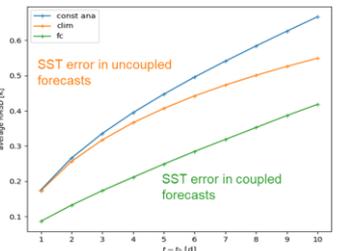


Numerical modelling at DWD: Operational status and selected R&D activities

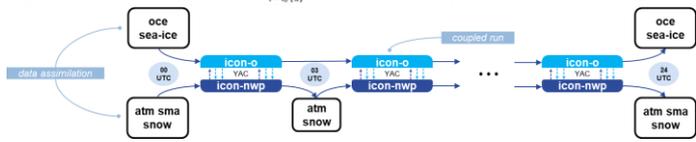
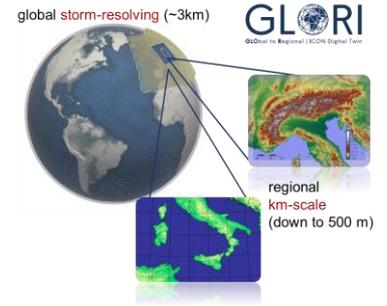
NWP model chain

Global	EU	D2 + D05	RUC	ART	AICON
ICON Global Non-Hydrostatic	ICON-EU 2-way-nest	ICON D2 LAM Convective Scale	ICON-D2 RUC Convective Scale	ICON ART Ensemble	AICON
Det 13 km Resolution EPS 26 km Resolution 120 level	Det 6.5 km Resolution EPS 13 km Resolution 74 level	Det 2 km + 500m Resolution EPS 2 km Resolution 65 level	Det 2 km Resolution EPS 2 km Resolution 65 level	26 km resolution 10 member Analysis every 3h	AI Forecast Forecasts Every 3h 7 days
40 member Analysis every 3h EnVAR + LETKF	40 member Analysis every 3h EnVAR + LETKF	40/20 member Analysis every 1h	40/20 member Analysis every 1h	EnVAR + LETKF	Forecasts 120h
Forecasts 180h: 00, 12 UTC, 120h: 06, 18 UTC, 51h: 03, 09, 15, 21 UTC	Forecasts 120 h: 00, 06, 12, 18 UTC, 51 h: 03, 09, 15, 21 UTC	KENDA: 4D-LETKF Forecasts 48h: 00, 03, 06, 09, 12, 15, 21 UTC	KENDA: 4D-LETKF Forecasts 14h: 00, 01, 02, ... 22, 23 UTC		

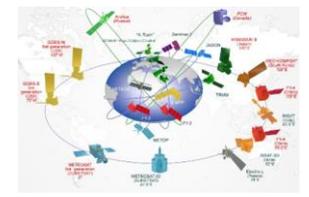
coupled ocean-atmosphere



GLORI digital twin



All-sky data assimilation



ICON@500m

