**Test Documentation**

1. **Test plan and outcome**

The tests are created to make sure the website is properly functioning. The following items are being tested in this procedure:

* 1. Stability and running speed
     1. The factor that impacts the speed the most is the rolling window lengths. We are testing using 10 year rolling window, which is the maximum number we ask for the users.
     2. The only problem was with Monte Carlo method. Since it involves huge amount of calculation, we test with different numbers of simulation steps. Finally decide to use 5000 as default. It will provide a relative accurate result and an expected average running time.
  2. Limitation
     1. The system is heavily dependent on the inputs users will enter. Therefore, we emphasize all the requirements. (See model documentation for more details) Users should be responsible for providing reasonable inputs.
     2. We expected the website to give error message whenever the inputs are not desirable.
  3. Accuracy
     1. Run Matlab code with the same input data, compare the calculated values and we can see if we are implementing the functions correctly
     2. The output are same for Matlab and our system, meaning that everything is working as expected

1. **Reference files**

Please find the attached test output files:

* + 1. .xlsx file include all the results from Matlab
    2. .csv files are data downloaded from our system