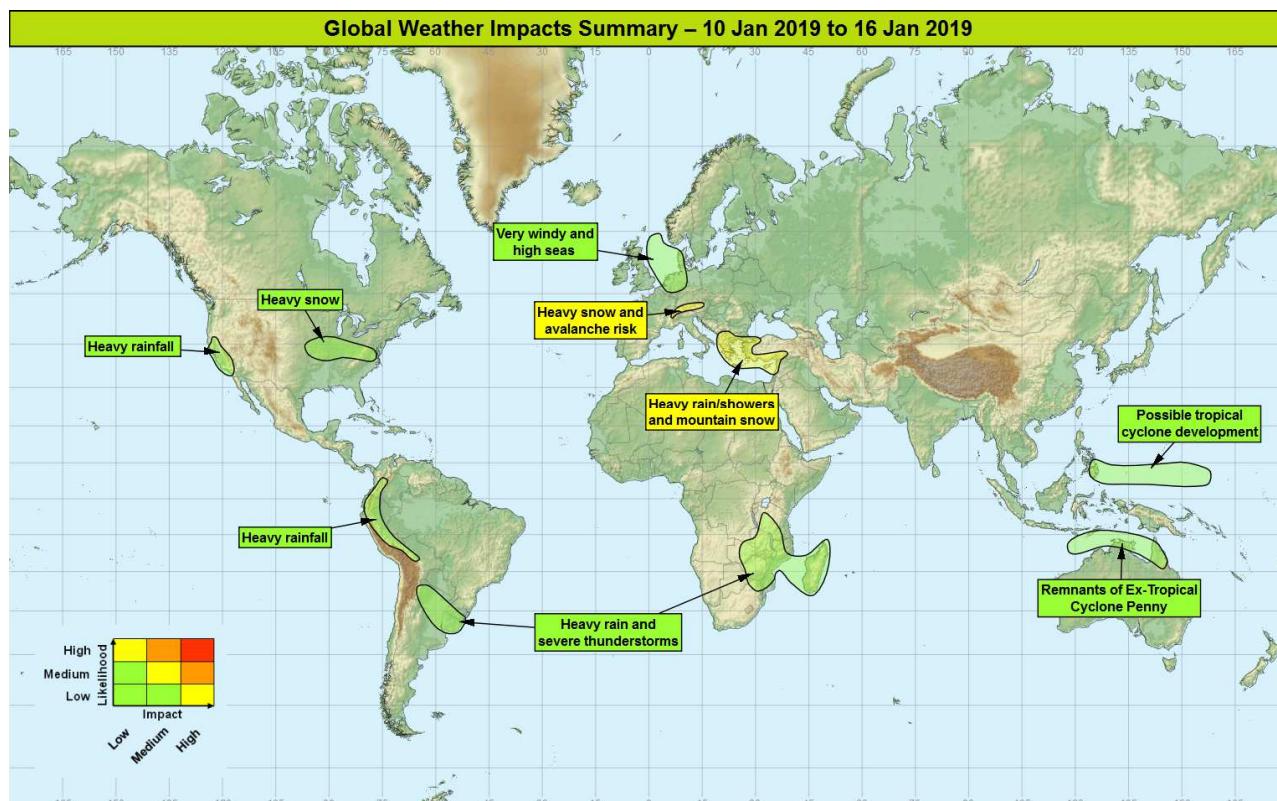


Global Weather Impacts – Thursday 10th to Wednesday 16th January 2019

Issued on Thursday 10th January 2019

HEADLINES

- Heavy snow expected to continue across the northern Alps, further disrupting transport and maintaining a high avalanche risk.
- Remaining unsettled across the eastern Mediterranean with heavy showers/thunderstorms and strong winds.



DISCUSSION

Tropical Cyclones

There are currently no named tropical cyclones. The following areas are being monitored:

Remnants of ex-Tropical Cyclone Penny (Northern Australia and Timor-Leste)

Weather

The remnants of ex-Tropical Cyclone Penny is expected to bring further heavy rainfall to the far north of Queensland. Widespread thunderstorm activity could produce a further 100-150 mm over the next couple of days. Through Friday and over the weekend, the system will cross the Gulf of Carpentaria and bringing similar amounts of rain to parts of Northern Territory around Darwin. Thereafter, there is an increasing likelihood of the system redeveloping into a tropical cyclone which could bring heavy rain to Timor-Leste through early next week.

Discussion

Whilst Penny has degenerated into a remnant low, the circulation is expected to remain intact as it crosses the far north of Australia over the next few days. There is increasing model support for this to redevelop into a tropical cyclone early next week, potentially rapidly as it moves across the Timor Sea.

Expected Impacts

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Risk of flash flooding as the remnants of Penny cross the far north of Queensland and northern Northern Territory, including Darwin over the next few days before a similar risk reaches Timor-Leste by Monday.

Northwest Pacific (Micronesia and southern Philippines)

Weather

An enhanced area of thunderstorms is expected to track west from across Micronesia towards the southern Philippines (Mindanao) by the middle of next week. There is a low risk that the convective activity could become organised to form a tropical cyclone.

Discussion

An equatorial Rossby Wave developed a tropical low level circulation in the last few days, and this is expected to track westward track across Micronesia through the coming week.

Expected Impacts

Possibility of local flash flooding affecting some of the tiny Micronesian Islands and later southern Philippines, with a much lower likelihood of wind-related impacts.



Europe

Greece, Turkey, Cyprus, Lebanon, northwest Syria and the former Yugoslav Republic of Macedonia

Weather

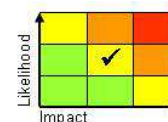
Further spells of heavy rain, thunderstorms and mountain snow are expected to affect the region over the next week. The focus for the heaviest rainfall will be across Greece and Turkey over the next few days, with the rest of the region having a somewhat drier spell of weather. However, conditions are expected to turn very unsettled across Cyprus and parts of Syria once again from Monday next week. Up to 50-100 mm could fall in some locations on any particular day, with up to 300 mm in some places building up over the course of the next few days.

Discussion

The remarkably persistent planetary scale ridge near to the meridian will continue to feed trough extensions south towards the eastern Mediterranean. This will create an environment which develops a series of waves/lows resulting in widespread showers and thunderstorms across the region. On the northern edge of the systems cold air will result in snowfall across higher ground of southeast Europe. This pattern shows no sign of breaking down and the very unsettled conditions have the potential to last for another couple of weeks.

Expected Impacts

Further heavy rainfall will lead to an enhanced threat of flash flooding and landslides in the region, more especially as this follows previous wet weather in recent weeks and months. In addition strong winds and below average temperatures are likely to affect vulnerable populations in parts of southern Turkey and the Levant region. Snowfall over parts of the former Yugoslav Republic of Macedonia and northern Greece may also cause some further transport disruption and perhaps utility outages.



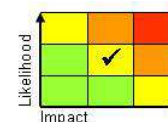
Alps, Switzerland, Austria and southern Germany

Weather

Further spells of heavy snow are expected across the Austrian, Swiss and southern German Alps through this period. Heavy snow ongoing across the region will ease through today (Thursday) but a further spell of heavy snow is expected to develop through Sunday and Monday. With the snow line lifting to around 800 metres with this system, this could bring a combination of heavy rain and short-lived thaw of lying snow to low levels before colder conditions return later Monday.

Discussion

Frontal systems arriving from the north or northwest, bringing higher WBPT/moister air, combined with brisk northerly flow will generate significant orographically enhanced precipitation. Over the next few days snow will fall to all levels, but over the weekend will become restricted to above 800 metres, leading to a thaw of lying snow at low levels. Rising and fluctuating freezing levels over the weekend will make the snow pack more unstable than usual, increasing the risk of avalanches.



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Expected Impacts

Even in a region so well prepared for such weather, this amount of snowfall is likely to cause disruption to air and land based transport. Additional snow will also increase the threat of avalanches in the region. Risk of some flood impacts at lower elevations possible this weekend.

North Sea and adjacent coastlines

Weather

A further spell of severe gales is likely to develop on Sunday, perhaps lasting into Monday, affecting countries bordering the southern North Sea.

Discussion

There is increasing evidence to suggest another deep depression will track close to northeast Scotland, through southern Norway and into the Baltic Sea during Sunday and Monday. This will lead to very rough seas and possibly produce a significant storm surge in the southern North Sea.

Expected Impacts

Disruption to marine and offshore activities is expected. Wind damage is possible across Denmark, northern Germany and the Netherlands, with these coastlines seeing the threat of storm surge flooding.



North America

California

Weather

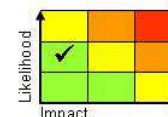
After a brief reprieve, further Pacific weather systems are expected to affect the state on Saturday and again through early next week. Over the next 7 days, many locations will receive over 75 mm of rain with locally 150-200 mm possible. Above 1800 metres, further significant snowfall is expected over the Sierra Nevada range.

Discussion

A succession of Pacific depressions will affect the region over the weekend and through early next week, driven by a stronger sub-tropical jet. The semi-permanent trough across the western USA is expected to prevail throughout next week and maintain the unsettled conditions across the southwest.

Expected Impacts

Flash flooding has already affected California, Washington and Oregon in recent days so further rainfall will add to the problems. Mudslides are a significant threat in burn scar regions of California in particular. Heightened avalanche threat is also likely in the Sierra Nevada.



Central and eastern USA

Weather

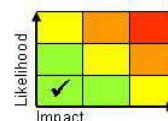
A spell of heavy snow is expected to develop across Kansas and southeast Nebraska on Friday afternoon and extend eastwards across the Mid-South to the Appalachians through Saturday. Some larger population centres such as St Louis and Indianapolis could receive up to 15 cm of snow.

Discussion

An upper trough will interact with a high WBPT plume moving north from Mexico to produce a shallow wave depression, which then moves east across southern parts of the USA over the weekend. Along the northern flank of this system areas of heavy snow will develop.

Expected Impacts

Disruption to travel is expected and some short-term interruptions to power supplies are possible.



Central America and Caribbean

Nil significant.

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South America**Northern Argentina, far south of Brazil and Uruguay****Weather**

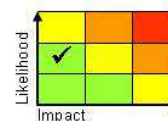
Further episodes of frequent heavy showers and severe thunderstorms are expected to affect this area over the next week, producing a combination of torrential, short-period rainfall, large hail, damaging wind gusts and a tornado threat. Storms will develop during most afternoons, persisting well into the night time.

Discussion

Successive rounds of severe convection are expected as the seasonal warm plume is drawn south and engaged by shortwave upper troughs crossing South America. A combination of large CAPE and vertical wind shear will support the development of MCS and supercells.

Expected Impacts

Impacts will be fairly localised given the nature of showers, but further flash flooding from heavy rainfall is likely. Additionally, large hail, frequent lightning and strong winds/tornadoes are likely to cause some damage to property and utilities infrastructure.

**Western Colombia, Ecuador, Peru and Bolivia****Weather**

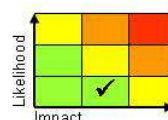
Enhanced rainfall, in association with frequent showers and thunderstorms, is expected this week across the region. There is the potential for up to 400 mm of rain across part of the Andes over the next week. This is likely to equate to the average January rainfall.

Discussion

The MJO is currently moving across the western Hemisphere which is enhancing convection across the Andes region.

Expected Impacts

Increased likelihood of flooding and landslides.

**Africa****Mozambique, Zimbabwe, Zambia, Malawi, Madagascar, northern South Africa and Tanzania****Weather**

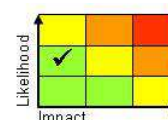
Enhanced seasonal rains are expected to continue in the form of more frequent thunderstorms. These could locally bring 50-100 mm of rainfall in 24 hours, with some significant totals perhaps falling in a short period. Some locations could see 200-250 mm over the next week, with these values close to the January average. In addition to heavy rainfall, these will likely produce frequent lightning, strong downdraughts and possibly large hailstones too.

Discussion

Enhanced seasonal rainfall associated with monsoon plume is forecast to continue over the next week, with significant rainfall anomalies being generated by the models. Showers will mainly be focussed by the (at times diffuse) axis of high WBPT.

Expected Impacts

The majority of the area highlighted is sparsely populated; however there are a few large densely populated cities within it. Impacts will be fairly localised given the nature of showers, but flash flooding from heavy rainfall is possible. Additionally, large hail, frequent lightning and strong winds are likely to cause some damage to property, crops and infrastructure. The likelihood of a populated area being significantly affected is rather low.

**Middle East**

Syria and Lebanon – See *Europe* section.

Asia

Micronesia, Philippines and Timor-Leste – See *Tropical Cyclone* section.

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Daily Global Weather Impacts Assessment

Australasia

Northern Australia – See *Tropical Cyclone* section.

Additional information

Nil.

Issued at: 100735 UTC **Meteorologist:** Matthew Lewis

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