

Step1 : The identification of single-core and multicore eddies in daily SLA fields

Step2 : Eddy tracking just involves multicore eddies

Just the multicore eddy trajectories with more than 6 d within interval of 10 d are reserved and saved as the multicore eddy trajectories dataset

Step3 : The hybrid eddy tracking involves single-core eddies and multicore trajectories

For a single-core eddy and the search at later times, the multicore eddy trajectories dataset is searched firstly; if none, then the single-core eddy dataset is searched

Trajectories just include single-core eddy

Yes

Multicore trajectories with single-core eddy which exceeds 6 d

No

No

Yes

Single-core eddy trajectory dataset

Hybrid eddy dataset

Transient eddy-like signatures

Splitting events

Merging events

Part of single-core eddies