

ECMWF Model

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Detailed model description

Page containing details for all model configurations available in S2S since the project start => [ECMWF model description](#)

Overview of the model changes

Model version	Implementation Date in S2S	Time range	Atmosphere Resolution	Ens. Size	Frequency	Rfc type	Rfc length	Rfc frequency	Rfc size	Ocean Resolution	Active Sea Ice	Remarks
CY48R1	27/06/2023	d 0-46	Tco319L137 (about 32 km)	101	daily	on the fly	past 20 years	2/week (Mon/Thu)	11	1/4 degree	Yes	
CY47R3	13/10/2021	d 0-46	Tco639 L137 (about 16 km) up to day 15 and Tco319 (about 32 km) after day 15	51	2/week (Mon/Thu)	on the fly	past 20 years	2/week (Mon/Thu)	11	1/4 degree	Yes	
CY47R2	11/05/2021	d 0-46	Tco639 L137 (about 16 km) up to day 15 and Tco319 (about 32 km) after day 15	51	2/week (Mon/Thu)	on the fly	past 20 years	2/week (Mon/Thu)	11	1/4 degree	Yes	
CY47R1	30/06/2020	d 0-46	Tco639 L91 (about 16 km) up to day 15 and Tco319 (about 32 km) after day 15 day 15 L91	51	2/week (Mon/Thu)	on the fly	past 20 years	2/week (Mon/Thu)	11	1/4 degree	Yes	6-hourly 10u /v added since 26 Nov 2020
CY46R1	11/06/2019	d 0-46	Tco639 L91 (about 16 km) up to day 15 and Tco319 (about 32 km) after day 15	51	2/week (Mon/Thu)	on the fly	past 20 years	2/week (Mon/Thu)	11	1/4 degree	Yes	additional ocean parameters added since 2020/01/02
CY45R1	06/06/2018	d 0-46	Tco639 L91 (about 16 km) up to day 15 and Tco319 (about 32 km) after day 15	51	2/week (Mon/Thu)	on the fly	past 20 years	2/week (Mon/Thu)	11	1/4 degree	Yes	
CY43R3	11/07/2017	d 0-46	Tco639 L91 (about 16 km) up to day 15 and Tco319 (about 32 km) after day 15	51	2/week (Mon/Thu)	on the fly	past 20 years	2/week (Mon/Thu)	11	1/4 degree	Yes	
CY43R1	22/11/2016	d 0-46	Tco639 L91 (about 16 km) up to day 15 and Tco319 (about 32 km) after day 15	51	2/week (Mon/Thu)	on the fly	past 20 years	2/week (Mon/Thu)	11	1/4 degree	Yes	
CY41R2	08/03/2016	d 0-46	Tco639 L91 (about 16 km) up to day 15 and Tco319 (about 32 km) after day 15	51	2/week (Mon/Thu)	on the fly	past 20 years	2/week (Mon/Thu)	11	1 degree	No	
CY41R1	14/05/2015	d 0-46	TL639 L91 (about 32 km) up to day 10 and TL319 (about 64 km) after day 10	51	2/week Mon/Thu	on the fly	past 20 years	2/week (Mon/Thu)	11	1 degree	No	
CY40R1	01/01/2015	d 0-32	TL639 L91 (about 32 km) up to day 10 and TL319 (about 64 km) after day 10	51	2/week (Mon/Thu)	on the fly	past 20 years	once a week (Thu)	5	1 degree	No	

Description of the main changes

 For the full details refer to [the official IFS documentation](#).

CY48R1

- increased eps size to 101 for the real-time forecasts
- the frequency changed to daily for the real-time forecasts since 28/06/2023
- the same horizontal resolution for the atmosphere Tco319L137 (about 32 km) and the whole forecast range
- the first reforecasts run with the new cycle on 29/06/2023

2020/01/02 [Addition of ocean parameters](#)

CY43R1

- changes include increased ocean model resolution to 1/4 degree and active sea-ice
- operational since 22/11/2016 (included)

CY41R2

- operational from 8/03/2016 (included) to 22/11/2016 (excluded)

CY41R1

- changes include extension of re-forecast ensemble size to 11 twice-weekly and forecast length to 46 days
- operational from 14/05/2015 (included) to 8/03/2016 (excluded)

CY40R1

- operational before 14/05/2015 (excluded)