

*First Circular – Workshop of the International Space Science Institute (ISSI)  
10 September 2020*

## **GLOBAL CHANGE IN AFRICA**

### ***Role of Space Observations***

**Date:** 11 – 15 January 2021

**Location:** International Space Science Institute (ISSI), Hallerstrasse 6, 3012 Bern, Switzerland

**Workshop website:** <http://www.issibern.ch/workshops/>

**Conveners:**

Anny Cazenave	(ISSI, Switzerland & LEGOS, France)
Teodolina Lopez	(OMP, France)
David Baratoux	(IRD, France)
Jean Kann Kouamé	(CURAT, Côte d'Ivoire)
Jérôme Benveniste	(ESA, Italy)
Lorena Moreira	(ISSI, Switzerland)

**Local organisation:** Alexandra Lehmann (secretary) – [Alexandra.Lehmann@issibern.ch](mailto:Alexandra.Lehmann@issibern.ch)  
Saliba Saliba (computer administrator) – [Saliba@issibern.ch](mailto:Saliba@issibern.ch)  
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**Summary and main objectives of the Workshop:**

The objective of the workshop is to investigate the benefit of using Earth Observation data to monitor and understand global environmental changes due to natural phenomena and anthropogenic forcing factors over the African continent, and highlight a number of associated applications of high societal relevance. The main topics addressed concern ***water resource; land use & land cover change, and implications for agriculture and deforestation; exploitation of mineral resources and environmental impacts; floods, droughts and desertification; coastal zones changes***. The workshop will offer an opportunity to discuss with scientists from different horizons on the role of space-based observations for monitoring and understanding global changes in Africa, and investigate how this knowledge can be communicated to stakeholders to mitigate associated societal impacts. A large variety of remote sensing data can indeed help addressing these topics, e.g., multi-mission satellite altimetry, including the SWOT mission to be launched in 2021, SMOS, GRACE, radar and optical imagery from the Copernicus Sentinel missions, future missions of the Earth Explorer program of ESA, as well as Earth Observation missions from other space agencies worldwide.

**Outcomes of the Workshop:**

An important outcome of the workshop is a special issue of the *Surveys in Geophysics* journal (impact factor 5.5). This special issue is not intended to be the proceedings of the workshop, but a collection of in-depth overview papers informed by the contributions and discussions during the workshop. The papers, that will be subject of classical peer-review process, should provide a coherent picture of the current state of the subject and discuss perspectives for improvement. Each paper will be published online as soon as it is accepted. The whole collection of papers will further appear in the special issue and will be also published by Springer as a book of the Space Sciences Series of ISSI (SSSI, see <https://www.issibern.ch/index.php/publications/>).

It is recommended to submit the papers within 3-6 months after the workshop. The journal special issue and the SSSI volume are expected to appear about 15-18 months after the workshop.

### Expectation of the participants:

We expect from speakers an oral presentation of about 25 minutes (+ 5 minutes for questions) and an active contribution from all participants during plenary discussions. Participants are also expected to contribute to the writing of the overview/review papers to be published later on after the workshop, as indicated above.

Attendance: The workshop is by invitation only with a limited number of participants (maximum 40 to 45).

### Early career research scientists

Under its special program for supporting early career research scientists, ISSI invites a few early career scientists, within two years of their PhD, to take full part in the workshop.

Invitation letter: If you need an official invitation letter, please contact directly Alexandra Lehmann ([Alexandra.Lehmann@issibern.ch](mailto:Alexandra.Lehmann@issibern.ch)).

Funding: ISSI provides the subsistence costs (hotel and per diem to cover meals) to all participants while in Bern, and deals with all organizational matters such as reservations, reimbursements (please contact directly Alexandra Lehmann) and computer issues. However, except for conveners, ISSI is not in a position to cover travel expenses. There is also no registration fee for the workshop.

### Travelling to Bern

Bern can be reached easily from two international airports: Zurich (ZRH) and Geneva (GVA). Direct intercity trains to Bern depart every half hour from inside the airport buildings; see <http://www.rail.ch> for detailed departure times. The travel time is ~ 1.5 hours from Zurich airport and ~ 2 hours from Geneva airport. Bern is connected to many European cities by fast intercity trains (e.g. TGV Paris- Bern in 4.5 hours, or Frankfurt-Bern in 5 hours). Timetable information of trains within and around Switzerland can be found at <http://www.rail.ch>. Also check out our website <http://www.issibern.ch> for a few more travel tips such as links to city maps of Bern, weather forecasts, tourist information.

### Hotel reservations

All participants at the workshop are requested to contact ISSI Secretary, Alexandra Lehmann (Tel. +41-31-631-4896, Fax: +41-31-631-4897, email: [alexandra.lehmann@issibern.ch](mailto:alexandra.lehmann@issibern.ch)), to indicate their expected arrival and departure dates and times, as well as any special requests they may have (e.g. double room). A confirmation will be returned shortly after your request. Please note that all hotel reservations have to be made by the ISSI Secretariat. Please see <http://www.issibern.ch/localguide/location.html> for maps that indicate the location of ISSI and of the hotels (go to “hotels”, and near the bottom of the page “map of hotels”).

Registration: The registration to the workshop is directly assumed by sending Alexandra Lehmann the request for the hotel reservation (see Hotel reservations section). The participants that are not able to attend the workshop in person are requested to inform Lorena Moreira ([lorena.moreira@issibern.ch](mailto:lorena.moreira@issibern.ch)). Remote participation will be possible.

### **Schedule:**

<b>1st Circular:</b>	<b>10 September 2020</b>
<b>Registration &amp; Hotel Reservation Deadline:</b>	<b>15 October 2020</b>
<b>2nd Circular and Final Programme:</b>	<b>1 December 2020</b>
<b>Workshop Date:</b>	<b>11 – 15 January 2021</b>