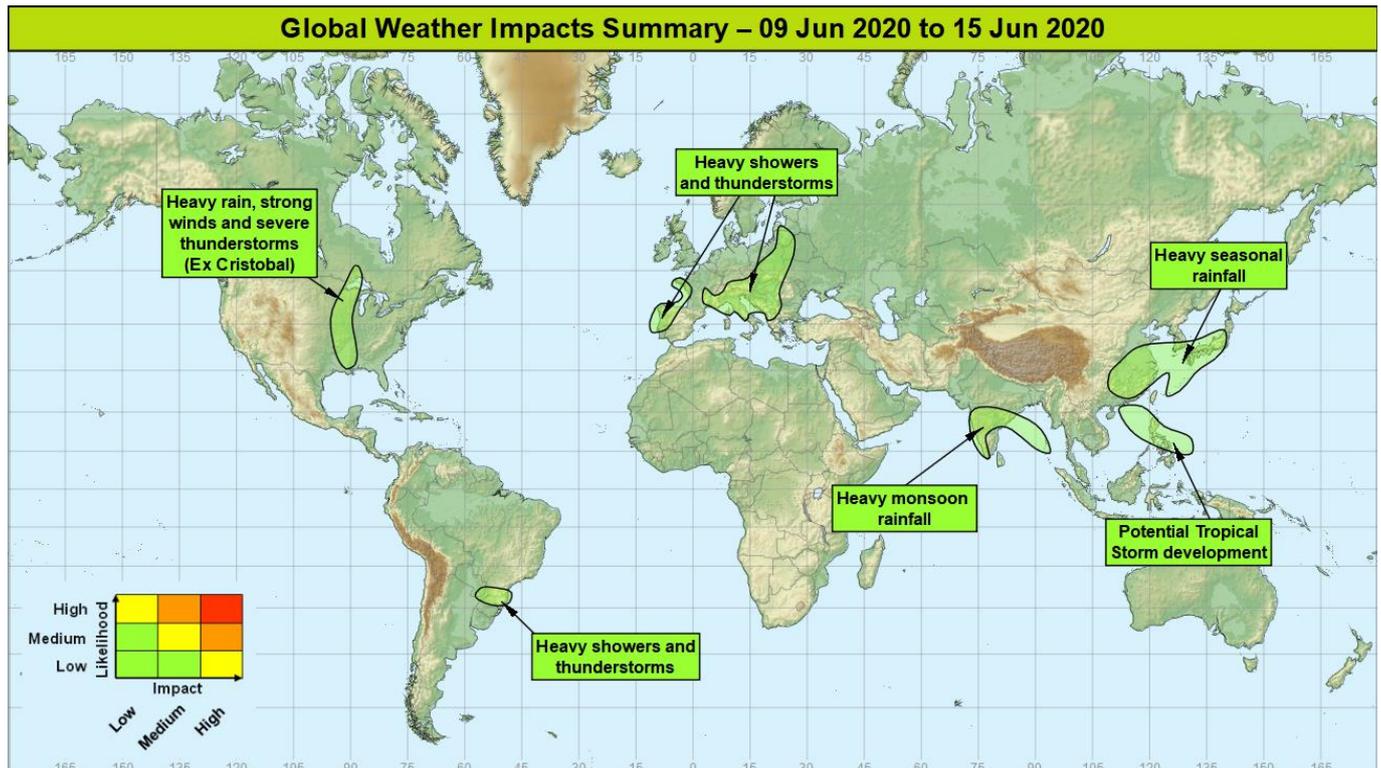


**Global Weather Impacts – Tuesday 9<sup>th</sup> to Monday 15<sup>th</sup> June 2020**Issued on Tuesday 9<sup>th</sup> June 2020**HEADLINES**

- The remains of Tropical Storm Cristobal will continue to bring heavy rain, thunderstorms and strong winds to parts of the USA.
- Severe thunderstorms expected over parts of central and eastern Europe.
- Possible Tropical Storm development near the Philippines by the end of the week.



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

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## DISCUSSION

### TROPICAL CYCLONES

*Tropical depression Cristobal has undergone extra-tropical transition, (See N. America for details) and so there are no further active Tropical Storms affecting land, but the following area is being watched for potential development:*

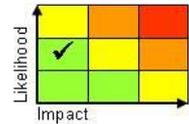
#### Northern Philippines towards Hong Kong

##### **Weather**

There is a low risk of a tropical storm developing southeast of the Philippines at the end of this week.

If it does form, it is likely to travel northwestwards towards Hong Kong.

Even if no storm forms, there are good signals for very heavy rain nonetheless.



##### **Discussion**

The warm and moist air in this area, related to the maritime part of SE Asia monsoon, will enter an area of weak upper-level flow, and will also sit over SSTs of >30C – both ingredients for further development at the end of the week. GM produces a discrete centre by Friday over the central Philippines, with gales indicated, but EC is less keen – hence low confidence at the moment. Heavy rainfall and thunderstorms are likely in any case, irrespective of whether or not a named storm develops.

##### **Expected Impacts**

Flooding associated with torrential rain, and possibility of wind damage.

### EUROPE

#### Parts of Central and Eastern Europe

##### **Weather**

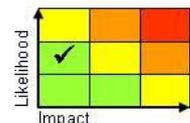
Spells of unsettled weather are likely for quite a large part of Europe through the rest of the week. The heaviest and most frequent rain/showers are expected over parts of northern Italy and Austria at first before spreading east through the week, all the way to the Balkans and Latvia. Up to 150 mm (equivalent to a month's worth of rain) possible in places. However, each day some localised torrential downpours are likely with the potential to bring 50-100 mm within a few hours. As well as heavy rainfall, frequent lightning, hail, and locally strong wind gusts are likely, with thunderstorms persisting well into the night-time period.

##### **Discussion**

Two or more upper trough extensions are likely to dive SE across continental Europe with a cut-off upper low likely at first today (Tuesday). Associated cold air aloft, overlying warm air near the surface, will lead to large lapse rates and the risk of several periods of severe thunderstorms. Conditions should slowly improve later in the week as the flow becomes generally more ridged from the west.

##### **Expected Impacts**

Flash flooding looks possible in places, along with an increased threat of landslides in mountainous terrain. Hail and wind damage looks like a lower likelihood than flash flooding.

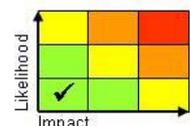


#### Iberia and western France

##### **Weather**

Spell of heavy rain and thunderstorms will develop across western Spain, Portugal and parts of western France later this week and over the weekend. The most intense and widespread thunderstorms seem likely to be across Portugal during Sunday. Around 100-150 mm of rain could fall widely, with up to 250 mm across the wettest parts of Portugal. Rain will tend to fall in short, intense bursts, with 50-75 mm possible in a day in a few places.

##### **Discussion**



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Major trough extension across western Europe midweek, will eventually culminate in the formation of a complex and slow-moving upper vortex over Biscay. This will destabilise the airmass over W/NW Iberia, allowing the widespread development of thunderstorms. More intense and prolonged spell of rain are possible at times as frontal systems arrive from the west and high WBPT plumes are drawn north from North Africa.

### **Expected Impacts**

Flash flooding probable, particularly across northern Spain and northern Portugal.

## **NORTH AMERICA**

### **Central parts of the USA**

#### **Weather**

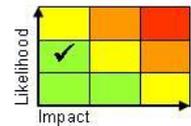
The warm moist air from Cristobal will continue to move north across the central part of the USA through Tuesday and Wednesday, bringing very heavy rain and strong winds (gusts to 50mph), with the risk of some severe thunderstorms. Up to 100mm of rain could fall in 24 hours, with would be the equivalent of the average June rainfall falling in just one day.

#### **Discussion**

Tropical Storm Cristobal has undergone extra-tropical transition as it interacted with a trough in the mid-latitude jet. However, this system will maintain enough integrity to continue producing strong winds and very heavy rainfall through to midweek due to increased forcing from the upper trough that will steer the system northwards. We are likely to see severe thunderstorms develop with heavy rain, hail and perhaps tornadoes given the high levels of CAPE on some forecast ascents. This will however be a complex development, with low confidence for now in exact position/timing of any development.

#### **Expected Impacts**

Heavy rain bringing risk of flash and river flooding, as well as landslides in hillier areas. Strong winds, severe thunderstorms, large hail and tornadoes will likely be additional hazards.



## **CENTRAL AMERICA AND THE CARIBBEAN**

Nil.

## **SOUTH AMERICA**

### **Southern Brazil, far northeast Argentina and eastern Paraguay**

#### **Weather**

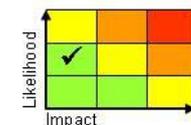
Given the recent wet conditions, this area is susceptible to further furthers bouts of heavy rain. However, despite a brief respite earlier this week, from today, further heavy rain is likely to develop, then last through the following few days. 50-100mm of rainfall is likely quite widely, perhaps 150mm falling in some places in a few days (most likely southern Brazil).

#### **Discussion**

In the wake of the current system which has recently cleared E an active pulse in the SACZ is signalled from Tuesday as high WBPT air is drawn S to be engaged by short wave upper troughs in the strong subtropical jet. This will lead to a slow-moving baroclinic zone become established over this region, acting as a focus for heavy rain and thunderstorm development.

#### **Expected Impacts**

Flash flooding is possible with a threat of landslides in more mountainous areas.



## **AFRICA**

Nil.

## **MIDDLE EAST**

Nil.

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## ASIA

### Southern and central India, Andaman Islands and western Myanmar

#### **Weather**

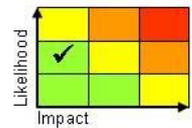
Another active pulse in the monsoon is signalled during the coming week with heavy rain and thunderstorms spreading more widely across this region as the monsoon progresses northwards. Each day, there will be the potential for 100-150 mm of rain to fall in places.

#### **Discussion**

The monsoon is expected to progress northwards through the coming week, mainly due to the development of the first monsoon low pressure system, which will track west from the Bay of Bengal across central parts of India later in the week.

#### **Expected Impacts**

Increased likelihood of flash flood and landslides.



### Southern and central China, Ryukyu Islands, South Korea and southern Japan

#### **Weather**

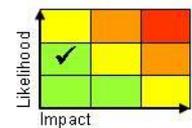
Heavy monsoon rainfall is expected over the coming week. Some places are likely to see 100-150mm per day in association with heavy and persistent rain across quite a wide area of this region. 300-500mm of rainfall is most likely in total across the wettest areas, which is above the average June rainfall in this region. There is also the potential for intense short period rainfall from thunderstorms.

#### **Discussion**

Increasing monsoon southerly flow into this area will enhance moisture and wind convergence associated with the seasonal Mei-yu / Baiu front, leading to episodes of heavy rain and thunderstorms. Whilst the upper flow is not especially conducive to large scale development, a number of short-waves embedded within the flow will continue to trigger rainfall across a similar area along the quasi-stationary front, leading to large rainfall accumulations building up.

#### **Expected Impacts**

Increased threat of flash and fluvial flooding as well as landslides.



### Northern Philippines towards Hong Kong

See *Tropical Cyclone* section.

## AUSTRALASIA

Nil.

### Additional Information

#### **Cox's Bazar, southeast Bangladesh**

There will be a threat of a heavy shower or thunderstorm most days, especially through the afternoon and into the evening, but with only a low likelihood of any flash flooding impacts. This activity is likely to be slightly below what is usually expected for early June. However, increased rainfall is likely from next week (15<sup>th</sup>) with an increased threat of flooding and landslide impacts.

#### **Western Yemen**

Drier conditions have become established again. For the rest of this week, any showers should be confined to the Western Highlands or the Gulf of Aden coastline. An isolated heavy shower or thunderstorm is possible most afternoons/evenings, but significant rainfall is not expected.

#### **Scandinavia and northwest Russia**

Unusually high temperatures in this area are creating large (record-breaking in places) amounts of snow-melt which is bringing flooding to many parts of Scandinavia and NW Russia at the moment. Temperatures are expected to fall through the rest of the week.

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**Issued at:** 09/0720UTC**Meteorologist:**

Chris Almond / Brent Walker

**Global Guidance Unit**

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