

```
Python 3.6.7 (default, Oct 22 2018, 11:32:17)
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IPython 6.5.0 -- An enhanced Interactive Python.

In [1]: runfile('/home/sedna/PYTHON/PROJECTS/DEMO/LUMPCOLLOCATION/lump_rfb.py',
      wdir='/home/sedna/PYTHON/PROJECTS/DEMO/LUMPCOLLOCATION')
```

Pima Dataset
Parameters: PCA: 95.0%
DATASET TRANSFORMATION: sum
COLOCATION METHOD: RBF

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0649018
  Initializing linear solver - done. Time (sec): 0.0658162
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0396247
  Solving linear system (col. 0) - done. Time (sec): 0.0405405
Training - done. Time (sec): 0.1159079
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0057011

Prediction time/pt. (sec) : 0.0000285
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0059202

Prediction time/pt. (sec) : 0.0000178
```

Evaluation

```
# eval points. : 332  
  
Predicting ...  
Predicting - done. Time (sec): 0.0054021  
  
Prediction time/pt. (sec) : 0.0000163
```

Evaluation

```
# eval points. : 332  
  
Predicting ...  
Predicting - done. Time (sec): 0.0075459  
  
Prediction time/pt. (sec) : 0.0000227
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...  
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0033929  
Initializing linear solver - done. Time (sec): 0.0044036  
Solving linear system (col. 0) ...  
Back solving (201 x 201 mtx) ...  
Back solving (201 x 201 mtx) - done. Time (sec): 0.0002899  
Solving linear system (col. 0) - done. Time (sec): 0.0013733  
Training - done. Time (sec): 0.0124137
```

Evaluation

```
# eval points. : 332  
  
Predicting ...  
Predicting - done. Time (sec): 0.0057530  
  
Prediction time/pt. (sec) : 0.0000173
```

Evaluation

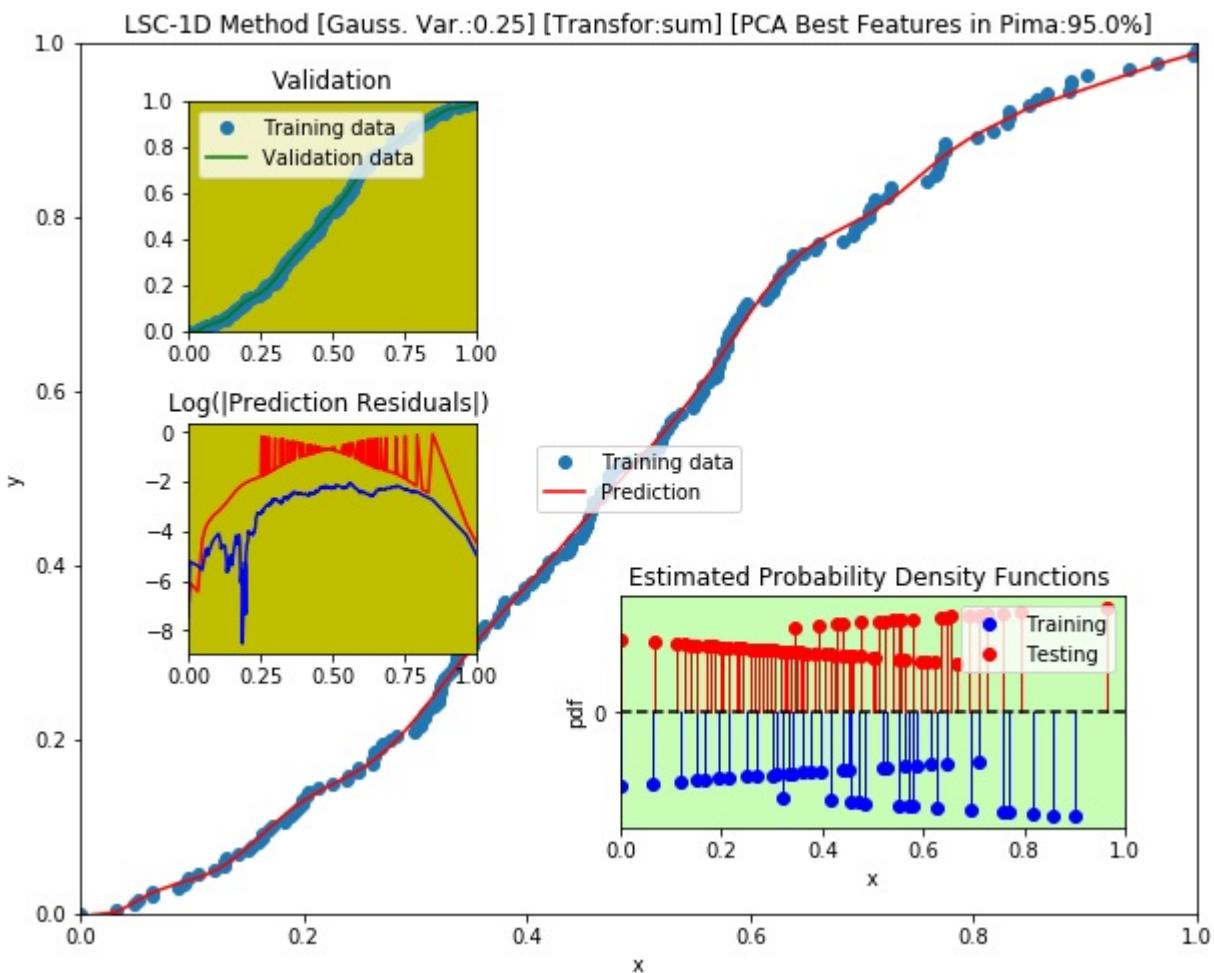
```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0033336  
Prediction time/pt. (sec) : 0.0000167
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0114708  
Prediction time/pt. (sec) : 0.0000346
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0055718  
Prediction time/pt. (sec) : 0.0000168
```



Pima Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0024819
  Initializing linear solver - done. Time (sec): 0.0027320
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0002840
  Solving linear system (col. 0) - done. Time (sec): 0.0004179
Training - done. Time (sec): 0.0112934

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0068891  
Prediction time/pt. (sec) : 0.0000344
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0037186  
Prediction time/pt. (sec) : 0.0000112
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0062649  
Prediction time/pt. (sec) : 0.0000189
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0062075  
Prediction time/pt. (sec) : 0.0000187
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0060706
Initializing linear solver - done. Time (sec): 0.0063202
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0011222
    Solving linear system (col. 0) - done. Time (sec): 0.0013018
Training - done. Time (sec): 0.0142260
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0061481

Prediction time/pt. (sec) : 0.0000185
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0045354

Prediction time/pt. (sec) : 0.0000227
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0059628

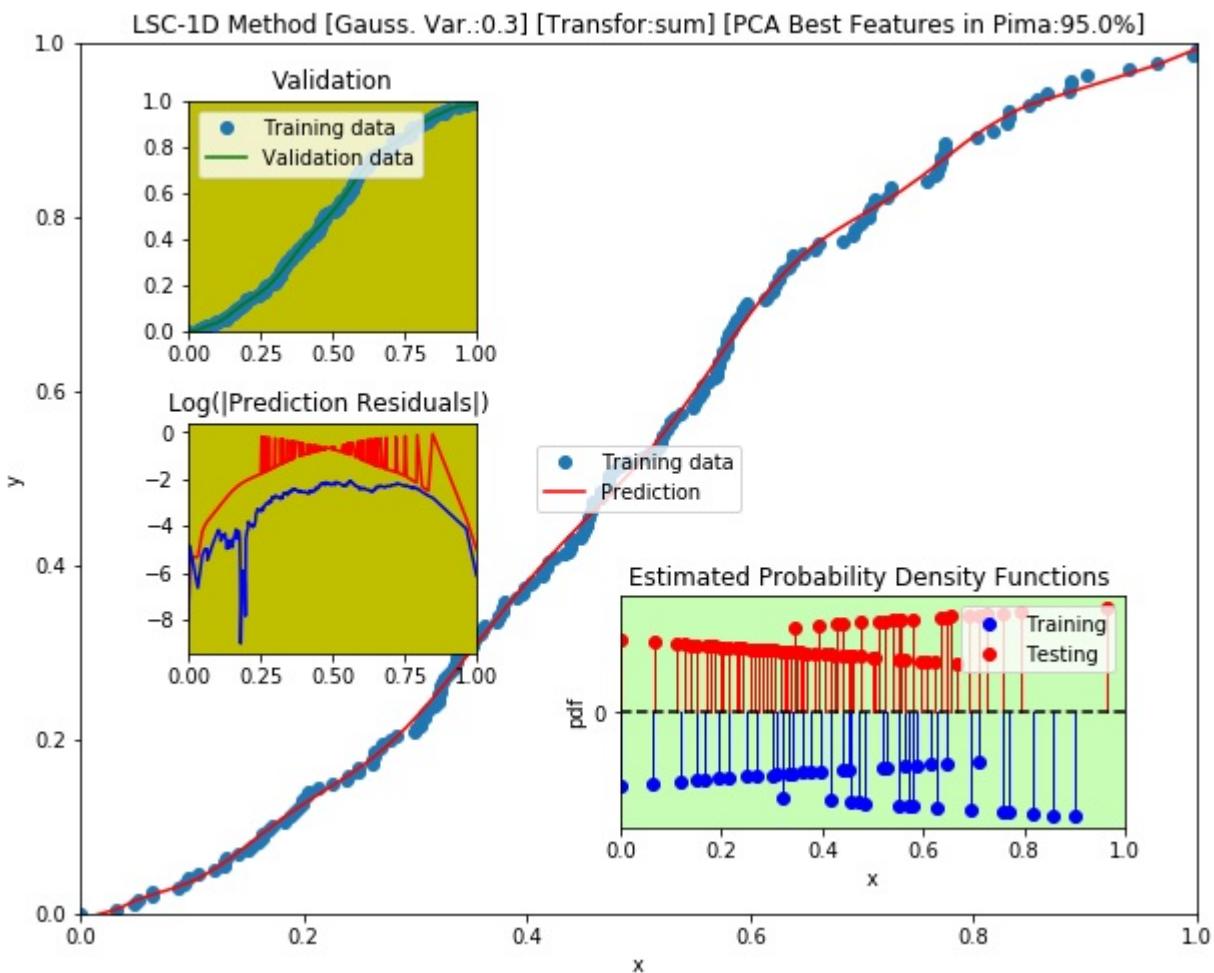
Prediction time/pt. (sec) : 0.0000180
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0061393

Prediction time/pt. (sec) : 0.0000185
```



Pima Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0032995
    Initializing linear solver - done. Time (sec): 0.0035815
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0003538
    Solving linear system (col. 0) - done. Time (sec): 0.0005460
Training - done. Time (sec): 0.0104380

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0088401  
Prediction time/pt. (sec) : 0.0000442
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0053818  
Prediction time/pt. (sec) : 0.0000162
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0052247  
Prediction time/pt. (sec) : 0.0000157
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0067301  
Prediction time/pt. (sec) : 0.0000203
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0037963
Initializing linear solver - done. Time (sec): 0.0043278
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003047
    Solving linear system (col. 0) - done. Time (sec): 0.0009582
Training - done. Time (sec): 0.0088215
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0028985

Prediction time/pt. (sec) : 0.0000087
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0017807

Prediction time/pt. (sec) : 0.0000089
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0029995

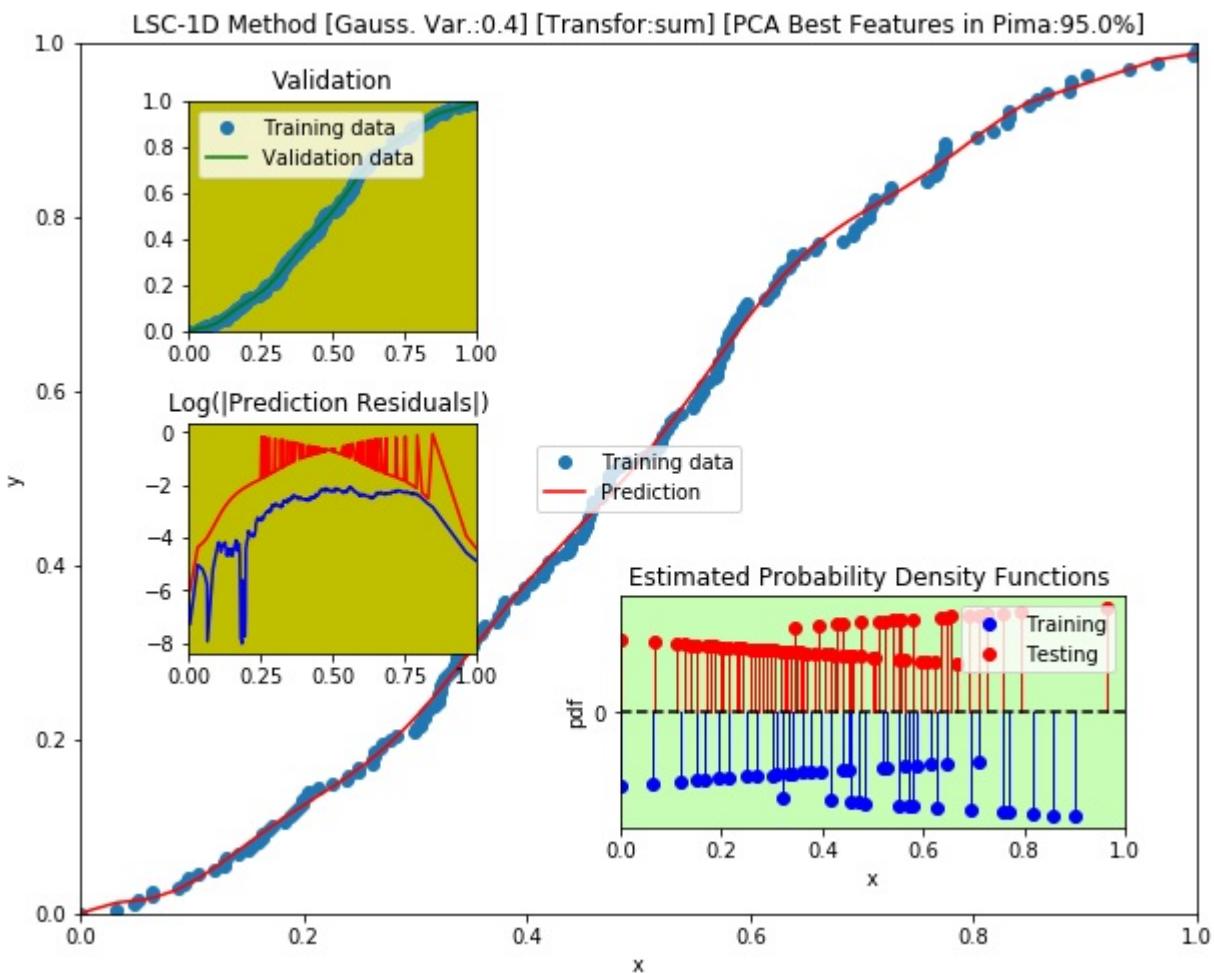
Prediction time/pt. (sec) : 0.0000090
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0028589

Prediction time/pt. (sec) : 0.0000086
```



Pima Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0023756
    Initializing linear solver - done. Time (sec): 0.0026290
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0002880
    Solving linear system (col. 0) - done. Time (sec): 0.0004244
Training - done. Time (sec): 0.0112474

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0057521  
Prediction time/pt. (sec) : 0.0000288
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0057256  
Prediction time/pt. (sec) : 0.0000172
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0083404  
Prediction time/pt. (sec) : 0.0000251
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0057240  
Prediction time/pt. (sec) : 0.0000172
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0057111
Initializing linear solver - done. Time (sec): 0.0059807
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0011113
    Solving linear system (col. 0) - done. Time (sec): 0.0012910
Training - done. Time (sec): 0.0138295
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0072279

Prediction time/pt. (sec) : 0.0000218
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0023353

Prediction time/pt. (sec) : 0.0000117
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0065272

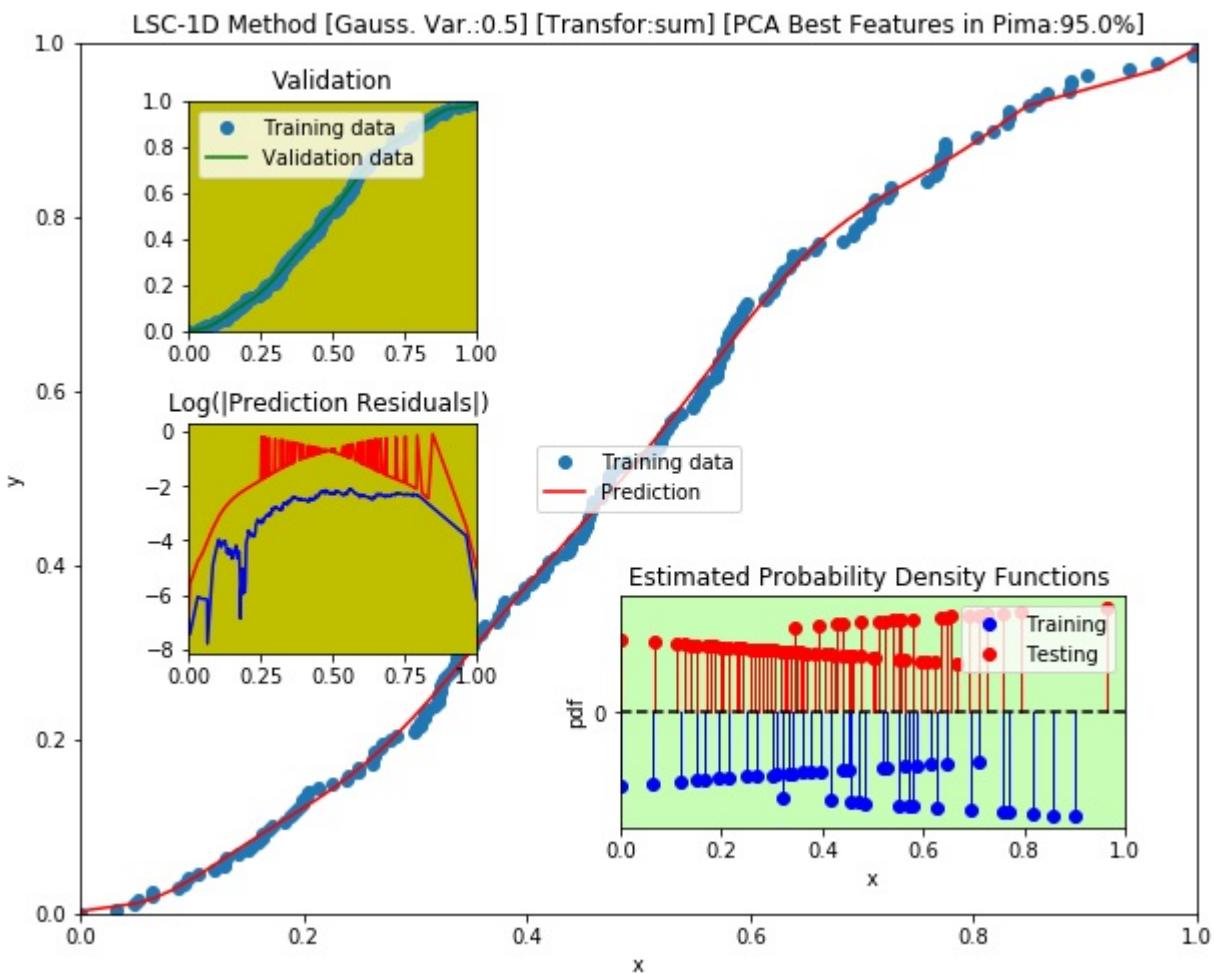
Prediction time/pt. (sec) : 0.0000197
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0064430

Prediction time/pt. (sec) : 0.0000194
```



Pima Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0033484
    Initializing linear solver - done. Time (sec): 0.0036733
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0004065
    Solving linear system (col. 0) - done. Time (sec): 0.0006065
Training - done. Time (sec): 0.0125387

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0074267  
Prediction time/pt. (sec) : 0.0000371
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0067110  
Prediction time/pt. (sec) : 0.0000202
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0027981  
Prediction time/pt. (sec) : 0.0000084
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0073903  
Prediction time/pt. (sec) : 0.0000223
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0057867
Initializing linear solver - done. Time (sec): 0.0063262
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003023
    Solving linear system (col. 0) - done. Time (sec): 0.0009217
Training - done. Time (sec): 0.0107880
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0027857

Prediction time/pt. (sec) : 0.0000084
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0044167

Prediction time/pt. (sec) : 0.0000221
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0027723

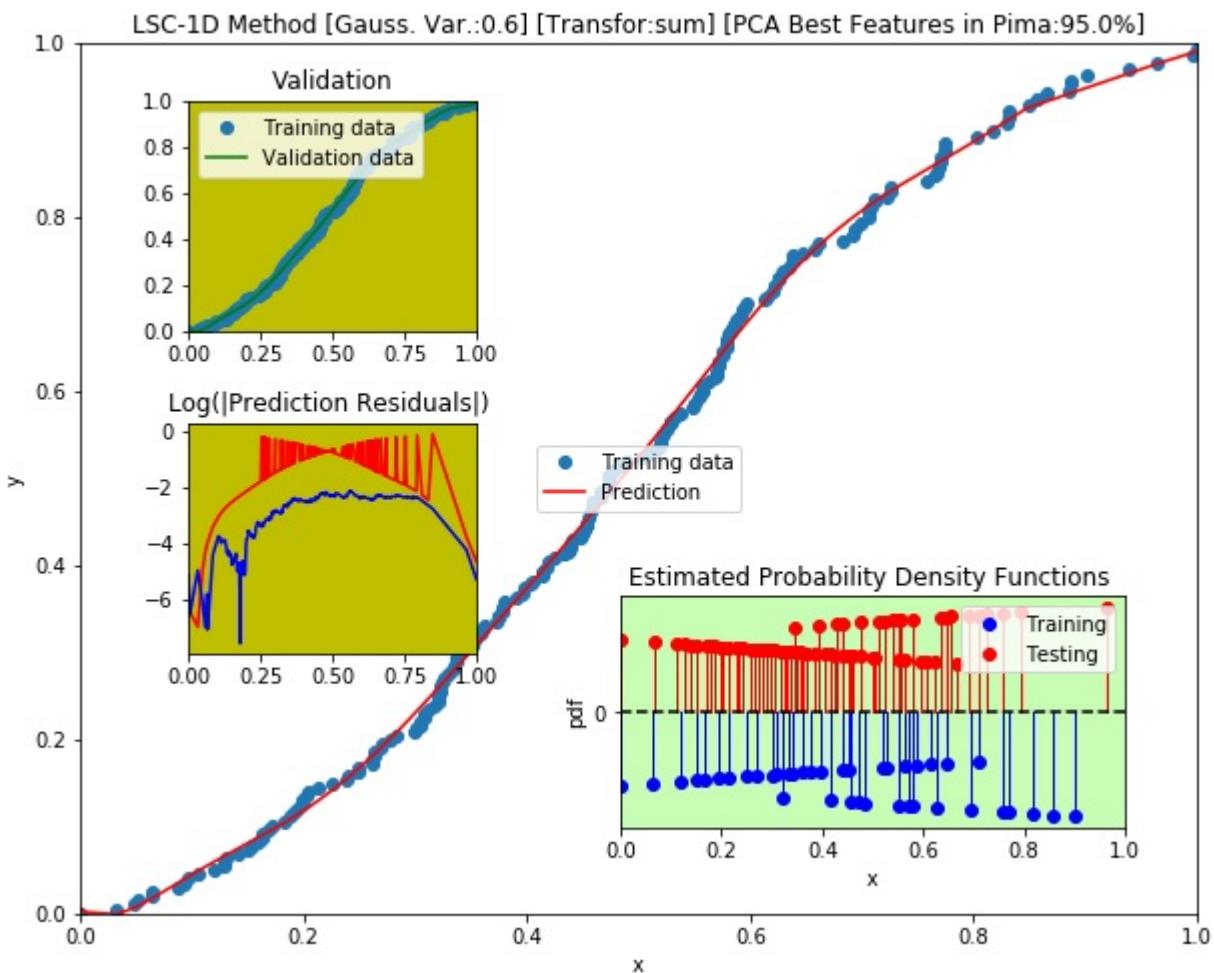
Prediction time/pt. (sec) : 0.0000084
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0027852

Prediction time/pt. (sec) : 0.0000084
```



Pima Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0033603
    Initializing linear solver - done. Time (sec): 0.0036893
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0003524
    Solving linear system (col. 0) - done. Time (sec): 0.0005426
Training - done. Time (sec): 0.0124075

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0038064  
Prediction time/pt. (sec) : 0.0000190
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0112934  
Prediction time/pt. (sec) : 0.0000340
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0046864  
Prediction time/pt. (sec) : 0.0000141
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0024948  
Prediction time/pt. (sec) : 0.0000075
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0086632
Initializing linear solver - done. Time (sec): 0.0088892
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003071
    Solving linear system (col. 0) - done. Time (sec): 0.0004518
Training - done. Time (sec): 0.0120509
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0055199

Prediction time/pt. (sec) : 0.0000166
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0037467

Prediction time/pt. (sec) : 0.0000187
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0046034

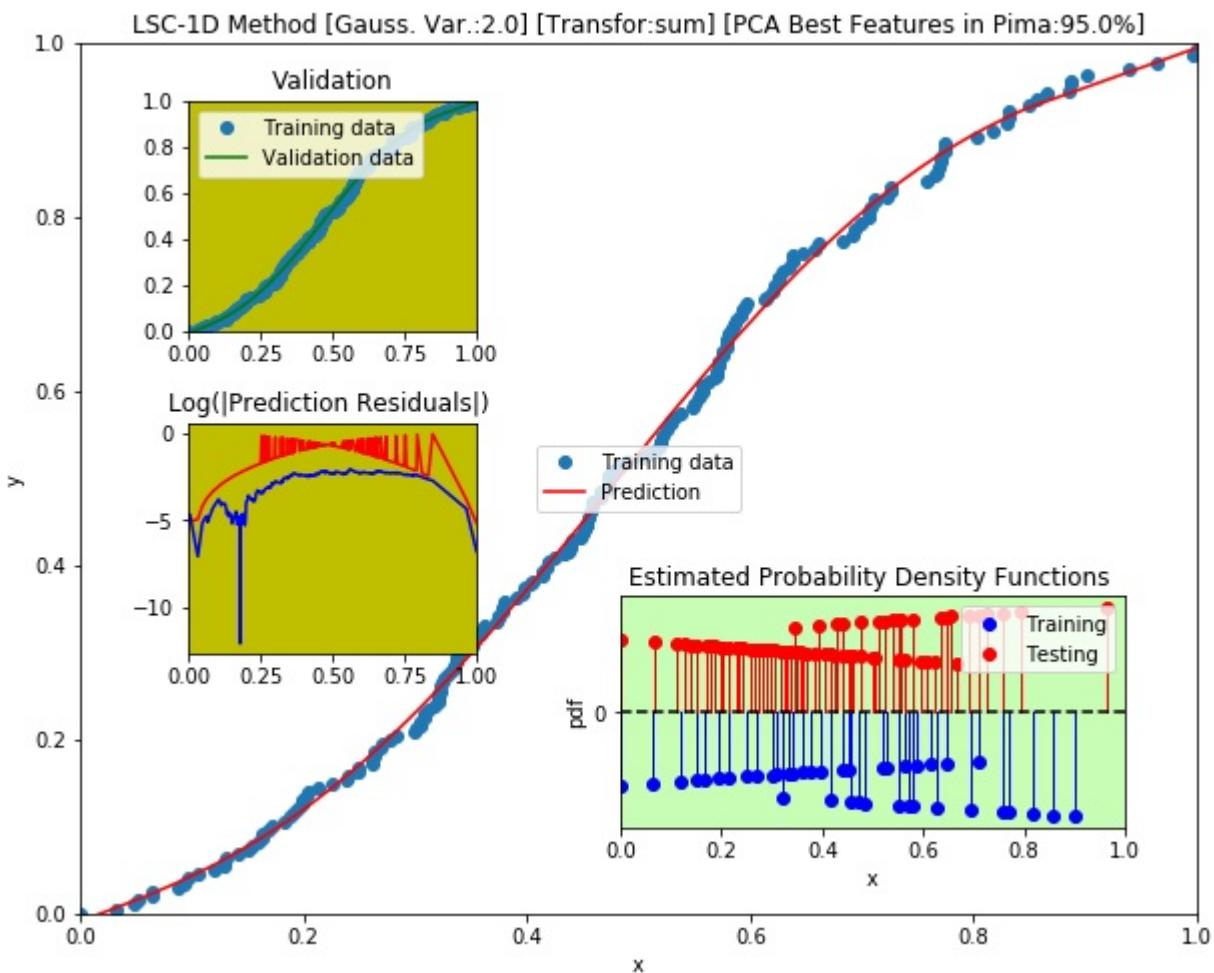
Prediction time/pt. (sec) : 0.0000139
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0024703

Prediction time/pt. (sec) : 0.0000074
```



Pima Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (201 x 201 mtx) ...
        Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0052931
    Initializing linear solver - done. Time (sec): 0.0058143
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0005929
    Solving linear system (col. 0) - done. Time (sec): 0.0008380
Training - done. Time (sec): 0.0137565

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0070546  
Prediction time/pt. (sec) : 0.0000353
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0064521  
Prediction time/pt. (sec) : 0.0000194
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0051386  
Prediction time/pt. (sec) : 0.0000155
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0051022  
Prediction time/pt. (sec) : 0.0000154
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0057571
Initializing linear solver - done. Time (sec): 0.0060127
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0011353
    Solving linear system (col. 0) - done. Time (sec): 0.0022519
Training - done. Time (sec): 0.0142779
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0047781

Prediction time/pt. (sec) : 0.0000144
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0032110

Prediction time/pt. (sec) : 0.0000161
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0049460

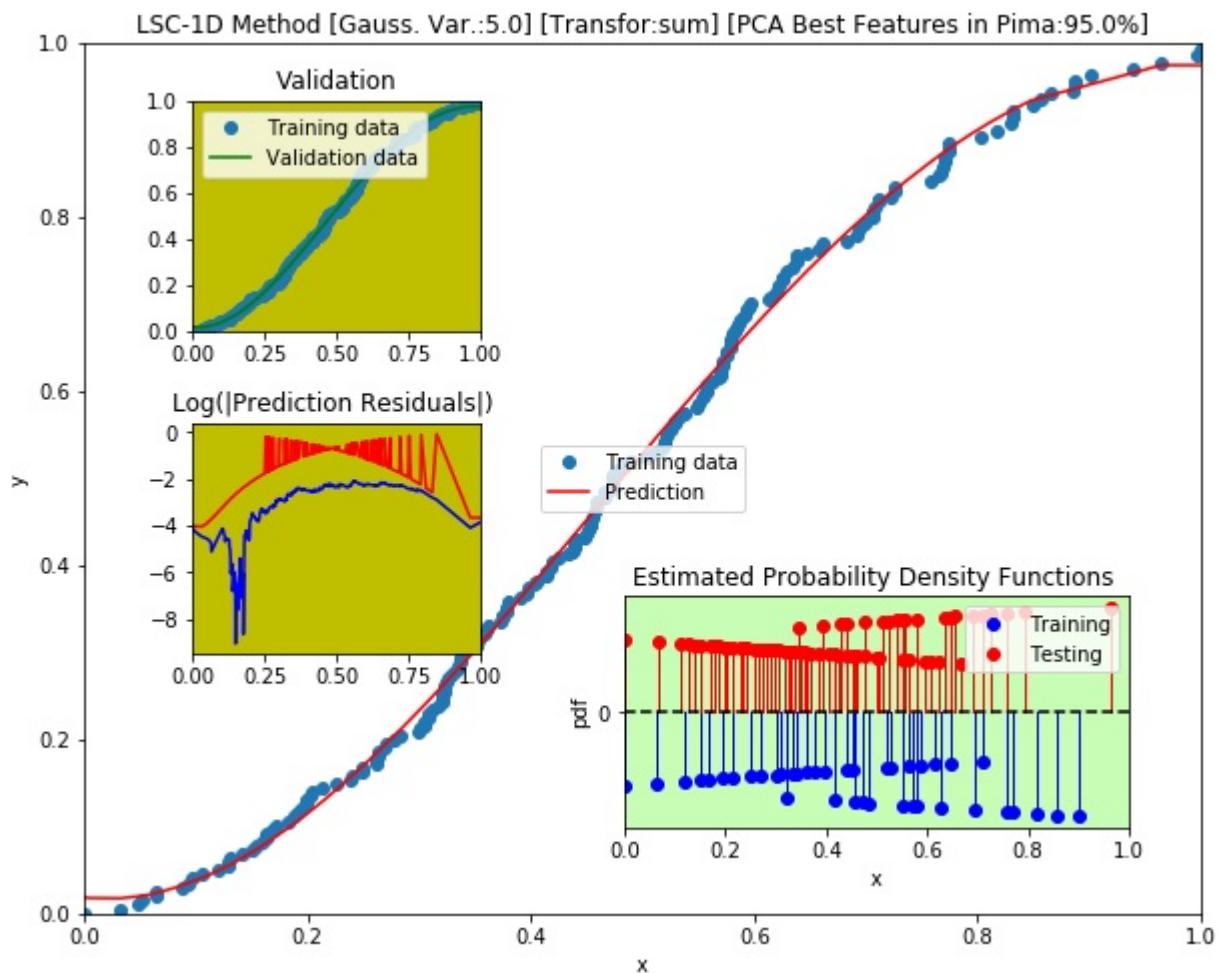
Prediction time/pt. (sec) : 0.0000149
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0047858

Prediction time/pt. (sec) : 0.0000144
```



Pima Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0059211
    Initializing linear solver - done. Time (sec): 0.0064721
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0003643
    Solving linear system (col. 0) - done. Time (sec): 0.0005579
Training - done. Time (sec): 0.0153830

```

Evaluation

```
# eval points. : 200  
  
Predicting ...  
Predicting - done. Time (sec): 0.0057263  
  
Prediction time/pt. (sec) : 0.0000286
```

Evaluation

```
# eval points. : 332  
  
Predicting ...  
Predicting - done. Time (sec): 0.0043468  
  
Prediction time/pt. (sec) : 0.0000131
```

Evaluation

```
# eval points. : 332  
  
Predicting ...  
Predicting - done. Time (sec): 0.0049160  
  
Prediction time/pt. (sec) : 0.0000148
```

Evaluation

```
# eval points. : 332  
  
Predicting ...  
Predicting - done. Time (sec): 0.0045700  
  
Prediction time/pt. (sec) : 0.0000138
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0017626
Initializing linear solver - done. Time (sec): 0.0025196
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003154
    Solving linear system (col. 0) - done. Time (sec): 0.0009515
Training - done. Time (sec): 0.0074148
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0033236

Prediction time/pt. (sec) : 0.0000100
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0020361

Prediction time/pt. (sec) : 0.0000102
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0022199

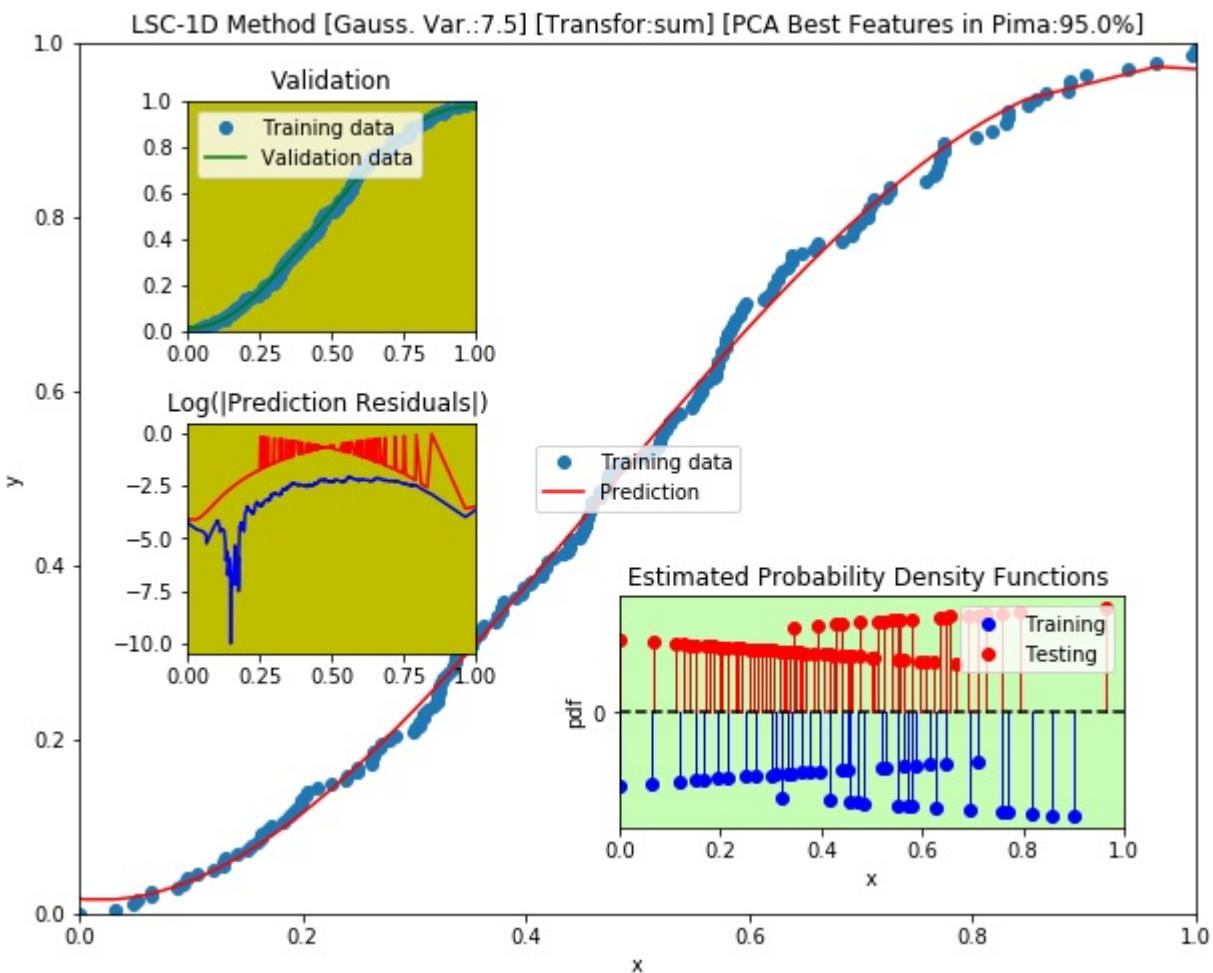
Prediction time/pt. (sec) : 0.0000067
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0022495

Prediction time/pt. (sec) : 0.0000068
```



Pima Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0063808
    Initializing linear solver - done. Time (sec): 0.0069988
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0003724
    Solving linear system (col. 0) - done. Time (sec): 0.0005717
Training - done. Time (sec): 0.0139074

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0089633  
Prediction time/pt. (sec) : 0.0000448
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0098090  
Prediction time/pt. (sec) : 0.0000295
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0072813  
Prediction time/pt. (sec) : 0.0000219
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0072272  
Prediction time/pt. (sec) : 0.0000218
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0190678
Initializing linear solver - done. Time (sec): 0.0193164
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0011063
    Solving linear system (col. 0) - done. Time (sec): 0.0012867
Training - done. Time (sec): 0.0229559
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0046656

Prediction time/pt. (sec) : 0.0000141
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0036445

Prediction time/pt. (sec) : 0.0000182
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0055220

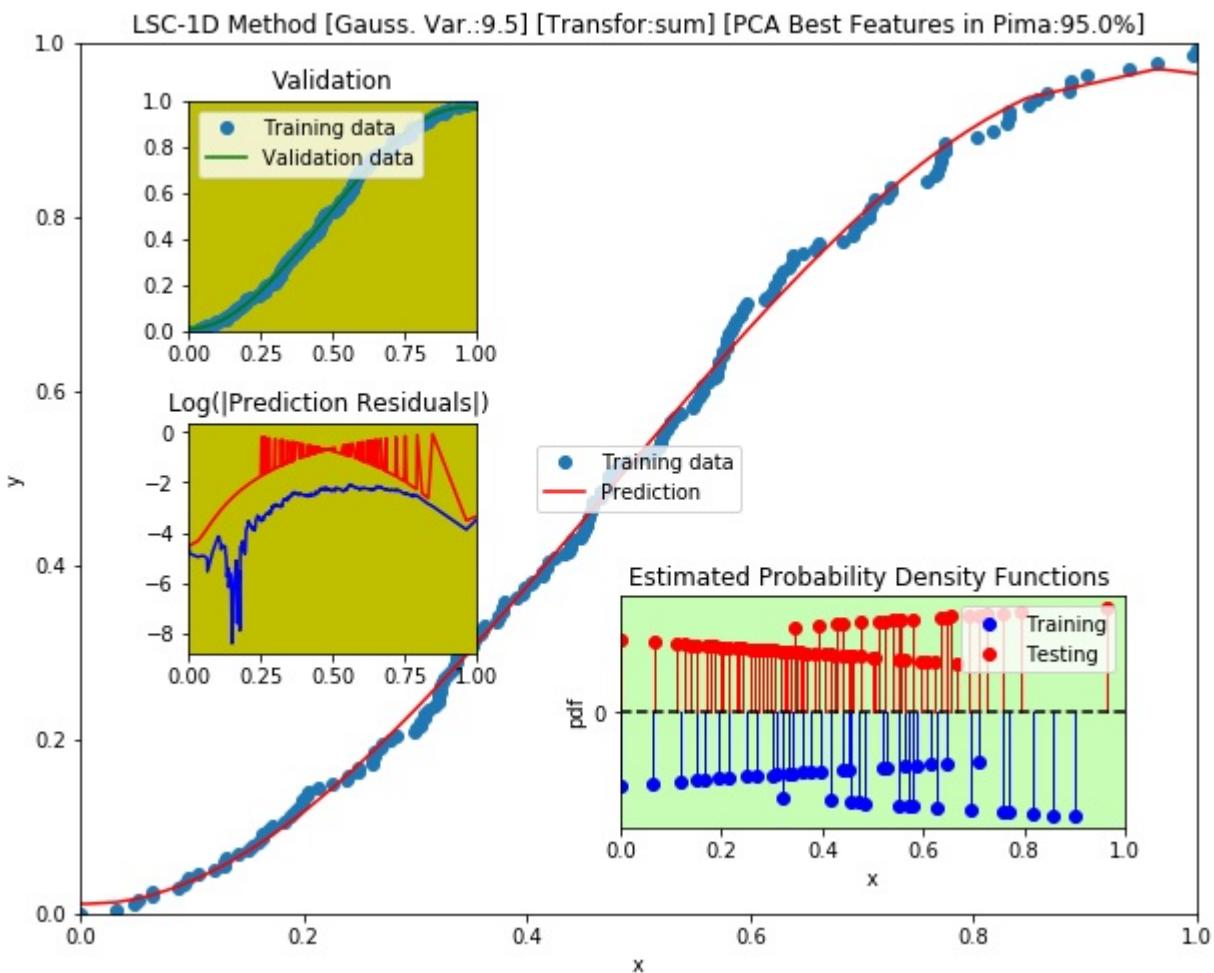
Prediction time/pt. (sec) : 0.0000166
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0054178

Prediction time/pt. (sec) : 0.0000163
```



Pima Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0022902
    Initializing linear solver - done. Time (sec): 0.0025444
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0002835
    Solving linear system (col. 0) - done. Time (sec): 0.0004215
Training - done. Time (sec): 0.0109327

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0054555  
Prediction time/pt. (sec) : 0.0000273
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0050948  
Prediction time/pt. (sec) : 0.0000153
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0050421  
Prediction time/pt. (sec) : 0.0000152
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0048001  
Prediction time/pt. (sec) : 0.0000145
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0071425
Initializing linear solver - done. Time (sec): 0.0074031
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0011108
    Solving linear system (col. 0) - done. Time (sec): 0.0015149
Training - done. Time (sec): 0.0144517
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0052335

Prediction time/pt. (sec) : 0.0000158
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0034616

Prediction time/pt. (sec) : 0.0000173
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0057178

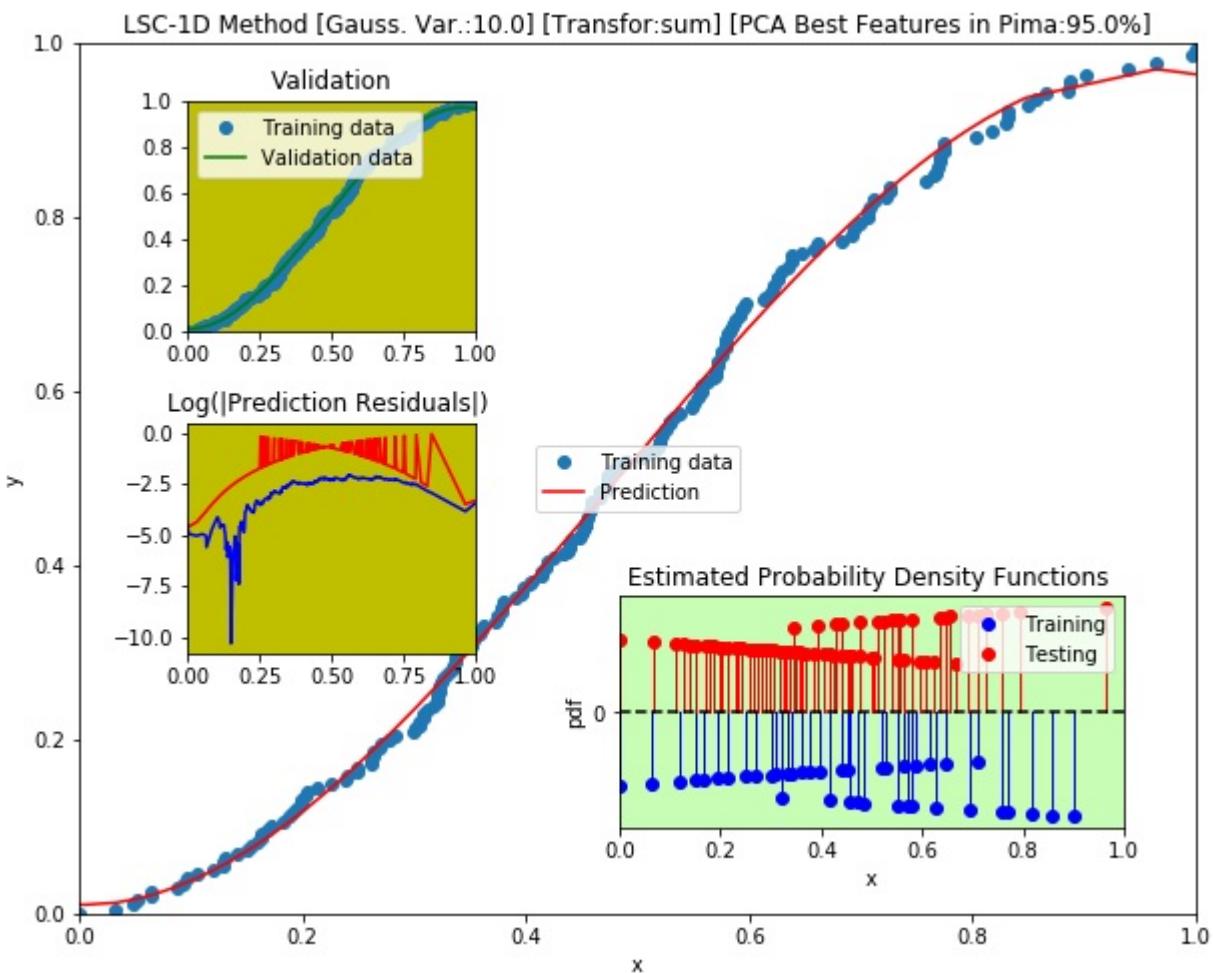
Prediction time/pt. (sec) : 0.0000172
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0055254

Prediction time/pt. (sec) : 0.0000166
```



Pima Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: average
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0068364
    Initializing linear solver - done. Time (sec): 0.0070989
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0004892
    Solving linear system (col. 0) - done. Time (sec): 0.0006616
Training - done. Time (sec): 0.0120966

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0044286  
Prediction time/pt. (sec) : 0.0000221
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0028241  
Prediction time/pt. (sec) : 0.0000085
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0105412  
Prediction time/pt. (sec) : 0.0000318
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0052557  
Prediction time/pt. (sec) : 0.0000158
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0017610
Initializing linear solver - done. Time (sec): 0.0019703
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0002882
    Solving linear system (col. 0) - done. Time (sec): 0.0004256
Training - done. Time (sec): 0.0105731
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0028119

Prediction time/pt. (sec) : 0.0000085
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0103867

Prediction time/pt. (sec) : 0.0000519
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0075309

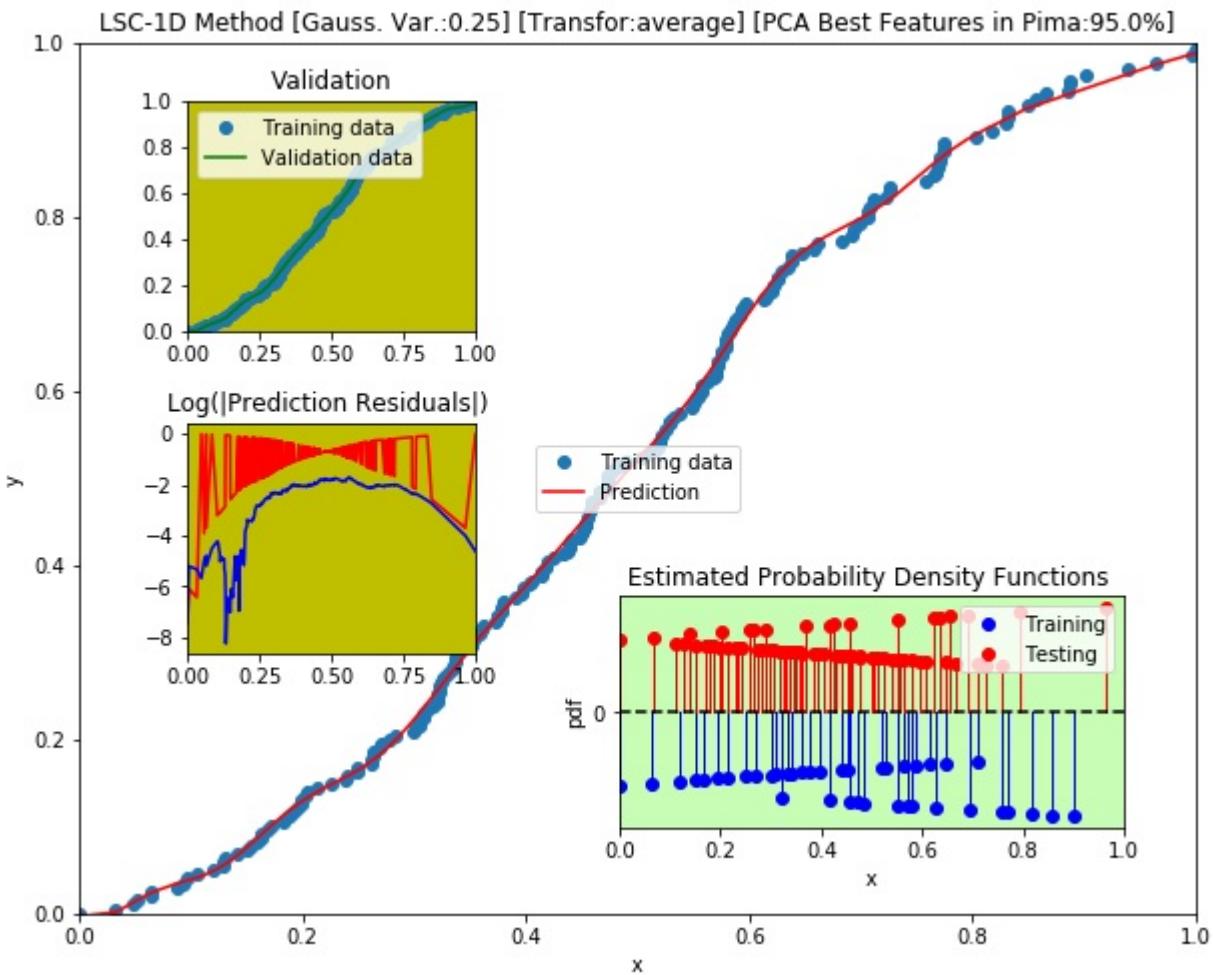
Prediction time/pt. (sec) : 0.0000227
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0052888

Prediction time/pt. (sec) : 0.0000159
```



Pima Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

Training ...

Initializing linear solver ...

Performing LU fact. (201 x 201 mtx) ...

Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0064204

Initializing linear solver - done. Time (sec): 0.0069945

Solving linear system (col. 0) ...

Back solving (201 x 201 mtx) ...

Back solving (201 x 201 mtx) - done. Time (sec): 0.0002992

Solving linear system (col. 0) - done. Time (sec): 0.0009222

Training - done. Time (sec): 0.0132399

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0018282  
Prediction time/pt. (sec) : 0.0000091
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0030038  
Prediction time/pt. (sec) : 0.0000090
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0030863  
Prediction time/pt. (sec) : 0.0000093
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0030746  
Prediction time/pt. (sec) : 0.0000093
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0018466
Initializing linear solver - done. Time (sec): 0.0026445
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003495
    Solving linear system (col. 0) - done. Time (sec): 0.0010276
Training - done. Time (sec): 0.0076969
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0033300

Prediction time/pt. (sec) : 0.0000100
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0019908

Prediction time/pt. (sec) : 0.0000100
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0030775

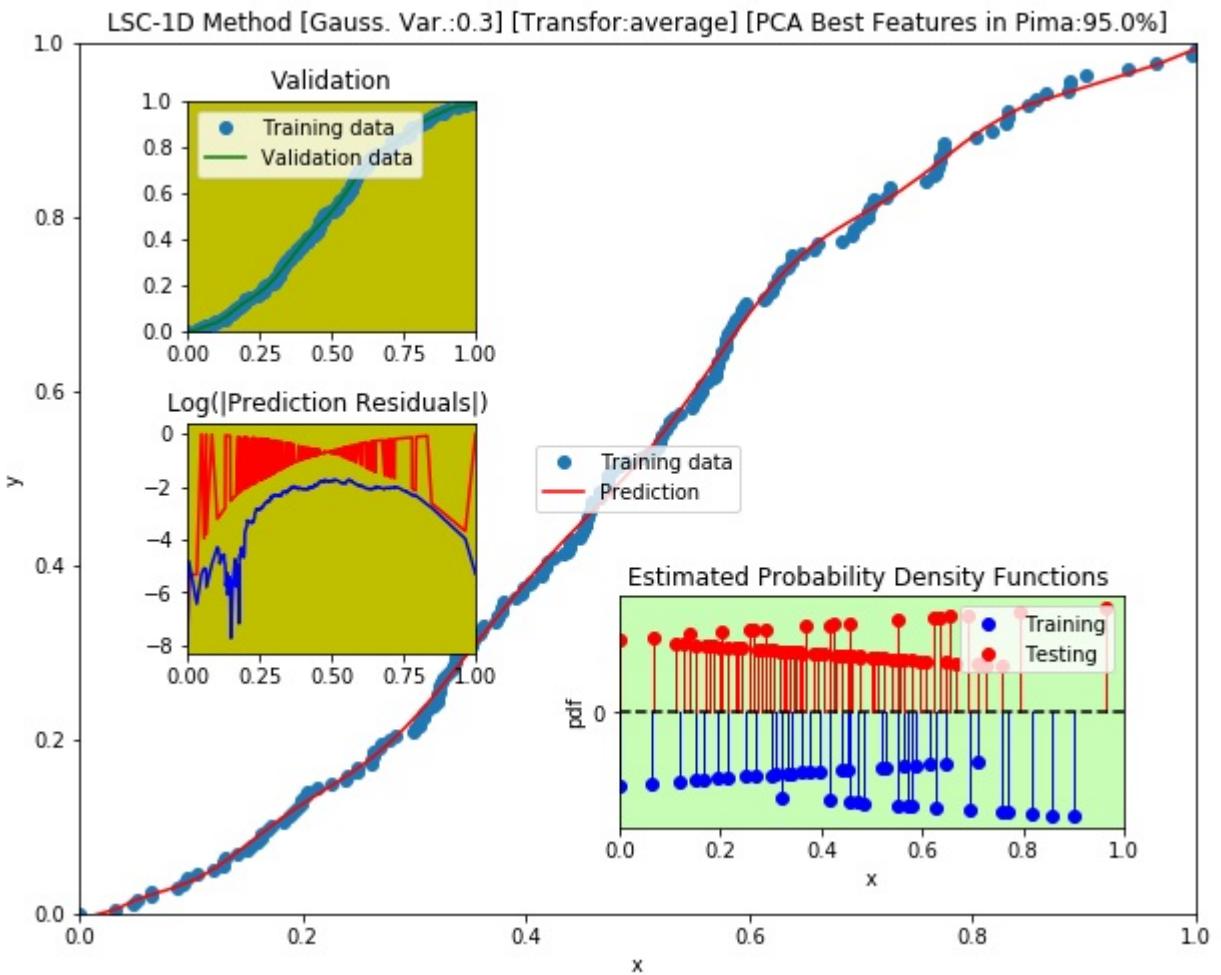
Prediction time/pt. (sec) : 0.0000093
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0031884

Prediction time/pt. (sec) : 0.0000096
```



Pima Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0032492
  Initializing linear solver - done. Time (sec): 0.0035329
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003612
  Solving linear system (col. 0) - done. Time (sec): 0.0005541
Training - done. Time (sec): 0.0122685

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0057876  
Prediction time/pt. (sec) : 0.0000289
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0028515  
Prediction time/pt. (sec) : 0.0000086
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0149422  
Prediction time/pt. (sec) : 0.0000450
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0028870  
Prediction time/pt. (sec) : 0.0000087
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0089879
Initializing linear solver - done. Time (sec): 0.0092206
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0002906
    Solving linear system (col. 0) - done. Time (sec): 0.0004292
Training - done. Time (sec): 0.0124311
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0058243

Prediction time/pt. (sec) : 0.0000175
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0039566

Prediction time/pt. (sec) : 0.0000198
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0028868

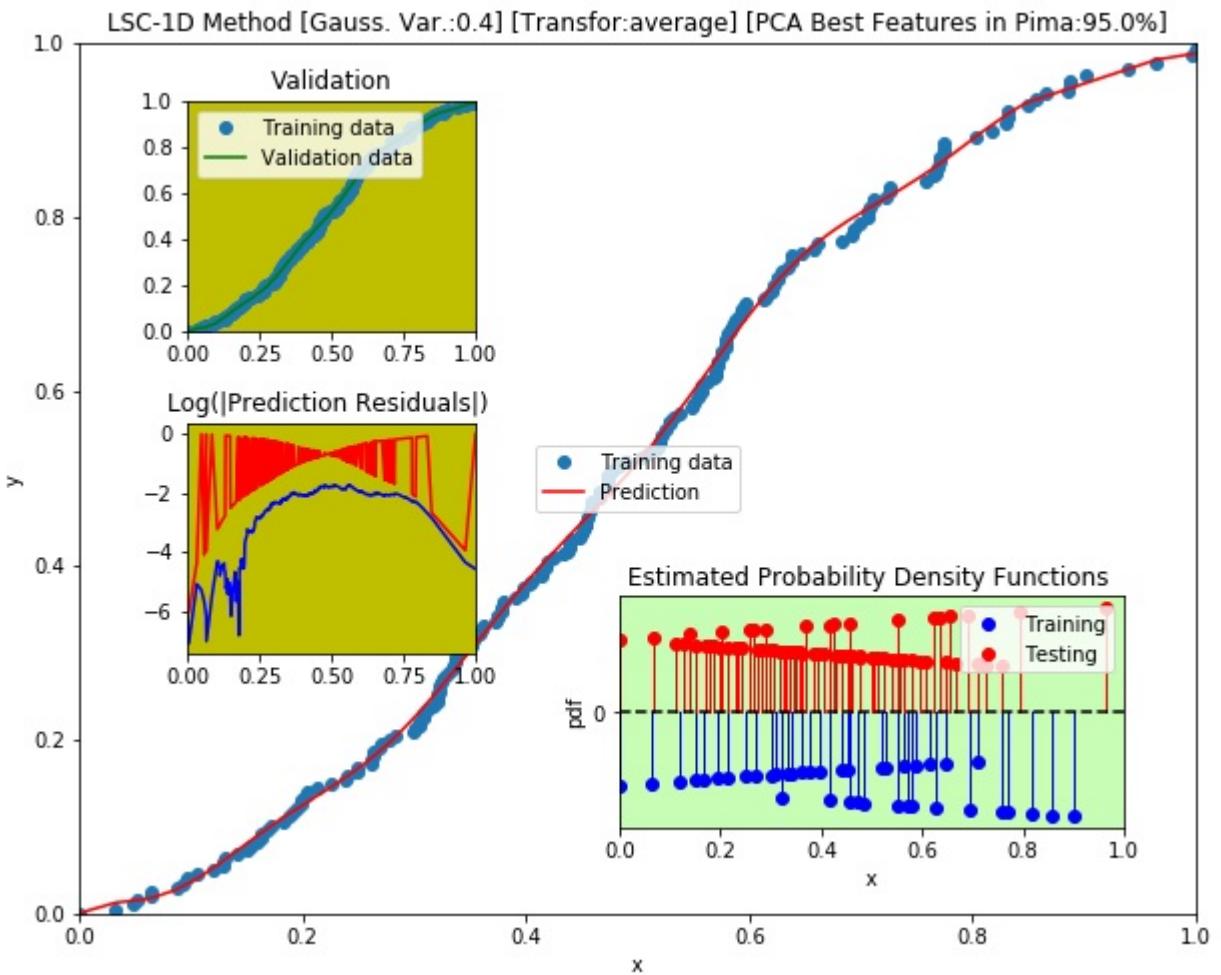
Prediction time/pt. (sec) : 0.0000087
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0028729

Prediction time/pt. (sec) : 0.0000087
```



Pima Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0024474
  Initializing linear solver - done. Time (sec): 0.0027101
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0002873
  Solving linear system (col. 0) - done. Time (sec): 0.0004280
Training - done. Time (sec): 0.0125172

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0086372  
Prediction time/pt. (sec) : 0.0000432
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0039487  
Prediction time/pt. (sec) : 0.0000119
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0075779  
Prediction time/pt. (sec) : 0.0000228
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0109799  
Prediction time/pt. (sec) : 0.0000331
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0073209
Initializing linear solver - done. Time (sec): 0.0075543
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0002918
    Solving linear system (col. 0) - done. Time (sec): 0.0004325
Training - done. Time (sec): 0.0105786
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0055621

Prediction time/pt. (sec) : 0.0000168
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0039306

Prediction time/pt. (sec) : 0.0000197
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0048971

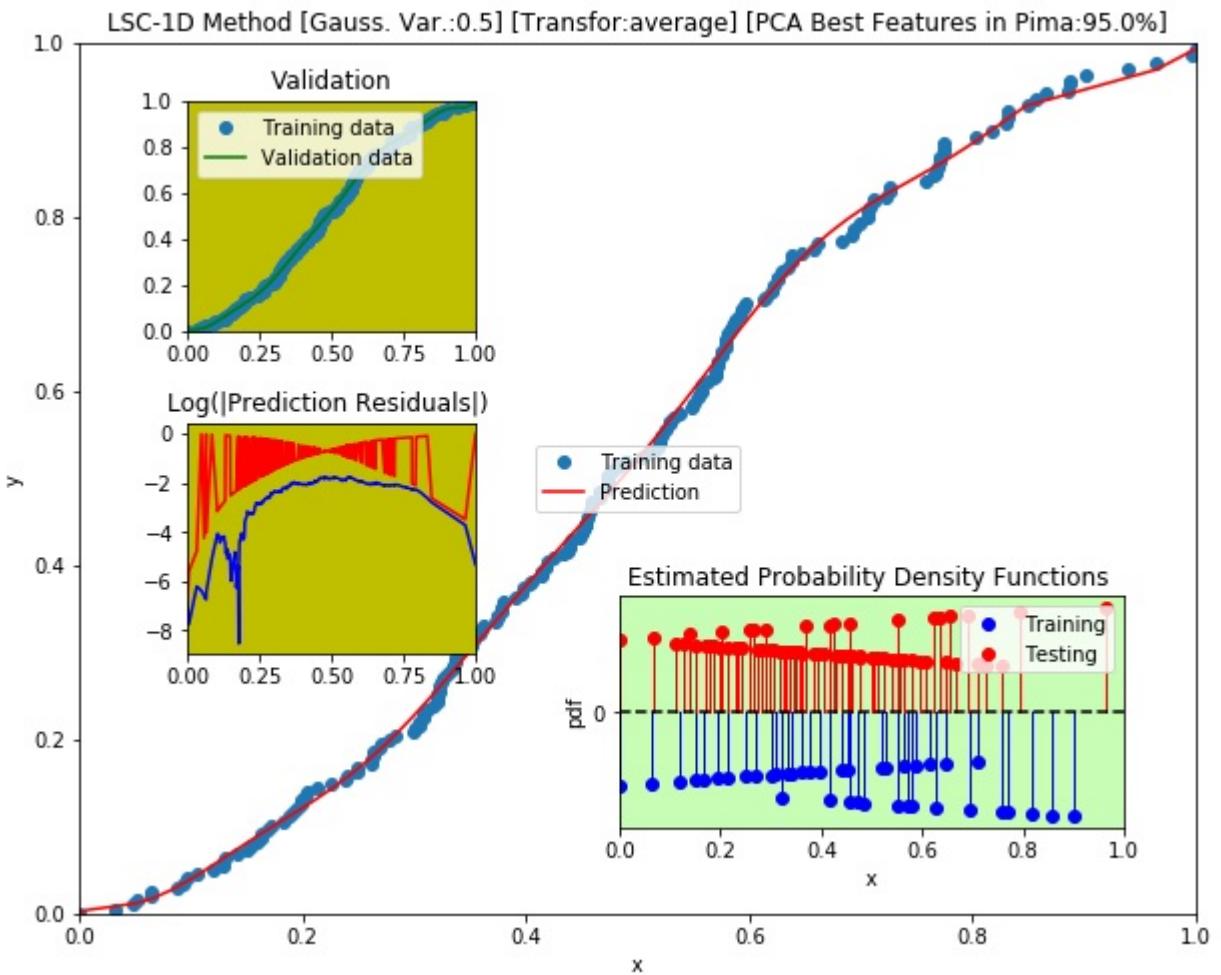
Prediction time/pt. (sec) : 0.0000148
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0050082

Prediction time/pt. (sec) : 0.0000151
```



Pima Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0031908
  Initializing linear solver - done. Time (sec): 0.0034873
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003567
  Solving linear system (col. 0) - done. Time (sec): 0.0006034
Training - done. Time (sec): 0.0125864

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0046096  
Prediction time/pt. (sec) : 0.0000230
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0028098  
Prediction time/pt. (sec) : 0.0000085
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0027523  
Prediction time/pt. (sec) : 0.0000083
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0118926  
Prediction time/pt. (sec) : 0.0000358
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0080492
Initializing linear solver - done. Time (sec): 0.0082912
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003178
    Solving linear system (col. 0) - done. Time (sec): 0.0005047
Training - done. Time (sec): 0.0114863
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0060287

Prediction time/pt. (sec) : 0.0000182
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0044506

Prediction time/pt. (sec) : 0.0000223
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0057552

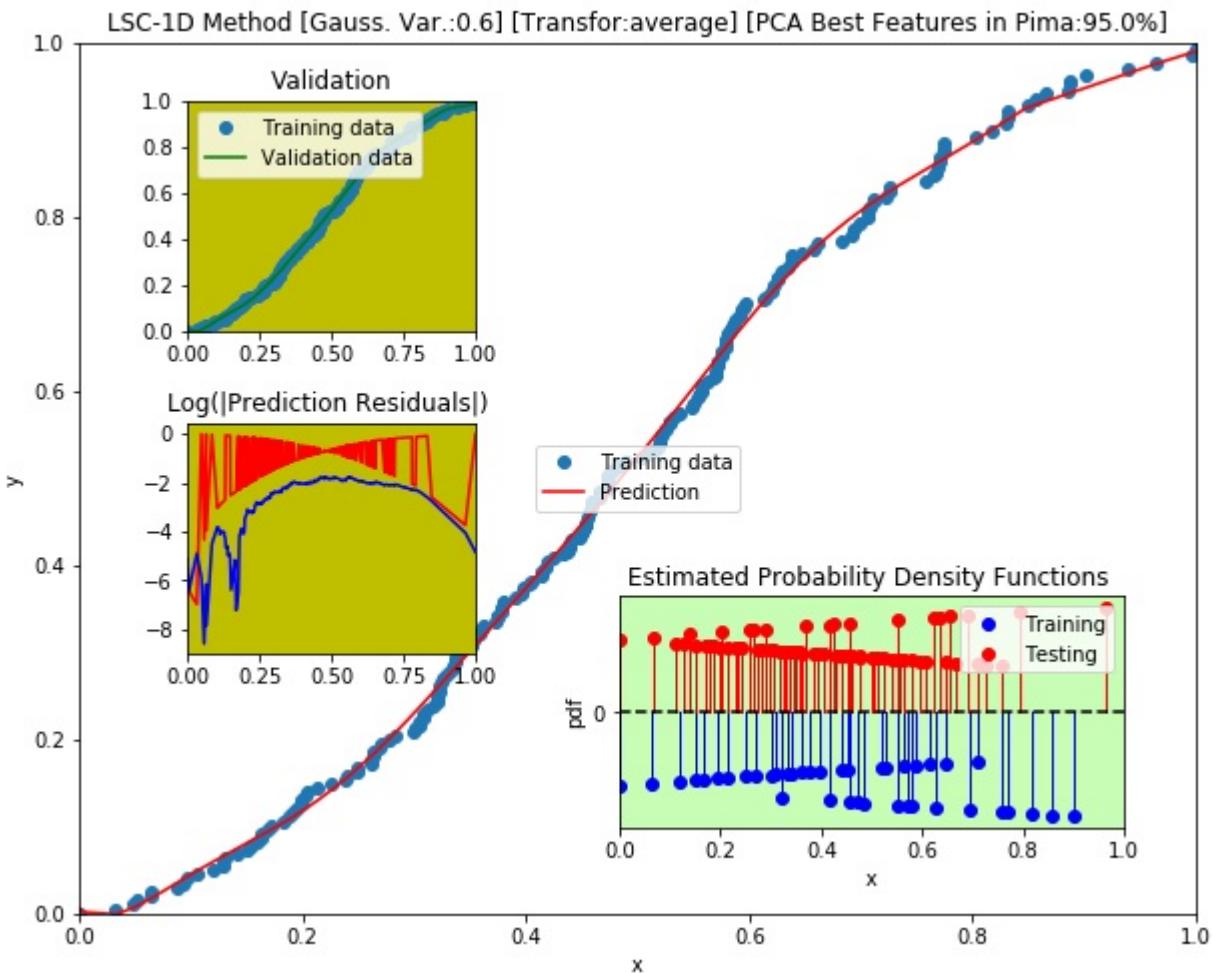
Prediction time/pt. (sec) : 0.0000173
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0058727

Prediction time/pt. (sec) : 0.0000177
```



Pima Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0023286
  Initializing linear solver - done. Time (sec): 0.0025816
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0002849
  Solving linear system (col. 0) - done. Time (sec): 0.0004230
Training - done. Time (sec): 0.0107999

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0087485  
Prediction time/pt. (sec) : 0.0000437
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0023370  
Prediction time/pt. (sec) : 0.0000070
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0079887  
Prediction time/pt. (sec) : 0.0000241
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0024793  
Prediction time/pt. (sec) : 0.0000075
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0024288
Initializing linear solver - done. Time (sec): 0.0026581
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0002892
    Solving linear system (col. 0) - done. Time (sec): 0.0004342
Training - done. Time (sec): 0.0116467
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0057867

Prediction time/pt. (sec) : 0.0000174
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0016451

Prediction time/pt. (sec) : 0.0000082
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0077343

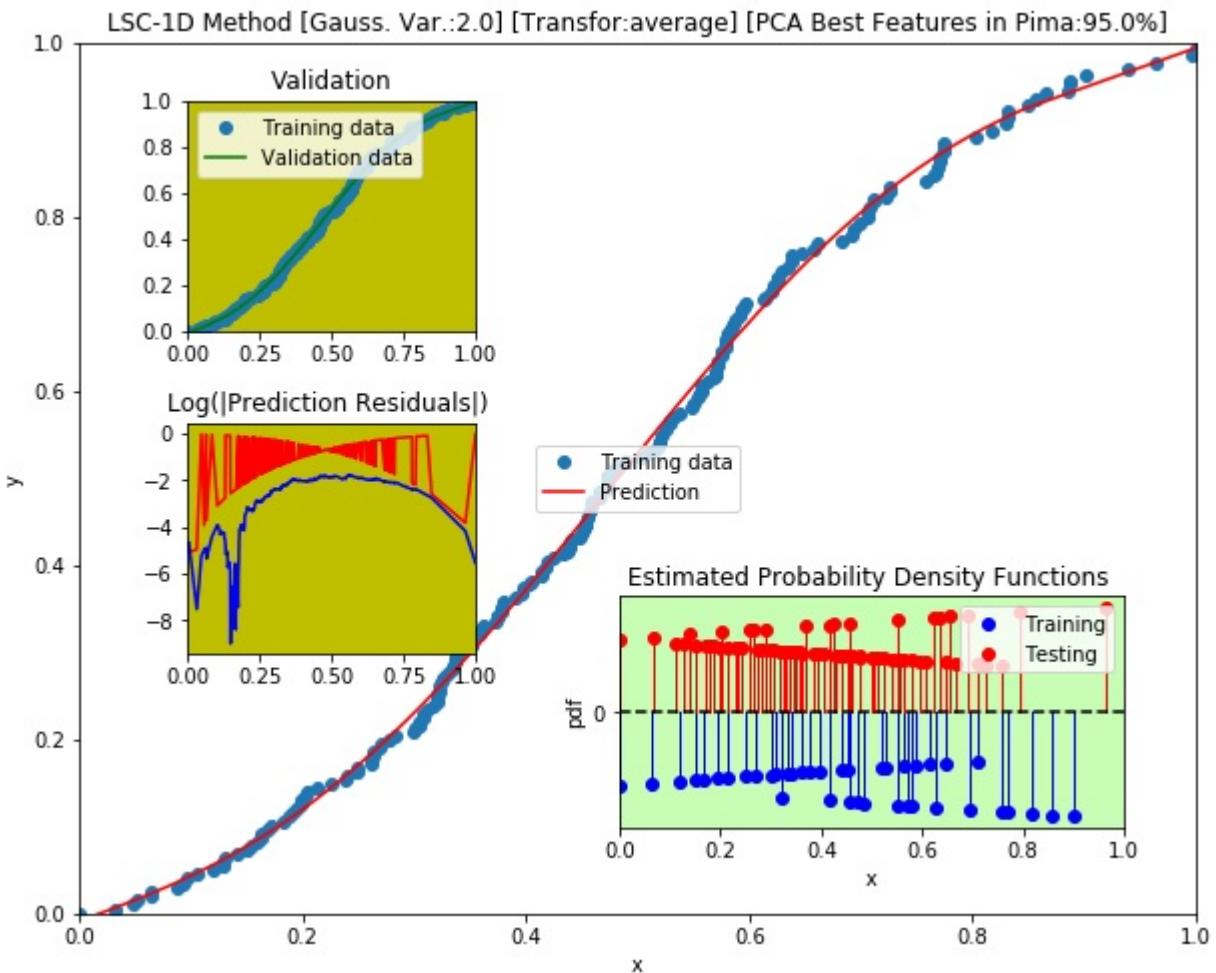
Prediction time/pt. (sec) : 0.0000233
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0052536

Prediction time/pt. (sec) : 0.0000158
```



Pima Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

Training ...

Initializing linear solver ...

Performing LU fact. (201 x 201 mtx) ...

Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0025866

Initializing linear solver - done. Time (sec): 0.0028703

Solving linear system (col. 0) ...

Back solving (201 x 201 mtx) ...

Back solving (201 x 201 mtx) - done. Time (sec): 0.0003552

Solving linear system (col. 0) - done. Time (sec): 0.0005481

Training - done. Time (sec): 0.0112951

Evaluation

```
# eval points. : 200  
  
Predicting ...  
Predicting - done. Time (sec): 0.0099161  
  
Prediction time/pt. (sec) : 0.0000496
```

Evaluation

```
# eval points. : 332  
  
Predicting ...  
Predicting - done. Time (sec): 0.0050032  
  
Prediction time/pt. (sec) : 0.0000151
```

Evaluation

```
# eval points. : 332  
  
Predicting ...  
Predicting - done. Time (sec): 0.0022843  
  
Prediction time/pt. (sec) : 0.0000069
```

Evaluation

```
# eval points. : 332  
  
Predicting ...  
Predicting - done. Time (sec): 0.0077167  
  
Prediction time/pt. (sec) : 0.0000232
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0059502
Initializing linear solver - done. Time (sec): 0.0061843
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0002949
    Solving linear system (col. 0) - done. Time (sec): 0.0004356
Training - done. Time (sec): 0.0089881
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0022850

Prediction time/pt. (sec) : 0.0000069
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0067277

Prediction time/pt. (sec) : 0.0000336
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0023766

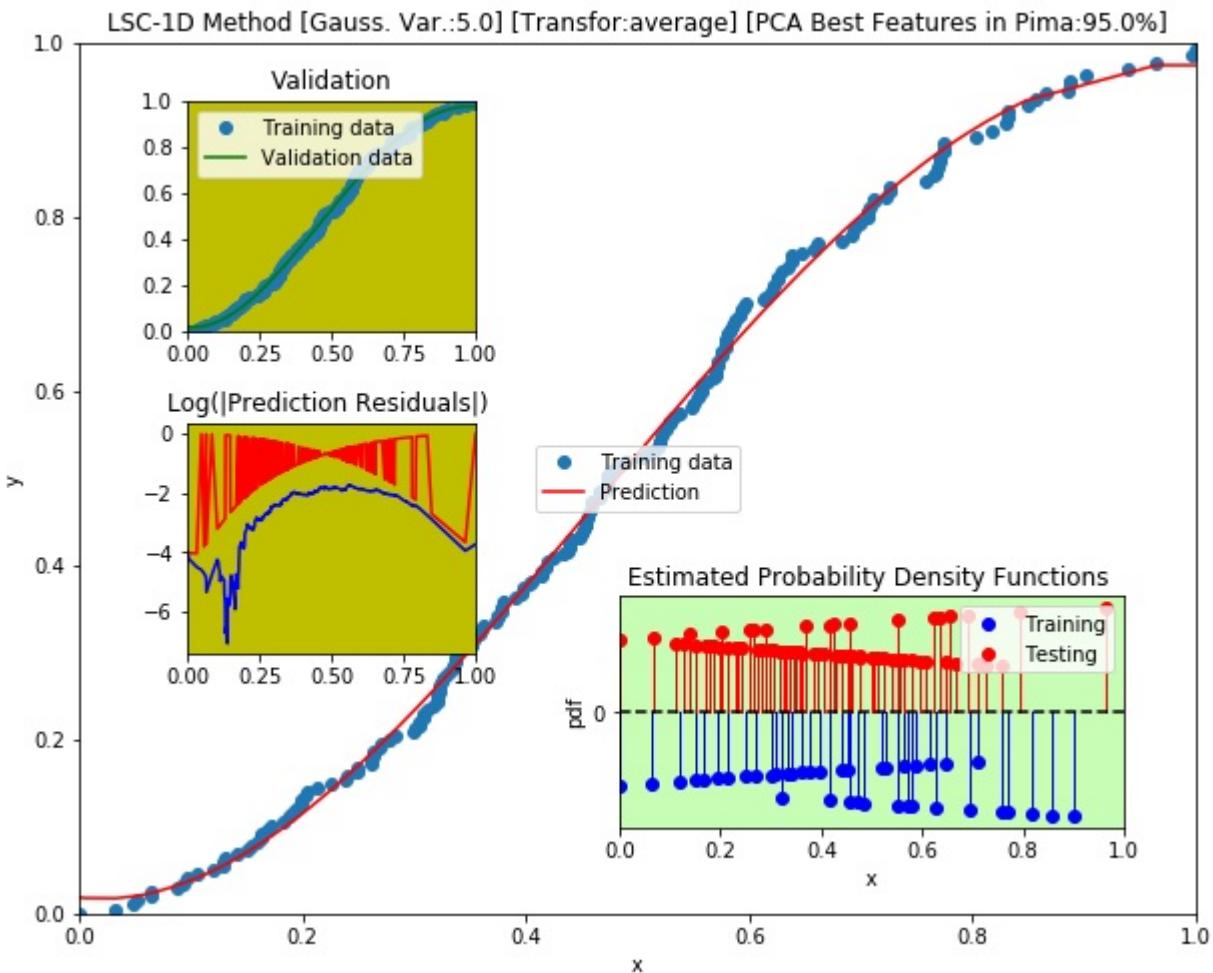
Prediction time/pt. (sec) : 0.0000072
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0071979

Prediction time/pt. (sec) : 0.0000217
```



Pima Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0022540
  Initializing linear solver - done. Time (sec): 0.0024943
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0002773
  Solving linear system (col. 0) - done. Time (sec): 0.0004094
Training - done. Time (sec): 0.0109482

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0055621  
Prediction time/pt. (sec) : 0.0000278
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0050120  
Prediction time/pt. (sec) : 0.0000151
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0070410  
Prediction time/pt. (sec) : 0.0000212
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0049627  
Prediction time/pt. (sec) : 0.0000149
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0042355
Initializing linear solver - done. Time (sec): 0.0045116
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0011854
    Solving linear system (col. 0) - done. Time (sec): 0.0013781
Training - done. Time (sec): 0.0119922
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0052767

Prediction time/pt. (sec) : 0.0000159
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0042191

Prediction time/pt. (sec) : 0.0000211
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0056469

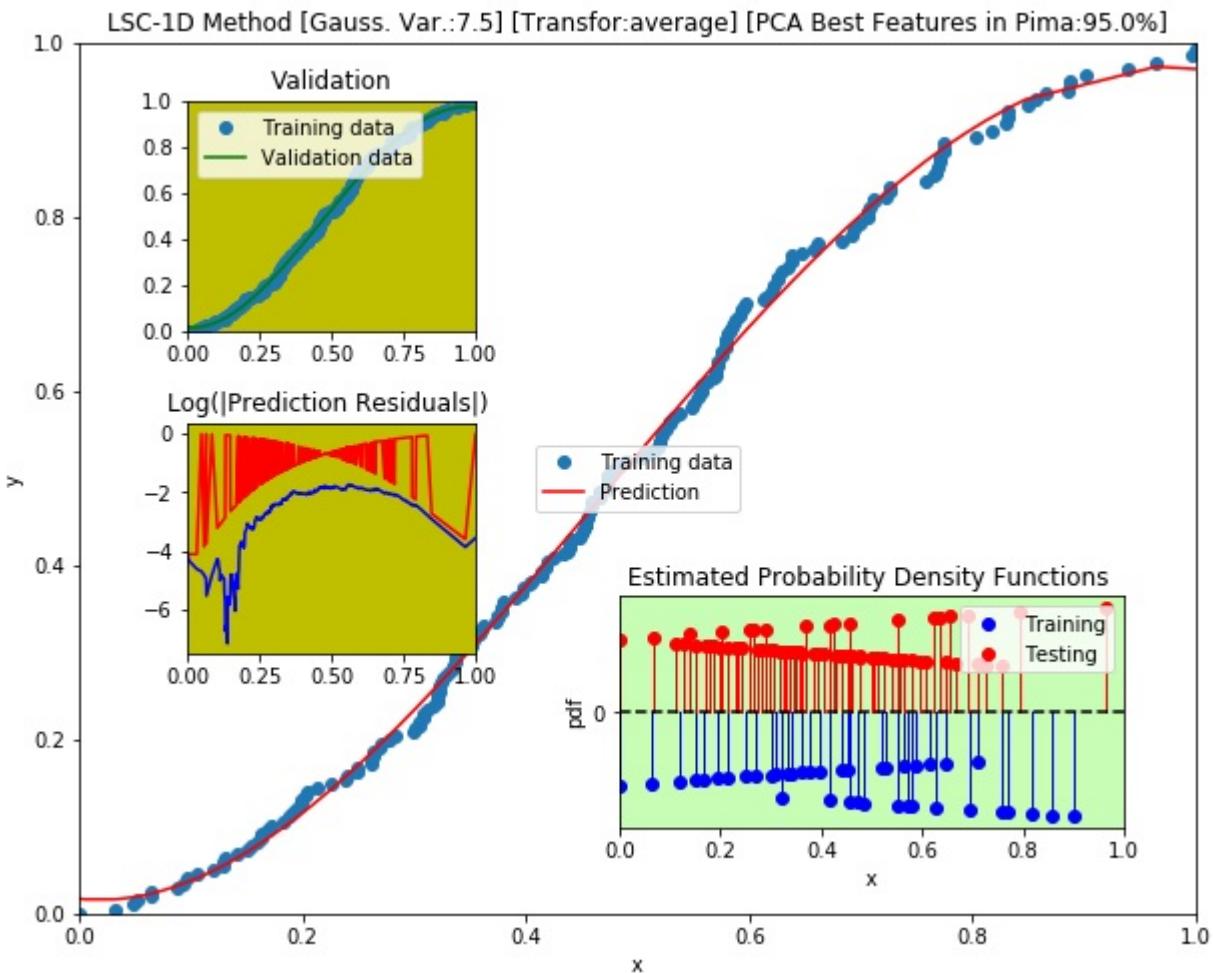
Prediction time/pt. (sec) : 0.0000170
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0059347

Prediction time/pt. (sec) : 0.0000179
```



Pima Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

Training ...

Initializing linear solver ...

Performing LU fact. (201 x 201 mtx) ...

Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0033031

Initializing linear solver - done. Time (sec): 0.0035956

Solving linear system (col. 0) ...

Back solving (201 x 201 mtx) ...

Back solving (201 x 201 mtx) - done. Time (sec): 0.0003514

Solving linear system (col. 0) - done. Time (sec): 0.0005391

Training - done. Time (sec): 0.0122285

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0040441  
Prediction time/pt. (sec) : 0.0000202
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0069346  
Prediction time/pt. (sec) : 0.0000209
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0022562  
Prediction time/pt. (sec) : 0.0000068
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0022213  
Prediction time/pt. (sec) : 0.0000067
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0079508
Initializing linear solver - done. Time (sec): 0.0081747
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003059
    Solving linear system (col. 0) - done. Time (sec): 0.0004504
Training - done. Time (sec): 0.0117908
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0065787

Prediction time/pt. (sec) : 0.0000198
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0067308

Prediction time/pt. (sec) : 0.0000337
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0055211

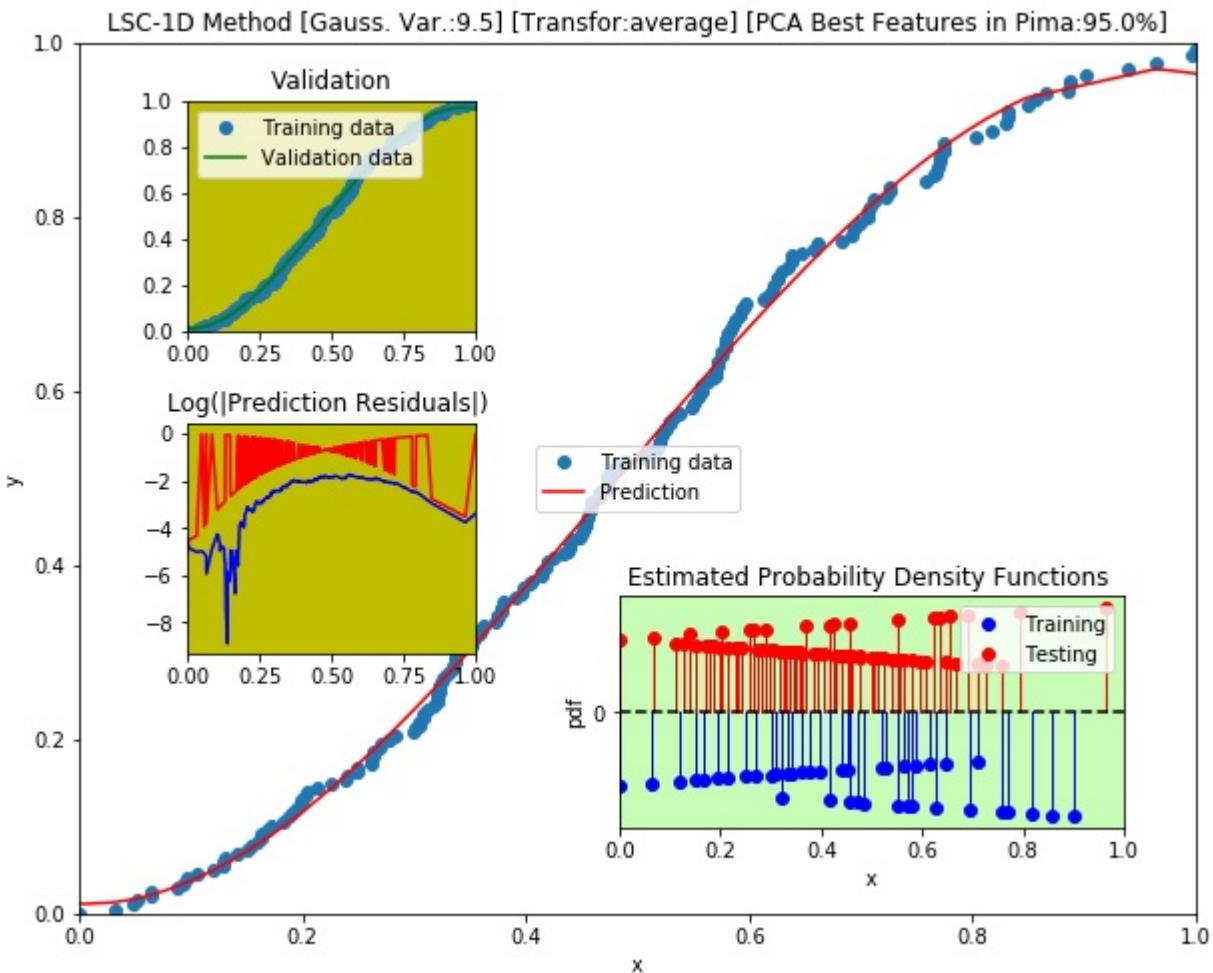
Prediction time/pt. (sec) : 0.0000166
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0049734

Prediction time/pt. (sec) : 0.0000150
```



Pima Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0023839
  Initializing linear solver - done. Time (sec): 0.0026479
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0002875
  Solving linear system (col. 0) - done. Time (sec): 0.0004306
Training - done. Time (sec): 0.0112267

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0014780  
Prediction time/pt. (sec) : 0.0000074
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0057902  
Prediction time/pt. (sec) : 0.0000174
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0056243  
Prediction time/pt. (sec) : 0.0000169
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0067599  
Prediction time/pt. (sec) : 0.0000204
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0114079
Initializing linear solver - done. Time (sec): 0.0116091
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0005040
    Solving linear system (col. 0) - done. Time (sec): 0.0008519
Training - done. Time (sec): 0.0215857
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0025408

Prediction time/pt. (sec) : 0.0000077
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0026784

Prediction time/pt. (sec) : 0.0000134
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0052767

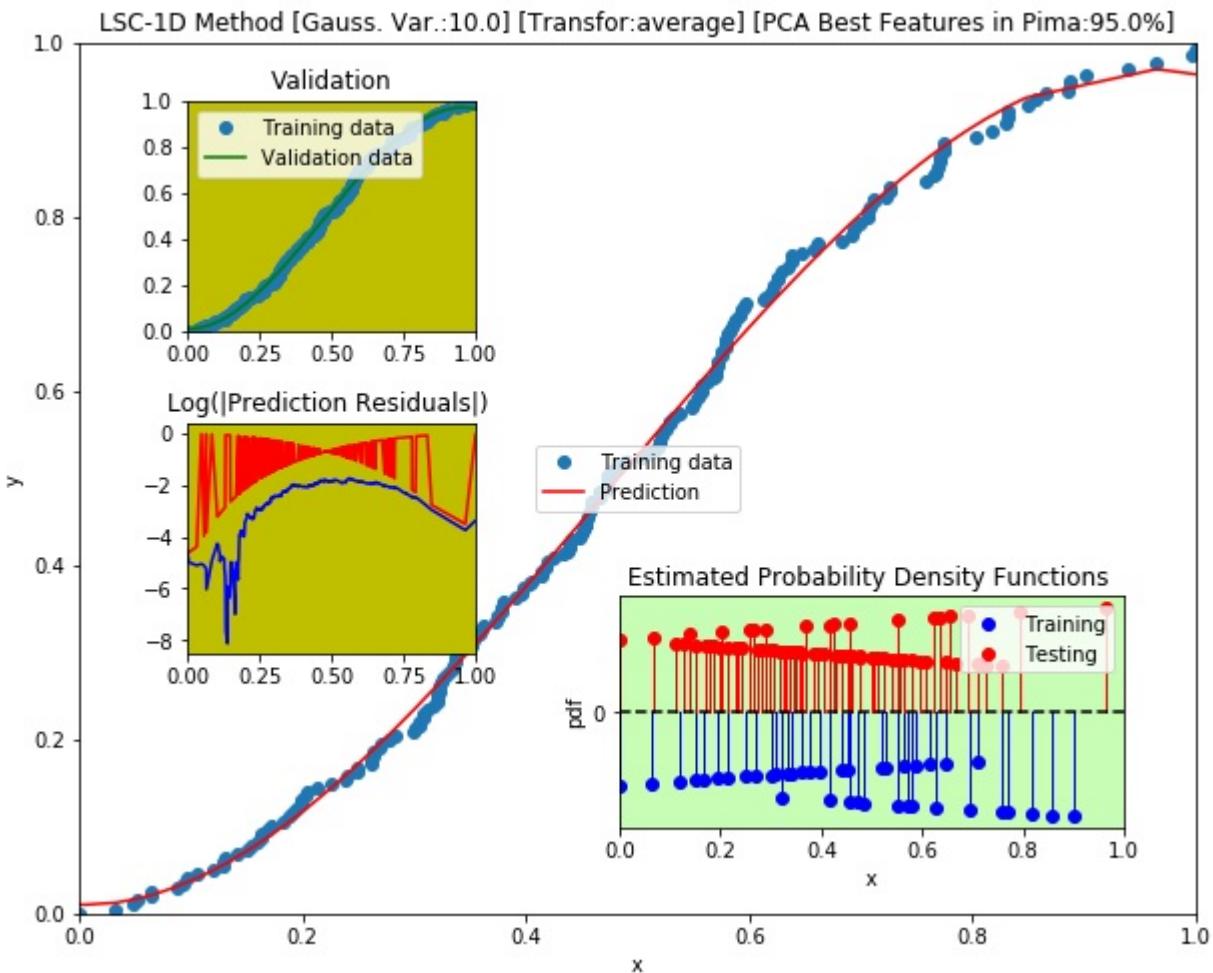
Prediction time/pt. (sec) : 0.0000159
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0052590

Prediction time/pt. (sec) : 0.0000158
```



Pima Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (201 x 201 mtx) ...
        Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0077939
    Initializing linear solver - done. Time (sec): 0.0080733
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0011015
    Solving linear system (col. 0) - done. Time (sec): 0.0012772
Training - done. Time (sec): 0.0176013

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0039825  
Prediction time/pt. (sec) : 0.0000199
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0070016  
Prediction time/pt. (sec) : 0.0000211
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0064480  
Prediction time/pt. (sec) : 0.0000194
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0085485  
Prediction time/pt. (sec) : 0.0000257
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0039918
Initializing linear solver - done. Time (sec): 0.0042565
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0011175
    Solving linear system (col. 0) - done. Time (sec): 0.0013018
Training - done. Time (sec): 0.0115693
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0074861

Prediction time/pt. (sec) : 0.0000225
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0045772

Prediction time/pt. (sec) : 0.0000229
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0066512

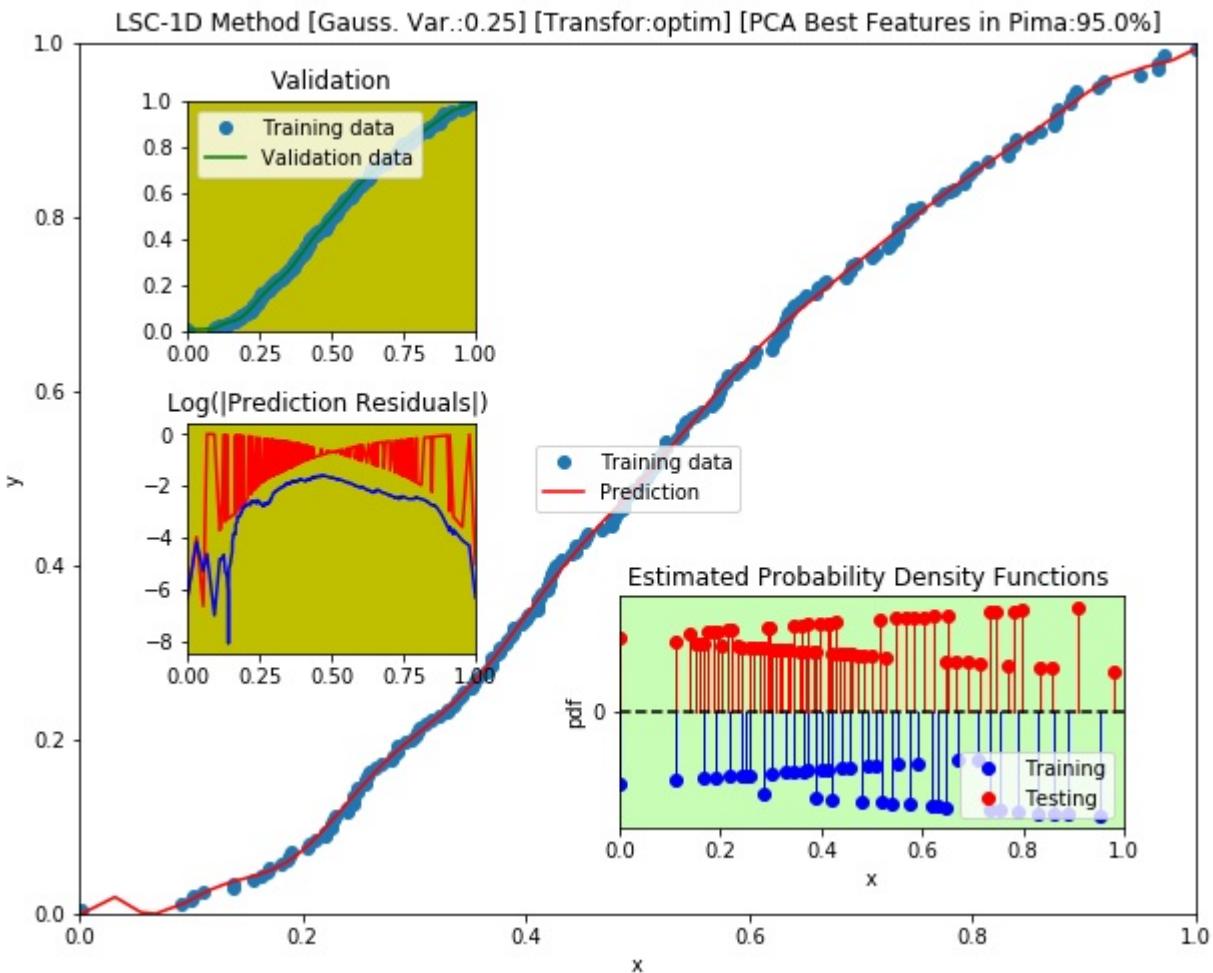
Prediction time/pt. (sec) : 0.0000200
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0054569

Prediction time/pt. (sec) : 0.0000164
```



Pima Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (201 x 201 mtx) ...
        Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0068834
    Initializing linear solver - done. Time (sec): 0.0070734
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0002940
    Solving linear system (col. 0) - done. Time (sec): 0.0004311
Training - done. Time (sec): 0.0140808

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0069230  
Prediction time/pt. (sec) : 0.0000346
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0075574  
Prediction time/pt. (sec) : 0.0000228
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0062759  
Prediction time/pt. (sec) : 0.0000189
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0054524  
Prediction time/pt. (sec) : 0.0000164
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0060847
Initializing linear solver - done. Time (sec): 0.0063210
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003035
    Solving linear system (col. 0) - done. Time (sec): 0.0004554
Training - done. Time (sec): 0.0098038
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0065007

Prediction time/pt. (sec) : 0.0000196
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0036433

Prediction time/pt. (sec) : 0.0000182
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0053902

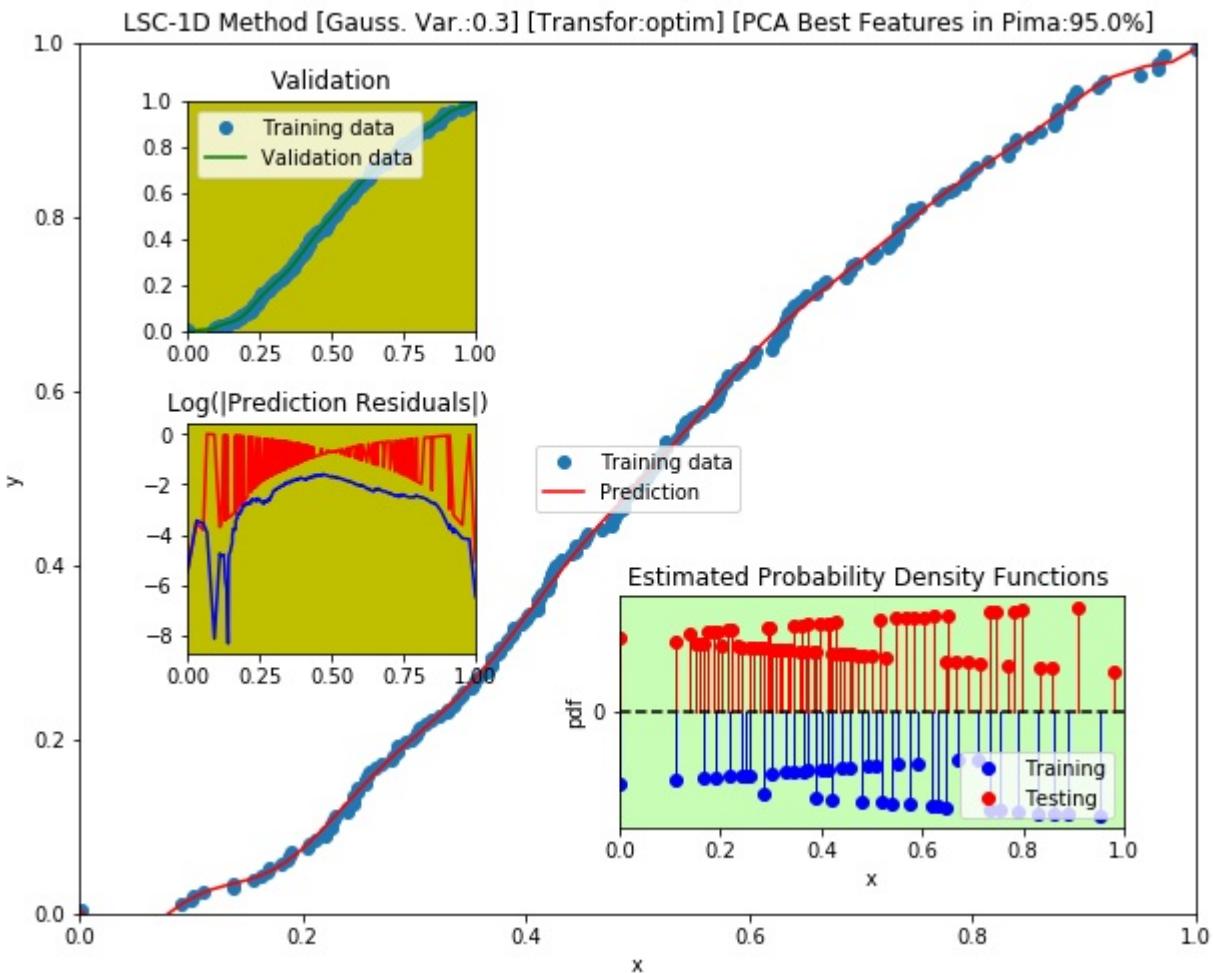
Prediction time/pt. (sec) : 0.0000162
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0032344

Prediction time/pt. (sec) : 0.0000097
```



Pima Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0062196
    Initializing linear solver - done. Time (sec): 0.0064692
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0002975
    Solving linear system (col. 0) - done. Time (sec): 0.0004382
Training - done. Time (sec): 0.0108440

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0080605  
Prediction time/pt. (sec) : 0.0000403
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0089400  
Prediction time/pt. (sec) : 0.0000269
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0075710  
Prediction time/pt. (sec) : 0.0000228
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0060108  
Prediction time/pt. (sec) : 0.0000181
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0035083
Initializing linear solver - done. Time (sec): 0.0046017
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003004
    Solving linear system (col. 0) - done. Time (sec): 0.0014687
Training - done. Time (sec): 0.0130634
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0061636

Prediction time/pt. (sec) : 0.0000186
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0036552

Prediction time/pt. (sec) : 0.0000183
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0063391

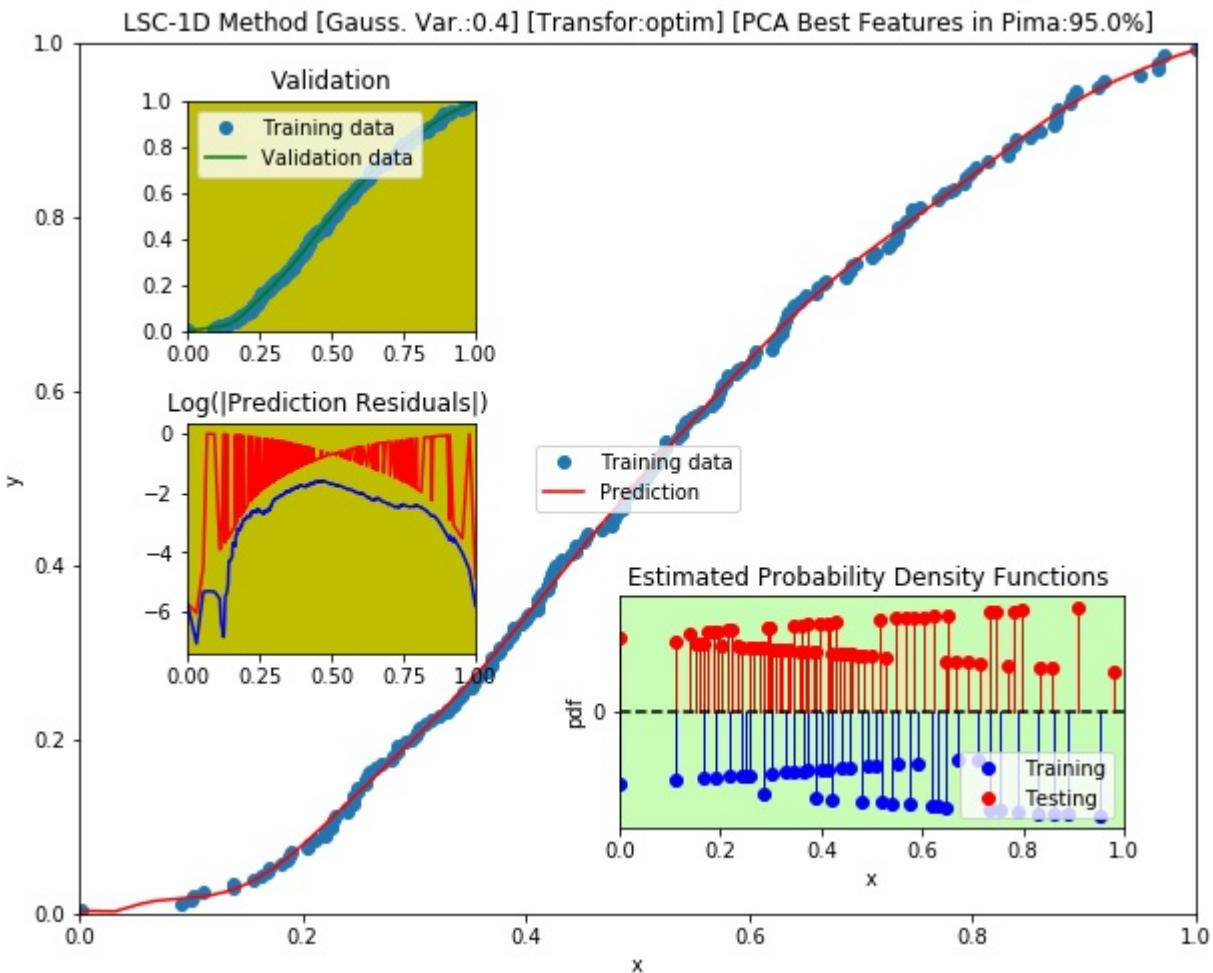
Prediction time/pt. (sec) : 0.0000191
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0061524

Prediction time/pt. (sec) : 0.0000185
```



Pima Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0023754
    Initializing linear solver - done. Time (sec): 0.0026405
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0002868
    Solving linear system (col. 0) - done. Time (sec): 0.0004244
Training - done. Time (sec): 0.0111215

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0058966  
Prediction time/pt. (sec) : 0.0000295
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0058491  
Prediction time/pt. (sec) : 0.0000176
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0053084  
Prediction time/pt. (sec) : 0.0000160
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0062611  
Prediction time/pt. (sec) : 0.0000189
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0056360
Initializing linear solver - done. Time (sec): 0.0059202
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0011003
    Solving linear system (col. 0) - done. Time (sec): 0.0012949
Training - done. Time (sec): 0.0153985
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0059071

Prediction time/pt. (sec) : 0.0000178
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0044911

Prediction time/pt. (sec) : 0.0000225
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0068710

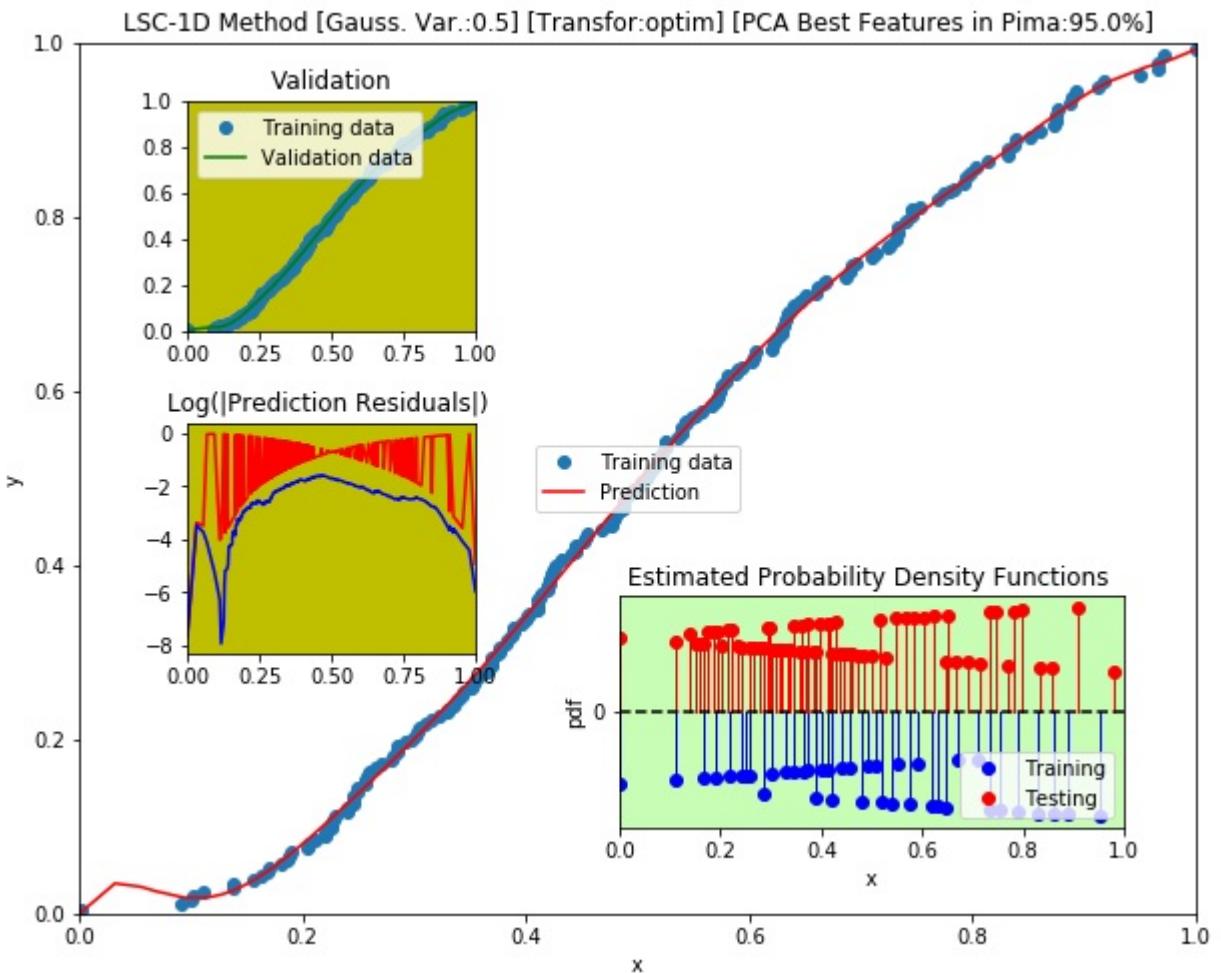
Prediction time/pt. (sec) : 0.0000207
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0059850

Prediction time/pt. (sec) : 0.0000180
```



Pima Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0024099
    Initializing linear solver - done. Time (sec): 0.0026746
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0002995
    Solving linear system (col. 0) - done. Time (sec): 0.0004432
Training - done. Time (sec): 0.0076826

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0099883  
Prediction time/pt. (sec) : 0.0000499
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0052946  
Prediction time/pt. (sec) : 0.0000159
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0051489  
Prediction time/pt. (sec) : 0.0000155
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0052054  
Prediction time/pt. (sec) : 0.0000157
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0061307
Initializing linear solver - done. Time (sec): 0.0063798
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003095
    Solving linear system (col. 0) - done. Time (sec): 0.0004556
Training - done. Time (sec): 0.0098321
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0061362

Prediction time/pt. (sec) : 0.0000185
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0044022

Prediction time/pt. (sec) : 0.0000220
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0050104

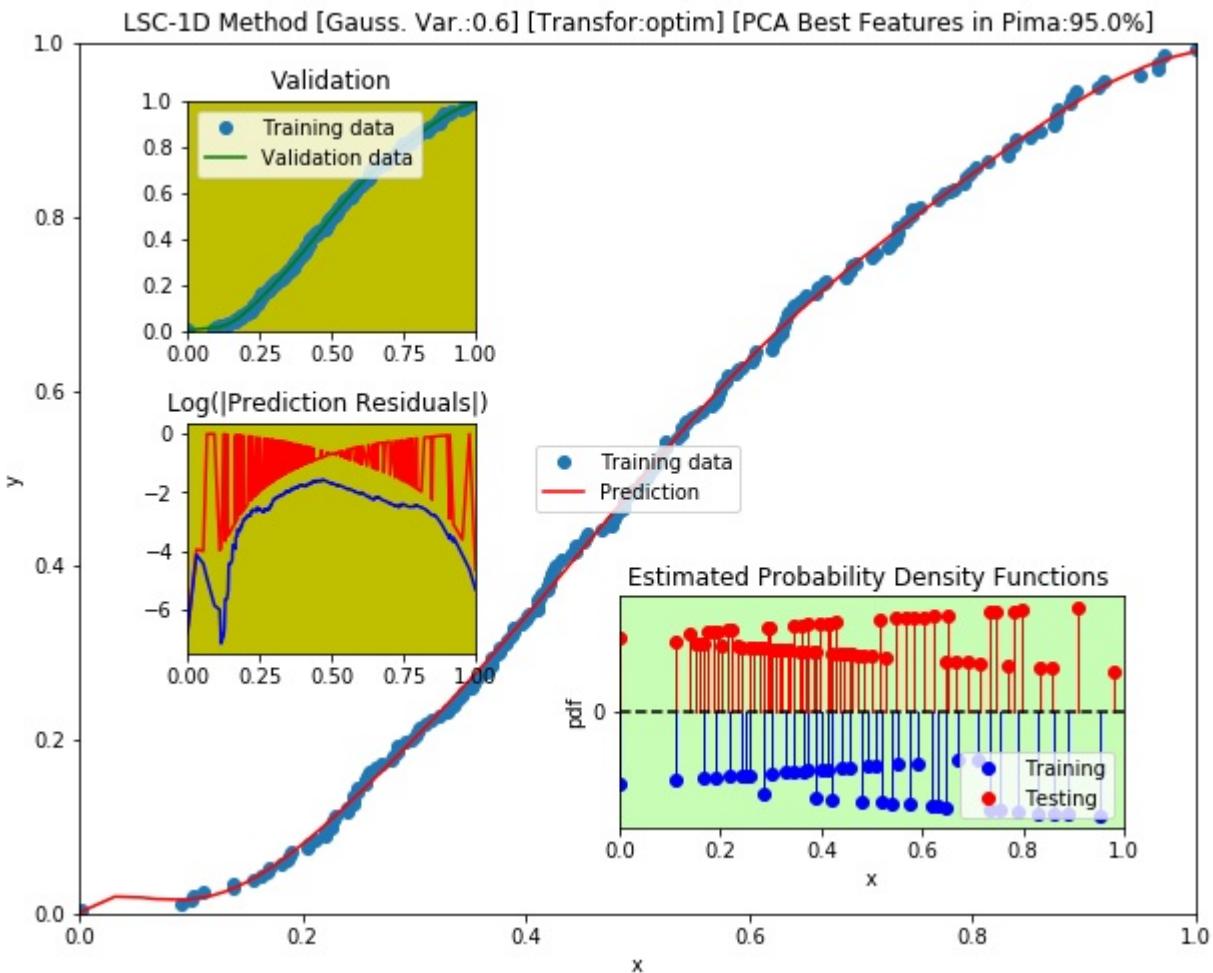
Prediction time/pt. (sec) : 0.0000151
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0030754

Prediction time/pt. (sec) : 0.0000093
```



Pima Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (201 x 201 mtx) ...
        Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0022769
    Initializing linear solver - done. Time (sec): 0.0025315
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0002847
    Solving linear system (col. 0) - done. Time (sec): 0.0004222
Training - done. Time (sec): 0.0111125

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0014482  
Prediction time/pt. (sec) : 0.0000072
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0098677  
Prediction time/pt. (sec) : 0.0000297
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0062966  
Prediction time/pt. (sec) : 0.0000190
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0049014  
Prediction time/pt. (sec) : 0.0000148
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0061874
Initializing linear solver - done. Time (sec): 0.0064323
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003014
    Solving linear system (col. 0) - done. Time (sec): 0.0004461
Training - done. Time (sec): 0.0097229
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0058732

Prediction time/pt. (sec) : 0.0000177
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0041199

Prediction time/pt. (sec) : 0.0000206
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0051069

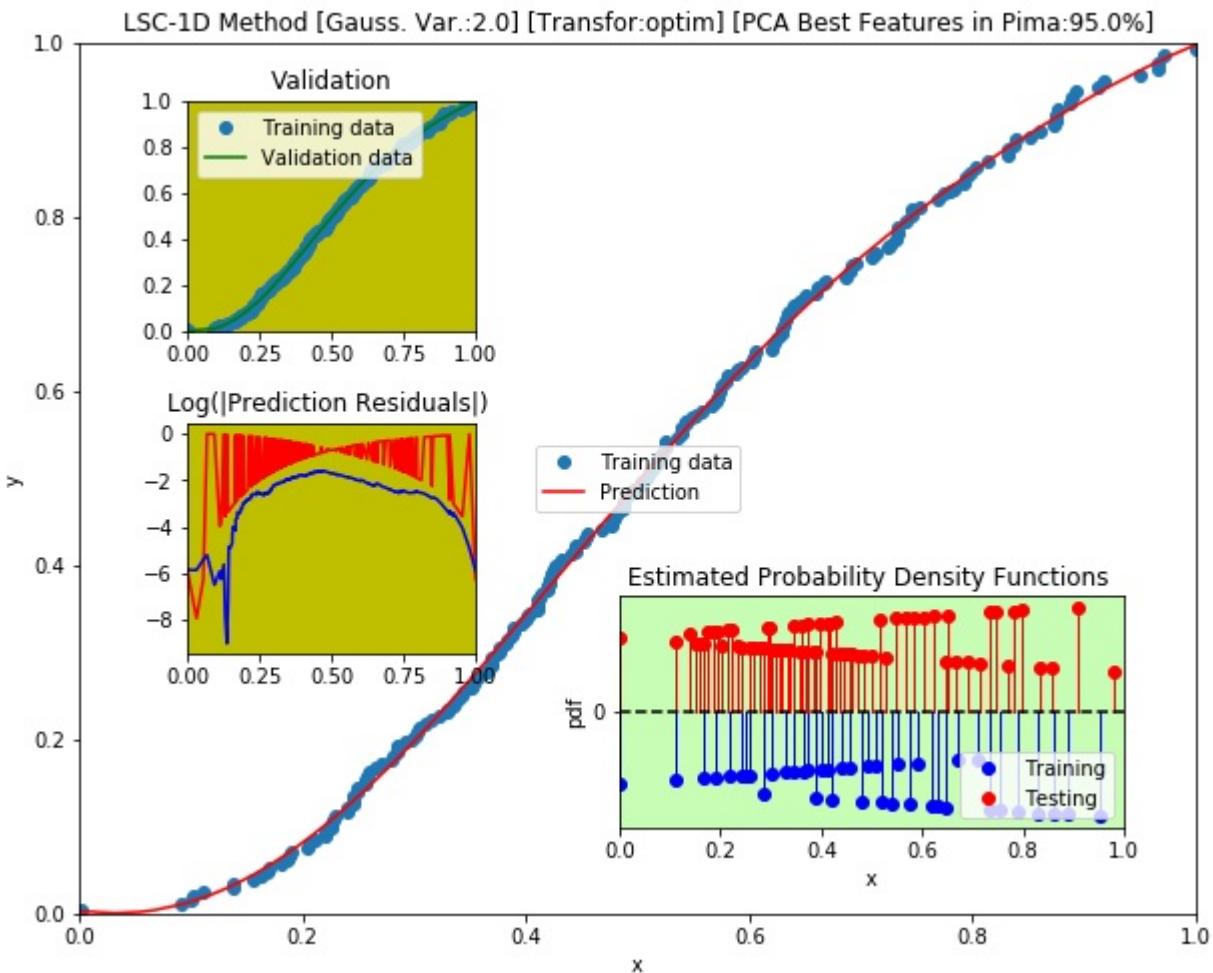
Prediction time/pt. (sec) : 0.0000154
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0053346

Prediction time/pt. (sec) : 0.0000161
```



Pima Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0054400
    Initializing linear solver - done. Time (sec): 0.0056906
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0006418
    Solving linear system (col. 0) - done. Time (sec): 0.0008855
Training - done. Time (sec): 0.0143573

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0106223  
Prediction time/pt. (sec) : 0.0000531
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0072732  
Prediction time/pt. (sec) : 0.0000219
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0050118  
Prediction time/pt. (sec) : 0.0000151
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0024133  
Prediction time/pt. (sec) : 0.0000073
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0097356
Initializing linear solver - done. Time (sec): 0.0099578
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003057
    Solving linear system (col. 0) - done. Time (sec): 0.0004466
Training - done. Time (sec): 0.0139782
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0072708

Prediction time/pt. (sec) : 0.0000219
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0037158

Prediction time/pt. (sec) : 0.0000186
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0023775

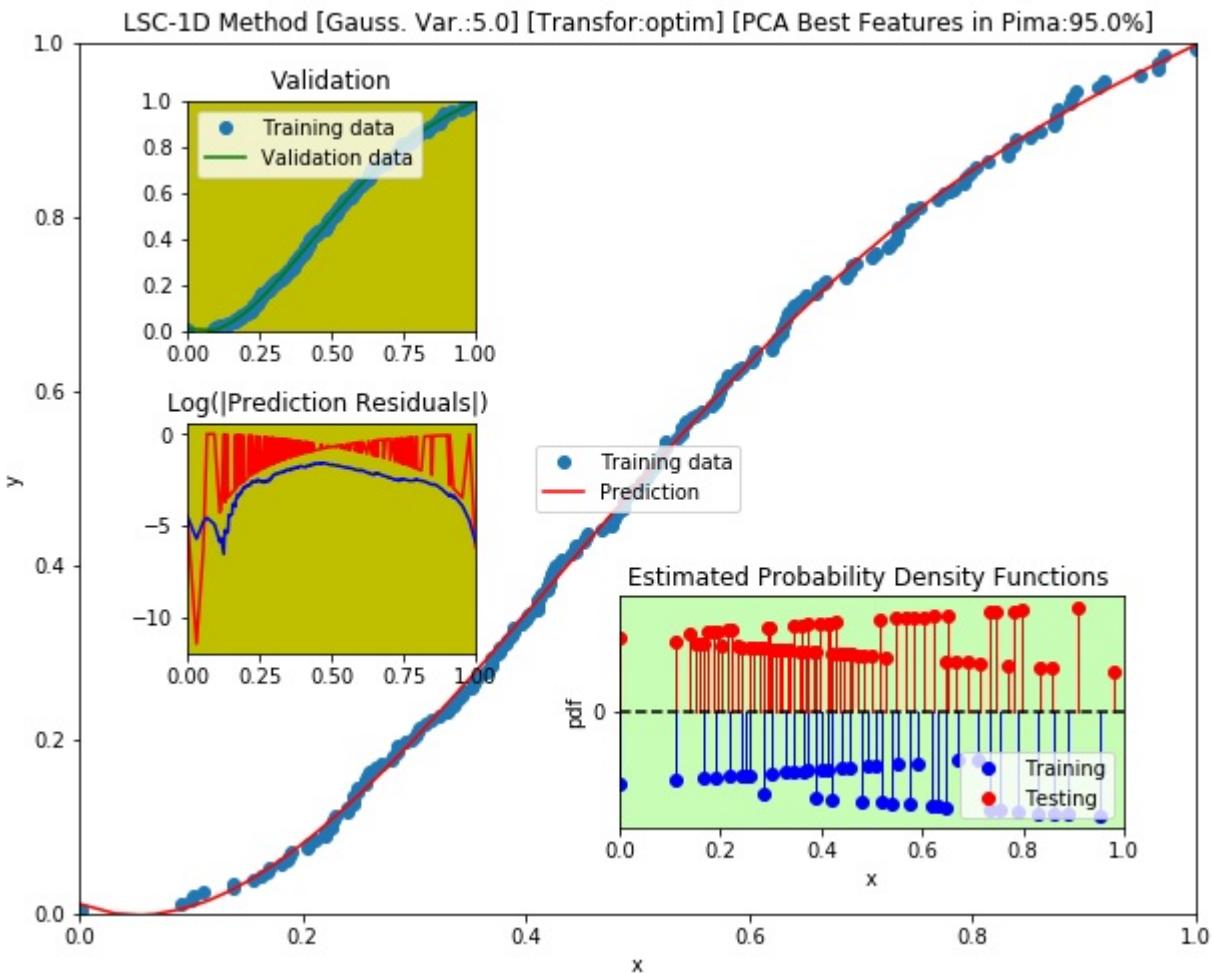
Prediction time/pt. (sec) : 0.0000072
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0071092

Prediction time/pt. (sec) : 0.0000214
```



Pima Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0090976
  Initializing linear solver - done. Time (sec): 0.0093157
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0002916
  Solving linear system (col. 0) - done. Time (sec): 0.0004320
Training - done. Time (sec): 0.0132027

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0055959  
Prediction time/pt. (sec) : 0.0000280
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0051837  
Prediction time/pt. (sec) : 0.0000156
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0052798  
Prediction time/pt. (sec) : 0.0000159
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0051389  
Prediction time/pt. (sec) : 0.0000155
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0042245
Initializing linear solver - done. Time (sec): 0.0044885
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0011137
    Solving linear system (col. 0) - done. Time (sec): 0.0013044
Training - done. Time (sec): 0.0146565
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0052578

Prediction time/pt. (sec) : 0.0000158
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0033274

Prediction time/pt. (sec) : 0.0000166
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0060132

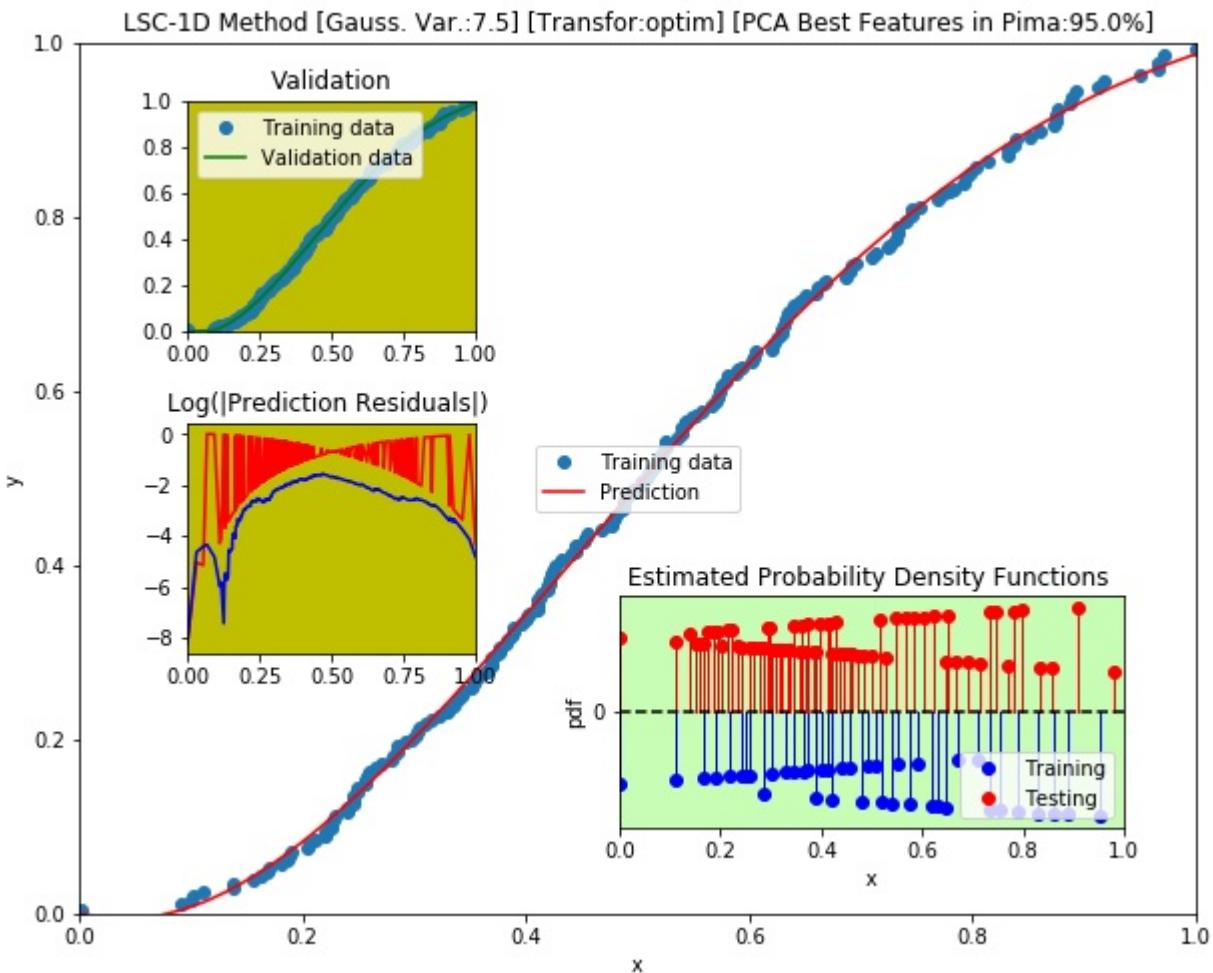
Prediction time/pt. (sec) : 0.0000181
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0051157

Prediction time/pt. (sec) : 0.0000154
```



Pima Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0092452
    Initializing linear solver - done. Time (sec): 0.0094488
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0006456
    Solving linear system (col. 0) - done. Time (sec): 0.0009887
Training - done. Time (sec): 0.0138545

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0053978  
Prediction time/pt. (sec) : 0.0000270
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0055070  
Prediction time/pt. (sec) : 0.0000166
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0053649  
Prediction time/pt. (sec) : 0.0000162
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0051980  
Prediction time/pt. (sec) : 0.0000157
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0054421
Initializing linear solver - done. Time (sec): 0.0057116
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0011971
    Solving linear system (col. 0) - done. Time (sec): 0.0013857
Training - done. Time (sec): 0.0134091
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0051126

Prediction time/pt. (sec) : 0.0000154
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0014937

Prediction time/pt. (sec) : 0.0000075
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0047348

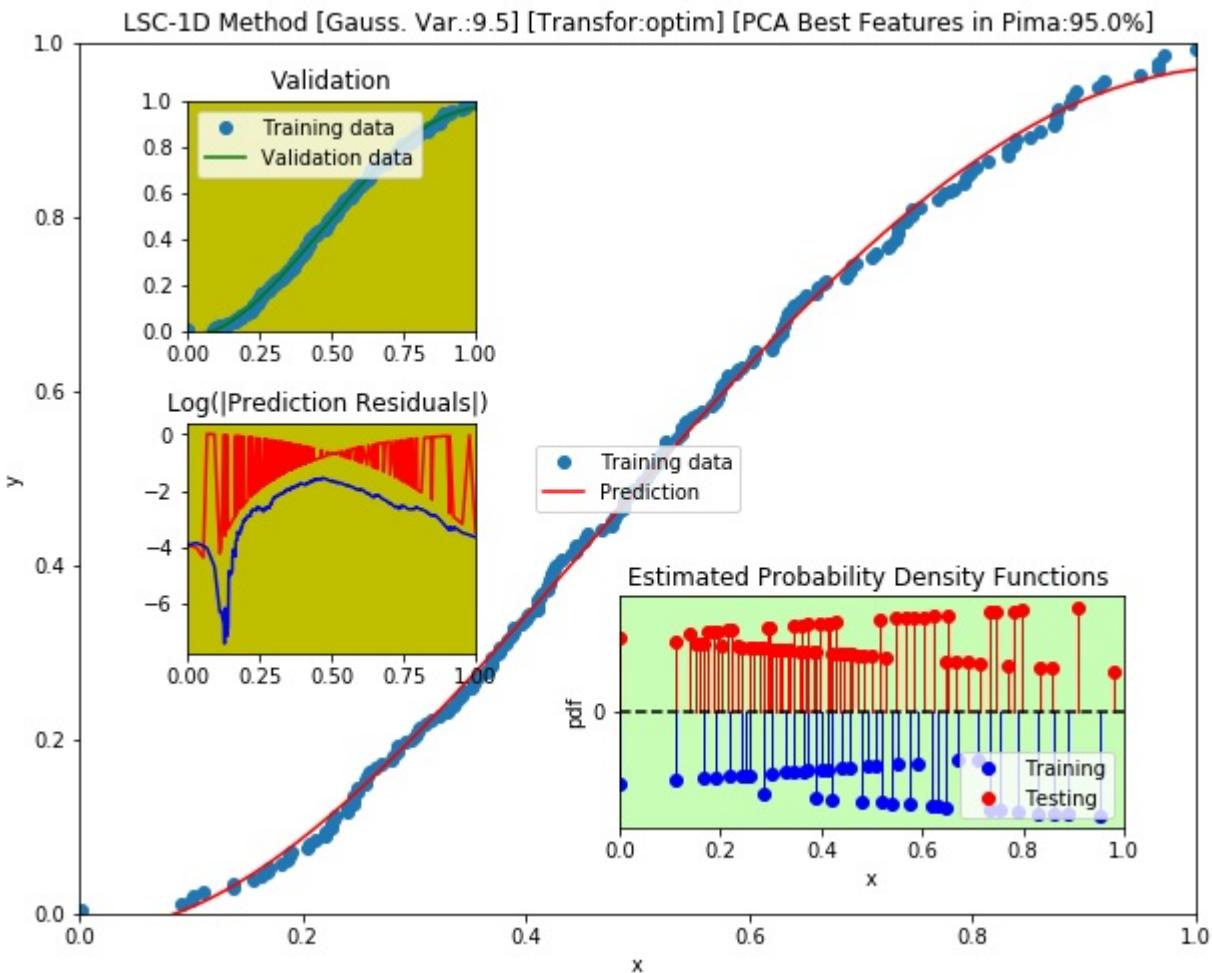
Prediction time/pt. (sec) : 0.0000143
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0046022

Prediction time/pt. (sec) : 0.0000139
```



Pima Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0032897
    Initializing linear solver - done. Time (sec): 0.0036128
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0004017
    Solving linear system (col. 0) - done. Time (sec): 0.0006034
Training - done. Time (sec): 0.0128369

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0056710  
Prediction time/pt. (sec) : 0.0000284
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0052924  
Prediction time/pt. (sec) : 0.0000159
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0050545  
Prediction time/pt. (sec) : 0.0000152
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0048723  
Prediction time/pt. (sec) : 0.0000147
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0044625
Initializing linear solver - done. Time (sec): 0.0048759
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0010476
    Solving linear system (col. 0) - done. Time (sec): 0.0013564
Training - done. Time (sec): 0.0117593
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0054507

Prediction time/pt. (sec) : 0.0000164
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0030322

Prediction time/pt. (sec) : 0.0000152
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0059600

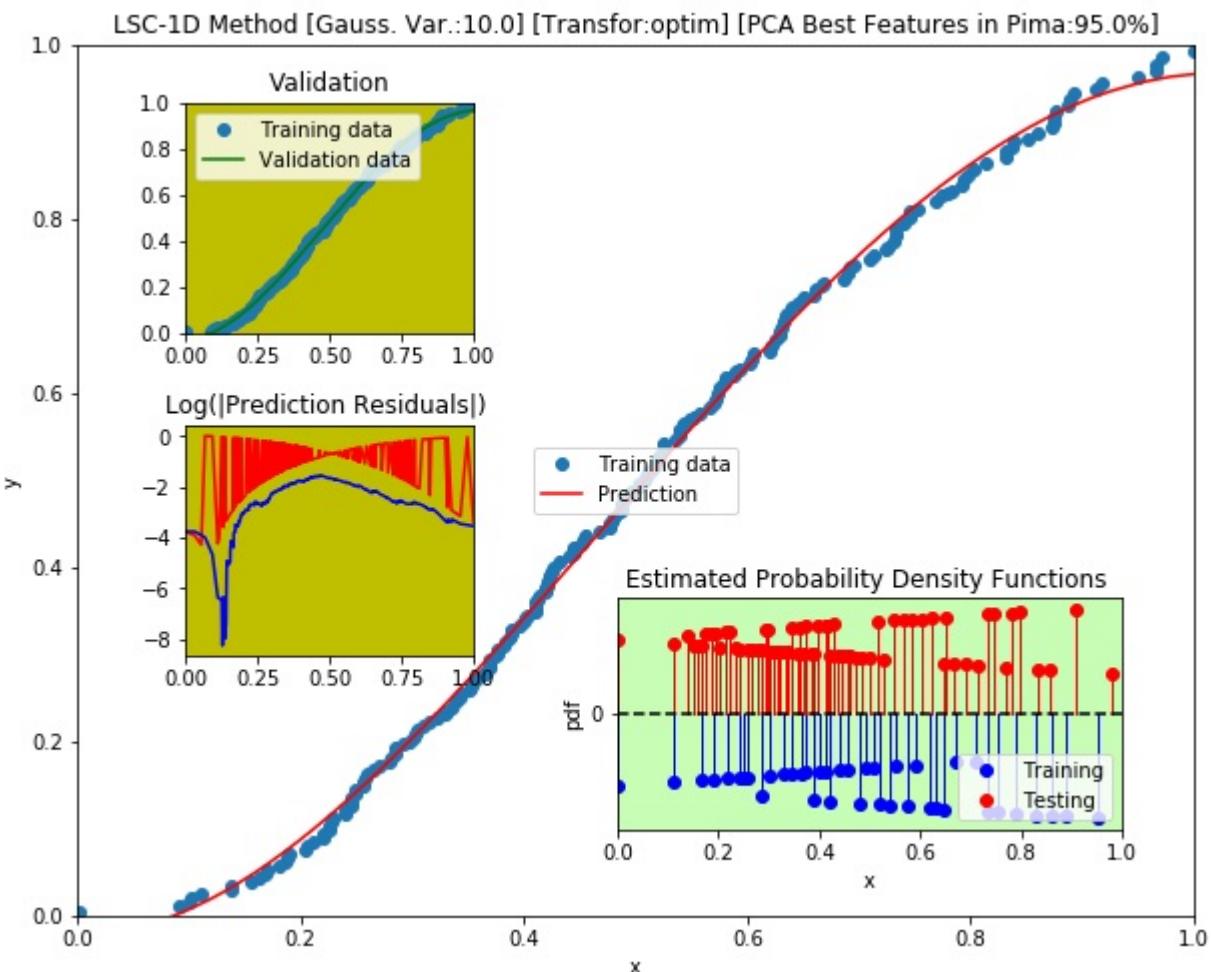
Prediction time/pt. (sec) : 0.0000180
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0058045

Prediction time/pt. (sec) : 0.0000175
```



Pima Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0052979
  Initializing linear solver - done. Time (sec): 0.0054994
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0004549
  Solving linear system (col. 0) - done. Time (sec): 0.0006580
Training - done. Time (sec): 0.0132885

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0059156  
Prediction time/pt. (sec) : 0.0000296
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0060105  
Prediction time/pt. (sec) : 0.0000181
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0064168  
Prediction time/pt. (sec) : 0.0000193
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0062952  
Prediction time/pt. (sec) : 0.0000190
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0042820
Initializing linear solver - done. Time (sec): 0.0045562
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0013318
    Solving linear system (col. 0) - done. Time (sec): 0.0015380
Training - done. Time (sec): 0.0128725
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0064375

Prediction time/pt. (sec) : 0.0000194
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0039122

Prediction time/pt. (sec) : 0.0000196
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0069427

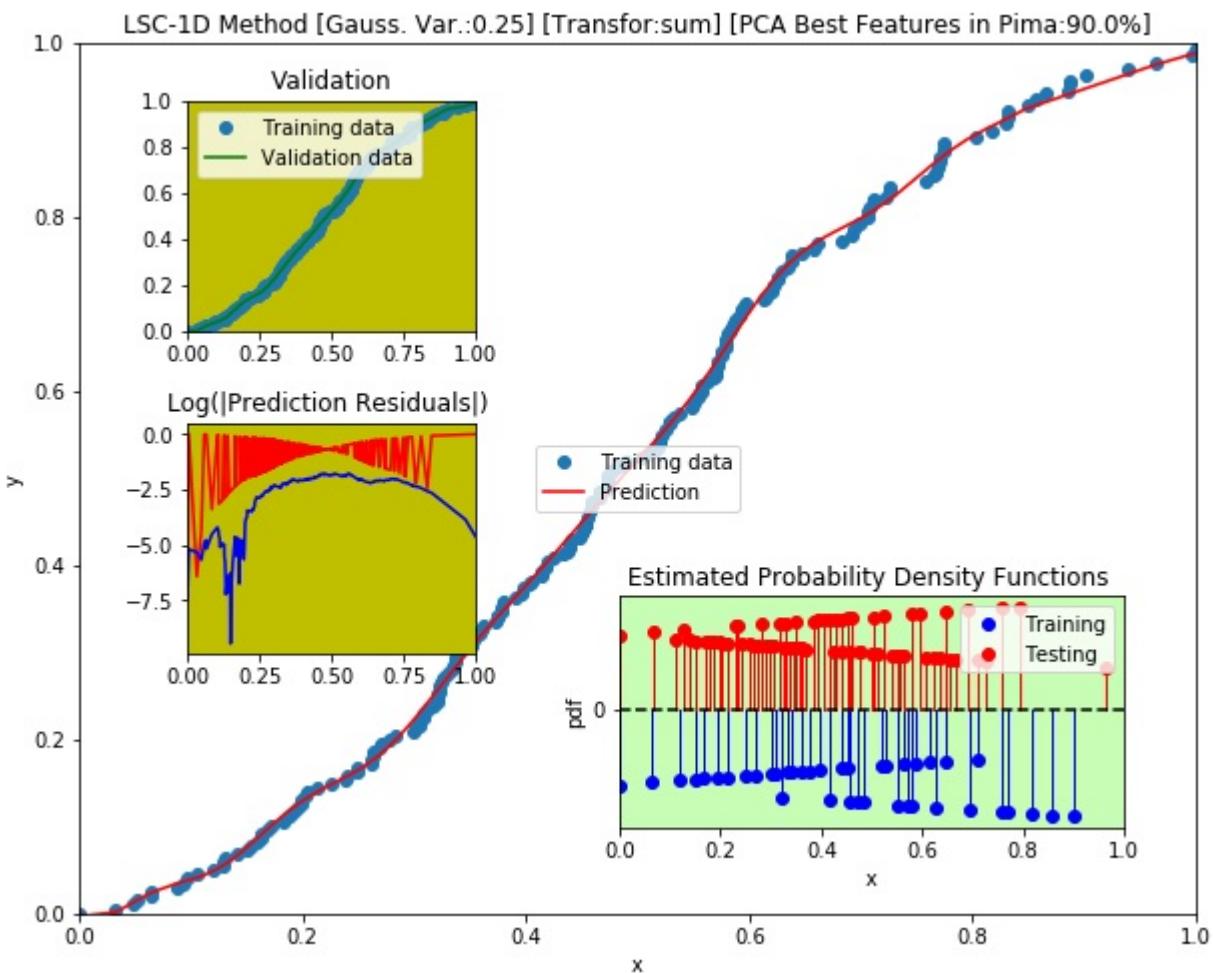
Prediction time/pt. (sec) : 0.0000209
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0065746

Prediction time/pt. (sec) : 0.0000198
```



Pima Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0023241
    Initializing linear solver - done. Time (sec): 0.0025573
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0004551
    Solving linear system (col. 0) - done. Time (sec): 0.0016174
Training - done. Time (sec): 0.0076647

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0039282  
Prediction time/pt. (sec) : 0.0000196
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0056963  
Prediction time/pt. (sec) : 0.0000172
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0057776  
Prediction time/pt. (sec) : 0.0000174
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0032611  
Prediction time/pt. (sec) : 0.0000098
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0123391
Initializing linear solver - done. Time (sec): 0.0126123
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0011554
    Solving linear system (col. 0) - done. Time (sec): 0.0014677
Training - done. Time (sec): 0.0206597
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0063567

Prediction time/pt. (sec) : 0.0000191
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0052302

Prediction time/pt. (sec) : 0.0000262
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0065763

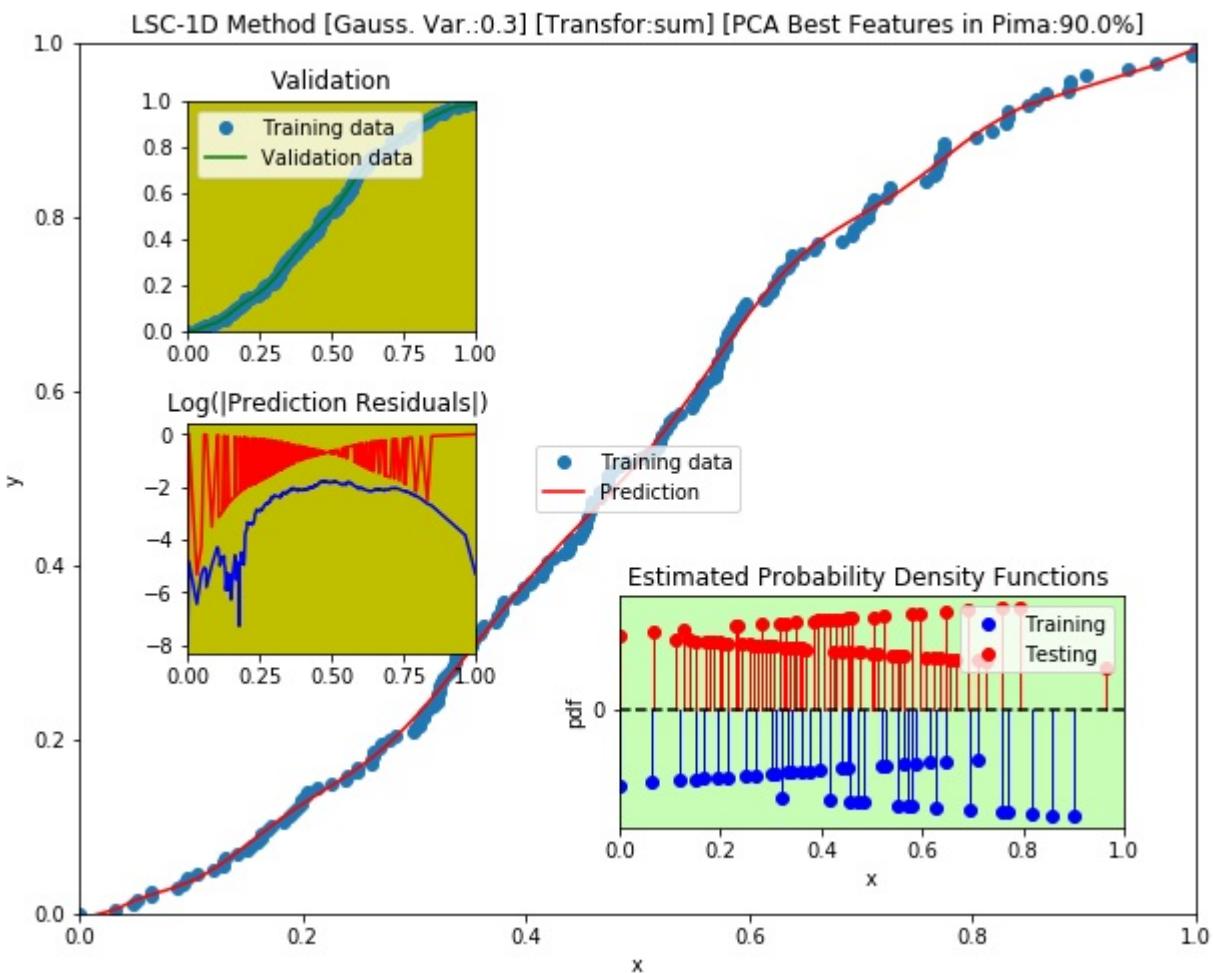
Prediction time/pt. (sec) : 0.0000198
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0061667

Prediction time/pt. (sec) : 0.0000186
```



Pima Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0024209
    Initializing linear solver - done. Time (sec): 0.0026679
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0003006
    Solving linear system (col. 0) - done. Time (sec): 0.0004995
Training - done. Time (sec): 0.0124764

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0059845  
Prediction time/pt. (sec) : 0.0000299
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0091345  
Prediction time/pt. (sec) : 0.0000275
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0072031  
Prediction time/pt. (sec) : 0.0000217
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0069342  
Prediction time/pt. (sec) : 0.0000209
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0040329
Initializing linear solver - done. Time (sec): 0.0042953
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0010798
    Solving linear system (col. 0) - done. Time (sec): 0.0012708
Training - done. Time (sec): 0.0125787
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0063107

Prediction time/pt. (sec) : 0.0000190
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0045977

Prediction time/pt. (sec) : 0.0000230
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0074487

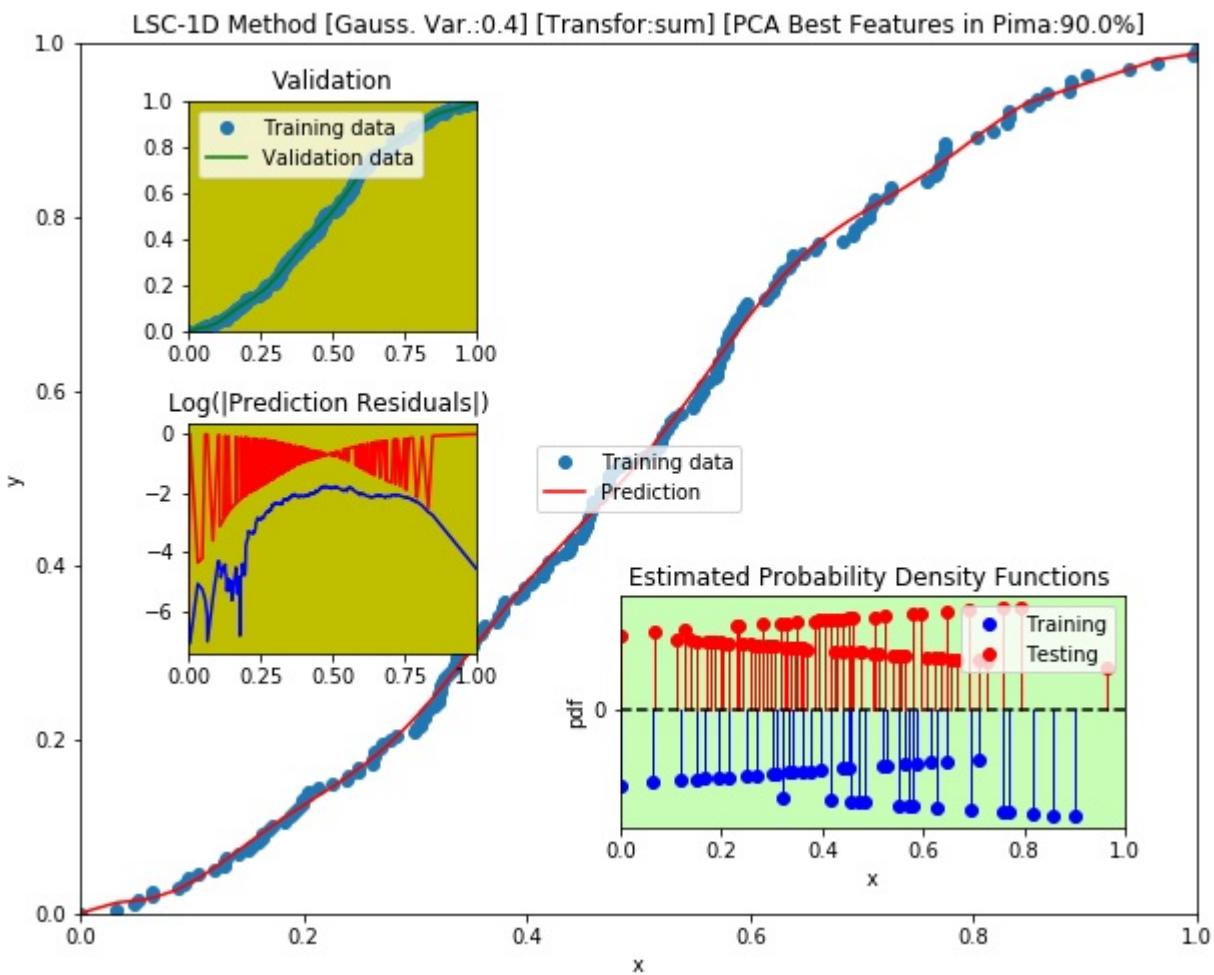
Prediction time/pt. (sec) : 0.0000224
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0072083

Prediction time/pt. (sec) : 0.0000217
```



Pima Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0033376
    Initializing linear solver - done. Time (sec): 0.0036266
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0003514
    Solving linear system (col. 0) - done. Time (sec): 0.0005436
Training - done. Time (sec): 0.0124433

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0064845  
Prediction time/pt. (sec) : 0.0000324
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0056448  
Prediction time/pt. (sec) : 0.0000170
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0064299  
Prediction time/pt. (sec) : 0.0000194
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0052133  
Prediction time/pt. (sec) : 0.0000157
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0041053
Initializing linear solver - done. Time (sec): 0.0044062
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003698
    Solving linear system (col. 0) - done. Time (sec): 0.0005527
Training - done. Time (sec): 0.0115800
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0058646

Prediction time/pt. (sec) : 0.0000177
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0043654

Prediction time/pt. (sec) : 0.0000218
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0067747

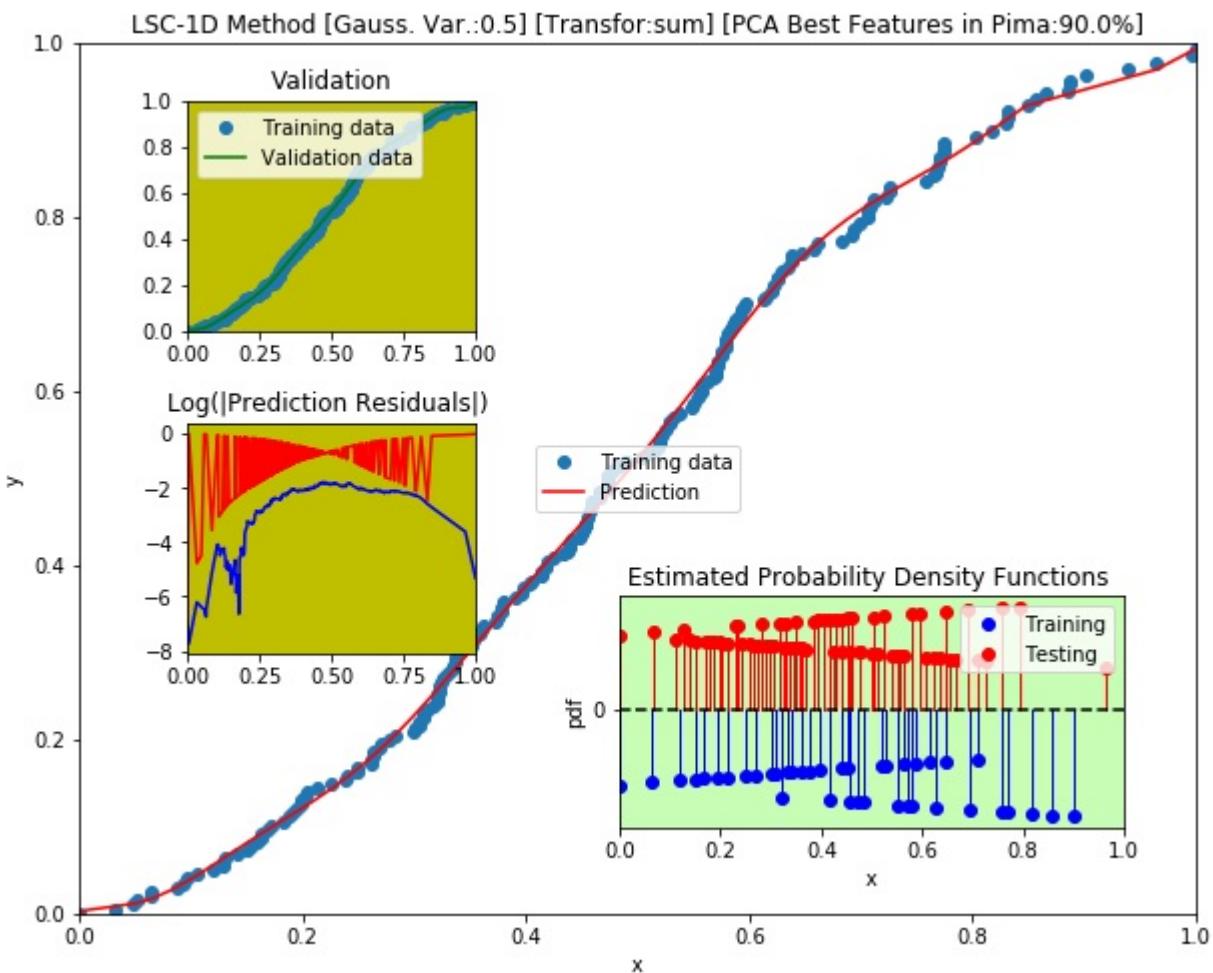
Prediction time/pt. (sec) : 0.0000204
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0065503

Prediction time/pt. (sec) : 0.0000197
```



Pima Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0023558
  Initializing linear solver - done. Time (sec): 0.0026031
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0002880
  Solving linear system (col. 0) - done. Time (sec): 0.0004265
Training - done. Time (sec): 0.0114934

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0091512  
Prediction time/pt. (sec) : 0.0000458
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0027666  
Prediction time/pt. (sec) : 0.0000083
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0086846  
Prediction time/pt. (sec) : 0.0000262
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0051610  
Prediction time/pt. (sec) : 0.0000155
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0024488
Initializing linear solver - done. Time (sec): 0.0027237
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003061
    Solving linear system (col. 0) - done. Time (sec): 0.0004580
Training - done. Time (sec): 0.0100961
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0064499

Prediction time/pt. (sec) : 0.0000194
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0044901

Prediction time/pt. (sec) : 0.0000225
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0030663

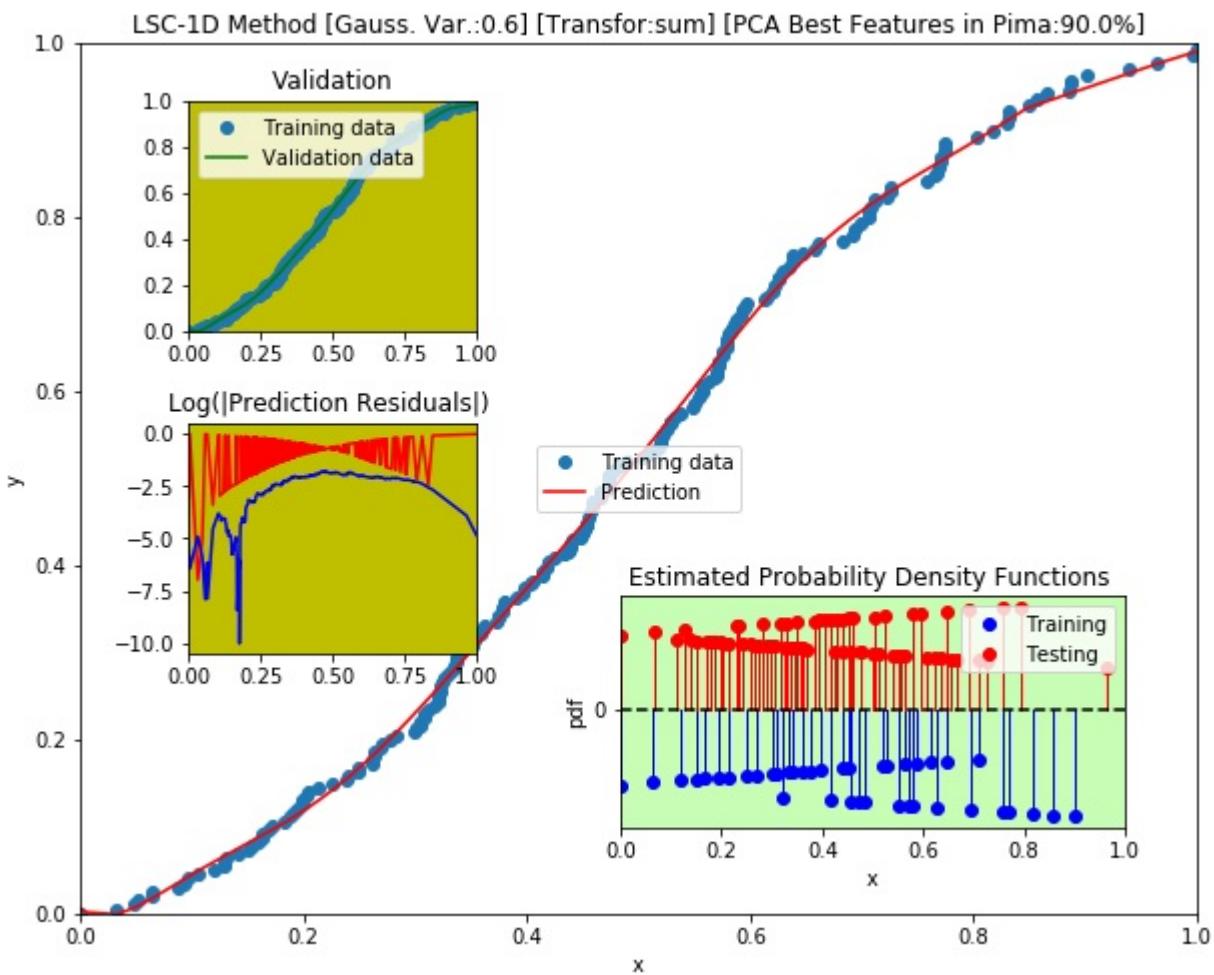
Prediction time/pt. (sec) : 0.0000092
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0030715

Prediction time/pt. (sec) : 0.0000093
```



Pima Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0033035
    Initializing linear solver - done. Time (sec): 0.0036249
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0003526
    Solving linear system (col. 0) - done. Time (sec): 0.0005479
Training - done. Time (sec): 0.0126169

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0056012  
Prediction time/pt. (sec) : 0.0000280
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0053804  
Prediction time/pt. (sec) : 0.0000162
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0052924  
Prediction time/pt. (sec) : 0.0000159
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0053089  
Prediction time/pt. (sec) : 0.0000160
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0060511
Initializing linear solver - done. Time (sec): 0.0063124
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0011785
    Solving linear system (col. 0) - done. Time (sec): 0.0015044
Training - done. Time (sec): 0.0138559
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0053346

Prediction time/pt. (sec) : 0.0000161
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0036201

Prediction time/pt. (sec) : 0.0000181
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0062761

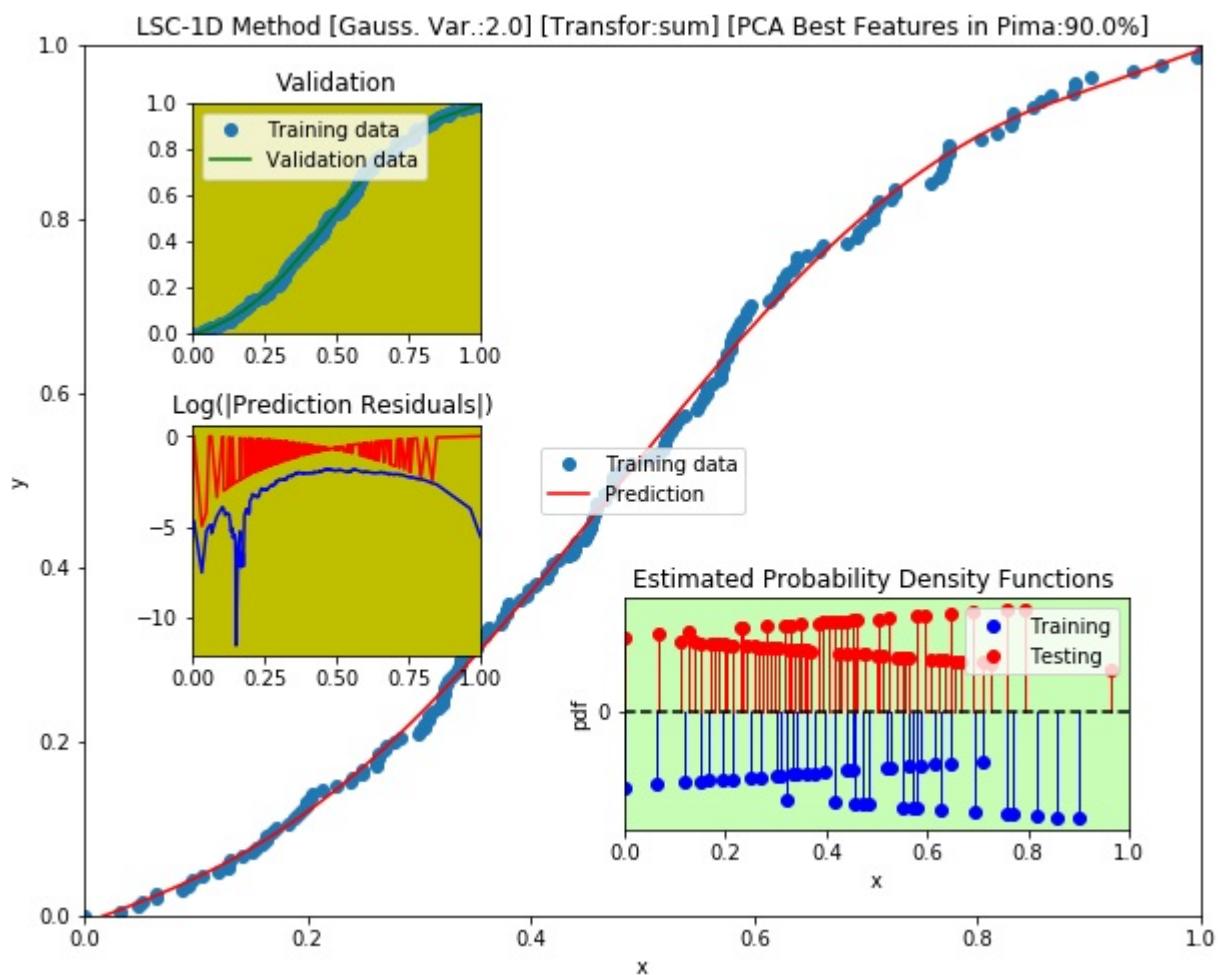
Prediction time/pt. (sec) : 0.0000189
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0057230

Prediction time/pt. (sec) : 0.0000172
```



Pima Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0043905
  Initializing linear solver - done. Time (sec): 0.0046363
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003603
  Solving linear system (col. 0) - done. Time (sec): 0.0005512
Training - done. Time (sec): 0.0124588

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0065596  
Prediction time/pt. (sec) : 0.0000328
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0046582  
Prediction time/pt. (sec) : 0.0000140
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0046775  
Prediction time/pt. (sec) : 0.0000141
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0023761  
Prediction time/pt. (sec) : 0.0000072
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0024331
Initializing linear solver - done. Time (sec): 0.0029037
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0002999
    Solving linear system (col. 0) - done. Time (sec): 0.0004470
Training - done. Time (sec): 0.0117521
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0024312

Prediction time/pt. (sec) : 0.0000073
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0069685

Prediction time/pt. (sec) : 0.0000348
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0025129

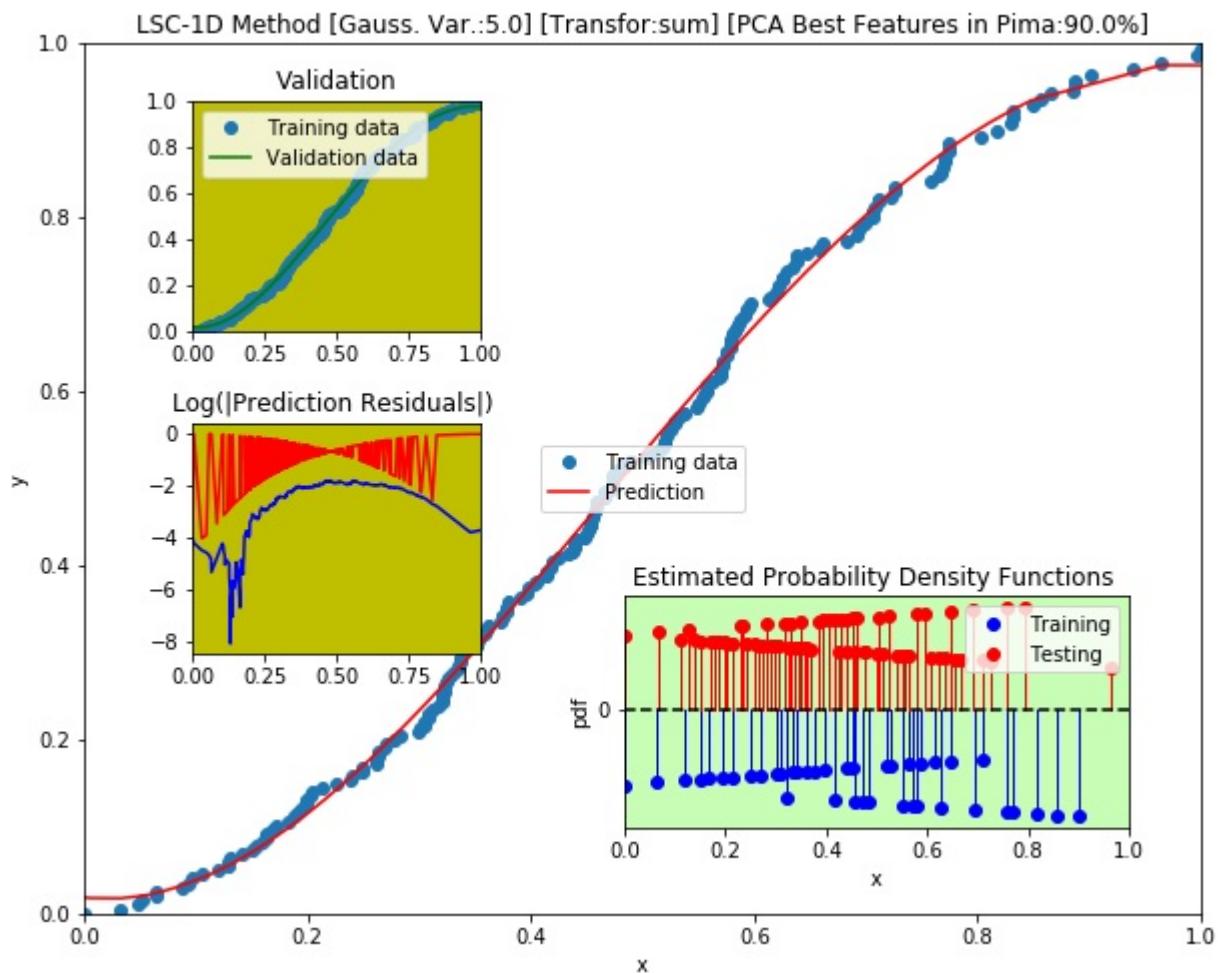
Prediction time/pt. (sec) : 0.0000076
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0074608

Prediction time/pt. (sec) : 0.0000225
```



Pima Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0023828
  Initializing linear solver - done. Time (sec): 0.0026417
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003006
  Solving linear system (col. 0) - done. Time (sec): 0.0004508
Training - done. Time (sec): 0.0113738

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0057588  
Prediction time/pt. (sec) : 0.0000288
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0071988  
Prediction time/pt. (sec) : 0.0000217
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0023897  
Prediction time/pt. (sec) : 0.0000072
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0024796  
Prediction time/pt. (sec) : 0.0000075
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0060446
Initializing linear solver - done. Time (sec): 0.0062358
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003011
    Solving linear system (col. 0) - done. Time (sec): 0.0004492
Training - done. Time (sec): 0.0177991
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0054193

Prediction time/pt. (sec) : 0.0000163
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0030508

Prediction time/pt. (sec) : 0.0000153
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0060027

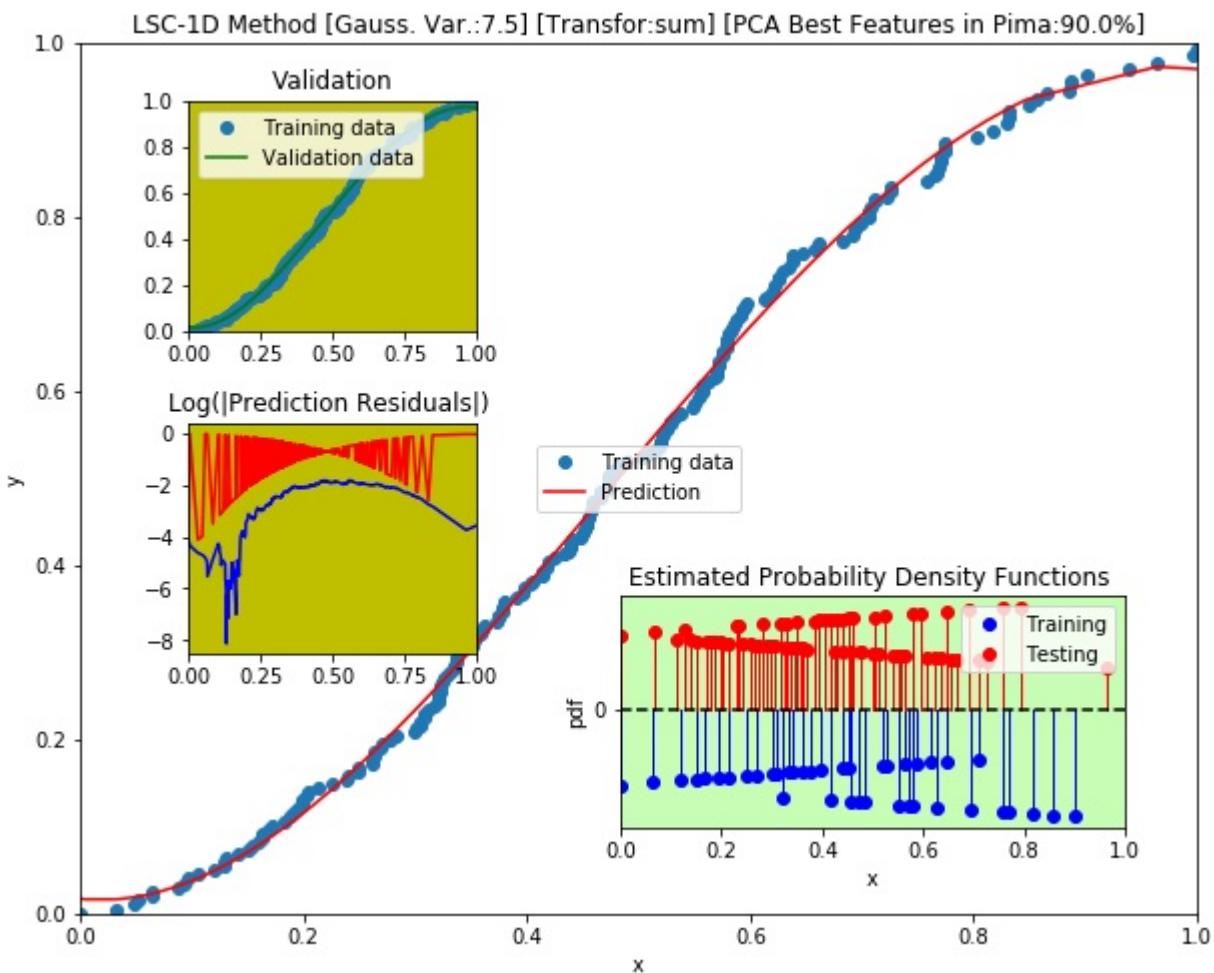
Prediction time/pt. (sec) : 0.0000181
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0050323

Prediction time/pt. (sec) : 0.0000152
```



Pima Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0032675
    Initializing linear solver - done. Time (sec): 0.0035911
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0003481
    Solving linear system (col. 0) - done. Time (sec): 0.0005381
Training - done. Time (sec): 0.0127895

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0045297  
Prediction time/pt. (sec) : 0.0000226
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0023289  
Prediction time/pt. (sec) : 0.0000070
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0022244  
Prediction time/pt. (sec) : 0.0000067
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0062673  
Prediction time/pt. (sec) : 0.0000189
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0101061
Initializing linear solver - done. Time (sec): 0.0103214
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003195
    Solving linear system (col. 0) - done. Time (sec): 0.0004690
Training - done. Time (sec): 0.0132680
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0051041

Prediction time/pt. (sec) : 0.0000154
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0014889

Prediction time/pt. (sec) : 0.0000074
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0085487

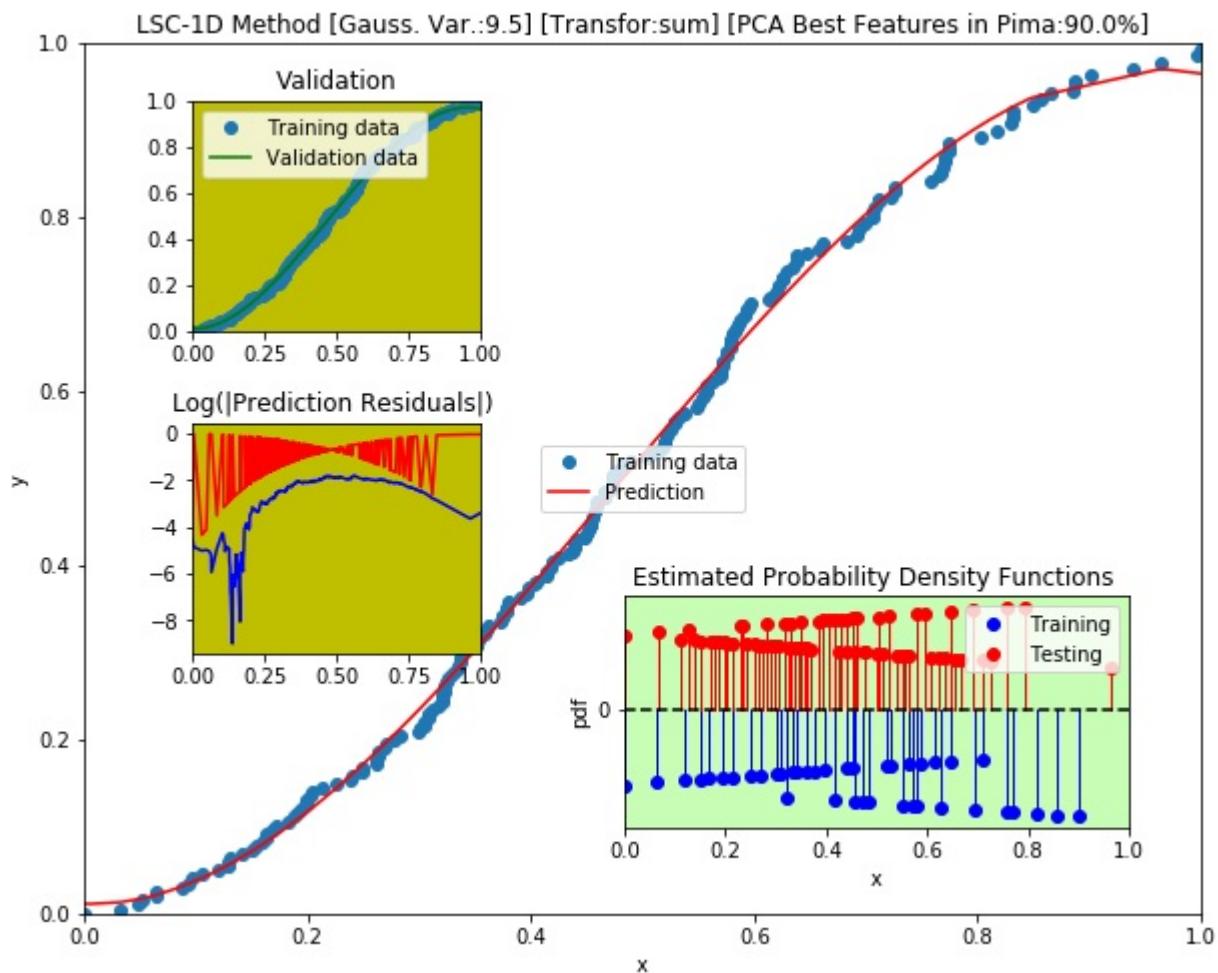
Prediction time/pt. (sec) : 0.0000257
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0052435

Prediction time/pt. (sec) : 0.0000158
```



Pima Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0022299
    Initializing linear solver - done. Time (sec): 0.0025196
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0002875
    Solving linear system (col. 0) - done. Time (sec): 0.0004263
Training - done. Time (sec): 0.0109770

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0013630  
Prediction time/pt. (sec) : 0.0000068
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0034974  
Prediction time/pt. (sec) : 0.0000105
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0088818  
Prediction time/pt. (sec) : 0.0000268
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0077496  
Prediction time/pt. (sec) : 0.0000233
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0097575
Initializing linear solver - done. Time (sec): 0.0100160
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003791
    Solving linear system (col. 0) - done. Time (sec): 0.0005469
Training - done. Time (sec): 0.0130882
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0025024

Prediction time/pt. (sec) : 0.0000075
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0070775

Prediction time/pt. (sec) : 0.0000354
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0024807

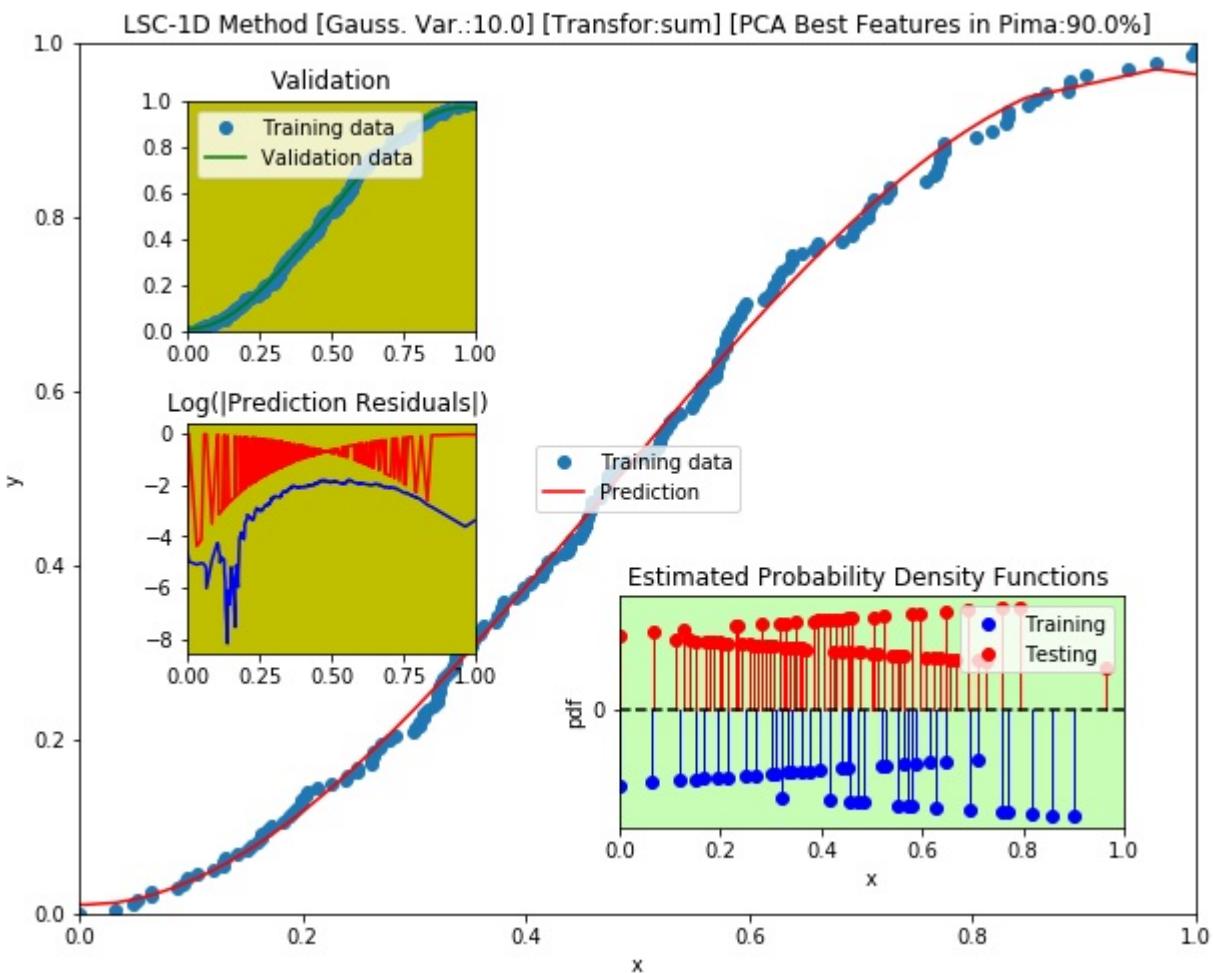
Prediction time/pt. (sec) : 0.0000075
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0073888

Prediction time/pt. (sec) : 0.0000223
```



Pima Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

Training ...

Initializing linear solver ...

Performing LU fact. (201 x 201 mtx) ...

Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0023420

Initializing linear solver - done. Time (sec): 0.0025969

Solving linear system (col. 0) ...

Back solving (201 x 201 mtx) ...

Back solving (201 x 201 mtx) - done. Time (sec): 0.0002792

Solving linear system (col. 0) - done. Time (sec): 0.0004218

Training - done. Time (sec): 0.0111294

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0058203  
Prediction time/pt. (sec) : 0.0000291
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0076523  
Prediction time/pt. (sec) : 0.0000230
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0059083  
Prediction time/pt. (sec) : 0.0000178
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0065334  
Prediction time/pt. (sec) : 0.0000197
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0053980
Initializing linear solver - done. Time (sec): 0.0056691
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0011094
    Solving linear system (col. 0) - done. Time (sec): 0.0013044
Training - done. Time (sec): 0.0140946
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0063939

Prediction time/pt. (sec) : 0.0000193
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0036213

Prediction time/pt. (sec) : 0.0000181
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0068157

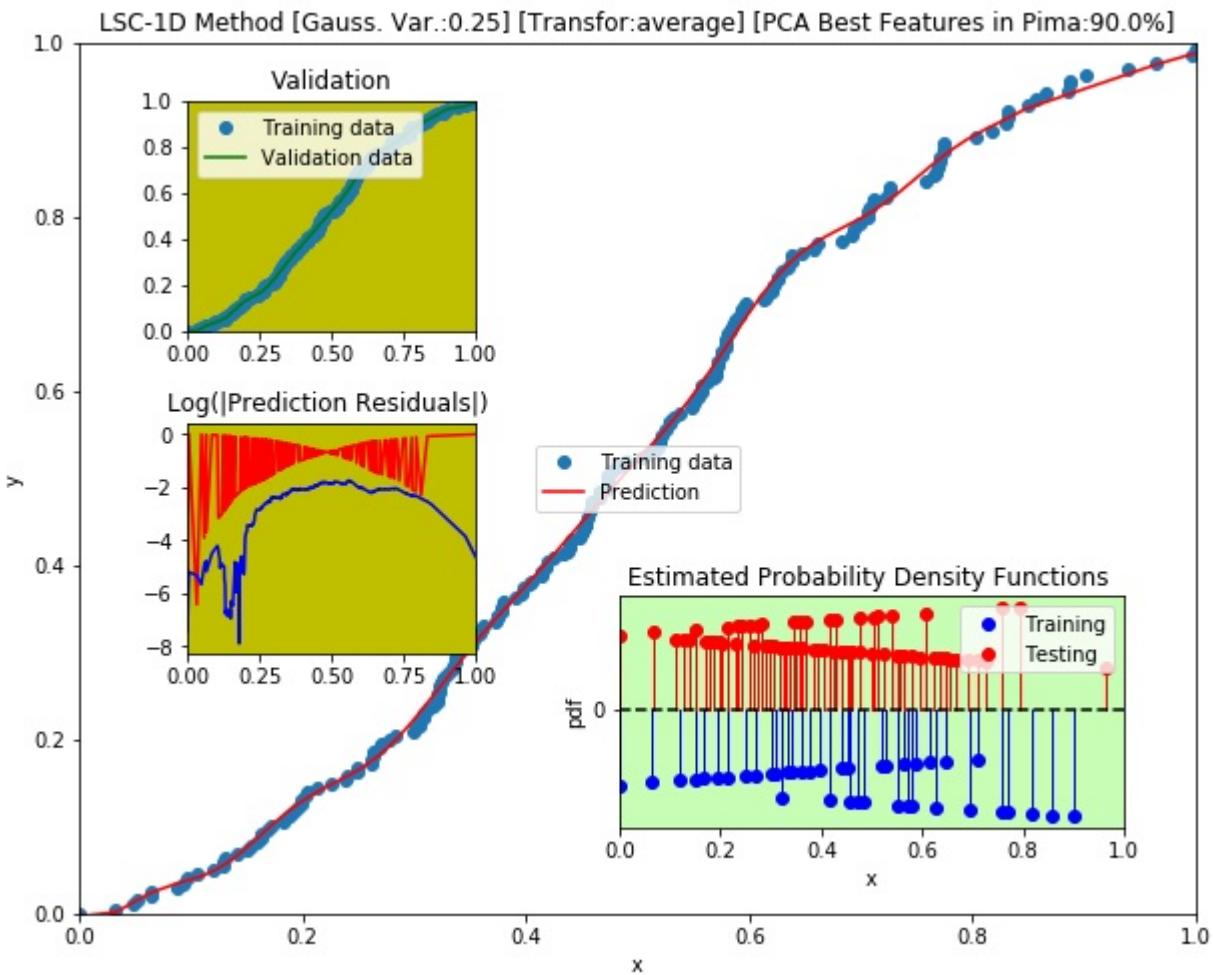
Prediction time/pt. (sec) : 0.0000205
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0067365

Prediction time/pt. (sec) : 0.0000203
```



Pima Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0033138
  Initializing linear solver - done. Time (sec): 0.0036027
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003567
  Solving linear system (col. 0) - done. Time (sec): 0.0005479
Training - done. Time (sec): 0.0124741

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0054333  
Prediction time/pt. (sec) : 0.0000272
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0030928  
Prediction time/pt. (sec) : 0.0000093
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0073562  
Prediction time/pt. (sec) : 0.0000222
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0043972  
Prediction time/pt. (sec) : 0.0000132
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0116057
Initializing linear solver - done. Time (sec): 0.0117936
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003202
    Solving linear system (col. 0) - done. Time (sec): 0.0004740
Training - done. Time (sec): 0.0151756
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0033734

Prediction time/pt. (sec) : 0.0000102
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0019631

Prediction time/pt. (sec) : 0.0000098
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0032809

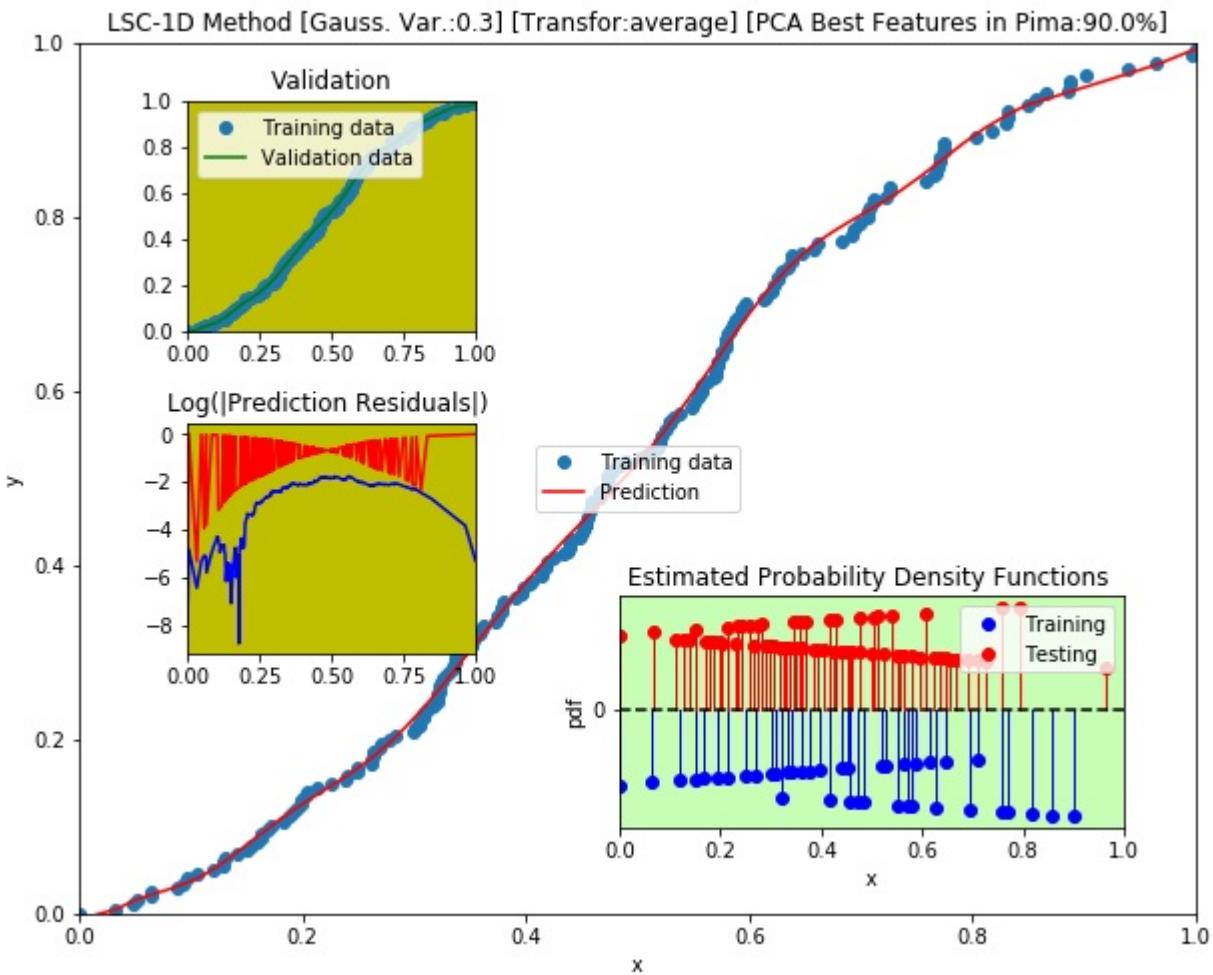
Prediction time/pt. (sec) : 0.0000099
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0097318

Prediction time/pt. (sec) : 0.0000293
```



Pima Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

Training ...

Initializing linear solver ...

Performing LU fact. (201 x 201 mtx) ...

Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0033247

Initializing linear solver - done. Time (sec): 0.0036192

Solving linear system (col. 0) ...

Back solving (201 x 201 mtx) ...

Back solving (201 x 201 mtx) - done. Time (sec): 0.0003529

Solving linear system (col. 0) - done. Time (sec): 0.0005510

Training - done. Time (sec): 0.0127275

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0051315  
Prediction time/pt. (sec) : 0.0000257
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0028503  
Prediction time/pt. (sec) : 0.0000086
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0028605  
Prediction time/pt. (sec) : 0.0000086
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0128148  
Prediction time/pt. (sec) : 0.0000386
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0065191
Initializing linear solver - done. Time (sec): 0.0068207
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0002992
    Solving linear system (col. 0) - done. Time (sec): 0.0004447
Training - done. Time (sec): 0.0103374
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0063164

Prediction time/pt. (sec) : 0.0000190
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0045702

Prediction time/pt. (sec) : 0.0000229
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0058000

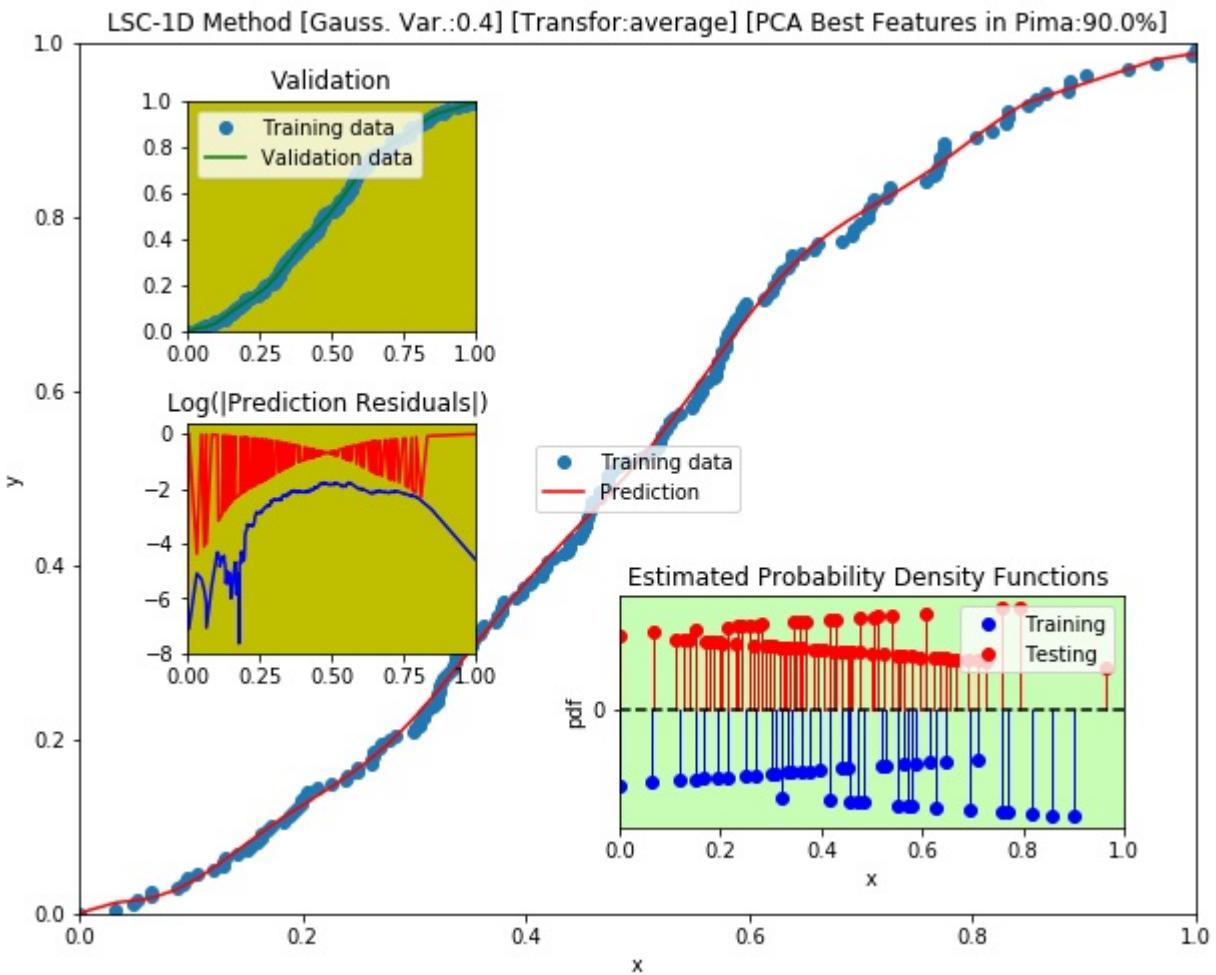
Prediction time/pt. (sec) : 0.0000175
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0031674

Prediction time/pt. (sec) : 0.0000095
```



Pima Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

Training ...

Initializing linear solver ...

Performing LU fact. (201 x 201 mtx) ...

Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0067308

Initializing linear solver - done. Time (sec): 0.0073235

Solving linear system (col. 0) ...

Back solving (201 x 201 mtx) ...

Back solving (201 x 201 mtx) - done. Time (sec): 0.0003653

Solving linear system (col. 0) - done. Time (sec): 0.0005603

Training - done. Time (sec): 0.0130038

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0084527  
Prediction time/pt. (sec) : 0.0000423
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0076227  
Prediction time/pt. (sec) : 0.0000230
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0076549  
Prediction time/pt. (sec) : 0.0000231
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0051217  
Prediction time/pt. (sec) : 0.0000154
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0035176
Initializing linear solver - done. Time (sec): 0.0045786
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003085
    Solving linear system (col. 0) - done. Time (sec): 0.0014775
Training - done. Time (sec): 0.0127361
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0058005

Prediction time/pt. (sec) : 0.0000175
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0034595

Prediction time/pt. (sec) : 0.0000173
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0052807

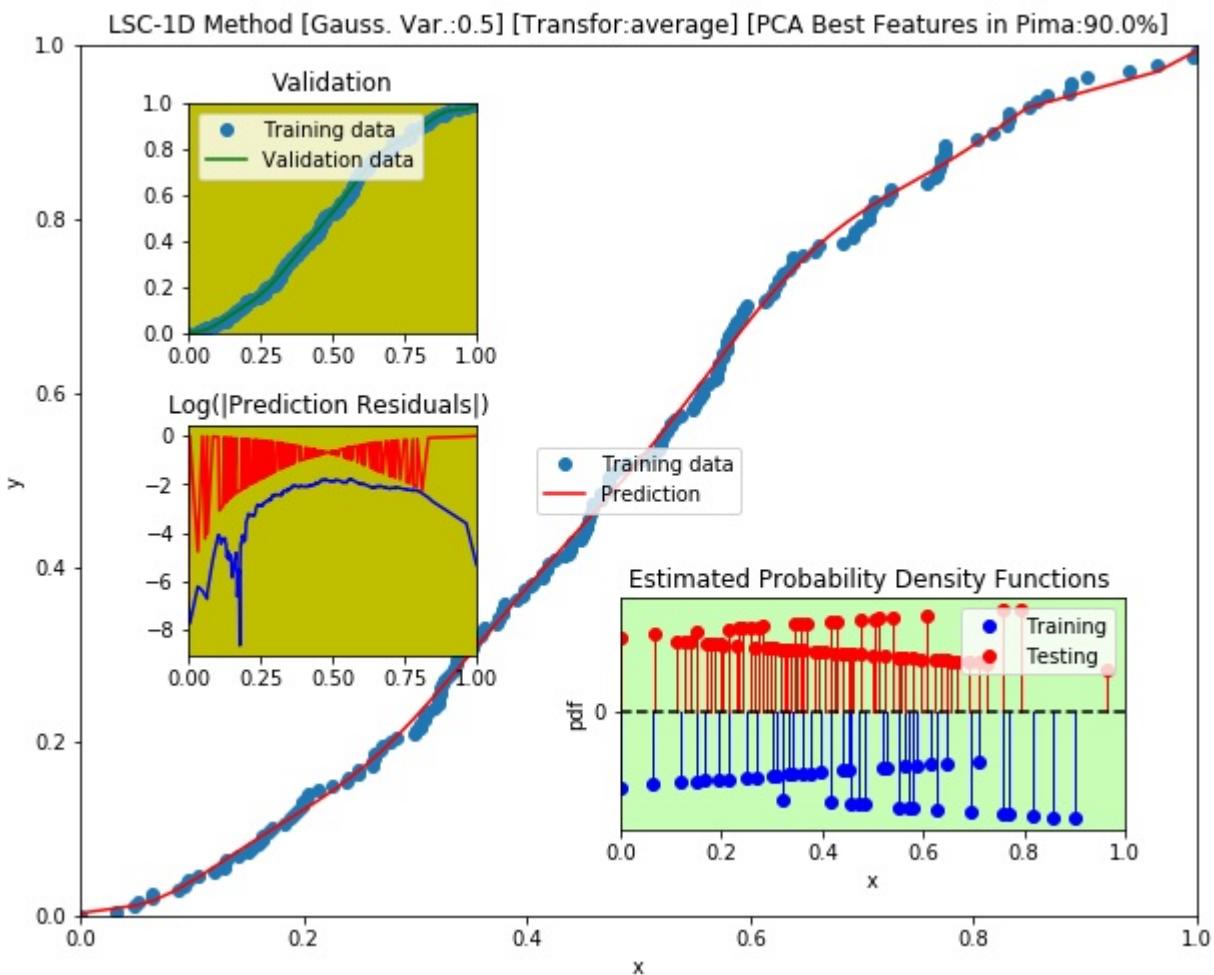
Prediction time/pt. (sec) : 0.0000159
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0054128

Prediction time/pt. (sec) : 0.0000163
```



Pima Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

Training ...

Initializing linear solver ...

Performing LU fact. (201 x 201 mtx) ...

Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0024772

Initializing linear solver - done. Time (sec): 0.0027399

Solving linear system (col. 0) ...

Back solving (201 x 201 mtx) ...

Back solving (201 x 201 mtx) - done. Time (sec): 0.0003028

Solving linear system (col. 0) - done. Time (sec): 0.0004456

Training - done. Time (sec): 0.0117059

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0093851  
Prediction time/pt. (sec) : 0.0000469
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0065019  
Prediction time/pt. (sec) : 0.0000196
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0059936  
Prediction time/pt. (sec) : 0.0000181
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0064099  
Prediction time/pt. (sec) : 0.0000193
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0043817
Initializing linear solver - done. Time (sec): 0.0046613
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0011697
    Solving linear system (col. 0) - done. Time (sec): 0.0013616
Training - done. Time (sec): 0.0123477
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0065734

Prediction time/pt. (sec) : 0.0000198
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0047343

Prediction time/pt. (sec) : 0.0000237
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0065837

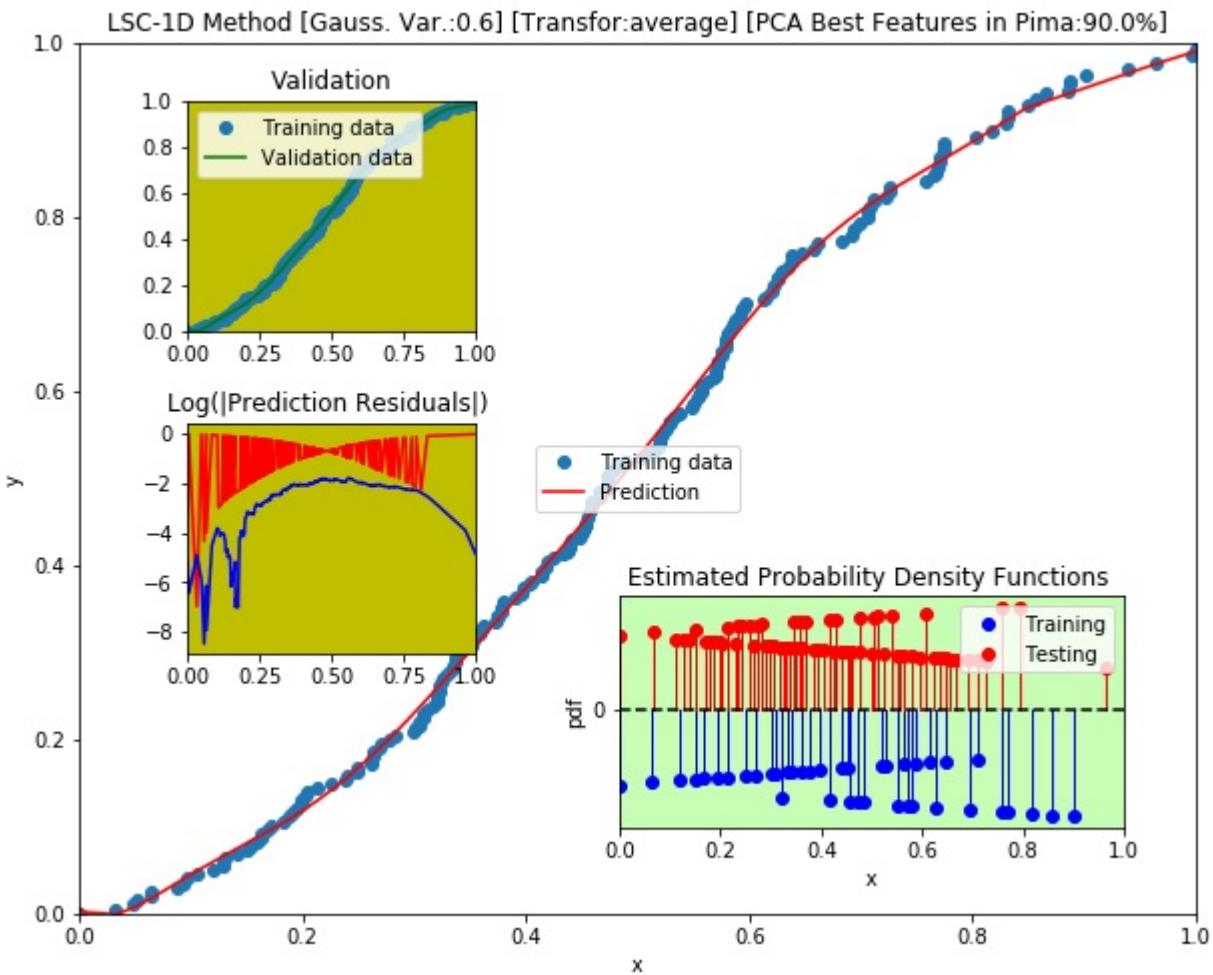
Prediction time/pt. (sec) : 0.0000198
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0071917

Prediction time/pt. (sec) : 0.0000217
```



Pima Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0022483
  Initializing linear solver - done. Time (sec): 0.0024962
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003252
  Solving linear system (col. 0) - done. Time (sec): 0.0004778
Training - done. Time (sec): 0.0111008

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0015149  
Prediction time/pt. (sec) : 0.0000076
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0077341  
Prediction time/pt. (sec) : 0.0000233
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0024230  
Prediction time/pt. (sec) : 0.0000073
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0024784  
Prediction time/pt. (sec) : 0.0000075
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0123646
Initializing linear solver - done. Time (sec): 0.0126023
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003178
    Solving linear system (col. 0) - done. Time (sec): 0.0004749
Training - done. Time (sec): 0.0157371
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0109649

Prediction time/pt. (sec) : 0.0000330
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0014827

Prediction time/pt. (sec) : 0.0000074
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0024011

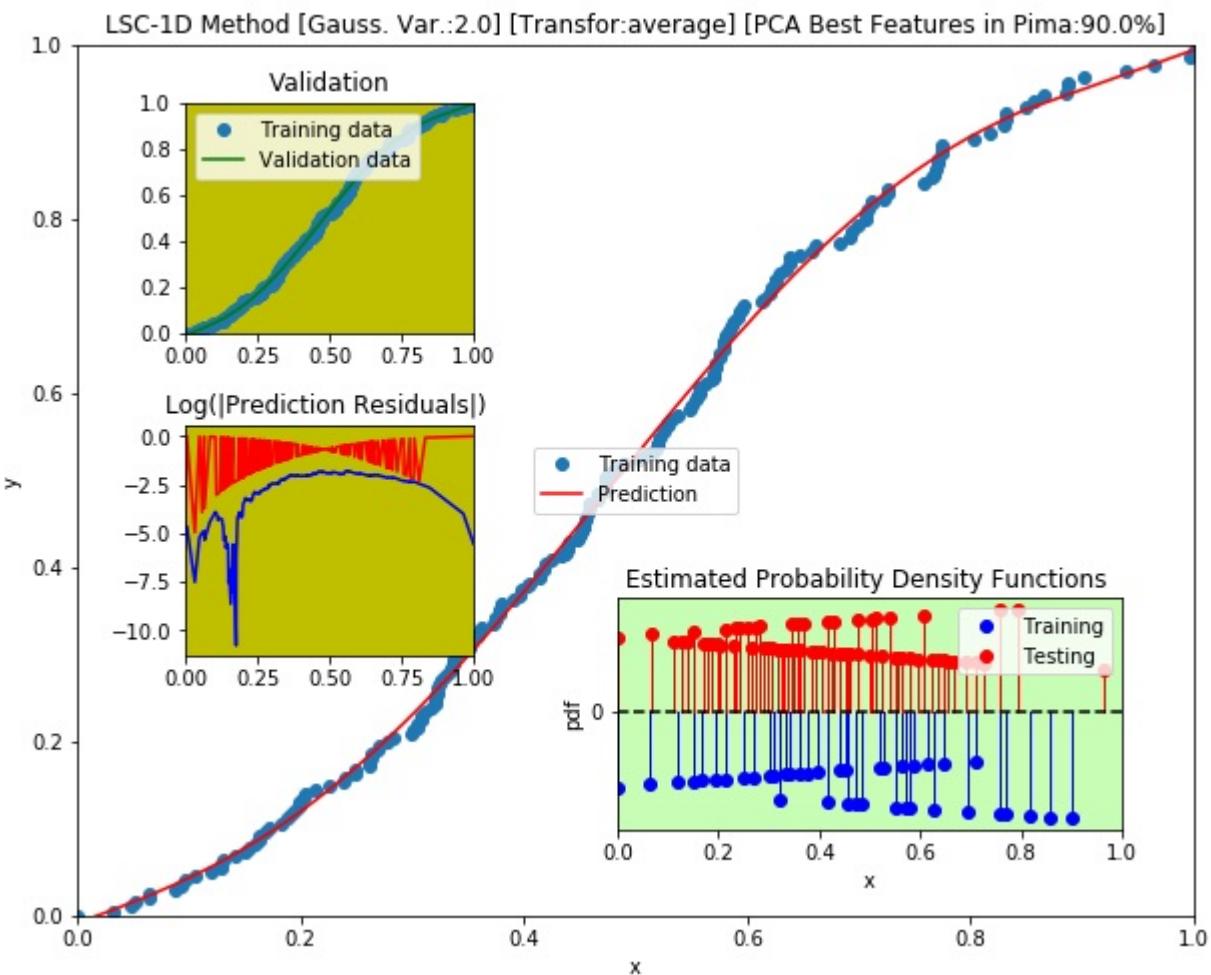
Prediction time/pt. (sec) : 0.0000072
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0094228

Prediction time/pt. (sec) : 0.0000284
```



Pima Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0023212
  Initializing linear solver - done. Time (sec): 0.0025749
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003285
  Solving linear system (col. 0) - done. Time (sec): 0.0004690
Training - done. Time (sec): 0.0109808

```

Evaluation

```
# eval points. : 200  
  
Predicting ...  
Predicting - done. Time (sec): 0.0089023  
  
Prediction time/pt. (sec) : 0.0000445
```

Evaluation

```
# eval points. : 332  
  
Predicting ...  
Predicting - done. Time (sec): 0.0028019  
  
Prediction time/pt. (sec) : 0.0000084
```

Evaluation

```
# eval points. : 332  
  
Predicting ...  
Predicting - done. Time (sec): 0.0052564  
  
Prediction time/pt. (sec) : 0.0000158
```

Evaluation

```
# eval points. : 332  
  
Predicting ...  
Predicting - done. Time (sec): 0.0052290  
  
Prediction time/pt. (sec) : 0.0000157
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0051808
Initializing linear solver - done. Time (sec): 0.0054483
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0012240
    Solving linear system (col. 0) - done. Time (sec): 0.0015674
Training - done. Time (sec): 0.0144835
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0055976

Prediction time/pt. (sec) : 0.0000169
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0043828

Prediction time/pt. (sec) : 0.0000219
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0062490

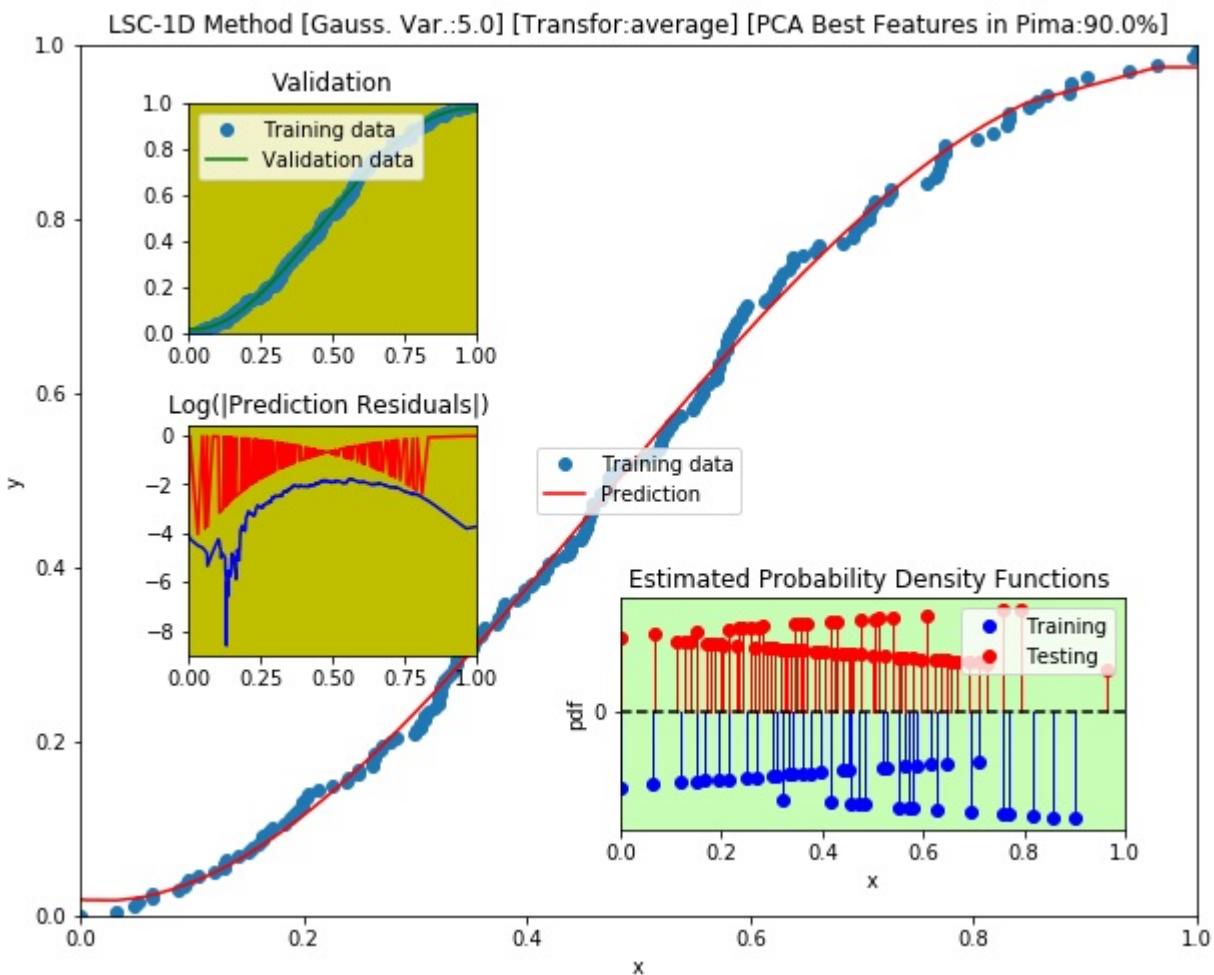
Prediction time/pt. (sec) : 0.0000188
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0060480

Prediction time/pt. (sec) : 0.0000182
```



Pima Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

Training ...

Initializing linear solver ...

Performing LU fact. (201 x 201 mtx) ...

Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0033174

Initializing linear solver - done. Time (sec): 0.0036092

Solving linear system (col. 0) ...

Back solving (201 x 201 mtx) ...

Back solving (201 x 201 mtx) - done. Time (sec): 0.0003614

Solving linear system (col. 0) - done. Time (sec): 0.0005538

Training - done. Time (sec): 0.0120406

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0112717  
Prediction time/pt. (sec) : 0.0000564
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0047977  
Prediction time/pt. (sec) : 0.0000145
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0045786  
Prediction time/pt. (sec) : 0.0000138
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0050592  
Prediction time/pt. (sec) : 0.0000152
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0023129
Initializing linear solver - done. Time (sec): 0.0025415
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0002961
    Solving linear system (col. 0) - done. Time (sec): 0.0004449
Training - done. Time (sec): 0.0094252
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0023165

Prediction time/pt. (sec) : 0.0000070
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0069444

Prediction time/pt. (sec) : 0.0000347
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0050697

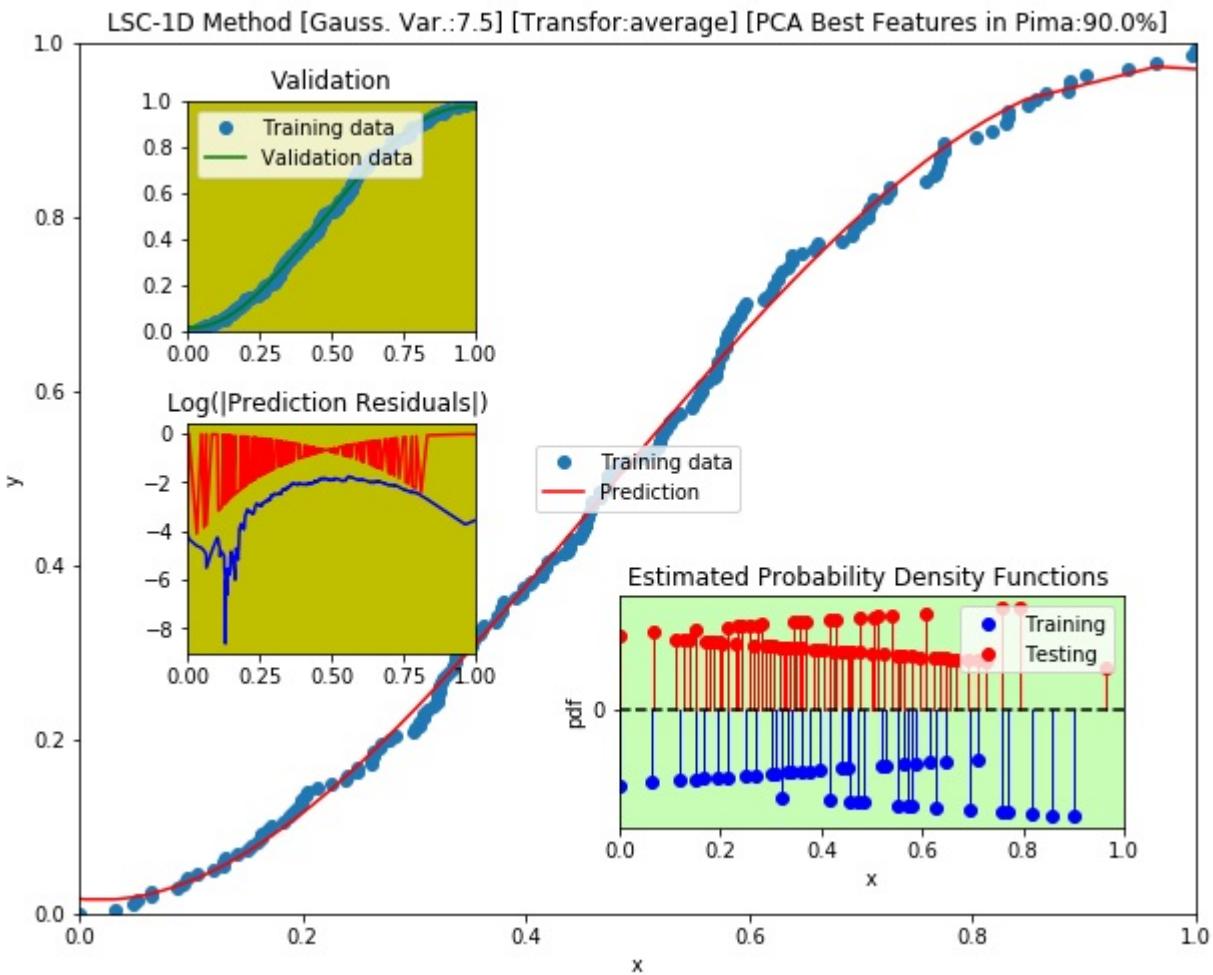
Prediction time/pt. (sec) : 0.0000153
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0050697

Prediction time/pt. (sec) : 0.0000153
```



Pima Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

Training ...

Initializing linear solver ...

Performing LU fact. (201 x 201 mtx) ...

Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0023878

Initializing linear solver - done. Time (sec): 0.0026388

Solving linear system (col. 0) ...

Back solving (201 x 201 mtx) ...

Back solving (201 x 201 mtx) - done. Time (sec): 0.0002828

Solving linear system (col. 0) - done. Time (sec): 0.0004218

Training - done. Time (sec): 0.0089941

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0062790  
Prediction time/pt. (sec) : 0.0000314
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0022221  
Prediction time/pt. (sec) : 0.0000067
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0021815  
Prediction time/pt. (sec) : 0.0000066
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0022461  
Prediction time/pt. (sec) : 0.0000068
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0103810
Initializing linear solver - done. Time (sec): 0.0106022
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003352
    Solving linear system (col. 0) - done. Time (sec): 0.0005121
Training - done. Time (sec): 0.0139914
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0024641

Prediction time/pt. (sec) : 0.0000074
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0105622

Prediction time/pt. (sec) : 0.0000528
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0057135

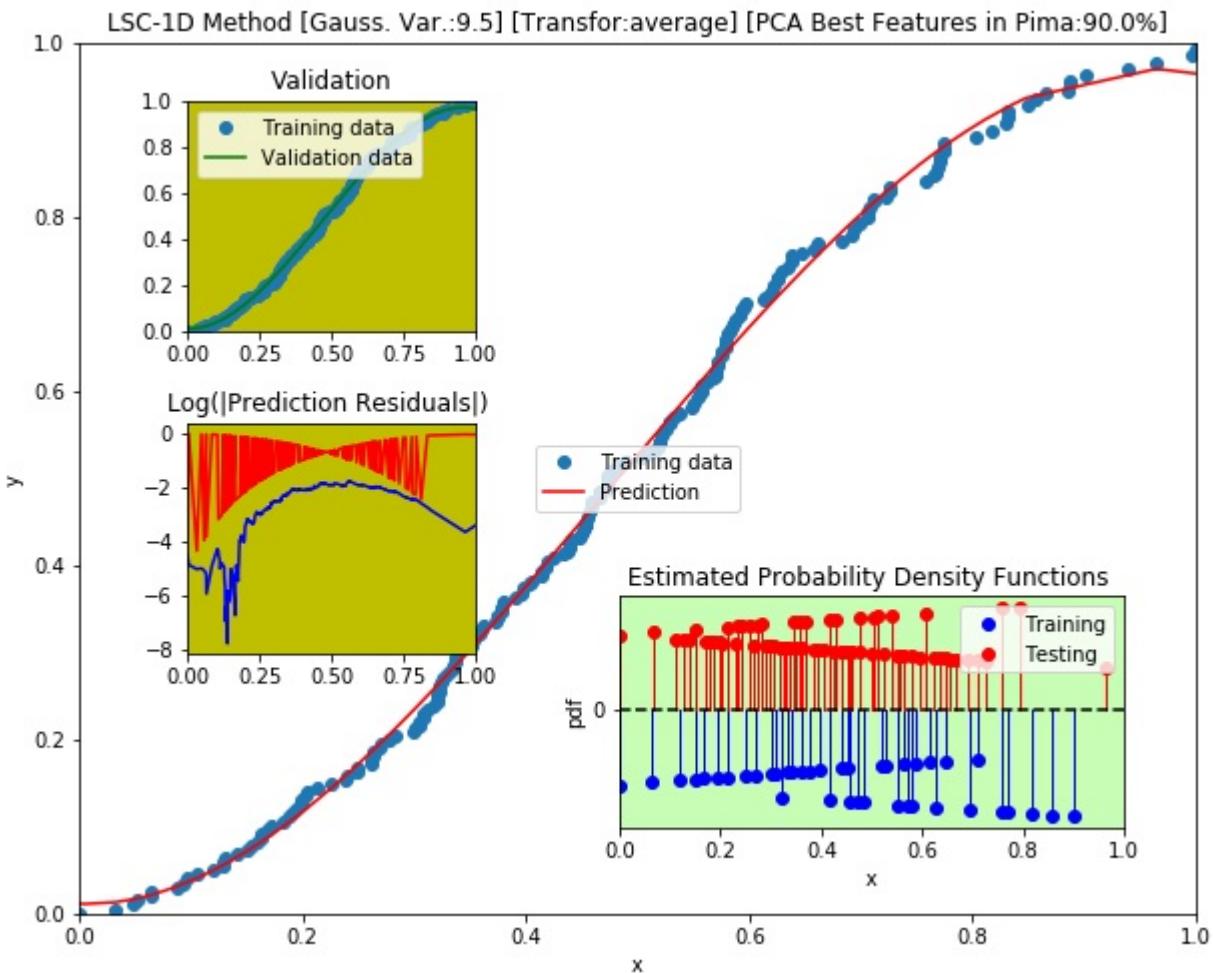
Prediction time/pt. (sec) : 0.0000172
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0024927

Prediction time/pt. (sec) : 0.0000075
```



Pima Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

Training ...

Initializing linear solver ...

Performing LU fact. (201 x 201 mtx) ...

Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0024378

Initializing linear solver - done. Time (sec): 0.0026915

Solving linear system (col. 0) ...

Back solving (201 x 201 mtx) ...

Back solving (201 x 201 mtx) - done. Time (sec): 0.0002916

Solving linear system (col. 0) - done. Time (sec): 0.0004249

Training - done. Time (sec): 0.0110595

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0054498  
Prediction time/pt. (sec) : 0.0000272
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0052121  
Prediction time/pt. (sec) : 0.0000157
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0050836  
Prediction time/pt. (sec) : 0.0000153
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0054624  
Prediction time/pt. (sec) : 0.0000165
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0030096
Initializing linear solver - done. Time (sec): 0.0032694
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0006669
    Solving linear system (col. 0) - done. Time (sec): 0.0008504
Training - done. Time (sec): 0.0127723
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0051613

Prediction time/pt. (sec) : 0.0000155
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0042546

Prediction time/pt. (sec) : 0.0000213
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0063696

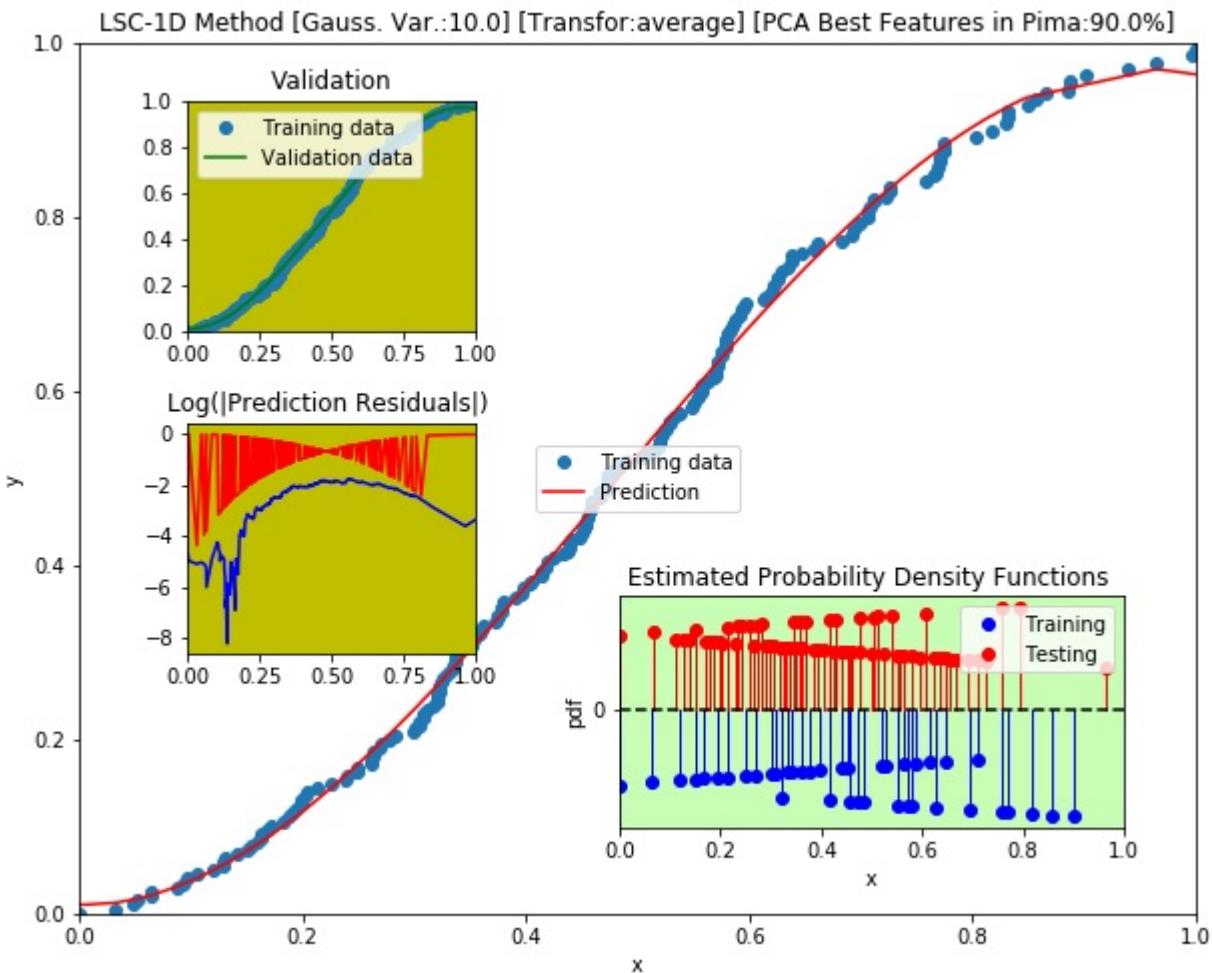
Prediction time/pt. (sec) : 0.0000192
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0059059

Prediction time/pt. (sec) : 0.0000178
```



Pima Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0019765
    Initializing linear solver - done. Time (sec): 0.0028412
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0003352
    Solving linear system (col. 0) - done. Time (sec): 0.0010707
Training - done. Time (sec): 0.0080976

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0019536  
Prediction time/pt. (sec) : 0.0000098
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0030072  
Prediction time/pt. (sec) : 0.0000091
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0030253  
Prediction time/pt. (sec) : 0.0000091
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0030499  
Prediction time/pt. (sec) : 0.0000092
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0018795
Initializing linear solver - done. Time (sec): 0.0026653
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003042
    Solving linear system (col. 0) - done. Time (sec): 0.0009749
Training - done. Time (sec): 0.0075142
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0029352

Prediction time/pt. (sec) : 0.0000088
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0018616

Prediction time/pt. (sec) : 0.0000093
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0030367

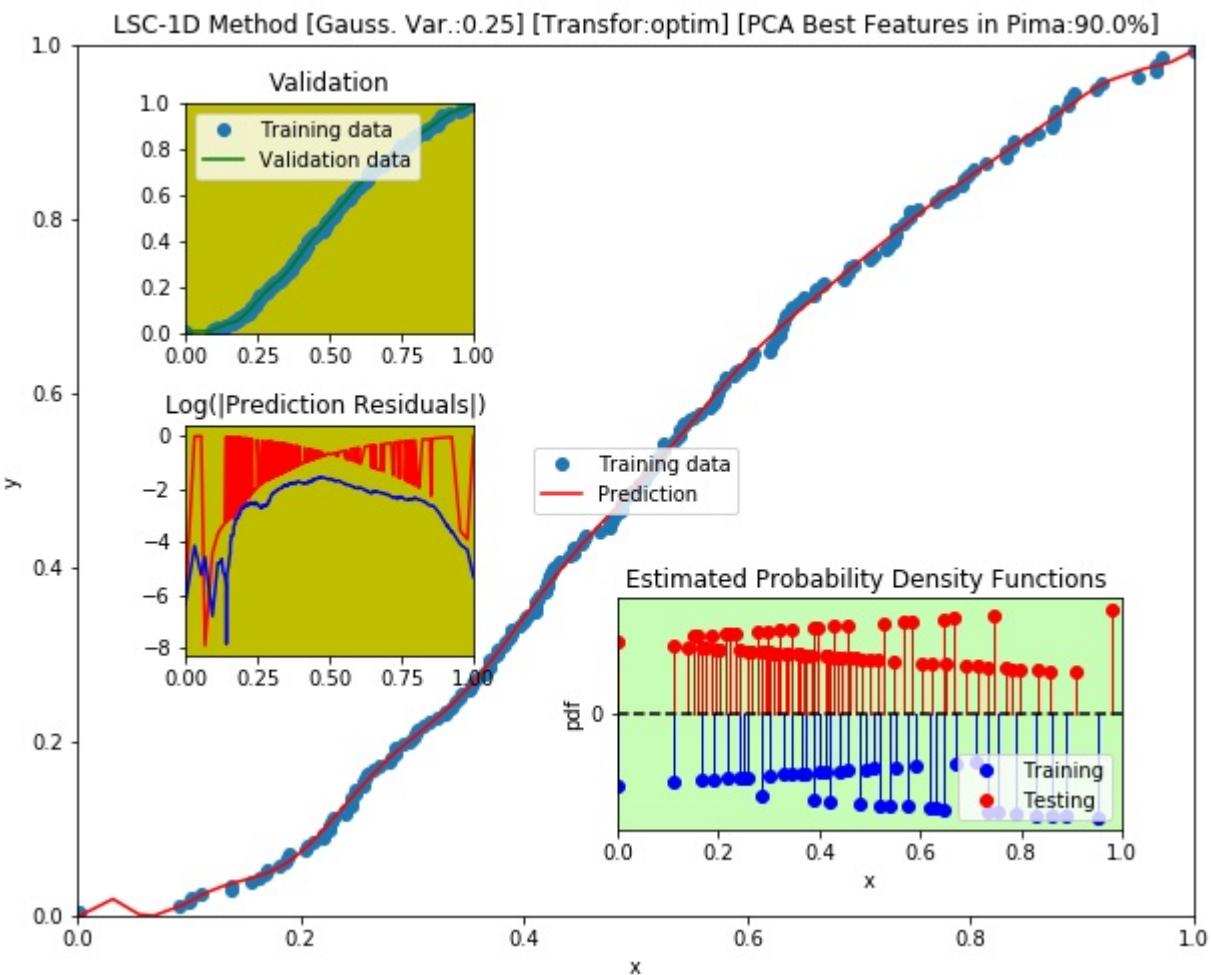
Prediction time/pt. (sec) : 0.0000091
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0029995

Prediction time/pt. (sec) : 0.0000090
```



Pima Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (201 x 201 mtx) ...
        Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0097957
    Initializing linear solver - done. Time (sec): 0.0101221
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0003030
    Solving linear system (col. 0) - done. Time (sec): 0.0004478
Training - done. Time (sec): 0.0144982

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0119917  
Prediction time/pt. (sec) : 0.0000600
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0030937  
Prediction time/pt. (sec) : 0.0000093
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0077398  
Prediction time/pt. (sec) : 0.0000233
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0058999  
Prediction time/pt. (sec) : 0.0000178
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0079355
Initializing linear solver - done. Time (sec): 0.0081542
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0016468
    Solving linear system (col. 0) - done. Time (sec): 0.0018497
Training - done. Time (sec): 0.0130913
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0079124

Prediction time/pt. (sec) : 0.0000238
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0019732

Prediction time/pt. (sec) : 0.0000099
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0030746

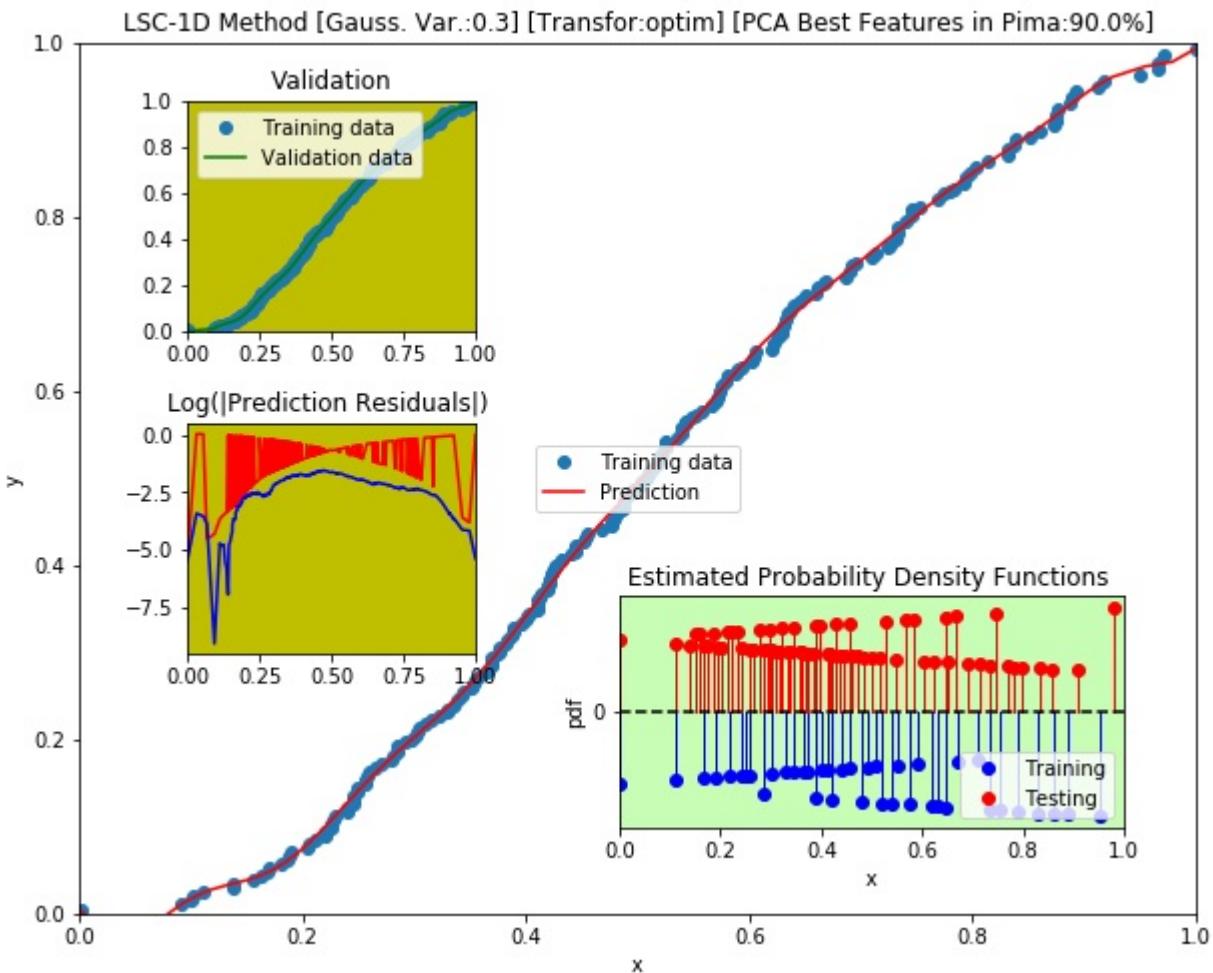
Prediction time/pt. (sec) : 0.0000093
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0033548

Prediction time/pt. (sec) : 0.0000101
```



Pima Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0024006
    Initializing linear solver - done. Time (sec): 0.0026588
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0002885
    Solving linear system (col. 0) - done. Time (sec): 0.0004303
Training - done. Time (sec): 0.0113251

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0089705  
Prediction time/pt. (sec) : 0.0000449
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0055492  
Prediction time/pt. (sec) : 0.0000167
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0055127  
Prediction time/pt. (sec) : 0.0000166
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0056863  
Prediction time/pt. (sec) : 0.0000171
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0025342
Initializing linear solver - done. Time (sec): 0.0031321
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003130
    Solving linear system (col. 0) - done. Time (sec): 0.0004661
Training - done. Time (sec): 0.0107017
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0064366

Prediction time/pt. (sec) : 0.0000194
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0019388

Prediction time/pt. (sec) : 0.0000097
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0033562

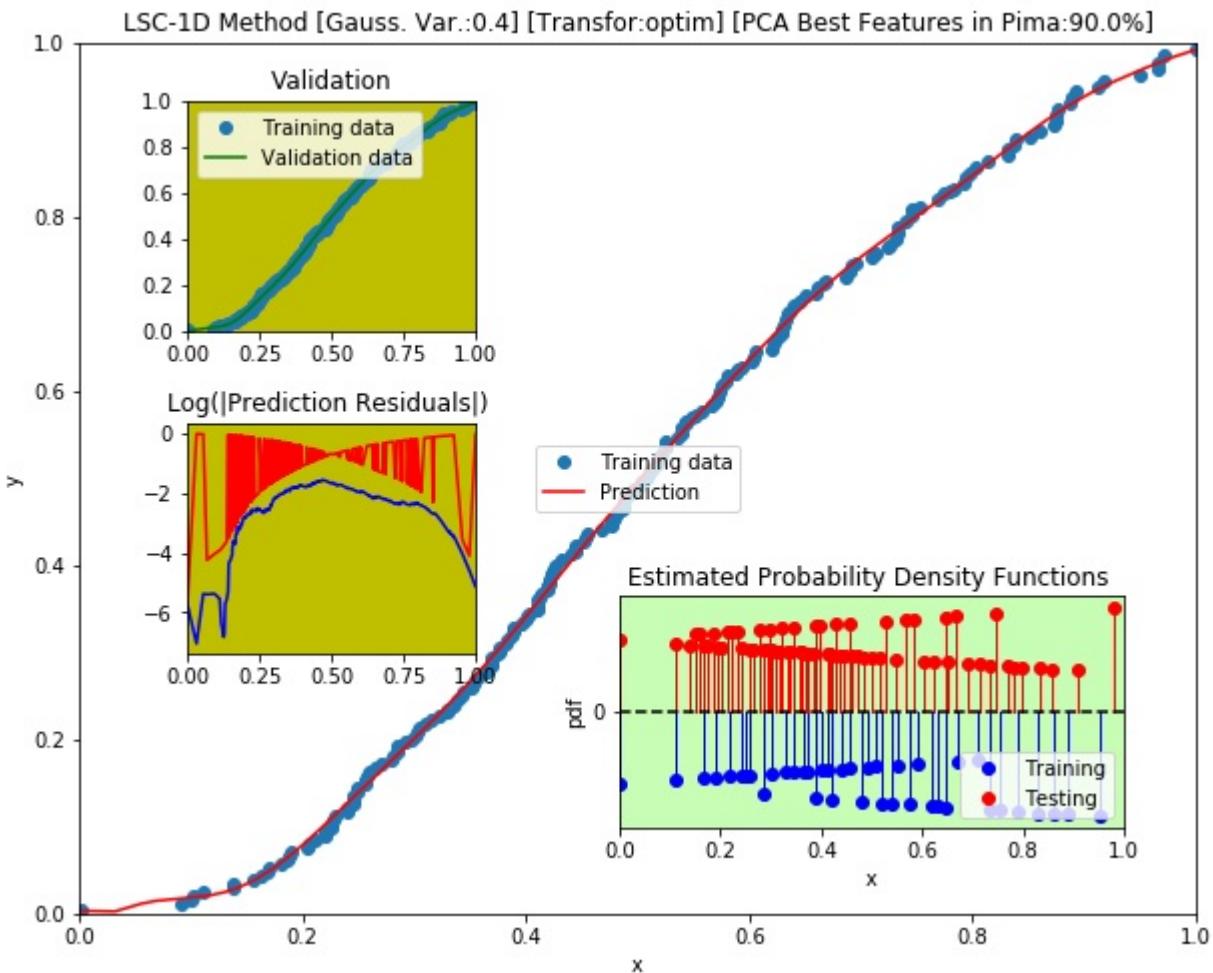
Prediction time/pt. (sec) : 0.0000101
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0033584

Prediction time/pt. (sec) : 0.0000101
```



Pima Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0024886
    Initializing linear solver - done. Time (sec): 0.0027537
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0002885
    Solving linear system (col. 0) - done. Time (sec): 0.0004292
Training - done. Time (sec): 0.0092108

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0094302  
Prediction time/pt. (sec) : 0.0000472
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0057313  
Prediction time/pt. (sec) : 0.0000173
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0049326  
Prediction time/pt. (sec) : 0.0000149
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0051892  
Prediction time/pt. (sec) : 0.0000156
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0060761
Initializing linear solver - done. Time (sec): 0.0063152
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003617
    Solving linear system (col. 0) - done. Time (sec): 0.0005162
Training - done. Time (sec): 0.0095475
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0061364

Prediction time/pt. (sec) : 0.0000185
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0042970

Prediction time/pt. (sec) : 0.0000215
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0055013

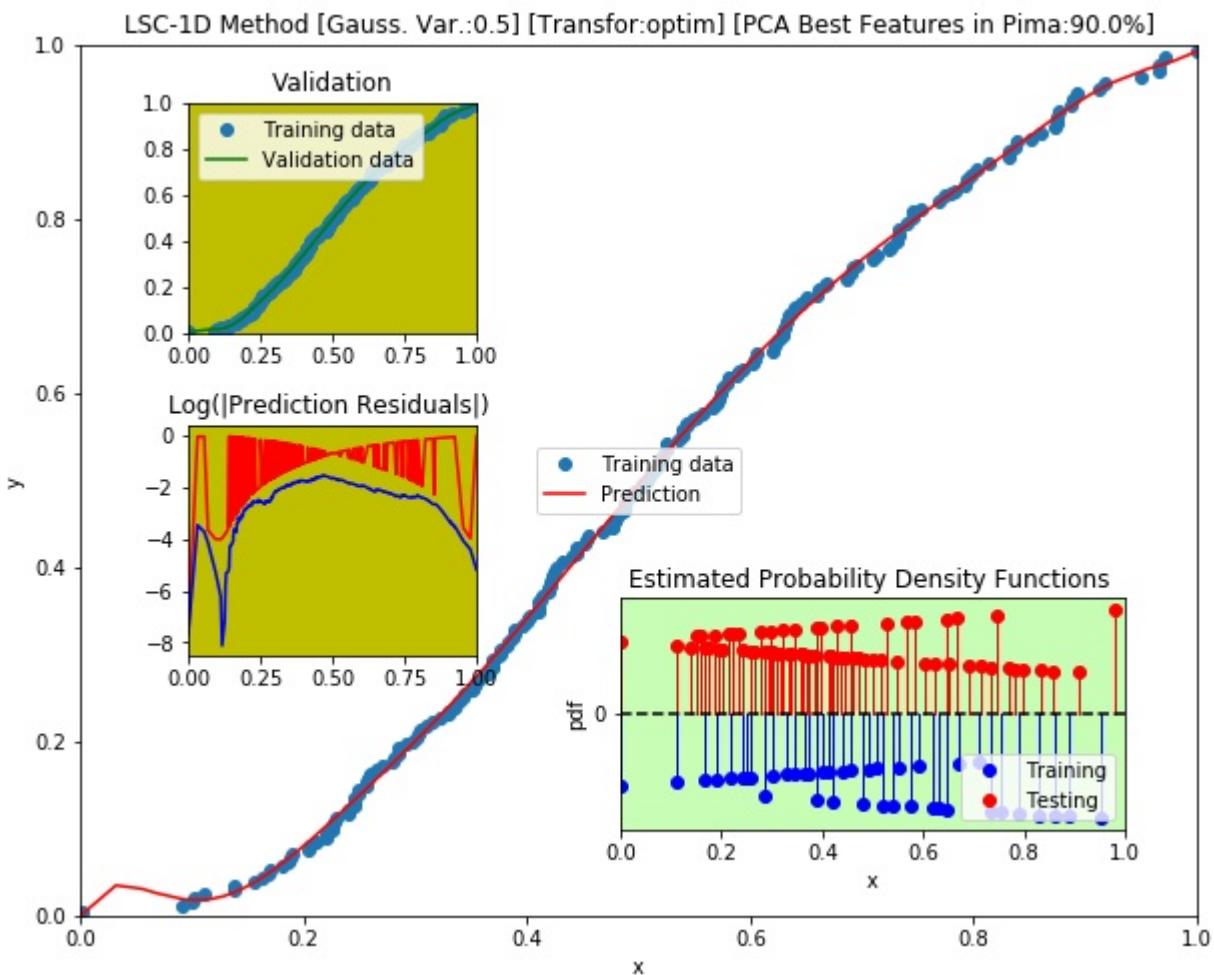
Prediction time/pt. (sec) : 0.0000166
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0029840

Prediction time/pt. (sec) : 0.0000090
```



Pima Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (201 x 201 mtx) ...
        Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0051060
    Initializing linear solver - done. Time (sec): 0.0053153
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0004296
    Solving linear system (col. 0) - done. Time (sec): 0.0006275
Training - done. Time (sec): 0.0138404

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0030849  
Prediction time/pt. (sec) : 0.0000154
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0061235  
Prediction time/pt. (sec) : 0.0000184
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0084350  
Prediction time/pt. (sec) : 0.0000254
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0028934  
Prediction time/pt. (sec) : 0.0000087
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0018981
Initializing linear solver - done. Time (sec): 0.0021245
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0002997
    Solving linear system (col. 0) - done. Time (sec): 0.0004461
Training - done. Time (sec): 0.0054626
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0095139

Prediction time/pt. (sec) : 0.0000287
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0064907

Prediction time/pt. (sec) : 0.0000325
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0061631

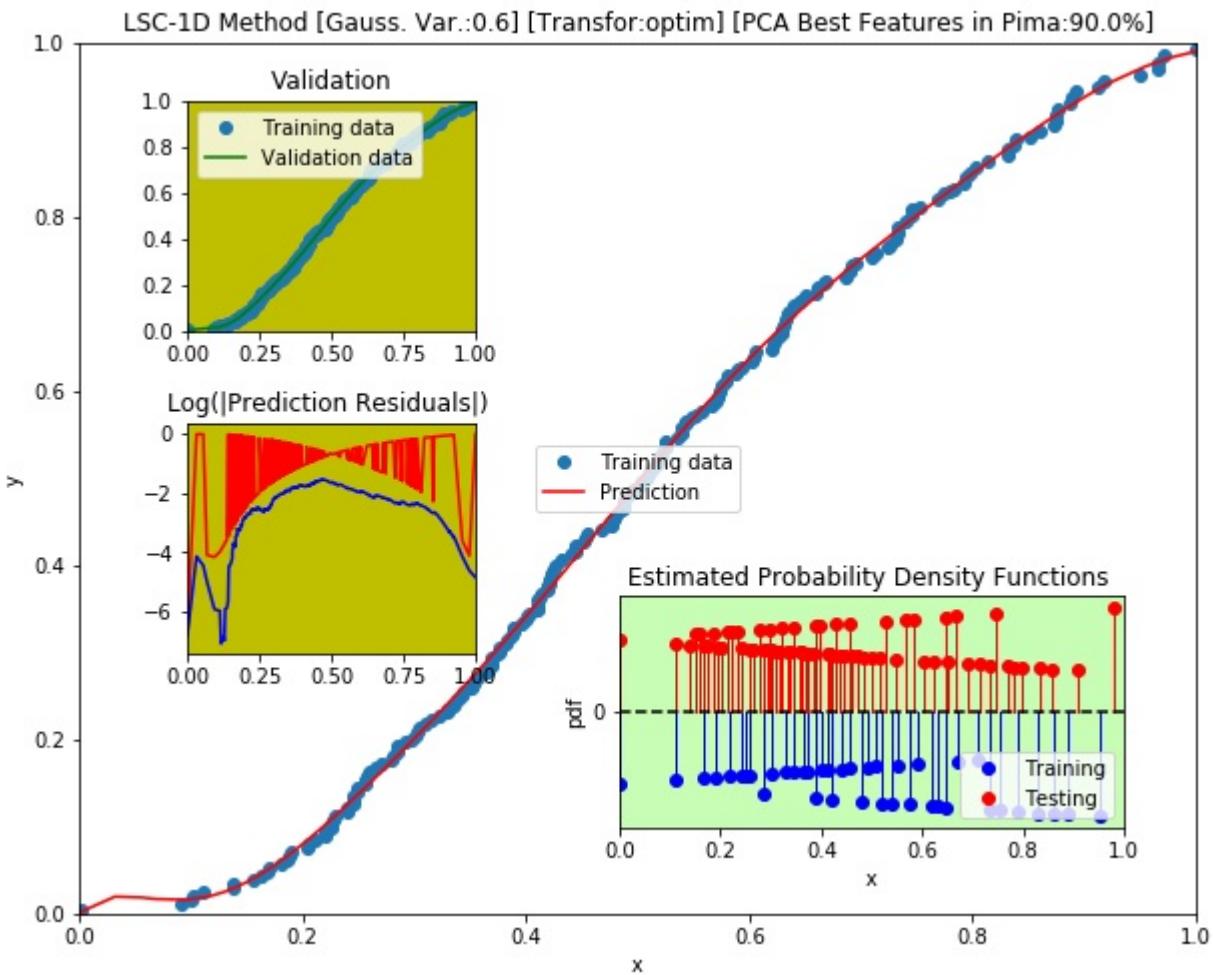
Prediction time/pt. (sec) : 0.0000186
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0078630

Prediction time/pt. (sec) : 0.0000237
```



Pima Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0026712
    Initializing linear solver - done. Time (sec): 0.0029597
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0003090
    Solving linear system (col. 0) - done. Time (sec): 0.0004642
Training - done. Time (sec): 0.0117264

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0014710  
Prediction time/pt. (sec) : 0.0000074
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0023046  
Prediction time/pt. (sec) : 0.0000069
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0156720  
Prediction time/pt. (sec) : 0.0000472
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0041852  
Prediction time/pt. (sec) : 0.0000126
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0071480
Initializing linear solver - done. Time (sec): 0.0073872
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0002978
    Solving linear system (col. 0) - done. Time (sec): 0.0004423
Training - done. Time (sec): 0.0103018
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0025861

Prediction time/pt. (sec) : 0.0000078
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0019743

Prediction time/pt. (sec) : 0.0000099
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0053139

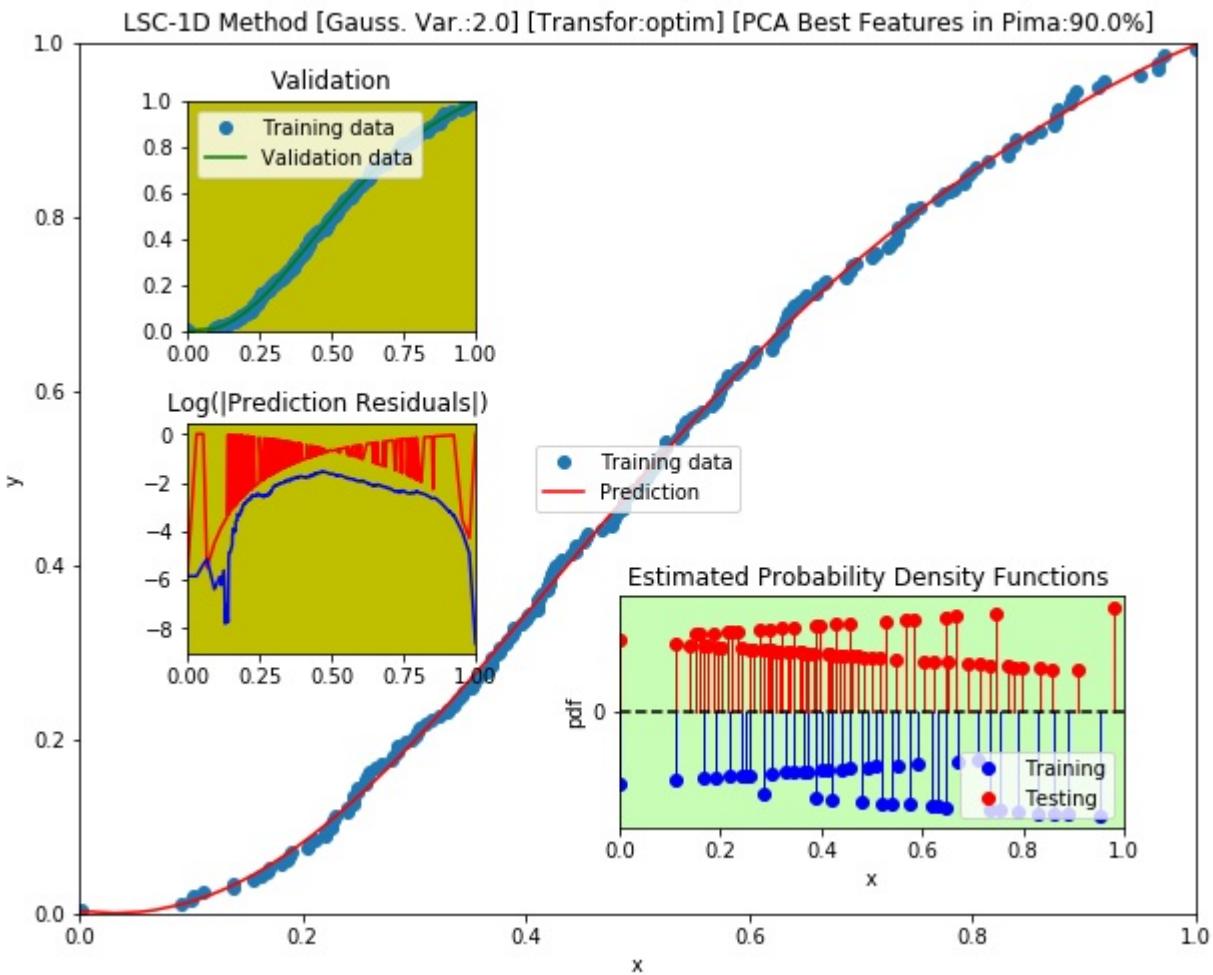
Prediction time/pt. (sec) : 0.0000160
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0027027

Prediction time/pt. (sec) : 0.0000081
```



Pima Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0023909
    Initializing linear solver - done. Time (sec): 0.0026455
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0002897
    Solving linear system (col. 0) - done. Time (sec): 0.0004296
Training - done. Time (sec): 0.0112298

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0056441  
Prediction time/pt. (sec) : 0.0000282
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0054660  
Prediction time/pt. (sec) : 0.0000165
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0053766  
Prediction time/pt. (sec) : 0.0000162
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0056319  
Prediction time/pt. (sec) : 0.0000170
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0040565
Initializing linear solver - done. Time (sec): 0.0043170
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0010965
    Solving linear system (col. 0) - done. Time (sec): 0.0012891
Training - done. Time (sec): 0.0120685
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0057454

Prediction time/pt. (sec) : 0.0000173
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0039892

Prediction time/pt. (sec) : 0.0000199
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0064027

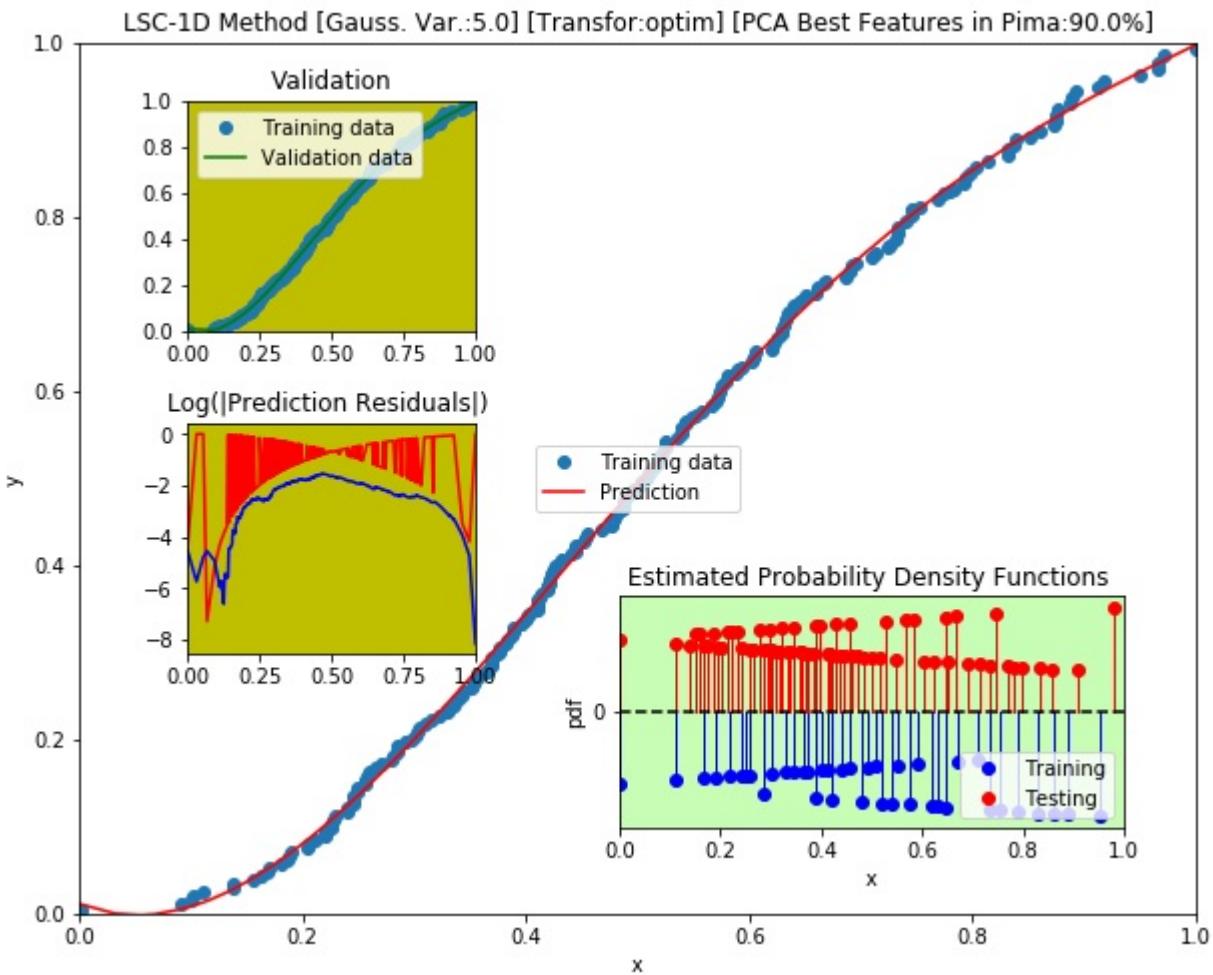
Prediction time/pt. (sec) : 0.0000193
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0060217

Prediction time/pt. (sec) : 0.0000181
```



Pima Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (201 x 201 mtx) ...
        Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0022852
    Initializing linear solver - done. Time (sec): 0.0025444
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0002835
    Solving linear system (col. 0) - done. Time (sec): 0.0004170
Training - done. Time (sec): 0.0086510

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0107522  
Prediction time/pt. (sec) : 0.0000538
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0022810  
Prediction time/pt. (sec) : 0.0000069
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0038233  
Prediction time/pt. (sec) : 0.0000115
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0051517  
Prediction time/pt. (sec) : 0.0000155
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0059912
Initializing linear solver - done. Time (sec): 0.0062604
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0013497
    Solving linear system (col. 0) - done. Time (sec): 0.0015686
Training - done. Time (sec): 0.0143471
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0054462

Prediction time/pt. (sec) : 0.0000164
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0039864

Prediction time/pt. (sec) : 0.0000199
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0058784

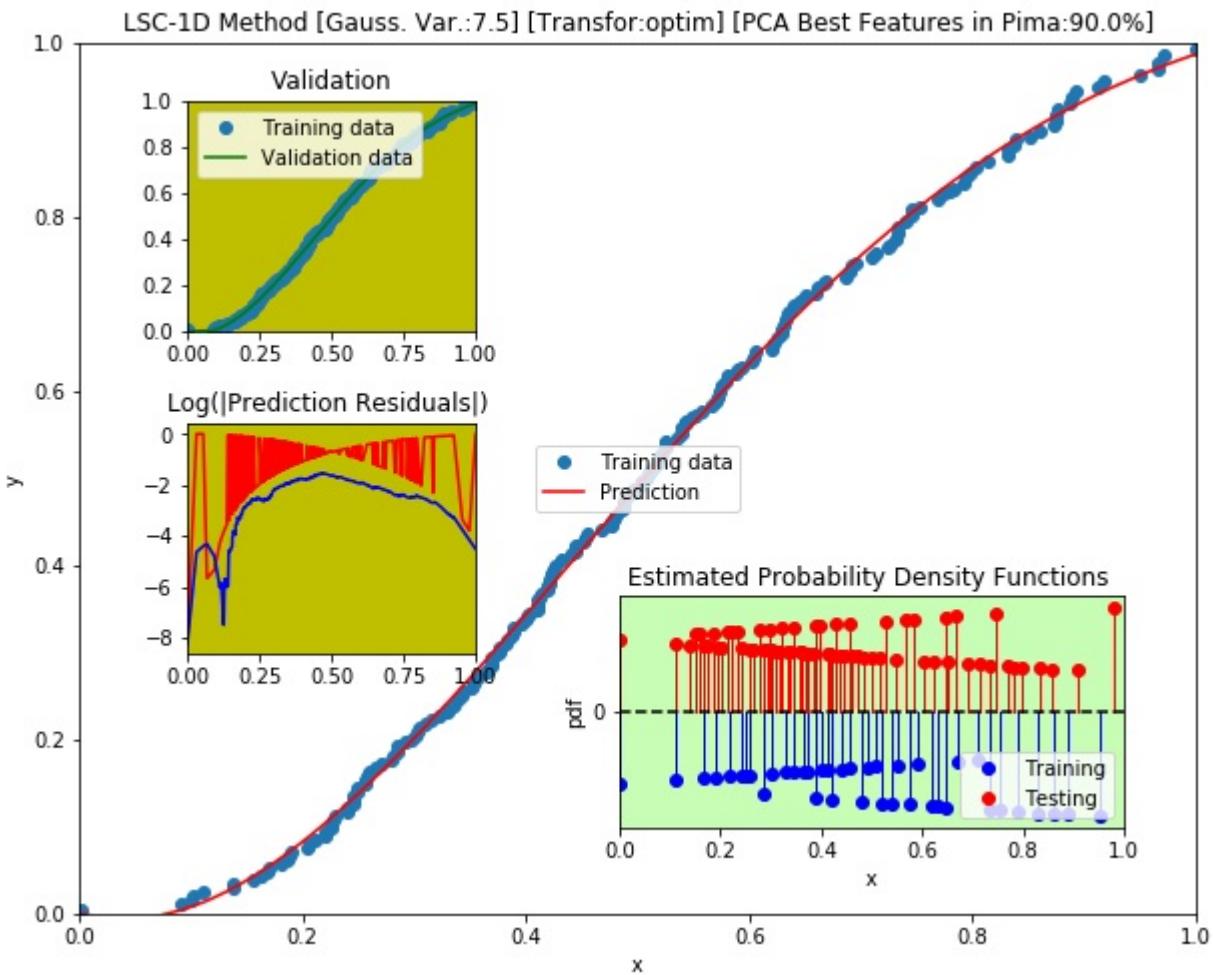
Prediction time/pt. (sec) : 0.0000177
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0060225

Prediction time/pt. (sec) : 0.0000181
```



Pima Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0023303
    Initializing linear solver - done. Time (sec): 0.0025783
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0002832
    Solving linear system (col. 0) - done. Time (sec): 0.0004187
Training - done. Time (sec): 0.0108955

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0014906  
Prediction time/pt. (sec) : 0.0000075
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0059519  
Prediction time/pt. (sec) : 0.0000179
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0056977  
Prediction time/pt. (sec) : 0.0000172
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0100048  
Prediction time/pt. (sec) : 0.0000301
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0097630
Initializing linear solver - done. Time (sec): 0.0100236
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003204
    Solving linear system (col. 0) - done. Time (sec): 0.0004754
Training - done. Time (sec): 0.0131669
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0057728

Prediction time/pt. (sec) : 0.0000174
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0040584

Prediction time/pt. (sec) : 0.0000203
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0054965

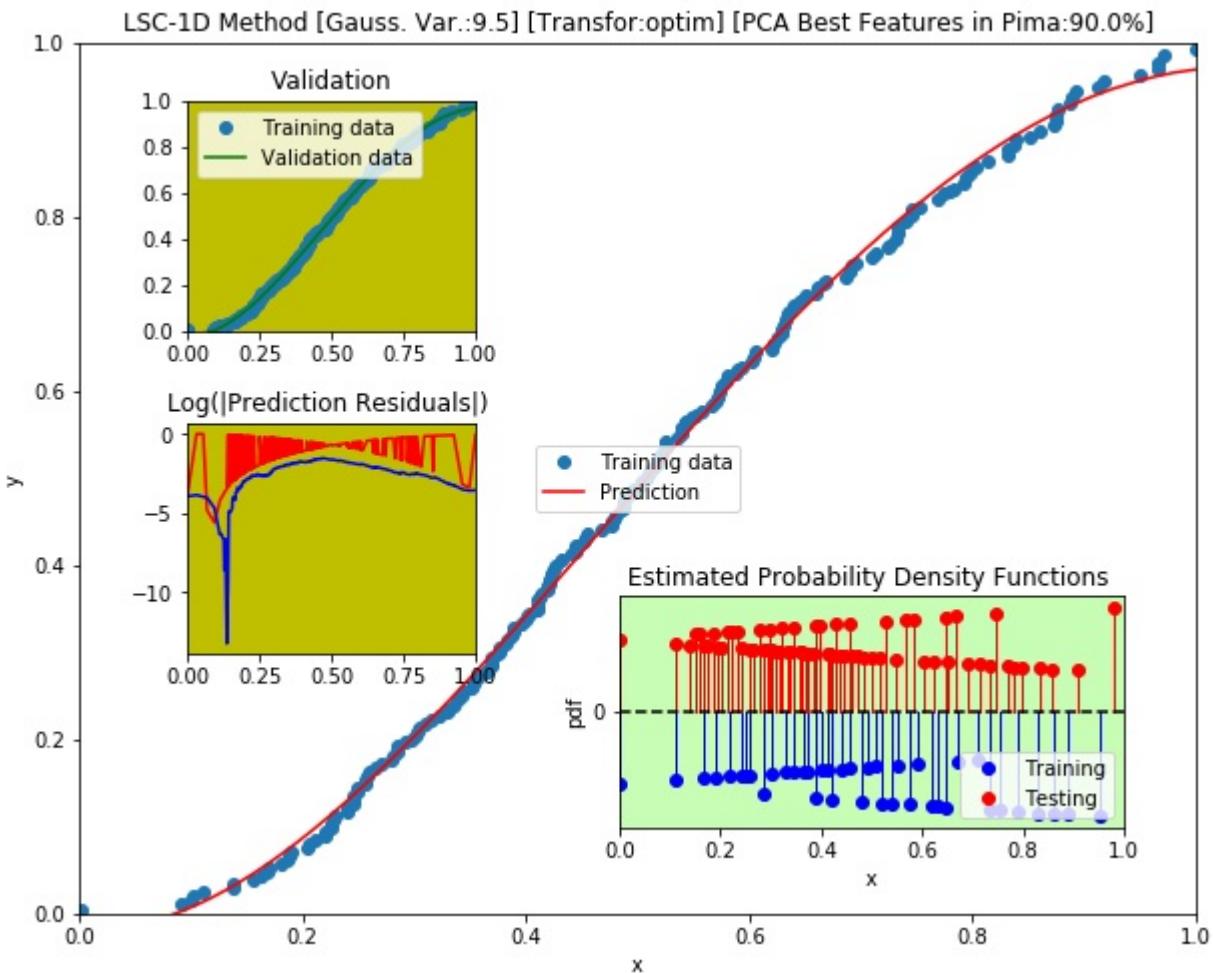
Prediction time/pt. (sec) : 0.0000166
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0052731

Prediction time/pt. (sec) : 0.0000159
```



Pima Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0021987
    Initializing linear solver - done. Time (sec): 0.0024440
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0002880
    Solving linear system (col. 0) - done. Time (sec): 0.0004261
Training - done. Time (sec): 0.0114329

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0054152  
Prediction time/pt. (sec) : 0.0000271
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0058789  
Prediction time/pt. (sec) : 0.0000177
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0052927  
Prediction time/pt. (sec) : 0.0000159
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0054448  
Prediction time/pt. (sec) : 0.0000164
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0052936
Initializing linear solver - done. Time (sec): 0.0058267
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0010781
    Solving linear system (col. 0) - done. Time (sec): 0.0014381
Training - done. Time (sec): 0.0136185
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0058413

Prediction time/pt. (sec) : 0.0000176
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0032525

Prediction time/pt. (sec) : 0.0000163
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0060472

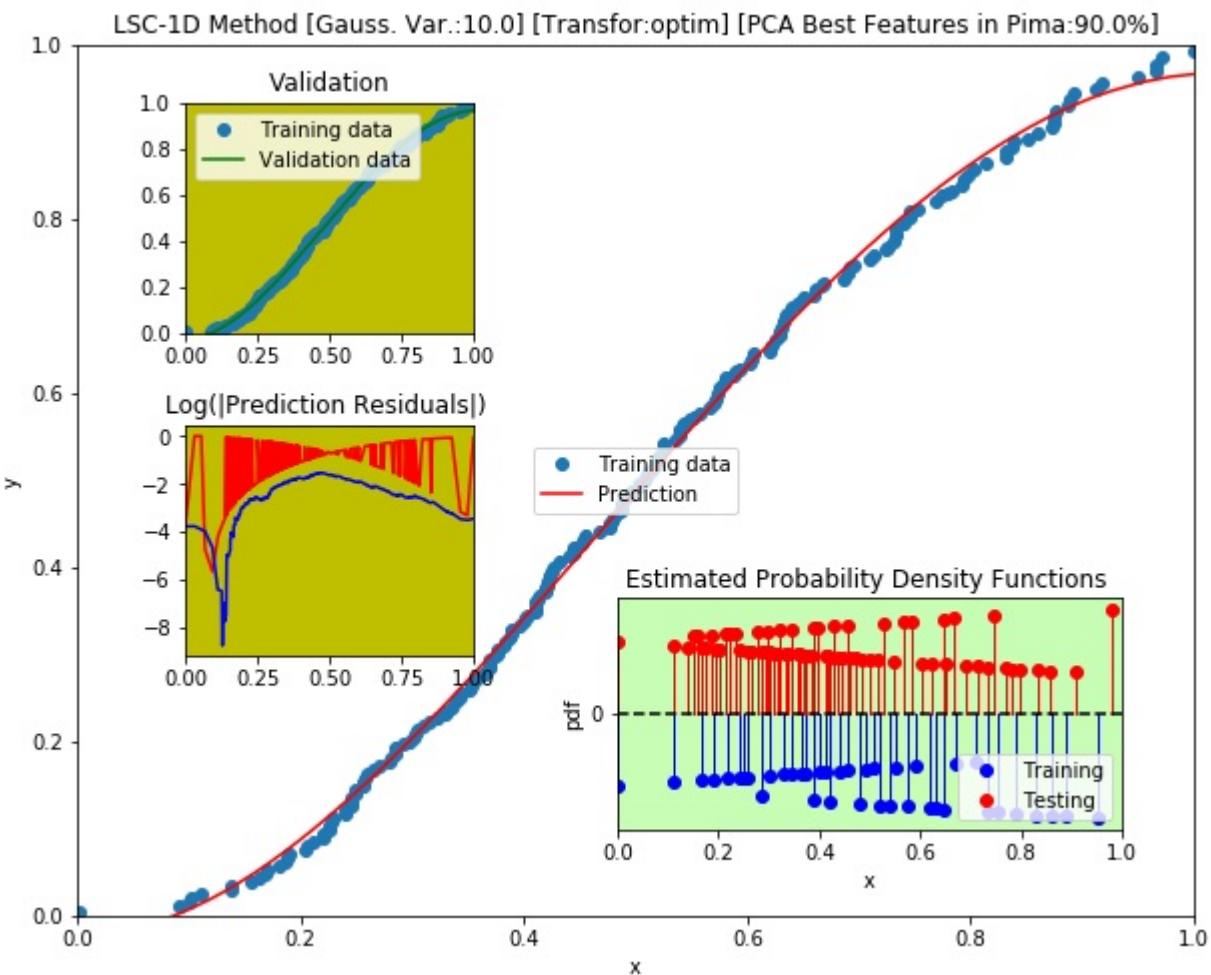
Prediction time/pt. (sec) : 0.0000182
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0049725

Prediction time/pt. (sec) : 0.0000150
```



Pima Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (201 x 201 mtx) ...
        Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0032175
    Initializing linear solver - done. Time (sec): 0.0035095
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0004647
    Solving linear system (col. 0) - done. Time (sec): 0.0006456
Training - done. Time (sec): 0.0119159

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0057259  
Prediction time/pt. (sec) : 0.0000286
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0061207  
Prediction time/pt. (sec) : 0.0000184
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0064540  
Prediction time/pt. (sec) : 0.0000194
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0064225  
Prediction time/pt. (sec) : 0.0000193
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0051699
Initializing linear solver - done. Time (sec): 0.0054393
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0011289
    Solving linear system (col. 0) - done. Time (sec): 0.0013294
Training - done. Time (sec): 0.0137010
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0065794

Prediction time/pt. (sec) : 0.0000198
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0048757

Prediction time/pt. (sec) : 0.0000244
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0071580

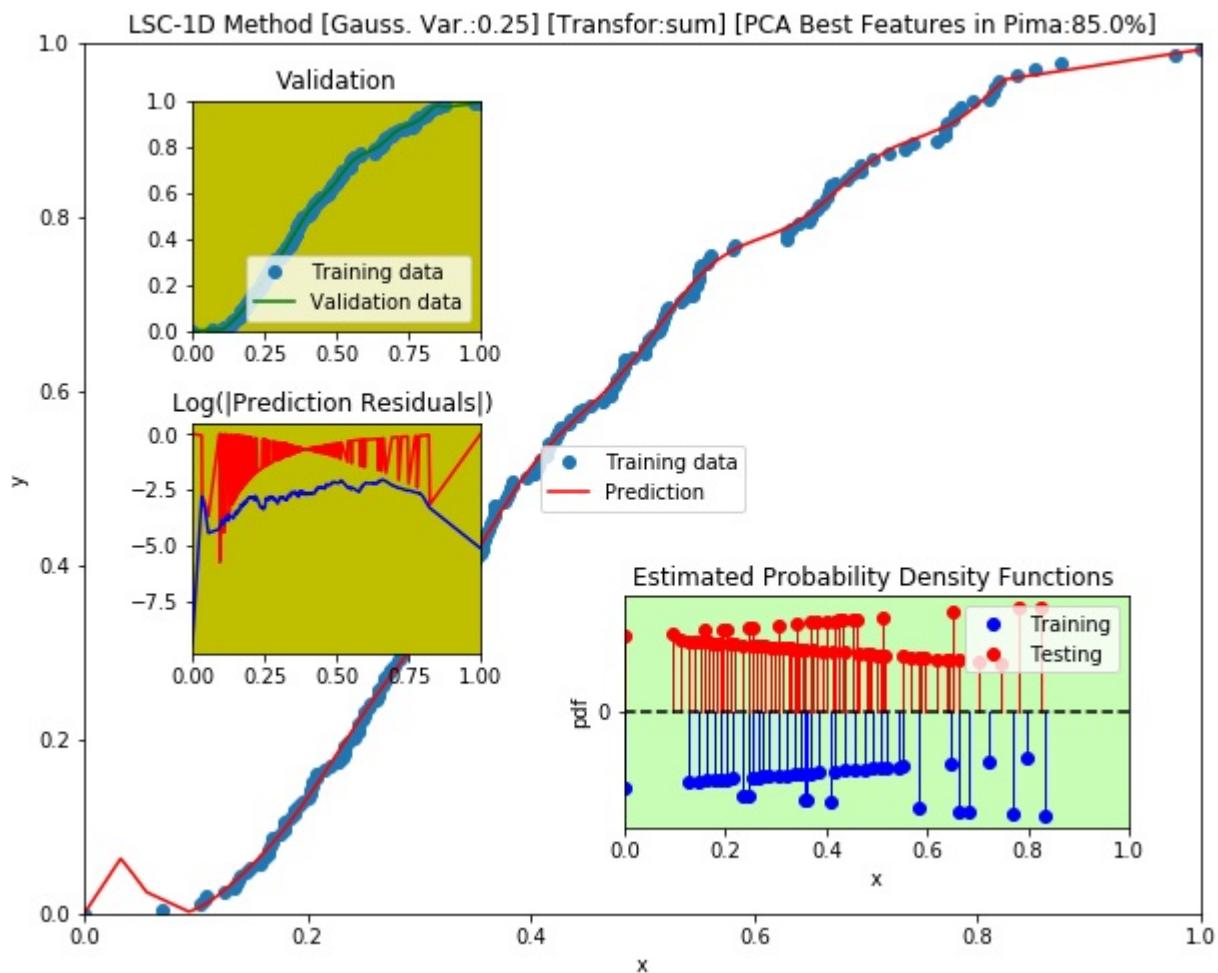
Prediction time/pt. (sec) : 0.0000216
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0064943

Prediction time/pt. (sec) : 0.0000196
```



Pima Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0025697
  Initializing linear solver - done. Time (sec): 0.0028112
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0005350
  Solving linear system (col. 0) - done. Time (sec): 0.0007272
Training - done. Time (sec): 0.0073326

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0050118  
Prediction time/pt. (sec) : 0.0000251
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0055442  
Prediction time/pt. (sec) : 0.0000167
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0030584  
Prediction time/pt. (sec) : 0.0000092
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0110579  
Prediction time/pt. (sec) : 0.0000333
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0081875
Initializing linear solver - done. Time (sec): 0.0084517
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003076
    Solving linear system (col. 0) - done. Time (sec): 0.0004652
Training - done. Time (sec): 0.0119545
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0065095

Prediction time/pt. (sec) : 0.0000196
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0019784

Prediction time/pt. (sec) : 0.0000099
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0080831

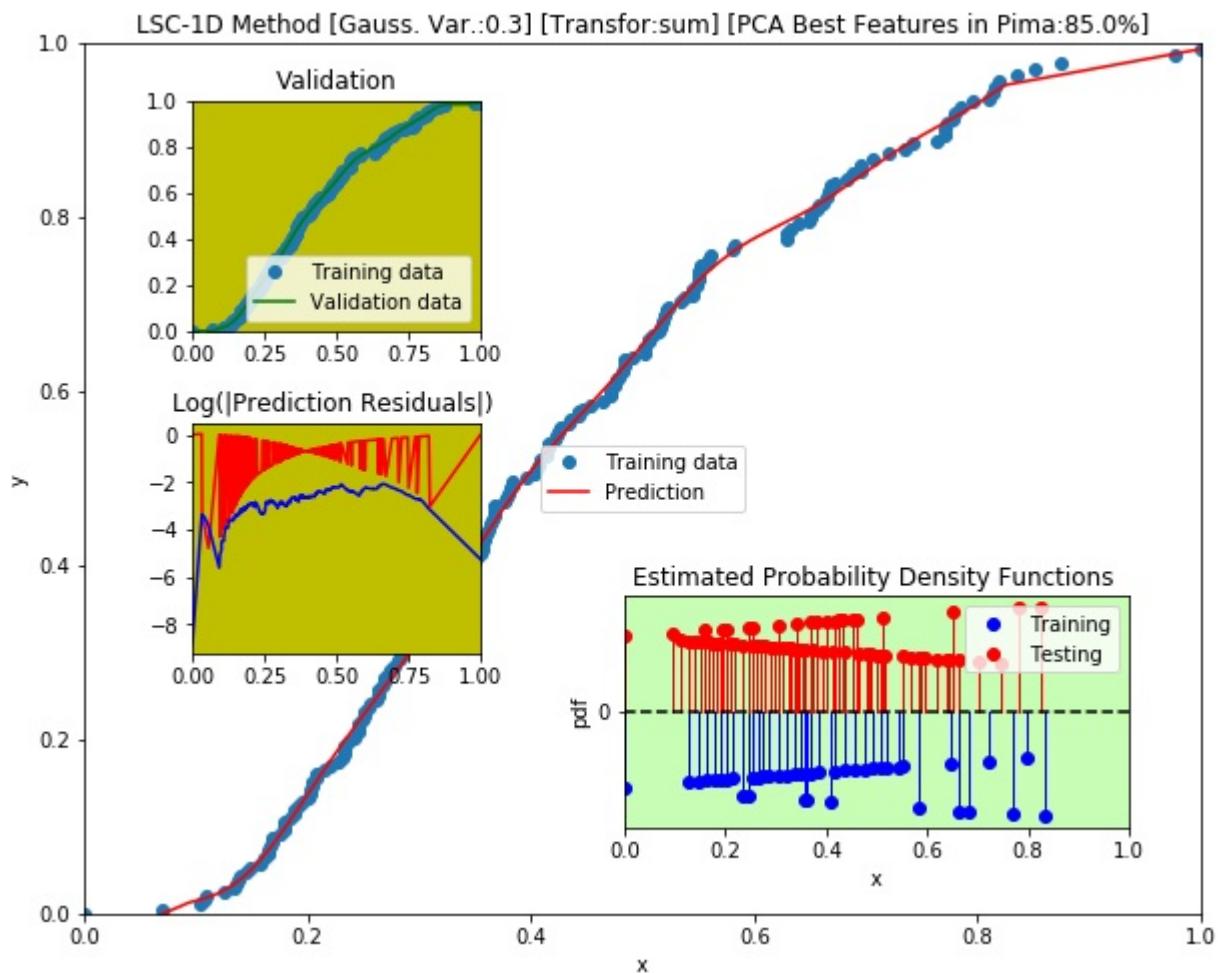
Prediction time/pt. (sec) : 0.0000243
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0047922

Prediction time/pt. (sec) : 0.0000144
```



Pima Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0022697
  Initializing linear solver - done. Time (sec): 0.0025418
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0002882
  Solving linear system (col. 0) - done. Time (sec): 0.0004249
Training - done. Time (sec): 0.0114753

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0081968  
Prediction time/pt. (sec) : 0.0000410
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0052416  
Prediction time/pt. (sec) : 0.0000158
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0052826  
Prediction time/pt. (sec) : 0.0000159
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0064735  
Prediction time/pt. (sec) : 0.0000195
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0025902
Initializing linear solver - done. Time (sec): 0.0028377
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003085
    Solving linear system (col. 0) - done. Time (sec): 0.0004604
Training - done. Time (sec): 0.0104971
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0067506

Prediction time/pt. (sec) : 0.0000203
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0020432

Prediction time/pt. (sec) : 0.0000102
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0033011

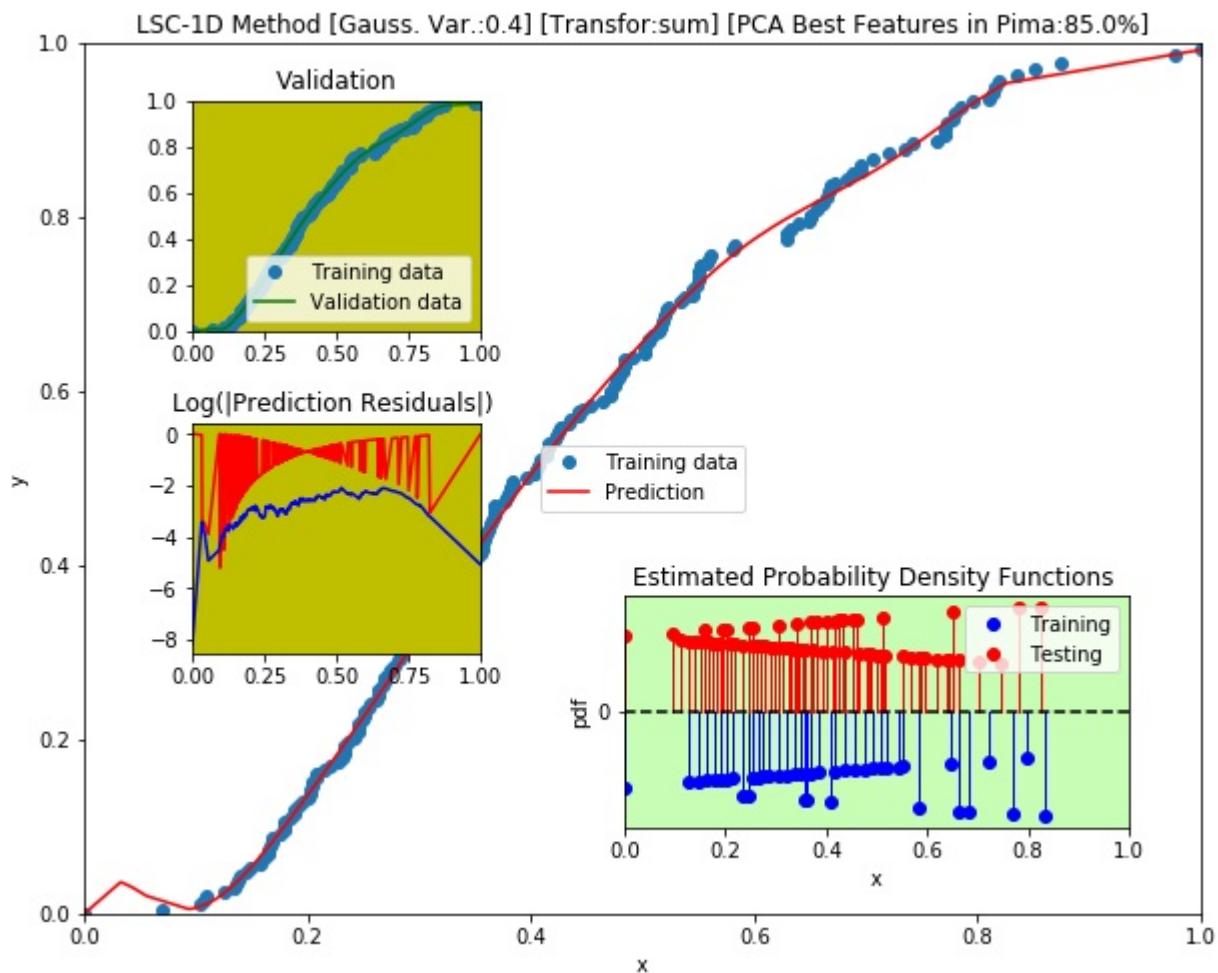
Prediction time/pt. (sec) : 0.0000099
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0031283

Prediction time/pt. (sec) : 0.0000094
```



Pima Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0024650
  Initializing linear solver - done. Time (sec): 0.0027537
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003724
  Solving linear system (col. 0) - done. Time (sec): 0.0005891
Training - done. Time (sec): 0.0113871

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0050128  
Prediction time/pt. (sec) : 0.0000251
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0025649  
Prediction time/pt. (sec) : 0.0000077
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0025473  
Prediction time/pt. (sec) : 0.0000077
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0056803  
Prediction time/pt. (sec) : 0.0000171
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0088050
Initializing linear solver - done. Time (sec): 0.0090086
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003057
    Solving linear system (col. 0) - done. Time (sec): 0.0004544
Training - done. Time (sec): 0.0128102
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0028510

Prediction time/pt. (sec) : 0.0000086
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0101440

Prediction time/pt. (sec) : 0.0000507
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0062618

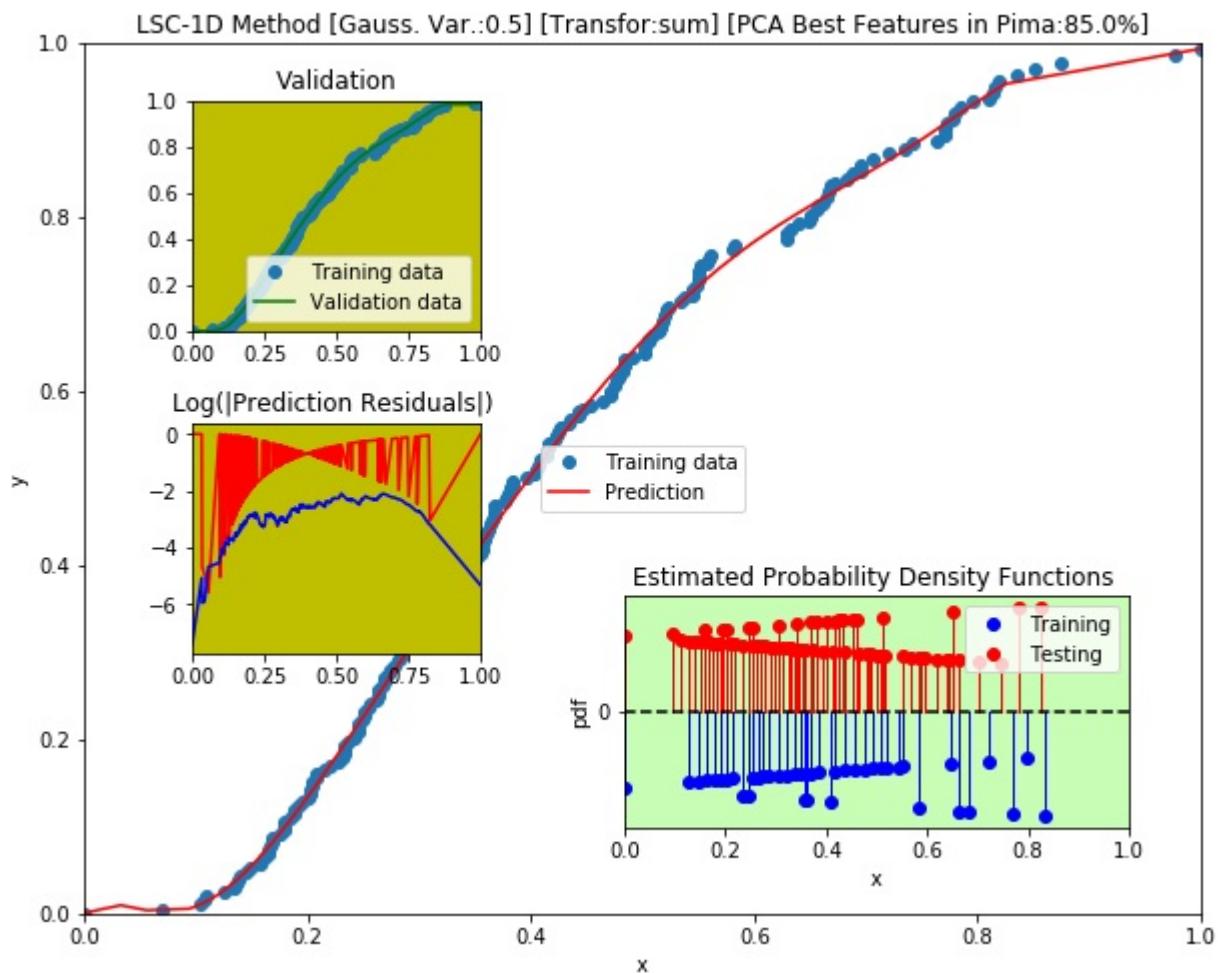
Prediction time/pt. (sec) : 0.0000189
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0073323

Prediction time/pt. (sec) : 0.0000221
```



Pima Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0022123
  Initializing linear solver - done. Time (sec): 0.0024562
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0004323
  Solving linear system (col. 0) - done. Time (sec): 0.0006070
Training - done. Time (sec): 0.0112054

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0122488  
Prediction time/pt. (sec) : 0.0000612
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0064373  
Prediction time/pt. (sec) : 0.0000194
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0027575  
Prediction time/pt. (sec) : 0.0000083
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0073543  
Prediction time/pt. (sec) : 0.0000222
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0019107
Initializing linear solver - done. Time (sec): 0.0021374
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0005574
    Solving linear system (col. 0) - done. Time (sec): 0.0007424
Training - done. Time (sec): 0.0057907
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0131533

Prediction time/pt. (sec) : 0.0000396
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0059414

Prediction time/pt. (sec) : 0.0000297
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0056384

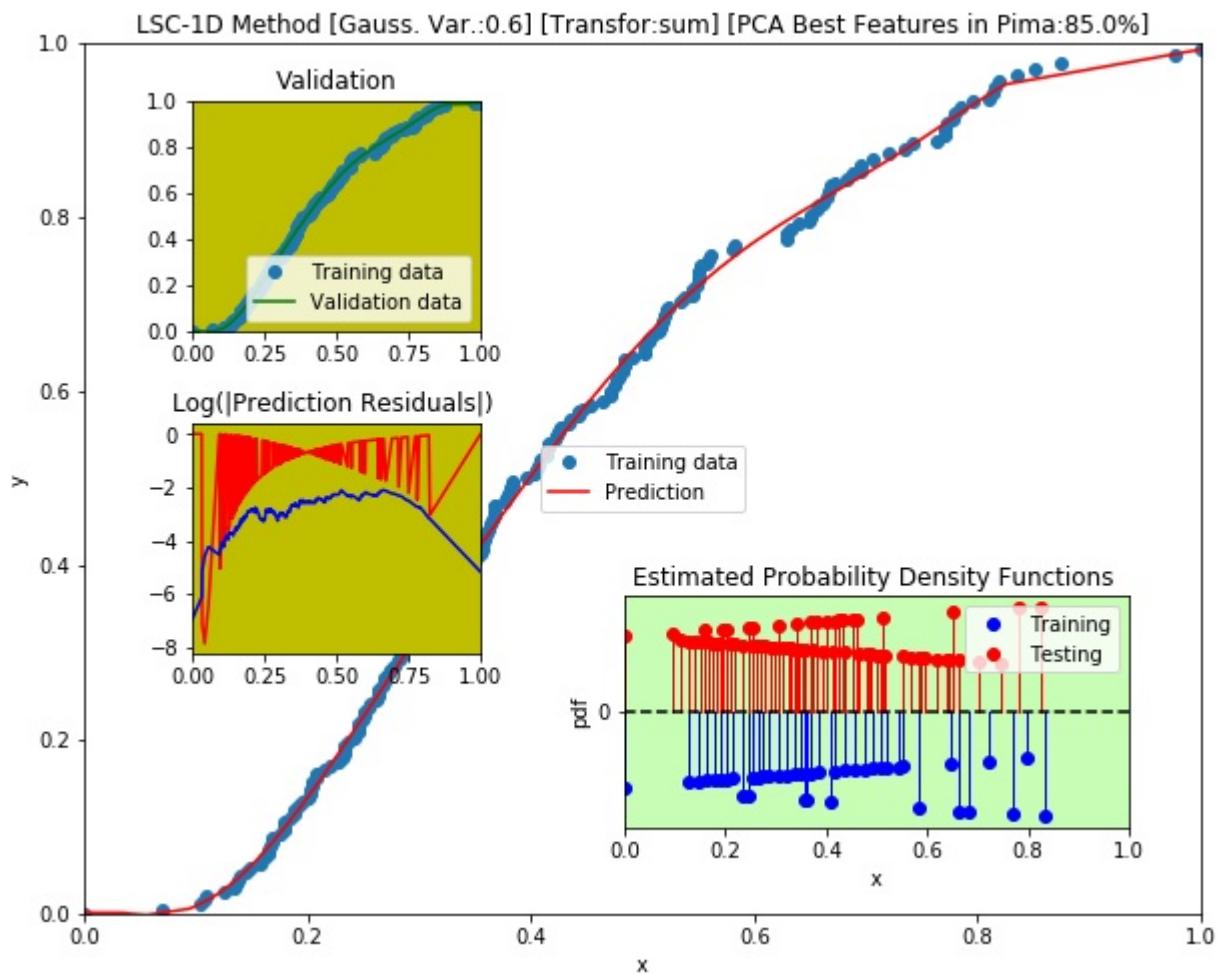
Prediction time/pt. (sec) : 0.0000170
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0056162

Prediction time/pt. (sec) : 0.0000169
```



Pima Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0052526
  Initializing linear solver - done. Time (sec): 0.0055125
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0004044
  Solving linear system (col. 0) - done. Time (sec): 0.0005779
Training - done. Time (sec): 0.0146565

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0019114  
Prediction time/pt. (sec) : 0.0000096
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0106723  
Prediction time/pt. (sec) : 0.0000321
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0023754  
Prediction time/pt. (sec) : 0.0000072
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0022838  
Prediction time/pt. (sec) : 0.0000069
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0025151
Initializing linear solver - done. Time (sec): 0.0027134
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003071
    Solving linear system (col. 0) - done. Time (sec): 0.0004592
Training - done. Time (sec): 0.0160322
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0026617

Prediction time/pt. (sec) : 0.0000080
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0074441

Prediction time/pt. (sec) : 0.0000372
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0054877

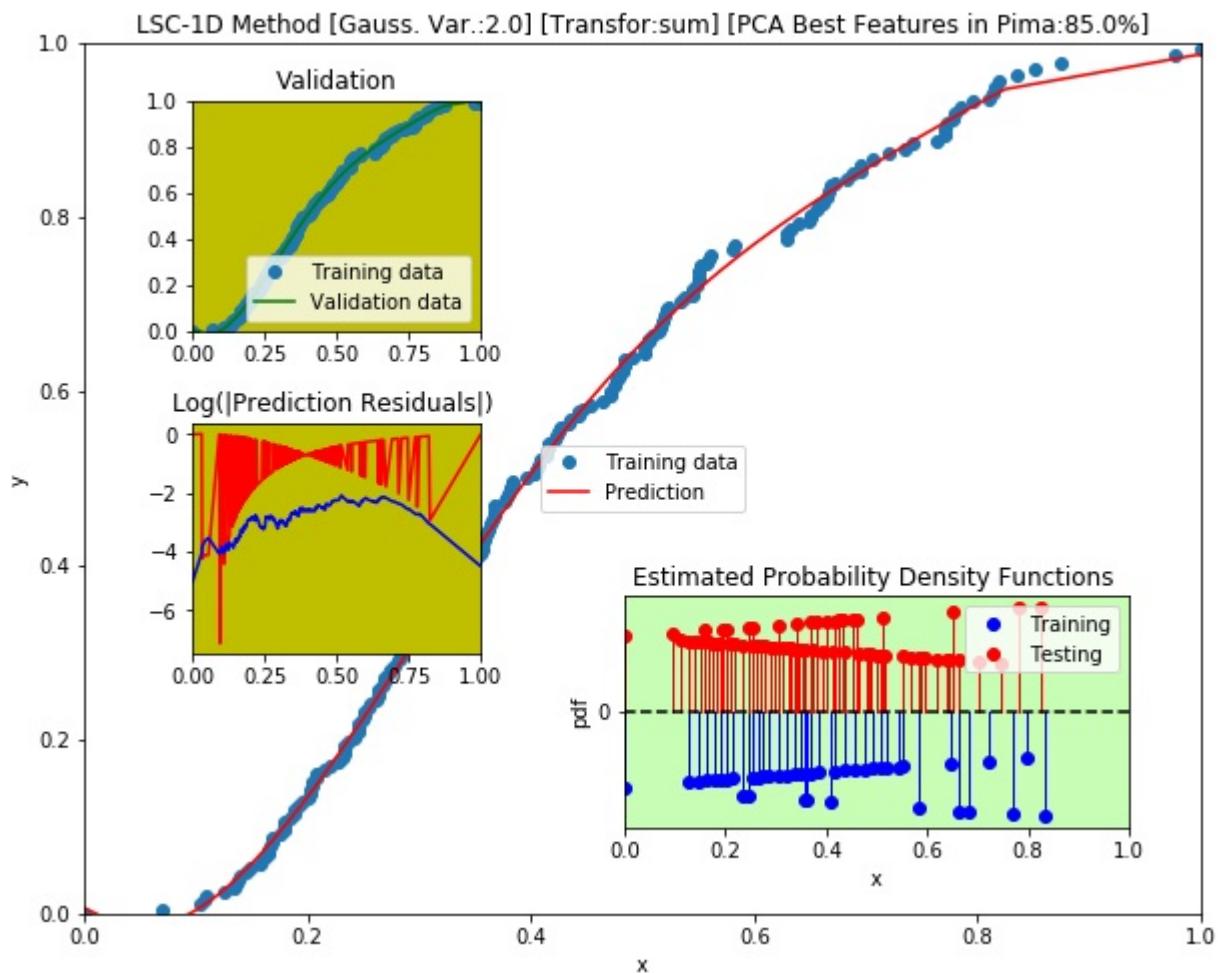
Prediction time/pt. (sec) : 0.0000165
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0053647

Prediction time/pt. (sec) : 0.0000162
```



Pima Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0042858
  Initializing linear solver - done. Time (sec): 0.0045538
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0002916
  Solving linear system (col. 0) - done. Time (sec): 0.0004325
Training - done. Time (sec): 0.0113304

```

Evaluation

```
# eval points. : 200  
  
Predicting ...  
Predicting - done. Time (sec): 0.0016112  
  
Prediction time/pt. (sec) : 0.0000081
```

Evaluation

```
# eval points. : 332  
  
Predicting ...  
Predicting - done. Time (sec): 0.0023201  
  
Prediction time/pt. (sec) : 0.0000070
```

Evaluation

```
# eval points. : 332  
  
Predicting ...  
Predicting - done. Time (sec): 0.0124853  
  
Prediction time/pt. (sec) : 0.0000376
```

Evaluation

```
# eval points. : 332  
  
Predicting ...  
Predicting - done. Time (sec): 0.0025322  
  
Prediction time/pt. (sec) : 0.0000076
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0086565
Initializing linear solver - done. Time (sec): 0.0089037
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003061
    Solving linear system (col. 0) - done. Time (sec): 0.0004559
Training - done. Time (sec): 0.0119314
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0059936

Prediction time/pt. (sec) : 0.0000181
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0016222

Prediction time/pt. (sec) : 0.0000081
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0074081

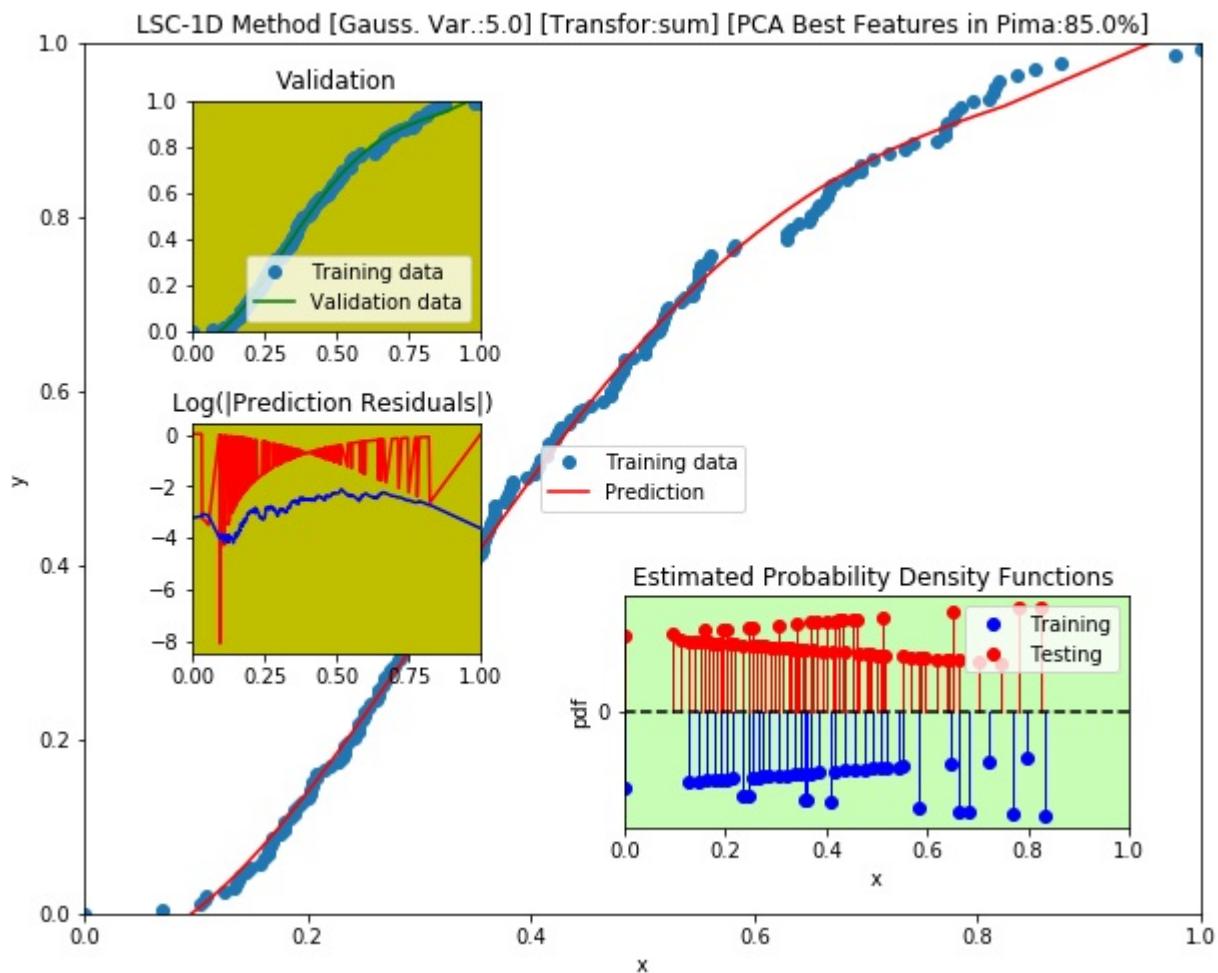
Prediction time/pt. (sec) : 0.0000223
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0026510

Prediction time/pt. (sec) : 0.0000080
```



Pima Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0056348
    Initializing linear solver - done. Time (sec): 0.0058296
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0002983
    Solving linear system (col. 0) - done. Time (sec): 0.0004690
Training - done. Time (sec): 0.0109010

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0044982  
Prediction time/pt. (sec) : 0.0000225
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0048637  
Prediction time/pt. (sec) : 0.0000146
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0049479  
Prediction time/pt. (sec) : 0.0000149
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0049770  
Prediction time/pt. (sec) : 0.0000150
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0026987
Initializing linear solver - done. Time (sec): 0.0029483
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003054
    Solving linear system (col. 0) - done. Time (sec): 0.0004590
Training - done. Time (sec): 0.0109785
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0061560

Prediction time/pt. (sec) : 0.0000185
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0042565

Prediction time/pt. (sec) : 0.0000213
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0082328

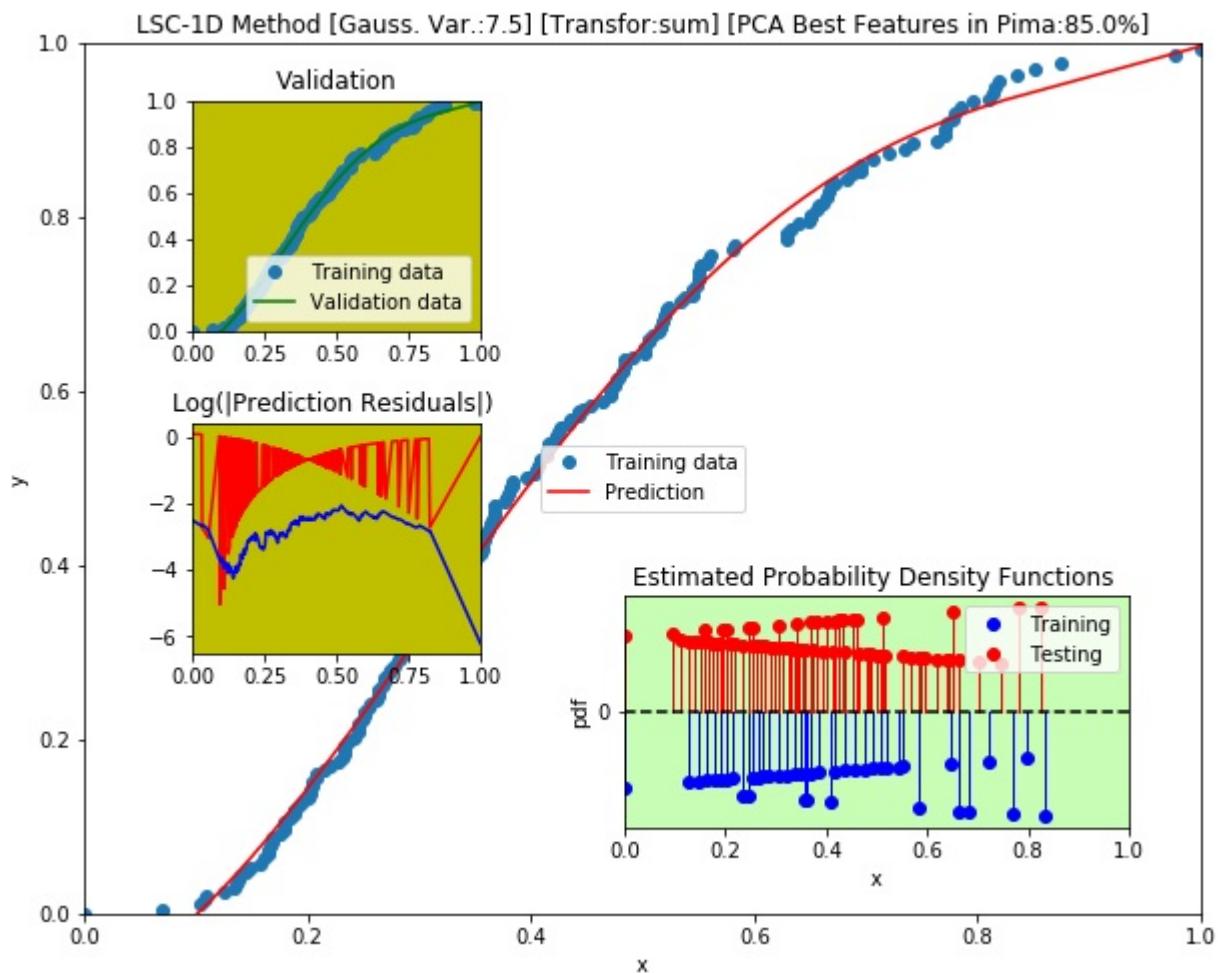
Prediction time/pt. (sec) : 0.0000248
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0023837

Prediction time/pt. (sec) : 0.0000072
```



Pima Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0022819
    Initializing linear solver - done. Time (sec): 0.0025349
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0003324
    Solving linear system (col. 0) - done. Time (sec): 0.0004778
Training - done. Time (sec): 0.0120831

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0054259  
Prediction time/pt. (sec) : 0.0000271
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0051193  
Prediction time/pt. (sec) : 0.0000154
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0052583  
Prediction time/pt. (sec) : 0.0000158
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0056245  
Prediction time/pt. (sec) : 0.0000169
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0069935
Initializing linear solver - done. Time (sec): 0.0072618
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0011492
    Solving linear system (col. 0) - done. Time (sec): 0.0013487
Training - done. Time (sec): 0.0151913
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0056388

Prediction time/pt. (sec) : 0.0000170
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0036266

Prediction time/pt. (sec) : 0.0000181
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0061703

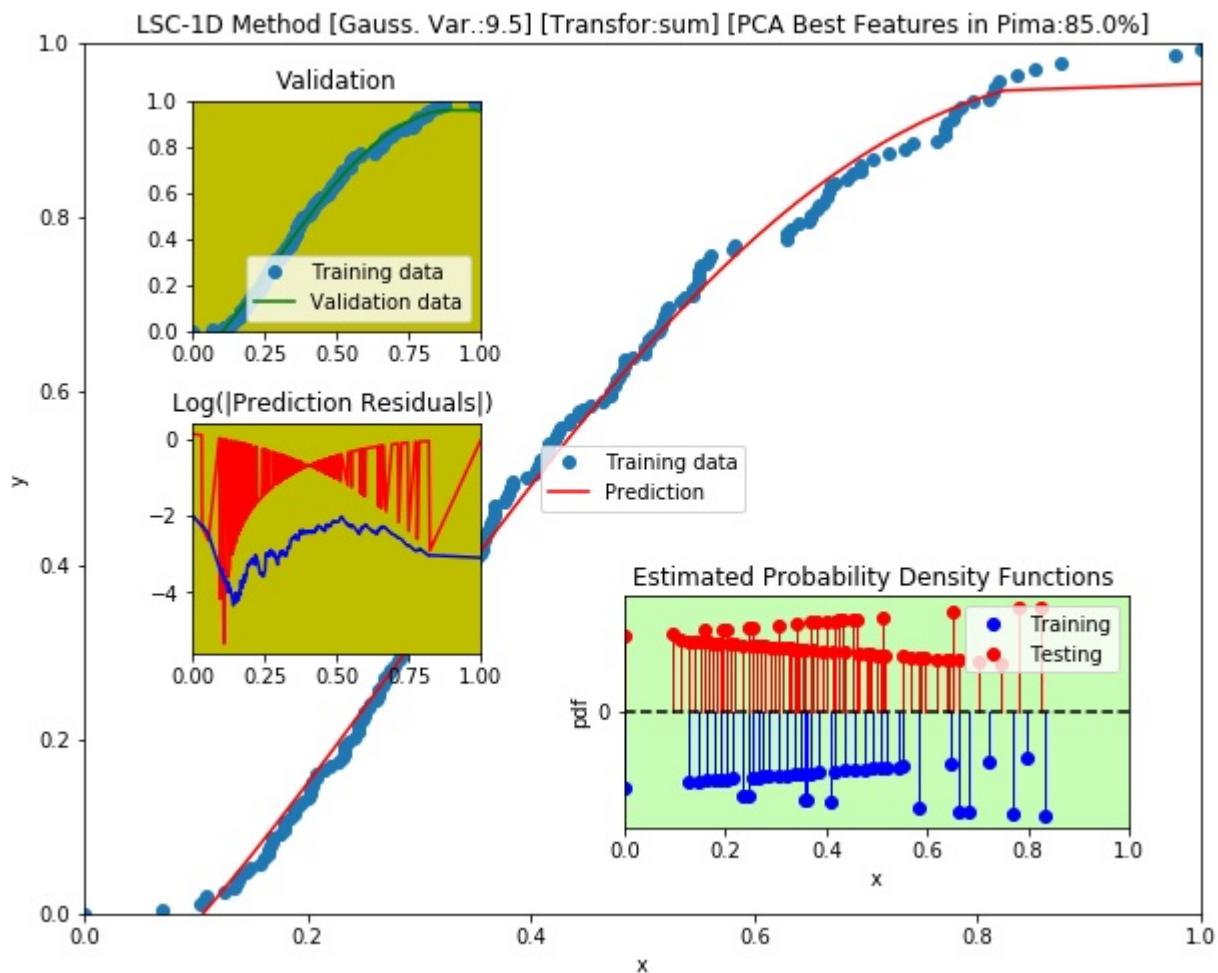
Prediction time/pt. (sec) : 0.0000186
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0054920

Prediction time/pt. (sec) : 0.0000165
```



Pima Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0032561
    Initializing linear solver - done. Time (sec): 0.0036256
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0003619
    Solving linear system (col. 0) - done. Time (sec): 0.0005562
Training - done. Time (sec): 0.0125670

```

Evaluation

```
# eval points. : 200  
  
Predicting ...  
Predicting - done. Time (sec): 0.0049663  
  
Prediction time/pt. (sec) : 0.0000248
```

Evaluation

```
# eval points. : 332  
  
Predicting ...  
Predicting - done. Time (sec): 0.0068407  
  
Prediction time/pt. (sec) : 0.0000206
```

Evaluation

```
# eval points. : 332  
  
Predicting ...  
Predicting - done. Time (sec): 0.0022433  
  
Prediction time/pt. (sec) : 0.0000068
```

Evaluation

```
# eval points. : 332  
  
Predicting ...  
Predicting - done. Time (sec): 0.0021715  
  
Prediction time/pt. (sec) : 0.0000065
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0101984
Initializing linear solver - done. Time (sec): 0.0104361
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003097
    Solving linear system (col. 0) - done. Time (sec): 0.0004606
Training - done. Time (sec): 0.0175359
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0024979

Prediction time/pt. (sec) : 0.0000075
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0095880

Prediction time/pt. (sec) : 0.0000479
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0056481

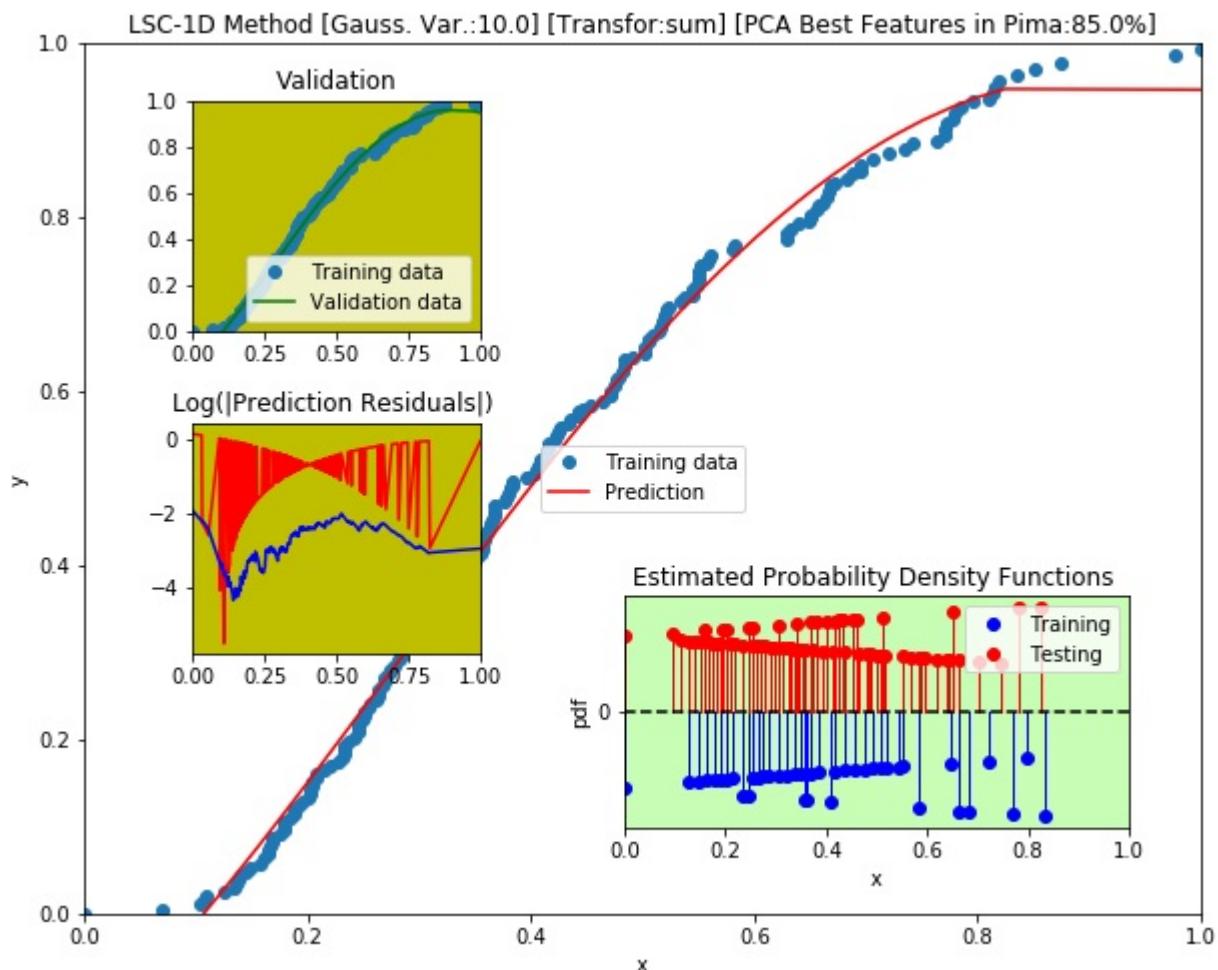
Prediction time/pt. (sec) : 0.0000170
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0024188

Prediction time/pt. (sec) : 0.0000073
```



Pima Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0053027
  Initializing linear solver - done. Time (sec): 0.0055537
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0005224
  Solving linear system (col. 0) - done. Time (sec): 0.0007069
Training - done. Time (sec): 0.0154068

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0058882  
Prediction time/pt. (sec) : 0.0000294
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0065281  
Prediction time/pt. (sec) : 0.0000197
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0063672  
Prediction time/pt. (sec) : 0.0000192
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0061893  
Prediction time/pt. (sec) : 0.0000186
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0042543
Initializing linear solver - done. Time (sec): 0.0052104
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0012617
    Solving linear system (col. 0) - done. Time (sec): 0.0014651
Training - done. Time (sec): 0.0132296
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0068152

Prediction time/pt. (sec) : 0.0000205
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0044017

Prediction time/pt. (sec) : 0.0000220
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0070088

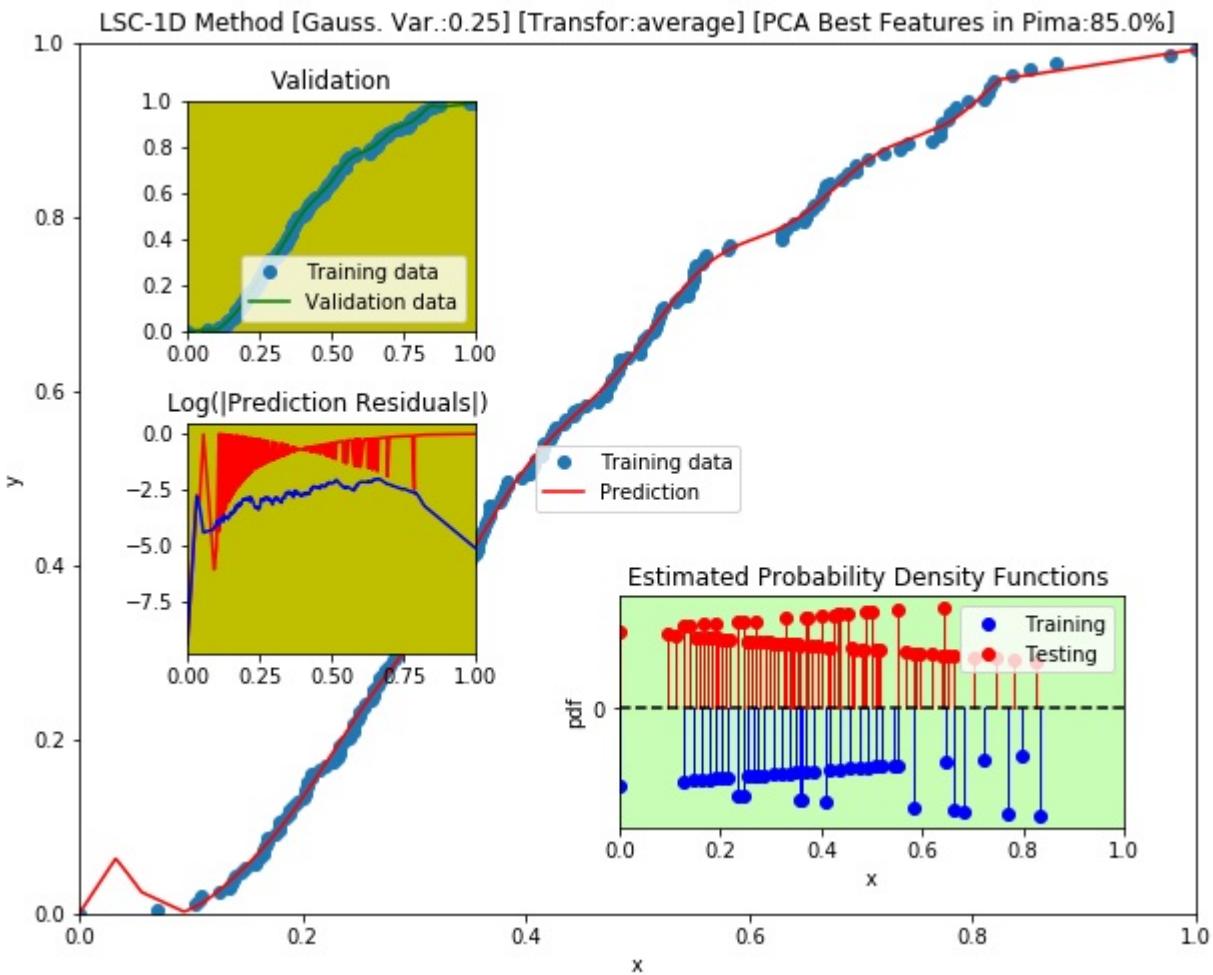
Prediction time/pt. (sec) : 0.0000211
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0068345

Prediction time/pt. (sec) : 0.0000206
```



Pima Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

Training ...

Initializing linear solver ...

Performing LU fact. (201 x 201 mtx) ...

Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0024965

Initializing linear solver - done. Time (sec): 0.0027678

Solving linear system (col. 0) ...

Back solving (201 x 201 mtx) ...

Back solving (201 x 201 mtx) - done. Time (sec): 0.0002968

Solving linear system (col. 0) - done. Time (sec): 0.0004408

Training - done. Time (sec): 0.0080781

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0085750  
Prediction time/pt. (sec) : 0.0000429
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0054071  
Prediction time/pt. (sec) : 0.0000163
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0066462  
Prediction time/pt. (sec) : 0.0000200
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0054445  
Prediction time/pt. (sec) : 0.0000164
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0074463
Initializing linear solver - done. Time (sec): 0.0076661
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003123
    Solving linear system (col. 0) - done. Time (sec): 0.0005019
Training - done. Time (sec): 0.0115142
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0034616

Prediction time/pt. (sec) : 0.0000104
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0103889

Prediction time/pt. (sec) : 0.0000519
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0072873

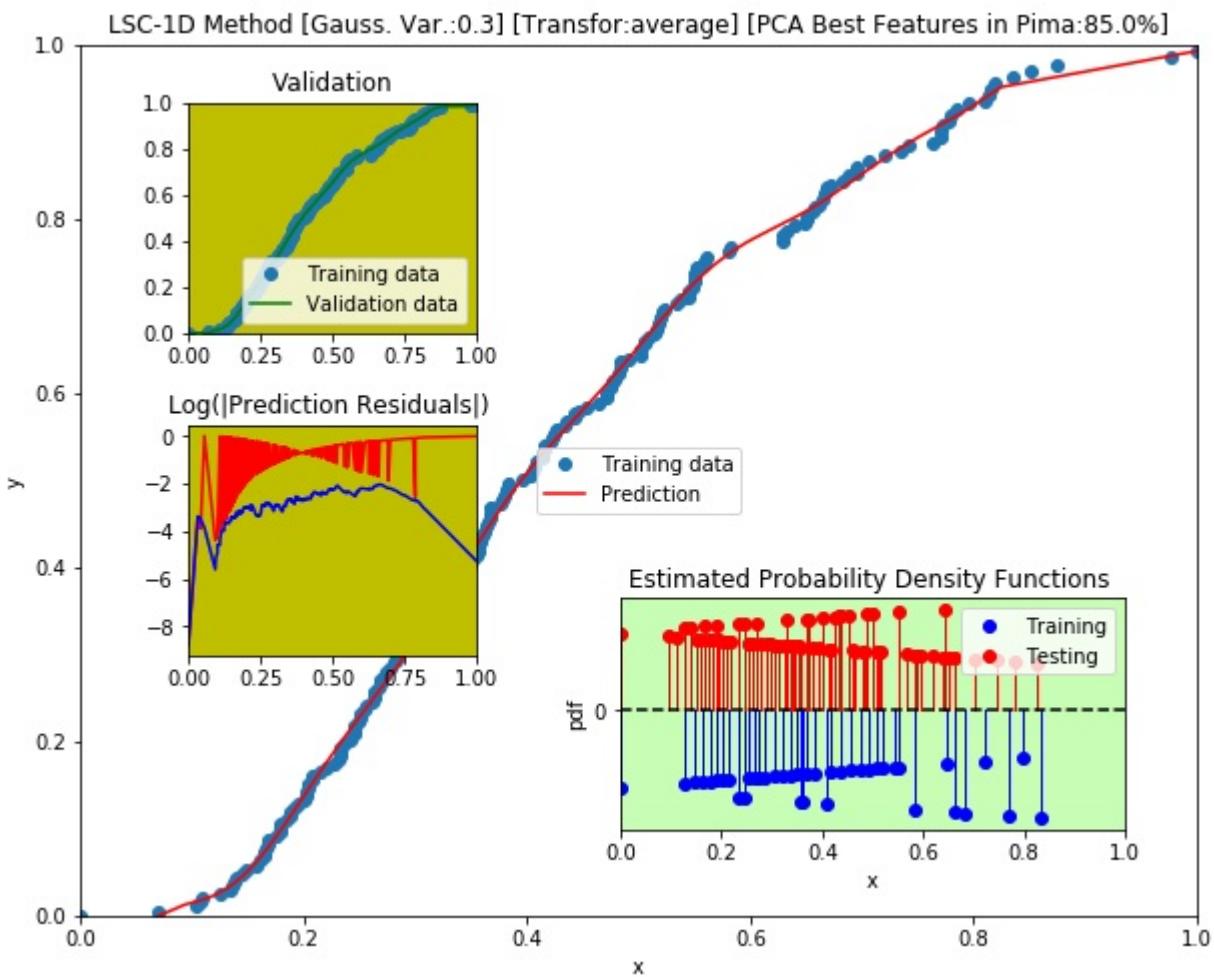
Prediction time/pt. (sec) : 0.0000219
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0057642

Prediction time/pt. (sec) : 0.0000174
```



Pima Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

Training ...

Initializing linear solver ...

Performing LU fact. (201 x 201 mtx) ...

Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0032897

Initializing linear solver - done. Time (sec): 0.0036168

Solving linear system (col. 0) ...

Back solving (201 x 201 mtx) ...

Back solving (201 x 201 mtx) - done. Time (sec): 0.0003512

Solving linear system (col. 0) - done. Time (sec): 0.0005405

Training - done. Time (sec): 0.0138891

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0039010  
Prediction time/pt. (sec) : 0.0000195
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0117390  
Prediction time/pt. (sec) : 0.0000354
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0058191  
Prediction time/pt. (sec) : 0.0000175
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0053935  
Prediction time/pt. (sec) : 0.0000162
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0026722
Initializing linear solver - done. Time (sec): 0.0029340
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003099
    Solving linear system (col. 0) - done. Time (sec): 0.0004618
Training - done. Time (sec): 0.0103233
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0066280

Prediction time/pt. (sec) : 0.0000200
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0039401

Prediction time/pt. (sec) : 0.0000197
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0057101

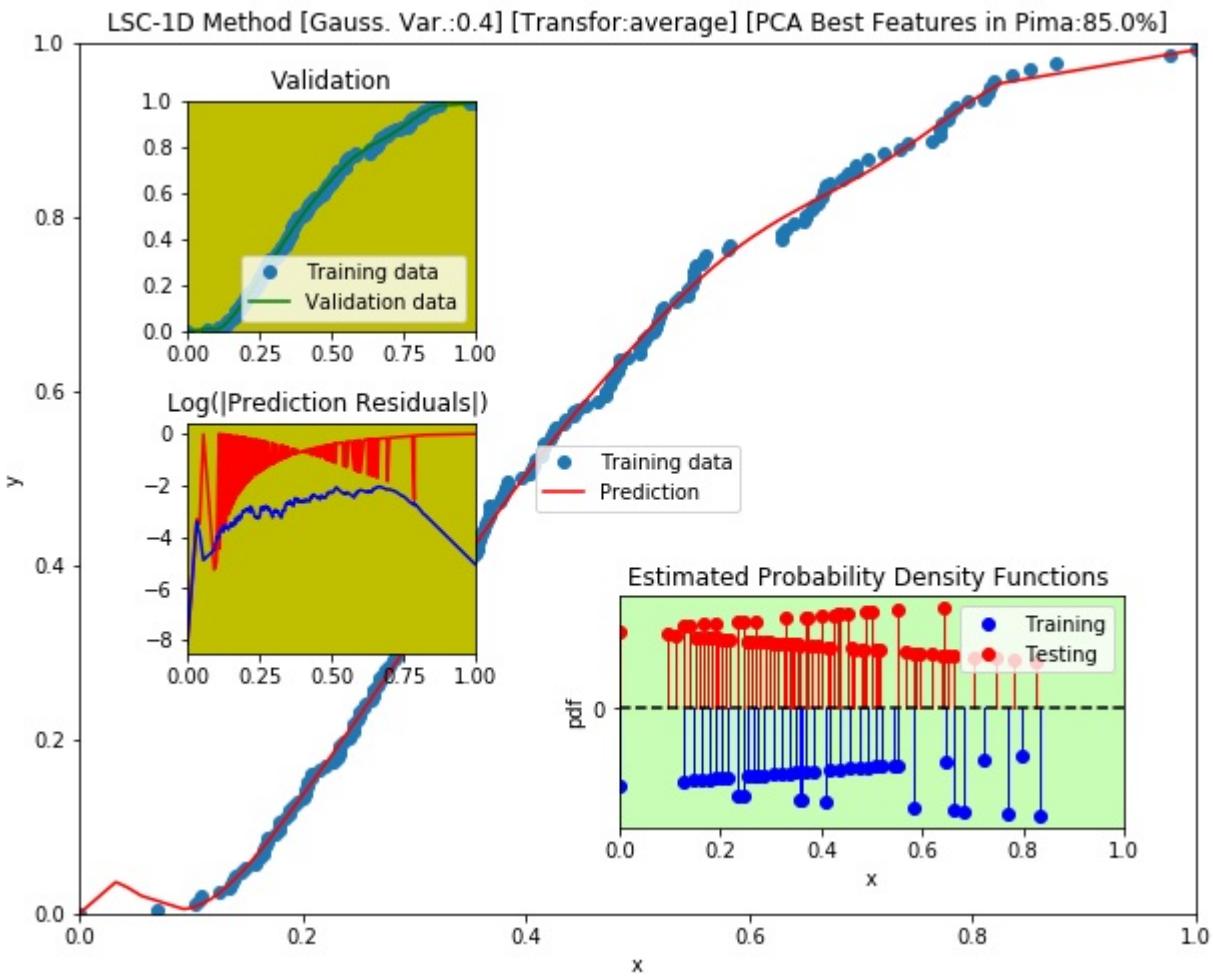
Prediction time/pt. (sec) : 0.0000172
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0033152

Prediction time/pt. (sec) : 0.0000100
```



Pima Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

Training ...

Initializing linear solver ...

Performing LU fact. (201 x 201 mtx) ...

Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0033064

Initializing linear solver - done. Time (sec): 0.0036283

Solving linear system (col. 0) ...

Back solving (201 x 201 mtx) ...

Back solving (201 x 201 mtx) - done. Time (sec): 0.0003479

Solving linear system (col. 0) - done. Time (sec): 0.0005426

Training - done. Time (sec): 0.0131814

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0089436  
Prediction time/pt. (sec) : 0.0000447
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0065403  
Prediction time/pt. (sec) : 0.0000197
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0049181  
Prediction time/pt. (sec) : 0.0000148
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0049012  
Prediction time/pt. (sec) : 0.0000148
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0061579
Initializing linear solver - done. Time (sec): 0.0063953
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003254
    Solving linear system (col. 0) - done. Time (sec): 0.0004783
Training - done. Time (sec): 0.0095055
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0060983

Prediction time/pt. (sec) : 0.0000184
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0017142

Prediction time/pt. (sec) : 0.0000086
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0082352

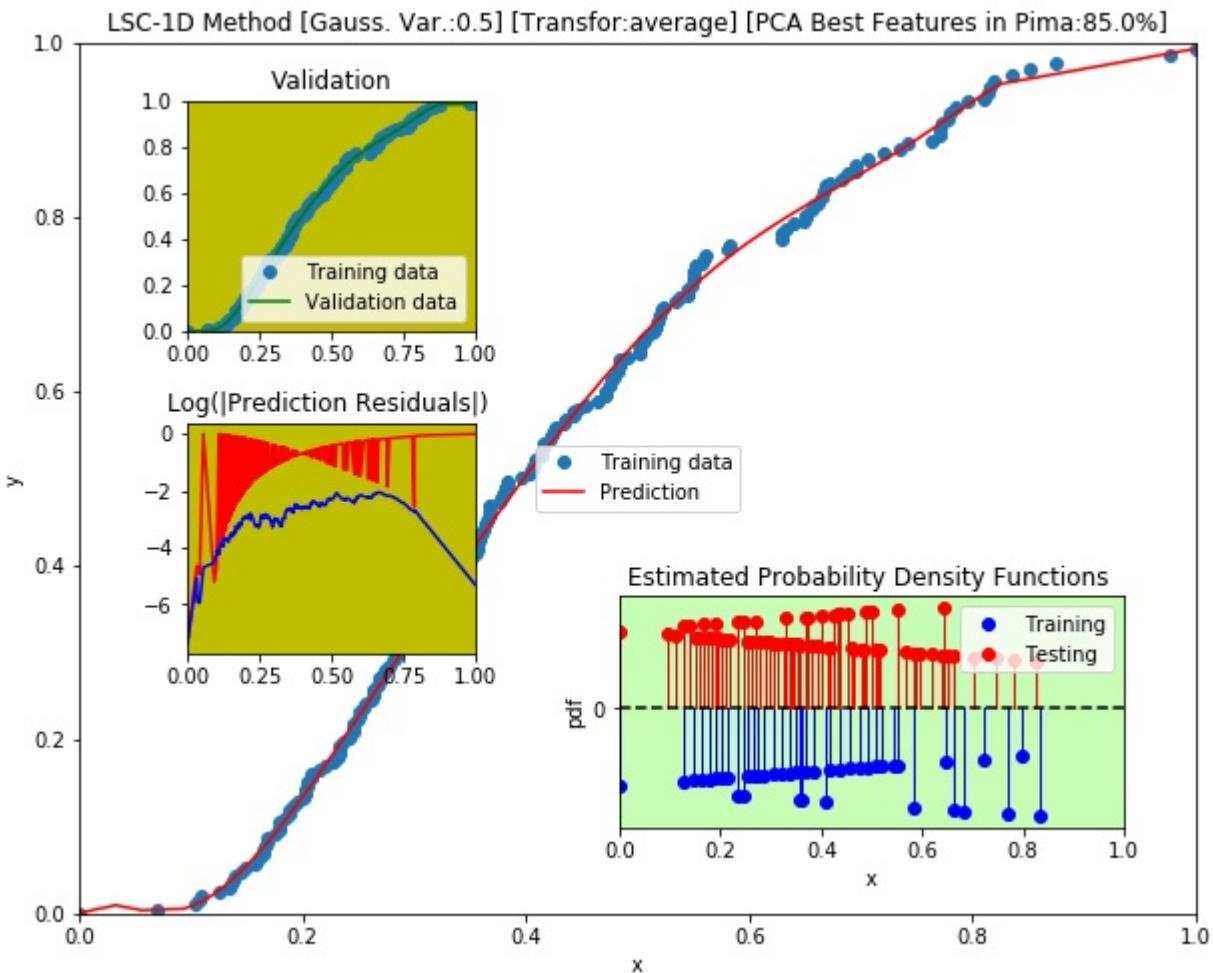
Prediction time/pt. (sec) : 0.0000248
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0029664

Prediction time/pt. (sec) : 0.0000089
```



Pima Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0024712
  Initializing linear solver - done. Time (sec): 0.0027585
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0002909
  Solving linear system (col. 0) - done. Time (sec): 0.0004308
Training - done. Time (sec): 0.0122025

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0052793  
Prediction time/pt. (sec) : 0.0000264
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0029218  
Prediction time/pt. (sec) : 0.0000088
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0028586  
Prediction time/pt. (sec) : 0.0000086
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0107718  
Prediction time/pt. (sec) : 0.0000324
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0018837
Initializing linear solver - done. Time (sec): 0.0021148
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003257
    Solving linear system (col. 0) - done. Time (sec): 0.0005281
Training - done. Time (sec): 0.0055490
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0032451

Prediction time/pt. (sec) : 0.0000098
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0089016

Prediction time/pt. (sec) : 0.0000445
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0032227

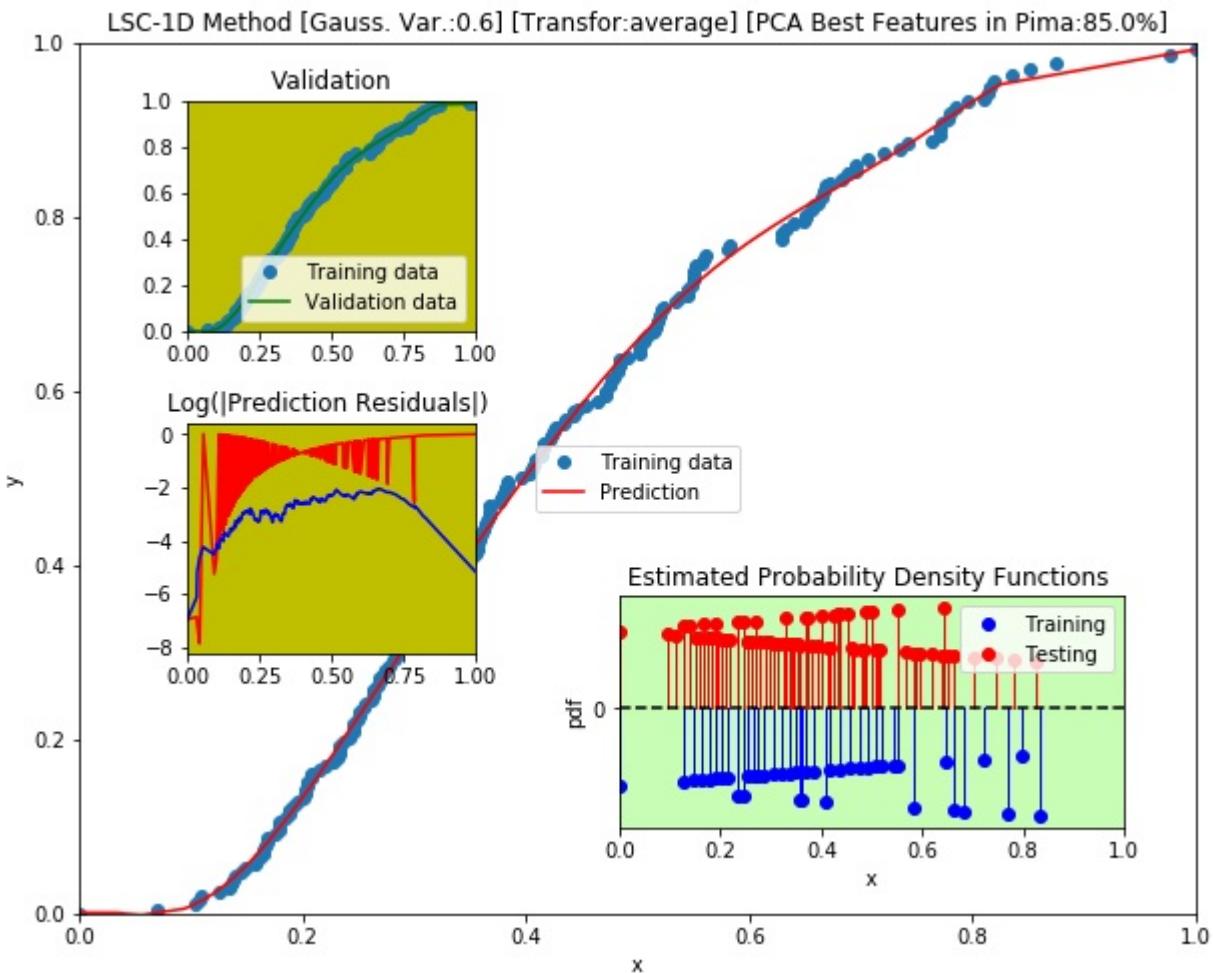
Prediction time/pt. (sec) : 0.0000097
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0031497

Prediction time/pt. (sec) : 0.0000095
```



Pima Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0026996
  Initializing linear solver - done. Time (sec): 0.0029883
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003607
  Solving linear system (col. 0) - done. Time (sec): 0.0005536
Training - done. Time (sec): 0.0117269

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0072534  
Prediction time/pt. (sec) : 0.0000363
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0044403  
Prediction time/pt. (sec) : 0.0000134
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0051901  
Prediction time/pt. (sec) : 0.0000156
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0069132  
Prediction time/pt. (sec) : 0.0000208
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0040483
Initializing linear solver - done. Time (sec): 0.0043023
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0012023
    Solving linear system (col. 0) - done. Time (sec): 0.0015800
Training - done. Time (sec): 0.0120213
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0057638

Prediction time/pt. (sec) : 0.0000174
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0041461

Prediction time/pt. (sec) : 0.0000207
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0067203

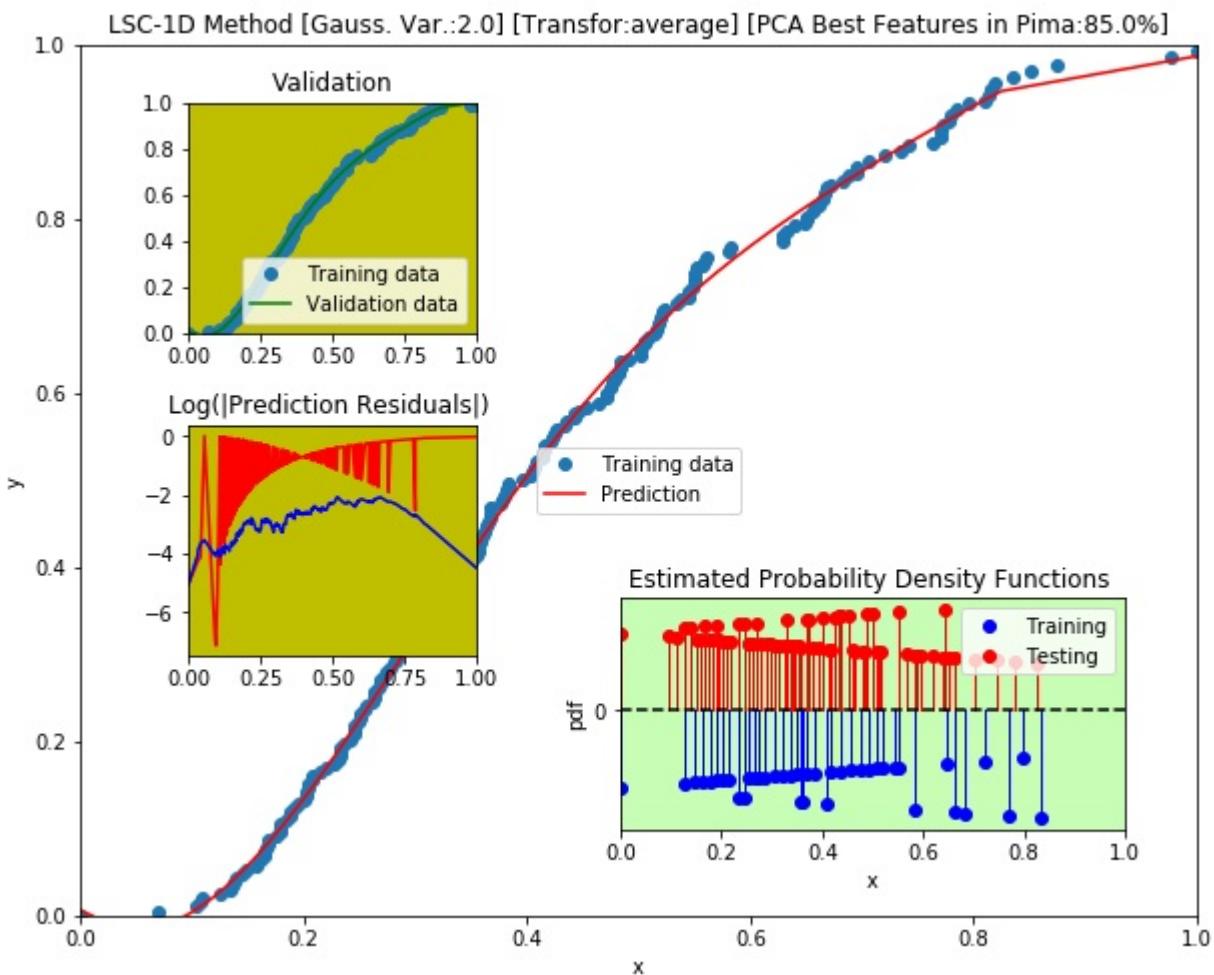
Prediction time/pt. (sec) : 0.0000202
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0062065

Prediction time/pt. (sec) : 0.0000187
```



Pima Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0100124
  Initializing linear solver - done. Time (sec): 0.0102789
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0005000
  Solving linear system (col. 0) - done. Time (sec): 0.0006816
Training - done. Time (sec): 0.0148406

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0077424  
Prediction time/pt. (sec) : 0.0000387
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0047805  
Prediction time/pt. (sec) : 0.0000144
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0023789  
Prediction time/pt. (sec) : 0.0000072
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0073054  
Prediction time/pt. (sec) : 0.0000220
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0017691
Initializing linear solver - done. Time (sec): 0.0019810
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0002830
    Solving linear system (col. 0) - done. Time (sec): 0.0004227
Training - done. Time (sec): 0.0167155
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0026197

Prediction time/pt. (sec) : 0.0000079
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0074360

Prediction time/pt. (sec) : 0.0000372
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0050430

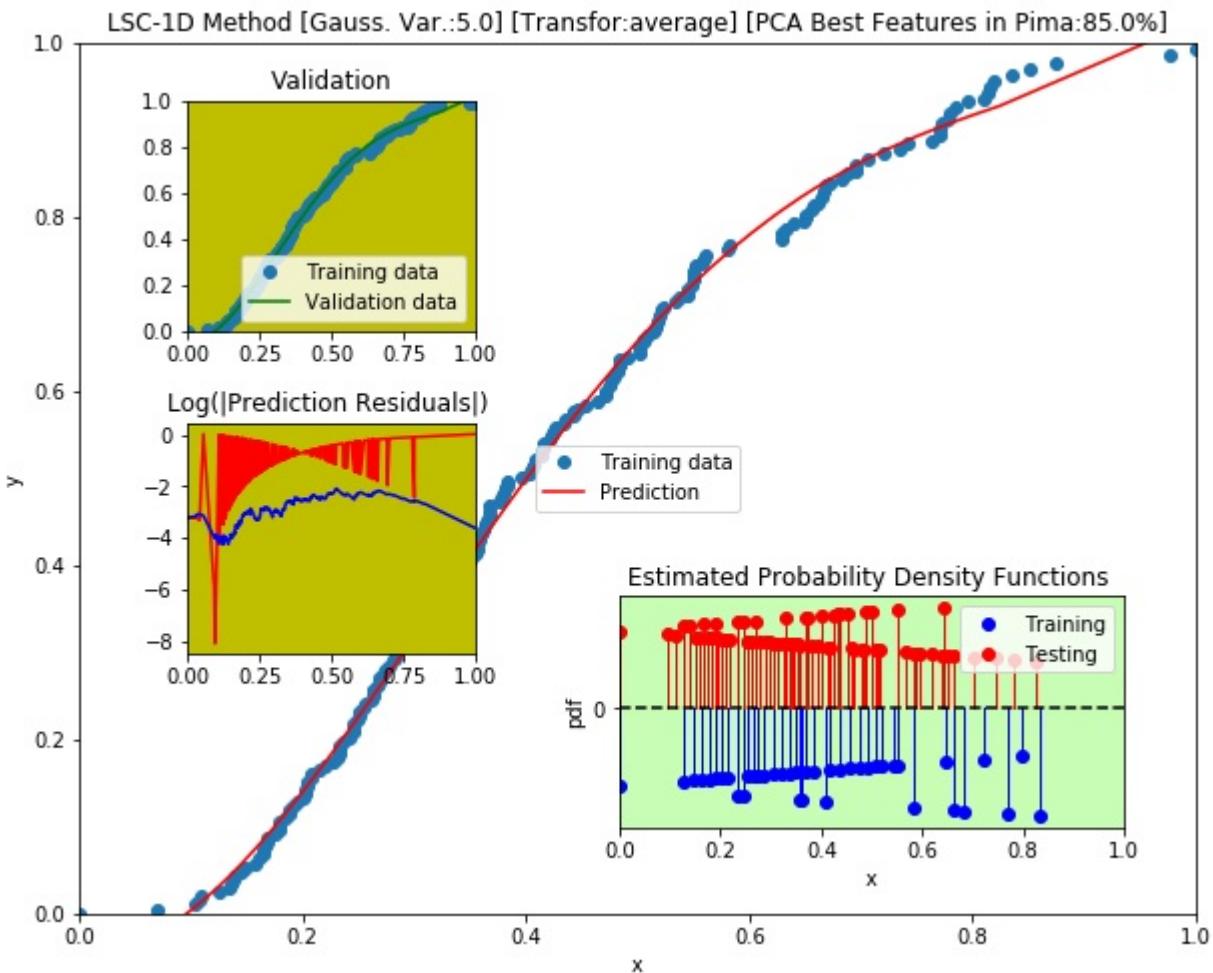
Prediction time/pt. (sec) : 0.0000152
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0053329

Prediction time/pt. (sec) : 0.0000161
```



Pima Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

Training ...

Initializing linear solver ...

Performing LU fact. (201 x 201 mtx) ...

Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0059147

Initializing linear solver - done. Time (sec): 0.0067480

Solving linear system (col. 0) ...

Back solving (201 x 201 mtx) ...

Back solving (201 x 201 mtx) - done. Time (sec): 0.0003214

Solving linear system (col. 0) - done. Time (sec): 0.0010343

Training - done. Time (sec): 0.0118215

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0027046  
Prediction time/pt. (sec) : 0.0000135
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0026455  
Prediction time/pt. (sec) : 0.0000080
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0026524  
Prediction time/pt. (sec) : 0.0000080
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0025730  
Prediction time/pt. (sec) : 0.0000078
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0019305
Initializing linear solver - done. Time (sec): 0.0027542
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003076
    Solving linear system (col. 0) - done. Time (sec): 0.0010021
Training - done. Time (sec): 0.0074096
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0024621

Prediction time/pt. (sec) : 0.0000074
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0015056

Prediction time/pt. (sec) : 0.0000075
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0024602

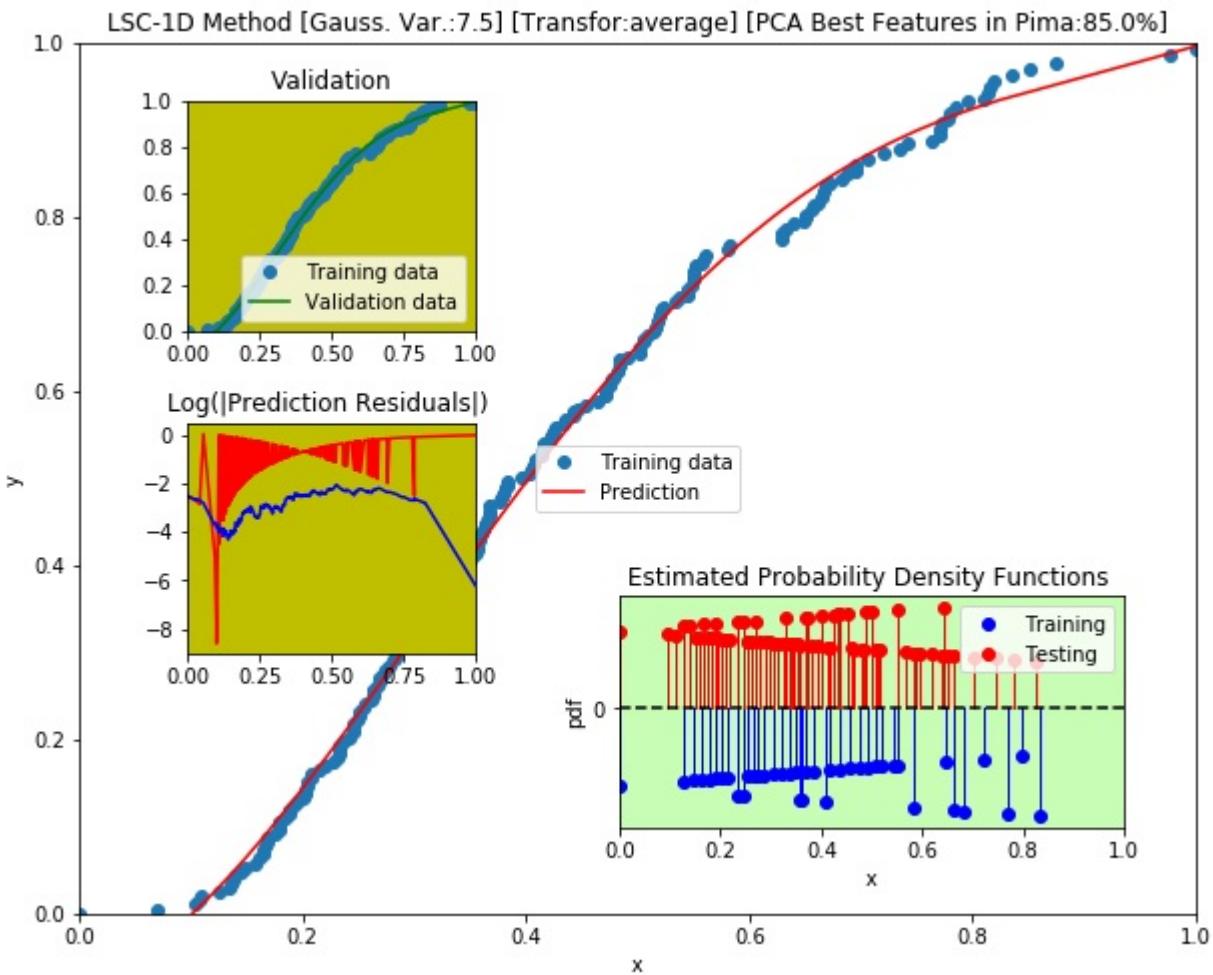
Prediction time/pt. (sec) : 0.0000074
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0024507

Prediction time/pt. (sec) : 0.0000074
```



Pima Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: average
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0053060
    Initializing linear solver - done. Time (sec): 0.0055282
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0004063
    Solving linear system (col. 0) - done. Time (sec): 0.0005836
Training - done. Time (sec): 0.0144379

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0076017  
Prediction time/pt. (sec) : 0.0000380
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0049844  
Prediction time/pt. (sec) : 0.0000150
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0050023  
Prediction time/pt. (sec) : 0.0000151
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0051870  
Prediction time/pt. (sec) : 0.0000156
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0066073
Initializing linear solver - done. Time (sec): 0.0068629
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003166
    Solving linear system (col. 0) - done. Time (sec): 0.0004778
Training - done. Time (sec): 0.0098958
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0059812

Prediction time/pt. (sec) : 0.0000180
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0044842

Prediction time/pt. (sec) : 0.0000224
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0040371

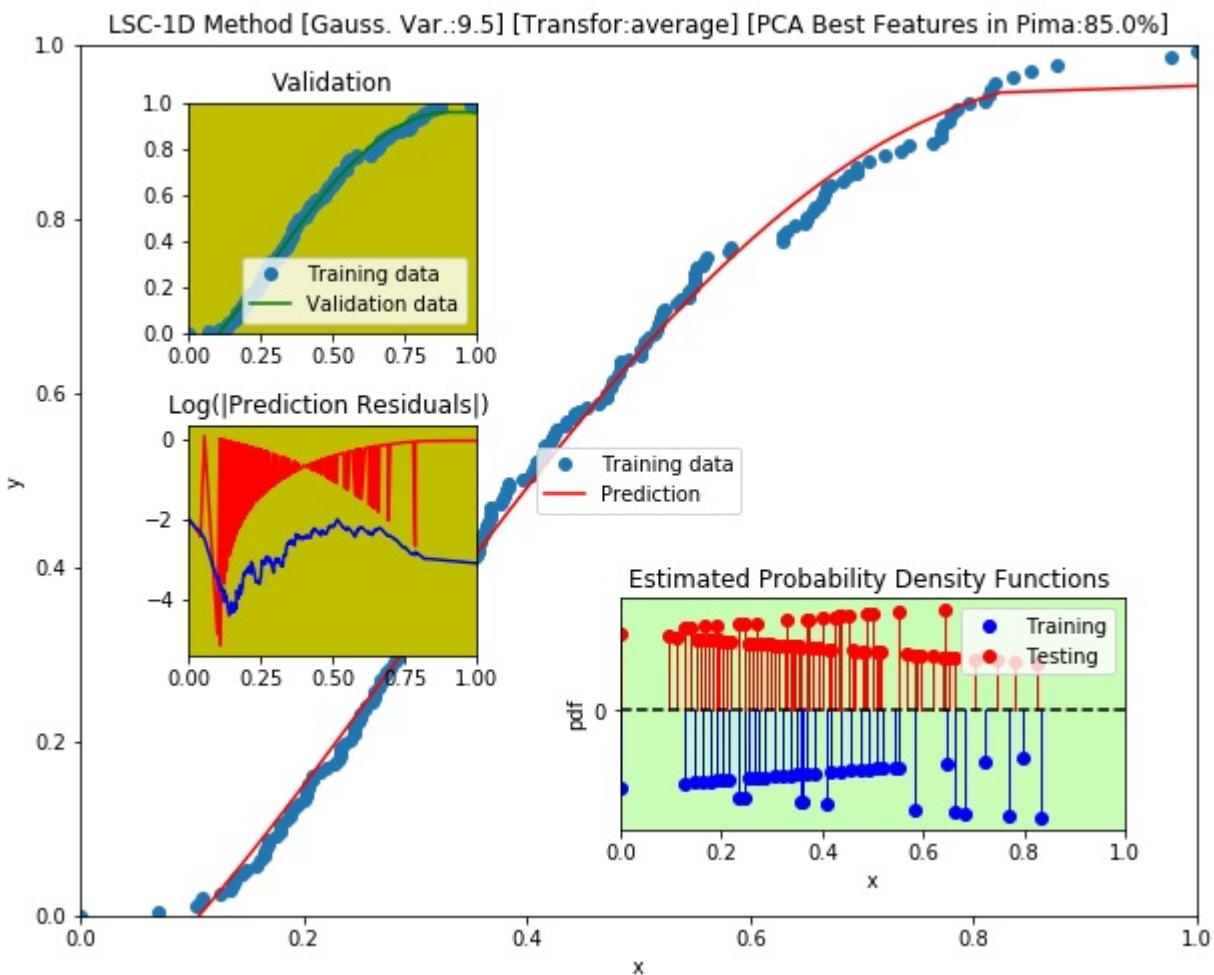
Prediction time/pt. (sec) : 0.0000122
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0026057

Prediction time/pt. (sec) : 0.0000078
```



Pima Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0023253
  Initializing linear solver - done. Time (sec): 0.0026054
  Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0002935
  Solving linear system (col. 0) - done. Time (sec): 0.0004396
Training - done. Time (sec): 0.0114362

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0082641  
Prediction time/pt. (sec) : 0.0000413
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0024281  
Prediction time/pt. (sec) : 0.0000073
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0076001  
Prediction time/pt. (sec) : 0.0000229
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0023119  
Prediction time/pt. (sec) : 0.0000070
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0025661
Initializing linear solver - done. Time (sec): 0.0028090
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003049
    Solving linear system (col. 0) - done. Time (sec): 0.0004609
Training - done. Time (sec): 0.0127835
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0025353

Prediction time/pt. (sec) : 0.0000076
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0077040

Prediction time/pt. (sec) : 0.0000385
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0052891

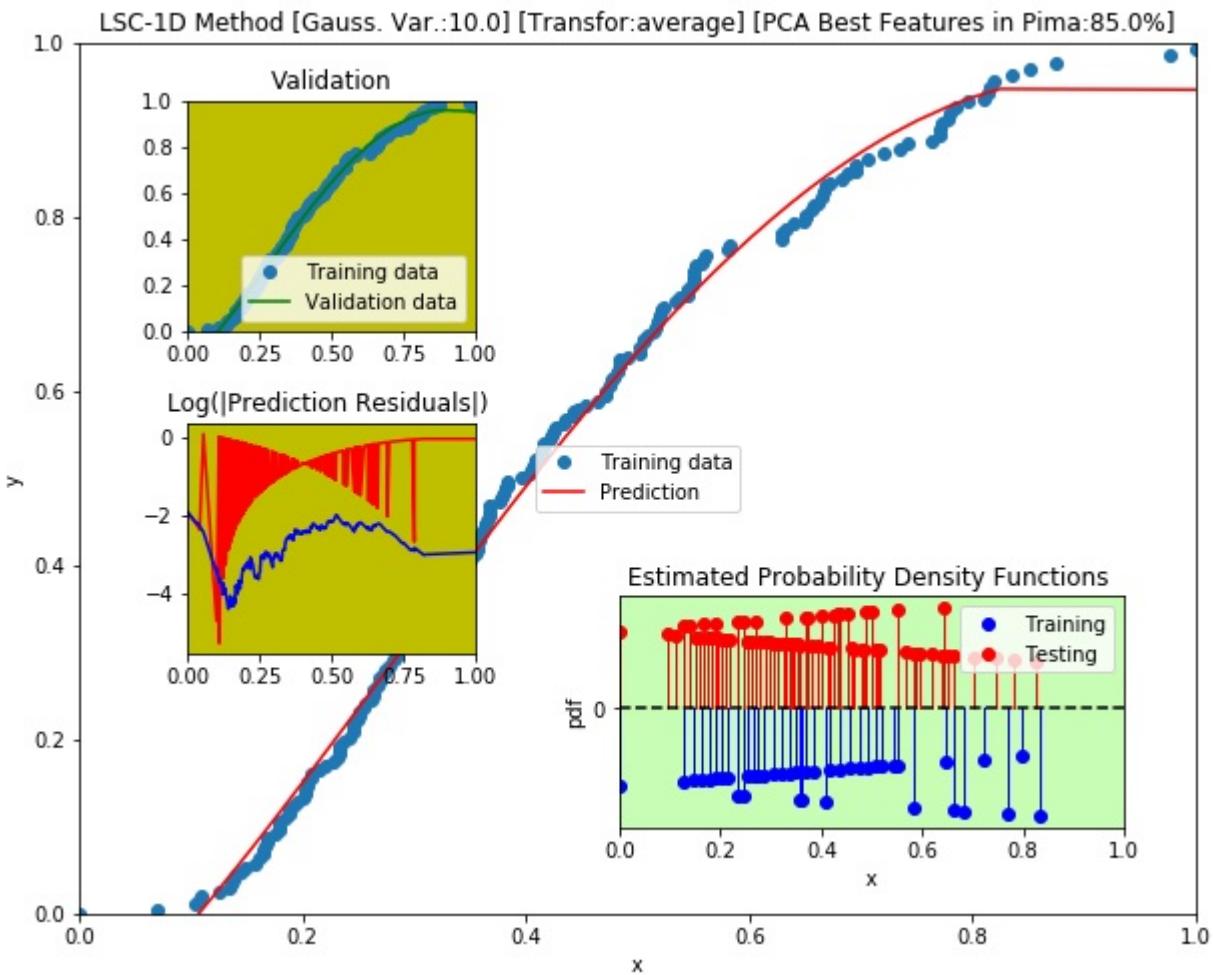
Prediction time/pt. (sec) : 0.0000159
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0042782

Prediction time/pt. (sec) : 0.0000129
```



Pima Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```
Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0124404
    Initializing linear solver - done. Time (sec): 0.0134783
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0003097
    Solving linear system (col. 0) - done. Time (sec): 0.0015829
Training - done. Time (sec): 0.0195193
```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0018160  
Prediction time/pt. (sec) : 0.0000091
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0028107  
Prediction time/pt. (sec) : 0.0000085
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0028236  
Prediction time/pt. (sec) : 0.0000085
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0028236  
Prediction time/pt. (sec) : 0.0000085
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0098917
Initializing linear solver - done. Time (sec): 0.0110323
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003114
    Solving linear system (col. 0) - done. Time (sec): 0.0015323
Training - done. Time (sec): 0.0194464
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0059705

Prediction time/pt. (sec) : 0.0000180
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0036461

Prediction time/pt. (sec) : 0.0000182
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0029535

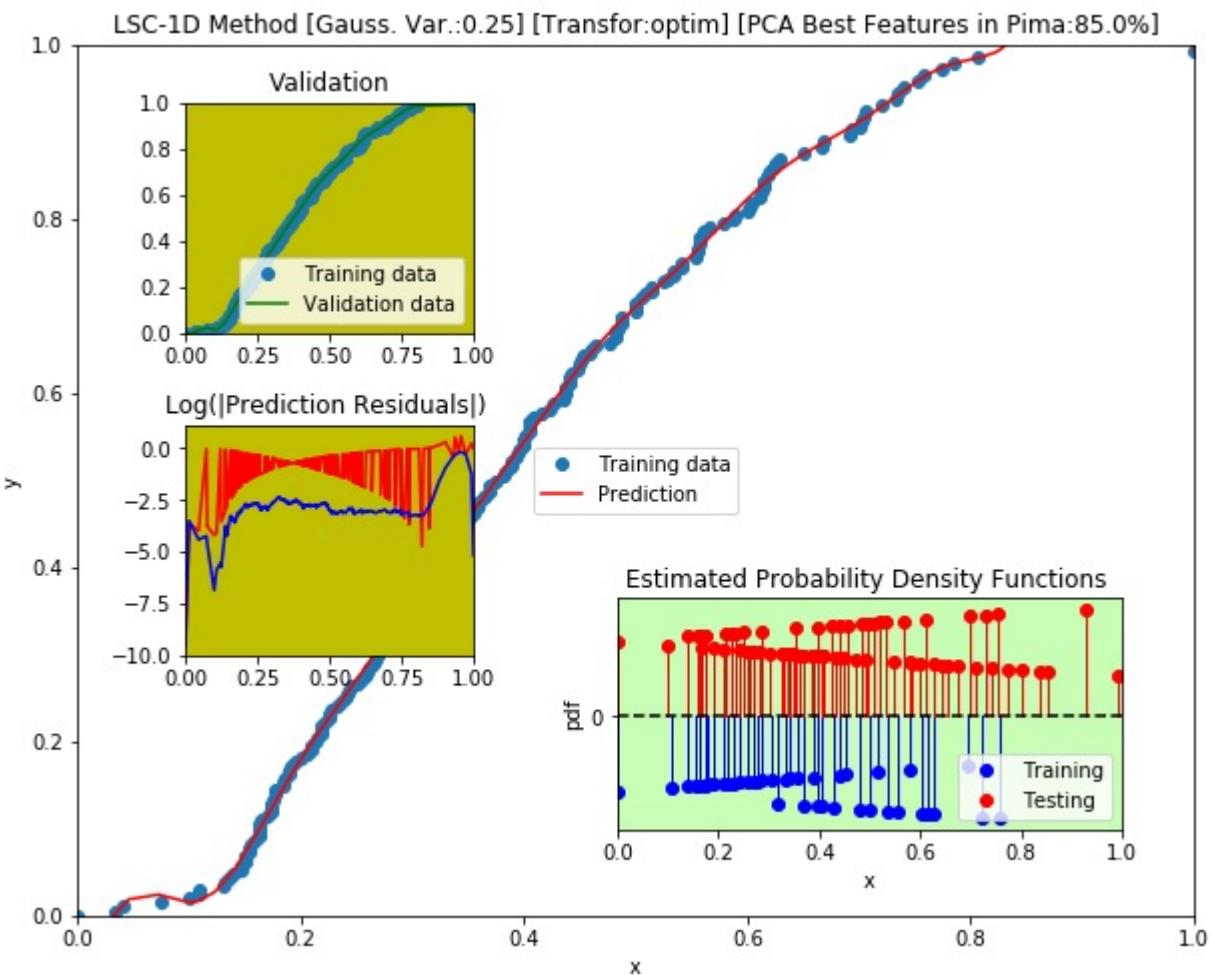
Prediction time/pt. (sec) : 0.0000089
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0056536

Prediction time/pt. (sec) : 0.0000170
```



Pima Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (201 x 201 mtx) ...
        Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0025227
    Initializing linear solver - done. Time (sec): 0.0027955
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0004969
    Solving linear system (col. 0) - done. Time (sec): 0.0006804
Training - done. Time (sec): 0.0069044

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0050256  
Prediction time/pt. (sec) : 0.0000251
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0058346  
Prediction time/pt. (sec) : 0.0000176
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0062578  
Prediction time/pt. (sec) : 0.0000188
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0057960  
Prediction time/pt. (sec) : 0.0000175
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0020056
Initializing linear solver - done. Time (sec): 0.0022469
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0005608
    Solving linear system (col. 0) - done. Time (sec): 0.0007477
Training - done. Time (sec): 0.0062799
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0120418

Prediction time/pt. (sec) : 0.0000363
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0071592

Prediction time/pt. (sec) : 0.0000358
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0032101

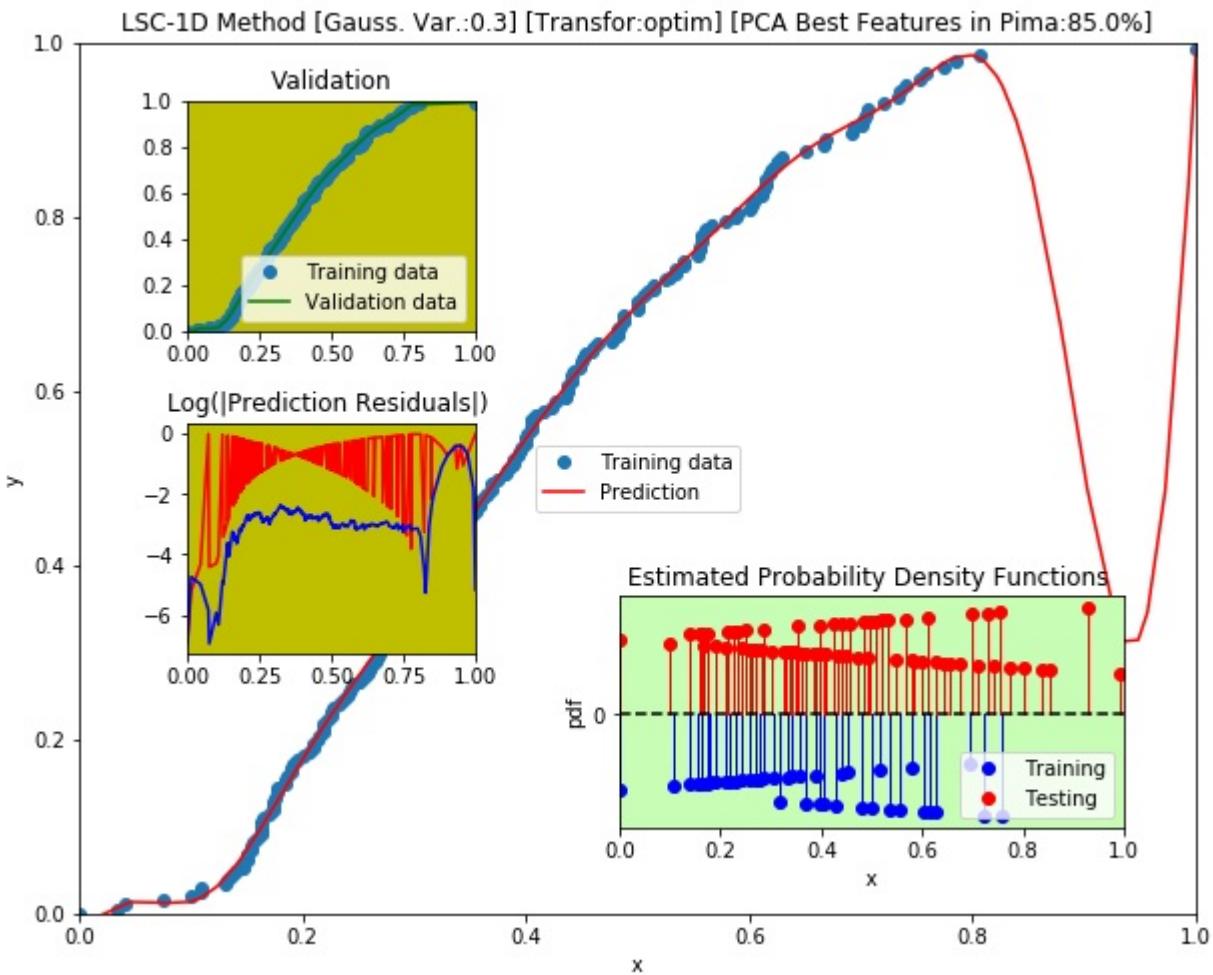
Prediction time/pt. (sec) : 0.0000097
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0081081

Prediction time/pt. (sec) : 0.0000244
```



Pima Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0025074
    Initializing linear solver - done. Time (sec): 0.0027738
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0002980
    Solving linear system (col. 0) - done. Time (sec): 0.0004461
Training - done. Time (sec): 0.0119765

```

Evaluation

```
# eval points. : 200  
  
Predicting ...  
Predicting - done. Time (sec): 0.0093274  
  
Prediction time/pt. (sec) : 0.0000466
```

Evaluation

```
# eval points. : 332  
  
Predicting ...  
Predicting - done. Time (sec): 0.0062613  
  
Prediction time/pt. (sec) : 0.0000189
```

Evaluation

```
# eval points. : 332  
  
Predicting ...  
Predicting - done. Time (sec): 0.0052481  
  
Prediction time/pt. (sec) : 0.0000158
```

Evaluation

```
# eval points. : 332  
  
Predicting ...  
Predicting - done. Time (sec): 0.0031064  
  
Prediction time/pt. (sec) : 0.0000094
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0025735
Initializing linear solver - done. Time (sec): 0.0029485
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003531
    Solving linear system (col. 0) - done. Time (sec): 0.0005064
Training - done. Time (sec): 0.0130017
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0067544

Prediction time/pt. (sec) : 0.0000203
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0020242

Prediction time/pt. (sec) : 0.0000101
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0033236

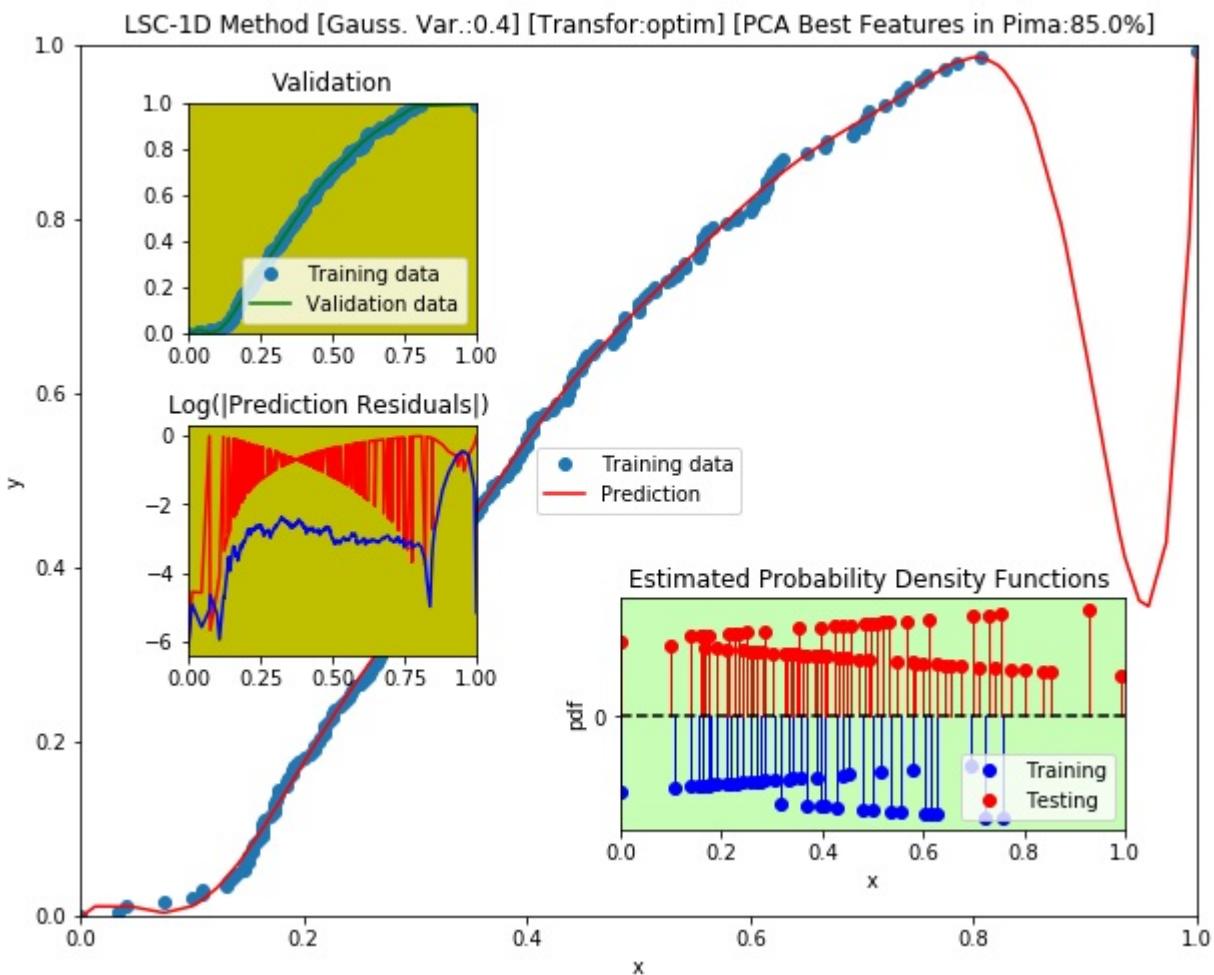
Prediction time/pt. (sec) : 0.0000100
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0033138

Prediction time/pt. (sec) : 0.0000100
```



Pima Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (201 x 201 mtx) ...
        Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0027380
    Initializing linear solver - done. Time (sec): 0.0030336
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0003815
    Solving linear system (col. 0) - done. Time (sec): 0.0005896
Training - done. Time (sec): 0.0124962

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0081301  
Prediction time/pt. (sec) : 0.0000407
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0048890  
Prediction time/pt. (sec) : 0.0000147
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0025752  
Prediction time/pt. (sec) : 0.0000078
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0074325  
Prediction time/pt. (sec) : 0.0000224
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0063906
Initializing linear solver - done. Time (sec): 0.0066340
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003052
    Solving linear system (col. 0) - done. Time (sec): 0.0004547
Training - done. Time (sec): 0.0097387
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0063727

Prediction time/pt. (sec) : 0.0000192
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0045555

Prediction time/pt. (sec) : 0.0000228
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0056779

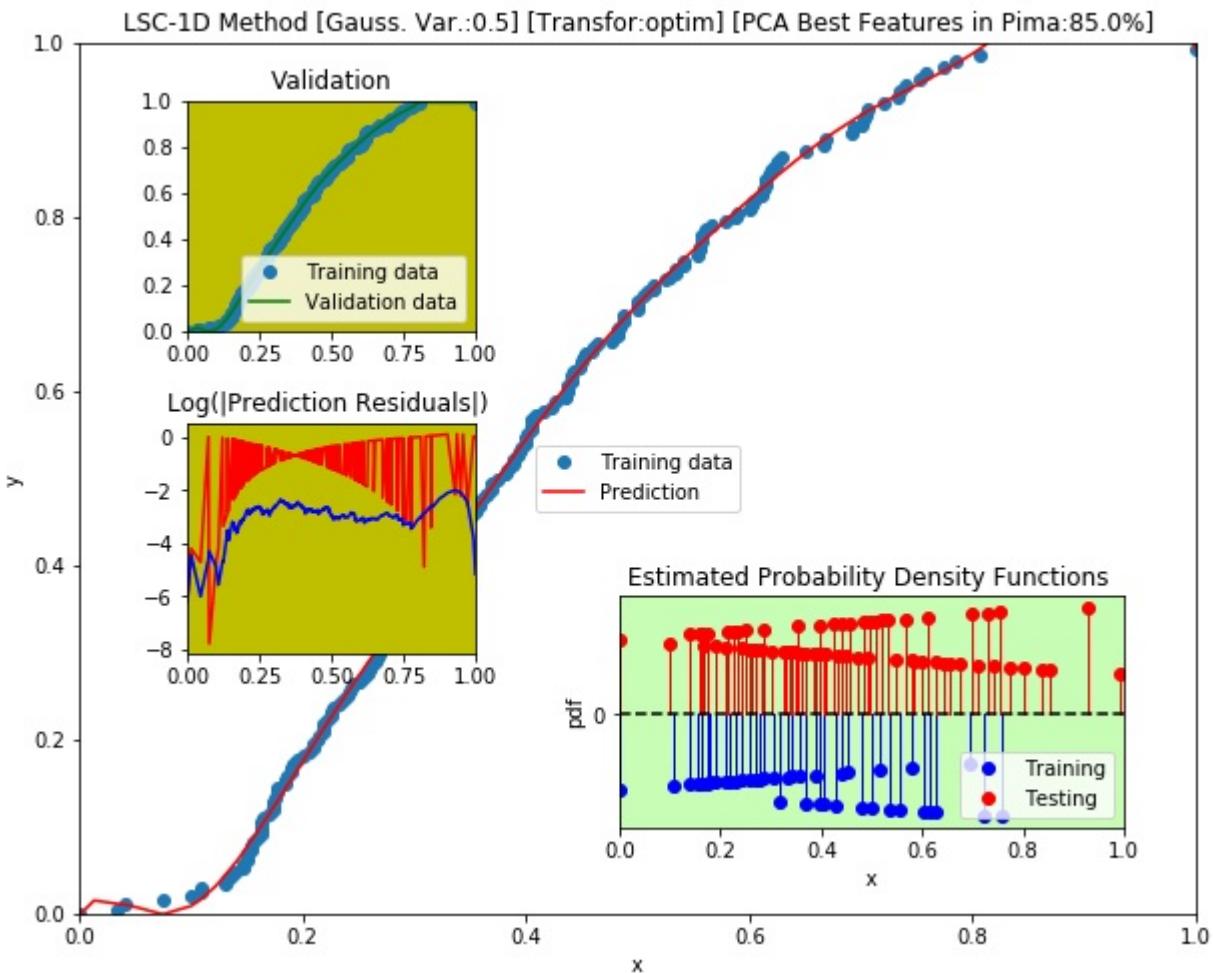
Prediction time/pt. (sec) : 0.0000171
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0029845

Prediction time/pt. (sec) : 0.0000090
```



Pima Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0042658
    Initializing linear solver - done. Time (sec): 0.0045033
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0006166
    Solving linear system (col. 0) - done. Time (sec): 0.0008578
    Training - done. Time (sec): 0.0113058

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0060940  
Prediction time/pt. (sec) : 0.0000305
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0086577  
Prediction time/pt. (sec) : 0.0000261
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0095389  
Prediction time/pt. (sec) : 0.0000287
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0149910  
Prediction time/pt. (sec) : 0.0000452
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0064855
Initializing linear solver - done. Time (sec): 0.0066936
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003192
    Solving linear system (col. 0) - done. Time (sec): 0.0004721
Training - done. Time (sec): 0.0103199
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0031023

Prediction time/pt. (sec) : 0.0000093
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0091178

Prediction time/pt. (sec) : 0.0000456
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0060182

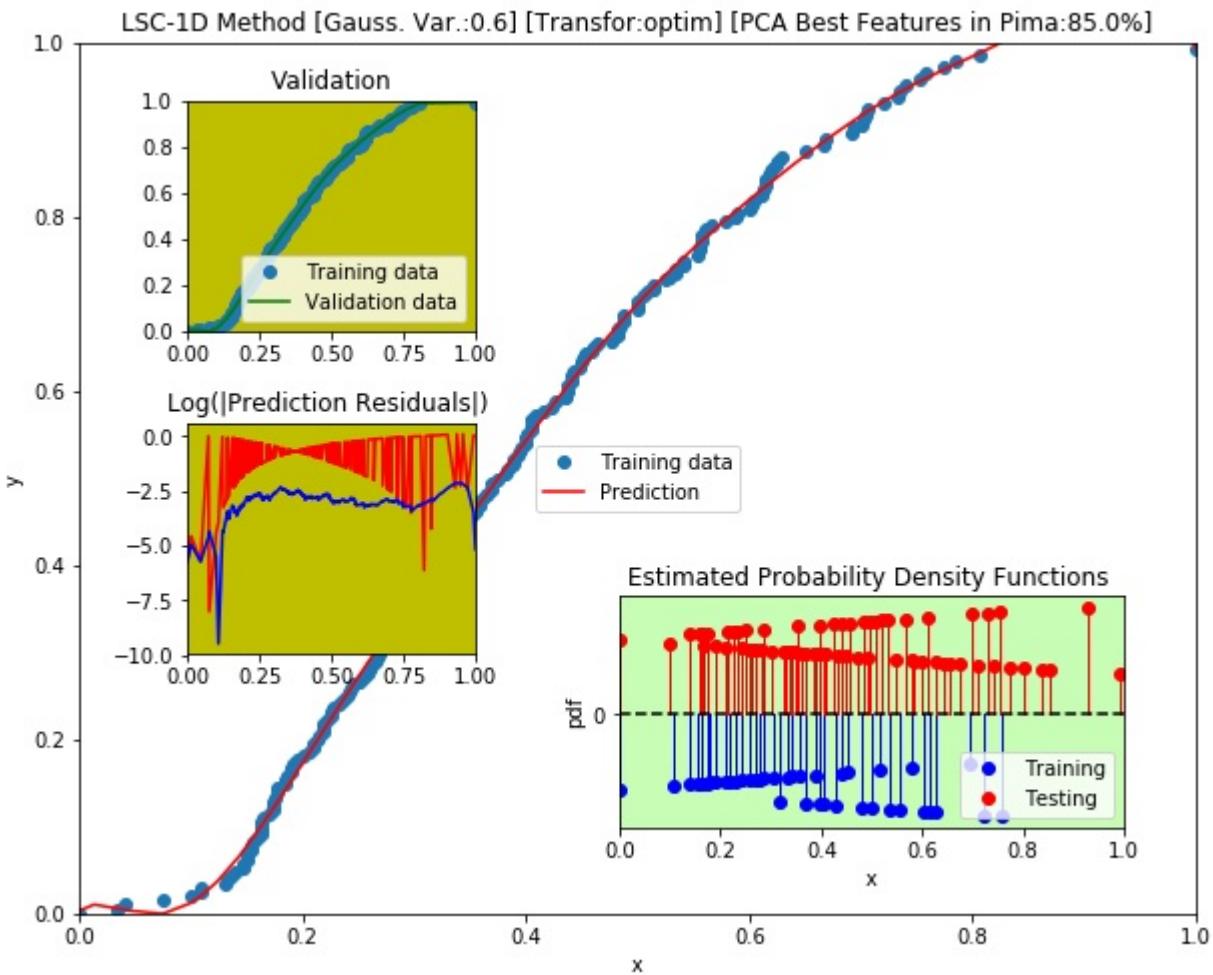
Prediction time/pt. (sec) : 0.0000181
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0054076

Prediction time/pt. (sec) : 0.0000163
```



Pima Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0032756
    Initializing linear solver - done. Time (sec): 0.0035973
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0003536
    Solving linear system (col. 0) - done. Time (sec): 0.0005479
Training - done. Time (sec): 0.0135913

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0040419  
Prediction time/pt. (sec) : 0.0000202
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0057273  
Prediction time/pt. (sec) : 0.0000173
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0094690  
Prediction time/pt. (sec) : 0.0000285
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0073526  
Prediction time/pt. (sec) : 0.0000221
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0018902
Initializing linear solver - done. Time (sec): 0.0021150
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003133
    Solving linear system (col. 0) - done. Time (sec): 0.0005987
Training - done. Time (sec): 0.0052607
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0110149

Prediction time/pt. (sec) : 0.0000332
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0016775

Prediction time/pt. (sec) : 0.0000084
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0124931

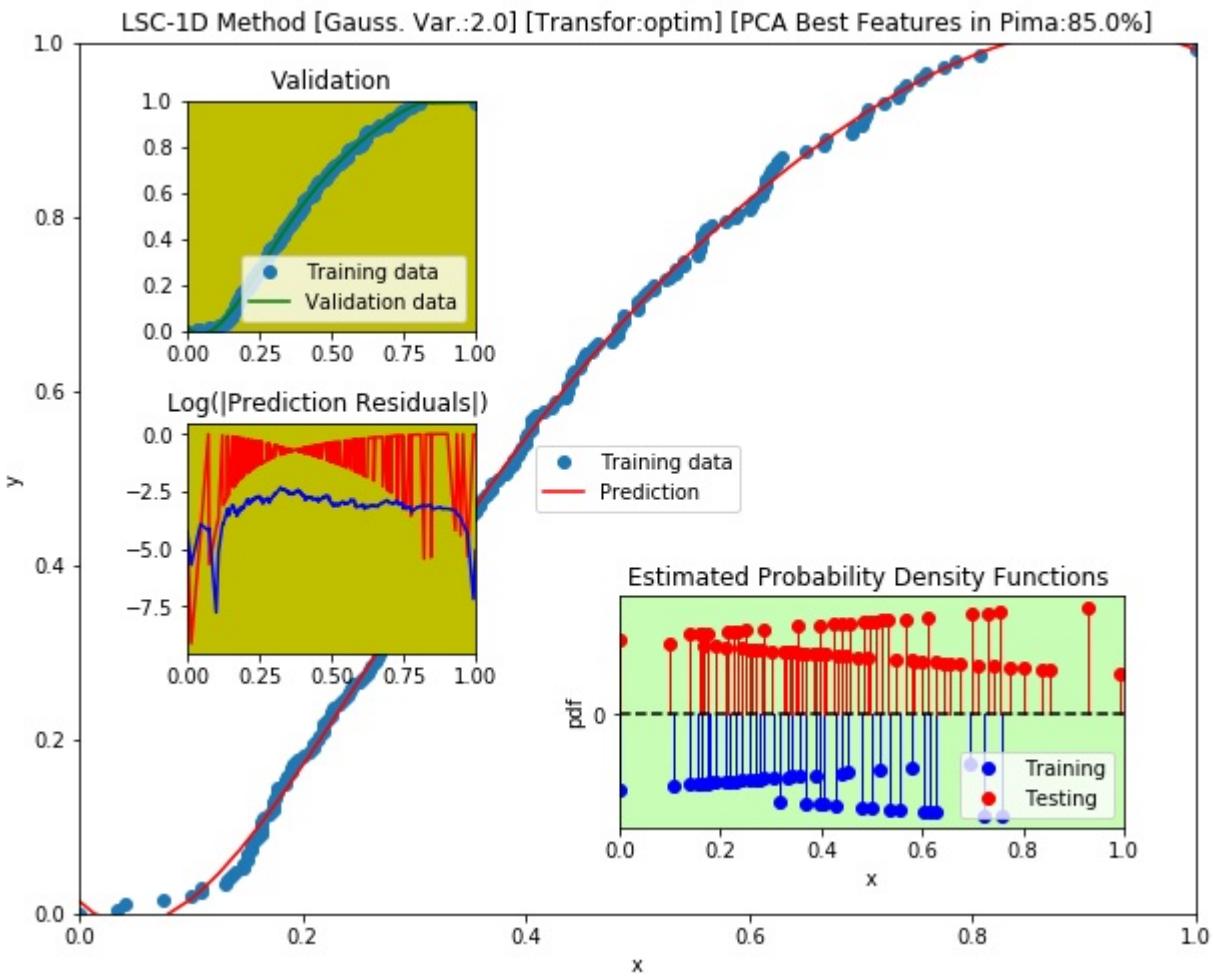
Prediction time/pt. (sec) : 0.0000376
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0026391

Prediction time/pt. (sec) : 0.0000079
```



Pima Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0026138
    Initializing linear solver - done. Time (sec): 0.0028362
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0005949
    Solving linear system (col. 0) - done. Time (sec): 0.0007961
Training - done. Time (sec): 0.0075467

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0071402  
Prediction time/pt. (sec) : 0.0000357
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0028868  
Prediction time/pt. (sec) : 0.0000087
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0055306  
Prediction time/pt. (sec) : 0.0000167
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0056362  
Prediction time/pt. (sec) : 0.0000170
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0084126
Initializing linear solver - done. Time (sec): 0.0086918
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0005059
    Solving linear system (col. 0) - done. Time (sec): 0.0006897
Training - done. Time (sec): 0.0159407
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0056932

Prediction time/pt. (sec) : 0.0000171
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0034482

Prediction time/pt. (sec) : 0.0000172
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0055037

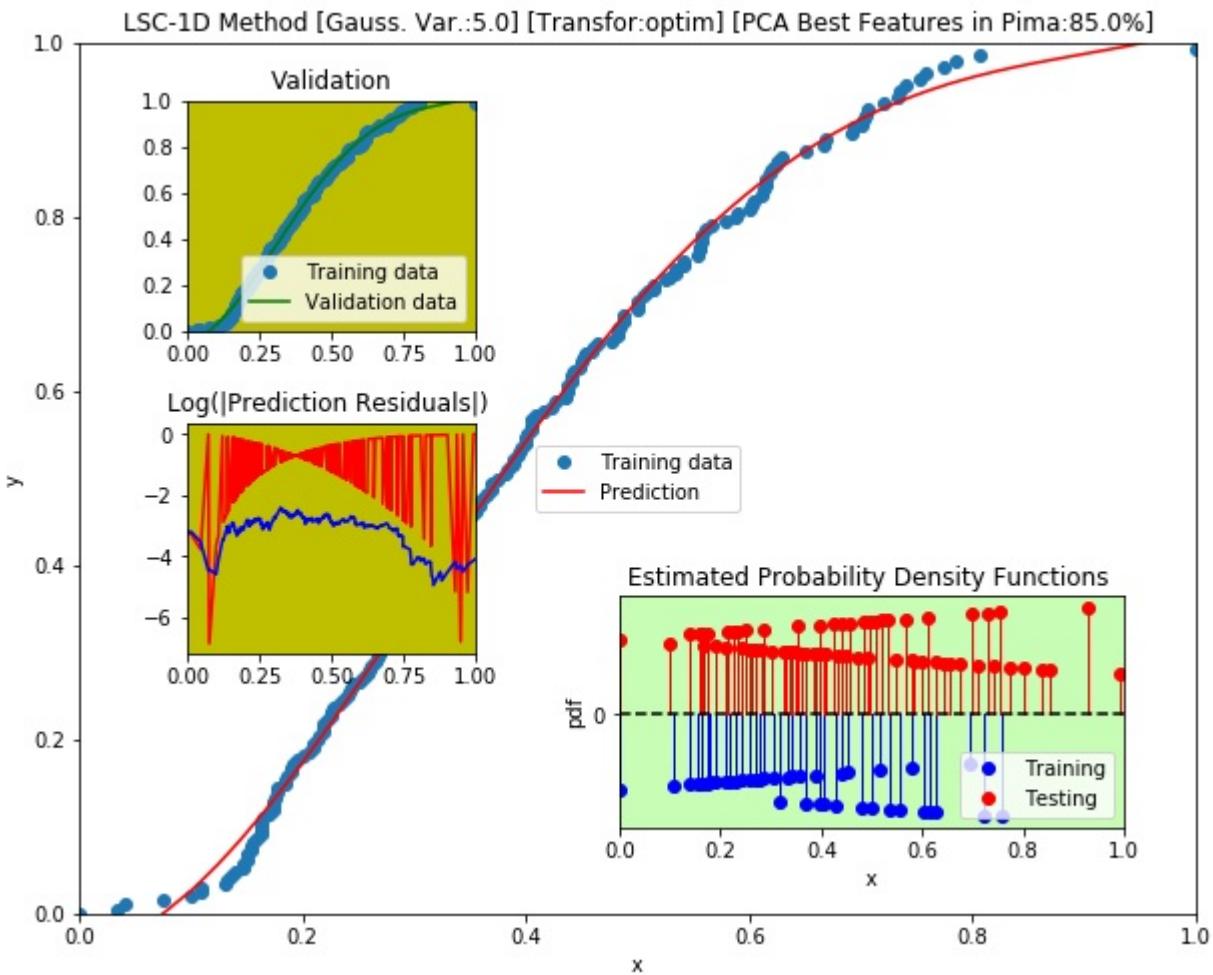
Prediction time/pt. (sec) : 0.0000166
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0063818

Prediction time/pt. (sec) : 0.0000192
```



Pima Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0091684
    Initializing linear solver - done. Time (sec): 0.0093715
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0002978
    Solving linear system (col. 0) - done. Time (sec): 0.0004473
Training - done. Time (sec): 0.0133529

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0055754  
Prediction time/pt. (sec) : 0.0000279
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0058265  
Prediction time/pt. (sec) : 0.0000175
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0048406  
Prediction time/pt. (sec) : 0.0000146
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0052898  
Prediction time/pt. (sec) : 0.0000159
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0081015
Initializing linear solver - done. Time (sec): 0.0083795
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0009012
    Solving linear system (col. 0) - done. Time (sec): 0.0010996
Training - done. Time (sec): 0.0165973
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0055919

Prediction time/pt. (sec) : 0.0000168
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0040286

Prediction time/pt. (sec) : 0.0000201
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0061388

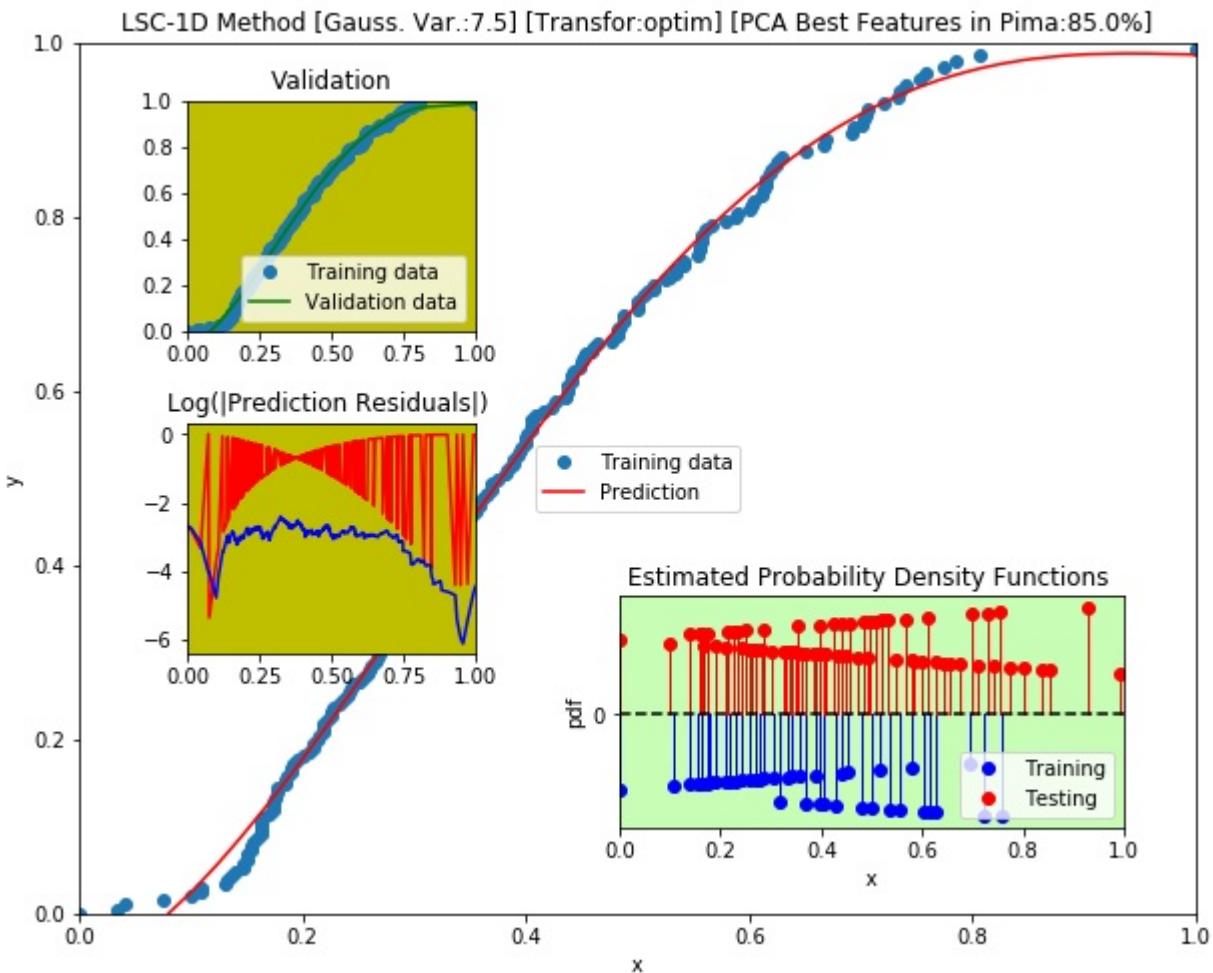
Prediction time/pt. (sec) : 0.0000185
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0057967

Prediction time/pt. (sec) : 0.0000175
```



Pima Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0029609
    Initializing linear solver - done. Time (sec): 0.0032687
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0003529
    Solving linear system (col. 0) - done. Time (sec): 0.0005436
Training - done. Time (sec): 0.0116339

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0054209  
Prediction time/pt. (sec) : 0.0000271
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0059922  
Prediction time/pt. (sec) : 0.0000180
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0051150  
Prediction time/pt. (sec) : 0.0000154
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0051286  
Prediction time/pt. (sec) : 0.0000154
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0049548
Initializing linear solver - done. Time (sec): 0.0052247
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0012355
    Solving linear system (col. 0) - done. Time (sec): 0.0014324
Training - done. Time (sec): 0.0125206
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0054071

Prediction time/pt. (sec) : 0.0000163
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0042233

Prediction time/pt. (sec) : 0.0000211
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0062075

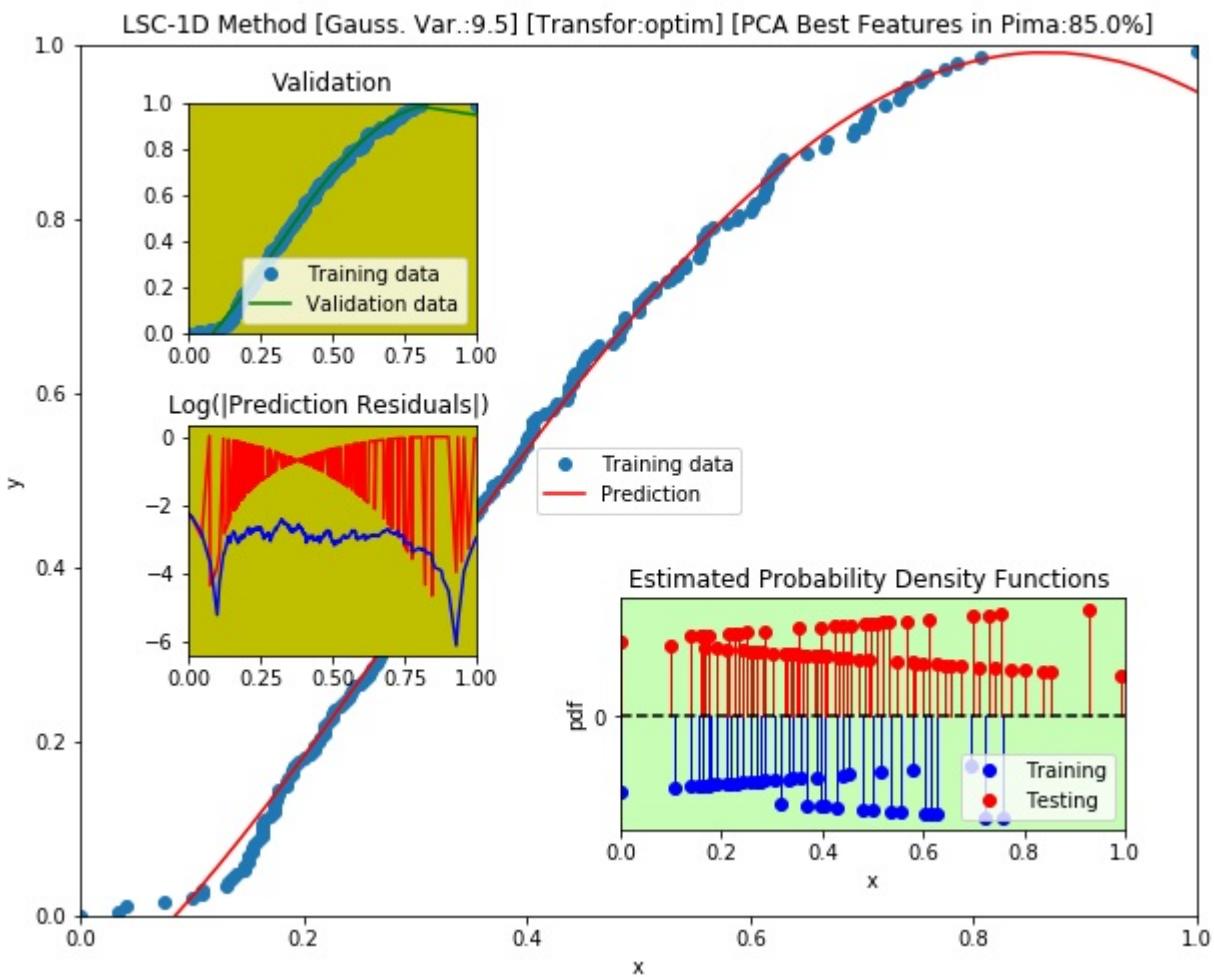
Prediction time/pt. (sec) : 0.0000187
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0060143

Prediction time/pt. (sec) : 0.0000181
```



Pima Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 200

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (201 x 201 mtx) ...
    Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0094490
    Initializing linear solver - done. Time (sec): 0.0107799
    Solving linear system (col. 0) ...
        Back solving (201 x 201 mtx) ...
        Back solving (201 x 201 mtx) - done. Time (sec): 0.0003352
    Solving linear system (col. 0) - done. Time (sec): 0.0018797
Training - done. Time (sec): 0.0170133

```

Evaluation

```
# eval points. : 200  
Predicting ...  
Predicting - done. Time (sec): 0.0113447  
Prediction time/pt. (sec) : 0.0000567
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0074983  
Prediction time/pt. (sec) : 0.0000226
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0042558  
Prediction time/pt. (sec) : 0.0000128
```

Evaluation

```
# eval points. : 332  
Predicting ...  
Predicting - done. Time (sec): 0.0024276  
Prediction time/pt. (sec) : 0.0000073
```

RBF

Problem size

```
# training points. : 200
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (201 x 201 mtx) ...
```

```
Performing LU fact. (201 x 201 mtx) - done. Time (sec): 0.0020146
Initializing linear solver - done. Time (sec): 0.0028589
Solving linear system (col. 0) ...
    Back solving (201 x 201 mtx) ...
    Back solving (201 x 201 mtx) - done. Time (sec): 0.0003188
    Solving linear system (col. 0) - done. Time (sec): 0.0010345
Training - done. Time (sec): 0.0083866
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0026398

Prediction time/pt. (sec) : 0.0000080
```

Evaluation

```
# eval points. : 200

Predicting ...
Predicting - done. Time (sec): 0.0015745

Prediction time/pt. (sec) : 0.0000079
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0026100

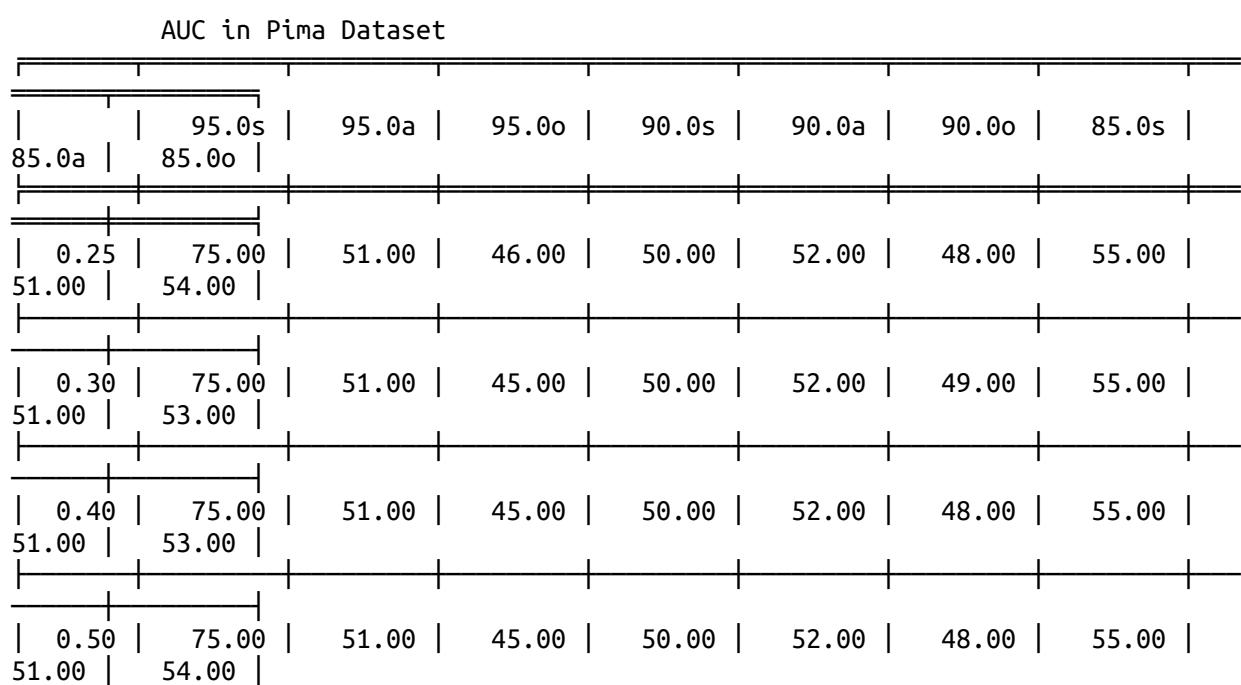
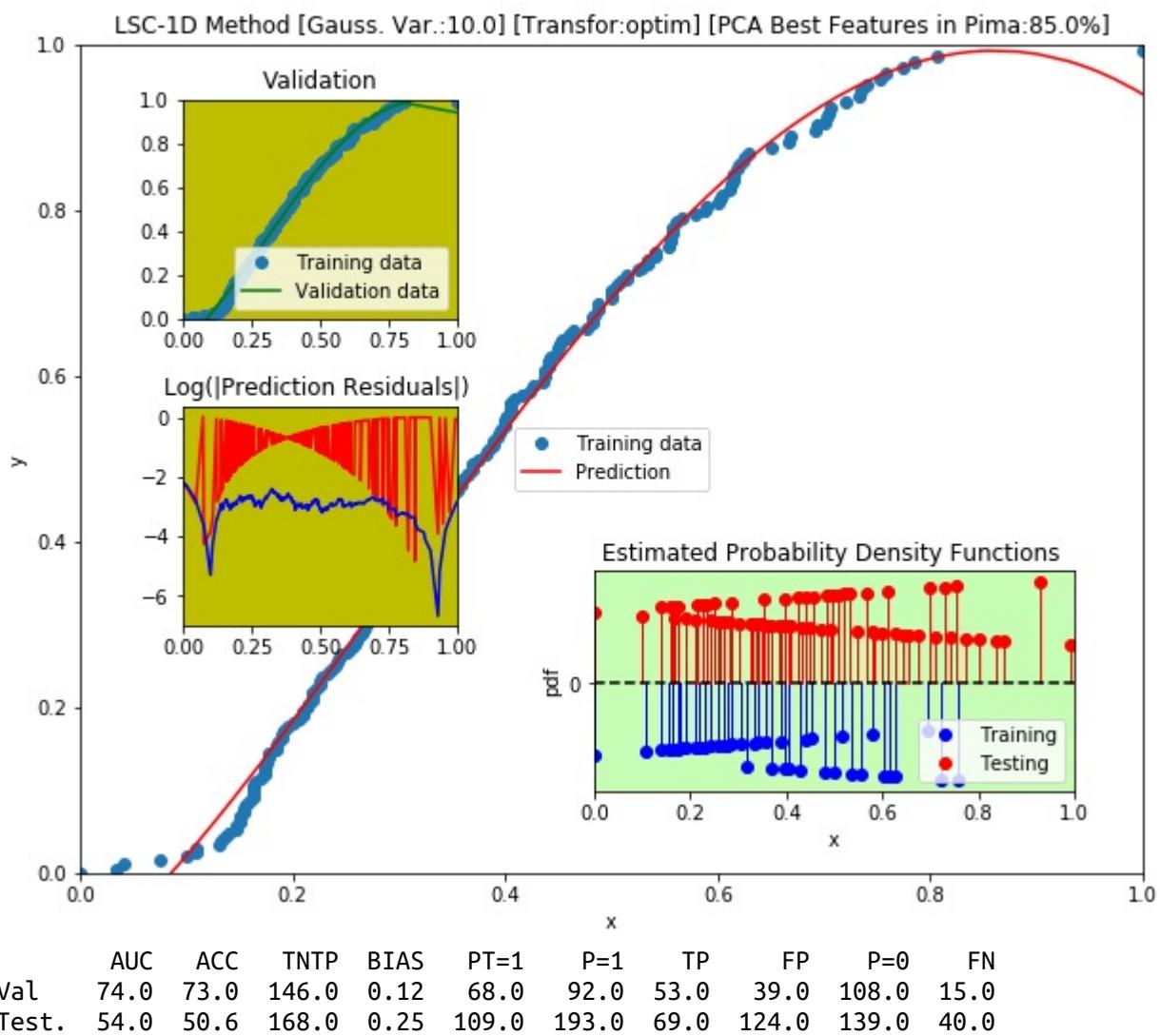
Prediction time/pt. (sec) : 0.0000079
```

Evaluation

```
# eval points. : 332

Predicting ...
Predicting - done. Time (sec): 0.0025952

Prediction time/pt. (sec) : 0.0000078
```



0.60	75.00	51.00	45.00	50.00	52.00	48.00	55.00	
51.00	54.00							
2.00	75.00	51.00	45.00	50.00	52.00	49.00	55.00	
51.00	54.00							
5.00	75.00	51.00	45.00	50.00	52.00	47.00	55.00	
51.00	54.00							
7.50	75.00	51.00	45.00	50.00	52.00	47.00	55.00	
51.00	54.00							
9.50	75.00	51.00	45.00	50.00	52.00	47.00	54.00	
51.00	54.00							
10.00	75.00	51.00	45.00	50.00	52.00	47.00	54.00	
51.00	54.00							

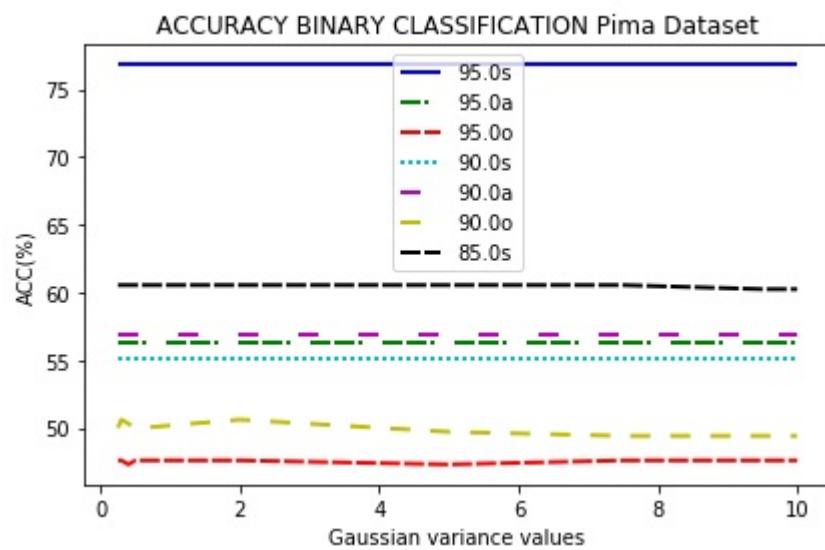
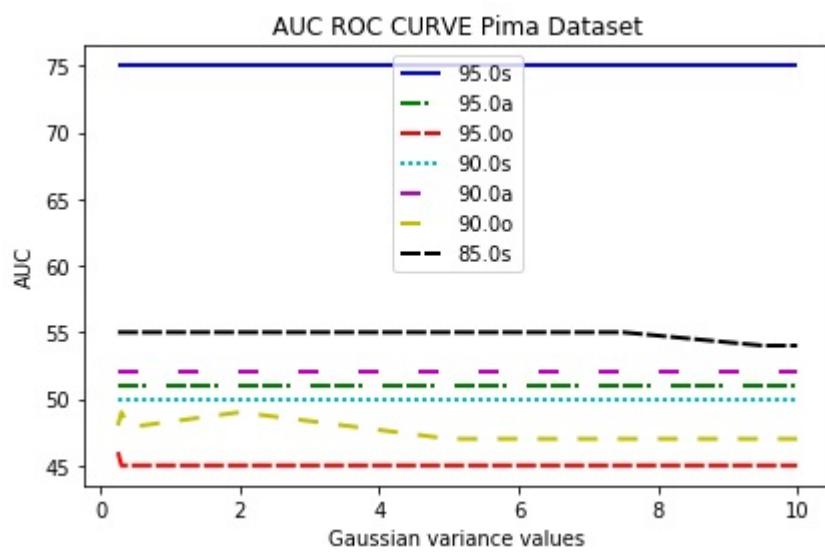
ACC in Pima Dataset								
85.0a	95.0s	95.0a	95.0o	90.0s	90.0a	90.0o	85.0s	
85.0a	85.0o							
0.25	76.81	56.33	47.59	55.12	56.93	50.00	60.54	
57.53	50.60							
0.30	76.81	56.33	47.59	55.12	56.93	50.60	60.54	
57.53	50.60							
0.40	76.81	56.33	47.29	55.12	56.93	50.30	60.54	
57.53	50.30							
0.50	76.81	56.33	47.59	55.12	56.93	50.00	60.54	
57.53	50.60							
0.60	76.81	56.33	47.59	55.12	56.93	50.00	60.54	
57.53	50.60							
2.00	76.81	56.33	47.59	55.12	56.93	50.60	60.54	

57.53	50.30							
5.00	76.81	56.33	47.29	55.12	56.93	49.70	60.54	
57.53	50.60							
7.50	76.81	56.33	47.59	55.12	56.93	49.40	60.54	
57.53	50.60							
9.50	76.81	56.33	47.59	55.12	56.93	49.40	60.24	
57.83	50.90							
10.00	76.81	56.33	47.59	55.12	56.93	49.40	60.24	
57.83	50.90							

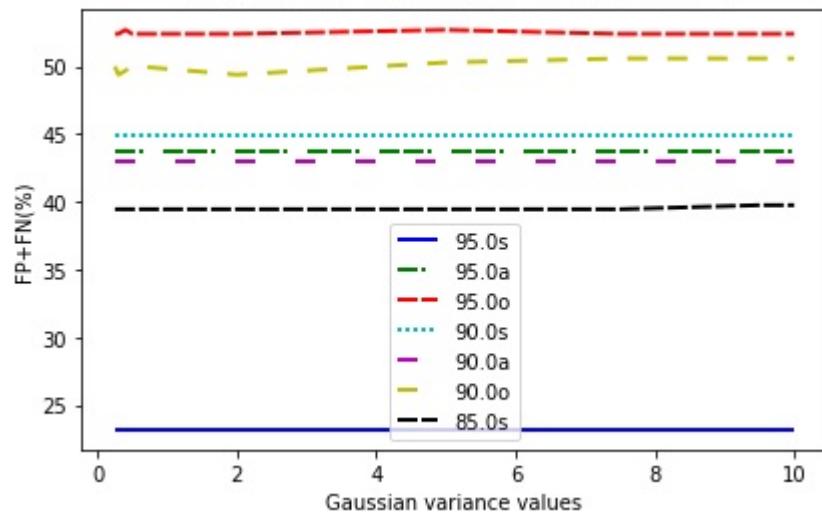
FPFN in Pima Dataset

		95.0s	95.0a	95.0o	90.0s	90.0a	90.0o	85.0s
85.0a	85.0o							
0.25	23.19	43.67	52.41	44.88	43.07	50.00	39.46	
42.47	49.40							
0.30	23.19	43.67	52.41	44.88	43.07	49.40	39.46	
42.47	49.40							
0.40	23.19	43.67	52.71	44.88	43.07	49.70	39.46	
42.47	49.70							
0.50	23.19	43.67	52.41	44.88	43.07	50.00	39.46	
42.47	49.40							
0.60	23.19	43.67	52.41	44.88	43.07	50.00	39.46	
42.47	49.40							
2.00	23.19	43.67	52.41	44.88	43.07	49.40	39.46	
42.47	49.70							
5.00	23.19	43.67	52.71	44.88	43.07	50.30	39.46	
42.47	49.40							

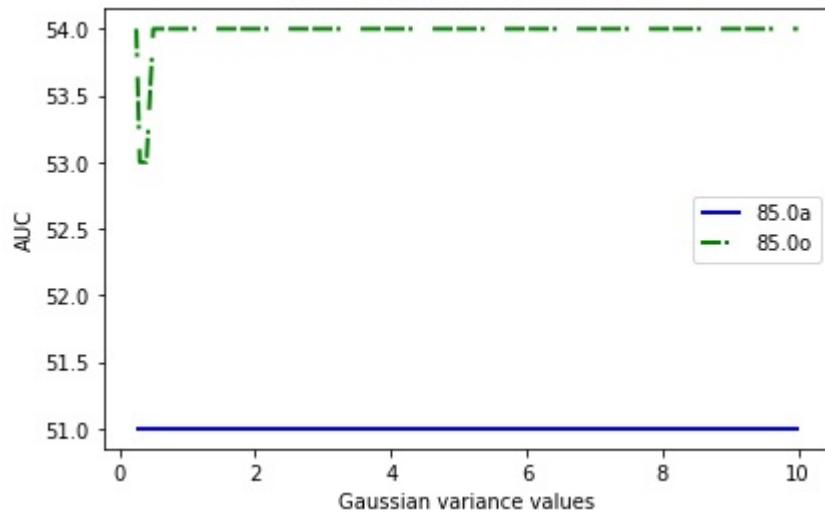
7.50	23.19	43.67	52.41	44.88	43.07	50.60	39.46
42.47	49.40						
9.50	23.19	43.67	52.41	44.88	43.07	50.60	39.76
42.17	49.10						
10.00	23.19	43.67	52.41	44.88	43.07	50.60	39.76
42.17	49.10						



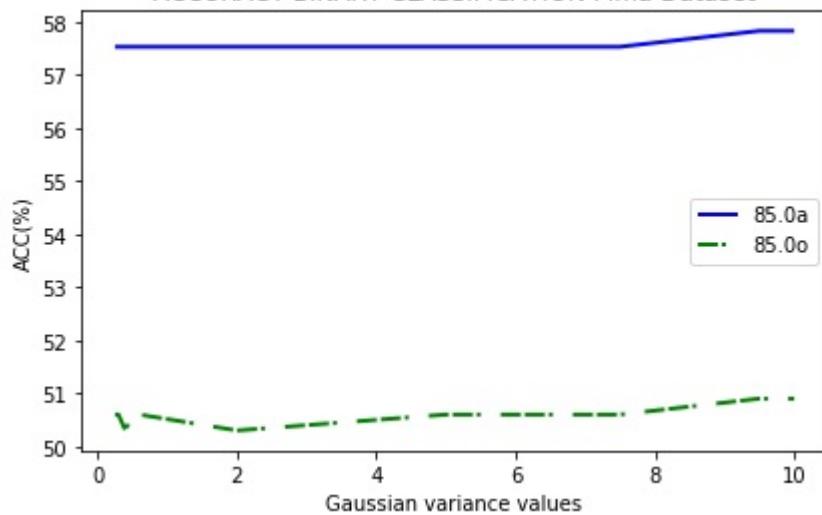
FP+FN BINARY CLASSIFICATION Pima Dataset

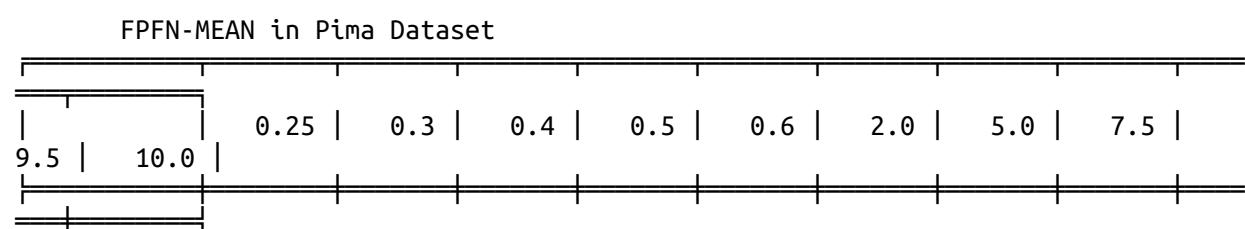
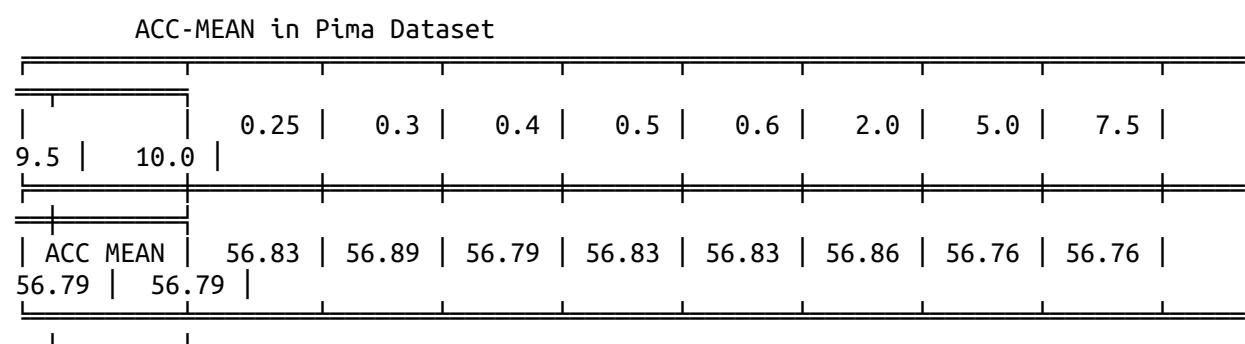
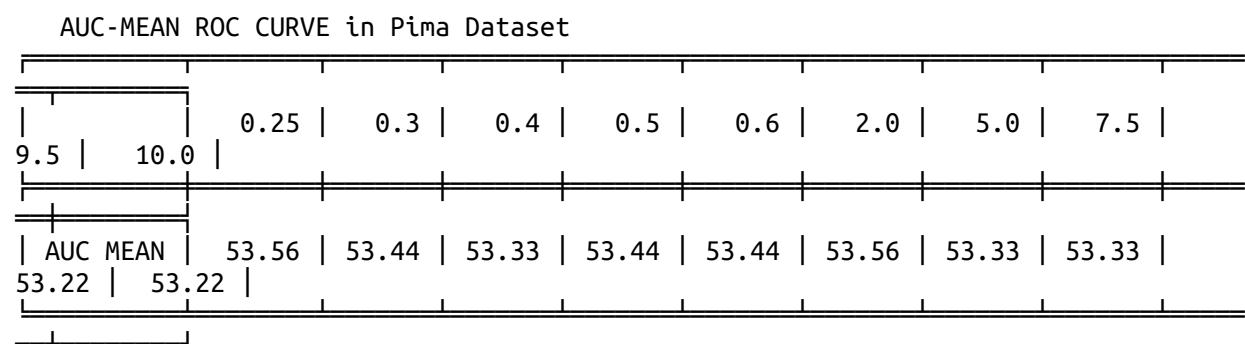
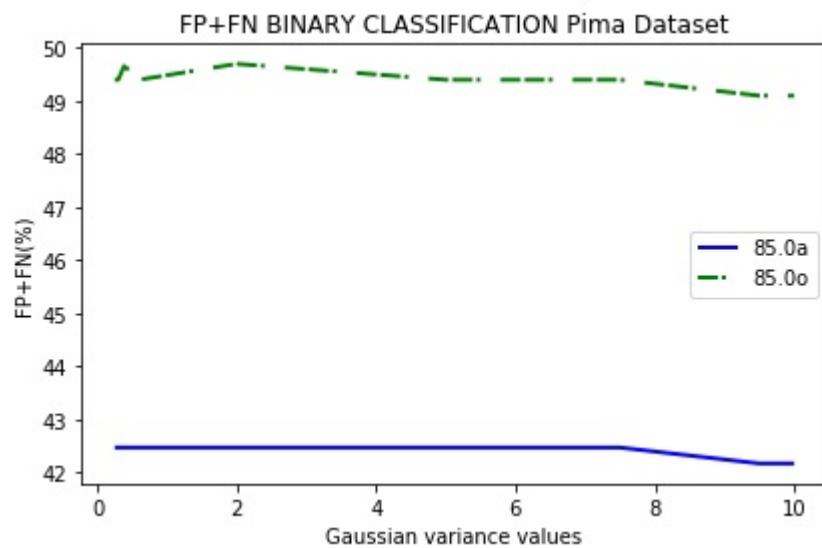


AUC ROC CURVE Pima Dataset



ACCURACY BINARY CLASSIFICATION Pima Dataset





FPFN	MEAN	43.17	43.11	43.21	43.17	43.17	43.14	43.24	43.24
		43.21	43.21						

AUC-TOP ROC CURVE [TOP] in Pima Dataset

10.0	0.25	0.3	0.4	0.5	0.6	2.0	5.0	7.5	9.5
AUC TOP	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00

ACC-TOP in Pima Dataset

10.0	0.25	0.3	0.4	0.5	0.6	2.0	5.0	7.5	9.5
ACC TOP	76.81	76.81	76.81	76.81	76.81	76.81	76.81	76.81	76.81

FPFN-MINIMUM in Pima Dataset

9.5	10.0	0.25	0.3	0.4	0.5	0.6	2.0	5.0	7.5
FPFN MINIMUM	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19	23.19

Sonar Dataset
Parameters: PCA: 95.0%

DATASET TRANSFORMATION: sum
COLLOCATION METHOD: RBF

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0011015
  Initializing linear solver - done. Time (sec): 0.0013256
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002956
  Solving linear system (col. 0) - done. Time (sec): 0.0004945
Training - done. Time (sec): 0.0089734
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0052218

Prediction time/pt. (sec) : 0.0000421
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0015211

Prediction time/pt. (sec) : 0.0000181
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0013912

Prediction time/pt. (sec) : 0.0000166
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0015109  
  
Prediction time/pt. (sec) : 0.0000180
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...  
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0038686  
Initializing linear solver - done. Time (sec): 0.0040810  
Solving linear system (col. 0) ...  
Back solving (125 x 125 mtx) ...  
Back solving (125 x 125 mtx) - done. Time (sec): 0.0002649  
Solving linear system (col. 0) - done. Time (sec): 0.0004151  
Training - done. Time (sec): 0.0081077
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0012288  
  
Prediction time/pt. (sec) : 0.0000146
```

Evaluation

```
# eval points. : 124  
  
Predicting ...  
Predicting - done. Time (sec): 0.0015421  
  
Prediction time/pt. (sec) : 0.0000124
```

Evaluation

```

# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0013545

Prediction time/pt. (sec) : 0.0000161

```

Evaluation

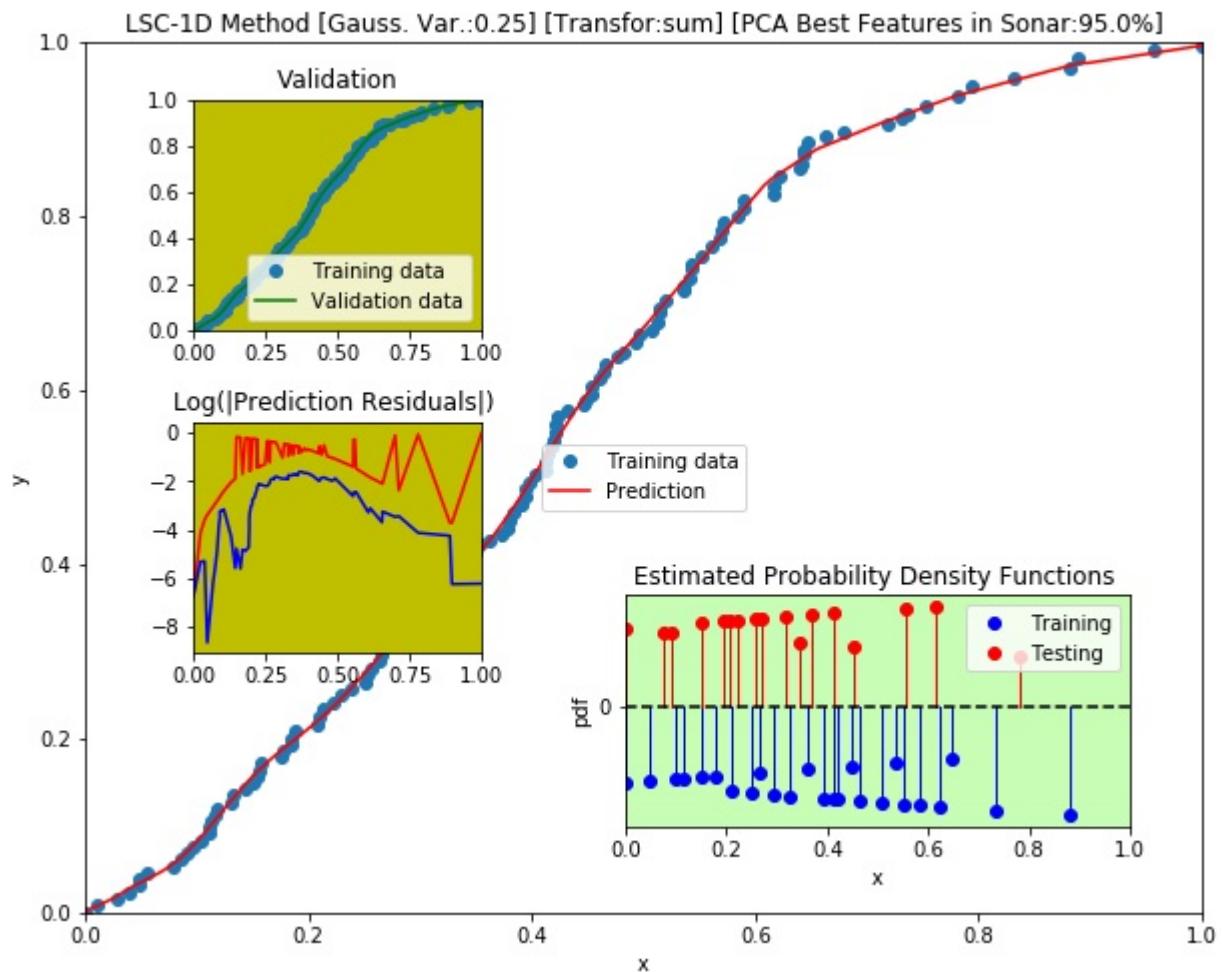
```

# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0027761

Prediction time/pt. (sec) : 0.0000330

```



RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0036809
  Initializing linear solver - done. Time (sec): 0.0040028
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0005143
  Solving linear system (col. 0) - done. Time (sec): 0.0011218
Training - done. Time (sec): 0.0108144
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0100298

Prediction time/pt. (sec) : 0.0000809
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005329

Prediction time/pt. (sec) : 0.0000063
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0024707

Prediction time/pt. (sec) : 0.0000294
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0007820
```

Prediction time/pt. (sec) : 0.0000093

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0082998
  Initializing linear solver - done. Time (sec): 0.0084834
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002425
  Solving linear system (col. 0) - done. Time (sec): 0.0003707
Training - done. Time (sec): 0.0103860
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005283

Prediction time/pt. (sec) : 0.0000063
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0007010

Prediction time/pt. (sec) : 0.0000057
```

Evaluation

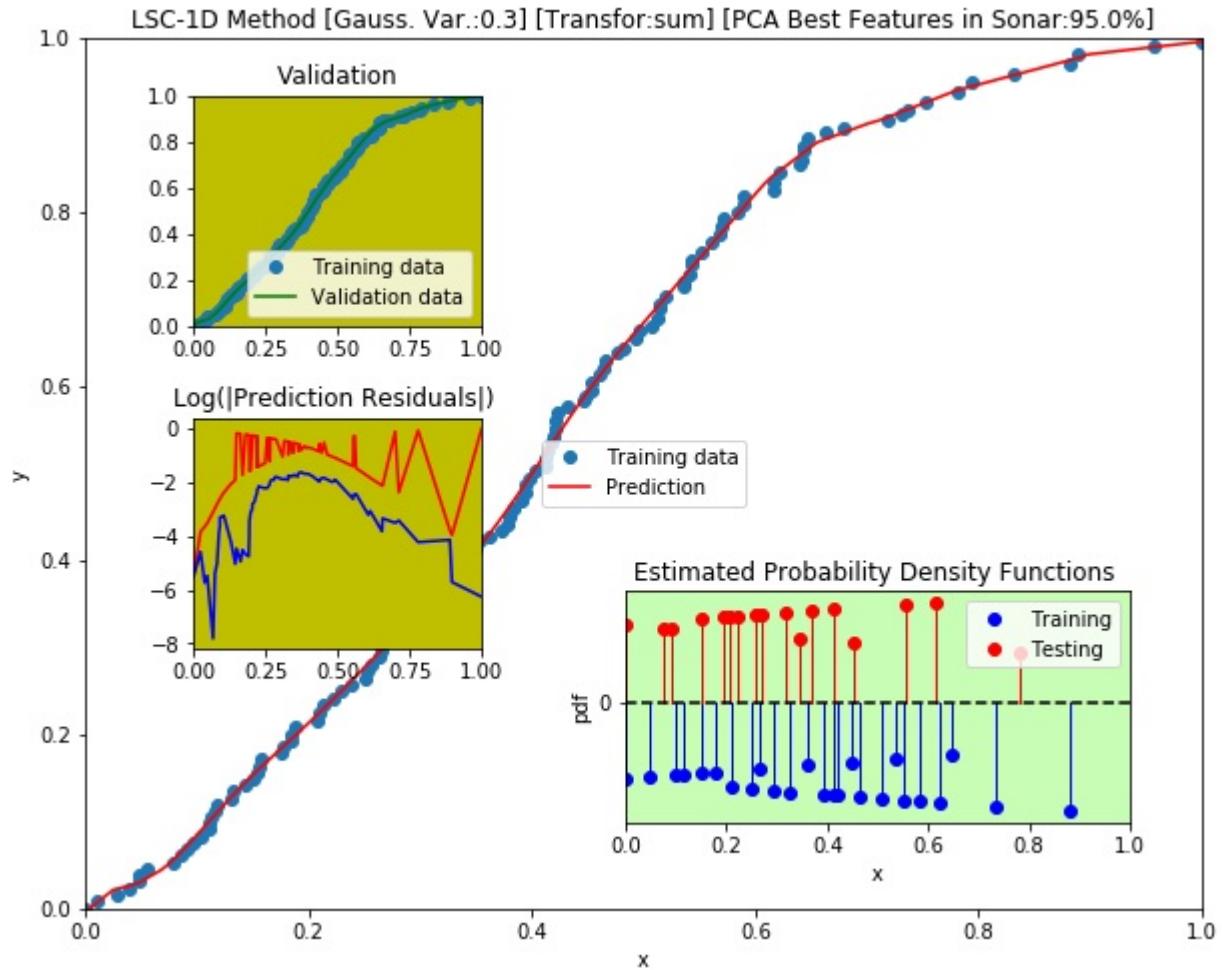
```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0042980

Prediction time/pt. (sec) : 0.0000512
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005276  
Prediction time/pt. (sec) : 0.0000063
```



Sonar Dataset
Parameters: PCA: 95.0%
DATASET TRANSFORMATION: sum
COLOCATION METHOD: RBF

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0063889
  Initializing linear solver - done. Time (sec): 0.0066237
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0004334
  Solving linear system (col. 0) - done. Time (sec): 0.0005941
Training - done. Time (sec): 0.0227914
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0019572

Prediction time/pt. (sec) : 0.0000158
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0052037

Prediction time/pt. (sec) : 0.0000619
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005074

Prediction time/pt. (sec) : 0.0000060
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005240

Prediction time/pt. (sec) : 0.0000062
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0006523
  Initializing linear solver - done. Time (sec): 0.0008221
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0001953
  Solving linear system (col. 0) - done. Time (sec): 0.0003171
Training - done. Time (sec): 0.0026348
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005226

Prediction time/pt. (sec) : 0.0000062
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0006983

Prediction time/pt. (sec) : 0.0000056
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0079165

Prediction time/pt. (sec) : 0.0000942
```

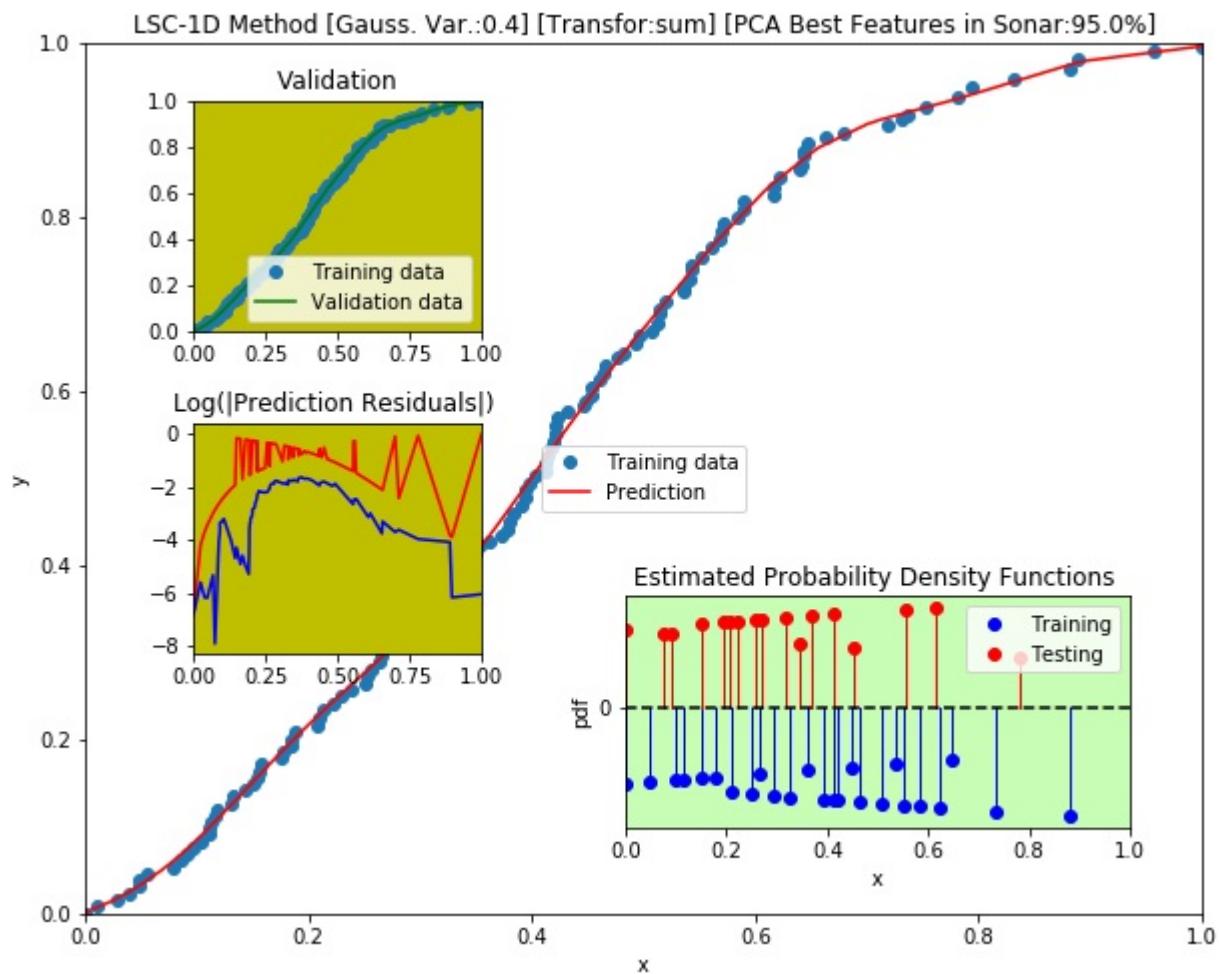
Evaluation

```
# eval points. : 84

Predicting ...
```

Predicting - done. Time (sec): 0.0005045

Prediction time/pt. (sec) : 0.0000060



Sonar Dataset

Parameters: PCA: 95.0%
DATASET TRANSFORMATION: sum
COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

Training ...
Initializing linear solver ...
Performing LU fact. (125 x 125 mtx) ...
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0007839
Initializing linear solver - done. Time (sec): 0.0017452
Solving linear system (col. 0) ...

```
Back solving (125 x 125 mtx) ...
Back solving (125 x 125 mtx) - done. Time (sec): 0.0002303
Solving linear system (col. 0) - done. Time (sec): 0.0008183
Training - done. Time (sec): 0.0059924
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0041561

Prediction time/pt. (sec) : 0.0000335
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005429

Prediction time/pt. (sec) : 0.0000065
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005748

Prediction time/pt. (sec) : 0.0000068
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005383

Prediction time/pt. (sec) : 0.0000064
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0024645
  Initializing linear solver - done. Time (sec): 0.0029244
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002365
  Solving linear system (col. 0) - done. Time (sec): 0.0008485
Training - done. Time (sec): 0.0059316
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0012734

Prediction time/pt. (sec) : 0.0000152
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0006828

Prediction time/pt. (sec) : 0.0000055
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004640

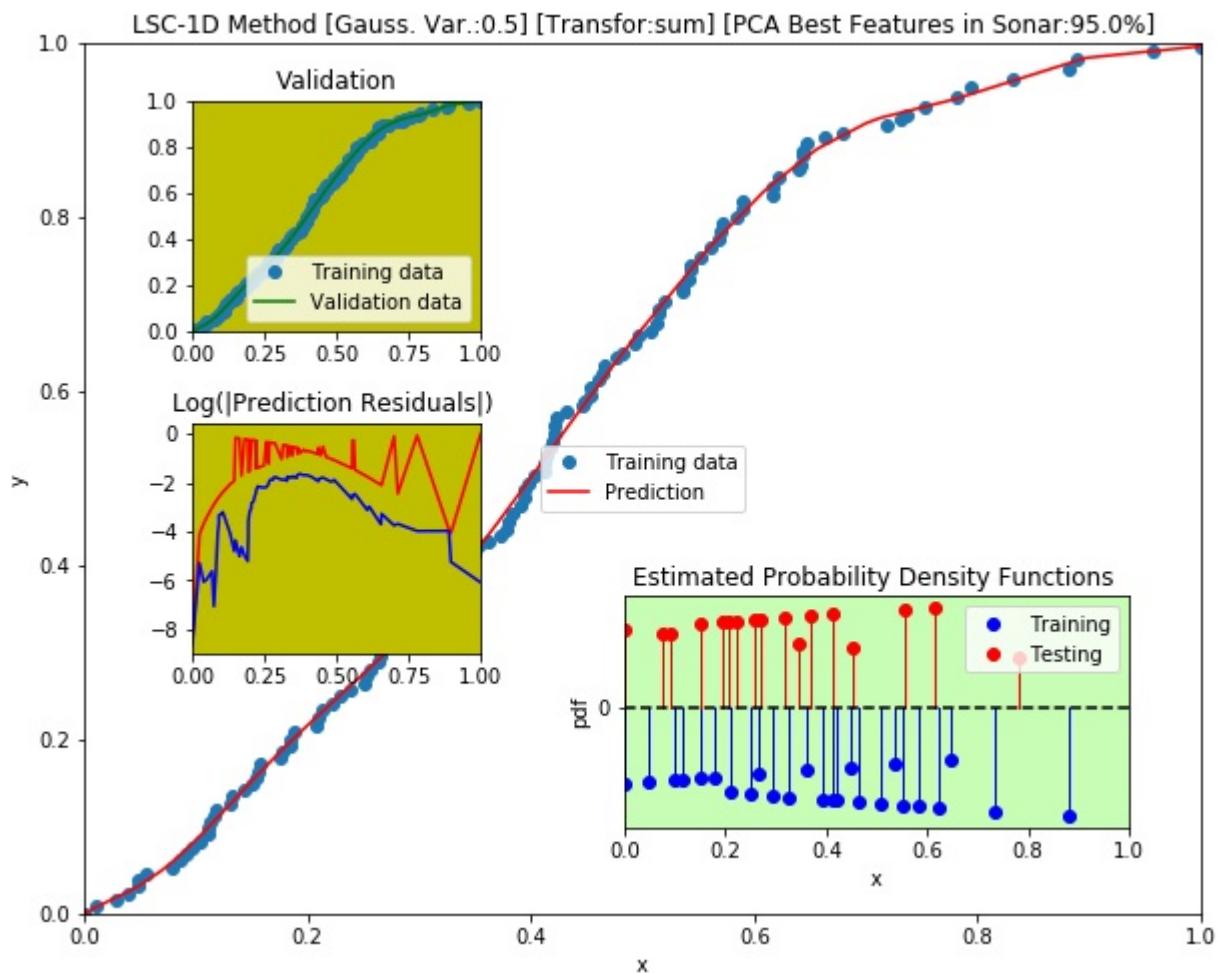
Prediction time/pt. (sec) : 0.0000055
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0073364

Prediction time/pt. (sec) : 0.0000873
```



Sonar Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0008168
  Initializing linear solver - done. Time (sec): 0.0018158
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002894
  Solving linear system (col. 0) - done. Time (sec): 0.0011814
Training - done. Time (sec): 0.0073764

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0070584  
Prediction time/pt. (sec) : 0.0000569
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005369  
Prediction time/pt. (sec) : 0.0000064
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005045  
Prediction time/pt. (sec) : 0.0000060
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004897  
Prediction time/pt. (sec) : 0.0000058
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0019865
Initializing linear solver - done. Time (sec): 0.0024478
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002379
    Solving linear system (col. 0) - done. Time (sec): 0.0008206
Training - done. Time (sec): 0.0053959
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005074

Prediction time/pt. (sec) : 0.0000060
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0017366

Prediction time/pt. (sec) : 0.0000140
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0033364

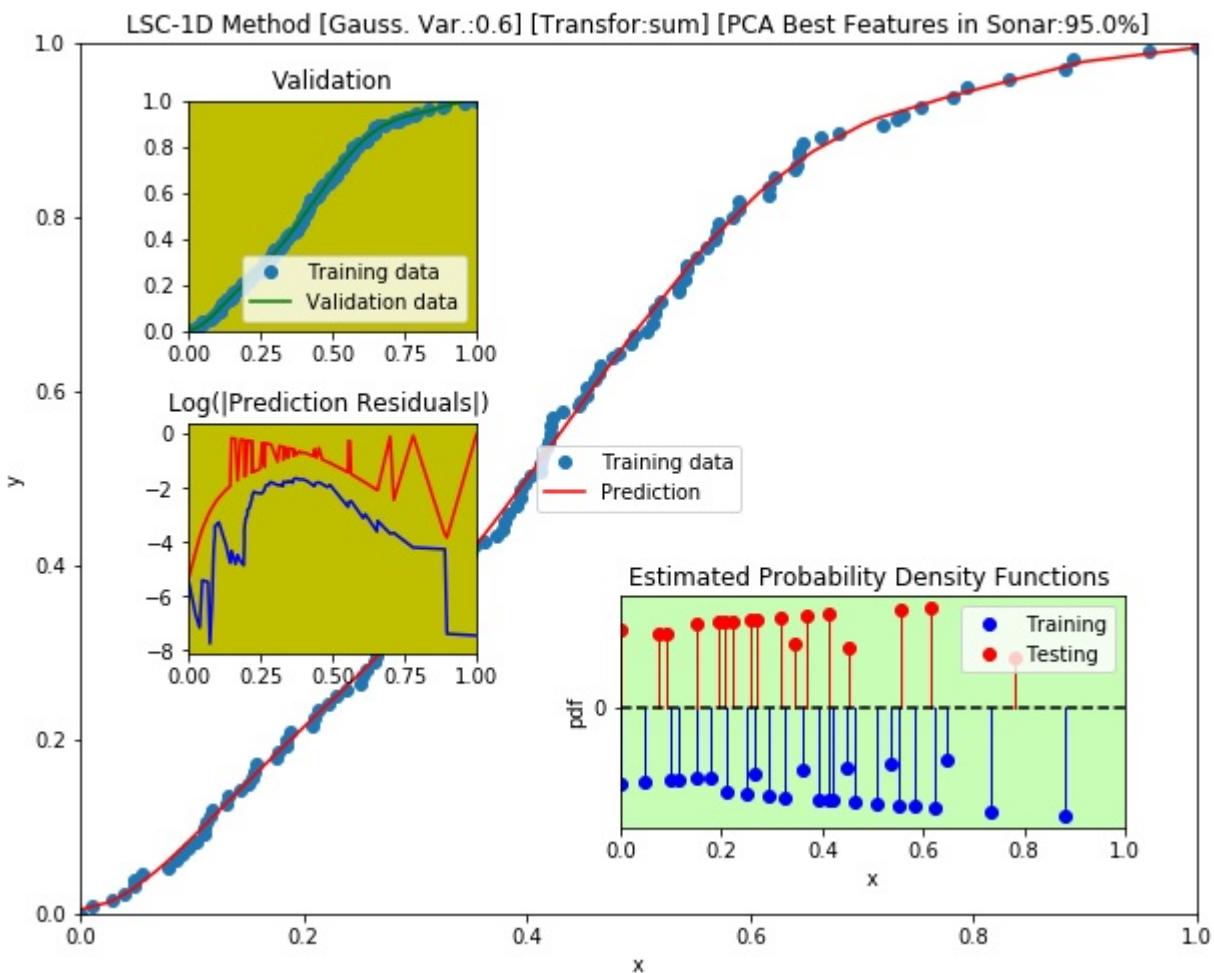
Prediction time/pt. (sec) : 0.0000397
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0029328

Prediction time/pt. (sec) : 0.0000349
```



Sonar Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0076399
  Initializing linear solver - done. Time (sec): 0.0089016
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0003231
  Solving linear system (col. 0) - done. Time (sec): 0.0017810
Training - done. Time (sec): 0.0143156

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0026288  
Prediction time/pt. (sec) : 0.0000212
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0027084  
Prediction time/pt. (sec) : 0.0000322
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0026636  
Prediction time/pt. (sec) : 0.0000317
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0027256  
Prediction time/pt. (sec) : 0.0000324
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0168746
Initializing linear solver - done. Time (sec): 0.0172992
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0008948
    Solving linear system (col. 0) - done. Time (sec): 0.0010664
Training - done. Time (sec): 0.0219073
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0018668

Prediction time/pt. (sec) : 0.0000222
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0020523

Prediction time/pt. (sec) : 0.0000166
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0020626

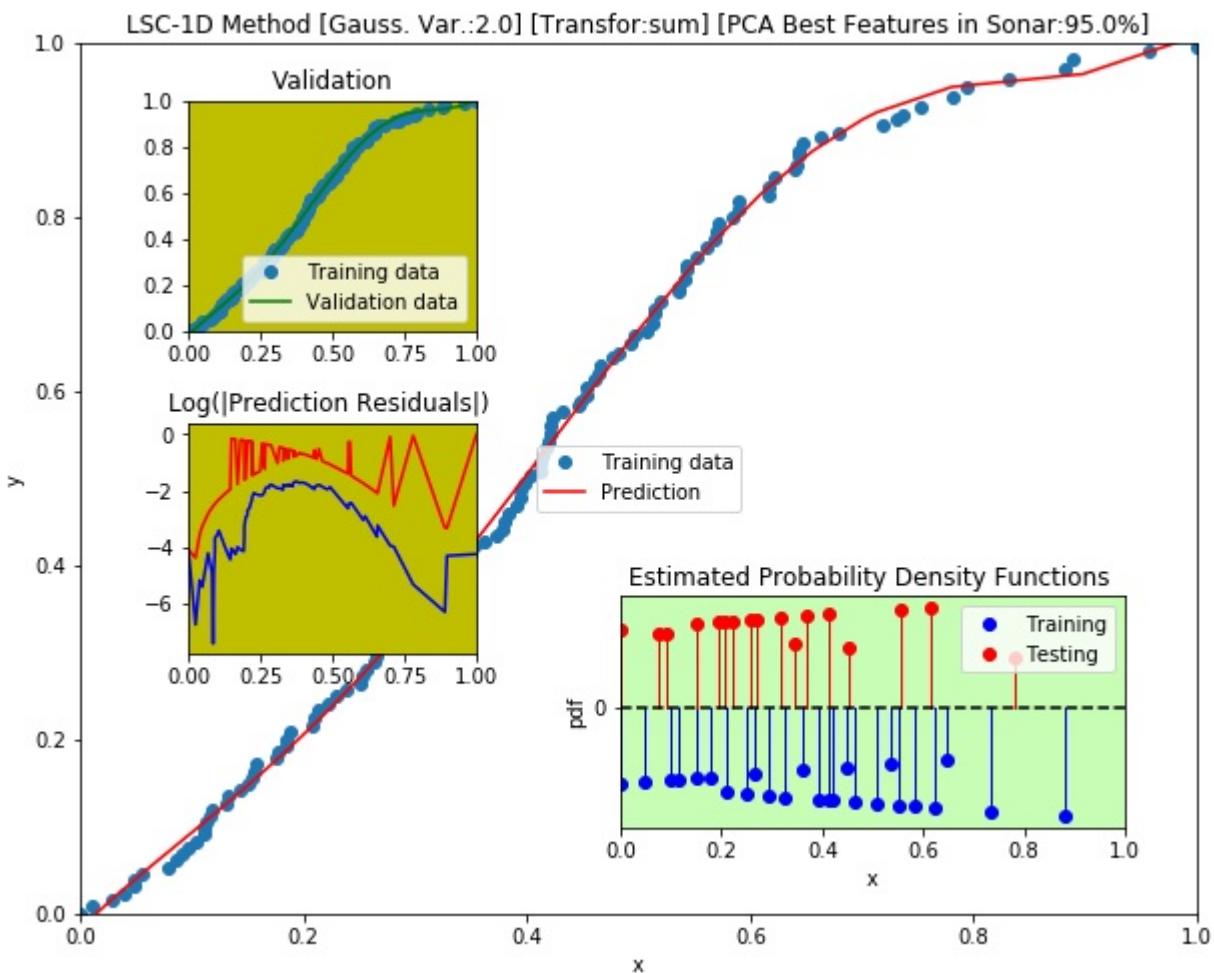
Prediction time/pt. (sec) : 0.0000246
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0014904

Prediction time/pt. (sec) : 0.0000177
```



Sonar Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0088644
  Initializing linear solver - done. Time (sec): 0.0094852
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0011728
  Solving linear system (col. 0) - done. Time (sec): 0.0013511
Training - done. Time (sec): 0.0133204

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0022669  
Prediction time/pt. (sec) : 0.0000183
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0018554  
Prediction time/pt. (sec) : 0.0000221
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0035770  
Prediction time/pt. (sec) : 0.0000426
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0018094  
Prediction time/pt. (sec) : 0.0000215
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0133388
Initializing linear solver - done. Time (sec): 0.0135944
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002832
    Solving linear system (col. 0) - done. Time (sec): 0.0004897
Training - done. Time (sec): 0.0175171
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0017939

Prediction time/pt. (sec) : 0.0000214
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0025969

Prediction time/pt. (sec) : 0.0000209
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0018830

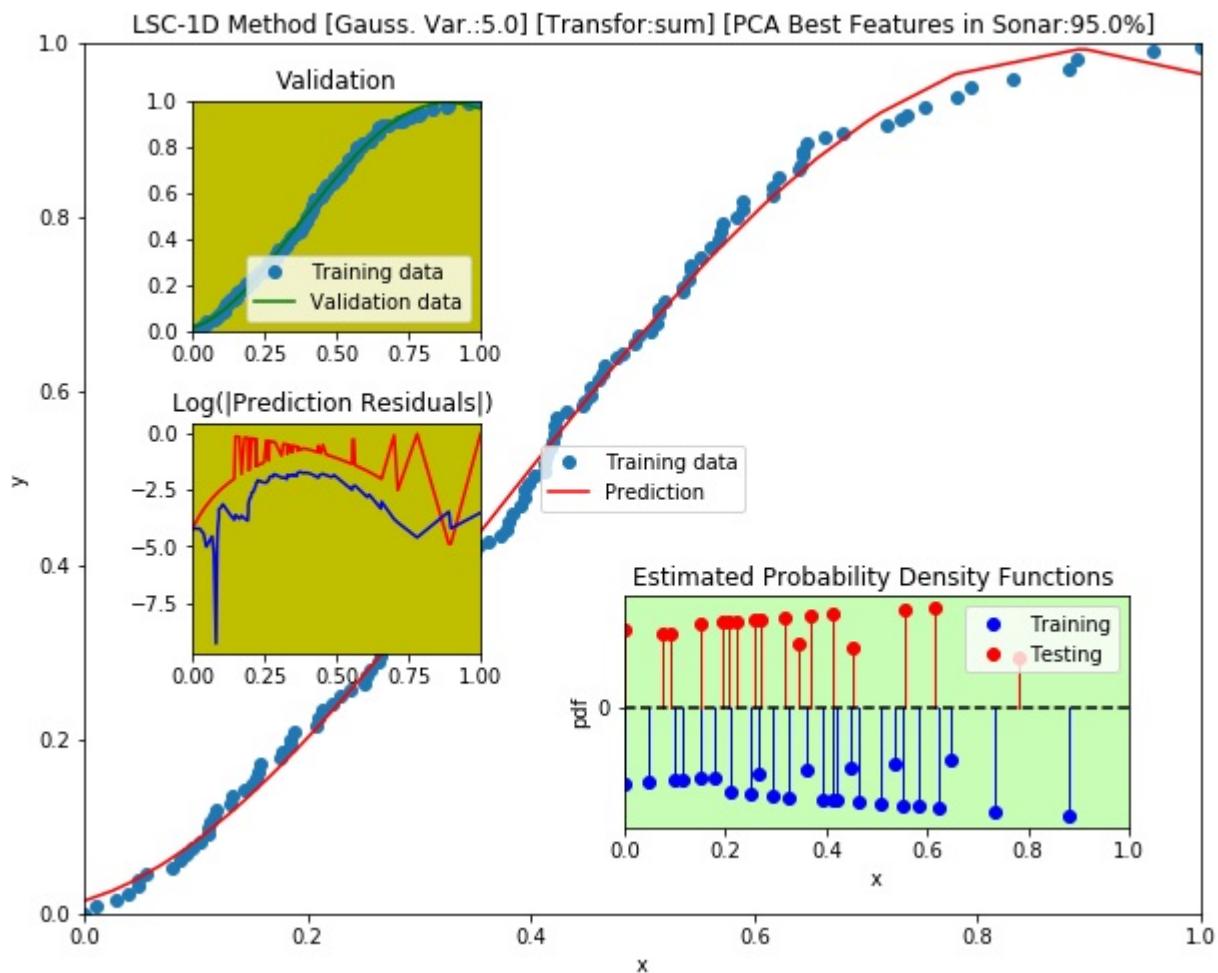
Prediction time/pt. (sec) : 0.0000224
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0031304

Prediction time/pt. (sec) : 0.0000373
```



Sonar Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0121326
  Initializing linear solver - done. Time (sec): 0.0124295
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002844
  Solving linear system (col. 0) - done. Time (sec): 0.0004828
Training - done. Time (sec): 0.0241795

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0017500  
Prediction time/pt. (sec) : 0.0000141
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0036621  
Prediction time/pt. (sec) : 0.0000436
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0083575  
Prediction time/pt. (sec) : 0.0000995
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0029824  
Prediction time/pt. (sec) : 0.0000355
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0035255
Initializing linear solver - done. Time (sec): 0.0037298
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002382
    Solving linear system (col. 0) - done. Time (sec): 0.0003693
Training - done. Time (sec): 0.0058911
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004172

Prediction time/pt. (sec) : 0.0000050
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0127680

Prediction time/pt. (sec) : 0.0001030
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0028811

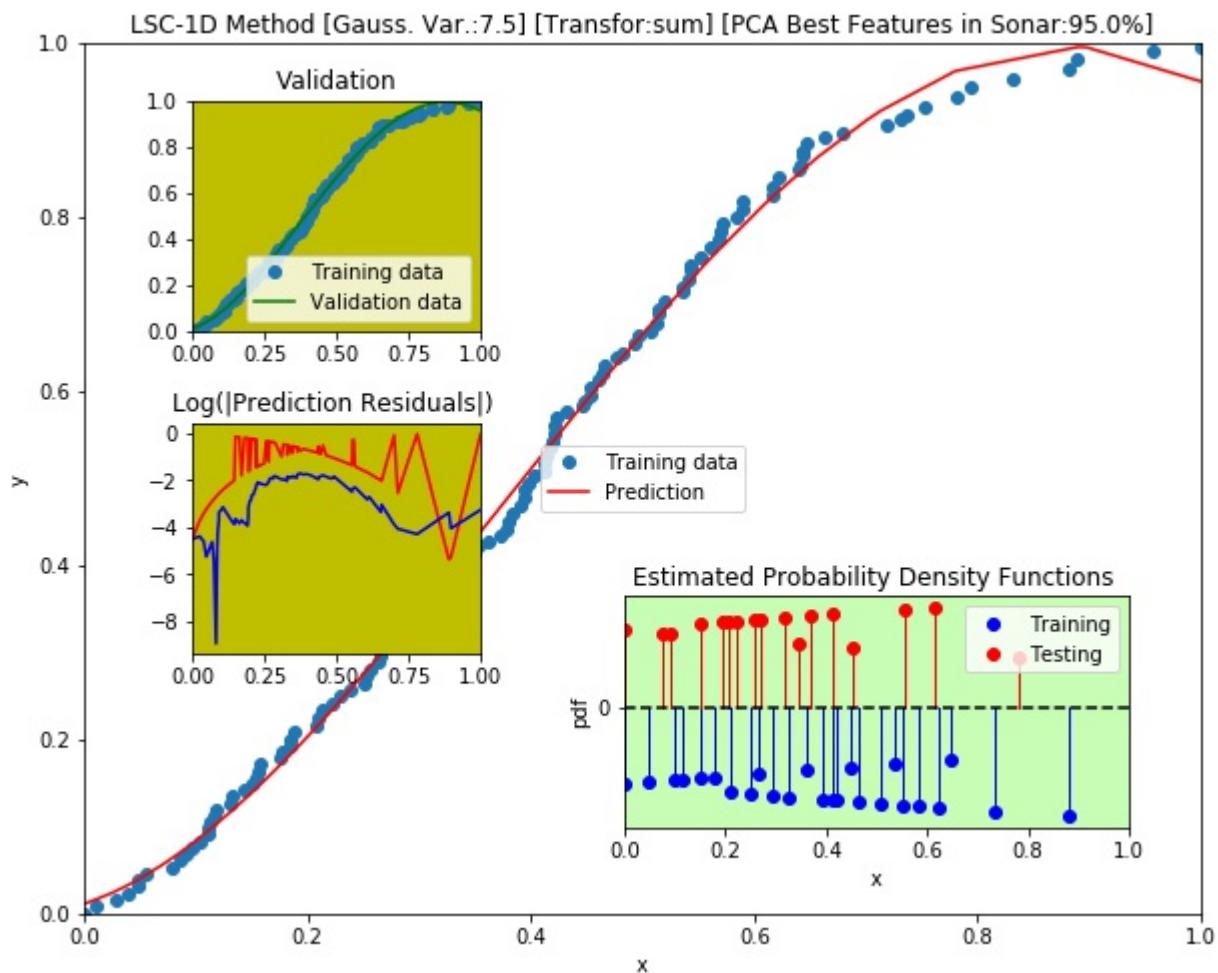
Prediction time/pt. (sec) : 0.0000343
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004079

Prediction time/pt. (sec) : 0.0000049
```



Sonar Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0109880
  Initializing linear solver - done. Time (sec): 0.0121872
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002999
  Solving linear system (col. 0) - done. Time (sec): 0.0020897
Training - done. Time (sec): 0.0183618

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0019412  
Prediction time/pt. (sec) : 0.0000157
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0029762  
Prediction time/pt. (sec) : 0.0000354
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0027232  
Prediction time/pt. (sec) : 0.0000324
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0027308  
Prediction time/pt. (sec) : 0.0000325
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0172567
Initializing linear solver - done. Time (sec): 0.0174856
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0009818
    Solving linear system (col. 0) - done. Time (sec): 0.0011597
Training - done. Time (sec): 0.0223863
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0043182

Prediction time/pt. (sec) : 0.0000514
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0020714

Prediction time/pt. (sec) : 0.0000167
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0018785

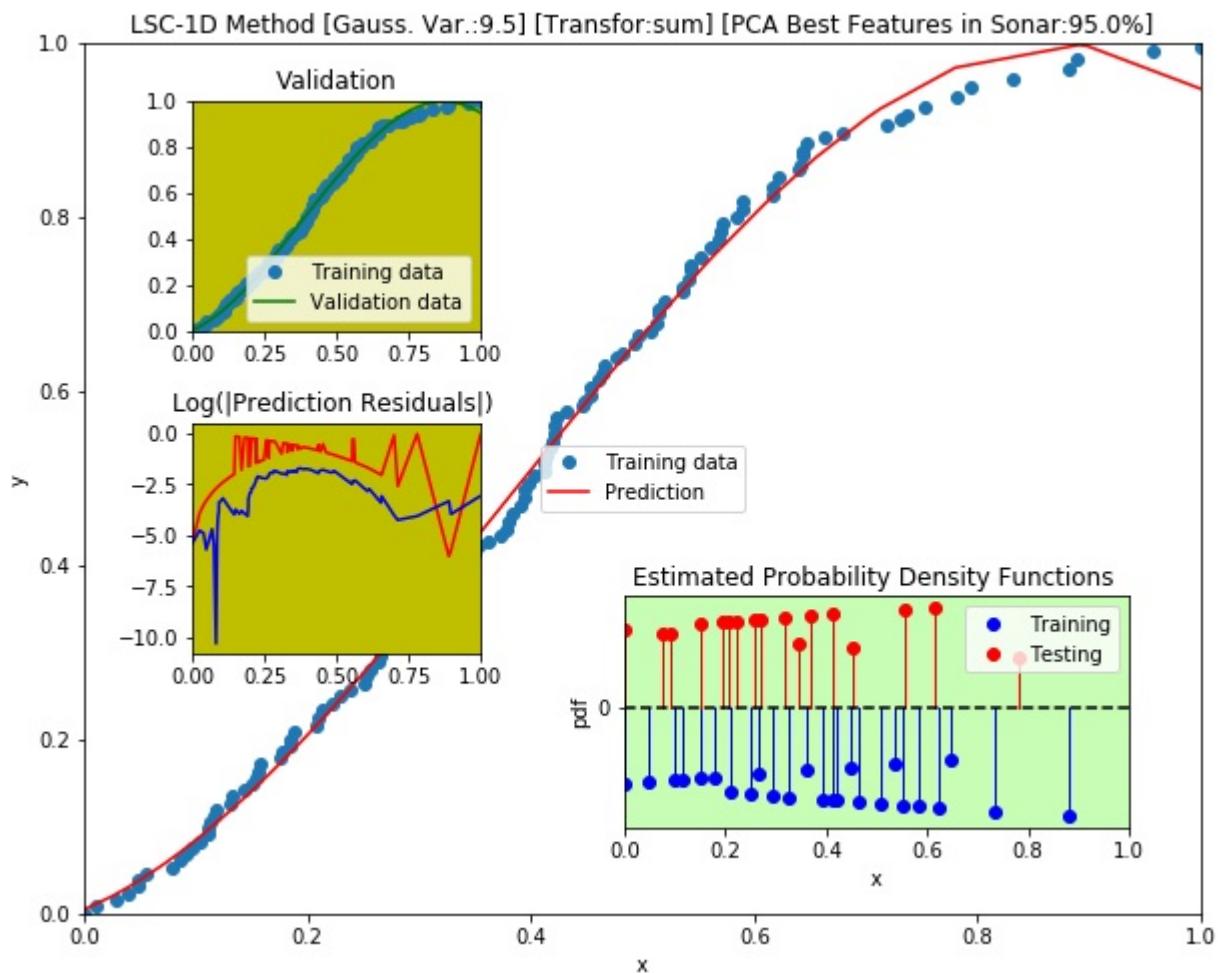
Prediction time/pt. (sec) : 0.0000224
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0025582

Prediction time/pt. (sec) : 0.0000305
```



Sonar Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0134177
  Initializing linear solver - done. Time (sec): 0.0139964
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0004799
  Solving linear system (col. 0) - done. Time (sec): 0.0006578
Training - done. Time (sec): 0.0170724

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0031886  
Prediction time/pt. (sec) : 0.0000257
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0013845  
Prediction time/pt. (sec) : 0.0000165
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0013978  
Prediction time/pt. (sec) : 0.0000166
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0012879  
Prediction time/pt. (sec) : 0.0000153
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0070000
Initializing linear solver - done. Time (sec): 0.0072653
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002594
    Solving linear system (col. 0) - done. Time (sec): 0.0003986
Training - done. Time (sec): 0.0113978
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0024731

Prediction time/pt. (sec) : 0.0000294
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0013804

Prediction time/pt. (sec) : 0.0000111
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0053318

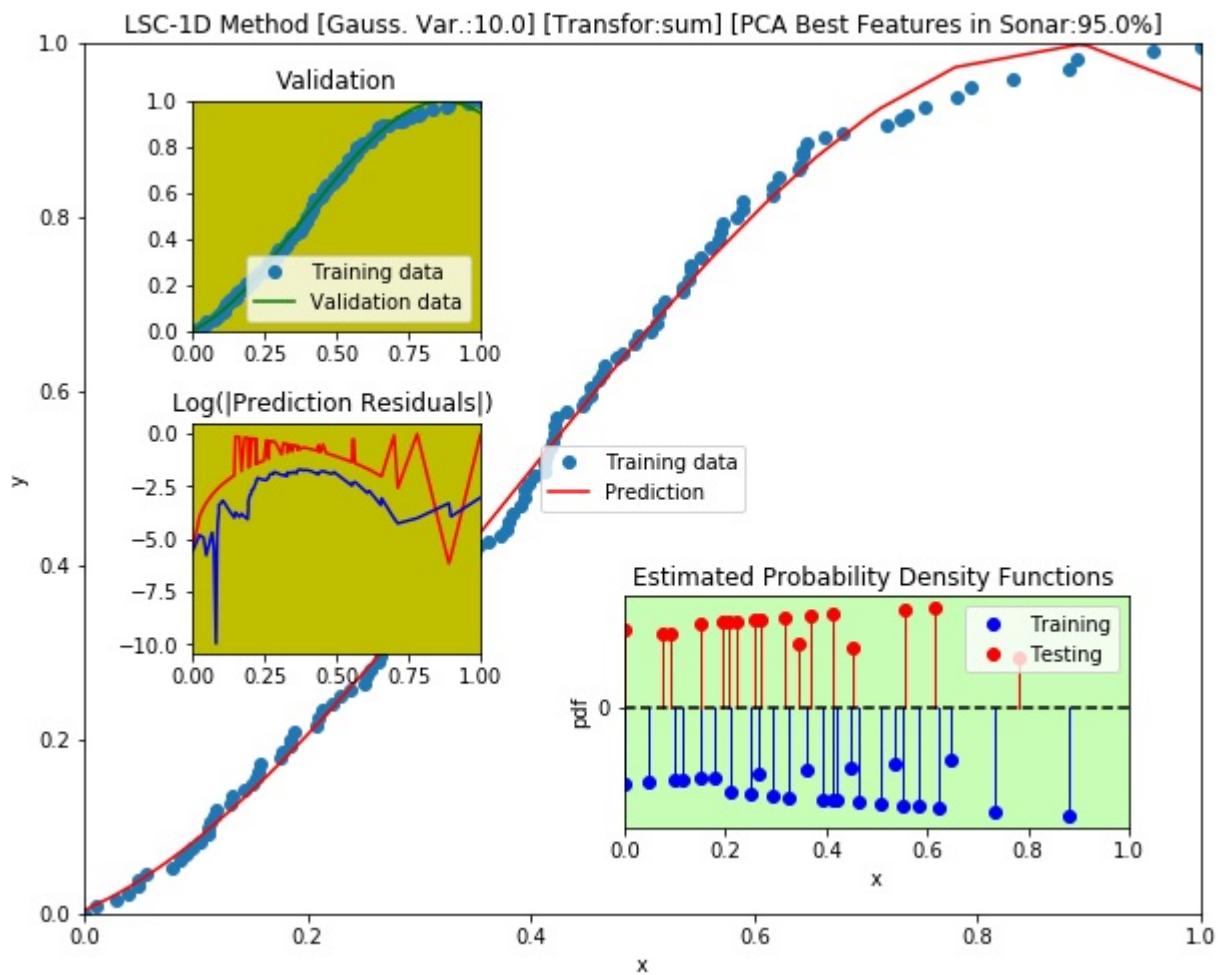
Prediction time/pt. (sec) : 0.0000635
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0010006

Prediction time/pt. (sec) : 0.0000119
```



Sonar Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0012155
  Initializing linear solver - done. Time (sec): 0.0014286
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002127
  Solving linear system (col. 0) - done. Time (sec): 0.0003357
Training - done. Time (sec): 0.0084839

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0021753  
Prediction time/pt. (sec) : 0.0000175
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004644  
Prediction time/pt. (sec) : 0.0000055
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0118906  
Prediction time/pt. (sec) : 0.0001416
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004995  
Prediction time/pt. (sec) : 0.0000059
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0041697
Initializing linear solver - done. Time (sec): 0.0043426
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002265
    Solving linear system (col. 0) - done. Time (sec): 0.0003524
Training - done. Time (sec): 0.0062127
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0022032

Prediction time/pt. (sec) : 0.0000262
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0072930

Prediction time/pt. (sec) : 0.0000588
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005121

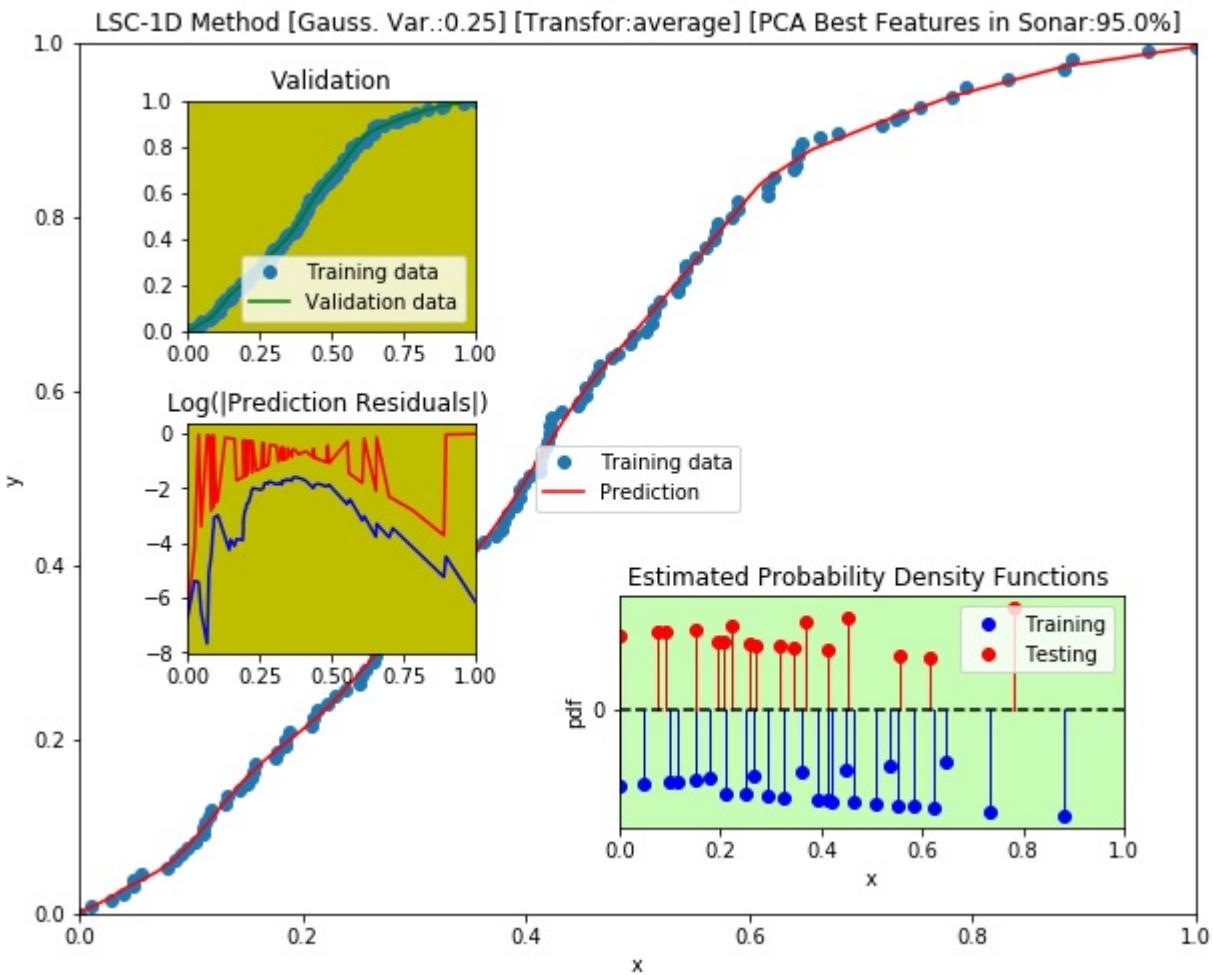
Prediction time/pt. (sec) : 0.0000061
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004716

Prediction time/pt. (sec) : 0.0000056
```



Sonar Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

Training ...

Initializing linear solver ...

Performing LU fact. (125 x 125 mtx) ...

Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0007701

Initializing linear solver - done. Time (sec): 0.0017798

Solving linear system (col. 0) ...

Back solving (125 x 125 mtx) ...

Back solving (125 x 125 mtx) - done. Time (sec): 0.0002882

Solving linear system (col. 0) - done. Time (sec): 0.0011432

Training - done. Time (sec): 0.0066531

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0056326  
Prediction time/pt. (sec) : 0.0000454
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0017304  
Prediction time/pt. (sec) : 0.0000206
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0011711  
Prediction time/pt. (sec) : 0.0000139
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0012329  
Prediction time/pt. (sec) : 0.0000147
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0006950
Initializing linear solver - done. Time (sec): 0.0014040
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002222
    Solving linear system (col. 0) - done. Time (sec): 0.0008738
Training - done. Time (sec): 0.0051434
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005817

Prediction time/pt. (sec) : 0.0000069
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0008230

Prediction time/pt. (sec) : 0.0000066
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005691

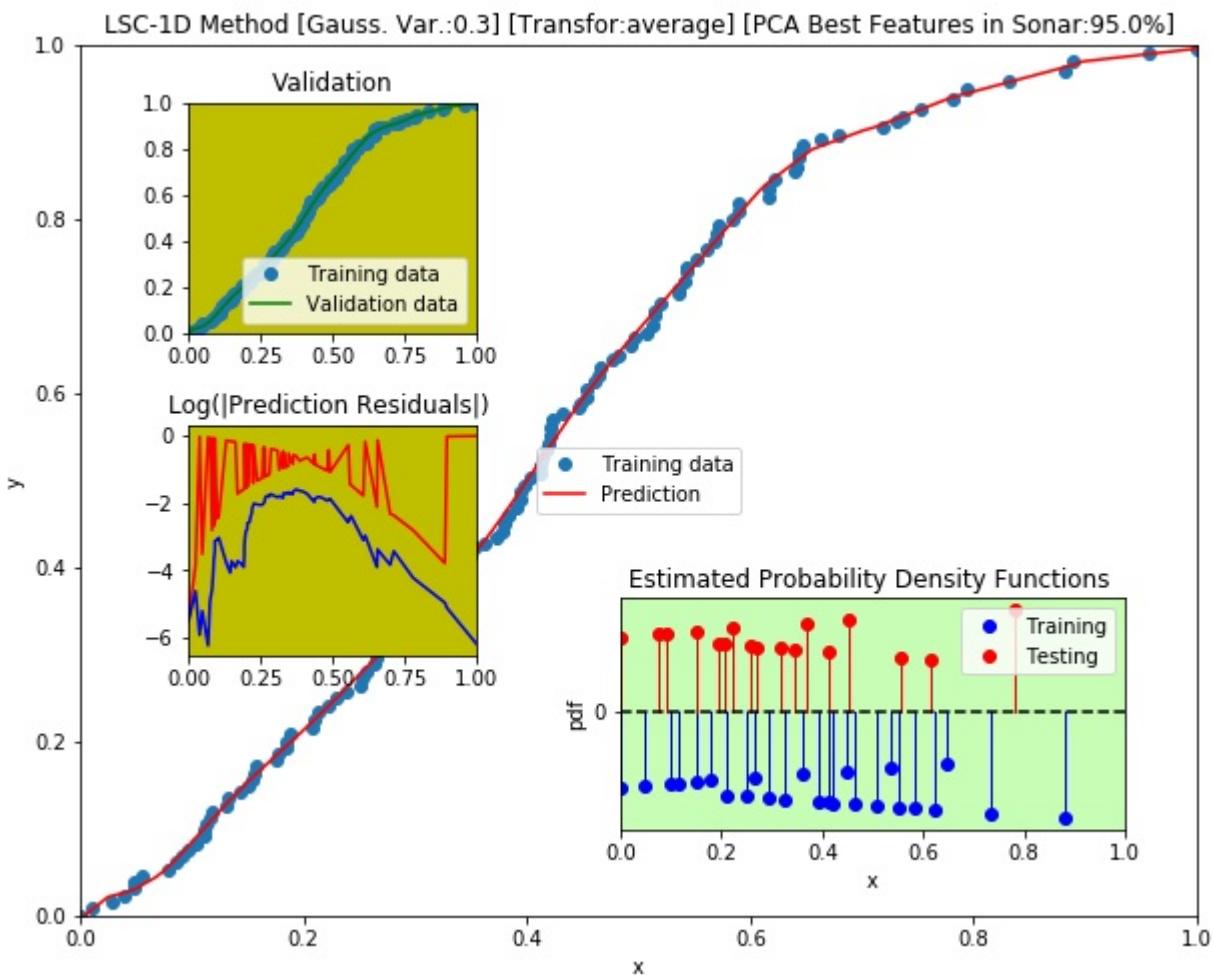
Prediction time/pt. (sec) : 0.0000068
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005620

Prediction time/pt. (sec) : 0.0000067
```



Sonar Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0114965
  Initializing linear solver - done. Time (sec): 0.0127356
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0003066
  Solving linear system (col. 0) - done. Time (sec): 0.0016670
Training - done. Time (sec): 0.0179062

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0024428  
Prediction time/pt. (sec) : 0.0000197
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0016193  
Prediction time/pt. (sec) : 0.0000193
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0015955  
Prediction time/pt. (sec) : 0.0000190
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0016370  
Prediction time/pt. (sec) : 0.0000195
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0062375
Initializing linear solver - done. Time (sec): 0.0064671
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0008671
    Solving linear system (col. 0) - done. Time (sec): 0.0010278
Training - done. Time (sec): 0.0118065
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0015185

Prediction time/pt. (sec) : 0.0000181
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0019362

Prediction time/pt. (sec) : 0.0000156
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0013716

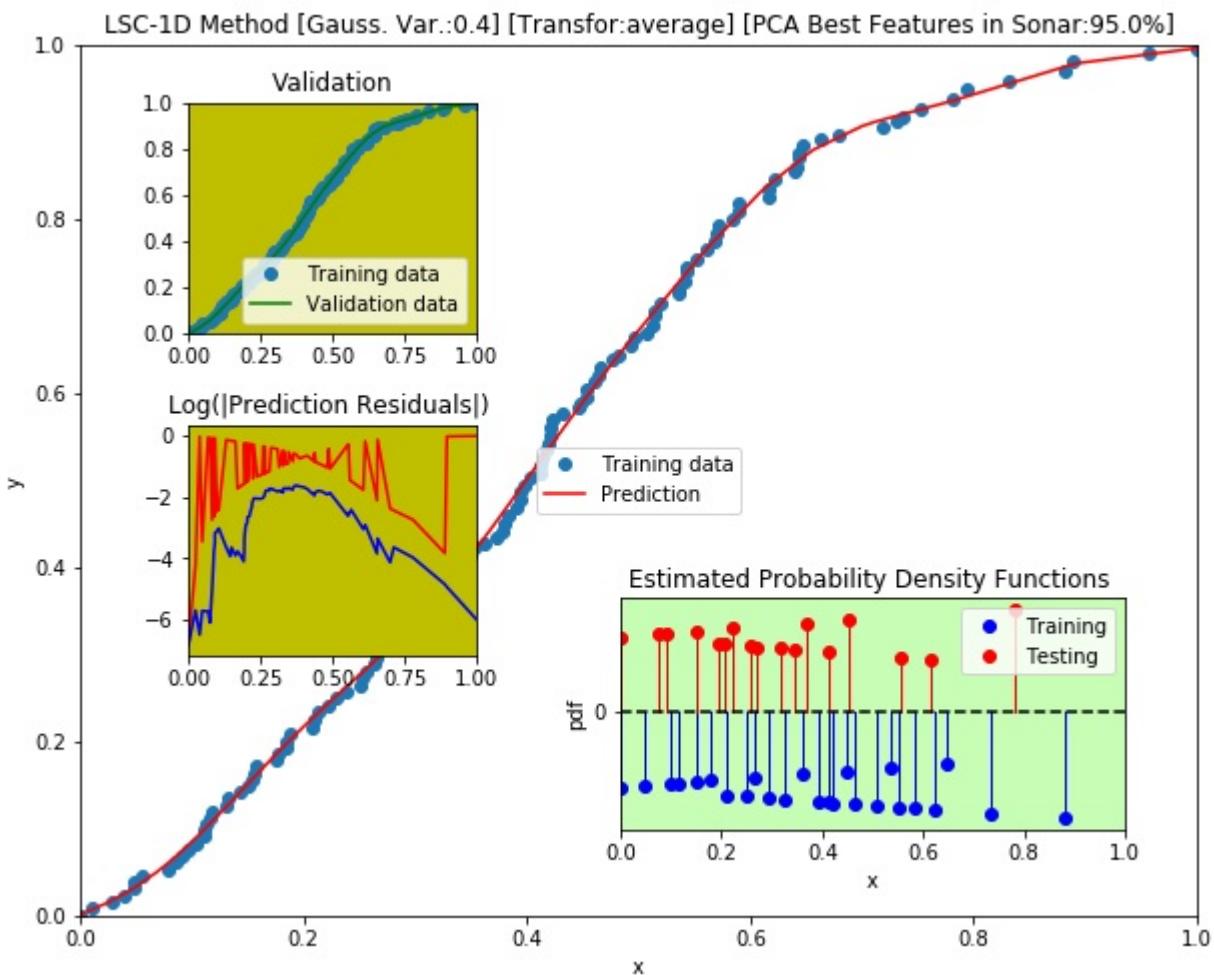
Prediction time/pt. (sec) : 0.0000163
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0017738

Prediction time/pt. (sec) : 0.0000211
```



Sonar Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0051537
  Initializing linear solver - done. Time (sec): 0.0055187
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0004768
  Solving linear system (col. 0) - done. Time (sec): 0.0006535
Training - done. Time (sec): 0.0080545

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0014493  
Prediction time/pt. (sec) : 0.0000117
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0016732  
Prediction time/pt. (sec) : 0.0000199
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0015156  
Prediction time/pt. (sec) : 0.0000180
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0015419  
Prediction time/pt. (sec) : 0.0000184
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0068936
Initializing linear solver - done. Time (sec): 0.0071132
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002544
    Solving linear system (col. 0) - done. Time (sec): 0.0004117
Training - done. Time (sec): 0.0115345
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005496

Prediction time/pt. (sec) : 0.0000065
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0016065

Prediction time/pt. (sec) : 0.0000130
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0015447

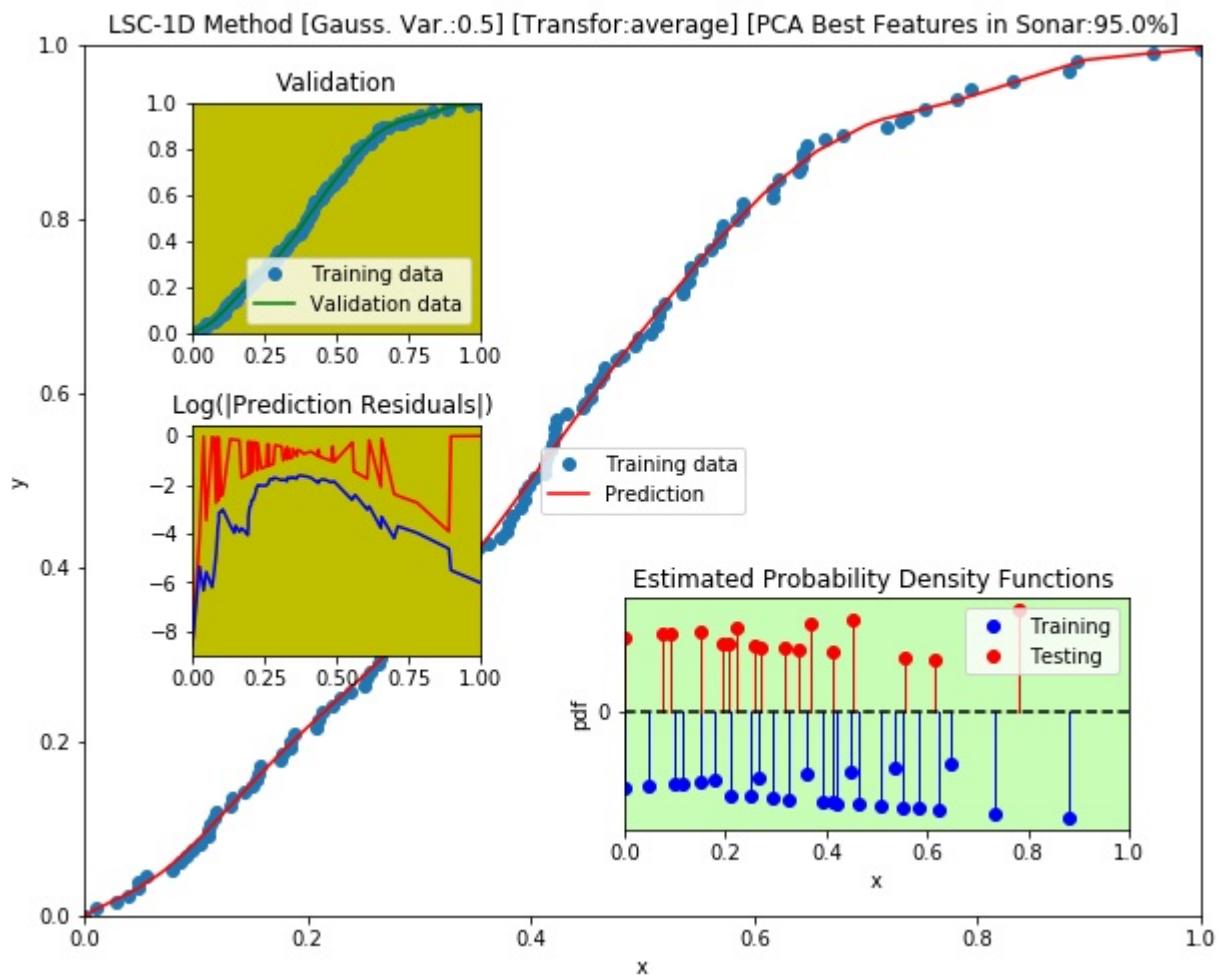
Prediction time/pt. (sec) : 0.0000184
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0012712

Prediction time/pt. (sec) : 0.0000151
```



Sonar Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0011075
  Initializing linear solver - done. Time (sec): 0.0020344
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002871
  Solving linear system (col. 0) - done. Time (sec): 0.0011475
Training - done. Time (sec): 0.0062678

```

Evaluation

```
# eval points. : 124  
  
Predicting ...  
Predicting - done. Time (sec): 0.0054412  
  
Prediction time/pt. (sec) : 0.0000439
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0005591  
  
Prediction time/pt. (sec) : 0.0000067
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0005302  
  
Prediction time/pt. (sec) : 0.0000063
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0005364  
  
Prediction time/pt. (sec) : 0.0000064
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0025499
Initializing linear solver - done. Time (sec): 0.0030084
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002441
    Solving linear system (col. 0) - done. Time (sec): 0.0009043
Training - done. Time (sec): 0.0062788
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005262

Prediction time/pt. (sec) : 0.0000063
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0035923

Prediction time/pt. (sec) : 0.0000290
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005147

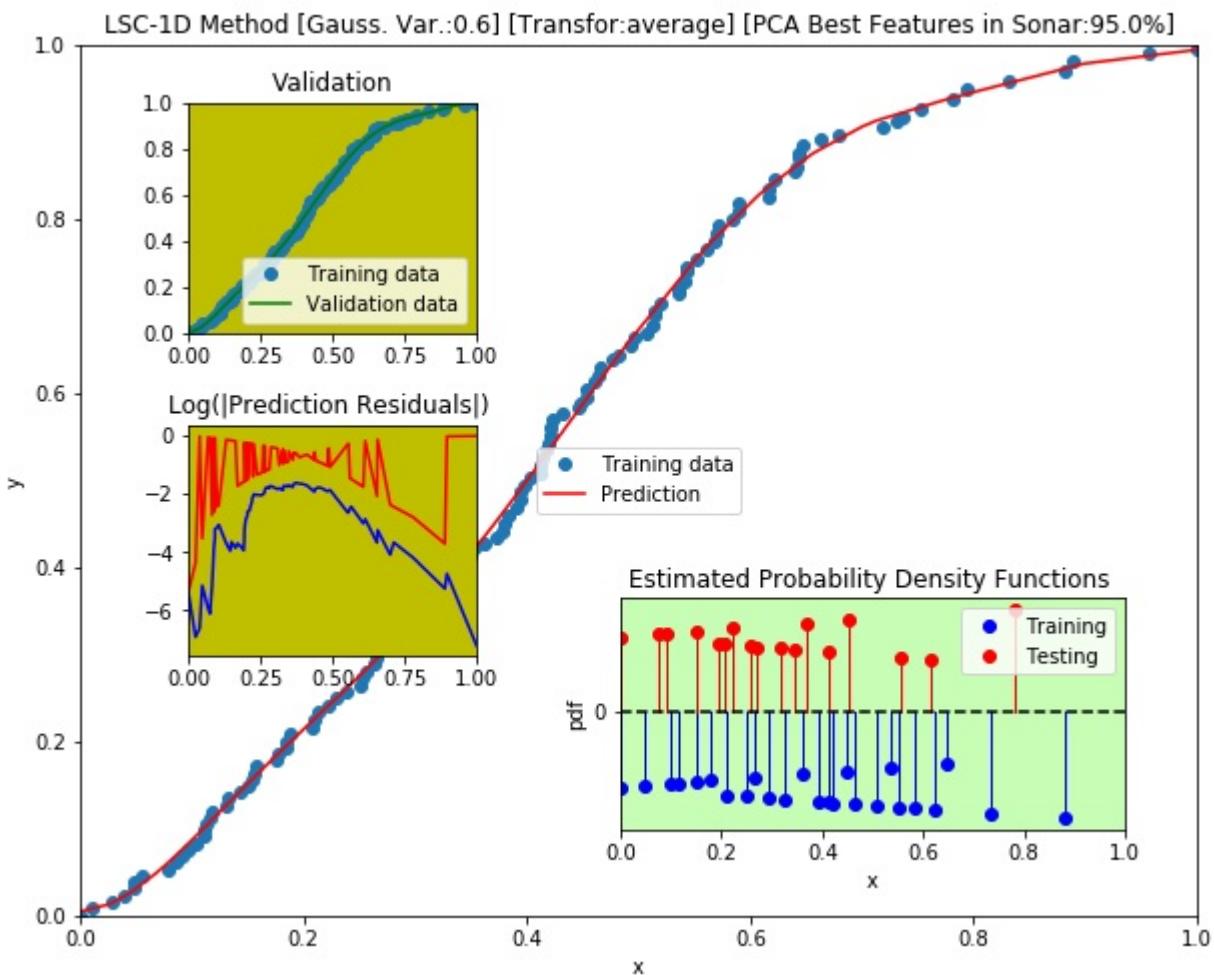
Prediction time/pt. (sec) : 0.0000061
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005240

Prediction time/pt. (sec) : 0.0000062
```



Sonar Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0008624
  Initializing linear solver - done. Time (sec): 0.0020125
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002666
  Solving linear system (col. 0) - done. Time (sec): 0.0010552
Training - done. Time (sec): 0.0069222

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0098336  
Prediction time/pt. (sec) : 0.0000793
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004504  
Prediction time/pt. (sec) : 0.0000054
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004237  
Prediction time/pt. (sec) : 0.0000050
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004528  
Prediction time/pt. (sec) : 0.0000054
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0024507
Initializing linear solver - done. Time (sec): 0.0029018
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002358
    Solving linear system (col. 0) - done. Time (sec): 0.0008287
Training - done. Time (sec): 0.0058167
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0021508

Prediction time/pt. (sec) : 0.0000256
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0029540

Prediction time/pt. (sec) : 0.0000238
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0028210

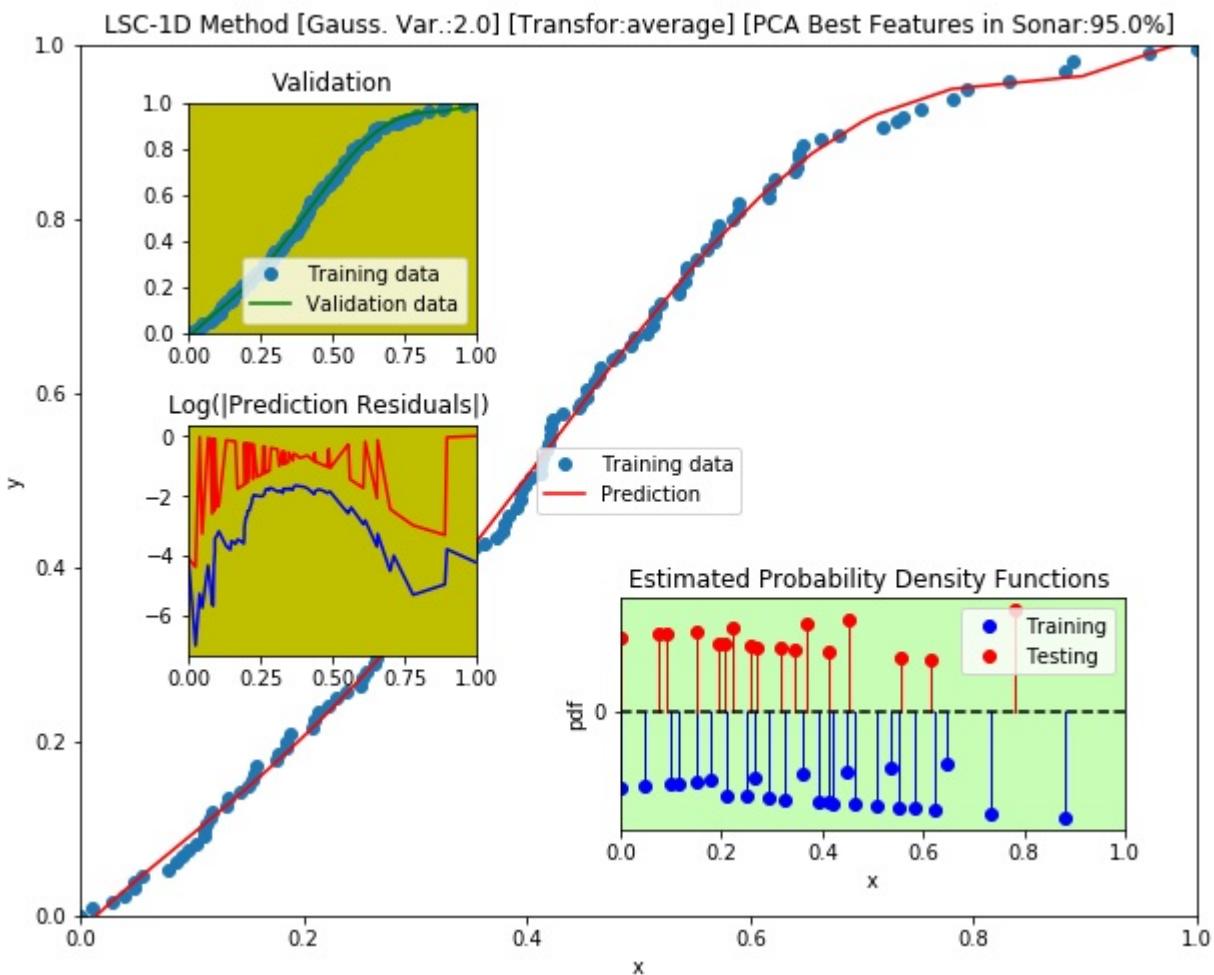
Prediction time/pt. (sec) : 0.0000336
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0028546

Prediction time/pt. (sec) : 0.0000340
```



Sonar Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

Training ...

Initializing linear solver ...

Performing LU fact. (125 x 125 mtx) ...

Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0010207

Initializing linear solver - done. Time (sec): 0.0019472

Solving linear system (col. 0) ...

Back solving (125 x 125 mtx) ...

Back solving (125 x 125 mtx) - done. Time (sec): 0.0002706

Solving linear system (col. 0) - done. Time (sec): 0.0010490

Training - done. Time (sec): 0.0064228

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0049548  
Prediction time/pt. (sec) : 0.0000400
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004640  
Prediction time/pt. (sec) : 0.0000055
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004406  
Prediction time/pt. (sec) : 0.0000052
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004873  
Prediction time/pt. (sec) : 0.0000058
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0028846
Initializing linear solver - done. Time (sec): 0.0033658
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002367
    Solving linear system (col. 0) - done. Time (sec): 0.0004952
Training - done. Time (sec): 0.0058832
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0027254

Prediction time/pt. (sec) : 0.0000324
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0006280

Prediction time/pt. (sec) : 0.0000051
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0050726

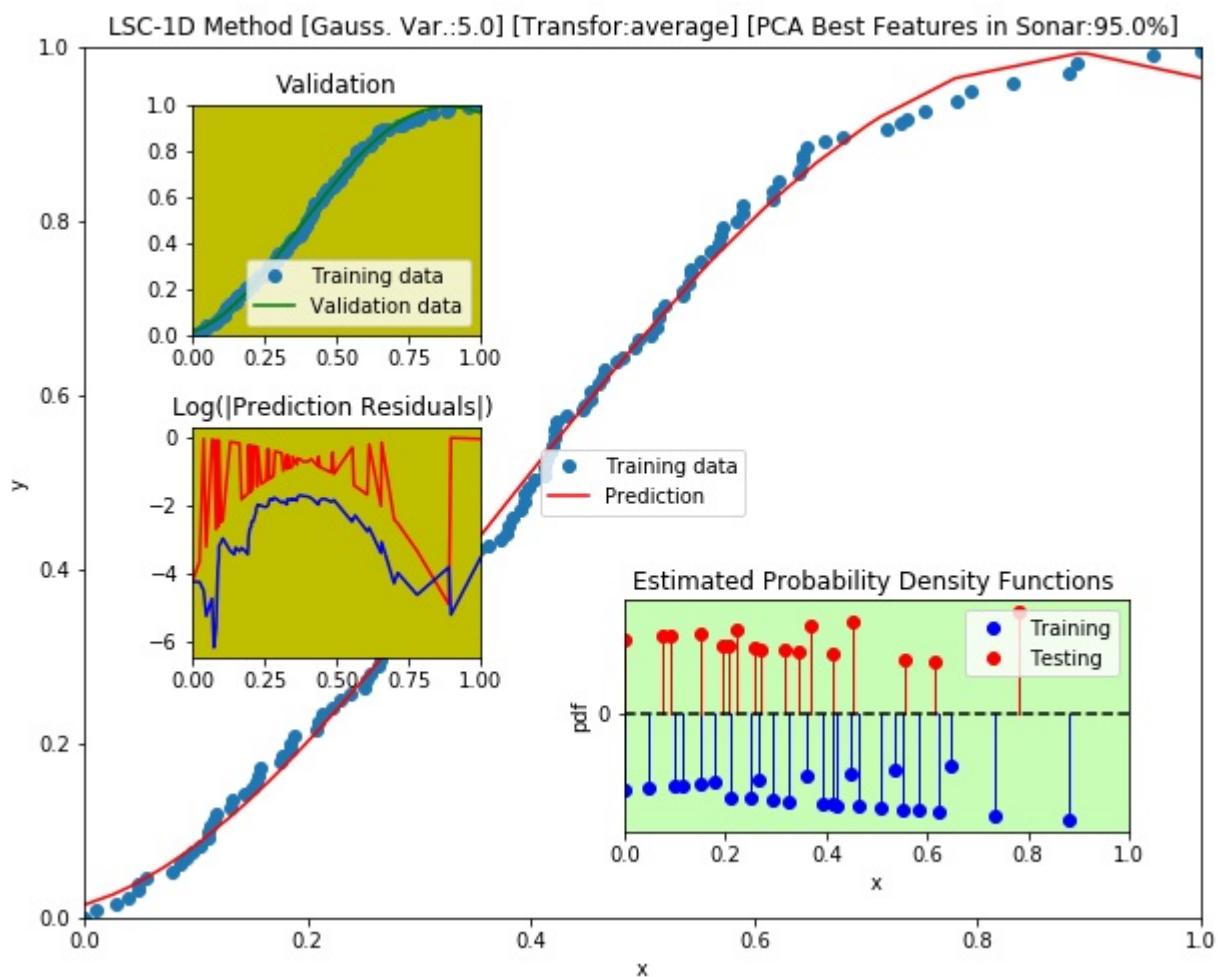
Prediction time/pt. (sec) : 0.0000604
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0028014

Prediction time/pt. (sec) : 0.0000334
```



Sonar Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0116470
  Initializing linear solver - done. Time (sec): 0.0118635
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002770
  Solving linear system (col. 0) - done. Time (sec): 0.0004618
Training - done. Time (sec): 0.0146110

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0081422  
Prediction time/pt. (sec) : 0.0000657
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004184  
Prediction time/pt. (sec) : 0.0000050
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0023572  
Prediction time/pt. (sec) : 0.0000281
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0035203  
Prediction time/pt. (sec) : 0.0000419
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0023675
Initializing linear solver - done. Time (sec): 0.0025437
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002286
    Solving linear system (col. 0) - done. Time (sec): 0.0003583
Training - done. Time (sec): 0.0042412
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004032

Prediction time/pt. (sec) : 0.0000048
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0091491

Prediction time/pt. (sec) : 0.0000738
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004179

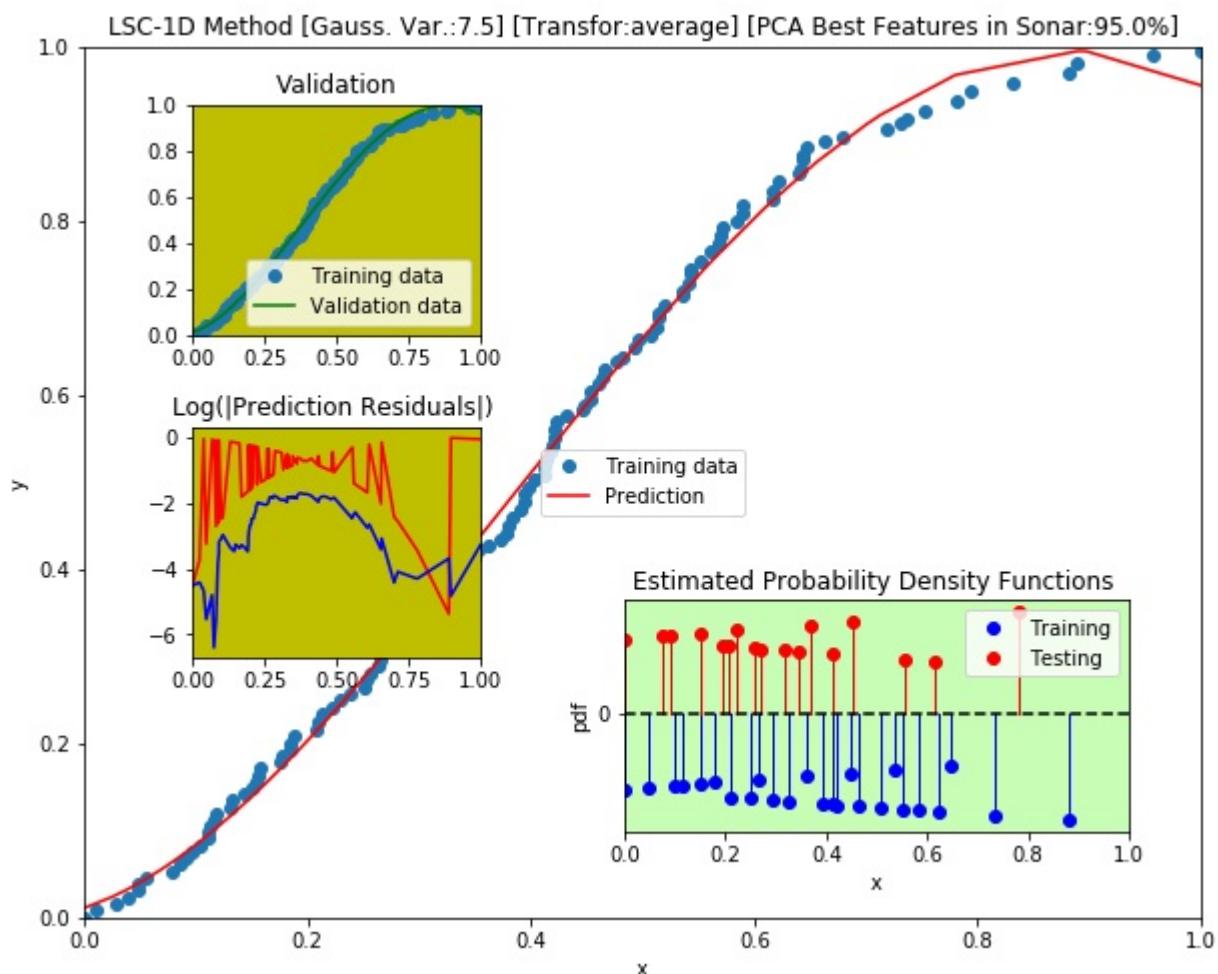
Prediction time/pt. (sec) : 0.0000050
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0003915

Prediction time/pt. (sec) : 0.0000047
```



Sonar Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0019426
  Initializing linear solver - done. Time (sec): 0.0025232
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002882
  Solving linear system (col. 0) - done. Time (sec): 0.0011823
Training - done. Time (sec): 0.0063825

```

Evaluation

```
# eval points. : 124  
  
Predicting ...  
Predicting - done. Time (sec): 0.0053666  
  
Prediction time/pt. (sec) : 0.0000433
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0004871  
  
Prediction time/pt. (sec) : 0.0000058
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0004108  
  
Prediction time/pt. (sec) : 0.0000049
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0004301  
  
Prediction time/pt. (sec) : 0.0000051
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0014522
Initializing linear solver - done. Time (sec): 0.0019350
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002437
    Solving linear system (col. 0) - done. Time (sec): 0.0003819
Training - done. Time (sec): 0.0055230
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0032656

Prediction time/pt. (sec) : 0.0000389
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0030513

Prediction time/pt. (sec) : 0.0000246
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0029731

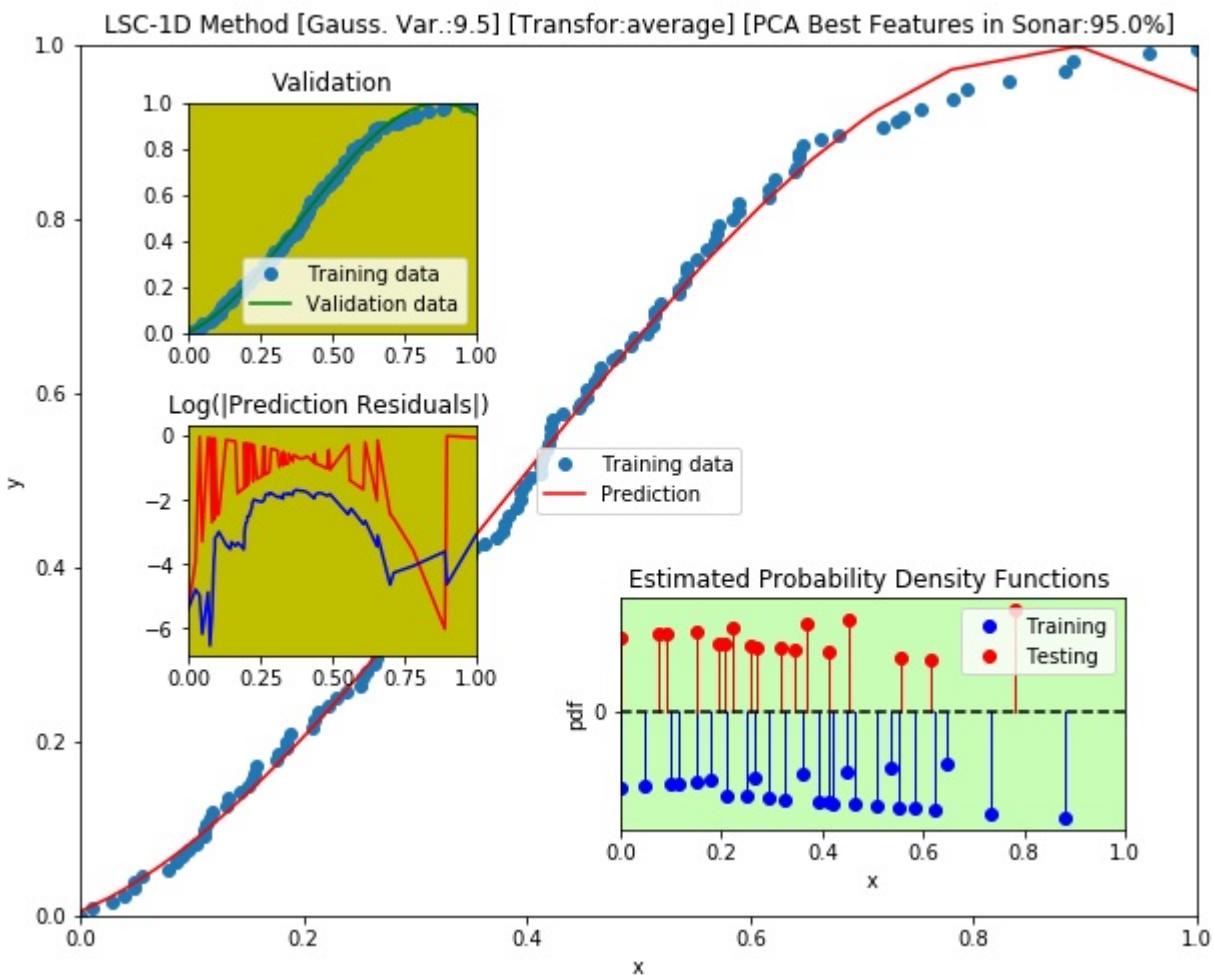
Prediction time/pt. (sec) : 0.0000354
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0028977

Prediction time/pt. (sec) : 0.0000345
```



Sonar Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

Training ...

Initializing linear solver ...

Performing LU fact. (125 x 125 mtx) ...

Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0101743

Initializing linear solver - done. Time (sec): 0.0104098

Solving linear system (col. 0) ...

Back solving (125 x 125 mtx) ...

Back solving (125 x 125 mtx) - done. Time (sec): 0.0003219

Solving linear system (col. 0) - done. Time (sec): 0.0005744

Training - done. Time (sec): 0.0127990

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0078452  
Prediction time/pt. (sec) : 0.0000633
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0030637  
Prediction time/pt. (sec) : 0.0000365
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0028093  
Prediction time/pt. (sec) : 0.0000334
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0018108  
Prediction time/pt. (sec) : 0.0000216
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0130911
Initializing linear solver - done. Time (sec): 0.0133207
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0009656
    Solving linear system (col. 0) - done. Time (sec): 0.0011439
Training - done. Time (sec): 0.0209663
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0019312

Prediction time/pt. (sec) : 0.0000230
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0040979

Prediction time/pt. (sec) : 0.0000330
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0018876

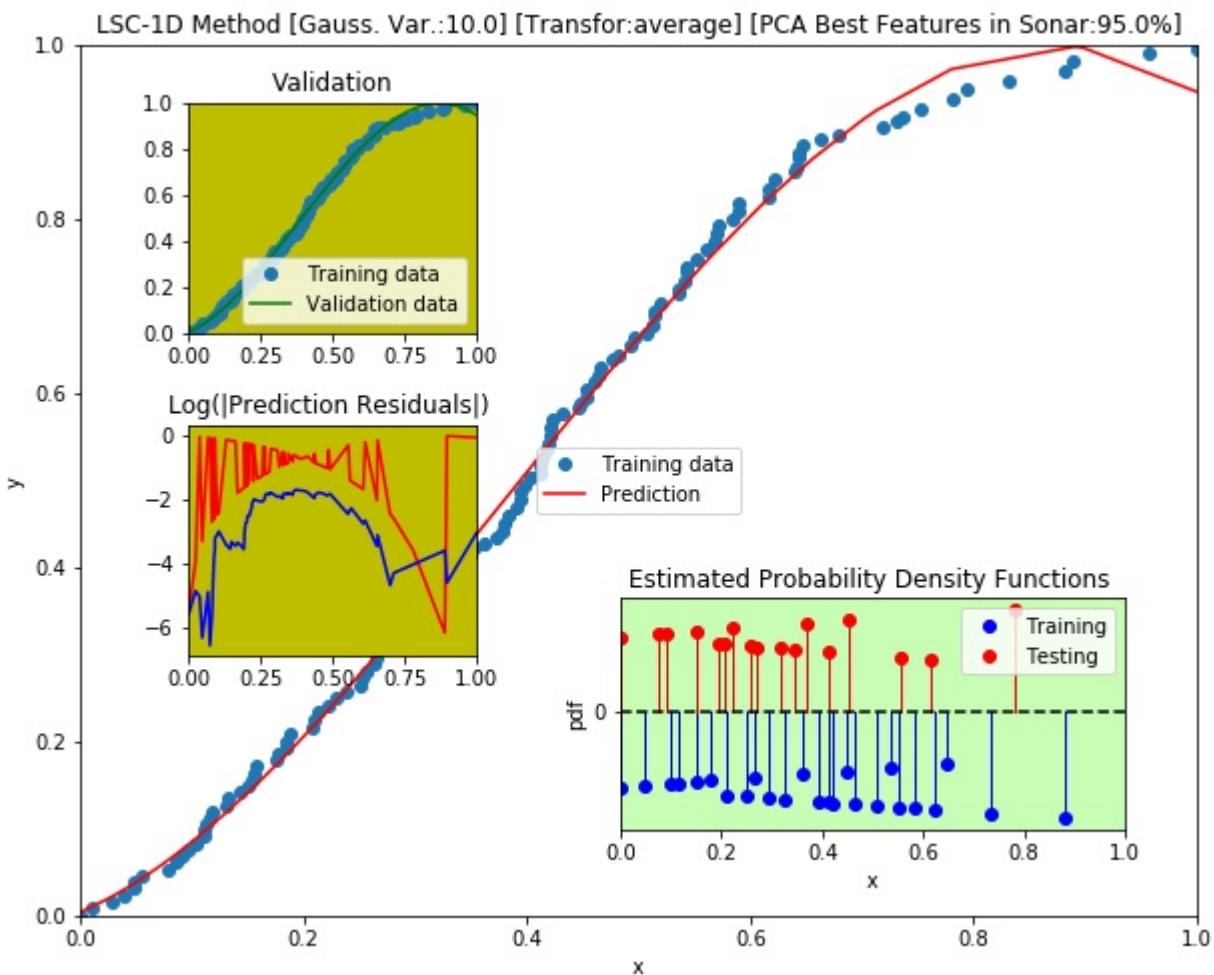
Prediction time/pt. (sec) : 0.0000225
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0022776

Prediction time/pt. (sec) : 0.0000271
```



Sonar Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0160618
    Initializing linear solver - done. Time (sec): 0.0169575
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0002332
    Solving linear system (col. 0) - done. Time (sec): 0.0012476
Training - done. Time (sec): 0.0210824

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0007071  
Prediction time/pt. (sec) : 0.0000057
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0010347  
Prediction time/pt. (sec) : 0.0000123
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004947  
Prediction time/pt. (sec) : 0.0000059
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0010161  
Prediction time/pt. (sec) : 0.0000121
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0168517
Initializing linear solver - done. Time (sec): 0.0178323
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002363
    Solving linear system (col. 0) - done. Time (sec): 0.0012629
Training - done. Time (sec): 0.0232415
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005190

Prediction time/pt. (sec) : 0.0000062
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0028520

Prediction time/pt. (sec) : 0.0000230
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005474

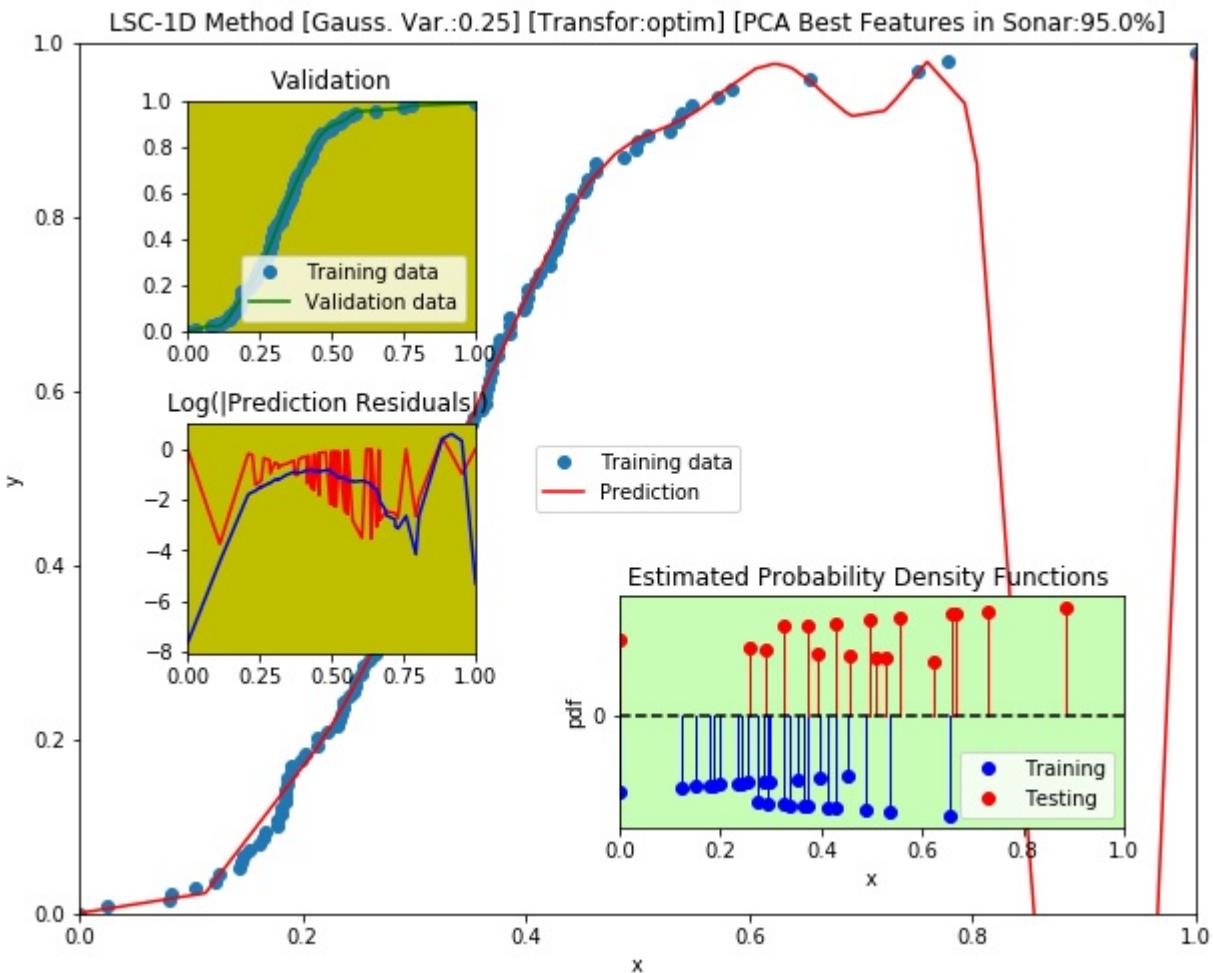
Prediction time/pt. (sec) : 0.0000065
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005250

Prediction time/pt. (sec) : 0.0000062
```



Sonar Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0164175
  Initializing linear solver - done. Time (sec): 0.0167265
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002859
  Solving linear system (col. 0) - done. Time (sec): 0.0004778
Training - done. Time (sec): 0.0200150

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0065055  
Prediction time/pt. (sec) : 0.0000525
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0036025  
Prediction time/pt. (sec) : 0.0000429
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0023072  
Prediction time/pt. (sec) : 0.0000275
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0030727  
Prediction time/pt. (sec) : 0.0000366
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0111961
Initializing linear solver - done. Time (sec): 0.0116482
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002429
    Solving linear system (col. 0) - done. Time (sec): 0.0008404
Training - done. Time (sec): 0.0202603
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005536

Prediction time/pt. (sec) : 0.0000066
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0007758

Prediction time/pt. (sec) : 0.0000063
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005522

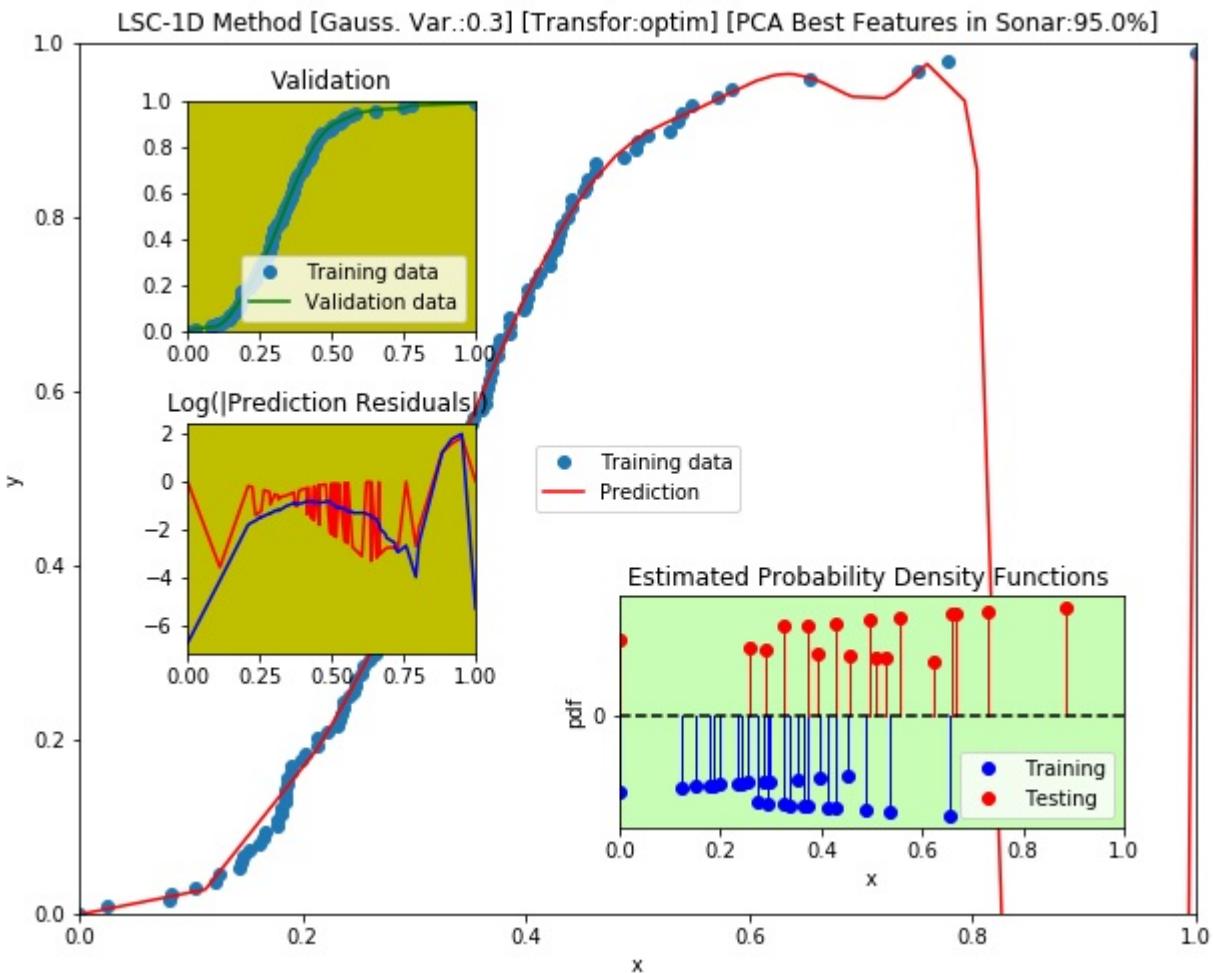
Prediction time/pt. (sec) : 0.0000066
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005360

Prediction time/pt. (sec) : 0.0000064
```



Sonar Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0046551
    Initializing linear solver - done. Time (sec): 0.0048645
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0002272
    Solving linear system (col. 0) - done. Time (sec): 0.0003555
Training - done. Time (sec): 0.0121846

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0042455  
Prediction time/pt. (sec) : 0.0000342
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0033448  
Prediction time/pt. (sec) : 0.0000398
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0028565  
Prediction time/pt. (sec) : 0.0000340
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005033  
Prediction time/pt. (sec) : 0.0000060
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0089307
Initializing linear solver - done. Time (sec): 0.0092103
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002420
    Solving linear system (col. 0) - done. Time (sec): 0.0003784
Training - done. Time (sec): 0.0111196
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005350

Prediction time/pt. (sec) : 0.0000064
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0007153

Prediction time/pt. (sec) : 0.0000058
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004997

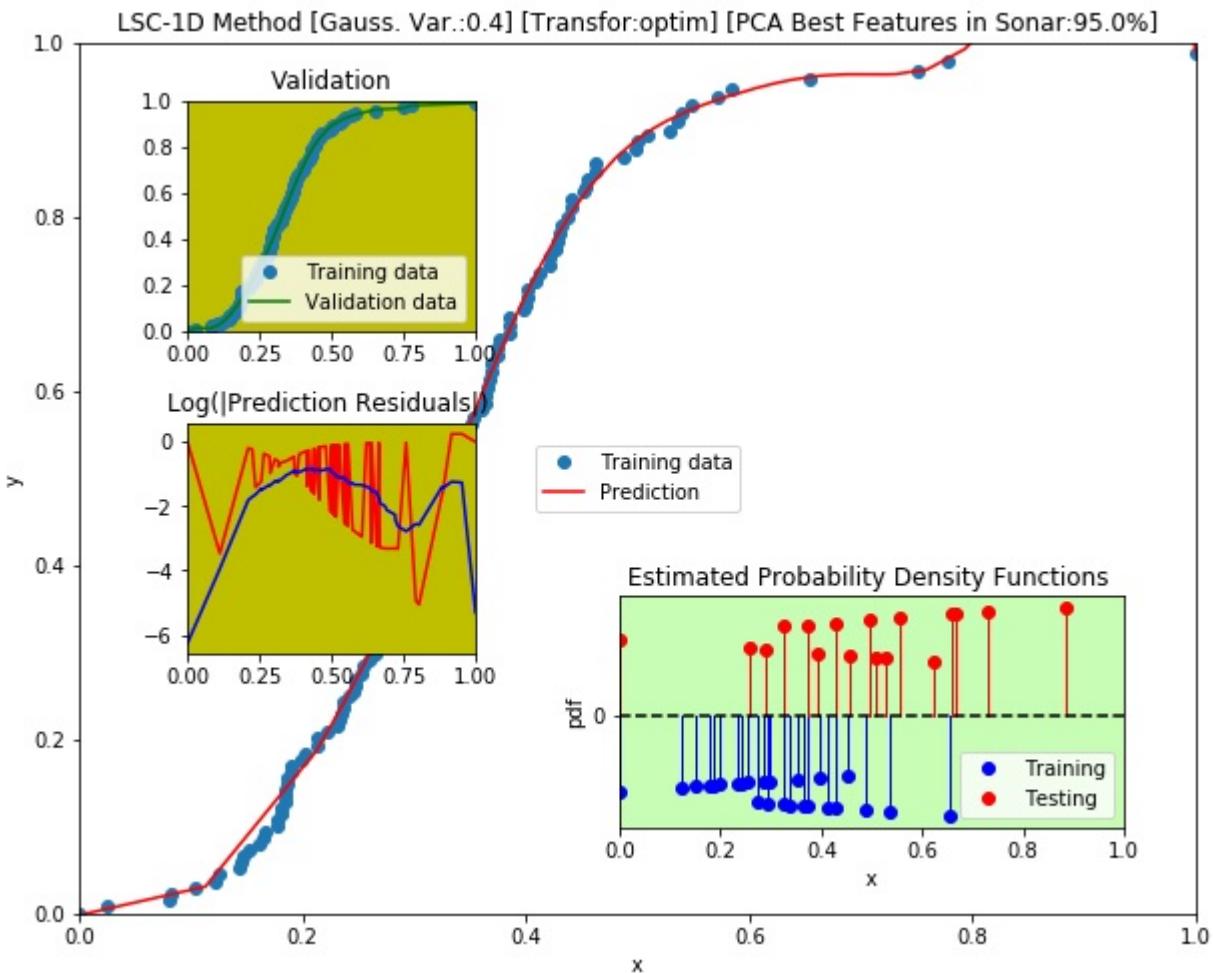
Prediction time/pt. (sec) : 0.0000059
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0051086

Prediction time/pt. (sec) : 0.0000608
```



Sonar Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0080714
    Initializing linear solver - done. Time (sec): 0.0083003
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0004406
    Solving linear system (col. 0) - done. Time (sec): 0.0006120
Training - done. Time (sec): 0.0107636

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0047753  
Prediction time/pt. (sec) : 0.0000385
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0017138  
Prediction time/pt. (sec) : 0.0000204
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0013914  
Prediction time/pt. (sec) : 0.0000166
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0015554  
Prediction time/pt. (sec) : 0.0000185
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0070889
Initializing linear solver - done. Time (sec): 0.0072901
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002356
    Solving linear system (col. 0) - done. Time (sec): 0.0003691
Training - done. Time (sec): 0.0106974
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0024161

Prediction time/pt. (sec) : 0.0000288
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0021374

Prediction time/pt. (sec) : 0.0000172
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0013497

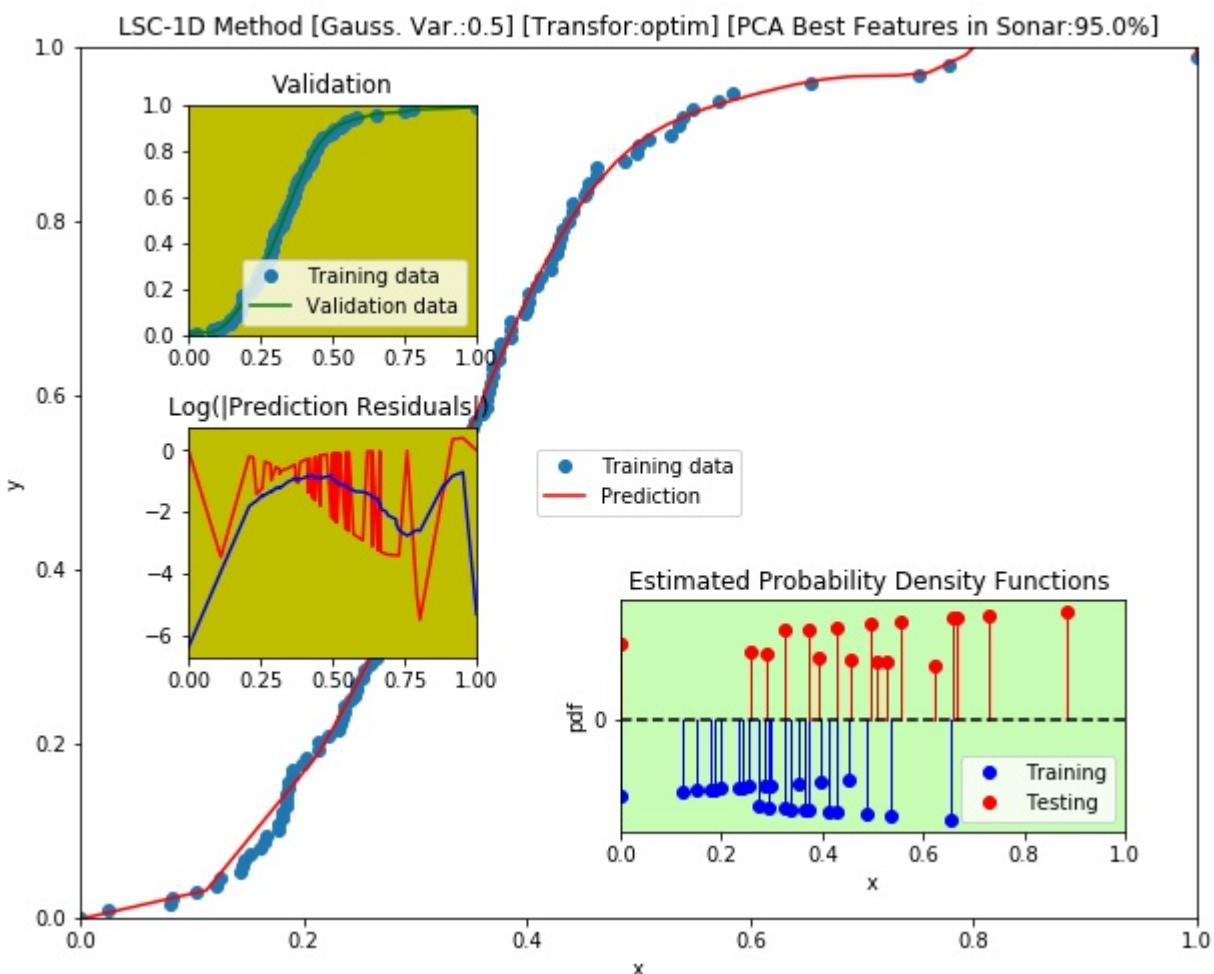
Prediction time/pt. (sec) : 0.0000161
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0016069

Prediction time/pt. (sec) : 0.0000191
```



Sonar Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0154345
    Initializing linear solver - done. Time (sec): 0.0156982
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0002878
    Solving linear system (col. 0) - done. Time (sec): 0.0004766
Training - done. Time (sec): 0.0191014

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0010288  
Prediction time/pt. (sec) : 0.0000083
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0019169  
Prediction time/pt. (sec) : 0.0000228
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0018382  
Prediction time/pt. (sec) : 0.0000219
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0033414  
Prediction time/pt. (sec) : 0.0000398
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0007119
Initializing linear solver - done. Time (sec): 0.0009046
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0001912
    Solving linear system (col. 0) - done. Time (sec): 0.0003169
Training - done. Time (sec): 0.0170243
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005226

Prediction time/pt. (sec) : 0.0000062
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0049851

Prediction time/pt. (sec) : 0.0000402
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005217

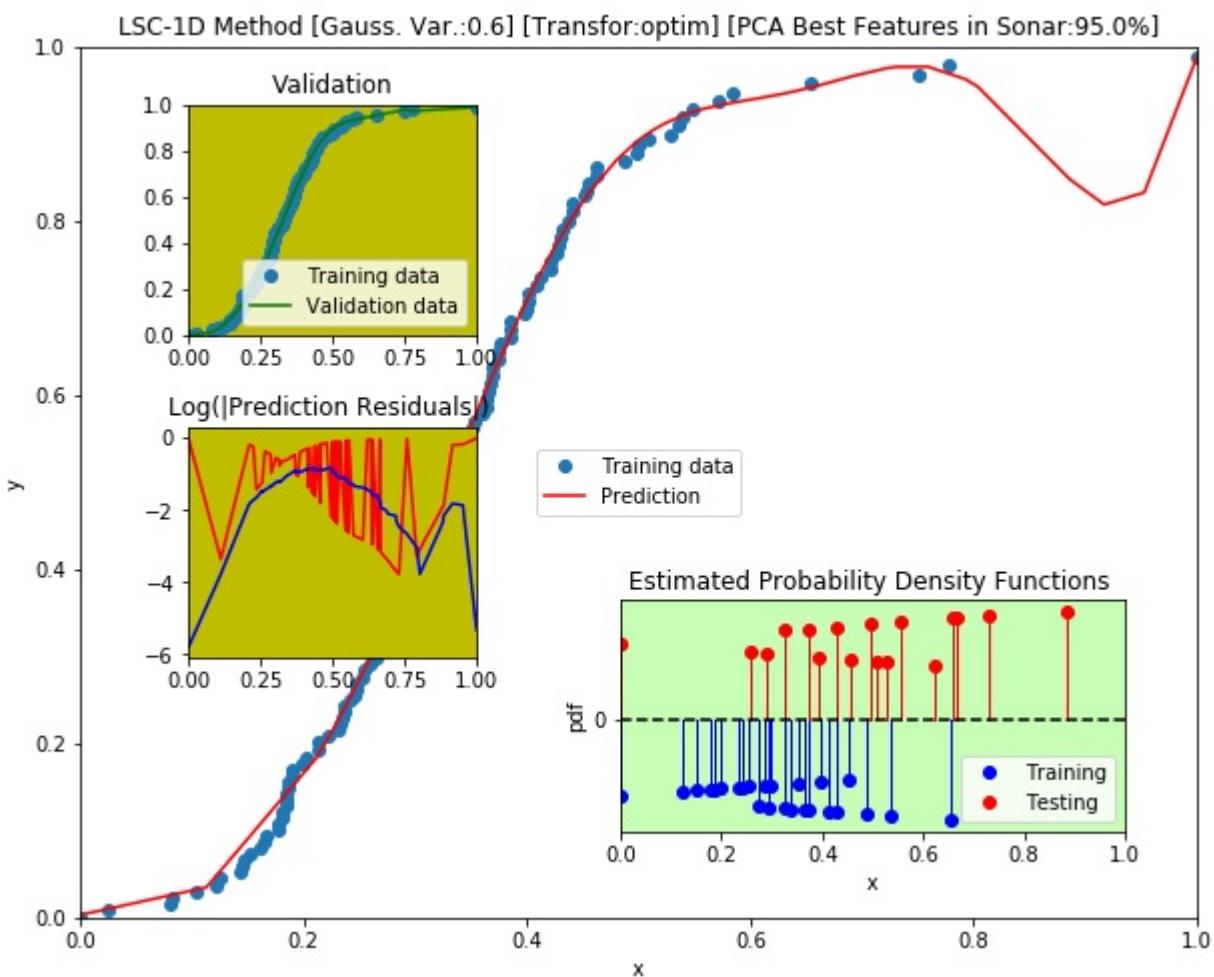
Prediction time/pt. (sec) : 0.0000062
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004771

Prediction time/pt. (sec) : 0.0000057
```



Sonar Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (125 x 125 mtx) ...
        Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0116918
    Initializing linear solver - done. Time (sec): 0.0120335
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0003126
    Solving linear system (col. 0) - done. Time (sec): 0.0005369
Training - done. Time (sec): 0.0148280

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0110896  
Prediction time/pt. (sec) : 0.0000894
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0027606  
Prediction time/pt. (sec) : 0.0000329
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0018911  
Prediction time/pt. (sec) : 0.0000225
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0027542  
Prediction time/pt. (sec) : 0.0000328
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0110643
Initializing linear solver - done. Time (sec): 0.0112624
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0004008
    Solving linear system (col. 0) - done. Time (sec): 0.0005612
Training - done. Time (sec): 0.0140462
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004413

Prediction time/pt. (sec) : 0.0000053
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0016890

Prediction time/pt. (sec) : 0.0000136
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0040059

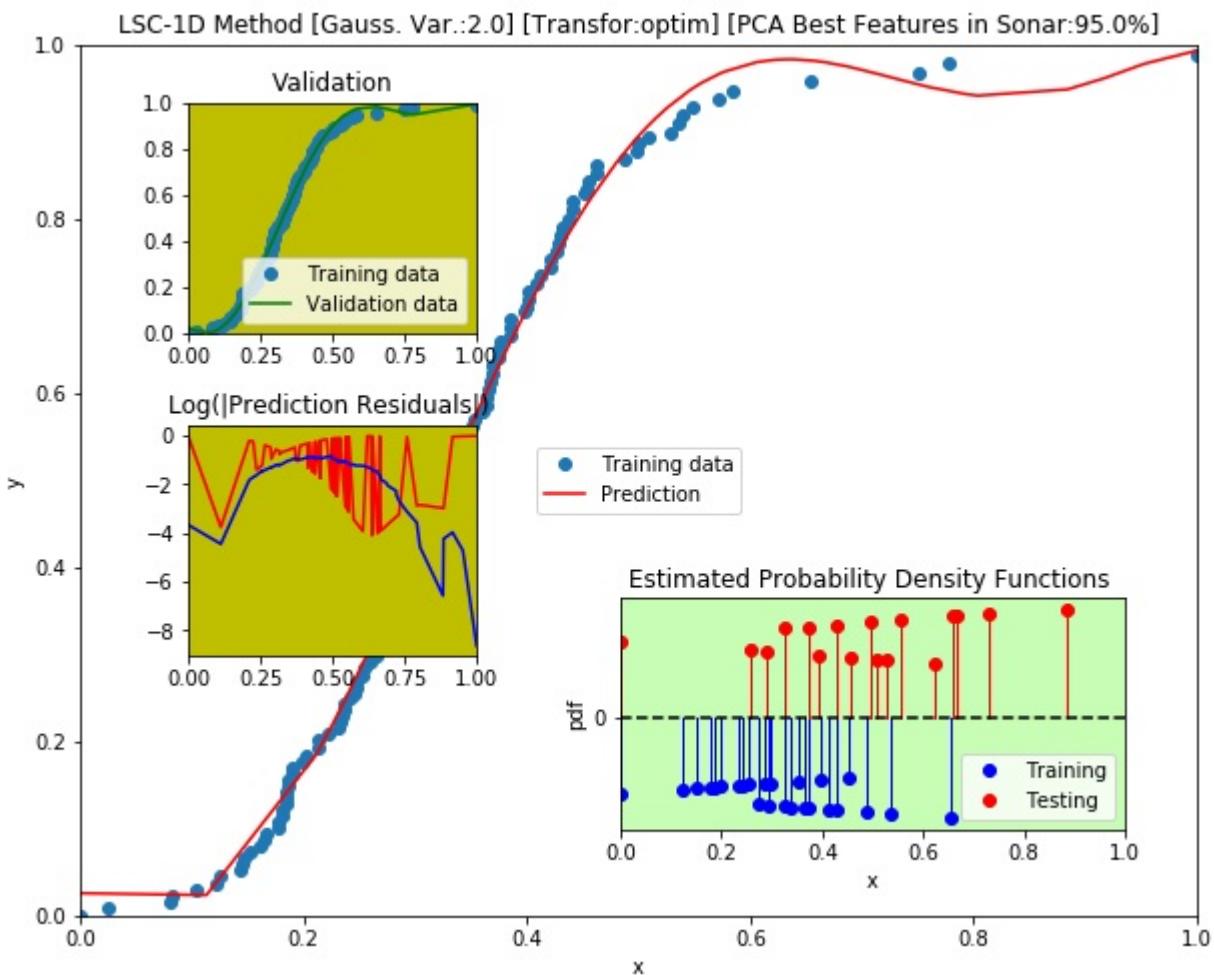
Prediction time/pt. (sec) : 0.0000477
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0095563

Prediction time/pt. (sec) : 0.0001138
```



Sonar Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0023487
    Initializing linear solver - done. Time (sec): 0.0029724
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0002911
    Solving linear system (col. 0) - done. Time (sec): 0.0012174
Training - done. Time (sec): 0.0068243

```

Evaluation

```
# eval points. : 124  
  
Predicting ...  
Predicting - done. Time (sec): 0.0054891  
  
Prediction time/pt. (sec) : 0.0000443
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0004594  
  
Prediction time/pt. (sec) : 0.0000055
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0004408  
  
Prediction time/pt. (sec) : 0.0000052
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0004387  
  
Prediction time/pt. (sec) : 0.0000052
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0031080
Initializing linear solver - done. Time (sec): 0.0034730
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002406
    Solving linear system (col. 0) - done. Time (sec): 0.0003841
Training - done. Time (sec): 0.0053542
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0020802

Prediction time/pt. (sec) : 0.0000248
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0029573

Prediction time/pt. (sec) : 0.0000238
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0031312

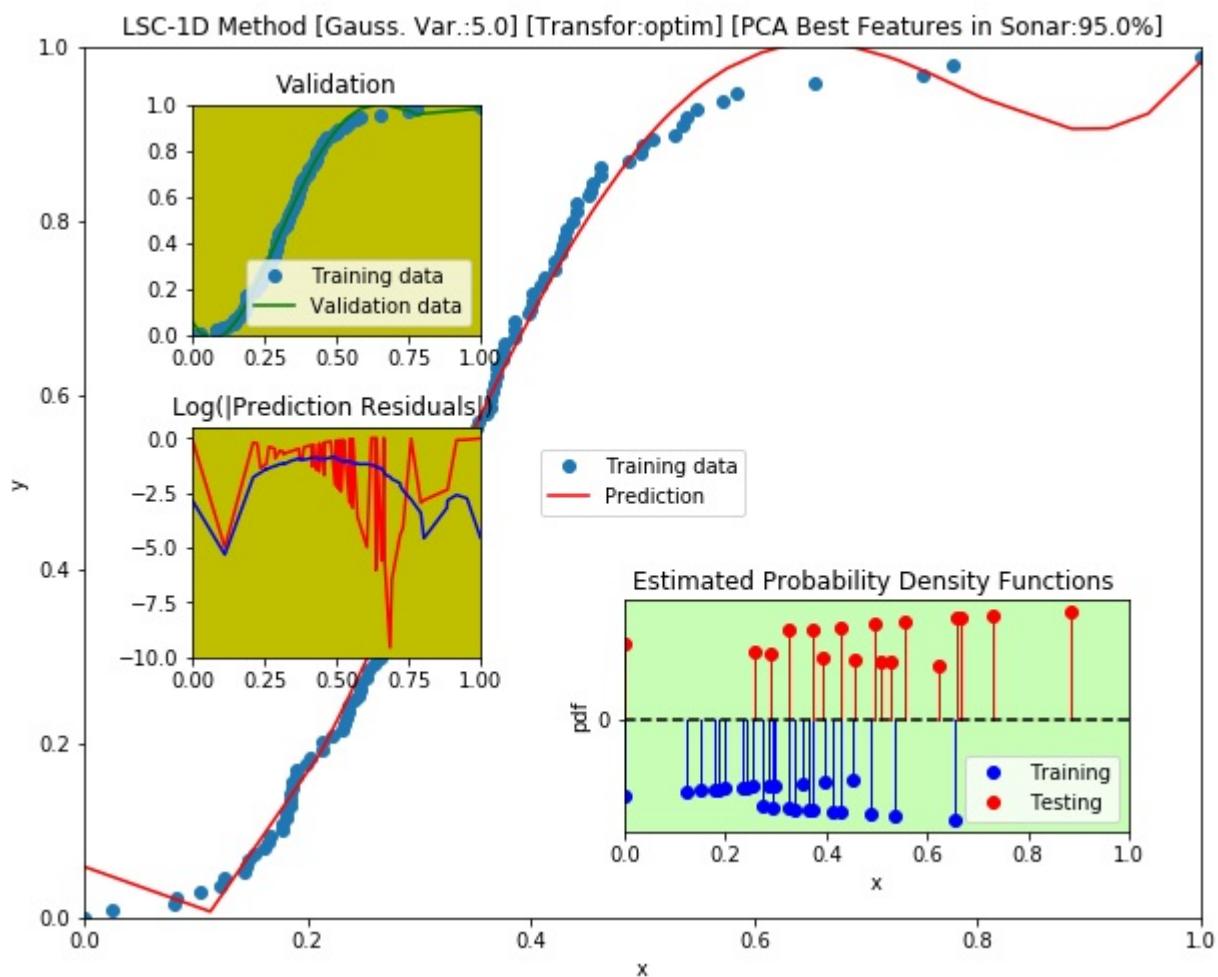
Prediction time/pt. (sec) : 0.0000373
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0031257

Prediction time/pt. (sec) : 0.0000372
```



Sonar Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (125 x 125 mtx) ...
        Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0008016
    Initializing linear solver - done. Time (sec): 0.0029933
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0003169
    Solving linear system (col. 0) - done. Time (sec): 0.0012329
Training - done. Time (sec): 0.0069952

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0071485  
Prediction time/pt. (sec) : 0.0000576
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004265  
Prediction time/pt. (sec) : 0.0000051
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004060  
Prediction time/pt. (sec) : 0.0000048
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004072  
Prediction time/pt. (sec) : 0.0000048
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0028656
Initializing linear solver - done. Time (sec): 0.0033185
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002375
    Solving linear system (col. 0) - done. Time (sec): 0.0003777
Training - done. Time (sec): 0.0053709
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0031037

Prediction time/pt. (sec) : 0.0000369
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0031271

Prediction time/pt. (sec) : 0.0000252
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0029554

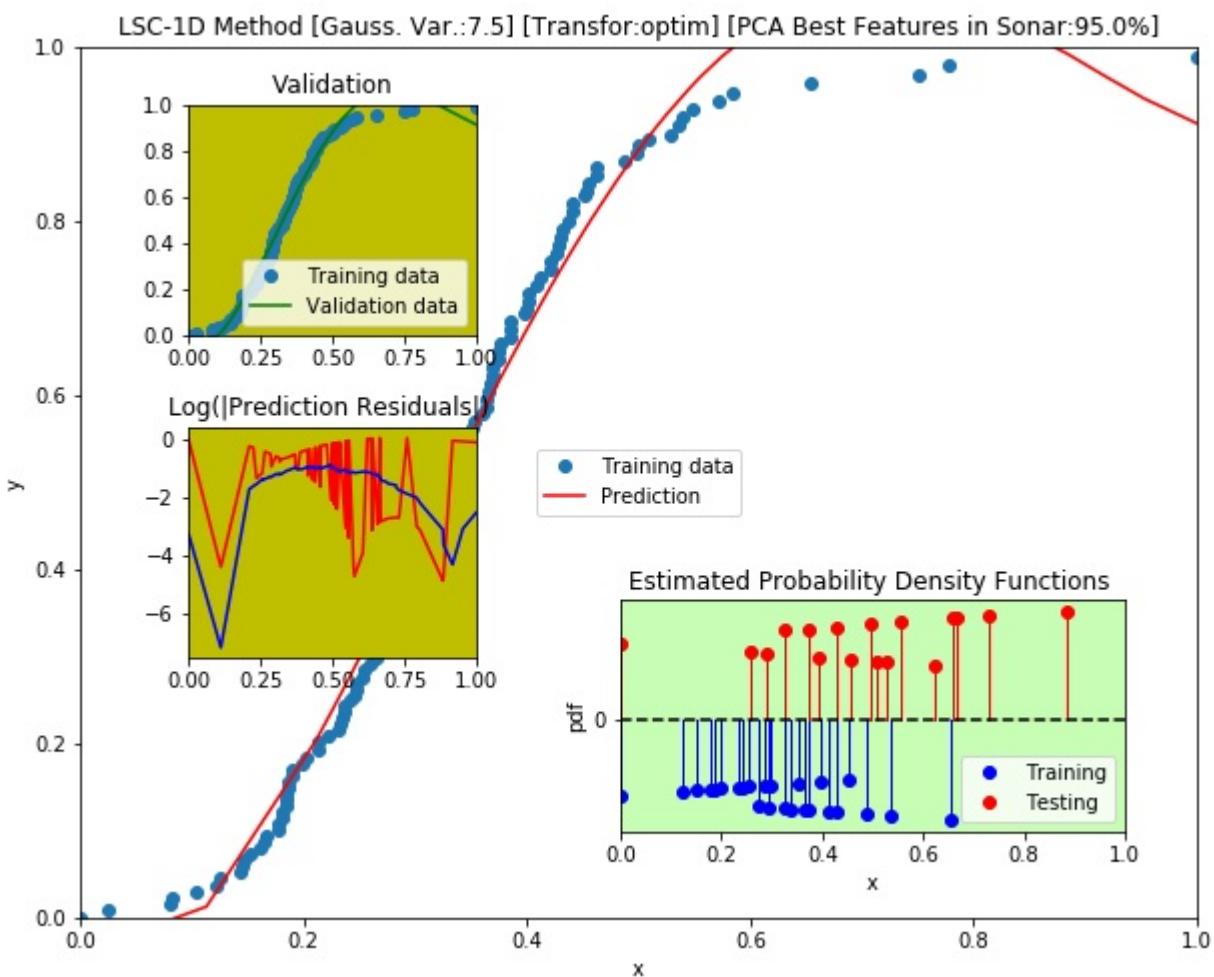
Prediction time/pt. (sec) : 0.0000352
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0031550

Prediction time/pt. (sec) : 0.0000376
```



Sonar Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (125 x 125 mtx) ...
        Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0020130
    Initializing linear solver - done. Time (sec): 0.0026400
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0004740
    Solving linear system (col. 0) - done. Time (sec): 0.0006514
Training - done. Time (sec): 0.0091197

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0011117  
Prediction time/pt. (sec) : 0.0000090
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0017037  
Prediction time/pt. (sec) : 0.0000203
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0013740  
Prediction time/pt. (sec) : 0.0000164
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0011578  
Prediction time/pt. (sec) : 0.0000138
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0062554
Initializing linear solver - done. Time (sec): 0.0064473
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002973
    Solving linear system (col. 0) - done. Time (sec): 0.0006146
Training - done. Time (sec): 0.0102603
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004439

Prediction time/pt. (sec) : 0.0000053
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0011063

Prediction time/pt. (sec) : 0.0000089
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0011275

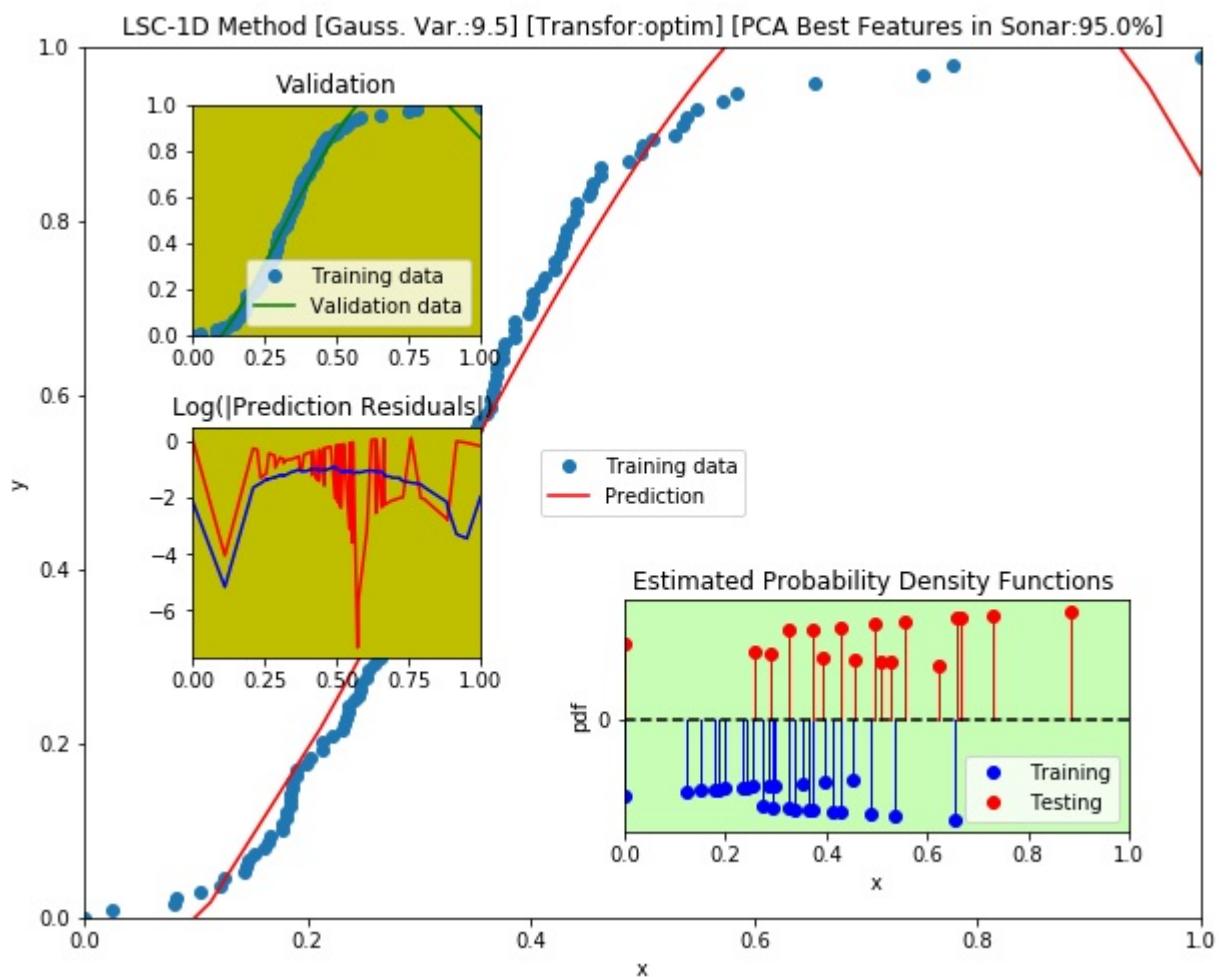
Prediction time/pt. (sec) : 0.0000134
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0011456

Prediction time/pt. (sec) : 0.0000136
```



Sonar Dataset

Parameters: PCA: 95.0%
DATASET TRANSFORMATION: optim
COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```
Training ...
    Initializing linear solver ...
        Performing LU fact. (125 x 125 mtx) ...
            Performing LU fact. (125 x 125 mtx) - done. Time (sec):  0.0036709
    Initializing linear solver - done. Time (sec):  0.0042756
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
            Back solving (125 x 125 mtx) - done. Time (sec):  0.0004692
    Solving linear system (col. 0) - done. Time (sec):  0.0007071
Training - done. Time (sec):  0.0087235
```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0011384  
Prediction time/pt. (sec) : 0.0000092
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0012913  
Prediction time/pt. (sec) : 0.0000154
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0012705  
Prediction time/pt. (sec) : 0.0000151
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0012791  
Prediction time/pt. (sec) : 0.0000152
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0088065
Initializing linear solver - done. Time (sec): 0.0090280
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0003126
    Solving linear system (col. 0) - done. Time (sec): 0.0006459
Training - done. Time (sec): 0.0136538
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004787

Prediction time/pt. (sec) : 0.0000057
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0013373

Prediction time/pt. (sec) : 0.0000108
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0015652

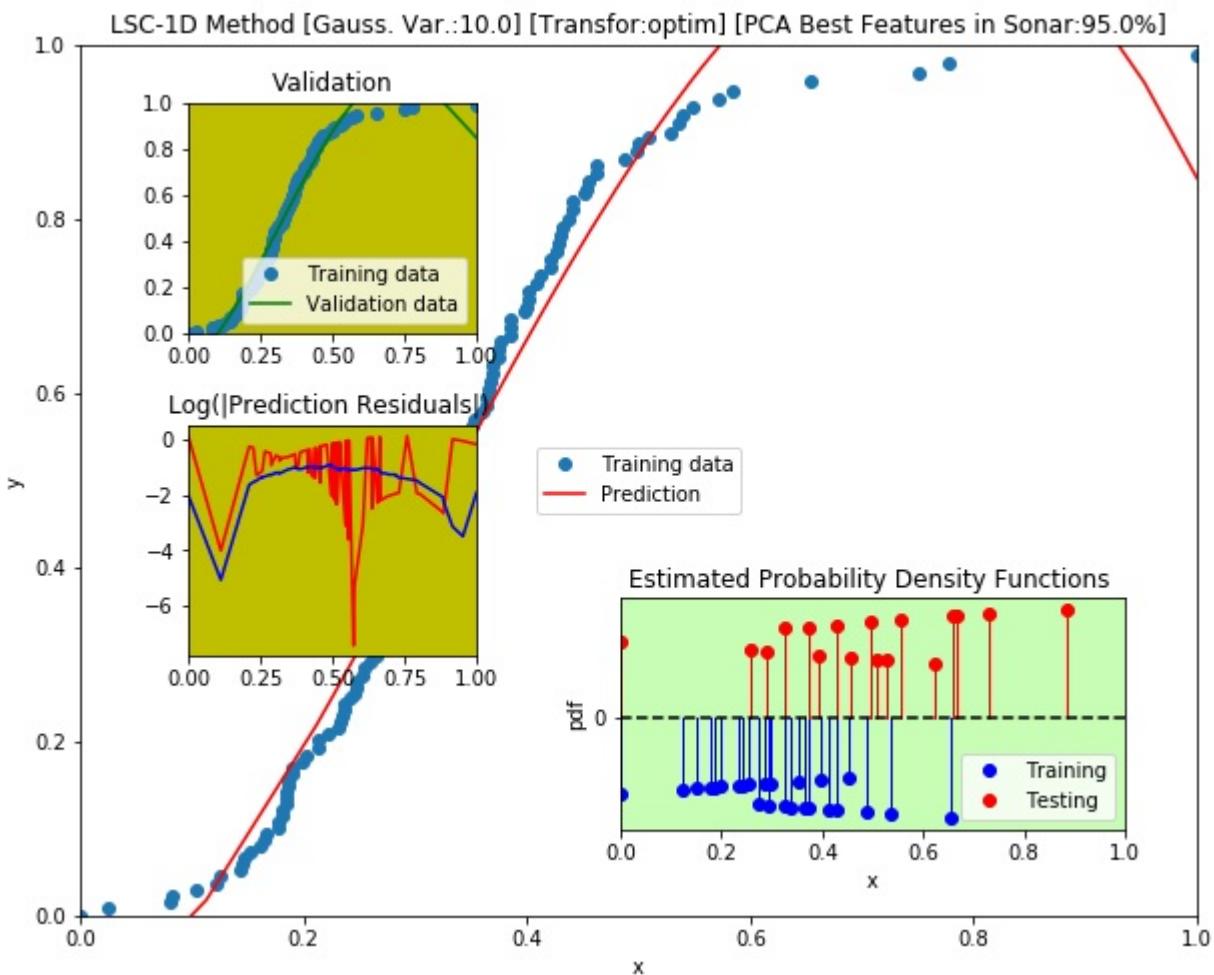
Prediction time/pt. (sec) : 0.0000186
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0016847

Prediction time/pt. (sec) : 0.0000201
```



Sonar Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0025625
    Initializing linear solver - done. Time (sec): 0.0028386
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0002878
    Solving linear system (col. 0) - done. Time (sec): 0.0004666
Training - done. Time (sec): 0.0114071

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0042510  
Prediction time/pt. (sec) : 0.0000343
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0041664  
Prediction time/pt. (sec) : 0.0000496
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005422  
Prediction time/pt. (sec) : 0.0000065
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0048339  
Prediction time/pt. (sec) : 0.0000575
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0047519
Initializing linear solver - done. Time (sec): 0.0049458
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002291
    Solving linear system (col. 0) - done. Time (sec): 0.0003581
Training - done. Time (sec): 0.0067854
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0006206

Prediction time/pt. (sec) : 0.0000074
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0049124

Prediction time/pt. (sec) : 0.0000396
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005066

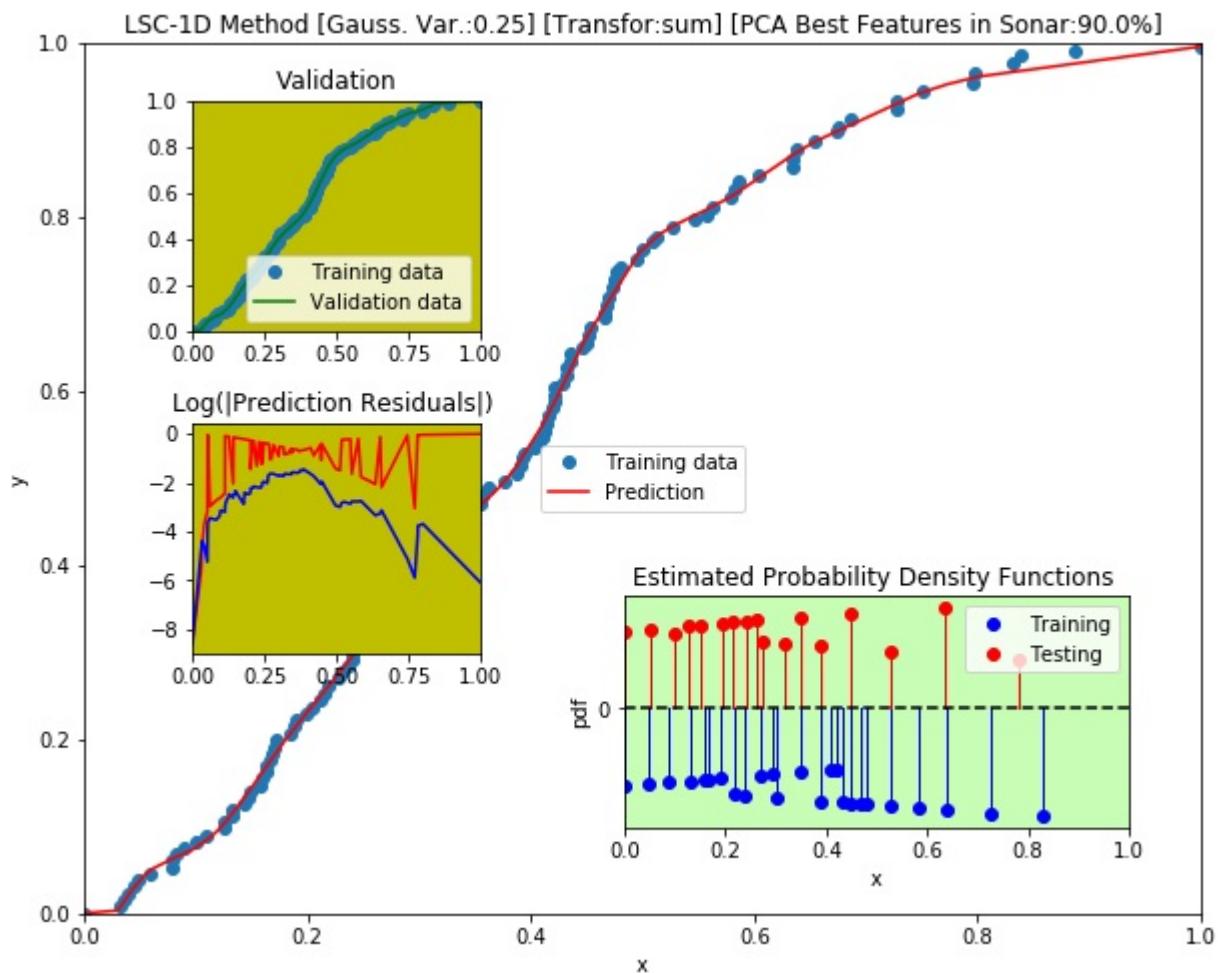
Prediction time/pt. (sec) : 0.0000060
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004697

Prediction time/pt. (sec) : 0.0000056
```



Sonar Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0146194
  Initializing linear solver - done. Time (sec): 0.0149229
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0008767
  Solving linear system (col. 0) - done. Time (sec): 0.0011439
Training - done. Time (sec): 0.0199924

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0073147  
Prediction time/pt. (sec) : 0.0000590
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0040967  
Prediction time/pt. (sec) : 0.0000488
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0022302  
Prediction time/pt. (sec) : 0.0000265
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0077100  
Prediction time/pt. (sec) : 0.0000918
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0019586
Initializing linear solver - done. Time (sec): 0.0021398
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002346
    Solving linear system (col. 0) - done. Time (sec): 0.0003676
Training - done. Time (sec): 0.0041006
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0036106

Prediction time/pt. (sec) : 0.0000430
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0008063

Prediction time/pt. (sec) : 0.0000065
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0034599

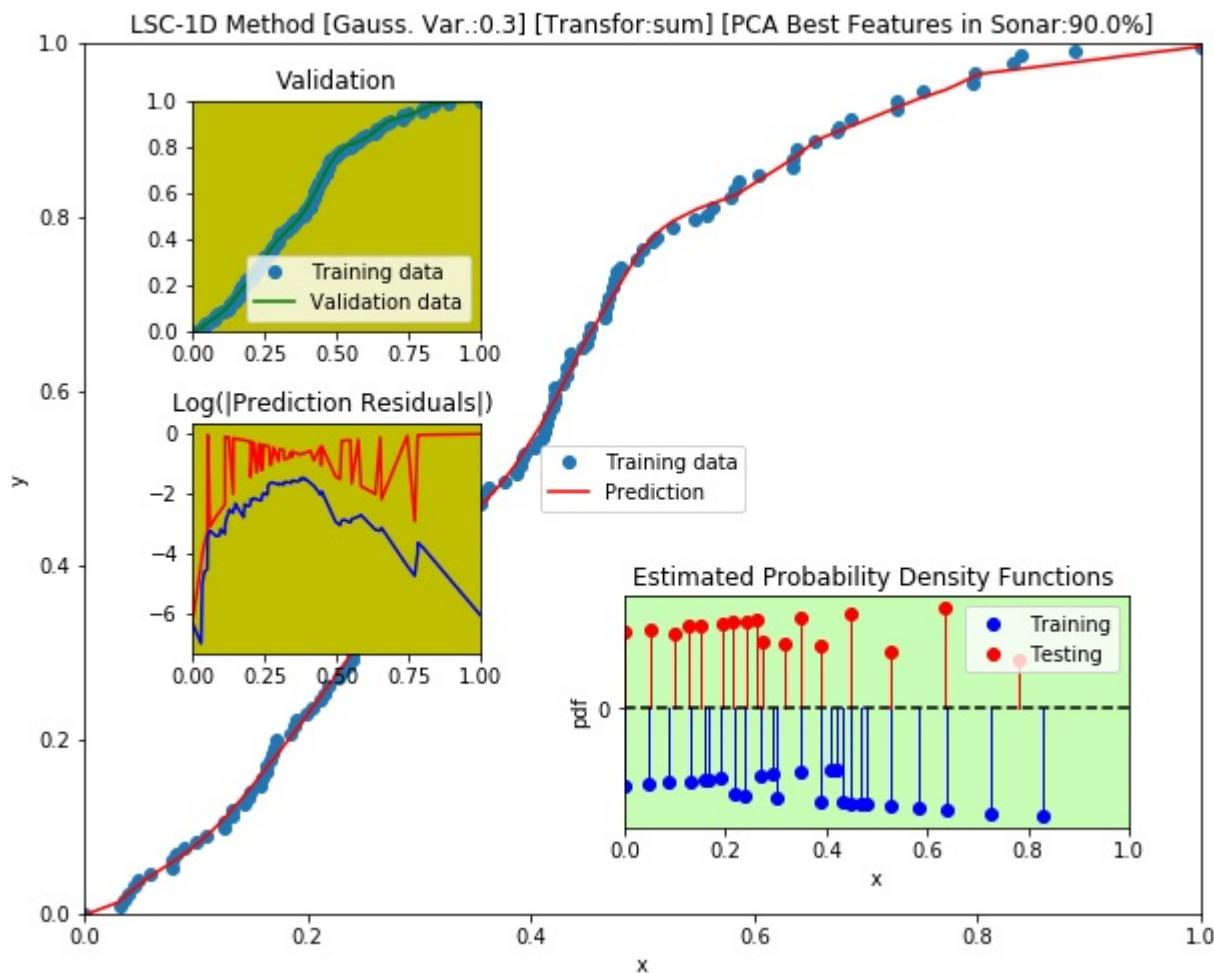
Prediction time/pt. (sec) : 0.0000412
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0071843

Prediction time/pt. (sec) : 0.0000855
```



Sonar Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0072002
  Initializing linear solver - done. Time (sec): 0.0081255
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002882
  Solving linear system (col. 0) - done. Time (sec): 0.0019557
Training - done. Time (sec): 0.0134366

```

Evaluation

```
# eval points. : 124  
  
Predicting ...  
Predicting - done. Time (sec): 0.0016551  
  
Prediction time/pt. (sec) : 0.0000133
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0005302  
  
Prediction time/pt. (sec) : 0.0000063
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0046575  
  
Prediction time/pt. (sec) : 0.0000554
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0038133  
  
Prediction time/pt. (sec) : 0.0000454
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0135729
Initializing linear solver - done. Time (sec): 0.0137563
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002627
    Solving linear system (col. 0) - done. Time (sec): 0.0004036
Training - done. Time (sec): 0.0157120
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0056126

Prediction time/pt. (sec) : 0.0000668
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0049872

Prediction time/pt. (sec) : 0.0000402
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0018203

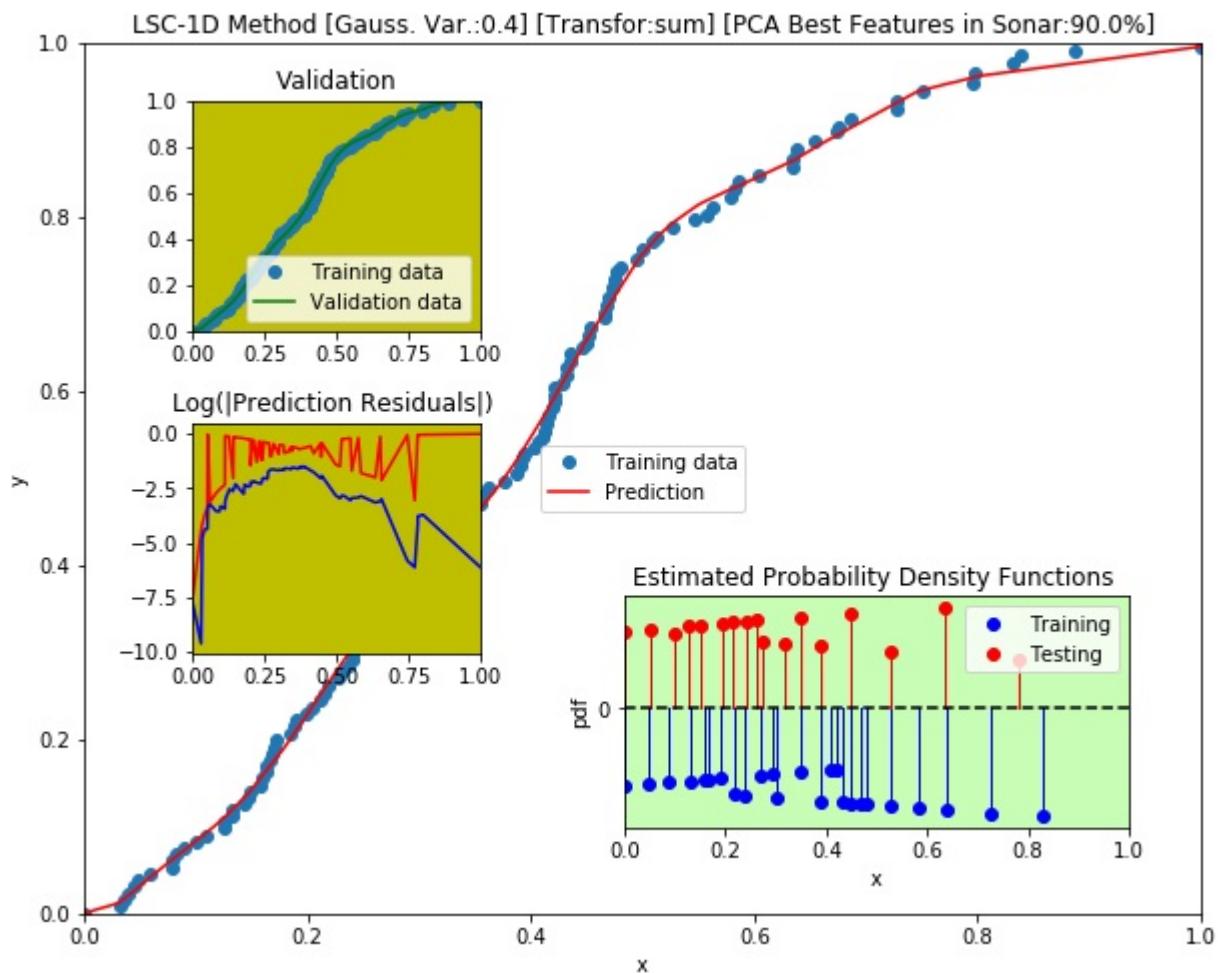
Prediction time/pt. (sec) : 0.0000217
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0018177

Prediction time/pt. (sec) : 0.0000216
```



Sonar Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0012221
  Initializing linear solver - done. Time (sec): 0.0022249
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002110
  Solving linear system (col. 0) - done. Time (sec): 0.0003490
Training - done. Time (sec): 0.0060098

```

Evaluation

```
# eval points. : 124  
  
Predicting ...  
Predicting - done. Time (sec): 0.0057318  
  
Prediction time/pt. (sec) : 0.0000462
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0070982  
  
Prediction time/pt. (sec) : 0.0000845
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0069904  
  
Prediction time/pt. (sec) : 0.0000832
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0029540  
  
Prediction time/pt. (sec) : 0.0000352
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0050044
Initializing linear solver - done. Time (sec): 0.0051966
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002472
    Solving linear system (col. 0) - done. Time (sec): 0.0003867
Training - done. Time (sec): 0.0077391
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0006647

Prediction time/pt. (sec) : 0.0000079
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0053747

Prediction time/pt. (sec) : 0.0000433
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005152

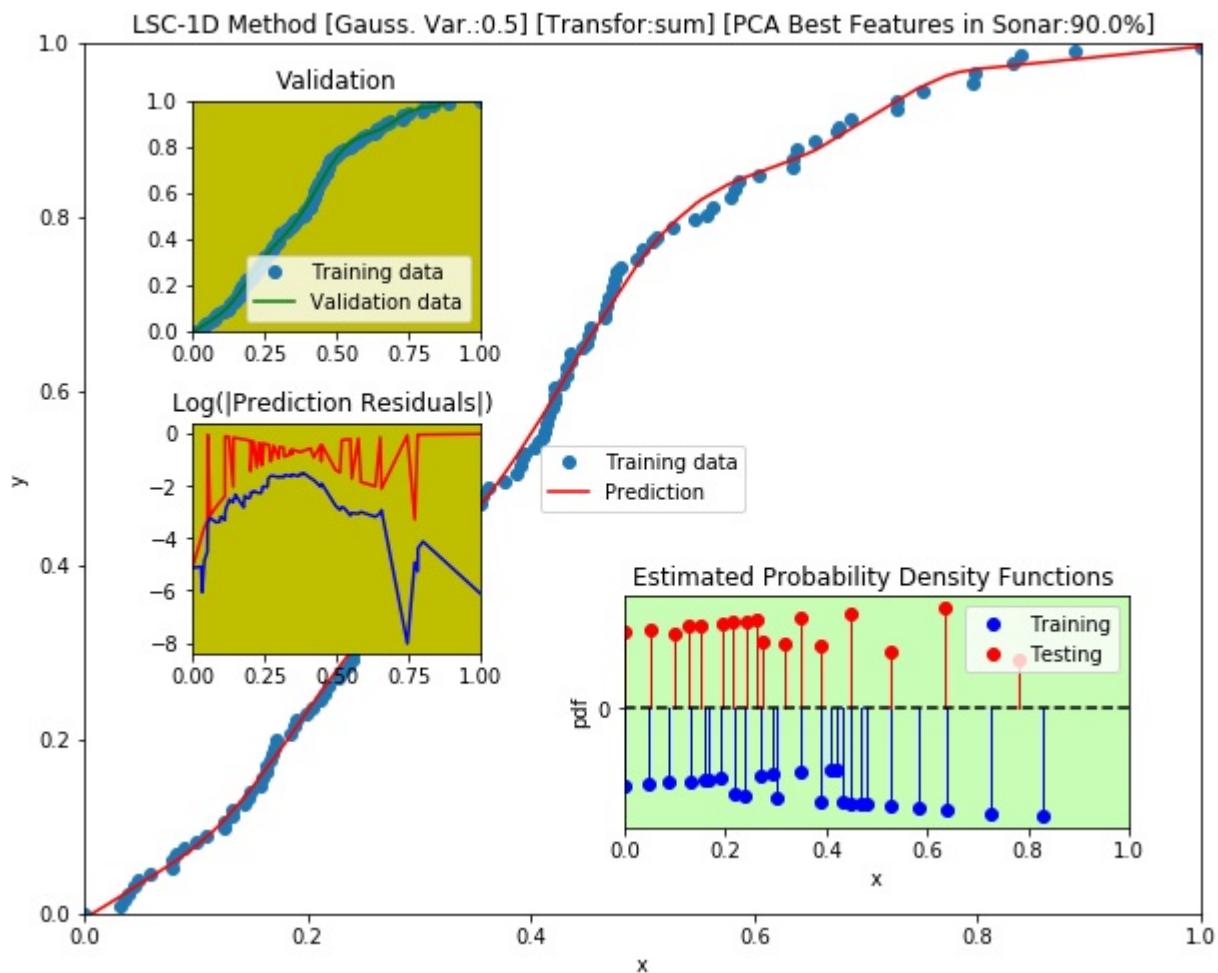
Prediction time/pt. (sec) : 0.0000061
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0037763

Prediction time/pt. (sec) : 0.0000450
```



Sonar Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0132432
  Initializing linear solver - done. Time (sec): 0.0135112
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0009441
  Solving linear system (col. 0) - done. Time (sec): 0.0011237
Training - done. Time (sec): 0.0167606

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0031271  
Prediction time/pt. (sec) : 0.0000252
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0028987  
Prediction time/pt. (sec) : 0.0000345
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0027664  
Prediction time/pt. (sec) : 0.0000329
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0037382  
Prediction time/pt. (sec) : 0.0000445
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0134227
Initializing linear solver - done. Time (sec): 0.0136869
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0010471
    Solving linear system (col. 0) - done. Time (sec): 0.0012305
Training - done. Time (sec): 0.0189188
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0021520

Prediction time/pt. (sec) : 0.0000256
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0023108

Prediction time/pt. (sec) : 0.0000186
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0020916

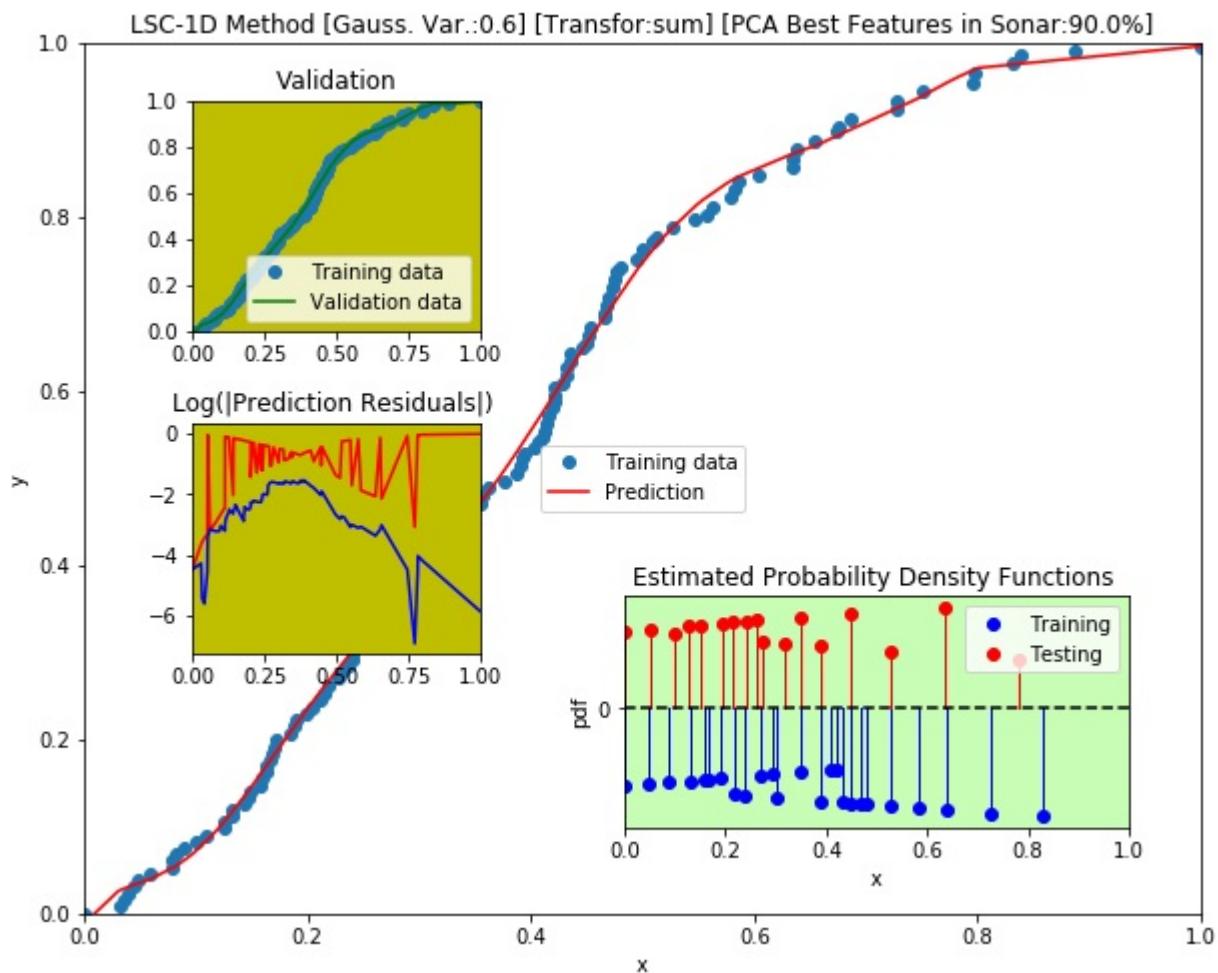
Prediction time/pt. (sec) : 0.0000249
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0026631

Prediction time/pt. (sec) : 0.0000317
```



Sonar Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0012605
  Initializing linear solver - done. Time (sec): 0.0014753
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002089
  Solving linear system (col. 0) - done. Time (sec): 0.0003343
Training - done. Time (sec): 0.0074086

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0049958  
Prediction time/pt. (sec) : 0.0000403
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0013585  
Prediction time/pt. (sec) : 0.0000162
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0012317  
Prediction time/pt. (sec) : 0.0000147
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0009894  
Prediction time/pt. (sec) : 0.0000118
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0104120
Initializing linear solver - done. Time (sec): 0.0106251
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0004258
    Solving linear system (col. 0) - done. Time (sec): 0.0005939
Training - done. Time (sec): 0.0142486
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0006111

Prediction time/pt. (sec) : 0.0000073
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0008235

Prediction time/pt. (sec) : 0.0000066
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0006340

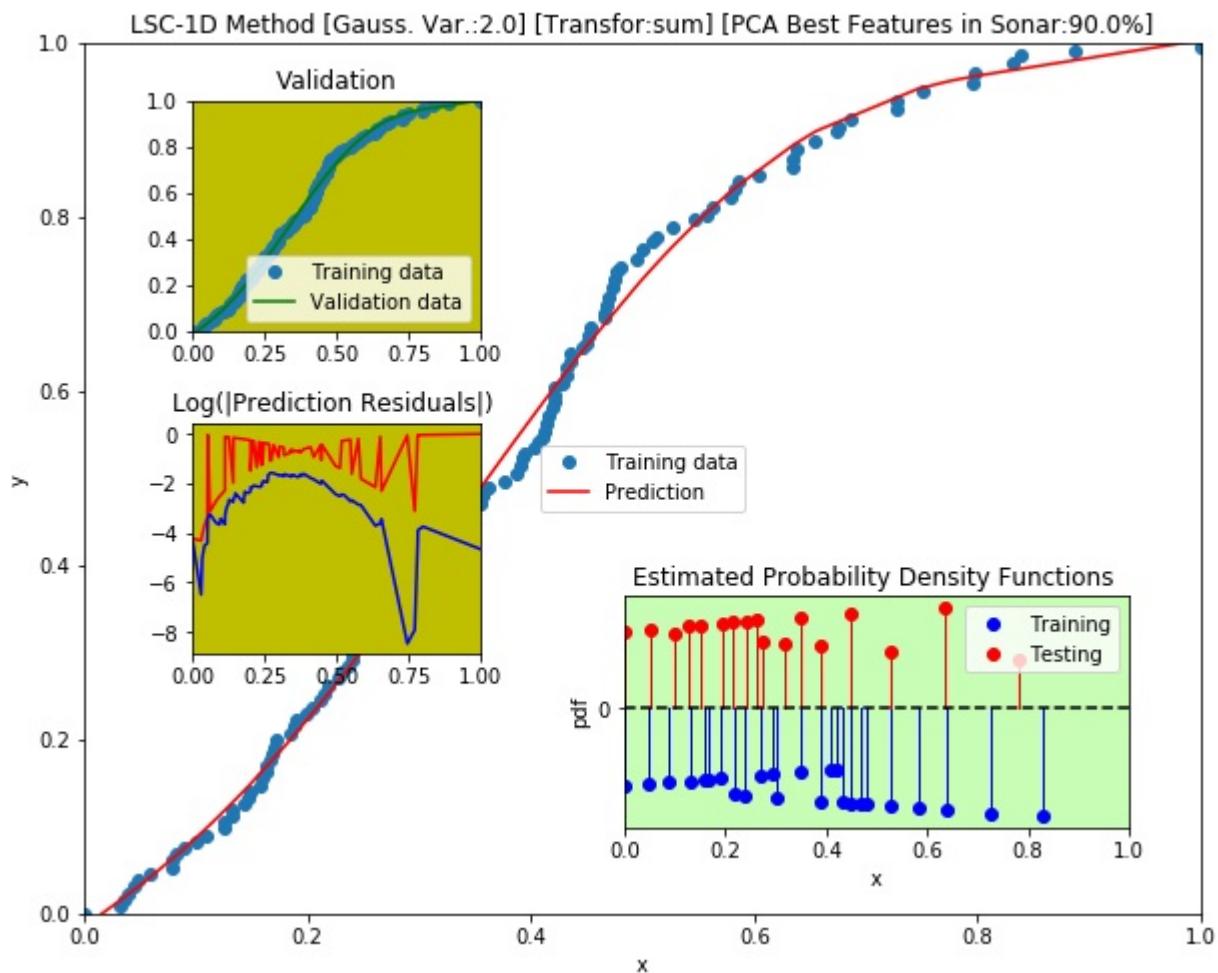
Prediction time/pt. (sec) : 0.0000075
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0020366

Prediction time/pt. (sec) : 0.0000242
```



Sonar Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0188785
  Initializing linear solver - done. Time (sec): 0.0191202
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002742
  Solving linear system (col. 0) - done. Time (sec): 0.0004449
Training - done. Time (sec): 0.0277944

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0048432  
Prediction time/pt. (sec) : 0.0000391
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0013638  
Prediction time/pt. (sec) : 0.0000162
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0017905  
Prediction time/pt. (sec) : 0.0000213
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0008051  
Prediction time/pt. (sec) : 0.0000096
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0161896
Initializing linear solver - done. Time (sec): 0.0165710
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0004590
    Solving linear system (col. 0) - done. Time (sec): 0.0006320
Training - done. Time (sec): 0.0207508
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0038812

Prediction time/pt. (sec) : 0.0000462
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0006652

Prediction time/pt. (sec) : 0.0000054
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004761

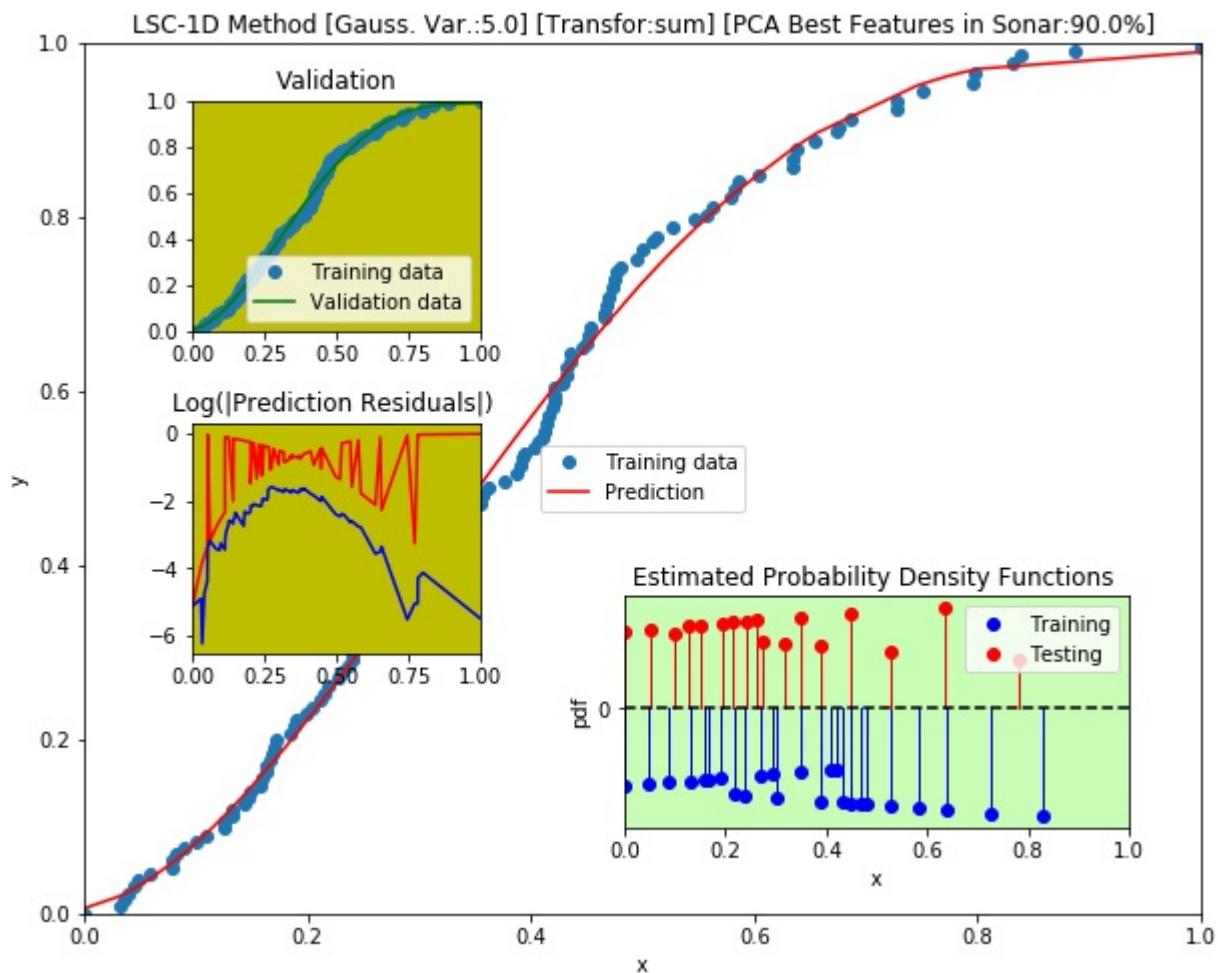
Prediction time/pt. (sec) : 0.0000057
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0006149

Prediction time/pt. (sec) : 0.0000073
```



Sonar Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0013864
  Initializing linear solver - done. Time (sec): 0.0016170
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002208
  Solving linear system (col. 0) - done. Time (sec): 0.0003567
Training - done. Time (sec): 0.0068519

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0023062  
Prediction time/pt. (sec) : 0.0000186
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0145140  
Prediction time/pt. (sec) : 0.0001728
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004032  
Prediction time/pt. (sec) : 0.0000048
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0027180  
Prediction time/pt. (sec) : 0.0000324
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0100527
Initializing linear solver - done. Time (sec): 0.0103002
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002356
    Solving linear system (col. 0) - done. Time (sec): 0.0003674
Training - done. Time (sec): 0.0120189
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004096

Prediction time/pt. (sec) : 0.0000049
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0005486

Prediction time/pt. (sec) : 0.0000044
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0003989

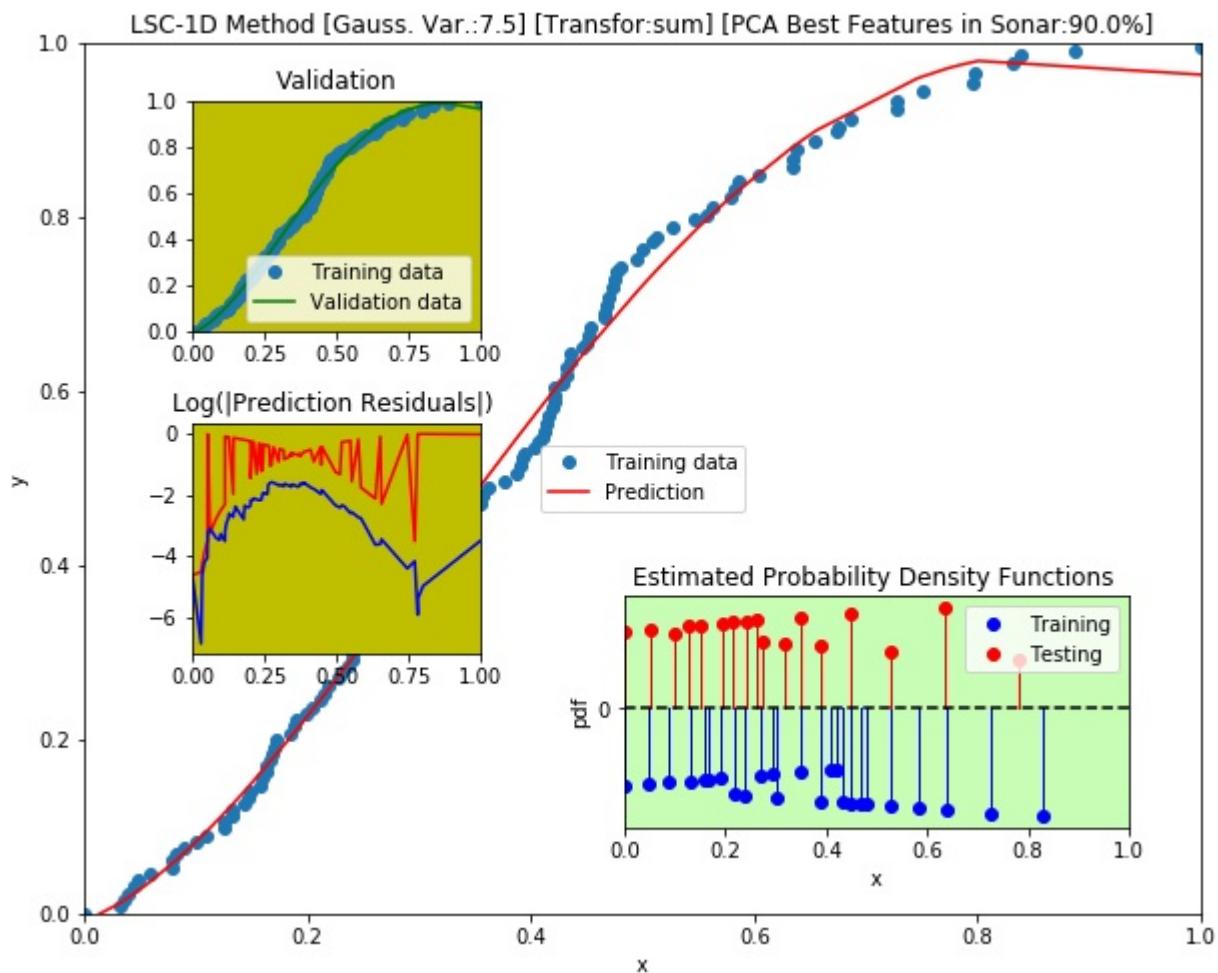
Prediction time/pt. (sec) : 0.0000047
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0024750

Prediction time/pt. (sec) : 0.0000295
```



Sonar Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0020819
  Initializing linear solver - done. Time (sec): 0.0026243
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002871
  Solving linear system (col. 0) - done. Time (sec): 0.0011725
Training - done. Time (sec): 0.0064206

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0030499  
Prediction time/pt. (sec) : 0.0000246
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004859  
Prediction time/pt. (sec) : 0.0000058
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0018370  
Prediction time/pt. (sec) : 0.0000219
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0035236  
Prediction time/pt. (sec) : 0.0000419
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0076113
Initializing linear solver - done. Time (sec): 0.0078239
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002320
    Solving linear system (col. 0) - done. Time (sec): 0.0003655
Training - done. Time (sec): 0.0095747
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0051227

Prediction time/pt. (sec) : 0.0000610
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0022995

Prediction time/pt. (sec) : 0.0000185
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0065904

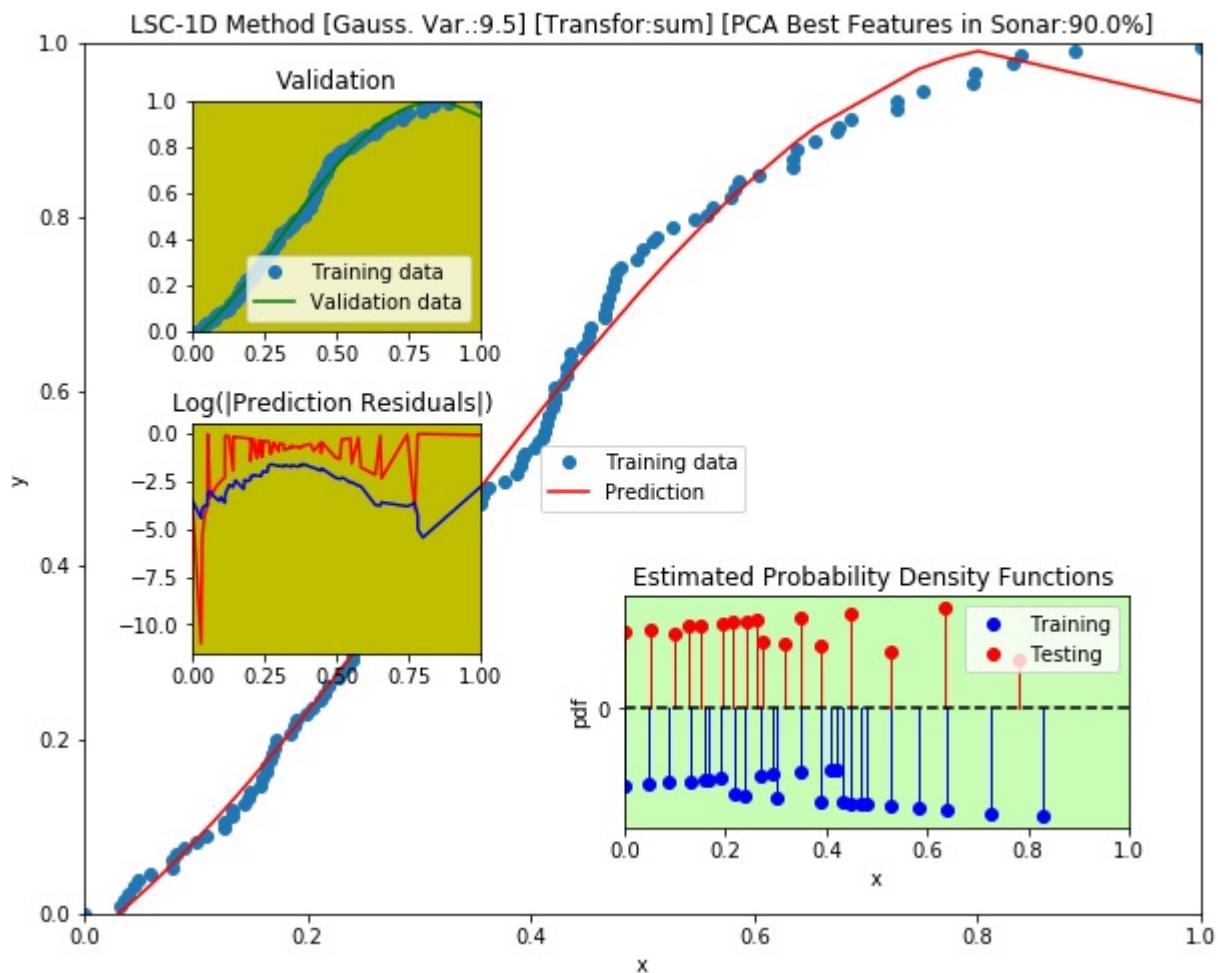
Prediction time/pt. (sec) : 0.0000785
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0016789

Prediction time/pt. (sec) : 0.0000200
```



Sonar Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0108600
  Initializing linear solver - done. Time (sec): 0.0112169
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0013821
  Solving linear system (col. 0) - done. Time (sec): 0.0016465
Training - done. Time (sec): 0.0151560

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0171578  
Prediction time/pt. (sec) : 0.0001384
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0033181  
Prediction time/pt. (sec) : 0.0000395
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0013351  
Prediction time/pt. (sec) : 0.0000159
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0084064  
Prediction time/pt. (sec) : 0.0001001
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0041654
Initializing linear solver - done. Time (sec): 0.0043728
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002356
    Solving linear system (col. 0) - done. Time (sec): 0.0003736
Training - done. Time (sec): 0.0068064
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004377

Prediction time/pt. (sec) : 0.0000052
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0113733

Prediction time/pt. (sec) : 0.0000917
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004411

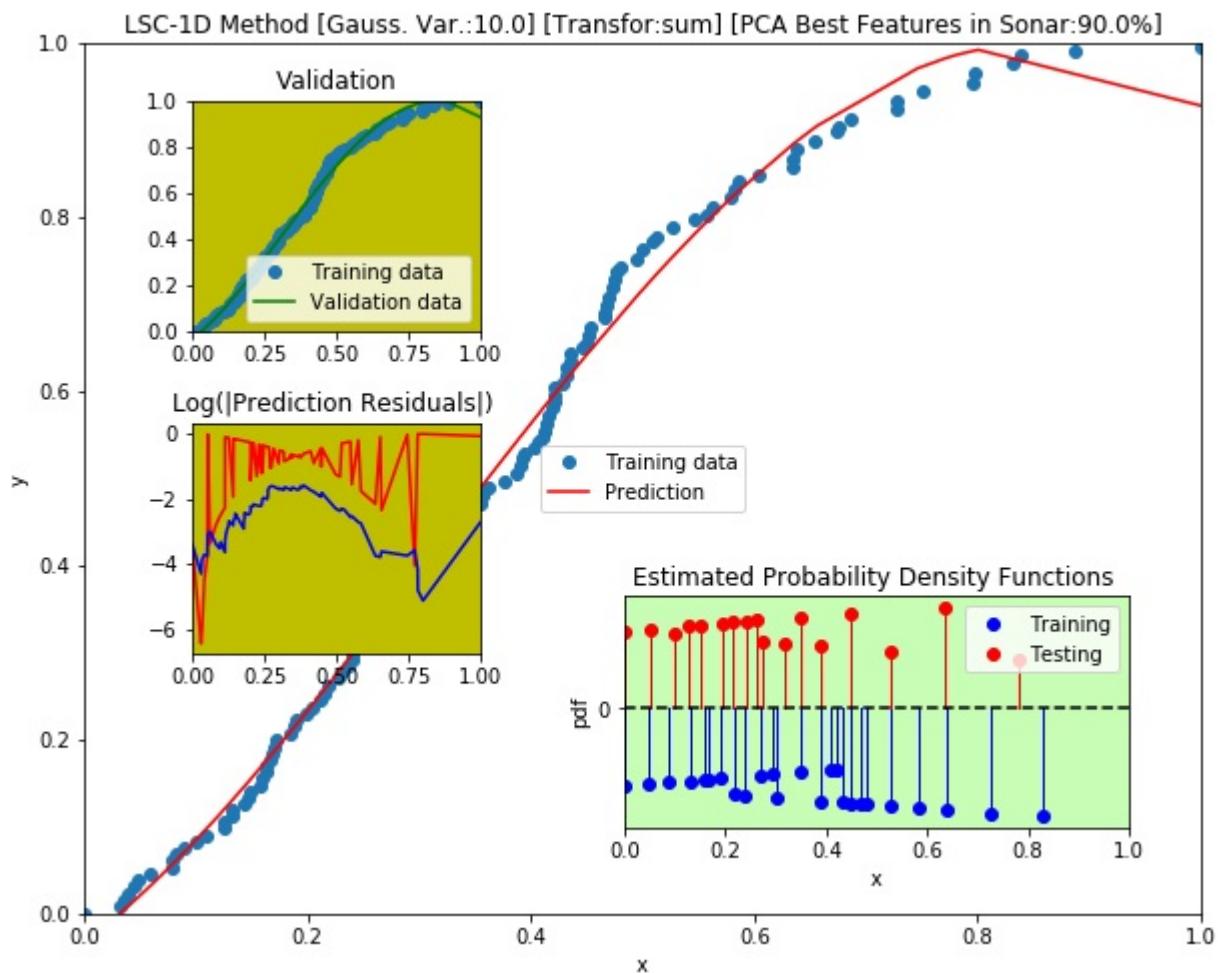
Prediction time/pt. (sec) : 0.0000053
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0009201

Prediction time/pt. (sec) : 0.0000110
```



Sonar Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

Training ...

Initializing linear solver ...

Performing LU fact. (125 x 125 mtx) ...

Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0040808

Initializing linear solver - done. Time (sec): 0.0043566

Solving linear system (col. 0) ...

Back solving (125 x 125 mtx) ...

Back solving (125 x 125 mtx) - done. Time (sec): 0.0002897

Solving linear system (col. 0) - done. Time (sec): 0.0004733

Training - done. Time (sec): 0.0130537

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0110686  
Prediction time/pt. (sec) : 0.0000893
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0013909  
Prediction time/pt. (sec) : 0.0000166
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0073907  
Prediction time/pt. (sec) : 0.0000880
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004911  
Prediction time/pt. (sec) : 0.0000058
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0025196
Initializing linear solver - done. Time (sec): 0.0026882
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0001905
    Solving linear system (col. 0) - done. Time (sec): 0.0003068
Training - done. Time (sec): 0.0044351
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0084848

Prediction time/pt. (sec) : 0.0001010
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0006933

Prediction time/pt. (sec) : 0.0000056
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0124004

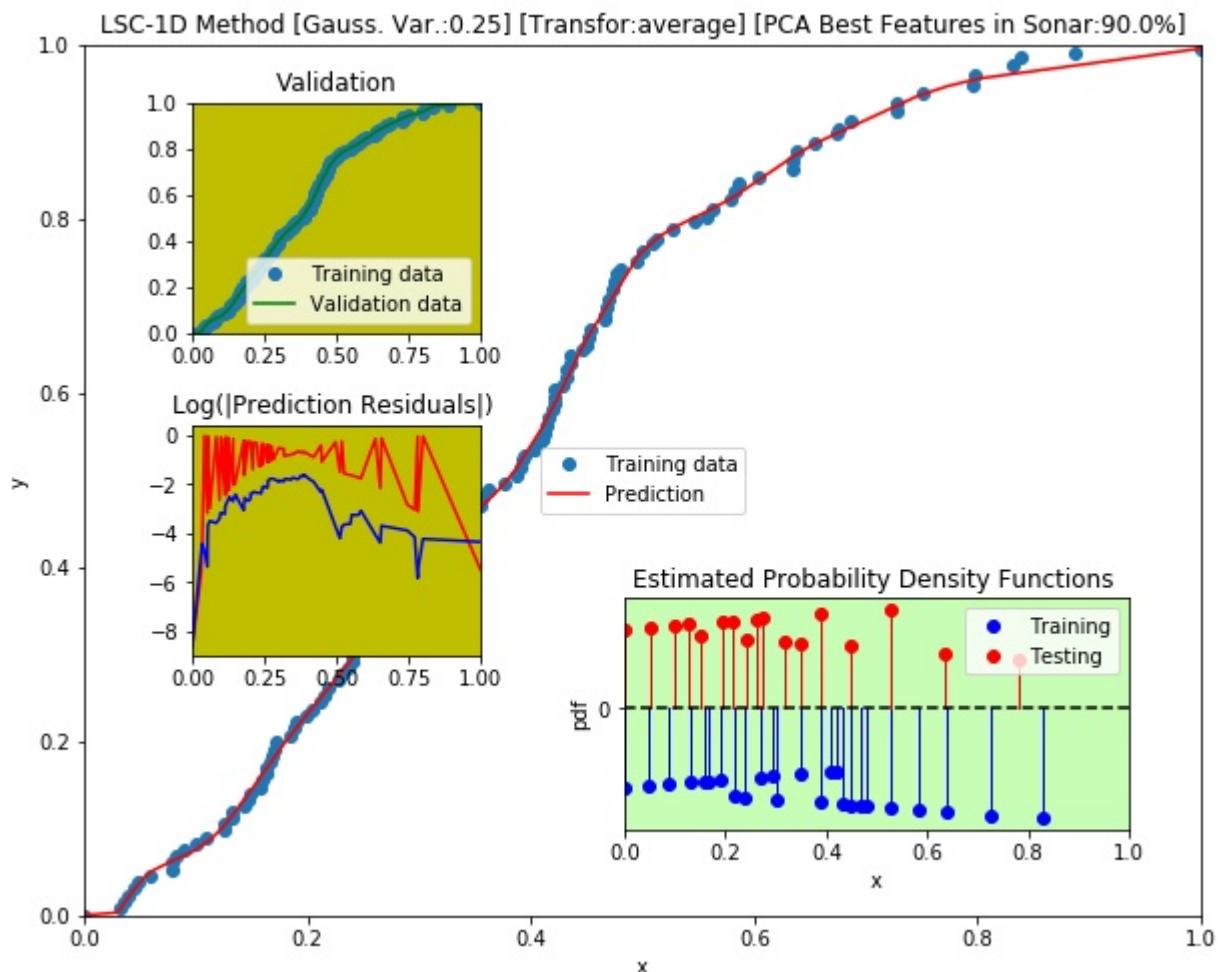
Prediction time/pt. (sec) : 0.0001476
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004957

Prediction time/pt. (sec) : 0.0000059
```



Sonar Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0014033
  Initializing linear solver - done. Time (sec): 0.0016286
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002177
  Solving linear system (col. 0) - done. Time (sec): 0.0003548
Training - done. Time (sec): 0.0058870

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0055041  
Prediction time/pt. (sec) : 0.0000444
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005417  
Prediction time/pt. (sec) : 0.0000064
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005004  
Prediction time/pt. (sec) : 0.0000060
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005031  
Prediction time/pt. (sec) : 0.0000060
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0072825
Initializing linear solver - done. Time (sec): 0.0074639
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002413
    Solving linear system (col. 0) - done. Time (sec): 0.0003738
Training - done. Time (sec): 0.0094726
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005445

Prediction time/pt. (sec) : 0.0000065
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0080228

Prediction time/pt. (sec) : 0.0000647
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005479

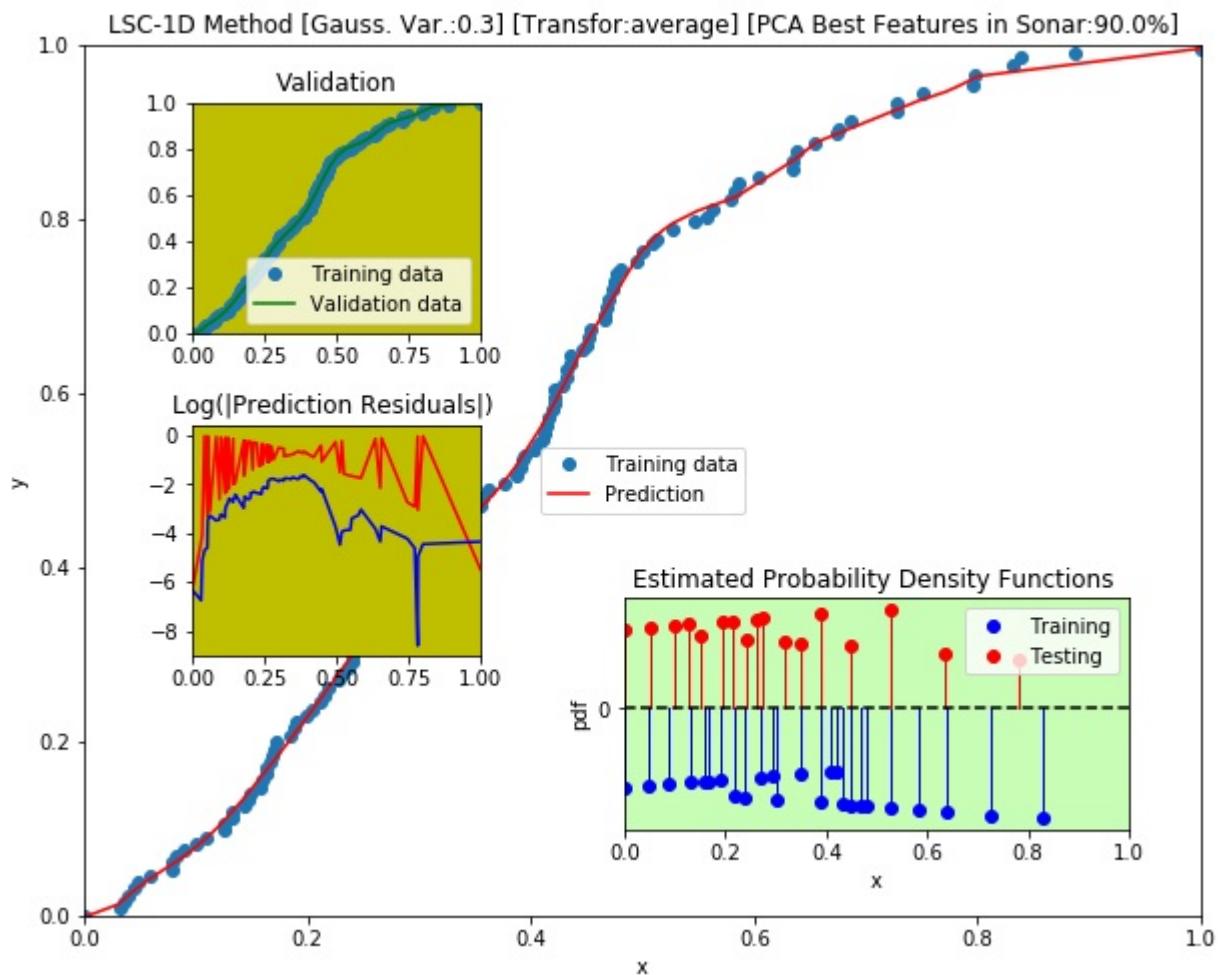
Prediction time/pt. (sec) : 0.0000065
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005019

Prediction time/pt. (sec) : 0.0000060
```



Sonar Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

Training ...

Initializing linear solver ...

Performing LU fact. (125 x 125 mtx) ...

Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0024402

Initializing linear solver - done. Time (sec): 0.0030010

Solving linear system (col. 0) ...

Back solving (125 x 125 mtx) ...

Back solving (125 x 125 mtx) - done. Time (sec): 0.0002949

Solving linear system (col. 0) - done. Time (sec): 0.0011868

Training - done. Time (sec): 0.0069754

Evaluation

```
# eval points. : 124  
  
Predicting ...  
Predicting - done. Time (sec): 0.0054502  
  
Prediction time/pt. (sec) : 0.0000440
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0005748  
  
Prediction time/pt. (sec) : 0.0000068
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0005567  
  
Prediction time/pt. (sec) : 0.0000066
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0005991  
  
Prediction time/pt. (sec) : 0.0000071
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0026698
Initializing linear solver - done. Time (sec): 0.0031302
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002458
    Solving linear system (col. 0) - done. Time (sec): 0.0008757
Training - done. Time (sec): 0.0064080
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0014050

Prediction time/pt. (sec) : 0.0000167
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0007844

Prediction time/pt. (sec) : 0.0000063
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0073545

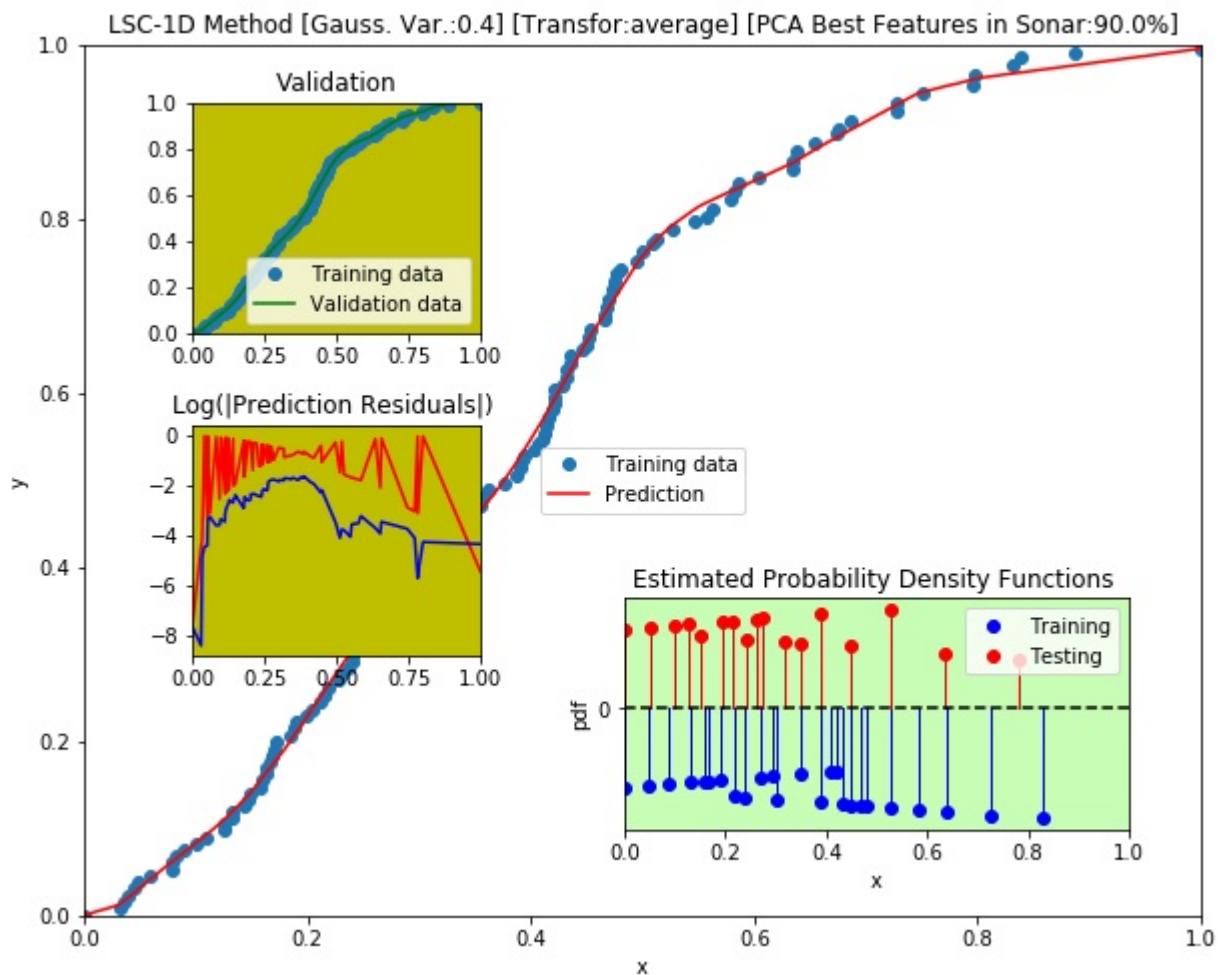
Prediction time/pt. (sec) : 0.0000876
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0024483

Prediction time/pt. (sec) : 0.0000291
```



Sonar Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0028071
  Initializing linear solver - done. Time (sec): 0.0034637
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002975
  Solving linear system (col. 0) - done. Time (sec): 0.0012681
Training - done. Time (sec): 0.0077615

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0061476  
Prediction time/pt. (sec) : 0.0000496
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005436  
Prediction time/pt. (sec) : 0.0000065
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004811  
Prediction time/pt. (sec) : 0.0000057
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004709  
Prediction time/pt. (sec) : 0.0000056
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0024610
Initializing linear solver - done. Time (sec): 0.0029061
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002387
    Solving linear system (col. 0) - done. Time (sec): 0.0008650
Training - done. Time (sec): 0.0059383
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0011039

Prediction time/pt. (sec) : 0.0000131
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0031865

Prediction time/pt. (sec) : 0.0000257
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0023034

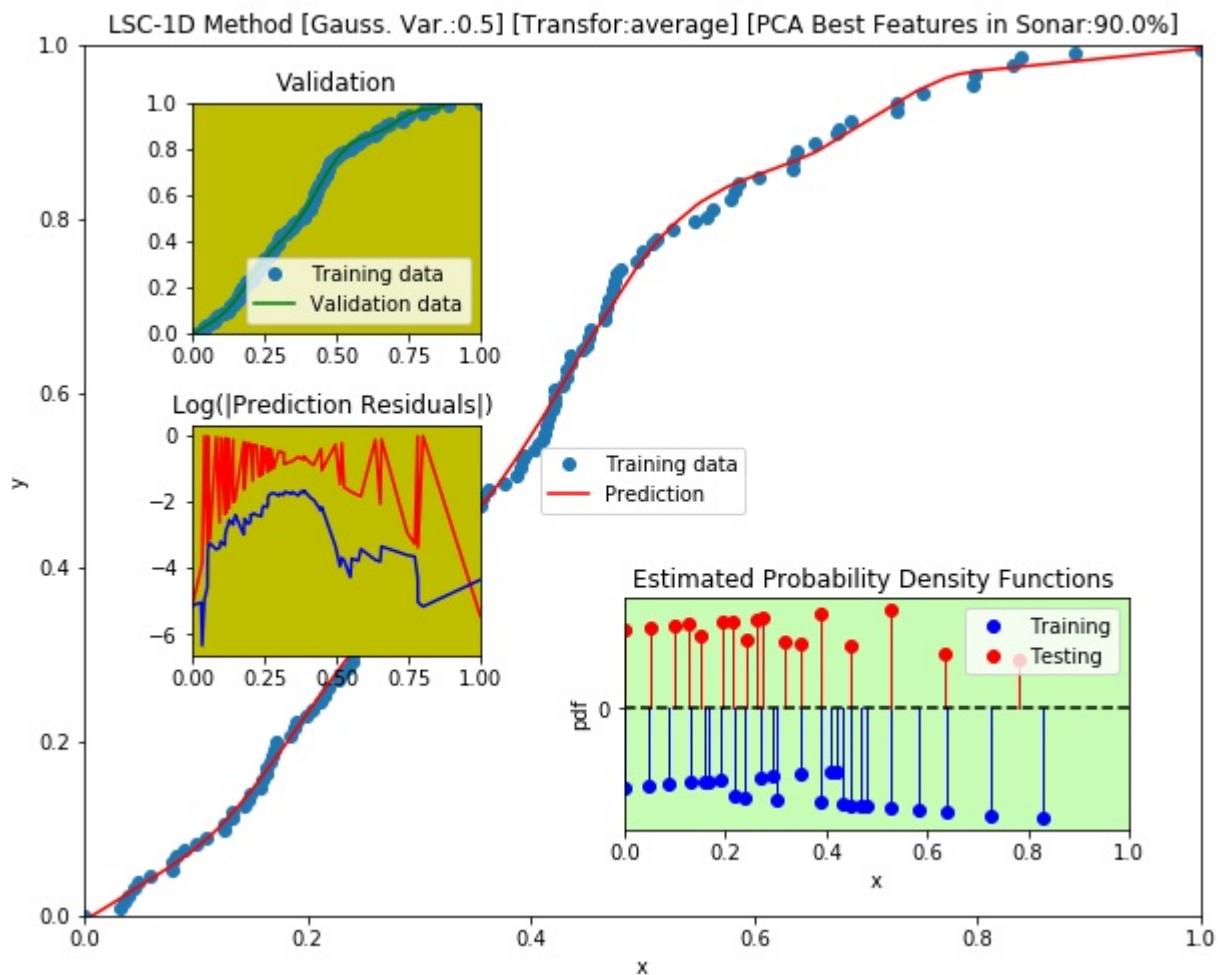
Prediction time/pt. (sec) : 0.0000274
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005045

Prediction time/pt. (sec) : 0.0000060
```



Sonar Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0008750
  Initializing linear solver - done. Time (sec): 0.0020378
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0003035
  Solving linear system (col. 0) - done. Time (sec): 0.0012670
Training - done. Time (sec): 0.0076206

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0090814  
Prediction time/pt. (sec) : 0.0000732
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005627  
Prediction time/pt. (sec) : 0.0000067
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005019  
Prediction time/pt. (sec) : 0.0000060
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005212  
Prediction time/pt. (sec) : 0.0000062
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0024705
Initializing linear solver - done. Time (sec): 0.0029378
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002391
    Solving linear system (col. 0) - done. Time (sec): 0.0008357
Training - done. Time (sec): 0.0059934
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0011003

Prediction time/pt. (sec) : 0.0000131
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0034547

Prediction time/pt. (sec) : 0.0000279
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005608

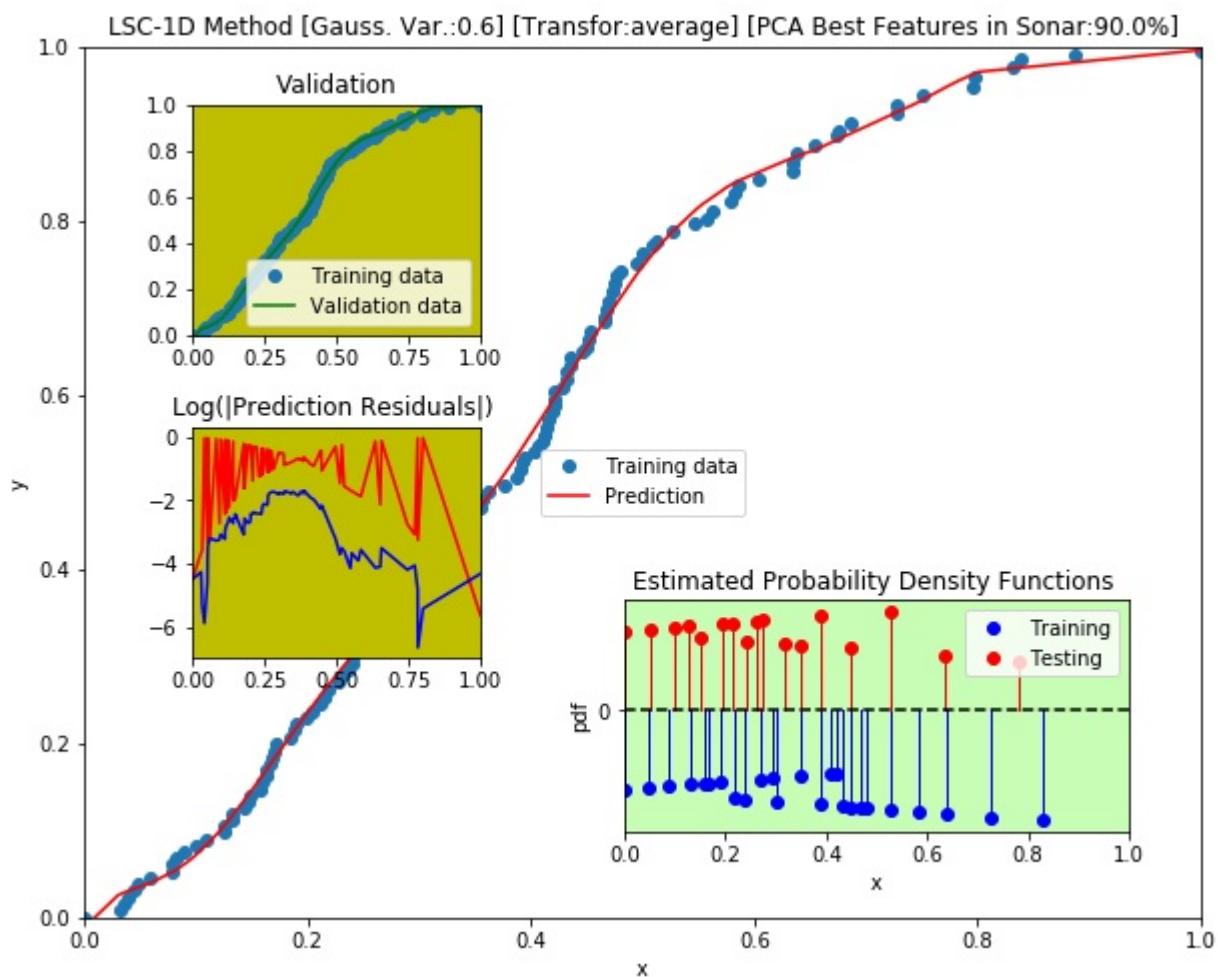
Prediction time/pt. (sec) : 0.0000067
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0053480

Prediction time/pt. (sec) : 0.0000637
```



Sonar Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0043564
  Initializing linear solver - done. Time (sec): 0.0050826
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0003042
  Solving linear system (col. 0) - done. Time (sec): 0.0012932
Training - done. Time (sec): 0.0092459

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0046756  
Prediction time/pt. (sec) : 0.0000377
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0008311  
Prediction time/pt. (sec) : 0.0000099
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0008562  
Prediction time/pt. (sec) : 0.0000102
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0008373  
Prediction time/pt. (sec) : 0.0000100
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0068607
Initializing linear solver - done. Time (sec): 0.0070567
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002298
    Solving linear system (col. 0) - done. Time (sec): 0.0003598
Training - done. Time (sec): 0.0088260
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0051441

Prediction time/pt. (sec) : 0.0000612
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0043693

Prediction time/pt. (sec) : 0.0000352
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0050783

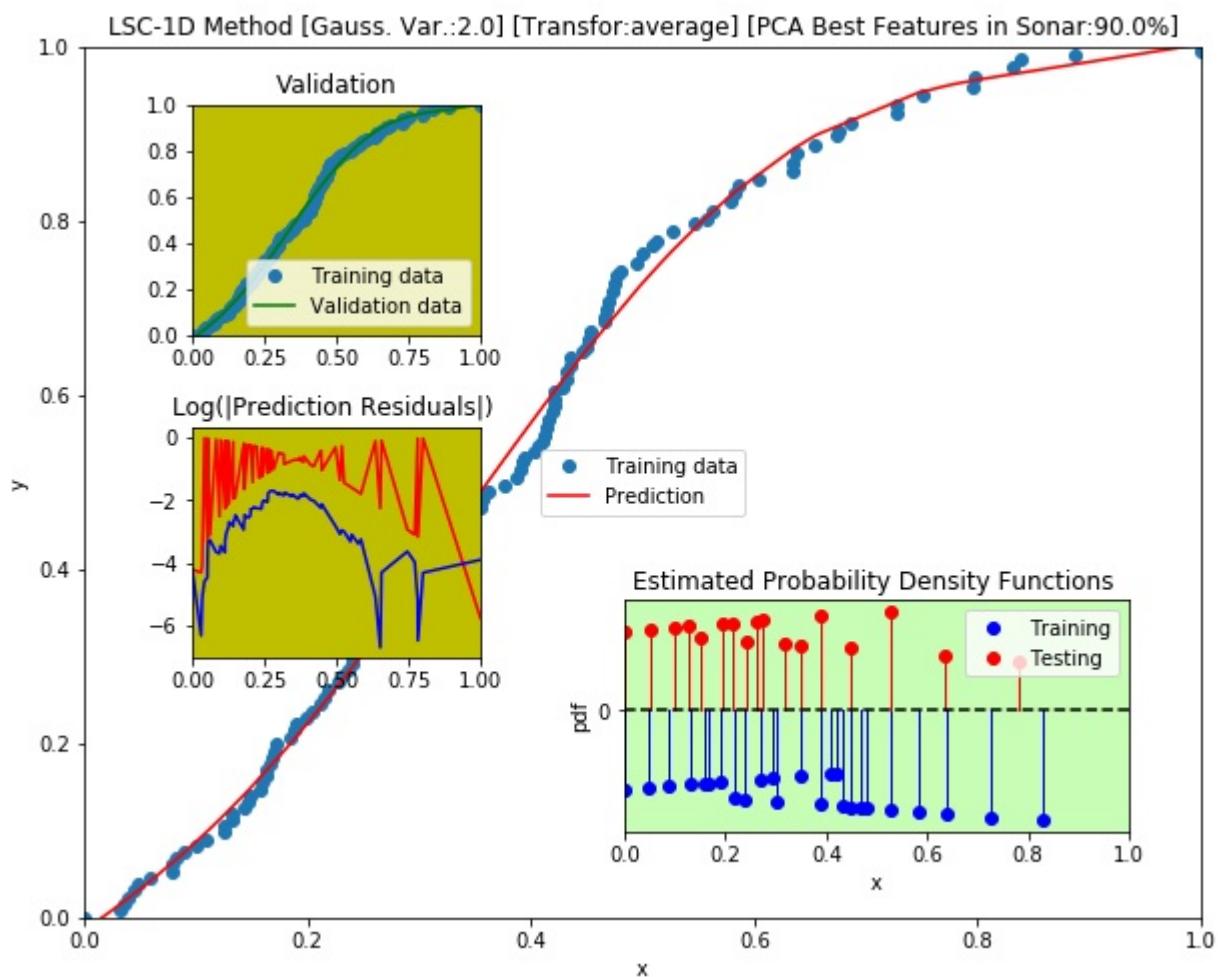
Prediction time/pt. (sec) : 0.0000605
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0017672

Prediction time/pt. (sec) : 0.0000210
```



Sonar Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0076065
  Initializing linear solver - done. Time (sec): 0.0078433
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0004334
  Solving linear system (col. 0) - done. Time (sec): 0.0005918
Training - done. Time (sec): 0.0153968

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0035987  
Prediction time/pt. (sec) : 0.0000290
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004084  
Prediction time/pt. (sec) : 0.0000049
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0003822  
Prediction time/pt. (sec) : 0.0000045
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0003791  
Prediction time/pt. (sec) : 0.0000045
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0006902
Initializing linear solver - done. Time (sec): 0.0008602
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002615
    Solving linear system (col. 0) - done. Time (sec): 0.0003936
Training - done. Time (sec): 0.0026240
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0061710

Prediction time/pt. (sec) : 0.0000735
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0019360

Prediction time/pt. (sec) : 0.0000156
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004339

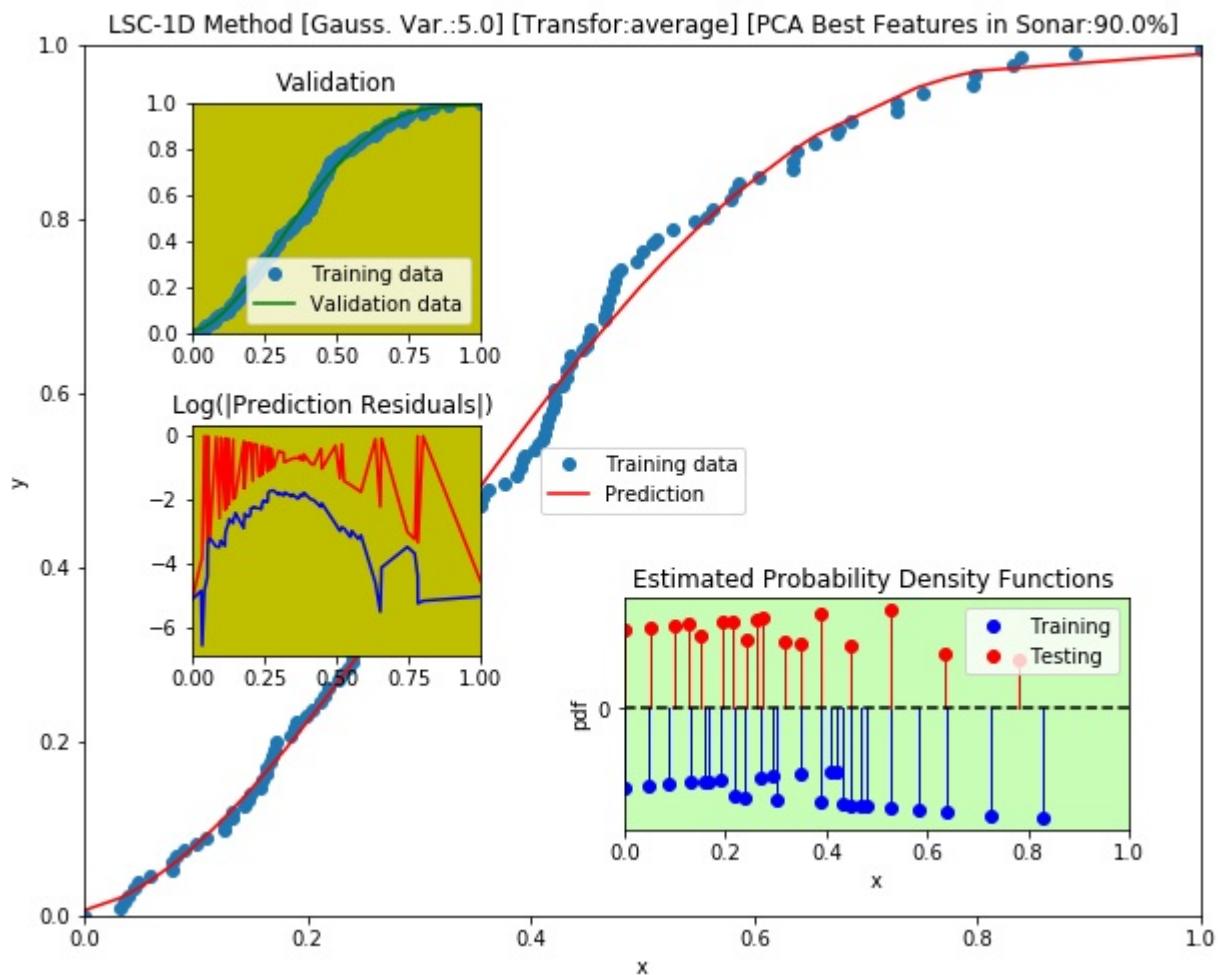
Prediction time/pt. (sec) : 0.0000052
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0065308

Prediction time/pt. (sec) : 0.0000777
```



Sonar Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

Training ...

Initializing linear solver ...

Performing LU fact. (125 x 125 mtx) ...

Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0041852

Initializing linear solver - done. Time (sec): 0.0044284

Solving linear system (col. 0) ...

Back solving (125 x 125 mtx) ...

Back solving (125 x 125 mtx) - done. Time (sec): 0.0002878

Solving linear system (col. 0) - done. Time (sec): 0.0004661

Training - done. Time (sec): 0.0116529

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0072825  
Prediction time/pt. (sec) : 0.0000587
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0013046  
Prediction time/pt. (sec) : 0.0000155
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0084782  
Prediction time/pt. (sec) : 0.0001009
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004115  
Prediction time/pt. (sec) : 0.0000049
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0055916
Initializing linear solver - done. Time (sec): 0.0057564
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002339
    Solving linear system (col. 0) - done. Time (sec): 0.0003605
Training - done. Time (sec): 0.0074594
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004134

Prediction time/pt. (sec) : 0.0000049
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0074537

Prediction time/pt. (sec) : 0.0000601
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004408

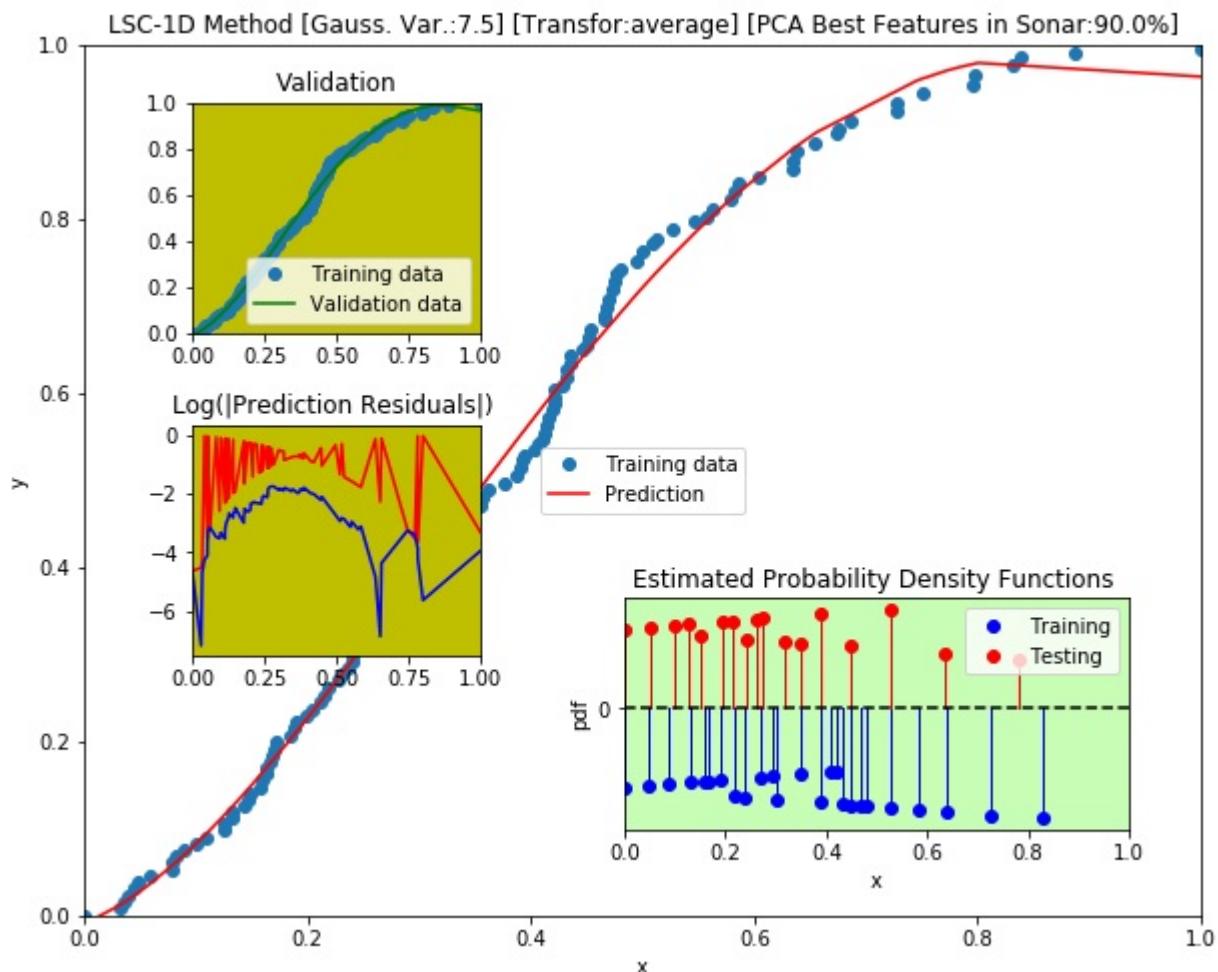
Prediction time/pt. (sec) : 0.0000052
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0103357

Prediction time/pt. (sec) : 0.0001230
```



Sonar Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0023315
  Initializing linear solver - done. Time (sec): 0.0025623
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0004954
  Solving linear system (col. 0) - done. Time (sec): 0.0006754
Training - done. Time (sec): 0.0051787

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0046985  
Prediction time/pt. (sec) : 0.0000379
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0016124  
Prediction time/pt. (sec) : 0.0000192
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0015812  
Prediction time/pt. (sec) : 0.0000188
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0012565  
Prediction time/pt. (sec) : 0.0000150
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0089910
Initializing linear solver - done. Time (sec): 0.0091863
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0004315
    Solving linear system (col. 0) - done. Time (sec): 0.0006006
Training - done. Time (sec): 0.0136704
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004792

Prediction time/pt. (sec) : 0.0000057
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0006194

Prediction time/pt. (sec) : 0.0000050
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0008004

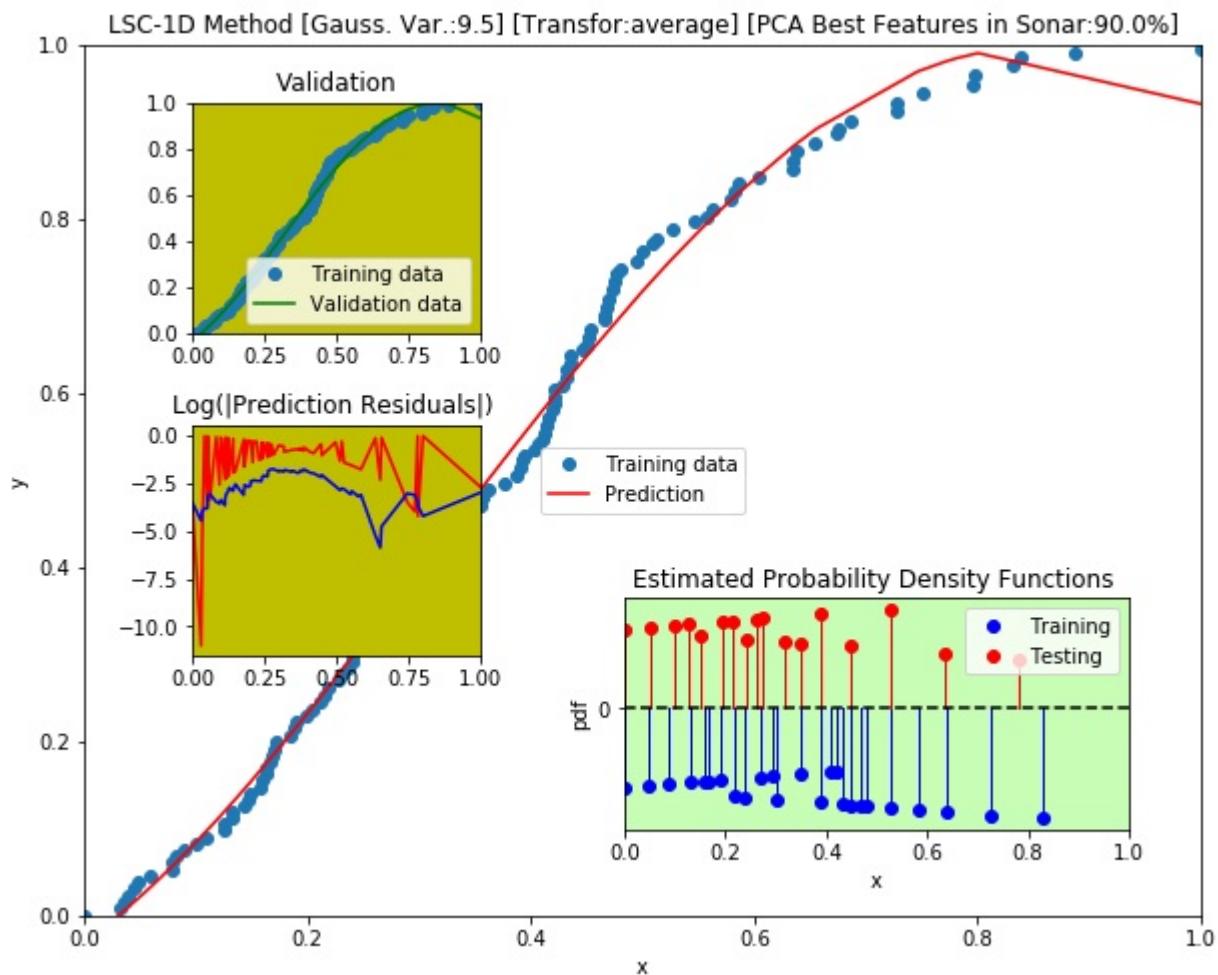
Prediction time/pt. (sec) : 0.0000095
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0011916

Prediction time/pt. (sec) : 0.0000142
```



Sonar Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0072677
  Initializing linear solver - done. Time (sec): 0.0082083
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002992
  Solving linear system (col. 0) - done. Time (sec): 0.0020454
Training - done. Time (sec): 0.0136039

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0016711  
Prediction time/pt. (sec) : 0.0000135
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0028441  
Prediction time/pt. (sec) : 0.0000339
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0041957  
Prediction time/pt. (sec) : 0.0000499
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0023365  
Prediction time/pt. (sec) : 0.0000278
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0052025
Initializing linear solver - done. Time (sec): 0.0054209
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002396
    Solving linear system (col. 0) - done. Time (sec): 0.0003812
Training - done. Time (sec): 0.0091181
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0053718

Prediction time/pt. (sec) : 0.0000640
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0005798

Prediction time/pt. (sec) : 0.0000047
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0043097

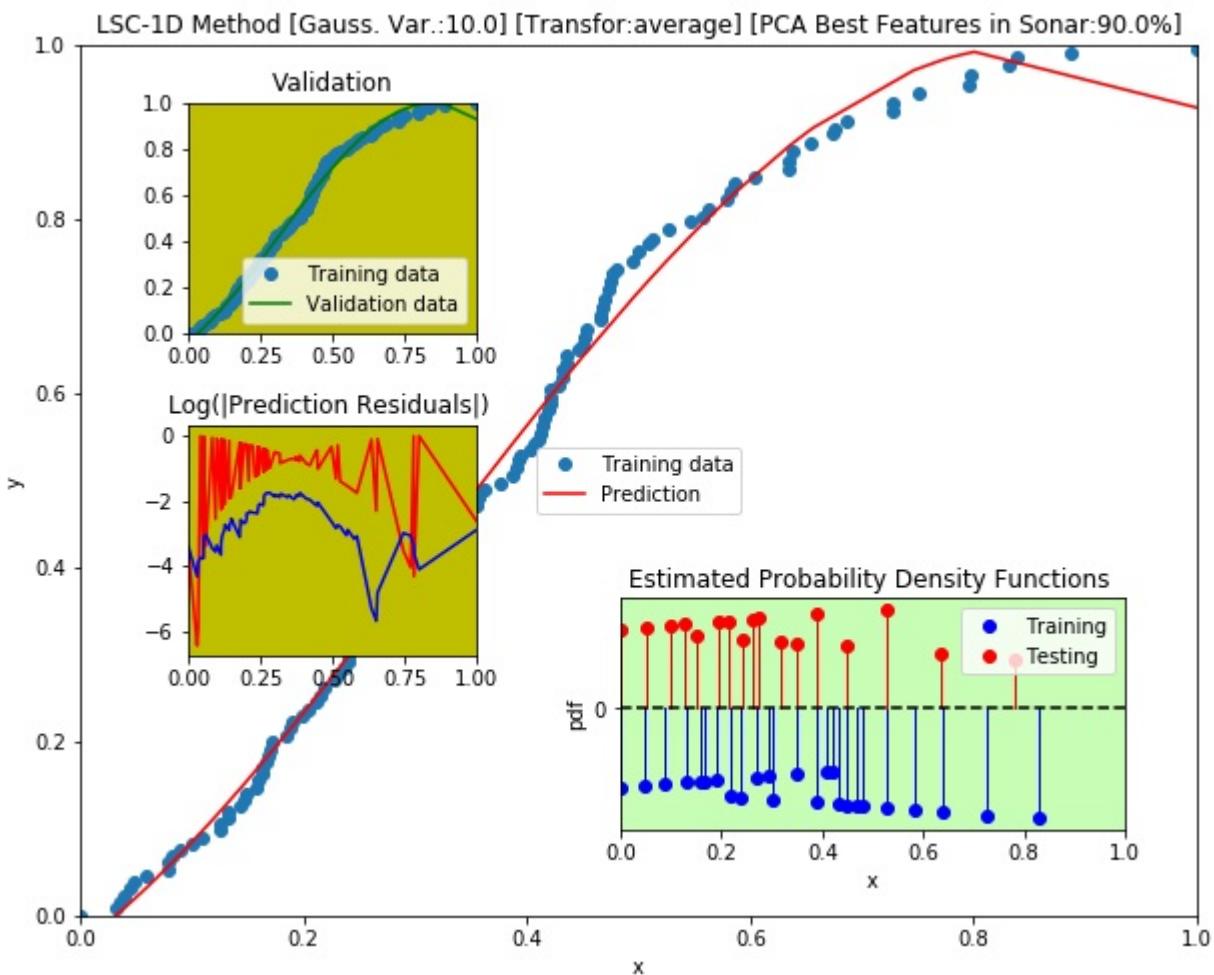
Prediction time/pt. (sec) : 0.0000513
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0089884

Prediction time/pt. (sec) : 0.0001070
```



Sonar Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```
Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0074165
    Initializing linear solver - done. Time (sec): 0.0083289
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0002358
    Solving linear system (col. 0) - done. Time (sec): 0.0012729
Training - done. Time (sec): 0.0124800
```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0007398  
Prediction time/pt. (sec) : 0.0000060
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005314  
Prediction time/pt. (sec) : 0.0000063
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005152  
Prediction time/pt. (sec) : 0.0000061
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005145  
Prediction time/pt. (sec) : 0.0000061
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0210350
Initializing linear solver - done. Time (sec): 0.0217118
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002382
    Solving linear system (col. 0) - done. Time (sec): 0.0012484
Training - done. Time (sec): 0.0253830
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0010264

Prediction time/pt. (sec) : 0.0000122
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0006967

Prediction time/pt. (sec) : 0.0000056
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005050

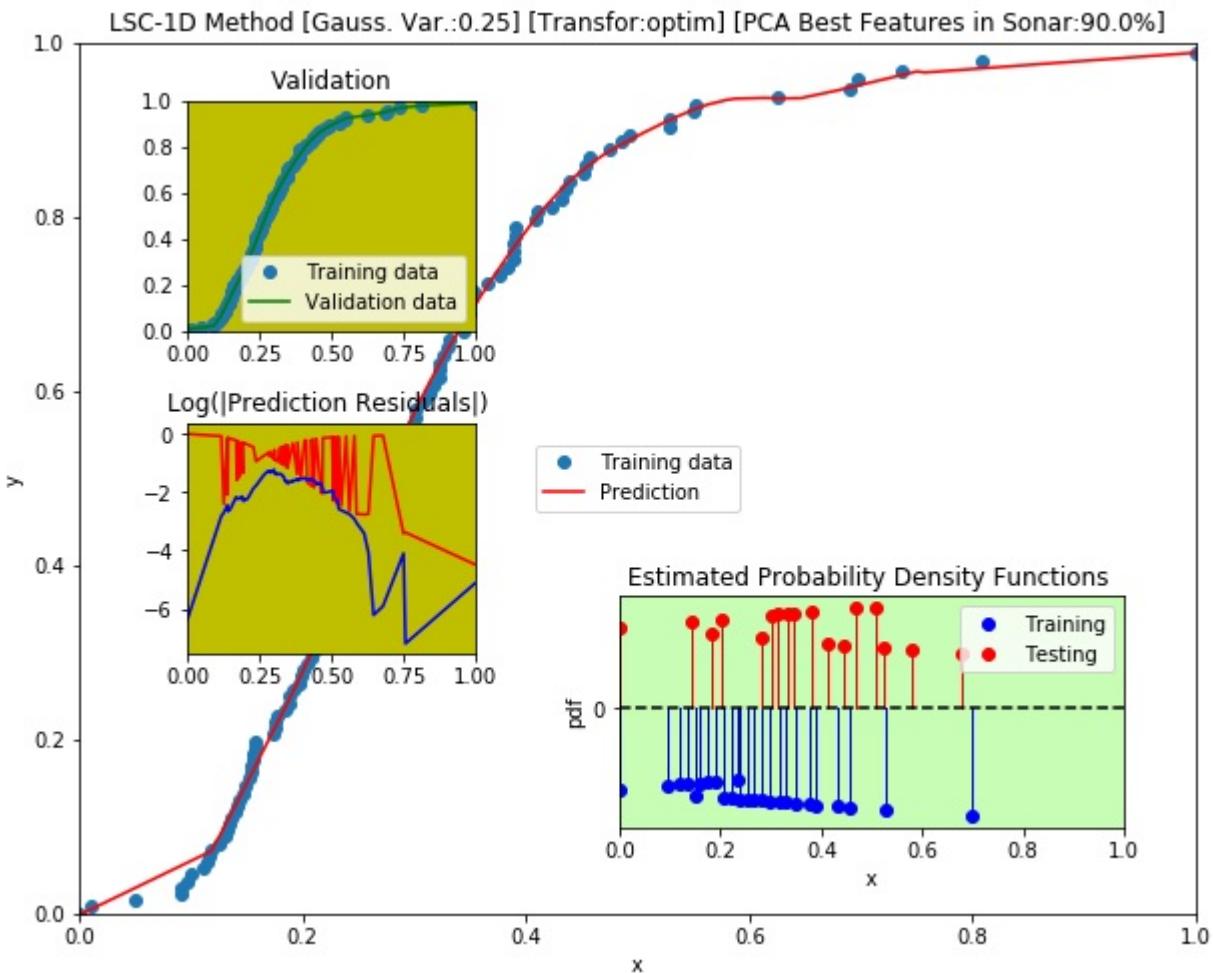
Prediction time/pt. (sec) : 0.0000060
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005147

Prediction time/pt. (sec) : 0.0000061
```



Sonar Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0009730
    Initializing linear solver - done. Time (sec): 0.0021973
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0003166
    Solving linear system (col. 0) - done. Time (sec): 0.0010648
Training - done. Time (sec): 0.0065427

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0009129  
Prediction time/pt. (sec) : 0.0000074
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0028641  
Prediction time/pt. (sec) : 0.0000341
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0023711  
Prediction time/pt. (sec) : 0.0000282
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0049047  
Prediction time/pt. (sec) : 0.0000584
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0102673
Initializing linear solver - done. Time (sec): 0.0104699
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002513
    Solving linear system (col. 0) - done. Time (sec): 0.0003865
Training - done. Time (sec): 0.0127234
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0011961

Prediction time/pt. (sec) : 0.0000142
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0085416

Prediction time/pt. (sec) : 0.0000689
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0010653

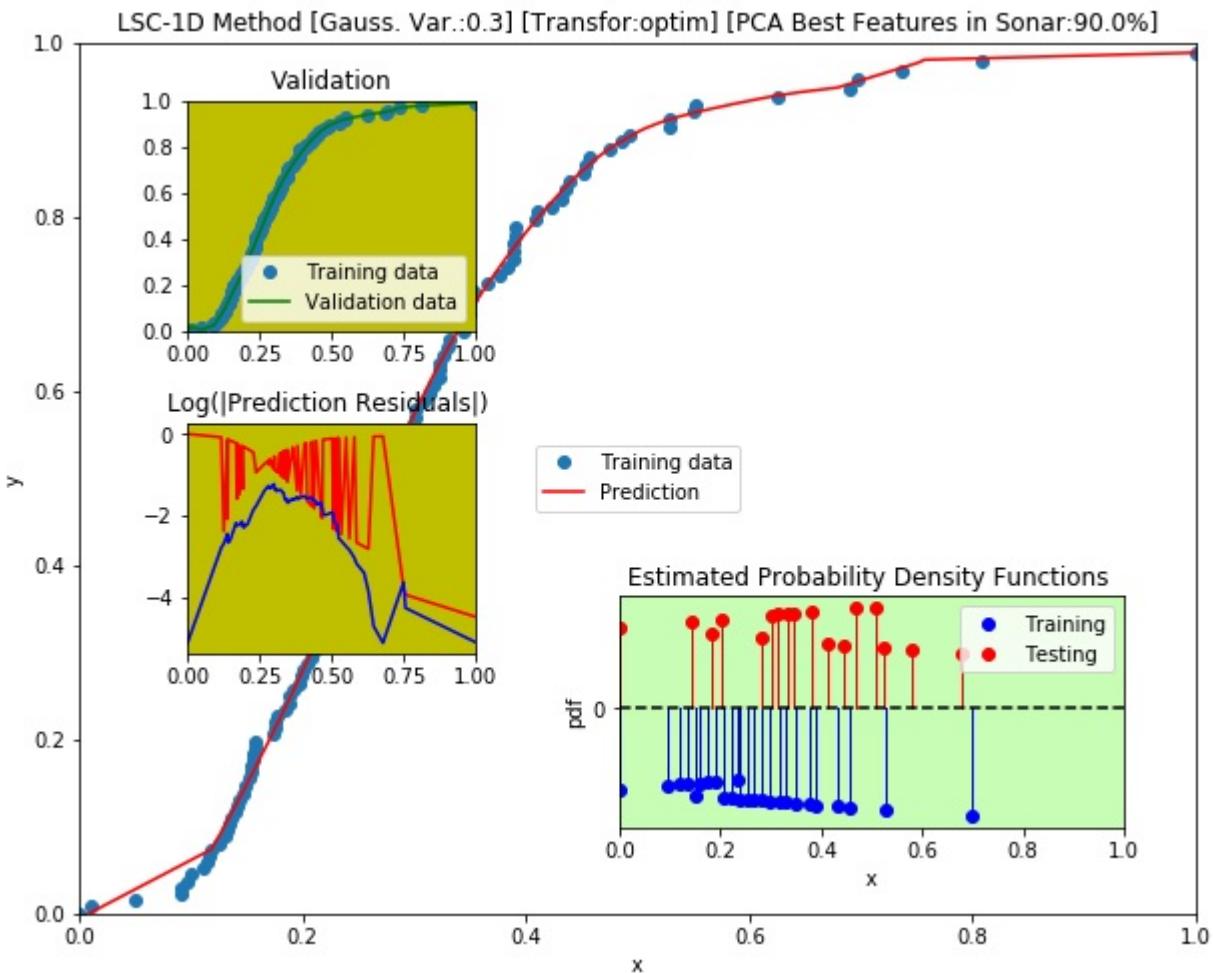
Prediction time/pt. (sec) : 0.0000127
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0017729

Prediction time/pt. (sec) : 0.0000211
```



Sonar Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0087271
    Initializing linear solver - done. Time (sec): 0.0089619
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0002904
    Solving linear system (col. 0) - done. Time (sec): 0.0004764
Training - done. Time (sec): 0.0123069

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0080223  
Prediction time/pt. (sec) : 0.0000647
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0022776  
Prediction time/pt. (sec) : 0.0000271
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0119829  
Prediction time/pt. (sec) : 0.0001427
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005181  
Prediction time/pt. (sec) : 0.0000062
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0136893
Initializing linear solver - done. Time (sec): 0.0139070
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0008848
    Solving linear system (col. 0) - done. Time (sec): 0.0011780
Training - done. Time (sec): 0.0169642
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0046177

Prediction time/pt. (sec) : 0.0000550
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0026147

Prediction time/pt. (sec) : 0.0000211
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0029700

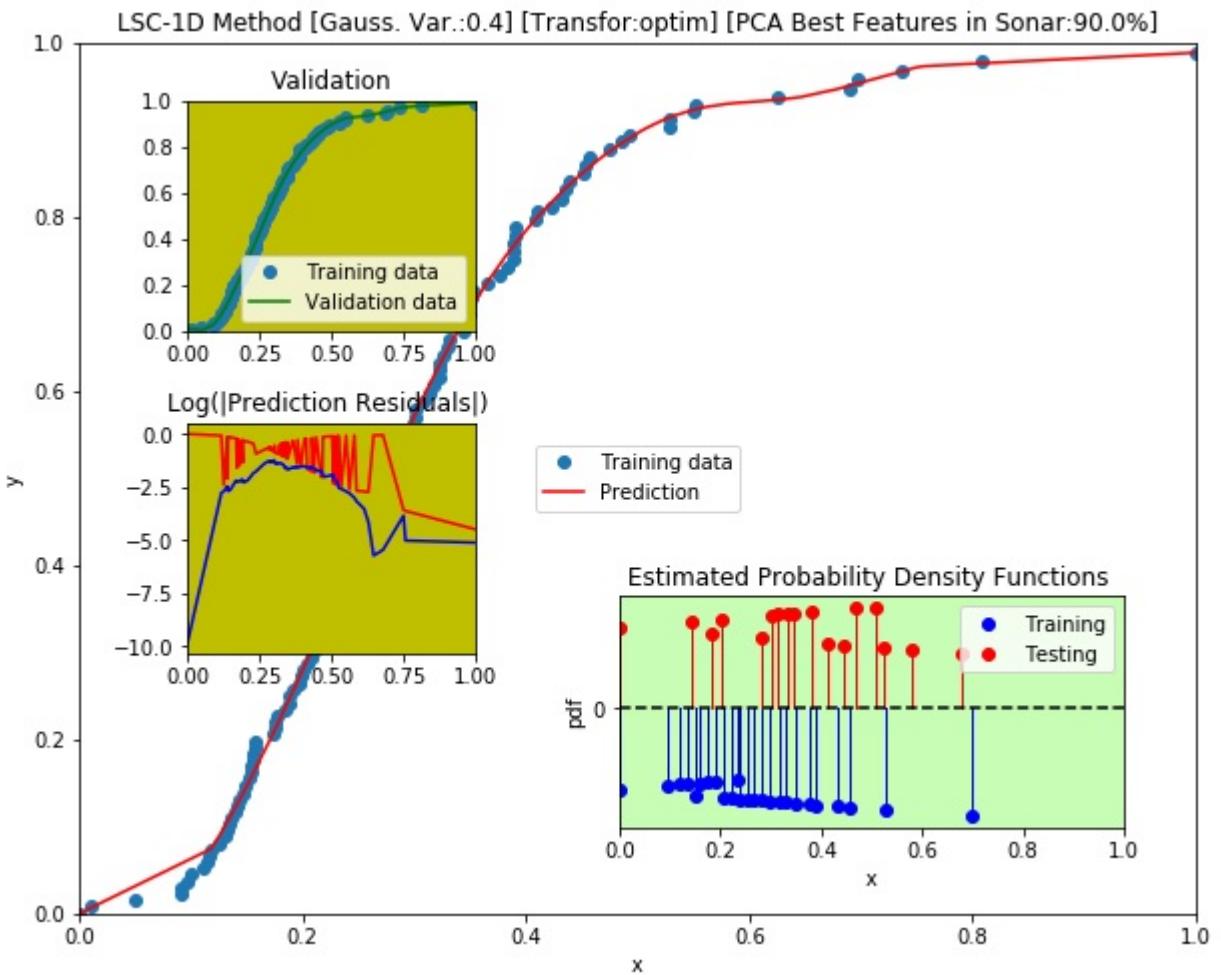
Prediction time/pt. (sec) : 0.0000354
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0031161

Prediction time/pt. (sec) : 0.0000371
```



Sonar Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0085292
    Initializing linear solver - done. Time (sec): 0.0088167
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0009227
    Solving linear system (col. 0) - done. Time (sec): 0.0011070
Training - done. Time (sec): 0.0123496

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0030148  
Prediction time/pt. (sec) : 0.0000243
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0028956  
Prediction time/pt. (sec) : 0.0000345
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0019817  
Prediction time/pt. (sec) : 0.0000236
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0022919  
Prediction time/pt. (sec) : 0.0000273
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0065124
Initializing linear solver - done. Time (sec): 0.0067301
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002403
    Solving linear system (col. 0) - done. Time (sec): 0.0003729
Training - done. Time (sec): 0.0109179
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005074

Prediction time/pt. (sec) : 0.0000060
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0060167

Prediction time/pt. (sec) : 0.0000485
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005138

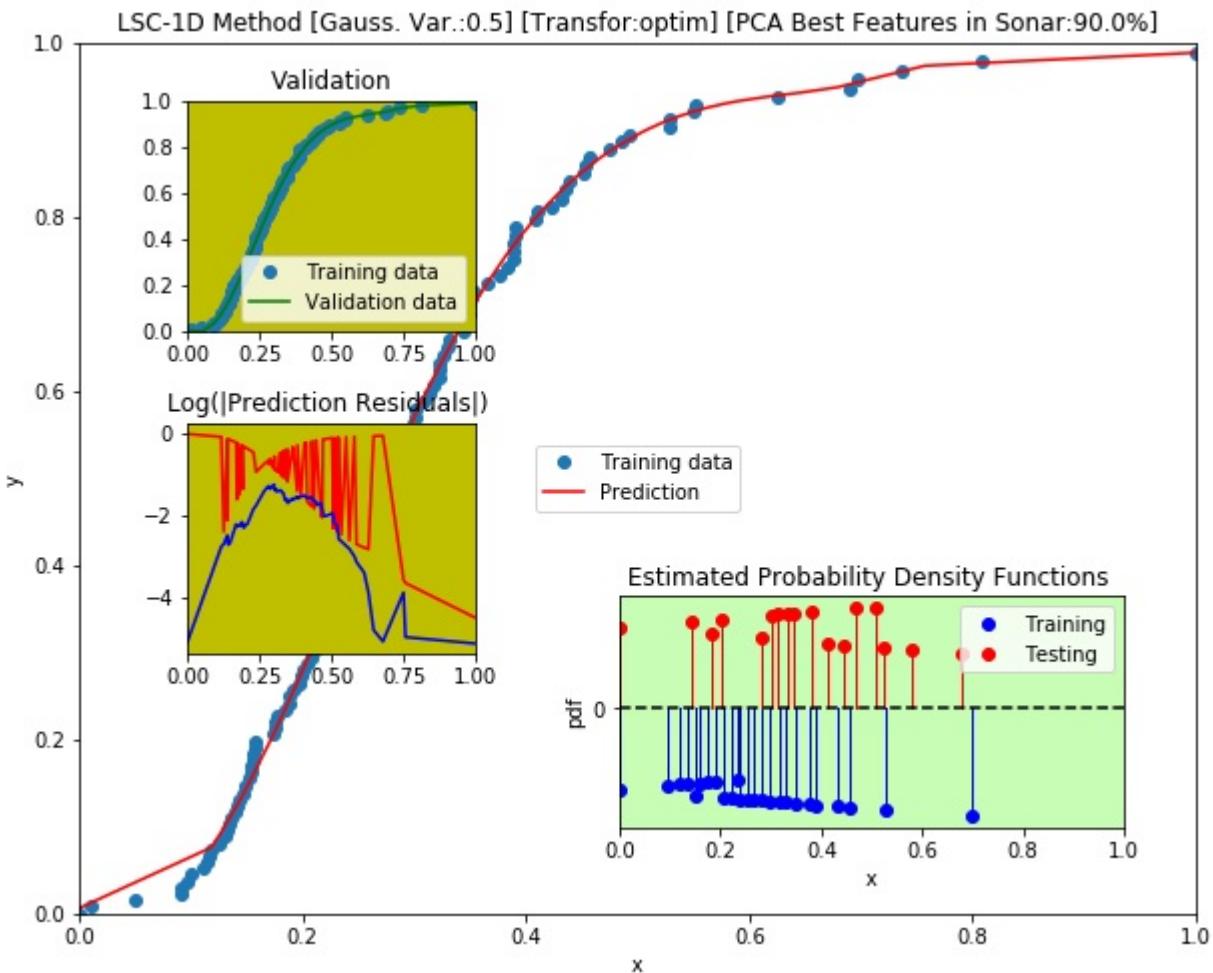
Prediction time/pt. (sec) : 0.0000061
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0019214

Prediction time/pt. (sec) : 0.0000229
```



Sonar Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0012782
    Initializing linear solver - done. Time (sec): 0.0014935
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0002074
    Solving linear system (col. 0) - done. Time (sec): 0.0003331
Training - done. Time (sec): 0.0090933

```

Evaluation

```
# eval points. : 124  
  
Predicting ...  
Predicting - done. Time (sec): 0.0019364  
  
Prediction time/pt. (sec) : 0.0000156
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0006952  
  
Prediction time/pt. (sec) : 0.0000083
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0097513  
  
Prediction time/pt. (sec) : 0.0001161
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0005085  
  
Prediction time/pt. (sec) : 0.0000061
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0207067
Initializing linear solver - done. Time (sec): 0.0215499
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002930
    Solving linear system (col. 0) - done. Time (sec): 0.0005260
Training - done. Time (sec): 0.0236475
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0055826

Prediction time/pt. (sec) : 0.0000665
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0036240

Prediction time/pt. (sec) : 0.0000292
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0038702

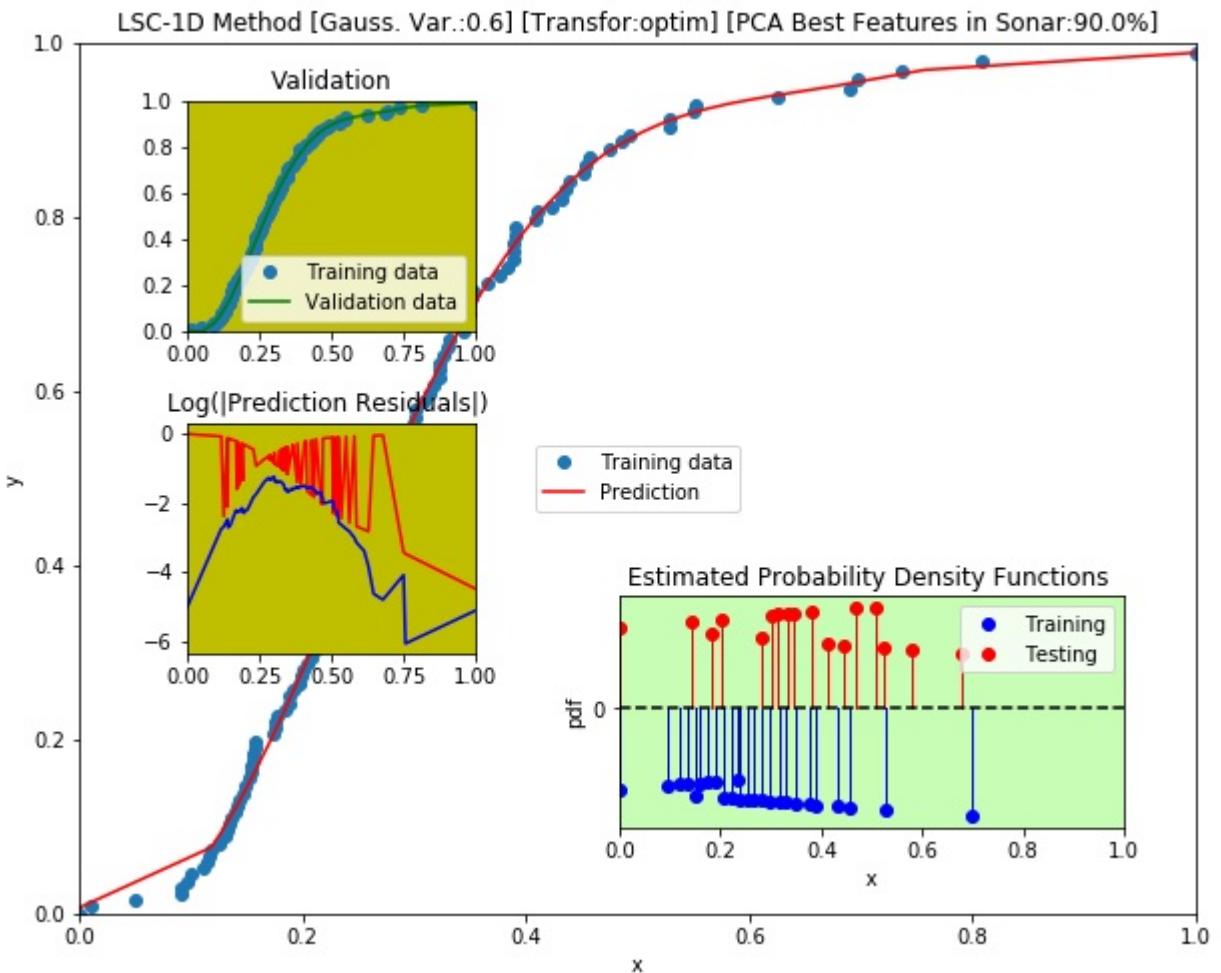
Prediction time/pt. (sec) : 0.0000461
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0041289

Prediction time/pt. (sec) : 0.0000492
```



Sonar Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0012798
    Initializing linear solver - done. Time (sec): 0.0014975
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0003595
    Solving linear system (col. 0) - done. Time (sec): 0.0005283
Training - done. Time (sec): 0.0089791

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0014114  
Prediction time/pt. (sec) : 0.0000114
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005736  
Prediction time/pt. (sec) : 0.0000068
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0079522  
Prediction time/pt. (sec) : 0.0000947
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004046  
Prediction time/pt. (sec) : 0.0000048
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0105913
Initializing linear solver - done. Time (sec): 0.0108123
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002375
    Solving linear system (col. 0) - done. Time (sec): 0.0003679
Training - done. Time (sec): 0.0127039
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004103

Prediction time/pt. (sec) : 0.0000049
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0005763

Prediction time/pt. (sec) : 0.0000046
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0019836

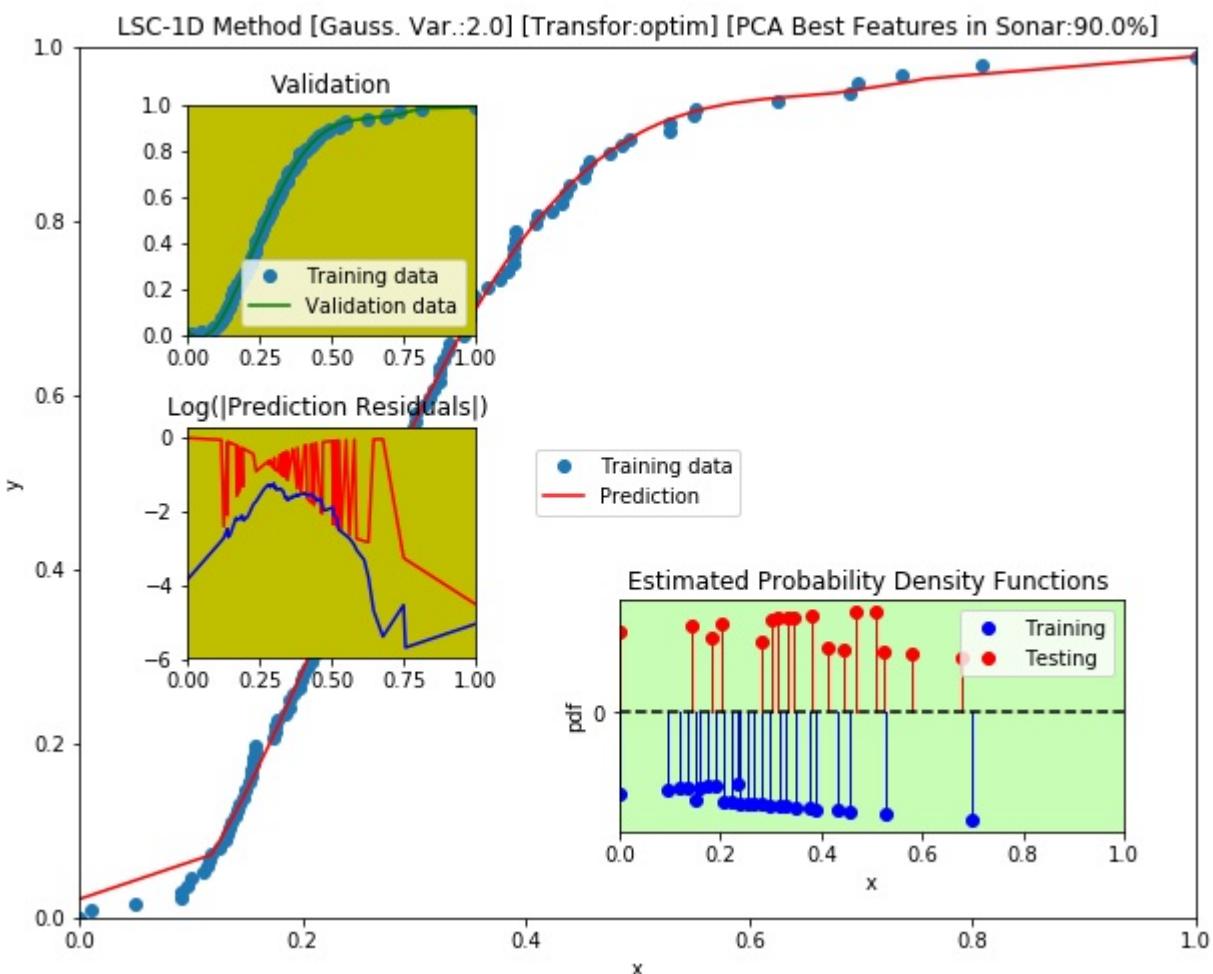
Prediction time/pt. (sec) : 0.0000236
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0071914

Prediction time/pt. (sec) : 0.0000856
```



Sonar Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0138786
    Initializing linear solver - done. Time (sec): 0.0146163
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0007143
    Solving linear system (col. 0) - done. Time (sec): 0.0008984
Training - done. Time (sec): 0.0175281

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0033169  
Prediction time/pt. (sec) : 0.0000267
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0028937  
Prediction time/pt. (sec) : 0.0000344
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0027862  
Prediction time/pt. (sec) : 0.0000332
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0046415  
Prediction time/pt. (sec) : 0.0000553
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0123067
Initializing linear solver - done. Time (sec): 0.0125425
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0010004
    Solving linear system (col. 0) - done. Time (sec): 0.0011821
Training - done. Time (sec): 0.0160642
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0020287

Prediction time/pt. (sec) : 0.0000242
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0053327

Prediction time/pt. (sec) : 0.0000430
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0019999

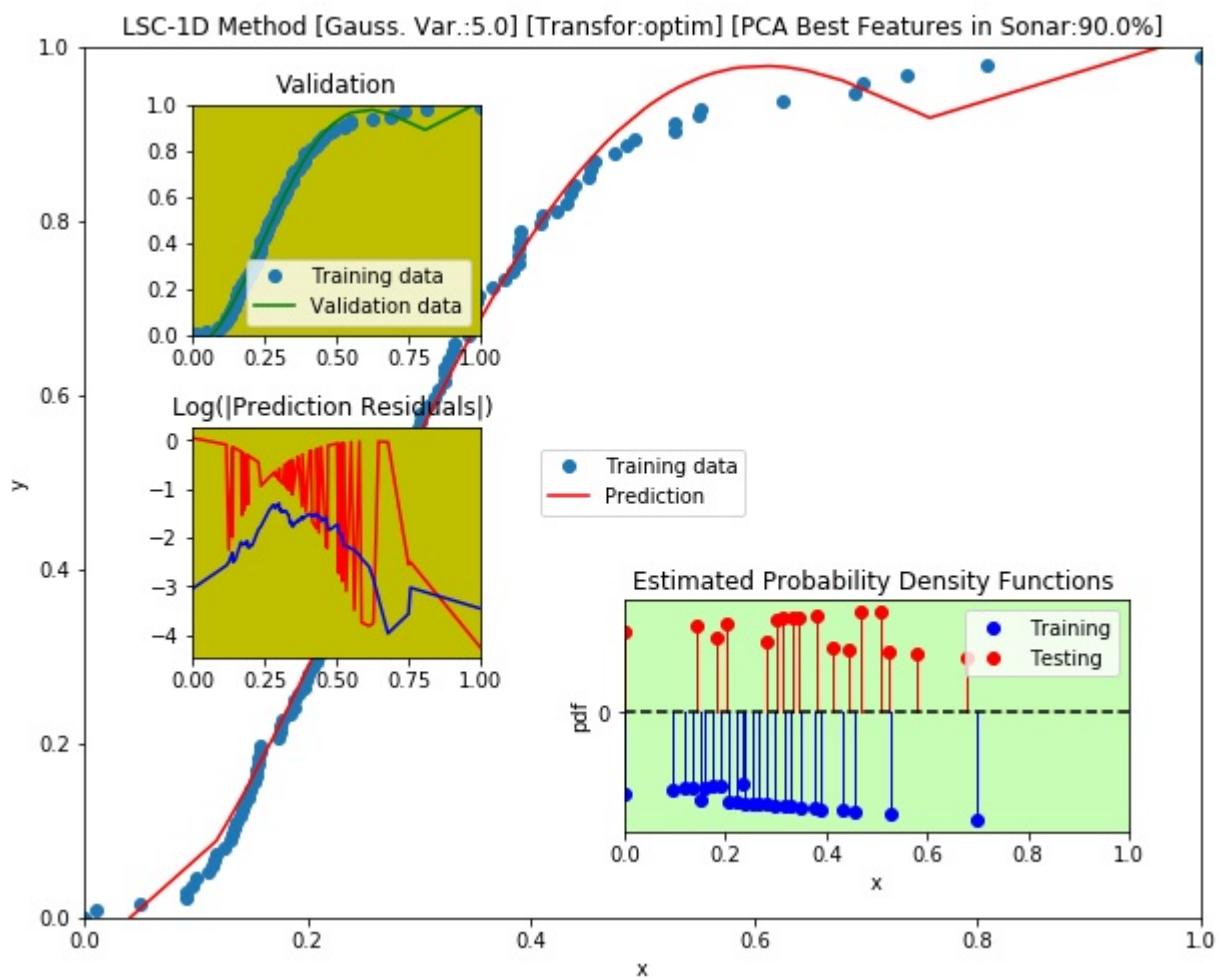
Prediction time/pt. (sec) : 0.0000238
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0022829

Prediction time/pt. (sec) : 0.0000272
```



Sonar Dataset

Scikit-learn dataset
Parameters: PCA: 90.0%
DATASET TRANSFORMATION: optim
COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```
Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
      Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0111704
  Initializing linear solver - done. Time (sec): 0.0114362
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
      Back solving (125 x 125 mtx) - done. Time (sec): 0.0008466
  Solving linear system (col. 0) - done. Time (sec): 0.0010357
Training - done. Time (sec): 0.0148253
```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0029321  
Prediction time/pt. (sec) : 0.0000236
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0028038  
Prediction time/pt. (sec) : 0.0000334
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0030410  
Prediction time/pt. (sec) : 0.0000362
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0027182  
Prediction time/pt. (sec) : 0.0000324
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0153606
Initializing linear solver - done. Time (sec): 0.0155826
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0009255
    Solving linear system (col. 0) - done. Time (sec): 0.0011094
Training - done. Time (sec): 0.0201936
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0040708

Prediction time/pt. (sec) : 0.0000485
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0022261

Prediction time/pt. (sec) : 0.0000180
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0019882

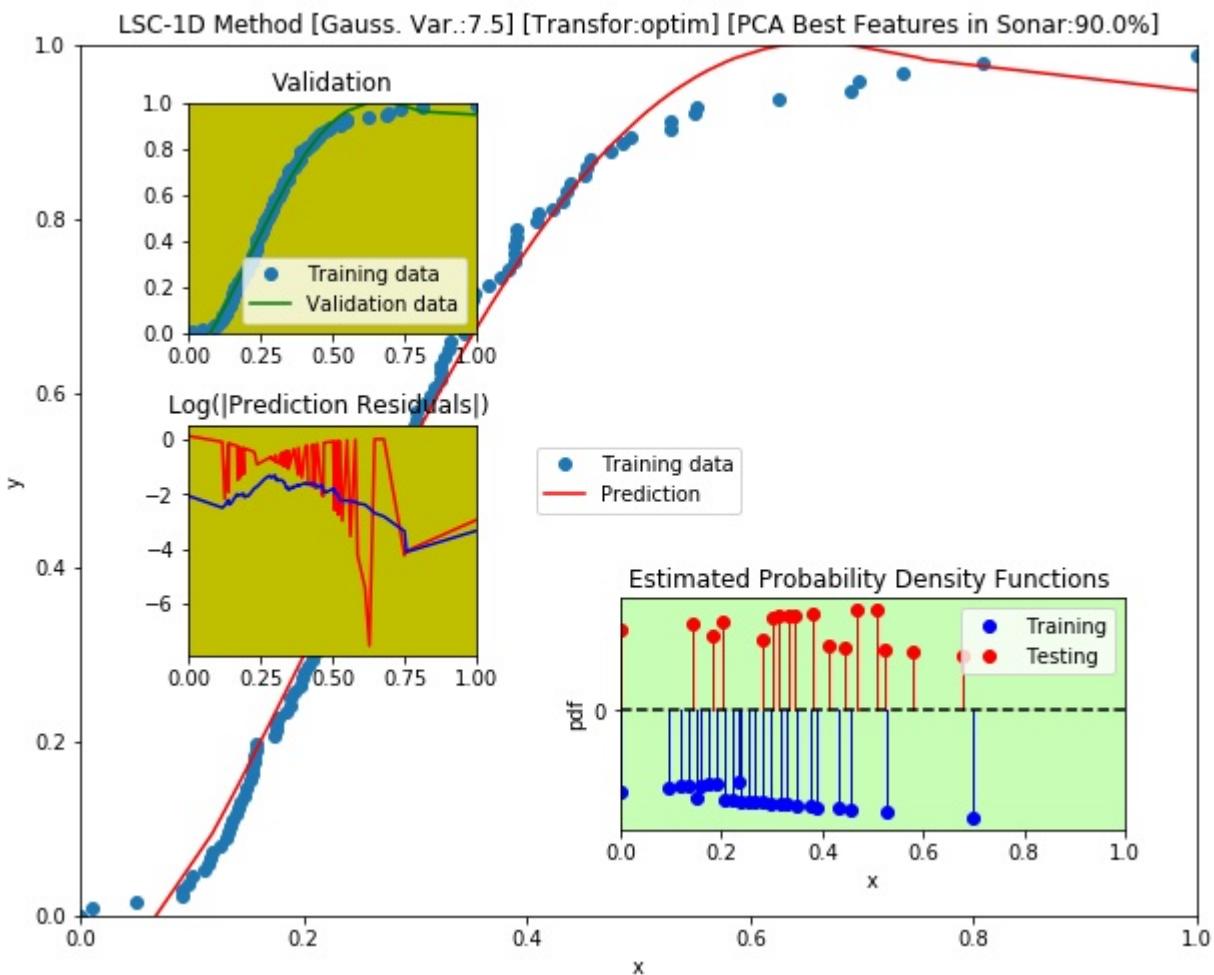
Prediction time/pt. (sec) : 0.0000237
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0024164

Prediction time/pt. (sec) : 0.0000288
```



RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0030236
  Initializing linear solver - done. Time (sec): 0.0036545
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002968
  Solving linear system (col. 0) - done. Time (sec): 0.0012138
Training - done. Time (sec): 0.0075042

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0016634  
Prediction time/pt. (sec) : 0.0000134
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004339  
Prediction time/pt. (sec) : 0.0000052
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004323  
Prediction time/pt. (sec) : 0.0000051
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0016689  
Prediction time/pt. (sec) : 0.0000199
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0052207
Initializing linear solver - done. Time (sec): 0.0054684
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002403
    Solving linear system (col. 0) - done. Time (sec): 0.0003805
Training - done. Time (sec): 0.0073106
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0036273

Prediction time/pt. (sec) : 0.0000432
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0033362

Prediction time/pt. (sec) : 0.0000269
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004952

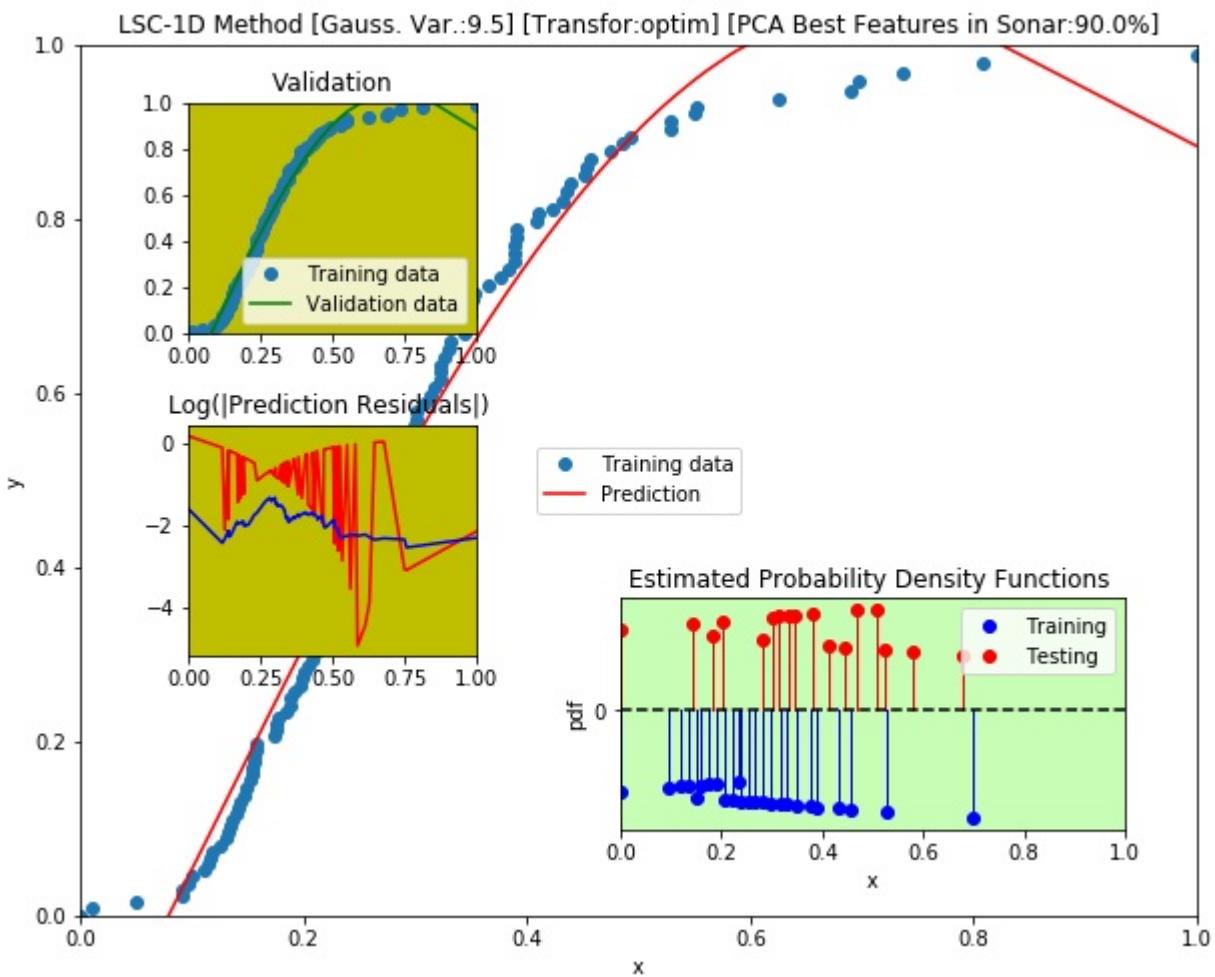
Prediction time/pt. (sec) : 0.0000059
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0052450

Prediction time/pt. (sec) : 0.0000624
```



Sonar Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0053389
    Initializing linear solver - done. Time (sec): 0.0055692
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0002518
    Solving linear system (col. 0) - done. Time (sec): 0.0003974
Training - done. Time (sec): 0.0075951

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0108447  
Prediction time/pt. (sec) : 0.0000875
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0025139  
Prediction time/pt. (sec) : 0.0000299
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0017216  
Prediction time/pt. (sec) : 0.0000205
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0025520  
Prediction time/pt. (sec) : 0.0000304
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0085318
Initializing linear solver - done. Time (sec): 0.0089934
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002518
    Solving linear system (col. 0) - done. Time (sec): 0.0008867
Training - done. Time (sec): 0.0206757
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0023043

Prediction time/pt. (sec) : 0.0000274
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0031655

Prediction time/pt. (sec) : 0.0000255
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004337

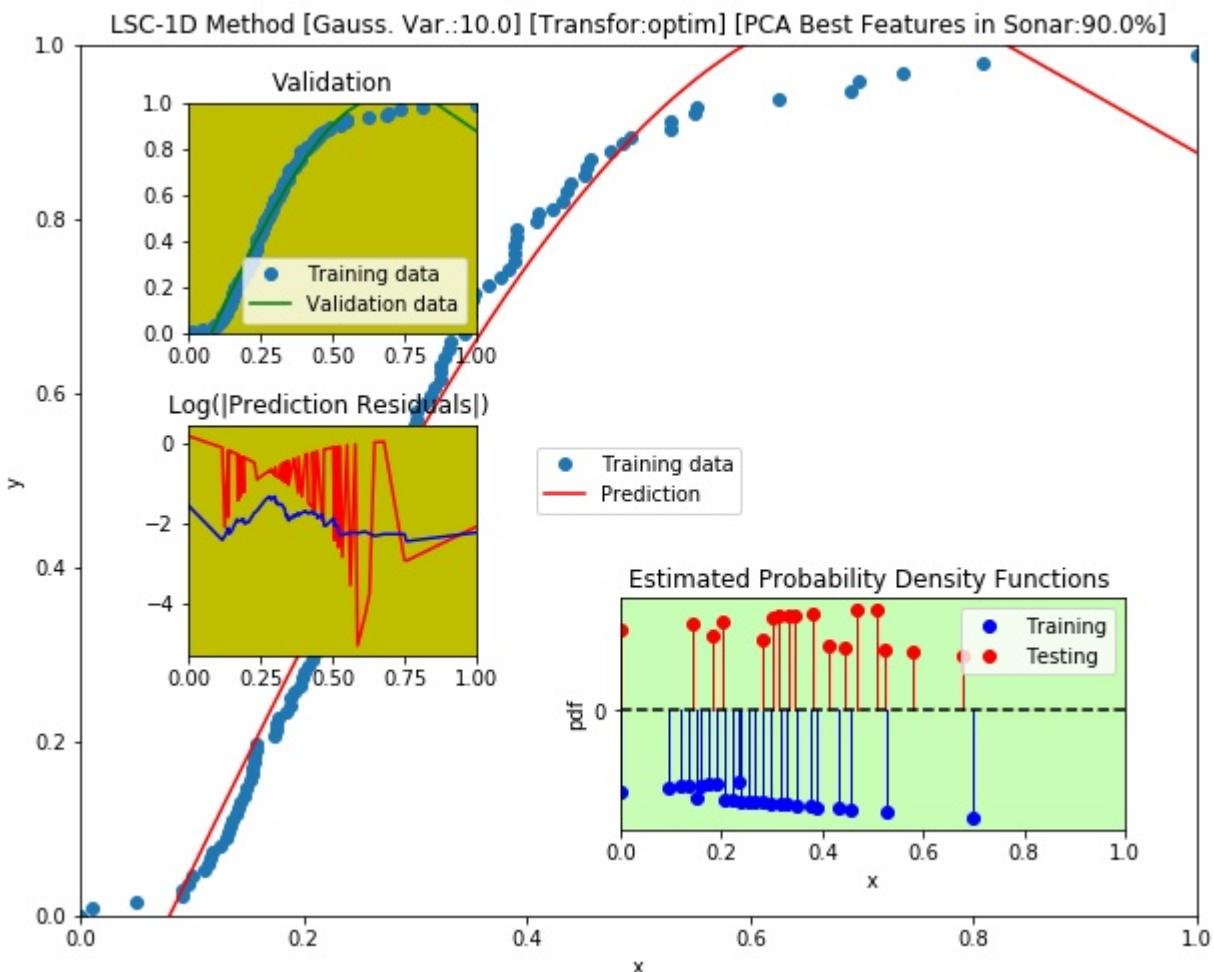
Prediction time/pt. (sec) : 0.0000052
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0052674

Prediction time/pt. (sec) : 0.0000627
```



Sonar Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (125 x 125 mtx) ...
        Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0068457
    Initializing linear solver - done. Time (sec): 0.0070741
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0004346
    Solving linear system (col. 0) - done. Time (sec): 0.0006051
Training - done. Time (sec): 0.0101111

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0087717  
Prediction time/pt. (sec) : 0.0000707
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005341  
Prediction time/pt. (sec) : 0.0000064
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0053926  
Prediction time/pt. (sec) : 0.0000642
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005240  
Prediction time/pt. (sec) : 0.0000062
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0077803
Initializing linear solver - done. Time (sec): 0.0079985
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002482
    Solving linear system (col. 0) - done. Time (sec): 0.0003870
Training - done. Time (sec): 0.0100591
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005383

Prediction time/pt. (sec) : 0.0000064
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0007081

Prediction time/pt. (sec) : 0.0000057
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0027313

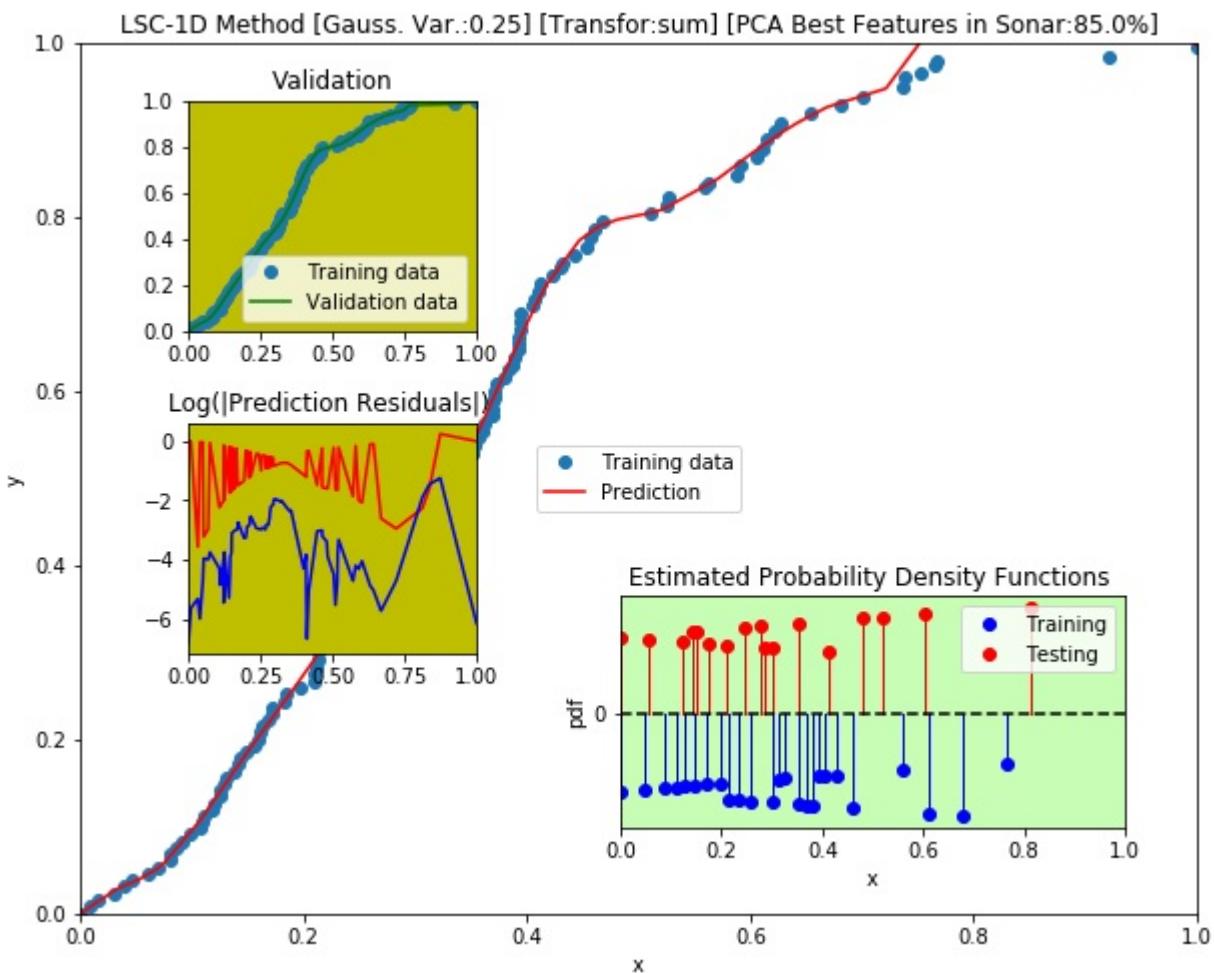
Prediction time/pt. (sec) : 0.0000325
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0017812

Prediction time/pt. (sec) : 0.0000212
```



Sonar Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0019033
    Initializing linear solver - done. Time (sec): 0.0028164
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0003884
    Solving linear system (col. 0) - done. Time (sec): 0.0016565
    Training - done. Time (sec): 0.0087008

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0054927  
Prediction time/pt. (sec) : 0.0000443
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0018070  
Prediction time/pt. (sec) : 0.0000215
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0011284  
Prediction time/pt. (sec) : 0.0000134
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0006039  
Prediction time/pt. (sec) : 0.0000072
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0007951
Initializing linear solver - done. Time (sec): 0.0015700
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002379
    Solving linear system (col. 0) - done. Time (sec): 0.0008633
Training - done. Time (sec): 0.0052226
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005791

Prediction time/pt. (sec) : 0.0000069
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0007939

Prediction time/pt. (sec) : 0.0000064
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005994

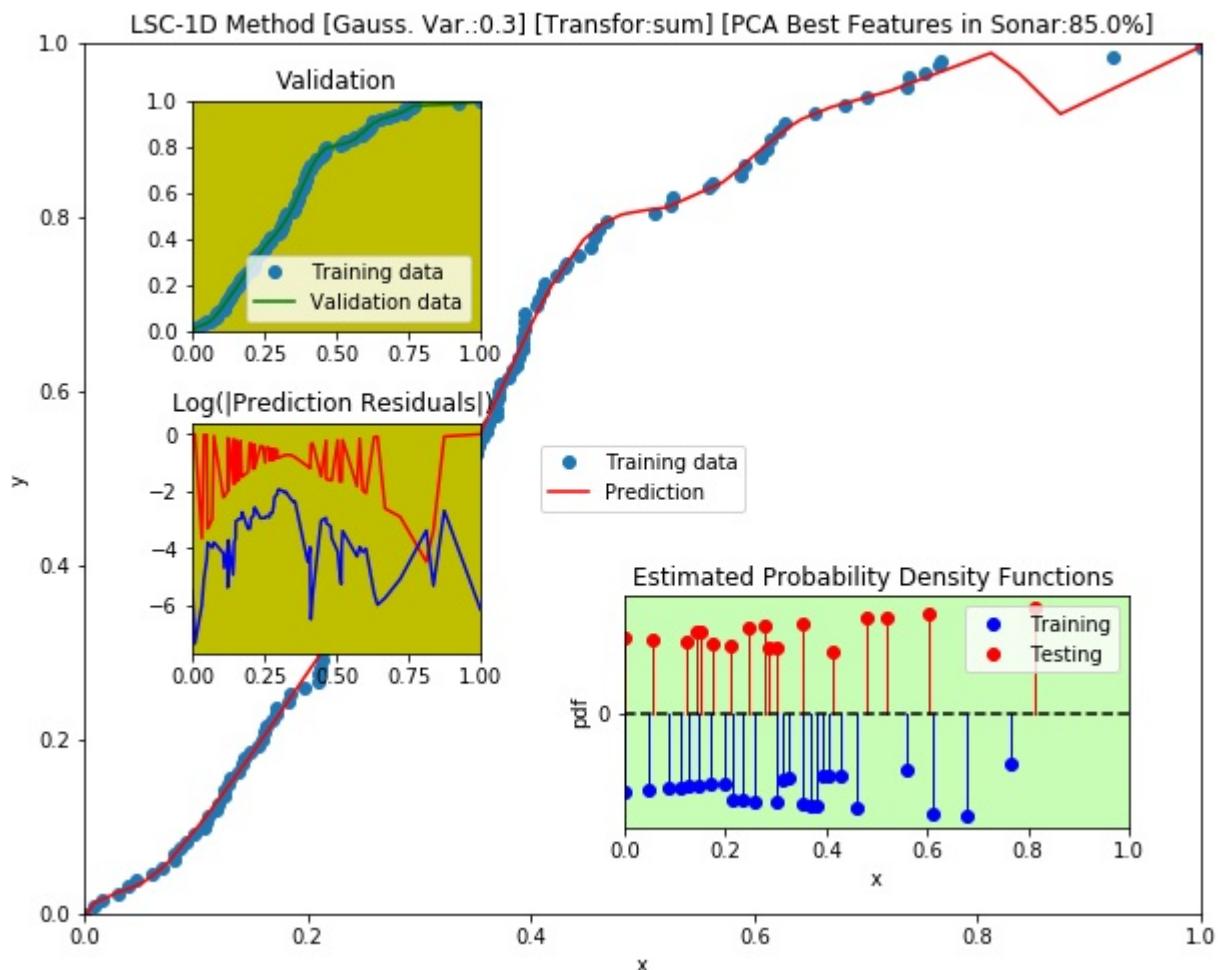
Prediction time/pt. (sec) : 0.0000071
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0015094

Prediction time/pt. (sec) : 0.0000180
```



Sonar Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0014575
    Initializing linear solver - done. Time (sec): 0.0024776
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0002975
    Solving linear system (col. 0) - done. Time (sec): 0.0012527
Training - done. Time (sec): 0.0079410

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0021727  
Prediction time/pt. (sec) : 0.0000175
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005450  
Prediction time/pt. (sec) : 0.0000065
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005395  
Prediction time/pt. (sec) : 0.0000064
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0016227  
Prediction time/pt. (sec) : 0.0000193
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0013278
Initializing linear solver - done. Time (sec): 0.0016932
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002358
    Solving linear system (col. 0) - done. Time (sec): 0.0003803
Training - done. Time (sec): 0.0078323
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0036216

Prediction time/pt. (sec) : 0.0000431
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0033751

Prediction time/pt. (sec) : 0.0000272
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0029590

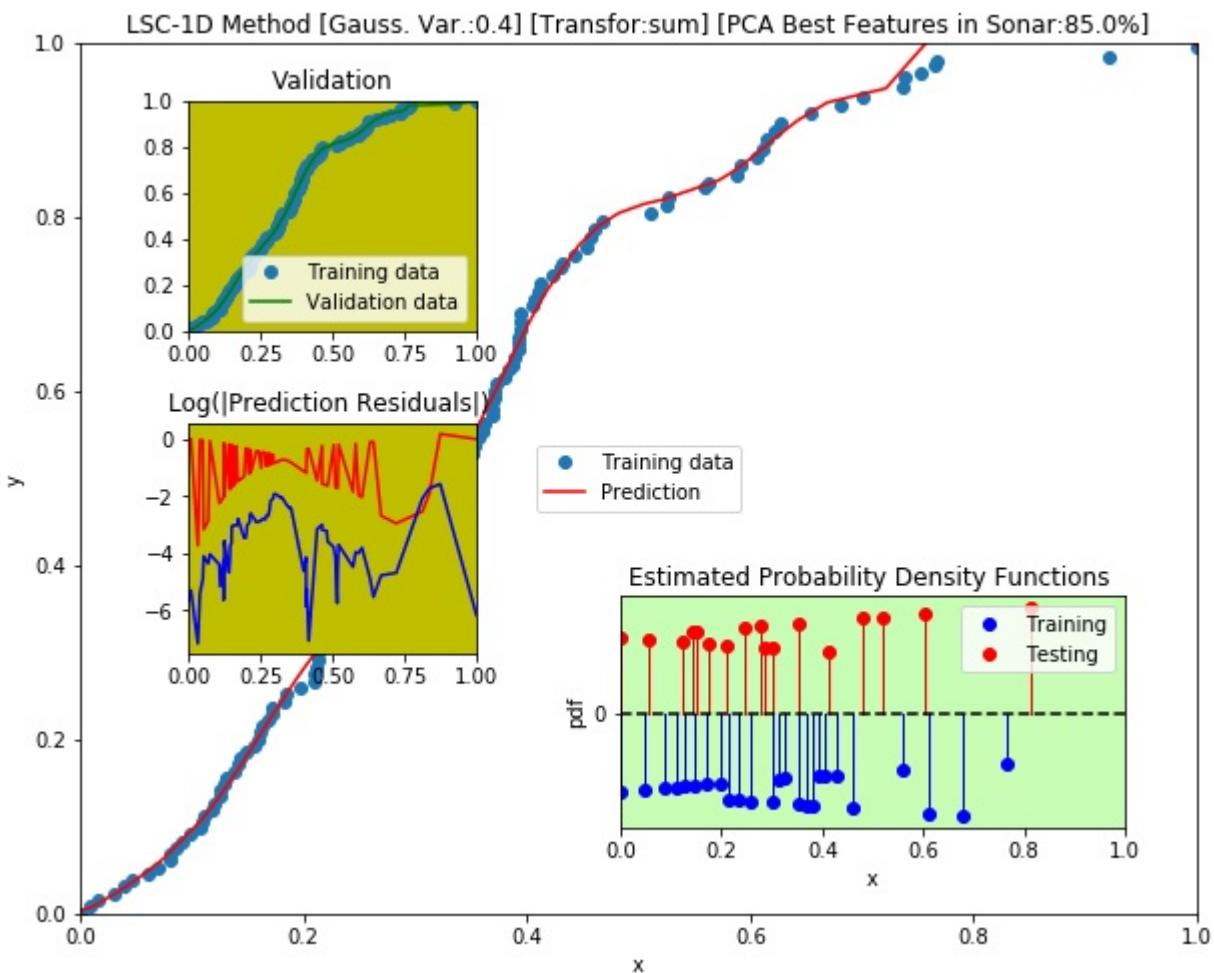
Prediction time/pt. (sec) : 0.0000352
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005181

Prediction time/pt. (sec) : 0.0000062
```



Sonar Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0056865
  Initializing linear solver - done. Time (sec): 0.0064101
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0003119
  Solving linear system (col. 0) - done. Time (sec): 0.0012658
Training - done. Time (sec): 0.0108783

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0045760  
Prediction time/pt. (sec) : 0.0000369
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005205  
Prediction time/pt. (sec) : 0.0000062
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004897  
Prediction time/pt. (sec) : 0.0000058
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005004  
Prediction time/pt. (sec) : 0.0000060
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0029051
Initializing linear solver - done. Time (sec): 0.0033846
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002437
    Solving linear system (col. 0) - done. Time (sec): 0.0004032
Training - done. Time (sec): 0.0058308
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005021

Prediction time/pt. (sec) : 0.0000060
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0057118

Prediction time/pt. (sec) : 0.0000461
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004904

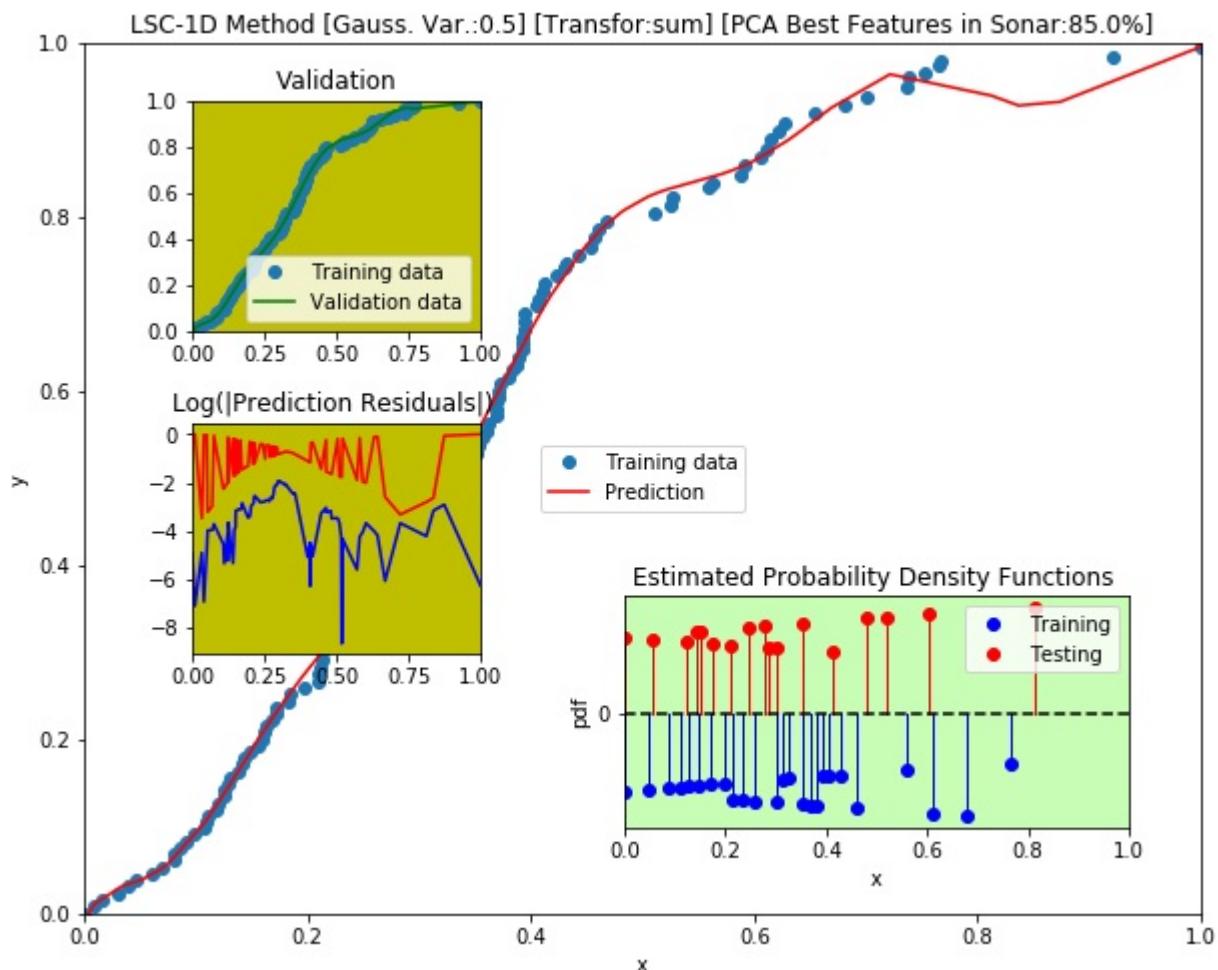
Prediction time/pt. (sec) : 0.0000058
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0052786

Prediction time/pt. (sec) : 0.0000628
```



Sonar Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0049725
  Initializing linear solver - done. Time (sec): 0.0052719
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0004041
  Solving linear system (col. 0) - done. Time (sec): 0.0005665
Training - done. Time (sec): 0.0134153

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0036161  
Prediction time/pt. (sec) : 0.0000292
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005572  
Prediction time/pt. (sec) : 0.0000066
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004566  
Prediction time/pt. (sec) : 0.0000054
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004561  
Prediction time/pt. (sec) : 0.0000054
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0006461
Initializing linear solver - done. Time (sec): 0.0008118
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0001950
    Solving linear system (col. 0) - done. Time (sec): 0.0003190
Training - done. Time (sec): 0.0026221
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0041726

Prediction time/pt. (sec) : 0.0000497
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0007436

Prediction time/pt. (sec) : 0.0000060
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004849

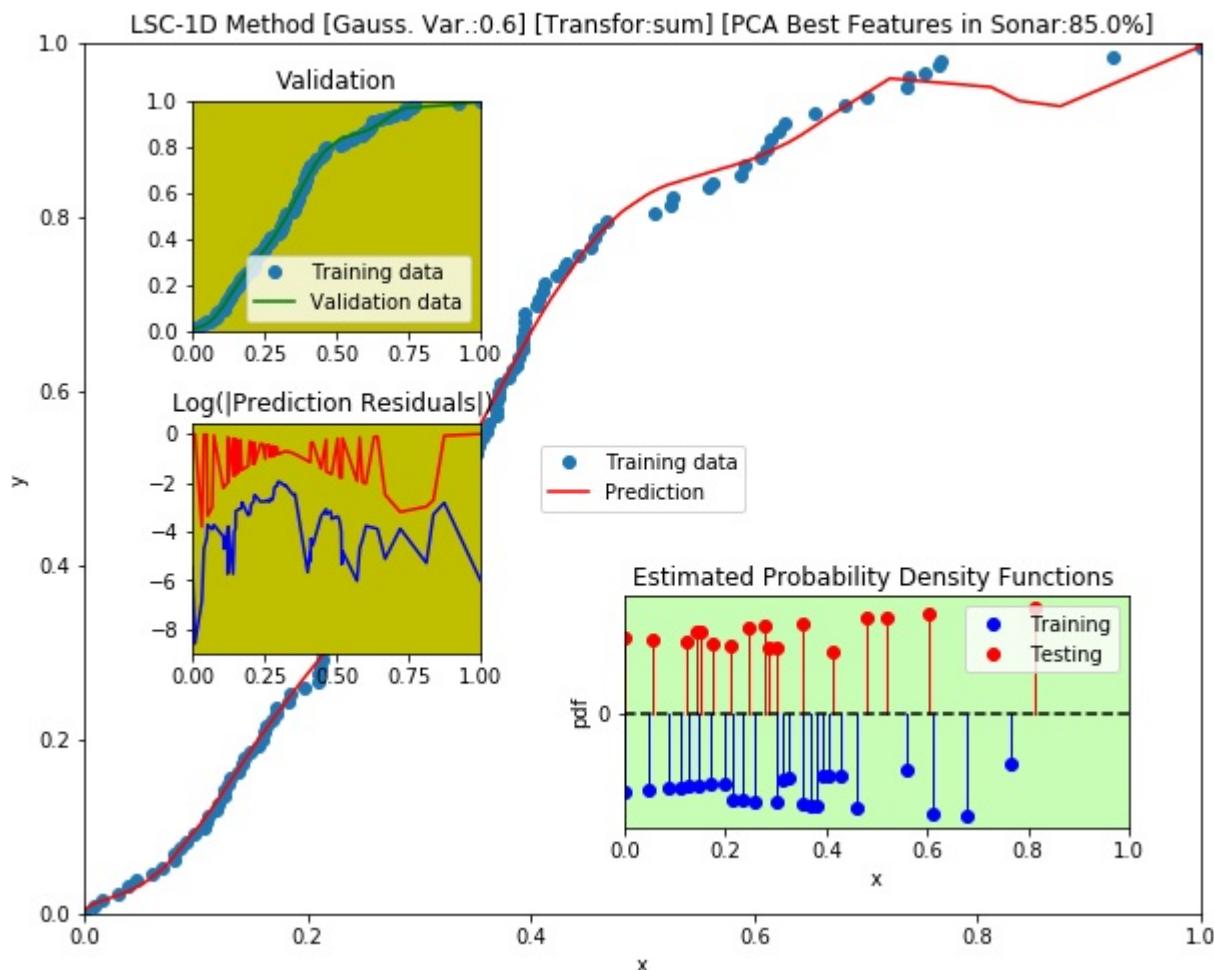
Prediction time/pt. (sec) : 0.0000058
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004826

Prediction time/pt. (sec) : 0.0000057
```



Sonar Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0036163
  Initializing linear solver - done. Time (sec): 0.0043969
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002964
  Solving linear system (col. 0) - done. Time (sec): 0.0012259
Training - done. Time (sec): 0.0085163

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0074117  
Prediction time/pt. (sec) : 0.0000598
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004792  
Prediction time/pt. (sec) : 0.0000057
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004380  
Prediction time/pt. (sec) : 0.0000052
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004430  
Prediction time/pt. (sec) : 0.0000053
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0035274
Initializing linear solver - done. Time (sec): 0.0037415
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002480
    Solving linear system (col. 0) - done. Time (sec): 0.0003974
Training - done. Time (sec): 0.0057440
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0038924

Prediction time/pt. (sec) : 0.0000463
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0033069

Prediction time/pt. (sec) : 0.0000267
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0030768

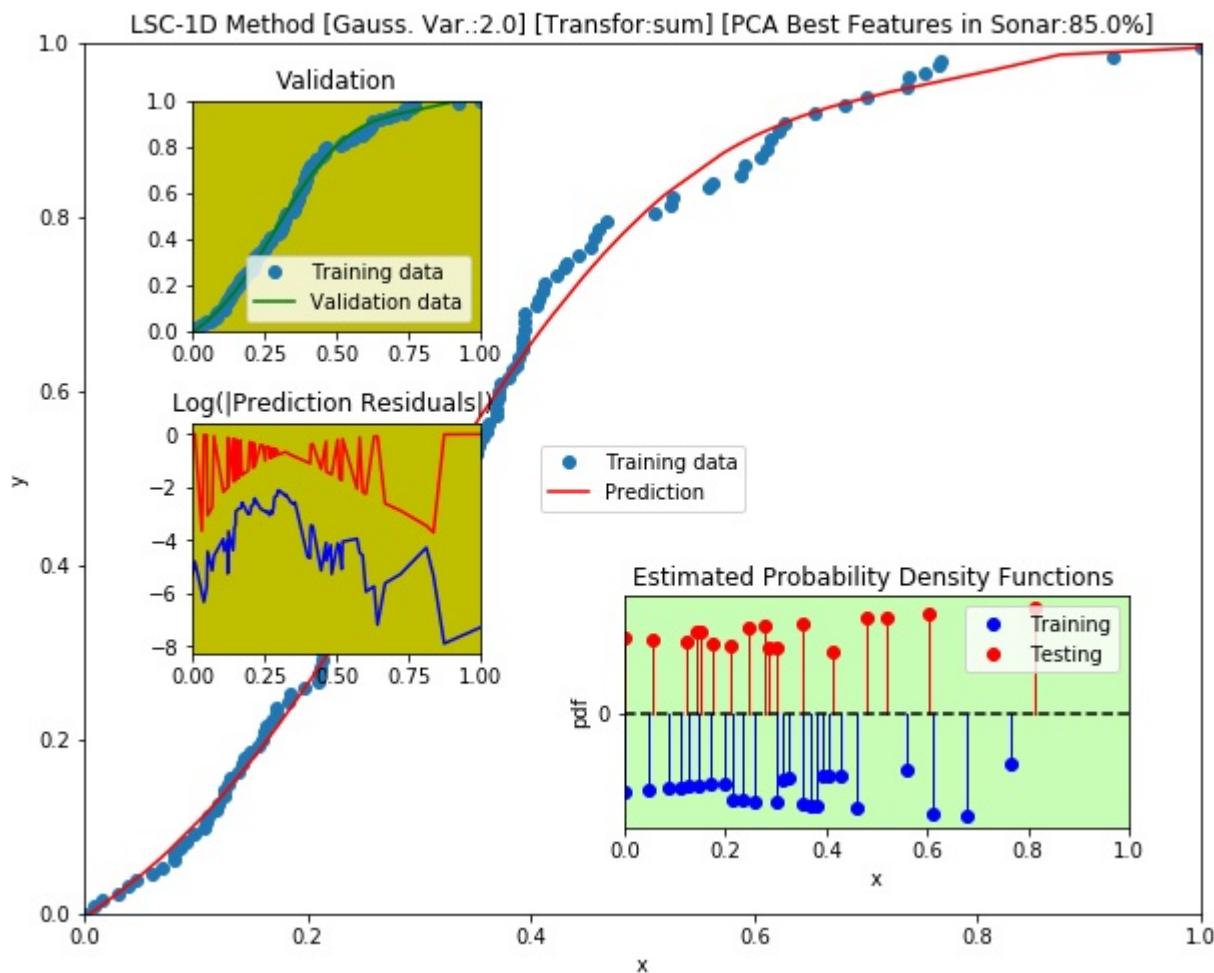
Prediction time/pt. (sec) : 0.0000366
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0030444

Prediction time/pt. (sec) : 0.0000362
```



Sonar Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0017550
  Initializing linear solver - done. Time (sec): 0.0027742
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002971
  Solving linear system (col. 0) - done. Time (sec): 0.0012443
Training - done. Time (sec): 0.0083098

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0032670  
Prediction time/pt. (sec) : 0.0000263
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004795  
Prediction time/pt. (sec) : 0.0000057
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004957  
Prediction time/pt. (sec) : 0.0000059
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005798  
Prediction time/pt. (sec) : 0.0000069
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0046206
Initializing linear solver - done. Time (sec): 0.0048280
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002980
    Solving linear system (col. 0) - done. Time (sec): 0.0004463
Training - done. Time (sec): 0.0067704
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0036776

Prediction time/pt. (sec) : 0.0000438
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0006306

Prediction time/pt. (sec) : 0.0000051
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0053408

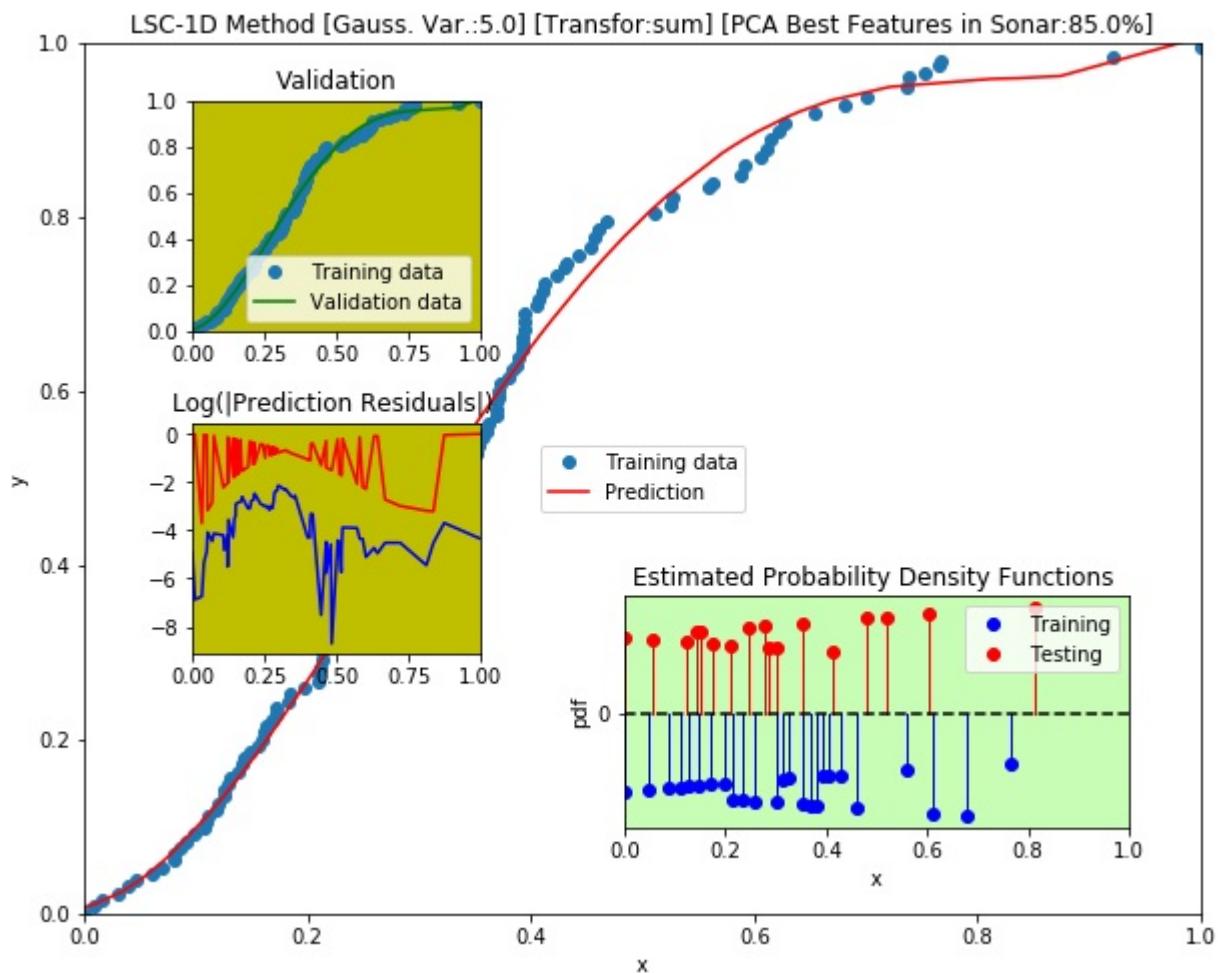
Prediction time/pt. (sec) : 0.0000636
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0023012

Prediction time/pt. (sec) : 0.0000274
```



Sonar Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0105464
  Initializing linear solver - done. Time (sec): 0.0116622
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0006118
  Solving linear system (col. 0) - done. Time (sec): 0.0012717
Training - done. Time (sec): 0.0160472

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0024798  
Prediction time/pt. (sec) : 0.0000200
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0035059  
Prediction time/pt. (sec) : 0.0000417
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0028241  
Prediction time/pt. (sec) : 0.0000336
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0015228  
Prediction time/pt. (sec) : 0.0000181
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0102367
Initializing linear solver - done. Time (sec): 0.0104432
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0008452
    Solving linear system (col. 0) - done. Time (sec): 0.0010173
Training - done. Time (sec): 0.0147891
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0019426

Prediction time/pt. (sec) : 0.0000231
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0034325

Prediction time/pt. (sec) : 0.0000277
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0023768

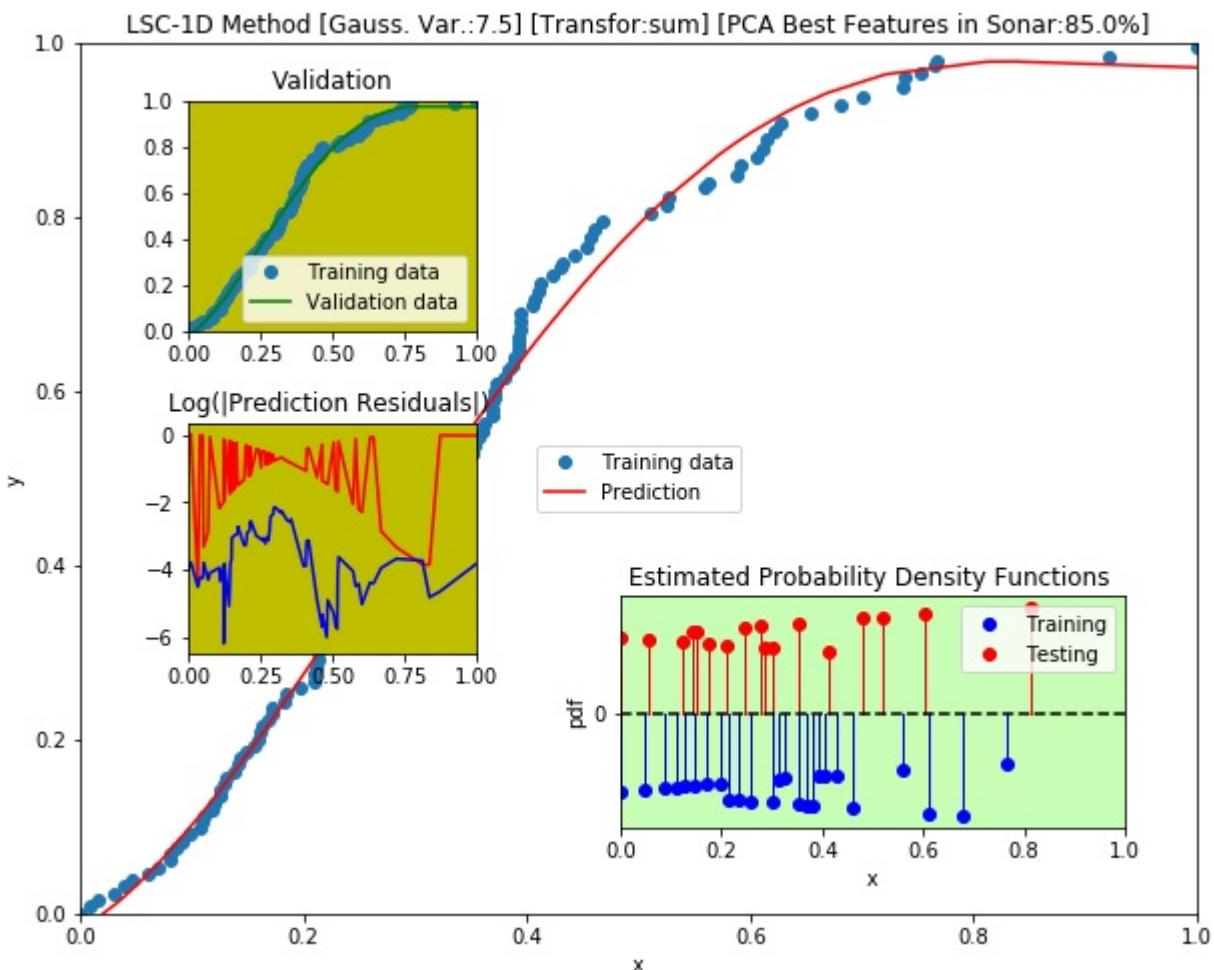
Prediction time/pt. (sec) : 0.0000283
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0038264

Prediction time/pt. (sec) : 0.0000456
```



Sonar Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0048072
  Initializing linear solver - done. Time (sec): 0.0050466
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0013812
  Solving linear system (col. 0) - done. Time (sec): 0.0015717
Training - done. Time (sec): 0.0138640

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0046587  
Prediction time/pt. (sec) : 0.0000376
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0014999  
Prediction time/pt. (sec) : 0.0000179
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0014009  
Prediction time/pt. (sec) : 0.0000167
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0014014  
Prediction time/pt. (sec) : 0.0000167
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0124905
Initializing linear solver - done. Time (sec): 0.0128255
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0005417
    Solving linear system (col. 0) - done. Time (sec): 0.0007195
Training - done. Time (sec): 0.0197930
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0034781

Prediction time/pt. (sec) : 0.0000414
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0007994

Prediction time/pt. (sec) : 0.0000064
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0006127

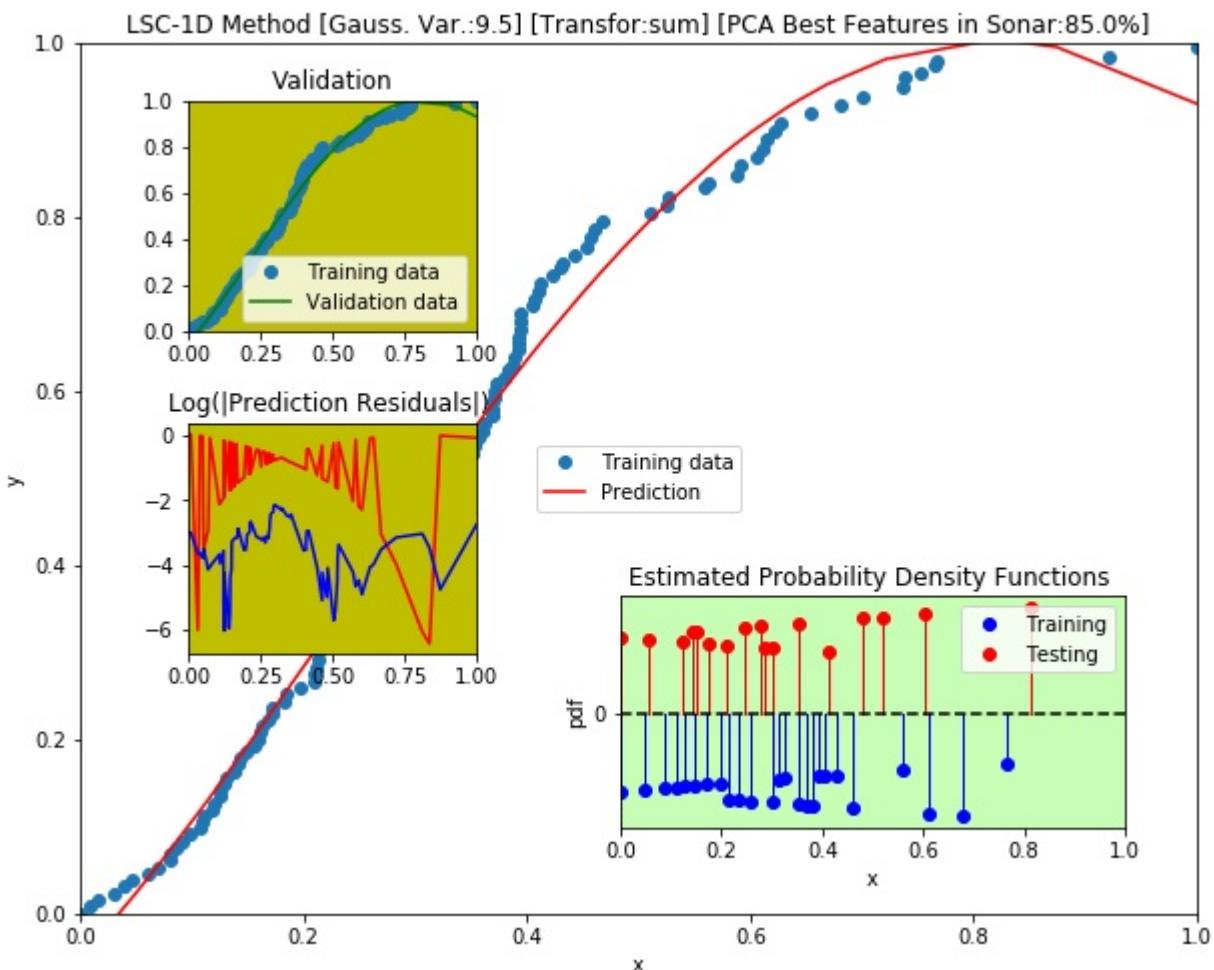
Prediction time/pt. (sec) : 0.0000073
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0006478

Prediction time/pt. (sec) : 0.0000077
```



Sonar Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0098248
  Initializing linear solver - done. Time (sec): 0.0104113
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002565
  Solving linear system (col. 0) - done. Time (sec): 0.0009048
Training - done. Time (sec): 0.0140100

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0013814  
Prediction time/pt. (sec) : 0.0000111
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0026786  
Prediction time/pt. (sec) : 0.0000319
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0028191  
Prediction time/pt. (sec) : 0.0000336
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0028229  
Prediction time/pt. (sec) : 0.0000336
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0052500
Initializing linear solver - done. Time (sec): 0.0054405
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002439
    Solving linear system (col. 0) - done. Time (sec): 0.0003839
Training - done. Time (sec): 0.0073249
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004661

Prediction time/pt. (sec) : 0.0000055
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0060468

Prediction time/pt. (sec) : 0.0000488
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004320

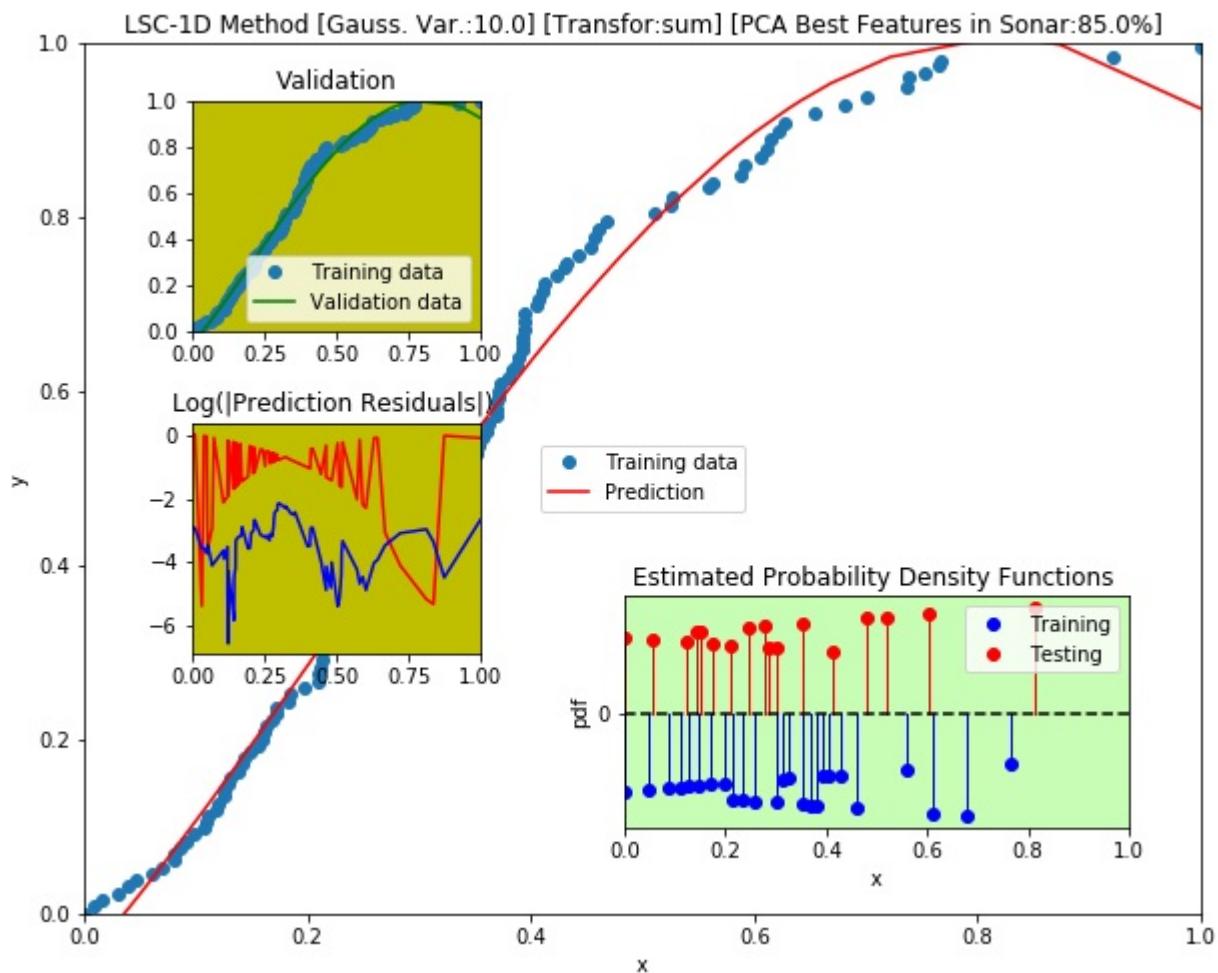
Prediction time/pt. (sec) : 0.0000051
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004129

Prediction time/pt. (sec) : 0.0000049
```



Sonar Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0080853
  Initializing linear solver - done. Time (sec): 0.0084167
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0005713
  Solving linear system (col. 0) - done. Time (sec): 0.0008011
Training - done. Time (sec): 0.0164607

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0050778  
Prediction time/pt. (sec) : 0.0000410
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0017002  
Prediction time/pt. (sec) : 0.0000202
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0013895  
Prediction time/pt. (sec) : 0.0000165
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0012946  
Prediction time/pt. (sec) : 0.0000154
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0033290
Initializing linear solver - done. Time (sec): 0.0035498
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0004368
    Solving linear system (col. 0) - done. Time (sec): 0.0006070
Training - done. Time (sec): 0.0080490
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0012736

Prediction time/pt. (sec) : 0.0000152
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0019383

Prediction time/pt. (sec) : 0.0000156
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0016479

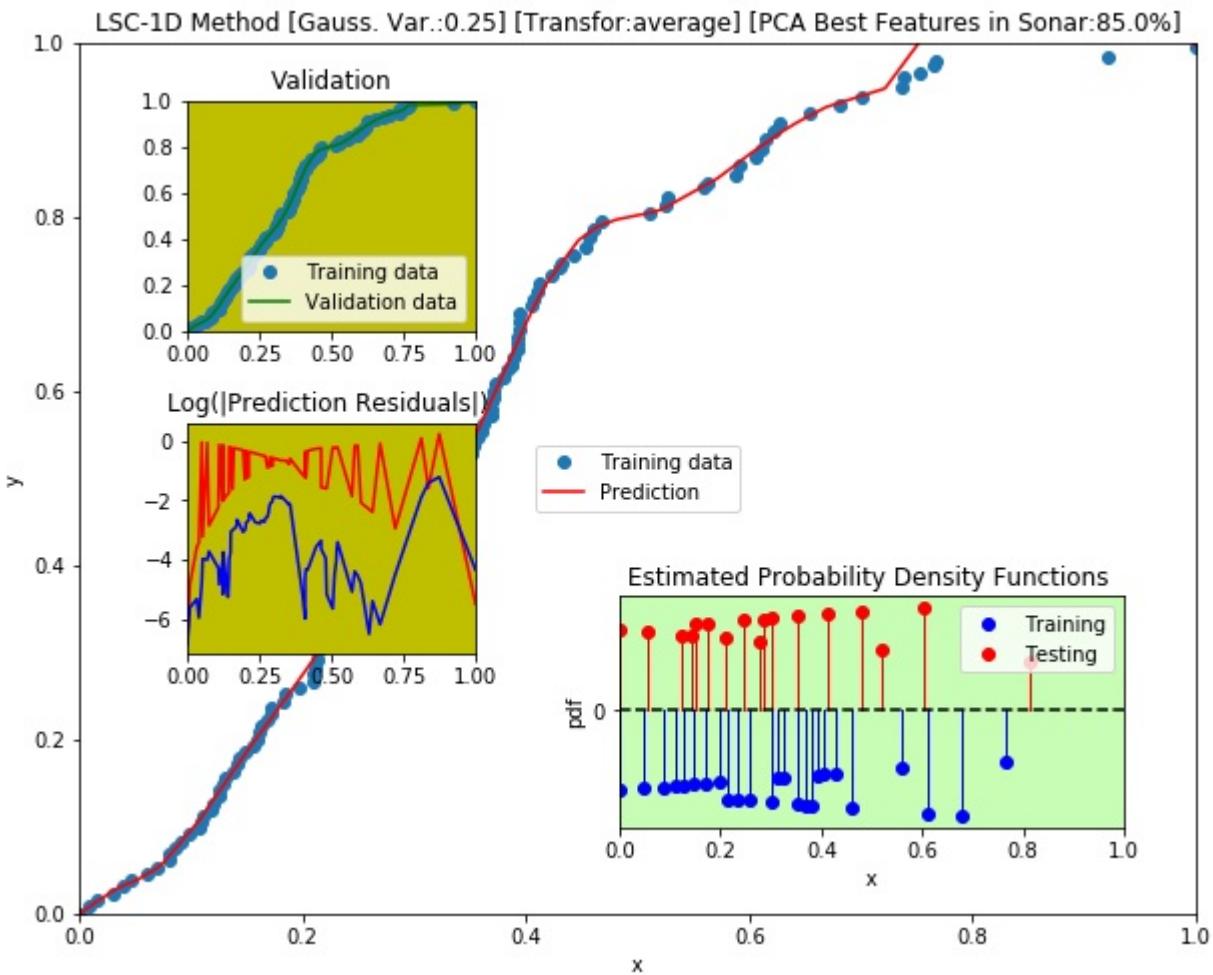
Prediction time/pt. (sec) : 0.0000196
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0020063

Prediction time/pt. (sec) : 0.0000239
```



Sonar Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

Training ...

Initializing linear solver ...

Performing LU fact. (125 x 125 mtx) ...

Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0144854

Initializing linear solver - done. Time (sec): 0.0154040

Solving linear system (col. 0) ...

Back solving (125 x 125 mtx) ...

Back solving (125 x 125 mtx) - done. Time (sec): 0.0003037

Solving linear system (col. 0) - done. Time (sec): 0.0020268

Training - done. Time (sec): 0.0208278

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0018661  
Prediction time/pt. (sec) : 0.0000150
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005763  
Prediction time/pt. (sec) : 0.0000069
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0011179  
Prediction time/pt. (sec) : 0.0000133
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005572  
Prediction time/pt. (sec) : 0.0000066
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0041645
Initializing linear solver - done. Time (sec): 0.0047991
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002449
    Solving linear system (col. 0) - done. Time (sec): 0.0012803
Training - done. Time (sec): 0.0086577
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005805

Prediction time/pt. (sec) : 0.0000069
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0008233

Prediction time/pt. (sec) : 0.0000066
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005486

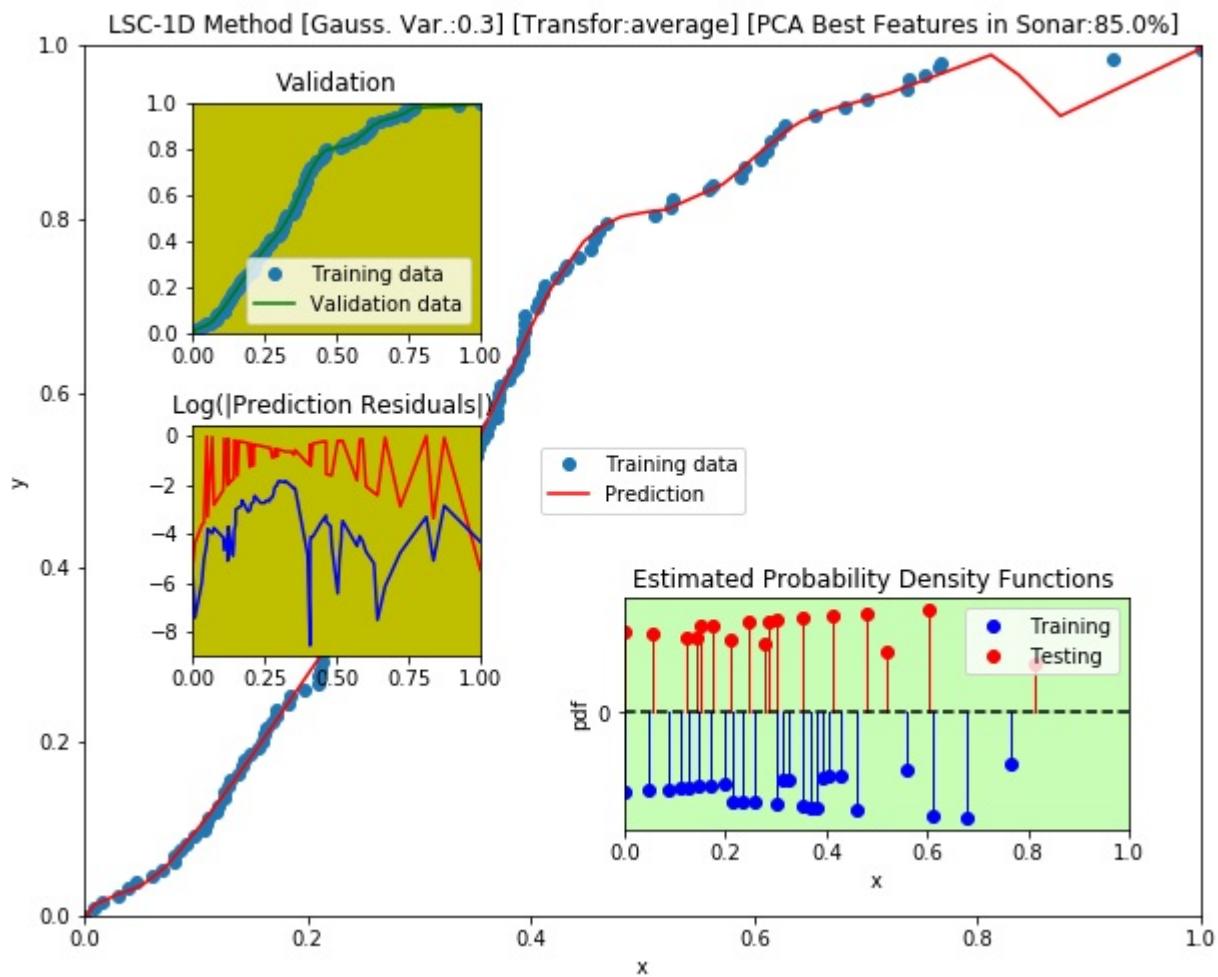
Prediction time/pt. (sec) : 0.0000065
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0102236

Prediction time/pt. (sec) : 0.0001217
```



Sonar Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0139041
  Initializing linear solver - done. Time (sec): 0.0141683
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0003974
  Solving linear system (col. 0) - done. Time (sec): 0.0006990
Training - done. Time (sec): 0.0177934

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0161796  
Prediction time/pt. (sec) : 0.0001305
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0006387  
Prediction time/pt. (sec) : 0.0000076
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0094855  
Prediction time/pt. (sec) : 0.0001129
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0031438  
Prediction time/pt. (sec) : 0.0000374
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0069687
Initializing linear solver - done. Time (sec): 0.0071957
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0009038
    Solving linear system (col. 0) - done. Time (sec): 0.0010617
Training - done. Time (sec): 0.0105214
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0071721

Prediction time/pt. (sec) : 0.0000854
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0046198

Prediction time/pt. (sec) : 0.0000373
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0030010

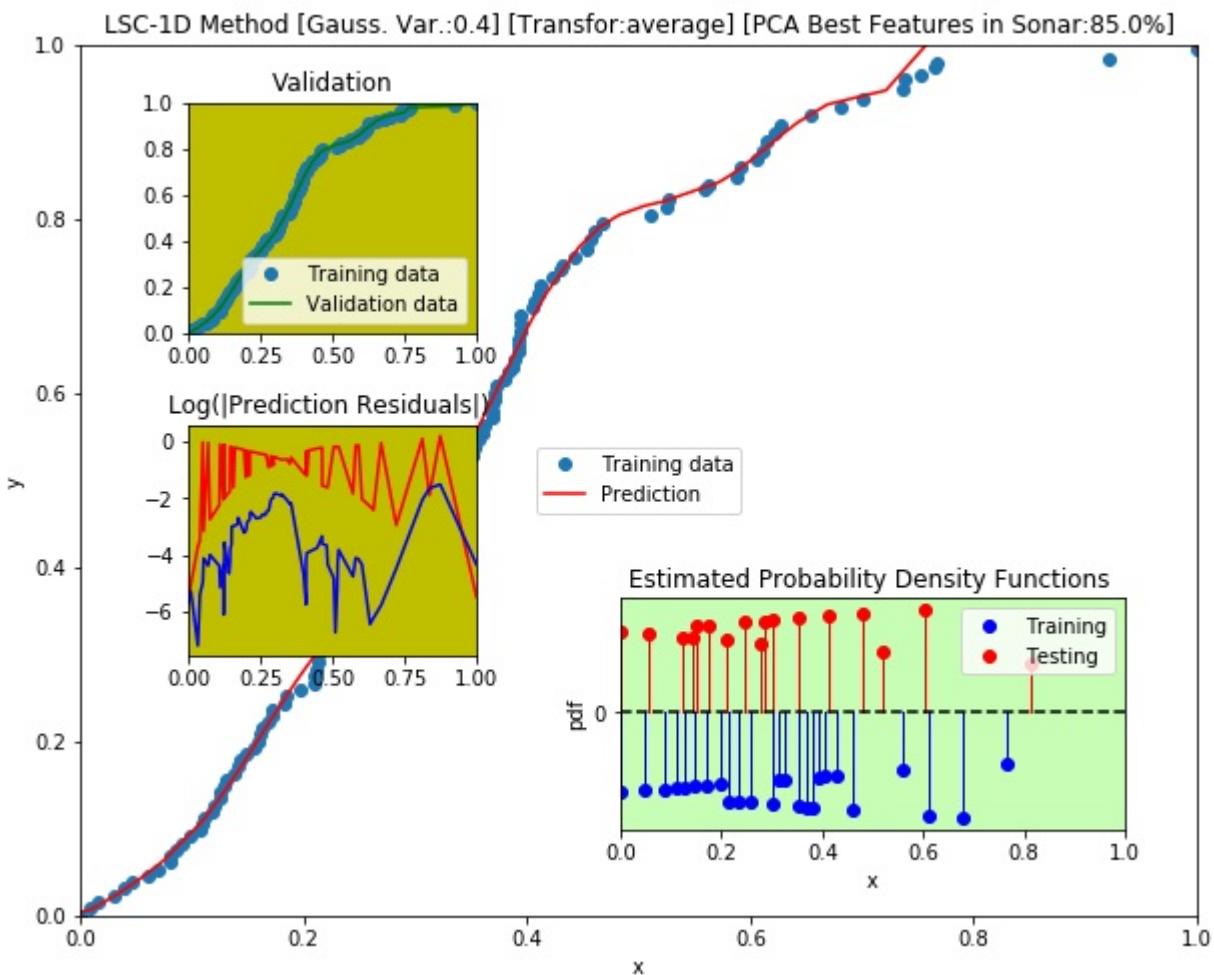
Prediction time/pt. (sec) : 0.0000357
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0010569

Prediction time/pt. (sec) : 0.0000126
```



Sonar Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

Training ...

Initializing linear solver ...

Performing LU fact. (125 x 125 mtx) ...

Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0049870

Initializing linear solver - done. Time (sec): 0.0052400

Solving linear system (col. 0) ...

Back solving (125 x 125 mtx) ...

Back solving (125 x 125 mtx) - done. Time (sec): 0.0005183

Solving linear system (col. 0) - done. Time (sec): 0.0007410

Training - done. Time (sec): 0.0143046

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0050108  
Prediction time/pt. (sec) : 0.0000404
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0015886  
Prediction time/pt. (sec) : 0.0000189
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0014031  
Prediction time/pt. (sec) : 0.0000167
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0013859  
Prediction time/pt. (sec) : 0.0000165
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0023665
Initializing linear solver - done. Time (sec): 0.0025609
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002503
    Solving linear system (col. 0) - done. Time (sec): 0.0003912
Training - done. Time (sec): 0.0058343
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0015285

Prediction time/pt. (sec) : 0.0000182
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0038733

Prediction time/pt. (sec) : 0.0000312
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0012476

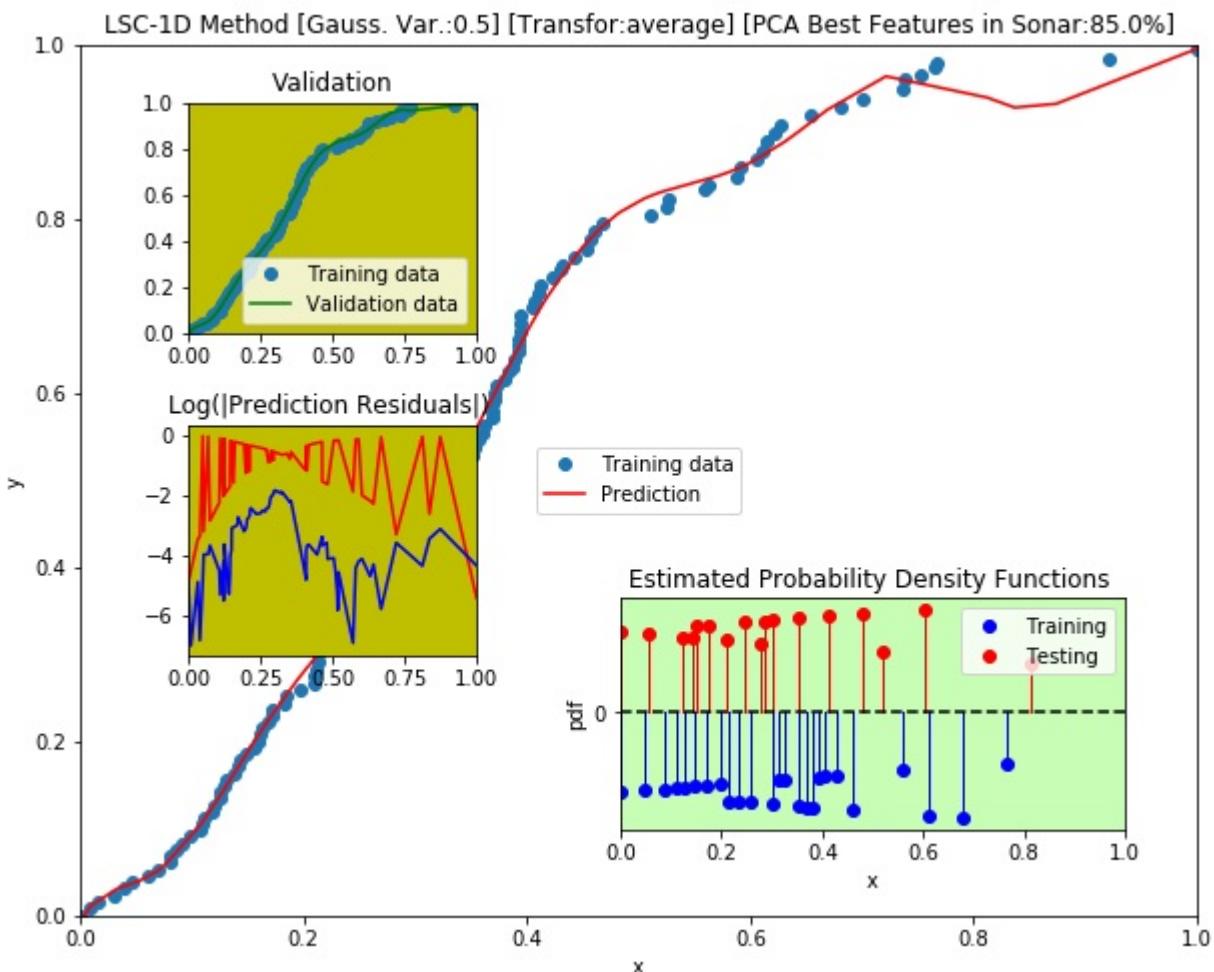
Prediction time/pt. (sec) : 0.0000149
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0013759

Prediction time/pt. (sec) : 0.0000164
```



Sonar Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

Training ...

Initializing linear solver ...

Performing LU fact. (125 x 125 mtx) ...

Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0008326

Initializing linear solver - done. Time (sec): 0.0018203

Solving linear system (col. 0) ...

Back solving (125 x 125 mtx) ...

Back solving (125 x 125 mtx) - done. Time (sec): 0.0003090

Solving linear system (col. 0) - done. Time (sec): 0.0012553

Training - done. Time (sec): 0.0076995

Evaluation

```
# eval points. : 124  
  
Predicting ...  
Predicting - done. Time (sec): 0.0042038  
  
Prediction time/pt. (sec) : 0.0000339
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0006120  
  
Prediction time/pt. (sec) : 0.0000073
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0008616  
  
Prediction time/pt. (sec) : 0.0000103
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0024402  
  
Prediction time/pt. (sec) : 0.0000291
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0052223
Initializing linear solver - done. Time (sec): 0.0054290
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002851
    Solving linear system (col. 0) - done. Time (sec): 0.0004370
Training - done. Time (sec): 0.0074880
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0037487

Prediction time/pt. (sec) : 0.0000446
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0032477

Prediction time/pt. (sec) : 0.0000262
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0030963

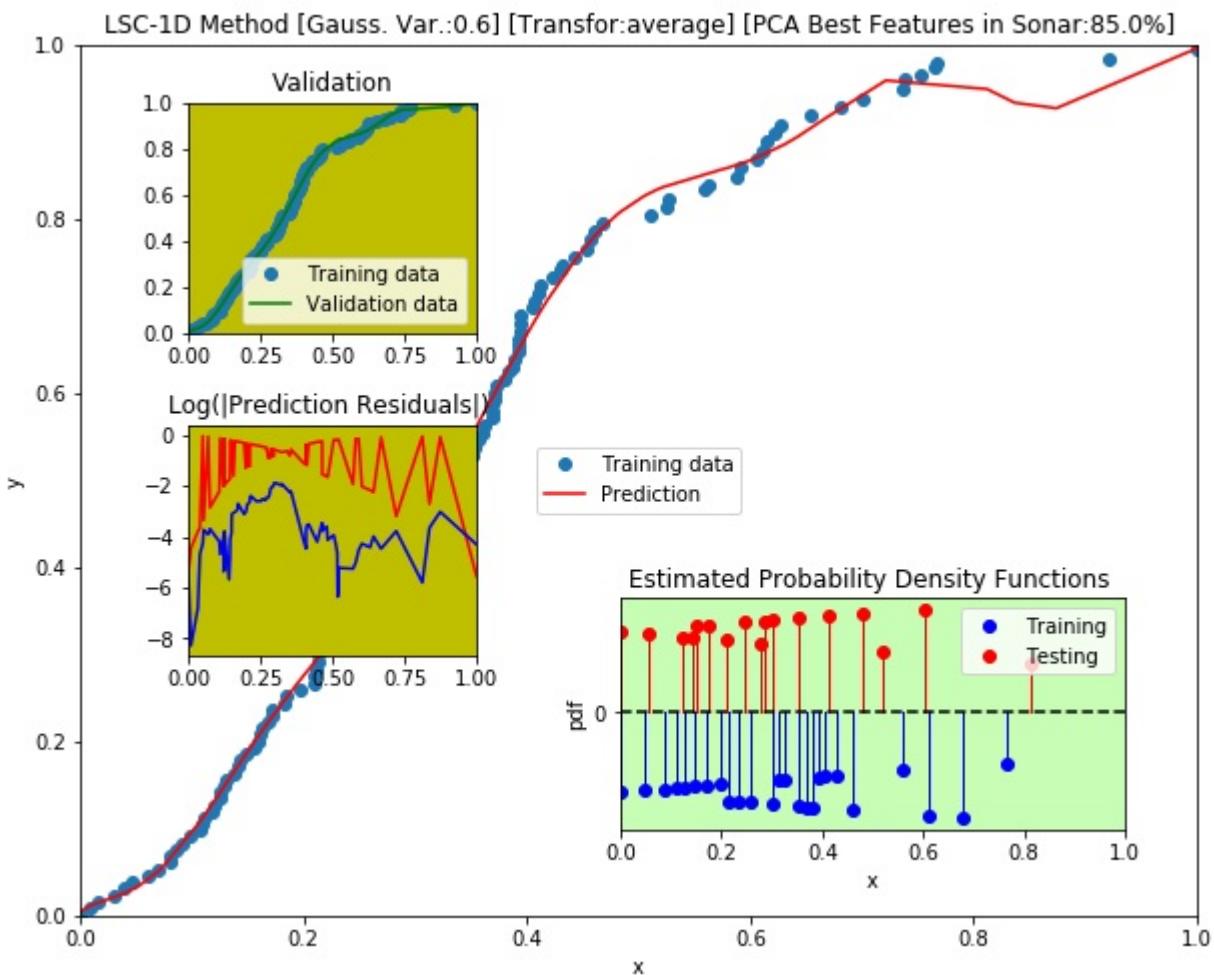
Prediction time/pt. (sec) : 0.0000369
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0035245

Prediction time/pt. (sec) : 0.0000420
```



Sonar Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0030417
  Initializing linear solver - done. Time (sec): 0.0037780
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0003285
  Solving linear system (col. 0) - done. Time (sec): 0.0013661
Training - done. Time (sec): 0.0083029

```

Evaluation

```
# eval points. : 124  
  
Predicting ...  
Predicting - done. Time (sec): 0.0079401  
  
Prediction time/pt. (sec) : 0.0000640
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0004609  
  
Prediction time/pt. (sec) : 0.0000055
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0004554  
  
Prediction time/pt. (sec) : 0.0000054
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0004389  
  
Prediction time/pt. (sec) : 0.0000052
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0031791
Initializing linear solver - done. Time (sec): 0.0035493
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0011437
    Solving linear system (col. 0) - done. Time (sec): 0.0013180
Training - done. Time (sec): 0.0063999
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0025973

Prediction time/pt. (sec) : 0.0000309
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0032942

Prediction time/pt. (sec) : 0.0000266
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004387

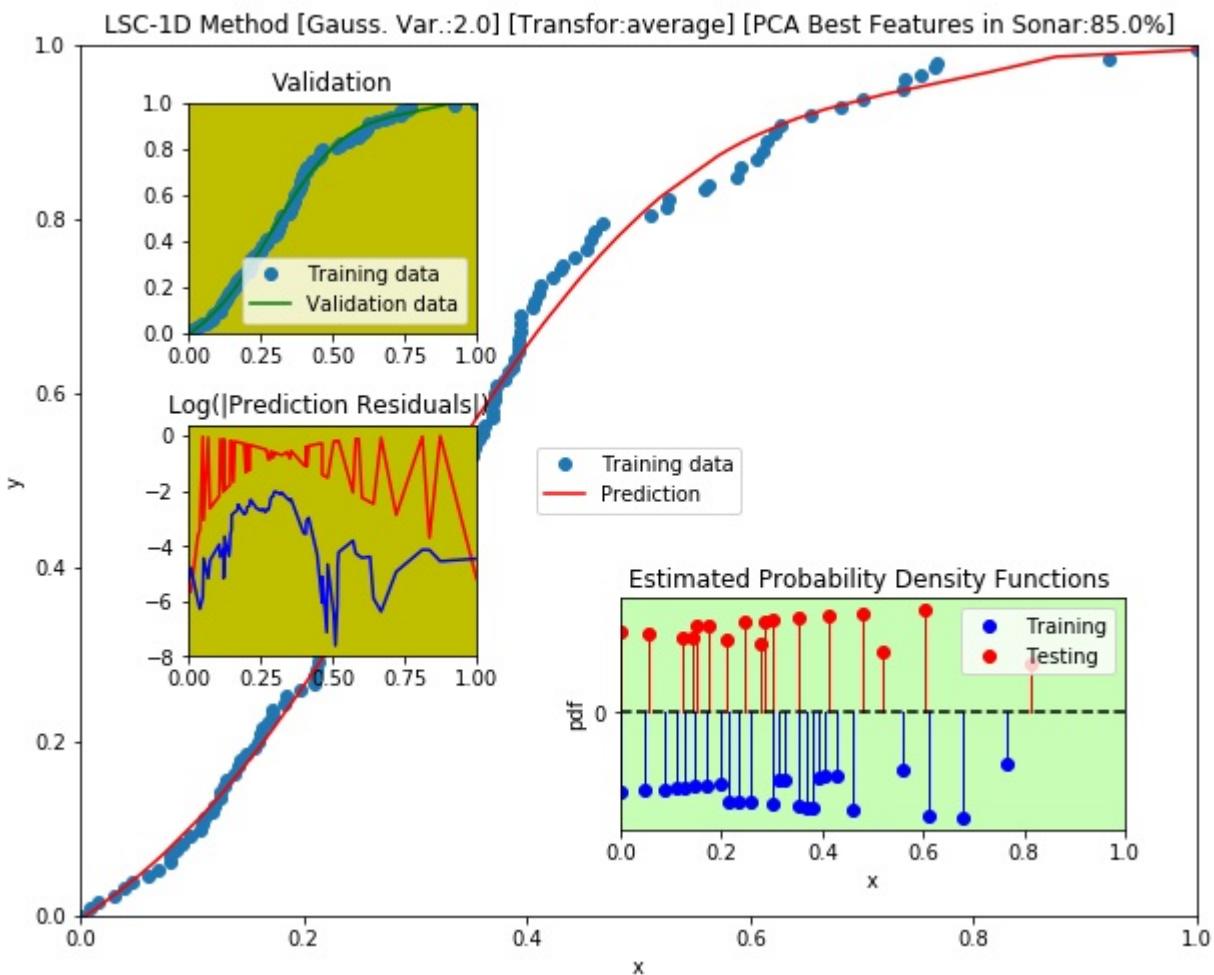
Prediction time/pt. (sec) : 0.0000052
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0052795

Prediction time/pt. (sec) : 0.0000629
```



Sonar Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

Training ...

Initializing linear solver ...

Performing LU fact. (125 x 125 mtx) ...

Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0027025

Initializing linear solver - done. Time (sec): 0.0033088

Solving linear system (col. 0) ...

Back solving (125 x 125 mtx) ...

Back solving (125 x 125 mtx) - done. Time (sec): 0.0003054

Solving linear system (col. 0) - done. Time (sec): 0.0012548

Training - done. Time (sec): 0.0075300

Evaluation

```
# eval points. : 124  
  
Predicting ...  
Predicting - done. Time (sec): 0.0075603  
  
Prediction time/pt. (sec) : 0.0000610
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0004592  
  
Prediction time/pt. (sec) : 0.0000055
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0004501  
  
Prediction time/pt. (sec) : 0.0000054
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0004466  
  
Prediction time/pt. (sec) : 0.0000053
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0029452
Initializing linear solver - done. Time (sec): 0.0033870
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002320
    Solving linear system (col. 0) - done. Time (sec): 0.0011806
Training - done. Time (sec): 0.0060618
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0026882

Prediction time/pt. (sec) : 0.0000320
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0031385

Prediction time/pt. (sec) : 0.0000253
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0029535

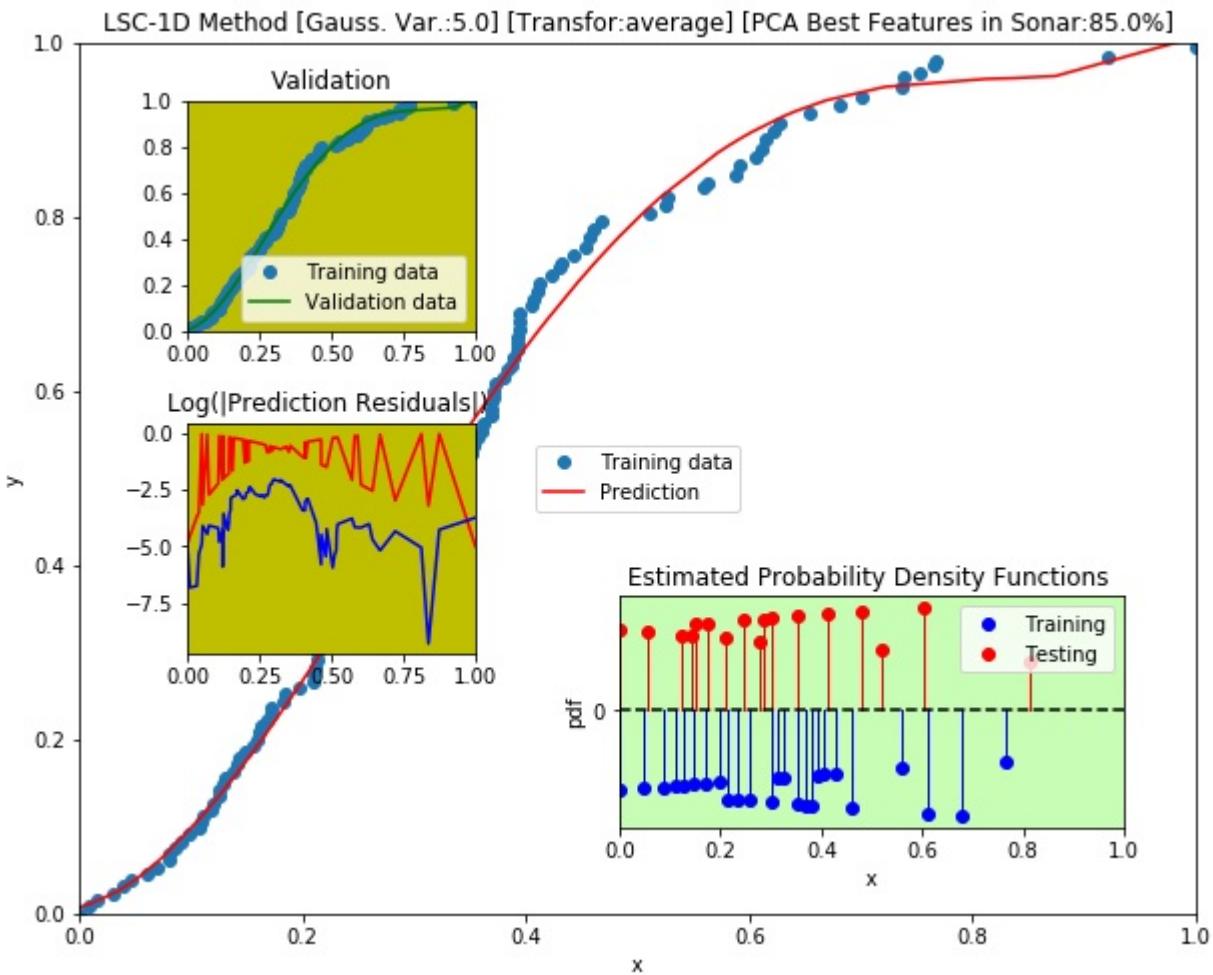
Prediction time/pt. (sec) : 0.0000352
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0029125

Prediction time/pt. (sec) : 0.0000347
```



Sonar Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

Training ...

Initializing linear solver ...

Performing LU fact. (125 x 125 mtx) ...

Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0017116

Initializing linear solver - done. Time (sec): 0.0027244

Solving linear system (col. 0) ...

Back solving (125 x 125 mtx) ...

Back solving (125 x 125 mtx) - done. Time (sec): 0.0003030

Solving linear system (col. 0) - done. Time (sec): 0.0012615

Training - done. Time (sec): 0.0083051

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0072706  
Prediction time/pt. (sec) : 0.0000586
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004833  
Prediction time/pt. (sec) : 0.0000058
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004611  
Prediction time/pt. (sec) : 0.0000055
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004733  
Prediction time/pt. (sec) : 0.0000056
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0016747
Initializing linear solver - done. Time (sec): 0.0019073
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002494
    Solving linear system (col. 0) - done. Time (sec): 0.0003929
Training - done. Time (sec): 0.0067937
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0037000

Prediction time/pt. (sec) : 0.0000440
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0034263

Prediction time/pt. (sec) : 0.0000276
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0029230

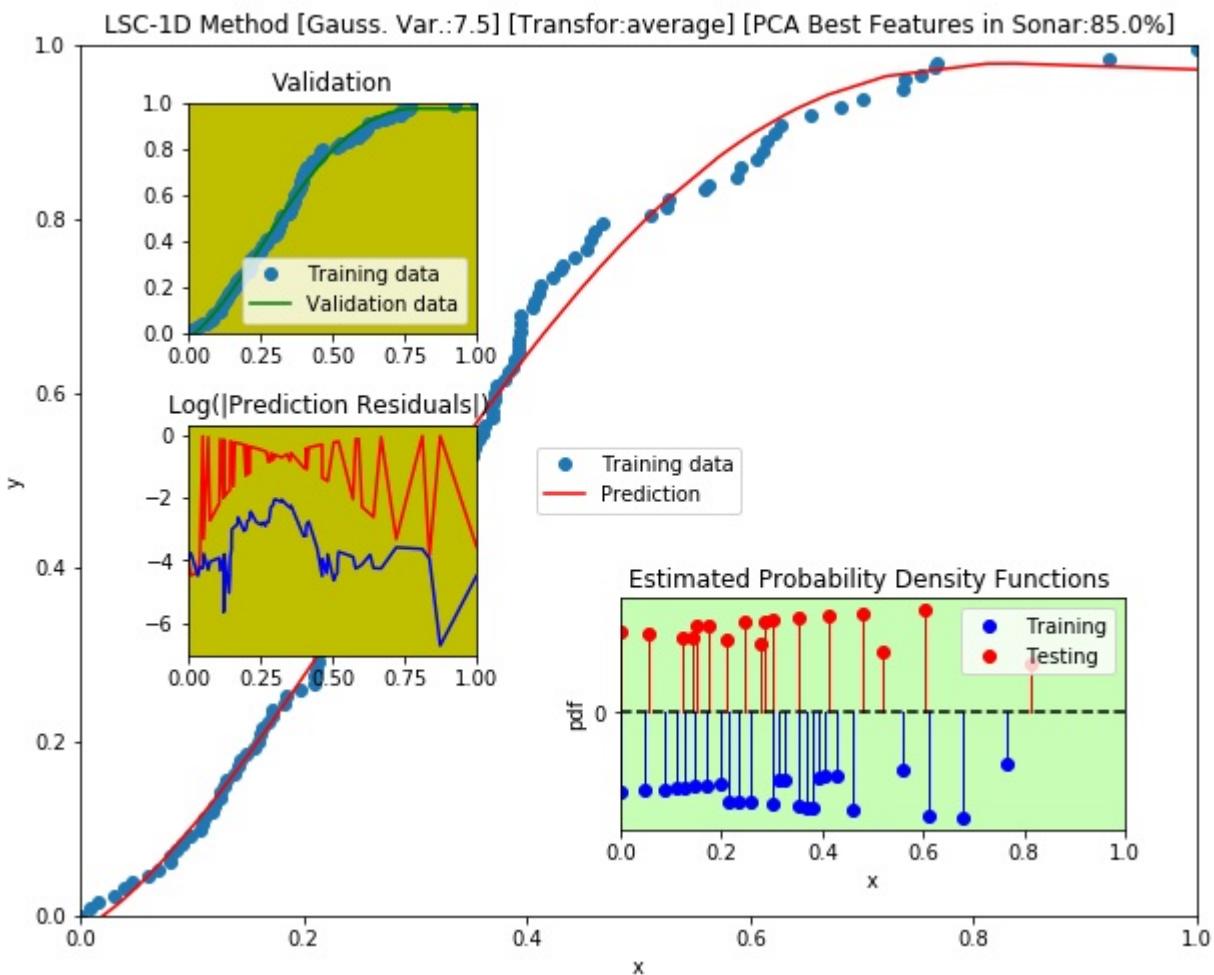
Prediction time/pt. (sec) : 0.0000348
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0029273

Prediction time/pt. (sec) : 0.0000348
```



Sonar Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0049560
  Initializing linear solver - done. Time (sec): 0.0052128
  Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0005252
  Solving linear system (col. 0) - done. Time (sec): 0.0007513
Training - done. Time (sec): 0.0129282

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0064235  
Prediction time/pt. (sec) : 0.0000518
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0003977  
Prediction time/pt. (sec) : 0.0000047
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0027263  
Prediction time/pt. (sec) : 0.0000325
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0003910  
Prediction time/pt. (sec) : 0.0000047
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0078261
Initializing linear solver - done. Time (sec): 0.0080433
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002494
    Solving linear system (col. 0) - done. Time (sec): 0.0003858
Training - done. Time (sec): 0.0097938
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004194

Prediction time/pt. (sec) : 0.0000050
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0005617

Prediction time/pt. (sec) : 0.0000045
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0003922

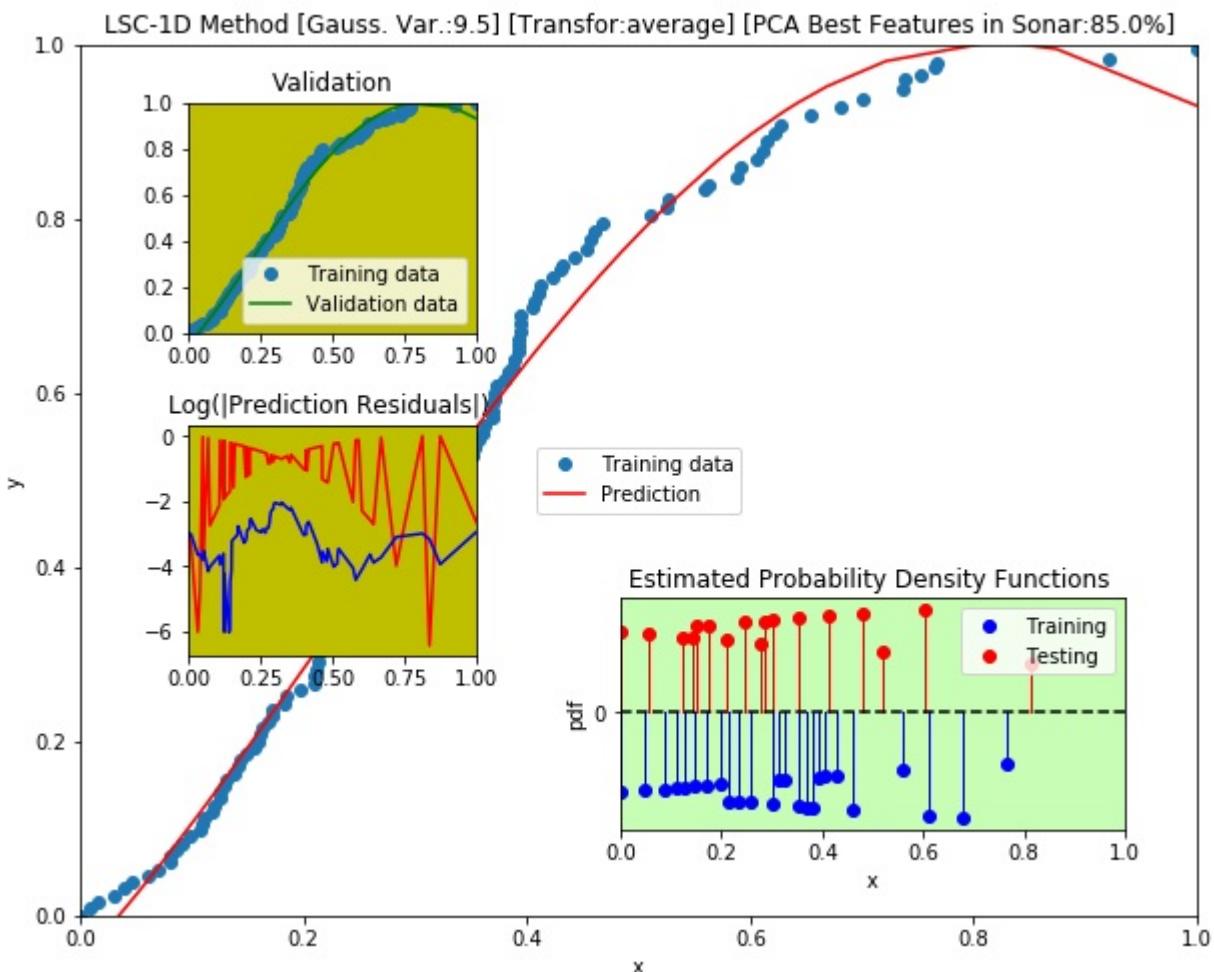
Prediction time/pt. (sec) : 0.0000047
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0037000

Prediction time/pt. (sec) : 0.0000440
```



Sonar Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

Training ...

Initializing linear solver ...

Performing LU fact. (125 x 125 mtx) ...

Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0043457

Initializing linear solver - done. Time (sec): 0.0045543

Solving linear system (col. 0) ...

Back solving (125 x 125 mtx) ...

Back solving (125 x 125 mtx) - done. Time (sec): 0.0002363

Solving linear system (col. 0) - done. Time (sec): 0.0003664

Training - done. Time (sec): 0.0121791

Evaluation

```
# eval points. : 124  
  
Predicting ...  
Predicting - done. Time (sec): 0.0036995  
  
Prediction time/pt. (sec) : 0.0000298
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0025306  
  
Prediction time/pt. (sec) : 0.0000301
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0004091  
  
Prediction time/pt. (sec) : 0.0000049
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0052922  
  
Prediction time/pt. (sec) : 0.0000630
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0006614
Initializing linear solver - done. Time (sec): 0.0008326
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0001984
    Solving linear system (col. 0) - done. Time (sec): 0.0003383
Training - done. Time (sec): 0.0025985
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0011268

Prediction time/pt. (sec) : 0.0000134
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0032265

Prediction time/pt. (sec) : 0.0000260
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004387

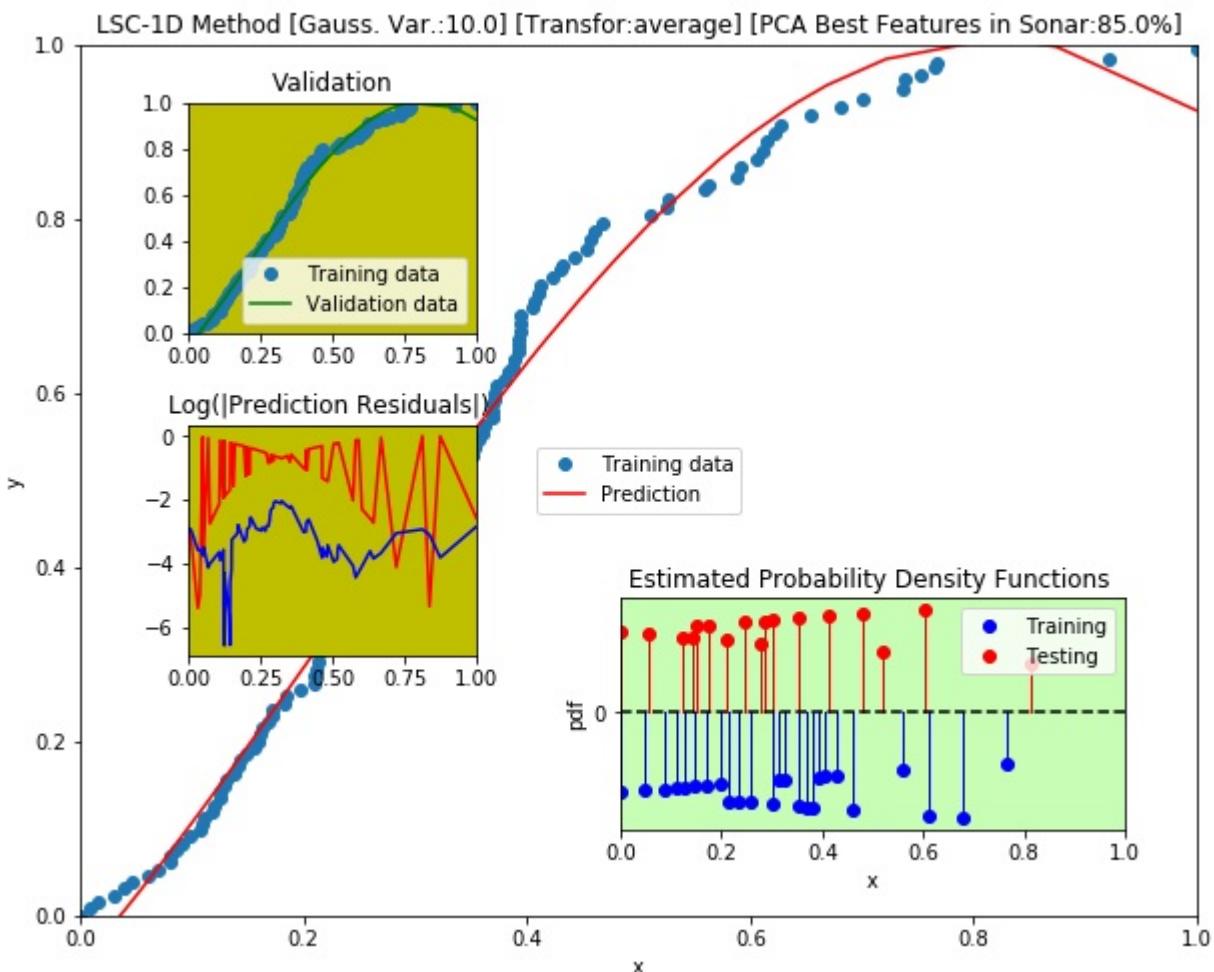
Prediction time/pt. (sec) : 0.0000052
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0092006

Prediction time/pt. (sec) : 0.0001095
```



Sonar Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0007315
    Initializing linear solver - done. Time (sec): 0.0014687
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0002282
    Solving linear system (col. 0) - done. Time (sec): 0.0008547
Training - done. Time (sec): 0.0050046

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0007408  
Prediction time/pt. (sec) : 0.0000060
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005267  
Prediction time/pt. (sec) : 0.0000063
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0005393  
Prediction time/pt. (sec) : 0.0000064
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0040073  
Prediction time/pt. (sec) : 0.0000477
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0055382
Initializing linear solver - done. Time (sec): 0.0057518
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002589
    Solving linear system (col. 0) - done. Time (sec): 0.0004170
Training - done. Time (sec): 0.0078590
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0039659

Prediction time/pt. (sec) : 0.0000472
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0033863

Prediction time/pt. (sec) : 0.0000273
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0027032

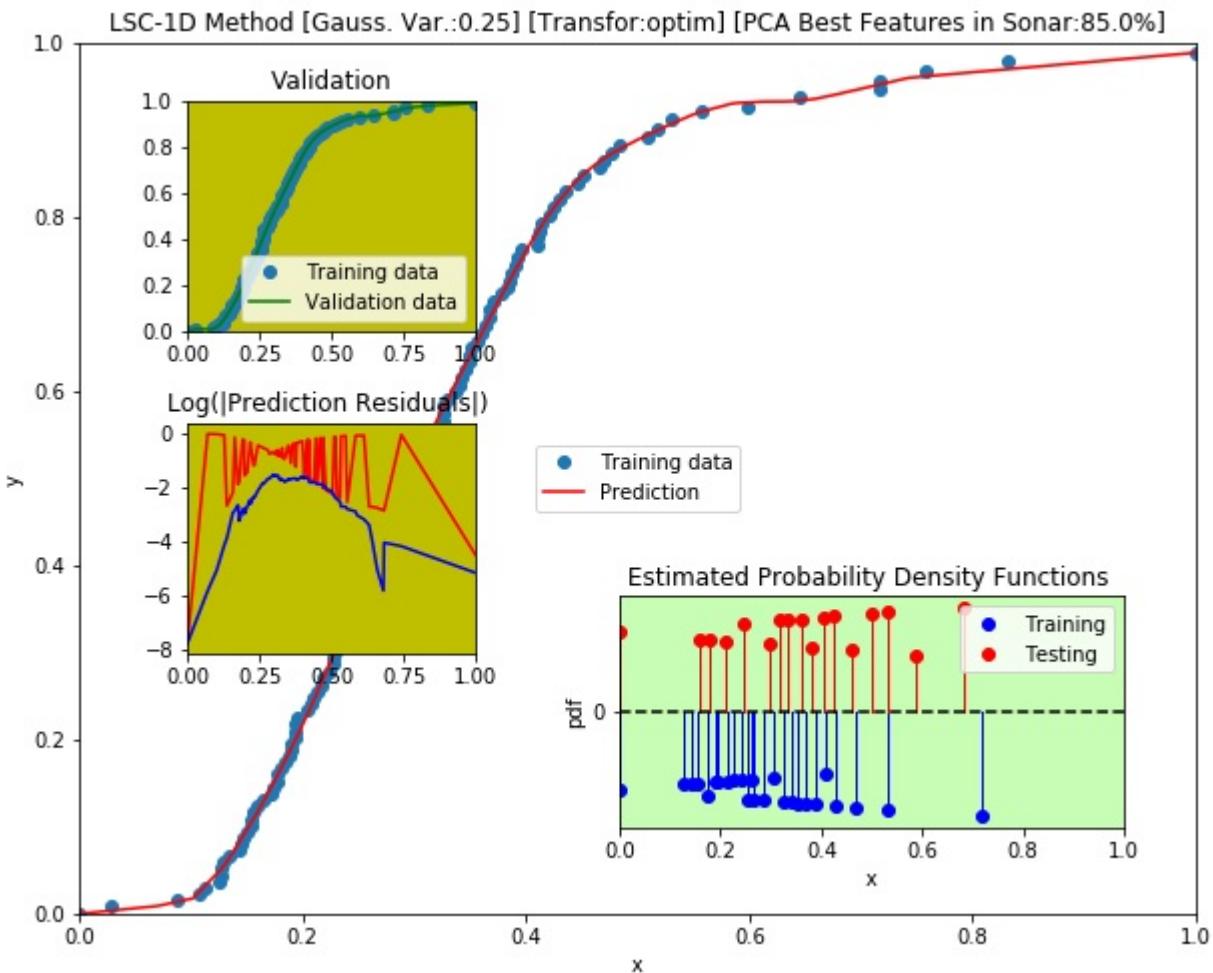
Prediction time/pt. (sec) : 0.0000322
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0037286

Prediction time/pt. (sec) : 0.0000444
```



Sonar Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0129013
    Initializing linear solver - done. Time (sec): 0.0131853
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0003433
    Solving linear system (col. 0) - done. Time (sec): 0.0006068
Training - done. Time (sec): 0.0158236

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0171158  
Prediction time/pt. (sec) : 0.0001380
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0020528  
Prediction time/pt. (sec) : 0.0000244
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0019441  
Prediction time/pt. (sec) : 0.0000231
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0019937  
Prediction time/pt. (sec) : 0.0000237
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0130162
Initializing linear solver - done. Time (sec): 0.0132167
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002420
    Solving linear system (col. 0) - done. Time (sec): 0.0003788
Training - done. Time (sec): 0.0188572
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0024698

Prediction time/pt. (sec) : 0.0000294
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0077934

Prediction time/pt. (sec) : 0.0000629
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005596

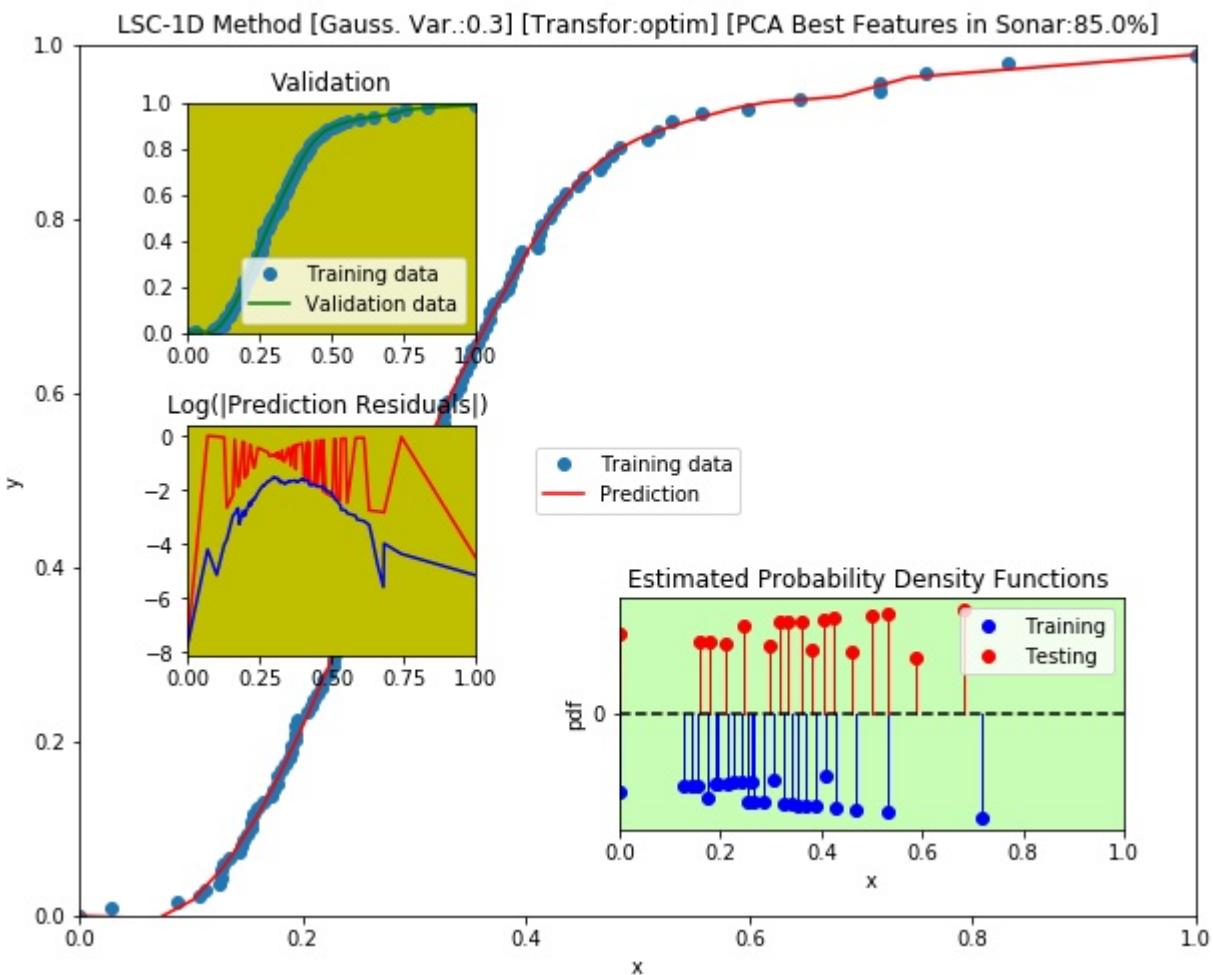
Prediction time/pt. (sec) : 0.0000067
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0031013

Prediction time/pt. (sec) : 0.0000369
```



Sonar Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (125 x 125 mtx) ...
        Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0058653
    Initializing linear solver - done. Time (sec): 0.0071893
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0005124
    Solving linear system (col. 0) - done. Time (sec): 0.0015330
Training - done. Time (sec): 0.0132923

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0032098  
Prediction time/pt. (sec) : 0.0000259
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0031304  
Prediction time/pt. (sec) : 0.0000373
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0025489  
Prediction time/pt. (sec) : 0.0000303
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0041420  
Prediction time/pt. (sec) : 0.0000493
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0154347
Initializing linear solver - done. Time (sec): 0.0156860
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0009964
    Solving linear system (col. 0) - done. Time (sec): 0.0011709
Training - done. Time (sec): 0.0185616
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0018914

Prediction time/pt. (sec) : 0.0000225
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0027387

Prediction time/pt. (sec) : 0.0000221
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0021040

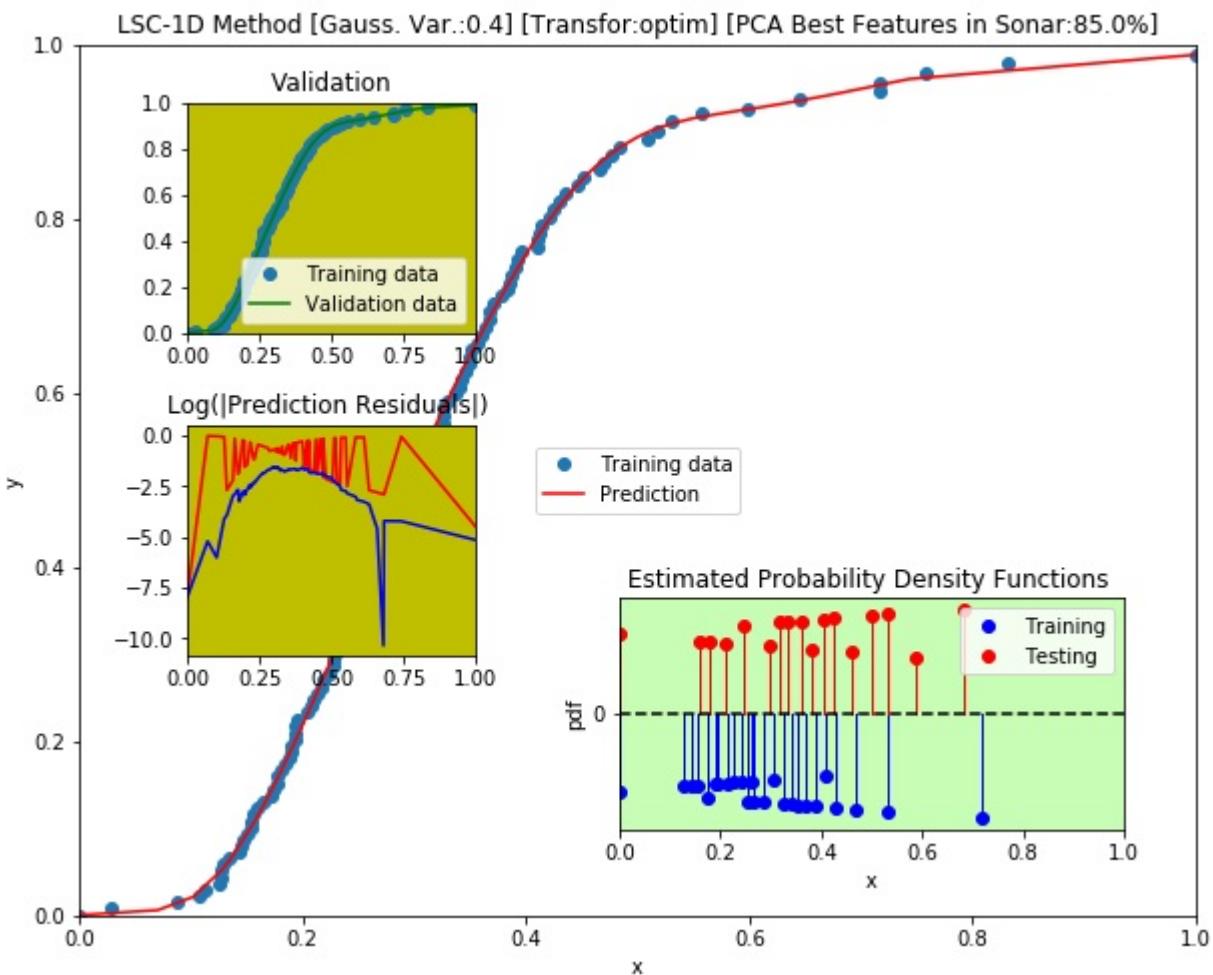
Prediction time/pt. (sec) : 0.0000250
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0025020

Prediction time/pt. (sec) : 0.0000298
```



Sonar Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0069129
    Initializing linear solver - done. Time (sec): 0.0079172
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0003123
    Solving linear system (col. 0) - done. Time (sec): 0.0021594
Training - done. Time (sec): 0.0139258

```

Evaluation

```
# eval points. : 124  
  
Predicting ...  
Predicting - done. Time (sec): 0.0017197  
  
Prediction time/pt. (sec) : 0.0000139
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0020678  
  
Prediction time/pt. (sec) : 0.0000246
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0005248  
  
Prediction time/pt. (sec) : 0.0000062
```

Evaluation

```
# eval points. : 84  
  
Predicting ...  
Predicting - done. Time (sec): 0.0004926  
  
Prediction time/pt. (sec) : 0.0000059
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0129616
Initializing linear solver - done. Time (sec): 0.0134761
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002308
    Solving linear system (col. 0) - done. Time (sec): 0.0012300
Training - done. Time (sec): 0.0288854
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005050

Prediction time/pt. (sec) : 0.0000060
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0006940

Prediction time/pt. (sec) : 0.0000056
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004933

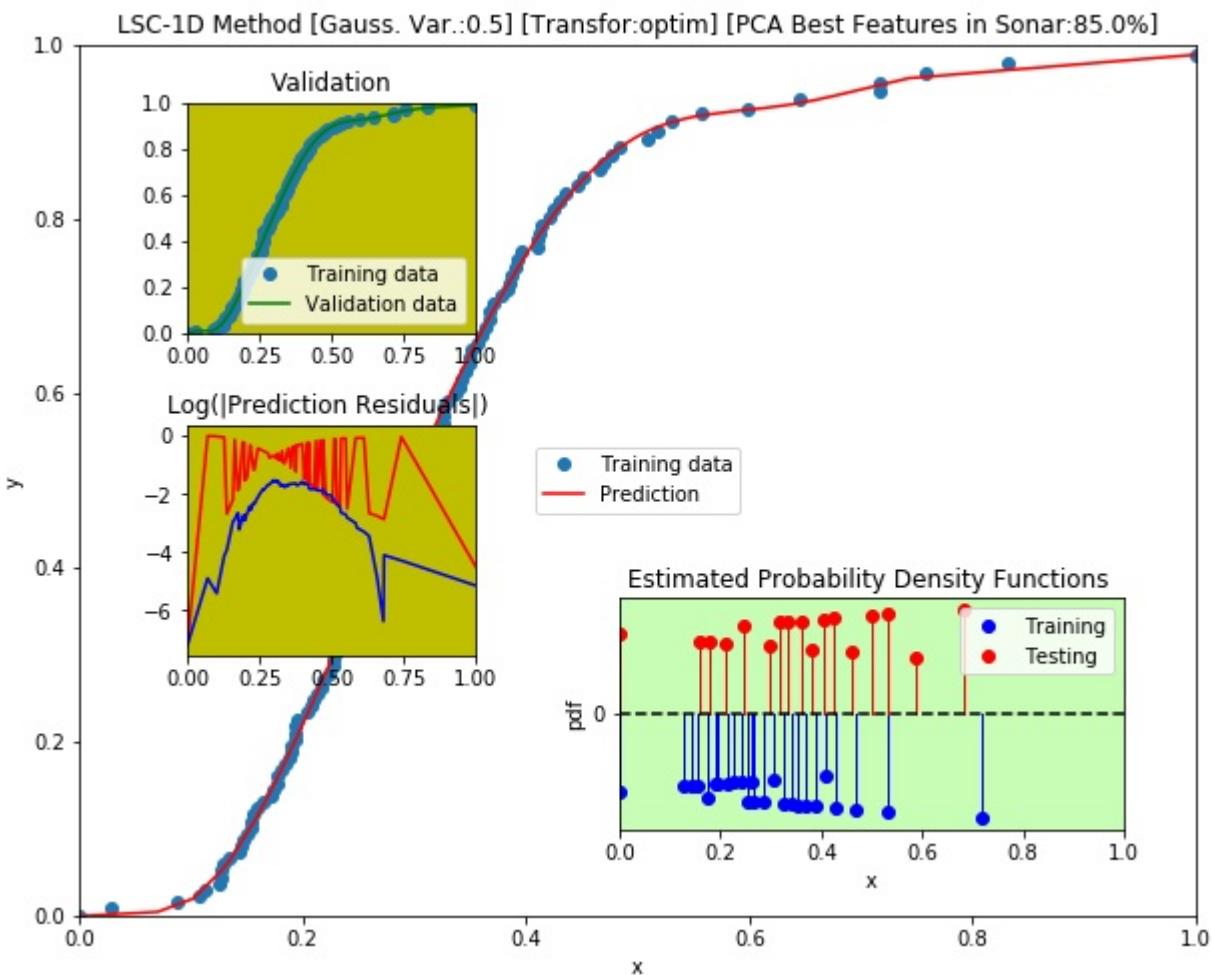
Prediction time/pt. (sec) : 0.0000059
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0100369

Prediction time/pt. (sec) : 0.0001195
```



Sonar Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (125 x 125 mtx) ...
        Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0013251
    Initializing linear solver - done. Time (sec): 0.0015469
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0002089
    Solving linear system (col. 0) - done. Time (sec): 0.0003421
Training - done. Time (sec): 0.0093067

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0048697  
Prediction time/pt. (sec) : 0.0000393
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0014627  
Prediction time/pt. (sec) : 0.0000174
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0012250  
Prediction time/pt. (sec) : 0.0000146
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0015197  
Prediction time/pt. (sec) : 0.0000181
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0095990
Initializing linear solver - done. Time (sec): 0.0098455
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0004065
    Solving linear system (col. 0) - done. Time (sec): 0.0005696
Training - done. Time (sec): 0.0142033
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005984

Prediction time/pt. (sec) : 0.0000071
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0007875

Prediction time/pt. (sec) : 0.0000064
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0013885

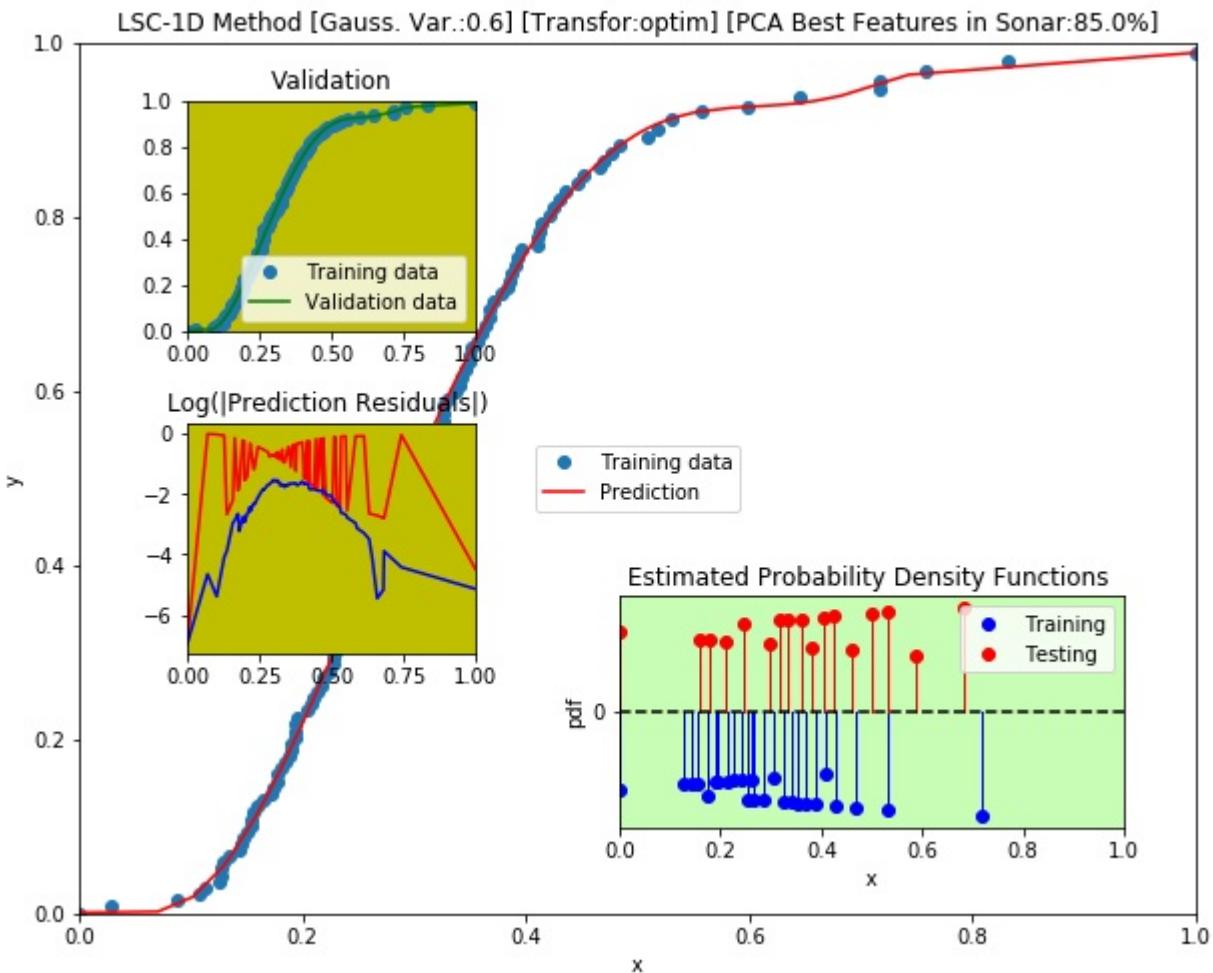
Prediction time/pt. (sec) : 0.0000165
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0006037

Prediction time/pt. (sec) : 0.0000072
```



Sonar Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0012882
    Initializing linear solver - done. Time (sec): 0.0015106
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0002151
    Solving linear system (col. 0) - done. Time (sec): 0.0003452
Training - done. Time (sec): 0.0091186

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0047011  
Prediction time/pt. (sec) : 0.0000379
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0014775  
Prediction time/pt. (sec) : 0.0000176
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0013087  
Prediction time/pt. (sec) : 0.0000156
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0061760  
Prediction time/pt. (sec) : 0.0000735
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0023627
Initializing linear solver - done. Time (sec): 0.0025666
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0004551
    Solving linear system (col. 0) - done. Time (sec): 0.0006223
Training - done. Time (sec): 0.0053823
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004721

Prediction time/pt. (sec) : 0.0000056
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0014780

Prediction time/pt. (sec) : 0.0000119
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0015674

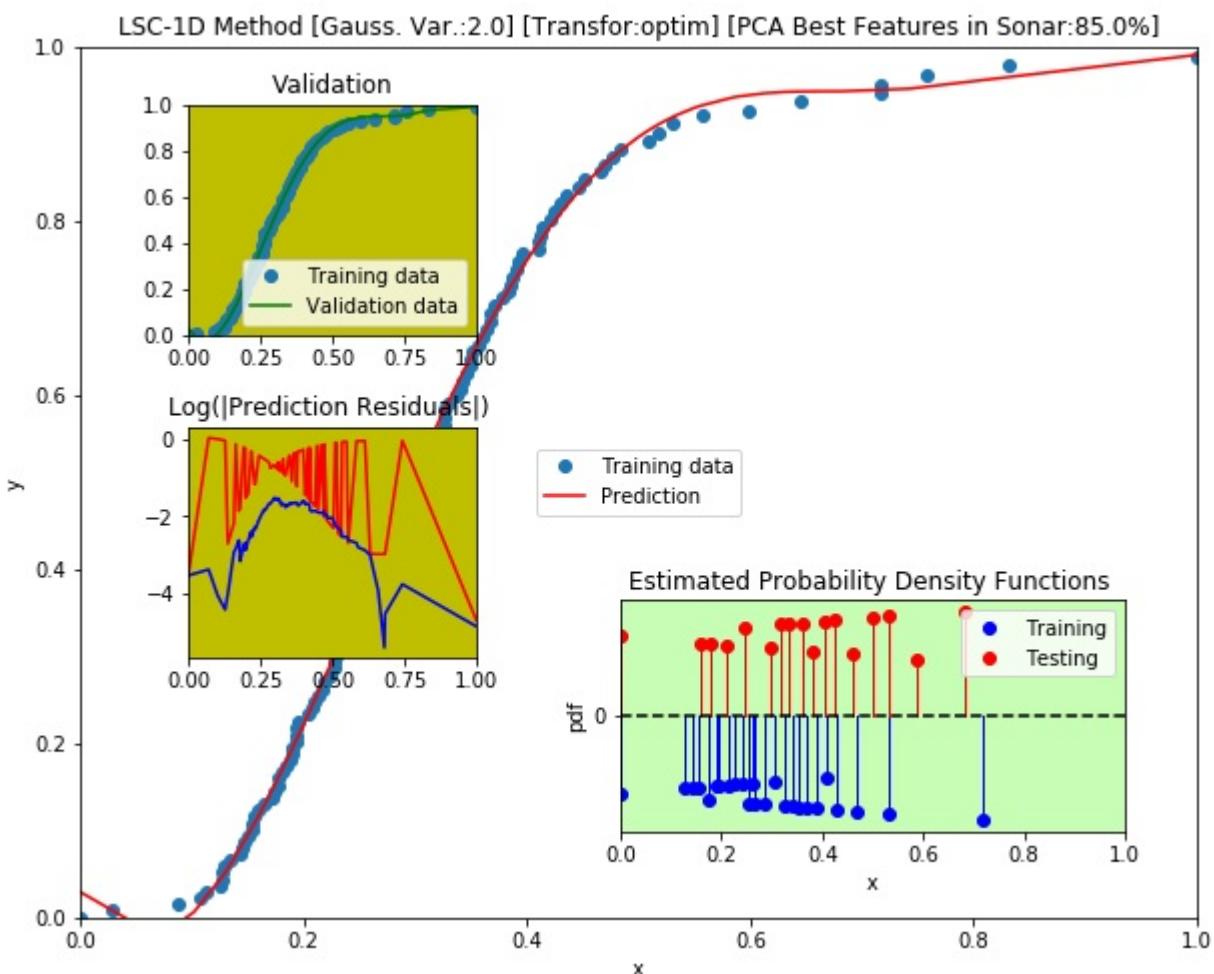
Prediction time/pt. (sec) : 0.0000187
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0019407

Prediction time/pt. (sec) : 0.0000231
```



Sonar Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0022202
    Initializing linear solver - done. Time (sec): 0.0028298
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0003090
    Solving linear system (col. 0) - done. Time (sec): 0.0012355
Training - done. Time (sec): 0.0068555

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0057855  
Prediction time/pt. (sec) : 0.0000467
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004828  
Prediction time/pt. (sec) : 0.0000057
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004630  
Prediction time/pt. (sec) : 0.0000055
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004599  
Prediction time/pt. (sec) : 0.0000055
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0035806
Initializing linear solver - done. Time (sec): 0.0037858
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002394
    Solving linear system (col. 0) - done. Time (sec): 0.0003796
Training - done. Time (sec): 0.0057483
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0036657

Prediction time/pt. (sec) : 0.0000436
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0035906

Prediction time/pt. (sec) : 0.0000290
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004499

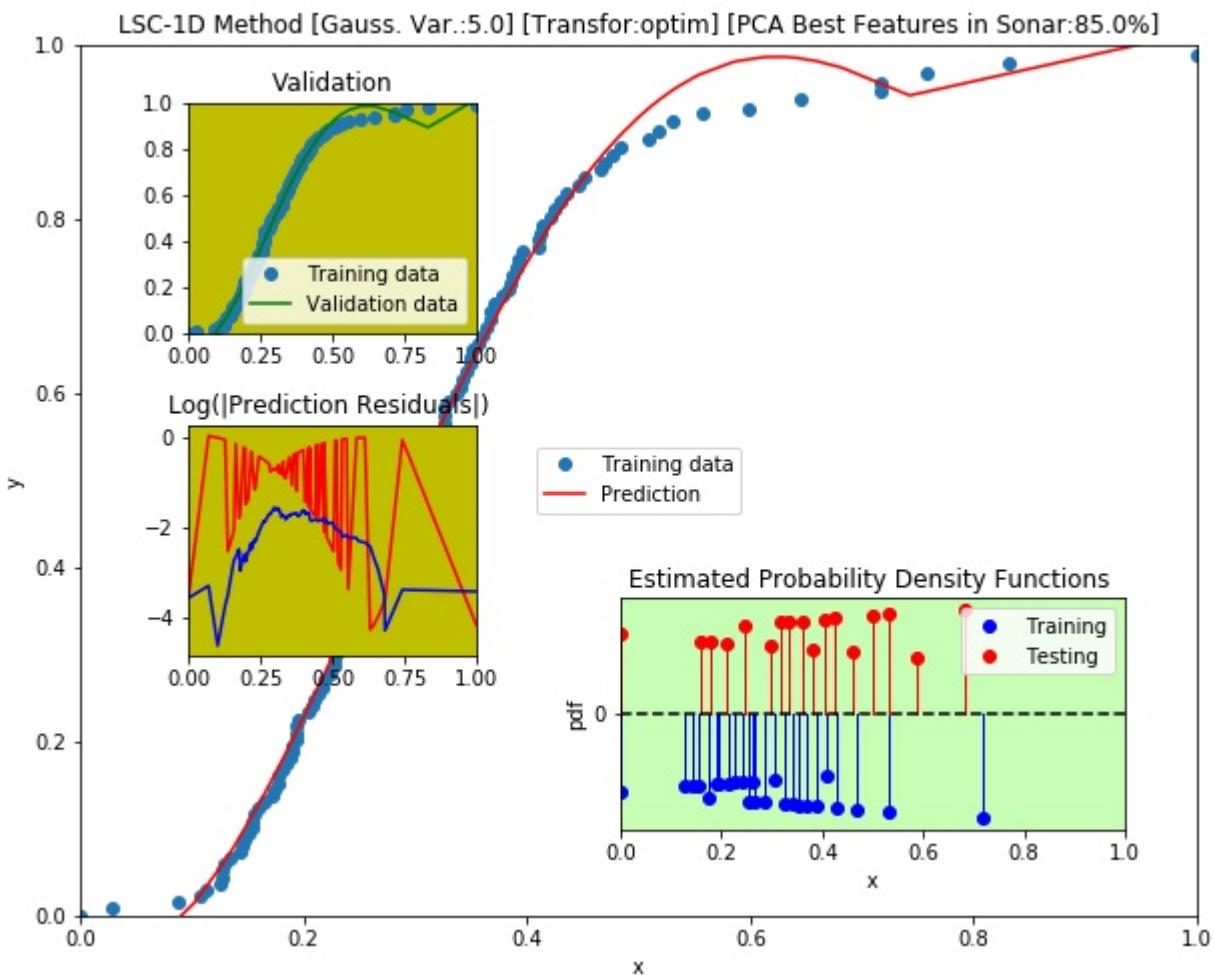
Prediction time/pt. (sec) : 0.0000054
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0051985

Prediction time/pt. (sec) : 0.0000619
```



Sonar Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0175319
    Initializing linear solver - done. Time (sec): 0.0178120
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0002937
    Solving linear system (col. 0) - done. Time (sec): 0.0004940
Training - done. Time (sec): 0.0228224

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0112092  
Prediction time/pt. (sec) : 0.0000904
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0033474  
Prediction time/pt. (sec) : 0.0000398
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004516  
Prediction time/pt. (sec) : 0.0000054
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004380  
Prediction time/pt. (sec) : 0.0000052
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0074923
Initializing linear solver - done. Time (sec): 0.0076995
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002506
    Solving linear system (col. 0) - done. Time (sec): 0.0003917
Training - done. Time (sec): 0.0105720
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0065129

Prediction time/pt. (sec) : 0.0000775
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0005829

Prediction time/pt. (sec) : 0.0000047
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0003924

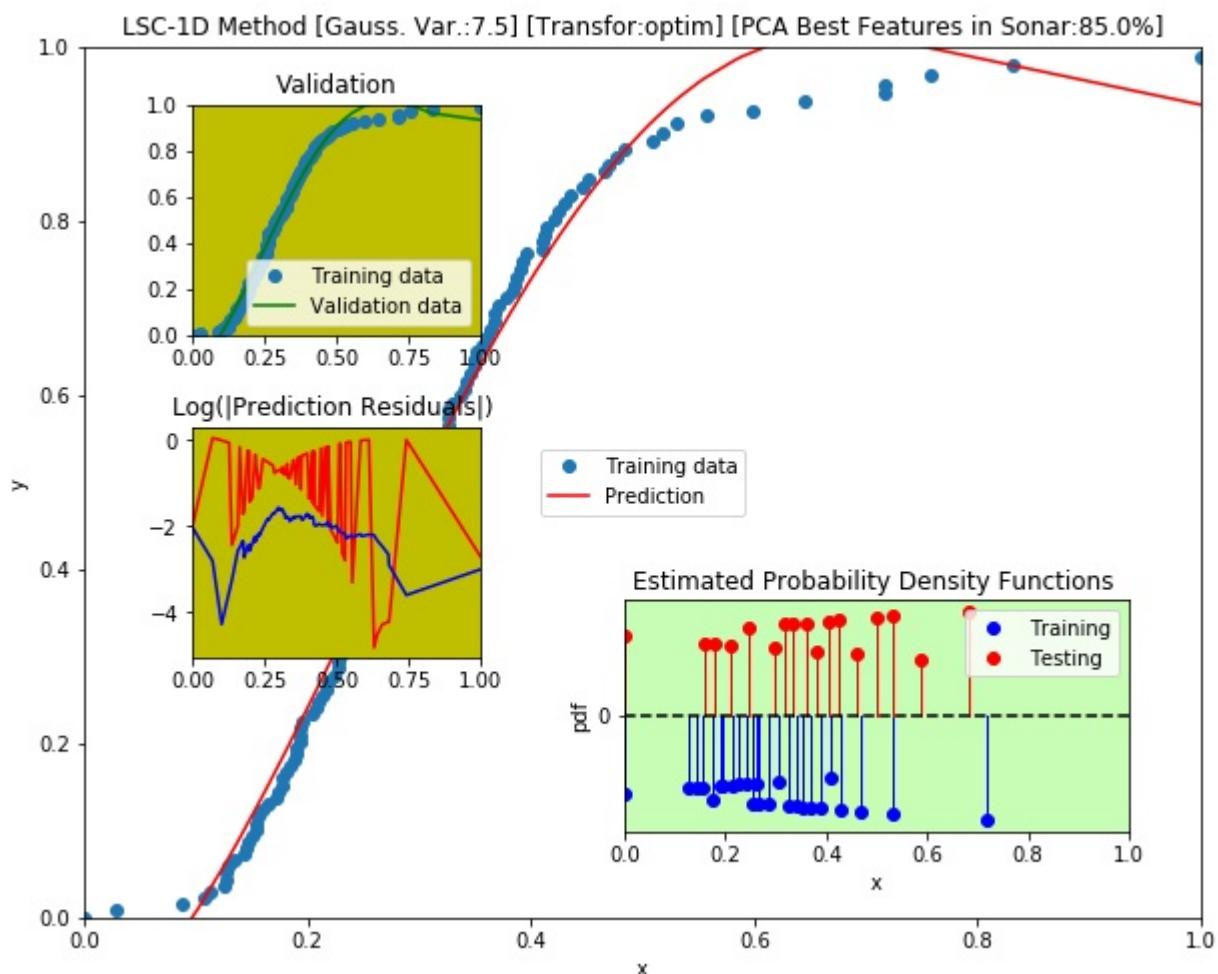
Prediction time/pt. (sec) : 0.0000047
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0025561

Prediction time/pt. (sec) : 0.0000304
```



Sonar Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0049992
    Initializing linear solver - done. Time (sec): 0.0051906
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0003960
    Solving linear system (col. 0) - done. Time (sec): 0.0005562
Training - done. Time (sec): 0.0129867

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0033567  
Prediction time/pt. (sec) : 0.0000271
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0003946  
Prediction time/pt. (sec) : 0.0000047
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004079  
Prediction time/pt. (sec) : 0.0000049
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0003693  
Prediction time/pt. (sec) : 0.0000044
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0006394
Initializing linear solver - done. Time (sec): 0.0008016
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002015
    Solving linear system (col. 0) - done. Time (sec): 0.0003524
Training - done. Time (sec): 0.0026474
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0004199

Prediction time/pt. (sec) : 0.0000050
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0097597

Prediction time/pt. (sec) : 0.0000787
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0005739

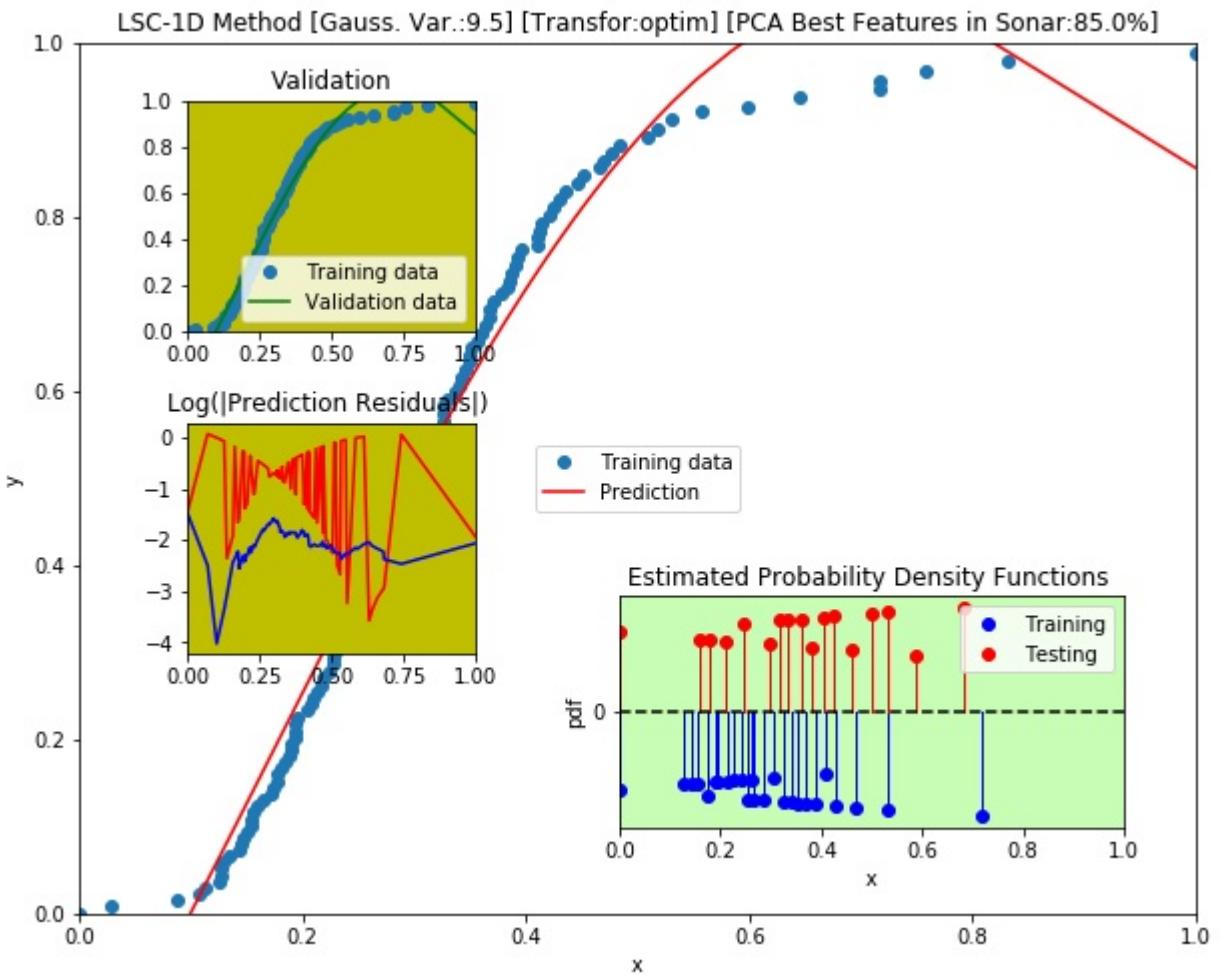
Prediction time/pt. (sec) : 0.0000068
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0090544

Prediction time/pt. (sec) : 0.0001078
```



Sonar Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 124

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (125 x 125 mtx) ...
    Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0009646
    Initializing linear solver - done. Time (sec): 0.0021625
    Solving linear system (col. 0) ...
        Back solving (125 x 125 mtx) ...
        Back solving (125 x 125 mtx) - done. Time (sec): 0.0003345
    Solving linear system (col. 0) - done. Time (sec): 0.0014043
    Training - done. Time (sec): 0.0092816

```

Evaluation

```
# eval points. : 124  
Predicting ...  
Predicting - done. Time (sec): 0.0106311  
Prediction time/pt. (sec) : 0.0000857
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004482  
Prediction time/pt. (sec) : 0.0000053
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004246  
Prediction time/pt. (sec) : 0.0000051
```

Evaluation

```
# eval points. : 84  
Predicting ...  
Predicting - done. Time (sec): 0.0004287  
Prediction time/pt. (sec) : 0.0000051
```

RBF

Problem size

```
# training points. : 124
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (125 x 125 mtx) ...
```

```
Performing LU fact. (125 x 125 mtx) - done. Time (sec): 0.0030971
Initializing linear solver - done. Time (sec): 0.0034661
Solving linear system (col. 0) ...
    Back solving (125 x 125 mtx) ...
    Back solving (125 x 125 mtx) - done. Time (sec): 0.0002432
    Solving linear system (col. 0) - done. Time (sec): 0.0003850
Training - done. Time (sec): 0.0053365
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0036089

Prediction time/pt. (sec) : 0.0000430
```

Evaluation

```
# eval points. : 124

Predicting ...
Predicting - done. Time (sec): 0.0013385

Prediction time/pt. (sec) : 0.0000108
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0018210

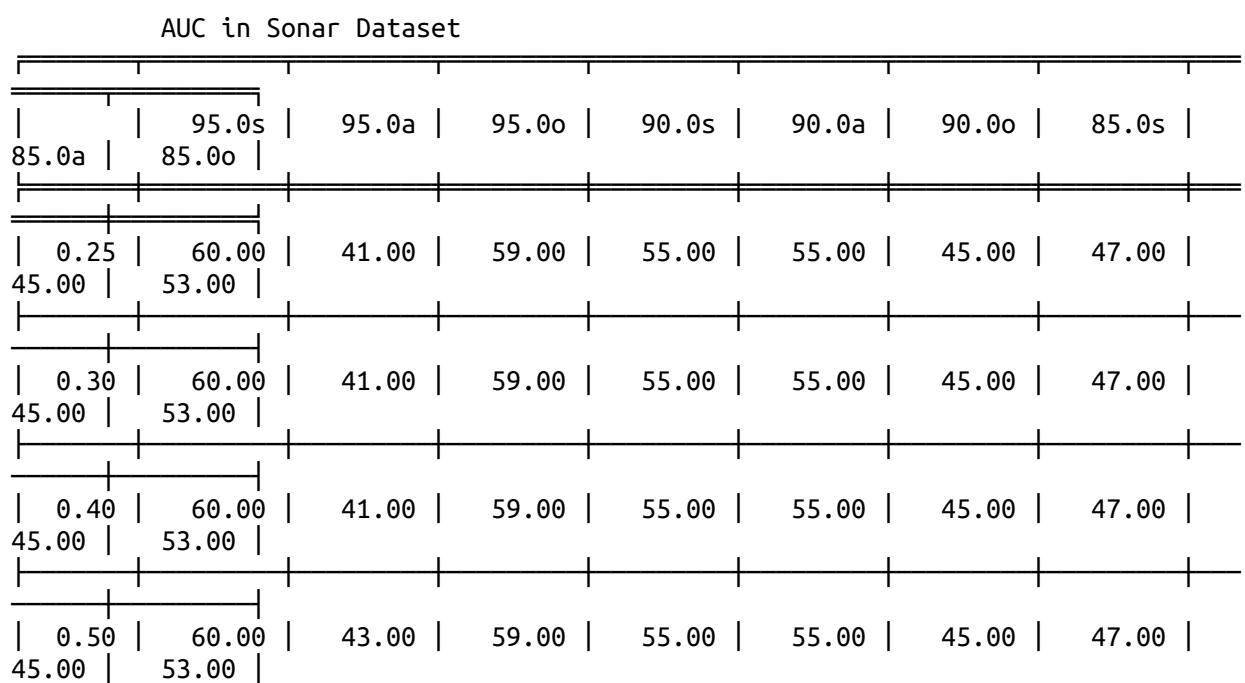
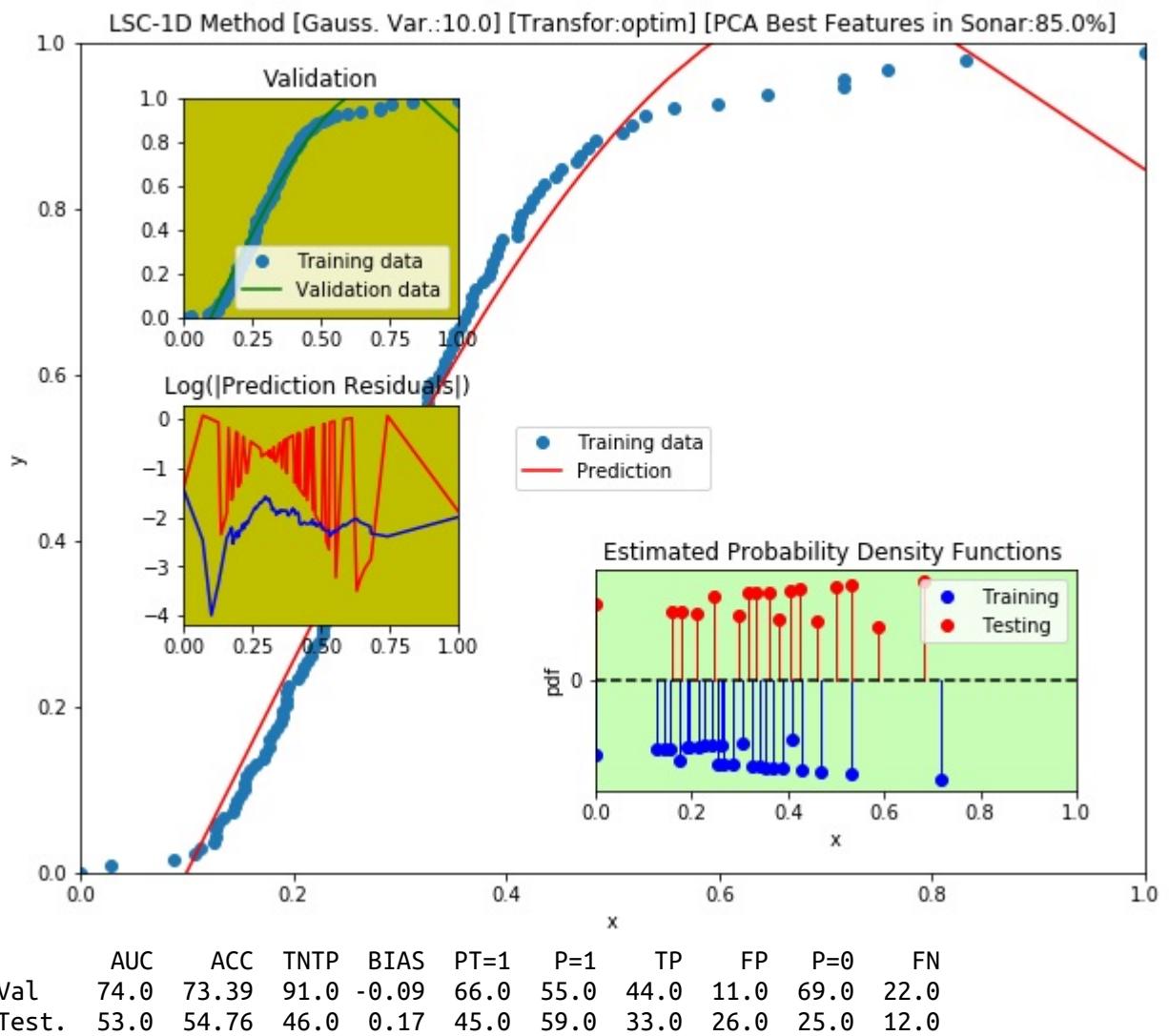
Prediction time/pt. (sec) : 0.0000217
```

Evaluation

```
# eval points. : 84

Predicting ...
Predicting - done. Time (sec): 0.0022621

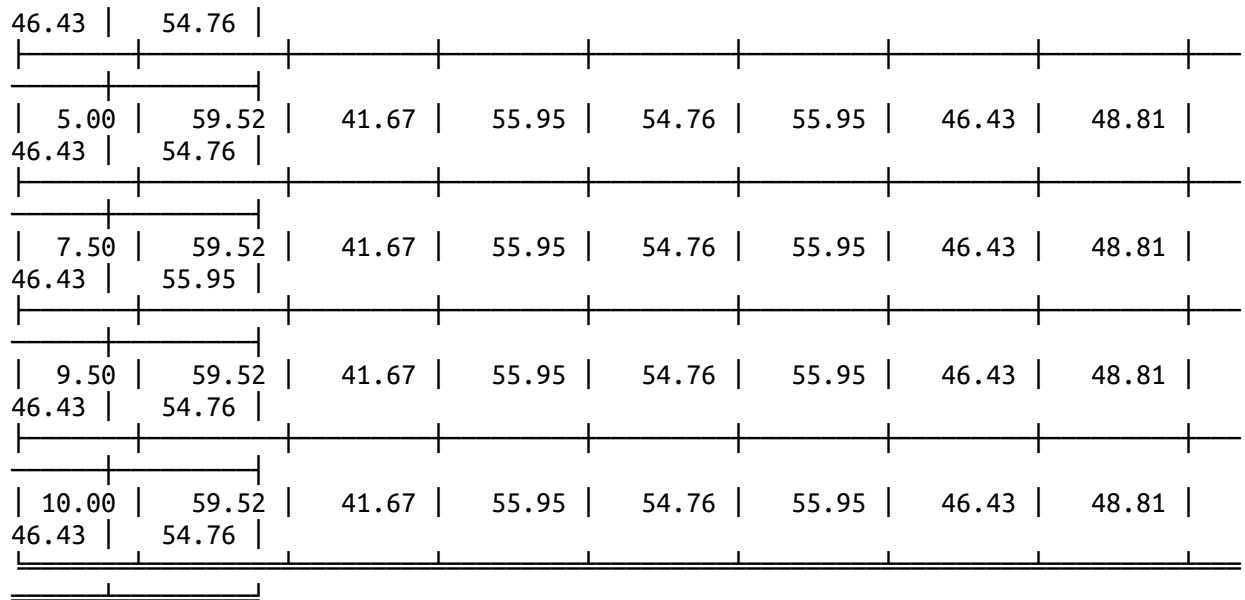
Prediction time/pt. (sec) : 0.0000269
```



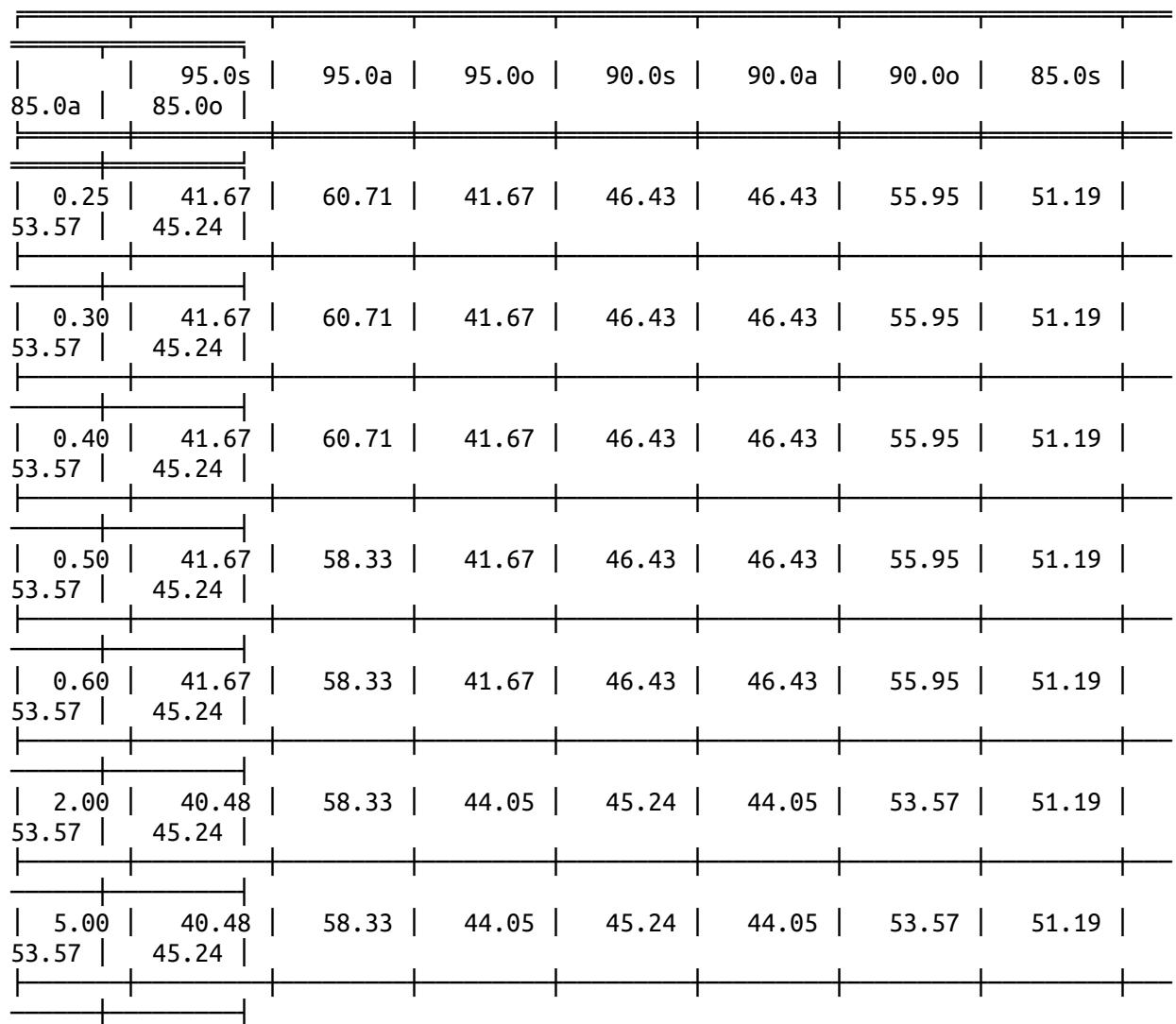
0.60	60.00	43.00	59.00	55.00	55.00	45.00	47.00	
45.00	53.00							
2.00	61.00	43.00	57.00	56.00	57.00	47.00	47.00	
45.00	53.00							
5.00	61.00	43.00	57.00	56.00	57.00	47.00	47.00	
45.00	53.00							
7.50	61.00	43.00	57.00	56.00	57.00	47.00	47.00	
45.00	55.00							
9.50	61.00	43.00	57.00	56.00	57.00	47.00	47.00	
45.00	54.00							
10.00	61.00	43.00	57.00	56.00	57.00	47.00	47.00	
45.00	54.00							

ACC in Sonar Dataset

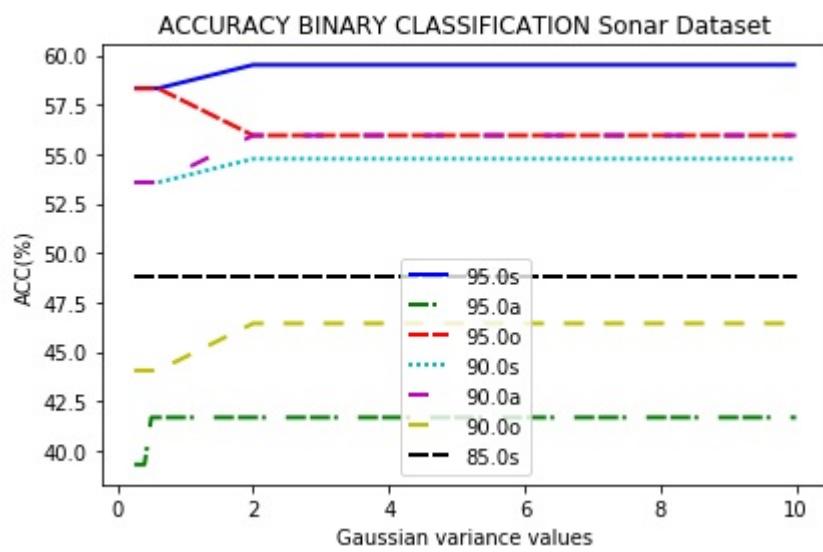
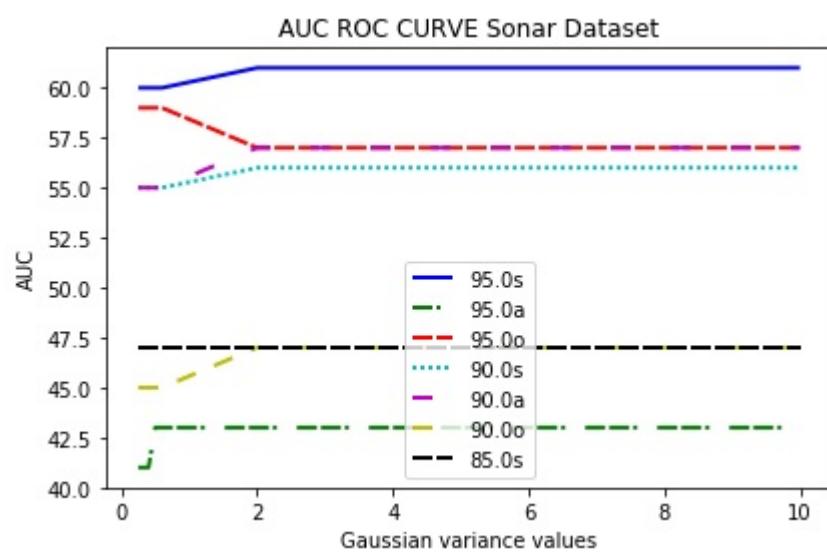
95.0s	95.0a	95.0o	95.0o	90.0s	90.0a	90.0o	85.0s	
85.0a	85.0o							
0.25	58.33	39.29	58.33	53.57	53.57	44.05	48.81	
46.43	54.76							
0.30	58.33	39.29	58.33	53.57	53.57	44.05	48.81	
46.43	54.76							
0.40	58.33	39.29	58.33	53.57	53.57	44.05	48.81	
46.43	54.76							
0.50	58.33	41.67	58.33	53.57	53.57	44.05	48.81	
46.43	54.76							
0.60	58.33	41.67	58.33	53.57	53.57	44.05	48.81	
46.43	54.76							
2.00	59.52	41.67	55.95	54.76	55.95	46.43	48.81	



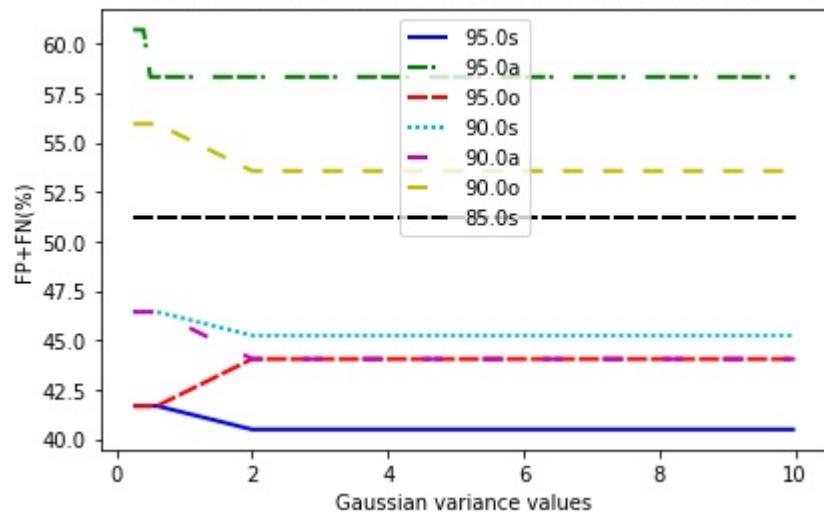
FPFN in Sonar Dataset



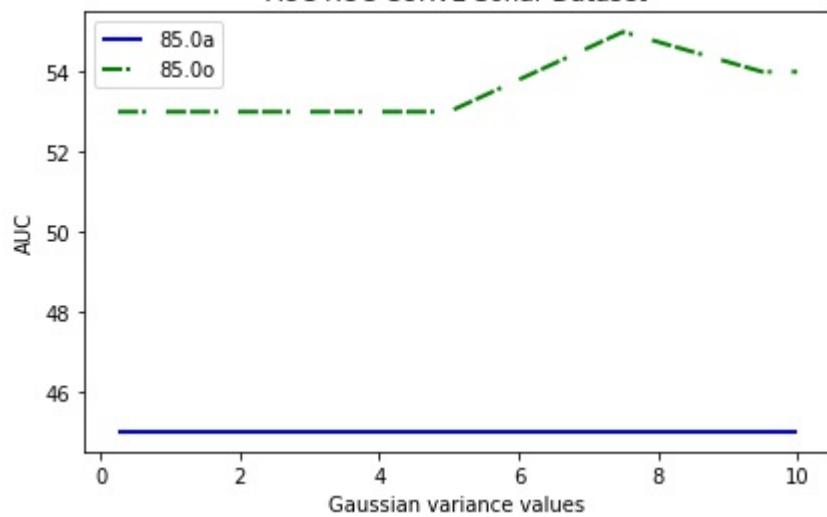
7.50	40.48	58.33	44.05	45.24	44.05	53.57	51.19
53.57	44.05						
9.50	40.48	58.33	44.05	45.24	44.05	53.57	51.19
53.57	45.24						
10.00	40.48	58.33	44.05	45.24	44.05	53.57	51.19
53.57	45.24						



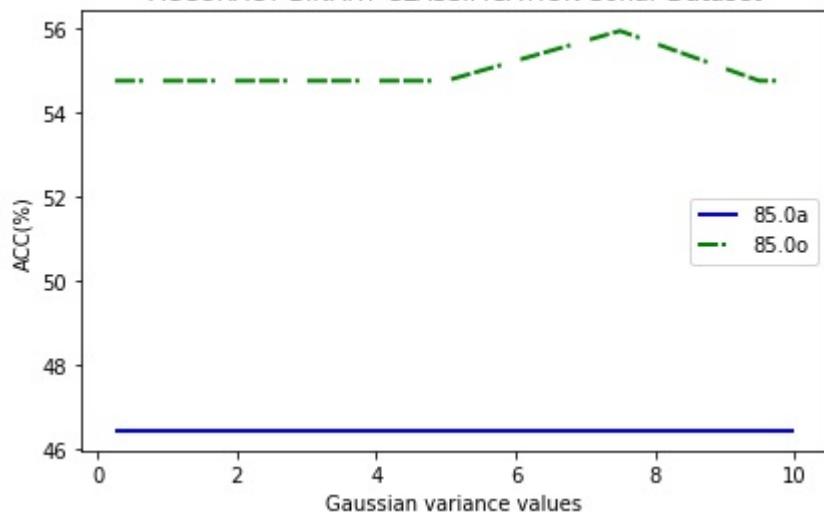
FP+FN BINARY CLASSIFICATION Sonar Dataset

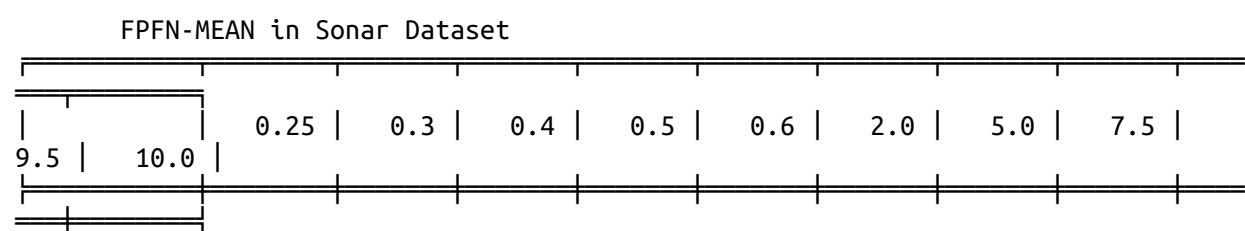
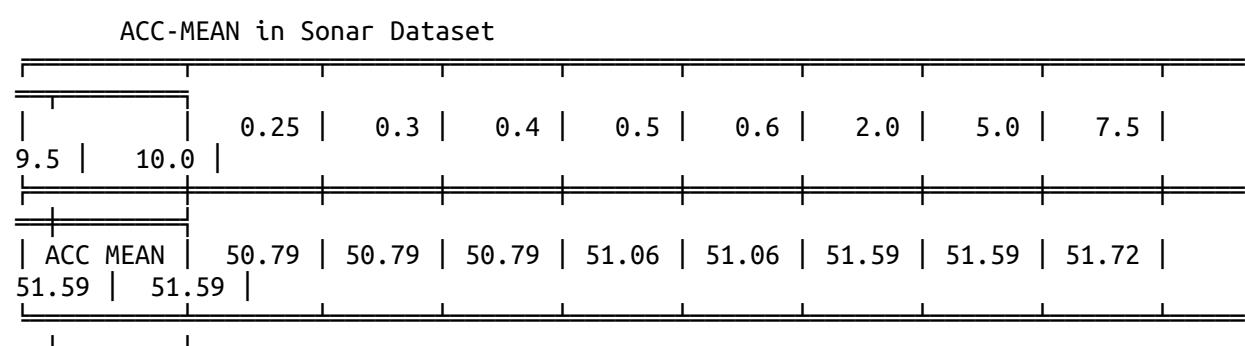
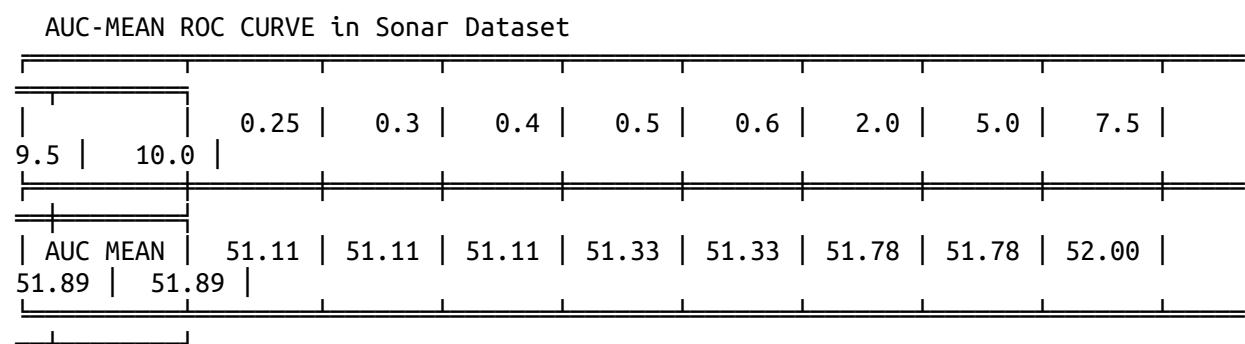
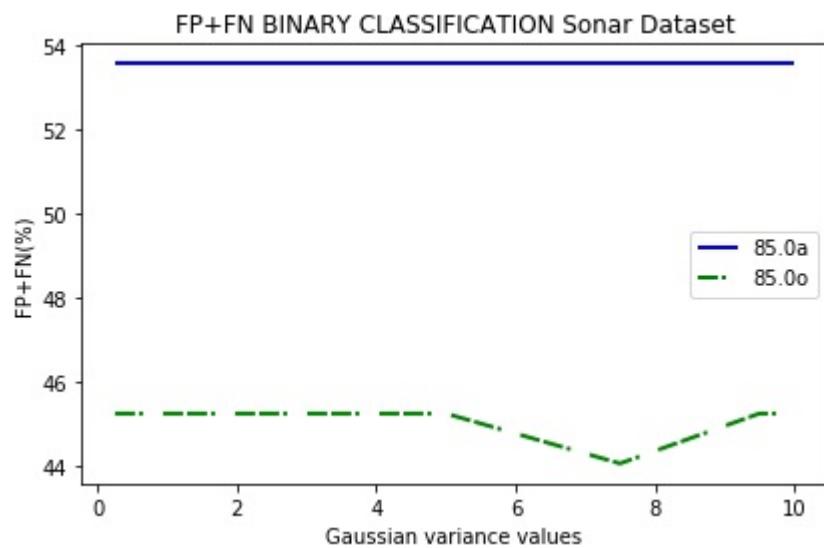


AUC ROC CURVE Sonar Dataset



ACCURACY BINARY CLASSIFICATION Sonar Dataset





FPFN	MEAN	49.21	49.21	49.21	48.94	48.94	48.41	48.41	48.28
48.41	48.41								

AUC-TOP ROC CURVE [TOP] in Sonar Dataset

10.0	0.25	0.3	0.4	0.5	0.6	2.0	5.0	7.5	9.5
AUC TOP	60.00	60.00	60.00	60.00	60.00	61.00	61.00	61.00	61.00
61.00									

ACC-TOP in Sonar Dataset

10.0	0.25	0.3	0.4	0.5	0.6	2.0	5.0	7.5	9.5
ACC TOP	58.33	58.33	58.33	58.33	58.33	59.52	59.52	59.52	59.52
59.52									

FPFN-MINIMUM in Sonar Dataset

9.5	10.0	0.25	0.3	0.4	0.5	0.6	2.0	5.0	7.5
40.48	40.48	41.67	41.67	41.67	41.67	41.67	40.48	40.48	40.48

Ionosphere Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: sum
COLLOCATION METHOD: RBF

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0099244
  Initializing linear solver - done. Time (sec): 0.0102324
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0006320
  Solving linear system (col. 0) - done. Time (sec): 0.0008399
Training - done. Time (sec): 0.0193160
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0059013

Prediction time/pt. (sec) : 0.0000281
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0026798

Prediction time/pt. (sec) : 0.0000190
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0029938

Prediction time/pt. (sec) : 0.0000212
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0031815  
  
Prediction time/pt. (sec) : 0.0000226
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...  
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0064769  
Initializing linear solver - done. Time (sec): 0.0067360  
Solving linear system (col. 0) ...  
Back solving (211 x 211 mtx) ...  
Back solving (211 x 211 mtx) - done. Time (sec): 0.0011196  
Solving linear system (col. 0) - done. Time (sec): 0.0014207  
Training - done. Time (sec): 0.0156498
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0039475  
  
Prediction time/pt. (sec) : 0.0000280
```

Evaluation

```
# eval points. : 210  
  
Predicting ...  
Predicting - done. Time (sec): 0.0040371  
  
Prediction time/pt. (sec) : 0.0000192
```

Evaluation

```

# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0030248

Prediction time/pt. (sec) : 0.0000215

```

Evaluation

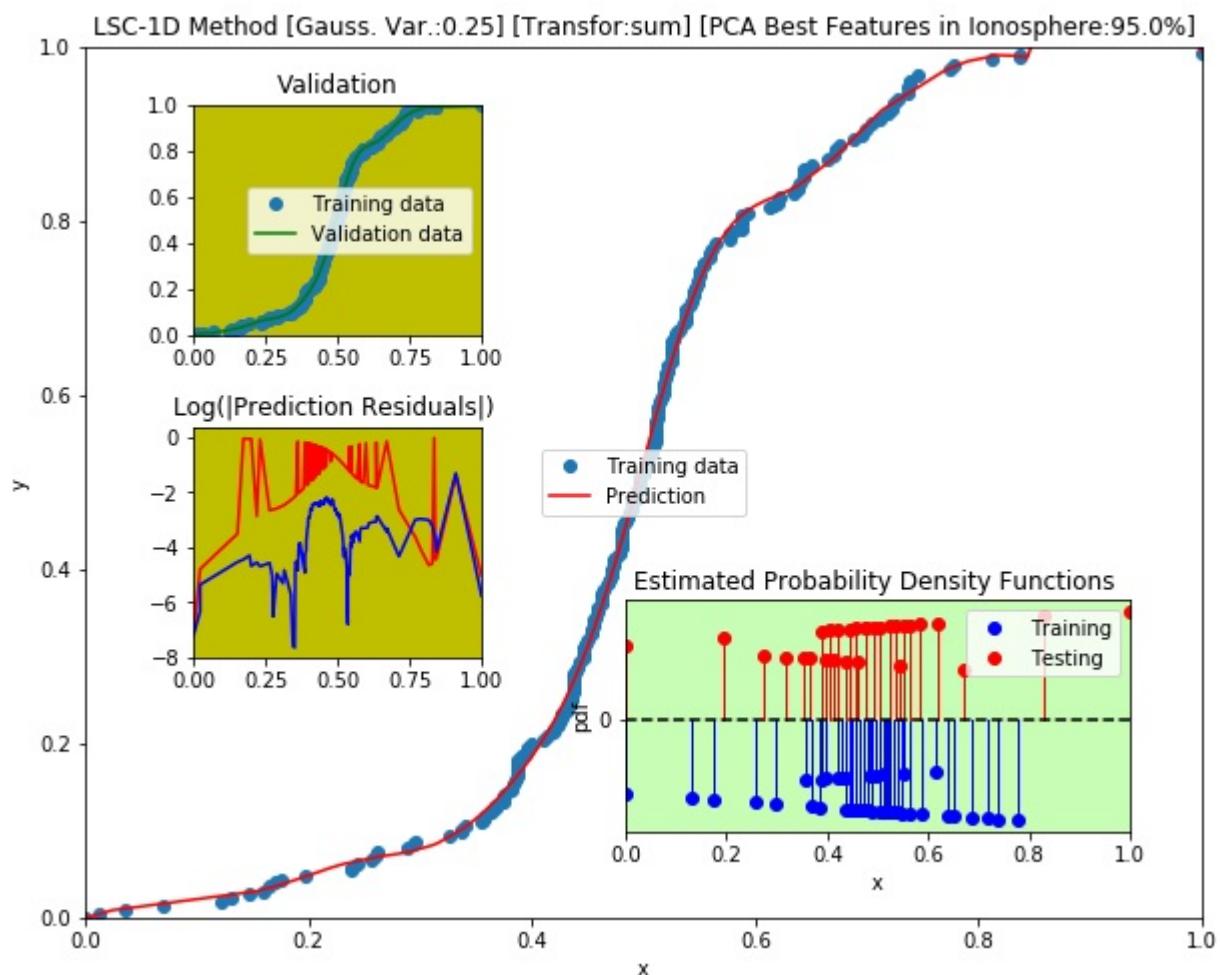
```

# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0027232

Prediction time/pt. (sec) : 0.0000193

```



Ionosphere Dataset
 Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0025580
  Initializing linear solver - done. Time (sec): 0.0028124
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003004
  Solving linear system (col. 0) - done. Time (sec): 0.0004387
Training - done. Time (sec): 0.0115762
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0081675

Prediction time/pt. (sec) : 0.0000389
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0013106

Prediction time/pt. (sec) : 0.0000093
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0013661

Prediction time/pt. (sec) : 0.0000097
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0123410
```

Prediction time/pt. (sec) : 0.0000875

RBF

Problem size

training points. : 210

Training

```
Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0077863
  Initializing linear solver - done. Time (sec): 0.0079882
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003295
  Solving linear system (col. 0) - done. Time (sec): 0.0004942
Training - done. Time (sec): 0.0115800
```

Evaluation

eval points. : 141

```
Predicting ...
Predicting - done. Time (sec): 0.0014563
```

Prediction time/pt. (sec) : 0.0000103

Evaluation

eval points. : 210

```
Predicting ...
Predicting - done. Time (sec): 0.0086021
```

Prediction time/pt. (sec) : 0.0000410

Evaluation

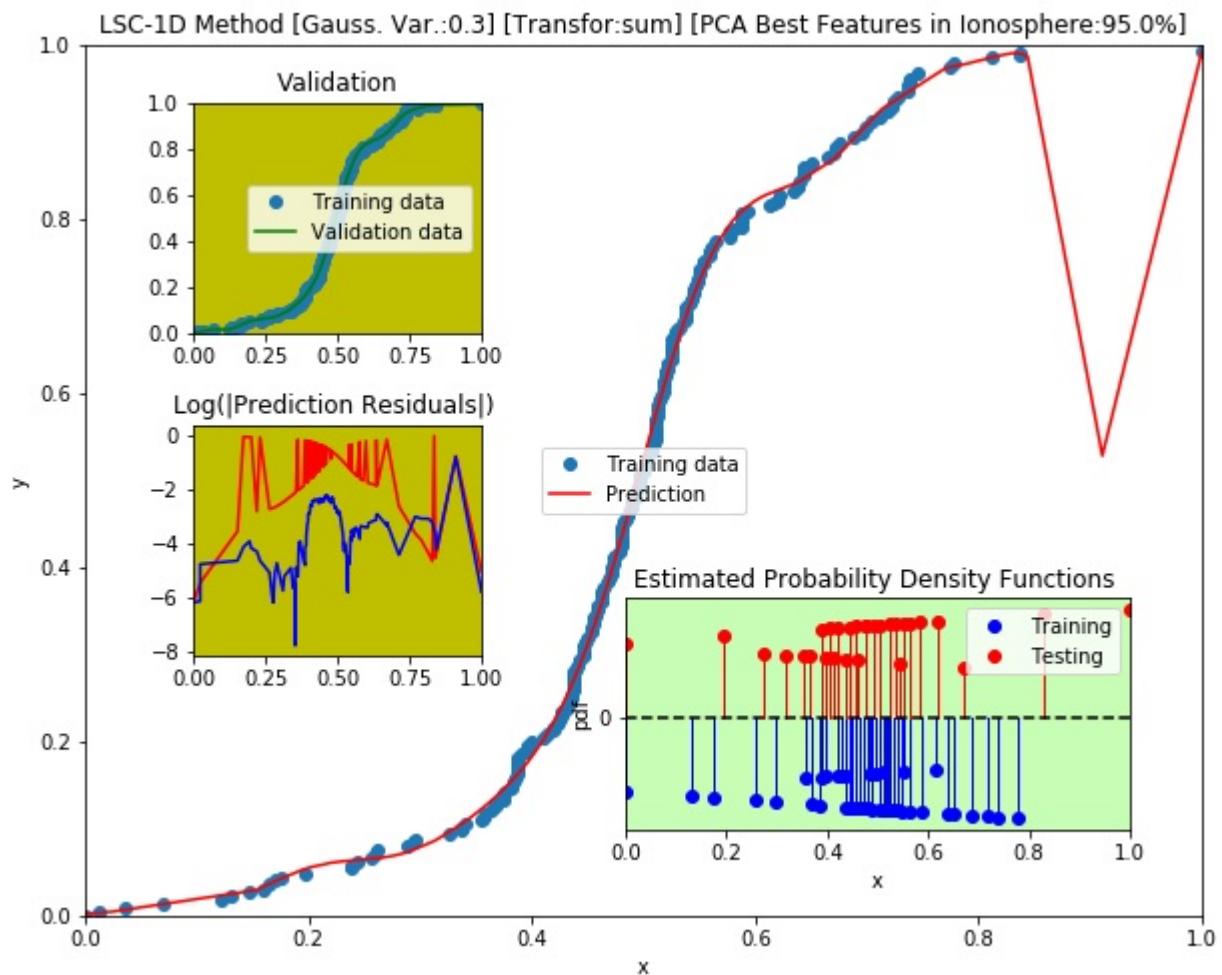
eval points. : 141

```
Predicting ...
Predicting - done. Time (sec): 0.0039604
```

Prediction time/pt. (sec) : 0.0000281

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0015433  
Prediction time/pt. (sec) : 0.0000109
```



Ionosphere Dataset
Parameters: PCA: 95.0%
DATASET TRANSFORMATION: sum
COLOCATION METHOD: RBF

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0025537
  Initializing linear solver - done. Time (sec): 0.0028079
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003016
  Solving linear system (col. 0) - done. Time (sec): 0.0004427
Training - done. Time (sec): 0.0117605
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0046151

Prediction time/pt. (sec) : 0.0000220
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0102112

Prediction time/pt. (sec) : 0.0000724
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0013483

Prediction time/pt. (sec) : 0.0000096
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0012918

Prediction time/pt. (sec) : 0.0000092
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
      Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0028000
  Initializing linear solver - done. Time (sec): 0.0029962
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
      Back solving (211 x 211 mtx) - done. Time (sec): 0.0003154
  Solving linear system (col. 0) - done. Time (sec): 0.0004692
Training - done. Time (sec): 0.0152652
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0043821

Prediction time/pt. (sec) : 0.0000311
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0054212

Prediction time/pt. (sec) : 0.0000258
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0041792

Prediction time/pt. (sec) : 0.0000296
```

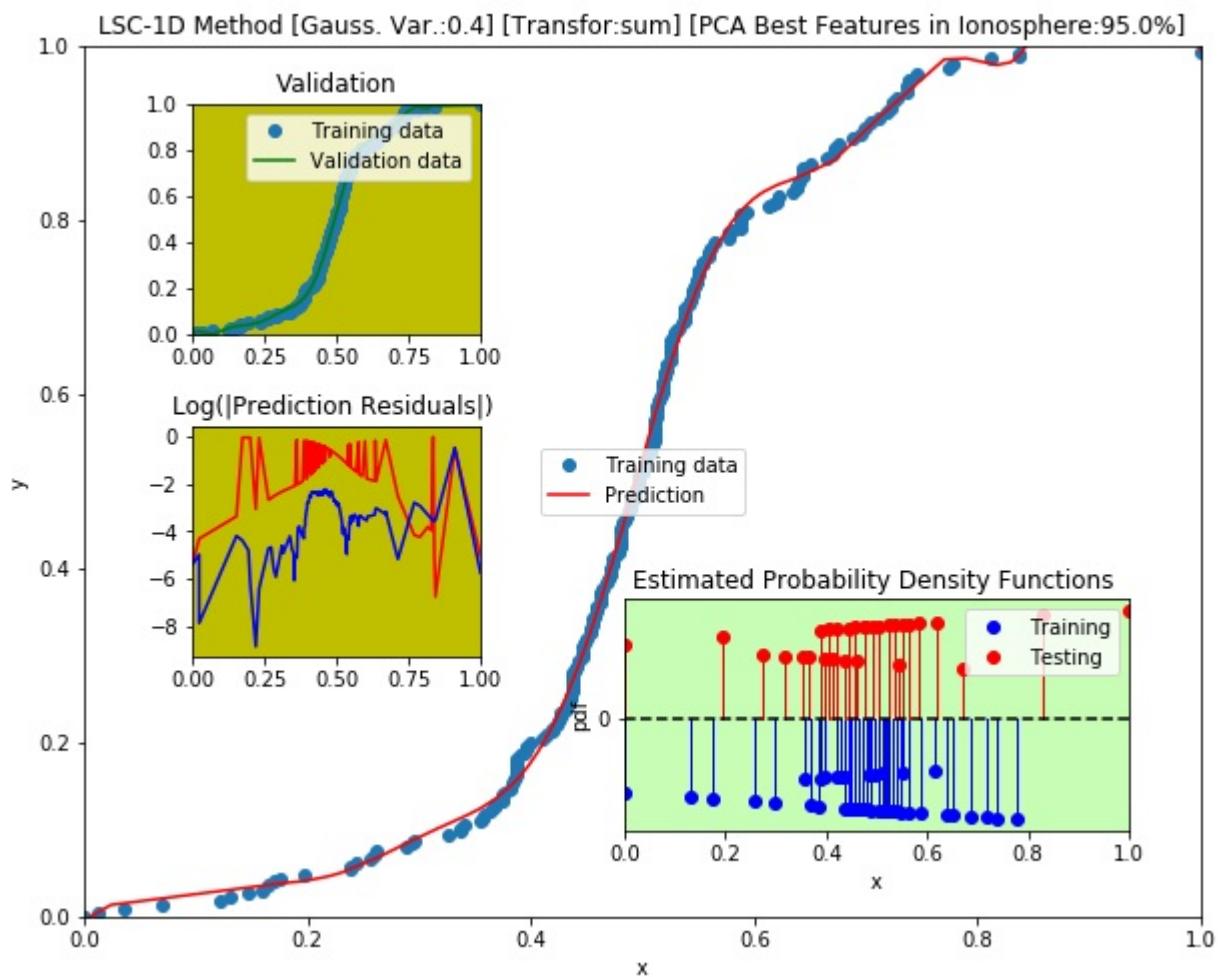
Evaluation

```
# eval points. : 141

Predicting ...
```

Predicting - done. Time (sec): 0.0042639

Prediction time/pt. (sec) : 0.0000302



Ionosphere Dataset

Parameters: PCA: 95.0%
DATASET TRANSFORMATION: sum
COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...
Initializing linear solver ...
Performing LU fact. (211 x 211 mtx) ...
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0032208
Initializing linear solver - done. Time (sec): 0.0035062
Solving linear system (col. 0) ...

```
Back solving (211 x 211 mtx) ...
Back solving (211 x 211 mtx) - done. Time (sec): 0.0004432
Solving linear system (col. 0) - done. Time (sec): 0.0026383
Training - done. Time (sec): 0.0125566
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0058279

Prediction time/pt. (sec) : 0.0000278
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0030787

Prediction time/pt. (sec) : 0.0000218
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0027399

Prediction time/pt. (sec) : 0.0000194
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0056431

Prediction time/pt. (sec) : 0.0000400
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0062499
  Initializing linear solver - done. Time (sec): 0.0065153
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0012829
  Solving linear system (col. 0) - done. Time (sec): 0.0014787
Training - done. Time (sec): 0.0158517
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0029359

Prediction time/pt. (sec) : 0.0000208
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0042112

Prediction time/pt. (sec) : 0.0000201
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0031343

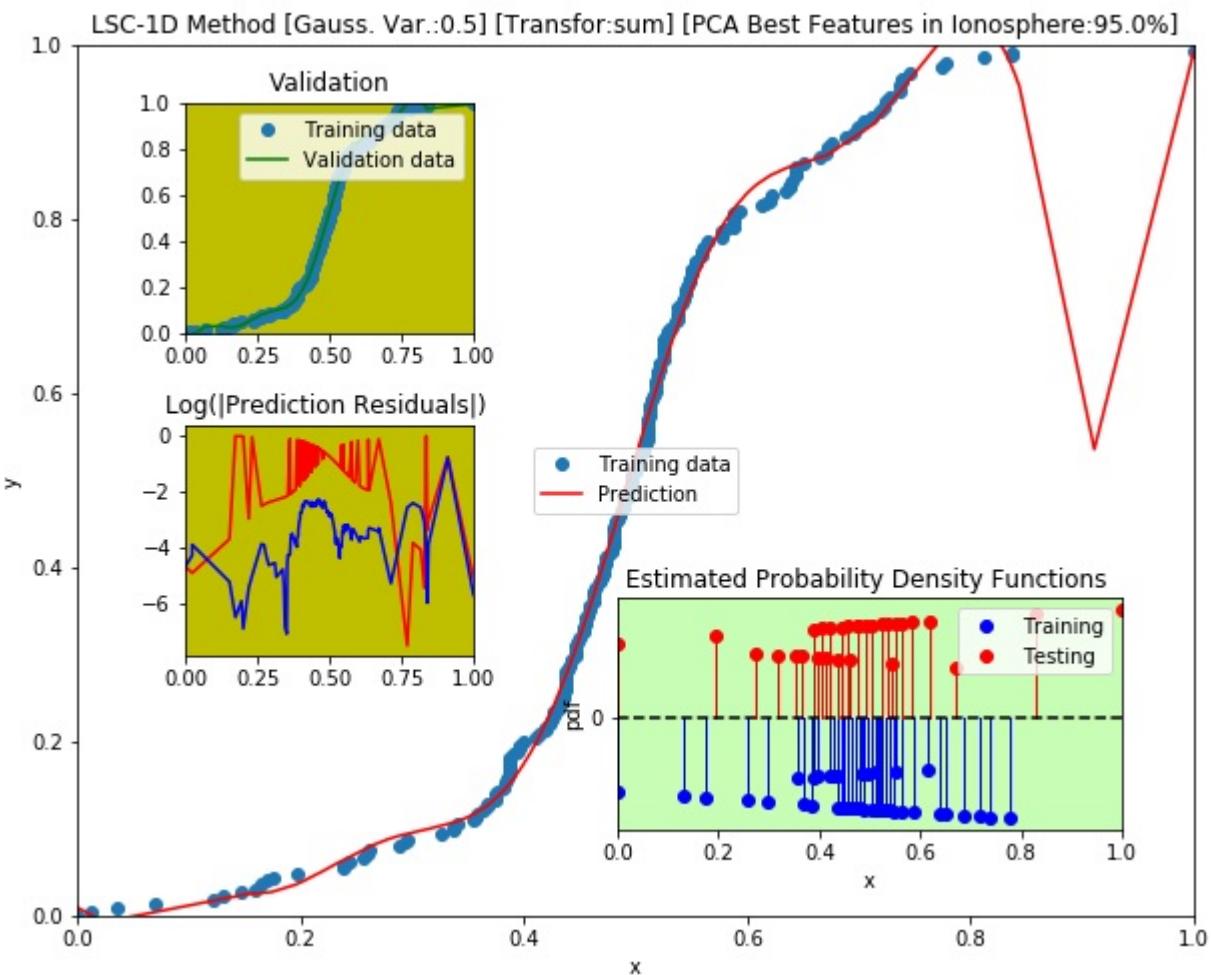
Prediction time/pt. (sec) : 0.0000222
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0027153

Prediction time/pt. (sec) : 0.0000193
```



Ionosphere Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0026541
    Initializing linear solver - done. Time (sec): 0.0029120
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003333
    Solving linear system (col. 0) - done. Time (sec): 0.0004857
Training - done. Time (sec): 0.0090334

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0076931  
Prediction time/pt. (sec) : 0.0000366
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0013428  
Prediction time/pt. (sec) : 0.0000095
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0013390  
Prediction time/pt. (sec) : 0.0000095
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0028400  
Prediction time/pt. (sec) : 0.0000201
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0104034
Initializing linear solver - done. Time (sec): 0.0106392
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003200
    Solving linear system (col. 0) - done. Time (sec): 0.0005143
Training - done. Time (sec): 0.0193000
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0047121

Prediction time/pt. (sec) : 0.0000334
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0052576

Prediction time/pt. (sec) : 0.0000250
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0034599

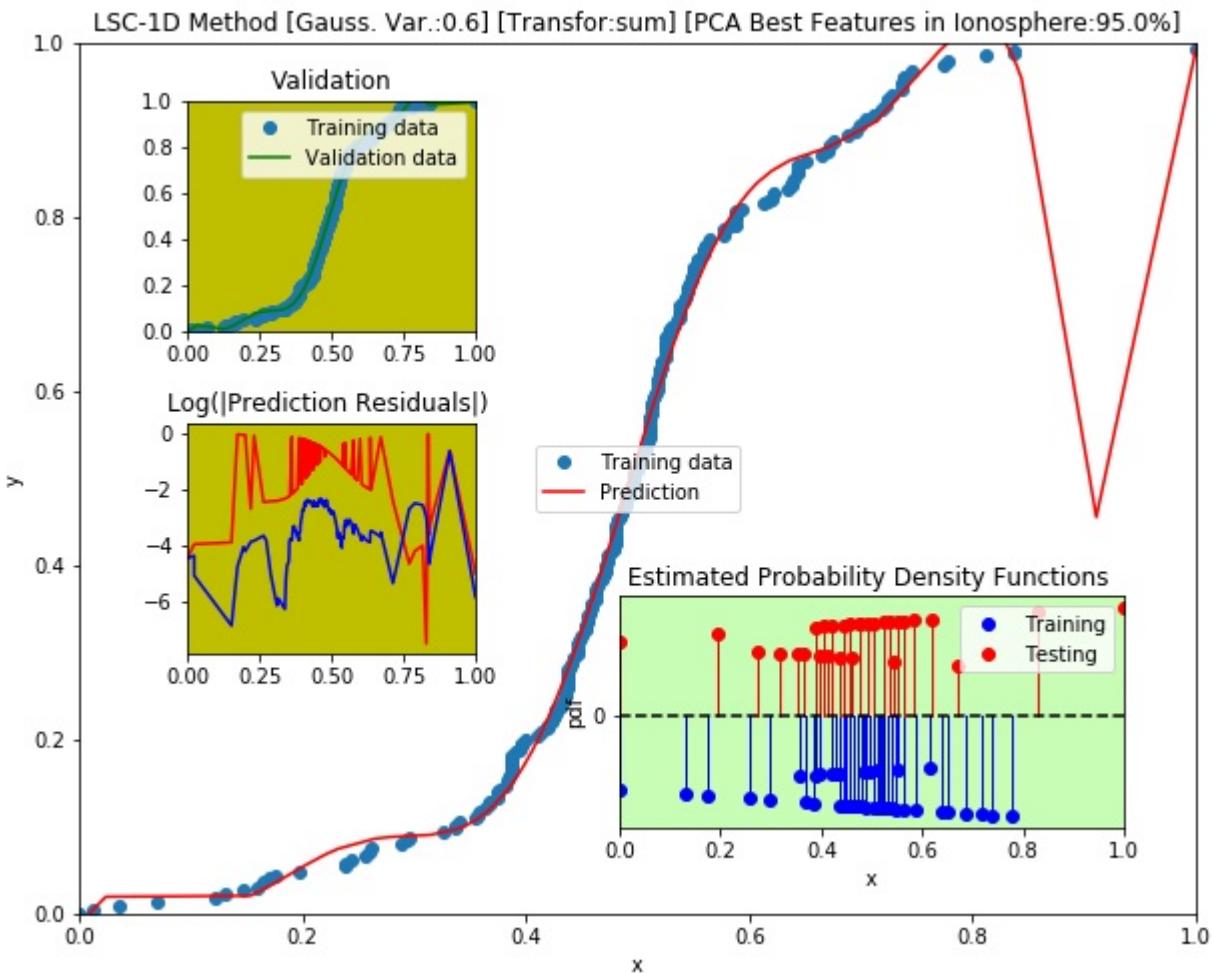
Prediction time/pt. (sec) : 0.0000245
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0032282

Prediction time/pt. (sec) : 0.0000229
```



Ionosphere Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (211 x 211 mtx) ...
        Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0104201
    Initializing linear solver - done. Time (sec): 0.0116794
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003765
    Solving linear system (col. 0) - done. Time (sec): 0.0022147
Training - done. Time (sec): 0.0189941

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0035727  
Prediction time/pt. (sec) : 0.0000170
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011895  
Prediction time/pt. (sec) : 0.0000084
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0063972  
Prediction time/pt. (sec) : 0.0000454
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0031543  
Prediction time/pt. (sec) : 0.0000224
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0110393
Initializing linear solver - done. Time (sec): 0.0121939
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003214
    Solving linear system (col. 0) - done. Time (sec): 0.0015259
Training - done. Time (sec): 0.0209219
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011389

Prediction time/pt. (sec) : 0.0000081
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0033076

Prediction time/pt. (sec) : 0.0000158
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011270

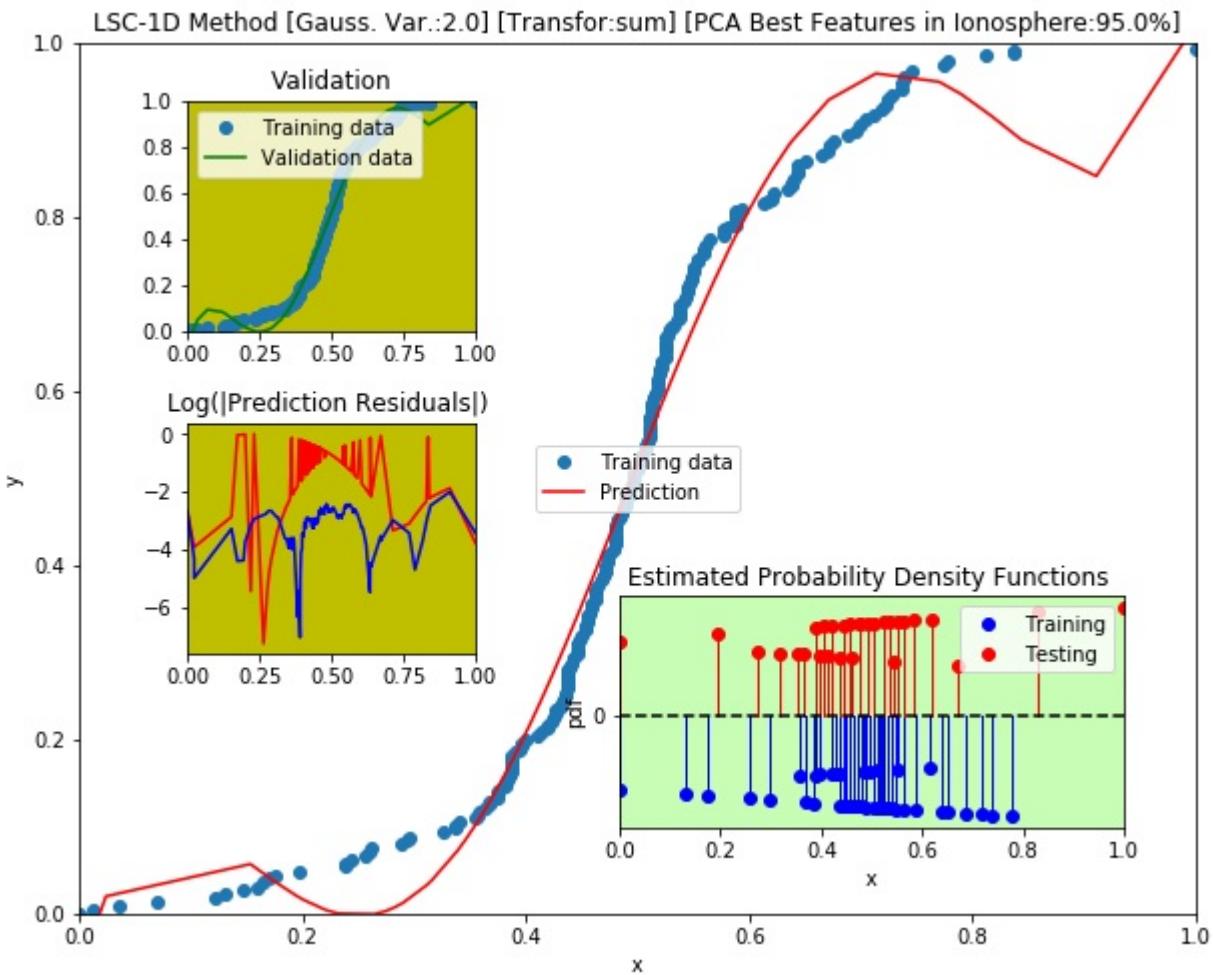
Prediction time/pt. (sec) : 0.0000080
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011308

Prediction time/pt. (sec) : 0.0000080
```



Ionosphere Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0028090
  Initializing linear solver - done. Time (sec): 0.0030820
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0005128
  Solving linear system (col. 0) - done. Time (sec): 0.0006974
Training - done. Time (sec): 0.0071008

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0046704  
Prediction time/pt. (sec) : 0.0000222
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0042608  
Prediction time/pt. (sec) : 0.0000302
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011268  
Prediction time/pt. (sec) : 0.0000080
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0032685  
Prediction time/pt. (sec) : 0.0000232
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0067372
Initializing linear solver - done. Time (sec): 0.0069878
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003150
    Solving linear system (col. 0) - done. Time (sec): 0.0004642
Training - done. Time (sec): 0.0162847
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011942

Prediction time/pt. (sec) : 0.0000085
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0016930

Prediction time/pt. (sec) : 0.0000081
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0023870

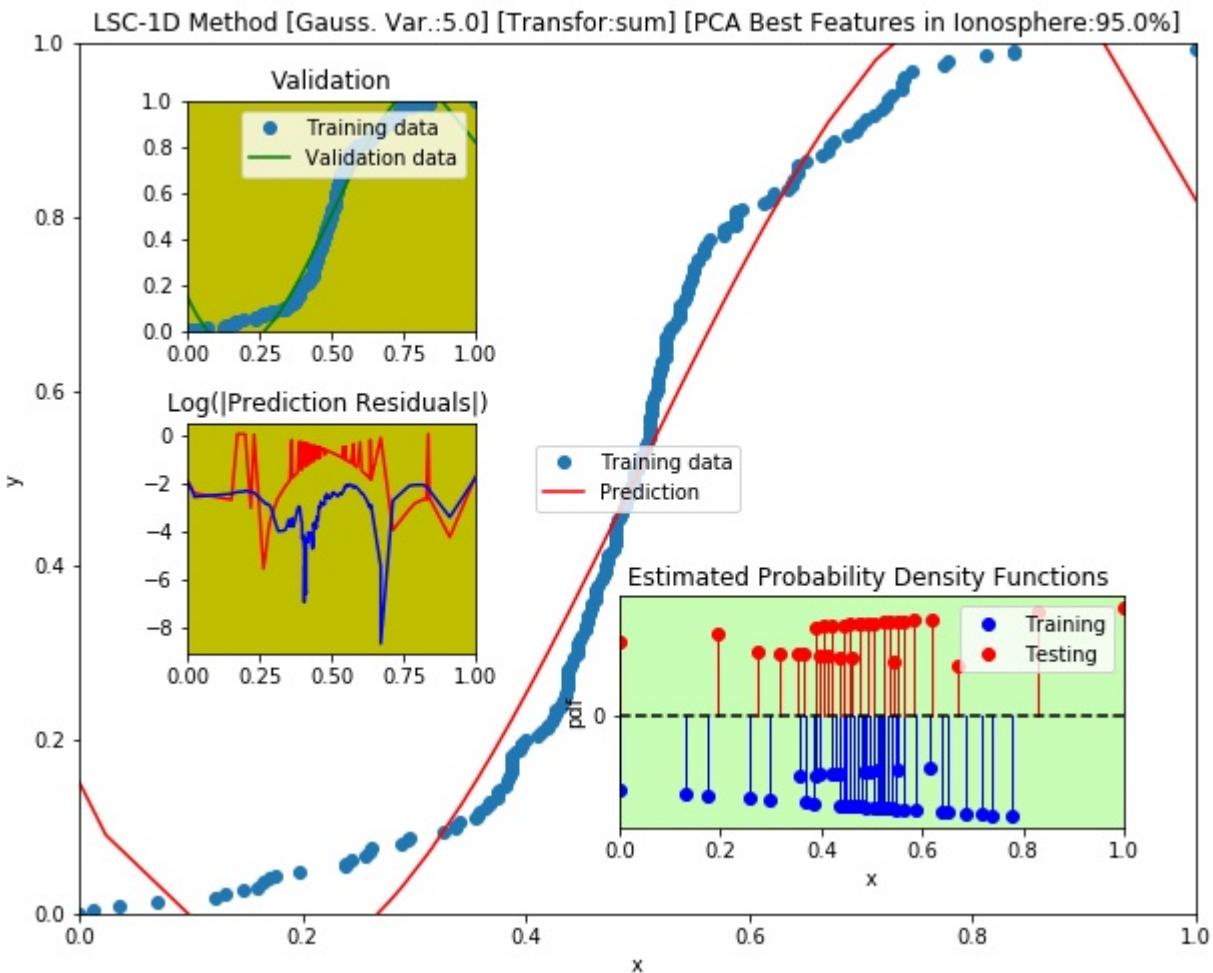
Prediction time/pt. (sec) : 0.0000169
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0027826

Prediction time/pt. (sec) : 0.0000197
```



Ionosphere Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: sum

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027046

Initializing linear solver - done. Time (sec): 0.0029652

Solving linear system (col. 0) ...

Back solving (211 x 211 mtx) ...

Back solving (211 x 211 mtx) - done. Time (sec): 0.0004742

Solving linear system (col. 0) - done. Time (sec): 0.0006545

Training - done. Time (sec): 0.0099857

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0066004  
Prediction time/pt. (sec) : 0.0000314
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0010216  
Prediction time/pt. (sec) : 0.0000072
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0009835  
Prediction time/pt. (sec) : 0.0000070
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0010264  
Prediction time/pt. (sec) : 0.0000073
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027928
Initializing linear solver - done. Time (sec): 0.0029838
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003026
    Solving linear system (col. 0) - done. Time (sec): 0.0004523
Training - done. Time (sec): 0.0059459
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0122960

Prediction time/pt. (sec) : 0.0000872
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0016425

Prediction time/pt. (sec) : 0.0000078
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0072455

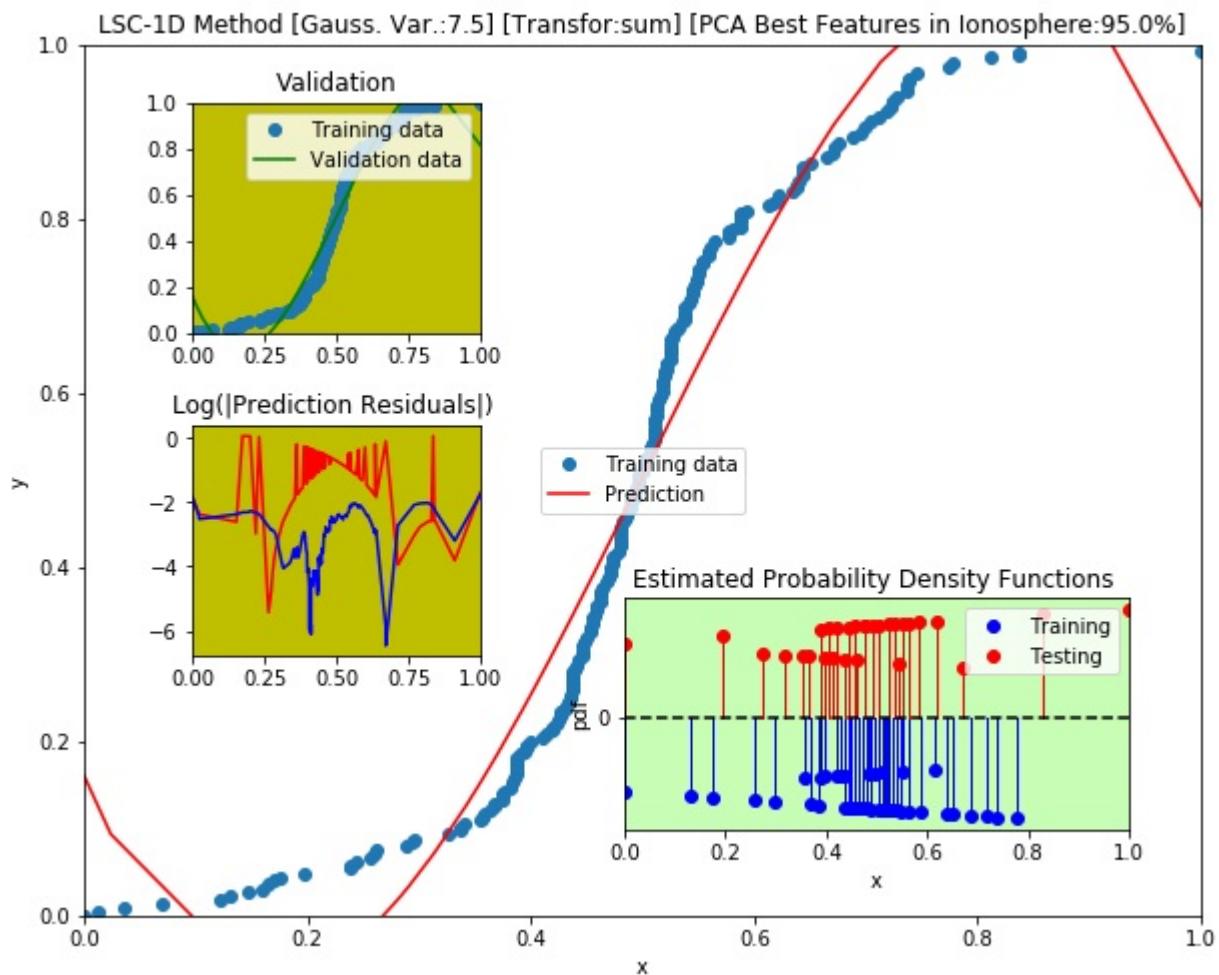
Prediction time/pt. (sec) : 0.0000514
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011377

Prediction time/pt. (sec) : 0.0000081
```



Ionosphere Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: sum

COLLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027044

Initializing linear solver - done. Time (sec): 0.0029719

Solving linear system (col. 0) ...

Back solving (211 x 211 mtx) ...

Back solving (211 x 211 mtx) - done. Time (sec): 0.0003090

Solving linear system (col. 0) - done. Time (sec): 0.0004563

Training - done. Time (sec): 0.0081737

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0089016  
Prediction time/pt. (sec) : 0.0000424
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0012066  
Prediction time/pt. (sec) : 0.0000086
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0085332  
Prediction time/pt. (sec) : 0.0000605
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0034659  
Prediction time/pt. (sec) : 0.0000246
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0085084
Initializing linear solver - done. Time (sec): 0.0087581
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003192
    Solving linear system (col. 0) - done. Time (sec): 0.0004740
Training - done. Time (sec): 0.0118353
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0045385

Prediction time/pt. (sec) : 0.0000322
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0042610

Prediction time/pt. (sec) : 0.0000203
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0040867

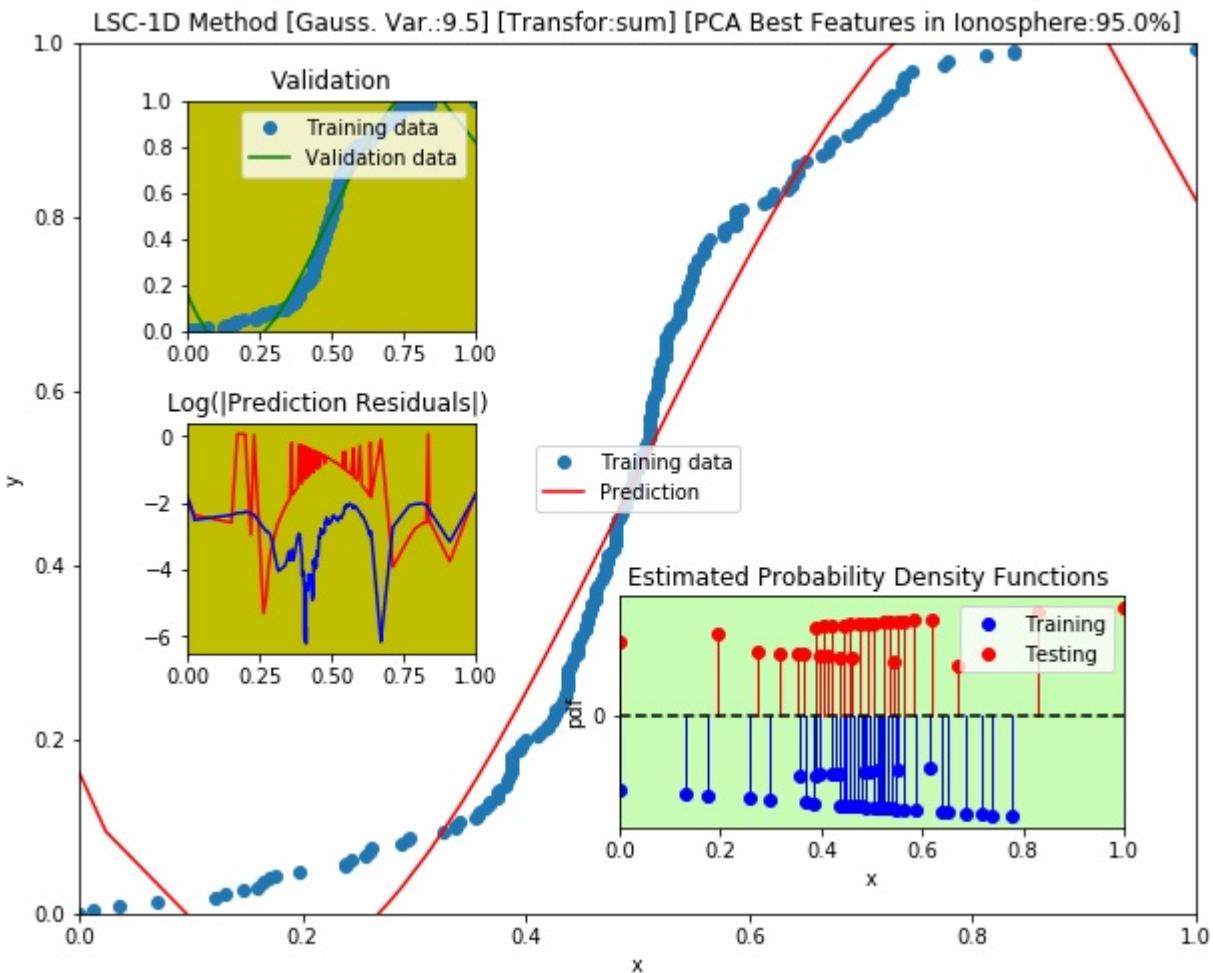
Prediction time/pt. (sec) : 0.0000290
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0039454

Prediction time/pt. (sec) : 0.0000280
```



Ionosphere Dataset

Parameters: PCA: 95.0%
DATASET TRANSFORMATION: sum
COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027609
  Initializing linear solver - done. Time (sec): 0.0030720
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003703
  Solving linear system (col. 0) - done. Time (sec): 0.0005593
Training - done. Time (sec): 0.0094297

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0064585  
Prediction time/pt. (sec) : 0.0000308
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0024886  
Prediction time/pt. (sec) : 0.0000176
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0032623  
Prediction time/pt. (sec) : 0.0000231
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0019827  
Prediction time/pt. (sec) : 0.0000141
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0087674
Initializing linear solver - done. Time (sec): 0.0090358
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003283
    Solving linear system (col. 0) - done. Time (sec): 0.0004835
Training - done. Time (sec): 0.0166068
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011988

Prediction time/pt. (sec) : 0.0000085
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0016947

Prediction time/pt. (sec) : 0.0000081
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011890

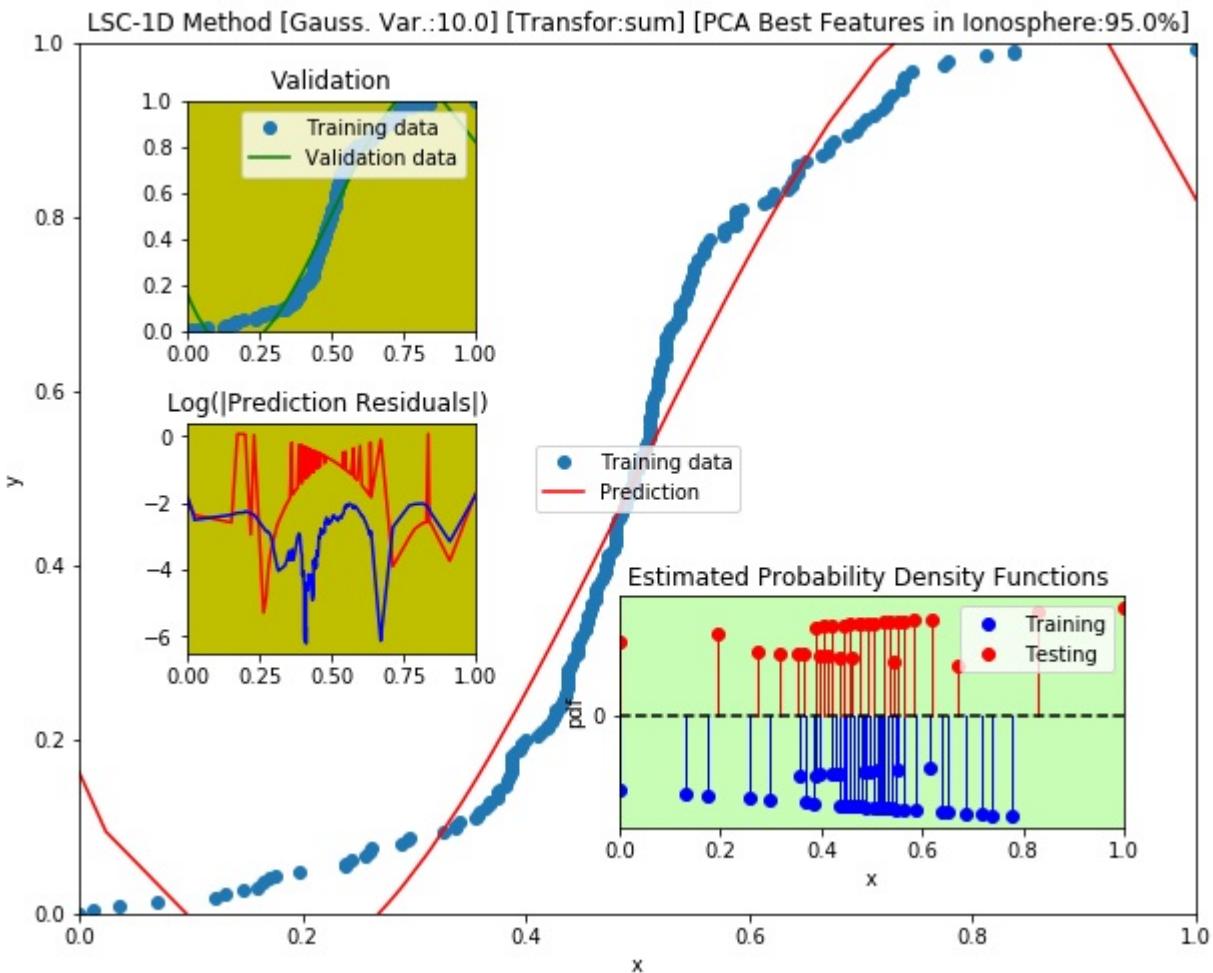
Prediction time/pt. (sec) : 0.0000084
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0028570

Prediction time/pt. (sec) : 0.0000203
```



Ionosphere Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027261
  Initializing linear solver - done. Time (sec): 0.0029953
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003643
  Solving linear system (col. 0) - done. Time (sec): 0.0005236
Training - done. Time (sec): 0.0123234

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0050902  
Prediction time/pt. (sec) : 0.0000242
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0089612  
Prediction time/pt. (sec) : 0.0000636
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0013463  
Prediction time/pt. (sec) : 0.0000095
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0061378  
Prediction time/pt. (sec) : 0.0000435
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0059659
Initializing linear solver - done. Time (sec): 0.0061772
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003214
    Solving linear system (col. 0) - done. Time (sec): 0.0004785
Training - done. Time (sec): 0.0097237
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0013595

Prediction time/pt. (sec) : 0.0000096
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0087857

Prediction time/pt. (sec) : 0.0000418
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0039804

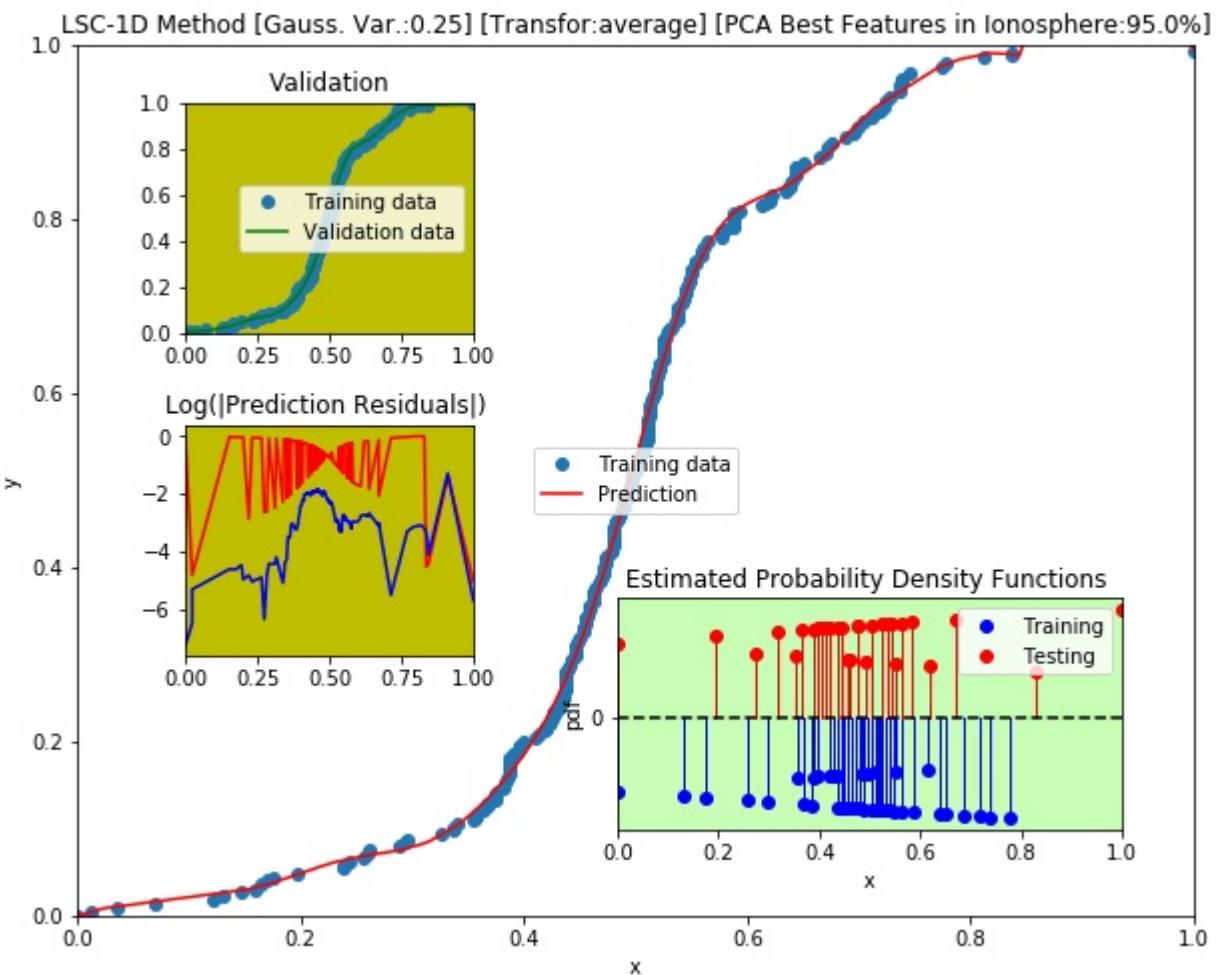
Prediction time/pt. (sec) : 0.0000282
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0013919

Prediction time/pt. (sec) : 0.0000099
```



Ionosphere Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0035851
  Initializing linear solver - done. Time (sec): 0.0039582
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003719
  Solving linear system (col. 0) - done. Time (sec): 0.0005686
Training - done. Time (sec): 0.0135050

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0061030  
Prediction time/pt. (sec) : 0.0000291
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0028105  
Prediction time/pt. (sec) : 0.0000199
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0031073  
Prediction time/pt. (sec) : 0.0000220
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0027907  
Prediction time/pt. (sec) : 0.0000198
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0084364
Initializing linear solver - done. Time (sec): 0.0087135
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0012443
    Solving linear system (col. 0) - done. Time (sec): 0.0015860
Training - done. Time (sec): 0.0188344
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0030704

Prediction time/pt. (sec) : 0.0000218
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0048699

Prediction time/pt. (sec) : 0.0000232
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0032635

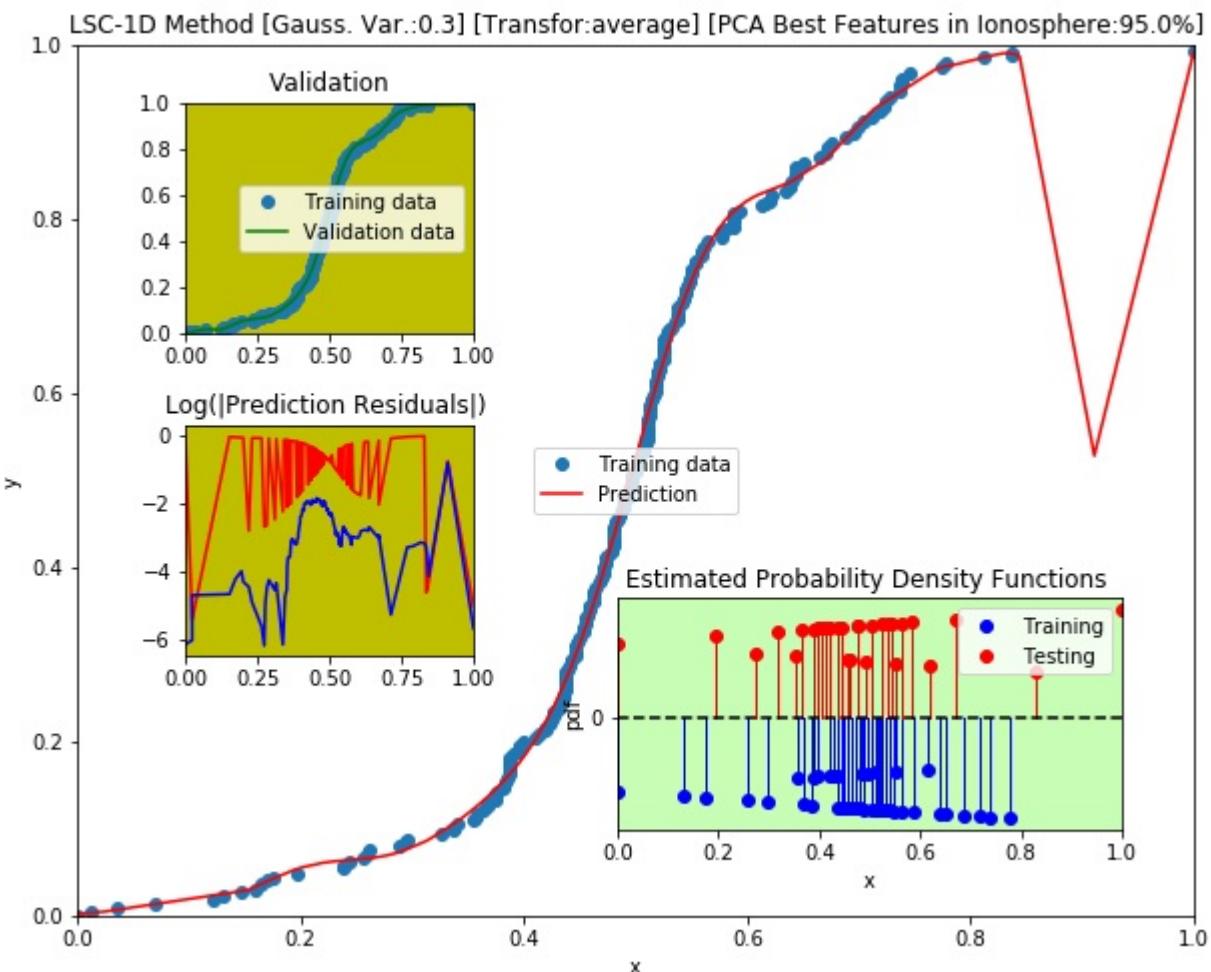
Prediction time/pt. (sec) : 0.0000231
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0027595

Prediction time/pt. (sec) : 0.0000196
```



Ionosphere Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0025411
  Initializing linear solver - done. Time (sec): 0.0028191
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0005493
  Solving linear system (col. 0) - done. Time (sec): 0.0007365
Training - done. Time (sec): 0.0080991

```

Evaluation

```
# eval points. : 210  
  
Predicting ...  
Predicting - done. Time (sec): 0.0055261  
  
Prediction time/pt. (sec) : 0.0000263
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0073826  
  
Prediction time/pt. (sec) : 0.0000524
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0042465  
  
Prediction time/pt. (sec) : 0.0000301
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0013971  
  
Prediction time/pt. (sec) : 0.0000099
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0049119
Initializing linear solver - done. Time (sec): 0.0051217
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0004764
    Solving linear system (col. 0) - done. Time (sec): 0.0006688
Training - done. Time (sec): 0.0124731
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0057054

Prediction time/pt. (sec) : 0.0000405
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0028987

Prediction time/pt. (sec) : 0.0000138
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0013647

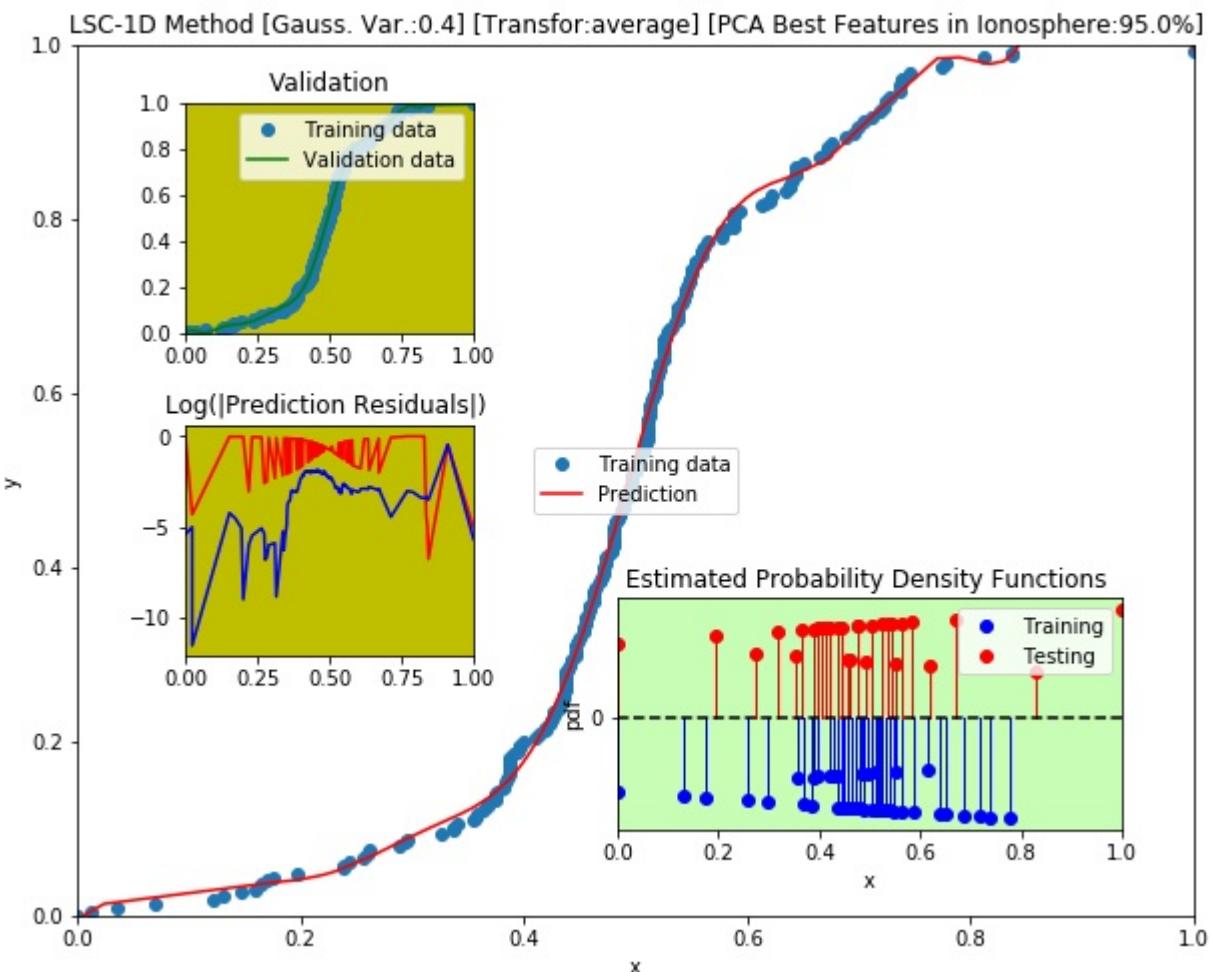
Prediction time/pt. (sec) : 0.0000097
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0078435

Prediction time/pt. (sec) : 0.0000556
```



Ionosphere Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0026896

Initializing linear solver - done. Time (sec): 0.0029504

Solving linear system (col. 0) ...

Back solving (211 x 211 mtx) ...

Back solving (211 x 211 mtx) - done. Time (sec): 0.0003068

Solving linear system (col. 0) - done. Time (sec): 0.0004523

Training - done. Time (sec): 0.0082011

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0050187  
Prediction time/pt. (sec) : 0.0000239
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0012910  
Prediction time/pt. (sec) : 0.0000092
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0012107  
Prediction time/pt. (sec) : 0.0000086
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0012331  
Prediction time/pt. (sec) : 0.0000087
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0179555
Initializing linear solver - done. Time (sec): 0.0182033
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0011334
    Solving linear system (col. 0) - done. Time (sec): 0.0013113
Training - done. Time (sec): 0.0277216
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0030644

Prediction time/pt. (sec) : 0.0000217
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0038431

Prediction time/pt. (sec) : 0.0000183
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0038719

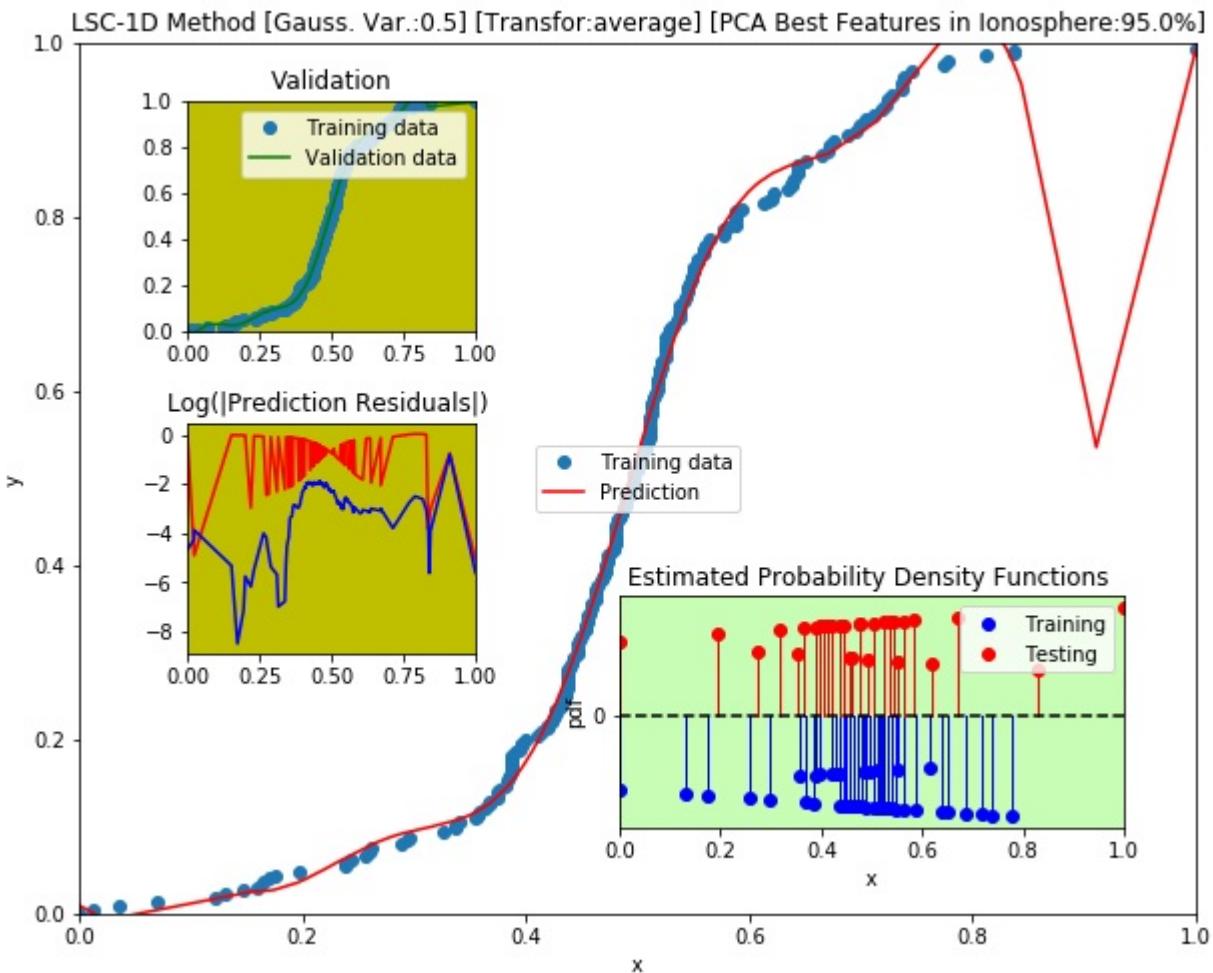
Prediction time/pt. (sec) : 0.0000275
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0027263

Prediction time/pt. (sec) : 0.0000193
```



Ionosphere Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0028088
  Initializing linear solver - done. Time (sec): 0.0030787
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003095
  Solving linear system (col. 0) - done. Time (sec): 0.0004580
Training - done. Time (sec): 0.0074673

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0051396  
Prediction time/pt. (sec) : 0.0000245
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0013676  
Prediction time/pt. (sec) : 0.0000097
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0013387  
Prediction time/pt. (sec) : 0.0000095
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0120876  
Prediction time/pt. (sec) : 0.0000857
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0056729
Initializing linear solver - done. Time (sec): 0.0058837
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003219
    Solving linear system (col. 0) - done. Time (sec): 0.0004776
Training - done. Time (sec): 0.0095472
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0045006

Prediction time/pt. (sec) : 0.0000319
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0020053

Prediction time/pt. (sec) : 0.0000095
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0086503

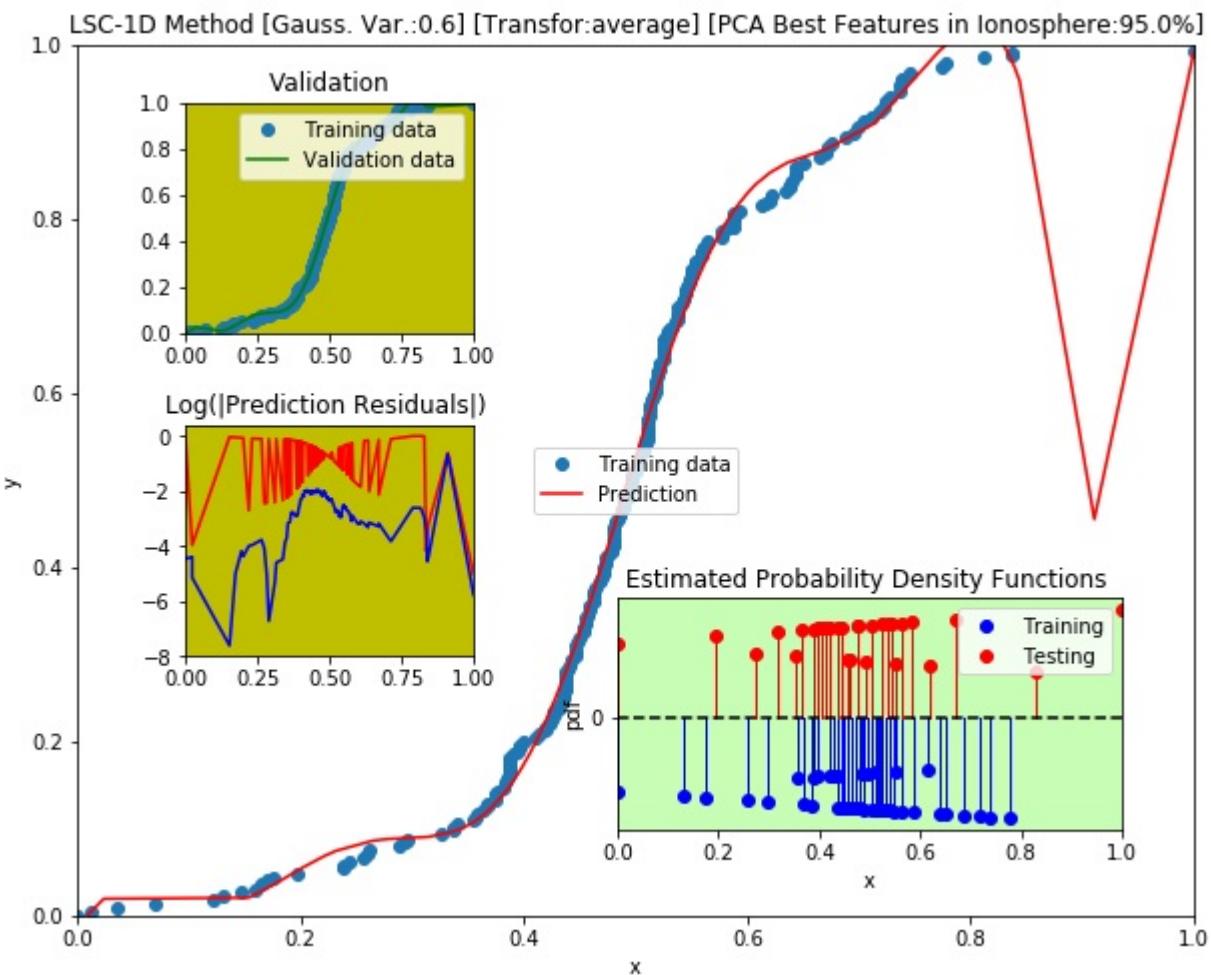
Prediction time/pt. (sec) : 0.0000613
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0014458

Prediction time/pt. (sec) : 0.0000103
```



Ionosphere Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0028412
  Initializing linear solver - done. Time (sec): 0.0031130
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003228
  Solving linear system (col. 0) - done. Time (sec): 0.0004802
Training - done. Time (sec): 0.0069525

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0050633  
Prediction time/pt. (sec) : 0.0000241
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011775  
Prediction time/pt. (sec) : 0.0000084
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011690  
Prediction time/pt. (sec) : 0.0000083
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0074923  
Prediction time/pt. (sec) : 0.0000531
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0119174
Initializing linear solver - done. Time (sec): 0.0121143
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003550
    Solving linear system (col. 0) - done. Time (sec): 0.0005205
Training - done. Time (sec): 0.0153337
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011125

Prediction time/pt. (sec) : 0.0000079
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0047345

Prediction time/pt. (sec) : 0.0000225
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0060382

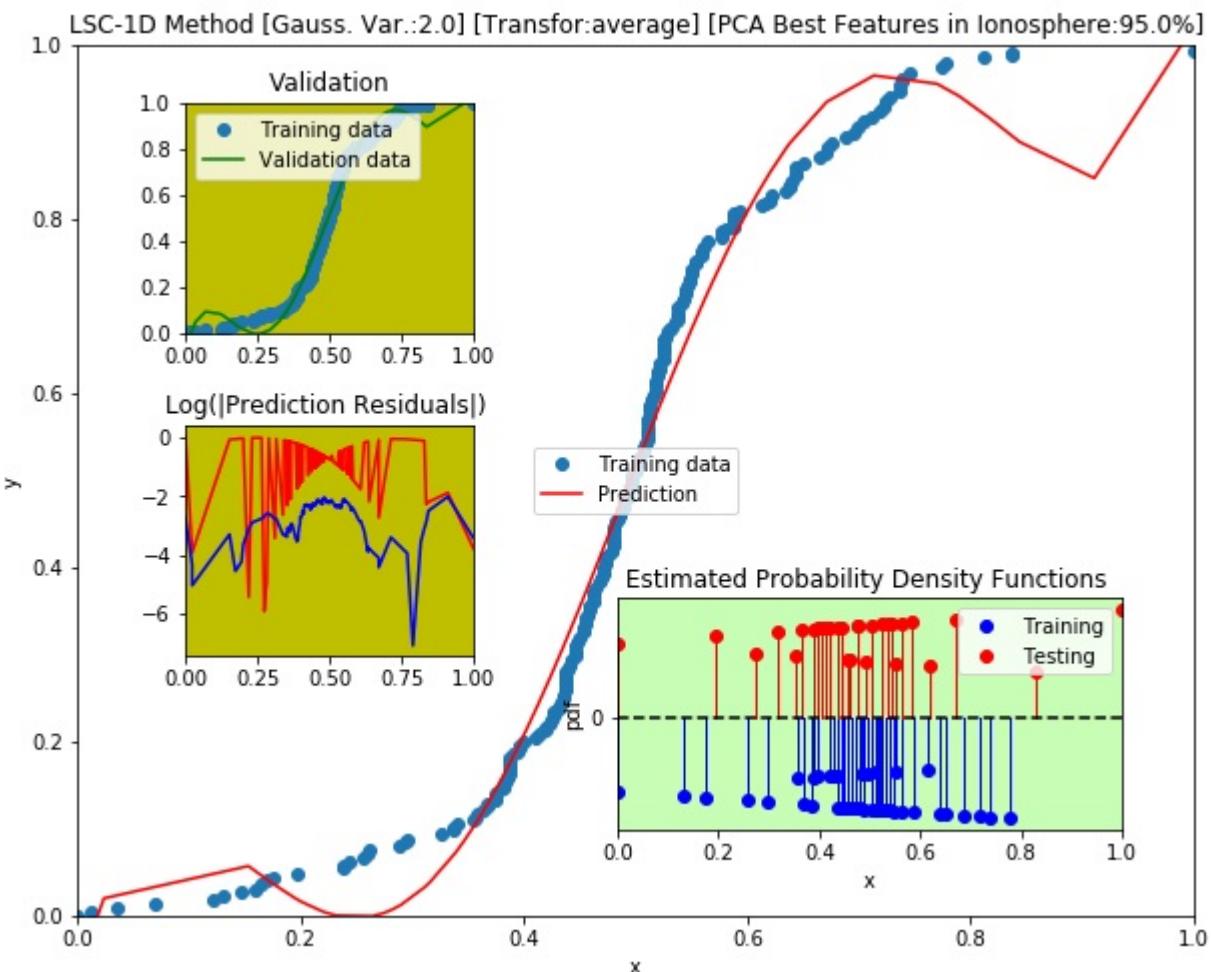
Prediction time/pt. (sec) : 0.0000428
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011094

Prediction time/pt. (sec) : 0.0000079
```



Ionosphere Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027275

Initializing linear solver - done. Time (sec): 0.0029967

Solving linear system (col. 0) ...

Back solving (211 x 211 mtx) ...

Back solving (211 x 211 mtx) - done. Time (sec): 0.0003133

Solving linear system (col. 0) - done. Time (sec): 0.0004606

Training - done. Time (sec): 0.0069938

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0059314  
Prediction time/pt. (sec) : 0.0000282
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011258  
Prediction time/pt. (sec) : 0.0000080
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011010  
Prediction time/pt. (sec) : 0.0000078
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011370  
Prediction time/pt. (sec) : 0.0000081
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0092118
Initializing linear solver - done. Time (sec): 0.0094144
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003288
    Solving linear system (col. 0) - done. Time (sec): 0.0004823
Training - done. Time (sec): 0.0206306
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011008

Prediction time/pt. (sec) : 0.0000078
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0084438

Prediction time/pt. (sec) : 0.0000402
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011933

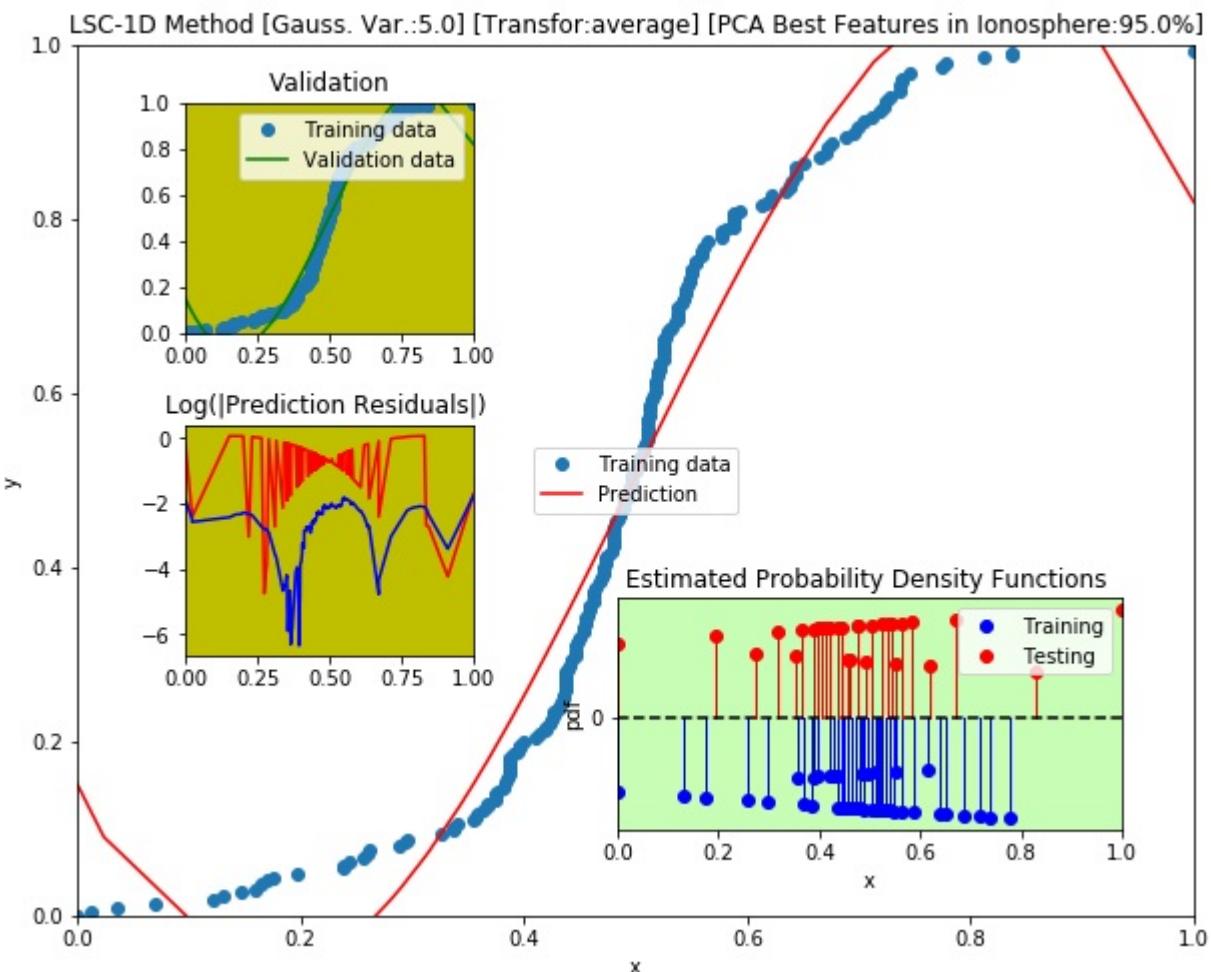
Prediction time/pt. (sec) : 0.0000085
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011554

Prediction time/pt. (sec) : 0.0000082
```



Ionosphere Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0038006
  Initializing linear solver - done. Time (sec): 0.0040975
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003693
  Solving linear system (col. 0) - done. Time (sec): 0.0005665
Training - done. Time (sec): 0.0130589

```

Evaluation

```
# eval points. : 210  
  
Predicting ...  
Predicting - done. Time (sec): 0.0096095  
  
Prediction time/pt. (sec) : 0.0000458
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0034904  
  
Prediction time/pt. (sec) : 0.0000248
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0038381  
  
Prediction time/pt. (sec) : 0.0000272
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0010097  
  
Prediction time/pt. (sec) : 0.0000072
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0084665
Initializing linear solver - done. Time (sec): 0.0086732
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003824
    Solving linear system (col. 0) - done. Time (sec): 0.0006065
Training - done. Time (sec): 0.0119088
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0012009

Prediction time/pt. (sec) : 0.0000085
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0016263

Prediction time/pt. (sec) : 0.0000077
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0029223

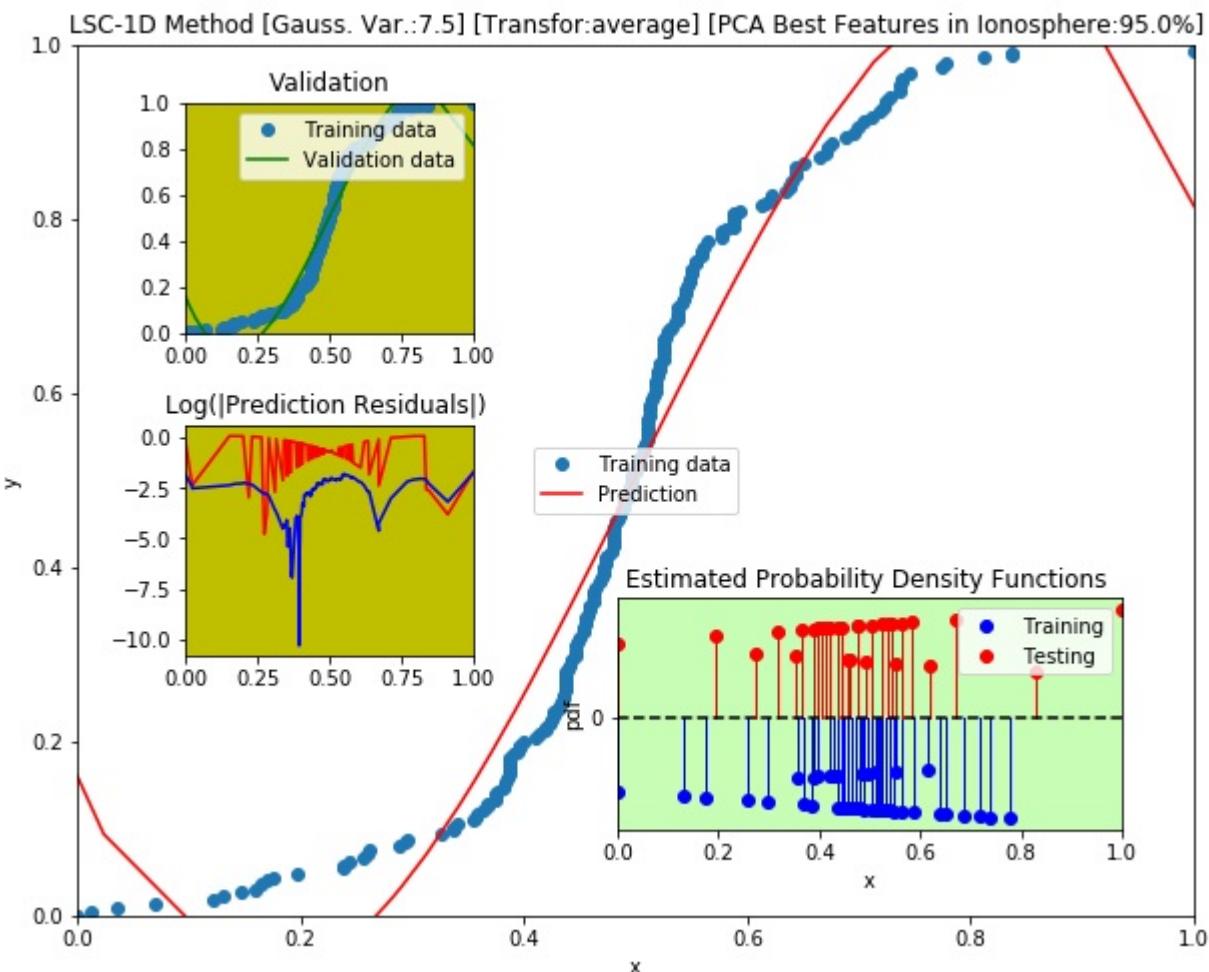
Prediction time/pt. (sec) : 0.0000207
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0039949

Prediction time/pt. (sec) : 0.0000283
```



Ionosphere Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027275

Initializing linear solver - done. Time (sec): 0.0029924

Solving linear system (col. 0) ...

Back solving (211 x 211 mtx) ...

Back solving (211 x 211 mtx) - done. Time (sec): 0.0005181

Solving linear system (col. 0) - done. Time (sec): 0.0006876

Training - done. Time (sec): 0.0067675

Evaluation

```
# eval points. : 210  
  
Predicting ...  
Predicting - done. Time (sec): 0.0038111  
  
Prediction time/pt. (sec) : 0.0000181
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0048511  
  
Prediction time/pt. (sec) : 0.0000344
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0011127  
  
Prediction time/pt. (sec) : 0.0000079
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0010893  
  
Prediction time/pt. (sec) : 0.0000077
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0044982
Initializing linear solver - done. Time (sec): 0.0047307
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003219
    Solving linear system (col. 0) - done. Time (sec): 0.0004797
Training - done. Time (sec): 0.0087304
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0061784

Prediction time/pt. (sec) : 0.0000438
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0029137

Prediction time/pt. (sec) : 0.0000139
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0054760

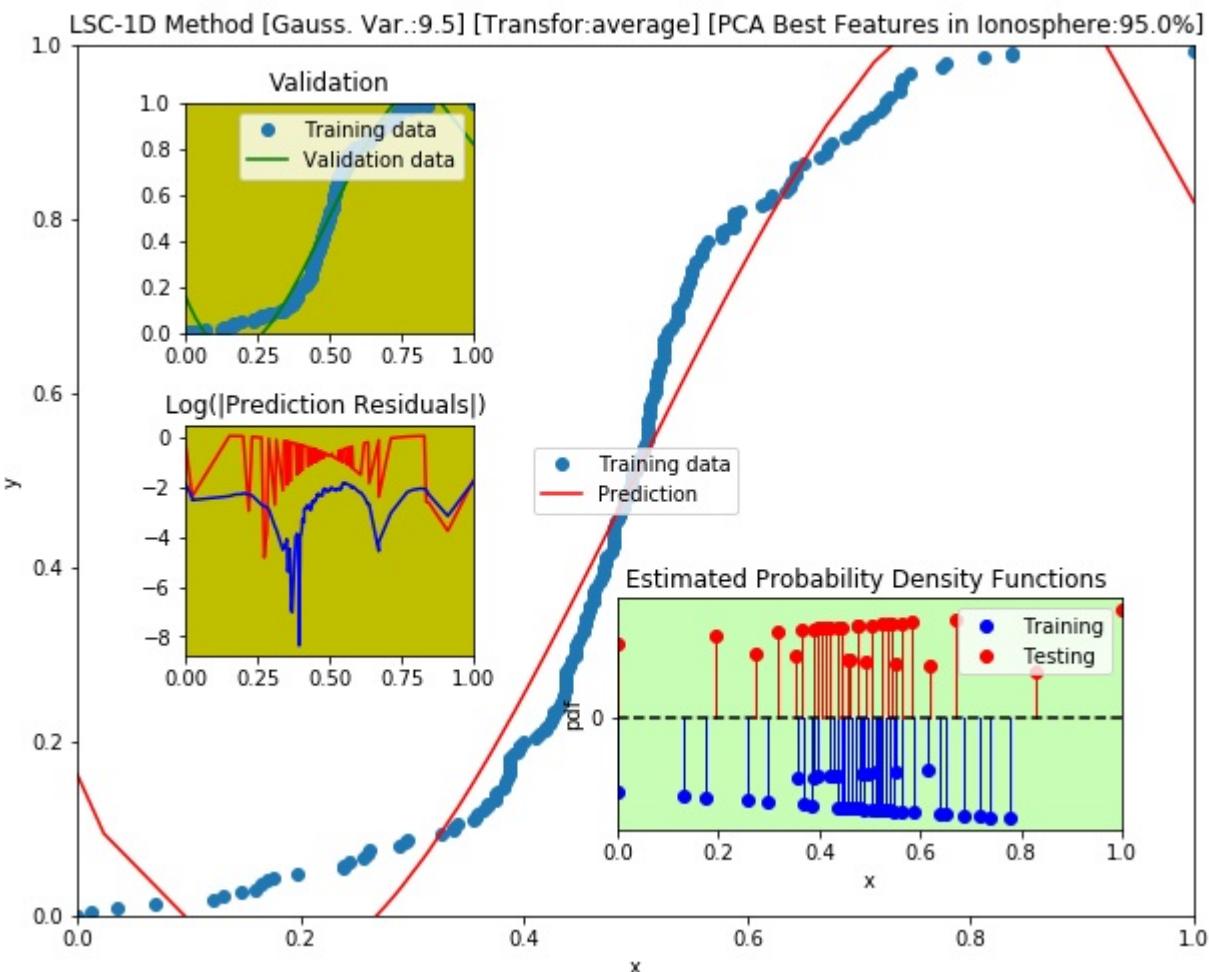
Prediction time/pt. (sec) : 0.0000388
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011806

Prediction time/pt. (sec) : 0.0000084
```



Ionosphere Dataset

Parameters: PCA: 95.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027678
  Initializing linear solver - done. Time (sec): 0.0030396
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003095
  Solving linear system (col. 0) - done. Time (sec): 0.0004580
Training - done. Time (sec): 0.0102091

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0056839  
Prediction time/pt. (sec) : 0.0000271
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0029552  
Prediction time/pt. (sec) : 0.0000210
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0023868  
Prediction time/pt. (sec) : 0.0000169
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0029557  
Prediction time/pt. (sec) : 0.0000210
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0094585
Initializing linear solver - done. Time (sec): 0.0097406
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0012333
    Solving linear system (col. 0) - done. Time (sec): 0.0015643
Training - done. Time (sec): 0.0197926
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0025799

Prediction time/pt. (sec) : 0.0000183
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0035996

Prediction time/pt. (sec) : 0.0000171
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0032966

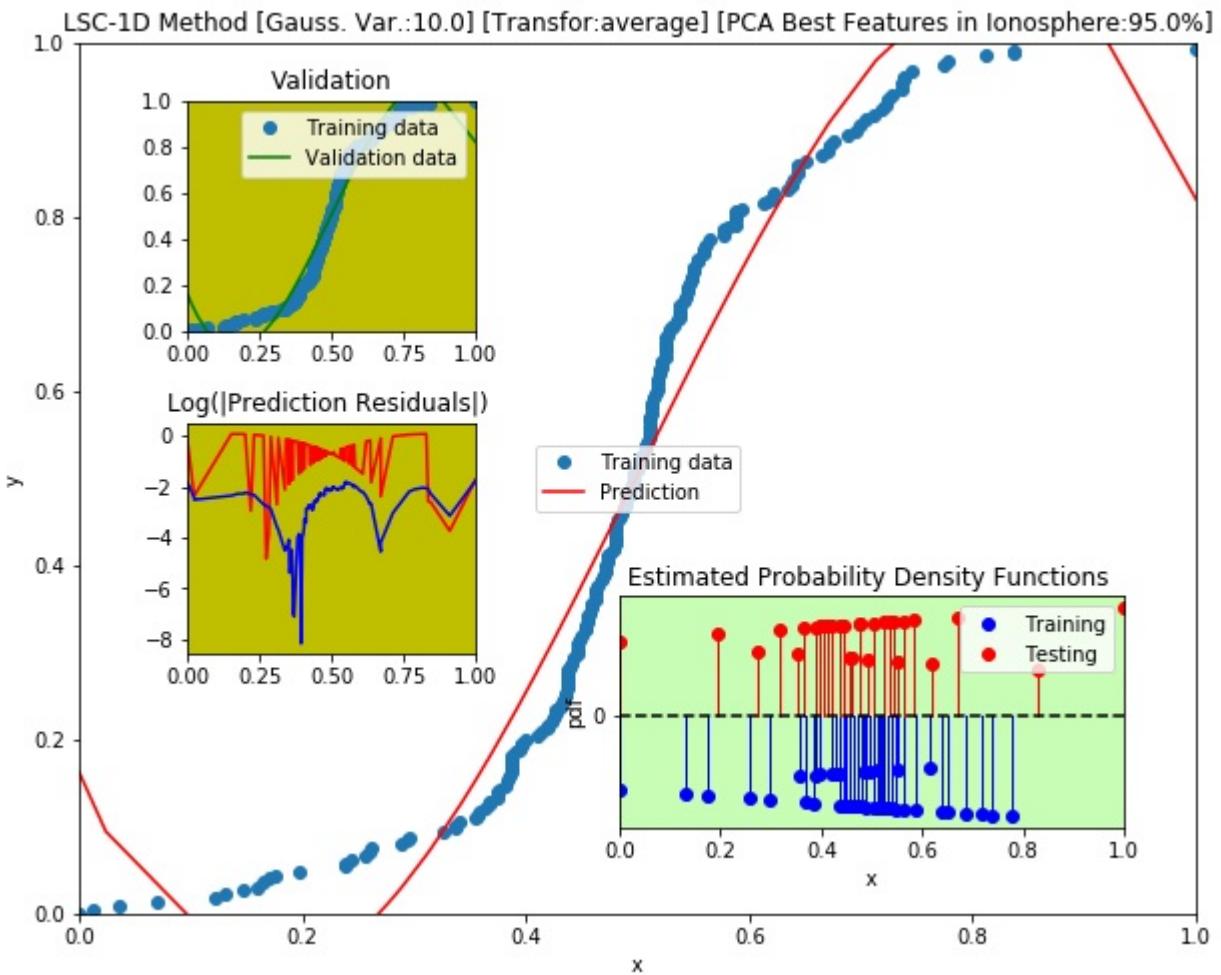
Prediction time/pt. (sec) : 0.0000234
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0019848

Prediction time/pt. (sec) : 0.0000141
```



Ionosphere Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0076563
    Initializing linear solver - done. Time (sec): 0.0086606
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003490
    Solving linear system (col. 0) - done. Time (sec): 0.0016179
Training - done. Time (sec): 0.0146072

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0019212  
Prediction time/pt. (sec) : 0.0000091
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0013738  
Prediction time/pt. (sec) : 0.0000097
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0013390  
Prediction time/pt. (sec) : 0.0000095
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0014708  
Prediction time/pt. (sec) : 0.0000104
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0105891
Initializing linear solver - done. Time (sec): 0.0117090
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003173
    Solving linear system (col. 0) - done. Time (sec): 0.0015156
Training - done. Time (sec): 0.0207171
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0018854

Prediction time/pt. (sec) : 0.0000134
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0038056

Prediction time/pt. (sec) : 0.0000181
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0012858

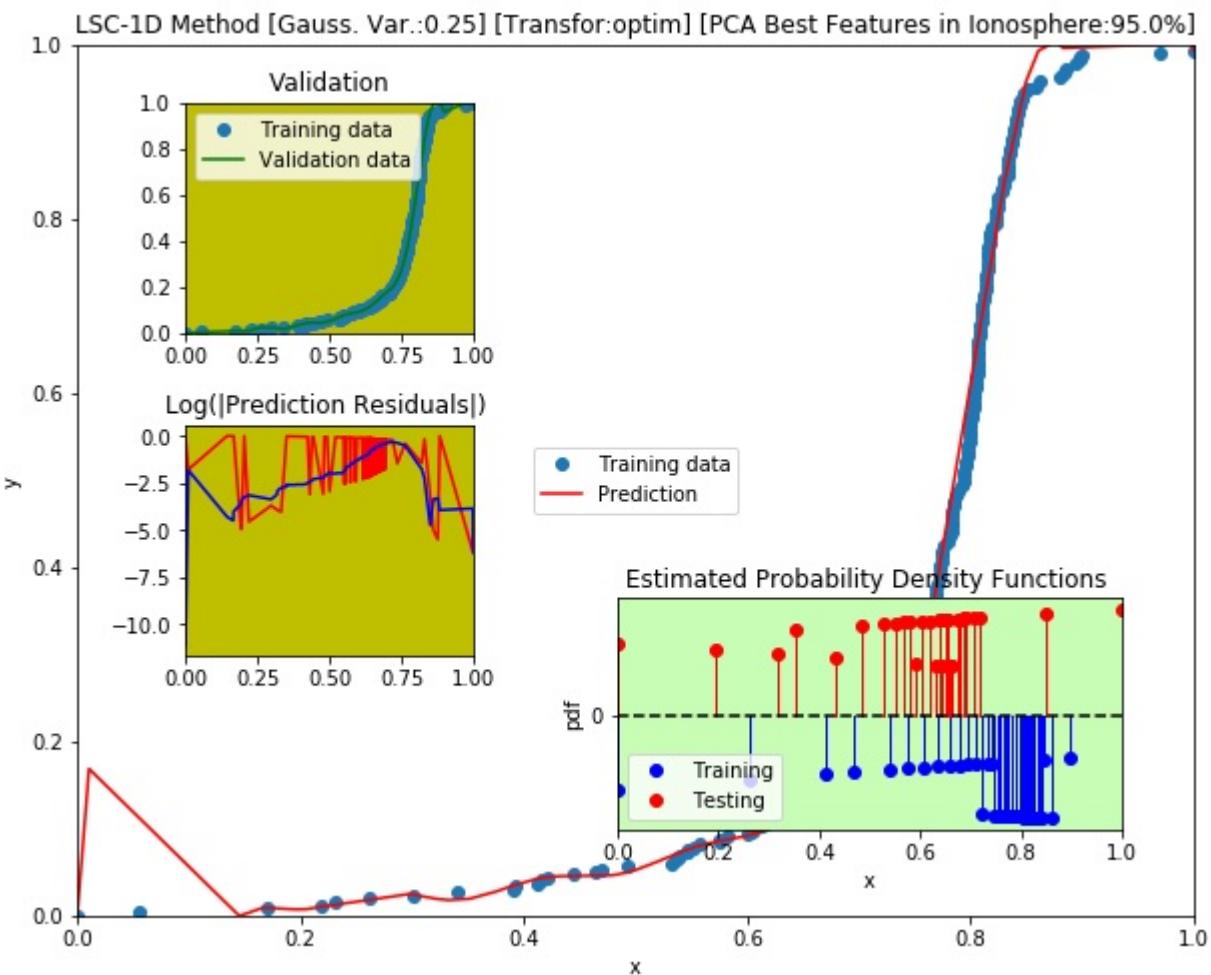
Prediction time/pt. (sec) : 0.0000091
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0013237

Prediction time/pt. (sec) : 0.0000094
```



Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0085390
  Initializing linear solver - done. Time (sec): 0.0098555
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0009825
  Solving linear system (col. 0) - done. Time (sec): 0.0013120
Training - done. Time (sec): 0.0171402

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0046802  
Prediction time/pt. (sec) : 0.0000223
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0039446  
Prediction time/pt. (sec) : 0.0000280
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0038674  
Prediction time/pt. (sec) : 0.0000274
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0039239  
Prediction time/pt. (sec) : 0.0000278
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0141146
Initializing linear solver - done. Time (sec): 0.0144057
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0012755
    Solving linear system (col. 0) - done. Time (sec): 0.0014815
Training - done. Time (sec): 0.0231307
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0037267

Prediction time/pt. (sec) : 0.0000264
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0043383

Prediction time/pt. (sec) : 0.0000207
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0044971

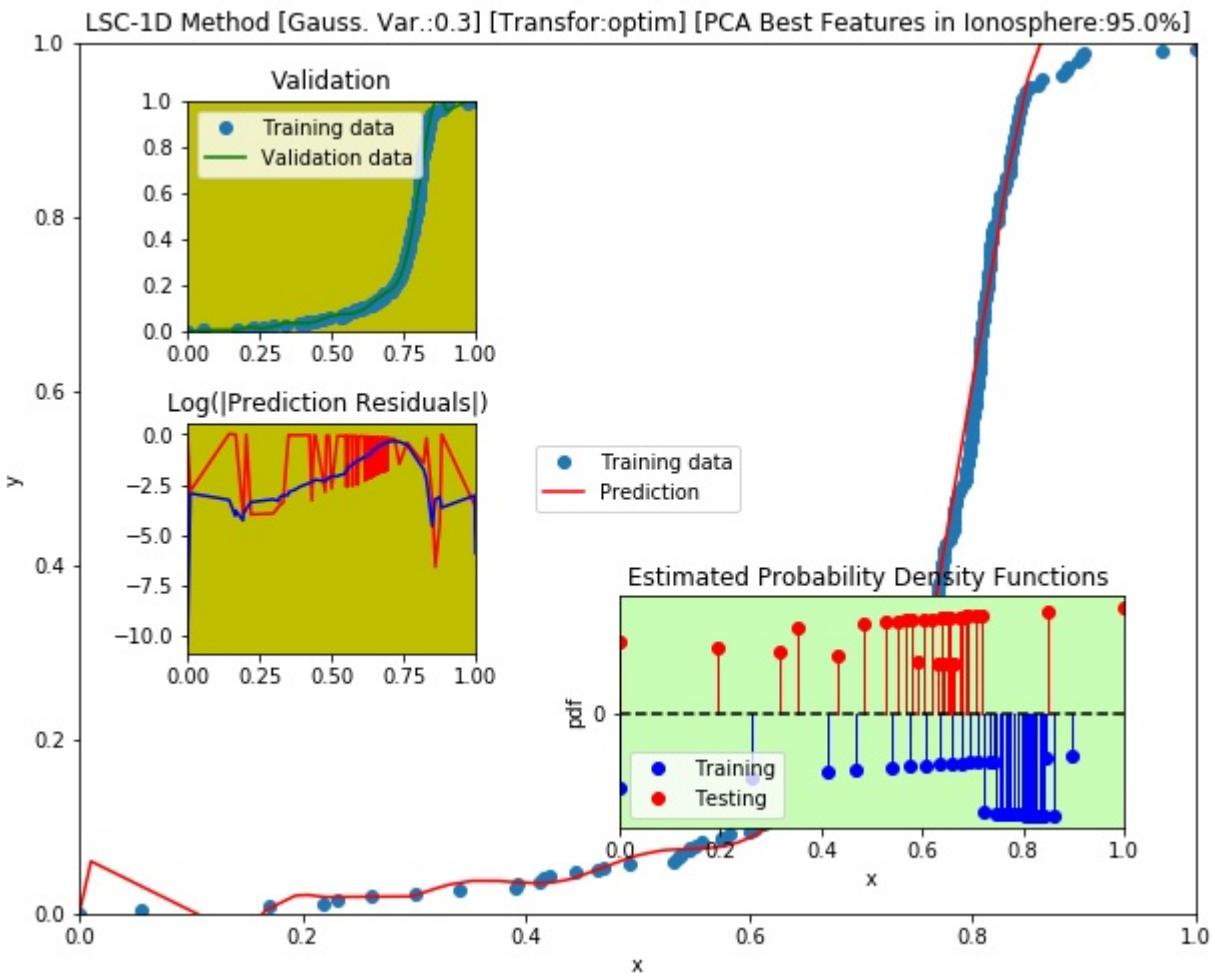
Prediction time/pt. (sec) : 0.0000319
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0030880

Prediction time/pt. (sec) : 0.0000219
```



Ionosphere Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0048482
    Initializing linear solver - done. Time (sec): 0.0050945
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003531
    Solving linear system (col. 0) - done. Time (sec): 0.0004997
Training - done. Time (sec): 0.0132835

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0048461  
Prediction time/pt. (sec) : 0.0000231
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0036745  
Prediction time/pt. (sec) : 0.0000261
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0013227  
Prediction time/pt. (sec) : 0.0000094
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0059741  
Prediction time/pt. (sec) : 0.0000424
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0072434
Initializing linear solver - done. Time (sec): 0.0075023
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003402
    Solving linear system (col. 0) - done. Time (sec): 0.0005040
Training - done. Time (sec): 0.0113511
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0049596

Prediction time/pt. (sec) : 0.0000352
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0052943

Prediction time/pt. (sec) : 0.0000252
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0047336

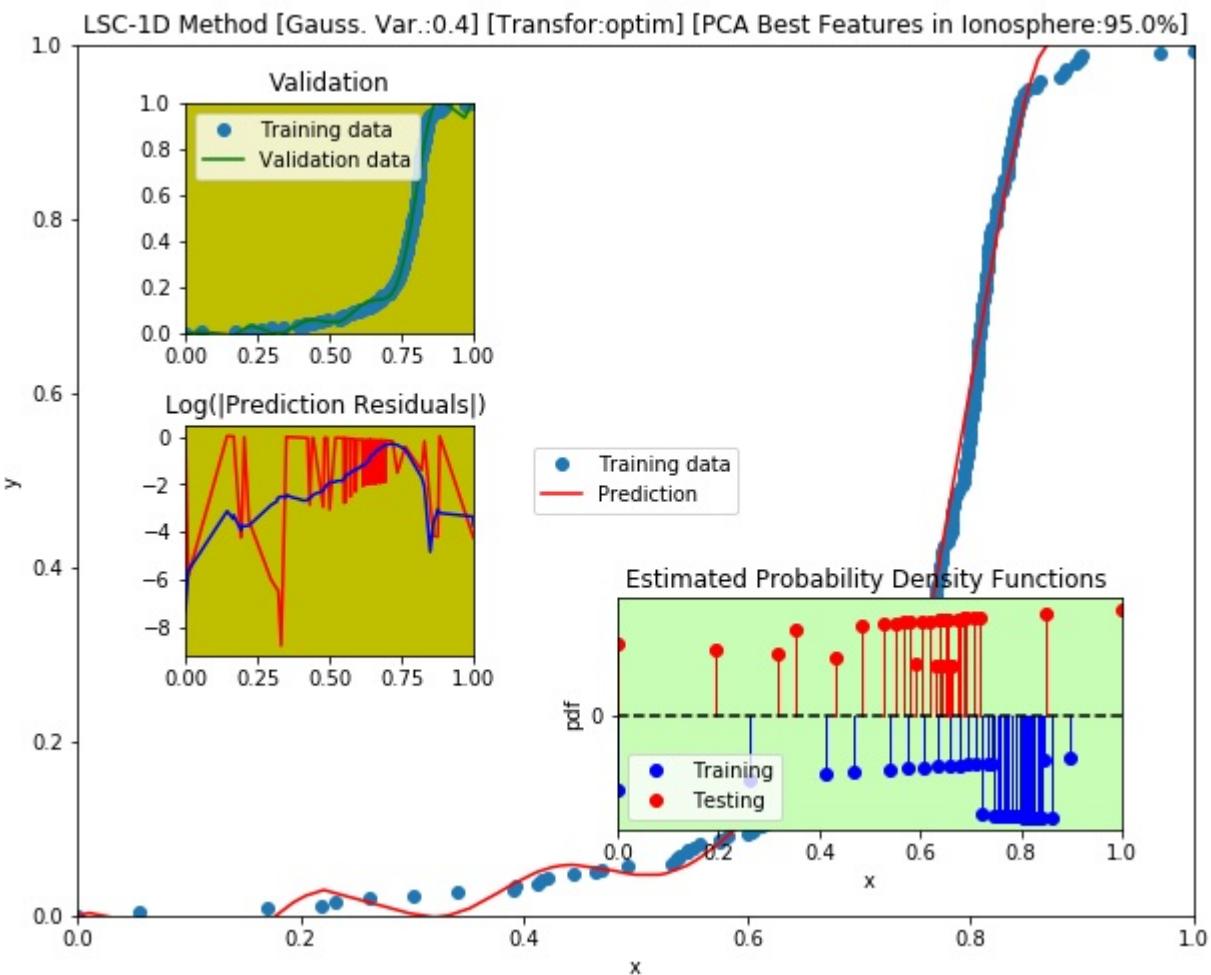
Prediction time/pt. (sec) : 0.0000336
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0015049

Prediction time/pt. (sec) : 0.0000107
```



RBF

Problem size

training points. : 210

Training

Training ...
 Initializing linear solver ...
 Performing LU fact. (211 x 211 mtx) ...
 Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0036242
 Initializing linear solver - done. Time (sec): 0.0039499
 Solving linear system (col. 0) ...
 Back solving (211 x 211 mtx) ...
 Back solving (211 x 211 mtx) - done. Time (sec): 0.0003684
 Solving linear system (col. 0) - done. Time (sec): 0.0005629
 Training - done. Time (sec): 0.0134645

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0039217  
Prediction time/pt. (sec) : 0.0000187
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0100126  
Prediction time/pt. (sec) : 0.0000710
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0043542  
Prediction time/pt. (sec) : 0.0000309
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0012162  
Prediction time/pt. (sec) : 0.0000086
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0096004
Initializing linear solver - done. Time (sec): 0.0098515
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003312
    Solving linear system (col. 0) - done. Time (sec): 0.0004952
Training - done. Time (sec): 0.0132649
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0014060

Prediction time/pt. (sec) : 0.0000100
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0029089

Prediction time/pt. (sec) : 0.0000139
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0038662

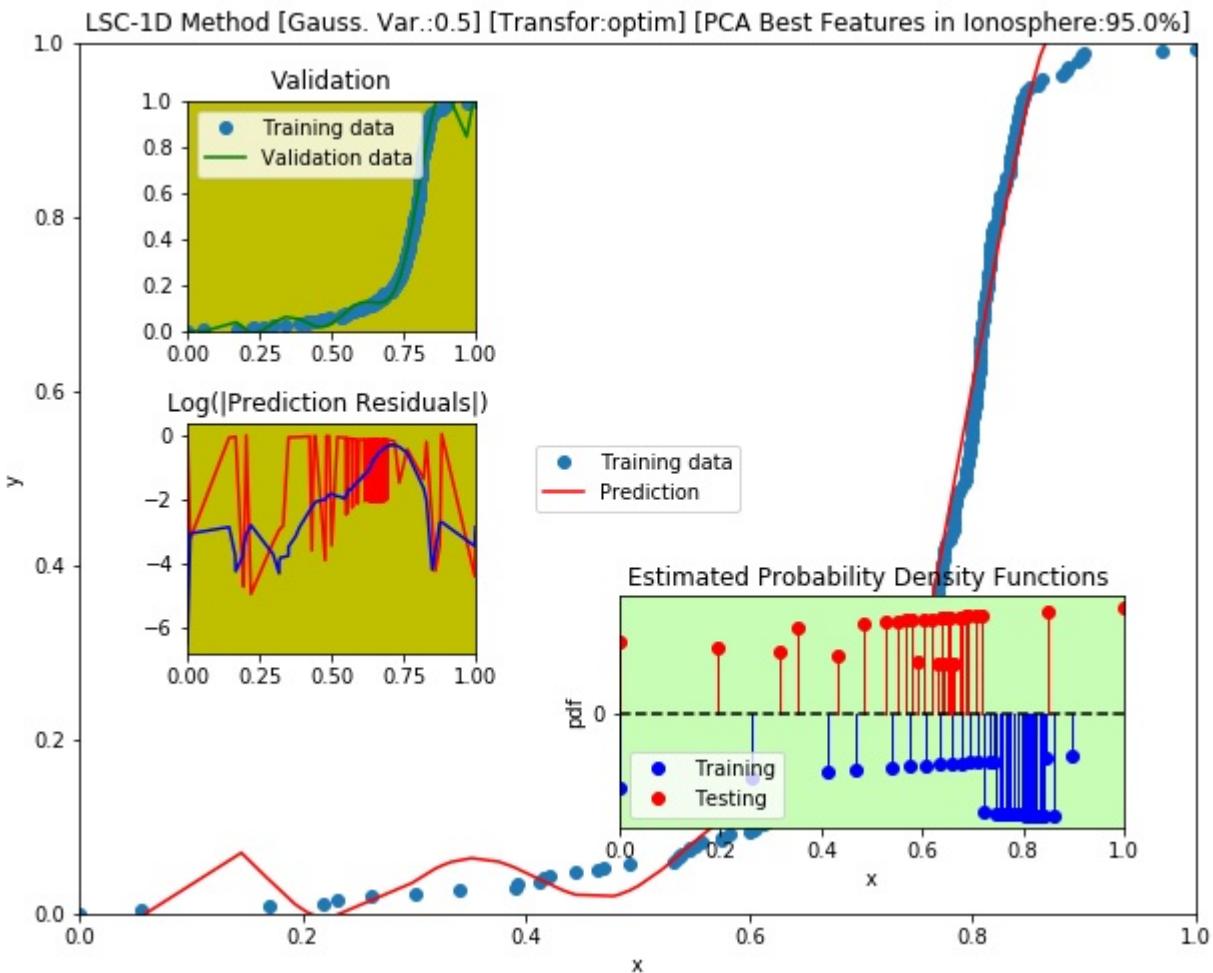
Prediction time/pt. (sec) : 0.0000274
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0031993

Prediction time/pt. (sec) : 0.0000227
```



Ionosphere Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (211 x 211 mtx) ...
        Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0029655
    Initializing linear solver - done. Time (sec): 0.0032475
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0005081
    Solving linear system (col. 0) - done. Time (sec): 0.0007026
Training - done. Time (sec): 0.0093865

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0063024  
Prediction time/pt. (sec) : 0.0000300
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0037739  
Prediction time/pt. (sec) : 0.0000268
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0035305  
Prediction time/pt. (sec) : 0.0000250
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0034242  
Prediction time/pt. (sec) : 0.0000243
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0088394
Initializing linear solver - done. Time (sec): 0.0091155
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0012181
    Solving linear system (col. 0) - done. Time (sec): 0.0014105
Training - done. Time (sec): 0.0201342
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0031786

Prediction time/pt. (sec) : 0.0000225
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0041876

Prediction time/pt. (sec) : 0.0000199
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0036178

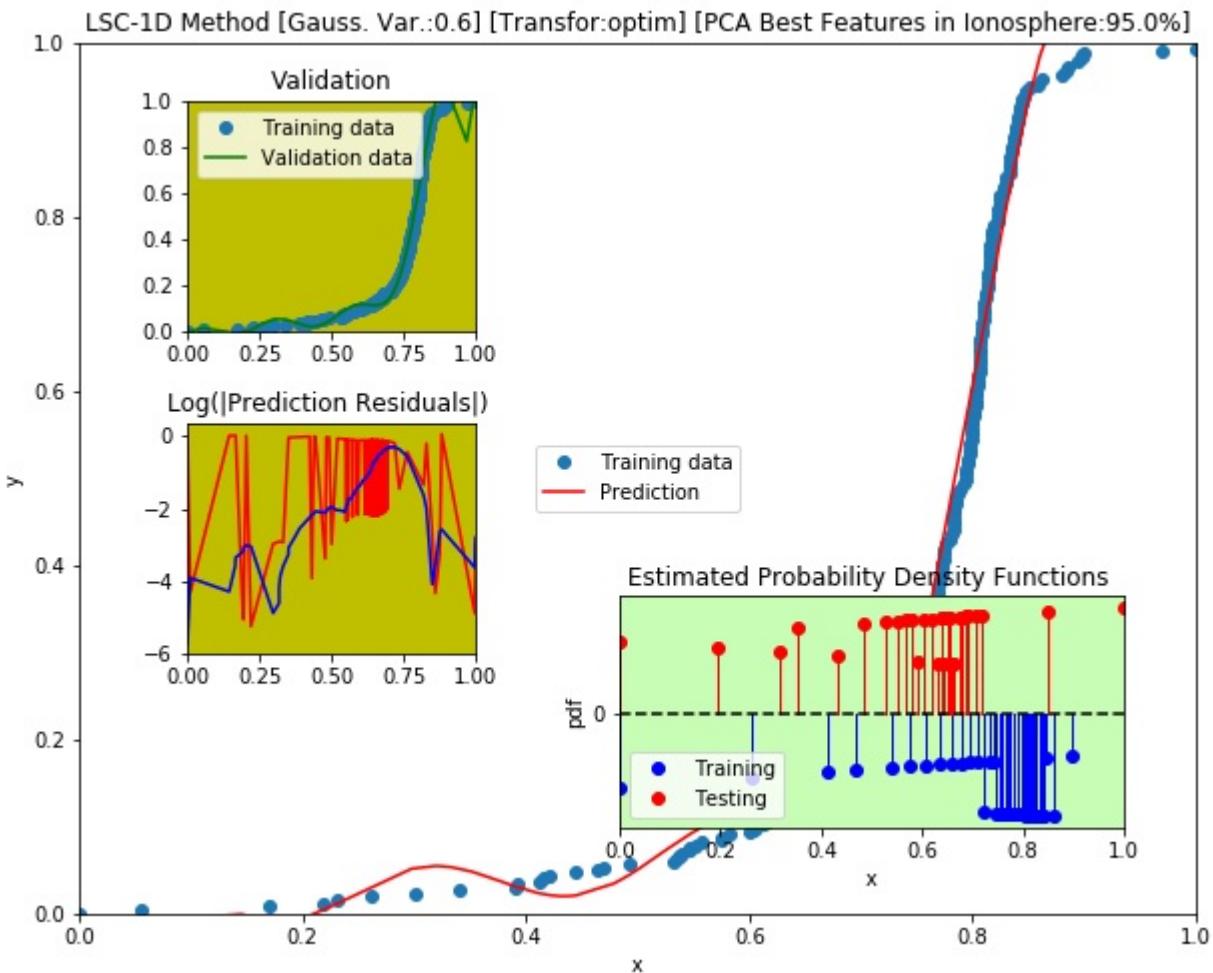
Prediction time/pt. (sec) : 0.0000257
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0032883

Prediction time/pt. (sec) : 0.0000233
```



Ionosphere Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027630
    Initializing linear solver - done. Time (sec): 0.0030327
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003076
    Solving linear system (col. 0) - done. Time (sec): 0.0004559
Training - done. Time (sec): 0.0097444

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0096264  
Prediction time/pt. (sec) : 0.0000458
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0010705  
Prediction time/pt. (sec) : 0.0000076
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0060585  
Prediction time/pt. (sec) : 0.0000430
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0010698  
Prediction time/pt. (sec) : 0.0000076
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0105770
Initializing linear solver - done. Time (sec): 0.0107794
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003312
    Solving linear system (col. 0) - done. Time (sec): 0.0004911
Training - done. Time (sec): 0.0139954
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0048935

Prediction time/pt. (sec) : 0.0000347
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0044024

Prediction time/pt. (sec) : 0.0000210
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0041454

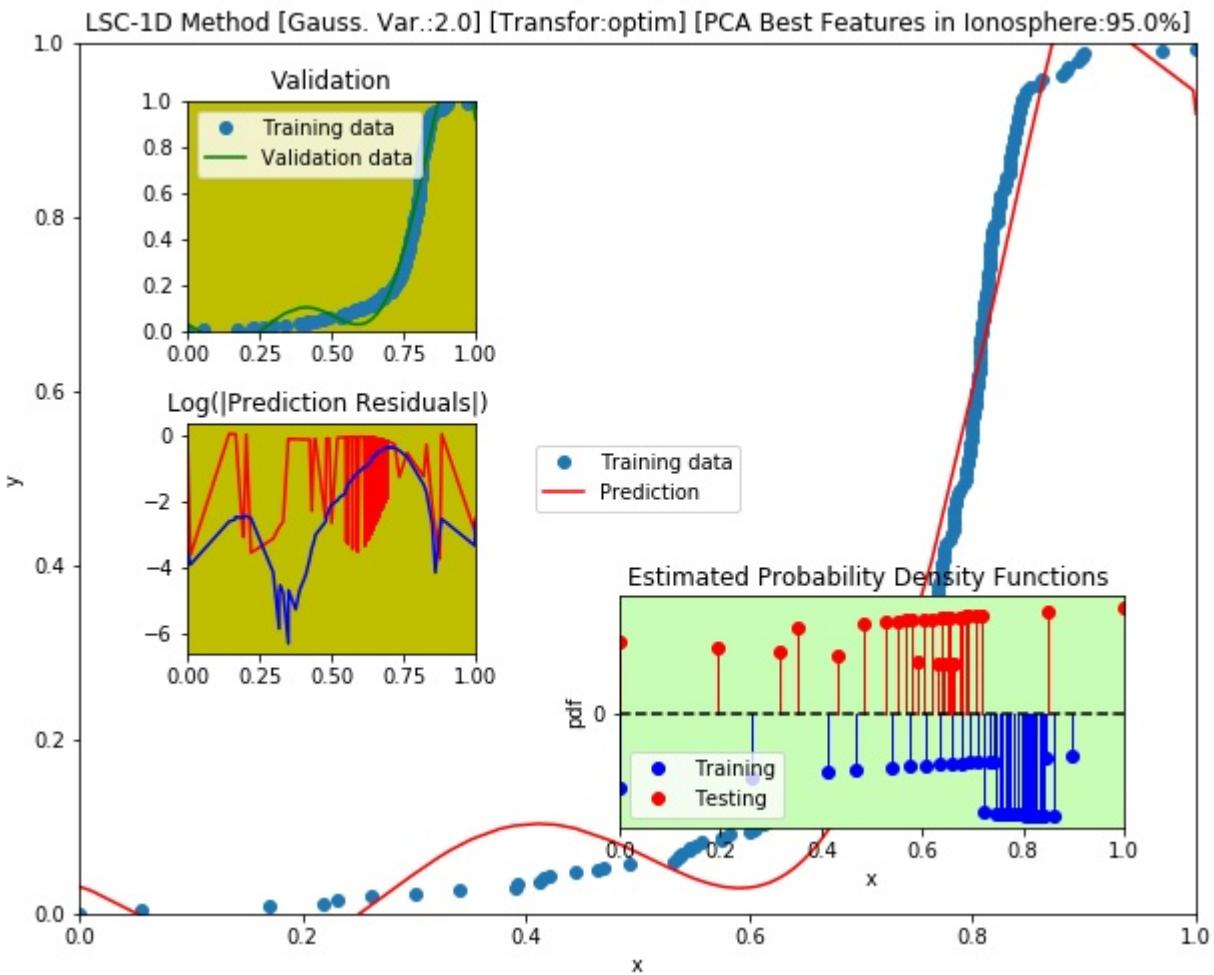
Prediction time/pt. (sec) : 0.0000294
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0043650

Prediction time/pt. (sec) : 0.0000310
```



Ionosphere Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0025284
    Initializing linear solver - done. Time (sec): 0.0027864
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003018
    Solving linear system (col. 0) - done. Time (sec): 0.0004396
Training - done. Time (sec): 0.0110118

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0097151  
Prediction time/pt. (sec) : 0.0000463
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0010884  
Prediction time/pt. (sec) : 0.0000077
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0069749  
Prediction time/pt. (sec) : 0.0000495
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0010762  
Prediction time/pt. (sec) : 0.0000076
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0074670
Initializing linear solver - done. Time (sec): 0.0076852
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003417
    Solving linear system (col. 0) - done. Time (sec): 0.0005100
Training - done. Time (sec): 0.0109363
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0043511

Prediction time/pt. (sec) : 0.0000309
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0087535

Prediction time/pt. (sec) : 0.0000417
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0013657

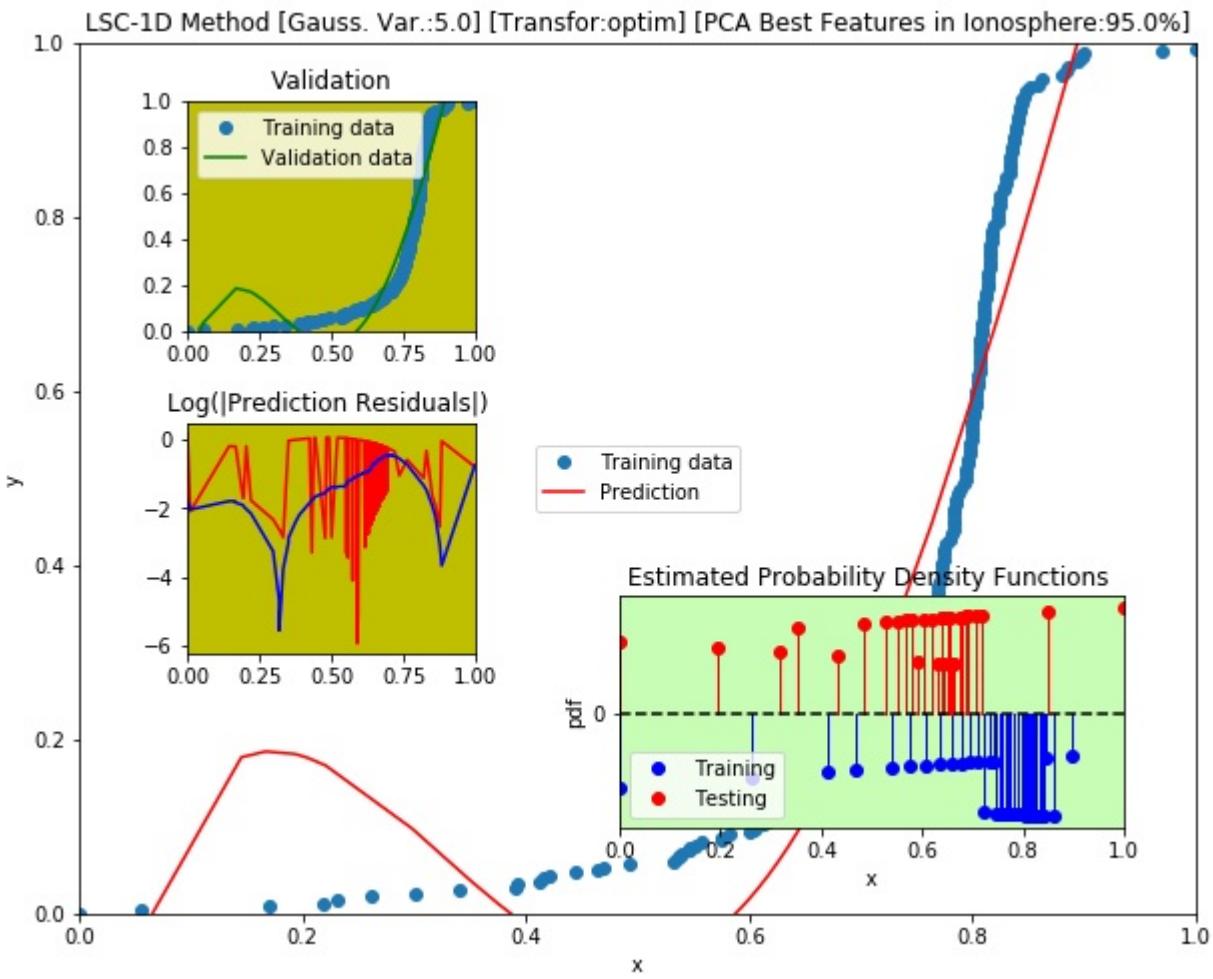
Prediction time/pt. (sec) : 0.0000097
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0013411

Prediction time/pt. (sec) : 0.0000095
```



Ionosphere Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027692
  Initializing linear solver - done. Time (sec): 0.0030439
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003095
  Solving linear system (col. 0) - done. Time (sec): 0.0004566
Training - done. Time (sec): 0.0096262

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0093286  
Prediction time/pt. (sec) : 0.0000444
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0039709  
Prediction time/pt. (sec) : 0.0000282
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0013733  
Prediction time/pt. (sec) : 0.0000097
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0009968  
Prediction time/pt. (sec) : 0.0000071
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0107698
Initializing linear solver - done. Time (sec): 0.0110490
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003312
    Solving linear system (col. 0) - done. Time (sec): 0.0004888
Training - done. Time (sec): 0.0143986
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0045679

Prediction time/pt. (sec) : 0.0000324
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0044026

Prediction time/pt. (sec) : 0.0000210
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0041444

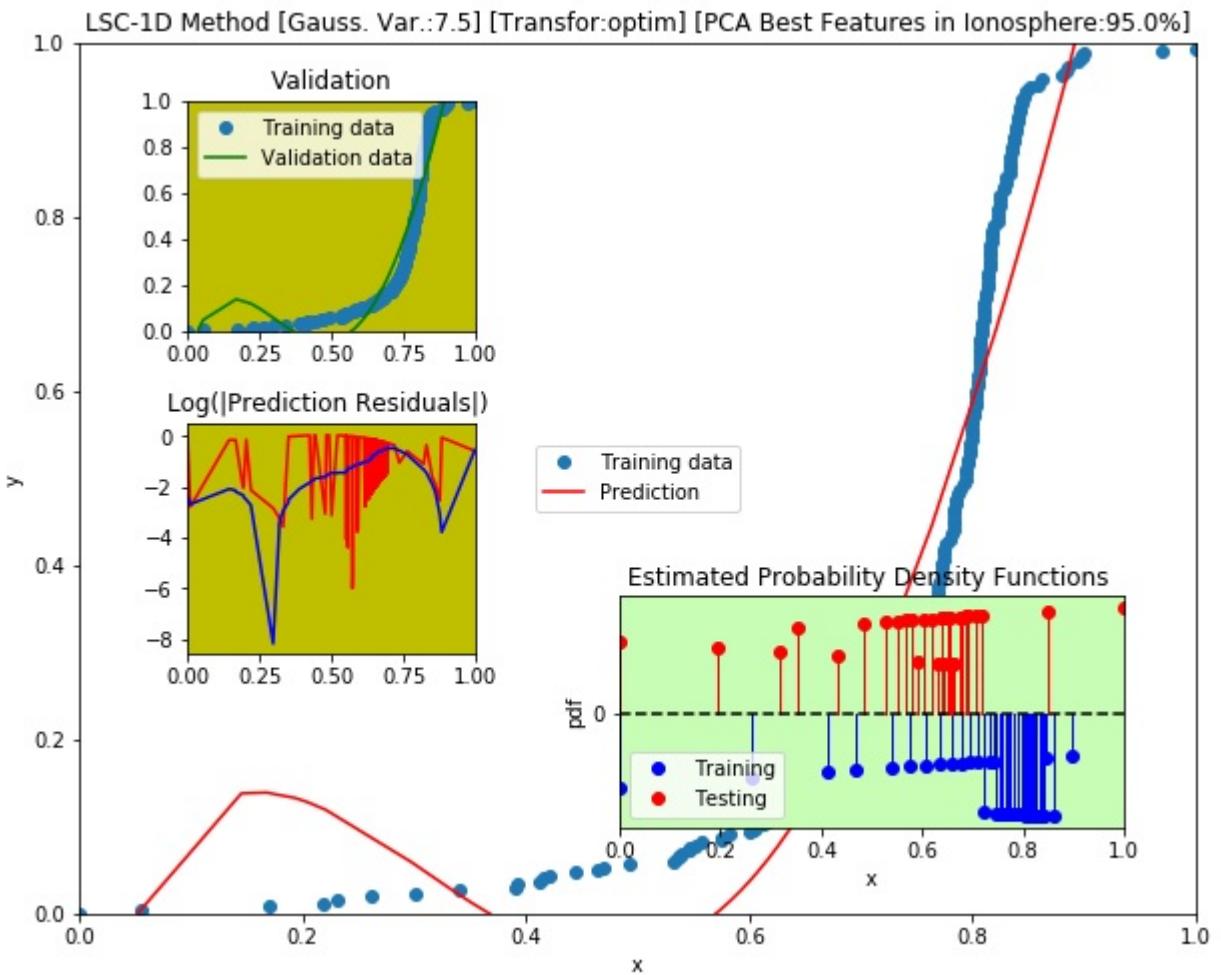
Prediction time/pt. (sec) : 0.0000294
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0043025

Prediction time/pt. (sec) : 0.0000305
```



Ionosphere Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0037460
    Initializing linear solver - done. Time (sec): 0.0040512
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003653
    Solving linear system (col. 0) - done. Time (sec): 0.0005600
Training - done. Time (sec): 0.0091558

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0102272  
Prediction time/pt. (sec) : 0.0000487
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0024989  
Prediction time/pt. (sec) : 0.0000177
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0041757  
Prediction time/pt. (sec) : 0.0000296
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0010090  
Prediction time/pt. (sec) : 0.0000072
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0095322
Initializing linear solver - done. Time (sec): 0.0097907
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0004010
    Solving linear system (col. 0) - done. Time (sec): 0.0005715
Training - done. Time (sec): 0.0130677
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0046232

Prediction time/pt. (sec) : 0.0000328
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0017445

Prediction time/pt. (sec) : 0.0000083
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0072453

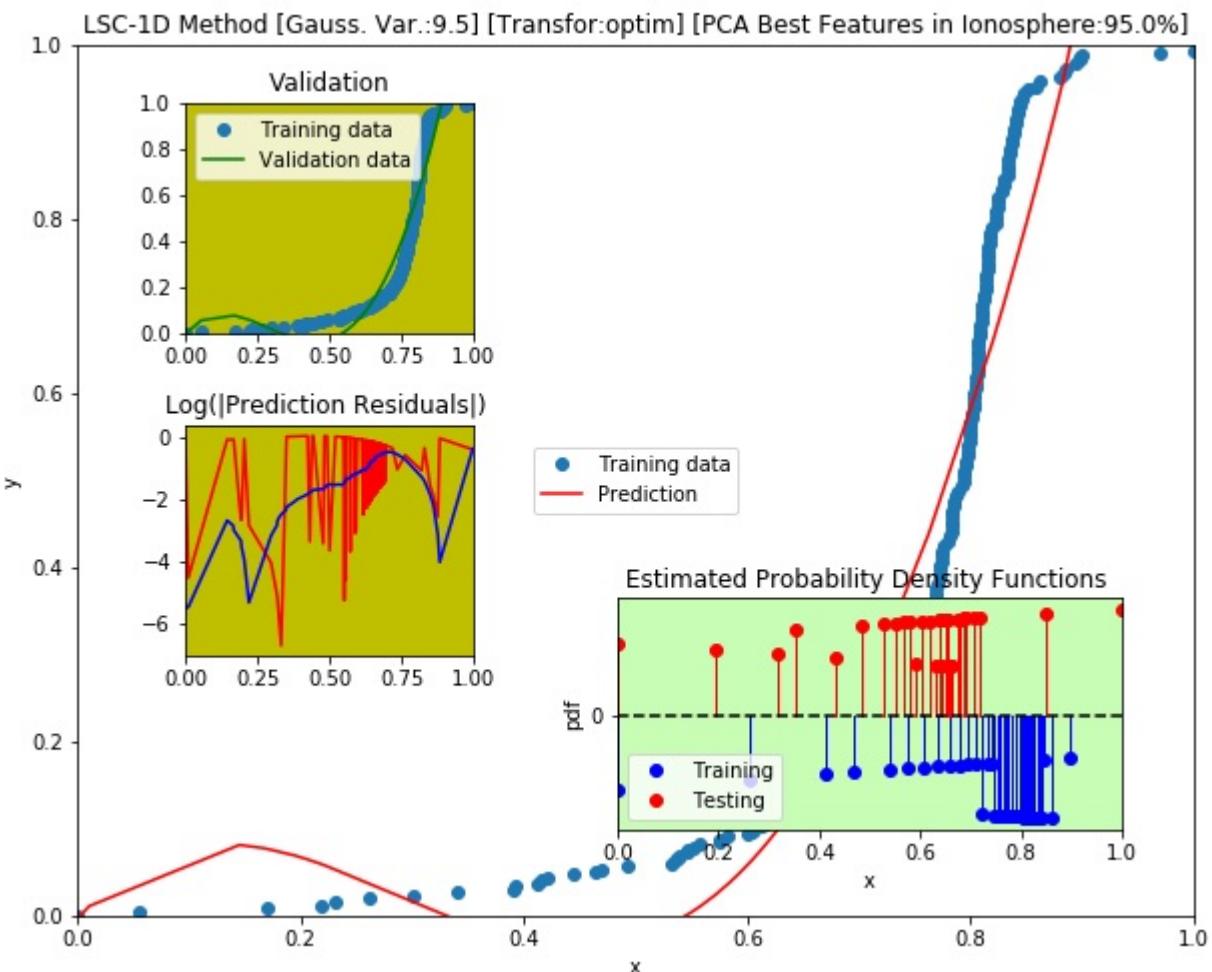
Prediction time/pt. (sec) : 0.0000514
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0028446

Prediction time/pt. (sec) : 0.0000202
```



Ionosphere Dataset

Parameters: PCA: 95.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (211 x 211 mtx) ...
        Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0042617
    Initializing linear solver - done. Time (sec): 0.0044649
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003166
    Solving linear system (col. 0) - done. Time (sec): 0.0004694
Training - done. Time (sec): 0.0094826

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0049546  
Prediction time/pt. (sec) : 0.0000236
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0036335  
Prediction time/pt. (sec) : 0.0000258
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0036652  
Prediction time/pt. (sec) : 0.0000260
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0036275  
Prediction time/pt. (sec) : 0.0000257
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0088847
Initializing linear solver - done. Time (sec): 0.0091434
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003247
    Solving linear system (col. 0) - done. Time (sec): 0.0005069
Training - done. Time (sec): 0.0124488
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0045526

Prediction time/pt. (sec) : 0.0000323
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0043659

Prediction time/pt. (sec) : 0.0000208
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011656

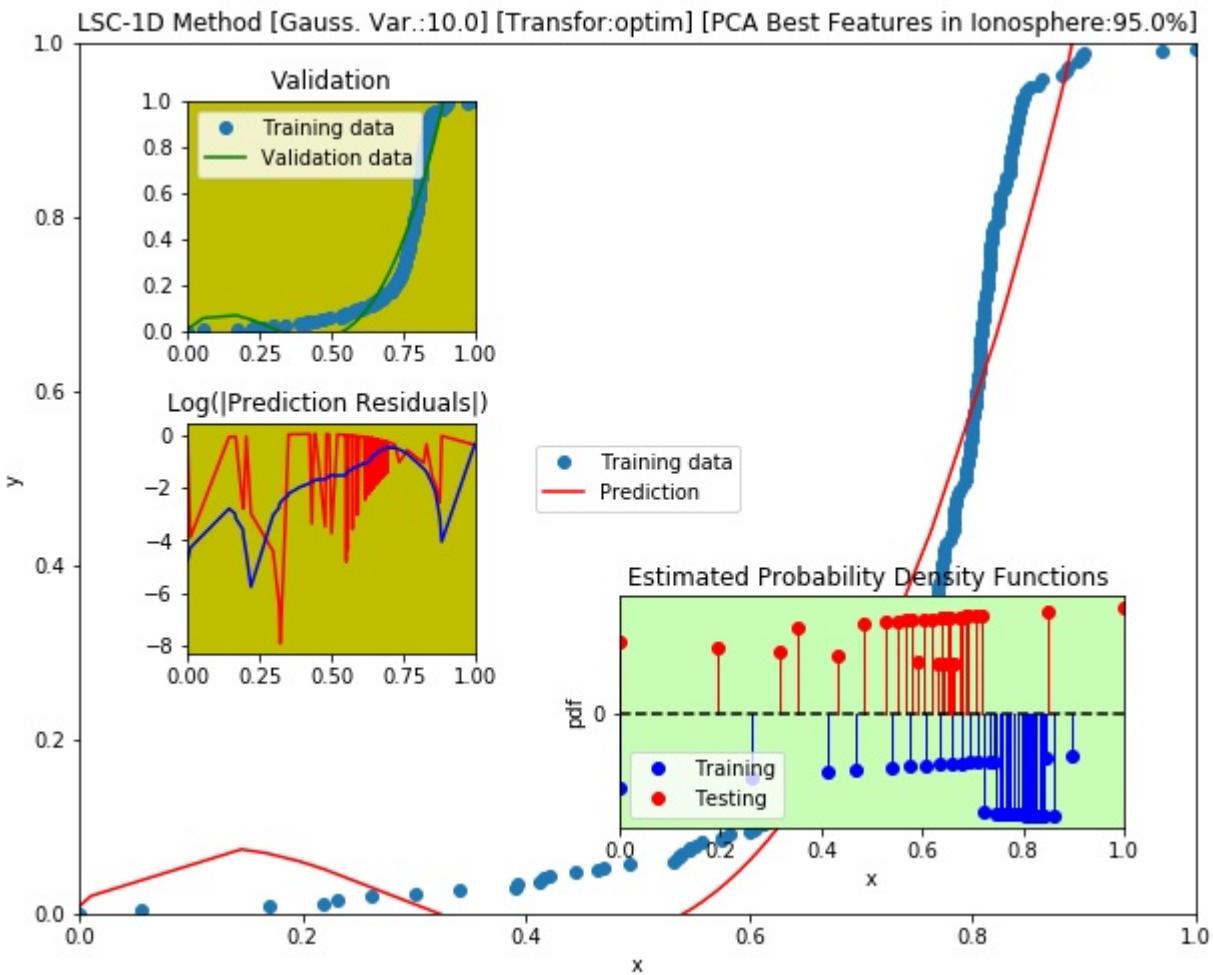
Prediction time/pt. (sec) : 0.0000083
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0063188

Prediction time/pt. (sec) : 0.0000448
```



Ionosphere Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (211 x 211 mtx) ...
        Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0021646
    Initializing linear solver - done. Time (sec): 0.0025446
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0005789
    Solving linear system (col. 0) - done. Time (sec): 0.0007536
Training - done. Time (sec): 0.0095274

```

Evaluation

```
# eval points. : 210  
  
Predicting ...  
Predicting - done. Time (sec): 0.0105386  
  
Prediction time/pt. (sec) : 0.0000502
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0034909  
  
Prediction time/pt. (sec) : 0.0000248
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0054924  
  
Prediction time/pt. (sec) : 0.0000390
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0013182  
  
Prediction time/pt. (sec) : 0.0000093
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0095067
Initializing linear solver - done. Time (sec): 0.0098696
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003326
    Solving linear system (col. 0) - done. Time (sec): 0.0004945
Training - done. Time (sec): 0.0135443
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0048349

Prediction time/pt. (sec) : 0.0000343
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0047870

Prediction time/pt. (sec) : 0.0000228
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0035541

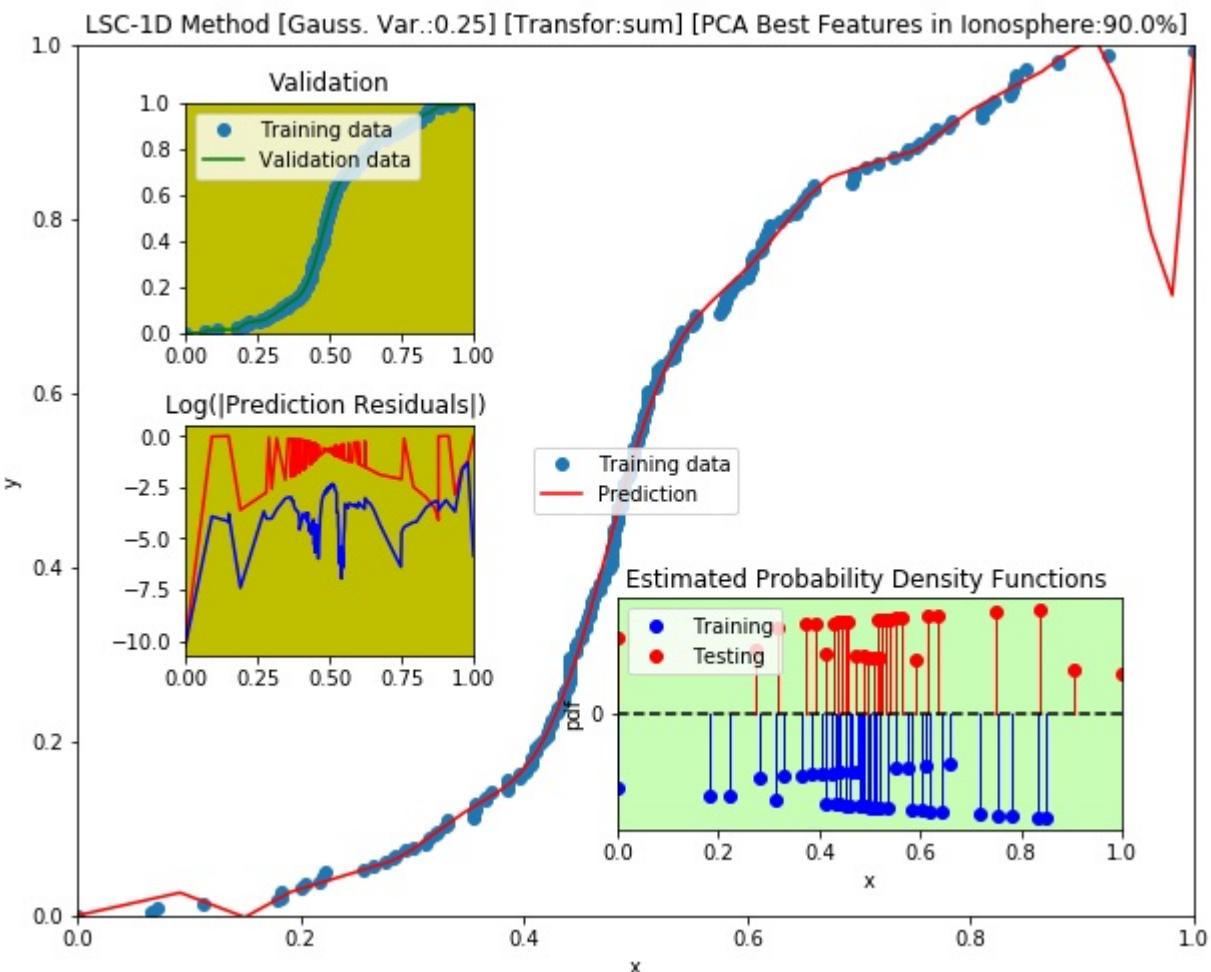
Prediction time/pt. (sec) : 0.0000252
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0046449

Prediction time/pt. (sec) : 0.0000329
```



Ionosphere Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0034120
  Initializing linear solver - done. Time (sec): 0.0037000
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0005555
  Solving linear system (col. 0) - done. Time (sec): 0.0007493
Training - done. Time (sec): 0.0082338

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0063293  
Prediction time/pt. (sec) : 0.0000301
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0040565  
Prediction time/pt. (sec) : 0.0000288
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0036068  
Prediction time/pt. (sec) : 0.0000256
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0036330  
Prediction time/pt. (sec) : 0.0000258
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0047250
Initializing linear solver - done. Time (sec): 0.0050054
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0012202
    Solving linear system (col. 0) - done. Time (sec): 0.0014155
Training - done. Time (sec): 0.0170290
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0037484

Prediction time/pt. (sec) : 0.0000266
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0047975

Prediction time/pt. (sec) : 0.0000228
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0046554

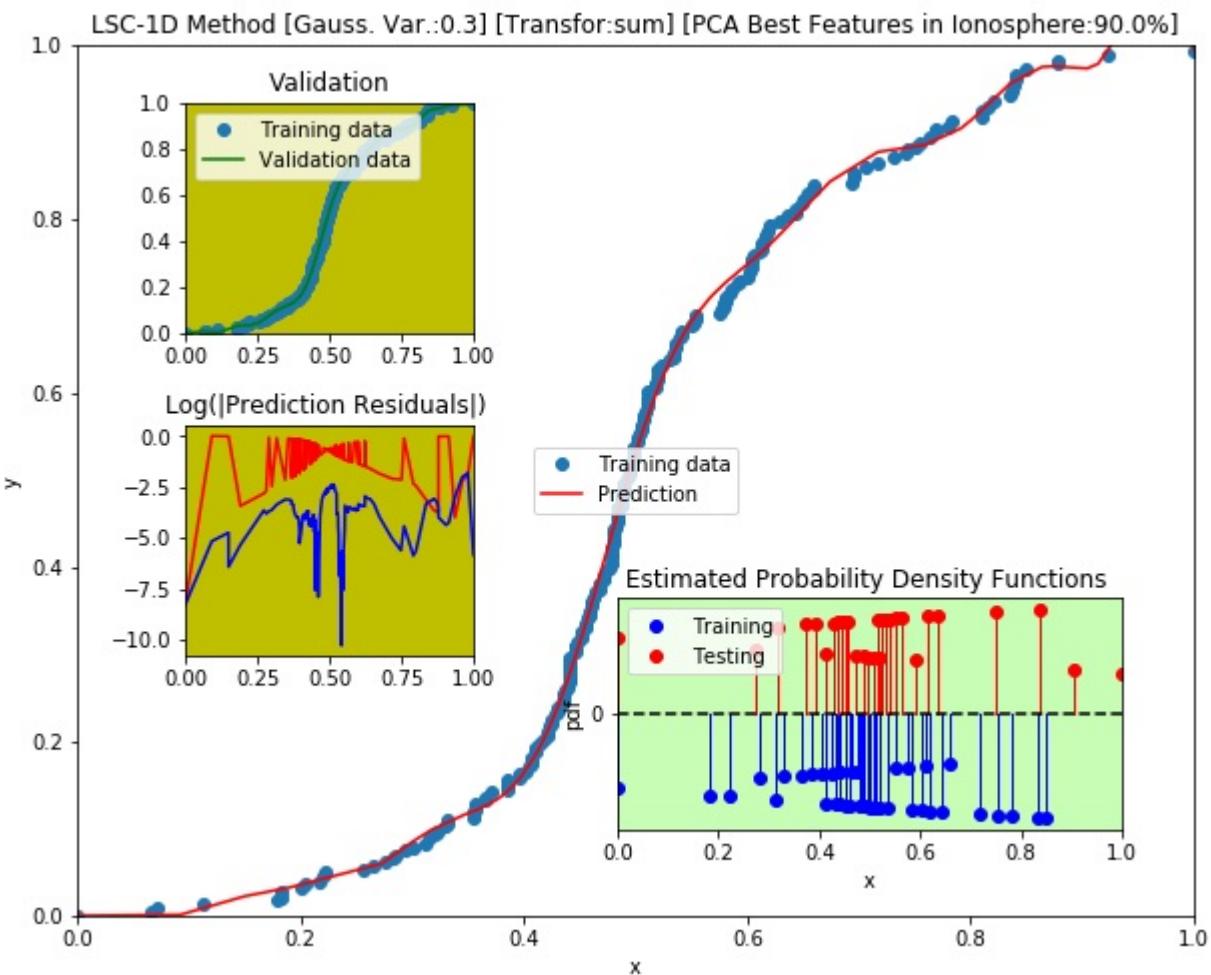
Prediction time/pt. (sec) : 0.0000330
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0036633

Prediction time/pt. (sec) : 0.0000260
```



Ionosphere Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027606
  Initializing linear solver - done. Time (sec): 0.0030277
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003123
  Solving linear system (col. 0) - done. Time (sec): 0.0004597
Training - done. Time (sec): 0.0084045

```

Evaluation

```
# eval points. : 210  
  
Predicting ...  
Predicting - done. Time (sec): 0.0075169  
  
Prediction time/pt. (sec) : 0.0000358
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0039499  
  
Prediction time/pt. (sec) : 0.0000280
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0039151  
  
Prediction time/pt. (sec) : 0.0000278
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0014219  
  
Prediction time/pt. (sec) : 0.0000101
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0110261
Initializing linear solver - done. Time (sec): 0.0112281
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003316
    Solving linear system (col. 0) - done. Time (sec): 0.0004902
Training - done. Time (sec): 0.0149798
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0014658

Prediction time/pt. (sec) : 0.0000104
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0079362

Prediction time/pt. (sec) : 0.0000378
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0041246

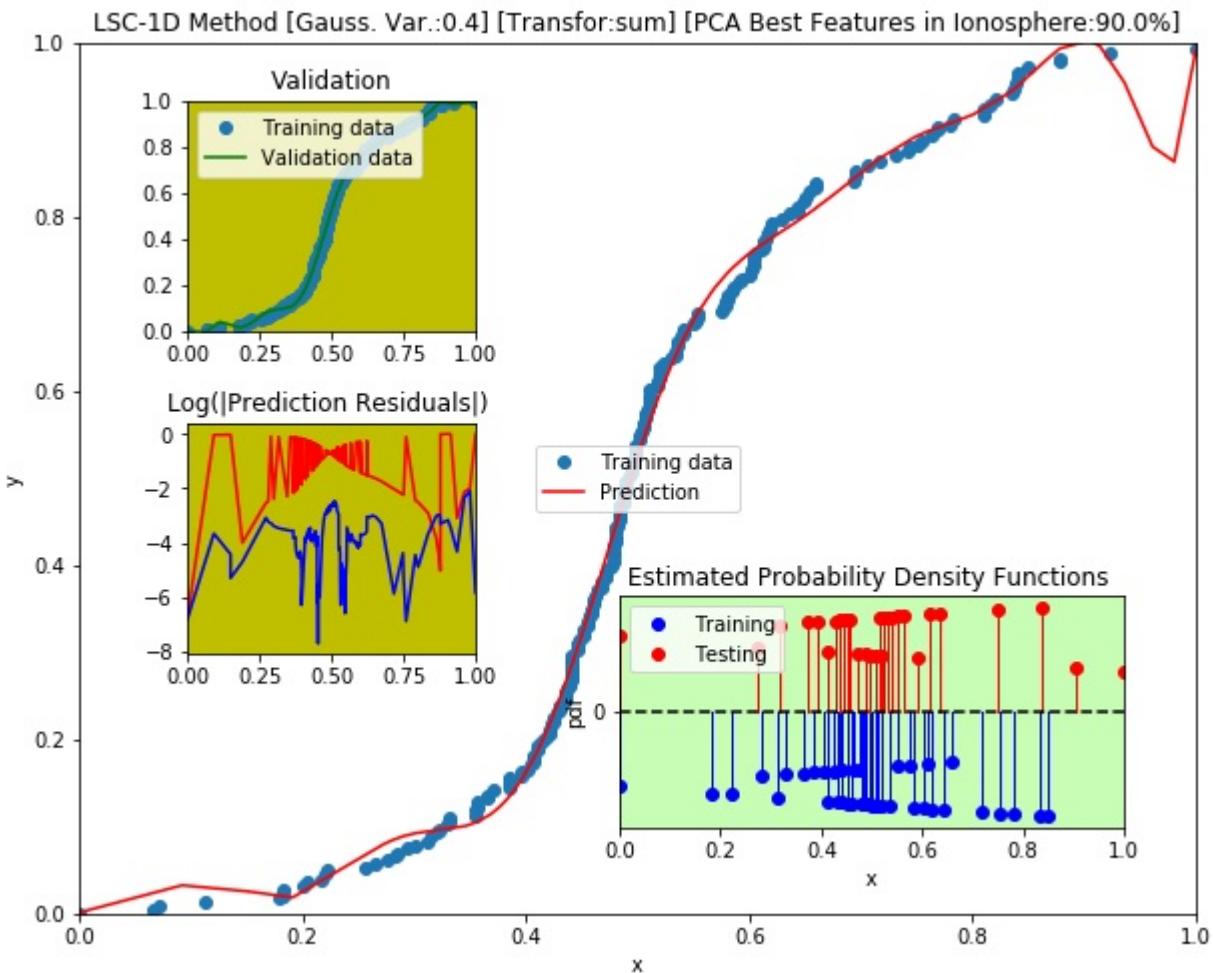
Prediction time/pt. (sec) : 0.0000293
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0041089

Prediction time/pt. (sec) : 0.0000291
```



Ionosphere Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (211 x 211 mtx) ...
        Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0036862
    Initializing linear solver - done. Time (sec): 0.0040147
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003688
    Solving linear system (col. 0) - done. Time (sec): 0.0005629
Training - done. Time (sec): 0.0123940

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0030847  
Prediction time/pt. (sec) : 0.0000147
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0087662  
Prediction time/pt. (sec) : 0.0000622
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0035245  
Prediction time/pt. (sec) : 0.0000250
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011353  
Prediction time/pt. (sec) : 0.0000081
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0083683
Initializing linear solver - done. Time (sec): 0.0085759
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003335
    Solving linear system (col. 0) - done. Time (sec): 0.0004907
Training - done. Time (sec): 0.0119755
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0013051

Prediction time/pt. (sec) : 0.0000093
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0102055

Prediction time/pt. (sec) : 0.0000486
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0040557

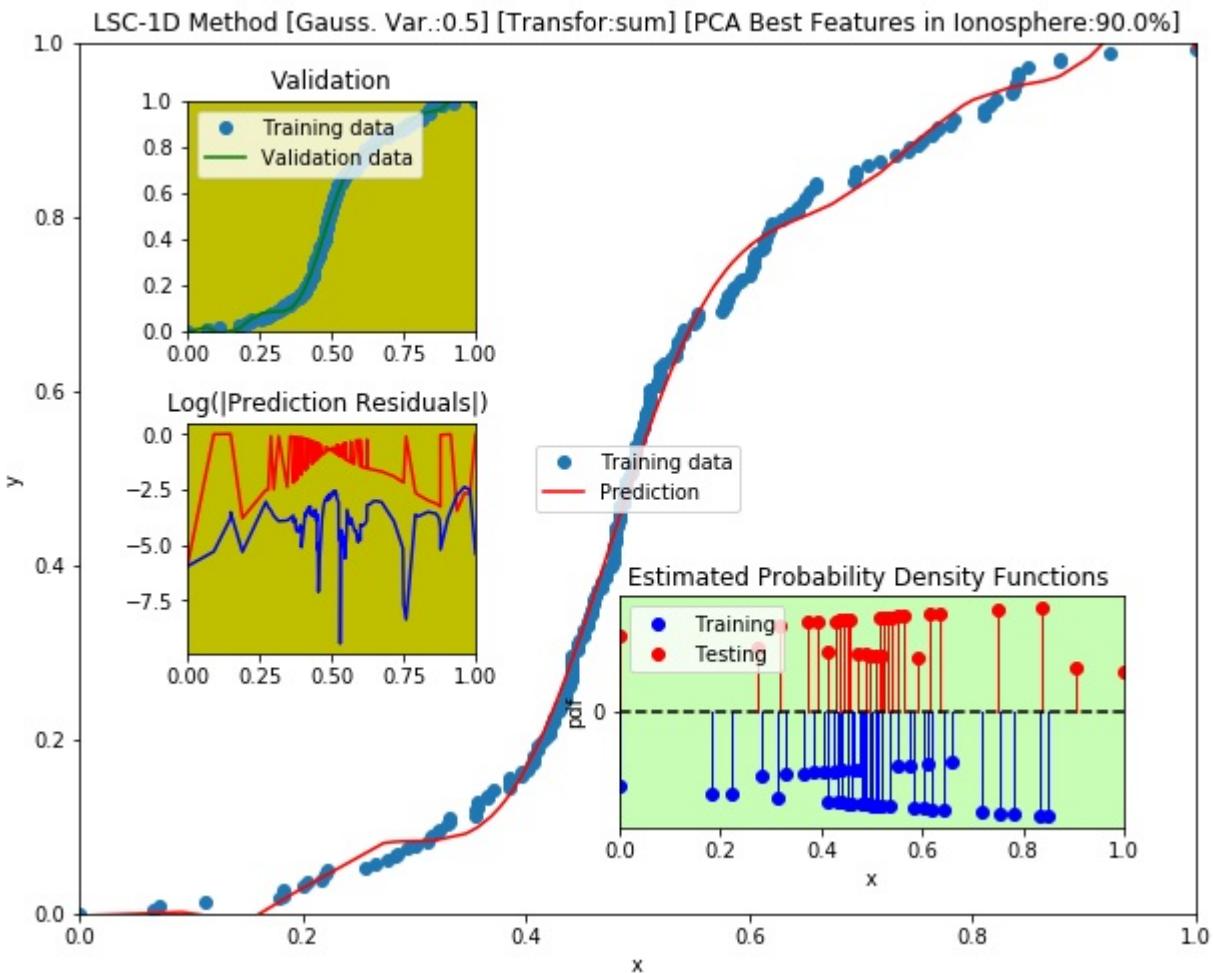
Prediction time/pt. (sec) : 0.0000288
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0057304

Prediction time/pt. (sec) : 0.0000406
```



Ionosphere Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0050278
    Initializing linear solver - done. Time (sec): 0.0052431
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0005956
    Solving linear system (col. 0) - done. Time (sec): 0.0008361
Training - done. Time (sec): 0.0131831

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0060940  
Prediction time/pt. (sec) : 0.0000290
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0035198  
Prediction time/pt. (sec) : 0.0000250
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0030980  
Prediction time/pt. (sec) : 0.0000220
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0030134  
Prediction time/pt. (sec) : 0.0000214
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0044591
Initializing linear solver - done. Time (sec): 0.0046973
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0004761
    Solving linear system (col. 0) - done. Time (sec): 0.0006917
Training - done. Time (sec): 0.0161610
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0027487

Prediction time/pt. (sec) : 0.0000195
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0046391

Prediction time/pt. (sec) : 0.0000221
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0033607

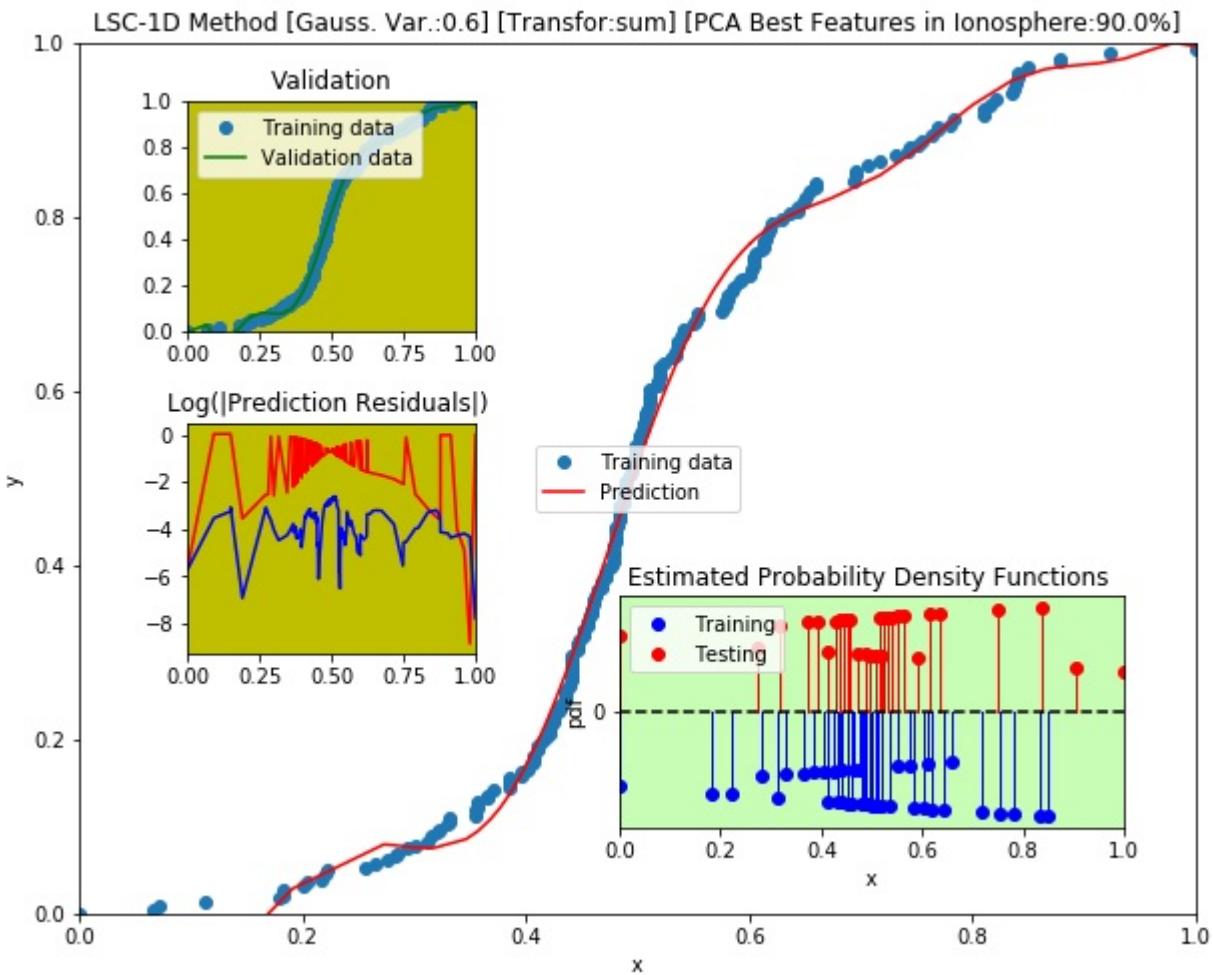
Prediction time/pt. (sec) : 0.0000238
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0034003

Prediction time/pt. (sec) : 0.0000241
```



Ionosphere Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027599
  Initializing linear solver - done. Time (sec): 0.0030401
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0005713
  Solving linear system (col. 0) - done. Time (sec): 0.0007360
Training - done. Time (sec): 0.0071721

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0050631  
Prediction time/pt. (sec) : 0.0000241
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011325  
Prediction time/pt. (sec) : 0.0000080
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0010991  
Prediction time/pt. (sec) : 0.0000078
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0082753  
Prediction time/pt. (sec) : 0.0000587
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0099673
Initializing linear solver - done. Time (sec): 0.0101900
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003202
    Solving linear system (col. 0) - done. Time (sec): 0.0004771
Training - done. Time (sec): 0.0134420
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0051260

Prediction time/pt. (sec) : 0.0000364
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0058236

Prediction time/pt. (sec) : 0.0000277
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011911

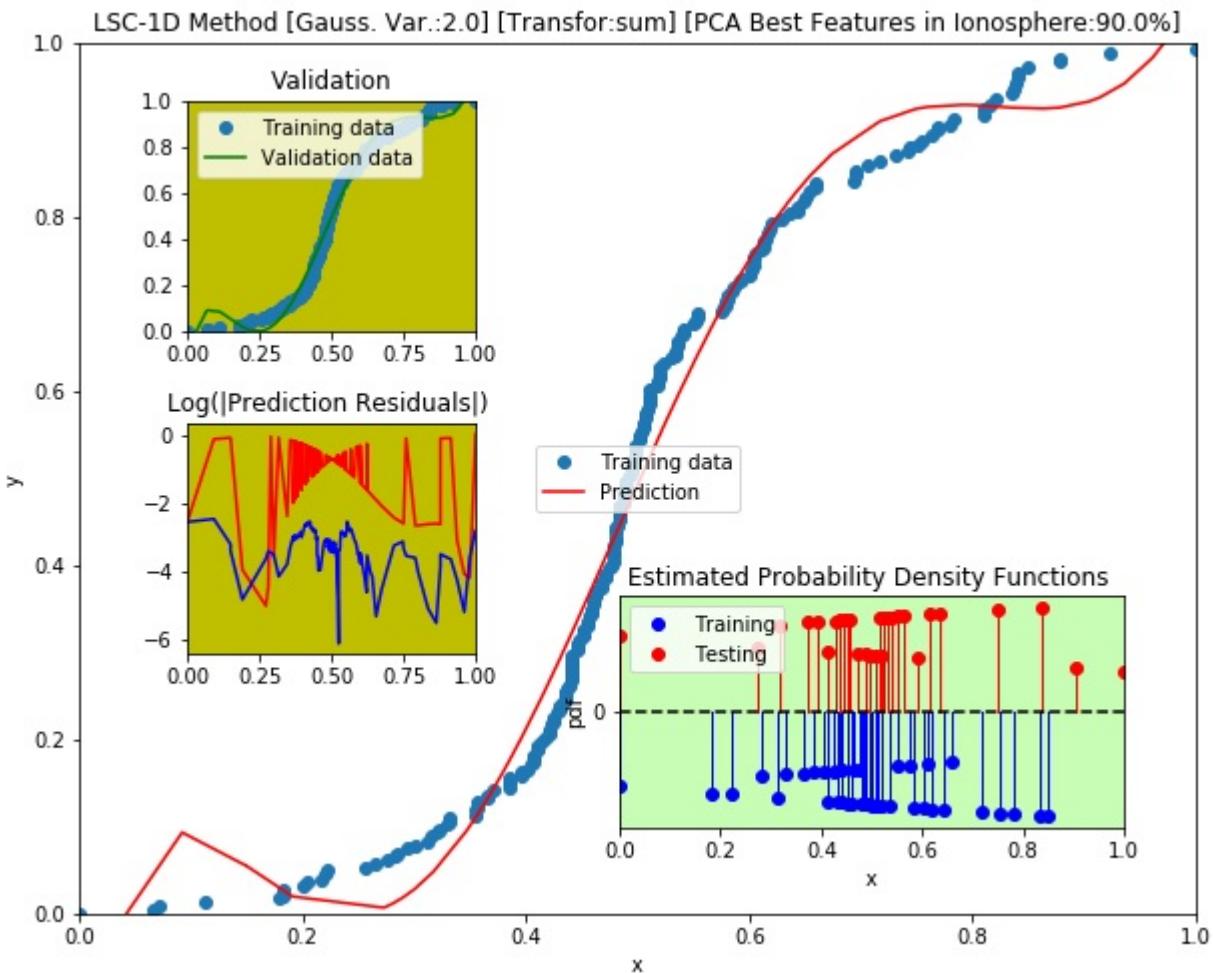
Prediction time/pt. (sec) : 0.0000084
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0063643

Prediction time/pt. (sec) : 0.0000451
```



Ionosphere Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (211 x 211 mtx) ...
        Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0025191
    Initializing linear solver - done. Time (sec): 0.0028036
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0005078
    Solving linear system (col. 0) - done. Time (sec): 0.0006964
Training - done. Time (sec): 0.0070171

```

Evaluation

```
# eval points. : 210  
  
Predicting ...  
Predicting - done. Time (sec): 0.0047760  
  
Prediction time/pt. (sec) : 0.0000227
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0011466  
  
Prediction time/pt. (sec) : 0.0000081
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0110998  
  
Prediction time/pt. (sec) : 0.0000787
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0011489  
  
Prediction time/pt. (sec) : 0.0000081
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0099323
Initializing linear solver - done. Time (sec): 0.0101390
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003235
    Solving linear system (col. 0) - done. Time (sec): 0.0005200
Training - done. Time (sec): 0.0154696
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0043838

Prediction time/pt. (sec) : 0.0000311
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0039768

Prediction time/pt. (sec) : 0.0000189
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0039077

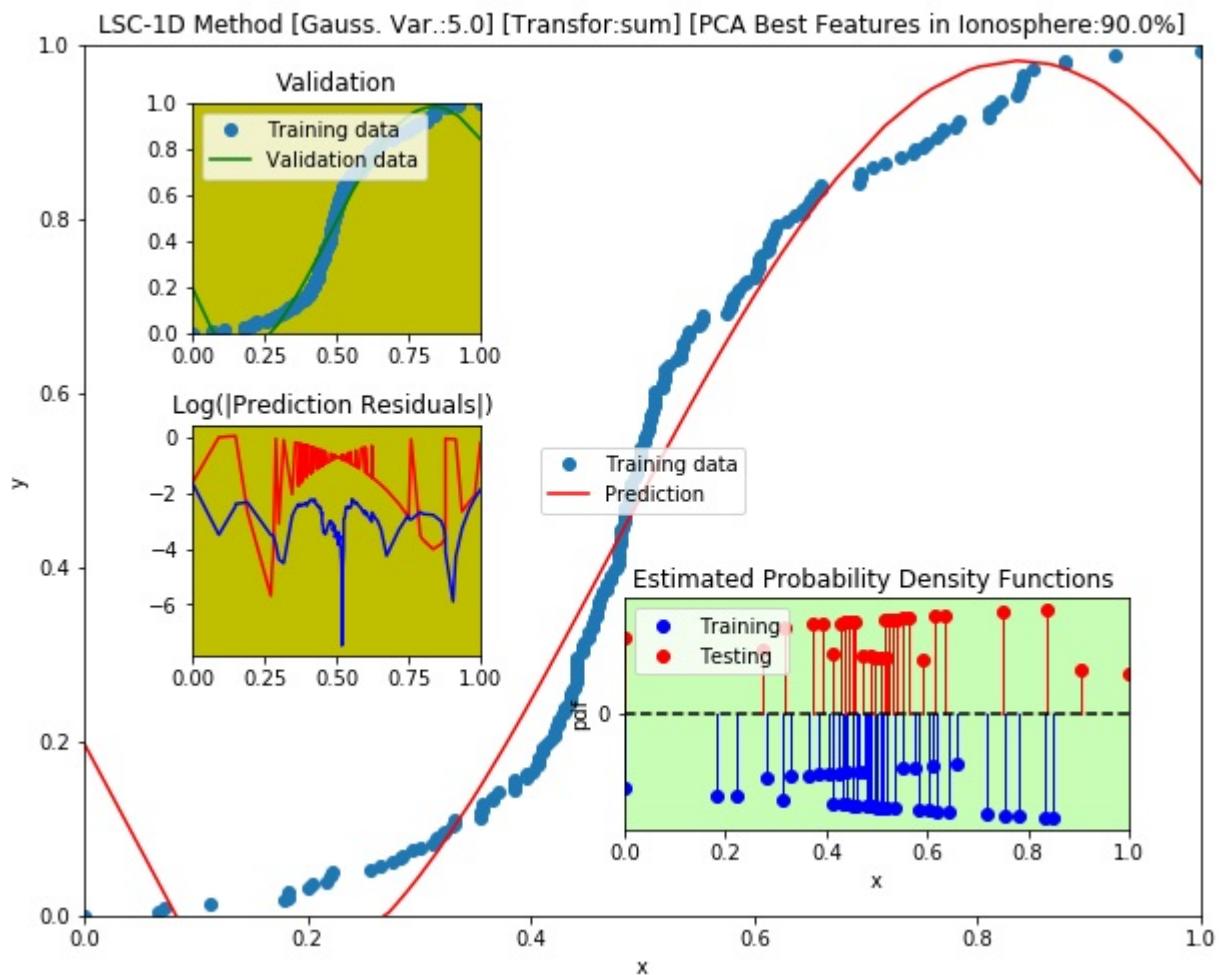
Prediction time/pt. (sec) : 0.0000277
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0027630

Prediction time/pt. (sec) : 0.0000196
```



Ionosphere Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: sum

COLLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0026348

Initializing linear solver - done. Time (sec): 0.0028977

Solving linear system (col. 0) ...

Back solving (211 x 211 mtx) ...

Back solving (211 x 211 mtx) - done

Solving linear system (col. 0) - done. Time (sec): 0.0004637

Training : done. Time (sec): 0.0072494

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0047991  
Prediction time/pt. (sec) : 0.0000229
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011649  
Prediction time/pt. (sec) : 0.0000083
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0010910  
Prediction time/pt. (sec) : 0.0000077
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011330  
Prediction time/pt. (sec) : 0.0000080
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0048914
Initializing linear solver - done. Time (sec): 0.0051279
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003304
    Solving linear system (col. 0) - done. Time (sec): 0.0004945
Training - done. Time (sec): 0.0167000
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0049648

Prediction time/pt. (sec) : 0.0000352
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0067899

Prediction time/pt. (sec) : 0.0000323
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011320

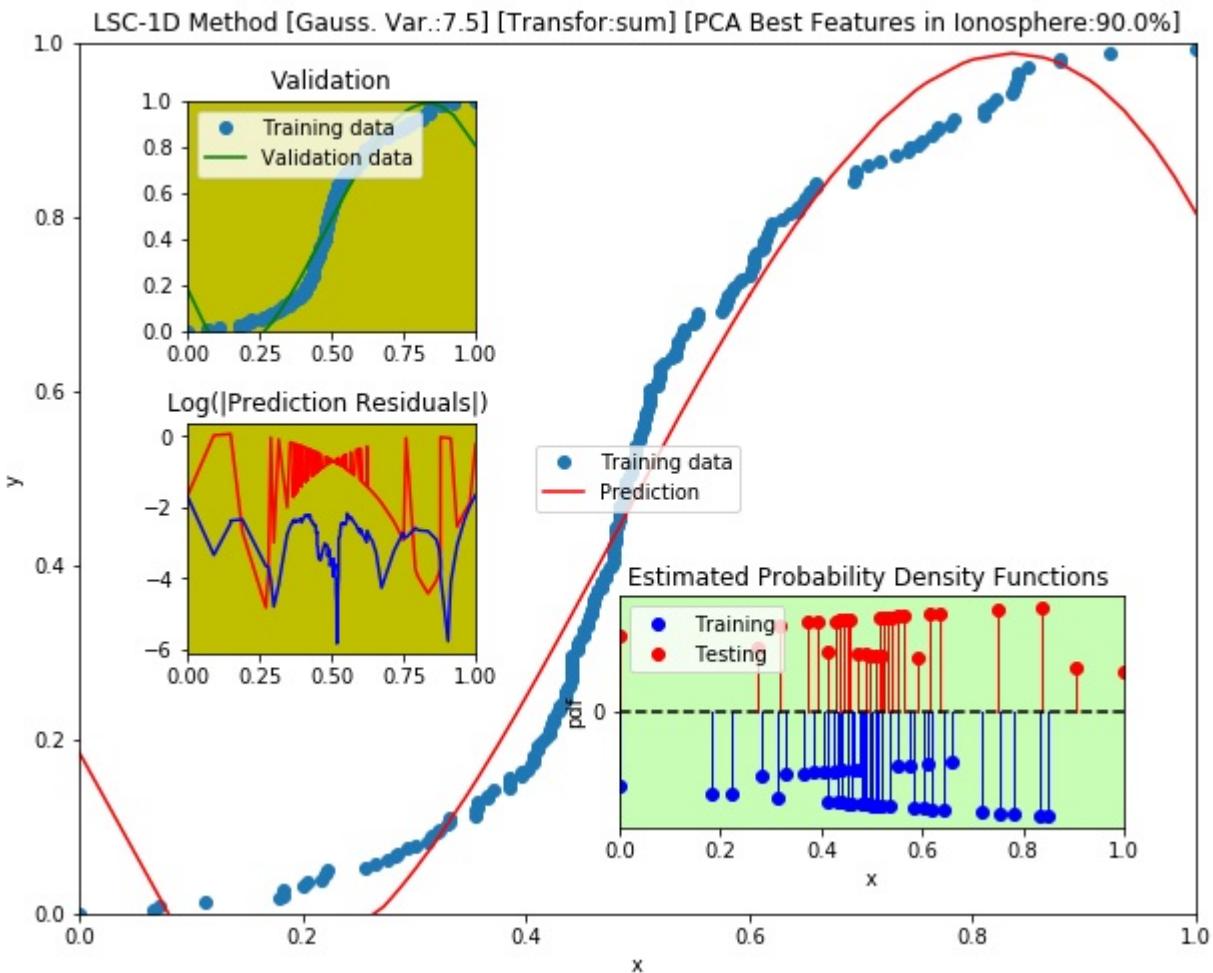
Prediction time/pt. (sec) : 0.0000080
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0078096

Prediction time/pt. (sec) : 0.0000554
```



Ionosphere Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0026999
  Initializing linear solver - done. Time (sec): 0.0029988
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0005338
  Solving linear system (col. 0) - done. Time (sec): 0.0007110
Training - done. Time (sec): 0.0070901

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0048146  
Prediction time/pt. (sec) : 0.0000229
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011177  
Prediction time/pt. (sec) : 0.0000079
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0010819  
Prediction time/pt. (sec) : 0.0000077
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0046222  
Prediction time/pt. (sec) : 0.0000328
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0100243
Initializing linear solver - done. Time (sec): 0.0102520
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003183
    Solving linear system (col. 0) - done. Time (sec): 0.0004714
Training - done. Time (sec): 0.0134311
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0012050

Prediction time/pt. (sec) : 0.0000085
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0101550

Prediction time/pt. (sec) : 0.0000484
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011773

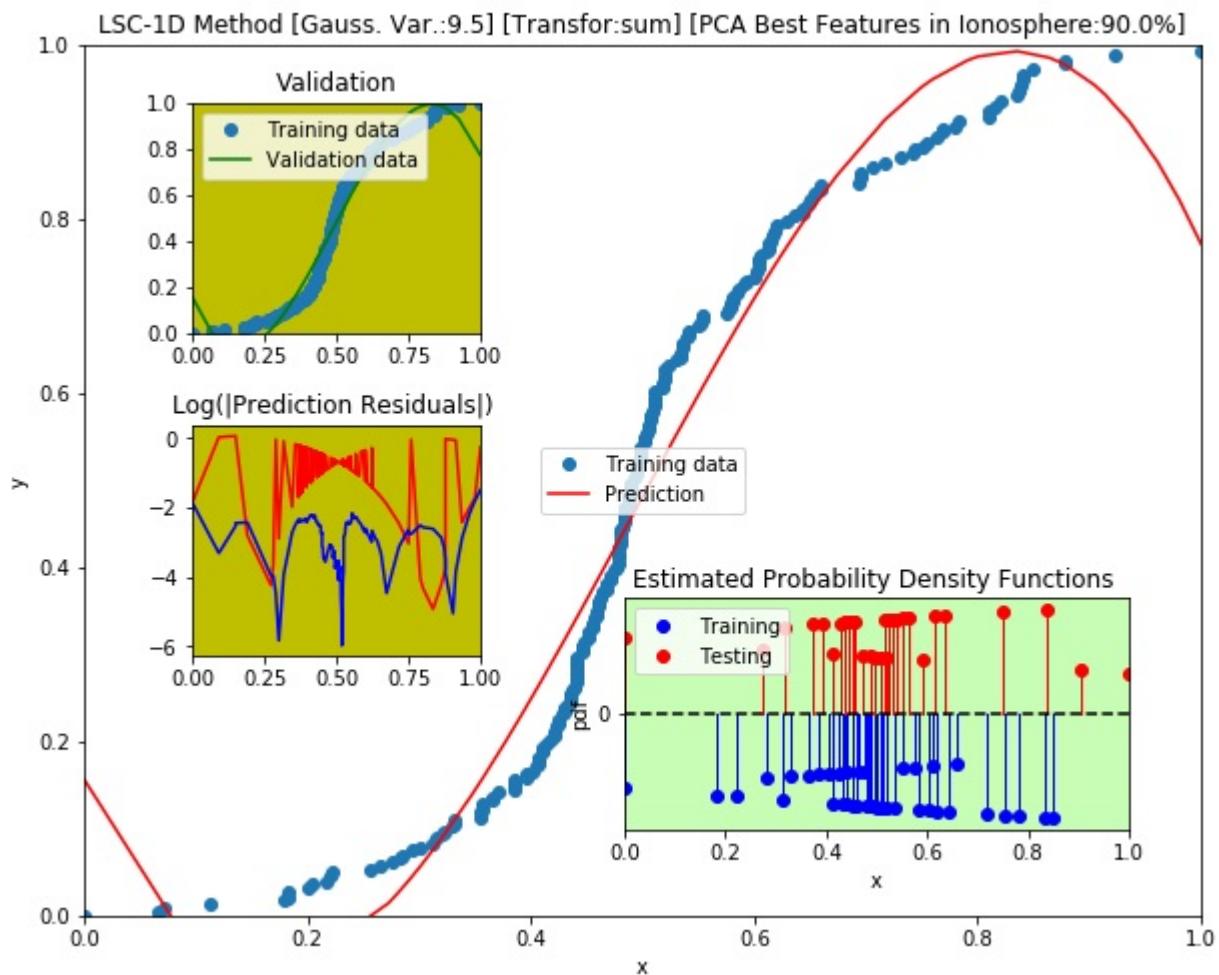
Prediction time/pt. (sec) : 0.0000083
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0063024

Prediction time/pt. (sec) : 0.0000447
```



Ionosphere Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: sum

COLLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0028288

Initializing linear solver - done. Time (sec): 0.0030944

Solving linear system (col. 0) ...

Back solving (211 x 211 mtx) ...

Back solving (211 x 211 mtx) - done. Time (sec): 0.0005391

Solving linear system (col. 0) - done. Time (sec): 0.0007143

Training - done. Time (sec): 0.0074525

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0049479  
Prediction time/pt. (sec) : 0.0000236
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011668  
Prediction time/pt. (sec) : 0.0000083
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011976  
Prediction time/pt. (sec) : 0.0000085
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0071027  
Prediction time/pt. (sec) : 0.0000504
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0107358
Initializing linear solver - done. Time (sec): 0.0109479
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0005474
    Solving linear system (col. 0) - done. Time (sec): 0.0007405
Training - done. Time (sec): 0.0154834
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0024681

Prediction time/pt. (sec) : 0.0000175
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0055523

Prediction time/pt. (sec) : 0.0000264
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0028334

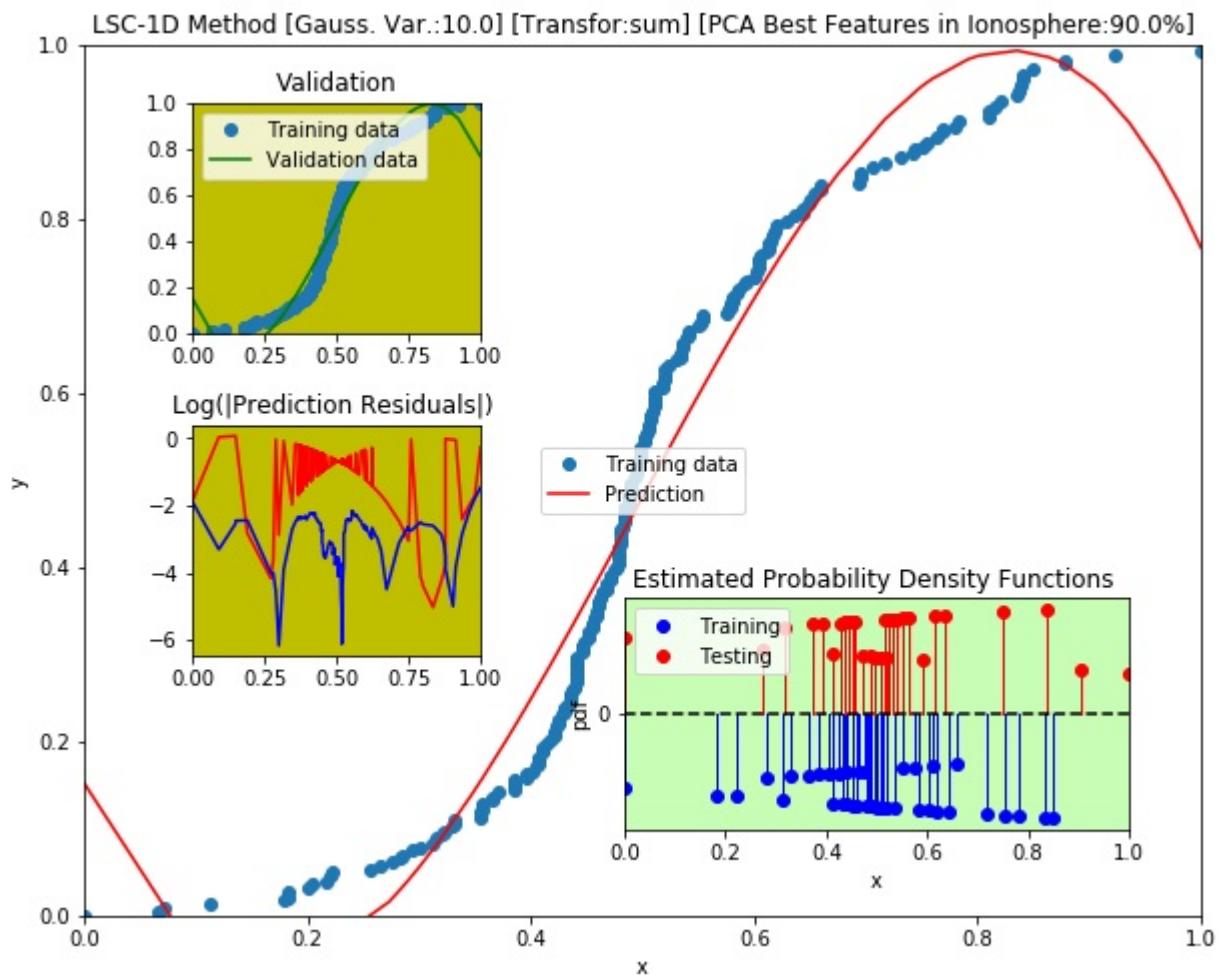
Prediction time/pt. (sec) : 0.0000201
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0032465

Prediction time/pt. (sec) : 0.0000230
```



Ionosphere Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0036323

Initializing linear solver - done. Time (sec): 0.0039282

Solving linear system (col. 0) ...

Back solving (211×211 mtx) ...

Back solving (211 x 211 mtx) - done

Solving linear system (col. 0) - done. Time (sec): 0.0005624

Solving linear system (cut: 0) - done
joining - done. Time (sec): 0.0130398

Waiting - done. Time (sec): 0.0130398

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0067735  
Prediction time/pt. (sec) : 0.0000323
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0031543  
Prediction time/pt. (sec) : 0.0000224
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0030499  
Prediction time/pt. (sec) : 0.0000216
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0031707  
Prediction time/pt. (sec) : 0.0000225
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0061145
Initializing linear solver - done. Time (sec): 0.0063920
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0013177
    Solving linear system (col. 0) - done. Time (sec): 0.0016177
Training - done. Time (sec): 0.0162284
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0036826

Prediction time/pt. (sec) : 0.0000261
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0054820

Prediction time/pt. (sec) : 0.0000261
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0039818

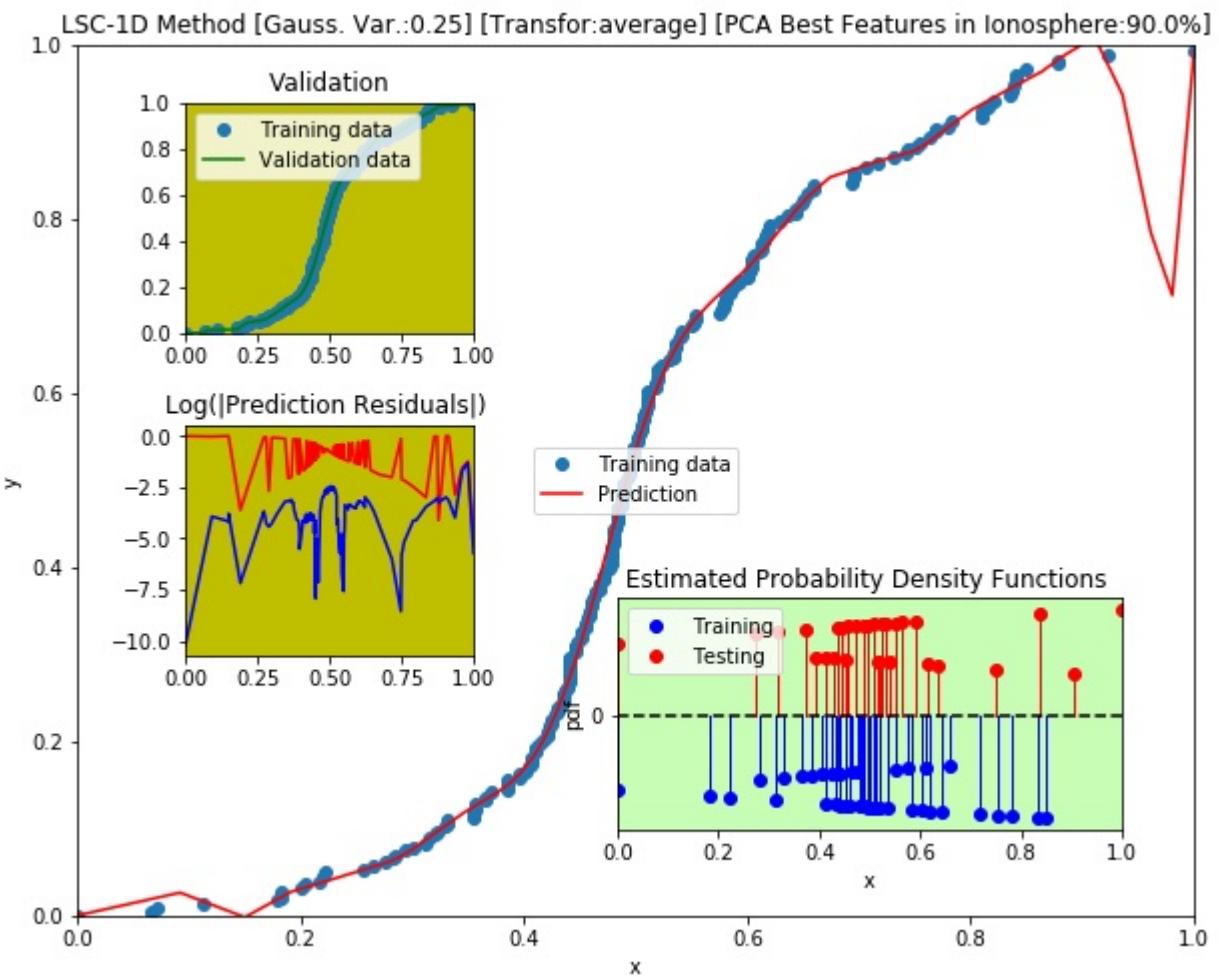
Prediction time/pt. (sec) : 0.0000282
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0032794

Prediction time/pt. (sec) : 0.0000233
```



Ionosphere Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0035076
  Initializing linear solver - done. Time (sec): 0.0038254
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003667
  Solving linear system (col. 0) - done. Time (sec): 0.0005686
Training - done. Time (sec): 0.0136912

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0067599  
Prediction time/pt. (sec) : 0.0000322
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0013466  
Prediction time/pt. (sec) : 0.0000096
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0012691  
Prediction time/pt. (sec) : 0.0000090
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0012870  
Prediction time/pt. (sec) : 0.0000091
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0067279
Initializing linear solver - done. Time (sec): 0.0069332
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0005236
    Solving linear system (col. 0) - done. Time (sec): 0.0006969
Training - done. Time (sec): 0.0208967
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0100684

Prediction time/pt. (sec) : 0.0000714
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0021317

Prediction time/pt. (sec) : 0.0000102
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0087967

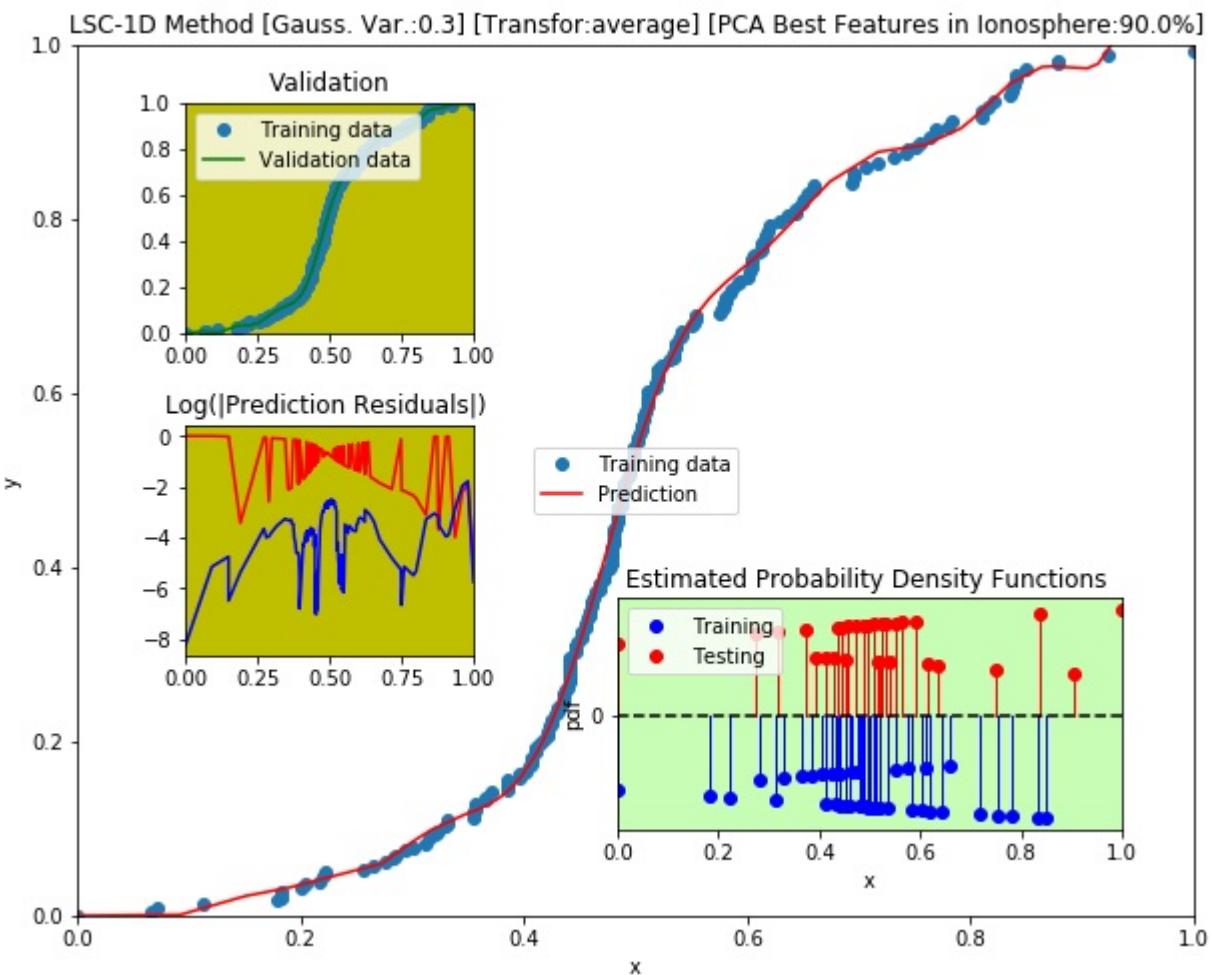
Prediction time/pt. (sec) : 0.0000624
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0093522

Prediction time/pt. (sec) : 0.0000663
```



Ionosphere Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0035541

Initializing linear solver - done. Time (sec): 0.0038433

Solving linear system (col. 0) ...

Back solving (211 x 211 mtx) ...

Back solving (211 x 211 mtx) - done. Time (sec): 0.0003676

Solving linear system (col. 0) - done. Time (sec): 0.0006082

Training - done. Time (sec): 0.0135808

Evaluation

```
# eval points. : 210  
  
Predicting ...  
Predicting - done. Time (sec): 0.0027740  
  
Prediction time/pt. (sec) : 0.0000132
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0097415  
  
Prediction time/pt. (sec) : 0.0000691
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0037136  
  
Prediction time/pt. (sec) : 0.0000263
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0013335  
  
Prediction time/pt. (sec) : 0.0000095
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0023351
Initializing linear solver - done. Time (sec): 0.0025837
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003159
    Solving linear system (col. 0) - done. Time (sec): 0.0004752
Training - done. Time (sec): 0.0142446
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0056050

Prediction time/pt. (sec) : 0.0000398
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0056043

Prediction time/pt. (sec) : 0.0000267
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0046639

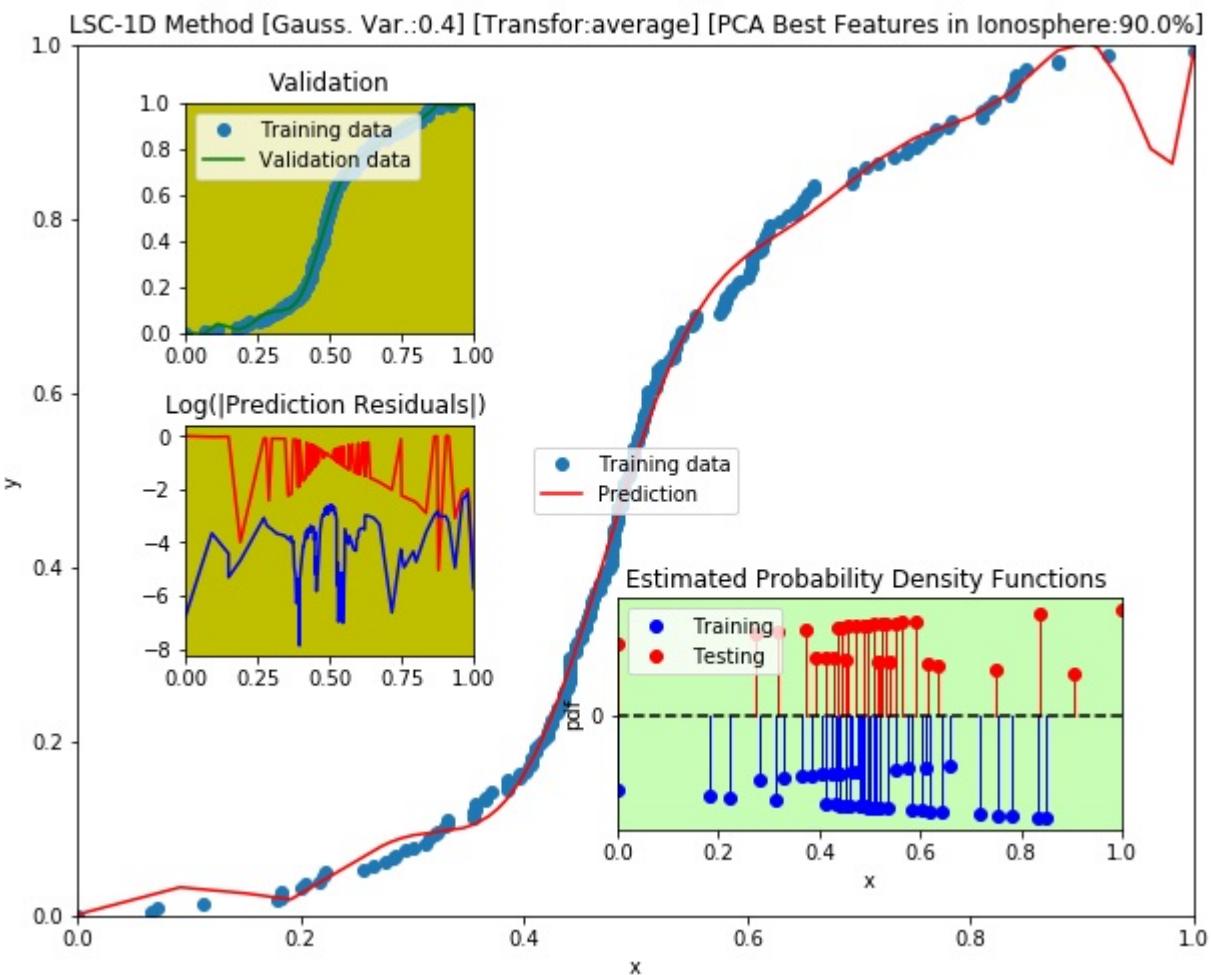
Prediction time/pt. (sec) : 0.0000331
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0041599

Prediction time/pt. (sec) : 0.0000295
```



Ionosphere Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027528
  Initializing linear solver - done. Time (sec): 0.0030568
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003116
  Solving linear system (col. 0) - done. Time (sec): 0.0004590
Training - done. Time (sec): 0.0069263

```

Evaluation

```
# eval points. : 210  
  
Predicting ...  
Predicting - done. Time (sec): 0.0069540  
  
Prediction time/pt. (sec) : 0.0000331
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0085456  
  
Prediction time/pt. (sec) : 0.0000606
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0012567  
  
Prediction time/pt. (sec) : 0.0000089
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0056803  
  
Prediction time/pt. (sec) : 0.0000403
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0072415
Initializing linear solver - done. Time (sec): 0.0074966
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003476
    Solving linear system (col. 0) - done. Time (sec): 0.0005076
Training - done. Time (sec): 0.0112090
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0046527

Prediction time/pt. (sec) : 0.0000330
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0047431

Prediction time/pt. (sec) : 0.0000226
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0013218

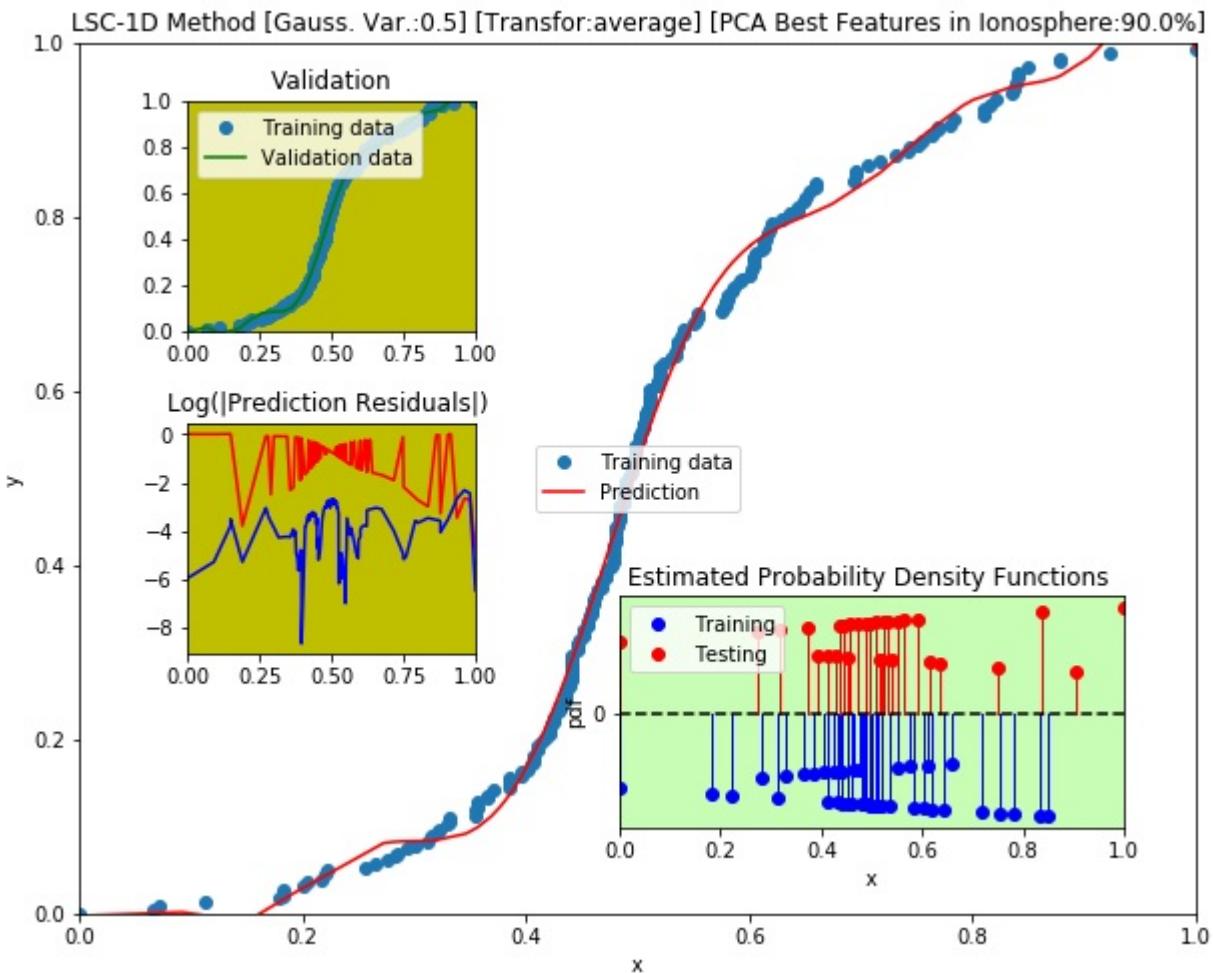
Prediction time/pt. (sec) : 0.0000094
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0030427

Prediction time/pt. (sec) : 0.0000216
```



Ionosphere Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027480
  Initializing linear solver - done. Time (sec): 0.0030124
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003099
  Solving linear system (col. 0) - done. Time (sec): 0.0004594
Training - done. Time (sec): 0.0072987

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0051942  
Prediction time/pt. (sec) : 0.0000247
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0013630  
Prediction time/pt. (sec) : 0.0000097
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0013640  
Prediction time/pt. (sec) : 0.0000097
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0020559  
Prediction time/pt. (sec) : 0.0000146
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0085680
Initializing linear solver - done. Time (sec): 0.0087786
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0005376
    Solving linear system (col. 0) - done. Time (sec): 0.0007296
Training - done. Time (sec): 0.0240638
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0035796

Prediction time/pt. (sec) : 0.0000254
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0021732

Prediction time/pt. (sec) : 0.0000103
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0035088

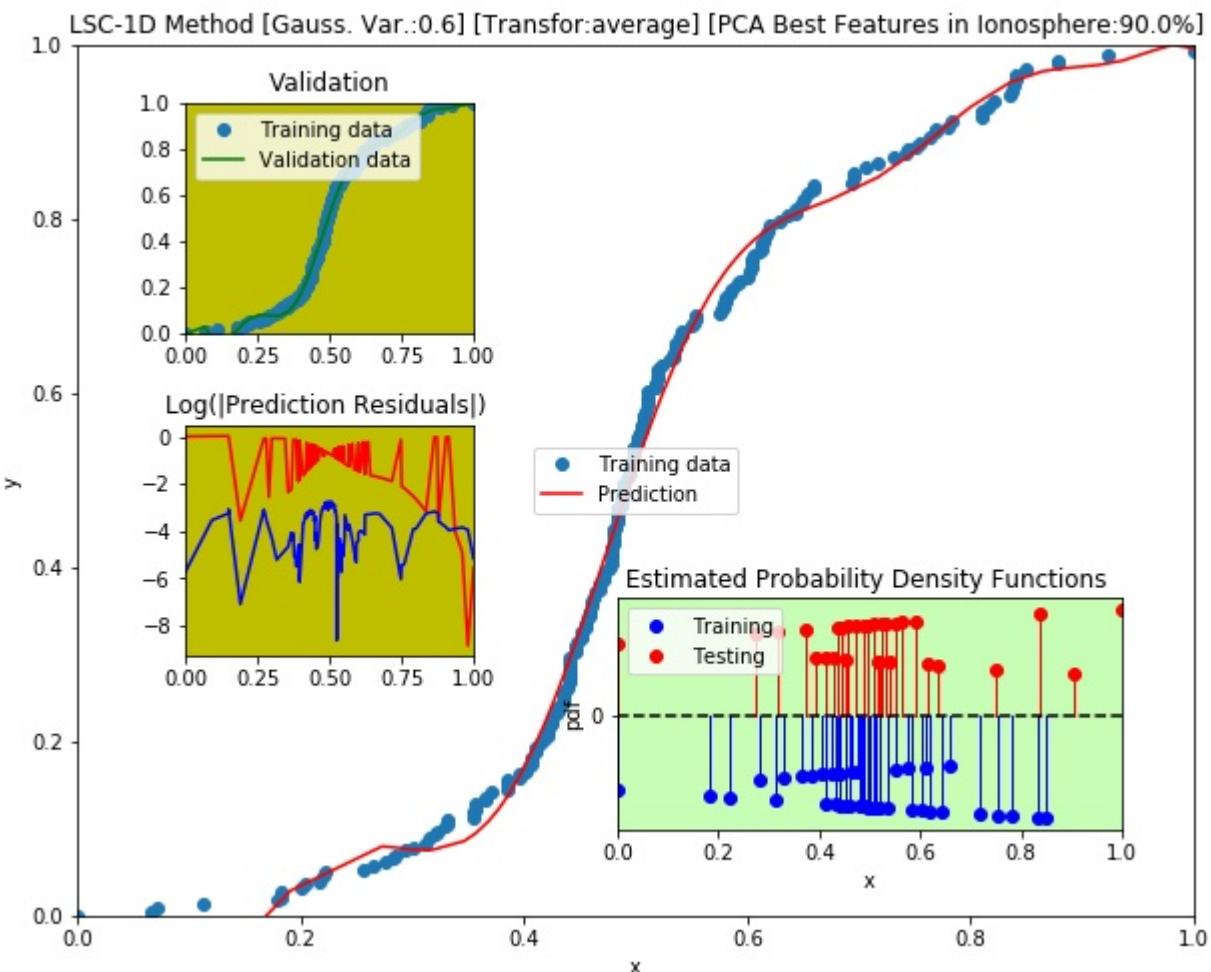
Prediction time/pt. (sec) : 0.0000249
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0034828

Prediction time/pt. (sec) : 0.0000247
```



Ionosphere Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0026348

Initializing linear solver - done. Time (sec): 0.0029926

Solving linear system (col. 0) ...

Back solving (211 x 211 mtx) ...

Back solving (211 x 211 mtx) - done. Time (sec): 0.0005205

Solving linear system (col. 0) - done. Time (sec): 0.0007133

Training - done. Time (sec): 0.0073249

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0060668  
Prediction time/pt. (sec) : 0.0000289
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0037746  
Prediction time/pt. (sec) : 0.0000268
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011210  
Prediction time/pt. (sec) : 0.0000080
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0010993  
Prediction time/pt. (sec) : 0.0000078
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0051727
Initializing linear solver - done. Time (sec): 0.0053818
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003195
    Solving linear system (col. 0) - done. Time (sec): 0.0004766
Training - done. Time (sec): 0.0165040
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0044415

Prediction time/pt. (sec) : 0.0000315
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0078411

Prediction time/pt. (sec) : 0.0000373
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011404

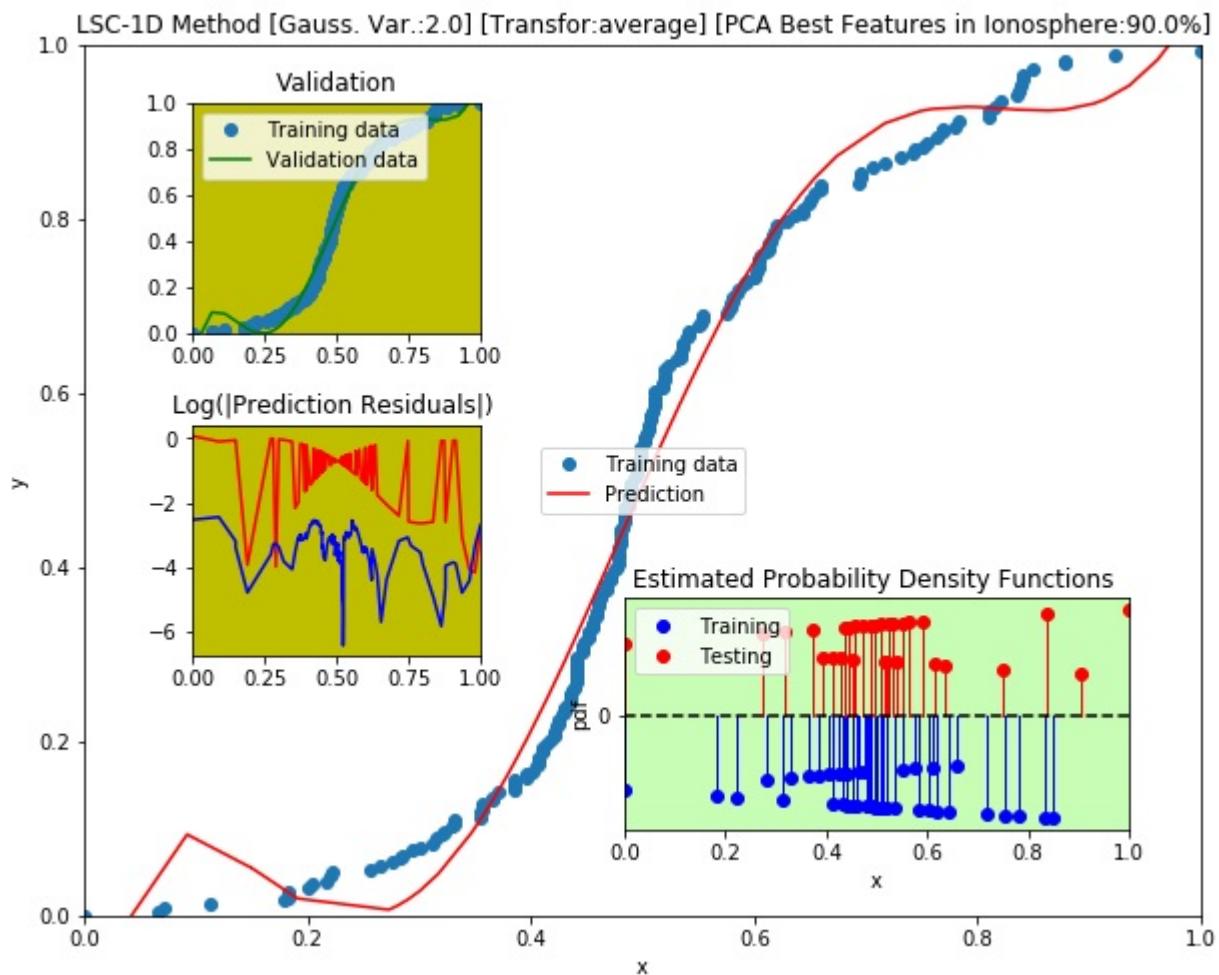
Prediction time/pt. (sec) : 0.0000081
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011597

Prediction time/pt. (sec) : 0.0000082
```



Ionosphere Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0026791

Initializing linear solver - done. Time (sec): 0.0029402

Solving linear system (col. 0) ...

Back solving (211 x 211 mtx) ...

Back solving (211 x 211 mtx) - done

Solving linear system (col. 0) - done. Time (sec): 0.0004904

Training : done. Time (sec): 0.006804

Evaluation

```
# eval points. : 210  
  
Predicting ...  
Predicting - done. Time (sec): 0.0071583  
  
Prediction time/pt. (sec) : 0.0000341
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0011272  
  
Prediction time/pt. (sec) : 0.0000080
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0102284  
  
Prediction time/pt. (sec) : 0.0000725
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0033906  
  
Prediction time/pt. (sec) : 0.0000240
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0079100
Initializing linear solver - done. Time (sec): 0.0081196
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003724
    Solving linear system (col. 0) - done. Time (sec): 0.0005355
Training - done. Time (sec): 0.0113840
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0061276

Prediction time/pt. (sec) : 0.0000435
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0042341

Prediction time/pt. (sec) : 0.0000202
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0037961

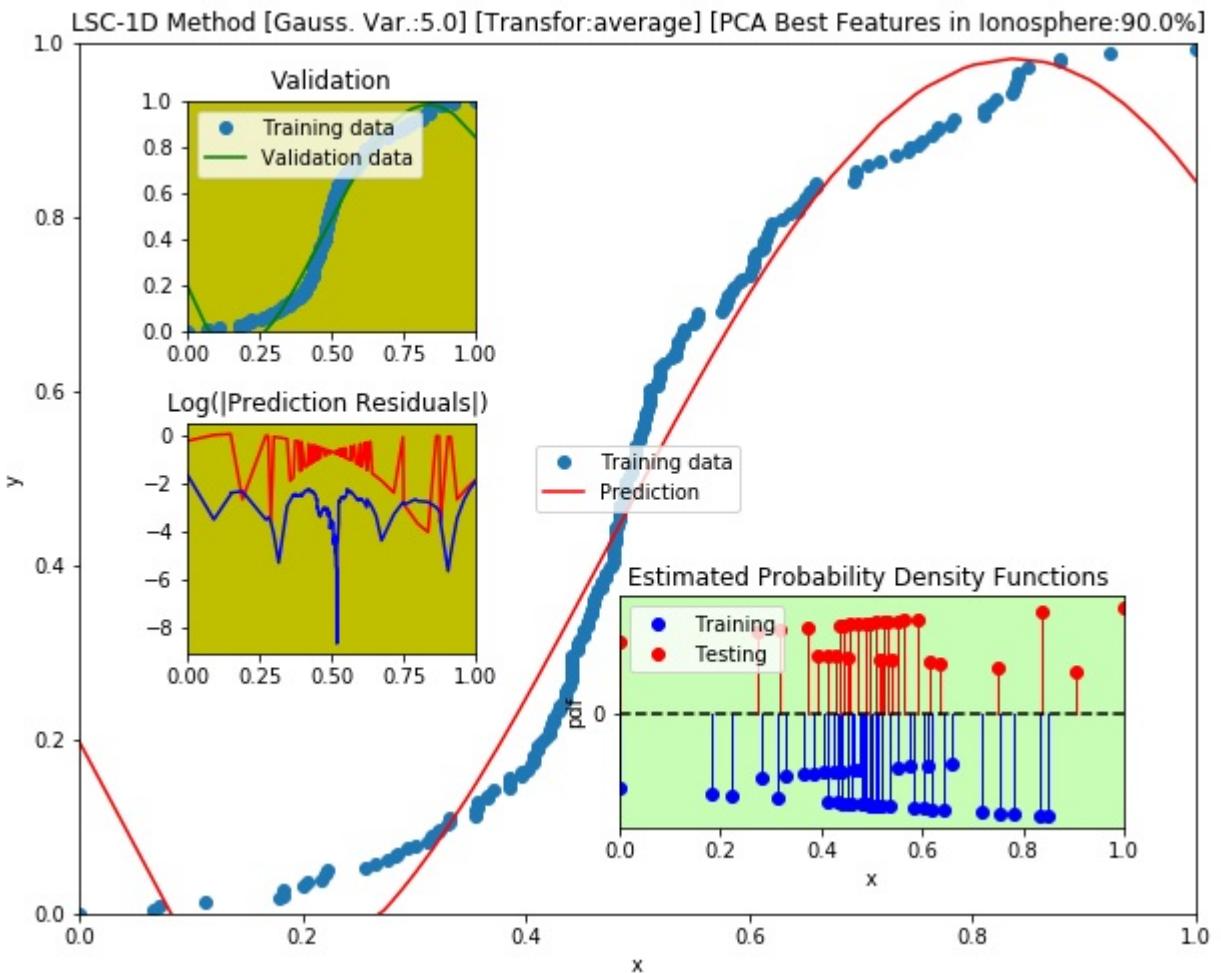
Prediction time/pt. (sec) : 0.0000269
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011997

Prediction time/pt. (sec) : 0.0000085
```



Ionosphere Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0028596
  Initializing linear solver - done. Time (sec): 0.0031350
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003059
  Solving linear system (col. 0) - done. Time (sec): 0.0004566
Training - done. Time (sec): 0.0069847

```

Evaluation

```
# eval points. : 210  
  
Predicting ...  
Predicting - done. Time (sec): 0.0048225  
  
Prediction time/pt. (sec) : 0.0000230
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0011549  
  
Prediction time/pt. (sec) : 0.0000082
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0011008  
  
Prediction time/pt. (sec) : 0.0000078
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0091531  
  
Prediction time/pt. (sec) : 0.0000649
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0113449
Initializing linear solver - done. Time (sec): 0.0115597
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003390
    Solving linear system (col. 0) - done. Time (sec): 0.0005608
Training - done. Time (sec): 0.0149717
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011785

Prediction time/pt. (sec) : 0.0000084
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0076811

Prediction time/pt. (sec) : 0.0000366
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011792

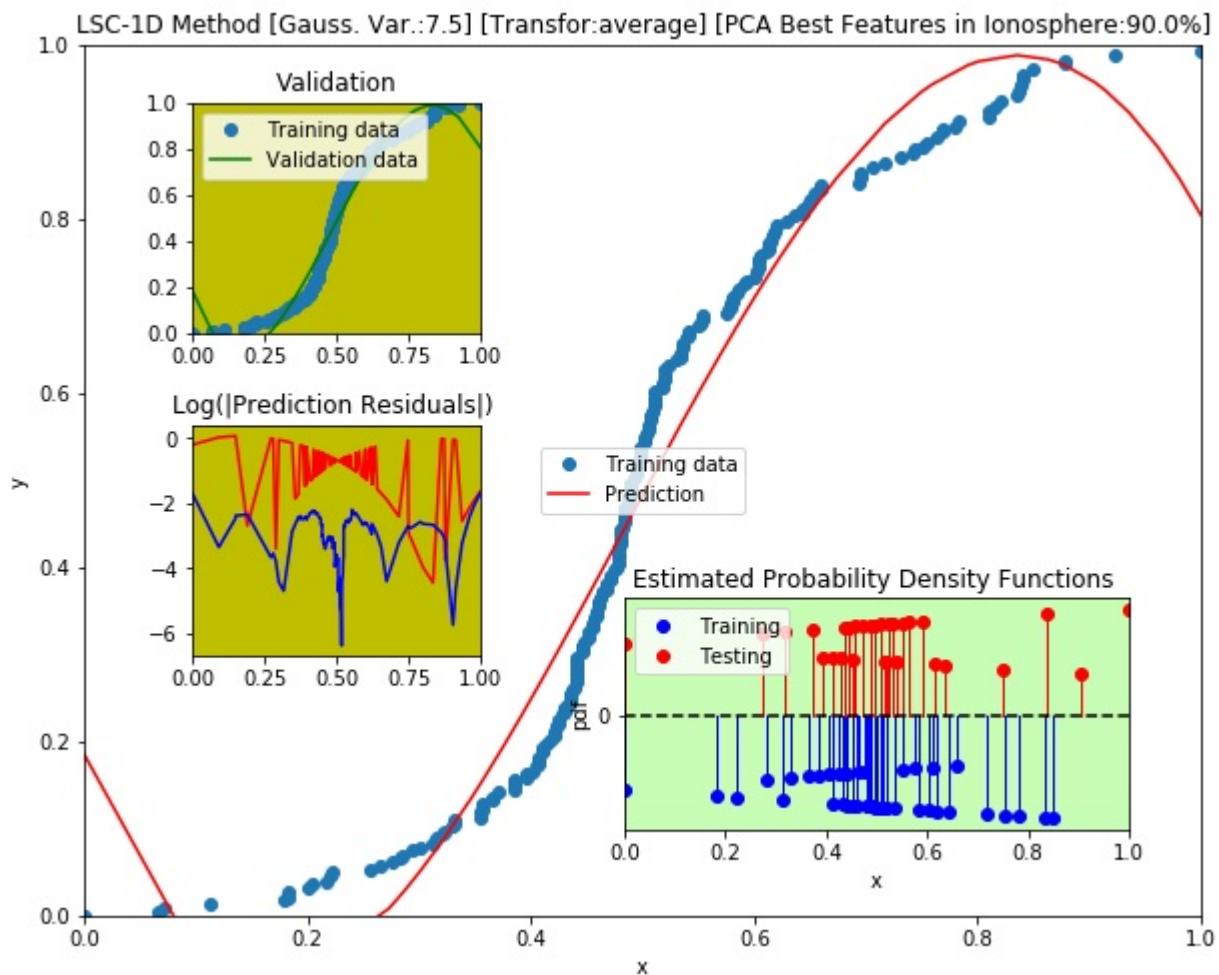
Prediction time/pt. (sec) : 0.0000084
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0046957

Prediction time/pt. (sec) : 0.0000333
```



Ionosphere Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0028634

Initializing linear solver - done. Time (sec): 0.0031447

Solving linear system (col. 0) ...

Back solving (211 x 211 mtx) ...

Back solving (211 x 211 mtx) - do

Solving linear system (col. 0) - done. Time (sec): 0.00097312

Training : done. Time (sec): 0.0074203

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0047557  
Prediction time/pt. (sec) : 0.0000226
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0036402  
Prediction time/pt. (sec) : 0.0000258
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011215  
Prediction time/pt. (sec) : 0.0000080
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0080354  
Prediction time/pt. (sec) : 0.0000570
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0097239
Initializing linear solver - done. Time (sec): 0.0100226
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003364
    Solving linear system (col. 0) - done. Time (sec): 0.0004950
Training - done. Time (sec): 0.0134585
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0043781

Prediction time/pt. (sec) : 0.0000311
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0016179

Prediction time/pt. (sec) : 0.0000077
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0064373

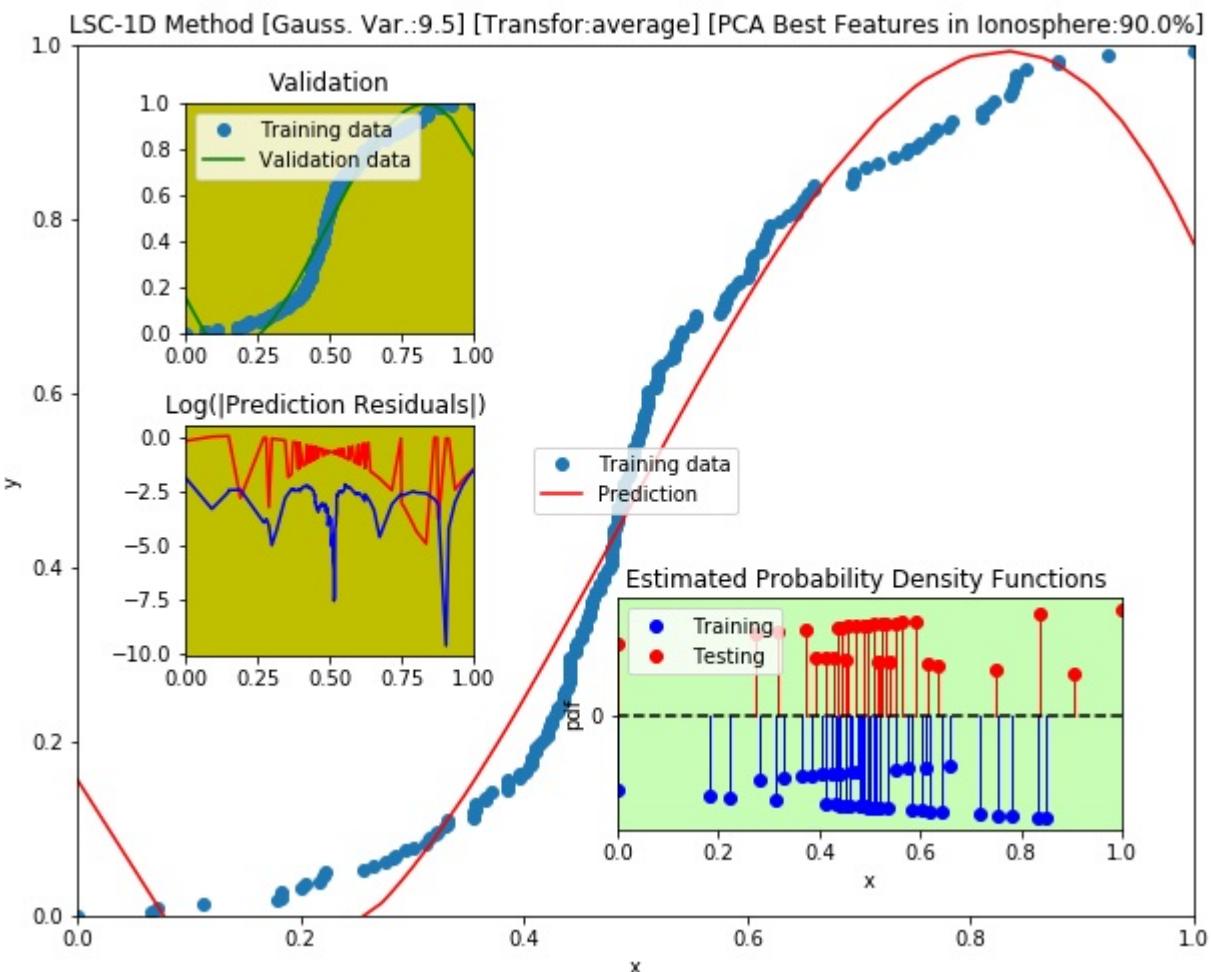
Prediction time/pt. (sec) : 0.0000457
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0037894

Prediction time/pt. (sec) : 0.0000269
```



Ionosphere Dataset

Parameters: PCA: 90.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0070877
  Initializing linear solver - done. Time (sec): 0.0078051
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003881
  Solving linear system (col. 0) - done. Time (sec): 0.0005984
Training - done. Time (sec): 0.0162971

```

Evaluation

```
# eval points. : 210  
  
Predicting ...  
Predicting - done. Time (sec): 0.0092907  
  
Prediction time/pt. (sec) : 0.0000442
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0033779  
  
Prediction time/pt. (sec) : 0.0000240
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0066295  
  
Prediction time/pt. (sec) : 0.0000470
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0050149  
  
Prediction time/pt. (sec) : 0.0000356
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0123751
Initializing linear solver - done. Time (sec): 0.0126319
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003200
    Solving linear system (col. 0) - done. Time (sec): 0.0004737
Training - done. Time (sec): 0.0157909
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0074239

Prediction time/pt. (sec) : 0.0000527
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0075550

Prediction time/pt. (sec) : 0.0000360
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0065689

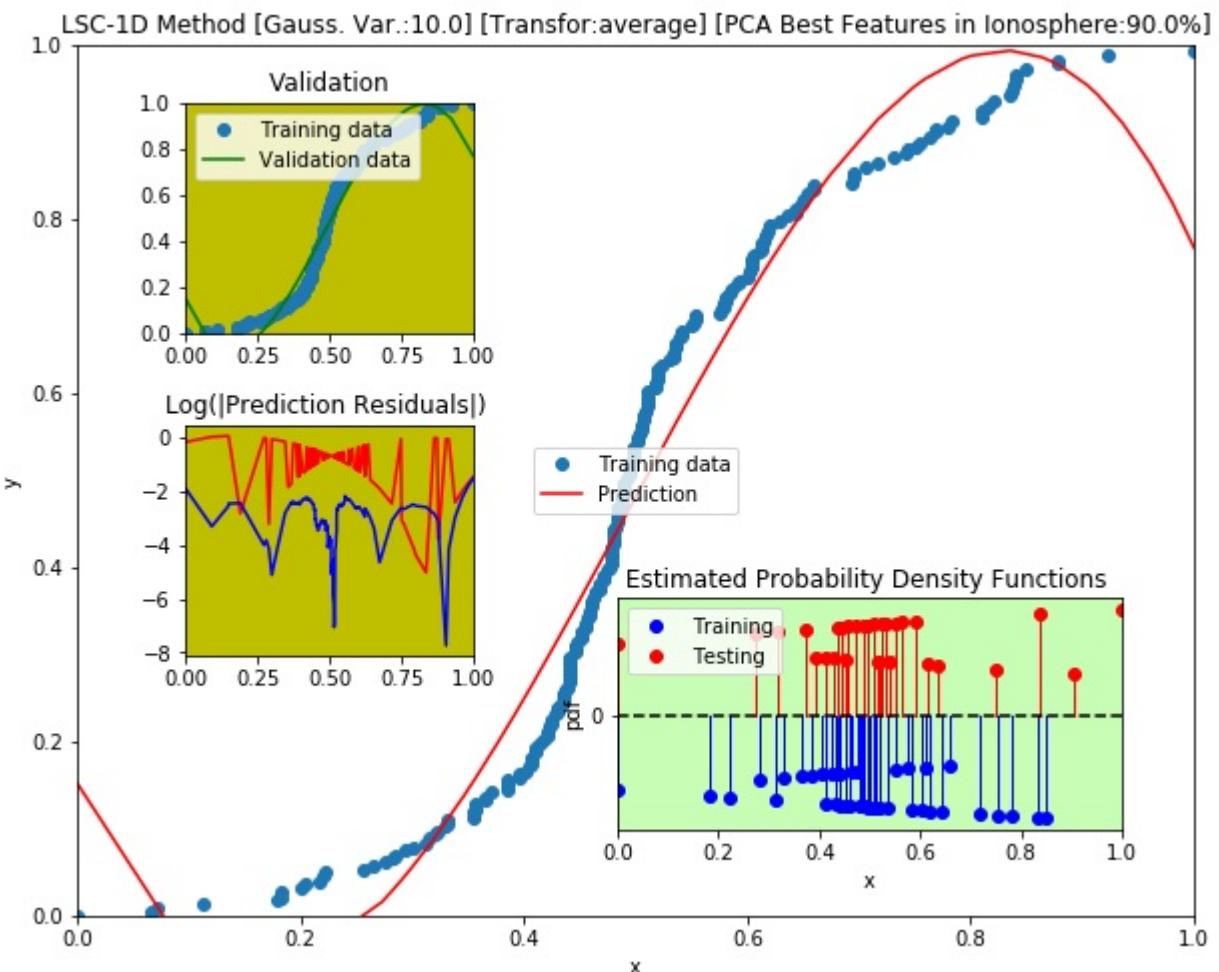
Prediction time/pt. (sec) : 0.0000466
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0022807

Prediction time/pt. (sec) : 0.0000162
```



RBF

Problem size

training points. : 210

Training

Training ...
 Initializing linear solver ...
 Performing LU fact. (211 x 211 mtx) ...
 Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0158644
 Initializing linear solver - done. Time (sec): 0.0161581
 Solving linear system (col. 0) ...
 Back solving (211 x 211 mtx) ...
 Back solving (211 x 211 mtx) - done. Time (sec): 0.0012219
 Solving linear system (col. 0) - done. Time (sec): 0.0014198
 Training - done. Time (sec): 0.0246592

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0040321  
Prediction time/pt. (sec) : 0.0000192
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0040090  
Prediction time/pt. (sec) : 0.0000284
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0040150  
Prediction time/pt. (sec) : 0.0000285
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0040190  
Prediction time/pt. (sec) : 0.0000285
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0071292
Initializing linear solver - done. Time (sec): 0.0074143
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0012443
    Solving linear system (col. 0) - done. Time (sec): 0.0014529
Training - done. Time (sec): 0.0162206
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0036712

Prediction time/pt. (sec) : 0.0000260
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0050077

Prediction time/pt. (sec) : 0.0000238
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0045621

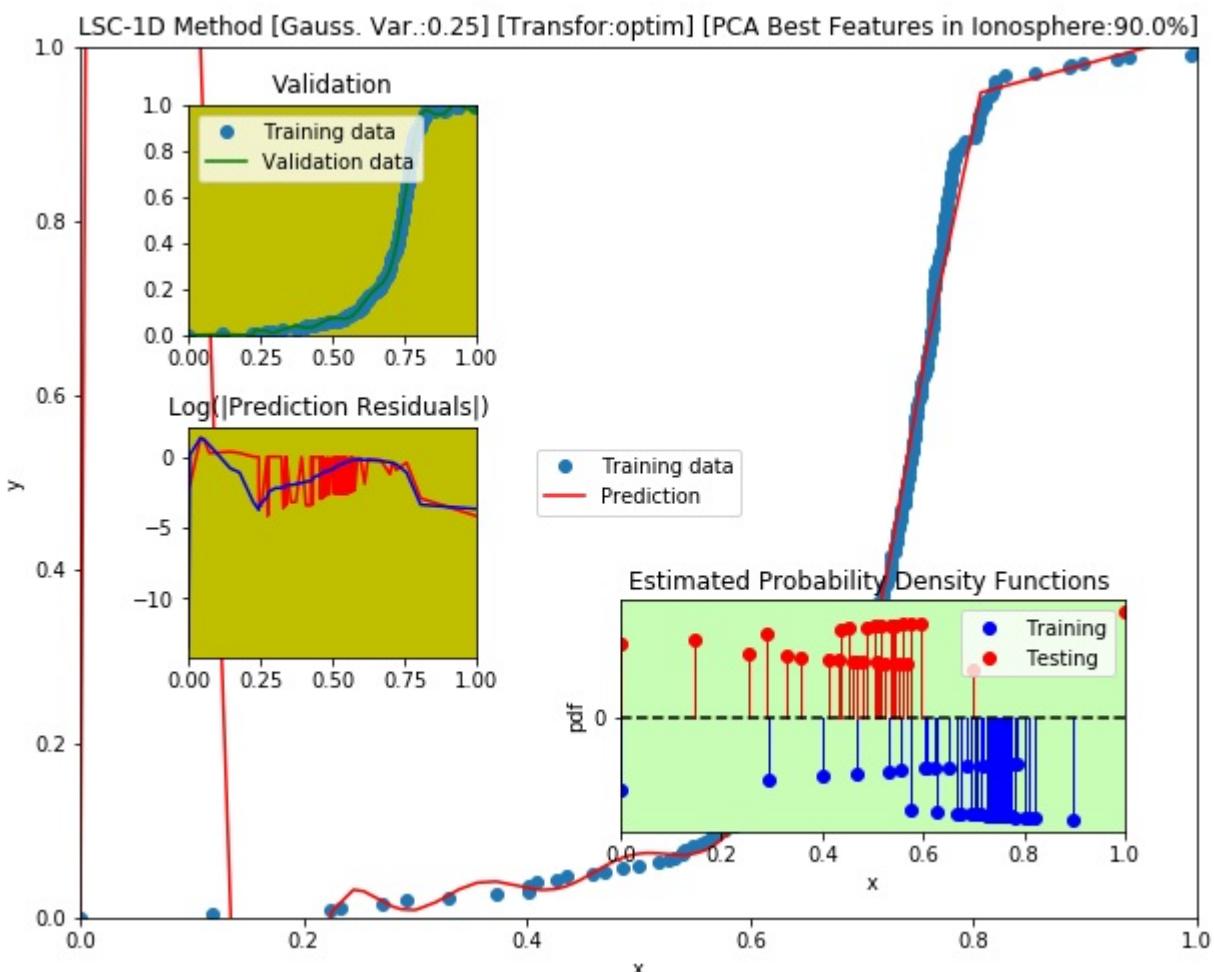
Prediction time/pt. (sec) : 0.0000324
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0031369

Prediction time/pt. (sec) : 0.0000222
```



Ionosphere Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0108135
    Initializing linear solver - done. Time (sec): 0.0114622
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0005507
    Solving linear system (col. 0) - done. Time (sec): 0.0008280
Training - done. Time (sec): 0.0176761

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0064728  
Prediction time/pt. (sec) : 0.0000308
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0039241  
Prediction time/pt. (sec) : 0.0000278
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0037608  
Prediction time/pt. (sec) : 0.0000267
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0036712  
Prediction time/pt. (sec) : 0.0000260
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0055625
Initializing linear solver - done. Time (sec): 0.0058491
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0012488
    Solving linear system (col. 0) - done. Time (sec): 0.0014465
Training - done. Time (sec): 0.0166726
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0038834

Prediction time/pt. (sec) : 0.0000275
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0047474

Prediction time/pt. (sec) : 0.0000226
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0050392

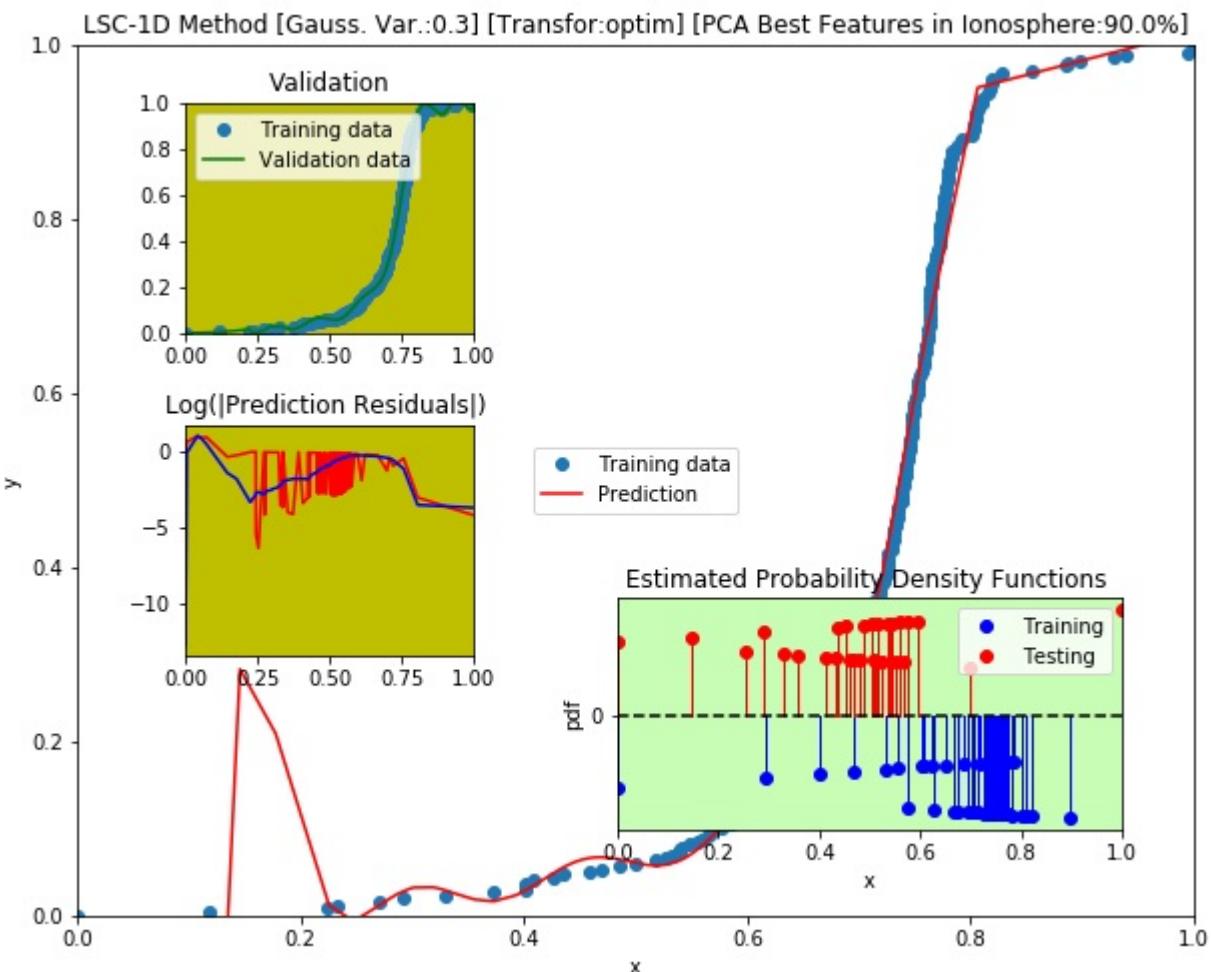
Prediction time/pt. (sec) : 0.0000357
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0026715

Prediction time/pt. (sec) : 0.0000189
```



Ionosphere Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0061696
    Initializing linear solver - done. Time (sec): 0.0067594
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003231
    Solving linear system (col. 0) - done. Time (sec): 0.0010052
Training - done. Time (sec): 0.0125413

```

Evaluation

```
# eval points. : 210  
  
Predicting ...  
Predicting - done. Time (sec): 0.0054548  
  
Prediction time/pt. (sec) : 0.0000260
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0029471  
  
Prediction time/pt. (sec) : 0.0000209
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0030301  
  
Prediction time/pt. (sec) : 0.0000215
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0051239  
  
Prediction time/pt. (sec) : 0.0000363
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0041518
Initializing linear solver - done. Time (sec): 0.0052817
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003147
    Solving linear system (col. 0) - done. Time (sec): 0.0015144
Training - done. Time (sec): 0.0142677
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0032134

Prediction time/pt. (sec) : 0.0000228
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0044069

Prediction time/pt. (sec) : 0.0000210
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0030587

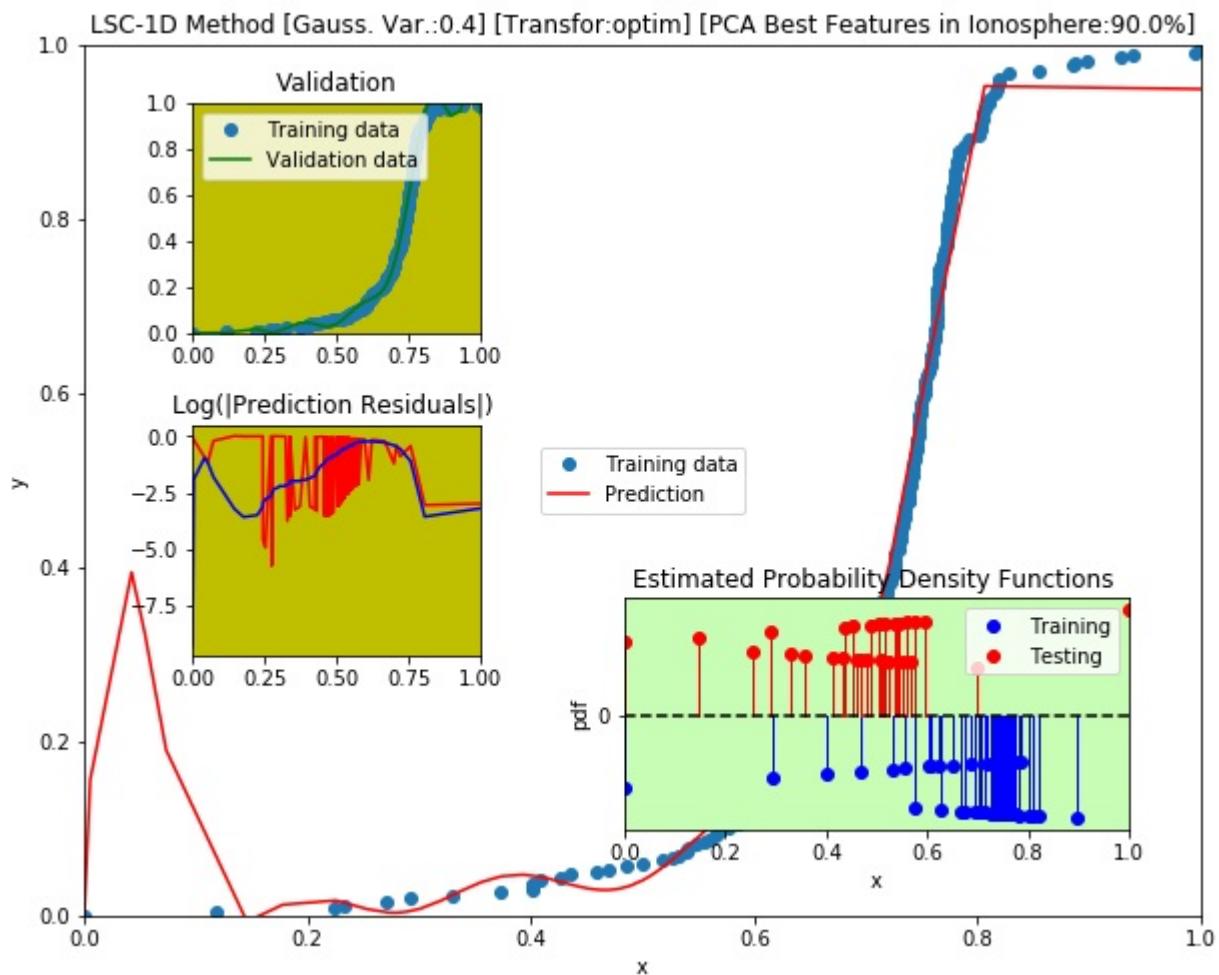
Prediction time/pt. (sec) : 0.0000217
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0030677

Prediction time/pt. (sec) : 0.0000218
```



Ionosphere Dataset

Parameters: PCA: 90.0%
DATASET TRANSFORMATION: optim
COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```
Training ...
    Initializing linear solver ...
        Performing LU fact. (211 x 211 mtx) ...
        Performing LU fact. (211 x 211 mtx) - done. Time (sec):  0.0027466
    Initializing linear solver - done. Time (sec):  0.0030131
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec):  0.0003028
    Solving linear system (col. 0) - done. Time (sec):  0.0004544
Training - done. Time (sec):  0.0126321
```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0102334  
Prediction time/pt. (sec) : 0.0000487
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0036907  
Prediction time/pt. (sec) : 0.0000262
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0037296  
Prediction time/pt. (sec) : 0.0000265
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0013423  
Prediction time/pt. (sec) : 0.0000095
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0130558
Initializing linear solver - done. Time (sec): 0.0133367
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003414
    Solving linear system (col. 0) - done. Time (sec): 0.0005093
Training - done. Time (sec): 0.0166144
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0055146

Prediction time/pt. (sec) : 0.0000391
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0051565

Prediction time/pt. (sec) : 0.0000246
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0015345

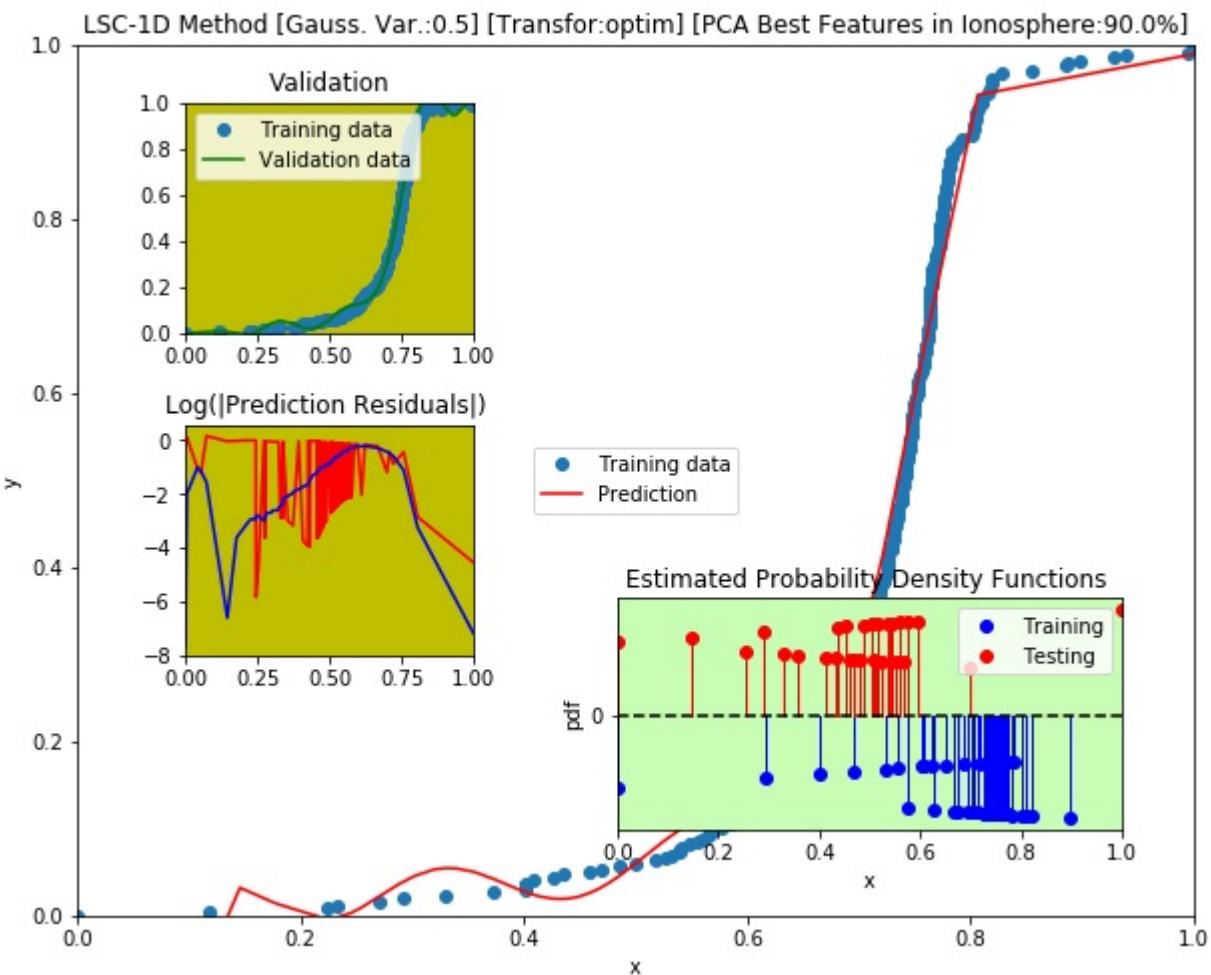
Prediction time/pt. (sec) : 0.0000109
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0067222

Prediction time/pt. (sec) : 0.0000477
```



Ionosphere Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (211 x 211 mtx) ...
        Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027092
    Initializing linear solver - done. Time (sec): 0.0029731
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003119
    Solving linear system (col. 0) - done. Time (sec): 0.0004621
Training - done. Time (sec): 0.0097196

```

Evaluation

```
# eval points. : 210  
  
Predicting ...  
Predicting - done. Time (sec): 0.0055454  
  
Prediction time/pt. (sec) : 0.0000264
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0015354  
  
Prediction time/pt. (sec) : 0.0000109
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0013664  
  
Prediction time/pt. (sec) : 0.0000097
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0013711  
  
Prediction time/pt. (sec) : 0.0000097
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0115862
Initializing linear solver - done. Time (sec): 0.0117857
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003369
    Solving linear system (col. 0) - done. Time (sec): 0.0005021
Training - done. Time (sec): 0.0164986
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0015008

Prediction time/pt. (sec) : 0.0000106
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0091925

Prediction time/pt. (sec) : 0.0000438
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0039833

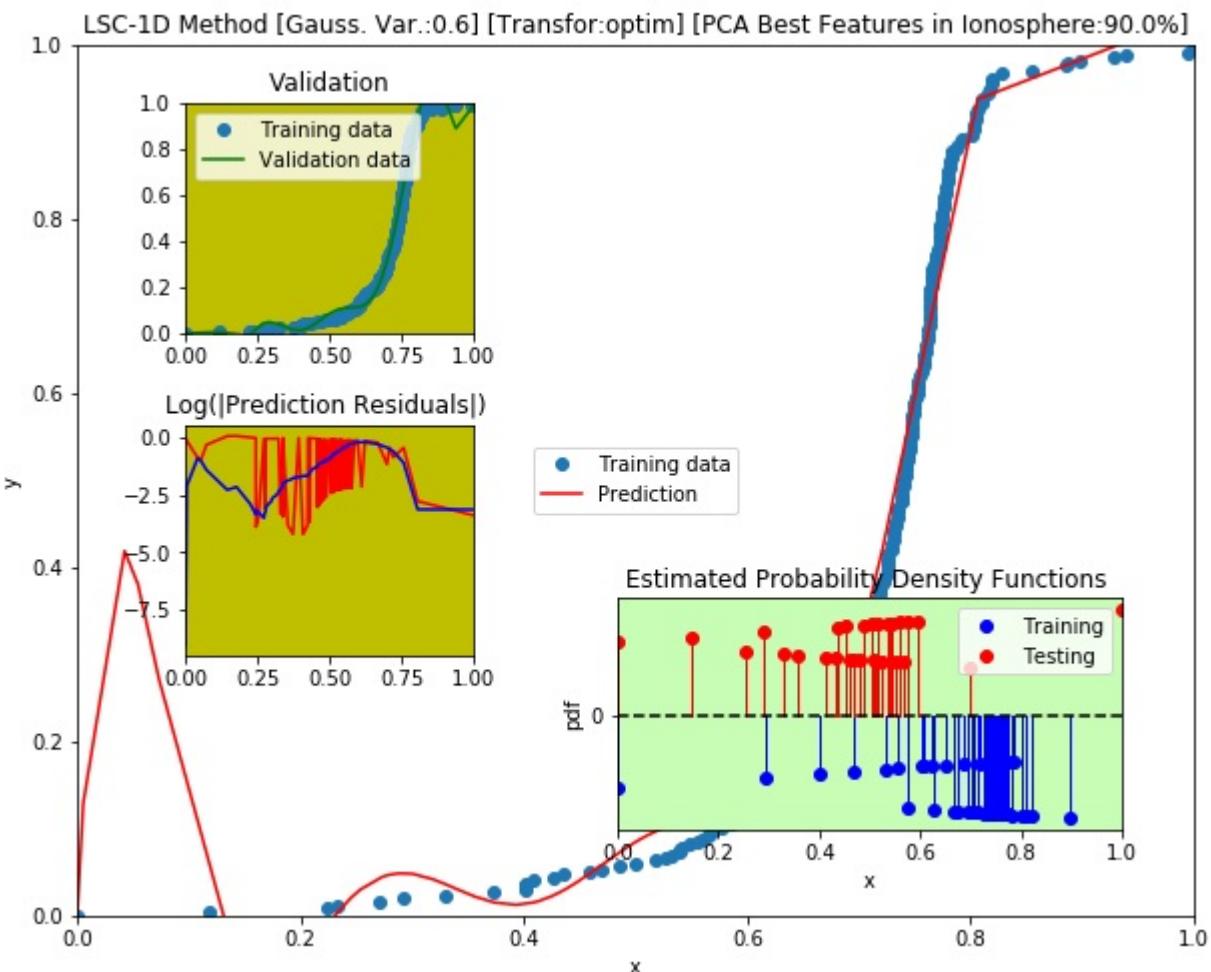
Prediction time/pt. (sec) : 0.0000283
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0087388

Prediction time/pt. (sec) : 0.0000620
```



Ionosphere Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (211 x 211 mtx) ...
        Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0035708
    Initializing linear solver - done. Time (sec): 0.0039313
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003691
    Solving linear system (col. 0) - done. Time (sec): 0.0005636
Training - done. Time (sec): 0.0125301

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0072353  
Prediction time/pt. (sec) : 0.0000345
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0014005  
Prediction time/pt. (sec) : 0.0000099
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0027359  
Prediction time/pt. (sec) : 0.0000194
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0028214  
Prediction time/pt. (sec) : 0.0000200
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0091517
Initializing linear solver - done. Time (sec): 0.0094173
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003238
    Solving linear system (col. 0) - done. Time (sec): 0.0004830
Training - done. Time (sec): 0.0175698
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0037618

Prediction time/pt. (sec) : 0.0000267
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0049014

Prediction time/pt. (sec) : 0.0000233
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0030520

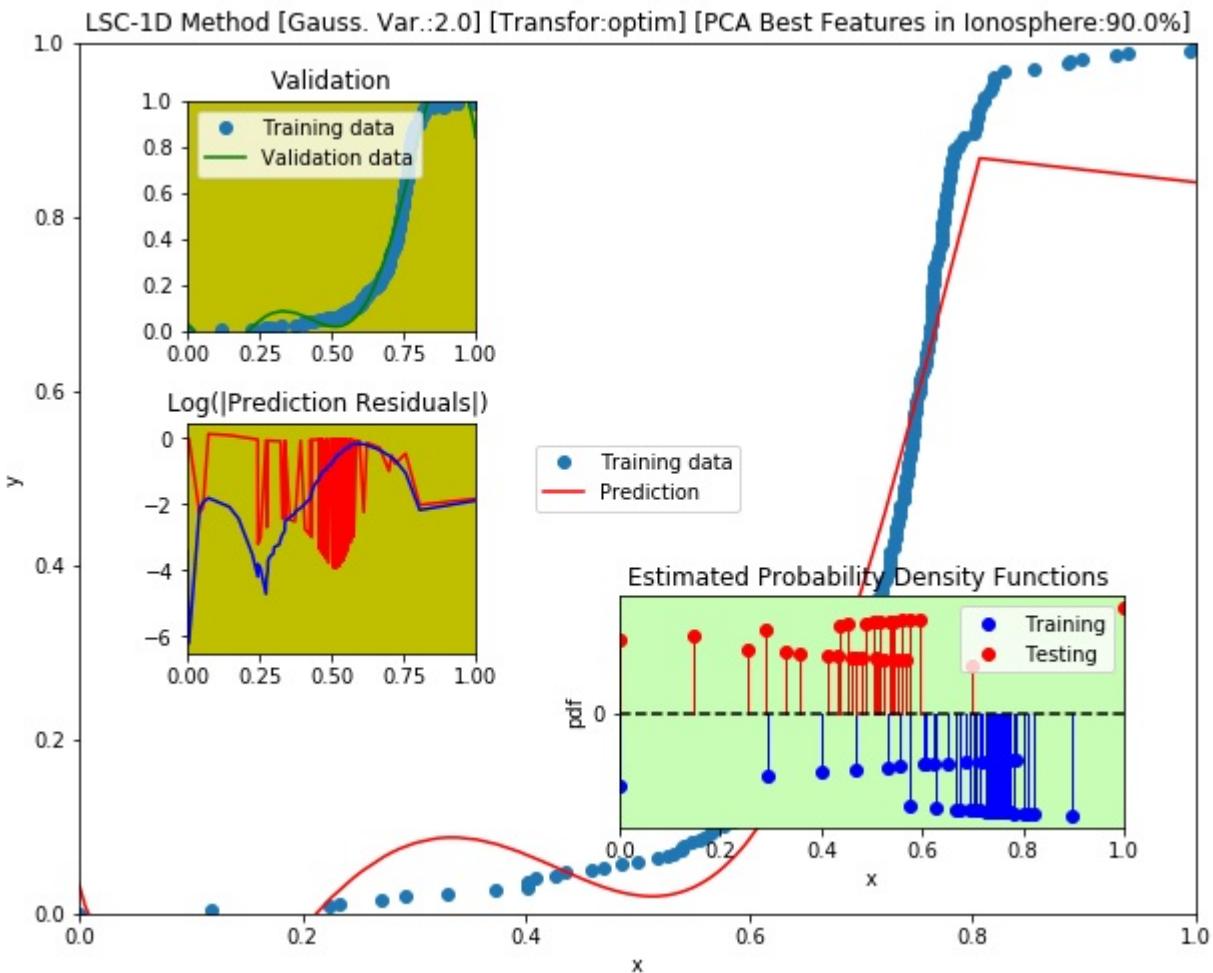
Prediction time/pt. (sec) : 0.0000216
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0028319

Prediction time/pt. (sec) : 0.0000201
```



Ionosphere Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (211 x 211 mtx) ...
        Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0061550
    Initializing linear solver - done. Time (sec): 0.0063684
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003257
    Solving linear system (col. 0) - done. Time (sec): 0.0004876
Training - done. Time (sec): 0.0109818

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0052361  
Prediction time/pt. (sec) : 0.0000249
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0038700  
Prediction time/pt. (sec) : 0.0000274
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0039055  
Prediction time/pt. (sec) : 0.0000277
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0037556  
Prediction time/pt. (sec) : 0.0000266
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0083609
Initializing linear solver - done. Time (sec): 0.0086343
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003378
    Solving linear system (col. 0) - done. Time (sec): 0.0005052
Training - done. Time (sec): 0.0119045
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0045438

Prediction time/pt. (sec) : 0.0000322
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0043957

Prediction time/pt. (sec) : 0.0000209
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0039017

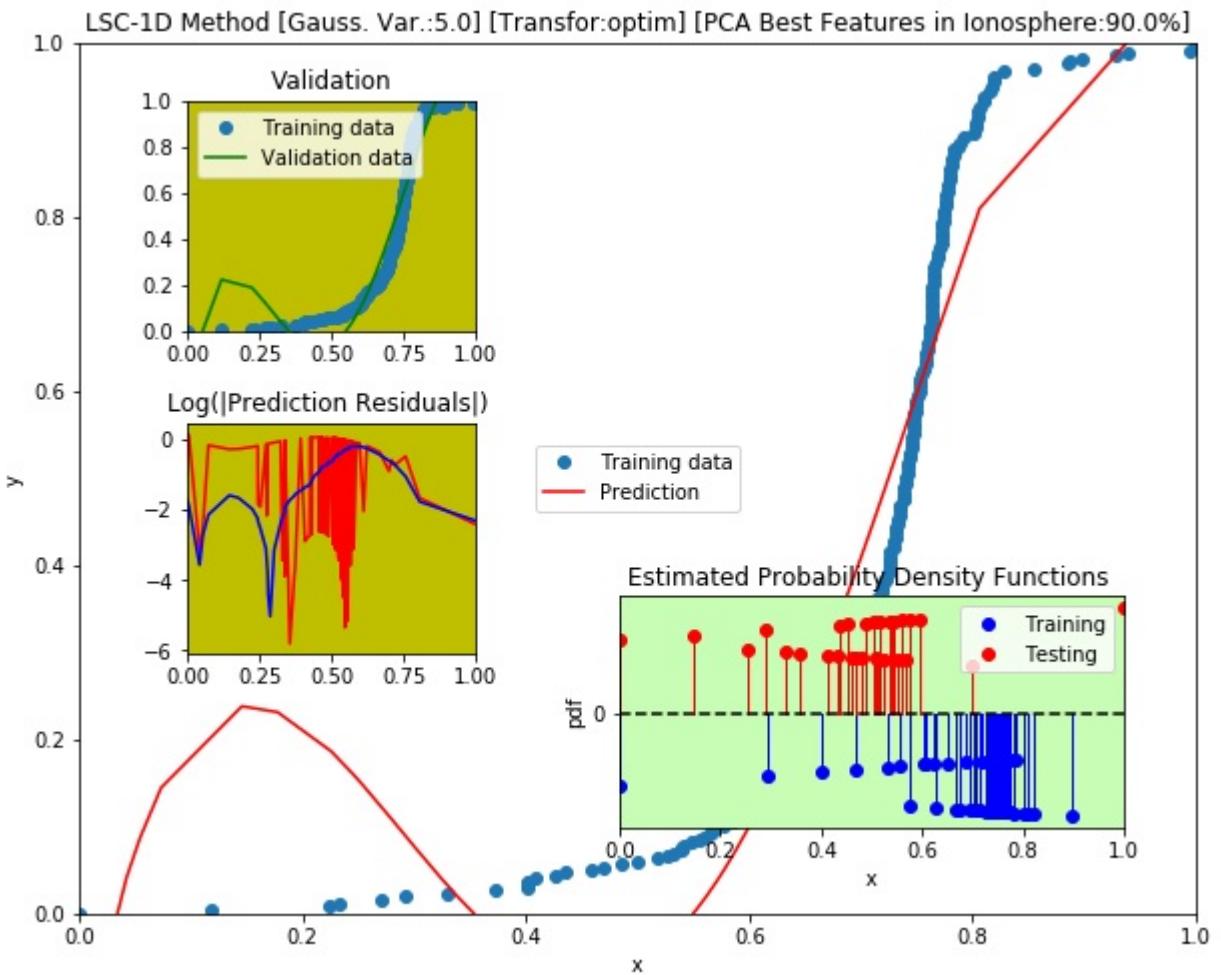
Prediction time/pt. (sec) : 0.0000277
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0043223

Prediction time/pt. (sec) : 0.0000307
```



Ionosphere Dataset

Parameters: PCA: 90.0%
DATASET TRANSFORMATION: optim
COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0034163
  Initializing linear solver - done. Time (sec): 0.0036995
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0005252
  Solving linear system (col. 0) - done. Time (sec): 0.0007215
Training - done. Time (sec): 0.0077555

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0053284  
Prediction time/pt. (sec) : 0.0000254
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0030973  
Prediction time/pt. (sec) : 0.0000220
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0029843  
Prediction time/pt. (sec) : 0.0000212
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0029459  
Prediction time/pt. (sec) : 0.0000209
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0144985
Initializing linear solver - done. Time (sec): 0.0153241
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003223
    Solving linear system (col. 0) - done. Time (sec): 0.0015883
Training - done. Time (sec): 0.0268104
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011311

Prediction time/pt. (sec) : 0.0000080
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0032561

Prediction time/pt. (sec) : 0.0000155
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011325

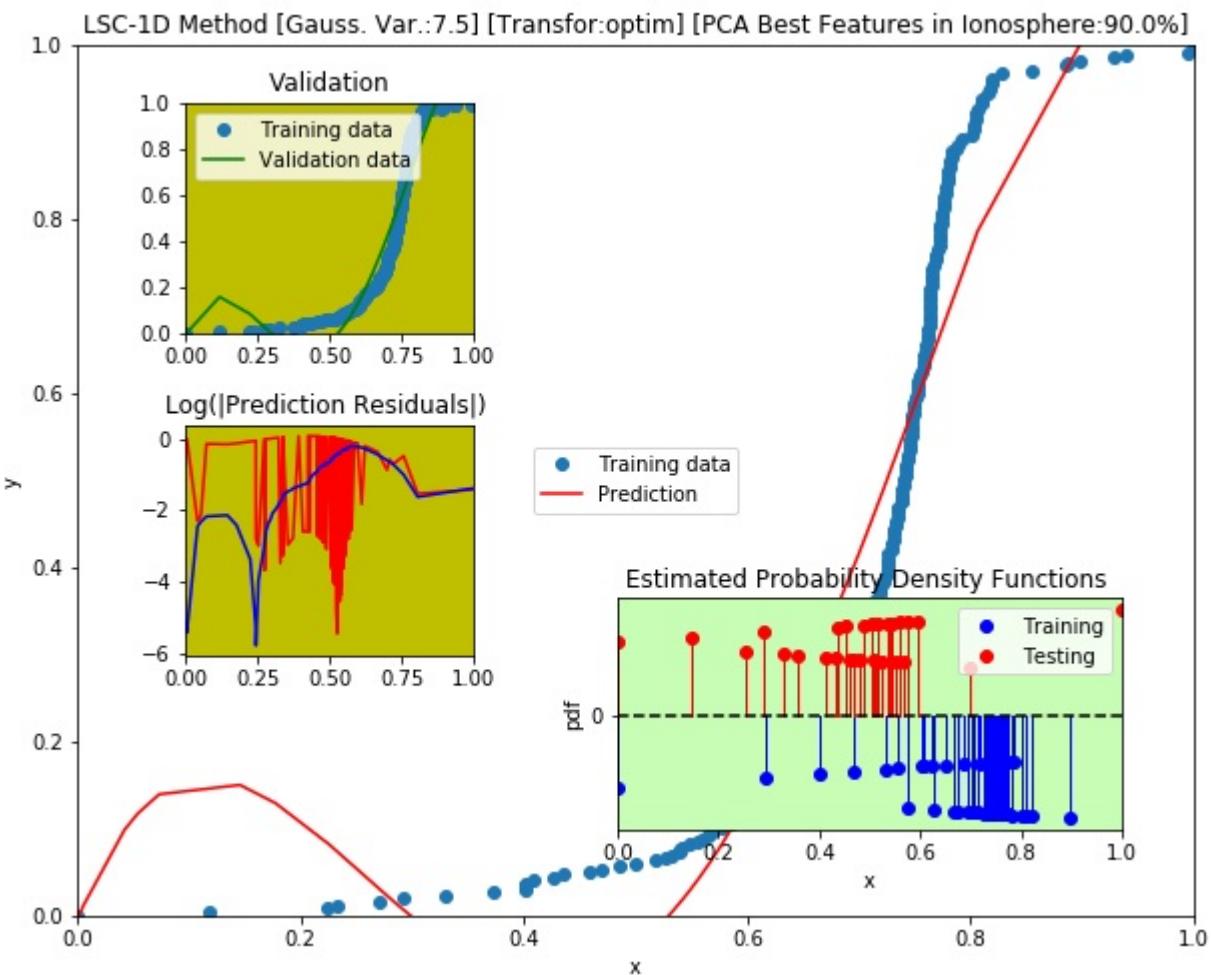
Prediction time/pt. (sec) : 0.0000080
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011294

Prediction time/pt. (sec) : 0.0000080
```



Ionosphere Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (211 x 211 mtx) ...
        Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0035658
    Initializing linear solver - done. Time (sec): 0.0039120
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003109
    Solving linear system (col. 0) - done. Time (sec): 0.0005512
Training - done. Time (sec): 0.0138690

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0057323  
Prediction time/pt. (sec) : 0.0000273
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0027947  
Prediction time/pt. (sec) : 0.0000198
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0026433  
Prediction time/pt. (sec) : 0.0000187
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0027797  
Prediction time/pt. (sec) : 0.0000197
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0095196
Initializing linear solver - done. Time (sec): 0.0098758
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0005019
    Solving linear system (col. 0) - done. Time (sec): 0.0006919
Training - done. Time (sec): 0.0176890
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0026779

Prediction time/pt. (sec) : 0.0000190
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0044210

Prediction time/pt. (sec) : 0.0000211
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0028734

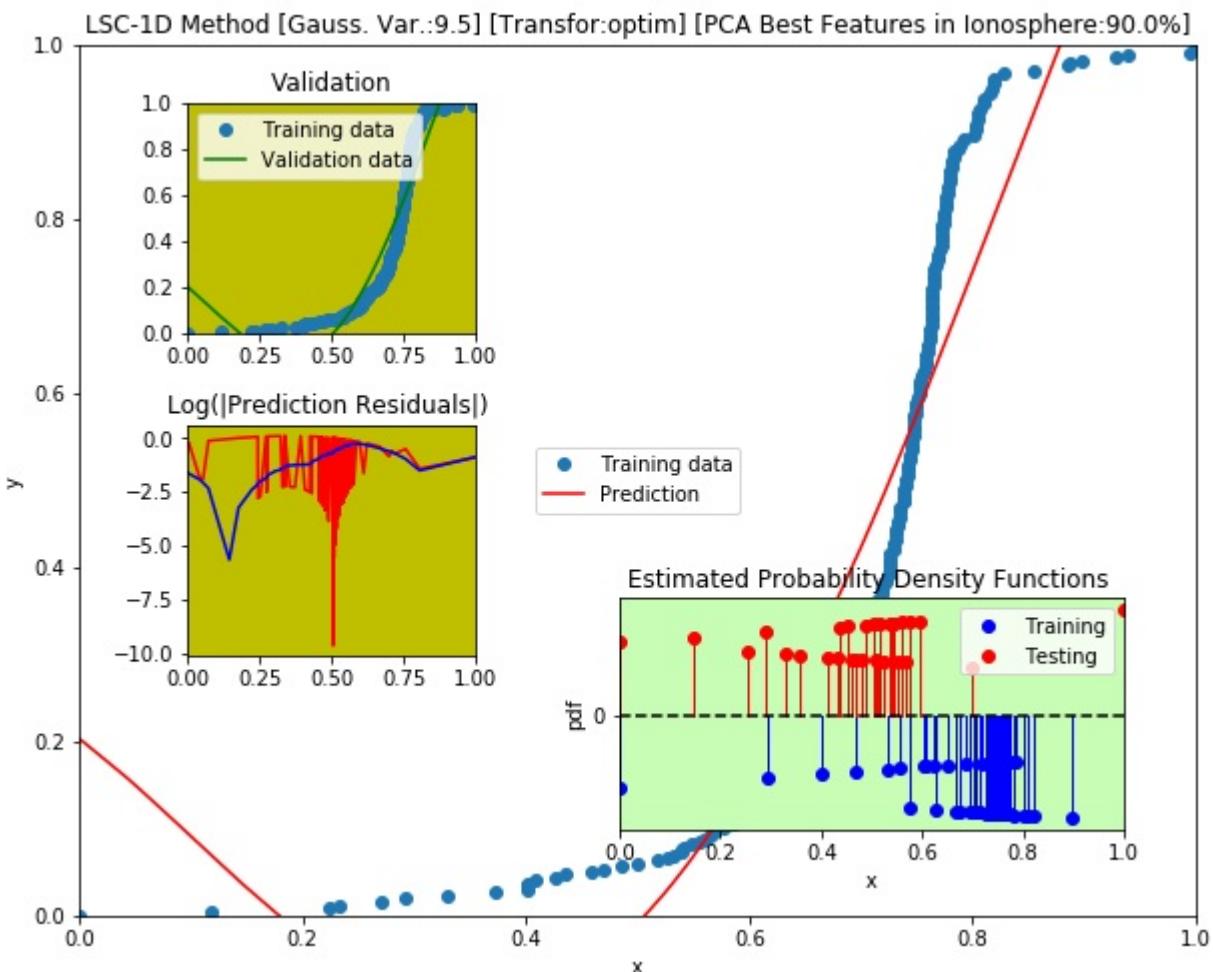
Prediction time/pt. (sec) : 0.0000204
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0023260

Prediction time/pt. (sec) : 0.0000165
```



Ionosphere Dataset

Parameters: PCA: 90.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (211 x 211 mtx) ...
        Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027237
    Initializing linear solver - done. Time (sec): 0.0029902
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003376
    Solving linear system (col. 0) - done. Time (sec): 0.0005074
Training - done. Time (sec): 0.0099797

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0049651  
Prediction time/pt. (sec) : 0.0000236
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011029  
Prediction time/pt. (sec) : 0.0000078
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0010705  
Prediction time/pt. (sec) : 0.0000076
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011008  
Prediction time/pt. (sec) : 0.0000078
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0108998
Initializing linear solver - done. Time (sec): 0.0110908
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003207
    Solving linear system (col. 0) - done. Time (sec): 0.0004835
Training - done. Time (sec): 0.0150802
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0101590

Prediction time/pt. (sec) : 0.0000720
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0016174

Prediction time/pt. (sec) : 0.0000077
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0073311

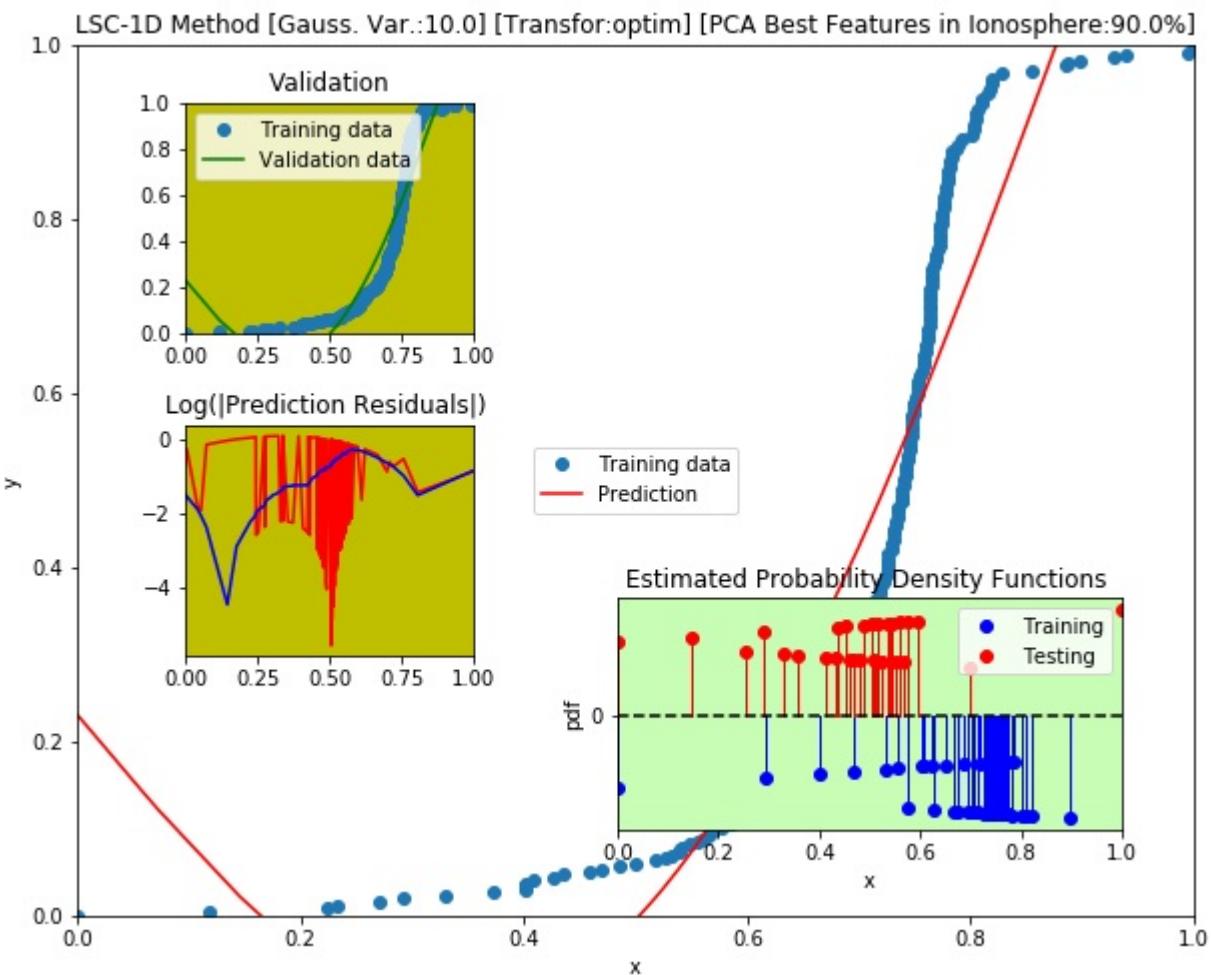
Prediction time/pt. (sec) : 0.0000520
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011628

Prediction time/pt. (sec) : 0.0000082
```



Ionosphere Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027668
    Initializing linear solver - done. Time (sec): 0.0030308
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003133
    Solving linear system (col. 0) - done. Time (sec): 0.0005143
    Training - done. Time (sec): 0.0123732

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0051363  
Prediction time/pt. (sec) : 0.0000245
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0014100  
Prediction time/pt. (sec) : 0.0000100
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0013826  
Prediction time/pt. (sec) : 0.0000098
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0013773  
Prediction time/pt. (sec) : 0.0000098
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0142922
Initializing linear solver - done. Time (sec): 0.0145252
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003643
    Solving linear system (col. 0) - done. Time (sec): 0.0005517
Training - done. Time (sec): 0.0188565
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0076699

Prediction time/pt. (sec) : 0.0000544
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0020664

Prediction time/pt. (sec) : 0.0000098
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0085614

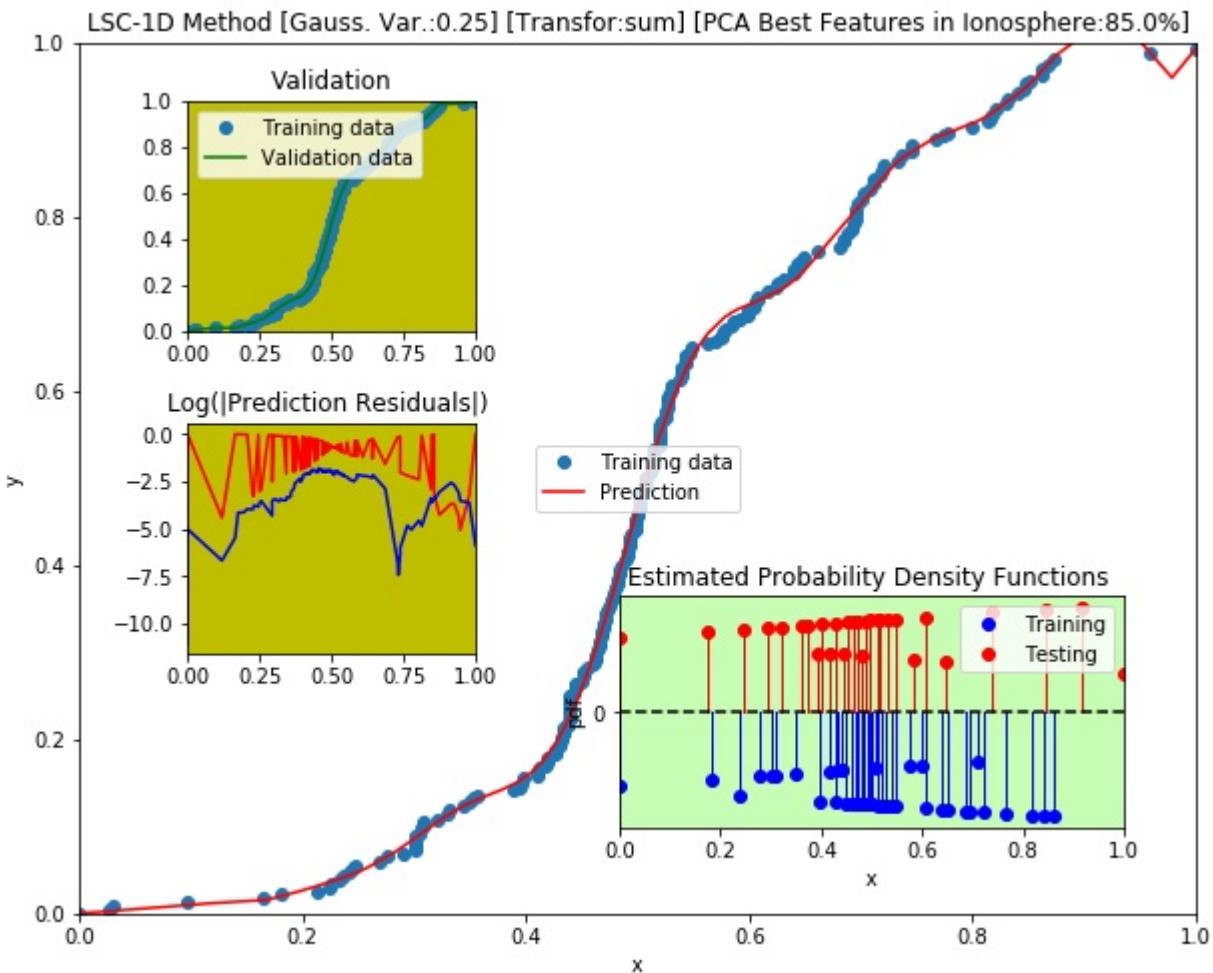
Prediction time/pt. (sec) : 0.0000607
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0014601

Prediction time/pt. (sec) : 0.0000104
```



Ionosphere Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (211 x 211 mtx) ...
        Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0025034
    Initializing linear solver - done. Time (sec): 0.0035558
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003281
    Solving linear system (col. 0) - done. Time (sec): 0.0010843
Training - done. Time (sec): 0.0103261

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0022876  
Prediction time/pt. (sec) : 0.0000109
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0015345  
Prediction time/pt. (sec) : 0.0000109
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0015244  
Prediction time/pt. (sec) : 0.0000108
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0015333  
Prediction time/pt. (sec) : 0.0000109
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0022414
Initializing linear solver - done. Time (sec): 0.0030925
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003302
    Solving linear system (col. 0) - done. Time (sec): 0.0010970
Training - done. Time (sec): 0.0086691
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0035589

Prediction time/pt. (sec) : 0.0000252
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0022678

Prediction time/pt. (sec) : 0.0000108
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0015512

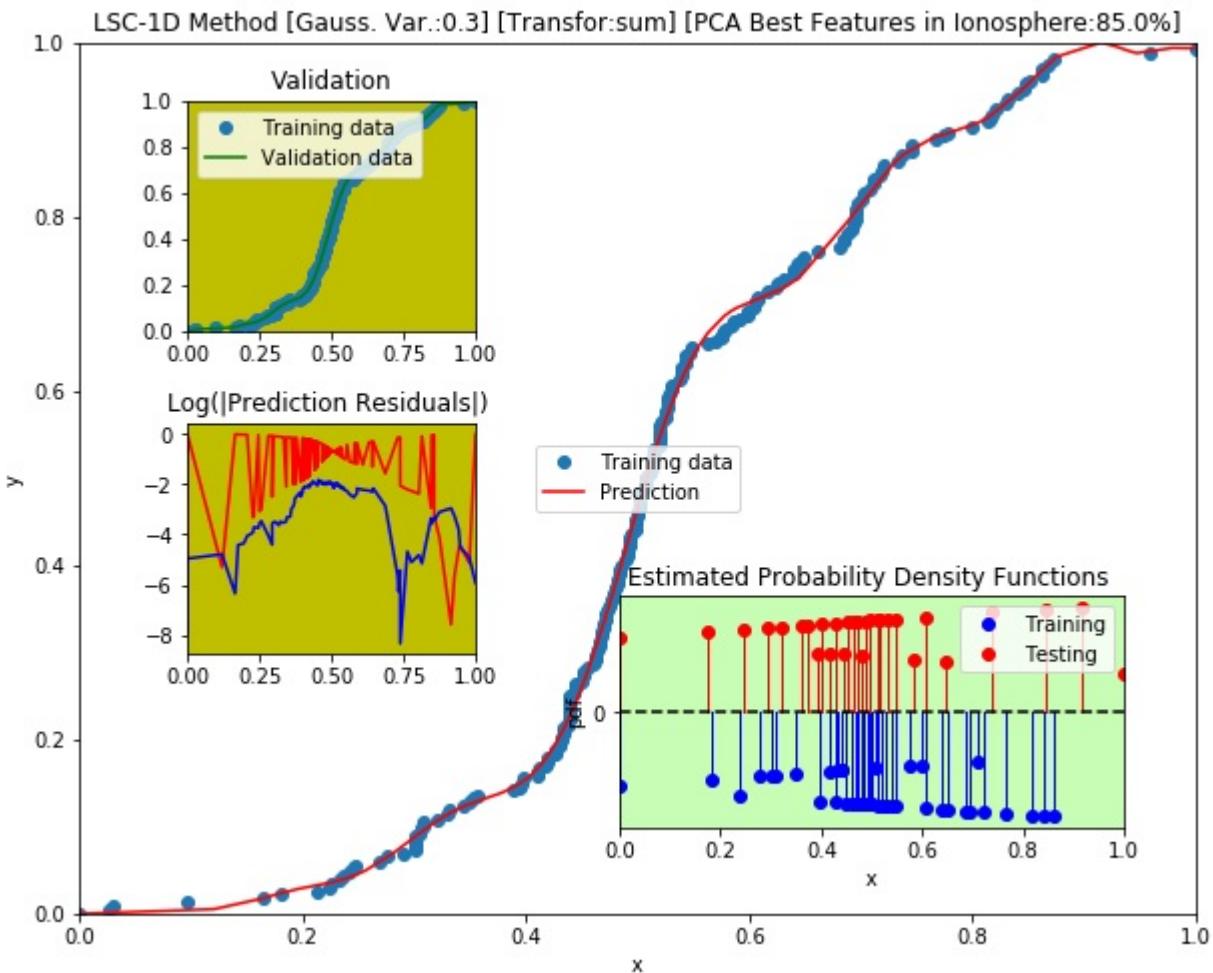
Prediction time/pt. (sec) : 0.0000110
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0015364

Prediction time/pt. (sec) : 0.0000109
```



Ionosphere Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027246
  Initializing linear solver - done. Time (sec): 0.0029900
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003557
  Solving linear system (col. 0) - done. Time (sec): 0.0005138
Training - done. Time (sec): 0.0103481

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0052795  
Prediction time/pt. (sec) : 0.0000251
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0014482  
Prediction time/pt. (sec) : 0.0000103
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0013776  
Prediction time/pt. (sec) : 0.0000098
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0013711  
Prediction time/pt. (sec) : 0.0000097
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0250673
Initializing linear solver - done. Time (sec): 0.0253284
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003362
    Solving linear system (col. 0) - done. Time (sec): 0.0004966
Training - done. Time (sec): 0.0298185
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0022130

Prediction time/pt. (sec) : 0.0000157
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0044806

Prediction time/pt. (sec) : 0.0000213
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0039198

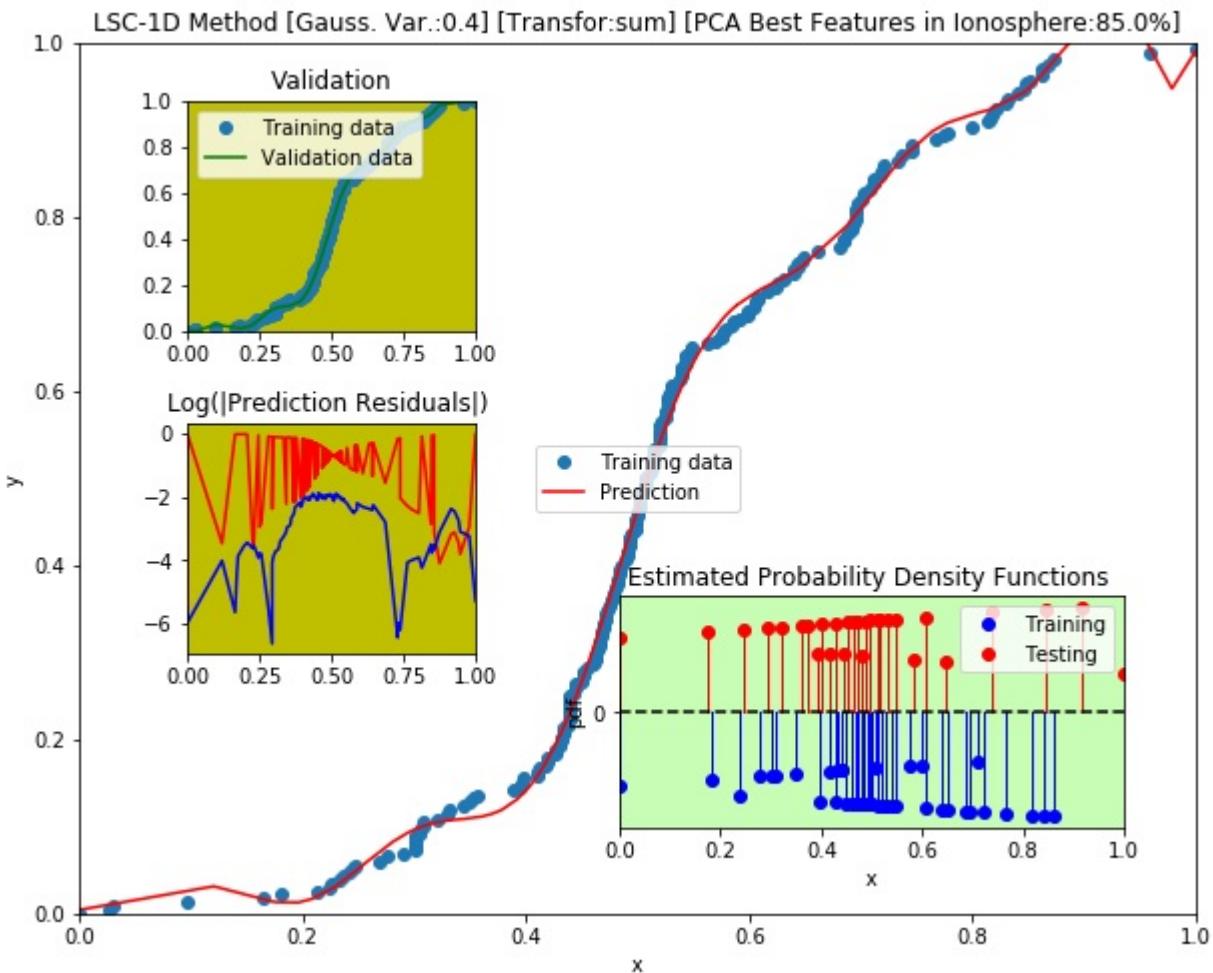
Prediction time/pt. (sec) : 0.0000278
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0035968

Prediction time/pt. (sec) : 0.0000255
```



Ionosphere Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0028472
  Initializing linear solver - done. Time (sec): 0.0031691
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003245
  Solving linear system (col. 0) - done. Time (sec): 0.0004816
Training - done. Time (sec): 0.0126784

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0090945  
Prediction time/pt. (sec) : 0.0000433
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0034788  
Prediction time/pt. (sec) : 0.0000247
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0032067  
Prediction time/pt. (sec) : 0.0000227
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0029950  
Prediction time/pt. (sec) : 0.0000212
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0063722
Initializing linear solver - done. Time (sec): 0.0066395
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0012739
    Solving linear system (col. 0) - done. Time (sec): 0.0014710
Training - done. Time (sec): 0.0152967
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0034873

Prediction time/pt. (sec) : 0.0000247
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0044503

Prediction time/pt. (sec) : 0.0000212
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0044296

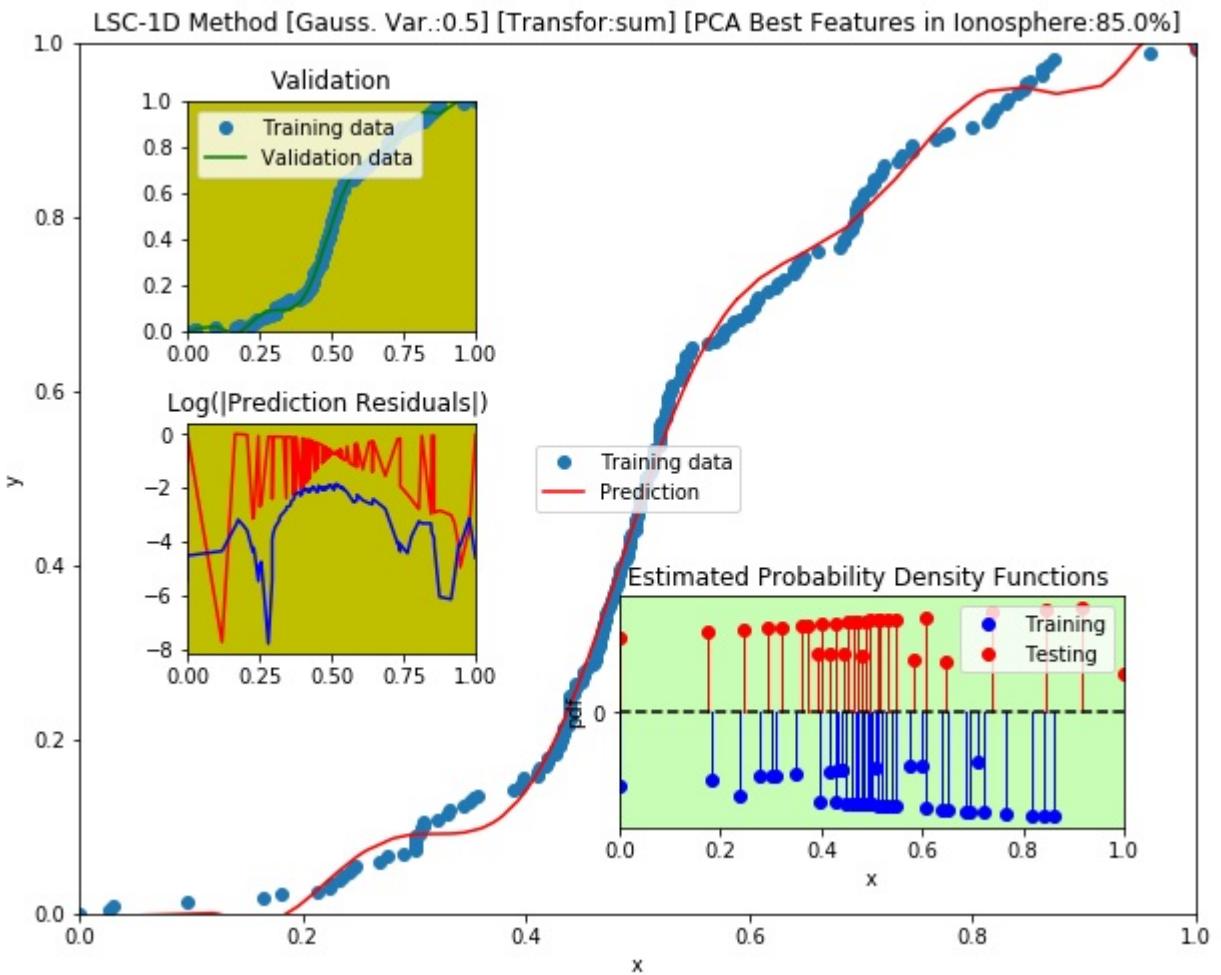
Prediction time/pt. (sec) : 0.0000314
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0012922

Prediction time/pt. (sec) : 0.0000092
```



Ionosphere Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0051346
  Initializing linear solver - done. Time (sec): 0.0054166
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003717
  Solving linear system (col. 0) - done. Time (sec): 0.0005653
Training - done. Time (sec): 0.0114179

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0070839  
Prediction time/pt. (sec) : 0.0000337
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0015433  
Prediction time/pt. (sec) : 0.0000109
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0012345  
Prediction time/pt. (sec) : 0.0000088
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0077782  
Prediction time/pt. (sec) : 0.0000552
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0030174
Initializing linear solver - done. Time (sec): 0.0033135
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003355
    Solving linear system (col. 0) - done. Time (sec): 0.0004904
Training - done. Time (sec): 0.0110972
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0047860

Prediction time/pt. (sec) : 0.0000339
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0048339

Prediction time/pt. (sec) : 0.0000230
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0016575

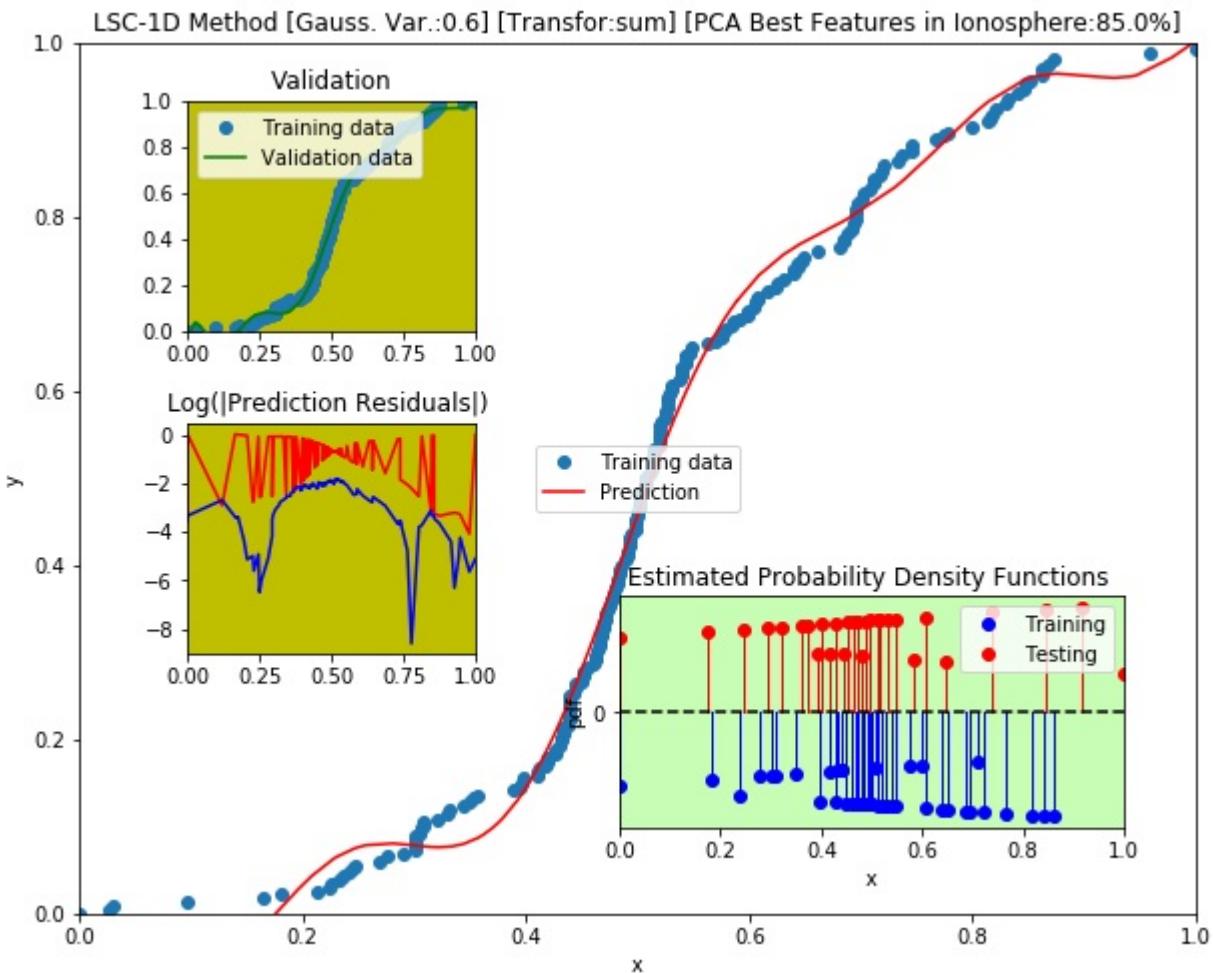
Prediction time/pt. (sec) : 0.0000118
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0074117

Prediction time/pt. (sec) : 0.0000526
```



Ionosphere Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027523
  Initializing linear solver - done. Time (sec): 0.0030229
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003247
  Solving linear system (col. 0) - done. Time (sec): 0.0004809
Training - done. Time (sec): 0.0100925

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0051324  
Prediction time/pt. (sec) : 0.0000244
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0012441  
Prediction time/pt. (sec) : 0.0000088
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0013633  
Prediction time/pt. (sec) : 0.0000097
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0013502  
Prediction time/pt. (sec) : 0.0000096
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0073235
Initializing linear solver - done. Time (sec): 0.0075684
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003300
    Solving linear system (col. 0) - done. Time (sec): 0.0004909
Training - done. Time (sec): 0.0121961
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0012629

Prediction time/pt. (sec) : 0.0000090
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0017440

Prediction time/pt. (sec) : 0.0000083
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0012848

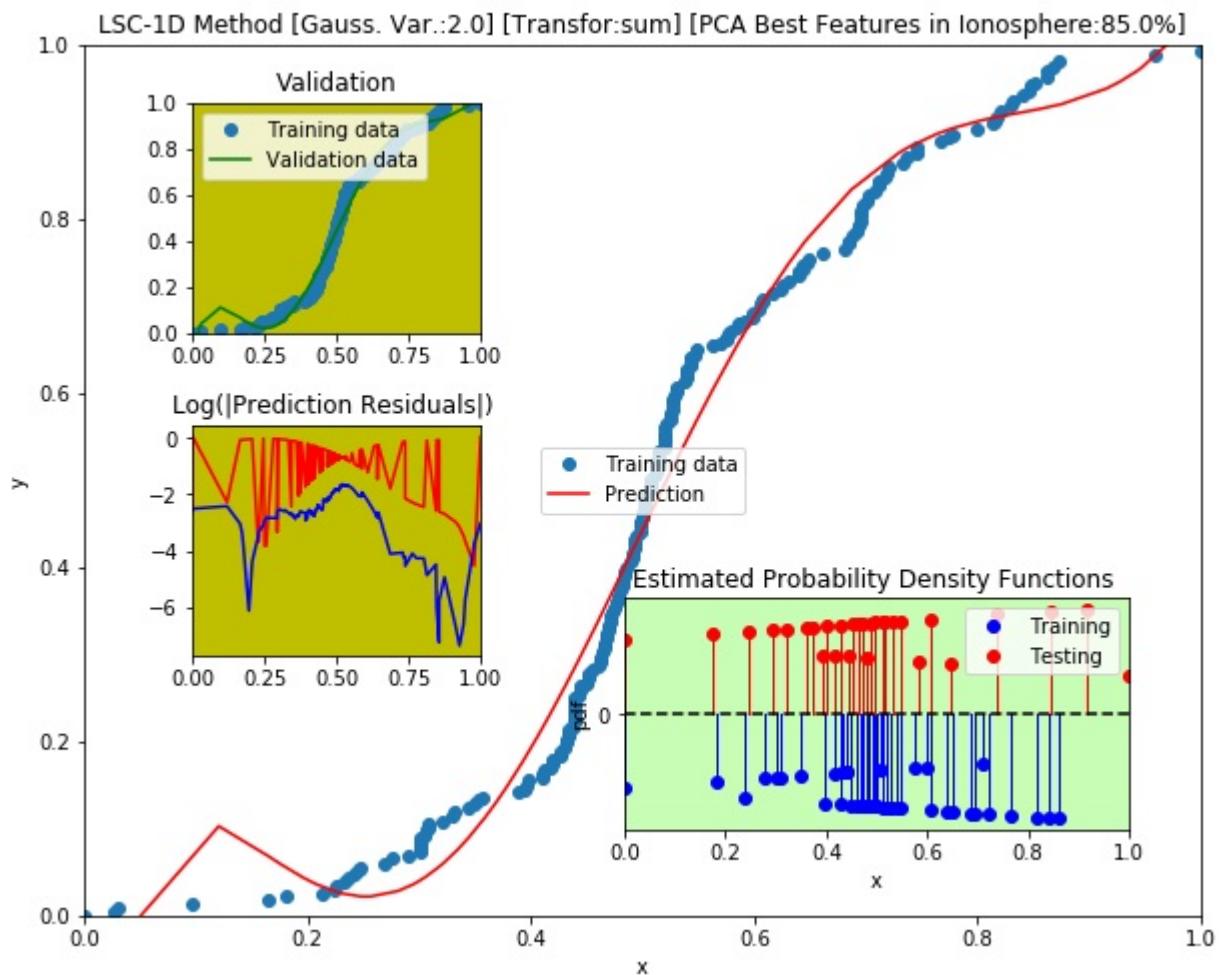
Prediction time/pt. (sec) : 0.0000091
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0163467

Prediction time/pt. (sec) : 0.0001159
```



Ionosphere Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: SUM

COLLOCATION METHOD: RBF

PBE

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0036404

Initializing linear solver - done. Time (sec): 0.0039644

Solving linear system (col. 0) ...

Back solving (211 x 211 mtx) ...

Back solving (211 x 211 mtx) - d

Solving linear system (col. 0) - done. Time (sec): 0.0005639

Training - done. Time (sec): 0.0130517

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0057859  
Prediction time/pt. (sec) : 0.0000276
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0027905  
Prediction time/pt. (sec) : 0.0000198
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0028119  
Prediction time/pt. (sec) : 0.0000199
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0023162  
Prediction time/pt. (sec) : 0.0000164
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0088274
Initializing linear solver - done. Time (sec): 0.0090523
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003610
    Solving linear system (col. 0) - done. Time (sec): 0.0005226
Training - done. Time (sec): 0.0167494
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0029237

Prediction time/pt. (sec) : 0.0000207
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0052855

Prediction time/pt. (sec) : 0.0000252
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0012486

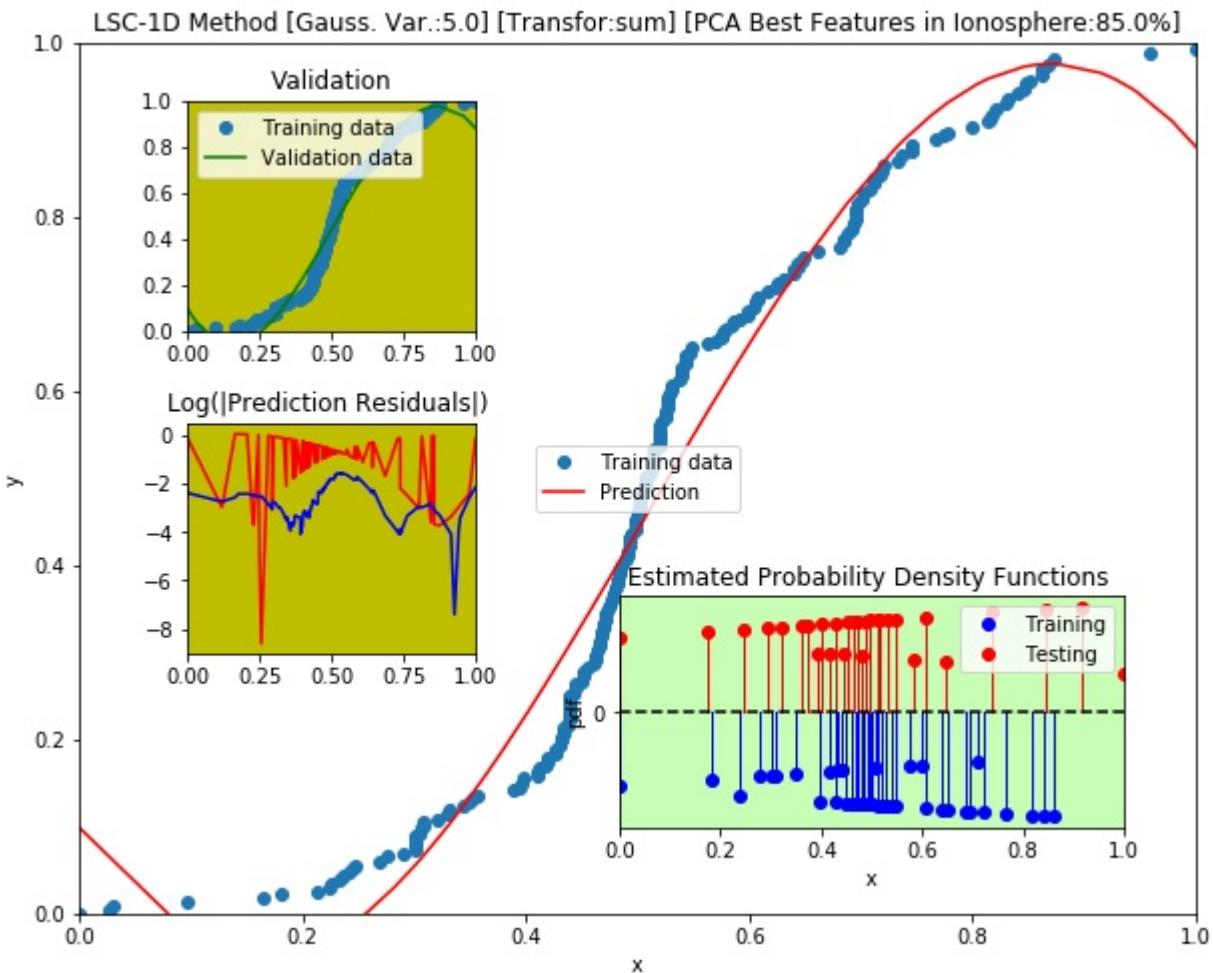
Prediction time/pt. (sec) : 0.0000089
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011730

Prediction time/pt. (sec) : 0.0000083
```



Ionosphere Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027156
  Initializing linear solver - done. Time (sec): 0.0029840
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003085
  Solving linear system (col. 0) - done. Time (sec): 0.0004601
Training - done. Time (sec): 0.0097797

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0068007  
Prediction time/pt. (sec) : 0.0000324
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011396  
Prediction time/pt. (sec) : 0.0000081
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0033174  
Prediction time/pt. (sec) : 0.0000235
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0063181  
Prediction time/pt. (sec) : 0.0000448
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0073931
Initializing linear solver - done. Time (sec): 0.0076048
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003450
    Solving linear system (col. 0) - done. Time (sec): 0.0005124
Training - done. Time (sec): 0.0108619
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0012040

Prediction time/pt. (sec) : 0.0000085
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0061347

Prediction time/pt. (sec) : 0.0000292
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0055037

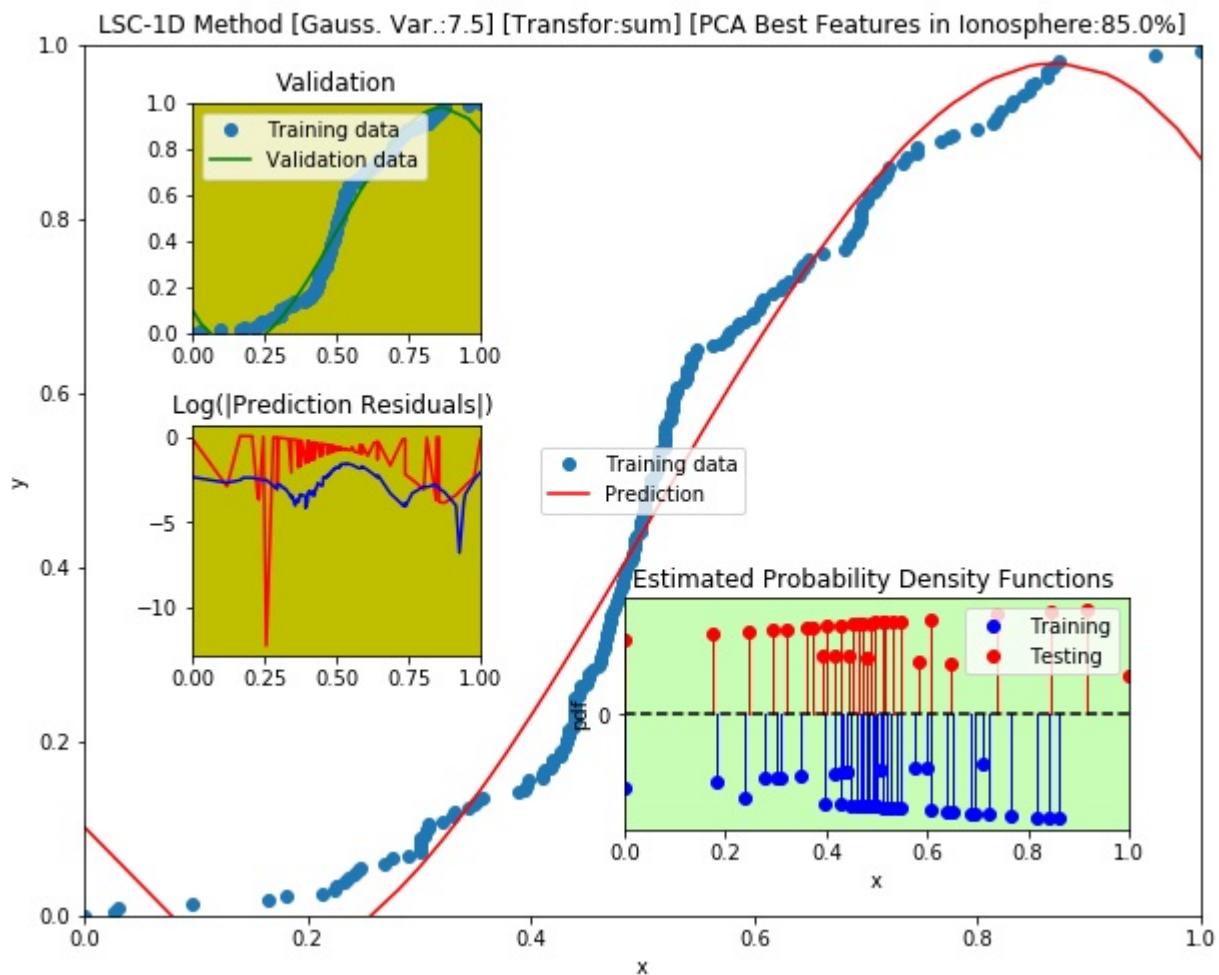
Prediction time/pt. (sec) : 0.0000390
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0019870

Prediction time/pt. (sec) : 0.0000141
```



Ionosphere Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: sum

COLLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0064497

Initializing linear solver - done. Time (sec): 0.0066516

Solving linear system (col. 0) ...

Back solving (211×211 mtx) ...

Back solving (211 x 211 mtx) ...

Solving linear system (col. 0) - done. Time (sec): 0.0004766

Training - done. Time (sec): 0.0128157

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0049403  
Prediction time/pt. (sec) : 0.0000235
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0036237  
Prediction time/pt. (sec) : 0.0000257
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0023477  
Prediction time/pt. (sec) : 0.0000167
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0054002  
Prediction time/pt. (sec) : 0.0000383
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0069218
Initializing linear solver - done. Time (sec): 0.0071993
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003846
    Solving linear system (col. 0) - done. Time (sec): 0.0005553
Training - done. Time (sec): 0.0106556
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0051796

Prediction time/pt. (sec) : 0.0000367
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0049648

Prediction time/pt. (sec) : 0.0000236
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0038602

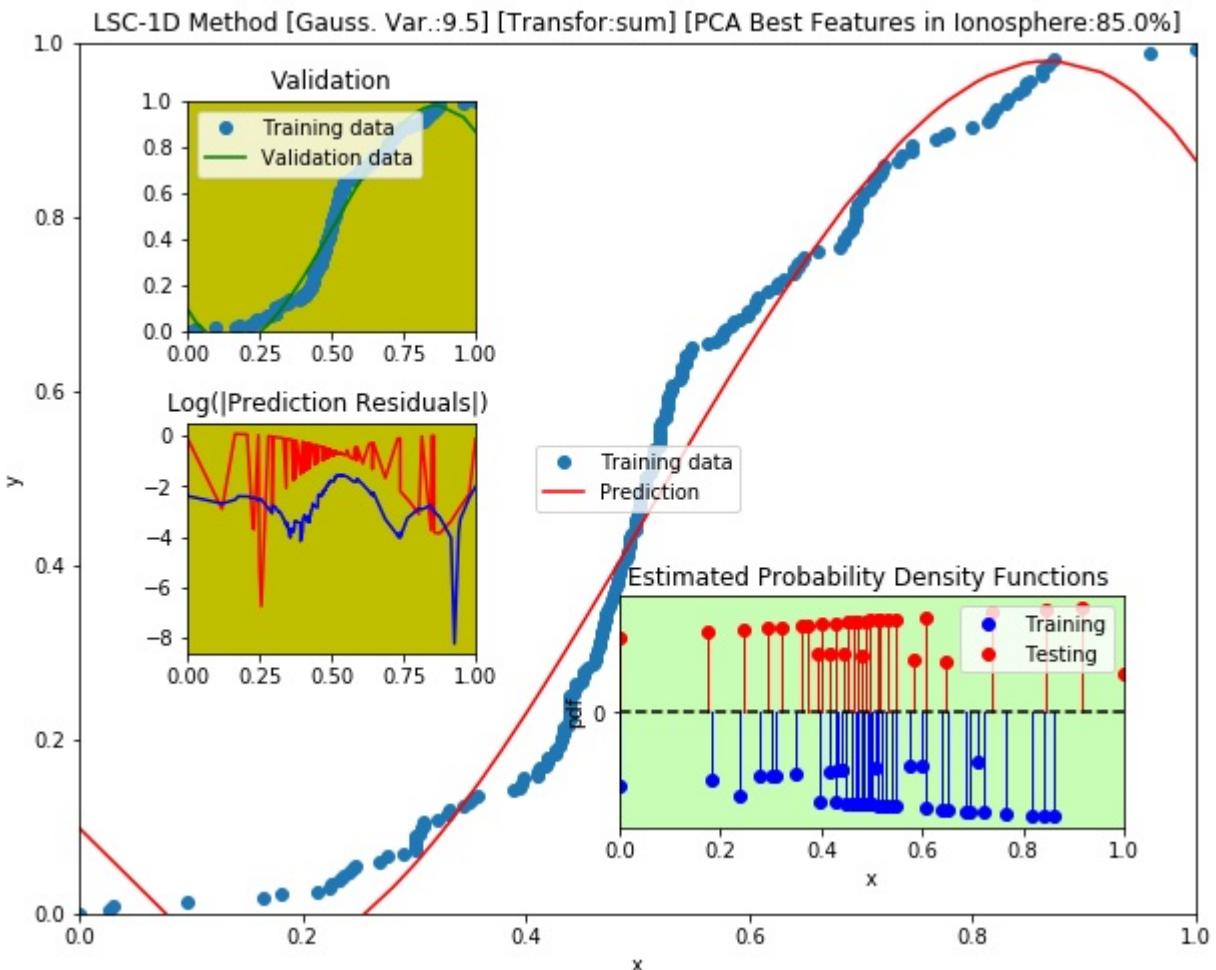
Prediction time/pt. (sec) : 0.0000274
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0038915

Prediction time/pt. (sec) : 0.0000276
```



Ionosphere Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: sum
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027766
  Initializing linear solver - done. Time (sec): 0.0030501
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003169
  Solving linear system (col. 0) - done. Time (sec): 0.0004704
Training - done. Time (sec): 0.0071526

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0057957  
Prediction time/pt. (sec) : 0.0000276
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0049019  
Prediction time/pt. (sec) : 0.0000348
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011358  
Prediction time/pt. (sec) : 0.0000081
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0026202  
Prediction time/pt. (sec) : 0.0000186
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0089173
Initializing linear solver - done. Time (sec): 0.0091467
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0031579
    Solving linear system (col. 0) - done. Time (sec): 0.0034339
Training - done. Time (sec): 0.0187962
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0026052

Prediction time/pt. (sec) : 0.0000185
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0040560

Prediction time/pt. (sec) : 0.0000193
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0041788

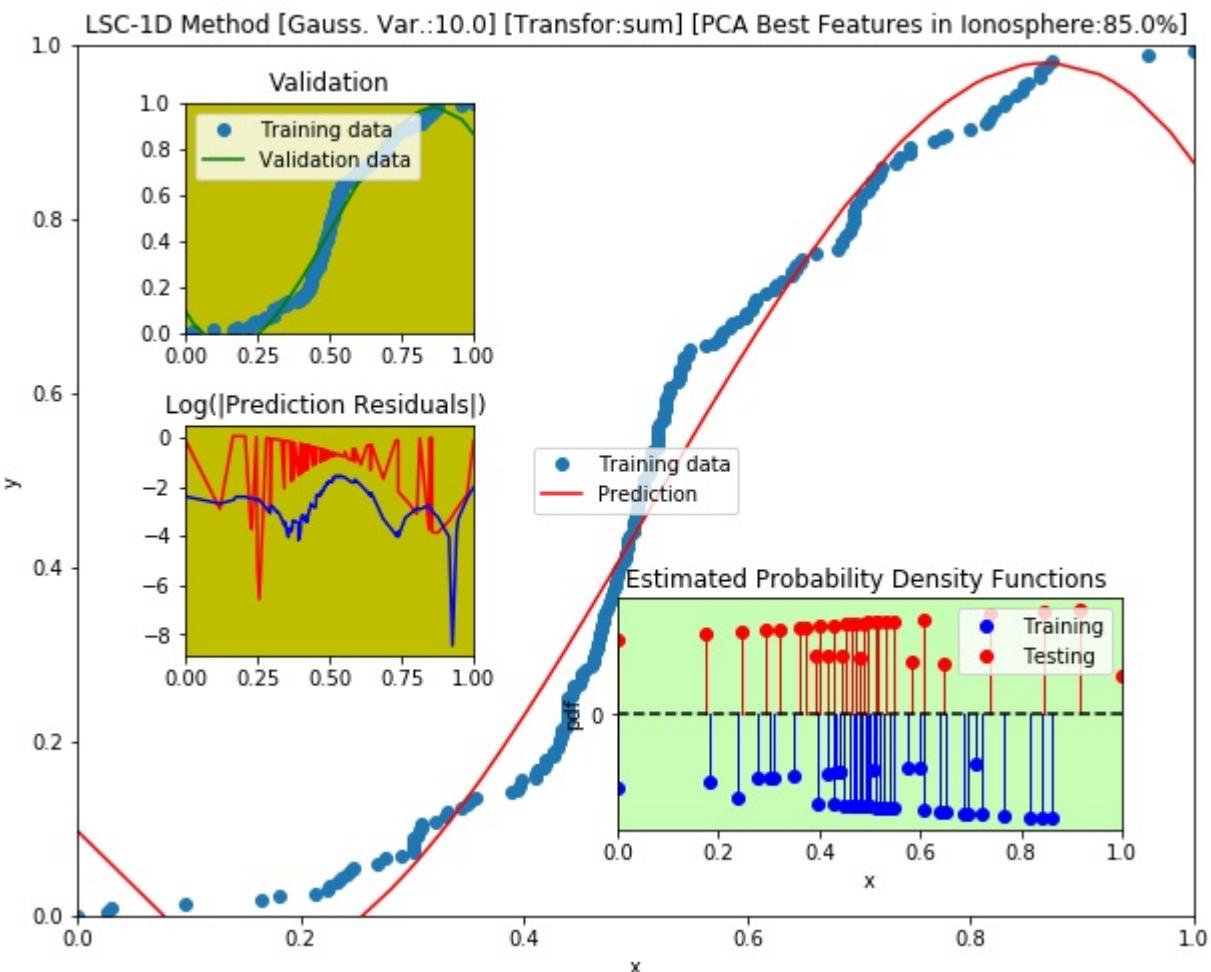
Prediction time/pt. (sec) : 0.0000296
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0029759

Prediction time/pt. (sec) : 0.0000211
```



Ionosphere Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027320

Initializing linear solver - done. Time (sec): 0.0030007

Solving linear system (col. 0) ...

Back solving (211 x 211 mtx) ...

Back solving (211 x 211 mtx) - done. Time (sec): 0.0004344

Solving linear system (col. 0) - done. Time (sec): 0.0006044

Training - done. Time (sec): 0.0127208

Evaluation

```
# eval points. : 210  
  
Predicting ...  
Predicting - done. Time (sec): 0.0095258  
  
Prediction time/pt. (sec) : 0.0000454
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0014422  
  
Prediction time/pt. (sec) : 0.0000102
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0066078  
  
Prediction time/pt. (sec) : 0.0000469
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0014181  
  
Prediction time/pt. (sec) : 0.0000101
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0098052
Initializing linear solver - done. Time (sec): 0.0100219
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003543
    Solving linear system (col. 0) - done. Time (sec): 0.0005248
Training - done. Time (sec): 0.0138619
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0048790

Prediction time/pt. (sec) : 0.0000346
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0048354

Prediction time/pt. (sec) : 0.0000230
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0041525

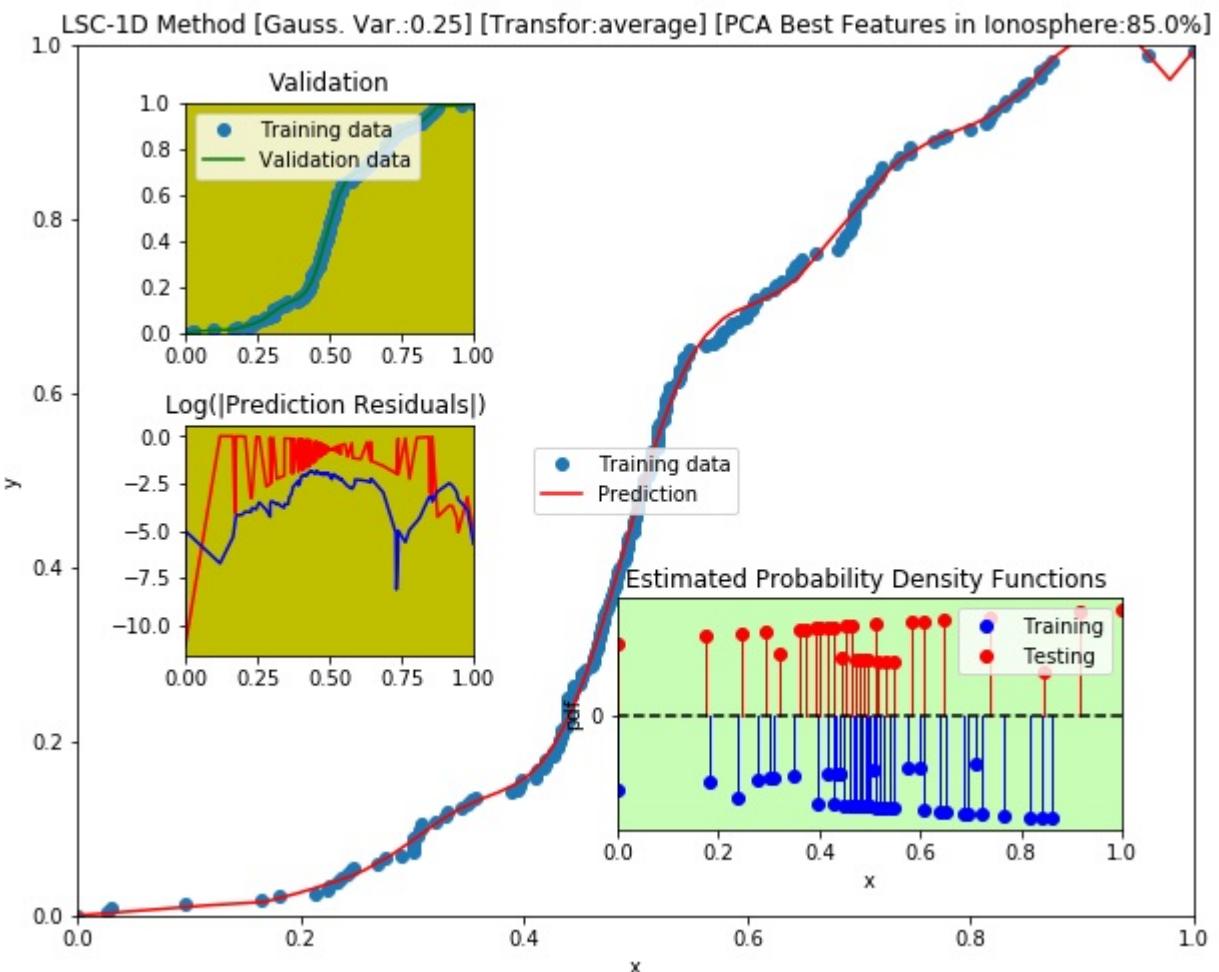
Prediction time/pt. (sec) : 0.0000295
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0014255

Prediction time/pt. (sec) : 0.0000101
```



Ionosphere Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0026469

Initializing linear solver - done. Time (sec): 0.0036893

Solving linear system (col. 0) ...

Back solving (211 x 211 mtx) ...

Back solving (211 x 211 mtx) - done. Time (sec): 0.0004039

Solving linear system (col. 0) - done. Time (sec): 0.0014663

Training - done. Time (sec): 0.0118032

Evaluation

```
# eval points. : 210  
  
Predicting ...  
Predicting - done. Time (sec): 0.0022762  
  
Prediction time/pt. (sec) : 0.0000108
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0015297  
  
Prediction time/pt. (sec) : 0.0000108
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0016043  
  
Prediction time/pt. (sec) : 0.0000114
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0015354  
  
Prediction time/pt. (sec) : 0.0000109
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0022566
Initializing linear solver - done. Time (sec): 0.0031257
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003562
    Solving linear system (col. 0) - done. Time (sec): 0.0011005
Training - done. Time (sec): 0.0087049
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0035596

Prediction time/pt. (sec) : 0.0000252
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0022743

Prediction time/pt. (sec) : 0.0000108
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0015745

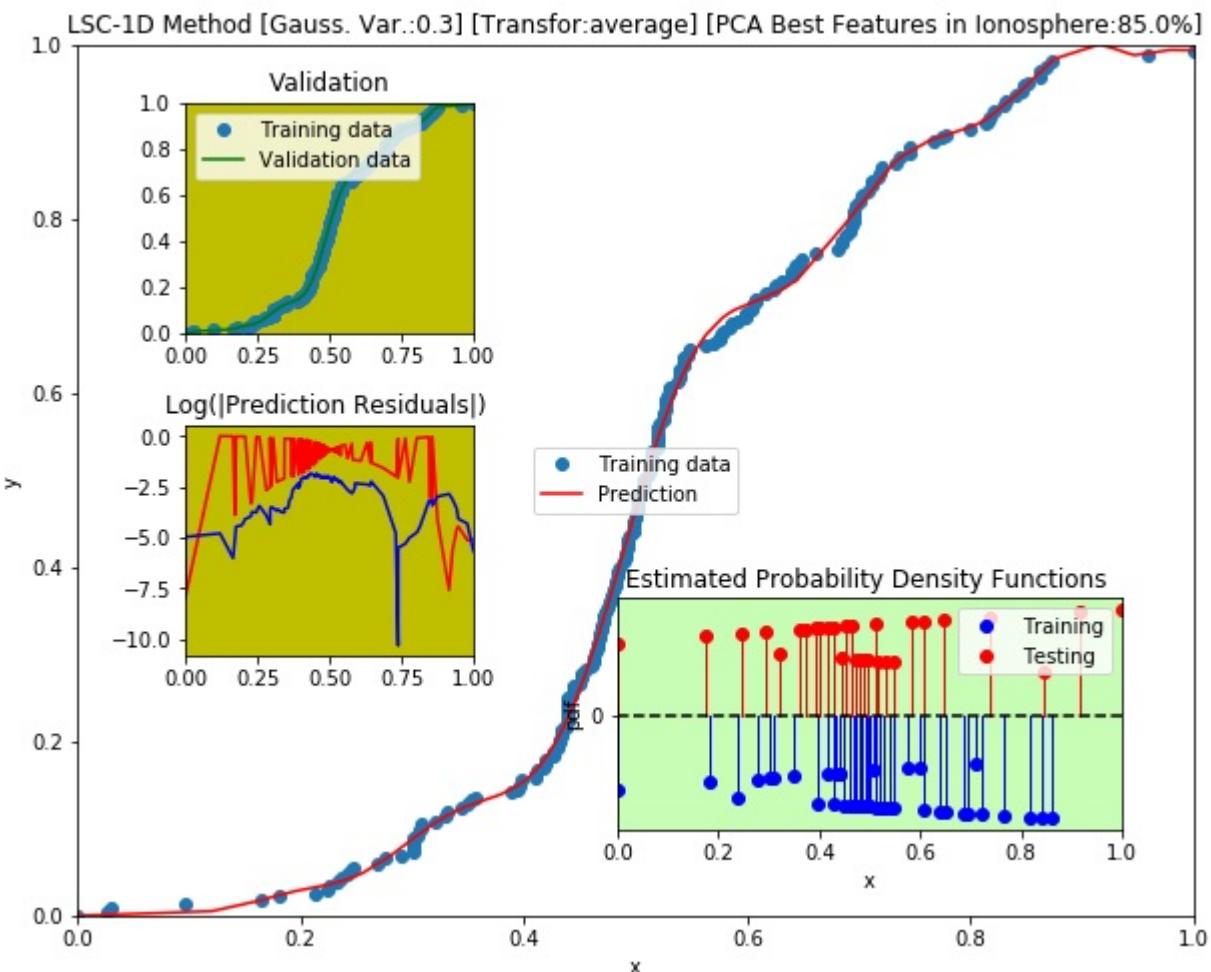
Prediction time/pt. (sec) : 0.0000112
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0014632

Prediction time/pt. (sec) : 0.0000104
```



Ionosphere Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0029368

Initializing linear solver - done. Time (sec): 0.0032172

Solving linear system (col. 0) ...

Back solving (211 x 211 mtx) ...

Back solving (211 x 211 mtx) - done. Time (sec): 0.0005138

Solving linear system (col. 0) - done. Time (sec): 0.0007055

Training - done. Time (sec): 0.0090466

Evaluation

```
# eval points. : 210  
  
Predicting ...  
Predicting - done. Time (sec): 0.0053611  
  
Prediction time/pt. (sec) : 0.0000255
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0021017  
  
Prediction time/pt. (sec) : 0.0000149
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0104957  
  
Prediction time/pt. (sec) : 0.0000744
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0039008  
  
Prediction time/pt. (sec) : 0.0000277
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0066035
Initializing linear solver - done. Time (sec): 0.0068543
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003133
    Solving linear system (col. 0) - done. Time (sec): 0.0004656
Training - done. Time (sec): 0.0107298
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0046828

Prediction time/pt. (sec) : 0.0000332
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0050883

Prediction time/pt. (sec) : 0.0000242
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0015028

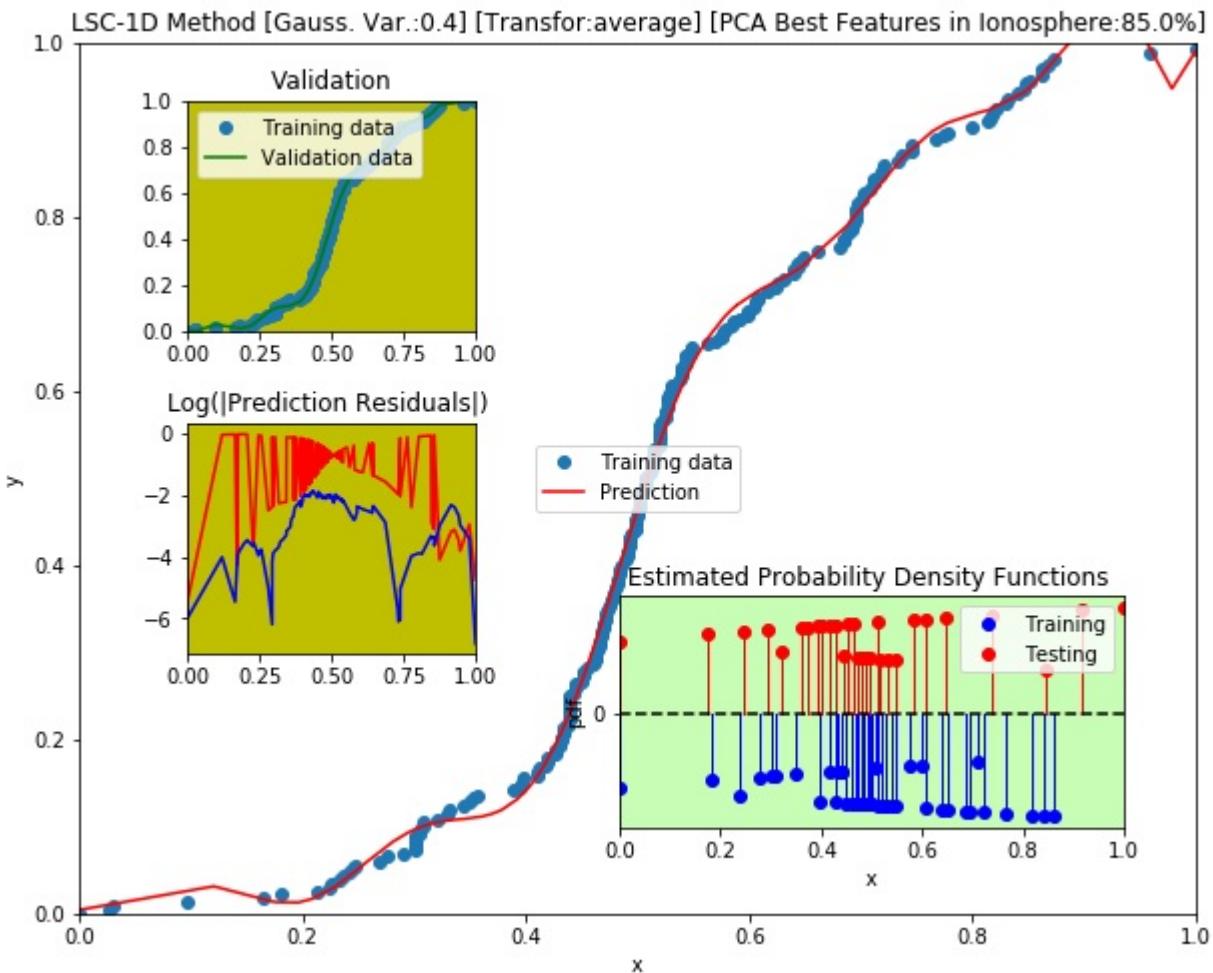
Prediction time/pt. (sec) : 0.0000107
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0089366

Prediction time/pt. (sec) : 0.0000634
```



Ionosphere Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0025156

Initializing linear solver - done. Time (sec): 0.0027707

Solving linear system (col. 0) ...

Back solving (211 x 211 mtx) ...

Back solving (211 x 211 mtx) - done. Time (sec): 0.0003047

Solving linear system (col. 0) - done. Time (sec): 0.0004504

Training - done. Time (sec): 0.0117917

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0059435  
Prediction time/pt. (sec) : 0.0000283
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0032718  
Prediction time/pt. (sec) : 0.0000232
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0031166  
Prediction time/pt. (sec) : 0.0000221
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0031917  
Prediction time/pt. (sec) : 0.0000226
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0111780
Initializing linear solver - done. Time (sec): 0.0114627
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0010417
    Solving linear system (col. 0) - done. Time (sec): 0.0012338
Training - done. Time (sec): 0.0209069
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0042307

Prediction time/pt. (sec) : 0.0000300
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0049126

Prediction time/pt. (sec) : 0.0000234
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0034773

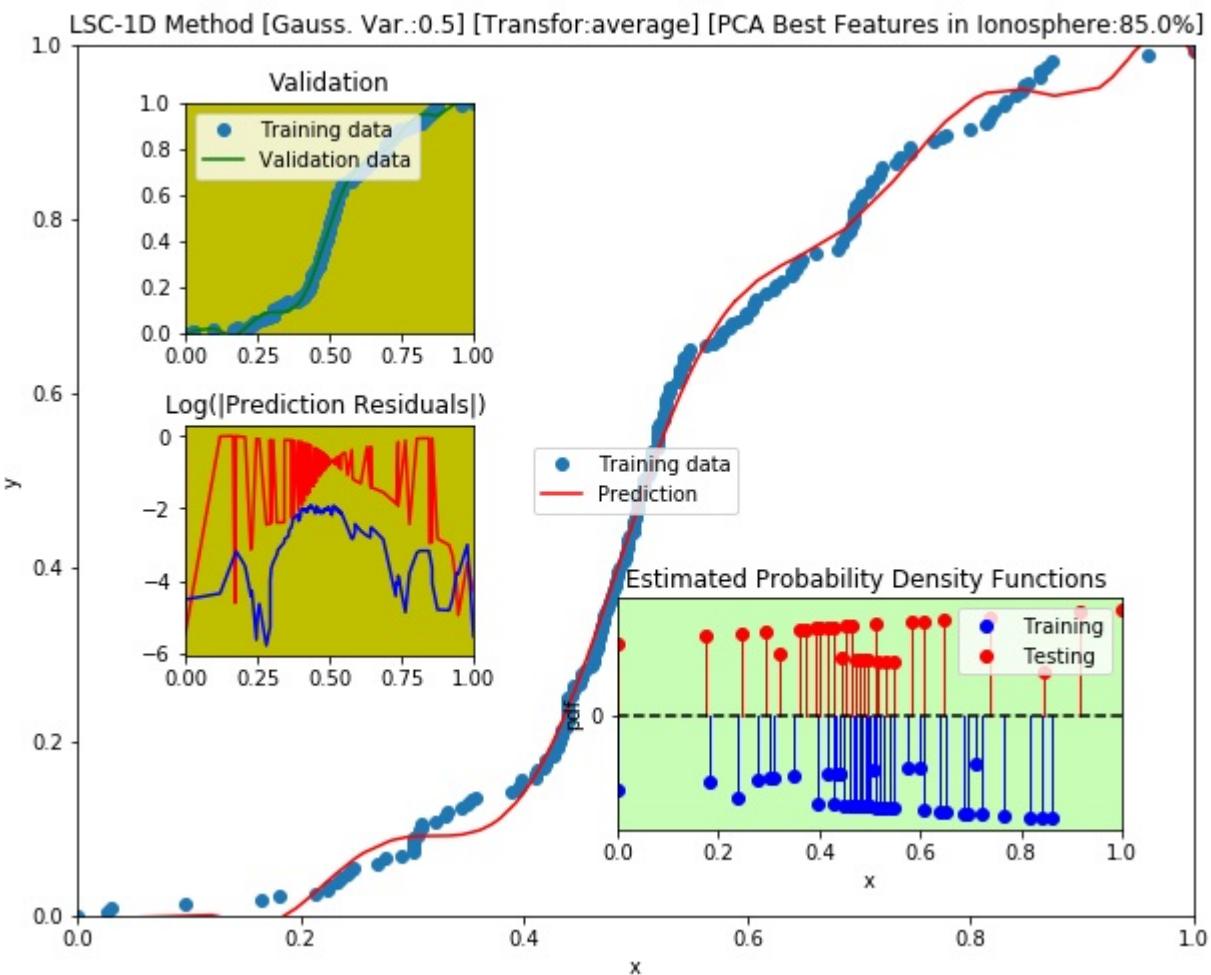
Prediction time/pt. (sec) : 0.0000247
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0035436

Prediction time/pt. (sec) : 0.0000251
```



Ionosphere Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0026610

Initializing linear solver - done. Time (sec): 0.0029268

Solving linear system (col. 0) ...

Back solving (211 x 211 mtx) ...

Back solving (211 x 211 mtx) - done. Time (sec): 0.0003040

Solving linear system (col. 0) - done. Time (sec): 0.0004492

Training - done. Time (sec): 0.0119622

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0038223  
Prediction time/pt. (sec) : 0.0000182
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0013926  
Prediction time/pt. (sec) : 0.0000099
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0013342  
Prediction time/pt. (sec) : 0.0000095
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0105863  
Prediction time/pt. (sec) : 0.0000751
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0136092
Initializing linear solver - done. Time (sec): 0.0138121
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003281
    Solving linear system (col. 0) - done. Time (sec): 0.0005019
Training - done. Time (sec): 0.0175502
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0014591

Prediction time/pt. (sec) : 0.0000103
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0060425

Prediction time/pt. (sec) : 0.0000288
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0031414

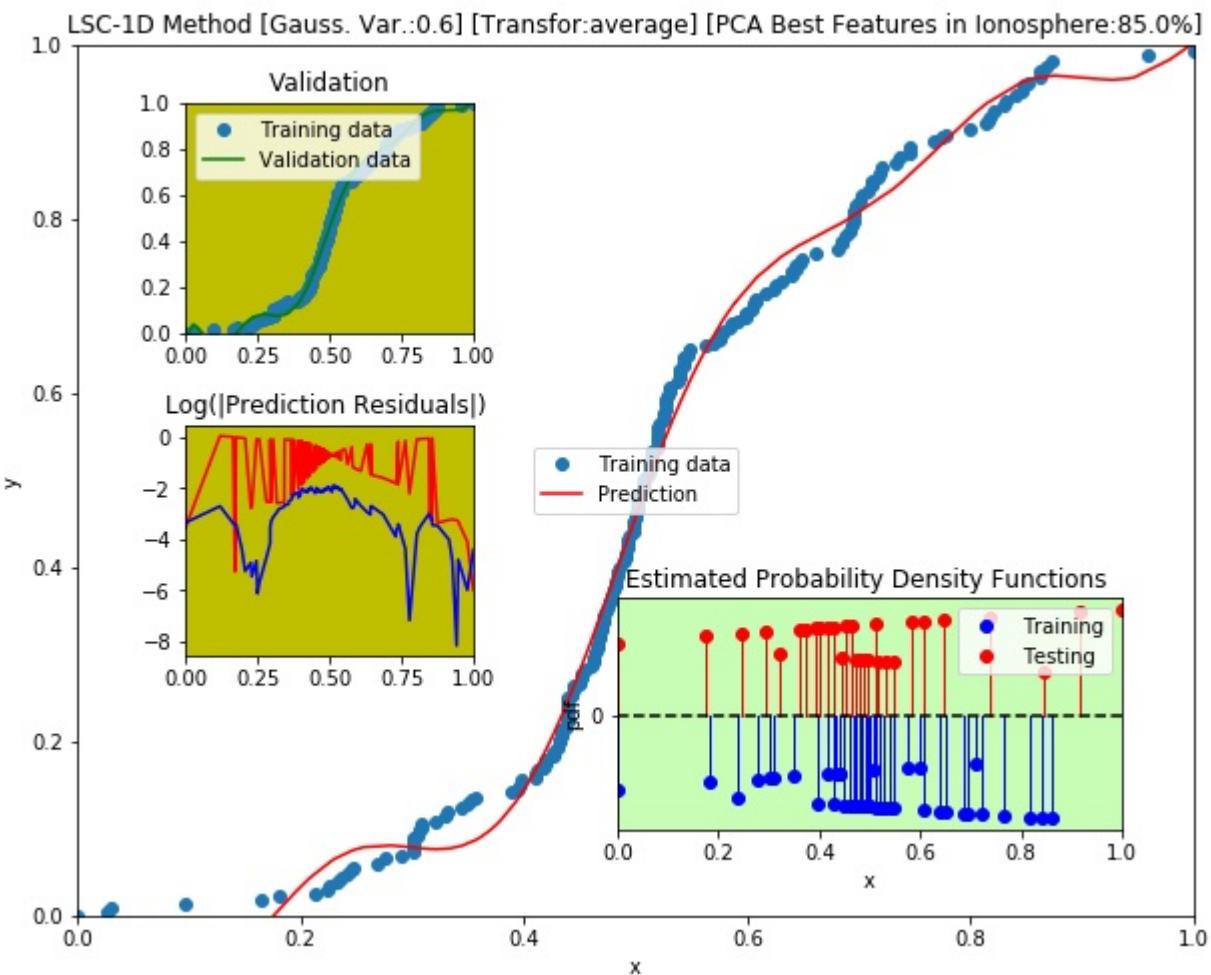
Prediction time/pt. (sec) : 0.0000223
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0014956

Prediction time/pt. (sec) : 0.0000106
```



Ionosphere Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0032074

Initializing linear solver - done. Time (sec): 0.0034921

Solving linear system (col. 0) ...

Back solving (211 x 211 mtx) ...

Back solving (211 x 211 mtx) - done. Time (sec): 0.0003765

Solving linear system (col. 0) - done. Time (sec): 0.0005710

Training - done. Time (sec): 0.0120854

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0063441  
Prediction time/pt. (sec) : 0.0000302
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0028791  
Prediction time/pt. (sec) : 0.0000204
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0029118  
Prediction time/pt. (sec) : 0.0000207
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0029328  
Prediction time/pt. (sec) : 0.0000208
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0074611
Initializing linear solver - done. Time (sec): 0.0077441
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0012226
    Solving linear system (col. 0) - done. Time (sec): 0.0016115
Training - done. Time (sec): 0.0185974
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0039678

Prediction time/pt. (sec) : 0.0000281
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0043933

Prediction time/pt. (sec) : 0.0000209
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0042264

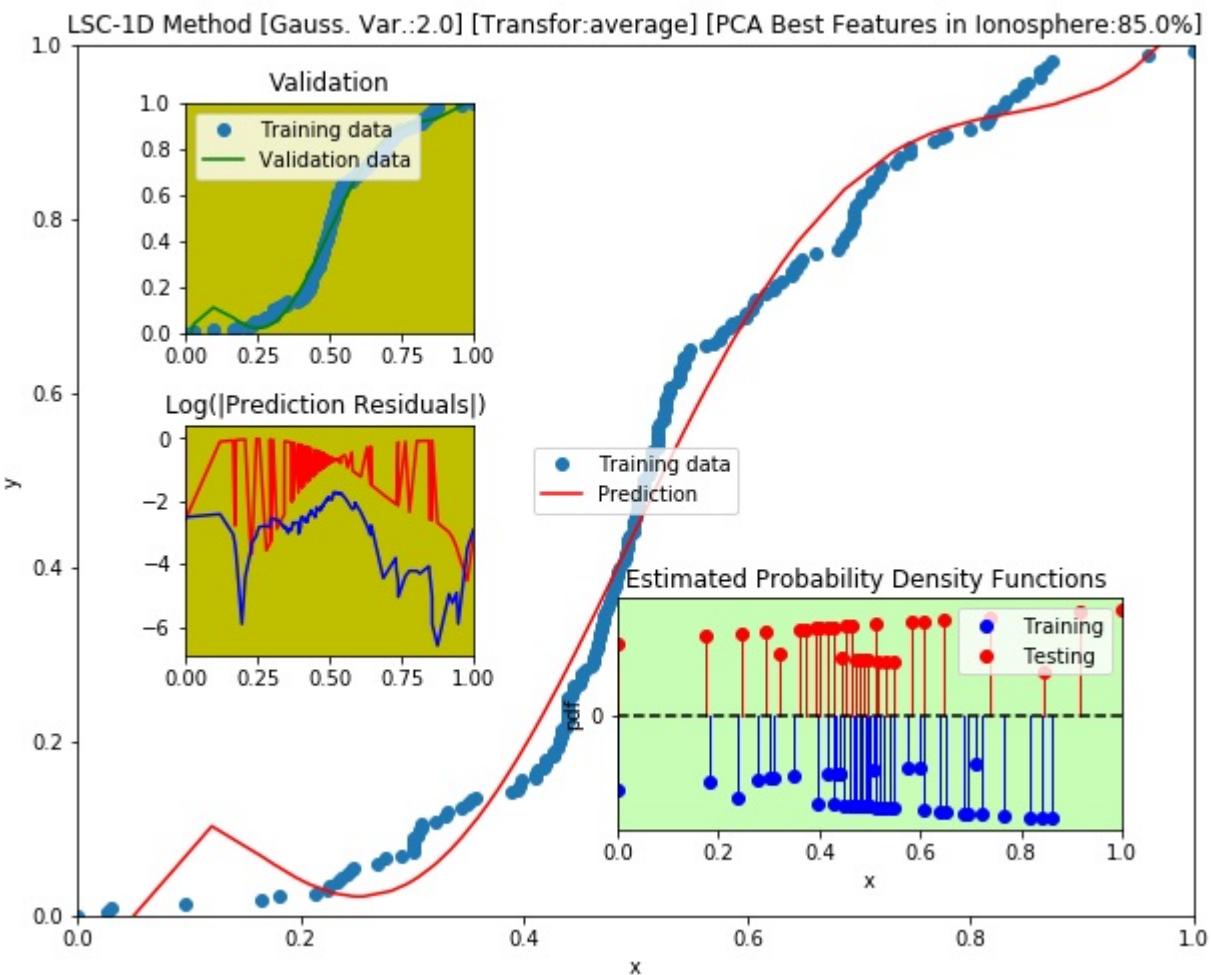
Prediction time/pt. (sec) : 0.0000300
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0027890

Prediction time/pt. (sec) : 0.0000198
```



Ionosphere Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0050595

Initializing linear solver - done. Time (sec): 0.0053353

Solving linear system (col. 0) ...

Back solving (211 x 211 mtx) ...

Back solving (211 x 211 mtx) - done. Time (sec): 0.0005887

Solving linear system (col. 0) - done. Time (sec): 0.0008087

Training - done. Time (sec): 0.0112922

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0036869  
Prediction time/pt. (sec) : 0.0000176
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0053463  
Prediction time/pt. (sec) : 0.0000379
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0089736  
Prediction time/pt. (sec) : 0.0000636
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0046585  
Prediction time/pt. (sec) : 0.0000330
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0067563
Initializing linear solver - done. Time (sec): 0.0070124
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003271
    Solving linear system (col. 0) - done. Time (sec): 0.0004861
Training - done. Time (sec): 0.0104871
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0046418

Prediction time/pt. (sec) : 0.0000329
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0048852

Prediction time/pt. (sec) : 0.0000233
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0013821

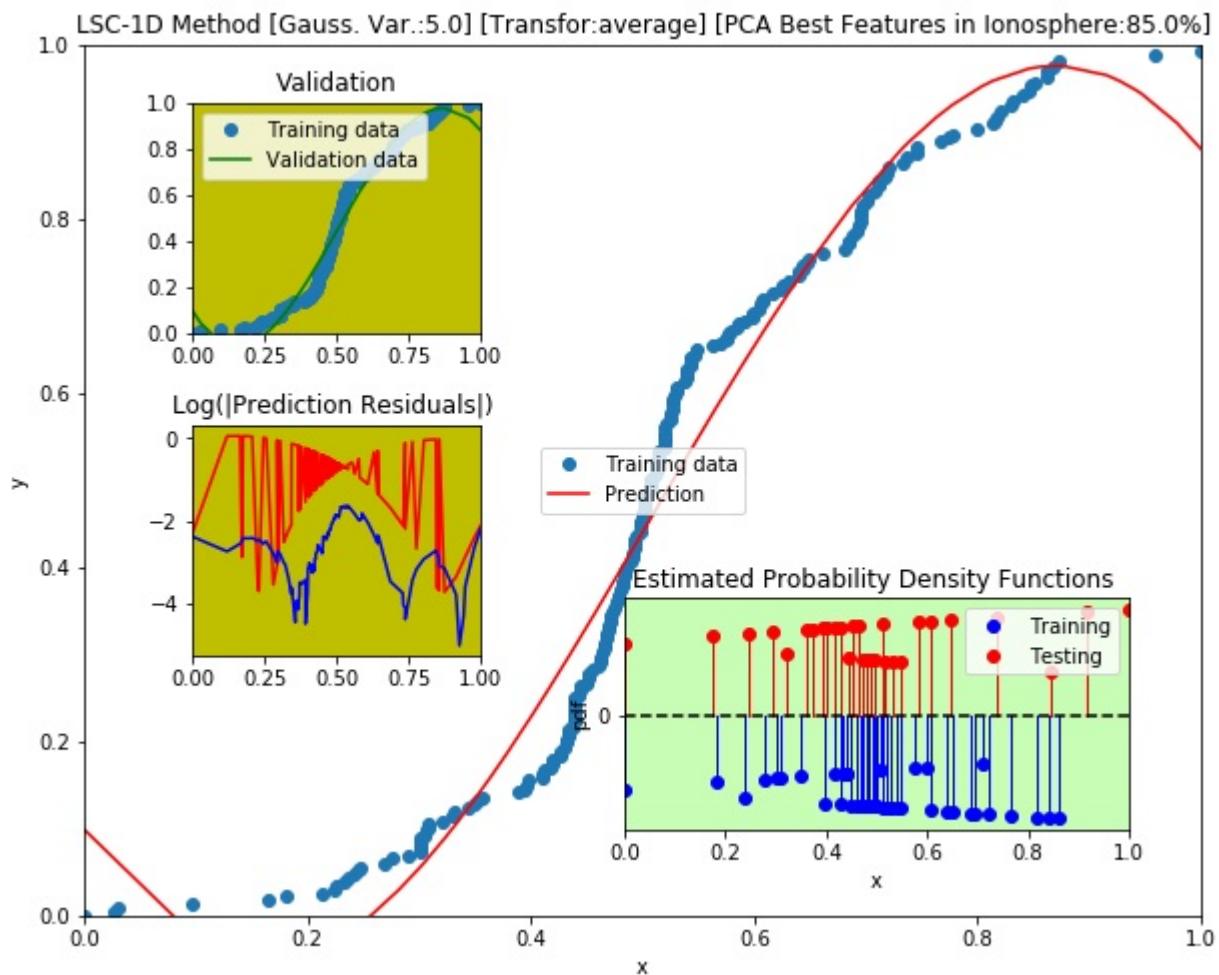
Prediction time/pt. (sec) : 0.0000098
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0071738

Prediction time/pt. (sec) : 0.0000509
```



Ionosphere Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0028179

Initializing linear solver - done. Time (sec): 0.0030928

Solving linear system (col. 0) ...

Back solving (211 x 211 mtx) ...

Back solving (211 x 211 mtx) - done. Time (sec): 0.0003157

Solving linear system (col. 0) - done. Time (sec): 0.0004761

Training - done. Time (sec): 0.0073025

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0051658  
Prediction time/pt. (sec) : 0.0000246
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011778  
Prediction time/pt. (sec) : 0.0000084
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011842  
Prediction time/pt. (sec) : 0.0000084
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011523  
Prediction time/pt. (sec) : 0.0000082
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0089991
Initializing linear solver - done. Time (sec): 0.0092373
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003278
    Solving linear system (col. 0) - done. Time (sec): 0.0004840
Training - done. Time (sec): 0.0139601
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0060916

Prediction time/pt. (sec) : 0.0000432
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0016646

Prediction time/pt. (sec) : 0.0000079
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011287

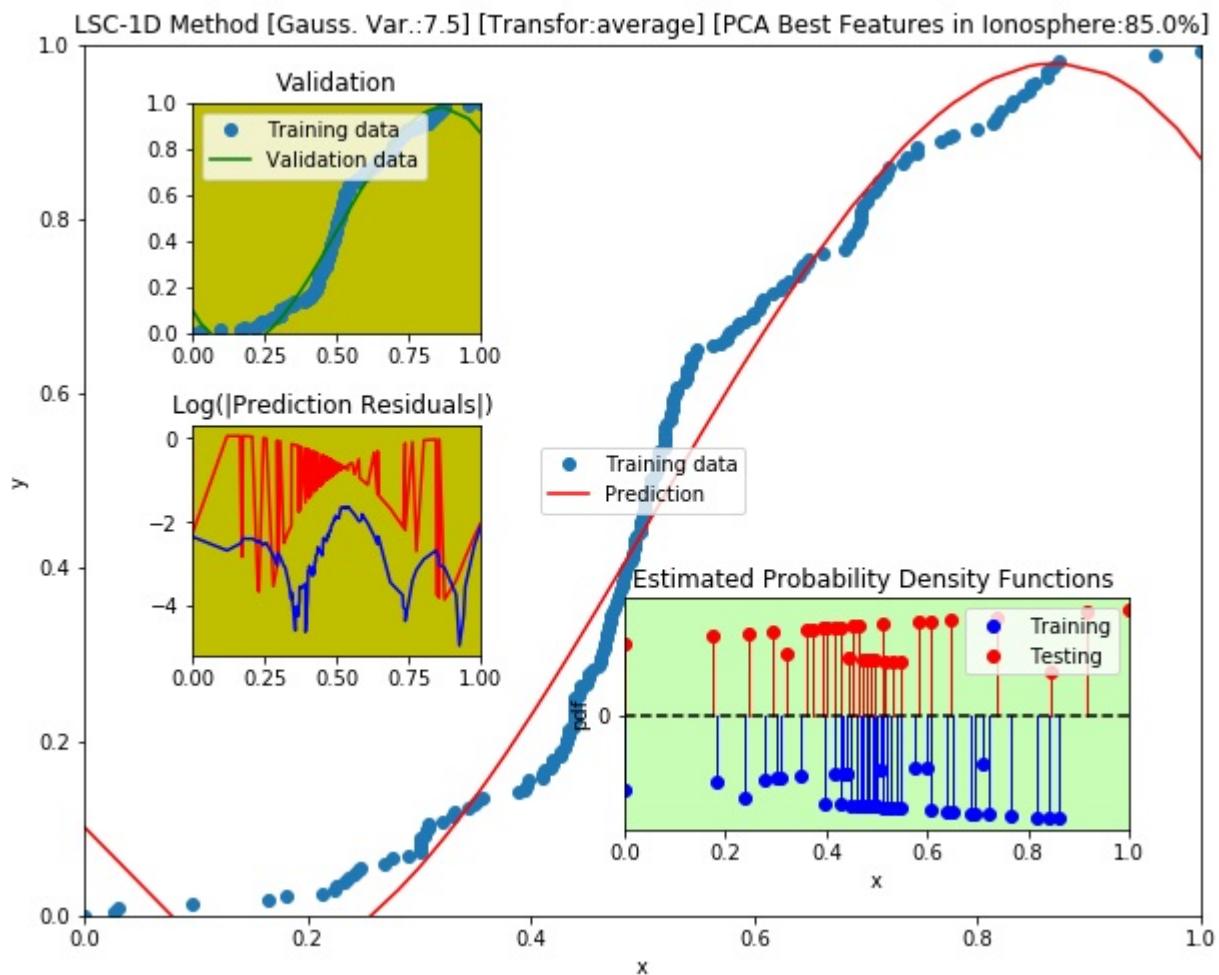
Prediction time/pt. (sec) : 0.0000080
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0088284

Prediction time/pt. (sec) : 0.0000626
```



Ionosphere Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027804

Initializing linear solver - done. Time (sec): 0.0030503

Solving linear system (col. 0) ...

Back solving (211 x 211 mtx) ...

Back solving (211×211 mtx) ...

Solving linear system (col. 0) - done. Time (sec): 0.0005248

Solving linear system (cut. 0) - done. Time (sec): 0.0075414
Simplifying - done. Time (sec): 0.0075414

Training - done. Time (sec): 0.0075414

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0058217  
Prediction time/pt. (sec) : 0.0000277
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0029986  
Prediction time/pt. (sec) : 0.0000213
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0031090  
Prediction time/pt. (sec) : 0.0000220
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0030434  
Prediction time/pt. (sec) : 0.0000216
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0092039
Initializing linear solver - done. Time (sec): 0.0094838
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0013108
    Solving linear system (col. 0) - done. Time (sec): 0.0016613
Training - done. Time (sec): 0.0206127
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0027351

Prediction time/pt. (sec) : 0.0000194
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0035186

Prediction time/pt. (sec) : 0.0000168
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0037844

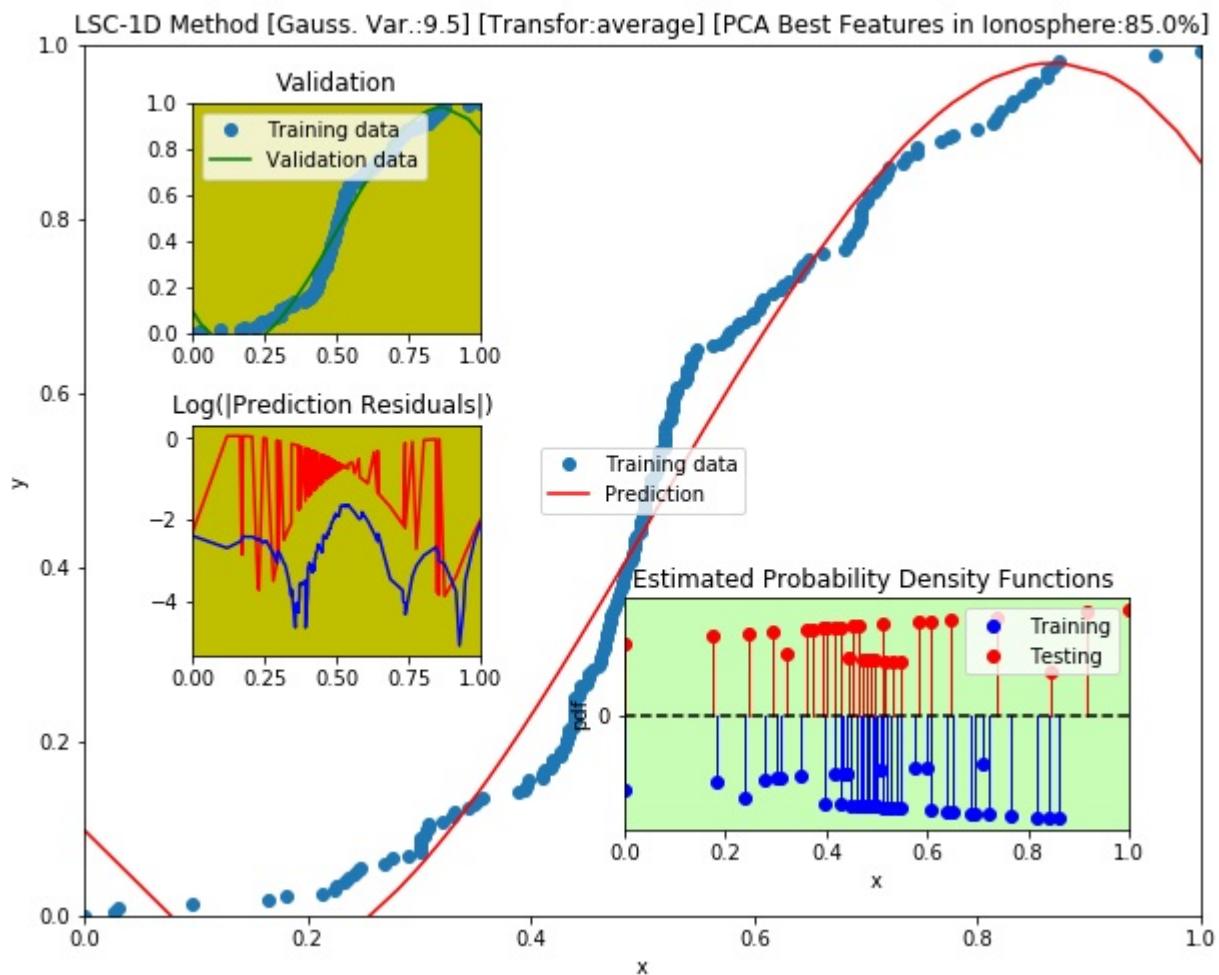
Prediction time/pt. (sec) : 0.0000268
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0028827

Prediction time/pt. (sec) : 0.0000204
```



Ionosphere Dataset

Parameters: PCA: 85.0%

DATASET TRANSFORMATION: average

COLLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

Training ...

Initializing linear solver ...

Performing LU fact. (211 x 211 mtx) ...

Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0029323

Initializing linear solver - done. Time (sec): 0.0032122

Solving linear system (col. 0) ...

Back solving (211 x 211 mtx) ...

Back solving (211 x 211 mtx) - do

Solving linear system (col. 0) - done. Time (sec): 0.0004849

Training : done. Time (sec): 0.0071654

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0051172  
Prediction time/pt. (sec) : 0.0000244
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011971  
Prediction time/pt. (sec) : 0.0000085
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011523  
Prediction time/pt. (sec) : 0.0000082
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011675  
Prediction time/pt. (sec) : 0.0000083
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0054169
Initializing linear solver - done. Time (sec): 0.0056207
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003154
    Solving linear system (col. 0) - done. Time (sec): 0.0004728
Training - done. Time (sec): 0.0168555
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0044458

Prediction time/pt. (sec) : 0.0000315
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0070169

Prediction time/pt. (sec) : 0.0000334
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011754

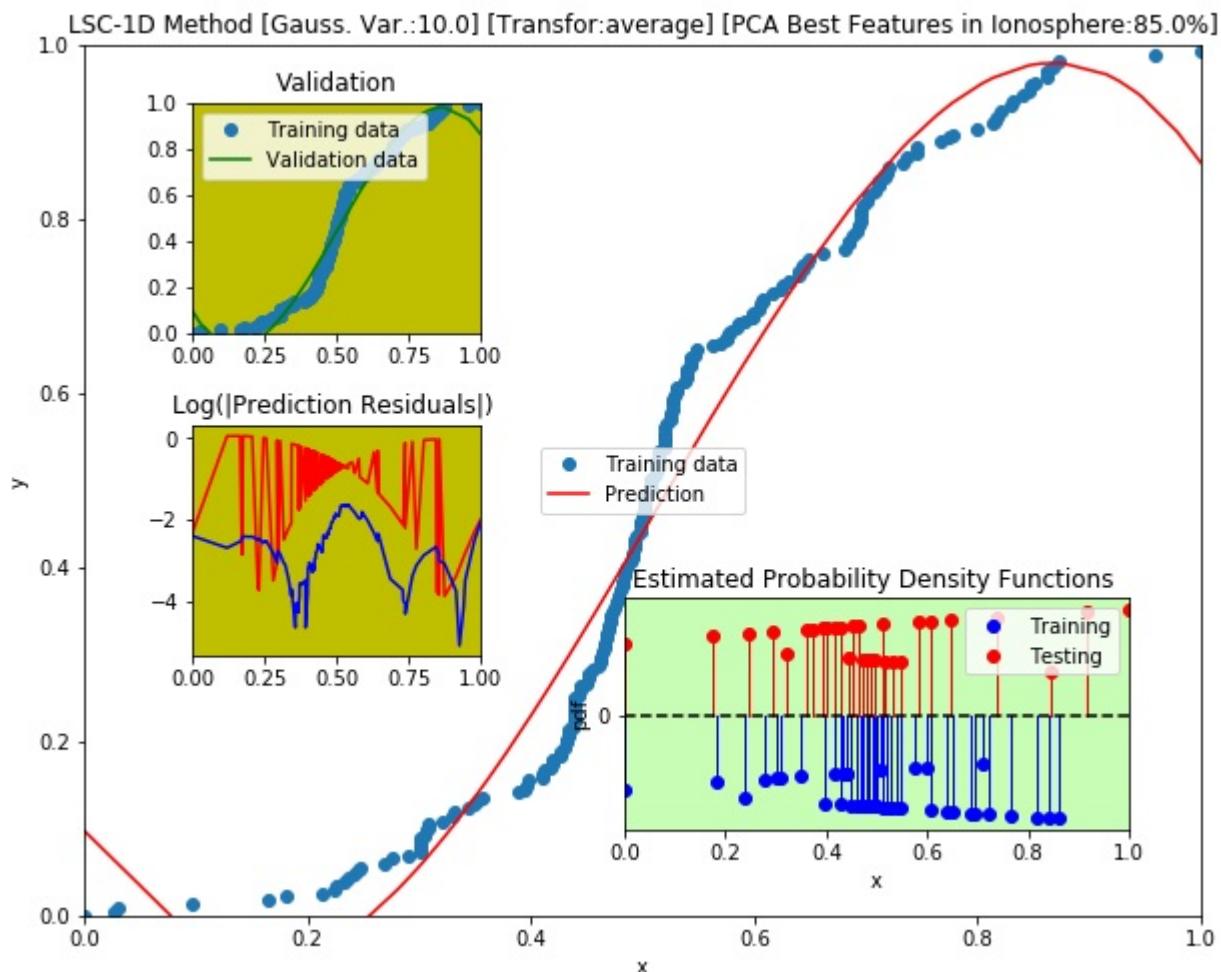
Prediction time/pt. (sec) : 0.0000083
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011556

Prediction time/pt. (sec) : 0.0000082
```



Ionosphere Dataset

Ionosphere dataset
Parameters: PCA: 85.0%
DATASET TRANSFORMATION: optim
COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```
Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
      Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0164659
  Initializing linear solver - done. Time (sec): 0.0167463
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
      Back solving (211 x 211 mtx) - done. Time (sec): 0.0012660
  Solving linear system (col. 0) - done. Time (sec): 0.0014710
Training - done. Time (sec): 0.0234532
```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0042734  
Prediction time/pt. (sec) : 0.0000203
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0041187  
Prediction time/pt. (sec) : 0.0000292
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0039771  
Prediction time/pt. (sec) : 0.0000282
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0047081  
Prediction time/pt. (sec) : 0.0000334
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0130687
Initializing linear solver - done. Time (sec): 0.0133781
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0012383
    Solving linear system (col. 0) - done. Time (sec): 0.0014393
Training - done. Time (sec): 0.0221133
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0035045

Prediction time/pt. (sec) : 0.0000249
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0039973

Prediction time/pt. (sec) : 0.0000190
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0058975

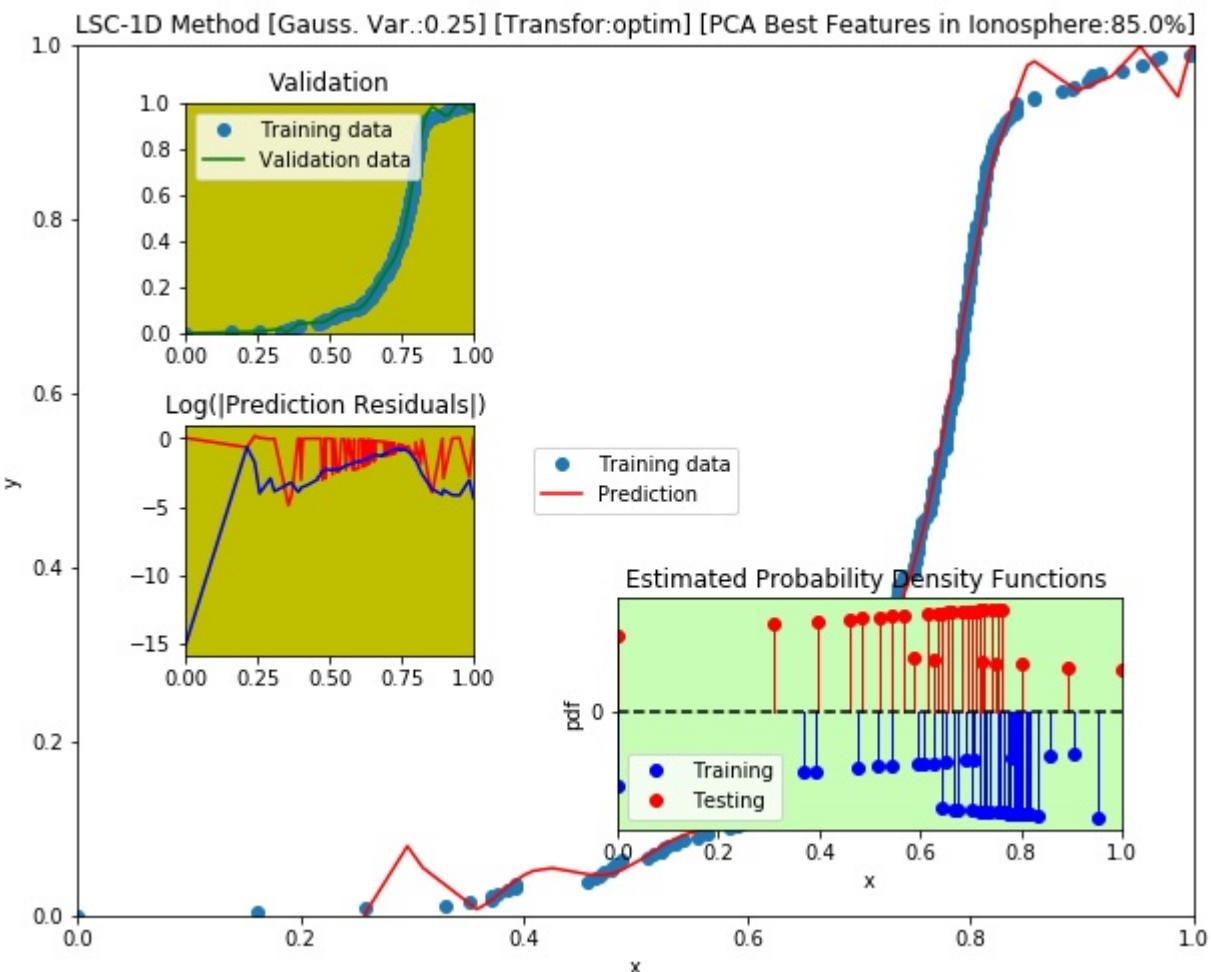
Prediction time/pt. (sec) : 0.0000418
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0040169

Prediction time/pt. (sec) : 0.0000285
```



Ionosphere Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0036211
    Initializing linear solver - done. Time (sec): 0.0039527
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003703
    Solving linear system (col. 0) - done. Time (sec): 0.0005696
Training - done. Time (sec): 0.0143249

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0079136  
Prediction time/pt. (sec) : 0.0000377
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0036533  
Prediction time/pt. (sec) : 0.0000259
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0013158  
Prediction time/pt. (sec) : 0.0000093
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0053916  
Prediction time/pt. (sec) : 0.0000382
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0094082
Initializing linear solver - done. Time (sec): 0.0096750
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003266
    Solving linear system (col. 0) - done. Time (sec): 0.0004914
Training - done. Time (sec): 0.0133610
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0056491

Prediction time/pt. (sec) : 0.0000401
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0054715

Prediction time/pt. (sec) : 0.0000261
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0048325

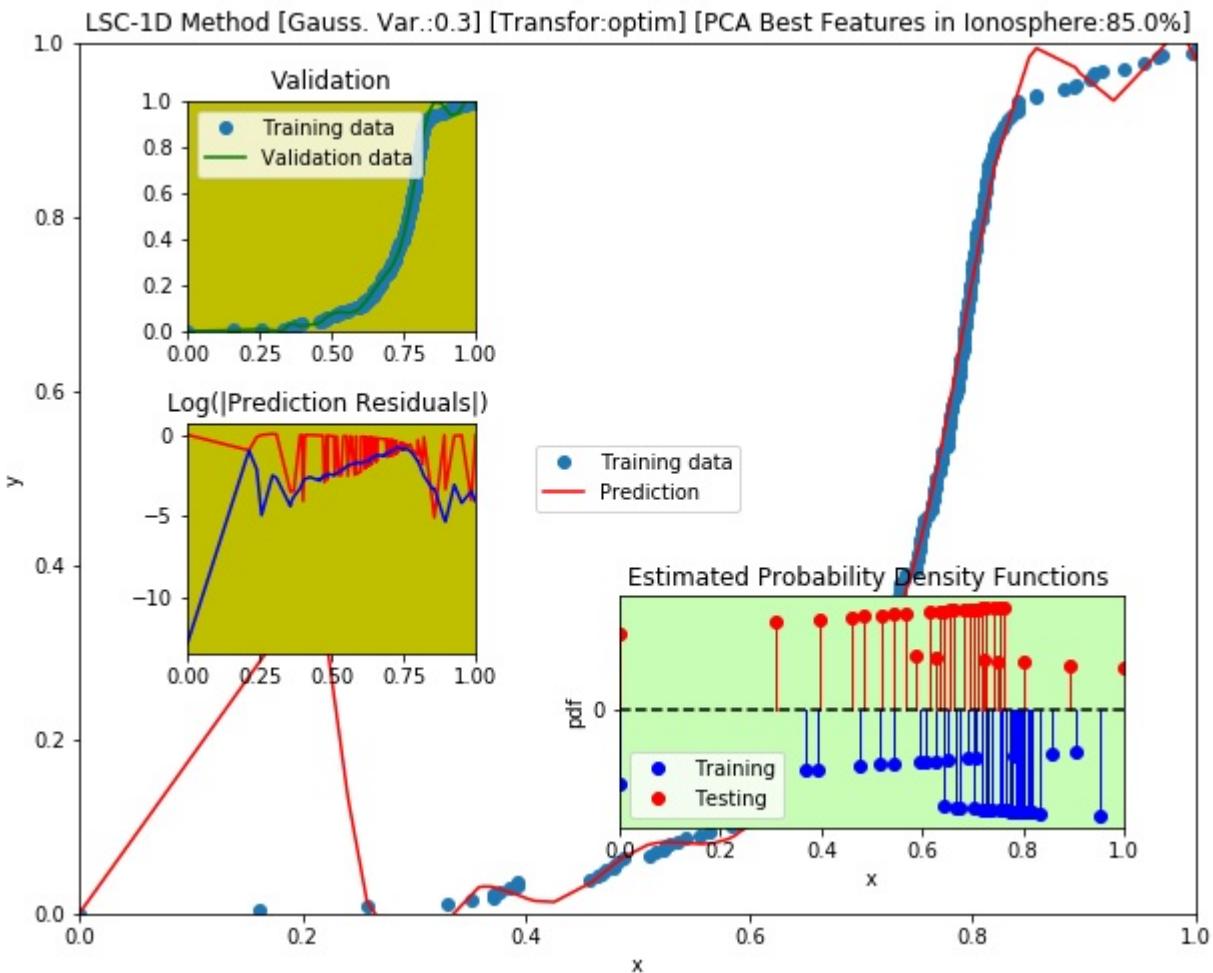
Prediction time/pt. (sec) : 0.0000343
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0041933

Prediction time/pt. (sec) : 0.0000297
```



Ionosphere Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (211 x 211 mtx) ...
        Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027485
    Initializing linear solver - done. Time (sec): 0.0030172
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003355
    Solving linear system (col. 0) - done. Time (sec): 0.0005023
Training - done. Time (sec): 0.0097439

```

Evaluation

```
# eval points. : 210  
  
Predicting ...  
Predicting - done. Time (sec): 0.0095775  
  
Prediction time/pt. (sec) : 0.0000456
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0039845  
  
Prediction time/pt. (sec) : 0.0000283
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0014014  
  
Prediction time/pt. (sec) : 0.0000099
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0068214  
  
Prediction time/pt. (sec) : 0.0000484
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0067656
Initializing linear solver - done. Time (sec): 0.0069783
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003245
    Solving linear system (col. 0) - done. Time (sec): 0.0004835
Training - done. Time (sec): 0.0105786
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0044708

Prediction time/pt. (sec) : 0.0000317
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0054183

Prediction time/pt. (sec) : 0.0000258
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0015090

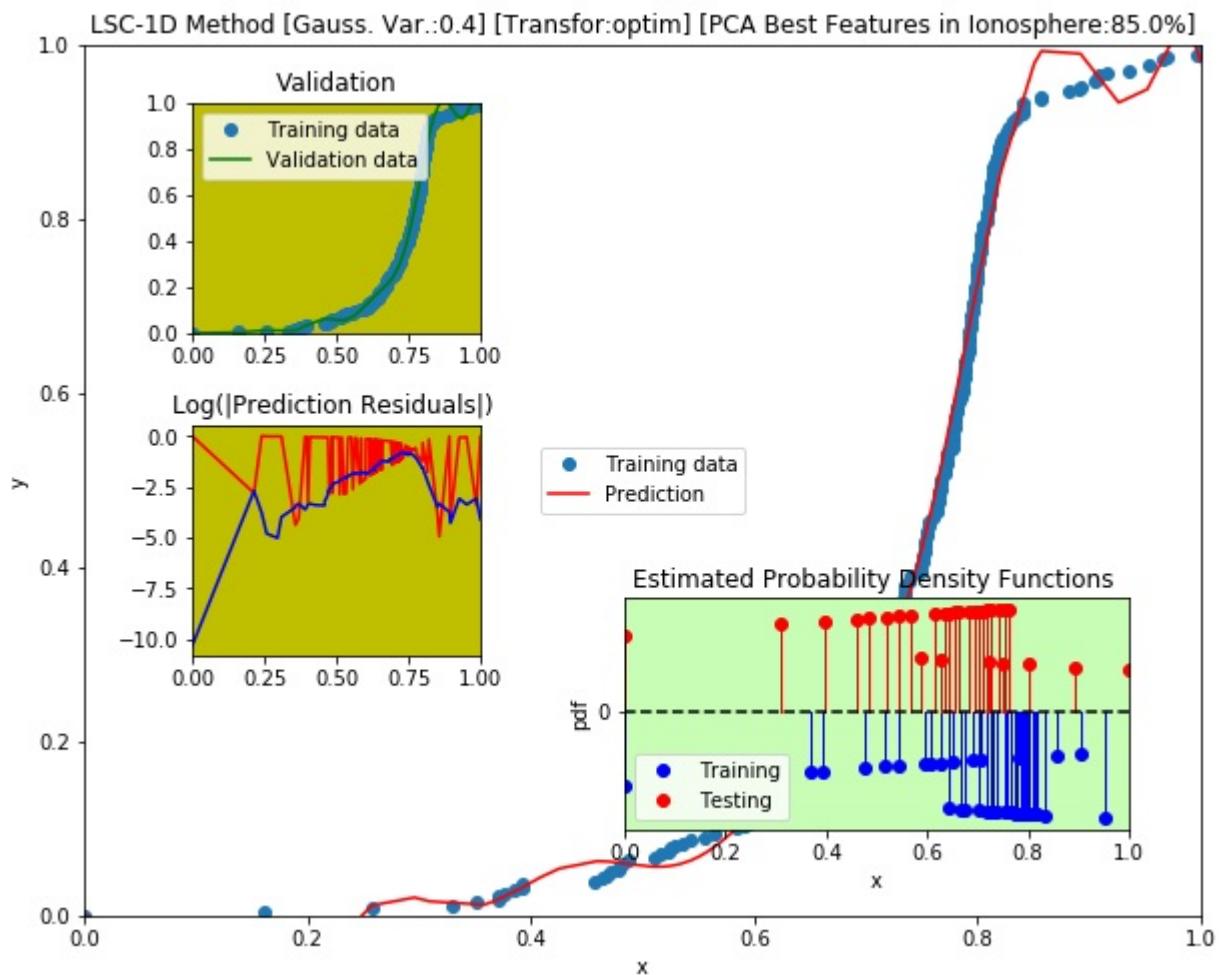
Prediction time/pt. (sec) : 0.0000107
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0074658

Prediction time/pt. (sec) : 0.0000529
```



Ionosphere Dataset

Parameters: PCA: 85.0%
DATASET TRANSFORMATION: optim
COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```
Training ...
  Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
      Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027280
  Initializing linear solver - done. Time (sec): 0.0029953
  Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
      Back solving (211 x 211 mtx) - done. Time (sec): 0.0003676
  Solving linear system (col. 0) - done. Time (sec): 0.0005283
Training - done. Time (sec): 0.0125279
```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0050159  
Prediction time/pt. (sec) : 0.0000239
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0012562  
Prediction time/pt. (sec) : 0.0000089
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0012238  
Prediction time/pt. (sec) : 0.0000087
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0012169  
Prediction time/pt. (sec) : 0.0000086
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0132358
Initializing linear solver - done. Time (sec): 0.0134563
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003562
    Solving linear system (col. 0) - done. Time (sec): 0.0005422
Training - done. Time (sec): 0.0171821
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0015121

Prediction time/pt. (sec) : 0.0000107
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0110879

Prediction time/pt. (sec) : 0.0000528
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0013449

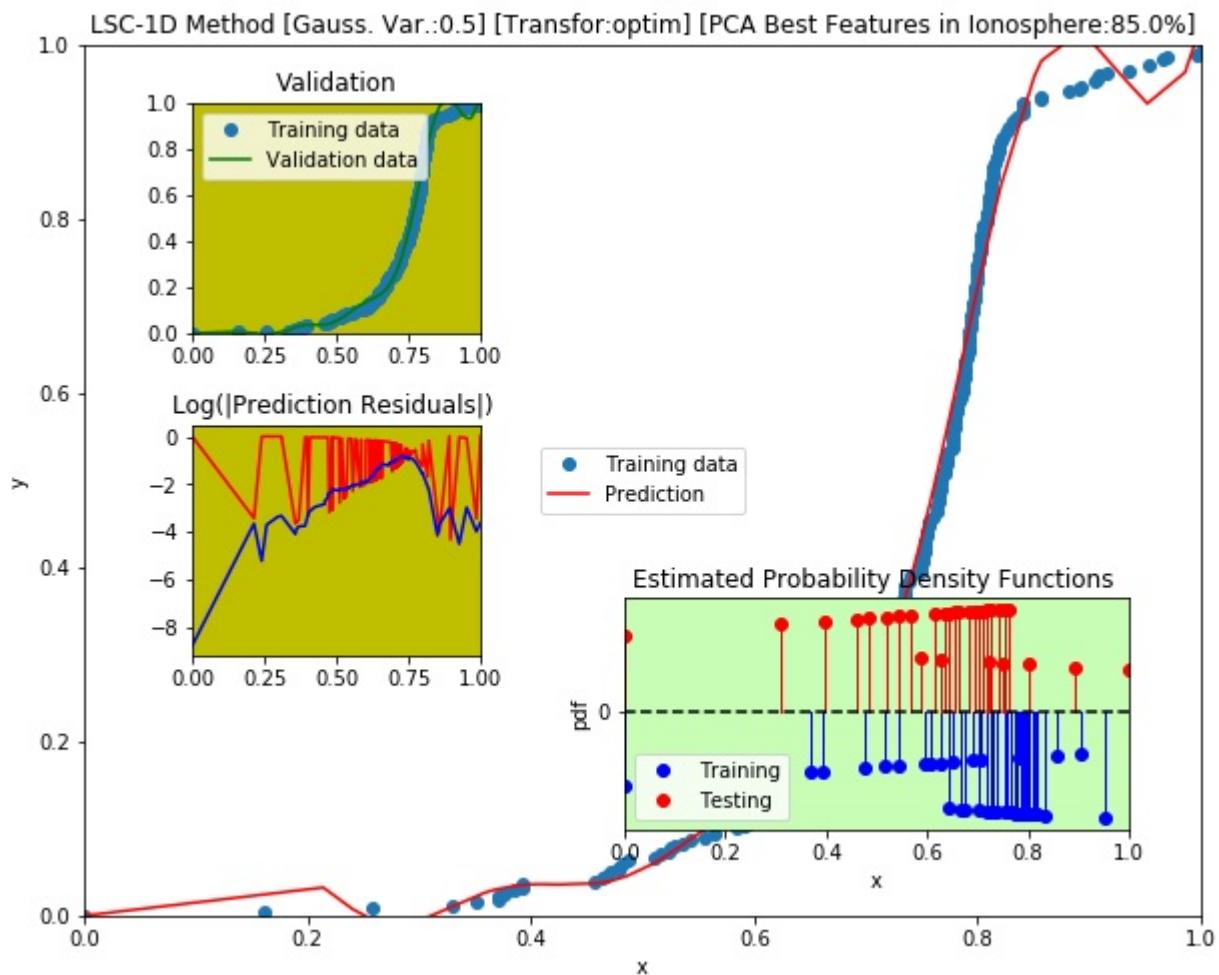
Prediction time/pt. (sec) : 0.0000095
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0034933

Prediction time/pt. (sec) : 0.0000248
```



Ionosphere Dataset

Parameters: PCA: 85.0%
DATASET TRANSFORMATION: optim
COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```
Training ...
    Initializing linear solver ...
        Performing LU fact. (211 x 211 mtx) ...
        Performing LU fact. (211 x 211 mtx) - done. Time (sec):  0.0027678
    Initializing linear solver - done. Time (sec):  0.0030456
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec):  0.0003183
    Solving linear system (col. 0) - done. Time (sec):  0.0004771
Training - done. Time (sec):  0.0102775
```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0055370  
Prediction time/pt. (sec) : 0.0000264
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0014915  
Prediction time/pt. (sec) : 0.0000106
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0014353  
Prediction time/pt. (sec) : 0.0000102
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0014050  
Prediction time/pt. (sec) : 0.0000100
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0069485
Initializing linear solver - done. Time (sec): 0.0071654
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0005980
    Solving linear system (col. 0) - done. Time (sec): 0.0007861
Training - done. Time (sec): 0.0120211
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0037804

Prediction time/pt. (sec) : 0.0000268
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0136852

Prediction time/pt. (sec) : 0.0000652
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0013661

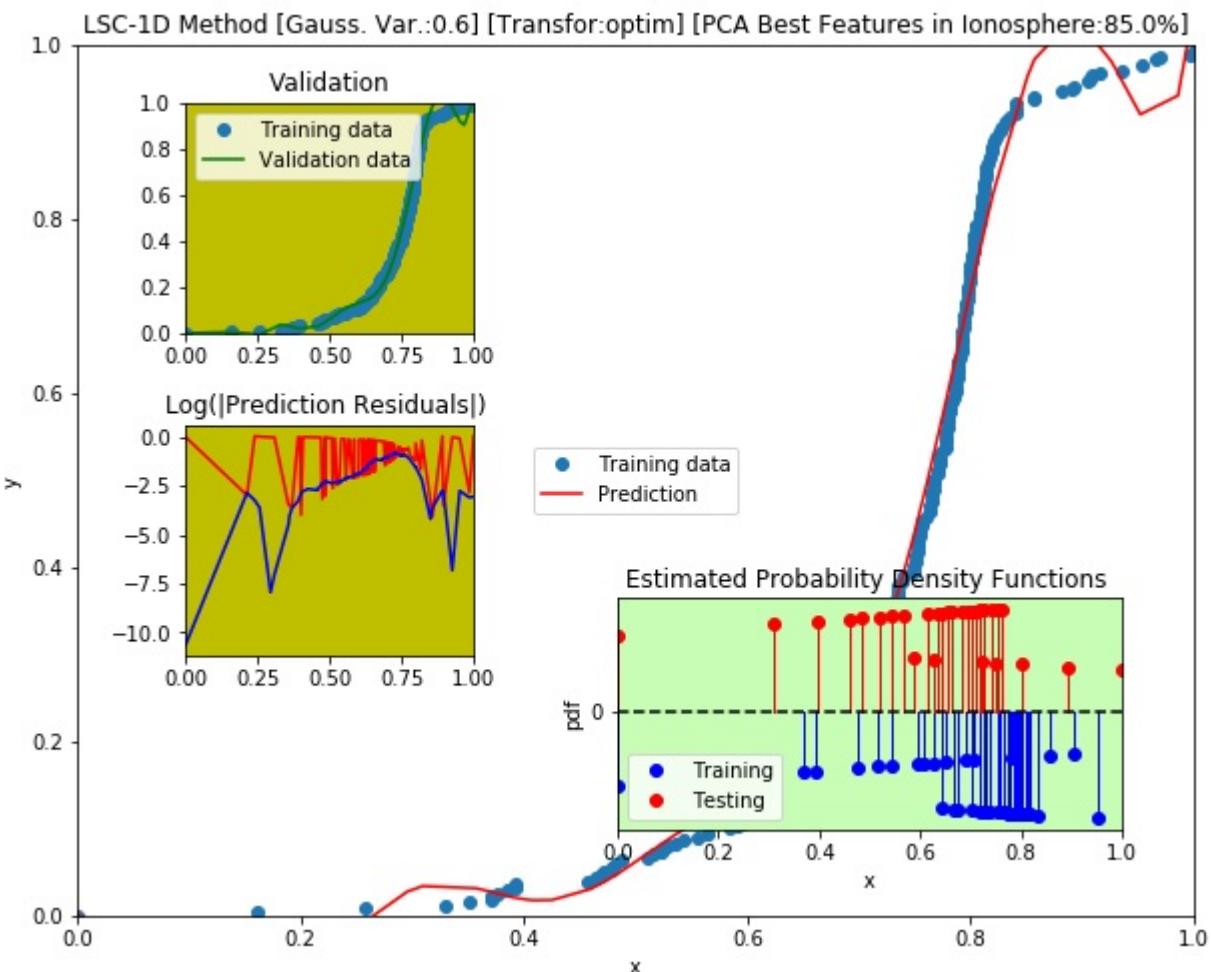
Prediction time/pt. (sec) : 0.0000097
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0061319

Prediction time/pt. (sec) : 0.0000435
```



Ionosphere Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
    Performing LU fact. (211 x 211 mtx) ...
    Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0139337
    Initializing linear solver - done. Time (sec): 0.0141461
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003366
    Solving linear system (col. 0) - done. Time (sec): 0.0005171
Training - done. Time (sec): 0.0176628

```

Evaluation

```
# eval points. : 210  
  
Predicting ...  
Predicting - done. Time (sec): 0.0128372  
  
Prediction time/pt. (sec) : 0.0000611
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0038533  
  
Prediction time/pt. (sec) : 0.0000273
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0041363  
  
Prediction time/pt. (sec) : 0.0000293
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0011697  
  
Prediction time/pt. (sec) : 0.0000083
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0101326
Initializing linear solver - done. Time (sec): 0.0103540
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003376
    Solving linear system (col. 0) - done. Time (sec): 0.0004969
Training - done. Time (sec): 0.0138321
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0047827

Prediction time/pt. (sec) : 0.0000339
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0044734

Prediction time/pt. (sec) : 0.0000213
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0038612

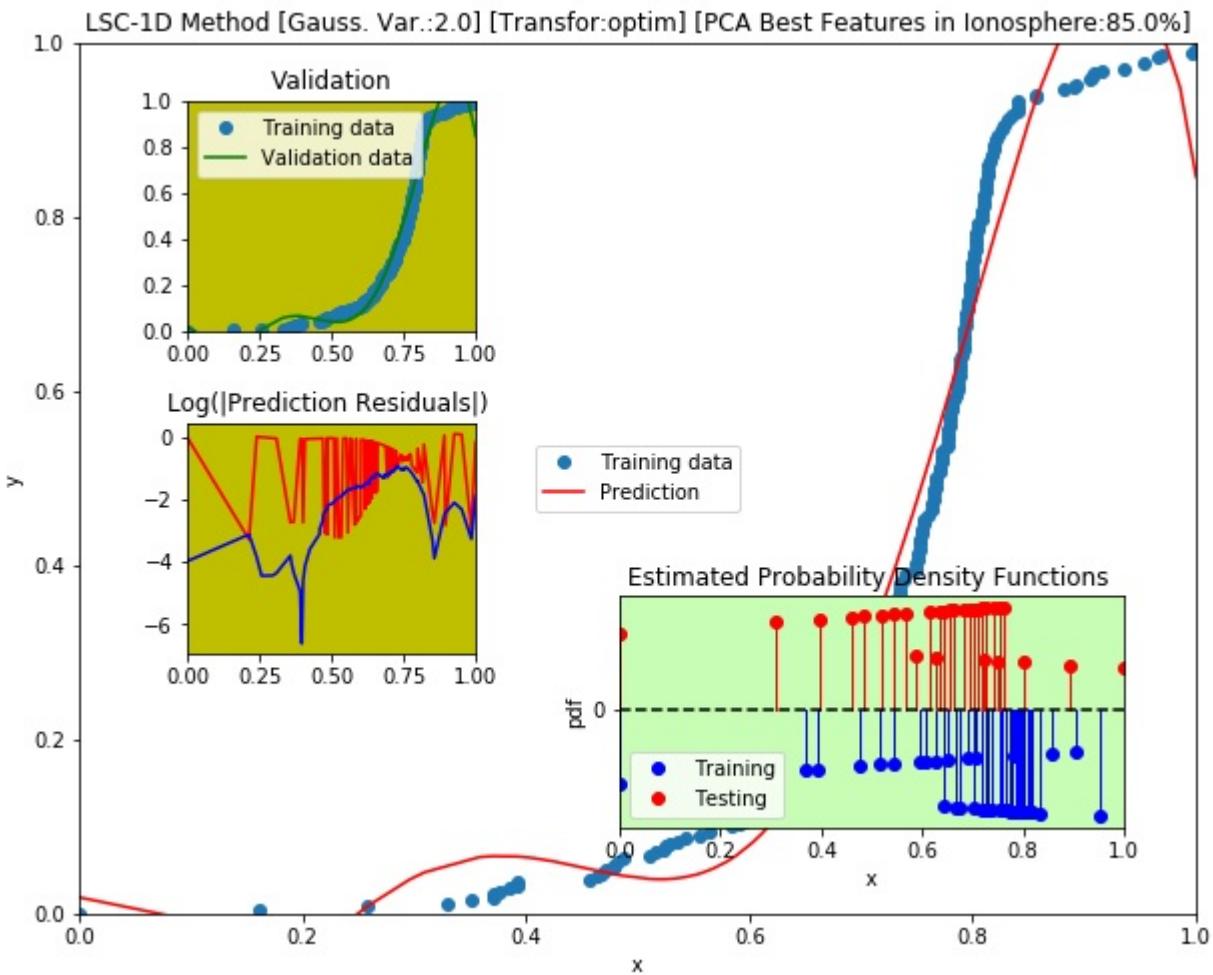
Prediction time/pt. (sec) : 0.0000274
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0038626

Prediction time/pt. (sec) : 0.0000274
```



Ionosphere Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (211 x 211 mtx) ...
        Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027740
    Initializing linear solver - done. Time (sec): 0.0030472
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003228
    Solving linear system (col. 0) - done. Time (sec): 0.0004771
Training - done. Time (sec): 0.0081618

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0065863  
Prediction time/pt. (sec) : 0.0000314
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011437  
Prediction time/pt. (sec) : 0.0000081
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0017226  
Prediction time/pt. (sec) : 0.0000122
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0028520  
Prediction time/pt. (sec) : 0.0000202
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0135393
Initializing linear solver - done. Time (sec): 0.0138438
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003660
    Solving linear system (col. 0) - done. Time (sec): 0.0008352
Training - done. Time (sec): 0.0212069
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0012429

Prediction time/pt. (sec) : 0.0000088
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0032973

Prediction time/pt. (sec) : 0.0000157
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0031745

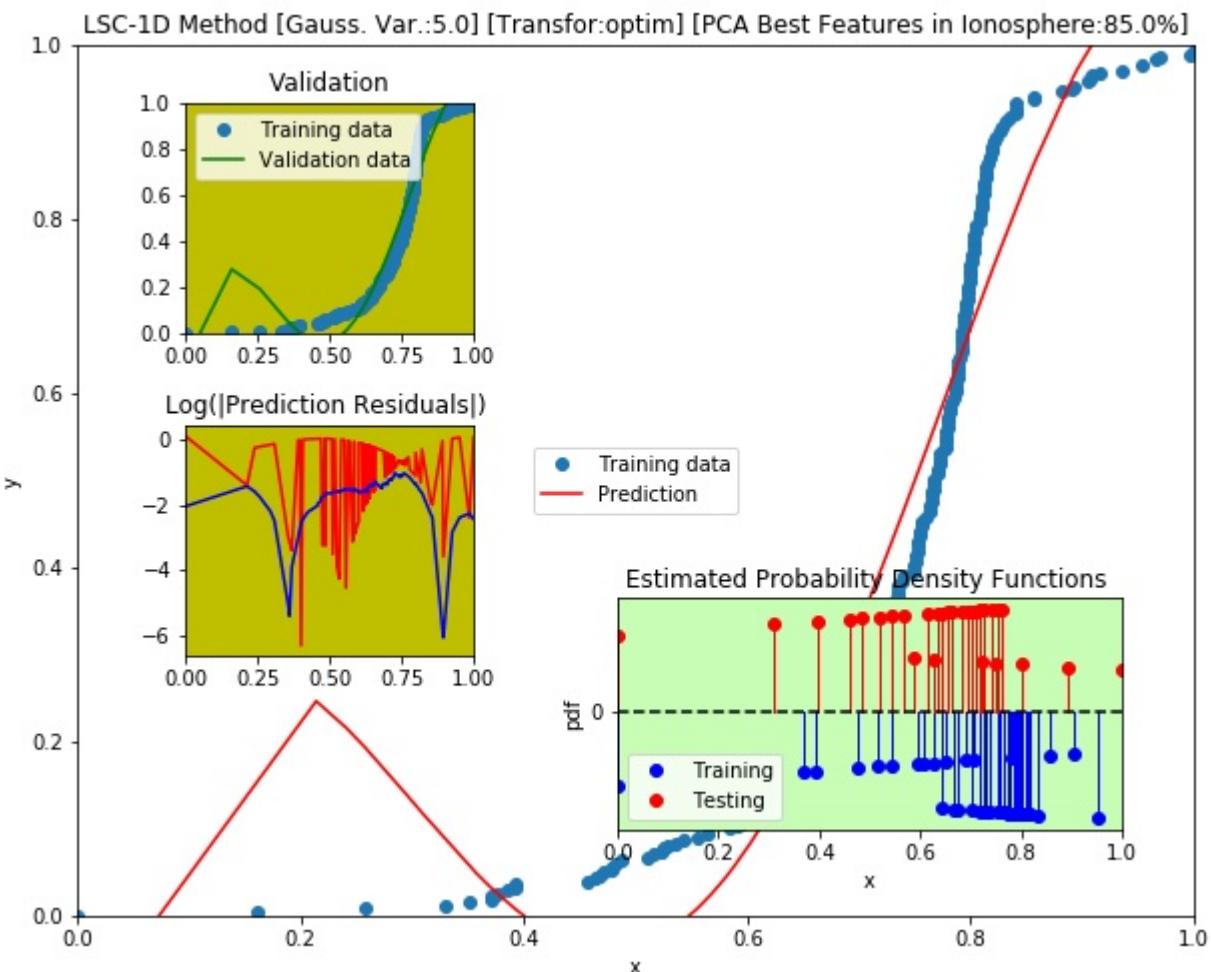
Prediction time/pt. (sec) : 0.0000225
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0029459

Prediction time/pt. (sec) : 0.0000209
```



Ionosphere Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (211 x 211 mtx) ...
        Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0027342
    Initializing linear solver - done. Time (sec): 0.0030057
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003254
    Solving linear system (col. 0) - done. Time (sec): 0.0004833
Training - done. Time (sec): 0.0081625

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0094781  
Prediction time/pt. (sec) : 0.0000451
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0036962  
Prediction time/pt. (sec) : 0.0000262
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0011432  
Prediction time/pt. (sec) : 0.0000081
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0039065  
Prediction time/pt. (sec) : 0.0000277
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0085418
Initializing linear solver - done. Time (sec): 0.0087664
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0003953
    Solving linear system (col. 0) - done. Time (sec): 0.0005729
Training - done. Time (sec): 0.0123324
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0047724

Prediction time/pt. (sec) : 0.0000338
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0017231

Prediction time/pt. (sec) : 0.0000082
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0070703

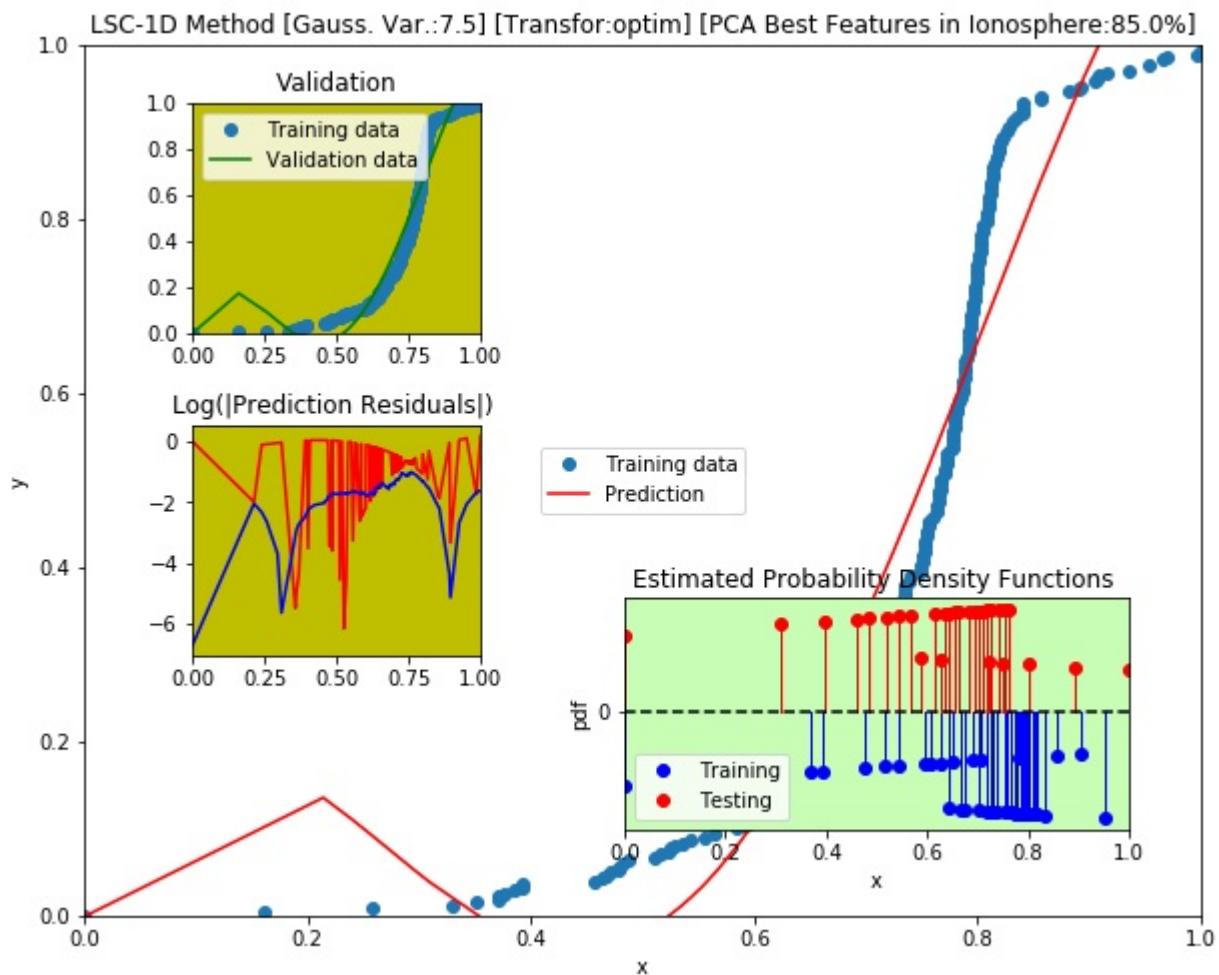
Prediction time/pt. (sec) : 0.0000501
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0042603

Prediction time/pt. (sec) : 0.0000302
```



Ionosphere Dataset

Parameters: PCA: 85.0%
DATASET TRANSFORMATION: optim
COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```
Training ...
    Initializing linear solver ...
        Performing LU fact. (211 x 211 mtx) ...
        Performing LU fact. (211 x 211 mtx) - done. Time (sec):  0.0025704
    Initializing linear solver - done. Time (sec):  0.0031145
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec):  0.0005143
    Solving linear system (col. 0) - done. Time (sec):  0.0007083
Training - done. Time (sec):  0.0077283
```

Evaluation

```
# eval points. : 210  
  
Predicting ...  
Predicting - done. Time (sec): 0.0049403  
  
Prediction time/pt. (sec) : 0.0000235
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0038881  
  
Prediction time/pt. (sec) : 0.0000276
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0035570  
  
Prediction time/pt. (sec) : 0.0000252
```

Evaluation

```
# eval points. : 141  
  
Predicting ...  
Predicting - done. Time (sec): 0.0011761  
  
Prediction time/pt. (sec) : 0.0000083
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0043647
Initializing linear solver - done. Time (sec): 0.0046089
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0004148
    Solving linear system (col. 0) - done. Time (sec): 0.0006213
Training - done. Time (sec): 0.0086396
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0084646

Prediction time/pt. (sec) : 0.0000600
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0046406

Prediction time/pt. (sec) : 0.0000221
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0011811

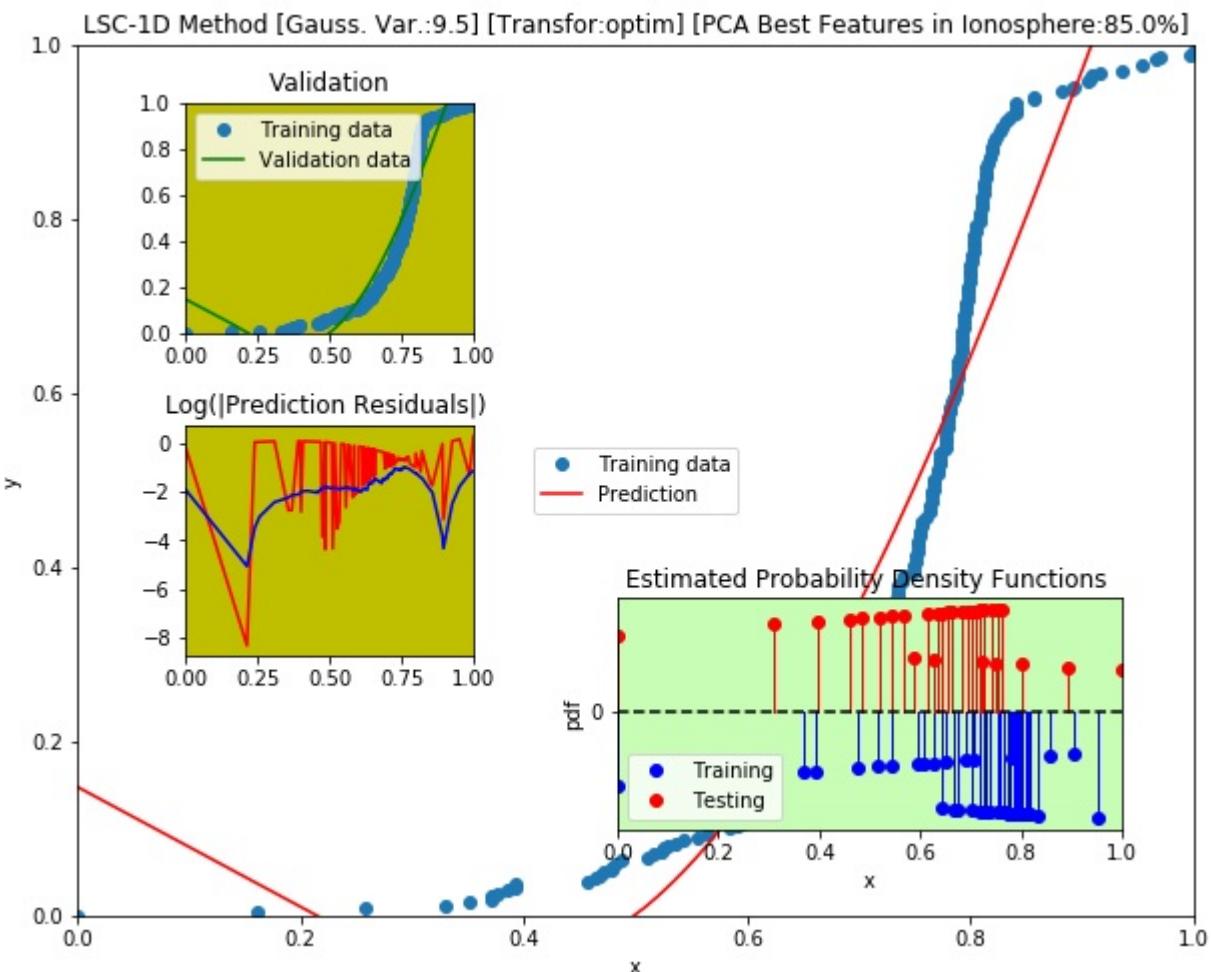
Prediction time/pt. (sec) : 0.0000084
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0060787

Prediction time/pt. (sec) : 0.0000431
```



Ionosphere Dataset

Parameters: PCA: 85.0%
 DATASET TRANSFORMATION: optim
 COLOCATION METHOD: RBF

RBF

Problem size

training points. : 210

Training

```

Training ...
    Initializing linear solver ...
        Performing LU fact. (211 x 211 mtx) ...
        Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0037761
    Initializing linear solver - done. Time (sec): 0.0045152
    Solving linear system (col. 0) ...
        Back solving (211 x 211 mtx) ...
        Back solving (211 x 211 mtx) - done. Time (sec): 0.0003283
    Solving linear system (col. 0) - done. Time (sec): 0.0012424
Training - done. Time (sec): 0.0098326

```

Evaluation

```
# eval points. : 210  
Predicting ...  
Predicting - done. Time (sec): 0.0064502  
Prediction time/pt. (sec) : 0.0000307
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0044925  
Prediction time/pt. (sec) : 0.0000319
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0051951  
Prediction time/pt. (sec) : 0.0000368
```

Evaluation

```
# eval points. : 141  
Predicting ...  
Predicting - done. Time (sec): 0.0041842  
Prediction time/pt. (sec) : 0.0000297
```

RBF

Problem size

```
# training points. : 210
```

Training

```
Training ...  
Initializing linear solver ...  
Performing LU fact. (211 x 211 mtx) ...
```

```
Performing LU fact. (211 x 211 mtx) - done. Time (sec): 0.0142982
Initializing linear solver - done. Time (sec): 0.0145586
Solving linear system (col. 0) ...
    Back solving (211 x 211 mtx) ...
    Back solving (211 x 211 mtx) - done. Time (sec): 0.0011714
    Solving linear system (col. 0) - done. Time (sec): 0.0013666
Training - done. Time (sec): 0.0251253
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0030532

Prediction time/pt. (sec) : 0.0000217
```

Evaluation

```
# eval points. : 210

Predicting ...
Predicting - done. Time (sec): 0.0034721

Prediction time/pt. (sec) : 0.0000165
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0039783

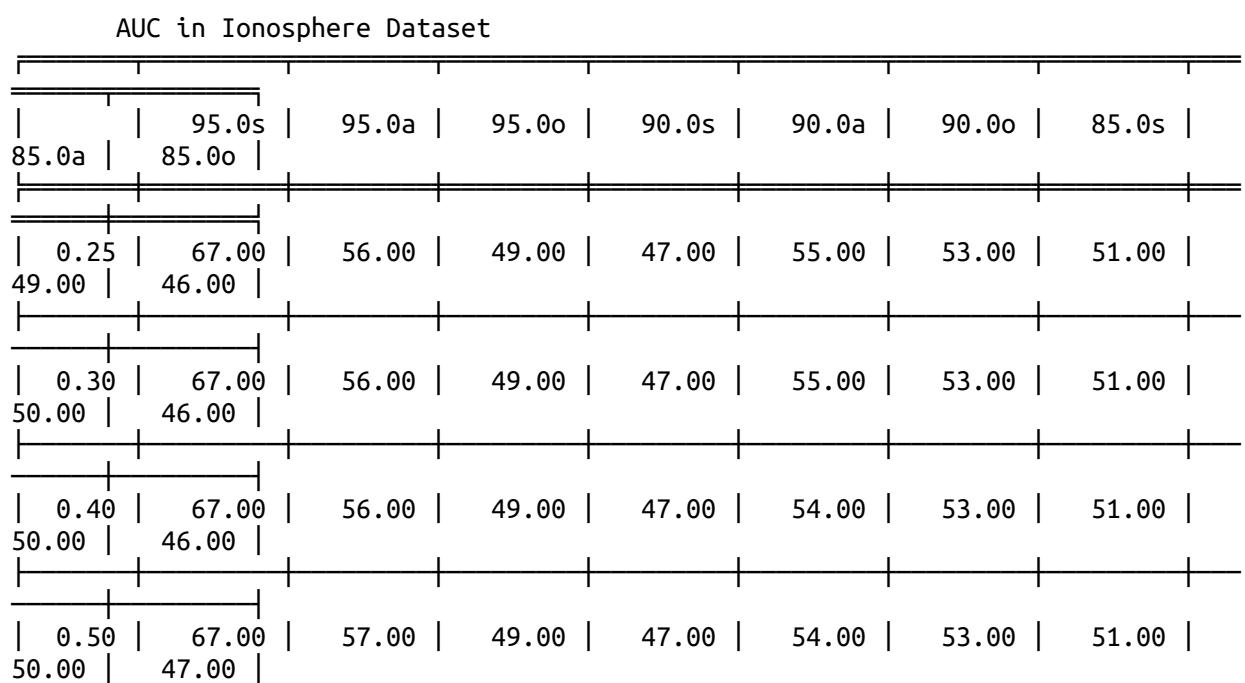
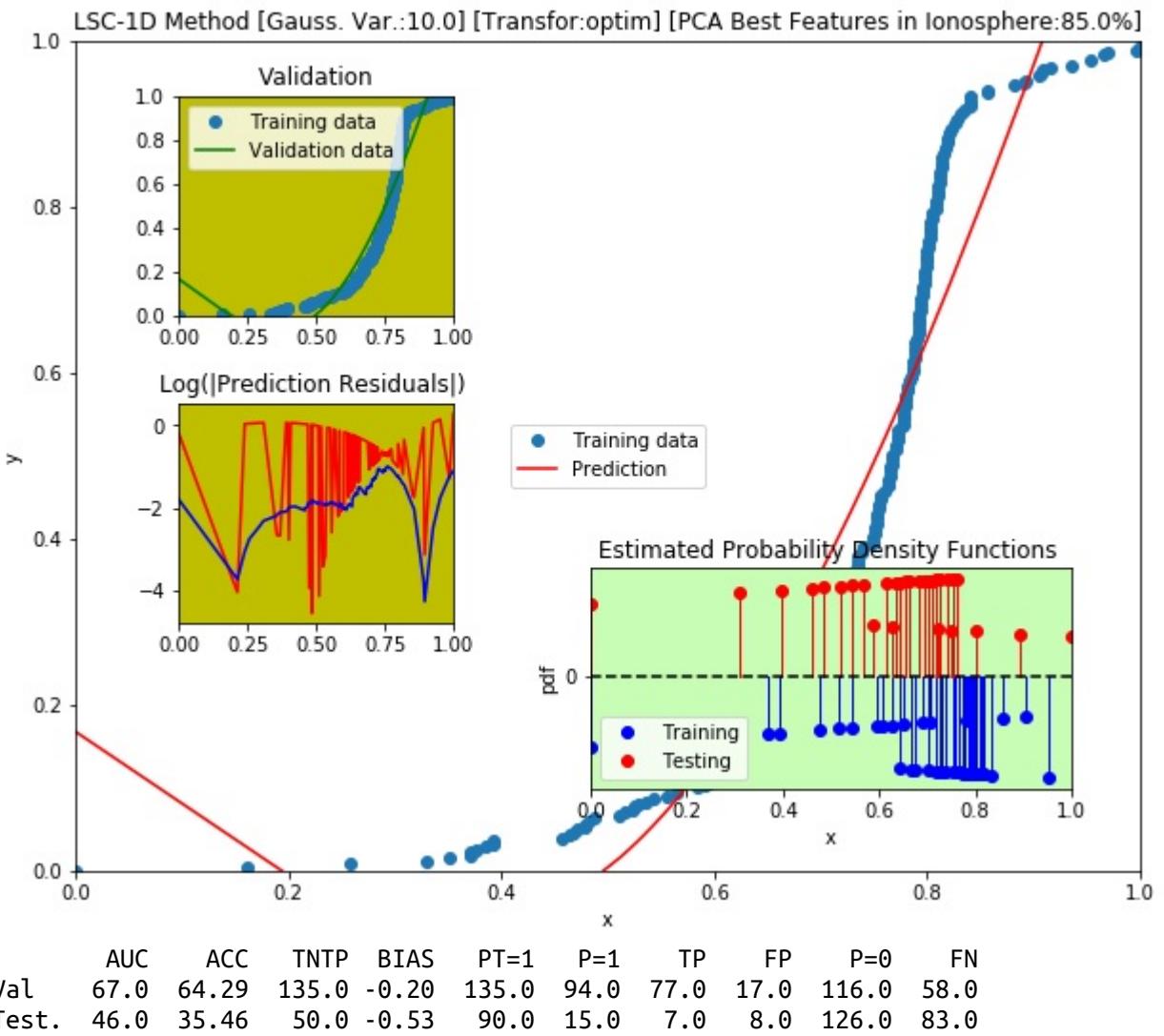
Prediction time/pt. (sec) : 0.0000282
```

Evaluation

```
# eval points. : 141

Predicting ...
Predicting - done. Time (sec): 0.0028582

Prediction time/pt. (sec) : 0.0000203
```



0.60	66.00	57.00	49.00	46.00	54.00	52.00	51.00	
50.00	47.00							
2.00	67.00	57.00	48.00	47.00	54.00	52.00	51.00	
50.00	46.00							
5.00	66.00	58.00	48.00	46.00	53.00	53.00	51.00	
50.00	45.00							
7.50	66.00	59.00	48.00	46.00	51.00	53.00	51.00	
50.00	45.00							
9.50	66.00	59.00	48.00	46.00	51.00	53.00	51.00	
50.00	45.00							
10.00	66.00	59.00	48.00	46.00	51.00	53.00	51.00	
50.00	45.00							

ACC in Ionosphere Dataset

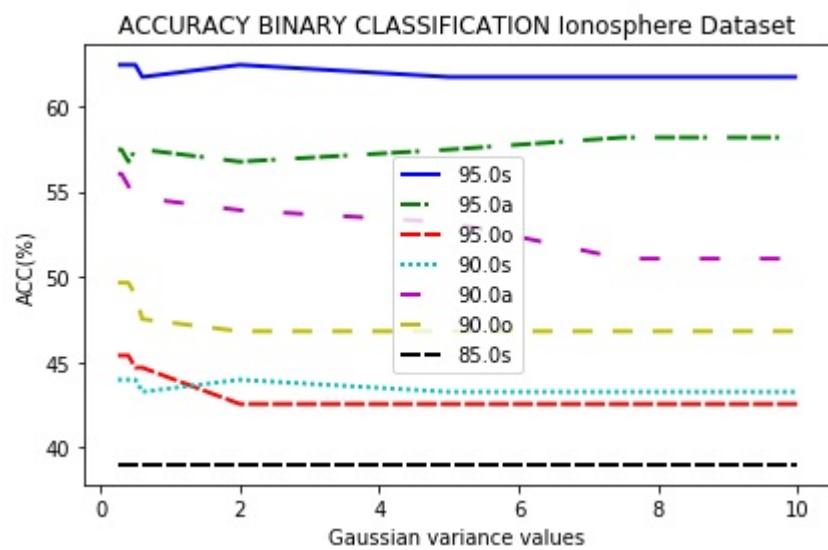
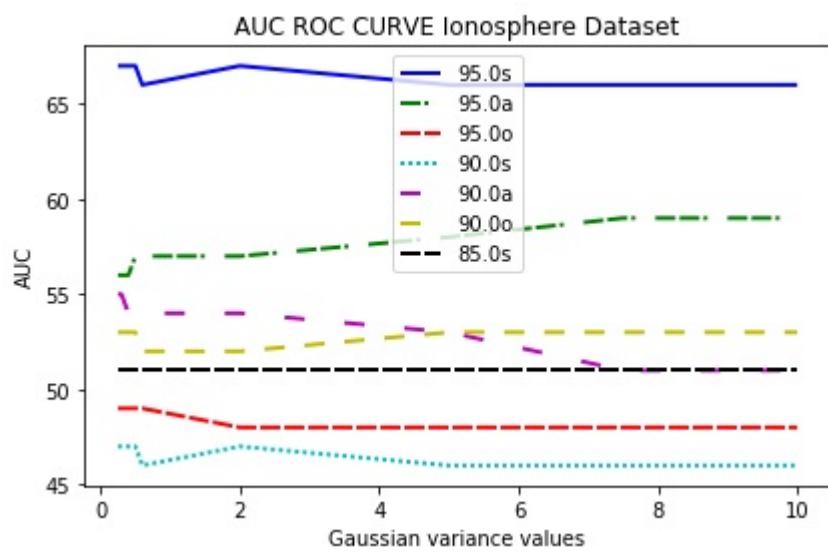
85.0a	95.0s	95.0a	95.0o	90.0s	90.0a	90.0o	85.0s	
85.0o	85.0o							
0.25	62.41	57.45	45.39	43.97	56.03	49.65	39.01	
36.88	35.46							
0.30	62.41	57.45	45.39	43.97	56.03	49.65	39.01	
36.88	35.46							
0.40	62.41	56.74	45.39	43.97	55.32	49.65	39.01	
36.88	35.46							
0.50	62.41	57.45	44.68	43.97	54.61	48.94	39.01	
36.88	36.17							
0.60	61.70	57.45	44.68	43.26	54.61	47.52	39.01	
36.88	36.17							
2.00	62.41	56.74	42.55	43.97	53.90	46.81	39.01	

36.88	36.17							
5.00	61.70	57.45	42.55	43.26	53.19	46.81	39.01	
36.88	36.88							
7.50	61.70	58.16	42.55	43.26	51.06	46.81	39.01	
36.88	36.88							
9.50	61.70	58.16	42.55	43.26	51.06	46.81	39.01	
36.88	36.88							
10.00	61.70	58.16	42.55	43.26	51.06	46.81	39.01	
36.88	36.88							

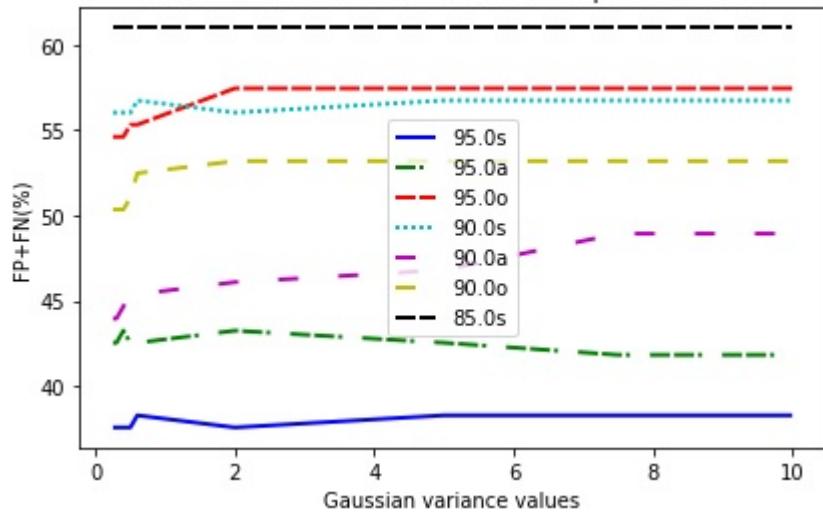
FPFN in Ionosphere Dataset

		95.0s	95.0a	95.0o	90.0s	90.0a	90.0o	85.0s
85.0a	85.0o							
0.25	37.59	42.55	54.61	56.03	43.97	50.35	60.99	
63.12	64.54							
0.30	37.59	42.55	54.61	56.03	43.97	50.35	60.99	
63.12	64.54							
0.40	37.59	43.26	54.61	56.03	44.68	50.35	60.99	
63.12	64.54							
0.50	37.59	42.55	55.32	56.03	45.39	51.06	60.99	
63.12	63.83							
0.60	38.30	42.55	55.32	56.74	45.39	52.48	60.99	
63.12	63.83							
2.00	37.59	43.26	57.45	56.03	46.10	53.19	60.99	
63.12	63.83							
5.00	38.30	42.55	57.45	56.74	46.81	53.19	60.99	
63.12	63.12							

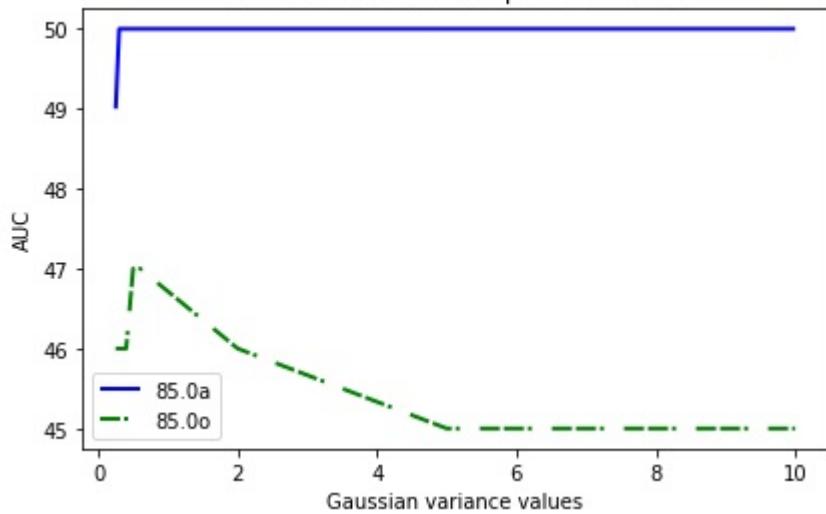
7.50	38.30	41.84	57.45	56.74	48.94	53.19	60.99	
63.12	63.12							
9.50	38.30	41.84	57.45	56.74	48.94	53.19	60.99	
63.12	63.12							
10.00	38.30	41.84	57.45	56.74	48.94	53.19	60.99	
63.12	63.12							



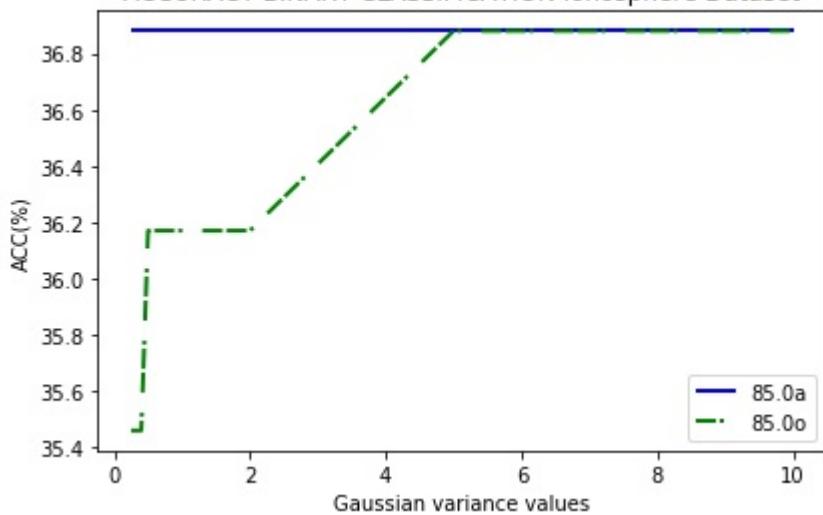
FP+FN BINARY CLASSIFICATION Ionosphere Dataset

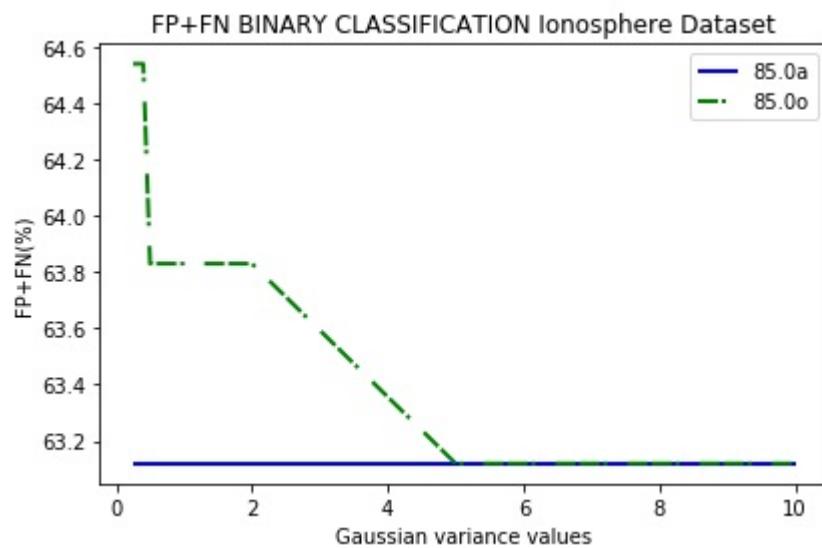


AUC ROC CURVE Ionosphere Dataset



ACCURACY BINARY CLASSIFICATION Ionosphere Dataset





AUC-MEAN ROC CURVE in Ionosphere Dataset

9.5	10.0	0.25	0.3	0.4	0.5	0.6	2.0	5.0	7.5
AUC	MEAN	52.56	52.67	52.56	52.78	52.44	52.44	52.22	52.11
52.11	52.11								
1									

ACC-MEAN in Ionosphere Dataset

9.5	10.0	0.25	0.3	0.4	0.5	0.6	2.0	5.0	7.5
ACC	MEAN	47.36	47.36	47.20	47.12	46.81	46.49	46.41	46.26
46.26	46.26								
1									

FPFN-MEAN in Ionosphere Dataset

9.5	10.0	0.25	0.3	0.4	0.5	0.6	2.0	5.0	7.5

FPFN	MEAN	52.64	52.64	52.80	52.88	53.19	53.51	53.59	53.74
		53.74	53.74						

AUC-TOP ROC CURVE [TOP] in Ionosphere Dataset

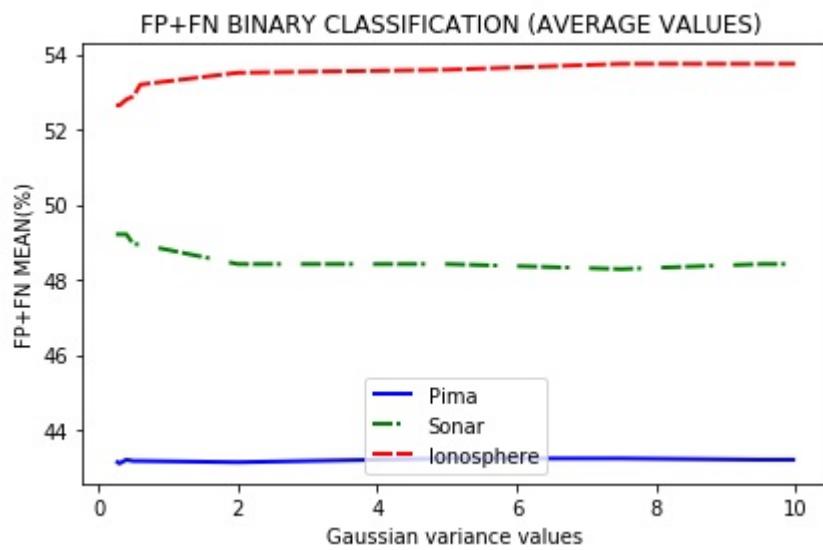
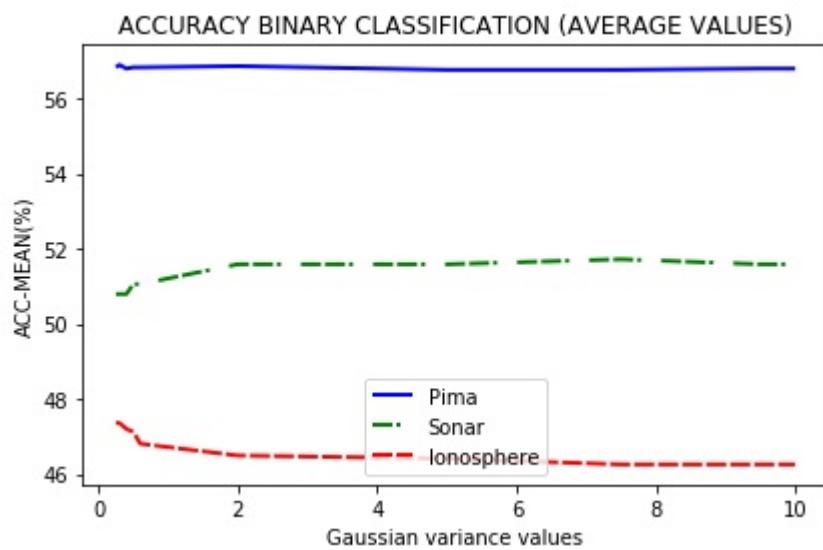
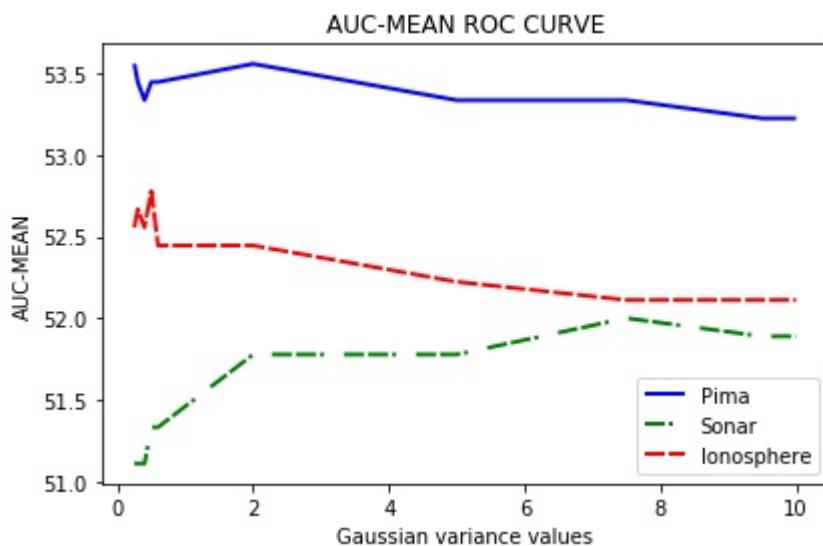
10.0	0.25	0.3	0.4	0.5	0.6	2.0	5.0	7.5	9.5
AUC TOP	67.00	67.00	67.00	67.00	66.00	67.00	66.00	66.00	66.00
	66.00								

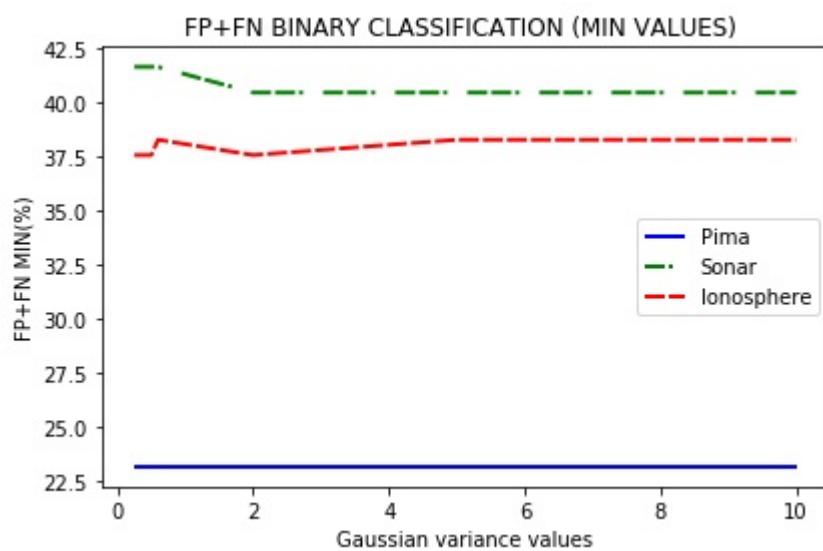
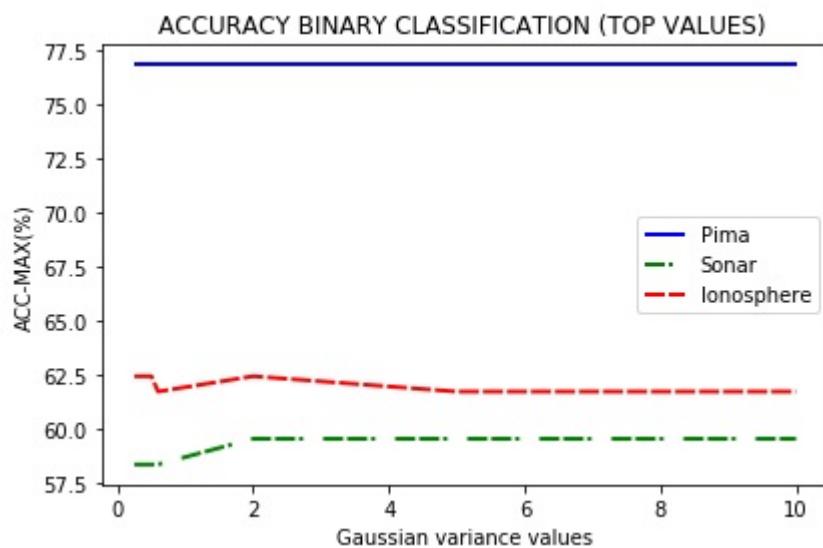
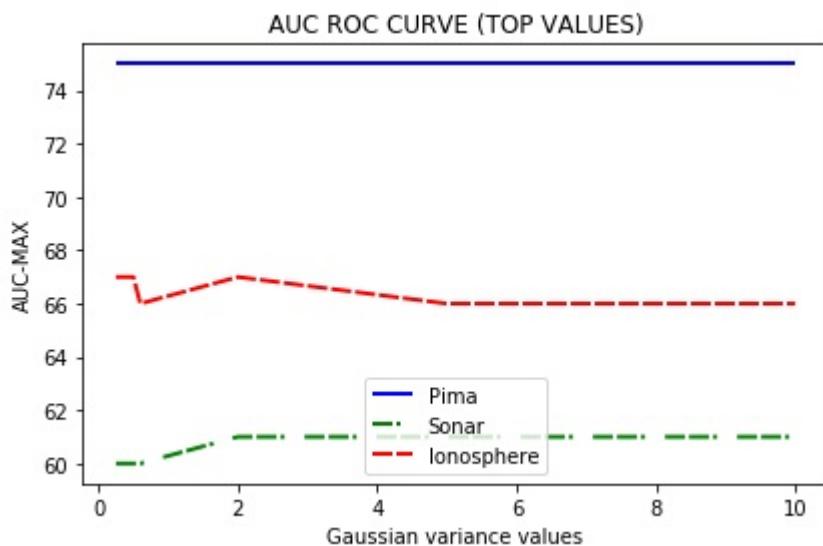
ACC-TOP in Ionosphere Dataset

10.0	0.25	0.3	0.4	0.5	0.6	2.0	5.0	7.5	9.5
ACC TOP	62.41	62.41	62.41	62.41	61.70	62.41	61.70	61.70	61.70
	61.70								

FPFN-MINIMUM in Ionosphere Dataset

9.5	10.0	0.25	0.3	0.4	0.5	0.6	2.0	5.0	7.5
FPFN MINIMUM	38.30	38.30	37.59	37.59	37.59	37.59	38.30	37.59	38.30
	38.30								





In [2]: