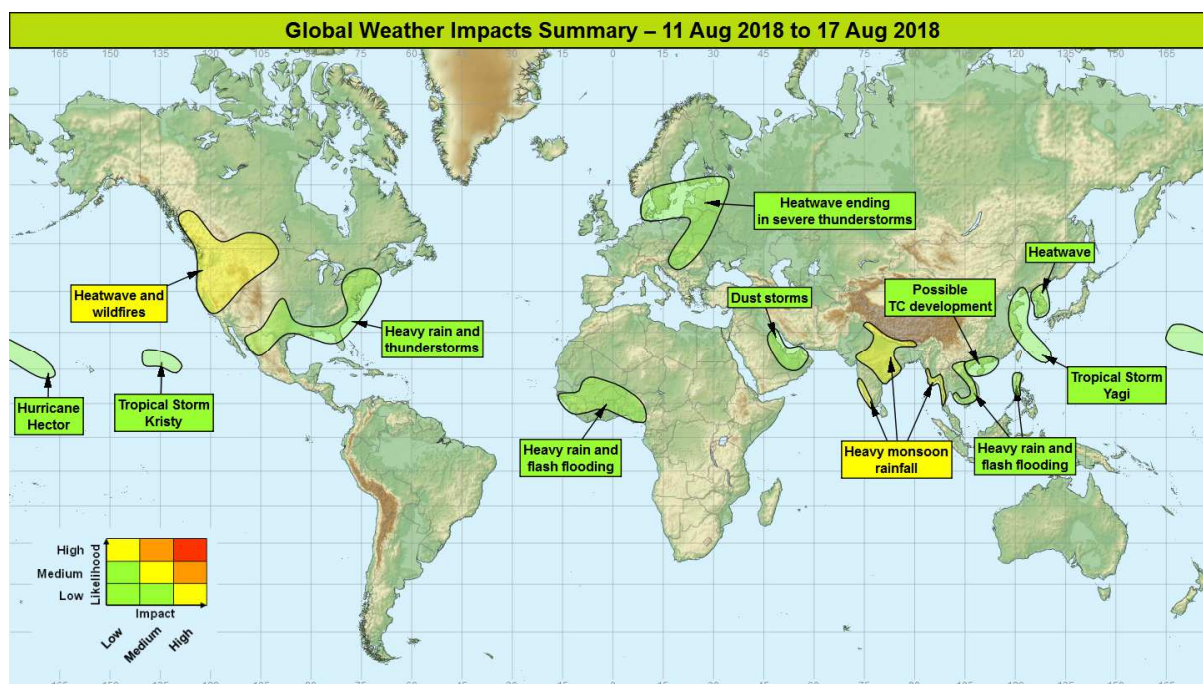


Global Weather Impacts – Saturday 11th to Friday 17th August 2018

Issued on Saturday 11th August 2018

HEADLINES

- Heavy monsoon rainfall continues across parts of southern Asia, especially SW India, Nepal and Myanmar.
- Heatwave, wildfires and poor air quality ongoing across parts of western North America.
- Calgary (Alberta, Canada) recorded its highest ever temperature on Friday.
- Tropical Storm Yagi likely to affect eastern China and the Korean Peninsula over the next few days.



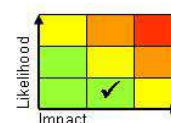
DISCUSSION

Tropical Cyclones

Tropical Storm Yagi (Western North Pacific)

Tropical Storm Yagi is currently being steered NW around the sub-tropical upper ridge. As Yagi crosses the warm waters of East China Sea and Yellow Sea over the weekend there is the potential for slight intensification. NWP models are in reasonably agreement up until then, but spread increases over its subsequent track. GM has a more southerly track than EC, GFS or official guidance from JMA and is currently considered an outlier. Yagi was located near Okinawa on Saturday morning and moving northwest at around 15mph. Yagi is expected to continue on a similar path this weekend, making landfall along the east China coast near Shanghai on Sunday night before dissipating over northeast China and Korean Peninsula early next week. Yagi is unlikely to become a typhoon, but is still expected to bring heavy rain and sustained wind speeds of up to 55mph to some coastal areas near landfall.

The main impact is expected to be from heavy rainfall leading to flash flooding and an increased risk of landslides across the Ryukyu Islands today (Saturday) and parts of eastern China from Sunday until midweek. Many places will see 50-75mm of rain, with locally 150-200mm over parts of northeast China. Some disruption to flights in the region, including Shanghai, is expected due to the combined effects of strong winds and thunderstorms.

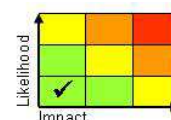


Hurricane Hector (Eastern North Pacific)

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Whilst Hector remains an impressive hurricane, its presentation through Friday has degraded compared to that earlier on Friday. Gradual weakening is expected to continue over the next several days as shear and cooling SSTs will contribute to its decline.

Hector was located around 725 miles west of Honolulu this (Saturday) morning, moving west at around 15mph. Hector is expected to remain over open water with little threat to land before gradually weakening over the next 5 days.

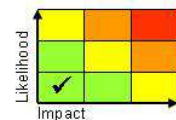
Large swells generated by Hector will peak at Johnston Island (a small atoll west of Hawaii) this (Saturday) before declining.

Tropical Storm Kristy (Eastern North Pacific)

Kristy has started to move over cooler seas and is now showing signs of weakening as convection around its centre becomes less organised. Increasing shear has also contributed to its decline and is expected to become a remnant low on Sunday.

Kristy was located around 1300 miles west of the Baja California peninsula this (Saturday) morning and is expected to remain over open water as it weakens into an area of low pressure this weekend.

None, due to Kristy being over open water.

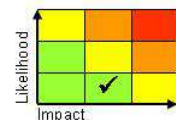


South China Sea

There continues to be a signal for an area of enhanced convection, associated with an equatorial Rossby wave, over the South China Sea to develop into a tropical depression and potentially a tropical storm over the South China Sea or Gulf of Tonkin over the next few days. However, there is large uncertainty where this slow moving system may go and over when tropical storm genesis may occur.

There is an increasing likelihood of a tropical storm to develop in the South China Sea or Gulf of Tonkin this weekend with a threat of very heavy rainfall as this becomes slow-moving across parts of southern China, Hainan and northern Vietnam. Some places could record 500-600mm of rain over the next 5 days.

There is an increased likelihood of very heavy rainfall leading to flash flooding and an increased risk of landslides. There remains some uncertainty as to where this will occur, but northern Vietnam appears to be at greatest risk. This is an area which saw significant flooding and landslides from Tropical Storm Son Tinh at the end of July.



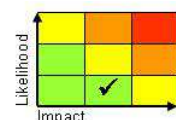
Europe

Southern Scandinavia and Eastern Europe

A plume of very warm air will continue to be engaged by a sharp upper trough on Saturday and trigger further locally severe thunderstorms. A secondary area of low pressure developing out of deep convection affecting the UK on Friday will bring a further spell of strong winds to the Baltic region over the weekend.

High temperatures that have persisted for several days will moderate over the weekend with temperatures returning to nearer average. However, this change will be accompanied by a continuation of locally severe thunderstorms with an associated risk of large hail and strong winds, as well as heavy rain (up to 75mm in 3 hours).

The effect on vulnerable populations due to the heat will abate as temperatures ease but thunderstorms are likely to cause further flash flooding whilst strong winds are likely to cause some localised damage to property and infrastructure, as well as disrupt outdoor events.



North America

NW USA and SW Canada

A cut-off low will engage the resident hot plume across the Pacific Northwest over this weekend bringing a temporary end to the very high temperatures seen through the past week. This is likely to trigger scattered thunderstorms across SW Canada before the upper ridge builds again through early next week and allows a return of higher temperatures across the region.



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The heatwave conditions have resulted in Calgary (Alberta, Canada) breaking the record for the highest recorded temperature. The record was 36.1°C, set 85 years ago, but was beaten by the maximum temperature of 36.4°C set on Friday. Increasing winds associated with a cold front moving into parts of northwest USA and British Columbia will maintain critical fire weather conditions across the region this weekend before widely very warm or hot conditions redevelop through next week. Scattered thunderstorms this weekend could trigger further fires whilst stronger winds could exacerbate existing fires despite introducing cooler weather for a time.

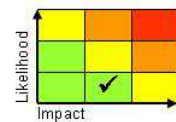
Several significant wildfires continue to burn from Alaska to California, with the most significant fires in California (the Mendocino Fire Complex is now the largest in state history at 263,527 acres). Ongoing wildfires are contributing to poor air quality across a larger region of western North America, whilst the wildfires themselves threaten to damage or destroy property and infrastructure in the region.

S & E USA, NW Mexico and SE Canada

A cold front will slowly and erratically transfer southeast, being engaged by several short wave upper troughs to produce some severe thunderstorms through the period.

Scattered strong to severe thunderstorms are expected to continue affecting parts of the southern and eastern USA and northwest Mexico over the next 5 days. These storms will produce locally heavy rain (up to 75mm in 3 hours), along with some large hail and strong winds.

Flash flooding, along with wind and hail damage are likely impacts, with aviation likely to see further impacts from thunderstorm activity, particularly from Eastern Seaboard hubs such as New York, Washington DC and Philadelphia until Monday.



Central America and Caribbean

See the *North America* section for impacts on Central America.

South America

Nil significant.

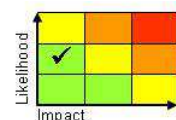
Africa

Equatorial West Africa

Further active AEWs are expected to contribute to above average rainfall across the region over the next week.

Further areas of frequent thunderstorms are expected to affect parts of West Africa over the next week. These thunderstorms are likely to produce 75-100 mm of rain in just a few hours. Whilst thunderstorms are not uncommon at this time of the year, they are expected to be slightly more numerous than normal.

Heavy rainfall, often falling in a very short period, will result in an increased likelihood of flash flooding and landslides. Strong winds from thunderstorms can also cause damage to crops and properties, and lift dense dust storms across the Sahel region.



Middle East

Persian Gulf

A Shamal is expected to redevelop across the Persian Gulf, lifting dust from southern Iraq and eastern Saudi Arabia from Sunday into early next week. However, the Shamal is unlikely to be as strong as that seen earlier this week.

Over the last few days there were areas of lifted dust across the Persian Gulf and adjacent nations. Another pulse in the Shamal is expected to develop from Sunday into next week which will bring a renewed threat of dust storms.

The main impacts will be on aviation operations at the major hub airports in the region, but there will also be surface transport network and marine transport issues, along with human health issues due to the extensive, long-lived dust storms this coming week.



Asia

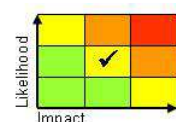
See *Tropical Cyclones* section.

N & SW India, Nepal and Myanmar

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An enhanced southwest monsoon flow will persist across the Bay of Bengal and SW India through the next few days, bringing high rainfall accumulations over hills that face into the prevailing wind. Meanwhile, the remnants of a monsoon depression will bring heavy rainfall to northern India as well as Nepal this weekend. A second, potentially more intense, monsoon depression may develop early next week and track inland across the northern half of India.

Persistent heavy monsoon rain and thunderstorms are expected to continue through the next few days. Around 50-100 mm of rainfall may occur each day within this region, with some locations likely to record totals approaching 300 mm over the period. The heaviest rainfall is expected to be across western Myanmar and SW India, where 500-600mm may accumulate in places. There is the potential for the remnants of a monsoon depression to bring very heavy rainfall to northern India and perhaps Nepal over the weekend and for a further depression to bring heavy rain to central India through next week.

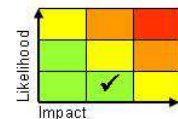
A high likelihood of further flooding and landslides, posing a danger to life, as well as damage to property and infrastructure. However, this is the wet season, and so these impacts are expected in the region at this time of year. The most significant flooding impacts are likely to be across Myanmar and SW India. High water levels at some dams in Kerala has resulted in some water being released, inundating communities downstream.

N Philippines, parts of Cambodia, Vietnam and Laos

A persistent south-westerly Monsoon flow will maintain moist, deep convection to parts of Cambodia, Laos and Vietnam, perhaps augmented by the development of a South China Sea tropical storm. Meanwhile, across the Philippines the southwesterly flow across the South China Sea will lead to very heavy rainfall, particularly across western Luzon, including Manila.

Enhanced monsoon rains will affect the region through much of the next week. Most locations should have daily precipitation accumulations of 25-50 mm, with peaks of the order 100-150 mm each day. The risk of very heavy rainfall is likely to return this coming week to the Manila area in the Philippines.

Flash and river flooding likely, along with an enhanced likelihood of landslides in mountainous areas.

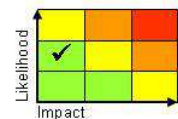


Korean Peninsula

The Changma front remains displaced to the north of its normal position for the time of year but is likely to become more active through the next week as a consequence of Tropical Storm Yagi being drawn into the mid-latitudes. This will likely result in temperatures returning nearer to the seasonal norm, with a marked increase in rainfall.

Very high temperatures are expected to continue through the next 3-4 days, although these will be slightly cooler than those experienced last week. A tropical cyclone dissipating across eastern China will result in an increase in shower and thunderstorm activity which is more typical of this time of year, with temperatures returning to nearer normal by the end of next week.

The persistence of this heatwave to-date has already had impacts on vulnerable populations as well as affecting agricultural production, particularly in North Korea. However, the return to nearer normal conditions is likely to moderate these impacts to an extent by the end of next week.



Australasia

Nil significant.

Additional Information

Nil significant.

Issued at: 110700 UTC

Meteorologist: Matthew Lewis

Global Guidance Unit

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