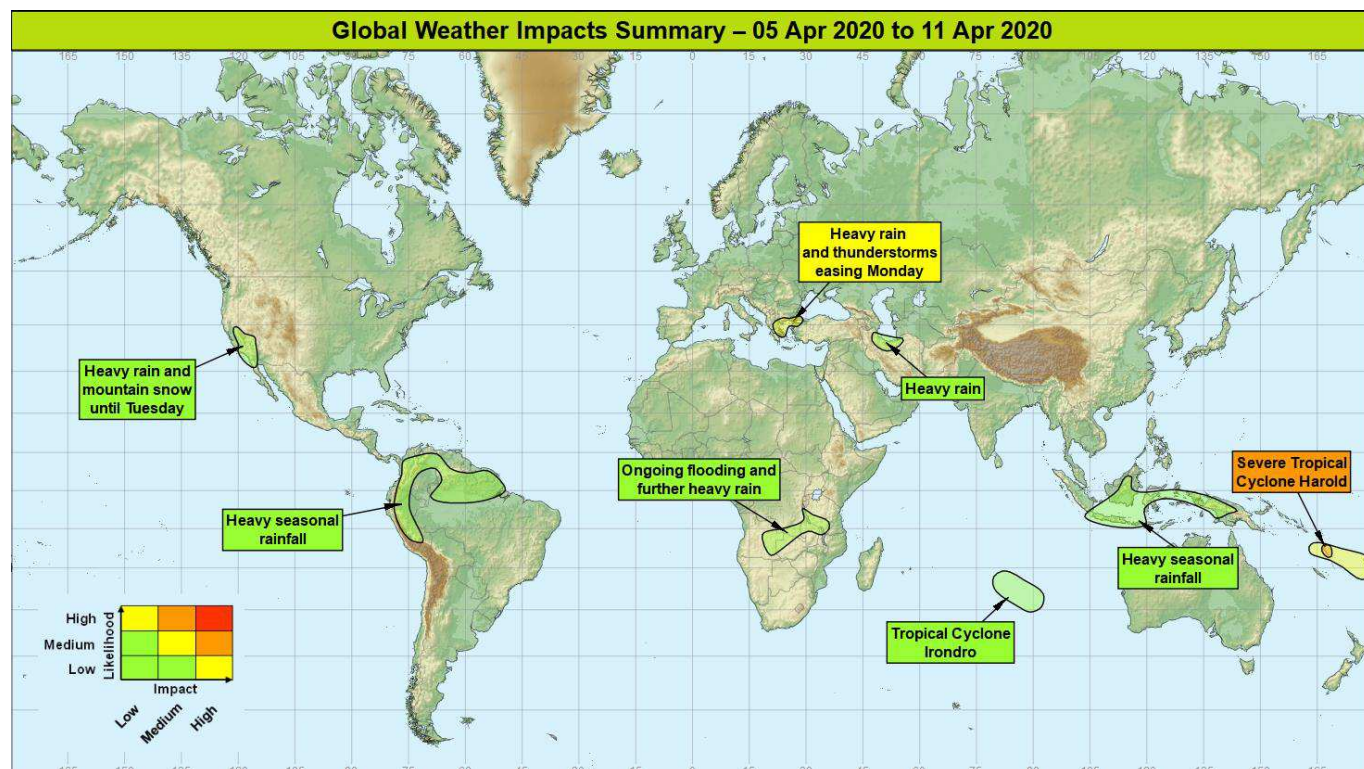


## Global Weather Impacts – Sunday 5<sup>th</sup> to Saturday 11<sup>th</sup> April 2020

Issued on Sunday 5<sup>th</sup> April 2020

### HEADLINES

- Destructive winds and torrential rain from Severe Tropical Cyclone Harold to impact Vanuatu over the next few days.
- Some flooding likely due to heavy rain continuing across Greece until Monday.



### DISCUSSION

#### Tropical Cyclones

#### Severe Tropical Cyclone Harold (Southwest Pacific Ocean including Vanuatu)

##### Weather

Harold was located around 225 miles northwest of Port Vila, Vanuatu on Sunday morning and is moving slowly southeast. Harold rapidly intensified during Saturday and is now producing maximum sustained winds of up to 125 mph offshore and is forecast to strengthen further to above 125 mph offshore on Sunday. Some slight weakening is possible before crossing the archipelago on Monday but is still expected to produce destructive winds on some islands. Some uncertainty exists in the exact track but the strongest winds are likely to affect the islands of Malakula and Espiritu Santo, including Luganville (pop. 16k) through to the end of Monday. In addition to very strong winds, 200-300 mm of rain is expected along its track with isolated accumulations of 600-800 mm. Average April rainfall in Luganville is 285 mm and annually 2720 mm. There is the possibility of Harold then passing close to Fiji through the middle of next week.



**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](mailto:ggu@metoffice.gov.uk)

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## Discussion

Low vertical wind shear and warm sea surface temperatures contributed to the rapid intensification of Harold on Saturday. Weaker steering flow across the system is resulting in much slower motion over the next 24 hours before sub-tropical westerlies associated with a broad upper trough strengthen across the system and accelerate it southeastward. The rate at which this occurs lends some uncertainty to its trajectory across Vanuatu and onward towards Fiji next week. The consensus suggests a central track across Vanuatu and remaining south of Fiji. Increasing wind shear and lowering SSTs (in part due to upwelling initially) will likely result in some weakening prior to landfall and more generally through next week.

## 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

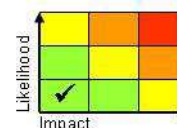
Tropical Cyclone Irondro continues to move southeast over the open water of the southern Indian Ocean with no impact to land expected before dissipating early next week.

### 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 next week.

### Expected Impacts

Nil.



## Europe

### Aegean Sea region including Greece and western Turkey

#### Weather

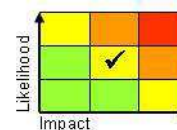
An area of low pressure will continue to bring a combination of heavy rain and strong winds to southeast Europe, with the heaviest rainfall expected around the Aegean coastline of Greece today (Sunday) before easing on Monday. The heaviest rainfall is expected to affect the coastal areas of Central Greece and Thessaly where event totals of 100-200 mm locally 250 mm are expected. 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 today before slowly clearing east through 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 is likely to disrupt maritime transport in the region.



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

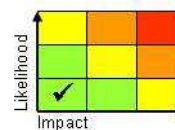
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VPN: n6225 4319 Email: [ggu@metoffice.gov.uk](mailto:ggu@metoffice.gov.uk)

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**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 100 mm of rain could fall during this 72-hour period. The snow level will steadily decrease through early next 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**

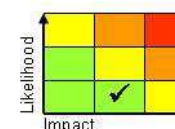
Enhanced shower and thunderstorm activity are signalled to continue across much of the northern Andes and Amazon through this period. A further 150-300mm of rainfall is likely to fall across the area. This represents locally more than double the average rainfall for parts of this region which have been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

**Expected Impacts**

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

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

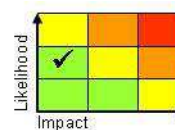
Following a wet March where much of the region received around double of the average rainfall for the month, shower and thunderstorm activity is expected to remain above normal through the next week. This will initially be concentrated over Angola on Sunday before transferring east into southern DRC, Tanzania and northern Malawi early next 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 Sunday. Further east, despite being at a time of year where 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.



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

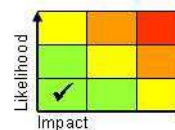
Further spells of persistent and locally heavy rain are expected to affect the northern provinces of Iran over the next week. The heaviest rainfall is expected along the Caspian Sea coast, including cities such as Rasht and Sari, although Tehran may be at risk later in the week. 40-60 mm of rainfall 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 subtropical jet will continue 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.

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

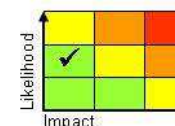
Shower and thunderstorm activity is expected to remain more widespread than normal over this week with many places receiving 50-100 mm during this time, with 300 mm for a few spots. The heaviest rainfall is expected to affect coastal regions around the Java Sea, particularly southern Borneo and East 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 the next 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:** 050230 UTC    **Meteorologists:** Matthew Lehnert / Martin Young

**Global Guidance Unit**

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

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