```matlab
53      %%
54      %Update the Files property of the datastore with the resized filenames
55      resizedDataset = resizeDataset(files, 0, numFiles);
56      resizedDataset.Labels = labels;
57      inputSize = size(imread(resizedDataset.Files{1}));
58
59      %Transform image into 1D array of pixel values
60      trainImages = transformImagesTo1D(inputSize, resizedDataset);
61      %Change labels to binary values indicating the images class with a 1 in the
62      %corresponding row indicating the sky type
63      numClasses = 15;
64      trainLabels = transformLabels(resizedDataset.Labels, numClasses);
65
66      trainSkyNetwork(neurons, funcs, funcNames, trainImages, trainLabels, 0);
```