

ASSAAGM

Presidential Report on Council 2021 / 2022 Activities

Preamble

First, I would like to thank Lerika for setting up this meeting, Bosman for chairing it, and all attendees for your participation.

Second, I wish to thank the Council members for their indefatigable commitment and support over the past year, especially considering the trying times under which we are operating. There is a great deal more going on behind the scenes than meets the eye, much of it tedious. Your tireless efforts and considerable expertise are deeply appreciated. Our success is a team effort.

State of the Nation

Whilst Covid restrictions and their aftermath continue to hamper our activities, particularly by precluding physical meetings such as star parties at unpredictable intervals, the frequency of these disruptions appears to be abating.

Unfortunately, some, such as the Pretoria Centre, still do not have access to their own facilities which are hosted by external parties, largely due to those party's protocols surrounding Covid. It is hoped that this will be resolved in the near term. The Joburg Centre on the other hand is enjoying great support from their new landlords. Considering the difficulties they experienced under the previous landlords; this is a welcome relief.

The "new normal" of running our communal activities on-line is now well established and continues to work well. Some Centres have been experimenting with "hybrid" meetings, where there is a physical meeting at a Centre's normal venue, and those unable or unwilling to gather physically can attend electronically.

That said, it is encouraging to note that physical gatherings, including star parties which require travel, are resuming.

Centres have continued to invite one another to join their meetings, and in some cases held joint meetings with other clubs and societies abroad. In addition, similar interactions with AfAS (the African Astronomy Society) and the Botswana group are ongoing.

I would particularly like to commend the Hermanus Centre for their frequent meetings on wide-ranging topics of interest, which are both well-run and often made available via recordings published on YouTube. This makes it possible for those unable to attend, or wishing to review the content, to retroactively benefit.

Equally the Pretoria Centre has hosted virtual "viewing evenings", where many convivial free-wheeling conversations have taken place.

Membership

Note that in this summary, there is some overlap between Centre, Country and Honorary members. In terms of total membership, at over 600 we are doing OK.

Certainly, Covid has taken its toll, but I feel that after years of isolation people have cabin fever and are keen to get out again. Open days, star parties, enquiries from the public & response to the James Web Space Telescope indicate an untapped pool of interest. The time is now for a membership drive.

What I am concerned about is Bloemfontein. I know they are very active, and are blessed with facilities, but from an ASSA perspective they have dropped off the map. It was my intention to visit, but unfortunately my opportunities were thwarted by lockdowns. I believe we need to make an effort draw them back into the fold.

100	<i>Country Members</i>
13	<i>Honorary Members</i>
541	<i>Centre members</i>
Cape	83
Durban	138
Garden Route	42
Hermanus	56
Johannesburg	62
Pretoria	47
Bloemfontein	?

Review of activities

I will now present brief summaries of the reports received to date, which will be made available on the website.

Communications

Without proper communications, both internal and outwards, the Society cannot function properly. The Internal communications through the mail groups are working well, being widely used and keeping members up-to-date.

ASSA liaison with the media continues as the occasion arises, though nothing as exciting as last year's topics has hit the headlines.

The "Ask an Astronomer" feature on the website has produced 117 questions since the last AGM. Of these, career guidance queries continue to predominate and those were as usual mostly passed on to the SAAO. Other popular queries include instrumentation setup and mirror re-aluminising. Questions on specialist topics are passed on to relevant experts; three such were forwarded to Tim Cooper and Prof Peter Dunsby at UCT. Unfortunately, there is also the inevitable spam component to discard.

Thanks to John Gill for keeping the website in shape, and Christian Hettlage for his liaison with SAAO IT, who kindly host our website. We particularly appreciate SAAO's continued support.

Citizen Science

No report is available for this, the section remaining dormant. Those with an interest in this topic are invited to step forward.

Comet and meteor

My thanks to Tim Cooper for resurrecting this section, and with it the excellent new section newsletter. I am sure you have all be enthralled with Tim's account of sleuthing down meteor fragments.

Imagers and those who enjoy observing should keep an eye on the newsletter for potential targets. Those who would like to participate actively, may wish to ask Tim about how to get involved in the sky surveillance camera network.

Cosmology

The cosmology section is a platform for ASSA members to highlight relevant research that they encounter. Although this section largely deals with the arcane, for those with an interest it has been a bountiful year.

The highlight was the astonishing early images that have been published by the Webb telescope and the Space Telescope Science team. The CHIME array continues to discover FRB's (fast radio bursts), with discovery of their 21st repeater recently being announced. Although it's an active area of research, the physics that generates these pulses is still poorly understood. Efforts are underway to detect neutron star collisions optically, whilst long period variability of cataclysmic variables may be caused by planets upsetting the gravitational field between the companions.

I have in this group periodically encountered erudite discussions on esoteric subjects so way above my pay grade, they might as well be in outer space. As I suppose they are. It is quite humbling. But what bigger questions can humans explore than the very origin of the universe itself, and thus of we humans too.

Our thanks to Bruce supported by Maciej for keeping this going.

Observing section

This section's goal is to increase enthusiasm for people to go out and observe. It's publication "Southern Skies Quarterly" offers an opportunity for members of ASSA, and the general public, to share what they have observed/imaged. Questions are answered, astronomical equipment is reviewed, and upcoming ASSA events mentioned.

The 4 editions to date have been well received. 107 observations from across the country were chronicled, covering a wide range of targets. Queries fielded by the public have been addressed, ranging from the identity of a mysterious bright light (Jupiter) to the spectacle of astronomical debris re-entering the atmosphere. Comets, sunspot activity and eclipses were tackled, as was the ongoing scientific research into Clyde's Spot. A diverse range of equipment was reviewed.

All in all, the amount of engagement over the year highlights the relevance of the new section to our community. Thanks to Angus, and well done to all participants.

Double & Variable stars

This is an area where amateurs can and do make a real contribution to science. Prominent active members include Berto Monard, Tim Cooper and Dave Blane, whose findings have been published in scholarly journals. In the year under review, Berto's observations submitted to the AAVSO alone passed the cumulative threshold of 2.8million, and he discovered yet another supernova. The latter is impressive considering the growing number of automated sky survey observatories

Photometric studies of cataclysmic variables and eclipsing binaries are ongoing, whilst the Director continues mentoring beginners for the AAVSO. Hats off to you all.

Historical

The concerted effort to update the website is ongoing. Research was undertaken for the centenary of ASSA. An overhaul of the Digital Archive is underway, with substantial space on Google Drive already procured. Exactly how best to manage the transfer and curation of the vast quantities of information is currently under consideration. Relevant scholarly articles on hypotheses and instrumentation were published in MNASSA by F Thackeray and IS Glass respectively, sadly accompanied by an obituary of astronomer Tom Foley.

Our thanks to Chris de Coning who reminded us all last year about the ASSA turning 100 on 1 July. In that respect we've had a busy year. Thank you, Ian and Sally, for your efforts regarding Centenary celebrations on 1 July. Meanwhile Daniel and Christian have been putting in long hours to plan and organise the upcoming Symposium in October which will be the final highlight of the centenary celebrations. We're all looking forward to this event. Great job everybody.

Imaging / Astrophotography

The Flickr collection continues to showcase the talent of our astrophotographers and is well worth visiting to see what's new. Humans are very much visual creatures, and images are what grab the public's attention. Happily, some find themselves drawn to astronomy as a result. Ongoing collaboration between the Astrophotography Section and all ASSA publications (i.e. the Sky Guide, MNASSA and Southern Skies) is very successful. The image contributions by astrophotographers of Comet C/2021 A1 (Leonard) in the April 2022 edition of MNASSA deserves special mention. Members have also received international recognition for their contributions.

Astrophotography competitions (such as that celebrating the Conjunction of Mars, Venus and the crescent Moon) have proved popular. Notably, Janco Moolman achieved a category win in the SAAO and SciFest Africa - SAAO 200 Astrophotography competition, and was also awarded the 3rd Prize in the nPAE Southern Hemisphere 2021 competition.

Our thanks to Martin for running this dynamic section. We look forward to exciting new targets of opportunity, and perhaps some more fiercely-contested competitions.

Instrumentation

This Section directly supports the needs of both ASSA members and the general public regarding selection, purchase, construction, maintenance and use of instrumentation.

This is mostly done via the Amateur Telescope Making (ATM) class, the ever-growing Telescope Making SA Facebook page, e-mail correspondence, telephonic discussion, and WhatsApp/SMS. Thankfully the ATM class has resumed physical meetings after being on hold due to lockdown, though attendance has diminished somewhat. Via FaceBook there is a large international component that produces an energetic flow of ideas, information, technical assistance and encouragement.

Work continues with several instruments in progress, notably an 8" binocular instrument. Etsuo Takayanagi completed his skeletal Cassegrain following his return to Japan. Recently finished is a pseudo Dobsonian, where the mount doubles as a case to enclose the optical tube assembly and accessories for storage and transport. It becomes an interesting item of furniture when not in use. Twin heavy-duty binocular stands with unusually large height adjustability were completed, each adapted to different tripods. Novel components continue to be produced, with 3D printed parts now the norm.

Approximately 35 eyepieces were constructed from salvaged optics and distributed pro bono to worthy candidates. An 8" Skywatcher telescope was acquired, refurbished, and donated to the Girl Guides head office, where it is being used to promote youthful interest in astronomy.

Photometry & Spectroscopy

Spectroscopy is a fascinating area of astronomy, enabling us to determine what physical processes are in play in distant stars and nebulae. With photometry being mostly practiced in variable star observation, the emphasis of this section continues to be on promoting spectroscopy and supplying spectra to global research programs. Practitioners submit spectra directly to research programs per demand.

Regarding photometry, for his variable star work Dave Blane utilises an ordinary DSLR to obtain quality photometric observations of value to science. This is something that can easily be emulated by other interested individuals, and Dave will happily mentor you.

Our thanks to Percy for starting and running the Section to date. Due to other commitments Percy has now stepped down as Section Director. We thank Dave Blane who undertook to run the section on an interim basis. It would be appreciated if someone with an interest in this topic set would step forward to take over the reins. You do not need to be an expert, just enthusiastic, and you will get guidance.

Dark Sky

This section was dormant, but is now thankfully restarted under the guidance of Daniel. Preserving our night skies is not trivial task. The path is long, there are many obstacles, and we need to educate a lot of people. However, progress is being made.

Some discussions between interested parties have been held, research into the process of instituting suitable bylaws that could further the aims is ongoing, and external parties with whom we can collaborate to achieve shared objectives are being identified.

Whilst it appears that the fragmented local authorities will probably have to be tackled one by one, at least in order to have some test case successes as prototypes that can be pointed to, there is some small hope that in time higher-level influences could be brought to bear. Meanwhile a strategy has been agreed among a group of member volunteers and a key focus is to work closely with the Government on their strategy for promoting Astro Tourism - which implies dark skies.

Anyone with an interest in this topic is strongly encouraged to engage with this section.

My thanks to Daniel for stepping up as Section Director.

Scholarships

Due to poor performance of our invested funds during 2020, no scholarships were offered in 2021. However, it was possible to resume in 2022 and eleven eligible applications for scholarships were received. Most included excellent academic results, which is impressive considering the challenges faced by these students during the prior two "COVID years". None of the applicants were previous holders of either scholarship.

The scholarships were awarded to Physics / Astrophysics students currently in their third year of studies at the University of Cape Town. The ASSA Scholarship was awarded to Adnaan Nauthoo (a Mauritian national), whilst the Cooke Scholarship was awarded to Gary Louw.

Congratulations to Claire and the team for your professional process that has ensured identification and selection of worthy candidates for the ASSA and Cook bursaries.

Publications

This could properly be considered part of Communications, but our publications are important enough to be considered alone.

Our Editorial Board continues to produce top quality publications. These publications continue to do us proud, but they take a lot of work. It should be noted that the Sky Guide and MNASSA generate royalties, which are critical to fund ASSA's national operations. These royalties replace the former capitation tax on the Centres, relieving them of that financial burden. Therefore please promote the publications widely at every opportunity.

The long-running bimonthly peer-reviewed journal MNASSA is always a delight, peppered with diverse articles on interesting topics. A highlight of the year was the bumper edition, celebrating the Society's 100 years of existence.

Even those with dedicated astronomy software regularly refer to the spectacular annual SkyGuide. Next year there will be a refresh in the look and feel, which we look forward to.

Our observing-related sections too have produced excellent bulletins on noteworthy topics. They simply get better and better. It is clear from feedback and interactions with interested parties that the newsletters have encouraged people to go out and see the sky. A big thank you to the team.

Conclusion

Note that all reports received will be available for perusal on the ASSA website.

Despite the troubling times and the earlier restrictions on physical gatherings, members of the Society continue to actively pursue their interests. Centres have found ways to keep their members in touch, while Council remains engaged and functional.

Although load-shedding continues to plague us, the increase in public enquiries regarding sightings may actually signal that the consequent darker sky plus fewer distractions is actually raising public interest and activity in astronomy.

Our communications have continuously improved (but could always be better).

Scholarships funding has resumed, the team is fully committed with an excellent track record, and the bursary recipients have excelled.

Our changes with respect to Observing have borne fruit and we welcome the new Comets and Meteor section. However, we need someone to take over the Photometry and Spectroscopy section, and more involvement on Dark Sky. Meanwhile the Citizen Science section remains dormant

On balance, I think we are doing rather well, but naturally we aspire to do better.

General thanks

That said, there are additional glue functions which pervade every aspect of the Society's existence. They are not in the spotlight, but without them, we cannot function cohesively and effectively.

So of course my sincere thanks to everyone on Council, to our Section Directors, to our Centre committees as well as all those supporting them in the background. However, I would like to specifically single out a few for special mention...

- Eddie Nijeboer, our Membership Secretary. Having to deal with Country members irate at the Post Office's dismal non-performance is an onerous chore
- AJ Nel, our Treasurer, who not only keeps our finances on the straight and level, but also provides invaluable legal advice.
- Lerika Cross, our Secretary, who keeps us all in line, makes things happen, and brings her prodigious Project management expertise to bear. You will agree that her dedication is a little frightening for us lesser beings.
- Our past presidents for their wisdom and ongoing support of Council
- And outside of our organisation, the company **CTFS** for compiling the annual financials, lead by Rudolf Strydom, and also Peter Carlisle our Independent Financial Compiler. They have given invaluable financial and tax guidance to the Society over many years, as well as supporting our long-running ScopeX events. CTFS will also assist us with our registration as a Public Benefit Organisation to help secure our future.

One cannot buy the level of dedication and expertise you all bring to the Society. And that is on top of having to earn a living in your day jobs. I am truly grateful to you all.

That concludes my report