BEFORE STARTING

An introduction to the SAFE Toolbox is provided in the **paper**:
Pianosi, F., Sarrazin, F., Wagener, T. (2015), A Matlab toolbox for Global Sensitivity Analysis,
Environmental Modelling & Software, 70, 80-85.
The paper is freely available at:
www.sciencedirect.com/science/article/pii/S1364815215001188
We recommend reading this (short) paper before getting started.

TO GET STARTED

To get started using SAFE, we suggest opening one of the workflow scripts and running the
code step by step. The header of each workflow script gives a short description of the
method and case study model, and of the main steps and purposes of that workflow, as well
as references for further reading. The name of each workflow is composed as:
workflow_<*method*>_<*model*>

Implemented models are:
- the hydrological Hymod model (see documentation and help of functions in folder "example/hymod")
- the hydrological HBV model (see documentation and help of functions in "example/hbv")
- the Ishigami and Homma test function (see help of functions in "example/ishigami_homma")
- the Sobol' g-function (see help of functions in "example/sobol_g_function")

Implemented methods are:
- dynia (dynamic identifiability analysis)
- eet (elementary effects test, or method of Morris)
- fast (Fourier amplitude sensitivity test)
- glue (generalized likelihood uncertainty estimation)
- pawn
- rsa (regional sensitivity analysis)
- vbsa (variance-based sensitivity analysis, or method of Sobol')

Furthermore, SAFE includes additional workflow scripts:
- *external*: how to connect SAFE to a model running outside matlab/octave
- *tvsa*: how to apply GSA methods to perform time-varying sensitivity analysis
- *visual*: how to use visualisation functions for qualitative GSA

If the user still has not clear idea of what method(s) to start with, we suggest one of the three
most widely used methods: eet (e.g. *workflow_eet_hymod*), rsa (*workflow_rsa_hymod*), vbsa
(*workflow_vbsa_hymod*) or the visualization workflow (*workflow_visual_ishigami_homma.m*).