



ALOS Kyoto and Carbon Initiative

JRC Project Status

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10th K&C Science Team meeting
RESTEC HQ, Roppongi/Tokyo
June 23-26, 2008.

MOSAIC GENERATION - Products

50 m FBD mosaics

Africa – Geographical coordinates (un-projected lat, long)

Siberia – Albers Conical projection

Europe – Albers Conical projection

50 m SCANSAR mosaics

Congo river basin - Geographical coordinates

Okavango delta - Geogr. coord.

Ob river basin - Albers Conical

MOSAIC GENERATION - Schedule

Africa 50 m FBD

Summer 2007 data

Delivery by November 2008

Siberia 50 m FBS/FBD

Winter 2006/2007 FBS mosaic CANCELLED due to lack of data

Summer 2007 - Generation during winter 2008/2009

Europe – Albers Conical projection

Summer 2008 - Generation during spring 2009

Congo, Ob, Okavango ScanSAR mosaics

Generated when data become available

Mosaic methodology

Method

Geocoding by solution of range-Doppler equation:

JAXA slant range 50 m HH+HV detected data + SCANSAR data

SRTM, GTOPO (Siberia lat > 60) digital elevation data

JAXA orbital data

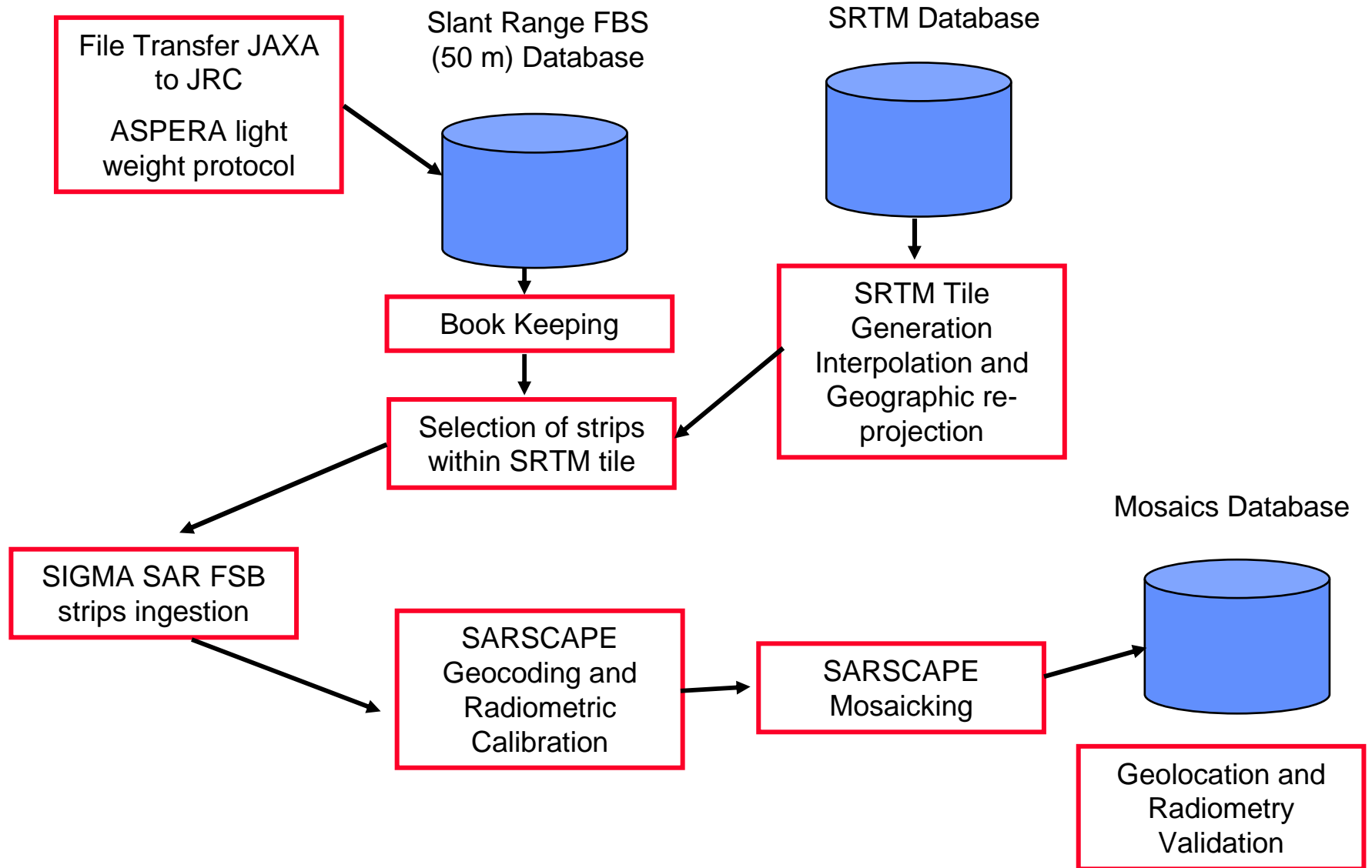
Radiometric revision (effective scattering area and spreading loss)

Mosaic compilation, stitching and seams regularization

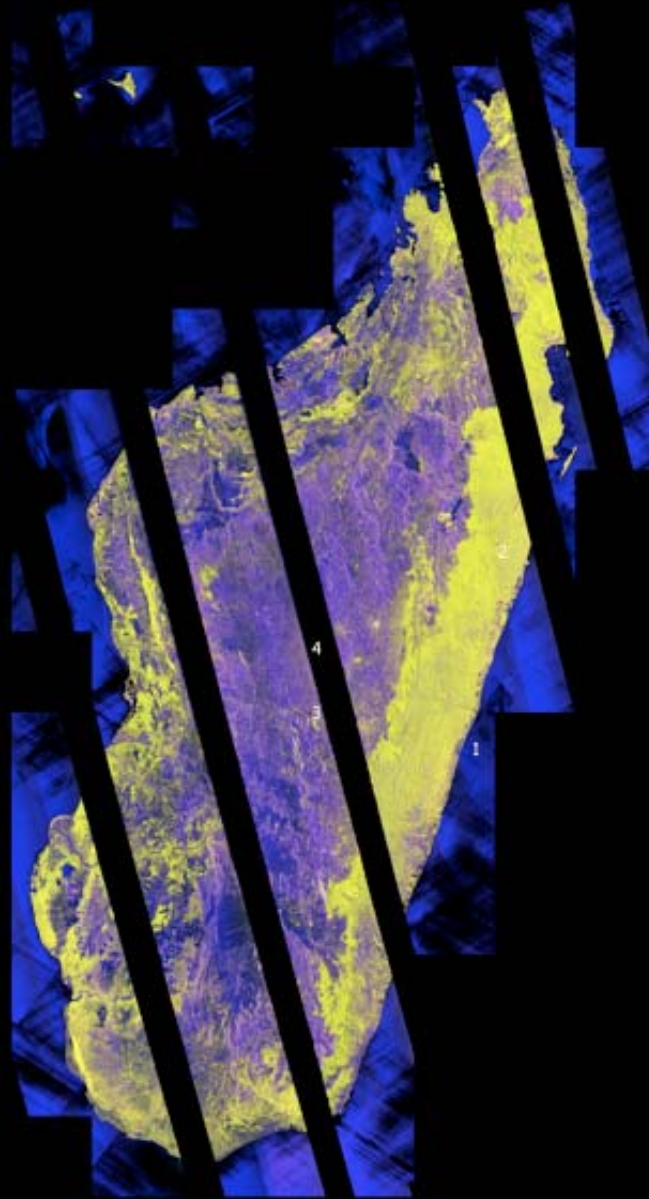
Software

SARMAP SARSCAPE + JRC proprietary code

MOSAIC GENERATION – PROCESSING CHAIN



Prototype ScanSAR MOSAIC – Madagascar



Institute for Environment and Sustainability
Global Environment Monitoring Unit





SUMMARY

SCHEDULE

Siberia FBS Winter - Cancelled

Africa FBD; Siberia FBD; Europe FBD

During summer, autumn 2008

Radiometry

Amplitude data assumed - additional calibration applied

-> excellent radiometry

Geometry

Better than 1 pixel geolocation for both FBD and ScanSAR

Data unavailability major bottleneck for mosaic generation