CLUMPAK - CLUster Markov Packager Across *K*

This is a beta version.

We are working on improving CLUMPAK for enhanced flexibility and a better user interface. If you run into problems please email *evolseq@tauex.tau.ac.il* (mailto:#) and specify the job ID.
If you haven't received any results within a few hours, please contact us and re-submit.
See *Known Issues* (issues.html). Thank you!

Job #1627484654

Job type: *Best K by Evanno*

Job status: *finished*

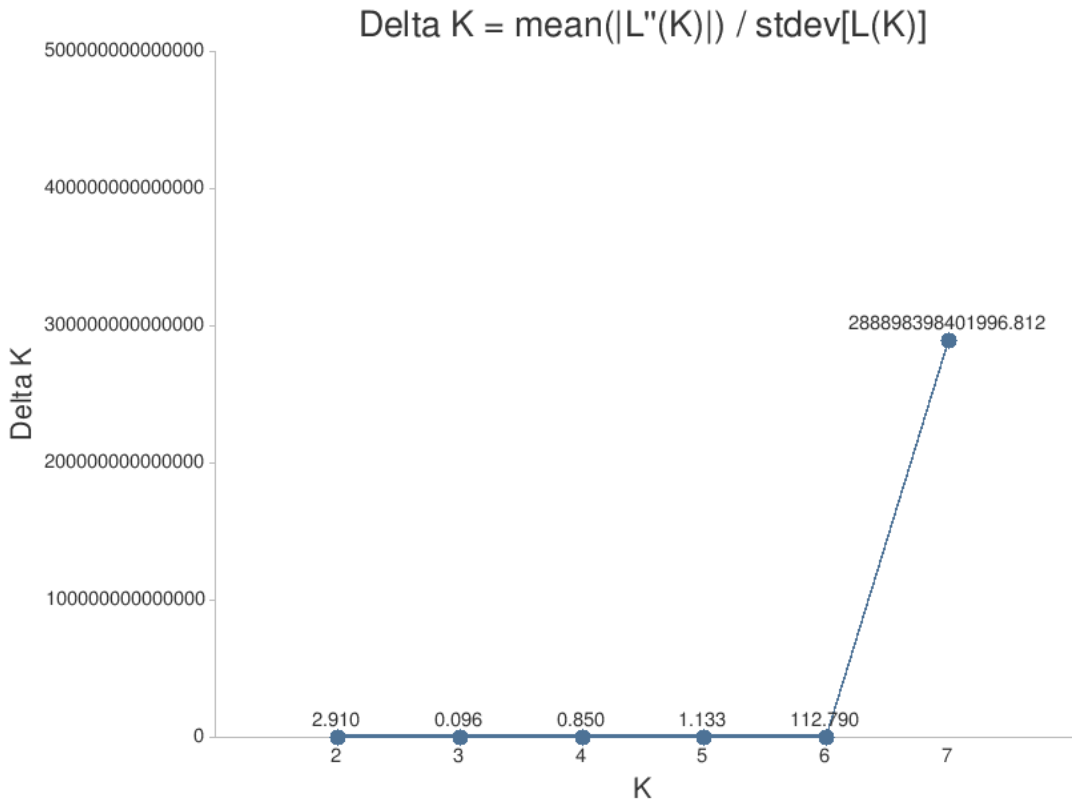
Output files:

1627484654.zip
(http://clumpak.tau.ac.il/CLUMPAK_results/1627484654/1627484654.zip

Output files will be stored on CLUMPAK server for one month.
It is advisable to download the output Files.

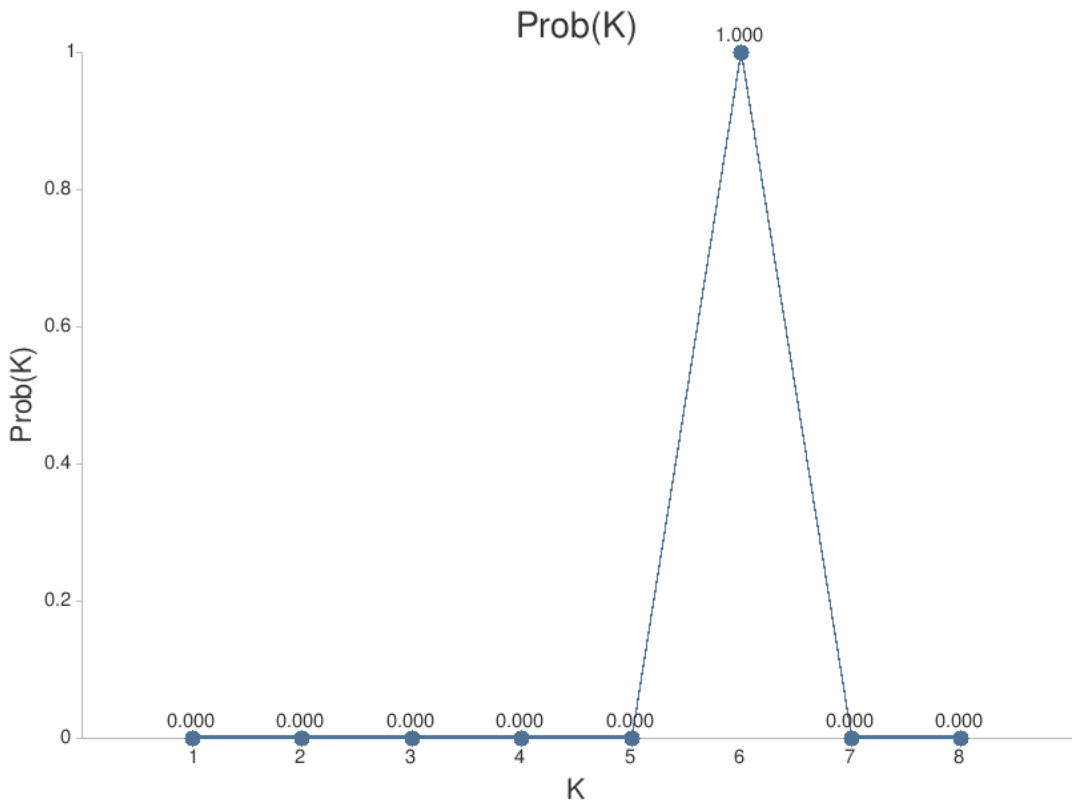
Output Images:

DeltaK graph Optimal K by Evanno is: 7



(CLUMPAK_results/1627484654/Best_K_By_Evanno-DeltaKByKGraph.png)

Probability By K graph Using median values of Ln(Pr Data) the k for which Pr(K=k) is highest: 6



(CLUMPAK_results/1627484654/Best_K_By_Pritchard-ProbByKGraph.png)

Log Data:

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Wed Jul 28 18:04:14 2021: Running validation tests on input files
Wed Jul 28 18:04:14 2021: Finished validating - Submitting job to queue
Wed Jul 28 18:04:15 2021: Job 1627484654 was submitted to queue.
Wed Jul 28 18:04:18 2021: Job 1627484654 started running.
Wed Jul 28 18:04:18 2021: Retrieving data from files for each K
Wed Jul 28 18:04:18 2021: K=1 mean: -540507.25592312
Wed Jul 28 18:04:18 2021: K=1 standard deviation: 997.694867724411
Wed Jul 28 18:04:18 2021: K=1 median: -540098.870003
Wed Jul 28 18:04:18 2021: K=2 mean: -518982.73150102
Wed Jul 28 18:04:18 2021: K=2 standard deviation: 1967.12397751232
Wed Jul 28 18:04:18 2021: K=2 median: -518213.251823
Wed Jul 28 18:04:18 2021: K=3 mean: -503182.33104228
Wed Jul 28 18:04:18 2021: K=3 standard deviation: 2228.9997642902
Wed Jul 28 18:04:18 2021: K=3 median: -501710.050861
Wed Jul 28 18:04:18 2021: K=4 mean: -487596.78024854
Wed Jul 28 18:04:18 2021: K=4 standard deviation: 1145.55886781303
Wed Jul 28 18:04:18 2021: K=4 median: -487677.234479
Wed Jul 28 18:04:18 2021: K=5 mean: -472984.9750388
Wed Jul 28 18:04:18 2021: K=5 standard deviation: 833.666427036872
Wed Jul 28 18:04:18 2021: K=5 median: -472881.391883
Wed Jul 28 18:04:18 2021: K=6 mean: -459318.10497294
Wed Jul 28 18:04:18 2021: K=6 standard deviation: 1356.09245214579
Wed Jul 28 18:04:18 2021: K=6 median: -459025.173124
Wed Jul 28 18:04:18 2021: K=7 mean: -598605.273008999
Wed Jul 28 18:04:18 2021: K=7 standard deviation: 5.87986167841714e-10
Wed Jul 28 18:04:18 2021: K=7 median: -598605.273009
Wed Jul 28 18:04:18 2021: K=8 mean: -568024.17887306
Wed Jul 28 18:04:18 2021: K=8 standard deviation: 1363.96600392852
Wed Jul 28 18:04:18 2021: K=8 median: -567141.779884
Wed Jul 28 18:04:18 2021: Calculating Best K by Evanno
Wed Jul 28 18:04:18 2021: Ln'(2) = 21524.5244220998
Wed Jul 28 18:04:18 2021: Ln'(3) = 15800.4004587402
Wed Jul 28 18:04:18 2021: Ln'(4) = 15585.5507937401
Wed Jul 28 18:04:18 2021: Ln'(5) = 14611.8052097397
Wed Jul 28 18:04:18 2021: Ln'(6) = 13666.8700658599
Wed Jul 28 18:04:18 2021: Ln'(7) = -139287.168036059
Wed Jul 28 18:04:18 2021: Ln'(8) = 30581.0941359395
Wed Jul 28 18:04:18 2021: |Ln''(K=2)| = 5724.12396335963
Wed Jul 28 18:04:18 2021: |Ln''(K=3)| = 214.849665000045
Wed Jul 28 18:04:18 2021: |Ln''(K=4)| = 973.745584000426
Wed Jul 28 18:04:18 2021: |Ln''(K=5)| = 944.935143879789
Wed Jul 28 18:04:18 2021: |Ln''(K=6)| = 152954.038101919
Wed Jul 28 18:04:18 2021: |Ln''(K=7)| = 169868.262171999
Wed Jul 28 18:04:18 2021: Delta(K=2) = 2.90989486620894
Wed Jul 28 18:04:18 2021: Delta(K=3) = 0.0963883749303409
Wed Jul 28 18:04:18 2021: Delta(K=4) = 0.850017935664357
Wed Jul 28 18:04:18 2021: Delta(K=5) = 1.13346911094693
Wed Jul 28 18:04:18 2021: Delta(K=6) = 112.790273155709
Wed Jul 28 18:04:18 2021: Delta(K=7) = 288898398401997
Wed Jul 28 18:04:18 2021: Max Delta K: 288898398401997
Wed Jul 28 18:04:18 2021: Optimal K by Evanno is: 7
Wed Jul 28 18:04:18 2021: Using median values of Ln Prob of Data to calculate Prob(K
=k):
Wed Jul 28 18:04:18 2021: Prob(K=1) = 0
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Wed Jul 28 18:04:18 2021: Prob(K=2) = 0
Wed Jul 28 18:04:18 2021: Prob(K=3) = 0
Wed Jul 28 18:04:18 2021: Prob(K=4) = 0
Wed Jul 28 18:04:18 2021: Prob(K=5) = 0
Wed Jul 28 18:04:18 2021: Prob(K=6) = 1
Wed Jul 28 18:04:18 2021: Prob(K=7) = 0
Wed Jul 28 18:04:18 2021: Prob(K=8) = 0
Wed Jul 28 18:04:18 2021: Max Probability: 1
Wed Jul 28 18:04:18 2021: The k for which Prob(K=k) obtains the highest value is: 6
Wed Jul 28 18:04:18 2021: Creating job zip file
Wed Jul 28 18:04:18 2021: Job 1627484654 has finished running.
```