

FEATURE TRACKING

Sentinel-2
L2A NIR
scenes

Reproject to EPSG
3413; mosaic tiles;
crop to AOIs

Feature tracking
(DWF SDM)

Uncorrected
velocity fields

DETERMINING
PAIR-SPECIFIC OFFSET

Median of
same-orbit pairs

3×3 median filter

Reference
flow field

Convert raw
velocities to raw
displacement

Median offset of
matching orbit pairs
with $n \geq 5$

Offset between raw
displacement and
expected
displacement

3×3 median filter

Orbit-specific
offset fields

CORRECTION AND
FILTERING

GrIMP mask

Correct raw fields
with orbit-specific
offset

Calculate error from
GrIMP bedrock
mask pixels

Filter GrIMP ice
mask pixels where
flow direction $>20^\circ$
from reference

Metadata

Corrected
and filtered
velocity

