

ESC 2018 - master document

I will add links to a page each for each section in the tables below

Climate in 2018

	What / link to page**	Comment	Main contacts
Europe temperature	General description	See similar page 2017 ERA/E-OBS	freja.vamborg@ecmwf.int
Europe hydrological variables	General description	See similar page 2017, ERA/E-OBS +satellite soil moisture else.van.den.besselaar@knmi.nle	freja.vamborg@ecmwf.int
Cold event - Almost all of Europe, Feb-March	General description	climate indices describing event	KNMI: schrier@knmi.nl besselaar@knmi.nl
	Late arrival of spring vegetation	LAI/fAPAR	iskander.benhadj@vito.be

	Others?	(e.g. link to glacier section below)	
Dry and warm event- northern/central Europe (late spring to autumn)	General description	climate indices describing long term event, plus example weather event (e.g. heatwave)*	KNM: schrier@knmi.nl besselaar@knmi.nl
	impact on vegetation / land surface	LAI/fAPAR wildfire emissions, wildfire danger	iskander.benhadj@vito.be Mark Parrington Claudia Vitolo
	Alpine glaciers	Glacier mass balance, glacier melt, ..	WGMS
	A very sunny year	sunshine duration ((C) CMSAF)	DWD rainer.hollmann@dwd.de anna-christina.mikalsen@dwd.de
	Impact on the aquatic environment	lake temperatures ocean colour	Christopher Merchant Jamie Davies Thomas Jackson
	impact on economic sectors - water and energy?	River flows - confirmed Others - TBC	Troccoli, Wetterhall (etc TBC) louise.arnal@ecmwf.int shaun.harrigan@ecmwf.int
	Others?		

Wet event - Mediterranean (late spring to autumn)	General description	climate indices describing long term event, plus example weather event*	KNMI
	Example weather events	Include in above? Or separate	KNMI / Freja
	impact on economic sectors - water and energy?	TBC	Troccoli, louise.arnal@ecmwf.int shaun.harrigan@ecmwf.int Wetterhall (TBC)
European Arctic	General description		Freja
	notable event	ice melt north of Greenland	MetNO/ DMI

*specific coordination with BAMS Europe chapter needed

** placeholder titles - other suggestions welcome

Headline climate indicators

These will be displayed in a separate section on the website, but the key take home messages are to be highlighted in the ESC2018 summary

Indicator	What	Comment	Main contact
<u>Surface temperature</u>	Global + Europe		Freja
<u>Greenhouse gases</u>	Concentrations Fluxes		Michael Buchwitz Frederic Chevalier
<u>Sea ice</u>	Arctic + Antartctic	ERA + satellite	Freja DMI/Metno
<u>Glaciers</u>	Global + Europe		WGMS
<u>Sea level</u>	Global + Europe	with CMEMS	CLS - Jean-Francois Legeais
Heat content		TBC, with CMEMS	Karina von Schuckmann

Ocean acidity		TBC, with CMEMS	Karina von Schuckmann
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Technical specifications

Regions

For Europe we want to streamline comparisons by using the same region definitions for calculation statistics:

- Europe: 25W-60E, 34N-72N
- SW Europe: 25W-15E, 34N-45N
- NW Europe: 25W-15E, 45N-72N
- SE Europe: 15E-40E, 34N-45N
- NE Europe: 15E-40E, 45N-72N
- Central Europe: 2E - 24E, 45N - 55N
- European Arctic: 25W-60E, 66N-90N

Land sea mask

Use the native land sea mask of each dataset

Climatology

Where possible the climatology 1981-2010 should be used. If this is not possible, due to a shorter data record (or other good reason), this should be clearly stated. For the latter, maybe it could be possible to find a common "later" period for climatology calculations?

So far there are quite a number of different definitions:

- ERA/ E-OBS: 1981-2010
- Satellite soil moisture: *1991-2016 (used in ESC2017)*
- LAi/fAPAR: (proposed) *1998-2014*
- Fire danger: *1980-2017*
- River flow: will aim to use same as soil moisture