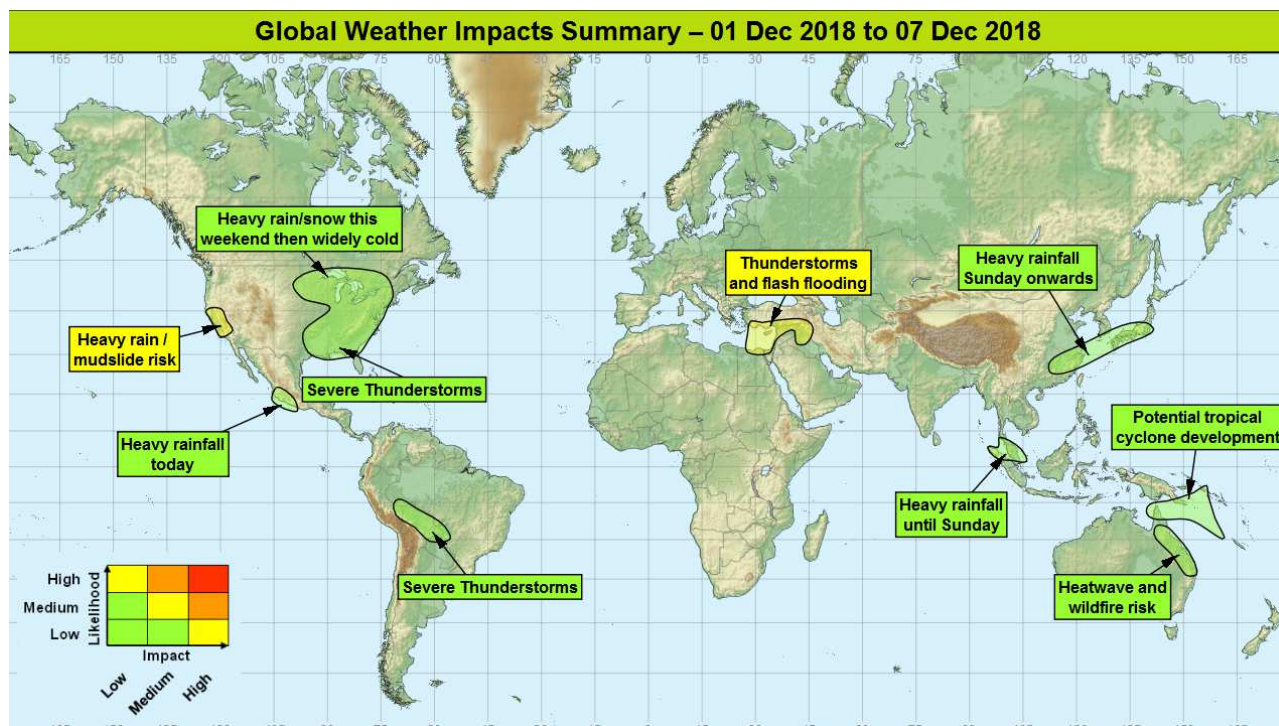


Global Weather Impacts – Saturday 1st December to Friday 7th December 2018

Issued on Saturday 1st December 2018

HEADLINES

- Further bouts of unsettled weather likely across the eastern Mediterranean and Levant.
- Heavy rain easing across California.
- Heat wave and wildfires continue across parts of Queensland, Australia.



DISCUSSION

Tropical Cyclones

There are no active tropical cyclones at present.

Potential Tropical Cyclones

Coral Sea, Solomon Islands and northeast Australia

Weather

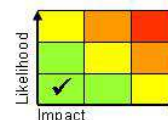
There is a low to moderate likelihood of a tropical cyclone developing in the Coral Sea this weekend. A tropical low in the Solomon Sea is expected to gradually strengthen as it tracks slowly south-west this weekend. Regardless of development this system is likely to bring very heavy rainfall to parts of The Solomon Island through the next couple of days. Locally 100-150 mm of rain is possible over 24 hours. The system is then likely to enter the Coral Sea after which huge model spread makes predicting its likely track and strength difficult.

Discussion

An equatorial Rossby wave near the Solomon Islands is associated with a broad area of shower and thunderstorm activity. There has been an increase in model support for a small circulation to develop as this moves into the Coral Sea this weekend. The likely track of the system is uncertain, although model ensembles still just about favour a turn west toward northern Queensland.

Expected Impacts

Heavy rainfall, often in a short period of time, is likely to lead to some localised flash flooding and an increased risk of landslides in parts of the Solomon Islands.



This forecast may be amended at any time

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Europe

Southern Turkey, Cyprus, Syria, Iraq, northern Egypt

Weather

Another day of severe thunderstorms across northern Syria and Iraq today. Up to 100 mm of rain could fall in a 24-hour period, much of this falling in a short period. Whilst quieter conditions are expected on Sunday, further heavy showers and thunderstorms are expected to migrate east across a similar region next week.

Discussion

The upper trough responsible for the disturbed weather will cross Syria and Iraq today. This will be followed by a transient upper ridge which should bring a couple of days of benign weather. However a further upper trough is expected to cross the eastern Mediterranean early next week. This will result in a remarkably similar set up to that seen over the past few days, unsurprisingly with similar results.

Expected Impacts

Thunderstorms will lead to a continued threat of flash flooding, with additional hazards to property, infrastructure and life from a combination of large hail, frequent lightning and tornadoes/waterspouts. Landslides are also possible across more mountainous parts of southern Turkey and northern Iraq.



North America

California

Weather

Low pressure will bring further heavy rain, mountain snow and strong winds to California through Saturday. 30 to 50 mm could fall in places, mainly across the north of the state.

Discussion

The upper pattern across the eastern Pacific is now becoming more amplified as a major trough digs down across the western USA, while an upper ridge builds over the eastern Pacific. This should cut off the run of low pressure systems which have brought heavy rainfall to the state for the past two weeks and allow a few days respite. By midweek a major upper vortex is signalled to lie just offshore, and this could herald a return to unsettled conditions.

Expected Impacts

In regions affected by recent wildfires, burn scars will be at an increased likelihood of ash and mudslides as well as debris flows due to heavy rainfall. Flash flooding of urban areas and some minor disruption to air transport is also possible due to the combination of embedded thunderstorm activity and strong winds.



North and east USA and southeast Canada

Weather

Another active spell of weather is expected to affect many parts of this region this weekend thanks to an area of low pressure now forming east of The Rockies. The more southern parts of the region will experience the most severe weather. Heavy rain and severe thunderstorms (up to 150 mm of rain in 24 hours), tornadoes and very large hail are likely in a zone from Oklahoma to Georgia and northern Florida. Areas further north are at risk of significant snowfall, perhaps 30 to 50 cm in parts of the northern plains and potential for freezing rain. Widespread cold conditions are expected to follow across much of continental North America through next week with accumulating snow expected downwind of the Great Lakes.

Discussion

An upper trough is now engaging a warm plume emerging from the Gulf of Mexico with an area of low pressure developing, then tracking northeast and emerging into the North Atlantic early next week. Thereafter, there is very good agreement for a widespread and prolonged cold spell to develop across much of North America.

Expected Impacts



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Combination of heavy rain and thunderstorms in the south will be associated with an increased risk of flash flooding, some disruption to air travel in the region and localised damage to property and infrastructure from lightning, very large hail and possibly tornadoes. Some short-term transport disruption is possible further north due to wintry precipitation.

Central America and Caribbean

Nil significant.

South America

Southeast Peru and Bolivia.

Weather

An active pulse of heavy monsoon rainfall is expected across this region of Peru and Bolivia through the next 2-3 days. Some places are likely to receive 100-150 mm in 24 hours, much of this falling in short periods of time. Severe thunderstorms are possible.

Discussion

An active phase of the South Atlantic Convergence Zone has progressed northwards over the past few days. This is likely being enhanced by the MJO moving through Phase 8 and should maintain above average rainfall in the region through much of next week. However the heaviest rainfall is likely through the weekend, with severe thunderstorms possible, east of the Andes. Forecast profiles show CAPE of around 2000 J/kg, with a degree of shear through the column allowing some organised convection to develop.

Expected Impacts

Flash and river flooding possible, along with frequent lightning, large hail and tornadoes in severe thunderstorms.



Africa

Northern Egypt – See *Europe* section.

Middle East

Syria and Iraq – See *Europe* section.

Asia

Malay Peninsula and north Sumatra

Weather

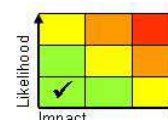
Shower and thunderstorm activity is expected to be widespread across the region from until Sunday with up to 100 mm falling in 24 hours, much of which will fall in short periods of time.

Discussion

An enhanced northeast monsoon flow will bring enhanced deep convection onshore across the Malay Peninsula and north Sumatra.

Expected Impacts

Localised flash flooding with a slight increase in the risk of landslides in more mountainous regions.



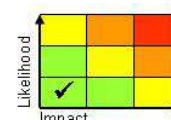
Eastern China, South Korea, South-western Japan

Weather

An active cold front is likely to be slow moving across this region from Sunday through into next week. Pulses of heavy rainfall and thunderstorms are likely move north-east, with some strong and gusty winds and large hail likely. Up to 100 mm per day could fall, with some parts of south-western Japan in particular perhaps seeing upward of 200 mm over a few days.

Discussion

A strong thermal gradient exists across this region between the frigid, Siberian air to the north, and the moist tropical air to the south. A strong jet aloft will induce waves along the front, bringing pulses of intense rainfall and thunderstorms. These waves will keep the front in a similar location for several days, allowing some large rainfall totals to accumulate.



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Expected Impacts

Flash flooding, large hail and gusty winds could lead to disruption to travel, including the busy shipping lanes through this region. Damage to crops and property is possible.

Australasia

Solomon Islands and Queensland – See *Tropical Cyclones* section.

Queensland

Weather

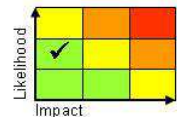
Heat wave conditions are expected to persist across a large part of Queensland, as well as some largely uninhabited parts of Northern Territories, through the weekend. Fire danger ratings in the state are high or very high, which although down from the 'catastrophic' rating given earlier in the week, maintain the risk for rapid fire development and spread. There is a growing signal for a thundery breakdown starting on Monday.

Discussion

Fire weather conditions have improved through the past couple of days but the dry and hot conditions are expected to persist over the weekend. However, an upper trough is expected to engage the resident warm plume across southern Queensland on Monday resulting in the triggering of thunderstorms followed by a transition to somewhat cooler conditions midweek.

Expected Impacts

Whilst the region is relatively sparsely populated, rapidly developing and spreading wildfires pose a threat to small communities. Heat wave conditions may have an adverse on human health. Thunderstorms may result in localised flash flooding and damage to property and infrastructure due to the combination of frequent lightning and large hail.



Additional information

Nil.

Issued at: 010820 UTC **Meteorologist:** Mark Sidaway

Global Guidance Unit

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