The IPCC Sixth Assessment Report WGIII climate assessment of mitigation pathways: from emissions to global temperatures

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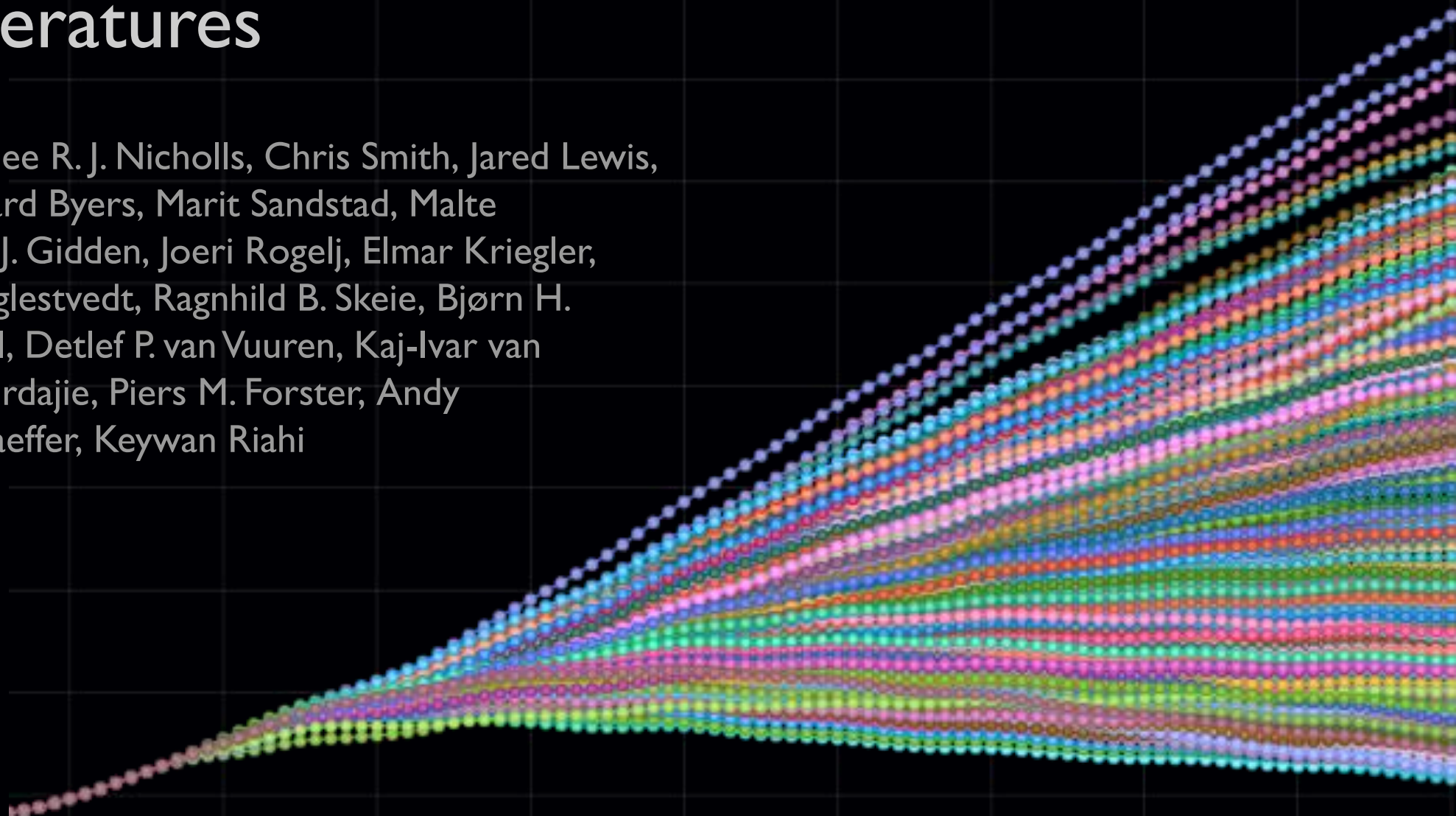


Emission scenario A

Emission scenario B

Emission scenario C

Submitted global emissions pathway database (AR6DB)

# of scenarios 3131

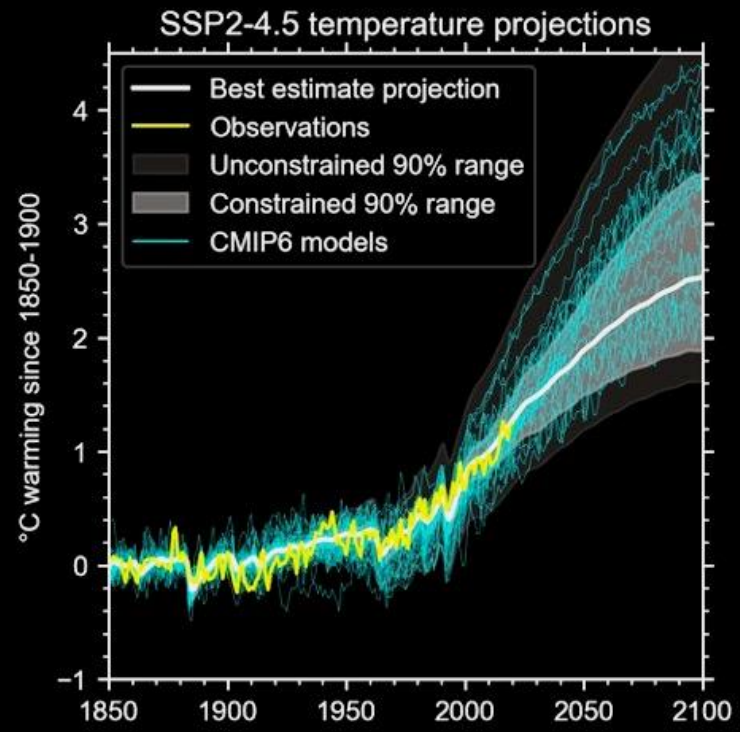
Vetting: Quality and completeness verification of input data

1683

Harmonization of emissions pathways (aneris 0.3.1)

1202

Infilling (silicone 1.2.1) of emissions species not reported



Emissions-driven probabilistic climate model emulators

- MAGICC 7.5.3
- fair 1.6.2
- CICERO-SCM

Climate categorization

C1: 1.5°C with low or no overshoot

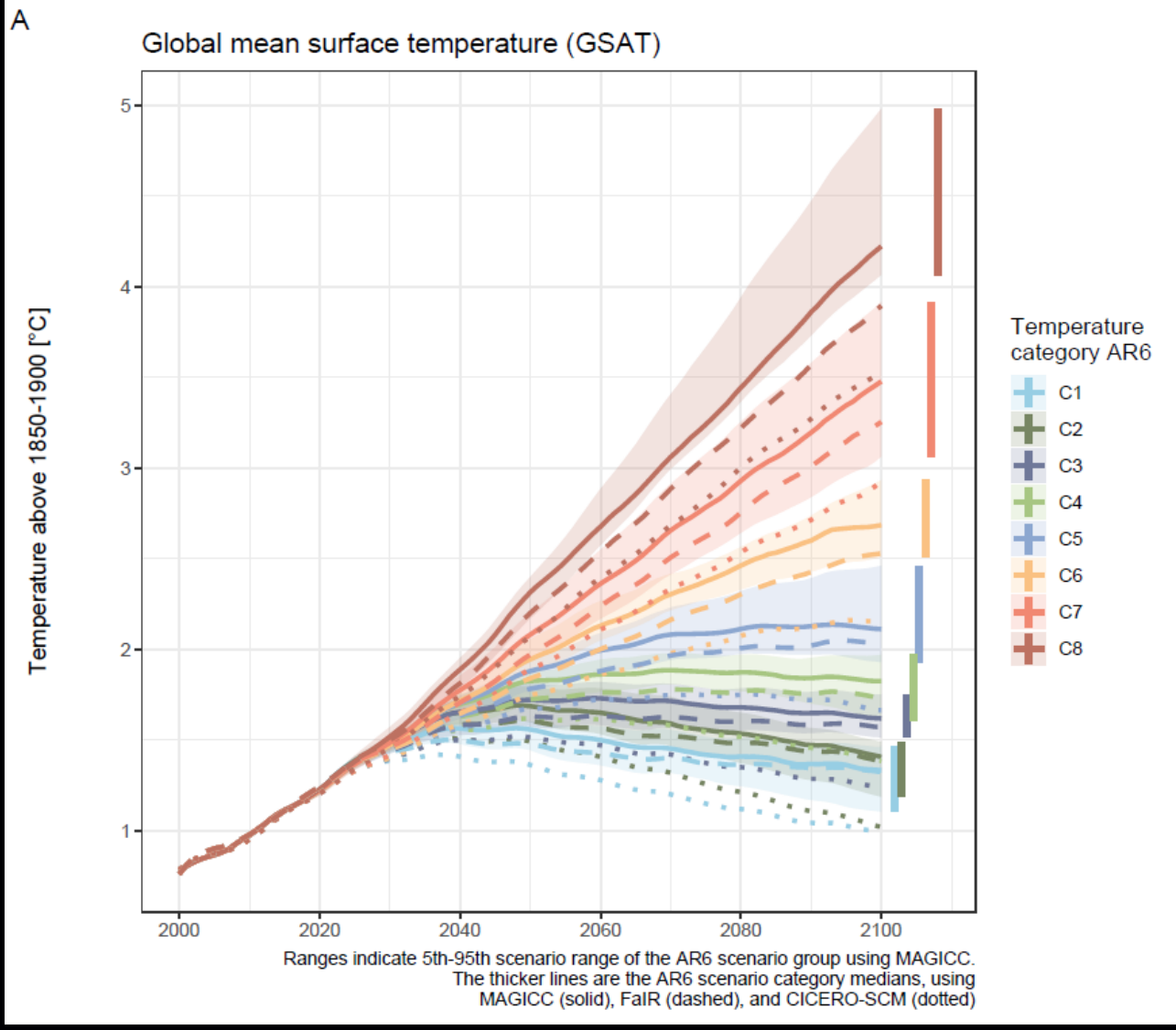
>33% chance of avoiding 1.5°C peak warming, 50% chance <1.5°C in 2100

C2: 1.5°C with high overshoot

50% chance <1.5°C in 2100

C3: "well-below" 2°C

>67% chance <2.0°C in 2100



An open source tool

data.ene.iiasa.ac.at/ar6

github.com/iiasa/climate-assessment

```
pip install climate-assessment
```

Future extension: spatial climate information and regional impacts