Start Simulation

Select number of subsamples to return

x-coordinates
y-coordinates

Get Random Subsamples

subsampled x-coordinates
subsampled y-coordinates

v_model (wink2016)
R_model (wink2016)

Get subsample Arrays

Introduce Noise to the z-array (simulated measurements)

z-array
r-array
t-array

Initial Values
v, R

Inverse Kinematic Model

Check if matrix is singular

True

ehat = 0
y = 0
fit = 0
cond number = 0

False

Check fit < 0 or is equal to 'nan'

True

fit = 0

False

Check cond number is equal to 'nan'

True

Cond number is set to 1500

False

Save
-Cond Number
- Fit

Reached end of simulation?

No

Restart Simulation

Yes

Stop