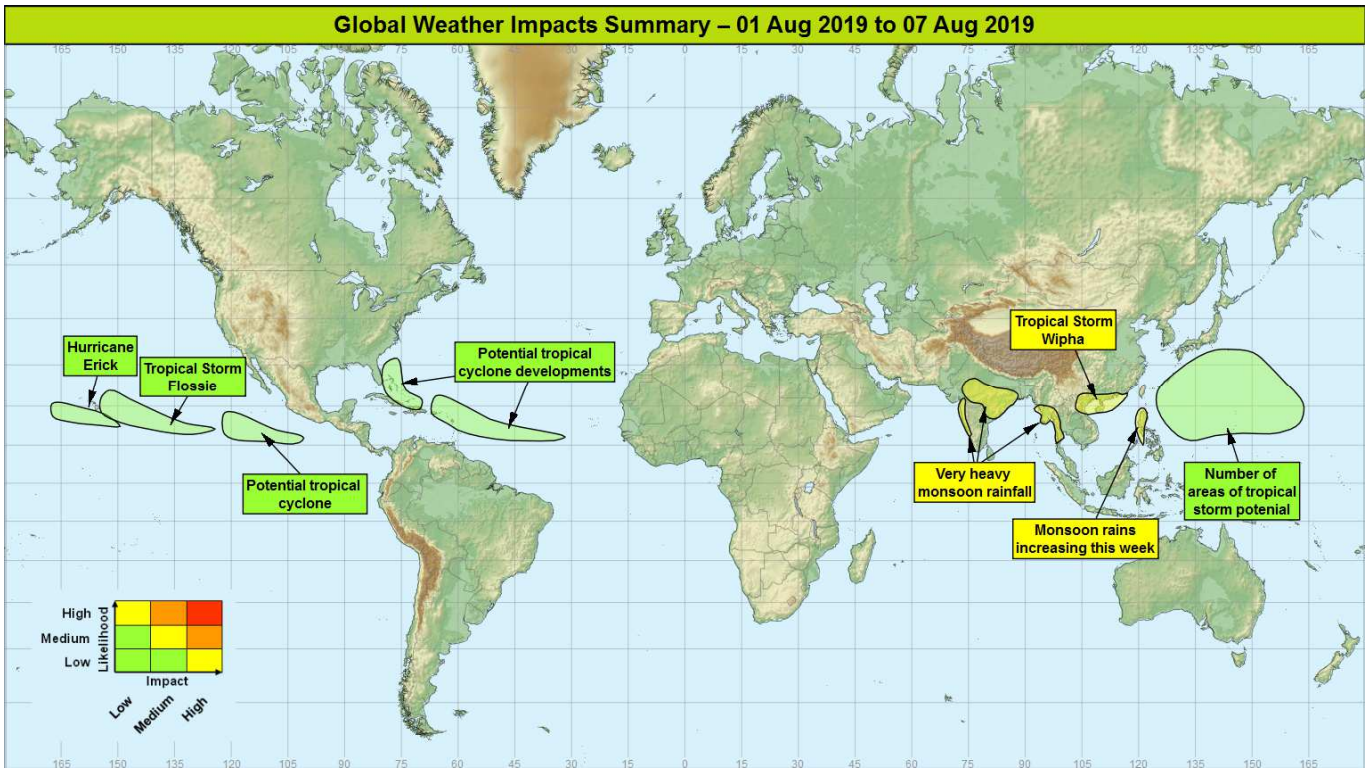
Daily Global Weather Impacts Assessment

Global Weather Impacts – Thursday 1st to Wednesday 7th August 2019

Issued on Thursday 1st August 2019

HEADLINES

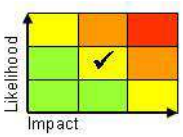
- Further intense monsoon rainfall for parts of southern and south-eastern Asia through the next week.
- Tropical Storm Wipha impacting Hainan, south China and making landfall in north Vietnam until the weekend.



DISCUSSION

Tropical Cyclones

Tropical Storm Wipha (South China Sea, far south of China and northern Vietnam)



Weather

Tropical Storm Wipha was located close to the island of Hainan at 0300 UTC with sustained winds of around 45 mph. Wipha is forecast to slowly track across the Leizhou Peninsula close to Hainan during the next few days, before likely making landfall over north-eastern Vietnam and heading into northern Laos this weekend. With Wipha likely to be a slow moving cyclone, the primary impact will come from heavy rainfall. Along its path widely 150-250mm, locally 300-500mm of rainfall is possible by the end of the weekend. Damaging winds are also a possibility, but the official forecast currently calls for Wipha to be a relatively weak tropical storm at landfall.

Discussion

Wipha developed on Tuesday night from storms coalescing around a centre associated with an Equatorial Rossby Wave. There is pretty good agreement in its overall track, but the speed of motion is still less clear – how long Wipha spends in a favourable SST and wind shear environment is closely correlated to its overall intensity which is therefore very uncertain at this stage. The likely slow movement of this system will pose a significant threat of flooding rains.

Expected Impacts

This forecast may be amended at any time
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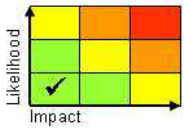
Impacts are currently expected to mainly be from rainfall, with flash flooding the primary hazard and landslides possible in steeper terrain. A possibly prolonged event will increase the likelihood of river flooding, with wind damage considered a lower probability. Hong Kong looks likely to see some impacts from rain over the next couple of days.

Hurricane Erick (eastern North Pacific, just south of Hawaii)



Weather

Hurricane Erick is currently 480 miles southeast of Hilo, Hawaii, carrying sustained winds of 105 mph. Erick has weakened overnight, and will continue to weaken, likely to a Tropical Storm as it passes to the south of Hawaii on Friday. So any damaging winds will remain offshore, but it will bring the threat of heavy rain (50-100 mm in 24 hours) to Big Island.

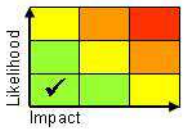
Discussion

Erick has moved into an unfavourable wind shear environment leading to weakening of the storm. Confidence in a continued weakening system tracking to the south of Hawaii is high, but Big Island is still likely to experience a period of tropical storm force winds and potentially heavy rain for a short time as it passes by.

Expected Impacts

Large swells and a minor threat of localised flash flooding on Big Island.

Tropical Storm Flossie (Eastern North Pacific and perhaps Hawaii)



Weather

Flossie is currently located just under 1800 miles east-southeast of Hawaii, carrying sustained winds of 65 mph. Flossie is expected to head in the general direction of Hawaii over the next 5 days with most models taking the system just north of the islands early next week. Flossie may bring some heavy rainfall, large swells and strong winds to parts of Hawaii next week.

Discussion

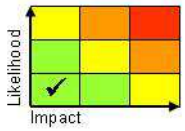
The intensity forecast from the National Hurricane Center has weakened through Wednesday due to Flossie encountering increased levels of wind shear. This reduces confidence in the intensity forecast for the remainder of the track, although all models do show a weakening system by the time Flossie reaches Hawaii.

Expected Impacts

Large swells, strong winds and a minor threat of localised flash flooding to the Hawaiian chain.

The following areas are also being monitored for development:

Northern Caribbean to Florida and the Bahamas



Weather

There is a very low likelihood of a currently disorganised area of showers/thunderstorms just north of Haiti organising sufficiently to be classed as a tropical storm by the time it reaches the Bahamas and perhaps eastern Florida over the coming weekend. Even if a tropical storm does not develop, intense showers and thunderstorms will bring the threat of up to 75 mm of rain in a few hours to this region through the next few days.

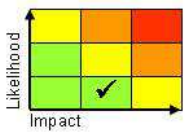
Discussion

An area of showers associated with a tropical wave has been given a 10% chance of tropical cyclone formation over the next 3-5 days, before heading out over the cooler waters of the sub-tropical North Atlantic.

Expected Impacts

Localised, short lived disruption by flash flooding or power outages is the most likely impact.

Tropical North Atlantic and northeastern Caribbean



Weather

An area of showers and thunderstorms currently 900 miles south-west of Cabo Verde may develop into a tropical storm as it approaches the Lesser Antilles early next week. Even if a tropical storm does not develop, intense showers and thunderstorms will bring the threat of up to 125 mm of rain in a few hours to parts of the northeastern Caribbean early next week.

Discussion

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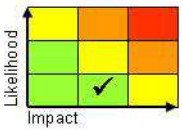
An area of thunderstorms associated with an African Easterly Wave is expected to remain non-developmental over the next few days with wind shear remaining strong – however by early next week its track into a more favourable environment sees a reasonable chance of tropical cyclogenesis occurring as the system approaches the Lesser Antilles early next week. The National Hurricane Center has given this system a 70% chance of tropical storm development.

Expected Impacts

Most likely at this stage would be threat of flash flooding for the northern islands of the Lesser Antilles early next week.

Northwest Pacific (affecting the Northern Mariana Islands and perhaps Japan)



Weather

Across a broad region of the northwest Pacific there are several clusters of thunderstorms that have the potential to develop into tropical cyclones later this week, and track generally north or northwest. During this time period the only risk of impacts for land is in the South Mariana Islands (including Guam) from the weekend onwards.

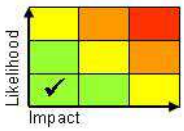
Discussion

A series of tropical waves, that may be sourced from AEW, ERW or breakdown of the ITCZ into eddies from shear instability are currently organising various areas of deep convection in the northwest Pacific. There remains inconsistent signal from models for the development of multiple tropical cyclones in this region over the coming week.

Expected Impacts

During this period the only risk to land would be for small remote islands such as the Northern Mariana Islands (including Guam), with a lower likelihood of impacting Japan. These could potentially see impacts from heavy rainfall, strong winds and rough seas.

Eastern Pacific



A large, but disorganised area of showers and thunderstorms lies a few hundred miles southwest of the Mexican coast. This area is expected to track westwards, remaining over the Pacific over the next 7 days, with a moderate probability of development into a tropical storm.

A tropical wave has enhanced convection across the eastern Pacific, and there is a moderate probability (assessed by the NHC as 50%) for development into a tropical storm in the next 5 days. There is good agreement this will track away from Mexico and remain over open water.

Nil.

Europe

Nil.

North America

Florida and Hawaii – see *Tropical Cyclones* section.

Central America and Caribbean

Bahamas and the northeastern Caribbean islands - see *Tropical Cyclones* section.

South America

Nil.

Africa

Nil.

Middle East

Nil.

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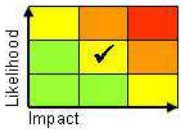
Asia

Far south of China and northern Vietnam, Northern Mariana Islands and perhaps Japan – see *Tropical Cyclones* section.

Parts of central, western and northern India, along with western Myanmar



Weather

Periods of widespread, intense showers and thunderstorms will affect this region through the next week, producing locally 200 to 300 mm of rain in a 24-hour period, with a threat of up to 400 to 600 mm through the coming week in places. The higher values are equivalent to several times the average July rainfall falling in just a few days in places. There are some very large cities in this region that could see intense rainfall events during the next week.

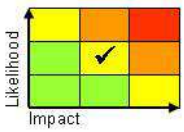
Discussion

The main driver behind the severe monsoon conditions through the next week will continue to be monsoon low pressure systems that will produce intense rainfall from deep, moist convection. These systems will also induce a strong southwesterly flow which will bring deep, moist convection into southwestern India and western parts of Myanmar. Forecast profiles show deep skinny CAPE, with high precipitable water allowing these fairly frequent cells to produce large precipitation accumulations.

Expected Impacts

High likelihood of flash flooding, and an increasing threat of river flooding. An increasing likelihood of landslides in hillier regions. Significant disruption to travel is likely, especially road and rail. Densely populated regions of India (including some large cities) are likely to be impacted this coming week. South-eastern Bangladesh where Cox's Bazar is located may just be north of the heaviest rainfall, but is likely to see isolated heavy rainfall events through the next 7 days.

Central and northern Philippines



Weather

A steady stream of heavy showers/thunderstorms is expected to develop across this region over the next few days, becoming more intense from the weekend. Daily totals of up to 300 mm are possibly from the weekend, with event totals through the next 7 days of 500-800, perhaps 1000 mm possible. This would be the average August rainfall falling in just a week.

Discussion

A strengthening SW'ly monsoon flow over the next few days, in part due to tropical cyclone activity to the north-west, will bring enhanced showers/thunderstorms to this region. Impacts could be felt in Manila should the wind direction line up correctly.

Expected Impacts

Flash flooding and landslides are probable. Manila will probably miss the worst of the impacts but there is a moderate probability of flooding here too.

Australasia

Nil.

Additional information

Nil.

Issued at: 010730 UTC **Meteorologist:** Paul Hutcheon / Mark Sidaway **Global Guidance Unit**

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