

# bayesian\_optimization

## Parameters

cm\_name: bo\_60  
dataframe\_in: data\_missing\_60  
description: Bayesian optimization method for optimization of timeseries  
diff\_func\_name: manhattan\_metrics  
diff\_func\_parameters: {}  
model\_method: bayesian\_optimization  
name: bayesian\_optimization  
parameters:  
  decision\_variables:  
    keys:  
      - max\_keys  
  decision\_variables\_names:  
    - graph\_structure  
  exploration\_strategy: ei  
  ground\_truth\_topology:  
    keys:  
      - max\_keys  
  initial\_points: 100  
  n\_iterations: 3750  
  num\_pool: 5  
  seed: 11  
report\_parameters: {}  
running\_time: 210427.81221532822  
type: calibrationmodel  
version: 1.0.0

## Results

Summary CalibrationModel with most optimal solution:

|   | graph_structure | min_distance | round |
|---|-----------------|--------------|-------|
| 0 | 34016           | 7.557813     | 34016 |

# bayesian\_optimization

## Parameters

cm\_name: bo\_50  
dataframe\_in: data\_missing\_50  
description: Bayesian optimization method for optimization of timeseries  
diff\_func\_name: manhattan\_metrics  
diff\_func\_parameters: {}  
model\_method: bayesian\_optimization  
name: bayesian\_optimization  
parameters:  
  decision\_variables:  
    keys:  
      - max\_keys  
  decision\_variables\_names:  
    - graph\_structure  
  exploration\_strategy: ei  
  ground\_truth\_topology:  
    keys:  
      - max\_keys  
  initial\_points: 100  
  n\_iterations: 3750  
  num\_pool: 5  
  seed: 11  
report\_parameters: {}  
running\_time: 266657.9934270382  
type: calibrationmodel  
version: 1.0.0

## Results

Summary CalibrationModel with most optimal solution:

|   | graph_structure | min_distance | round |
|---|-----------------|--------------|-------|
| 0 | 21040           | 5.19669      | 21040 |

# Summary

| Model Name | Model Method          | Score | Difference Function | Dataframe       | Duration       |
|------------|-----------------------|-------|---------------------|-----------------|----------------|
| bo_60      | bayesian_optimization | 0.98  | manhattan_metrics   | data_missing_60 | 210427.812 sec |
| bo_50      | bayesian_optimization | 0.97  | manhattan_metrics   | data_missing_50 | 266657.993 sec |