

3RD GENERAL ASSEMBLY



**African Seismological
Commission**

SECOND CIRCULAR CONFERENCE ANNOUNCEMENT

KASANE, BOTSWANA |
13 – 19 DECEMBER 2020

Deadline of Submission of
Abstracts - September 01, 2020

AFRICAN SEISMOLOGICAL COMMISSION (AFSC) MISSION

The AfSC mission is to develop the Science of Seismology within the scientific community of the African countries, by promoting research studies, to extend and enhance scientific co-operation and to train young scientists.

INTRODUCTION AND WELCOME

The 3rd General Assembly of the African Seismological Commission (AfSC3GA2020) will be held in Kasane, Botswana on 13 – 19 Dec. 2020. This is the third event in the biennial AfSC General Assembly series, and the first Commission's GA to be hosted in Southern Africa. We wish to extend invitations not only from the African countries but also from the global scientists.

The Third GA will provide a new model for the participation of scientists from Africa, including youth and women in science. Together with participants from around the world to articulate results, ideas, approaches and innovations in support of continental needs for seismic disaster risk reduction. The GA will promote minimization of loss of human life, property damage and socio-economic disruption due to earthquakes in Africa.

The AfSC3GA2020 will furnish a distinctive global multi-disciplinary platform for scientists interested in seismological research in Africa and other geological settings around the world to share their findings and exchange data, knowledge and ideas.

The GA will foster collaboration and partnership opportunities as well as potential research themes that are specifically focused on Africa along with being of global interest. It is hoped that the 3rd GA will articulate strategies that could improve techniques for earthquake disaster risk reduction through identification of seismic hazards, building safer structures, and providing public education on earthquake safety.

Building on the success of the previous General Assemblies (GAs), the AfSC3GA2020 will facilitate the formulation of new frontiers of research and foster multi-sectoral participation through provision of interdisciplinary scientific sessions including seismic network operation, earthquakes monitoring, seismotectonics, earth structure, seismic hazard assessment and public education and outreach, among others.

Participants from all over the world are invited to submit their abstracts of presentations in English. Presentations in scientific sessions will be either be oral or poster. Abstracts will be published in the conference proceedings.

We take this opportunity to wish everyone a fruitful 2020 and a very enjoyable and stimulating GA in support of this great African scientific gathering, and very much look forward to warmly welcoming you all to Botswana.

LOCAL ORGANIZING COMMITTEE

Dr. Zibisani Bagai - Member

Mr. Koketso G. Botepe - Vice Chairperson

Ms. Gofaone Jacob - Member

Dr. James G. King - Member

Mr. Motsamai T.O. Kwadiba - Member

Dr. Kebabonye Laletsang - Member

Mr. James B. Molosankwe - Co-Chairperson

Mr. Lebogang Mpelega - Member

Ms. Tembi Ncube - Secretary Admin & Alternative LOC Secretary

Mr. Onkgopotse Ntibinyane - LOC Secretary

Mr. Oarabile Seipheho - Member

Dr. Ame T. Selepeng - Member

Dr. Rapelang E. Simon - Co-Chairperson

Dr. Edwin Thuma - Member

Dr. Gomotsang Tshoso - Member

Co-Hosts:

**Botswana
Geoscience
Institute**

Excellence in Geoscience



Deadline of Submission of Abstracts - September 01, 2020

CONTACT DETAILS: The Chairperson, Local Organising Committee,
3rd African Seismological Commission General Assembly, Private Bag 0014, Lobatse,
Botswana, **Tel:** +267 5330428 **Fax:** +267 5334295, **Email:** AfSC3GA2020@bgi.org.bw

SECOND CIRCULAR CONFERENCE ANNOUNCEMENT

African Seismological
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SCIENTIFIC COMMITTEE

Mr. Puso Akanyang

Botswana Geoscience Institute, Botswana

Dr. Atalay Ayele

Addis Ababa University, Ethiopia

Dr. Paulina Amponsah

National Data Centre of the Ghana Atomic Energy, Ghana

Dr. Ateba Bekoa

Mount Cameroon Volcano Observatory, Cameroon

Prof. Eric Calais

École Normale Supérieure, France

Dr. Damien Delvaux

Royal Museum for Central Africa, Belgium

Prof. Raymond Durrheim

University of the Witwatersrand, RSA

Dr. Mohamed ElGabry

National Research Institute of Astronomy and
Geophysics, Cairo (NRIAG), Egypt

Prof. Claudia Faccenna

Roma Tre University, Italy

Dr. Richard Ferdinand

University of Dar Es Salaam, Tanzania

Ms. Michelle Grobbelaar

Council for Geoscience, RSA

Dr. Chris Hartnady

Umvoto Africa (Pty) Ltd, RSA

Prof. Dumisani J. Hlatywayo

National University of Science and Technology, Zimbabwe

Dr. Ahmed Hosni

National Research Institute of Astronomy and Geophysics,
Cairo (NRIAG), Egypt

Dr. Derek Keir

University of Southampton, UK

Prof. Andrzej Kijko

Natural Hazard Centre, University of Pretoria, RSA

Mr. Motsamai T. Kwadiba

Botswana Geoscience Institute, Botswana

Dr. Kebabonye Laletsang

Botswana Geoscience Institute, Botswana

Mr. Bufelo Lushetile

Geological Survey, Namibia

Mr. Kwangwari Marimira

Goetz Observatory, Zimbabwe

Dr. George T. Mavunga

Volcanological Observatory of Goma (OVG), DRC

Dr. Vunganai Midzi

Council for Geoscience, RSA

Dr. Moikwathai D. Moidaki

University of Botswana

Prof. Meghraoui Mustapha

Université de Strasbourg, France

Prof. Ghebrebrhan B. Ogubazghi

Eritrea Institute of Technology, Eritrea

Prof. Emile A Okal

Northwestern University, USA

Dr. Olaf Zilke

King Abdullah University of Science and Technology,
Saudi Arabia

Dr. Rapelang E. Simon

University of Botswana, Botswana

SCIENTIFIC PROGRAMME

- **Seismic Hazard Assessment**
- **Active Tectonics and Paleoseismology**
- **Mining-induced Seismicity**
- **Meteorite Impact Detection and Risk Mitigation
Seismic Source**
- **Earth Structures in Africa and other Similar Geologic
Settings of the World**
- **Geodynamics, GPS, InSAR and Remote Sensing
Reservoir-induced Seismicity**
- **The East African Rift System**
- **Special Session on the 2017 Botswana Earthquake**
- **Ground Motion and Site Effects**
- **GIS and Risk Scenario**
- **Education, Outreach and Communication**

INVITATION FOR CONTRIBUTIONS

Contributions are welcome on all aspects of Seismological studies in Africa and around the world, and we hereby invite everyone to play an active role in organizing the scientific program of the General Assembly.

Please feel free to suggest new sessions with conveners, including description and modifications. Study the sessions that already exist and send us your proposal.

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African Seismological
Commission 3rd General
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13 – 19 DECEMBER 2020

OFFICIAL LANGUAGE

The official language of the 2020 General Assembly is English. Simultaneous interpretation is not provided.

IMPORTANT DATES

- Call for Sessions and Session Chairs:
01st June 2020
- Deadline for submission of Sessions
and Session Chairs: 30th June 2020
- Call for submission of Abstracts:
1st July 2020
- Abstracts Submission deadline:
01st September 2020
- Notification of Acceptance of Abstracts:
30th September 2020

REGISTRATION DATES

NOTE: REGISTRATION OPENS ON SEPT. 01, 2020

	CLOSING DATE
EARLY BIRD REGISTRATION	30th Sept. 2020
STANDARD REGISTRATION	10th Nov. 2020
STUDENT REGISTRATION	10th Nov. 2020
LATE REGISTRATION	13th Dec. 2020

REGISTRATION FEES

Early Bird Registration: US\$70.00
Standard: US\$80.00
Students: US\$30.00
Accompanying Person: US\$30.00

ACCOMMODATION *per day for six days

Double/Single Room (Single occupancy):
US\$125.00
Double/Twin Room (2 people sharing): US\$65.00
Family Room (3 people sharing): US\$55.00

REGISTRATION FEES WILL COVER THE FOLLOWING;

- Transportation to and from the Kasane International Airport (BBK)
- Accreditation
- Entry to all GA sessions
- Entry to the Posters area
- Conference bag with program and abstracts book
- Coffee breaks, Water and lunch during entire period of the Assembly
- Welcome drink and GA dinner

PAYMENT INFORMATION

Payment must be made by bank transfer to the account number stated below, free of charge to the recipient:

Account Name: BOTSWANA GEOSCIENCE INSTITUTE
Name of Bank: First National Bank of Botswana
Branch: Corporate Branch
Account Number: 62841065924
Branch Code: 28-22-67
SWIFT code: FIRNBWGX
Bank Address: P.O. Box 381, Lobatse, Botswana
Payee:
Address:

Reference: **GA participant FULL Names followed by AfSC3GA2020**

Email proof to: AfSC3GA2020@bgi.org.bw

For any information or clarifications please contact:

LOC Secretary,

E-mail: AfSC3GA2020@bgi.org.bw

Alternatively, visit our website: www.AfSC3GA2020.co.bw

WORKSHOPS AND TUTORIALS

Those who are interested in running workshops or tutorials should submit their proposals to the LOC Secretariat no later than 29th February 2020 at AfSC3GA2020@bgi.org.bw

EXHIBITION INFORMATION

This GA offers an opportunity to exhibit/show case seismological services and products. The exhibition will be at the Conference venue gardens on a thick-grassed open space. Exhibitors are required to provide their own shelters/gazebos and related branding material. Electricity will be provided.

Space available is 3 m x 3 m at a fee of **US\$ 1500.00**

This fee will cover the following;

- Exhibition space,
- Accreditation of 3 exhibitors
- Entry to the Posters area
- Conference bag with program and abstracts book
- Coffee breaks, Water and lunch during the entire period of the Assembly
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African Seismological
Commission 3rd General
Assembly

KASANE, BOTSWANA |
13 - 19 DECEMBER 2020

PRACTICAL INFORMATION

About the Assembly Venue *Travel Lodge Kasane in snapshots*

The AfSC3GA2020 will be held at the **Travelodge Kasane in Kasane**, Botswana from 13 to 19 December 2020.



Figure 1: Pool Area at Travel Lodge Kasane



Figure 2: Double Room at Travel Lodge Kasane



Figure 3: Entrance/drop off area

SECOND CIRCULAR CONFERENCE ANNOUNCEMENT

African Seismological
Commission 3rd General
Assembly

KASANE, BOTSWANA |
13 – 19 DECEMBER 2020

About the Venue

KASANE, BOTSWANA



Kasane is situated in a riverine woodland region of northeastern Botswana at the meeting point of four countries embracing Botswana, Zambia, Namibia and Zimbabwe. The town also hosts the confluence of two mighty rivers of the Chobe and the Zambezi.

Kasane is an important gateway to Chobe National Park, the impressive Okavango Delta often referred to as the Jewel of Africa, the nearby Victoria Falls in Zimbabwe and Livingstone in Zambia, and Namibia's Caprivi Strip. Here, there's certainly no shortage of lodges and safari companies, as well as petrol stations and supermarkets as the town attracts thousands of tourists from all over the world because of its natural strategic locale and beautiful landscape.

A must-see, the Okavango Delta was named as one of the Seven Natural Wonders of Africa, which were officially declared on 11 February 2013 in Arusha, Tanzania; on 22 June 2014, the Delta became the 1000th site to be officially inscribed on the UNESCO World Heritage List.

Spread out along the banks of the Chobe River, Kasane presents an array of hotels, guesthouses and campsites that accommodate all the visitors to the national park. Some are splendidly situated, with wonderful views of the river and its wildlife. Often visitors opt to have a morning game drive and an afternoon boat cruise, with an afternoon game drive the following day, as this is the time of day when elephants are usually spotted. Another option is a day trip to Victoria Falls, which is about 80 kilometres from Kasane.

Kasane now boasts small shopping malls where all basic commodities can be purchased, and arts and crafts shops. While the main local attraction is the Chobe National Park that is located only 10 kilometres away, there are nevertheless attractions in and around the town.

It is our pleasure to invite you to participate in this important Assembly.

OKAVANGO DELTA

The Okavango delta is one of the world's largest inland water systems. It's headwaters start in Angola's western highlands, with numerous tributaries joining to form the Cubango river, which then flows through Namibia (called the Kavango) and finally enters Botswana, where it is then called the Okavango. Millions of years ago the Okavango river used to flow into a large inland lake called Lake Makgadikgadi (now Makgadikgadi Pans).

OKAVANGO DELTA

Tectonic activity and faulting interrupted the flow of the river causing it to backup and form what is now the Okavango delta. This has created a unique system of waterways that now supports a vast array of animal and plant life that would have otherwise been a dry Kalahari savanna.

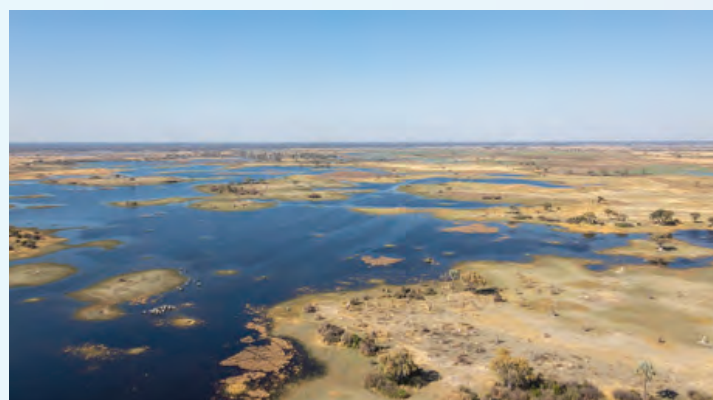


Figure 4: Typical region in the Okavango Delta, with free canals and lakes, swamps and islands

The delta's floods are fed from the Angolan rains, which start in October and finish sometime in April. The floods only cross the border between Botswana and Namibia in December and will only reach the bottom end of the delta (Maun) sometime in July, taking almost nine months from the source to the bottom. This slow meandering pace of the flood is due to the lack of drop in elevation, which drops a little more than 60 metres over a distance of 450 kilometres. The delta's water ends in the Kalahari – via the Boteti river, with over 95 per cent of the water eventually evaporating.

During the peak of the flooding the delta's area can expand to over 16,000 square kilometres, shrinking to less than 9,000 square kilometres in the low period. As the water travels through the delta, the wildlife starts to move back into the region. The areas surrounding the delta are beginning to dry out (the rains in Botswana occur approximately the same time as in Angola) and the wildlife starts to congregate on the edge of the newly flooded areas, May through October.

The delta environment has large numbers of animal populations that are otherwise rare, such as crocodile, red lechwe, sitatunga, elephant, wild dogs, buffalo, wattle crane as well as the other more common mammals and bird life.

The best time for game viewing in the delta is during the May-October period, as the animal life is concentrated along the flooded areas and the vegetation has dried out. The best time for birding and vegetation is during the rainy season (Nov.- April) as the migrant bird populations are returning and the plants are flowering and green.

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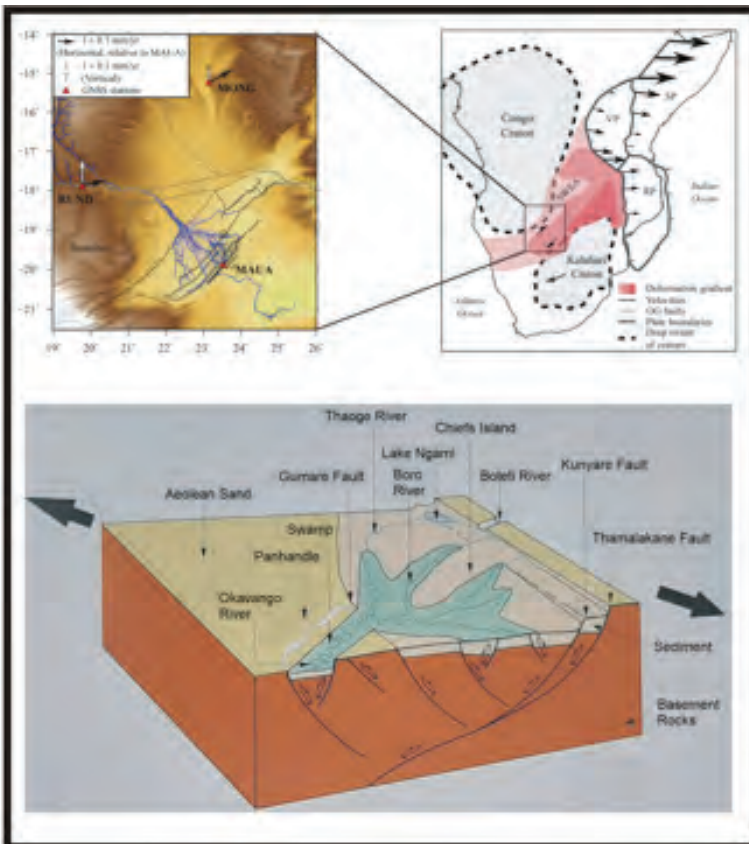
**CONFERENCE CIRCULAR
PAGE | 05**

SECOND CIRCULAR CONFERENCE ANNOUNCEMENT

African Seismological
Commission 3rd General
Assembly

KASANE, BOTSWANA |
13 – 19 DECEMBER 2020

OKAVANGO RIFT ZONE



Maps from Pastier et al. (2017) [Pastier, A.-M., O. Dauteuil, M. Murray-Hudson, F. Moreau, A. Walpersdorf and K. Makati, 2017. Is the Okavango Delta the terminus of the East African Rift System? Towards a new geodynamic model: Geodetic study and geophysical review. *Tectonophysics* 712-713, 469-481]; Schematic diagram modified from Department of Surveys and Mapping (2001)[Department of Surveys and Mapping, 2001. Botswana National Atlas. Private Bag 0037, Gaborone]

The Okavango Rift Zone (ORZ), or the Okavango Graben, or Okavango Escarpment is considered to be a zone of incipient continental rifting taking place at the southern-most terminus of the southwestern branch of the East African Rift System (EARS). Continental rifting is one of the fundamental elements of plate tectonics, but the fundamentals of rifting are not well understood. Therefore, the Okavango delta region (ODR) has in recent years attracted considerable attention of geoscientists to become one of the most significant hotspots of research programs in Southern Africa, as it provides an ideal natural laboratory for investigating geodynamic and neotectonic processes and mechanisms involved during the earliest developmental stages of continental rifts to gain a better understanding strain localization, fault growth and propagation.

The incipient rift is characterized by a set of en echelon normal faults of Quaternary to Recent age within the ODR and adjacent areas. The tectonic setting of the ODR has been interpreted as that of a developing graben at the tip of a propagating rift which follows an old post-Karoo pre-Cretaceous rift zone. The seismic activity associated with the ORZ is attributed to the rifting process that is precursor to fragmentation of the African plate by a gradual propagation of rifting prior to the occurrence of sea-floor spreading across the ODR.

Before the propagating rift along the southwestern branch of EARS reached the current ODR locality, the Okavango River used to flow into a large ancient inland lake called Lake Makgadikgadi, the remnant of which is the present day Makgadikgadi Pans. Tectonic activity and faulting along the EARS branch interrupted the flow of the river, causing it to backup and form what is now the Okavango delta.

FIELD EXCURSIONS

- Kasane Hot Springs and Geological outcrops
- A visit to the Kasane (KSANE) Seismological station: Part of the Botswana Seismological Network (BSN) stations

LEISURE ACTIVITIES

The Local Organizing Committee has made No arrangements for leisure activities. However, information can be found at the www.botswanaturismorganisation.co.bw

NEARBY LOCALITIES (in snapshots)

CHOBE NATIONAL PARK



Figure 5: Gnus and Zebras in Chobe National Park, Botswana

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African Seismological
Commission 3rd General
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Figure 6: Lions devouring their killing



Figure 7: Elephants drinking at the Chobe River near Kasane. Botswana is home to the largest population of Elephants in the world

VISA INFORMATION  


Please note that it will be your responsibility to apply for your VISA using the invitation letter sent to you. Countries requiring visas for Botswana are listed on the following website, among others:

<http://www.botswanaturism.co.bw/info/countries-requiring-visas>
Attendees are strongly encouraged to start the process of visa application immediately as it may take longer prior to approval. Letters of Invitations will be available to those who need a visa to visit Botswana.


VARIOUS OPTIONS TO REACH KASANE.

Kasane is a very active tourist area and getting there should not be a big issue.

YOU MAY:

Fly into Gaborone and then connect to Kasane with **Air Botswana** 

Get a direct flight from Johannesburg to Kasane with **South African Airways/ SA Express**. 

You can go via **Victoria Falls** if you do not mind the border hassles of Visa (if you need it). It is **short by road** from Victoria Falls to Kasane (about 200km), and with the advantage of combining with some Safari, then it could work well. 



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African Seismological
Commission 3rd General
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KASANE, BOTSWANA |
13 – 19 DECEMBER 2020

PRELIMINARY PROGRAMME OF EVENTS

Sunday 13 December 2020	
TIME	ACTIVITY
All Day	Arrival of Conference Delegates and registration
Monday 14 December 2020	
08h00	Registration
09h00	Official Opening
10h30	Welcome Tea Break and Group Photo
11h30	Scientific Presentations
12h30	Lunch
14h30	Scientific Presentations
19h00	Welcome Dinner
Tuesday 15 December 2020	
09h00	Poster Session
10h30	Tea Break and Exhibitions
11h30	Scientific Session
12h30	Lunch
13h30	Scientific Session
15h30	Tea Break
16h00	Scientific Session
17h00-19h00	Business Sessions/ Meetings
Wednesday 16 December 2020	
09h00-16h00	Field Excursion (Cost \$50 per Person)
Thursday 17 December 2020	
09h00	Scientific Session
10h30	Tea Break and Exhibitions
11h30	Scientific Session
12h30	Lunch
14h00-17h00	Plenary Business Meeting
Friday 18 December 2020	
	Training Workshop A
	Training Workshop 2
Saturday 19 December 2020	
	Departure of Delegates

SPONSORS

Thank you to our sponsors for enabling the successful organization of the AfSC3GA2020. Without your generosity, many of the Assembly sessions would not materialize. A complete list of available sponsorship opportunities can be found at AfSC3GA2020@bgi.org.bw



CONTACT DETAILS:

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