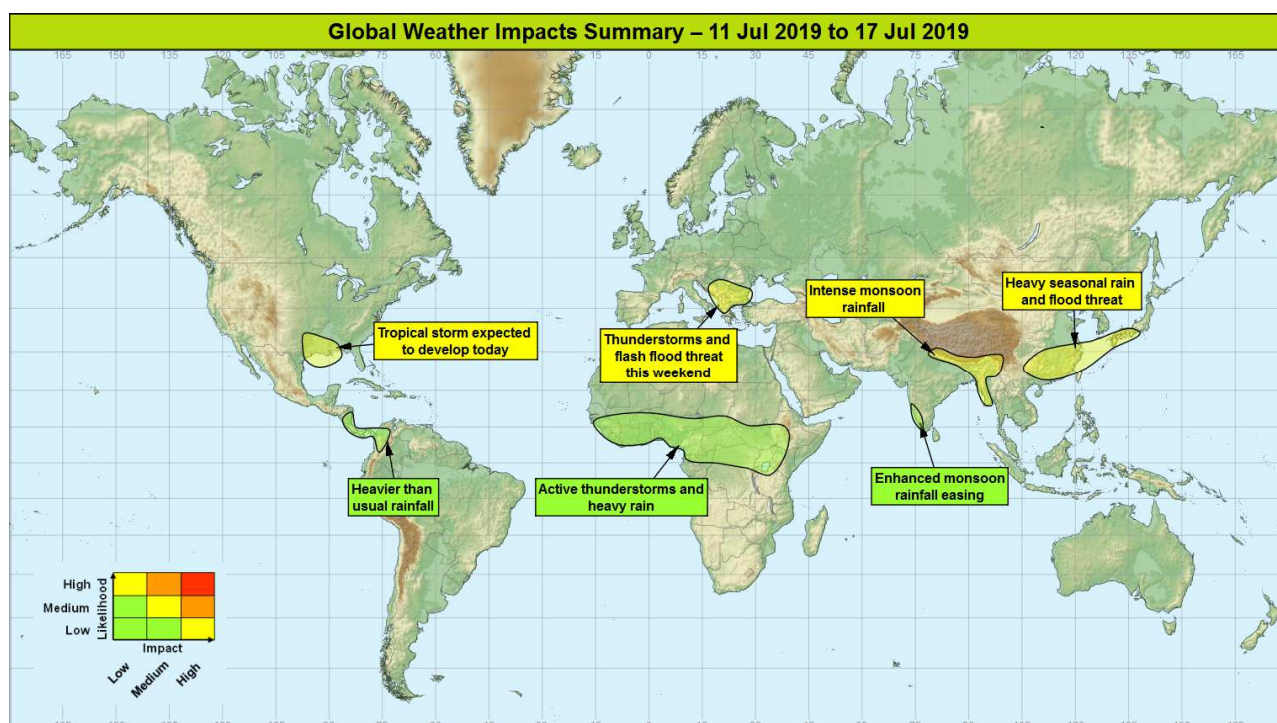


Global Weather Impacts – Thursday 11th to Wednesday 17th July 2019

Issued on Thursday 11th July 2019

HEADLINES

- Tropical storm expected to develop today in the Gulf of Mexico, and is likely to become a hurricane before making landfall along the Gulf coast early in the weekend.
- The focus of the Indian Monsoon is likely to transfer north to Bhutan and Nepal through the next few days with significant impacts possible here.
- Heavy seasonal rainfall continuing to affect parts of China and Japan.
- Intense thunderstorms likely across parts of southeastern Europe this weekend.



DISCUSSION

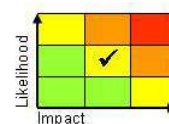
Tropical Cyclones

Gulf of Mexico and the Gulf coast states of the USA

Weather

An area of severe thunderstorms is expected to consolidate into a tropical storm (Barry) today and is expected to track west, then north-west, strengthening as it does so. Barry is expected to attain hurricane strength by time of landfall on Saturday, with sustained winds of 85mph likely. The exact position of landfall is open to a lot of uncertainty, but is most likely to happen between Houston (Texas) and Lafayette (Louisiana). Impacts from Barry will extend across much of the Gulf Coast. Torrential rain is also likely, with some 500-900mm signalled as Barry affects the area.

Discussion



This forecast may be amended at any time

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With SSTs in the Gulf of Mexico being several degrees above normal, coupled with limited shear and existing severe convection, further development of this system is highly likely, with all deterministic models now suggesting that there is a high likelihood of the system strengthening to a cat 1 (at least) hurricane by the time it makes landfall on Saturday. The system is then expected to maintain some form of organisation as it moves inland across the Southern Plains, by which time heavy rain will be the main hazard.

Expected Impacts

Heavy rainfall, tropical storm to hurricane force winds, and storm surge (of 3-6 feet) are the main hazards. Depending on exact track, tidal locking of estuaries such as the Mississippi Delta could occur, with levees in the area being overwhelmed, exacerbating flood risk.

Europe

South-eastern Europe

Weather

Areas of thunderstorms are expected in this region through the weekend, producing up to 40-75 mm of rainfall in a few hours, along with large hail, gusty winds and frequent lightning.

Discussion

A series of trough extensions are expected to bring periods of enhanced convection this weekend.

Expected Impacts

Flash flooding, large hail and damaging winds are possible where intense thunderstorms form.



North America

Gulf of Mexico and the Gulf coast states of the USA – see *Tropical Cyclone* section

Central America and Caribbean

Nicaragua, Costa Rica and Panama – see *South America* section.

South America

Western Colombia, Nicaragua, Costa Rica and Panama

Weather

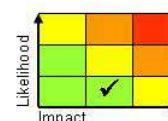
Increased frequency of heavy showers and thunderstorms is expected in this region through the period, especially early next week. Up to a 150 mm of rain could fall in places, which is well in excess of the average monthly rainfall at this time of year in southern parts of Central America.

Discussion

The westward progression of African Easterly Waves will enhance seasonal rainfall in this region at times. In addition the potential formation of Central American Gyre is signalled in southern parts of Central America next week, with these systems possibly leading to exceptional rainfall accumulations during the rainy season.

Expected Impacts

An enhanced threat of flash flooding and landslides will be the most likely impacts this week.



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Africa

Central and western parts of Africa

Weather

Widespread heavy showers and thunderstorms are expected through the coming week across parts of these central latitudes of Africa. Up to 75-100 mm of rain could accumulate in just a few hours, with a threat of strong winds. The strong winds could lift dense dust storms on the northern edge of this active shower region which still has a dry ground state.

Discussion

The transit of the MJO across the region will likely act to enhance the convective rainfall across central latitudes of Africa along the ITCZ. This will result in more frequent and/or active African Easterly Waves, as well as a higher likelihood of large MCS events.

Expected Impacts

Flash flooding is the most likely impact, with a lower likelihood of wind damage. Dense dust storms on the northern edge of this region will produce hazardous air quality.



Middle East

Nil.

Asia

Northern India, Nepal, northern / eastern Bangladesh, Bhutan and western / northern Myanmar

Weather

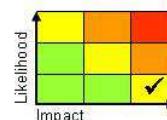
The Monsoon Trough is expected to push north, before becoming slow-moving across Nepal, Bhutan, the far northeast of India and northern Myanmar in the next few days. Torrential rain and severe thunderstorms are likely, with as much as 750-1000 mm of rain possible in the next five days in more northern areas, with 300-500 mm further south. Some strong and gusty winds are also possible.

Discussion

With a Monsoon Break further south across this region allowing a downtick in precipitation, there are strong signals that the Monsoon Trough will be displaced further north to affect the southern Himalayan region. Forecast profiles are very moist in depth, with 2000-2500 J/kg of column CAPE. Furthermore, PWAT in excess of 70mm, along with reasonable shear, will likely promote intense thunderstorms and torrential downpours.

Expected Impacts

With the focus of the Indian Summer Monsoon now signalled to transfer further north into a much more mountainous region, landslides become an increasing threat. Severe flash and river flooding impacts are also likely.



Western India

Weather

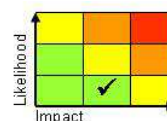
The heavy monsoon rain that has affected this region for the past week or so is expected to ease through Thursday. However, up to a further 250 mm of rain could fall in places in the coming 36 hours, which is around a third of the average July rainfall.

Discussion

The active phase of the Indian Summer Monsoon is expected to cease from, midweek due to the MJO progression across Africa. This signal is supported by all models.

Expected Impacts

Torrential rain will increase the threat of flooding and landslides up to midweek.



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Southern China and southwestern Japan**Weather**

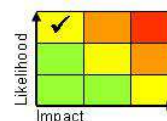
Torrential rain and severe thunderstorms associated with the seasonal rains will affect this region through much of the week ahead, with 150-250 mm widely, locally as much as 400 mm falling. This is around a month to two month's worth of rain for some locations.

Discussion

Strong convergence along the Mei-yu/Baiu front will continue to provide a focus for intense rainfall and a threat of severe storms. A succession of upper troughs will engage the northern edge of the monsoon frontal plume through much of the coming week, resulting in persistent, heavy rains in places.

Expected Impacts

Both fluvial and flash flooding is possible, with an additional risk of landslides in mountainous areas. Disruption to transport and infrastructure is likely in what is a densely populated area due to the slow-moving seasonal heavy rainfall.

**Australasia**

Nil.

Additional information

The record-breaking heatwave across Alaska – Bethel Airport in the far southwest reported a maximum of 35°C on Saturday – is starting to wane, with temperatures likely easing back closer to average over the next few days. Despite this, values are likely to remain on the warm side of normal. Thunderstorms are also expected, which may help dampen the forest fires which have developed across the state over the last few days, though lightning remains a possible source of ignition away from rain cores.

Issued at: 110700 UTC **Meteorologists** Jason Kelly / Paul Hutcheon

Global Guidance Unit

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