

Severe Weather Advisory for Mozambique and wider southern Africa

Tropical Cyclone Dineo

Issued on Tuesday, 14 February 2017 at 15:45 local time.

Headline

Tropical Storm Dineo strengthening to Tropical Cyclone before making landfall in Mozambique most likely on Wednesday evening.

Impacts

Localised Hurricane force winds close to landfall with a wider area of gales and severe Gales. Possible storm surge with large waves causing impacts along Mozambique coastline. Heavy rain also likely to lead to impacts across Mozambique and wider Southern African region through the remainder of the week.

Discussion

An area of deep convection in the Mozambique Channel has developed into Severe Tropical Storm Dineo and is forecast to move slowly W-SW and intensify to a Tropical Cyclone (perhaps Intense Tropical Cyclone) through the next 24 hours as it tracks towards Mozambique.

Even at this short lead time there is considerable uncertainty regarding the intensity, track and speed of movement of this storm, however there is considered a likelihood that Tropical Cyclone Dineo will make landfall in southern Mozambique through Wednesday afternoon or evening (with a lower probability of Thursday morning).

The most likely track based on combined information from Modelling centres looks to be close to the official track from the official RMSC La Reunion (Fig 1), tracking close to the cities of Inhambane and Maxixe, making landfall around 1800UTC Wednesday. However there is still significant uncertainty in this track with the range of possible tracks spread from as far south as Xai-Xai to as far north as Vilanculos in the north. Recent model runs from the Met Office (06/12UTC) are signalling the possibility that the Tropical cyclone may make landfall further north and as such be even faster arriving in Mozambique, perhaps as early as 0600-1200UTC on Wednesday. Whilst this cannot be ruled out general consensus remains slower and further south. It should also be noted that GFS has in the last 24-48 hours been producing a slower more southern track, with a less intense storm. This is important due to many of the products generally generated by NCEP GFS data (GDACS etc). The 06UTC GFS run has moved towards a faster solution (landfall between 1800-2400UTC Wednesday).

Destructive winds with maximum 10 minute mean winds may reach 90KT (with a low probability of >110KT) as the storm makes landfall. These peak winds will be in a fairly limited radius, close to the storm centre at landfall, although a much wider area likely to experience Tropical storm strength winds. The storm is also likely to cause a storm surge (guidance from the RMSC suggest localised peaks of 2-3m possible) and combined with large waves may result in coastal inundation. Heavy rain is expected across the region through Wednesday and Thursday with forecasts suggesting 200-400mm possible in some locations, which would likely result in flash flooding (most likely on the coastal plane).

As the weakening storm moves inland through Thursday and the rest of the week, a wider area will be exposed to heavy rain. With soil moisture levels high at this time (following above average seasonal rainfall in recent months in places), further flash flooding and river flooding in basins such as Limpopo may be further developing hazards.

Sources

RMSC La Reunion (Meteo France), Met Office, ECMWF, NCEP, JTWC.

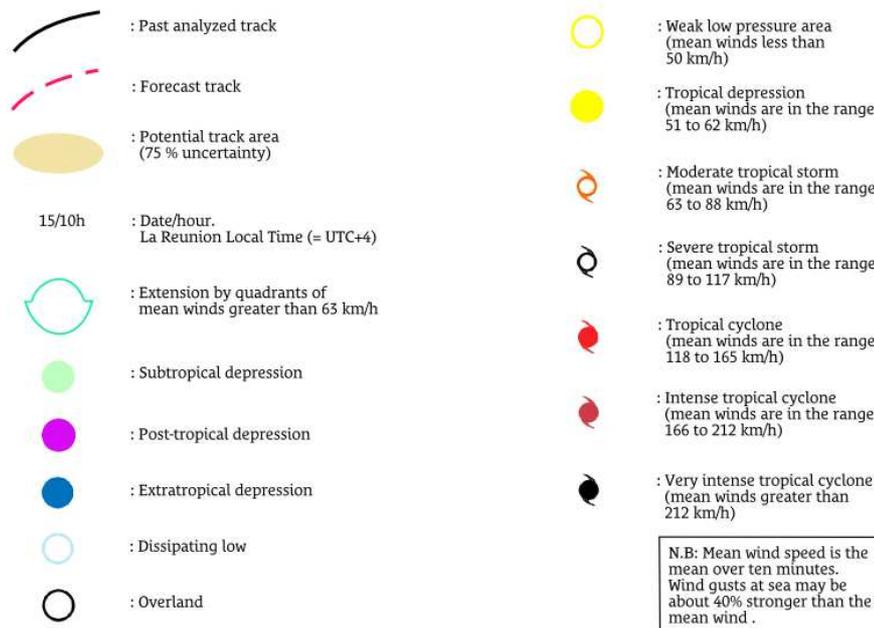
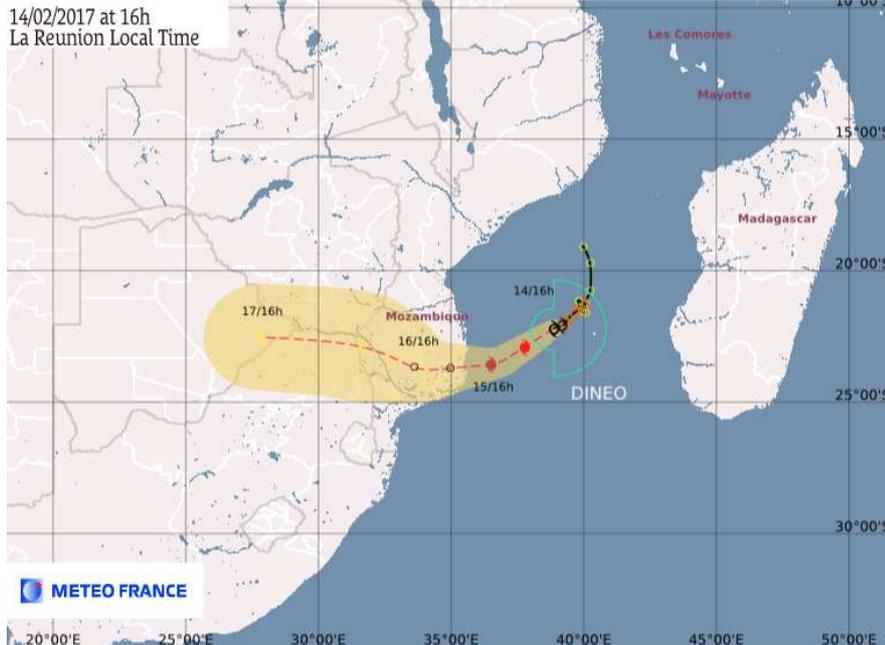
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Fig 1: Official Guidance from RMSC in La Reunion from 1200 UTC Tuesday – Note times are La Reunion local time on graphic.



WARNING:

The potential track area depicts the track forecast uncertainty for days 1-5 of the forecast. It indicates that the entire 5-days path of the center of the tropical system for which the track forecast has been made will remain within the cone about 75% of the time.

Hence being situated outside of the uncertainty cone does not mean that there is no risk of being affected by the system, especially so since the uncertainty cone is for the storm's center and does not consider the more or less large extension of potential damaging winds or rain surrounding this center.

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