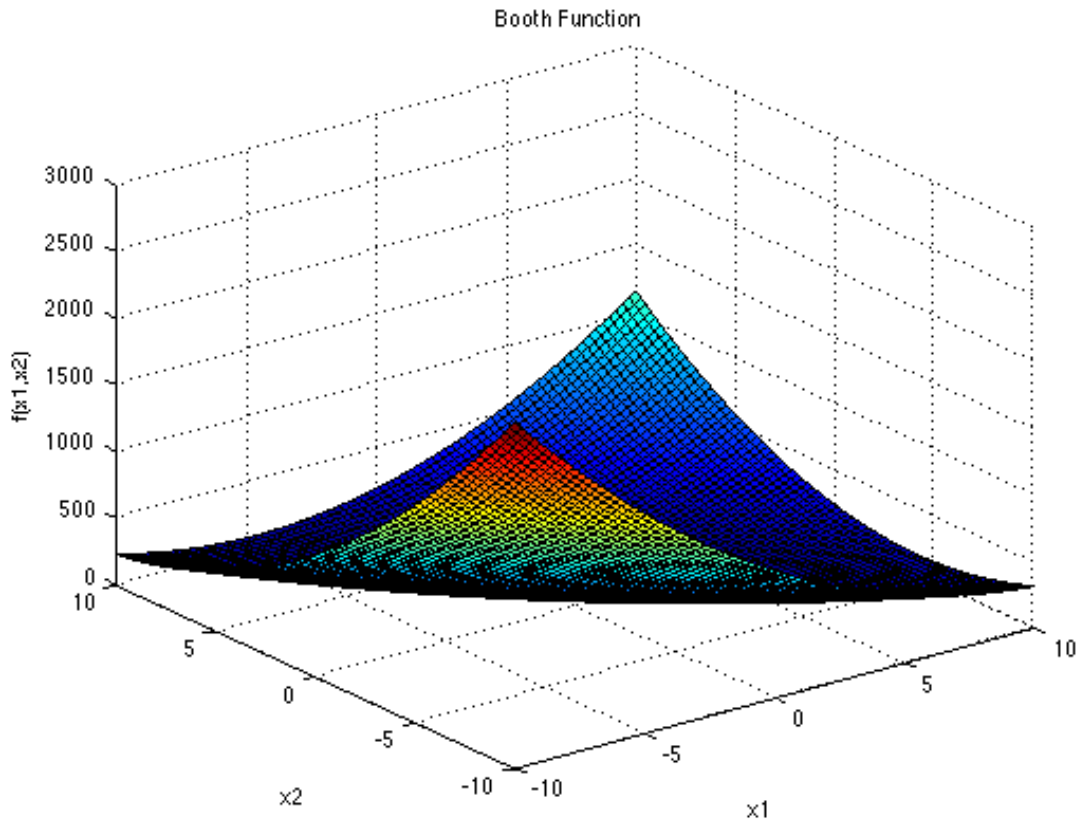


# Results

Note that:

- No. of iterations: 300
- No. of runs: 20

Fitness function:  $f(X_1, X_2)$  where,



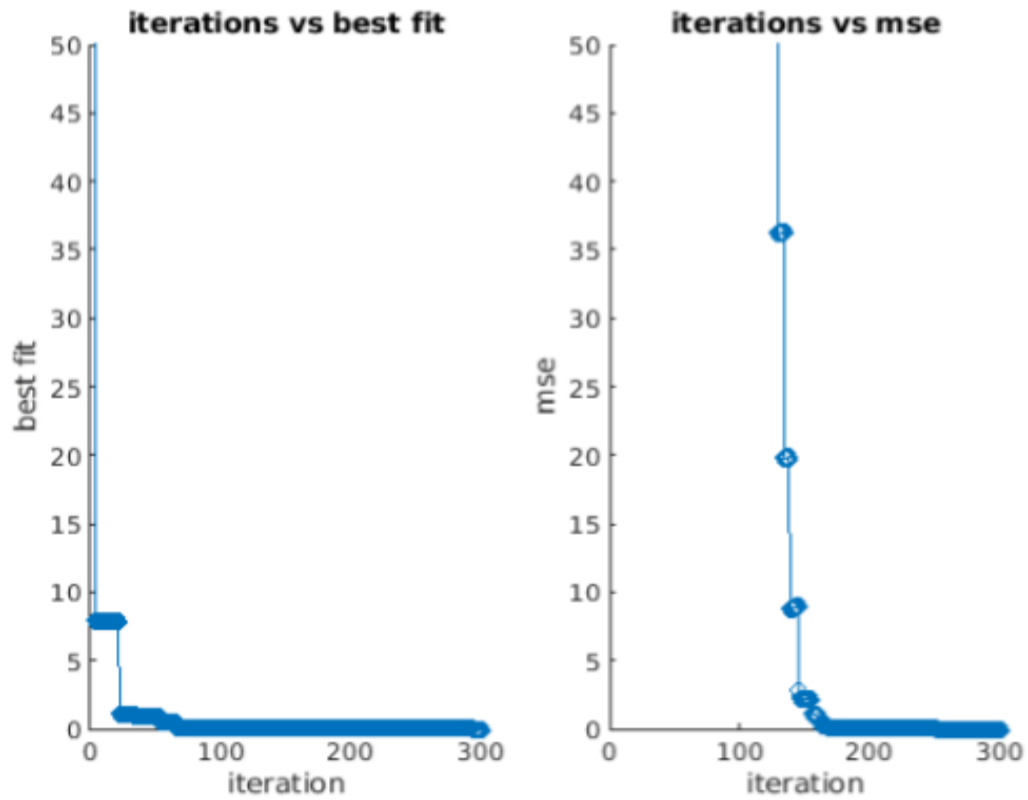
$$f(X_1, X_2) = (X_1 + 2X_2 - 7)^2 + (2X_1 + X_2 - 5)^2$$

$X_i \in [-10, 10]$ , for all  $i = 1, 2$

Global minimum at:

$f(X_1, X_2) = 0$  where  $X_1 = 1$  and  $X_2 = 3$

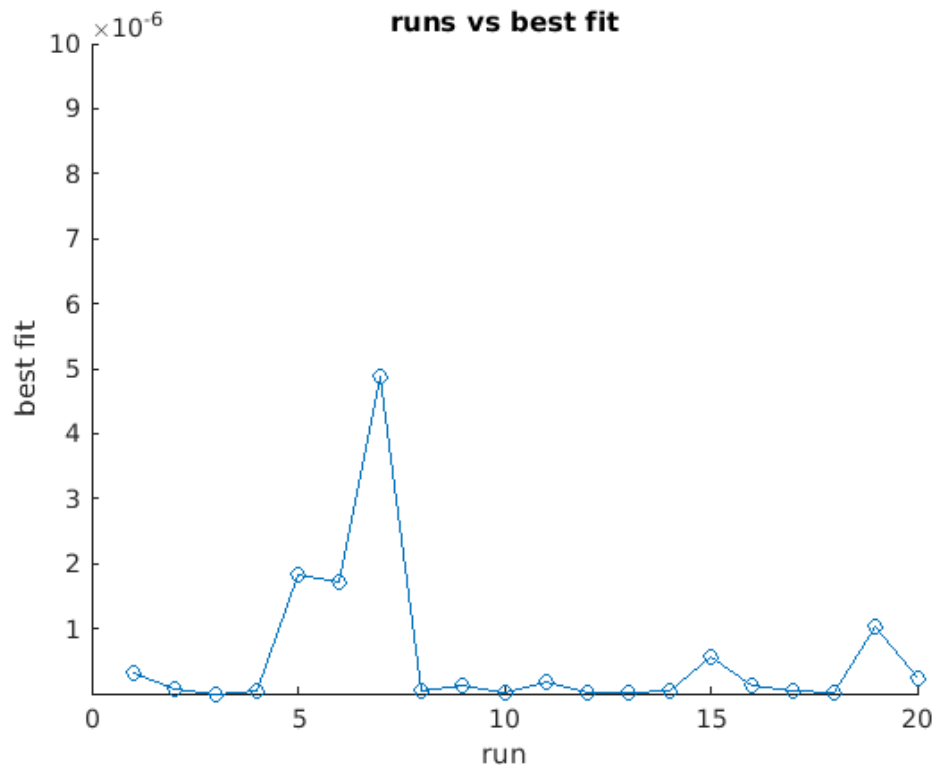
1. Iterations vs Best fit and Iterations vs MSE of the current run



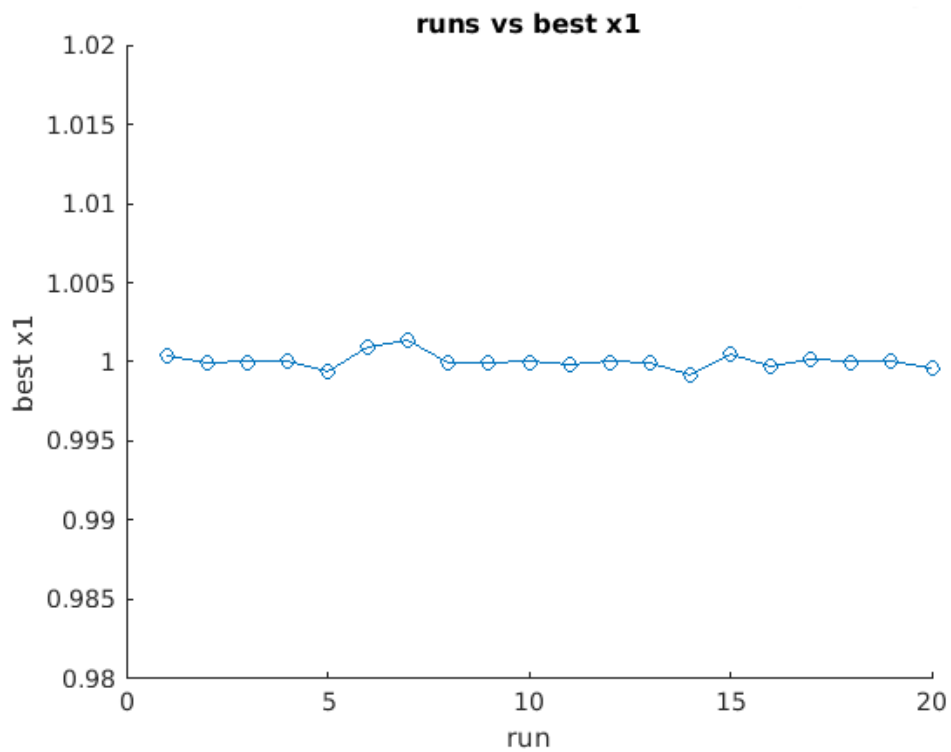
Best output of the current run:

- Best fit:  $2.4168 \times 10^{-7}$
- X1: 0.99979
- X2: 3

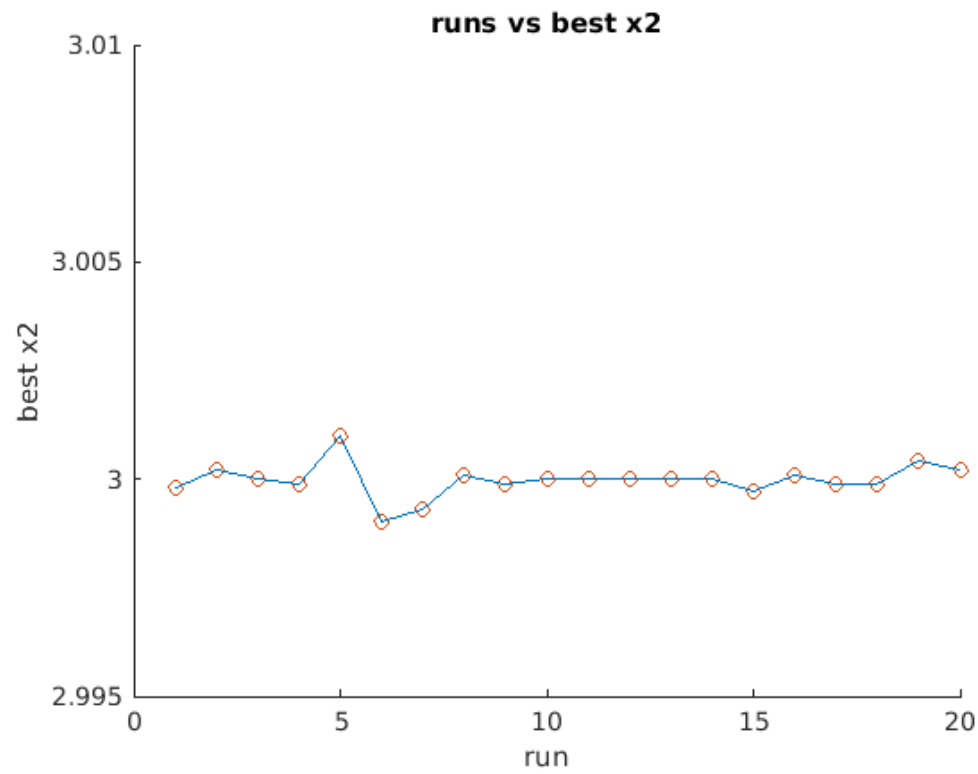
## 2. Runs vs Best fit



## 3. Runs vs Best X1



#### 4. Runs vs Best X2



#### 5. Runs vs Time

