



PROGRAMME OF THE
EUROPEAN UNION

Copernicus
Europe's eyes on Earth



European
Commission

CEMS Hydrological Forecast computational centre

EFAS Annual meeting 2023
Christel Prudhomme



COPERNICUS EMERGENCY MANAGEMENT SERVICE

What do we do?

24/7 production



computation maintenance

Data services



archiving access

Web operation



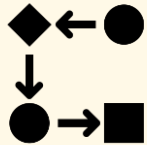
services interface

Delivery



design management

Continuous improvements



workflows products

Evolution



collaboration development

Research to Operation



integration testing

Performance monitoring



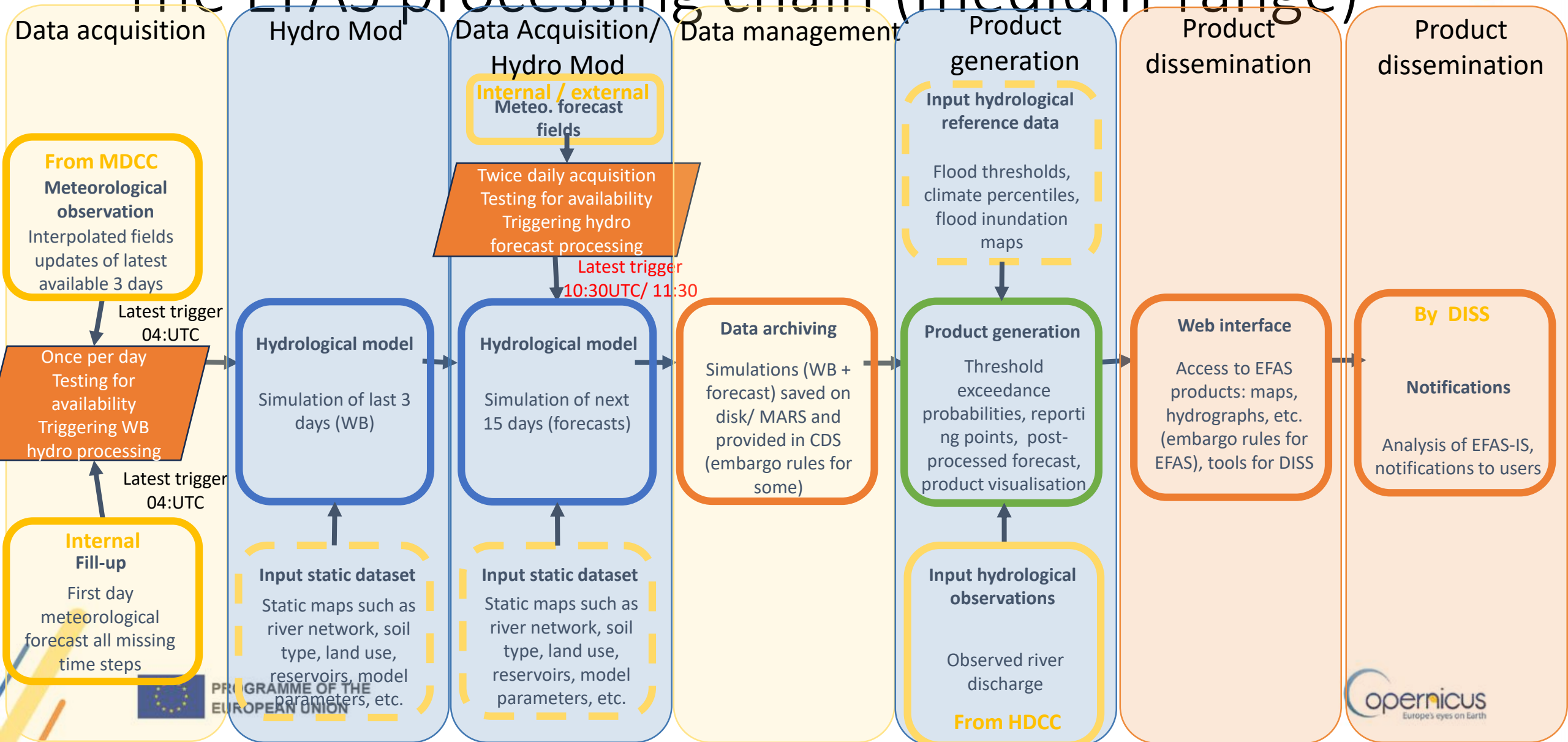
support analytics

Outreach



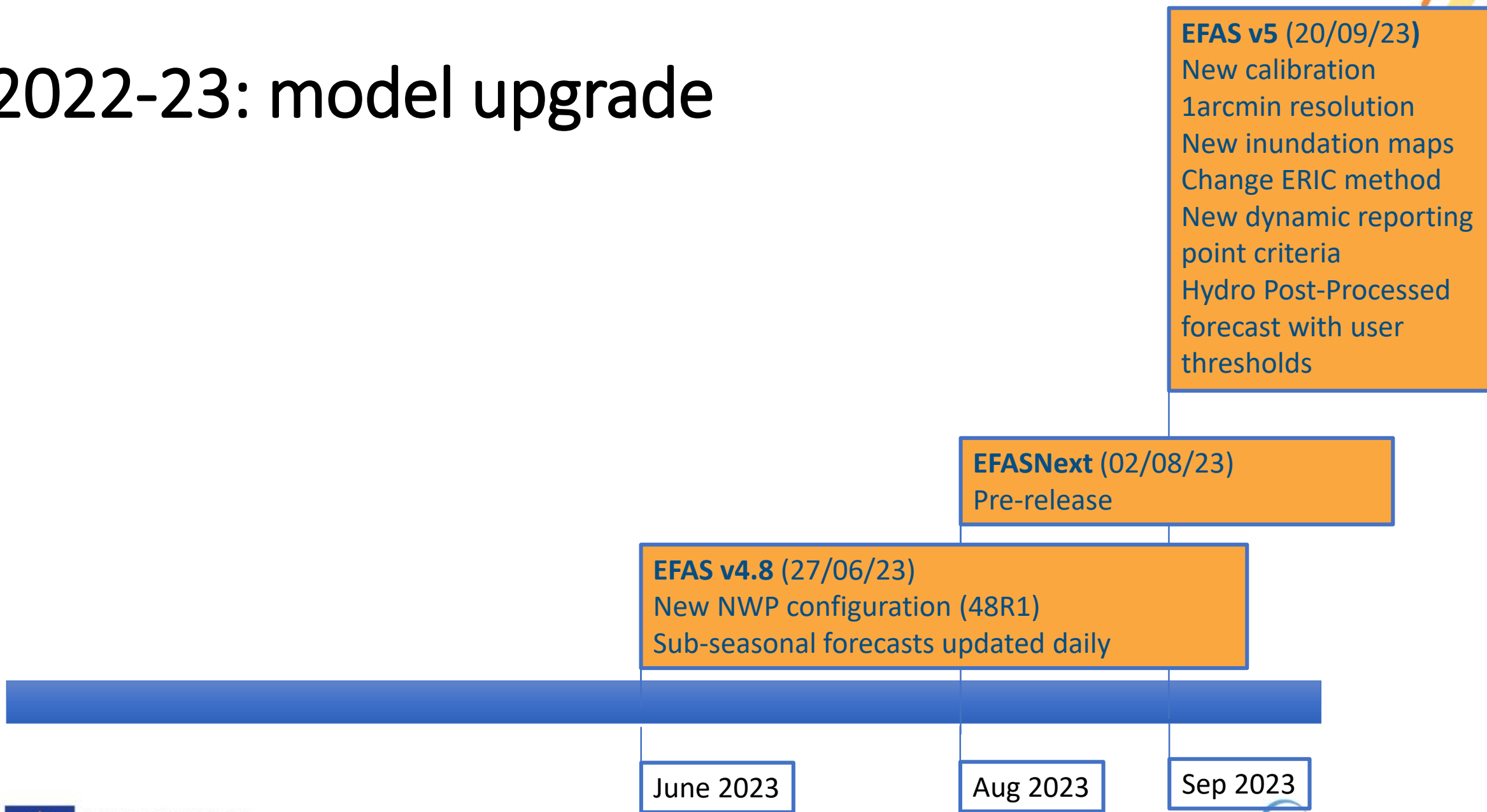
documentation training

The EFAS processing chain (medium-range)

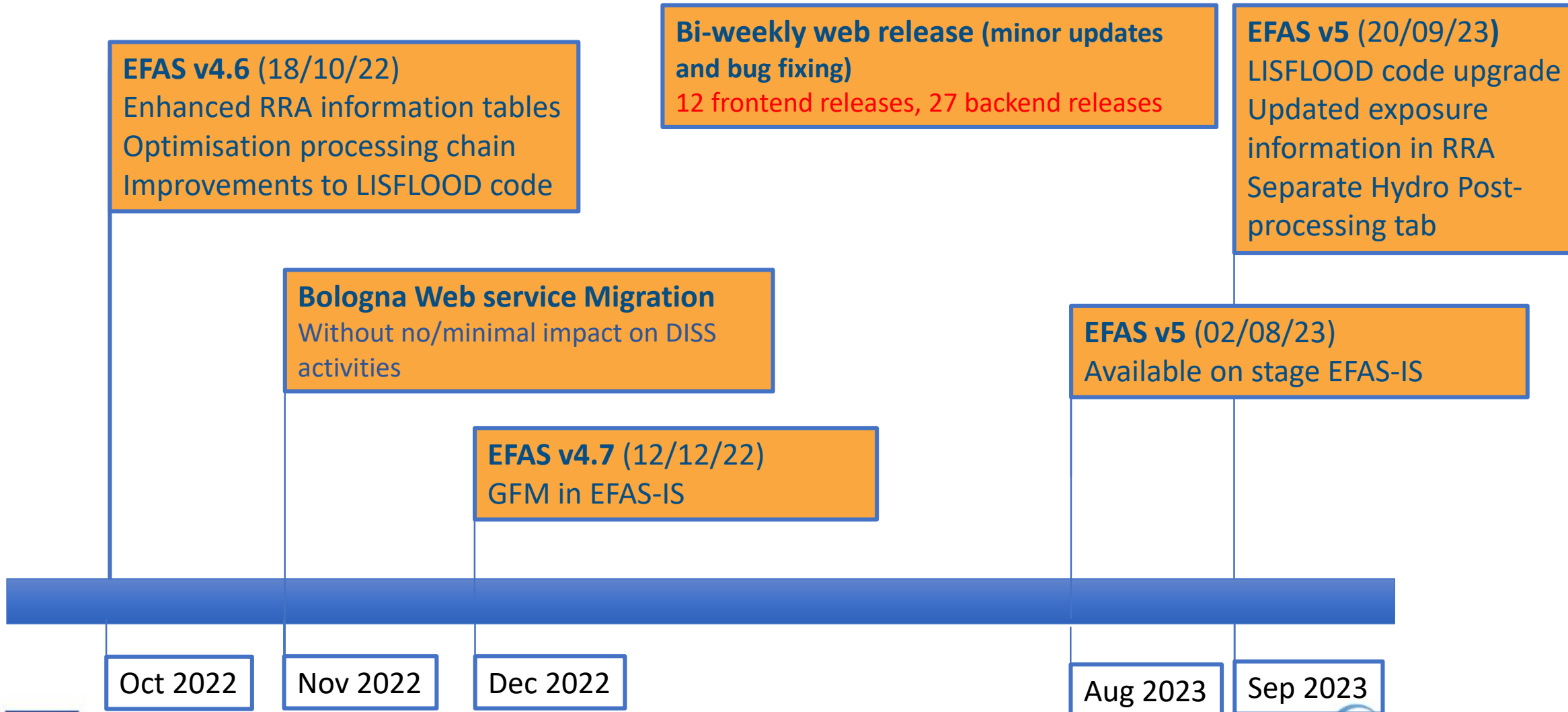


What happened in 2022-23?

2022-23: model upgrade



2022-23: system upgrade



2022-23: degraded service

23 Nov 2022: COSMO-LEPS delayed (late NWP)

29 Nov 2022: Web delivery failure – service resumed 09:06 UTC (55mn before KPI)

12 Feb 2023: Degraded forecast due to missing DWD files

17 Feb 2023: ERCC overview not working – service resumed 09:02 UTC (58 mn before KPI)

Nov 2022

Feb 2023

2022-23: service failure

From 20 Sep 2023
Breach of KPI
(between 5 and 15 mn)
for 12UTC
forecasts

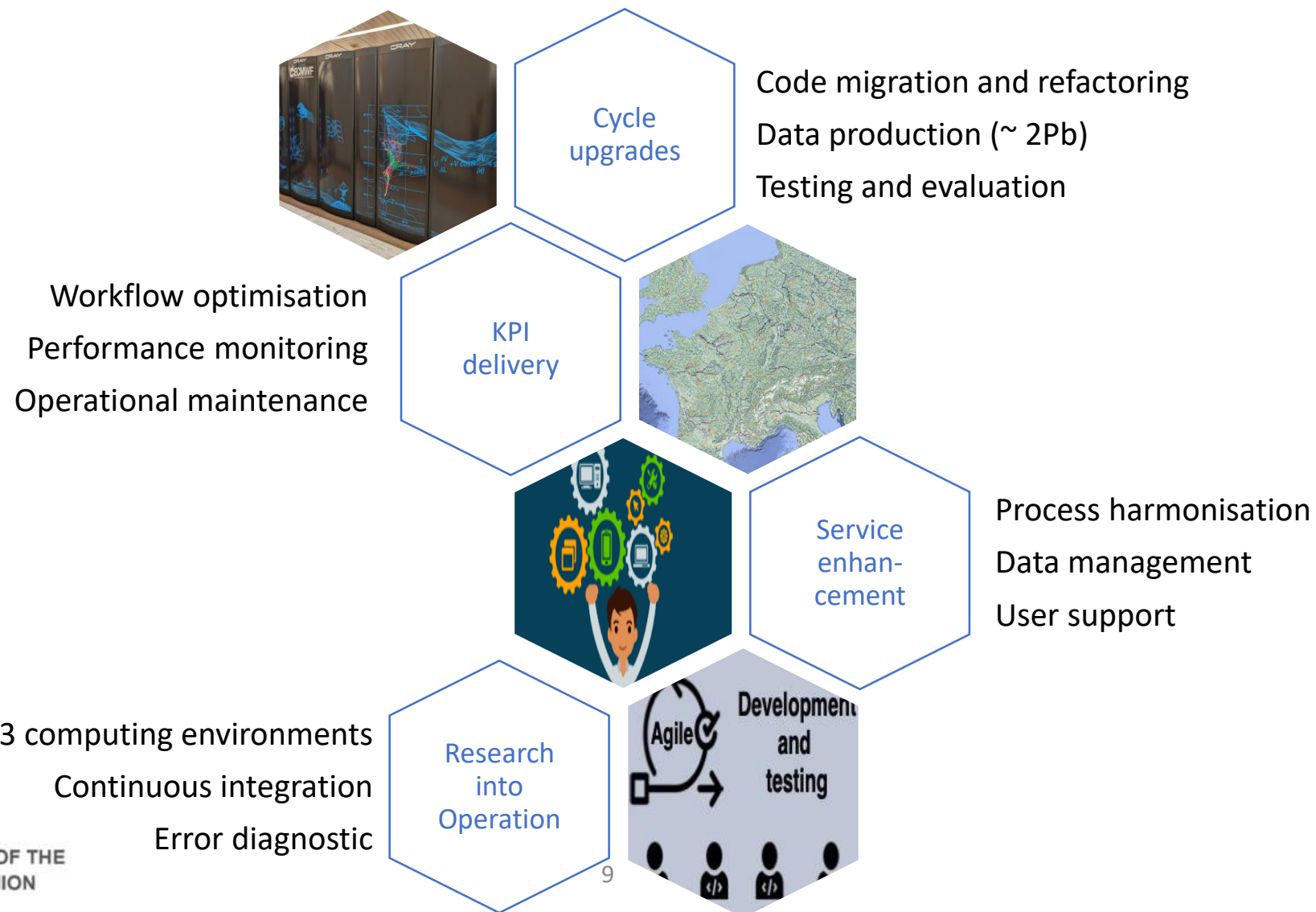
Oct 2022

Jan 2023

June 2023

September 2023

Behind the scenes



Key collaborations across centres

LISFLOOD refactoring and optimization
New modules

Outreach and training
Improved knowledge exchange

Flash Flood
Improved information

Feedback notification
Improved functionalities

GFM in EFAS-IS
New technology

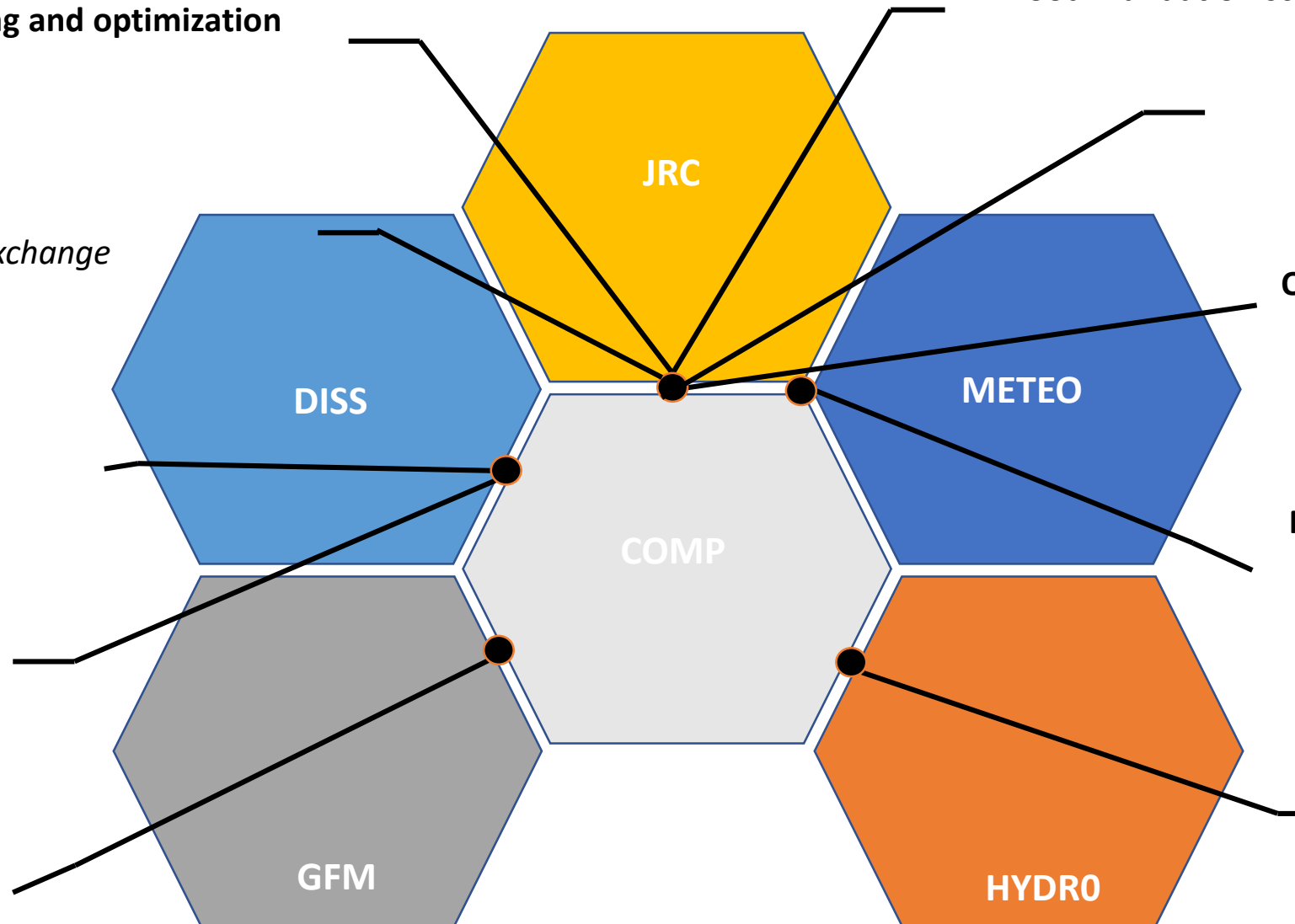
Flood inundation scripts migration/testing
New infrastructure

Notification criteria
New algorithm

European Drought Observatory scripts migration and testing
New infrastructure

METEO forcing data exchange
Workflow optimisation

Update of Hydro stations
New exchange mechanisms



Who are we?

Cinzia



COMP deputy director,
Hydrological modelling

Christel



COMP director
Project management

Arthur



Operational
production

Shaun



Evaluation, quality
control

Ellie



Support, CDS, Data
management

Calum



Flash flood and flood
impact forecasting

Ervin



Hydrological forecasting

Michel



Research To
Operation

Gwyn



Support, Hydro
Post-processing

Corentin



Computing
science

Karen



Support,
outreach, KPI

Juan



Software engineering

Dimitar



Web development

STAY CONNECTED

EVENTS, ONLINE, and MAP VIEWERS



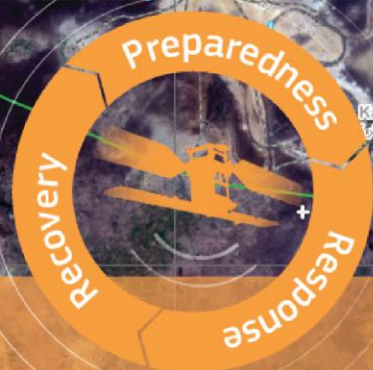
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Rapid Mapping



Risk & Recovery Mapping



Floods



Fires



Droughts



Population



Built-up areas



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