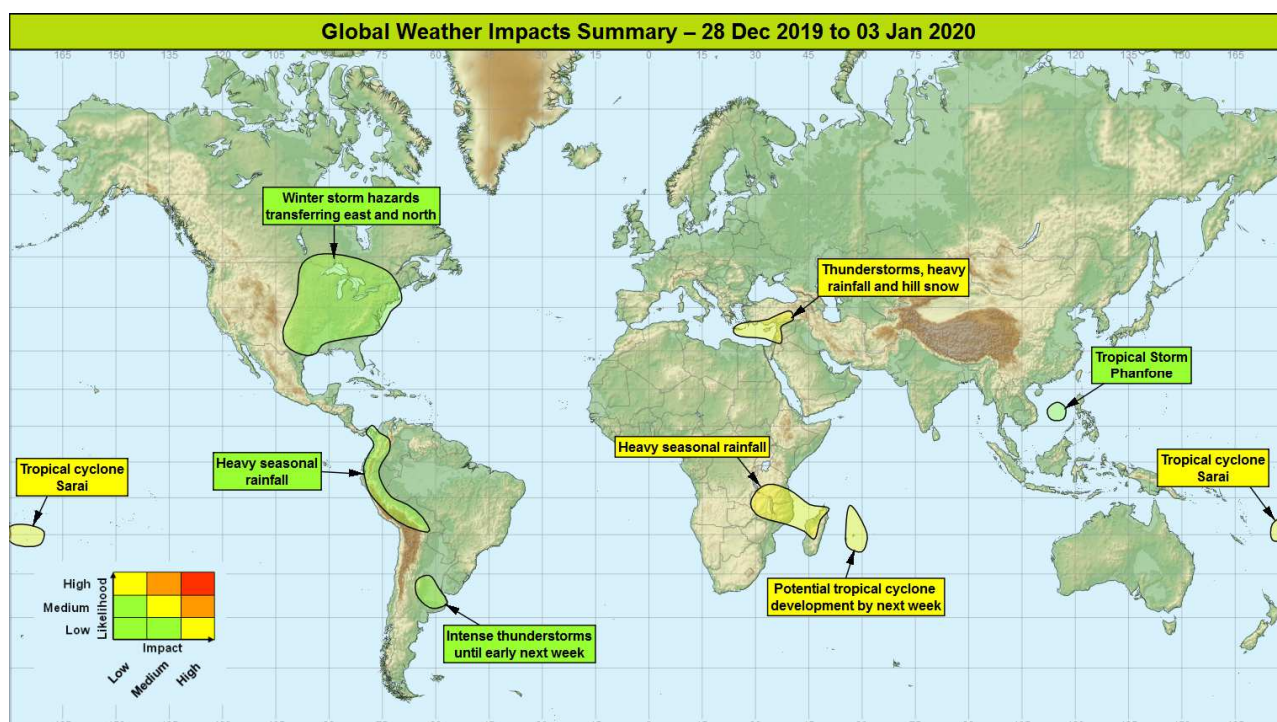


## Global Weather Impacts – Saturday 28<sup>th</sup> December 2019 to Friday 3<sup>rd</sup> January 2020

Issued on Saturday 28<sup>th</sup> December 2019

### HEADLINES

- Very unsettled across the eastern Mediterranean.
- Tropical cyclone Sarai affecting Fiji and potentially Tonga.
- Potential tropical cyclone developing in the southwest Indian Ocean.
- Very heavy seasonal rainfall for parts eastern Africa.



### DISCUSSION

#### Tropical Cyclones

#### Tropical Cyclone Sarai

##### Weather

Tropical Cyclone Sarai has tracked south just west of Fiji through Friday and is expected to track east just to the south of Fiji this weekend, maintaining sustained winds of 55 to 70 mph. Early next week Sarai is expected to continue eastwards at a similar strength across Tonga.

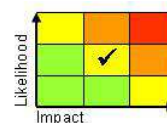
As well as the tropical storm force winds, up to 400-600mm of rainfall is likely to be associated with this cyclone (2 to 3 times the average December rainfall), with very rough sea states around the islands.

##### Discussion

There is good model agreement for a slow eastward track of Sarai just south of the main Fijian islands this weekend, but with increasing uncertainty thereafter. This is associated with the interaction, or not, of Sarai with a higher latitude disrupting upper trough. It is possible that Sarai may become slow moving as a decaying feature close to Fiji rather than track east to affect Tonga next week.

##### Expected Impacts

Flash flooding seems likely, along with some structural wind damage. There is also the potential for minor storm surge flooding too.



**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)

**Tropical Storm Phanfone****Weather**

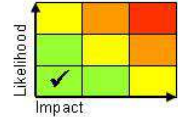
Phanfone has continued to weaken through Friday, down to tropical storm strength with sustained winds of around 50 mph, as it continues to track westwards across the South China Sea. This system is expected to weaken further and decay during Saturday.

**Discussion**

Strong wind shear will continue to weaken Phanfone through Saturday.

**Expected Impacts**

Any further impacts restricted to maritime activities due to strong winds and rough seas.



The following area are being monitored for potential development:

**Southwest Indian Ocean – La Reunion, Mauritius and Rodrigues****Weather**

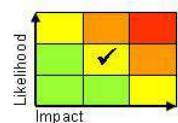
There is a reasonable likelihood of a tropical cyclone developing in the southwestern Indian Ocean this weekend, possibly tracking close to Reunion and Mauritius next week, but the island of Rodrigues is most likely to see impacts from this developing system. Up to 400 mm of rainfall is likely to be associated with this system (around 4 times the December average rainfall), along with tropical storm force winds and very rough seas.

**Discussion**

Fairly consistent model signal for a modest tropical cyclone development to take place this weekend east of northern Madagascar, and the resultant system to track south to affect one or more of the Mascarene Islands next week, although the exact track remains fairly low confidence.

**Expected Impacts**

Flash flooding and an enhanced threat of landslides, with a lower likelihood of storm surge flooding.

**Europe****Eastern Mediterranean, southern Turkey, Crete, Cyprus, western Syria, Lebanon and****Israel****Weather**

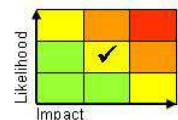
Periods of widespread / frequent thunderstorms will affect this region at times through the next week, with peak activity likely on Sunday and Monday. Up to 200 mm of rainfall could accumulate in places through the next 7 days (up to twice the December average rainfall), with the potential for 50-100 mm of rain in just 24 hours during the peak activity period. Strong or gale force winds will build rough or very rough seas at times.

**Discussion**

A persistent cyclonic upper pattern will result in periods of deep convection across this region through the next week. Organised thunderstorm activity is possible due to large CAPE and favourable vertical wind shear. As the centre of gravity of the upper vortex/trough edges eastwards, cold air will be allowed to flood south, allowing precipitation to increasingly fall as snow over higher parts of Turkey and Syria, mainly above 1200 metres.

**Expected Impacts**

Flash flooding and landslides are an enhanced likelihood. Dangerous seas conditions likely at times.



**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)

© Crown copyright 2019. 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

### Central and eastern USA along with southeastern Canada

#### **Weather**

A developing area of low pressure and associated active frontal system will transfer east and northeast across much of the central and eastern part of North America through the weekend and start of next week.

Northern areas will see a mixture of heavy snow (up to 25-40 cm) and freezing rain, with southern parts of the region seeing heavy rainfall (up to 50-100 mm in 24 hours) and thunderstorms.

Much more settled conditions will follow by midweek.

#### **Discussion**

A major long wave upper trough will engage a warming plume from the south, resulting in a cyclogenesis event that will then be steered east and northeast across the continent.

#### **Expected Impacts**

Power and transport network issues are likely in association with winter hazards. Flash flooding is possible in the south due to thunderstorms.



## Central America

**Panama** – see *South America section*

## South America

### Panama, western Colombia, Ecuador, Peru and Bolivia

#### **Weather**

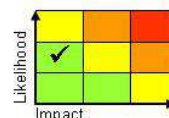
Continued heavy seasonal rainfall in the form of more widespread / frequent thunderstorms will affect areas close to the Andes Mountains from Bolivia northwards through the next week. Up to 300 mm of rainfall is expected in places (around twice the average December rainfall).

#### **Discussion**

With the South American Monsoon now extending well southward, daily rounds of showers and thunderstorms are expected to form to the west of the Andes of Colombia and Ecuador, and to the east of the Andes further south. The region highlighted has seen above average rainfall during the past weeks.

#### **Expected Impacts**

Flash flooding and landslides are an enhanced likelihood.



## Northern Argentina

#### **Weather**

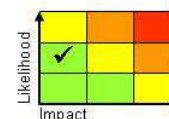
Intense thunderstorms are expected at times through the next 4 days bringing torrential rain (50-100 mm of rain could fall in a few hours), large hail, frequent lightning and strong wind gusts.

#### **Discussion**

The airmass over northern Argentina will be very unstable until early next week with forecast profiles showing CAPE of ~3000J/kg and significant wind shear that will allow for the development of severe thunderstorms.

#### **Expected Impacts**

Flash flooding along with the potential for property and crop damage from strong wind and large hail. Lightning strikes could lead to power outages in places.



**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)

© Crown copyright 2019. 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

**La Reunion, Mauritius and Rodrigues** – See *Tropical Cyclones* section

### **Madagascar, Mozambique, Tanzania, Malawi and Zambia**

#### **Weather**

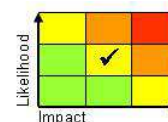
More widespread / frequent thunderstorms than is usually expected will affect this region of eastern Africa at times through the next week, producing up to 300 mm of rainfall in places during the next 7 days (around twice the average December rainfall).

#### **Discussion**

Strong model signal for the ITCZ to be active across this region of Africa through the next week.

#### **Expected Impacts**

There will be an enhanced likelihood of some flash flooding and landslides.



### Middle East

**Western Syria, Lebanon and Israel** – see *Europe* section

### Asia

**South China Sea** – see *Tropical Cyclones* section

### Australasia

**Fiji and Tonga** – see *Tropical Cyclone* section

### Additional Information

#### **Southern and eastern Australia**

Numerous bush fires continue across parts of Victoria, eastern New South Wales, southeastern Queensland and Australian Capital Territory with dry conditions persisting across much of the region.

Heatwave conditions are likely to continue across much of this region through much of the next week, with maximum temperatures rising above 40 degrees Celsius (10 degrees Celsius above average).

A cold front is likely to progress northeast across southeastern Australia early next week, bringing a spell of strong winds for a time (mostly likely Monday and Tuesday).

So conditions are likely to remain conducive for further bushfire generation or spread during the next week.

The sheer size of many ongoing fires will continue to produce large amounts of small particulates that will contribute to very poor air quality for several weeks to come, affecting heavily populated areas such as Sydney.

**Issued at:** 280500 UTC    **Meteorologists:** Paul Hutcheon

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

© Crown copyright 2019. 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.