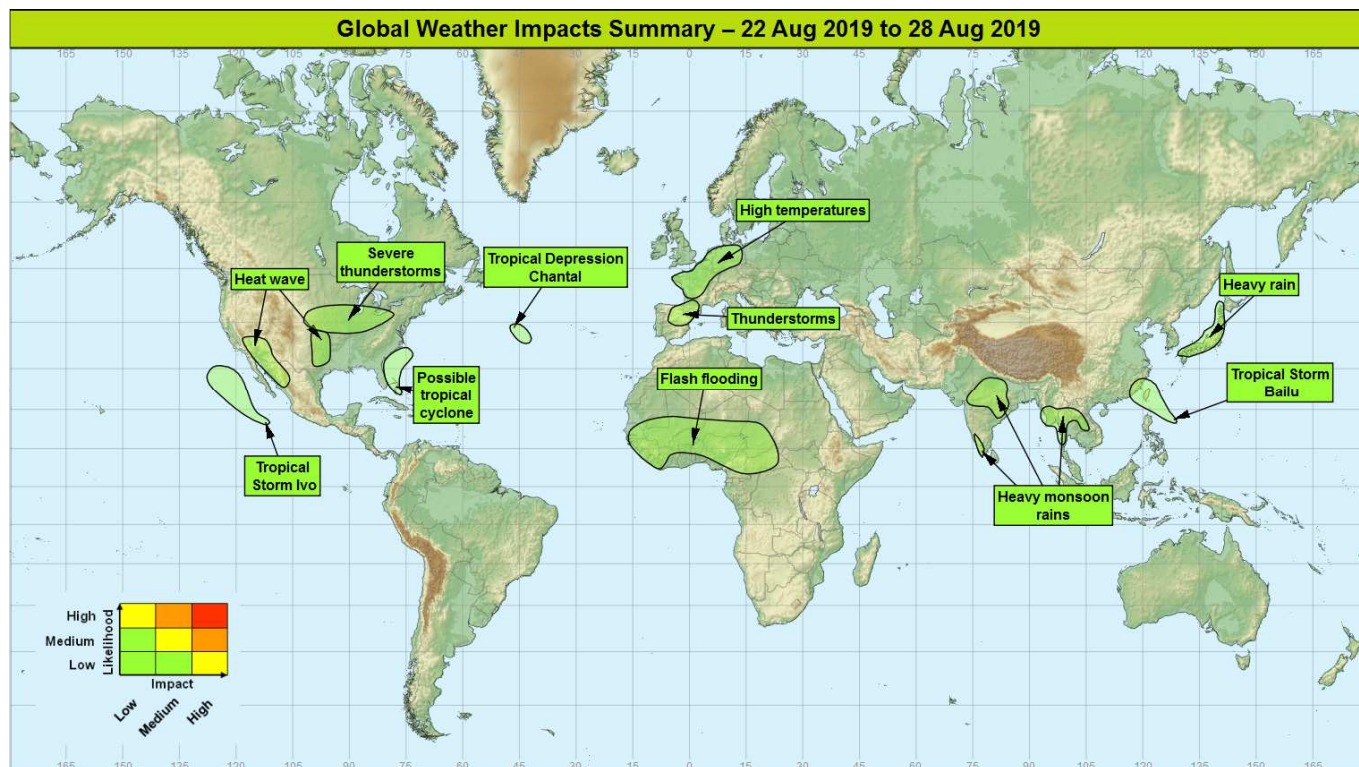


## Global Weather Impacts – Thursday 22 August 2019 to Wednesday 28 August 2019

Issued on Thursday 21 August 2019

### HEADLINES

- Enhanced monsoon rainfall across parts of West Africa and south/southeast Asia.
- Tropical Storm Bailu likely to affect Taiwan and southeastern China this weekend.
- Tropical Depression Chantal and Tropical Storm Ivo likely to remain over open ocean.



### DISCUSSION

#### Tropical Cyclones

##### Tropical Depression Chantal - Western Atlantic

##### **Weather**

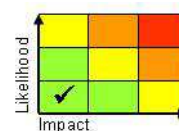
Chantal formed in the early hours of Wednesday in the western North Atlantic. Chantal is expected to drift slowly eastwards and southeastwards while weakening further. Chantal will pose no threat to land.

##### **Discussion**

Tropical Depression Chantal now lies around 675 miles southeast of Newfoundland with mean winds 35 mph. Chantal will be expected to drift east then southeast through Thursday in a statically stable environment with dry air in the low to mid levels, which is likely to help weaken the system into a remnant low by late Friday.

##### **Expected Impacts**

Nil apart from being a hazard to shipping.



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## **Tropical Storm Bailu - North-West Pacific**

### **Weather**

Bailu formed during Wednesday and now lies around 650 miles southeast of Taiwan. Bailu is likely to track steadily northwestwards toward Taiwan, gaining strength as it does so. The system is expected to make landfall on Taiwan, probably as a Strong Tropical Storm, during Saturday UK time. The remnants of Bailu are then likely to go on to impact the coast of southeastern China.

### **Discussion**

Bailu is presently passing over very warm (30°C) sea surface temperatures in a low vertical shear environment. Therefore some strengthening is expected over the next couple of days as the system tracks steadily northwestwards. There is good agreement between models for Bailu to pass to the northeast of Luzon on Friday, then most likely make landfall on the eastern coast of Taiwan on Saturday. Landfall should then weaken Bailu, the remnants then impacting the Chinese coast on Saturday.

### **Expected Impacts**

Heavy rainfall and large swells may affect the north east of Luzon on Friday. Bailu could bring 200-300 mm of rainfall to parts of Taiwan, which is around a month's worth of rainfall, with very strong winds and flash flooding likely across Taiwan and portions of SE China later this week and into the weekend. Landslides are possible in some mountainous areas, with coastal impacts from large swell and waves likely.



## **Tropical Storm Ivo – Eastern north Pacific**

### **Weather**

Ivo formed late Wednesday and presently lies around 500 miles south of Baja California. Ivo is likely to track westwards then northwestwards, and is expected to briefly become a hurricane later this week. Ivo is most likely to remain over the open ocean, sufficiently far offshore so as to bring no impacts to land, before it weakens and dissipates by early next week.

### **Discussion**

Ivo is presently tracking steadily west through a region favourable for development, although moderate shear is likely to restrict the rate of intensification. Models agree on steady strengthening of the system through the coming 24-36 hours, with Ivo likely becoming a hurricane on Friday. A weakness in the sub-tropical ridge is then likely to allow Ivo to turn to the northwest. This will bring the system over unfavourable sea surface temperatures and into an increased shear environment, causing Ivo to weaken and eventually dissipate.

### **Expected Impacts**

Ivo is not expected to bring any impacts to land.



*The following areas are being monitored for potential tropical cyclone developments:*

## **Western Atlantic**

### **Weather**

An area of enhanced thunderstorms just offshore of The Bahamas may well undergo some slow development over the coming days as it tracks northwestwards toward Florida. Although it looks unlikely at this stage to become a named tropical storm, the system is expected to bring enhanced rainfall 75-100 mm, locally 150-200 mm in 48 hours in the northern Bahamas, and strong winds to The Bahamas and parts of the southeastern USA through the next few days.

### **Discussion**

The region of enhanced thunderstorms just off the coast of The Bahamas has become better organised through the past 24 hours. Any development however will likely be disrupted by its proximity to The Bahamas, then the Florida coast. The system is likely to turn northeastwards later this weekend, with some models, GM especially, favouring more development as it moves back into the Atlantic, east of the Carolinas.

### **Expected Impacts**

Enhanced thunderstorm activity is likely across the northern Bahamas through the next couple of days, then parts of Florida this weekend. Some flash flood impacts are possible.



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## Europe

### Southwest Europe

#### **Weather**

Severe thunderstorms are likely to develop across parts of Spain and southwest France during Sunday and Monday. In addition to torrential downpours, these storms will be capable of producing large hail and strong winds. Whilst many places will remain dry, some locations could have 30-50 mm of rain, mostly falling in a few hours.

#### **Discussion**

A disrupting upper trough is expected to move in off the Atlantic, ultimately developing into a cut-off vortex and cold pool over Biscay and Iberia. Steep lapse rates with large CAPE will allow some intense downpours with large hail to develop in response to diurnal heating.

#### **Expected Impacts**

Flash flooding will be the main impact, with frequent lightning strikes perhaps leading to an increased risk of power outages.



### Northwest Europe

#### **Weather**

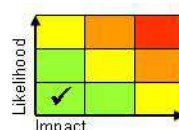
After a spell of cooler weather, temperatures are expected to rise over the weekend. Initially the heat will be confined to France before becoming more widespread and spreading into Benelux, Germany and parts of Poland and Denmark by early next week. Temperatures are expected to widely reach the low- to mid-30s°C; whilst this is much lower than the record breaking spell in July, it is still noteworthy for late-August.

#### **Discussion**

A combination of strong subsidence and gentle warm advection from Iberia will allow temperatures to gradually rise over the weekend and into next week. By Monday models predict large swathes of partial thickness >141Dm, quite noteworthy for late-August.

#### **Expected Impacts**

Increased heat stress particularly for vulnerable populations. Perhaps some minor disruption to transport but not on the scale of the event in July.



## North America

### Parts of southern USA and north-western Mexico

#### **Weather**

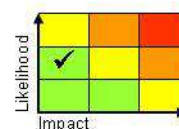
Maximum temperatures widely in excess of 35°C, locally 40-45°C, some 5-10 °C above the average for the time of year, are being recorded across the region. The most intense heat focused across north-western Mexico, where on Tuesday 46.8 C was recorded at Altar, parts of Arizona, southern Nevada (including Las Vegas) and south-eastern California along with central parts of Oklahoma. Temperatures gradually returning closer to more normal later this week with the heat across north-west Mexico likely breaking down into some severe storms through Wednesday and Thursday. However, early next week there could be a resurgence of heat, particularly across the southern Rockies.

#### **Discussion**

Upper ridging dominates with the polar front jet now well to the north of the region – partial thicknesses widely in excess of 145 dam, combined with sunny skies and stable profiles will make for a period of hot weather where temperatures are widely 5°C or more above average. Across north-western Mexico severe storms are likely to end the heatwave here.

#### **Expected Impacts**

Heat health impacts with risk to life of vulnerable demographics. Risk of flash flooding, frequent lightning and strong gusts of wind across north-west Mexico.



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**USA Mid-West****Weather**

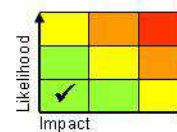
Thunderstorms are expected to affect the region over the next few days. Torrential downpours with 50-75 mm of rain falling in a few hours are possible.

**Discussion**

A slow-moving cold front will be the focus for severe thunderstorm development over the next few days. Whilst CAPE is large, wind shear is fairly limited restricting the development of supercells and upscale growth into MCS, although some pulse storms with frequent lightning are possible. Large hail and strong, gusty winds are likely.

**Expected Impacts**

Flash flooding will be the main impact with some damage to crops and property possible from large hail and strong winds.

**Central America and Caribbean**

**North-western Mexico** – see *North America* section.

**Bahamas** – see *North America* section.

**South America**

Nil.

**Africa****Central and West Africa****Weather**

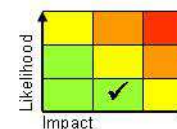
Tropical waves will bring enhanced shower and thunderstorm activity to this region over the next week. Thunderstorms are likely to produce locally 50 to 100mm of rain in a short period, with up to around 350 mm possible in places during this period. The focus for the largest rainfall totals looks likely to be around coastal areas in the west along with southern parts of Mali. This comes on top of wetter than average conditions for many parts over the summer monsoon so far – around 125-150% of climatology since mid-May.

**Discussion**

Enhanced seasonal rainfall continues to be signalled with above normal totals expected in this region. This will likely come in the form of MCS developments, organised at times by African Easterly Waves, with impacts especially likely should these catch any of the more urbanised regions within this zone. Along the Gulf of Guinea coast below average rainfall is expected.

**Expected Impacts**

Flash flooding is likely together with an increased risk of landslides. Risk of some dense lifted dust on the northern periphery of the thunderstorms.

**Middle East**

Nil.

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**Asia****Parts of South and Southeast Asia including India, Myanmar, Thailand and Laos****Weather**

Frequent intense showers and thunderstorms are expected to continue through the next week, producing up to 100-200 mm in a 24-hour period, and up to 600 mm through the next week in places. This would result in the average August rainfall falling in a week in places. Parts of central and northern India in particular look likely to see a return of heavy monsoon rains.

**Discussion**

Convection associated with a developing monsoon depression will slowly move northwest inland across NE and central India this week, with a further depression developing across northeast India by the weekend. These depressions will be the focus for heavy showers/thunderstorms. Meanwhile, northern parts of the Bay of Bengal should have a drier week, whilst further south a strengthening monsoonal flow will bring heavy rainfall to southern Myanmar and parts of Thailand. Southwest facing upslopes will be most threatened by enhanced rainfall due to orographic uplift of the very moist airmass. Enhanced convection is also expected over the higher ground of Laos, with a consistent model signal for above average rainfall here too.

**Expected Impacts**

Flash flooding events are highly likely, with an increasing likelihood of river flooding and landslides.

**Japan****Weather**

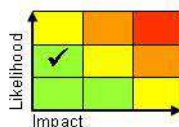
Spells of very heavy rain and thunderstorms will affect Japan over the next 7 days. Western parts are expected to see the most frequent and heaviest rain with the potential for 100-150mm each day in places and up to 300mm through the period.

**Discussion**

Successive upper troughs will run east across the islands through this week engaging in situ warm/moist sub-tropical air. Any shallow depressions that form will bring spells of westerly winds leading to orographic enhancement of rainfall.

**Expected Impacts**

Flash flooding and landslides in mountainous areas.



**Taiwan and southeast China** – see tropical cyclones section.

**Australasia**

Nil.

**Additional information**

**Wildfires Gran Canaria:** Conditions will remain dry with moderate to strong northeasterly trade winds at times. Some easing of the wind strength in the past 24 hours has helped efforts to control the wildfires that have been affecting the centre of the island since Saturday. No rain is forecast during this week. There have been reports of 9,000 evacuations from inland areas, with potential impacts to tourists in the region. The main airport is upwind of the wildfire smoke, and unlikely to be impacted.

**Issued at:** 220705 UTC

**Meteorologist:** Mark Sidaway / Laura Ellam

**Global Guidance Unit**

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

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