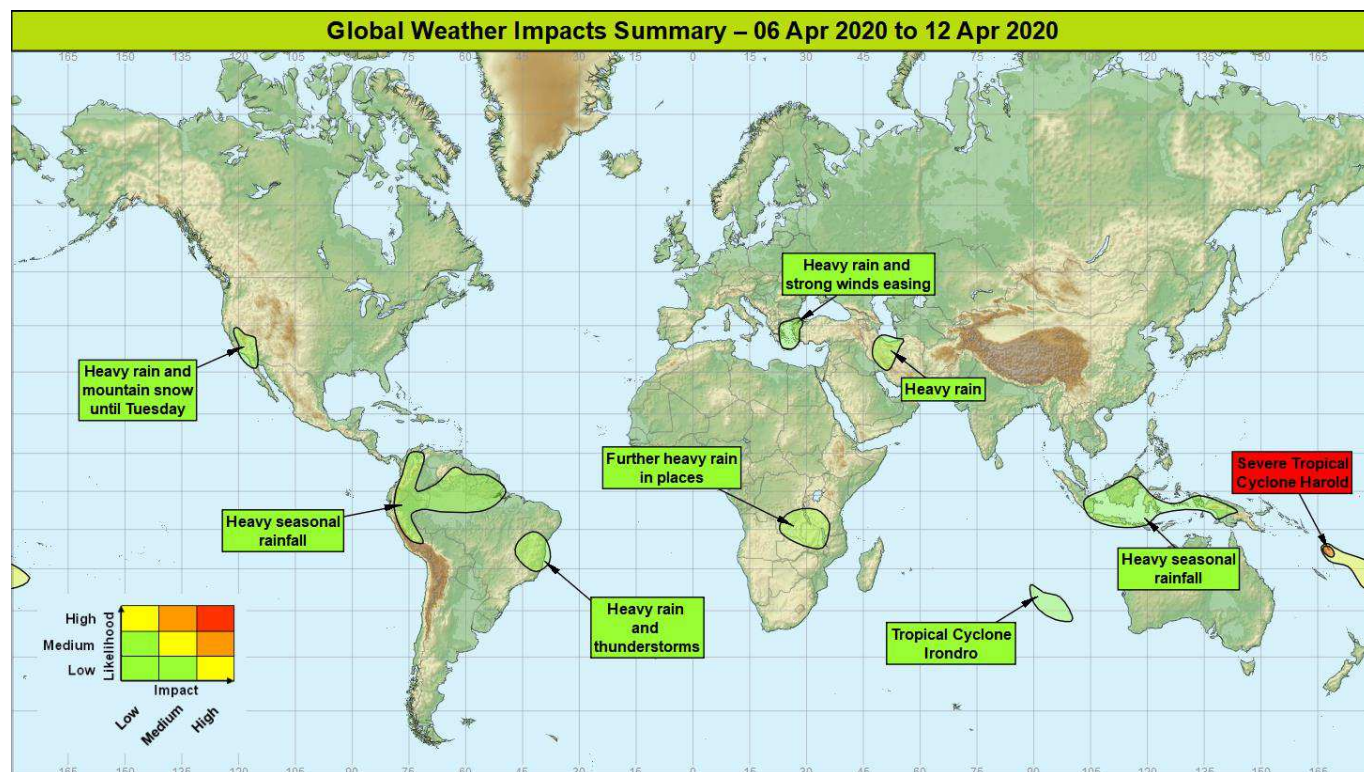


Global Weather Impacts – Monday 6th to Sunday 12th April 2020

Issued on Monday 6th April 2020

HEADLINES

- Severe Tropical Cyclone Harold impacting Vanuatu today (Monday).



DISCUSSION

Tropical Cyclones

Severe Tropical Cyclone Harold (Southwest Pacific Ocean including Vanuatu)

Weather

Harold is now tracking across the Vanuatu archipelago with its centre located around 100 miles north of Port Vila at 0600 UTC. The latest official advisory (from RSMC Nadi, Fiji) continues to have Harold as a category 5 cyclone with sustained winds of around 135 mph and gusts 170 to 180 mph. Harold will continue to track east-southeast across Vanuatu today with the greatest impacts across the provinces of Sanma (including Luganville - population 16k), Penama and Malampa. In addition to the destructive winds 200-300mm of rain will fall along its track with the potential of a few locations to see 300-400mm. The worst conditions are expected to remain north of the capital Port Villa. Average April rainfall in Luganville is 285 mm and annually 2720 mm.

After clearing Vanuatu there is fairly high confidence that Harold will track close to the southwest of Fiji and then Tonga during Tuesday and Wednesday. Whilst the system is unlikely to weaken substantially, the strongest winds currently look most likely to remain offshore for these areas.



This forecast may be amended at any time

Global Guidance Unit, Operations Centre, Met Office, FitzRoy Road, Exeter, Tel: +44(0)1392 884319

VPN: n6225 4319 Email: ggu@metoffice.gov.uk

© Crown copyright 2020. This information is for use by UK government only. It does not replace the advice and guidance provided by the official meteorological service for this region. Where there is a requirement to share this information with non-UK government agencies, please contact the Met Office to discuss.

Discussion

Low vertical wind shear and warm sea surface temperatures contributed to the rapid intensification of Harold over the weekend. Weaker steering flow across the system has resulted in relatively slow movement before sub-tropical westerlies associated with a broad upper trough strengthen across the system and accelerate it southeastwards. The rate at which this occurs lends some uncertainty to its trajectory towards Fiji by the middle of this week. Increasing wind shear and lowering SSTs (in part due to upwelling initially) will likely result in some modest weakening.

Expected Impacts

Destructive winds are likely to disrupt communication and prevent inter-island transport until Harold has passed. Poorly built structures, trees and crops are likely to be significantly damaged or destroyed. Heavy rain is likely to cause significant flooding with a risk to life. High seas and large waves are likely to cause damage to harbours and some coastal flooding.

Tropical Cyclone Irondro (South Indian Ocean)

Weather

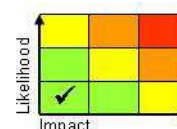
Tropical Cyclone Irondro continues to move southeastwards over the open water of the southern Indian Ocean with no impact to land expected before dissipating early this week.

Discussion

Irondro has now moved out of an environment favourable for further development and is expected to slowly weaken as it merges with a mid-latitude frontal system this week.

Expected Impacts

Nil.



Europe

Aegean Sea region including Greece and western Turkey

Weather

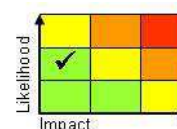
An area of low pressure will continue to bring a combination of heavy rain and strong winds to southeast Europe, with the heaviest rainfall expected around the Aegean coastline of Greece today (Monday) before easing by Tuesday. The heaviest rainfall is expected to affect the coastal areas of Central Greece and Thessaly where event totals of 100-200 mm locally 250 mm are expected (today's rain in addition to what fell here over the weekend). With the exception of the Peloponnese, much of Greece and the far west of Turkey (including Istanbul) will receive their average April rainfall of 30-60 mm. Severe gales are also likely to affect parts of the Aegean Sea.

Discussion

A diffluent upper trough is engaging a plume of high WBPT from northeast Africa with the occluding portion of the resulting system pivoting over the Aegean before slowly clearing east later on Monday. Strong winds are also developing within the cold conveyor belt on the northwestern flank of the system across the Black Sea into the Aegean.

Expected Impacts

Surface water and riverine flooding are both likely, with an increased risk of landslides in areas where the terrain is steep. Strong winds in the Aegean are likely to disrupt maritime transport in the region.



This forecast may be amended at any time

Global Guidance Unit, Operations Centre, Met Office, FitzRoy Road, Exeter, Tel: +44(0)1392 884319

VPN: n6225 4319 Email: ggu@metoffice.gov.uk

© Crown copyright 2020. This information is for use by UK government only. It does not replace the advice and guidance provided by the official meteorological service for this region. Where there is a requirement to share this information with non-UK government agencies, please contact the Met Office to discuss.

North America

California and Nevada, USA and Baja California, Mexico

Weather

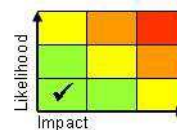
Heavy rain and mountain snow is expected to affect California, western Nevada and the far northwest of Baja California, Mexico until Tuesday. Along the South California coast, including Santa Barbara and Los Angeles, locally 80 mm of rain could fall during this 48-hour period. The snow level will steadily decrease early this week with accumulating snow possible to around 1400 metres over the Sierra Nevada and Northern California ranges where 50-100 cm of snow is likely.

Discussion

A cut-off low will develop from an extending upper trough over the weekend and dredge up a plume of sub-tropical moisture on its eastern flank. Orographic enhancement of rainfall within a persistent southwesterly flow will support some large snowfall accumulations over the Northern California and Sierra Nevada ranges with heavy rain along the southern California coast.

Expected Impacts

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



Central America

Nil.

South America

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

Weather

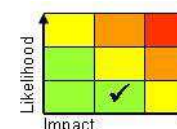
Enhanced shower and thunderstorm activity are signalled to continue across much of the northern Andes and Amazon through this period. A further 150-300mm of rainfall is likely to fall across the area. This represents locally more than double the average rainfall for parts of this region which have been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

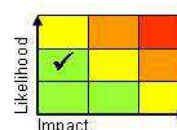
Slow-moving heavy showers and thunderstorms are expected to develop across eastern parts of Brazil from Thursday. As much as 100-150mm of rain could fall in a few places each day. This is roughly equivalent to a month's worth of rainfall.

Discussion

An active pulse in the SACZ is well signalled to develop from Thursday which will help focus heavy rain and thunderstorms across eastern parts of Brazil.

Expected Impacts

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



This forecast may be amended at any time

Global Guidance Unit, Operations Centre, Met Office, FitzRoy Road, Exeter, Tel: +44(0)1392 884319

VPN: n6225 4319 Email: ggu@metoffice.gov.uk

© Crown copyright 2020. This information is for use by UK government only. It does not replace the advice and guidance provided by the official meteorological service for this region. Where there is a requirement to share this information with non-UK government agencies, please contact the Met Office to discuss.

Africa**Zambia, southern DRC, northern Zambia, Tanzania and northern Malawi****Weather**

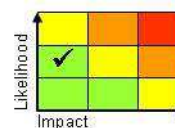
Following a wet March where much of the region received around double the average rainfall for the month, shower and thunderstorm activity is expected to remain above normal through this week.

Discussion

The northern portion of an upper trough in the mid-latitude flow well to the south will engage tropical moisture across Angola initially on Monday. Further east, despite being at a time of year when the ITCZ bodily shifts northward across Africa, a temporary southward shift is signalled bringing renewed rainfall further south to prolong the wet season a little longer.

Expected Impacts

Given recent heavy rainfall that has already caused flooding impacts to some communities in the region, this additional rainfall will likely maintain high river levels and saturated ground for a little longer. Crops in the region may also be adversely affected.

**Middle East****Northern Iran****Weather**

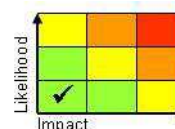
Further spells of persistent and locally heavy rain are expected to affect the northern and western provinces of Iran this week. The heaviest rainfall is expected along the Caspian Sea coast, including cities such as Rasht and Sari, although Tehran may be at risk later in the week. 40-60 mm of rainfall is expected quite widely over the next week, equivalent to the average monthly rainfall for April, with locally 100 mm along the coast.

Discussion

A succession of Western Disturbances embedded within the STJ will continue to transfer east across northern Iran over the next week. Increasing baroclinicity due to a cold surge across northwest Asia by Tuesday will be the focus for a prolonged spell of rainfall until Friday.

Expected Impacts

Whilst the focus for flooding impacts in recent weeks has been across the south of the country, localised flash flooding is likely across the northern provinces this week.

**Asia****Malaysia, Indonesia and Papua New Guinea****Weather**

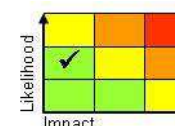
Shower and thunderstorm activity is expected to remain more widespread than normal over this week with many places receiving 50-100 mm during this time, with 300 mm for a few spots. The heaviest rainfall is expected to affect coastal regions around the Java Sea, particularly southern Borneo and East Java, including Surabaya.

Discussion

Whilst the MJO is now moving east into the western Pacific, a Kelvin wave is now approaching the Maritime Continent and will act to maintain the theme of above average rainfall over this week. However, the impact of Tropical Cyclone Harold will likely draw drier air northward across the Solomon Islands and act to suppress rainfall here relative to this week.

Expected Impacts

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

**Australasia****Vanuatu and Fiji** – see *Tropical Cyclones* section.**Additional Information:**

Nil.

Issued at: 060800 UTC **Meteorologists:** Chris Tubbs / Chris Bulmer

Global Guidance Unit

This forecast may be amended at any time

Global Guidance Unit, Operations Centre, Met Office, FitzRoy Road, Exeter, Tel: +44(0)1392 884319

VPN: n6225 4319 Email: ggu@metoffice.gov.uk

© Crown copyright 2020. This information is for use by UK government only. It does not replace the advice and guidance provided by the official meteorological service for this region. Where there is a requirement to share this information with non-UK government agencies, please contact the Met Office to discuss.