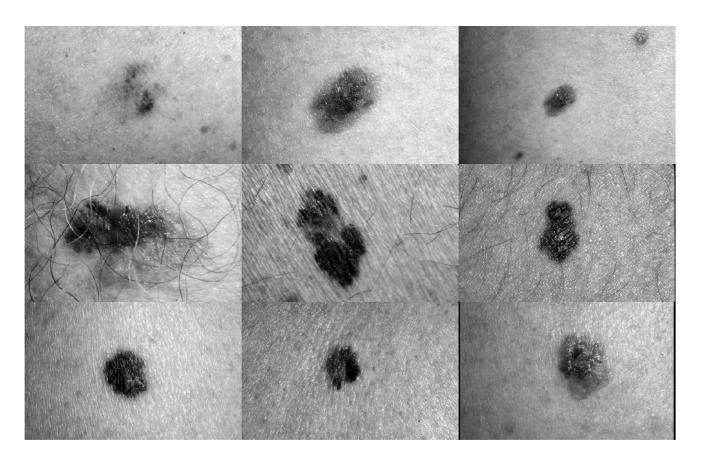
```
clc;
close all;
clear all
% Read the image and corresponding threshold value from .csv file for training and testing
trainingData = readtable("Train.csv");
X_Train = trainingData.Name;
testingData = readtable("Test.csv");
X_Test = testingData.Name;
```

```
% Threshold value for testing and training
Y_Train = trainingData.Value;
Y_Test = testingData.Value;
fn = X_Train{1};
size(imread(fn));
```

```
% Display 9 sample images from the database
imds = imageDatastore(X_Train(1:9));
montage(imds)
```



```
trainds = augmentedImageDatastore([224 224],trainingData);
testds = augmentedImageDatastore([224 224],testingData);
```

```
%DTP-Net Layers
layers = [
    imageInputLayer([224 224 1])
    convolution2dLayer(3,8,'Padding','same')
    convolution2dLayer(3,8,'Padding','same')
    batchNormalizationLayer
    reluLayer
    maxPooling2dLayer(2, 'Stride',2)
    convolution2dLayer(3,16,'Padding','same')
    convolution2dLayer(3,16,'Padding','same')
    batchNormalizationLayer
    reluLayer
    maxPooling2dLayer(2,'Stride',2)
    convolution2dLayer(3,32,'Padding','same')
    convolution2dLayer(3,32,'Padding','same')
    batchNormalizationLayer
    reluLayer
    maxPooling2dLayer(2, 'Stride', 2)
    convolution2dLayer(3,64, 'Padding', 'same')
    convolution2dLayer(3,64,'Padding','same')
    batchNormalizationLayer
    reluLayer
    maxPooling2dLayer(2,'Stride',2)
    convolution2dLayer(3,128, 'Padding', 'same')
    convolution2dLayer(3,128,'Padding','same')
    batchNormalizationLayer
    reluLayer
    convolution2dLayer(3,256, 'Padding', 'same')
    batchNormalizationLayer
    reluLayer
    dropoutLayer(0.2)
    fullyConnectedLayer(1)
    regressionLayer];
```

```
options = trainingOptions("sgdm", "MaxEpochs", 150, "InitialLearnRate", 0.0001, 'Shuffle', 'every-epo
    'MiniBatchSize',64)
options =
```

TrainingOptionsSGDM with properties:

Momentum: 0.9000 InitialLearnRate: 1.0000e-04 LearnRateSchedule: 'none' LearnRateDropFactor: 0.1000 LearnRateDropPeriod: 10 L2Regularization: 1.0000e-04 GradientThresholdMethod: 'l2norm' GradientThreshold: Inf MaxEpochs: 150 MiniBatchSize: 64 Verbose: 1

```
VerboseFrequency: 50
             ValidationData: []
        ValidationFrequency: 50
         ValidationPatience: Inf
                     Shuffle: 'every-epoch'
              CheckpointPath: ''
        CheckpointFrequency: 1
    CheckpointFrequencyUnit: 'epoch'
        ExecutionEnvironment: 'auto'
                  WorkerLoad: []
                   OutputFcn: []
                       Plots: 'none'
              SequenceLength: 'longest'
        SequencePaddingValue: 0
   SequencePaddingDirection: 'right'
       DispatchInBackground: 0
     ResetInputNormalization: 1
BatchNormalizationStatistics: 'population'
               OutputNetwork: 'last-iteration'
```

```
% options = trainingOptions("sgdm","MaxEpochs",500,"InitialLearnRate",0.0001, ...
%
      'ValidationData', {validds, YValid}, 'ValidationFrequency', 10, ...
%
      'MiniBatchSize',8,'Plots','training-progress')
% miniBatchSize = 128;
% validationFrequency = floor(numel(YTrain)/miniBatchSize);
% options = trainingOptions('sgdm', ...
%
      'MiniBatchSize', miniBatchSize, ...
%
      'MaxEpochs',30, ...
%
      'InitialLearnRate',1e-3, ...
%
      'LearnRateSchedule', 'piecewise', ...
%
      'LearnRateDropFactor',0.1, ...
%
      'LearnRateDropPeriod',20, ...
%
      'Shuffle', 'every-epoch', ...
%
      'ValidationData', {testds, YTrain}, ...
%
      'ValidationFrequency', validationFrequency, ...
%
      'Plots', 'training-progress', ...
%
      'Verbose', false);
```

```
%Train the DTP-Net
ccnet = trainNetwork(trainds, layers, options)
```

Training on single GPU.
Initializing input data normalization.

	Epoch	==   	Iteration	==   	Time Elapsed	==   	Mini-batch	==   	Mini-batch	Base Learning	
	======	 ==	========	 ==	(hh:mm:ss) ========	 ==	RMSE =======	 ==	Loss 	Rate	  -
	1		1		00:00:25		120.00		7199.5	1.0000e-04	
	1		50		00:00:46		26.10		340.5	1.0000e-04	
	2		100		00:01:19		20.91		218.6	1.0000e-04	
	3		150		00:01:51		21.26		225.9	1.0000e-04	
	3		200		00:02:12		30.24		457.3	1.0000e-04	

	4   5	250	00 00 44 1			
     			00:02:44	23.98	287.5	1.0000e-04
		300	00:03:17	27.63	381.6	1.0000e-04
		350	:			1.0000c 04     1.0000e-04
	5		00:03:44	18.04	162.7	
ļ	6	400	00:04:19	21.49	230.8	1.0000e-04
- 1	7	450	00:04:54	21.21	224.9	1.0000e-04
	8	500	00:05:28	17.06	145.5	1.0000e-04
	8	550	00:05:48	23.39	273.5	1.0000e-04
Ĺ	9	600	00:06:24	16.75	140.2	1.0000e-04
i	10	650	00:07:00	21.18	224.4	1.0000e-04
i	10	700	00:07:22	20.61	212.4	1.0000e-04
-	11	750	00:07:55	14.55	105.8	1.0000e-04   1.0000e-04
-			:			
-	12	800	00:08:29	16.74	140.2	1.0000e-04
- !	12	850	00:08:49	16.24	131.8	1.0000e-04
ļ	13	900	00:09:21	20.38	207.7	1.0000e-04
ļ	14	950	00:09:55	16.13	130.1	1.0000e-04
	15	1000	00:10:27	18.19	165.4	1.0000e-04
	15	1050	00:10:52	15.35	117.8	1.0000e-04
	16	1100	00:11:26	15.07	113.6	1.0000e-04
i	17	1150	00:11:59	17.14	146.9	1.0000e-04
i	17	1200	00:12:21	19.83	196.6	1.0000e-04
i	18	1250	00:12:56	16.62	138.1	1.0000e-04
i	19	1300	00:12:30	16.54	136.8	1.0000e-04
-			!			!!!
-	20	1350	00:14:05	15.38	118.3	1.0000e-04
- !	20	1400	00:14:26	15.06	113.4	1.0000e-04
ļ	21	1450	00:15:00	15.89	126.2	1.0000e-04
ļ	22	1500	00:15:34	13.46	90.5	1.0000e-04
	22	1550	00:15:55	14.41	103.9	1.0000e-04
	23	1600	00:16:30	20.08	201.7	1.0000e-04
	24	1650	00:17:02	13.97	97.5	1.0000e-04
ĺ	24	1700	00:17:22	14.05	98.8	1.0000e-04
i	25	1750	00:17:56	15.62	122.0	1.0000e-04
i	26	1800	00:18:29	19.85	197.1	1.0000e-04
i	27	1850	00:19:06	15.67	122.7	1.0000e-04
-	27	1900	00:19:26	14.37	103.3	1.0000c 04     1.0000e-04
-						!!!
-	28	1950	00:20:00	18.43	169.8	1.0000e-04
- !	29	2000	00:20:35	15.87	125.9	1.0000e-04
ļ	29	2050	00:20:56	13.35	89.2	1.0000e-04
ļ	30	2100	00:21:26	13.20	87.2	1.0000e-04
	31	2150	00:21:57	15.07	113.5	1.0000e-04
	31	2200	00:22:18	14.78	109.3	1.0000e-04
	32	2250	00:22:53	19.06	181.6	1.0000e-04
	33	2300	00:23:20	18.95	179.6	1.0000e-04
Ì	34	2350	00:23:45	12.14	73.6	1.0000e-04
i	34	2400	00:24:00	20.26	205.2	1.0000e-04
i	35	2450	00:24:22	14.61	106.7	1.0000e-04
i	36	2500	00:24:44	14.72	108.4	1.0000e-04
H	36	2550	00:25:00	15.78	124.6	1.0000e-04     1.0000e-04
-	37	2600	00:25:21	17.79	158.2	1.0000e-04     1.0000e-04
-			:			
- !	38	2650	00:25:43	12.36	76.3	1.0000e-04
ļ	39	2700	00:26:04	12.68	80.4	1.0000e-04
ļ	39	2750	00:26:19	15.07	113.5	1.0000e-04
	40	2800	00:26:42	15.49	120.0	1.0000e-04
	41	2850	00:27:04	15.21	115.6	1.0000e-04
	41	2900	00:27:19	12.82	82.2	1.0000e-04
	42	2950	00:27:40	14.44	104.2	1.0000e-04
i	43	3000	00:28:02	11.99	71.8	1.0000e-04
- 1	43	3050	00:28:18	11.99	71.9	1.0000e-04
i	44	3100	00:28:40	11.24	63.2	1.0000e-04
ļ	:	3150	00:20:40	12.75	81.3	1.0000c 04     1.0000e-04
	45 I		:	12.54	78.7	1.0000e-04   1.0000e-04
	45   46	גוגוויכ	1212 • 111 • 121			
	46	3200	00:29:23			:
	46   46	3250	00:29:38	10.38	53.9	1.0000e-04
	46   46   47	3250 3300	00:29:38   00:30:00	10.38   13.23	53.9 87.5	1.0000e-04   1.0000e-04
	46   46	3250	00:29:38	10.38	53.9	1.0000e-04

- 1	49	3450	00:30:58	15.60	121.7	1.0000e-04
i	50	3500	00:31:19	14.23	101.2	1.0000e-04
-						1.0000c 04     1.0000e-04
-	50	3550	00:31:35	16.99	144.3	
ļ	51	3600	00:31:56	13.63	92.8	1.0000e-04
	52	3650	00:32:18	14.12	99.7	1.0000e-04
	53	3700	00:32:39	12.64	79.9	1.0000e-04
	53	3750	00:32:55	16.50	136.1	1.0000e-04
Ĺ	54	3800	00:33:17	17.13	146.7	1.0000e-04
i	55	3850	00:33:39	16.60	137.7	1.0000e-04
i	55	3900	00:33:54	10.02	50.2	1.0000e-04
-	56	3950	00:33:34	13.24	87.6	1.0000e-04     1.0000e-04
-						: :
-	57	4000	00:34:38	12.79	81.8	1.0000e-04
- !	58	4050	00:34:59	13.14	86.3	1.0000e-04
ļ	58	4100	00:35:15	13.73	94.3	1.0000e-04
ļ	59	4150	00:35:37	10.30	53.0	1.0000e-04
	60	4200	00:35:58	9.66	46.7	1.0000e-04
	60	4250	00:36:14	13.90	96.6	1.0000e-04
	61	4300	00:36:35	15.09	113.8	1.0000e-04
Ì	62	4350	00:36:57	14.81	109.7	1.0000e-04
i	62	4400	00:37:12	15.76	124.2	1.0000e-04
i	63	4450	00:37:33	10.67	56.9	1.0000e-04
i	64	4500	00:37:55	11.69	68.3	1.0000e-04
-	65	4550	00:37:35	12.01	72.1	1.0000e-04     1.0000e-04
-						
- !	65	4600	00:38:31	8.12	33.0	1.0000e-04
- [	66	4650	00:38:52	9.89	48.9	1.0000e-04
ļ	67	4700	00:39:14	14.33	102.6	1.0000e-04
	67	4750	00:39:29	8.81	38.8	1.0000e-04
	68	4800	00:39:51	11.60	67.3	1.0000e-04
	69	4850	00:40:12	14.44	104.3	1.0000e-04
	70	4900	00:40:33	9.13	41.7	1.0000e-04
i	70	4950	00:40:48	10.83	58.7	1.0000e-04
i	71	5000	00:41:09	7.94	31.5	1.0000e-04
i	72	5050	00:41:30	10.37	53.8	1.0000e-04
H	72	5100	00:41:46	8.83	39.0	1.0000e-04
-	72					1.0000e-04     1.0000e-04
-		5150	00:42:07	15.56	121.0	
-	74	5200	00:42:28	10.83	58.6	1.0000e-04
ļ	74	5250	00:42:43	12.35	76.3	1.0000e-04
ļ	75	5300	00:43:07	9.94	49.4	1.0000e-04
	76	5350	00:43:30	8.48	36.0	1.0000e-04
	77	5400	00:43:53	9.51	45.3	1.0000e-04
	77	5450	00:44:09	15.43	119.0	1.0000e-04
	78	5500	00:44:30	10.21	52.1	1.0000e-04
Ì	79	5550	00:44:52	11.61	67.4	1.0000e-04
i	79	5600	00:45:07	8.71	38.0	1.0000e-04
i	80	5650	00:45:28	8.39	35.2	1.0000e-04
l	81	5700	00:45:50	8.49	36.1	1.0000c 04     1.0000e-04
l	81	5750	00:46:06	11.51	66.2	1.0000c 04     1.0000e-04
-	82		00:46:27		49.6	1.0000e-04     1.0000e-04
-		5800		9.96		:
- [	83	5850	00:46:48	12.15	73.8	1.0000e-04
-	84	5900	00:47:09	12.59	79.3	1.0000e-04
ļ	84	5950	00:47:24	9.86	48.6	1.0000e-04
	85	6000	00:47:52	10.37	53.8	1.0000e-04
	86	6050	00:48:15	9.75	47.5	1.0000e-04
	86	6100	00:48:31	13.21	87.3	1.0000e-04
	87	6150	00:48:52	9.28	43.1	1.0000e-04
į	88	6200	00:49:14	11.13	62.0	1.0000e-04
i	89	6250	00:49:36	8.10	32.8	1.0000e-04
i	89	6300	00:49:51	14.92	111.3	1.0000e-04
i	90	6350	00:50:12	9.60	46.1	1.0000c 04     1.0000e-04
l	91	6400	00:50:34		54.7	1.0000e-04     1.0000e-04
I				10.46		:
- [	91	6450	00:50:51	12.38	76.6	1.0000e-04
	92	6500	00:51:14	7.07	25.0	1.0000e-04
	93	6550	00:51:37	6.39	20.4	1.0000e-04
- !	93	6600	00:51:53	8.16	33.3	1.0000e-04

94   6659   00:52:15   11.49   66.0   95   6700   00:52:36   11.40   65.0   96   6750   00:52:36   7.83   30.6   96   6750   00:53:14   7.70   29.6   97   6850   00:53:15   8.71   38.0   98   6990   00:53:15   8.71   38.0   98   6990   00:53:15   8.71   38.0   98   6990   00:53:15   8.29   34.4   98   6990   00:54:12   10.66   56.8   99   7000   00:54:12   10.66   56.8   100   7050   00:54:54   10.57   55.9   100   7100   00:55:30   8.74   38.2   1100   7100   00:55:30   8.74   38.2   1101   7150   00:55:30   8.74   38.2   1102   7200   00:55:51   8.96   40.2   1103   7300   00:56:12   8.97   40.3   1104   7350   00:56:12   8.97   40.3   1105   7490   00:57:10   7.44   27.7   1105   7450   00:57:10   7.44   27.7   1105   7450   00:57:10   7.44   27.7   1105   7450   00:57:47   12.70   80.7   1106   7500   00:58:30   9.48   45.0   1108   7600   00:58:30   7.87   31.0   1108   7600   00:58:30   7.87   31.0   1108   7600   00:59:28   9.41   44.3   110   7780   00:59:28   9.41   44.3   110   7780   00:59:28   9.41   44.3   111   7850   01:00:41   8.36   35.0   1111   7850   01:00:41   8.36   35.0   1112   7950   01:00:41   8.36   35.0   1113   8000   01:01:22   8.43   35.6   1114   8050   01:01:22   8.43   35.6   1115   8100   01:01:24   8.17   33.4   1116   8260   01:01:22   8.43   35.6   1117   8250   01:00:41   8.36   35.0   1118   8350   01:01:22   8.43   35.6   112   7950   01:00:41   8.36   35.0   113   8000   01:01:22   8.43   35.6   114   8850   01:01:24   8.17   33.4   115   8150   01:00:45   8.32   34.7   117   8250   01:00:41   8.36   35.0   118   8350   01:00:41   8.48   36.0   122   8600   01:00:24   8.17   33.4   114   8850   01:00:45   8.50   9.55   4.60   125   8850   01:00:45   8.50   9.55   4.60   126   8900   01:00:45   8.57   7.65   9.2   127   8000   01:00:45   8.57   7.65   9.2   128   8000   01:00:45   8.57   7.65   9.2   129   9100   01:00:45   8.57   7.65   9.2   120   8450   01:00:48   5.66   5.75   1.65   121   8850   01:00:48   5.66   5.75   1.65   122   8600   01:00:48   5.06   5.06   5						
95   6700   00:52:36   11.40   65.0   96   6750   00:52:36   7.83   30.6   96   6750   00:53:14   7.70   29.6   97   6880   00:53:14   7.70   29.6   98   6900   00:53:15   8.71   33.0   6   98   6900   00:53:55   8.29   34.4   98   6950   00:54:12   10.66   56.8   99   7000   00:54:33   8.49   36.0   100   70:50   00:54:33   8.49   36.0   100   7100   00:55:90   6.89   23.7   100   7100   00:55:90   6.89   23.7   101   7150   00:55:90   6.89   23.7   101   7150   00:55:51   8.96   40.2   103   7250   00:55:51   8.97   40.3   103   7250   00:56:12   8.97   40.3   103   7250   00:56:48   9.61   46.2   105   7400   00:57:25   10.09   50.9   104   7350   00:56:48   9.61   46.2   105   7450   00:57:25   10.12   51.2   106   7500   00:57:25   10.12   51.2   106   7500   00:58:46   7.40   00:57:25   10.12   51.2   106   7500   00:58:46   7.40   7.50   00:58:46   7.43   7.87   31.0   108   7600   00:58:30   7.87   31.0   108   7600   00:58:30   7.87   31.0   109   7700   00:59:28   9.41   44.3   110   7750   00:59:67   8.78   38.5   110   7750   00:59:07   8.78   38.5   111   7850   01:09:50   7.97   31.8   112   7990   01:00:41   8.36   35.0   114   8050   01:01:43   6.94   24.1   115   8100   01:01:43   6.94   24.1   116   8200   01:01:43   6.94   24.1   117   8300   01:01:58   8.60   13.4   7.77   22.6   122   8.600   01:01:43   6.94   24.1   117   8300   01:01:58   8.50   112   8.500   01:01:43   6.94   24.1   117   8300   01:01:58   8.50   10:01:58   7.77   26.5   122   8.600   01:01:43   6.94   24.1   117   8.500   01:01:43   6.94   24.1   117   8.500   01:01:43   6.94   24.1   117   8.500   01:01:43   6.94   24.1   117   8.500   01:01:43   6.94   24.1   117   8.500   01:01:43   6.94   24.1   117   8.500   01:01:43   6.94   24.1   117   8.500   01:01:43   6.94   24.1   117   8.500   01:01:43   6.94   24.1   117   8.500   01:01:43   6.95   01:01:44   8.75   01:01:45   8.75   01:01:45   8.500   01:01:45   8.500   01:01:45   8.500   01:01:45   8.500   01:01:45   8.500   01:01:45   8.500   01:01:45   8.500   01:01:45	94 l	6650 l	00:52:15	11.49	66.0 l	1.0000e-04
96   6750   00:52:58   7.83   30.6   96   6890   00:53:14   7.70   29.6   97   6850   00:53:15   8.71   33.0   98   6950   00:53:57   8.29   34.4   99   7600   00:54:12   10.66   56.8   99   7600   00:54:33   8.49   36.0   100   7650   00:54:33   8.49   36.0   100   7650   00:54:34   10.57   55.9   1100   7100   00:55:39   6.89   23.7   1101   7150   00:55:30   8.74   38.2   1102   7200   00:55:51   8.96   40.2   1103   7250   00:56:12   8.97   40.3   1104   7350   00:56:62   10.09   50.9   1104   7350   00:55:36   9.61   46.2   1105   7490   00:57:10   7.44   27.7   1106   7490   00:57:10   7.44   27.7   1107   7550   00:58:48   9.61   46.2   1108   7600   00:57:47   12.70   80.7   1109   7700   00:58:30   7.87   31.0   1108   7650   00:58:46   7.43   27.6   1109   7700   00:59:28   9.48   45.0   1100   7750   00:59:28   9.41   44.3   110   7800   00:59:28   9.41   44.3   110   7800   00:59:28   9.41   44.3   111   7850   01:00:65   7.77   31.8   112   7900   01:00:61   8.36   9.61   46.2   113   8000   01:00:24   8.36   35.0   1111   7850   01:00:41   8.36   35.0   1112   7990   01:00:25   8.91   33.4   1114   8050   01:00:24   8.17   33.4   115   8150   01:00:41   8.36   35.0   116   8200   01:01:22   8.43   35.6   117   8250   01:00:41   8.36   37.1   118   8350   01:00:41   8.36   37.1   119   8400   01:01:22   8.43   35.6   1110   8750   01:00:41   8.36   37.1   112   7990   01:00:41   8.36   37.1   113   8000   01:01:22   8.43   35.6   114   8050   01:01:32   8.43   35.6   115   8150   01:00:41   8.50   30.0   118   8350   01:00:41   8.50   30.0   119   8400   01:01:32   8.43   35.6   1110   8400   01:01:32   8.43   35.6   112   8500   01:00:44   8.52   36.3   113   8000   01:00:44   8.52   36.3   114   8050   01:00:45   8.77   7.65   22.2   120   8450   01:00:45   7.77   7.65   22.2   121   8400   01:00:46   7.70   7.70   7.70   7.70   122   8600   01:00:46   7.70   7.70   7.70   7.70   7.70   123   8700   01:00:48   7.70   7.70   7.70   7.70   7.70   7.70   7.70   7.70   7.70   7.70   7.70   7.70   7.7			!	!		1.0000e-04
96   6800   00:53:14   7.70   29.6   97   6850   00:53:15   8.71   38.0   98   6900   00:53:57   8.29   34.4   98   6900   00:53:57   8.29   34.4   98   6900   00:54:12   10:66   56.8   99   7000   00:54:33   8.49   36.0   100   7050   00:54:34   10:57   55.9   100   7100   00:55:09   6.89   23.7   101   7150   00:55:30   8.74   38.2   102   7200   00:55:51   8.96   40.2   103   7250   00:55:51   8.97   40.3   103   7250   00:55:51   8.97   40.3   103   7350   00:56:67   10:09   50.9   104   7350   00:55:27   10:09   50.9   104   7350   00:55:48   9.61   46.2   105   7450   00:57:25   10:12   51.2   106   7500   00:57:47   12.70   80.7   107   7550   00:58:30   7.87   31.0   108   7650   00:58:30   7.87   31.0   109   7700   00:58:30   7.87   31.0   109   7700   00:59:28   9.48   45.0   110   7750   00:59:28   9.41   44.3   110   7750   00:59:28   9.41   44.3   111   7850   01:00:26   10:00:41   8.36   50.8   112   7950   01:00:26   10:00:41   8.36   50.8   112   7950   01:00:26   10:00:41   8.36   50.8   111   7550   01:00:41   8.36   50.8   111   7550   01:00:41   8.36   53.0   7.97   31.8   112   7950   01:00:26   10:00:41   8.36   50.8   112   7950   01:00:26   10:00:41   8.36   50.8   112   7950   01:00:26   10:00:41   8.36   50.8   112   7950   01:00:26   10:00:41   8.36   50.8   112   7950   01:00:24   8.17   33.4   114   8050   01:01:22   8.43   35.6   115   8100   01:01:43   6.94   42.1   115   8150   01:01:58   8.61   37.1   116   8200   01:01:22   8.43   35.6   122   8650   01:02:24   8.17   33.4   117   8300   01:01:22   8.43   35.6   122   8650   01:02:24   8.17   33.4   117   8300   01:01:22   8.43   35.6   122   8650   01:02:24   8.17   33.4   117   8300   01:02:24   8.17   33.4   117   8300   01:02:24   8.17   33.4   117   8300   01:02:24   8.17   33.4   117   8300   01:02:24   8.17   33.5   119   8400   01:02:24   8.17   33.4   117   8300   01:02:24   8.17   33.5   122   8650   01:02:24   8.17   33.4   4.50   122   8650   01:02:24   8.17   33.4   4.50   122   8.650   01:02:24   8.77   12.6   12			:			
97   6850   06:53:35   8.71   38.0   98   6990   06:53:57   8.29   34.4   98   6950   06:54:12   10.66   56.8   99   7000   06:54:33   8.49   36.0   100   7050   06:54:33   8.49   36.0   100   7100   06:55:09   6.89   23.7   101   7150   06:55:09   6.89   23.7   102   7200   06:55:51   8.96   40.2   103   7300   06:56:12   8.97   40.3   103   7300   06:56:12   8.97   40.3   104   7350   06:56:12   8.97   40.3   105   7400   06:57:10   7.44   27.7   105   7450   06:57:47   10.09   56.9   106   7500   06:57:25   10.12   51.2   107   7550   06:58:09   9.48   45.0   108   7600   06:58:30   7.87   31.0   108   7600   06:58:30   7.87   31.0   108   7600   06:58:30   7.87   31.0   108   7600   06:59:07   8.78   38.5   110   7750   06:59:07   8.78   38.5   110   7800   06:59:44   9.62   46.3   111   7850   01:00:05   7.97   31.8   112   7950   01:00:24   8.37   33.4   114   8050   01:00:22   8.43   35.6   115   8100   01:01:23   8.43   35.6   115   8100   01:01:23   8.43   35.6   116   8200   01:01:03   09.55   10.22   26.5   120   8450   01:00:24   8.17   33.4   117   8250   01:00:24   8.17   33.4   118   8350   01:00:24   8.17   33.4   119   8400   01:01:03   09.05   41.0   1110   8500   01:00:26   5.39   41.5   112   7900   01:00:26   5.39   41.5   115   8150   01:00:28   8.31   7.27   26.5   120   8450   01:00:24   8.17   33.4   121   8550   01:00:45   8.32   34.7   122   8600   01:00:45   8.32   34.7   123   8700   01:00:45   8.50   30.0   124   8800   01:00:45   8.50   30.0   125   8850   01:00:45   8.50   30.0   126   8900   01:00:55   10.22   22.5   127   8950   01:00:41   8.48   36.0   128   9950   01:00:45   8.57   21.6   129   9150   01:00:45   7.97   21.6   120   8450   01:00:65   7.97   31.8   121   9900   01:00:65   7.97   31.8   122   8660   01:00:56   6.66   22.2   123   8700   01:00:65   7.97   21.6   124   8800   01:00:65   7.97   21.6   125   8850   01:00:65   7.97   21.6   126   8900   01:00:65   7.97   21.6   127   9900   01:00:65   7.97   21.6   128   9950   01:00:65   7.97   21.3   131   9350   0	:		:	:	:	1.0000e-04
98   6990   00:54:12   10:66   56.8   99   7000   00:54:12   10:66   56.8   99   7000   00:54:33   8.49   36.0   100   7100   00:55:09   6.89   23.7   101   7150   00:55:30   8.74   38.2   102   7200   00:55:51   8.96   40.2   103   7250   00:56:12   8.97   40.3   104   7350   00:56:27   10:09   50.9   104   7350   00:55:57   10:09   50.9   104   7350   00:55:57   10:09   50.9   104   7350   00:55:27   10:09   50.9   105   7400   00:57:25   10:12   51.2   106   7590   00:57:47   12.70   80.7   107   7550   00:58:80   9.48   45.0   108   7600   00:58:30   7.87   31.0   108   7600   00:59:37   8.78   38.5   110   7750   00:59:28   9.41   44.3   111   7850   01:00:26   10.88   50.8   112   7900   01:00:26   10.88   50.8   113   8000   01:01:02   8.17   33.4   114   8050   01:01:28   8.51   37.1   115   8150   01:01:58   8.51   37.1   116   8200   01:01:28   8.31   33.5   117   8300   01:01:28   8.32   34.7   117   8350   01:01:28   8.51   37.1   118   8350   01:01:28   8.31   37.1   119   8400   01:01:28   8.31   33.4   111   8550   01:01:28   8.32   34.7   112   7950   01:03:41   8.15   35.0   113   8000   01:01:22   8.43   35.6   114   8550   01:01:28   8.32   34.7   115   8150   01:01:58   8.51   37.1   116   8200   01:01:28   8.32   34.7   117   8350   01:03:41   8.19   33.5   110   8500   01:04:43   6.72   22.2   120   8450   01:04:24   8.17   33.4   117   8350   01:03:42   6.66   22.2   120   8450   01:04:23   7.77   26.5   121   8550   01:04:44   8.52   36.3   122   8650   01:04:43   6.75   22.9   124   8850   01:06:57   7.55   29.2   125   8850   01:06:51   7.57   21.6   126   8900   01:06:58   5.75   10.5   127   9000   01:08:31   5.84   7.71   22.6   128   9050   01:06:41   8.48   36.0   124   8800   01:06:57   7.55   29.2   125   8850   01:06:37   7.55   29.2   126   8900   01:06:58   7.97   21.6   127   9000   01:08:51   5.90   22.5   129   9100   01:08:51   5.90   22.5   129   9100   01:08:51   5.90   22.5   120   9100   01:08:51   5.90   22.5   121   9100   01:08:51   5.90   22.5   122   9100   01:08	96	6800	00:53:14	7.70	29.6	1.0000e-04
98   6950   00:54:12   10.66   56.8   99   7000   00:54:33   8.49   36.0   100   7050   00:54:34   10:57   55.9   100   7100   00:55:99   6.89   23.7   101   7150   00:55:91   8.74   38.2   102   7200   00:55:51   8.96   40.2   103   7250   00:56:12   8.97   40:3   103   7300   00:56:12   8.97   40:3   104   7350   00:56:48   9.61   46.2   105   7400   00:57:10   7.44   27.7   105   7400   00:57:25   10:12   51:2   106   7500   00:57:47   12.70   80:7   107   7550   00:58:80   9.48   45.0   108   7650   00:58:80   9.48   45.0   108   7650   00:58:30   7.87   31.0   108   7650   00:58:46   7.43   27.6   109   7700   00:59:28   9.41   44.3   110   7750   00:59:28   9.41   44.3   1110   7750   00:59:44   9.62   46.3   1111   7850   01:00:26   10.88   56.8   1112   7900   01:00:26   10.88   56.8   1113   8000   01:01:22   8.43   35.6   1114   8050   01:01:22   8.43   35.6   1115   8150   01:01:22   8.43   35.6   1116   8200   01:01:22   8.43   35.6   1117   8350   01:01:24   8.17   33.4   1117   8250   01:02:45   8.32   34.7   1117   8350   01:02:45   8.32   34.7   1117   8350   01:02:45   8.32   34.7   1117   8350   01:02:45   8.32   34.7   1117   8350   01:02:45   8.32   34.7   1117   8350   01:02:58   8.61   37.1   1119   8400   01:01:22   8.43   35.6   1131   8000   01:01:22   8.43   35.6   1132   8500   01:02:44   8.17   33.4   1144   8050   01:01:23   8.91   33.5   115   8150   01:02:45   8.32   34.7   117   8350   01:02:45   8.32   34.7   117   8350   01:04:44   8.52   36.3   122   8600   01:05:55   4.62   10.7   124   8800   01:06:57   5.95   4.62   10.7   125   8850   01:04:43   8.52   36.3   126   8900   01:06:58   5.75   10.22   127   9000   01:08:31   5.84   17.1   138   9550   01:06:41   8.48   36.0   139   9550   01:07:55   10.22   22.6   129   9150   01:08:31   5.84   17.1   130   9200   01:08:52   7.00   24.5   121   8550   01:06:58   5.75   10.22   22.6   122   8650   01:07:55   10.22   22.1   131   9300   01:08:52   7.00   24.5   122   8650   01:07:55   10.22   22.1   131   9300   01:08:52   7.00	97	6850	00:53:35	8.71	38.0	1.0000e-04
98   6950   06:54:12   10.66   56.8   99   7000   06:54:33   8.49   36.0   100   7050   06:54:34   10.57   55.9   100   7100   06:55:69   6.89   23.7   101   7150   06:55:51   8.74   38.2   102   7200   06:55:51   8.96   40.2   103   7250   06:56:12   8.97   40.3   103   7300   06:56:27   10.09   56.9   104   7350   06:56:48   9.61   46.2   105   7400   06:57:40   7.44   27.7   105   7400   06:57:25   10.12   51.2   106   7500   06:57:25   10.12   51.2   107   7550   06:58:09   9.48   45.0   108   7650   06:58:30   7.87   31.0   108   7650   06:58:30   7.87   31.0   108   7650   06:58:30   7.87   31.0   109   7700   06:59:28   9.41   44.3   110   7750   06:59:28   9.41   44.3   110   7750   06:59:28   9.41   44.3   111   7850   01:00:26   10.08   56.8   111   7850   01:00:26   10.08   55.0   111   7850   01:00:26   10.08   56.8   111   7850   01:00:26   10.08   56.8   111   7850   01:00:26   10.08   56.8   111   7850   01:00:26   10.08   56.8   111   7850   01:00:26   10.08   56.8   111   7850   01:00:26   10.08   56.8   111   7850   01:00:26   10.08   56.8   112   7900   01:00:26   10.08   56.8   113   8000   01:01:22   8.43   35.6   115   8150   01:01:28   8.61   37.1   117   8250   01:02:44   8.17   33.4   118   8350   01:01:32   8.32   34.7   117   8350   01:02:44   8.32   34.7   117   8350   01:02:44   8.32   34.7   117   8350   01:02:44   8.32   34.7   117   8350   01:02:44   8.32   34.7   117   8350   01:02:44   8.32   34.7   117   8350   01:02:44   8.52   36.3   122   8600   01:02:43   8.32   34.7   123   8700   01:03:00   9.05   41.0   124   8800   01:06:57   5.0   5.99   41.5   125   8850   01:06:37   7.05   29.2   126   8900   01:06:58   5.55   10.22   5.2   127   9000   01:08:31   5.84   7.7   138   9550   01:09:12   6.69   2.4   131   9300   01:09:28   7.96   31.7   132   9350   01:09:28   7.96   31.7   133   9400   01:09:28   7.96   31.7   134   9450   01:09:28   7.96   31.7   135   9550   01:10:44   6.66   6.88   19.1   136   9550   01:11:41   6.27   19.7	98 İ	6900 İ	00:53:57 İ	8.29 İ	34.4 İ	1.0000e-04
199						1.0000e-04
100			:			1.0000e-04
100	:		!			
101			!			1.0000e-04
102		· ·	00:55:09	·	· ·	1.0000e-04
183	101	7150	00:55:30	8.74	38.2	1.0000e-04
103	102	7200	00:55:51	8.96	40.2	1.0000e-04
103	103 İ	7250 İ	00:56:12	8.97 İ	40.3 İ	1.0000e-04
104			:			1.0000e-04
105			!			1.0000e-04
105		· ·	: : : : : : : : : : : : : : : : : : :	·		!
106			:			1.0000e-04
107			!			1.0000e-04
108	106	7500	00:57:47	12.70	80.7	1.0000e-04
108	107	7550	00:58:09	9.48	45.0	1.0000e-04
108	108 İ	7600 Ì	00:58:30	7.87	31.0	1.0000e-04
109		· ·	:		:	1.0000e-04
110			:	!		1.0000e-04
110			:			
111			!			1.0000e-04
112			!			1.0000e-04
112	111	7850	01:00:05	7.97	31.8	1.0000e-04
113	112	7900	01:00:26	10.08	50.8	1.0000e-04
113	112	7950	01:00:41	8.36	35.0	1.0000e-04
114			01:01:02			1.0000e-04
115			!			1.0000e-04
115			!			1.0000e-04
116		· ·			· ·	!
117       8250       01:02:45       8.32       34.7         117       8300       01:03:00       9.05       41.0         118       8350       01:03:21       8.19       33.5         119       8400       01:03:42       6.66       22.2         120       8450       01:04:03       6.72       22.6         120       8500       01:04:23       7.27       26.5         121       8550       01:04:44       8.52       36.3         122       8600       01:05:05       4.62       10.7         122       8650       01:05:20       5.39       14.5         123       8700       01:05:41       8.48       36.0         124       8750       01:06:01       9.24       42.6         124       8750       01:06:17       6.57       21.6         125       8850       01:06:37       7.65       29.2         126       8900       01:06:37       7.65       29.2         127       8950       01:07:19       6.76       22.9         127       9000       01:07:34       6.57       21.6         128       9050       01:07:55			:	!		1.0000e-04
117			:			1.0000e-04
118       8350       01:03:21       8.19       33.5         119       8400       01:03:42       6.66       22.2         120       8450       01:04:03       6.72       22.6         120       8500       01:04:23       7.27       26.5         121       8550       01:04:44       8.52       36.3         122       8600       01:05:05       4.62       10.7         122       8650       01:05:20       5.39       14.5         123       8700       01:05:20       5.39       14.5         124       8750       01:06:01       9.24       42.6         124       8800       01:06:17       6.57       21.6         125       8850       01:06:37       7.65       29.2         126       8900       01:06:58       5.75       16.5         127       8950       01:07:19       6.76       22.9         127       9000       01:07:34       6.57       21.6         128       9050       01:07:55       10.22       52.2         129       9100       01:08:16       6.95       24.2         129       9150       01:08:31 <td< td=""><td>117  </td><td>8250  </td><td>01:02:45</td><td>8.32</td><td>34.7</td><td>1.0000e-04</td></td<>	117	8250	01:02:45	8.32	34.7	1.0000e-04
119	117	8300	01:03:00	9.05	41.0	1.0000e-04
119	118	8350	01:03:21	8.19	33.5	1.0000e-04
120		· ·	01:03:42		· ·	1.0000e-04
120				:		1.0000e-04
121			:			1.0000e-04
122			:			
122			!			1.0000e-04
123		· ·	: : : : : : : : : : : : : : : : : : :	·		1.0000e-04
124       8750       01:06:01       9.24       42.6         124       8800       01:06:17       6.57       21.6         125       8850       01:06:37       7.65       29.2         126       8900       01:06:58       5.75       16.5         127       8950       01:07:19       6.76       22.9         127       9000       01:07:34       6.57       21.6         128       9050       01:07:55       10.22       52.2         129       9100       01:08:16       6.95       24.2         129       9150       01:08:31       5.84       17.1         130       9200       01:08:52       7.00       24.5         131       9250       01:09:12       6.69       22.4         131       9300       01:09:28       7.96       31.7         132       9350       01:09:48       7.62       29.1         133       9400       01:10:30       6.36       20.2         134       9450       01:10:45       7.92       31.3         135       9550       01:11:05       6.86       23.5         136       9600       01:11:26 <td< td=""><td>122  </td><td>8650  </td><td>•</td><td>5.39</td><td>14.5</td><td>1.0000e-04</td></td<>	122	8650	•	5.39	14.5	1.0000e-04
124       8800       01:06:17       6.57       21.6         125       8850       01:06:37       7.65       29.2         126       8900       01:06:58       5.75       16.5         127       8950       01:07:19       6.76       22.9         127       9000       01:07:34       6.57       21.6         128       9050       01:07:55       10.22       52.2         129       9100       01:08:16       6.95       24.2         129       9150       01:08:31       5.84       17.1         130       9200       01:08:31       5.84       17.1         131       9250       01:09:12       6.69       22.4         131       9250       01:09:12       6.69       22.4         131       9300       01:09:28       7.96       31.7         132       9350       01:09:48       7.62       29.1         133       9400       01:10:30       6.36       20.2         134       9450       01:10:45       7.92       31.3         135       9550       01:11:05       6.86       23.5         136       9600       01:11:41 <td< td=""><td>123  </td><td>8700</td><td>01:05:41</td><td>8.48</td><td>36.0</td><td>1.0000e-04</td></td<>	123	8700	01:05:41	8.48	36.0	1.0000e-04
124       8800       01:06:17       6.57       21.6         125       8850       01:06:37       7.65       29.2         126       8900       01:06:58       5.75       16.5         127       8950       01:07:19       6.76       22.9         127       9000       01:07:34       6.57       21.6         128       9050       01:07:55       10.22       52.2         129       9100       01:08:16       6.95       24.2         129       9150       01:08:31       5.84       17.1         130       9200       01:08:31       5.84       17.1         131       9250       01:09:12       6.69       22.4         131       9250       01:09:12       6.69       22.4         131       9300       01:09:28       7.96       31.7         132       9350       01:09:48       7.62       29.1         133       9400       01:10:30       6.36       20.2         134       9450       01:10:45       7.92       31.3         135       9550       01:11:05       6.86       23.5         136       9600       01:11:41 <td< td=""><td>124  </td><td>8750</td><td>01:06:01</td><td>9.24</td><td>42.6</td><td>1.0000e-04</td></td<>	124	8750	01:06:01	9.24	42.6	1.0000e-04
125	124	8800	01:06:17	6.57	21.6	1.0000e-04
126     8900     01:06:58     5.75     16.5       127     8950     01:07:19     6.76     22.9       127     9000     01:07:34     6.57     21.6       128     9050     01:07:55     10.22     52.2       129     9100     01:08:16     6.95     24.2       129     9150     01:08:31     5.84     17.1       130     9200     01:08:31     5.84     17.1       131     9250     01:08:52     7.00     24.5       131     9250     01:09:12     6.69     22.4       131     9300     01:09:28     7.96     31.7       132     9350     01:09:48     7.62     29.1       133     9400     01:10:09     12.98     84.3       134     9450     01:10:30     6.36     20.2       134     9500     01:10:45     7.92     31.3       135     9550     01:11:05     6.86     23.5       136     9600     01:11:26     6.18     19.1       136     9650     01:11:41     6.27     19.7			•			1.0000e-04
127       8950       01:07:19       6.76       22.9         127       9000       01:07:34       6.57       21.6         128       9050       01:07:55       10.22       52.2         129       9100       01:08:16       6.95       24.2         129       9150       01:08:31       5.84       17.1         130       9200       01:08:52       7.00       24.5         131       9250       01:09:12       6.69       22.4         131       9300       01:09:28       7.96       31.7         132       9350       01:09:48       7.62       29.1         133       9400       01:10:09       12.98       84.3         134       9450       01:10:30       6.36       20.2         134       9500       01:10:45       7.92       31.3         135       9550       01:11:05       6.86       23.5         136       9600       01:11:41       6.27       19.7			:	:		1.0000e-04
127       9000       01:07:34       6.57       21.6         128       9050       01:07:55       10.22       52.2         129       9100       01:08:16       6.95       24.2         129       9150       01:08:31       5.84       17.1         130       9200       01:08:52       7.00       24.5         131       9250       01:09:12       6.69       22.4         131       9300       01:09:28       7.96       31.7         132       9350       01:09:48       7.62       29.1         133       9400       01:10:09       12.98       84.3         134       9450       01:10:30       6.36       20.2         134       9500       01:10:45       7.92       31.3         135       9550       01:11:05       6.86       23.5         136       9600       01:11:26       6.18       19.1         136       9650       01:11:41       6.27       19.7			· ·			1.0000e-04   1.0000e-04
128     9050     01:07:55     10.22     52.2       129     9100     01:08:16     6.95     24.2       129     9150     01:08:31     5.84     17.1       130     9200     01:08:52     7.00     24.5       131     9250     01:09:12     6.69     22.4       131     9300     01:09:28     7.96     31.7       132     9350     01:09:48     7.62     29.1       133     9400     01:10:09     12.98     84.3       134     9450     01:10:30     6.36     20.2       134     9500     01:10:45     7.92     31.3       135     9550     01:11:05     6.86     23.5       136     9600     01:11:26     6.18     19.1       136     9650     01:11:41     6.27     19.7			!			!
129     9100     01:08:16     6.95     24.2       129     9150     01:08:31     5.84     17.1       130     9200     01:08:52     7.00     24.5       131     9250     01:09:12     6.69     22.4       131     9300     01:09:28     7.96     31.7       132     9350     01:09:48     7.62     29.1       133     9400     01:10:09     12.98     84.3       134     9450     01:10:30     6.36     20.2       134     9500     01:10:45     7.92     31.3       135     9550     01:11:05     6.86     23.5       136     9600     01:11:26     6.18     19.1       136     9650     01:11:41     6.27     19.7			:			1.0000e-04
129     9150     01:08:31     5.84     17.1       130     9200     01:08:52     7.00     24.5       131     9250     01:09:12     6.69     22.4       131     9300     01:09:28     7.96     31.7       132     9350     01:09:48     7.62     29.1       133     9400     01:10:09     12.98     84.3       134     9450     01:10:30     6.36     20.2       134     9500     01:10:45     7.92     31.3       135     9550     01:11:05     6.86     23.5       136     9600     01:11:26     6.18     19.1       136     9650     01:11:41     6.27     19.7			•	:		1.0000e-04
130     9200     01:08:52     7.00     24.5       131     9250     01:09:12     6.69     22.4       131     9300     01:09:28     7.96     31.7       132     9350     01:09:48     7.62     29.1       133     9400     01:10:09     12.98     84.3       134     9450     01:10:30     6.36     20.2       134     9500     01:10:45     7.92     31.3       135     9550     01:11:05     6.86     23.5       136     9600     01:11:26     6.18     19.1       136     9650     01:11:41     6.27     19.7	129	9100	01:08:16	6.95	24.2	1.0000e-04
131     9250     01:09:12     6.69     22.4       131     9300     01:09:28     7.96     31.7       132     9350     01:09:48     7.62     29.1       133     9400     01:10:09     12.98     84.3       134     9450     01:10:30     6.36     20.2       134     9500     01:10:45     7.92     31.3       135     9550     01:11:05     6.86     23.5       136     9600     01:11:26     6.18     19.1       136     9650     01:11:41     6.27     19.7	129	9150	01:08:31	5.84	17.1	1.0000e-04
131     9250     01:09:12     6.69     22.4       131     9300     01:09:28     7.96     31.7       132     9350     01:09:48     7.62     29.1       133     9400     01:10:09     12.98     84.3       134     9450     01:10:30     6.36     20.2       134     9500     01:10:45     7.92     31.3       135     9550     01:11:05     6.86     23.5       136     9600     01:11:26     6.18     19.1       136     9650     01:11:41     6.27     19.7	130	9200	01:08:52	7.00	24.5	1.0000e-04
131     9300     01:09:28     7.96     31.7       132     9350     01:09:48     7.62     29.1       133     9400     01:10:09     12.98     84.3       134     9450     01:10:30     6.36     20.2       134     9500     01:10:45     7.92     31.3       135     9550     01:11:05     6.86     23.5       136     9600     01:11:26     6.18     19.1       136     9650     01:11:41     6.27     19.7			:			1.0000e-04
132     9350     01:09:48     7.62     29.1       133     9400     01:10:09     12.98     84.3       134     9450     01:10:30     6.36     20.2       134     9500     01:10:45     7.92     31.3       135     9550     01:11:05     6.86     23.5       136     9600     01:11:26     6.18     19.1       136     9650     01:11:41     6.27     19.7			:			1.0000e-04
133     9400     01:10:09     12.98     84.3       134     9450     01:10:30     6.36     20.2       134     9500     01:10:45     7.92     31.3       135     9550     01:11:05     6.86     23.5       136     9600     01:11:26     6.18     19.1       136     9650     01:11:41     6.27     19.7		•	:			•
134     9450     01:10:30     6.36     20.2       134     9500     01:10:45     7.92     31.3       135     9550     01:11:05     6.86     23.5       136     9600     01:11:26     6.18     19.1       136     9650     01:11:41     6.27     19.7			:	:		1.0000e-04
134     9500     01:10:45     7.92     31.3       135     9550     01:11:05     6.86     23.5       136     9600     01:11:26     6.18     19.1       136     9650     01:11:41     6.27     19.7						1.0000e-04
135     9550     01:11:05     6.86     23.5       136     9600     01:11:26     6.18     19.1       136     9650     01:11:41     6.27     19.7			:			1.0000e-04
136   9600   01:11:26   6.18   19.1     136   9650   01:11:41   6.27   19.7	134	9500	01:10:45	7.92	31.3	1.0000e-04
136   9600   01:11:26   6.18   19.1     136   9650   01:11:41   6.27   19.7	135	9550	01:11:05	6.86	23.5	1.0000e-04
136   9650   01:11:41   6.27   19.7		•	01:11:26			1.0000e-04
			:	:		1.0000e-04
137   9700   01:12:02   5.62   15.8				5.62		1.0000e-04
			:			:
138   9750   01:12:23   5.71   16.3		:	•			1.0000e-04
139   9800   01:12:44   7.27   26.4	139	9800	01:12:44	/.2/	26.4	1.0000e-04

139	9850	01:12:59	8.49	36.1	1.0000e-04
140	9900	01:13:20	6.30	19.9	1.0000e-04
141	9950	01:13:41	8.12	33.0	1.0000e-04
141	10000	01:13:56	5.66	16.0	1.0000e-04
142	10050	01:14:16	4.88	11.9	1.0000e-04
143	10100	01:14:37	6.01	18.1	1.0000e-04
143	10150	01:14:52	7.31	26.7	1.0000e-04
144	10200	01:15:13	5.69	16.2	1.0000e-04
145	10250	01:15:34	9.71	47.1	1.0000e-04
146	10300	01:15:54	5.62	15.8	1.0000e-04
146	10350	01:16:09	7.43	27.6	1.0000e-04
147	10400	01:16:30	4.81	11.6	1.0000e-04
148	10450	01:16:51	9.50	45.1	1.0000e-04
148	10500	01:17:06	11.22	62.9	1.0000e-04
149	10550	01:17:27	6.55	21.4	1.0000e-04
150	10600	01:17:48	9.70	47.0	1.0000e-04
150	10650	01:18:03	9.32	43.5	1.0000e-04
=======	-=========	=============	===========	===========	

Training finished: Max epochs completed.

SeriesNetwork with properties:

Layers: [31×1 nnet.cnn.layer.Layer]

InputNames: {'imageinput'}
OutputNames: {'regressionoutput'}

```
% Prediction of Threshold value using the trained DTP-Net
Train_Predicted = predict(ccnet,trainds);
Test_Predicted = predict(ccnet,testds);

% Error estimation
Train_predictionError = Y_Train - Train_Predicted;
Test_predictionError = Y_Test - Test_Predicted;
```

```
% Evalaution for training data
Train_Pred_mae = errperf(Y_Train,Train_Predicted,'mae')
```

Train\_Pred\_mae = single

5.1116

```
Train_Pred_mse = errperf(Y_Train,Train_Predicted,'mse')
```

Train\_Pred\_mse = single

40.5576

```
Train_Pred_rmse = errperf(Y_Train,Train_Predicted,'rmse')
```

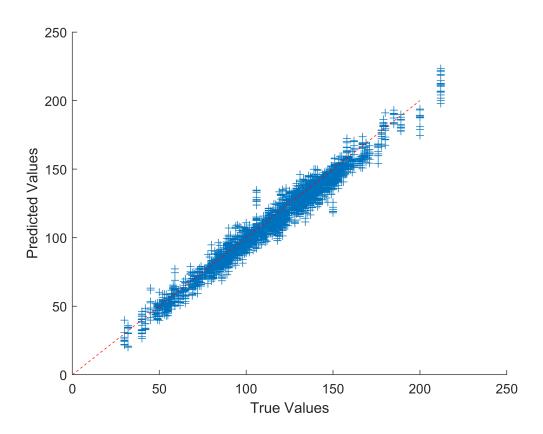
Train\_Pred\_rmse = single

6.3685

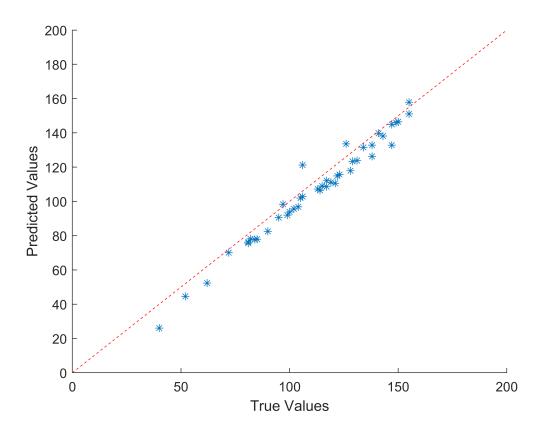
```
%Train_Pred_mare = errperf(Y_Train,Train_Predicted,'mare')
%Train_Pred_msre = errperf(Y_Train,Train_Predicted,'msre')
%Train_Pred_rmsre = errperf(Y_Train,Train_Predicted,'rmsre')
%Train_Pred_mape = errperf(Y_Train,Train_Predicted,'mape')
```

```
%Train_Pred_rmspe = errperf(Y_Train,Train_Predicted,'rmspe')
% Evalaution for test data
Test_Pred_mae = errperf(Y_Test,Test_Predicted,'mae')
Test_Pred_mae = single
   6.2166
Test_Pred_mse = errperf(Y_Test,Test_Predicted,'mse')
Test_Pred_mse = single
   48.8017
Test_Pred_rmse = errperf(Y_Test,Test_Predicted,'rmse')
Test_Pred_rmse = single
   6.9858
% Test_Pred_mare = errperf(Y_Test,Test_Predicted,'mare')
% Test Pred msre = errperf(Y Test, Test Predicted, 'msre')
% Test_Pred_rmsre = errperf(Y_Test,Test_Predicted,'rmsre')
% Test_Pred_mape = errperf(Y_Test,Test_Predicted,'mape')
% Testn_Pred_mspe = errperf(Y_Test,Test_Predicted,'mspe')
% Test_Pred_rmspe = errperf(Y_Test,Test_Predicted,'rmspe')
% Scatter plot for training phase
figure
scatter(Y_Train,Train_Predicted,'+')
xlabel("True Values")
ylabel("Predicted Values")
hold on
plot([0 200], [0 200], 'r--')
```

%Train\_Pred\_mspe = errperf(Y\_Train,Train\_Predicted,'mspe')



```
% Scatter plot for testing phase
figure
scatter(Y_Test,Test_Predicted,'*')
xlabel("True Values")
ylabel("Predicted Values")
hold on
plot([0 200], [0 200],'r--')
```



%ccnet.Layers