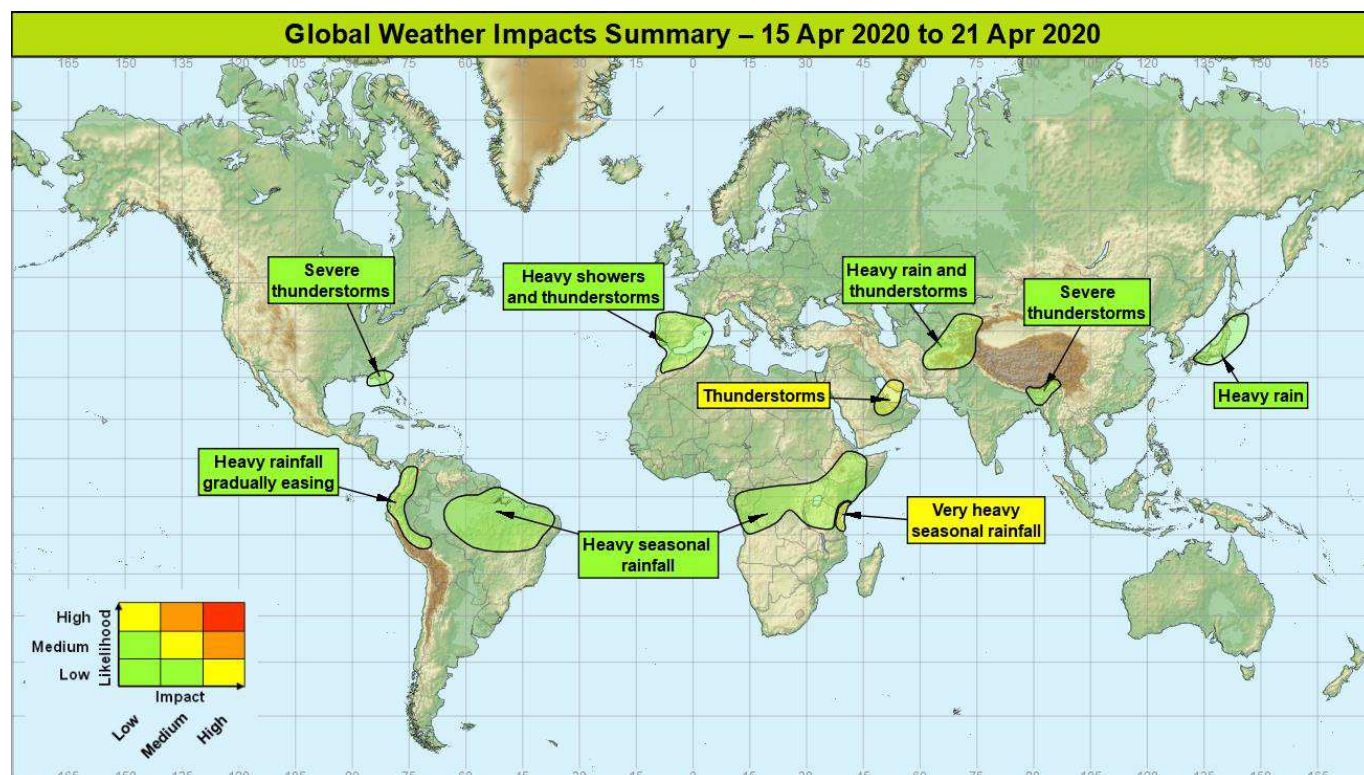


Global Weather Impacts – Wednesday 15th to Tuesday 21st April 2020

Issued on Wednesday 15th April 2020

HEADLINES

- Thunderstorms with torrential downpours likely across parts of the Persian Gulf next few days.
- Heavy seasonal rainfall in central, and especially east, Africa.
- Severe thunderstorms across Bangladesh and northeast India at times.
- Heavy showers and thunderstorms across Iberia and northwest Africa at times.



DISCUSSION

Tropical Cyclones

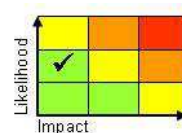
No tropical cyclone activity that could impact land is expected over the next 7 days.

Europe

Iberia, northern Morocco and northwest Algeria Weather

Heavy showers and thunderstorms will affect the region at times through the rest of this week. The heaviest and most widespread rainfall will initially be across western Spain and Portugal during Wednesday and Thursday; here up to 40 to 70 mm of rain could fall in just 3-6 hours. A second, more active period, then seems likely to affect northern Morocco, northwest Algeria and eastern Spain, including the Balearic Isles over the weekend and early next week. Around 75-100 mm of rainfall in 6-12 hours is possible. Frequent lightning strikes will also be likely, with strong winds and a lower likelihood of large hail.

Discussion



This forecast may be amended at any time

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A cyclonic upper pattern is expected across this region through the rest of this week. Several upper troughs sweep NE over the coming days, enhancing convection in the west of the region. Over the weekend an upper vortex will interact with a high WBPT plume moving north from N Africa, allowing in widespread deep convection to break out. Both events produce fairly skinny CAPE profiles (around 500-1000 J/Kg) and so the highest likely impact in both events will be flash flooding. The first event will be surface rooted with reasonable vertical wind shear, with the second event more likely an elevated based CB event, but with some diurnal input and also reasonable wind shear. So organised deep convection looks likely in both events, with intense rainfall most likely, but with frequent lightning especially likely in the second event.

Expected Impacts

Enhanced threat of flash flooding. Potential impact from frequent lightning, especially over the weekend.

North America

Florida

Weather

Further severe thunderstorms are expected to affect northern parts of the state during Wednesday and possibly Thursday. As well as torrential rainfall (40 to 70 mm in 6 hours), strong winds and large hail will be additional hazards.

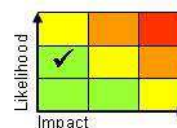
More thunderstorms, possibly severe, are likely to affect southern parts the USA from Texas eastwards from Saturday through to Tuesday next week.

Discussion

Severe thunderstorms are likely to develop fairly widely ahead of a cold front as it moves slowly south across northern parts of Florida over the next day or so. CAPE and vertical wind shear and sufficient to support severe, organised storms with large hail and strong winds. Weaker low-level shear suggest the risk of tornadoes is lower than earlier in the week.

Expected Impacts

Flash flooding is likely. Damage to property and crops from large hail and/or strong winds are possible.



Central America

Nil.

South America

Much of Ecuador, Peru and western Colombia

Weather

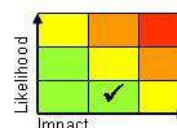
Heavy showers and thunderstorms will continue to be more frequent, widespread and intense than usual for the time of year through the rest of the week. Over the weekend, showers will begin to ease and into next week conditions should become much drier. A further 100-250mm of rainfall is likely to fall across the area. This represents locally more than double the average rainfall for parts of this region which have been very wet over recent weeks and months.

Discussion

The MJO is now moving across South America with convection beginning to ease in its wake over the weekend and into next week. Until then further heavy rainfall is expected across the region, particularly in the north.

Expected Impacts

Threat of further landslides and flash flooding, particularly in areas where the terrain is steep.



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Brazil

Weather

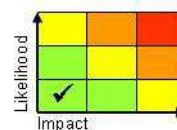
Further heavy rainfall is expected to affect large swathes of northern Brazil over the next week. Large areas are expected to see accumulations around 50-100mm with peaks of over 250mm. Whilst much of the rain will tend to fall in the sparsely populated Amazon basin, more populated regions in northeast Brazil will also be affected at times.

Discussion

A south displaced and active ITCZ, mainly due to above-average SSTs in the tropical regions of the South Atlantic, will lead to enhanced convection across much of northern Brazil over the next week. Convection will be further enhanced in the coming days as the MJO moves across the tropical Atlantic Ocean.

Expected Impacts

Enhanced risk of landslides and flash flooding.



Africa

Central and eastern Africa

Weather

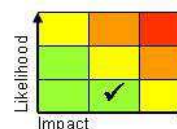
Fairly widespread showers and thunderstorms are expected large parts of tropical Africa through the coming week, with up to 50-75 mm falling in a few hours, and up to 150 mm accumulating in places through the next 7 days.

Discussion

The progress of the MJO towards and ultimately across Africa over the coming week is likely to lead to enhanced convection across the tropical part of the continent, with the ITCZ likely to become very active.

Expected Impacts

Flash flooding and some riverine flooding will become increasingly likely, as will landslides in mountainous terrain.



Tanzania and Kenya

Weather

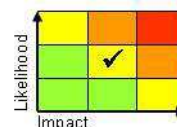
Coastal regions of Tanzania and Kenya are expected to have the heaviest rainfall across Africa with up to 250 mm accumulating here over the coming week, especially from Thursday to Sunday. It is likely that parts of this region will see more than their average April rainfall accumulate within a 3 or 4 day period.

Discussion

High SSTs off the coast of East Africa and an active MJO moving across the continent will lead to enhance rainfall across the region, particularly coastal parts of Tanzania and Kenya. This region has been wet for several months and additional rainfall is likely to generate impacts.

Expected Impacts

Flash flooding likely impacting travel in the region, with some property flooding also possible.



Northern Morocco and northwest Algeria – see Europe section

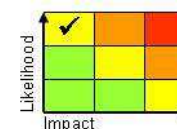
Middle East

Across and around the Persian Gulf

Weather

Thunderstorms are expected to develop across the Persian Gulf in the next few days, with activity likely peaking on Wednesday. Torrential rain associated with the storms could bring 50-75 mm of rain in less than 6hrs with eastern Saudi Arabia and Qatar most prone, but also perhaps Bahrain and the UAE. Other hazards such as strong winds, dense haboob dust storms (where intense rainfall does not occur) and frequent lightning strikes are also expected.

Discussion



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An upper trough will interact drawn a high WBPT plume north across the region and allow it to become increasingly unstable over the next couple of days. Convection will break out widely and, as the airmass gradually moistens, heavy rain will increasingly reach the surface. Forecast profiles show a high CAPE and strong vertical wind shear environment and upscale growth into MSC seems likely.

Expected Impacts

Flash flooding and dense dust storms impacting transport networks, with some property flooding likely. Damaging winds are possible associated with more severe thunderstorms.

Asia

Afghanistan, Tajikistan and northern Pakistan

Weather

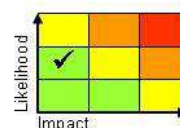
Further periods of locally heavy rainfall is expected in this region through the next week. Widespread 25-40 mm of rainfall is expected, with as much as 75 mm possible over high ground. This is almost equivalent to more than a month's worth of rainfall in the wettest areas, and the rainfall could combine with seasonal snow melt to exacerbate the potential flooding.

Discussion

Disturbances embedded within the STJ will transfer east across this region through the next week. The associated upper forcing engaging the northern side of the warm plume to produce areas of rain and thunderstorms.

Expected Impacts

Flash flooding looks like the main threat in this region, but locally some dense lifted dust plumes are also possible across the desert regions.



Bangladesh and northeast India

Weather

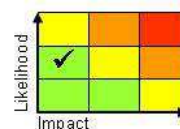
Severe thunderstorms are expected to develop across this region, producing intense rainfall (up to 50-75 mm in just a few hours) along with the threat of large hail and tornadoes. This is now the peak season for severe storm impacts in this region.

Discussion

Advancing upper troughs will engage a warm plume advecting up from the Bay of Bengal. This will result in forecast profiles that show very large CAPE (around 4000 J/kg) and marked vertical wind shear, especially in the lower atmosphere.

Expected Impacts

Flash flooding is likely along with, strong winds and large hail damage. Very localised tornadic damage is also possible along with impacts from frequent lightning.



Japan

Weather

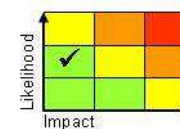
A further period of very windy and wet weather is expected on Friday night and into Saturday, producing a further 75-125 mm of rain (the average for the whole of April) rainfall. Gale force winds are also expected, mainly along the southern coasts, leading to some rough seas.

Discussion

An upper trough will interact with WBPT plume leading the cyclogenesis. The resulting a gradually deepening area of low pressure will track NE across the mainland, before clearing on Saturday night.

Expected Impacts

Threat of flash flooding with a lower likelihood of landslides. Lower likelihood of some wind damage or disruption. Rough seas.



Australasia

Nil.

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Additional Information:

Nil.

Issued at: 150700 UTC

Meteorologists: Brent Walker / Paul Hutcheon

Global Guidance Unit

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