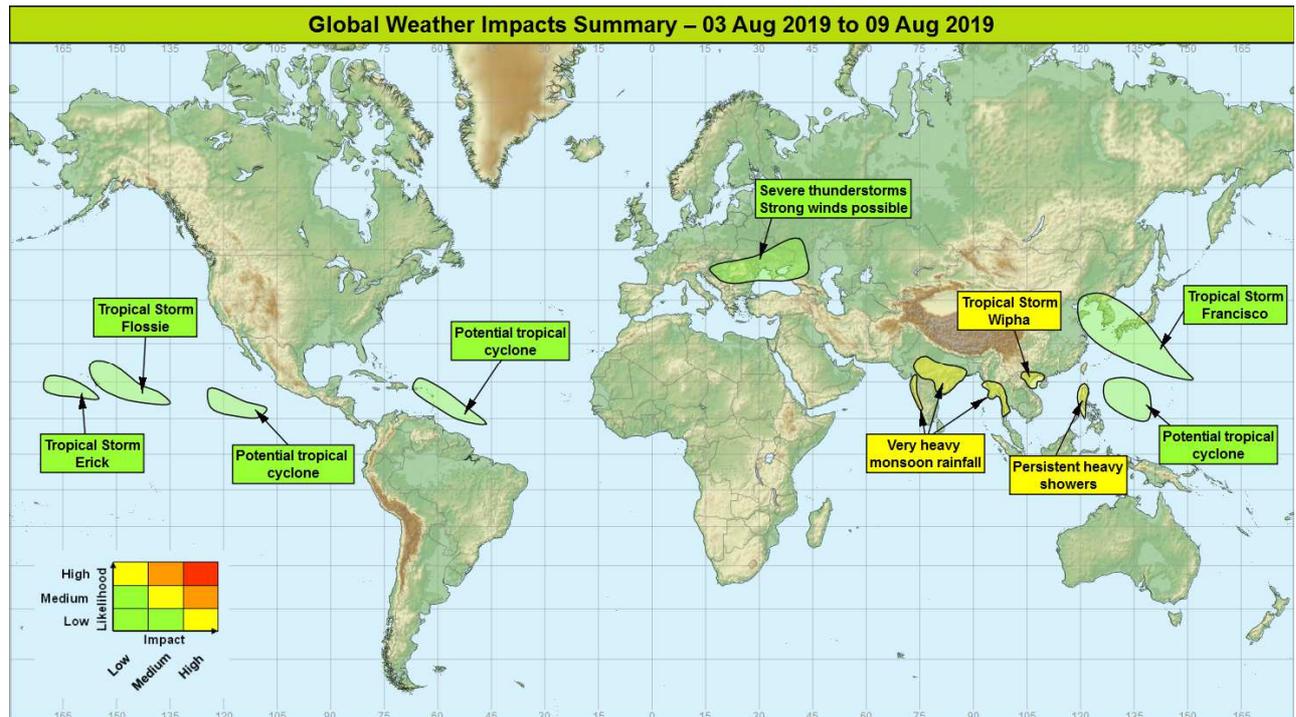


## Global Weather Impacts – Saturday 3<sup>rd</sup> to Friday 9<sup>th</sup> August 2019

Issued on Saturday 3<sup>rd</sup> August 2019

### HEADLINES

- Further intense monsoon rains for parts of south and south-east Asia.
- Several tropical storms over the Pacific; Wipha bringing heavy rain south China and Vietnam.



### DISCUSSION

#### Tropical Cyclones

#### Tropical Storm Wipha (South China Sea, far south of China and northern Vietnam)

##### Weather

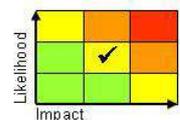
Wipha lies close to the NW coast of the Gulf of Tonkin, and is expected to slowly drift west making a final landfall over northeast Vietnam within the next 24 hours. Further very heavy rainfall is expected across the far south of China and northern Vietnam (including Hanoi) over the next 2 to 3 days. 100-200mm of rain is expected to fall widely with 300-400mm in the wettest areas. Damaging winds are not expected with this system with maximum wind gusts of 40-50mph for coastal areas.

##### Discussion

Wipha developed on Tuesday night, orchestrated by an Equatorial Rossby Wave. Having crossed the Leizhou Peninsula it is interacting with land, limiting its development with a consensus that the system will track west into Vietnam during the weekend.

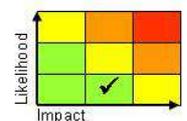
##### Expected Impacts

Flash flooding the primary hazard and landslides possible in steeper terrain. A prolonged event will increase the likelihood of river flooding. Minor impacts/disruption to maritime activities.



#### Tropical Storm Francisco (northwest Pacific)

##### Weather



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Francisco developed early Friday over the northwest Pacific and is expected to track northwest towards southern Japan over the coming days. Currently Francisco is estimated to have sustained winds of around 50mph. Francisco may reach Typhoon strength (sustained winds of 75mph) before arriving across parts of southern Japan early next week. After passing across parts of Japan Francisco may also impact South Korea and/or eastern China but probably weakening by that stage.

### Discussion

Francisco formed in a region which has been favoured for TC development over recent days as various tropical waves organised areas of deep convection. With vertical wind shear becoming weaker over the weekend there good agreement that Francisco will intensify as it heads towards southern Japan.

### Expected Impacts

Dangerous maritime conditions. Potential for damaging or even destructive winds, flash flooding and coastal flooding from a combination of surge and large waves.

## Tropical Storm Erick (Central Pacific - south of Hawaii)

### Weather

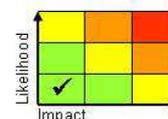
Erick is now tracking west-northwest to the south of Hawaii and looks likely to fall below tropical storm strength imminently. Heavy rain and strong winds from Erick will continue to miss Hawaii. Rough seas are expected to the south and southwest of the islands.

### Discussion

Erick continues to move into ever more unfavourable conditions for tropical cyclone development, with confidence high in the weakening trend and track.

### Expected Impacts

Nil.



## Tropical Storm Flossie (Eastern North Pacific and perhaps Hawaii)

### Weather

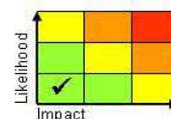
Flossie continues to head towards Hawaii as a slowly weakening tropical storm, most likely veering to the north just before reaching the islands. There is only a very low probability now that Flossie will track further south than expected, directly over the Hawaiian islands.

### Discussion

There is now a strong consensus that Flossie will remain a tropical cyclone over the coming days, weakening as it encounters higher vertical wind shear and cooler SSTs. There are still a very small number of ensemble members which allow Flossie to reach the Big Island on Monday.

### Expected Impacts

Large swells, very low risk of localised damaging winds and a very low chance of localised flash flooding should Flossie track further south than the most likely track



*The following areas are also being monitored for development:*

## Tropical North Atlantic and north-eastern Caribbean

### Weather

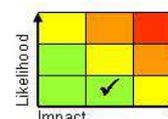
An area of showers and thunderstorms over the central Tropical North Atlantic may develop into a (most likely) weak tropical storm as it approaches the Lesser Antilles early next week. Even if a tropical storm does not develop, intense showers and thunderstorms will bring the threat of up to 125 mm of rain in a few hours to parts of the eastern Caribbean early next week.

### Discussion

An area of thunderstorms associated with an African Easterly Wave is expected to remain non-developmental over the next few days with wind shear remaining strong – and current forecasts suggest this is more likely to remain so as the system approaches the Lesser Antilles early next week. Nevertheless the National Hurricane Centre has given this system a 40% chance of tropical storm development.

### Expected Impacts

Most likely at this stage would be threat of flash flooding for parts of the Lesser Antilles early next week.



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

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## Northwest Pacific (affecting the Northern Mariana Islands and perhaps Japan)

### **Weather**

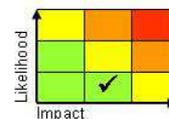
Across a broad region of the northwest Pacific there are several clusters of thunderstorms that have the potential to develop into tropical cyclones later this week, and track generally north or northwest. A system looks likely to form to the east of the Philippines either later in the weekend or early next week before tracking north. If this system forms it would bring a threat of destructive winds and very heavy rainfall to southern Japan during the mid or latter part of next week.

### **Discussion**

A series of tropical waves, that may be sourced from AEW, ERW or breakdown of the ITCZ into eddies from shear instability are currently organising various areas of deep convection in the northwest Pacific. In addition to the now formed Francisco, models are beginning to agree on a further development to the east of the Philippines with a resulting Typhoon heading north towards Japan.

### **Expected Impacts**

Potential for destructive winds, flash flooding and dangerous seas. Initially for remote islands Pacific islands but perhaps the south of Japan later next week.



## Eastern Pacific

### **Weather**

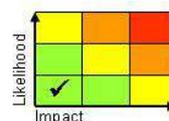
A large, but disorganised area of showers and thunderstorms lies a few hundred miles southwest of the Mexican coast. This area is expected to track westwards, remaining over the Pacific over the next 7 days, with a low probability of development into a weak tropical storm.

### **Discussion**

A tropical wave has enhanced convection across the eastern Pacific, and there is a low probability (assessed by the NHC as 30%) for development into a tropical storm in the next 5 days. There is good agreement this will track away from Mexico and remain over open water.

### **Expected Impacts**

Nil expected at this stage.



## Europe

### Eastern Europe

#### **Weather**

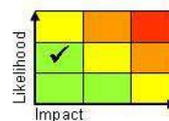
Areas of thunderstorms will continue to move eastwards across parts of eastern Europe over the weekend. These thunderstorms have the potential to bring 50-75mm of rainfall within a few hours in places and will also be associated with frequent lightning and possibly large hail. In addition, during Sunday and early next week there is the potential for an active low pressure system to develop over southern Ukraine and southern Russia bringing wind gusts of 50-60mph here.

#### **Discussion**

An upper trough running east over the weekend will engage an already active high WBPT over central Europe. This will help to push thunderstorm activity eastwards but also looks likely to lead to cyclogenesis in the vicinity of the Black Sea bringing a spell of unusually strong winds to parts of Ukraine and southern Russia.

#### **Expected Impacts**

Risk of flash flooding, disruption to transport and potential damage from lightning and/or hail (e.g. leading to power outages). Disruptive winds may also impact transport and power/utilities in south-eastern parts of the highlighted area.



## North America

Hawaii – see *Tropical Cyclones* section.

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**Central America and Caribbean**

**North-eastern Caribbean islands** - see *Tropical Cyclones* section.

**South America**

Nil.

**Africa**

Nil.

**Middle East**

Nil.

**Asia**

**Far south of China, Vietnam, remote Pacific islands and south Japan** – see *Tropical Cyclones* section.

**Western and northern India, and western Myanmar**

**Weather**

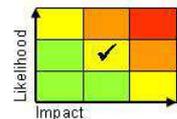
Periods of widespread, intense showers and thunderstorms will affect this region through the next week, producing locally 200 to 300 mm of rain in a 24-hour period, with a threat of up to 800 mm through the coming week in places. The higher values are equivalent to several times the average July rainfall falling in just a few days in places. There are some very large cities in this region that could see intense rainfall events during the next week.

**Discussion**

The main driver behind the severe monsoon conditions through the next week will continue to be monsoon low pressure systems that will produce intense rainfall from deep, moist convection. These systems will also induce a strong south-westerly flow which will bring deep, moist convection into south-western India and western parts of Myanmar. Forecast profiles show deep skinny CAPE, with high precipitable water allowing these fairly frequent cells to produce large precipitation accumulations.

**Expected Impacts**

High likelihood of flash flooding in places and an increasing threat of river flooding. An increasing likelihood of landslides in mountainous regions. Significant disruption to travel is likely, especially road and rail. Densely populated regions of India (including some large cities) are likely to be impacted this coming week. Southeast Bangladesh where Cox's Bazar is located may just be north of the heaviest rainfall, but is likely to see isolated heavy rainfall events through the next 7 days.



**Central and northern Philippines**

**Weather**

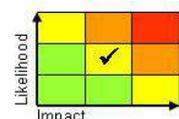
A steady stream of heavy showers/thunderstorms is expected to develop across this region over the next few days, becoming more intense from the weekend. Daily totals of up to 300 mm are possible from the weekend, with event totals through the next 7 days of 500-800, perhaps 1000 mm possible. This would be the average August rainfall falling in just a week.

**Discussion**

A strengthening SW'y monsoon flow over the next few days, in part due to tropical cyclone activity to the north-west, will bring enhanced showers/thunderstorms to this region. Impacts could be felt in Manila should the wind direction line up correctly.

**Expected Impacts**

Flash flooding and landslides are probable. Manila will probably miss the worst of the impacts but there is a moderate probability of flooding here too.



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**Australasia**

Nil.

**Additional information**

Nil.

**Issued at:** 030325 UTC    **Meteorologist:** Chris Bulmer / D J Harris

**Global Guidance Unit**

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