Thunderslide - from rainfall to preliminary landslide mapping:
an open data-oriented tool for local management authorities

Stefano Crema[1]*, Alessandro Sarretta[1], Giorgia Macchi[1], Velio Coviello[1],

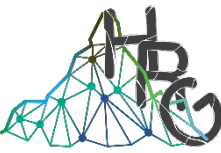Marco Borga[2], Francesco Marra[3], Lorenzo Marchi[1] and Marco Cavalli[1]

[1]Hydrogeomorphology Research Group, CNR-IRPI, Padova
[2]University of Padova
[3]CNR-ISAC, Bologna

*e-mail: *stefano.crema@irpi.cnr.it*

QUESTIONS

- Rainfall *(or other severe conditions)* -induced Landslides *("land cover changes")*

    - Can we improve bias in census?

    - Can we systematize it on a budget?

    - Can we provide a tool for management authorities?
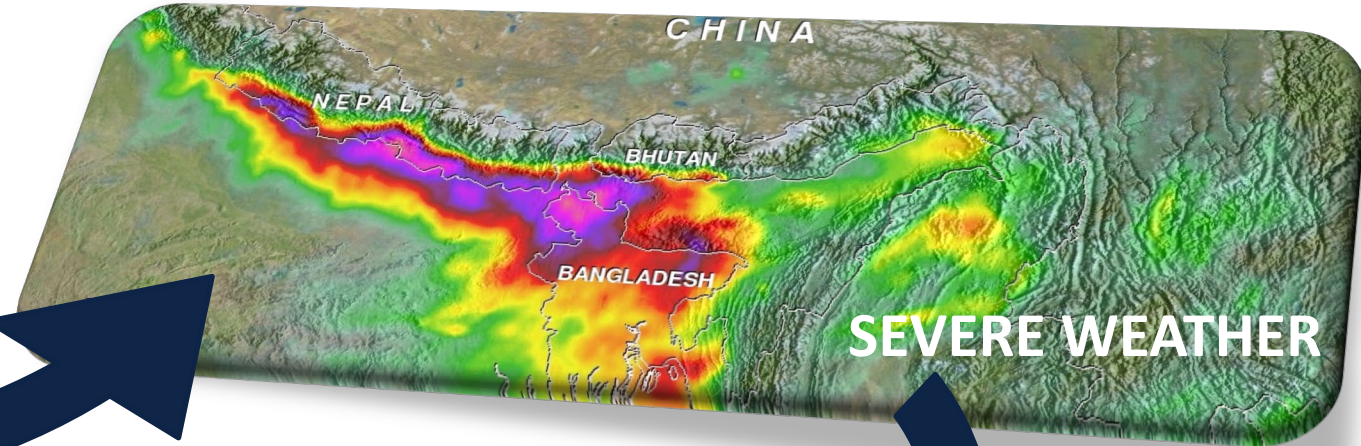
IDEA-WORKFLOW/1

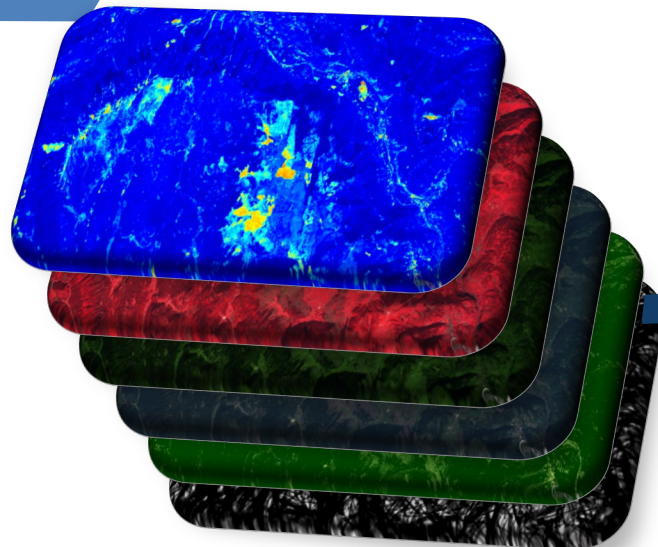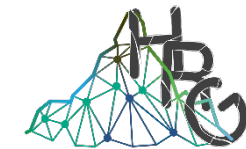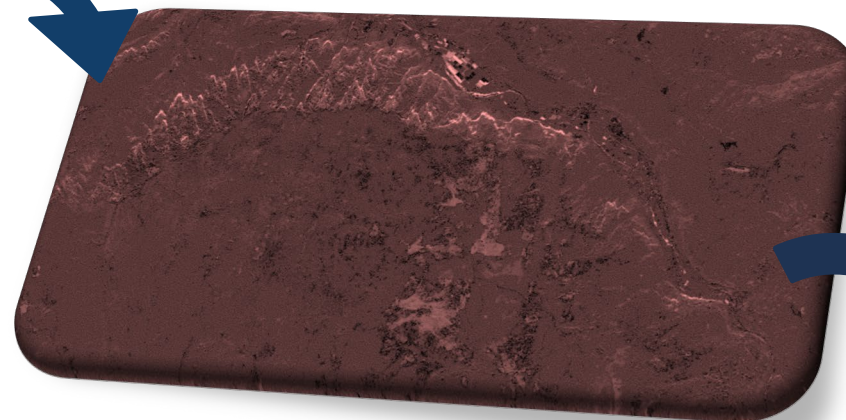AVAILABLE INPUTS
(Open) weather data

SEVERE WEATHER

IMAGE ANALYSIS

MASK

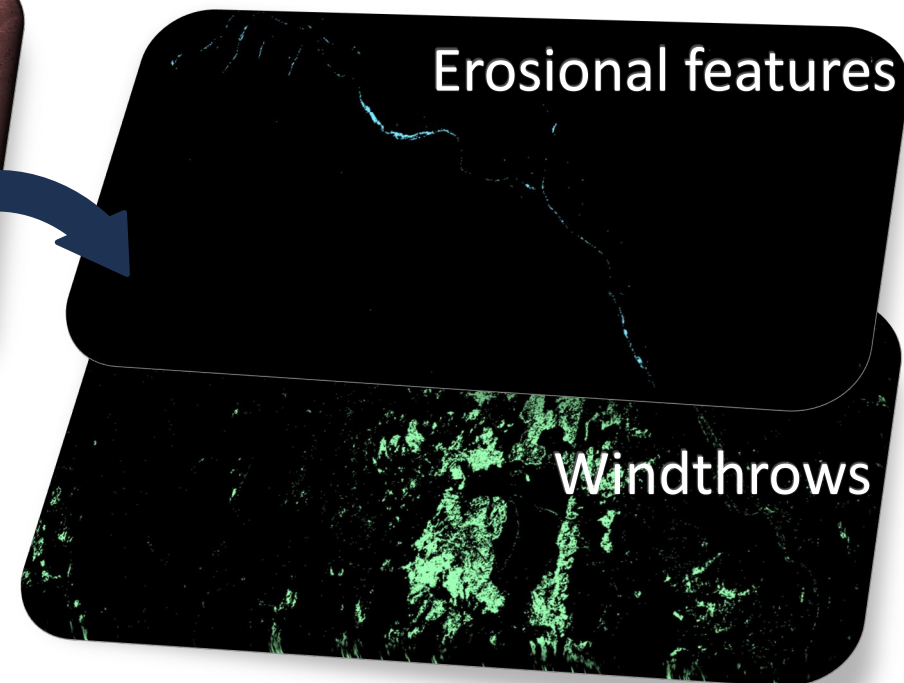Area shrinking to speed up the analyses

IDEA-WORKFLOW/2

«Quick and dirty» approach, with or without ad hoc software, for landscape management authorities

PRE-POST SENTINEL-2(1) MULTISPECTRAL IMAGES

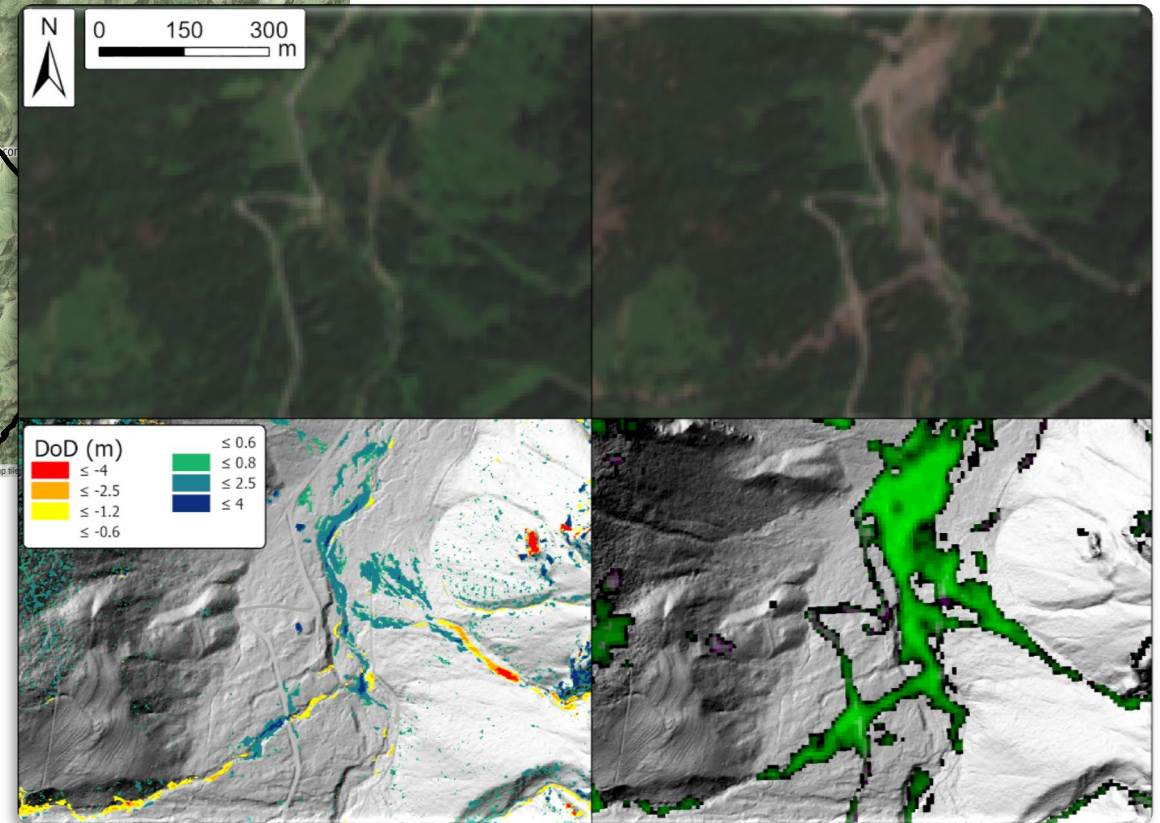CHANGE DETECTION

Erosional features

Windthrows

RAW CLASSIFICATION

SAMPLE APPLICATION
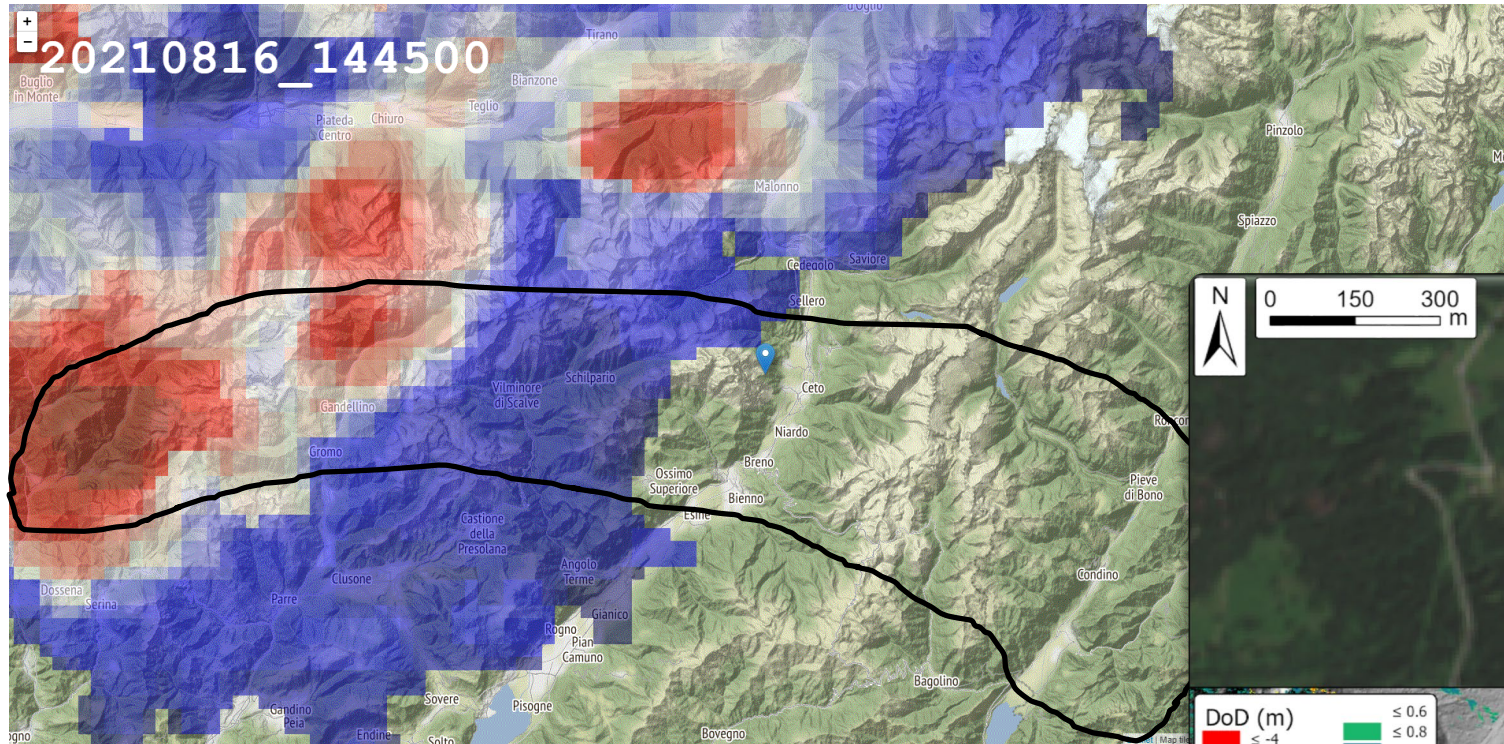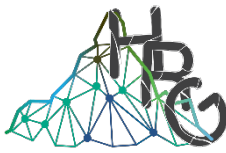
- Severe weather and event mask

- Change detection and DoD comparison

Thanks for your patience!