## ALOS An international science collaboration led by JAXA

## **Country-Wide Land Cover Mapping – Mid-term Results**

## **Objectives**

The main objective is to develop a methodology for the identification of relevant land cover types (agriculture in particular) aimed at assessing, on a monthly basis, the land cover and related changes at country level. The method is based on the synergetic use of multi-temporal, multi-source high (> 10m) resolution SAR data.

## Results

The results obtained so far clearly show that the synergetic use of interferometric ALOS PALSAR data with multi-temporal ENVISAT

ASAR AP data enables the identification of key land cover types and their evolution over time, providing basic information on the vegetation status.



Crop Map





The color composite on the left illustrates a multi-temporal data set based on **ENVISAT ASAR AP** (120 images) and **ALOS PALSAR FBS** (70 scenes) data covering the whole Malawi (100,000 sqkm, 15m resolution). The image on the right shows an interferometric color composite based on **ALOS PALSAR FBS** data (70 image pairs). The enlargements highlight the extensive information included in this type of multi-temporal multi-source data set, which allows the generation of products such as crop map, main land cover/change classes, and digital elevation model. All processing has been performed starting from raw data.

JAXA and ESA are acknowledged for the provision of ALOS PALSAR and ENVISAT ASAR data.