Training By and For the CF Community: An Example of Community Engagement

Alison Pamment[1,2] and Sadie Bartholomew[1,3;*]

1. National Centre for Atmospheric Science
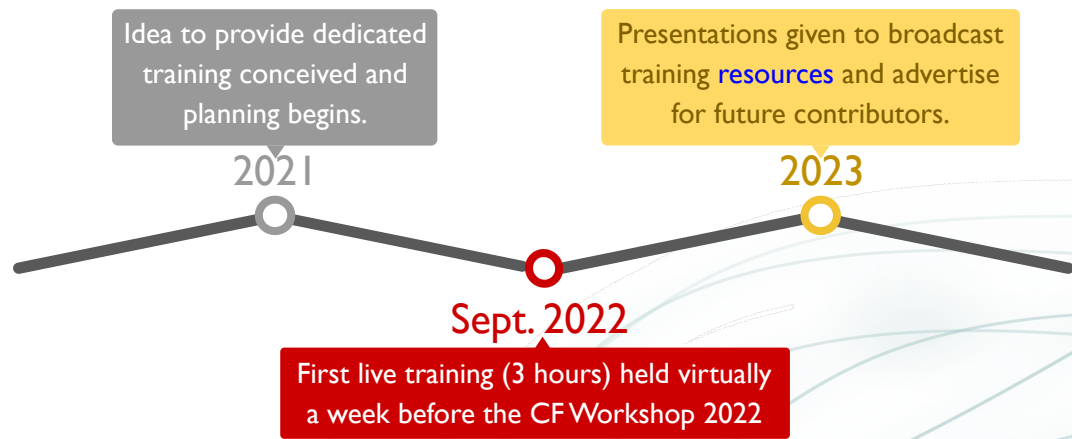2. UK Research and Innovation
3. University of Reading
*: presenting in-person

The story of CF training *so far*

Idea to provide dedicated training conceived and planning begins.

2021

Presentations given to broadcast training resources and advertise for future contributors.

2023

Sept. 2022

First live training (3 hours) held virtually a week before the CF Workshop 2022

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The story of CF training *so far*

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CF Training Materials and Workshops

CF training workshops

- 2022 CF training workshop · 8 September 2022, 15:00-18:00 UTC - online

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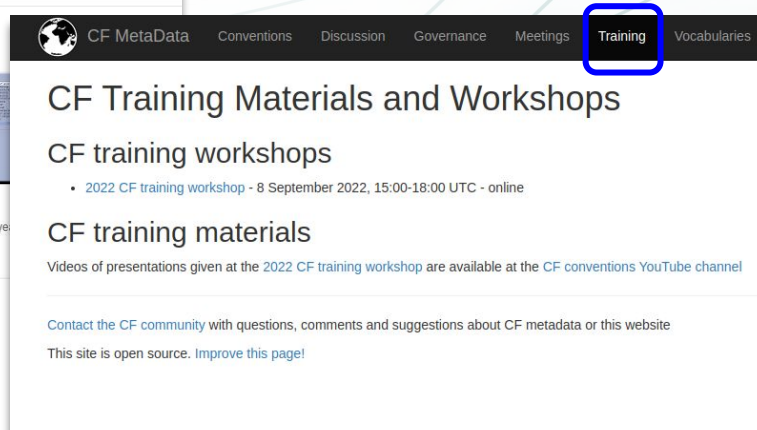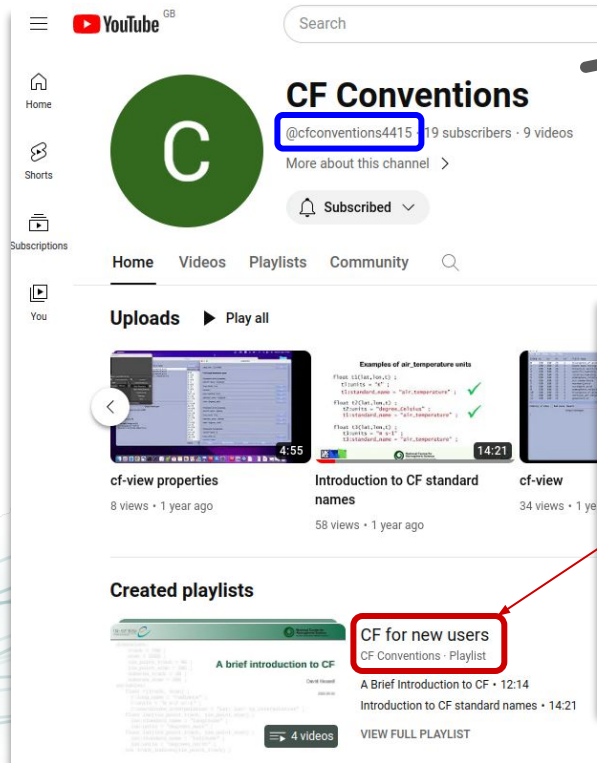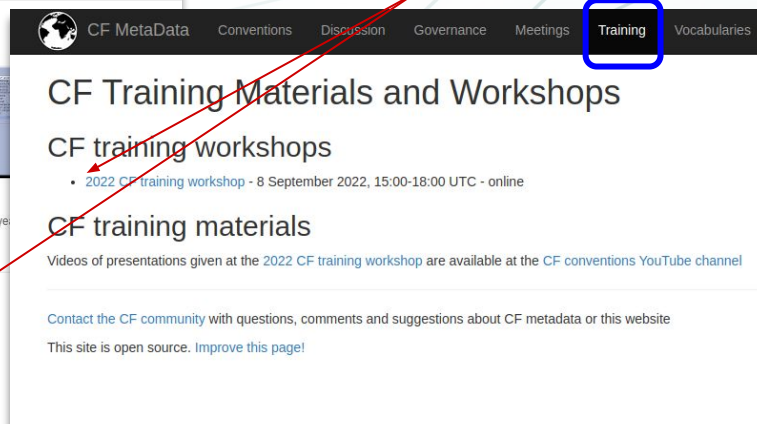NATURAL ENVIRONMENT RESEARCH COUNCIL

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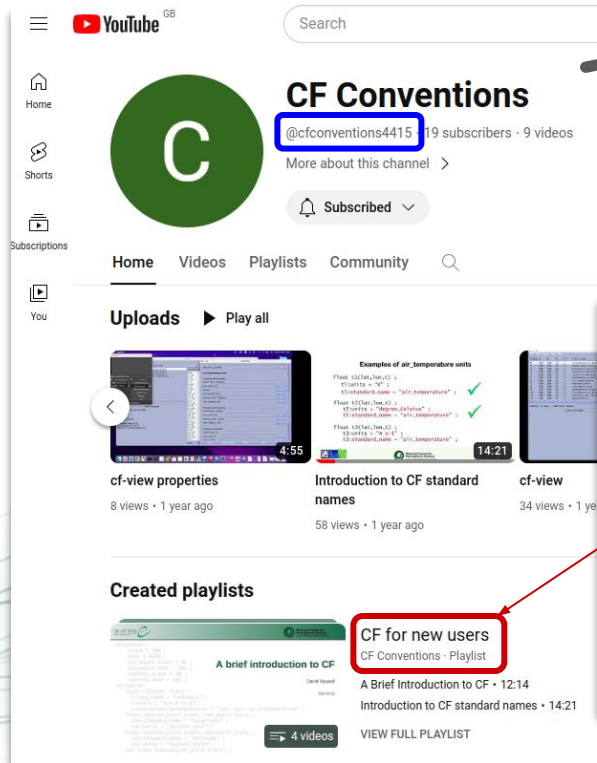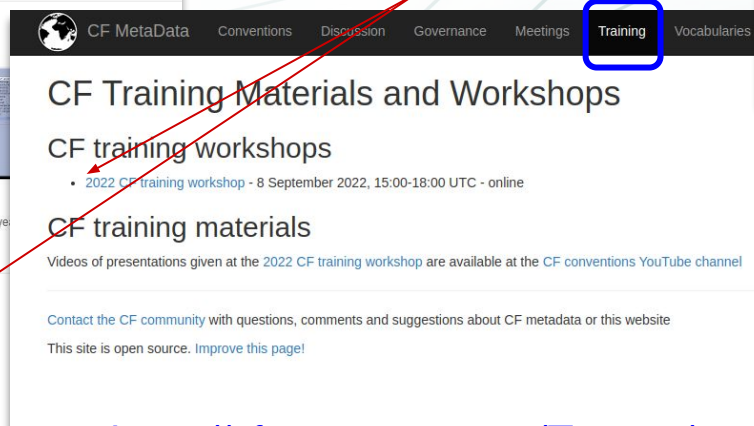
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Initial training was aimed at those (fairly) new to CF

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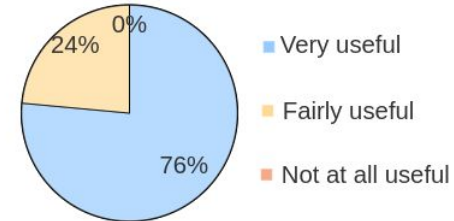
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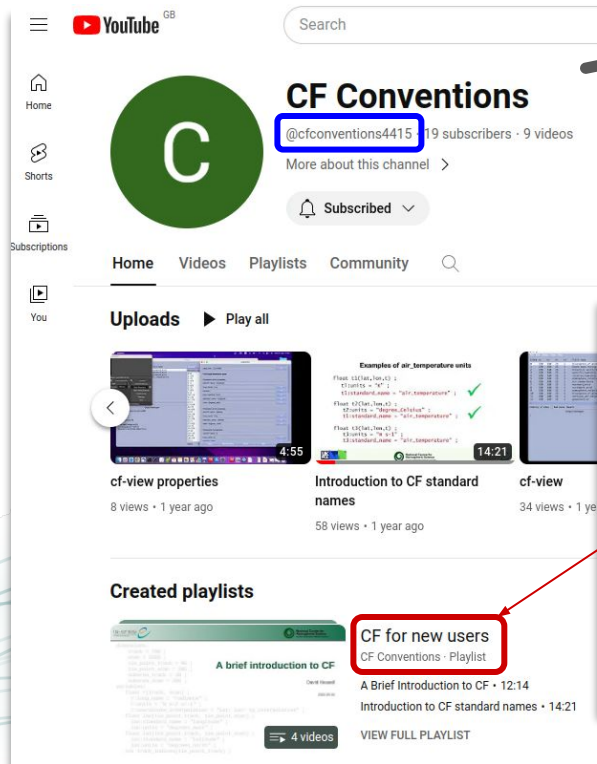
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Did you find this training session useful?

0%
24%
76%

- Very useful
- Fairly useful
- Not at all useful

Key considerations:
- **Sustainability** and **accessibility** ⇒ materials created/used hosted openly and freely online
- **Applicability** ⇒ coverage spanning domains (generalised to specialised), levels of expertise, user *roles*

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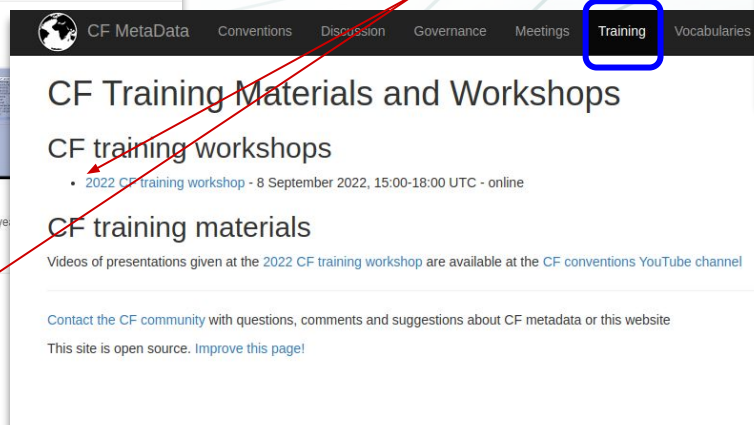Presentations given to broadcast training resources and advertise for future contributors.

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Aims for future: get more of community involved; add more advanced and specialised content; new formats
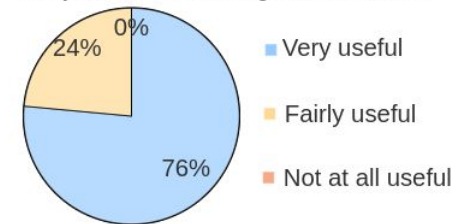
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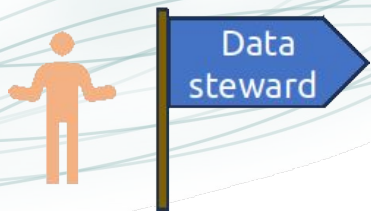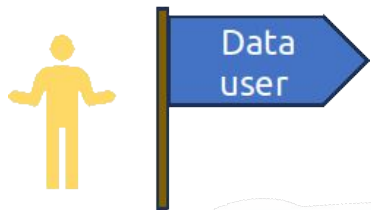
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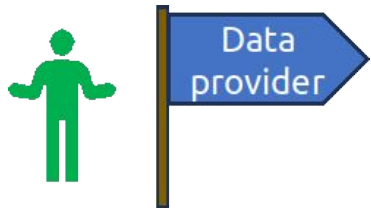
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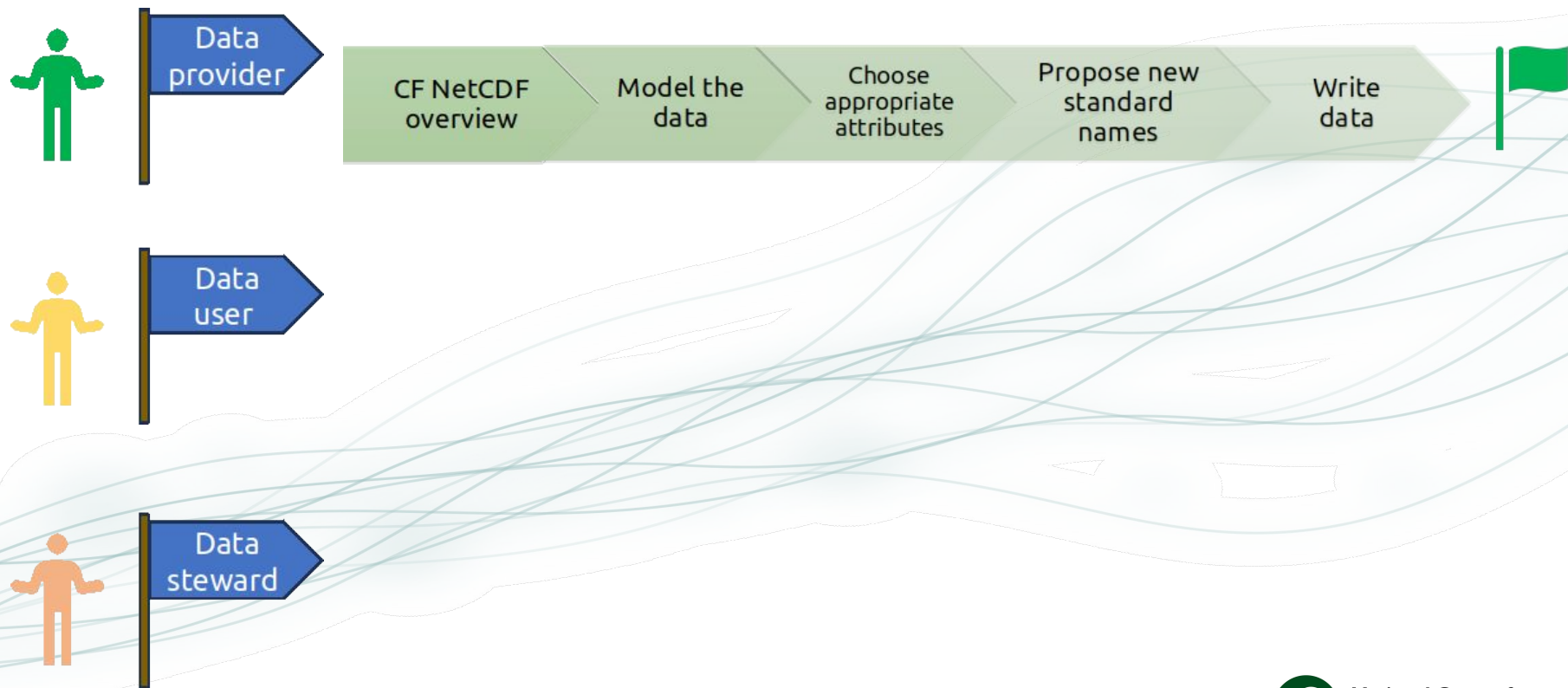
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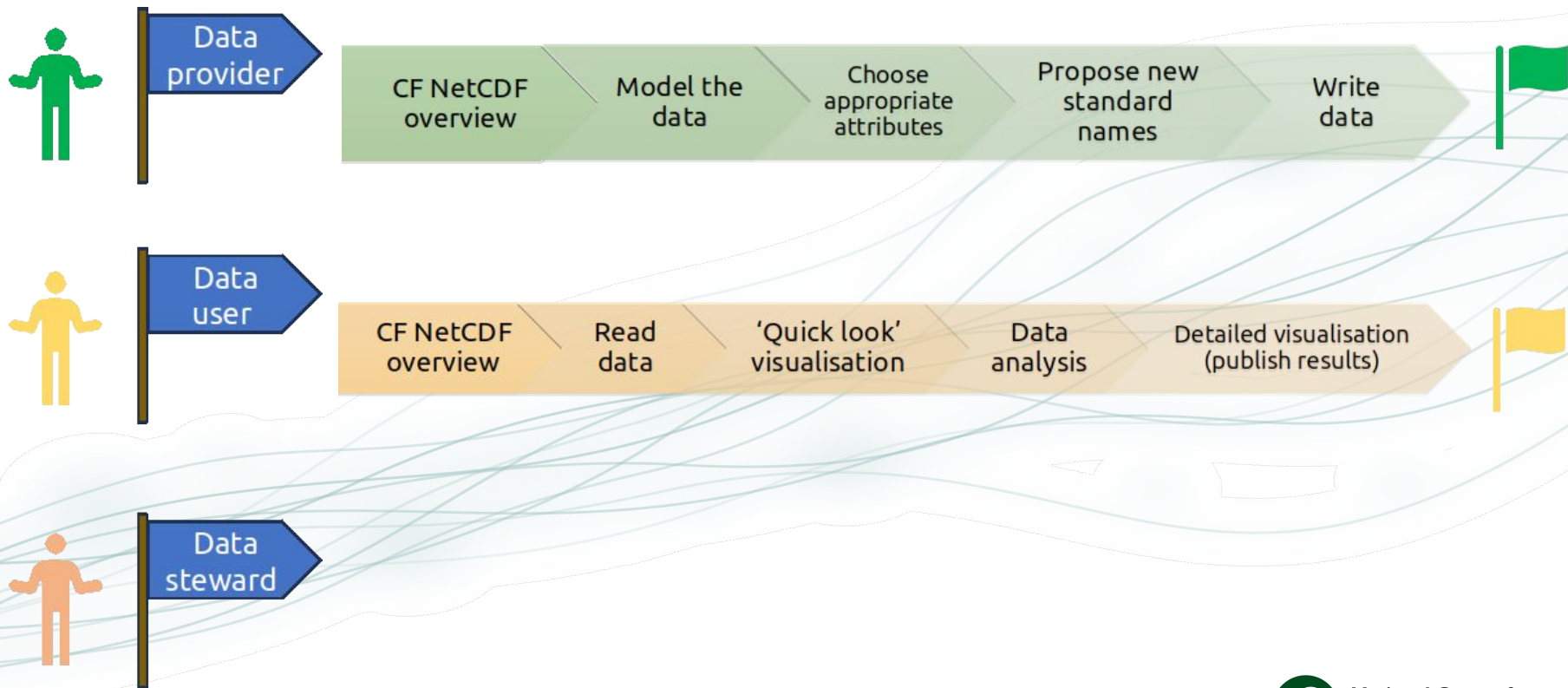
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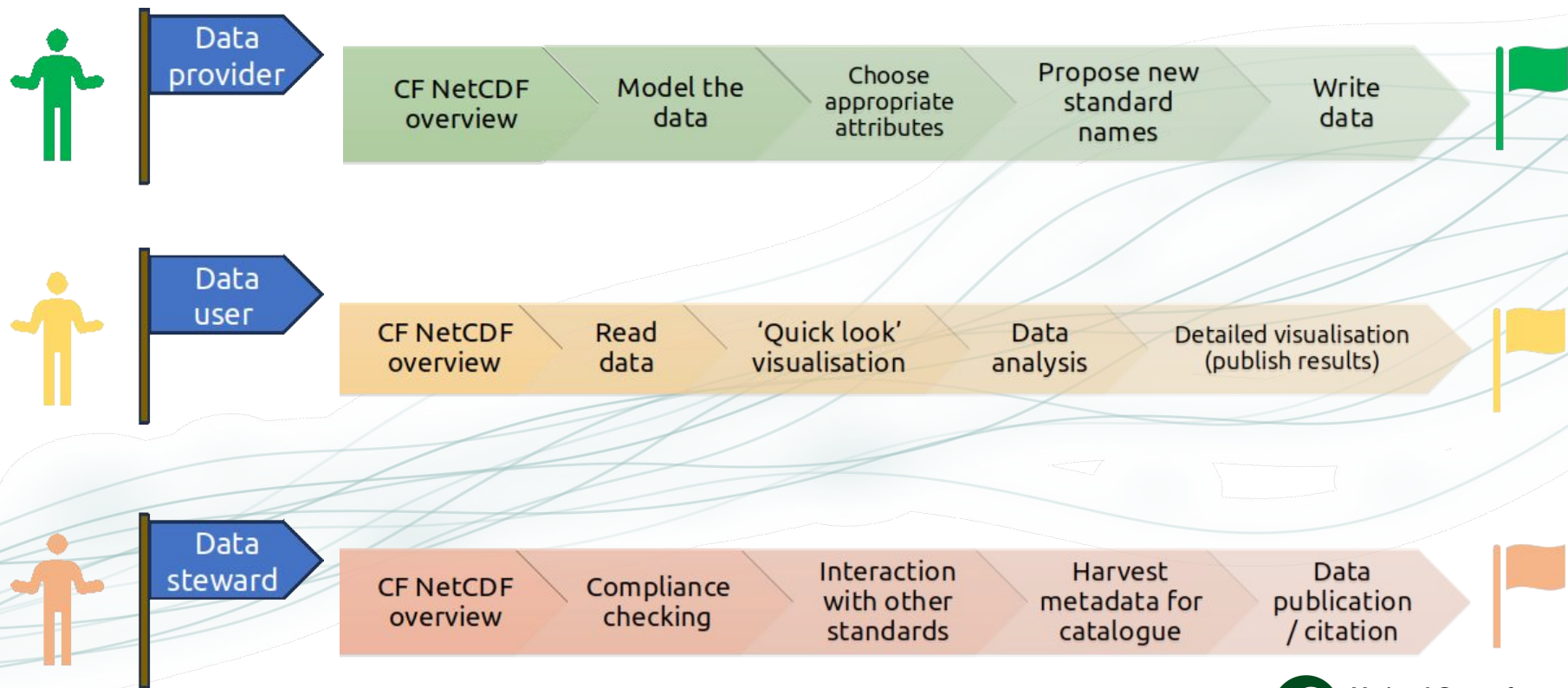NATURAL ENVIRONMENT RESEARCH COUNCIL

We need training pathways for different types of CF user

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Data provider

CF NetCDF overview → Model the data → Choose appropriate attributes → Propose new standard names → Write data

Data user

CF NetCDF overview → Read data → 'Quick look' visualisation → Data analysis → Detailed visualisation (publish results)

Data steward

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Data steward

CF NetCDF overview → Compliance checking → Interaction with other standards → Harvest metadata for catalogue → Data publication / citation

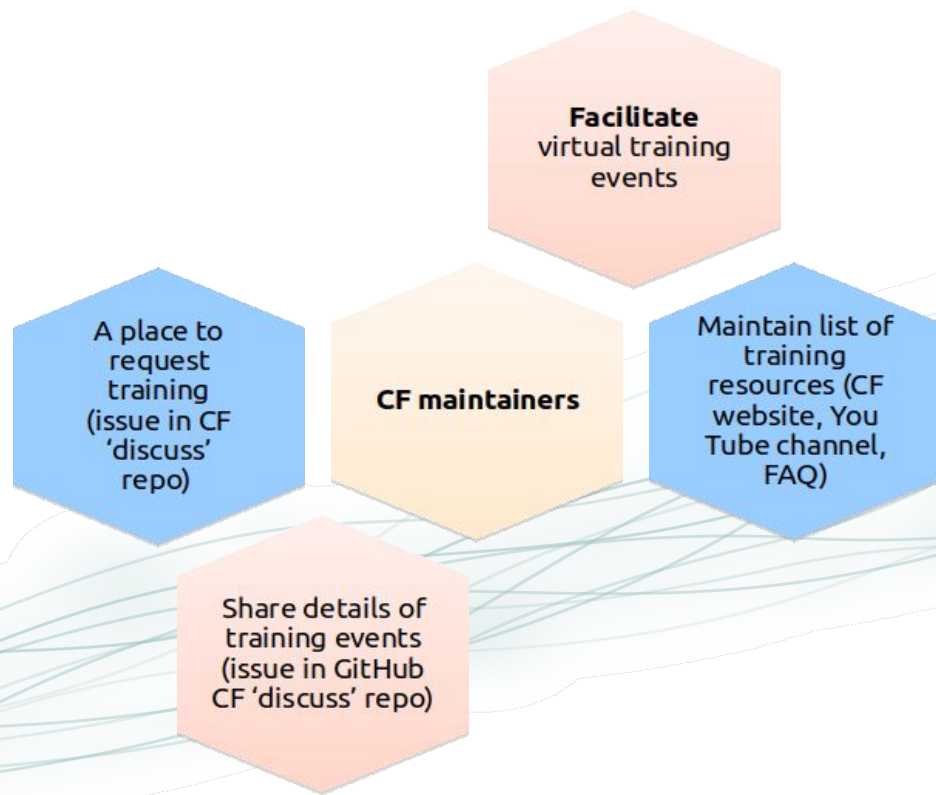**National Centre for Atmospheric Science**
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CF training by the community, for the community

The CF maintainers can act as a hub to coordinate a broad community effort.

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Facilitate
virtual training
events

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Share details of
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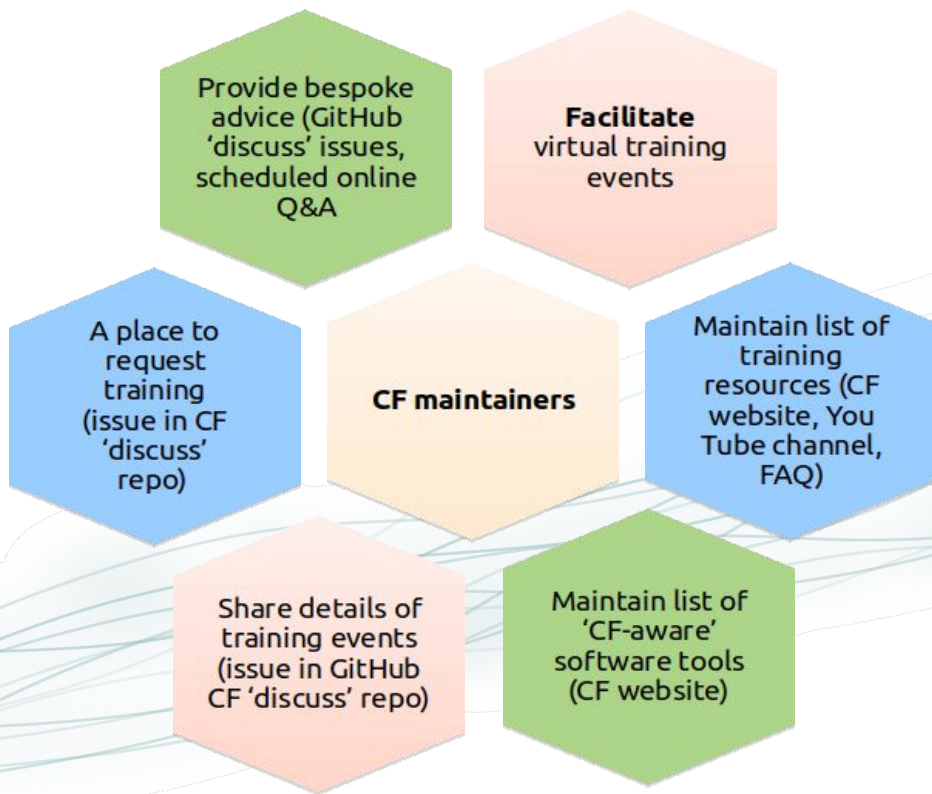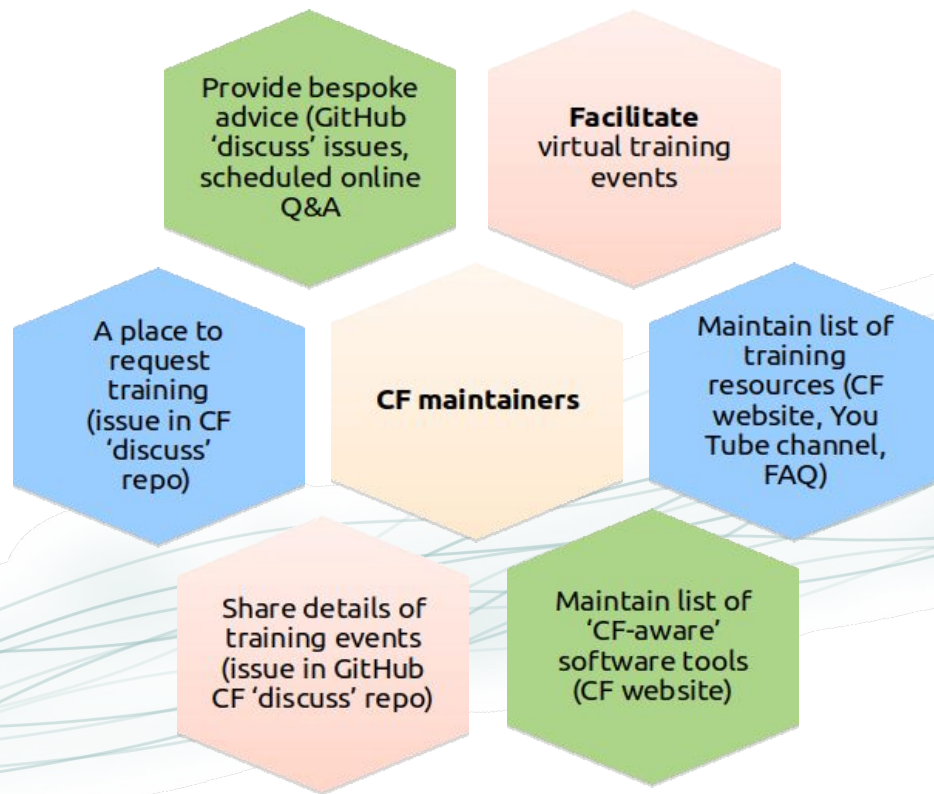NATURAL ENVIRONMENT RESEARCH COUNCIL

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Provide bespoke advice (GitHub 'discuss' issues, scheduled online Q&A)

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A place to request training (issue in CF 'discuss' repo)

CF maintainers

Maintain list of training resources (CF website, You Tube channel, FAQ)

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Maintain list of 'CF-aware' software tools (CF website)

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The CF maintainers can act as a hub to coordinate a broad community effort.

Discussion at the 2023 CF workshop showed:
- There is a strong appetite for further community training events, often on very specific topics.
- A library of example files and accompanying Jupyter Notebooks (Python, R) would be a valuable resource.
- The CF conventions document is currently aimed mostly at data *writers* – advice could also be included from the perspective of data *users* and software developers.

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Take-home points

➔ CF Training has been spun-up as of 2022, with:

◆ a well-received first live 3-hour session which was general and aimed at beginners; and

◆ launch of a training homepage on the official website and a dedicated YouTube channel to host created and future resources for sustainability and open access for all.

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➔ A core principle is '*by the community, for the community*'; we're (hoping to be) just facilitators:

   ◆ CF maintainers can act as a hub to *coordinate* a broad community effort; but

   ◆ sourcing volunteers to create advanced or specialised content may pose a challenge.

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➔ Discussions at the previous CF Workshop (2023) confirmed that we should diversify content:
- ◆ to cater better for more roles and perspectives, including data roles and specialisations;
- ◆ where other formats to video tutorials, e.g. notebooks & demo files, would be of benefit.

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➔ Structuring training based upon training pathways tailored to user roles has been identified as a strategy to make training useful to everyone.

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(We'd love you to) get involved!

To contribute to, request features, or ask any questions about, the CF Training:

- Fill out our dedicated request form at https://t.ly/nHnOm (shortened URL pointer to https://forms.gle/HhVPpzLzbgt6xudh7) as linked by the QR code.
- Or, ask us here at AGU23! Questions very welcome...

For more on how to contribute to the CF Conventions *in general*, see https://cfconventions.org/discussion.html. An updated recording of the video 'How to contribute to CF' will shortly be added to the Training YouTube page.

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