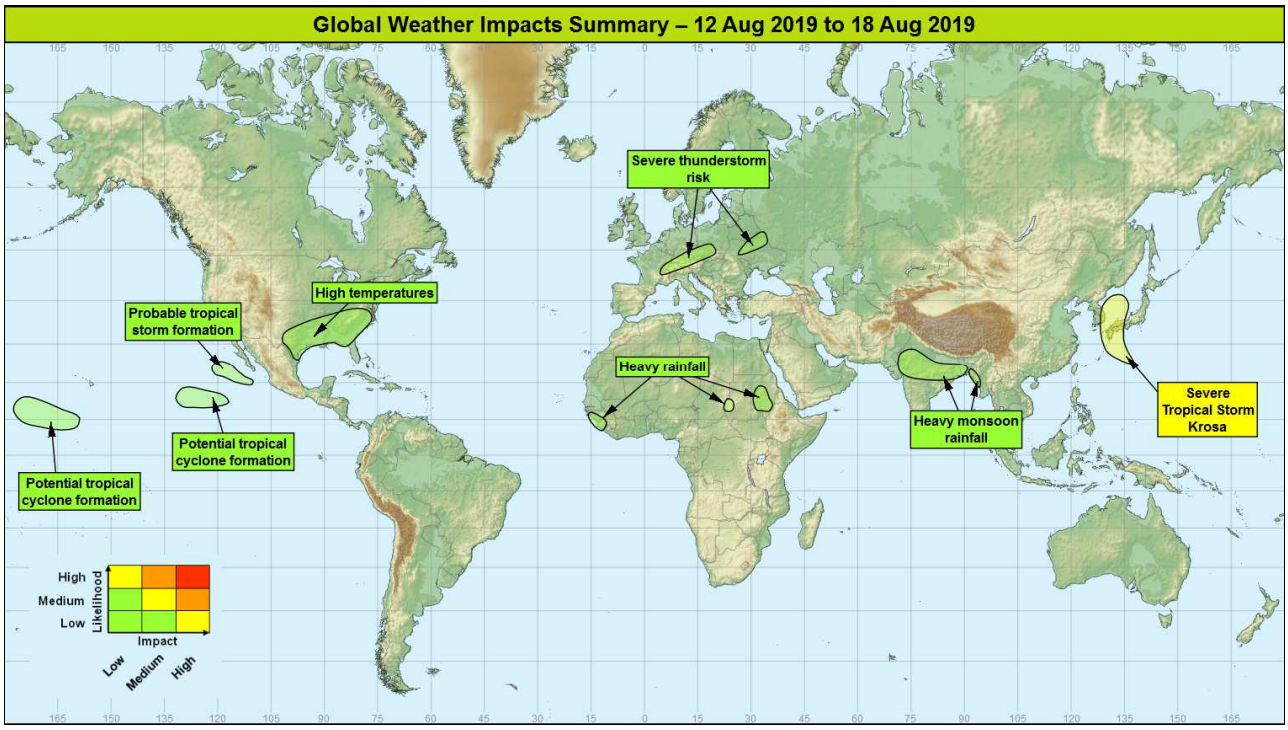
# Daily Global Weather Impacts Assessment

## Global Weather Impacts – Monday 12th to Sunday 18th August 2019

Issued on Monday 12th August 2019

### HEADLINES

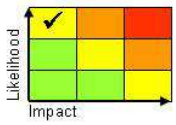
- Severe Tropical Storm Krosa likely to re-strengthen into a typhoon make a landfall across Kyushu in southern Japan on early on Thursday.




### DISCUSSION

#### Tropical Cyclones

#### Severe Tropical Storm Krosa (Western North Pacific)




**Weather**

Severe Tropical Storm Krosa, was located around 600 miles southeast of Kyushu (Japan) of Tokyo on Monday morning, with estimated sustained winds of around 65 mph, meaning the system continues to be classed as a Severe Tropical Storm (having weakened from a Typhoon in Saturday). The system is forecast to track northwest, re-strengthen to a typhoon, and then make landfall across Kyushu Island (southern Japan) early Thursday. Krosa is likely to bring a combination of heavy rain (300-600mm), damaging winds and modest storm surge to a similar area recently affected by Typhoon Francisco.

**Discussion**

Krosa is currently an unusual system, with an upper low overlaying centre (where usually an anti-cyclone allowing good upper level outflow), the convective structure is very broad with a large exposed core >150 miles in diameter. With the exception of this upper low, other environment conditions remain favourable for development. As the system continues northwest and approaches Japan, a the arrival of an upper trough running across the East China Sea will allow the system to improve its poleward outflow and likely strengthen into a Typhoon ahead of landfall once more. Confidence is now high for a landfall across Kyushu on Thursday.

This forecast may be amended at any time

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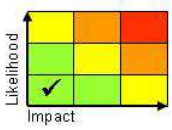
**Expected Impacts**
Damaging winds are likely to affect southern parts of Japan through the middle of next week, accompanied by a modest storm surge which combined with large waves may allow some isolated coastal flooding. Inland heavy rain is likely to lead to both flash and fluvial flooding, and an enhanced risk of landslides, with both being exacerbated by the passage of Typhoon Francisco and Tropical Strom Nari across a similar area in the last few weeks.

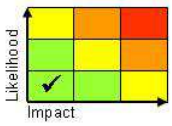
*The following area is being monitored for potential tropical cyclone development:*

**Nine-E, Eastern North Pacific**



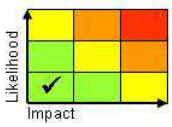

**Weather**
Tropical depression Nine-E has formed about 250 miles to the south of Baja California, the system is expected to develop into a short-lived named tropical storm today (likely named Henriette). Over the next couple of days this system will continue to move generally west across open ocean before decaying into a depression.
**Discussion**
Although many of the key environmental factors for the gradual development of a tropical cyclone are present for a few days, the development of this system is limited by quickly decreasing Sea Surface Temperatures (SSTs) along its track. As such it is likely that if a named system formed it will be very short-lived.
**Expected Impacts**
Nil.

**Eastern North Pacific**




**Weather**
An area of semi-organised showers and thunderstorms currently around 800 miles southwest of Baja California is expected to move gradually northwest. By midweek this will move into a region more favourable for develop, with a moderate chance of a named tropical cyclone occurring.
**Discussion**
As this area moves into an increasingly favourable region for development (high SSTs, low vertical wind shear etc...). There is thought to be a moderate chance of a tropical cyclone developing in this zone, with any feature steered northwestwards, and remaining over open ocean through this period.
**Expected Impacts**
Nil.

**Central North Pacific**




**Weather**
An area of showers disorganised around 650mile to the south of Hawaii has a small chance of organising into a tropical cyclone across open ocean.
**Discussion**
The usual pattern occurs as this zone moves into a marginally more favourable region for development (high SSTs, low vertical wind shear etc...). There is thought to be a low to moderate chance of a tropical cyclone developing in this zone, with any feature steered northwestwards, and remaining over open ocean throughout this period.
**Expected Impacts**
Nil.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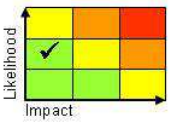
## Europe

### Central Europe (particularly Alps) and Eastern Europe




**Weather**

Frequent thunderstorms are expected to develop across the Alps today and the transfer east-northeast and across Poland on Tuesday. Similarly further thunderstorms are expected across part of Romania, Moldova ad Ukraine on Wednesday The peak of the activity in both events would see 50-75 mm of rain falling a few hours with the potential for frequent lightning, large hail and squally winds too.

**Discussion**

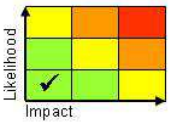
A strong baroclinic zone lying northeast to southwest across continental Europe will lie on the forward side of a longwave upper trough. This is expected to be the focus for rounds of locally severe convection as upper troughs engage with this feature. A combination of moderate instability, strong wind shear and high precipitable water will result in these storms tending to upscale into organised mesoscale convective systems or squall lines.

**Expected Impacts**

Risk of flash flooding, disruption to transport and potential damage from lightning (e.g. leading to power outages). Disruptive winds may also impact transport and power/utilities.

## North America

### Southern and southeast USA (except Florida Peninsula)




**Weather**

Above average temperatures are expected to persist across the region until the middle of the week, with the combination with relatively high humidity which will result in high heat stress. Feels like temperatures may locally exceed 45°C across southeast Texas, northern Louisiana into the Memphis area. These very high temperatures may expand into the southeast through midweek before temperatures begin to return nearer to normal by Thursday.

**Discussion**

An upper high will remain slow-moving over eastern Texas and the lower Mississippi Valley before slipping south by the end of the week. This will maintain above average temperatures in combination with dewpoints widely exceeding 20 °C contributing to high heat stress.

**Expected Impacts**

High heat stress, exacerbated by high overnight temperatures, persisting over several days are likely to have an adverse impact on unacclimatised tourists and those more vulnerable hot weather.

## Central America and Caribbean

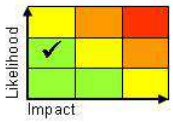
Nil.

## South America

Nil.

## Africa

### 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 few hours in a few locations. This follows heavy rain that has already fallen over the past week affecting the southern half of the country. Some locations in Western Darfur have received up to 150 mm of rainfall (based on satellite estimates).

This forecast may be amended at any time
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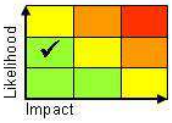
**Discussion**
With the ITCZ approaching its northern limit, rainfall from scattered thunderstorms across southern Sudan is not unusual in August with it being the wettest month of the year in Khartoum (48 mm). However, numerous states have reported heavy rainfall and related human health impacts over the past week. There remain some uncertainties as to the intensity of the showers due to model differences.
**Expected Impacts**
Localised flash flooding may lead to property and infrastructure damage in the region.

**Sierra Leone and Guinea**

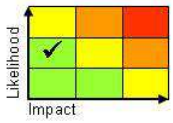



**Weather**
Above average rainfall has affected western Guinea and Sierra Leone through July and has continued into early August. Many locations have received more than double what is usual during this period. Over the coming week, further torrential downpours and thunderstorms are expected to affect the region, particularly from Wednesday.
**Discussion**
An anomalously dry low-level northerly flow across Senegal and The Gambia has maintained a focus for thunderstorm activity in association with African Easterly Waves across lower latitude portions of West Africa as they emerge into the Atlantic. This pattern is set to continue through the week
**Expected Impacts**
Further flash flooding (particularly in low-lying areas that lack good drainage) and damage to poorly built property and infrastructure is likely, including in the capital cities of Conakry and Freetown. Further mudslides are possible in areas of steeper terrain.

**Middle East**
Nil.

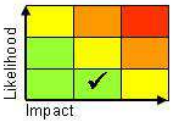
**Asia**
**Northeast China and Japan** – See *Tropical Cyclones* section.

**Parts of Bangladesh and central and eastern India**




**Weather**
A further spell of frequent torrential downpours and thunderstorms has developed over eastern India and will now transfer slowly northwestward through the week into central and northwestern India. Intense rainfall is likely to produce locally 150 to 250 mm of rain in a 24-hour period.
**Discussion**
The monsoon low pressure system that has developed across the northwest Bay of Bengal . This then gradually transferring slowly west-northwest across central and northwest India in the coming week, before largely decaying by the weekend.
**Expected Impacts**
Whilst such events are not unusual for this time of year, higher river levels in Odisha following recent heavy rainfall means an increased likelihood of surface water and minor river flooding in this region. This may result in further travel disruption as well as some damage to property and infrastructure.

**Myanmar and southeast Bangladesh**




**Weather**
Shower and thunderstorm activity is expected to remain more frequent than normal on Monday with the potential for 50-125 mm of rain to fall in 24 hours, often in short periods. Thereafter the frequency of showers and thunderstorms will gradually decrease and returning to more normal rainfall patterns for the region.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**Discussion**

The development of another monsoon low pressure system in the northwest Bay of Bengal will maintain the enhanced south-westerly flow against the coast of Myanmar and southeast Bangladesh for one more day. As monsoon low then moves northwest across north central India, the flow decreases across the Bay of Bengal, with shower activity in this region reducing to near climatology by Wednesday.

**Expected Impacts**

Although not particularly unusual for this time of year, flash flooding and landslides remain likely. The heaviest rainfall (and impacts) are expected to remain away from Cox's Bazar.

**Australasia**

Nil.

**Additional information**

**Kerala, India**: Although rainfall has now eased across this region, with near to below average rainfall forecast in the region over the coming week. However ongoing reports of flooding are likely in this region over the next day or so, this is a result of the delayed lag time between some of the heaviest rainfall falling, and peak river levels in the lower parts of larger catchments.

**Issued at:** 120845 UTC **Meteorologist:** Tony Wardle and Nick Silkstone **Global Guidance Unit**



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