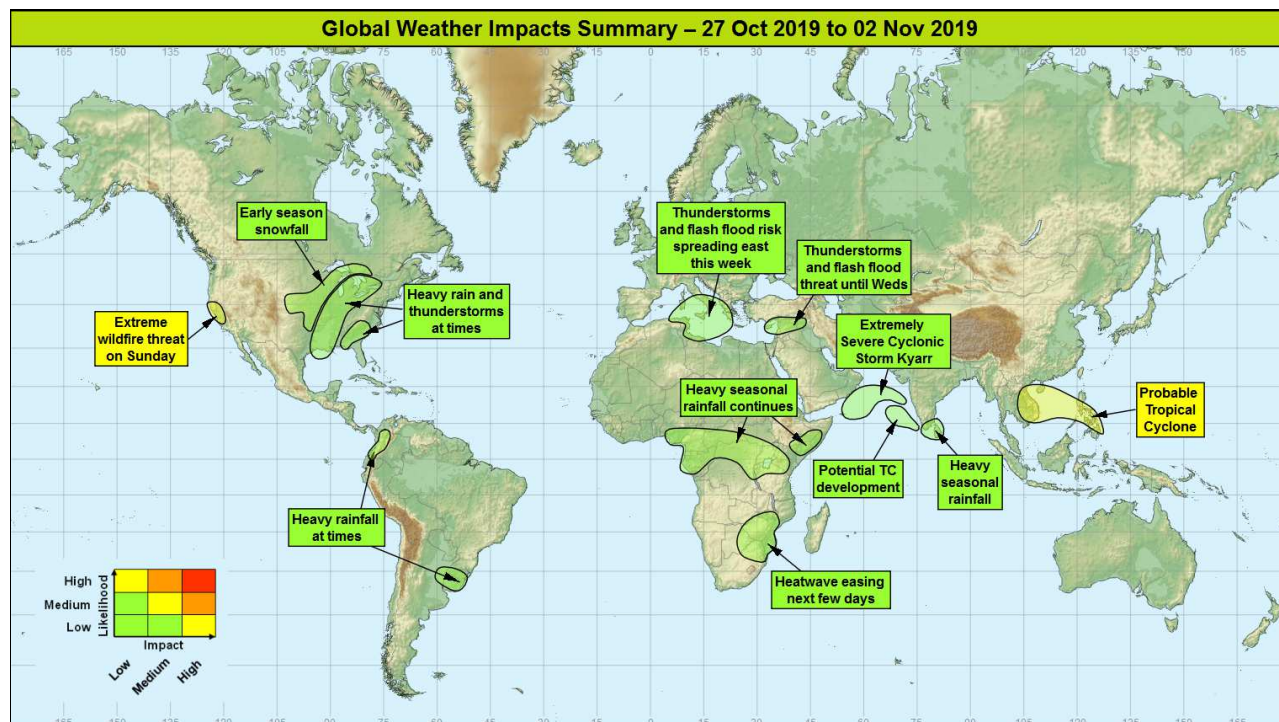


Global Weather Impacts – Sunday 27th October to Saturday 2nd November 2019

Issued on Sunday 27th October 2019

HEADLINES

- Meteorological conditions will generate an extreme threat of wildfires in California on Sunday.
- Probable tropical cyclone development in the South China Sea early next week.
- Extremely Severe Cyclonic Storm Kyarr is no longer expected to directly impact Oman.



DISCUSSION

Tropical Cyclones

Extremely Severe Cyclonic Storm Kyarr, Arabian Sea

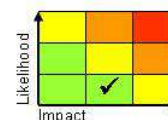
Weather

Over the past 24 hours Kyarr has tracked slowly northwest into the open Arabian Sea. Since moving away from western India it has encountered favourable conditions for development and become an extremely severe cyclonic storm, with sustained winds around 140 mph. Kyarr is forecast to track very slowly westwards towards Oman, likely strengthening to a Super Cyclonic Storm for a time during the next 24-36 hours with sustained winds of around 165 mph, however from midweek it is now thought likely to turn to the southwest (remaining over open ocean), where it is expected to weaken due to increasingly hostile environmental conditions.

Discussion

Since moving away from the Indian coastline, Kyarr has been able to intensify with ideal conditions of warm underlying SSTs, low vertical wind shear, and high relative humidity air around the cyclone. This has allowed rapid deepening and the development of a clear eye. The likely trend towards a slowing forward motion early next week will likely lead to upwelling of less warm waters which will likely weaken the storm, and lead to the system being steered increasingly towards southwest (remaining over the sea).

Expected Impacts



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.

Very dangerous marine conditions close in the vicinity of this intense system, with large waves affecting many coastlines surrounding the Arabian Sea. Although the storm will probably now remain offshore, it will still bring some thunderstorms across eastern Oman, with a risk of flash flooding, and increased winds capable of lifting dust across the southeast of the Arabian Peninsula.

The following area is being monitored for tropical storm development that may affect land in the next 7 days:

Central Philippines, South China Sea and Vietnam

Weather

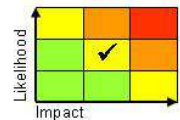
An area of organised thunderstorms will track across the central Philippines over the next couple of days and then emerge into the South China Sea. At this point a tropical cyclone is likely to develop and track steadily westwards reaching the Vietnam coastline around the middle of next week. The system is not signalled to be strong, most probably remaining as a tropical storm and falling short of becoming a typhoon. The main hazard will likely be rainfall with 100-200mm likely across the Philippines, and then 250-500mm likely across central Vietnam, and parts of northern Cambodia in the middle of next week.

Discussion

An Equatorial Rossby Wave (ERW) will cross the Philippines over the next 48 hours and emerge into the South China Sea and have a brief period in which to develop into a tropical cyclone. This is thought likely to happen, but due the brief window without land interaction (around 48 hours) any system that does develop is likely to remain weak. However given the abundant rainfall in this region recently, and multiple reports of flooding in recent weeks, the rainfall from this system is thought likely to bring considerable impacts to Vietnam.

Expected Impacts

Flash flooding and landslides are the most likely impacts for the Philippines over the next couple of days, and then central Vietnam during the middle of next week. Dangerous marine and beach conditions likely in and around the South China Sea.



Arabian Sea

Weather

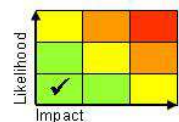
The area of enhanced thunderstorms which is forecast to bring heavy rainfall to parts of southern India and Sri Lanka over the coming days is forecast to emerge into the open southeast Arabian Sea during the middle part of next week. At this point these storms may be able to take advantage of favourable environmental conditions and organise into a tropical cyclone.

Discussion

An ERW has couplet has formed from the passage of the MJO across the Indian Ocean, the northern part of this couplet will cross Sri Lanka and southern India over coming days and then emerge into the Arabian Sea in the middle of next week. At this point it will be able to take advantage of favourable environmental factors and may develop into a tropical cyclone. Although a track to the northwest is most probable, this is complicated by a possible slight Fujiwhara interaction with Kyarr.

Expected Impacts

Any system that develops is likely to remain over open ocean. At this point potentially hazardous marine conditions look to be the only hazard.



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.

Europe

Central Mediterranean, and surrounding countries

Weather

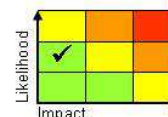
Thunderstorm will continue across this region over the coming week. Activity is likely to become confined to the west of the region highlighted and reduce in severity over coming days. However storms will then spread eastwards from midweek, increasing in severity and frequency once more. During this period some places could see in excess of 100mm, with a large proportion of this falling in a short duration from just one or two individual showers.

Discussion

A cut off upper low will remain slowly move slowly across this region over the coming days, and will continue to engage a marked low level WBPT plume although this will continue to gradually occlude with thunderstorms gradually becoming less severe and organised. However a fresh upper trough extension into this area during the middle of next week will give a further round of deep and organised severe convection, which will spread eastwards with time.

Expected Impacts

A continued threat of flash flooding is expected especially in urban areas; initially impacts are expected to be less severe than observed over recent days. Frequent lightning, large hail and locally strong winds possibly causing damage to property and infrastructure, and disrupting travel. An enhanced risk of landslides in areas where terrain is steep.



Eastern Mediterranean, including Cyprus, Lebanon and Syria

Weather

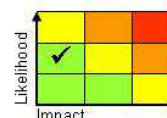
Showers and thunderstorms will continue across this region over coming days, before tending to ease down from the middle of next week. The nature of the showers vary markedly across this region, with heavy rain, hail and frequent lightning the main risk around the eastern Med, however characterised by strong convective gusts lifted dust inlands across the Levant.

Discussion

A slow moving cut-off upper vortex sits across southern Turkey and promotes deep convection across this region until midweek. Although much of the convection will be tied to the diurnal cycle, some elements of upper forcing will maintain some convection overnight. The vortex will degenerate into a trough and sweep east across this region between Monday and Wednesday with more benign conditions dominating thereafter.

Expected Impacts

A continued threat of flash flooding. Frequent lightning, large hail and locally strong winds possibly causing damage to property and infrastructure, and disrupting travel around the eastern Med, inland across the Levant strong winds and lifted dust may impinge on transportation.



North America

California

Weather

A very strong, dry Santa Ana (east to northeasterly) will impact across central and northern California on Sunday. There are already several wildfires in this region, with the likelihood of more widespread and / or severe wildfires developing and spreading in response to these weather conditions. Winds should ease early next week allowing the wildfire conditions to improve.

Discussion

The passage of a cold front on will introduce this new Santa Ana wind through Sunday. As these winds flow over the Sierra Nevada and descend they will be exceptionally dry and locally very strong and gusty. There is good model agreement for this synoptic setup, producing extremely critical wildfire conditions in parts of California.

Expected Impacts

Severe threat of severe wildfire impacts to property, people and infrastructure.



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.

Central USA into parts of southern Canada**Weather**

From Tuesday onwards a further areas of low pressure is signalled to develop across the southern USA, and transfer northeast bringing a spell of heavy rain, thunderstorm, and some heavy early season snowfall on the northwestern edge of the feature (some of which will fall before Tuesday). The low will also act to generate an area of enhanced thunderstorms across the Florida panhandle region that will transfer northward. Through the whole event 50-100mm could fall in the areas highlighted for heavy rain, with perhaps 15-30cm of snowfall in the areas where the precipitation abuts the cold air.

Discussion

A further trough extension takes place across the Rockies early next week, and engages a plume of warm low level air generating a strong surface low which will transfer northeast across the states into Canada from the middle of next week. Although the heaviest ppn will fall in the warm sector, where some isolated severe storms are possible, early season snowfall is likely to fall on the northwest flank of the system.

Expected Impacts

Flash flooding is the most likely impact, but power and transport disruption from lightning also likely. Snowfall to the northwest of the system is likely to disrupt both road and air travel.

**Central America and Caribbean**

Nil.

South America**Western Colombia and northern Ecuador****Weather**

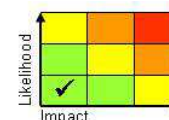
Further frequent heavy showers and thunderstorms will continue over north-western parts of South America. This follows a period of above average rainfall over the past month with some locations recording double their October rainfall. Over the next week, much of the area is likely to receive a further 75-125 mm of rain, locally 250-300 mm.

Discussion

There is a continued model signal for above average rainfall in this mountainous region of north-western South America. When examining the upper air there appears to be an area of weak upper troughing that pushes E across this area through the next couple of days, perhaps this could be responsible for the enhanced precipitation.

Expected Impacts

Continuation of flooding impacts is likely across the region with more mountainous areas at heightened risk of landslides due to saturated ground.

**Uruguay, northeast Argentina and southern Brazil****Weather**

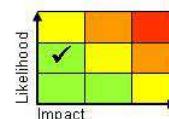
From Sunday and into middle of next week spells of heavy rain and severe thunderstorms are expected to develop in this area. Rainfall totals of 100-150 mm are possible in places each day. This equivalent to over a month's worth of rainfall (although will only be in a few isolated locations). Frequent lightning, large hail and strong winds gusts will be additional hazards.

Discussion

The SACZ will become increasingly active during this period, enhanced by a southward extension of tropical air over central S America. This will allow a mixture of surface based and elevated (triggered by minor upper short waves) severe thunderstorms across the area.

Expected Impacts

Flash flooding, disruption to transport and a small risk of damage to property 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.

Africa

Parts of central and eastern Africa

Weather

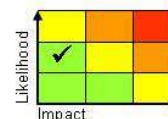
Although rainfall is expected to be less extreme over the coming week, it will likely still remain above average for much of the area highlight. Whilst rainfall amounts will inevitably vary from place to place, some locations may receive their entire average October rainfall in a few hours.

Discussion

A strong positive Indian Ocean Dipole (IOD) event continues. This is probably responsible for the slightly above average rainfall signal in these areas over the coming week. Based on the strength of the positive IOD event (largest since at least 2001) this could lead to above average rainfall in these areas for the next 2 to 3 months which may gradually make impacts more likely.

Expected Impacts

Continued increased likelihood of both flash flooding and flooding along some of the regions rivers. In addition there will be an enhanced risk of land/mudslides in areas of steep terrain.



Parts of southern Africa

Weather

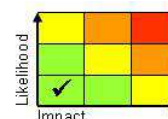
Temperatures are widely some 5-10 °C above average across parts of southern Africa. Within the area highlighted maximum temperatures are expected to exceed 35°C, and in some places exceed 40°C (especially northeast South Africa, south Mozambique, south Zimbabwe and eastern Botswana) until early next week. Temperatures are likely to return to near normal by the middle of next week. Whilst these temperatures are normal for mid-summer, falling this early in the season makes it near record breaking, particularly over parts of South Africa.

Discussion

The IOD is causing excessive rain to fall in east Africa close to the equator, and keeping the weather dry, hot and sunny in much of south-eastern Africa, especially the north of South Africa. A cold front will track NE across southern Africa through Monday and Tuesday, allowing temperatures to fall back to nearer average.

Expected Impacts

Utilities will be under strain due to high air conditioning requirements, and water demands will be high in a region still waiting for the first rains of the spring/summer season. Increased potential for health impacts for vulnerable demographics. Severe wildfire conditions will be present across tracts of this area too.



Northern parts of Algeria, Tunisia and northwest Libya – See the Europe section.

Middle East

Israel, Lebanon, Syria and northern Iraq – See the Europe section.

Southern and eastern Oman– See the Tropical Cyclones section.

Asia

Philippines, Vietnam and Cambodia – See the Tropical Cyclones section.

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.

Southern India and Sri Lanka
Weather

An area of widespread heavy showers and thunderstorms will transfer westwards across this region through the next 5 days, bringing heavy rainfall (up to 300 mm in a day or two) across the region, which would equate to or just above the average October rainfall.

Discussion

An ERW has couplet has formed from the passage of the MJO across the Indian Ocean, the northern part of this couplet will cross Sri Lanka and southern India over coming days and then emerge into the Arabian Sea in the middle of next week.

Expected Impacts

Flash flooding and landslides are the most likely impacts.



Australasia

Nil.

Additional Information

Nil.

Issued at: 270315UTC **Meteorologists:** Nick Silkstone

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.