



CONFESS

Consistent representation of temporal variations of
boundary forcings in reanalyses and seasonal forecasts

Project Website

Daniel Thiemert

www.confess-h2020.eu



Co-ordinated by
ECMWF



D4.2 Project Website

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CONFESS

Consistent representation of temporal variations of boundary forcings in reanalyses and seasonal forecasts

Research and Innovation Action (RIA)
H2020- LC-SPACE-18-EO-2020 Copernicus evolution: Research activities in support of the evolution of the Copernicus services - Copernicus Climate Change Service (C3S)

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1 Executive Summary

The project website will be a major dissemination instrument. As such, the website will be an important tool for maintaining the coherence of the full project and for promoting its progress across the many stakeholders, as well as providing a project interface to the wider public.

The CONFESS project website can be accessed via www.confess-h2020.eu. It is the main dissemination tool for the project and provides project-external sections. It is to be updated regularly, both throughout the lifetime of the project and thereafter. It contains information on the project, news, results (including public deliverables), data sets, amongst others.



2 Introduction

2.1 Background

A climate resilient society requires reliable monitoring and forecasting information of the climate trends, patterns and disturbances, both at global and regional scales. Through consistent representation of temporal variations of boundary forcings in reanalyses and Seasonal forecasts, CONFESS will contribute to the emerging societal need for an enhanced Copernicus Climate Change Service (C3S) that can support adaptation and mitigation strategies facing increased frequency and intensity of climate extremes.

The aim of CONFESS is to improve the reliability and usability of C3S information in the land-atmosphere coupled system by exploiting new and improved Earth Observations data records of land-use, vegetation states and surface-emitted aerosols delivered across different Copernicus Services. CONFESS developments will be integrated consistently for use in future C3S systems, enhancing the service's accuracy by representing annual changes of land use, and adding satellite-derived and prognostic vegetation states along with aerosols emissions due to hazardous/extreme events such as volcanic eruptions and large-scale biomass burning (e.g. wildfires).

The added capacity to represent temporal variations and trends of these variables and the occurrence of hazardous/ extreme events will be supported by a rapid uptake of new Earth Observations. The impact on the Earth system will be evaluated by assessing the quality of global reanalysis as well as seasonal forecasts using state-of-the-art modelling systems.

The infrastructure and knowledge developed within CONFESS will contribute to improve the C3S capabilities for reliable monitoring and forecasting with particular focus on extremes.

2.2 Scope of this deliverable

2.2.1 Objectives of this deliverable

D4.2 describes the CONFESS Project website as well as the project-internal software collaboration platform.

2.2.2 Work performed in this deliverable

The website www.confess-h2020.eu was implemented. The internal software collaboration platform was setup using the Atlassian tools Jira, Confluence and Bitbucket.

2.2.3 Deviations and counter measures

No deviations have been encountered.



3 The CONFESS project website

The project website will be a major dissemination instrument for the CONFESS Project. As such, the website will be an important tool for maintaining the coherence of the full project and for promoting its progress across the many stakeholders, as well as providing a project interface to the wider public.

The CONFESS project website can be accessed via www.confess-h2020.eu. It is the main dissemination tool for the project and provides project-external sections.

The website structure is as follows:

- | - Home
- | - About CONFESS
 - | - Objectives
 - | - Variations in Land Cover
 - | - Variations in Vegetation
 - | - Closing the Gap
 - | - Consistent temporal treatment
 - | - Respond to volcanic eruptions
 - | - Respond to biomass burning
 - | - Concepts
 - | - Observations
 - | - Implementation
 - | - Impact
 - | - Structure
 - | - WP1
 - | - WP2
 - | - WP3
 - | - Partners
 - | - ECMWF
 - | - MF-CNRM
 - | - BSC
 - | - CNR-ISAC
 - | - Team



- | - Team members pages...
- | - News
- | - Results
 - | - Highlights
 - | - Deliverables
 - | - Publications
 - | - Presentations
 - | - Data sets
- | - Contact

All pages and posts allow sharing via social media networks such as Facebook, Twitter, and LinkedIn. The main menu is present on all pages and posts in the top right corner, allowing for consistent navigation. A bread crumb feature allows for identifying the current location of the visitor when away from the home page. The footer contains funding acknowledgment as well as privacy notice and credits.

In the following we will present illustrations of the various project website sections.

3.1 Home page

The Home Page is the starting point for the project website.

Figure 1: CONFESS Home Page

It provides a summary of latest news items and results highlights.



3.2 About CONFESS

The “About CONFESS” section provides information on the project, and has the subsections “Objectives”, “Concepts”, “Structure”, “Partners” and “Team”.

Figure 2: About CONFESS page

3.2.1 Objectives

Figure 3: Objectives page



The “Objectives” page provides an introduction to the global objectives, and provides links to sub-pages on the specific objectives of the CONFESS project.

3.2.2 Concepts

Concepts

Reanalysis and seasonal forecasts are two major services provided by C3S. They have demonstrated Europe's leading role in the integration and exploitation of earth system observations for climate monitoring. This is largely due to the use of the best available atmospheric models and data assimilation system, which excel in the integration and prediction of the dynamical variables. While the physical variables in the C3S reanalysis and forecasting systems are consistently modelled and initialized, the treatment of the biogeochemical and human-induced variations is currently not included as part of the modelling. There is an aspiration for C3S to deliver in the future integrated reanalyses across earth system components, which can fully exploit the earth observing system in a consistent manner to provide information on the temporal evolution of atmospheric, land, ocean, sea-ice, and atmospheric chemistry. These integrated Earth System Reanalyses will in turn enable the initialization, verification and calibration of seasonal forecasts of increased number of user relevant climate and environmental variables, such as vegetation indices, air pollution or fires, to fulfil the demands of downstream users and support the EU Green Deal and UN sustainability goals.

Although there is still substantial ground to cover in the path towards integrated reanalyses and seasonal forecasts of the Earth System, the roadmap for developments is made in incremental steps. CONFESS aims at enhancing the quality of the C3S reanalysis and seasonal forecasts by incremental advances along that roadmap. CONFESS contributions to C3S evolution obey three main principles:

1. Exploitation of existing observational information and recent model developments according to their readiness level.
2. Feasible and staged operational implementation.
3. Impact on the quality of climate services in relation with downstream user needs.

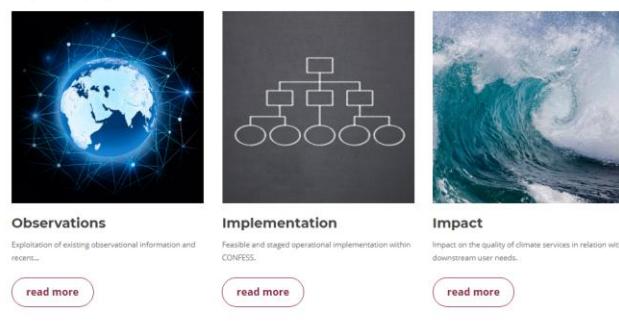


Figure 4: Concepts page

The “Concepts” page provides an introduction and links to sub-pages on the CONFESS concepts.

3.2.3 Structure

Structure

CONFESS methodology exploits seasonal forecasting as a natural integrator of Copernicus Services. It aims at leveraging efforts in modelling infrastructure and observational datasets across Copernicus Services to further advance the upstream information flow for the production of C3S reanalyses and seasonal forecasts, which would ultimately enhance the quality and authoritative value of the C3S products and cascade down to the downstream climate services. The methodology will follow a modular workflow, enabling the reuse of existing developments carried out for seasonal forecast systems, if successful, will be applicable to the production of reanalyses. Seasonal forecasts are chosen as a test-bed for evaluation because the proposed developments are expected to have large impact in the low frequency climate signals. Seasonal forecasts have an advantage over non-initialized climate simulation in that they are easier to verify with independent observations, and the model bias often remains small enough to avoid contamination of the model response to a given forcing. Seasonal forecasts are also a more efficient methodology to evaluate low frequency impact than reanalyses: the data assimilation methodology used in reanalyses is quite expensive, and is more effective for evaluation of fast processes.

The proposed methodology follows three basic principles:

1. Modular workflow.
2. Verifiable developments.
3. Robust assessment.

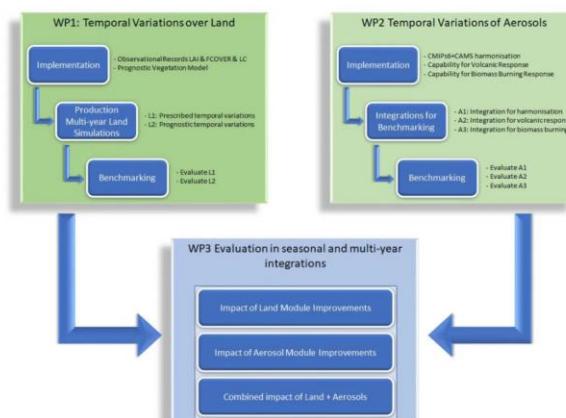


Figure 5: Structure page



The “Structure” page provides an introduction to the project structure and links to sub-pages explaining the CONFESS work packages.

3.2.4 Partners

ECMWF, the reach is extended beyond these 4 countries due to the member and cooperating states of this international organisation of European interest.



The partnership presents a well-balanced mixture of operational and research centres (ECMWF, Meteo-France, BSC) and research centres (CNR-ISAC) necessary to address the challenges of the CONFESS project.

In particular:

- The consortium is coordinated by the world-leading global weather prediction centre, which was founded by its member states to focus European excellence in a single organisation. Moreover, ECMWF is the entrusted entity for both the Copernicus Climate Change Service (C3S) as well as the Copernicus Atmosphere Monitoring Service, and has thus a unique mandate in this domain.

Customise Edit Statistics ...

Show all X

Figure 6: Partners page

The “Partners” page introduces the consortium and provides links to sub-pages for each partner organisation.



3.2.5 Team

Figure 7: Team page

The team pages provides links to sub-pages for the team members behind the CONFESS project.

3.3 News

News items are featured on the front page and can also be accessed via the “News” section, which is maintained as a blog format.

Figure 8: News page



29TH DEC 2020 /

First deliverable submitted

The first deliverable has officially been submitted to the EU. D4.1 Risk and Quality Management Plan sets out the baseline of internal quality management including the identification of key performance indicators and related metrics that will help the project to measure its progress.

CONFESS

Risk and Quality Management Plan

Read More

Twitter, Facebook, LinkedIn

Posted in News Items

PREVIOUS POST
CONFESS PROJECT KICKED OFF

NEXT POST
PLANNED RESULTS

Follow ...

Figure 9: Specific news item

3.4 Results

The “Results” page provides the links to its subsections, providing the outputs of the CONFESS project.

Results

CONFESS will provide a multitude of results, including deliverables, scientific publications, presentations and datasets. You will find below links to the relevant sections

Twitter, Facebook, LinkedIn

Highlights

Highlights of CONFESS results are published here.

[READ MORE](#)

Deliverables

The full list of project deliverables including downloads.

[READ MORE](#)

Publications

The full list of project publications including downloads.

[READ MORE](#)

Planned Results

The full list of project planned results including downloads.

[READ MORE](#)

Figure 10: Results page



3.4.1 Highlights

The highlights page is maintained as a blog, providing regular updates on the progress of the project, which will also be featured on the home page.

Figure 11: Highlights page

Figure 12: Specific highlights item



3.4.2 Deliverables

The “Deliverables” page provides a list of deliverables, and will provide downloads to those deliverables that are designated as public once they have been submitted to the EC.

No	Title	Dissemination Level	Due Date	Download
D1.1	Report on the vegetation dataset of LC and LAI	Public	31/07/2021	
D1.2	Report on the improved vegetation variability	Public	31/10/2022	
D1.3	Report on the suitable vegetation modelling configurations	Public	30/04/2023	
D2.1	Harmonized CAMS and CMIP6 datasets for aerosols from task 2.1	Public	31/10/2021	
D2.2	Report on the definition and performance of an empirical model for biomass burning emissions, benchmarked against climatology	Public	30/04/2022	
D2.3	Simplified volcanic aerosol prediction module validated and interfaced to IFS and EC-Earth	Confidential	31/10/2022	
D2.4	Validation report on the experiments using biomass burning climatological and observed emissions for the selected test cases	Public	30/04/2023	
D3.1	Experimental protocol for land and aerosol forcing re-forecasts	Public	31/07/2021	
D3.2	Evaluation of impact of improved volcanic forcings on seasonal and near-term predictions, including recommendations for implementation	Public	31/10/2023	
D3.3	Evaluation of impact of variable land cover and vegetation on seasonal and near-term predictions, including recommendations for implementation	Public	31/10/2023	
D3.4	Intermediate Report on WP3 activities and results	Public	31/10/2022	
D4.1	Risk and Quality Management Plan	Confidential	31/12/2020	
D4.2	Project Website	Public	31/01/2020	
D4.3	Dissemination and Exploitation Plan	Public	31/01/2020	
D4.4	Media and Communication Plan	Public	28/02/2021	
D4.5	Data Management Plan	Public	30/04/2021	
D4.6	Mid-Term Dissemination and Exploitation Report	Public	31/10/2021	
D4.7	Final Dissemination and Exploitation Report	Public	31/10/2023	
D4.8	Cost-Benefit and IPR Analysis	Confidential	31/10/2023	

Figure 13: Deliverables page

3.4.3 Publications

The “Publications” page will contain the list of publications together with links to the publications themselves.

Year	Title	Lead Author	Journal/ Conference	Download
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Figure 14: Publications page



3.4.4 Presentations

The “Presentations” page will contain a list of presentations given by CONFESS partners at conferences and workshop, which can also be downloaded.

Figure 15: Presentations page

3.4.5 Data sets

The “Data sets” page will contain the list of data sets created by CONFESS, together with links to their repositories.

Figure 16: Data sets page

3.5 Contact

The “Contact” page contains an easy-to-use contact form which visitors can use to send messages to the consortium.



CONFESS

Home About CONFESS News Results Contact

Home > Contact

Contact

Don't hesitate to send a message using the form.

Send Us a Message

Name (required)

Email (required)

Website

Message (required)

SUBMIT

The CONFESS project has received  This website reflects the views only of the 

Figure 17: Contact page



4 Project Internal Pages

The project currently utilises Atlassian Confluence for internal communication and exchange. If the need arises, Atlassian Jira, a bug and issue tracking tool, as well as FTP exchange servers will be made available.

CONFESS Home

Created by Daniel Thiemert, last modified by Daniel Thiemert on Nov 13, 2019

Proposal addressing LC-SPICE-18-EO-2020: Copernicus evolution: Research activities in support of the evolution of the Copernicus services

SPACE SHORTCUTS

Here you can add shortcut links to the most important content for your team or project. [Configure sidebar](#).

PAGE TREE

- Grant Preparation Phase
- Project Phase
- Collaborative Space
 - WP1 Space
 - WP2 Space
 - WP3 Space
 - WP4 Space
- Project Management
 - Deliverables
 - Project Dissemination
 - Project Documents
 - Project Timeline
 - QMRs
 - Risk Register
 - Staff Contact List
- Project Meetings
- Proposal Phase

Recent space activity

Space contributors

Figure 18: CONFESS Confluence space



5 Conclusion

This document, D4.2, provides a high-level description of the CONFESS project website. It presents details on the structure of the website. The website (accessible via www.confess-h2020.eu) is to be updated regularly, both throughout the lifetime of the project and thereafter. It contains information on the project, news, results (including public deliverables), data sets, amongst others.



Document History

Version	Author(s)	Date	Changes
0.1	Daniel Thiemert (ECMWF)	05/01/2021	Initial version
1.0	Daniel Thiemert (ECMWF)	25/01/2021	Final version

Internal Review History

Internal Reviewers	Date	Comments
Roberto Bilbao (BSC)	22/01/2021	Approved with comments
Constantin Ardilouze (MF-CNRM)	25/01/2021	Approved with comments

Estimated Effort Contribution per Partner

Partner	Effort
ECMWF	0.5
Total	0.5