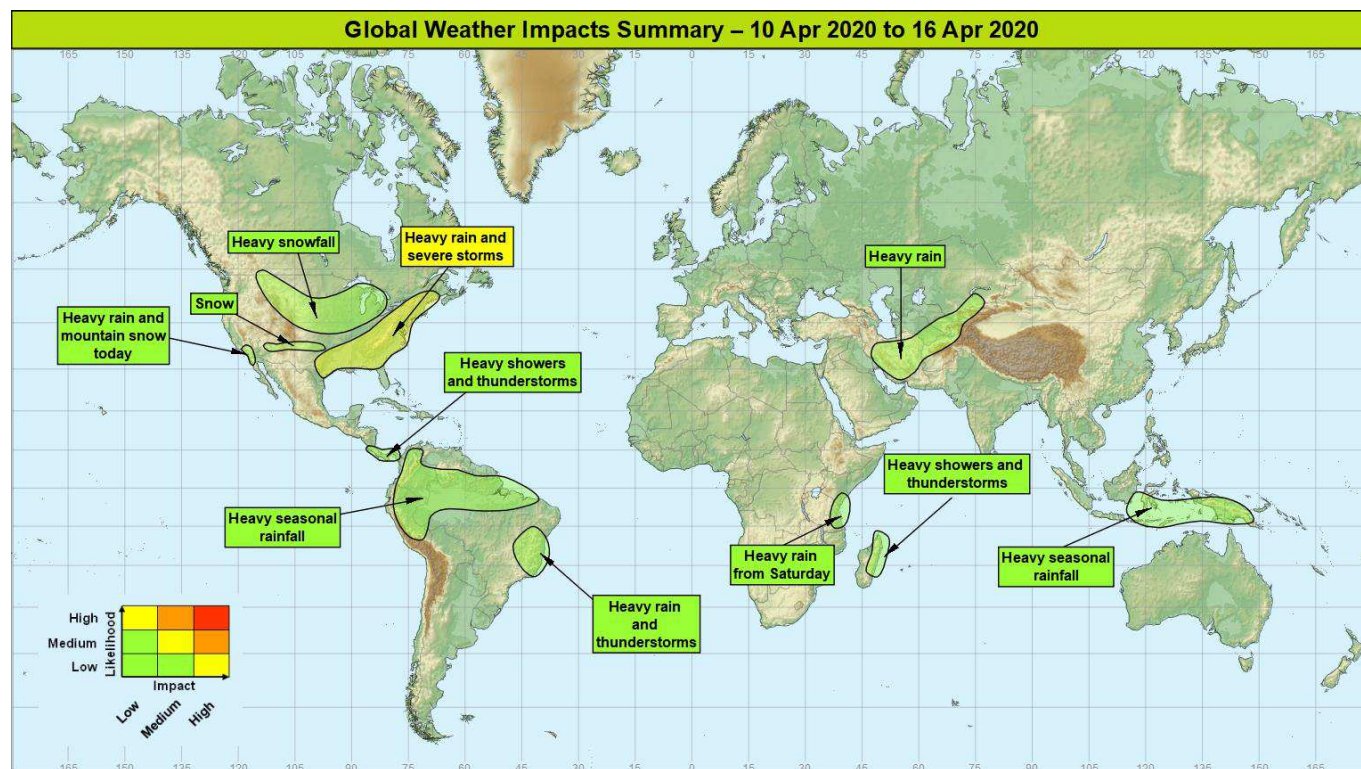


Global Weather Impacts – Friday 10th to Thursday 16th April 2020Issued on Friday 10th April 2020**HEADLINES**

- Severe storms developing across southern and eastern USA this weekend and early next week.
- Tropical Cyclone Harold now over the open waters of the southwest Pacific and decaying.

**DISCUSSION****Tropical Cyclones**

Tropical Cyclone Harold remains active over the open waters of the south-west Pacific, but is expected to soon become a deep extra-tropical storm. No impacts are expected. Otherwise no tropical cyclone activity is expected over the next 7 days – but see Tanzania/Kenya section below.

Europe

Nil.

This forecast may be amended at any time

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North America

Southern California, USA

Weather

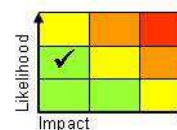
Further heavy rain, with some mountain snow is expected to affect parts of southern California today, with this following heavy ppn across the area in the last few days. San Diego could see 40-60mm during this time, with some further snow (~0.25m) over 1600m across the far south of the Sierra Nevada range.

Discussion

A slow moving cut-off vortex across the area will gradually clear east and south-east. This will interact with a slow moving frontal zone today bringing persistent, and at times heavy rain and mountain snow. Later this week it will go on to assist in the generation of a multi-hazard storm (see next region).

Expected Impacts

Localised flash flooding and mudslides, particularly in burn scar regions. Further snow may affect some transport routes.



Southern and eastern parts of the USA

Weather

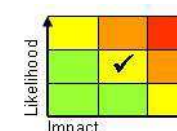
Severe thunderstorms are expected to break out tomorrow (Saturday) across parts of northern Texas, before become more frequent and extensive as the whole complex moves east and northeast through Sunday and Monday. Intense rainfall (up to 150 mm in 24 hours), large hail, damaging winds and tornadoes are likely to be associated with these storms. The average April rainfall in the southern states is 100-150 mm, with the Eastern Seaboard usually seeing 50-100 mm through April.

Discussion

Models are in good broad agreement that a large mass of very warm, moist Gulf of Mexico air will move northwards across this region, to become engaged by both the cut-off vortex described in previous section, and a strong diffluent upper trough arriving from the north-west. Strong upper level winds on the periphery of relaxing vortex, and strong vertical wind shear will provide significant lift and instability to promote persistent and severe storms, and likely supercells.

Expected Impacts

Localised flash flooding, hail damage, and wind damage, in the vicinity of the severe storms. Flash flooding also looks a threat for the Eastern Seaboard, perhaps impacting large cities.



Parts of North and Central USA.

Weather

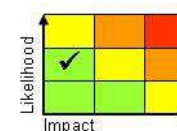
A cold plunge will bring significant snow falls to some parts of the northern US, with widely 15-30 cm of snow arriving into the north-west of the region tomorrow (Saturday), then quickly moving south-east over the weekend and then north-east early next week, on the north-western edge of the storm system described above. The snow fall will be accompanied by strong east to north-easterly winds generating blizzard conditions at times, particularly across central and eastern parts of this region.

Discussion

A strong cold front well forced by a diffluent upper trough is expected to bring significant snow fall to this region, eventually merging with the system affecting south-eastern parts of the US this weekend. As the gradient tightens on the northern flank of cyclogenesis initiated across Central US, blizzard conditions are likely to become more widespread.

Expected Impacts

Difficult travel conditions with disruption to transport, and perhaps temporary disruption to utilities such as power/mobile phones. Agriculture (eg calving/lambing) likely to be significantly disrupted.



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New Mexico, North Texas, Oklahoma

Weather

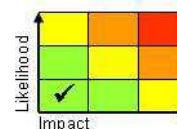
A spell of snow is expected early next week (Monday/Tuesday), bringing a temporary coverage of 5-10cm of lying snow in some areas. This is unusually far south given the time of year.

Discussion

The cold plunge taking place over the weekend will allow cold air to extend unusually far south, interacting with a wave on the trailing cold front to bring a temporary spell of climatologically unusually far south snowfall. Good model agreement in this aspect, although lower confidence in coverage and longevity.

Expected Impacts

Some temporary transport disruption is likely.



Central America

Costa Rica, Nicaragua and Panama

Weather

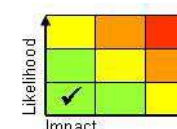
Showers and thunderstorms are likely to become more frequent and intense from the weekend. Daily accumulations of 50-100 mm are possible, with up to 250 mm in a few locations by midweek. This is a very start of the wet season, with rainfall typically increasing rapidly at this time of year. However, for many locations this would represent close to a month's worth of rain. From mid-week there are signs for the activity to decrease somewhat.

Discussion

The ITCZ will surge northwards this week. Combined with an active MJO in the western hemisphere is likely to lead to enhanced rainfall next week across the region for a time.

Expected Impacts

Flash flooding likely along with an increased risk of landslides.



South America

Colombia, Peru, Ecuador, northern Brazil, Suriname, Guyana and Venezuela

Weather

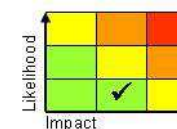
Enhanced shower and thunderstorm activity are signalled to continue across much of the northern Andes and Amazon through this period. A further 150-300mm of rainfall is likely to fall across the area. This represents locally more than double the average rainfall for parts of this region which have been very wet over recent weeks and months.

Discussion

Convective activity is forecast to remain well above average across the northern Andes over the next week. For Colombia and Ecuador, above average near shore SSTs are likely contributing to the increased activity, with onshore winds/orographic lift triggering convection on western upslopes of the Andes.

Expected Impacts

Continued threat of landslides and flash flooding, particularly in the steep terrain of the northern Andes.



Eastern Brazil

Weather

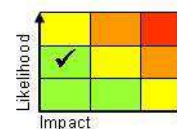
Slow-moving heavy showers and thunderstorms are expected across eastern parts of Brazil today, before activity gradually eases over the weekend. Coastal areas likely to see the heaviest rain though this should remain generally to the north of Rio de Janeiro. As much as 100-150mm of rain could fall in a few places each day. This is roughly equivalent to a month's worth of rainfall.

Discussion

An active pulse in the SACZ will help focus heavy rain and thunderstorms across eastern parts of Brazil before activity is focused offshore.

Expected Impacts

Increased threat of flash flooding as well as landslides in areas of steep terrain.



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Africa

Eastern parts of Tanzania and Kenya

Weather

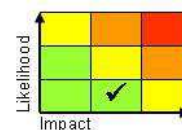
There is the potential for heavy rainfall from thunderstorms to develop along the coast of Kenya and/or eastern Tanzania associated with a weak tropical depression from Saturday to Tuesday. Up to 200 mm of rain could fall, which would be around the average for the whole of April.

Discussion

Most models produce a weak tropical cyclonic circulation which moves in from the Indian Ocean later this weekend and into next week to produce a threat of enhanced heavy showers and thunderstorms to this part of the region, but confidence in the timing and location details remains rather low at this time.

Expected Impacts

Increased threat of flash flooding as well as landslides in areas of steep terrain.



Eastern Madagascar

Weather

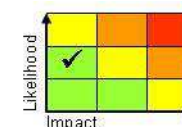
Enhanced heavy showers and thunderstorms are expected across eastern Madagascar in the next 4 or 5 days. 50-100 mm of rain is expected per day, with the northeast of the island particularly prone. April one of the wetter months across the islands, but as 150-200 mm of rain could fall in places, which represents around half the average.

Discussion

An enhanced easterly flow, plus a minor tropical depression moving to the north of the island is expected to bring more frequent heavy showers and thunderstorms to eastern Madagascar in the next 4 or 5 days.

Expected Impacts

Flash flooding in the major coastal cities is a threat during this event.



Middle East

Nil.

Asia

Northern and western Iran, Afghanistan, Uzbekistan, Tajikistan and Kyrgyzstan

Weather

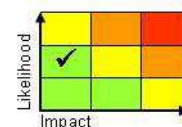
Further spells of persistent and locally heavy rain are expected to affect this region at times through the next week, with thunderstorms also expected. Across many parts of the areas highlighted 40-60 mm of rainfall will build up with as much as 100-150 mm possible over high ground. This equivalent to more than a month's worth of rainfall in the wettest areas.

Discussion

A succession of Western disturbances embedded within the STJ will continue to transfer east across this region over the next week with 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.



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Indonesia and New Guinea**Weather**

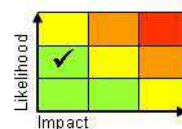
Shower and thunderstorm activity is expected to remain more widespread than normal over this week with many places receiving 50-100 mm during this time, with 200 mm for a few spots.

Discussion

Whilst the MJO is now moving east across the Pacific Ocean, the ITCZ remains quite active across parts of the Maritime Continent and is likely to be periodically enhanced by Kelvin waves running eastwards over the next few days.

Expected Impacts

Increased risk of flash flooding and landslides, particularly in areas that have been affected by recent heavy rainfall.

**Australasia**

Nil.

Additional Information:

Nil.

Issued at: 100800 UTC **Meteorologists:** Tony Wardle / D J Harris

Global Guidance Unit

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