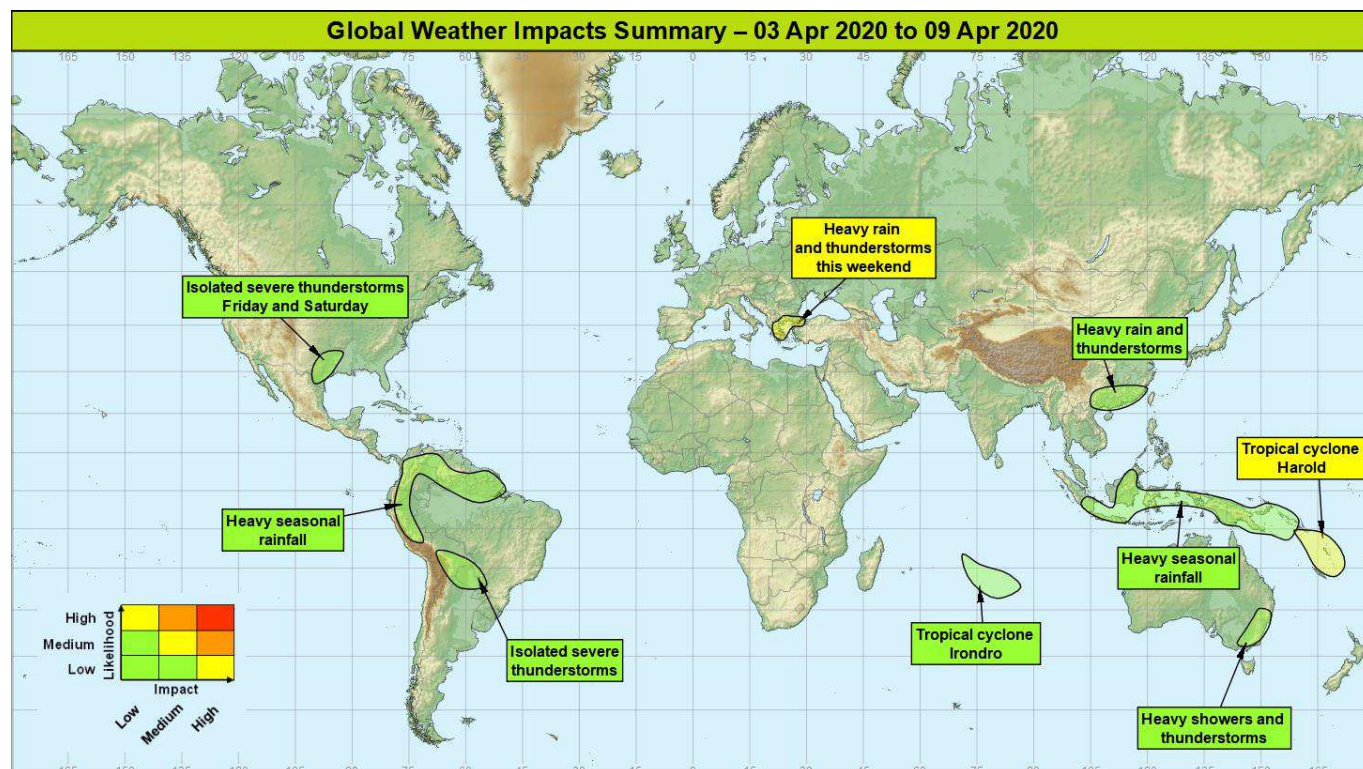


## Global Weather Impacts – Friday 3<sup>rd</sup> to Thursday 9<sup>th</sup> April 2020

Issued on Friday 3<sup>rd</sup> April 2020

### HEADLINES

- Tropical Cyclone Harold continues southeast across the southwest Pacific.
- Tropical Cyclone Irondro remains over open water in the southern Indian Ocean.
- Heavy rain for parts of southeast Europe this weekend, particularly Greece.



### DISCUSSION

#### Tropical Cyclones

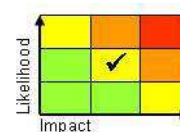
##### Tropical cyclone Harold - Southwest Pacific

##### Weather

Tropical cyclone Harold developed on Thursday and is currently located near to the southeastern tip of the Solomon Islands and moving southeast at 20mph. Harold currently has maximum sustained winds of 40-45mph. There remains some uncertainties about the exact track of Harold, but regardless, it is likely to bring heavy rain to the Solomon Islands, New Caledonia and/or Vanuatu through the weekend and into early next week. 150-300mm of rain is likely from Harold, whilst should it make landfall over some of the more mountainous islands of the region, then totals could approach 800mm.

##### Discussion

An active Indian Ocean and Maritime continent with respect to tropical wave activity continues. The SPCZ is also very active, and it is this which has spawned tropical storm Harold. There remains significant differences between the main global models as well as EPS data with respect to the storm's track, and therefore islands at risk of destructive winds. Regardless, heavy rain can be expected widely, impacting the islands listed above.



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

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## Expected Impacts

Should Harold make landfall, then damaging or even destructive winds are possible along with large waves and inundation of coastal areas likely. Heavy rain will bring flash-flooding risk to many of the islands in the area.

## Tropical storm Irondro - Southern Indian Ocean

### Weather

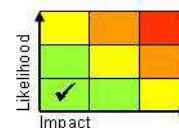
Tropical storm Irondro formed on Thursday well to the south of Diego Garcia. The system is expected to track south-east over the next few days, staying over open water.

### Discussion

An active Indian Ocean, characterised by a passing MJO, as well as multiple tropical waves, has resulted in the development of Irondro. The system is expected to continue to strengthen as it moves ESE, though with no impacts.

### Expected Impacts

Nil.



## Europe

### Parts of southeast Europe

### Weather

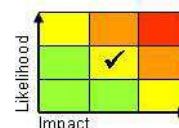
Several bouts of heavy rain and thunderstorms are expected to affect the area with the worst conditions over the weekend. Coastal areas of Greece, as well as more mountainous areas elsewhere, will see the heaviest rain. By the time conditions ease early next week, 40-60mm of rain is likely widely, with 150-200mm over some higher ground. For context, average rainfall for all of April in the region is between 20-40mm.

### Discussion

A sharpening upper trough, responsible for heavy showers and thunderstorms across the Balearics over the last few days, is signalled to dig south into northern Africa over the next 24-36 hours. The trough is then expected to be swept ENE by an approaching ridge, leading to it disrupting to the SW of Greece. On the forward side, theta-W in excess of 12°C is signalled to be drawn N, leading to elevated convection and also enhanced baroclinicity. This will lead several rounds of heavy rain and mountain snow across the area and into the early part of next week.

### Expected Impacts

Flash and some fluvial flooding both likely, along with an enhanced risk of landslides in areas where terrain is steep. Snowfall across mountains of northern Greece and the southern Balkans is also likely.



## North America

### Texas

### Weather

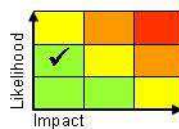
Severe thunderstorms are likely to develop across central parts of the southern USA through Friday, lasting into Saturday. The most intense and widespread thunderstorms are likely across parts of Texas, where a few tornadoes, large, damaging hail and 30-60mm of rain is likely widely, and perhaps 150-200mm in places in association with the most severe thunderstorms. For context, Austin's average rainfall for April is 56.2mm. Conditions should improve quickly during the latter part of the weekend.

### Discussion

An upper trough is expected to advance from the Rockies, engaging a plume of very moist air from the Gulf of Mexico. A low-level jet is also likely to develop, bringing 1000-2000J/kg of CAPE, as well as reasonable shear. This dynamical set-up is conducive to supercell developments, bringing all hazards to the area.

### Expected Impacts

Localised property and infrastructure damage from a combination of flash flooding, damaging strong winds, and tornadoes. Large hail and frequent lightning could also produce impacts.



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**Central America**

Nil.

**South America****Colombia, Peru, Ecuador, northern Brazil, Suriname, Guyana and Venezuela****Weather**

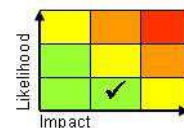
Enhanced shower and thunderstorm activity are signalled to continue across much of the northern Andes and Amazon through this period. A further 150-300mm of rainfall is likely to fall across the area. This represents locally more than double the average rainfall for parts of this region which have been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

**Northern Argentina, Paraguay, southern Bolivia and southern Brazil****Weather**

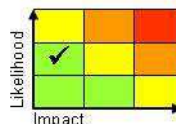
Heavy showers and thunderstorms are expected to continue across the area through Friday, before easing into Saturday. These storms are likely to bring 20-40mm of rain widely, with some spots seeing 100-150mm, this several times the average for April, which is around 50-60mm.

**Discussion**

A mid-latitude cold front, well-forced by an extending trough, is likely to continue to be the source of severe convection across the area until early tomorrow (Saturday). With ~1500J/kg of CAPE available, fast training MCS are possible ahead of the cold front, bringing torrential downpours.

**Expected Impacts**

Flash flooding and localised fluvial flooding, with a low risk of some highly localised damage from strong winds, large hail or an isolated tornado.

**Middle East**

Nil.

**Asia****Southern China****Weather**

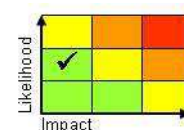
A period of heavy rain is expected to continue into early next week. During this period, 50-100mm of rainfall is likely to fall quite widely with peaks of 200-250mm possible in places. In many locations half of the total precipitation will likely fall in less than 24 hours. The average rainfall for April in this region is between 125 mm and 200 mm.

**Discussion**

A strong baroclinic zone has become established across this region and this will remain fairly slow-moving. Various shortwave features in a modest sub-tropical jet will engage this zone, generating areas of heavy rainfall and thunderstorms which will run eastwards. However as this is near the start of the wet season in this area, impacts are expected to be minimal.

**Expected Impacts**

Localised flash flooding causing damage to property and infrastructure.



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**Malaysia, Indonesia, Papua New Guinea and Solomon Islands****Weather**

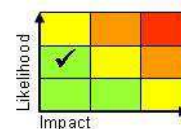
Shower and thunderstorm activity is expected to remain more widespread than normal over this week with many places receiving 50-100 mm during this time, with 300 mm for a few spots. The heaviest rain is expected to occur over New Guinea, including Port Moresby, during this period.

**Discussion**

The MJO will approach, then track across this region over the coming week, and in addition to this, multiple tropical waves will remain active in the region, leading to enhanced rainfall.

**Expected Impacts**

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

**Australasia**

**Solomon Islands, New Caledonia and Vanuatu** – See the Tropical Cyclones section.

**Southeast Australia****Weather**

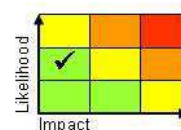
Heavy showers and thunderstorms will affect southeastern parts of Australia until early tomorrow (Saturday), with up to 50-75 mm of rain falling in a 6-12 hour period in places. Hail and frequent lightning is also possible. Drier and cooler conditions will become established across this region into the weekend.

**Discussion**

A major upper trough is signalled to drive an active cold front ENE across this region of Australia over the next 24 hours. Ahead of the cold front, active thunderstorms are possible as CA aloft overruns the underlying warm, moist tropical air. Some short-lived severe storms are possible.

**Expected Impacts**

Localised flash flooding. Lower likelihood of hail / lightning impacts.

**Additional Information:**

Nil.

**Issued at:** 030800 UTC    **Meteorologists:** Jason Kelly / Chris Bulmer

**Global Guidance Unit**

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

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