

# A4E PUBLICATIONS

## Emissions from infrastructure

**Measuring carbon emissions at the Canada–France–Hawaii Telescope**  
*Flagey et al., 2020, Nat. Astron. 4, 816*

**The ecological impact of high-performance computing in astrophysics**  
*Portegies Zwart et al., 2022, Nat. Astron. 4, 819*

**A path to net-zero carbon emissions at the W. M. Keck Observatory**  
*McCann et al., 2022, Nat. Astron. 6, 1223*

**Estimate of the carbon footprint of astronomical research infrastructures**  
*Knöldlseder et al., 2022, Nat. Astron. 6, 503*

**The energy consumption and carbon footprint of the LOFAR telescope**  
*Kruithof et al., 2023, Exp. Astron., 56, 687*

**Life cycle assessment of the Athena X-ray integral field unit**  
*Barret et al., 2024, Exp. Astron., 57, 19*

**Astronomers for Planet Earth: Engaging with the Public to Forge a Sustainable Future**

*White et al., 2021, Bulletin of the AAS, 53(2)*

**Five steps for astronomers to communicate climate change effectively**  
*Anderson & Maffey, 2021, Nat. Astron., 5, 861*

## Outreach



ASTRONOMERS  
FOR PLANET EARTH

## The impact of climate change on astronomical observations

*Cantaloube et al., 2020, Nat. Astron. 4, 826*

## Travel & Conferences

### The carbon footprint of large astronomy meetings

*Burtscher et al., 2020, Nat. Astron., 4, 823*

**Forging a path to a better normal for conferences & collaboration**  
*Moss et al., 2021, Nat. Astron., 5, 213*

**A more sustainable future for astronomy**  
*Wagner et al., 2023, Nat. Astron., 7, 244*

**The future of meetings in the particle astrophysics community**  
*Tibaldo et al., 2023, Nat. Astron., 7, 1408*

**Astronomy's climate emissions: Global travel to scientific meetings in 2019**  
*Gokus et al., 2024, PNAS Nexus, 3(5), pgae143*

## General astronomy profession

**An astronomical institute's perspective on meeting the challenges of the climate crisis**  
*Jahnke et al., 2020, Nat. Astron., 4, 812*

**The imperative to reduce carbon emissions in astronomy**  
*Stevens et al., 2020, Nat. Astron., 4, 843*

**The carbon footprint of astronomy research in the Netherlands**  
*van der Tak et al., 2021, Nat. Astron., 5, 1195*

**A comprehensive assessment of the carbon footprint of an astronomical institute**  
*Martin et al., 2023, Nat. Astron., 6, 1219*