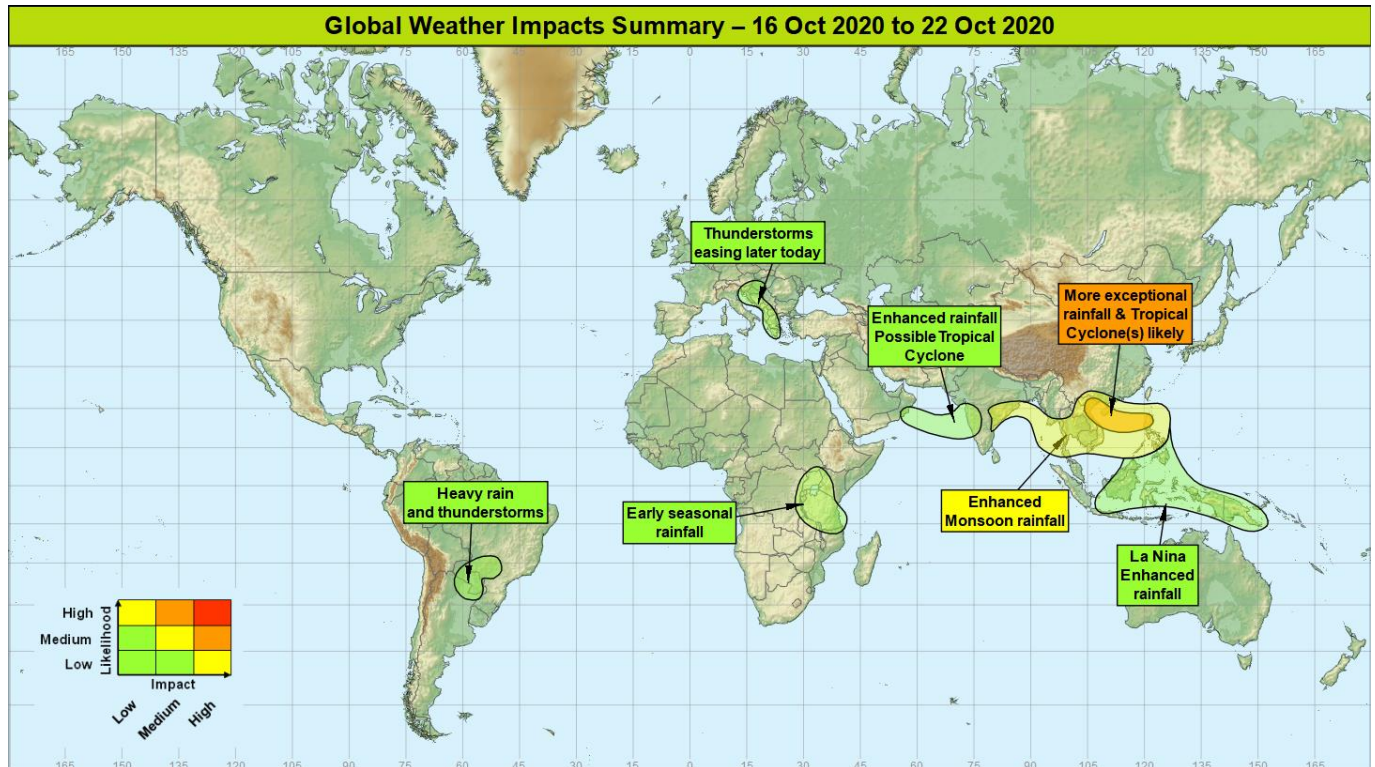


## Global Weather Impacts – Friday 16<sup>th</sup> to Thursday 22<sup>nd</sup> October 2020

Issued on Friday 16<sup>th</sup> October 2020

### HEADLINES

- Vietnam likely to see further severe/exceptional flooding impacts due to continued extreme rainfall.
- Further heavy rain and potential tropical cyclone developments more widely over south and southeast Asia.
- Thunderstorms over parts of Europe easing.



### Tropical Cyclones

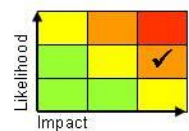
There are no tropical cyclones impacting land presently.

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

### Tropical Depression 94-W Parts of The Philippines, Vietnam, South China (inc. S.C. Sea) and Laos

#### Weather

An area of showers and thunderstorms currently over the South China Sea has developed a cyclonic flow at the surface, and consequently it has been labelled Tropical Depression 94-W. This area is likely to develop into a tropical cyclone as it continues heading westwards across the South of China today, as it heads towards Vietnam. Winds are unlikely to cause any issues, but rainfall will be the most impactful element. Regardless of storm development, more exceptional amounts of rain are forecast, and with this all coming only a short time after Nangka, more severe flooding is likely to occur. During next week, there is potential for another 400 to 600mm widely in this area, with parts of Vietnam seeing 1000 mm or more, in areas which have seen recent excessive rain and flooding. Some parts of Vietnam have had over 1500mm in the last week already.



**This forecast may be amended at any time**

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## Discussion

A tropical Rossby wave is currently manifesting itself as an area of showers and thunderstorms currently over the South China Sea, and with a cyclonic flow detected at the surface, it has been labelled Tropical Depression 94-W. With SSTs around 29°C to 30°C and little vertical wind-shear, conditions look favourable for some degree of development. The multi-model ensemble signal for such a development is reasonably good, but all models develop a fairly weak system, with not particularly strong winds – but copious amounts of rain. Regardless of development, another bout of very heavy rainfall is expected in this area, with anomalous easterly flow around the north of the monsoon trough developing and bringing tropical moisture (enhanced by La Nina conditions) into an area that has currently experienced severe rainfall. There is a low signal for another tropical storm to develop in the same area by the middle of next week – but again this just reaffirms the continuation of exceptionally large rainfall totals in this area.

## 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 over the weekend and into next week – bearing in mind that there are already 130,000 homes inundated by flood water, and 29 people have lost their lives. Further land/mudslides are also highly likely.

## Western India and the Arabian Sea, Oman

### Weather

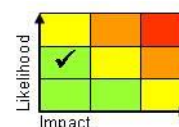
A cluster of thunderstorms associated with a tropical depression that crossed India will continue westwards over the Arabian Sea today. This system was named 92A on some guidance issued overnight, but not from the Indian Met Department. However, there is a good chance that this system will strengthen again with a tropical cyclone potentially forming through the weekend or early next week as it likely tracks westwards towards Oman.

### Discussion

The remains of a tropical depression associated with another Equatorial Rossby Wave will continue to bring frequent heavy showers within the very high PWAT air mass. This previously brought high hourly and daily totals over India. The mitigating factors this weekend are that, despite the monsoon having generally been active, much of this region has seen below or around average rainfall over the past month, and the heaviest precipitation and strongest winds look likely to stay out over the Arabian Sea. There is a reasonable model signal for this system to move further out across the Arabian Sea this weekend and strengthen across the anomalously warm water, perhaps bringing some rain to the usually dry Oman early next week.

### Expected Impacts

Increased risk of tropical cyclone impacts (strong winds and dangerous coastal conditions) for Arabian Sea coasts from the weekend. Any rainfall over Oman is likely to be relatively small, but given average monthly rainfall here in October is usually <5mm, it will be quite unusual.



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

Tropical Cyclone Chanhom, previously south of Japan, has now dissipated.

\*\*\*\*\*

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## Europe

### Adriatic coastal countries, some parts of central/east Europe

#### Weather

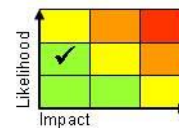
Recent thundery conditions look set to ease after today over this part of Europe. An area of low pressure over northern Italy has brought a wet spell to many parts of central Europe in recent days, but to the most severe convection today will be over the Adriatic Sea, The Balkans down to Greece. The weather should be much quieter over the weekend.

#### Discussion

The surface low and upper cold pool which has brought heavy rain and thunderstorms to many parts of central Europe will gradually drift away to the east by the weekend. In the warning area, the remnants of the warm moist air will (which was previously advected north from the southern Mediterranean and northern Africa), will continue to interact with the upper cold-pool and is likely to release some deep convection today, though generally less-so than previous days.

#### Expected Impacts

Flash flooding and landslides are still possible across the Balkans given previous heavy rainfall. Isolated river flooding looks possible as well. Disruption from strong winds is possible at first, but winds will gradually ease.



## North America

Nil.

## Central America and Caribbean

Nil

## South America

### Paraguay, parts of southern Brazil and northern Argentina

#### Weather

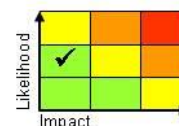
Heavy rain and thunderstorms are likely over the weekend after a little/brief respite today.

#### Discussion

A marked baroclinic zone with some very warm moist air to the north, will become engaged by another prominent upper trough crossing this part of South America over the weekend. Pulses of heavy rain (up to 100mm in a few days) are likely along the front and some severe thunderstorms in the warm air to the north (as yesterday). A transient ridge will cross on Friday bringing a temporary respite after yesterday's storms, but the next upper trough will cross from the west over the weekend, bringing more storms and heavy rain.

#### Expected Impacts

Local flash flooding probable, low risk of damage from hail and lightning.



## Africa

### Parts of East Africa

#### Weather

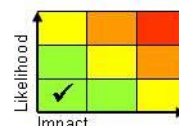
Early seasonal heavy rainfall in the form of daily heavy showers and thunderstorms is expected across this area over the coming week. Most areas will avoid the heaviest downpours but there is still the potential for 100-150mm to build up in places over the next few days. Thunderstorms may also bring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

#### Discussion

Tropical air is now starting to leak southwards across Africa, signalling the start 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.



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## Middle East

### Oman

See *Tropical Cyclones*.

## Asia

### Philippines, China, Vietnam, India

See *Tropical Cyclones*.

## Eastern India, southern Myanmar, Laos, Cambodia, Thailand, and the Philippines

### **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 during the remainder of this week, with totals 300 to 400 mm possible by next week.

### **Discussion**

With the most severe activity elsewhere across the South-East Asian region, showers and thunderstorm will generally be below what we have seen over the past few weeks. However, there remains a signal for above average ppn here, no doubt aided by the current 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, Malaysia and Papua New Guinea

### **Weather**

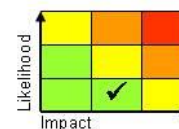
More frequent than usual showers and thunderstorms are expected during the next week over this region. Some places could receive 75-100mm in 6-12 hours, and overall widely 50-100mm will fall across the region.

### **Discussion**

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

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

There is a low risk of an isolated shower or thunderstorm over the next few days. By the weekend, there is a greater risk of heavy downpours from thunderstorms across southeast Bangladesh although at this stage it looks likely that 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 stay 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.

**Parts of the western USA, including California.**

The continued dry conditions will maintain the wildfire threat, especially 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:** 160710 UTC

**Meteorologists:** Chris Almond / Chris Tubbs

**Global Guidance Unit**

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