

SPARC Activity Report 2020

SPARC Data Repository

Activity overview

Activity leaders: Charlotte Pascoe, Martin Juckes

** Briefly describe the main overall goals of your activity (2-3 sentences)*

CEDA archives the data behind the SPARC Data Centre, and provides access via an FTP server. CEDA support includes ensuring that the datasets have full documentation so that their long-term value and accessibility is ensured.

The terms of CEDA support are set out in a 2014 Memorandum of Understanding between CEDA and SPARC.

I. Achievements and Plans

** What has your activity achieved over the past year?*

- Published catalogue records for all CCMI-I datasets;²
- Cleaned up the “arrivals” cache area where data from SPARC projects is deposited prior to archival by CEDA staff;
- Modified the access control on the CCMI-I data, making it open access.
- Ongoing hosting of data, providing access to users via the FTP server.

** Have you completed any major deliverables e.g. reports or reviews or reached any major milestones?*

No major deliverables

** How do those achievement tie into the three main themes of SPARC?*

(This material will be incorporated into the Annual Report).

Looking after the data is a support service which underpins all three SPARC scientific themes.

** What does your activity plan to do over the coming year?*

Provide support for CCMI Phase Two (<http://blogs.reading.ac.uk/ccmi/ccmi-phase-two/>)

** What deliverables (e.g. reports, review papers) do you plan to complete?*

(This material may also be incorporated into the Annual Report).

A data management plan for CCMI Phase two, including plans for publication in ESGF.

² CEDA catalogue page for CCMI-1: <https://catalogue.ceda.ac.uk/uuid/d982781218704637a8c180fdeb598984>

II. Resources

* *What workshops have you planned for the coming year and what level of WCRP/SPARC funding do you require to support those workshops?*

No workshops planned.

* *For what do you intend to use any allocated funding?*
(This information will guide the allocation of SPARC travel support over the coming year).

Not applicable.

* *What other activities (besides workshop organisation) would benefit from SPARC support?*

We rely heavily on the ongoing and effective support of David Plummer.

* *What resource issues is your activity facing?*

Normal funding issues, no specific causes for concern,

* *Is there anything that the SSG can do to help?*

Communication between CEDA and SPARC has been weak in recent years, with much of the blame falling on CEDA where there has been some significant re-organisation of the management structure in the National Centre for Atmospheric Science which funds this activity. It would be good for CEDA if we could, in the future, improve on this so that CEDA has some statement on the impact of its work to pass back to our funders.

III. WCRP Communications³

* *What are the data issues/needs for your activity?*

We require completion of the Data Management Plan for CCMI-2, as mentioned above.

* *What are the modelling issues/needs for your activity?*

Not Applicable

* *Where do you see opportunities or issues with collaborations with other WCRP groups?*

Efficient data management relies on close alignment of data management practises with CMIP. This alignment works well among the practitioners. There is scope for improving the coordination through the WCRP Data-home activity.

CEDA has been working closely with the IPCC Technical Support Units to integrate data management planning into the IPCC assessment process for AR6. This includes work to document and capture “figure data”, such as the time series of global emissions and temperature trends which will be displayed in the report. These figure data are often

³ Issues/needs in this context refers especially to those that may require WCRP engagement beyond SPARC.

generated from large and diverse underlying source datasets. Preserving them will make their re-use much simpler for a wide user community which wants to explore the numeric values behind these critical assessment figures. This work could be adapted to support the preparation of the next Ozone Assessment. This work is in progress. A catalogue record for the final data behind a key figure in the Summary for Policy Makers of the IPCC Special Report on 1.5°C has been prepared ([CEDA catalogue record](#))

IV. SPARC Programmatic Issues

** What can your activity contribute to the strategic goals formulated in the WCRP strategic plan?*

Our activity contributes to meeting the critical infrastructure needs identified in the 2019-2028 [Strategic Plan](#) . Specifically, we provide curation of sustained reference datasets in an open access archive, with best practise in data management.

** What needs to be formulated in the WCRP Implementation Plan to facilitate this contribution?*

(1) A commitment to implementing the FAIR data guidelines, including resources to align activities across WCRP. If FAIR guidelines are implemented independently in dozens of different activities, the end result will be, from the user perspective, a little un-FAIR, with different approaches undermining the collective value of the different activities.

** To which other SPARC or WCRP activities does your activity connect?*

Our data management activity links to the Coupled Model Intercomparison Project (CMIP) of the Working Group on Coupled Models (WGCM).

We support the IPCC 6th Assessment process as one of the partners in the IPCC Data Distribution Centre (www.ipcc-data.org).

With European partners, we support the dissemination of WCRP climate model output through the Copernicus Climate Change Service, Europe's new climate service platform.

** Has your activity contributed in any way to SPARC's capacity development effort?*

Not Applicable

** Is there anything else that the SSG can do to assist your activity in any way?
(This will also guide the discussion at the SPARC SSG meeting).*

The Memorandum of Understanding which sets out the terms of CEDA support for SPARC. It was signed in 2014, by Bryan Lawrence, former head of CEDA, and Joan Alexander, former co-chair of SSG. It contains a recommendation that it should be reviewed every 5 years. I believe a review will be simple enough, but we should check that the text fits the expectations of current SSG members and CEDA management.

Formulate and disseminate a clear data policy setting the ground rules to guide the way that SPARC projects manage their data to achieve FAIR data objectives. The policy should cover issues of data curation and documentation, to ensure that SPARC data products are accessible to a wide user community.

*** Please also take this opportunity to revisit the material published for your activity on the SPARC web page. (Please communicate any required changes to the SPARC Project Office).**

The link from SPARC Data Centre page for CCMVal (<https://www.sparc-climate.org/data-centre/data-access/ccmval/>) goes to an old project page (<https://www.pa.op.dlr.de/CCMVal/>) which does not link to the data (it has some broken links and outdated text about provisional data collections).

STFC now has catalogue records for CCMVal (<https://catalogue.ceda.ac.uk/uuid/388bce4c47f94dcfbac2898a86118f8f>) and CCMVal2 (<https://catalogue.ceda.ac.uk/uuid/053e6a561eaa563e2d7f69f1df3786ef>) and CCM1-1 (<https://catalogue.ceda.ac.uk/uuid/9cc6b94df0f4469d8066d69b5df879d5>) which are not include in the SPARC Data Centre pages: can links be added?

The text on the “SPARC Data Centre Mirror” paged) <https://www.sparc-climate.org/data-centre/sparc-data-centre-mirror/>) is out of date and should be updated.