NEWSLETTER

SAR INTER-COMPARISON EXPERIMENT

Component 1, Activities 1a, 1b & 2, and Component 2, Activity1 are closed OCTOBER 15th 2017! We will send a new Participation Form in January 2018 for interest in Activity 2 for both Components! Thank you for your interest!

Presentation at SPIE 2017

(From left: Medhi Hosseini, AAFC, and Katarzyna Dabrowska-Zielinska, Poland.)

Medhi Hosseini presented his work on the Water-Cloud Model at SPIE 2017 in Warsaw, Poland. While he was there he met with the JECAM Poland lead Katarzyna Dabrowska-Zielinska, head of the Remote Sensing Center, Institute of Geodesy and Cartography, Poland.

PARTICIPANTS

Component 1, Activities 1a, 1b & 2,

Argentina, Belgium, Brazil –Tocantins, Canada, France, India, Italy, Poland, Ukraine, USA-Georgia, USA-Iowa and USA-North Dakota!

Component 2, Activity 1

Canada, India, Italy, Poland, Taiwan, Ukraine, USA-Georgia, USA-Iowa and USA-North Dakota!

EXPERIMENT PROCESSING

<u>EO Data Processing</u>: We are re-processing the Sentinel 1, Landsat 8, Sentinel 2 and Radarsat-2 data for those files that failed our QC phase.

<u>Field Data Processing</u>: We continue to refine the field data received from the partners to create the most consistent *in situ* data sets possible.

EVENTS

Past	Upcoming
August 3, 2017 LAI & Biomass Webinar #2	**December 2017** JECAM site visits
September 2017 SPIE. Remote Sensing Warsaw, Poland Mehdi Presented	**December 2017** AGU 2017, New Orleans Laura attending
	January 2018 1st Annual Report to CSA and JECAM Partners

LAI & Biomass Model Testing Update

We will be testing 4 LAI and Biomass models utilizing the data that has been uploaded, and the EO data that has been acquired and pre-processed.

<u>3 variations of the Water -Cloud Model</u>
Canada

Hosseini, M., McNairn, H., Merzouki, A., and Pacheco, A. (2015). "Estimation of Leaf Area Index (LAI) in corn and soybeans using multi-polarization C- and L-band radar data.", *Remote Sensing of Environment, 170*, pp. 77-89.

Belgium

Beriaux E., Lambot S., and Defourny P. (2011), "Estimating surface-soil moisture for retrieving maize leaf-area index from SAR data.", Can. J. Remote Sensing, 37, pp. 136-150.

Poland

Dabrowska-Zielinska K., Inoue Y., Kowalik W., Gruszczynska M. (2007). "Inferring the effect of plant and soil variables on C- and L-band SAR backscatter over agriculture fields based on model analysis.", Advances in Space Research, 39, pp. 139-148

Italy
Method: Band Ratios

CONTACTS: LAURA.DINGLE-ROBERTSON@AGR.GC.CA
MEHDI.HOSSEINI@CARLETON.CA

JECAM
Joint Experiment for Crop Assessment and Monitoring

GEO GROUP ON EARTH OBSERVATIONS