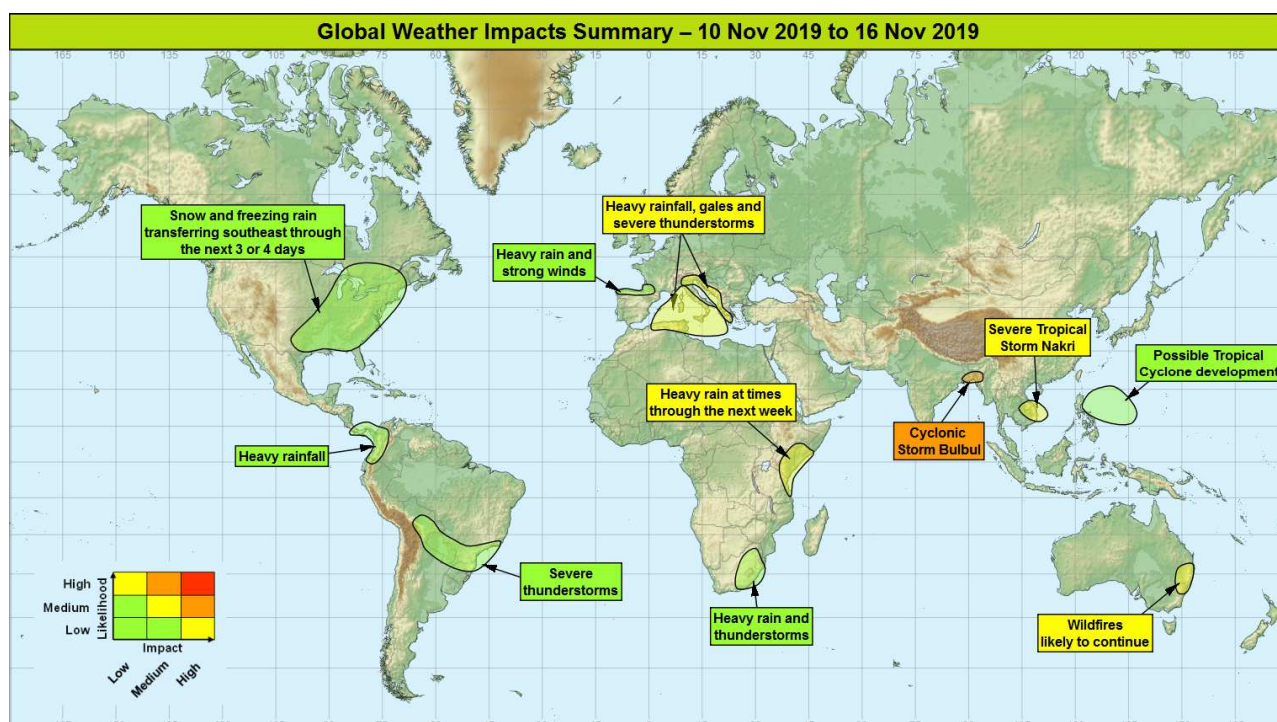


Global Weather Impacts – Sunday 10th to Saturday 16th November 2019

Issued on Sunday 10th November 2019

HEADLINES

- Cyclonic Storm Bulbul across Bangladesh decaying by Monday.
- Severe Tropical Storm Nakri impacting Vietnam during the next few days.
- Remaining very unsettled across and around the central Mediterranean.
- Heavy rainfall across parts of Somalia and eastern Ethiopia transferring south.
- Wildfires in parts of eastern Australia likely to continue due to forecast weather conditions.



DISCUSSION

Tropical Cyclones

Cyclonic Storm Bulbul (Northeast India and Bangladesh)

Weather

Bulbul made landfall on Saturday in the West Bengal state of India, just west of the Bangladesh border, with estimated sustained winds of 85-90 mph.

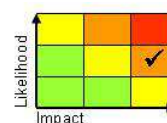
It is likely that Bulbul also produced a storm surge as high as 2 metres along the Ganges Delta region of Bangladesh through Saturday.

After making landfall Bulbul weakened and was rated as a Cyclonic Storm at 0300 UTC on Sunday morning with sustained winds of 50 mph, being located just south of Dhaka in Bangladesh.

Bulbul will weaken further through Sunday as it tracks northeast into northern Myanmar, but will produce event rainfall totals of up to 350 mm across parts of West Bengal and Bangladesh through the weekend before decaying into Monday. This is equivalent to 10-15 times the average November rainfall.

For Cox's Bazar conditions will be much less severe, with only 25-50 mm of rain likely here, but this is still 50-75% of the average November rainfall.

Discussion



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

© 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.

Bulbul will continue to weaken and eventually decay as it continues to track northeastwards across Bangladesh through Sunday.

Expected Impacts

The highest impacts from Bulbul will have already occurred due to flash, river and coastal flooding along with some wind damage. However, continued heavy rainfall and strong winds results in the matrix rating remaining a medium of high event for one more day.

Severe Tropical Storm Nakri (South China Sea and Vietnam)

Weather

Severe Tropical Storm Nakri has tracked west across the South China Sea through Saturday night and was located 120 miles east of Vietnam at 10/0300 UTC with maximum sustained winds around 70 mph.

Nakri is expected weaken as it makes landfall in central parts of Vietnam later on Sunday, but could still produce wind gusts of around 50 mph.

Nakri may affect similar areas which are still recovering from the impacts of the transit of Matmo across the area a week or so ago.

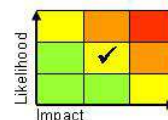
Whilst heaviest rainfall from the system will likely be over open waters, some 150-300 mm of rain is likely for parts of central Vietnam through the next few days (which is up to 50% of the average November rainfall).

Discussion

There is good model agreement for Nakri to make landfall as a weakening system across central Vietnam on Sunday, close to where Matmo made landfall a week ago.

Expected Impacts

Most likely impacts will be from flash flooding, but with a threat of river flooding and landslides too. Wind damage and storm surge coastal flooding are assessed as a lower likelihood.



The following area could see a tropical cyclone development in the next 7 days:

Philippine Sea

Weather

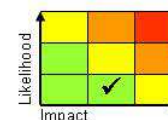
There is an increasing likelihood of a tropical cyclone development next week in the Philippine Sea, perhaps impacting Luzon later in the week.

Discussion

There is growing model evidence for a tropical cyclone development to the east of Luzon, most likely associated with an Equatorial Rossby Wave, but with a marked cold surge event from the East China Sea likely to complicate the track of any cyclone later in the week.

Expected Impacts

Potential for flash flooding rainfall, landslides, damaging winds and dangerous seas.



Europe

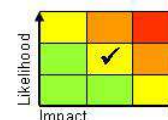
Italy, Corsica, Malta, Greece, eastern parts of the Balkans, Tunisia and northern Algeria

Weather

Following recent heavy rainfall in this region, further active weather systems are expected to move across this region over the next week bringing persistent, heavy rain and thunderstorms to this area. The heaviest rain is likely to be focussed on southwest facing high ground of Italy, the Balkan region, and western Greece, with Montenegro already reporting flooding impacts. Many places will see 25-50 mm in a few hours on wetter days, with some prone spots seeing as much as 150 mm in a 24 hour period. It's possible that some locations could see as much as 400 mm of rainfall in total by early next week, 2 to 3 times the average November rainfall. This accompanied by strong winds or gales, especially around coasts, with very rough seas and lifted dust from North Africa also expected.

A deep area of low pressure is likely to bring the threat of storm force winds (gusts to 65 mph) in the Western Mediterranean later on Sunday and through Monday, possibly affecting the eastern Balearic Islands. The Spanish Met Service (AEMET) has named this system 'Bernardo'.

Discussion



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

© 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.

A strongly cyclonic upper pattern will dominate through much of the next week leading to a continuation of very unsettled conditions as significant upper forcing engages warm plumes drawn northwards across the region. As well as NCS type convection producing large CAPE / high PWAT type systems, precipitation will be modulated by orography and act as a focus for the heaviest rainfall accumulations.

Expected Impacts

Increased likelihood of flash flooding causing damage to property and infrastructure. Lightning strikes, large hail and tornadoes/waterspouts could also produce localised significant damage. Dangerous marine conditions are also expected in the region.

Southwestern France and northern Spain

Weather

Conditions will also remain unsettled across this region at times through the next week, with further spells of strong winds and heavy rain/thunderstorms. Around 25-50 mm of rain could fall in thunderstorms in a few hours with up to 150-200 mm accumulating up in places through a 7 day period, which is the equivalent on the November rainfall falling in a week. Winds will be strong and gusty at times, especially in or near thunderstorms.

Discussion

South-shifted Atlantic mobility will steer a number of active Atlantic systems into western Europe.

Expected Impacts

Increased threat of flooding with heavy rain. Risk of landslides in steep terrain. Strong winds may bring impacts to travel and power supplies.



North America

Central & eastern USA and southeastern Canada

Weather

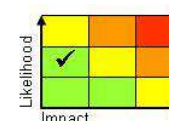
Another winter storm is expected to sweep southeast across this part of North America in the coming 3 or 4 days, bringing a threat of heavy snowfall and freezing rain, with even the Gulf Coast states potentially seeing some winter hazards for a time.

Discussion

An upper trough swinging SE from the Canadian Rockies will drive an active cold front SE across this region. Air of Canadian arctic origin will follow post front, reaching as far south as the Gulf Coast by the middle of the week, bringing exceptionally cold conditions here for early to mid November. The rearward sloping nature of the frontal system will allow a well-marked cold undercut to develop, with snow falling widely across central/northern regions and freezing rain in the south.

Expected Impacts

Widespread travel disruption is possible as well as interruptions to power supplies due to ice accretion. Damage to crops in the south is likely in the rapid freeze that is expected to take place.



Central America and Caribbean

Panama and Costa Rica – See *South America* section.

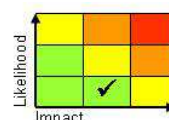
South America

Panama, Costa Rica, western Colombia and northern Ecuador

Weather

Enhanced shower and thunderstorm activity is likely across this region through much of the next week. Up to 50 to 100 mm of rainfall is possible each day, with some places seeing up to 400 mm in total by the early part of next week (equivalent to the average November rainfall), although these totals are likely to be very localised.

Discussion



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

© 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.

Surface rooted convection release is likely with in excess of 3000 J/kg CAPE available, leading to some severe and slow moving storms each day. The driver behind the enhanced rainfall could be increased convergence across the southern part of Central American, but also anomalously high sea surface temperatures in the region. There is also the potential for tropical waves to enhance convection at times through the next week.

Expected Impacts

Increased threat of flash and river flooding with landslides increasingly likely in mountainous areas. In recent days 1000 people were affected when the San Jose river burst its banks in north western Colombia and there have been other reports of flooding in this region.

Paraguay, southeast Bolivia, northwest Argentina and southeast Brazil

Weather

Spells of heavy rain and severe thunderstorms are forecast to across the region at times in the coming week, although not into southeast Brazil until Thursday.

Rainfall totals of 50-100 mm in 24 hours are possible in places, with frequent lightning, large hail and strong wind gusts being additional hazards.

Discussion

The South Atlantic Convergence Zone will remain active during this period, enhanced by a southward extension of tropical air over central South America engaged by various minor upper troughs in the subtropical jet. This will allow a mixture of surface based and elevated convection, severe thunderstorms (bringing large hail and a strong, gusty wind threat) are most probable towards the northern edge of this zone of convection.

Expected Impacts

Flash flooding and a threat of property damage from hail and strong wind gusts.



Africa

Parts of southern Somalia, southeastern Ethiopia, Kenya and eastern Tanzania

Weather

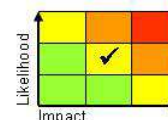
Periods of heavier than average rainfall from thunderstorm activity is expected in this part of East Africa through the next week, but with northern Somalia and eastern Ethiopia seeing drier weather which should help river levels fall here. Up to 50 mm of rain could fall in a day, with up to 150 mm of rain in places through the week (average November rainfall around 100 mm).

Discussion

Equatorial Rossby Waves will likely add to the enhanced convective environment in the region that the positive Indian Ocean Dipole has set up. There may also still be some enhanced atmospheric moisture from the remnants of Tropical Cyclone Kyarr.

Expected Impacts

River levels in central Somalia are likely to slowly lower through the coming week, but there is an increased flash flood threat further south in East Africa.



Northern Algeria and Tunisia – See Europe section

South Africa, Lesotho and Eswatini

Weather

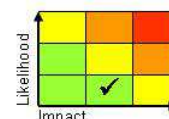
Heavy showers and thunderstorms are expected to affect this region through much of the next week, producing frequent lightning, large hail and strong, gusty winds. 50-100mm of rain could fall in a day (equivalent to the November average), with some significant totals in a few hours.

Discussion

A succession of upper troughs will engage the resident high WBPT plume promoting the development of heavy showers and thunderstorms. Serious multi-year droughts have affect parts of the country, and to a degree this rain will be welcome.

Expected Impacts

Flash flooding and a small risk of property damage from hail and wind gusts.



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

© 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.

Middle East

Nil.

Asia

South China Sea and Vietnam – See *Tropical Cyclone* section

Northeastern India and Bangladesh – See *Tropical Cyclone* section

Luzon, Philippines – See *Tropical Cyclone* section

Australasia

Parts of eastern Australia

Weather

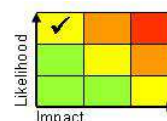
Serious wildfires are already affecting parts of New South Wales, between Sydney and Brisbane. With no significant rainfall expected through the next week along with likely strong wind events at times, the wildfire threat will remain extremely high in the region.

Discussion

This very early season wildfire event has already claimed a number of lives, with good model agreement for dry and at times windy conditions to continue through the next week.

Expected Impacts

Weather conditions will not be conducive for limiting existing wildfires, and could result in a deteriorating situation for existing and new wildfire generation.



Additional Information

The annual smog season across parts of Northern India continues to make news, with authorities describing pollution levels in New Delhi as unbearable <https://www.bbc.co.uk/news/world-asia-india-50333985>.

Issued at: 100600UTC **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

© 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.