（1） light_data_3.9/result/3.9：

1. /rand_bias0.6：采样率 10M，均匀分布，偏置电流 0.6A。

1.1 /norm_LS: 用 LS 算法，求出各个幅度信号的 NMSE。LS 估计时用的信号是归一化之后的信号，但归一化的方式变了。

原来：

```
xTrain_tmp = cellfun(@(cell1)(cell1*100*1.1^amp),xTrain_tmp,'UniformOutput',false);
xTest_tmp = cellfun(@(cell1)(cell1*100*1.1^amp),xTest_tmp,'UniformOutput',false);
```

现在：

```
xTrain_tmp = cellfun(@(cell1)(cell1*32000*(0.0015+(amp-1)*0.03994)),xTrain_tmp,'UniformOutput',false);
xTest_tmp = cellfun(@(cell1)(cell1*32000*(0.0015+(amp-1)*0.03994)),xTest_tmp,'UniformOutput',false);
```

1.2 /single_amp: 单一幅度数据作为训练数据，且数据归一化。发送信号是均匀分布的随机信号，采样率为 10M，偏置电流 0.6A。（归一化的方式也变了）

原来：

```
xTrain_tmp = cellfun(@(cell1)(cell1*100*1.1^amp),xTrain_tmp,'UniformOutput',false);
xTest_tmp = cellfun(@(cell1)(cell1*100*1.1^amp),xTest_tmp,'UniformOutput',false);
```

现在：

```
xTrain_tmp = cellfun(@(cell1)(cell1*32000*(0.0015+(amp-1)*0.03994)),xTrain_tmp,'UniformOutput',false);
xTest_tmp = cellfun(@(cell1)(cell1*32000*(0.0015+(amp-1)*0.03994)),xTest_tmp,'UniformOutput',false);
```

```
Threenonlinear ,
ini learningRate = 1.000000e-02 ,
min batch size = 200 ,
DropPeriod = 12 ,
DropFactor = 0.100000 ,
amp begin = 1 , amp end = 26 , amp step = 1
data_num = 100
validationFrequency is floor(size(xTrain{1},2)/miniBatchSize
Hidden Units = 40
```

1.3 /mix_amp: 混合幅度数据作为训练数据，且数据归一化，归一化的方式也变了。发送信号是均匀分布的随机信号，采样率为 10M，偏置电流 0.6A。

1.3.1 /mix_amp/Twononlinear1：

原来：

```
xTrain_tmp = cellfun(@(cell1)(cell1*100*1.1^amp),xTrain_tmp,'UniformOutput',false);
xTest_tmp = cellfun(@(cell1)(cell1*100*1.1^amp),xTest_tmp,'UniformOutput',false);
```

现在：

```
xTrain_tmp = cellfun(@(cell1)(cell1*32000*(0.0015+(amp-1)*0.03994)),xTrain_tmp,'UniformOutput',false);
xTest_tmp = cellfun(@(cell1)(cell1*32000*(0.0015+(amp-1)*0.03994)),xTest_tmp,'UniformOutput',false);
```

```
Twononlinear ,
ini learningRate = 1.000000e-02 ,
min batch size = 400 ,
DropPeriod = 5 ,
DropFactor = 0.100000 ,
amp begin = 1 , amp end = 26 , amp step = 1
data_num = 100
validationFrequency is floor(numel(xTrain)/miniBatchSize/4)
Hidden Units = 25
```

2. /rand_bias0.3：采样率 10M，均匀分布，偏置电流 0.3A。

2.1 /norm_LS: 用 LS 算法，求出各个幅度信号的 NMSE。LS 估计时用的信号是归一化之后的信号，但归一化的方式变了。

原来：

```
xTrain_tmp = cellfun(@(cell1)(cell1*100*1.1^amp),xTrain_tmp,'UniformOutput',false);
xTest_tmp = cellfun(@(cell1)(cell1*100*1.1^amp),xTest_tmp,'UniformOutput',false);
```

现在：

```
xTrain_tmp = cellfun(@(cell1)(cell1*32000*(0.0015+(amp-1)*0.03994)),xTrain_tmp,'UniformOutput',false);
xTest_tmp = cellfun(@(cell1)(cell1*32000*(0.0015+(amp-1)*0.03994)),xTest_tmp,'UniformOutput',false);
```

2.2 /single_amp: 单一幅度数据作为训练数据，且数据归一化。发送信号是均匀分布的随机信号，采样率为 10M，偏置电流 0.3A。（归一化的方式也变了）

原来：

```
xTrain_tmp = cellfun(@(cell1)(cell1*100*1.1^amp),xTrain_tmp,'UniformOutput',false);
xTest_tmp = cellfun(@(cell1)(cell1*100*1.1^amp),xTest_tmp,'UniformOutput',false);
```

现在：

```
xTrain_tmp = cellfun(@(cell1)(cell1*32000*(0.0015+(amp-1)*0.03994)),xTrain_tmp,'UniformOutput',false);
xTest_tmp = cellfun(@(cell1)(cell1*32000*(0.0015+(amp-1)*0.03994)),xTest_tmp,'UniformOutput',false);
```

```
Threenonlinear ,
ini learningRate = 1.000000e-02 ,
min batch size = 200 ,
DropPeriod = 12 ,
DropFactor = 0.100000 ,
amp begin = 1 , amp end = 26 , amp step = 1
data_num = 100
validationFrequency is floor(size(xTrain{1},2)/miniBatchSize
Hidden Units = 40
```

2.3 /mix_amp: 混合幅度数据作为训练数据，且数据归一化，归一化的方式也变了。发送信号是均匀分布的随机信号，采样率为 10M，偏置电流 0.3A。

2.3.1 /mix_amp/Twononlinear1：

原来：

```
xTrain_tmp = cellfun(@(cell1)(cell1*100*1.1^amp),xTrain_tmp,'UniformOutput',false);
xTest_tmp = cellfun(@(cell1)(cell1*100*1.1^amp),xTest_tmp,'UniformOutput',false);
```

现在：

```
xTrain_tmp = cellfun(@(cell1)(cell1*32000*(0.0015+(amp-1)*0.03994)),xTrain_tmp,'UniformOutput',false);
xTest_tmp = cellfun(@(cell1)(cell1*32000*(0.0015+(amp-1)*0.03994)),xTest_tmp,'UniformOutput',false);
```

```
Twononlinear ,
ini learningRate = 1.000000e-02 ,
min batch size = 400 ,
DropPeriod = 5 ,
DropFactor = 0.100000 ,
amp begin = 1 , amp end = 26 , amp step = 1
data_num = 100
validationFrequency is floor(numel(xTrain)/miniBatchSize/4)
Hidden Units = 25
```