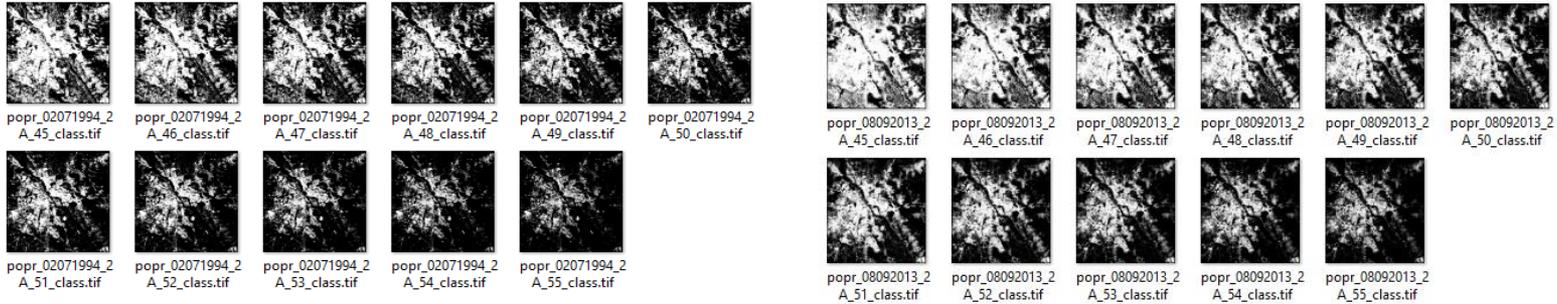# CENTRUM BADAŃ KOSMICZNYCH
Polskiej Akademii Nauk

Change detection approaches used by Earth Observation Group in CBK PAN

Sebastian Aleksandrowicz
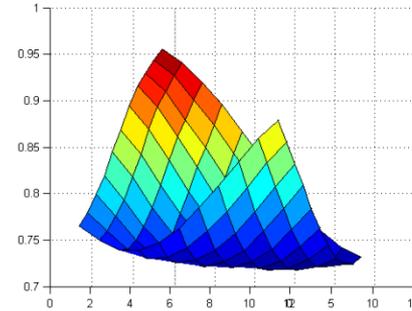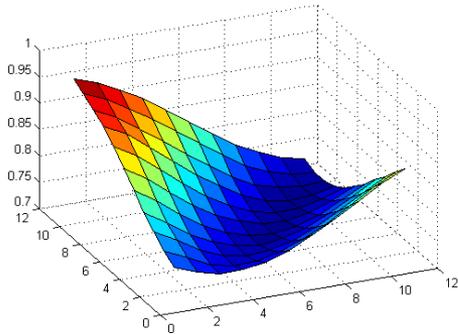saleksandrowicz@cbk.waw.pl
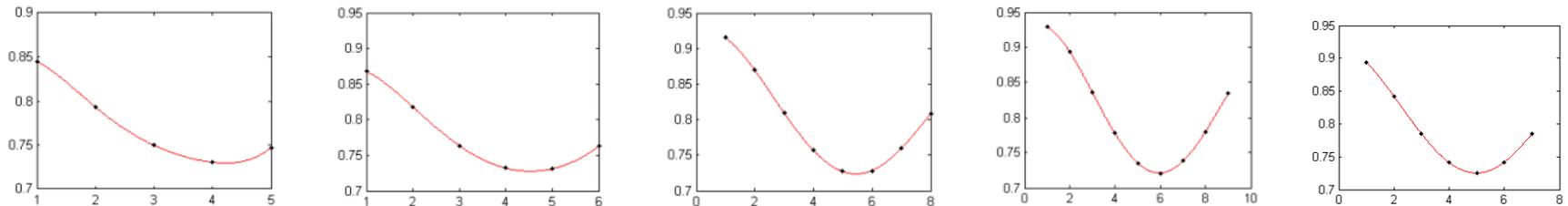
Classification based change detection

1st step - classifications

popr_02071994_2 A_45_class.tif
popr_02071994_2 A_46_class.tif
popr_02071994_2 A_47_class.tif
popr_02071994_2 A_48_class.tif
popr_02071994_2 A_49_class.tif
popr_02071994_2 A_50_class.tif

popr_02071994_2 A_51_class.tif
popr_02071994_2 A_52_class.tif
popr_02071994_2 A_53_class.tif
popr_02071994_2 A_54_class.tif
popr_02071994_2 A_55_class.tif

popr_08092013_2 A_45_class.tif
popr_08092013_2 A_46_class.tif
popr_08092013_2 A_47_class.tif
popr_08092013_2 A_48_class.tif
popr_08092013_2 A_49_class.tif
popr_08092013_2 A_50_class.tif

popr_08092013_2 A_51_class.tif
popr_08092013_2 A_52_class.tif
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popr_08092013_2 A_55_class.tif
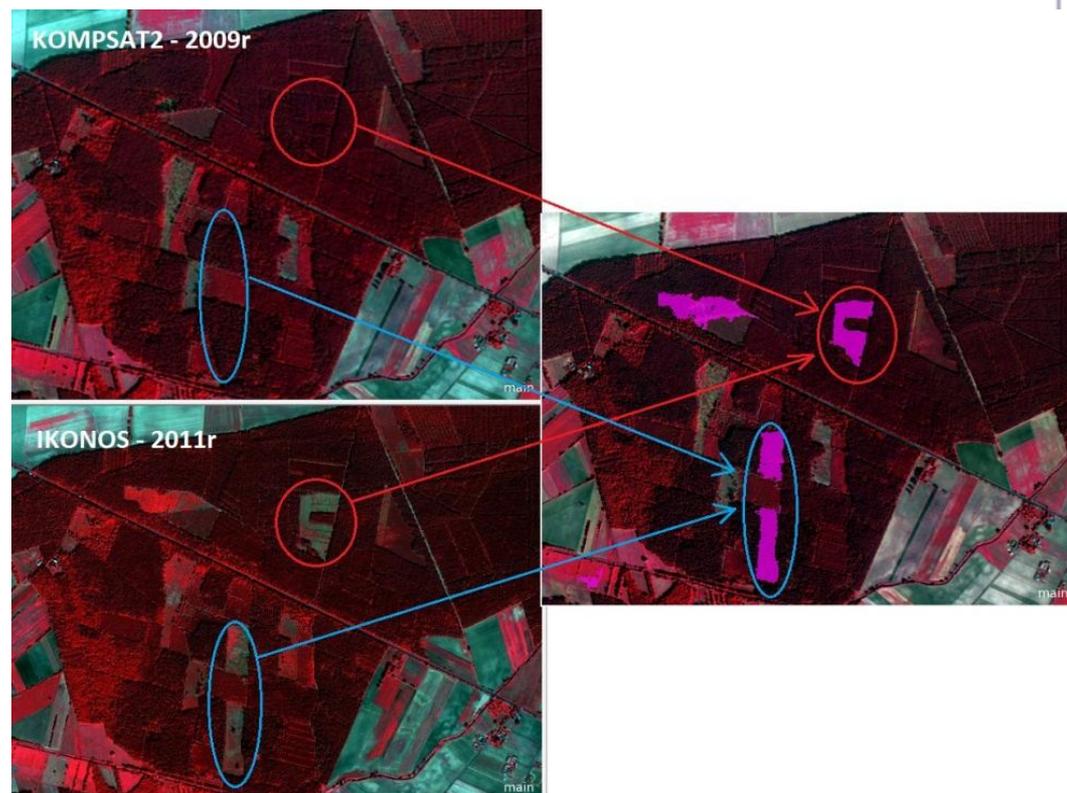
2nd step – measure of compliance
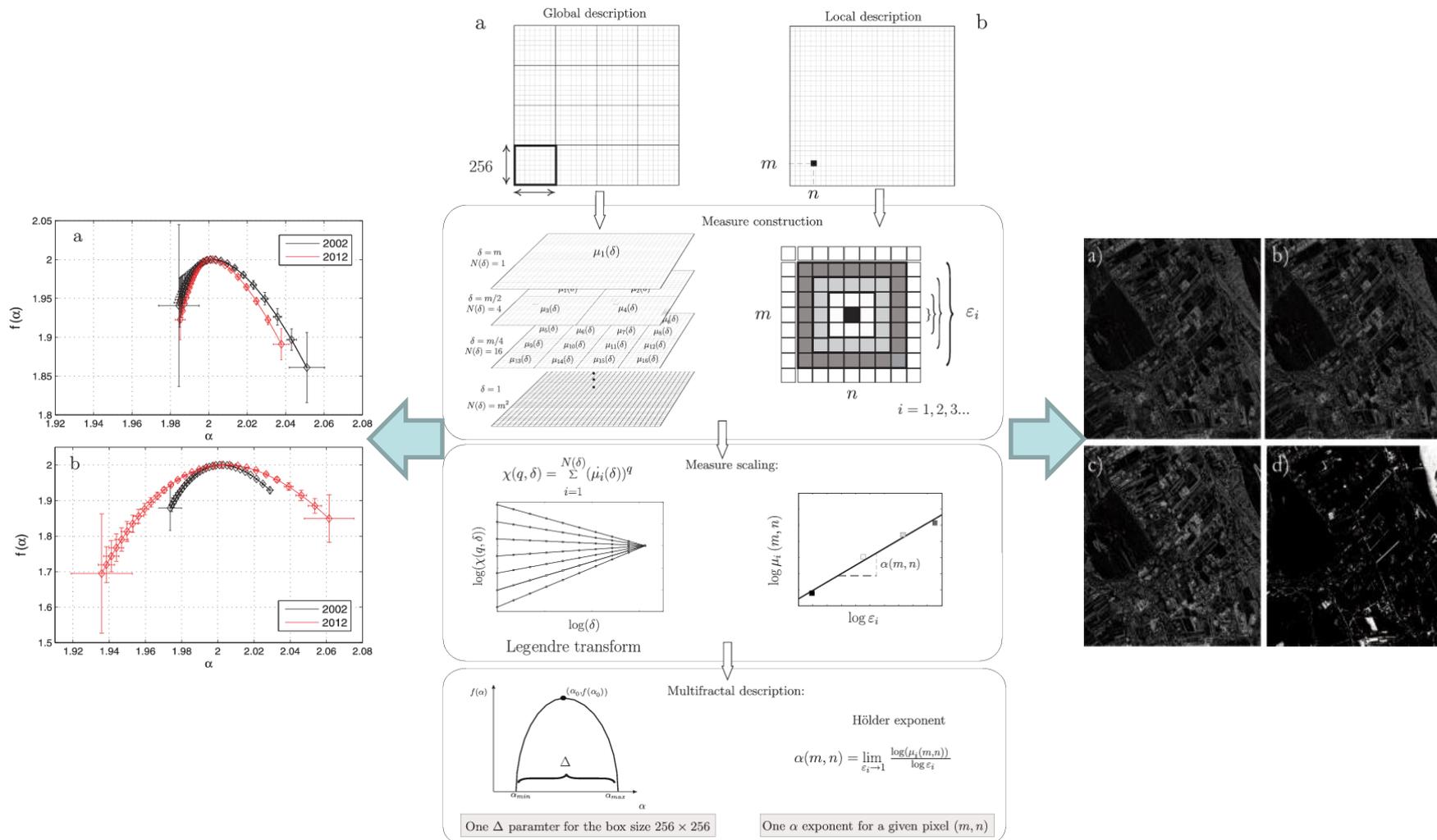

3rd step – minima detection

Object based change detection

- Change detection and change classification

- CHD algorithm used in the FP7 Geoland 2 project

Change detection using multifractals

Object based change detection

- Automatic detection of forest fires using Landsat and MODIS images