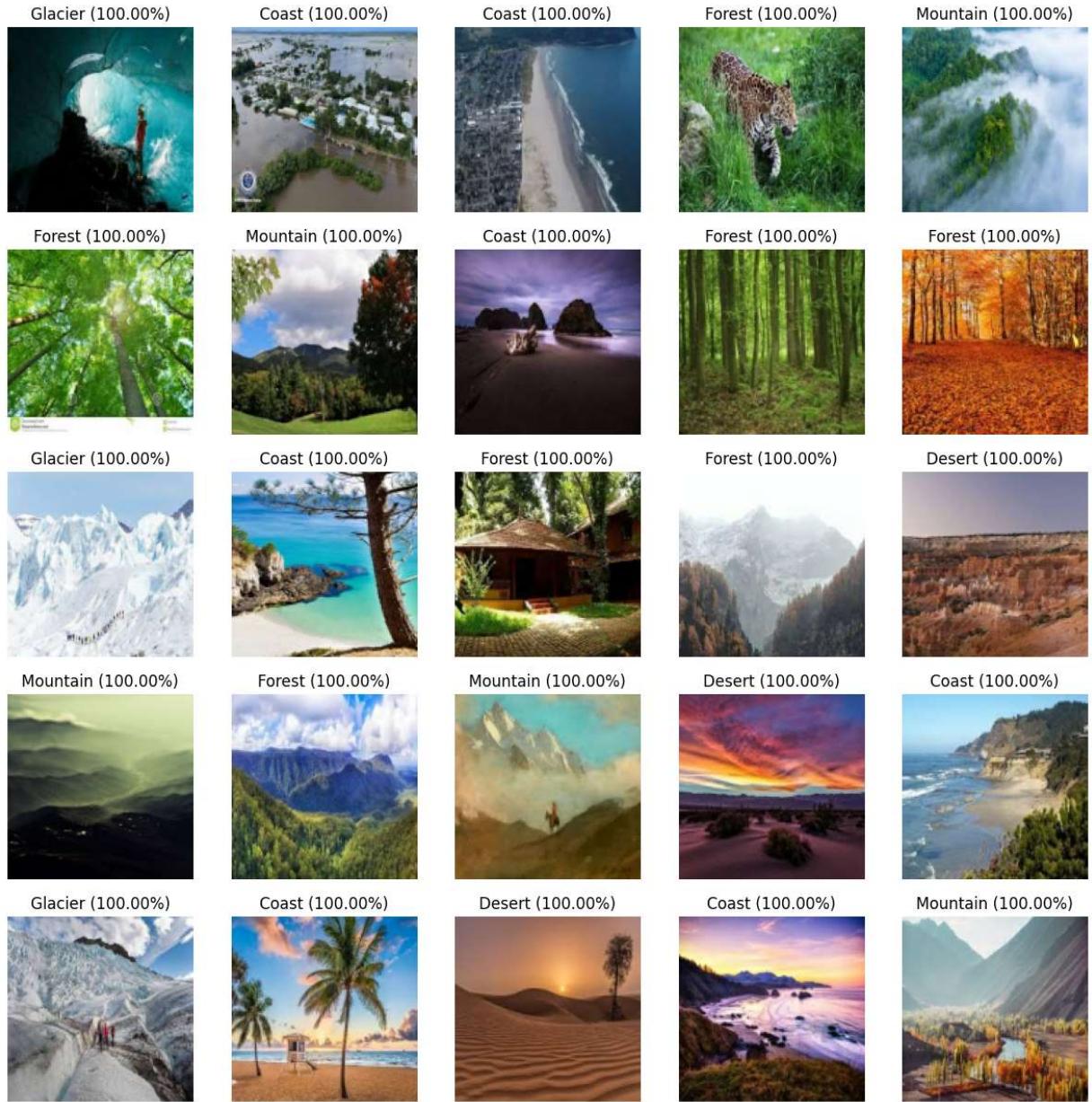


Visualize Dataset

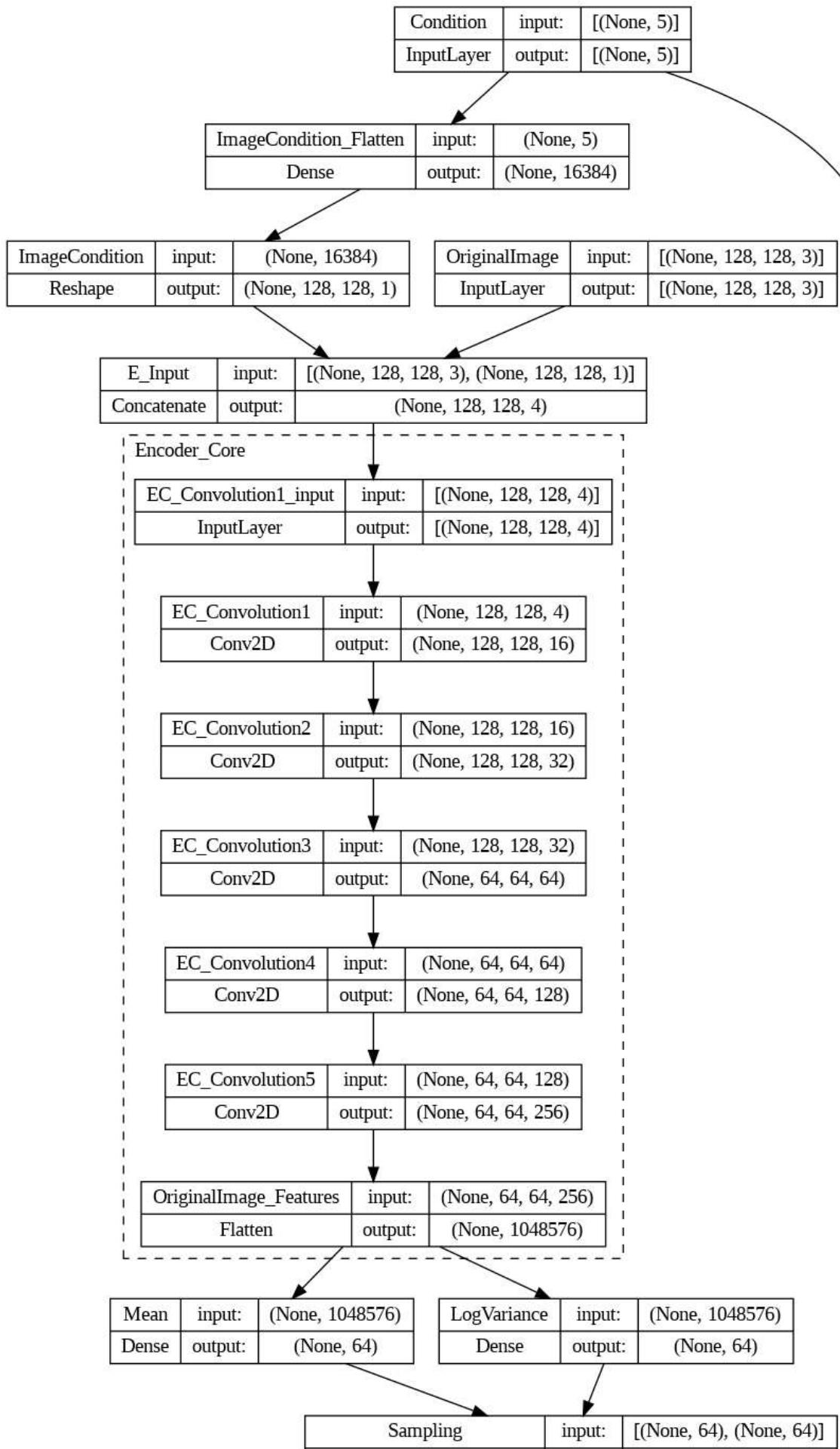


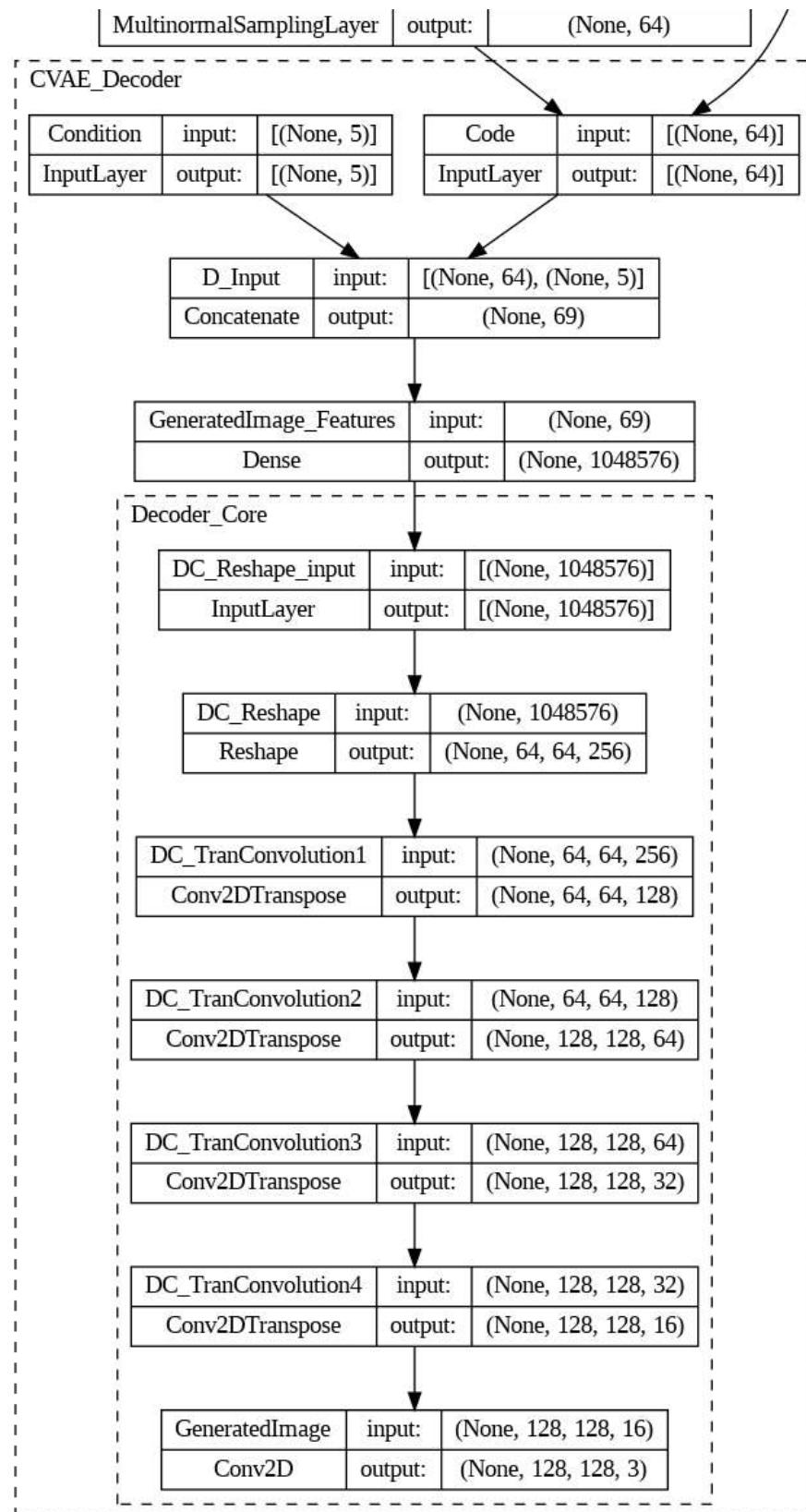
CVAE

Model: "CVAE"

Layer (type)	Output Shape	Param #	Connected to
<hr/>			
Condition (InputLayer)	[(None, 5)]	0	[]
ImageCondition_Flatten (De [0]' nse)	(None, 16384)	98304	['Condition[0]
OriginalImage (InputLayer)	[(None, 128, 128, 3)]	0	[]
ImageCondition (Reshape) _Flatten[0][0]	(None, 128, 128, 1)	0	['ImageCondition ']
E_Input (Concatenate) [0][0]', [0][0]'	(None, 128, 128, 4)	0	['OriginalImage 'ImageCondition [0][0]']
Encoder_Core (Sequential) [0]'	(None, 1048576)	392752	['E_Input[0] [0]']
Mean (Dense) [0][0]'	(None, 64)	6710892	['Encoder_Core 8
LogVariance (Dense) [0][0]'	(None, 64)	6710892	['Encoder_Core 8
Sampling (MultinormalSampl ingLayer) [0]'	(None, 64)	0	['Mean[0][0]', 'LogVariance[0] [0]']
CVAE_Decoder (Functional) [0]', [0]'	(None, 128, 128, 3)	7357483	['Sampling[0] [0]', 5 'Condition[0] [0]']
<hr/>			
<hr/>			
Total params: 208283747 (794.54 MB)			
Trainable params: 208283747 (794.54 MB)			
Non-trainable params: 0 (0.00 Byte)			

Out[76]:





Training

Epoch 1/1000

6/Unknown - 21s 166ms/step - loss: 801.6368 - reconstruction_error: 718.3401 - regularization_error: 83.2967

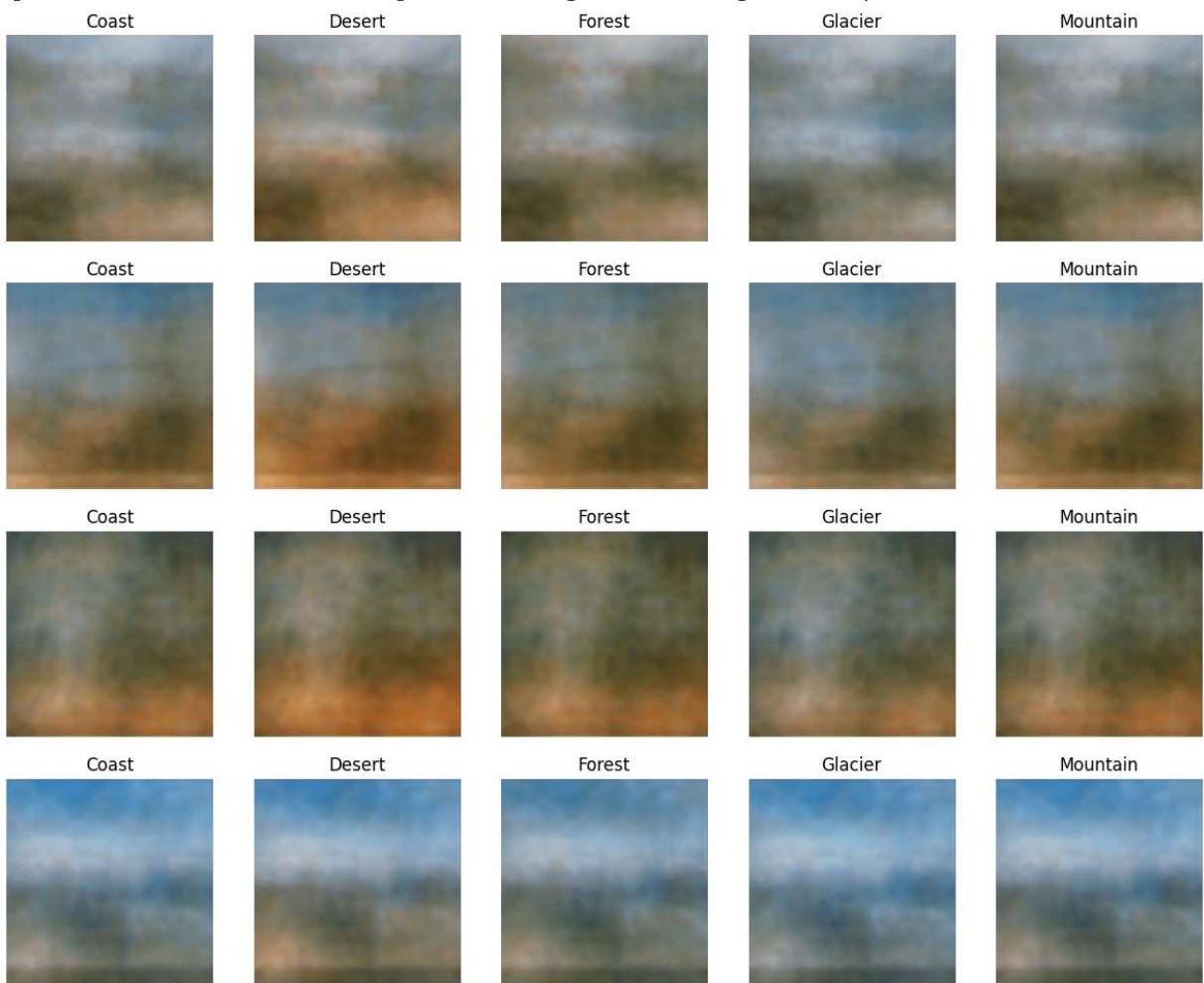
WARNING:tensorflow:Callback method `on_train_batch_end` is slow compared to the batch time (batch time: 0.0231s vs `on_train_batch_end` time: 0.1187s). Check your callbacks.

600/Unknown - 91s 118ms/step - loss: 339.8396 - reconstruction_error: 304.6819 - regularization_error: 35.1575

[2023-11-30 09:13:52.954439]: Generating fixed images for epoch 1 ...



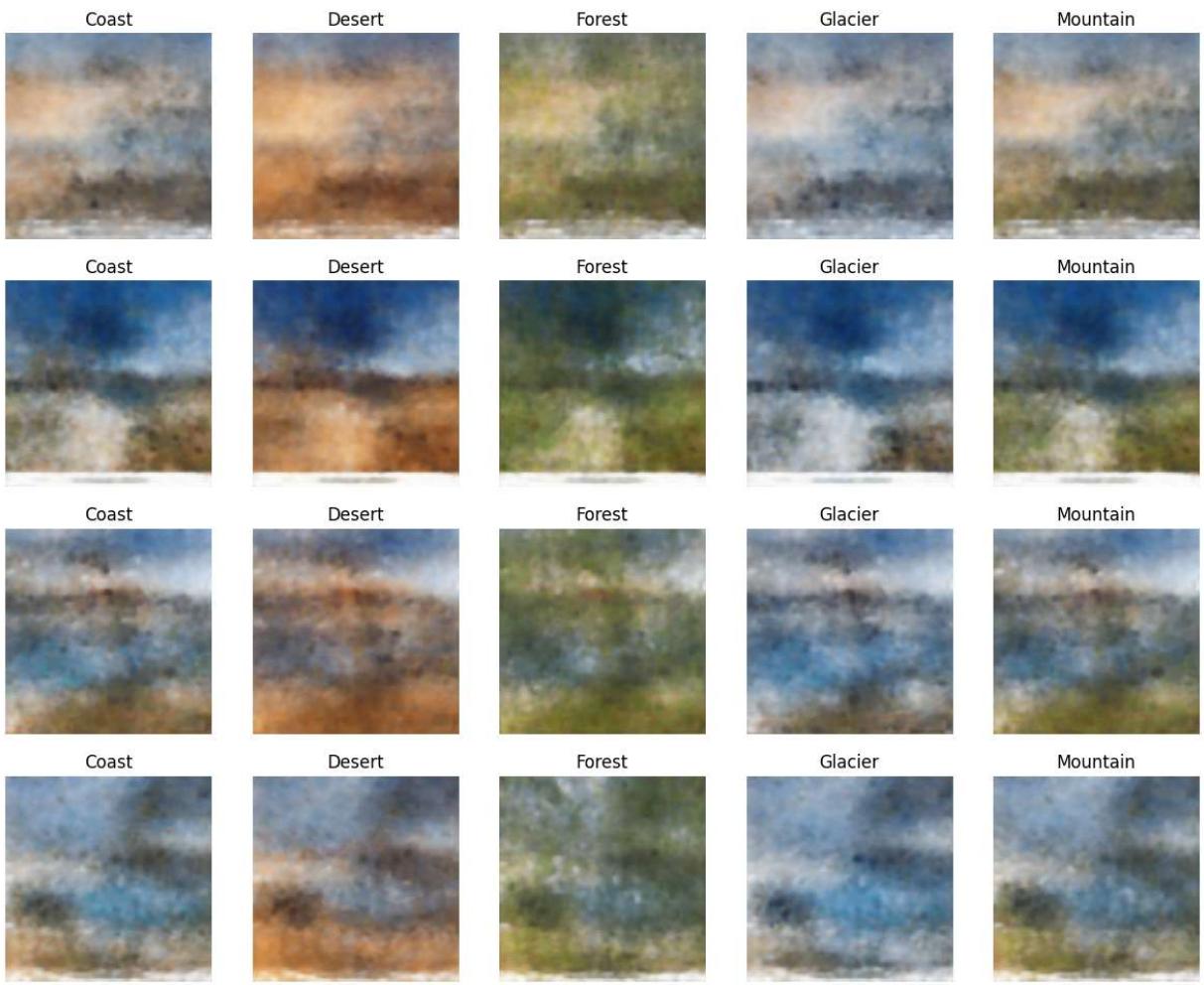
[2023-11-30 09:13:54.454081]: Generating random images for epoch 1 ...



600/600 [=====] - 113s 155ms/step - loss: 339.8396 - reconstruction_error: 304.6819 - regularization_error: 35.1575 - val_loss: 261.8177 - val_reconstruction_error: 220.6959 - val_regularization_error: 41.1219
Epoch 2/1000
600/600 [=====] - 66s 110ms/step - loss: 246.2651 - reconstruction_error: 203.1783 - regularization_error: 43.0867 - val_loss: 240.7156 - val_reconstruction_error: 196.4581 - val_regularization_error: 44.2575
Epoch 3/1000
600/600 [=====] - 77s 127ms/step - loss: 229.0267 - reconstruction_error: 185.9373 - regularization_error: 43.0894 - val_loss: 227.4730 - val_reconstruction_error: 182.6385 - val_regularization_error: 44.8344
Epoch 4/1000
600/600 [=====] - 75s 125ms/step - loss: 219.8466 - reconstruction_error: 176.0827 - regularization_error: 43.7637 - val_loss: 225.5020 - val_reconstruction_error: 180.6329 - val_regularization_error: 44.8690
Epoch 5/1000
600/600 [=====] - 77s 128ms/step - loss: 214.7481 - reconstruction_error: 170.1819 - regularization_error: 44.5662 - val_loss: 219.7183 - val_reconstruction_error: 176.0497 - val_regularization_error: 43.6686
Epoch 6/1000
600/600 [=====] - 76s 127ms/step - loss: 209.7525 - reconstruction_error: 164.5387 - regularization_error: 45.2138 - val_loss: 221.2826 - val_reconstruction_error: 172.6208 - val_regularization_error: 48.6617
Epoch 7/1000
600/600 [=====] - 83s 138ms/step - loss: 205.9161 - reconstruction_error: 159.9036 - regularization_error: 46.0126 - val_loss: 218.8851 - val_reconstruction_error: 172.8978 - val_regularization_error: 45.9873
Epoch 8/1000
600/600 [=====] - 78s 130ms/step - loss: 202.2489 - reconstruction_error: 155.6527 - regularization_error: 46.5963 - val_loss: 217.0080 - val_reconstruction_error: 172.9310 - val_regularization_error: 44.0770
Epoch 9/1000
600/600 [=====] - 76s 127ms/step - loss: 199.0508 - reconstruction_error: 151.6810 - regularization_error: 47.3699 - val_loss: 216.5774 - val_reconstruction_error: 169.1765 - val_regularization_error: 47.4009
Epoch 10/1000
600/600 [=====] - 72s 120ms/step - loss: 195.3400 - reconstruction_error: 147.2509 - regularization_error: 48.0892 - val_loss: 217.2807 - val_reconstruction_error: 169.1801 - val_regularization_error: 48.1006
Epoch 11/1000
600/600 [=====] - ETA: 0s - loss: 191.6426 - reconstruction_error: 142.8197 - regularization_error: 48.8231
[2023-11-30 09:26:43.154584]: Generating fixed images for epoch 11 ...



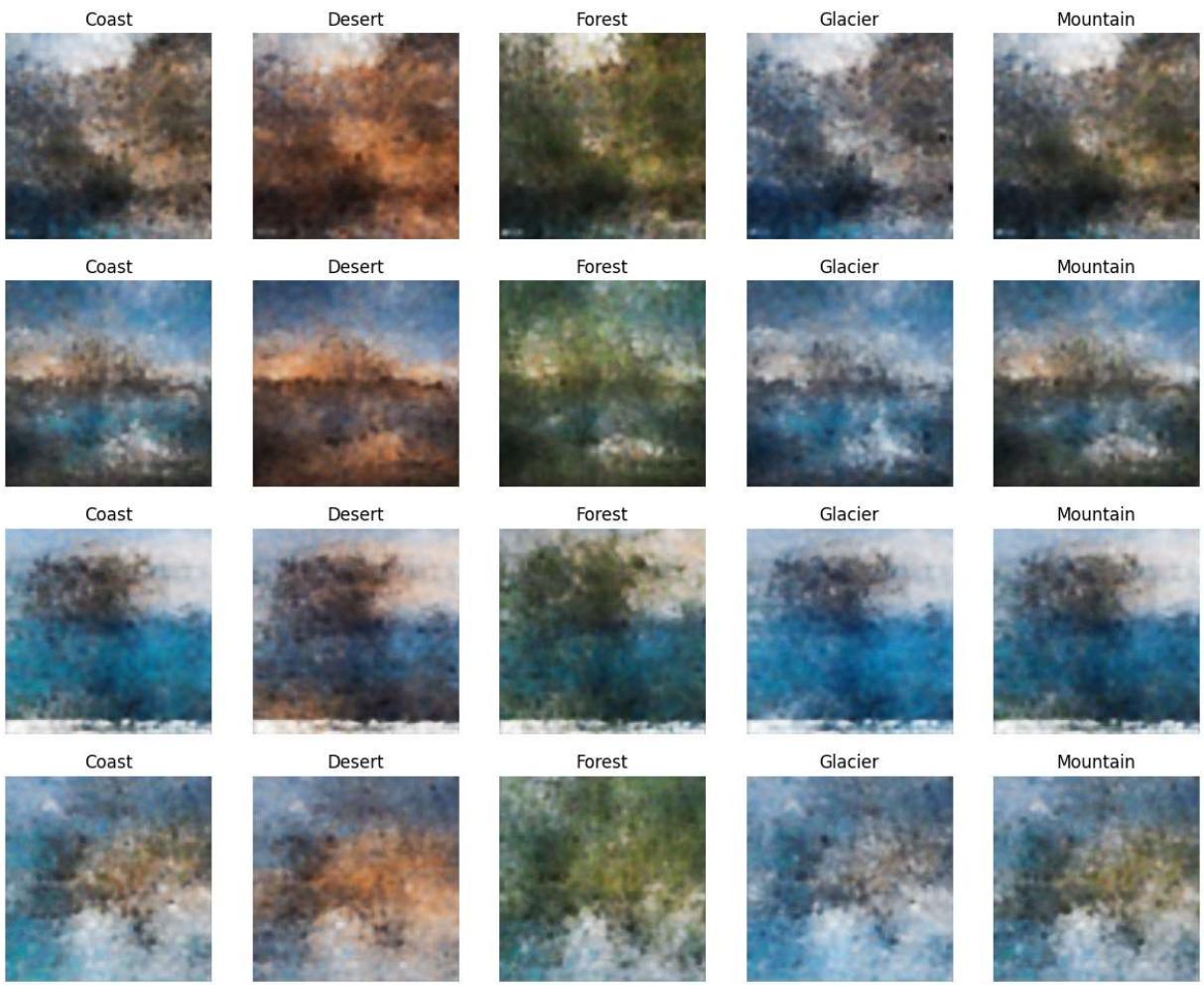
[2023-11-30 09:26:44.379374]: Generating random images for epoch 11 ...



600/600 [=====] - 82s 136ms/step - loss: 191.6426 - reconstruction_error: 142.8197 - regularization_error: 48.8231 - val_loss: 218.0776 - val_reconstruction_error: 169.4993 - val_regularization_error: 48.5783
Epoch 12/1000
600/600 [=====] - 79s 130ms/step - loss: 187.8452 - reconstruction_error: 138.3109 - regularization_error: 49.5344 - val_loss: 218.5141 - val_reconstruction_error: 167.4738 - val_regularization_error: 51.0404
Epoch 13/1000
600/600 [=====] - 75s 124ms/step - loss: 184.2112 - reconstruction_error: 133.8892 - regularization_error: 50.3220 - val_loss: 218.4684 - val_reconstruction_error: 171.5585 - val_regularization_error: 46.9098
Epoch 14/1000
600/600 [=====] - 77s 129ms/step - loss: 180.5059 - reconstruction_error: 129.6694 - regularization_error: 50.8365 - val_loss: 222.6762 - val_reconstruction_error: 170.0196 - val_regularization_error: 52.6567
Epoch 15/1000
600/600 [=====] - 71s 117ms/step - loss: 177.9334 - reconstruction_error: 126.4002 - regularization_error: 51.5333 - val_loss: 219.6439 - val_reconstruction_error: 173.4957 - val_regularization_error: 46.1481
Epoch 16/1000
600/600 [=====] - 77s 128ms/step - loss: 174.0129 - reconstruction_error: 122.1483 - regularization_error: 51.8647 - val_loss: 221.3056 - val_reconstruction_error: 173.7757 - val_regularization_error: 47.5299
Epoch 17/1000
600/600 [=====] - 73s 122ms/step - loss: 171.3970 - reconstruction_error: 119.2634 - regularization_error: 52.1336 - val_loss: 222.9925 - val_reconstruction_error: 170.9684 - val_regularization_error: 52.0241
Epoch 18/1000
600/600 [=====] - 73s 122ms/step - loss: 168.8232 - reconstruction_error: 116.2976 - regularization_error: 52.5255 - val_loss: 225.2682 - val_reconstruction_error: 172.6897 - val_regularization_error: 52.5784
Epoch 19/1000
600/600 [=====] - 73s 120ms/step - loss: 165.9961 - reconstruction_error: 113.1748 - regularization_error: 52.8213 - val_loss: 227.3628 - val_reconstruction_error: 172.7297 - val_regularization_error: 54.6332
Epoch 20/1000
600/600 [=====] - 81s 134ms/step - loss: 163.6612 - reconstruction_error: 110.5422 - regularization_error: 53.1191 - val_loss: 225.5447 - val_reconstruction_error: 171.0110 - val_regularization_error: 54.5336
Epoch 21/1000
600/600 [=====] - ETA: 0s - loss: 161.5706 - reconstruction_error: 108.2188 - regularization_error: 53.3519
[2023-11-30 09:39:23.277286]: Generating fixed images for epoch 21 ...



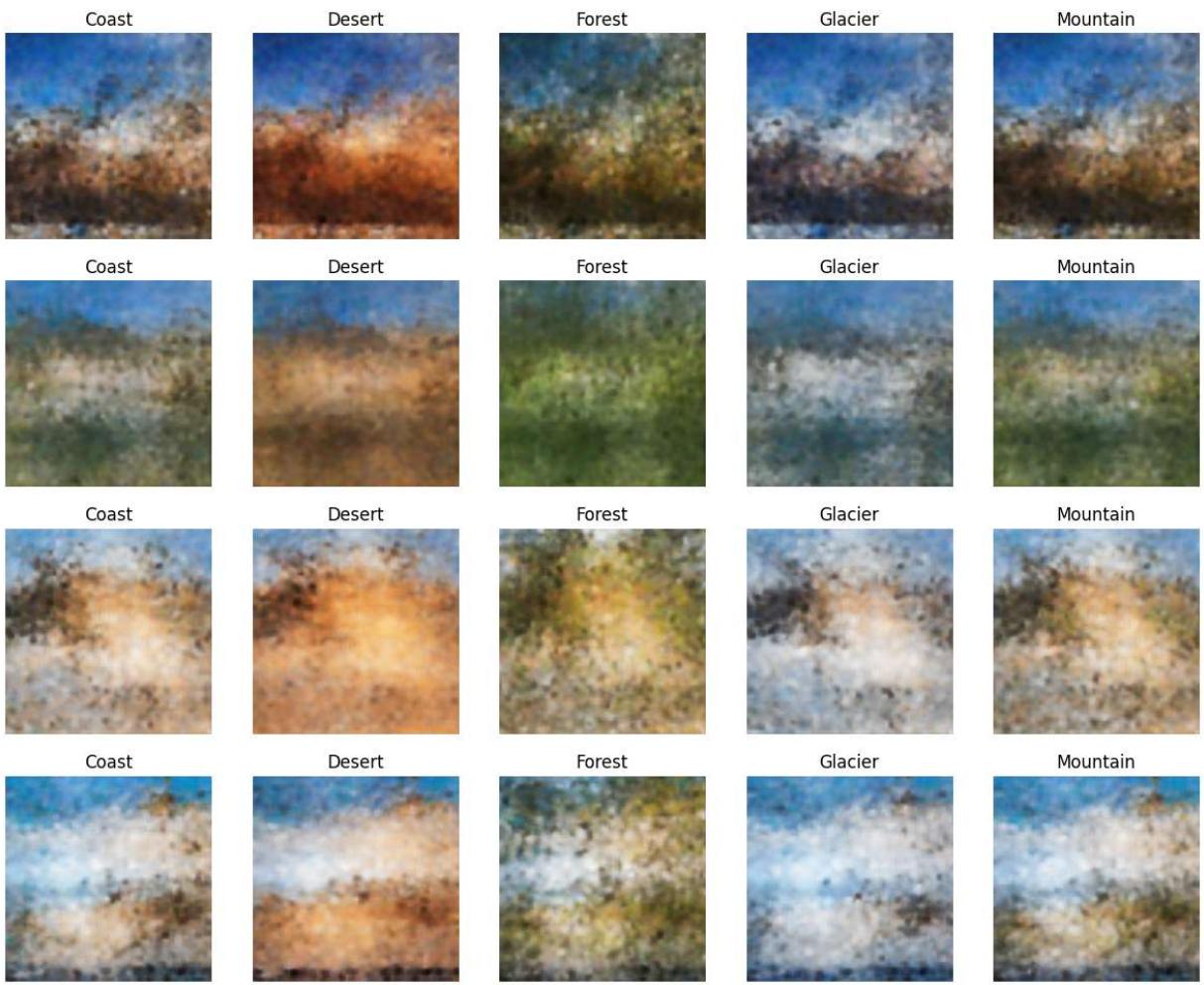
[2023-11-30 09:39:24.083462]: Generating random images for epoch 21 ...



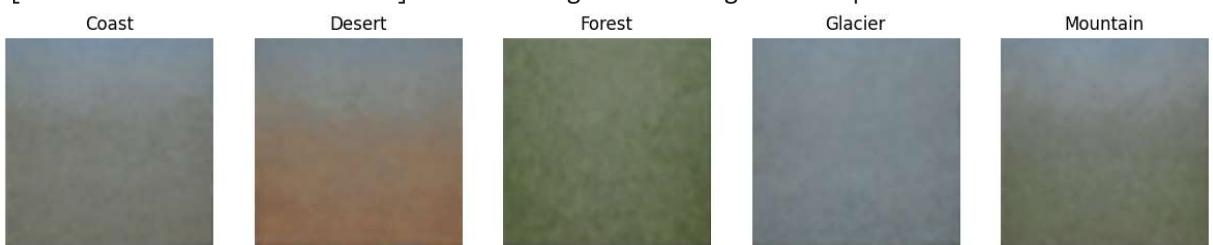
600/600 [=====] - 78s 130ms/step - loss: 161.5706 - reconstruction_error: 108.2188 - regularization_error: 53.3519 - val_loss: 227.2095 - val_reconstruction_error: 174.4653 - val_regularization_error: 52.7442
Epoch 22/1000
600/600 [=====] - 73s 122ms/step - loss: 159.6368 - reconstruction_error: 106.1461 - regularization_error: 53.4907 - val_loss: 226.0765 - val_reconstruction_error: 171.6032 - val_regularization_error: 54.4734
Epoch 23/1000
600/600 [=====] - 72s 120ms/step - loss: 157.7095 - reconstruction_error: 104.0106 - regularization_error: 53.6990 - val_loss: 225.7903 - val_reconstruction_error: 173.8191 - val_regularization_error: 51.9712
Epoch 24/1000
600/600 [=====] - 71s 117ms/step - loss: 155.6828 - reconstruction_error: 101.9045 - regularization_error: 53.7781 - val_loss: 226.8419 - val_reconstruction_error: 172.6377 - val_regularization_error: 54.2041
Epoch 25/1000
600/600 [=====] - 78s 130ms/step - loss: 154.3193 - reconstruction_error: 100.2856 - regularization_error: 54.0337 - val_loss: 227.7453 - val_reconstruction_error: 173.3625 - val_regularization_error: 54.3829
Epoch 26/1000
600/600 [=====] - 74s 123ms/step - loss: 152.6419 - reconstruction_error: 98.6033 - regularization_error: 54.0386 - val_loss: 225.8352 - val_reconstruction_error: 172.5177 - val_regularization_error: 53.3175
Epoch 27/1000
600/600 [=====] - 72s 119ms/step - loss: 151.3999 - reconstruction_error: 97.1979 - regularization_error: 54.2020 - val_loss: 233.4077 - val_reconstruction_error: 175.6483 - val_regularization_error: 57.7594
Epoch 28/1000
600/600 [=====] - 76s 125ms/step - loss: 149.5642 - reconstruction_error: 95.3705 - regularization_error: 54.1937 - val_loss: 226.8276 - val_reconstruction_error: 174.2160 - val_regularization_error: 52.6116
Epoch 29/1000
600/600 [=====] - 81s 135ms/step - loss: 148.3118 - reconstruction_error: 93.9922 - regularization_error: 54.3194 - val_loss: 225.9506 - val_reconstruction_error: 172.9847 - val_regularization_error: 52.9659
Epoch 30/1000
600/600 [=====] - 76s 127ms/step - loss: 147.5276 - reconstruction_error: 93.0778 - regularization_error: 54.4499 - val_loss: 231.5852 - val_reconstruction_error: 178.9456 - val_regularization_error: 52.6395
Epoch 31/1000
600/600 [=====] - ETA: 0s - loss: 145.6424 - reconstruction_error: 91.1466 - regularization_error: 54.4958
[2023-11-30 09:51:56.985794]: Generating fixed images for epoch 31 ...



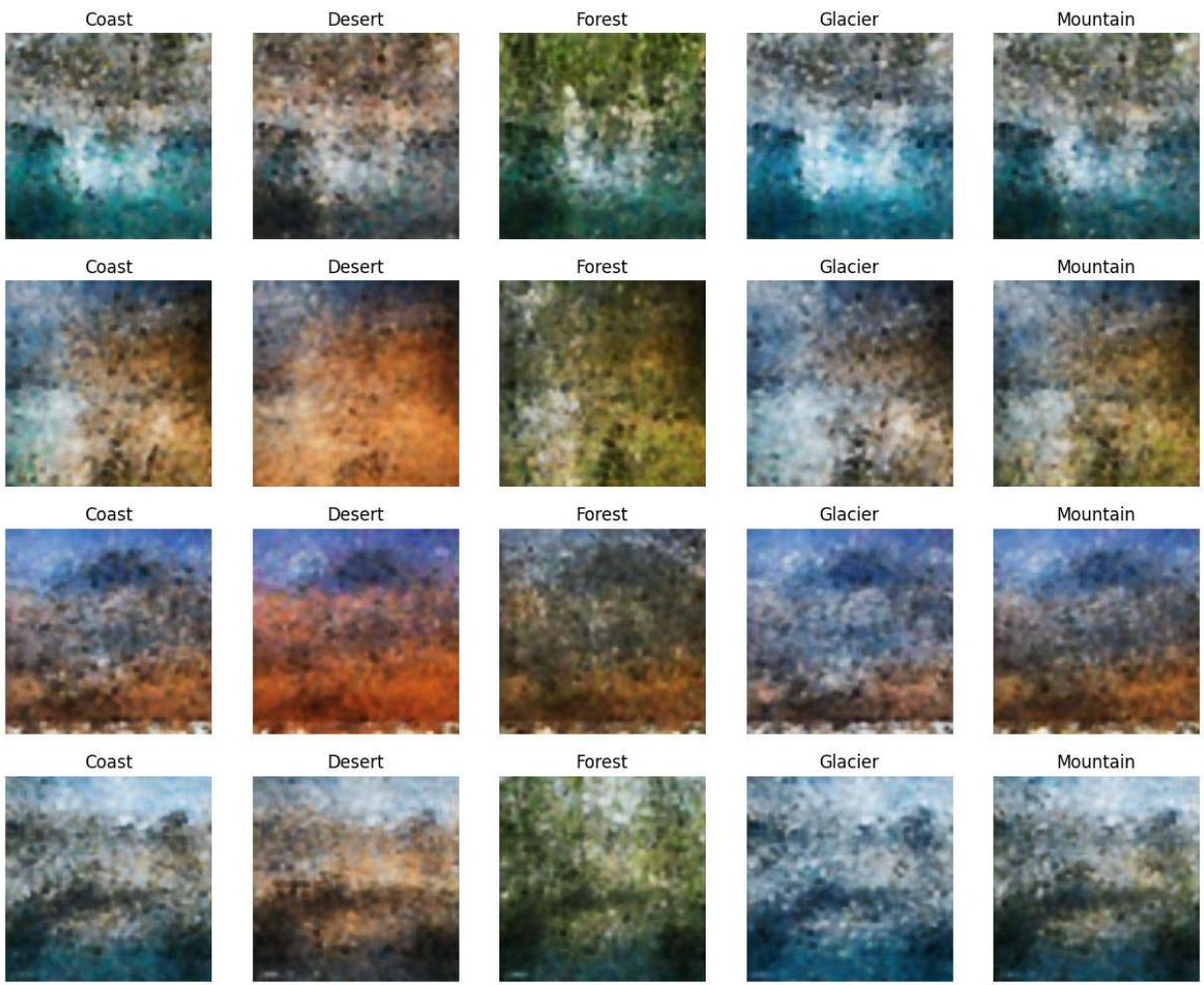
[2023-11-30 09:51:57.823640]: Generating random images for epoch 31 ...



600/600 [=====] - 78s 129ms/step - loss: 145.6424 - reconstruction_error: 91.1466 - regularization_error: 54.4958 - val_loss: 227.4170 - val_reconstruction_error: 174.4208 - val_regularization_error: 52.9962
Epoch 32/1000
600/600 [=====] - 72s 120ms/step - loss: 144.9907 - reconstruction_error: 90.3539 - regularization_error: 54.6369 - val_loss: 233.7484 - val_reconstruction_error: 183.8793 - val_regularization_error: 49.8692
Epoch 33/1000
600/600 [=====] - 74s 123ms/step - loss: 143.4963 - reconstruction_error: 89.0584 - regularization_error: 54.4379 - val_loss: 231.4912 - val_reconstruction_error: 179.4798 - val_regularization_error: 52.0114
Epoch 34/1000
600/600 [=====] - 71s 117ms/step - loss: 143.1117 - reconstruction_error: 88.4412 - regularization_error: 54.6706 - val_loss: 229.9899 - val_reconstruction_error: 176.5503 - val_regularization_error: 53.4395
Epoch 35/1000
600/600 [=====] - 72s 119ms/step - loss: 141.7046 - reconstruction_error: 87.1251 - regularization_error: 54.5796 - val_loss: 232.2489 - val_reconstruction_error: 176.0907 - val_regularization_error: 56.1582
Epoch 36/1000
600/600 [=====] - 68s 113ms/step - loss: 140.8930 - reconstruction_error: 86.2264 - regularization_error: 54.6666 - val_loss: 232.7386 - val_reconstruction_error: 178.2575 - val_regularization_error: 54.4811
Epoch 37/1000
600/600 [=====] - 73s 121ms/step - loss: 139.8136 - reconstruction_error: 85.1847 - regularization_error: 54.6288 - val_loss: 230.4147 - val_reconstruction_error: 177.7012 - val_regularization_error: 52.7135
Epoch 38/1000
600/600 [=====] - 82s 136ms/step - loss: 139.1941 - reconstruction_error: 84.4727 - regularization_error: 54.7214 - val_loss: 233.8113 - val_reconstruction_error: 176.6649 - val_regularization_error: 57.1464
Epoch 39/1000
600/600 [=====] - 72s 120ms/step - loss: 137.9763 - reconstruction_error: 83.3216 - regularization_error: 54.6548 - val_loss: 231.7487 - val_reconstruction_error: 174.4481 - val_regularization_error: 57.3006
Epoch 40/1000
600/600 [=====] - 65s 107ms/step - loss: 137.5616 - reconstruction_error: 82.9049 - regularization_error: 54.6567 - val_loss: 235.4216 - val_reconstruction_error: 180.4120 - val_regularization_error: 55.0096
Epoch 41/1000
600/600 [=====] - ETA: 0s - loss: 136.9617 - reconstruction_error: 82.3111 - regularization_error: 54.6506
[2023-11-30 10:04:05.944802]: Generating fixed images for epoch 41 ...



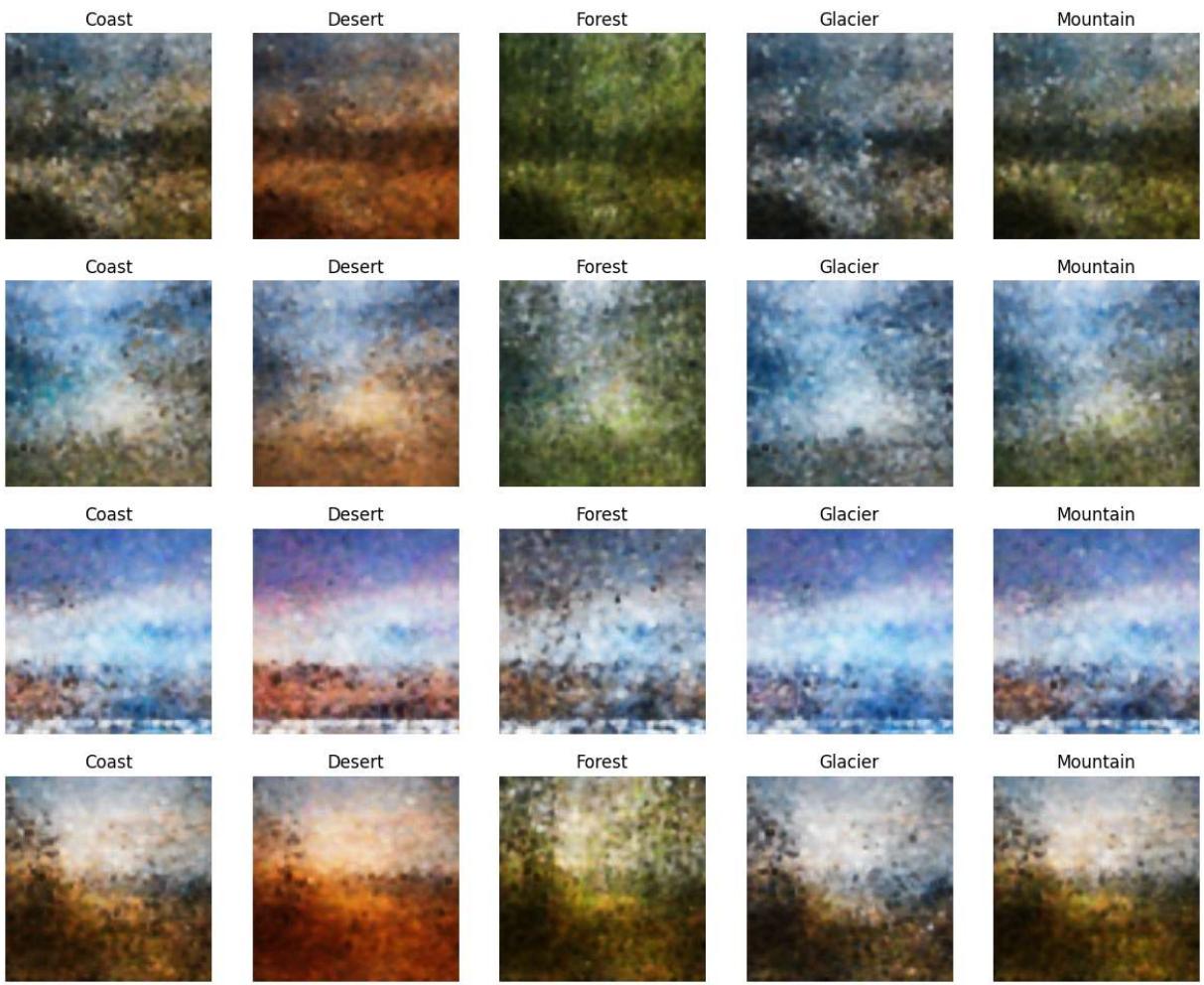
[2023-11-30 10:04:07.408436]: Generating random images for epoch 41 ...



600/600 [=====] - 80s 134ms/step - loss: 136.9617 - reconstruction_error: 82.3111 - regularization_error: 54.6506 - val_loss: 232.3358 - val_reconstruction_error: 179.3354 - val_regularization_error: 53.0002
Epoch 42/1000
600/600 [=====] - 69s 114ms/step - loss: 135.8923 - reconstruction_error: 81.1571 - regularization_error: 54.7354 - val_loss: 232.8175 - val_reconstruction_error: 179.8842 - val_regularization_error: 52.9333
Epoch 43/1000
600/600 [=====] - 68s 113ms/step - loss: 135.4449 - reconstruction_error: 80.7137 - regularization_error: 54.7311 - val_loss: 232.1986 - val_reconstruction_error: 180.5792 - val_regularization_error: 51.6193
Epoch 44/1000
600/600 [=====] - 82s 137ms/step - loss: 134.5609 - reconstruction_error: 79.9728 - regularization_error: 54.5882 - val_loss: 231.8910 - val_reconstruction_error: 177.1231 - val_regularization_error: 54.7679
Epoch 45/1000
600/600 [=====] - 68s 112ms/step - loss: 133.9204 - reconstruction_error: 79.3158 - regularization_error: 54.6046 - val_loss: 230.9078 - val_reconstruction_error: 179.4618 - val_regularization_error: 51.4461
Epoch 46/1000
600/600 [=====] - 77s 127ms/step - loss: 133.5051 - reconstruction_error: 78.7958 - regularization_error: 54.7093 - val_loss: 233.0598 - val_reconstruction_error: 176.5033 - val_regularization_error: 56.5564
Epoch 47/1000
600/600 [=====] - 75s 125ms/step - loss: 132.6659 - reconstruction_error: 78.1139 - regularization_error: 54.5521 - val_loss: 235.5361 - val_reconstruction_error: 181.5450 - val_regularization_error: 53.9911
Epoch 48/1000
600/600 [=====] - 66s 110ms/step - loss: 132.1748 - reconstruction_error: 77.6012 - regularization_error: 54.5735 - val_loss: 237.6540 - val_reconstruction_error: 181.3049 - val_regularization_error: 56.3491
Epoch 49/1000
600/600 [=====] - 72s 120ms/step - loss: 131.2098 - reconstruction_error: 76.7200 - regularization_error: 54.4898 - val_loss: 232.8891 - val_reconstruction_error: 180.0116 - val_regularization_error: 52.8776
Epoch 50/1000
600/600 [=====] - 80s 133ms/step - loss: 131.5637 - reconstruction_error: 76.9717 - regularization_error: 54.5920 - val_loss: 236.2749 - val_reconstruction_error: 179.1515 - val_regularization_error: 57.1234
Epoch 51/1000
600/600 [=====] - ETA: 0s - loss: 130.0141 - reconstruction_error: 75.5124 - regularization_error: 54.5016
[2023-11-30 10:16:20.108897]: Generating fixed images for epoch 51 ...



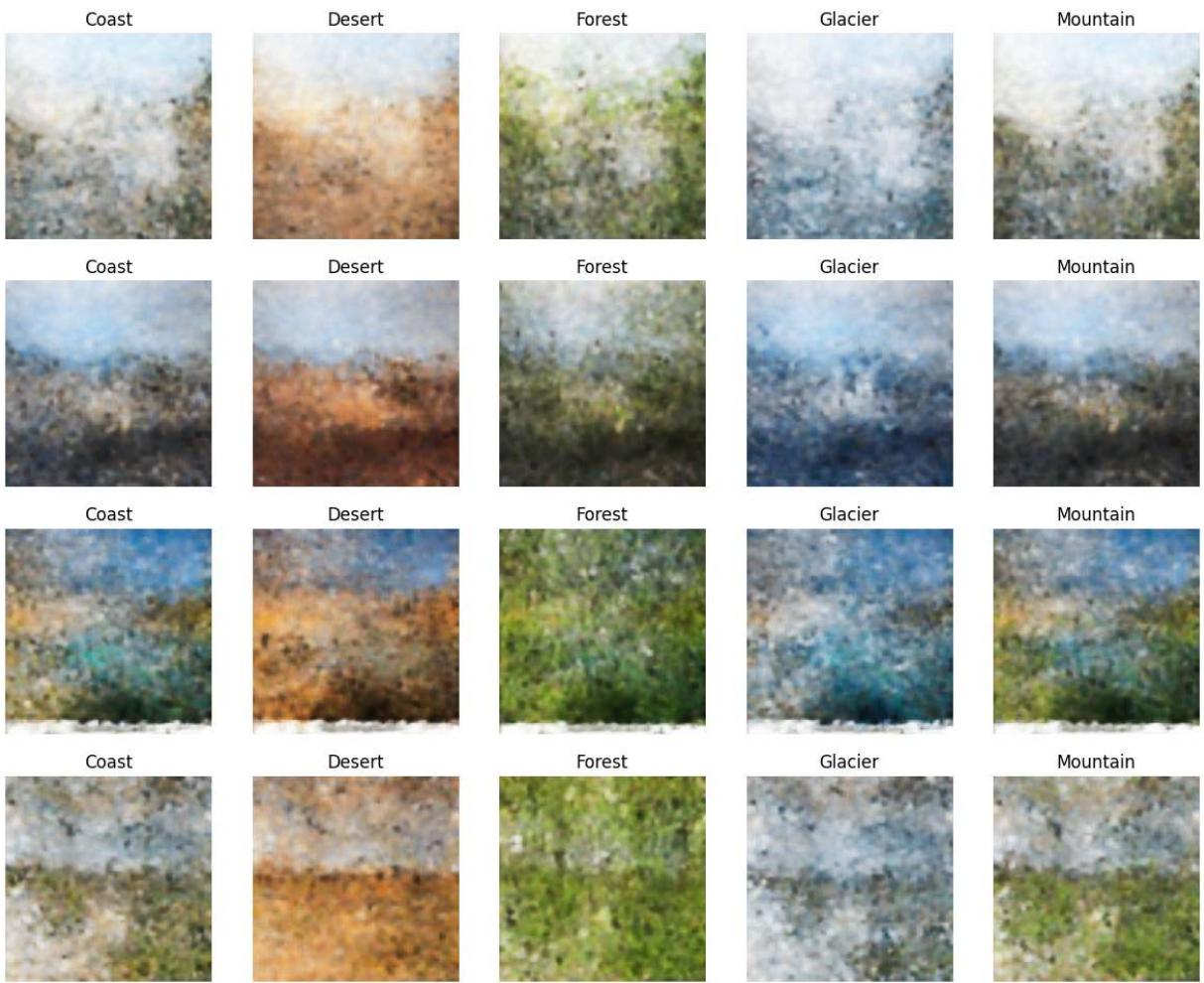
[2023-11-30 10:16:21.377403]: Generating random images for epoch 51 ...



600/600 [=====] - 75s 125ms/step - loss: 130.0141 - reconstruction_error: 75.5124 - regularization_error: 54.5016 - val_loss: 235.3917 - val_reconstruction_error: 179.6097 - val_regularization_error: 55.7820
Epoch 52/1000
600/600 [=====] - 78s 130ms/step - loss: 129.7733 - reconstruction_error: 75.2961 - regularization_error: 54.4771 - val_loss: 235.8800 - val_reconstruction_error: 180.2594 - val_regularization_error: 55.6206
Epoch 53/1000
600/600 [=====] - 76s 126ms/step - loss: 129.6606 - reconstruction_error: 75.1612 - regularization_error: 54.4994 - val_loss: 234.4711 - val_reconstruction_error: 178.0955 - val_regularization_error: 56.3755
Epoch 54/1000
600/600 [=====] - 69s 115ms/step - loss: 129.1607 - reconstruction_error: 74.7290 - regularization_error: 54.4317 - val_loss: 237.7234 - val_reconstruction_error: 181.3914 - val_regularization_error: 56.3321
Epoch 55/1000
600/600 [=====] - 67s 112ms/step - loss: 128.5126 - reconstruction_error: 74.0855 - regularization_error: 54.4272 - val_loss: 232.4388 - val_reconstruction_error: 178.0237 - val_regularization_error: 54.4150
Epoch 56/1000
600/600 [=====] - 76s 127ms/step - loss: 128.1618 - reconstruction_error: 73.7202 - regularization_error: 54.4416 - val_loss: 240.7249 - val_reconstruction_error: 186.4904 - val_regularization_error: 54.2345
Epoch 57/1000
600/600 [=====] - 74s 123ms/step - loss: 127.4569 - reconstruction_error: 73.1222 - regularization_error: 54.3347 - val_loss: 233.4095 - val_reconstruction_error: 180.0626 - val_regularization_error: 53.3469
Epoch 58/1000
600/600 [=====] - 71s 117ms/step - loss: 127.2575 - reconstruction_error: 72.9526 - regularization_error: 54.3048 - val_loss: 234.2315 - val_reconstruction_error: 181.2571 - val_regularization_error: 52.9744
Epoch 59/1000
600/600 [=====] - 77s 128ms/step - loss: 126.6815 - reconstruction_error: 72.3425 - regularization_error: 54.3389 - val_loss: 235.2151 - val_reconstruction_error: 182.5064 - val_regularization_error: 52.7087
Epoch 60/1000
600/600 [=====] - 73s 121ms/step - loss: 126.3840 - reconstruction_error: 72.0558 - regularization_error: 54.3283 - val_loss: 233.4556 - val_reconstruction_error: 181.9817 - val_regularization_error: 51.4738
Epoch 61/1000
600/600 [=====] - ETA: 0s - loss: 126.2526 - reconstruction_error: 71.9297 - regularization_error: 54.3230
[2023-11-30 10:28:42.734182]: Generating fixed images for epoch 61 ...



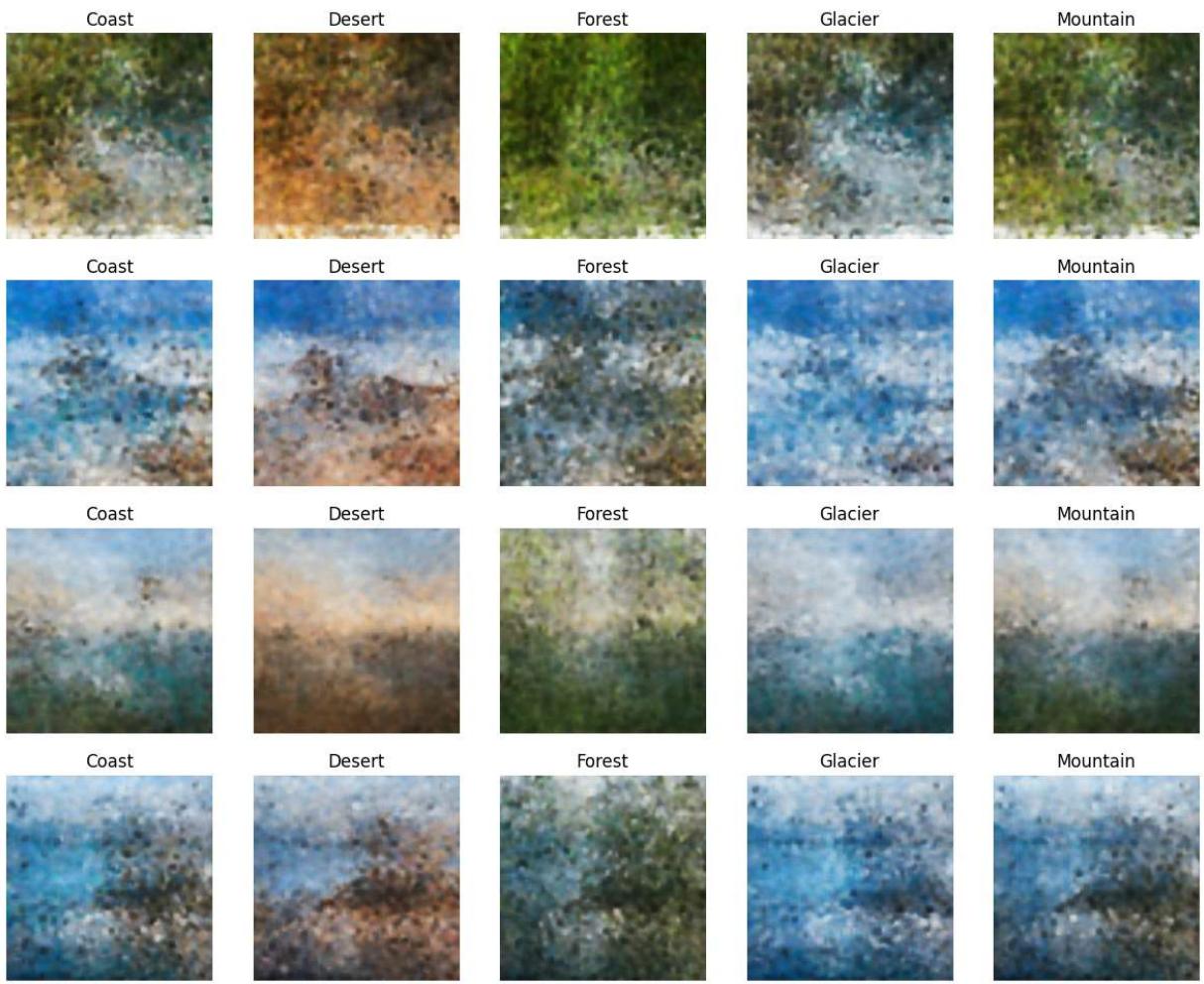
[2023-11-30 10:28:43.381475]: Generating random images for epoch 61 ...



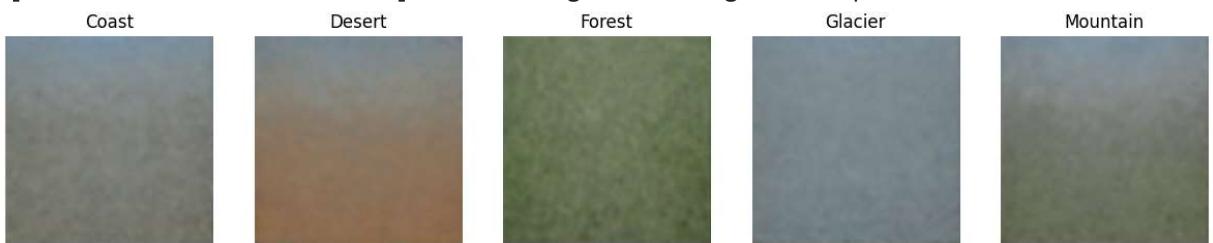
600/600 [=====] - 80s 134ms/step - loss: 126.2526 - reconstruction_error: 71.9297 - regularization_error: 54.3230 - val_loss: 234.9930 - val_reconstruction_error: 179.3666 - val_regularization_error: 55.6263
Epoch 62/1000
600/600 [=====] - 76s 127ms/step - loss: 125.8546 - reconstruction_error: 71.5132 - regularization_error: 54.3415 - val_loss: 237.9440 - val_reconstruction_error: 181.8757 - val_regularization_error: 56.0683
Epoch 63/1000
600/600 [=====] - 77s 127ms/step - loss: 125.4757 - reconstruction_error: 71.1957 - regularization_error: 54.2800 - val_loss: 234.1071 - val_reconstruction_error: 179.9324 - val_regularization_error: 54.1747
Epoch 64/1000
600/600 [=====] - 79s 130ms/step - loss: 124.8959 - reconstruction_error: 70.7036 - regularization_error: 54.1923 - val_loss: 240.4421 - val_reconstruction_error: 188.7669 - val_regularization_error: 51.6752
Epoch 65/1000
600/600 [=====] - 73s 122ms/step - loss: 124.6249 - reconstruction_error: 70.4249 - regularization_error: 54.2000 - val_loss: 236.1675 - val_reconstruction_error: 180.2409 - val_regularization_error: 55.9267
Epoch 66/1000
600/600 [=====] - 67s 111ms/step - loss: 124.1206 - reconstruction_error: 69.9373 - regularization_error: 54.1832 - val_loss: 235.4370 - val_reconstruction_error: 183.2062 - val_regularization_error: 52.2308
Epoch 67/1000
600/600 [=====] - 65s 108ms/step - loss: 124.2395 - reconstruction_error: 70.0274 - regularization_error: 54.2123 - val_loss: 235.9918 - val_reconstruction_error: 182.8435 - val_regularization_error: 53.1483
Epoch 68/1000
600/600 [=====] - 78s 130ms/step - loss: 123.7281 - reconstruction_error: 69.4612 - regularization_error: 54.2670 - val_loss: 236.6577 - val_reconstruction_error: 186.7984 - val_regularization_error: 49.8593
Epoch 69/1000
600/600 [=====] - 78s 129ms/step - loss: 122.9956 - reconstruction_error: 68.9809 - regularization_error: 54.0147 - val_loss: 234.8973 - val_reconstruction_error: 182.3782 - val_regularization_error: 52.5191
Epoch 70/1000
600/600 [=====] - 81s 135ms/step - loss: 122.9827 - reconstruction_error: 68.9226 - regularization_error: 54.0600 - val_loss: 236.1973 - val_reconstruction_error: 181.5098 - val_regularization_error: 54.6876
Epoch 71/1000
600/600 [=====] - ETA: 0s - loss: 122.5979 - reconstruction_error: 68.5607 - regularization_error: 54.0372
[2023-11-30 10:41:17.166645]: Generating fixed images for epoch 71 ...



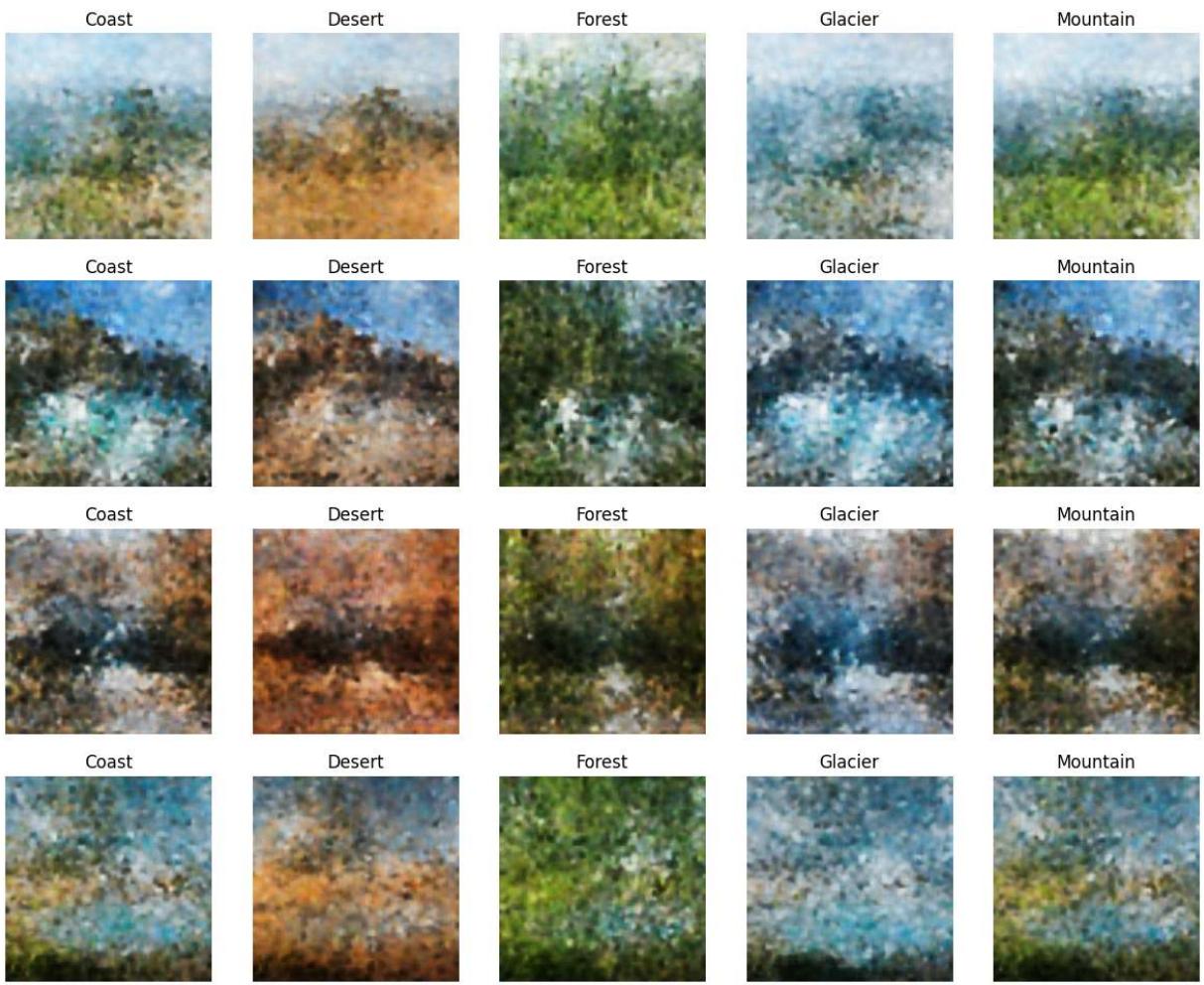
[2023-11-30 10:41:17.904269]: Generating random images for epoch 71 ...



600/600 [=====] - 79s 131ms/step - loss: 122.5979 - reconstruction_error: 68.5607 - regularization_error: 54.0372 - val_loss: 240.1359 - val_reconstruction_error: 187.5052 - val_regularization_error: 52.6307
Epoch 72/1000
600/600 [=====] - 80s 133ms/step - loss: 122.0293 - reconstruction_error: 68.1802 - regularization_error: 53.8491 - val_loss: 235.7728 - val_reconstruction_error: 183.4918 - val_regularization_error: 52.2810
Epoch 73/1000
600/600 [=====] - 75s 125ms/step - loss: 121.9389 - reconstruction_error: 68.0296 - regularization_error: 53.9093 - val_loss: 237.2049 - val_reconstruction_error: 185.0555 - val_regularization_error: 52.1494
Epoch 74/1000
600/600 [=====] - 72s 119ms/step - loss: 121.6460 - reconstruction_error: 67.7750 - regularization_error: 53.8709 - val_loss: 238.7105 - val_reconstruction_error: 182.6352 - val_regularization_error: 56.0753
Epoch 75/1000
600/600 [=====] - 73s 121ms/step - loss: 121.7871 - reconstruction_error: 67.7830 - regularization_error: 54.0041 - val_loss: 243.8885 - val_reconstruction_error: 184.1270 - val_regularization_error: 59.7616
Epoch 76/1000
600/600 [=====] - 71s 118ms/step - loss: 121.1456 - reconstruction_error: 67.3052 - regularization_error: 53.8403 - val_loss: 235.9459 - val_reconstruction_error: 182.2750 - val_regularization_error: 53.6709
Epoch 77/1000
600/600 [=====] - 74s 122ms/step - loss: 120.7143 - reconstruction_error: 66.8344 - regularization_error: 53.8798 - val_loss: 236.3277 - val_reconstruction_error: 183.6831 - val_regularization_error: 52.6446
Epoch 78/1000
600/600 [=====] - 70s 116ms/step - loss: 120.9530 - reconstruction_error: 67.0746 - regularization_error: 53.8785 - val_loss: 238.7376 - val_reconstruction_error: 187.0797 - val_regularization_error: 51.6580
Epoch 79/1000
600/600 [=====] - 78s 129ms/step - loss: 120.4633 - reconstruction_error: 66.6357 - regularization_error: 53.8277 - val_loss: 235.3339 - val_reconstruction_error: 184.1178 - val_regularization_error: 51.2160
Epoch 80/1000
600/600 [=====] - 79s 131ms/step - loss: 120.0680 - reconstruction_error: 66.2825 - regularization_error: 53.7855 - val_loss: 241.9302 - val_reconstruction_error: 190.0545 - val_regularization_error: 51.8757
Epoch 81/1000
600/600 [=====] - ETA: 0s - loss: 120.0497 - reconstruction_error: 66.1409 - regularization_error: 53.9088
[2023-11-30 10:53:46.595817]: Generating fixed images for epoch 81 ...



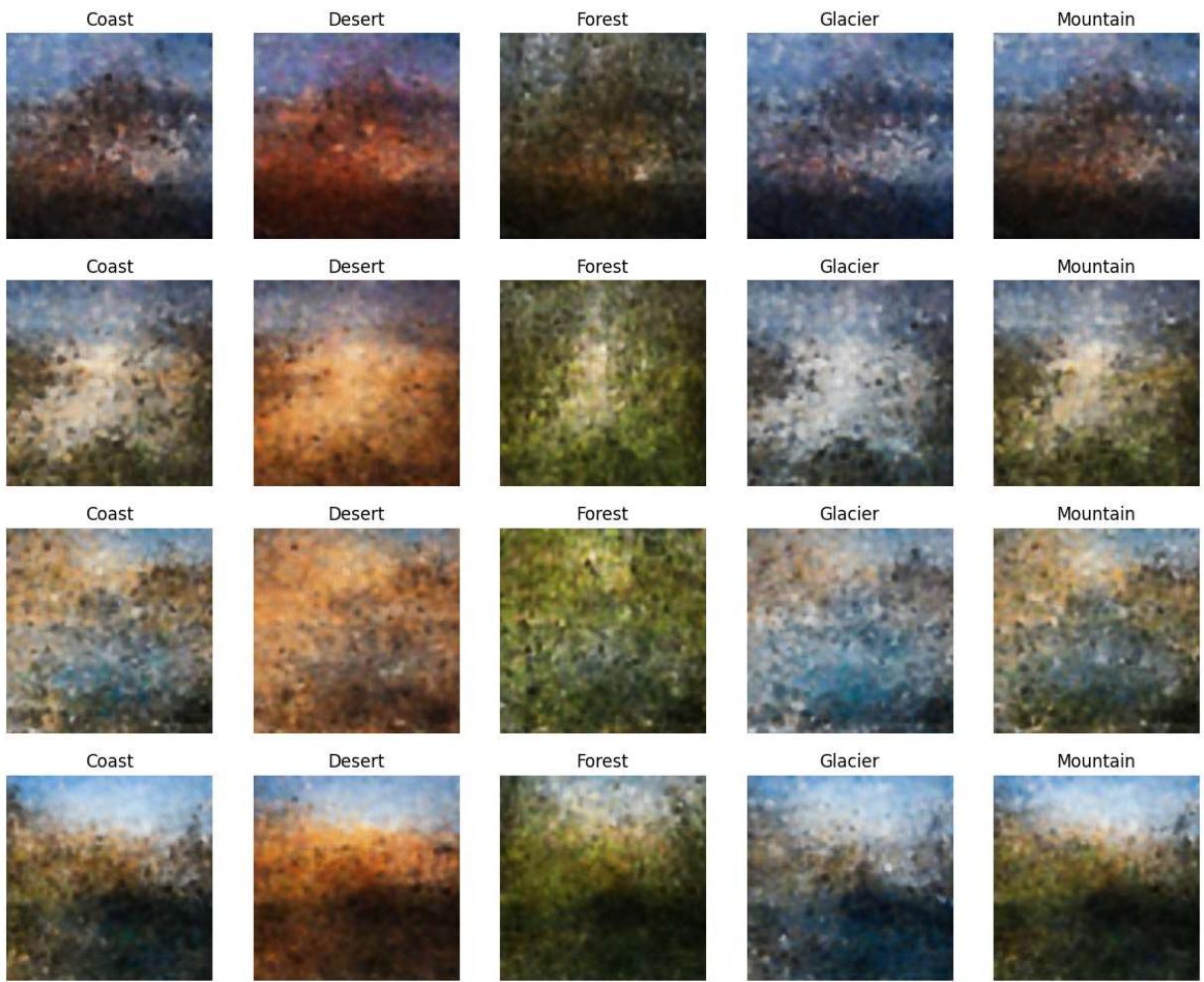
[2023-11-30 10:53:47.438363]: Generating random images for epoch 81 ...



```
600/600 [=====] - 78s 130ms/step - loss: 120.0497 - reconstruction_error: 66.1409 - regularization_error: 53.9088 - val_loss: 242.2287 - val_reconstruction_error: 186.1760 - val_regularization_error: 56.0527
Epoch 82/1000
600/600 [=====] - 74s 124ms/step - loss: 119.7523 - reconstruction_error: 65.9088 - regularization_error: 53.8434 - val_loss: 240.3596 - val_reconstruction_error: 186.8054 - val_regularization_error: 53.5543
Epoch 83/1000
600/600 [=====] - 72s 120ms/step - loss: 119.3854 - reconstruction_error: 65.7006 - regularization_error: 53.6847 - val_loss: 236.9989 - val_reconstruction_error: 184.7316 - val_regularization_error: 52.2673
Epoch 84/1000
600/600 [=====] - 77s 128ms/step - loss: 119.3043 - reconstruction_error: 65.5328 - regularization_error: 53.7714 - val_loss: 238.8111 - val_reconstruction_error: 185.0760 - val_regularization_error: 53.7350
Epoch 85/1000
600/600 [=====] - 73s 121ms/step - loss: 118.6343 - reconstruction_error: 65.0168 - regularization_error: 53.6176 - val_loss: 239.8355 - val_reconstruction_error: 186.6806 - val_regularization_error: 53.1549
Epoch 86/1000
600/600 [=====] - 77s 128ms/step - loss: 118.8190 - reconstruction_error: 65.1008 - regularization_error: 53.7182 - val_loss: 239.2915 - val_reconstruction_error: 184.4082 - val_regularization_error: 54.8834
Epoch 87/1000
600/600 [=====] - 75s 125ms/step - loss: 118.3991 - reconstruction_error: 64.8101 - regularization_error: 53.5891 - val_loss: 238.5366 - val_reconstruction_error: 185.8357 - val_regularization_error: 52.7008
Epoch 88/1000
600/600 [=====] - 79s 132ms/step - loss: 118.2945 - reconstruction_error: 64.6959 - regularization_error: 53.5986 - val_loss: 239.0665 - val_reconstruction_error: 185.4258 - val_regularization_error: 53.6407
Epoch 89/1000
600/600 [=====] - 73s 121ms/step - loss: 118.0054 - reconstruction_error: 64.4369 - regularization_error: 53.5686 - val_loss: 240.5804 - val_reconstruction_error: 185.2559 - val_regularization_error: 55.3246
Epoch 90/1000
600/600 [=====] - 82s 136ms/step - loss: 117.5102 - reconstruction_error: 64.1028 - regularization_error: 53.4073 - val_loss: 238.0588 - val_reconstruction_error: 184.9285 - val_regularization_error: 53.1304
Epoch 91/1000
600/600 [=====] - ETA: 0s - loss: 117.5544 - reconstruction_error: 64.0179 - regularization_error: 53.5365
[2023-11-30 11:06:25.806820]: Generating fixed images for epoch 91 ...
```



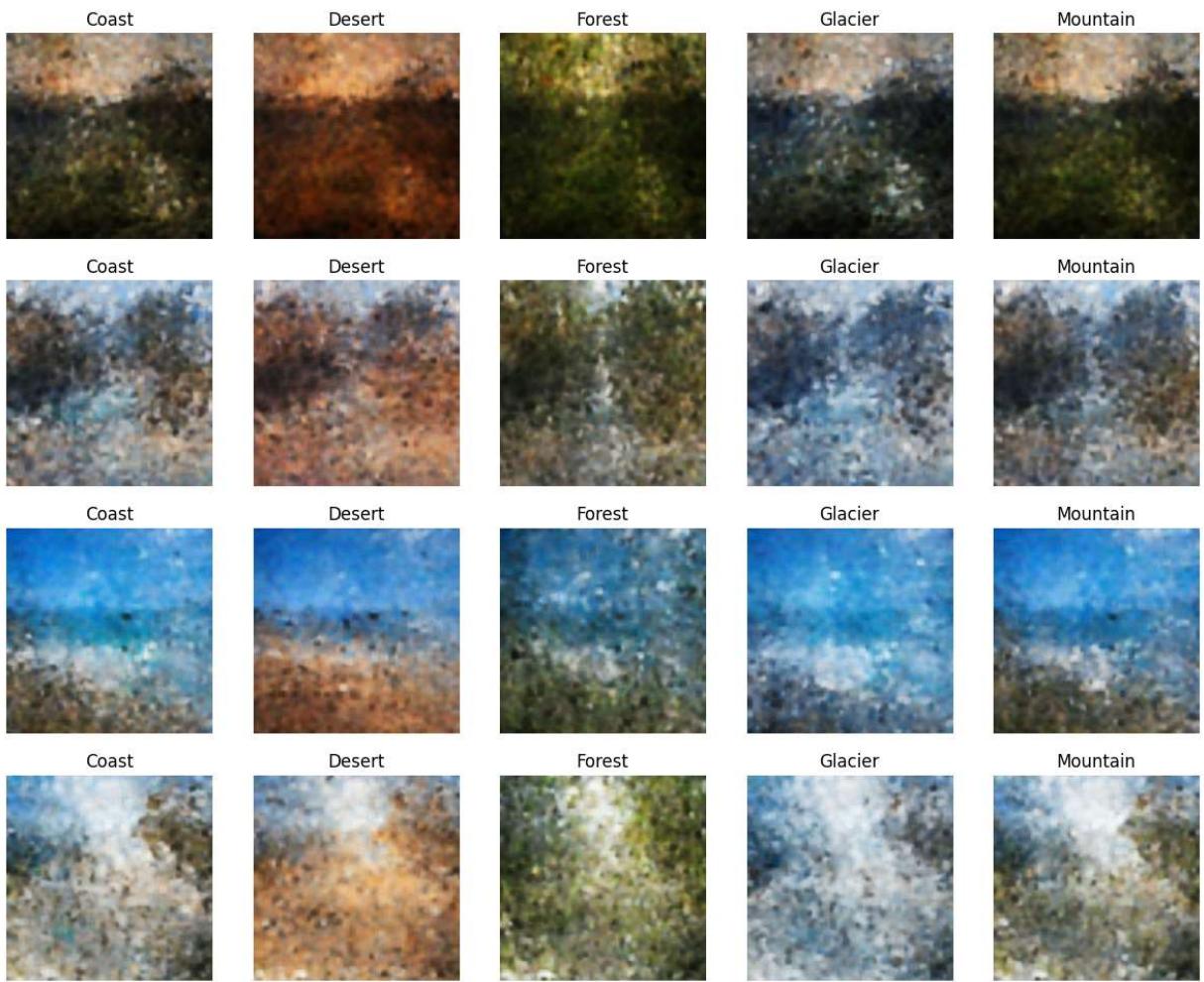
```
[2023-11-30 11:06:26.755813]: Generating random images for epoch 91 ...
```



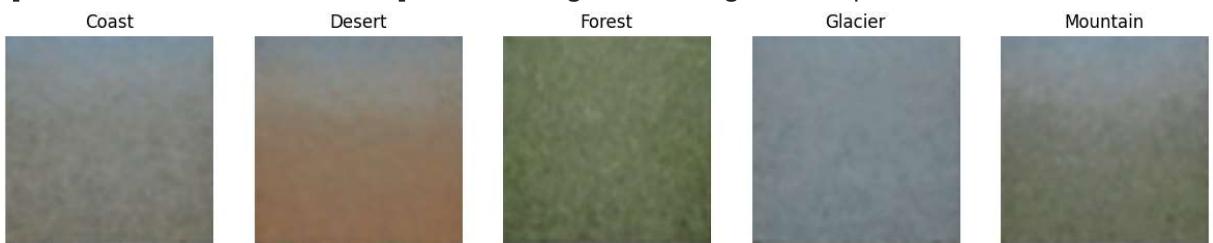
```
600/600 [=====] - 72s 120ms/step - loss: 117.5544 - reconstruction_error: 64.0179 - regularization_error: 53.5365 - val_loss: 236.3627 - val_reconstruction_error: 181.4338 - val_regularization_error: 54.9290
Epoch 92/1000
600/600 [=====] - 72s 120ms/step - loss: 117.3744 - reconstruction_error: 63.8326 - regularization_error: 53.5418 - val_loss: 236.1958 - val_reconstruction_error: 184.0994 - val_regularization_error: 52.0965
Epoch 93/1000
600/600 [=====] - 70s 116ms/step - loss: 117.0724 - reconstruction_error: 63.7444 - regularization_error: 53.3280 - val_loss: 240.5108 - val_reconstruction_error: 187.3222 - val_regularization_error: 53.1885
Epoch 94/1000
600/600 [=====] - 80s 133ms/step - loss: 116.9678 - reconstruction_error: 63.5198 - regularization_error: 53.4480 - val_loss: 240.0198 - val_reconstruction_error: 186.4940 - val_regularization_error: 53.5259
Epoch 95/1000
600/600 [=====] - 79s 131ms/step - loss: 116.6183 - reconstruction_error: 63.2814 - regularization_error: 53.3369 - val_loss: 242.7402 - val_reconstruction_error: 188.4606 - val_regularization_error: 54.2795
Epoch 96/1000
600/600 [=====] - 70s 117ms/step - loss: 116.5953 - reconstruction_error: 63.2674 - regularization_error: 53.3279 - val_loss: 236.0551 - val_reconstruction_error: 186.6397 - val_regularization_error: 49.4154
Epoch 97/1000
600/600 [=====] - 71s 117ms/step - loss: 116.2518 - reconstruction_error: 62.8976 - regularization_error: 53.3542 - val_loss: 243.1778 - val_reconstruction_error: 189.5750 - val_regularization_error: 53.6027
Epoch 98/1000
600/600 [=====] - 78s 130ms/step - loss: 116.3633 - reconstruction_error: 63.0377 - regularization_error: 53.3255 - val_loss: 238.7220 - val_reconstruction_error: 187.5344 - val_regularization_error: 51.1877
Epoch 99/1000
600/600 [=====] - 71s 118ms/step - loss: 116.0805 - reconstruction_error: 62.8009 - regularization_error: 53.2795 - val_loss: 242.7520 - val_reconstruction_error: 187.6394 - val_regularization_error: 55.1125
Epoch 100/1000
600/600 [=====] - 80s 132ms/step - loss: 115.4134 - reconstruction_error: 62.2328 - regularization_error: 53.1805 - val_loss: 238.3607 - val_reconstruction_error: 185.3295 - val_regularization_error: 53.0313
Epoch 101/1000
600/600 [=====] - ETA: 0s - loss: 115.4541 - reconstruction_error: 62.3333 - regularization_error: 53.1207
[2023-11-30 11:18:51.265791]: Generating fixed images for epoch 101 ...
```



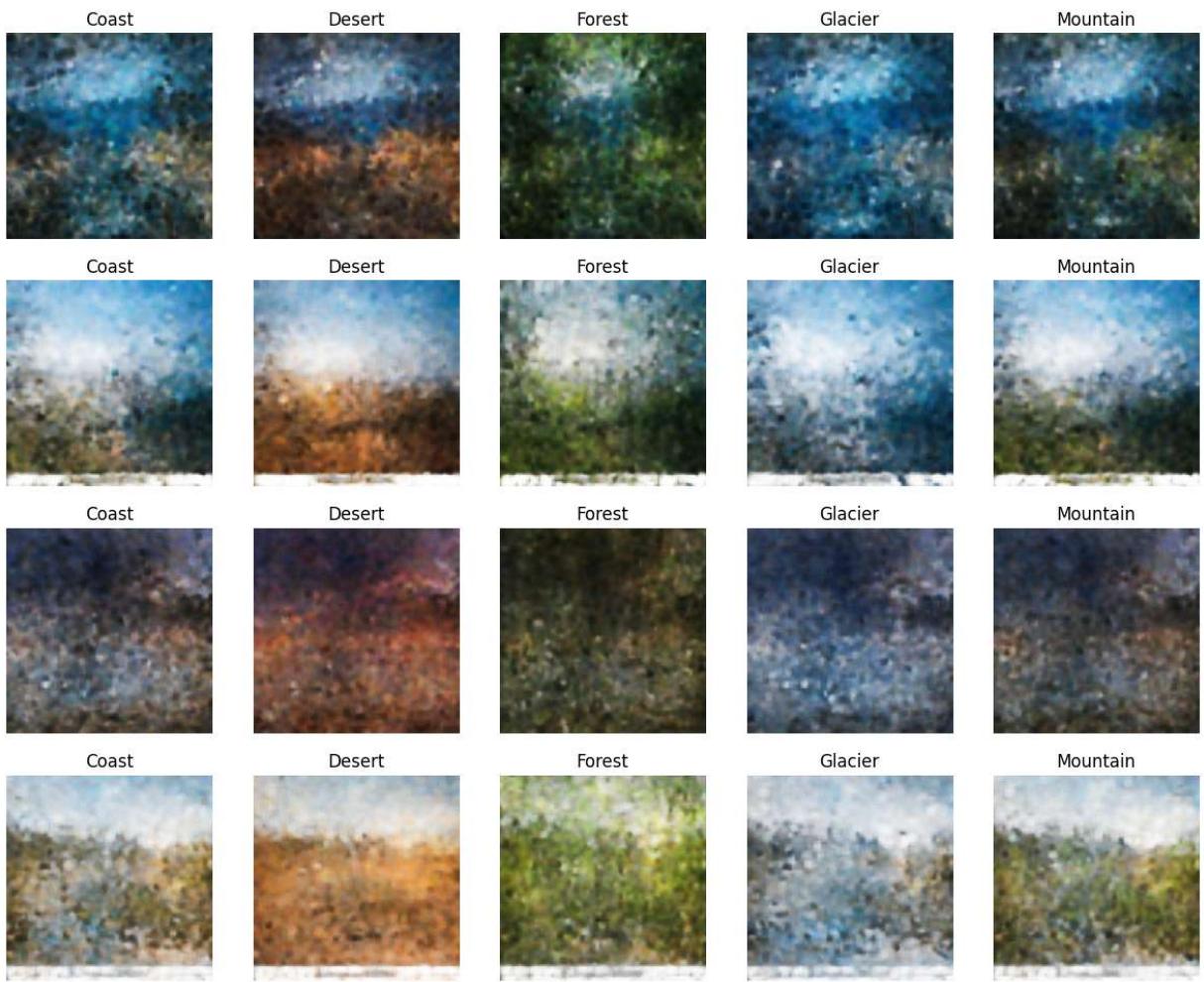
```
[2023-11-30 11:18:52.112462]: Generating random images for epoch 101 ...
```



```
600/600 [=====] - 73s 121ms/step - loss: 115.4541 - reconstruction_error: 62.3333 - regularization_error: 53.1207 - val_loss: 240.1716 - val_reconstruction_error: 187.5585 - val_regularization_error: 52.6131
Epoch 102/1000
600/600 [=====] - 70s 116ms/step - loss: 115.4639 - reconstruction_error: 62.2140 - regularization_error: 53.2498 - val_loss: 242.6542 - val_reconstruction_error: 191.1833 - val_regularization_error: 51.4709
Epoch 103/1000
600/600 [=====] - 66s 109ms/step - loss: 115.4963 - reconstruction_error: 62.1851 - regularization_error: 53.3113 - val_loss: 236.1134 - val_reconstruction_error: 186.2595 - val_regularization_error: 49.8539
Epoch 104/1000
600/600 [=====] - 71s 117ms/step - loss: 114.9998 - reconstruction_error: 61.8463 - regularization_error: 53.1535 - val_loss: 238.8035 - val_reconstruction_error: 187.6966 - val_regularization_error: 51.1070
Epoch 105/1000
600/600 [=====] - 75s 124ms/step - loss: 114.9500 - reconstruction_error: 61.7627 - regularization_error: 53.1872 - val_loss: 237.7834 - val_reconstruction_error: 186.0434 - val_regularization_error: 51.7399
Epoch 106/1000
600/600 [=====] - 76s 126ms/step - loss: 114.7011 - reconstruction_error: 61.6211 - regularization_error: 53.0800 - val_loss: 241.7982 - val_reconstruction_error: 190.0845 - val_regularization_error: 51.7137
Epoch 107/1000
600/600 [=====] - 70s 116ms/step - loss: 114.9938 - reconstruction_error: 61.7568 - regularization_error: 53.2370 - val_loss: 240.1803 - val_reconstruction_error: 189.4383 - val_regularization_error: 50.7420
Epoch 108/1000
600/600 [=====] - 70s 117ms/step - loss: 114.3641 - reconstruction_error: 61.2805 - regularization_error: 53.0837 - val_loss: 240.7962 - val_reconstruction_error: 187.9531 - val_regularization_error: 52.8430
Epoch 109/1000
600/600 [=====] - 78s 129ms/step - loss: 114.4994 - reconstruction_error: 61.3416 - regularization_error: 53.1577 - val_loss: 242.5548 - val_reconstruction_error: 189.0253 - val_regularization_error: 53.5295
Epoch 110/1000
600/600 [=====] - 75s 124ms/step - loss: 114.2138 - reconstruction_error: 61.0973 - regularization_error: 53.1166 - val_loss: 238.6179 - val_reconstruction_error: 185.5120 - val_regularization_error: 53.1059
Epoch 111/1000
600/600 [=====] - ETA: 0s - loss: 114.0986 - reconstruction_error: 61.1026 - regularization_error: 52.9961
[2023-11-30 11:31:02.186478]: Generating fixed images for epoch 111 ...
```



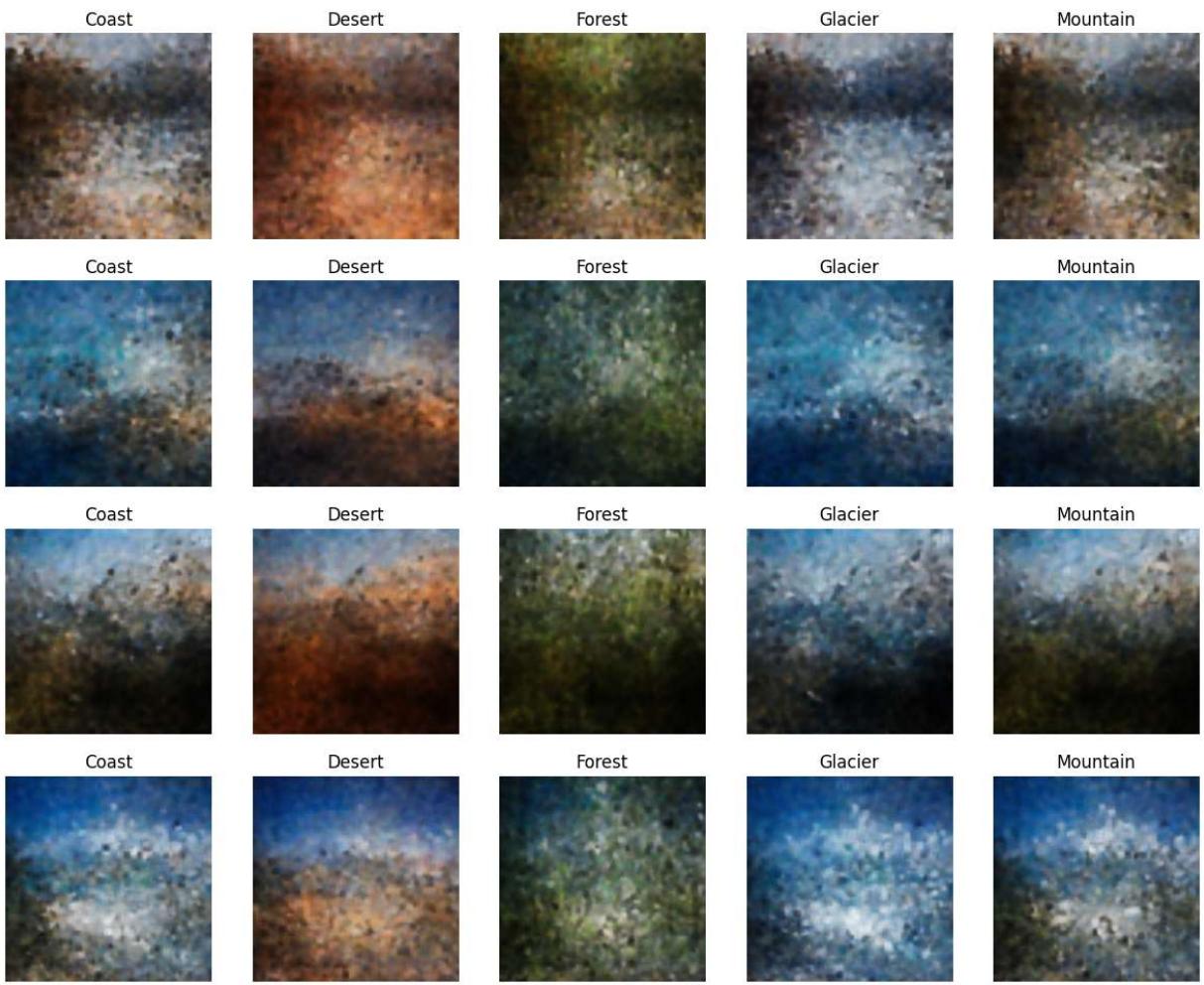
```
[2023-11-30 11:31:02.939730]: Generating random images for epoch 111 ...
```



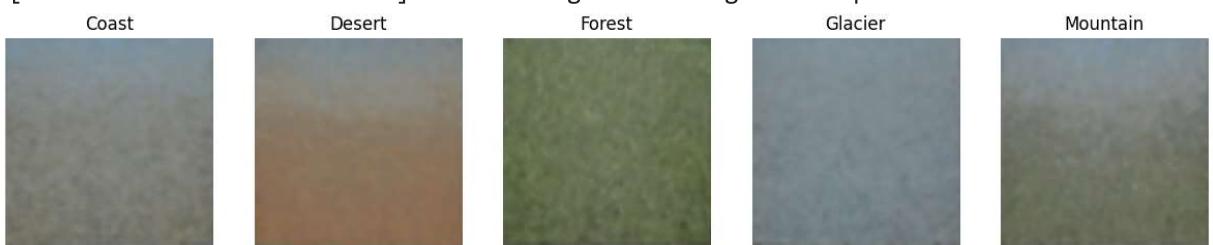
600/600 [=====] - 78s 129ms/step - loss: 114.0986 - reconstruction_error: 61.1026 - regularization_error: 52.9961 - val_loss: 239.9536 - val_reconstruction_error: 187.4635 - val_regularization_error: 52.4901
Epoch 112/1000
600/600 [=====] - 69s 115ms/step - loss: 113.7115 - reconstruction_error: 60.7550 - regularization_error: 52.9565 - val_loss: 244.6329 - val_reconstruction_error: 190.7784 - val_regularization_error: 53.8544
Epoch 113/1000
600/600 [=====] - 68s 113ms/step - loss: 113.9987 - reconstruction_error: 60.9331 - regularization_error: 53.0656 - val_loss: 242.7039 - val_reconstruction_error: 189.5650 - val_regularization_error: 53.1389
Epoch 114/1000
600/600 [=====] - 74s 123ms/step - loss: 113.7771 - reconstruction_error: 60.6559 - regularization_error: 53.1211 - val_loss: 241.7285 - val_reconstruction_error: 190.1083 - val_regularization_error: 51.6203
Epoch 115/1000
600/600 [=====] - 69s 115ms/step - loss: 113.1757 - reconstruction_error: 60.2678 - regularization_error: 52.9079 - val_loss: 245.8558 - val_reconstruction_error: 192.8011 - val_regularization_error: 53.0547
Epoch 116/1000
600/600 [=====] - 75s 124ms/step - loss: 113.3868 - reconstruction_error: 60.4913 - regularization_error: 52.8955 - val_loss: 241.0479 - val_reconstruction_error: 192.2678 - val_regularization_error: 48.7801
Epoch 117/1000
600/600 [=====] - 77s 128ms/step - loss: 113.1795 - reconstruction_error: 60.3688 - regularization_error: 52.8106 - val_loss: 240.2305 - val_reconstruction_error: 186.1556 - val_regularization_error: 54.0749
Epoch 118/1000
600/600 [=====] - 82s 136ms/step - loss: 113.0261 - reconstruction_error: 60.0712 - regularization_error: 52.9549 - val_loss: 242.0032 - val_reconstruction_error: 189.4809 - val_regularization_error: 52.5223
Epoch 119/1000
600/600 [=====] - 76s 126ms/step - loss: 112.7924 - reconstruction_error: 59.9083 - regularization_error: 52.8841 - val_loss: 241.8678 - val_reconstruction_error: 188.7536 - val_regularization_error: 53.1142
Epoch 120/1000
600/600 [=====] - 72s 120ms/step - loss: 112.8992 - reconstruction_error: 60.0926 - regularization_error: 52.8066 - val_loss: 241.2561 - val_reconstruction_error: 190.6907 - val_regularization_error: 50.5655
Epoch 121/1000
600/600 [=====] - ETA: 0s - loss: 112.3580 - reconstruction_error: 59.6277 - regularization_error: 52.7304
[2023-11-30 11:43:26.067718]: Generating fixed images for epoch 121 ...



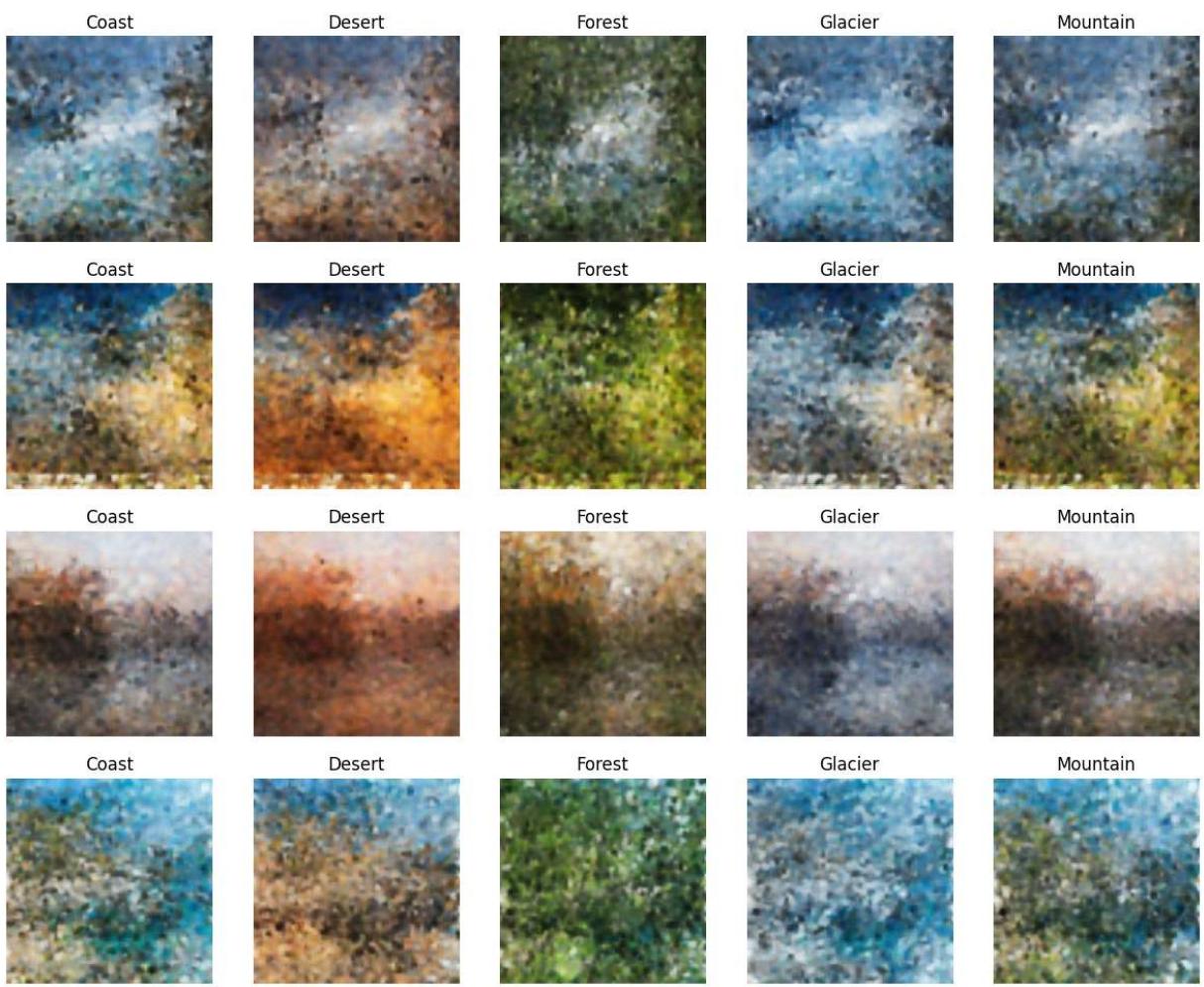
[2023-11-30 11:43:26.849413]: Generating random images for epoch 121 ...



600/600 [=====] - 78s 130ms/step - loss: 112.3580 - reconstruction_error: 59.6277 - regularization_error: 52.7304 - val_loss: 246.4261 - val_reconstruction_error: 189.0404 - val_regularization_error: 57.3857
Epoch 122/1000
600/600 [=====] - 84s 139ms/step - loss: 112.4404 - reconstruction_error: 59.7170 - regularization_error: 52.7234 - val_loss: 238.9738 - val_reconstruction_error: 187.7364 - val_regularization_error: 51.2374
Epoch 123/1000
600/600 [=====] - 72s 119ms/step - loss: 112.4249 - reconstruction_error: 59.5949 - regularization_error: 52.8301 - val_loss: 243.1543 - val_reconstruction_error: 191.7044 - val_regularization_error: 51.4498
Epoch 124/1000
600/600 [=====] - 78s 130ms/step - loss: 112.0782 - reconstruction_error: 59.4035 - regularization_error: 52.6748 - val_loss: 242.8506 - val_reconstruction_error: 191.4467 - val_regularization_error: 51.4038
Epoch 125/1000
600/600 [=====] - 76s 126ms/step - loss: 111.7069 - reconstruction_error: 59.0519 - regularization_error: 52.6550 - val_loss: 241.2465 - val_reconstruction_error: 191.1962 - val_regularization_error: 50.0502
Epoch 126/1000
600/600 [=====] - 76s 126ms/step - loss: 112.0414 - reconstruction_error: 59.3124 - regularization_error: 52.7289 - val_loss: 243.6882 - val_reconstruction_error: 191.6278 - val_regularization_error: 52.0604
Epoch 127/1000
600/600 [=====] - 69s 114ms/step - loss: 111.7309 - reconstruction_error: 59.0930 - regularization_error: 52.6379 - val_loss: 239.4673 - val_reconstruction_error: 189.1727 - val_regularization_error: 50.2946
Epoch 128/1000
600/600 [=====] - 70s 116ms/step - loss: 111.6080 - reconstruction_error: 58.9412 - regularization_error: 52.6668 - val_loss: 239.4620 - val_reconstruction_error: 188.9032 - val_regularization_error: 50.5588
Epoch 129/1000
600/600 [=====] - 71s 118ms/step - loss: 111.6031 - reconstruction_error: 58.9741 - regularization_error: 52.6291 - val_loss: 241.6891 - val_reconstruction_error: 187.9756 - val_regularization_error: 53.7135
Epoch 130/1000
600/600 [=====] - 78s 130ms/step - loss: 111.2382 - reconstruction_error: 58.6472 - regularization_error: 52.5909 - val_loss: 242.1335 - val_reconstruction_error: 190.4420 - val_regularization_error: 51.6915
Epoch 131/1000
600/600 [=====] - ETA: 0s - loss: 111.0517 - reconstruction_error: 58.6103 - regularization_error: 52.4415
[2023-11-30 11:55:57.808284]: Generating fixed images for epoch 131 ...



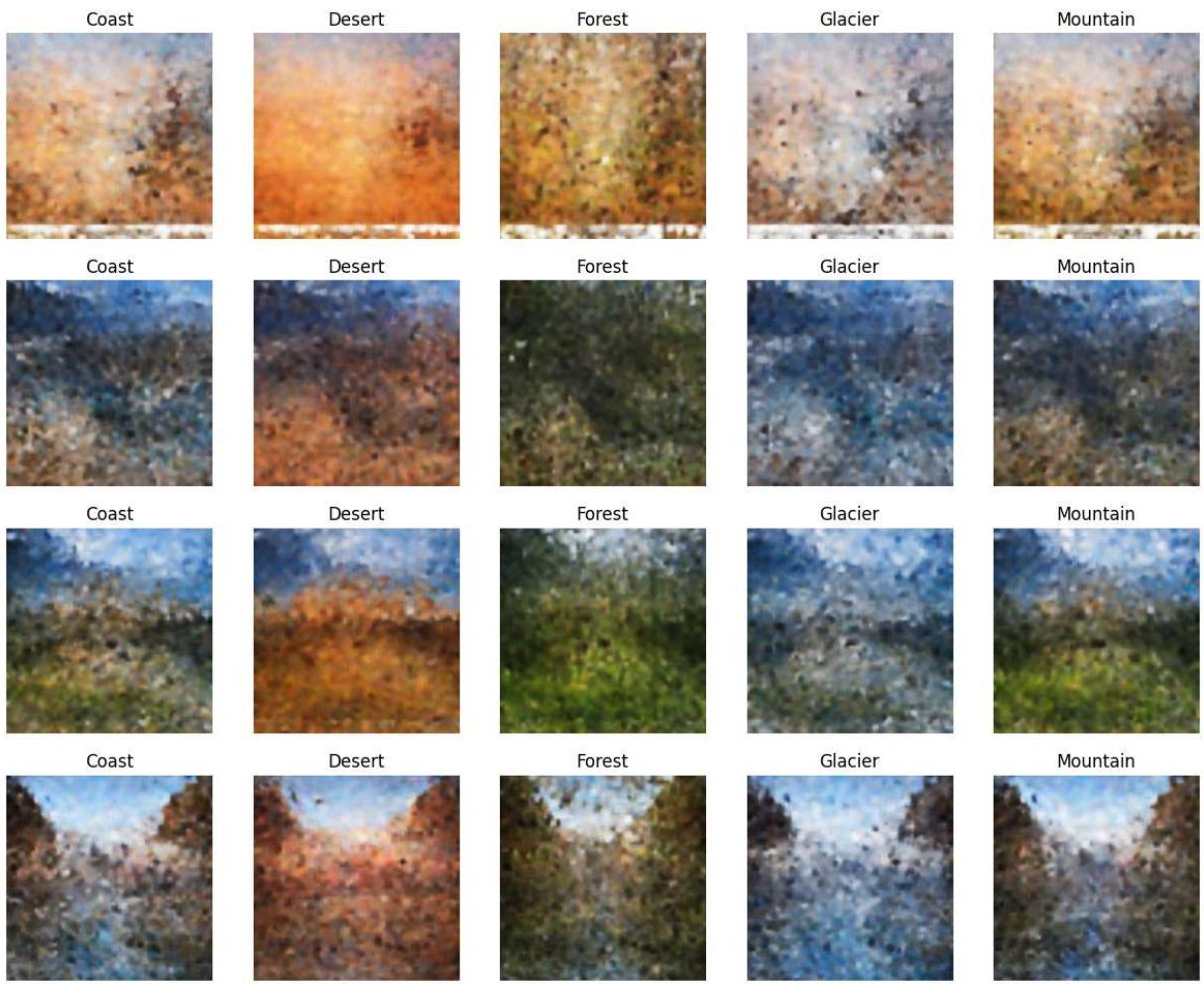
[2023-11-30 11:55:58.646751]: Generating random images for epoch 131 ...



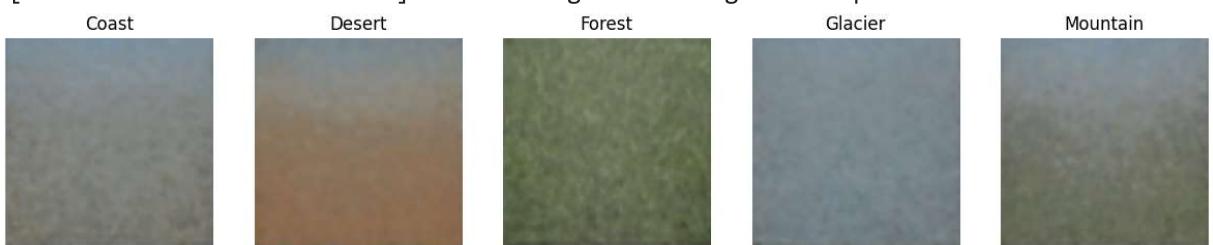
```
600/600 [=====] - 76s 127ms/step - loss: 111.0517 - reconstruction_error: 58.6103 - regularization_error: 52.4415 - val_loss: 239.8863 - val_reconstruction_error: 187.0509 - val_regularization_error: 52.8354
Epoch 132/1000
600/600 [=====] - 73s 122ms/step - loss: 110.8078 - reconstruction_error: 58.4600 - regularization_error: 52.3478 - val_loss: 240.5795 - val_reconstruction_error: 186.4186 - val_regularization_error: 54.1609
Epoch 133/1000
600/600 [=====] - 77s 128ms/step - loss: 111.3476 - reconstruction_error: 58.7287 - regularization_error: 52.6189 - val_loss: 241.6938 - val_reconstruction_error: 191.1020 - val_regularization_error: 50.5919
Epoch 134/1000
600/600 [=====] - 74s 123ms/step - loss: 110.9551 - reconstruction_error: 58.5271 - regularization_error: 52.4282 - val_loss: 244.1464 - val_reconstruction_error: 192.7231 - val_regularization_error: 51.4234
Epoch 135/1000
600/600 [=====] - 73s 121ms/step - loss: 110.8892 - reconstruction_error: 58.3785 - regularization_error: 52.5106 - val_loss: 243.6689 - val_reconstruction_error: 193.1545 - val_regularization_error: 50.5145
Epoch 136/1000
600/600 [=====] - 70s 116ms/step - loss: 110.6212 - reconstruction_error: 58.2353 - regularization_error: 52.3859 - val_loss: 243.2587 - val_reconstruction_error: 193.2603 - val_regularization_error: 49.9985
Epoch 137/1000
600/600 [=====] - 80s 132ms/step - loss: 110.6983 - reconstruction_error: 58.1884 - regularization_error: 52.5099 - val_loss: 243.8404 - val_reconstruction_error: 189.3421 - val_regularization_error: 54.4983
Epoch 138/1000
600/600 [=====] - 71s 117ms/step - loss: 110.5718 - reconstruction_error: 58.1664 - regularization_error: 52.4054 - val_loss: 240.2591 - val_reconstruction_error: 189.0442 - val_regularization_error: 51.2148
Epoch 139/1000
600/600 [=====] - 75s 124ms/step - loss: 110.1169 - reconstruction_error: 57.8380 - regularization_error: 52.2789 - val_loss: 243.3421 - val_reconstruction_error: 194.1163 - val_regularization_error: 49.2257
Epoch 140/1000
600/600 [=====] - 67s 112ms/step - loss: 109.9915 - reconstruction_error: 57.6987 - regularization_error: 52.2928 - val_loss: 243.4563 - val_reconstruction_error: 191.8321 - val_regularization_error: 51.6241
Epoch 141/1000
600/600 [=====] - ETA: 0s - loss: 110.2250 - reconstruction_error: 57.8736 - regularization_error: 52.3514
[2023-11-30 12:08:18.114996]: Generating fixed images for epoch 141 ...
```



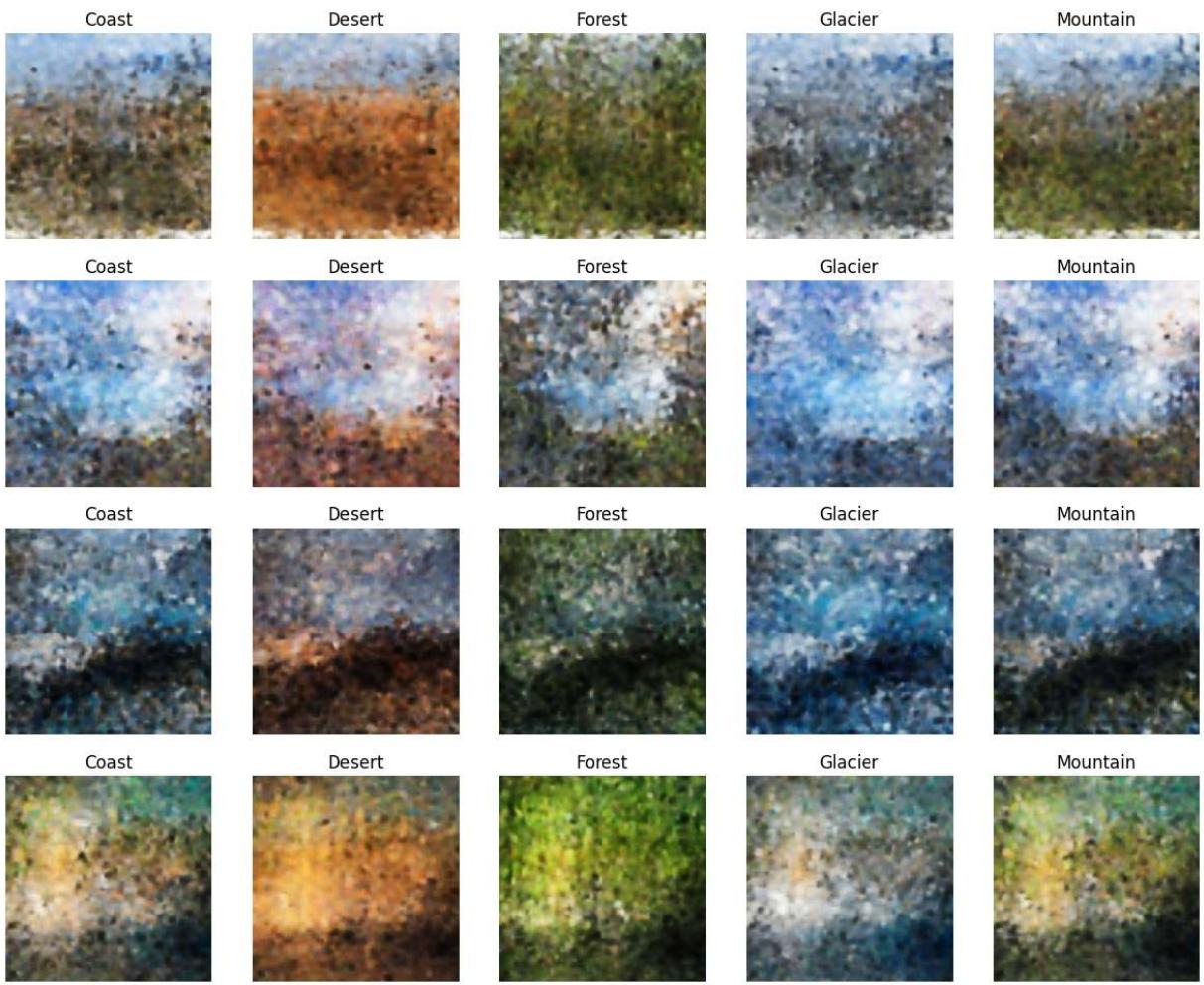
```
[2023-11-30 12:08:18.692155]: Generating random images for epoch 141 ...
```



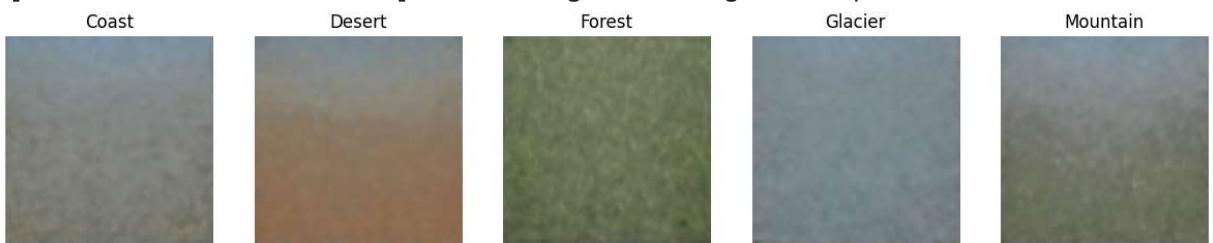
600/600 [=====] - 79s 131ms/step - loss: 110.2250 - reconstruction_error: 57.8736 - regularization_error: 52.3514 - val_loss: 243.9627 - val_reconstruction_error: 192.9803 - val_regularization_error: 50.9824
Epoch 142/1000
600/600 [=====] - 70s 117ms/step - loss: 109.7992 - reconstruction_error: 57.5552 - regularization_error: 52.2439 - val_loss: 246.8142 - val_reconstruction_error: 192.8818 - val_regularization_error: 53.9323
Epoch 143/1000
600/600 [=====] - 83s 138ms/step - loss: 110.0235 - reconstruction_error: 57.6538 - regularization_error: 52.3698 - val_loss: 243.1393 - val_reconstruction_error: 191.1439 - val_regularization_error: 51.9954
Epoch 144/1000
600/600 [=====] - 73s 122ms/step - loss: 109.6456 - reconstruction_error: 57.4107 - regularization_error: 52.2349 - val_loss: 241.4245 - val_reconstruction_error: 191.9155 - val_regularization_error: 49.5090
Epoch 145/1000
600/600 [=====] - 76s 126ms/step - loss: 109.5551 - reconstruction_error: 57.3791 - regularization_error: 52.1760 - val_loss: 250.3713 - val_reconstruction_error: 196.4707 - val_regularization_error: 53.9006
Epoch 146/1000
600/600 [=====] - 66s 110ms/step - loss: 109.6625 - reconstruction_error: 57.3179 - regularization_error: 52.3446 - val_loss: 243.7720 - val_reconstruction_error: 193.4406 - val_regularization_error: 50.3314
Epoch 147/1000
600/600 [=====] - 72s 120ms/step - loss: 109.6127 - reconstruction_error: 57.4430 - regularization_error: 52.1698 - val_loss: 242.8436 - val_reconstruction_error: 190.3193 - val_regularization_error: 52.5243
Epoch 148/1000
600/600 [=====] - 61s 102ms/step - loss: 109.3700 - reconstruction_error: 57.1691 - regularization_error: 52.2010 - val_loss: 239.6518 - val_reconstruction_error: 189.8948 - val_regularization_error: 49.7571
Epoch 149/1000
600/600 [=====] - 64s 107ms/step - loss: 109.0443 - reconstruction_error: 56.9667 - regularization_error: 52.0775 - val_loss: 240.7769 - val_reconstruction_error: 188.5196 - val_regularization_error: 52.2572
Epoch 150/1000
600/600 [=====] - 73s 121ms/step - loss: 109.3791 - reconstruction_error: 57.0270 - regularization_error: 52.3522 - val_loss: 245.8065 - val_reconstruction_error: 191.4302 - val_regularization_error: 54.3763
Epoch 151/1000
600/600 [=====] - ETA: 0s - loss: 108.8734 - reconstruction_error: 56.8080 - regularization_error: 52.0654
[2023-11-30 12:20:24.219540]: Generating fixed images for epoch 151 ...



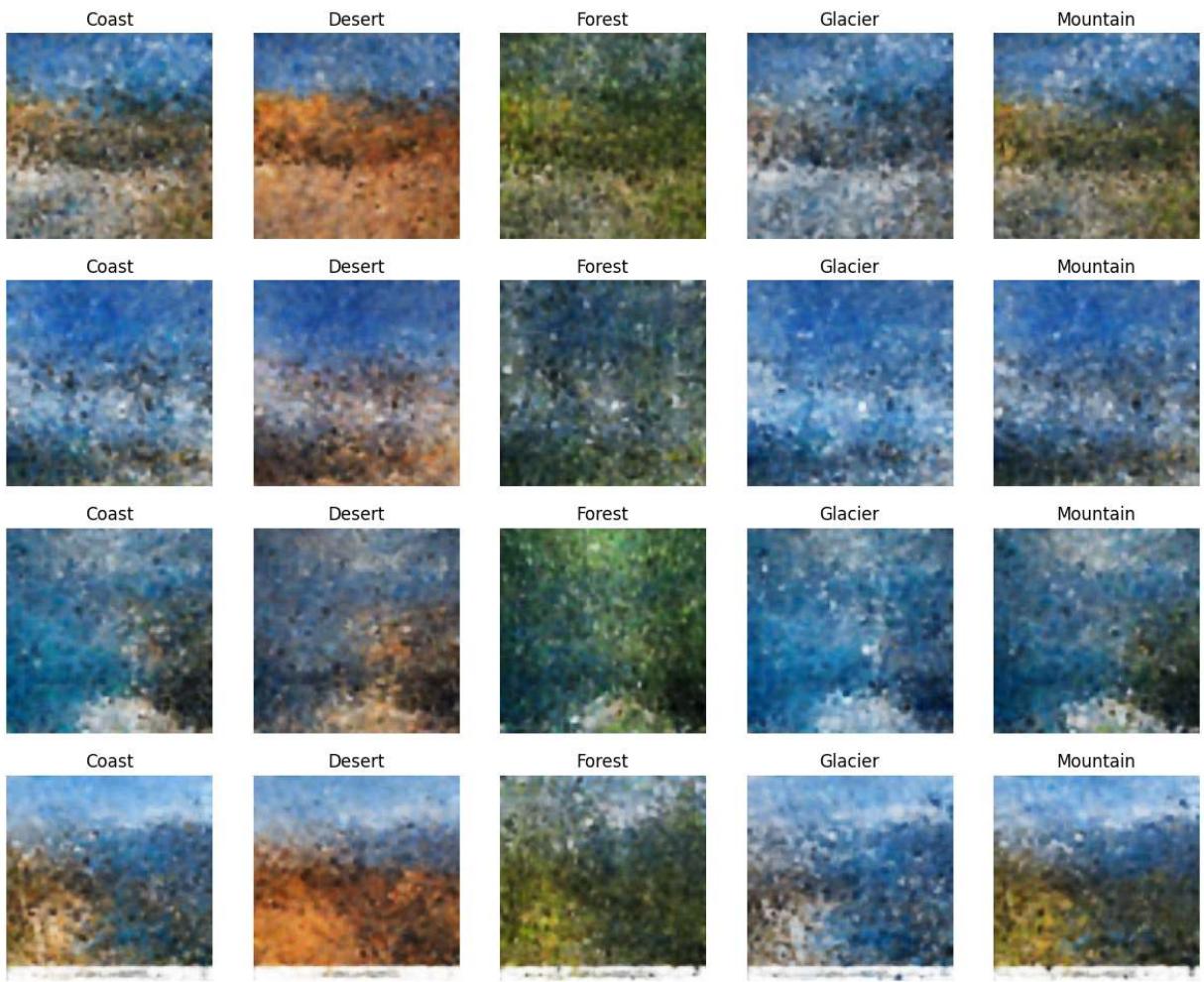
[2023-11-30 12:20:25.011996]: Generating random images for epoch 151 ...



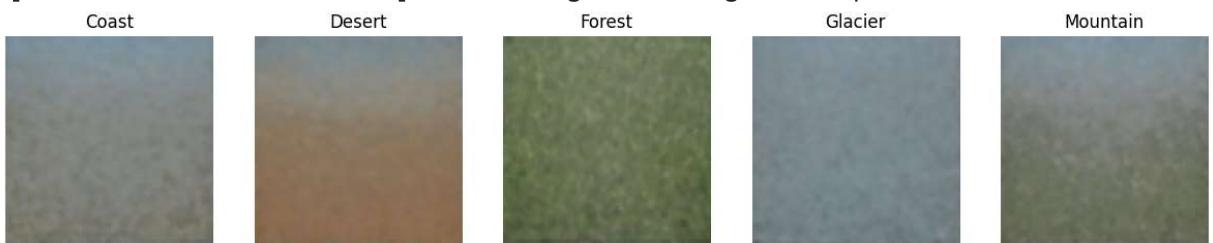
600/600 [=====] - 84s 140ms/step - loss: 108.8734 - reconstruction_error: 56.8080 - regularization_error: 52.0654 - val_loss: 241.4181 - val_reconstruction_error: 193.4704 - val_regularization_error: 47.9477
Epoch 152/1000
600/600 [=====] - 74s 123ms/step - loss: 108.9278 - reconstruction_error: 56.8869 - regularization_error: 52.0410 - val_loss: 243.2762 - val_reconstruction_error: 191.8060 - val_regularization_error: 51.4702
Epoch 153/1000
600/600 [=====] - 73s 122ms/step - loss: 108.9800 - reconstruction_error: 56.8374 - regularization_error: 52.1426 - val_loss: 243.8457 - val_reconstruction_error: 190.5676 - val_regularization_error: 53.2781
Epoch 154/1000
600/600 [=====] - 74s 123ms/step - loss: 108.7648 - reconstruction_error: 56.6754 - regularization_error: 52.0894 - val_loss: 244.9845 - val_reconstruction_error: 192.4977 - val_regularization_error: 52.4868
Epoch 155/1000
600/600 [=====] - 72s 120ms/step - loss: 108.6765 - reconstruction_error: 56.5939 - regularization_error: 52.0826 - val_loss: 245.4225 - val_reconstruction_error: 191.5804 - val_regularization_error: 53.8421
Epoch 156/1000
600/600 [=====] - 70s 117ms/step - loss: 108.4517 - reconstruction_error: 56.4274 - regularization_error: 52.0243 - val_loss: 240.3464 - val_reconstruction_error: 191.3427 - val_regularization_error: 49.0037
Epoch 157/1000
600/600 [=====] - 73s 122ms/step - loss: 108.4064 - reconstruction_error: 56.4200 - regularization_error: 51.9864 - val_loss: 243.6563 - val_reconstruction_error: 190.0118 - val_regularization_error: 53.6444
Epoch 158/1000
600/600 [=====] - 73s 121ms/step - loss: 108.3082 - reconstruction_error: 56.3370 - regularization_error: 51.9712 - val_loss: 246.7039 - val_reconstruction_error: 197.8357 - val_regularization_error: 48.8682
Epoch 159/1000
600/600 [=====] - 72s 120ms/step - loss: 108.5540 - reconstruction_error: 56.4667 - regularization_error: 52.0873 - val_loss: 242.8201 - val_reconstruction_error: 192.0562 - val_regularization_error: 50.7640
Epoch 160/1000
600/600 [=====] - 72s 120ms/step - loss: 108.0456 - reconstruction_error: 56.1190 - regularization_error: 51.9267 - val_loss: 242.6473 - val_reconstruction_error: 190.2016 - val_regularization_error: 52.4457
Epoch 161/1000
600/600 [=====] - ETA: 0s - loss: 108.1263 - reconstruction_error: 56.1514 - regularization_error: 51.9749
[2023-11-30 12:32:43.145473]: Generating fixed images for epoch 161 ...



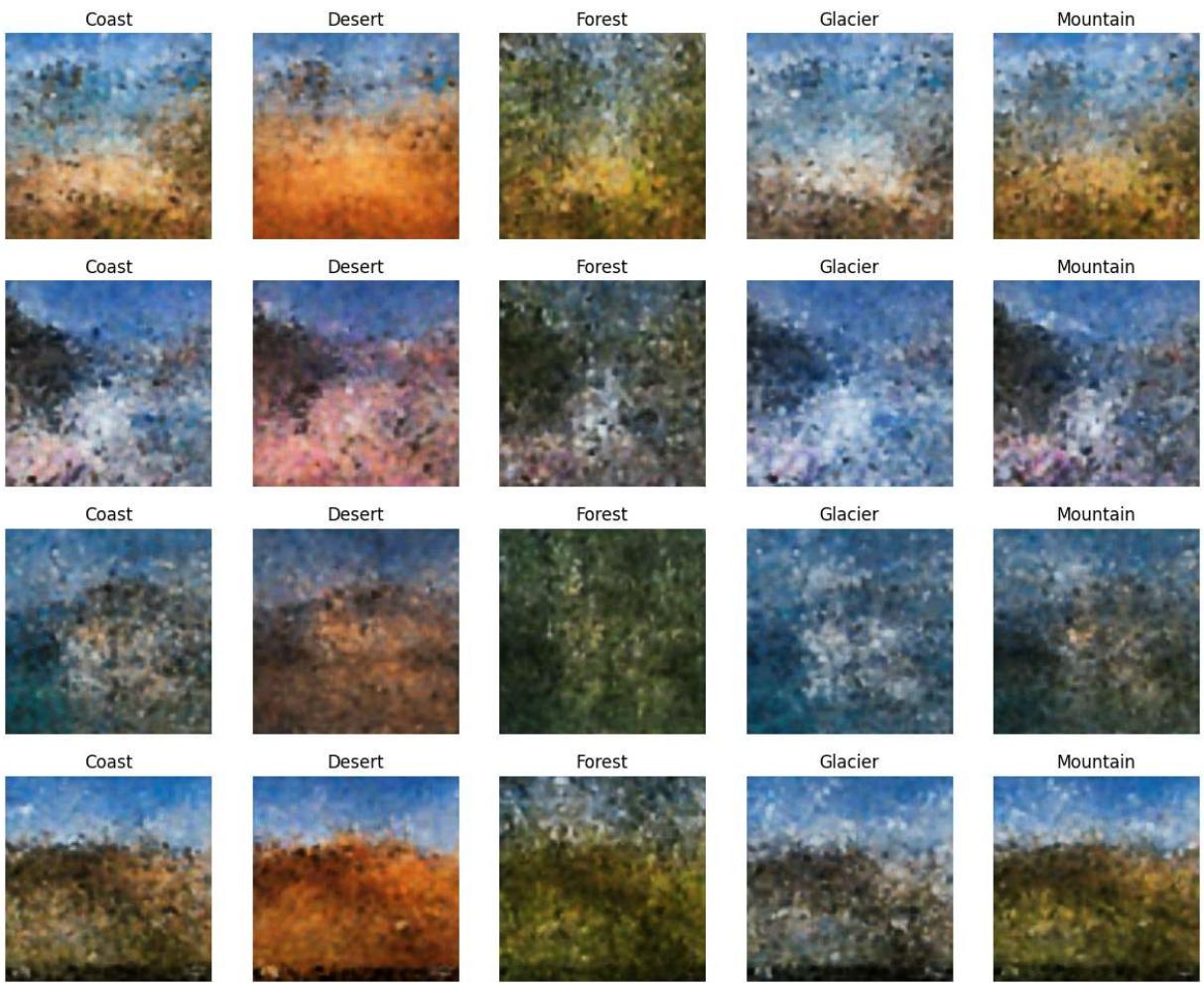
[2023-11-30 12:32:44.352456]: Generating random images for epoch 161 ...



600/600 [=====] - 74s 122ms/step - loss: 108.1263 - reconstruction_error: 56.1514 - regularization_error: 51.9749 - val_loss: 243.4771 - val_reconstruction_error: 192.2001 - val_regularization_error: 51.2770
Epoch 162/1000
600/600 [=====] - 70s 117ms/step - loss: 108.1030 - reconstruction_error: 56.1038 - regularization_error: 51.9991 - val_loss: 243.7136 - val_reconstruction_error: 190.1226 - val_regularization_error: 53.5910
Epoch 163/1000
600/600 [=====] - 73s 122ms/step - loss: 107.8496 - reconstruction_error: 55.9073 - regularization_error: 51.9423 - val_loss: 245.7701 - val_reconstruction_error: 193.4759 - val_regularization_error: 52.2941
Epoch 164/1000
600/600 [=====] - 76s 126ms/step - loss: 107.8533 - reconstruction_error: 55.9913 - regularization_error: 51.8620 - val_loss: 243.9688 - val_reconstruction_error: 190.8372 - val_regularization_error: 53.1316
Epoch 165/1000
600/600 [=====] - 77s 128ms/step - loss: 107.9745 - reconstruction_error: 56.0129 - regularization_error: 51.9616 - val_loss: 244.5128 - val_reconstruction_error: 192.0915 - val_regularization_error: 52.4213
Epoch 166/1000
600/600 [=====] - 72s 120ms/step - loss: 107.7221 - reconstruction_error: 55.7489 - regularization_error: 51.9732 - val_loss: 244.8106 - val_reconstruction_error: 191.1214 - val_regularization_error: 53.6892
Epoch 167/1000
600/600 [=====] - 68s 114ms/step - loss: 107.7311 - reconstruction_error: 55.7646 - regularization_error: 51.9666 - val_loss: 245.5714 - val_reconstruction_error: 195.1426 - val_regularization_error: 50.4287
Epoch 168/1000
600/600 [=====] - 77s 128ms/step - loss: 107.4608 - reconstruction_error: 55.5842 - regularization_error: 51.8766 - val_loss: 243.3168 - val_reconstruction_error: 192.2828 - val_regularization_error: 51.0340
Epoch 169/1000
600/600 [=====] - 78s 130ms/step - loss: 107.4861 - reconstruction_error: 55.6109 - regularization_error: 51.8751 - val_loss: 246.1681 - val_reconstruction_error: 192.4974 - val_regularization_error: 53.6707
Epoch 170/1000
600/600 [=====] - 68s 112ms/step - loss: 107.2973 - reconstruction_error: 55.5138 - regularization_error: 51.7835 - val_loss: 243.4361 - val_reconstruction_error: 193.4486 - val_regularization_error: 49.9875
Epoch 171/1000
600/600 [=====] - ETA: 0s - loss: 107.0906 - reconstruction_error: 55.3935 - regularization_error: 51.6972
[2023-11-30 12:45:04.272436]: Generating fixed images for epoch 171 ...



[2023-11-30 12:45:05.194931]: Generating random images for epoch 171 ...



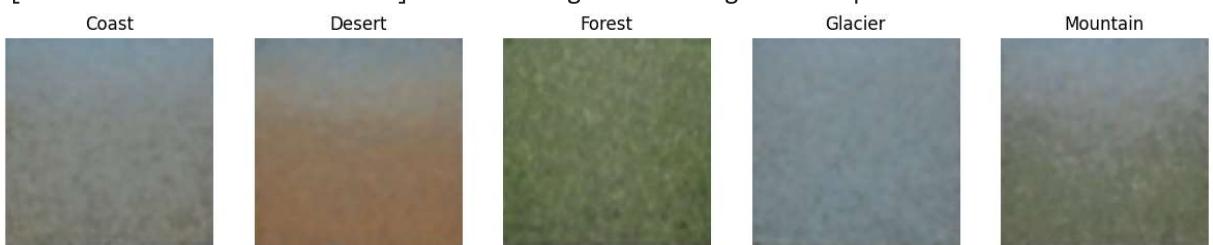
600/600 [=====] - 78s 129ms/step - loss: 107.0906 - reconstruction_error: 55.3935 - regularization_error: 51.6972 - val_loss: 243.6891 - val_reconstruction_error: 196.0376 - val_regularization_error: 47.6514
Epoch 172/1000
600/600 [=====] - 76s 126ms/step - loss: 107.3082 - reconstruction_error: 55.5686 - regularization_error: 51.7396 - val_loss: 244.2560 - val_reconstruction_error: 193.9810 - val_regularization_error: 50.2749
Epoch 173/1000
600/600 [=====] - 76s 127ms/step - loss: 107.1023 - reconstruction_error: 55.2879 - regularization_error: 51.8144 - val_loss: 244.8726 - val_reconstruction_error: 192.6126 - val_regularization_error: 52.2600
Epoch 174/1000
600/600 [=====] - 68s 113ms/step - loss: 107.1609 - reconstruction_error: 55.3441 - regularization_error: 51.8169 - val_loss: 242.5059 - val_reconstruction_error: 195.3391 - val_regularization_error: 47.1668
Epoch 175/1000
600/600 [=====] - 74s 122ms/step - loss: 106.7543 - reconstruction_error: 55.1535 - regularization_error: 51.6007 - val_loss: 244.0311 - val_reconstruction_error: 193.4012 - val_regularization_error: 50.6298
Epoch 176/1000
600/600 [=====] - 71s 118ms/step - loss: 106.8921 - reconstruction_error: 55.2154 - regularization_error: 51.6767 - val_loss: 243.2722 - val_reconstruction_error: 192.1945 - val_regularization_error: 51.0776
Epoch 177/1000
600/600 [=====] - 79s 130ms/step - loss: 106.9505 - reconstruction_error: 55.1945 - regularization_error: 51.7561 - val_loss: 242.7551 - val_reconstruction_error: 191.0086 - val_regularization_error: 51.7465
Epoch 178/1000
600/600 [=====] - 70s 116ms/step - loss: 106.5187 - reconstruction_error: 54.9587 - regularization_error: 51.5599 - val_loss: 243.0275 - val_reconstruction_error: 191.4032 - val_regularization_error: 51.6243
Epoch 179/1000
600/600 [=====] - 74s 123ms/step - loss: 106.5861 - reconstruction_error: 55.0052 - regularization_error: 51.5809 - val_loss: 244.4654 - val_reconstruction_error: 194.2675 - val_regularization_error: 50.1979
Epoch 180/1000
600/600 [=====] - 76s 126ms/step - loss: 106.5295 - reconstruction_error: 54.8626 - regularization_error: 51.6670 - val_loss: 246.1183 - val_reconstruction_error: 196.2134 - val_regularization_error: 49.9048
Epoch 181/1000
600/600 [=====] - ETA: 0s - loss: 106.3487 - reconstruction_error: 54.7957 - regularization_error: 51.5531
[2023-11-30 12:57:25.251461]: Generating fixed images for epoch 181 ...



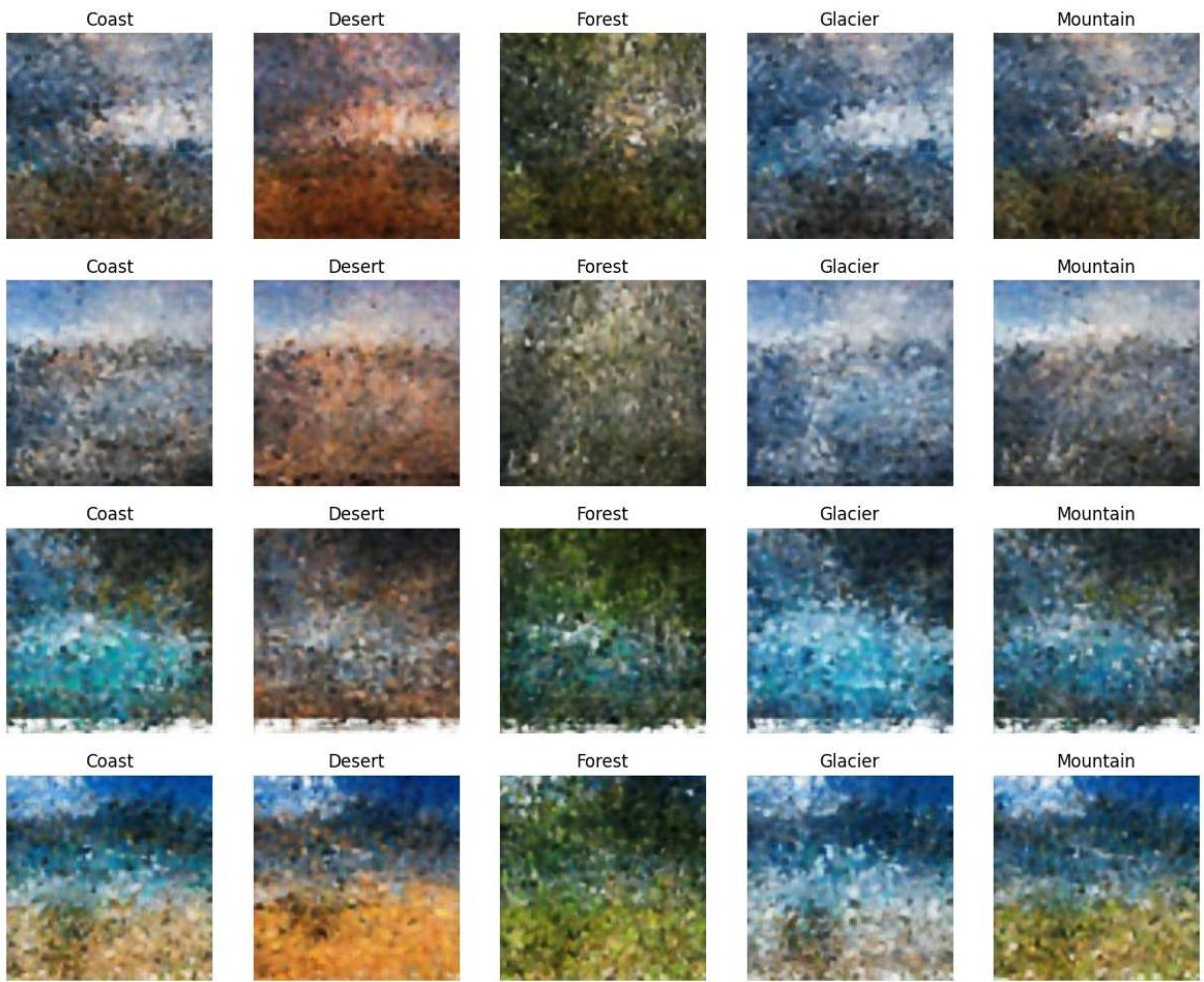
[2023-11-30 12:57:26.448900]: Generating random images for epoch 181 ...



600/600 [=====] - 76s 127ms/step - loss: 106.3487 - reconstruction_error: 54.7957 - regularization_error: 51.5531 - val_loss: 243.6194 - val_reconstruction_error: 194.8680 - val_regularization_error: 48.7514
Epoch 182/1000
600/600 [=====] - 71s 119ms/step - loss: 106.2981 - reconstruction_error: 54.6908 - regularization_error: 51.6073 - val_loss: 245.7630 - val_reconstruction_error: 194.7154 - val_regularization_error: 51.0476
Epoch 183/1000
600/600 [=====] - 75s 125ms/step - loss: 106.0613 - reconstruction_error: 54.5943 - regularization_error: 51.4670 - val_loss: 242.5627 - val_reconstruction_error: 193.3064 - val_regularization_error: 49.2563
Epoch 184/1000
600/600 [=====] - 73s 121ms/step - loss: 106.1662 - reconstruction_error: 54.6634 - regularization_error: 51.5027 - val_loss: 241.9836 - val_reconstruction_error: 192.7466 - val_regularization_error: 49.2370
Epoch 185/1000
600/600 [=====] - 79s 132ms/step - loss: 105.9634 - reconstruction_error: 54.4926 - regularization_error: 51.4708 - val_loss: 241.9083 - val_reconstruction_error: 193.0532 - val_regularization_error: 48.8552
Epoch 186/1000
600/600 [=====] - 73s 122ms/step - loss: 106.0264 - reconstruction_error: 54.5598 - regularization_error: 51.4665 - val_loss: 241.6145 - val_reconstruction_error: 191.8436 - val_regularization_error: 49.7709
Epoch 187/1000
600/600 [=====] - 79s 131ms/step - loss: 106.1277 - reconstruction_error: 54.5901 - regularization_error: 51.5376 - val_loss: 246.5776 - val_reconstruction_error: 197.1658 - val_regularization_error: 49.4119
Epoch 188/1000
600/600 [=====] - 76s 126ms/step - loss: 105.9071 - reconstruction_error: 54.3855 - regularization_error: 51.5216 - val_loss: 242.5937 - val_reconstruction_error: 191.3805 - val_regularization_error: 51.2132
Epoch 189/1000
600/600 [=====] - 75s 124ms/step - loss: 105.7942 - reconstruction_error: 54.2780 - regularization_error: 51.5162 - val_loss: 246.1629 - val_reconstruction_error: 193.1481 - val_regularization_error: 53.0148
Epoch 190/1000
600/600 [=====] - 69s 114ms/step - loss: 105.7805 - reconstruction_error: 54.2600 - regularization_error: 51.5205 - val_loss: 244.4717 - val_reconstruction_error: 193.6743 - val_regularization_error: 50.7975
Epoch 191/1000
600/600 [=====] - ETA: 0s - loss: 105.7344 - reconstruction_error: 54.3391 - regularization_error: 51.3953
[2023-11-30 13:09:59.223104]: Generating fixed images for epoch 191 ...



[2023-11-30 13:10:00.430679]: Generating random images for epoch 191 ...



600/600 [=====] - 82s 136ms/step - loss: 105.7344 - reconstruction_error: 54.3391 - regularization_error: 51.3953 - val_loss: 242.9251 - val_reconstruction_error: 193.8634 - val_regularization_error: 49.0617
Epoch 192/1000
600/600 [=====] - 74s 124ms/step - loss: 105.6297 - reconstruction_error: 54.2054 - regularization_error: 51.4242 - val_loss: 244.9500 - val_reconstruction_error: 196.7359 - val_regularization_error: 48.2141
Epoch 193/1000
600/600 [=====] - 71s 117ms/step - loss: 105.6821 - reconstruction_error: 54.2273 - regularization_error: 51.4548 - val_loss: 244.9210 - val_reconstruction_error: 193.8598 - val_regularization_error: 51.0612
Epoch 194/1000
600/600 [=====] - 76s 125ms/step - loss: 105.3654 - reconstruction_error: 54.0274 - regularization_error: 51.3379 - val_loss: 248.7158 - val_reconstruction_error: 196.3318 - val_regularization_error: 52.3840
Epoch 195/1000
600/600 [=====] - 67s 111ms/step - loss: 105.3504 - reconstruction_error: 54.0707 - regularization_error: 51.2796 - val_loss: 244.4897 - val_reconstruction_error: 195.3442 - val_regularization_error: 49.1455
Epoch 196/1000
600/600 [=====] - 65s 109ms/step - loss: 105.1504 - reconstruction_error: 53.8490 - regularization_error: 51.3014 - val_loss: 248.8375 - val_reconstruction_error: 197.8284 - val_regularization_error: 51.0091
Epoch 197/1000
600/600 [=====] - 70s 116ms/step - loss: 105.4630 - reconstruction_error: 53.9764 - regularization_error: 51.4866 - val_loss: 247.5888 - val_reconstruction_error: 194.7112 - val_regularization_error: 52.8776
Epoch 198/1000
600/600 [=====] - 73s 120ms/step - loss: 105.1919 - reconstruction_error: 53.8887 - regularization_error: 51.3032 - val_loss: 247.3996 - val_reconstruction_error: 196.2641 - val_regularization_error: 51.1356
Epoch 199/1000
600/600 [=====] - 78s 130ms/step - loss: 104.9679 - reconstruction_error: 53.7443 - regularization_error: 51.2236 - val_loss: 245.0758 - val_reconstruction_error: 193.6906 - val_regularization_error: 51.3852
Epoch 200/1000
600/600 [=====] - 77s 128ms/step - loss: 105.0276 - reconstruction_error: 53.6982 - regularization_error: 51.3295 - val_loss: 245.7520 - val_reconstruction_error: 196.1907 - val_regularization_error: 49.5612
Epoch 201/1000
600/600 [=====] - ETA: 0s - loss: 105.2528 - reconstruction_error: 53.8413 - regularization_error: 51.4115
[2023-11-30 13:22:09.282481]: Generating fixed images for epoch 201 ...



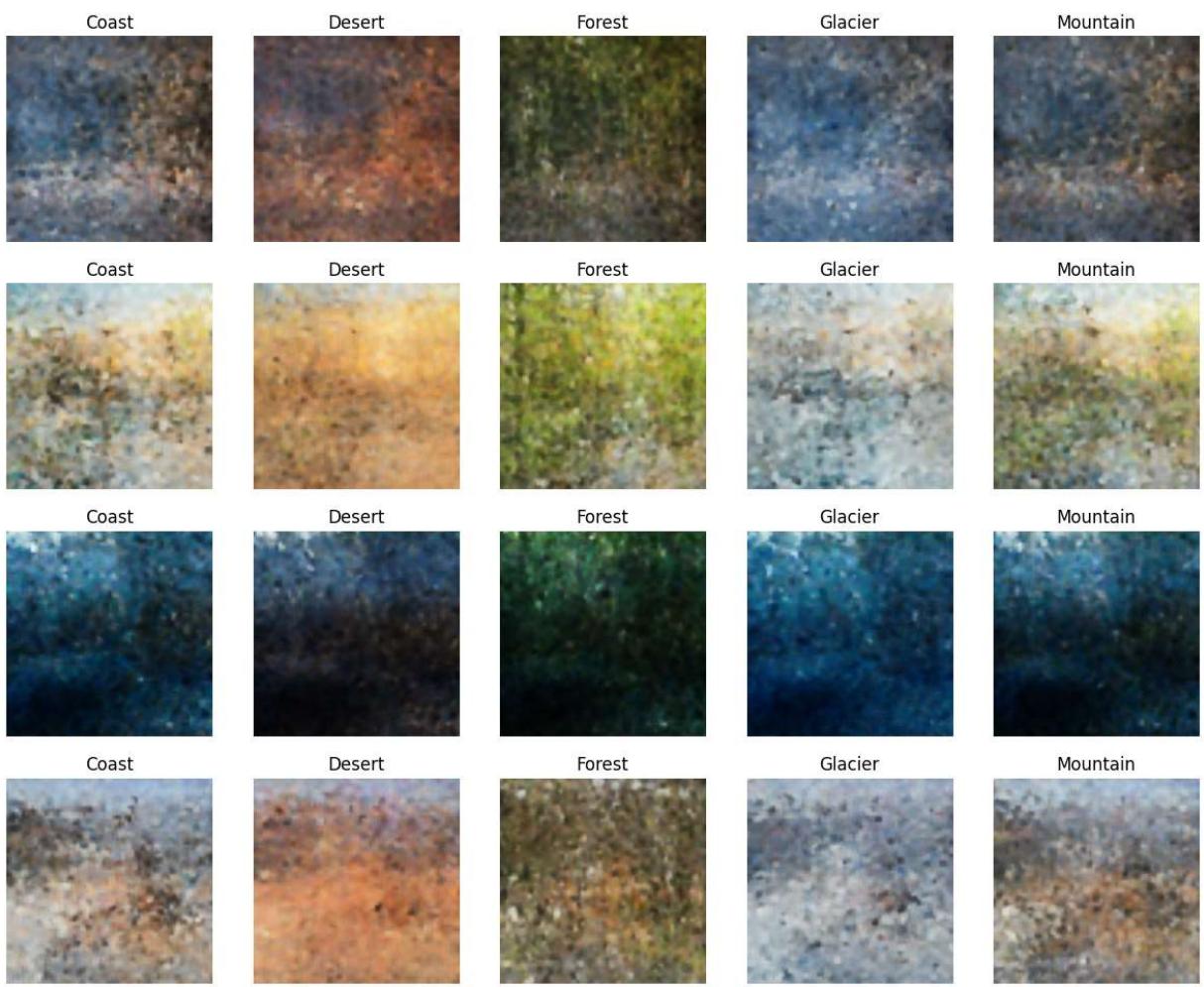
[2023-11-30 13:22:10.353654]: Generating random images for epoch 201 ...



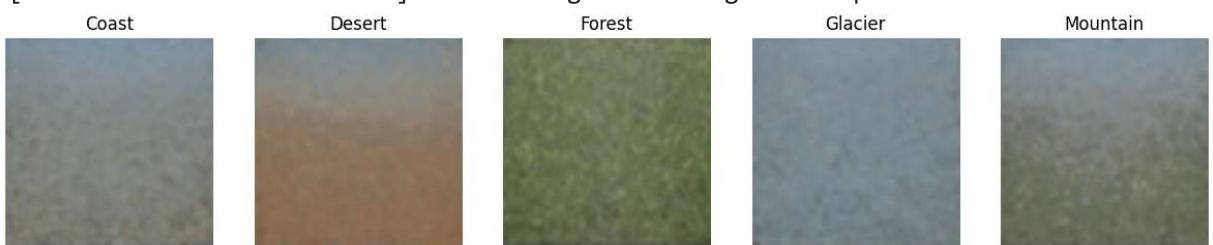
600/600 [=====] - 77s 127ms/step - loss: 105.2528 - reconstruction_error: 53.8413 - regularization_error: 51.4115 - val_loss: 244.9985 - val_reconstruction_error: 194.2645 - val_regularization_error: 50.7341
Epoch 202/1000
600/600 [=====] - 74s 123ms/step - loss: 104.8794 - reconstruction_error: 53.5852 - regularization_error: 51.2942 - val_loss: 247.2385 - val_reconstruction_error: 194.6001 - val_regularization_error: 52.6384
Epoch 203/1000
600/600 [=====] - 71s 118ms/step - loss: 104.6819 - reconstruction_error: 53.5372 - regularization_error: 51.1447 - val_loss: 243.6438 - val_reconstruction_error: 192.8244 - val_regularization_error: 50.8193
Epoch 204/1000
600/600 [=====] - 76s 127ms/step - loss: 105.0277 - reconstruction_error: 53.7075 - regularization_error: 51.3202 - val_loss: 249.9930 - val_reconstruction_error: 197.9071 - val_regularization_error: 52.0859
Epoch 205/1000
600/600 [=====] - 67s 111ms/step - loss: 104.7111 - reconstruction_error: 53.4190 - regularization_error: 51.2920 - val_loss: 249.5959 - val_reconstruction_error: 195.6720 - val_regularization_error: 53.9239
Epoch 206/1000
600/600 [=====] - 75s 125ms/step - loss: 105.0180 - reconstruction_error: 53.7317 - regularization_error: 51.2863 - val_loss: 246.5141 - val_reconstruction_error: 195.0055 - val_regularization_error: 51.5086
Epoch 207/1000
600/600 [=====] - 73s 122ms/step - loss: 104.6924 - reconstruction_error: 53.4949 - regularization_error: 51.1975 - val_loss: 248.0243 - val_reconstruction_error: 199.2024 - val_regularization_error: 48.8218
Epoch 208/1000
600/600 [=====] - 80s 132ms/step - loss: 104.5453 - reconstruction_error: 53.3058 - regularization_error: 51.2395 - val_loss: 244.9594 - val_reconstruction_error: 195.0196 - val_regularization_error: 49.9397
Epoch 209/1000
600/600 [=====] - 82s 137ms/step - loss: 104.4691 - reconstruction_error: 53.2426 - regularization_error: 51.2265 - val_loss: 243.8942 - val_reconstruction_error: 193.3448 - val_regularization_error: 50.5495
Epoch 210/1000
600/600 [=====] - 76s 125ms/step - loss: 104.3652 - reconstruction_error: 53.2630 - regularization_error: 51.1022 - val_loss: 244.9846 - val_reconstruction_error: 196.7060 - val_regularization_error: 48.2786
Epoch 211/1000
600/600 [=====] - ETA: 0s - loss: 104.3630 - reconstruction_error: 53.1760 - regularization_error: 51.1870
[2023-11-30 13:34:46.562020]: Generating fixed images for epoch 211 ...



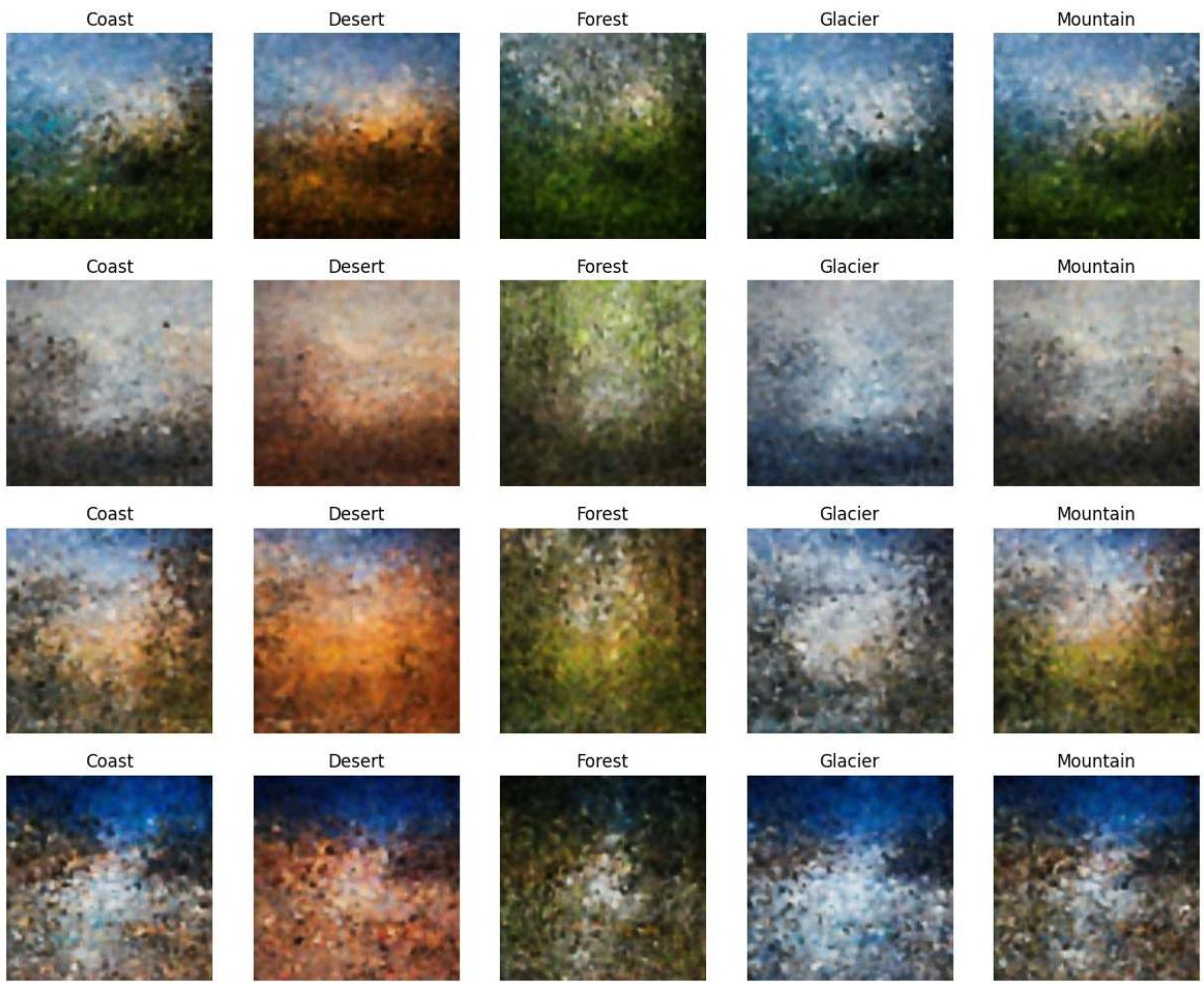
[2023-11-30 13:34:47.331060]: Generating random images for epoch 211 ...



600/600 [=====] - 80s 133ms/step - loss: 104.3630 - reconstruction_error: 53.1760 - regularization_error: 51.1870 - val_loss: 245.7806 - val_reconstruction_error: 194.8407 - val_regularization_error: 50.9400
Epoch 212/1000
600/600 [=====] - 70s 117ms/step - loss: 104.1528 - reconstruction_error: 53.1197 - regularization_error: 51.0330 - val_loss: 244.0354 - val_reconstruction_error: 193.6198 - val_regularization_error: 50.4156
Epoch 213/1000
600/600 [=====] - 79s 131ms/step - loss: 104.2857 - reconstruction_error: 53.1185 - regularization_error: 51.1672 - val_loss: 246.9822 - val_reconstruction_error: 198.6240 - val_regularization_error: 48.3583
Epoch 214/1000
600/600 [=====] - 75s 125ms/step - loss: 104.0145 - reconstruction_error: 52.9195 - regularization_error: 51.0950 - val_loss: 245.8375 - val_reconstruction_error: 198.8347 - val_regularization_error: 47.0029
Epoch 215/1000
600/600 [=====] - 80s 132ms/step - loss: 104.2172 - reconstruction_error: 53.1386 - regularization_error: 51.0786 - val_loss: 244.3157 - val_reconstruction_error: 196.5952 - val_regularization_error: 47.7204
Epoch 216/1000
600/600 [=====] - 80s 132ms/step - loss: 103.8835 - reconstruction_error: 52.8270 - regularization_error: 51.0564 - val_loss: 245.5791 - val_reconstruction_error: 197.3761 - val_regularization_error: 48.2031
Epoch 217/1000
600/600 [=====] - 78s 130ms/step - loss: 104.0360 - reconstruction_error: 52.9033 - regularization_error: 51.1328 - val_loss: 247.2863 - val_reconstruction_error: 195.1101 - val_regularization_error: 52.1761
Epoch 218/1000
600/600 [=====] - 79s 132ms/step - loss: 103.7157 - reconstruction_error: 52.7502 - regularization_error: 50.9655 - val_loss: 245.6931 - val_reconstruction_error: 196.4926 - val_regularization_error: 49.2004
Epoch 219/1000
600/600 [=====] - 73s 120ms/step - loss: 103.6911 - reconstruction_error: 52.7074 - regularization_error: 50.9837 - val_loss: 245.4449 - val_reconstruction_error: 192.3370 - val_regularization_error: 53.1079
Epoch 220/1000
600/600 [=====] - 74s 122ms/step - loss: 103.9220 - reconstruction_error: 52.8459 - regularization_error: 51.0762 - val_loss: 247.2288 - val_reconstruction_error: 195.6514 - val_regularization_error: 51.5773
Epoch 221/1000
600/600 [=====] - ETA: 0s - loss: 103.7627 - reconstruction_error: 52.7906 - regularization_error: 50.9721
[2023-11-30 13:47:24.907611]: Generating fixed images for epoch 221 ...



[2023-11-30 13:47:25.790365]: Generating random images for epoch 221 ...



600/600 [=====] - 70s 116ms/step - loss: 103.7627 - reconstruction_error: 52.7906 - regularization_error: 50.9721 - val_loss: 244.3697 - val_reconstruction_error: 196.8307 - val_regularization_error: 47.5390
Epoch 222/1000
600/600 [=====] - 78s 129ms/step - loss: 103.8432 - reconstruction_error: 52.7979 - regularization_error: 51.0452 - val_loss: 246.0819 - val_reconstruction_error: 198.2396 - val_regularization_error: 47.8423
Epoch 223/1000
600/600 [=====] - 75s 124ms/step - loss: 103.7464 - reconstruction_error: 52.7018 - regularization_error: 51.0445 - val_loss: 249.5546 - val_reconstruction_error: 197.4672 - val_regularization_error: 52.0874
Epoch 224/1000
600/600 [=====] - 83s 138ms/step - loss: 103.6838 - reconstruction_error: 52.6702 - regularization_error: 51.0136 - val_loss: 251.3621 - val_reconstruction_error: 198.9546 - val_regularization_error: 52.4076
Epoch 225/1000
600/600 [=====] - 74s 123ms/step - loss: 103.3591 - reconstruction_error: 52.4687 - regularization_error: 50.8904 - val_loss: 245.8249 - val_reconstruction_error: 196.2826 - val_regularization_error: 49.5424
Epoch 226/1000
600/600 [=====] - 75s 124ms/step - loss: 103.3463 - reconstruction_error: 52.5011 - regularization_error: 50.8453 - val_loss: 246.8703 - val_reconstruction_error: 195.2502 - val_regularization_error: 51.6202
Epoch 227/1000
600/600 [=====] - 73s 122ms/step - loss: 103.4939 - reconstruction_error: 52.5089 - regularization_error: 50.9849 - val_loss: 248.8400 - val_reconstruction_error: 197.6179 - val_regularization_error: 51.2221
Epoch 228/1000
600/600 [=====] - 77s 129ms/step - loss: 103.7781 - reconstruction_error: 52.7360 - regularization_error: 51.0422 - val_loss: 247.5262 - val_reconstruction_error: 194.7879 - val_regularization_error: 52.7384
Epoch 229/1000
600/600 [=====] - 74s 123ms/step - loss: 103.1843 - reconstruction_error: 52.3208 - regularization_error: 50.8635 - val_loss: 246.5587 - val_reconstruction_error: 197.8014 - val_regularization_error: 48.7573
Epoch 230/1000
600/600 [=====] - 81s 135ms/step - loss: 103.3411 - reconstruction_error: 52.4395 - regularization_error: 50.9015 - val_loss: 245.3184 - val_reconstruction_error: 197.1533 - val_regularization_error: 48.1650
Epoch 231/1000
600/600 [=====] - ETA: 0s - loss: 103.0172 - reconstruction_error: 52.2176 - regularization_error: 50.7995
[2023-11-30 14:00:28.139189]: Generating fixed images for epoch 231 ...



[2023-11-30 14:00:29.414487]: Generating random images for epoch 231 ...



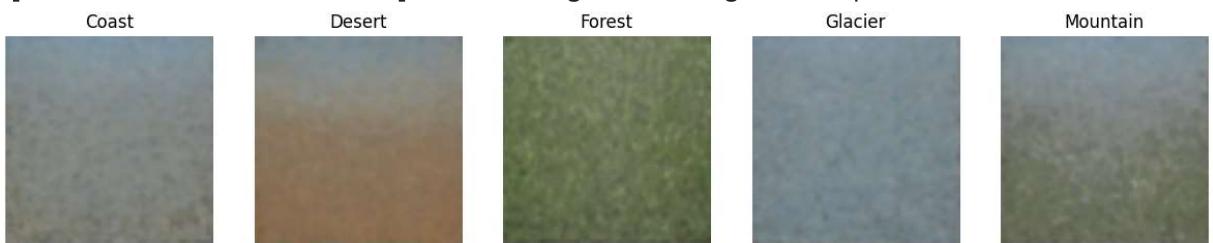
600/600 [=====] - 84s 139ms/step - loss: 103.0172 - reconstruction_error: 52.2176 - regularization_error: 50.7995 - val_loss: 244.5194 - val_reconstruction_error: 197.9650 - val_regularization_error: 46.5544
Epoch 232/1000
600/600 [=====] - 79s 131ms/step - loss: 103.5169 - reconstruction_error: 52.5508 - regularization_error: 50.9662 - val_loss: 245.1399 - val_reconstruction_error: 196.9664 - val_regularization_error: 48.1735
Epoch 233/1000
600/600 [=====] - 74s 124ms/step - loss: 103.1449 - reconstruction_error: 52.2378 - regularization_error: 50.9071 - val_loss: 249.2352 - val_reconstruction_error: 197.8850 - val_regularization_error: 51.3501
Epoch 234/1000
600/600 [=====] - 81s 135ms/step - loss: 103.2210 - reconstruction_error: 52.3682 - regularization_error: 50.8527 - val_loss: 244.4989 - val_reconstruction_error: 195.3186 - val_regularization_error: 49.1803
Epoch 235/1000
600/600 [=====] - 74s 123ms/step - loss: 102.6418 - reconstruction_error: 51.9736 - regularization_error: 50.6683 - val_loss: 246.9317 - val_reconstruction_error: 199.1922 - val_regularization_error: 47.7395
Epoch 236/1000
600/600 [=====] - 81s 134ms/step - loss: 102.8068 - reconstruction_error: 52.1052 - regularization_error: 50.7017 - val_loss: 245.7411 - val_reconstruction_error: 192.9935 - val_regularization_error: 52.7476
Epoch 237/1000
600/600 [=====] - 70s 117ms/step - loss: 102.7549 - reconstruction_error: 52.0090 - regularization_error: 50.7459 - val_loss: 246.9405 - val_reconstruction_error: 198.5696 - val_regularization_error: 48.3709
Epoch 238/1000
600/600 [=====] - 73s 122ms/step - loss: 102.7194 - reconstruction_error: 52.0135 - regularization_error: 50.7061 - val_loss: 249.0183 - val_reconstruction_error: 197.8496 - val_regularization_error: 51.1688
Epoch 239/1000
600/600 [=====] - 76s 126ms/step - loss: 102.8271 - reconstruction_error: 52.0039 - regularization_error: 50.8232 - val_loss: 245.9223 - val_reconstruction_error: 198.1442 - val_regularization_error: 47.7781
Epoch 240/1000
600/600 [=====] - 85s 141ms/step - loss: 102.8188 - reconstruction_error: 52.0110 - regularization_error: 50.8078 - val_loss: 244.3489 - val_reconstruction_error: 196.7482 - val_regularization_error: 47.6008
Epoch 241/1000
600/600 [=====] - ETA: 0s - loss: 102.8337 - reconstruction_error: 52.0527 - regularization_error: 50.7811
[2023-11-30 14:13:27.635454]: Generating fixed images for epoch 241 ...



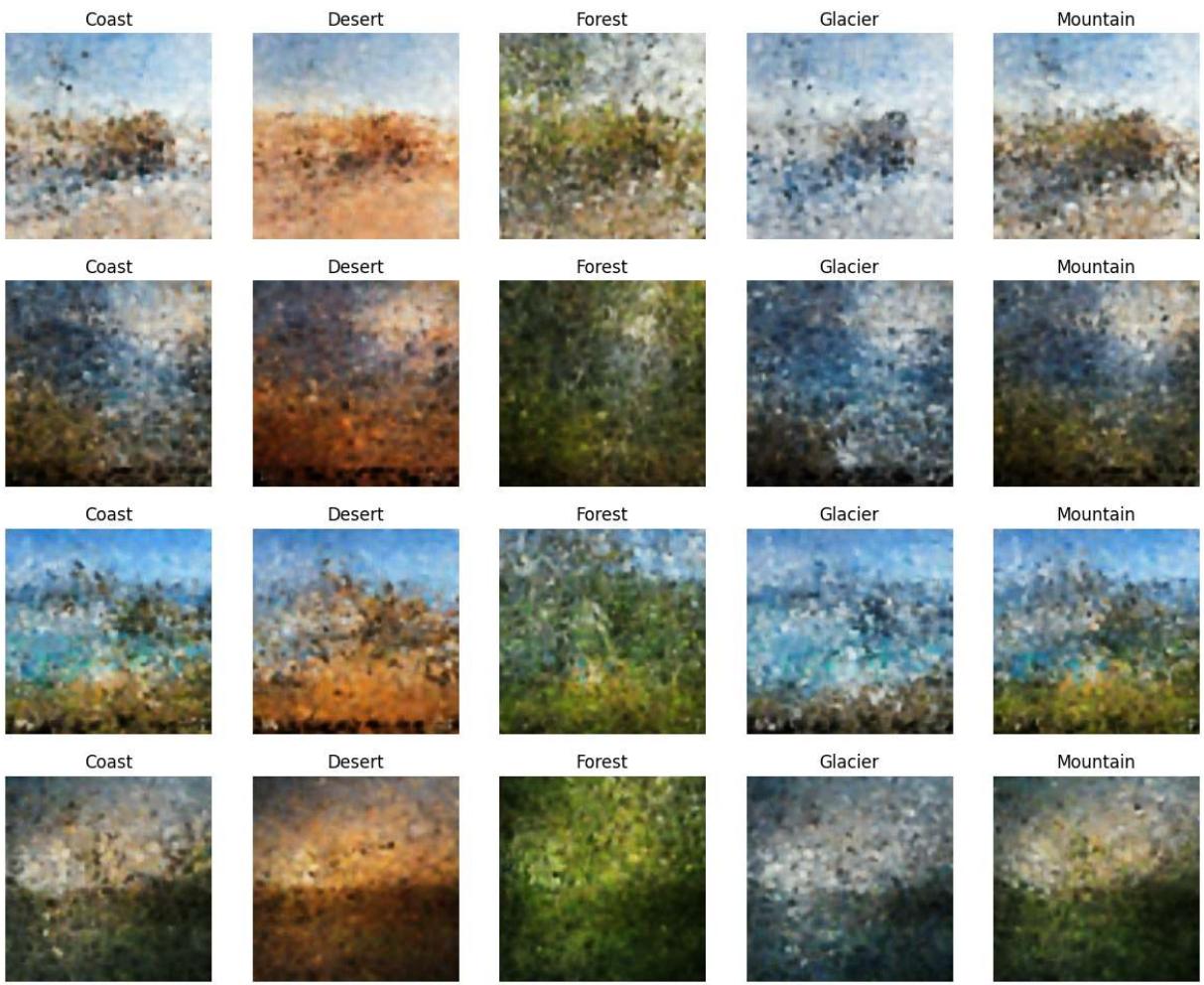
[2023-11-30 14:13:28.455120]: Generating random images for epoch 241 ...



600/600 [=====] - 82s 137ms/step - loss: 102.8337 - reconstruction_error: 52.0527 - regularization_error: 50.7811 - val_loss: 248.2739 - val_reconstruction_error: 197.1852 - val_regularization_error: 51.0886
Epoch 242/1000
600/600 [=====] - 77s 129ms/step - loss: 102.3926 - reconstruction_error: 51.8030 - regularization_error: 50.5896 - val_loss: 245.7652 - val_reconstruction_error: 197.4288 - val_regularization_error: 48.3363
Epoch 243/1000
600/600 [=====] - 73s 121ms/step - loss: 102.5914 - reconstruction_error: 51.8564 - regularization_error: 50.7350 - val_loss: 244.3659 - val_reconstruction_error: 195.7449 - val_regularization_error: 48.6210
Epoch 244/1000
600/600 [=====] - 76s 126ms/step - loss: 102.2292 - reconstruction_error: 51.5858 - regularization_error: 50.6434 - val_loss: 245.3782 - val_reconstruction_error: 196.4693 - val_regularization_error: 48.9088
Epoch 245/1000
600/600 [=====] - 76s 125ms/step - loss: 102.4119 - reconstruction_error: 51.7921 - regularization_error: 50.6198 - val_loss: 250.6109 - val_reconstruction_error: 200.2037 - val_regularization_error: 50.4073
Epoch 246/1000
600/600 [=====] - 82s 136ms/step - loss: 102.5628 - reconstruction_error: 51.8400 - regularization_error: 50.7228 - val_loss: 244.8247 - val_reconstruction_error: 196.0416 - val_regularization_error: 48.7830
Epoch 247/1000
600/600 [=====] - 78s 130ms/step - loss: 102.3298 - reconstruction_error: 51.6855 - regularization_error: 50.6442 - val_loss: 247.0306 - val_reconstruction_error: 197.4443 - val_regularization_error: 49.5864
Epoch 248/1000
600/600 [=====] - 78s 129ms/step - loss: 102.2836 - reconstruction_error: 51.6487 - regularization_error: 50.6349 - val_loss: 246.4675 - val_reconstruction_error: 195.8578 - val_regularization_error: 50.6097
Epoch 249/1000
600/600 [=====] - 78s 129ms/step - loss: 102.4345 - reconstruction_error: 51.6579 - regularization_error: 50.7766 - val_loss: 245.8668 - val_reconstruction_error: 195.7036 - val_regularization_error: 50.1632
Epoch 250/1000
600/600 [=====] - 78s 130ms/step - loss: 102.1463 - reconstruction_error: 51.5123 - regularization_error: 50.6341 - val_loss: 247.3190 - val_reconstruction_error: 199.3155 - val_regularization_error: 48.0034
Epoch 251/1000
600/600 [=====] - ETA: 0s - loss: 102.3071 - reconstruction_error: 51.5816 - regularization_error: 50.7255
[2023-11-30 14:26:24.979319]: Generating fixed images for epoch 251 ...



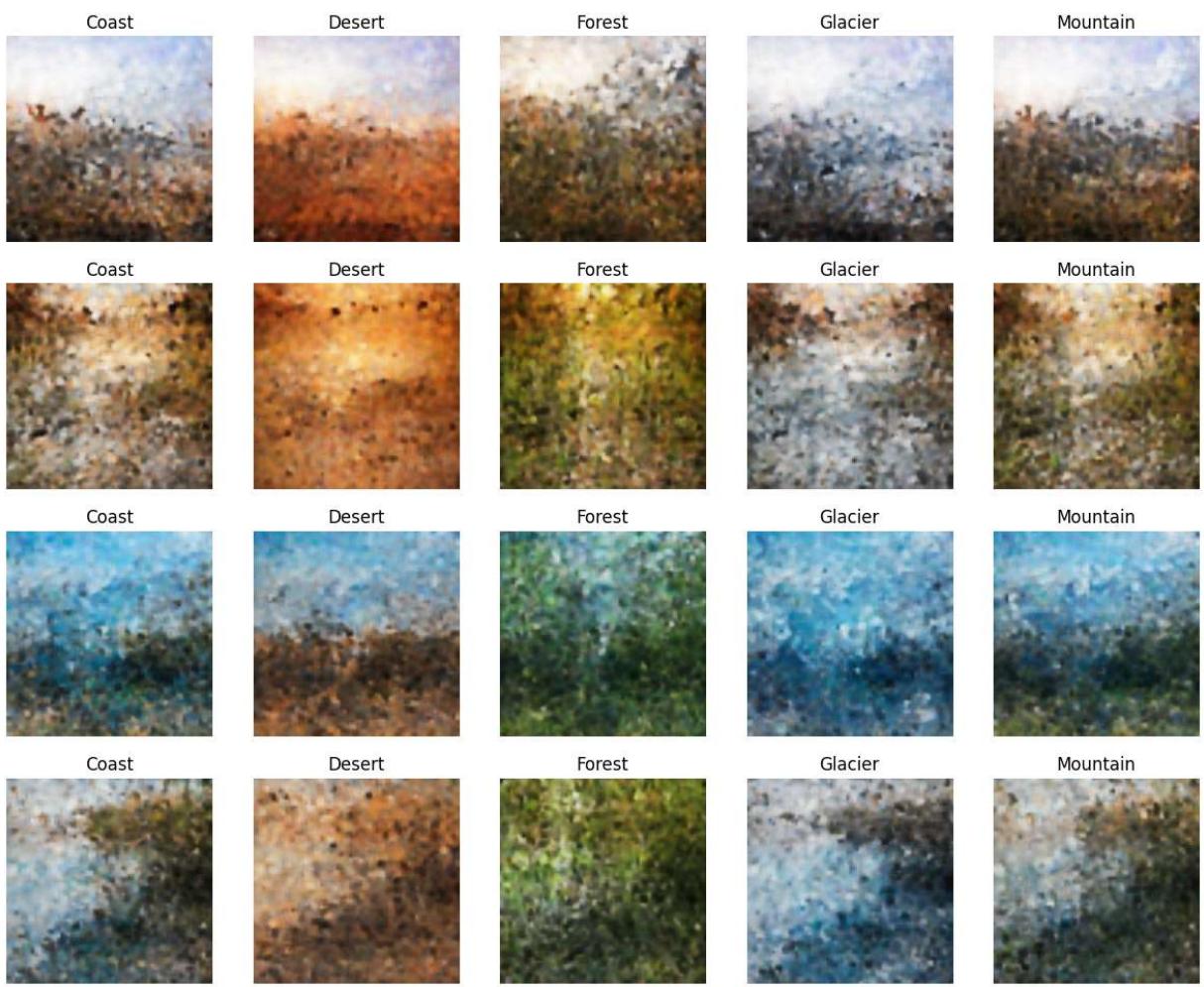
[2023-11-30 14:26:26.438734]: Generating random images for epoch 251 ...



600/600 [=====] - 81s 135ms/step - loss: 102.3071 - reconstruction_error: 51.5816 - regularization_error: 50.7255 - val_loss: 247.0862 - val_reconstruction_error: 196.4522 - val_regularization_error: 50.6339
Epoch 252/1000
600/600 [=====] - 77s 128ms/step - loss: 101.8961 - reconstruction_error: 51.3208 - regularization_error: 50.5753 - val_loss: 246.6555 - val_reconstruction_error: 198.3332 - val_regularization_error: 48.3223
Epoch 253/1000
600/600 [=====] - 79s 130ms/step - loss: 102.1698 - reconstruction_error: 51.5387 - regularization_error: 50.6311 - val_loss: 246.7805 - val_reconstruction_error: 197.8644 - val_regularization_error: 48.9161
Epoch 254/1000
600/600 [=====] - 81s 135ms/step - loss: 102.0741 - reconstruction_error: 51.4296 - regularization_error: 50.6445 - val_loss: 247.3635 - val_reconstruction_error: 196.4926 - val_regularization_error: 50.8709
Epoch 255/1000
600/600 [=====] - 73s 121ms/step - loss: 101.8824 - reconstruction_error: 51.3392 - regularization_error: 50.5433 - val_loss: 244.2129 - val_reconstruction_error: 196.1053 - val_regularization_error: 48.1076
Epoch 256/1000
600/600 [=====] - 66s 109ms/step - loss: 101.7180 - reconstruction_error: 51.2006 - regularization_error: 50.5174 - val_loss: 244.6361 - val_reconstruction_error: 196.8197 - val_regularization_error: 47.8163
Epoch 257/1000
600/600 [=====] - 75s 125ms/step - loss: 101.7437 - reconstruction_error: 51.2591 - regularization_error: 50.4845 - val_loss: 247.2327 - val_reconstruction_error: 197.9932 - val_regularization_error: 49.2394
Epoch 258/1000
600/600 [=====] - 72s 119ms/step - loss: 101.9612 - reconstruction_error: 51.4545 - regularization_error: 50.5067 - val_loss: 247.8687 - val_reconstruction_error: 197.8365 - val_regularization_error: 50.0322
Epoch 259/1000
600/600 [=====] - 75s 124ms/step - loss: 101.6180 - reconstruction_error: 51.1766 - regularization_error: 50.4413 - val_loss: 248.5942 - val_reconstruction_error: 200.0039 - val_regularization_error: 48.5904
Epoch 260/1000
600/600 [=====] - 73s 121ms/step - loss: 101.5628 - reconstruction_error: 51.0924 - regularization_error: 50.4704 - val_loss: 247.7346 - val_reconstruction_error: 196.5843 - val_regularization_error: 51.1503
Epoch 261/1000
600/600 [=====] - ETA: 0s - loss: 101.6507 - reconstruction_error: 51.2064 - regularization_error: 50.4443
[2023-11-30 14:38:54.762616]: Generating fixed images for epoch 261 ...



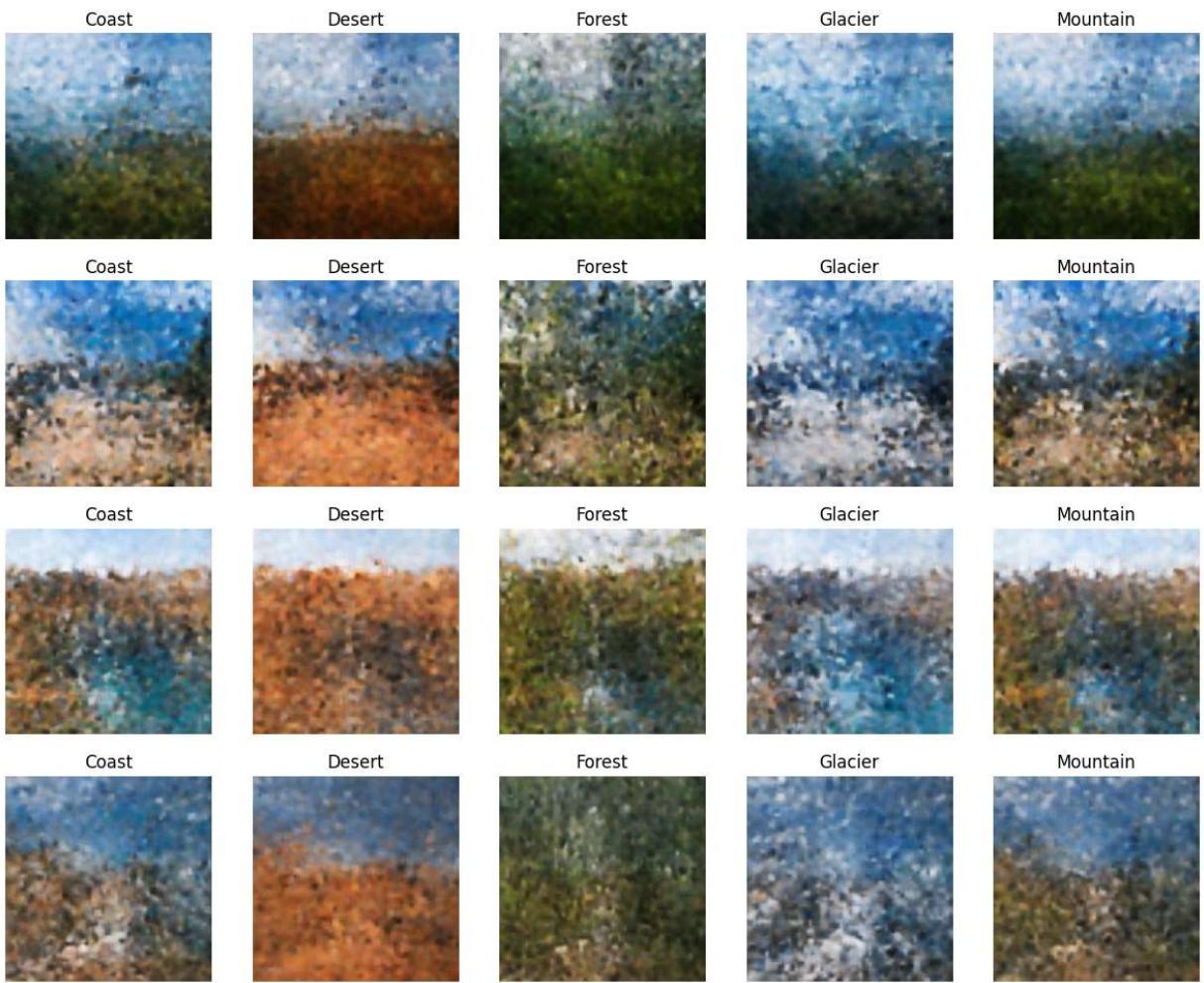
[2023-11-30 14:38:55.532388]: Generating random images for epoch 261 ...



600/600 [=====] - 77s 128ms/step - loss: 101.6507 - reconstruction_error: 51.2064 - regularization_error: 50.4443 - val_loss: 249.2207 - val_reconstruction_error: 198.6468 - val_regularization_error: 50.5739
Epoch 262/1000
600/600 [=====] - 71s 119ms/step - loss: 101.8245 - reconstruction_error: 51.2353 - regularization_error: 50.5892 - val_loss: 251.3502 - val_reconstruction_error: 200.5842 - val_regularization_error: 50.7660
Epoch 263/1000
600/600 [=====] - 71s 118ms/step - loss: 101.7077 - reconstruction_error: 51.1510 - regularization_error: 50.5566 - val_loss: 245.4827 - val_reconstruction_error: 194.9570 - val_regularization_error: 50.5257
Epoch 264/1000
600/600 [=====] - 77s 128ms/step - loss: 101.5099 - reconstruction_error: 51.0260 - regularization_error: 50.4838 - val_loss: 249.2862 - val_reconstruction_error: 200.3819 - val_regularization_error: 48.9044
Epoch 265/1000
600/600 [=====] - 74s 123ms/step - loss: 101.4523 - reconstruction_error: 50.9926 - regularization_error: 50.4597 - val_loss: 246.8831 - val_reconstruction_error: 198.0575 - val_regularization_error: 48.8255
Epoch 266/1000
600/600 [=====] - 81s 135ms/step - loss: 101.3226 - reconstruction_error: 50.8782 - regularization_error: 50.4444 - val_loss: 249.1405 - val_reconstruction_error: 199.1395 - val_regularization_error: 50.0010
Epoch 267/1000
600/600 [=====] - 75s 125ms/step - loss: 101.4368 - reconstruction_error: 51.0297 - regularization_error: 50.4071 - val_loss: 249.7439 - val_reconstruction_error: 201.5240 - val_regularization_error: 48.2198
Epoch 268/1000
600/600 [=====] - 74s 123ms/step - loss: 101.3914 - reconstruction_error: 50.9784 - regularization_error: 50.4129 - val_loss: 245.2221 - val_reconstruction_error: 198.6897 - val_regularization_error: 46.5324
Epoch 269/1000
600/600 [=====] - 77s 127ms/step - loss: 101.3981 - reconstruction_error: 50.9436 - regularization_error: 50.4545 - val_loss: 246.7025 - val_reconstruction_error: 197.6225 - val_regularization_error: 49.0800
Epoch 270/1000
600/600 [=====] - 76s 127ms/step - loss: 101.2610 - reconstruction_error: 50.8159 - regularization_error: 50.4451 - val_loss: 245.5945 - val_reconstruction_error: 198.9033 - val_regularization_error: 46.6912
Epoch 271/1000
600/600 [=====] - ETA: 0s - loss: 101.2442 - reconstruction_error: 50.8804 - regularization_error: 50.3638
[2023-11-30 14:51:32.422765]: Generating fixed images for epoch 271 ...



[2023-11-30 14:51:33.264371]: Generating random images for epoch 271 ...



```
600/600 [=====] - 80s 133ms/step - loss: 101.2442 - reconstruction_error: 50.8804 - regularization_error: 50.3638 - val_loss: 247.4485 - val_reconstruction_error: 197.8761 - val_regularization_error: 49.5724
Epoch 272/1000
600/600 [=====] - 74s 123ms/step - loss: 101.1728 - reconstruction_error: 50.7523 - regularization_error: 50.4206 - val_loss: 249.0642 - val_reconstruction_error: 198.5863 - val_regularization_error: 50.4779
Epoch 273/1000
600/600 [=====] - 73s 122ms/step - loss: 101.1804 - reconstruction_error: 50.7654 - regularization_error: 50.4150 - val_loss: 246.6478 - val_reconstruction_error: 198.2635 - val_regularization_error: 48.3843
Epoch 274/1000
600/600 [=====] - 69s 114ms/step - loss: 101.2685 - reconstruction_error: 50.8045 - regularization_error: 50.4640 - val_loss: 249.6337 - val_reconstruction_error: 199.1232 - val_regularization_error: 50.5105
Epoch 275/1000
600/600 [=====] - 68s 112ms/step - loss: 101.0095 - reconstruction_error: 50.6217 - regularization_error: 50.3877 - val_loss: 247.8216 - val_reconstruction_error: 199.2186 - val_regularization_error: 48.6031
Epoch 276/1000
600/600 [=====] - 72s 120ms/step - loss: 100.9870 - reconstruction_error: 50.6188 - regularization_error: 50.3683 - val_loss: 246.1723 - val_reconstruction_error: 199.5819 - val_regularization_error: 46.5905
Epoch 277/1000
600/600 [=====] - 86s 142ms/step - loss: 101.1160 - reconstruction_error: 50.7522 - regularization_error: 50.3638 - val_loss: 250.0832 - val_reconstruction_error: 200.6117 - val_regularization_error: 49.4715
Epoch 278/1000
600/600 [=====] - 75s 124ms/step - loss: 100.7591 - reconstruction_error: 50.4606 - regularization_error: 50.2985 - val_loss: 247.8966 - val_reconstruction_error: 196.5129 - val_regularization_error: 51.3837
Epoch 279/1000
600/600 [=====] - 77s 129ms/step - loss: 100.7098 - reconstruction_error: 50.4566 - regularization_error: 50.2531 - val_loss: 245.2301 - val_reconstruction_error: 196.9376 - val_regularization_error: 48.2924
Epoch 280/1000
600/600 [=====] - 77s 128ms/step - loss: 100.5689 - reconstruction_error: 50.4808 - regularization_error: 50.0880 - val_loss: 249.8291 - val_reconstruction_error: 199.7637 - val_regularization_error: 50.0655
Epoch 281/1000
600/600 [=====] - ETA: 0s - loss: 100.6811 - reconstruction_error: 50.5066 - regularization_error: 50.1744
[2023-11-30 15:04:02.242484]: Generating fixed images for epoch 281 ...
```



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[2023-11-30 15:04:03.439397]: Generating random images for epoch 281 ...
```



600/600 [=====] - 78s 129ms/step - loss: 100.6811 - reconstruction_error: 50.5066 - regularization_error: 50.1744 - val_loss: 246.3763 - val_reconstruction_error: 198.5931 - val_regularization_error: 47.7832
Epoch 282/1000
600/600 [=====] - 79s 131ms/step - loss: 100.6264 - reconstruction_error: 50.3374 - regularization_error: 50.2890 - val_loss: 247.8570 - val_reconstruction_error: 198.3769 - val_regularization_error: 49.4802
Epoch 283/1000
600/600 [=====] - 81s 134ms/step - loss: 100.7952 - reconstruction_error: 50.5337 - regularization_error: 50.2615 - val_loss: 248.3006 - val_reconstruction_error: 199.0754 - val_regularization_error: 49.2252
Epoch 284/1000
600/600 [=====] - 70s 116ms/step - loss: 100.7766 - reconstruction_error: 50.4908 - regularization_error: 50.2858 - val_loss: 248.3554 - val_reconstruction_error: 198.3802 - val_regularization_error: 49.9752
Epoch 285/1000
600/600 [=====] - 78s 130ms/step - loss: 100.5849 - reconstruction_error: 50.3366 - regularization_error: 50.2483 - val_loss: 249.9625 - val_reconstruction_error: 199.4913 - val_regularization_error: 50.4713
Epoch 286/1000
600/600 [=====] - 78s 129ms/step - loss: 100.5294 - reconstruction_error: 50.3565 - regularization_error: 50.1730 - val_loss: 248.1421 - val_reconstruction_error: 199.1494 - val_regularization_error: 48.9926
Epoch 287/1000
600/600 [=====] - 75s 124ms/step - loss: 100.3358 - reconstruction_error: 50.1636 - regularization_error: 50.1722 - val_loss: 247.6604 - val_reconstruction_error: 197.2483 - val_regularization_error: 50.4121
Epoch 288/1000
600/600 [=====] - 80s 134ms/step - loss: 100.4963 - reconstruction_error: 50.1978 - regularization_error: 50.2985 - val_loss: 246.3974 - val_reconstruction_error: 198.2646 - val_regularization_error: 48.1328
Epoch 289/1000
600/600 [=====] - 77s 128ms/step - loss: 100.4072 - reconstruction_error: 50.2322 - regularization_error: 50.1749 - val_loss: 248.5600 - val_reconstruction_error: 198.8712 - val_regularization_error: 49.6887
Epoch 290/1000
600/600 [=====] - 75s 125ms/step - loss: 100.2002 - reconstruction_error: 50.0811 - regularization_error: 50.1190 - val_loss: 245.9571 - val_reconstruction_error: 198.9735 - val_regularization_error: 46.9836
Epoch 291/1000
600/600 [=====] - ETA: 0s - loss: 100.3629 - reconstruction_error: 50.1826 - regularization_error: 50.1802
[2023-11-30 15:16:59.566436]: Generating fixed images for epoch 291 ...



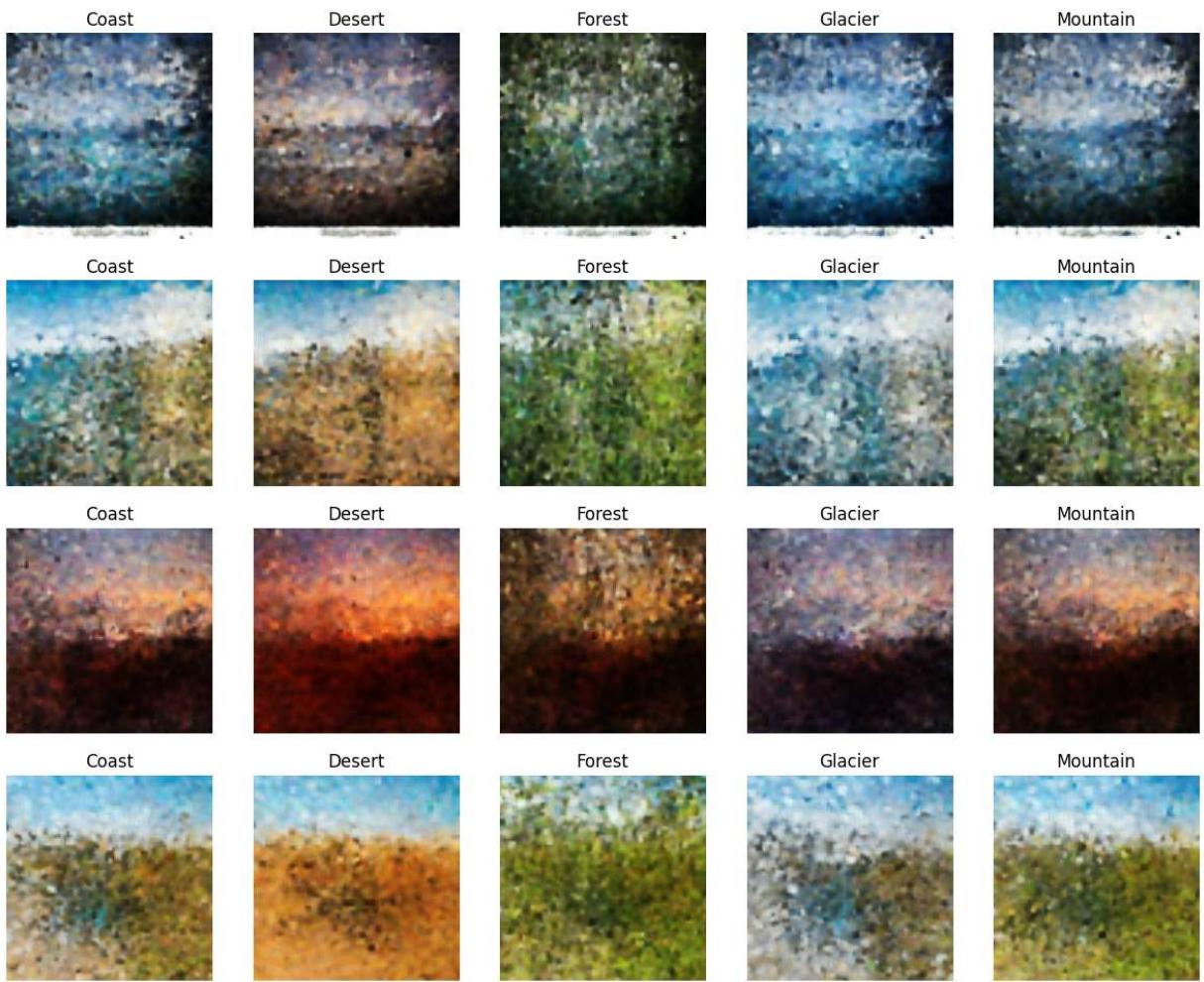
[2023-11-30 15:17:00.441837]: Generating random images for epoch 291 ...



600/600 [=====] - 82s 137ms/step - loss: 100.3629 - reconstruction_error: 50.1826 - regularization_error: 50.1802 - val_loss: 244.9793 - val_reconstruction_error: 195.3488 - val_regularization_error: 49.6305
Epoch 292/1000
600/600 [=====] - 80s 132ms/step - loss: 100.1299 - reconstruction_error: 50.0967 - regularization_error: 50.0333 - val_loss: 247.3329 - val_reconstruction_error: 197.2562 - val_regularization_error: 50.0767
Epoch 293/1000
600/600 [=====] - 88s 145ms/step - loss: 100.2596 - reconstruction_error: 50.1362 - regularization_error: 50.1234 - val_loss: 246.9121 - val_reconstruction_error: 196.9076 - val_regularization_error: 50.0046
Epoch 294/1000
600/600 [=====] - 75s 124ms/step - loss: 100.2366 - reconstruction_error: 50.0920 - regularization_error: 50.1446 - val_loss: 249.9217 - val_reconstruction_error: 199.2629 - val_regularization_error: 50.6588
Epoch 295/1000
600/600 [=====] - 76s 126ms/step - loss: 100.2925 - reconstruction_error: 50.1390 - regularization_error: 50.1535 - val_loss: 248.4123 - val_reconstruction_error: 203.1378 - val_regularization_error: 45.2745
Epoch 296/1000
600/600 [=====] - 78s 130ms/step - loss: 100.1481 - reconstruction_error: 50.1235 - regularization_error: 50.0246 - val_loss: 244.8524 - val_reconstruction_error: 195.5597 - val_regularization_error: 49.2928
Epoch 297/1000
600/600 [=====] - 76s 127ms/step - loss: 100.1120 - reconstruction_error: 49.9838 - regularization_error: 50.1283 - val_loss: 248.5471 - val_reconstruction_error: 197.6079 - val_regularization_error: 50.9392
Epoch 298/1000
600/600 [=====] - 83s 138ms/step - loss: 100.0635 - reconstruction_error: 49.9646 - regularization_error: 50.0989 - val_loss: 249.0830 - val_reconstruction_error: 199.8697 - val_regularization_error: 49.2132
Epoch 299/1000
600/600 [=====] - 84s 139ms/step - loss: 100.0230 - reconstruction_error: 49.9990 - regularization_error: 50.0239 - val_loss: 245.7761 - val_reconstruction_error: 195.8709 - val_regularization_error: 49.9052
Epoch 300/1000
600/600 [=====] - 81s 135ms/step - loss: 100.0924 - reconstruction_error: 49.9185 - regularization_error: 50.1740 - val_loss: 251.0193 - val_reconstruction_error: 200.7405 - val_regularization_error: 50.2787
Epoch 301/1000
600/600 [=====] - ETA: 0s - loss: 99.8929 - reconstruction_error: 49.8496 - regularization_error: 50.0433
[2023-11-30 15:30:28.149840]: Generating fixed images for epoch 301 ...



[2023-11-30 15:30:29.449075]: Generating random images for epoch 301 ...



600/600 [=====] - 80s 133ms/step - loss: 99.8929 - reconstruction_error: 49.8496 - regularization_error: 50.0433 - val_loss: 249.5504 - val_reconstruction_error: 201.0218 - val_regularization_error: 48.5285
Epoch 302/1000
600/600 [=====] - 77s 128ms/step - loss: 99.7334 - reconstruction_error: 49.7261 - regularization_error: 50.0073 - val_loss: 247.9595 - val_reconstruction_error: 198.9822 - val_regularization_error: 48.9772
Epoch 303/1000
600/600 [=====] - 81s 134ms/step - loss: 99.8152 - reconstruction_error: 49.8421 - regularization_error: 49.9731 - val_loss: 250.0970 - val_reconstruction_error: 200.3347 - val_regularization_error: 49.7622
Epoch 304/1000
600/600 [=====] - 80s 133ms/step - loss: 99.9653 - reconstruction_error: 49.8457 - regularization_error: 50.1196 - val_loss: 249.8864 - val_reconstruction_error: 199.6074 - val_regularization_error: 50.2790
Epoch 305/1000
600/600 [=====] - 81s 135ms/step - loss: 99.6719 - reconstruction_error: 49.6897 - regularization_error: 49.9821 - val_loss: 250.3083 - val_reconstruction_error: 200.4934 - val_regularization_error: 49.8148
Epoch 306/1000
600/600 [=====] - 86s 143ms/step - loss: 99.9696 - reconstruction_error: 49.9310 - regularization_error: 50.0385 - val_loss: 246.8907 - val_reconstruction_error: 196.7393 - val_regularization_error: 50.1513
Epoch 307/1000
600/600 [=====] - 74s 123ms/step - loss: 99.8834 - reconstruction_error: 49.8153 - regularization_error: 50.0681 - val_loss: 249.0347 - val_reconstruction_error: 198.6201 - val_regularization_error: 50.4146
Epoch 308/1000
600/600 [=====] - 81s 135ms/step - loss: 99.5330 - reconstruction_error: 49.6021 - regularization_error: 49.9309 - val_loss: 249.7460 - val_reconstruction_error: 200.5367 - val_regularization_error: 49.2093
Epoch 309/1000
600/600 [=====] - 77s 129ms/step - loss: 99.7000 - reconstruction_error: 49.6598 - regularization_error: 50.0402 - val_loss: 250.9711 - val_reconstruction_error: 200.6969 - val_regularization_error: 50.2742
Epoch 310/1000
600/600 [=====] - 77s 128ms/step - loss: 99.6195 - reconstruction_error: 49.6440 - regularization_error: 49.9755 - val_loss: 250.2457 - val_reconstruction_error: 202.5647 - val_regularization_error: 47.6809
Epoch 311/1000
600/600 [=====] - ETA: 0s - loss: 99.7263 - reconstruction_error: 49.8173 - regularization_error: 49.9090
[2023-11-30 15:43:48.487298]: Generating fixed images for epoch 311 ...



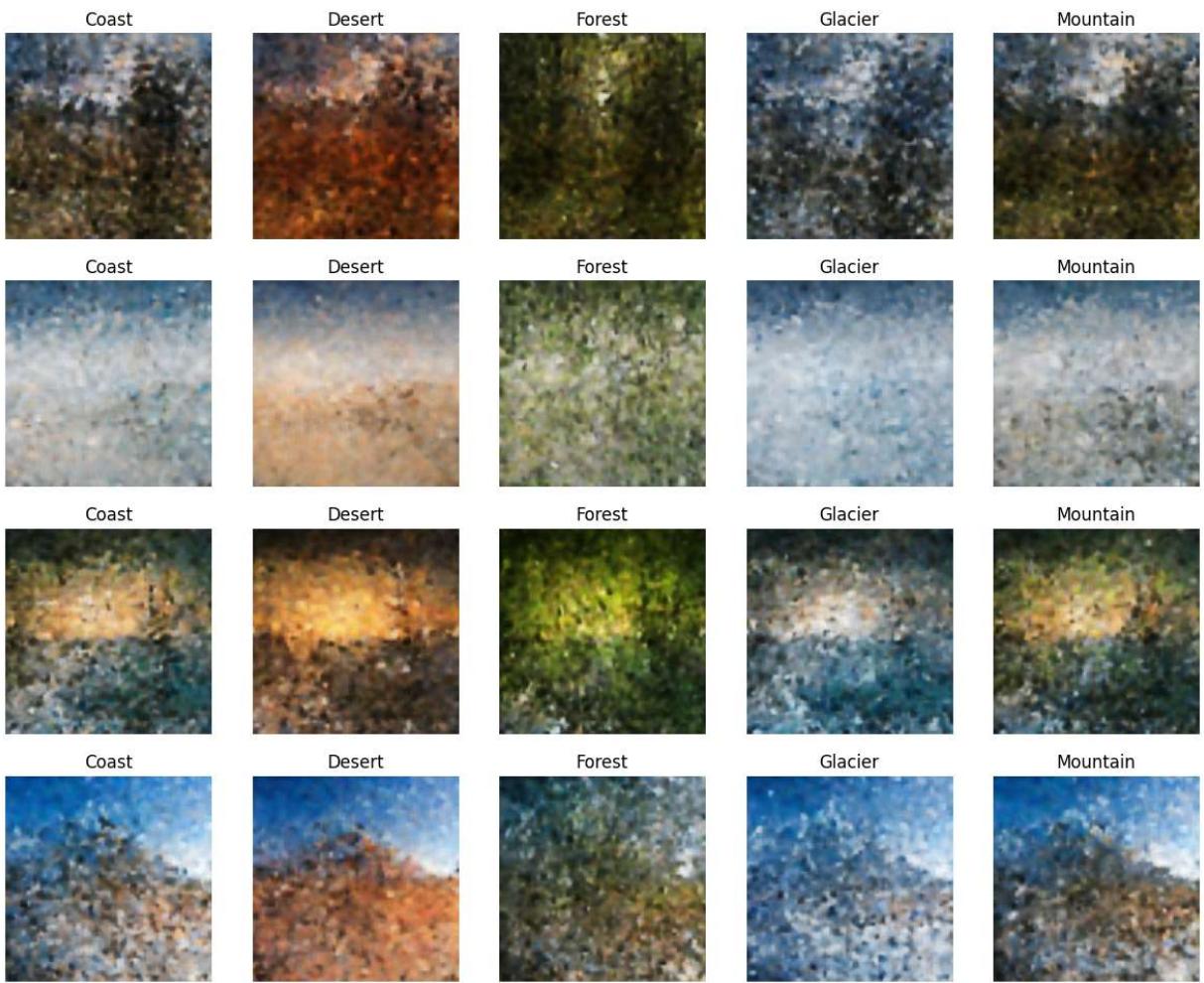
[2023-11-30 15:43:49.369137]: Generating random images for epoch 311 ...



600/600 [=====] - 83s 137ms/step - loss: 99.7263 - reconstruction_error: 49.8173 - regularization_error: 49.9090 - val_loss: 249.4925 - val_reconstruction_error: 203.0368 - val_regularization_error: 46.4558
Epoch 312/1000
600/600 [=====] - 83s 139ms/step - loss: 99.5049 - reconstruction_error: 49.5152 - regularization_error: 49.9897 - val_loss: 249.6649 - val_reconstruction_error: 201.5163 - val_regularization_error: 48.1485
Epoch 313/1000
600/600 [=====] - 76s 127ms/step - loss: 99.5976 - reconstruction_error: 49.6592 - regularization_error: 49.9384 - val_loss: 250.9581 - val_reconstruction_error: 201.9319 - val_regularization_error: 49.0262
Epoch 314/1000
600/600 [=====] - 72s 120ms/step - loss: 99.5323 - reconstruction_error: 49.5285 - regularization_error: 50.0038 - val_loss: 247.0755 - val_reconstruction_error: 199.0912 - val_regularization_error: 47.9842
Epoch 315/1000
600/600 [=====] - 88s 147ms/step - loss: 99.6745 - reconstruction_error: 49.6442 - regularization_error: 50.0303 - val_loss: 249.8110 - val_reconstruction_error: 200.6065 - val_regularization_error: 49.2045
Epoch 316/1000
600/600 [=====] - 72s 120ms/step - loss: 99.4636 - reconstruction_error: 49.4818 - regularization_error: 49.9819 - val_loss: 250.2926 - val_reconstruction_error: 201.0839 - val_regularization_error: 49.2086
Epoch 317/1000
600/600 [=====] - 77s 128ms/step - loss: 99.3970 - reconstruction_error: 49.4505 - regularization_error: 49.9465 - val_loss: 250.3989 - val_reconstruction_error: 202.0524 - val_regularization_error: 48.3466
Epoch 318/1000
600/600 [=====] - 83s 139ms/step - loss: 99.1746 - reconstruction_error: 49.2802 - regularization_error: 49.8944 - val_loss: 249.2561 - val_reconstruction_error: 200.6997 - val_regularization_error: 48.5564
Epoch 319/1000
600/600 [=====] - 78s 130ms/step - loss: 99.2131 - reconstruction_error: 49.3410 - regularization_error: 49.8721 - val_loss: 250.0015 - val_reconstruction_error: 201.7489 - val_regularization_error: 48.2526
Epoch 320/1000
600/600 [=====] - 77s 128ms/step - loss: 99.6297 - reconstruction_error: 49.6543 - regularization_error: 49.9755 - val_loss: 248.5265 - val_reconstruction_error: 199.0667 - val_regularization_error: 49.4598
Epoch 321/1000
600/600 [=====] - ETA: 0s - loss: 99.2089 - reconstruction_error: 49.4296 - regularization_error: 49.7793
[2023-11-30 15:57:02.604159]: Generating fixed images for epoch 321 ...



[2023-11-30 15:57:03.520879]: Generating random images for epoch 321 ...



600/600 [=====] - 84s 140ms/step - loss: 99.2089 - reconstruction_error: 49.4296 - regularization_error: 49.7793 - val_loss: 250.9798 - val_reconstruction_error: 202.1199 - val_regularization_error: 48.8600
Epoch 322/1000
600/600 [=====] - 85s 141ms/step - loss: 98.9814 - reconstruction_error: 49.1325 - regularization_error: 49.8490 - val_loss: 249.9296 - val_reconstruction_error: 202.9121 - val_regularization_error: 47.0176
Epoch 323/1000
600/600 [=====] - 78s 130ms/step - loss: 99.2004 - reconstruction_error: 49.3435 - regularization_error: 49.8569 - val_loss: 251.4091 - val_reconstruction_error: 201.7457 - val_regularization_error: 49.6635
Epoch 324/1000
600/600 [=====] - 80s 132ms/step - loss: 99.0328 - reconstruction_error: 49.2619 - regularization_error: 49.7709 - val_loss: 247.5526 - val_reconstruction_error: 197.7722 - val_regularization_error: 49.7803
Epoch 325/1000
600/600 [=====] - 81s 135ms/step - loss: 99.0493 - reconstruction_error: 49.2597 - regularization_error: 49.7895 - val_loss: 255.6443 - val_reconstruction_error: 205.5529 - val_regularization_error: 50.0915
Epoch 326/1000
600/600 [=====] - 78s 129ms/step - loss: 99.0340 - reconstruction_error: 49.2151 - regularization_error: 49.8189 - val_loss: 249.7690 - val_reconstruction_error: 200.9704 - val_regularization_error: 48.7986
Epoch 327/1000
600/600 [=====] - 79s 130ms/step - loss: 98.9008 - reconstruction_error: 49.1293 - regularization_error: 49.7715 - val_loss: 251.5448 - val_reconstruction_error: 201.5870 - val_regularization_error: 49.9579
Epoch 328/1000
600/600 [=====] - 70s 116ms/step - loss: 98.7387 - reconstruction_error: 49.0958 - regularization_error: 49.6428 - val_loss: 249.5058 - val_reconstruction_error: 201.5228 - val_regularization_error: 47.9831
Epoch 329/1000
600/600 [=====] - 76s 127ms/step - loss: 98.8728 - reconstruction_error: 49.1602 - regularization_error: 49.7126 - val_loss: 251.2519 - val_reconstruction_error: 203.4288 - val_regularization_error: 47.8232
Epoch 330/1000
600/600 [=====] - 81s 135ms/step - loss: 98.9724 - reconstruction_error: 49.2010 - regularization_error: 49.7713 - val_loss: 249.1166 - val_reconstruction_error: 200.3617 - val_regularization_error: 48.7548
Epoch 331/1000
600/600 [=====] - ETA: 0s - loss: 98.9242 - reconstruction_error: 49.1859 - regularization_error: 49.7383
[2023-11-30 16:10:06.043570]: Generating fixed images for epoch 331 ...



[2023-11-30 16:10:06.826643]: Generating random images for epoch 331 ...



600/600 [=====] - 73s 122ms/step - loss: 98.9242 - reconstruction_error: 49.1859 - regularization_error: 49.7383 - val_loss: 251.3512 - val_reconstruction_error: 202.0584 - val_regularization_error: 49.2927
Epoch 332/1000
600/600 [=====] - 72s 120ms/step - loss: 98.9561 - reconstruction_error: 49.0668 - regularization_error: 49.8892 - val_loss: 252.1844 - val_reconstruction_error: 202.7173 - val_regularization_error: 49.4671
Epoch 333/1000
600/600 [=====] - 73s 122ms/step - loss: 98.8220 - reconstruction_error: 49.0839 - regularization_error: 49.7381 - val_loss: 246.4092 - val_reconstruction_error: 197.6336 - val_regularization_error: 48.7757
Epoch 334/1000
600/600 [=====] - 78s 130ms/step - loss: 98.8301 - reconstruction_error: 49.0421 - regularization_error: 49.7880 - val_loss: 249.5974 - val_reconstruction_error: 202.5018 - val_regularization_error: 47.0955
Epoch 335/1000
600/600 [=====] - 73s 121ms/step - loss: 98.6997 - reconstruction_error: 48.9357 - regularization_error: 49.7640 - val_loss: 250.1217 - val_reconstruction_error: 201.6664 - val_regularization_error: 48.4553
Epoch 336/1000
600/600 [=====] - 80s 132ms/step - loss: 98.5971 - reconstruction_error: 48.9003 - regularization_error: 49.6968 - val_loss: 247.2300 - val_reconstruction_error: 201.5619 - val_regularization_error: 45.6680
Epoch 337/1000
600/600 [=====] - 79s 131ms/step - loss: 98.6906 - reconstruction_error: 48.9752 - regularization_error: 49.7154 - val_loss: 251.3372 - val_reconstruction_error: 202.4672 - val_regularization_error: 48.8700
Epoch 338/1000
600/600 [=====] - 81s 134ms/step - loss: 98.5279 - reconstruction_error: 48.8242 - regularization_error: 49.7037 - val_loss: 249.3238 - val_reconstruction_error: 202.6620 - val_regularization_error: 46.6618
Epoch 339/1000
600/600 [=====] - 79s 131ms/step - loss: 98.4392 - reconstruction_error: 48.7977 - regularization_error: 49.6416 - val_loss: 248.5055 - val_reconstruction_error: 199.6498 - val_regularization_error: 48.8557
Epoch 340/1000
600/600 [=====] - 79s 130ms/step - loss: 98.4996 - reconstruction_error: 48.7920 - regularization_error: 49.7076 - val_loss: 255.2132 - val_reconstruction_error: 203.0508 - val_regularization_error: 52.1624
Epoch 341/1000
600/600 [=====] - ETA: 0s - loss: 98.7193 - reconstruction_error: 48.9656 - regularization_error: 49.7537
[2023-11-30 16:23:00.847162]: Generating fixed images for epoch 341 ...



[2023-11-30 16:23:02.355129]: Generating random images for epoch 341 ...



```
600/600 [=====] - 81s 134ms/step - loss: 98.7193 - reconstruction_error: 48.9656 - regularization_error: 49.7537 - val_loss: 246.9891 - val_reconstruction_error: 198.7921 - val_regularization_error: 48.1971
Epoch 342/1000
600/600 [=====] - 72s 121ms/step - loss: 98.5215 - reconstruction_error: 48.8254 - regularization_error: 49.6961 - val_loss: 246.9641 - val_reconstruction_error: 200.3476 - val_regularization_error: 46.6165
Epoch 343/1000
600/600 [=====] - 86s 144ms/step - loss: 98.4262 - reconstruction_error: 48.7522 - regularization_error: 49.6740 - val_loss: 249.8295 - val_reconstruction_error: 203.3096 - val_regularization_error: 46.5198
Epoch 344/1000
600/600 [=====] - 73s 121ms/step - loss: 98.5135 - reconstruction_error: 48.8237 - regularization_error: 49.6898 - val_loss: 248.5379 - val_reconstruction_error: 198.9442 - val_regularization_error: 49.5937
Epoch 345/1000
600/600 [=====] - 75s 124ms/step - loss: 98.3406 - reconstruction_error: 48.7472 - regularization_error: 49.5934 - val_loss: 249.1083 - val_reconstruction_error: 202.3191 - val_regularization_error: 46.7892
Epoch 346/1000
600/600 [=====] - 83s 137ms/step - loss: 98.2970 - reconstruction_error: 48.6860 - regularization_error: 49.6111 - val_loss: 254.3150 - val_reconstruction_error: 204.8445 - val_regularization_error: 49.4704
Epoch 347/1000
600/600 [=====] - 75s 124ms/step - loss: 98.2891 - reconstruction_error: 48.7361 - regularization_error: 49.5531 - val_loss: 247.6653 - val_reconstruction_error: 198.9819 - val_regularization_error: 48.6833
Epoch 348/1000
600/600 [=====] - 75s 124ms/step - loss: 98.3197 - reconstruction_error: 48.6831 - regularization_error: 49.6365 - val_loss: 251.3786 - val_reconstruction_error: 203.8327 - val_regularization_error: 47.5459
Epoch 349/1000
600/600 [=====] - 72s 120ms/step - loss: 98.1867 - reconstruction_error: 48.5762 - regularization_error: 49.6105 - val_loss: 249.2428 - val_reconstruction_error: 199.6004 - val_regularization_error: 49.6424
Epoch 350/1000
600/600 [=====] - 75s 124ms/step - loss: 98.2840 - reconstruction_error: 48.6398 - regularization_error: 49.6443 - val_loss: 252.7237 - val_reconstruction_error: 201.2038 - val_regularization_error: 51.5199
Epoch 351/1000
600/600 [=====] - ETA: 0s - loss: 98.0067 - reconstruction_error: 48.5244 - regularization_error: 49.4823
[2023-11-30 16:35:51.172794]: Generating fixed images for epoch 351 ...
```



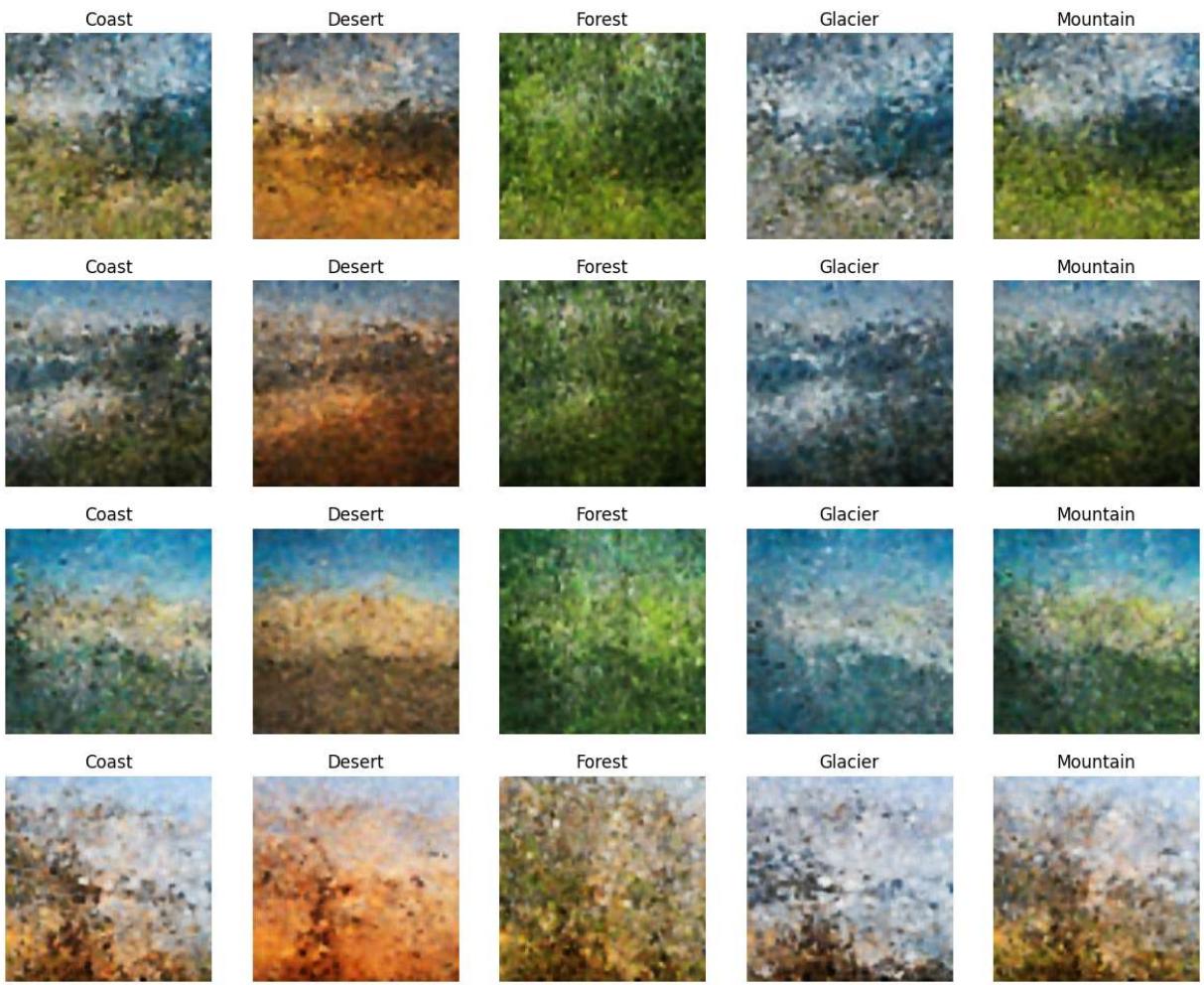
```
[2023-11-30 16:35:52.682954]: Generating random images for epoch 351 ...
```



600/600 [=====] - 85s 142ms/step - loss: 98.0067 - reconstruction_error: 48.5244 - regularization_error: 49.4823 - val_loss: 247.7862 - val_reconstruction_error: 201.4670 - val_regularization_error: 46.3192
Epoch 352/1000
600/600 [=====] - 70s 117ms/step - loss: 98.2155 - reconstruction_error: 48.6275 - regularization_error: 49.5880 - val_loss: 247.7310 - val_reconstruction_error: 201.3379 - val_regularization_error: 46.3931
Epoch 353/1000
600/600 [=====] - 74s 122ms/step - loss: 98.2342 - reconstruction_error: 48.6508 - regularization_error: 49.5834 - val_loss: 249.7191 - val_reconstruction_error: 201.2490 - val_regularization_error: 48.4701
Epoch 354/1000
600/600 [=====] - 76s 127ms/step - loss: 98.0546 - reconstruction_error: 48.5064 - regularization_error: 49.5483 - val_loss: 249.8765 - val_reconstruction_error: 200.7657 - val_regularization_error: 49.1108
Epoch 355/1000
600/600 [=====] - 71s 118ms/step - loss: 98.1240 - reconstruction_error: 48.5680 - regularization_error: 49.5560 - val_loss: 253.1301 - val_reconstruction_error: 203.3077 - val_regularization_error: 49.8224
Epoch 356/1000
600/600 [=====] - 74s 122ms/step - loss: 97.8900 - reconstruction_error: 48.3495 - regularization_error: 49.5404 - val_loss: 248.4520 - val_reconstruction_error: 199.5132 - val_regularization_error: 48.9388
Epoch 357/1000
600/600 [=====] - 74s 123ms/step - loss: 98.0872 - reconstruction_error: 48.5243 - regularization_error: 49.5629 - val_loss: 250.9562 - val_reconstruction_error: 202.0593 - val_regularization_error: 48.8969
Epoch 358/1000
600/600 [=====] - 77s 128ms/step - loss: 97.8116 - reconstruction_error: 48.2489 - regularization_error: 49.5627 - val_loss: 252.2533 - val_reconstruction_error: 203.4767 - val_regularization_error: 48.7765
Epoch 359/1000
600/600 [=====] - 74s 122ms/step - loss: 98.1562 - reconstruction_error: 48.5846 - regularization_error: 49.5716 - val_loss: 249.3086 - val_reconstruction_error: 200.5735 - val_regularization_error: 48.7351
Epoch 360/1000
600/600 [=====] - 79s 132ms/step - loss: 97.9403 - reconstruction_error: 48.4277 - regularization_error: 49.5127 - val_loss: 248.6906 - val_reconstruction_error: 199.5847 - val_regularization_error: 49.1060
Epoch 361/1000
600/600 [=====] - ETA: 0s - loss: 97.9203 - reconstruction_error: 48.3132 - regularization_error: 49.6072
[2023-11-30 16:48:19.695686]: Generating fixed images for epoch 361 ...



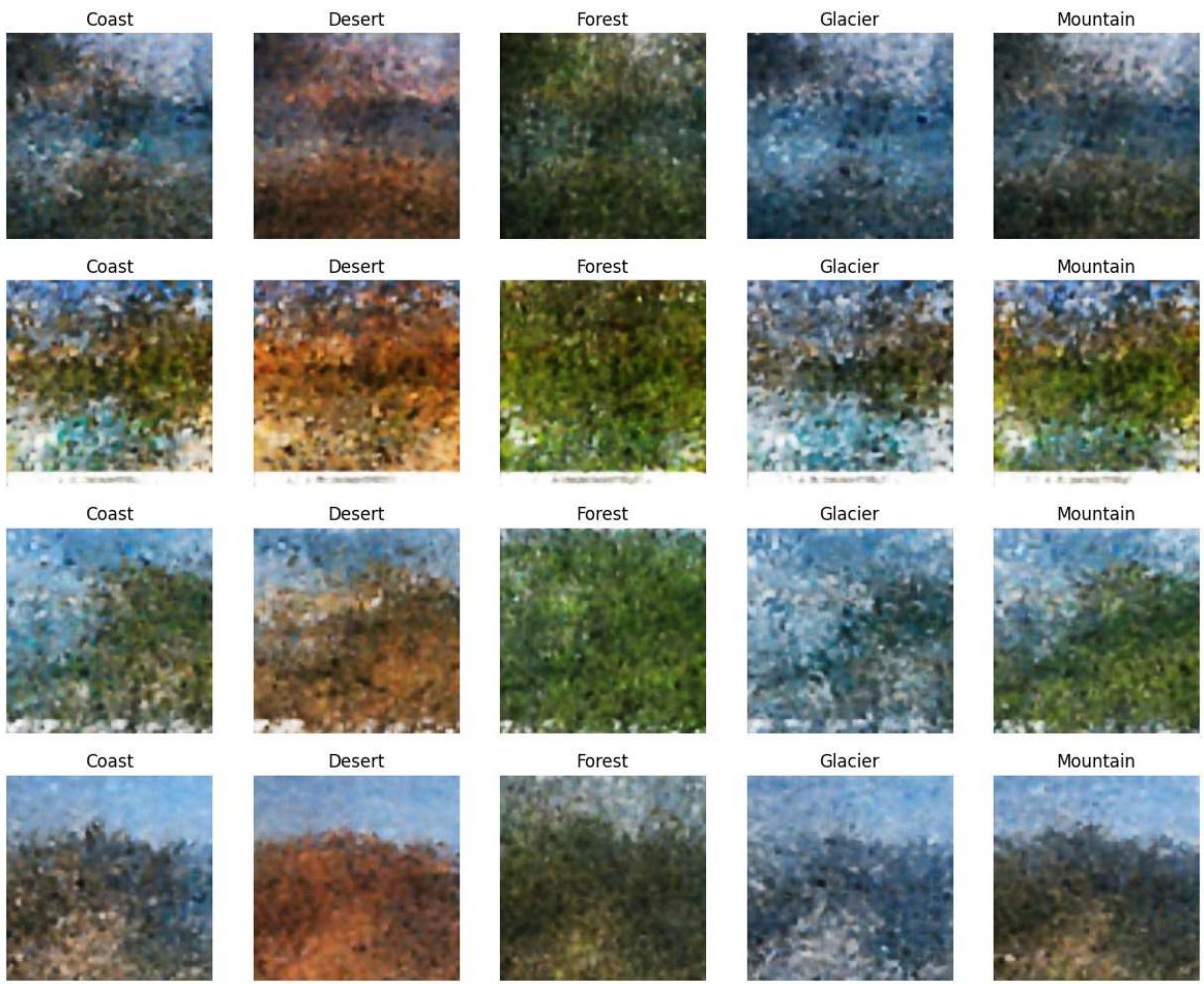
[2023-11-30 16:48:20.649037]: Generating random images for epoch 361 ...



600/600 [=====] - 77s 128ms/step - loss: 97.9203 - reconstruction_error: 48.3132 - regularization_error: 49.6072 - val_loss: 247.4444 - val_reconstruction_error: 199.1061 - val_regularization_error: 48.3383
Epoch 362/1000
600/600 [=====] - 69s 115ms/step - loss: 98.2320 - reconstruction_error: 48.5225 - regularization_error: 49.7096 - val_loss: 249.5183 - val_reconstruction_error: 202.0860 - val_regularization_error: 47.4324
Epoch 363/1000
600/600 [=====] - 79s 131ms/step - loss: 97.8324 - reconstruction_error: 48.3454 - regularization_error: 49.4871 - val_loss: 252.1337 - val_reconstruction_error: 203.5198 - val_regularization_error: 48.6138
Epoch 364/1000
600/600 [=====] - 71s 118ms/step - loss: 97.7539 - reconstruction_error: 48.2475 - regularization_error: 49.5064 - val_loss: 248.7080 - val_reconstruction_error: 198.1572 - val_regularization_error: 50.5507
Epoch 365/1000
600/600 [=====] - 71s 118ms/step - loss: 97.7989 - reconstruction_error: 48.3655 - regularization_error: 49.4334 - val_loss: 249.1377 - val_reconstruction_error: 201.0126 - val_regularization_error: 48.1251
Epoch 366/1000
600/600 [=====] - 77s 128ms/step - loss: 97.8565 - reconstruction_error: 48.2455 - regularization_error: 49.6110 - val_loss: 249.4609 - val_reconstruction_error: 201.3109 - val_regularization_error: 48.1500
Epoch 367/1000
600/600 [=====] - 75s 124ms/step - loss: 97.7699 - reconstruction_error: 48.2680 - regularization_error: 49.5019 - val_loss: 247.0568 - val_reconstruction_error: 200.4244 - val_regularization_error: 46.6324
Epoch 368/1000
600/600 [=====] - 73s 121ms/step - loss: 97.7922 - reconstruction_error: 48.3514 - regularization_error: 49.4408 - val_loss: 251.3365 - val_reconstruction_error: 200.9955 - val_regularization_error: 50.3410
Epoch 369/1000
600/600 [=====] - 76s 127ms/step - loss: 97.5607 - reconstruction_error: 48.1084 - regularization_error: 49.4525 - val_loss: 251.2624 - val_reconstruction_error: 203.7906 - val_regularization_error: 47.4719
Epoch 370/1000
600/600 [=====] - 79s 132ms/step - loss: 97.6327 - reconstruction_error: 48.2275 - regularization_error: 49.4052 - val_loss: 247.1109 - val_reconstruction_error: 199.4290 - val_regularization_error: 47.6818
Epoch 371/1000
600/600 [=====] - ETA: 0s - loss: 97.5308 - reconstruction_error: 48.1026 - regularization_error: 49.4283
[2023-11-30 17:00:54.527981]: Generating fixed images for epoch 371 ...



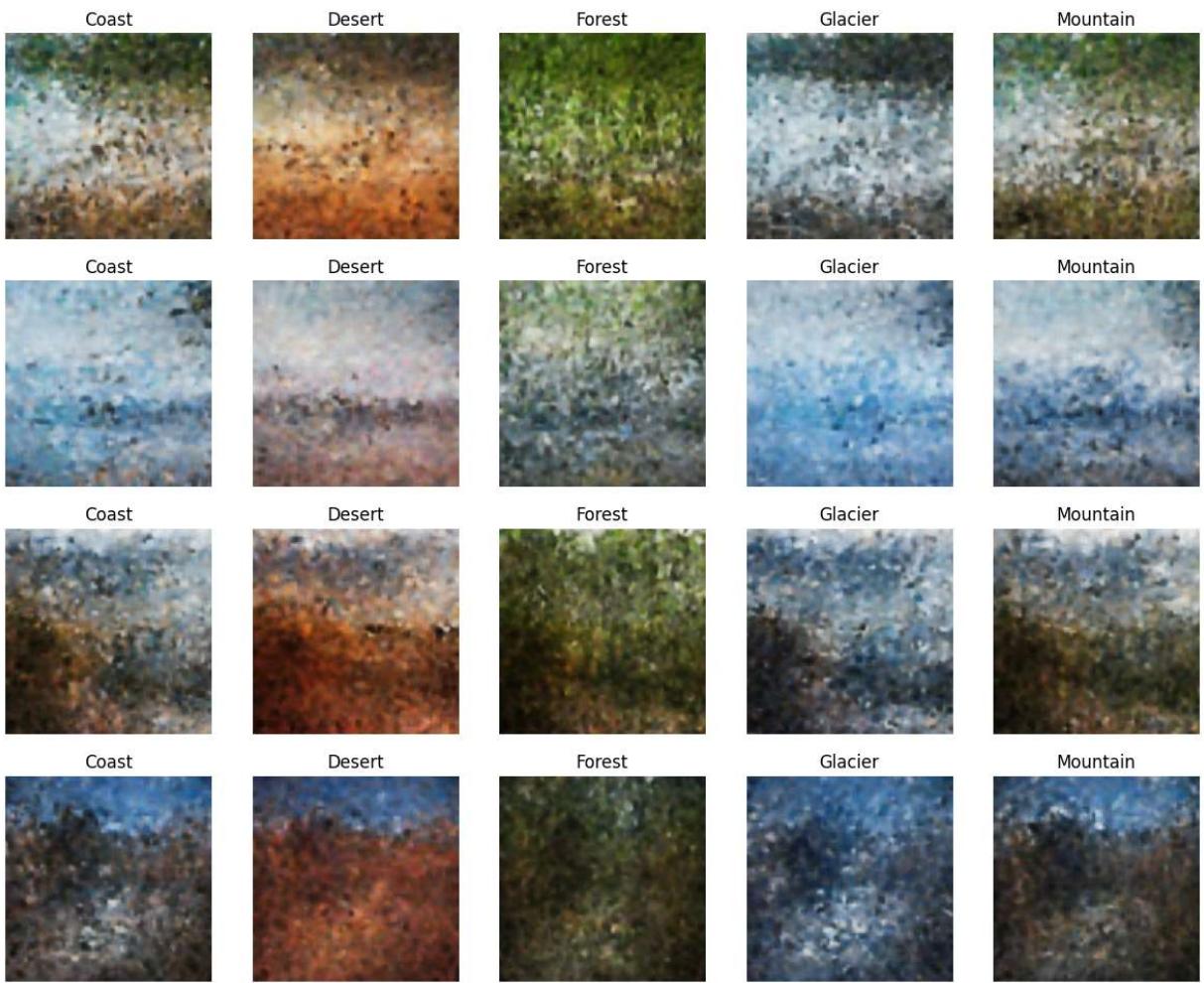
[2023-11-30 17:00:55.471047]: Generating random images for epoch 371 ...



```
600/600 [=====] - 81s 135ms/step - loss: 97.5308 - reconstruction_error: 48.1026 - regularization_error: 49.4283 - val_loss: 250.8382 - val_reconstruction_error: 202.5998 - val_regularization_error: 48.2384
Epoch 372/1000
600/600 [=====] - 77s 128ms/step - loss: 97.4399 - reconstruction_error: 48.0650 - regularization_error: 49.3749 - val_loss: 251.6926 - val_reconstruction_error: 204.8402 - val_regularization_error: 46.8525
Epoch 373/1000
600/600 [=====] - 78s 129ms/step - loss: 97.4440 - reconstruction_error: 48.0784 - regularization_error: 49.3657 - val_loss: 252.2856 - val_reconstruction_error: 204.7446 - val_regularization_error: 47.5409
Epoch 374/1000
600/600 [=====] - 77s 128ms/step - loss: 97.4959 - reconstruction_error: 48.0483 - regularization_error: 49.4477 - val_loss: 249.0428 - val_reconstruction_error: 200.9607 - val_regularization_error: 48.0820
Epoch 375/1000
600/600 [=====] - 73s 121ms/step - loss: 97.5018 - reconstruction_error: 48.1594 - regularization_error: 49.3425 - val_loss: 249.4929 - val_reconstruction_error: 201.9204 - val_regularization_error: 47.5725
Epoch 376/1000
600/600 [=====] - 77s 127ms/step - loss: 97.4108 - reconstruction_error: 48.0219 - regularization_error: 49.3890 - val_loss: 250.9626 - val_reconstruction_error: 204.7269 - val_regularization_error: 46.2357
Epoch 377/1000
600/600 [=====] - 71s 118ms/step - loss: 97.3673 - reconstruction_error: 48.0046 - regularization_error: 49.3627 - val_loss: 249.2571 - val_reconstruction_error: 201.3255 - val_regularization_error: 47.9315
Epoch 378/1000
600/600 [=====] - 79s 132ms/step - loss: 97.5592 - reconstruction_error: 47.9810 - regularization_error: 49.5781 - val_loss: 248.2122 - val_reconstruction_error: 201.2835 - val_regularization_error: 46.9288
Epoch 379/1000
600/600 [=====] - 79s 132ms/step - loss: 97.2634 - reconstruction_error: 47.9014 - regularization_error: 49.3621 - val_loss: 254.9603 - val_reconstruction_error: 203.9655 - val_regularization_error: 50.9949
Epoch 380/1000
600/600 [=====] - 73s 122ms/step - loss: 97.3419 - reconstruction_error: 47.8999 - regularization_error: 49.4421 - val_loss: 249.7986 - val_reconstruction_error: 201.7830 - val_regularization_error: 48.0158
Epoch 381/1000
600/600 [=====] - ETA: 0s - loss: 97.4213 - reconstruction_error: 48.0570 - regularization_error: 49.3642
[2023-11-30 17:13:37.836137]: Generating fixed images for epoch 381 ...
```



```
[2023-11-30 17:13:39.343027]: Generating random images for epoch 381 ...
```



600/600 [=====] - 78s 129ms/step - loss: 97.4213 - reconstruction_error: 48.0570 - regularization_error: 49.3642 - val_loss: 249.4647 - val_reconstruction_error: 201.4291 - val_regularization_error: 48.0356
Epoch 382/1000
600/600 [=====] - 82s 136ms/step - loss: 97.1641 - reconstruction_error: 47.8614 - regularization_error: 49.3027 - val_loss: 252.3304 - val_reconstruction_error: 202.4078 - val_regularization_error: 49.9226
Epoch 383/1000
600/600 [=====] - 71s 118ms/step - loss: 97.2695 - reconstruction_error: 47.9631 - regularization_error: 49.3064 - val_loss: 250.5400 - val_reconstruction_error: 202.3497 - val_regularization_error: 48.1903
Epoch 384/1000
600/600 [=====] - 77s 128ms/step - loss: 97.2132 - reconstruction_error: 47.8809 - regularization_error: 49.3323 - val_loss: 254.1626 - val_reconstruction_error: 202.4161 - val_regularization_error: 51.7464
Epoch 385/1000
600/600 [=====] - 79s 131ms/step - loss: 97.1282 - reconstruction_error: 47.8444 - regularization_error: 49.2837 - val_loss: 249.4256 - val_reconstruction_error: 202.6958 - val_regularization_error: 46.7298
Epoch 386/1000
600/600 [=====] - 80s 133ms/step - loss: 97.2783 - reconstruction_error: 47.9011 - regularization_error: 49.3772 - val_loss: 251.5227 - val_reconstruction_error: 204.7444 - val_regularization_error: 46.7782
Epoch 387/1000
600/600 [=====] - 77s 129ms/step - loss: 97.3255 - reconstruction_error: 47.9266 - regularization_error: 49.3989 - val_loss: 252.3414 - val_reconstruction_error: 203.4276 - val_regularization_error: 48.9138
Epoch 388/1000
600/600 [=====] - 82s 136ms/step - loss: 97.2795 - reconstruction_error: 47.9155 - regularization_error: 49.3640 - val_loss: 250.6132 - val_reconstruction_error: 201.2831 - val_regularization_error: 49.3302
Epoch 389/1000
600/600 [=====] - 81s 135ms/step - loss: 97.0910 - reconstruction_error: 47.7895 - regularization_error: 49.3015 - val_loss: 249.8840 - val_reconstruction_error: 202.2856 - val_regularization_error: 47.5984
Epoch 390/1000
600/600 [=====] - 80s 133ms/step - loss: 96.9783 - reconstruction_error: 47.7117 - regularization_error: 49.2666 - val_loss: 251.4173 - val_reconstruction_error: 202.5873 - val_regularization_error: 48.8299
Epoch 391/1000
600/600 [=====] - ETA: 0s - loss: 96.9573 - reconstruction_error: 47.7042 - regularization_error: 49.2531
[2023-11-30 17:26:51.372166]: Generating fixed images for epoch 391 ...



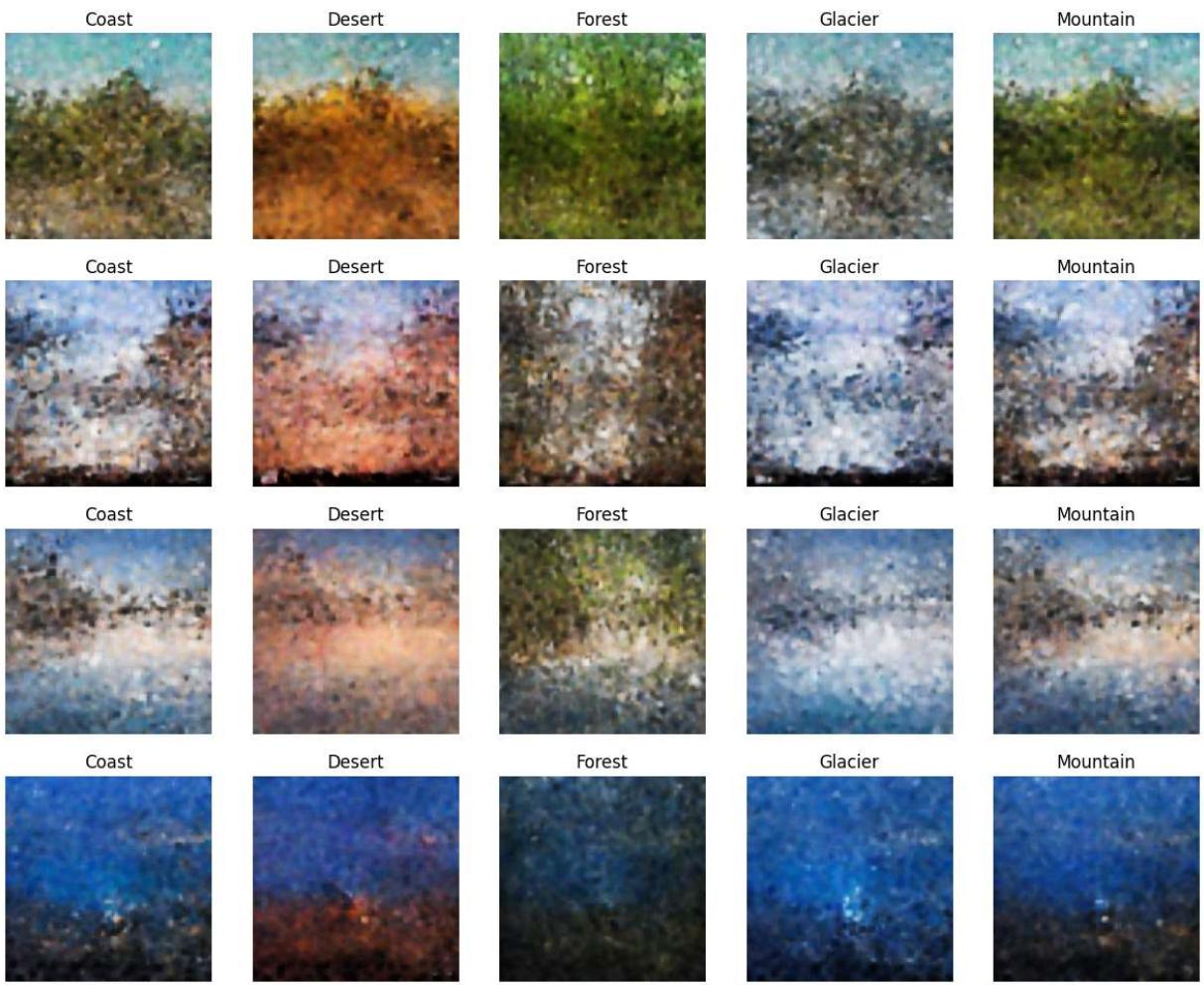
[2023-11-30 17:26:52.463526]: Generating random images for epoch 391 ...



600/600 [=====] - 83s 138ms/step - loss: 96.9573 - reconstruction_error: 47.7042 - regularization_error: 49.2531 - val_loss: 248.9579 - val_reconstruction_error: 201.7942 - val_regularization_error: 47.1637
Epoch 392/1000
600/600 [=====] - 81s 136ms/step - loss: 97.0440 - reconstruction_error: 47.8247 - regularization_error: 49.2193 - val_loss: 248.5807 - val_reconstruction_error: 201.7567 - val_regularization_error: 46.8240
Epoch 393/1000
600/600 [=====] - 75s 125ms/step - loss: 96.9883 - reconstruction_error: 47.6916 - regularization_error: 49.2967 - val_loss: 252.8631 - val_reconstruction_error: 205.1609 - val_regularization_error: 47.7022
Epoch 394/1000
600/600 [=====] - 71s 118ms/step - loss: 97.0285 - reconstruction_error: 47.7126 - regularization_error: 49.3159 - val_loss: 250.4296 - val_reconstruction_error: 203.4814 - val_regularization_error: 46.9483
Epoch 395/1000
600/600 [=====] - 78s 129ms/step - loss: 97.0441 - reconstruction_error: 47.7395 - regularization_error: 49.3047 - val_loss: 251.5826 - val_reconstruction_error: 204.6889 - val_regularization_error: 46.8937
Epoch 396/1000
600/600 [=====] - 80s 131ms/step - loss: 96.9853 - reconstruction_error: 47.6818 - regularization_error: 49.3036 - val_loss: 248.3304 - val_reconstruction_error: 200.9134 - val_regularization_error: 47.4170
Epoch 397/1000
600/600 [=====] - 82s 136ms/step - loss: 96.8955 - reconstruction_error: 47.6022 - regularization_error: 49.2933 - val_loss: 253.2285 - val_reconstruction_error: 204.3538 - val_regularization_error: 48.8747
Epoch 398/1000
600/600 [=====] - 77s 128ms/step - loss: 96.6701 - reconstruction_error: 47.5116 - regularization_error: 49.1585 - val_loss: 251.4345 - val_reconstruction_error: 202.2991 - val_regularization_error: 49.1354
Epoch 399/1000
600/600 [=====] - 77s 128ms/step - loss: 97.0239 - reconstruction_error: 47.6695 - regularization_error: 49.3544 - val_loss: 254.0148 - val_reconstruction_error: 204.4926 - val_regularization_error: 49.5222
Epoch 400/1000
600/600 [=====] - 75s 124ms/step - loss: 96.7735 - reconstruction_error: 47.5103 - regularization_error: 49.2632 - val_loss: 249.1267 - val_reconstruction_error: 201.9879 - val_regularization_error: 47.1387
Epoch 401/1000
600/600 [=====] - ETA: 0s - loss: 96.7257 - reconstruction_error: 47.4924 - regularization_error: 49.2334
[2023-11-30 17:39:51.453889]: Generating fixed images for epoch 401 ...



[2023-11-30 17:39:52.441349]: Generating random images for epoch 401 ...



600/600 [=====] - 81s 134ms/step - loss: 96.7257 - reconstruction_error: 47.4924 - regularization_error: 49.2334 - val_loss: 252.3529 - val_reconstruction_error: 203.3613 - val_regularization_error: 48.9917
Epoch 402/1000
600/600 [=====] - 69s 115ms/step - loss: 96.6648 - reconstruction_error: 47.4484 - regularization_error: 49.2164 - val_loss: 252.1382 - val_reconstruction_error: 205.2423 - val_regularization_error: 46.8959
Epoch 403/1000
600/600 [=====] - 79s 132ms/step - loss: 97.0741 - reconstruction_error: 47.6432 - regularization_error: 49.4308 - val_loss: 249.3718 - val_reconstruction_error: 201.9802 - val_regularization_error: 47.3917
Epoch 404/1000
600/600 [=====] - 71s 118ms/step - loss: 96.4894 - reconstruction_error: 47.4620 - regularization_error: 49.0274 - val_loss: 249.0950 - val_reconstruction_error: 201.3896 - val_regularization_error: 47.7054
Epoch 405/1000
600/600 [=====] - 74s 123ms/step - loss: 96.6371 - reconstruction_error: 47.4727 - regularization_error: 49.1644 - val_loss: 251.3081 - val_reconstruction_error: 203.1089 - val_regularization_error: 48.1993
Epoch 406/1000
600/600 [=====] - 74s 124ms/step - loss: 96.5493 - reconstruction_error: 47.4807 - regularization_error: 49.0686 - val_loss: 253.8509 - val_reconstruction_error: 204.2790 - val_regularization_error: 49.5719
Epoch 407/1000
600/600 [=====] - 78s 131ms/step - loss: 96.5550 - reconstruction_error: 47.4201 - regularization_error: 49.1349 - val_loss: 248.9510 - val_reconstruction_error: 199.3795 - val_regularization_error: 49.5715
Epoch 408/1000
600/600 [=====] - 71s 118ms/step - loss: 96.9180 - reconstruction_error: 47.5680 - regularization_error: 49.3500 - val_loss: 250.1425 - val_reconstruction_error: 202.5548 - val_regularization_error: 47.5877
Epoch 409/1000
600/600 [=====] - 73s 122ms/step - loss: 96.7641 - reconstruction_error: 47.4991 - regularization_error: 49.2651 - val_loss: 252.0383 - val_reconstruction_error: 202.4794 - val_regularization_error: 49.5588
Epoch 410/1000
600/600 [=====] - 76s 126ms/step - loss: 96.5773 - reconstruction_error: 47.4077 - regularization_error: 49.1696 - val_loss: 251.7910 - val_reconstruction_error: 203.5863 - val_regularization_error: 48.2046
Epoch 411/1000
600/600 [=====] - ETA: 0s - loss: 96.4150 - reconstruction_error: 47.3080 - regularization_error: 49.1070
[2023-11-30 17:52:17.500155]: Generating fixed images for epoch 411 ...



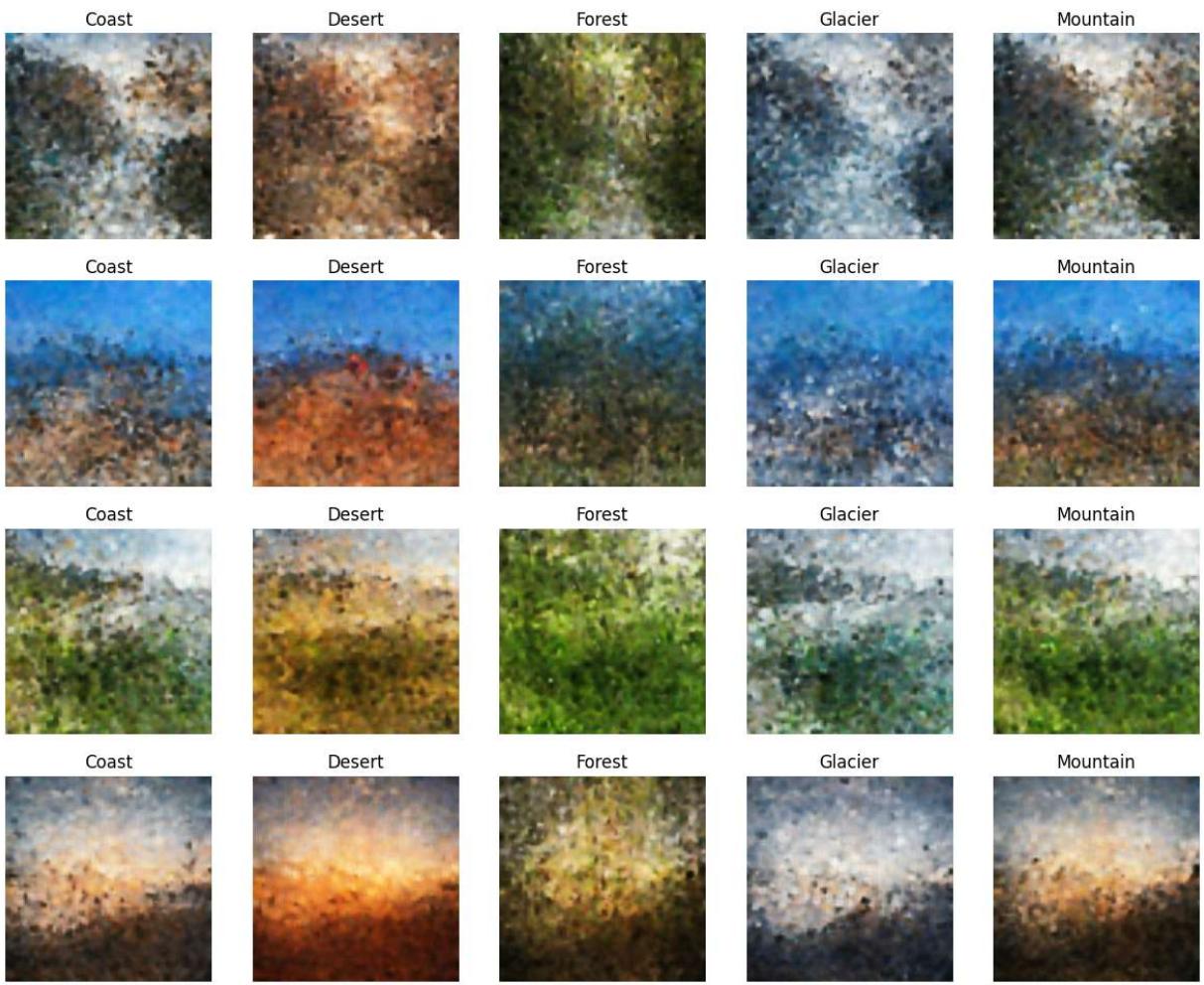
[2023-11-30 17:52:18.433517]: Generating random images for epoch 411 ...



600/600 [=====] - 78s 130ms/step - loss: 96.4150 - reconstruction_error: 47.3080 - regularization_error: 49.1070 - val_loss: 250.3317 - val_reconstruction_error: 203.5114 - val_regularization_error: 46.8203
Epoch 412/1000
600/600 [=====] - 67s 111ms/step - loss: 96.2946 - reconstruction_error: 47.2656 - regularization_error: 49.0290 - val_loss: 249.6102 - val_reconstruction_error: 203.9634 - val_regularization_error: 45.6467
Epoch 413/1000
600/600 [=====] - 73s 120ms/step - loss: 96.6505 - reconstruction_error: 47.4585 - regularization_error: 49.1920 - val_loss: 249.5925 - val_reconstruction_error: 201.3065 - val_regularization_error: 48.2859
Epoch 414/1000
600/600 [=====] - 79s 132ms/step - loss: 96.6092 - reconstruction_error: 47.4676 - regularization_error: 49.1416 - val_loss: 254.3471 - val_reconstruction_error: 206.1523 - val_regularization_error: 48.1949
Epoch 415/1000
600/600 [=====] - 75s 125ms/step - loss: 96.3210 - reconstruction_error: 47.2573 - regularization_error: 49.0637 - val_loss: 250.5798 - val_reconstruction_error: 203.1030 - val_regularization_error: 47.4768
Epoch 416/1000
600/600 [=====] - 70s 116ms/step - loss: 96.4617 - reconstruction_error: 47.2543 - regularization_error: 49.2075 - val_loss: 250.5864 - val_reconstruction_error: 203.7384 - val_regularization_error: 46.8480
Epoch 417/1000
600/600 [=====] - 71s 119ms/step - loss: 96.3206 - reconstruction_error: 47.2683 - regularization_error: 49.0522 - val_loss: 248.6702 - val_reconstruction_error: 202.5967 - val_regularization_error: 46.0736
Epoch 418/1000
600/600 [=====] - 78s 129ms/step - loss: 96.3148 - reconstruction_error: 47.1965 - regularization_error: 49.1183 - val_loss: 255.9995 - val_reconstruction_error: 206.6285 - val_regularization_error: 49.3710
Epoch 419/1000
600/600 [=====] - 72s 119ms/step - loss: 96.2819 - reconstruction_error: 47.2112 - regularization_error: 49.0707 - val_loss: 255.4033 - val_reconstruction_error: 207.1169 - val_regularization_error: 48.2866
Epoch 420/1000
600/600 [=====] - 73s 121ms/step - loss: 96.3184 - reconstruction_error: 47.3101 - regularization_error: 49.0084 - val_loss: 251.7149 - val_reconstruction_error: 206.4924 - val_regularization_error: 45.2225
Epoch 421/1000
600/600 [=====] - ETA: 0s - loss: 96.6553 - reconstruction_error: 47.4085 - regularization_error: 49.2468
[2023-11-30 18:04:33.188956]: Generating fixed images for epoch 421 ...



[2023-11-30 18:04:34.459054]: Generating random images for epoch 421 ...



600/600 [=====] - 77s 128ms/step - loss: 96.6553 - reconstruction_error: 47.4085 - regularization_error: 49.2468 - val_loss: 251.8162 - val_reconstruction_error: 203.1368 - val_regularization_error: 48.6794
Epoch 422/1000
600/600 [=====] - 77s 128ms/step - loss: 96.1228 - reconstruction_error: 47.1013 - regularization_error: 49.0215 - val_loss: 248.5912 - val_reconstruction_error: 201.1589 - val_regularization_error: 47.4323
Epoch 423/1000
600/600 [=====] - 77s 127ms/step - loss: 96.2977 - reconstruction_error: 47.2427 - regularization_error: 49.0550 - val_loss: 249.1973 - val_reconstruction_error: 201.0107 - val_regularization_error: 48.1866
Epoch 424/1000
600/600 [=====] - 72s 119ms/step - loss: 96.3425 - reconstruction_error: 47.3023 - regularization_error: 49.0402 - val_loss: 251.7888 - val_reconstruction_error: 205.2320 - val_regularization_error: 46.5569
Epoch 425/1000
600/600 [=====] - 81s 135ms/step - loss: 96.0851 - reconstruction_error: 47.0589 - regularization_error: 49.0262 - val_loss: 249.8041 - val_reconstruction_error: 202.2952 - val_regularization_error: 47.5090
Epoch 426/1000
600/600 [=====] - 81s 135ms/step - loss: 96.0166 - reconstruction_error: 47.1042 - regularization_error: 48.9124 - val_loss: 249.9713 - val_reconstruction_error: 203.8319 - val_regularization_error: 46.1393
Epoch 427/1000
600/600 [=====] - 74s 122ms/step - loss: 96.2135 - reconstruction_error: 47.1614 - regularization_error: 49.0521 - val_loss: 253.8971 - val_reconstruction_error: 205.3273 - val_regularization_error: 48.5698
Epoch 428/1000
600/600 [=====] - 73s 122ms/step - loss: 96.0097 - reconstruction_error: 47.0384 - regularization_error: 48.9713 - val_loss: 253.5826 - val_reconstruction_error: 205.7641 - val_regularization_error: 47.8186
Epoch 429/1000
600/600 [=====] - 69s 114ms/step - loss: 96.2656 - reconstruction_error: 47.0972 - regularization_error: 49.1685 - val_loss: 252.8651 - val_reconstruction_error: 206.2569 - val_regularization_error: 46.6082
Epoch 430/1000
600/600 [=====] - 66s 109ms/step - loss: 96.2245 - reconstruction_error: 47.0859 - regularization_error: 49.1386 - val_loss: 254.4661 - val_reconstruction_error: 205.3916 - val_regularization_error: 49.0745
Epoch 431/1000
600/600 [=====] - ETA: 0s - loss: 96.1232 - reconstruction_error: 47.1902 - regularization_error: 48.9331
[2023-11-30 18:16:58.143866]: Generating fixed images for epoch 431 ...



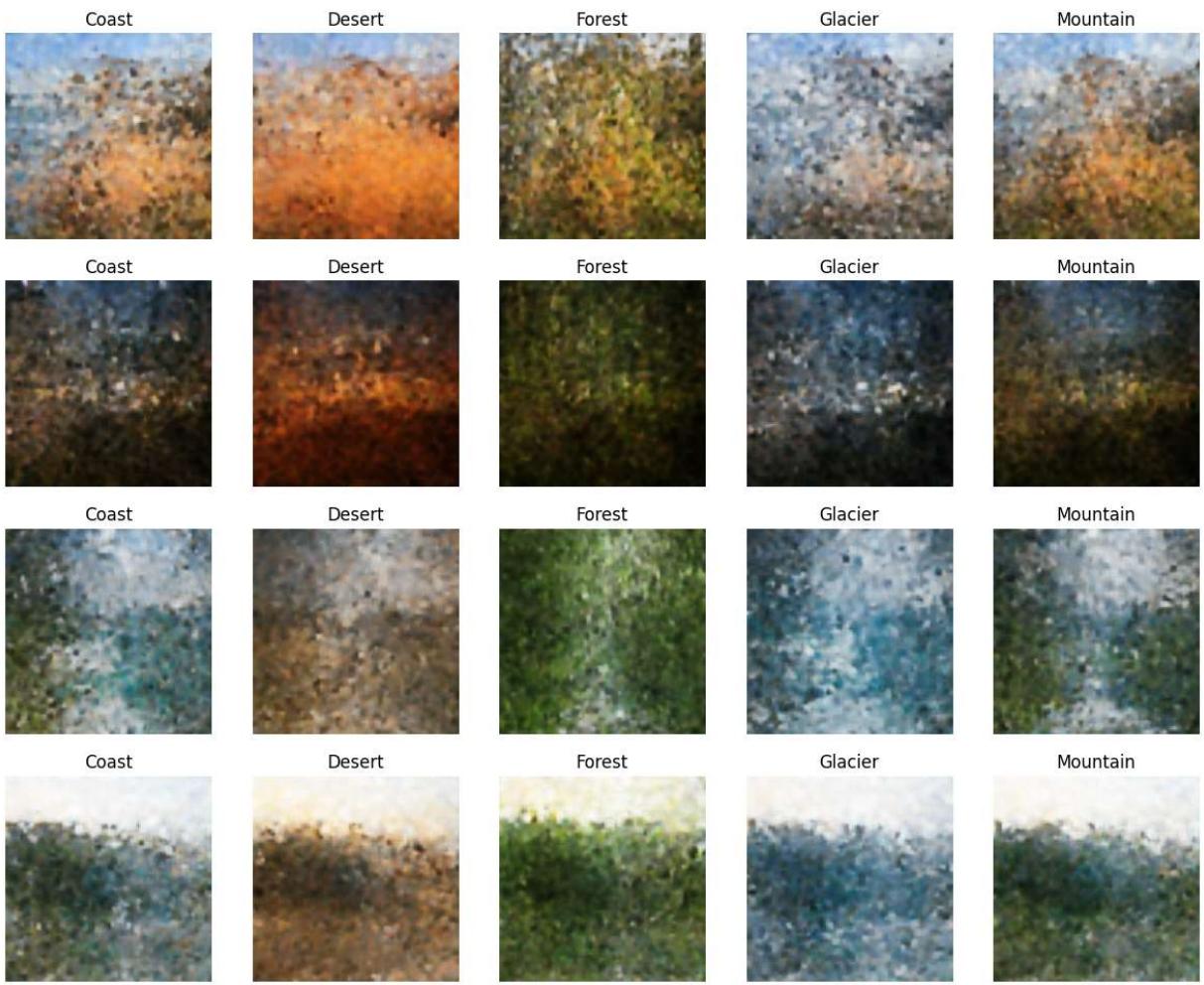
[2023-11-30 18:16:59.414507]: Generating random images for epoch 431 ...



600/600 [=====] - 75s 126ms/step - loss: 96.1232 - reconstruction_error: 47.1902 - regularization_error: 48.9331 - val_loss: 251.6060 - val_reconstruction_error: 203.0913 - val_regularization_error: 48.5147
Epoch 432/1000
600/600 [=====] - 78s 130ms/step - loss: 96.0015 - reconstruction_error: 47.0532 - regularization_error: 48.9484 - val_loss: 251.9932 - val_reconstruction_error: 205.9340 - val_regularization_error: 46.0593
Epoch 433/1000
600/600 [=====] - 76s 127ms/step - loss: 95.9928 - reconstruction_error: 46.9318 - regularization_error: 49.0610 - val_loss: 250.2446 - val_reconstruction_error: 203.0046 - val_regularization_error: 47.2399
Epoch 434/1000
600/600 [=====] - 76s 126ms/step - loss: 95.8340 - reconstruction_error: 46.9054 - regularization_error: 48.9286 - val_loss: 256.6044 - val_reconstruction_error: 207.0789 - val_regularization_error: 49.5255
Epoch 435/1000
600/600 [=====] - 76s 127ms/step - loss: 96.1473 - reconstruction_error: 47.0849 - regularization_error: 49.0625 - val_loss: 251.1908 - val_reconstruction_error: 203.9245 - val_regularization_error: 47.2663
Epoch 436/1000
600/600 [=====] - 75s 125ms/step - loss: 96.0159 - reconstruction_error: 46.9731 - regularization_error: 49.0428 - val_loss: 250.4771 - val_reconstruction_error: 203.3009 - val_regularization_error: 47.1762
Epoch 437/1000
600/600 [=====] - 75s 124ms/step - loss: 95.7727 - reconstruction_error: 46.9146 - regularization_error: 48.8581 - val_loss: 252.0773 - val_reconstruction_error: 201.5929 - val_regularization_error: 50.4845
Epoch 438/1000
600/600 [=====] - 80s 132ms/step - loss: 95.7700 - reconstruction_error: 46.8919 - regularization_error: 48.8782 - val_loss: 252.1245 - val_reconstruction_error: 203.2937 - val_regularization_error: 48.8307
Epoch 439/1000
600/600 [=====] - 70s 117ms/step - loss: 95.8960 - reconstruction_error: 46.9227 - regularization_error: 48.9733 - val_loss: 251.6916 - val_reconstruction_error: 204.3726 - val_regularization_error: 47.3190
Epoch 440/1000
600/600 [=====] - 74s 123ms/step - loss: 95.8978 - reconstruction_error: 46.9368 - regularization_error: 48.9609 - val_loss: 254.8467 - val_reconstruction_error: 206.4087 - val_regularization_error: 48.4380
Epoch 441/1000
600/600 [=====] - ETA: 0s - loss: 95.7206 - reconstruction_error: 46.7477 - regularization_error: 48.9729
[2023-11-30 18:29:32.902958]: Generating fixed images for epoch 441 ...



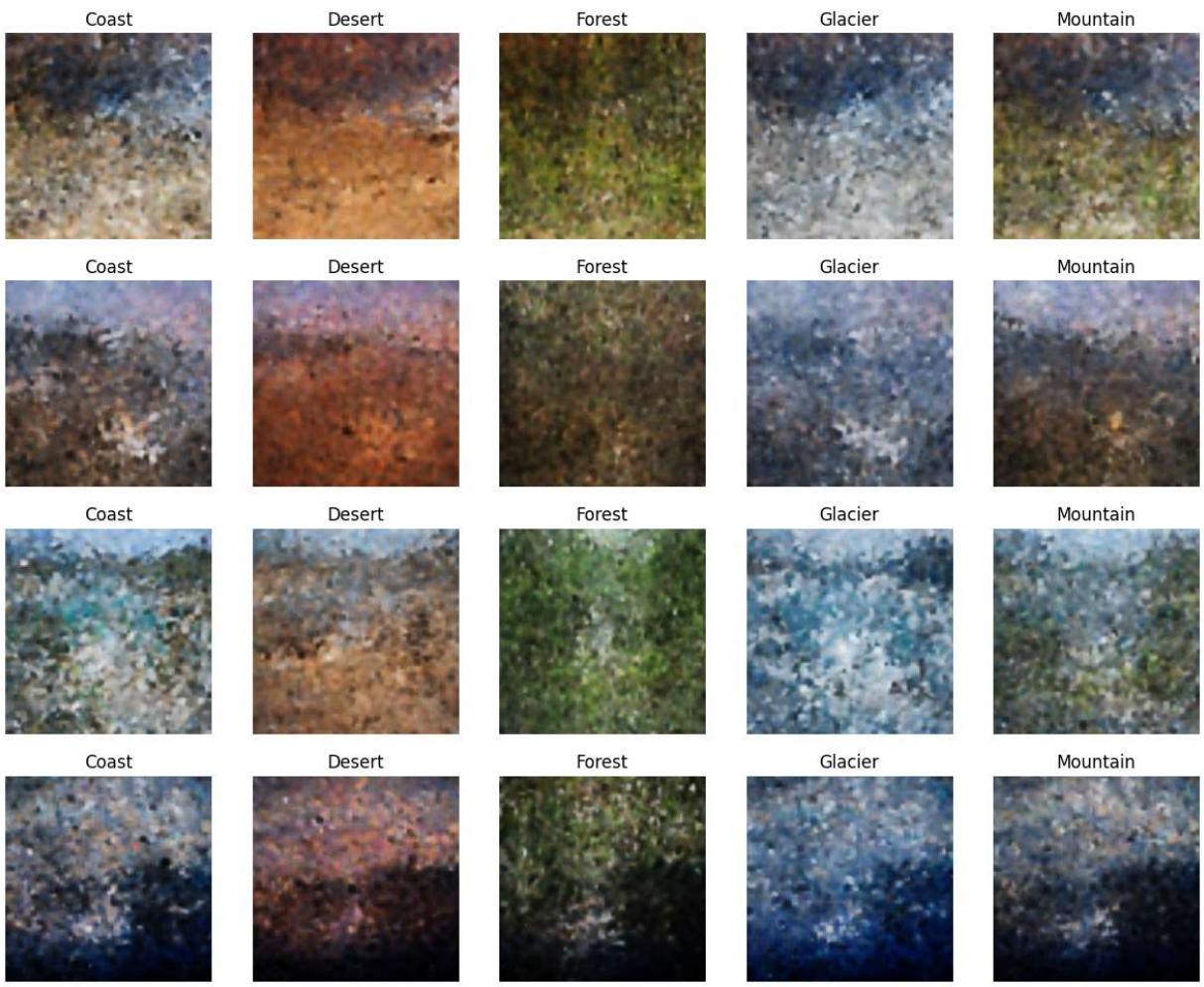
[2023-11-30 18:29:33.563919]: Generating random images for epoch 441 ...



600/600 [=====] - 71s 118ms/step - loss: 95.7206 - reconstruction_error: 46.7477 - regularization_error: 48.9729 - val_loss: 250.7701 - val_reconstruction_error: 204.4841 - val_regularization_error: 46.2860
Epoch 442/1000
600/600 [=====] - 74s 124ms/step - loss: 95.7019 - reconstruction_error: 46.7948 - regularization_error: 48.9070 - val_loss: 254.8110 - val_reconstruction_error: 206.3760 - val_regularization_error: 48.4350
Epoch 443/1000
600/600 [=====] - 75s 124ms/step - loss: 95.7269 - reconstruction_error: 46.8408 - regularization_error: 48.8861 - val_loss: 252.2989 - val_reconstruction_error: 206.1201 - val_regularization_error: 46.1787
Epoch 444/1000
600/600 [=====] - 75s 124ms/step - loss: 95.6744 - reconstruction_error: 46.8218 - regularization_error: 48.8526 - val_loss: 252.8362 - val_reconstruction_error: 206.2042 - val_regularization_error: 46.6319
Epoch 445/1000
600/600 [=====] - 72s 120ms/step - loss: 95.8390 - reconstruction_error: 46.8591 - regularization_error: 48.9798 - val_loss: 249.1063 - val_reconstruction_error: 202.9094 - val_regularization_error: 46.1969
Epoch 446/1000
600/600 [=====] - 73s 120ms/step - loss: 95.6286 - reconstruction_error: 46.7395 - regularization_error: 48.8891 - val_loss: 252.0066 - val_reconstruction_error: 205.0560 - val_regularization_error: 46.9506
Epoch 447/1000
600/600 [=====] - 76s 127ms/step - loss: 95.7448 - reconstruction_error: 46.8375 - regularization_error: 48.9072 - val_loss: 251.0016 - val_reconstruction_error: 204.7946 - val_regularization_error: 46.2070
Epoch 448/1000
600/600 [=====] - 77s 128ms/step - loss: 95.6426 - reconstruction_error: 46.6827 - regularization_error: 48.9599 - val_loss: 248.1862 - val_reconstruction_error: 201.6341 - val_regularization_error: 46.5520
Epoch 449/1000
600/600 [=====] - 73s 122ms/step - loss: 95.4548 - reconstruction_error: 46.6272 - regularization_error: 48.8276 - val_loss: 252.3411 - val_reconstruction_error: 204.4784 - val_regularization_error: 47.8627
Epoch 450/1000
600/600 [=====] - 84s 140ms/step - loss: 95.7820 - reconstruction_error: 46.7917 - regularization_error: 48.9902 - val_loss: 249.9326 - val_reconstruction_error: 204.0634 - val_regularization_error: 45.8692
Epoch 451/1000
600/600 [=====] - ETA: 0s - loss: 95.7420 - reconstruction_error: 46.8164 - regularization_error: 48.9256
[2023-11-30 18:42:09.015727]: Generating fixed images for epoch 451 ...



[2023-11-30 18:42:09.683838]: Generating random images for epoch 451 ...



600/600 [=====] - 77s 127ms/step - loss: 95.7420 - reconstruction_error: 46.8164 - regularization_error: 48.9256 - val_loss: 255.7589 - val_reconstruction_error: 206.8571 - val_regularization_error: 48.9017
Epoch 452/1000
600/600 [=====] - 79s 132ms/step - loss: 95.4507 - reconstruction_error: 46.5811 - regularization_error: 48.8696 - val_loss: 248.9583 - val_reconstruction_error: 200.2225 - val_regularization_error: 48.7358
Epoch 453/1000
600/600 [=====] - 70s 116ms/step - loss: 95.5302 - reconstruction_error: 46.7139 - regularization_error: 48.8163 - val_loss: 252.5087 - val_reconstruction_error: 203.9180 - val_regularization_error: 48.5907
Epoch 454/1000
600/600 [=====] - 71s 118ms/step - loss: 95.4430 - reconstruction_error: 46.6249 - regularization_error: 48.8180 - val_loss: 256.6227 - val_reconstruction_error: 207.1721 - val_regularization_error: 49.4507
Epoch 455/1000
600/600 [=====] - 71s 119ms/step - loss: 95.3028 - reconstruction_error: 46.5778 - regularization_error: 48.7250 - val_loss: 250.6865 - val_reconstruction_error: 203.1514 - val_regularization_error: 47.5352
Epoch 456/1000
600/600 [=====] - 73s 121ms/step - loss: 95.5567 - reconstruction_error: 46.7215 - regularization_error: 48.8351 - val_loss: 252.5021 - val_reconstruction_error: 205.6962 - val_regularization_error: 46.8059
Epoch 457/1000
600/600 [=====] - 71s 118ms/step - loss: 95.3201 - reconstruction_error: 46.5110 - regularization_error: 48.8092 - val_loss: 252.1260 - val_reconstruction_error: 205.0146 - val_regularization_error: 47.1114
Epoch 458/1000
600/600 [=====] - 72s 119ms/step - loss: 95.2215 - reconstruction_error: 46.5424 - regularization_error: 48.6791 - val_loss: 254.2046 - val_reconstruction_error: 205.8403 - val_regularization_error: 48.3643
Epoch 459/1000
600/600 [=====] - 78s 130ms/step - loss: 95.2224 - reconstruction_error: 46.4708 - regularization_error: 48.7517 - val_loss: 252.1920 - val_reconstruction_error: 204.3542 - val_regularization_error: 47.8377
Epoch 460/1000
600/600 [=====] - 73s 121ms/step - loss: 95.4775 - reconstruction_error: 46.6650 - regularization_error: 48.8125 - val_loss: 256.6410 - val_reconstruction_error: 208.8497 - val_regularization_error: 47.7913
Epoch 461/1000
600/600 [=====] - ETA: 0s - loss: 95.3255 - reconstruction_error: 46.5625 - regularization_error: 48.7630
[2023-11-30 18:54:35.186769]: Generating fixed images for epoch 461 ...



[2023-11-30 18:54:35.816027]: Generating random images for epoch 461 ...



```

600/600 [=====] - 76s 126ms/step - loss: 95.3255 - reconstruction_error: 46.5625 - regularization_error: 48.7630 - val_loss: 252.9476 - val_reconstruction_error: 204.2955 - val_regularization_error: 48.6521
Epoch 462/1000
600/600 [=====] - 68s 114ms/step - loss: 95.2612 - reconstruction_error: 46.4925 - regularization_error: 48.7687 - val_loss: 253.5444 - val_reconstruction_error: 205.6901 - val_regularization_error: 47.8543
Epoch 463/1000
600/600 [=====] - 74s 122ms/step - loss: 95.3131 - reconstruction_error: 46.5023 - regularization_error: 48.8109 - val_loss: 254.9025 - val_reconstruction_error: 207.5476 - val_regularization_error: 47.3550
Epoch 464/1000
600/600 [=====] - 71s 119ms/step - loss: 95.2828 - reconstruction_error: 46.4847 - regularization_error: 48.7982 - val_loss: 251.3190 - val_reconstruction_error: 204.5309 - val_regularization_error: 46.7881
Epoch 465/1000
600/600 [=====] - 74s 122ms/step - loss: 95.3714 - reconstruction_error: 46.5864 - regularization_error: 48.7851 - val_loss: 253.7384 - val_reconstruction_error: 205.1915 - val_regularization_error: 48.5468
Epoch 466/1000
600/600 [=====] - 81s 134ms/step - loss: 95.2131 - reconstruction_error: 46.4801 - regularization_error: 48.7330 - val_loss: 251.8928 - val_reconstruction_error: 204.0428 - val_regularization_error: 47.8500
Epoch 467/1000
600/600 [=====] - 66s 109ms/step - loss: 95.2008 - reconstruction_error: 46.4046 - regularization_error: 48.7962 - val_loss: 252.0116 - val_reconstruction_error: 203.9155 - val_regularization_error: 48.0961
Epoch 468/1000
600/600 [=====] - 67s 110ms/step - loss: 95.2360 - reconstruction_error: 46.4949 - regularization_error: 48.7410 - val_loss: 255.4917 - val_reconstruction_error: 208.1952 - val_regularization_error: 47.2964
Epoch 469/1000
600/600 [=====] - 77s 128ms/step - loss: 95.3477 - reconstruction_error: 46.4982 - regularization_error: 48.8494 - val_loss: 251.1771 - val_reconstruction_error: 202.8226 - val_regularization_error: 48.3544
Epoch 470/1000
600/600 [=====] - 81s 134ms/step - loss: 95.1358 - reconstruction_error: 46.4146 - regularization_error: 48.7212 - val_loss: 249.5777 - val_reconstruction_error: 202.8680 - val_regularization_error: 46.7098
Epoch 471/1000
600/600 [=====] - ETA: 0s - loss: 95.2577 - reconstruction_error: 46.4679 - regularization_error: 48.7898
[2023-11-30 19:06:51.903572]: Generating fixed images for epoch 471 ...

```



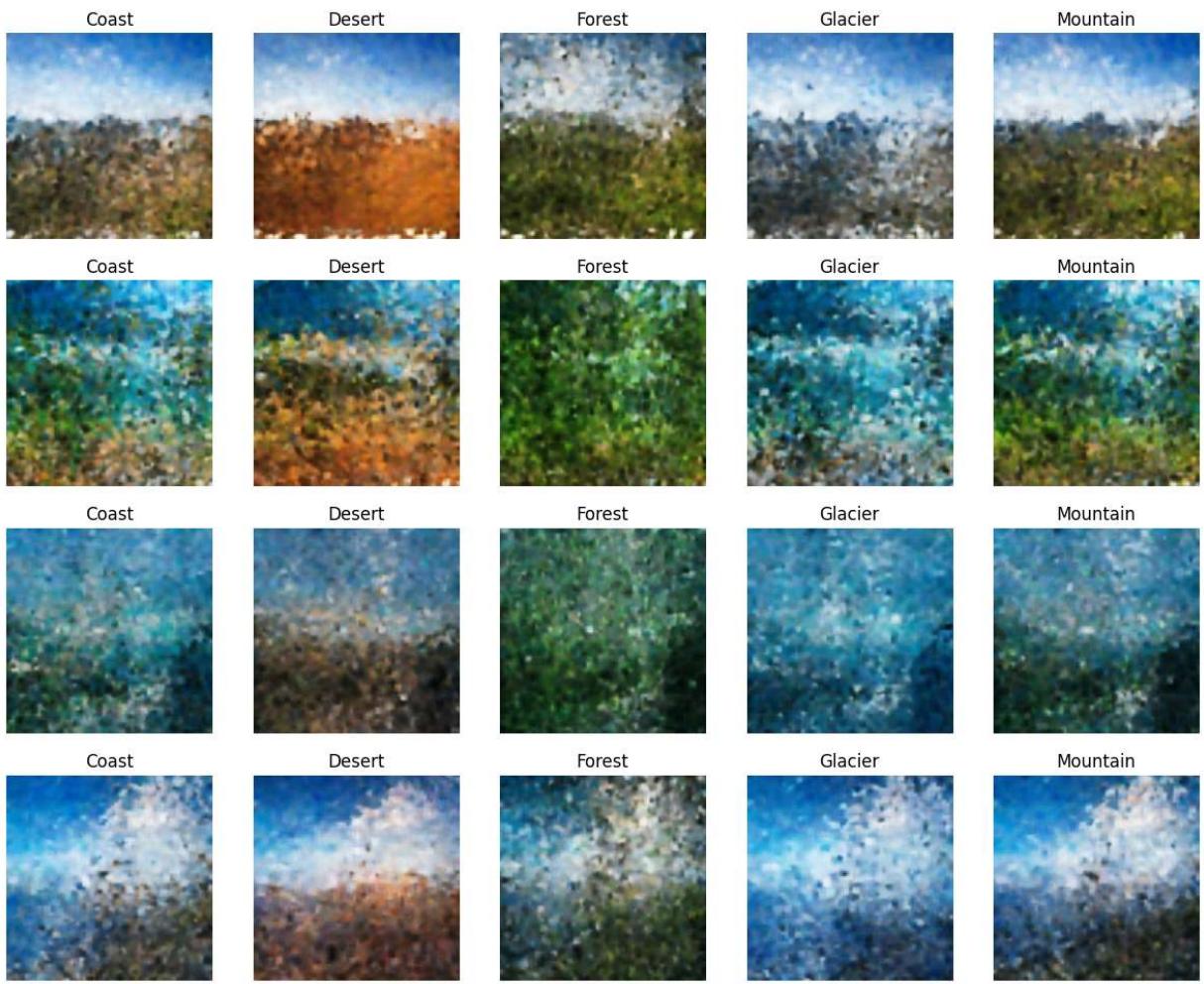
[2023-11-30 19:06:53.436229]: Generating random images for epoch 471 ...



600/600 [=====] - 77s 128ms/step - loss: 95.2577 - reconstruction_error: 46.4679 - regularization_error: 48.7898 - val_loss: 251.5475 - val_reconstruction_error: 205.5513 - val_regularization_error: 45.9961
Epoch 472/1000
600/600 [=====] - 74s 122ms/step - loss: 95.0220 - reconstruction_error: 46.3249 - regularization_error: 48.6971 - val_loss: 251.2031 - val_reconstruction_error: 202.4657 - val_regularization_error: 48.7375
Epoch 473/1000
600/600 [=====] - 74s 123ms/step - loss: 95.1440 - reconstruction_error: 46.4044 - regularization_error: 48.7395 - val_loss: 252.6836 - val_reconstruction_error: 203.3442 - val_regularization_error: 49.3394
Epoch 474/1000
600/600 [=====] - 68s 114ms/step - loss: 95.0298 - reconstruction_error: 46.2953 - regularization_error: 48.7345 - val_loss: 251.5276 - val_reconstruction_error: 204.0087 - val_regularization_error: 47.5190
Epoch 475/1000
600/600 [=====] - 76s 127ms/step - loss: 94.8948 - reconstruction_error: 46.2319 - regularization_error: 48.6629 - val_loss: 251.8690 - val_reconstruction_error: 202.9384 - val_regularization_error: 48.9306
Epoch 476/1000
600/600 [=====] - 76s 126ms/step - loss: 95.1003 - reconstruction_error: 46.3903 - regularization_error: 48.7099 - val_loss: 253.1515 - val_reconstruction_error: 204.2207 - val_regularization_error: 48.9308
Epoch 477/1000
600/600 [=====] - 77s 128ms/step - loss: 95.0174 - reconstruction_error: 46.3068 - regularization_error: 48.7106 - val_loss: 253.8381 - val_reconstruction_error: 205.5367 - val_regularization_error: 48.3014
Epoch 478/1000
600/600 [=====] - 85s 141ms/step - loss: 94.9574 - reconstruction_error: 46.3029 - regularization_error: 48.6545 - val_loss: 253.8395 - val_reconstruction_error: 206.5571 - val_regularization_error: 47.2823
Epoch 479/1000
600/600 [=====] - 73s 121ms/step - loss: 94.8338 - reconstruction_error: 46.1535 - regularization_error: 48.6802 - val_loss: 251.0362 - val_reconstruction_error: 203.3808 - val_regularization_error: 47.6555
Epoch 480/1000
600/600 [=====] - 75s 125ms/step - loss: 94.9344 - reconstruction_error: 46.2140 - regularization_error: 48.7204 - val_loss: 253.1323 - val_reconstruction_error: 206.0085 - val_regularization_error: 47.1238
Epoch 481/1000
600/600 [=====] - ETA: 0s - loss: 94.9960 - reconstruction_error: 46.3154 - regularization_error: 48.6806
[2023-11-30 19:19:31.13300]: Generating fixed images for epoch 481 ...



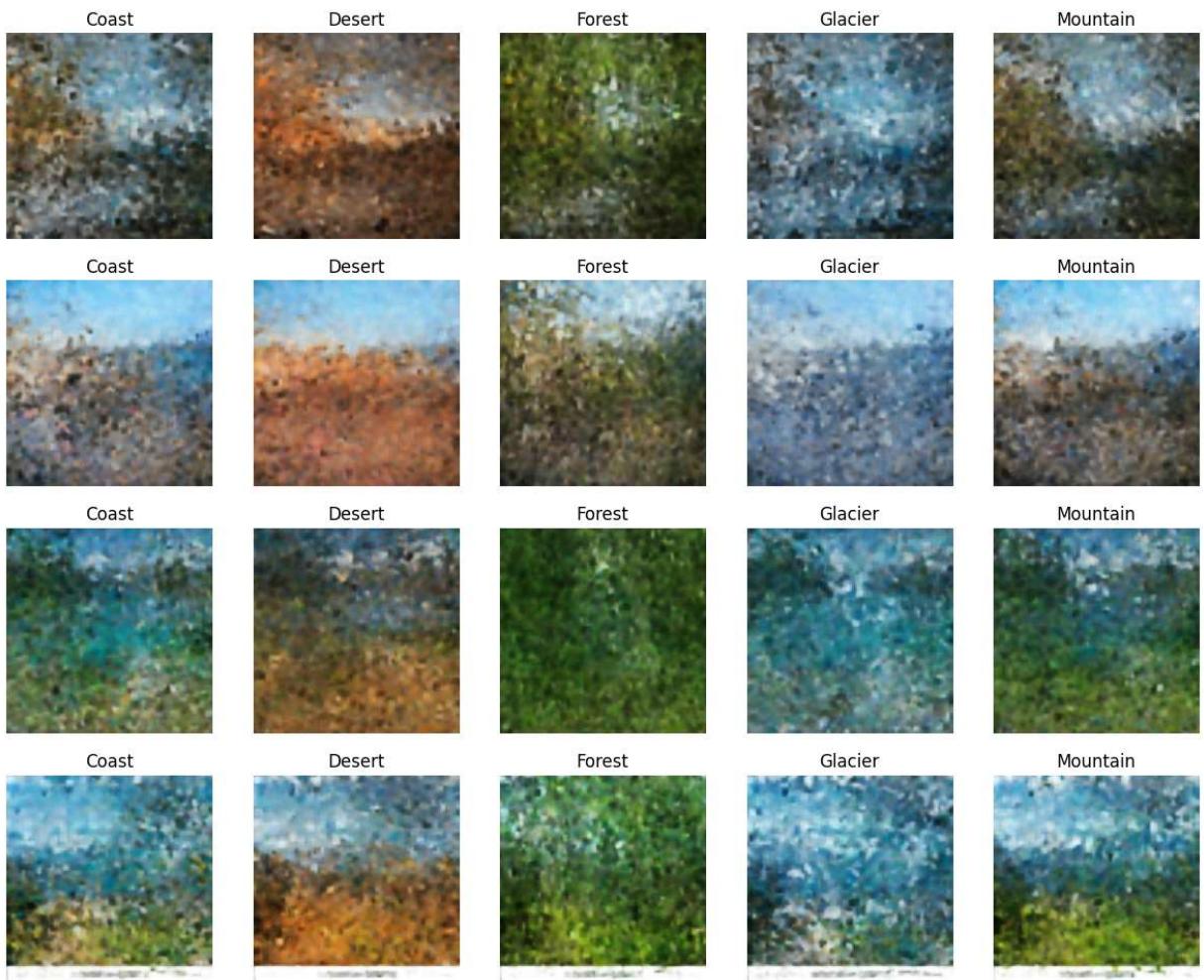
[2023-11-30 19:19:32.406957]: Generating random images for epoch 481 ...



600/600 [=====] - 79s 131ms/step - loss: 94.9960 - reconstruction_error: 46.3154 - regularization_error: 48.6806 - val_loss: 253.5699 - val_reconstruction_error: 204.6714 - val_regularization_error: 48.8985
Epoch 482/1000
600/600 [=====] - 77s 127ms/step - loss: 94.9612 - reconstruction_error: 46.2880 - regularization_error: 48.6732 - val_loss: 249.3986 - val_reconstruction_error: 202.9094 - val_regularization_error: 46.4893
Epoch 483/1000
600/600 [=====] - 75s 124ms/step - loss: 94.9745 - reconstruction_error: 46.2836 - regularization_error: 48.6908 - val_loss: 254.7675 - val_reconstruction_error: 206.7025 - val_regularization_error: 48.0649
Epoch 484/1000
600/600 [=====] - 76s 126ms/step - loss: 94.7781 - reconstruction_error: 46.1249 - regularization_error: 48.6532 - val_loss: 250.0154 - val_reconstruction_error: 203.6755 - val_regularization_error: 46.3399
Epoch 485/1000
600/600 [=====] - 67s 111ms/step - loss: 94.8935 - reconstruction_error: 46.1809 - regularization_error: 48.7126 - val_loss: 252.3356 - val_reconstruction_error: 204.1739 - val_regularization_error: 48.1618
Epoch 486/1000
600/600 [=====] - 77s 128ms/step - loss: 94.7980 - reconstruction_error: 46.1214 - regularization_error: 48.6766 - val_loss: 250.7825 - val_reconstruction_error: 204.2842 - val_regularization_error: 46.4983
Epoch 487/1000
600/600 [=====] - 75s 125ms/step - loss: 94.8538 - reconstruction_error: 46.2202 - regularization_error: 48.6335 - val_loss: 252.0726 - val_reconstruction_error: 204.6030 - val_regularization_error: 47.4696
Epoch 488/1000
600/600 [=====] - 73s 122ms/step - loss: 94.9174 - reconstruction_error: 46.2039 - regularization_error: 48.7135 - val_loss: 256.4884 - val_reconstruction_error: 207.7297 - val_regularization_error: 48.7587
Epoch 489/1000
600/600 [=====] - 75s 124ms/step - loss: 94.7230 - reconstruction_error: 46.0884 - regularization_error: 48.6345 - val_loss: 254.9206 - val_reconstruction_error: 208.3786 - val_regularization_error: 46.5418
Epoch 490/1000
600/600 [=====] - 72s 119ms/step - loss: 94.7490 - reconstruction_error: 46.1538 - regularization_error: 48.5952 - val_loss: 251.0167 - val_reconstruction_error: 204.8477 - val_regularization_error: 46.1691
Epoch 491/1000
600/600 [=====] - ETA: 0s - loss: 94.7166 - reconstruction_error: 46.1882 - regularization_error: 48.5284
[2023-11-30 19:31:57.783493]: Generating fixed images for epoch 491 ...



[2023-11-30 19:31:59.474393]: Generating random images for epoch 491 ...



600/600 [=====] - 78s 130ms/step - loss: 94.7166 - reconstruction_error: 46.1882 - regularization_error: 48.5284 - val_loss: 255.2929 - val_reconstruction_error: 205.6658 - val_regularization_error: 49.6272
Epoch 492/1000
600/600 [=====] - 69s 116ms/step - loss: 94.7228 - reconstruction_error: 46.1525 - regularization_error: 48.5702 - val_loss: 253.2701 - val_reconstruction_error: 205.6786 - val_regularization_error: 47.5914
Epoch 493/1000
600/600 [=====] - 71s 118ms/step - loss: 94.6997 - reconstruction_error: 46.1842 - regularization_error: 48.5155 - val_loss: 251.6887 - val_reconstruction_error: 204.1902 - val_regularization_error: 47.4985
Epoch 494/1000
600/600 [=====] - 73s 121ms/step - loss: 94.6448 - reconstruction_error: 46.0576 - regularization_error: 48.5872 - val_loss: 250.7959 - val_reconstruction_error: 203.7079 - val_regularization_error: 47.0879
Epoch 495/1000
600/600 [=====] - 74s 122ms/step - loss: 94.5100 - reconstruction_error: 45.9241 - regularization_error: 48.5860 - val_loss: 252.0954 - val_reconstruction_error: 204.7415 - val_regularization_error: 47.3539
Epoch 496/1000
600/600 [=====] - 74s 123ms/step - loss: 94.6750 - reconstruction_error: 46.0656 - regularization_error: 48.6094 - val_loss: 254.0506 - val_reconstruction_error: 207.6065 - val_regularization_error: 46.4441
Epoch 497/1000
600/600 [=====] - 76s 126ms/step - loss: 94.5913 - reconstruction_error: 46.0074 - regularization_error: 48.5840 - val_loss: 253.2500 - val_reconstruction_error: 206.0420 - val_regularization_error: 47.2078
Epoch 498/1000
600/600 [=====] - 72s 120ms/step - loss: 94.5660 - reconstruction_error: 46.0533 - regularization_error: 48.5127 - val_loss: 250.0111 - val_reconstruction_error: 203.5410 - val_regularization_error: 46.4701
Epoch 499/1000
600/600 [=====] - 70s 117ms/step - loss: 94.5594 - reconstruction_error: 45.9919 - regularization_error: 48.5675 - val_loss: 254.4177 - val_reconstruction_error: 206.4741 - val_regularization_error: 47.9435
Epoch 500/1000
600/600 [=====] - 75s 125ms/step - loss: 94.4381 - reconstruction_error: 45.9232 - regularization_error: 48.5149 - val_loss: 253.8356 - val_reconstruction_error: 207.4517 - val_regularization_error: 46.3839
Epoch 501/1000
600/600 [=====] - ETA: 0s - loss: 94.3722 - reconstruction_error: 45.9449 - regularization_error: 48.4273
[2023-11-30 19:44:11.155075]: Generating fixed images for epoch 501 ...



[2023-11-30 19:44:12.354040]: Generating random images for epoch 501 ...

