

Models from SMHI used in the SEPRISE demonstration

Institution	SMHI
Model Name	Hiromb
Characteristics	3D-circulation model
Area Covered	Sea Area: North Sea, Skagerrak, Kattegat and Baltic Sea
Variables Predicted	Salinity, temperature, currents, different ice-parameters, water level, turbulence parameters
Operational / Pre-operational	Operational, with 48 hr version and 10-day version
Source of Atmospheric Forcing	Hirlam 22-km (atmospheric circulation model) for 48-hr forecast & ECMWF 2.25° for 10-day forecast
Length of Forecast	48 hrs and 10-day
How many forecast cycles per day, i.e. how often is the model run?	2 times, 00Z & 12Z

Additional Information				
Numerical basis of the model	Model Area	Lon: -4.1° Lat: 48.5°		
	North Sea	Lon: 30.6° Lat: 65.9°		
	Number of grid points in X-Y axis	105 × 88		
	Model Area	Lon: 5.9° Lat: 53.3°		
	Baltic Sea extended	Lon: 30.3° Lat: 65.9°		
Resolution (° or km)	Number of grid points in X-Y axis	294 × 253		
	Number of vertical levels	24		
Computer used	Linux-cluster			
Validation method				
Use of model	x	Research	x	Public
	x	Governmental	x	Commercial
		Private		

Institution	SMHI
Model Name	SWAN
Characteristics	Third generation spectral wave model
Area Covered	Sea Area: North Sea, Skagerrak, Kattegat and Baltic Sea
Variables Predicted	Significant wave height, M2-period, wave direction
Operational / Pre-operational	Operational
Source of Atmospheric Forcing	Hirham 22-km (atmospheric circulation model)
Length of Forecast	48 hrs
How many forecast cycles per day, i.e. how often is the model run?	4 times, 00Z, 06Z, 12Z, 18Z

Additional Information				
Numerical basis of the model	Model Area	Lon	Lat	
		Lon	Lat	
	Number of grid points in X-Y axis			
	Number of vertical levels			
Resolution (° or km)	22 and 11 km			
Computer used	Linux-cluster			
Validation method				
Use of model	x	Research	x	Public
	x	Governmental	x	Commercial
		Private		