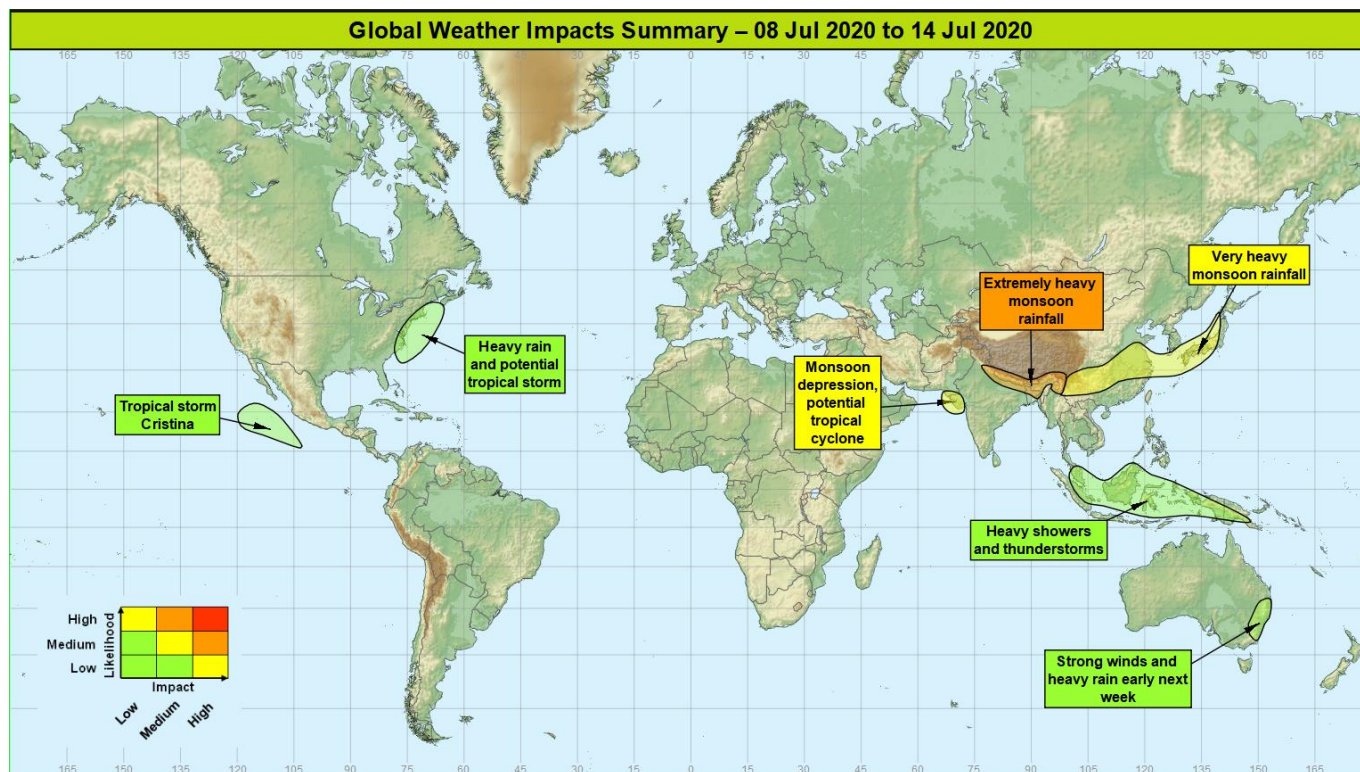


Global Weather Impacts – Wednesday 8th July – Tuesday 14th July 2020

Issued on Wednesday 8th July 2020

HEADLINE

- Extremely heavy monsoon rainfall continues for parts of South and East Asia.
- Tropical depression brings heavy rain to the India / Pakistan border in the northern Indian Ocean.



DISCUSSION

Tropical Cyclones

Tropical Storm Cristina - Northeast Pacific **Weather**

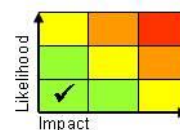
Tropical storm Cristina has formed over the open eastern Pacific, and conditions are favourable for some strengthening of this system. The NHC is predicting it will reach Hurricane status over the next 24 hours, however it is expected to track north-westwards, staying well offshore of Mexico.

Discussion

Several African Easterly Waves (AEWs) and the remnants thereof, are organising convection in this area, with environmental conditions favourable for the development of Cristina over the next few days. SSTs are approaching 30°C and with light winds aloft, Cristina is expected to reach hurricane strength in the next 24 hours. Cristina will however, be steered north-westwards by the prominent sub-tropical ridge to the north and remain over the open ocean.

Expected Impacts

Nil.



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

© Crown copyright 2020. This information is for use by UK government only. It does not replace the advice and guidance provided by the official meteorological service for this region. Where there is a requirement to share this information with non-UK government agencies, please contact the Met Office to discuss.

The following areas are being monitored for possible formation:

Northern Indian Ocean, India / Pakistan border region

Weather

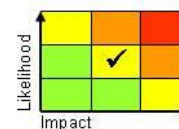
A monsoon depression, currently located across Gujarat coast in northwest India, will remain slow-moving and bring heavy rainfall to this region and Sindh Province in southern Pakistan. Around 300-500mm of rain could fall in this areas in the next few days (150-300mm the July average in this region). This depression may move a little further west, just offshore, and there is a small risk it could develop into a tropical cyclone during this time and bring further heavy rainfall and stronger winds to the region.

Discussion

Over recent days deep convection around this depression has brought heavy rainfall to the region, with this near stationary pattern likely to continue for the next few days. The depression is expected to move offshore along the monsoon front, with a small window for development over very warm seas (around 29°C) before vertical wind shear increases and renders the environment unfavourable by the end of the week.

Expected Impacts

Risk of flash flooding both from standing water and small water courses, especially if heavy precipitation effects an urban area. If a modest tropical does develop midweek, a small risk of some disruption from strong winds and rough seas.



Eastern USA, Western Atlantic

Weather

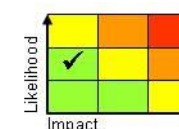
A tropical low over Georgia/South Carolina is bringing heavy rain and thunderstorms here today with another 30-50mm possible in places. Over the next day or so, it will move out across the Atlantic where the system could become better organised and develop into a tropical cyclone. Should a tropical storm form, this would then move northeast, tracking close to the Carolinas' coastline, bringing threat of heavy rain and strong winds here.

Discussion

Once the system moves out into the Atlantic Ocean, (most probably during Thursday), high SSTs (over 29°C which is 1-2°C above normal) and a relatively low shear environment lend an opportunity for some development to take place. Should a cyclone form, then this would most likely track northwards close to the Carolinas.

Expected Impacts

The potential for flash flooding over coming days. Later in the week depending on the degree of development some rough sea may affect the east coast of USA.



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

© Crown copyright 2020. This information is for use by UK government only. It does not replace the advice and guidance provided by the official meteorological service for this region. Where there is a requirement to share this information with non-UK government agencies, please contact the Met Office to discuss.

Europe

Nil.

North America

Eastern USA – See *Tropical cyclones section*

Central America and Caribbean

Nil

South America

Nil

Africa

Nil

Middle East

Nil.

Asia

Northeast India, Nepal, northern Bangladesh, Bhutan, and northern Myanmar

Weather

Following recent extreme rainfall across the hills and mountains in this region, there will still be some heavy thunderstorms in the next day or two, but they should be more scattered in nature compared to recent days. However, a further bout of extremely heavy monsoon rainfall is expected later this week and into the weekend. Across low lying areas, further totals of 100-200mm are widely expected, with the hills and mountains again likely to see 600-1200mm (this compares to the typical average at this time of year of 400-500mm across low lying regions, and 1000mm per month over the mountain sites). Recent rainfall has brought significant flooding across the region, although levels in the larger low lying rivers are now slowly receding, this additional rain will see levels rise once again in the coming week or two.

Discussion

A very active phase of the South Asian Monsoon will see an environment where high a PWAT airmass (>80mm), aided by SSTs approaching 30°C, which is 1-2°C above average, will maintain heavy rain. Another pulse of moisture associated with the tropical depression near the India/Pakistan border, will help generate further widespread torrential downpours, as it spreads northeast, with the mountains seeing the highest totals. CAPE will mainly be skinny, leading to efficient ppn generation, but occasional mid-level dry intrusions may well allow lightning and large hail to be additional hazards. Although this occurring relatively early in the monsoon season, flooding and widespread population displacement has already been widely reported. Although recent observations show levels in the larger rivers and flood plains to be slowly receding, modelling taking into account this additional rainfall suggests that within a week levels will have returned to levels seen during the recent floods, and will likely rise even higher. Signals are that rainfall amounts could subside a through next week.

Expected Impacts

Widespread surface and continued significant riverine flooding affecting the region, and likelihood of landslides in the higher terrain.



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

© Crown copyright 2020. This information is for use by UK government only. It does not replace the advice and guidance provided by the official meteorological service for this region. Where there is a requirement to share this information with non-UK government agencies, please contact the Met Office to discuss.

Central and eastern China, southern part of South Korea and Japan

Weather

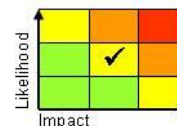
Following exceptional rainfall across these regions over recent days and weeks, the monsoon front that extends from central China to Japan is expected to remain very active through the coming days. Widely between 100-200mm of rain is expected, with peak accumulations over the hills and mountains are likely to be in the region of 500-700mm across both China and Japan.

Discussion

The southerly winds associated with the monsoon are drawing very warm and moist flow across this region with extremely high values of PWAT (>75mm). This will generate further torrential downpours from rain, showers and thunderstorms, with the mountains seeing the highest totals. Despite this occurring relatively early in the monsoon season, flooding and widespread population displacement has already been widely reported. Although recent observations show levels in the larger rivers and flood plains to be slowly receding, modelling taking into account this additional rainfall suggests that within a week levels will have returned to levels seen during the recent floods, and will likely rise even higher.

Expected Impacts

Widespread surface and continued significant riverine flooding affecting the region, and likelihood of landslides in the higher terrain.



India / Pakistan border region – See Tropical Cyclones section

Malaysia, Indonesia and Papua New Guinea

Weather

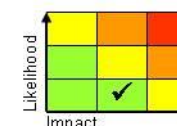
Above average rainfall will continue across this region in the form of heavy showers and thunderstorms. These will be capable of locally bringing 50-100 mm of precipitation in a short duration, with some locations likely to see 150-250 mm through the coming days. Average precipitation accumulations at this time of year across this region is around 250 mm per month.

Discussion

Strong and consistent signal from NWP for enhanced rainfall across this region no doubt aided by positive SST anomalies of 1 to 2°C. Profiles in the area show large amounts of PWAT, and large skinny CAPE so heavy rainfall likely to be the most disruptive element.

Expected Impacts

An increased risk of flash flooding and landslides in regions where terrain is steep.



Australasia

Eastern Australia, including Sydney and Brisbane

Weather

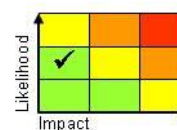
Some very unsettled weather is likely across this part of Australia early next week, as a winter storm develops just offshore. Strong winds, with gusts of 40-50mph, along with heavy rain is likely from the low from late Monday. Some 100-150mm of rain is also likely, this well above the average amounts of rainfall for July in this area (normally 80-100mm across the area).

Discussion

A deep area of low pressure is signalled to develop off the east coast of New South Wales. The development is likely to draw warm, tropical air south into the system, leading to some heavy rainfall, as well as strong winds. The system is likely to affect these areas until mid-week, at which point it should start to clear.

Expected Impacts

Heavy rain, flash-flooding over hillier interior areas. Rough seas.



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

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

It is monsoon season and around average shower and thunderstorm activity is expected in this area through the next few days, then increasing to above average activity later this week. Around 200mm of precipitation is expected in total through this week, which is close to average in what is a very wet time of year for this region.

Yemen

Throughout much of this week, showers or thunderstorms will be isolated and fairly short lived (5-10mm of rainfall per day in places at most). Midweek will see a decrease in activity, and therefore, no significant impacts are expected for a time. However, by the end of the week or in to the weekend, showers and thunderstorms are expected to develop a little more widely. Larger rainfall totals (locally up to 20-25mm in a day) are possible in the south of Yemen during this period, which would produce a slightly increased risk of threat of flash flooding.

Issued at: 080720UTC **Meteorologist** Chris Almond / Jason Kelly **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

VPN: n6225 4319 Email: GGU@metoffice.gov.uk

© Crown copyright 2020. This information is for use by UK government only. It does not replace the advice and guidance provided by the official meteorological service for this region. Where there is a requirement to share this information with non-UK government agencies, please contact the Met Office to discuss.