

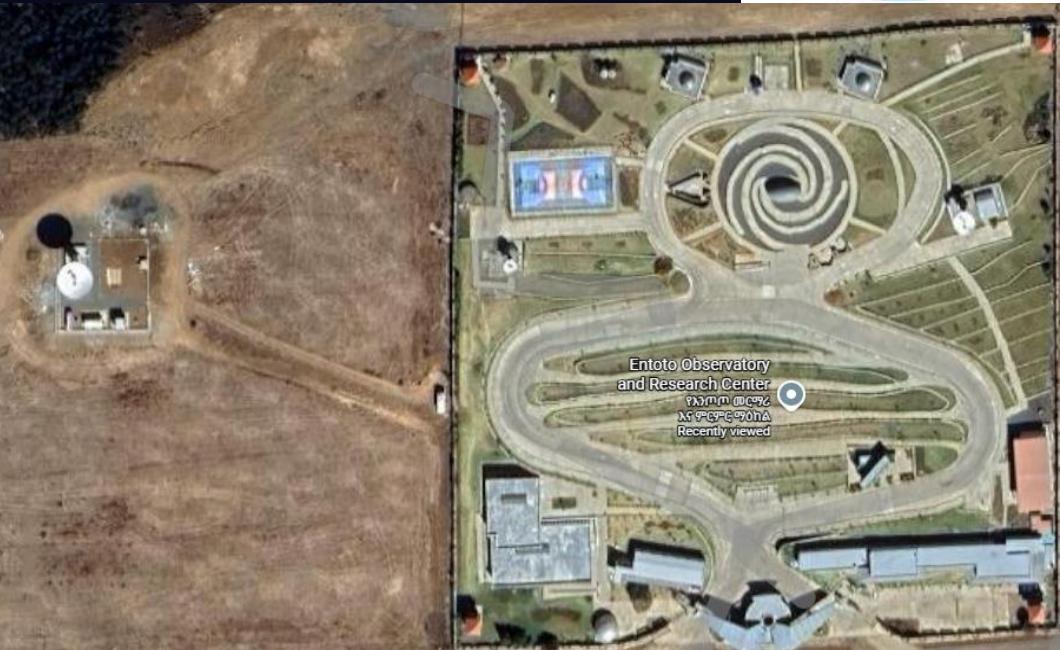
# Light Pollution and the Fading Skies over Entoto



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**Entoto Observatory:** Located at **3200 meters above sea level** near Addis Ababa and established in 2016.

- The observatory hosts twin 1-m telescopes for research and training.
- Three ground station for satellites data receiving
- City expansion increases artificial skyglow ALAN, reducing limiting magnitude.

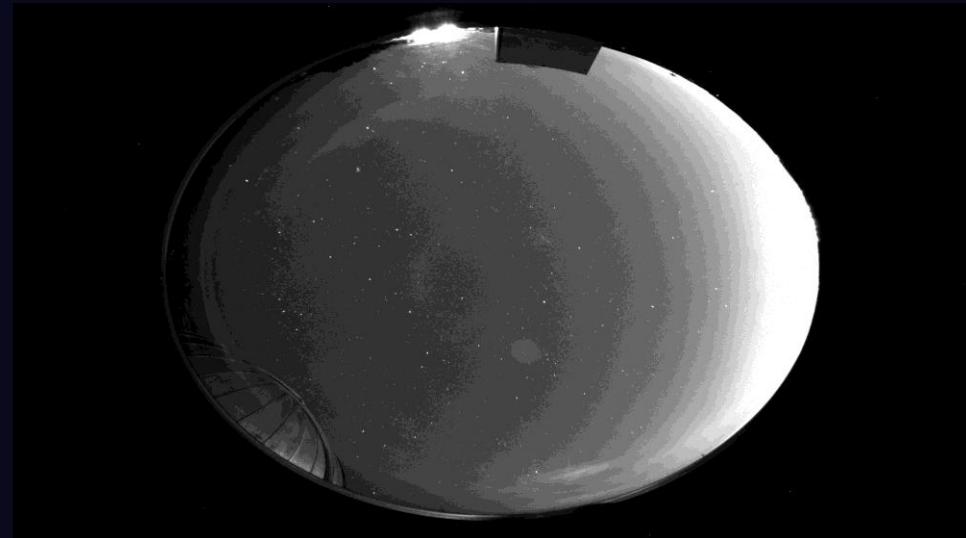


# Assessing and Quantifying Urban Skyglow

- A Sky Quality Meter (SQM) reading reveal 16 a very **bright, light-polluted sky**.

- **Satellite Interference:**

Satellite streaks are recorded in long-exposure CCD frames, but their frequency is low comparing to **ALAN from Addis Ababa** and **sululta** remains the dominant limiting factor for photometry.



# Toward Sustainable Dark-Sky Protection

- Proposal: Pilot Dark-Sky Protection Initiative with local authorities.
- Seeking partners for lighting audits, modeling tools, and policy frameworks.
- possible Astronomical site to relocate the telescopes

**Mitigation Necessity:** Both terrestrial light and satellite interference require urgent, coordinated mitigation strategies to preserve the observatory's scientific productivity.



Thank you

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