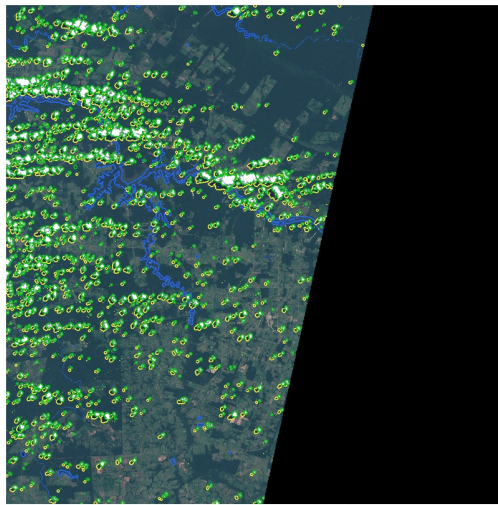


Supplemental material for:
**Validation of Copernicus Sentinel-2 cloud masks obtained from MAJA,
Sen2Cor and FMask processors using reference cloud masks gener-
ated with a supervised active learning procedure**
L.Baetens, C. Desjardins, O. Hagolle

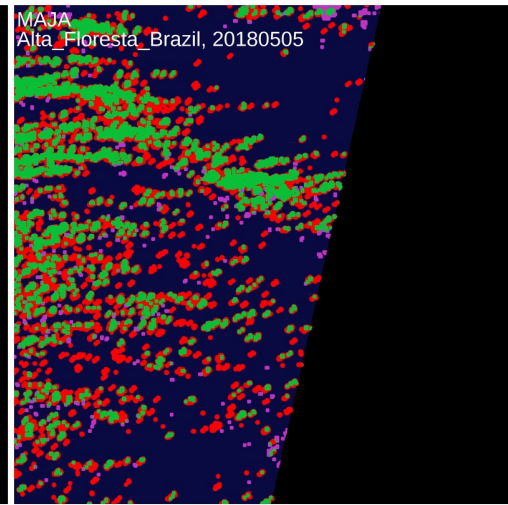
The following pages provide a comparison of the masks provided by MAJA, FMask and Sen2cor to the reference image provided by the ALCD method. For each page, the top left image shows a red, green, blue composite image from Sentinel-2 Level 1C product, on which *clouds* are outlined in green, *cloud shadows* in yellow, *water* in blue and *snow* in purple.

The 3 other images in each page show the comparison of each processor to ALCD reference masks (top-right, MAJA, bottom-left, FMask, and bottom-right, Sen2Cor). Green colour corresponds to true positive, deep blue to true negative, red colour to false negative and purple to false positive. The site, tilename and date are provided under each top-left image.

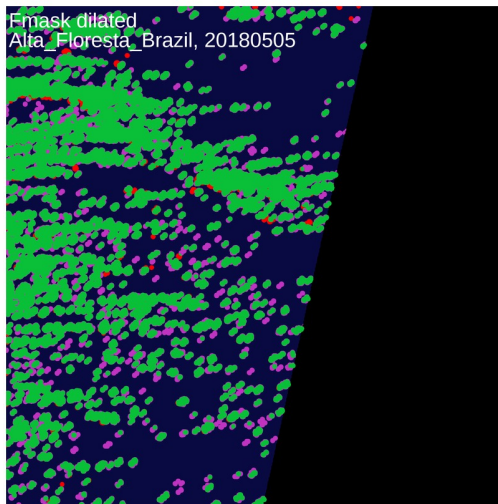
In each figure, the dates are expressed using format YYYYMMDD.



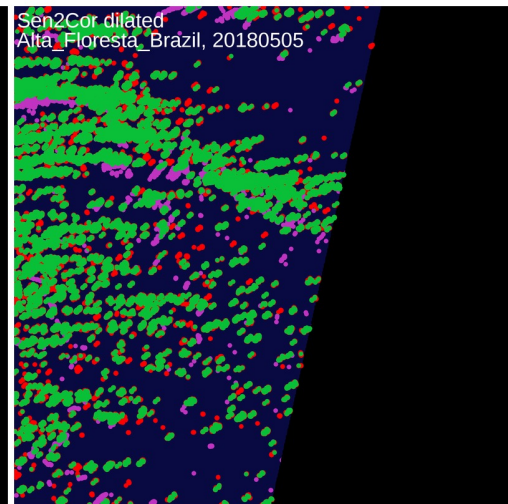
Alta_Floresta_Brazil_21LWK_20180505



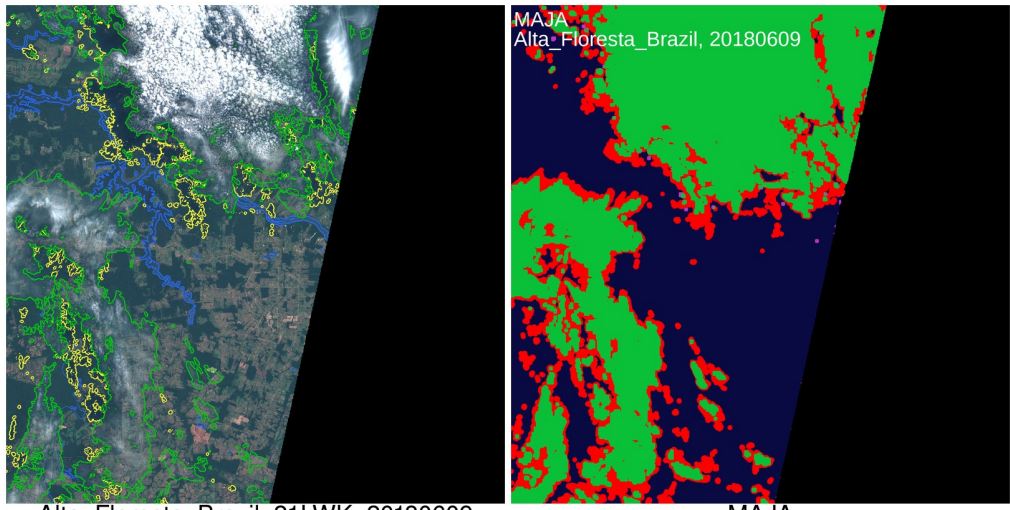
MAJA



FMask

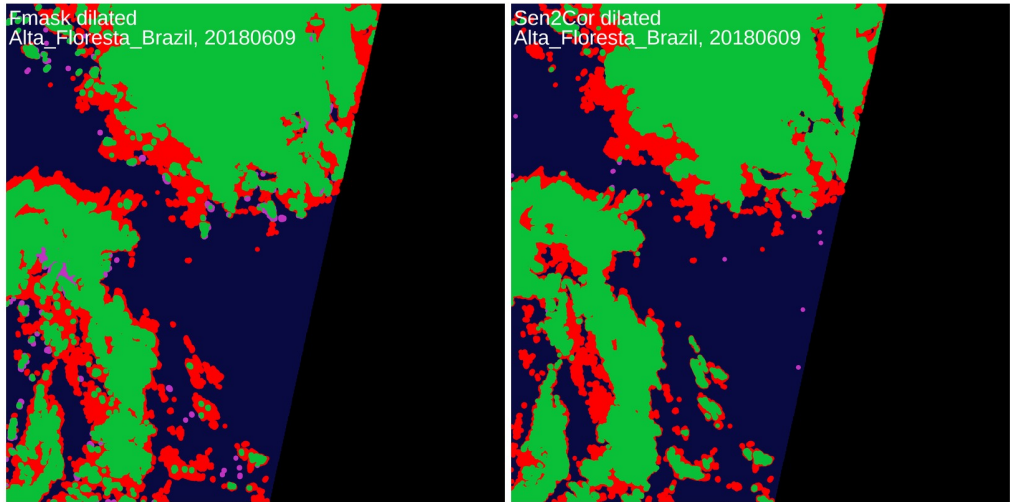


Sen2cor



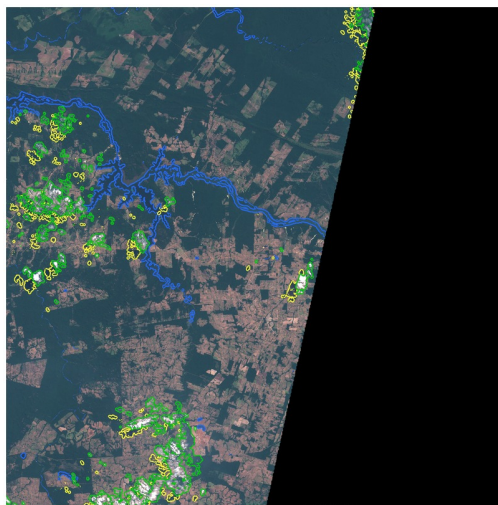
Alta_Floresta_Brazil_21LWK_20180609

MAJA

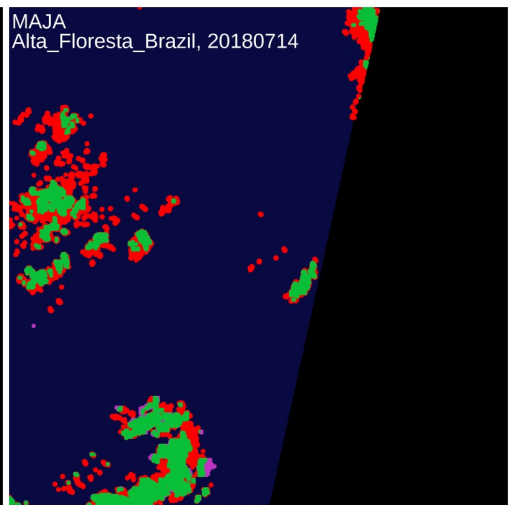


FMask

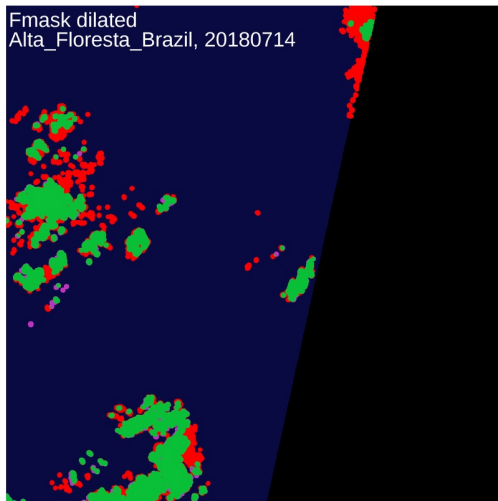
Sen2cor



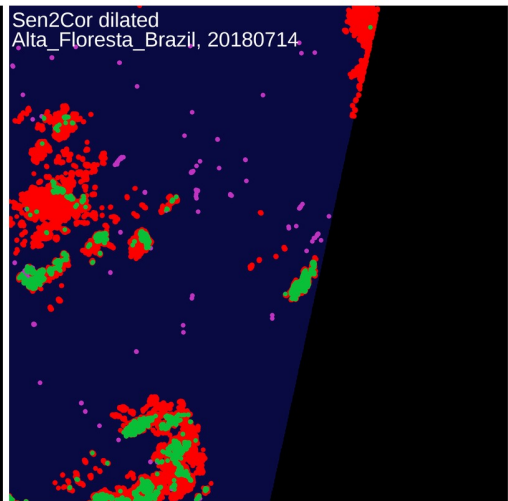
Alta_Floresta_Brazil_21LWK_20180714



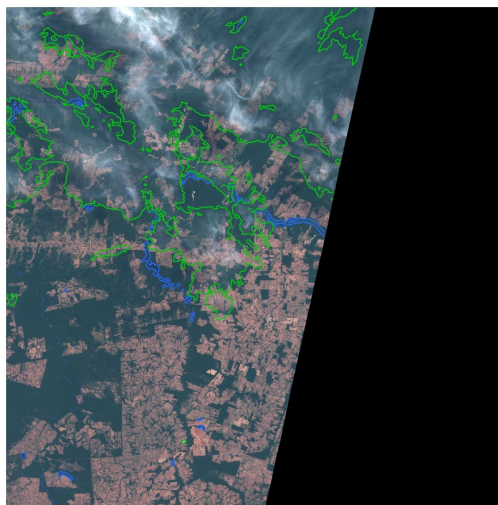
MAJA



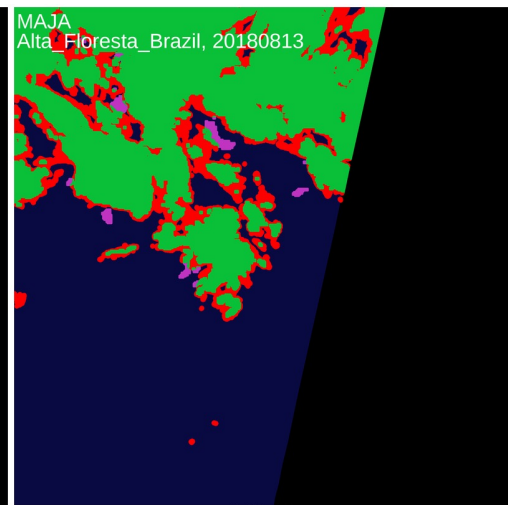
FMask



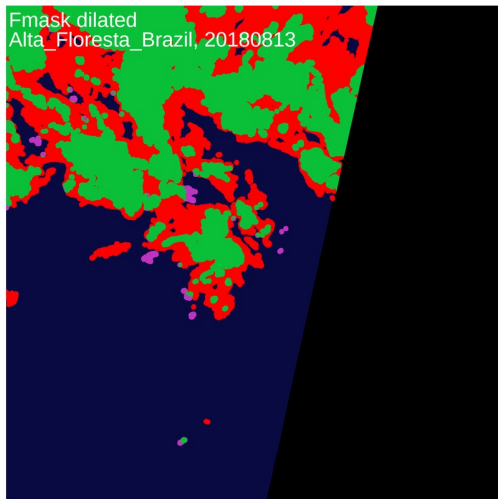
Sen2cor



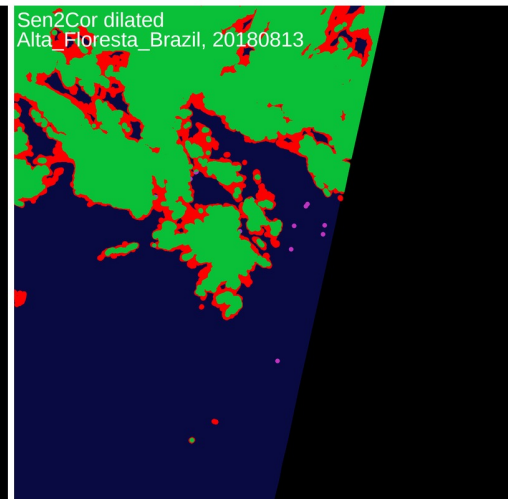
Alta_Floresta_Brazil_21LWK_20180813



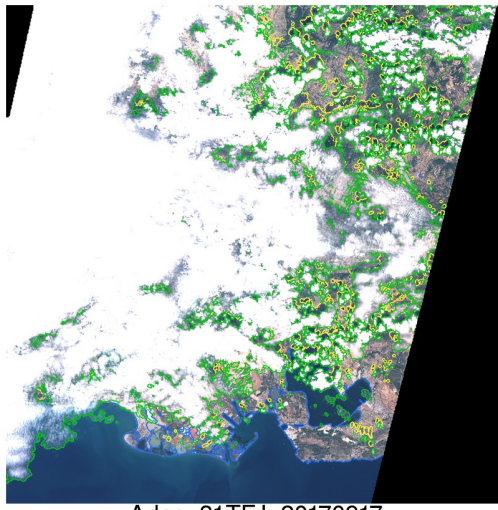
MAJA



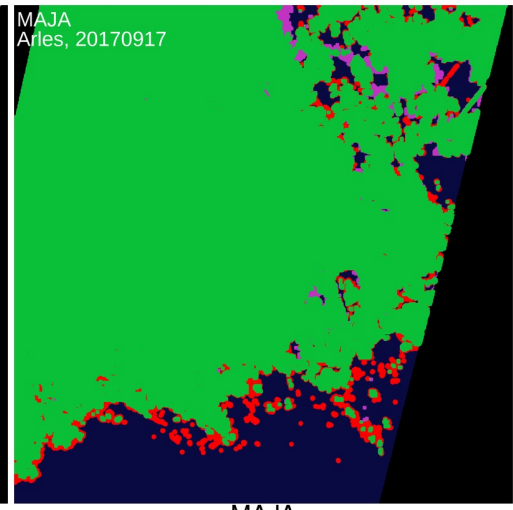
FMask



Sen2cor

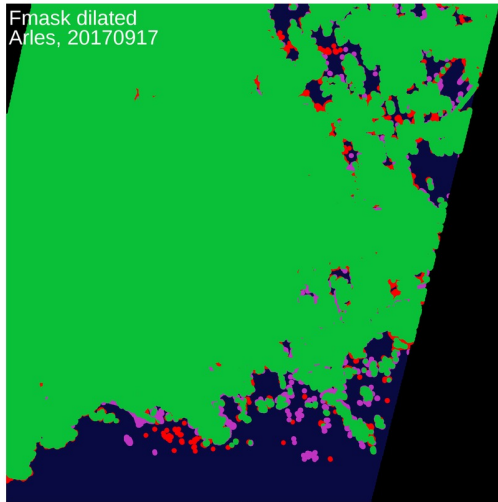


Arles_31TFJ_20170917



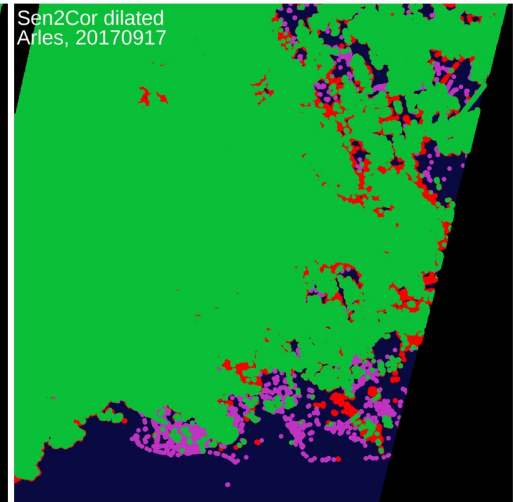
MAJA
Arles, 20170917

MAJA



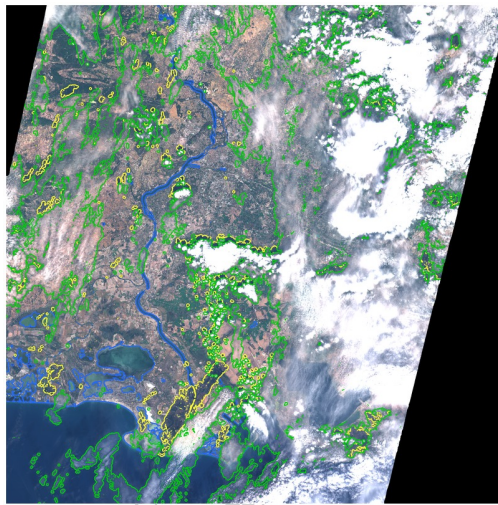
Fmask dilated
Arles, 20170917

FMask

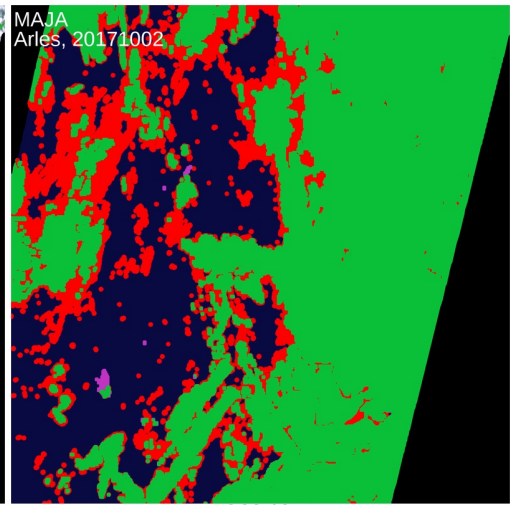


Sen2Cor dilated
Arles, 20170917

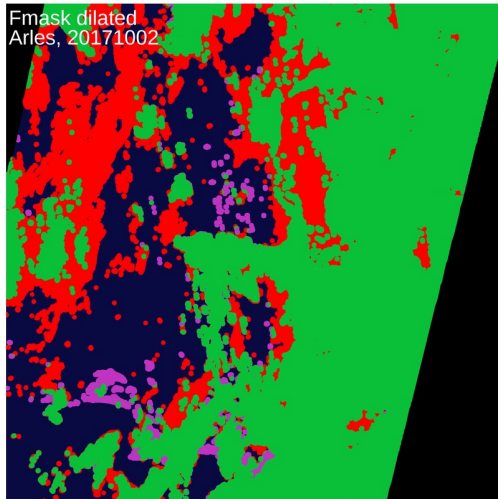
Sen2cor



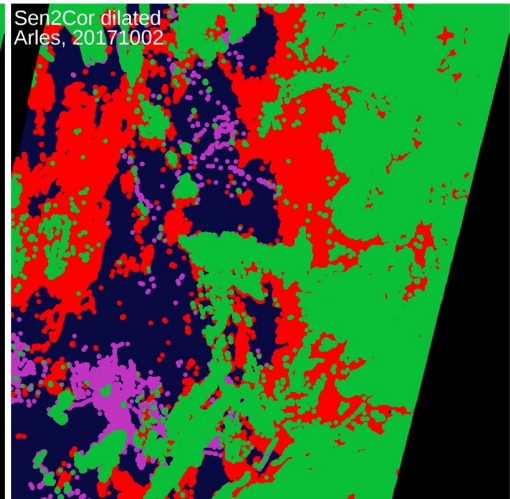
Arles_31TFJ_20171002



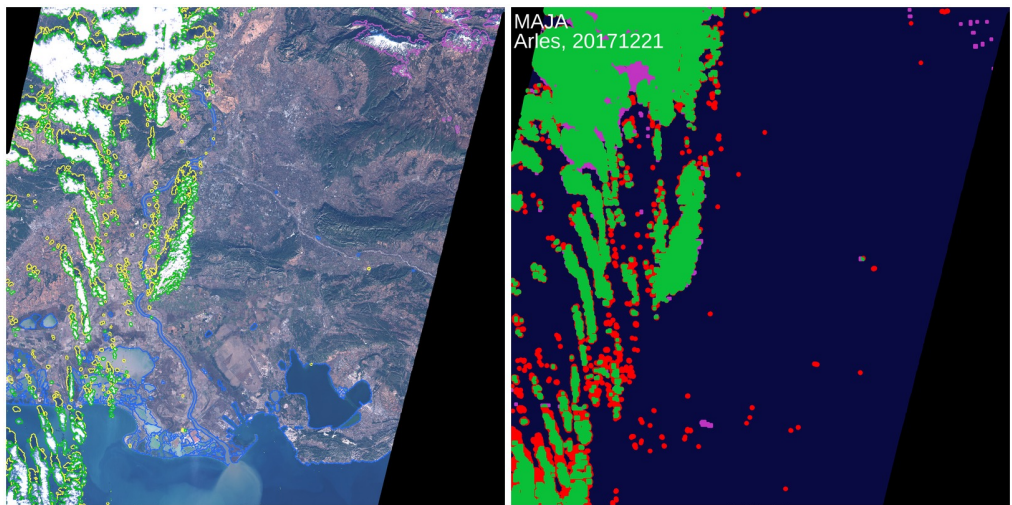
MAJA



FMask

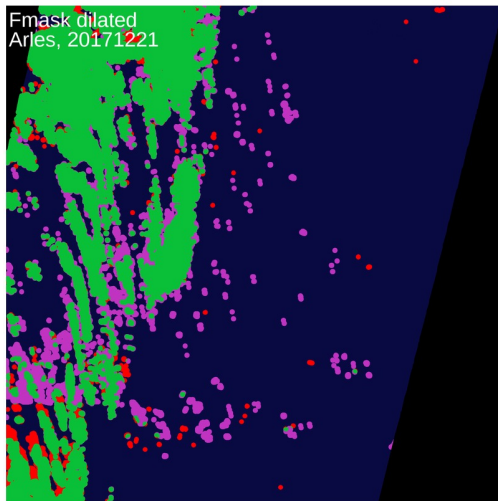


Sen2cor



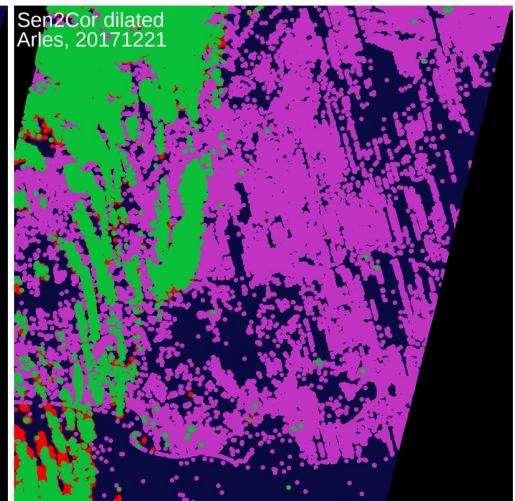
Arles_31TFJ_20171221

MAJA



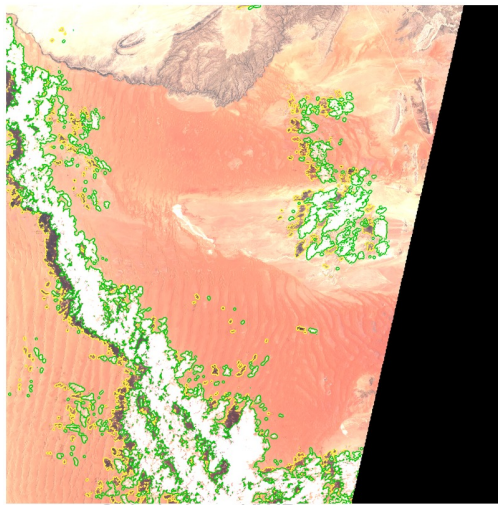
Fmask dilated
Arles, 20171221

FMask

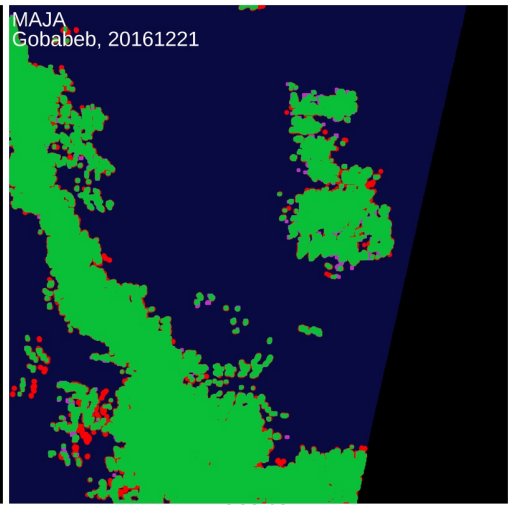


Sen2Cor dilated
Arles, 20171221

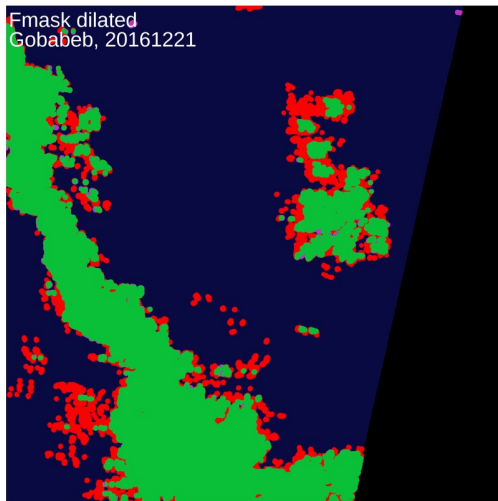
Sen2cor



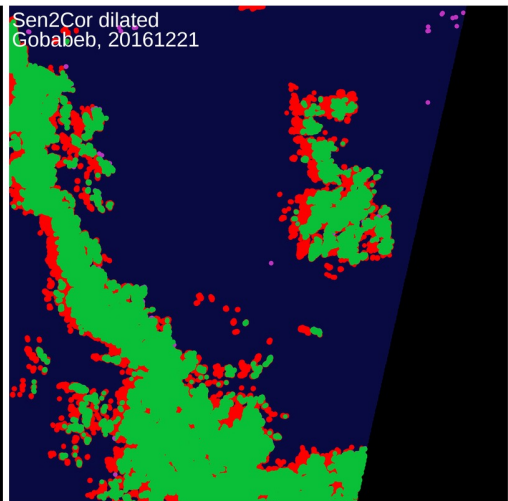
Gobabeb_33KWP_20161221



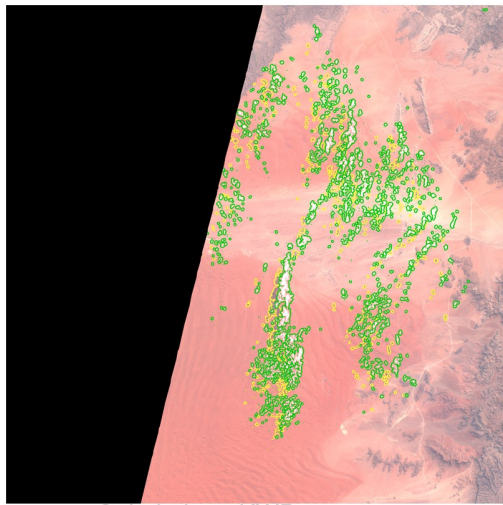
MAJA



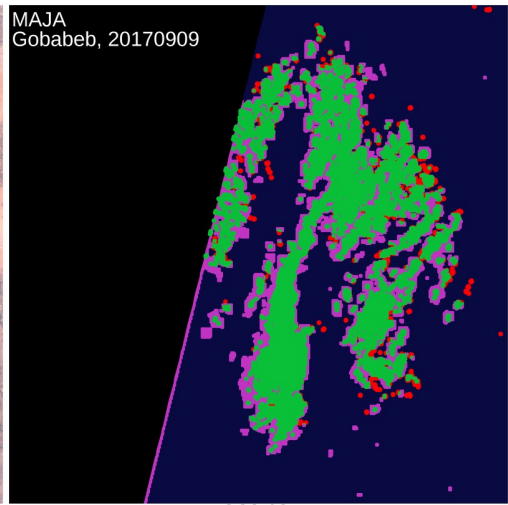
FMask



Sen2cor

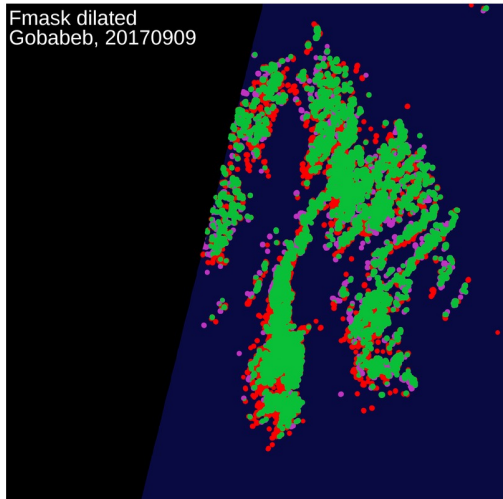


Gobabeb_33KWP_20170909



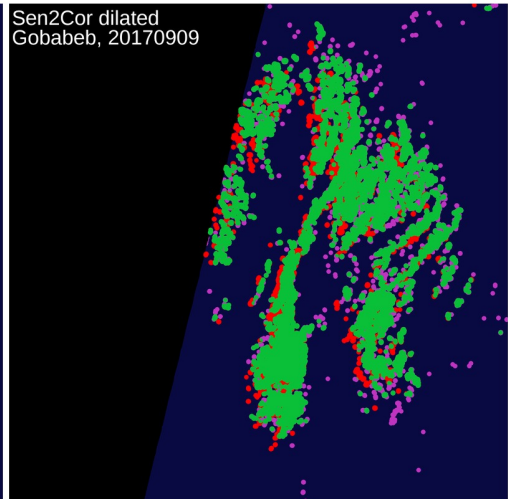
MAJA
Gobabeb, 20170909

MAJA



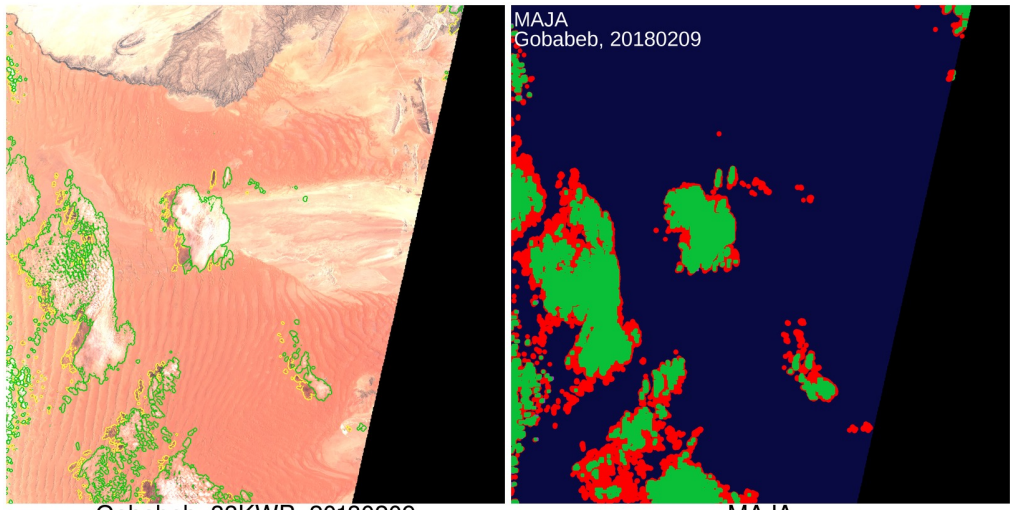
Fmask dilated
Gobabeb, 20170909

FMask



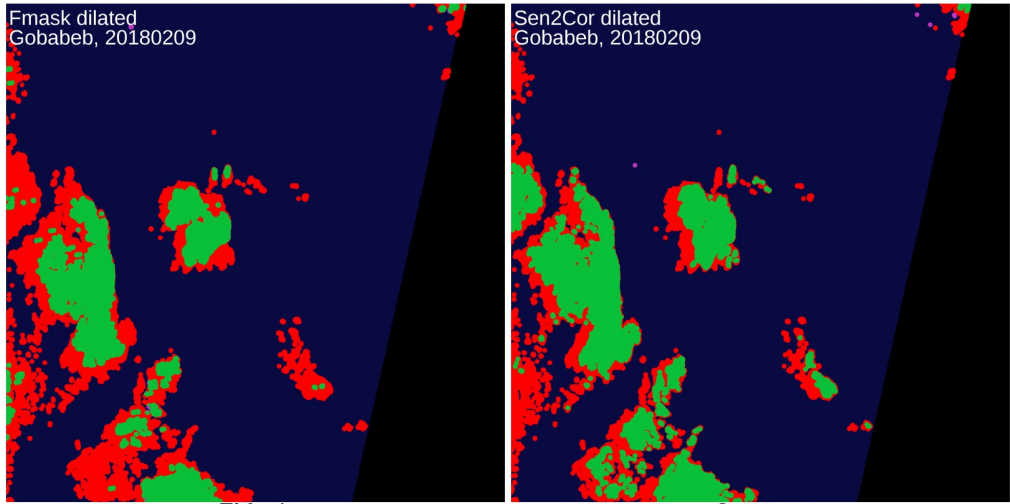
Sen2Cor dilated
Gobabeb, 20170909

Sen2cor



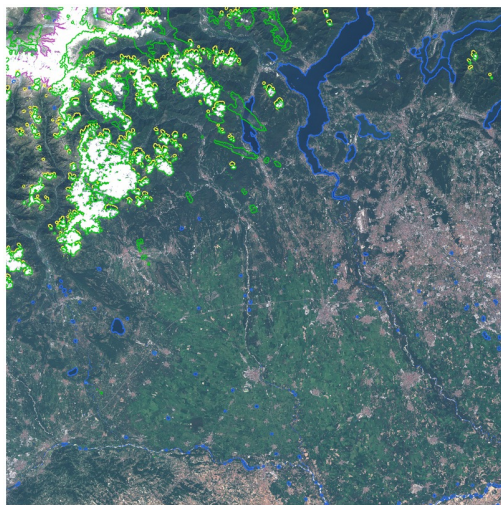
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MAJA

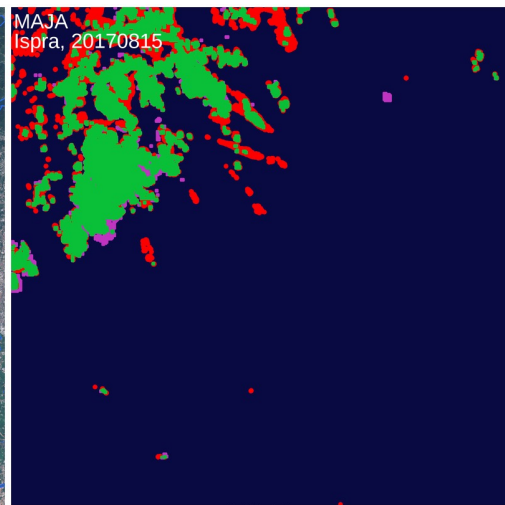


FMask

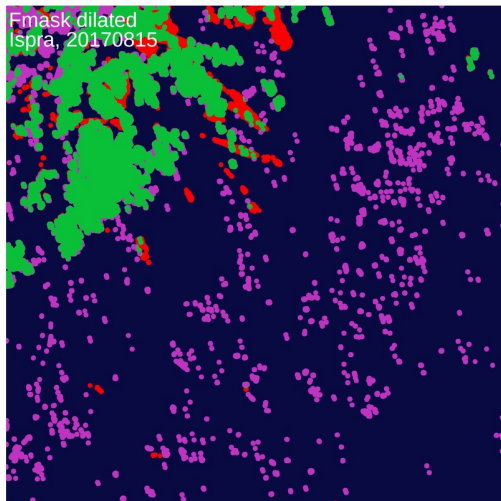
Sen2cor



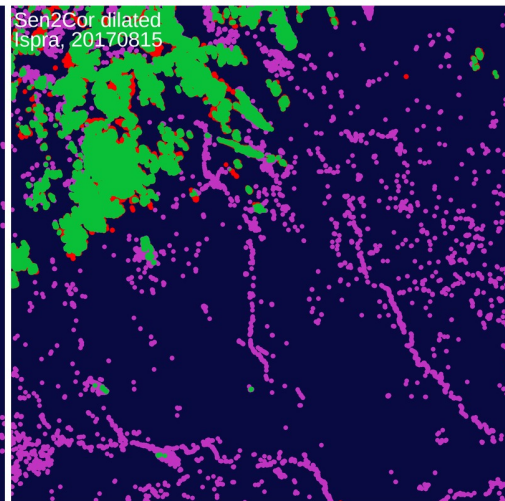
Ispra_32TMR_20170815



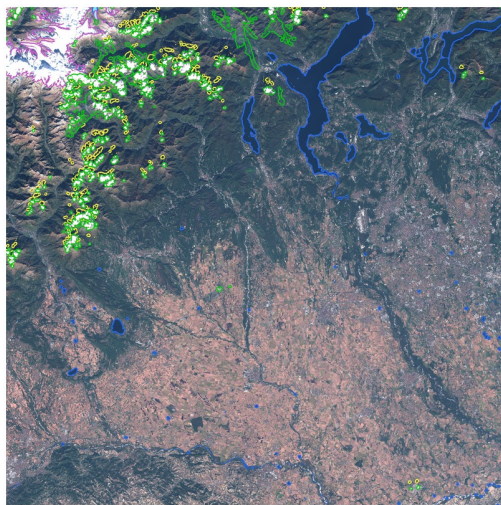
MAJA



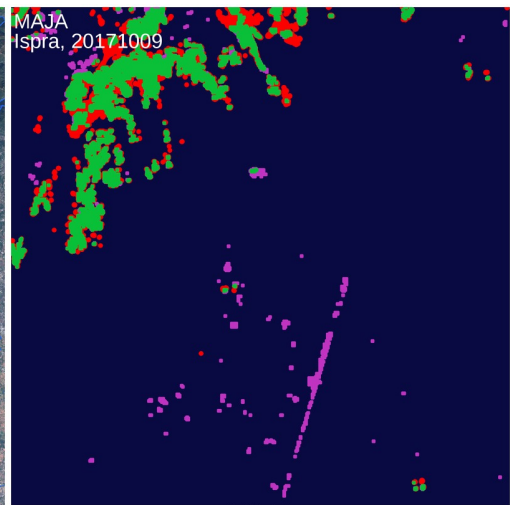
FMask



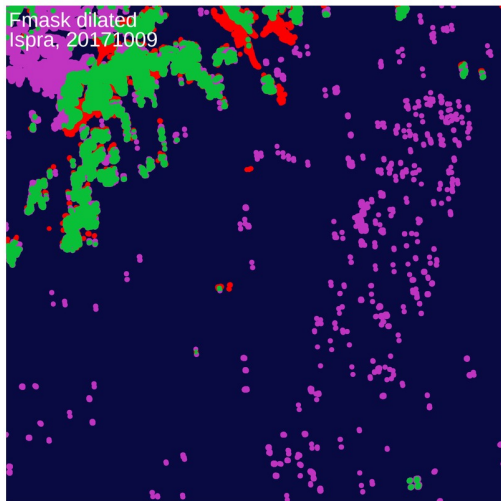
Sen2cor



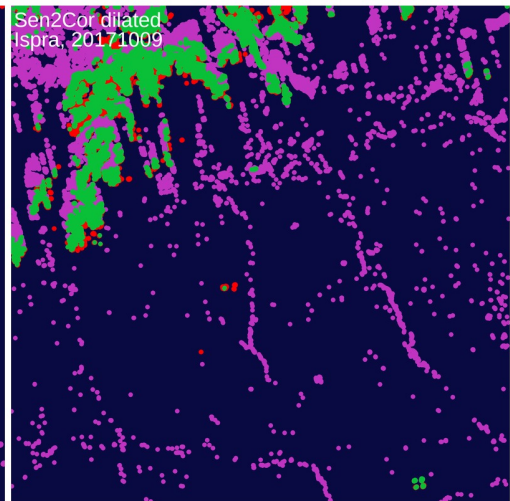
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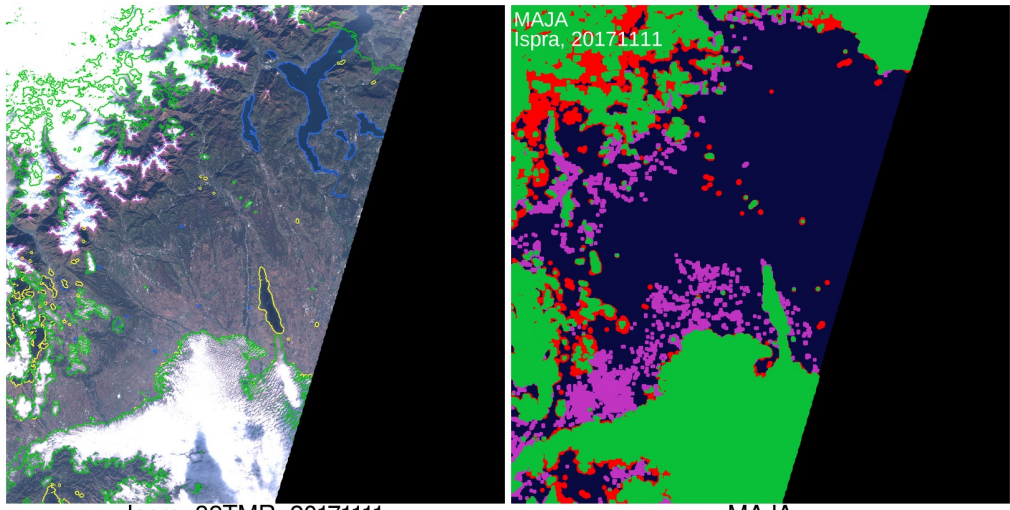
MAJA



FMask

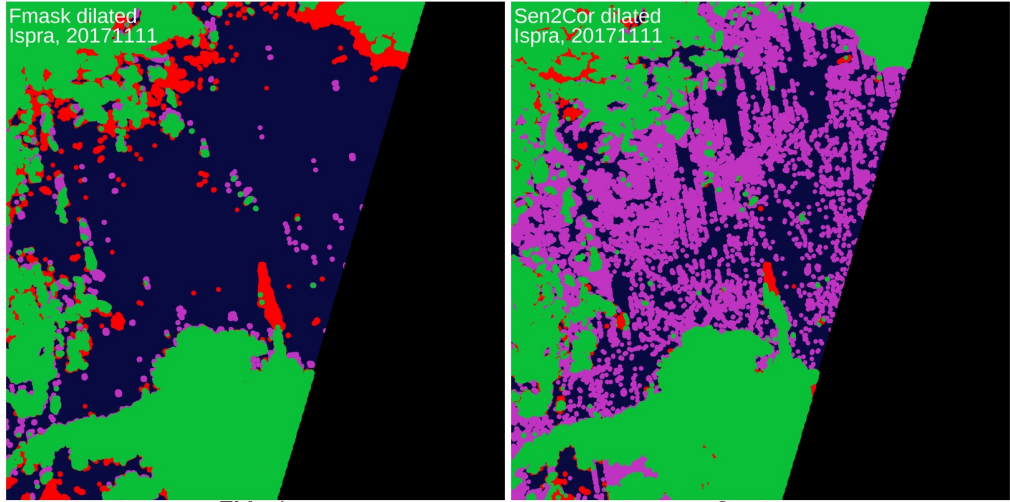


Sen2cor



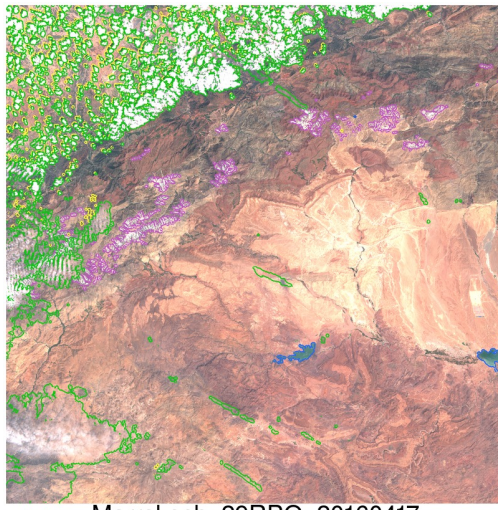
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MAJA

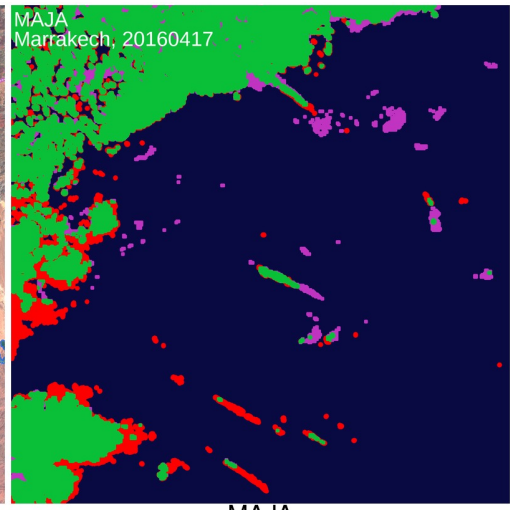


FMask

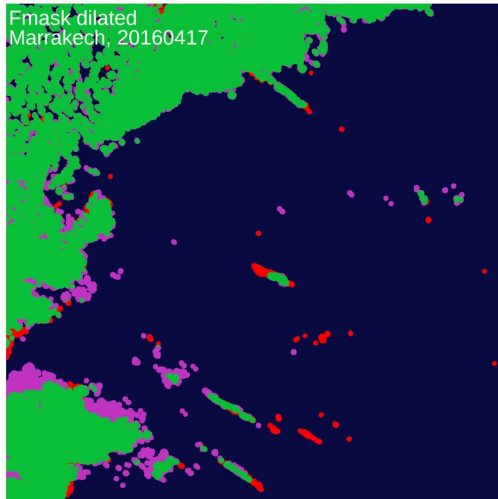
Sen2cor



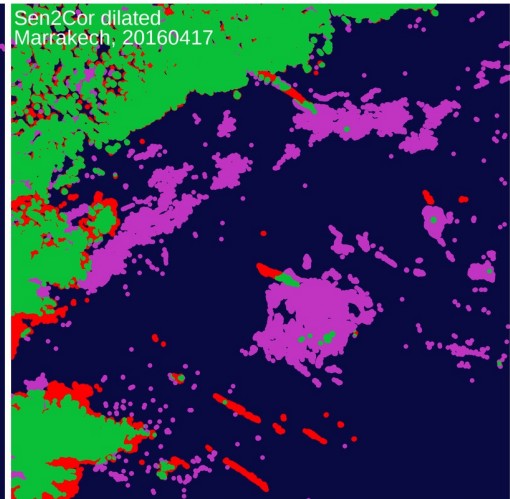
Marrakech_29RPQ_20160417



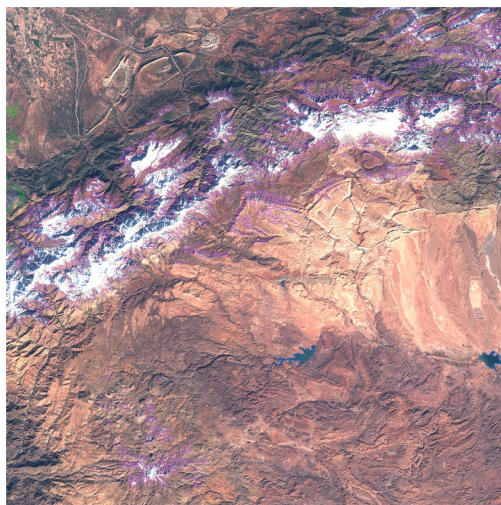
MAJA



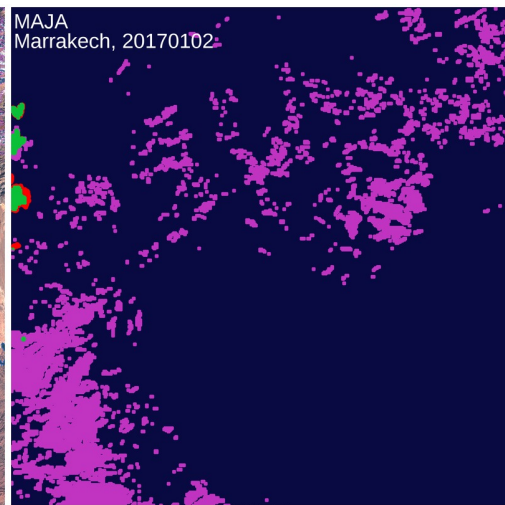
FMask



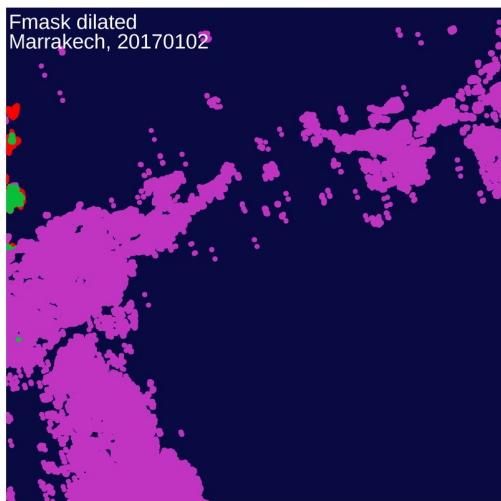
Sen2cor



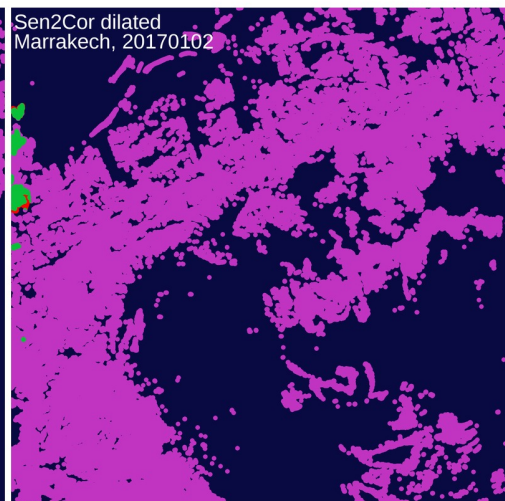
Marrakech_29RPQ_20170102



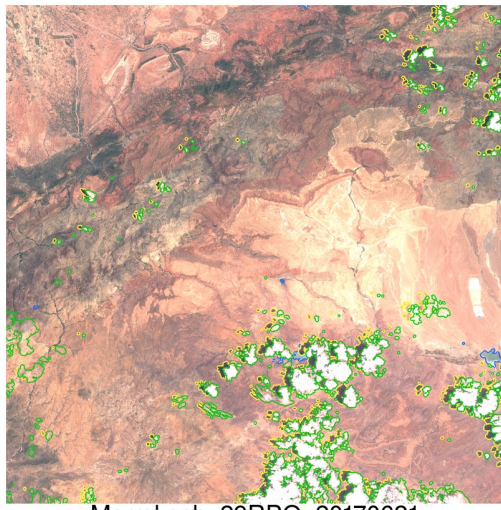
MAJA



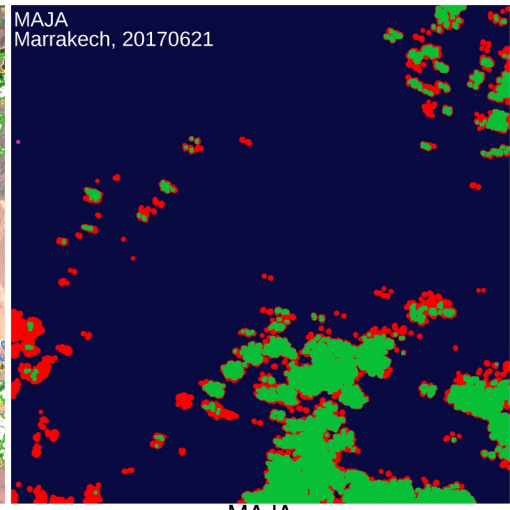
FMask



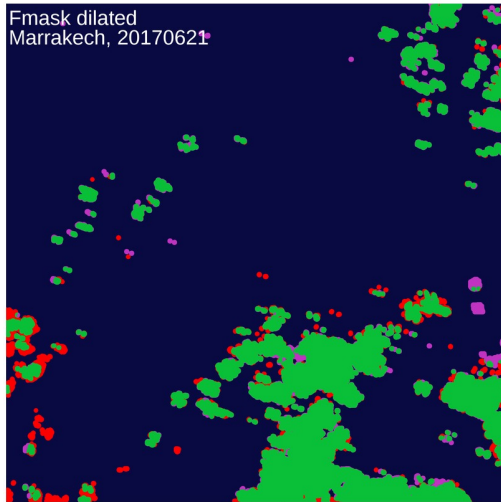
Sen2cor



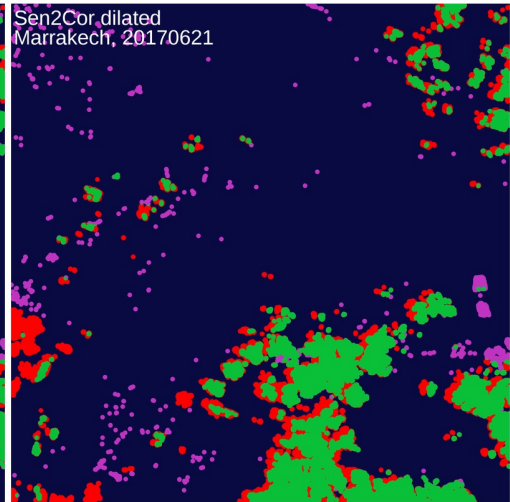
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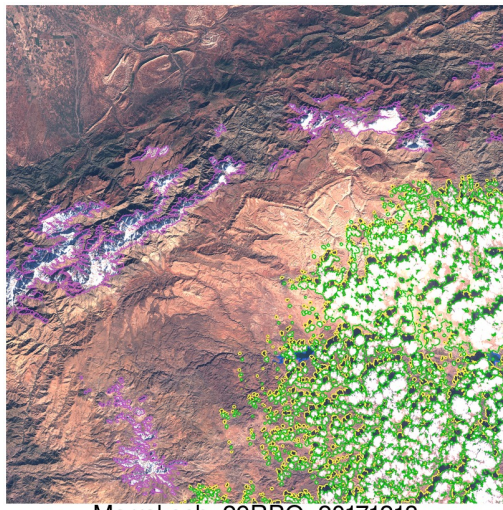
MAJA



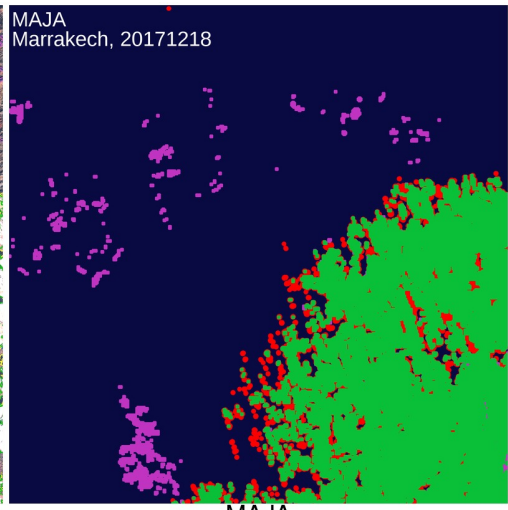
FMask



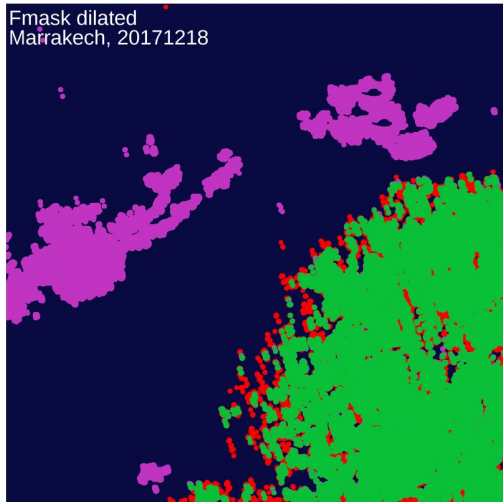
Sen2cor



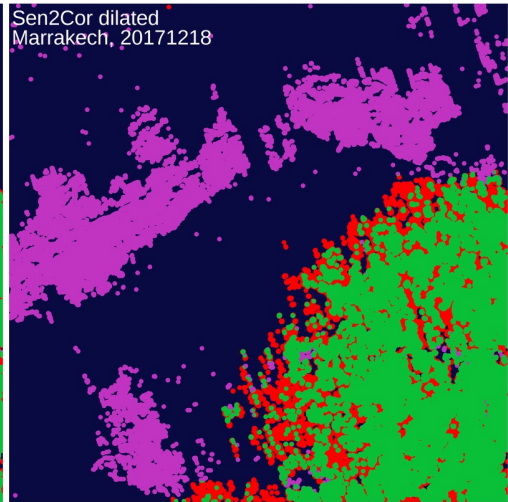
Marrakech_29RPQ_20171218



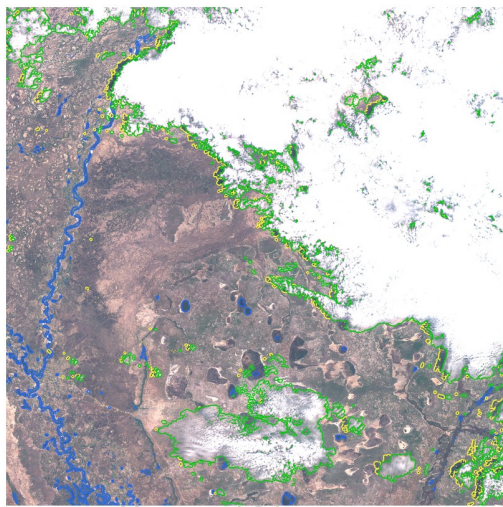
MAJA



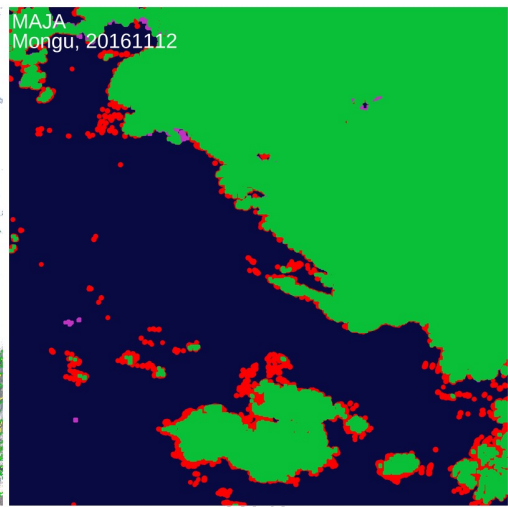
FMask



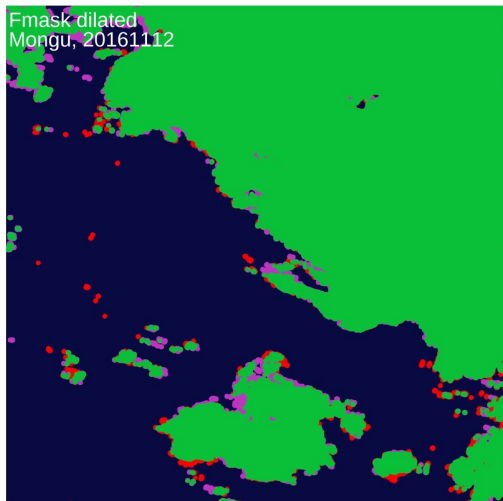
Sen2cor



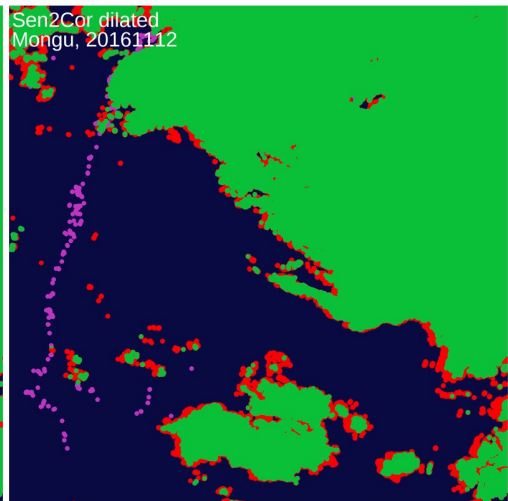
Mongu_34LGJ_20161112



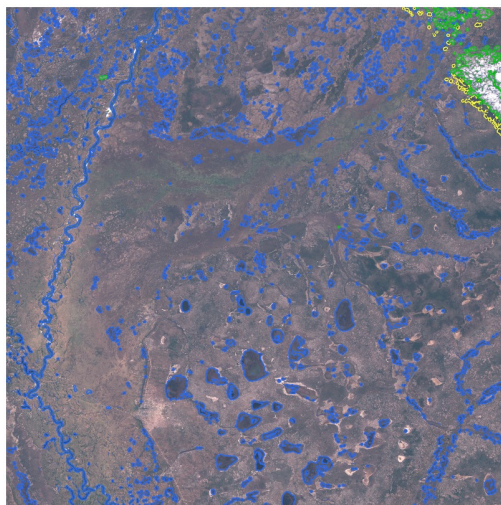
MAJA



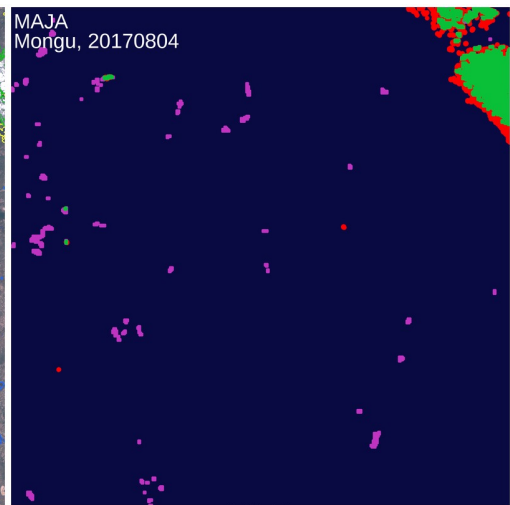
FMask



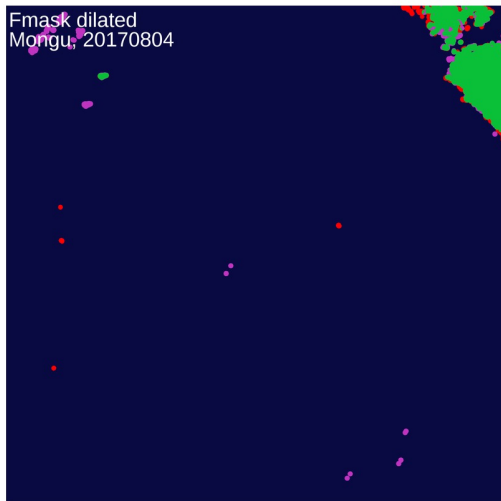
Sen2cor



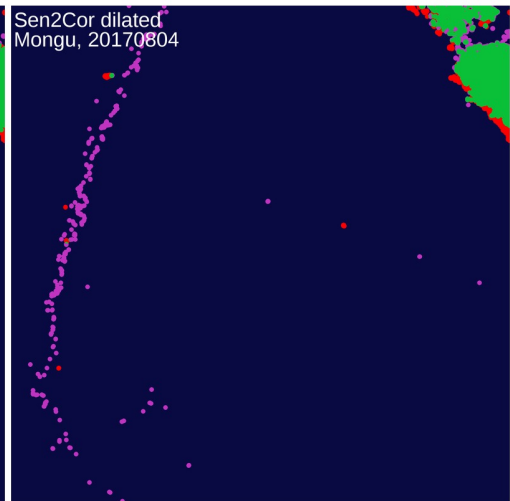
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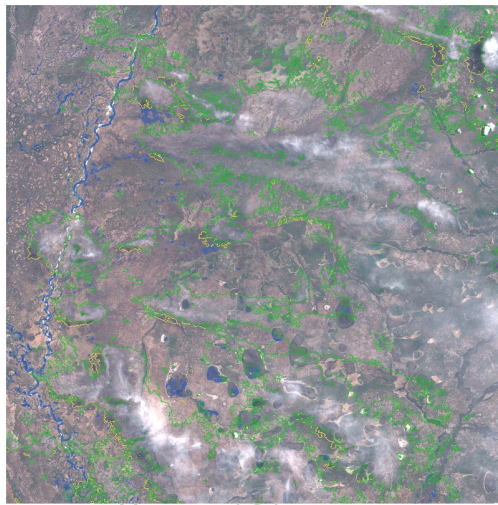
MAJA



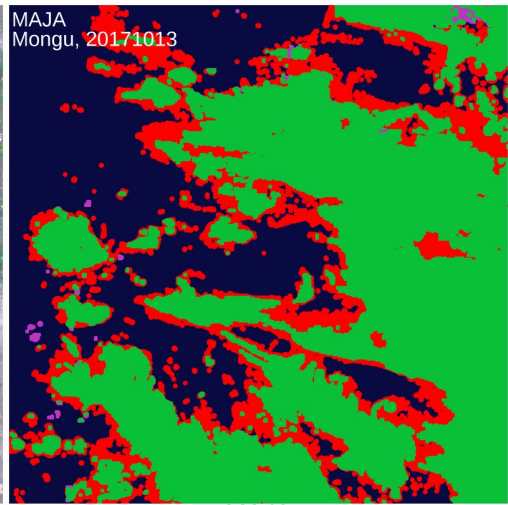
FMask



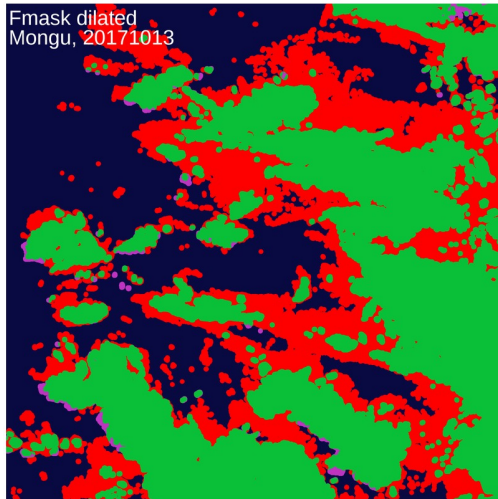
Sen2cor



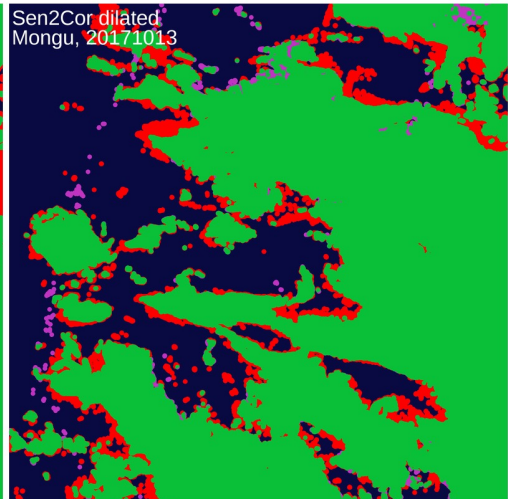
Mongu_34LGJ_20171013



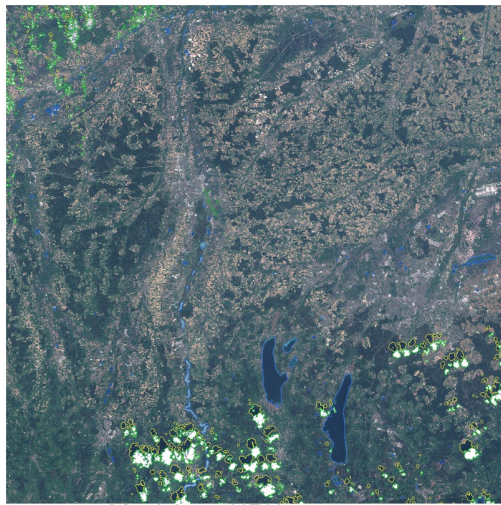
MAJA



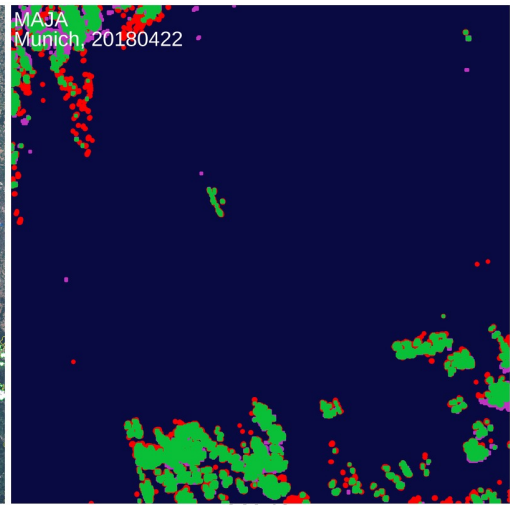
FMask



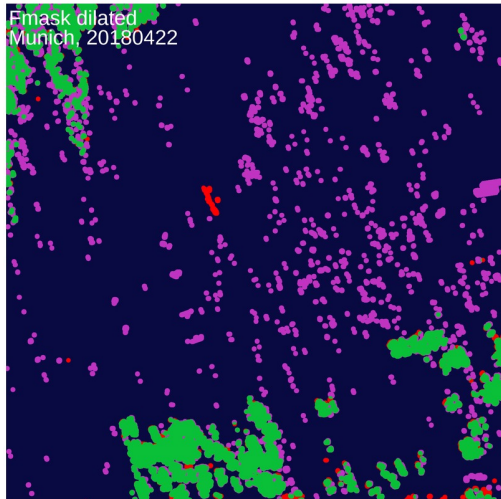
Sen2cor



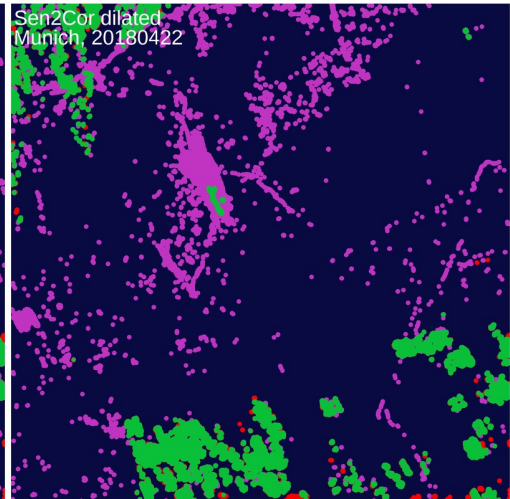
Munich_32UPU_20180422



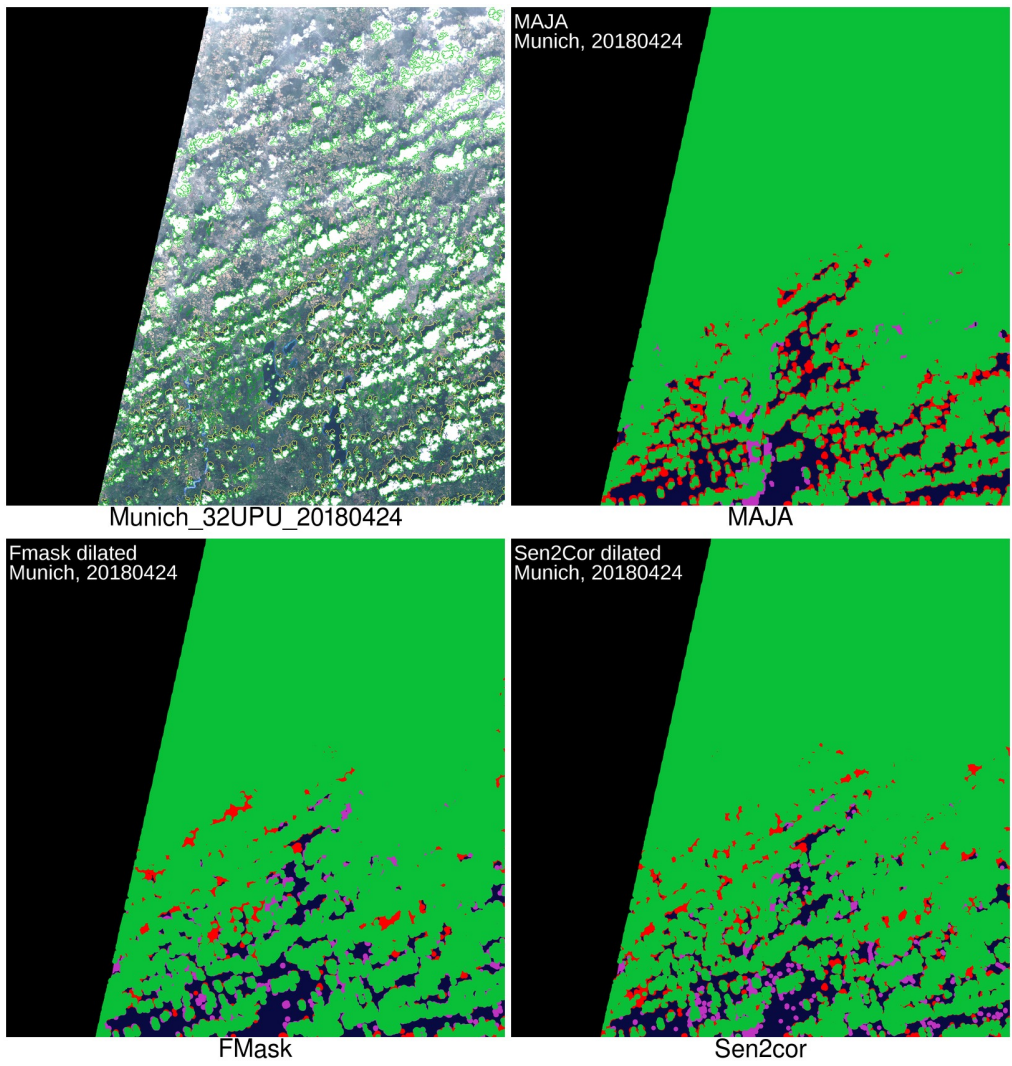
MAJA

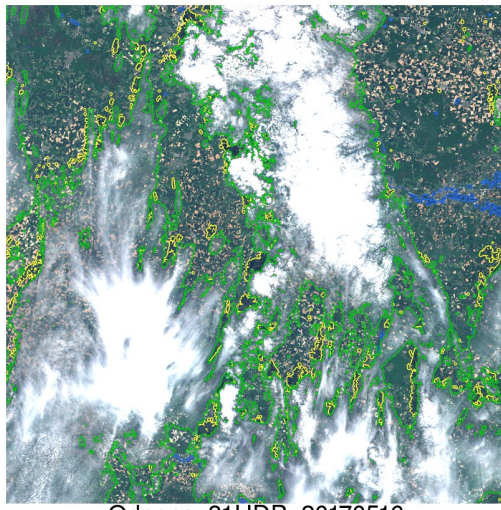


FMask

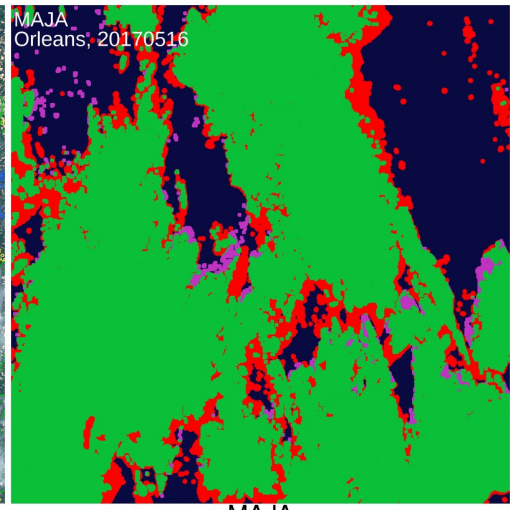


Sen2cor

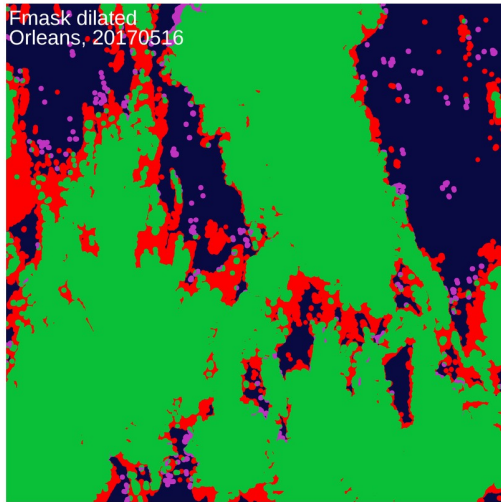




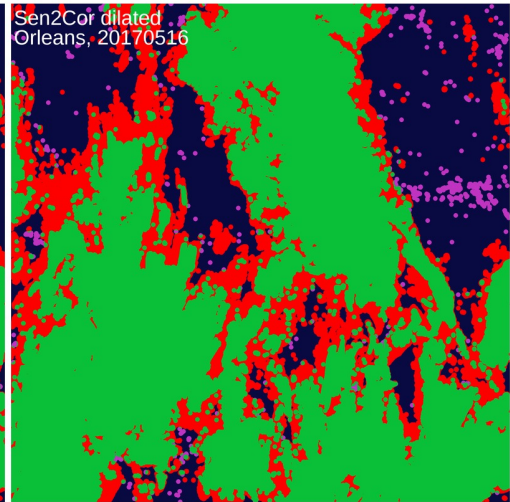
Orleans_31UDP_20170516



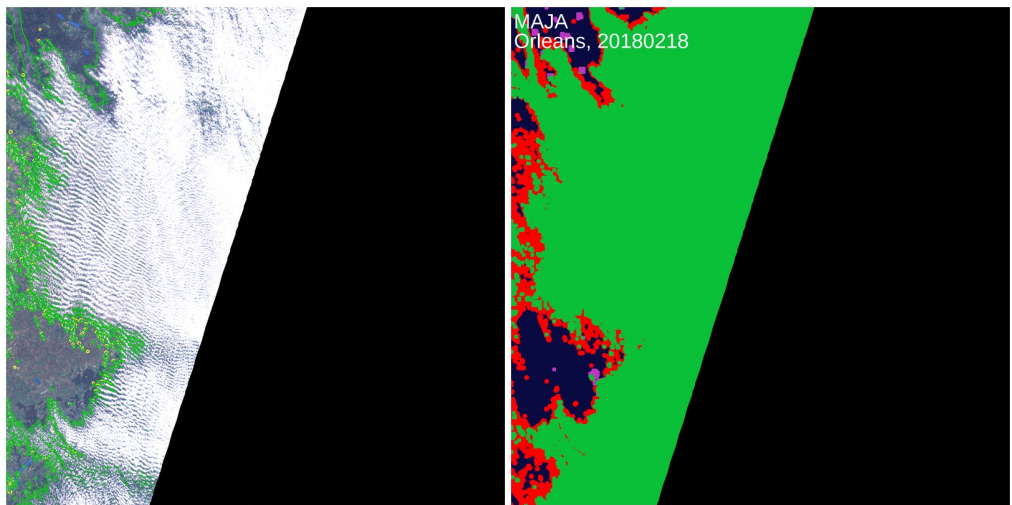
MAJA



FMask

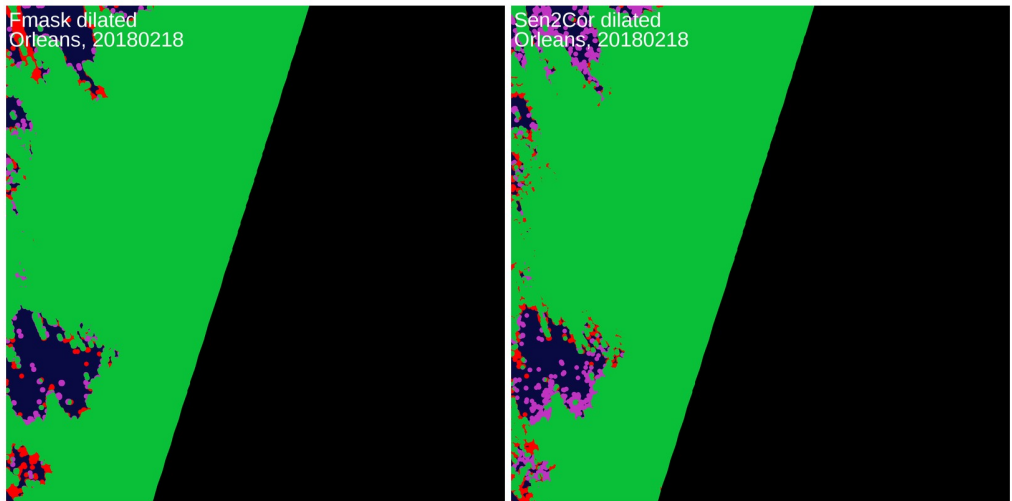


Sen2cor



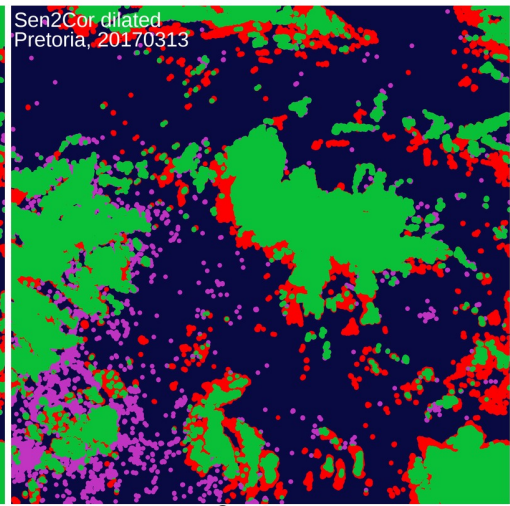
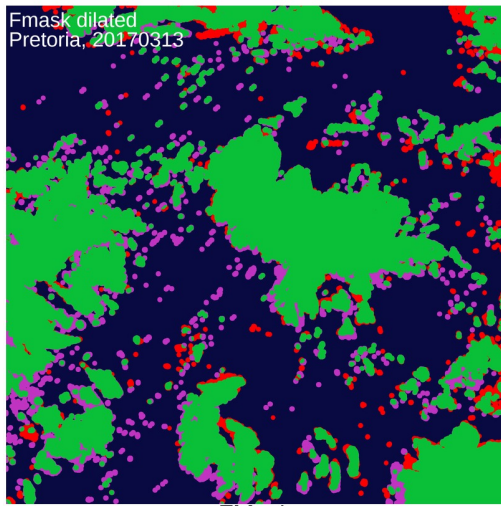
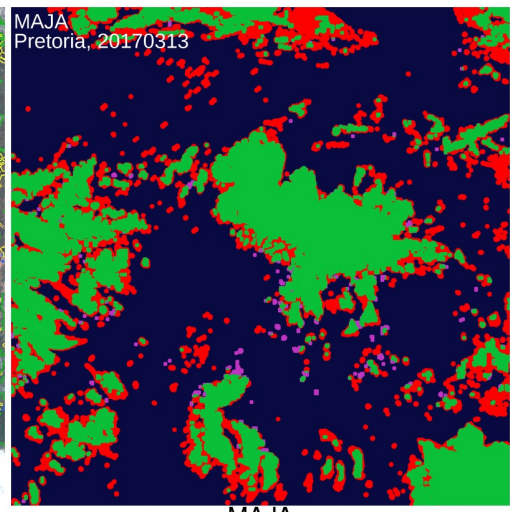
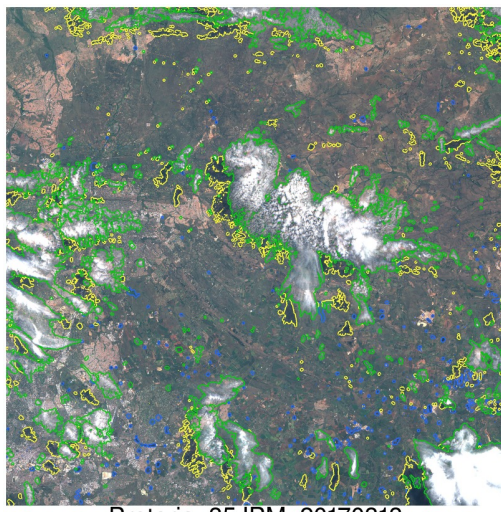
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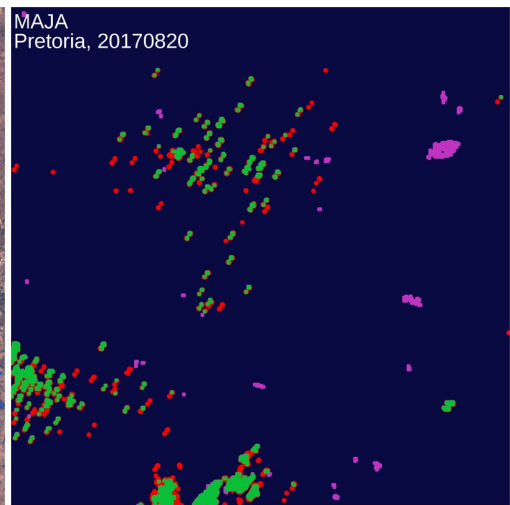


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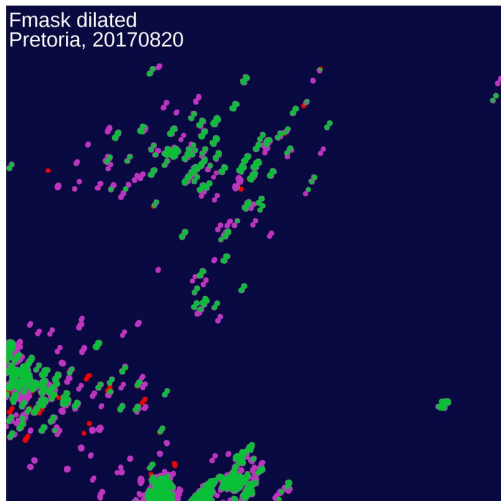
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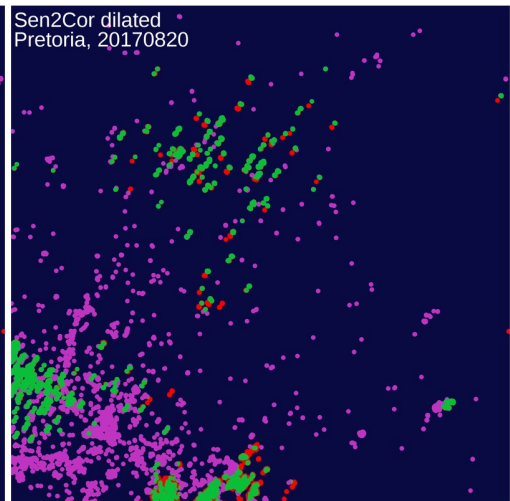
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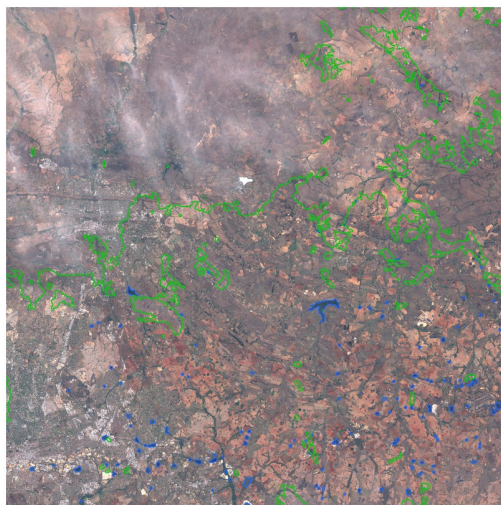
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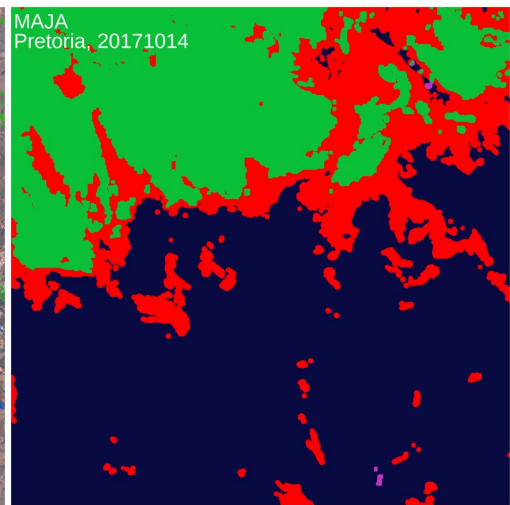
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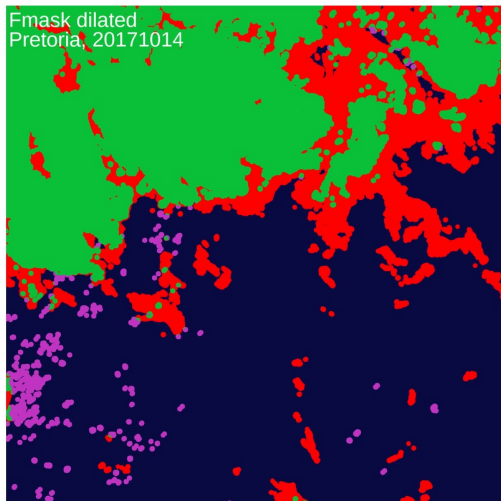
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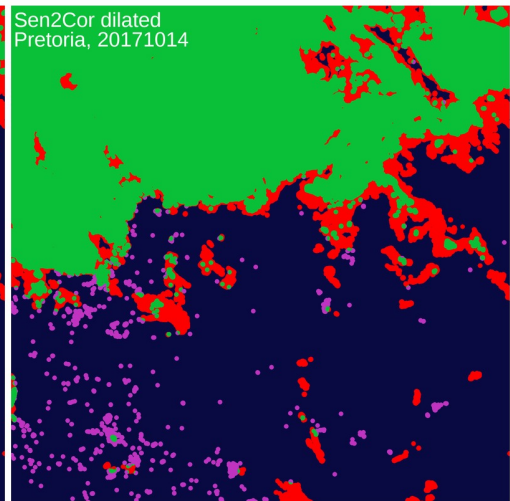
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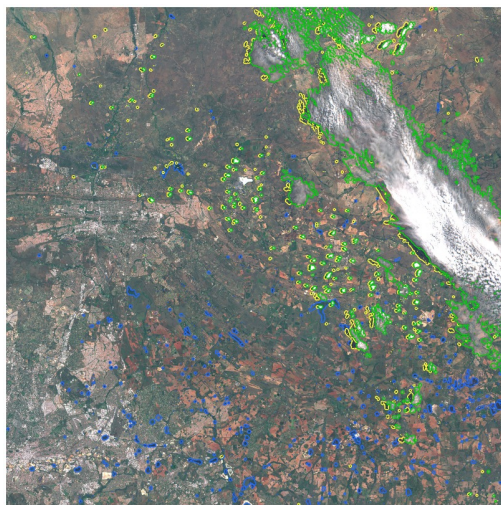
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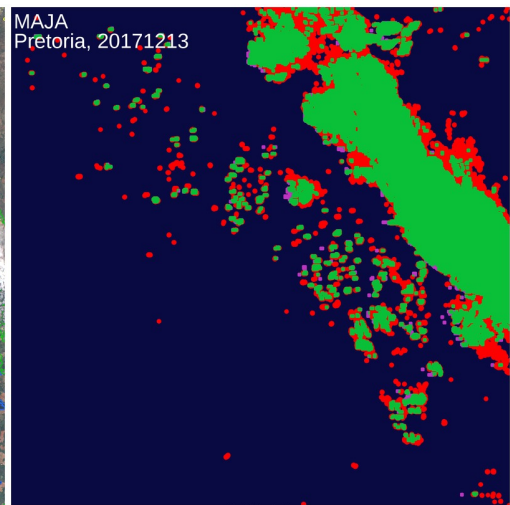
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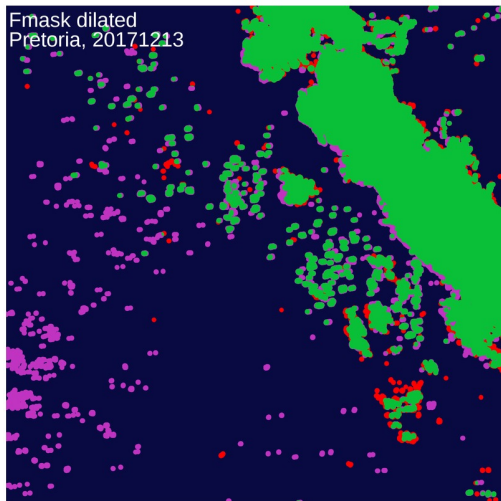
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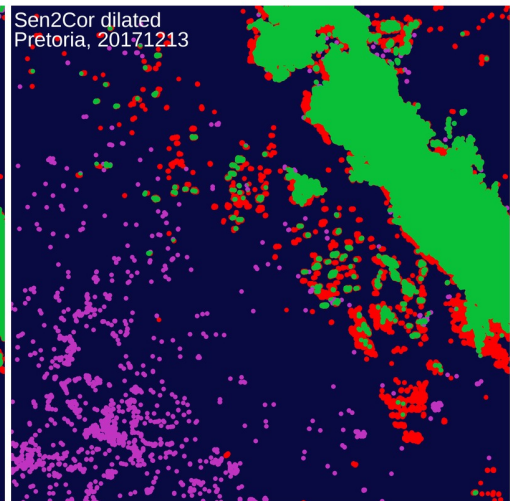
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Sen2cor

