EFAS

European Flood Awareness System

What is new since the 15th EFAS Annual Meeting

Emergency Management

CEMS Hydrological Data Collection Centre

October 2021

Copernicus

European Commission

soologic® TECHNOLOGICAL SOLUTIONS

Junta de Andalucía
Consejería de Agricultura, Ganadería, Pesca y Desarrollo Sostenible
Agencia de Medio Ambiente y Agua de Andalucía

Rediam

The EFAS Hydrological Data Collection Centre

Emergency Management

The CEMS Hydrological Data Collection Centre (HYDRO) is a fully operational and automated hydrological data collection service of the Copernicus Emergency Management Service.

Copernicus
Europe's eyes on Earth
European Commission

EFAS HDCC Consortium and TEAM

Emergency Management

soologic®
TECHNOLOGICAL SOLUTIONS

Junta de Andalucía
Consejería de Agricultura, Ganadería, Pesca y Desarrollo Sostenible
Agencia de Medio Ambiente y Agua de Andalucía

Rediam

opernicus
Europe's eyes on Earth

European Commission

Emergency Management

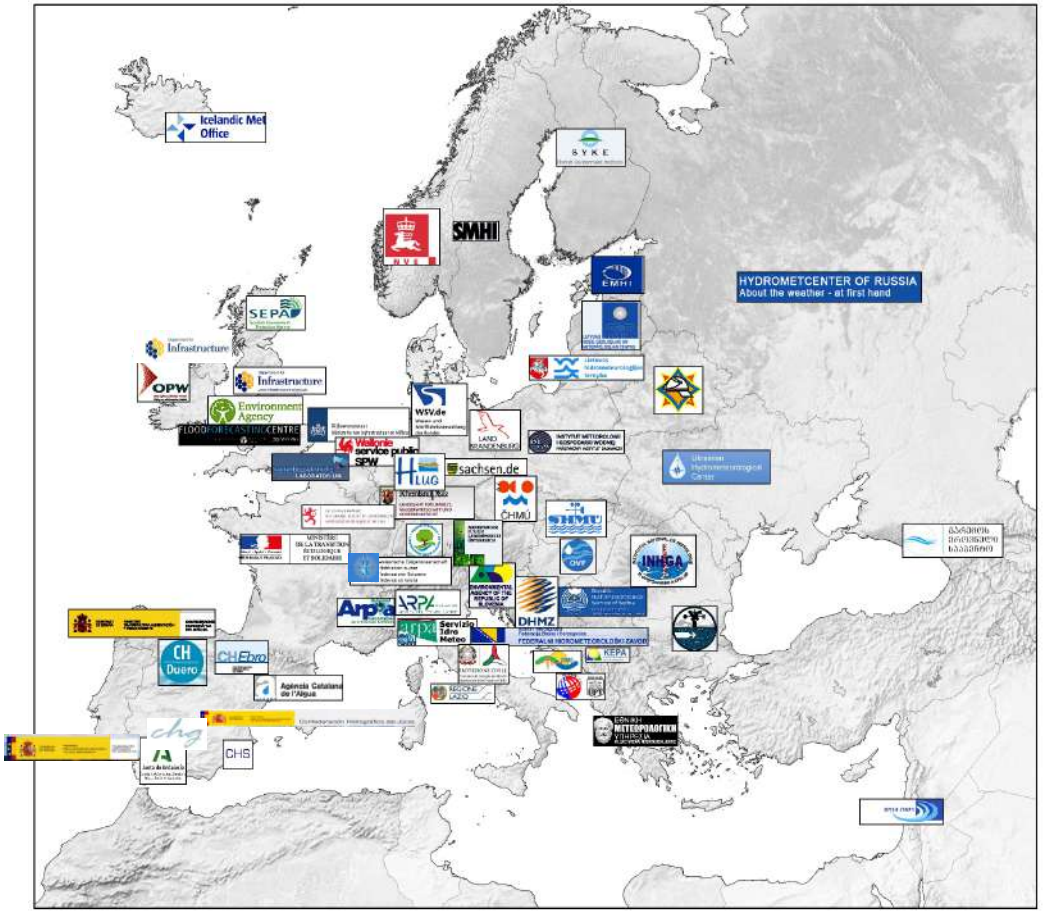
What the EFAS HDCC does?

- Collection: NRT, Historical data and Metadata
- Post processing: Harmonisation, Normalisation, Interpolation…
- Sharing data with Copernicus JRC and Centres
- Reports
- Communications with the partners

EFAS HDCC DATA PROVIDERS

Emergency Management

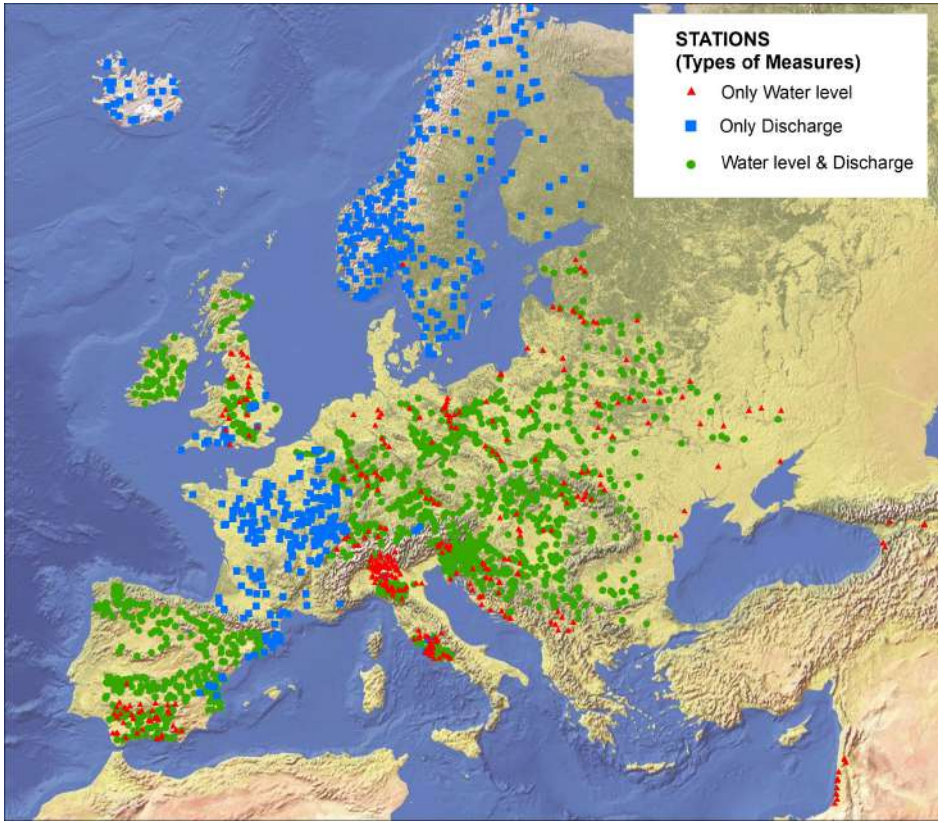
- By the end of 2020, 48 active data providers
- 1,990 stations
- 32 countries and more than a 50% of all the European water basins.



EFAS HDCC STATIONS

Emergency Management

	Before 2020	End of 2020	Oct-2021
Data Providers	64	67	68
Active Data Providers	46	48	50
No Of Stations Registered	3,253	3.533	3.949
No Of Active Stations	1,792	1.990	2.361



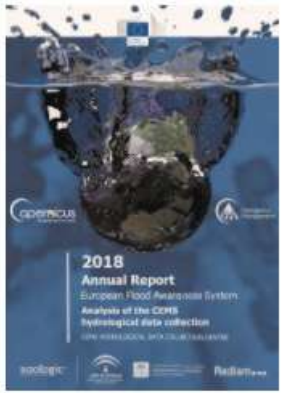
Copernicus Europe's eyes on Earth
European Commission

Emergency Management

CEMS Hydrological data collection Centre Annual report

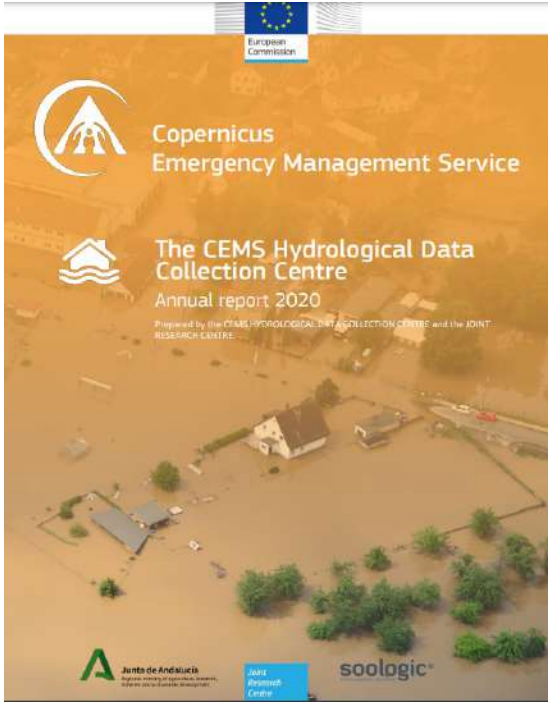
2017

2018



2019

2020



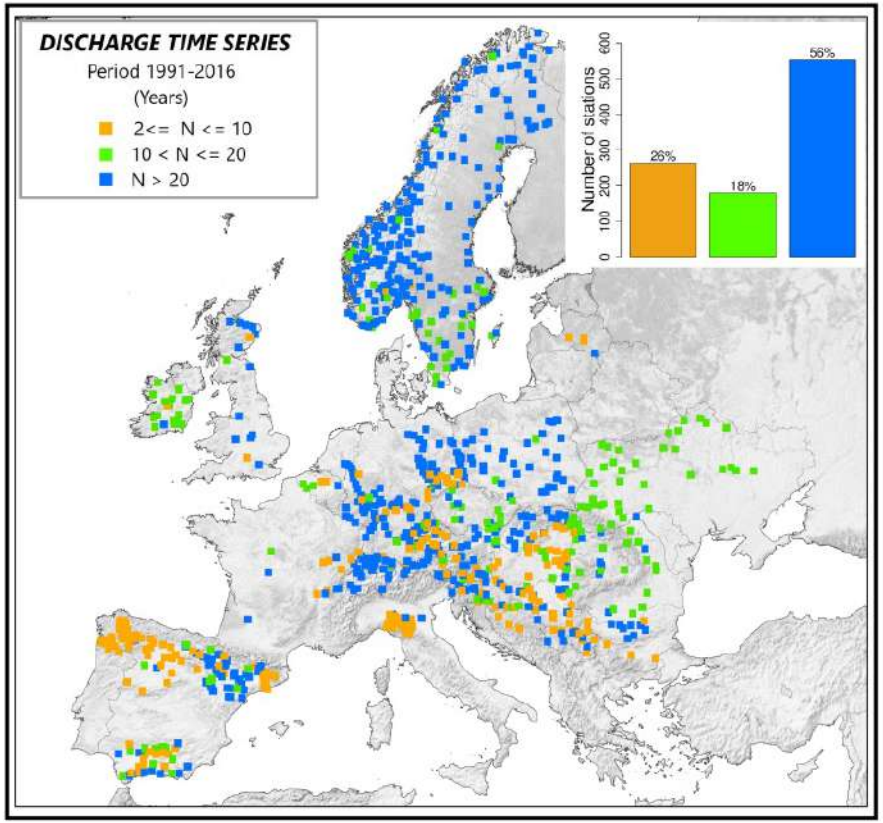
More info HERE

Copernicus Europe's eyes on Earth
European Commission

Emergency Management

Hydrological Conditions

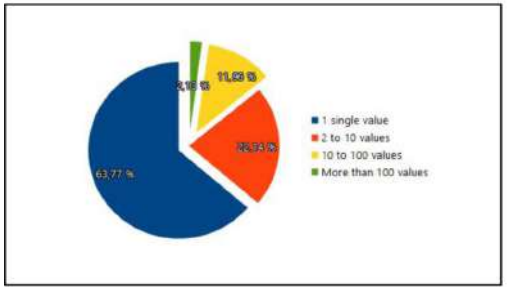
- The general hydrological conditions across Europe, focusing on important deviations of average discharge.
- In the map, the spatial distribution of the hydrological gauging stations chosen for this analysis

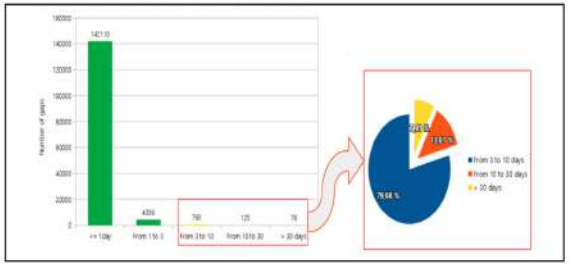


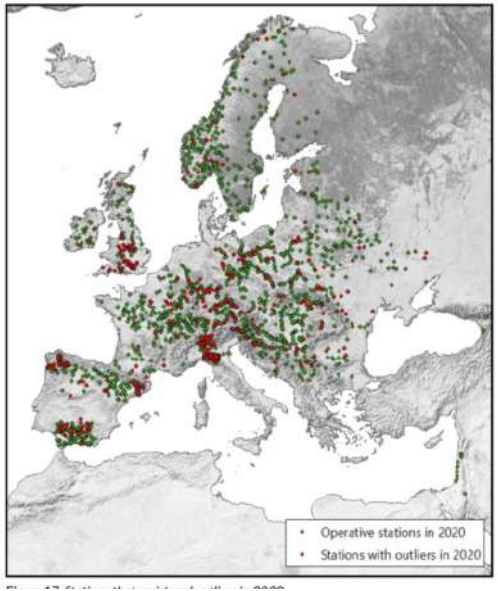
Emergency Management

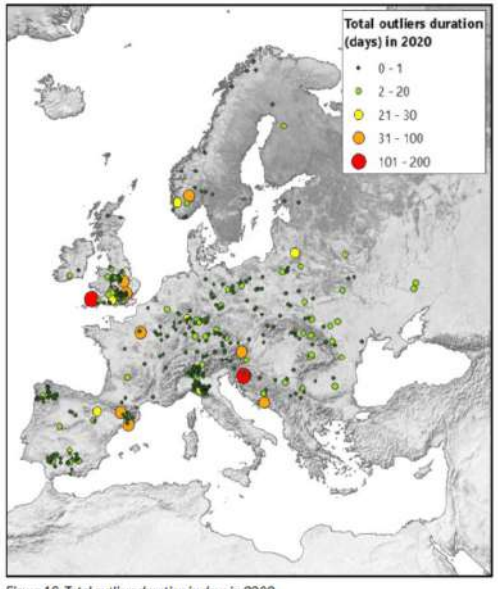
Gaps and outliers analysis

- 95.1% of all expected data were received
- Highest than in 2019 even with an increment in the number of data received
- Regularity in data reception. 90% - 96%.





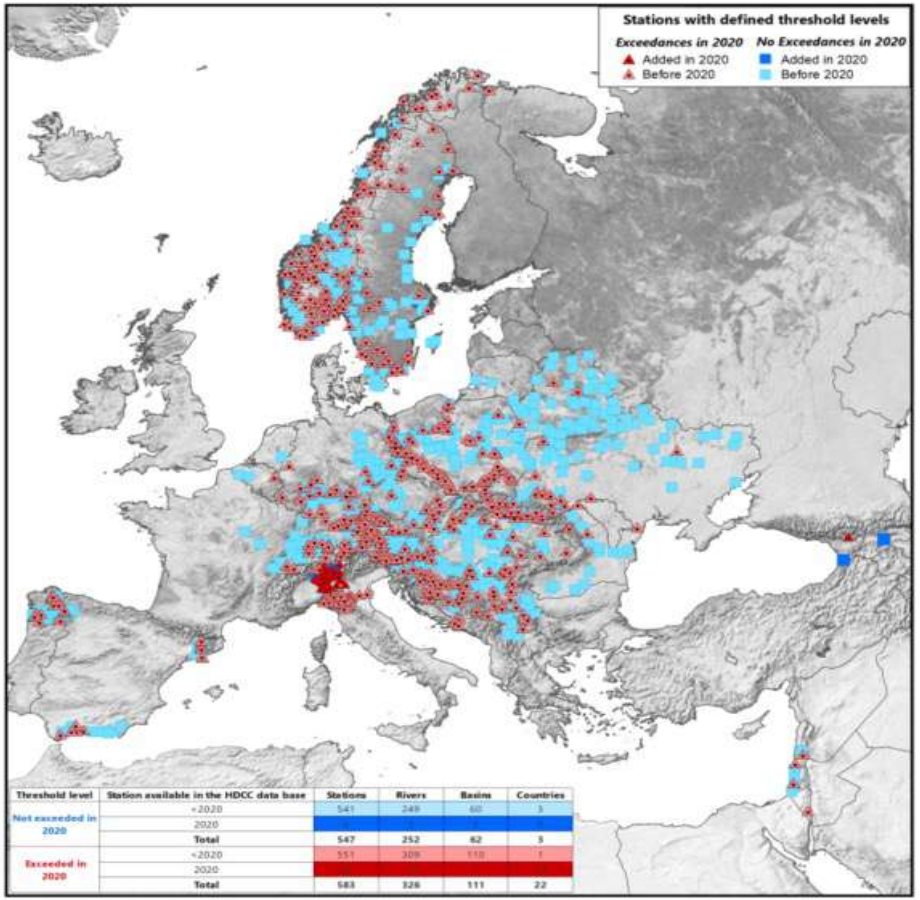




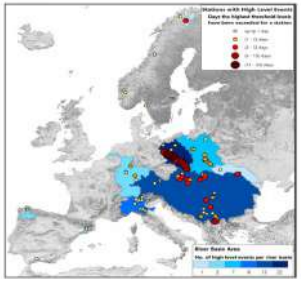
Emergency Management

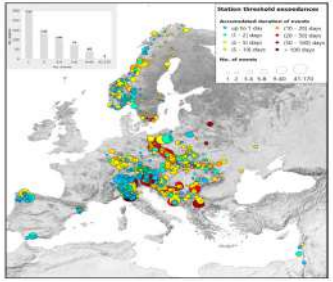
Exceedances

- 1790 active stations selected for this analysis
- threshold levels were available for 1130 stations (63%) (light and dark blue stations in the map)
- Compared to 2019, the number of stations with at least one threshold level has increased by 38 and these stations now cover a total of 578 rivers, 173 basins and 25 countries



Threshold level	Station available in the HDCC data base	Stations	Rivers	Basins	Countries
Not exceeded in 2020	<2020	541	249	60	3
	2020				
	Total	547	252	62	3
Exceeded in 2020	<2020	551	309	110	1
	2020				
	Total	583	326	111	22





Some conclusions

- The analysis has shown that the water contribution in 2020 is in general higher compared to 2019, however still lower than the historical average between 1991 and 2016.
- The number of data gaps in the hydrological time series have decreased in 2020 with respect to the previous year (525,936 vs 605,961) even when the total number of received data has increased by 10%.
- With regards to extreme events, the analysis has shown that although the total number of exceedance events decreased in 2020 compared to the year before,
- 2020 had twice the number of “high level" events as 2019 had.

Emergency Management

EFAS Detailed Assessment Report

From year 2019 onwards The EHDCC collaborates with all the EFAS Operative Centers

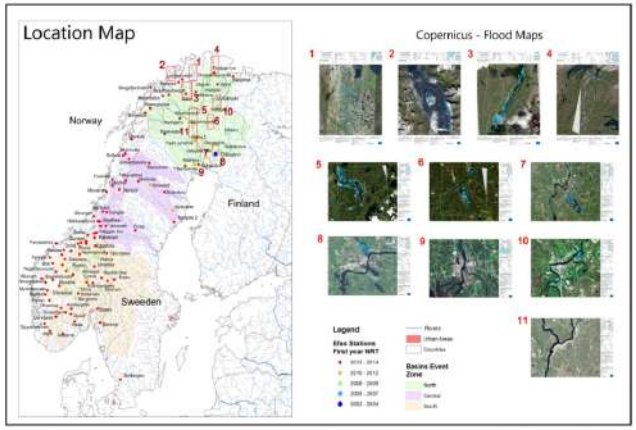
2019

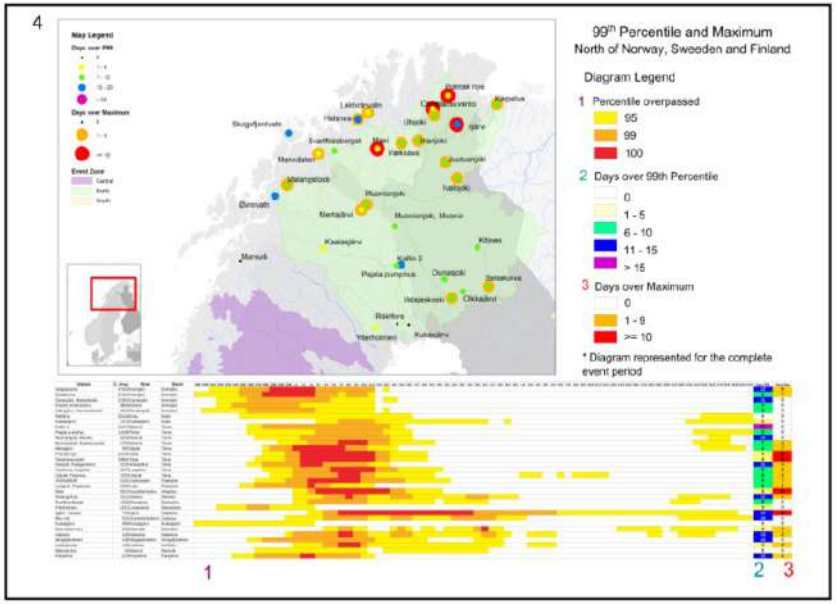
2020

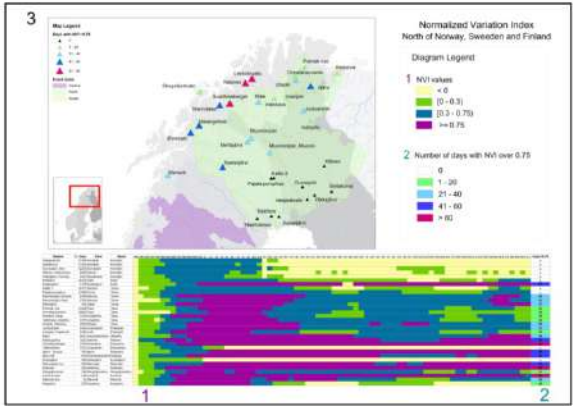
More info HERE

Emergency Management

Event analysis







Copernicus Europe's eyes on Earth

European Commission

Points of contact

Mercedes García-Padilla (Management and thematics)
mercedes.garcia.padilla@juntadeandalucia.es

Rafael García-Sánchez (IT subjects)
rafael.garcia@soologic.com

General email addres (JRC+HDCC):
hydro@efas.eu

¡ Thank you very much!

* * * * *

Dziekuje Merci beaucoup დიდი მადლობა Много Благодаря

Obrigado Paldies Ευχαριστώ Tack Dank u Muchas gracias

Hvala вялікі дзякуй Köszönöm Dekuj Multumesc Dakujem Danke

Takk Aitäh Grazzi Kiitos Grazie Tesekkur Ederim Dêkuji