

# Repeater Detection

- Input
  - eg\_mess.pha: initial MESS detection
  - fpha\_pal (eg\_pal\_hyp\_full.pha): PAL phase file (templates for MESS)
  - eg\_mess\_cc.ctlg: final relocated MESS catalog
  - fsta (station\_eg.csv): station file
- Output
  - eg\_rep.clust: repeater sequences
  - eg\_rep.pha: all repeaters

Input	Operation	Output	Notes
fpha_pal & fsta	run MESS	eg_mess.pha eg_mess_cc.ctlg	i.e. run PALM
eg_mess.pha	<i>run_clustering.py</i>	eg_rep-org_full.pha	find repeater candidates in MESS detections
eg_rep-org_full.pha	run MESS	eg_mess-rep.pha	detect with high CC threshold, e.g. 0.8
eg_mess-rep.pha	<i>run_clustering.py</i>	eg_rep.clust eg_rep.pha	using strict criteria, e.g. cc>0.9, dt_sp≤0.01s