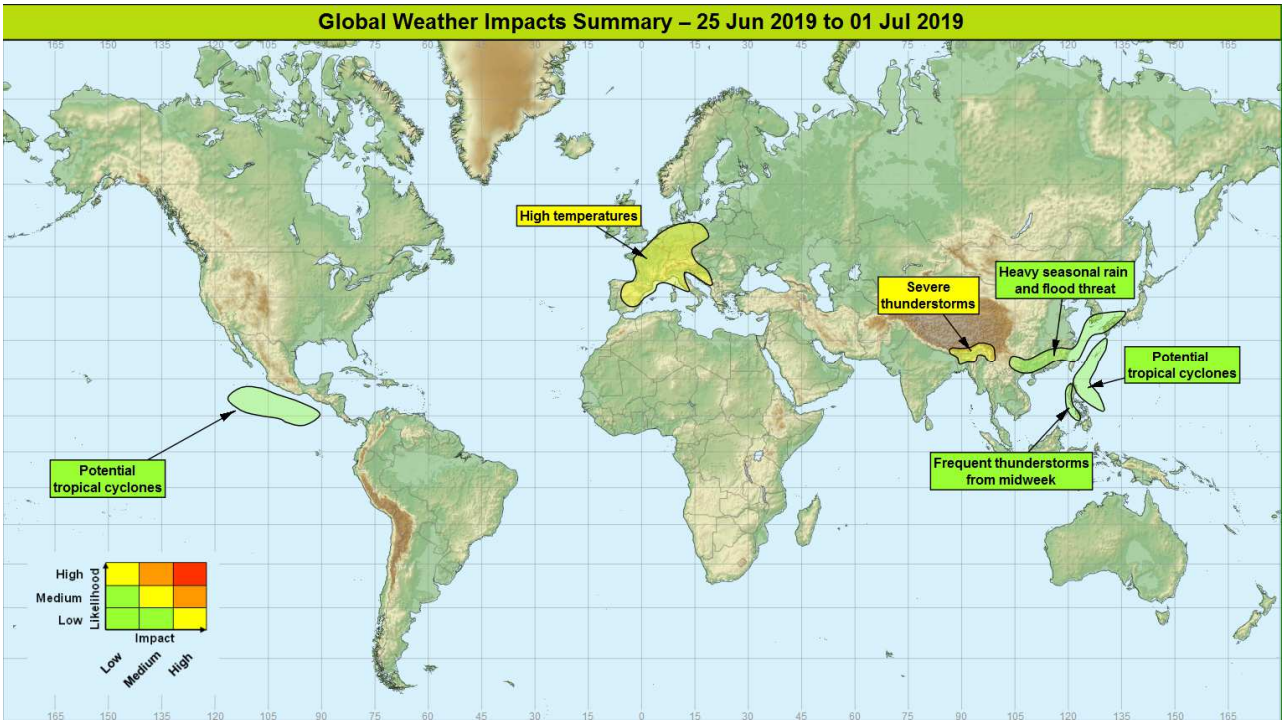
Daily Global Weather Impacts Assessment

Global Weather Impacts – Tuesday 25th June to Monday 1st July 2019

Issued on Tuesday 25th June 2019

HEADLINES

- Heat wave across central and western Europe.
- Heavy rain/thunderstorms NE India, N Bangladesh extending eastwards across China.
- Potential for weak tropical cyclones in both east and west Pacific Ocean.

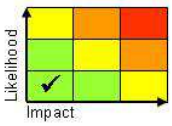


DISCUSSION

Tropical Cyclones

There are no tropical cyclones currently, but the following areas are being monitored for potential development:

Western North Pacific



Weather

There continues to be a signal for a weak tropical cyclone development in the West Pacific. Latest data indicates that there is now little or no threat to eastern Luzon however, with associated zone of showers and thunderstorms expected to curve away to the north and stay offshore in the short term. The system may eventually form a sub tropical low which could further enhance rainfall across southern and south-western Japan later this week. (See *Asia* section below)

Discussion

The area of convection associated with an ERW in the wake of the MJO shows little sign of development although the environment remains conducive to slight strengthening over the next 24-72 hours. Ensemble probs suggest that any impacts on Luzon are now very unlikely indeed. Subsequent areas of convection to the SE of this system also have the potential to spawn weak tropical cyclones over the next few days.

Expected Impacts

See *Asia* section below.

This forecast may be amended at any time
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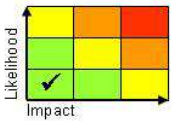
Eastern North Pacific Ocean



Weather

There is a moderate chance that one or more weak tropical cyclones may form along the Intertropical Convergence Zone, over the East Pacific early next week. Any system that does form is not expected to affect land.

Discussion

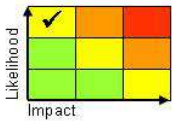
Shear instability along the ITCZ will provide areas of enhanced convection, organisation of these then potentially aided by a number of AEWs crossing Central America over the next few days. There is a weak signal in the global deterministic models, and a stronger signal in ensemble output, for the formation of one or more weak tropical cyclones during the first part of next week. The National Hurricane Centre has now highlighted a disturbance within this zone.

Expected Impacts

Nil.

Europe

Western Europe



Weather

Temperatures 10°C to very locally 15°C above average are expected to develop through this week, peaking most widely over the next few days, before a gradual cooling takes place, initially from the north and later the west. Maxima are likely to widely reach mid- to upper-30s°C, possibly into the low-40s°C in a few locations. Highest temperatures seem likely to be across France and parts of Spain. Overnight minima may not fall below 25°C in a few places. National June temperature records are likely to fall, with some all-time records under threat too.

Discussion

Low pressure anchored to the southwest of the UK will act to draw a very warm air mass across western Europe. With predominantly settled/subsided conditions, the boundary layer will also heat up in-situ given both adiabatic compression and the net diabatic input at this time of year.

Expected Impacts

High temperatures will bring heat health impacts to vulnerable populations, particularly given the spell of very warm nights (minima >20°C), whilst placing strain on some utilities and transport networks (e.g. railways).

North America

Nil.

Central America and Caribbean

Nil.

South America

Nil.

Africa

Nil.

Middle East

Nil.

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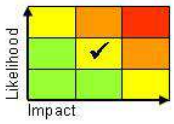
Asia

North Bangladesh, far northeast India and Bhutan



Weather

Thunderstorms with increasingly torrential rainfall are expected to develop across this region where many places will see over 100 mm per day, and perhaps locally as much as 800 mm over the next 5-7 days. These thunderstorms may be accompanied by hail and gusty winds, but torrential rainfall is likely to be the cause of the most significant impacts. Very isolated tornadic activity is also possible.

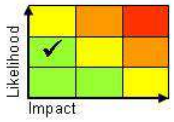
Discussion

Regular diurnal destabilisation of the extremely, moist and unstable air mass over this region will produce severe thunderstorms, organised at times by cyclonicity aloft and upscale growth. The most frequent and persistent storms will likely form on the southern upslopes of the Himalayas and the western upslopes of the Patkai hills, all draining into the Brahmaputra catchment. Very large precipitable water and very tall, skinny CAPE will result in torrential downpours; low level shear evident in forecast profiles also favours the risk of tornadoes with potential for wind damage associated with this.

Expected Impacts

Flash flooding and localised damage of property/infrastructure and transport links are probable. River flooding of smaller rivers in the Brahmaputra basin are possible and landslides are likely over the higher terrain.

Southern China and outlying southern Japanese Islands, south-western Japan



Weather

Further torrential rain and severe thunderstorms associated with the seasonal rains will affect parts of southern China over the next couple of days, before a break in the rains develops. Widely in excess of 200 mm of rain is expected with some locations receiving up to 500 mm. There is also the potential for severe thunderstorms which could produce hail and strong winds. Meanwhile an eastern extension of the rainband will affect the southern Japanese Islands then extend north to affect some parts of south-western Japan from midweek onwards.

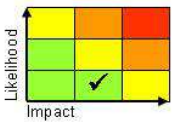
Discussion

Strong convergence along the Mei-yu front and heating of the high terrain in the moist air to its south will continue to produce heavy rain in the form of showers and thunderstorms. Although shear is fairly modest for mid-latitudes, in the tropics this is sufficient for MCS development.

Expected Impacts

Both fluvial and flash flooding is possible within the central and lower Yangtze River basin, with an additional risk of landslides in mountainous areas. Disruption to transport and infrastructure is also likely in what is a densely populated area.

Philippines (Western Luzon and Western Visayas)



Weather

A period of frequent heavy showers and thunderstorms are likely to develop from the middle of next week onwards, with potential for 80-100 mm, locally 150 mm of rain in some locations per 24 hours. The heavy rain could affect the capital Manila at times.

Discussion

A surge in the southwesterly monsoonal winds, possibly in the wake of a tropical system forecast to come close to the east of Luzon will lead to an increase in the frequency of heavy showers and thunderstorms.

Expected Impacts

Flash flooding, which will be particularly impactful should it affect significant urban areas such as Manila.

Australasia

Nil.

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Additional information
Nil.

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