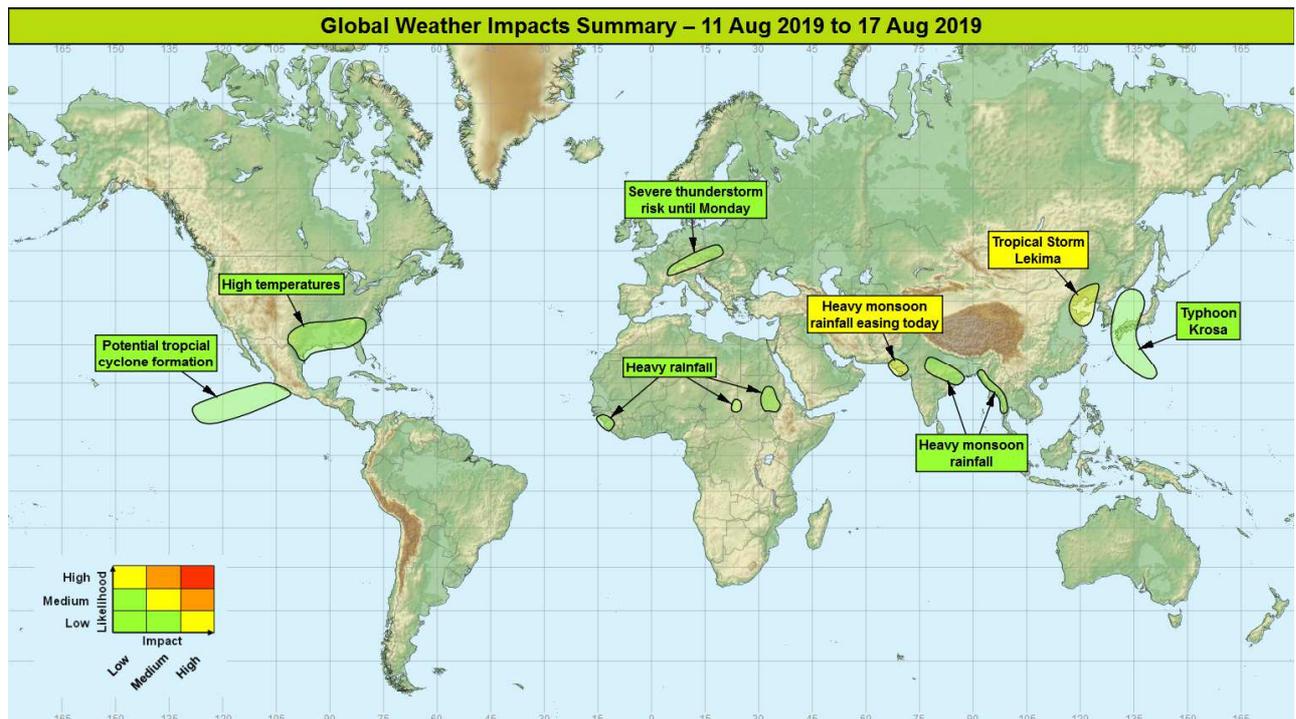


Global Weather Impacts – Sunday 11th to Saturday 17th August 2019

Issued on Sunday 11th August 2019

HEADLINES

- Tropical Storm Lekima weakening over eastern China.
- Heavy monsoon rainfall currently affecting parts of south Asia tending to ease into next week.
- Typhoon Krosa likely to bring a combination of heavy rain, damaging winds and storm surge to Japan through the middle of next week.



DISCUSSION

Tropical Cyclones

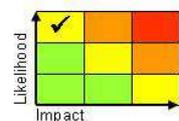
Tropical Storm Lekima (Yellow Sea)

Weather

Tropical Storm Lekima re-emerged over the Yellow Sea on Sunday morning having made landfall between Taizhou and Wenzhou in the province of Zhejiang on Friday evening. 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 east coast of China as it moves slowly north and eventually dissipates by the middle of next week. Many places around the Bohai Sea coast are likely to receive a further 100-200 mm locally 400 mm over the next 2-3 days, including some large cities such as Dalian and Jinan.

Discussion

Whilst Lekima made landfall on Friday evening as an equivalent category 2 on the Saffir-Simpson Hurricane Wind Scale, interaction with land has led to continued weakening. Whilst Lekima has re-emerged over water it will not intensify owing to an increasingly hostile wind shear environment, proximity to land and cooler SSTs. There is high confidence in Lekima dissipating into a remnant low during Tuesday whilst still producing heavy rainfall across east China.



This forecast may be amended at any time

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Expected Impacts

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 750 miles south of Tokyo on Sunday 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 and it is likely that Krosa will make landfall in southern Japan as a typhoon during the middle of next week. Krosa is likely to bring a combination of heavy rain, damaging winds and storm surge to a similar area affected by Typhoon Francisco earlier this week.

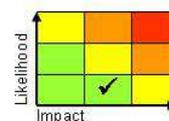
Discussion

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 that Krosa will make landfall in Kyushu or Shikoku on Thursday.

Expected Impacts

Damaging winds are likely to affect southern parts of Japan through the middle of next week, accompanied by a storm surge and potential coastal flooding. Heavy rain is likely to lead to flooding extending further inland, exacerbated by heavy rainfall following the passage of Typhoon Francisco across a similar area only 10 days beforehand. Travel disruption is likely to affect a wider area.

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



Eastern North Pacific

Weather

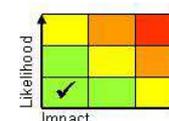
There is potential for one or more tropical cyclones to develop to the southwest of Mexico early week. The easternmost disturbance is likely to generate locally heavy rainfall along parts of the southern and southwestern coast of Mexico over the next couple of days.

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. Whilst the easternmost disturbance is likely to track close to the Mexican coast, conditions become unfavourable next week for further development into a tropical cyclone.

Expected Impacts

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

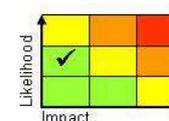


Europe

Central Europe (particularly Alps)

Weather

Two further thunderstorm episodes are expected to develop across southeast France and transfer east-northeast across the Alps into central Europe over the next couple of 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.



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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 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

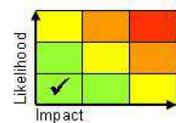
Above average temperatures are expected to persist across the region through the next 5 days in combination with relatively high humidity which will result in high heat stress. Feels like temperatures may locally exceed 45°C across southeast Texas, northern Louisiana into the Memphis area. These very 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 and Darfur

Weather

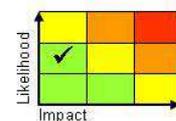
Further scattered heavy showers and thunderstorms are expected to affect southeast Sudan over the next week with the potential for 50-75 mm of rain to fall in a few hours in a few locations. This follows heavy rain that has already fallen over the past week affecting the southern half of the country. Some locations in Western Darfur have received up to 150 mm of rainfall (based on satellite estimates).

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.

Expected Impacts

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



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Sierra Leone and Guinea

Weather

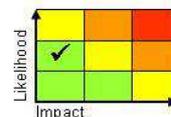
Above average rainfall has affected western Guinea and Sierra Leone through July and has continued into early August. Many locations have received more than double what is usual during this period. Over the next week, further torrential downpours and thunderstorms are expected to affect the region, particularly on Sunday and again from Thursday.

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

Southeast Pakistan and far western India (Gujarat)

Weather

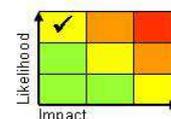
Clusters of torrential showers and thunderstorms will continue to affect the region on Sunday with many places receiving around 100 mm through the course of this weekend, including Karachi and Hyderabad. Some locations may receive as much as 300-400 mm by the end of Sunday, particularly along the southern portion of the India-Pakistan border. Much drier conditions will develop on Monday.

Discussion

A monsoon low pressure system will maintain the focus for frequent heavy showers and thunderstorms on Sunday. 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

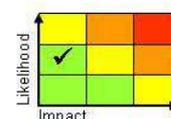
A further spell of frequent torrential downpours and thunderstorms is expected to develop over eastern India through Sunday and transfer slowly westward through next week into central India. Intense rainfall is likely to produce locally 150 to 250 mm of rain in a 24-hour period.

Discussion

There is now a consistent model signal for another monsoon low pressure system to develop across the northwest Bay of Bengal today 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.



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Myanmar and southeast Bangladesh**Weather**

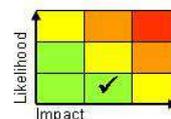
Shower and thunderstorm activity is expected to remain more frequent than normal over the next 2-3 days with the potential for 150-250 mm of rain to fall in 24 hours, often in short periods. Through next week, the frequency of showers and thunderstorms will gradually decrease.

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

**Australasia**

Nil.

Additional information

Nil.

Issued at: 110550 UTC **Meteorologist:** Matthew Lehnert and Martin Young **Global Guidance Unit**

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