

Must have run
SuperMasterCoreg.sh
first

Read Inputs



Pairs File

Parameters
File

[List of Processed]:
-list=filename (as MASMATE_SLVDATE) or
-f to check from Geocoded/Mode

PREPARE

DEM

Amplitude and Coeg

InSAR and Unwrap

GeoCode and Log

for all PAIRS in Pairs_to_process_RunDate_RandomNr.txt (Continue)

If S1
StripMap

YES: rename MAS as
(Super)mas-name

Test
MASSPROCESSPATHLONGGeocoded/Ampli/MASNAME.hdr
exist

YES: skip geocoding
MAS ampli

Test
MASSPROCESSPATHLONGGeocoded/Ampli/SLVNAME.hdr
exist

YES: skip geocoding
SLV ampli

Test
SKIPUW = SKIPYes

YES: skip geocoding
unwrapped phase

UTM

Test
projection

LatLong

Not implemented yet in scripts => UTM

GeocUTM

Auto :
geocoded pix closest (upper) multiple of 10 of ML original pix.
If gets holes, increase interpol radius

Test pixel re-
size method

Closest (or default) :
get geocoded pix as close as possible from original ML pix.
If gets holes, increase interpol radius

Forced : (for MSBAS !!):
size and crop imposed from Parameters.
If gets holes, increase interpol radius

Update geoProjectionParameters.txt with
xMin, xMax, yMin, yMax

Update geoProjectionParameters.txt with :
- file naming (UTM_PIXSIZExPIXSIZE)
- East and North sampling
- wich files to geocode
- resampling method and parameters

Test UnWrap
method

CIS

Use mask generated at Unwrap for
masking borders

Test interpol
RADIUS
method

Force
Radius

Force distance to nearest neighbour with
value from Parameters (RADIUSMETHD)

CIS

Keep defaults: CIS takes 2 times the
distance to nearest neighbour:

geoProjection -rk
(i.e. in GIS format (-r) and with parameters from current working dir rather than SM-MAS (-k))

BEFORE or NO
(or if skipped
UnWrapping)

Test if
interpolation

AFTER
or BOTH

fillGapsInImage
(interpolates also flattened if applicable)

PlotGeoc

Make figures (if option selected)

GetSatOrbDetails

Get infos :
HEADINGDIR: Ascending or Descending
LOOK: incid. angle at median slt range
HEADING: azimuth heading angle
BP and BT : perp. and temp. baselines
HA : altitude of ambiguity

RenameAllProducts

Rename all geocoded products with infos

Create MASSPROCESSPATHLONG/Geocoded and subdirs for each product
Create MASSPROCESSPATHLONG/GeocodedRasters and subdirs for each product

cd RUNDIR/i12/GeoProjection

MoveGeocRename

Move MASNAME.POLMAS.mod in MASSPROCESSPATHLONG/Geocoded/Ampli if it des not exist yet
Move SLVNAME.POLMAS.mod in MASSPROCESSPATHLONG/Geocoded/Ampli if it des not exist yet
Move coherence in MASSPROCESSPATHLONG/Geocoded/Coh
Move residualInterferogram in MASSPROCESSPATHLONG/Geocoded/InterfResid
Move residual Interferogram Filtered in MASSPROCESSPATHLONG/Geocoded/InterfFilt
Move deformation Map in MASSPROCESSPATHLONG/Geocoded/Defo (if computed)
Move Unwrapped Phase in MASSPROCESSPATHLONG/Geocoded/UnwrapPhase (if computed)
Move deformation Map flatten in MASSPROCESSPATHLONG/Geocoded/DefoDetrend (if computed)
Move deformation Map interpolated in MASSPROCESSPATHLONG/Geocoded/DefoInterpol (if computed)
Move deformation Map interpolated flatten in MASSPROCESSPATHLONG/Geocoded/DefoInterpolDetrend (if computed)
Move deformation Map interpolated interpolated in MASSPROCESSPATHLONG/Geocoded/DefoInterpolx2 (if computed)
Move deformation Map interpolated flatten interpolated in MASSPROCESSPATHLONG/Geocoded/DefoInterpolx2Detrend (if computed)

And copy corresponding rasters in MASSPROCESSPATHLONG/GeocodedRasters and subdirs

cd MAINRUNDIR

RUNDIR=MAINRUNDIR

Dump script, FUNCTIONS and Pairs lists
in log file

Clean Pair lists

RUNDIR and
OUTPUTDATA are
on the same Hard
disk

Yes : move
results to
OUTPUTDATA

No : copy results to
output data, check
difference a

No : warning and do
not clean
MAINRUNDIR.
Try rsync

check if cp source
= target

Yes : clean
MAINRUNDIR

STOP and say it

Speak out end
of processing

FUNCTIONS_FOR_CIS.sh
(script with fcts;
must be in PATH)

PATHMASK
(where mask are stored) e.g.:
../SAR_SM/MASK/...

DATAPATH
(where data are stored) e.g.:
/Volumes/.../SAR/CSL

=> INPUTDATA is
DATAPATH/SAT/TRK/
CROPDIR

DEMDIR
(where DEM are stored) e.g.:
/Volumes/.../DEM/SRTM30/
ALL

PROROOTHPATH =
from ParametersFile.txt

PROPATH =
PROROOTHPATH/SAT/TRK

RUNDIR =
PROPATH/
SMCROPDIR_Zoom_ML

RESAMPDATAPATH
(where data resampled on
SM are stored) e.g.:
/Volumes/.../SAR_SM/
RESAMPLED

=> OUTPUTDATA is
RESAMPDATAPATH/SAT/
TRK/SMCROPDIR

MASSPROCESSPATH =
from ParametersFile.txt

MASSPROCESSPATHLONG
=
MASSPROCESSPATH/SAT/
TRK/
SMCROPDIR_ZOOM_ML

NOTES:

1) Some names are shorten here for
the sake of clarity:

SAT is SATDIR in scripts
TRK is TRKDIR in scripts

2) To Do :

- allow processing in Lat Long