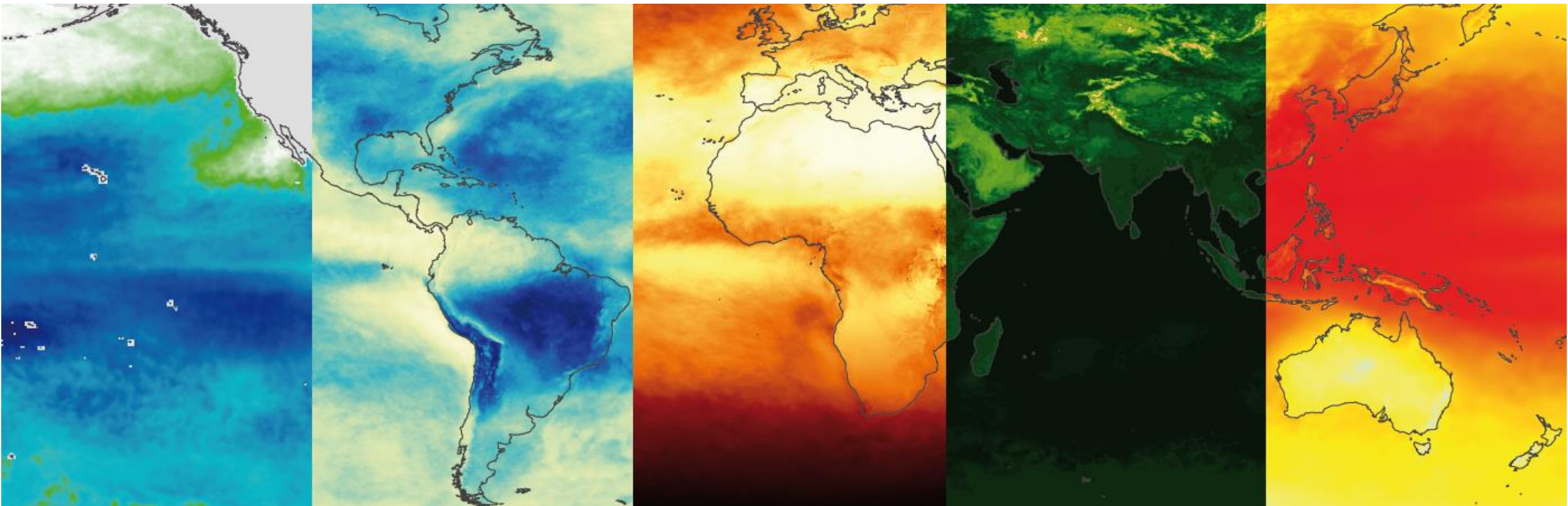


Satellite Application Facility on Climate Monitoring

- Data ordering -



SARAH-2.1

→ Variables

- Global radiation (SIS)
- Surface direct irradiance (SDI)
- Spectral resolved irradiance (SRI)

→ Resolution

- Spatial: $0.05^\circ \times 0.05^\circ$
- Temporal: 30 min instantaneous, daily-, monthly means

→ Coverage

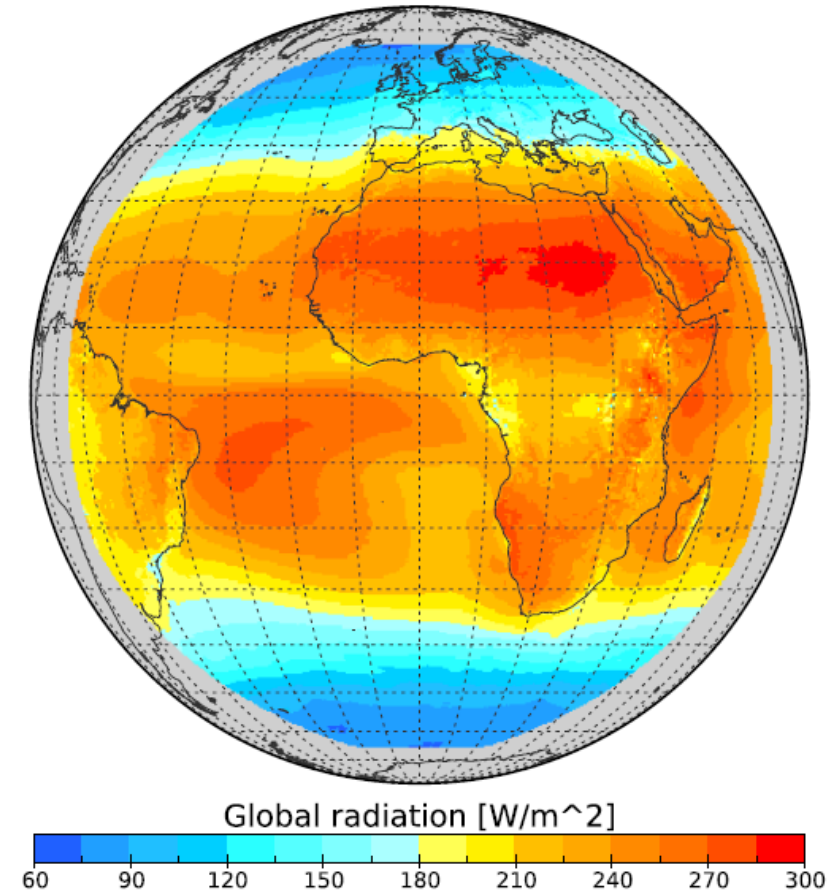
- Spatial: Meteosat disk
- Temporal: 1983 to 2017

→ Satellites

- Meteosat 2 to 10 (MVIRI/SEVIRI)

CM SAF SARAH Solar Surface Irradiance

Mean 1983-2013



Data Min = 69, Max = 292, Mean = 205

DOI:10.5676/EUM_SAF_CM/SARAH/V002

Data Access

→ Web User Interface

- Easy selection and online ordering
- Possibility of regular data delivery
- Postprocessing
 - Spatial, temporal selection
- Data format (NetCDF)
- Download via https or sftp
- All data free of charge

→ User Help Desk

<https://wui.cmsaf.eu>



Registration

Register once for free at
<https://wui.cmsaf.eu>

CM SAF Web User Interface // X

https://wui.cmsaf.eu/safira/action/viewCreateNewAccount?menuName=NUTZER_REGISTRATION

EUMETSAT CM SAF Home Sitemap Glossary Imprint Data Protection

001000110010110
010011011001001
001000110010110
010011011001001

Welcome, sign in Order cart (0)

Home
Products
User
Registration
Order
Service

Registration

Please fill in and submit the form below to get your own user account. You can review your data again before creating the account.

If you just forgot your login data, don't hesitate to contact our User Help Desk.

Contact our User Help Desk

USER PROFILE

First name * Last name *

Organisation * Department

Country * -Select- Subscribe CM SAF newsletter: ☐

Field of activity *

☒ Meteorological Service ☐ Other government service ☐ Research institute ☐ Private company ☐ Other

Description of intended work

E-mail * Re-enter E-mail *

* These fields are required. Continue

DIRECTLY TO

Documentation
User Help Desk
Feedback / User Problem Report
CM SAF Service Messages
CM SAF FAQs

EXTERNAL LINKS

EUMETSAT

CM SAF

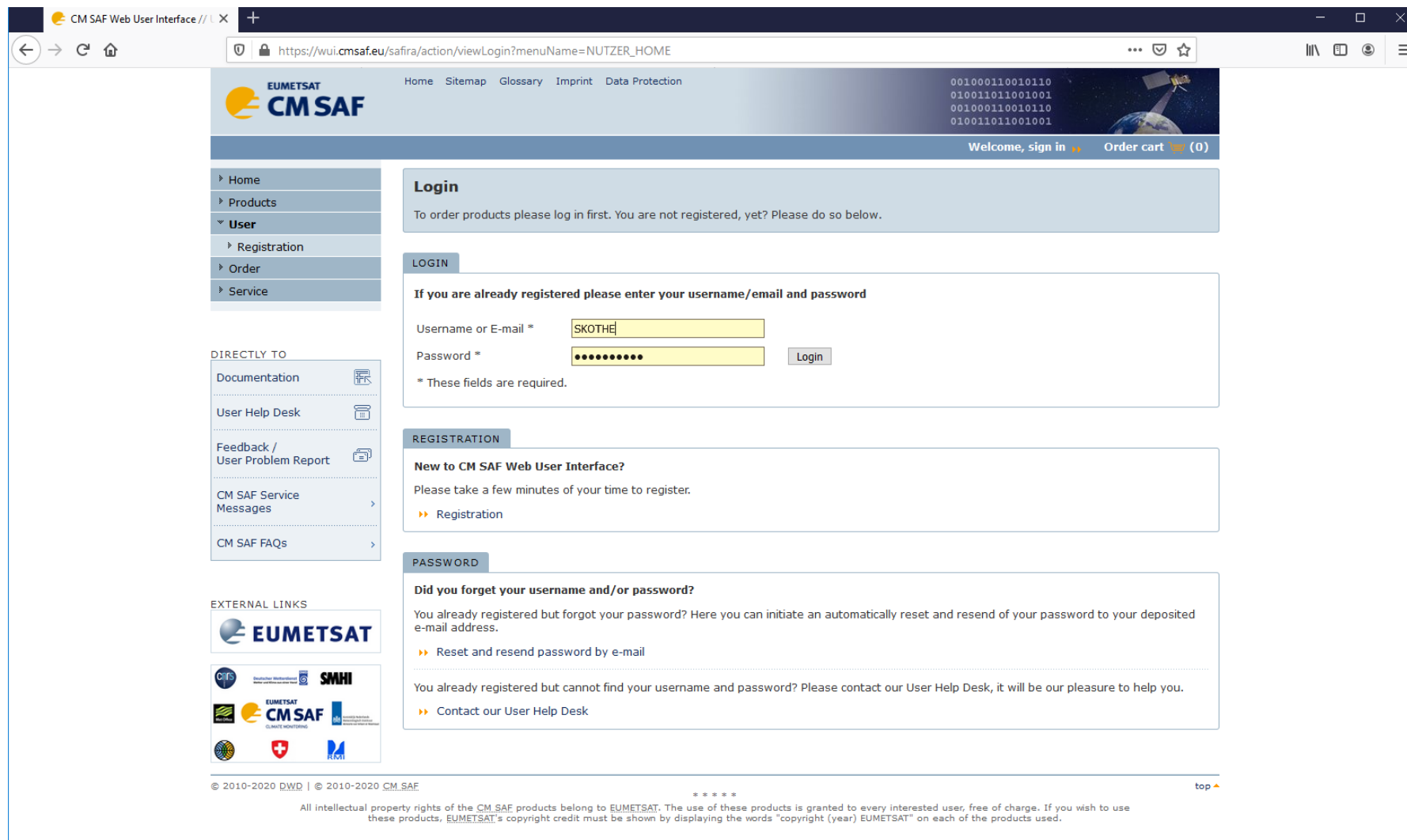
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Login

Login with your Username and password

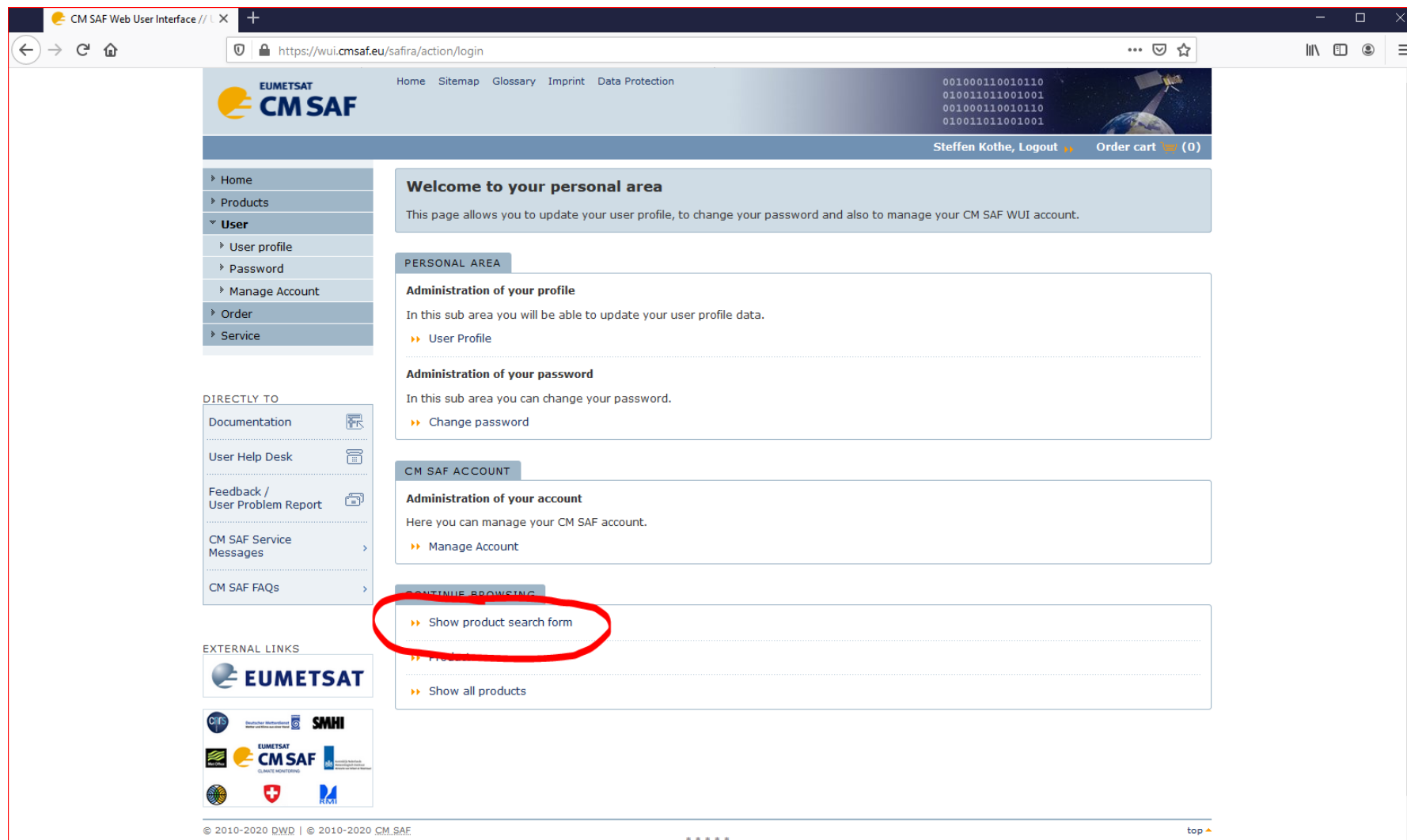


The screenshot shows the CM SAF Web User Interface in a web browser. The browser address bar displays the URL: `https://wui.cmsaf.eu/safira/action/viewLogin?menuName=NUTZER_HOME`. The page features a top navigation bar with links: Home, Sitemap, Glossary, Imprint, and Data Protection. A sidebar on the left contains a menu with options: Home, Products, User (expanded), Registration, Order, and Service. Below the sidebar, there are sections for 'DIRECTLY TO' (Documentation, User Help Desk, Feedback / User Problem Report, CM SAF Service Messages, CM SAF FAQs) and 'EXTERNAL LINKS' (EUMETSAT, DWD, SMHI, CM SAF, and other logos). The main content area is titled 'Login' and includes a message: 'To order products please log in first. You are not registered, yet? Please do so below.' The 'LOGIN' section has a form with fields for 'Username or E-mail' (containing 'SKOTHE') and 'Password' (masked with dots), and a 'Login' button. Below the login form is a 'REGISTRATION' section with a 'New to CM SAF Web User Interface?' message and a 'Registration' link. The 'PASSWORD' section contains a 'Did you forget your username and/or password?' message and links for 'Reset and resend password by e-mail' and 'Contact our User Help Desk'. The footer includes copyright information: '© 2010-2020 DWD | © 2010-2020 CM SAF' and a disclaimer: 'All intellectual property rights of the CM SAF products belong to EUMETSAT. The use of these products is granted to every interested user, free of charge. If you wish to use these products, EUMETSAT's copyright credit must be shown by displaying the words "copyright (year) EUMETSAT" on each of the products used.'



Product Search

Go to Product search Form



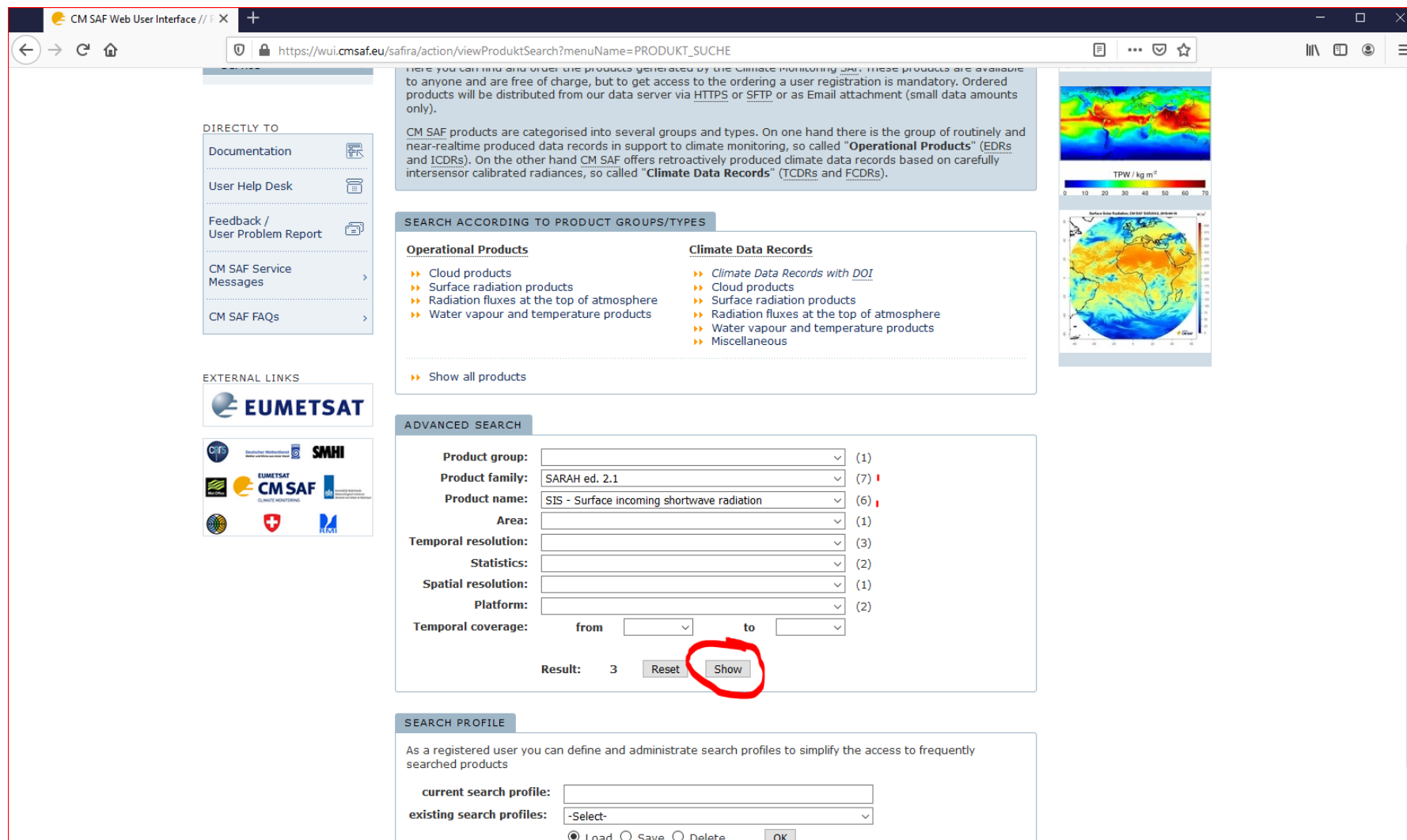
The screenshot displays the CM SAF Web User Interface (WUI) in a web browser. The browser's address bar shows the URL <https://wui.cmsaf.eu/safira/action/login>. The page features a header with the EUMETSAT CM SAF logo, navigation links (Home, Sitemap, Glossary, Imprint, Data Protection), and a user status bar indicating 'Steffen Kothe, Logout' and 'Order cart (0)'. A left sidebar contains a menu with 'Home', 'Products', 'User' (expanded), 'User profile', 'Password', 'Manage Account', 'Order', and 'Service'. Below this is a 'DIRECTLY TO' section with links to 'Documentation', 'User Help Desk', 'Feedback / User Problem Report', 'CM SAF Service Messages', and 'CM SAF FAQs'. An 'EXTERNAL LINKS' section at the bottom left shows logos for EUMETSAT, CM SAF, and other partners. The main content area is titled 'Welcome to your personal area' and includes sections for 'PERSONAL AREA' (with links for 'User Profile' and 'Change password'), 'CM SAF ACCOUNT' (with a link for 'Manage Account'), and 'CONTINUE BROWSING'. The 'CONTINUE BROWSING' section contains three links: 'Show product search form' (highlighted with a red circle), 'Show all products', and 'Show all products'. The footer contains copyright information: '© 2010-2020 DWD | © 2010-2020 CM SAF' and a 'top' link.

Product Search Form

Search for your product:

e.g., you are looking for
SARAH2.1 surface radiation:
Product family = **SARAH ed.**
2.1, Product name = **SIS**

Click on *Show*



CM SAF Web User Interface // X

https://wui.cmsaf.eu/safira/action/viewProduktSearch?menuName=PRODUKT_SUCHE

Here you can find and order the products generated by the Climate Monitoring SAF. These products are available to anyone and are free of charge, but to get access to the ordering a user registration is mandatory. Ordered products will be distributed from our data server via [HTTPS](#) or [SFTP](#) or as Email attachment (small data amounts only).

CM SAF products are categorised into several groups and types. On one hand there is the group of routinely and near-realtime produced data records in support to climate monitoring, so called "**Operational Products**" (EDRs and ICDRs). On the other hand CM SAF offers retroactively produced climate data records based on carefully intersensor calibrated radiances, so called "**Climate Data Records**" (TCDRs and FCDRs).

DIRECTLY TO

- Documentation
- User Help Desk
- Feedback / User Problem Report
- CM SAF Service Messages
- CM SAF FAQs

EXTERNAL LINKS

EUMETSAT

CM SAF

SEARCH ACCORDING TO PRODUCT GROUPS/TYPES

Operational Products

- Cloud products
- Surface radiation products
- Radiation fluxes at the top of atmosphere
- Water vapour and temperature products

Climate Data Records

- Climate Data Records with DOI
- Cloud products
- Surface radiation products
- Radiation fluxes at the top of atmosphere
- Water vapour and temperature products
- Miscellaneous

Show all products

ADVANCED SEARCH

Product group: (1)

Product family: SARAH ed. 2.1 (7)

Product name: SIS - Surface incoming shortwave radiation (6)

Area: (1)

Temporal resolution: (3)

Statistics: (2)

Spatial resolution: (1)

Platform: (2)

Temporal coverage: from to

Result: 3

SEARCH PROFILE

As a registered user you can define and administrate search profiles to simplify the access to frequently searched products

current search profile: -Select-

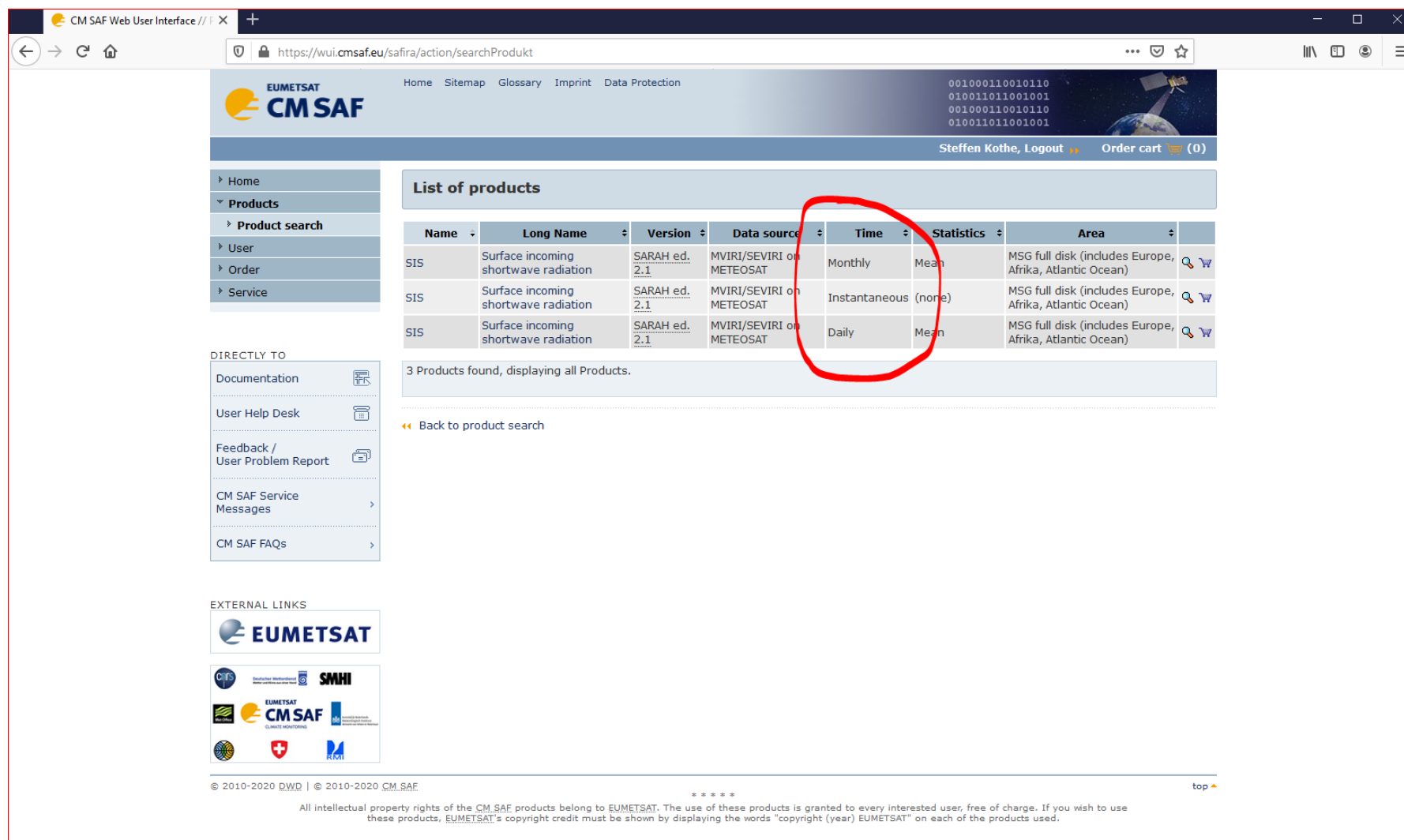
existing search profiles: -Select-

☒ Load ☐ Save ☐ Delete

List of products

Choose the product in the list and keep an eye on the correct temporal resolution

e.g., SARA2.1 contains monthly, daily and instantaneous (30 min) SIS



CM SAF Web User Interface

Home Sitemap Glossary Imprint Data Protection

001000110010110
010011011001001
001000110010110
010011011001001

Steffen Kothe, Logout Order cart (0)

List of products

Name	Long Name	Version	Data source	Time	Statistics	Area
SIS	Surface incoming shortwave radiation	SARAH ed. 2.1	MVIRI/SEVIRI on METEOSAT	Monthly	Mean	MSG full disk (includes Europe, Afrika, Atlantic Ocean)
SIS	Surface incoming shortwave radiation	SARAH ed. 2.1	MVIRI/SEVIRI on METEOSAT	Instantaneous	(none)	MSG full disk (includes Europe, Afrika, Atlantic Ocean)
SIS	Surface incoming shortwave radiation	SARAH ed. 2.1	MVIRI/SEVIRI on METEOSAT	Daily	Mean	MSG full disk (includes Europe, Afrika, Atlantic Ocean)

3 Products found, displaying all Products.

Back to product search

DIRECTLY TO

- Documentation
- User Help Desk
- Feedback / User Problem Report
- CM SAF Service Messages
- CM SAF FAQs

EXTERNAL LINKS

EUMETSAT

Deutscher Wetterdienst SMHI

EUMETSAT CM SAF CLIMATE MONITORING

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Change projection

In order to reduce the data amount you should restrict the area to the one you're looking for

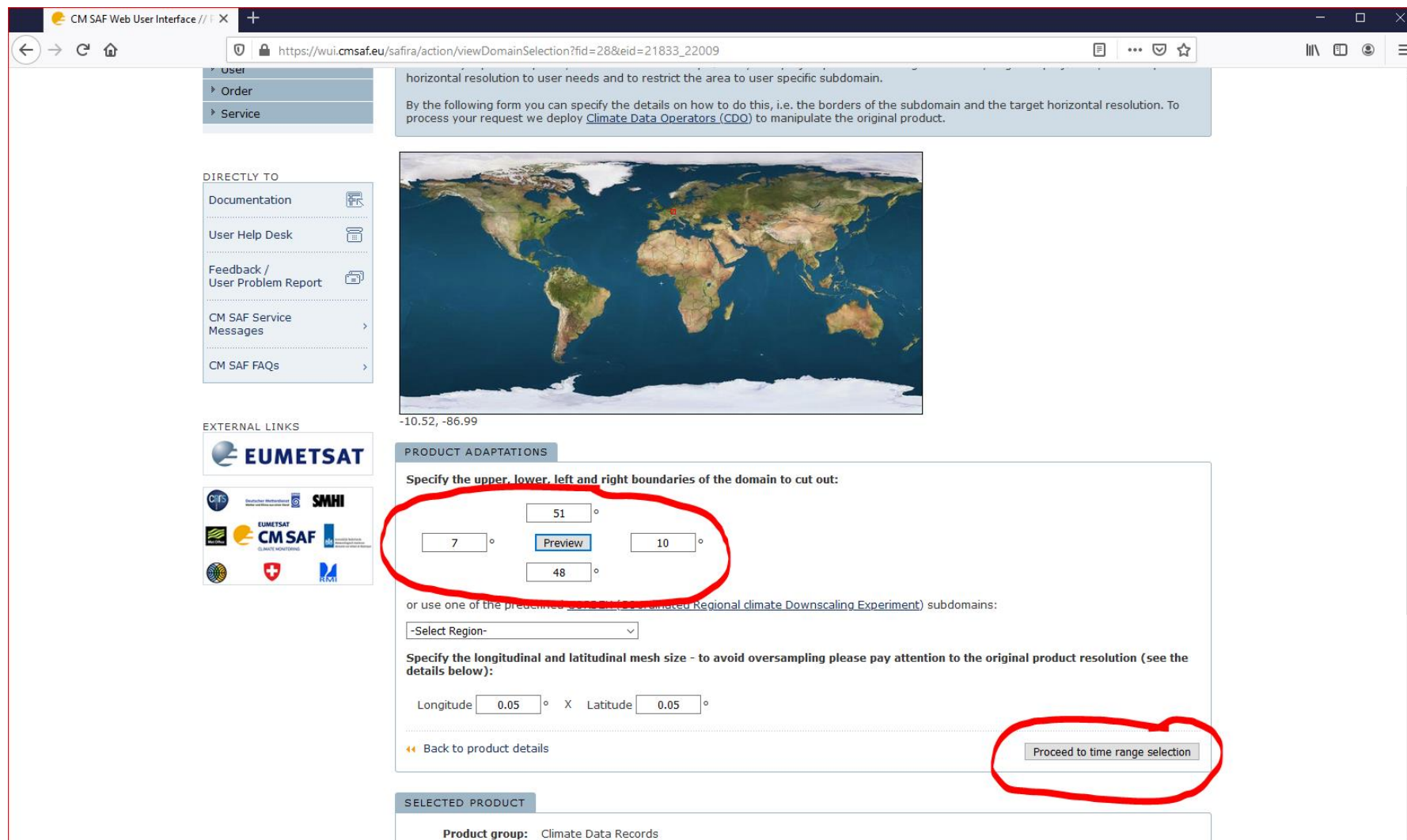
Click on *Change projection...*

The screenshot shows the CM SAF Web User Interface in a web browser. The URL is https://wui.cmsaf.eu/safira/action/viewProduktDetails?eid=21833_22009&fid=28. The page layout includes a left sidebar with 'CM SAF FAQs' and 'EXTERNAL LINKS' (featuring logos for EUMETSAT, CM SAF, and other partners). The main content area has a 'Citation / DOI' section, a 'PRODUCT ADAPTATIONS' section, and a 'VISUAL PRODUCT EXAMPLES' section. In the 'PRODUCT ADAPTATIONS' section, the text states: 'The product described above is appropriate for your purposes but you are interested in a different projection, spatial resolution and/or domain? Then check out our new feature: reprojection and interpolation to global latitude/longitude grid and optional cut out of a user-specific sub-domain.' Below this text, the button 'Change projection / spatial resolution / domain' is circled in red. The 'VISUAL PRODUCT EXAMPLES' section displays a global map titled 'Surface Solar Radiation, CM SAF SARAH-2, 2015-01-01' with a color scale from 0 to 400 W/m².

Change projection

Choose your region by drawing a rectangle or giving coordinates

Go on by clicking *Proceed to time range selection*



horizontal resolution to user needs and to restrict the area to user specific subdomain.

By the following form you can specify the details on how to do this, i.e. the borders of the subdomain and the target horizontal resolution. To process your request we deploy [Climate Data Operators \(CDO\)](#) to manipulate the original product.

DIRECTLY TO

- Documentation
- User Help Desk
- Feedback / User Problem Report
- CM SAF Service Messages
- CM SAF FAQs

EXTERNAL LINKS

- EUMETSAT
- CM SAF
- SMHI
- Deutscher Wetterdienst
- Climate Monitoring

PRODUCT ADAPTATIONS

Specify the upper, lower, left and right boundaries of the domain to cut out:

7 ° 51 ° 10 ° 48 °

Preview

or use one of the predefined [subdomains](#) (see [CM SAF Regional climate Downscaling Experiment](#)) subdomains:

-Select Region-

Specify the longitudinal and latitudinal mesh size - to avoid oversampling please pay attention to the original product resolution (see the details below):

Longitude 0.05 ° X Latitude 0.05 °

Back to product details

Proceed to time range selection

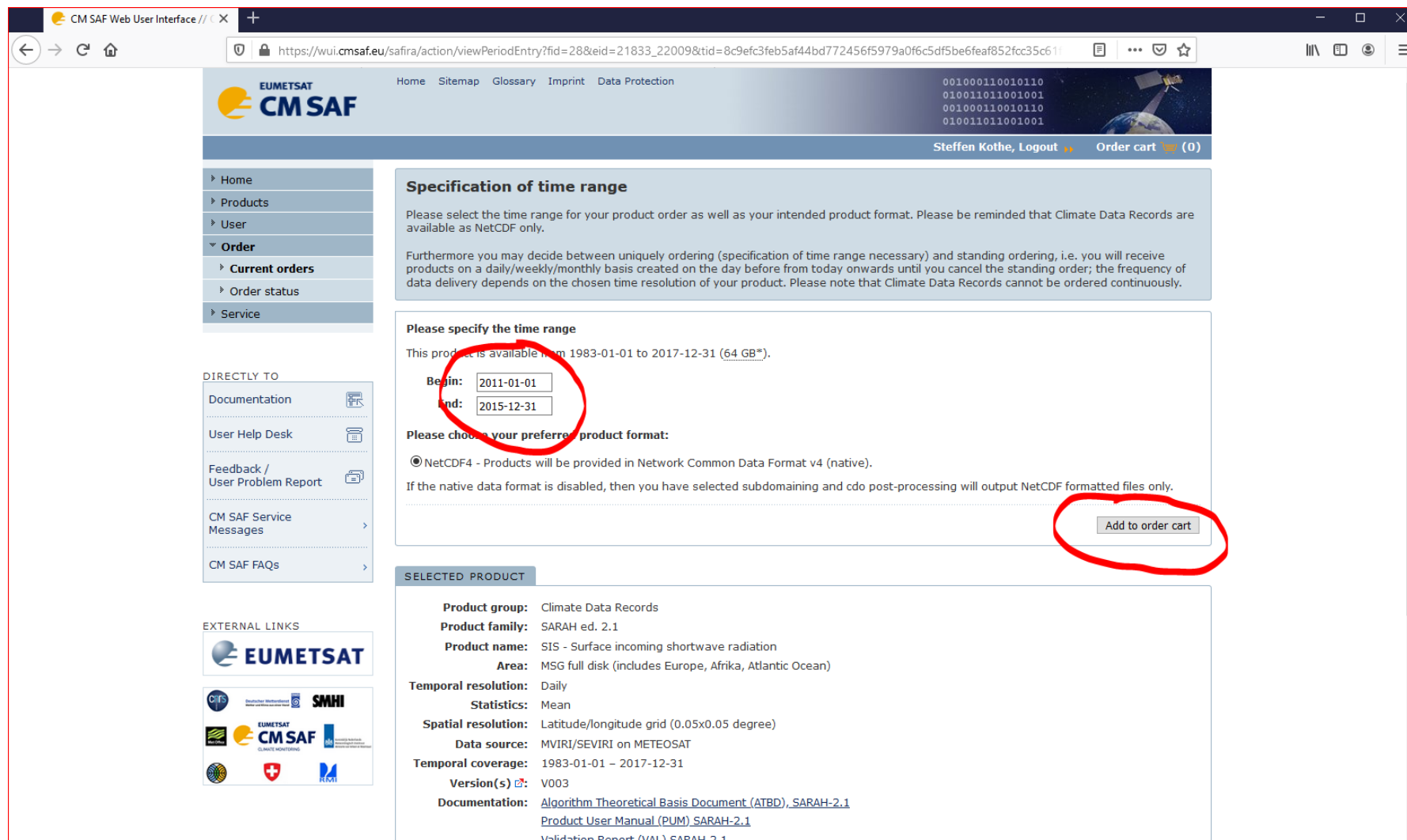
SELECTED PRODUCT

Product group: Climate Data Records

Choose time range

Choose the time range and keep in mind the longer the time period the larger the data amount

Go on by clicking *Add to order cart*



CM SAF Web User Interface

Home Sitemap Glossary Imprint Data Protection

001000110010110
010011011001001
001000110010110
010011011001001

Steffen Kothe, Logout Order cart (0)

Home
Products
User
Order
Current orders
Order status
Service

DIRECTLY TO
Documentation
User Help Desk
Feedback / User Problem Report
CM SAF Service Messages
CM SAF FAQs

EXTERNAL LINKS
EUMETSAT
CM SAF
CM SAF

Specification of time range

Please select the time range for your product order as well as your intended product format. Please be reminded that Climate Data Records are available as NetCDF only.

Furthermore you may decide between uniquely ordering (specification of time range necessary) and standing ordering, i.e. you will receive products on a daily/weekly/monthly basis created on the day before from today onwards until you cancel the standing order; the frequency of data delivery depends on the chosen time resolution of your product. Please note that Climate Data Records cannot be ordered continuously.

Please specify the time range

This product is available from 1983-01-01 to 2017-12-31 (64 GB*).

Begin: 2011-01-01
End: 2015-12-31

Please choose your preferred product format:

☒ NetCDF4 - Products will be provided in Network Common Data Format v4 (native).

If the native data format is disabled, then you have selected subdomain and cdo post-processing will output NetCDF formatted files only.

Add to order cart

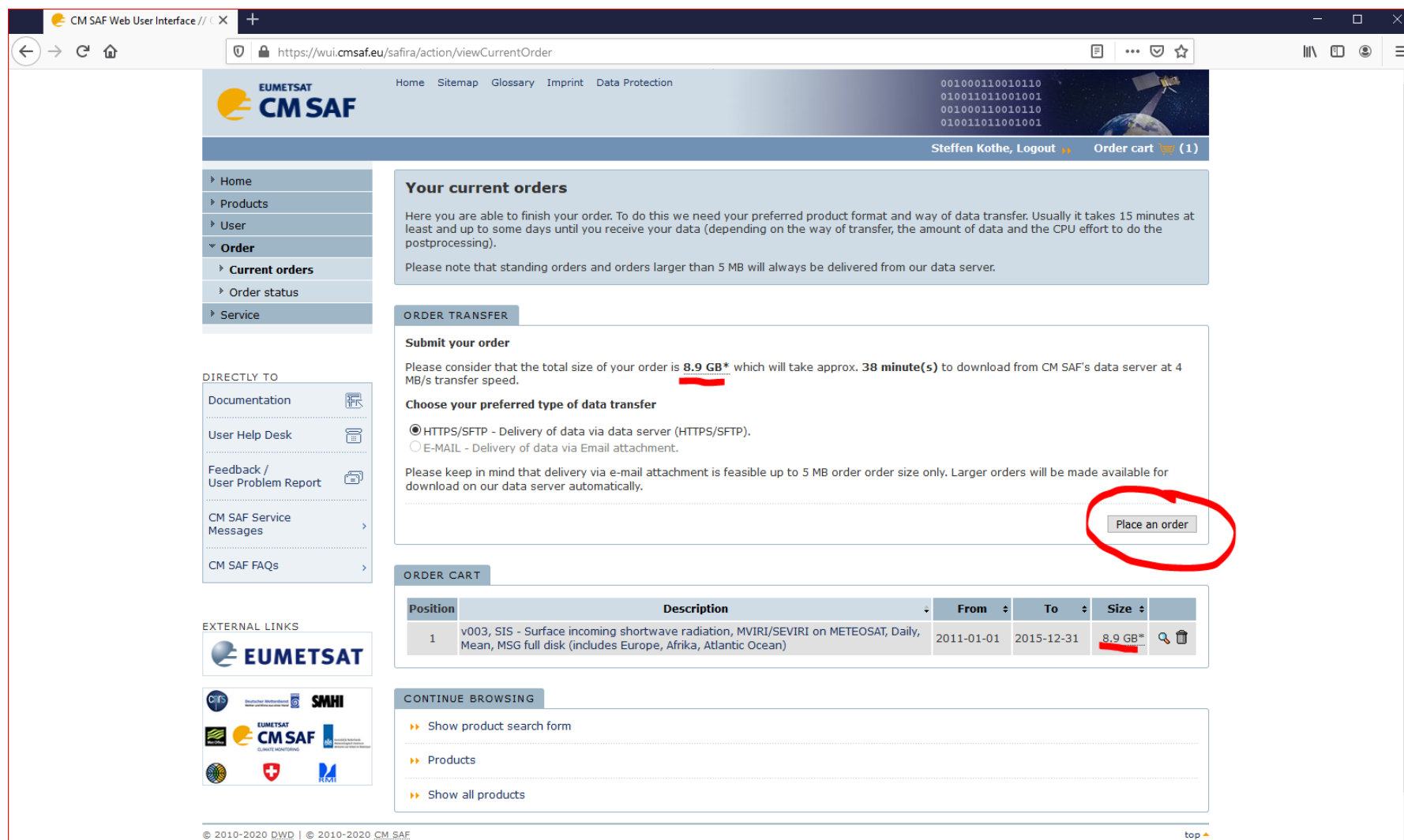
SELECTED PRODUCT

Product group: Climate Data Records
Product family: SARAH ed. 2.1
Product name: SIS - Surface incoming shortwave radiation
Area: MSG full disk (includes Europe, Afrika, Atlantic Ocean)
Temporal resolution: Daily
Statistics: Mean
Spatial resolution: Latitude/longitude grid (0.05x0.05 degree)
Data source: MVIRI/SEVIRI on METEOSAT
Temporal coverage: 1983-01-01 - 2017-12-31
Version(s): V003
Documentation: [Algorithm Theoretical Basis Document \(ATBD\) SARAH-2.1](#)
[Product User Manual \(PUM\) SARAH-2.1](#)
[Validation Report \(VAL\) SARAH-2.1](#)

Place order

If you're happy with your choice
click on *Place an order*

The shown data size does not
account for a reduced area and
is properly much smaller in the
end



The screenshot shows the 'CM SAF Web User Interface' in a web browser. The page title is 'CM SAF Web User Interface // X'. The URL is 'https://wui.cmsaf.eu/safira/action/viewCurrentOrder'. The page features the EUMETSAT CM SAF logo and navigation links: Home, Sitemap, Glossary, Imprint, Data Protection. The user is logged in as 'Steffen Kothe' and has an 'Order cart (1)'. The main content area is titled 'Your current orders' and includes instructions on how to finish an order. Below this, the 'ORDER TRANSFER' section is active, showing 'Submit your order' and 'Choose your preferred type of data transfer'. The 'Submit your order' section states: 'Please consider that the total size of your order is **8.9 GB*** which will take approx. **38 minute(s)** to download from CM SAF's data server at 4 MB/s transfer speed.' The 'Choose your preferred type of data transfer' section has two radio buttons: 'HTTPS/SFTP - Delivery of data via data server (HTTPS/SFTP)' (selected) and 'E-MAIL - Delivery of data via Email attachment'. A 'Place an order' button is circled in red. The 'ORDER CART' section shows a table with one item: 'v003, SIS - Surface incoming shortwave radiation, MVIRI/SEVIRI on METEOSAT, Daily, Mean, MSG full disk (includes Europe, Afrika, Atlantic Ocean)' with a size of '8.9 GB*'. The 'CONTINUE BROWSING' section has links for 'Show product search form', 'Products', and 'Show all products'.

CM SAF Web User Interface // X
https://wui.cmsaf.eu/safira/action/viewCurrentOrder

EUMETSAT **CM SAF**
CLIMATE MONITORING

Home Sitemap Glossary Imprint Data Protection

Steffen Kothe, Logout Order cart (1)

Your current orders

Here you are able to finish your order. To do this we need your preferred product format and way of data transfer. Usually it takes 15 minutes at least and up to some days until you receive your data (depending on the way of transfer, the amount of data and the CPU effort to do the postprocessing).

Please note that standing orders and orders larger than 5 MB will always be delivered from our data server.

ORDER TRANSFER

Submit your order

Please consider that the total size of your order is **8.9 GB*** which will take approx. **38 minute(s)** to download from CM SAF's data server at 4 MB/s transfer speed.

Choose your preferred type of data transfer

☒ HTTPS/SFTP - Delivery of data via data server (HTTPS/SFTP).
☐ E-MAIL - Delivery of data via Email attachment.

Please keep in mind that delivery via e-mail attachment is feasible up to 5 MB order order size only. Larger orders will be made available for download on our data server automatically.

Place an order

ORDER CART

Position	Description	From	To	Size
1	v003, SIS - Surface incoming shortwave radiation, MVIRI/SEVIRI on METEOSAT, Daily, Mean, MSG full disk (includes Europe, Afrika, Atlantic Ocean)	2011-01-01	2015-12-31	8.9 GB*

CONTINUE BROWSING

» Show product search form
» Products
» Show all products

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Questions

➔ In case of questions ask our User Help Desk

Contact data:

www.cmsaf.eu

Contact.cmsaf@dwd.de

