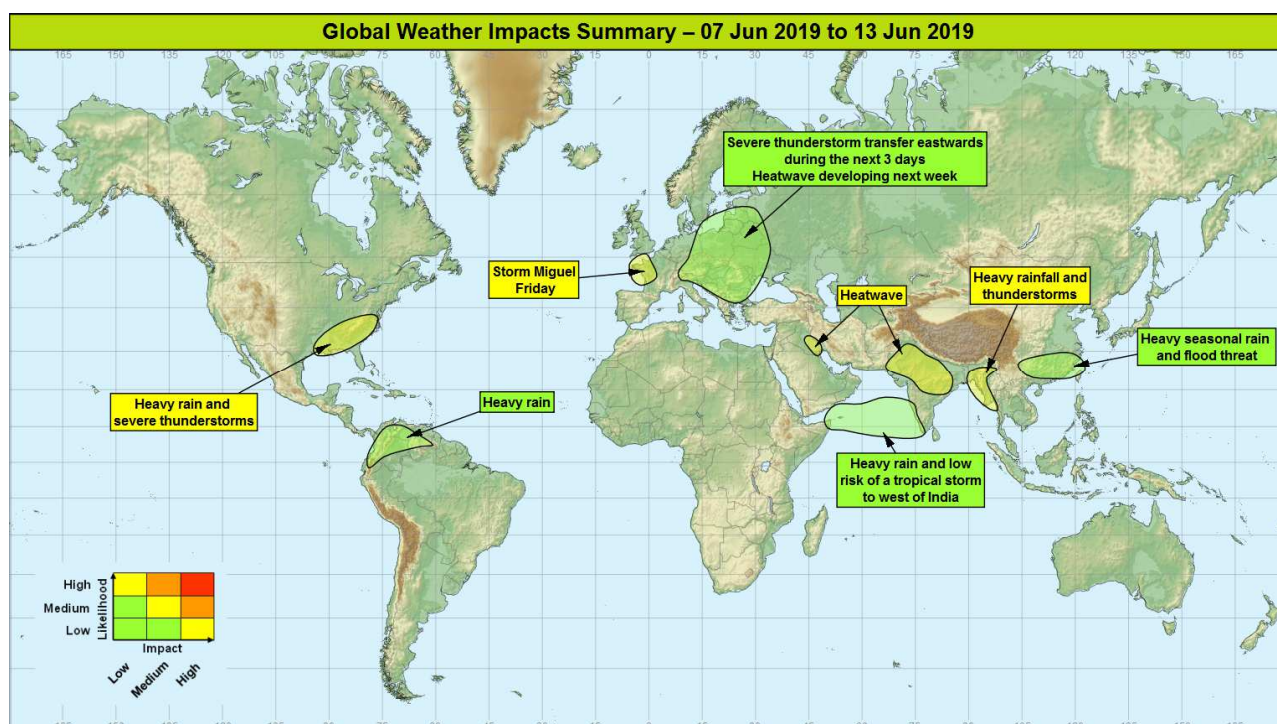


## Global Weather Impacts – Friday 7<sup>th</sup> to Thursday 13<sup>th</sup> June 2019

Issued on Friday 7<sup>th</sup> June 2019

### HEADLINES

- Very heavy seasonal rainfall and thunderstorms for parts of Bangladesh and Myanmar.
- Heavy rain and severe thunderstorms across Eastern Europe and southeastern USA.
- Heatwaves across parts of India, Pakistan and Lower Mesopotamia.
- Storm Miguel likely to bring disruptive winds to northwest France today.



### DISCUSSION

#### Tropical Cyclones

##### Indian Ocean, including Oman, Yemen and western India

###### **Weather**

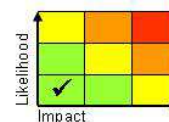
Over the eastern Arabian Sea there is a low probability of a monsoon depression or possible tropical storm developing early next week. Heavy rainfall is expected within this area with up to 150 mm in 24 hours possible along the southwest coast of India, perhaps as far north as Mumbai by next Tuesday.

###### **Discussion**

An Equatorial Rossby Wave couplet developed in the wake of the MJO as it moved across the Indian Ocean. This provides the focus for areas organised deep convection with some models showing the potential for these to consolidate into a monsoon depression or tropical storm.

###### **Expected Impacts**

Flash flooding looks like the main threat, but with a lower likelihood of dangerous maritime conditions and damaging coastal winds.



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

Global Guidance Unit, Operations Centre, Met Office, FitzRoy Road, Exeter

Tel: +44(0)1392 884319 VPN: n6225 4319 Email: [ggu@metoffice.gov.uk](mailto:ggu@metoffice.gov.uk)

© Crown copyright 2019 This information is for use by UK government only. It does not replace the advice and guidance provided by the official meteorological service for this region. Where there is a requirement to share this information with non-UK government agencies, please contact the Met Office to discuss.

**Europe****Eastern Europe****Weather**

Further severe thunderstorms will gradually transfer east across eastern Europe over the next 2-3 days. These storms could produce up to 50-75 mm of rain in a few hours, along with large hail, frequent lightning and strong winds. However, many areas will not see these storms.

This region is then likely to see a heatwave developing next week, with temperatures up to 10 degrees Celsius higher than average.

**Discussion**

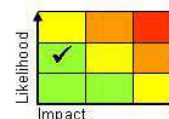
A warm continental plume across eastern Europe will be the focus for severe thunderstorms. Forecast profiles show large CAPE (in excess of 3000 J/Kg), with enough vertical wind shear to produce organised deep convection with isolated supercells and MCS.

An upper ridge will build, and persist through next week with a very warm plume of air advecting up from the south to produce a prolonged spell of hot weather across eastern Europe.

**Expected Impacts**

Flash flooding along with power outages and disruption to the transport networks (especially aviation) is possible. Large hail is likely to cause disruption to transport and damage to crops, some buildings and vehicles.

Heat stress will become an increasing impact next week as the heatwave develops, with an increasing likelihood of power failures and wild fires.

**Western France and far north of Spain****Weather**

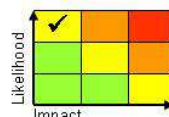
A deep area of low pressure, named Storm Miguel by the Spanish Meteorological Agency, in the Bay of Biscay will move north during Friday across Brittany and into the English Channel, before crossing southern UK and moving into the North Sea early on Saturday. Winds are likely to gust 60-70 mph in exposed coastal areas with 50-60 mph gusts extending inland over France.

**Discussion**

The area of low pressure crossed the jet axis on Thursday and underwent rapid cyclogenesis. The upper trough and jet will steer the storm N to NE during Friday and Saturday as a gradually filling feature.

**Expected Impacts**

Disruption to maritime and aviation activities. Smaller risk of damage to property or infrastructure. Given the time of year, there is an increased chance of damage to temporary structures. Large waves likely along the coast with an increased risk of minor coastal flooding.

**North America****Southeastern USA****Weather**

Heavy rain and thunderstorms will affect parts of southern USA through Friday and weekend. Some places could see up to 100-150 mm in a 24 hour period.

**Discussion**

A plume of tropical air from the Gulf of Mexico will be drawn north and east across the southern states during Thursday. The plume will be engaged by a low latitude upper trough leading to areas of severe convection over the next few days.

**Expected Impacts**

Flash flooding is the most likely impact, but frequent lightning, large hail, damaging winds and tornadoes are also possible and may cause localised disruption and damage.

**Central America and Caribbean**

Nil significant.

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

Global Guidance Unit, Operations Centre, Met Office, FitzRoy Road, Exeter

Tel: +44(0)1392 884319 VPN: n6225 4319 Email: [ggu@metoffice.gov.uk](mailto:ggu@metoffice.gov.uk)

© Crown copyright 2019 This information is for use by UK government only. It does not replace the advice and guidance provided by the official meteorological service for this region. Where there is a requirement to share this information with non-UK government agencies, please contact the Met Office to discuss.

## South America

### Ecuador, Colombia and Venezuela

#### **Weather**

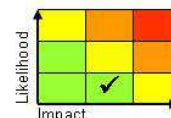
A continuation of the enhanced seasonal rainfall over northwest South America with a further 250-300mm likely in some places. The highest rainfall totals most likely over west facing slopes of the Andes mountains in Colombia.

#### **Discussion**

The ITCZ remains shifted a little south relative to normal, with the reduction in the usual wet seasonal rains withdrawing northwards from this region delayed. A series of African Easterly Waves will result in peaks of rainfall. Largest rainfall amounts are likely to be on Andes, as elevated terrain and orographic lift provide the most reliable trigger mechanisms for convection.

#### **Expected Impacts**

Flash flooding and landslides are likely, along with the potential for river flooding with this region having already experienced an anomalously wet month.



## Africa

See below.

## Middle East

### Southwestern Oman, southeastern Yemen and far northeast of Somalia

#### **Weather**

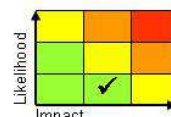
Over the last few days there has been a decreasing signal for tropical storm development in the northwest Arabian Sea and this is now considered a very low likelihood. However, there is still the possibility of heavy rain for southwestern Oman, southeastern Yemen and the far northeast of Somalia. The island of Socotra likely to see 100-150mm (the average June rainfall in this region is less than 40mm).

#### **Discussion**

An Equatorial Rossby Wave, spawned by the MJO in the India Ocean, will continue to provide the forcing for an area of enhanced convection across the NW Arabian Sea. While it is now unlikely to develop into a tropical storm heavy rain is still expected.

#### **Expected Impacts**

Flash flooding will be the main impact.



### Kuwait, southern Iraq and southwest Iran

#### **Weather**

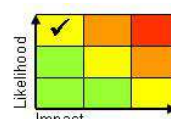
High temperatures will develop across the Tigris and Euphrates valley and Kuwait with day time maxima into the high 40s of Celsius and locally into the low 50s Celsius over the next 5-6 days.

#### **Discussion**

High temperatures are not unusual during the summer in this part of the world with extreme maxima for June generally PS52-53 across this region.

#### **Expected Impacts**

Significant threat of heat stress and power failures.



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

Global Guidance Unit, Operations Centre, Met Office, FitzRoy Road, Exeter

Tel: +44(0)1392 884319 VPN: n6225 4319 Email: [ggu@metoffice.gov.uk](mailto:ggu@metoffice.gov.uk)

© Crown copyright 2019 This information is for use by UK government only. It does not replace the advice and guidance provided by the official meteorological service for this region. Where there is a requirement to share this information with non-UK government agencies, please contact the Met Office to discuss.

**Asia****Southern Bangladesh and western Myanmar****Weather**

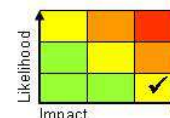
Intense showers and thunderstorms are expected during the next few days. This will mean that the threat of very heavy rainfall for Cox's Bazar. Up to 300 mm of rain could fall in a few days.

**Discussion**

Southwest winds will draw very high moisture northeast into Bangladesh and Myanmar leading to a threat of frequent thunderstorms and torrential rain over coast and inland mountains over the next few days.

**Expected Impacts**

Flash flooding looks like the main impact, especially for vulnerable populations within the Cox's Bazar district.

**Central and northern India, along with eastern Pakistan****Weather**

The pre-monsoon heatwave will become re-established over the weekend and through the early part of next week. Temperatures will increase to the high 40s of Celsius and locally into the low 50s Celsius again, around 5 to 10°C above average.

**Discussion**

The arrival of the monsoon rains into India are currently around 10 days slower than average, but may well jump northwards over the 3-5 days as the MJO propagates eastwards. As a result it is difficult to make predictions about arrival times across NW India and Pakistan, but an extended heatwave may lead to increasingly high impacts over the next few weeks.

**Expected Impacts**

Significant threat of heat stress and power failures.

**Southern China and Taiwan****Weather**

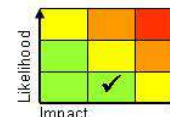
Heavy rainfall and thunderstorms will affect southern China and Taiwan over the next 5-6 days. Up to 400 mm of rain could fall in a few days and there is also the potential for severe thunderstorms that could produce hail and strong winds.

**Discussion**

There is good model agreement for upper troughing to engage the quasi-stationary baroclinic zone known as the Mei-yu front. The upper trough will destabilise the low-level plume, resulting in large CAPE/vertical wind shear profiles bringing the threat of severe convection.

**Expected Impacts**

Flooding and flash flooding are likely to be the main impacts, especially in urban areas. Disruption to transport and infrastructure is also likely in what is a densely populated area.

**Southwest India** – see *Tropical Cyclones* section**Australasia**

Nil significant.

**Additional information**

Nil.

**Issued at:** 070700 UTC **Meteorologist:** Neil Armstrong / Paul Hutcheon

**Global Guidance Unit**

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

Global Guidance Unit, Operations Centre, Met Office, FitzRoy Road, Exeter

Tel: +44(0)1392 884319 VPN: n6225 4319 Email: [ggu@metoffice.gov.uk](mailto:ggu@metoffice.gov.uk)

© Crown copyright 2019 This information is for use by UK government only. It does not replace the advice and guidance provided by the official meteorological service for this region. Where there is a requirement to share this information with non-UK government agencies, please contact the Met Office to discuss.