

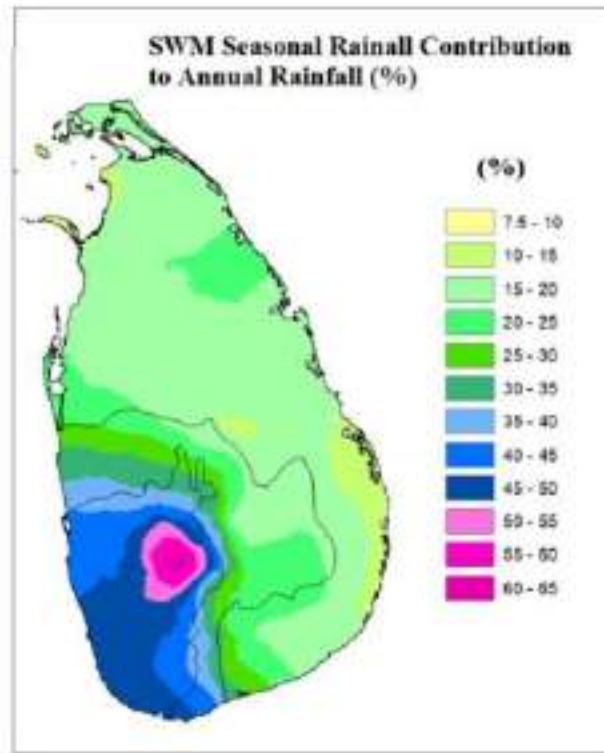
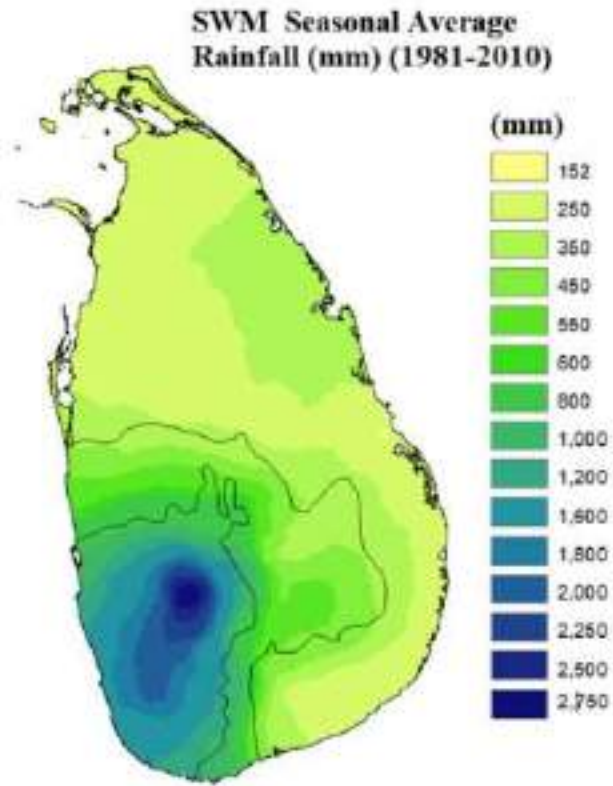
Southwest Monsoon onset and possible adverse weather conditions

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Director (Forecasting and Decision Support)

Department of Meteorology

Southwest Monsoon

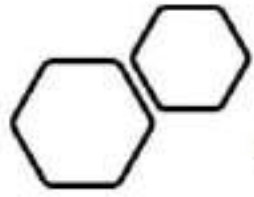


- The southwest monsoon usually begins in the third or fourth week of May and lasts until September.
- Southwest Monsoon is contributed almost 30% of the total annual rainfall of Sri Lanka
- western slopes of central hills receive 50-65% of annual rainfall from the Southwest monsoon.

- Monsoon onset often triggers
 - heavy rainfall
 - strong winds and
 - coastal inundation and erosion (southwestern and western coast)

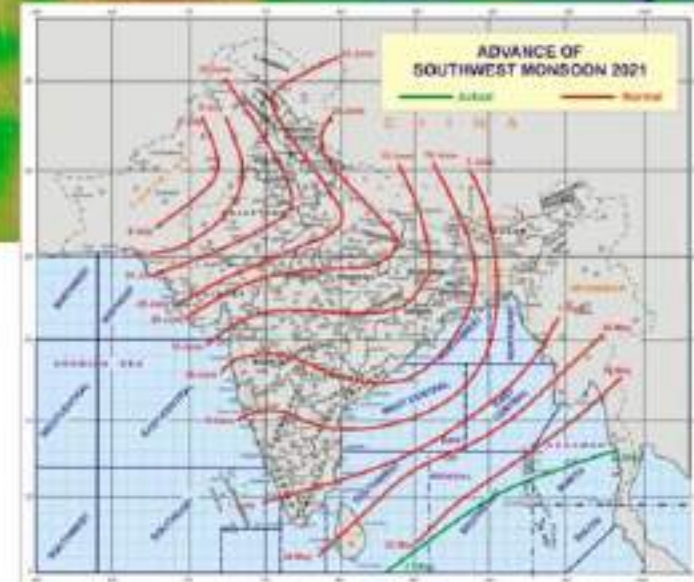
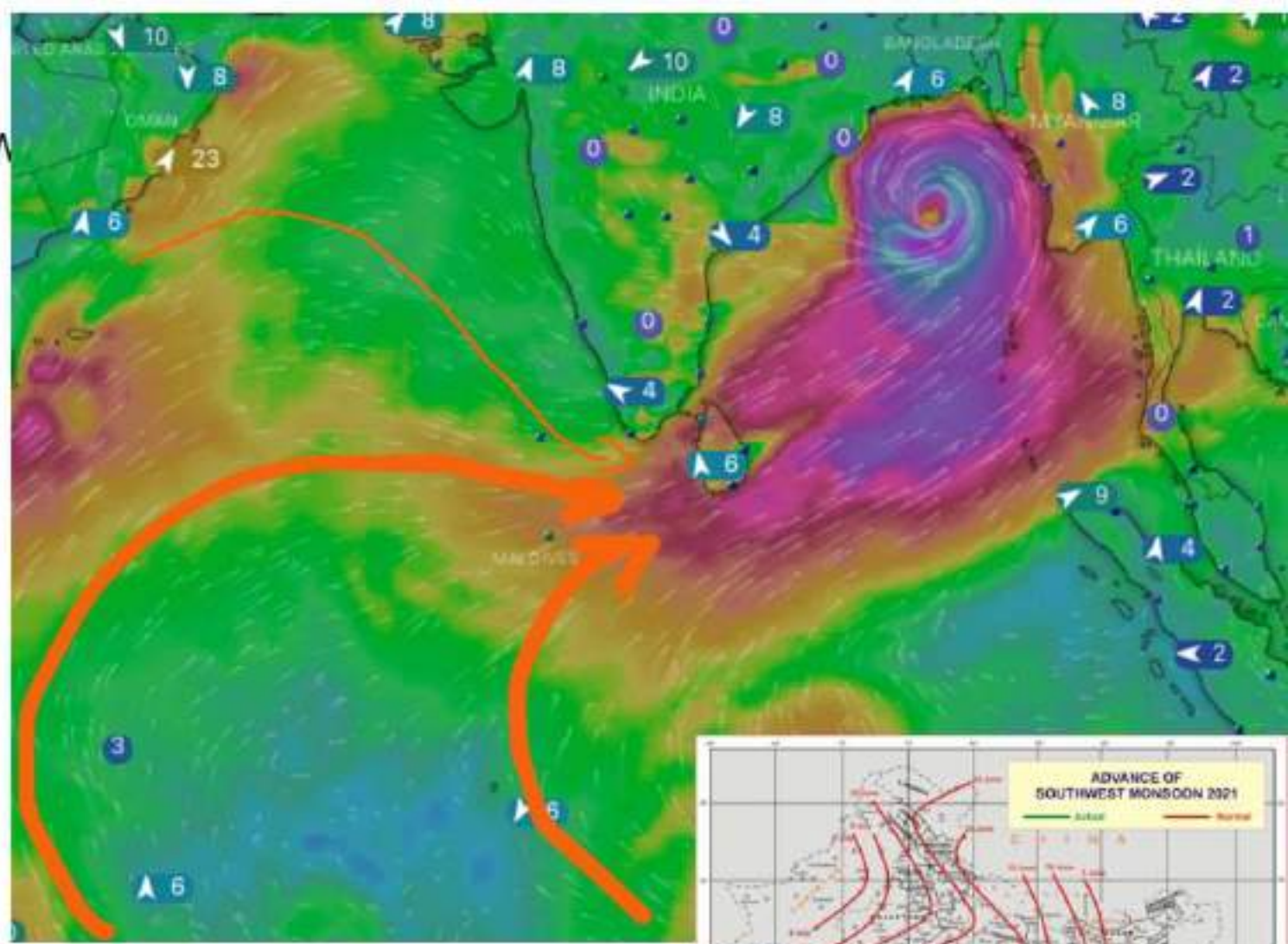
with large-scale impacts on fisheries, agriculture, infrastructure, economy, and livelihoods of the South-Western parts of Sri Lanka.



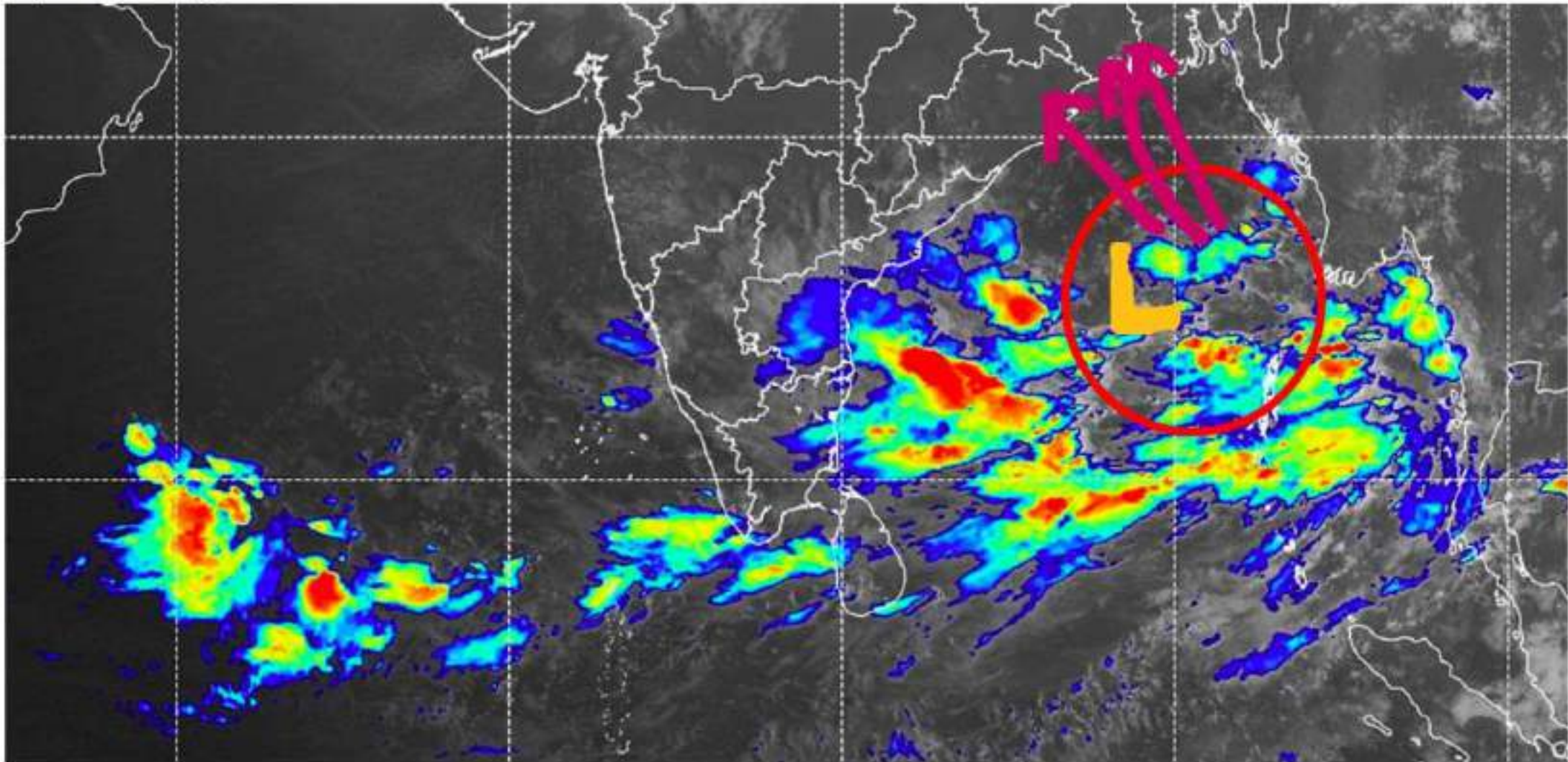


Atmospheric factors contribute to the southwest monsoon onset over Sri Lanka

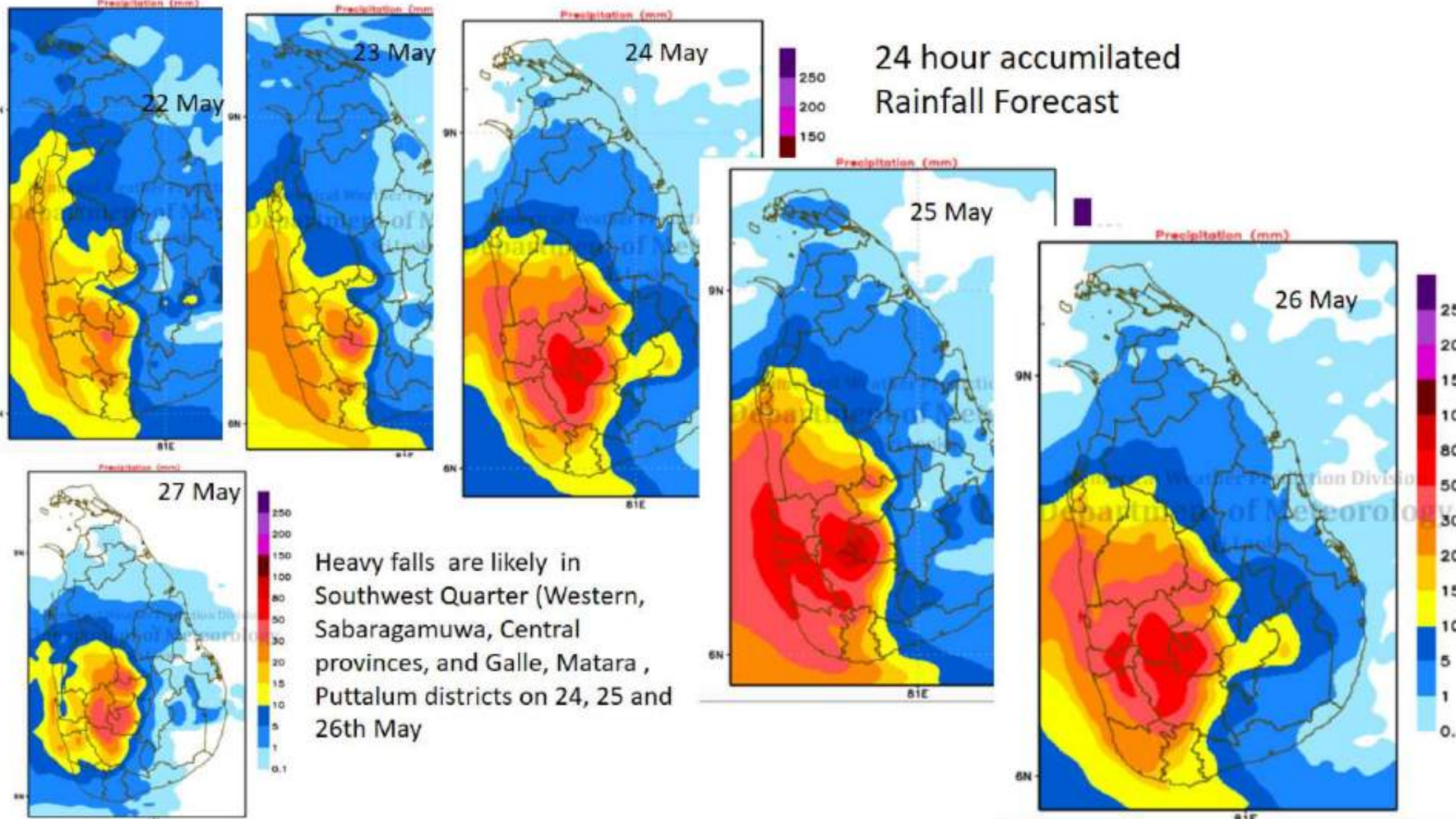
- Development of low pressure / cyclonic systems in the Bay of Bengal,
- convergence of monsoon winds,
- near sea level westerly wind burst (narrow strip with high westerly winds), and
- low-level trough in the vicinity of Sri Lanka



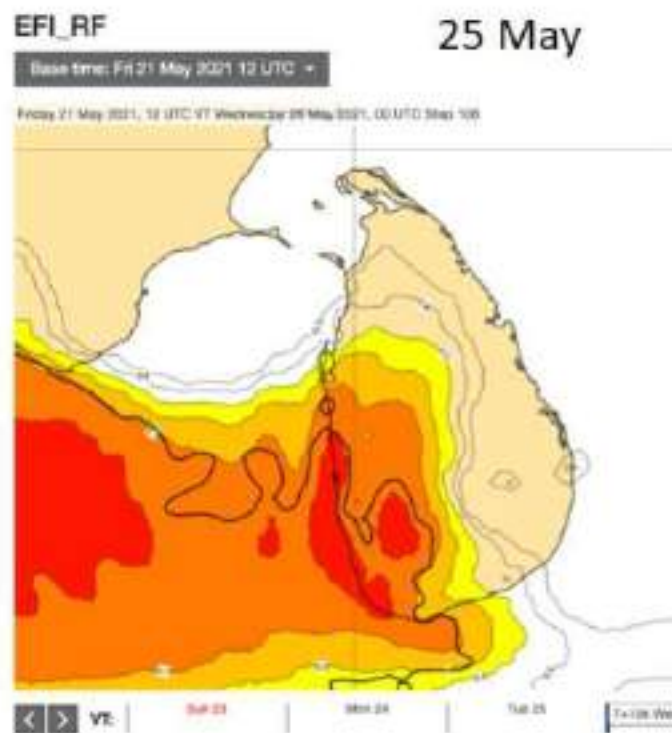
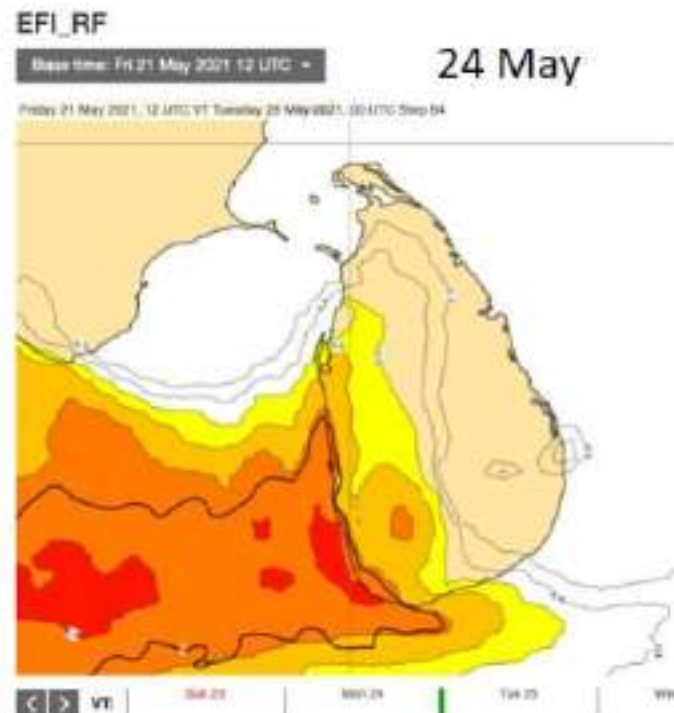
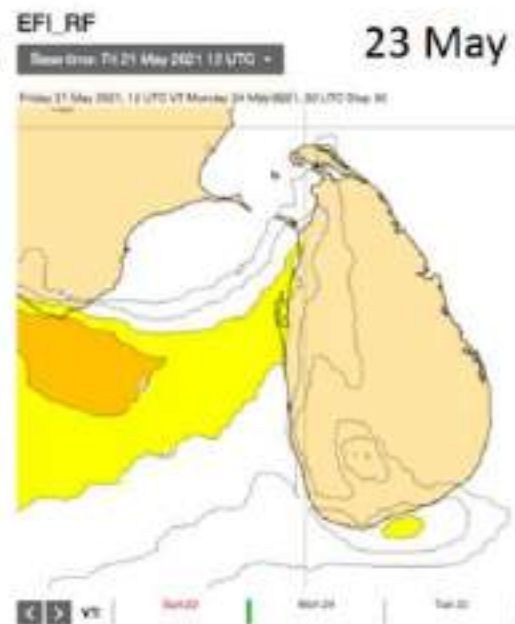
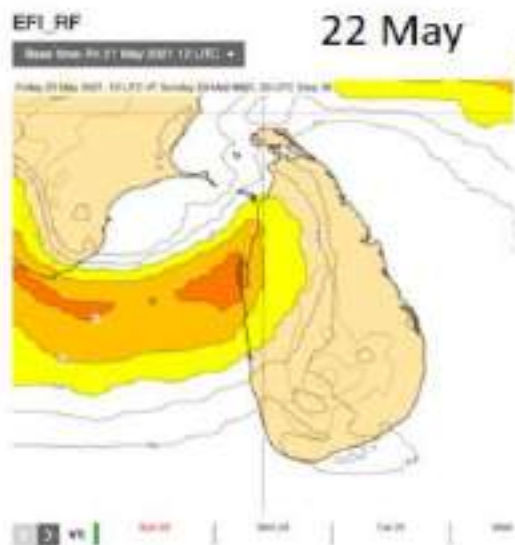
A Low pressure area is very likely to form over north Andaman Sea and adjoining eastcentral Bay of Bengal around 22nd May. It is very likely to intensify into a Cyclonic Storm by 24th May. It would move northwestwards and reach near Odisha- West Bengal coasts around 26th May morning.



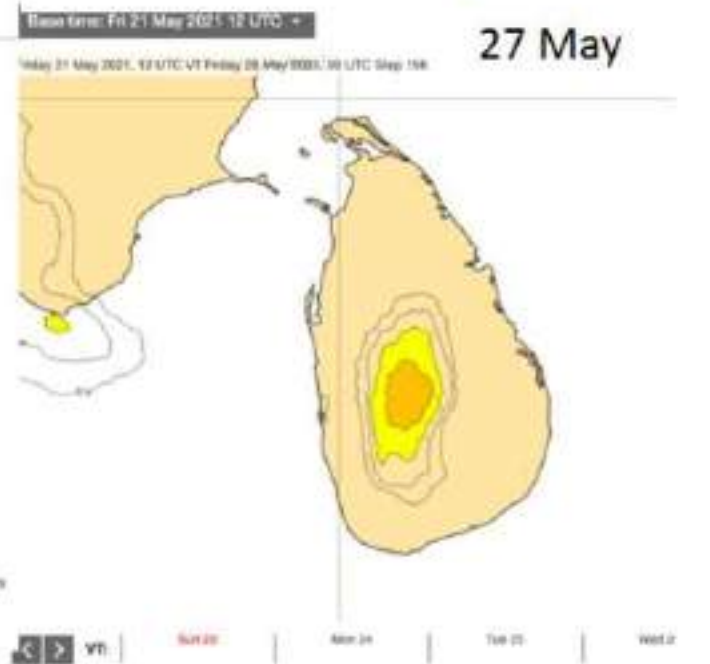
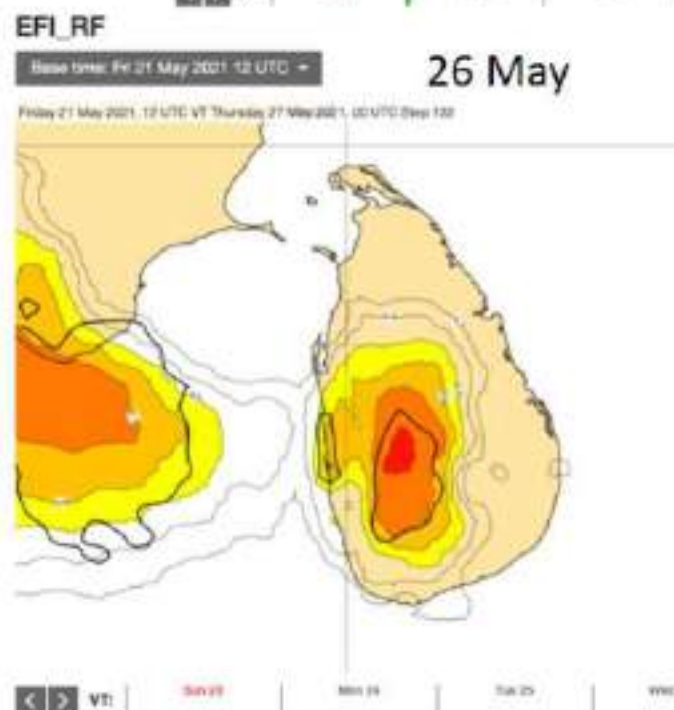
24 hour accumulated Rainfall Forecast



Possible heavy rainfalls during this week based on Rainfall Extreme Forecast Index



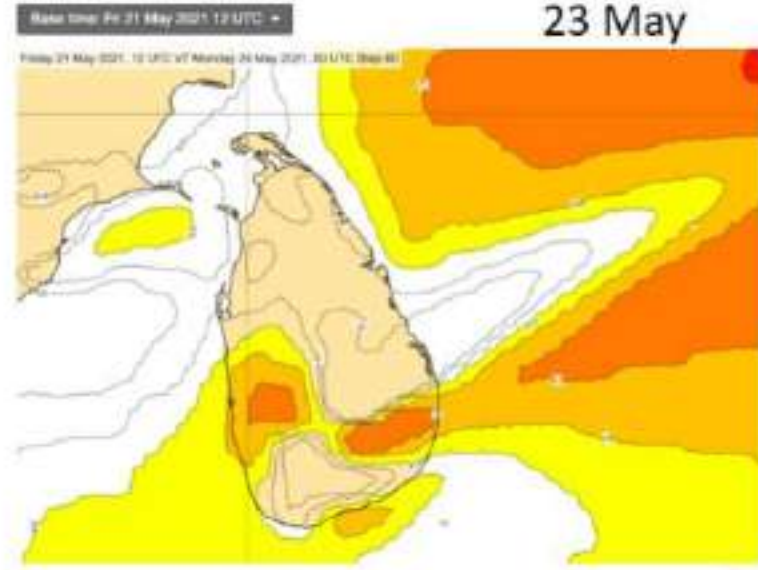
Very Heavy falls exceeding 100mm are likely in Southwest Quarter (Western, Sabaragamuwa, Central provinces, and Galle, Matara, Puttalam districts on 24, 25 and 26th May



Possible strong winds during this week based on wind Extreme Forecast Index

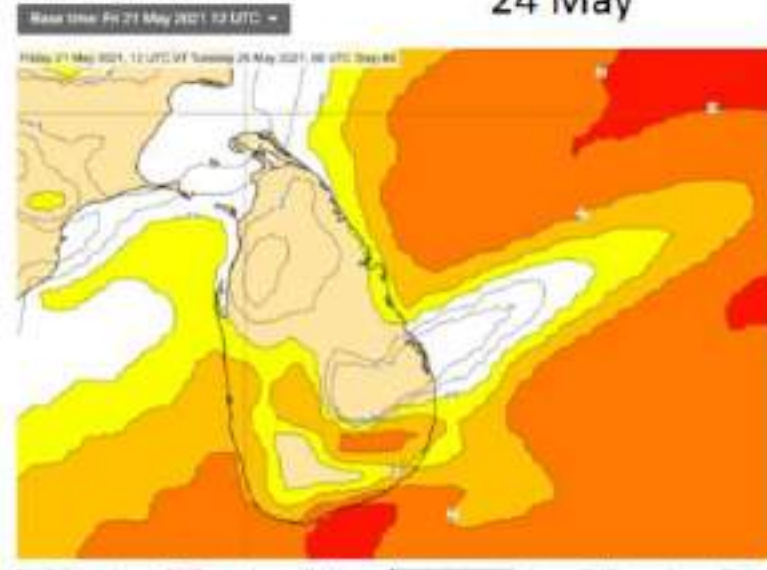
EFL_Wind

23 May



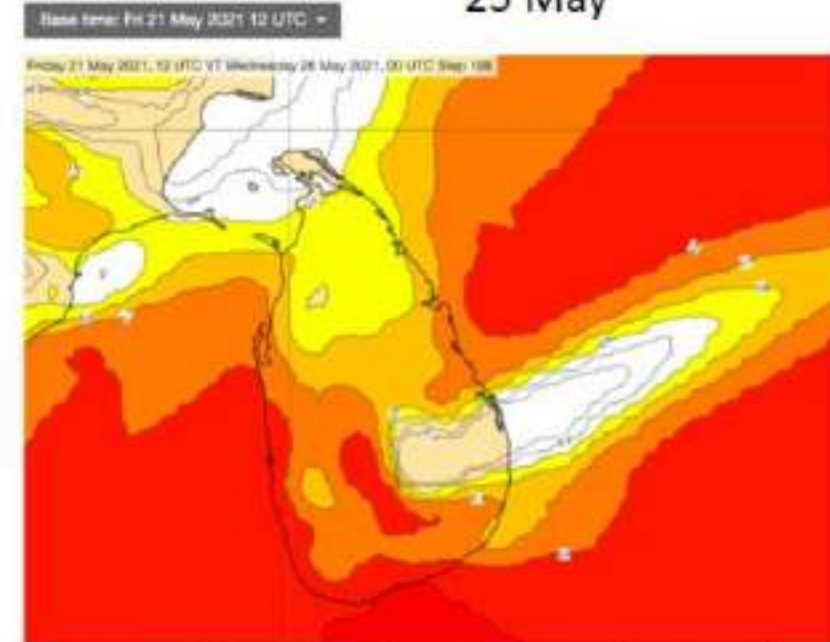
EFL_Wind

24 May



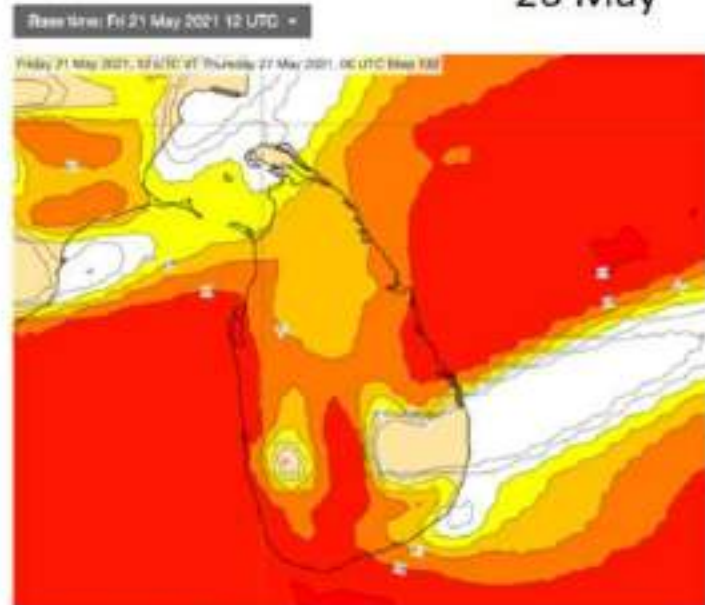
EFL_Wind

25 May



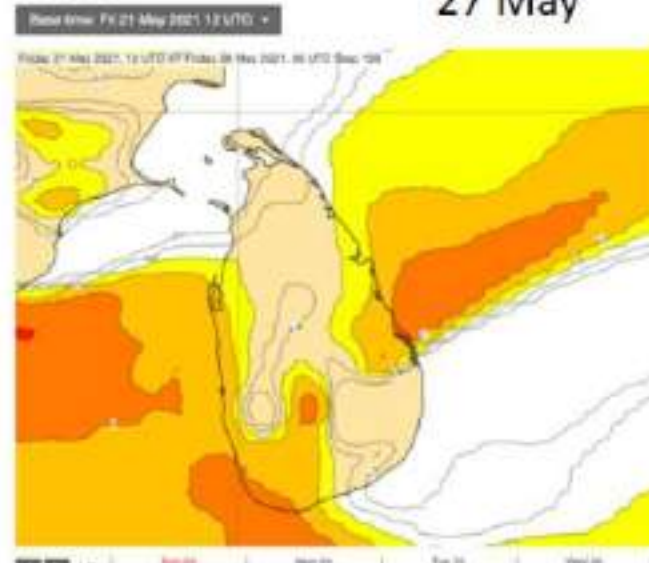
EFL_Wind

26 May



EFL_Wind

27 May

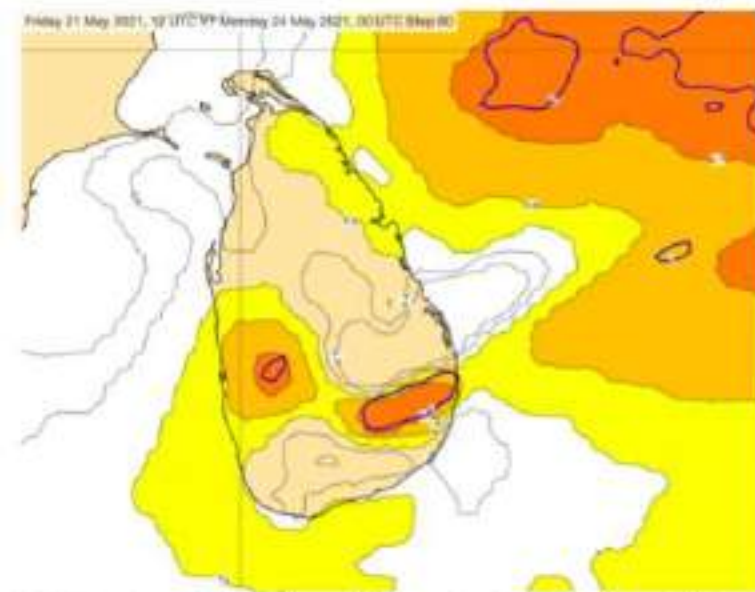


Strong wnds are likely over the island (especially western and Southwestern coastal areas, Southwest Quarter and Western slopes of the central hills) and surrounding sea areas on 25 and 26th May

EFI_WG

Base time: Fri 21 May 2021 12 UTC -

23 May

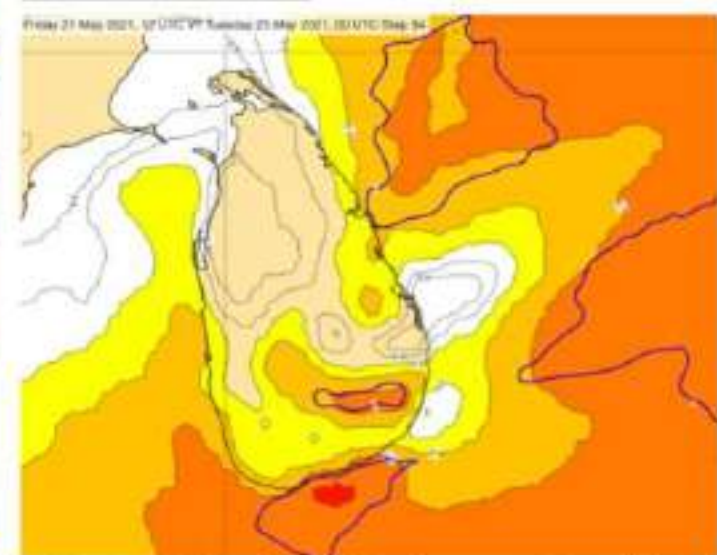


< > vt | Sun 23 | Mon 24 | Tue 25 | Wed 26

EFI_WG

Base time: Fri 21 May 2021 12 UTC -

24 May

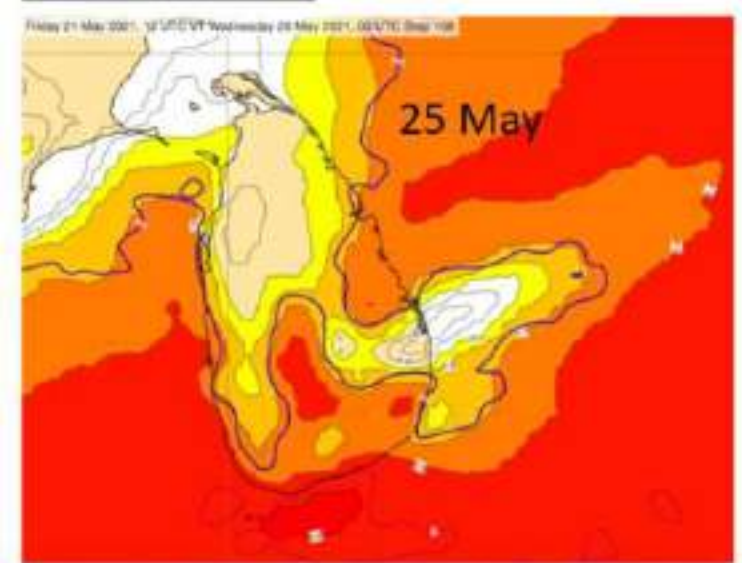


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EFI_WG

Base time: Fri 21 May 2021 12 UTC -

25 May

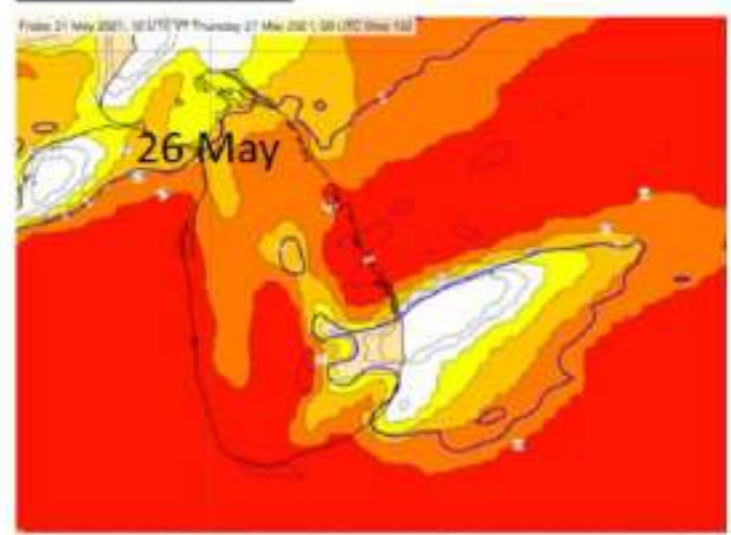


< > vt | Sun 23 | Mon 24 | Tue 25 | Wed 26 May 2021

EFI_WG

Base time: Fri 21 May 2021 12 UTC -

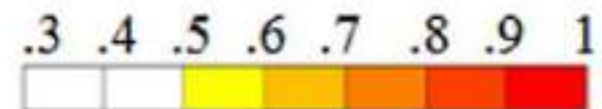
26 May



< > vt | Sun 23 | Mon 24 | Tue 25 | Wed 26

Possible wind gusts during this week based on wind Gust Extreme Forecast Index

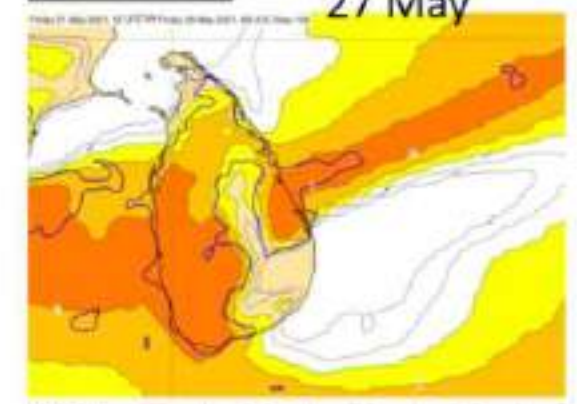
Strong wnd gusts are likely over the island (especially western and Southwestern coastal areas, Southwest Quarter and Western slopes of the central hills) and surrounding sea areas on 25 and 26th May



EFI_WG

Base time: Fri 21 May 2021 12 UTC -

27 May

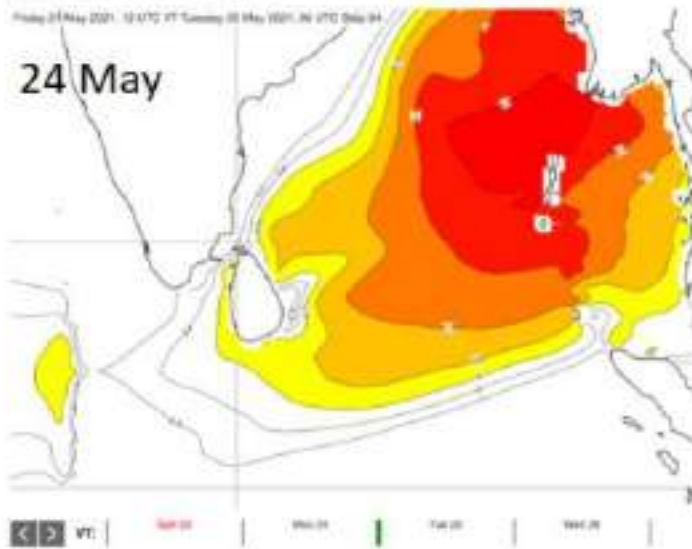


< > vt | Sun 23 | Mon 24 | Tue 25 | Wed 26

Possible rough seas / coastal inundations during this week based on Significant wave height Extreme Forecast Index

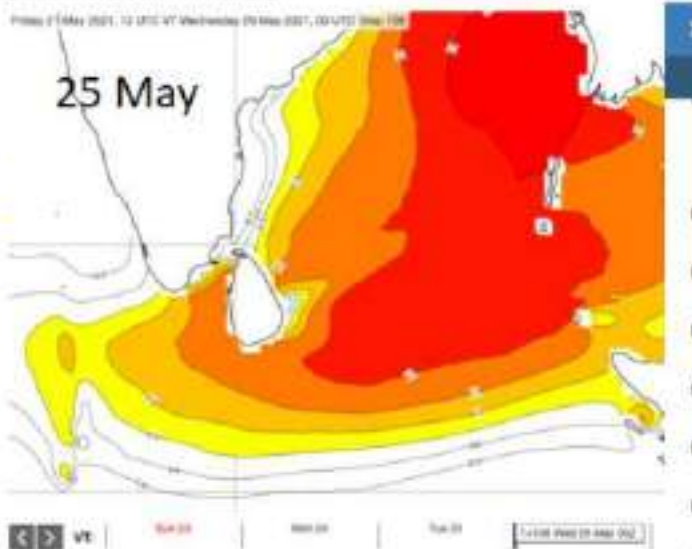
SWH_EFI

Base time: Fri 21 May 2021 12 UTC

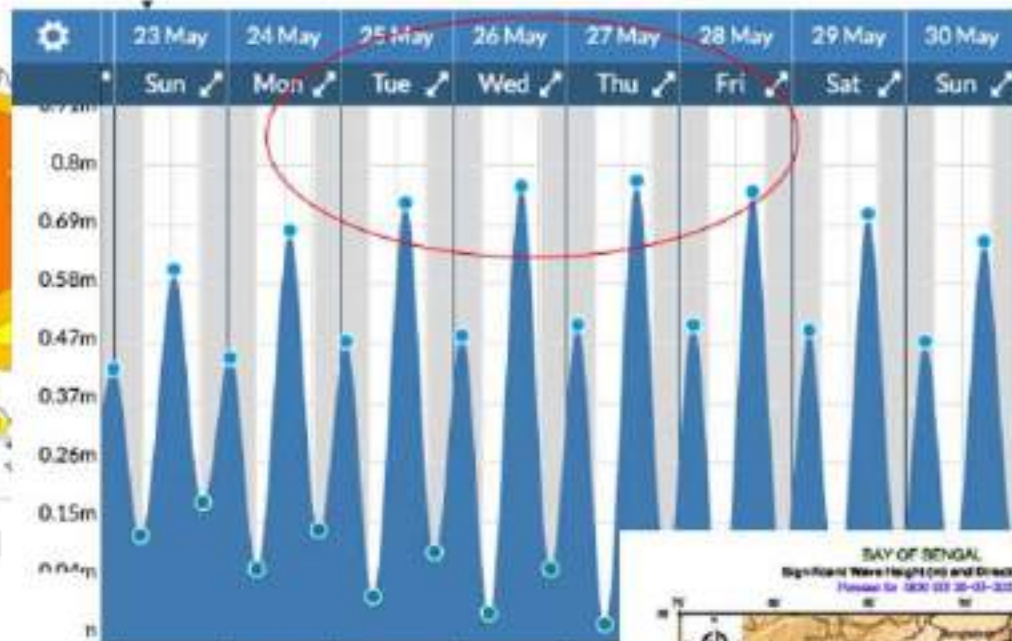


SWH_EFI

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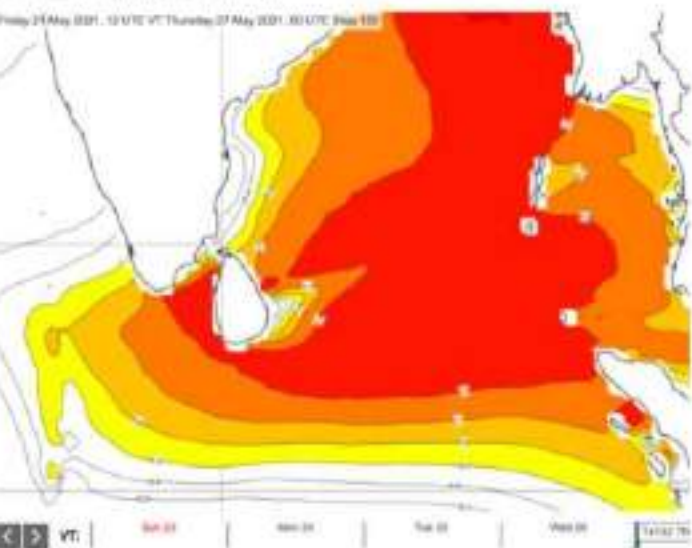


Astronomical Tide Forecast



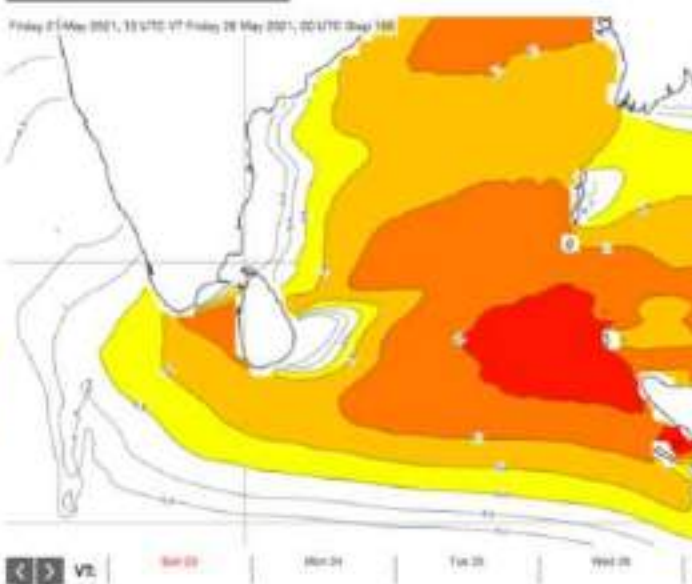
SWH_EFI

Base time: Fri 21 May 2021 12 UTC



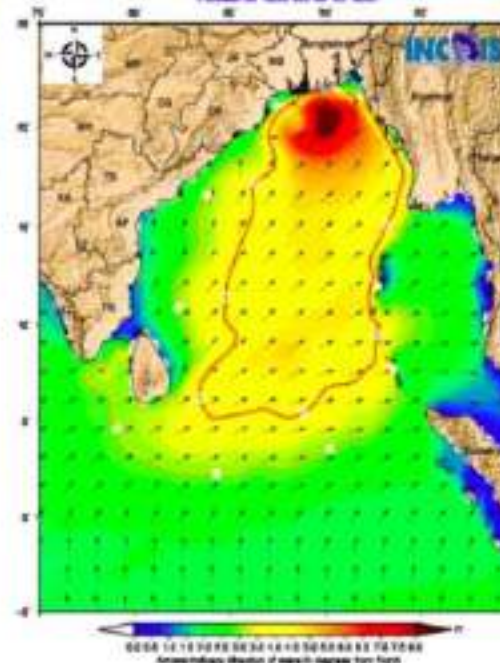
SWH_EFI

Base time: Fri 21 May 2021 12 UTC



Time	00:33AM	1:12AM	1:47AM	2:21AM
High Tide	0.45m	0.48m	0.49m	0.50m
Low Tide	0.61m	0.68m	0.73m	0.76m

BAY OF BENGAL
Significant Wave Heights and Direction
Forecast for 00:00:00 20-05-2021









rough seas
coastal inundations
western southwestern
southern coast
coincide with
astronomical high tide
25/26 May

Summary

With the formation of low pressure area subsequent cyclonic storm in the Bay of Bengal southwest monsoon flow will establish over Sri Lanka around 25-26th

- With the onset of Southwest monsoon
- Very heavy rainfalls over southwest quarter
- strong winds
- Rough seas
- coastal inundation and erosion southwestern and western coast
can be expected

Thank You

Near Gale	Whole trees in motion.		
8 Gale	Difficult to walk against wind. Twigs and small branches blown off trees.		62-74 km/h 34-40 knots
9 Strong Gale	Slight structural damage may occur (slates blown off roofs).		75-87 km/h 41-47 knots
10 Storm	Structural damage likely. Trees uprooted.		88-101 km/h 48-55 knots
11 Violent Storm	Widespread damage to structures.		102-117 km/h 56-63 knots
12 Hurricane	Severe structural damage to buildings. Widespread devastation.		118 km/h or more 64 knots or more

