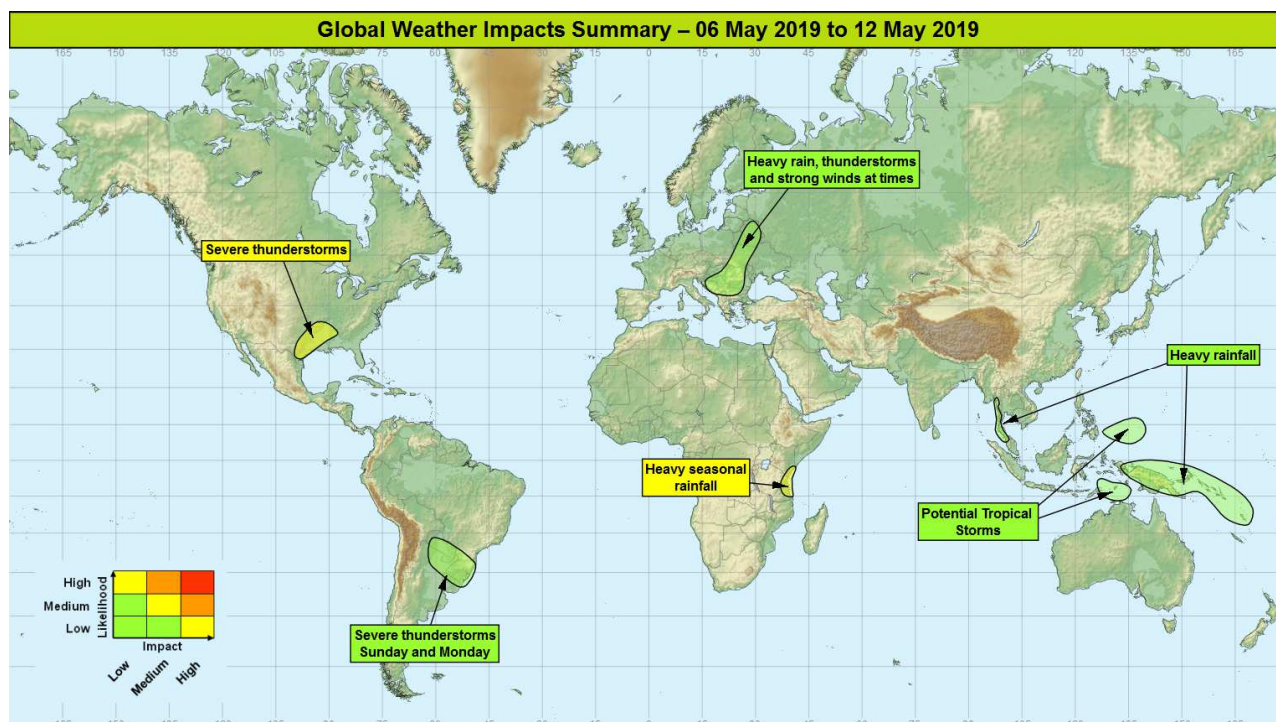


## Global Weather Impacts – Monday 6<sup>th</sup> to Sunday 12<sup>th</sup> May 2019

Issued on Monday 6<sup>th</sup> May 2019

### HEADLINES

- Heavy seasonal rainfall continues across parts of eastern Africa.
- Severe thunderstorms and risk of flash flooding across southern USA.



### DISCUSSION

#### Tropical Cyclones

There are currently no named tropical storms.

The following regions are also being monitored for potential tropical cyclone formation:

#### Micronesia and Philippine Sea

##### Weather

There is a low probability that an area of deep convection over the west Pacific could develop into a tropical storm over the coming days. Regardless of development this weak system will bring enhanced rainfall to parts of Micronesia as it slowly meanders north and west.

##### Discussion

The northern portion of an Equatorial Rossby Wave (ERW) probably emanating from the MJO has been associated with an area of showers and thunderstorms. Convection around this wave has aided the formation of a shallow low level circulation and there is a low risk this could develop into a tropical storm early this coming week.

##### Expected Impacts

In the short term the only impacts will be enhanced rainfall across some of the islands of Micronesia.



**This forecast may be amended at any time**

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## Timor-Leste and northern Australia

### **Weather**

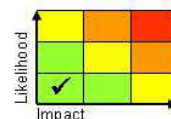
There is a low probability that an area of showers and thunderstorms, currently located in the Banda Sea, will develop into a tropical cyclone as it moves erratically into the Timor Sea during next week. If a cyclone does develop it would likely be steered close to northern Australia and/or Timor-Leste later this week.

### **Discussion**

The southern portion of an Equatorial Rossby Wave (ERW) spawned from an active MJO moving through the region, is currently associated with an area of showers and thunderstorms. This is signalled to become more organised this week, with a low level circulation developing. Although there are differences in model solutions, a number now show a tropical cyclone developing in this region later this coming week.

### **Expected Impacts**

Heavy rainfall will increase the risk of flash flooding and landslides across some of the small islands in this region, and potentially parts of northern Australia later this week. If a cyclone does develop strong winds will generate rough seas, and may cause some modest damage across land areas near the cyclone centre. As the majority of this region is sparsely populated the impacts of this event (even if a cyclone were to form) would likely be low.



## Europe

### East and Southeast Europe

### **Weather**

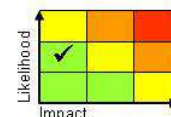
A deep low pressure system over Romania will move slowly northeast over the next 2-3 days bringing heavy rain, thunderstorms and occasional strong winds to large parts of eastern and southeastern Europe. 50-75mm of rain is likely in many areas with perhaps up to 100 mm in places. Hail and frequent lightning strikes will be additional hazards.

### **Discussion**

A deep Genoa Low developed and moved across northern Italy over the weekend and this will continue across E Europe over the next few days. The low and accompanying frontal systems will move E-NE over the next few days remain in contact with a complex low which maintains activity along the fronts.

### **Expected Impacts**

Heavy rain and thunderstorms will be associated with an increased likelihood of flash flooding and localised property/infrastructure damage.



## North America

### Central and Southern USA Plains

### **Weather**

Further thunderstorms are expected across large parts of the USA through the coming week, but the most severe of these are likely to be across the Central and Southern Plains on Tuesday, Wednesday and Thursday. These storms are capable of producing very intense rainfall (75-150 mm) over short time period (less than 6 hours). Additional hazards are large hail, strong winds and tornadoes.

### **Discussion**

A rather complex upper vortex will move slowly across the Rockies from Tuesday drawing a warm, moist airmass up from the Gulf of Mexico. This warm plume will be the focus for severe convection primarily across Texas, Oklahoma, Kansas and NE New Mexico but states to the north and east are also at risk. A combination of high CAPE, strong directional wind shear and a low-level jet will aid the development of severe thunderstorms and the potential for tornadoes.

### **Expected Impacts**

As well as flash flooding, hail and wind damage are possible to property and crops.



## Central America and Caribbean

Nil significant.

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## South America

### Paraguay, Uruguay, northeast Argentina and southern Brazil

#### **Weather**

Spell of heavy showers and thunderstorms, potentially severe, will develop across northeast Argentina, Paraguay, Uruguay and southern Brazil at times over the next week, chiefly on Monday, Wednesday and Friday. Locally high rainfall accumulations of up to 75 mm in a few hours are likely, with some places perhaps seeing locally 100-125mm.

#### **Discussion**

Pulses of activity along the South Atlantic Convergence Zone are expected over the coming week. The most intense convection is likely to be on Friday as an upper trough sweeps eastwards across the region to engage the low level tropical moisture plume.

#### **Expected Impacts**

Localised flash flooding increased chance of landslides in mountainous areas. Large hail, strong winds and frequent lightning are additional hazards which may cause damage to property and disruption to transport and utilities.



## Africa

### Eastern Tanzania and southeast Kenya

#### **Weather**

Above average shower and thunderstorm activity is expected to continue across eastern Tanzania and southeast Kenya over the next week. 75-100 mm of rainfall is possible per day, but some locations could receive as much as 300-400 mm of rain by the end of this week. Whilst May represents climatologically the wettest month of the year, this would represent more than the entire monthly average rainfall (around 250 mm).

#### **Discussion**

Whilst the remnants of Tropical Cyclone Kenneth have dissipated, the inter-tropical convergence zone will maintain the focus for frequent heavy showers and thunderstorms through the next week across eastern Tanzania and the extreme southeast of Kenya.

#### **Expected Impacts**

The focus for the heaviest rainfall has now moved away from the worst affected areas associated with the landfall and decay of Tropical Cyclone Kenneth. However, flash flooding and damage to property and infrastructure in locations further north is likely (including major cities such as Dar es Salaam and tourist destinations such as Zanzibar).



## Middle East

Nil significant.

## Asia

### Myanmar, southern Thailand and northwest Malaysia

#### **Weather**

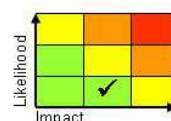
Heavy rainfall is expect across central and southern Myanmar, southern Thailand and perhaps the far northwest of Malaysia over the next week with daily rainfall accumulations of 75-100mm possible, and cumulative rainfall of 300-400mm in some places.

#### **Discussion**

Tropical moisture, drawn northwards in the wake of Cyclonic Storm Fani, accompanied by enhanced W-SW winds will be slow moving across the central Malay Peninsula over the next 5-6 days. This will provide the focus for heavy rainfall with locally very large accumulations likely.

#### **Expected Impacts**

Although May marks the start of the wet season for this part of southeast Asia, this pre-monsoon rainfall may lead to some areas seeing more than a month's worth of rainfall in 5-6 days. This is probably the first spell of heavy rainfall this year and will likely to lead to some localised flash flooding – particularly in urban areas.



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## New Guinea, Solomon Islands and Vanuatu

### **Weather**

The usual shower and thunderstorm activity is likely to be more frequent and intense for another 3-4 days, with 50-100 mm of rain in a 24 hour period (mostly falling in a 6-hour period) across portions of eastern Indonesia (Western New Guinea), Papua New Guinea, Solomon Islands and Vanuatu. Rainfall should begin to ease from Thursday.

### **Discussion**

The MJO is now over the western Pacific Ocean and so rainfall should begin to ease through this week week. However, as seen in the Indian Ocean, the MJO may spawn equatorial Rossby waves which present a low likelihood of tropical cyclogenesis.

### **Expected Impacts**

Increased threat of flash flooding and landslides.



## Australasia

Papua New Guinea, Solomon Islands and Vanuatu – see *Asia* section.

Northern Australia – see *Tropical Cyclones* section.

### Additional information

Nil.

**Issued at:** 060550 UTC    **Meteorologists:** Neil Armstrong & Matthew Lewis

**Global Guidance Unit**

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