

Folder "PS_DS_RASTER_cellsize_100"

There are several subfolders with different rasters:

Subfolders:

- "DS_PS_ba_A146_cellsize_100" Processing for PS/DS with reference to Sentinel-1 constellation Ascending view, orbit no. 146 (AOI: Bari)
- "DS_PS_fg_A146_cellsize_100" Processing for PS/DS with reference to Sentinel-1 constellation Ascending view, orbit no. 146 (AOI: Gargano)
- "DS_PS_ba_D051_cellsize_100" Processing for PS/DS with reference to Sentinel-1 constellation Descending view, orbit no. 146 (AOI: Bari)
- "DS_PS_fg_D124_cellsize_100" Processing for PS/DS with reference to Sentinel-1 constellation Descending view, orbit no. 124 (AOI: Gargano)
- "DS_PS_fg_A_CSK_cellsize_100" Processing for PS/DS with reference to Cosmo Sky-Med (CSK) and Cosmo Sky-Med II Gen. (CSG) constellations Ascending view (AOI: Gargano)

Rasters:

Raster file name	Unit of measurement	Meaning
ACL_LOS	mm/year ²	Average of PS/DS falling within the generic 100m resolution cell of the estimated acceleration value measured over the entire PS/DS displacement series. The estimate is projected along the satellite's line of sight (LOS = Line of Sight).
VR_L_LIN	mm/year	Average of displacement velocities of PS/DS falling within the generic 100m resolution cell relating to the most recent acquisition period of the original time series (and projected along the LOS). Note: if there are fewer than 10 images, the period considered is extended to include at least 10 images.
VELR_L_M	mm/year	Average of displacement velocities of PS/DS falling within the generic 100m resolution cell relating to the most recent acquisition period of the time series along the LOS cleared of the seasonal component of movement (if there are fewer than 10 images, the period considered is extended to include at least 10 images).
VELF_L_M	mm/year	Average of displacement velocities of PS/DS falling within the generic 100m resolution cell relating to the first acquisition period of the time series along the LOS cleared of the seasonal component of movement (if there are fewer than 10 images, the period considered is extended to include at least 10 images).

Folder "FuzEn_PolSel_cellsize_100"

Contains two subfolders, FuzEn and PolSel. In each subfolder, divided by territory (bari and fg=Gargano), view (ASC and DESC), orbit number, the following rasters are present.

FuzEn Rasters:

Raster file name	Unit of measurement	Meaning
FuzEn_Min	dimensionless	Minimum value of Fuzzy Entropy (FuzEn) in the time series of displacements of PS and DS present in the generic 100m resolution cell, calculated through the entropy variation as average correlation between subsegments of length m and m+1. FuzEn indicates the degree of regularity, or smoothness, of the series, useful for identifying anomalous behaviors without predefined models.
FuzEn_Max	dimensionless	Maximum value of Fuzzy Entropy (FuzEn) in the time series of displacements of PS and DS present in the generic 100m resolution cell, calculated through the entropy variation as average correlation between subsegments of length m and m+1. FuzEn indicates the degree of regularity, or smoothness, of the series, useful for identifying anomalous behaviors without predefined models.

PolSel Rasters:

Raster file name	Unit of measurement	Meaning
PolSel_min	dimensionless	Minimum value of the minimum degree of polynomial fit necessary to describe a time series of displacements of PS and DS present in the generic 100m resolution cell. It is identified through a statistical test (based on Fisher distribution) that compares the residuals of the fit at increasing degrees. This value corresponds to the lowest degree of the polynomial that significantly explains the dynamics of the series, useful for detecting non-linear trends and identifying targets with significant accelerations, as in the case of reactivated landslides.
PolSel_max	dimensionless	Maximum value of the minimum degree of polynomial fit necessary to describe a time series of displacements of PS and DS present in the generic 100m resolution cell. It is identified through a statistical test (based on Fisher distribution) that compares the residuals of the fit at increasing degrees. This value corresponds to the lowest degree of the polynomial that significantly explains the dynamics of the series, useful for detecting non-linear trends and identifying targets with significant accelerations, as in the case of reactivated landslides.

Folder "ORTHO_cellsize_100"

There are subfolders by territory (ba=Bari and fg=Gargano) and by component (E=East and V=Vertical)

Raster file name	Unit of measurement	Meaning
E_acc	mm/year ²	Average of the horizontal component (East-West) of the estimated acceleration value measured over the entire displacement series obtained by integrating the Ascending and Descending views of Sentinel-1 (S1).
V_acc	mm/year ²	Average of the vertical component (Up-Down) of the estimated acceleration value measured over the entire displacement series obtained by integrating the Ascending and Descending views of Sentinel-1 (S1).

Additionally, there are two files divided by territory (Bari and Gargano):

Raster file name	Unit of measurement	Meaning
E_V_Acc	mm/year ²	Average of the combination of vertical (Up-Down) and horizontal (East-West) components of the estimated acceleration value measured over the entire displacement series obtained by integrating the Ascending and Descending views of Sentinel-1 (S1).