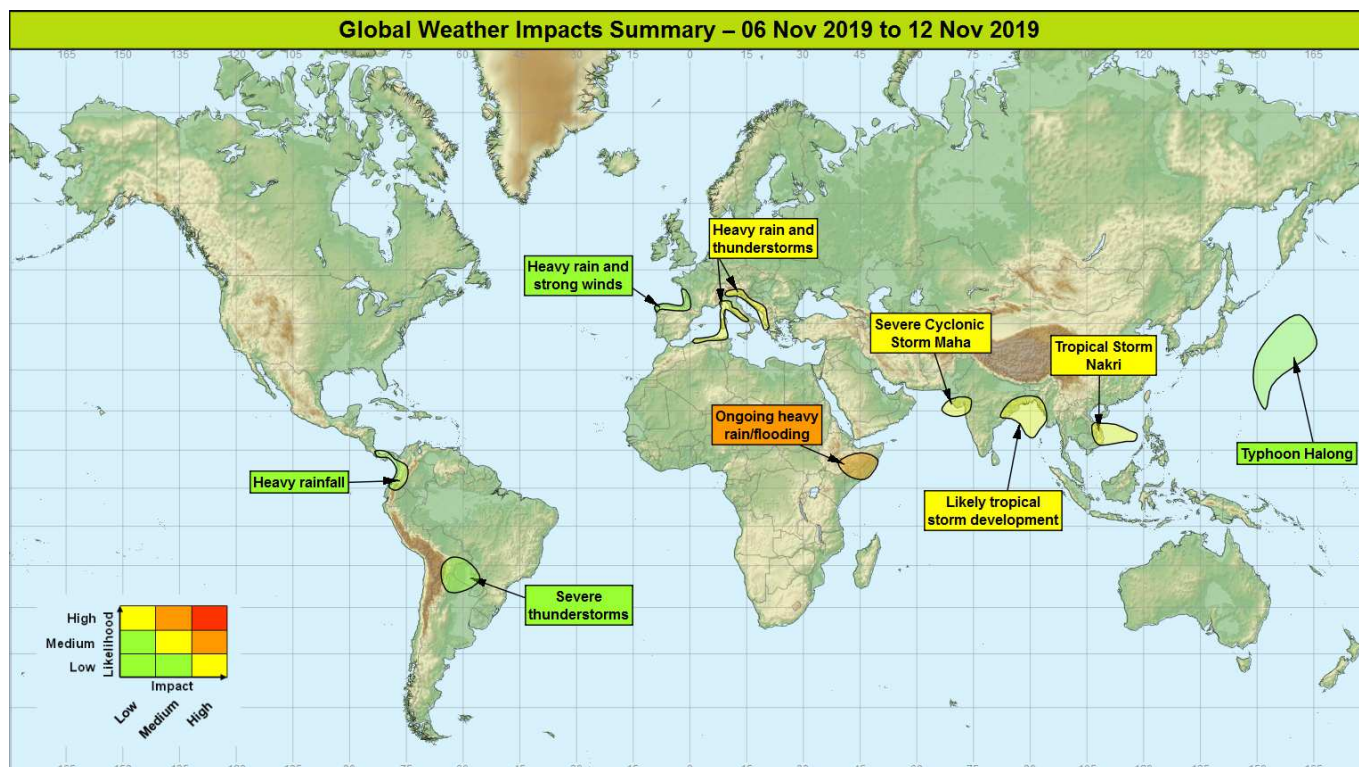


## Global Weather Impacts – Wednesday 6<sup>th</sup> to Tuesday 12<sup>th</sup> November 2019

Issued on Wednesday 6<sup>th</sup> November 2019

### HEADLINES

- Continued heavy rain and flooding across parts of Somalia and eastern Ethiopia.
- Severe Cyclonic Storm Maha expected to reach northwest India as a weakening system.
- Nakri forecast to reach Vietnam this weekend and another tropical cyclone is likely to form in the Bay of Bengal over the coming days.
- Remaining very unsettled across the central Mediterranean.



### DISCUSSION

#### Tropical Cyclones

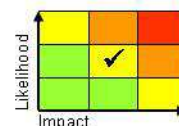
##### Severe Cyclonic Storm Maha (Arabian Sea)

##### Weather

Maha peaked as an extremely severe cyclonic storm early Tuesday, but has since weakened. This trend expected to continue before the system reaches the Gujarat/Maharashtra coast during Thursday. Some 200-300 mm of rainfall is likely along its path. Although rainfall of this intensity is not unheard of in this region of India, it would still represent several times the November average, given that this is usually the start of the dry season here.

##### Discussion

Maha formed in response to the organisation of an area of deep convection by an Equatorial Rossby Wave. Recently Maha has overrun the cold SST footprint left by the transit of Kyarr, and will therefore begin to weaken further through today. A trough extension across Iran will lead to strong upper level westerly winds in this region, these will have the impact of steering the system towards the east, but also producing a hostile environment (strong vertical windshear) that will further weaken the cyclone as it moves east.



This forecast may be amended at any time

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## Expected Impacts

During the next few days Maha is likely to bring strong winds and torrential rainfall to the coast of Gujarat and Maharashtra with flash flooding likely. Large swells/rip-currents could affect Arabian Sea coastlines.

## Typhoon Halong (Northwest Pacific)

### Weather

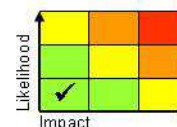
This system has significantly strengthened during the past few days, with sustained 10 minute winds of 130 mph. Halong is well to the northeast of Guam (Northern Mariana Isles) and will continue to track away to the northeast, slowly weakening as it does so.

### Discussion

Typhoon Halong has likely reached its peak over the open waters of the west Pacific. The storm is likely to slowly weaken in the coming days whilst staying clear of land.

### Expected Impacts

Limited to marine transport with this system not expected to impact any land.



## Tropical Storm Nakri (South China Sea)

### Weather

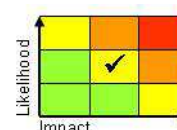
Tropical storm Nakri developed on Tuesday, with the tropical storm likely to track very slowly west toward Vietnam, probably reaching here over the weekend. Naki looks likely to intensify potentially becoming a typhoon by Friday. Nakri may affect similar areas which are still recovering from the impacts of the transit of Matmo across the area a week or so ago. Whilst heaviest rainfall from the system will likely be over open waters, some 150-300 mm of rain is possible for coastal parts of central Vietnam over the weekend.

### Discussion

Nakri is initially signalled to be almost stationary, before slowing moving toward Vietnam. Environmental conditions are conducive to further slow strengthening with the JMA forecasting the system reaching typhoon strength by Friday.

### Expected Impacts

Some impacts from flash flooding are possible across parts of the western Philippines in the next few days. Longer term there is a growing likelihood of flood and landslide impacts for parts of Vietnam from the weekend.



*The following area is being watched for tropical cyclone formation over the next 7 days.*

## Bay of Bengal

### Weather

A large area of showers and thunderstorms is likely to become better organised through this week, with a high chance of forming a tropical cyclone later this week. This system is likely to threaten some northern coastal regions of the Bay of Bengal by the weekend.

### Discussion

The circulation associated with tropical storm Matmo has remained a distinct feature at mid-levels and has tracked west across the Indochina Peninsula into the Bay of Bengal. This circulation will continue to promote thunderstorm activity surrounding it, with underlying sea surface temperatures increasing to over 30°C providing even more energy for convection. Windshear is expected to be more favourable for cyclonic development over the next few days.

### Expected Impacts

Some isolated flash flooding possible across the Andaman and Nicobar Islands in the next few days. Dangerous seas will also develop in the region, with landslide, flash and river flooding impacts possible in Bangladesh, northeastern India and perhaps Myanmar by the weekend.



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## Europe

### Italy, Corsica, Greece, western parts of the Balkans and northern coasts of Algeria and Tunisia

#### **Weather**

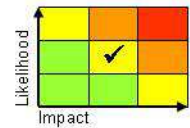
Following recent heavy rainfall in this region, further active weather systems are expected to move across this region over the next week bringing persistent, heavy rain and thunderstorms to this area. The heaviest rain is likely to be focussed on southwest facing high ground of Italy, the Balkan region, and western Greece. Many places will see 25-50 mm in a few hours on wetter days, with some prone spots seeing as much as 200 mm per day. It's possible that some locations could see as much as 500 mm of rainfall in total by early next week, 2 to 3 times the average November rainfall. This accompanied by strong winds, especially around coasts.

#### **Discussion**

A cyclonic upper pattern will dominate through the week leading to a continuation of unsettled conditions. As upstream mobility increases this will see a number of plumes drawn across the region, which will see precipitation increasingly modulated by orography and act as a focus for heavy rain and thunderstorms.

#### **Expected Impacts**

Increased likelihood of flash flooding causing damage to property and infrastructure. Lightning strikes, large hail and tornadoes/waterspouts could also produce localised significant damage, particularly in the south of this region.



### Western France, northern Spain and Portugal

#### **Weather**

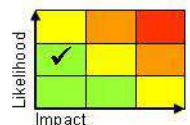
Conditions will also remain unsettled across this region with further spells of strong winds and heavy rain. During the next week around 50-100mm of rain will fall quite widely, especially across southwest France and northern Iberia, with potentially over 200mm in some spots. Winds will be strong at times, although we do not at present expect to see a repeat of winds of the strength storm Amelia brought to western France on Sunday.

#### **Discussion**

South-shifted Atlantic mobility will steer a number of active Atlantic systems into western Europe. Although no one system is expected to be as potent as storm Amelie, the cumulative effect of several systems could lead to increased impacts come the end of the week.

#### **Expected Impacts**

Increased risk of flooding. Risk of landslides in steep terrain. Strong winds may bring impacts to travel and power supplies.



## North America

Nil.

## Central America and Caribbean

Panama and Costa Rica – See *South America* section.

## South America

### Panama, Costa Rica, western Colombia and northern Ecuador

#### **Weather**

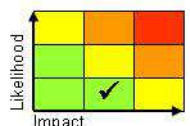
Enhanced shower and thunderstorm activity is likely across this region through the coming week. 50 to 100 mm of rainfall is possible each day, with some places seeing up to 500 mm in total by the weekend, although these totals likely very localised.

#### **Discussion**

Surface rooted convection release is likely with in excess of 3000 J/kg CAPE available, leading to some severe and slow moving storms each day.

#### **Expected Impacts**

Increased risk of flash and river flooding with landslides possible in mountainous areas. In recent days 1000 people were affected when the San Jose river burst its banks in north western Colombia.



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**Parts of Paraguay, southeast Bolivia and northern Argentina****Weather**

Spells of heavy rain and severe thunderstorms are forecast to continue northwards across this region over the next few days. Rainfall totals of 50-100 mm are possible in places each day, although this will only be in a few isolated locations. Frequent lightning, large hail and strong wind gusts will be additional hazards.

**Discussion**

The SACZ will remain active during this period, enhanced by a southward extension of tropical air over central South America engaged by various minor upper troughs in the subtropical jet. This will allow a mixture of surface based and elevated convection, severe thunderstorms (bringing large hail and greatest strong wind threat) are most probable towards the northern edge on zone of convection.

**Expected Impacts**

Flash flooding, transport disruption and a small risk of property damage from hail and wind gusts.

**Africa****Somalia and Eastern Ethiopia****Weather**

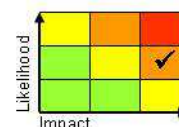
The remnants of cyclonic storm Kyarr will continue to produce heavy showers and thunderstorms across usually dry parts of Somalia/Ethiopia, perhaps bringing 75-150mm of rainfall over the coming few days (this is equivalent to more than 6 months worth of rain for many parts of this region). Drier conditions are expected to become established during Sunday and Monday.

**Discussion**

Areas of deep convection continue in the moisture plume which is the remnant of Kyarr. These areas of deep convection will promote frequent shower and thunderstorm activity over Somalia and parts of eastern Ethiopia over much of the coming days. Given recent media reports documenting severe flooding along the Jubba and Shabelle river catchments (which has already resulting in international financial aid), this additional rainfall is likely to further worsen the situation in this region.

**Expected Impacts**

Across Somalia and the far east of Ethiopia heavy rainfall will exacerbate significant flooding that is currently ongoing along major rivers (including the Shabelle) in this region.

**Middle East**

Nil.

**Asia**

**South China Sea, Philippines, Vietnam** – See *Tropical Cyclone* section

**Bay of Bengal, Andaman and Nicobar Islands, northeastern India, Bangladesh and Myanmar** – See *Tropical Cyclone* section

**Northwestern India** – See *Tropical Cyclone* section

**Australasia**

Nil.

**Additional Information**

The annual smog season across parts of Northern India is making news, with authorities describing pollution levels in New Delhi as unbearable <https://www.bbc.co.uk/news/world-asia-india-50280390> The remnants of Tropical cyclone Maha is likely to bring some relief in the form of rainfall on Thursday and Friday.

**Issued at:** 060830UTC **Meteorologists:** Jason Kelly / Chris Bulmer

**Global Guidance Unit**

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