

User Handbook of the GOSC Open Community

Brief Introduction

The GOSC Open Communities, operating under the Global Open Science Cloud (GOSC) testbed through the Virtual Collaboration Environment (VCE), are dynamic and collaborative working groups, which consist of global researchers, institutions, developers, and policy makers from various domains and disciplines. Together, they actively contribute data, knowledge, software, and systems to advance open and inclusive science, addressing significant human challenges through collective efforts.

Stakeholders

The GOSC Open Communities are composed of:

- **Researchers:** Scientists and experts from diverse domains and disciplines who are keen to collaborate on interdisciplinary projects.
- **Institutions:** Universities, research institutes, and other organizations that support and promote open science initiatives.
- **Developers:** Individual developers and IT teams dedicated to developing open-sourced tools, software, and platforms that facilitate research activities.
- **Policy Makers:** Stakeholders involved in crafting policies that promote responsible data sharing and open science practices.

Why Engage in the GOSC Open Community?

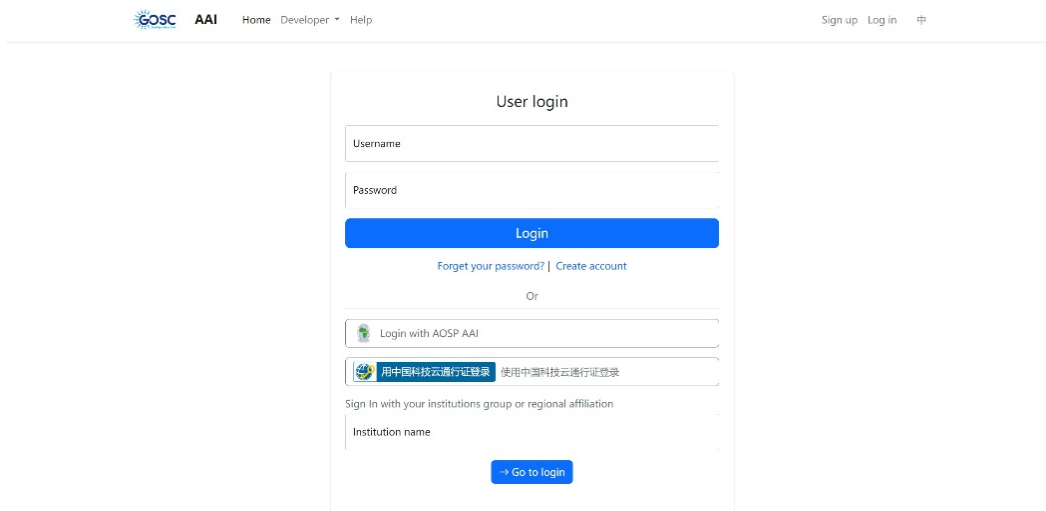
Engaging in the GOSC Open Communities offers several benefits, including but not limited to:

- **Collaborative funding:** Collaborate with a global network of researchers and institutions to secure joint funding for regional/international research projects from various funding sources.
- **Resource Sharing:** Gain access to an extensive pool of data, knowledge, software, and systems across multiple domains and disciplines.
- **Multidimensional Support:** Enjoy an open and supportive environment that offers training, policy alignment, and technical assistance, fostering a conducive atmosphere for scientific advancement.
- **Innovation for Science and Society:** Contribute to the innovative solutions that address global challenges, particularly those outlined in the UN Sustainable Development Goals.

How to Join/Create an Open Community?

Joining an Existing Community:

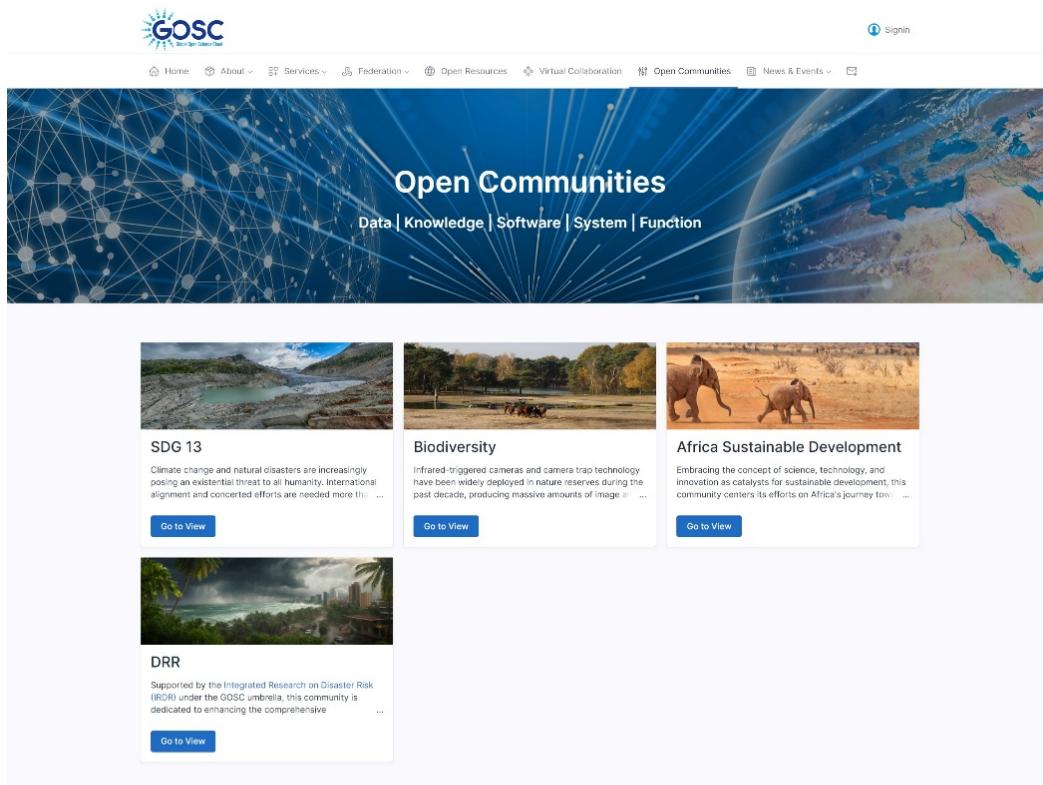
Step 1: Sign Up and Login: Create an account and login the GOSC testbed via AAI.
(<https://aai.goscloud.net/login>)



The screenshot shows the 'User login' page of the GOSC AAI system. The page has a header with the GOSC and AAI logos, and navigation links for Home, Developer, and Help. On the right, there are links for Sign up, Log in, and a language selector (中). The main content area is a login form with the following elements:

- User login** title
- Username** input field
- Password** input field
- Login** button
- Links: [Forget your password?](#) | [Create account](#)
- Or** separator
- Login with AOSP AAI** button
- 用中国科技云通行证登录** (Login with China Science Cloud Passport) button
- 使用中国科技云通行证登录** (Use China Science Cloud Passport to login) button
- Sign In with your institutions group or regional affiliation** section
- Institution name** input field
- Go to login** button

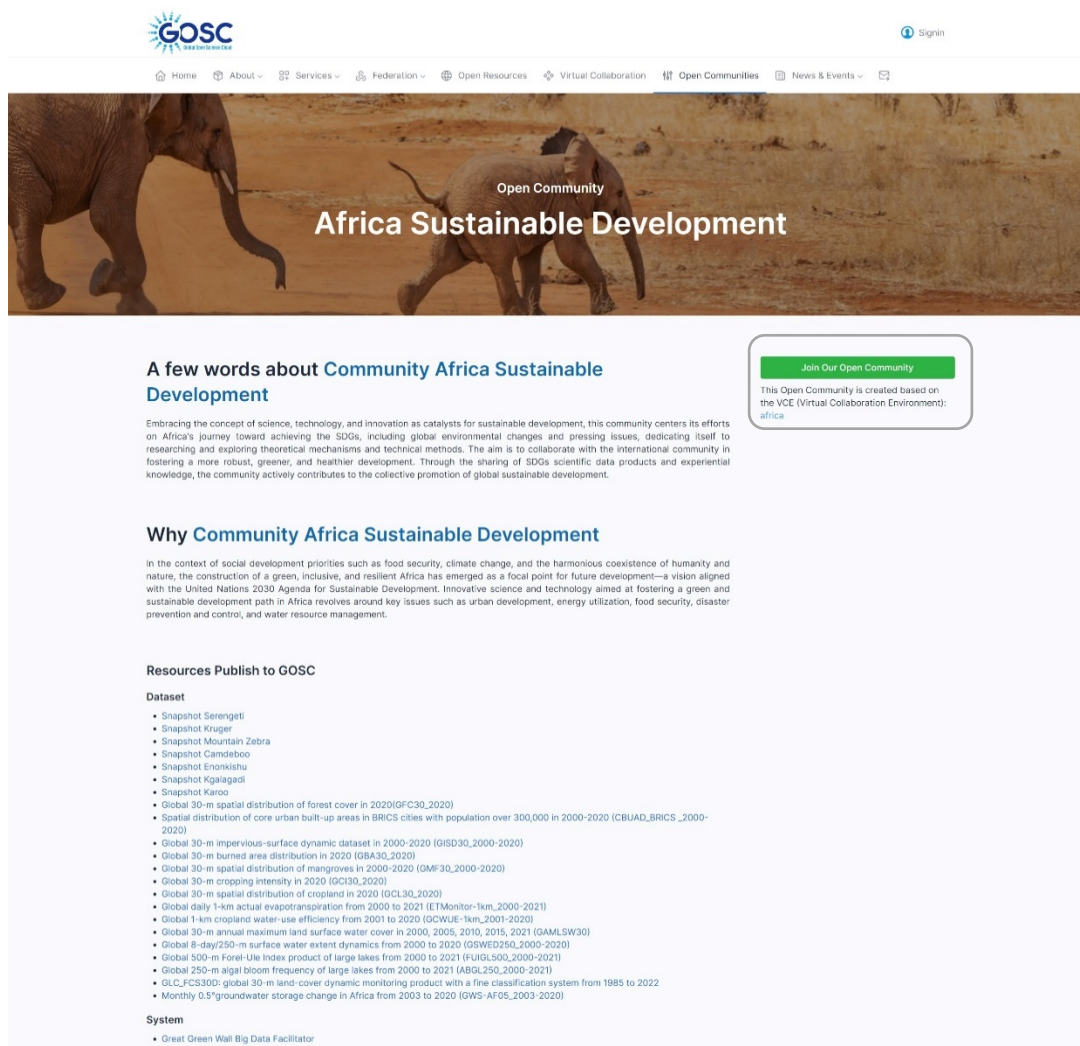
Step 2: Browse Communities: Explore existing communities that align with your research interests. (<https://goscloud.net/openCommunities>)



The screenshot shows the 'Open Communities' page of the GOSC system. The page has a header with the GOSC logo and navigation links for Home, About, Services, Federation, Open Resources, Virtual Collaboration, Open Communities, and News & Events. On the right, there is a 'Sign in' button. The main content area features a large banner with the text 'Open Communities' and 'Data | Knowledge | Software | System | Function'. Below the banner, there are four community cards, each with a title, a description, and a 'Go to View' button:

- SDG 13**: Climate change and natural disasters are increasingly posing an existential threat to all humanity. International alignment and concerted efforts are needed more than ever. ...
- Biodiversity**: Infrared-triggered cameras and camera trap technology have been widely deployed in nature reserves during the past decade, producing massive amounts of image data. ...
- Africa Sustainable Development**: Embracing the concept of science, technology, and innovation as catalysts for sustainable development, this community centers its efforts on Africa's journey towards sustainable development. ...
- DRR**: Supported by the Integrated Research on Disaster Risk (IRDR) under the GOSC umbrella, this community is dedicated to enhancing the comprehensive understanding of disaster risk. ...

Step 3: Join Request: Submit a request to join the desired community.



The screenshot shows the GOSC Africa Sustainable Development Open Community page. At the top, there is a navigation bar with links: Home, About, Services, Federation, Open Resources, Virtual Collaboration, Open Communities, News & Events, and a Signin button. Below the navigation bar is a large banner image of two elephants in a savanna, with the text "Open Community" and "Africa Sustainable Development" overlaid. To the right of the banner is a green button labeled "Join Our Open Community". Below the banner, there is a section titled "A few words about Community Africa Sustainable Development" with a paragraph of text. Below that is a section titled "Why Community Africa Sustainable Development" with a paragraph of text. At the bottom, there is a section titled "Resources Publish to GOSC" with a list of datasets and a system.

Open Community
Africa Sustainable Development

Join Our Open Community

This Open Community is created based on the VCE (Virtual Collaboration Environment): [africa](#)

A few words about Community Africa Sustainable Development

Embracing the concept of science, technology, and innovation as catalysts for sustainable development, this community centers its efforts on Africa's journey toward achieving the SDGs, including global environmental changes and pressing issues, dedicating itself to researching and exploring theoretical mechanisms and technical methods. The aim is to collaborate with the international community in fostering a more robust, greener, and healthier development. Through the sharing of SDGs scientific data products and experiential knowledge, the community actively contributes to the collective promotion of global sustainable development.

Why Community Africa Sustainable Development

In the context of social development priorities such as food security, climate change, and the harmonious coexistence of humanity and nature, the construction of a green, inclusive, and resilient Africa has emerged as a focal point for future development—a vision aligned with the United Nations 2030 Agenda for Sustainable Development. Innovative science and technology aimed at fostering a green and sustainable development path in Africa revolves around key issues such as urban development, energy utilization, food security, disaster prevention and control, and water resource management.

Resources Publish to GOSC

Dataset

- Snapshot Serengeti
- Snapshot Kruger
- Snapshot Mountain Zebra
- Snapshot Camdeboo
- Snapshot Enonkishu
- Snapshot Kgalagadi
- Snapshot Karoo
- Global 30-m spatial distribution of forest cover in 2020 (GFC30_2020)
- Spatial distribution of core urban built-up areas in BRICS cities with population over 300,000 in 2000-2020 (CBUAD_BRICS_2000-2020)
- Global 30-m impervious-surface dynamic dataset in 2000-2020 (GISD30_2000-2020)
- Global 30-m burned area distribution in 2020 (GBA30_2020)
- Global 30-m spatial distribution of mangroves in 2000-2020 (GMF30_2000-2020)
- Global 30-m cropping intensity in 2020 (GCI30_2020)
- Global 30-m spatial distribution of cropland in 2020 (GCL30_2020)
- Global daily 1-km actual evapotranspiration from 2000 to 2021 (ETMonitor-1km_2000-2021)
- Global 1-km cropland water-use efficiency from 2001 to 2020 (GCWUE-1km_2001-2020)
- Global 30-m annual maximum land surface water cover in 2000, 2005, 2010, 2015, 2021 (GAMLSW30)
- Global 8-day/250-m surface water extent dynamics from 2000 to 2020 (GSWED250_2000-2020)
- Global 500-m Forest-Use Index product of large lakes from 2000 to 2021 (FUIGL500_2000-2021)
- Global 250-m algal bloom frequency of large lakes from 2000 to 2021 (ABGL250_2000-2021)
- GLC_FCS300: global 30-m land-cover dynamic monitoring product with a fine classification system from 1985 to 2022
- Monthly 0.5° groundwater storage change in Africa from 2003 to 2020 (GWS-AF05_2003-2020)


System

- Great Green Wall Big Data Facilitator

Step 4: Approval: Community managers review and approve membership requests.

Creating a Community:

Step 1: VCE Setup: Create a Virtual Collaboration Environment (VCE) with your collaborators. To apply, provide the administrator with the basic information, including an official name, a short alias, and a brief description outlining the purpose and goals of your VCE. Ensure that this information clearly communicates the focus and objectives of your collaboration to facilitate the application process. (<https://goscloud.net/virtualCollaboration>)


Virtual Collaboration


[Home](#)
[About](#)
[Services](#)
[Federation](#)
[Open Resources](#)
[Virtual Collaboration](#)
[Open Communities](#)
[News & Events](#)
[Manage](#)

Virtual Collaboration

Your Can Do:

- Create Your Own Virtual Collaboration Environment.
- Join Others' Virtual Collaboration Environment.
- Use All Data Science Tools.
- Use All DevOps Tools.
- Share Your Data, Codes, Services to GOSC.

[Here With Your Partners](#)



Virtual Collaboration Environments


[Create New Virtual Collaboration Environment](#)

Own Virtual Collaboration Environment

NAME: CDECTEST CREATOR

Joined Virtual Collaboration Environments

NAME	CREATOR EMAIL	CREATION TIME	ROLE	STATUS
idyl 3	admin@gosc.cn	2023-10-25 01:35:43	Manager	Go to use
sdvsnrty	admin@gosc.cn	2023-10-24 09:10:02	Manager	Go to use
elicut	admin@gosc.cn	2023-10-24 09:10:02	Manager	Go to use
office	admin@gosc.cn	2023-12-11 02:26:01	Manager	Go to use
ini	admin@gosc.cn	2024-08-09 15:00:01	Manager	Go to use


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[Home](#)
[About](#)
[Services](#)
[Federation](#)
[Open Resources](#)
[Virtual Collaboration](#)
[Open Communities](#)
[News & Events](#)

Create Virtual Collaboration Environment

Input Virtual Collaboration Environment Information

[Create](#)

Name *

The name can contain only lowercase letters, numbers, and hyphens (-), and must start and end with a lowercase letter or number. The maximum length is 60 characters.

Alias

The alias can contain any characters and the maximum length is 63 characters.

Description

Step 2: Resource Sharing: After setting up the VCE, users gain access to all data science and DevOps tools available in the GOSC testbed. Users are strongly encouraged to share their data, codes, and services with GOSC to facilitate seamless collaboration with others. Users are responsible for uploading and maintaining high-quality data, ensuring that all shared resources meet the community standards and guidelines for accuracy and reliability.

GOSC VCE

- GOSC Home
- Dashboard
- Developing
 - Develop Tools
 - CICD
 - Deploy Via Helm
 - Application Manage
- Data Science
 - Data Science Tools
 - Data-Repo-Lake
 - Publish Data to VCE
 - VCE Shared Data
- Full Service
 - Information
 - Deploy Function
 - Use & Test Functions Online
 - Manage User's Functions
- Publish Resource to GOSC
 - Service System Publish
 - Function Service Publish
 - Data Publish
 - Software/CodeRelease Publish
 - Open Publication Metadata Publish
- Manage

OVERVIEW

Virtual Collaboration Environment - **sdg13** - Publish Datasets to GOSC

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← Publish Dataset to GOSC

SHOW OF 9 ITEMS

Search:

NO	TITLE	PUBLISH DATE	VERSIONS	STATUS	ADD VERSION
1	High resolution gridded air temperature dataset of key nodes of Pan-Third Pole region (2021-2076)	2023-09-17		done	Add Version
2	Satellite precipitation dataset for key nodes of pan-third pole region (1998-2076)	2023-09-17		done	Add Version
3	Dataset of the multi-year average of temperature for the Green Silk Road (2020 V1.0)	2023-09-17		done	Add Version
4	The monthly precipitation dataset in Pan-TPE based on the GPOC dataset (1891-2076)	2023-09-17		done	Add Version
5	Dynamic downscaled daily 5 km precipitation and near-surface air temperature over the Pan-Third Pole region (2000-2076)	2023-09-17		done	Add Version
6	Extreme precipitation disaster risk assessment data set (2019)	2023-09-17		done	Add Version
7	Central Asia and global land drought scenario data (2020-2099)	2023-09-17		done	Add Version
8	Dataset of the multi-year average of relative humidity for the Green Silk Road (Version 1.0)	2023-09-17		done	Add Version
9	Sea surface temperature (SST) dataset of the sea area along the Belt and Road (1981-2076)	2023-09-17		done	Add Version

Showing 1 to 9 of 9 entries

First

Previous

1

Next

Last

GOSC VCE

- GOSC Home
- Dashboard
- Developing
 - Develop Tools
 - CICD
 - Deploy Via Helm
 - Application Manage
- Data Science
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 - Open Publication Metadata Publish
- Manage

OVERVIEW

Virtual Collaboration Environment - **sdg13** - Publish Datasets to GOSC

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Input Metadata

Help Publish

Data Resource Title *

Data Resource Title

Data Resource Creators (At least one, Please Separate by semicolons) *

Data Resource Creators

Access Mode *

Data Resource Type *

License *

Open Access

Structured Data (Parquet, CSV...)

Data Resource Identify Type *

Data Resource Identify *

DOI

Data Resource Identify

Data Resource Keywords (At least one, No more than five, Please Separate by semicolons; Please input / if it has no keyword) *

Data Resource Keywords

Subjects (You can select more than one, input something to Search) *

Data Resource Description

Data Resource Description...

Country

Language

Type to search...

Type to search...

Associated with the SDG Goals (Type to search...)

Data Resource Publisher Organization

Data Resource Publish Date

Data Resource Publisher Organization

Select a date

Data Resource Allow Download *

Data Resource Download URL *

Yes

Data Resource Download URL

Allow Access Via Data-Repo-Lake *

Add to DataLake 1 *

Yes

Yes

Data Resource Release Version *

Repository Branch URL 2 *

Data Resource Release Version

xx/xx(repo)/branch

Access Key ID (Only Read) 3 *

Secret Key (Only Read) 3 *

Access Key ID (Only Read)

Secret Key (Only Read)

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Step 3: Application for a New Open Community: Managers of the GOSC VCE can apply to create their open community by providing the administrator with the name, a brief introduction, the reasons for establishing the community, and a title image representing the proposed community. This information will help clearly define the purpose and vision of the new open community.

GOSC VCE

GOSC Home

Dashboard

Developer

Developer Tools

CA/CD

Deploy Via Helm

Application Manage

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Manage

VCE Public Data Manage

Open Community Manage

Member Manage

OVERVIEW

Virtual Collaboration Environment · eiscat · Open Community Manage

can chan

Input Open Community Info

Create

Open Community Name *

Open Community Name

Open Community Brief Introduction *

Open Community Brief Introduction...

Reasons of this Open Community *

Reasons...

Title Image *

Cancel

Browse...

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Step 4: Open Community Management: Once approved, the community is officially formed, and members can join and start collaborating. Managers have the authority to manage memberships and groups in communities via the GOSC VCE dashboard.