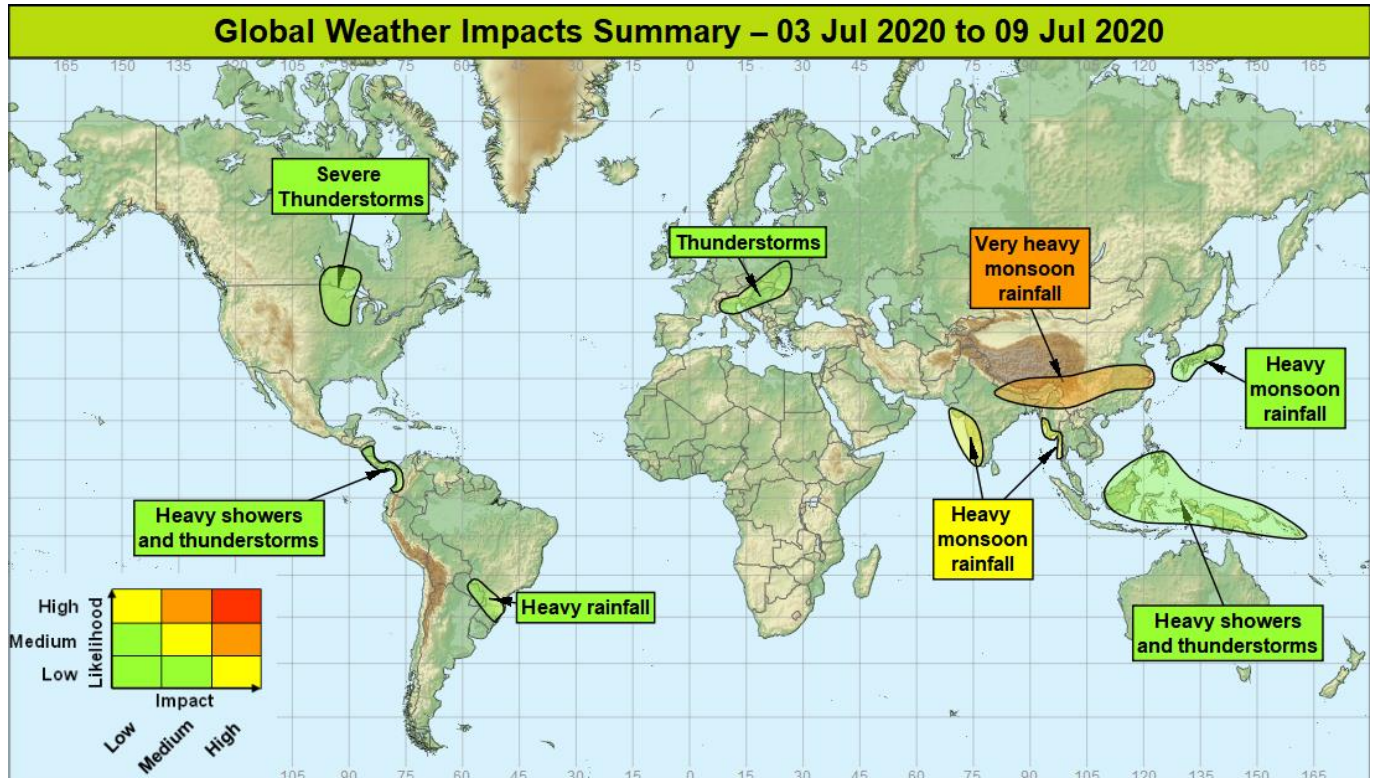


Global Weather Impacts – Friday 3rd July to Saturday 9th July 2020

Issued on Friday 3rd July 2020

HEADLINE

- Very heavy monsoon rainfall continues for parts of South and East Asia



DISCUSSION

Tropical Cyclones

There are no tropical cyclones in any basin.

There is however a low probability that approximately 500 km south of Acapulco, Mexico, a tropical cyclone may form over the coming days, but model output is widely varied, with no consensus on intensity or location. However, if anything were to form, it would likely not affect land.

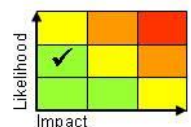
Europe

Southern / South-Eastern Europe

Weather

Further heavy showers and in places severe thunderstorms are likely to develop today across a swathe of Europe extending from northern Italy north-eastwards toward Belarus, north-western Romania and western Ukraine. Some likely hazards include torrential rain (50 mm in an hour, locally 100 mm in a few hours), large hail, frequent lightning and strong gusts of wind. Some locations could see their average July rainfall in a few hours with perhaps the focus for the most severe storms across northern Italy.

Discussion



This forecast may be amended at any time

Global Guidance Unit, Operations Centre, Met Office, FitzRoy Road, Exeter, Tel: +44(0)1392 884319

VPN: n6225 4319 Email: GGU@metoffice.gov.uk

© Crown copyright 2020. This information is for use by UK government only. It does not replace the advice and guidance provided by the official meteorological service for this region. Where there is a requirement to share this information with non-UK government agencies, please contact the Met Office to discuss.

A plume of high (18-20C) WBPT air will be engaged by shortwave upper troughs producing areas of heavy showers and thunderstorms. Forecast profiles support CAPE in excess of 2000 J/kg in places, with column shear supportive of some organisation of storms. A more marked upper trough should drive the plume further south-east over the weekend.

Expected Impacts

Risk of flash flooding. Damage to crops from large hail is possible. Possible disruption to power supplies.

North America

Central North USA, Central South Canada

Weather

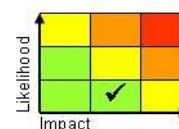
Isolated but intense thundery showers are likely from today (Friday) until Monday next week before easing. Whilst some places will see fairly small amounts of rainfall, the heaviest showers will bring localised totals of 100-150mm along with frequent lightning and large hail.

Discussion

A plume of very warm, moist Gulf of Mexico air will be drawn north, as the pattern amplifies over North America. As well as bringing surface temperatures into the low to mid-30's, destabilisation from the low-levels will take place in spite of strong upper ridging, with large amounts of CAPE (>5000 J/kg on Saturday), PWAT exceeding 45mm, and relatively slack steering winds. This will bring potentially explosive convection with large hail and heavy rain the primary hazards.

Expected Impacts

Flash flooding and disruption to transport, localised hail damage to homes and agriculture.



Central America and Caribbean

Costa Rica, Panama, Nicaragua and western Colombia

Weather

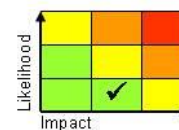
Above-average shower and thunderstorm activity will occur across this region through the next few days. Showers and thunderstorms could bring up to 50mm of rainfall over a short duration, especially this weekend, with up to 250 mm possible throughout the week across the mountains of Central America and as much as 300-400mm across the Colombian Andes.

Discussion

The ITCZ is expected to remain fairly active across this region, with the passage of several African Easterly Waves (AEW), or the remnants of AEWs, bringing one to two day periods of enhanced activity to Central America, and days with less precipitation between these features. Further south enhanced low-level moisture convergence across the Colombian Andes will lead to enhanced activity on most days, hence the higher rainfall accumulations signalled here.

Expected Impacts

An enhanced risk of flash flooding and landslides.



South America

Western Colombia – See Central America and Caribbean section

Paraguay, South-Eastern Brazil

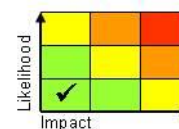
Weather

A further bout of heavy rainfall is likely to develop later this weekend and into next week. 50-75 mm of rainfall is possible in 24 hours, with some places seeing over 150 mm (around the average July rainfall) through a period of a few days.

Discussion

The South Atlantic Convergence Zone looks likely to become active across this region early next week with a powerful, northward shifted jet overlying the area inducing activity across the strong baroclinic zone. Some models allow cyclogenesis to form, which would also bring a risk of some strong winds.

Expected Impacts



This forecast may be amended at any time

Global Guidance Unit, Operations Centre, Met Office, FitzRoy Road, Exeter, Tel: +44(0)1392 884319

VPN: n6225 4319 Email: GGU@metoffice.gov.uk

© Crown copyright 2020. This information is for use by UK government only. It does not replace the advice and guidance provided by the official meteorological service for this region. Where there is a requirement to share this information with non-UK government agencies, please contact the Met Office to discuss.

Increased risk of flash flooding and landslides.

Africa

Nil.

Middle East

Nil.

Asia

Northeast India (including Assam), Nepal, northern Bangladesh, Bhutan, parts of central and southeastern China

Weather

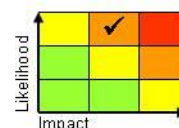
Widespread, heavy and persistent rainfall is expected to continue across this region over the coming 7 days, with a further 300-400mm on top of that which has fallen in the previous week in some places.

Discussion

An anomalously strong southerly to southwesterly monsoon flow across the region continues to pump an exceptionally warm and moist airmass (PWAT > 75mm) inland from the Bay of Bengal and the South China Sea. This will generate torrential downpours from showers and thunderstorms, with significant orographic component. Despite this occurring early in the monsoon season, flooding and widespread population displacement has already been reported, and is likely to worsen over the coming 7 days. River flooding may become more prevalent over the coming week further south as the rainfall filters down into the wide and heavily populated flood plains of northeast India and Bangladesh. Media reports also suggest that in this area of China the current flooding is the worst seen in over 70 years.

Expected Impacts

Widespread surface and continued river flooding, and likelihood of landslides in the higher terrain.



Western India

Weather

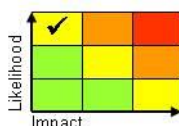
Heavy monsoon rainfall is expected through the coming 7 days, with totals widely in excess of 250mm and in excess of 500mm more locally in the foothills of the Western Ghats. This compares to the typical average at this time of year of 200-250mm per week.

Discussion

A very moist airmass (PWAT > 70mm) in these areas will bring numerous showers and thunderstorms to these areas, with very large totals building up over the coming days, even for the time of year. An Equatorial Rossby Wave in the area may also help to encourage more frequent convection in the coming days as it drifts westwards. This region has seen below normal rainfall over the past 7 days, so to some degree this will be welcome but given the volume of rainfall low impacts are inevitable.

Expected Impacts

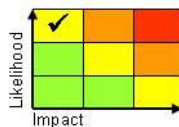
Localised flooding, and an increased likelihood of landslides in the Western Ghats.



Western Myanmar

Weather

Monsoon rainfall will be enhanced across this region as a strong flow from the Bay of Bengal brings numerous heavy showers and thunderstorms. 50-75 mm of rainfall per day is possible, with some places seeing 200-300 mm over a period of a few days, representing about a weeks' rainfall at this time of year.



This forecast may be amended at any time

Global Guidance Unit, Operations Centre, Met Office, FitzRoy Road, Exeter, Tel: +44(0)1392 884319

VPN: n6225 4319 Email: GGU@metoffice.gov.uk

© Crown copyright 2020. This information is for use by UK government only. It does not replace the advice and guidance provided by the official meteorological service for this region. Where there is a requirement to share this information with non-UK government agencies, please contact the Met Office to discuss.

Discussion

Enhanced south-westerly flow will feed numerous showers / thunderstorms into this region with an equatorial Rossby wave perhaps providing extra impetus.

Expected Impacts

Flash flooding and an increased landslide risk.

Japan

Weather

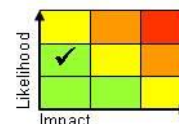
Very heavy rainfall is expected across the south of the country in particular this week with many areas seeing 50-100mm of rainfall, and as much as 300-400mm across the mountains in the region. This could represent 2-4 weeks' worth of precipitation falling in some of the wetter areas in just a few days.

Discussion

The monsoon southwesterly flow has now arrived across this region. Along the monsoon front (known as the seasonal Baiu front) convergent low-level flow will lead to episodes of heavy rain and thunderstorms. Whilst the upper flow is not especially conducive to large-scale development, a number of shortwaves embedded within the flow will amplify heavy rainfall further along the quasi-stationary front, leading to large rainfall accumulations.

Expected Impacts

Increased risk of flash flooding and landslides.



Parts of Malaysia, Philippines, Indonesia, Papua New Guinea and the Solomon Islands

Weather

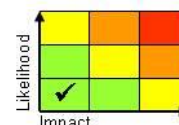
Above average rainfall will continue across this region in the form of heavy showers and thunderstorms. These will be capable of locally bringing 50-100 mm of precipitation in a short duration, with some locations likely to see 150-250 mm through the coming days, although some mountainous parts of the island of New Guinea could see over twice this amount. Average precipitation accumulations in June across this region is around 250 mm.

Discussion

Strong and consistent signal from NWP for enhanced rainfall across this region. Profiles in the area show large amounts of PWAT, and large skinny CAPE so heavy rainfall likely to be the most disruptive element.

Expected Impacts

An increased risk of flash flooding and landslides in regions where terrain is steep.



Australasia

Nil.

Additional Information

Cox's Bazar, southeast Bangladesh

Scattered shower and thunderstorm activity with storms blowing in from the Bay of Bengal. Strengthening monsoonal flow over the weekend should see the most frequent, heaviest showers falling here. Around 100-150mm is likely during the course of the coming 5-7 days.

Western Yemen

This forecast may be amended at any time

Global Guidance Unit, Operations Centre, Met Office, FitzRoy Road, Exeter, Tel: +44(0)1392 884319

VPN: n6225 4319 Email: GGU@metoffice.gov.uk

© Crown copyright 2020. This information is for use by UK government only. It does not replace the advice and guidance provided by the official meteorological service for this region. Where there is a requirement to share this information with non-UK government agencies, please contact the Met Office to discuss.

Largely dry at first, but over the weekend there is an increased risk of thundery showers breaking out over western Yemen. Daily totals of 30-50mm in the heavier showers are most probable. Showers should ease down again as we go in to next week

Issued at: 030715UTC

Meteorologist: Chris Almond / Mark Sidaway

Global Guidance Unit

This forecast may be amended at any time

Global Guidance Unit, Operations Centre, Met Office, FitzRoy Road, Exeter, Tel: +44(0)1392 884319

VPN: n6225 4319 Email: GGU@metoffice.gov.uk

© Crown copyright 2020. This information is for use by UK government only. It does not replace the advice and guidance provided by the official meteorological service for this region. Where there is a requirement to share this information with non-UK government agencies, please contact the Met Office to discuss.