



# Knowledge Exchange: 5 CCI Products for Interactions With Scientific Users And Policy Makers

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CCI Colocation Virtual Meeting

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## Poll - Relevance of KE Products for your work



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## **CCI KE Objectives**



## Maximise

- awareness
- access
- use
- understanding
- of satellite data for climate research

with an **emphasis on** promoting the **CCI Programme** 



Representative User User Type	Hollmann & Kaiser, DWD	Fitzsimons, NCEO	Kockelkorn, Museon	Swinkels, Museon	Hayward, TPZUK	Brockmann, BC	Salama, ITC	Nam, GERICS	Ghent, ULeic.	Maheca, MPI	ESA: Rider, Oakley, Talevi, Pinto, Mecklenburg, Trofaier, Cipolini
1 CCI Data Producers	X			2	3.743	x			X		
2 Climate research & reanalysis community	X							x			
Barth system science community	X			the constant				X		X	143 - 14 - 14 - 14 - 14 - 14 - 14 - 14 -
4 Climate service developers and providers	X				X	X		X			
5 Undergrad., postgraduate 5 students and supervisors		×		12			x			<ul> <li>A</li> </ul>	And and
Secondary and primary school teachers	n in a that an a' An an	х				and a					
7 General public			x	X				1 1 1			
8 ESA personnel	hite St.			in the second					5.00 m m		X

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## **Concrete targets**

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### A. Strengthen the R&D profile of CCI

- A. Distinguish from C3S
- B. Supported by ECV scientists
- C. Well known by other climate scientists
- D. Known by general public

### **B.** Develop KE products at "excellence" level

- A. Contemporary appearance
- B. Fast, informative, intuitive
- C. Consistency across products

### C. Keep KE product content up-to-date

- A. Provide latest Climate Change information
  - not restricted to CCI
- B. First choice for recent, quality controlled climate change data

## ESA CCI

### Research & Development = Next generation of operational products

### **Copernicus C3S**

Consolidated science, long term consistent time series

### 5 CCI Knowledge Exchange Products

## **5 CCI KE Products**



### **Climate from Space**

A web application for data visualisation, storytelling and public engagement

**Educational Resources** 

Learning materials for educators, students and the interested public

### Website

Present the activities of the ESA Climate Office with focus on the CCI programme

### **Open Data Portal**

Repository and access point to ESA's Climate Change Initiative data

### Cate Toolbox

Cloud-enabled computing environment to analyse, process and visualise climate data

## Year 2: Operations & New Versions & New Material



### **Collection of high quality graphics and videos**

- 82 ready-to-use high-resolution stills
- 33 broadcast-quality videos
- 31 map sequences suitable for real-time rendering
- 2 computer animations

CfS - A web application for data visualisation, storytelling and public engagement

- Contains 23 ECV datasets + 1 non-ECV dataset
- 10 stories in 5 different languages
- 3 300 unique visitors of CfS
- CfS used in 21 different events and communication activities during 2021 (ESA Climate Office staff, KE team)
- Permanent installation at Museon in NL

## Year 2: Operations & New Versions & New Material



### Website - Present the activities of the ESA Climate Office with focus on the CCI programme

- Continuous updates of news, demonstration material and from CCI projects (thanks to CCI ECV Projects!)
- New education material
- Translation into 4 languages
- > 10 000 visits
- ~ 2000 downloads of resources
- **Open Data Portal ODP Repository and access point to ESA's Climate Change Initiative data**
- 381 datasets from 21 ECV projects
- 15 120 data downloads (31 940 activity days)
- C3S regular interaction and common data standards

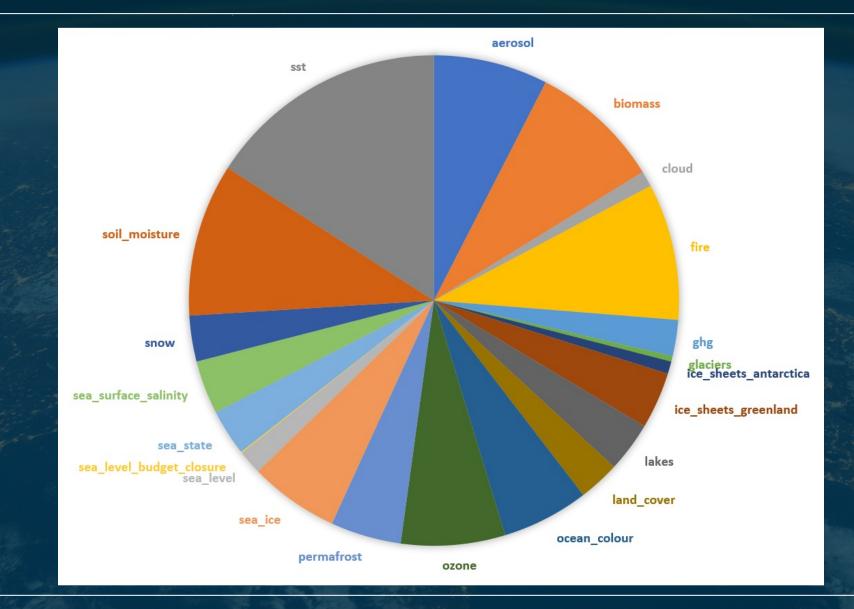
Cate - Cloud-enabled computing environment to analyse, process and visualise climate data

- Cate WebUI and new Jupyter Notebook
- ~ 100 active users
- All ECV datasets, (partly) accessible from very fast object store

## ODP "Activity Days" during Q3/2021

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## **Online Demo**



### 1. Website

- 2. Educational Material
- 3. Open Data Portal ODP
- 4. Cate Toolbox
- 5. Climate from Space CfS
- 6. Collection of high quality graphics and videos https://ccike-visuals.brockmann-consult.de



## **Poll – Relevance of KE Products for your work**



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## Requirements and Update Process (3-monthly cycles)



Mx Release



Consolidation & Prioritisation

Implementation

- Web
- CfS
- Edu
- Cate
- ODP

- Overarching requirements
  - KE objectives
  - External
    - User Survey
    - Representative users
    - Other CCI projects (ECVs)
    - Helpdesk tickets
  - Internal
    - ESA requests (Product owners)
    - Teams' suggestions + internal requests

- Merge & clean
- Prioritise
  - based on agreed guidelines
- Propose to ESA Project Lead & TO
- Decide on features for next iteration (by ESA PL & TO and Prime/team)
- Quarterly deliveries to ESA as staging, followed by public releases
  - Any bugs encountered are fixed immediately
  - Maintenance is ongoing

### **Requirements and Update Process (3-monthly cycles)** • (2)

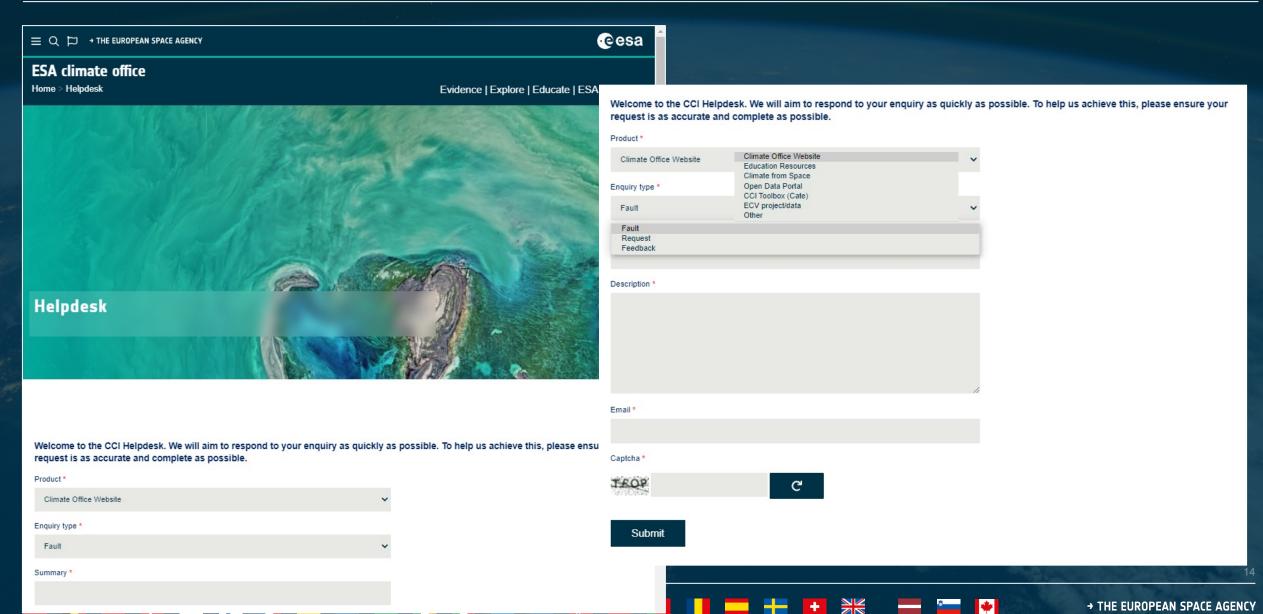


→ THE EUROPEAN SPACE AGENCY

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## Invitation to provide feedback – Helpdesk





## Where do we go from here?



CCI KE has 1 more year to go Continuation in CCI+ Phase 2

- 3-monthly requirements analysis and activity priorisation
- More focus on communicating the KE products
- Taking into account the shift in working practice due to COVID (online and hybrid working)
- e.g. tutorials, Jupyter Notebooks

Some questions the KE team has to audience here:

Q1: Which of the products would you use for your research / activity and what would you do with it?

Q2: Which evolutions of KE products would you recommend?

Poll: Which of the KE Products do you consider most relevant for your work? (slido.com, #310 067)