

# Earth Observation and Big Data for improved financial resilience

*How latest technology can support innovative risk financing solutions  
for climate shocks and other complex risks*

**Monday, 23<sup>rd</sup> November 2020**  
[8.00 – 9.30am EST / 2.00 - 3.30pm CET]

## Webinar 1 of 2

**23 November 2020**  
**2 – 3.30pm CET**

Webex Session  
[Link here](#)

### Organizers:

**The World Bank**  
Finance Competitiveness & Innovation Global Practice

**The European Space Agency**  
Centre for Earth Observation ESA/ESRIN

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## Background

Every day, the surface of our planet is monitored by hundreds of satellites operating at different altitudes, frequencies, registering changes related to crop growth, land use, soil moisture, floods, and complemented by a host of social/online/news media datasets.

The current Covid crisis highlights how supply chains are increasingly globalizing and becoming more complex. At the same time, climate change threatens our societies and economies. Satellite and big data are very powerful means to provide additional risk information to this picture, complementing or in some cases replacing traditional risk indicators, with new, global coverage, informing on severity and extent of impacts and shocks.

But how to produce the right, meaningful and timely information when it comes addressing financial risks from? Can satellite tech help us keep track of global supply chains?

From the standard applications (e.g. tracking deforestation and environmental risk) to most recent demand (e.g. credit risk assessments for smallholder farmers exposed to climate change and other disruptive events), the webinar will discuss the state-of-play, current pilots and most promising applications. It will cover a wide range of sectors and use cases, from financial assets mapping, to economic activity monitoring and including climate and complex risk modelling.

This first webinar will discuss opportunities and challenges related to earth observation and big data in the context of disaster risk financing, decision-support, anticipatory action, sector-specific loss assessment and loss transmission channels. Solutions, such as systemic risk modeling or convergence of evidence methods, will be discussed with a focus on isolated risks (e.g. flood risk) and compound risks (e.g. COVID19 vs. extreme climate).

## Agenda

**Facilitator:** WB/Antoine Bavandi (Crisis & Disaster Risk Finance)

Time (CET, Rome)	Activity	Lead/Speakers
14:00 – 14:15	Welcome and opening remarks	<ul style="list-style-type: none"> <li>• WB/Caroline Freund (Global Director, Finance, Competitiveness &amp; Innovation)</li> <li>• ESA/Stephen Coulson (Head of Sustainable Initiatives Office)</li> </ul>
14:15 – 15:10	Presentation/Views from Panelists	<ul style="list-style-type: none"> <li>• IDF/Ekhusuehi Iyehen (Secretary General)</li> <li>• Morocco Space Center/Driss El Hadani (Director, CRTS)</li> <li>• Willis Tower Watson/Matthew Foote (Senior Director of Science &amp; Analytics, Climate &amp; Resilience Hub)</li> <li>• Bristol University/Flavia de Luca (Senior Lecturer in Structural and Earthquake Engineering)</li> <li>• WB/Clara Ivanescu (Geospatial Operational Support Team, GIS Specialist)</li> </ul>
15:10 – 15:25	Q&A and Discussion	<ul style="list-style-type: none"> <li>• Q&amp;A Moderator: WB/Nicola Ranger (Crisis &amp; Disaster Risk Finance, Senior Consultant), and all participants</li> </ul>
15:25 – 15:30	Wrap-up and Next steps	<ul style="list-style-type: none"> <li>• ESA/WB</li> </ul>

**Webex Link:** [here](#)