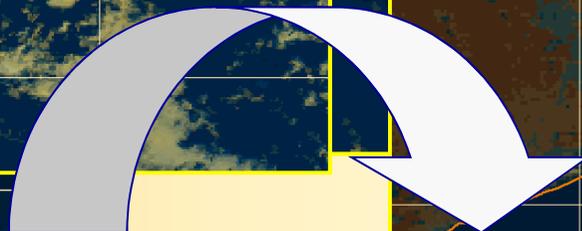
21/06/2001 0900 UTC.

22/06/2006 1030 UTC.

19/06/2001 1130 UTC.

**Dépression subtropicale n°11 :
évolution sur quatre jours**

Subtropical depression N°11 : 4-days evolution

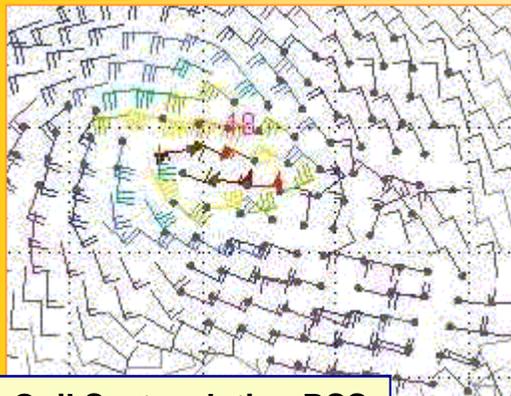


La dépression subtropicale n°11 à son maximum d'intensité

Subtropical depression N°11 at intensity peak

35E

37E



26S

27S

QuikScat, solution RSS
(21/06/2001 à 1509 UTC)

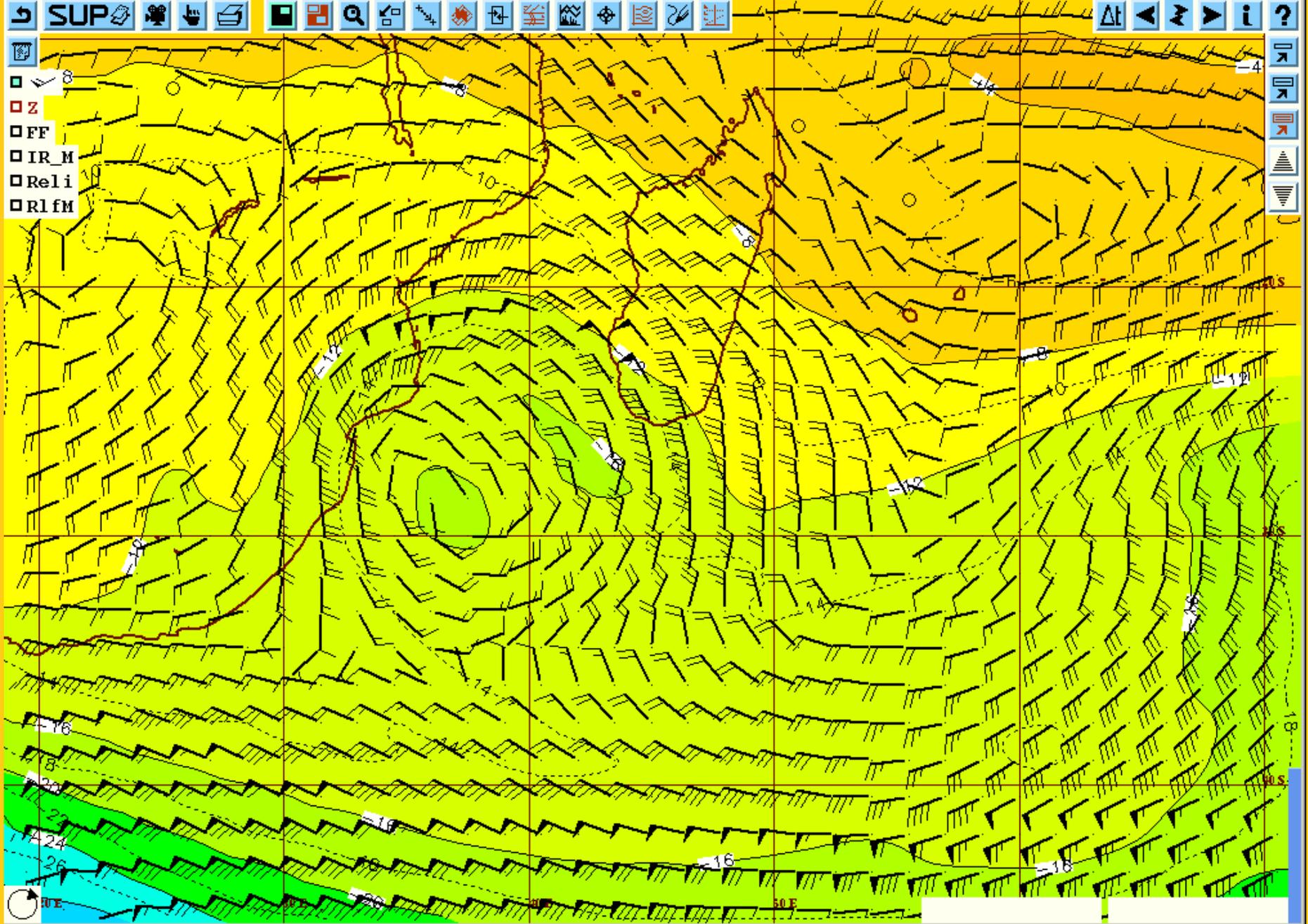
QuikScat, RSS solution
(21/06/2001 at 1509 UTC)

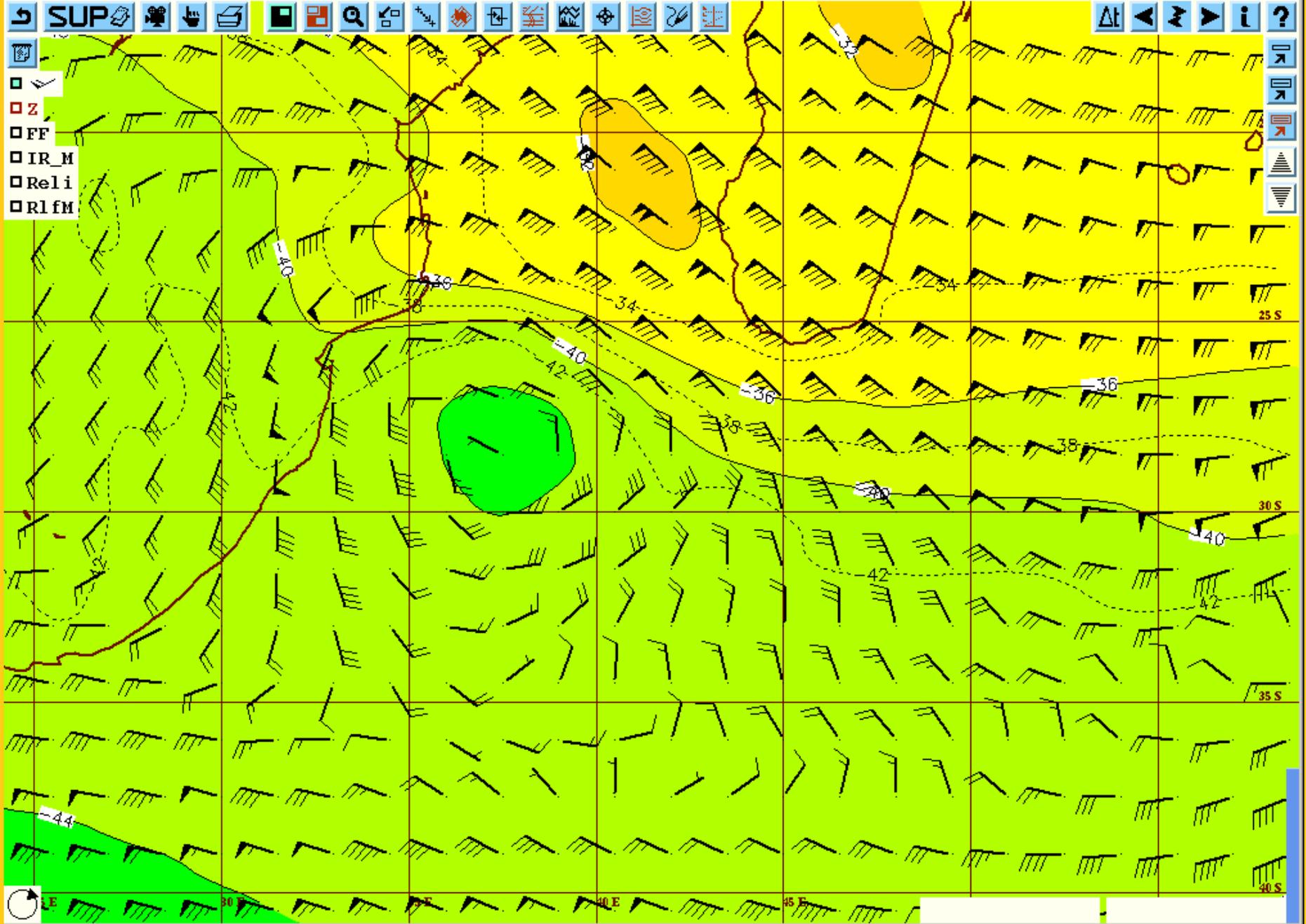
35NM / 70 km

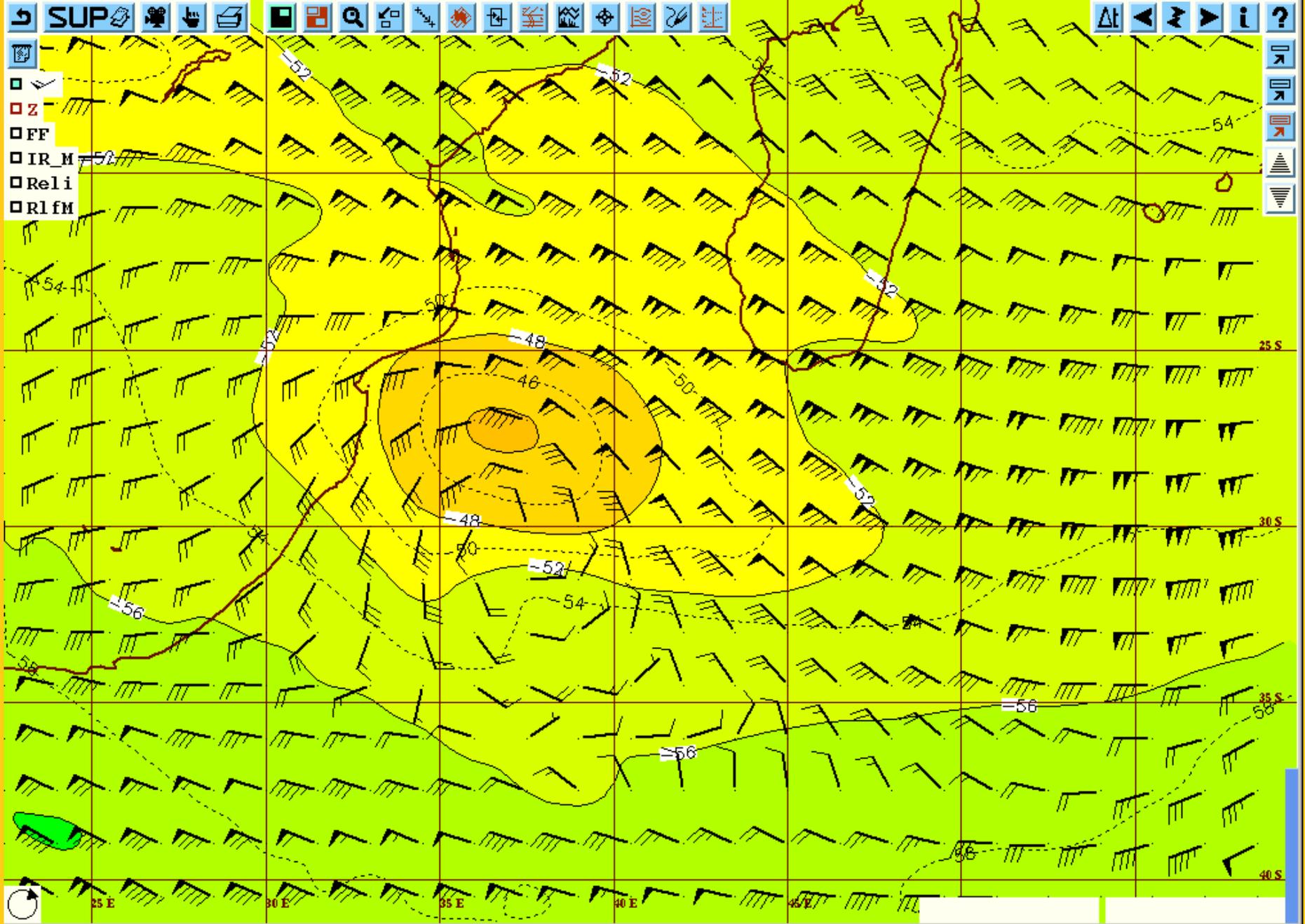
-25,0

-27,5

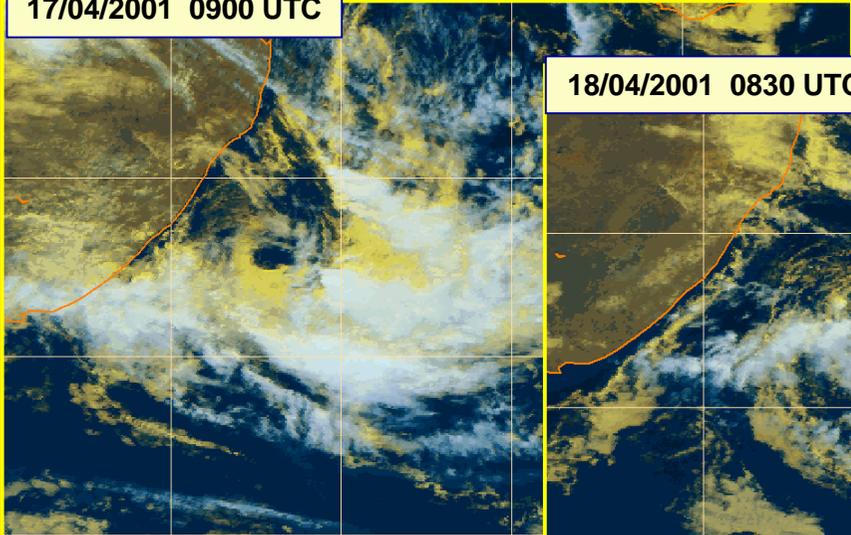
NOAA 16 21/06/2001 1115 UTC.



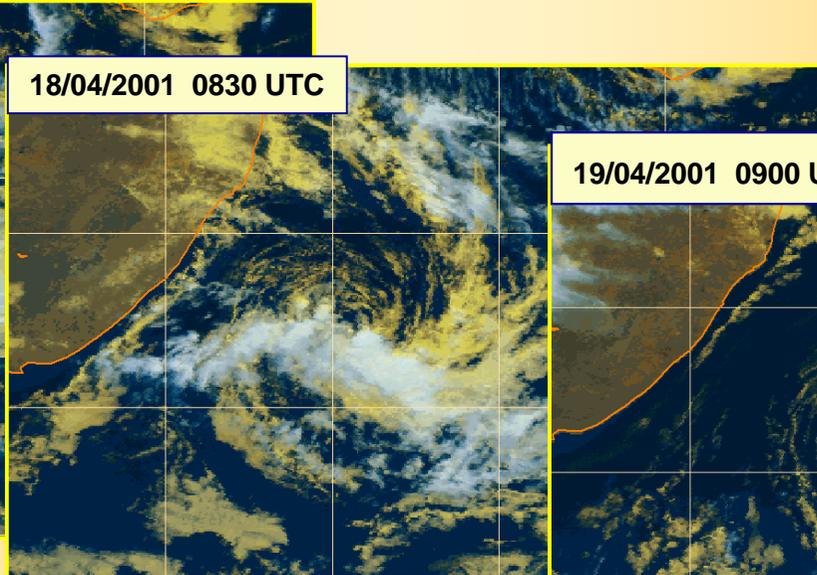




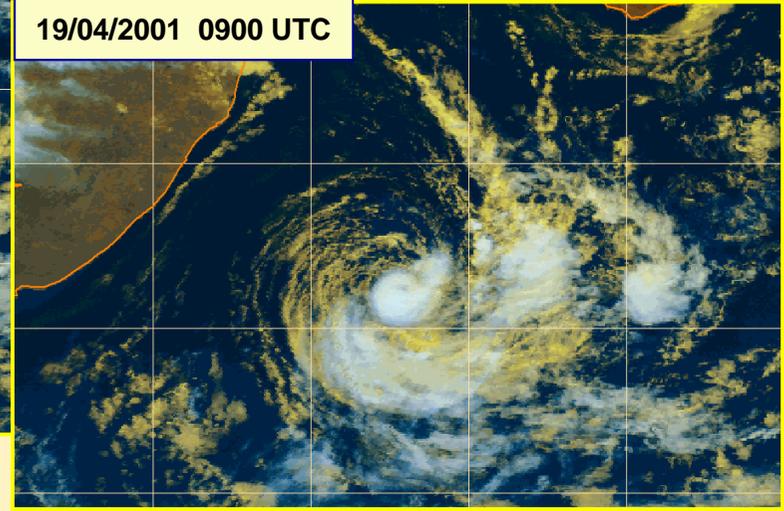
17/04/2001 0900 UTC



18/04/2001 0830 UTC

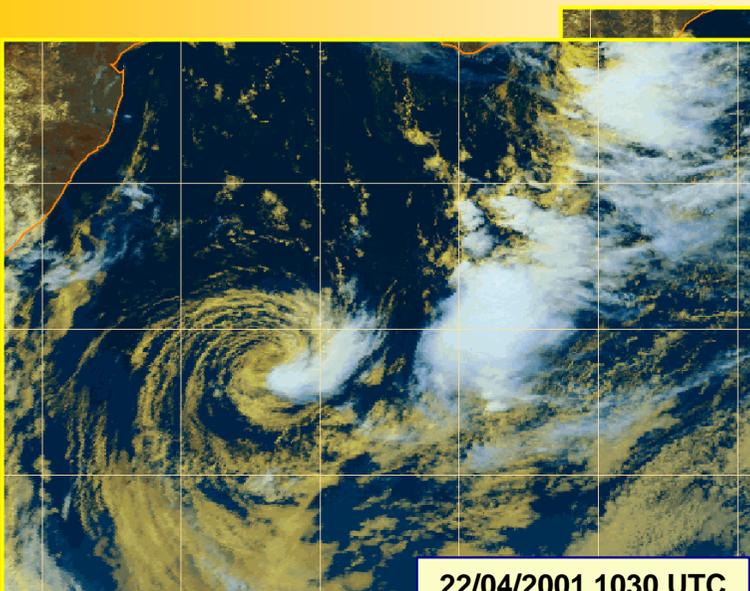


19/04/2001 0900 UTC

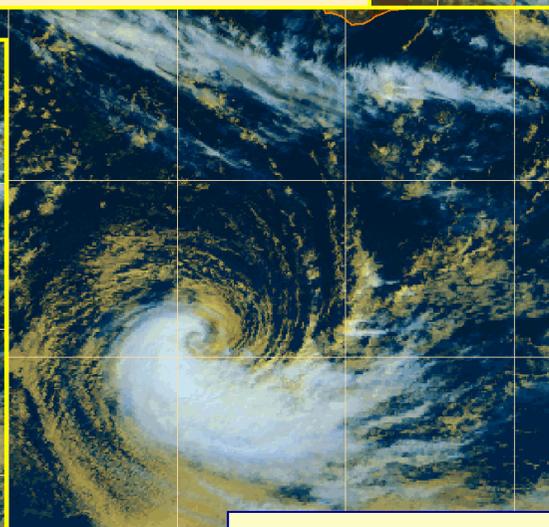


Un système hors zone de responsabilité

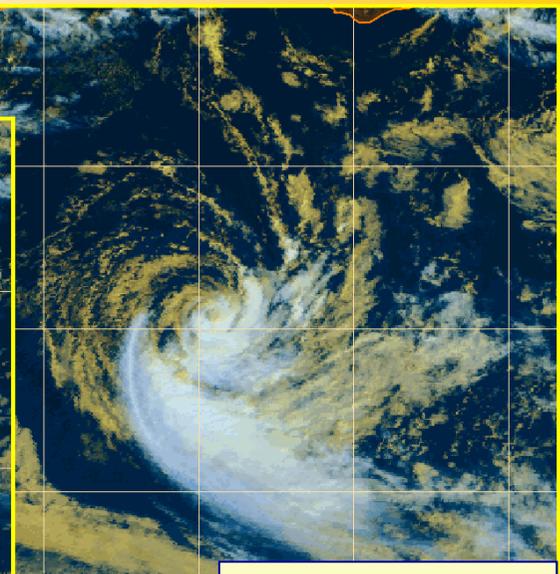
A system outside the area of responsibility



22/04/2001 1030 UTC

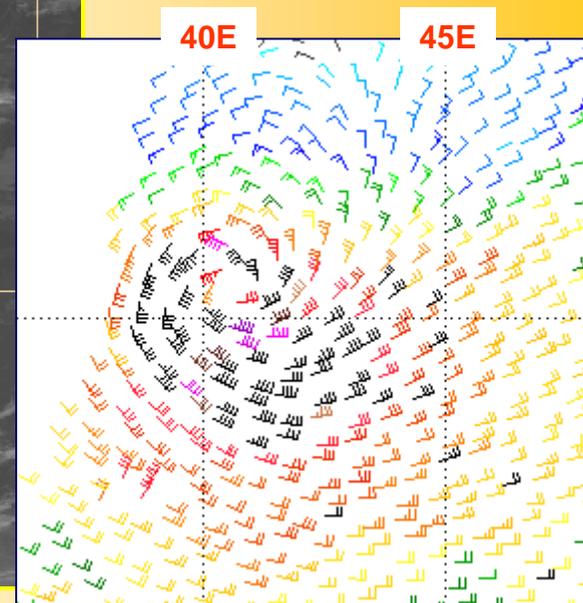
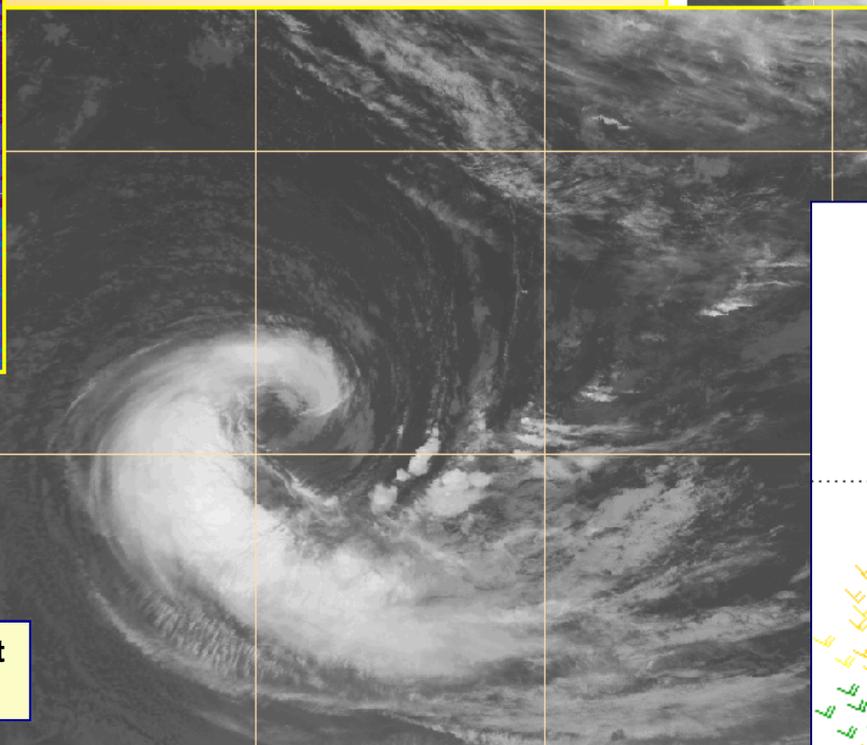
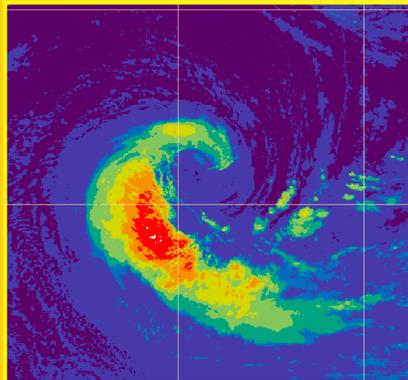
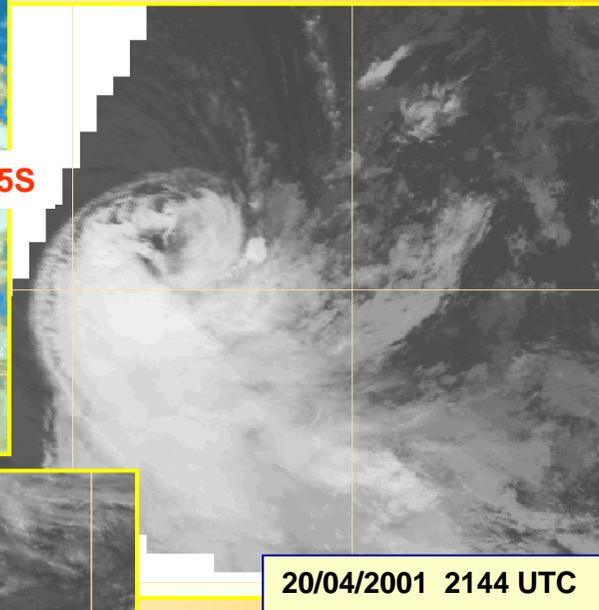
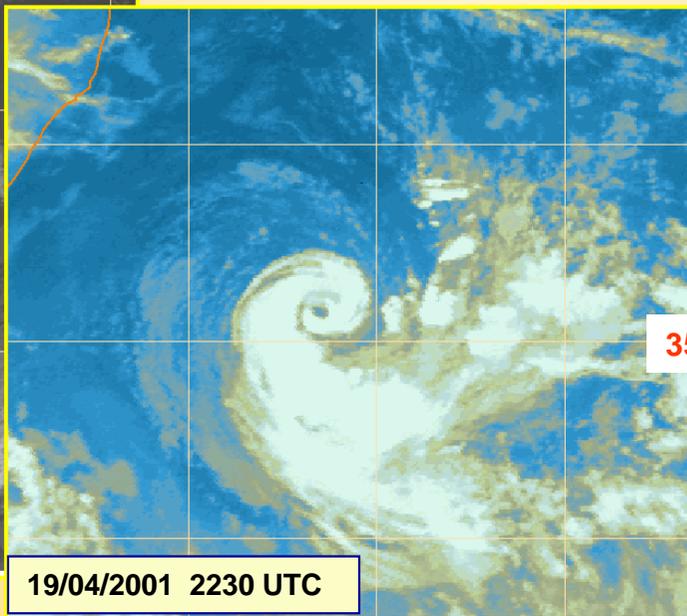
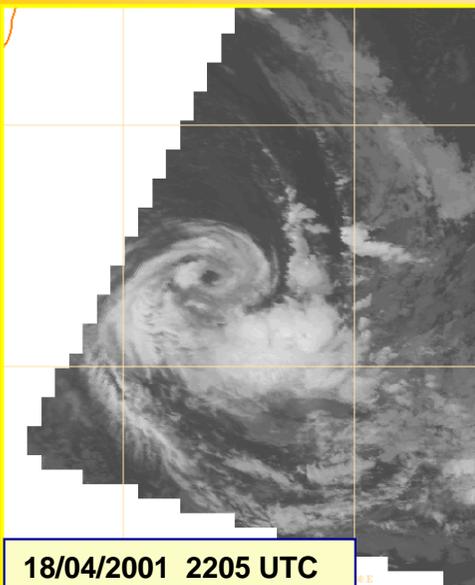


21/04/2001 1130 UTC

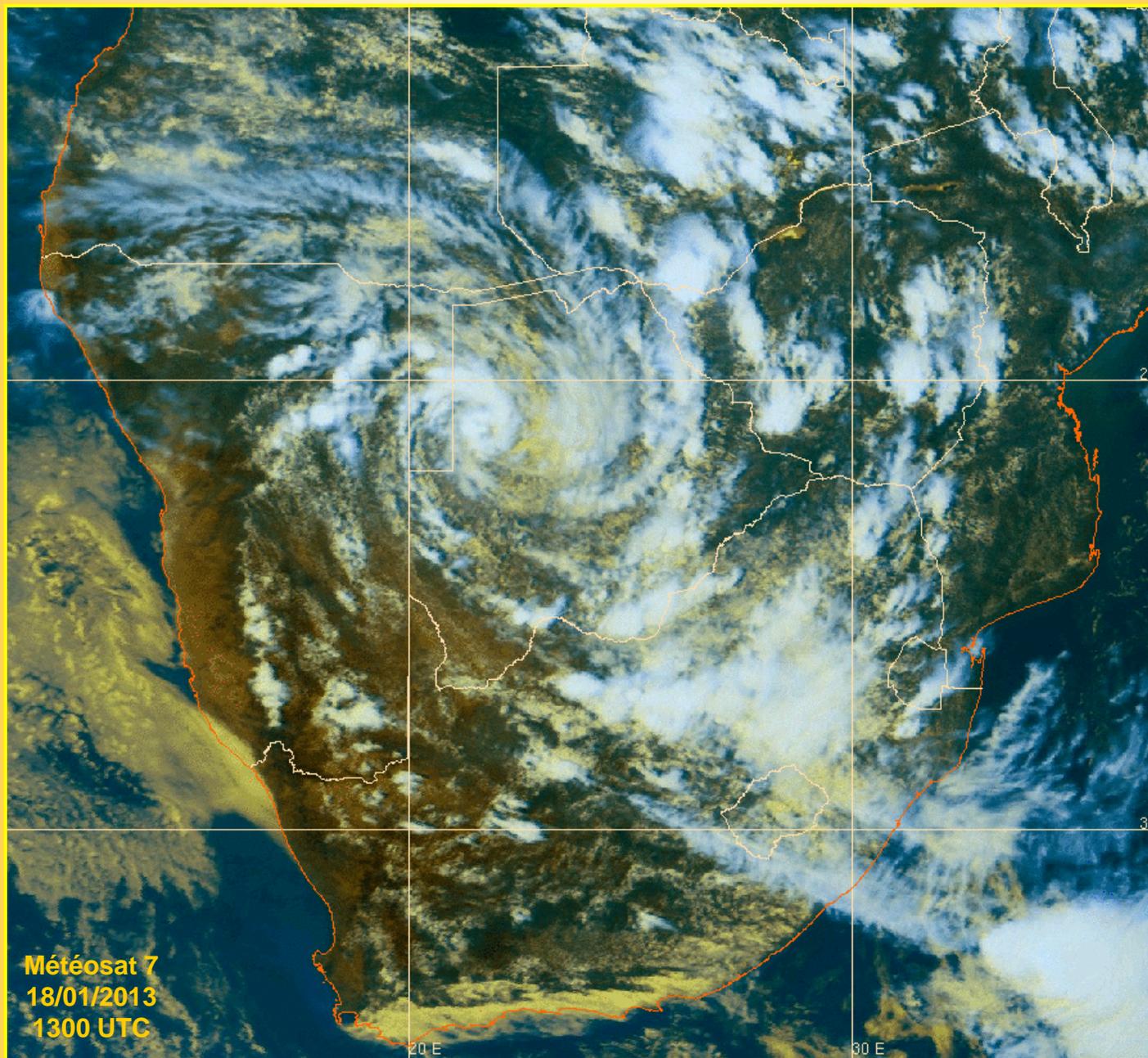


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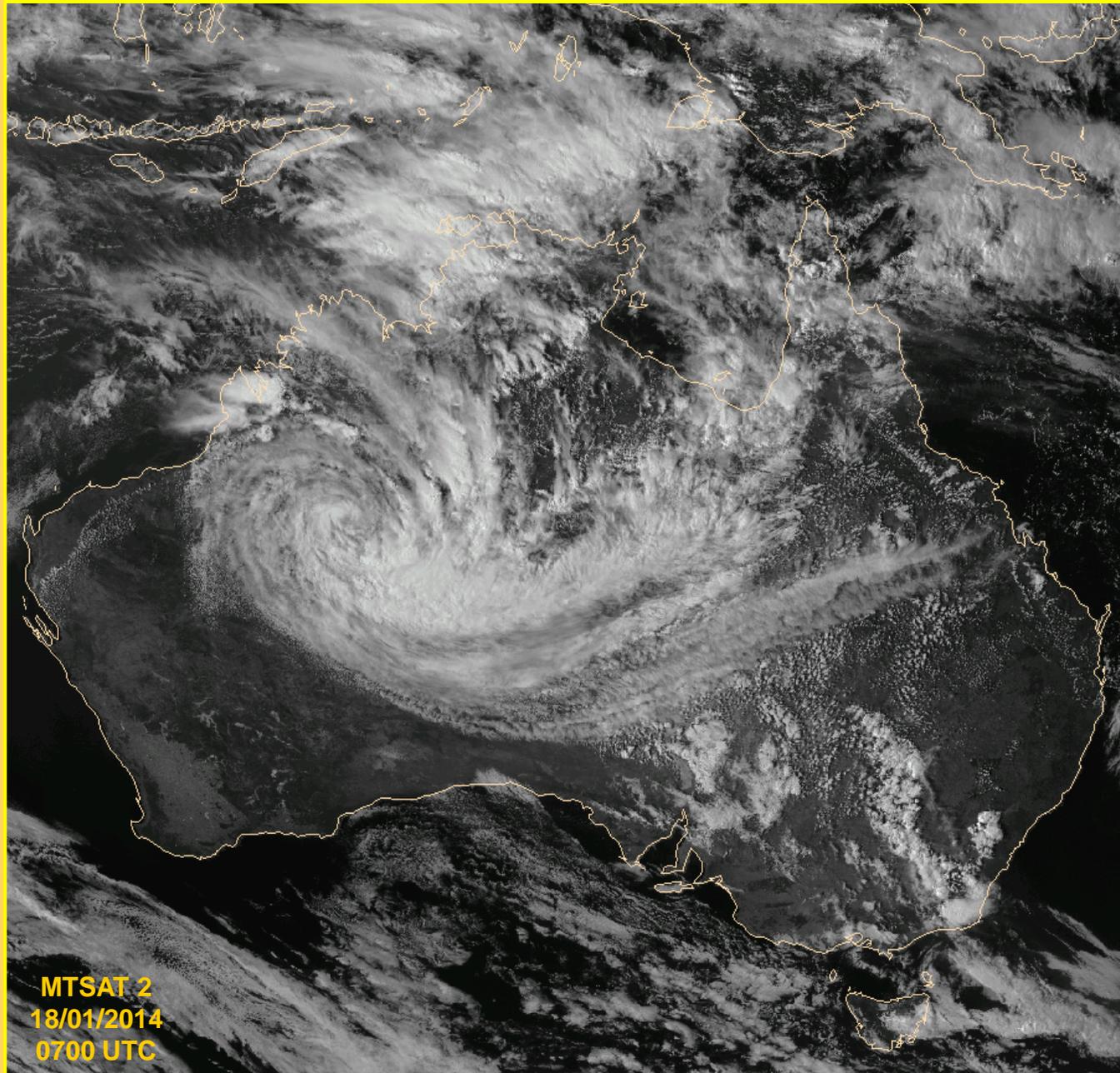
Un système hors zone de responsabilité



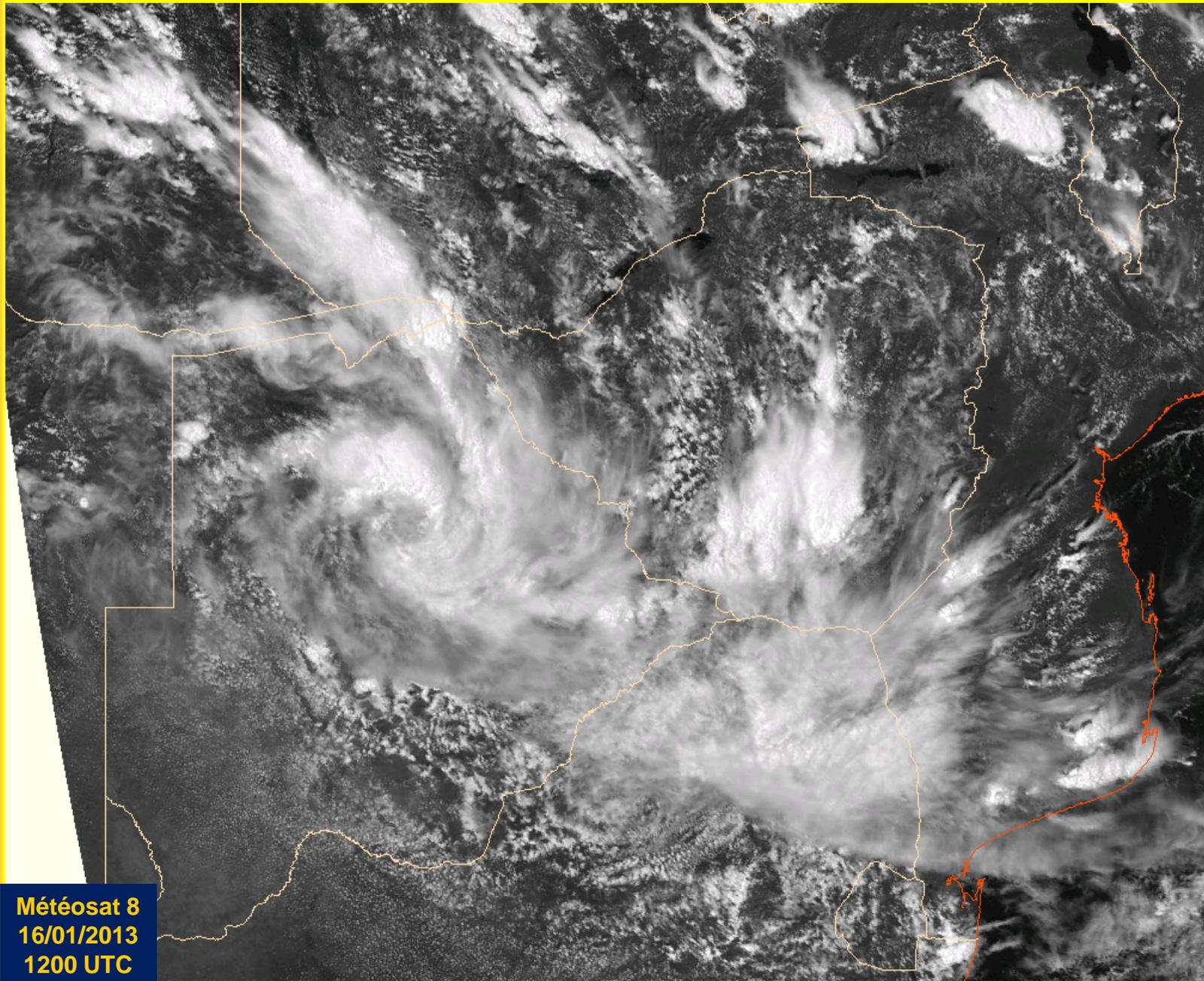
OVERLAND DEPRESSIONS



AUSTRALIAN « LANDPHOONS »

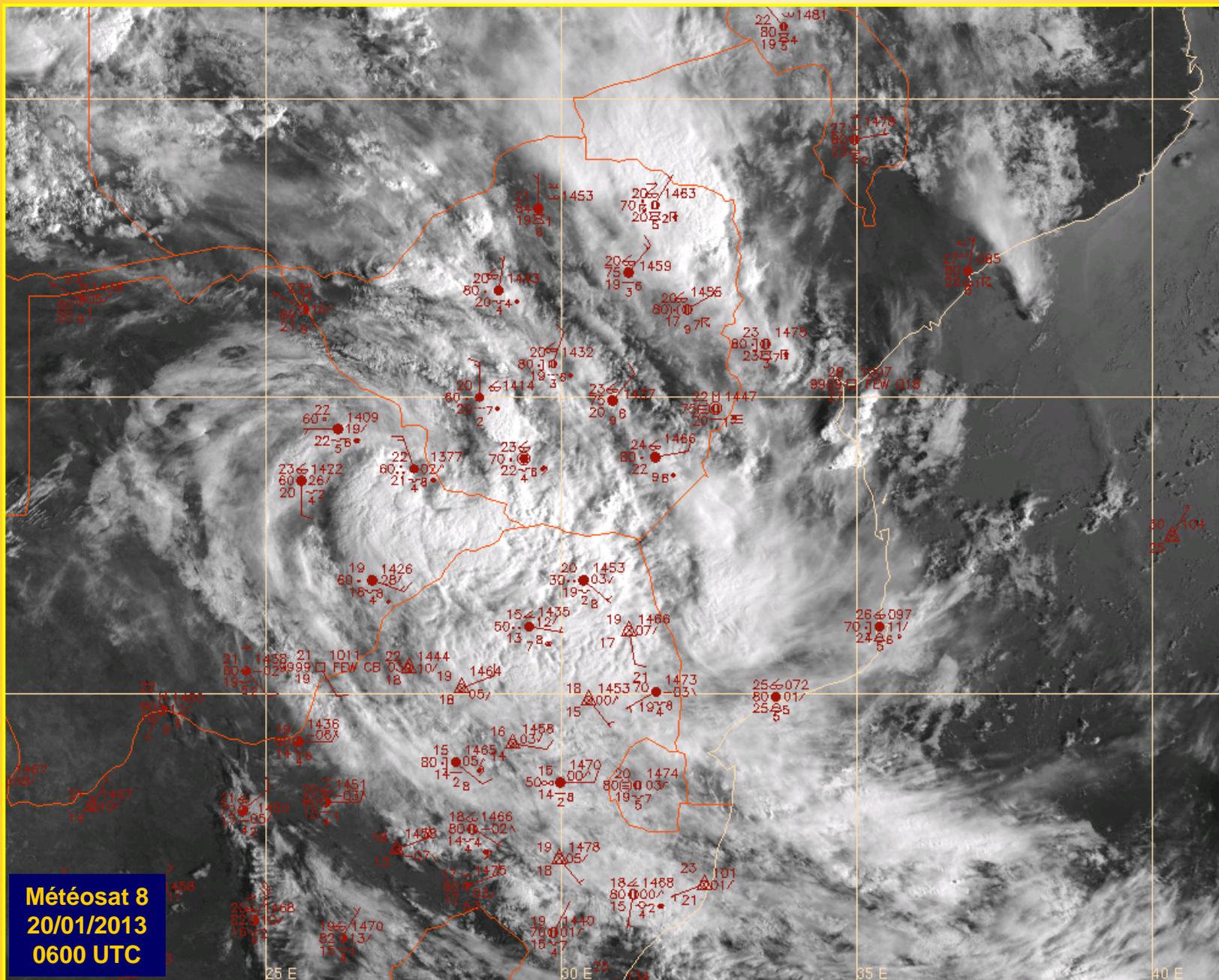


OVERLAND DEPRESSIONS or AFRICAN « LANDPHOONS »

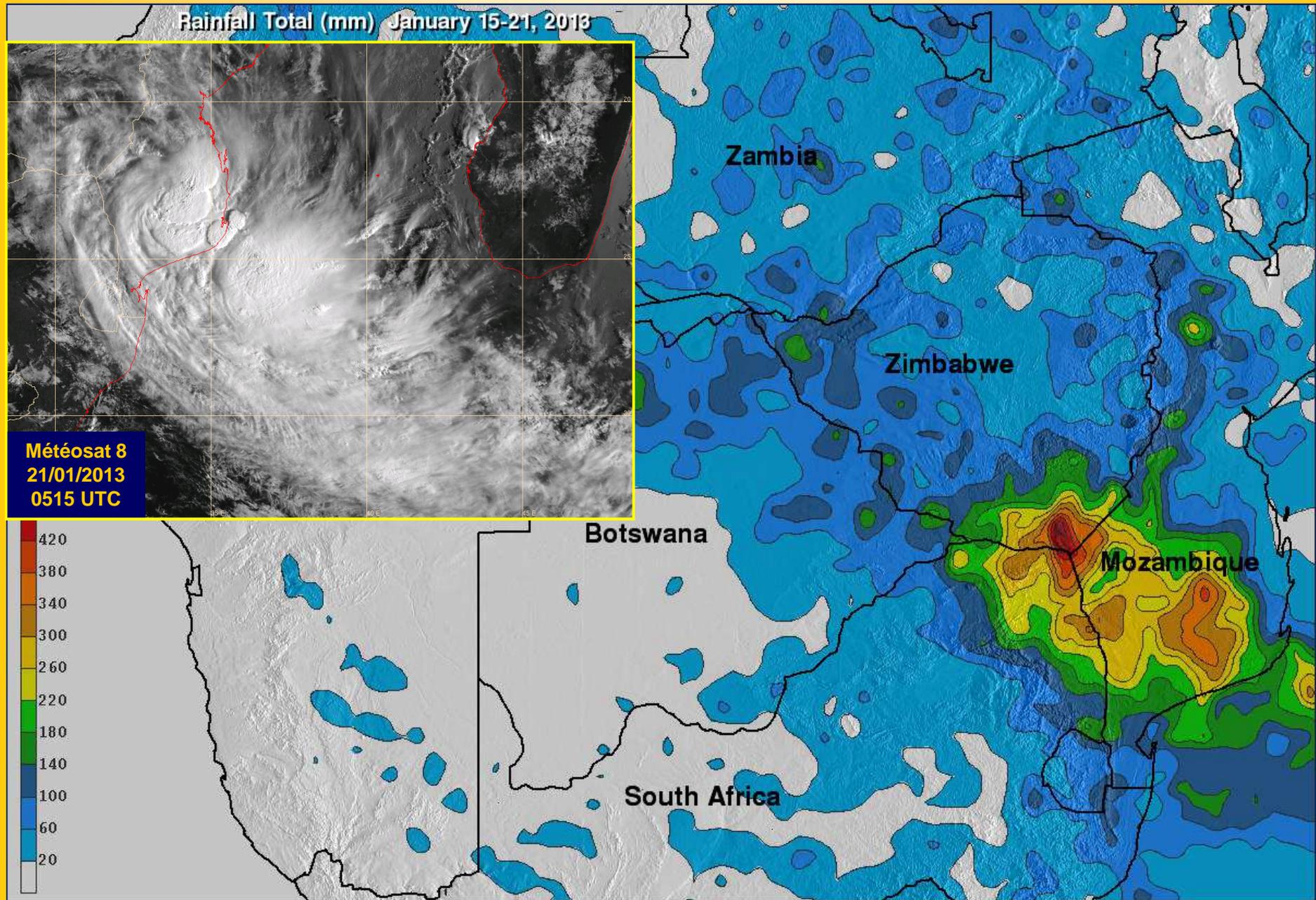


Météosat 8
16/01/2013
1200 UTC

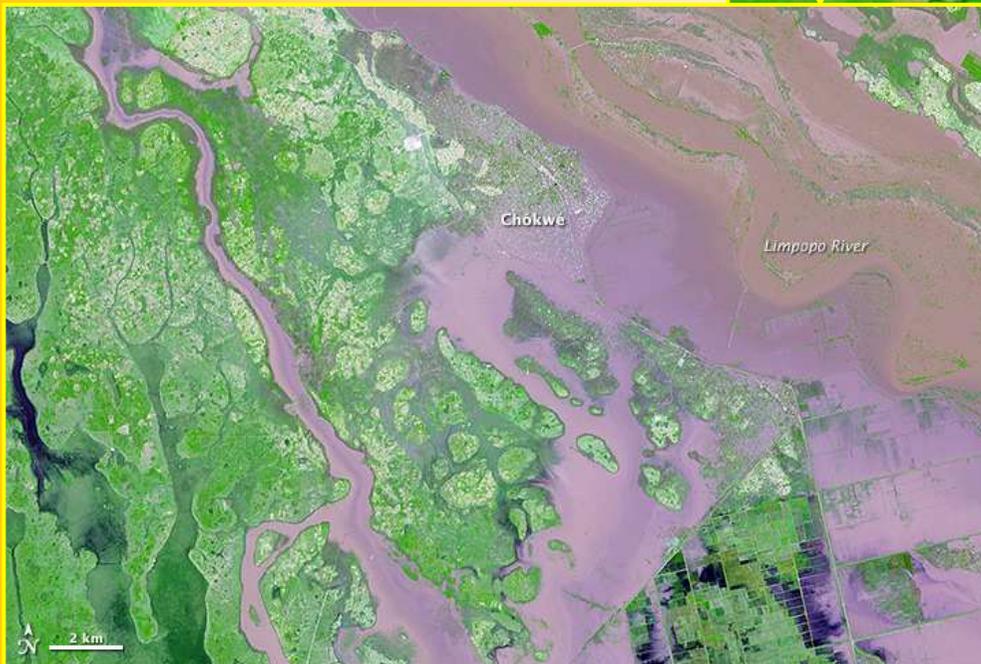
OVERLAND DEPRESSIONS



OVERLAND DEPRESSIONS



OVERLAND DEPRESSIONS



**Limpopo Valley flooding
(January 2013)**

OVERLAND DEPRESSIONS

