

Status Report on our CF Data Visualisation Tools, `cf-plot` & `cf-view`

Sadie Bartholomew • 07.06.24 • NCAS-CMS weekly meeting

1. Background

Andy Heaps



Andy Heaps



Andy Heaps



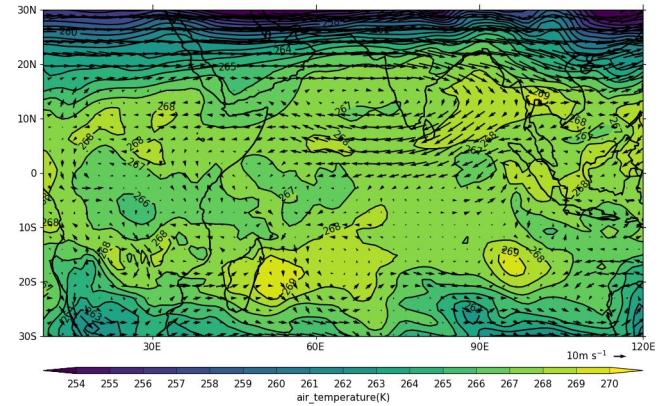
Andy Heaps



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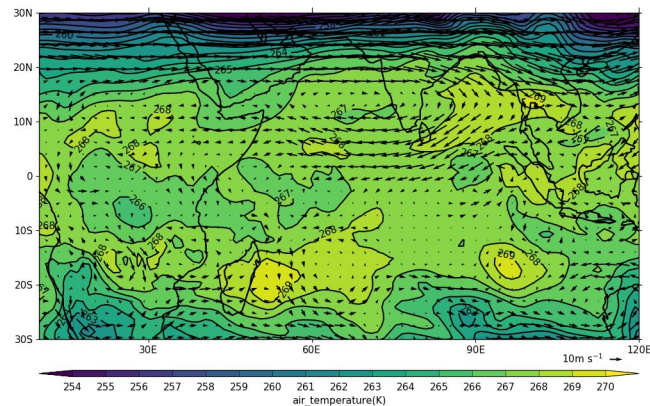
Andy Heaps



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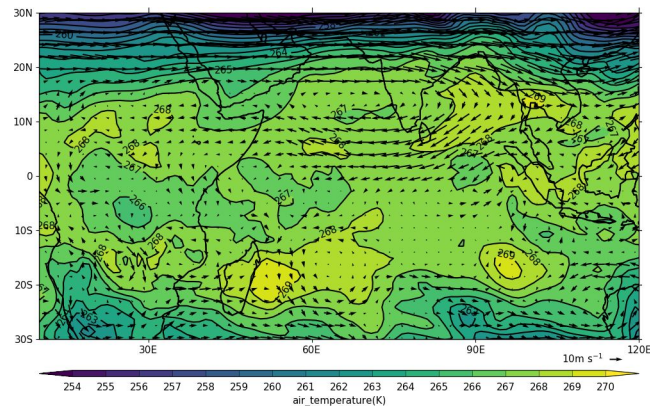
Retirement,
early 2024



Andy Heaps



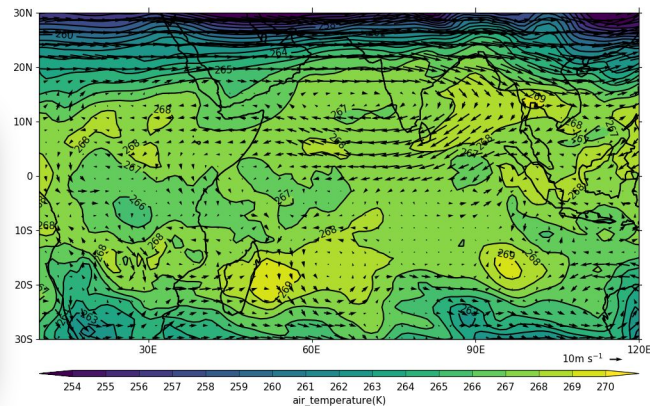
Retirement,
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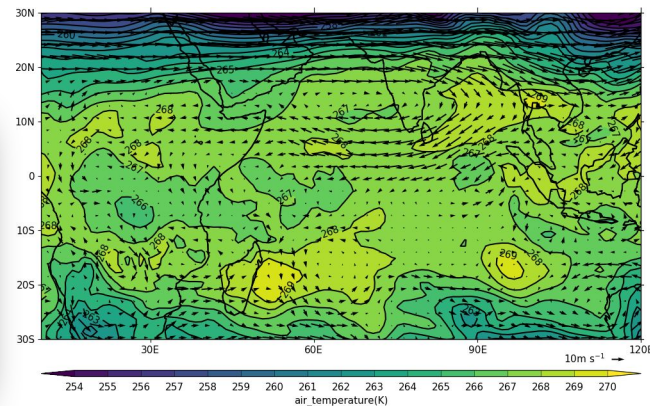
Retirement, early 2024



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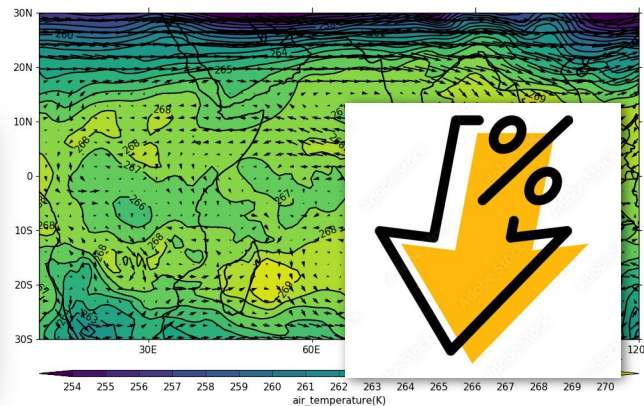
Retirement, early 2024



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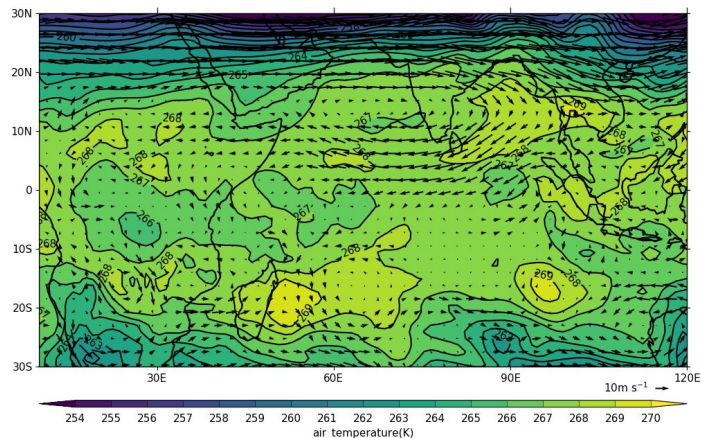


Retirement,
early 2024

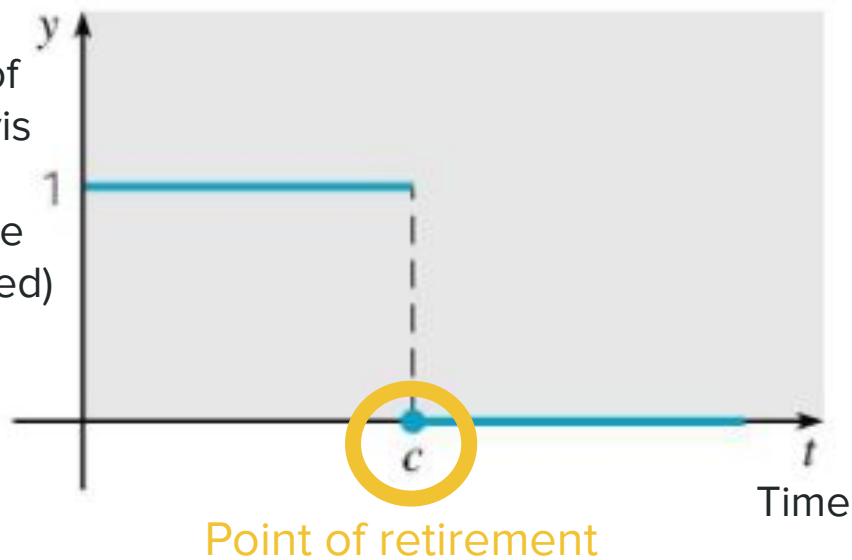




$$y(t) = 1 - u_c(t) = \begin{cases} 1, & 0 \leq t < c \\ 0, & t \geq c \end{cases}$$



Amount of
CF data vis
related
work done
(normalised)



Baton pass of the NCAS CF Data Visualisation Tools

cf-plot

- Visualisation of cf-python fields (and/or standalone numpy arrays)
- Previous strapline “*a set of Python plotting routines for the contour, vector and line plots that climate researchers commonly make*”
- New strapline “*Code-light plotting for earth science and aligned research*”

cf-view

- A GUI showing cf-python code and outputs and cf-plot visualisations in one integrated, organised window
- Previous strapline “*a graphical user interface that is used for analysing and plotting netCDF and Met Office format atmospheric data*”
- New strapline “*Exploration and plotting GUI for netCDF and Met Office format data*”

Overall, I (we - NCAS-CMS) want to continue Andy's legacy and ensure these excellent tools reach their potential and are promoted for better uptake by various communities.



Andy Heaps



2. Current status and plans

[Interactive section - in browser]

cf-plot

- See: <https://github.com/NCAS-CMS/cf-plot>
(new home!) with live docs now at:
<https://ncas-cms.github.io/cf-plot/build/>

cf-view

- See: <https://github.com/NCAS-CMS/cf-view>
with live docs now at:
<https://ncas-cms.github.io/cf-view/build/>

3. How can you help me* with this?

*and in turn, Andy('s CF legacy)

What can you do?

Use cf-plot and cf-view where you can!

If there is a chance to use cf-plot and/or cf-view in your work, or towards personal development time (etc.), please do. And crucially...

Report any issues or requests!

You can raise Issues on the Issue Trackers on the GitHub repos, or just let me know the details in person or via Slack/email.

Thanks already to: Bryan, Jeff, David H, contributions from others I may have forgotten (sorry)

Spread the word!

Tell people about these tools, esp. those outside of UoR and/or NCAS-CMS and those who can be poached from using any Met Office tools (not naming anything in particular)