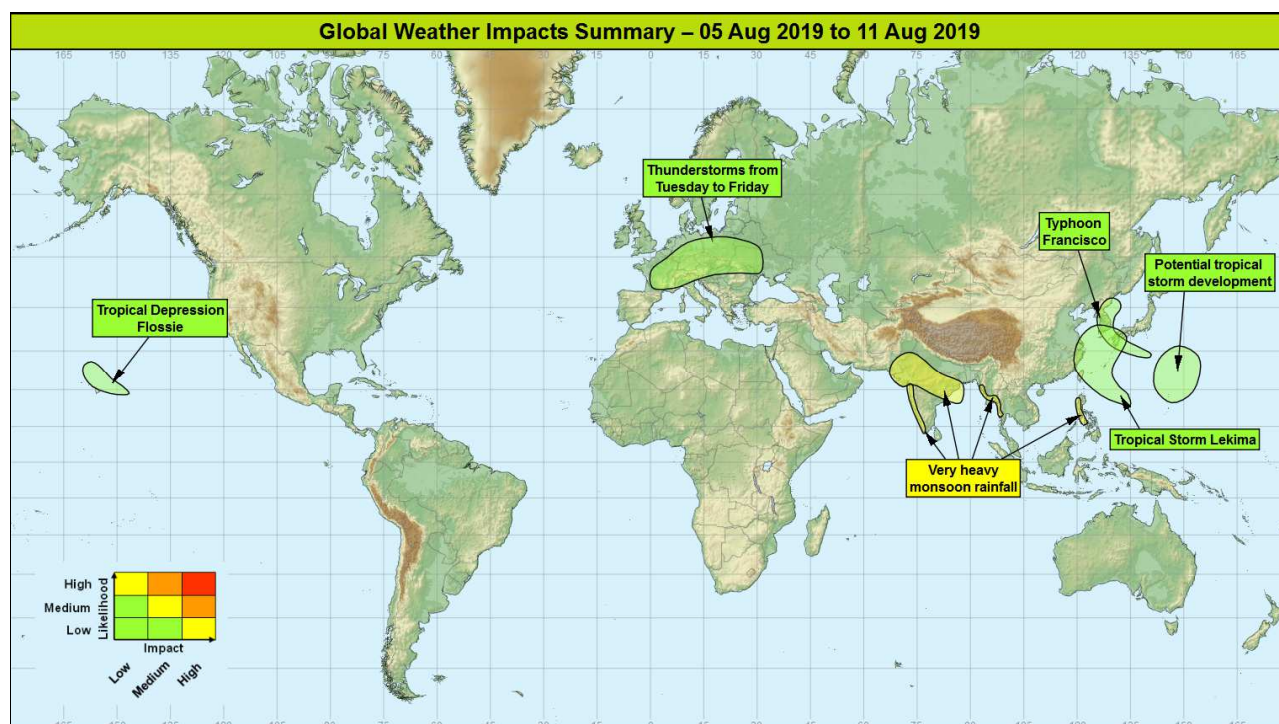


## Global Weather Impacts – Monday 5<sup>th</sup> to Sunday 11<sup>th</sup> August 2019

Issued on Monday 5<sup>th</sup> August 2019

### HEADLINES

- Further intense monsoon rains for parts of south and Southeast Asia.
- Typhoon Francisco impacting southwest Japan and the Korean Peninsula next few days.
- Tropical Storm Lekima likely strengthening to a typhoon and impacting parts of East Asia later this week.



### DISCUSSION

#### Tropical Cyclones

#### Tropical Storm Lekima (Western North Pacific)

##### **Weather**

Lekima formed on Sunday and was located 400 miles southeast of Taiwan on Monday morning with estimated sustained winds of 45 mph. Lekima is likely to be slow moving as it strengthens through the next day or two, before tracking northwards, probably across the southern Ryukyu Islands or Taiwan towards the end of this week. By this time Lekima is likely to have strengthened to a typhoon (sustained winds exceeding 75 mph), but with greater uncertainty in the track. Through the weekend there is even greater uncertainty in the track, with a landfall from eastern China to the Korean Peninsula and southwestern Japan possible.

##### **Discussion**

A broad area of shower and thunderstorm activity has consolidated sufficiently to form a tropical storm over the past 24 hours. With an absence of a strong steering flow for the next few days the trajectory of any system towards land is low confidence, although the majority of ensemble output steer the system northwest through next week. A number of deterministic models generate a strong typhoon in what is a high SST, low shear environment. The model spread in the track of Lekima grows with time, greatly lowering confidence.

##### **Expected Impacts**

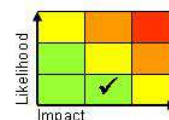
Potential for destructive winds, flash flooding and dangerous seas along the typhoon track.

This forecast may be amended at any time

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## **Typhoon Francisco (Western North Pacific)**

### **Weather**

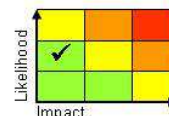
Francisco was located around 200 miles east of Kyushu Island, Japan on Monday morning with estimated sustained winds of around 70 mph and is expected to track northwest then north across Kyushu and the Korean Peninsula during the next two days as a weakening system. Typhoon strength (sustained winds exceeding 75 mph) is likely to be maintained up to landfall in Kyushu today (Monday). Some locations may see heavy rainfall (100-200 mm in 24 hours, locally more over higher ground) in addition to strong winds.

### **Discussion**

Francisco lies in an environment conducive to some further strengthening prior to landfall as it gets steered northwest around the sub-tropical ridge. There is high confidence in the forecast track and for the system to weaken significantly as it crosses southwestern Japan and the Korean Peninsula.

### **Expected Impacts**

Dangerous maritime conditions. Forecast wind strengths usually cause no significant structural damage to most well-constructed permanent structures but can damage mobile homes, uproot weak trees and cause some power outages. Flash flooding and landslides are possible from intense rainfall and coastal flooding from a combination of surge and large waves.



## **Tropical Depression Flossie (Eastern and Central North Pacific)**

### **Weather**

Flossie continues to head towards Hawaii as a slowly weakening tropical storm but is expected to decay into a depression before reaching the archipelago. The remnant rain bands of Flossie may affect the islands in the middle of the week, but are unlikely to produce significant accumulations.

### **Discussion**

There is strong consensus that Flossie will continue weakening and shortly dissipate as it encounters higher vertical wind shear and cooler SSTs.

### **Expected Impacts**

Large swells are expected to affect parts of Hawaii over the next couple of days along with some localised flash flooding from heavy downpours midweek.



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

## **Western North Pacific**

### **Weather**

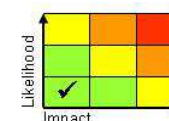
An area of showers and thunderstorms close to the Northern Mariana Islands is likely to develop into a tropical storm this week, most likely tracking north away from the islands as it develops.

### **Discussion**

Despite some model differences, there is reasonable confidence for a tropical storm development this week, but with little in the way of impacts due to a track away from any island chain.

### **Expected Impacts**

Most likely impact will be very isolated flash flooding in the development stage across the Northern Mariana Islands.

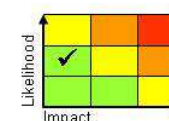


## **Europe**

### **Parts of continental Europe**

### **Weather**

Heavy showers and thunderstorms are expected to be more widespread across much of continental Europe from Tuesday to Friday, with the peak activity likely across the Alpine region. Up to 50-75 mm of rain could fall in a few hours, especially across the Alpine region.



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

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**Discussion**

A strong jet will engage a warm plume across the continent this week, with short wave upper troughs providing enough forcing to produce intense thunderstorms. Large CAPE, reasonable wind shear and high PWAT values will result in these storms producing frequent lightning, intense rainfall amounts, large hail and strong convective gusts.

**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.

**North America**

**Hawaii** – see *Tropical Cyclones* section.

**Central America and Caribbean**

Nil.

**South America**

Nil.

**Africa**

Nil.

**Middle East**

Nil.

**Asia**

**Southwestern Japan, Korean Peninsula, eastern China and the Northern Mariana Islands**

– see *Tropical Cyclones* section.

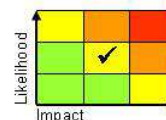
**Western and northern India, southeast Pakistan, and western Myanmar****Weather**

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 1000 mm through the next 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 southwesterly flow which will bring deep, moist convection into southwest 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.

Gujarat is experiencing a severe drought due to poor monsoon rains (76% of normal) in 2018 and a late start to the 2019 season. So the heavy rains from a monsoon low pressure system is likely to be welcomed in this region.



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## 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

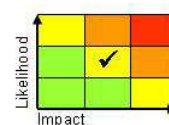
A steady stream of heavy showers/thunderstorms is expected to persist across this region over the next week. Daily rainfall totals of up to 300 mm are possible, with event totals through the next 7 days of 500-800, perhaps 1000 mm possible. This would be the average August rainfall falling in just a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

### Discussion

Parts of Manila saw over 200 mm of rain in 24 hours earlier in the weekend, causing severe flooding in the city. A continued strong southwesterly monsoon flow over, in part due to tropical cyclone activity to the north, will continue to bring enhanced showers/thunderstorms to this region. Impacts could continue to 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.



## Australasia

Nil.

## Additional information

Nil.

**Issued at:** 050745 UTC

**Meteorologist:** Paul Hutcheon / Nick Silkstone

**Global Guidance Unit**

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

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