# Dynamics of the Pantanal Ecosystem

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K&C products
• Water flooding dynamics
• Habitat mapping
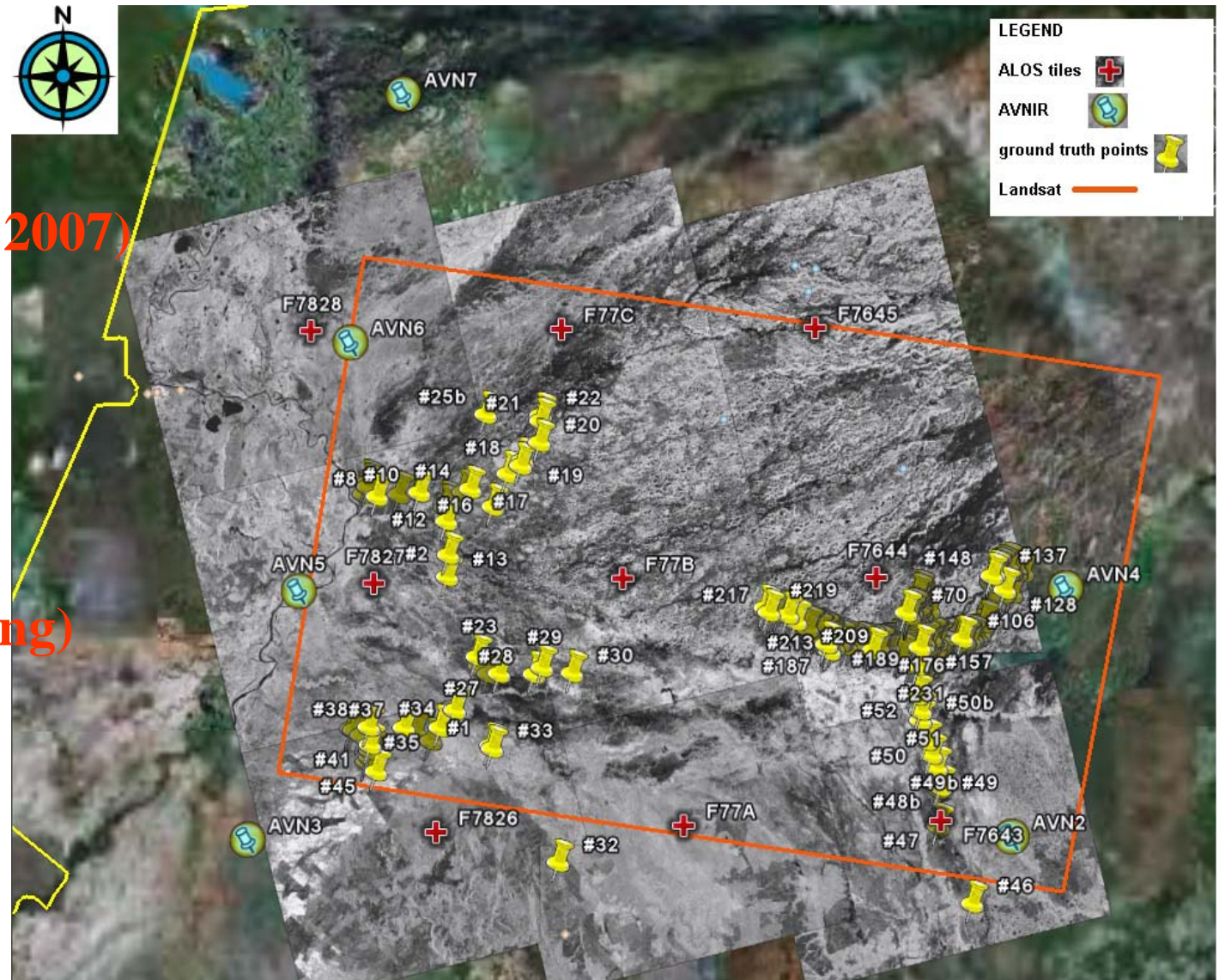= Lakes classification
• Backscattering library

**Processing status:**

**Data base**

- **6.25 m res (FBS 2007)**
- **FBD 2008**
- **Google Earth**
- **backscattering**
- **geometry**
- **strip (starting)**
- **ScanSAR (starting)**

Problems/solutions:

1st: (*.5GUA) images + LED file information = no success + images do not
mosaic properly

2nd: Emails.. Shimada-san, Ake, Bruce, Laura ….(factor_m… error…error)

3nd: Use ASF software (*.5GUA images + LED file) = geotiff file
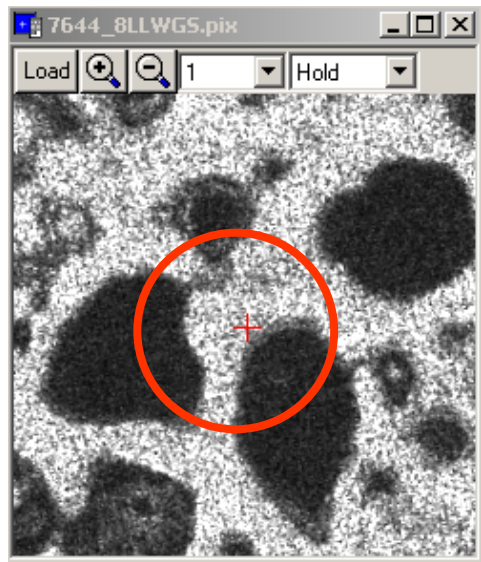(UTM 21 row C WGS84)

Kind of Success but…. end up in Greenland!

4th: Re-project to Lat/Long = Miracles happen! It works.

Major Success… we were finally in the Pantanal
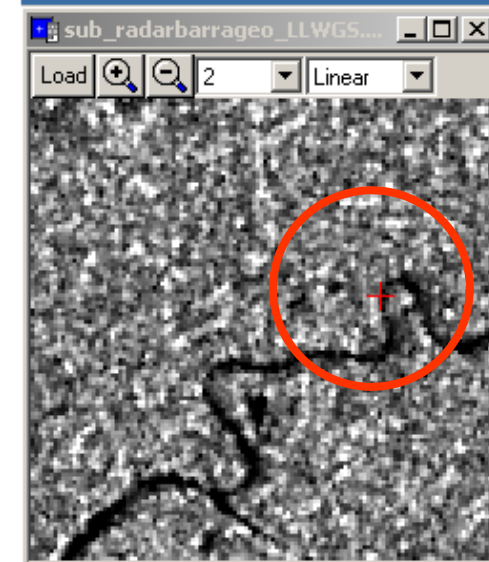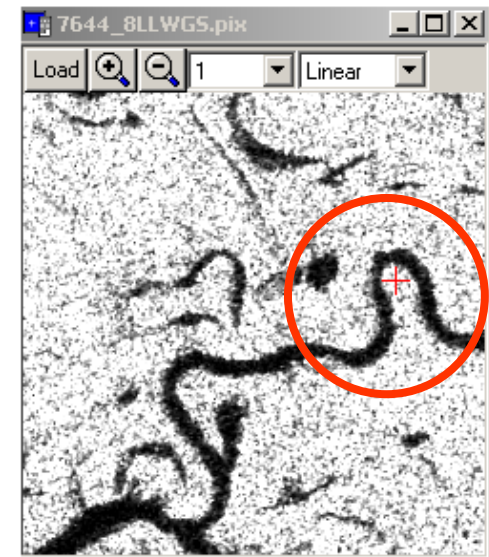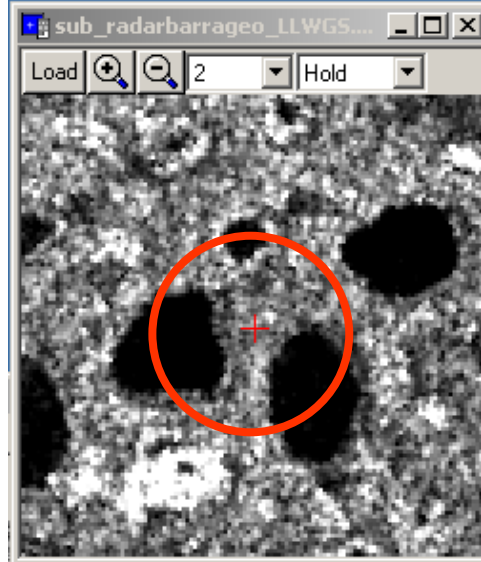and images mosaic properly

5th: Field work in June/July 2008 (ALOS/Radarsat2) / Wetlands International
Conference
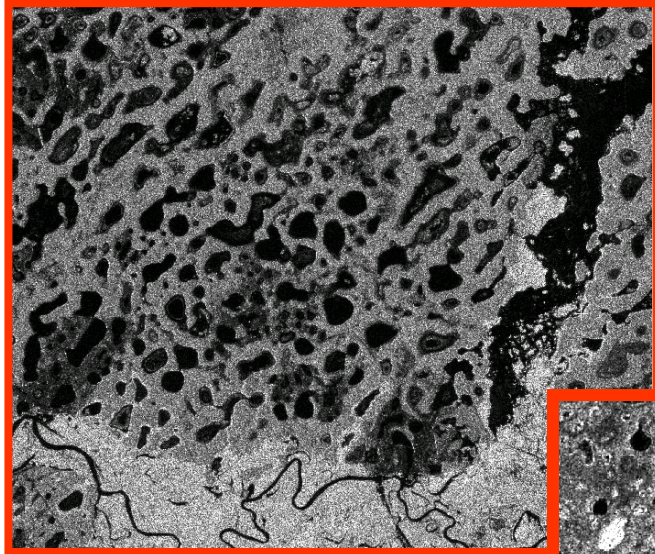
# Some results: still small geometric error



ALOS
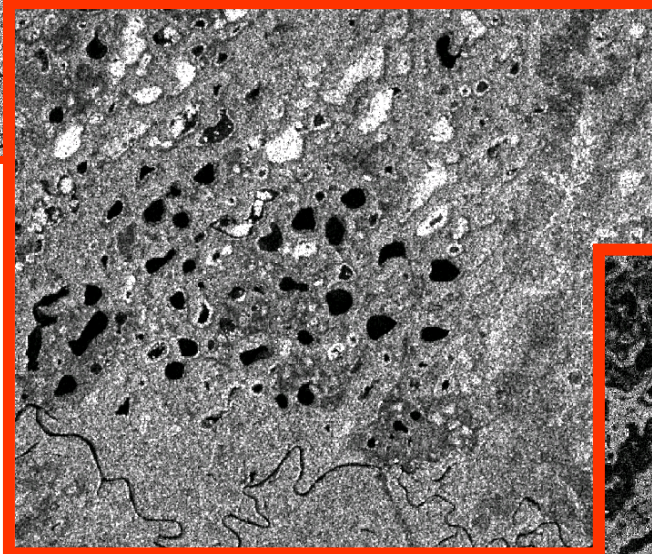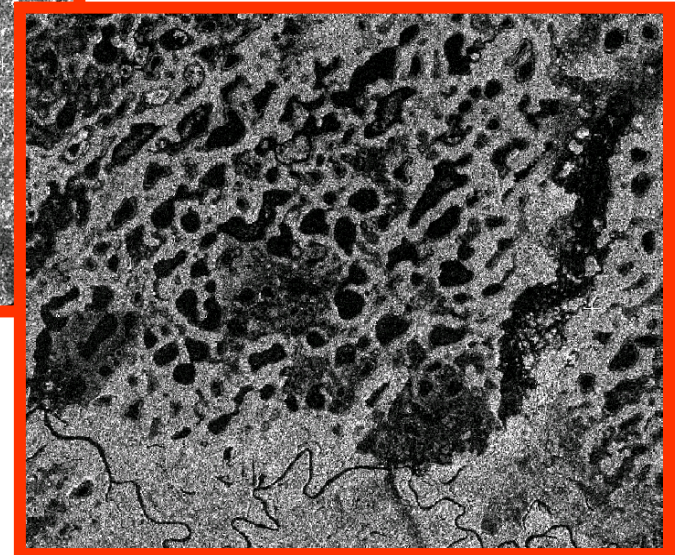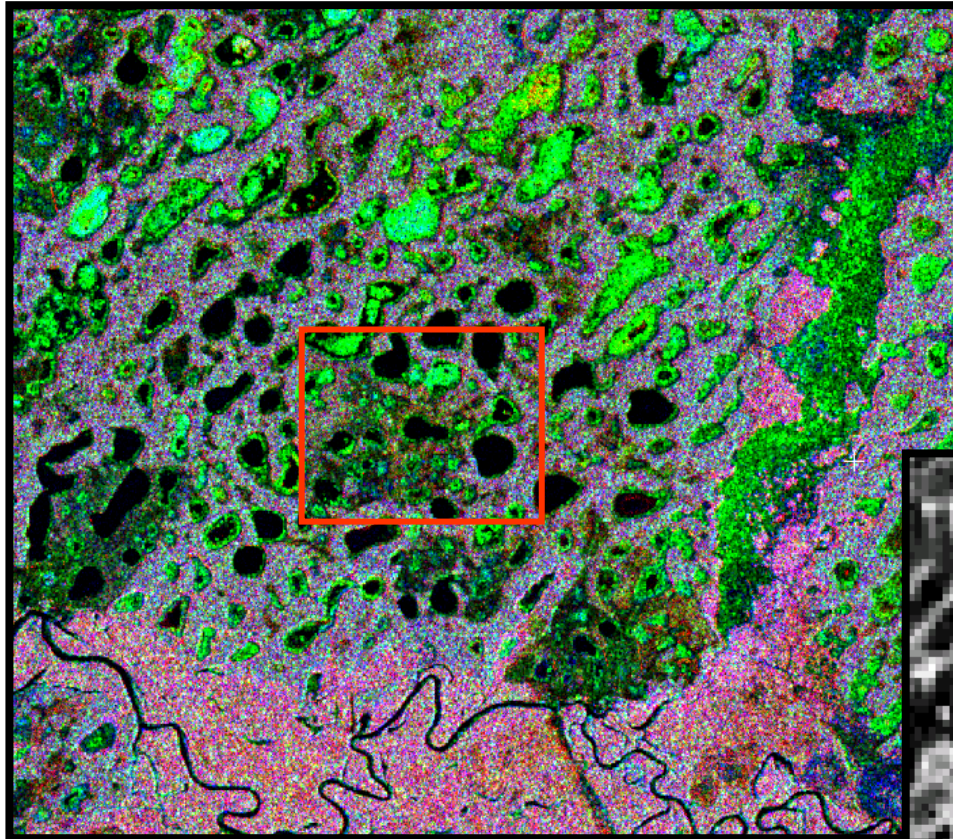
Radarsat 1

# Some results: with standard geometric correction (time series)


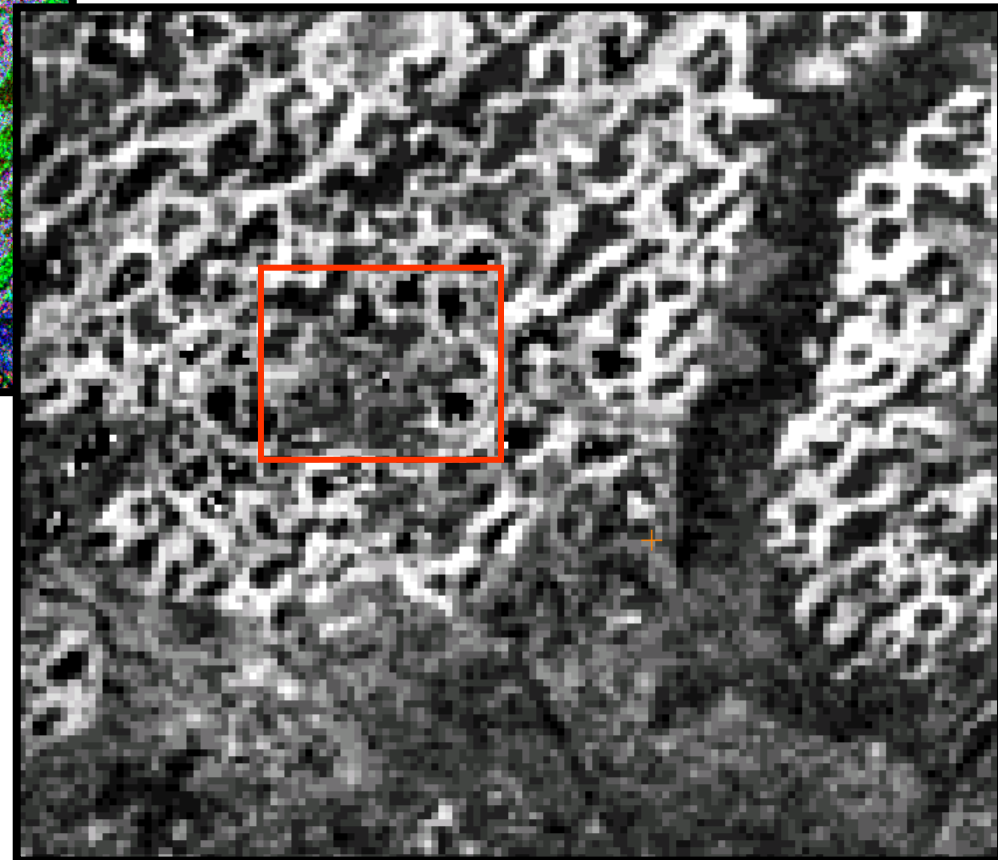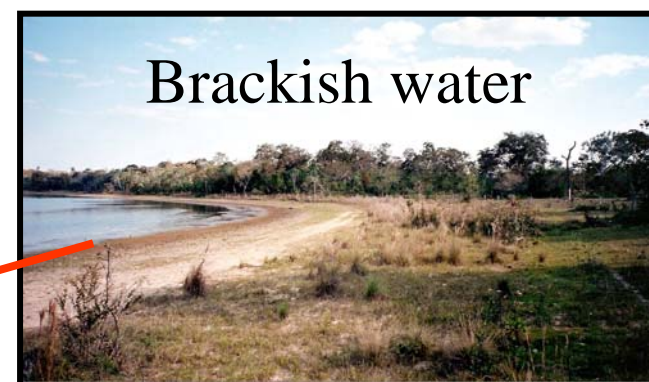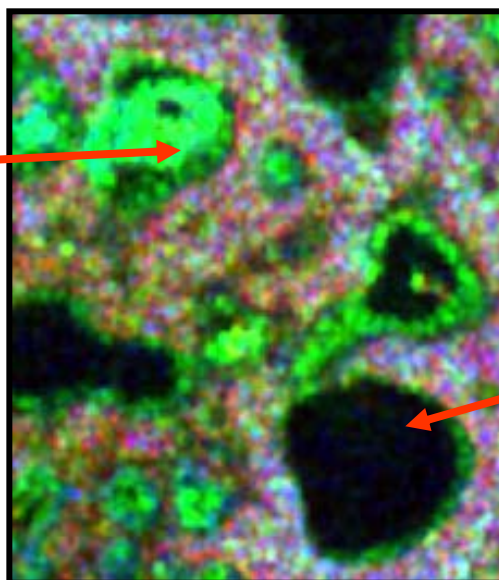
2007 - ALOS

2001- Radarsat 1

1993 - JERS

SRTM

R:ALOS 2007
G:Radarsat 2001
B:JERS 1993

88 - JERS1 - 1993

88 - Radarsat - 2001

88 - ALOS - 2007

Hard water

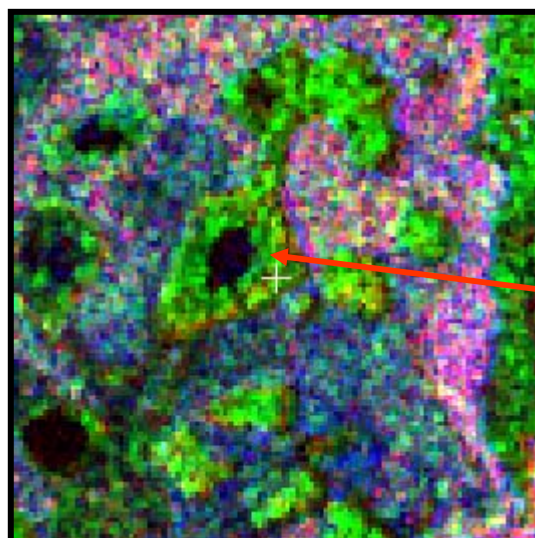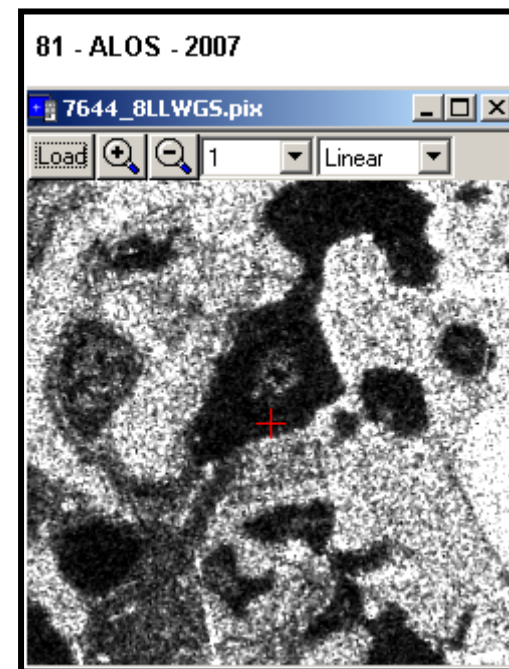Brackish water

81 - JERS1 - 1993

81 - Radarsat - 2001

81 - ALOS - 2007
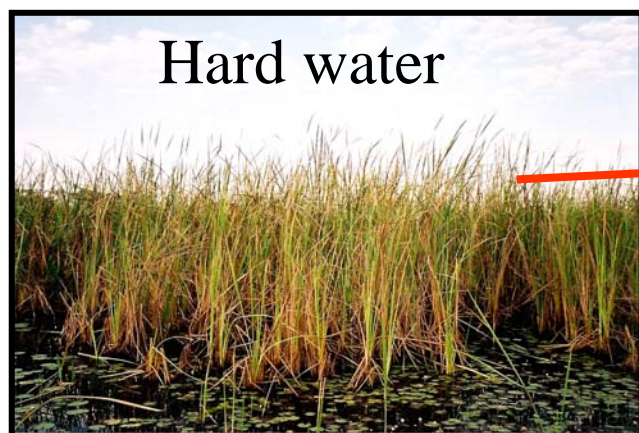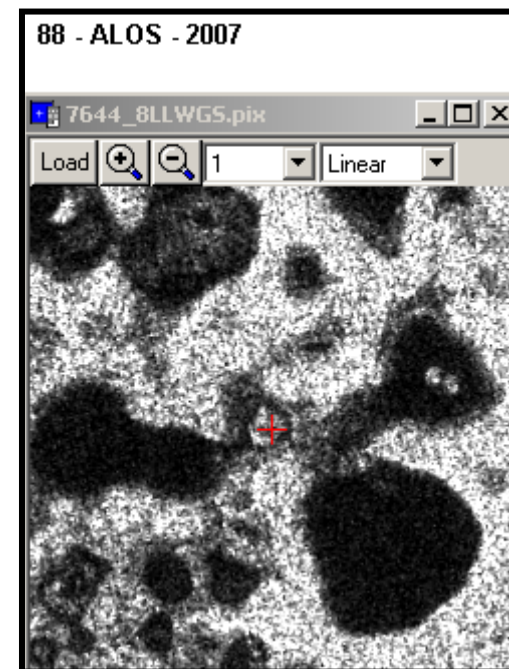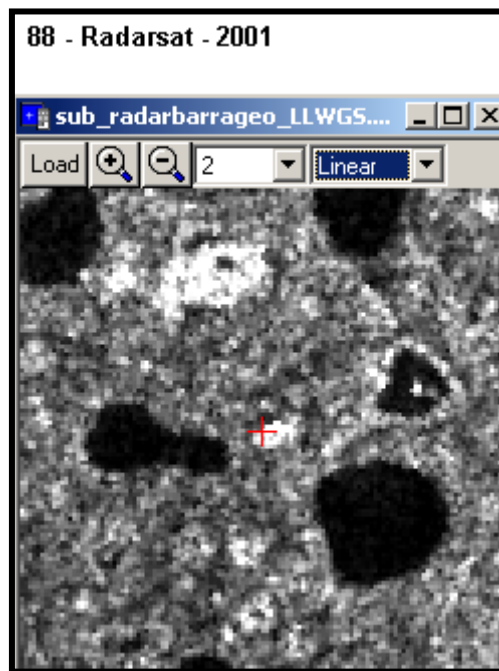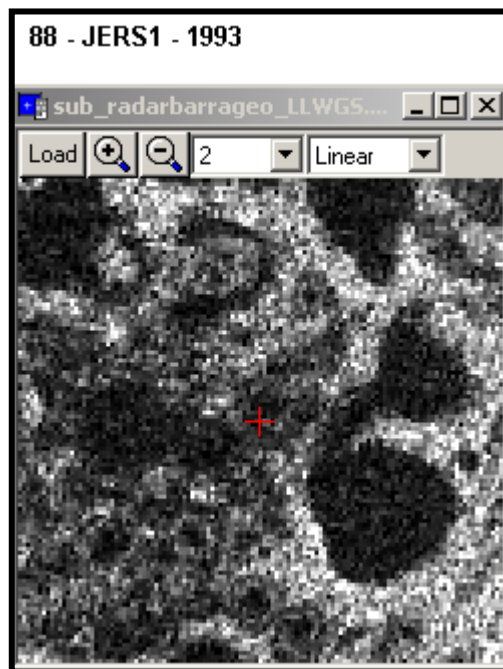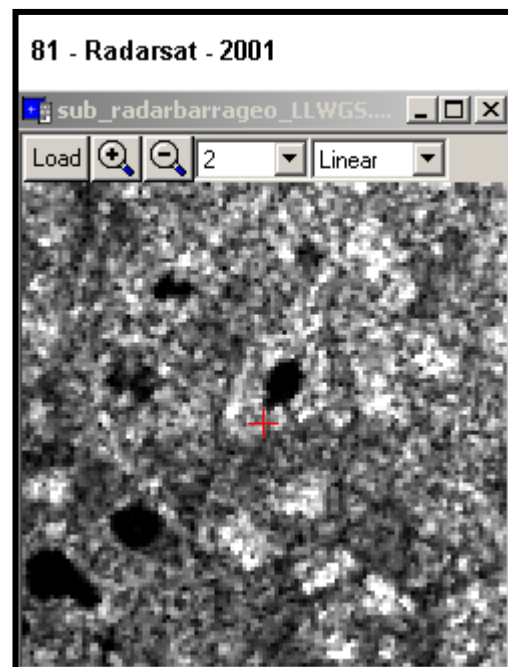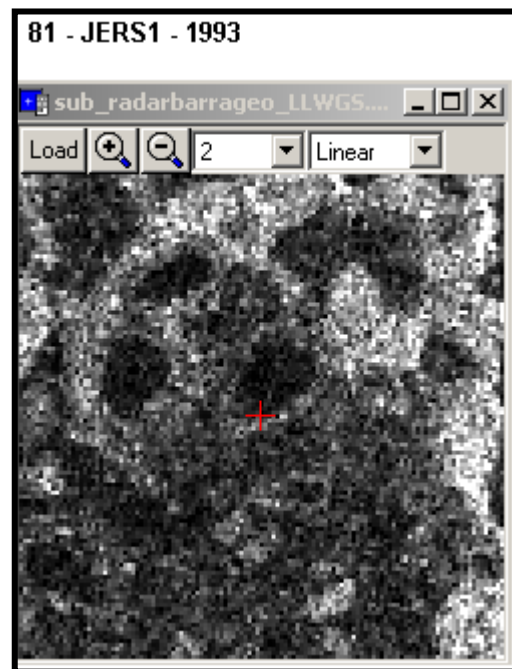
# Strip data…. Start to look at. But it seems the geometry will be an issue



JERS-1 mosaic – 1993 (100x 100 m)

ALOS/PALSAR strip – 2007 (50x50 m)

**Lakes Classification**
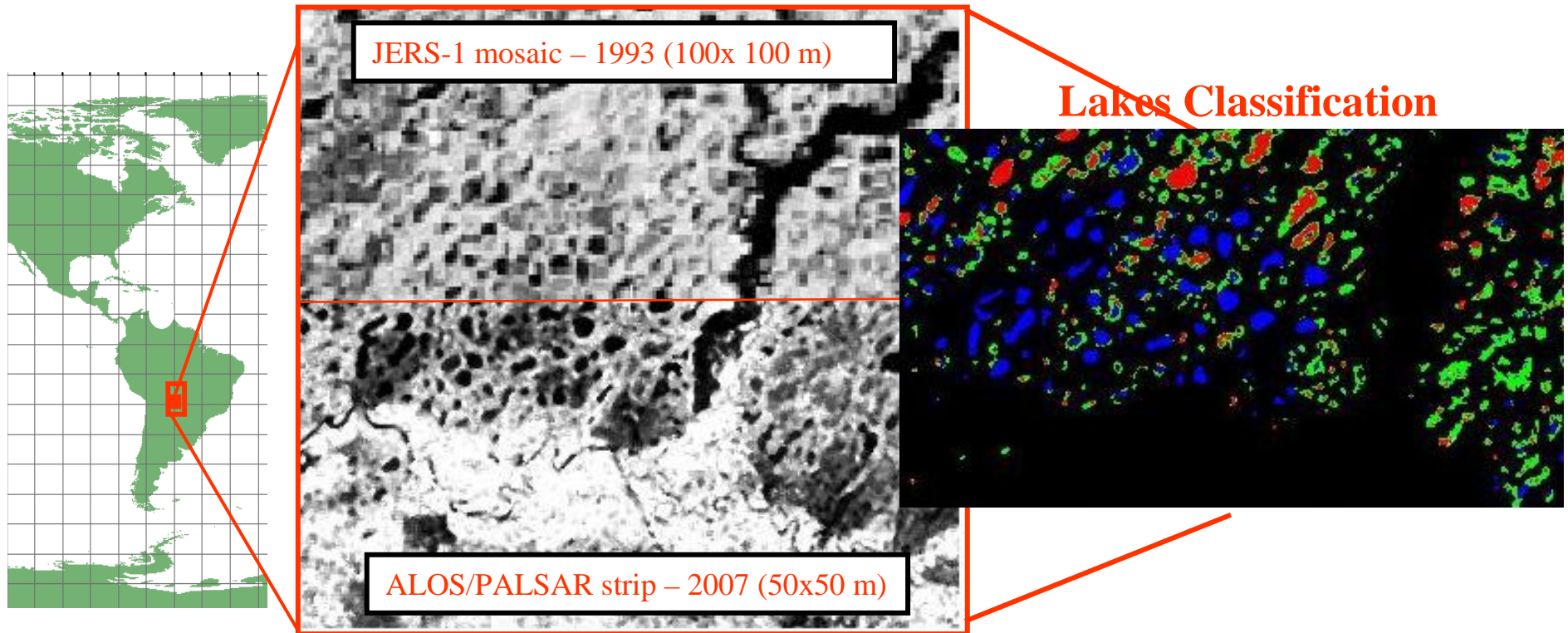
## Dual polarization – HH and HV strip data
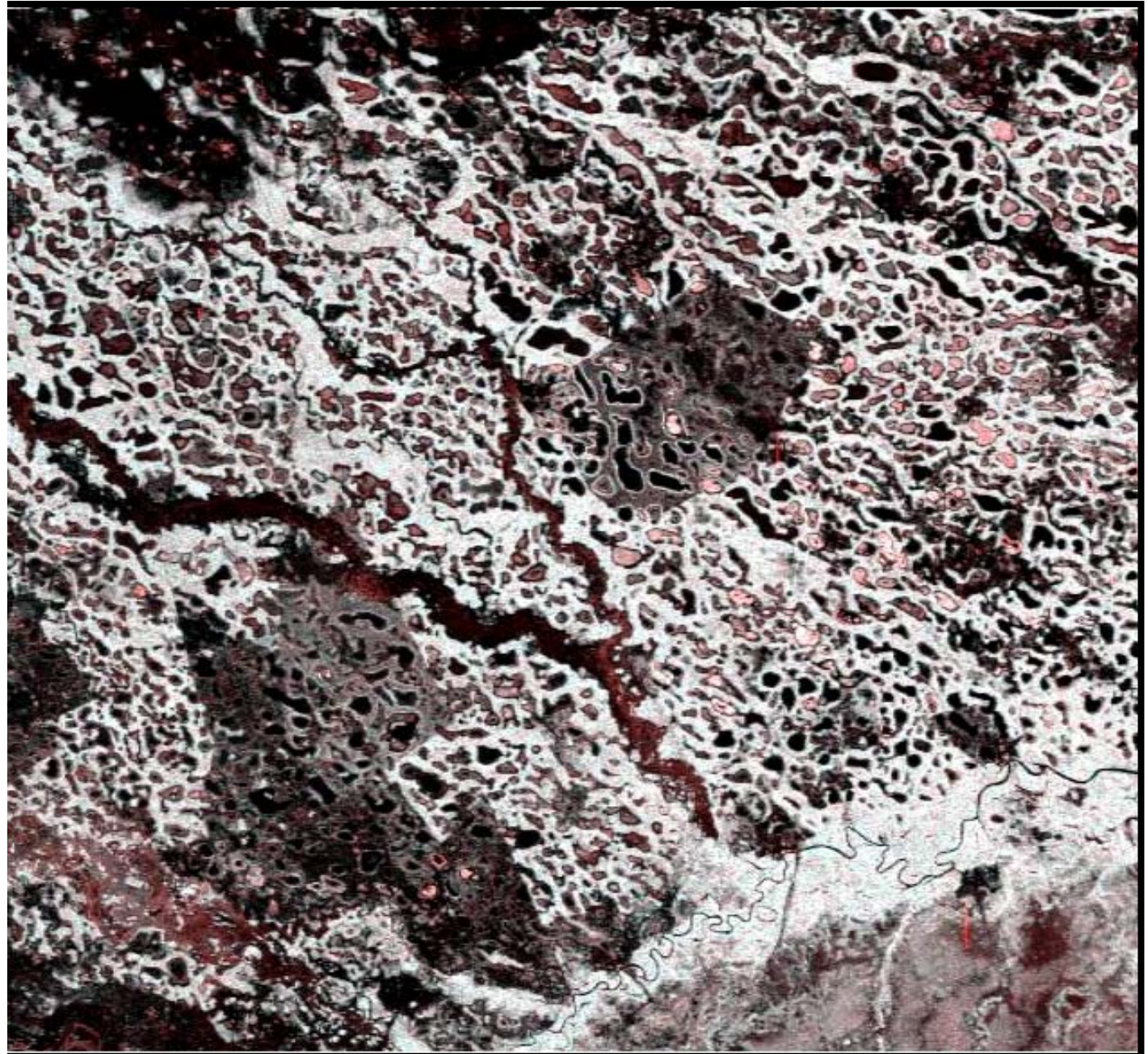
Problems/solutions:

- Strip data: geometry…..

- Mosaic: 1 mosaic dual pol by the end of 2008

Impact: flooding map only possible in 2009

- National Geographic Society…….waiting
- FBD data. Strip data?
- Radarsat 2 / ALOS
- Field work – June/July