

## ECMWF extends product sets available to WMO NMHS's

ECMWF has extended the data sets of HRES and ENS products it makes available to WMO NMHS's.

The new products for the HRES parameters are highlighted in Table 1 and Table 2 and those for the ENS parameters are summarized in Table 3.

Products have been made available via ECMWF's DCPC. Information on how to access the products is available at:

https://www.ecmwf.int/en/forecasts/datasets/wmo-and-acmad-datasets

Full description of the new products is available at:

https://www.ecmwf.int/en/forecasts/datasets/wmo-additional

Table 1 Products made available to WMO NMHS's based on HRES. New products are highlighted in red. WMO NMHS's from Region I will find ACMAD specific products, previously available for the ACMAD domain, are now available with a Global domain via DCPC interface.

BASED on HRES					
Fields	Parameter	Level			
	Geopotential height	850/500/250			
	Temperature	850/500/250			
	u,v	925/850/700/500/250/200			
	Relative humidity	850/700			
	Divergence, vorticity	925/700/250			
	MSL pressure	Surface			
	2m Temp,				
	10m u, 10m v	Surface			
	Total precipitation				
Resolution	0.5º x 0.5º				
Forecast range and time steps	Up to day 7 every 6h				
Frequency	Produced twice a day (00 and 12 UTC)				
of production					
Domain	Global				

Table 2: Products made available to WMO NMHS's based on HRES wave model. New products are highlighted in red.

Based on HRES wave parameters				
Fields	Parameter	Level		
	Significant height of combined wind waves and swell, Mean wave period, Mean wave direction	Surface		
	Peak wave period and Mean zero-crossing wave period	Surface		
Resolution	0.5º x 0.5º			
Forecast range and time	Up to day 3 every 3h, beyond day 3 every 6h			
Frequency	Produced twice a day (00 and 12 UTC)			
Domain	Global			

Table 3: Products based on ENS. New products are highlighted in red. Products marked with \* have not been released yet.

Requirements						
Fields	Parameter	Level	Thresholds			
	Probability of Precipitation		1, 5, 10,20, 25*, 50* mm and 100* mm/24 hours			
	Probability of 10 m sustained wind and gusts	Surface	10*, 15 and 25 m s <sup>-1</sup>			
	Probability of significant wave height		> 2/4/6/8 m			
	Probability of Temperature anomalies *	850	± 1, ± 1.5, ± 2 standard deviations with respect to a reanalysis climatology specified by the producing Centre			
	Ensemble mean + spread (standard deviation) of Geopotential height	500				
	Ensemble mean + spread (standard deviation) of MSL pressure	Surface				
	Ensemble mean + spread (standard deviation) of Wind speed and Temperature	850/250*				
Resolution	0.5					
Forecast range and time steps	Up to day ten every 12h					
Frequency of production	Produced twice a day (00 and 12 UTC)					
Domain	Global					