

NCAS-CMS: my role and perspective

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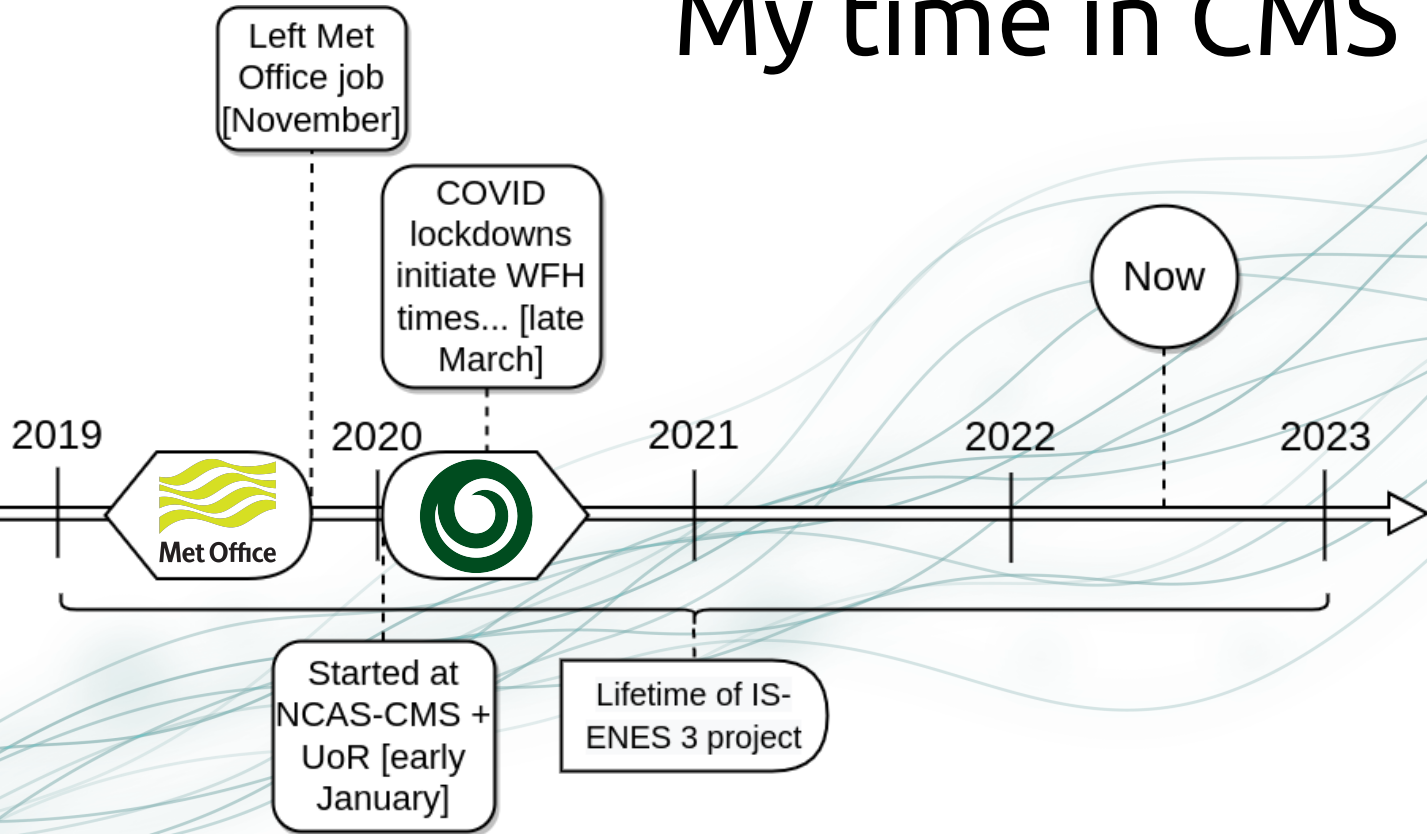
NCAS based at University of Reading

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NCAS-CMS Away Day '22

24th June 2022

My time in CMS





*eco-system of
tools & services
in support
of Earth System
documentation:
core team
member*

open-source
development
mostly in Python
& on GitHub

user & community
support

research software
engineering
collaboration

a core
developer
for cf-python
(& cfdm, etc.)
related *data tools*

*metadata
standards:*
member of the
Information
Management &
Support Team



My role

CF Conventions



the Knowledge
Exchange
Coordinator for
ExCALIData

2022+ Fellow
(RSE best
practice)



Software
Sustainability
Institute

A one-minute highlight

Climate Model Computational Performance: State of the Practice

Session IN015 | Submission deadline August 4th

Co-sponsored by WCRP (World Climate Research Programme)

Topics: computational models, algorithms; numerical algorithms; HPC

To share the current status of computational performance and best practices from diverse modeling groups, we welcome papers:

- addressing computational performance of Earth system models with emphasis on metrics informed by initiatives like CPMIP; and/or
- describing early performance from pathfinding work targeting future architectures.

Conveners:

- Sarat Sreepathi (Oak Ridge National Laboratory)
- Venkatramani Balaji (Geophysical Fluid Dynamics Laboratory)
- Mario Acosta (Barcelona Supercomputing Center)
- Sadie Bartholomew (National Centre for Atmospheric Science & University of Reading)

AGU FALL
MEETING

SCIENCE *is* SOCIETY



Praise

What I think CMS does well...



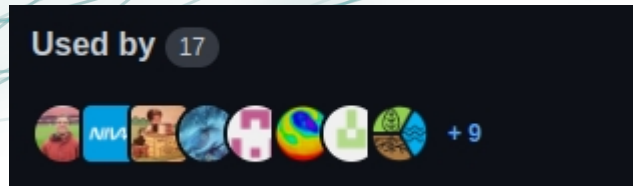
- **Supportive and inclusive** environment
 - e.g. from the start I was shown trust & included in important and/or higher-level conversations, not excluded for being too junior or new;
 - collaborative rather than competitive;
 - knowledge-sharing & learning culture.
- Engaged, open & highly-informed leadership
- Encouraged to make use of new/emerging technologies
 - ethos of not wanting to re-invent the wheel
- Sensible & balanced project management approach
 - make, & keep informed of, (sub-)team progress without going overboard (agile etc.); I like the weekly CMS meeting format.

Constructive criticism

...and what I think it could do better on



- Broadcasting our work: our tools are great but (arguably) overlooked
 - case in point: cf - python is better than (a similar library) iris for many quantifiable reasons, yet has a much smaller user base;
 - although our remit is the academic community, scoping more generally might allow us to reach a larger audience & in turn improve our tools.



[continued...]

[continued...]



- Engaging with the wider RSE community
 - surely most of our work comes under, or is aligned with, RSEing;
 - membership of the Society of Research Software Engineering and interaction with that mature group (e.g. via annual conference);
 - championing the climate and weather field as a very interesting & groundbreaking one for RSE work, challenges and technologies.
- Streamlining communications
 - lots of communication methods especially in/for hybrid working;
 - overwhelming & hard to get attention of target sub-set of group despite the number of Slack channels (too many);
 - *should this meeting be an email* (or Slack message/thread, or continuous updating of a collaborative document / Kanban board)?

Thanks for listening!

I look forward to chatting with you all.

(Feel free to drop me a line at
sadie.bartholomew@ncas.ac.uk if useful for
written/one-to-one thoughts)