Geo-Referenced Data to Inform Earth Observations Modeling for Agriculture: A Discussion among Collectors, Users, and Aggregators

Chat Transcript

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Presenters

Philomin Juliana, International Maize and Wheat Improvement Center

Jawoo Koo, International Food Policy Research Institute

Robert Hijmans, Geospatial and Farming Systems Consortium

Estefania Puricelli, GEOGLAM and NASA Harvest

Narendra Das, NASA Jet Propulsion Lab

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Moderator

Julie MacCartee, USAID Bureau for Food Security

Kiersten Johnson, USAID Bureau for Food Security

Paul Tanger, USAID Bureau for Food Security

Khaled El-Shamaa: Hi.. sound is clear here at my end

Scott Wallace: Your sound test is working

Carolyn Chelimo: Hi Everyone, The sound is now up from my location Amudat District Uganda.

Vakhtang Shelia: I can hear you.

Paul Scherzer: I can hear

Scott Wallace: yes

BK Singh: i CAN HEAR

LILIAN NDUNGU: Lilian from Kenya here

Narendra N. Das: Narendra Das From NASA JPL

Carolyn Chelimo: hi

Kiersten Johnson: Hi Narendra - we could hear you before...

Kiersten Johnson: We're just having trouble with the audio from our side.

Jawoo Koo: Hi all --

Kiersten Johnson: Good morning!

Jesus De los Santos: Good morning!

Srini: good morning

Scott Wallace: sound test working

Byomkesh Talukder: good morning

Khaled El-Shamaa: Yes we can

Kiersten Johnson: Great - thanks, Scott.

Kiersten Johnson: Good morning, Srini!

Paul Tanger: Morning/Afternoon/Evening everyone!

Estefania Puricelli: Good morning everyone!

Kiersten Johnson: Good morning, Paul & Estefania!

Tomaso Ceccarelli: Good day from Wageningen !

Ben Claar: Good morning, all!

John Russell: Hello all.

Julie MacCartee: Good morning, everyone! Thanks for introducing yourselves! This is Julie with USAID/BFS and the Agrilinks team. I'll be helping to facilitate today.

Roberto Martinez: hello all

srikanth ks: hello

John Russell: John Russell here, with Eco Food Systems in Bangkok.

Khaled El-Shamaa: Good afternoon everybody from Cairo, here is Khaled from ICARDA

Kiersten Johnson: Welcome, everyone!

Khaled El-Shamaa: is it on? or just testing sound clarity so far?

BK Singh: Hi Im B K Singh from weatherSys Delhi. I cannot hear

Kiersten Johnson: Hi Everyone - the webinar starts at 9:30

Roberto Martinez: Bobby here of Winrock International at Manila Regional Office

Kiersten Johnson: We're currently on mute as we gegt ready to get started.

Kiersten Johnson: Thank you for joining us today.

Julie MacCartee: We're getting set up here in the webinar control room, so please excuse any audio or technology tests over the next 12 minutes!

Yihun Taddele: Good morning

Ben Claar: We hear you! :)

John Russell: Yes. We can hear

Holli Jordan: We can hear!

Scott Wallace: loud and clear

Paul Scherzer 2: here you

Michael Roberts: loud n clear

Estefania Puricelli: loud and clear!

Udemba Klinsmann: loud and clear

Narendra N. Das: loud and clear

Max Ruas: Good afternoon everyone. I'm Max Ruas in charge of the Musa Germplasm Information System (MGIS) for whcih we are looking for new feature linked to climatic/environmental data

Brian Khureshi : Roger

Max Ruas: I'm based in Montpellier South of France at Bioversity office

Vakhtang Shelia: Hello everyone from University of Florida!

Julie MacCartee: Welcome! So glad to have a global group of participants

Oscar Castillo: Good morning, I am a graduate student at University of Florida

Hasib Ahsan: Hasib Ahsan from IT University of Copenhagen, Denmark. Used to lead remote sensing and sattelite data driven Precision Ag Project named as GeoPotato and GeoBis in Bangladesh.

Scott Wallace: Wallace & Associates based in Portland Oregon working on project design for development interventions. Currently supporting a BMGF intervention looking at fertilizer data in SSA. Interested in utilization of geo referenced data to inform land under production.

Ben Claar: Ben Claar here from Piestar, Inc. in Manhattan, Kansas, USA! We provide USAID programs with cloud-based software for data collection and project management, targeting FTFMS and other reporting to stakeholders.

layal atassi: Hi, I am layal from ICARDA

Julie MacCartee: Welcome, Oscar, Hasib, Scott, Ben, and Iyal?

Philip Abrahams: Phil Abrahams here from CABI, specifically regarding our PRISE EO/pest modelling programme

Udemba Klinsmann: hi, I'm Klinsmann Uche. An Agricultural Economics Graduate from Nigeria

Ross Hunt: Hi, Ross from Cainthus in Dublin, Ireland!

Yonah Bromberg Gaber: Radiant Earth Foundation, leading the development of open training datasets for machine learning with our ML Hub Earth project

Brian Oakes: Brian Oakes in Port-au-Prince, Haiti

Peter Levine: Peter Levine here. Independent consultant and user of GIS, drones and more for complex boundary setting in Indonesia for MCC.

Kiersten Johnson: Welcome everyone!

Wesley Laytham: Wesley Laytham from Cultural Practice. Hi Peter!

Carolyne Kirabo: Tim Rann - Partner Mercy Corps Ventures

Joseph Merton: Joseph Merton from Orange, Virginia, USA

Tulika Narayan: Russ Jones: Abt Associates in Boulder, CO

Roberto Martinez: I'm Bobby of Winrock International at Manila Regional OfficeI

Lyndon Estes: Greetings, Lyndon Estes here from Clark University Graduate School of Geography...

Julianna Campbell: Hello, Julianna Campbell in Washington DC of USAID's GeoCenter

Sabrina Birner: Sabrina Birner, International Finance Corporation, working on various projects in the Sahel.

Meaghan Murphy: Hi everyone, Meaghan here from Feed the Future Knowledge, Data, Learning and Training activity with Bixal here in Washington DC

Jeff Herrick: Jeff Herrick - USDA-ARS in Las Cruces NM and Boulder CO (CU)

Jessica McCarty: Jessica McCarty from Miami University in Oxford, Ohio; NASA LCLUC Science Team & UNEP CCAC Agriculture Technical Contact for Andes and HImalayas

Alando Ballantyne: Hi everyone, I'm from Radiant Earth Foundation (San Francisco)

Mary Beggs: Good day everyone! Mary Beggs from Cardno here. Looking forward to the session!

Elise van Tilborg: Elise van Tilborg - Netherlands Space Office

Ben Wallingford: Hi all! Ben Wallingford in Nairobi Kenya with MFR, a global rating agency specialized in inclusive finance

Josien Sluijs: Hi from NpM Platform Inclusive Finance in Utrecht, the Netherlands

Patrick Hanemann: Patrick Hanemann from Farm2Market Agribusiness Consulting

Frezer Asfaw: Frezer Asfaw international Potato Center -Ethiopia

Tomaso Ceccarelli: Tomaso Ceccarelli, Wageningen Environmental Research Earth Informatics Team- Food sec   senior researcher

Julie MacCartee: Thank you all for joining! Excited to hear your questions and perspectives

Geoffrey Chalmers 2: Good morning, Geoff Chalmers from ACDI/VOCA in Washington DC

Julie MacCartee: We've got a lot of speakers giving relatively short presentations today - lots of examples of this work

Carolyn Chelimo: Hi I am Carolyn from Amudat District Local Government.I work as as a Vermin Control Officer in the Entomology Sector, Production Department and also a Graduate Student at Uganda Christian University- Sustainable Agriculture. Interested in gaining knowledge and skills on how geo referenced data can help in improving food securty situations in semI arid regions such as where I am.Thank You

Mona McCord: Good day everyone. Mona McCord, Grameen Foundation

Julie MacCartee: Welsomce, Geoffrey, Carolyn, and Mona

Shadrack Stephene: Hi I am Shadrack Stephene from Tanzania working as a researcher on natural resource assessment at the National Land use Planning Commission

Brian Khureshi : Im Brian Khureshi, currently in Indian Head Maryland, a climate change specialist looking ionto GeoSensing as a solution towards addressing Climate Change issues that impact on Agricultural Production.

Francisco Rios: Good morning, Francisco Rios / Heifer International

Danice Guzmán: Hi all! Danice Brown Guzman, from Notre Dame's Initiative for Global Development

Brian Khureshi : Will we be receiving the recorded session?
Kiersten Johnson: Yes - the recording will be sent out to eveyrone who registered.
Brian Khureshi : Thanks

Yihun Taddele 2: Hi All, Abeyou Worqlul from Blackland Research Center

Kiersten Johnson: We'll also circulate online.

Sarah Huber: Sarah Huber, recently working with the Ethiopian govt on setting up pilot for using remote sensing for yield measurement

Brian Khureshi : Do we have anyone from UNEP?

Joseph AMBARA: Hello everyone. I am Ambara Joseph, from Cameroon; I am in charge of forest management at GIZ/ProPFE in Bertoua.

Julie MacCartee: Apologies for the slide formatting issue, all - we'll share the clean slides for download!

Julie MacCartee: We think it will be resolved after Paul's presentation

Miguel Montero: Hi, Miguel Montero from Dominican Republic

Denise van Wissen: Good morning from rainy Nicaragua -- Denise van Wissen, Food Security consultant

Jorge Barrientos: Good morning from Guatemala! Senior Tech specialist for a nat-cat microinsurance product

Esteban Copati: Good morning!! I'm Esteban Copati from the Buenos Aires Grain Exchange (Arg). I'm heading the agricultural estimate department.

Patrick Smith: glad to join you all, from Karachi, Pakistan, RuralBridges

Stephen Zepecki: Hello everyone from NOAA HQ in Washington, DC

Tomaso Ceccarelli: sorry, I have problems with the connection... I am kicked out often and have to connect again...

Robert Hijmans: sorry, I am loosing the connection regularly

ahmed kablan : Adobe connect keeps shutting off /closing the program by itself

Ben Claar: Robert is an attendeee now

Rebecca Anzueto 2: I am also having the same issue.

Ben Claar: He needs to be promoted to a presenter

Kiersten Johnson 2: Sorry for this - we're all having the same issue

Mona McCord: Having saving issues with Adobe connection.

Benson Kenduiywo: I get dropped off everytime too

Brian King: Being kicked out over here too.

Yihun Taddele: It is crushing

Kiersten Johnson 2: Thanks, Ben

Jawoo: Happening to me too...

Alice Laborte: I was kicked out too and had to connect back in.

Kiersten Johnson 2: I think you're right, Yihun.

Miguel Montero: I have problems with the connection, I am kicked out often and have to connect again

Khaled El-Shamaa: Yah.. all of us had that issue

Udemba Klinsmann: I can't download the files

Wesley Laytham: the broswer client is working better for me than the desktop client did

Paul Tanger: I had to restart my computer..

Nafis Muntasir: Hi this is Nafis from Mastercard Foundation joining from Canada.

Ben Claar: Narendra is gone again

Ben Claar: Keep an eye on the Presenters list -- you can tell when they drop off :)

Khaled El-Shamaa: It is something happen when Narendra start presenting

Philip Abrahams: Is this an issue with folks connecting via Google Chrome: Adobe Connect does not always like it

Khaled El-Shamaa: No, I am using the Adobe Connect desktop application

Brian Khureshi : oops have we lost Robert

Tomaso Ceccarelli: yes the last part of it..

Abedeh Abdolghafoorian: disconnected more than 10 times!!

Kiersten Johnson: So sorry, Abedeh and everyone!

Benson Kenduiywo 2: I think the browser works fine

Yihun Taddele: having issue

Khaled El-Shamaa: It is something in his slides, so please don't back to those slides cause they crash the whole system

Meraz Ahmed: disconnected more than 5 times

Yihun Taddele: me

Khaled El-Shamaa: OMG

LILIAN NDUNGU: disconnected too a couple of times. could be a bad connection from my end but not sure

Kiersten Johnson: Thanks everyone for your patience.

Brian Khureshi : same here always disconnecting

Oscar Castillo: disconnected several times

Chandrashekhar Biradar: use the edge to overcome disconnecting issue

Julie MacCartee: All - thanks for reporting on your technical difficulties. This is unprecedented in our Adobe Connect experience! We'll keep plugging and working on it

Khaled El-Shamaa: I am not sure what is the cause and how is the mechanisem, but I am very sure it is something in his slides!

Oscar Castillo: impossible to follow the webinar

Yihun Taddele: Disconnected several times while the current speaker speaks.

Ross Hunt: same problem for me

Tomaso Ceccarelli: same here

Abubacker Siddick: thanks..interesting information

Khaled El-Shamaa: I am sorry that we can't follow Narendra presentation.. its wierd

Chandrashekhar Biradar: it seems Google Chrome won't like Adobe, try edge or another browser

Kiersten Johnson: Thanks for the suggestion, Chandrashekhar!

Kayode Idode: Able to connect at last

Abubacker Siddick: voice breaking

Julie MacCartee: We think the tech has settled! Thanks for your patience!

Julie MacCartee: Also, you are welcome to post questions, and we'll collect them to ask to the speakers

Alando Ballantyne: how large are these datasets?

Ben Claar: @Alando: From the screenshot, I see dataset files ranging from 150MB to 822MB

Alando Ballantyne: good catch, thanks @Ben Claar

Ben Claar: No prob

Nafis Muntasir: A question for Narendra - in terms of data required for crop modelling, what data sources have been used so far and what type of data are required for the modelling? This could be a long answer and in that case I would be happy to connect with Narendra offline.

Ross Hunt: In terms of catching rate of change - what dataset has highest refresh rate? I suspect it's landsat 8 which can be every 14 days or faster, but is this actually correct?

Julie MacCartee: Good questions, thanks

Tomaso Ceccarelli: are there VI alternative to NDVI (e.g. incorporating red edge) been tested ad can they perform better ?

Pascal Nahasi: is it true that SWAT has been incorporated under FREEWAT software or it still works independently ?

Kiersten Johnson: Thanks, Tomaso & Pascal - we've got your questions and have added them to the line-up.

Holli Jordan: LWR is supporting this type of EO data validation at the farm level in partnership with NASA Harvest, but the issue of scale is a challenge. We are doing this in selected communities only with support of trained extenstion agents.

Tomaso Ceccarelli: Probably the use of drones in combination with area frames could mitigate the problem of scaing. If the predictions are good enough, which can be the case with wheat. Non sure about other crops where relation between production and total biomass is less evident

Julie MacCartee: We have one more presenter after Estefania, and then will dive into Q&A!

Adam Ahmed: https:gardian.bigdata.cgiar.org

Pascal Nahasi: thanks for the bigdata!

Kiersten Johnson: Thanks for highlighting the work of LWR, Holli - blog on this work is here: https://www.agrilinks.org/post/bringing-nasas-satellite-imagery-data-small-plot-farmers-mali

Robert Hijmans: I cannot speak...

Robert Hijmans: (I can, but I am not allowed to....)

Jorge Barrientos: How do you deal with ground education to capture data?

Jorge Barrientos: in order to build the necessary datasets from the ground besides technology, how do you create educational models for farmers, even in how to mantain and keep the equipments running?

Sunita Yadav: great discussion, I am curious about data sampling protocols out there, any standards in place that are tested? I am at USDA

Brian King: Really great overview of the state of the technology! Once comment: annotation of data according to widely recognized metadata and semantic data standards will go a

long way to solving these data availability, quality, and interoperability constraints noted by all speakers.

Tomaso Ceccarelli: Sentinel revist time is 5 days

Hasib Ahsan: For crop monitoring, can we only use EO images, that means by not using remote sensing data for NDVI?

Tulika Narayan: what is the resolution of the microwave sensor from Sentinel?

Kiersten Johnson 2: Standards for collecting field data: http://jecam.org/

Jawoo Koo: Can I speak?

Jawoo Koo: Sorry I'm not a speaker yet...

Sunita Yadav: thanks Kiersten, others apart from JECAM, that address representativeness and data quality

Julie MacCartee: Jawoo, just re-promoted you!

Jawoo Koo: Thanks

Holli Jordan 2: Thank you, very interesting! We will look forward to getting the slides if possible, or the recording.

Julie MacCartee: Thanks for participating! We'll send the recording, slides, and related resources in the post-event email

Julie MacCartee: Please open the email - it will have lots of good stuff! ;-)

Julie MacCartee: Kiersten Johnson (USAID/BFS) is wrapping up

Carolyn Chelimo: I have learnt quite alot. would be glad to receive the recordings and slides . Thank you

Roberto Martinez 2: Thank you for this interesting discussion

Lorena Villano: thank you for the interesting presentations and discussion

Brian Khureshi : Highly impressed and needs a lot of collaboration

Paul Tanger: Thanks everyone for joining! I encourage discussions to continue after this webinar

Tomaso Ceccarelli: than you !

Miguel Montero: thanks everyone

Khaled El-Shamaa: Thank you

Brian Khureshi : Pleasure

Antonio Sanchez: Thank you, bye!

Catherine Pfeifer: Thanks

Alando Ballantyne: thanks everyone!

Raj Kumar Singh: thanks

Pascal Nahasi: Thanks a lot

Dulal Chakrabarti: Thanks...

Kiersten Johnson 2: Many thanks, everyone!

Francisco Rios: Thank you!

Alice Laborte: Thanks

Julie MacCartee: Have a great rest of the day, everyone

Shwu Jiau Teoh: Thanks!

Jack Molyneaux: FYI: viewing this session on Chrome with my chromebook was more stable than on IE with my Windows 7 office machine

Abdul-Mumin YUSSIF: So sorry am joining late