



Report on IAU 386 Symposium in Ethiopia and related activities

Edited by: Mirjana Pović, Alemiye Mamo, Solomon Tessema Belay, Seblu Humne, Getinet Feleke, and Gemechu Muleta

Dear colleagues and friends,

We would like to share with you a brief summary of **IAU Symposium 386** on '*Dark Sky and Astronomical Heritage in Boosting Astrotourism Worldwide*' which was held in Addis Ababa, Ethiopia, November 13-17, 2023. This was the **4th Symposium organized in Africa in the last 100+ years since the foundation of IAU**, and the second **organized in Ethiopia** and East Africa. This Symposium was hybrid, giving participants the opportunity to attend in person and online. To benefit the general public, different activities were held for young researchers and students, tour guides, tourism associations and regional offices, and school children before and during the symposium. These include the **African Planetarium Association workshop** (11-12 December), **astro-tourism capacity building training** (11-12 December) and **outreach activities** in 6 public schools and at Addis Ababa University (17 December). All events and activities are described below.

IAU 386 Symposium (13 - 17 Nov 2023) **(<https://iau386.essti.gov.et/>)**

The main objectives of the IAU 386 Symposium were: 1) to promote and raise awareness about the importance of the dark sky as a natural resource and its protection, 2) to promote the importance of historical astronomical sites and cultural astronomy as part of our heritage and its protection, and 3) to promote strategies for the implementation of astrotourism as an important tool for sustainable socio-economic and environmental development. We had a very productive scientific meeting that focused the discussion around 5 sessions related to: S1. Dark skies for science and technological development and their conservation, S2. Dark skies, cultural astronomy and astronomical heritage, S3. Astrotourism, S4. Dark and quiet sky policy and implementation framework, and S5. Dark sky and astrotourism education, outreach and development activities.

IAU386 program
(in East African Time or UTC+3)

Dark sky and astronomical heritage in boosting astro-tourism around the globe
13-17 November 2023, Addis Ababa, Ethiopia

Monday 13

Opening session (Chair: Alemiye Mamo)	
9:00-10:15	<ul style="list-style-type: none">- Alemiye Mamo (IAU386 Chair)- Solomon Tessema Belay (Ministry of Innovation and Technology adviser, IAU Vice-President, IAU386 SOC/LOC)- Debra Elmegreen (IAU Preseident) - RECORDED- Edward Gomez (IAU Division C Education, Outreach, Heritage Vice-President) - RECORDED- Naomi Asabre/Charles Takalana (AfAS EXCO) - ONLINE- Takalani Nemaungani (DSI Astronomy Chief Director) - ONLINE- Joyful Mdhluli on behalf of Kevin Govender (OAD-IAU Director, GA 2024 Chair)- Abdissa Yilma (SSGI Director General)- Ministry of Innovation and Technology Minister or on his behalf (Official opening of the IAU 386 Symposium)
Dark skies for science and technological developments and its conservation (Chair: Alemiye Mamo)	
10:15-10:35 (plenary/invited talk, part 1)	John Hearnshaw <i>The benefits of dark skies: astro-tourism, economy, environment, human health and promoting STEM education</i> <i>(in-person)</i>
10:35-11:15	Symposium photo

	Coffee/tea break
Chair: Catherine Cress	
11:15-11:45 (plenary/invited talk, part 2)	John Hearnshaw <i>The Aoraki Mackenzie International Dark Sky Reserve in New Zealand and key factors</i> <i>(in-person)</i>
11:45-12:00	Priya Shah <i>The impact of satellites on observational astronomy</i> <i>(in-person)</i>
12:00-12:15	Parham Eisvandi Dehnoei <i>The importance of identifying dark sky places and its role on the environment</i> <i>(in-person)</i>
12:15-12:30	Michael Backes <i>Night sky brightness measurements towards the Namibian multi-wavelength observatory</i> <i>(in-person)</i>
12:30-14:00	Lunch break
Chair: Niruj Mohan Ramanujam	
14:00-14:15	Yosry Azzam <i>Kottamia Astronomical Observatory: a case study of a working observatory threatened by urban extension and light pollution</i> <i>(recorded/online)</i>
14:15-14:30	Andreas Hänel <i>Dark Sky Places as best practice for reducing light pollution and foster astro-tourism</i> <i>(recorded/online)</i>
14:30-14:45	Rita Ajuh and Bonaventure Okere <i>The bio-environmental and health impact of artificial light: the struggle to conserve the dark sky</i> <i>(recorded/online)</i>

14:45-15:00	<p>Carol Nyaguthii</p> <p><i>Measuring artificial light at night and facilitating dark sky preservation in Kenya</i> <i>(in-person)</i></p>
15:00-15:15	<p>Mohamed F. Aboushelib</p> <p><i>Night sky brightness and light pollution at Kottamia Astronomical Observatory</i> <i>(recorded/online)</i></p>
15:15-15:30	<p>Miguel Serra Ricart</p> <p><i>NeXT: a New Wireless Autonomous Mobile Night Sky Brightness Photometer</i> <i>(recorded/online)</i></p>
15:30-16:00	Coffee/tea break
Chair: Mirjana Povic	
16:00-16:15	<p>Hamza Ait Abdelaali</p> <p><i>The first results of measuring NSB with the CoSQM at Oukaimeden Observatory</i> <i>(recorded/online)</i></p>
16:15-16:30	<p>Shambel Sahlu</p> <p><i>Searching potential astronomical sites in Ethiopia</i> <i>(recorded/online)</i></p>
16:30-16:45	<p>Nebiyu Suleyman Mohammed</p> <p><i>Protecting Entoto Observatory from Addis Ababa's streetlight pollution</i> <i>(in-person)</i></p>
16:45-17:00	<p>Nadeem Oozeer</p> <p><i>The Karoo Array Telescope Historical Probability Radio Frequency Interference (KATHPRFI) framework</i> <i>(recorded/online)</i></p>
17:00-17:15	<p>Nicolas Lodieu</p> <p><i>Creating important partnerships around low-cost, disruptive, ultra-large telescope technologies</i> <i>(recorded/online)</i></p>
17:15-17:30	Connie Walker

	<i>Astronomy and the preservation of our dark skies heritage: a Chilean perspective</i> <i>(online)</i>
From 18:00	<i>Welcome reception (at the Capital Hotel, 2nd floor)</i>

Tuesday 14

Dark skies, cultural astronomy, and astronomical heritage (Chair: John Hearnshaw)	
9:00-9:30 (invited talk)	Ruskin Hartley <i>Stargazing for sustainable growth: Analyzing the economic impact of dark sky tourism in International Dark Sky Places</i> <i>(recorded/online)</i>
9:30-9:45	Rogel Mari Sese <i>Traditional astronomy culture in the Southern Philippines</i> <i>(recorded/online)</i>
9:45-10:00	Bosco Oruru <i>The first track of cultural astronomy in Uganda – Perspectives of major ethnic groups</i> <i>(in-person)</i>
10:00-10:15	Mónica Martínez Borrayo and Durruty Jesús de Alba Martínez <i>From heritage to dark sky: an astronomical route at Guadalajara's, México Downtown</i> <i>(in-person)</i>
10:15-10:30	Alejandro M. López <i>Indigenous peoples and sky stones: tourism and astronomical heritage in contexts of inequality</i> <i>(recorded/online)</i>
10:30-11:00	Coffee/tea break
Chair: Priya Hasan	
11:00-11:15	Tolu Biressa <i>Cosmology of the Ayyaana observations in Borena calendar</i> <i>(in-person)</i>

11:15-11:30	Hossein Khezri <i>Solar calendar and circular astronomical cities in ancient Iran</i> <i>(in-person)</i>
11:30-11:45	Ramesh Chander Kapoor <i>The lost and found telescopes and astronomical sites of history: tales from India</i> <i>(recorded/online)</i>
11:45-12:00	Negessa Shukure <i>Cultural astronomy: exploring the astronomical objects applied by the Gedeo society</i> <i>(in-person)</i>
12:00-12:15	Rayan Khan <i>Kalasha indigenous astronomy: Suri Jagek and its cultural significance</i> <i>(recorded/online)</i>
12:15-12:30	Encieh Erfani <i>Astronomical heritage in Iran</i> <i>(recorded/online)</i>
12:30-14:00	Lunch break
Chair: Getinet Feleke	
14:00-14:15	Cuauhtemoc Mendez Rosas <i>Mayan Archeoastronomy and different herophanies in Mexico, and Mesoamerica</i> <i>(recorded/online)</i>
14:15-14:30	Megha Rajoria <i>Jantar Mantar Observatories: astronomical heritage of India</i> <i>(recorded/online)</i>
14:30-14:45	Federico Di Giacomo <i>“Look up!” A virtual exhibition about the historical astronomical atlases</i> <i>(in-person)</i>
14:45-15:00	Rogel Mari Sese <i>Astronomy in creation mythologies of Philippine ethnic groups</i>

	<i>(recorded/online)</i>
15:00-15:30	Discussion: <i>Dark sky protection strategy for Africa</i> Alemye Mamo and Niruj Mohan Ramanujam
15:30-15:45	Etsegnat Getachew <i>Ethiopian astronomy</i> <i>(in-person)</i>
15:45-16:00	Coffee/tea break
Astro-tourism (Chair: Carol Nyaguthii)	
16:00-16:30 (invited talk)	Sonal Asgotraa <i>Astrostays : creating sustainable livelihoods through community led astro-tourism</i> <i>(in-person)</i>
16:30-16:45	Noorali Jiwaji <i>Enabling astro-tourism establishment in Tanzania</i> <i>(in-person)</i>
16:45-17:00	Sqalli Nasser <i>Dark and Quiet Sky for Astro-Tourism: a field-level experience</i> <i>(in-person)</i>
17:00-17:15	Shweta Kulkarni <i>AstroTribe for DarkSkies & AstroTourism</i> <i>(recorded/online)</i>
17:15-17:30	Andreas Hänel <i>Total solar eclipses – large astro-tourism events</i> <i>(recorded/online)</i>

Wednesday 15

Astro-tourism (cont.) (Chair: Maryam Papari)

9:00-9:15	Remembering Prof. Carolina Ödman after 1 year (Mirjana Povic and Niruj Mohan Ramanujam)
9:15-9:30	Sisco Auala (Michael Backes on her behalf) <i>Dark-sky tourism: a catalyst for socioeconomic empowerment of indigenous communities in Namibia</i> <i>(in-person)</i>
9:30-9:45	Pedro Russo <i>Astro-tourism: some contributions for a global strategy</i> <i>(online)</i>
9:45-10:00	Proven-Adzri Emmanuel <i>Exploring dark skies in the outback of Ghana through astro-tourism.</i> <i>(in-person)</i>
10:00-10:15	Alemiye Mamo <i>Dark sky and potential of astro-tourism in Ethiopia</i> <i>(in-person)</i>
10:15-10:30	Mohammad Saleh Timar <i>In search of darkness</i> <i>(in-person)</i>
10:30-11:00	Coffee/tea break
Chair: Seblu Humne	
11:00-11:30 (invited talk)	Audrey Dikgale-Mahlakoana & Laeticia Jacobs <i>The national astro-tourism strategy and implementation plan in South Africa</i> <i>(in-person)</i>
11:30-11:45	Hidehiko Agata

	<i>The current status and potential of astro-tourism (recorded/online)</i>
11:45-12:00	Koki Sawada <i>Empirical study for measuring Japanese astro-tourists' visual perception of night sky qualities with a Sky Quality Meter (in-person)</i>
12:00-12:15	Ladislaus Batinoluho <i>Assessment of the success, lessons learnt, and prospects for the astro-tourism sector in Tanzania (in-person)</i>
12:15-12:30	Kushatha Ntwaetsile <i>Socio-economic development through astro-tourism in Botswana (in-person)</i>
12:30-12:45	Cameron Davis <i>Lessons from the Ningaloo 2023 eclipse (recorded/online)</i>
12:45-13:45 (!!)	Lunch break (only one hour)
13:45 (departure)	Excursion to Entoto Observatory out of Addis Ababa

Thursday 16

Policy and implementation framework of dark and quiet sky (Chair: Laeticia Jacobs)	
9:00-9:30 (invited talk)	Antonia Varela <i>The sky as an engine for local sustainable socio-economic development: Starlight Network. (in-person)</i>
9:30-9:45	Melanie Johnston-Hollitt <i>Tracking the orbital radio frequency environment for better regulation (recorded/online)</i>

9:45-10:00	Hannah E Harris <i>Of night lights and nukes: dark sky and space stewardship for the nuclear age</i> <i>(recorded/online)</i>
10:00-10:30 (invited talk)	Solomon Tessema Belay <i>The role of astro-tourism in economic growth in developing countries. The case of Ethiopia</i> <i>(in-person)</i>
10:30-11:00	Coffee/tea break
Education, outreach and development activities of dark skies and astro-tourism (Chair: Mohammad Saleh Timar)	
11:00-11:15	Nalayini Brito-Davies <i>Dark sky as a core value of a nation</i> <i>(online)</i>
11:15-11:30	Maryam Papari <i>How can teaching astronomy to teachers and students help protect the dark sky?</i> <i>(in-person)</i>
11:30-11:45	Samyukta Manikumar <i>Harnessing dark skies for socioeconomic development in rural areas</i> <i>(in-person)</i>
11:45-12:00	Daniel Cunnama <i>Showcasing science, technology, and culture at SAAO</i> <i>(in-person)</i>
12:00-12:15	Duduzile Kubheka (Joyful Mdhuli on her behalf) <i>Reimagining the night: the #AfricaLookUp campaign's journey towards dark sky awareness and protection</i> <i>(in-person)</i>
12:15-12:30	Areg Mickaelian <i>Armenia's activities on developing the scientific (astro) tourism in the region</i>

	<i>(in-person)</i>
12:30-14:00	Lunch break
Chair: Durruty Jesús de Alba Martínez	
14:00-14:30 (invited talk)	Dorje Angchuk <i>Lighting up the Himalayas with stars</i> <i>(in-person)</i>
14:30-14:45	Maria Vilanidou <i>Navigating sustainable astro-tourism and dark sky conservation in Cyprus</i> <i>(in-person)</i>
14:45-15:00	Elyajouri Meriem <i>Activities of Moroccan National Outreach team in dark skies</i> <i>(recorded/online)</i>
15:00-15:15	Niruj Mohan Ramanujam <i>Astro-tourism: a holistic approach and a balancing act</i> <i>(in-person)</i>
14:15-15:30	Seblu Humne <i>Planetariums' involvement in Ethiopian education and development through astronomy</i> <i>(in-person)</i>
15:30-16:00	Coffee/tea break
Chair: Etsegenet Getachew	
16:00-16:30	Egbuim Timothy C. <i>Citizen science approach to dark sky protection and astro-tourism development across Nigeria</i> <i>(recorded/online)</i>
16:30-16:45	Rosa Maria Ros (Mirjana Povic on her behalf) <i>NASE. teaching and spreading astronomy to African professors</i> <i>(in-person)</i>
16:45-17:00	James O. Chibueze

	<i>Radio astronomy educational and outreach development in the African context</i> <i>(in-person)</i>
	Angel Bashyal <i>Astro-tourism for sustainability in local regions of Nepal</i> <i>(in-person)</i>
17:00-17:15	Exodus Chun-Long Sit <i>ASTROx education: dark sky advocacy in formal education and science communication</i> <i>(recorded/online)</i>
17:15-17:51 Poster session (3min each)	- Mohamed F. Aboushelib, ‘Zenith sky brightness, stellar and planets visibility during lunar eclipses at Kottamia Observatory’ - recorded - Samuel Nyangi, ‘Cultural Astronomy in Kenya’ - recorded - Dejene Zewdie, ‘The power of dark skies in astronomy, education, and economic growth’ – in-person - Meriem Elyajouri, ‘Titritland: Pioneering Astro-Tourism in Morocco’ - recorded - Mahdi Rokni, ‘Astro-Tourism development using the astronomical activities by students’ - recorded - Saba Izadi, ‘A platform for Dark sky and Photography; A SINA's project’ – recorded
18:15 approx (departure)	Conference dinner with traditional Ethiopian music and dance

Friday 17

Education, outreach and development activities of dark skies and astro-tourism (cont.) (Chair: Antonia Varela)	
9:30-10:00 (invited talk)	Kevin Govender (Joyful Mdhluhi on his behalf) <i>Realising the developmental benefits of dark skies through the work of the IAU OAD</i> <i>(in-person)</i>
10:00-10:15	Daniel Cunnama <i>Celebrating Africa's unique cultural heritage through the production of local fulldome content</i> <i>(in-person)</i>

10:15-10:30	Andreas Hänel <i>Planetariums – demonstrators for dark sky and its conservation for a large audience</i> <i>(recorded/online)</i>
10:30-11:00 (invited talk)	Mirjana Povic <i>Astronomy in Africa for attaining the UN Sustainable Development Goals</i> <i>(in-person)</i>
11:00-11:30	Coffee/tea break
11:30-11:45	David MacMahon <i>Without dark skies would we ask if we are alone?</i> <i>(in-person)</i>
11:45-13:00 (max)	IAU 386 open discussion (1 - conservation/protection, 2 - strategy and policy, 3 – collaborations and networking, 4 – education, outreach, and communication, and 5 – GA 2024)
13:00-13:20	Closing remarks
13:20-14:30	Lunch break
From 14:30 (departure)	Public talks at Addis Ababa University and outreach activities in different public schools

Additional events/trainings:

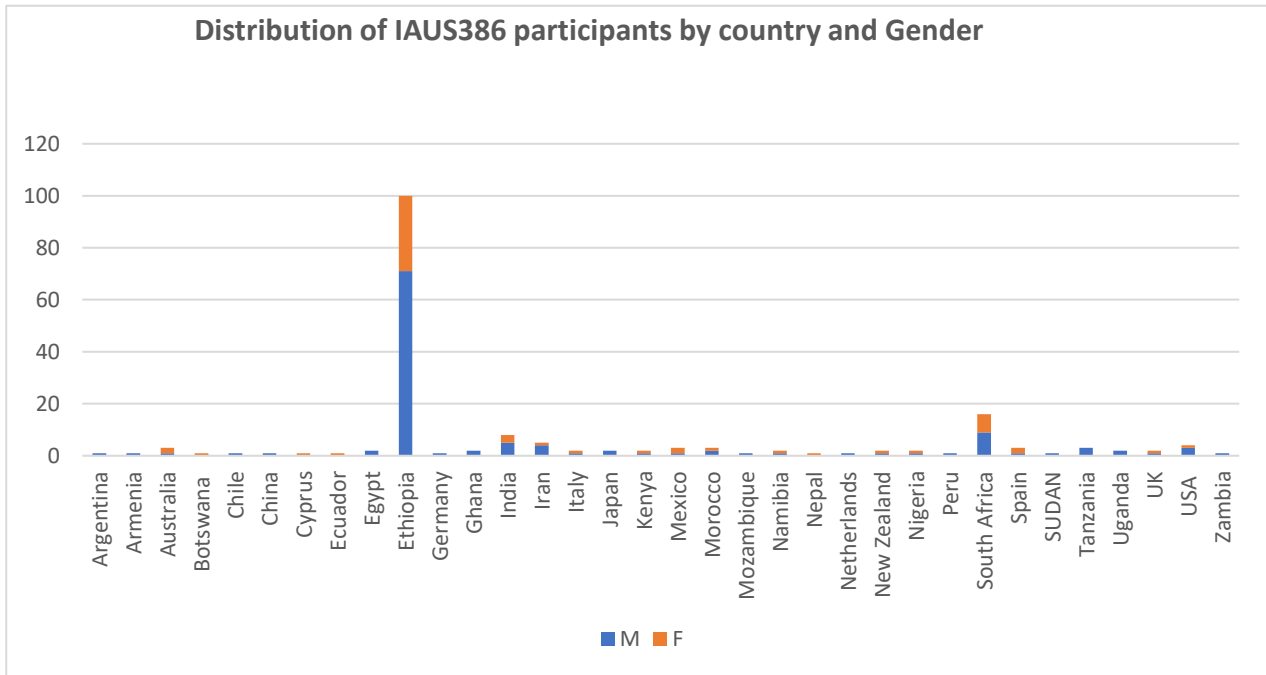
- **African Planetarium Association Workshop (11-12 Nov 2023)**
- **Capacity development training in astro-tourism for local tourist associations and regional tourist offices (11-12 Nov 2023)**

Invited Speakers of IAU386 Symposium

1. John Hearnshaw, University of Canterbury, New Zealand
2. Connie Walker, Co-director of IAU CPS and NSF's NOIRLab, USA
3. Sonal Asgotraa, Founder of Astrostays, India
4. María Antonia Varela, Director, Instituto de Astrofísica de Canarias & Starlight Foundation, Spain
5. Mirjana Povic, Space Science and Geospatial Institute (SSGI), Ethiopia
6. Ruskin Hartley, CEO, Dark-Sky International, USA
7. Kevin Govender, Director, IAU-OAD, South Africa
8. Solomon Belay Tessema, IAU-Vice president, Ethiopia
9. Audrey Dikgale and Laeticia Jacobs, Department of Science and Innovation(DSI), South Africa
10. Dorje Angchuk, Hanle Ladakh Dark Sky Reserve, Indian Astronomical Observatory, India

Session chairs

1. Alemiye Mamo
2. Catherine Cress
3. Niruj Mohan Ramanujam
4. Mirjana Povic
5. John Hearnshaw
6. Priya Hasan
7. Getinet Feleke
8. Carol Nyaguthii
9. Maryam Papari
10. Seblu Humne
11. Laeticia Jacobs
12. Mohammad Saleh Timar
13. Durruty Jesús de Alba Martínez
14. Etsegenet Getachew
15. Antonia Varela



Additional activities

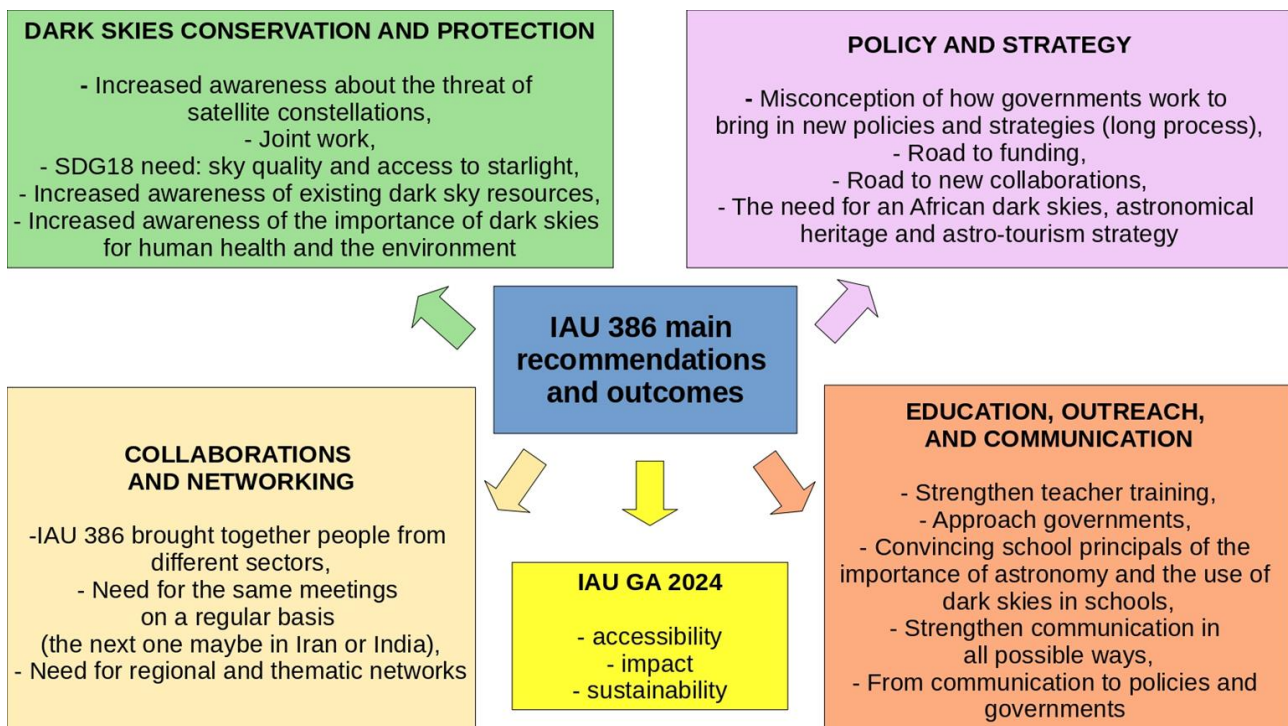
- An **exhibition** was organized throughout the Symposium featuring the work of the Space Science and Geospatial Institute, the Ethiopian Ministry of Innovation and Technology, the Ethiopian Space Science Society, the African Astronomical Society, the IAU Office of Astronomy for Development, including the East African Regional Office, the South African Astronomical Observatory, IAU GA 2024, the African Planetarium Association, the first Indian Hanle Dark Sky Reserve in Ladakh, the New Zealand Dark Sky Reserve, and astrophotography in Ethiopia by Antonio Fiorente.
- **Welcome reception** (Mon, Nov 13) sponsored by SSGI and the Ministry of Innovation and Technology.
- **Excursion** (Wed, Nov 15) to the Entoto Observatory, the Former Fuel-Carriers Women Association, and the traditional clothing market.
- **Conference dinner** (Thu, Nov 16) with traditional Ethiopian food, and unique cultural music and dances from different parts of Ethiopia.
- **Public talks and outreach** activities (Fri, Nov 17) conducted by Symposium participants at Addis Ababa University and 6 public schools in Addis Ababa.

Brief summary

The Symposium started with a talk given to all participants and high officials by **Prof. John Hearnshaw** on *'The benefits of dark skies: astro-tourism, economics, environment, human health and promotion of STEM education'*. Different initiatives and work related to dark skies for science and technological development and conservation in Chile, Egypt, Ethiopia, Germany, India, Iran, Kenya, Morocco, Namibia, Nigeria, New Zealand, South Africa, Spain, the United States were discussed. The session on cultural astronomy, astronomical heritage and its use in tourism was impressive and again very diverse, with contributions from Argentina, Colombia, Ethiopia, India, Iran, Italy, Kenya, Mexico, Pakistan, Philippines and Uganda. Examples of astrotourism activities and their contribution to socio-economic development came from Australia, Botswana, Germany, Ghana, Ethiopia, India, Iran, Japan, Morocco, Namibia, Tanzania, the Netherlands, South Africa and the United Kingdom. Policy and strategy development was raised from the perspectives of the South African Department of Science and Innovation, which presented the national astrotourism strategy and implementation plan for South Africa, the Ethiopian Ministry of Innovation and Technology, and the Starlight Foundation. Finally, the use of dark skies and astrotourism in education, outreach and sustainable development also presented very diverse activities carried out in Armenia, Australia, China, Cyprus, Ethiopia, Germany, India, Iran, Morocco, Nepal, Nigeria, South Africa, Spain, the United States and within the framework of the African Astronomical Society.

Two discussion sessions were organized. The first focused on the development of the African strategy for the conservation of dark skies, the development of astrotourism and the protection of astronomical heritage. The results and ideas from this session will be used in the African Astronomical Society working group that will be assigned to develop the African strategy. The second was the closing discussion of the Symposium. It highlighted the importance of dark sky conservation and protection, collaboration and networking, policy and strategy work and development, the use of dark skies in education and outreach, and the importance of the IAU GA 2024 for Astronomy in Africa.

The following figure shows the main recommendations of the IAU 386 Symposium.



Summary of the main recommendations from the IAU 386 Symposium. Credits: M. Pović.

Symposium material

- **Presentations** and **recordings** can be downloaded here:

https://mega.nz/folder/mmJkRAKK#_wtcYC3xFWzOCBnup1vGPQ

- Short **video** on YouTube as a **journey through the Symposium presentations** can be seen here:

<https://www.youtube.com/watch?v=3lHYld5eR9Q>



Group photos during the visit to the Entoto Observatory (top left), conference presentations (top right and middle left), final discussion panelists (middle right), and IAU 386 volunteers (bottom). Credits: SSGI.

Public talks and outreach activities at schools (17 Nov)

During the last afternoon we organized in collaboration with the Ethiopian Space Science Society 2 public talks at **Addis Ababa University**, given by **Dr. Daniel Cunnama** (South African Astronomical Observatory) and **Dr. Kushatha Ntwaetsile** (Botswana International University of Science and Technology).

In parallel, **outreach activities** were organized in **6 public schools**, where more than 20 Symposium participants interacted with our primary and secondary school students and their teachers, and promoted astronomy and science for several hours.

In total, with all the activities we reached **between 200 and 300 school children and students**. We thank all the facilitators for their volunteer work during all the activities. Attached is the poster announcing the public talks (*Credits: Lealem Kinfie*) and some photos of the public talks and outreach activities (*Credits: ESSS/SSGI, Priya Shah, Maryam Papari and Hosein Kherzi*).

TAU 356 ETHIOPIAN SPACE SCIENCE SOCIETY

Public Lecture

Dr. Kushatha Ntwaetsile **Dr. Daniel Cunnama**

📍 Addis Ababa Institute of Technology
📍 5 Kilo, King George IV Street
🕒 1:30 p.m.
📅 Friday, Nov 17, 2023

@officialsss

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African Planetarium Association Workshop (11-12 Nov)

The **African Planetarium Association**, under the African Astronomical Society, organized a 2-day workshop prior to IAU Symposium 386. It was the **first workshop organized outside of South Africa**. The workshop was organized as a hybrid meeting. It was attended by **62 participants in person** (17 from abroad and 45 from Ethiopia) and **10-15 online**. Different activities were presented from all over Africa, such as from Ethiopia, Ghana, Kenya, Morocco, Mozambique, Namibia, South Africa, Uganda, etc. On the first day, all participants visited the newly built **Addis Ababa Planetarium**, where the films ‘*Rising Stars*’ and ‘*Sida Tsoatsoas*’ were shown. These are the **first two planetarium films produced in South Africa and Africa in general**, which have already attracted a lot of attention for their quality and the amazing stories they tell, and have received recognitions, such as the 2022 Gold Award at the International Tourism Film Festival in the category of History and Heritage.



During the visit to the new planetarium in Addis Ababa. Credits: SSGI.

Capacity building training in astrotourism (11 - 12 Nov)

The **2-day astrotourism training** was organized prior to the symposium for tourism associations, regional tourism offices, representatives of the Ministry of Tourism, university professors and researchers. A total of **87 participants** attended the training. The training was delivered by **6 international and local trainers**, who subsequently attended IAU 386 Symposium. The training included introduction to astrotourism, education/social/economic benefits of dark skies, indigenous knowledge and promotion of astronomical heritage, training on Stellarium software, open discussion on astrotourism activities, and training on astrophotography and telescopes. Finally, a stargazing course was organized at the SSGI compound. Some photos are attached (*Credits: SSGI*).



Group photo of Capacity building training (credit: SSGI)

Sponsors

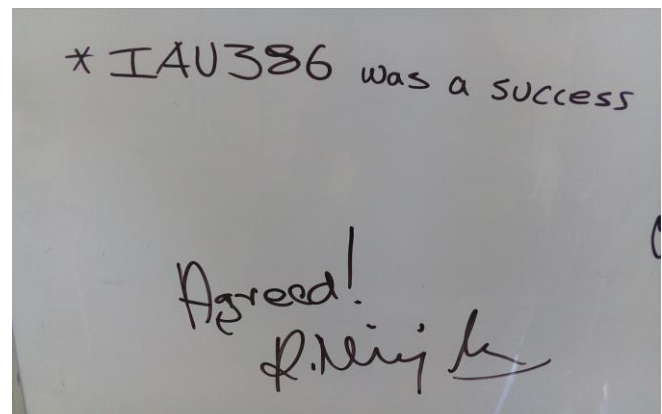
This symposium and all organised activities would not be possible without support and help of the: International Astronomical Union (IAU), Space Science and Geospatial Institute (SSGI), Entoto Observatory and Research Centre (EORC), Ministry of Innovation and Technology (MInT), Uppsala University, Ministry of Culture and Tourism, Ethiopian Space Science Society (ESSS), East-African Regional Office of Astronomy for Development (EA-ROAD), African Astronomical Society (AfAS), and African Science Stars. **All received support is highly appreciated.**



Acknowledgments

We greatly appreciate the support of all the institutions and individuals who, in one way or another, have contributed to the realization of this Symposium, from the initial stages of writing the proposal and its acceptance, to the final phase of the whole organization. In particular, our thanks go to the IAU for giving us the opportunity and financial support to host this symposium for the second time in Ethiopia and East Africa. We also extend our thanks to SSGI and MInT for all the local support in terms of human and financial resources. In addition, this symposium would not be possible without the tremendous support of the SOC and LOC members, all our sponsors, the invited speakers, all the trainers and volunteers, and the 386 IAUS participants. We hope that with all the support received this symposium will contribute significantly to the development of astronomy and science in Ethiopia and Africa.

Thank you very much to all of you!



***** ***Thank you very much for reading*** *****