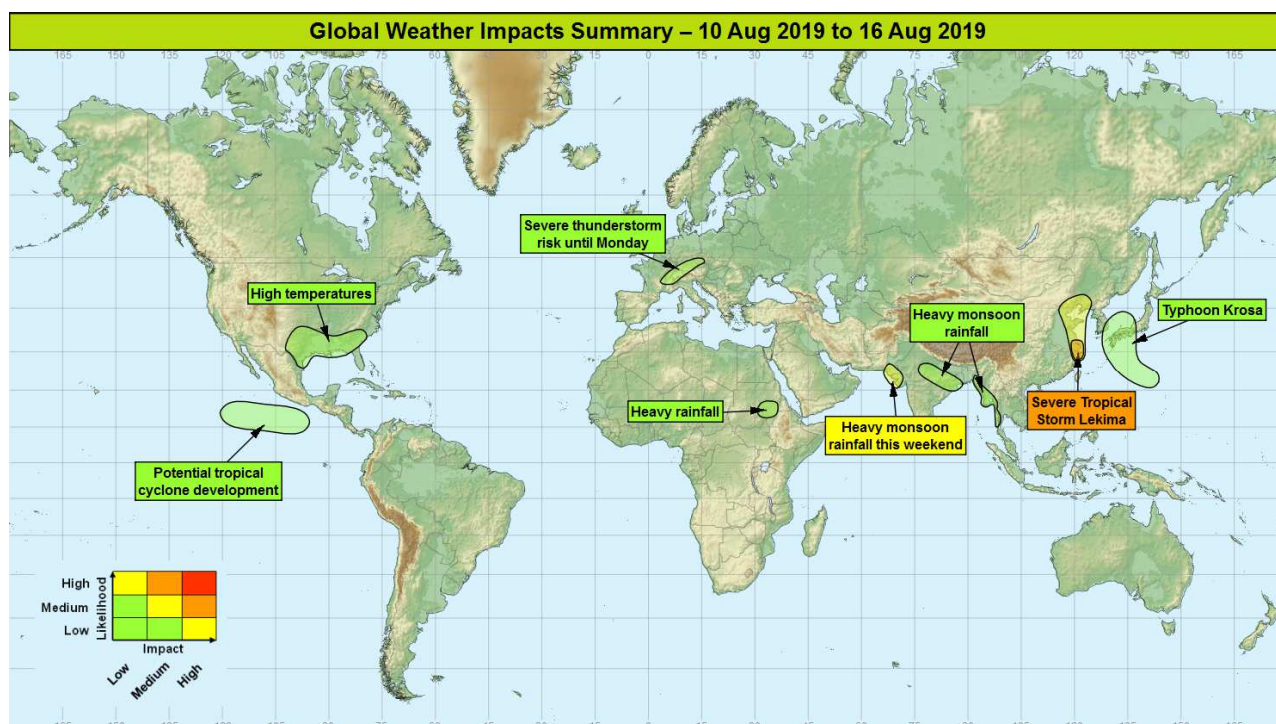


Global Weather Impacts – Saturday 10th to Friday 16th August 2019

Issued on Saturday 10th August 2019

HEADLINES

- Severe Tropical Storm Lekima to bring heavy rainfall to eastern China, including Shanghai, this weekend.
- Heavy monsoon rainfall affecting parts of south Asia tending to ease into next week.
- Typhoon Krosa likely to affect southern Japan later next week.



DISCUSSION

Tropical Cyclones

Severe Tropical Storm Lekima (Western North Pacific)

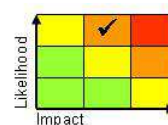
Weather

Severe Tropical Storm Lekima made landfall between Taizhou and Wenzhou in Zhejiang province on Friday evening as a typhoon with estimated sustained winds of 100 mph and gusts of 140 mph. Lekima has since weakened into a tropical storm but is still expected to bring a combination of strong winds, heavy rainfall and high seas along the coast as it moves slowly north across eastern China this weekend, including Shanghai. Many places are likely to receive 100-200 mm locally 400 mm over the next couple of days. Thereafter, Lekima will likely move into northeast China early next week, potentially affecting Beijing, as the system becomes slow-moving over the Bohai Sea.

Discussion

Lekima made landfall around 1800 UTC Friday as an equivalent category 2 on the Saffir-Simpson Hurricane Wind Scale. There is now good model agreement for Lekima to move north across Shanghai on Saturday before briefly re-emerging over the Yellow Sea on Sunday. However, significant re-intensification is unlikely as it becomes slow-moving in the Bohai Sea through early next week. Interaction with the surrounding land is likely to lead to gradual weakening in-situ.

Expected Impacts



This forecast may be amended at any time

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Coastal impacts from a combination of storm surge and large waves will gradually decrease through the weekend but some coastal flooding and disruption to maritime activities in the region are likely to persist into next week. Inland, damaging winds will soon ease but heavy rain along Lekima's path is likely to cause flash flooding, a heightened risk of landslides as well as transport disruption. This is exacerbated by the high population density along Lekima's track this weekend.

Typhoon Krosa (Western North Pacific)

Weather

Typhoon Krosa was located around 800 miles south of Tokyo on Saturday morning with estimated sustained winds of around 75 mph, equivalent to a category 1 hurricane on the Saffir-Simpson scale. The system is expected to track slowly northwest through the next few days with an increasing likelihood that Krosa will affect southern Japan as either a typhoon or strong tropical storm, primarily bringing a heavy rain threat to a similar region to that was affected by Typhoon Francisco earlier this week.

Discussion

Krosa is moving into an environment where further strengthening is expected to be limited over the next few days and a combination of subsidence and moderate vertical wind shear will offset supportive SSTs. Krosa will be steered slowly northwest under the influence of the subtropical ridge but its persistence next week will determine its rate of recurvature towards the northeast. Compared to 24 hours ago, there is increased confidence in Krosa affecting southern Japan later next week.

Expected Impacts

Over the weekend and early next week, impacts from heavy rainfall, strong winds and large waves would be limited to the outlying islands of Japan around Iwo Jima. In around a week's time there are possible flooding and wind impacts for parts of mainland Japan.

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

Eastern North Pacific

Weather

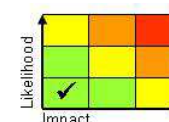
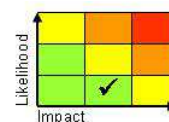
There is potential for one or more tropical cyclones to develop to the southwest of Mexico early week with the National Hurricane Centre showing a 40% probability of development over the next 5 days. At worst, the easternmost disturbance could produce locally heavy rainfall along parts of the southern and south-western coast of Mexico this weekend.

Discussion

There remains a moderate likelihood of one perhaps two tropical cyclones developing in the eastern Pacific from a pair of African Easterly Waves, but the main impacts from any developments will remain primarily offshore.

Expected Impacts

Localised flash flooding from heavy rainfall across coastal south and southwest Mexico.



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Europe

Central Europe (particularly Alps)

Weather

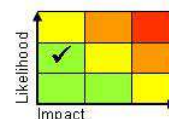
Further thunderstorm episodes are expected to develop across southeast France and transfer east-northeast across the Alps into central Europe over the next three days. The peak of the activity is expected to be across the northern side of the Alps where 50-75 mm of rain could fall in a few hours with 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 and is expected to be the focus for repeated rounds of locally severe convection. 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. These will tend to persist overnight before dissipating across central Europe.

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 through the next 5-6 days in 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 Friday.

Discussion

An upper high will remain slow-moving over eastern Texas and the lower Mississippi Valley through the next week which 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

Weather

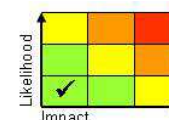
Further scattered heavy showers and thunderstorms are expected to affect southeast Sudan over the next week with the potential for 50-75 mm of rain to fall in a few hours in a few locations.

Discussion

With the ITCZ approaching its northern limit, rainfall across southern Sudan is not unusual in August. However, numerous states have reported heavy rainfall 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

Eastern China, Korean Peninsula and Japan – See *Tropical Cyclones* section.

Southeast Pakistan and far western India (Gujarat)**Weather**

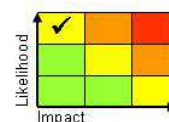
Clusters of torrential showers and thunderstorms will affect the region over the weekend with many places receiving around 100 mm in 48 hours, including Karachi and Hyderabad. Some locations may receive as much as 300-400 mm during this period, particularly along the southern portion of the India-Pakistan border. Much drier conditions will develop early next week.

Discussion

A monsoon low pressure system will maintain the focus for frequent heavy showers and thunderstorms over the weekend. Forecast profiles highlight very high precipitable water, modest instability and some wind shear which are collectively supportive of efficient rainfall production.

Expected Impacts

Flash flooding is likely, particularly in more densely populated cities such as Hyderabad and Karachi, although these are likely to be spared the highest rainfall totals. Some travel disruption is possible, as well as localised property and infrastructure damage.

**Central and eastern India****Weather**

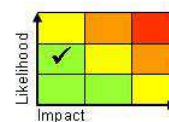
A further spell of frequent torrential downpours and thunderstorms is expected to develop over eastern India through Sunday and transfer slowly westward through next week into central India. Intense rainfall is likely to produce locally 150 to 250 mm of rain in a 24-hour period.

Discussion

There is now a consistent model signal for another monsoon low pressure system to develop across the northwest Bay of Bengal over the weekend and then move slowly west across north central India over the following days.

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.

**Coastal Myanmar and southeast Bangladesh****Weather**

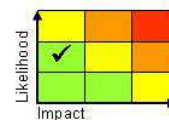
Shower and thunderstorm activity is expected to remain more frequent than normal over the next 3-4 days with the potential for 150-250 mm of rain to fall in 24 hours, often in short periods. Through next week, the frequency of showers and thunderstorms will gradually decrease.

Discussion

The development of another monsoon low pressure system in the northwest Bay of Bengal will maintain a stronger than normal south-westerly flow against the coast of Myanmar and southeast Bangladesh over the next few days. As this then moves inland across north central India, the onshore flow decreases with fewer showers expected.

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 be concentrated to the south of Cox's Bazar in central and southern Myanmar.

**Australasia**

Nil.

Additional information

Nil.

Issued at: 100520 UTC **Meteorologist:** Matthew Lehnert and Paul Hutcheon **Global Guidance Unit**

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