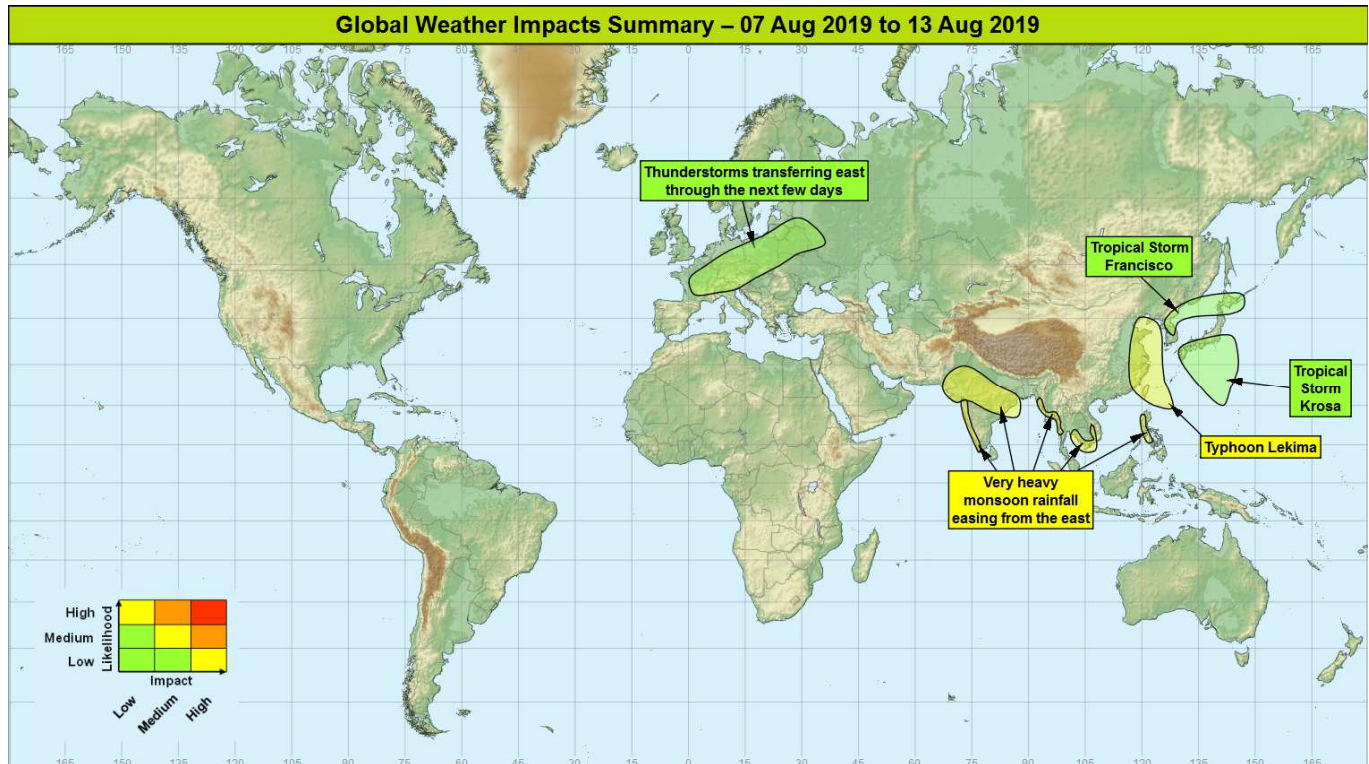


Global Weather Impacts – Wednesday 7th to Thursday 13th August 2019

Issued on Wednesday 7th August 2019

HEADLINES

- Intense monsoon rains across parts of southern Asia slowly easing through the next week.
- Typhoon Lekima and Tropical Storm Krosa expected to impact parts of East Asia.



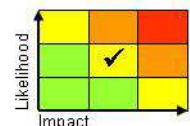
DISCUSSION

Tropical Cyclones

Typhoon Lekima (Western North Pacific)

Weather

Lekima was located around 425 miles east-southeast of Hualien, Taiwan on Wednesday morning with estimated sustained winds of 80 mph having strengthened to a typhoon overnight. Lekima is likely to strengthen further through Wednesday as it tracks slowly north-northwestwards towards Taiwan. There is still some certainty in the exact track through the rest of the week, but Lekima is likely to impact Taiwan and the southern Ryukyu Islands on Thursday and Friday. Any interaction with Taiwan is likely to weaken Lekima a little before it makes landfall in eastern China later Friday or on Saturday, most likely to the south of Shanghai. Should Lekima follow a track which curves a little further towards the north prior to landfall then it will likely remain a stronger system. Through the weekend Lekima is likely to track fairly slowly northwards across eastern China, probably impacting Shanghai. This system will bring a threat of hurricane force winds, torrential rainfall (up to 500 mm in a few days, perhaps as much as 1000 mm in parts of Taiwan) and a storm surge.



This forecast may be amended at any time

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Discussion

There is good model agreement for Lekima to track north-northwestwards around the subtropical ridge through the rest of the week, with increasing confidence for a track across or just to the north of northern Taiwan. Confidence is still lower in where it may make landfall in eastern China, however Lekima does look likely to affect Shanghai as it only slowly moves northwards through the weekend. The increased confidence in a track affecting Taiwan and eastern China results in an increased impact assessment from low to medium.

Expected Impacts

Potential for destructive winds, flash flooding, landslides, coastal flooding and dangerous seas along the typhoon track. The slow movement of this system across highly populated eastern China could result in significant impacts from flooding and landslides.

Tropical Storm Krosa (Western North Pacific)

Weather

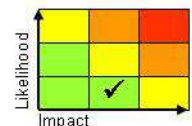
Krosa formed on Tuesday morning and has since strengthened into a severe tropical storm, currently lying around 1000 miles to the south of Tokyo. The system will continue to strengthen and slowly track northwards through the rest of the week, likely strengthening into a strong typhoon. Thereafter there is great uncertainty in the track towards and through the weekend, but there is a risk that this system may impact Japan early next week.

Discussion

Despite some model differences, there is high confidence for this system to develop into a strong, potentially very strong typhoon under near ideal environmental conditions and track generally northward, but with significant uncertainty if there will be any impact on Japan.

Expected Impacts

Over the coming five days 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.



Tropical Storm Francisco (Western North Pacific)

Weather

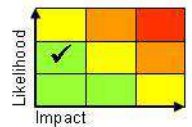
Francisco made landfall on the Japanese island of Kyushu on Monday night with estimated sustained winds of around 80 mph, and has weakened as it continued north across the eastern side of the Korean Peninsula on Tuesday. This system will be steered east across the Sea of Japan into northern Japan, most likely still as a tropical storm.

Discussion

There is strong model consensus for Francisco to be steered east as it encounters the mid-latitude upper flow, resulting in the commencement of extra-tropical transition; however it could maintain tropical characteristics prior to a further landfall over northern Japan later Thursday or on Friday.

Expected Impacts

A threat of flash flooding to the northern Japanese island of Hokkaido in the next few days.



Europe

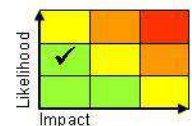
Parts of continental Europe

Weather

Heavy showers and thunderstorms are expected across parts of continental Europe on Wednesday, with the peak activity then clearing east into eastern Europe on Thursday. Up to 50-75 mm of rain could fall in a few hours.

Discussion

An upper trough in a strong jet will engage a warm plume across the continent through the next few days, providing enough forcing to produce intense thunderstorms. Large CAPE, reasonable wind shear and high PWAT values will result in these storms producing frequent lightning, intense rainfall amounts, large hail and strong convective gusts. Less significant convection is expected behind the upper trough, at least for a time.



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Expected Impacts

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

North America

Nil.

Central America and Caribbean

Nil.

South America

Nil.

Africa

Nil.

Middle East

Nil.

Asia

Japan, Korean Peninsula, Taiwan, eastern China and the Northern Mariana Islands – see *Tropical Cyclones* section.

Western and northern India, southeast Pakistan and western Myanmar

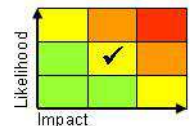
Weather

Periods of widespread, intense showers and thunderstorms will affect this region, producing locally 200 to 300 mm of rain in a 24-hour period, with a threat of up to 1000 mm through the next week in places. The higher values are equivalent to several times the average July rainfall falling in just a few days in places. There are some very large cities in this region that could see intense rainfall events during the next week. From Thursday drier conditions are expected to gradually extend from the east to the west across the region.

Discussion

The main driver behind the severe monsoon conditions through the next week will be a marked monsoon low pressure system that will produce intense rainfall from deep, moist convection as it tracks westwards across central/northern India. This system will maintain a strong southwesterly flow which will bring deep, moist convection into southwest India and western parts of Myanmar. Forecast profiles show deep skinny CAPE, with high precipitable water allowing these fairly frequent cells to produce large precipitation accumulations.

Gujarat is experiencing a severe drought due to poor monsoon rains (76% of normal) in 2018 and a late start to the 2019 season. So the heavy rains from a monsoon low pressure system is likely to be welcomed in this region. There is model evidence that this will be the last monsoon low pressure system for a while, allowing for a break period in the monsoon rains to extend westwards from Myanmar across India from Thursday into the early part of next week.



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Expected Impacts

High likelihood of flash flooding in places and an increasing threat of river flooding. An increasing likelihood of landslides in mountainous regions. Significant disruption to travel is likely, especially road and rail. Densely populated regions of India (including some large cities) are likely to be impacted this coming week. Southeast Bangladesh where Cox's Bazar is located may just be north of the heaviest rainfall, but is likely to see isolated heavy rainfall events through the next 7 days.

Cambodia, southern Vietnam and central/northern Philippines**Weather**

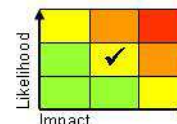
A steady stream of heavy showers/thunderstorms is expected to continue across this region over the 2 or 3 days. Daily rainfall totals of up to 250 mm are possible, with accumulations of up to 600 mm through the next 3 days in places. The rains will then ease towards and through the weekend.

Discussion

Parts of Manila saw over 200 mm of rain in 24 hours this past weekend, causing severe flooding in the city, with flooding also being reported in parts of Cambodia. A continued strong southwesterly monsoon flow over, in part due to tropical cyclone activity (Typhoon Lekima) to the north, will continue to bring enhanced showers/thunderstorms to this region through the next few days. Impacts could continue to be felt in Manila should the wind direction line up correctly. The movement away from the Philippines of Lekima will likely back and ease the flow, easing the rainfall across the region.

Expected Impacts

Flash flooding and landslides are probable. Manila will probably miss the worst of the impacts but there is a moderate probability of flooding here too.

**Australasia**

Nil.

Additional information

Nil.

Issued at: 070710 UTC

Meteorologist: Paul Hutcheon / Laura Ellam

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