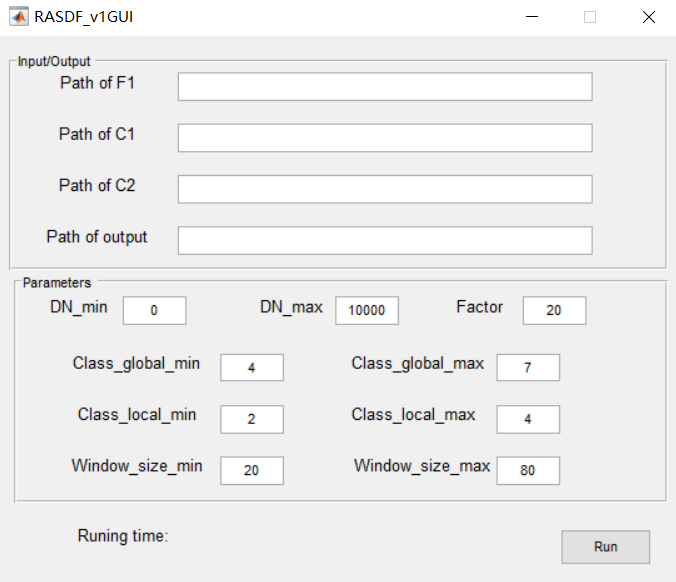
**User Guide**

Dear Users:

This program according to the paper *Shi W, Guo D, Zhang H. A reliable and adaptive spatiotemporal data fusion method for blending multi-spatiotemporal-resolution satellite images[J]. Remote Sensing of Environment, 2022,268:112770.* [*https://doi.org/10.1016/j.rse.2021.112770*](https://doi.org/10.1016/j.rse.2021.112770)*.* The authors greatly thank the great work of FSDAF, SFSDAF and OBSTFM from Xiaolin Zhu, Eileen H. Helmer, Feng Gao, Desheng Liu, Jin Chen, Michael A. Lefsky, Xiaodong Li, Giles M. Foody, Doreen S. Boyd, Yong Ge, Yihang Zhang, Yun Du, Feng Ling and Yue Sun.

Please double-click **MyAppInstaller\_web.exe** to install RASDF\_v1GUI and MATLAB Runtime version 9.9 (R2020b). Make sure you are connected to the network and anti-virus software (e.g., 360) is turned off during installation.

After installation, double-click **RASDF\_v1GUI.exe**, then a simple GUI of RASDF will appear as below:



Path of F1 indicates the path of the fine image obtained at based phase, Paths of C1 and C2 indicate the paths of the coarse images obtained at based phase and predicted phase. Path of output needs to contain the file name of the output image.

Please ensure that the fine image and coarse images have the same size. This version of the program can only process images in ENVI format.

Example of path of F1: E:\RASDF\_v1GUI\testdata\L1

Parameters seting:

DN\_min: Minimum DN value

DN\_max: Maximum DN value; if using reflectance, use 1 as DN\_max

Factor: Resolution ratio of coarse image to fine image

Class\_global\_min: Minimum number of classification in Global unmixing step (Recommended value: 3-5)

Class\_global\_max: Maximum number of classification in Global unmixing step (Recommended value: 4-10)

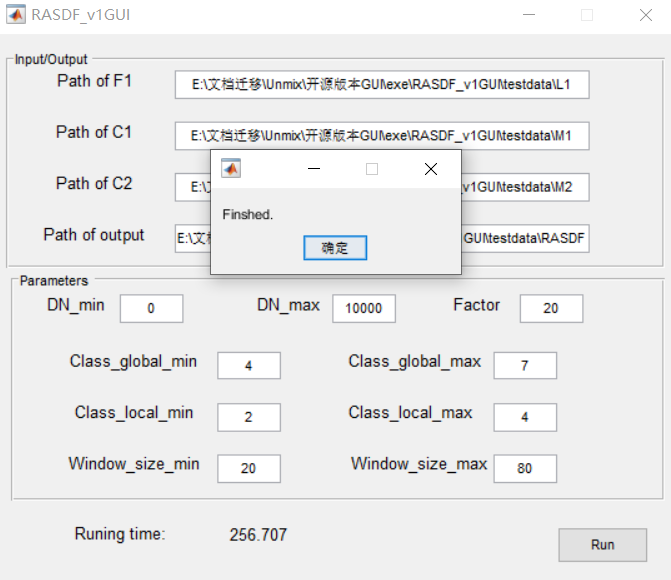
Class\_local\_min: Minimum number of classification in Local unmixing step (Recommended value: 2-4)

Class\_local\_max: Maximum number of classification in Local unmixing step (Recommended value: 3-6)

Window\_size\_min: Minimum window size in filtering and residual compensation steps

Window\_size\_min: Maximum window size in filtering and residual compensation steps

Click the Run button to run the program. There will be a window prompt after finishing the fusion.



This is the first version of the program and will be updated later.

Should you have any problem, please contact us.

Thank you!

Best regards,

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