

JECAM

R&D Towards Operational Update Progress and New Directions



Strategic Issues – Mexico City 2015

Strategic Issue #1: Enhancing Technology Transfer

Challenge:

Ensuring research is transferred, implemented and made relevant to our collective GEOGLAM outcomes.

Strategic Issue #2 Inter-comparison Projects and Strategic Partnerships

Challenge:

Need to leverage our multi-site research platform efforts to strengthen and focus R&D delivery towards operations.

Strategic Issue #3 Enhanced R&D Networks for Food Insecure Nations

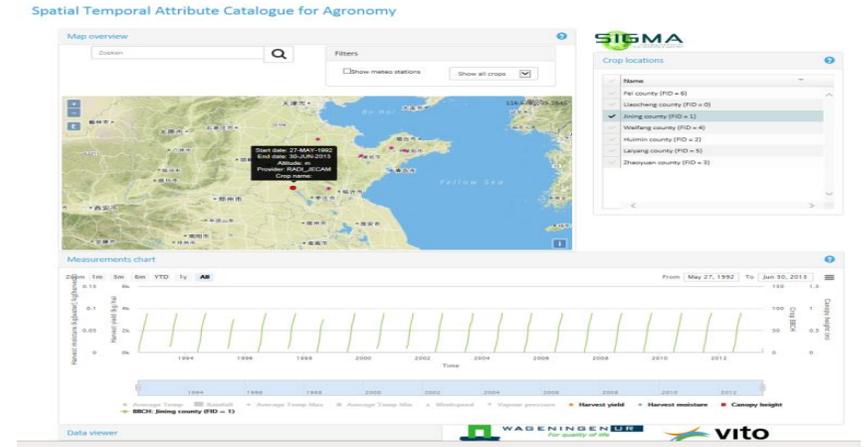
Challenge:

Monitoring in food insecure nations: Small and complex fields; in-situ data networks; technical capacity; infrastructure and institutional. The current R&D footprint of and coordination effort within GEOGLAM is insufficient to address this challenge.

Strategic Issue #1: Enhancing Technology Transfer

Progress:

- **SIGMA JECAM Support**
 - Site coordination (joint meetings)
 - STAC-database
- **Standards and Best Practices (JECAM-SIGMA-Sen2Agri)**
 - Development and implementation of Standards
 - Cropland definition
 - Minimum dataset requirements
 - Field data collection
 - FAO Review (Andy and Pierre)
- **New Standards work**

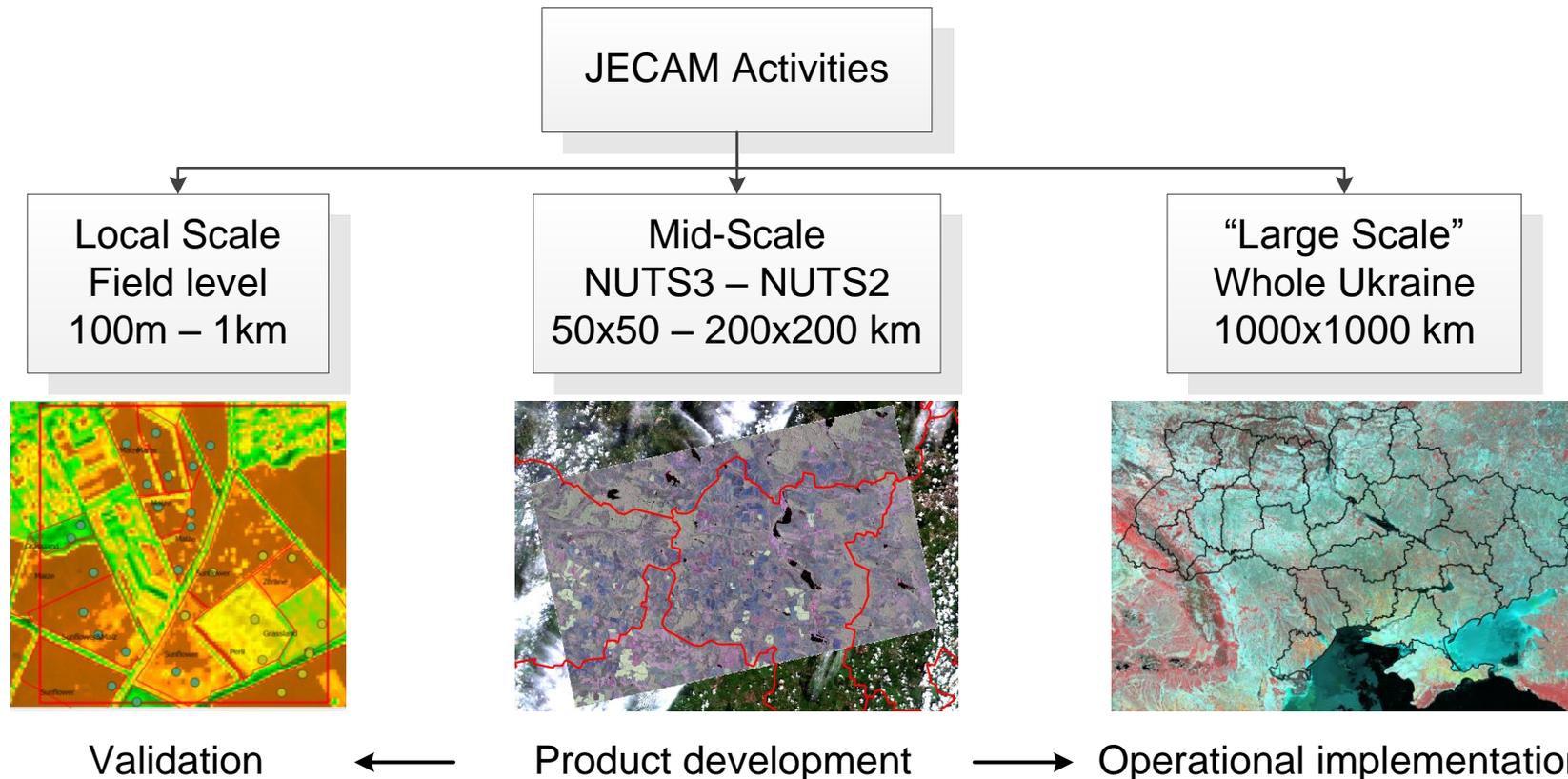


This document is the first version of the JECAM Guidelines for field data collection. It has been prepared based on 24 JECAM site reports for 2013, and the discussions from several working sessions in the framework of different international on-going efforts, including the ESA Sen2Agri and FP7-SIGMA projects which supports this work. The JECAM partners also provided feedback and suggestions during the JECAM science meeting (21-23 July 2014, Ottawa). This is a living document and will be revised and updated as required.

Strategic Issue #1: Enhancing Technology Transfer

Progress:

- Ukraine – Transition from R&D to Operations

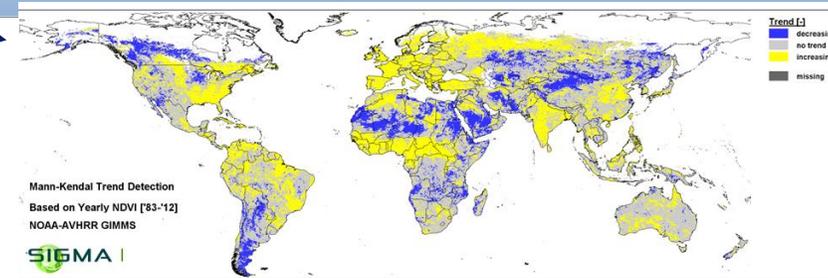
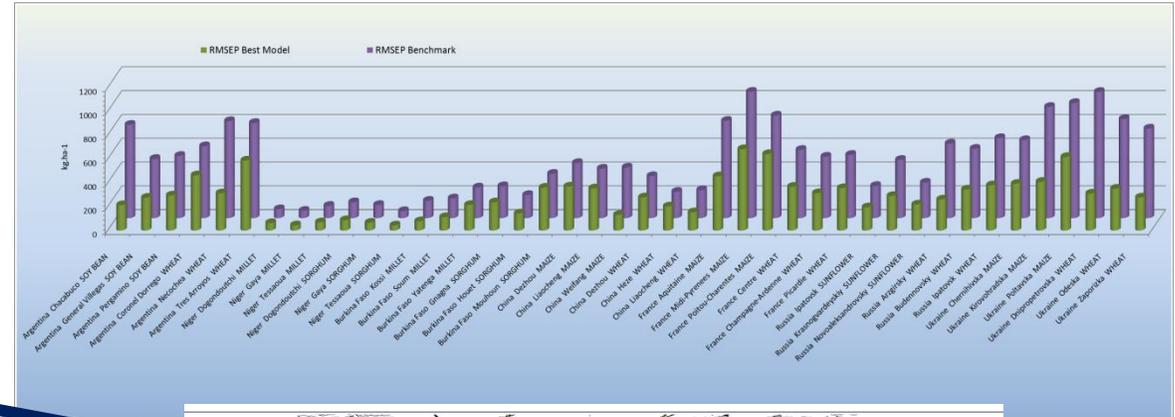


Strategic Issue #2 Inter-comparison Projects and Strategic Partnerships

Progress:

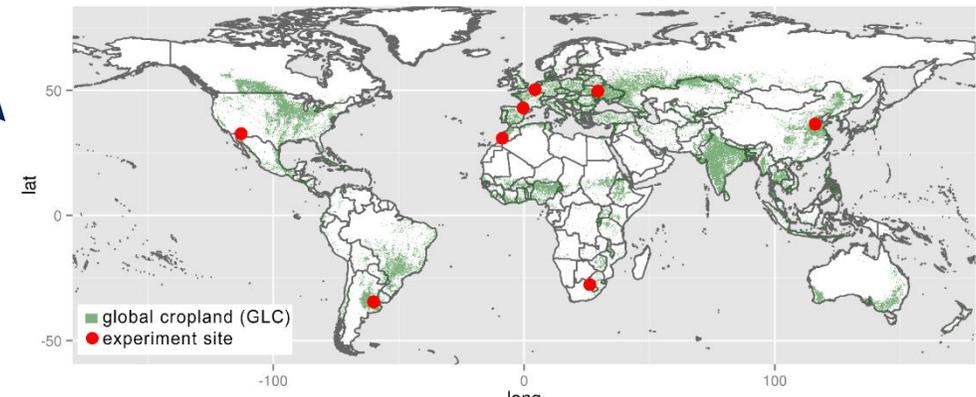
- **Cross Site Experiments**

- Land Cover Mapping
- Yield Estimations
- Agricultural Trend Analysis
- Optical Methods Benchmarking over 12 sites



- **Future Work on Inter-Comparisons**

- Initiating SAR inter-comparison
 - Cropland/crop type, SAR and SAR/Optical
 - Crop growth parameters (LAI, etc)
 - Other?



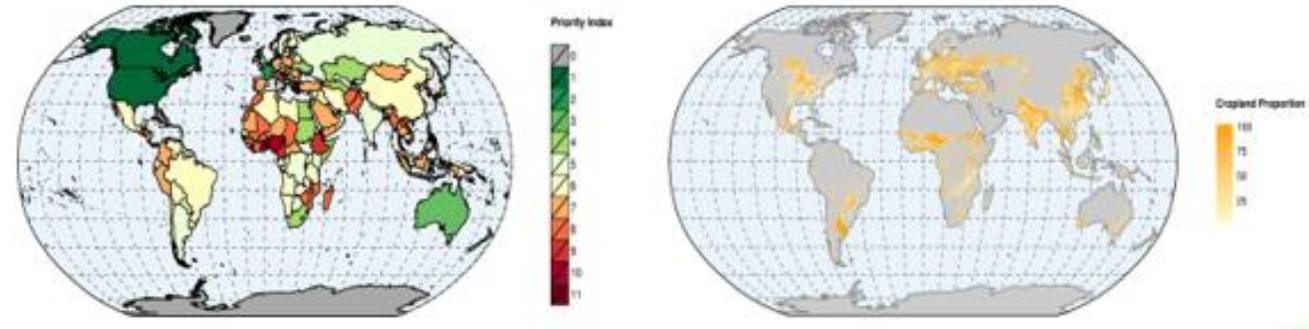
Strategic Issue #3 Enhanced R&D Networks for Food Insecure Nations

Progress:

• Capacity Needs Assessment

- Selection of Priority Countries
- Input to GEOGLAM Capacity Building

■ Priority map for land cover mapping + Global cropland map



Possible Future Linkages:

European Horizon 2020 call on Agriculture and Livestock Monitoring in Africa

Need for more capacity/investment in smallholder farm systems R&D