E2F Simple Operation Manual

We briefly explain the test of E2F in toc2me

[STEP 0] run E2F_v1.m
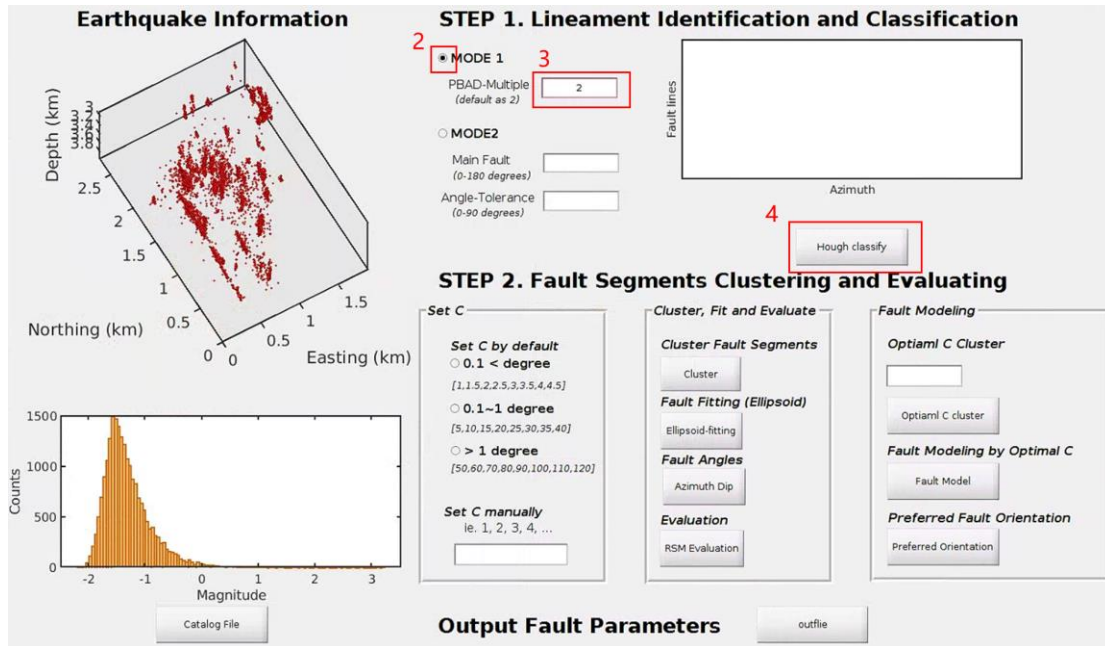

[STEP 1] load earthquake catalog

[STEP 2] Select Mode 1 and set PBAD-Multiple as 2 and run Hough classify

(Herein, for a simple demonstration of E2F testing in toc2me, we use mode 1. When dealing with complex fault distributions such as conjugate faults, mode 2 can be selected to input the dominant direction and uncertainty range)

[STEP 3] Select C and run Cluster and Ellipsoid fitting
(The input for C is divided into two parts, 1 being the three scales provided by default, and 2 being the manual input)
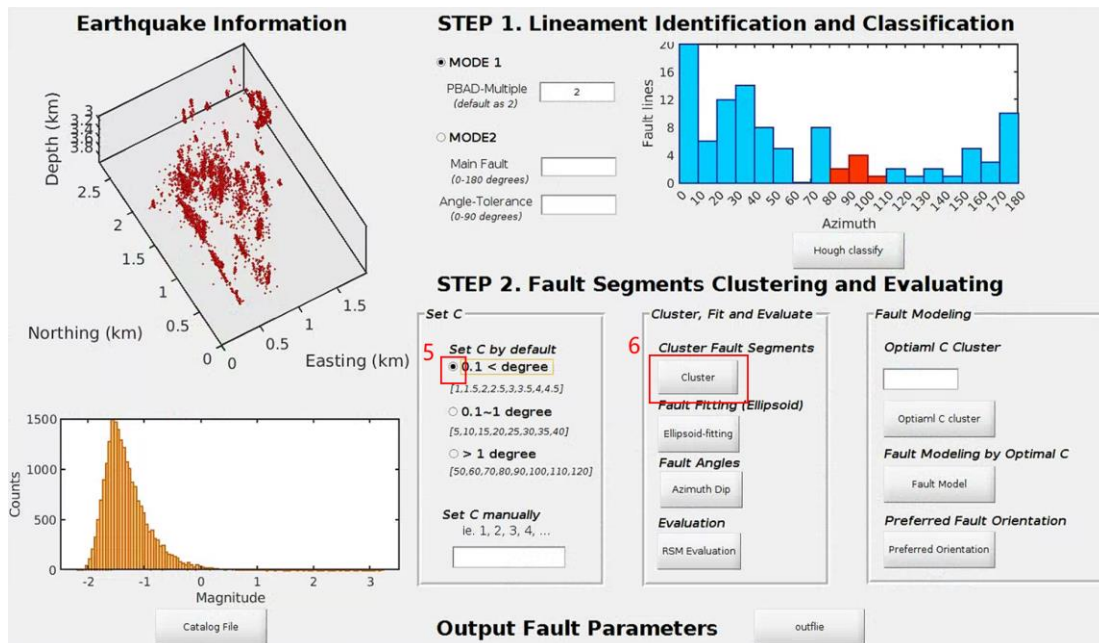
Fault Segement Clustering

Earthquake Information

STEP 1. Lineament Identification and Classification

● MODE 1

PBAD-Multiple
(default as 2)   [2]

○ MODE2

Main Fault
(0-180 degrees)   [   ]

Angle-Tolerance
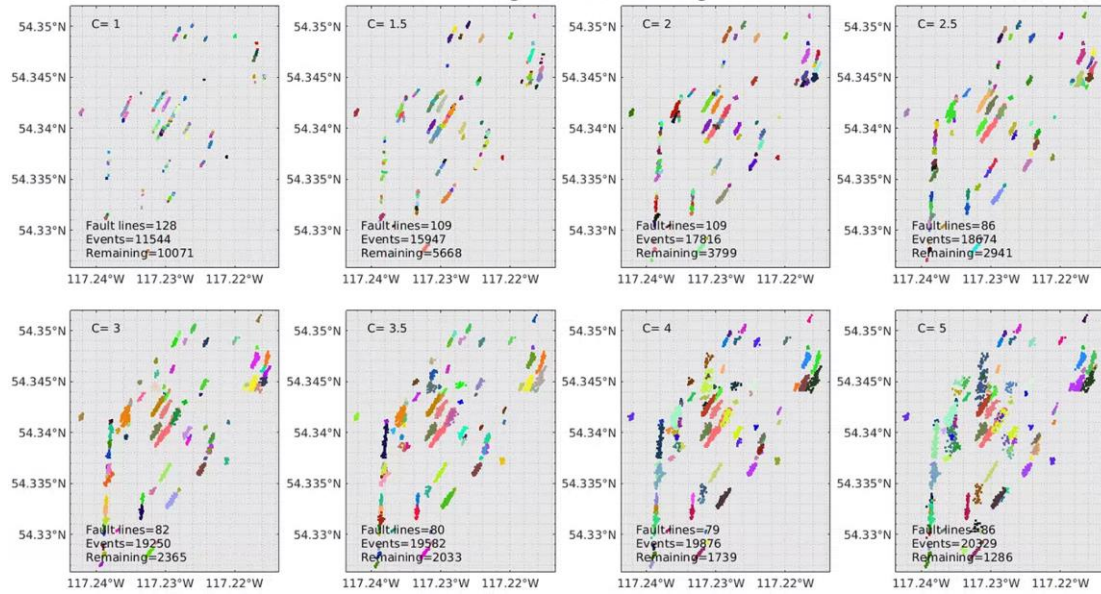(0-90 degrees)   [   ]

Hough classify

STEP 2. Fault Segments Clustering and Evaluating

Set C

Set C by default
● 0.1 < degree
[1,1.5,2,2.5,3,3.5,4,4.5]

○ 0.1~1 degree
[5,10,15,20,25,30,35,40]

○ > 1 degree
[50,60,70,80,90,100,110,120]

Set C manually
ie. 1, 2, 3, 4, ...
[   ]

Cluster, Fit and Evaluate

Cluster Fault Segments
[Cluster]

Fault Fitting (Ellipsoid)
[Ellipsoid-fitting]

Fault Angles
[Azimuth Dip]

Evaluation
[RSM Evaluation]

Fault Modeling

Optiaml C Cluster
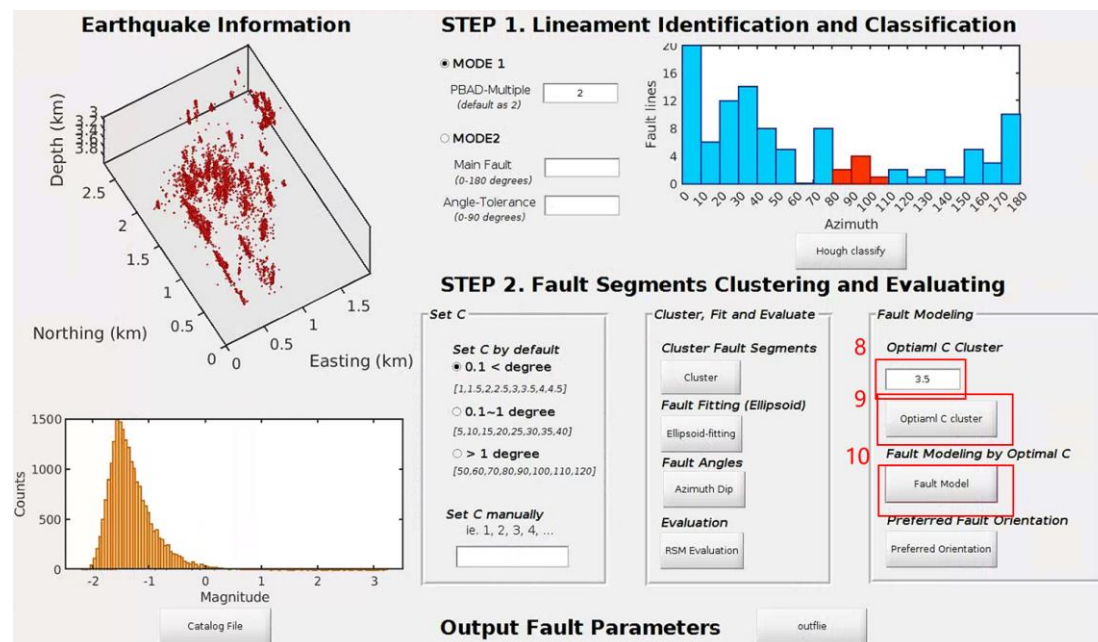[   ]

[Optiaml C cluster]

Fault Modeling by Optimal C
[Fault Model]

Preferred Fault Orientation
[Preferred Orientation]

Output Fault Parameters   [outflie]

[Catalog File]

Fault Fitting by Ellipsoid
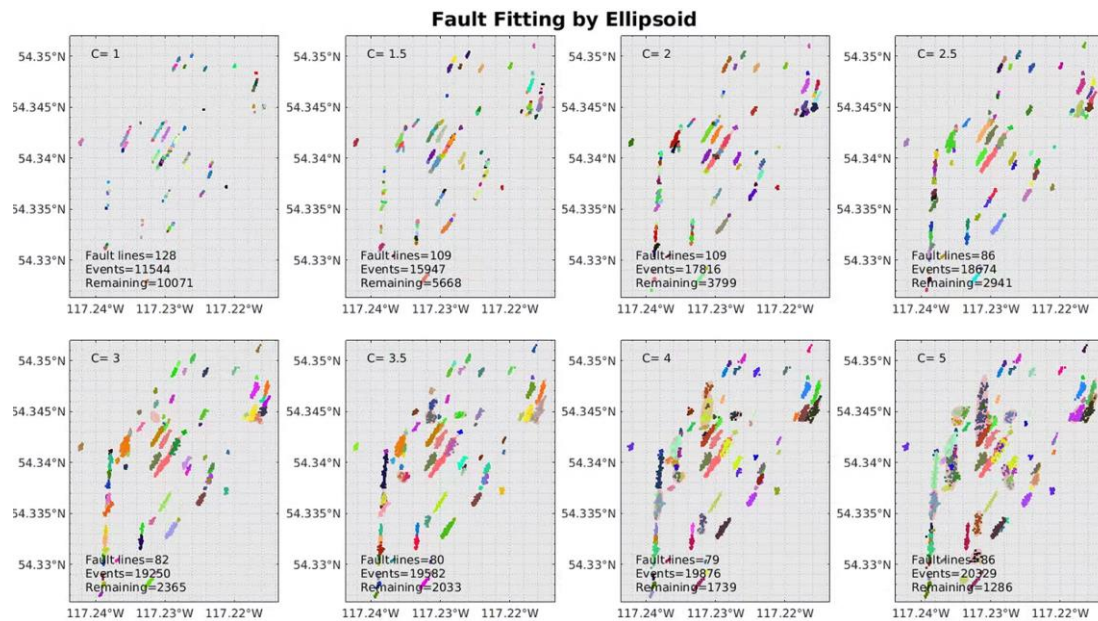
[STEP 4] Select an optimal C from the series of C and run Optimal C cluster and Fault Model

*(When clicking **Fault Model**, you need to click **Optimal C Cluster** and the corresponding **Ellipsoid fitting** for optimal C)*

Fault Structure Modeling