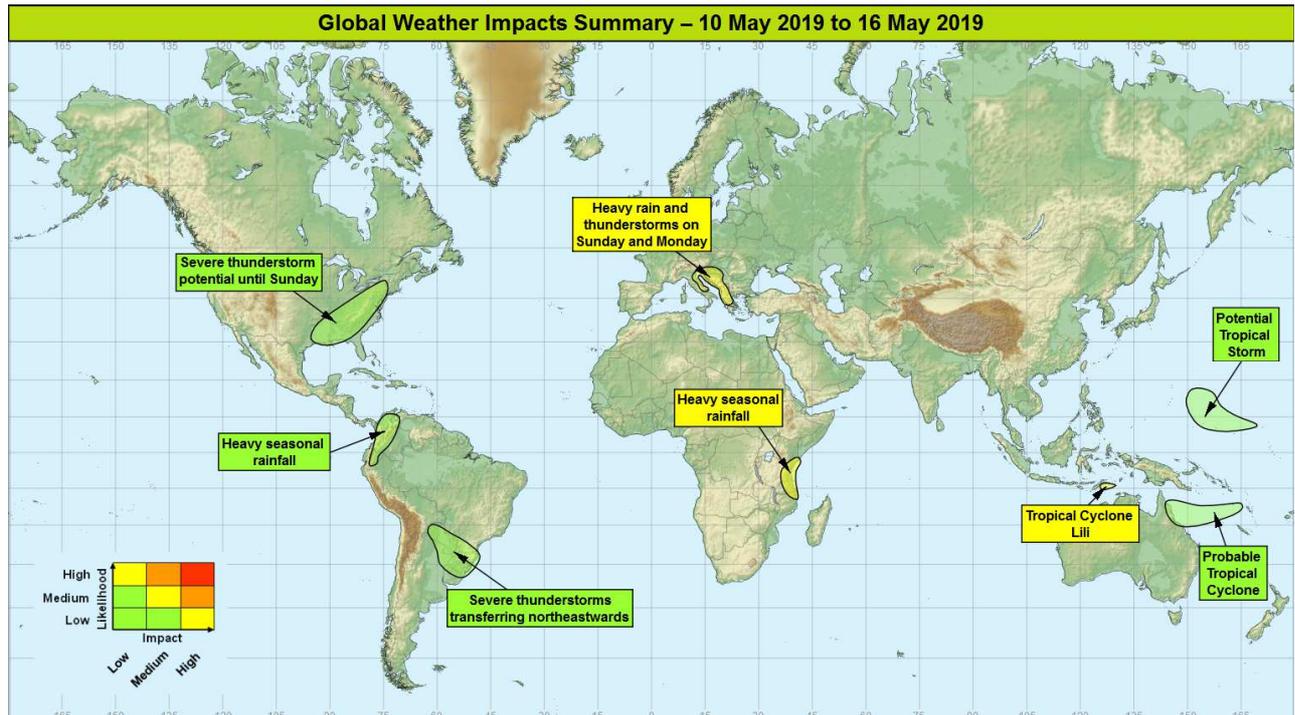


Global Weather Impacts – Friday 10th to Thursday 16th May 2019

Issued on Friday 10th May 2019

HEADLINES

- The now weakening Tropical Cyclone Lili continues to bring heavy rain to Timor-Leste.
- Heavy seasonal rainfall continuing for parts of eastern Africa.
- Heavy, thundery rain affecting areas adjacent to the Adriatic and Ionian Seas.



DISCUSSION

Tropical Cyclones

Timor-Leste – Tropical Cyclone Lili Weather

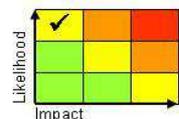
Although Tropical Cyclone Lili is now weakening and expected to decay as it moves slowly southwest through today, its remnants will continue to bring heavy rainfall to southern parts of Timor-Leste. A further 100-200mm of rain may fall over the next 24 hours.

Discussion

The very compact Tropical Cyclone Lili formed from an Equatorial Rossby Wave (ERW) that was spawned in the wake of the MJO, when this wave moved through an area favourable for development. Through Friday a combination of upper level convergence and entrainment of dry air will lead to a rapid weakening of this system.

Expected Impacts

The most likely impact will be flash flooding and landslides across some of the islands in the Banda Sea (especially Timor-Leste). Many of these islands and the area of Timor-Leste that has received the greatest rainfall totals appear sparsely populated.



This forecast may be amended at any time

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The following regions are also being monitored for potential tropical cyclone formation:

Micronesia

Weather

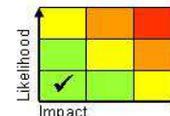
There is a chance that a weak tropical storm may develop in the southeastern part of Micronesia during the next few days, with any system likely to track northwest and remain over open ocean.

Discussion

This area of development emerges from the northern portion of an Equatorial Rossby Wave (ERW) pair, again spawned from the MJO. In the past 24 hours models have downgraded the potential for development of this system, although conditions appear marginally favourable.

Expected Impacts

No impacts expected with the weak circulation expected to remain over open ocean.



Melanesia and Coral Sea

Weather

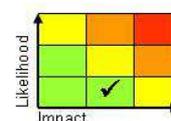
There is the potential for a tropical cyclone development over the coming day in the Coral Sea, south of the Solomon Islands. Over the last 24 hours, models have now begun indicating that this likely system may track westwards towards the Queensland coastline in around a week.

Discussion

This development is the result of the southern portion of the ERW pair, again spawned from the central Pacific MJO. Model output generally develops a weak tropical cyclone over the coming days, and atmospheric and oceanic conditions appear favourable to support gradual development.

Expected Impacts

For much of the next week impacts are likely to be for rougher than usual seas in the region and dangerous beach conditions. In around a week's time if the track towards Queensland is realised, impacts from heavy rainfall and potentially strong winds are possible.



Europe

Countries surrounding the Adriatic Sea and adjacent to north-east Ionian Sea.

Weather

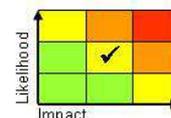
Areas of showers and thunderstorms are expected to affect this part of southern/central Europe from Sunday into the start of next week, following some pre-conditioning from heavy rain associated with a weather system earlier in the week. Up to 100 mm of rain could fall in a 24 hour period, with areas abutting the Adriatic and north-eastern Ionian Seas most prone. This would be close to a month's worth of rain in one day.

Discussion

There is good model agreement for a marked upper trough disruption across central Europe later this weekend, resulting in the formation of a cut off vortex. The marked forcing will engage a plume to produce a threat of deep organised convection.

Expected Impacts

Flash flooding is likely in places, along with the threat of frequent lightning.



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North America

Central/southern USA

Weather

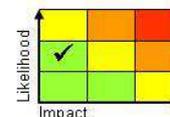
Further severe thunderstorms are possible across some eastern parts of the USA over the next 2 or 3 days. These storms would be capable of producing very intense rainfall (75-150 mm) over short time period (less than 6 hours). Additional hazards are large hail, strong winds and tornadoes. Heavy, thundery showers are likely to continue across parts of the south over the weekend, although these are expected to be less severe with a lower risk of hazards such as tornadoes and large hail.

Discussion

An upper trough will continue to engage a warm, moist airmass across central/southern parts of the USA on Friday, being a focus for severe convection. A combination of high CAPE, strong directional wind shear and a low-level jet will aid the development of severe thunderstorms and the potential for tornadoes. The upper trough will continue east and relax, pushing a cold front east and decreasing the severe storm threat through the weekend.

Expected Impacts

Flash flooding will be the major hazard, with the risk of isolated tornados, large hail and wind damage reducing over the coming days.



Central America and Caribbean

Nil significant.

South America

Paraguay, Uruguay, northeast Argentina and southern Brazil

Weather

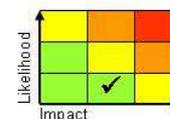
An area of heavy showers and thunderstorms, potentially severe, affecting parts of northeast Argentina, Uruguay and Paraguay will gradually transfer northeastwards through the next 3 or 4 days into parts of southern Brazil. Locally high rainfall accumulations of up to 100 mm in a few hours are likely, with some places perhaps seeing up to 200 mm during several days. The average rainfall in this region for May is 100-200 mm.

Discussion

The South Atlantic Convergence Zone will remain active as it is driven northwards through the next 3 to 4 days. The most intense and severe convection is likely to be on Friday and Saturday as an upper trough sweeps eastwards across the region to engage the low level tropical moisture plume.

Expected Impacts

Localised flash flooding and increased chance of landslides in mountainous areas. Large hail, strong winds and frequent lightning are additional hazards which may cause damage to property and disruption to transport and utilities. Parts of this region have seen a wetter than usual rainy season, and so further rainfall could result in river flooding.



Colombia, Venezuela, Ecuador and Peru

Weather

Heavy seasonal rainfall is expected across this region through the coming week, with daily rounds of frequent heavy showers and thunderstorms. Many places will see little or possibly even no rain, but where the showers occur most frequently a further 250-350 mm of rain could accumulate, which is close to the average for the whole of May in the wetter Colombian sites.

Discussion

Good model agreement for another spell of heavy seasonal rainfall that will increase the threat of further flood and landslide events in the region. This active period of weather could be associated with the El Niño type SST anomalies offshore in the west of the region, but also the influence of easterly waves moving across the north of South America through the ITCZ.

Expected Impacts



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Further flash flood and landslide events seem increasingly likely through the next week, threatening transport infrastructure and settlements in the region.

Africa

Eastern parts of Tanzania and Kenya, along with the far northeast of Mozambique

Weather

Very heavy seasonal rainfall has fallen through the past few days, with Zanzibar seeing their usual May rainfall (around 290 mm) in a 2 day period earlier this week.

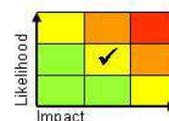
Above average shower and thunderstorm activity is expected to continue across eastern parts of Tanzania and southern Kenya until the end of the weekend, although activity is expected to gradually reduce with time into the early part of next week. A further 50-100 mm of rainfall is possible per day, but some locations could receive as much as a further 300 mm of rain by the middle of next week. Until Saturday there is the potential for the enhanced rainfall to extend south into the far northeast of Mozambique, possibly bringing up to an additional 50 mm of rainfall here.

Discussion

Whilst the remnants of Tropical Cyclone Kenneth have dissipated, the inter-tropical convergence zone will maintain the focus for frequent heavy showers and thunderstorms through the next week across eastern Tanzania and the extreme southeast of Kenya, enhanced by an Equatorial Rossby Wave that will extend the heavy rainfall south across the border into northeast Mozambique until Saturday. Increasing SW'ly flow to the S of the ITCZ, associated with developing monsoonal flow in the Indian Ocean Basin, will also contribute to the enhancement of showers and thunderstorms in this region.

Expected Impacts

Further flash flooding and damage to property and infrastructure in large cities like Dar es Salaam and Mombasa, plus the popular tourist destinations of Zanzibar. The far northeast of Mozambique, still recovering from the impacts of Tropical Cyclone Kenneth, could see an increased threat of flooding from a period of heavy rainfall later this week. This would be unseasonably late heavy rainfall here.



Middle East

Nil significant.

Asia

Southeastern Indonesia, Timor-Leste and Micronesia – see *Tropical Cyclones* section.

Australasia

Melanesia – see *Tropical Cyclones* section.

Additional information

Nil.

Issued at: 100700 UTC **Meteorologists:** Nick Silkstone / Paul Hutcheon

Global Guidance Unit

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