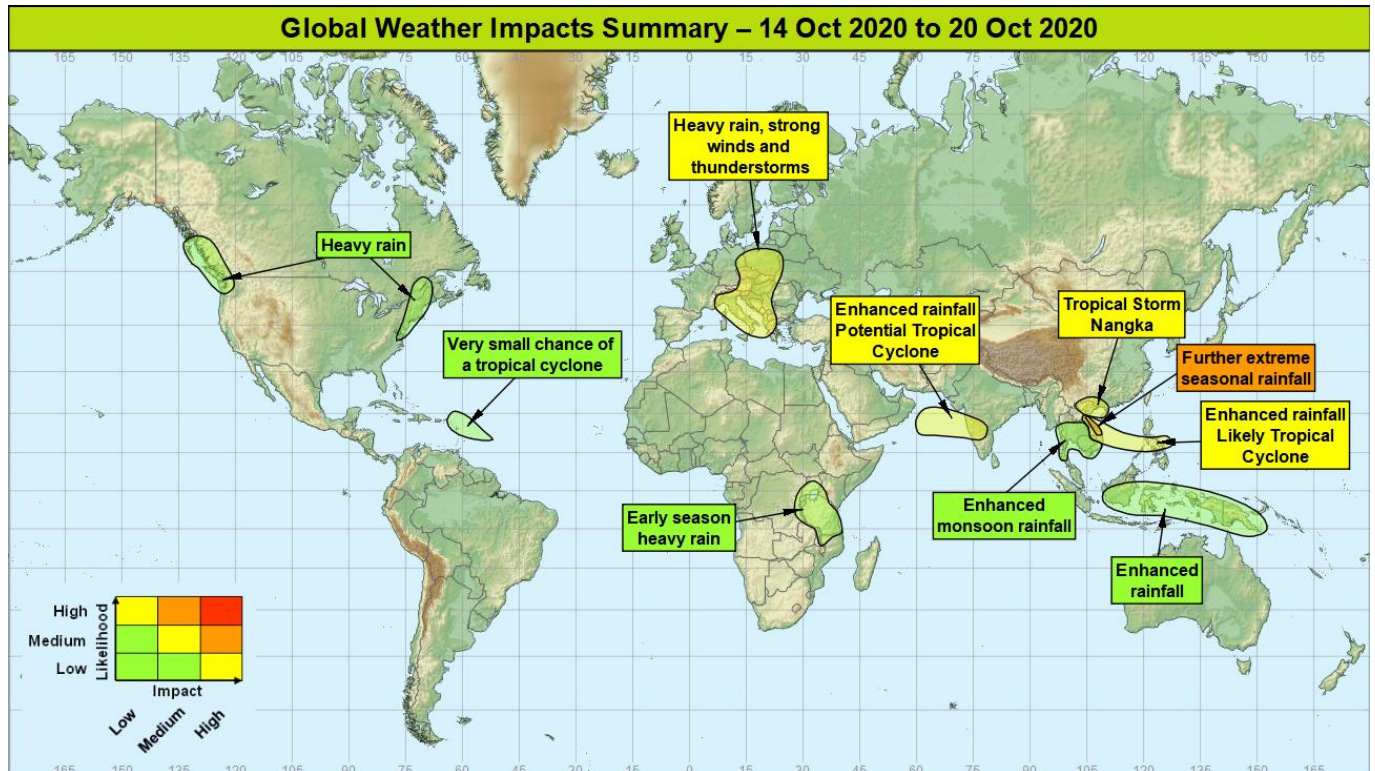


Global Weather Impacts – Wednesday 14th to Tuesday 20th October 2020

Issued on Wednesday 14th October 2020

HEADLINES

- Central Vietnam likely to see further severe flooding impacts due to continued extreme rainfall.
- Tropical Storm Nangka impacting northern Vietnam and southern China today.
- Further potential tropical cyclone developments over south and southeast Asia.
- Heavy rain and thunderstorm impacts for parts of central Europe during the next few days.



Tropical Cyclones

Tropical Storm Nangka - South China Sea, northern Vietnam and southern China **Weather**

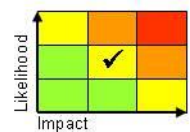
Tropical Storm Nangka crossed Hainan yesterday and is expected to continue west-northwestwards making final landfall over northern Vietnam during today (Wednesday). As well as bringing large amounts of rainfall (100-300mm along its path and also into the far south of mainland China) strong winds can be expected as it is likely to be tropical storm strength at landfall.

Discussion

Interaction with Hainan limited any further development yesterday. Nangka is expected to make landfall over N Vietnam as a Tropical Storm and the change to an offshore flow on its S'ern flank is helping to ease rainfall over central Vietnam for a short time which has seen copious amounts of rain over recent days.

Expected Impacts

Flash flooding, and landslides from heavy rainfall are likely. There is a lower likelihood of damage/disruption from strong winds and a dangerous coastal surge along with large waves.



This forecast may be amended at any time

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The following areas are being monitored for potential impactful tropical cyclone development:

India and the Arabian Sea

Weather

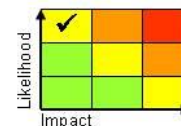
A tropical depression moved into central India from the Bay of Bengal on Tuesday, and will continue westwards through the next few days. Enhanced rainfall is likely to be the primary hazard, with a swathe of 100-200mm, locally 300mm of rain expected across parts of central/western India during the next few days. By the end of the week the system will emerge over the Arabian Sea (just south of Mumbai) and there is a good chance that it will strengthen again with a tropical cyclone potentially forming through the weekend into next week as it likely tracks westwards towards Oman.

Discussion

The remains of a tropical depression associated with an Equatorial Rossby Wave (ERW) will continue to bring frequent heavy showers within the very high PWAT air mass. This will realise high hourly and daily totals, bringing flash flooding to this region and a threat of river flooding later on. One mitigating factor is that, despite the monsoon having generally been active, much of this region has seen below or around average rainfall over the past month. There is a reasonable model signal for this system to move out across the Arabian Sea this weekend and strengthen across the anomalously warm water.

Expected Impacts

Flash flooding will be the primary hazard. Increased risk of tropical cyclone impacts (strong winds and dangerous coastal conditions) for Arabian Sea coasts from the weekend.



South China Sea, Philippines and Vietnam

Weather

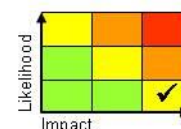
An area of showers and thunderstorms currently approaching the east of the Philippines may develop into a tropical cyclone as it crosses the South China Sea later this week and through the weekend. Regardless of development, this system is, after a short break in the wake of Nangka, is likely to re-intensify rainfall across central parts of Vietnam. This has the potential to bring rainfall totals of 300-500mm between Friday and Sunday across areas which have seen recent excessive rain and flooding. Another potential tropical cyclone development close to the northern Philippines is possible next week.

Discussion

A cluster of showers and thunderstorms associated with another ERW will cross the Philippines today (Wednesday), before emerging over the South China Sea where conditions may be more conducive to tropical cyclogenesis. The multi-model ensemble signal for such a development is currently rather weak, but what signal there is has consistently been further S than that from Nangka. This means that, regardless of development, an uptick in rainfall is expected across parts of central Vietnam, with anomalous easterly flow developing and bringing tropical moisture into an area that has currently experienced severe rainfall. There is a model signal for another tropical cyclone development near the northern Philippines next week, continuing an active tropical cyclone period across the region.

Expected Impacts

Localised flash flooding possible across Luzon and the Visayas (Philippines) mid-week, with more significant flash and river flooding probable across central Vietnam later this week and over the weekend. Further land/mudslides also likely.

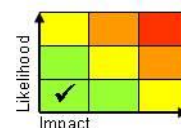


Tropical Atlantic

Weather

There is a very small chance (rated at 10% by NOAA NHC) that an area of heavy showers and thunderstorms to the east of the Lesser Antilles will become more organised over the next or two allowing a tropical storm to develop. So whilst strong winds look unlikely, northern parts of the Lesser Antilles look likely to see an increase in shower and thunderstorms activity during Thursday and Friday with some places potentially seeing 50-100mm of rainfall.

Discussion



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A disorganised area of convection associated with an AEW is moving west towards the Lesser Antilles. SSTs are sufficiently high (~28-29C) but vertical wind shear should gradually increase over the next day or so making the area environment hostile to development.

Expected Impacts

Small increase in the risk of flash flooding.

The following area is being monitored with no land impacts currently expected:

- Tropical Storm Norbert, currently southwest of Mexico is expected to weaken over the next few days as it tracks north before dissipating, but should stay away from land.

Europe

Central Mediterranean, Balkans, and parts of Central Europe

Weather

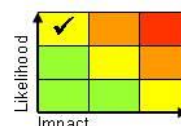
Widespread and persistent rain is expected to continue northwards across parts of Central Europe, again accompanied by increasingly strong to gale force winds through the next day or two. 50-75mm in 24 hours could fall across parts of Poland and Germany. On Thursday, another episode of heavy showers and thunderstorms will see large amounts of rain resuming across the Balkans in particular, before conditions generally ease later in the week.

Discussion

Persistent and at times sharp troughing across Central Europe will continue to engage a number of high WBPT plumes being drawn NE from Africa/the Med, with the system over Central Europe having resulted in a deep low over Poland and associated heavy rain/strong winds. The most severe impacts are likely to be across the Balkans, with a combination of severe thunderstorms from Monday, followed by further heavy rain on Thursday leading to totals exceeding 300mm in a few spots.

Expected Impacts

Flash flooding and landslides are possible, particularly across the Balkans. Damage and disruption from frequent lightning and large hail looks possible in the vicinity of the Central Mediterranean. Minor river flooding looks possible further north across Central Europe. Disruption from strong winds, particularly to marine transport, and dangerous coastal conditions from large waves.



North America

Northeast USA and southeast Canada

Weather

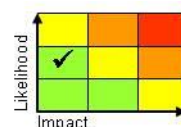
Tropical moisture associated with ex-Hurricane Delta continues to move northeastwards, with a further 50-75mm, locally 100mm of rainfall falling today across the east of this region. After something of a respite mid-week, a further band of heavy rain, with possible thunderstorms looks likely to become slow-moving more broadly over northeast USA and southeast Canada by Friday and Saturday. This will include some the areas which will have seen heavy rain from ex-Delta. This could bring a further 50-150mm of rain in 24-36 hours. Typically this region will see 75-125mm through the whole of October.

Discussion

The remnants of Delta has come up against a blocking high within the very cold air across eastern Canada leading to a persistent and very moist SE'y flow into parts of NE US, bringing frequent heavy showers and thunderstorms. Later in the week, a marked trough extension will drive a deepening area of low pressure across the Great Lakes area, eventually dredging up a further plume of warm air which will become the focus for a decelerating area of heavy rain and thunderstorms over a similar area as the pattern continues to amplify.

Expected Impacts

Rainfall is likely to result in some river and flash-flooding.



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Northwest USA and Southwest Canada

Weather

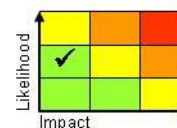
Following a period of heavy rain yesterday (Tuesday) a further period of rain is expected through the end of this week bringing accumulations of 150-200mm over 24-36hrs. For context this is around the average rainfall for the whole of October for this area.

Discussion

A necking upper trough will drive cyclogenesis on a frontal wave, drawing up a stream of very moist air from the Hawaii region, locally known as a Pineapple Express. This will bring torrential rainfall to the North American coastline at the end of this week.

Expected Impacts

Flash and some possible river flooding, along with strong wind impacts.



Central America and Caribbean

Nil

South America

Nil

Africa

Tanzania and parts of adjacent countries

Weather

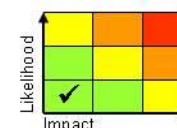
Early seasonal heavy rainfall in the form of daily heavy showers and thunderstorms is expected across this area over the coming week. Most areas will avoid the heaviest downpours but there is still the potential for 100-150 mm to build up in places over the next few days. Thunderstorms may also bring the additional hazard of localised strong, gusty winds.

Discussion

An ERW moving west across this region will help enhance rainfall over the coming days.

Expected Impacts

The enhanced rainfall comes ahead of the typical start of the wet season thus reducing this likelihood of flash flooding although this can't be ruled out. The heaviest downpours and associated strong winds gusts are likely to be focused around the African Great Lakes (especially Victoria, Tanganyika and Malawi) which could disrupt maritime activities.



Middle East

Nil

Asia

Philippines, China, Vietnam, India

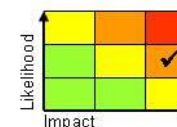
See *Tropical Cyclones*.

Central Vietnam

Weather

The next few days will see an easing of the recent extreme rainfall across the region. However, the likely development and passage of another tropical cyclone later this week (see tropical cyclones section) will bring further very heavy rainfall, with the following moist easterly flow introducing further thunderstorms and intense rainfall from the weekend. It is likely that another 500mm could accumulate, with some upland area perhaps seeing as much as 750-1000mm. The average rainfall through October is 500-800mm.

Discussion



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A combination of further tropical cyclone development, an active monsoon trough and enhanced onshore flow will bring another period of intense seasonal rainfall to an area of Vietnam that has already seen devastating floods. The rains may be slightly further north than the previous intense rainfall event, but if this is the case it will just extend the flooding impacts further north.

Expected Impacts

Increasingly severe flooding impacts possibly extending north. High likelihood of landslides.

South Vietnam, Laos, Cambodia, Thailand, south Myanmar

Weather

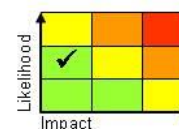
Enhanced showers and thunderstorms associated with an active period towards the end of the Southeast Asian monsoon could bring very locally 75-100mm of rain in a few hours, each day this week. Most areas will be generally dry for much of the time.

Discussion

With all the activity elsewhere across the South-East Asian region, showers and thunderstorm activity will generally be below what we have seen over the past week or two. However, there remains a signal for above average ppn here, coinciding with an active monsoon combining with La Nina conditions.

Expected Impacts

Very isolated flash flooding, and risk of very localised landslides, given that antecedent conditions over the past 7 days have widely been much wetter than average.



Indonesia and Papua New Guinea

Weather

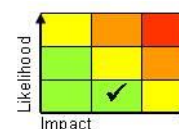
More frequent than usual showers and thunderstorms are expected during the next week over this region. Some places could receive 75-100mm in 6-12 hours, and overall widely 50-100mm will fall across the region.

Discussion

The La Nina background state makes showers and thunderstorms more likely to be frequent across the Maritime Continent, which has support from model output. Monthly anomalies across this region are generally positive too, particularly across Sulawesi, making impacts more likely than usual.

Expected Impacts

Localised flash flooding in places, and increased risk of landslides in higher terrain.



Australasia

Nil

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Additional Information**Cox's Bazar, southeast Bangladesh**

There is a very low risk of an isolated shower or thunderstorm over the next few days. From Friday, there is a greater risk of heavy downpours from thunderstorms across southeast Bangladesh although at this stage it looks like the heaviest rain will remain offshore.

Yemen

The development of very isolated showers is possible over the Western Highlands. We are now well into the dry season, with most places expected to be dry throughout.

Sudan/South Sudan

Apart from the far south, Sudan will dry, which is usual for this time of year. Daily showers and thunderstorms will continue across the far south of Sudan and South Sudan, although to a lesser extent than recent weeks – weekly totals could approach 75mm in a few places.

California

The continued hot conditions (temperatures 5-10 degrees Celsius above average) will combine with strong Santa Ana winds to increase the wildfire threat across California through the rest of this week. There is the potential for temperatures to decrease back closer to climatology next week, but still with no sign of any significant rainfall.

Issued at: 140700 UTC **Meteorologists:** Ele Hands / Paul Hutcheon

Global Guidance Unit

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