

# GEOGLAM Data Requests

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Alyssa Whitcraft, UMD/GEOGLAM Sec.

# Overview

- A few national scale requests received
  - Mostly for new acquisitions, one for archival data
    - COVE Coverage Analyzer bugs being fixed to assess archival requests
- Many requests are for JECAM (Ian Jarvis will elaborate)
- Broad request that the MuSLI activity work toward a fused 10m S2/L8 product (rather than 30m)

# New Acquisition Requests

Next step (as agreed at CEOS SIT 31) – contact space agency PoC's to request augmentation of acquisition plans

# PoC: Ian Jarvis, Agriculture & Agri-food Canada

Missions & Modes	Location	Time Periods	Frequency	Max Cloud	Purpose
Landsat-8	Canada	May 1 – Sept 30	Monthly	20%	Develop/test ARD; Develop/test Data Services; Dynamic crop type classification, acreage assessment, NRT yield forecasting; Drought/pest/disease
Sentinel-2	Canada	May 1 – Sept 30	Monthly	20%	
Sentinel-1 (IFWS, VV+VH)	Canada	May 1 – Sept 30	Monthly	-	
Radarsat-2 (Quad-Pol?)	Canada	May 1 – Sept 30	Monthly	-	

## Notes:

- This is a request for coordinated acquisitions & data access
- A key component is that these data will be used in tandem, resulting in 4+ usable scenes per month
- It is conceivable to request S1 & R2 on a sampled basis (based on existing Canadian sample frame)

# PoC: Natalia Kussul, Space Research Institute NAS Ukraine and SSA Ukraine

<b>Missions &amp; Modes</b>	<b>Location</b>	<b>Time Periods</b>	<b>Frequency</b>	<b>Max Cloud</b>	<b>Purpose</b>
L8, S2	Ukraine	March-October	Weekly	20%	Crop type classification, crop state monitoring, yield forecasting
Sentinel-1	Ukraine	March-October	Weekly	-	Crop classification

## **Notes:**

- This is a request for coordinated acquisitions & data access
- L8 & S2 can be dually leveraged to try to reach a <20% cloud cover composite on a weekly basis

# PoCs: Pierre Defourny (UCL) & Heather McNairn (AAFC)

Users: various (JECAM sites)

\*Growing season calendar varies by site; PoC's to confirm calendar

Missions & Modes	Location	Time Periods	Frequency	Max Cloud	Purpose
Sentinel-1	JECAM Sites	Whole year	Systematic	-	<b>SAR Cross-Site Experiment</b> Experimental use of multi-frequency SAR; Crop classification, LAI estimation, Crop Yield Estimate
Radarsat-2	JECAM Sites	Growing season*	Systematic	-	
TerraSar-X	JECAM Sites	Growing season*	Systematic	-	
Cosmo SkyMed	JECAM Sites	Growing season*	Systematic	-	
ALOS-2	JECAM Sites	Growing season*	Systematic	-	
Very high res optical	JECAM Sites	Growing Season*	Once per season	10%	Characterization of the sites (fine parcel delineation, agroforestry characterization); supports implementation of SAR cross-site

# PoC: Shin-Ichi Sobue & Kei Ohyoshi (on behalf of Asia-RiCE – SDMS in use)

Missions	Modes	Location	Time Periods	Frequency	Max Cloud	Purpose
C-Band SAR	HH+HV or VV+VH	Vietnam, Thailand, Indonesia Rice Croplands	May-Oct 2016; Nov-Apr 2017	1-2 per month (14- 30 days)		<i>Planted and harvested area, crop growth monitoring, yield estimation, damage assessment and methane in- direction estimation</i>
L-Band SAR	HH+HV or VV+VH	Vietnam, Thailand, Indonesia Rice Croplands	May-Oct 2016; Nov-Apr 2017	1-2 per month (14- 30 days)		
20-70m Optical	-	Vietnam, Thailand, Indonesia Rice Croplands	May-Oct 2016; Nov-Apr 2017	14-30 days**	20%	
100m-500m Optical	-	Vietnam, Thailand, Indonesia Rice Croplands	May-Oct 2016; Nov-Apr 2017	14-30 days	20%	

## Notes:

- \*\*14-30 days with <20% cloud cover, with mod-res optical, will not likely be feasible during monsoon (Nov-Mar = OK in Vietnam and Thailand. But for Indonesia May-Oct = OK)
- Multiple candidate missions to fulfill each of the requirements – how to allocate across missions?
- SDMS or Data Cube will be utilized for data access & analysis support

# Archival Data Access

Next step:

- Analyze coverage in COVE Coverage Analyzer
- Contact PoC's at agencies to request access to pre-processed archival data



# PoC: Natalia Kussul, Space Research Institute NAS Ukraine and SSA Ukraine

Missions	Modes	Location	Time Periods	Frequency	Max Cloud	Purpose
SPOT 5		Kiev Region (Ukraine)	March-October; 2010-2015 (priority April-July)	Weekly	20%	Crop state assessment, crop classification, LAI/FAPAR mapping
SPOT 4		Kiev Region (Ukraine)	March-October 2013	Weekly	20%	Crop state assessment, crop classification, LAI/FAPAR mapping
Landsat 7		Ukraine	March-October; 2010-Present	Weekly	20%	Crop type classification, crop state monitoring, yield forecasting
Sentinel-1	All Available	Ukraine	March-October; 2013-Present	Weekly		Crop classification
Radarsat-2	All Available	Kiev Region (Ukraine)	March-October; 2013-Present	Weekly		Crop state assessment, crop classification