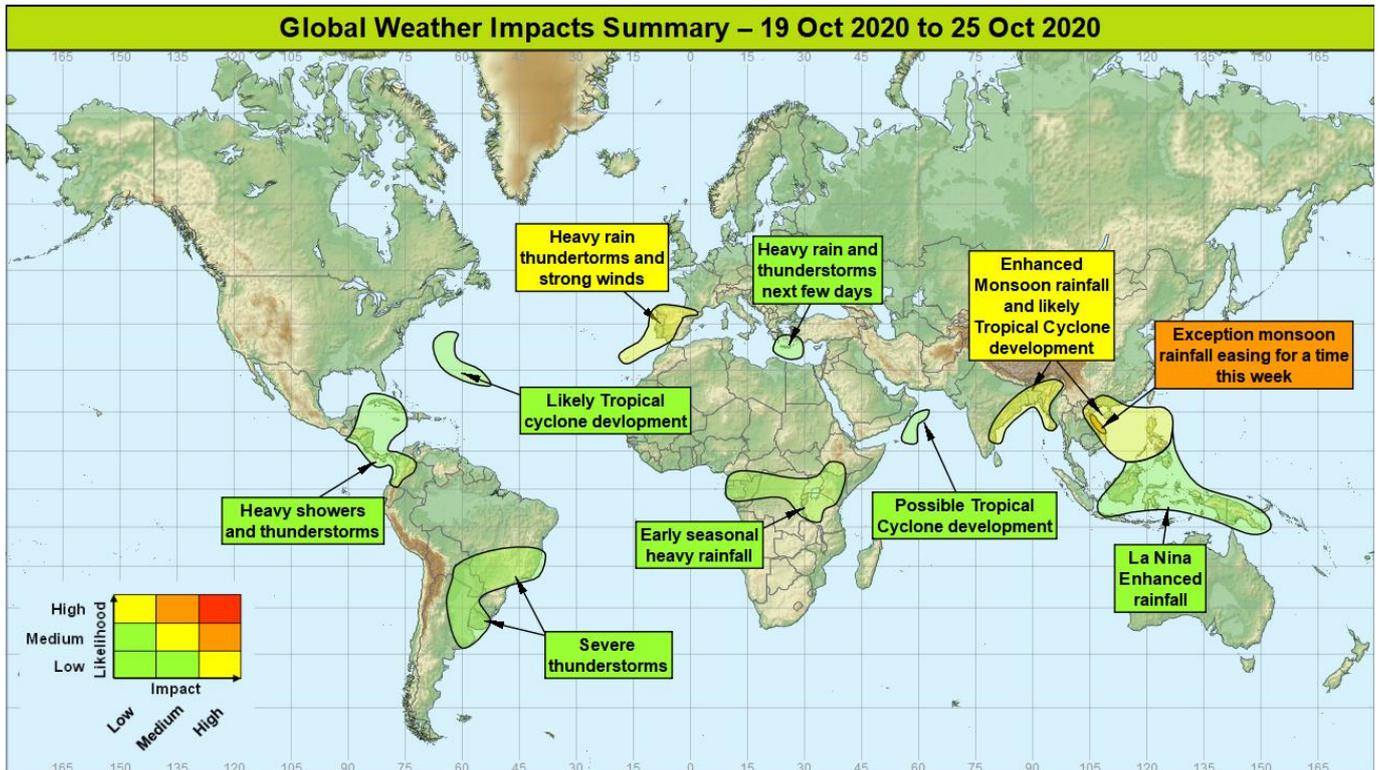


Global Weather Impacts – Monday 19th to Sunday 25th October 2020

Issued on Monday 19th October 2020

HEADLINES

- Vietnam likely to see further severe flooding impacts due to continued extreme rainfall.
- Further heavy rain and potential tropical cyclone developments across parts of south and southeast Asia.
- Heavy rain and strong winds across parts of southwestern Europe in the next few days.
- Potential tropical storm likely to pass over or close to Bermuda later this week.



Tropical Cyclones

There are no tropical cyclones impacting land presently.

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

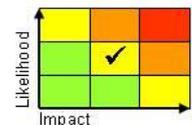
Northern Philippines, South China Sea, Vietnam, Bay of Bengal eastern India, Bangladesh and Western Myanmar

Weather

Southern and southeast Asia will continue to see areas of active monsoon rainfall, plus the potential for tropical cyclone developments during the next 7 days. The most significant tropical cyclone development is likely to form just east of Luzon (Philippines) today and track west across Luzon and into the South China Sea through the rest of this week as it strengthens, perhaps reaching typhoon strength before possibly making landfall in Vietnam at the weekend. A potential tropical cyclone development in the Bay of Bengal is likely to be less intense, but could track north into Bangladesh or northeast India, producing very heavy rainfall.

Widespread rainfall accumulations of 100-300mm look likely in this region, but with peak rainfall accumulations of 500mm possible in places. Strong winds is also a threat in this region, especially with the South China Sea system

Discussion



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The La Nina ENSO state is likely influencing the very active seasonal rainfall in this region, with the additional influence of a reasonably well marked MJO. Associated active Equatorial Rossby Waves may be the trigger for tropical cyclone development, There are increasing signals from the models for a particularly intense tropical cyclone development across the South China Sea this week, and this may track towards the Vietnam coast this weekend, however confidence in this evolution continues to be low.

Expected Impacts

Flash and river flooding can be expected anywhere in this area, but the most significant flash and river flooding will continue to be in Vietnam (see the dedicated event in *Asia* section). Landslides also highly likely, but with a much lower likelihood of wind or coastal flooding impacts from any tropical cyclone developments.

Arabian Sea Weather

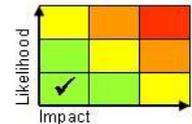
A cluster of thunderstorms associated with a tropical depression across Arabian Sea have become less organised through the weekend, and this system now looks unlikely to form into a tropical cyclone, although it remains a low likelihood area of development through the next few days. Some patchy rainfall and strong winds are possible today along the southern Oman coastline.

Discussion

Recent runs of all models have migrated to a much weaker signal for the development of this system through the next few days. This is possible due to the entrainment of dry air from Pakistan.

Expected Impacts

No significant impacts expected due to lower likelihood of further development.



North Atlantic (including Bermuda)

Weather

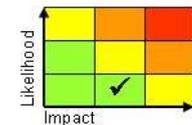
Showers and thunderstorms associated with a low pressure system located about 650 miles southeast of Bermuda have been increasing shown signs of organisation in the last 24 hours. As this system tracks northwest during the next few days this system is expected to become a subtropical or tropical storm, with a track across or close to Bermuda later this week. This would bring very heavy rain (100-300mm), very strong winds and associated rough sea to the island.

Discussion

A subtropical or tropical storm is very likely to form in the next day or two well to the southeast of Bermuda. The NHC gives a 90% chance of cyclone formation over the next 48 hours. A blocking high pressure aloft to the north of this system will likely steer the storm northwest towards Bermuda. There remain some differences in the track and intensity of this storm, but these less than in the last few days. If this develops into a tropical storm it would be named "Epsilon".

Expected Impacts

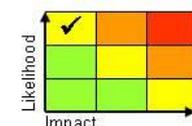
Flash flooding is possible, with dangerous coastal conditions likely and a lower likelihood of wind damage.



Europe Iberia and Madeira Weather

A period of very heavy rain and thunderstorms, plus gale force winds is expected to affect parts of Iberia and Madeira through the next few days, primarily over high ground and around the western coastal districts. This has been named Storm Barbara by the Spanish Met Service yesterday. This system will bring strong winds and possibly even gales, but it looks like the rain will cause the most significant impacts with 100mm likely quite widely across the region, and as much as 200-250mm in some upland areas. This would be the equivalent of 4-6 weeks rain in just a few days.

Discussion



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An active frontal system will become slow moving across the region through the next few days as it becomes aligned with the upper flow ahead of the extending upper trough. Short wave upper troughs moving around the base of the long wave upper trough will induce active frontal waves that will bring periods of very heavy rainfall to the region. There will be a threat of embedded deep convection and thunderstorm development, and there will also be an aspect of orographic enhancement of the rainfall on high ground exposed to the strong SW'ly flow, with a very moist warm conveyor likely becoming set up.

Expected Impacts

Flash flooding and land/rockslides are a significant threat, with a lower likelihood of large scale river flooding due to longer period rainfall, coastal impacts due to high seas and wind impacts.

Southern Greece, Crete and southwest Turkey

Weather

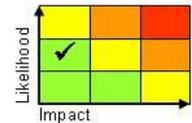
Heavy showers and thunderstorms are expected through much of this week, producing up to 50mm in just a few hours. The heaviest rainfall could be seen across northern Crete, where up to 150mm could accumulate through the week (twice the October average rainfall).

Discussion

A disrupting upper trough will form a slow moving vortex that will engage the warm plume from a slow moving frontal boundary across this part of the Mediterranean this week to produce deep convection. A northerly flow into Crete could produce an added orographic uplift mechanism to enhance the rainfall here.

Expected Impacts

Flash flooding looks possible, especially for parts of Crete.



North America

Nil.

Central America and the Caribbean

Central America, western Caribbean and western Colombia

Weather

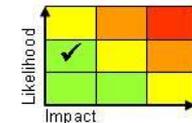
The next 7 days will see areas of heavy showers and thunderstorms affect this region. 24 hour rainfall of up to 100mm is likely in places, with peak 7 day accumulations of 200-300mm in a few places.

Discussion

A Central American Gyre (CAG) has developed across the south of Central America through the weekend, producing areas of more organised deep convection. It looks likely that this CAG will transfer north this week to extend the areas of more widespread thunderstorms into the western Caribbean. These systems can even develop weak tropical storms, and this is an aspect that will need to be monitored.

Expected Impacts

Increasing threat of flash flooding and landslides.



South America

Western Colombia

See *Central America and Caribbean*.

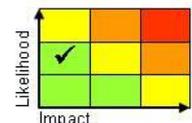
Paraguay, Uruguay, Bolivia, southeast Brazil and northern Argentina

Weather

Areas of intense showers and severe thunderstorms will transfer north across the region through the next 7 days, producing 50-75mm of rain in just a few hours, with a threat of strong winds, large hail and frequent lightning.

Discussion

A southward extension of the very warm, moist monsoon plume into northern Argentina will be engaged by several upper troughs through the next 7 days to produce high CAPE, marked wind shear deep convection.



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Expected Impacts

Local flash flooding probable with a lower likelihood of damage from hail, wind and lightning.

Africa

Parts of Central and East Africa

Weather

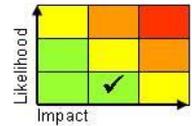
Early seasonal heavy rainfall in the form of daily heavy showers and thunderstorms is expected across this area over the coming week, particularly focused around the Lake Victoria region. Most areas will avoid the heaviest downpours but there is still the potential for up to 50-75 mm of rain in a few hours, with some places seeing 150-200mm through the next 7 days. Thunderstorms may also bring the additional hazard of localised strong, gusty winds.

Discussion

Tropical air is now starting to leak southwards across Africa, signalling the early part of the 'short-rains' season.

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.



Middle East

Arabian Sea

See *Tropical Cyclones*.

Asia

Northern Philippines, South China Sea, Vietnam, Bay of Bengal eastern India, Bangladesh and Western Myanmar

See *Tropical Cyclones*.

Central Vietnam

Weather

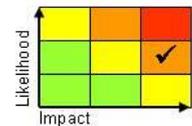
Further exceptional rainfall is likely across central parts of Vietnam in the next 2 or 3 days with some places seeing 300-500mm, exceptionally 750mm from persistent intense rainfall and thunderstorms. The heaviest rain will be across central coastal regions of the country, mainly from the Vinh in the north to Quang Nghia in the south. By the middle of next week the rains should finally begin to ease to more normal patterns for the region. However there is a low probability that enhanced rains will return to the area in association with a decaying tropical storm over the weekend.

Discussion

Strong signal from all models further exceptional rainfall across parts of Vietnam already badly impacted by previous heavy rains. The heaviest rain in the next few days is expected to fall just north of previously worst impacted parts, but this would result in a greater areal coverage of flooding across Vietnam. This intense rainfall is associated with an active monsoon trough. There is the potential for a more significant tropical cyclone development in the South China Sea by the middle of next week which is likely to push the monsoon trough south of Vietnam, allowing less warm and drier air to significantly ease the rainfall. However this system may bring further enhanced rain to the coastline over the weekend, but confidence in this evolution is low at this time.

Expected Impacts

Further severe flash and river flooding is expected with a very high likelihood of landslides. These Impacts perhaps occurring a little further north than recent events, extending the severe flooding impacts that have already seen at least 88 people losing their lives.



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Indonesia, Malaysia, southern Philippines and Papua New Guinea

Weather

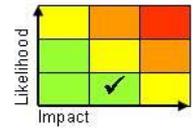
Slightly enhanced showers and thunderstorms are expected across parts of the region in the coming week, mainly in the next few days. Some places could receive 25-75mm in 3-6 hours, and overall widely 50-100mm will fall across the region. This following recent anomalous rainfall in the last few weeks.

Discussion

La Nina 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

Additional Information

Cox's Bazar, southeast Bangladesh

An increase in heavy shower / thunderstorm development is expected in the northern Bay of Bengal during the next few days which will produce an increasing threat of a heavy rainfall in Cox's Bazar this week. The most likely days for a threat of flash flooding and landslide impacts look like Wednesday to Friday when up to 100mm of rain could fall in just 6 hours due to intense thunderstorms. However a return to more normal rainfall patterns are expected through the weekend.

Yemen

The development of isolated heavy showers is possible over the Western Highlands (especially in the south) through the next 3 or 4 days, but with this risk lowering by the weekend. The chance of a tropical depression or storm affecting Socotra this week looks lower than recently suggested, although some rainfall is possible here around midweek. There is far more confidence that 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 stay dry, which is usual for this time of year. Daily showers and thunderstorms will continue across the far south of Sudan and more especially South Sudan, although to a lesser extent than recent weeks – weekly totals could approach 30-50mm in a few places.

Parts of the western USA, including California.

The continued dry conditions will maintain the wildfire threat, especially across California through much of the coming week. Temperatures likely remaining significantly above the average for October through to midweek, with the continued heat and threat of strong winds maintaining an extremely high threat of further wildfire development across this region. However, a marked cold wave is expected to sweep south across much of the USA this week, eventually lowering temperatures back to average and perhaps even bringing a little rain too.

Issued at: 190715 UTC

Meteorologists: Tony Wardle / Paul Hutcheon

Global Guidance Unit

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