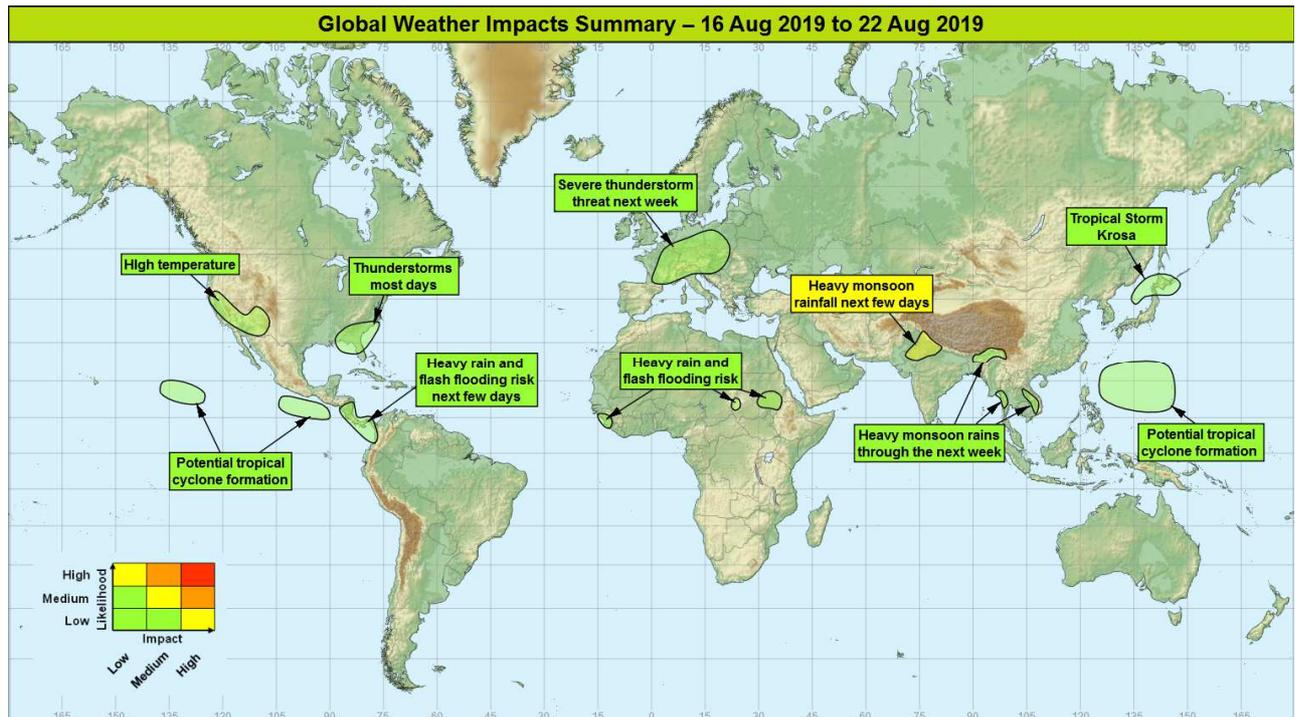


Global Weather Impacts – Friday 16th to Thursday 22nd August 2019

Issued on Friday 16th August 2019

HEADLINES

- Monsoon active in parts of Africa and southern Asia.
- Very little in the way of tropical cyclone activity expected through the next week.



DISCUSSION

Tropical Cyclones

Tropical Storm Krosa (Japan)

Weather

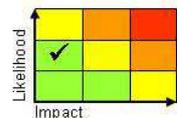
Krosa made landfall on Wednesday night across the western tip of Shikoku with estimated sustained winds of 65 mph and gusts of 90 mph, and weakened as it tracked north across the west of Honshu and into the Sea of Japan through Thursday. Krosa will continue to weaken as it tracks northeast across the Sea of Japan on Friday, before crossing Hokkaido as a dissipating feature on Saturday. Krosa could still bring heavy rainfall (up to 200 mm in 24 hours) to parts of Hokkaido and northeast Honshu through the next day or two.

Discussion

Krosa is continuing to weaken, mainly due to cooler SSTs in the Sea of Japan and recent enhanced vertical wind shear. There is good model agreement in Krosa undergoing extratropical transition before crossing Hokkaido on Friday night.

Expected Impacts

Flash flooding and landslides are the main concerns for Hokkaido and northeast Honshu.



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

Eastern North Pacific

Weather

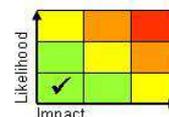
Two areas of organised shower and thunderstorm activity lying to the south and west of Mexico may develop into tropical cyclones in the next 5 days. However, if either develop they are unlikely to pose a direct threat to land. See *Central America and Caribbean* section for heavy rainfall discussion across land areas.

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 the Northern Mariana Islands)

Weather

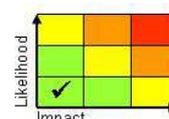
There is a low likelihood of a tropical cyclone developing from an area of low pressure centred between the Philippines and the Northern Mariana Islands through the next week. Irrespective of development, shower and thunderstorm activity is expected to increase over the weekend and early next week with some locations receiving 75-125 mm in a few hours.

Discussion

All models and EPS output show the potential for a cyclonic development in this region through the next week, but with poor model agreement.

Expected Impacts

This is a population sparse region, but there will be a threat of flash flooding to the Northern Mariana Islands.



Europe

Central and western continental Europe

Weather

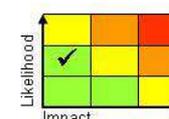
There is the potential for intense, severe thunderstorms across central and western parts of continental Europe next week. These storms could produce 50-75 mm of rain in a few hours, along with frequent lightning, very strong winds and large hail.

Discussion

An upper trough is likely to engage the continental warm plume next week, resulting in large CAPE and strong wind shear that could produce MCS type systems. However, there is significant model differences regarding the timing of the upper trough, and so the timing of the severe storm threat.

Expected Impacts

Flash flooding, damaging hail and winds along with power network and aviation disruption are the likely impacts.



North America

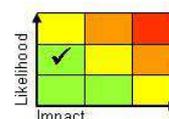
Parts of southeastern USA

Weather

This part of the USA looks likely to see thunderstorm activity most days through the next week. These storms could produce up to 75 mm of rain in a few hours, along with the risk of strong winds. Through the coming week up to 200 mm of rain could fall in places, which equates to the average August rainfall in this region.

Discussion

A slow-moving baroclinic zone will be the focus for a daily surge of deep convection, aided by low level convergence, large moisture levels and short wave upper troughs.



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Expected Impacts

Flash flooding is the highest likelihood impact, with a lower likelihood of river flooding. There could be local wind damage from these storms, but the gusty winds are more likely to affect aviation.

California and Desert Southwest USA

Weather

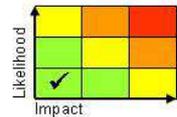
Intense heat has built across the Desert Southwest, California and the Great Basin, and whilst temperatures are likely to ease temporarily over the weekend, are likely to increase again next week.

Discussion

An area of high pressure has maintained dry and sunny conditions, allowing 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.



Central America and Caribbean

Northwest Colombia, Panama, Costa Rica and Nicaragua

Weather

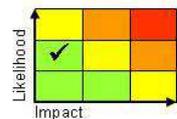
Frequent torrential showers and thunderstorms are expected to continue affecting the region through the next day or two. By the end of the week, some locations may receive as much as 200-300 mm of rainfall, often falling in short periods. As context, Panama City typically receives 220 mm of rain during the month of August.

Discussion

The monsoon trough is expected to remain active across Central America through the next day or two with an 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

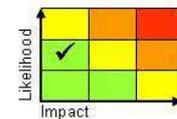
Tropical waves will bring enhanced shower and thunderstorm activity to this region over the next week, particularly on Friday and then again early next week. Thunderstorms are likely to produce locally 50 to 100mm of rain in a short period, with up to around 400 mm possible in places during this period.

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.



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Southeast Sudan and Darfur

Weather

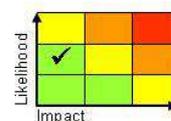
Further scattered heavy showers and thunderstorms are expected to affect southeast Sudan in the next week or so. This gives the potential for 50-75 mm of rain to fall in a couple of hours in a few locations. This follows heavy rain that has already fallen over the past week affecting the southern half 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. Higher river levels along the Nile and tributaries is also expected.



Middle East

Nil.

Asia

Japan – See *Tropical Cyclones* section.

Northwest India

Weather

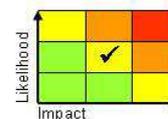
A spell of frequent torrential downpours and thunderstorms will become slow moving in the northwest of India through the next 2 or 3 days. Intense rainfall is likely to produce locally 150 to 250 mm of rain in a 24-hour period, with up to 400 mm in places during this event (around double the average for the whole of August in parts of this region).

Discussion

A monsoon low pressure system will become slow moving across northwestern India as it slowly dissipates over the weekend. However, the higher PWAT environment within this system will produce the potential for very high 2 or 3 day rainfall totals.

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.



Northeast India, far northeast of Bangladesh, far north and far south of Myanmar, far northeast of Cambodia, and parts of Vietnam and Laos

Weather

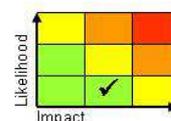
Frequent intense showers and thunderstorms are expected through the next week, producing up to 100-200 mm in a 24-hour period, and up to 600 mm through the next week in places. This would result in the average August rainfall falling in a week in places.

Discussion

An enhanced SW'ly monsoon flow will bring a spell of heavy monsoon rainfall to parts of Southeast Asia through the coming week. Southwest facing upslopes will be most threatened by enhanced rainfall due to orographic uplift of the very high (60-70 mm) PWAT column.

Expected Impacts

Flash flooding events are highly likely, with an increasing likelihood of river flooding and landslides.



Australasia

Nil.

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Additional information

Kerala, India

A monsoon break period is expected to persist over the next week across the region which should support a gradually 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: 160640 UTC **Meteorologist:** Paul Hutcheon and Matthew Lehnert **Global Guidance Unit**

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