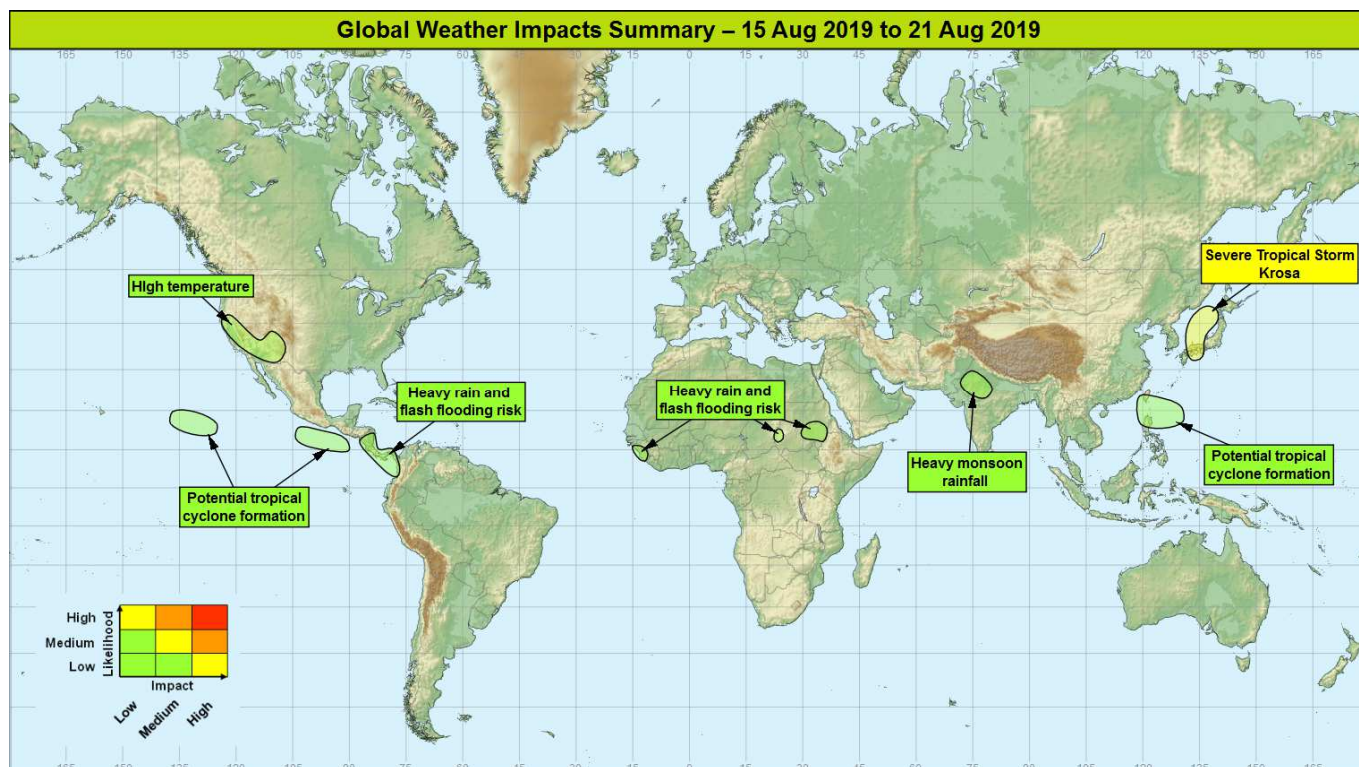


## Global Weather Impacts – Thursday 15<sup>th</sup> to Friday 21<sup>st</sup> August 2019

Issued on Thursday 15<sup>th</sup> August 2019

### HEADLINES

- Severe Tropical Storm Krosa bringing heavy rain, strong winds and high seas to southern Japan.
- Monsoon low pressure system to bringing heavy rain to central India; drier in Kerala.



### DISCUSSION

#### Tropical Cyclones

#### Severe Tropical Storm Krosa (Japan)

##### Weather

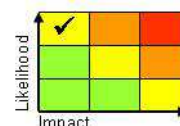
Krosa made landfall on Wednesday night across the western tip of Shikoku with estimated sustained winds of 65 mph and gusts of 90 mph. Through Thursday the system will continue to weaken as it emerges into the Sea of Japan, before crossing Hokkaido as a dissipating feature on Saturday. The heaviest rainfall is expected to fall near and east of the centre of Krosa with potential for 300-600 mm in combination with damaging winds and high seas. Southern Japan has already been impacted by tropical cyclones *Francisco* and *Nari* in recent weeks.

##### Discussion

Krosa was never able to recover from persistent wind shear and upper level convergence inhibiting convection over the centre and despite re-emerging shortly over water, strengthening wind shear and cooler SSTs in the Sea of Japan will combine to weaken the system further. There is good model agreement in Krosa undergoing extratropical transition before crossing Hokkaido on Friday night.

##### Expected Impacts

With the winds associated with Krosa quickly weakening, impacts from heavy rainfall are expected to be the primary concern. Heavy rainfall inland is likely to lead to both flash and fluvial flooding and an enhanced risk of landslides, with both being exacerbated by the passage of Typhoon Francisco and Tropical Storm Nari across a similar area in the last few weeks.



This forecast may be amended at any time

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The following areas are being monitored for potential tropical cyclone development:

## **Eastern North Pacific**

### **Weather**

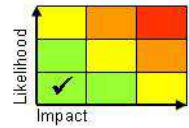
Two areas of organised shower and thunderstorm activity lying to the south and west of Mexico may develop into tropical cyclones in the next few days. However, if either develop they are unlikely to pose a direct threat to land. See *Central America and Caribbean* section for heavy rainfall discussion across a wider region.

### **Discussion**

African Easterly Waves emerging into the Eastern North Pacific show continued signs of gradual development over the next week, although ensemble guidance from GM and EC suggest that even if a tropical cyclone does form, it will track away from land. However, the easternmost disturbance may deepen rapidly offshore and act to enhance the North American Monsoon across Mexico and the Desert Southwest.

### **Expected Impacts**

Nil.



## **Western North Pacific (including Taiwan, northern Philippines and eastern China)**

### **Weather**

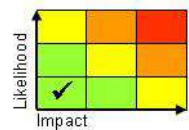
There is a low likelihood of a tropical cyclone developing from an area of low pressure centred over the Philippine Sea next week. Irrespective of development, shower and thunderstorm activity is expected to increase over the weekend and early next week with some locations receiving 75-125 mm in a few hours. However, the heaviest rainfall is likely to remain away from the large metropolitan areas of Taipei and Manila.

### **Discussion**

In the wake of Severe Tropical Storm Krosa, a broad and persistent area of low pressure centred over the Philippine Sea may become the focus for a further tropical cyclone to develop in the Western North Pacific. However, ensemble model guidance does not show much strengthening of any disturbance that does form as it drifts slowly west towards eastern China.

### **Expected Impacts**

Increased likelihood of flash flooding and landslides, particularly since the development of Typhoon Lekima last week resulted in widespread heavy rainfall which may have pre-conditioned ground conditions.



## **Europe**

Nil.

## **North America**

### **California and Desert Southwest USA**

### **Weather**

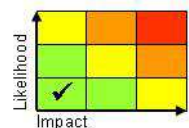
Intense heat will build across the Desert Southwest, California and the Great Basin over the next couple of days before temperatures likely ease over the weekend.

### **Discussion**

An area of high pressure will maintain dry and sunny conditions and allow temperatures to continue rising, ahead of a trough which will likely bring temperatures back to nearer normal by the weekend. These above average temperatures have been in part driven by an absence of monsoon moisture that would otherwise lead to increased cloudiness and scattered thunderstorm activity that suppress temperatures.

### **Expected Impacts**

Heat related illnesses such as heat exhaustion and heat stroke will be possible. People most vulnerable to heat illnesses include those who spend lots of time outdoors, those without air conditioning, young children, the elderly and those with pre-existing health conditions.



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## Central America and Caribbean

### Northwest Colombia, Panama, Costa Rica and Nicaragua

#### **Weather**

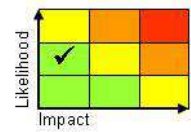
Frequent torrential showers and thunderstorms are expected to continue affecting the region through the remainder of the week. By the end of the week, some locations may receive as much as 300-400 mm of rainfall, often falling in short periods. As context, Panama City typically receives 220 mm of rain during the month of August.

#### **Discussion**

The monsoon trough is expected to remain active across Central America through the remainder of the week with African Easterly Waves acting to further organise shower and thunderstorm activity. Persistent southwesterly flow on the Pacific coast and northeasterly flow from the Caribbean Sea is particularly supportive for widespread heavy rainfall.

#### **Expected Impacts**

Heavy rainfall is likely to lead to flash flooding and mudslides, particularly in areas of steeply-sloping or poorly draining terrain.



## South America

Nil.

## Africa

### Guinea, Sierra Leone and Liberia

#### **Weather**

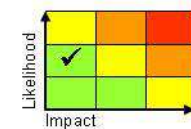
Tropical waves will bring enhanced shower and thunderstorm activity to this region over the next week, particularly later this week and then again early next week. Thunderstorms are likely to produce locally 50 to 100mm of rain in a short period, with up to around 400 mm possible in places during this period.

#### **Discussion**

At least two African Easterly Waves are expected to transfer westwards across the region during the next week, enhancing the seasonal rainfall. This wetter than average conditions over the summer monsoon so far – around 150-200% of climatology since the beginning of May.

#### **Expected Impacts**

Flash flooding is likely together with an increased risk of landslides.



### Southeast Sudan and Darfur

#### **Weather**

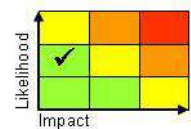
Further scattered heavy showers and thunderstorms are expected to affect southeast Sudan in the next week or so. This gives the potential for 50-75 mm of rain to fall in a couple of hours in a few locations. This follows heavy rain that has already fallen over the past week affecting the southern half of the country. There were reports of 155 mm of rainfall falling around Khartoum last week, equivalent to three times the August rainfall.

#### **Discussion**

With the ITCZ approaching its northern limit, rainfall from scattered thunderstorms across southern Sudan is not unusual in August with it being the wettest month of the year in Khartoum (48 mm). However, numerous states have reported flash flooding and related human health impacts over the past week.

#### **Expected Impacts**

Localised flash flooding may lead to property and infrastructure damage in the region.



## Middle East

Nil.

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**Asia****Japan** – See *Tropical Cyclones* section.**Central and northern India****Weather**

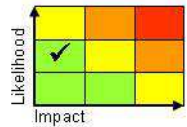
A further spell of frequent torrential downpours and thunderstorms will gradually transfer west-northwestwards across central and northern India through the remainder of the week. Intense rainfall is likely to produce locally 150 to 300 mm of rain in a 24-hour period, with up to 600 mm in places during this event (close to the average for the whole of August in parts of this region).

**Discussion**

A monsoon low pressure system centred over Madhya Pradesh is expected to move slowly west-northwest into Rajasthan on Friday before slowly dissipating as it moves towards Jammu and Kashmir over the weekend.

**Expected Impacts**

Flash flooding is likely in this region, with a threat of river flooding in places. This may result in further travel disruption, displaced populations as well as some damage to property and infrastructure.

**Australasia**

Nil.

**Additional information****Kerala, India**

A monsoon break period is expected to persist over the next week across the region which should support a gradual reduction in the extent of flooding, although larger rivers may remain high for a few more days as a result of the lag time for rainfall to feed into the lower parts of larger catchments.

**Issued at:** 150645 UTC**Meteorologist:** Matthew Lehnert and Laura Ellam**Global Guidance Unit**

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