ANFIS info:

Number of nodes: 92

Number of linear parameters: 192

Number of nonlinear parameters: 30

Total number of parameters: 222

Number of training data pairs: 80

Number of checking data pairs: 0

Number of fuzzy rules: 32

Warning: number of data is smaller than number of modifiable parameters

Start training ANFIS ...

1 0.00183858

2 0.0017385

3 0.00164369

4 0.00155395

5 0.00146908

Step size increases to 0.011000 after epoch 5.

6 0.0013889

7 0.00130587

8 0.00122805

9 0.00115518

Step size increases to 0.012100 after epoch 9.

10 0.00108702

Designated epoch number reached --> ANFIS training completed at epoch 10.

MSE =

1.7166e-06

MAE =

8.5693e-04

MRE =

0.0303

0.0008

0.0061

0.0266

0.0000

0.0137

0.0021

0.0065

0.0015

0.0022

0.0003

0.0092

x =

0.0083

ANFIS info:

Number of nodes: 55

Number of linear parameters: 80

Number of nonlinear parameters: 24

Total number of parameters: 104

Number of training data pairs: 80

Number of checking data pairs: 0

Number of fuzzy rules: 16

Warning: number of data is smaller than number of modifiable parameters

Start training ANFIS ...

1 0.061732

2 0.0608069

3 0.0599119

4 0.0590505

5 0.0582258

Step size increases to 0.011000 after epoch 5.

6 0.0574404

7 0.0566243

8 0.0558599

9 0.0551478

Step size increases to 0.012100 after epoch 9.

10 0.0544875

Designated epoch number reached --> ANFIS training completed at epoch 10.

MSEw =

0.0020

MAE\_MAT\_without =

0.0772

0.0120

0.0498

0.0074

0.0093

0.0038

0.0648

0.0258

0.0096

0.0918

0.0024

0.0489

MAEw =

8.5693e-04

xw =

0.5253