

***UN-SPIDER / ZFL Regional
Virtual Expert Meeting for
Southern Africa***

**Programme
of Activities**

***"Space-based
Solutions for
Disaster Risk
Management
and Emergency
Response"***

**Virtual event,
13 to 15 July 2021**

Agenda of the UN-SPIDER / ZFL Regional Virtual Expert Meeting for Southern Africa "Space-based Solutions for Disaster Risk Management and Emergency Response"

13-15 July 2021

**Local times for event: South African Standard Time (SAST)
(local time Botswana, Malawi, Namibia, South Africa
and Central European Time (CET))**

The UN-SPIDER / ZFL Regional Virtual Expert Meeting for Southern aims:

- To raise awareness regarding novel applications of satellite technologies in hazard mapping, early warning systems, and disaster response operations.
- To take stock of efforts conducted by risk and disaster management institutions in Southern African countries on the use of space technologies and space-based information in disaster risk management, preparedness, response and recovery efforts.
- To explore ways to enhance the use space technologies in disaster risk management and response and recovery applications in Southern Africa.

The programme of activities includes plenary sessions and discussions in the morning, and technical sessions in the afternoon. The technical sessions are designed to provide information on technical solutions developed by different institutions. The programme also includes three discussion sessions.

Discussion segment 1 on 13 July will address the lessons learned on the use of space-based and geospatial information by disaster management institutions and needs. Questions to be addressed in this segment include:

- When elaborating maps of areas impacted by disasters, what are the lessons learned when using open software versus commercial software? Is there a preference?
- What are the main challenges faced by national disaster management agencies when promoting the generation and use of space-based and geospatial information at the provincial and local levels?
- What lessons learned can disaster management agencies share about the combined use of space-based and in-situ data when elaborating maps to address risks and response to disasters

Discussion segment 2 on 14 July will address the use of solutions and products developed by the space community. Questions to be addressed in this segment include:

- What criteria need to be kept in mind when promoting the use of Copernicus services, the International Charter and solutions developed by space agencies such as DLR, ESA, NASA?
- Is the planning and organization of simulations or table-top exercises a viable option for disaster management agencies to become better aware of such products and services?

Discussion segment 3 on 15 July will address lessons learned on capacity building on the use of space-based and geospatial information. Questions to be addressed in this segment include:

- What lessons can be shared about previous capacity building efforts on the use of space-based data, products, and services? What has worked? What should be avoided?
- What critical issues need to be addressed when carrying our virtual training activities?

Agenda of the
UN-SPIDER / ZFL Regional Virtual Expert Meeting for Southern Africa
"Space-based Solutions for Disaster Risk Management and Emergency Response"

SESSION 1: 13 JULY 2021

This first session will allow national disaster management agencies of Southern African countries, the Regional Centre for Mapping of Resources for Development (RCMRD), UN-SPIDER and the Centre for Remote Sensing of Land Surfaces of the University of Bonn (ZFL) to present information on their activities.

Local times for event: South African Standard Time (SAST)

TIME	ACTIVITY
	Opening segment
10:00 am – 10:30 am	Welcome remarks, <i>UN-SPIDER and ZFL</i> Welcome remarks, Southern African institutions
10:30 am – 10:45 am	UN-SPIDER – ZFL Introductory Presentation
10:45 am – 11:00 am	Presentation by the Regional Centre for Mapping of Resources for Development (RCMRD)
11:00 am – 11:45 pm	Presentation by the National Disaster Management Centre (NDMC) of South Africa
11:45 am – 12:00 pm	Presentation by the Directorate Disaster Risk Management of Namibia
12:00 pm – 12:30 pm	Discussion segment 1
12:30 pm to 13:30 pm	A virtual breakout room will be opened for participants and presenters to meet each other.

SESSION 1: 13 JULY 2021 in the afternoon, Technical segment

This complementary segment of the first session will be used by the BEYOND Center of Earth Observation and Satellite Remote Sensing of the National Observatory of Athens (BCEORS/NOA), RCMRD, and by the Federal University of Santa Maria of Brazil (UFMS), to present information on tools that can be used to monitor floods, droughts, and forest fires. UFMS, RCMRD and BCE/NOA are Regional Support Offices of the UN-SPIDER Programme.

Local times for event: South African Standard Time (SAST)

TIME	ACTIVITY
2:00 pm – 2:40 pm	Technical presentation by BCEORS/NOA on its FloodHub and FireHub tools and applications in early warning systems
2:40 pm – 3:20 pm	Technical presentation of solutions provided by RCMRD including SERVIR
3:20 pm – 4:00 pm	Technical presentation by UFMS on UN-SPIDER Recommended Practices for drought monitoring and flood mapping
4:00 pm	End of session 1

Agenda of the
UN-SPIDER / ZFL Regional Virtual Expert Meeting for Southern Africa
"Space-based Solutions for Disaster Risk Management and Emergency Response"

SESSION 2: 14 JULY 2021

This second session will allow additional institutions of Southern African countries, as well as regional institutions operating in Southern Africa to present information on their activities. The session will also include a presentation on the Copernicus Emergency Mapping Service and a presentation by the German Aerospace Centre (DLR).

Local times for event: South African Standard Time (SAST)

TIME	ACTIVITY
10:00 am – 10:15 am	Presentation by RCMRD on AFRI GEO
10:15 am – 10:30 am	Presentation by Résilience Globale Pty Ltd on Drought Monitoring in South Africa
10:30 am – 10:45 am	Presentation by the South African National Space Agency (SANSA) on "Earth observation in Disaster Management, Risk Reduction and Mitigation in South Africa"
10:45 am – 11:00 pm	Presentation by the Environment and Water Institute of the Southern Africa Research and Documentation Centre (SARDC).
11:00 am – 11:15 am	Presentation by the Botswana International University of Science & Technology (BIUST) on "The transboundary CONNCET4WR project", implemented in the Limpopo Basin
11:15 am – 10:40 am	Presentation by the Copernicus Programme on the "Copernicus Emergency Management Service"
11:40 am – 12:00 pm	Presentation by the German Aerospace Centre (DLR) on the "Data4Human project"
12:00 pm – 12:30 pm	Discussion segment 2
12:30 pm to 13:30 pm	A virtual breakout room will be opened for participants and presenters to meet each other.

SESSION 2: 14 JULY 2021 in the afternoon, Technical segment on Copernicus Services

This complementary segment of the second session will be used to present additional, technical information on services offered by the Copernicus programme for applications in flood, drought, and forest fire monitoring activities. ZFL and DLR will complement this technical session with additional segment on ways for institutions in Southern Africa to take advantage of the solutions provided by the Copernicus programme.

Local times for event: South African Standard Time (SAST)

TIME	ACTIVITY
2:00 pm – 3:15 pm	Technical presentation on the Copernicus services: GLOFAS, GDO, and GWIS
3:15 pm – 3:30 pm	Technical presentation by DLR and ZFL on "Using Copernicus for disaster management in Africa"
3:30 pm – 4:00 pm	Discussion on how to enhance the use of Copernicus solutions and services
4:00 pm	End of session 2

Agenda of the
UN-SPIDER / ZFL Regional Virtual Expert Meeting for Southern Africa
"Space-based Solutions for Disaster Risk Management and Emergency Response"

SESSION 3: 15 JULY 2021

The third session will allow institutions from the space community to present information on services, tools and products developed by the space community to support disaster management efforts. The discussion session will focus on the topic of capacity building and disaster management institutions in Southern African countries are encouraged to participate actively.

Local times for event: South African Standard Time (SAST)

TIME	ACTIVITY
10:00 am – 10:15 am	Presentation by National Autonomous University of the State of Mexico (UAEM) and UN-SPIDER on "Multi-Temporal Radar Interferometry Analysis for Volcanic Activity Early Warning"
10:15 am – 10:30 am	Presentation by Airbus Defense & Space on the "Use of space technologies in Disaster Management"
10:30 am – 10:45 am	Presentation by DLR on the "International Charter Space and Major Disasters by DLR"
10:45 am – 11:00 am	Presentation by the National Space Research and Development Agency (NASRDA) of Nigeria on the "Use of Space Technologies in Disaster Management in Nigeria"
11:00 am – 11:15 am	Presentation by the Romanian Space Agency (ROSA)
11:15 am – 11:30 am	Presentation by the Algerian Space Agency (ASAL) on its "Procedure for Forest Fire Extent Mapping".
11:30 am – 11:45 am	Presentation by the Disasters Programme of the National Aeronautics and Space Administration (NASA) on "Satellite-Based Assessment of Flooding Rainfall and Severe Convection within the NASA Applied Sciences Disasters Program"
11:45 am – 12:00 pm	Presentation by Ruhr-Bochum and Jena Universities of Germany
12:00 pm – 12:30 pm	Discussion segment 3 on capacity building and institutional strengthening
12:30 pm – 12:40 pm	Closing remarks by UN-SPIDER and ZFL. End of Expert Meeting