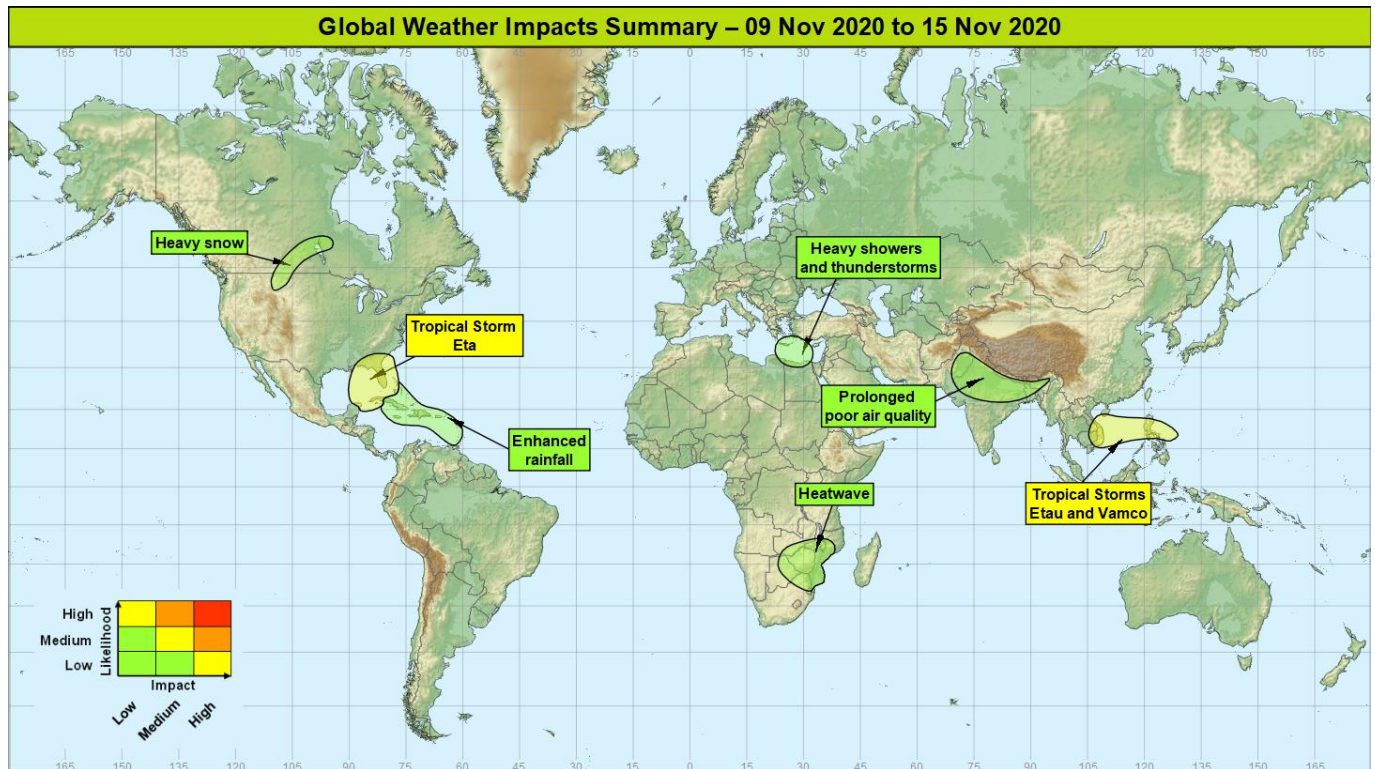


## Global Weather Impacts – Monday 9<sup>th</sup> November to Sunday 15<sup>th</sup> November 2020

Issued on Monday 9<sup>th</sup> November 2020

### HEADLINES

- Tropical Storm Eta remains in the Gulf of Mexico, very wet in the wider Caribbean area.
- Tropical Storm Eta to impact Vietnam tomorrow.
- Tropical Storm Vamco has formed over the Philippine Sea and is expected to impact Luzon by Wednesday.



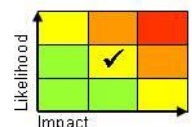
### Tropical Cyclones

#### Tropical Storm Eta - Cuba, Gulf of Mexico, western Caribbean, Florida **Weather**

After crossing the Florida Keys last night Tropical Storm Eta is currently moving westwards into the Gulf of Mexico. As it moves over the warmer seas of the Gulf it is forecast to strengthen over open waters and regain hurricane status on Tuesday. Thereafter the forecast track turns Eta to the north again, with a potential landfall across northern Florida as a tropical storm by Thursday. Heavy rainfall will affect much of the highlighted region with many places likely to see between 50-100mm of rainfall in the coming week with a corridor of higher places totals in the range 250-500mm. Typical rainfall in the wettest months in this region is around 200-300mm. Current sustained winds of 60-65mph will increase as Eta strengthens in the Gulf of Mexico over the next 48 hours.

#### **Discussion**

Moving over warmer seas and into an area with reduced vertical shear, Eta is forecast to regain category 1 hurricane status over open water in the Gulf of Mexico by Tuesday. The current forecast track then takes Eta northeastwards, reaching northern Florida by Thursday. However, there is a large degree of uncertainty in the behaviour of Eta beyond Wednesday with notable model divergence - MOGREPS indicates a westward track toward Mexico, ECMWF favours a more traditional northeasterly track, and GFS has elements of both. The official track most closely resembles EC at this time.



This forecast may be amended at any time

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## Expected Impacts

Increased likelihood of flash and riverine flooding over larger, more mountainous islands such as Cuba, with an enhanced risk of landslides in such terrain too. Strong winds will likely produce dangerous beach conditions and disrupt travel and utilities in the region.

## Tropical Storm Etau

### Weather

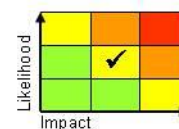
Tropical Storm Etau was named yesterday in the South China Sea. It is expected to continue westward through today, maintaining strength (sustained wind speeds of 45-55 mph) before making landfall over central Vietnam later today (slightly south of where Goni recently made landfall). Around the landfall area rainfall accumulations are likely to be 200-400 mm, with possible peaks of 600 mm through Tuesday and Wednesday.

### Discussion

An Equatorial Rossby Wave (ERW) aided in the formation of this circulation which tracked across the Philippines over the weekend. The SSTs over the South China Sea are slightly cooler than average due to all the recent cyclone activity and Etau is expected to move into an area of unfavourable wind shear through today so the storm is not expected to strengthen significantly.

### Expected Impacts

An enhanced threat of flash/riverine flooding and landslides across central Vietnam, with strong wind impacts also.



## Tropical Storm Vamco

### Weather

Tropical Storm Vamco located in the Philippine Sea has recently been upgraded from a tropical depression. It is forecast to strengthen rapidly through the next 2 days to become a typhoon ahead of making landfall across the Philippines on Wednesday. Given the track is expected to be similar to those of Molave and Goni in recent weeks, the intense rainfall (200-300 mm, close to or over Manila) and damaging winds are likely to bring impacts. Thereafter the circulation will move into the South China Sea and towards Vietnam next weekend with typhoon strength.

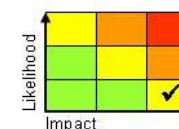
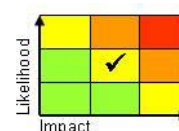
### Discussion

Vamco was upgraded this morning to a tropical storm by the Japanese Meteorological Agency. It is moving across the very warm waters of the Philippine Sea today within an area of favourable shear, meaning it is likely to reach typhoon strength ahead of making landfall in the Philippines on Wednesday. Model consensus and the official track take Vamco westwards across the South China Sea later this week ahead of landfall in Vietnam by the weekend.

### Expected Impacts

An enhanced threat of flash/riverine flooding and landslides as well as infrastructure damage from typhoon strength winds across the Philippines, and potential for similar impacts across Vietnam next weekend.

## Philippines



## Europe

Crete and southeast Greek Islands – See *Africa* section.

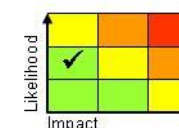
## North America

Florida - See *Tropical Storms* section

## Montana and adjacent states, parts of southwest Canada

### Weather

Heavy snowfall is expected to continue across Montana and parts of Canada today (Monday). Some very heavy snowfall is forecast with accumulations over two days widely in excess of 20cm for higher ground in the highlighted area, with localised totals near to 50cm being forecast by the National Weather Service. Freezing rain and strong winds will be additional hazards in some locations.



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## Discussion

A disrupting upper trough across California moved eastwards over the weekend, with a trough extension approaching from the north reinforcing the cut-off and steering this northeastwards. This led to the development of a large surface low across the USA by Sunday, allowing a plunge of cold air to run southwards around its western flank. National Weather Service guidance suggests that some parts of Montana may see record-breaking November snowfall totals in this event.

## Expected Impacts

Heavy snowfall is likely to lead to disruption to transport and infrastructure. Blizzards are possible as winds increase leading to drifting and potential for some communities to be cut-off.

## Central America and Caribbean

### Eastern Caribbean islands from Cuba and The Bahamas to Trinidad and Tobago

#### Weather

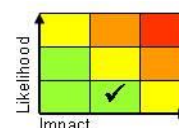
Enhanced tropical rainfall is expected in this region in the coming week. Heavy showers and intense thunderstorms are likely to develop with daily rainfall totals potentially reaching 50-100mm in places, perhaps locally 150-200mm. Monthly rainfall totals for the month of November are typically 150-250mm in this region, and this is expected to be reached or exceeded in the coming days. There is also a small chance of tropical cyclone development in the Caribbean Sea towards the end of the week.

#### Discussion

A combination of a major trough extension across the western USA and Tropical Storm Eta moving into the Gulf of Mexico will amplify the upper pattern and result in convergence across the eastern Caribbean. With very high moisture loading in the in-situ airmass enhanced convection is expected to develop.

#### Expected Impacts

Increased chance of flash and riverine flooding, particularly over more mountainous islands. An enhanced threat of landslides.



**Cuba, Gulf of Mexico, western Caribbean** – See *Tropical Cyclones* section.

## South America

Nil.

## Africa

### Northern Egypt, Libya, Crete and southeast Greek islands

#### Weather

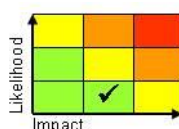
An area of active showers and thunderstorms is expected to become organised around a shallow low, this forming and becoming slow moving over the southeastern part of the Mediterranean for much of this week. The heaviest rainfall is forecast to be over sea areas, Crete and perhaps northern coastal strip of Africa, where 25-50mm may develop with the potential for much of this to occur in a short duration. The typical monthly rainfall along the north African coastline is just 20-40mm.

#### Discussion

Beneath a broad cyclonic upper pattern and over the warmest SSTs in the Mediterranean, persistent convection is signalled to form a shallow warm cored low that may organise convection even further. This low looks likely to remain in the eastern Mediterranean for some time and the flow around it may feed an unusually high abundance of showers and thunderstorms onto parts of the north Africa coastline in particular with the moist warm flow off the Mediterranean.

#### Expected Impacts

Impacts largely confined to populated urban areas where this unusual and short duration rainfall could will cause some significant flash flooding.



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## Mozambique, Zimbabwe and parts of neighbouring countries

### **Weather**

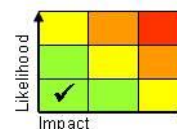
An ongoing heatwave will continue today (Monday) before easing this week. November is the hottest month across much of this region, with maximum temperatures of around 40°C in places. This around 5-10°C above average.

### **Discussion**

A combination of warm advection and subsidence has led to well above average temperatures developing across this wide region in what is usually the hottest month of the year.

### **Expected Impacts**

Heat health impacts likely for vulnerable humans and livestock.



## Middle East

Nil.

## Asia

Philippines, Vietnam and southern China - See *Tropical Cyclones* section

## Northern India, Pakistan, Nepal and Bangladesh

### **Weather**

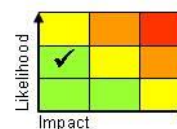
Very poor air quality is being reported and is expected to continue over this week, as light winds and increased particulate emissions, and seasonal crop burning combine to bring hazardous conditions, particularly by night.

### **Discussion**

Particulate emissions are increasing now due to an increase in fires/heating/lighting, and as the post-monsoon dry season progresses, light winds and overnight inversions will trap particulates near to the ground fairly widely in this area. There is still enough mixing during the daytimes to reduce pollution levels temporarily, but with winter coming this will be less and less likely with more prolonged periods of hazardous air quality expected.

### **Expected Impacts**

Effects such as breathing difficulties will be largest among (though not limited to) vulnerable sections of the population with existing health issues.



## Australasia

Nil.

## Additional Information

### Cox's Bazar, southeast Bangladesh

Conditions largely dry and fine, though there is a low risk of a shower or two at first this week.

## Yemen

Predominantly dry conditions are expected with isolated showers affecting the far south and western coasts at times as is normal at this time of year.

## Sudan/South Sudan

The dry season has developed across much of Sudan and the north of South Sudan with showers only likely to continue close to the Red Sea coast. Across the south of South Sudan showers continue much reduced in frequency compared to recent times, with a good deal of dry weather even here.

**Issued at:** 090900 UTC

**Meteorologists:** Ele Hands / David Oliver

**Global Guidance Unit**

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