



IAU Office of Astronomy for Development

Annual Call for Proposals 2020: Stage 1

Deadline for Stage 1 application is end of day, May 31, 2020

If you need support for accessibility, please write to us at projects@astro4dev.org.

Although English is the working language of the OAD, we will be happy to arrange translations of the call and documents if you need it. Please contact us at projects@astro4dev.org if you would like to request a translation.

Même si l'anglais est la langue utilisée au bureau d'astronomie pour le développement (OAD), nous mettons volontiers à disposition des traductions des documents d'appel d'offre si vous en avez besoin. Veuillez prendre contact avec projects@astro4dev.org si vous avez besoin d'une traduction.

Aunque la OAD trabaja mayoritariamente en inglés, nos ofrecemos a organizar traducciones para la convocatoria de propuestas y documentos relacionados. Para solicitar una traducción, por favor póngase en contacto con projects@astro4dev.org.

Несмотря на то, что рабочим языком для OAD является английский, мы готовы организовать перевод документов, если Вы нуждаетесь в этом. Пожалуйста, свяжитесь с projects@astro4dev.org, если Вам необходим перевод документов

虽然英语是OAD的工作语言，但是如果您需要翻译成所需语言的文件，我们将很高兴为您提供翻译服务。如果需要翻译，请用电子邮件与何金华联系 (projects@astro4dev.org)。

إلا أننا سنكون سعداء □ OAD على الرغم من أن اللغة الإنجليزية هي لغة العمل في

بالقيام بترجمة الدعوة والوثائق إذا كنت في حاجة إليها.

إذا كنت ترغب في طلب ترجمة projects@astro4dev.org يرجى الاتصال بكيفين غوفيندر

Embora Inglês seja a língua oficial do OAD, traduções para Português do formulário e das regras podem ser requisitadas. através do email projects@astro4dev.org.

Kindly read through all the information presented here before proceeding to the application form.

This call for proposals is for projects to be implemented in 2021. The Covid-19 global pandemic will likely continue to affect all of us for at least the next few months and maybe longer. Please bear this in mind when proposing your project, and build in mitigation strategies should travel and social contact be restricted still in 2021.

INTRODUCTION

The global Office of Astronomy for Development (OAD) is a joint partnership between the International Astronomical Union (IAU) and the South African National Research Foundation (NRF) with the support of the Department of Science and Technology (DST). The mission of the OAD is to further the use of astronomy, in all its aspects, as a tool for development.

One of the primary ways the OAD implements its mission is through the **Annual Call for Proposals**. Every year, the OAD invites proposals for projects that use astronomy as a tool to address an issue or issues related to sustainable development. The call is open to anyone from anywhere in the world. Since 2017, the OAD Call for Proposals is a two-stage process, where only a limited number of proposals from Stage 1 will be invited to submit a Stage 2 proposal.

A note on the COVID-19 pandemic

While astronomy can play a role in development, we acknowledge that there are many global issues, such as the current COVID-19 global pandemic, where it might be hard to see the direct role of astronomy. Nonetheless, there might be ways to use Astronomy to solve problems that have been exposed or exacerbated by the COVID-19 crisis and we welcome such proposals, for example, in improving online learning, teaching critical thinking to mitigate fake news, etc.

As a general rule, projects are encouraged to involve experts from relevant fields. Astronomy for Development, after all, is about applying the strengths of astronomy to tackle challenges in society. Due consideration needs to be given to the guidance and involvement of experts in development and related fields. This is especially critical for projects taking aim at the complex impacts of COVID-19.

“Astronomy for Development is about PEOPLE, not the STARS”

You may even prefer to join existing global efforts rather than submit an OAD proposal as there is a good chance someone is already working on it. See, for example, links in the [IAU Call to Action](#) or the [COVID-19 Global Hackathon](#). If you want to discuss an idea before submission, write to us at projects@astro4dev.org.

ASTRONOMY FOR DEVELOPMENT

At the OAD, we aim to encourage people to work towards development through the astronomy-based interventions executed as IAU-OAD funded projects. Our development goals are framed by the United Nations [Sustainable Development Goals](#) (SDGs), which are a set of globally adopted priorities to end poverty, preserve the planet and promote peace and prosperity for all. Astronomy for Development or Astro4Dev, thus, has different objectives than the sole development or advancement of the field of astronomy itself.

Flagship themes

From the experience of funding 160 projects (and reviewing more than 1000 proposals) since 2013, and with input from the regional offices around the world, the OAD has identified **Flagship (or Signature) projects** that encapsulate the idea of astronomy for development, and which have the potential for global roll-out. Flagships are seen as an effective means for achieving significant impact of astronomy for development over a substantial part of the world.

The Flagship themes for this call are:

1. Sustainable, local socio-economic development through Astronomy

This Flagship aims to use an astronomical facility, such as an observatory or planetarium, as a “hub” within a small town or village to stimulate various associated socio-economic benefits for the local community. Benefits could include job creation through astronomy-related tourism; community skills development; educational programmes; stimulation of local innovation; alternative activities for youth in order to keep away from negative/harmful activities; and infrastructure development. The establishment of such a facility in close collaboration with relevant government, industry, academic and development partners, including local and traditional leadership, will ensure the sustainability of the initiative.

[More information](#)

2. Science diplomacy through Astronomy: Celebrating our Common Humanity

Astronomy brings us a perspective of the beauty and scale of the universe. Most famously, Carl Sagan used this perspective to try to positively influence how people interact with their fellow human beings, and our planet, through his description of the earth as a “pale blue dot”. This project aims to take the inspiring potential of astronomy and use it to stimulate a sense of tolerance and common humanity in all parts of the world. The European Regional Office is leading this Flagship and recently organized the [Pale Blue Dot symposium](#) to celebrate 30 years of the Pale Blue Dot photo.

[More information](#)

3. Knowledge and Skills for Development

This flagship focuses on the use of astronomical knowledge, and skills used in astronomy to tackle development challenges. This includes methods and techniques widely used in the field including data handling, data analysis, machine learning as well as the necessary compute facilities. Projects under the Flagship may be executed in the form of advanced educational programmes, hackathons, competitions or other original interventions that focus on knowledge transfer and/or applying these skills towards development problems.

[More information](#)

It is not a requirement that your project aligns with these flagship themes. However, should you choose to submit a project related to one of the Flagship themes above, then your project should be designed in such a way that it can serve as pilot for the flagship. The OAD will therefore be available to provide additional assistance or guidance in developing such a project. For more information and queries on the flagships, please contact us at [projects\(at\)astro4dev.org](mailto:projects(at)astro4dev.org).

BEFORE YOU APPLY

Before you apply, please visit the "[Getting Started](#)" section that provides the background on Astronomy for Development, resources and links to assist you with project design, monitoring, evidence and evaluation etc. You can take the free [online course on Astronomy for Development](#) designed to provide a helping hand to anyone who intends to submit a proposal. We have also published a [short course on "Introduction to Development Economics"](#) for those who are interested in gaining a deeper understanding.

You can also search through the past projects funded by the OAD to learn about the work done around the world, to check if your idea has been tried by anyone before, and to find resources developed by other projects which could potentially be used for your project.

- [List of projects \(A-Z\)](#)
- [Search resources produced by past projects](#)

APPLICATION

Two Stage Application:

The Call for Proposals is divided into two stages of application. The first stage is open to everyone while only selected proposals from Stage 1 will be invited to Stage 2. Detailed information is provided below for the Stage 1 process; more information for Stage 2 will be provided after the end of Stage 1 in August 2020.

Stage 1 Proposals:

The Stage 1 proposal is open to proposers from anywhere in the world. Projects can be proposed by a single person or by a team of people (teams are encouraged). Proposers submit a brief, online application with the key aspects of their project and/or idea. Proposals will be scored by the OAD review panel based on a set of defined criteria (see below).

Around 30 proposals will be selected from the Stage 1 applications and invited to submit a Stage 2 proposal. In addition, each of the eleven IAU Regional and Language Offices will nominate any one proposal from their region to be invited to Stage 2. All proposals will receive feedback from the reviewers.

Stage 2 Proposals:

Selected proposals will be invited to submit a more comprehensive Stage 2 application, incorporating the feedback received in Stage 1. Once the Stage 2 applications are submitted, the OAD and the Regional Offices will engage with the proposers through this period to help refine the project.

The Regional Offices will be able to suggest ways of improving a proposal to be locally relevant, thus ensuring support from possible local collaborators who could strengthen the project. The OAD, alongside the Regional Offices, will check whether the projects are truly innovative (checking

[previously funded OAD projects](#) and other initiatives addressing similar concerns) and/or whether the project idea is supported by current evidence. The OAD and Regional Offices may suggest potential collaborators if applicable. External experts, consulted by the OAD where necessary, would provide useful additional guidance on the assessment of projects, including a perspective on which projects are most likely to make an impact on development.

Based on the discussions with OAD and the Regional Offices, proposers modify their Stage 2 applications and submit them by the final deadline. An independent review panel then scores these modified Stage 2 proposals and makes the final recommendations on the projects to be funded and the funding amounts for each project. Upon approval by the OAD Steering Committee, all applicants are notified of the results.

Grant Amount:

The IAU has earmarked a total amount of **€90,000** for this 2020 call for proposals.

SELECTION

Eligibility Criteria:

Please verify that you agree to/abide by the following before beginning your application. [Contact us](#) in case of queries.

- The proposed project should address a problem or challenge related to development and the project should use **Astronomy as a tool to address this problem**.
- One or more project deliverables should be ready by the end of the implementation year (given the evolving nature of the current global pandemic, this requirement may be reviewed and updated); proposals are welcome for projects that run over several years, although funds will only be released annually according to the proposed budget per year and subject to a review of progress.
- All distributable project resources, materials, etc. should be released to the public under an appropriate license (e.g. [Creative Commons](#)) allowing free use and adaptation.
- Proposers should be able to provide a verified bank account through which funds can be paid if the project is selected for funding.
- All projects should adhere to the [Principle of Universality of Science](#) as defined by ISC (previously ICSU).
- All project team members listed in the proposal should have discussed the proposal and committed to executing the project. The project team should be prepared to provide verification of qualifications and/or reference letters if requested by the OAD.
- The proposers should obtain all necessary permissions and authorizations, as required by their national laws, to carry out their work, such as written parental consent when working with minors, permission to use copyrighted material etc.
- The project team should support the detailed evaluation of the impact of their project by the OAD (if such an evaluation is feasible and if the project is selected for evaluation)
- Proposals should ideally be submitted via the online Application Form. All proposals received will be acknowledged by email. Contact us if you do not receive an email confirmation of your application. If you are unable to submit the proposal online for any reason, you may

[contact us](#) at least a week before the deadline to arrange for an alternative submission method. This includes anyone with visual or other impairments who may require assistance.

- If you require assistance in translating your application, please contact us immediately and at least 2 weeks before the deadline so we may make suitable arrangements
- Application forms should be complete and received at the OAD before the deadline.

Selection Criteria:

Selection Criterion	Corresponding information required from proposer in the application form	Scoring
1. Level of need for proposed activities in the region/project location/target audience	5. Which countries will your project target? 6. In which languages will your project be delivered and/or written? 7. Choose the primary target audience for your project 9a. Project summary 10 a. Describe the developmental challenge you aim to address in this project. 13. Why should we fund your project?	How relevant is this challenge or problem in terms of needs in the target location? (1-10)
2. Relevance to Astronomy for Development and/or Flagship themes	8 c. Will your proposal be a pilot project for the below OAD Flagship Theme(s) ? 9 a. Project summary 10 b. To which of the Sustainable Development Goals (SDGs) will your project respond ? 10 c. How will you achieve these goals using Astronomy ?	Does the proposal fit the OAD Flagship Themes and/or Is the project relevant to the OAD call? (1-10)

3. Innovation and creativity, improving on what has been shown to work	<p>8 a. Have you or any of your team members submitted this same idea in previous years? If Yes, what was the title of that proposal?</p> <p>8 b. Are you building upon previous work, done either by you or others ? If Yes, please provide more details or a link to the project.</p> <p>13. Why should we fund your project?</p>	Has this project come up with some interesting new ideas or built upon existing ideas in a constructive way? Has it improved upon any previous proposal? (1-10)
4. Project effectiveness	<p>9 a. Project summary</p> <p>9 b. how will you implement your project if travel and/or social distancing restrictions are in place in 2021?</p> <p>11. What are the intended Deliverables of the project?</p> <p>12. Budget</p> <p>13. Why should we fund your project?</p>	Does the proposed solution respond to the stated challenge? Are the budget and deliverables reasonable and match the need in the region? (1-10)

TIMELINE

The timeline below will be followed for the 2020 call:

Stage 1	
April 25	Open call for proposals issued
May 31	Deadline for Stage 1 applications
June - July	Proposals scored by reviewers with input from OAD Regional Offices
August 03	Announcement of Stage 1 results. All proposers notified
Stage 2	

August 03	Selected proposals invited for Stage 2
August	OAD and Regional Offices work with proposers to review/revise proposal, in consultation with external experts where relevant
September 07	Last date for any consultation with the OAD and Regional Offices
September 15	Deadline for Stage 2 applications
September 16 - October 31	Review of proposals
October 31	Review panel recommendations submitted to the OAD Steering Committee
mid November	Results announced
mid December	Grant agreements sent to successful projects
January - February 2021	Funds transferred to projects
July 2021	Mid year reports due
Jan-Feb 2022	Final reports due

Apply Online

Deadline for Stage 1 is end of day May 31, 2020

As long as it is May 31 somewhere in the world, we will continue to accept applications

ADDITIONAL INFORMATION ON SDGS:

The following is a list of the 17 SDGs (successors to the Millennium Development Goals) adopted by the United Nations in 2015. Please also look through the SDG indicators that links the goals to concrete outcomes <https://unstats.un.org/sdgs/indicators/indicators-list/>

1. **Poverty**– End poverty in all its forms everywhere
2. **Hunger**– End hunger, achieve food security and improved nutrition, and promote sustainable agriculture
3. **Health**– Ensure healthy lives and promote wellbeing for all at all ages
4. **Education**– Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
5. **Women**– Achieve gender equality and empower all women and girls
6. **Water**– Ensure availability and sustainable management of water and sanitation for all
7. **Energy**– Ensure access to affordable, reliable, sustainable and modern energy for all
8. **Employment & Economic Growth**– Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all
9. **Infrastructure & Innovation**– Build resilient infrastructure, promote inclusive and sustainable industrialisation, and foster innovation
10. **Inequality**– Reduce inequality within and among countries
11. **Urban Safety & Welfare**– Make cities and human settlements inclusive, safe, resilient and sustainable
12. **Production & Consumption**– Ensure sustainable production and consumption patterns
13. **Climate Change**– Take urgent action to combat climate change and its impacts
14. **Marine Conservation**– Conserve and sustainably use the oceans, seas and marine resources for sustainable development
15. **Environment preservation**– Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation, and halt biodiversity loss
16. **Peace, security, equality**– Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
17. **Implementation**– Strengthen the means of implementation and revitalise the global partnership for sustainable development

It can be difficult to conceptualise how astronomy, a seemingly esoteric and specialised science, can contribute to the above immediate and real challenges facing society today, but there are many ways in which it can. Some examples are:

- Using astronomy to support a sense of common humanity to contribute to goals 16 (Peace, Security) and 10 (Inequality)
- Leveraging the attraction of astronomy in order to support the economy, such as in astro tourism, to contribute to goal 8 (Employment, Economic growth)
- Projects that build science/technology skills and human capital to further goals 8 (Employment) and 9 (Infrastructure & Innovation), as well as 17 (Implementation)
- Repurposing astronomy compute facilities to run models for disease outbreaks addresses goals 3 (Health and Well being) and 17 (Partnerships for the goals).

The diagram below gives examples of ways in which past projects have tried to influence the SDGs. More in this [blog post](#) and our [Project Highlights booklet](#).

