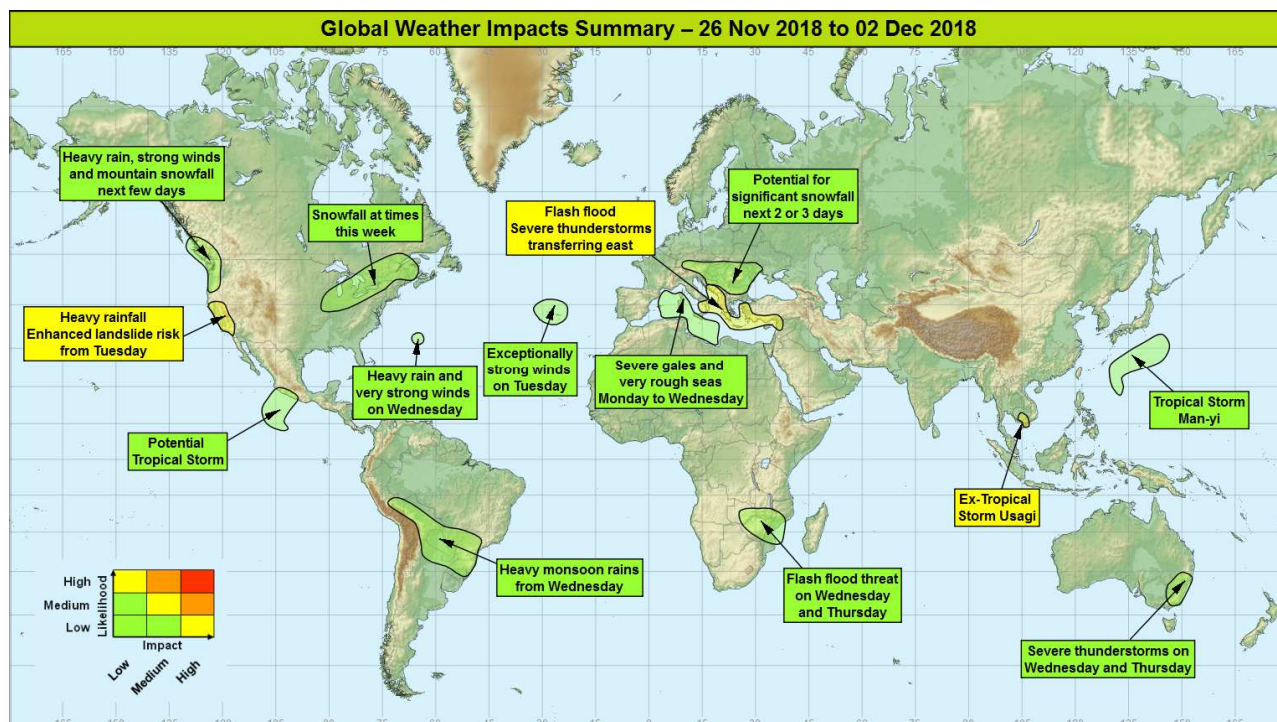


Global Weather Impacts – Monday 26th November to Sunday 2nd December 2018

Issued on Monday 26th November 2018

HEADLINES

- Further heavy rainfall from ex-Tropical Storm Usagi for southern Vietnam and eastern Cambodia.
- Unsettled in the eastern Mediterranean with a threat of flash flooding.
- Flash flood and mudslides possible in California from Tuesday.



DISCUSSION

Tropical Cyclones

Tropical Storm Man-yi: Northwest Pacific **Weather**

Man-yi has weakened through Sunday, and is now just a tropical storm with 10 minute sustained winds of 50 mph, located 1000 miles southwest of Tokyo.

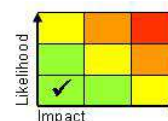
Through the next few days Man-yi will accelerate north then northeast where it will combine with a frontal system and track eastwards to the south of Japan on Wednesday and Thursday.

Discussion

Man-yi has encountered increased vertical windshear on the northern section of the storm which has weakened it and the deep convective activity. The continued weakening trend will be due to a move north into cooler SSTs and increased vertical wind shear as the system reaches the mid-latitude westerly upper flow. All models suggest Man-yi then undergoing extra-tropical transition as it combined with a mid-latitude frontal system to the south of Japan through Wednesday.

Expected Impacts

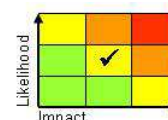
Impacts will be limited to marine transport due to very strong winds and large seas during the next few days.



Ex-Tropical Storm Usagi **Weather**

This forecast may be amended at any time

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Usagi made landfall as weakening tropical storm close to Ho Chi Minh City in southern Vietnam on Sunday. Very heavy rainfall was reported across southern Vietnam over the weekend, but Usagi continued to weaken overnight and has now been downgraded to a depression due to it being inland away from the warm tropical waters.

So the rainfall associated with Usagi will steadily weaken across eastern Cambodia and southern Vietnam during the next few days, but there could still be up to 200 mm of rain today (Monday).

Discussion

All models continue to weaken Usagi today (Monday). There have not been any significant impacts reported as yet. This could be because November is the wettest month of the year in southern Vietnam, and so this could be looked upon as climatology.

Expected Impacts

Flash and river flooding still possible in eastern Cambodia and southern Vietnam, along with landslides.

Potential Tropical Cyclones

Northeast Pacific

Weather

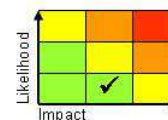
There is a 40% probability of a tropical cyclone forming just off the western Mexico coastline during the middle of next week and being steered north towards land, possibly bringing strong winds and very heavy rainfall (150 mm in 24 hours) to Acapulco later this week.

Discussion

A tropical depression is likely to develop along the ITCZ early this week. This is the system that could develop tropical storm force winds, with a low latitude upper trough likely to steer it into southwestern Mexico later in the week.

Expected Impacts

Flash flood possible in southwestern Mexico later this week, with a lower likelihood of wind damage.



Europe

Southern Italy to the western Balkans, southern Greece, southern Turkey and northwest

Syria

Weather

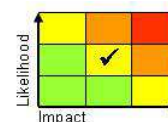
Further spells of heavy showers and thunderstorms are expected to gradually transfer east from southern Italy to southern Turkey and northwest Syria through the next 5 or 6 days. Up to 100 mm of rain could fall in a 24 hour period, with large hail and waterspouts or tornadoes also possible.

Discussion

A relaxing upper trough will bring severe thunderstorms to parts of southeastern Europe today (Monday). A sharpening upper trough will then push an area of thunderstorms east from southern Italy to southern Turkey and northwest Syria from Tuesday through to the end of the week. Frequent thunderstorms are expected, with the potential to organise and upscale into MCSs at times.

Expected Impacts

There will be a threat of flash flooding, with additional hazards of large hail, frequent lightning and a tornado/waterspout. Aviation travel through the region may be disrupted.



Central and western Mediterranean

Weather

Gales or severe gales are expected to extend from the western Mediterranean into the central Mediterranean during the next few days, building very rough seas. The winds and seas will ease later in the week.

Discussion

A sharpening upper trough will develop a depression that will sweep east through the western Mediterranean, with a 50kt gradient on the western and southwestern flank.

Expected Impacts



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Dangerous marine conditions are expected through a large part of the western and central Mediterranean for much of this week, with small craft especially vulnerable.

Parts of central and eastern Europe

Weather

Some snowfall is expected to be associated with a frontal system as it gradually moves south across central and eastern Europe through the next 2 or 3 days. The snow should not amount to much across most of this area, but there is a possibility for some significant snowfall in places.

Discussion

Cold advection in the lower atmosphere is expected to undercut a cold front that will gradually move south across central and eastern Europe through the first part of the week.

Expected Impacts

Potential for disruptive snow to transport networks, with a combination of wet snow accretion and strong winds posing a threat to power networks too.



Azores, Portugal

Weather

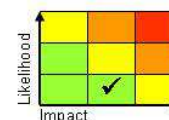
A deep area of low pressure will track northeastwards, to the northwest of the Azores on Tuesday. On the southeastern flank of this low the 10 minute sustained wind speed may exceed 60 mph with gusts locally exceeding 80 mph, with waves likely to reach as high as 12 metres. The Portuguese Meteorological Service (IPMA) have already issued orange warnings for the Azores and named this system "Storm Diana". This storm will retain this name as it moves across northwest Europe between Wednesday and Friday.

Discussion

There is good model agreement for a series of upper troughs to engage a deepening low pressure area through the next few days, steering this system northeastwards across the Atlantic.

Expected Impacts

Very strong winds and dangerous seas will likely disrupt air and sea travel. If the winds reach the speeds quoted above damage to property and infrastructure would be expected, with loss of electrical power and other utilities.



North America

Central plains of the USA, Great Lakes, northeast USA and southeast Canada

Weather

A combination of heavy snow and strong winds affected the central plains of the USA on Sunday, extending up across Chicago later in the day.

This area of significant snow will continue to transfer northeastwards across southeastern Canada (affecting Toronto and Montreal) through the next few days, possibly affecting the far northeast of the USA (north of Boston).

Through Tuesday, Wednesday and Thursday 'lake effect' snowfall will affect parts of the Great Lakes coastline, mainly affecting the far northeast of the USA.

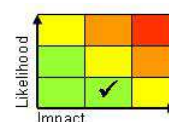
Discussion

An upper trough will drive a frontal system and associated depression northeast across the Great Lakes area through the next few days, with the northern side of the precip envelope engaging the cold Arctic airmass.

A strong northwesterly flow will follow, which will destabilise across the relatively warm Great Lakes to produce frequent snow showers downwind of the lakes. The 'lake effect' snowfall could build up in places, producing severe local disruption.

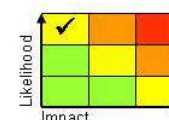
Expected Impacts

Transport disruption has already taken place with around 1200 flights cancelled because of the snowfall. Further air and land transport disruption looks likely, with the potential for power network disruption.



California

Weather



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An active Pacific frontal system will sweep across the state through Tuesday, producing heavy rain, mountain snowfall and strong winds across the north of the state. Some elevated locations are likely to see over 50 mm of rain.

Another active Pacific system will follow on Thursday and Friday, and up to 150 mm of rain could fall with heavy mountain snowfall. This rainfall will extend south to affect much of California, with strong winds likely too.

Discussion

A southwards displaced polar front jet will continue to bring unsettled weather to California over the coming week. Rainfall at lower levels will be a mixture of dynamic and convection precipitation, and at higher levels heavy snowfalls are expected over the Sierra Nevada Mountains. The Camp fire is 100% contained now.

Expected Impacts

In the regions affected by recent disruptive wildfires heavy rainfall will bring a high likelihood of ash and mud flows emanating from areas laid bare by the recent fires. The heavy rainfall and strong winds are likely to adversely impact some of the displaced population that are living in tented settlements, and are adding to the difficulties for the authorities sifting through ash to try and find the remains of unaccounted people.

Southwestern British Columbia and western Washington State

Weather

An active Pacific frontal system (same one that will bring heavy rain to northern California on Tuesday) will produce very heavy rainfall (up to 100 mm on low ground and 300 mm on high ground), falling as heavy snowfall on mountains through the next few days with the potential for freezing rain too.

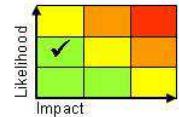
Gales or severe gales along with very rough seas will affect coastal regions today, before easing on Tuesday.

Discussion

A marked upper trough will drive an active Pacific frontal system into this region today (Monday), with a deeply unstable airmass following through Tuesday.

Expected Impacts

Dangerous coastal conditions, with flash and river flooding likely. Heavy snowfall and ice from freezing rain will affect key mountain routes.



Bermuda

Weather

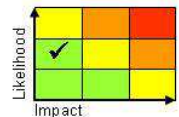
A rapidly deepening low pressure area will track northeastwards between Bermuda and the USA on Wednesday, pushing a band of heavy, thundery rain (possibly 50-75 mm in 12-24 hours) across Bermuda followed by severe gale westerly winds. Winds will ease on Thursday.

Discussion

A marked upper trough will engage a frontal wave to the southwest of Bermuda, resulting in explosive cyclogenesis (the MSLP is likely to fall 40hPa in 24 hours). The marked upper forcing will also result in a very active cold front with embedded thunderstorms possible, followed by a 50kt westerly gradient.

Expected Impacts

Localised flash flooding is possible, with gales or severe gales winds creating dangerous sea and beach conditions and possibly impacting on aviation transport.



Central America and Caribbean

Southwestern Mexico – see *Tropical Cyclone* section.

South America

Southeast Peru, Bolivia, Paraguay, southern Brazil and far north of Argentina

Weather

An active pulse of heavy monsoon rainfall is expected to transfer northwards across this part of South America from Wednesday through to the weekend. Severe thunderstorms are likely to affect northern Argentina, and perhaps Paraguay during this time.



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Discussion

An active phase of the South Atlantic Convergence Zone is expected to progress northwards from midweek, producing a possibility of severe thunderstorms in the south of this region and intense rainfall further north.

Expected Impacts

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

Africa

Mozambique, Zimbabwe, Malawi and Zambia

Weather

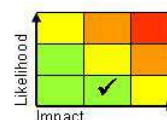
An area of thunderstorms will transfer north across this region during Wednesday and Thursday, producing intense rainfall (up to 75 mm in a few hours). Frequent lightning and large hail are also possible

Discussion

A marked upper trough will push a cold front north from South Africa, enhancing low level convergence to produce deep convection.

Expected Impacts

Flash flooding is likely to be the main impact, but frequent lightning will pose a threat to life and power networks, with damaging large hail possible.



Middle East

Nil Significant.

Asia

Southern Vietnam and eastern Cambodia— see *Tropical Cyclone* section.

Australasia

Southeastern Australia

Weather

Heavy showers and thunderstorms are expected to affect parts of southeastern Australia on Tuesday and Wednesday. Severe thunderstorms are also possible, producing up to 150 mm of rain in 24 hours, with a threat of large hail and frequent lightning. Sydney looks likely to see these storms during this period.

Discussion

A disrupting upper trough will engage a warm plume to produce an area of deep convection around the middle of this week.

Expected Impacts

Flash flooding is likely to be the main impact, but frequent lightning will pose a threat to life and power networks, with damaging large hail possible.



Additional information

Nil.

Issued at: 260820 UTC Meteorologist: Paul Hutcheon

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