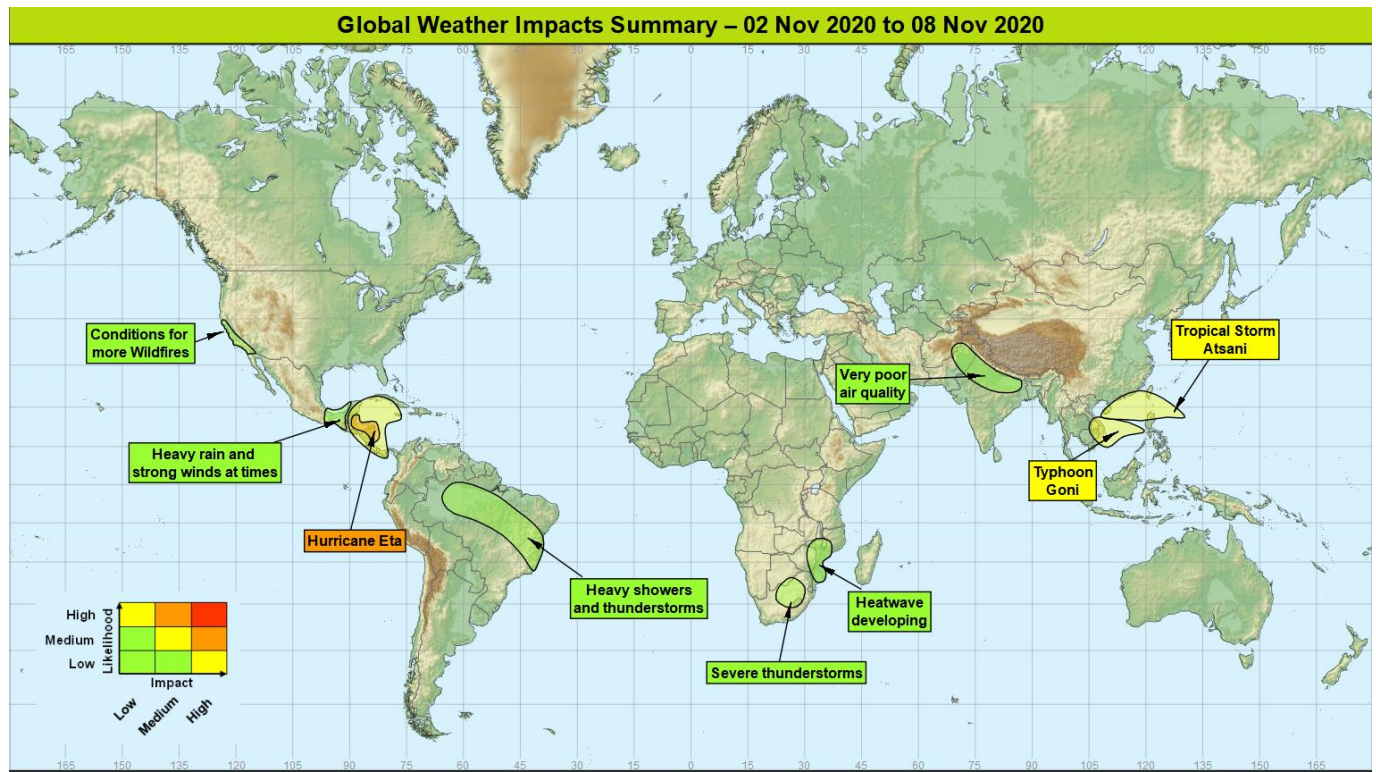


## Global Weather Impacts – Monday 2<sup>nd</sup> November to Sunday 8<sup>th</sup> November 2020

Issued on Monday 2<sup>nd</sup> November 2020

### HEADLINES

- Hurricane Eta expected to make landfall over Central America on Tuesday.
- Typhoon Goni will cross the South China Sea today then head for Vietnam by midweek.
- Tropical Storm Atsani possibly affecting the northern Philippines mid-week.



### Tropical Cyclones

#### Severe Tropical Storm Goni (Philippines, South China Sea and Vietnam)

##### Weather

Goni made landfall in the Philippines over Bato, Catanduanes late on Saturday night, with maximum sustained winds of 140 mph and gusts to 175 mph. This was the strongest tropical cyclone of the year and the strongest to hit the Philippines since Super Typhoon "Haiyan" killed more than 6300 people in 2013.

Goni has weakened now after its track over the Philippines and is expected to remain as a Severe Tropical Storm as it tracks across the South China Sea towards Vietnam, with maximum mean winds of 55 to 60mph. There remains some uncertainty in the track, however it is likely to produce strong winds and heavy rainfall (up to 250mm in a few days) as it makes another landfall in central or southern Vietnam, close to where previous tropical storms have made landfall through the last month or so.

##### Discussion

Goni's passage across the mountainous Philippines significantly weakened the circulation, and although back over warm seas now, re-intensification will be hampered by dry air wrapping into the circulation, and moderate wind shear perpendicular to the direction of movement. The JMA maintains its current intensity throughout the period before making landfall (as an STS) over Vietnam on Wednesday.

##### Expected Impacts

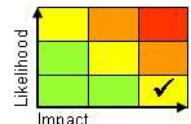
A much enhanced risk of landslides, flash and riverine flooding given very wet recent weather in the region, with central Vietnam possibly seeing further severe flood impacts coming after exceptional rainfall through the past month that has seen large amounts of people displaced from their homes and more vulnerable to further weather impacts. Strong winds may be an additional risk, even though they will likely be below typhoon strength.

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](mailto:GGU@metoffice.gov.uk)

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## **Tropical Storm Atsani (Philippine Sea and Philippines)**

### **Weather**

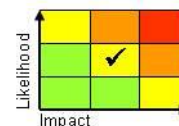
There remains significant uncertainty in the progress of Atsani this week, with the system likely to remain slow moving over the next day or so over open ocean whilst slowly strengthening. After that it is likely that Atsani will track generally westwards, skirting the far north of Luzon on Thursday as a Typhoon (maximum sustained winds >73 mph) before moving into the South China Sea towards Hainan or the China coast.

### **Discussion**

During the evolution of this storm environmental conditions are not always ideal for strengthening, with moderate vertical wind shear at times, and Atsani likely crossing the cooler wake in SSTs left by Goni too. Solutions begin to diverge fairly early on, with most allowing Atsani to develop into a strong typhoon before approaching the northern Philippines, whereas some allow a weaker circulation to move north through a break in the sub-tropical high and recurve harmlessly into mid-latitudes. Confidence is improving in the strengthening scenario.

### **Expected Impacts**

It is possible that this system could bring some impacts from wind, surge and rainfall from midweek across the northern Philippines.



## **Hurricane Eta (Western Caribbean Sea, Jamaica and Central America esp. Honduras and Nicaragua)**

### **Weather**

Eta is expected to continue strengthening today as it continues westwards through the Caribbean Sea. It is expected to make landfall over Nicaragua tomorrow (Tuesday), likely as a major hurricane (Category 3) with maximum sustained winds of around 125 mph.

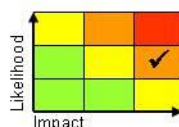
In addition to very strong winds, very large amounts of rainfall are expected, with widespread 24 hour accumulations of 200-300 mm likely with peak rainfall of up to 600 mm possible across Nicaragua, northern Honduras, eastern Guatemala and Belize.

### **Discussion**

The combination of a strengthening MJO moving through the region as well as a number of African Easterly Waves will produce a period of very wet weather across this region with areas of organised deep convection expected. The naming of Eta means that the 2020 North Atlantic tropical cyclone season has equalled the record for the most named storms in a season.

### **Expected Impacts**

Wind damage from hurricane strength winds at landfall is likely with flash and riverine flooding also likely well away from the centre of the storm. Storm surge is expected near and to the north of expected landfall. There is also an increasing threat landslides in the region.



*The following areas are being monitored for potential tropical cyclone development not affecting land:*

**Northwest Pacific Ocean** – There is a moderate chance of a tropical storm development to the west of Mexico during the week, but with any development remaining offshore with no significant impact.

## **Europe**

Nil.

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## North America

### Southern California

#### **Weather**

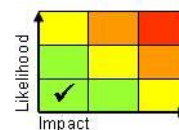
The antecedent dry spell will continue for much of this area in the coming week, with strong winds at times helping wildfires to spread.

#### **Discussion**

A persistent area of high pressure will lie off the west coast of America, continuing the dry spell with conditions looking favourable for wildfires to spread. An upper low/trough will cross on Tuesday, perhaps bringing a few showers and thunderstorms to the Sierra Nevada, but likely to miss the worst affected areas with the largely dry conditions continuing. Strong and gusty winds at times will help fires spread.

#### **Expected Impacts**

Any rainfall this week is unlikely to be widespread enough, or in the right area, to quell any fires; and in the continuing dry weather with strong winds, any fires are likely to be able to spread.



## Central America and Caribbean

### Southern Mexico and Guatemala

#### **Weather**

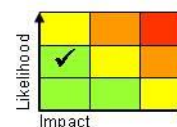
Strong northeasterly winds will affect this area through much of the coming week. This will draw moist air into the region from the Gulf and Mexico leading to enhanced shower and thunderstorm activity, with 250-500mm of rainfall possible through the coming week. In addition funnelling of the winds by the high terrain surrounding the Chivela Pass will result in gales or even severe gales through this region extending out over the Gulf of Tehuantepec at times.

#### **Discussion**

A strong anticyclone across the southern USA, will maintain a brisk northeasterly flow across the region, with this being enhanced by pressure falls in the western Caribbean as Tropical Storm Eta develops. In addition remnants of mid-latitude frontal zones will be drawn southwest across the region, further enhancing the available moisture for convection, which will be funnelled by the terrain with surface wind convergence repeatedly triggering deep convection across this area.

#### **Expected Impacts**

Flash and riverine flooding are likely with an enhanced risk of landslides where steeper terrain. Strong winds and dangerous sea conditions over the Gulf of Tehuantepec.



**Western Caribbean Sea, Jamaica and Central America** – See *Tropical Cyclones* section.

## South America

### Brazil

#### **Weather**

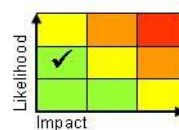
Shower and thunderstorms activity will be much more frequent than usual across this region through the coming week. These showers will be capable of producing as much as 50mm of rainfall within the hour, with some locations seeing 150-250mm of rainfall through the week.

#### **Discussion**

Across the south of the region mid-latitude frontal zone will act as a focus for moisture and surface wind convergence, with this added to an advancing upper trough triggering more frequent than usual showers here. Across the north of the area the advancing MJO may be partly responsible for the enhanced rainfall signal.

#### **Expected Impacts**

Enhanced risk of flash flooding and landslides.



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**Africa****South Africa and Lesotho****Weather**

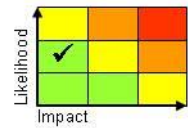
There may be a little respite in the next day or two after recent thunderstorms, but further thunderstorms, locally severe with locally heavy rain, large hail and strong winds are expected to affect the northeastern half of South Africa and Lesotho again later in the week. Dry ground conditions, particularly across central parts of the country, mean an enhanced risk of lightning strikes causing wildfires, at least initially.

**Discussion**

South Africa will lie under a large upper-ridge at first, which will suppress convection, but by the middle of the week, another marked upper low will approach from the west. Subtropical air being drawn south across the eastern half of the country will provide an environment supportive of thunderstorms. Locally heavy rain is possible but the high cloud bases will support strong convective gusts and the risk of dry lightning triggered veld fires.

**Expected Impacts**

Localised flash flooding is possible if the heavy showers cross over densely populated areas such as Johannesburg, as well as property/infrastructure damage from large hail, strong winds and lightning (especially in areas with substandard infrastructure already). Increased likelihood of rapidly developing wildfires presenting a risk to property and livestock.

**Mozambique, Zimbabwe and parts of neighbouring countries****Weather**

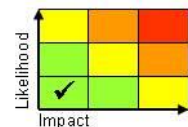
A heatwave is expected to gradually develop across this region over the coming week. November is the hottest month across much of this region, with maximum temperatures in places such as Harare likely to reach the mid-high 30s°C, and temperatures in parts of Mozambique exceed 40°C. These values are still around 5-10°C above average.

**Discussion**

A combination warm advection, and then from the middle of next week subsidence and adiabatic compression will lead to well above average temperatures developing across this wide region in what is usually the hottest month of the year, prior to the arrival of the seasonal rains over the following weeks

**Expected Impacts**

Heat health impacts likely for vulnerable humans and livestock.

**Middle East**

Nil.

**Asia****Northern Philippines and central Vietnam**

See *Tropical Cyclones* section (*Goni*).

**Northern India, Pakistan and Afghanistan****Weather**

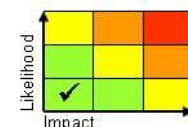
Very poor air quality is being reported and is expected to continue over the next few days, as light winds and increased particulate emissions combine to bring hazardous conditions, particularly by night.

**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.



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VPN: n6225 4319 Email: [GGU@metoffice.gov.uk](mailto:GGU@metoffice.gov.uk)



**Australasia**

Nil.

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

Further heavy showers and thunderstorms are expected at first this week, but there will be a downward trend through the week, with conditions becoming largely dry after midweek.

**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 with showers concentrated to the extreme south and the Red Sea coast. Fairly normal showers and thunderstorms are expected across South Sudan through the next week, the most heavy and frequent expected during the next couple of days – but still a good deal of dry weather between times.

**Issued at:** 020900 UTC

**Meteorologists:** Chris Almond / Ele Hands

**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

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