

Supplement of information

Quantification of surface water volume changes in the Mackenzie Delta using satellite multi-mission data

5 Cassandra Normandin¹, Frédéric Frappart^{2,3}, Bertrand Lubac¹, Simon Bélanger⁴, Vincent Marieu¹, Fabien
Blarel³, Arthur Robinet¹ and Léa Guiastrennec-Faugas¹

¹ EPOC, UMR 5805, Université de Bordeaux, Allée Geoffroy Saint-Hilaire, 33615 Pessac, France

² GET-GRGS, UMR 5563, CNRS/IRD/UPS, Observatoire Midi-Pyrénées, 31400 Toulouse, France

³ LEGOS-GRGS, UMR 5566, CNRS/IRD/UPS, Observatoire Midi-Pyrénées, 31400 Toulouse, France

10 ⁴Dép. Biologie, Chimie et Géographie, groupe BOREAS and Québec-Océan, Université du Québec à Rimouski, 300 allée des Ursulines, Rimouski, Qc, G5L 3A1, Canada

Correspondence to: Cassandra Normandin (cassandra.normandin@u-bordeaux.fr)

Figure S1: Index map and associated histogram in July 2013 for (a) EVI for MODIS, (b) EVI for OLI 500, (c) LSWI for MODIS and (d) LSWI for OLI 500

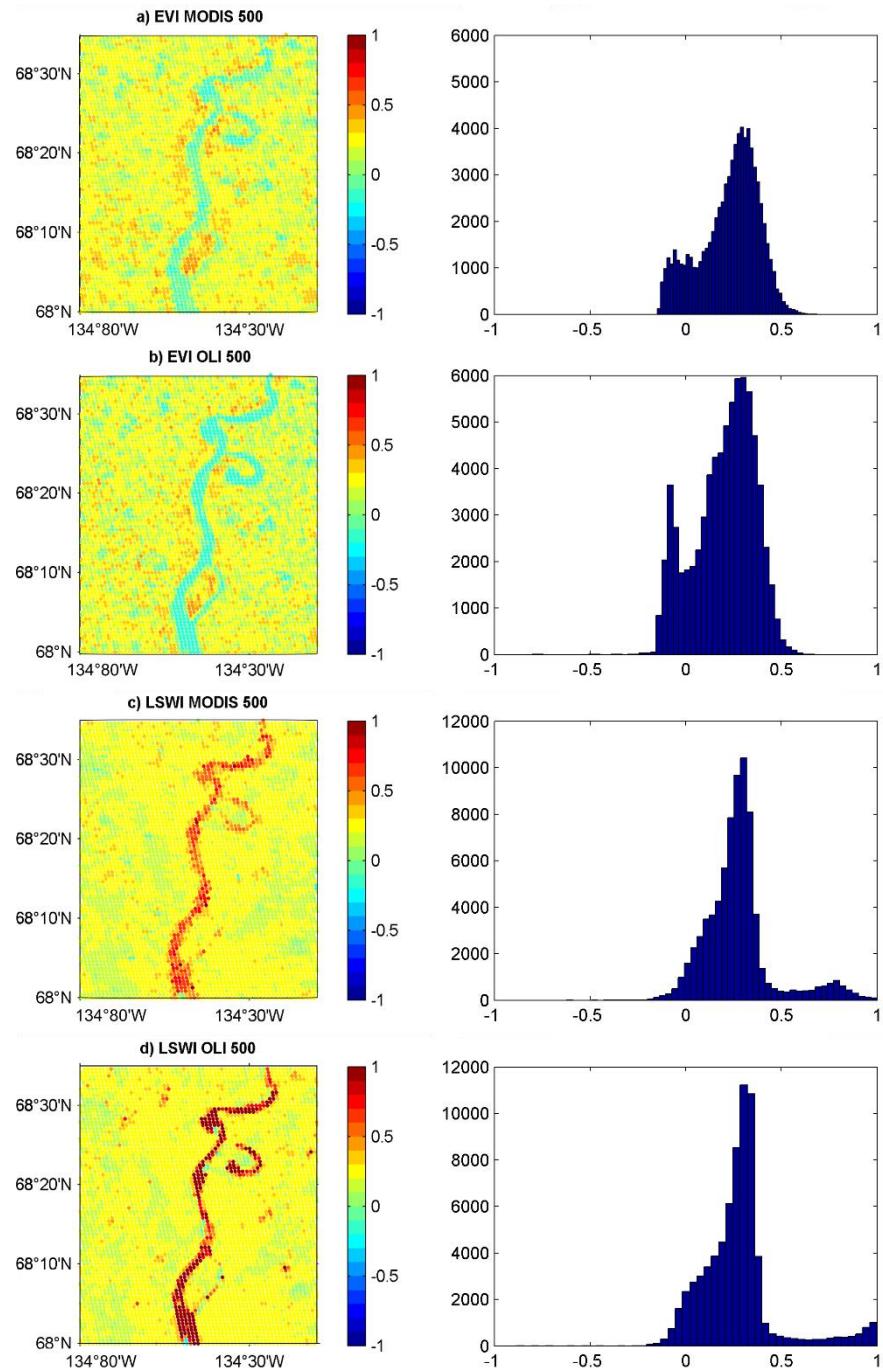


Figure S2: Map of difference between EVI and LSWI indices and associated histogram in July 2013 for (a) MODIS and (b) OLI 500

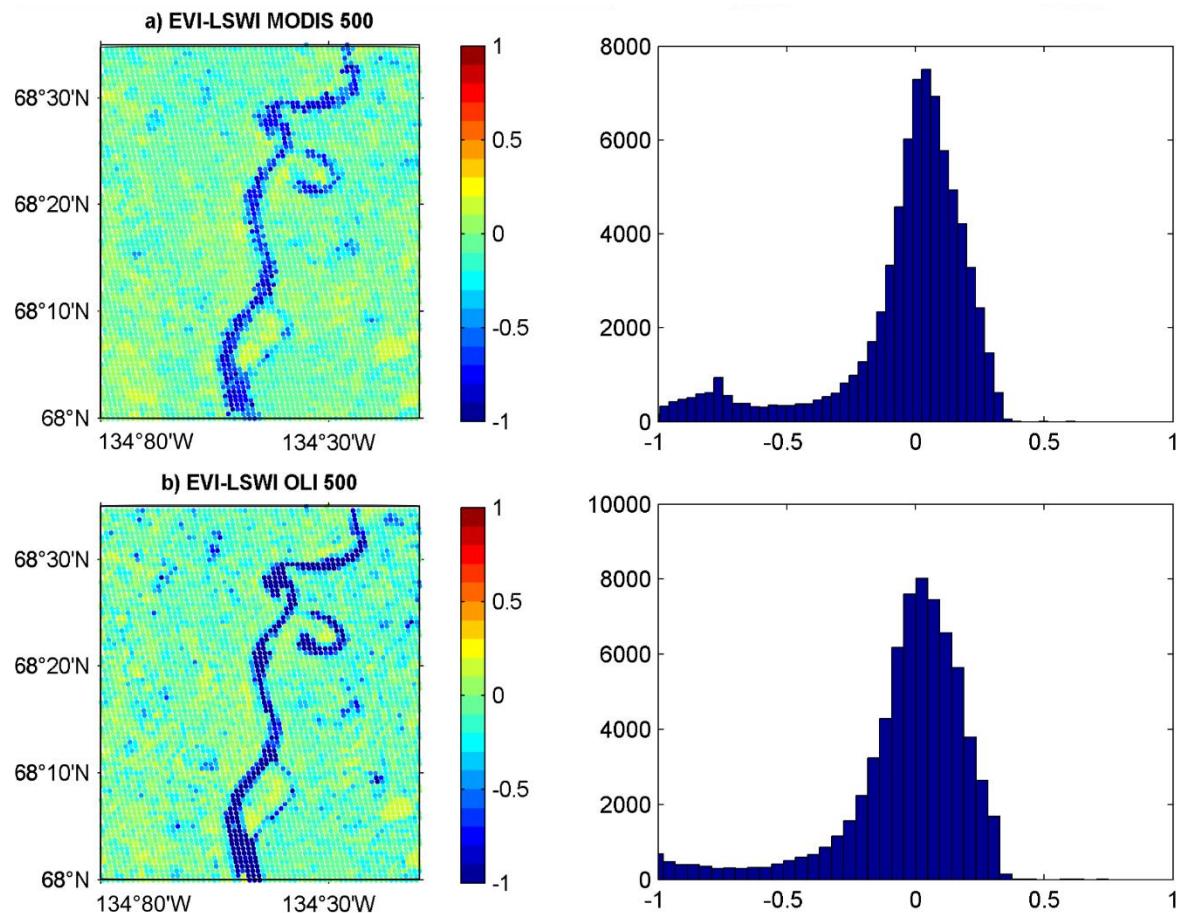


Figure S3: Surface water extent estimated in July 2013 using (a) MODIS at 500 m (b) OLI at 500 m and (c) OLI at 30 m. Permanent water bodies appear in blue and inundated areas in light blue.

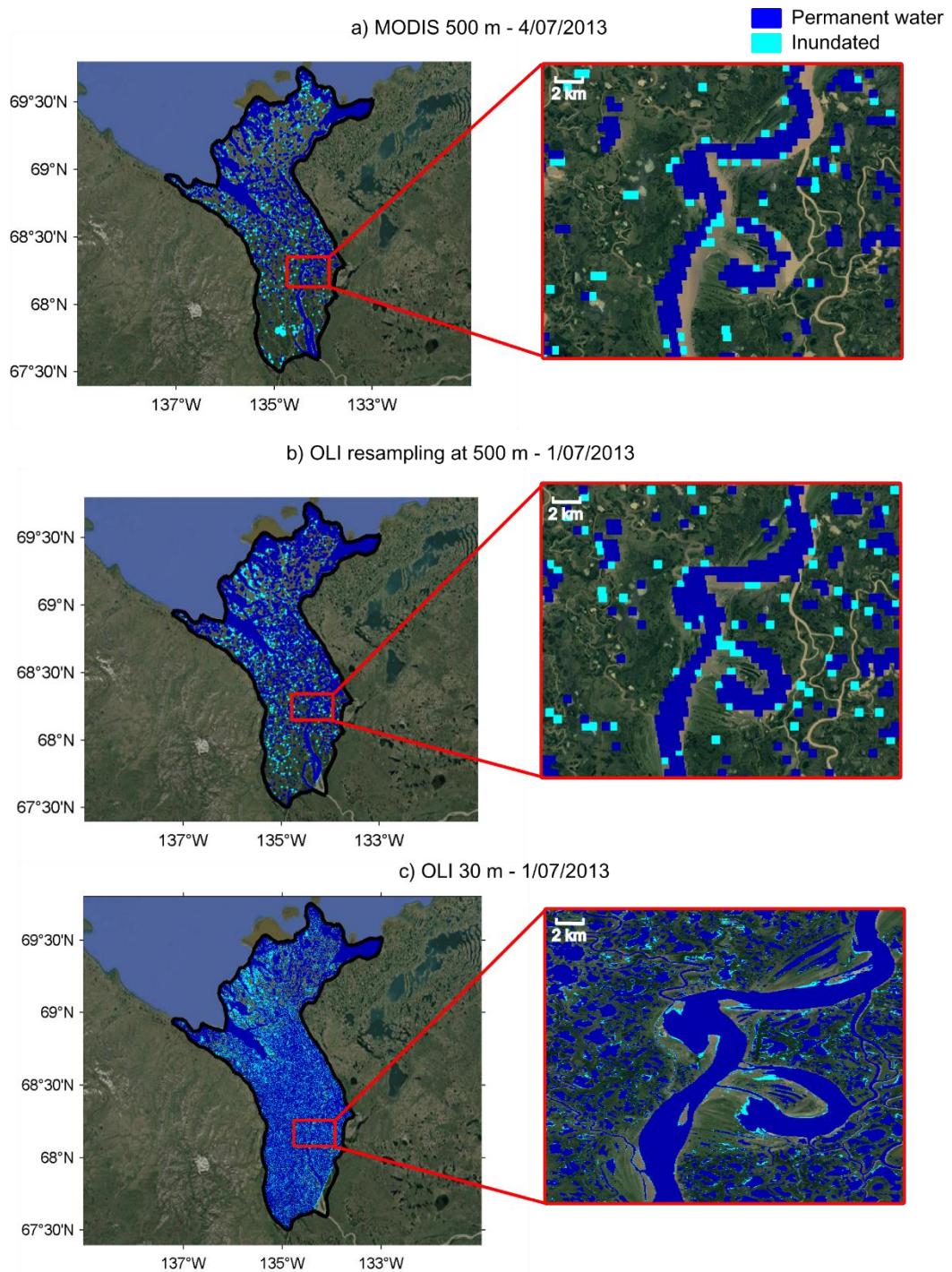


Figure S4: Comparisons of surface water areas detected using MODIS at 500 m and Landsat-8 images resampled at 500 m of spatial resolution for Landsat-8 images acquired on 04/07/2013 (a) and 05/08/2013 (b). Surface water only detected using MODIS, Landsat-8 resampled and detected by both appears in blue, light blue and yellow respectively.

