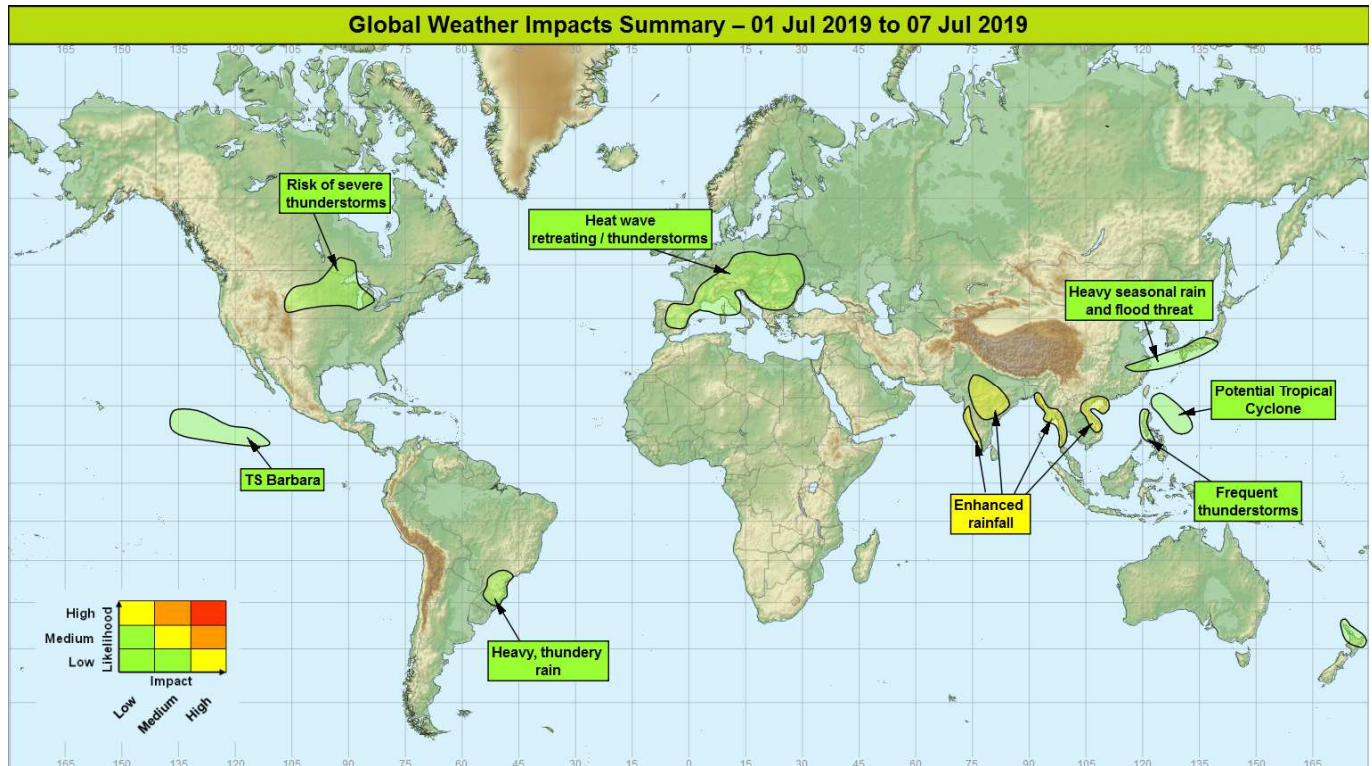


Global Weather Impacts – Monday 1st July to Sunday 7th July 2019

Issued on Monday 1st July 2019

HEADLINES

- Heavy monsoon rains continue across parts of southern and eastern Asia.
- European heat wave slowly declining, continued potential for isolated severe thunderstorms.
- Tropical Storm Barbara in the eastern Pacific expected to intensify but remain over open water.



DISCUSSION

Tropical Cyclones

Tropical Storm Barbara Weather

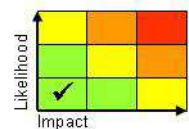
An area of low pressure over the open eastern Pacific Ocean intensified and became organised through Sunday and has now been named Tropical Storm Barbara. The system is likely to intensify to reach hurricane strength over the next 2 or 3 days but with an expected westwards track over the open ocean, no impacts to land are currently anticipated.

Discussion

There is good model agreement that Barbara will continue to track westwards over the coming days. There are differences in its rate of intensification but it looks likely to reach hurricane strength in the next 2 or 3 days as vertical wind shear reduces. There is a chance that another system will be spawned to the east of Barbara later in the week.

Expected Impacts

Any impacts will be limited to maritime activities.



This forecast may be amended at any time

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

Philippine Sea

Weather

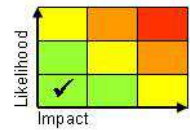
An area of disorganised thunderstorms associated with a weak tropical depression are moving slowly northwest across the Philippine Sea. It looks unlikely that this area will develop further, so tropical storm formation is unlikely.

Discussion

This system has become disorganised and weaker through the past 24 hours, although some deep convection persists. Development is inhibited by a high vertical shear environment, and dissipation is expected soon.

Expected Impacts

No impacts to land are expected.



Europe

Western Europe

Weather

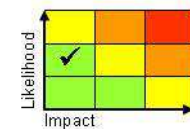
The heat wave of the past week which saw record breaking temperatures continues to ease as a cold front brings fresher conditions in from the north-west. Temperatures across southern parts of the continent are likely to remain above average through the coming week, and could still exceed 40C on Monday across parts of northeast Spain. Isolated, possibly severe thunderstorms are likely to form in this area each day. These could produce 30-50 mm of rainfall in a few hours, along with large hail, gusty winds and frequent lightning.

Discussion

Cooler Atlantic air associated with a cold front arriving from the north-west continues to edge into continental Europe. The front is likely to stall through central parts of the continent, where it is likely to aid the development of isolated, but potentially severe thunderstorms. Parts of southern Europe will still see temperatures into the mid to high 30s Celsius, with some areas still 5 to 8°C above normal.

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). Increased likelihood of wildfires. Flash flooding, large hail and damaging winds are possible where severe thunderstorms form.



North America

Parts of USA and central southern Canada

Weather

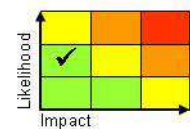
Areas of strong to locally severe thunderstorms are expected over the next week, with the potential for torrential rain, large hail, damaging wind gusts and a very isolated threat of tornadoes. Where these occur 50-75mm of rain could fall in just a few hours.

Discussion

A high WBPT plume on the forward side of broad troughing over NW North America will provide a focus for isolated severe storms over central-north US and central-south Canada; this moving eastward over the next few days. The increasingly slow moving trailing cold front becomes the main focus for storms later this week as a series of shortwave troughs interacts with it.

Expected Impacts

Primarily disrupting aviation, but very localised flash flooding and wind/hail damage is possible too.



Central America and Caribbean

Nil.

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South America

South Brazil

Weather

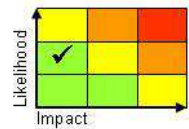
A band of heavy, thundery rain will move slowly north across this week. Daily rainfall totals of 50 to 75 mm are likely, with some locations perhaps seeing in excess of 100mm over the next few days. Frequent lightning and strong gusty winds will be additional hazards.

Discussion

The South Atlantic Convergence Zone will be active through this period, moving slowly and erratically northward. Strong low level wind convergence combined with strong mid-high level flow roughly parallel to the front will support training of thunderstorms along the slow moving boundary, and thus potential for large rainfall totals to accumulate in the high PWAT airmass north of the front.

Expected Impacts

Localised flash flooding, potentially of urban areas, and localised wind/lightning damage.



Africa

Nil.

Middle East

Nil.

Asia

Large parts of India, western Myanmar and southeast Bangladesh

Weather

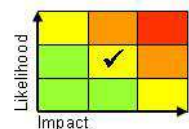
Heavy monsoon rain is expected in these locations through the coming week, with many areas seeing in excess of 200 mm. Perhaps the most anomalously heavy rainfall will be across parts of central India, where a depression is expected to move in from the Bay of Bengal and track slowly northwest. This system is expected to bring widely 200-300 mm along its path, and very locally up to 800 mm. This amounts to around three month's worth for central India, much of this falling in 2 to 3 days. Meanwhile, heavier than normal monsoon rainfall will continue across parts of western India, with 300-500mm of rain signalled in places over the next coming week, which is getting close to a month's worth of rain for somewhere like Mumbai. This comes on top of the 300mm or so of rain in the past 2-3 days, Mumbai reported 235mm in the 24 hours to 03Z on Saturday. Parts of western Myanmar and southeast Bangladesh are likely to see 200-400 mm through the period.

Discussion

The Indian Summer Monsoon is expected to continue in an active phase over the next few days, with a monsoon depression drifting inland from the Bay of Bengal across north-eastern and then central India through the first half of next week. As this system forms, enhanced south-westerly winds will pile frequent heavy showers onto the western coast of Myanmar, and as it drifts inland across India it will provide a focus for widespread heavy showers/thunderstorms. Heavier and more frequent than normal showers/thunderstorms are also signalled over the next few days for the far west of India, again associated with enhanced monsoon flow as the monsoon slowly marches northwards.

Expected Impacts

Heavy and torrential rain will increase the threat of flooding and landslides.



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Far east of China and south Japan

Weather

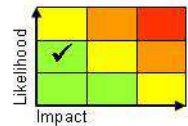
Torrential rain and severe thunderstorms associated with the seasonal rains are expected to become temporarily confined to the south of Japan over the next 2-3 days, with 100-200 mm, locally 300-500 mm falling over the next 3 days. This is around a month to two month's worth of rain for locations in southern Japan. Frequent thunderstorms look likely to resume across northeast China midweek, bringing 100-150mm of rain per day in some locations.

Discussion

Strong convergence along the Mei-yu / Baiu / Changma front will continue to provide a focus for severe storms. Troughing running across the northeast of China over the weekend will tend to force the focus of activity across the region described, whilst formation of a monsoon depression in the South China Sea will tend to suppress convection over China with conditions improving for a time here. Further flat troughing running to the N of the front early next week looks likely to lead to reactivation of the front over NE China midweek.

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.



Philippines (Western Luzon and Western Visayas)

Weather

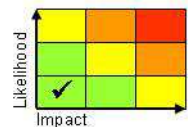
Frequent heavy showers and thunderstorms are likely to continue in this area on Monday and perhaps Tuesday, with potential for 80-100 mm per 24 hours. The heavy rain could affect the capital Manila at times, with some parts of the region perhaps seeing a further 200 mm.

Discussion

A surge in the south-westerly monsoonal winds aided by the passage of the tropical low to the north-east of Luzon (known locally as Egay) will continue to bring an increase in the frequency of heavy showers and thunderstorms. As the system runs away to the north winds should ease and back by midweek with a marked reduction in activity then expected.

Expected Impacts

Flash flooding, which will be particularly impactful should it affect significant urban areas such as Manila. There will also be an increased likelihood of landslides and fluvial flooding, with a general flood advisory in force for parts of Luzon.



Vietnam, Cambodia, Laos and far south of China

Weather

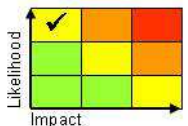
A tropical low is expected to bring enhanced rainfall and thunderstorm activity to this region over the next few days. 75-100mm of rain falling per 24 hours and more widely 100-250 mm of rain per 24 hours from early to mid-week onwards. 300-600 mm of rain is likely by the end of this forecast period in places which is around twice the monthly average for July.

Discussion

Enhanced showers and thunderstorms associated with an active period of the monsoon are expected to develop in this region, with a monsoon depression forming in the South China Sea and moving north-westwards inland early this week providing the focus for frequent and very heavy storms.

Expected Impacts

Flash flooding, landslides, and localised wind/hail damage all likely. North Vietnam is especially prone, with conditions exacerbating current impacts being reported.



Australasia

Nil.

Additional information

Nil.

Issued at: 010730 UTC **Meteorologists** Mark Sidaway / Chris Bulmer

Global Guidance Unit

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Global Guidance Unit, Operations Centre, Met Office, FitzRoy Road, Exeter

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