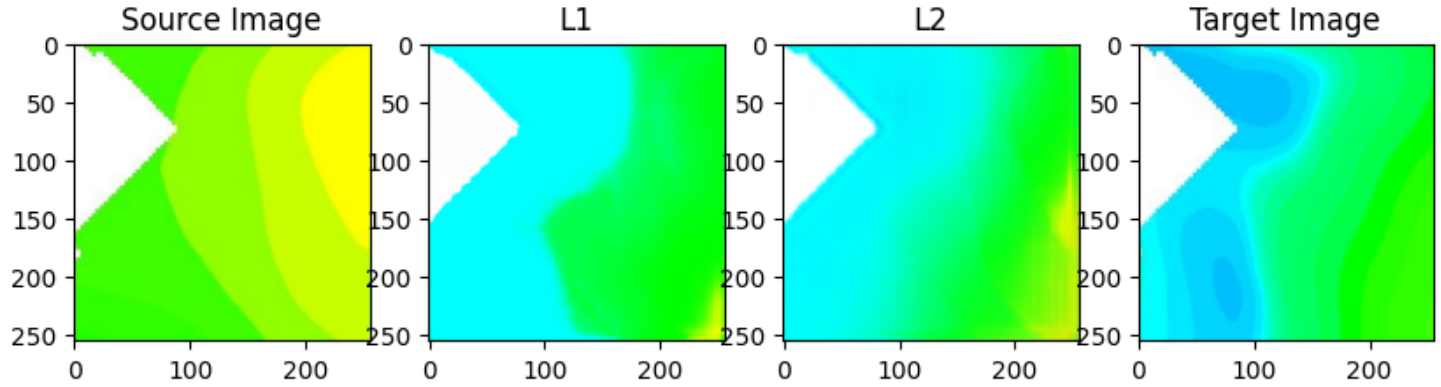
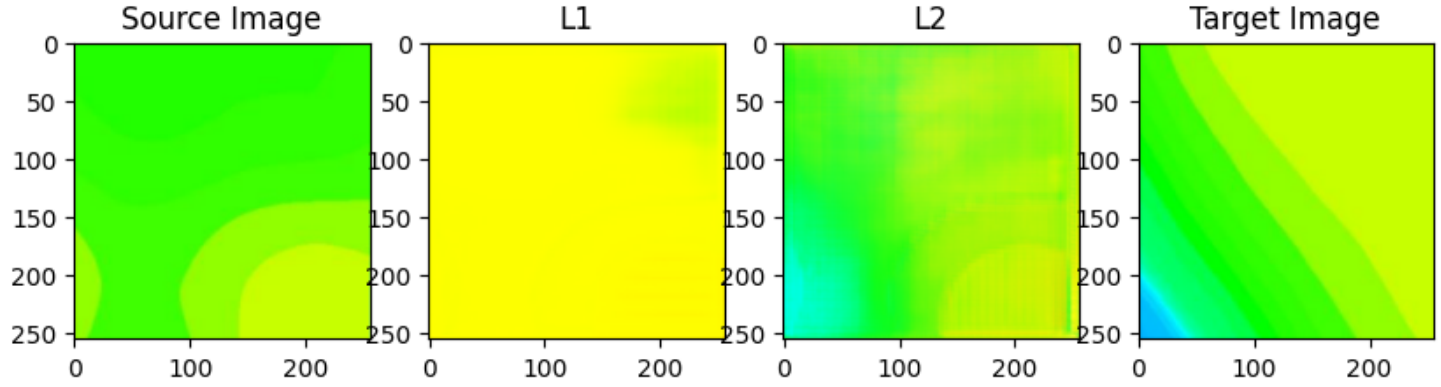
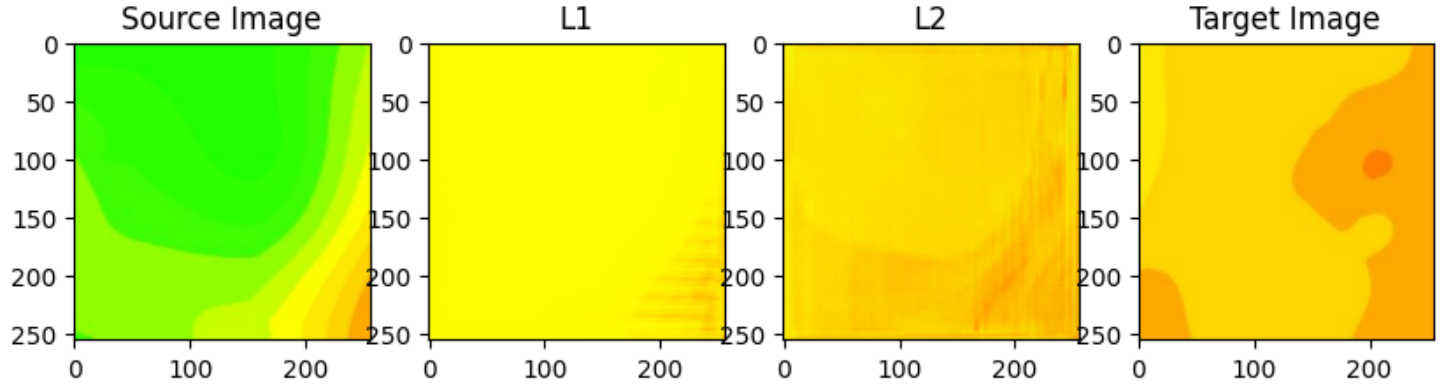
```
Index: 55
1/1 [==============================] - 0s 334ms/step
1/1 [==============================] - 0s 334ms/step
```



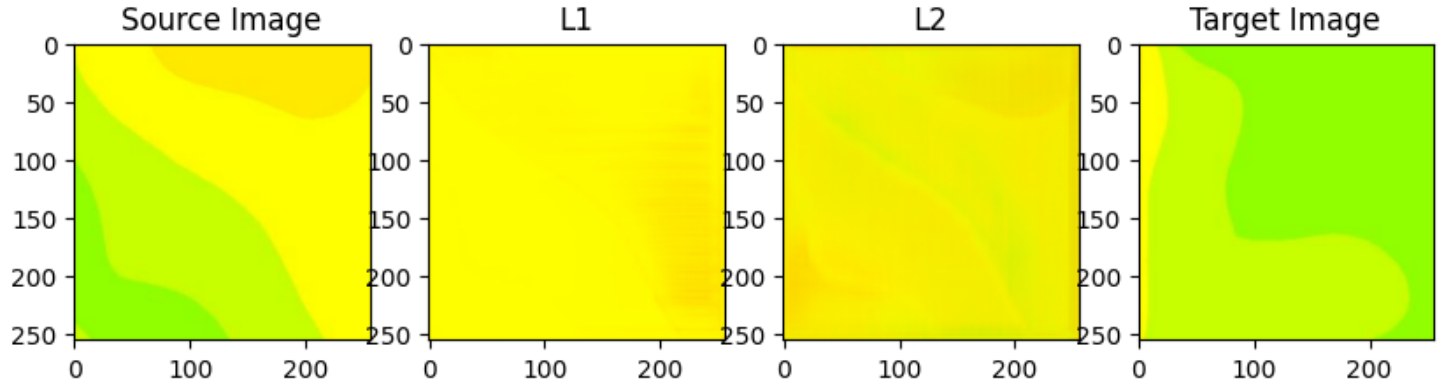

```
Index: 56
1/1 [==============================] - 0s 357ms/step
1/1 [==============================] - 0s 329ms/step
```



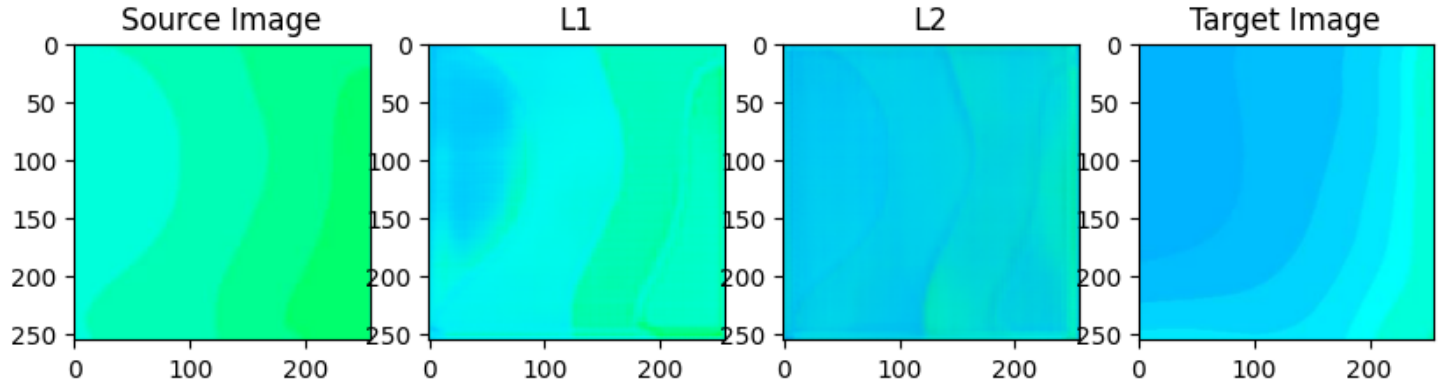

```
Index: 57
1/1 [==============================] - 0s 333ms/step
1/1 [==============================] - 0s 349ms/step
```



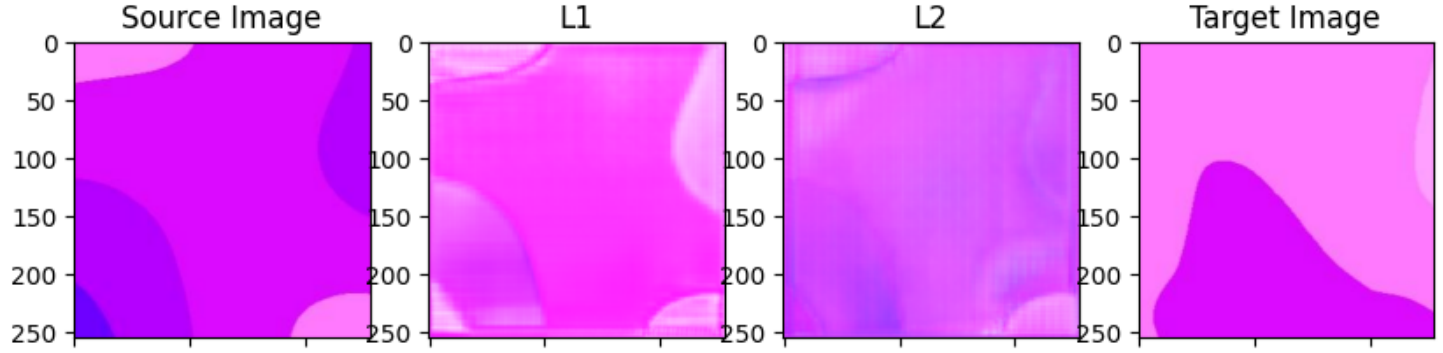
```
Index: 58
1/1 [==============================] - 0s 490ms/step
1/1 [==============================] - 1s 507ms/step
```



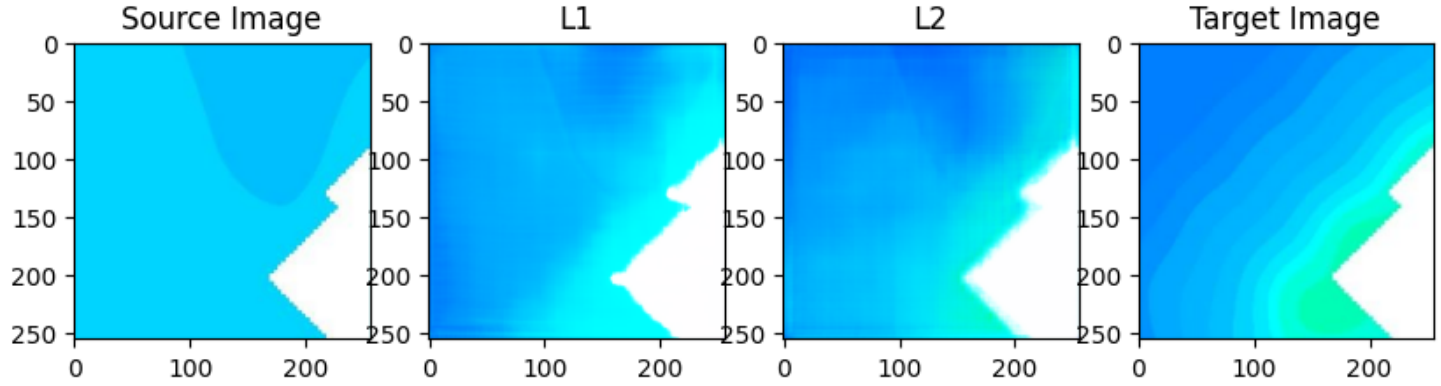

```
Index: 59
1/1 [==============================] - 0s 338ms/step
1/1 [==============================] - 0s 333ms/step
```



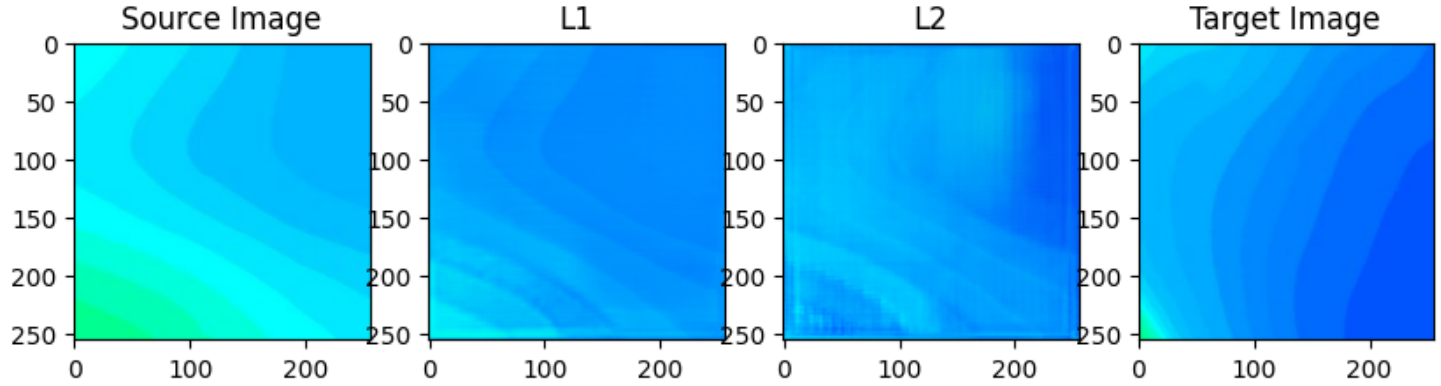

```
Index: 60
1/1 [==============================] - 0s 361ms/step
1/1 [==============================] - 0s 360ms/step
```



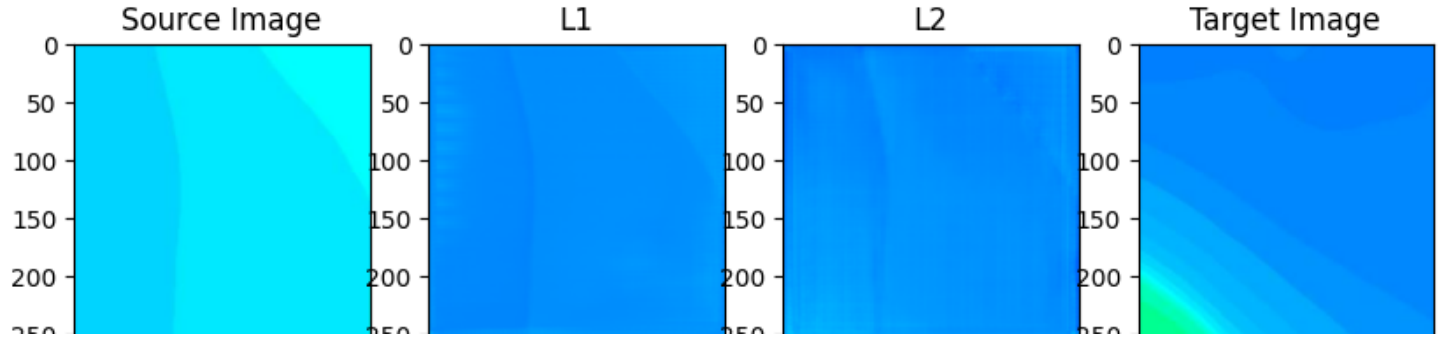
```
Index: 61
1/1 [==============================] - 0s 348ms/step
1/1 [==============================] - 0s 338ms/step
```

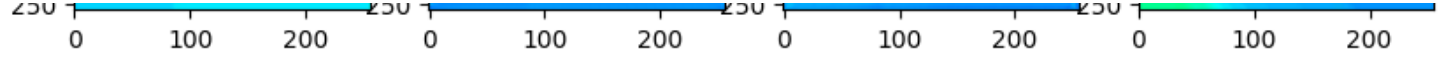



```
Index: 62
1/1 [==============================] - 0s 364ms/step
1/1 [==============================] - 0s 349ms/step
```

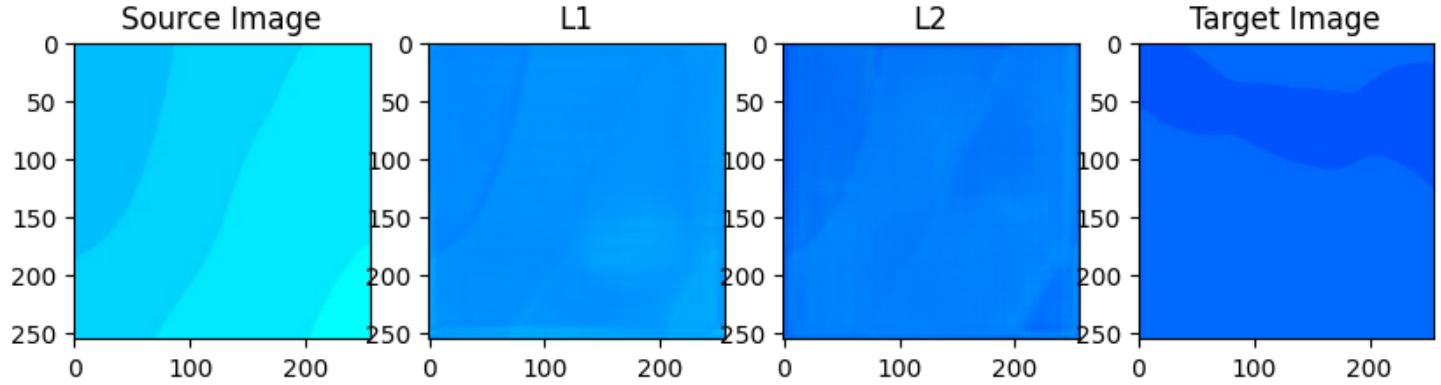



```
Index: 63
1/1 [==============================] - 0s 387ms/step
1/1 [==============================] - 0s 337ms/step
```

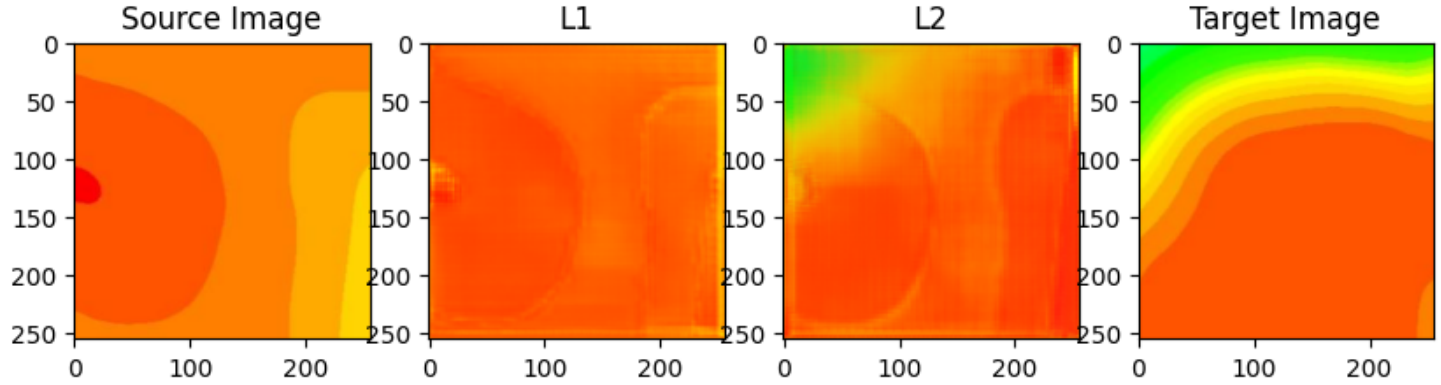




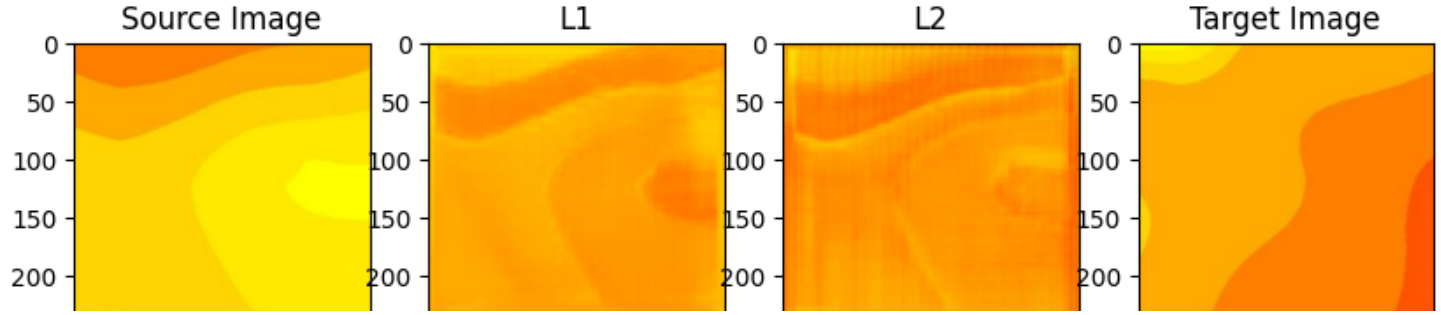
```
Index: 64
1/1 [==============================] - 0s 362ms/step
1/1 [==============================] - 0s 338ms/step
```

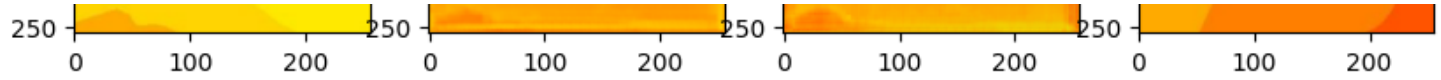



```
Index: 65
1/1 [==============================] - 0s 350ms/step
1/1 [==============================] - 0s 340ms/step
```

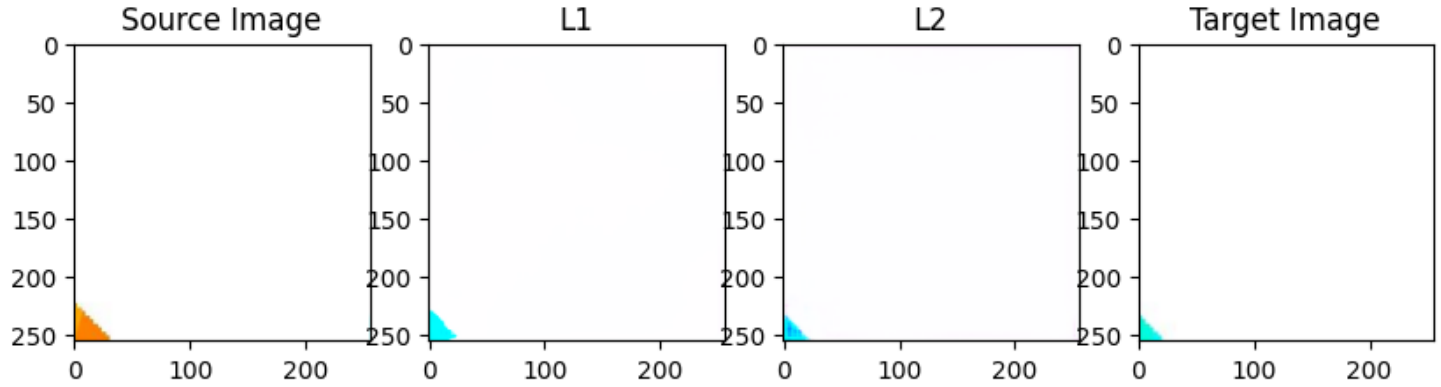



```
Index: 66
1/1 [==============================] - 0s 475ms/step
1/1 [==============================] - 0s 461ms/step
```

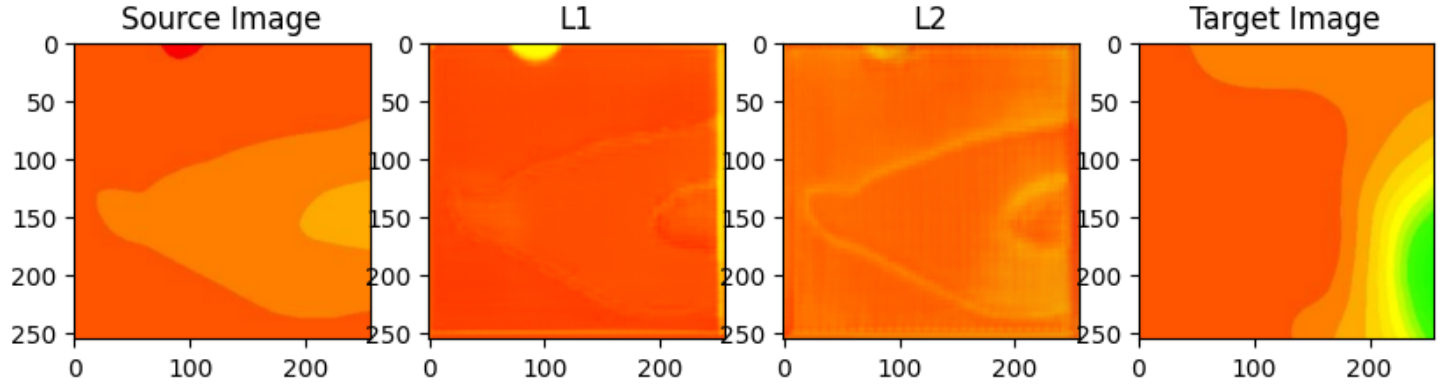




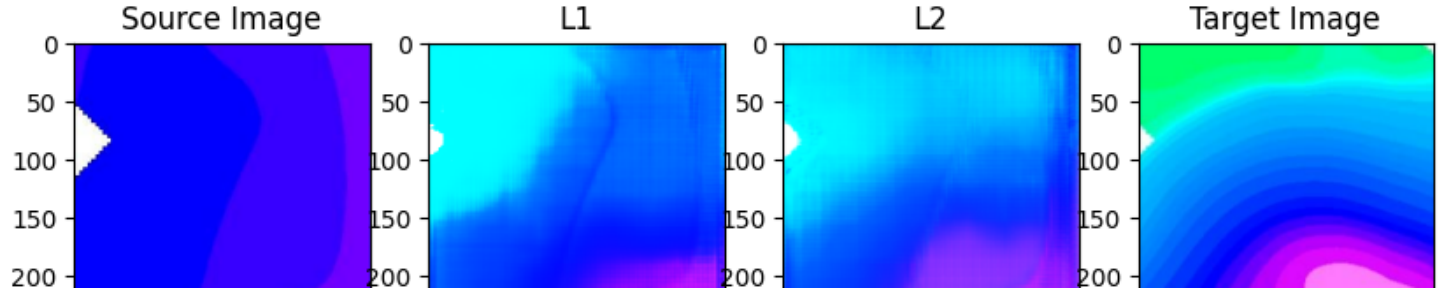
```
Index: 67
1/1 [==============================] - 0s 335ms/step
1/1 [==============================] - 0s 342ms/step
```

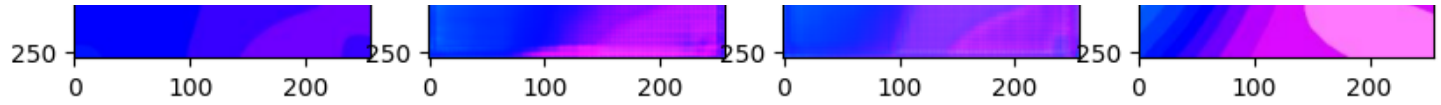



```
Index: 68
1/1 [==============================] - 0s 349ms/step
1/1 [==============================] - 0s 323ms/step
```

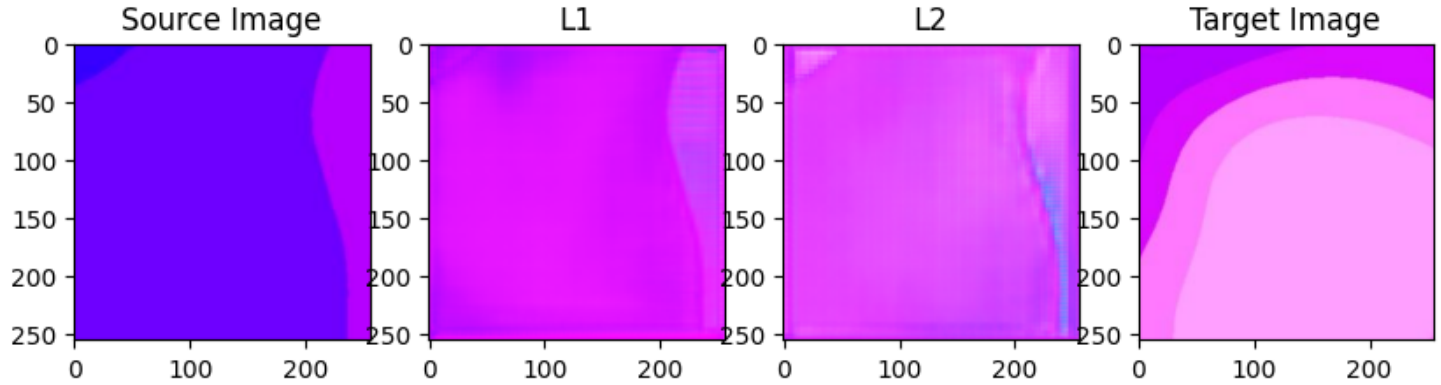



```
Index: 69
1/1 [==============================] - 0s 373ms/step
1/1 [==============================] - 0s 357ms/step
```

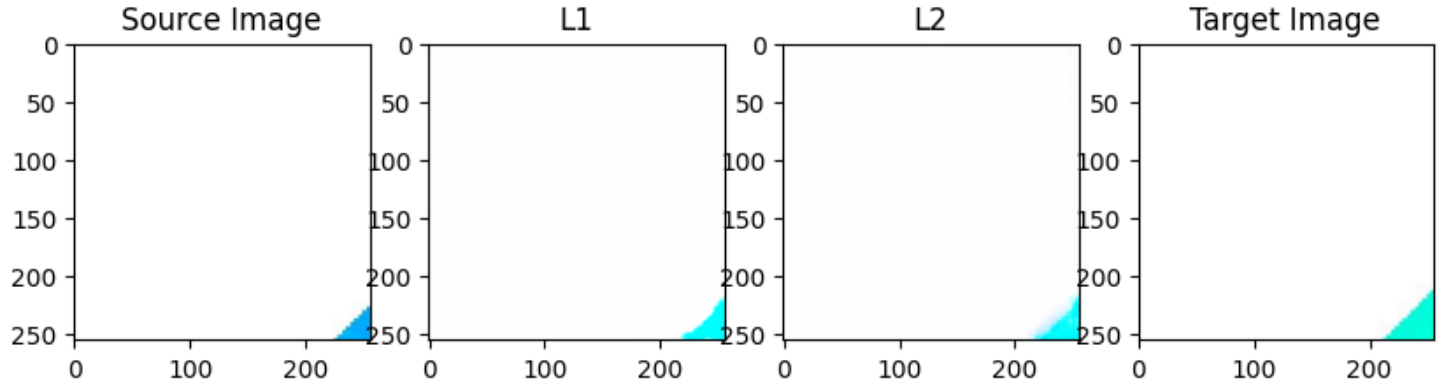




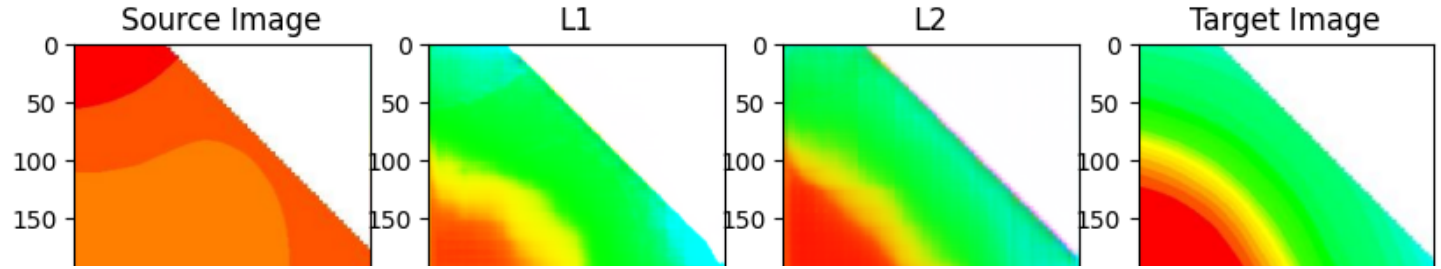
```
Index: 70
1/1 [==============================] - 0s 383ms/step
1/1 [==============================] - 0s 339ms/step
```

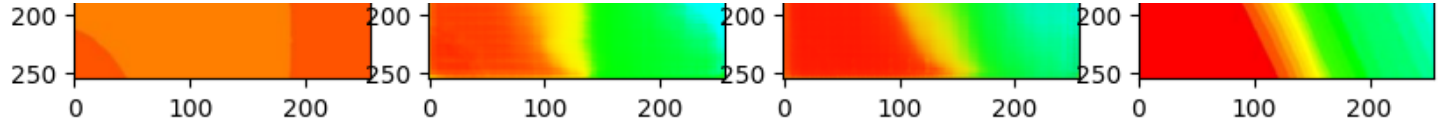



```
Index: 71
1/1 [==============================] - 0s 378ms/step
1/1 [==============================] - 0s 354ms/step
```

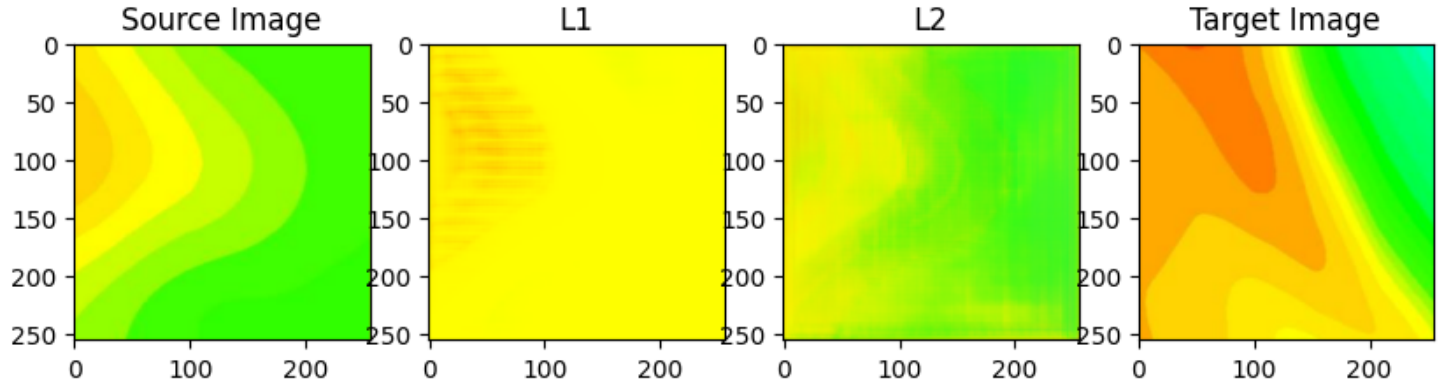



```
Index: 72
1/1 [==============================] - 0s 356ms/step
1/1 [==============================] - 0s 341ms/step
```

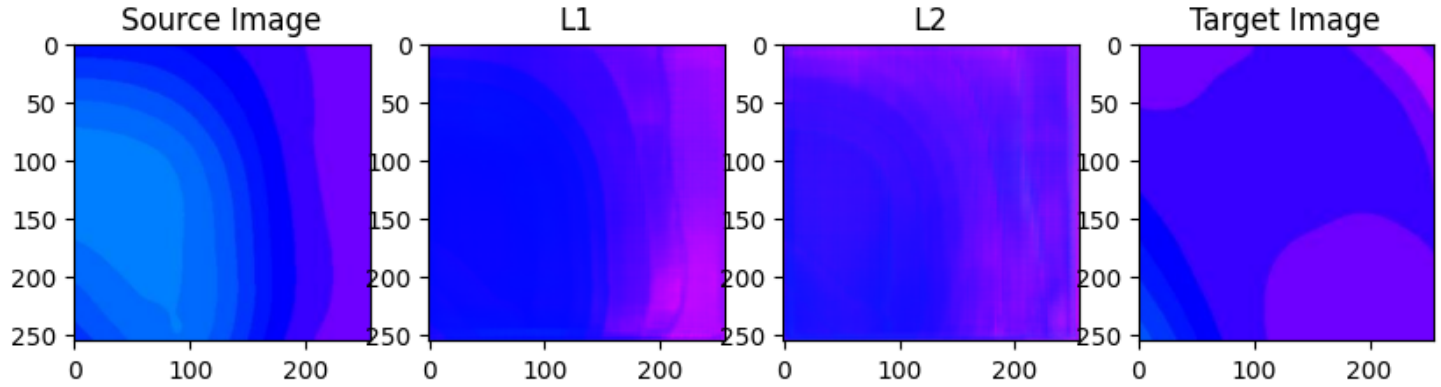




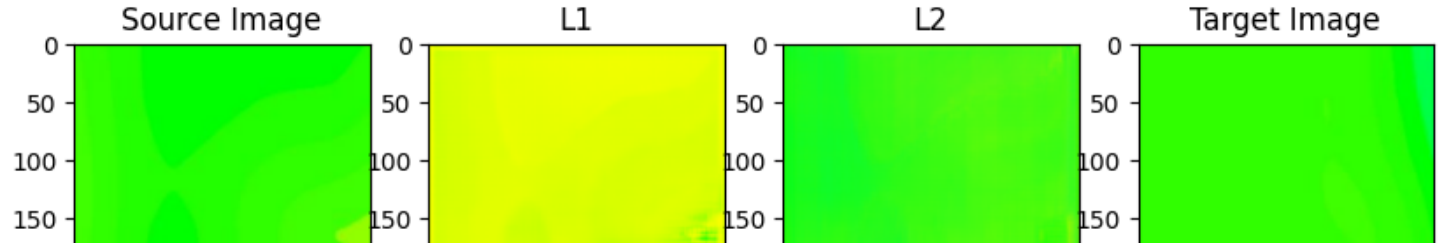
```
Index: 73
1/1 [==============================] - 0s 341ms/step
1/1 [==============================] - 0s 385ms/step
```

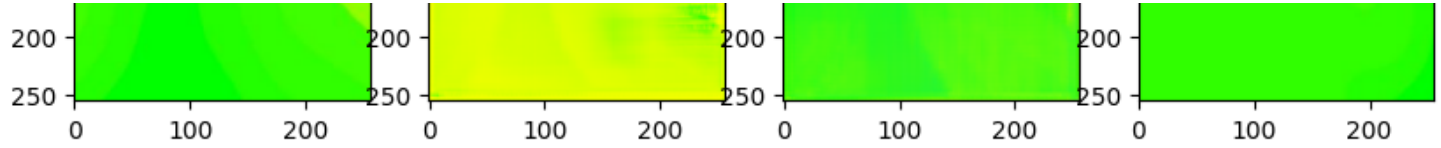



```
Index: 74
1/1 [==============================] - 0s 469ms/step
1/1 [==============================] - 0s 443ms/step
```

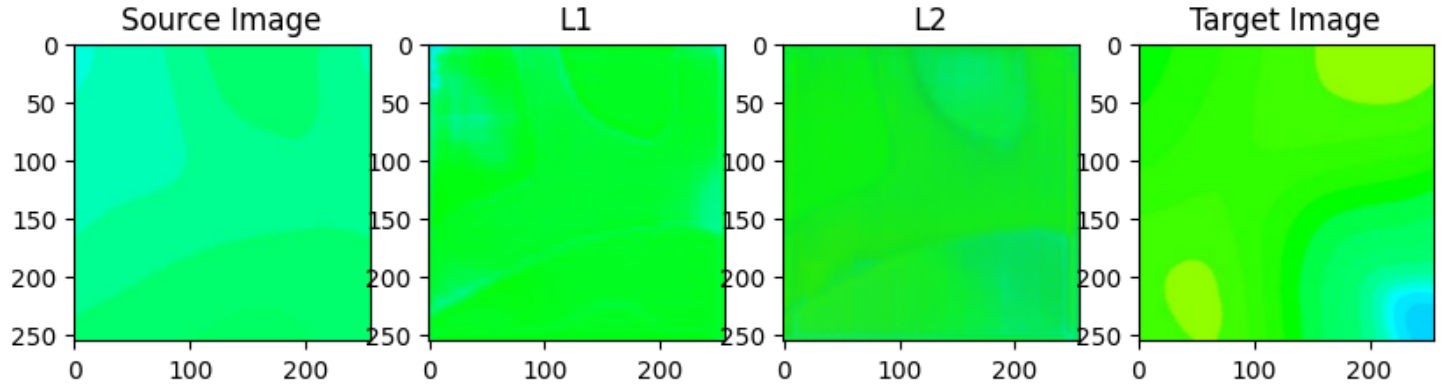



```
Index: 75
1/1 [==============================] - 0s 343ms/step
1/1 [==============================] - 0s 353ms/step
```

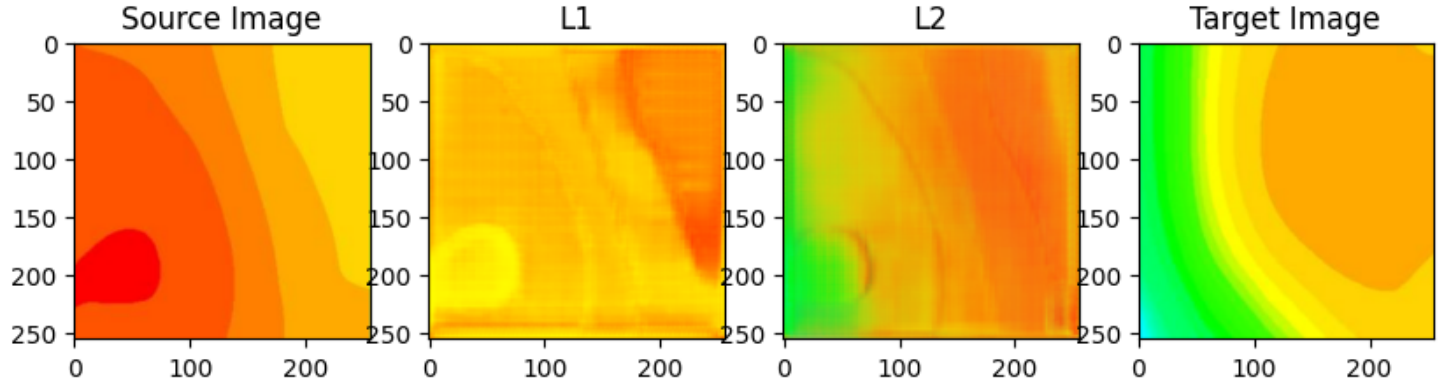




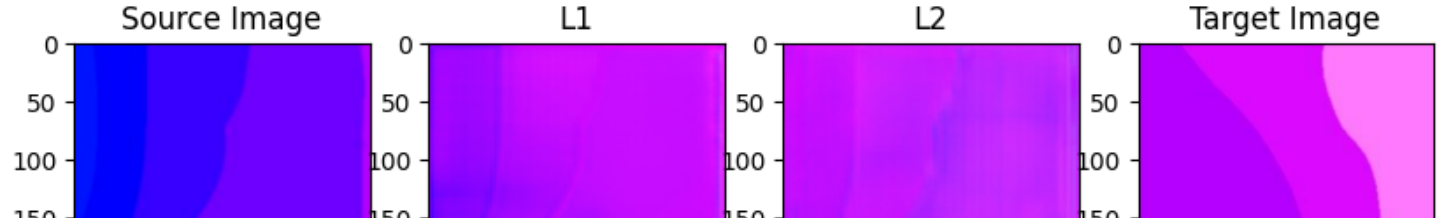
```
Index: 76
1/1 [==============================] - 0s 338ms/step
1/1 [==============================] - 0s 345ms/step
```

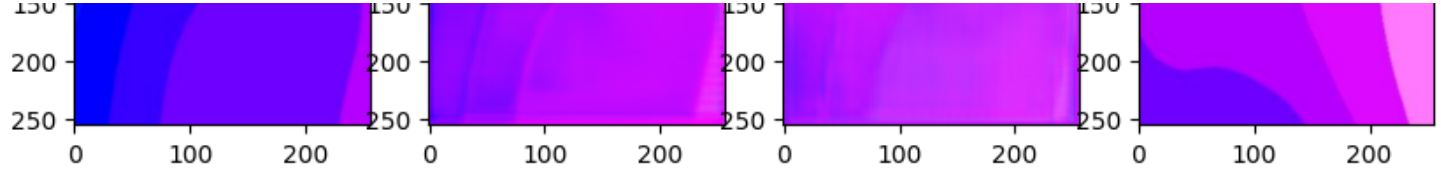



```
Index: 77
1/1 [==============================] - 0s 364ms/step
1/1 [==============================] - 0s 358ms/step
```

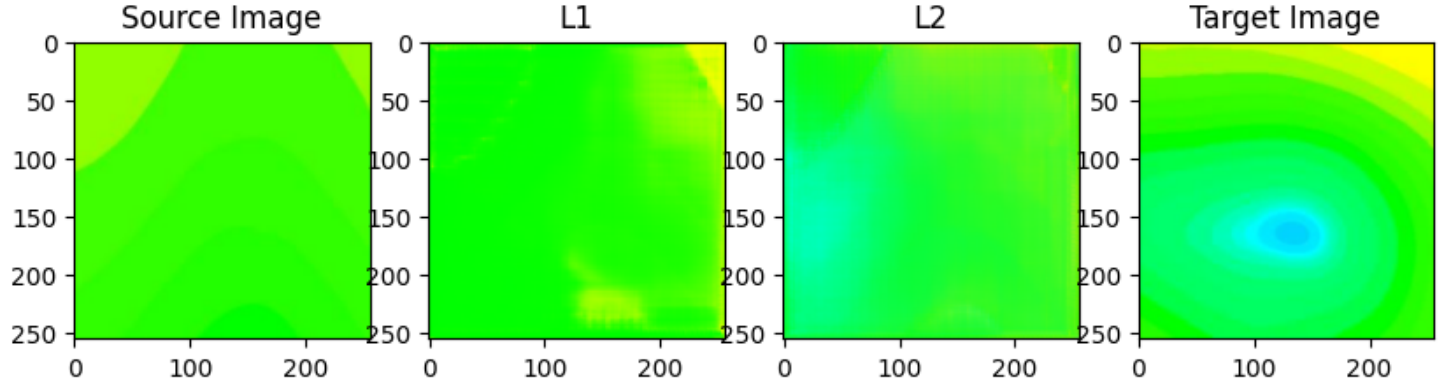



```
Index: 78
1/1 [==============================] - 0s 357ms/step
1/1 [==============================] - 0s 338ms/step
```

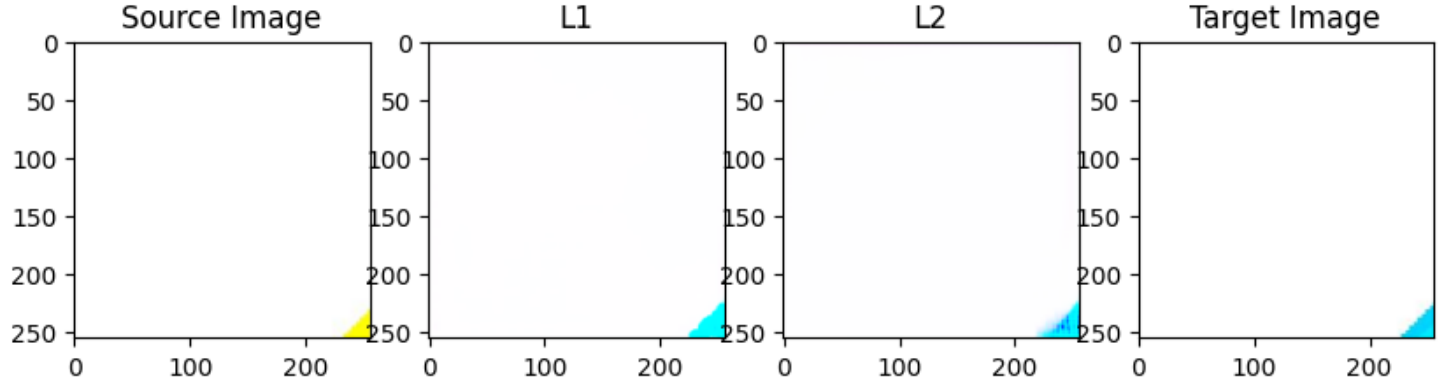




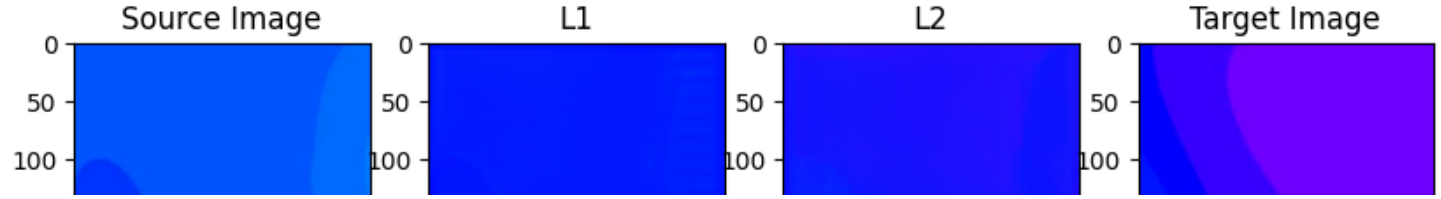
```
Index: 79
1/1 [==============================] - 0s 365ms/step
1/1 [==============================] - 0s 342ms/step
```

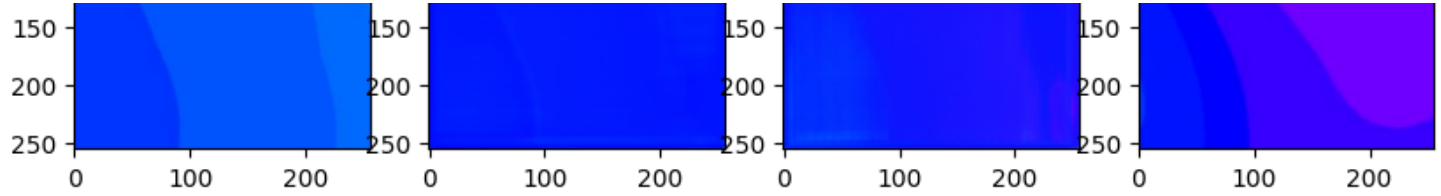



```
Index: 80
1/1 [==============================] - 0s 378ms/step
1/1 [==============================] - 0s 347ms/step
```

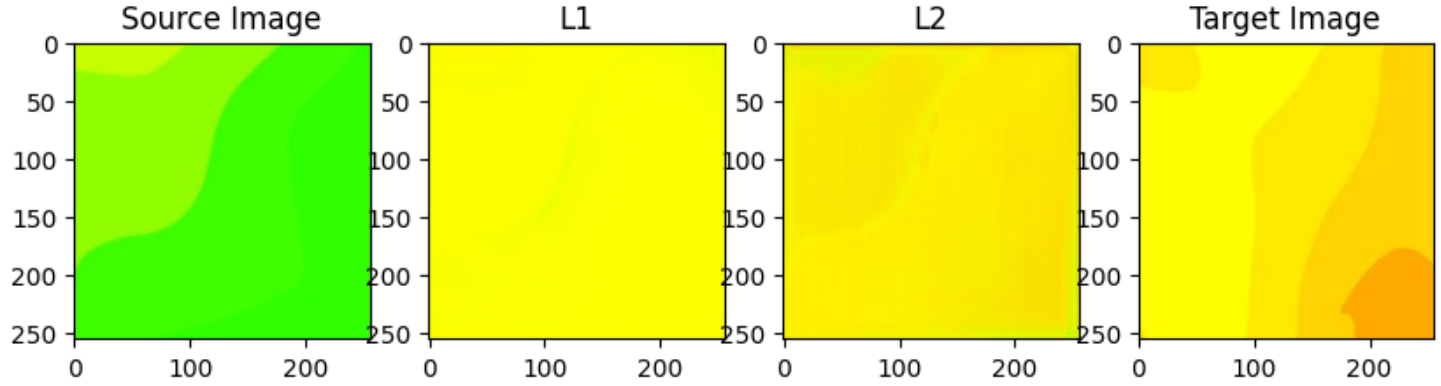



```
Index: 81
1/1 [==============================] - 0s 341ms/step
1/1 [==============================] - 0s 416ms/step
```

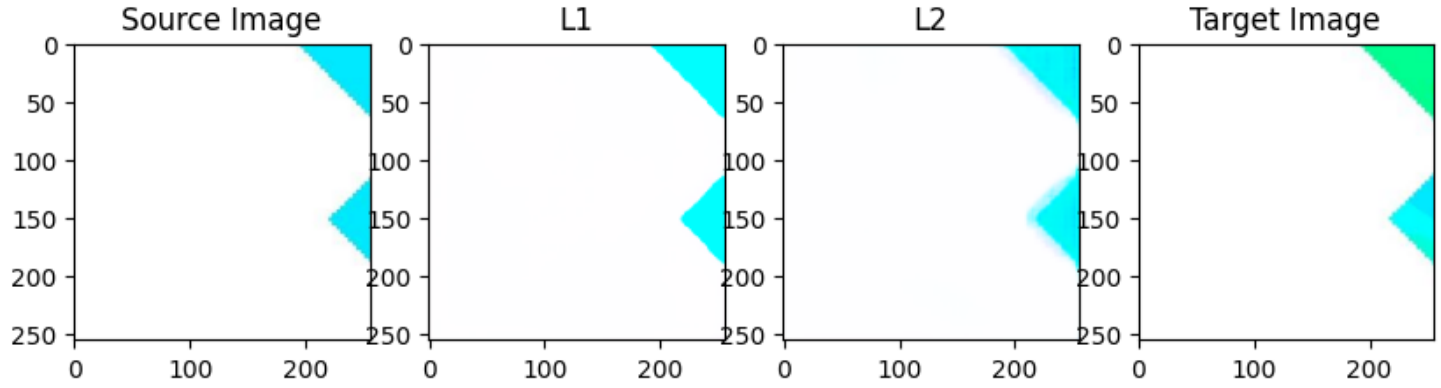




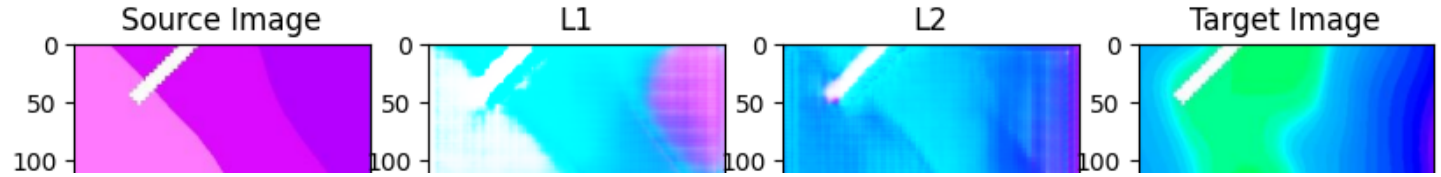
```
Index: 82
1/1 [==============================] - 1s 520ms/step
1/1 [==============================] - 1s 526ms/step
```

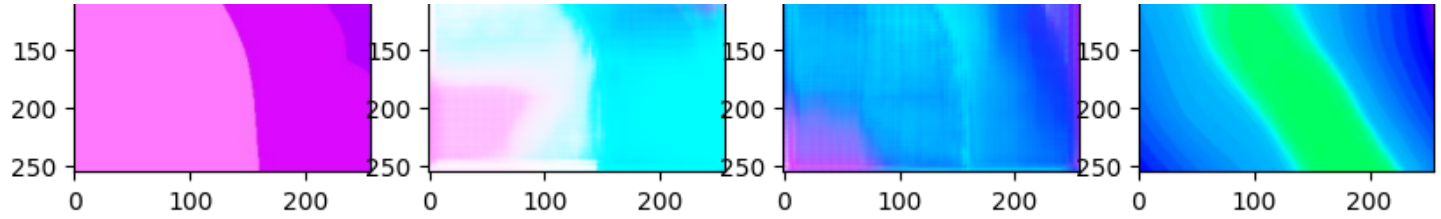



```
Index: 83
1/1 [==============================] - 0s 399ms/step
1/1 [==============================] - 0s 359ms/step
```

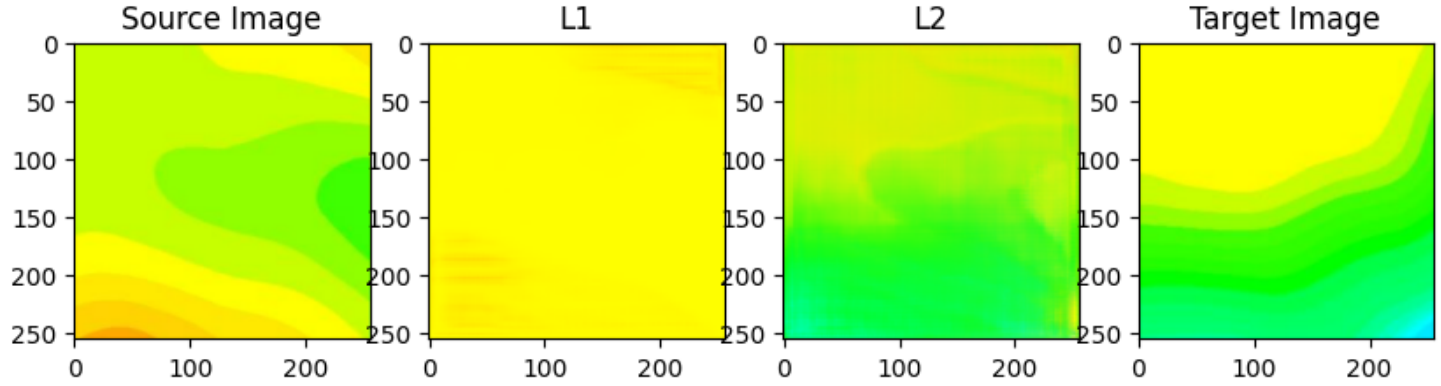



```
Index: 84
1/1 [==============================] - 0s 364ms/step
1/1 [==============================] - 0s 325ms/step
```

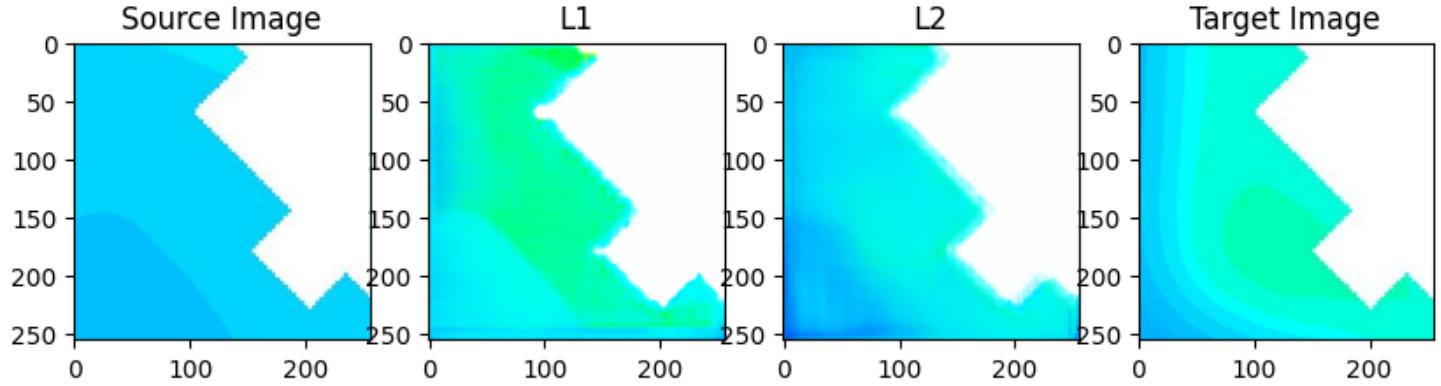




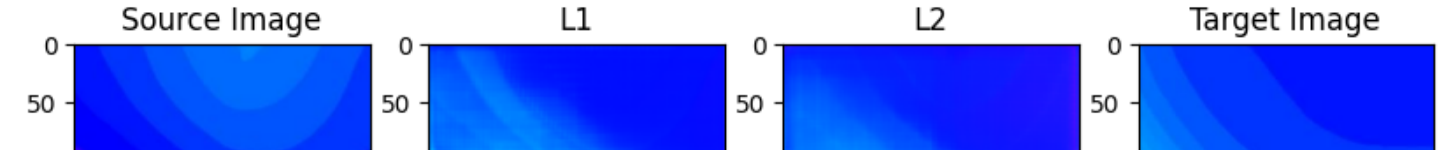
```
Index: 85
1/1 [==============================] - 0s 400ms/step
1/1 [==============================] - 0s 362ms/step
```

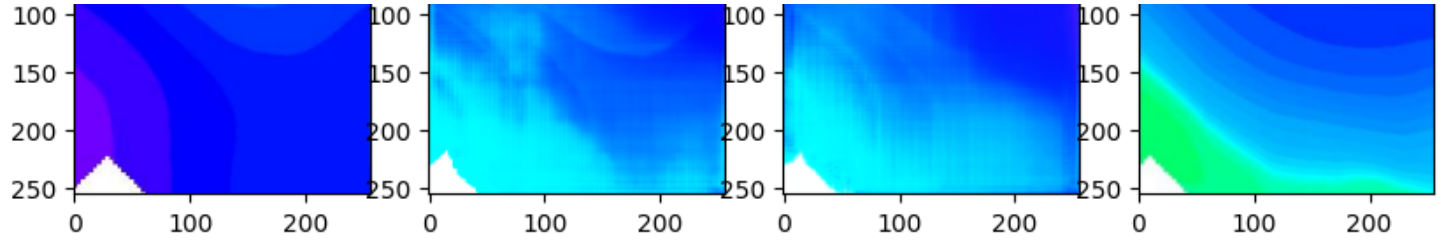



```
Index: 86
1/1 [==============================] - 0s 353ms/step
1/1 [==============================] - 0s 372ms/step
```

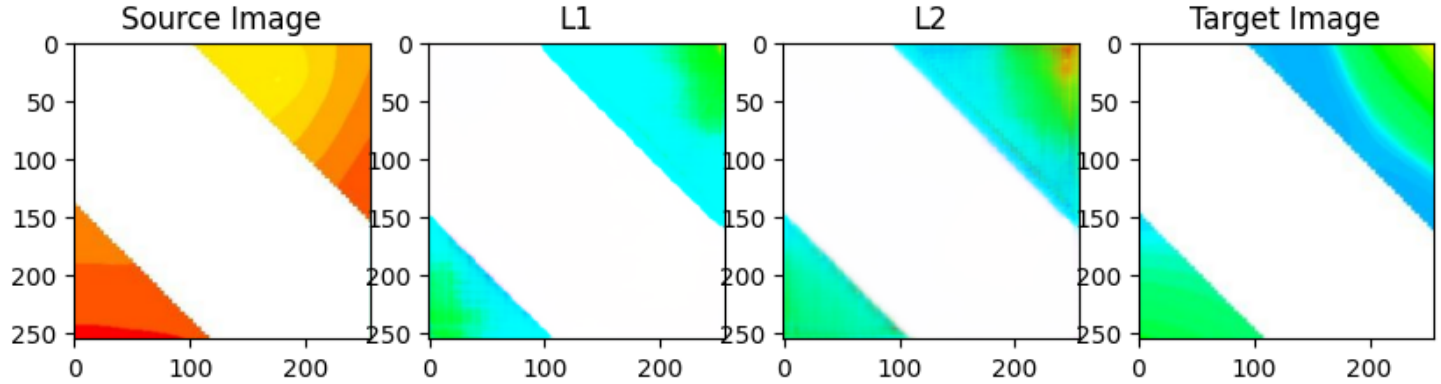



```
Index: 87
1/1 [==============================] - 0s 417ms/step
1/1 [==============================] - 0s 360ms/step
```

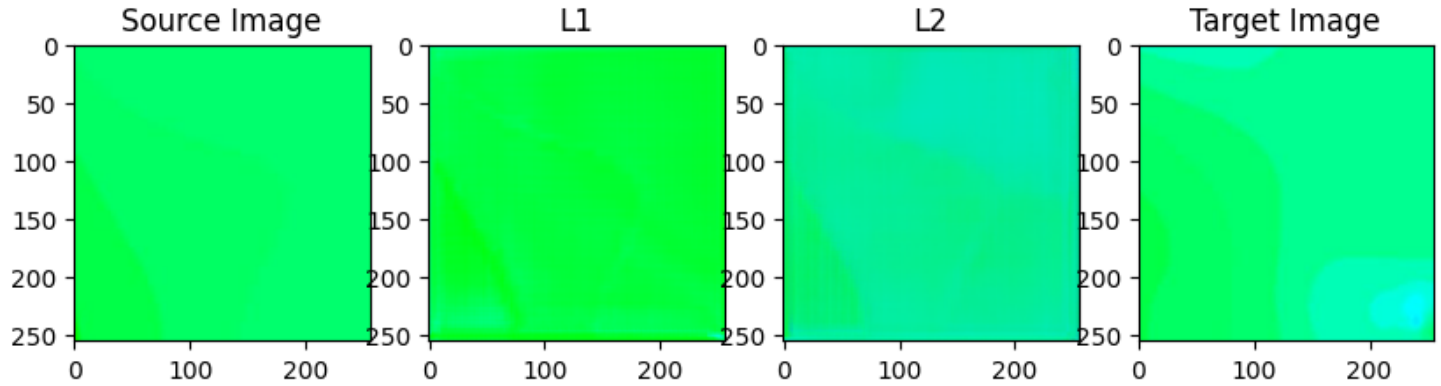




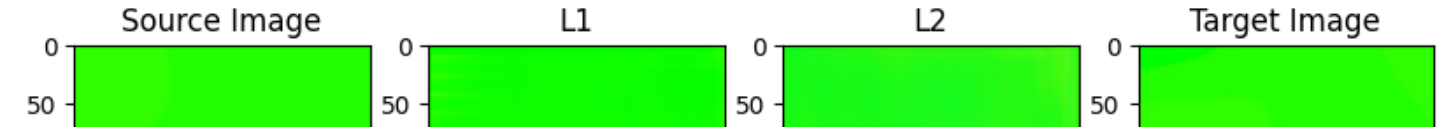
```
Index: 88
1/1 [==============================] - 0s 379ms/step
1/1 [==============================] - 0s 340ms/step
```

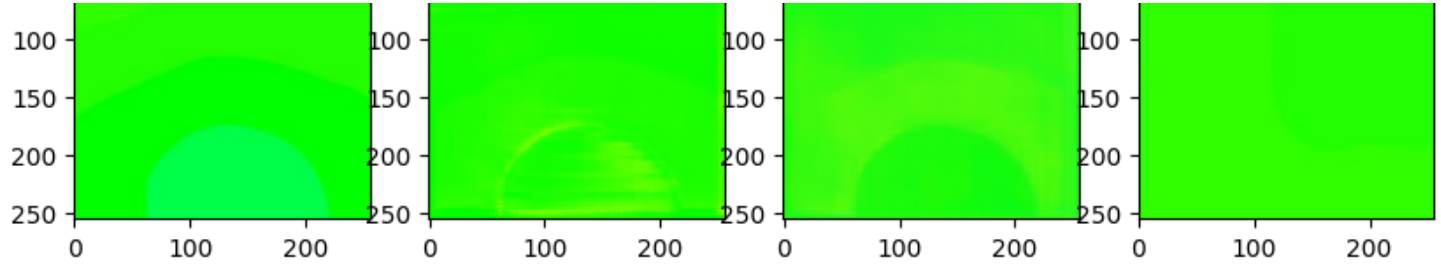



```
Index: 89
1/1 [==============================] - 0s 391ms/step
1/1 [==============================] - 0s 468ms/step
```

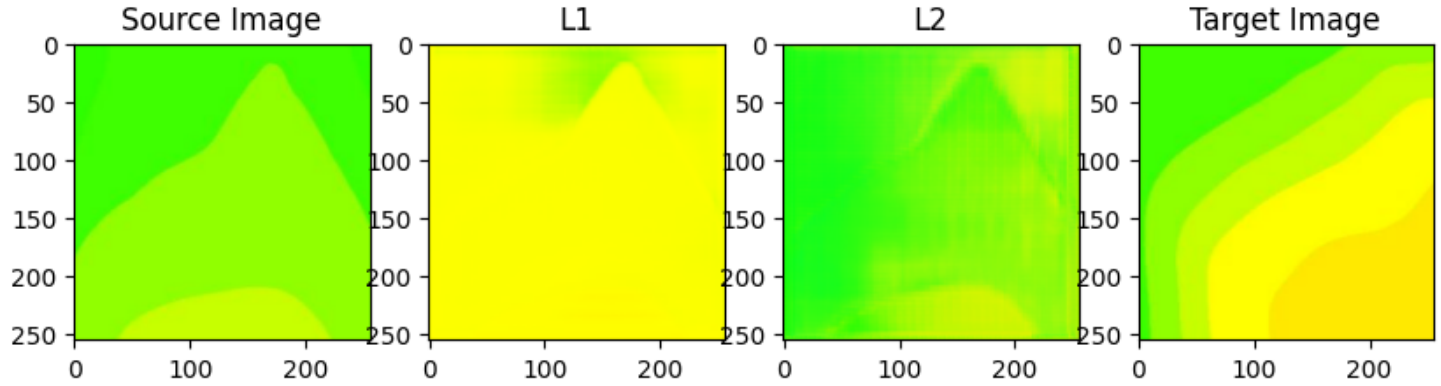



```
Index: 90
1/1 [==============================] - 1s 603ms/step
1/1 [==============================] - 0s 413ms/step
```

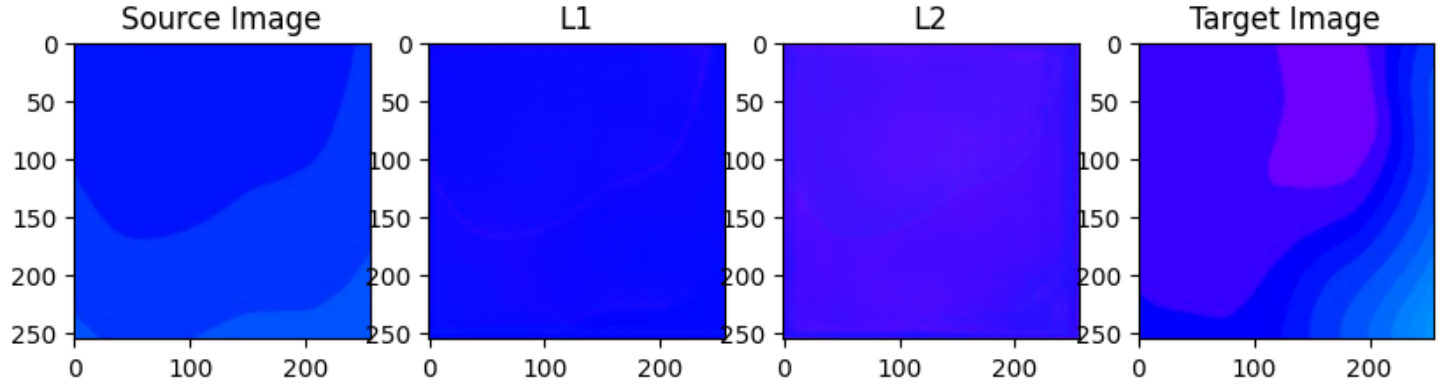




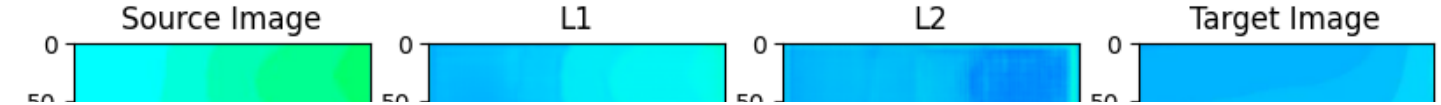
```
Index: 91
1/1 [==============================] - 0s 376ms/step
1/1 [==============================] - 0s 367ms/step
```

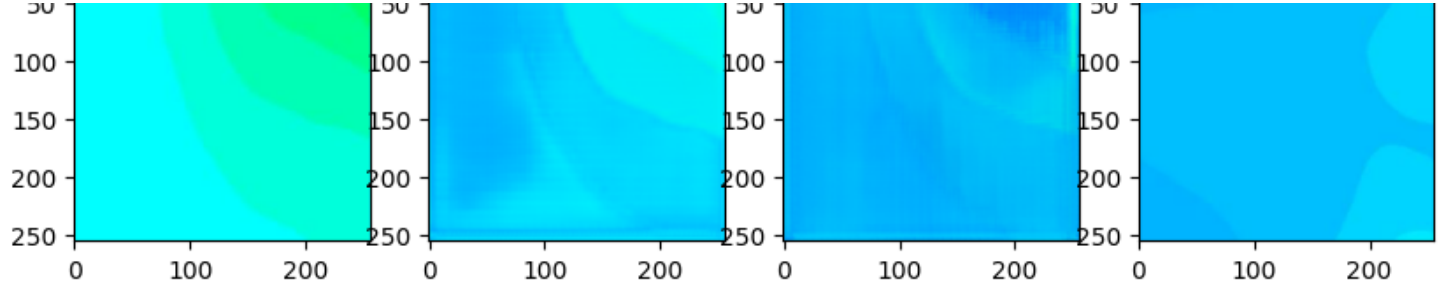



```
Index: 92
1/1 [==============================] - 0s 362ms/step
1/1 [==============================] - 0s 358ms/step
```

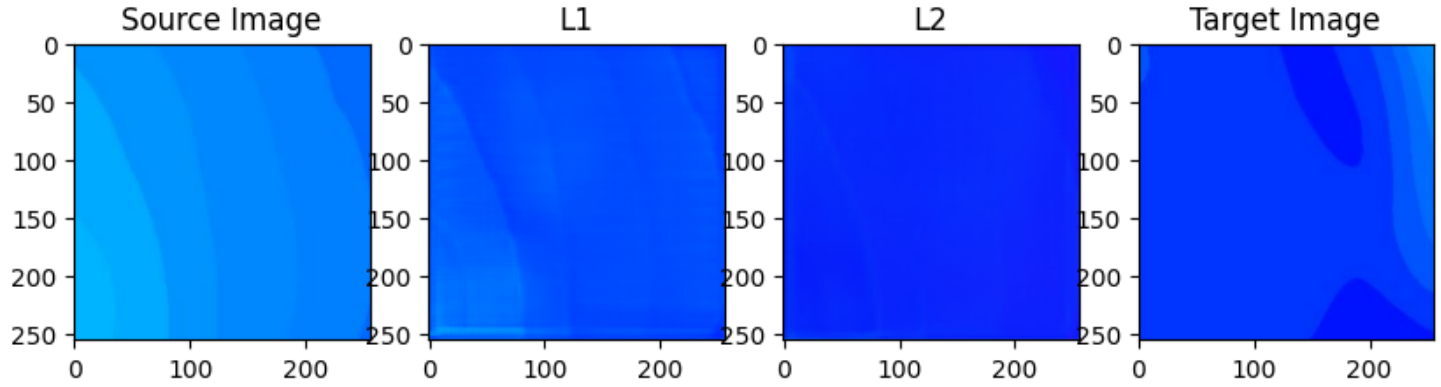



```
Index: 93
1/1 [==============================] - 0s 392ms/step
1/1 [==============================] - 0s 384ms/step
```

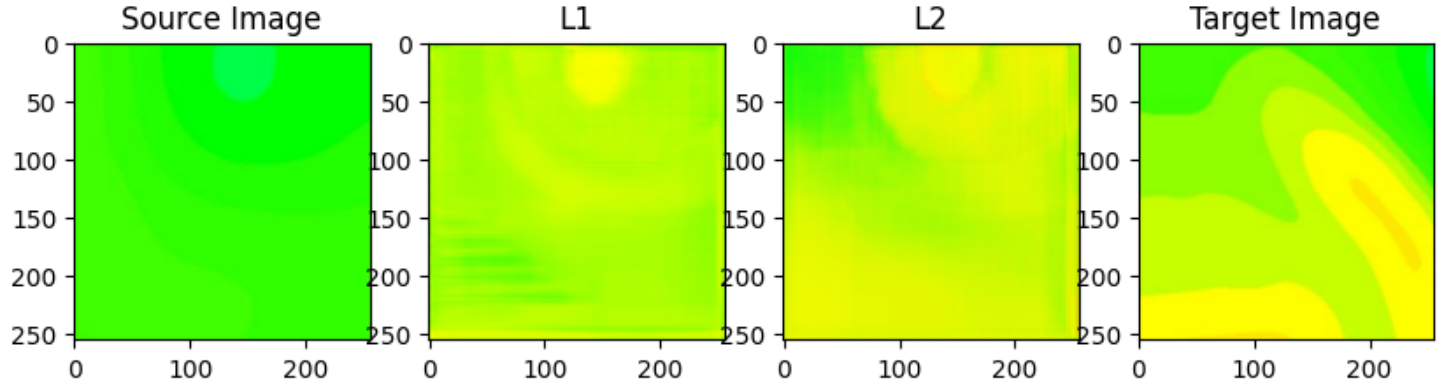




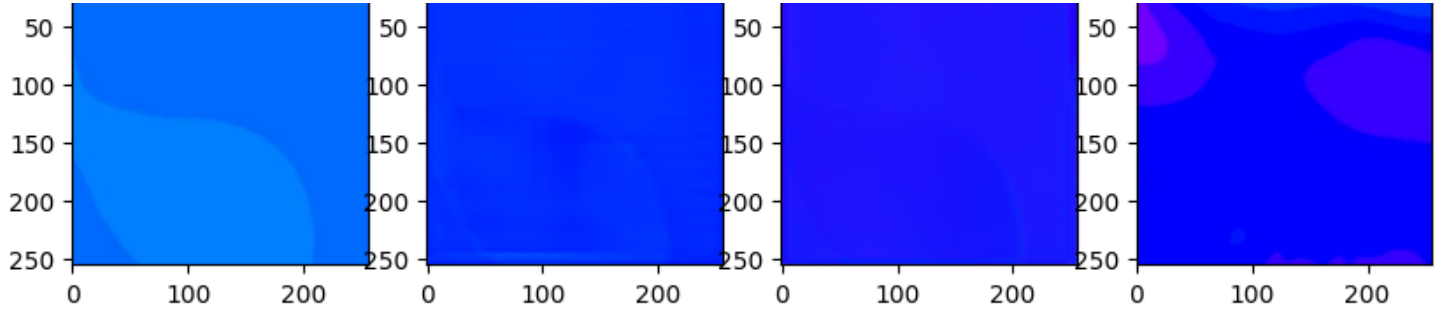
```
Index: 94
1/1 [==============================] - 0s 374ms/step
1/1 [==============================] - 0s 346ms/step
```



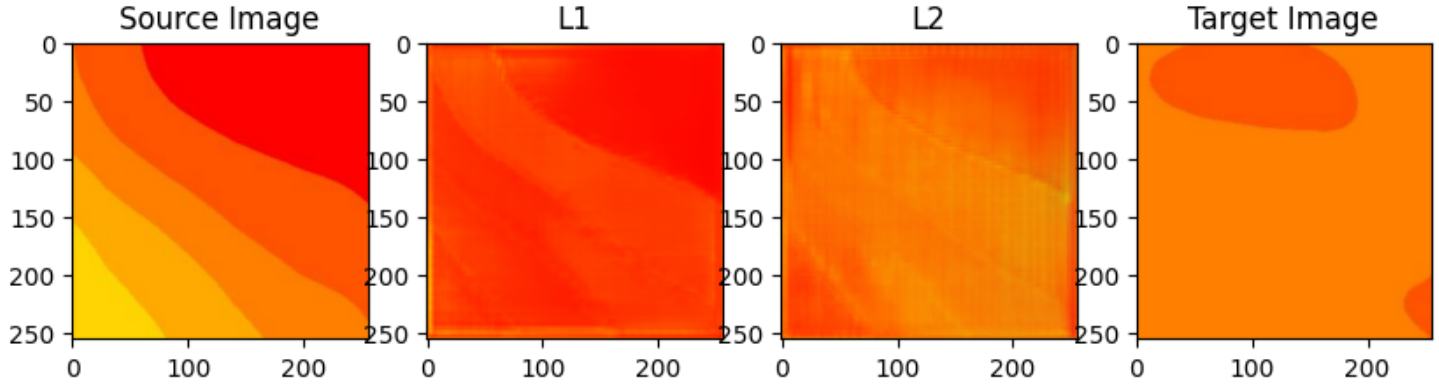

```
Index: 95
1/1 [==============================] - 0s 348ms/step
1/1 [==============================] - 0s 350ms/step
```



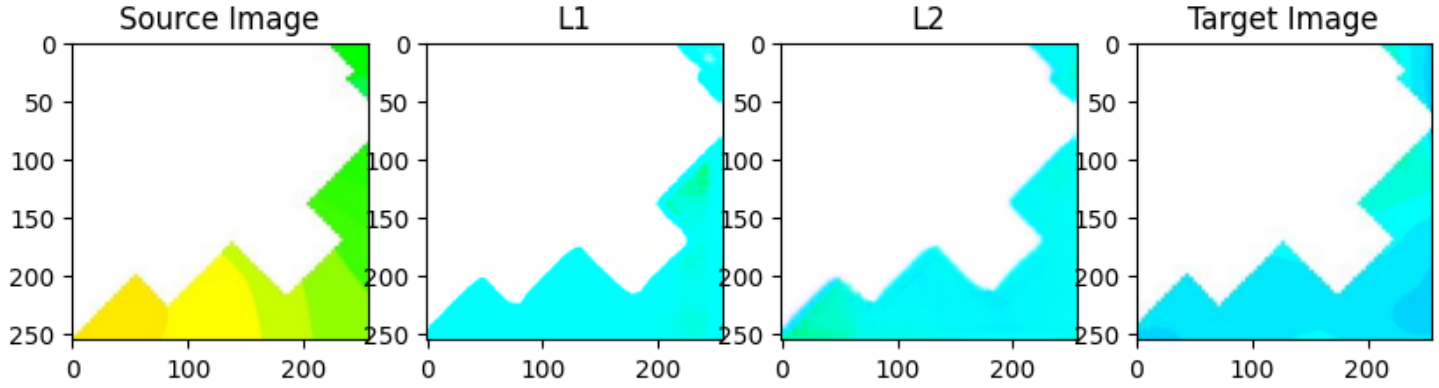

```
Index: 96
1/1 [==============================] - 0s 346ms/step
1/1 [==============================] - 0s 348ms/step
```



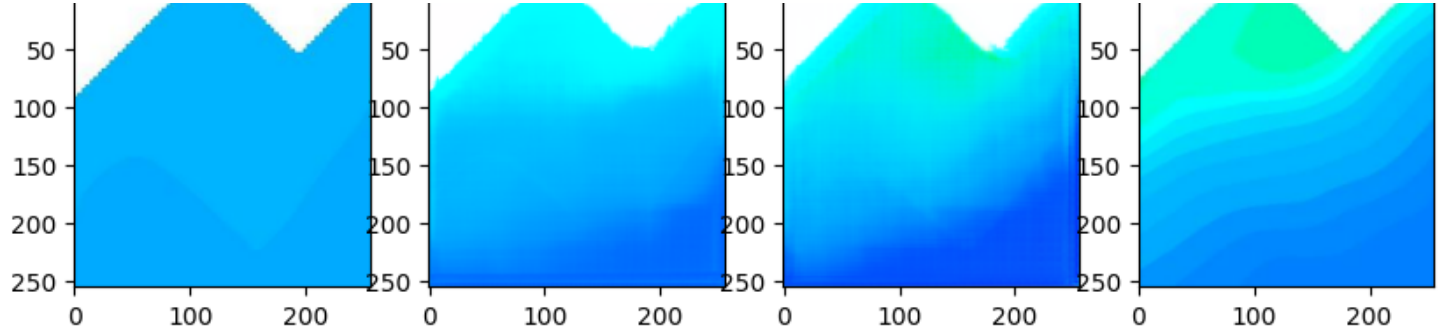
```
Index: 97
1/1 [==============================] - 0s 472ms/step
1/1 [==============================] - 1s 516ms/step
```




```
Index: 98
1/1 [==============================] - 0s 484ms/step
1/1 [==============================] - 0s 427ms/step
```




```
Index: 99
1/1 [==============================] - 0s 387ms/step
1/1 [==============================] - 0s 411ms/step
```




```
Index: 100
```

```
images_directory = "/content/drive/MyDrive/kaggle/l2learning/output_concatenated7"
```

```
from keras.models import load_model
from matplotlib import pyplot
import numpy as np
from skimage.metrics import peak_signal_noise_ratio, structural_similarity
from sklearn.metrics import accuracy_score, jaccard_score
from sklearn.metrics import confusion_matrix, accuracy_score
# Load the trained model
model = load_model('/content/drive/MyDrive/kaggle/l2learning/Giorgis_2/kaggle/working/model_109120.h5')
[X1, X2] = dataset
```

```
WARNING:tensorflow:No training configuration found in the save file, so the model was *not* compiled. Compile it manually.
```

```
# Select the source image and target image based on the input index
src_image = X1[input_index]
tar_image = X2[input_index]
```