OpenOpticalFlow is an open source optical flow program in Matlab for extraction of high-resolution velocity fields from various flow visualization images. This program is a useful tool for researchers to use the optical flow method in various flow measurements. This folder contains the main program, relevant subroutines and sample images. In addition, a paper is included, which describes the principles of the optical flow method, the programs, the selection of the relevant parameters, and examples to demonstrate the applications of the optical flow method.