

To the Federal Communications Commission:

In the Matter of Reflect Orbital's proposal [SAT-LOA-20250701-00129]

PETITION TO DENY AND REQUEST FOR FULL NEPA REVIEW

Filed by: Asociación Argentina de Astronomía (AAA)

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President

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The Asociación Argentina de Astronomía (AAA), representing the professional astronomical community in Argentina. We express our serious concern regarding Reflect Orbital's proposal [SAT-LOA-20250701-00129] and its potential impacts on the natural night environment.

Reflect Orbital's plan would deploy satellites equipped with large in-space mirrors to reflect sunlight down to Earth, creating "sunlight on demand" at night. This unconventional form of orbital illumination could introduce an unprecedented source of artificial light, with wide-ranging consequences for ecosystems, astronomical observations, and the integrity of the night sky.

I urge the Federal Communications Commission (FCC) to reject this proposal in its current form. Illuminating Earth from orbit would introduce an unprecedented source of artificial light at night, with global ecological, scientific, and cultural consequences.

Key concerns include:

- **Environmental impacts:** Disruption to wildlife behavior and increased pressure on ecosystems.
- **Human wellbeing and public safety:** Interference with sleep and biological rhythms, along with glare risks for drivers, pilots, and people using optical devices.
- **Astronomy:** Brightening of the night sky that interferes with research and threatens sensitive instruments.
- **Orbital debris:** Increased collision and debris risks in an already crowded orbital environment.

In particular, within our field of research and development, Astronomy, the light pollution generated by this project would have a significant and measurable impact on professional astronomical work. We therefore invite the reader to consult the documentation available at the "IAU Centre for the Protection of the Dark and Quiet Sky from Satellite Constellation Interference", which provides a comprehensive assessment of these effects (<https://cps.iau.org/about/>)

These impacts are well documented in scientific literature and are not speculative. Once

deployed, the effects of orbital illumination would be difficult or impossible to reverse.

For these reasons, I respectfully urge the FCC to require a comprehensive environmental review consistent with the National Environmental Policy Act and to reject this proposal until such review is completed and publicly available.

Innovation must advance alongside environmental responsibility. Until the risks of orbital illumination are fully assessed through a transparent, science-based process, this proposal should not move forward.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "M. Orellana", with a horizontal line underneath.

Mariana Orellana

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