Modeling Infrastructure, Data Standards, and Protocols Breakout Session Report

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Infrastructure breakout session report: organizational issues

- With the advent of seamless modeling, there is a great opportunity for greater coordination on infrastructure between the WCRP working groups across prediction and climate research.
- Can and should community archives be brought under ESGF umbrella?
- Stable funding for infrastructure still an issue: all institutions benefiting from the infrastructure should contribute as well. FTEs may be an equitable currency.
- Technical oversight bodies need to make pragmatic choices between stability/extensibility; usefulness/complexity; ...

Infrastructure breakout session report: technical issues

- Data harmonization such as CMIP6 brings huge benefits but is expensive.
- New technical issues requiring collaboration
 - WIP protocols need to pay greater attention to experiment design and data structure from the prediction side: e.g forecast start time and ensemble axis
 - perhaps an opportunity to converge on netCDF/CF (recall that CF is "Climate and Forecast"
- Reducing data movement by "bringing analysis to the data", long-promised, rarely achieved. Potentially containers/clouds is a breakthrough technology to enable this.
- WGCM strategy of separation of infrastructure into requirements (WIP), implementation (ESGF, ESDOC, ...), and operations (CDNOT) could perhaps be expanded.