

(1)

Graphical User Interface

(3)

Load full image dataset from folder

(4)

Apply cropping mask and image filters

(2) Calculate number of usable image pairs, generate plots.

(5)

Use single or multi-pass feature tracking algorithm to calculate 2d velocity maps

(6)

Filter individual maps relative to entire dataset, calculate mean and standard deviation

(7)

Divide dataset into monthly averages

(8)

Save images and georeferenced rasters of velocities

(9)

Generate time series plots, other post-processing



Code associated with step

(1) GIV_GUI_initialize.m, GIV_GUI_main.m

(2) GIVruntime.m

(3) loadtimeseries.m

(4) cropmask.m, imageprefilter.m

(5) GIVcore.m, GIVtrack.m, GIVtrackmulti.m

(6) filtall.m

(7) im2month.m

(8) save_images.m

(9) GIV_GUI_timeseries.m