



Emergency Management

Status of EFAS operation 2021-22: experience, issues, challenges

CEMS Hydrological Forecast
Computational team





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Who are we?





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Who is here?

Calum – Flash flood = impact

Arthur – Production analyst

Christel



Ervin – Drought and hydro forecasting

Cinzia – hydro modelling



Gwyn – Post-processing



Dimitar – Web service

Corentin – product generation

Karen – user support and documentation





Our mission

- Run **24/7 operations of EFAS and GloFAS**, including maintenance, bug fixes etc...
- Implement **improvements** on existing workflows and products
- (Co-)Develop, operate and maintain the EFAS and GloFAS **web services and interfaces**
- Develop, operate and maintain EFAS and GloFAS **data services**
- **Collaborate** with other centres and the JRC to continuously deliver an improved service
- **Develop, design, test and migrate** into operations new models, products and services
- **Respond** to issues raised by EFAS forecasters and users in general
- **Document** the service, provide user support, deliver training and outreach activities



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What happened in 2021-22?

Feb 2021

Jan 2022

June 2022

September 2022



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2021 - 22 : model upgrade

EFAS prod v4.1 (15/02/21)
ERIC reporting point criteria

EFAS v4.2 (24/02/21)
More PP models

EFAS v4.4 (20/06/22)
Reporting point upgrade

EFAS v4.5 (13/09/22)
6-hourly PP

Feb 2021

Jan 2022

June 2022

September 2022



2021 - 22 : system upgrade

Bi-weekly web release (minor updates and bug fixing)
12 improvements (major issues)

EFAS v4.2 (24/02/21)
Improved legend, improved RP layer

EFAS v4.3 (27/10/21)
Seasonal outlook open layer in EFAS-IS, more reporting points

EFAS v4.4 (20/06/222)
Social media layer, enhanced notification functionality, CDS enhanced, CEMS-Flood documentation

EFAS v4.5 (13/09/22)
TAMIR experimental products

Feb 2021

Jan 2022

June 2022

September 2022



2021 - 22 : degraded service

3 Oct 2021: Degraded meteo obs (MARS-JRC non available)

11 Nov 2021: Missing meteo obs maps, EFAS initial conditions revised (IT security incident)

23 Dec 2021: COSMO-LEPS delayed (late NWP)

8 March 2022: Degraded meteo maps in eastern Europe due to war in Ukraine

8 March 2022: COSMO-LEPS delayed

11-13 July 2022
COSMO-LEPS delay

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2021-22: service failure

2 Mar 2021: COSMO-LEPS failure (Delayed NWP)

16 June 2021: Cray HPC failure (delayed NWP)

24 Nov 2021: ECMWF data failure (delayed NWP)

Feb 2021

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September 2022



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2021-22: service delivery

36 ECMWF 'high risk periods' (system sessions)
No impact on EFAS release

No cases of missed KPI

8 September 2022
Start move ECMWF data
tapes
No impact on EFAS release

Feb 2021

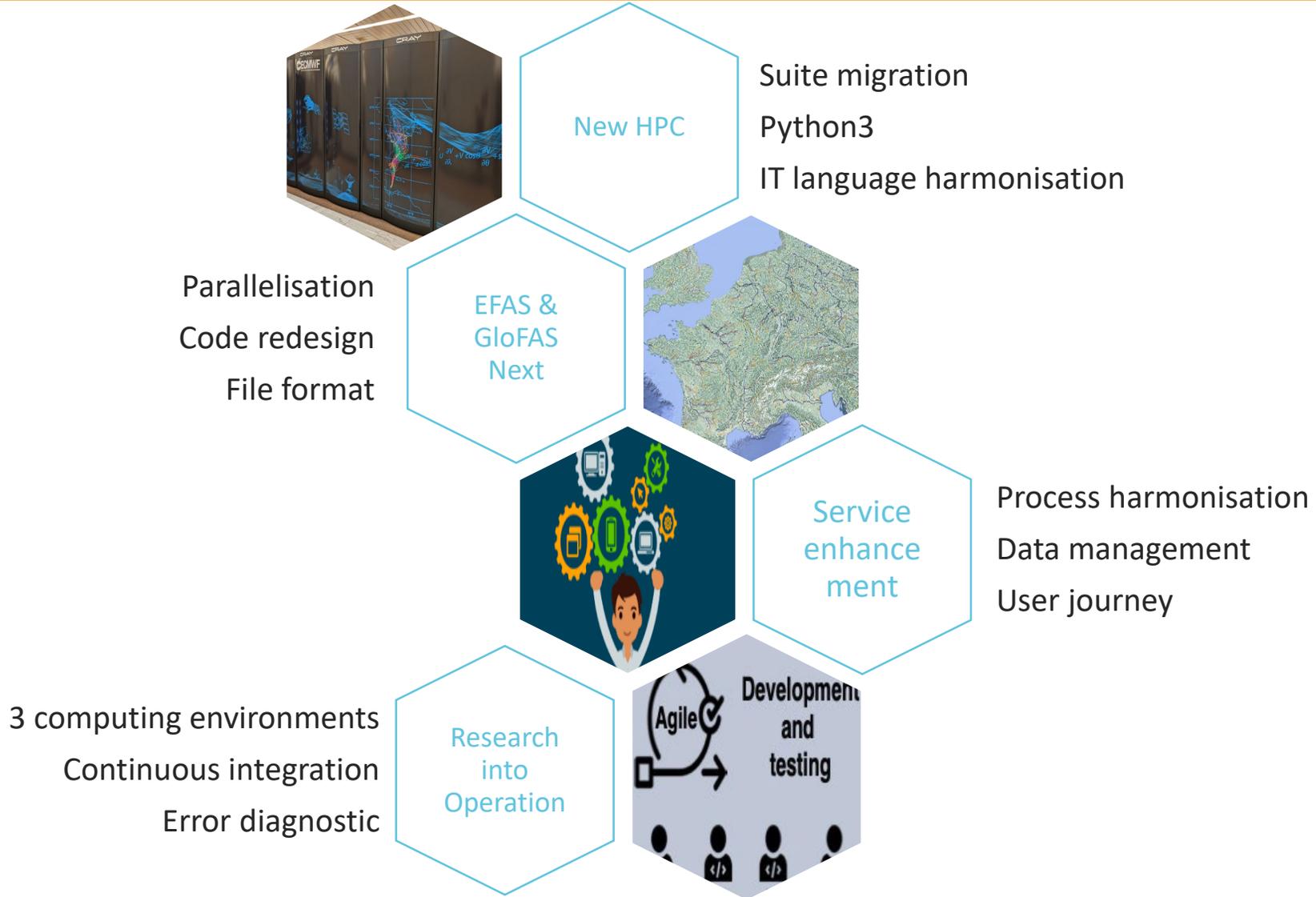
Jan 2022

June 2022

September 2022



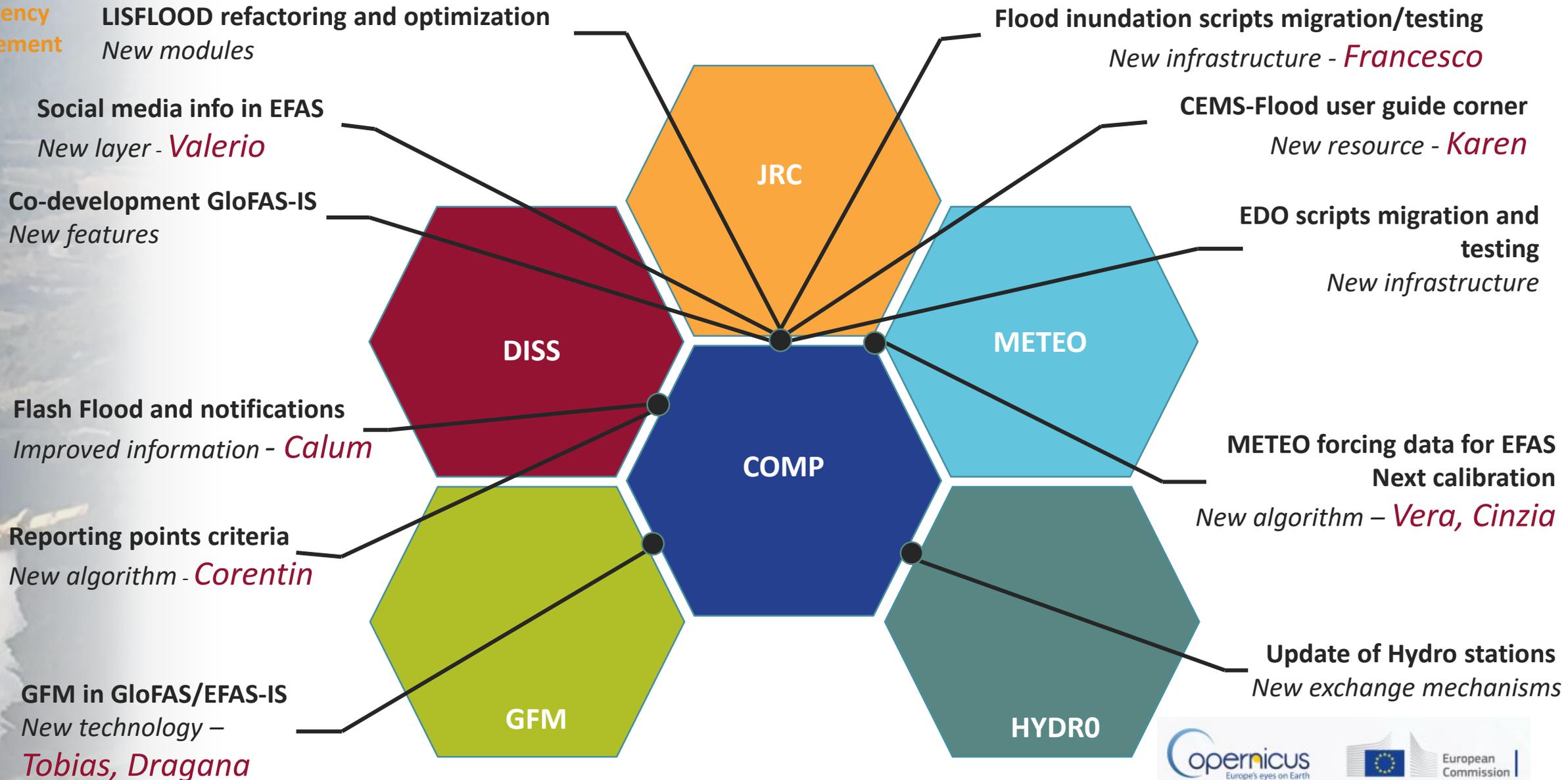
Behind the scenes





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Key collaborations





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Thank you

