

Epoch 1/100

6/Unknown - 20s 1s/step - loss: 766.3060 - reconstruction\_error: 748.9265 - regularization\_error: 17.3795

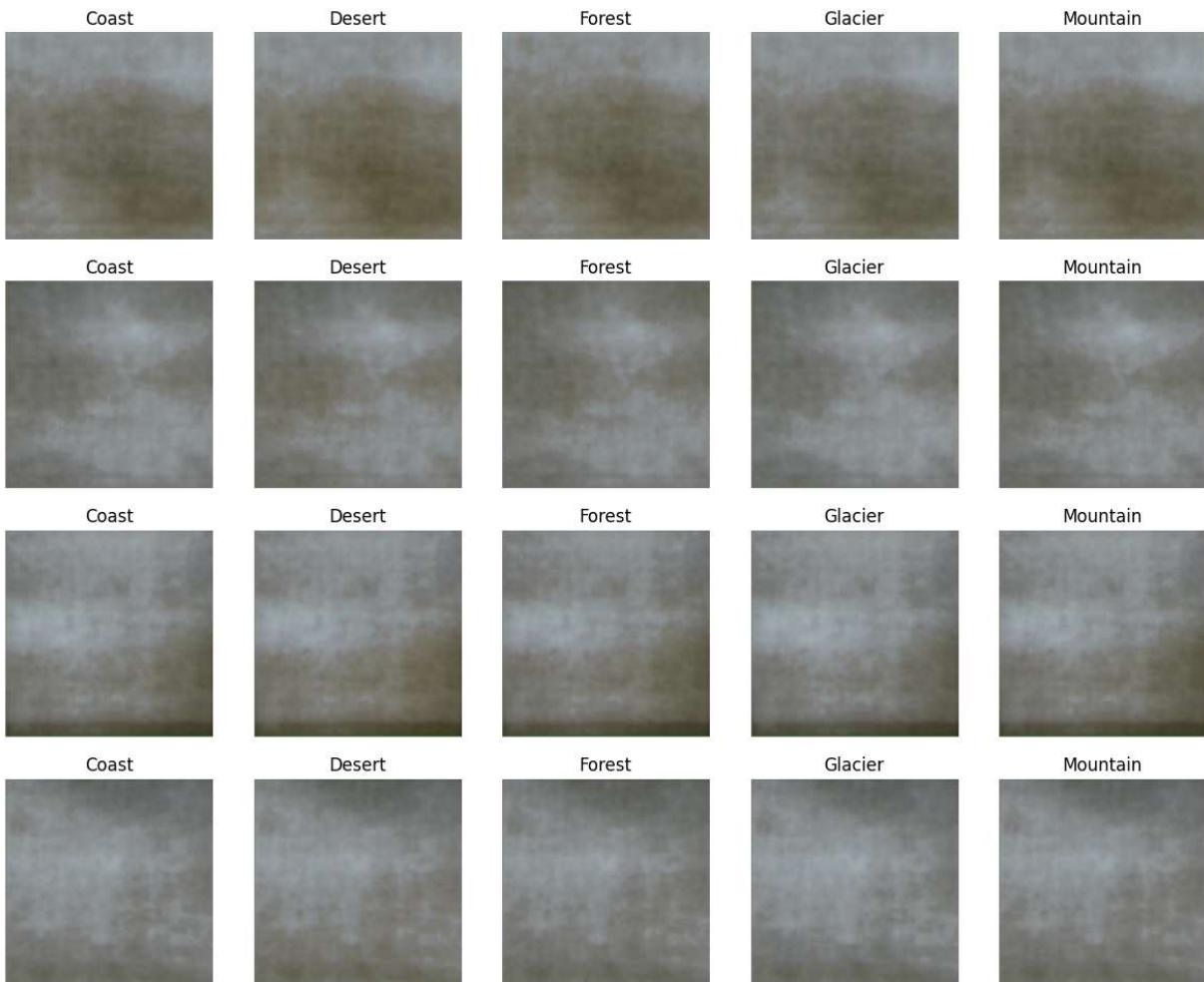
WARNING:tensorflow:Callback method `on\_train\_batch\_end` is slow compared to the batch time (batch time: 0.1128s vs `on\_train\_batch\_end` time: 1.1660s). Check your callbacks.

300/Unknown - 111s 325ms/step - loss: 509.8751 - reconstruction\_error: 487.8404 - regularization\_error: 22.0348

[2023-11-21 17:40:32.003304]: Generating fixed images for epoch 1 ...



[2023-11-21 17:40:34.367754]: Generating random images for epoch 1 ...



300/300 [=====] - 154s 471ms/step - loss: 509.8751 - reconstruction\_error: 487.8404 - regularization\_error: 22.0348 - val\_loss: 385.6887 - val\_reconstruction\_error: 353.4586 - val\_regularization\_error: 32.4417

Epoch 2/100

300/300 [=====] - ETA: 0s - loss: 326.1262 - reconstruction\_error: 284.7499 - regularization\_error: 41.3762

[2023-11-21 17:42:32.249799]: Generating fixed images for epoch 2 ...



[2023-11-21 17:42:33.396833]: Generating random images for epoch 2 ...



300/300 [=====] - 117s 389ms/step - loss: 326.1262 - reconstruction\_error: 284.7499 - regularization\_error: 41.3762 - val\_loss: 302.7629 - val\_reconstruction\_error: 256.6189 - val\_regularization\_error: 46.2210

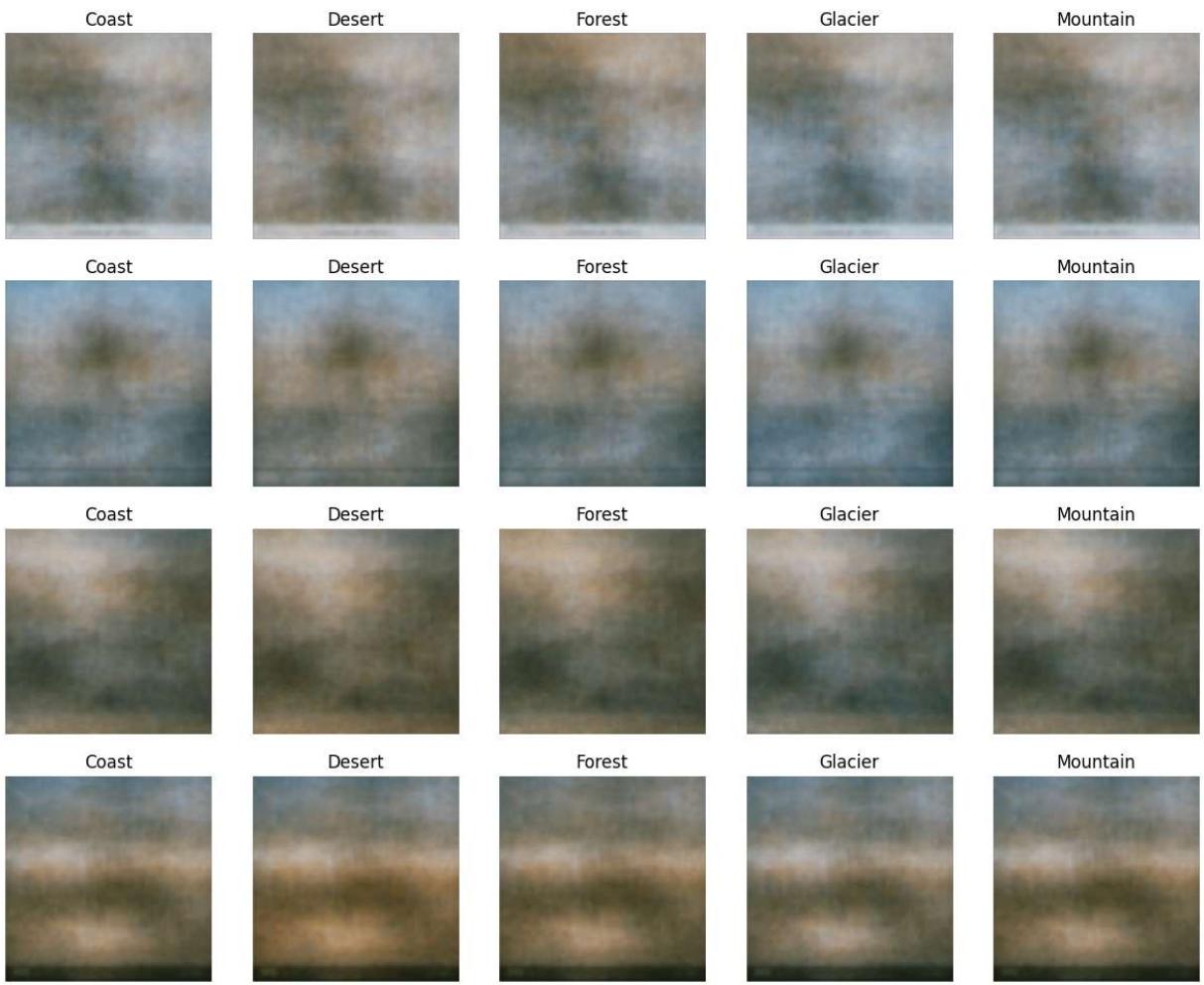
Epoch 3/100

300/300 [=====] - ETA: 0s - loss: 289.5262 - reconstruction\_error: 242.0000 - regularization\_error: 47.5262

[2023-11-21 17:44:53.713923]: Generating fixed images for epoch 3 ...



[2023-11-21 17:44:55.421341]: Generating random images for epoch 3 ...



300/300 [=====] - 118s 393ms/step - loss: 289.5262 - reconstruction\_error: 242.0000 - regularization\_error: 47.5262 - val\_loss: 286.1815 - val\_reconstruction\_error: 237.3020 - val\_regularization\_error: 49.0020

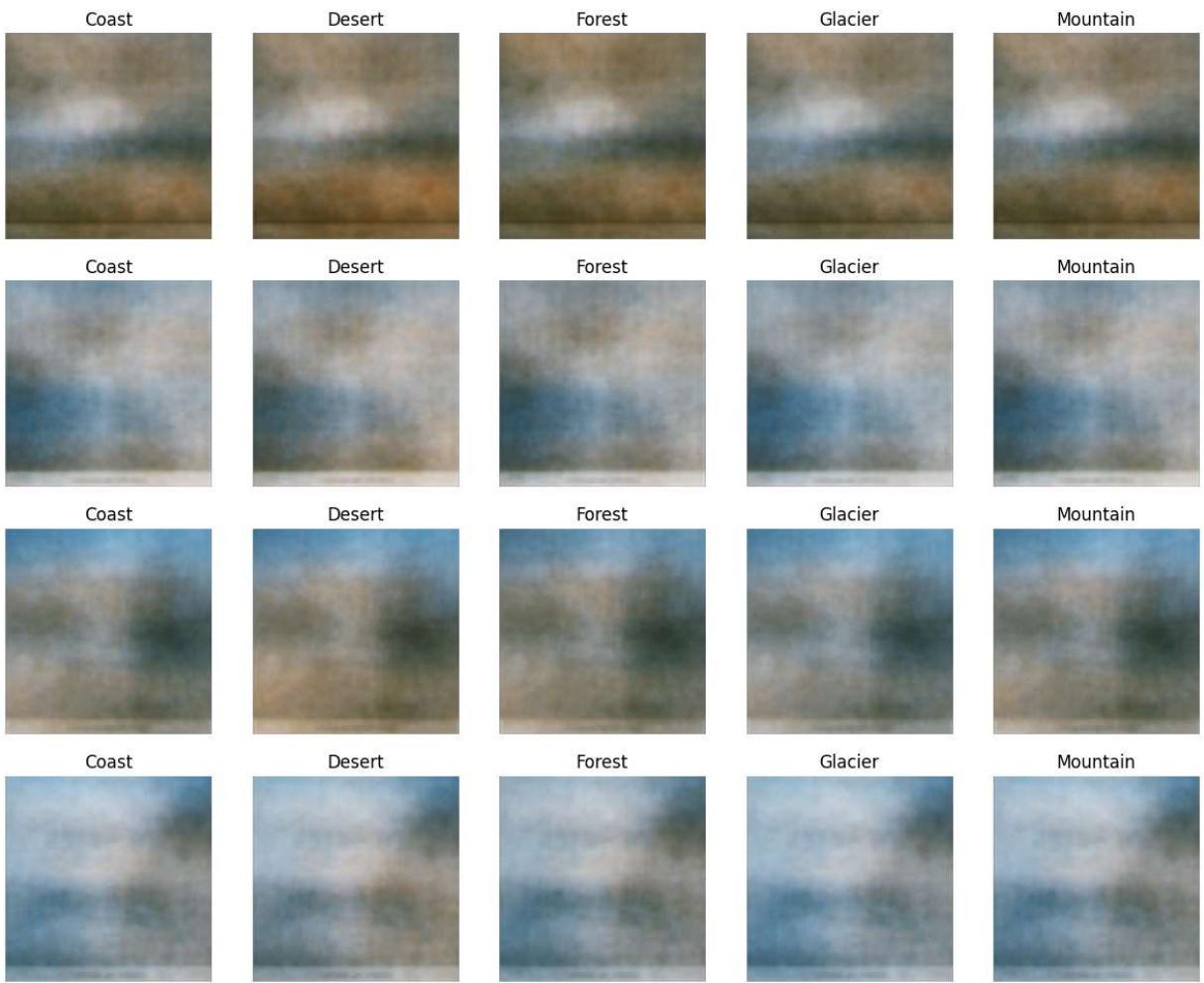
Epoch 4/100

300/300 [=====] - ETA: 0s - loss: 276.7834 - reconstruction\_error: 227.6838 - regularization\_error: 49.0996

[2023-11-21 17:46:52.033235]: Generating fixed images for epoch 4 ...



[2023-11-21 17:46:53.451684]: Generating random images for epoch 4 ...



300/300 [=====] - 116s 384ms/step - loss: 276.7834 - reconstruction\_error: 227.6838 - regularization\_error: 49.0996 - val\_loss: 273.3098 - val\_reconstruction\_error: 223.4799 - val\_regularization\_error: 50.0223

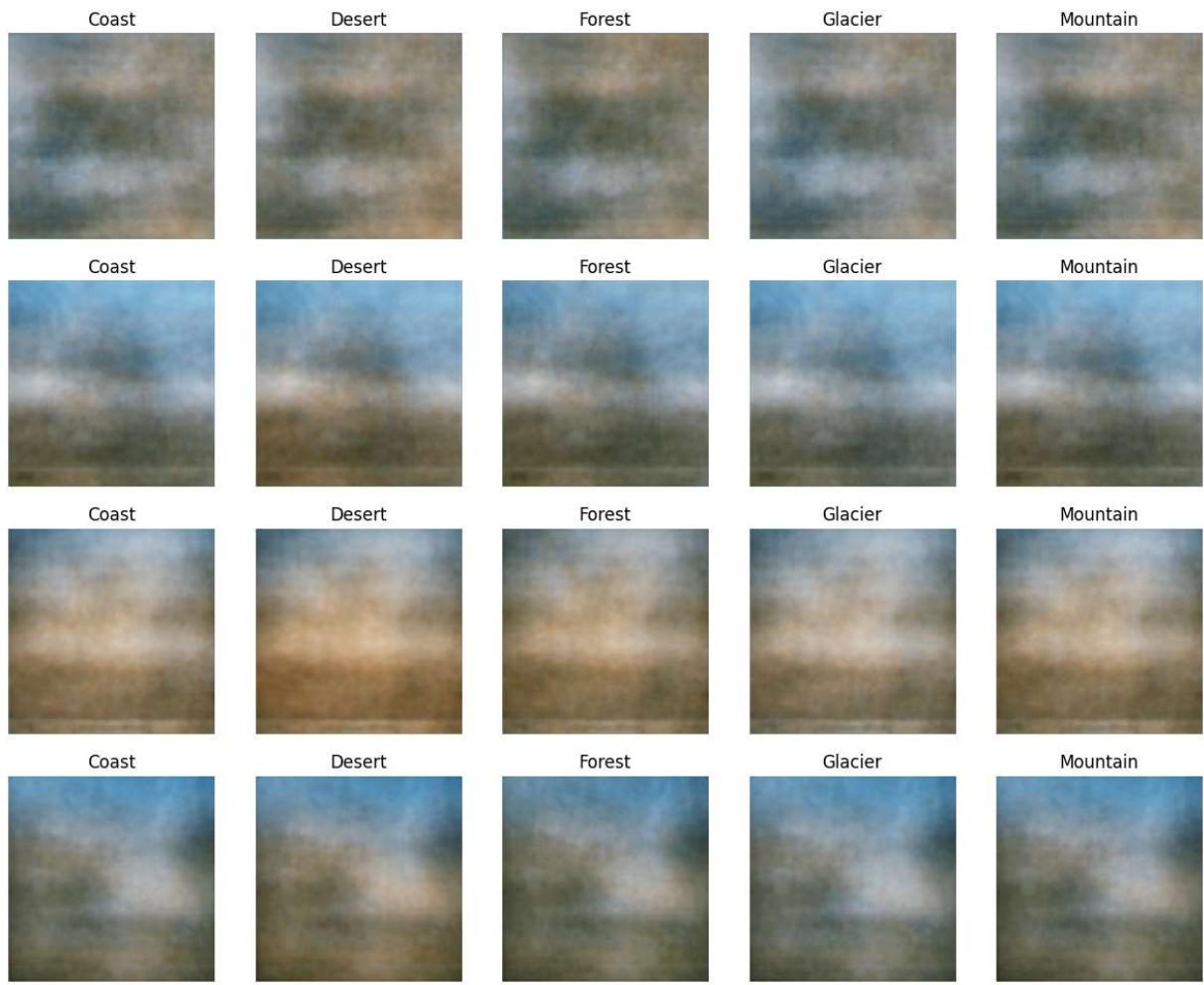
Epoch 5/100

300/300 [=====] - ETA: 0s - loss: 264.4613 - reconstruction\_error: 215.9592 - regularization\_error: 48.5021

[2023-11-21 17:48:55.890392]: Generating fixed images for epoch 5 ...



[2023-11-21 17:48:57.096515]: Generating random images for epoch 5 ...



300/300 [=====] - 123s 408ms/step - loss: 264.4613 - reconstruction\_error: 215.9592 - regularization\_error: 48.5021 - val\_loss: 262.6876 - val\_reconstruction\_error: 214.4404 - val\_regularization\_error: 48.3786

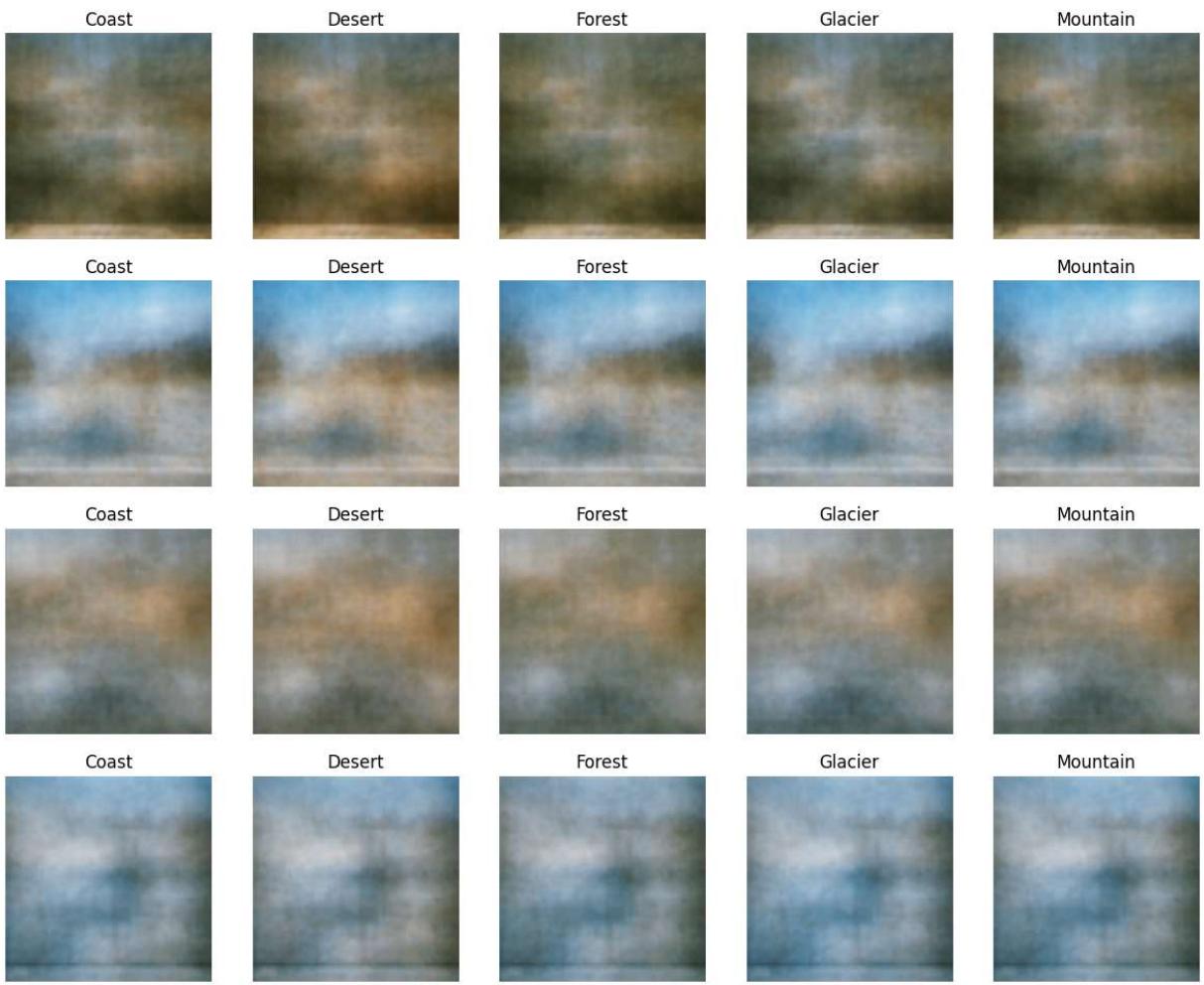
Epoch 6/100

300/300 [=====] - ETA: 0s - loss: 254.7140 - reconstruction\_error: 206.5391 - regularization\_error: 48.1749

[2023-11-21 17:50:56.138126]: Generating fixed images for epoch 6 ...



[2023-11-21 17:50:57.454980]: Generating random images for epoch 6 ...

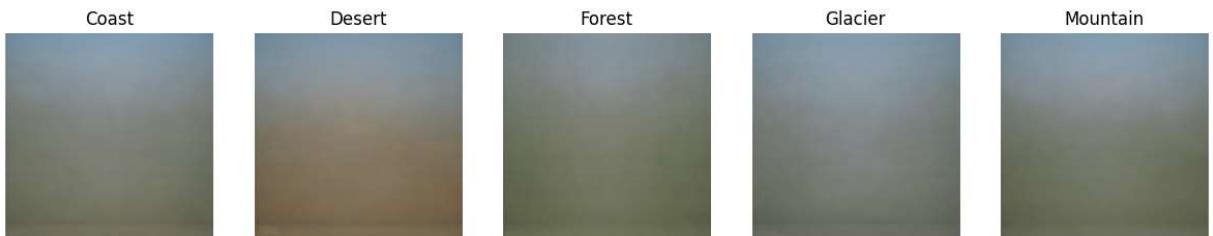


300/300 [=====] - 121s 403ms/step - loss: 254.7140 - reconstruction\_error: 206.5391 - regularization\_error: 48.1749 - val\_loss: 255.0029 - val\_reconstruction\_error: 205.5243 - val\_regularization\_error: 49.5881

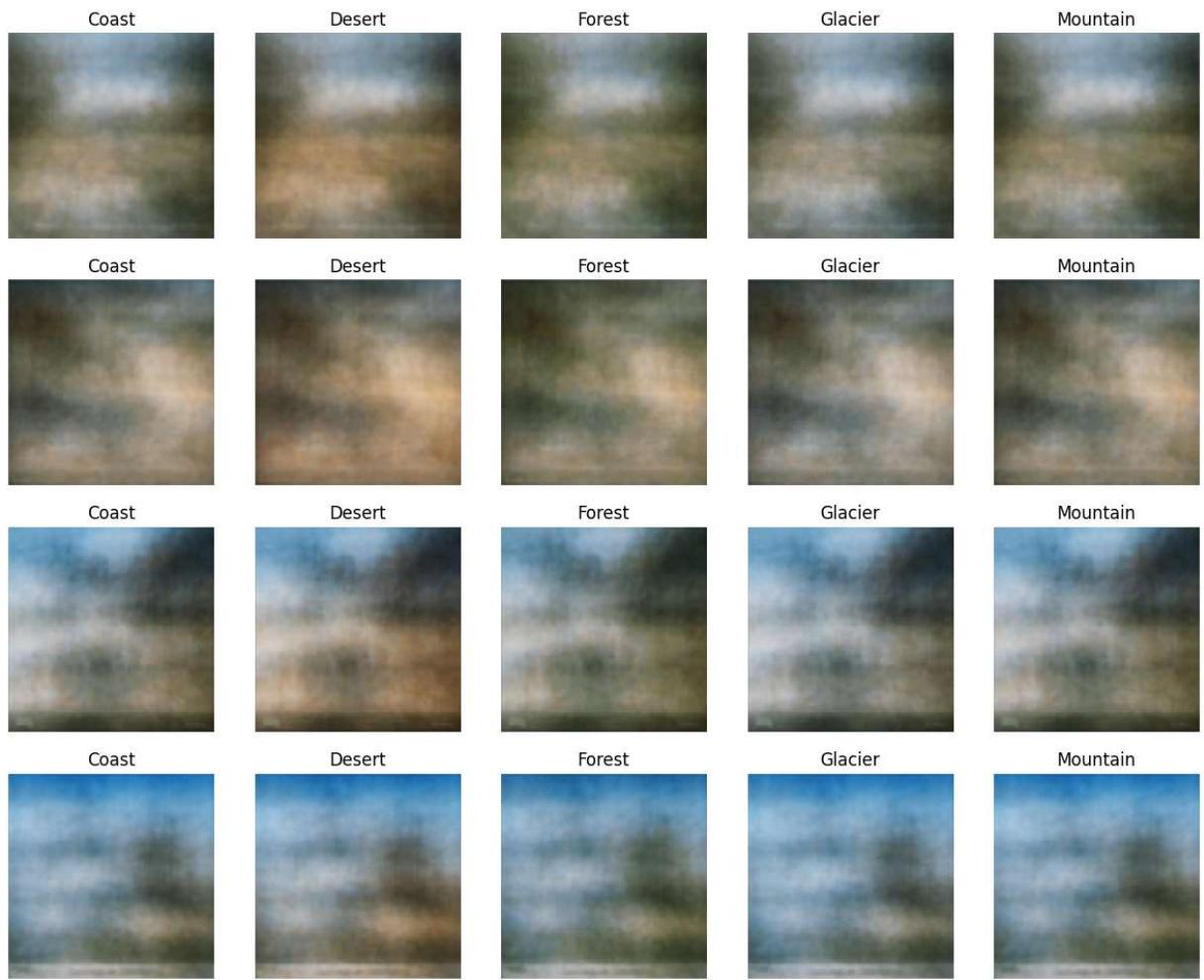
Epoch 7/100

300/300 [=====] - ETA: 0s - loss: 247.0389 - reconstruction\_error: 198.8995 - regularization\_error: 48.1394

[2023-11-21 17:52:53.726168]: Generating fixed images for epoch 7 ...



[2023-11-21 17:52:55.424864]: Generating random images for epoch 7 ...

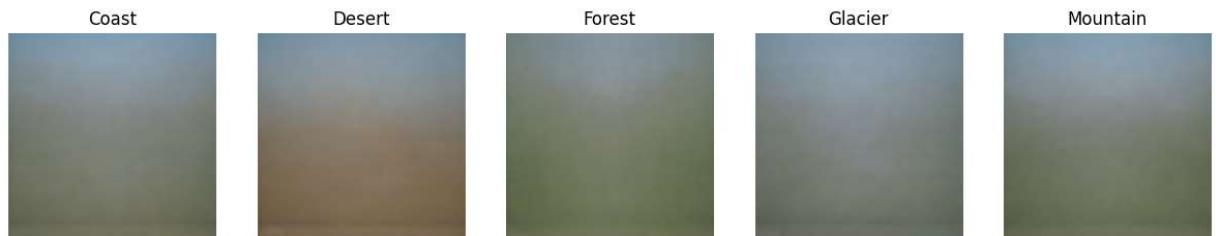


300/300 [=====] - 117s 390ms/step - loss: 247.0389 - reconstruction\_error: 198.8995 - regularization\_error: 48.1394 - val\_loss: 248.0455 - val\_reconstruction\_error: 199.0918 - val\_regularization\_error: 49.1254

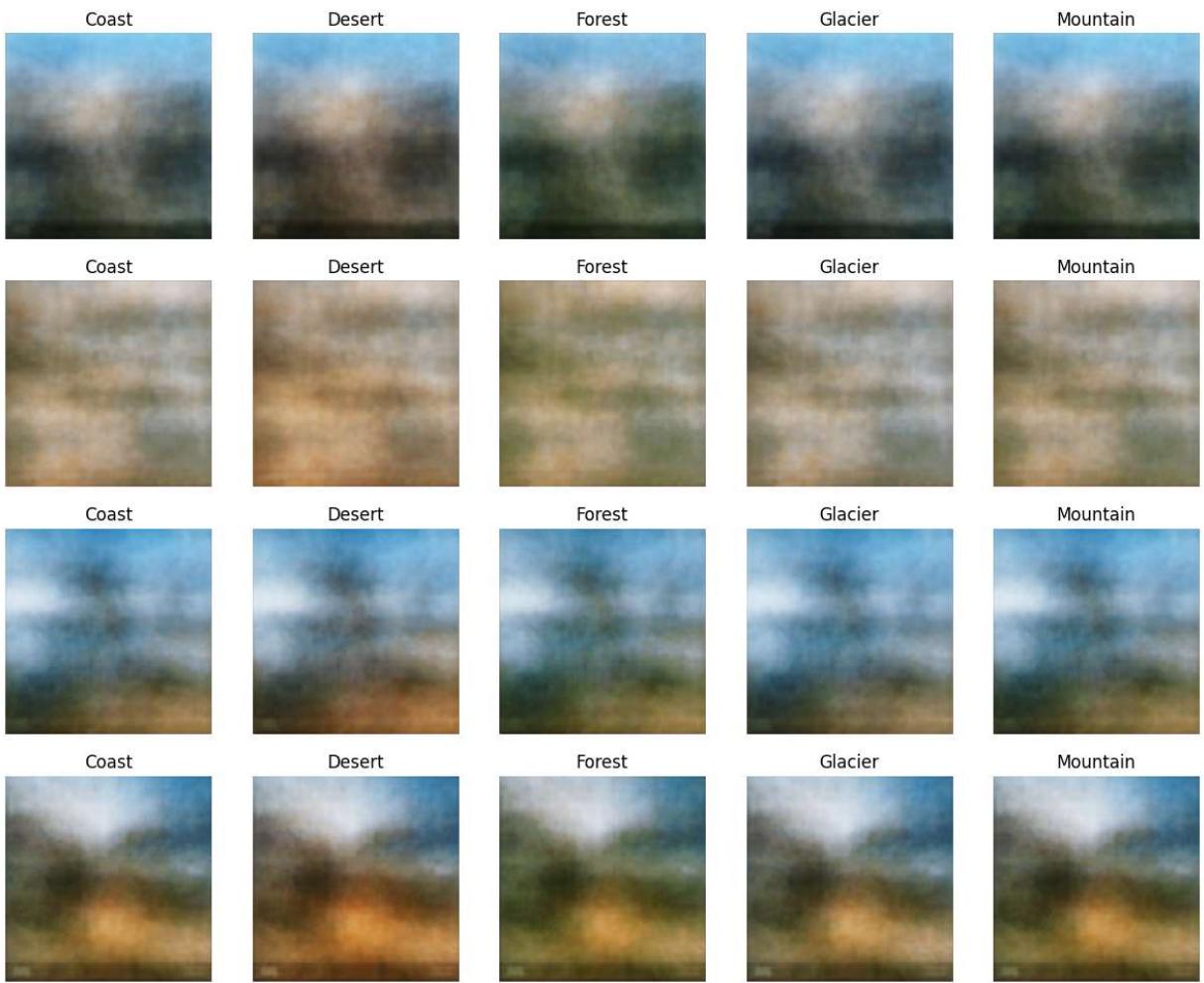
Epoch 8/100

300/300 [=====] - ETA: 0s - loss: 241.3441 - reconstruction\_error: 192.7935 - regularization\_error: 48.5506

[2023-11-21 17:54:54.866606]: Generating fixed images for epoch 8 ...



[2023-11-21 17:54:56.376866]: Generating random images for epoch 8 ...

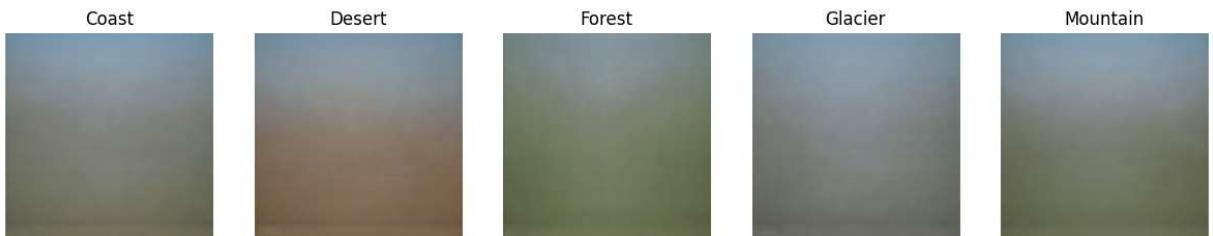


300/300 [=====] - 122s 404ms/step - loss: 241.3441 - reconstruction\_error: 192.7935 - regularization\_error: 48.5506 - val\_loss: 243.3352 - val\_reconstruction\_error: 193.8960 - val\_regularization\_error: 49.6106

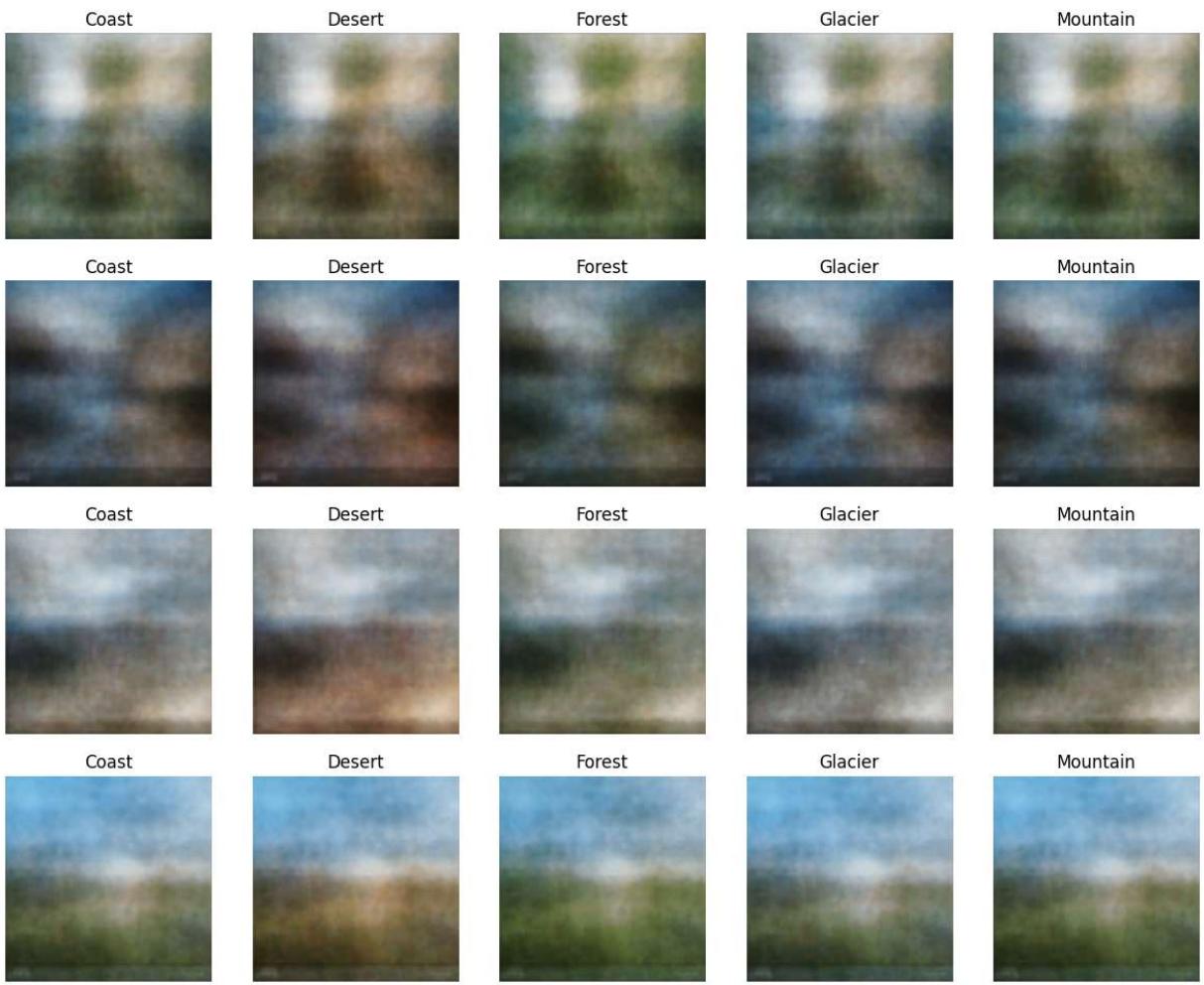
Epoch 9/100

300/300 [=====] - ETA: 0s - loss: 236.6671 - reconstruction\_error: 187.8490 - regularization\_error: 48.8181

[2023-11-21 17:56:50.939351]: Generating fixed images for epoch 9 ...



[2023-11-21 17:56:52.427430]: Generating random images for epoch 9 ...



300/300 [=====] - 116s 385ms/step - loss: 236.6671 - reconstruction\_error: 187.8490 - regularization\_error: 48.8181 - val\_loss: 238.3878 - val\_reconstruction\_error: 189.1311 - val\_regularization\_error: 49.4548

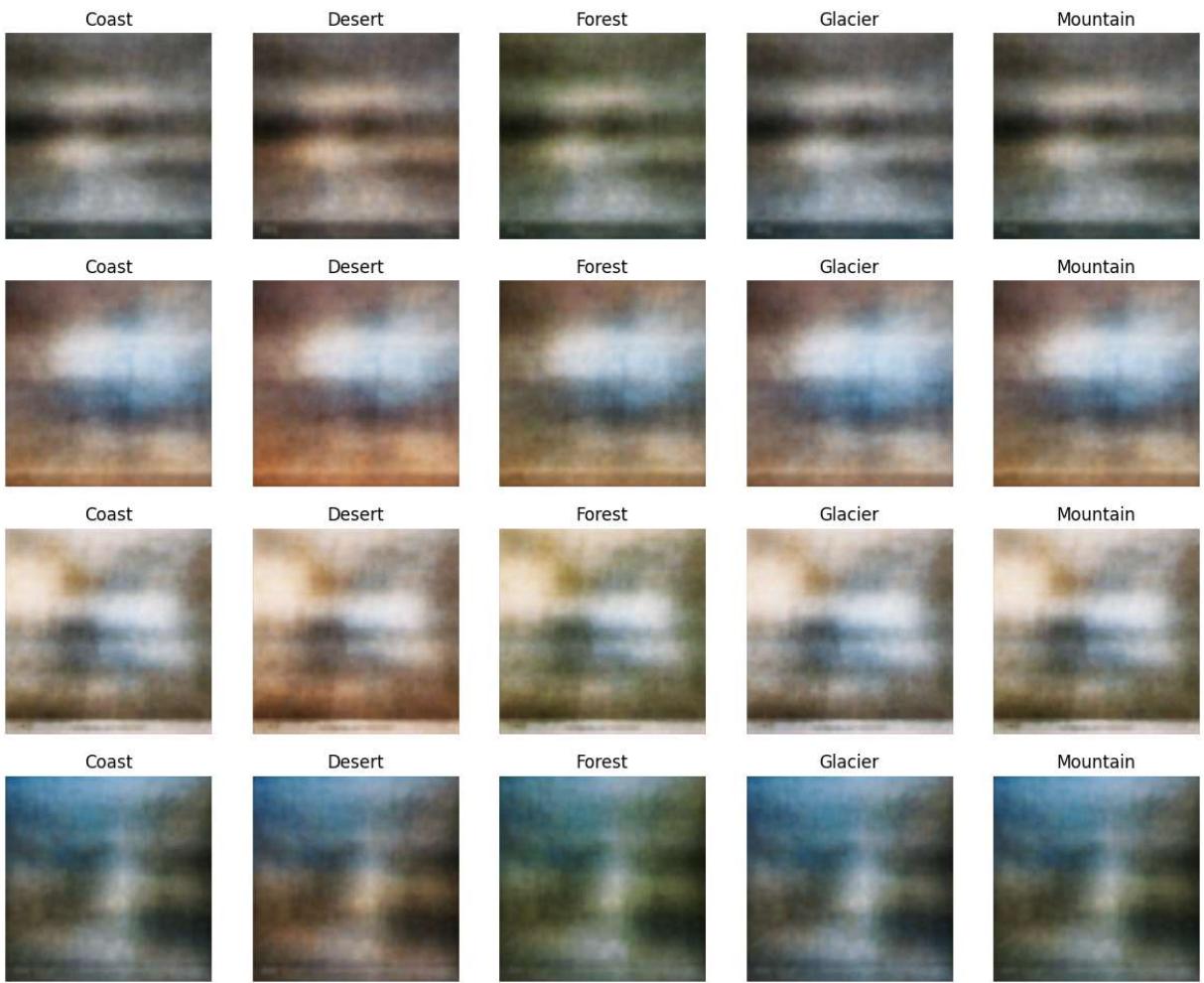
Epoch 10/100

300/300 [=====] - ETA: 0s - loss: 232.6683 - reconstruction\_error: 183.6587 - regularization\_error: 49.0095

[2023-11-21 17:58:53.243045]: Generating fixed images for epoch 10 ...



[2023-11-21 17:58:54.317408]: Generating random images for epoch 10 ...



300/300 [=====] - 123s 410ms/step - loss: 232.6683 - reconstruction\_error: 183.6587 - regularization\_error: 49.0095 - val\_loss: 236.5440 - val\_reconstruction\_error: 187.8627 - val\_regularization\_error: 48.8708

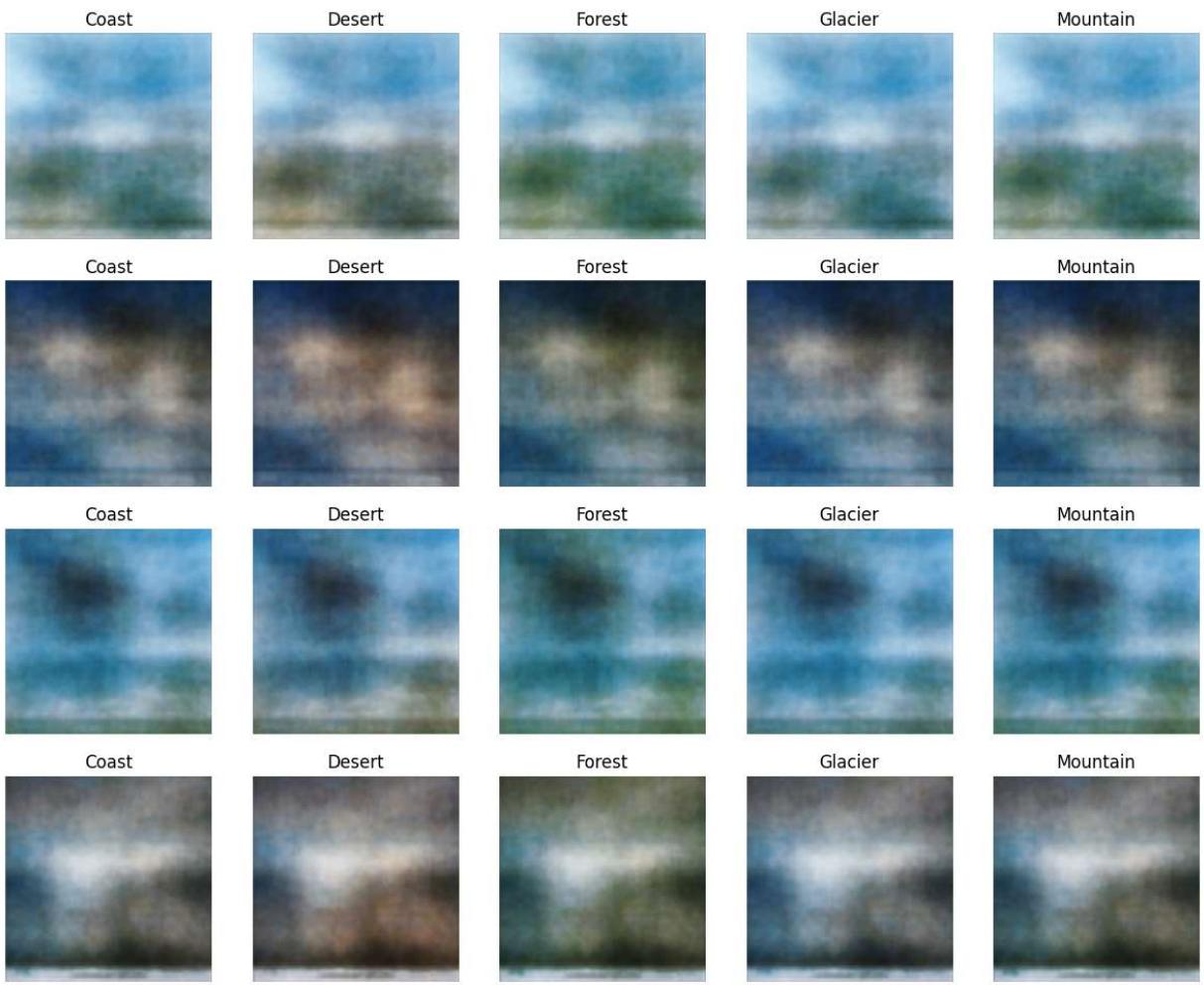
Epoch 11/100

300/300 [=====] - ETA: 0s - loss: 229.9175 - reconstruction\_error: 180.9187 - regularization\_error: 48.9986

[2023-11-21 18:00:52.744171]: Generating fixed images for epoch 11 ...



[2023-11-21 18:00:54.418578]: Generating random images for epoch 11 ...



300/300 [=====] - 118s 393ms/step - loss: 229.9175 - reconstruction\_error: 180.9187 - regularization\_error: 48.9986 - val\_loss: 233.7919 - val\_reconstruction\_error: 185.4455 - val\_regularization\_error: 48.5324

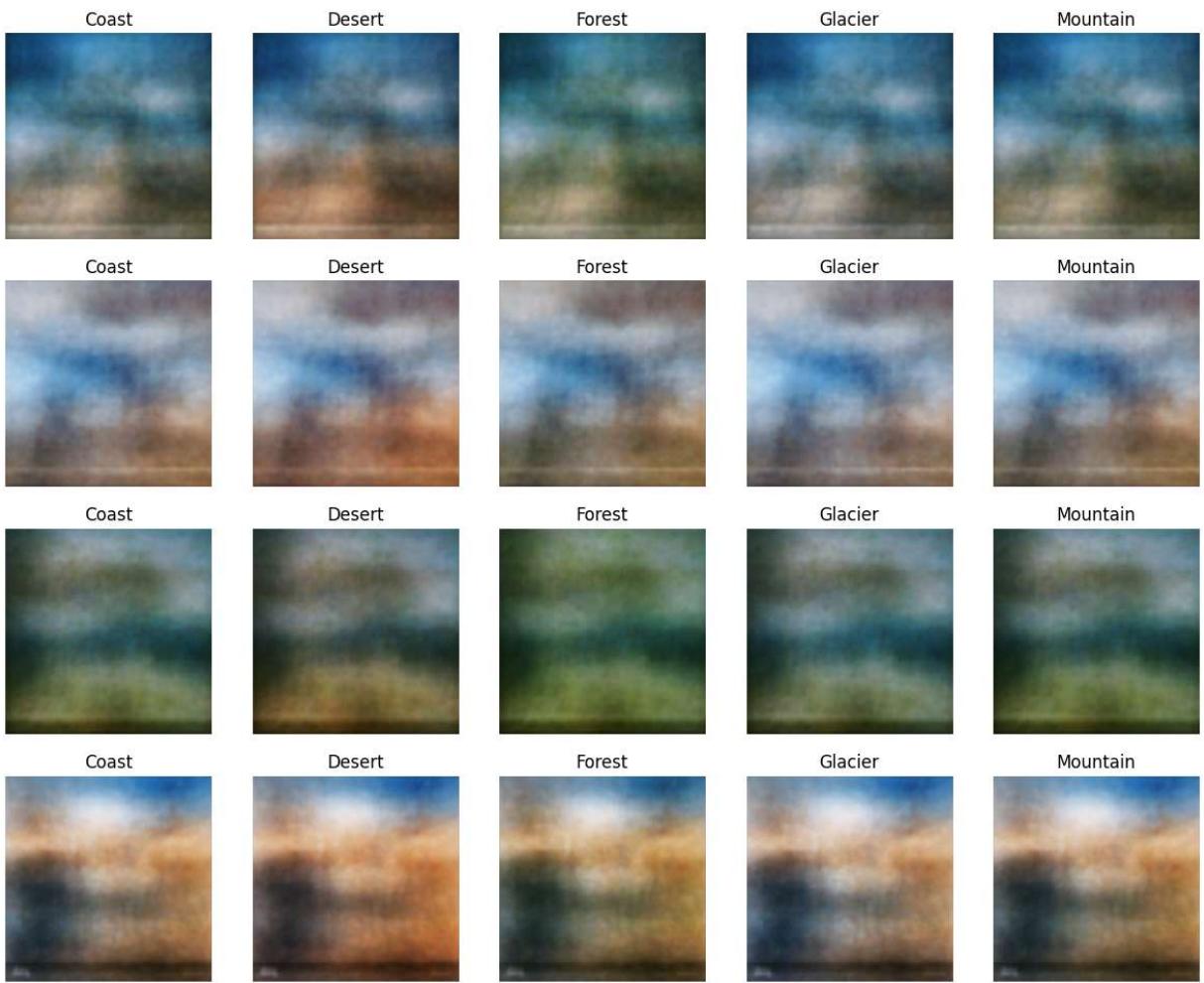
Epoch 12/100

300/300 [=====] - ETA: 0s - loss: 227.8332 - reconstruction\_error: 178.6693 - regularization\_error: 49.1639

[2023-11-21 18:02:52.653677]: Generating fixed images for epoch 12 ...



[2023-11-21 18:02:54.412963]: Generating random images for epoch 12 ...



300/300 [=====] - 120s 399ms/step - loss: 227.8332 - reconstruction\_error: 178.6693 - regularization\_error: 49.1639 - val\_loss: 231.9311 - val\_reconstruction\_error: 183.9596 - val\_regularization\_error: 48.0843

Epoch 13/100

300/300 [=====] - ETA: 0s - loss: 225.9751 - reconstruction\_error: 176.8195 - regularization\_error: 49.1557

[2023-11-21 18:04:46.649979]: Generating fixed images for epoch 13 ...



[2023-11-21 18:04:48.391074]: Generating random images for epoch 13 ...

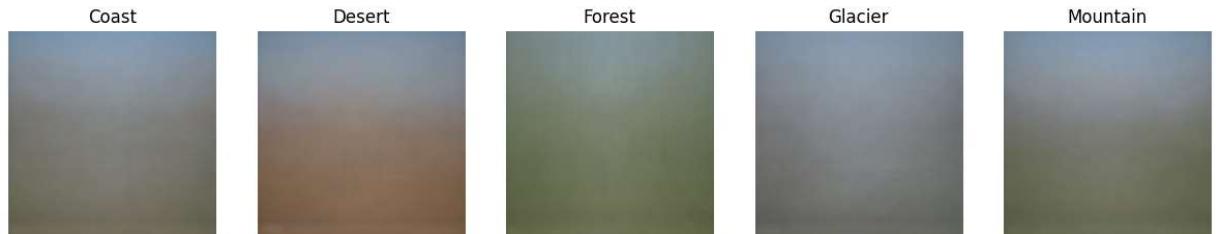


300/300 [=====] - 114s 379ms/step - loss: 225.9751 - reconstruction\_error: 176.8195 - regularization\_error: 49.1557 - val\_loss: 230.5269 - val\_reconstruction\_error: 181.5557 - val\_regularization\_error: 49.1425

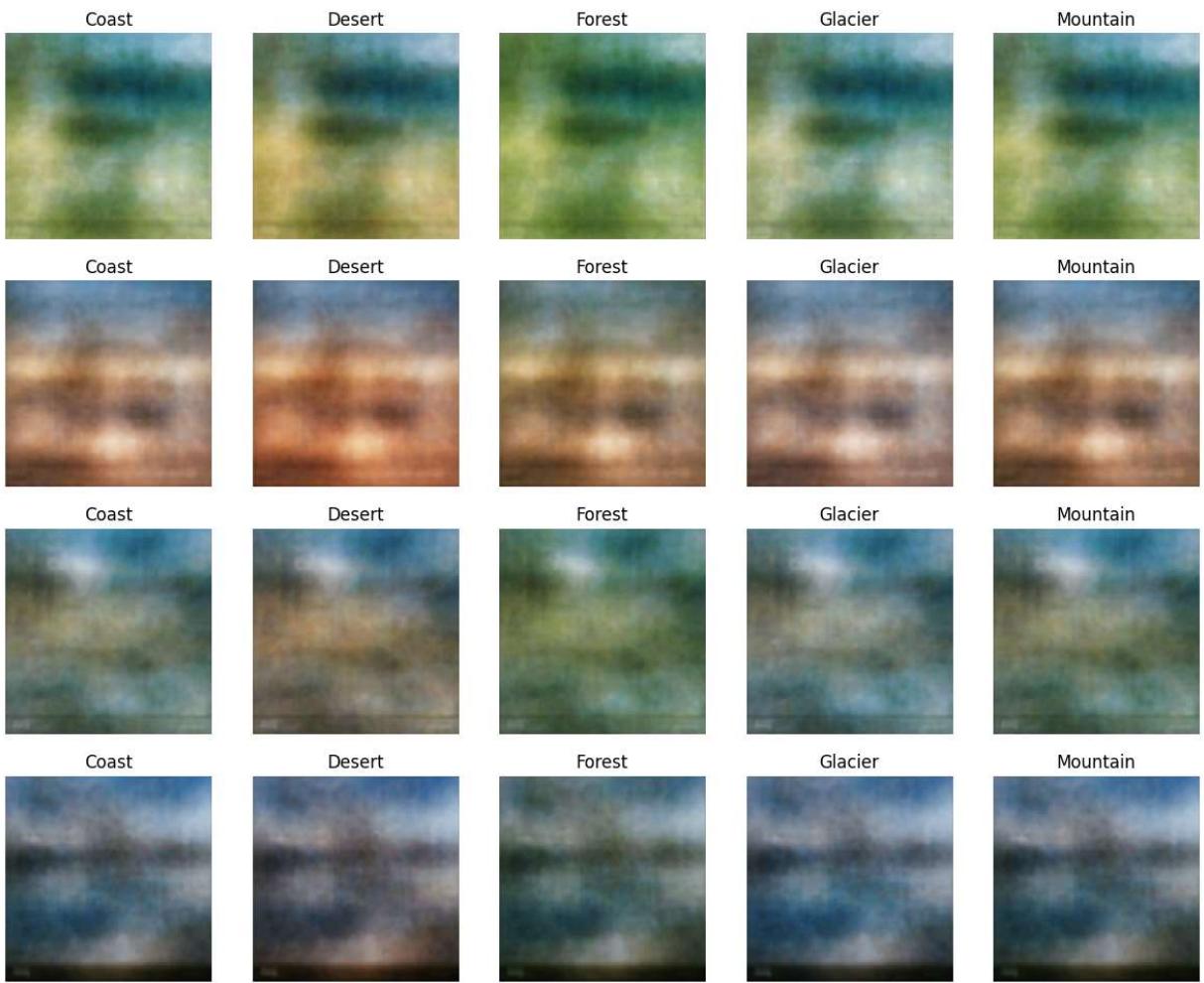
Epoch 14/100

300/300 [=====] - ETA: 0s - loss: 224.3063 - reconstruction\_error: 174.9503 - regularization\_error: 49.3559

[2023-11-21 18:06:50.628345]: Generating fixed images for epoch 14 ...



[2023-11-21 18:06:51.815960]: Generating random images for epoch 14 ...

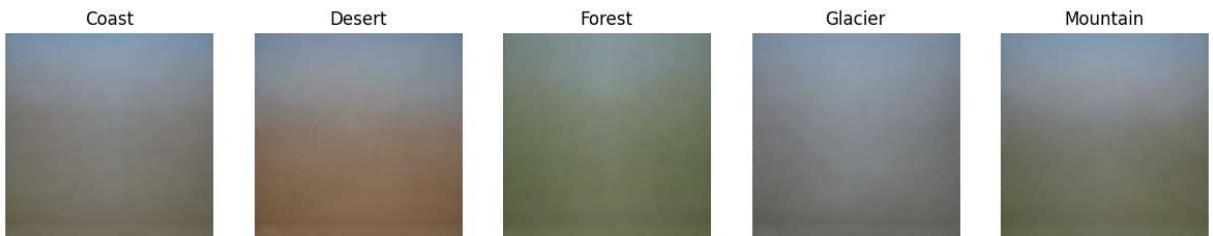


300/300 [=====] - 123s 410ms/step - loss: 224.3063 - reconstruction\_error: 174.9503 - regularization\_error: 49.3559 - val\_loss: 229.3121 - val\_reconstruction\_error: 180.8584 - val\_regularization\_error: 48.6478

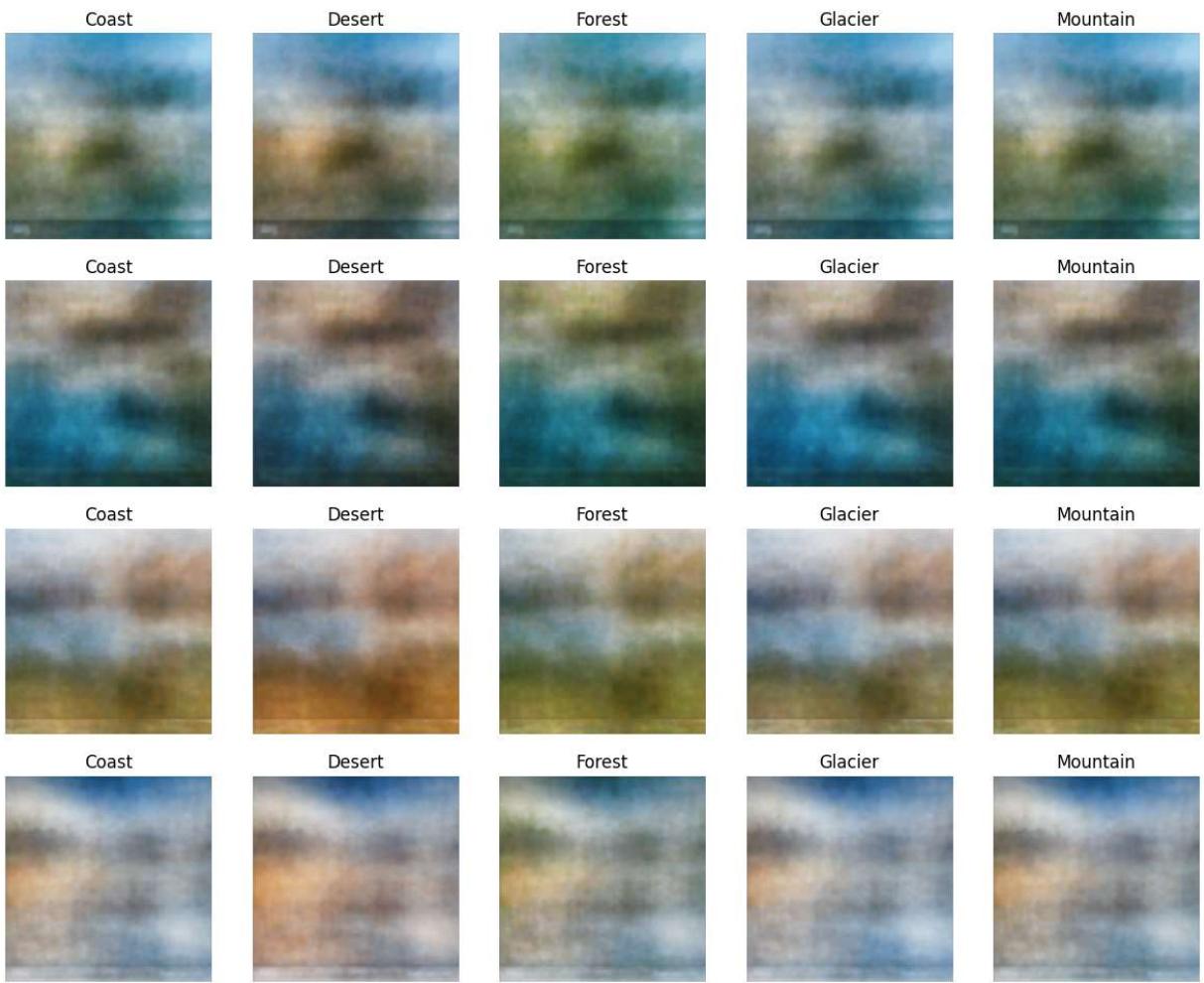
Epoch 15/100

300/300 [=====] - ETA: 0s - loss: 222.7909 - reconstruction\_error: 173.4536 - regularization\_error: 49.3373

[2023-11-21 18:08:53.660423]: Generating fixed images for epoch 15 ...



[2023-11-21 18:08:54.759606]: Generating random images for epoch 15 ...

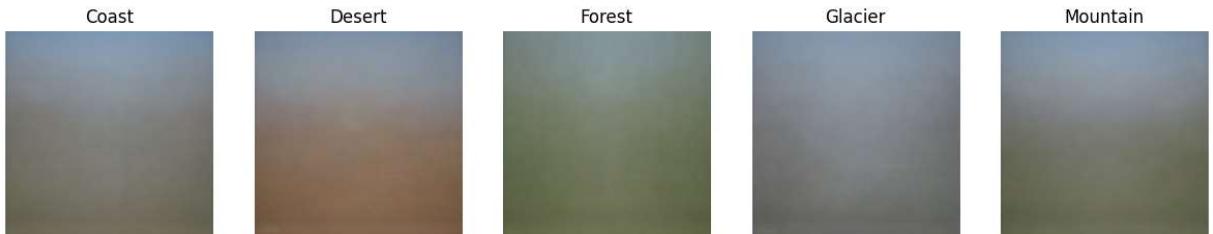


300/300 [=====] - 123s 409ms/step - loss: 222.7909 - reconstruction\_error: 173.4536 - regularization\_error: 49.3373 - val\_loss: 228.4595 - val\_reconstruction\_error: 180.1535 - val\_regularization\_error: 48.4770

Epoch 16/100

300/300 [=====] - ETA: 0s - loss: 221.7513 - reconstruction\_error: 172.3147 - regularization\_error: 49.4366

[2023-11-21 18:10:50.760746]: Generating fixed images for epoch 16 ...



[2023-11-21 18:10:52.427432]: Generating random images for epoch 16 ...

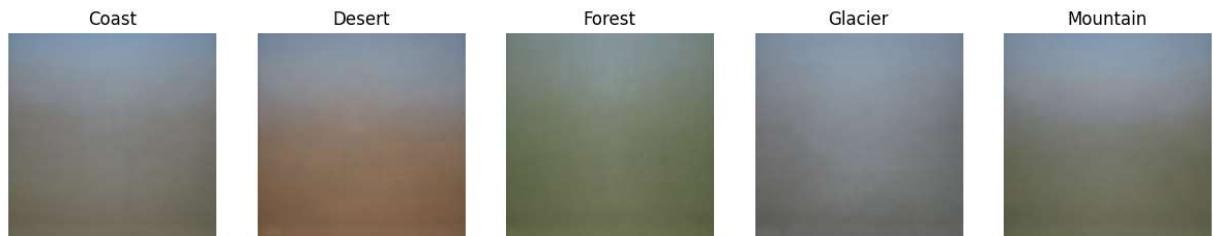


300/300 [=====] - 118s 395ms/step - loss: 221.7513 - reconstruction\_error: 172.3147 - regularization\_error: 49.4366 - val\_loss: 227.5310 - val\_reconstruction\_error: 179.6451 - val\_regularization\_error: 48.0480

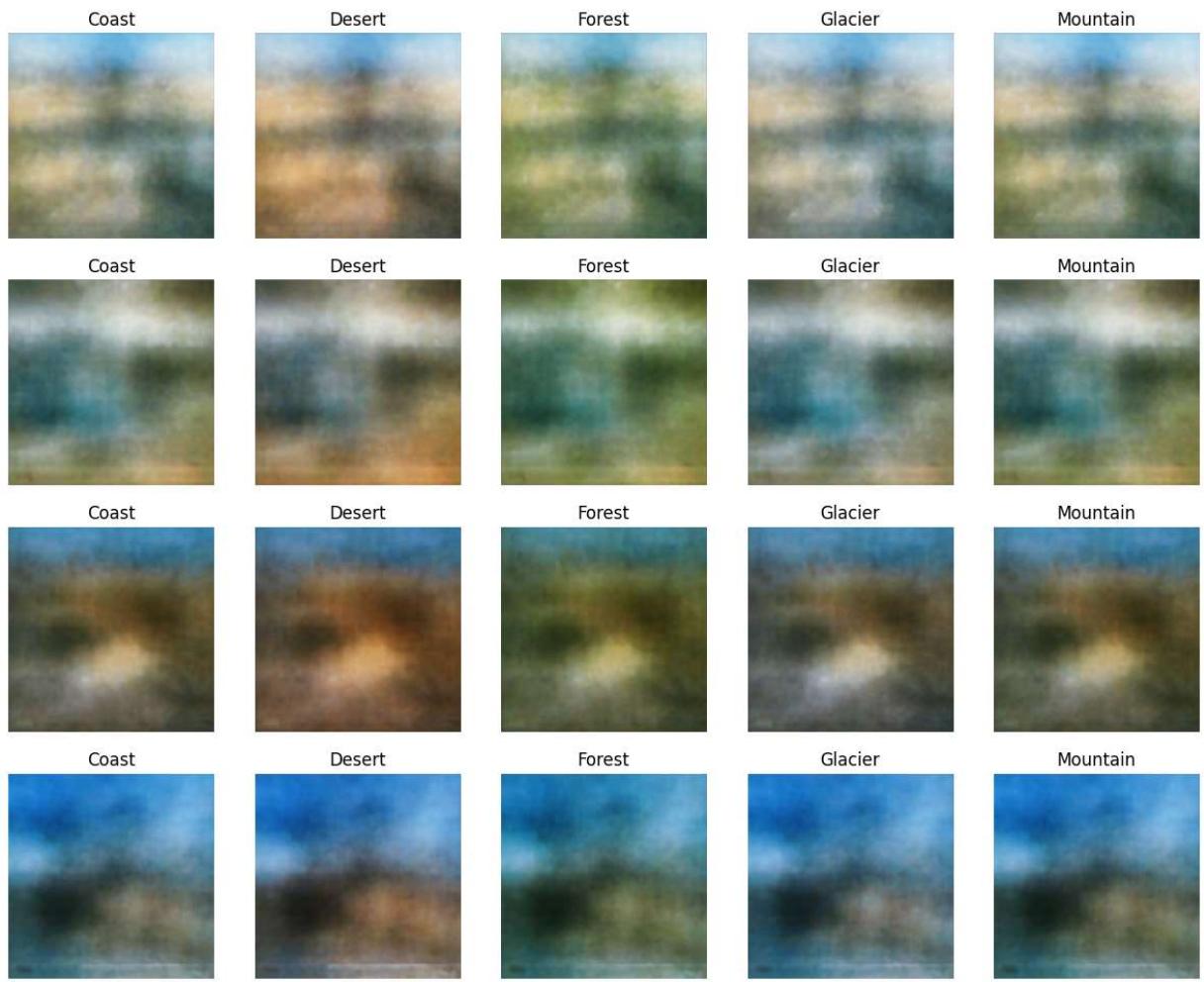
Epoch 17/100

300/300 [=====] - ETA: 0s - loss: 220.7896 - reconstruction\_error: 171.0934 - regularization\_error: 49.6962

[2023-11-21 18:12:44.918017]: Generating fixed images for epoch 17 ...



[2023-11-21 18:12:46.045719]: Generating random images for epoch 17 ...



300/300 [=====] - 113s 376ms/step - loss: 220.7896 - reconstruction\_error: 171.0934 - regularization\_error: 49.6962 - val\_loss: 226.6889 - val\_reconstruction\_error: 178.7355 - val\_regularization\_error: 48.0824

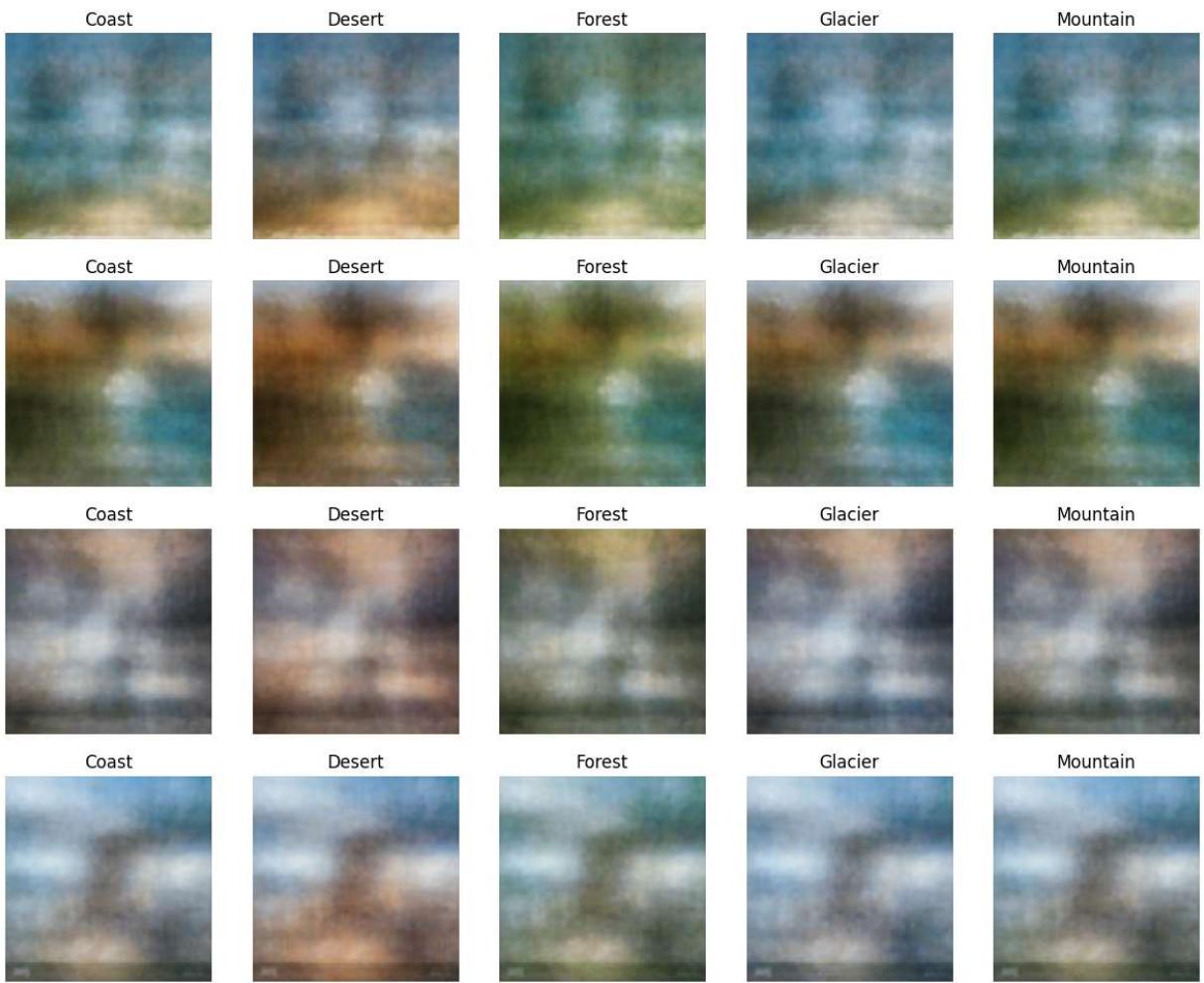
Epoch 18/100

300/300 [=====] - ETA: 0s - loss: 219.8090 - reconstruction\_error: 170.0293 - regularization\_error: 49.7797

[2023-11-21 18:14:49.318080]: Generating fixed images for epoch 18 ...



[2023-11-21 18:14:50.440073]: Generating random images for epoch 18 ...

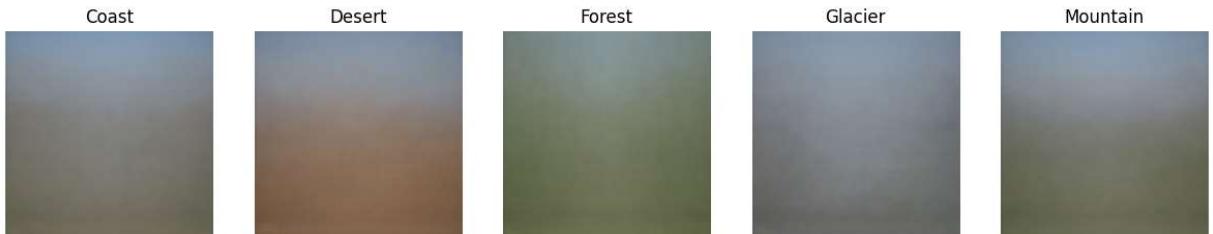


300/300 [=====] - 124s 413ms/step - loss: 219.8090 - reconstruction\_error: 170.0293 - regularization\_error: 49.7797 - val\_loss: 227.1289 - val\_reconstruction\_error: 176.0397 - val\_regularization\_error: 51.2522

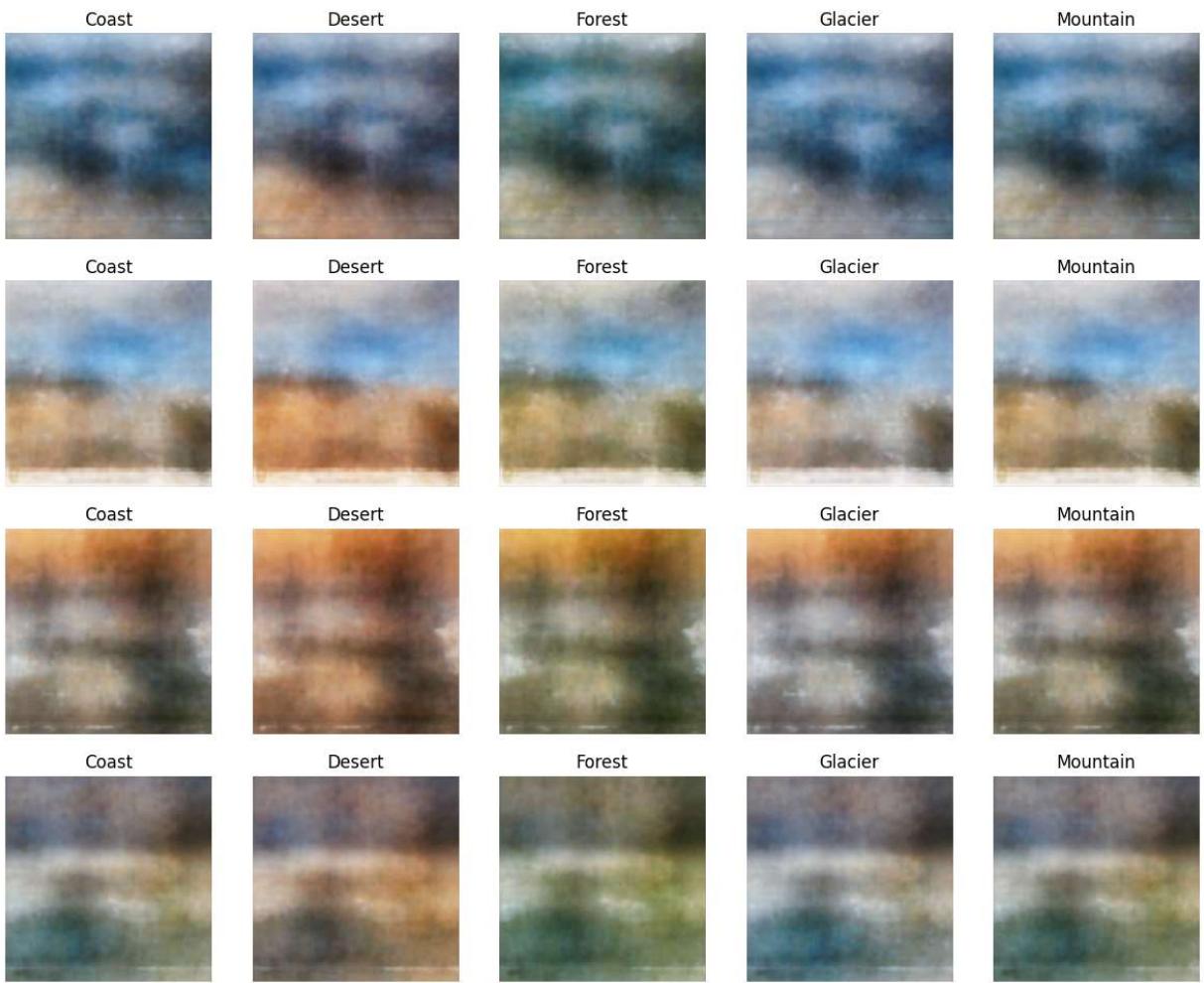
Epoch 19/100

300/300 [=====] - ETA: 0s - loss: 218.9810 - reconstruction\_error: 169.2750 - regularization\_error: 49.7059

[2023-11-21 18:16:46.687323]: Generating fixed images for epoch 19 ...



[2023-11-21 18:16:48.391034]: Generating random images for epoch 19 ...

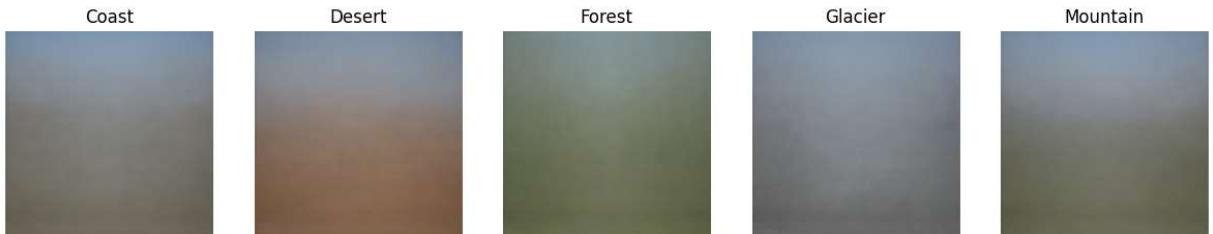


300/300 [=====] - 118s 389ms/step - loss: 218.9810 - reconstruction\_error: 169.2750 - regularization\_error: 49.7059 - val\_loss: 225.9774 - val\_reconstruction\_error: 176.5424 - val\_regularization\_error: 49.5722

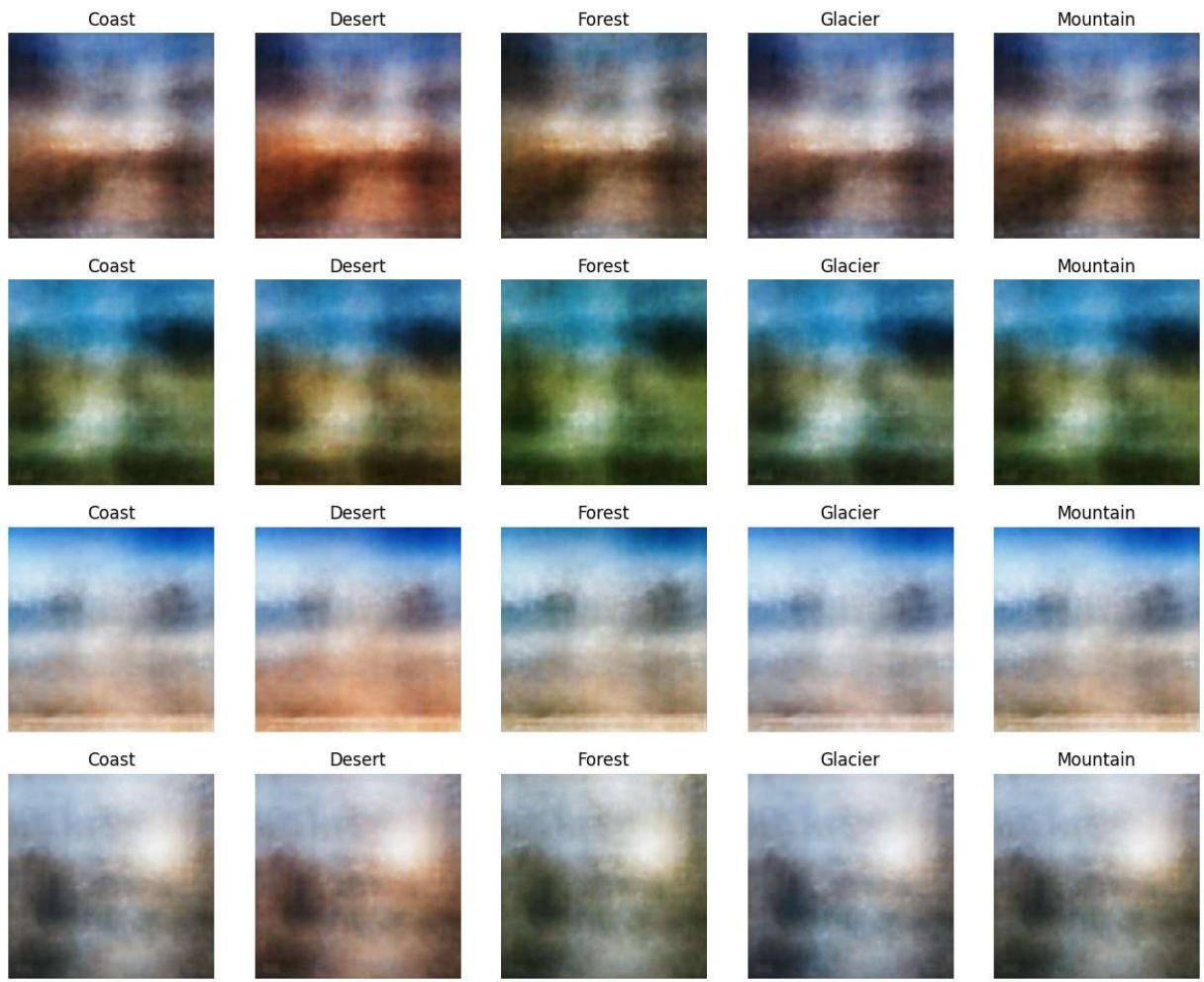
Epoch 20/100

300/300 [=====] - ETA: 0s - loss: 218.3809 - reconstruction\_error: 168.4431 - regularization\_error: 49.9378

[2023-11-21 18:18:36.372531]: Generating fixed images for epoch 20 ...



[2023-11-21 18:18:37.522795]: Generating random images for epoch 20 ...



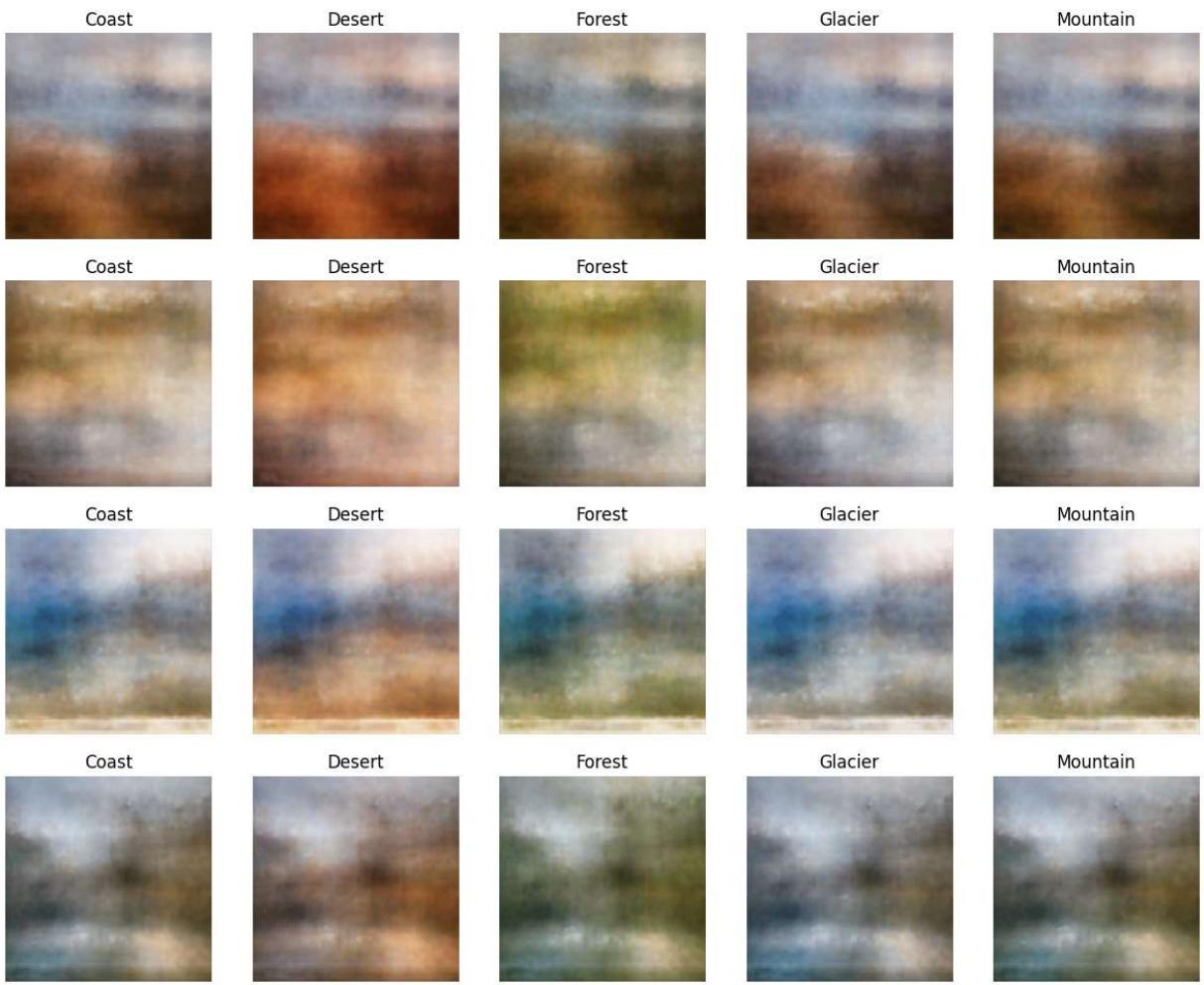
300/300 [=====] - 109s 364ms/step - loss: 218.3809 - reconstruction\_error: 168.4431 - regularization\_error: 49.9378 - val\_loss: 225.9058 - val\_reconstruction\_error: 174.7490 - val\_regularization\_error: 51.2984  
Epoch 21/100

300/300 [=====] - ETA: 0s - loss: 217.4674 - reconstruction\_error: 167.4329 - regularization\_error: 50.0346

[2023-11-21 18:20:41.609598]: Generating fixed images for epoch 21 ...



[2023-11-21 18:20:43.338125]: Generating random images for epoch 21 ...



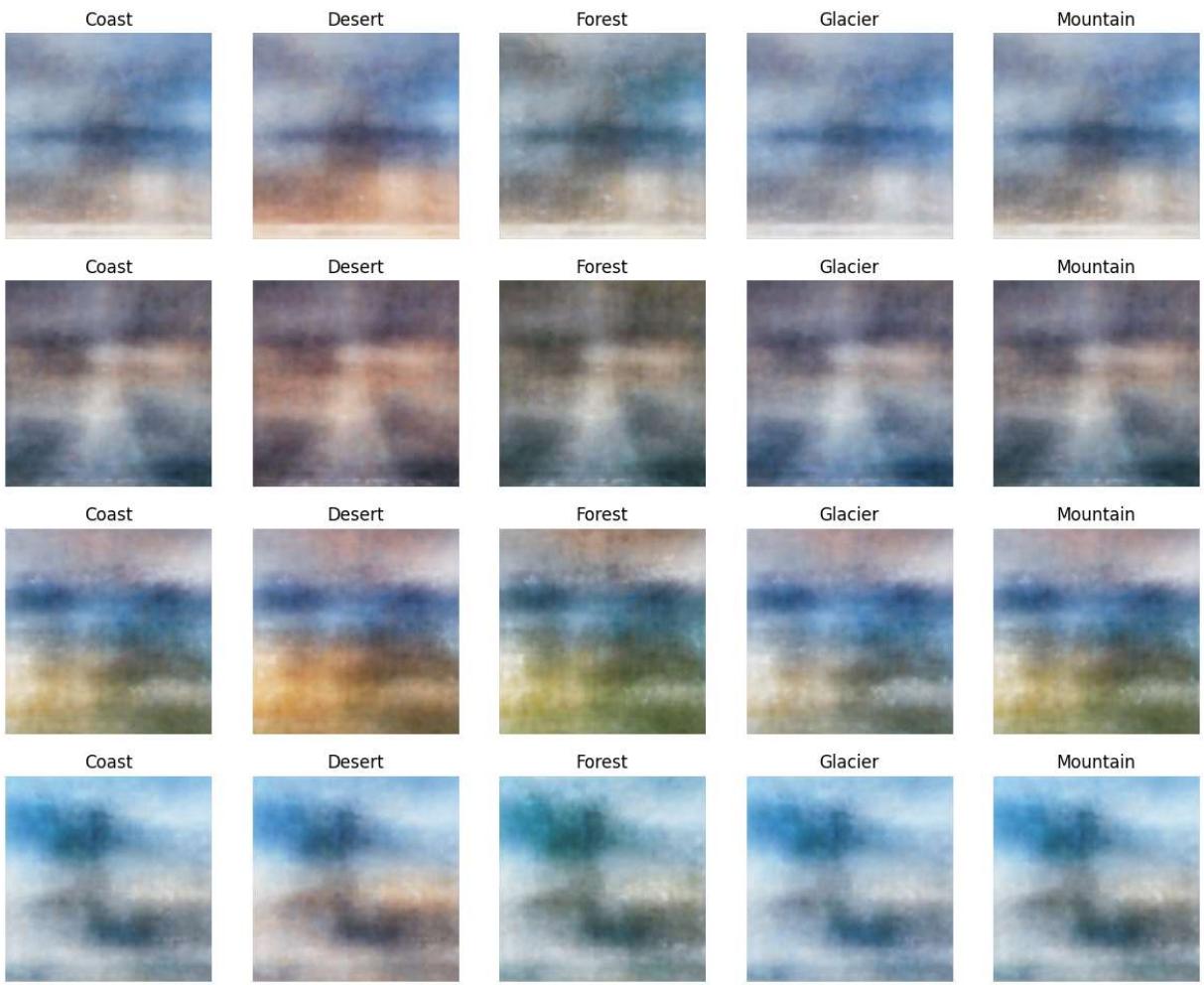
300/300 [=====] - 128s 427ms/step - loss: 217.4674 - reconstruction\_error: 167.4329 - regularization\_error: 50.0346 - val\_loss: 224.5188 - val\_reconstruction\_error: 177.0375 - val\_regularization\_error: 47.6442  
Epoch 22/100

300/300 [=====] - ETA: 0s - loss: 216.5608 - reconstruction\_error: 166.4862 - regularization\_error: 50.0746

[2023-11-21 18:22:45.398251]: Generating fixed images for epoch 22 ...



[2023-11-21 18:22:46.533908]: Generating random images for epoch 22 ...



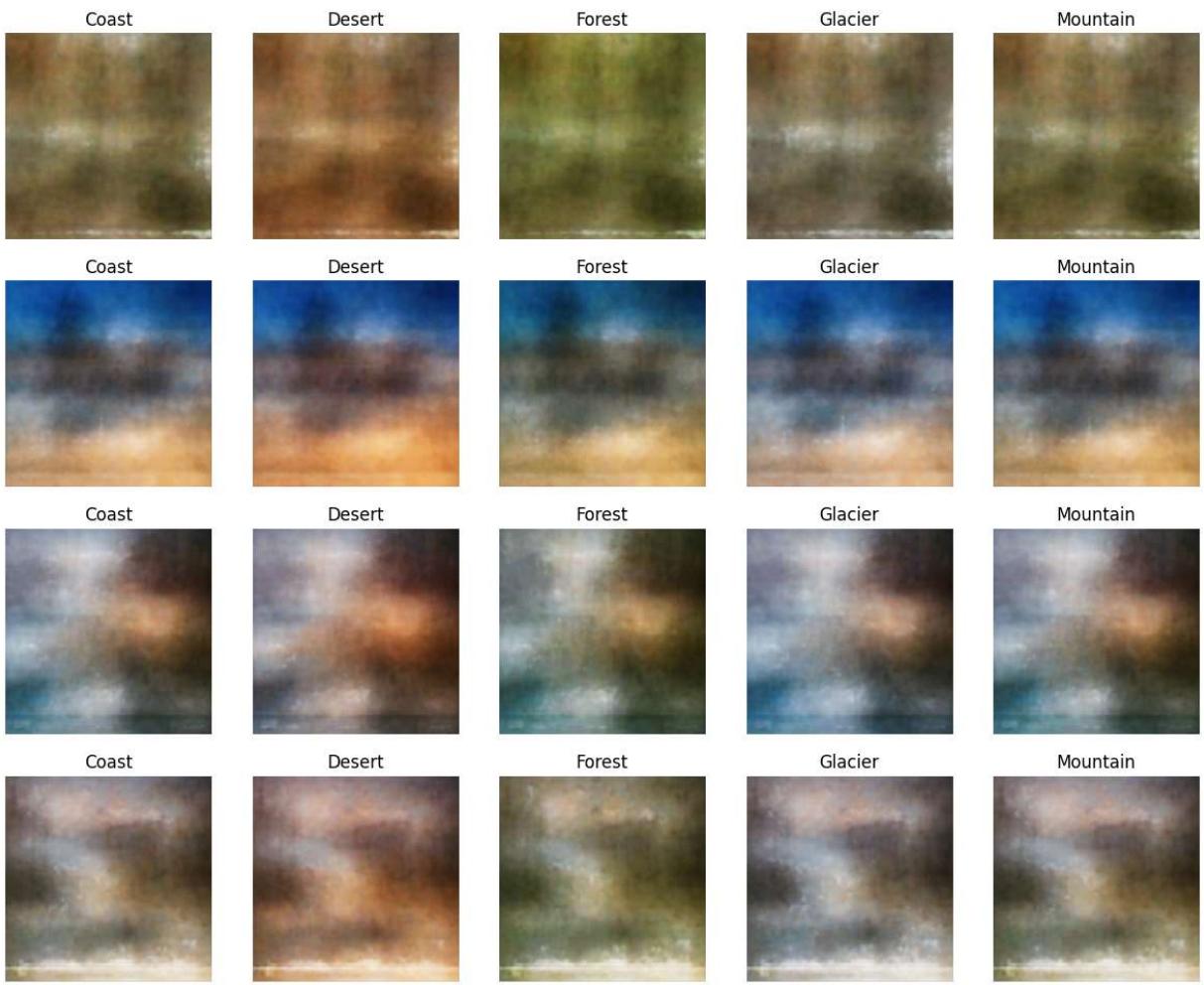
300/300 [=====] - 123s 408ms/step - loss: 216.5608 - reconstruction\_error: 166.4862 - regularization\_error: 50.0746 - val\_loss: 224.6179 - val\_reconstruction\_error: 174.3189 - val\_regularization\_error: 50.4953  
Epoch 23/100

300/300 [=====] - ETA: 0s - loss: 215.8811 - reconstruction\_error: 165.5811 - regularization\_error: 50.3001

[2023-11-21 18:24:55.899271]: Generating fixed images for epoch 23 ...



[2023-11-21 18:24:57.013856]: Generating random images for epoch 23 ...

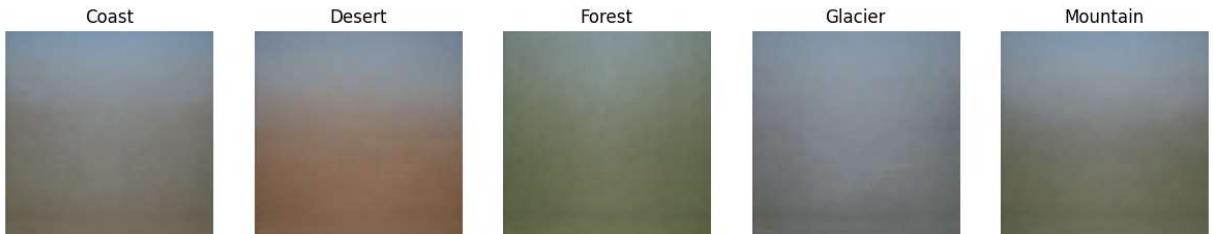


300/300 [=====] - 128s 427ms/step - loss: 215.8811 - reconstruction\_error: 165.5811 - regularization\_error: 50.3001 - val\_loss: 224.6609 - val\_reconstruction\_error: 175.5795 - val\_regularization\_error: 49.2736

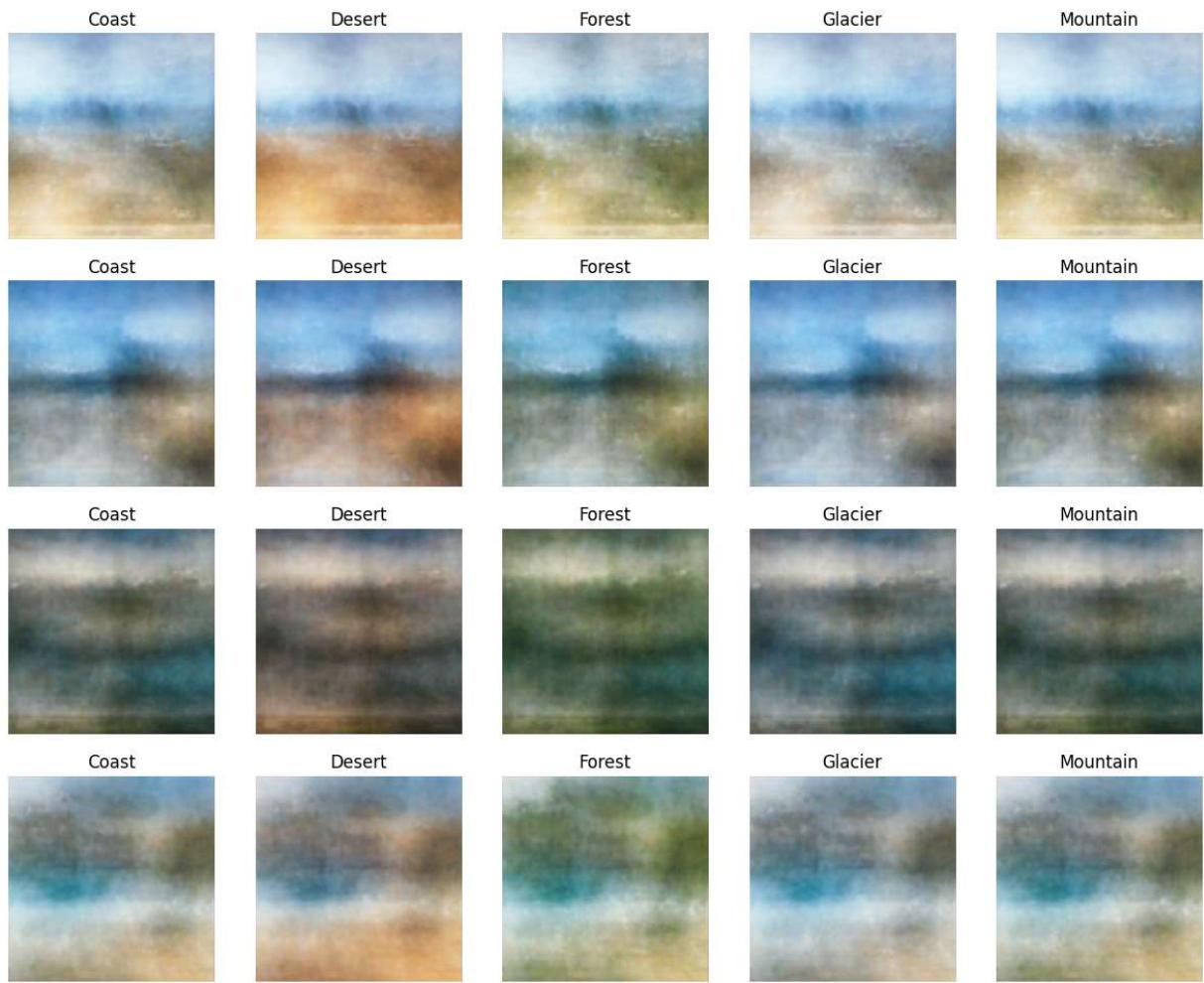
Epoch 24/100

300/300 [=====] - ETA: 0s - loss: 215.2199 - reconstruction\_error: 164.7413 - regularization\_error: 50.4787

[2023-11-21 18:27:09.218690]: Generating fixed images for epoch 24 ...



[2023-11-21 18:27:10.366543]: Generating random images for epoch 24 ...



300/300 [=====] - 133s 444ms/step - loss: 215.2199 - reconstruction\_error: 164.7413 - regularization\_error: 50.4787 - val\_loss: 224.2026 - val\_reconstruction\_error: 173.4128 - val\_regularization\_error: 50.9569

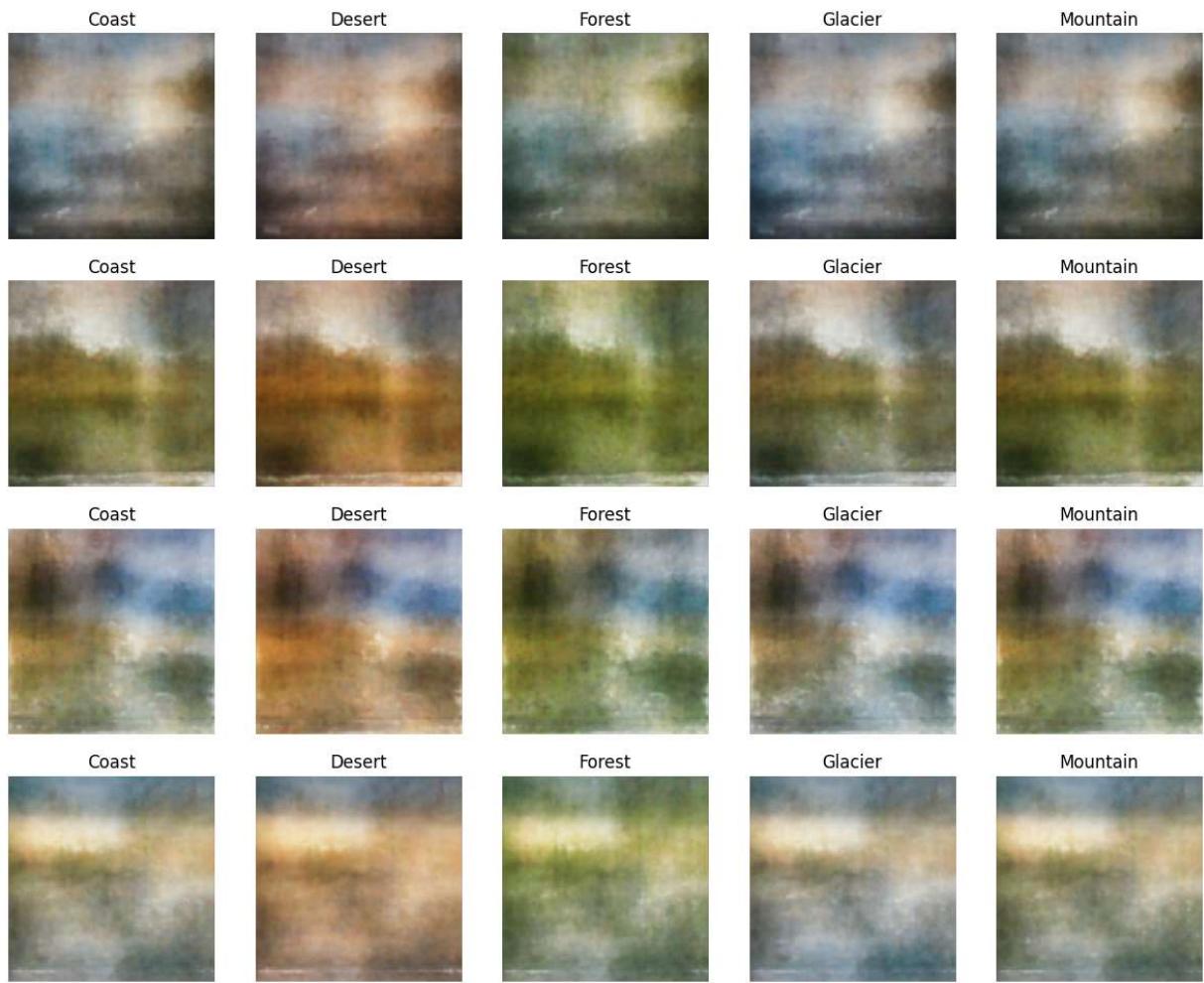
Epoch 25/100

300/300 [=====] - ETA: 0s - loss: 214.5170 - reconstruction\_error: 163.9018 - regularization\_error: 50.6153

[2023-11-21 18:29:10.060143]: Generating fixed images for epoch 25 ...



[2023-11-21 18:29:11.139997]: Generating random images for epoch 25 ...

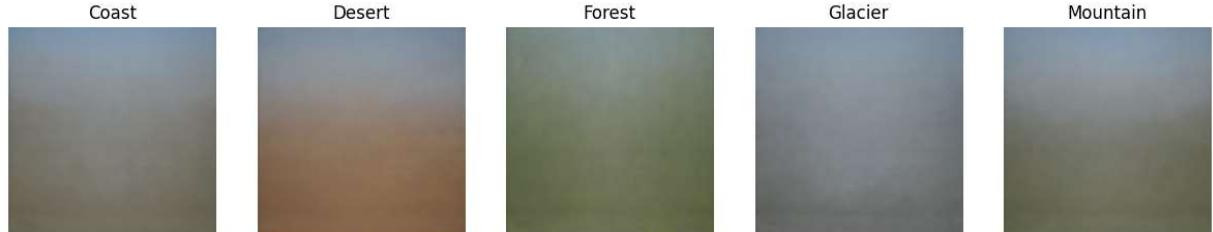


300/300 [=====] - 121s 403ms/step - loss: 214.5170 - reconstruction\_error: 163.9018 - regularization\_error: 50.6153 - val\_loss: 224.0074 - val\_reconstruction\_error: 175.0841 - val\_regularization\_error: 49.0322

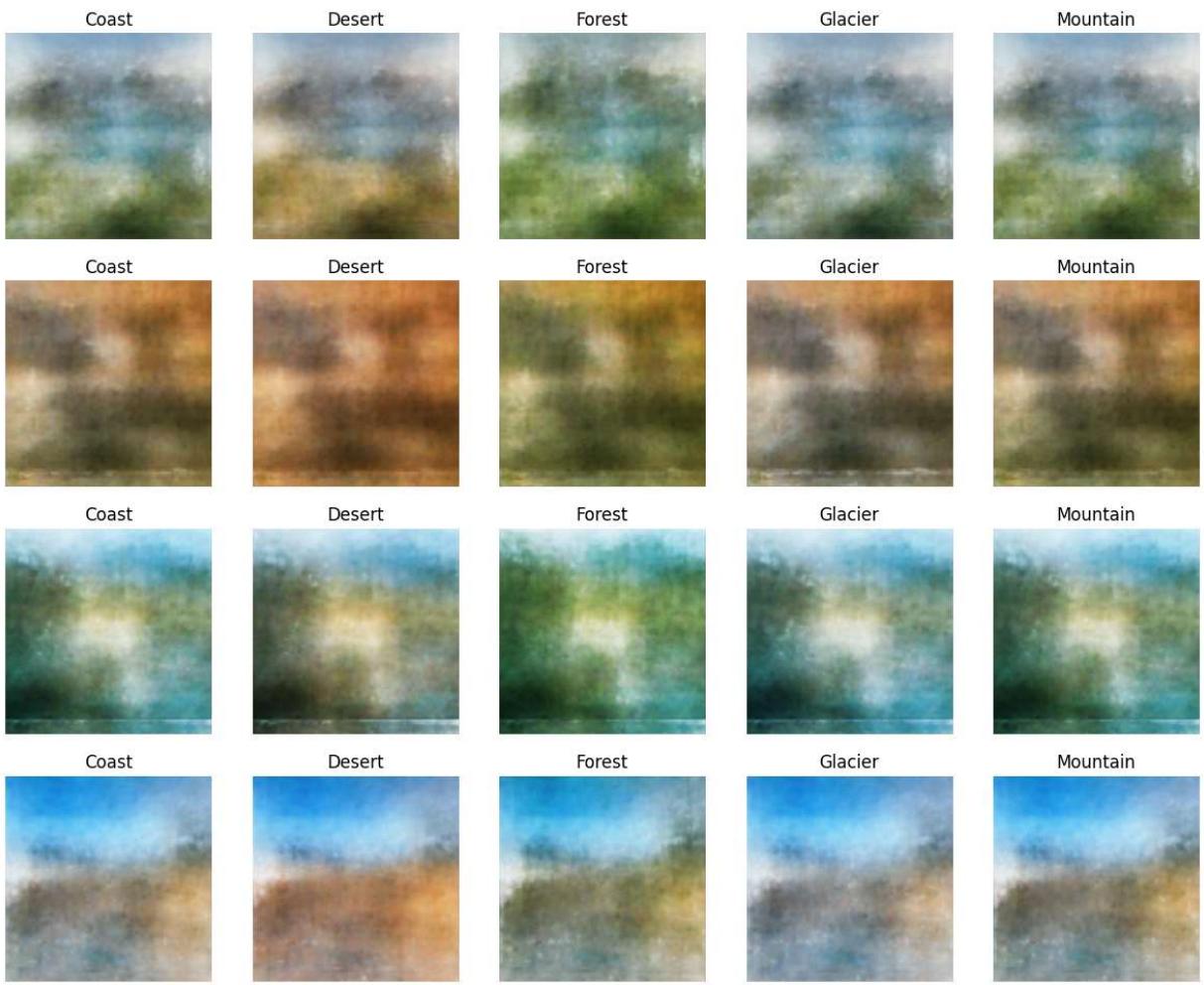
Epoch 26/100

300/300 [=====] - ETA: 0s - loss: 213.6078 - reconstruction\_error: 162.7439 - regularization\_error: 50.8639

[2023-11-21 18:31:13.841583]: Generating fixed images for epoch 26 ...



[2023-11-21 18:31:14.913706]: Generating random images for epoch 26 ...



300/300 [=====] - 124s 413ms/step - loss: 213.6078 - reconstruction\_error: 162.7439 - regularization\_error: 50.8639 - val\_loss: 224.0393 - val\_reconstruction\_error: 171.5442 - val\_regularization\_error: 52.6549

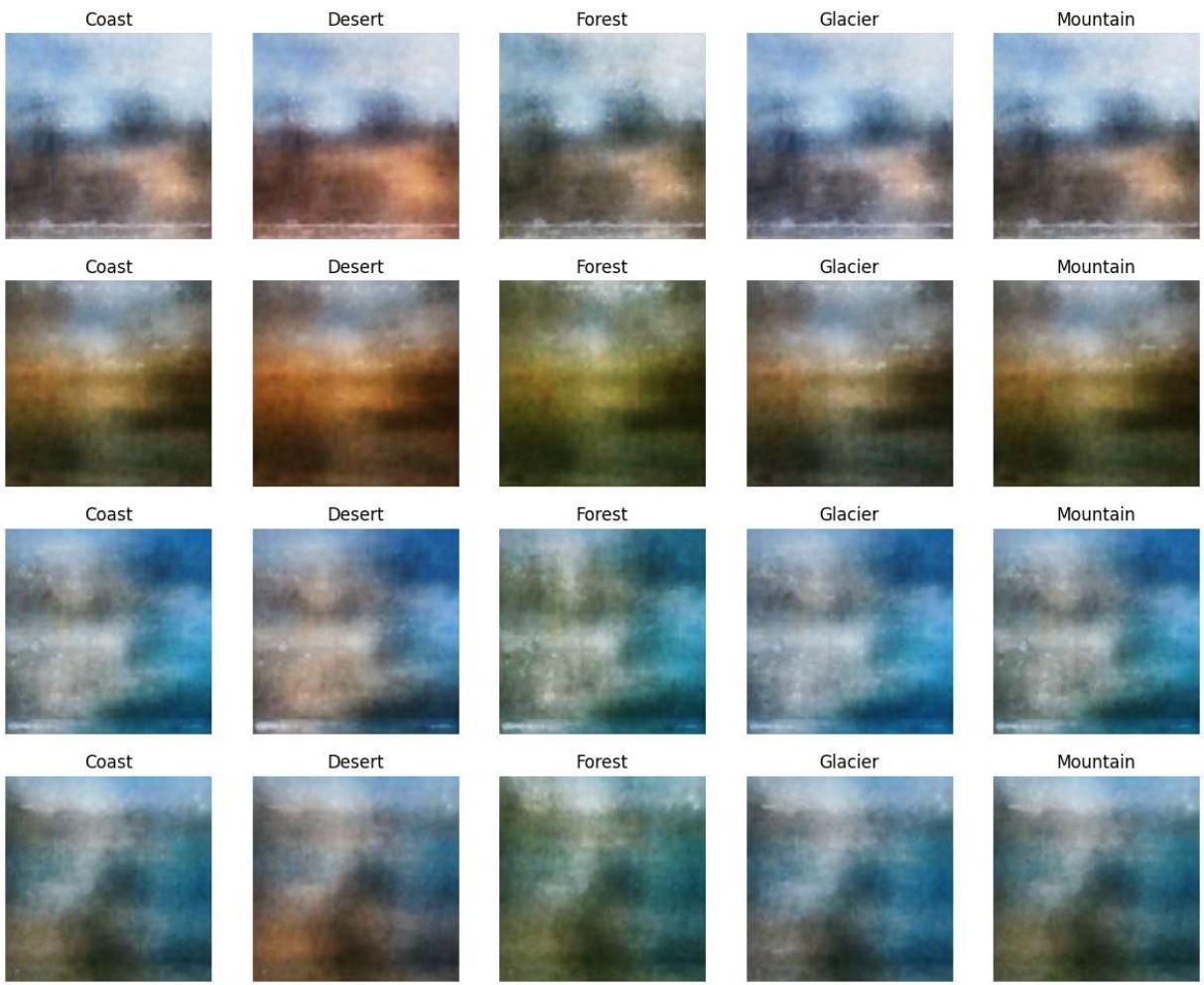
Epoch 27/100

300/300 [=====] - ETA: 0s - loss: 212.6720 - reconstruction\_error: 161.7729 - regularization\_error: 50.8991

[2023-11-21 18:33:15.649047]: Generating fixed images for epoch 27 ...



[2023-11-21 18:33:16.709165]: Generating random images for epoch 27 ...



300/300 [=====] - 122s 407ms/step - loss: 212.6720 - reconstruction\_error: 161.7729 - regularization\_error: 50.8991 - val\_loss: 223.7689 - val\_reconstruction\_error: 174.4511 - val\_regularization\_error: 49.4575

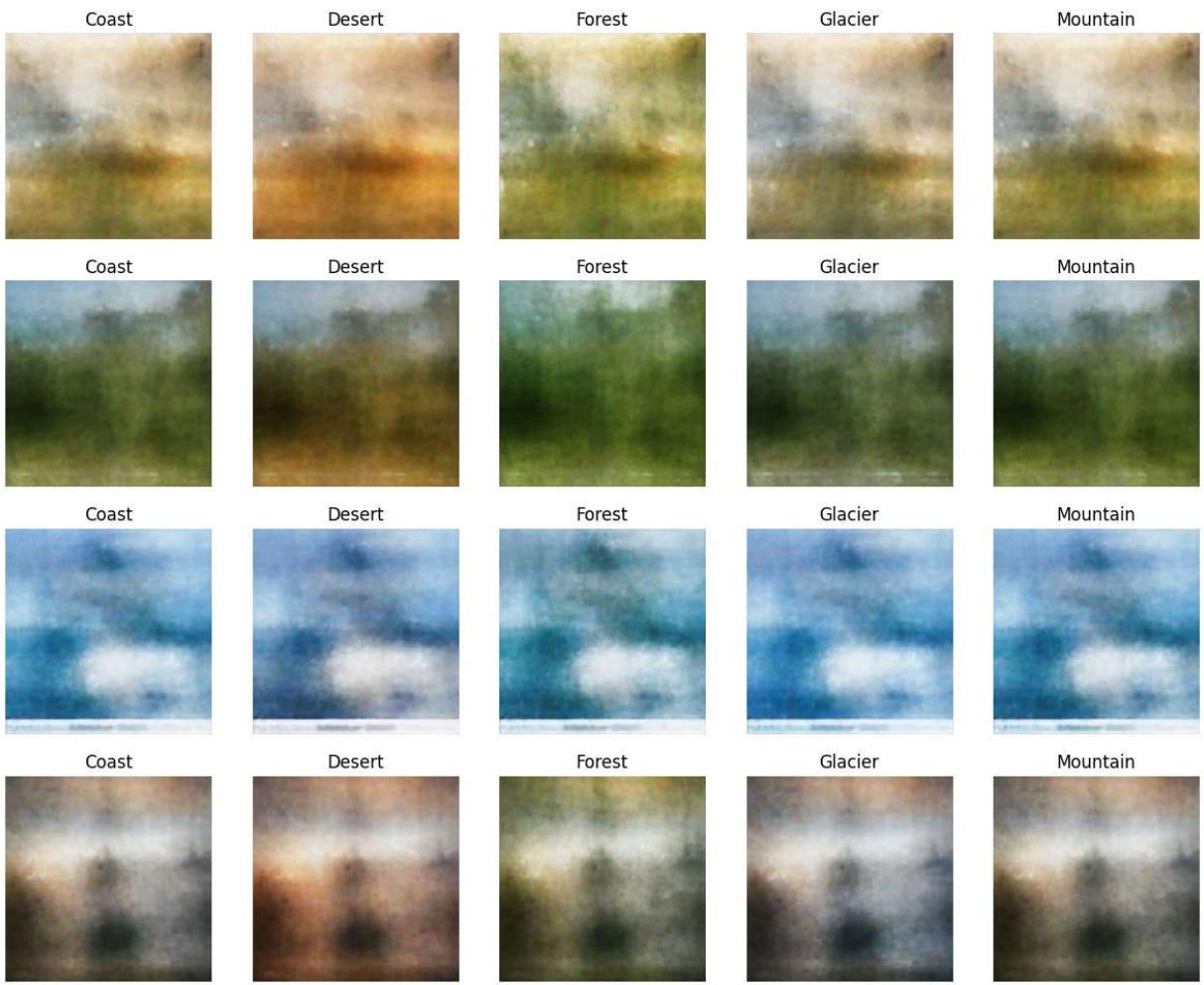
Epoch 28/100

300/300 [=====] - ETA: 0s - loss: 211.7798 - reconstruction\_error: 160.6762 - regularization\_error: 51.1036

[2023-11-21 18:35:21.120355]: Generating fixed images for epoch 28 ...



[2023-11-21 18:35:22.244446]: Generating random images for epoch 28 ...

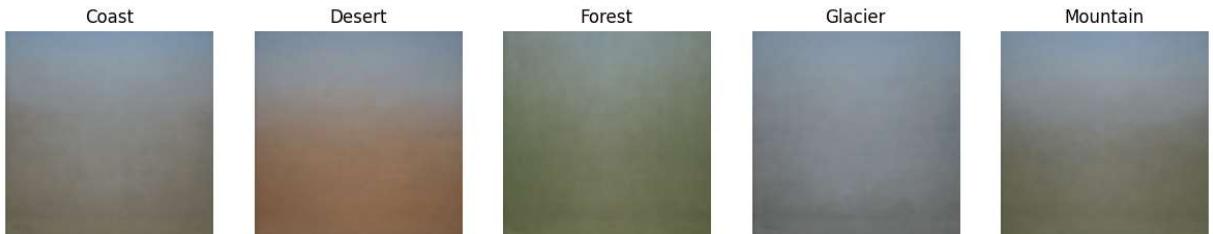


300/300 [=====] - 125s 416ms/step - loss: 211.7798 - reconstruction\_error: 160.6762 - regularization\_error: 51.1036 - val\_loss: 223.8035 - val\_reconstruction\_error: 175.8769 - val\_regularization\_error: 48.1313

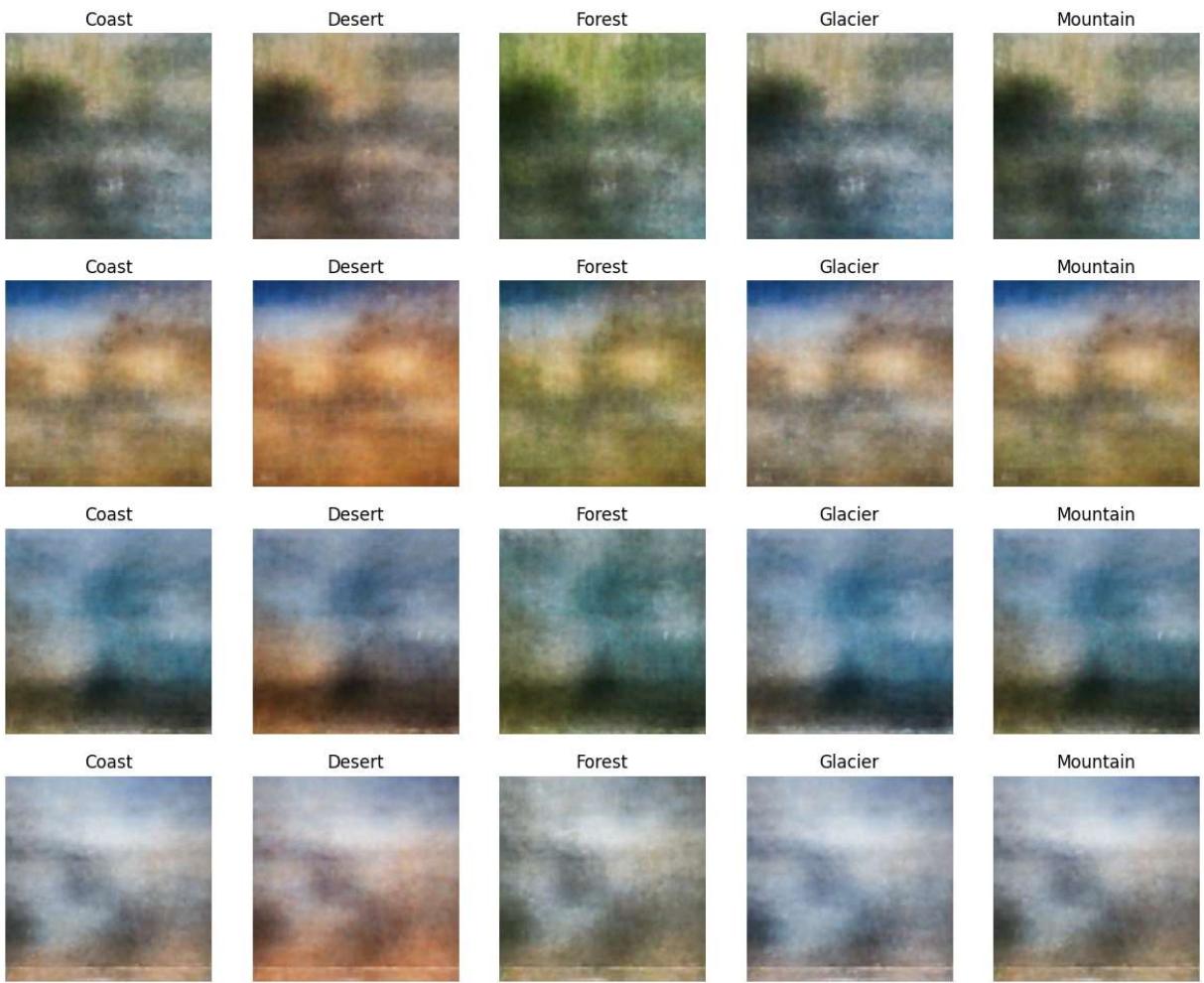
Epoch 29/100

300/300 [=====] - ETA: 0s - loss: 211.0066 - reconstruction\_error: 159.6808 - regularization\_error: 51.3258

[2023-11-21 18:37:24.769075]: Generating fixed images for epoch 29 ...



[2023-11-21 18:37:26.391475]: Generating random images for epoch 29 ...



300/300 [=====] - 124s 414ms/step - loss: 211.0066 - reconstruction\_error: 159.6808 - regularization\_error: 51.3258 - val\_loss: 223.5549 - val\_reconstruction\_error: 173.5311 - val\_regularization\_error: 50.1583

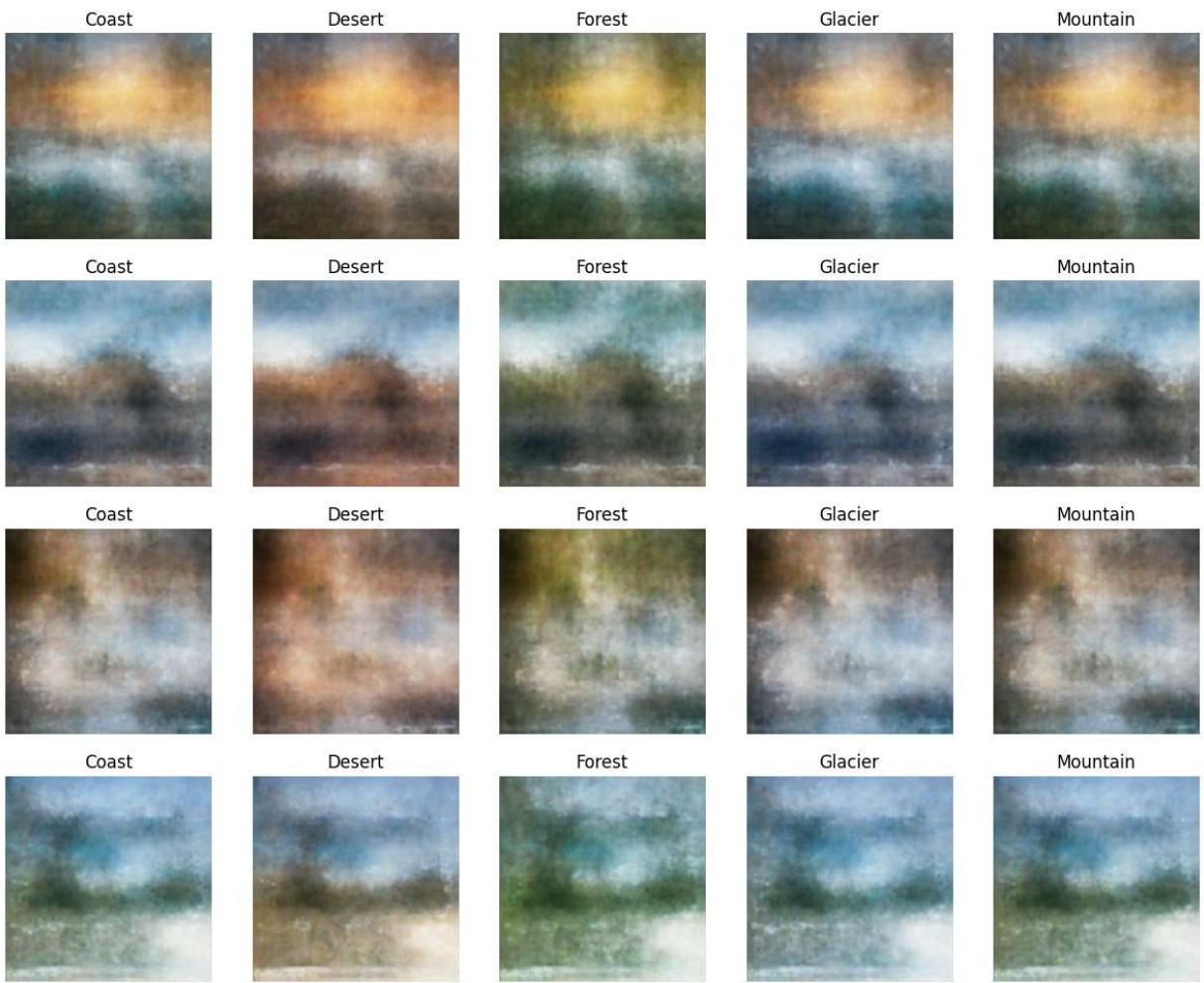
Epoch 30/100

300/300 [=====] - ETA: 0s - loss: 209.9933 - reconstruction\_error: 158.5110 - regularization\_error: 51.4823

[2023-11-21 18:39:31.078311]: Generating fixed images for epoch 30 ...



[2023-11-21 18:39:32.144781]: Generating random images for epoch 30 ...



300/300 [=====] - 126s 420ms/step - loss: 209.9933 - reconstruction\_error: 158.5110 - regularization\_error: 51.4823 - val\_loss: 223.4896 - val\_reconstruction\_error: 172.9490 - val\_regularization\_error: 50.7112  
Epoch 31/100

300/300 [=====] - ETA: 0s - loss: 209.2512 - reconstruction\_error: 157.4502 - regularization\_error: 51.8009

[2023-11-21 18:41:29.987504]: Generating fixed images for epoch 31 ...



[2023-11-21 18:41:31.387693]: Generating random images for epoch 31 ...



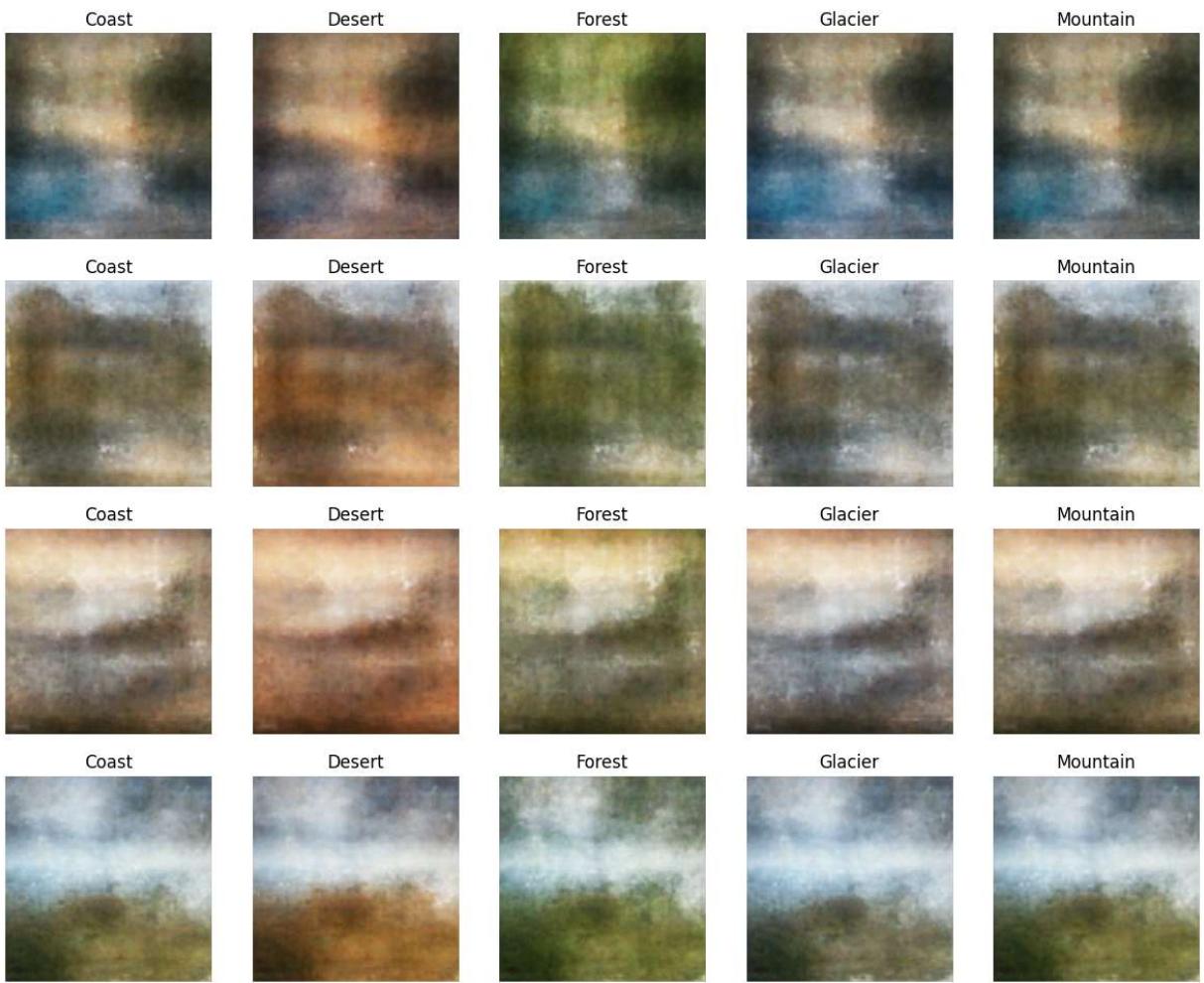
300/300 [=====] - 119s 398ms/step - loss: 209.2512 - reconstruction\_error: 157.4502 - regularization\_error: 51.8009 - val\_loss: 224.3192 - val\_reconstruction\_error: 173.5578 - val\_regularization\_error: 50.9401  
Epoch 32/100

300/300 [=====] - ETA: 0s - loss: 208.2051 - reconstruction\_error: 156.1409 - regularization\_error: 52.0643

[2023-11-21 18:43:39.101575]: Generating fixed images for epoch 32 ...



[2023-11-21 18:43:40.436628]: Generating random images for epoch 32 ...



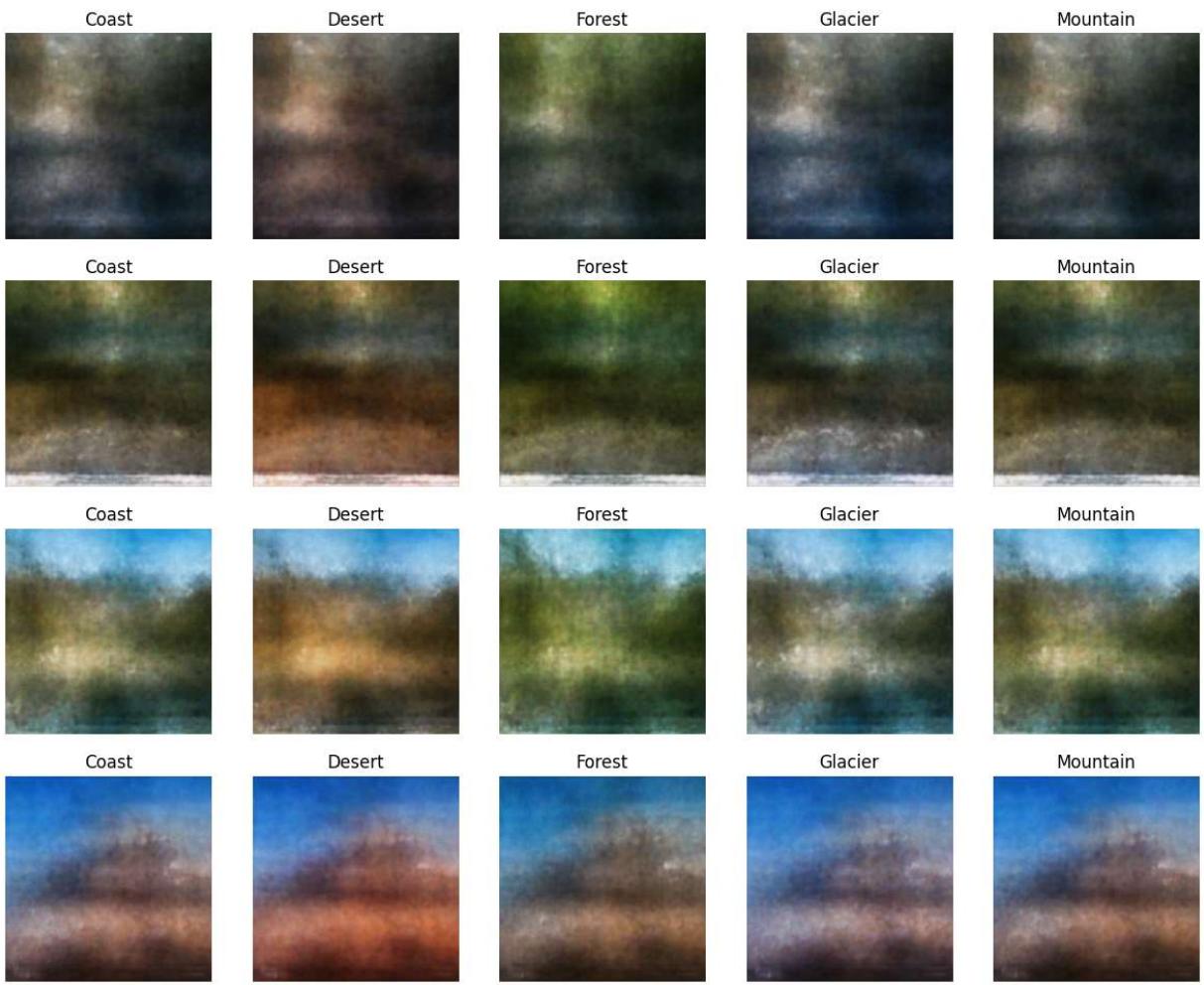
300/300 [=====] - 130s 433ms/step - loss: 208.2051 - reconstruction\_error: 156.1409 - regularization\_error: 52.0643 - val\_loss: 223.4203 - val\_reconstruction\_error: 174.8333 - val\_regularization\_error: 48.7455  
Epoch 33/100

300/300 [=====] - ETA: 0s - loss: 207.1814 - reconstruction\_error: 154.9818 - regularization\_error: 52.1996

[2023-11-21 18:45:45.115788]: Generating fixed images for epoch 33 ...



[2023-11-21 18:45:46.234101]: Generating random images for epoch 33 ...



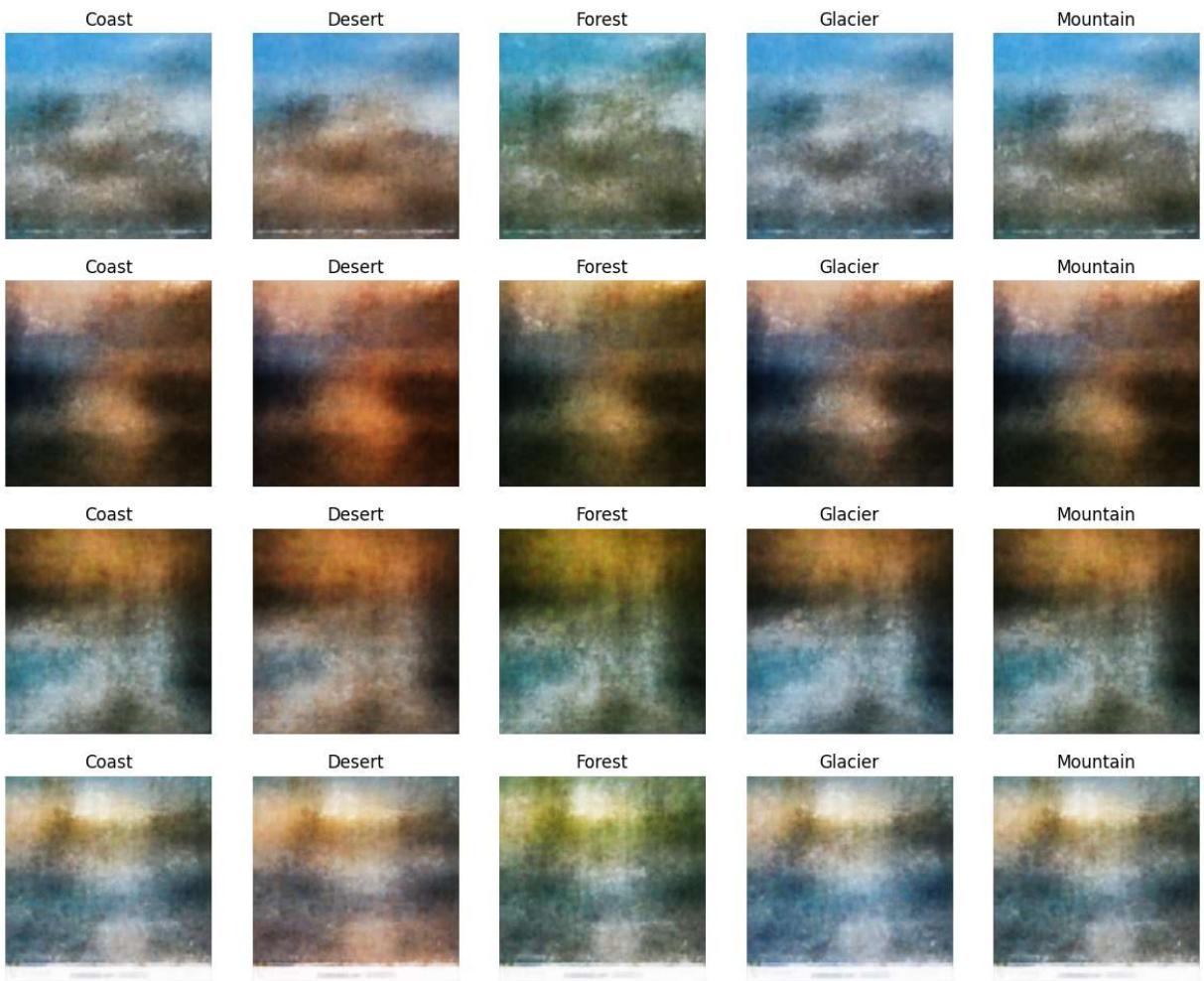
300/300 [=====] - 125s 416ms/step - loss: 207.1814 - reconstruction\_error: 154.9818 - regularization\_error: 52.1996 - val\_loss: 224.2519 - val\_reconstruction\_error: 172.5681 - val\_regularization\_error: 51.8559  
Epoch 34/100

300/300 [=====] - ETA: 0s - loss: 206.1421 - reconstruction\_error: 153.6483 - regularization\_error: 52.4938

[2023-11-21 18:47:45.599067]: Generating fixed images for epoch 34 ...



[2023-11-21 18:47:46.799789]: Generating random images for epoch 34 ...



300/300 [=====] - 121s 402ms/step - loss: 206.1421 - reconstruction\_error: 153.6483 - regularization\_error: 52.4938 - val\_loss: 224.5073 - val\_reconstruction\_error: 173.0546 - val\_regularization\_error: 51.5903

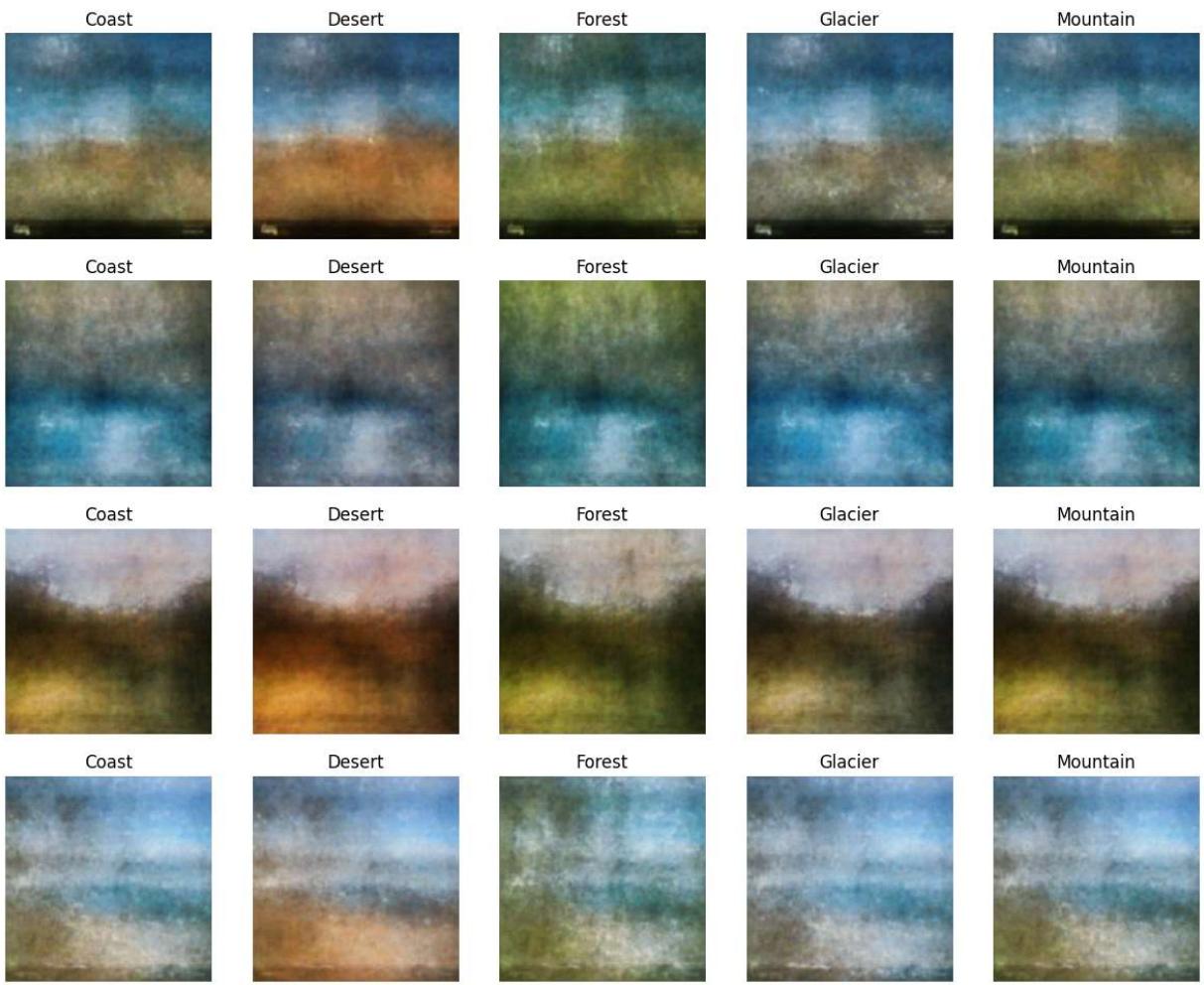
Epoch 35/100

300/300 [=====] - ETA: 0s - loss: 205.1217 - reconstruction\_error: 152.3772 - regularization\_error: 52.7444

[2023-11-21 18:49:52.494814]: Generating fixed images for epoch 35 ...



[2023-11-21 18:49:54.340865]: Generating random images for epoch 35 ...



300/300 [=====] - 128s 426ms/step - loss: 205.1217 - reconstruction\_error: 152.3772 - regularization\_error: 52.7444 - val\_loss: 224.2846 - val\_reconstruction\_error: 174.2829 - val\_regularization\_error: 50.1291

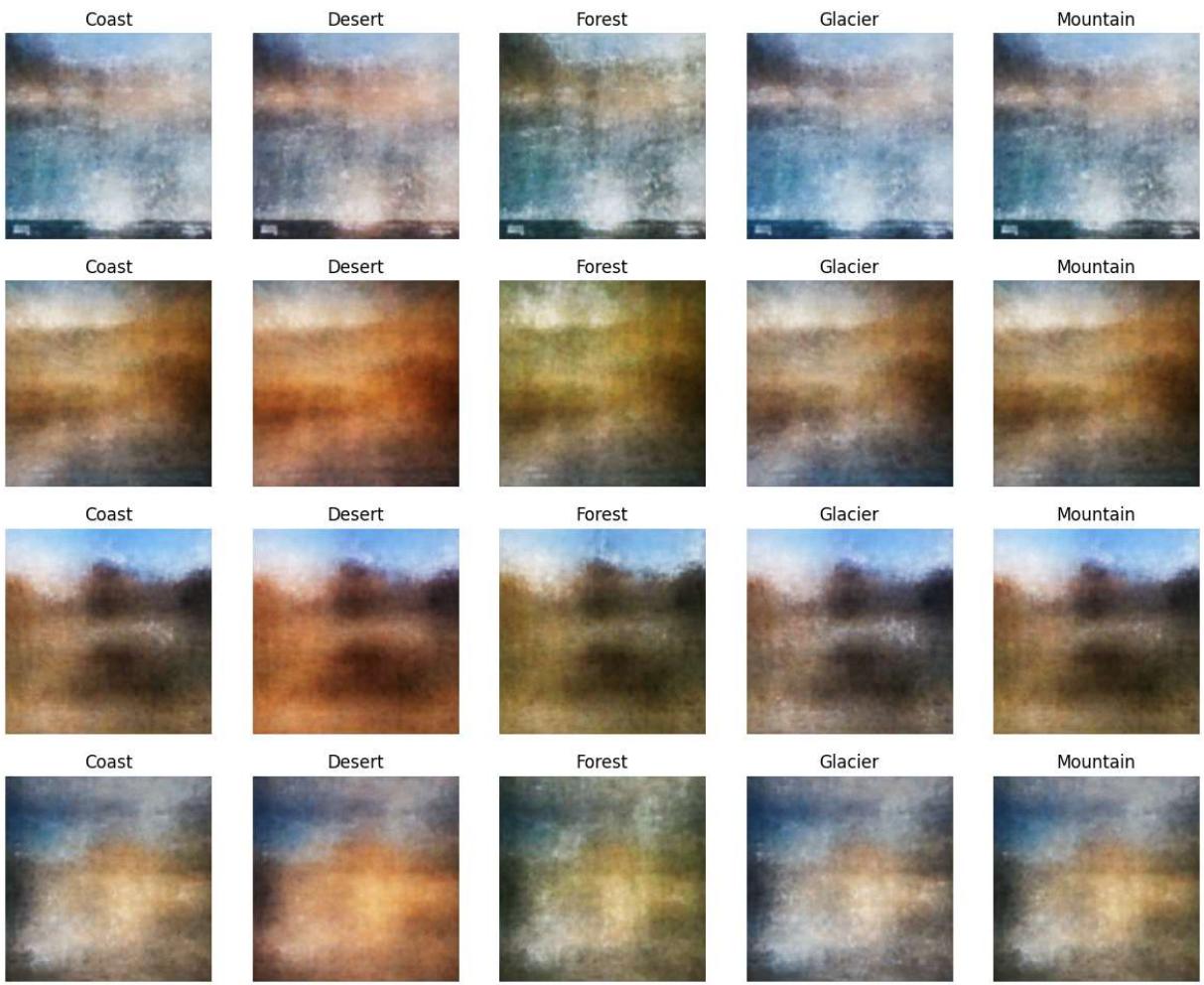
Epoch 36/100

300/300 [=====] - ETA: 0s - loss: 204.2951 - reconstruction\_error: 151.2239 - regularization\_error: 53.0711

[2023-11-21 18:51:58.792260]: Generating fixed images for epoch 36 ...



[2023-11-21 18:52:00.402391]: Generating random images for epoch 36 ...



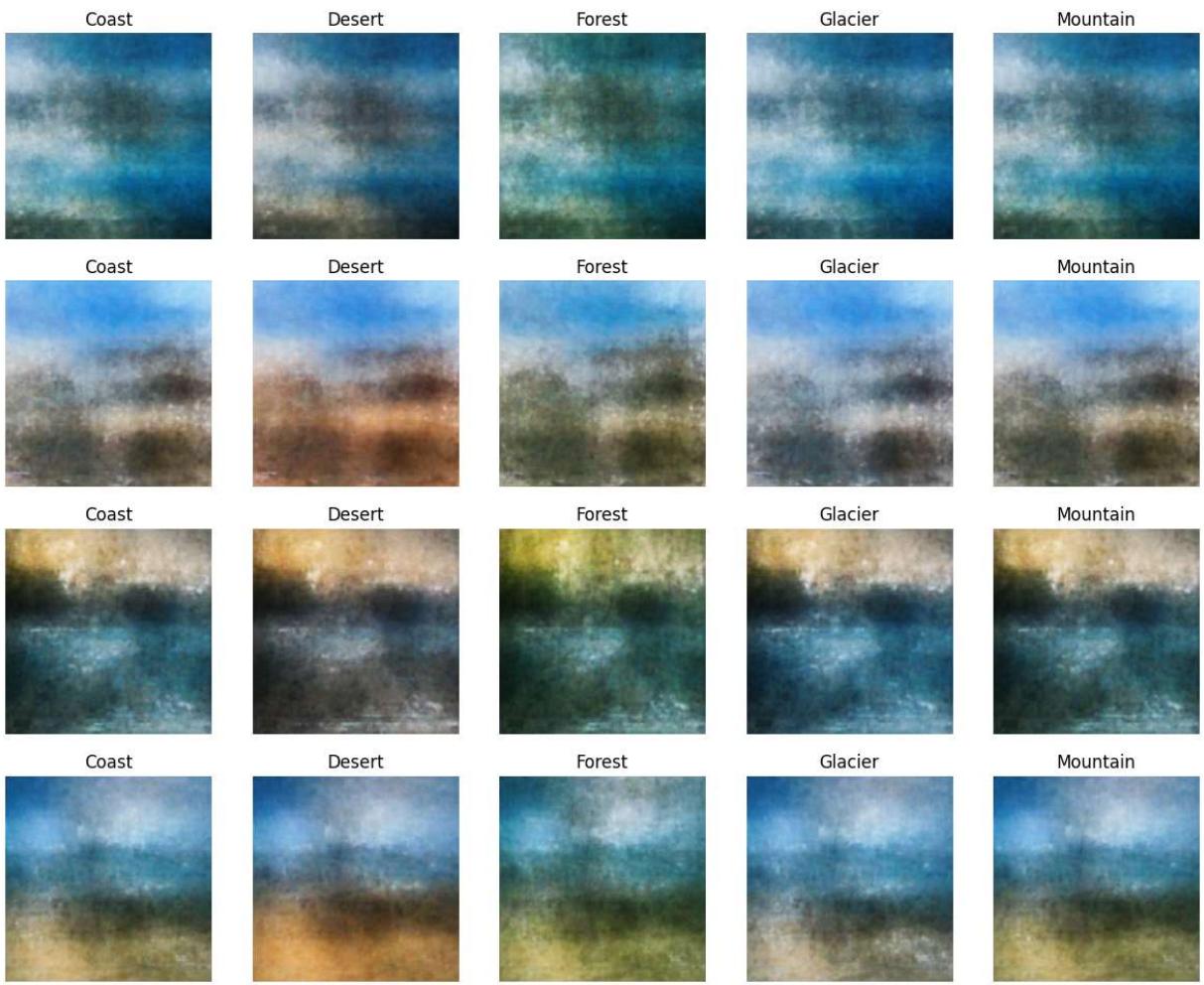
300/300 [=====] - 126s 420ms/step - loss: 204.2951 - reconstruction\_error: 151.2239 - regularization\_error: 53.0711 - val\_loss: 225.9064 - val\_reconstruction\_error: 172.3859 - val\_regularization\_error: 53.6520  
Epoch 37/100

300/300 [=====] - ETA: 0s - loss: 203.2863 - reconstruction\_error: 149.9722 - regularization\_error: 53.3142

[2023-11-21 18:54:00.527498]: Generating fixed images for epoch 37 ...



[2023-11-21 18:54:02.438148]: Generating random images for epoch 37 ...



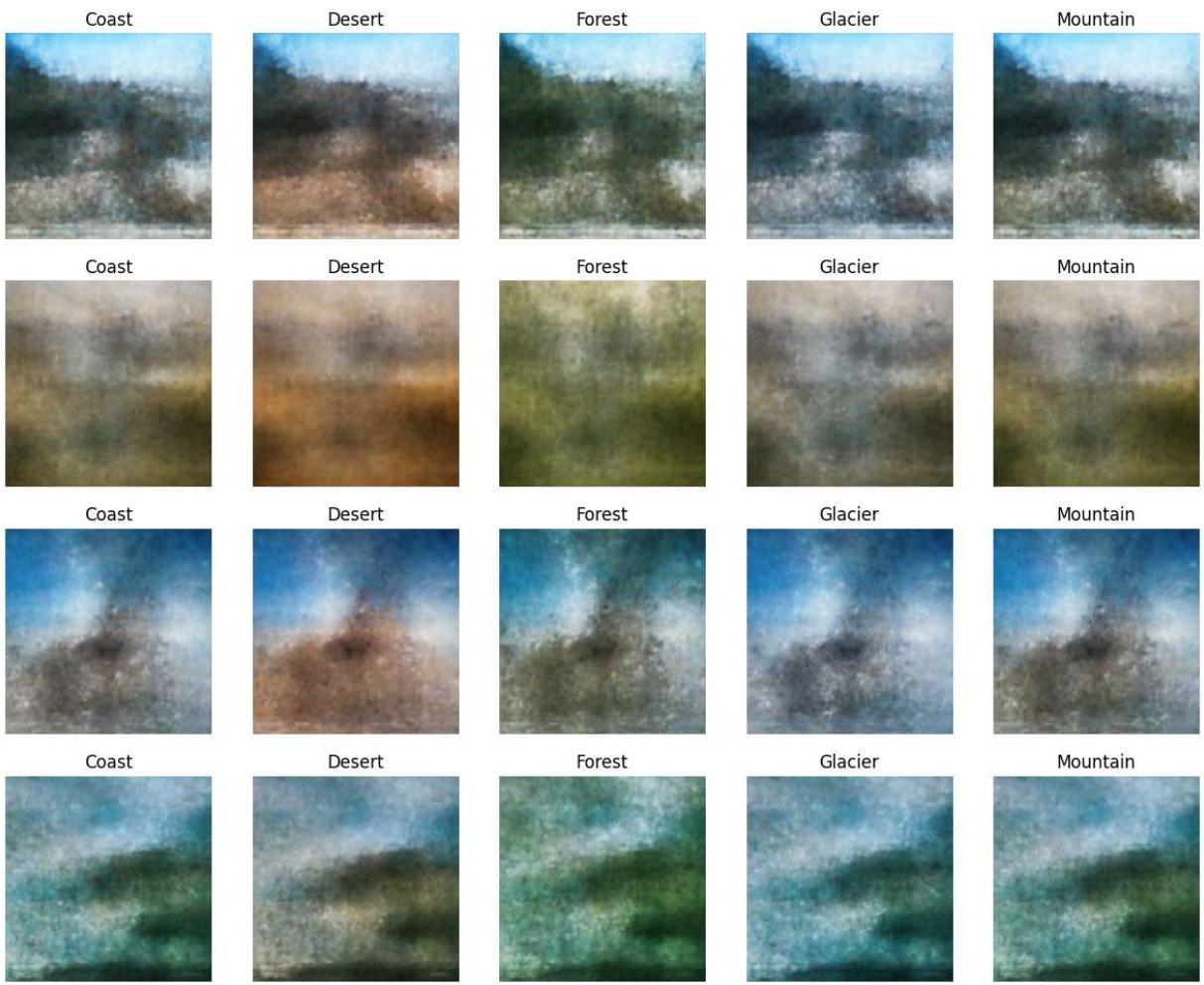
300/300 [=====] - 122s 407ms/step - loss: 203.2863 - reconstruction\_error: 149.9722 - regularization\_error: 53.3142 - val\_loss: 225.7576 - val\_reconstruction\_error: 174.3939 - val\_regularization\_error: 51.5213  
Epoch 38/100

300/300 [=====] - ETA: 0s - loss: 202.1220 - reconstruction\_error: 148.4810 - regularization\_error: 53.6409

[2023-11-21 18:56:12.008208]: Generating fixed images for epoch 38 ...



[2023-11-21 18:56:13.048012]: Generating random images for epoch 38 ...



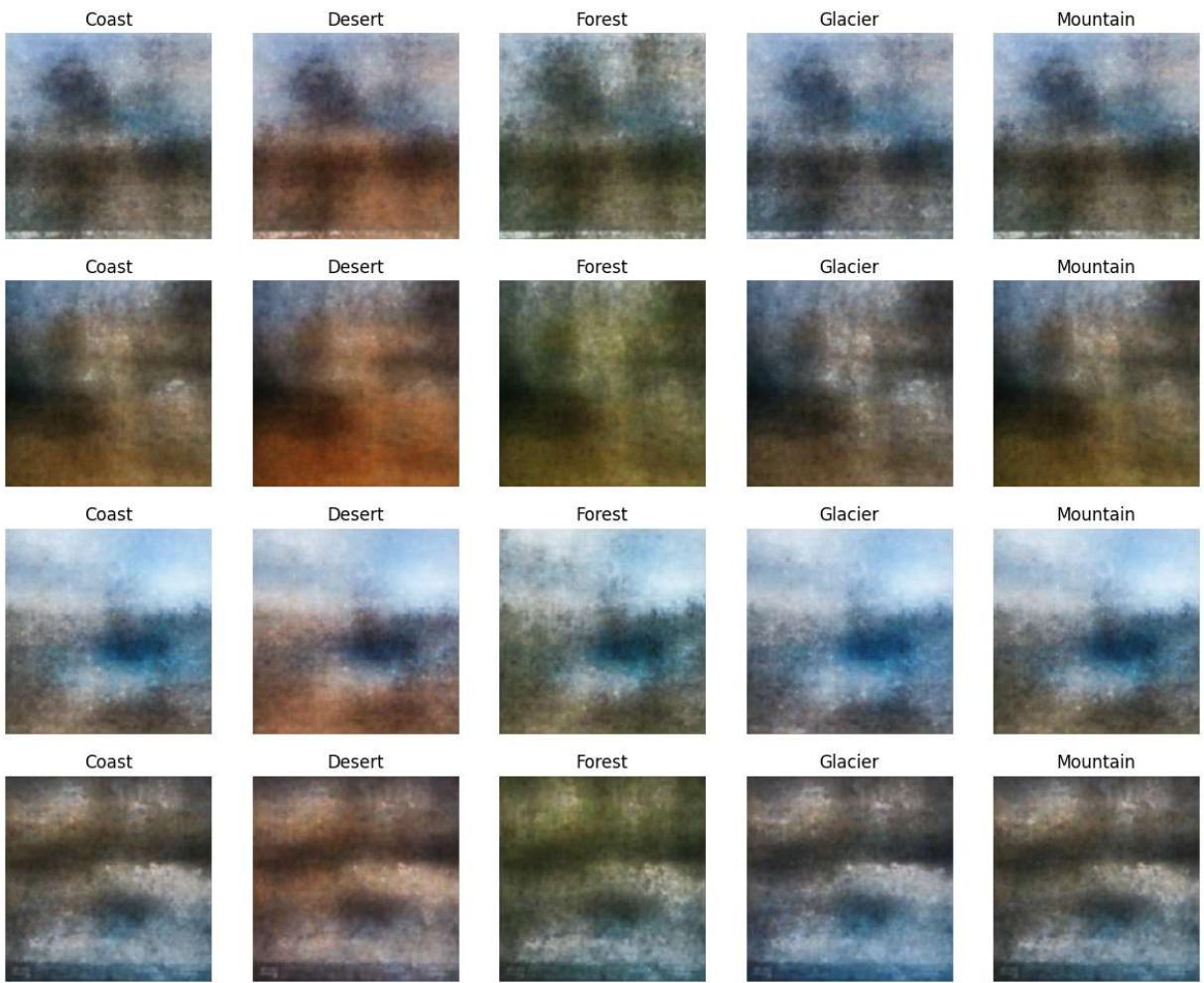
300/300 [=====] - 130s 435ms/step - loss: 202.1220 - reconstruction\_error: 148.4810 - regularization\_error: 53.6409 - val\_loss: 225.3809 - val\_reconstruction\_error: 173.6370 - val\_regularization\_error: 51.9020  
Epoch 39/100

300/300 [=====] - ETA: 0s - loss: 201.0434 - reconstruction\_error: 147.1118 - regularization\_error: 53.9316

[2023-11-21 18:58:16.100020]: Generating fixed images for epoch 39 ...



[2023-11-21 18:58:17.416396]: Generating random images for epoch 39 ...



300/300 [=====] - 126s 422ms/step - loss: 201.0434 - reconstruction\_error: 147.1118 - regularization\_error: 53.9316 - val\_loss: 225.7158 - val\_reconstruction\_error: 174.0665 - val\_regularization\_error: 51.8090

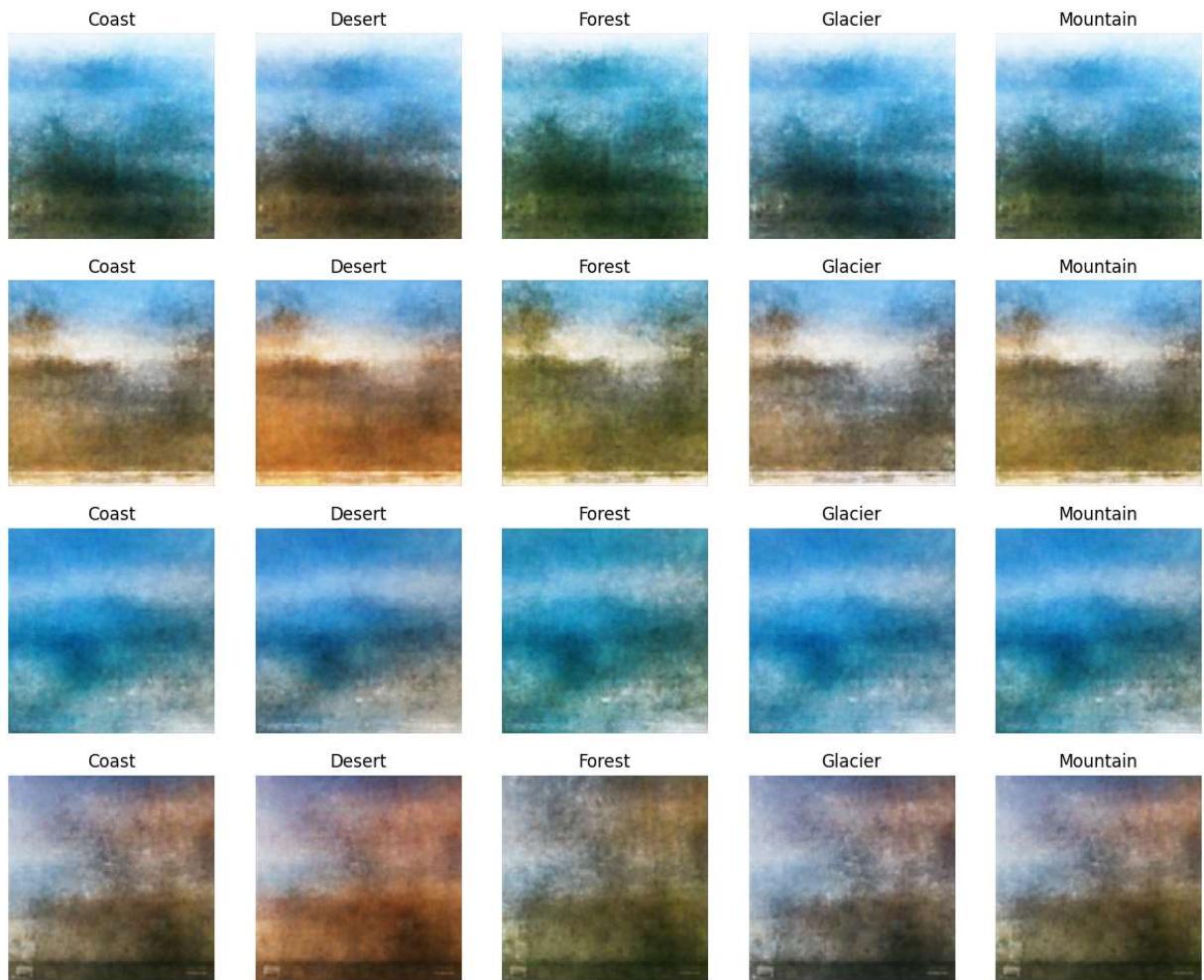
Epoch 40/100

300/300 [=====] - ETA: 0s - loss: 199.9974 - reconstruction\_error: 145.7617 - regularization\_error: 54.2357

[2023-11-21 19:00:19.325898]: Generating fixed images for epoch 40 ...



[2023-11-21 19:00:20.378129]: Generating random images for epoch 40 ...



300/300 [=====] - 121s 402ms/step - loss: 199.9974 - reconstruction\_error: 145.7617 - regularization\_error: 54.2357 - val\_loss: 225.6496 - val\_reconstruction\_error: 174.9938 - val\_regularization\_error: 50.8408

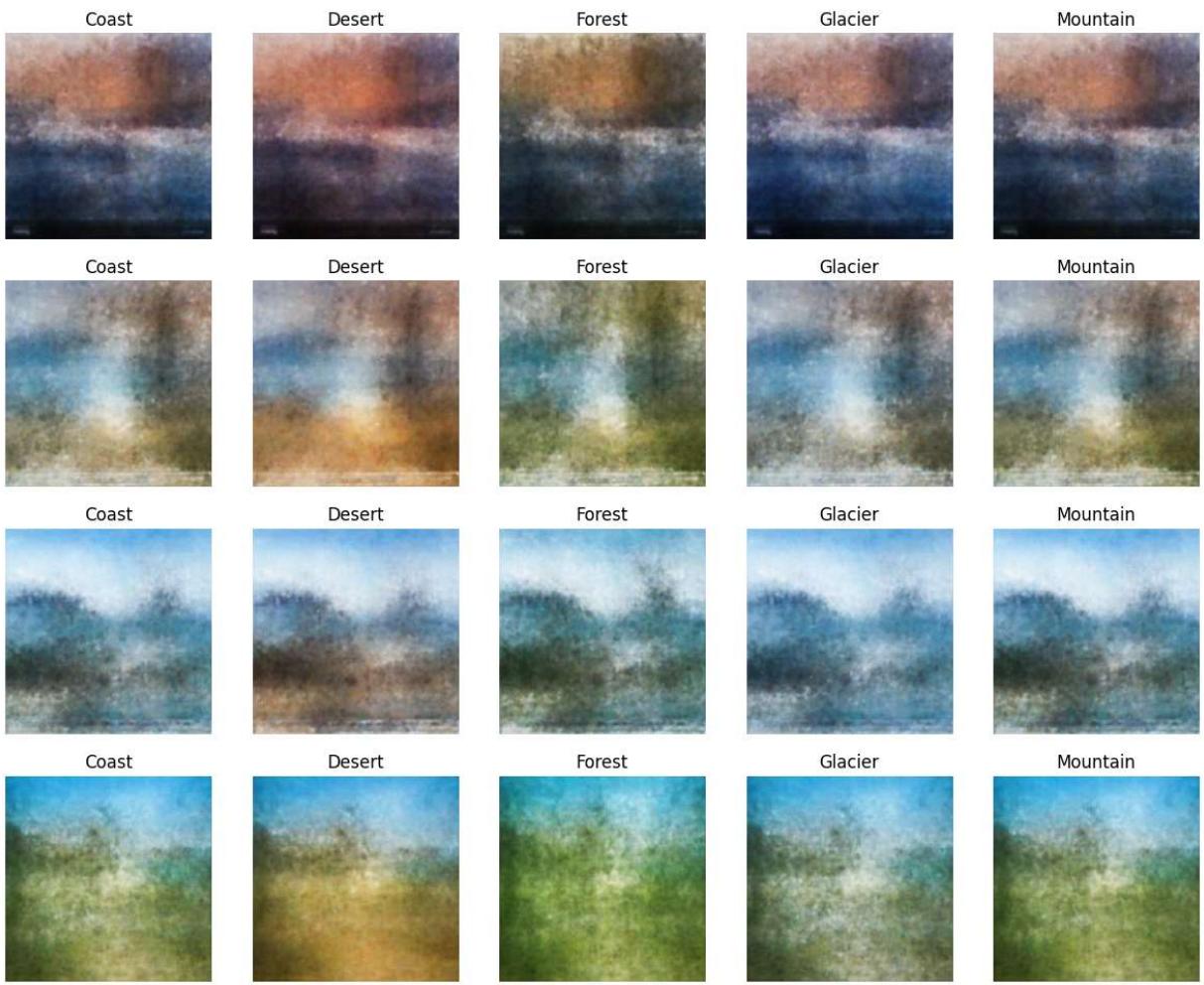
Epoch 41/100

300/300 [=====] - ETA: 0s - loss: 198.8378 - reconstruction\_error: 144.4887 - regularization\_error: 54.3490

[2023-11-21 19:02:21.923662]: Generating fixed images for epoch 41 ...



[2023-11-21 19:02:24.424563]: Generating random images for epoch 41 ...



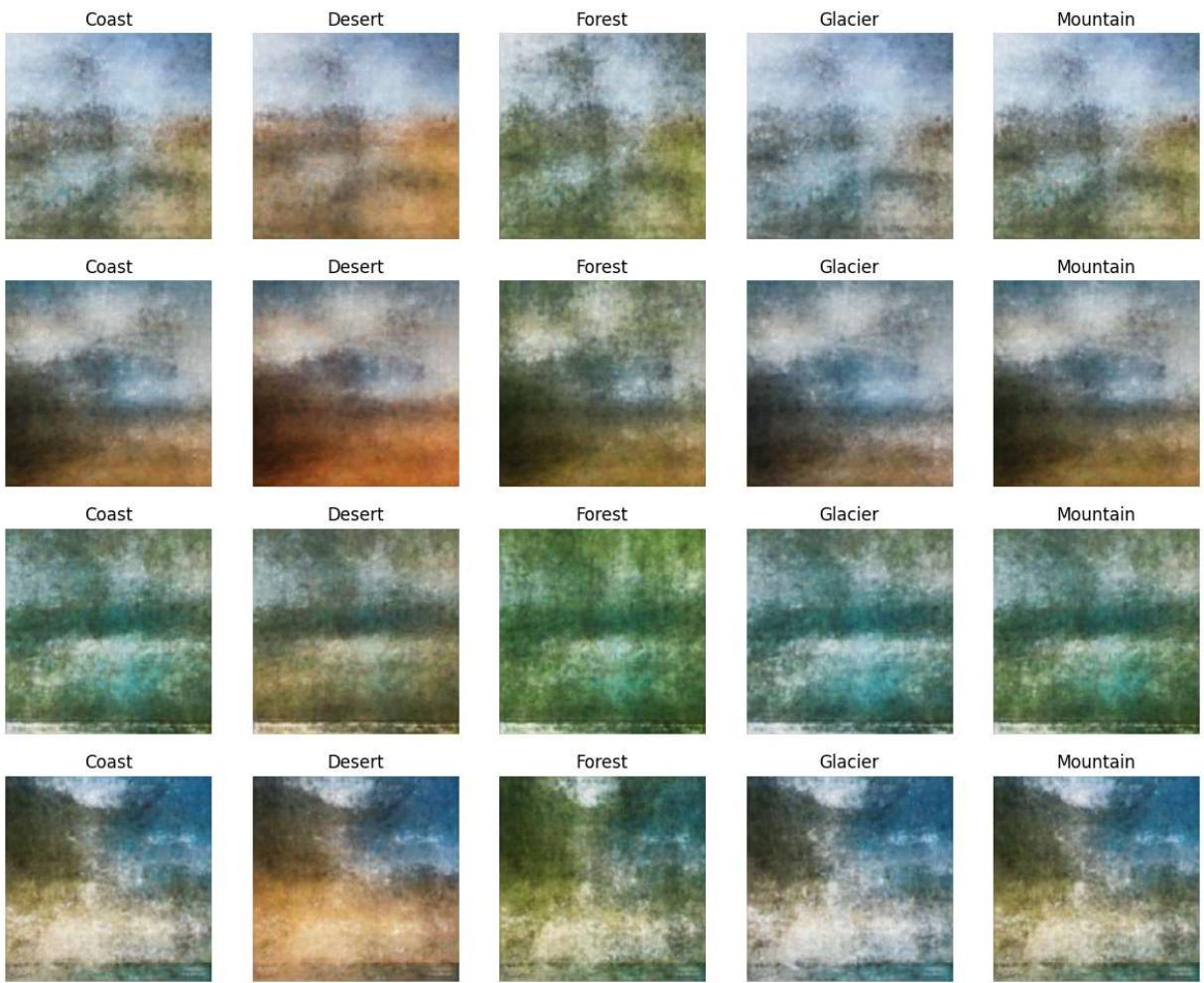
300/300 [=====] - 124s 412ms/step - loss: 198.8378 - reconstruction\_error: 144.4887 - regularization\_error: 54.3490 - val\_loss: 227.0003 - val\_reconstruction\_error: 172.7684 - val\_regularization\_error: 54.3614  
Epoch 42/100

300/300 [=====] - ETA: 0s - loss: 197.9946 - reconstruction\_error: 143.3679 - regularization\_error: 54.6267

[2023-11-21 19:04:29.627704]: Generating fixed images for epoch 42 ...



[2023-11-21 19:04:31.428959]: Generating random images for epoch 42 ...



300/300 [=====] - 127s 423ms/step - loss: 197.9946 - reconstruction\_error: 143.3679 - regularization\_error: 54.6267 - val\_loss: 228.4085 - val\_reconstruction\_error: 174.8459 - val\_regularization\_error: 53.7445

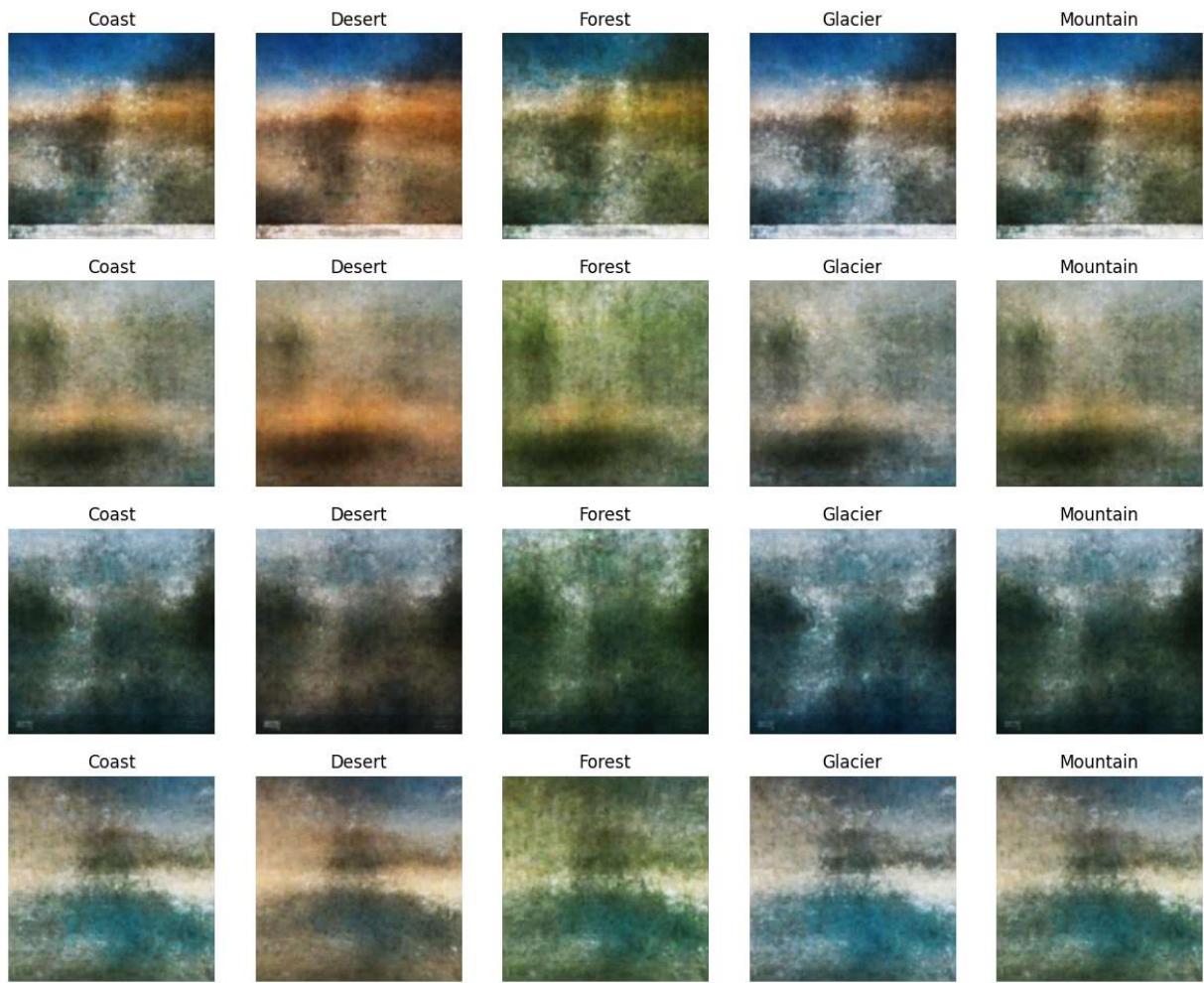
Epoch 43/100

300/300 [=====] - ETA: 0s - loss: 197.1224 - reconstruction\_error: 142.0833 - regularization\_error: 55.0391

[2023-11-21 19:06:33.892999]: Generating fixed images for epoch 43 ...



[2023-11-21 19:06:35.318223]: Generating random images for epoch 43 ...



300/300 [=====] - 123s 410ms/step - loss: 197.1224 - reconstruction\_error: 142.0833 - regularization\_error: 55.0391 - val\_loss: 228.6853 - val\_reconstruction\_error: 175.2645 - val\_regularization\_error: 53.5406

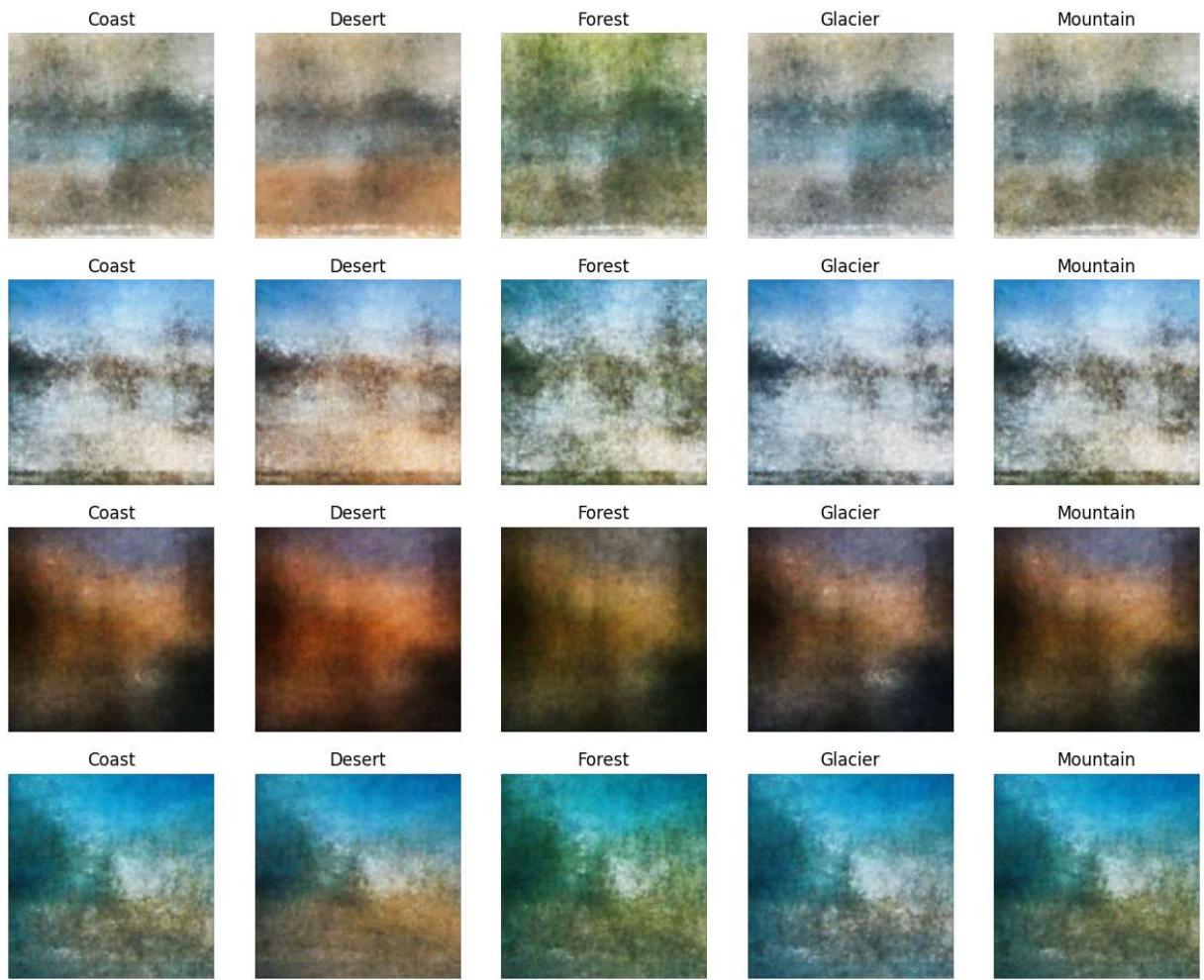
Epoch 44/100

300/300 [=====] - ETA: 0s - loss: 196.1420 - reconstruction\_error: 140.8541 - regularization\_error: 55.2879

[2023-11-21 19:08:33.959016]: Generating fixed images for epoch 44 ...



[2023-11-21 19:08:35.401063]: Generating random images for epoch 44 ...



300/300 [=====] - 120s 400ms/step - loss: 196.1420 - reconstruction\_error: 140.8541 - regularization\_error: 55.2879 - val\_loss: 228.6337 - val\_reconstruction\_error: 174.6061 - val\_regularization\_error: 54.1945

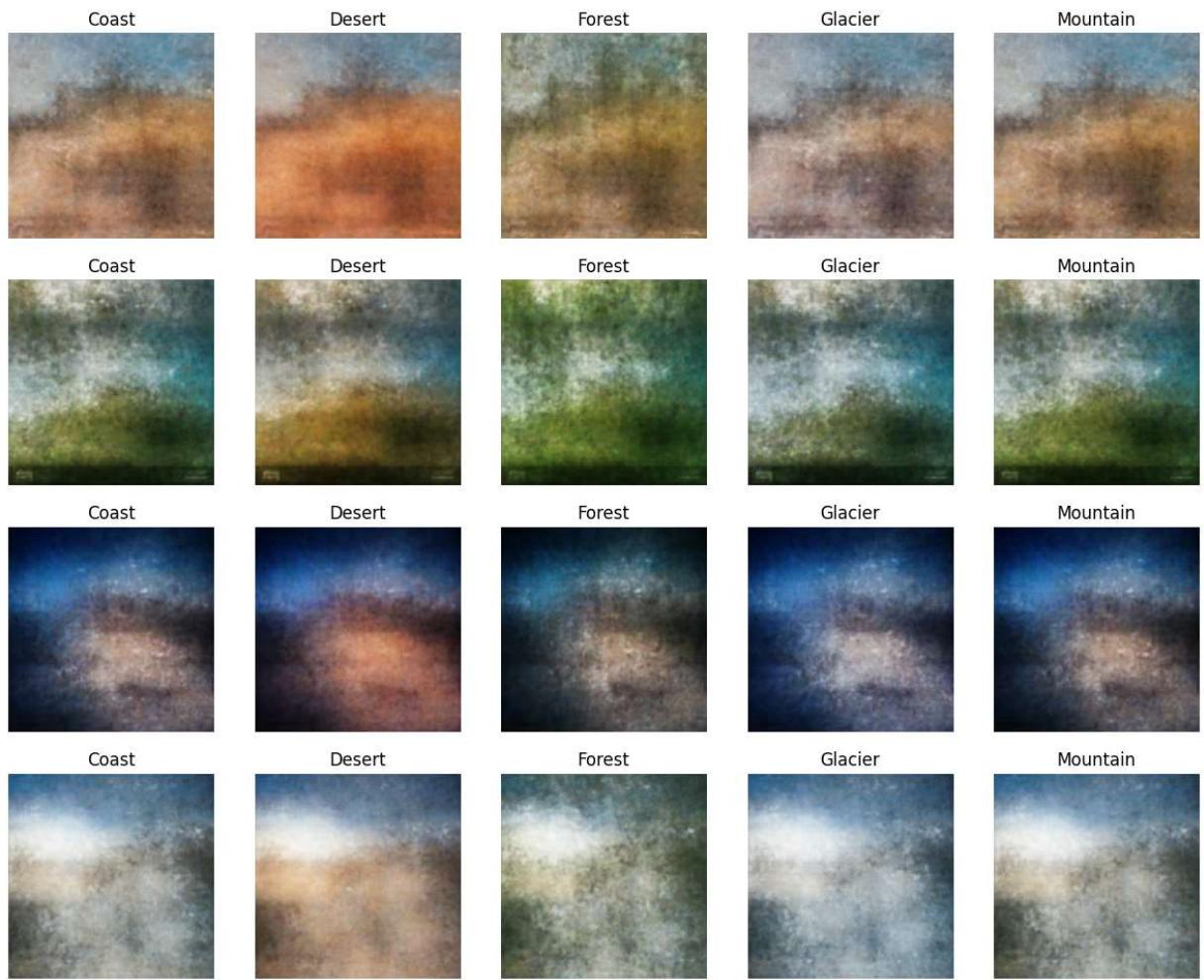
Epoch 45/100

300/300 [=====] - ETA: 0s - loss: 194.8987 - reconstruction\_error: 139.4021 - regularization\_error: 55.4967

[2023-11-21 19:10:48.268863]: Generating fixed images for epoch 45 ...



[2023-11-21 19:10:49.570039]: Generating random images for epoch 45 ...



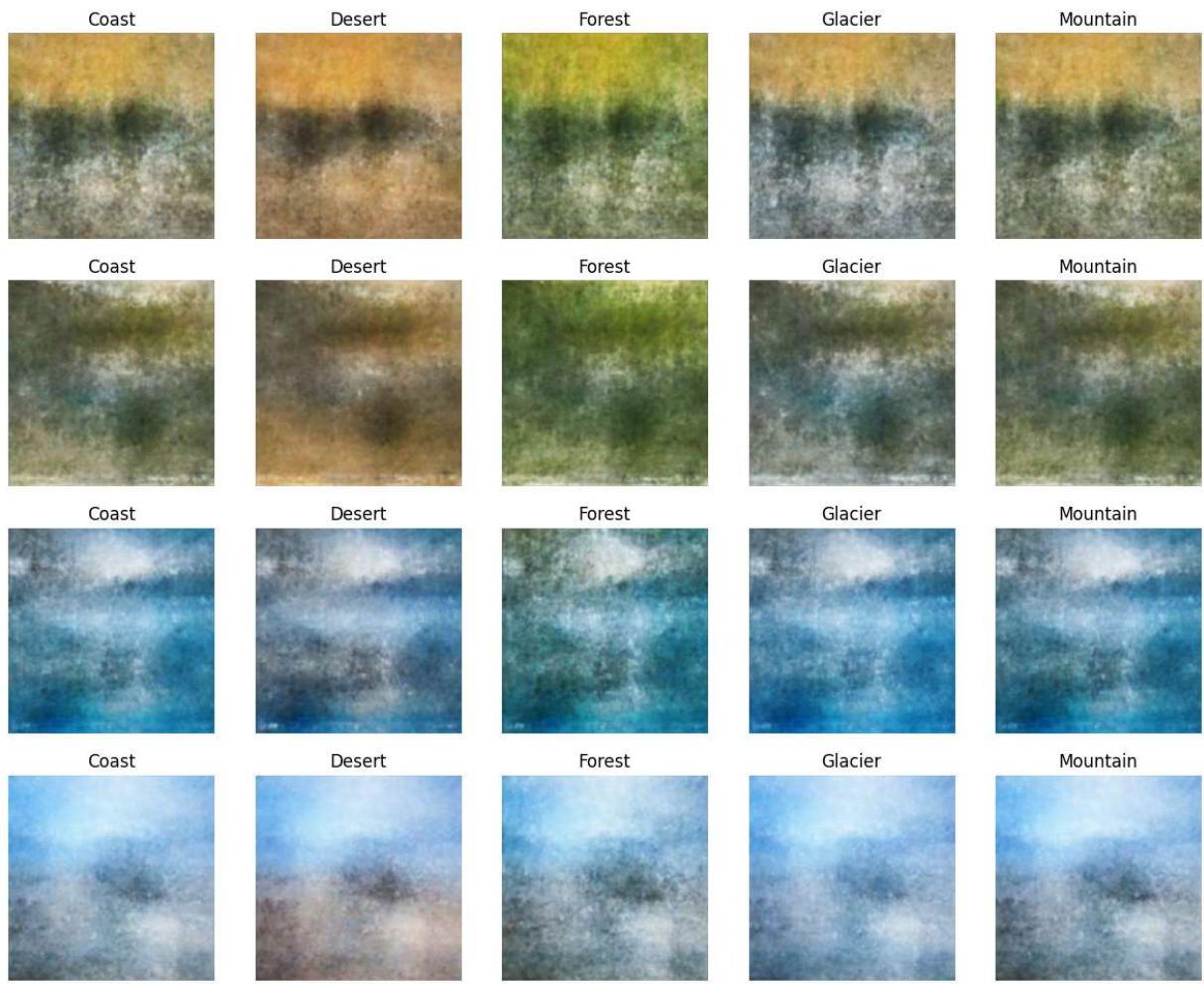
300/300 [=====] - 134s 447ms/step - loss: 194.8987 - reconstruction\_error: 139.4021 - regularization\_error: 55.4967 - val\_loss: 227.4927 - val\_reconstruction\_error: 173.5094 - val\_regularization\_error: 54.1867  
Epoch 46/100

300/300 [=====] - ETA: 0s - loss: 193.7642 - reconstruction\_error: 138.0944 - regularization\_error: 55.6698

[2023-11-21 19:12:54.481330]: Generating fixed images for epoch 46 ...



[2023-11-21 19:12:55.673325]: Generating random images for epoch 46 ...



300/300 [=====] - 126s 420ms/step - loss: 193.7642 - reconstruction\_error: 138.0944 - regularization\_error: 55.6698 - val\_loss: 227.5875 - val\_reconstruction\_error: 174.0526 - val\_regularization\_error: 53.6919

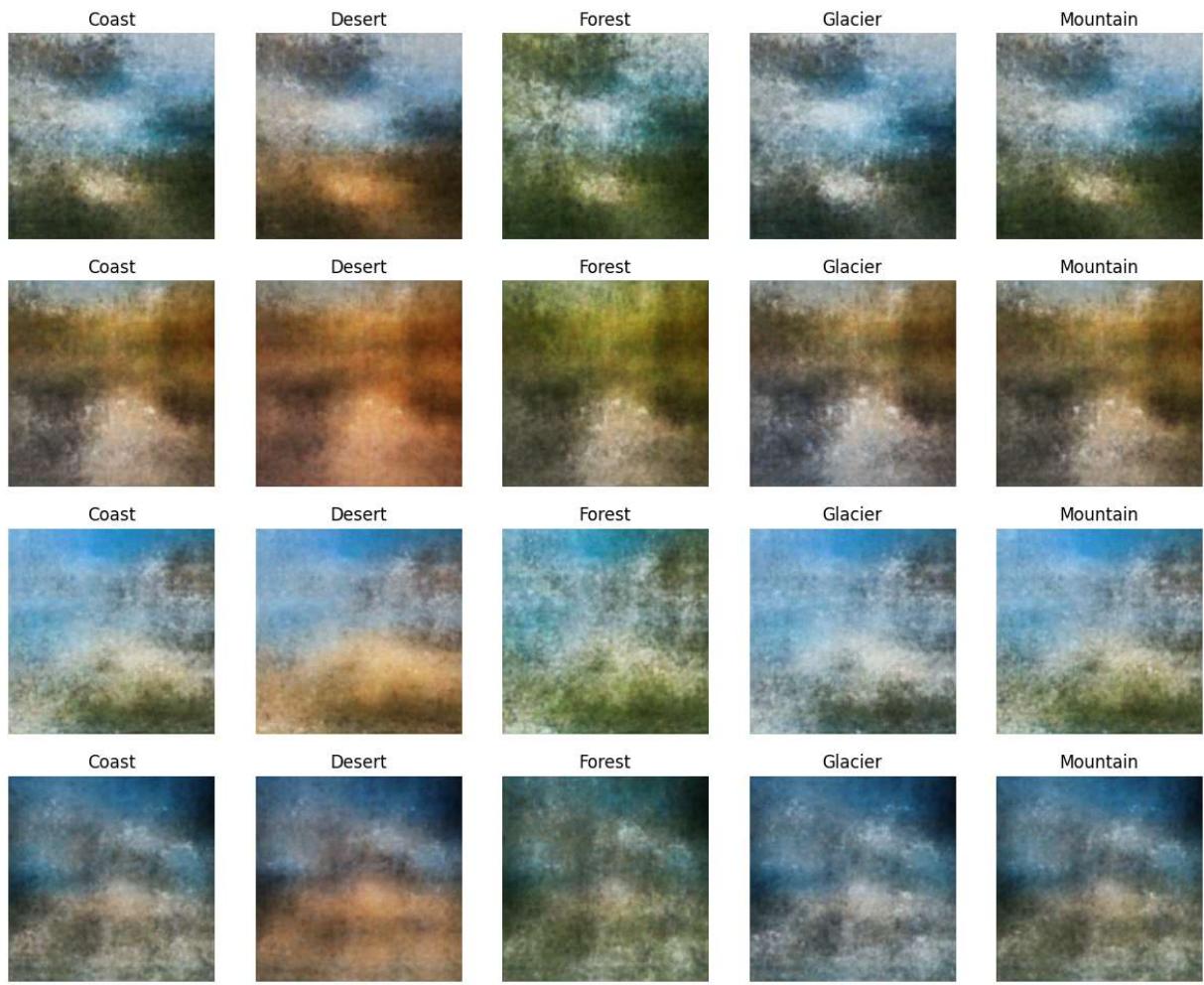
Epoch 47/100

300/300 [=====] - ETA: 0s - loss: 193.2417 - reconstruction\_error: 137.2357 - regularization\_error: 56.0060

[2023-11-21 19:14:53.820711]: Generating fixed images for epoch 47 ...



[2023-11-21 19:14:55.391000]: Generating random images for epoch 47 ...



300/300 [=====] - 120s 402ms/step - loss: 193.2417 - reconstruction\_error: 137.2357 - regularization\_error: 56.0060 - val\_loss: 230.0910 - val\_reconstruction\_error: 176.6047 - val\_regularization\_error: 53.6915

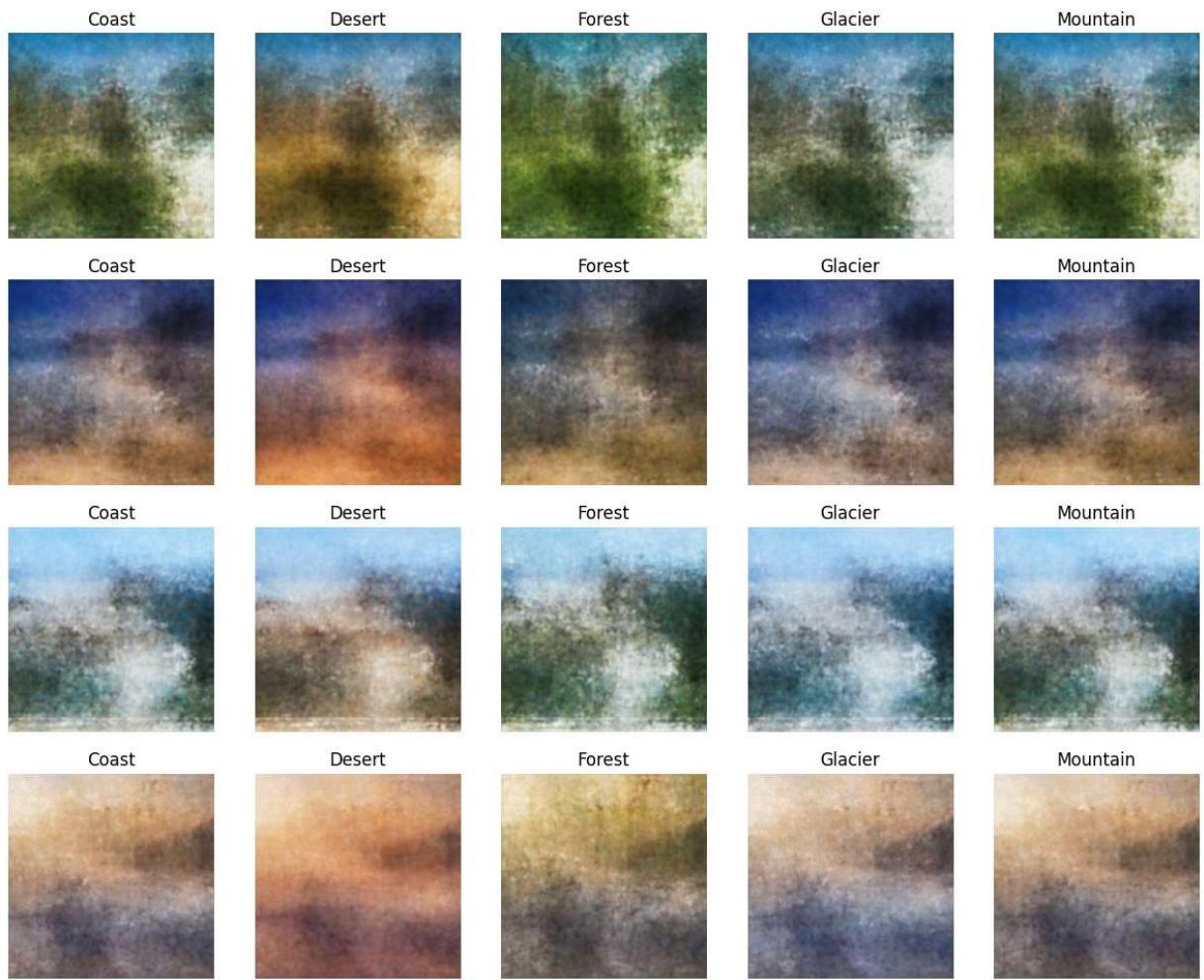
Epoch 48/100

300/300 [=====] - ETA: 0s - loss: 192.0930 - reconstruction\_error: 135.8718 - regularization\_error: 56.2211

[2023-11-21 19:17:01.917333]: Generating fixed images for epoch 48 ...



[2023-11-21 19:17:03.350770]: Generating random images for epoch 48 ...



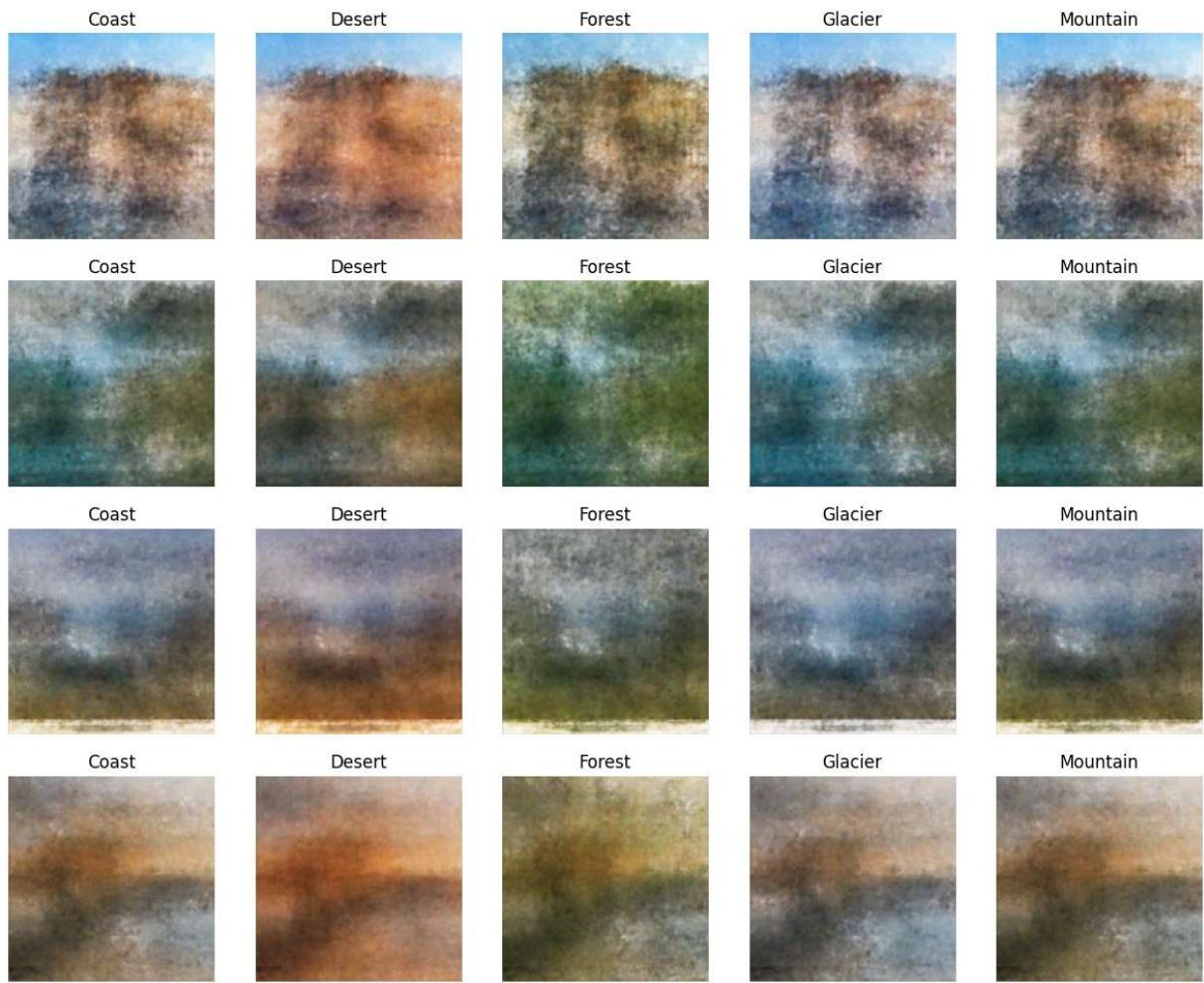
300/300 [=====] - 127s 423ms/step - loss: 192.0930 - reconstruction\_error: 135.8718 - regularization\_error: 56.2211 - val\_loss: 230.2240 - val\_reconstruction\_error: 174.2122 - val\_regularization\_error: 56.1752  
Epoch 49/100

300/300 [=====] - ETA: 0s - loss: 191.0103 - reconstruction\_error: 134.6695 - regularization\_error: 56.3407

[2023-11-21 19:19:13.426480]: Generating fixed images for epoch 49 ...



[2023-11-21 19:19:14.675989]: Generating random images for epoch 49 ...



300/300 [=====] - 132s 440ms/step - loss: 191.0103 - reconstruction\_error: 134.6695 - regularization\_error: 56.3407 - val\_loss: 229.4639 - val\_reconstruction\_error: 175.3720 - val\_regularization\_error: 54.2780

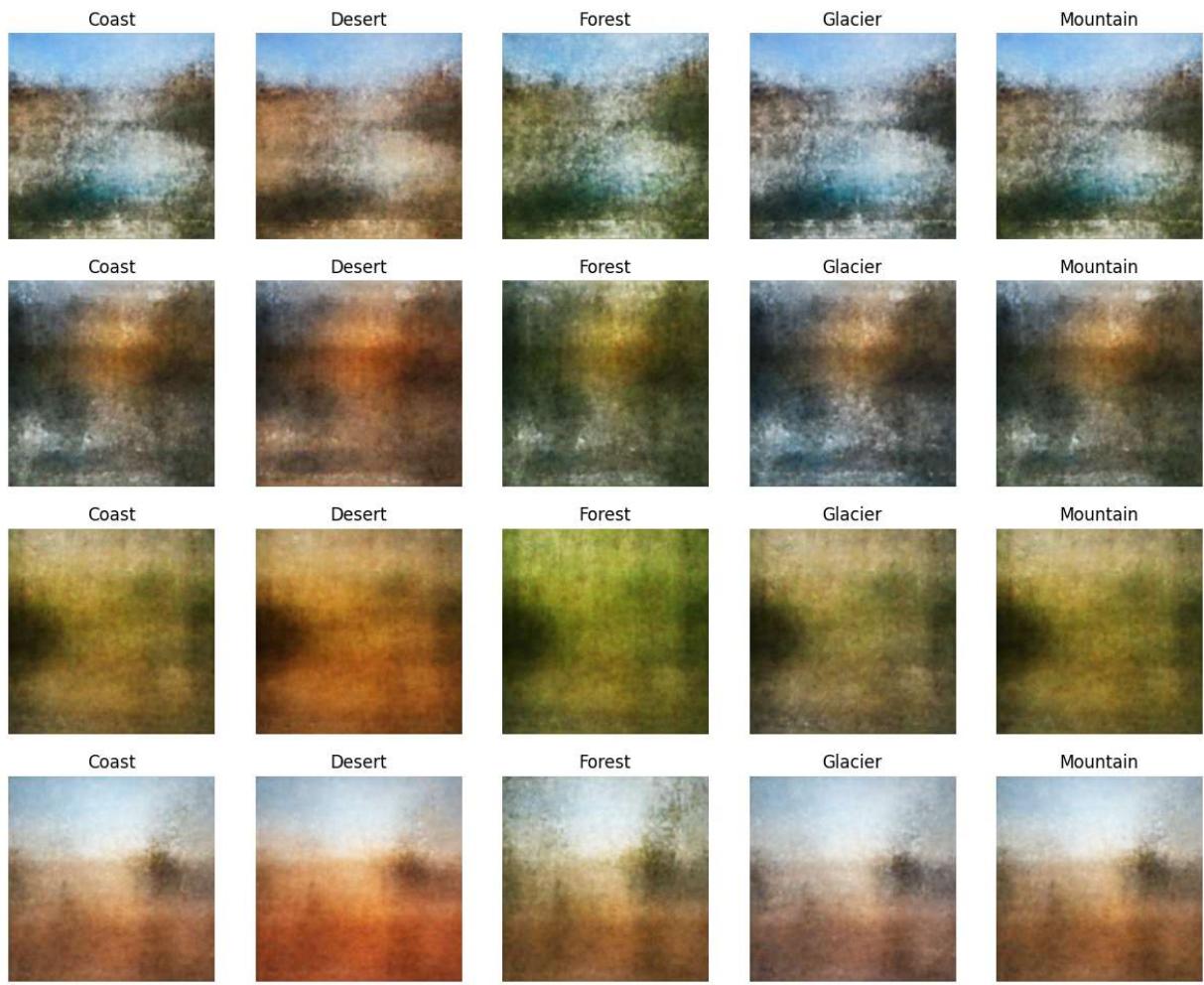
Epoch 50/100

300/300 [=====] - ETA: 0s - loss: 190.3407 - reconstruction\_error: 133.6450 - regularization\_error: 56.6957

[2023-11-21 19:21:27.496562]: Generating fixed images for epoch 50 ...



[2023-11-21 19:21:28.592866]: Generating random images for epoch 50 ...



300/300 [=====] - 133s 443ms/step - loss: 190.3407 - reconstruction\_error: 133.6450 - regularization\_error: 56.6957 - val\_loss: 230.6842 - val\_reconstruction\_error: 176.2468 - val\_regularization\_error: 54.5469

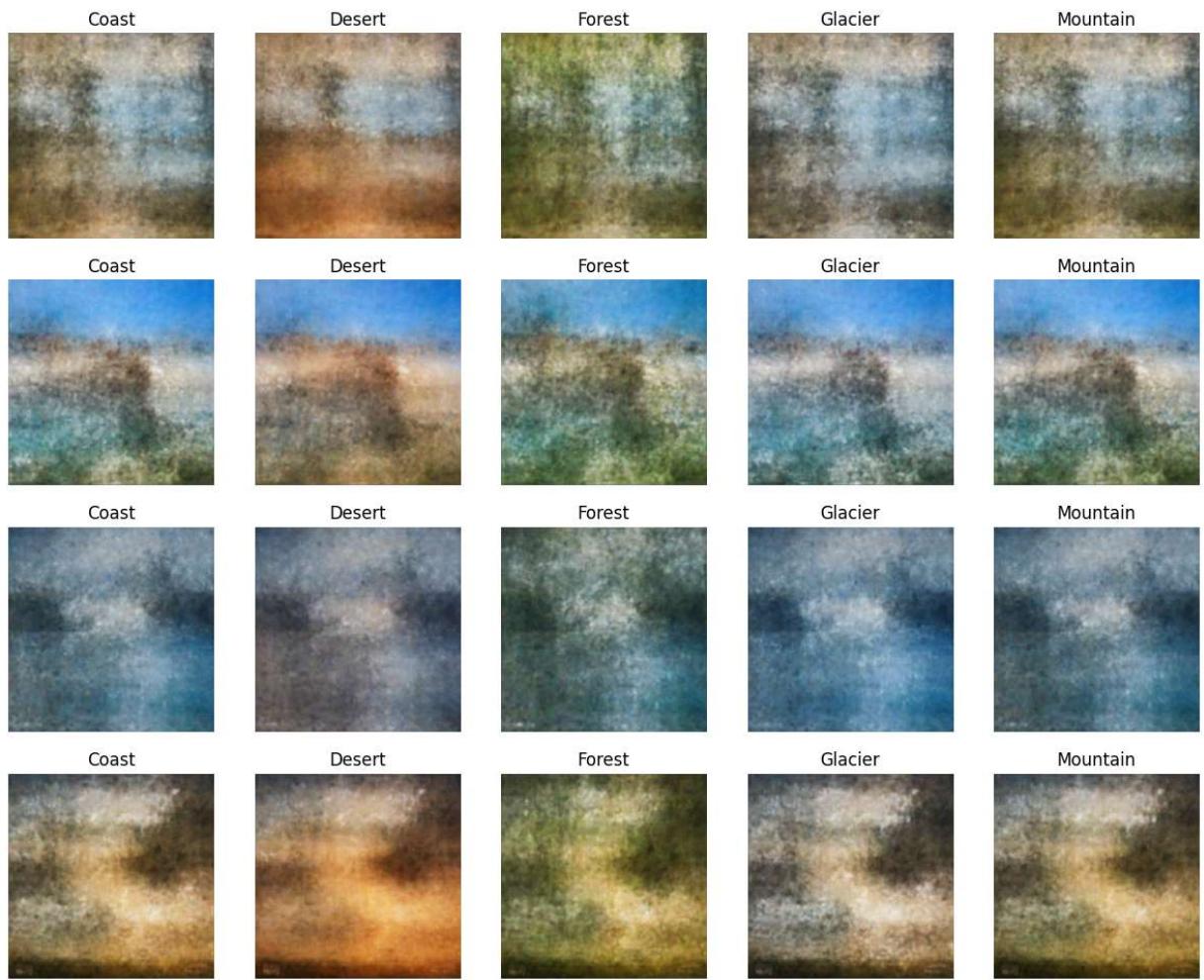
Epoch 51/100

300/300 [=====] - ETA: 0s - loss: 189.4689 - reconstruction\_error: 132.5479 - regularization\_error: 56.9211

[2023-11-21 19:23:28.988683]: Generating fixed images for epoch 51 ...



[2023-11-21 19:23:30.385953]: Generating random images for epoch 51 ...



300/300 [=====] - 123s 409ms/step - loss: 189.4689 - reconstruction\_error: 132.5479 - regularization\_error: 56.9211 - val\_loss: 230.5672 - val\_reconstruction\_error: 175.3656 - val\_regularization\_error: 55.3742

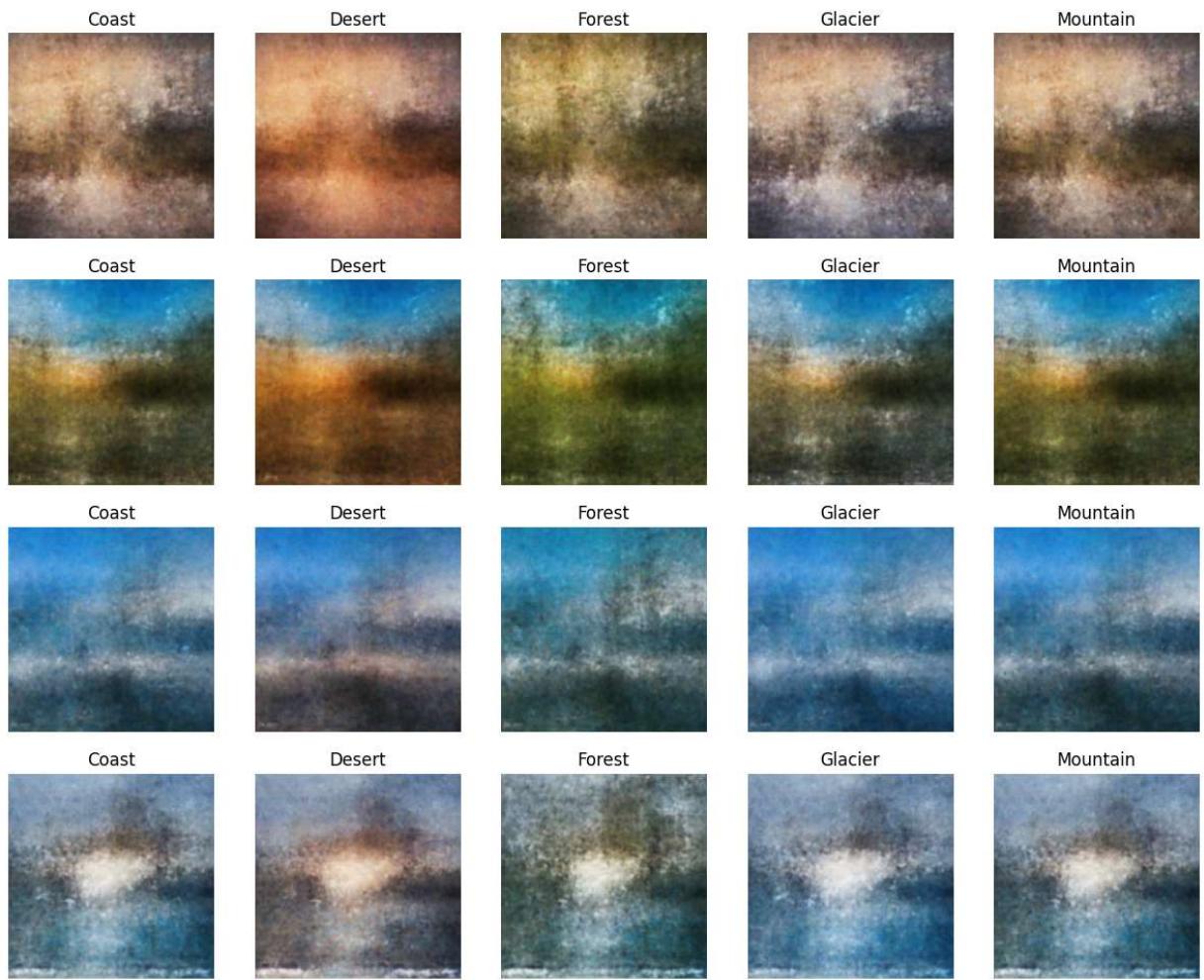
Epoch 52/100

300/300 [=====] - ETA: 0s - loss: 188.6766 - reconstruction\_error: 131.4935 - regularization\_error: 57.1830

[2023-11-21 19:25:21.654609]: Generating fixed images for epoch 52 ...



[2023-11-21 19:25:23.345904]: Generating random images for epoch 52 ...



300/300 [=====] - 112s 373ms/step - loss: 188.6766 - reconstruction\_error: 131.4935 - regularization\_error: 57.1830 - val\_loss: 231.4366 - val\_reconstruction\_error: 175.9988 - val\_regularization\_error: 55.5951

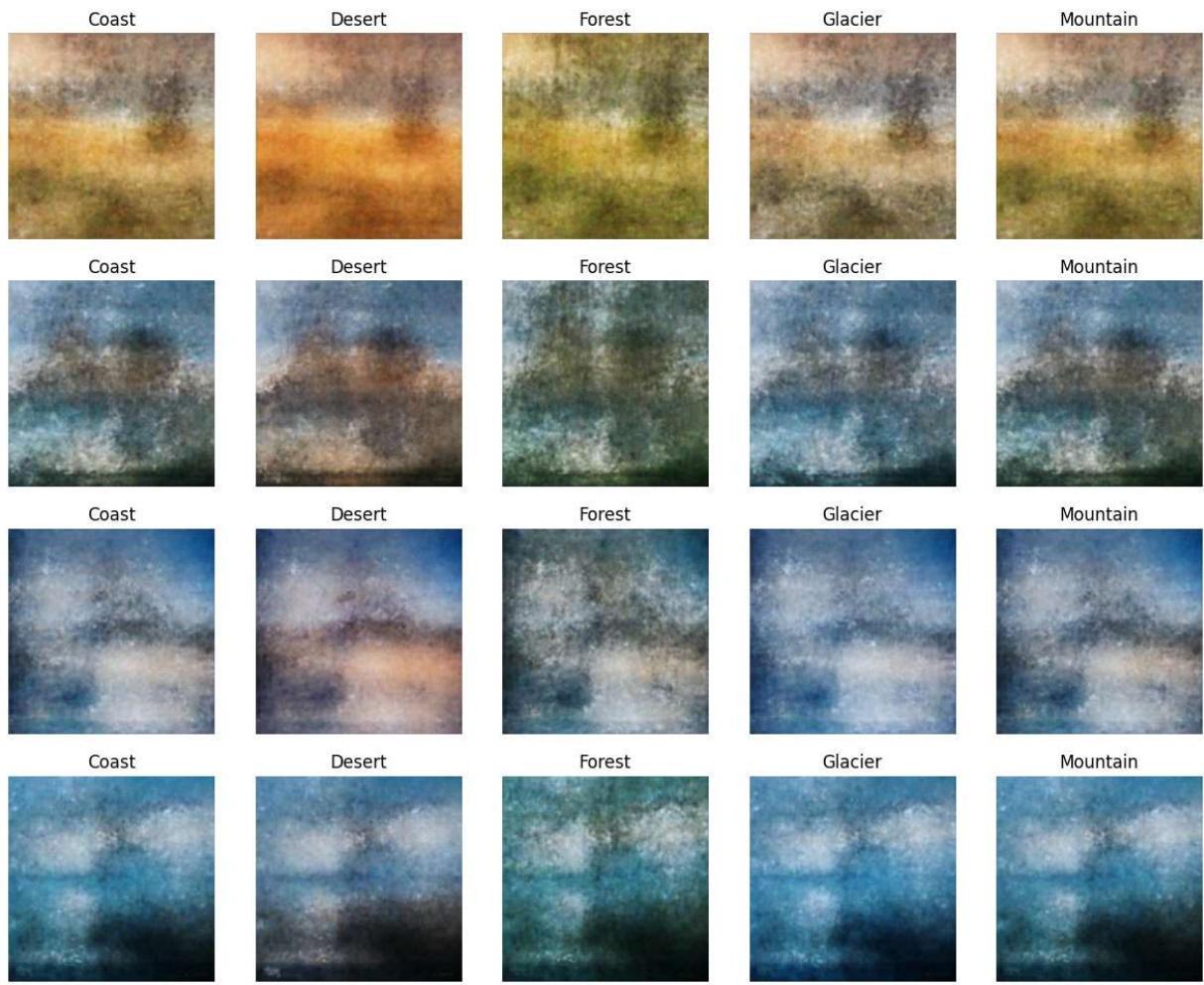
Epoch 53/100

300/300 [=====] - ETA: 0s - loss: 187.8343 - reconstruction\_error: 130.5322 - regularization\_error: 57.3021

[2023-11-21 19:27:22.840229]: Generating fixed images for epoch 53 ...



[2023-11-21 19:27:24.385890]: Generating random images for epoch 53 ...



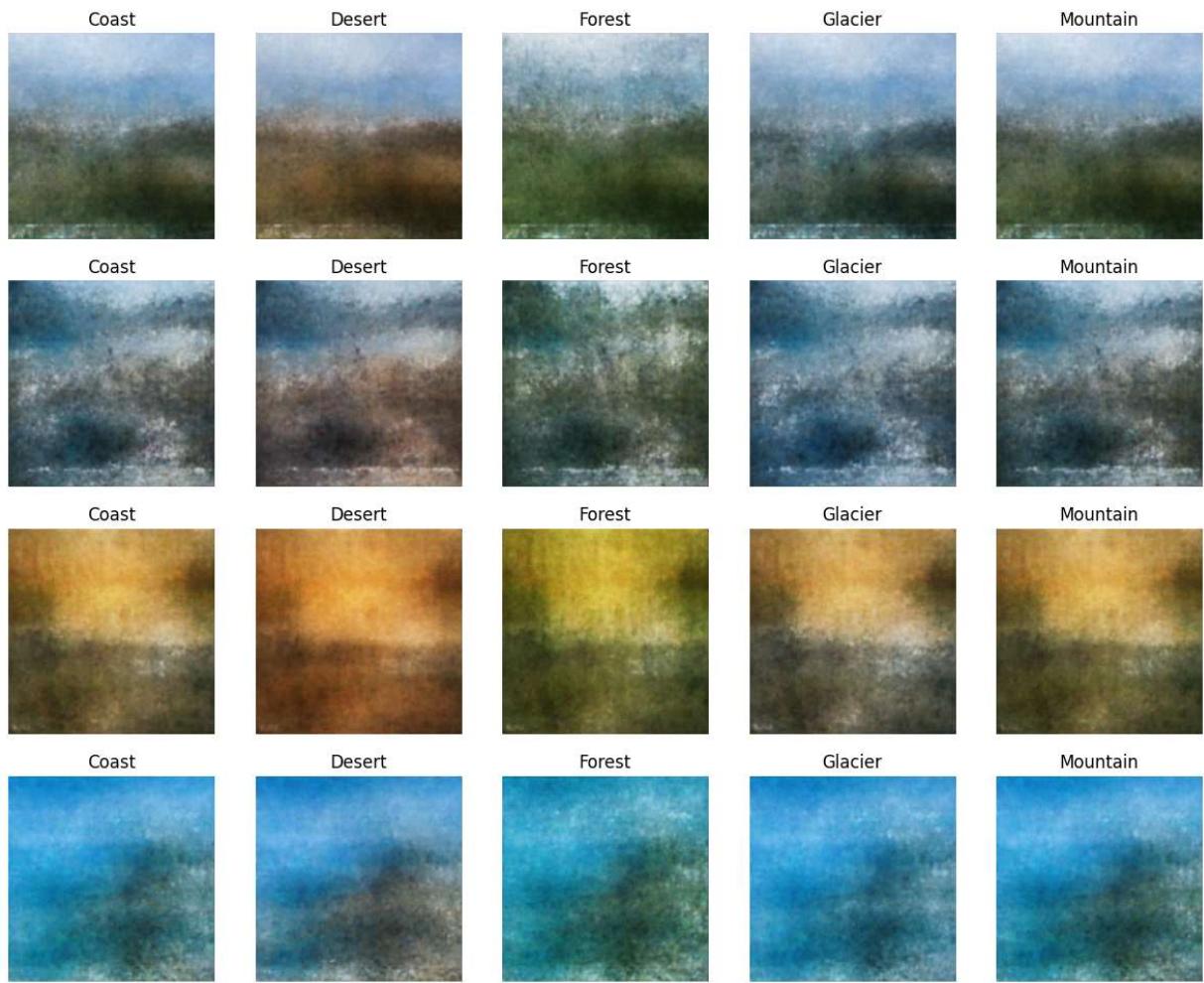
300/300 [=====] - 122s 406ms/step - loss: 187.8343 - reconstruction\_error: 130.5322 - regularization\_error: 57.3021 - val\_loss: 231.8676 - val\_reconstruction\_error: 175.5133 - val\_regularization\_error: 56.5240  
Epoch 54/100

300/300 [=====] - ETA: 0s - loss: 187.0047 - reconstruction\_error: 129.4902 - regularization\_error: 57.5146

[2023-11-21 19:29:33.814448]: Generating fixed images for epoch 54 ...



[2023-11-21 19:29:35.346075]: Generating random images for epoch 54 ...



300/300 [=====] - 130s 433ms/step - loss: 187.0047 - reconstruction\_error: 129.4902 - regularization\_error: 57.5146 - val\_loss: 233.3085 - val\_reconstruction\_error: 176.8496 - val\_regularization\_error: 56.6203

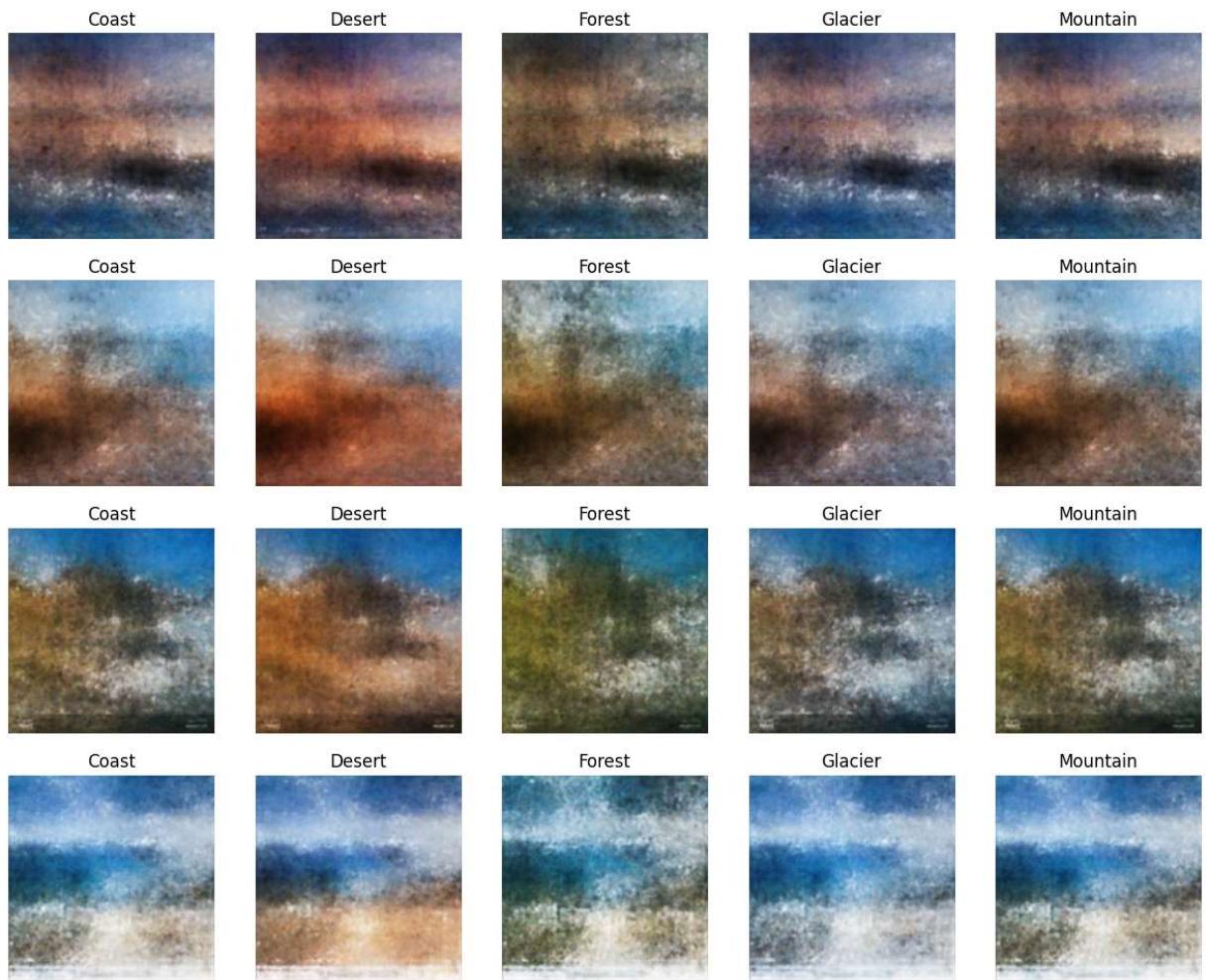
Epoch 55/100

300/300 [=====] - ETA: 0s - loss: 186.1358 - reconstruction\_error: 128.4993 - regularization\_error: 57.6365

[2023-11-21 19:31:45.997072]: Generating fixed images for epoch 55 ...



[2023-11-21 19:31:47.137494]: Generating random images for epoch 55 ...



300/300 [=====] - 132s 441ms/step - loss: 186.1358 - reconstruction\_error: 128.4993 - regularization\_error: 57.6365 - val\_loss: 233.1728 - val\_reconstruction\_error: 178.2715 - val\_regularization\_error: 55.0933

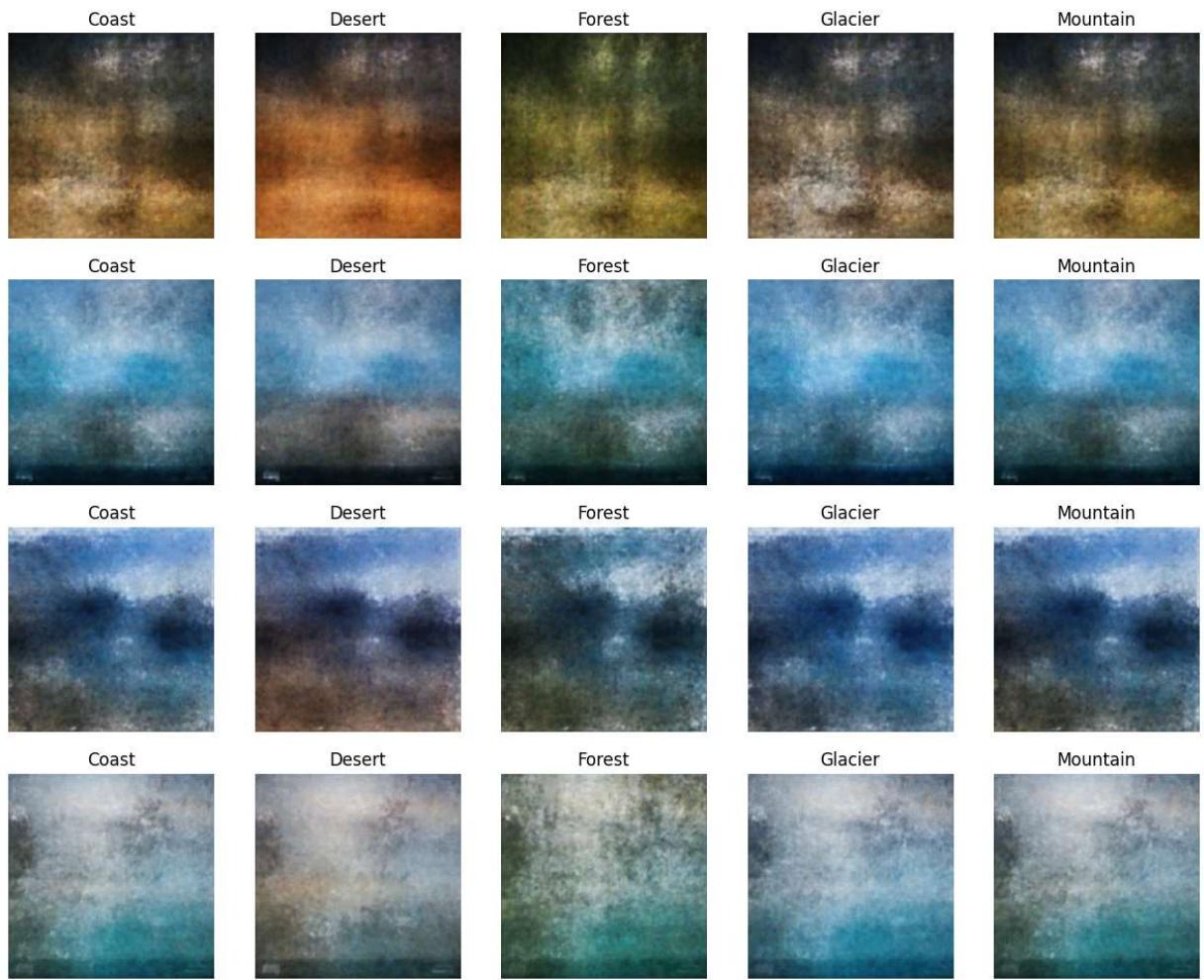
Epoch 56/100

300/300 [=====] - ETA: 0s - loss: 185.6152 - reconstruction\_error: 127.8093 - regularization\_error: 57.8060

[2023-11-21 19:33:45.909569]: Generating fixed images for epoch 56 ...



[2023-11-21 19:33:47.402843]: Generating random images for epoch 56 ...



300/300 [=====] - 120s 401ms/step - loss: 185.6152 - reconstruction\_error: 127.8093 - regularization\_error: 57.8060 - val\_loss: 232.9668 - val\_reconstruction\_error: 177.1952 - val\_regularization\_error: 55.9629

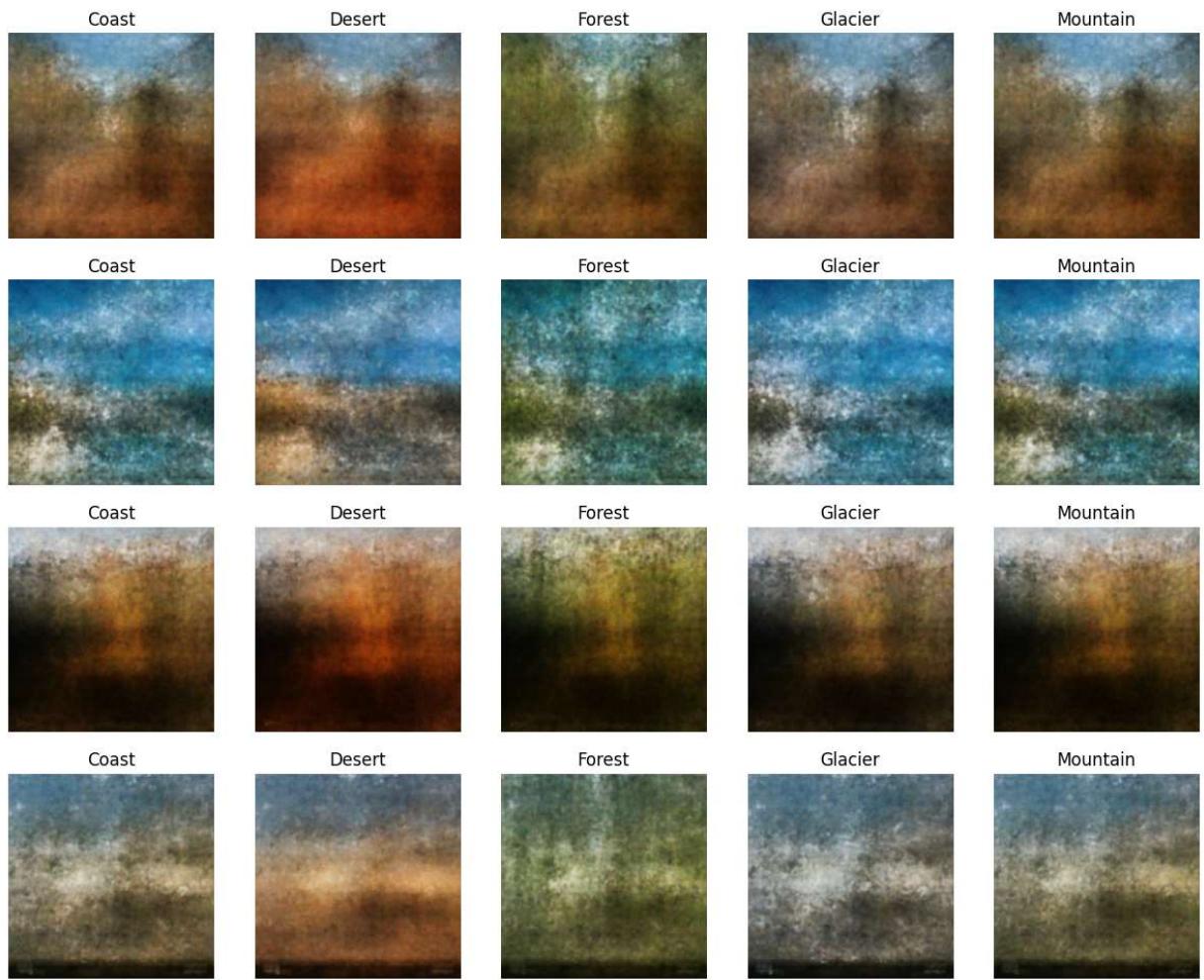
Epoch 57/100

300/300 [=====] - ETA: 0s - loss: 184.6085 - reconstruction\_error: 126.7555 - regularization\_error: 57.8530

[2023-11-21 19:35:56.314605]: Generating fixed images for epoch 57 ...



[2023-11-21 19:35:57.569371]: Generating random images for epoch 57 ...



300/300 [=====] - 130s 432ms/step - loss: 184.6085 - reconstruction\_error: 126.7555 - regularization\_error: 57.8530 - val\_loss: 232.2237 - val\_reconstruction\_error: 176.6226 - val\_regularization\_error: 55.7879

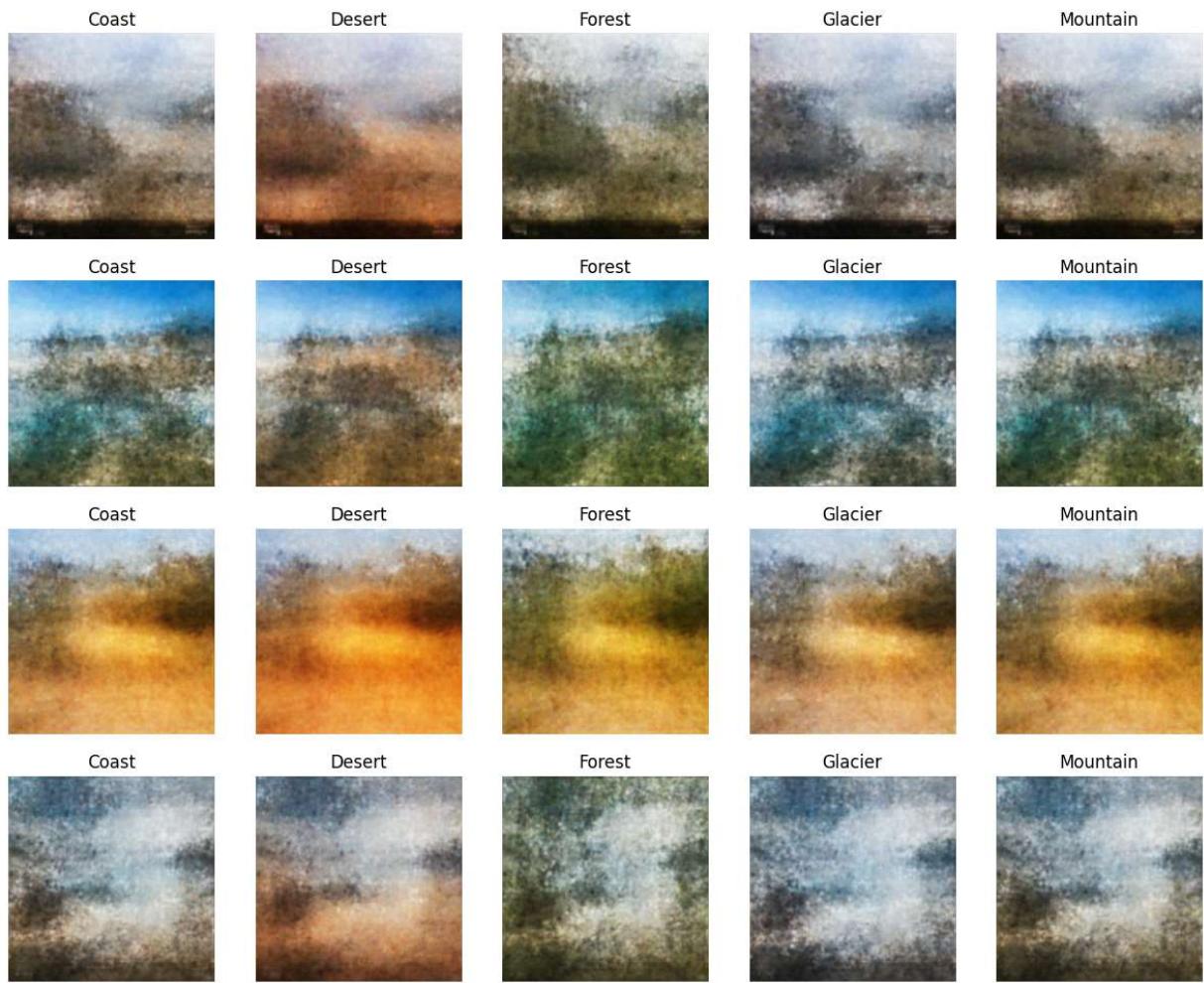
Epoch 58/100

300/300 [=====] - ETA: 0s - loss: 183.9770 - reconstruction\_error: 125.8717 - regularization\_error: 58.1052

[2023-11-21 19:37:55.232346]: Generating fixed images for epoch 58 ...



[2023-11-21 19:37:56.370168]: Generating random images for epoch 58 ...



300/300 [=====] - 119s 395ms/step - loss: 183.9770 - reconstruction\_error: 125.8717 - regularization\_error: 58.1052 - val\_loss: 233.9491 - val\_reconstruction\_error: 178.8689 - val\_regularization\_error: 55.2925

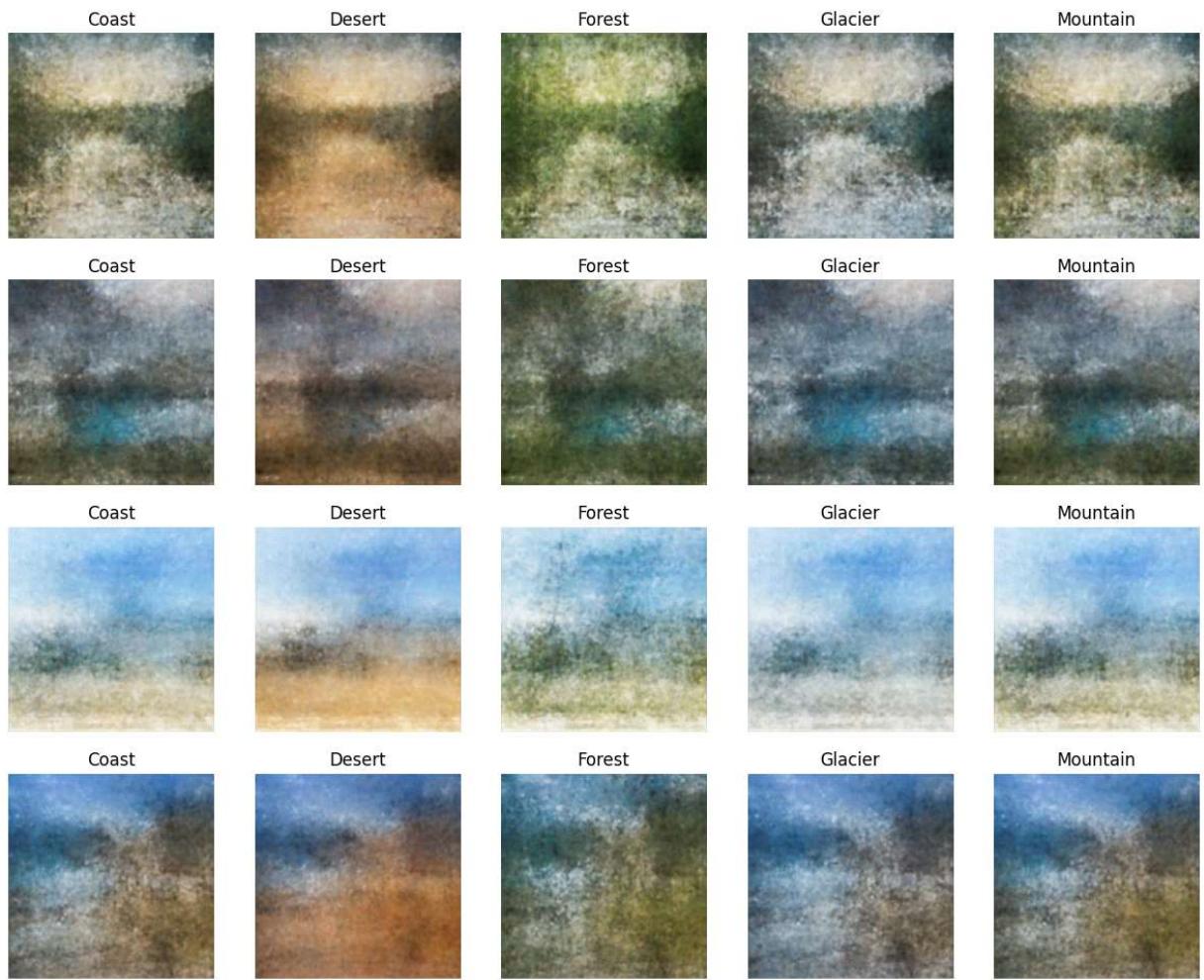
Epoch 59/100

300/300 [=====] - ETA: 0s - loss: 183.2394 - reconstruction\_error: 124.9069 - regularization\_error: 58.3325

[2023-11-21 19:40:04.799510]: Generating fixed images for epoch 59 ...



[2023-11-21 19:40:06.442272]: Generating random images for epoch 59 ...



300/300 [=====] - 130s 435ms/step - loss: 183.2394 - reconstruction\_error: 124.9069 - regularization\_error: 58.3325 - val\_loss: 236.0823 - val\_reconstruction\_error: 181.1930 - val\_regularization\_error: 55.0751

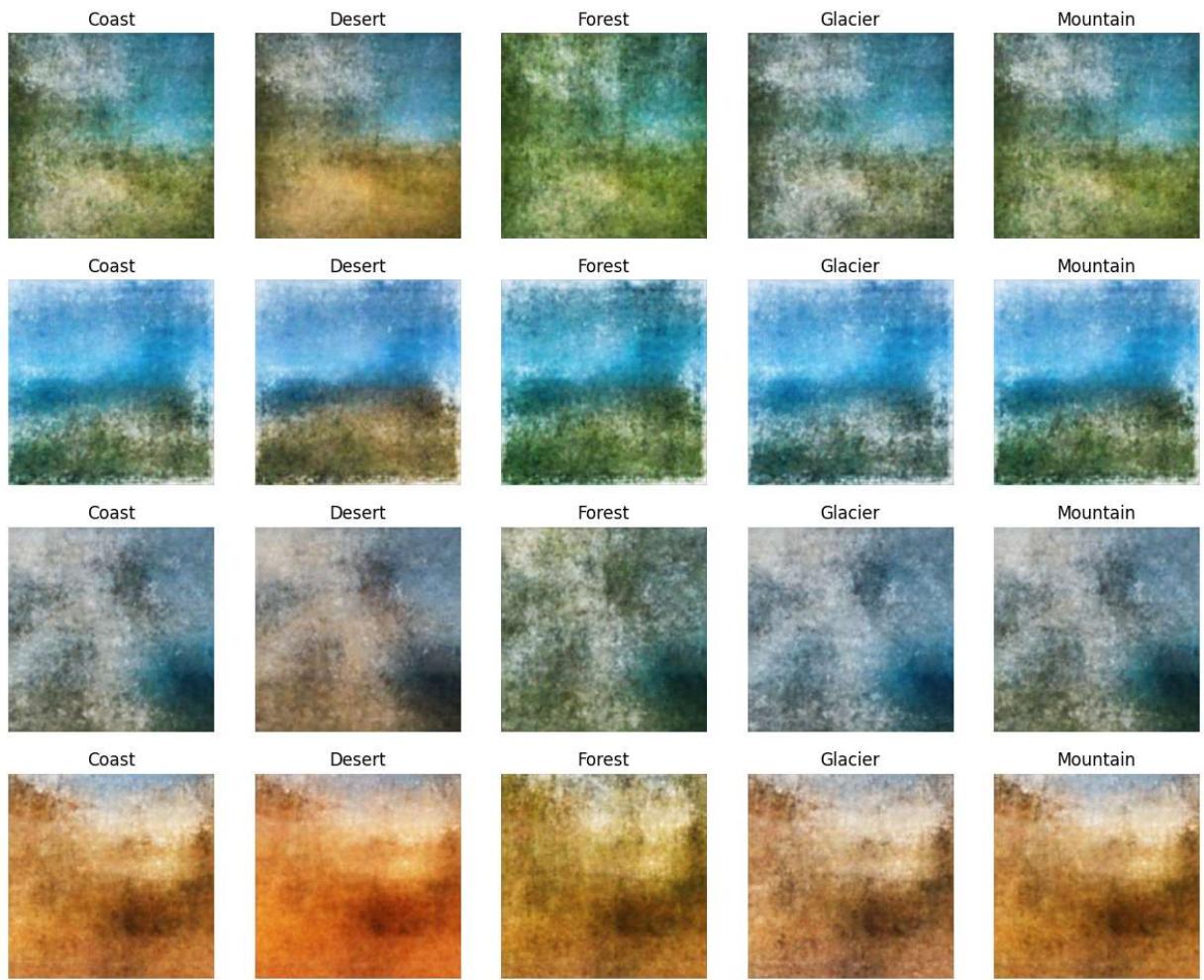
Epoch 60/100

300/300 [=====] - ETA: 0s - loss: 182.4424 - reconstruction\_error: 124.0219 - regularization\_error: 58.4205

[2023-11-21 19:42:11.577490]: Generating fixed images for epoch 60 ...



[2023-11-21 19:42:12.839016]: Generating random images for epoch 60 ...



300/300 [=====] - 126s 420ms/step - loss: 182.4424 - reconstruction\_error: 124.0219 - regularization\_error: 58.4205 - val\_loss: 233.3220 - val\_reconstruction\_error: 177.3915 - val\_regularization\_error: 56.0863

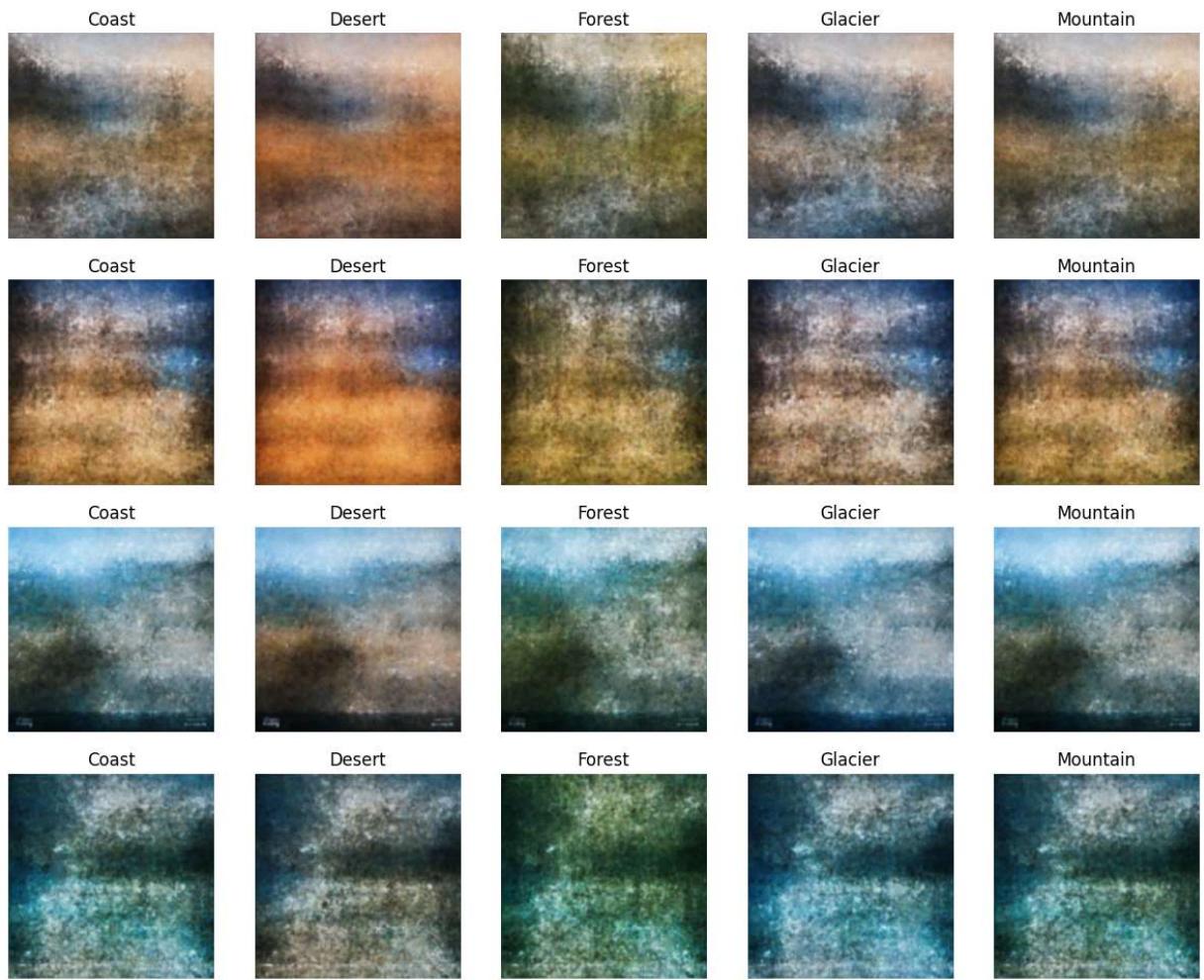
Epoch 61/100

300/300 [=====] - ETA: 0s - loss: 181.9743 - reconstruction\_error: 123.4255 - regularization\_error: 58.5488

[2023-11-21 19:44:16.858782]: Generating fixed images for epoch 61 ...



[2023-11-21 19:44:18.006248]: Generating random images for epoch 61 ...



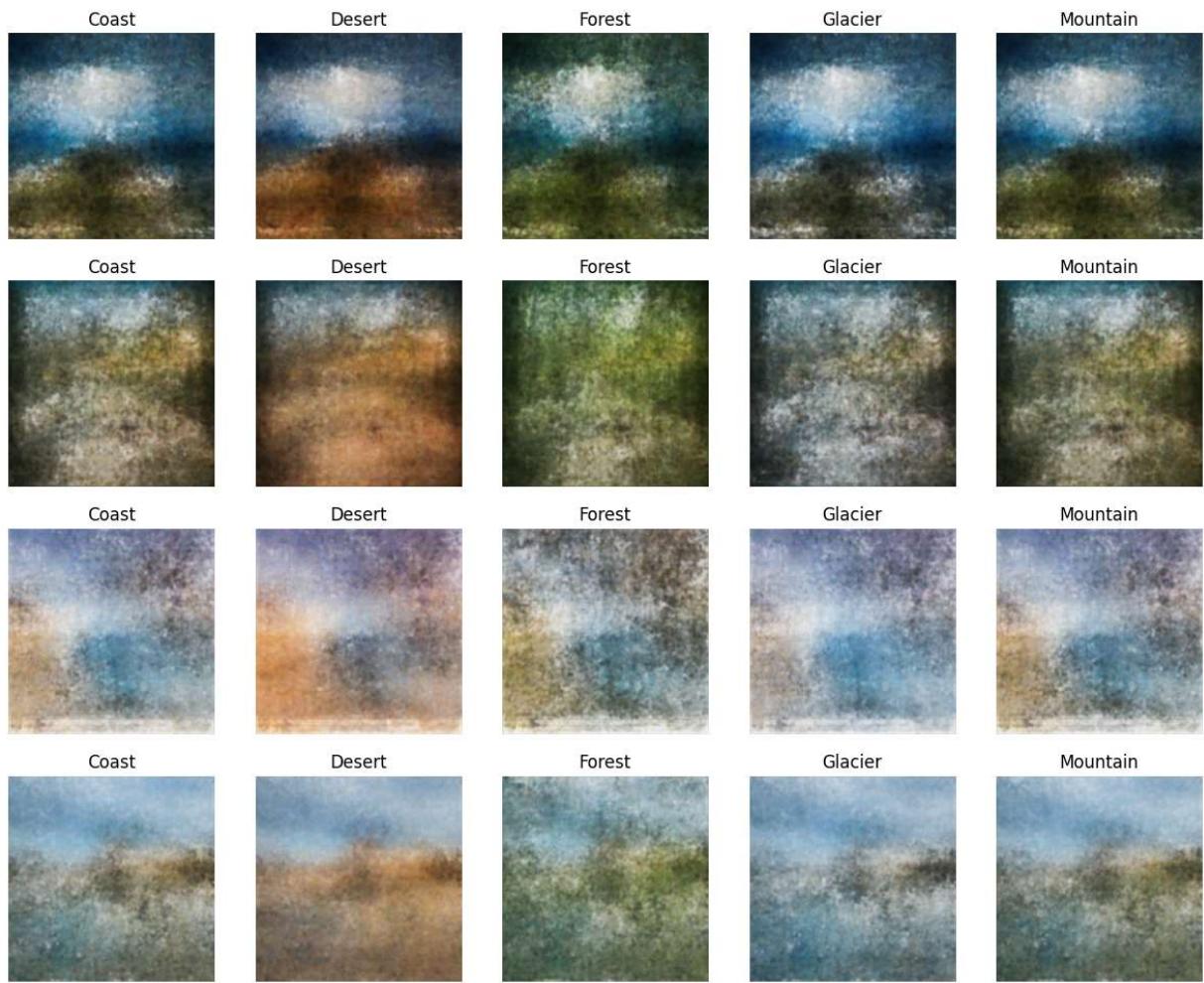
300/300 [=====] - 125s 417ms/step - loss: 181.9743 - reconstruction\_error: 123.4255 - regularization\_error: 58.5488 - val\_loss: 233.1003 - val\_reconstruction\_error: 177.2066 - val\_regularization\_error: 56.0711  
Epoch 62/100

300/300 [=====] - ETA: 0s - loss: 181.1577 - reconstruction\_error: 122.4778 - regularization\_error: 58.6800

[2023-11-21 19:46:14.551543]: Generating fixed images for epoch 62 ...



[2023-11-21 19:46:16.400876]: Generating random images for epoch 62 ...



300/300 [=====] - 118s 394ms/step - loss: 181.1577 - reconstruction\_error: 122.4778 - regularization\_error: 58.6800 - val\_loss: 233.1164 - val\_reconstruction\_error: 178.5772 - val\_regularization\_error: 54.7320

Epoch 63/100

300/300 [=====] - ETA: 0s - loss: 180.6573 - reconstruction\_error: 121.8132 - regularization\_error: 58.8441

[2023-11-21 19:48:19.600189]: Generating fixed images for epoch 63 ...



[2023-11-21 19:48:21.404014]: Generating random images for epoch 63 ...



300/300 [=====] - 125s 413ms/step - loss: 180.6573 - reconstruction\_error: 121.8132 - regularization\_error: 58.8441 - val\_loss: 234.3500 - val\_reconstruction\_error: 177.8599 - val\_regularization\_error: 56.6861

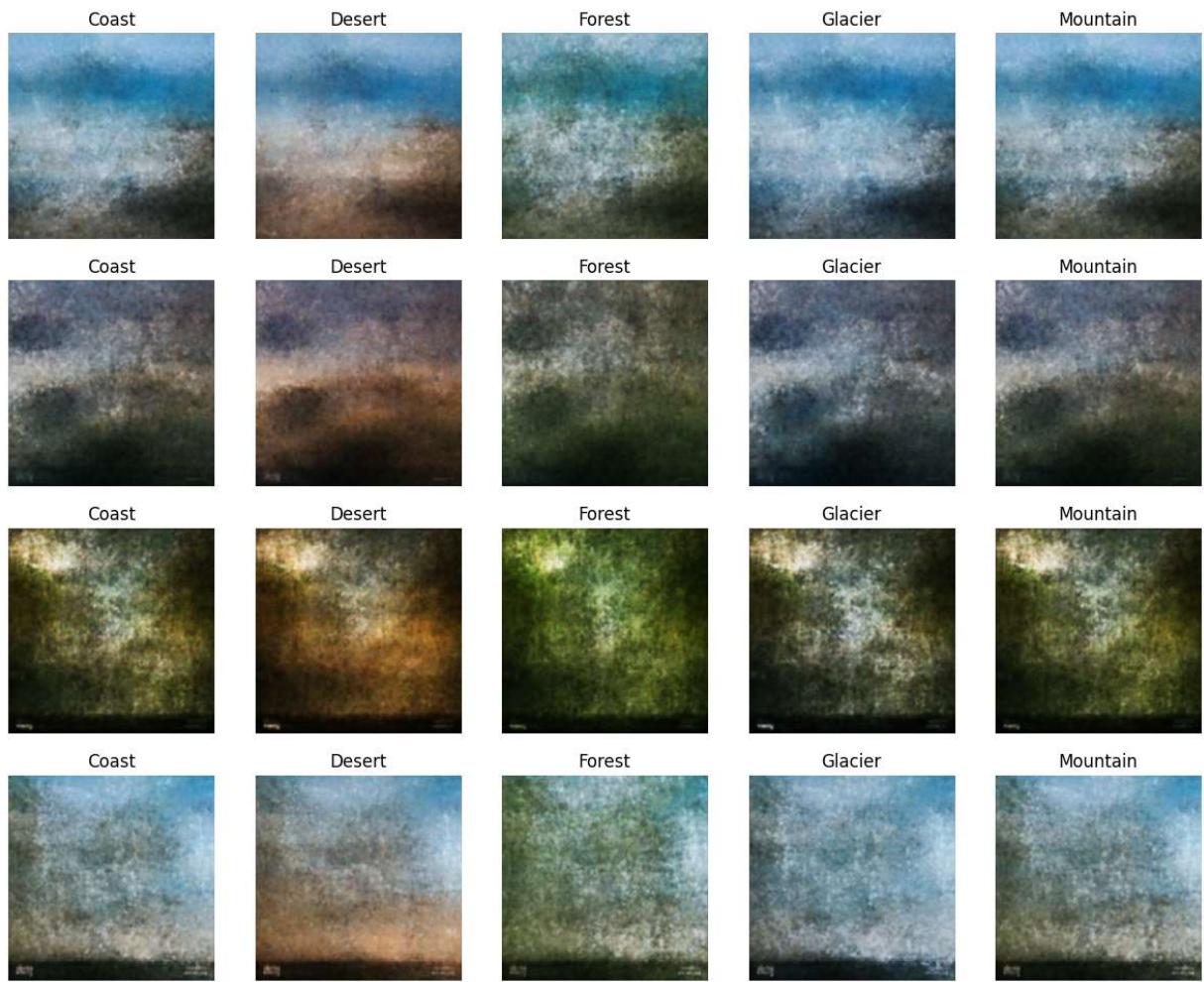
Epoch 64/100

300/300 [=====] - ETA: 0s - loss: 180.0651 - reconstruction\_error: 121.0828 - regularization\_error: 58.9823

[2023-11-21 19:50:20.627119]: Generating fixed images for epoch 64 ...



[2023-11-21 19:50:22.323849]: Generating random images for epoch 64 ...



300/300 [=====] - 121s 403ms/step - loss: 180.0651 - reconstruction\_error: 121.0828 - regularization\_error: 58.9823 - val\_loss: 235.2458 - val\_reconstruction\_error: 178.1737 - val\_regularization\_error: 57.2135

Epoch 65/100

300/300 [=====] - ETA: 0s - loss: 179.2745 - reconstruction\_error: 120.1192 - regularization\_error: 59.1553

[2023-11-21 19:52:23.731097]: Generating fixed images for epoch 65 ...



[2023-11-21 19:52:25.393194]: Generating random images for epoch 65 ...



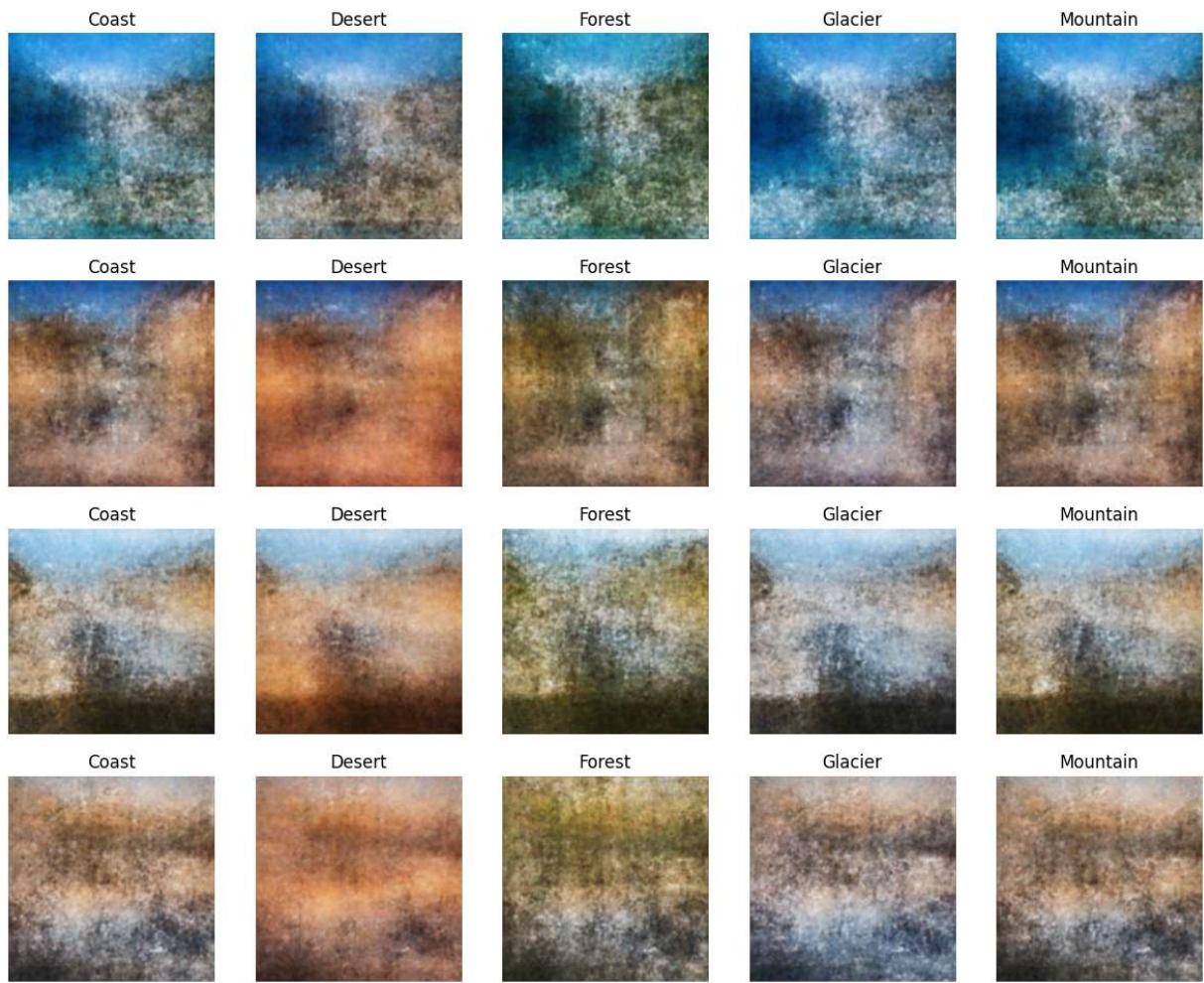
300/300 [=====] - 124s 412ms/step - loss: 179.2745 - reconstruction\_error: 120.1192 - regularization\_error: 59.1553 - val\_loss: 235.5019 - val\_reconstruction\_error: 179.1823 - val\_regularization\_error: 56.5187  
Epoch 66/100

300/300 [=====] - ETA: 0s - loss: 178.7528 - reconstruction\_error: 119.5583 - regularization\_error: 59.1945

[2023-11-21 19:54:36.588177]: Generating fixed images for epoch 66 ...



[2023-11-21 19:54:38.304314]: Generating random images for epoch 66 ...



300/300 [=====] - 133s 441ms/step - loss: 178.7528 - reconstruction\_error: 119.5583 - regularization\_error: 59.1945 - val\_loss: 235.5350 - val\_reconstruction\_error: 179.9768 - val\_regularization\_error: 55.7603

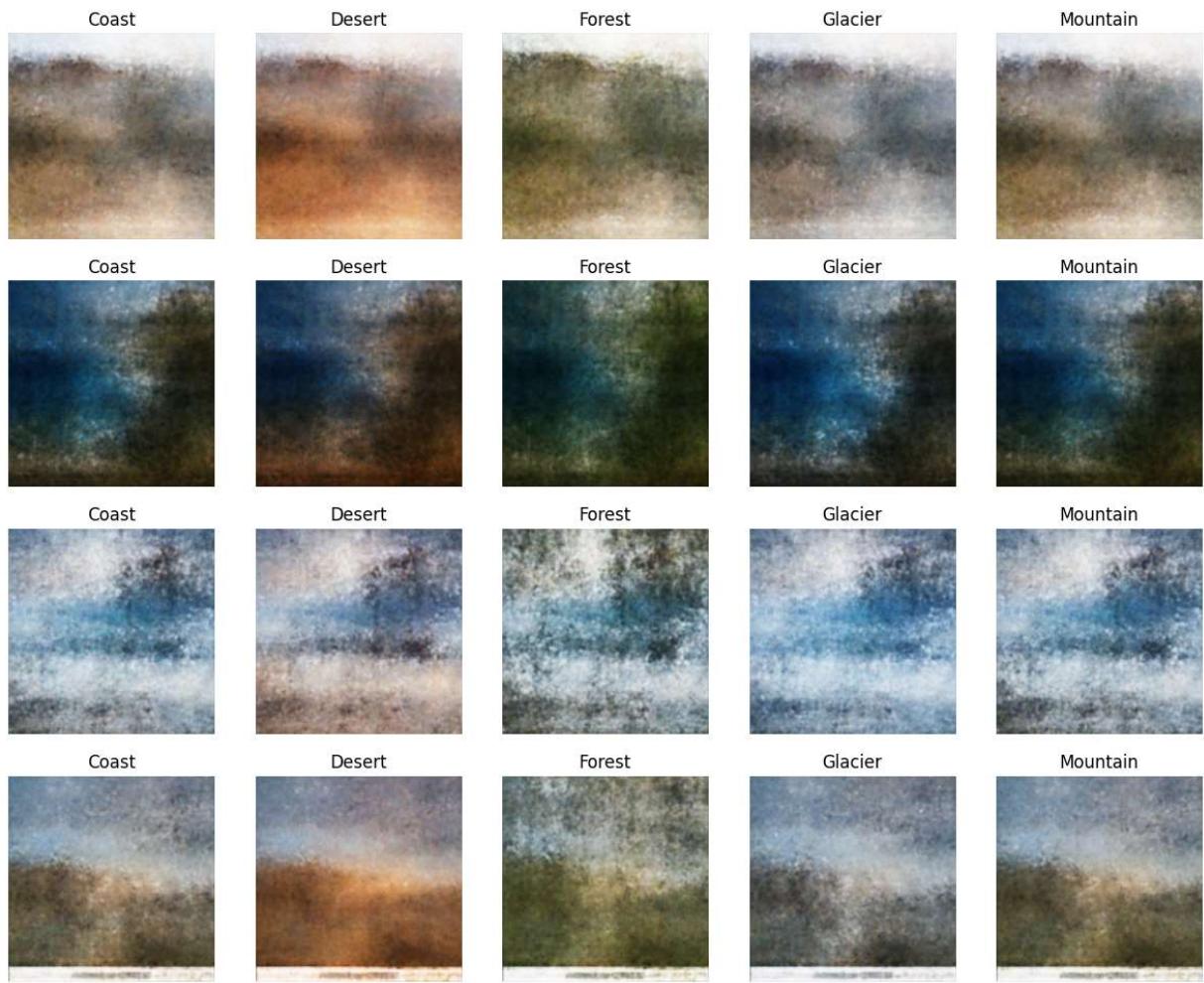
Epoch 67/100

300/300 [=====] - ETA: 0s - loss: 178.1975 - reconstruction\_error: 118.8892 - regularization\_error: 59.3083

[2023-11-21 19:56:47.847893]: Generating fixed images for epoch 67 ...



[2023-11-21 19:56:49.382998]: Generating random images for epoch 67 ...



300/300 [=====] - 131s 438ms/step - loss: 178.1975 - reconstruction\_error: 118.8892 - regularization\_error: 59.3083 - val\_loss: 236.1514 - val\_reconstruction\_error: 179.7597 - val\_regularization\_error: 56.5572

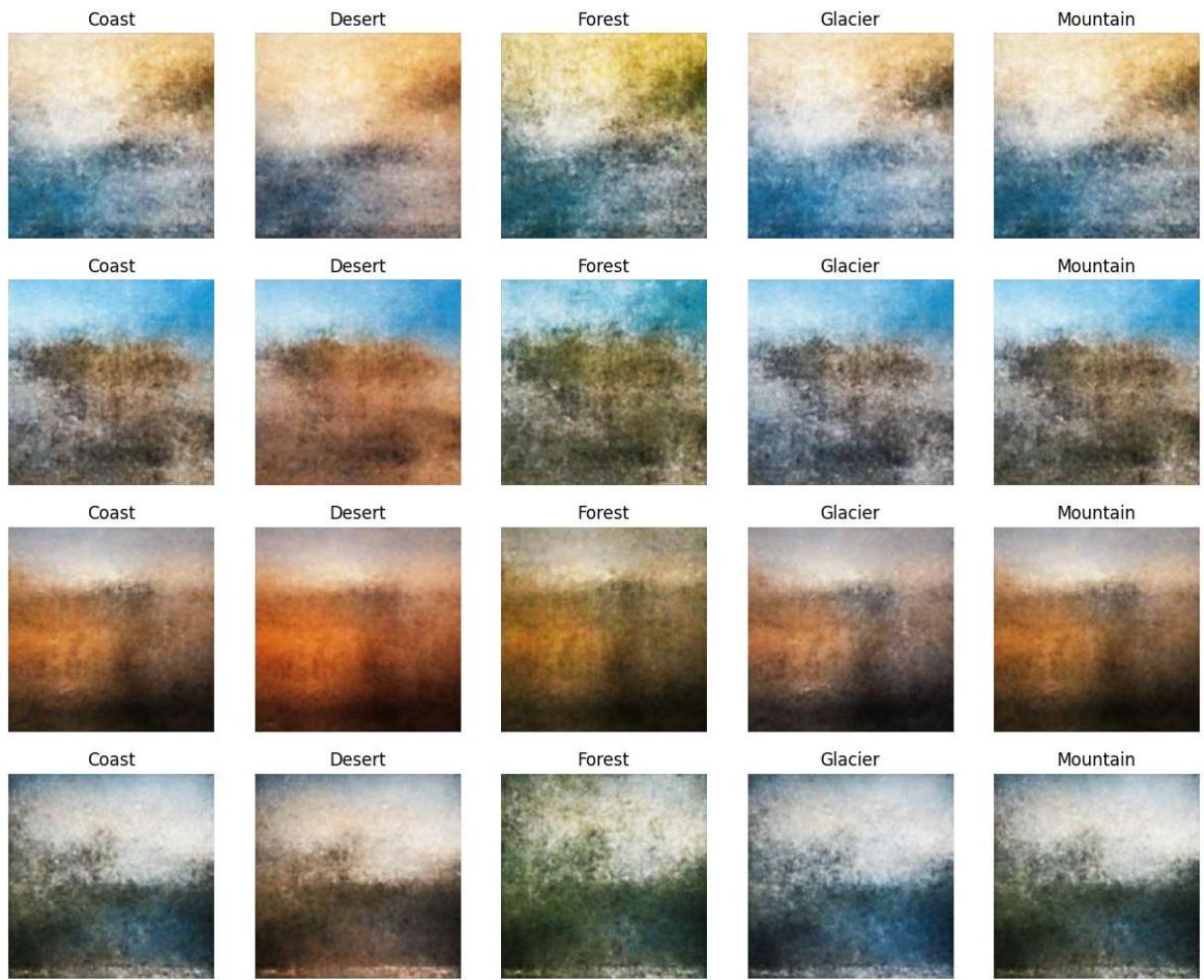
Epoch 68/100

300/300 [=====] - ETA: 0s - loss: 177.3943 - reconstruction\_error: 118.0740 - regularization\_error: 59.3202

[2023-11-21 19:58:55.261130]: Generating fixed images for epoch 68 ...



[2023-11-21 19:58:56.361329]: Generating random images for epoch 68 ...



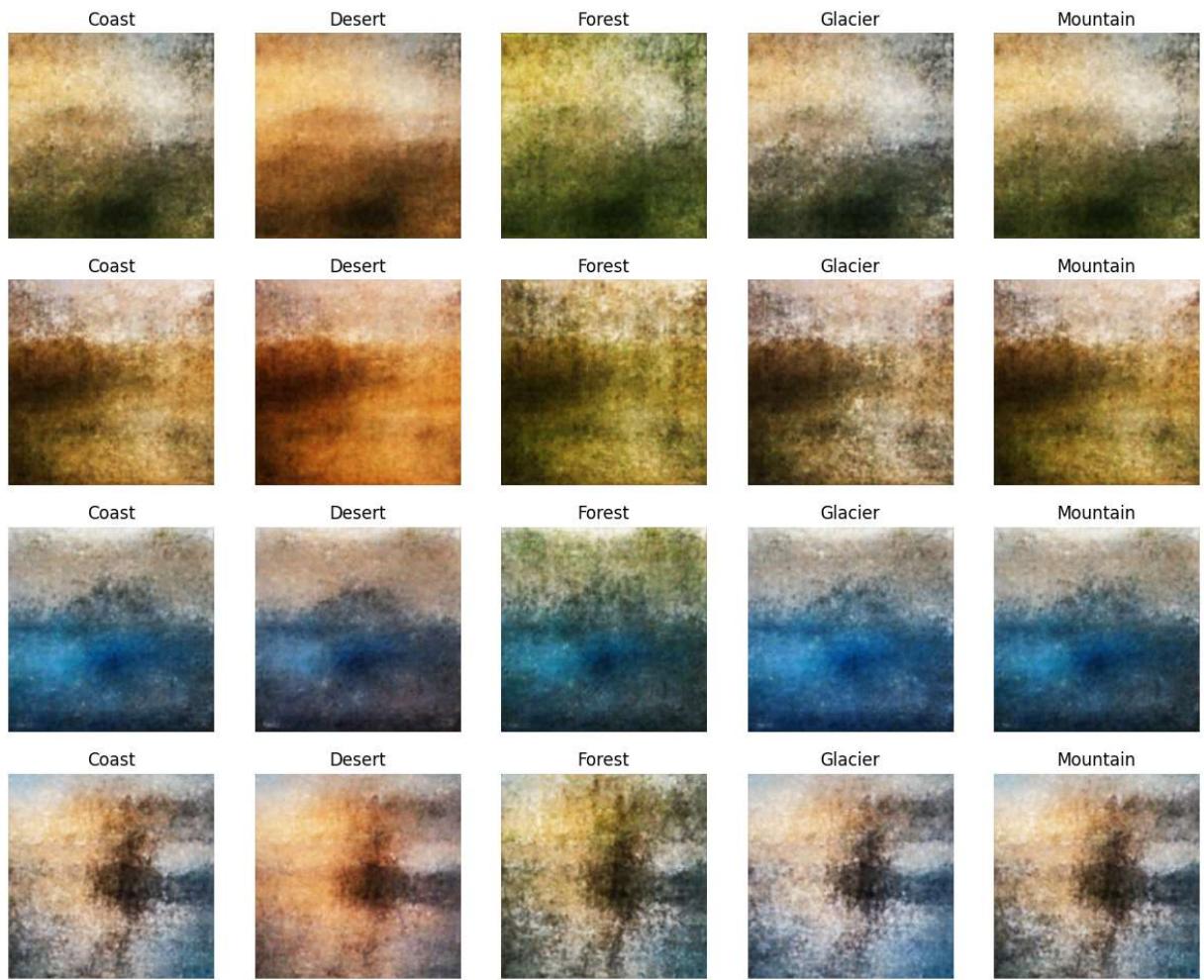
300/300 [=====] - 127s 423ms/step - loss: 177.3943 - reconstruction\_error: 118.0740 - regularization\_error: 59.3202 - val\_loss: 237.2798 - val\_reconstruction\_error: 179.9850 - val\_regularization\_error: 57.5127  
Epoch 69/100

300/300 [=====] - ETA: 0s - loss: 176.9618 - reconstruction\_error: 117.5039 - regularization\_error: 59.4579

[2023-11-21 20:01:03.321055]: Generating fixed images for epoch 69 ...



[2023-11-21 20:01:04.540876]: Generating random images for epoch 69 ...



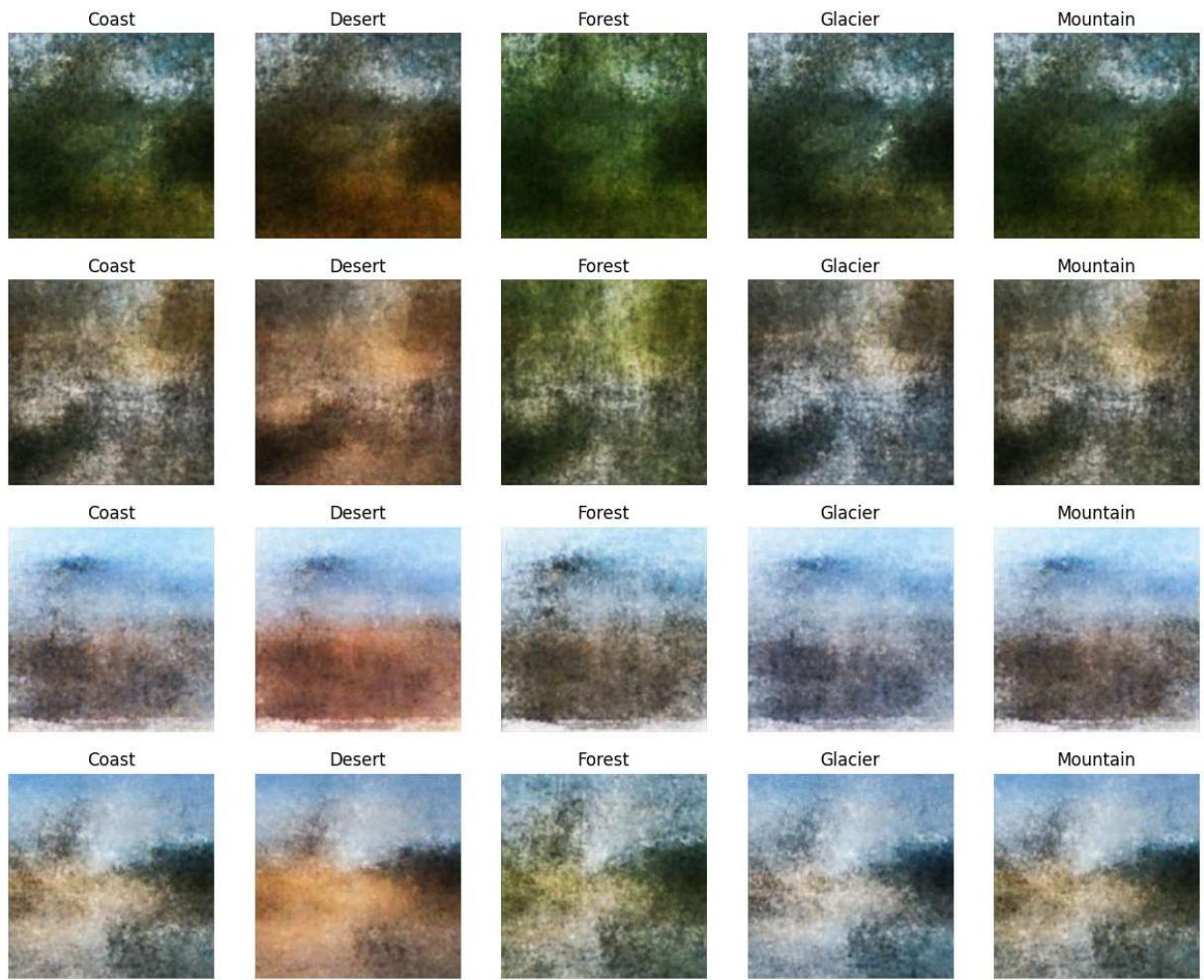
300/300 [=====] - 128s 426ms/step - loss: 176.9618 - reconstruction\_error: 117.5039 - regularization\_error: 59.4579 - val\_loss: 235.8123 - val\_reconstruction\_error: 181.1593 - val\_regularization\_error: 54.8157  
Epoch 70/100

300/300 [=====] - ETA: 0s - loss: 176.4662 - reconstruction\_error: 116.8418 - regularization\_error: 59.6243

[2023-11-21 20:03:07.482793]: Generating fixed images for epoch 70 ...



[2023-11-21 20:03:09.060731]: Generating random images for epoch 70 ...



300/300 [=====] - 124s 414ms/step - loss: 176.4662 - reconstruction\_error: 116.8418 - regularization\_error: 59.6243 - val\_loss: 235.8382 - val\_reconstruction\_error: 180.0596 - val\_regularization\_error: 55.9653

Epoch 71/100

300/300 [=====] - ETA: 0s - loss: 175.7855 - reconstruction\_error: 116.1448 - regularization\_error: 59.6407

[2023-11-21 20:05:15.035244]: Generating fixed images for epoch 71 ...



[2023-11-21 20:05:16.203728]: Generating random images for epoch 71 ...



300/300 [=====] - 127s 423ms/step - loss: 175.7855 - reconstruction\_error: 116.1448 - regularization\_error: 59.6407 - val\_loss: 237.0785 - val\_reconstruction\_error: 181.1431 - val\_regularization\_error: 56.0649

Epoch 72/100

300/300 [=====] - ETA: 0s - loss: 175.2647 - reconstruction\_error: 115.4333 - regularization\_error: 59.8314

[2023-11-21 20:07:29.235456]: Generating fixed images for epoch 72 ...



[2023-11-21 20:07:30.363895]: Generating random images for epoch 72 ...



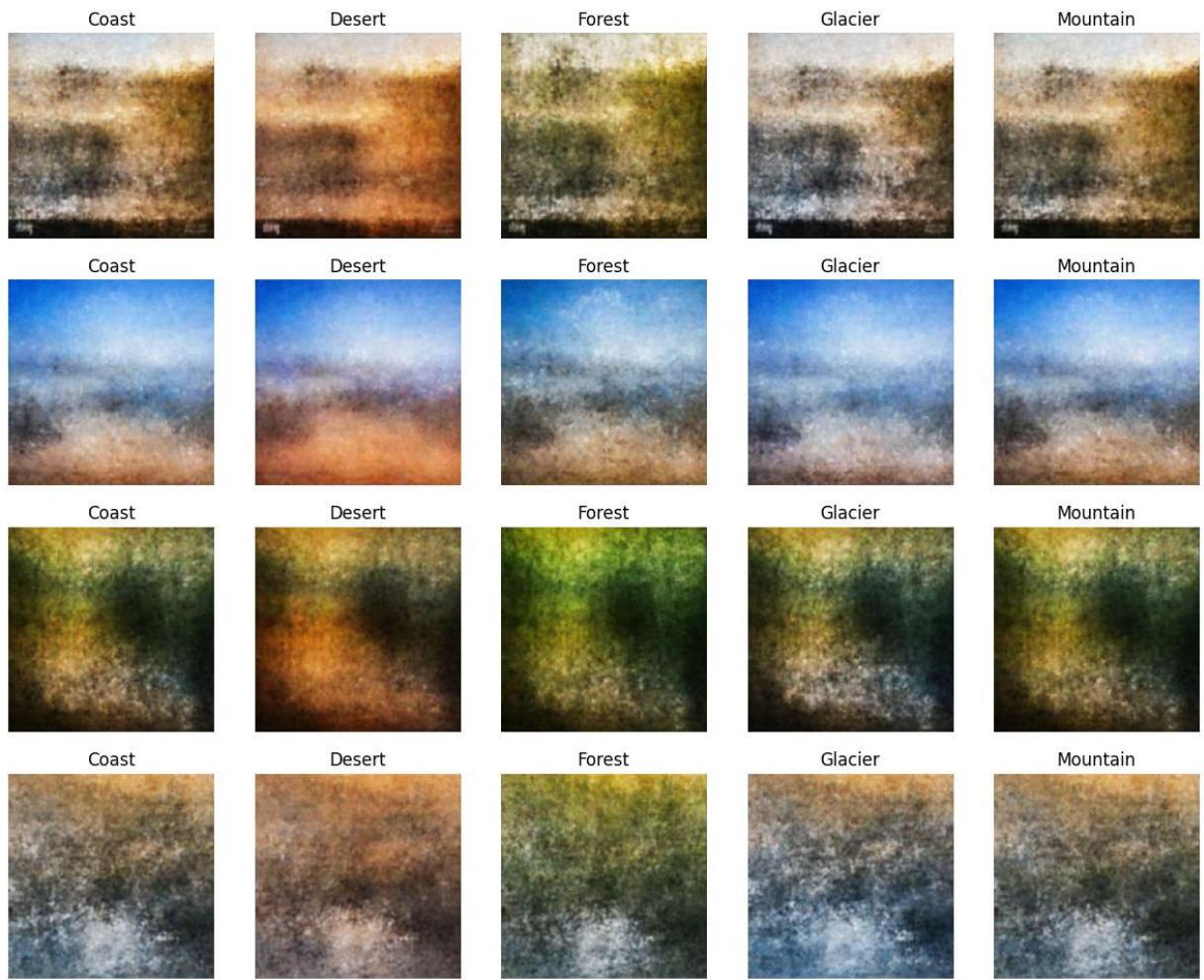
300/300 [=====] - 120s 396ms/step - loss: 175.2647 - reconstruction\_error: 115.4333 - regularization\_error: 59.8314 - val\_loss: 236.8140 - val\_reconstruction\_error: 179.6054 - val\_regularization\_error: 57.3855  
Epoch 73/100

300/300 [=====] - ETA: 0s - loss: 174.7901 - reconstruction\_error: 114.9856 - regularization\_error: 59.8045

[2023-11-21 20:09:25.541209]: Generating fixed images for epoch 73 ...



[2023-11-21 20:09:27.302253]: Generating random images for epoch 73 ...



300/300 [=====] - 116s 385ms/step - loss: 174.7901 - reconstruction\_error: 114.9856 - regularization\_error: 59.8045 - val\_loss: 236.2360 - val\_reconstruction\_error: 176.4082 - val\_regularization\_error: 60.0315

Epoch 74/100

300/300 [=====] - ETA: 0s - loss: 174.1994 - reconstruction\_error: 114.2559 - regularization\_error: 59.9435

[2023-11-21 20:11:31.939283]: Generating fixed images for epoch 74 ...



[2023-11-21 20:11:33.084687]: Generating random images for epoch 74 ...



300/300 [=====] - 128s 427ms/step - loss: 174.1994 - reconstruction\_error: 114.2559 - regularization\_error: 59.9435 - val\_loss: 237.3617 - val\_reconstruction\_error: 179.5772 - val\_regularization\_error: 57.9470

Epoch 75/100

300/300 [=====] - ETA: 0s - loss: 173.9051 - reconstruction\_error: 113.8586 - regularization\_error: 60.0466

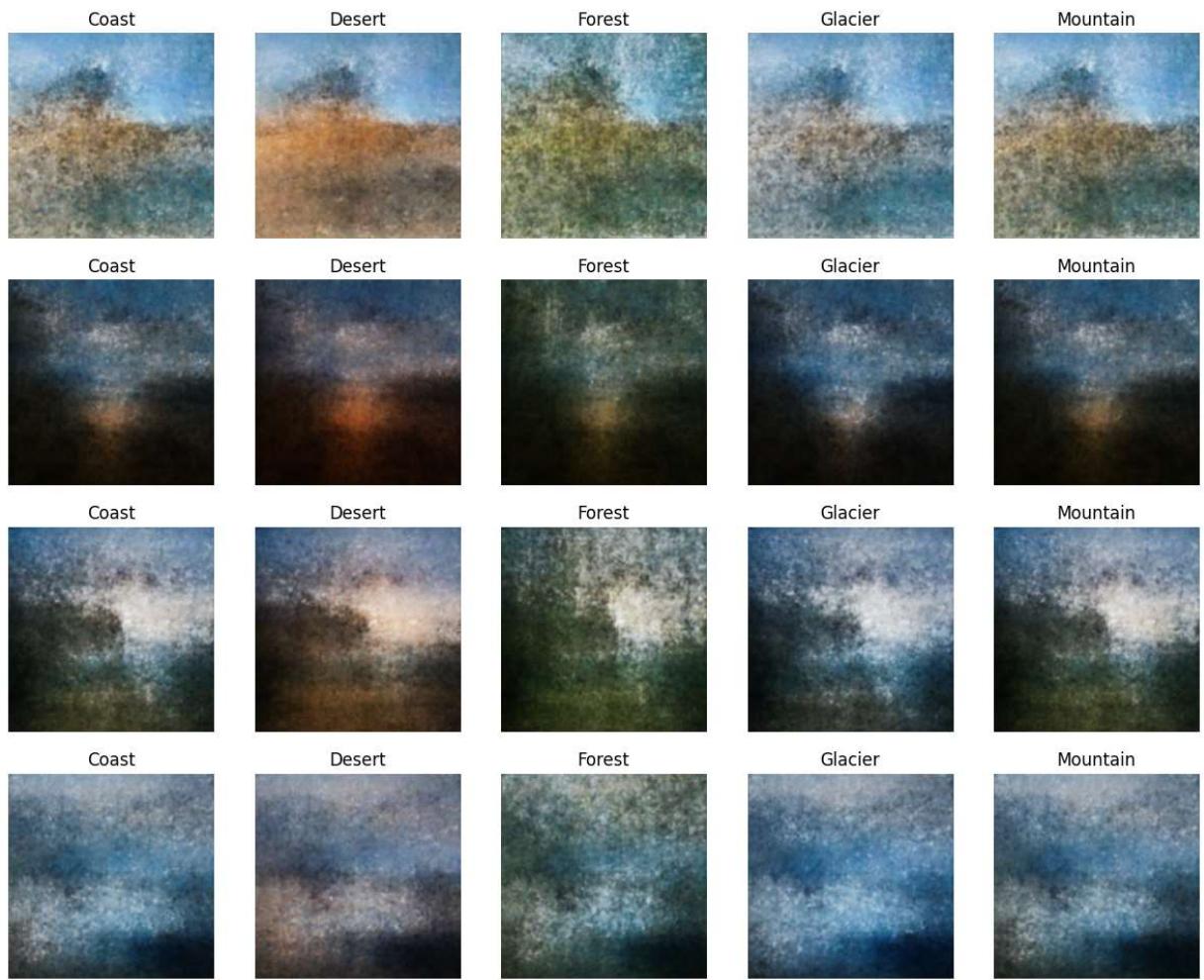
[2023-11-21 20:13:30.116394]: Generating fixed images for epoch 75 ...



[2023-11-21 20:13:31.378650]: Generating random images for epoch 75 ...

22/11/23, 12:40

e100d200



300/300 [=====] - 115s 383ms/step - loss: 173.9051 - reconstruction\_error: 113.8586 - regularization\_error: 60.0466 - val\_loss: 237.0905 - val\_reconstruction\_error: 181.8291 - val\_regularization\_error: 55.4614

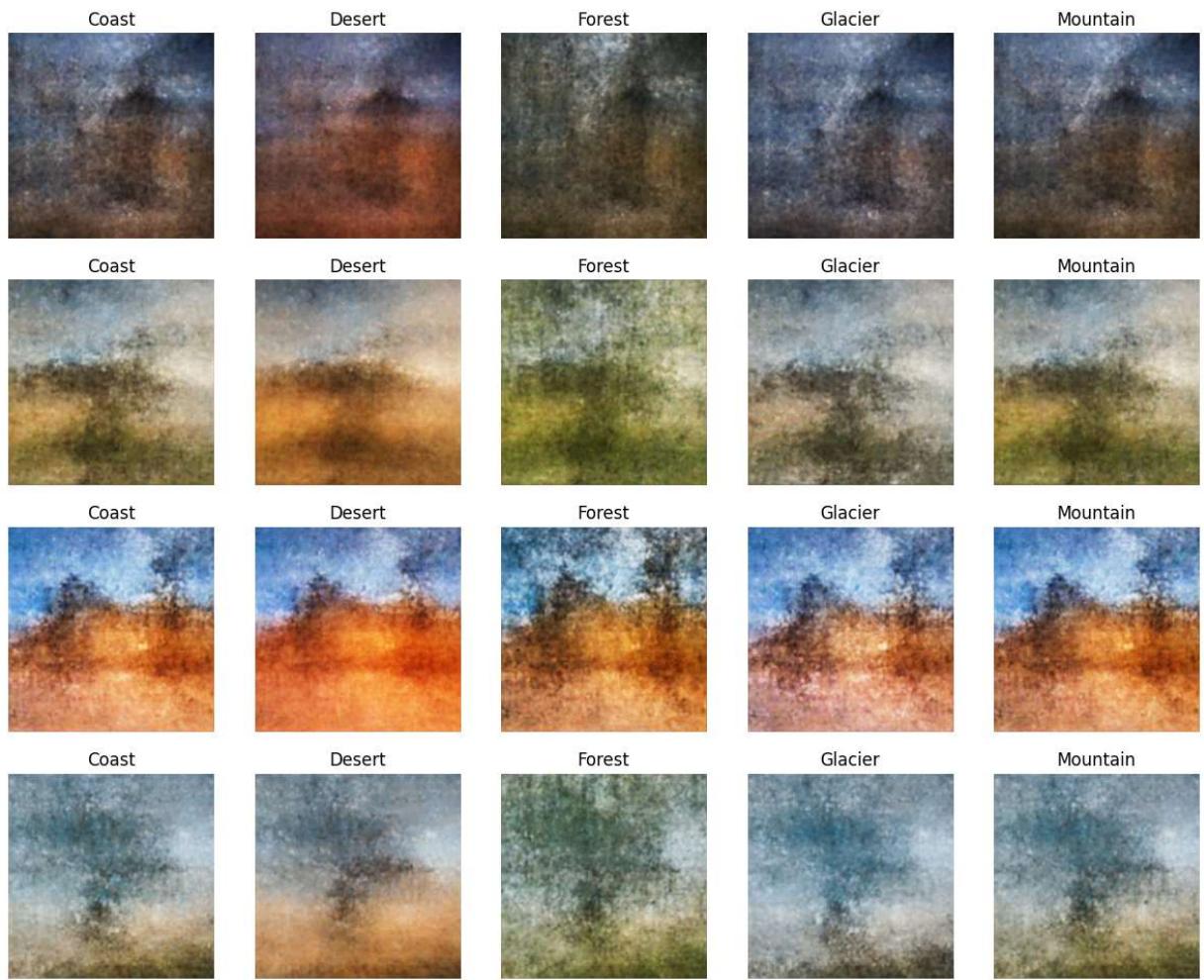
Epoch 76/100

300/300 [=====] - ETA: 0s - loss: 173.3756 - reconstruction\_error: 113.2658 - regularization\_error: 60.1096

[2023-11-21 20:15:39.628310]: Generating fixed images for epoch 76 ...



[2023-11-21 20:15:41.327939]: Generating random images for epoch 76 ...



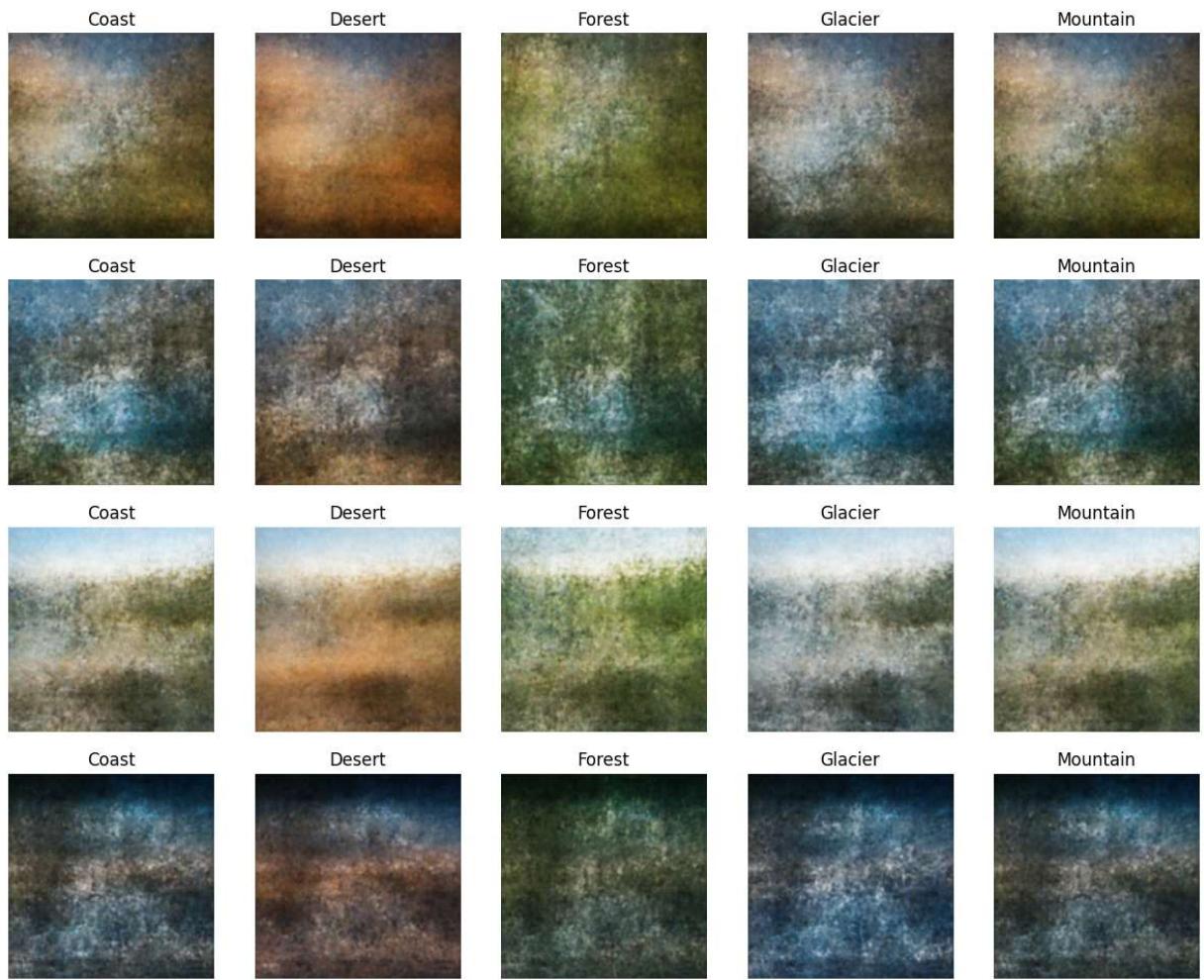
300/300 [=====] - 131s 436ms/step - loss: 173.3756 - reconstruction\_error: 113.2658 - regularization\_error: 60.1096 - val\_loss: 238.7716 - val\_reconstruction\_error: 180.3448 - val\_regularization\_error: 58.6391  
Epoch 77/100

300/300 [=====] - ETA: 0s - loss: 172.7502 - reconstruction\_error: 112.6429 - regularization\_error: 60.1072

[2023-11-21 20:17:46.124904]: Generating fixed images for epoch 77 ...



[2023-11-21 20:17:47.338331]: Generating random images for epoch 77 ...



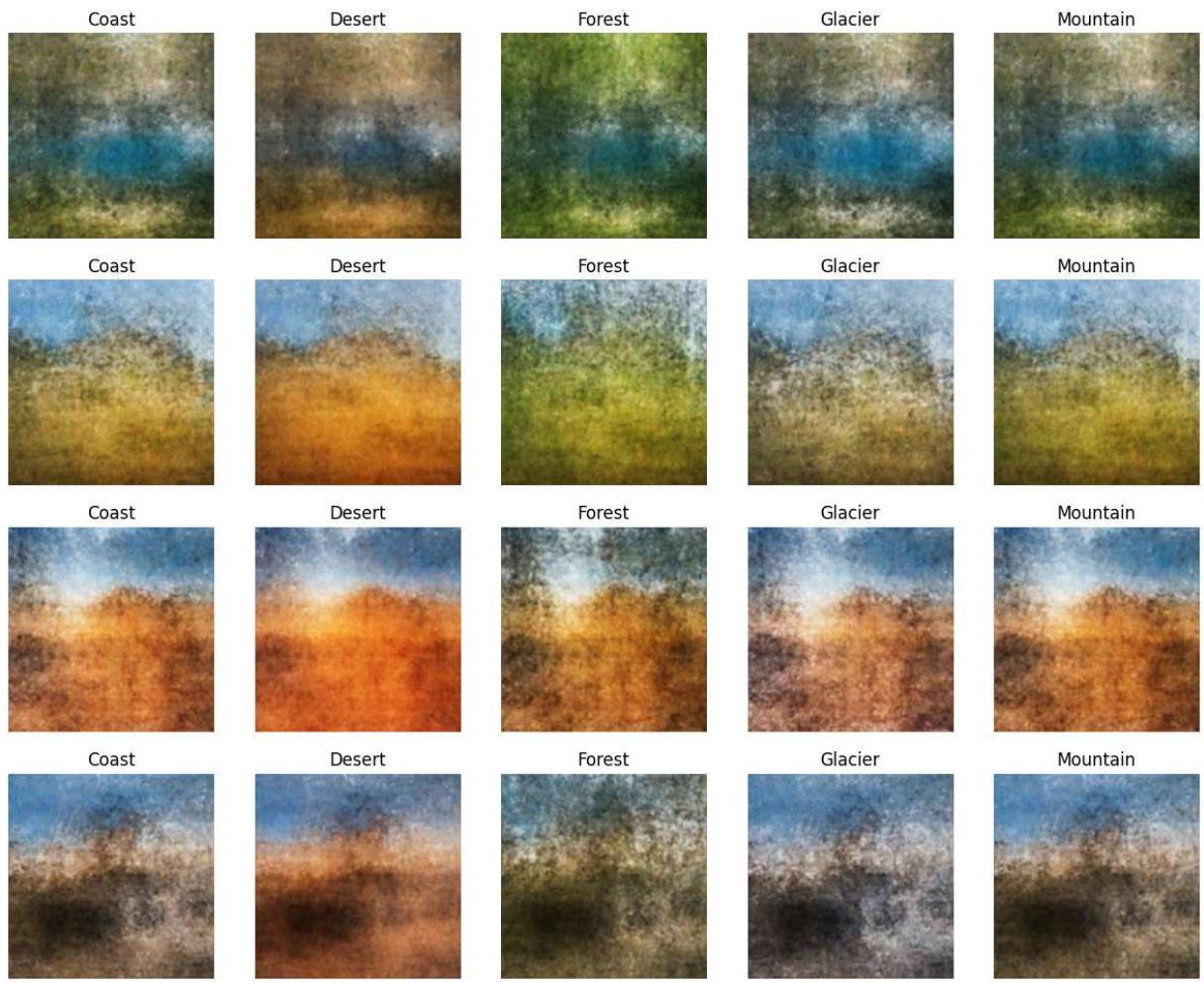
300/300 [=====] - 127s 424ms/step - loss: 172.7502 - reconstruction\_error: 112.6429 - regularization\_error: 60.1072 - val\_loss: 239.3007 - val\_reconstruction\_error: 181.1087 - val\_regularization\_error: 58.3962  
Epoch 78/100

300/300 [=====] - ETA: 0s - loss: 172.2547 - reconstruction\_error: 112.0636 - regularization\_error: 60.1911

[2023-11-21 20:19:53.220691]: Generating fixed images for epoch 78 ...



[2023-11-21 20:19:54.314874]: Generating random images for epoch 78 ...



300/300 [=====] - 127s 421ms/step - loss: 172.2547 - reconstruction\_error: 112.0636 - regularization\_error: 60.1911 - val\_loss: 238.1472 - val\_reconstruction\_error: 180.5922 - val\_regularization\_error: 57.7283

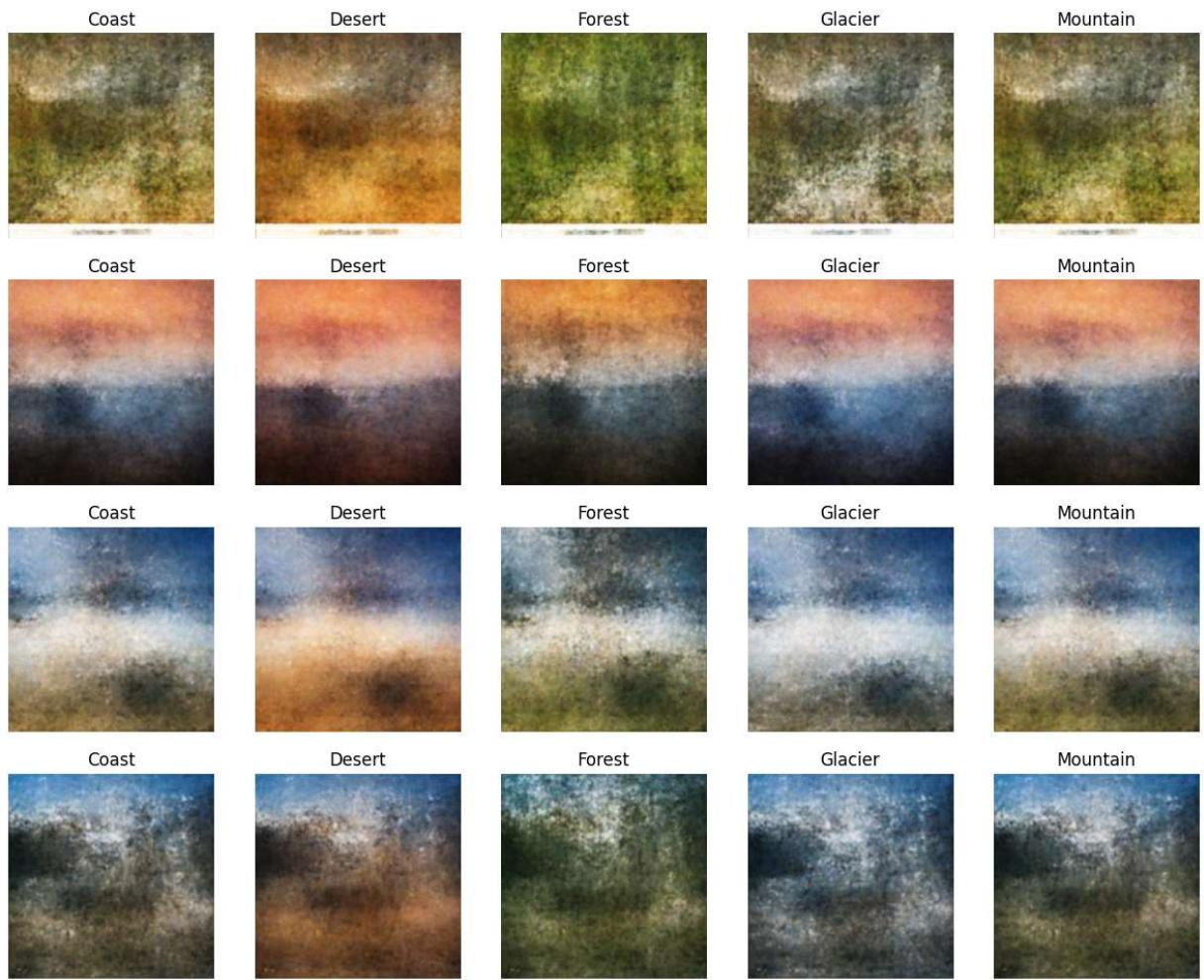
Epoch 79/100

300/300 [=====] - ETA: 0s - loss: 171.8911 - reconstruction\_error: 111.5886 - regularization\_error: 60.3025

[2023-11-21 20:21:53.152528]: Generating fixed images for epoch 79 ...



[2023-11-21 20:21:54.532510]: Generating random images for epoch 79 ...



300/300 [=====] - 118s 392ms/step - loss: 171.8911 - reconstruction\_error: 111.5886 - regularization\_error: 60.3025 - val\_loss: 237.5764 - val\_reconstruction\_error: 180.3916 - val\_regularization\_error: 57.3086

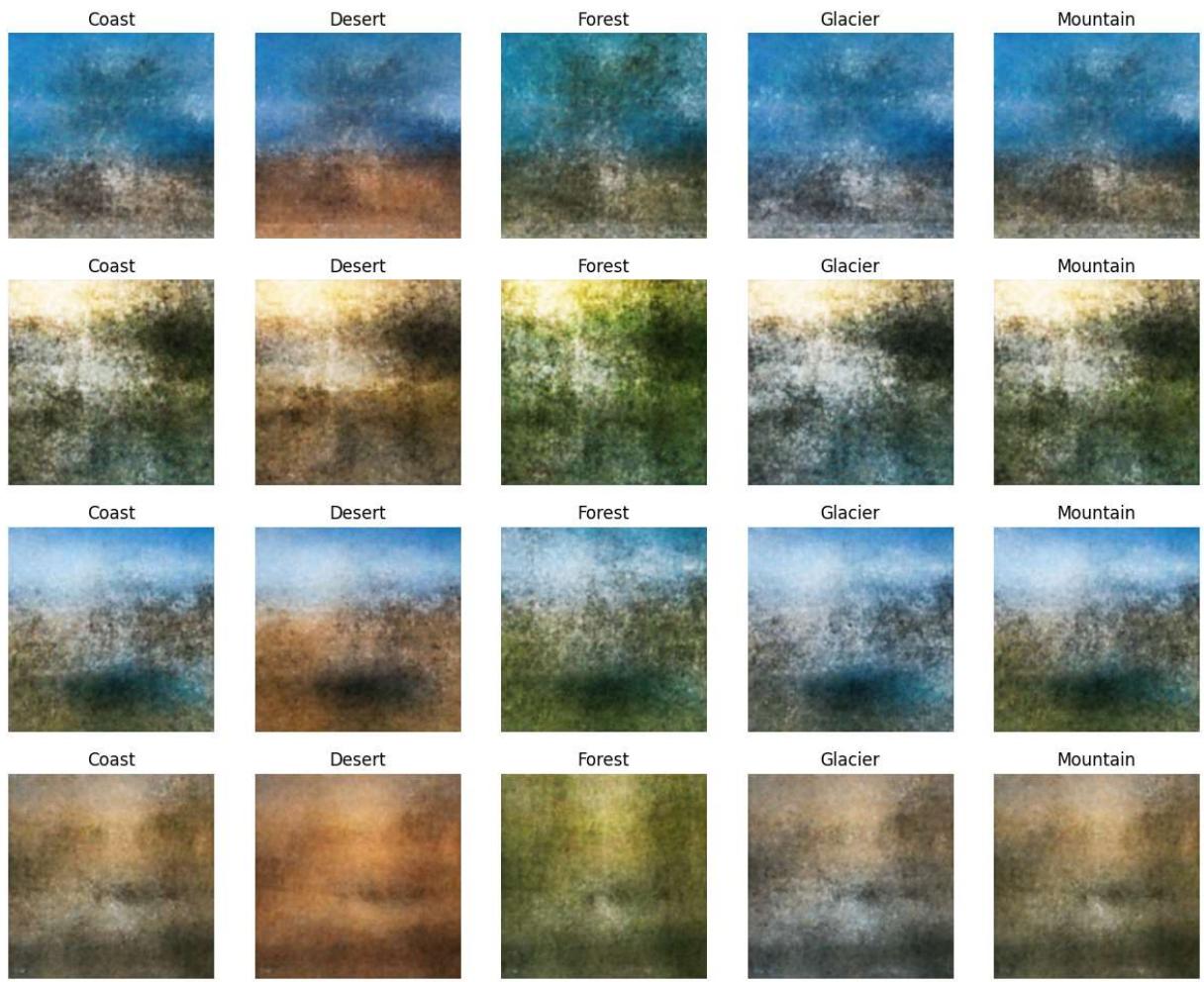
Epoch 80/100

300/300 [=====] - ETA: 0s - loss: 171.4228 - reconstruction\_error: 111.0339 - regularization\_error: 60.3891

[2023-11-21 20:24:26.307776]: Generating fixed images for epoch 80 ...



[2023-11-21 20:24:27.421308]: Generating random images for epoch 80 ...



300/300 [=====] - 131s 435ms/step - loss: 171.4228 - reconstruction\_error: 111.0339 - regularization\_error: 60.3891 - val\_loss: 238.7174 - val\_reconstruction\_error: 183.3274 - val\_regularization\_error: 55.5824

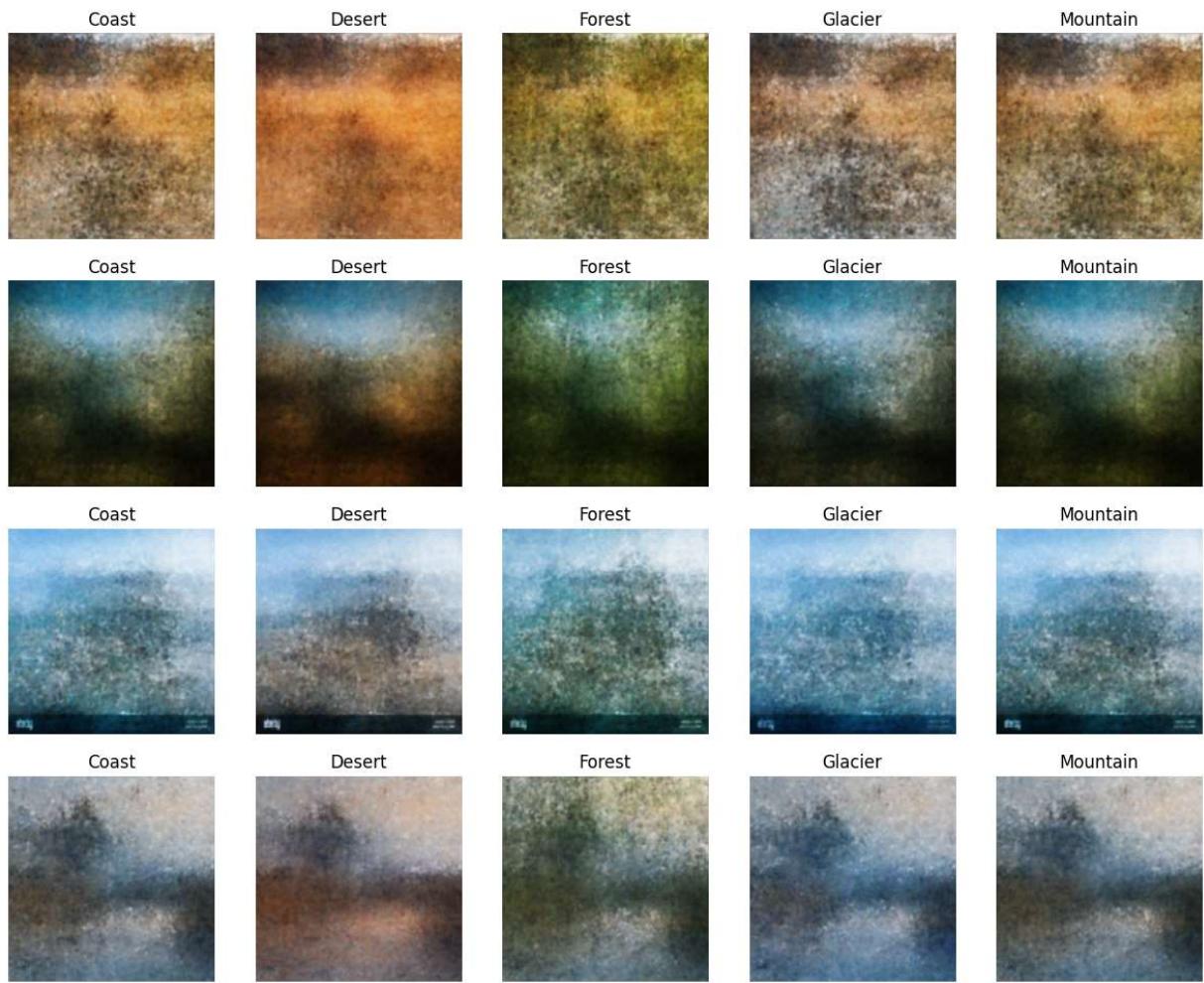
Epoch 81/100

300/300 [=====] - ETA: 0s - loss: 170.9509 - reconstruction\_error: 110.6310 - regularization\_error: 60.3199

[2023-11-21 20:26:41.230645]: Generating fixed images for epoch 81 ...



[2023-11-21 20:26:42.383371]: Generating random images for epoch 81 ...



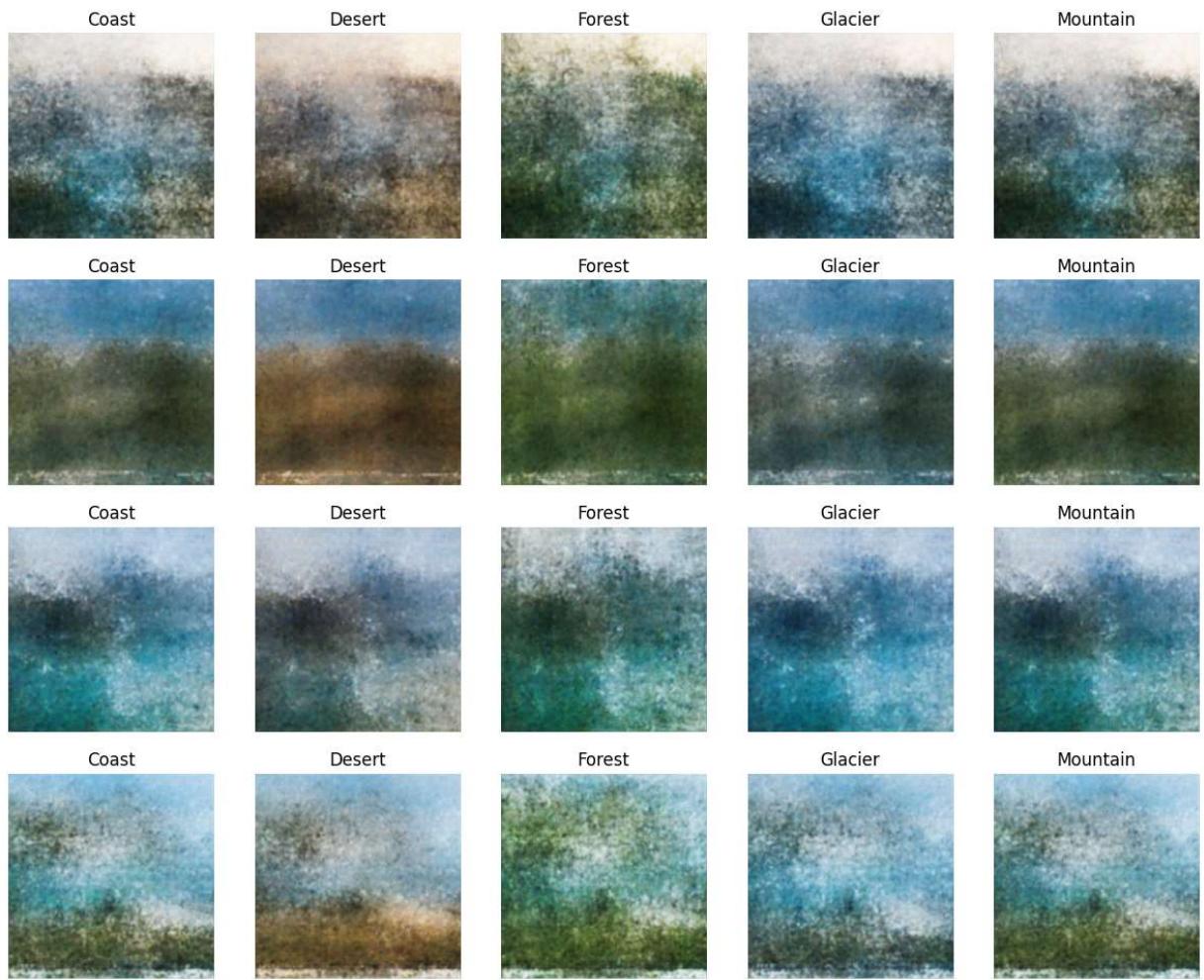
300/300 [=====] - 135s 448ms/step - loss: 170.9509 - reconstruction\_error: 110.6310 - regularization\_error: 60.3199 - val\_loss: 238.6170 - val\_reconstruction\_error: 181.9877 - val\_regularization\_error: 56.8470  
Epoch 82/100

300/300 [=====] - ETA: 0s - loss: 170.3586 - reconstruction\_error: 109.8963 - regularization\_error: 60.4622

[2023-11-21 20:28:51.433358]: Generating fixed images for epoch 82 ...



[2023-11-21 20:28:52.609219]: Generating random images for epoch 82 ...



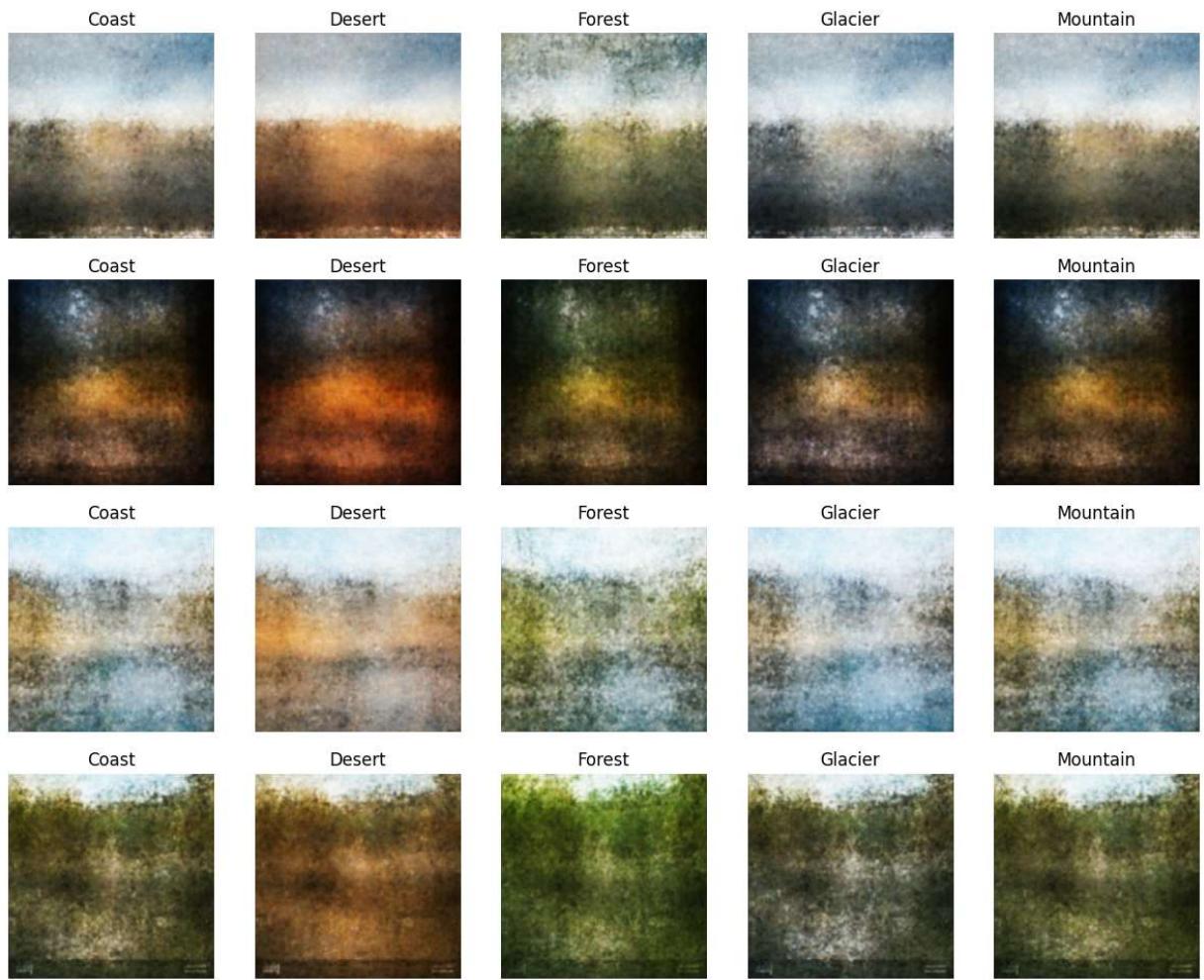
300/300 [=====] - 128s 426ms/step - loss: 170.3586 - reconstruction\_error: 109.8963 - regularization\_error: 60.4622 - val\_loss: 237.8537 - val\_reconstruction\_error: 180.3869 - val\_regularization\_error: 57.6450  
Epoch 83/100

300/300 [=====] - ETA: 0s - loss: 170.0869 - reconstruction\_error: 109.6237 - regularization\_error: 60.4632

[2023-11-21 20:30:54.630180]: Generating fixed images for epoch 83 ...



[2023-11-21 20:30:56.319912]: Generating random images for epoch 83 ...



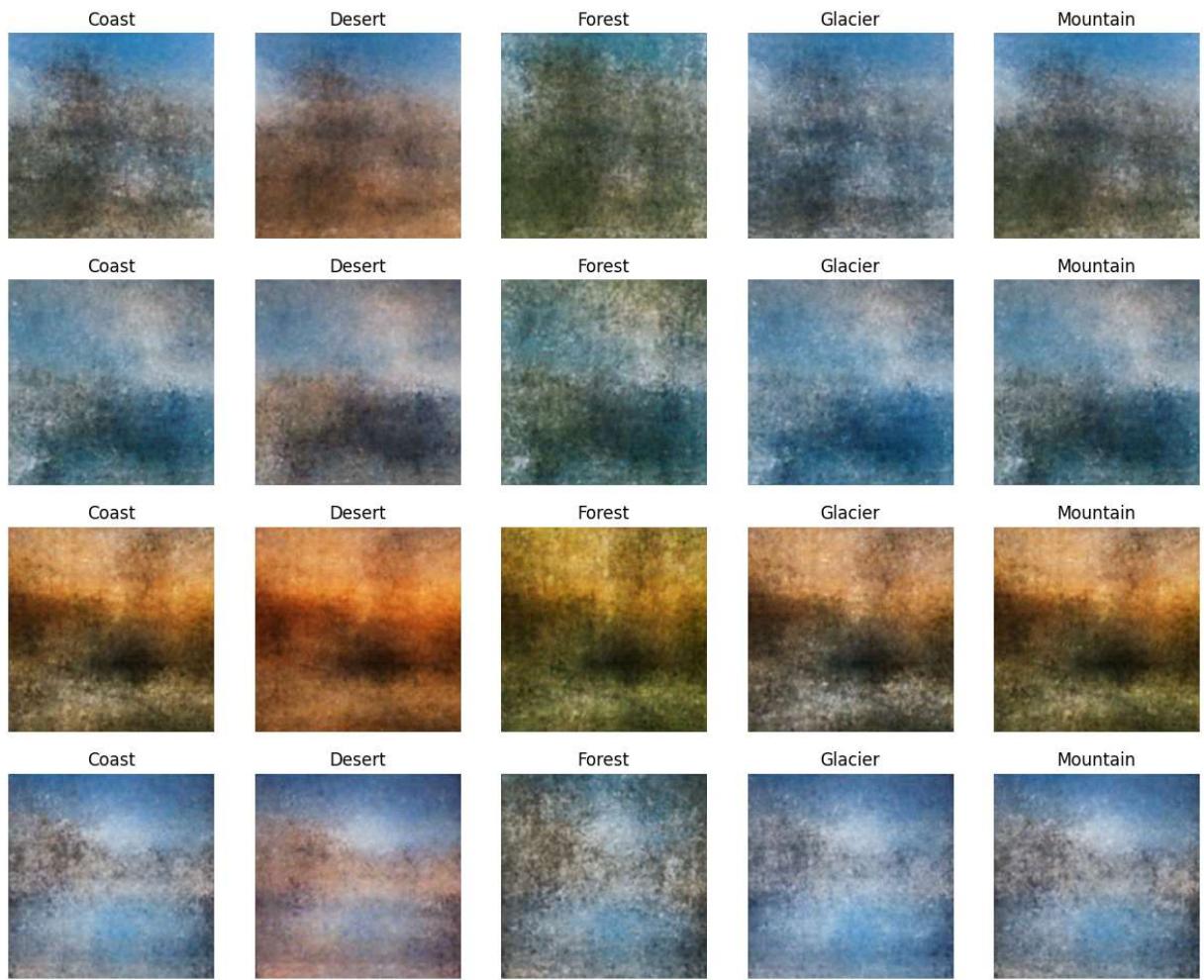
300/300 [=====] - 123s 411ms/step - loss: 170.0869 - reconstruction\_error: 109.6237 - regularization\_error: 60.4632 - val\_loss: 239.5133 - val\_reconstruction\_error: 180.9005 - val\_regularization\_error: 58.8161  
Epoch 84/100

300/300 [=====] - ETA: 0s - loss: 169.6228 - reconstruction\_error: 109.1275 - regularization\_error: 60.4953

[2023-11-21 20:32:55.494569]: Generating fixed images for epoch 84 ...



[2023-11-21 20:32:56.637496]: Generating random images for epoch 84 ...



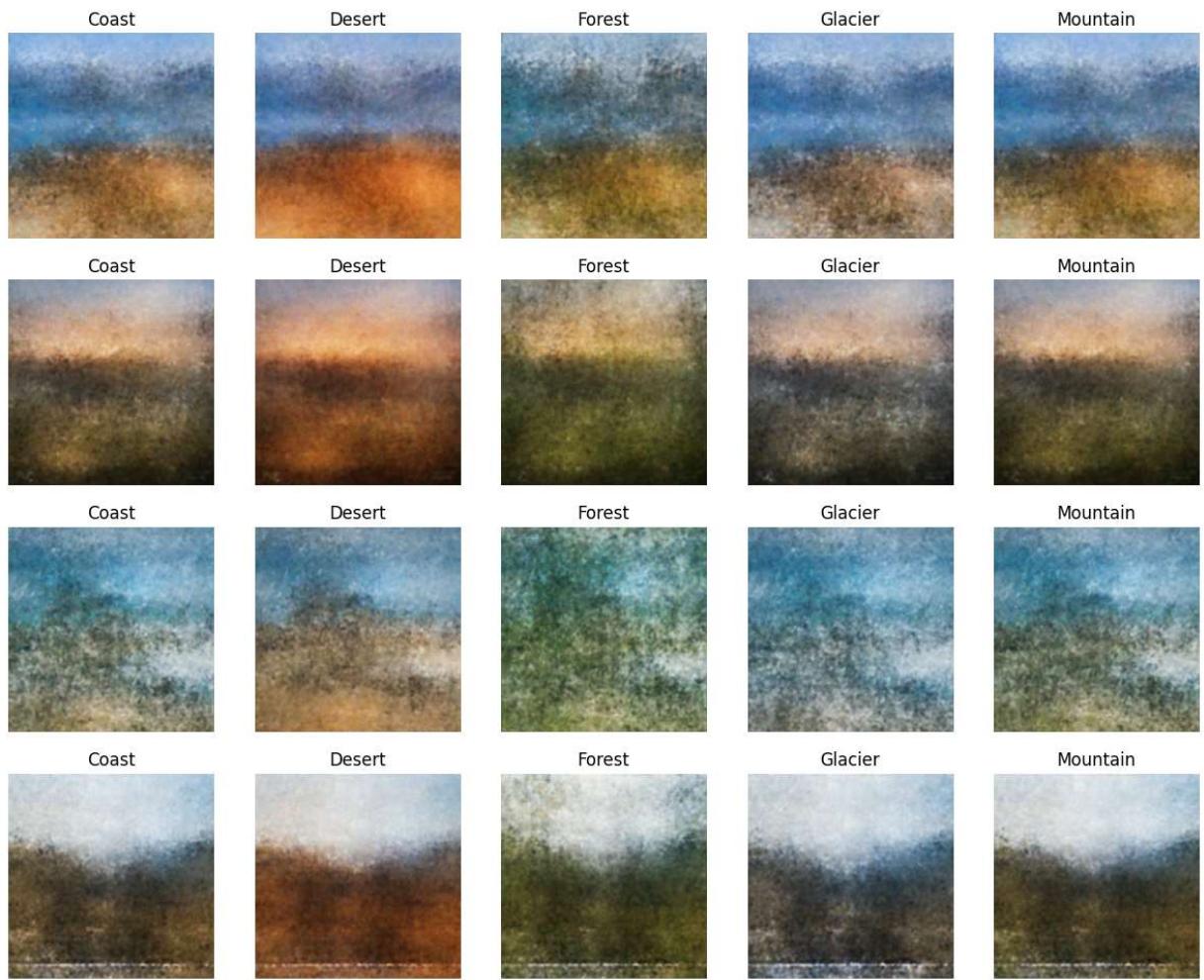
300/300 [=====] - 122s 408ms/step - loss: 169.6228 - reconstruction\_error: 109.1275 - regularization\_error: 60.4953 - val\_loss: 236.9318 - val\_reconstruction\_error: 181.0345 - val\_regularization\_error: 56.1156  
Epoch 85/100

300/300 [=====] - ETA: 0s - loss: 169.3600 - reconstruction\_error: 108.7370 - regularization\_error: 60.6231

[2023-11-21 20:34:58.192591]: Generating fixed images for epoch 85 ...



[2023-11-21 20:34:59.565513]: Generating random images for epoch 85 ...



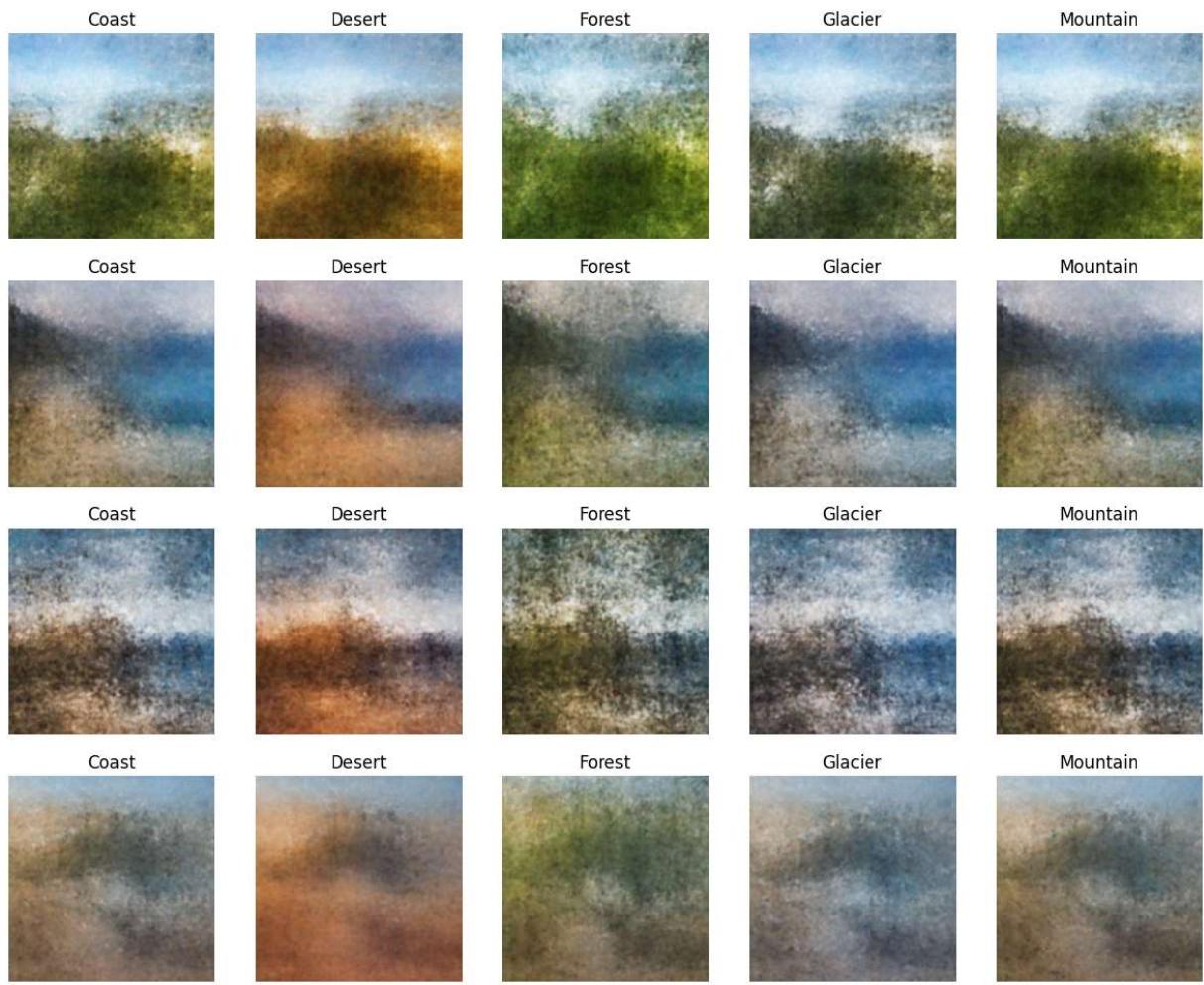
300/300 [=====] - 121s 402ms/step - loss: 169.3600 - reconstruction\_error: 108.7370 - regularization\_error: 60.6231 - val\_loss: 239.3301 - val\_reconstruction\_error: 181.7114 - val\_regularization\_error: 57.7878  
Epoch 86/100

300/300 [=====] - ETA: 0s - loss: 168.8081 - reconstruction\_error: 108.1015 - regularization\_error: 60.7066

[2023-11-21 20:36:58.744372]: Generating fixed images for epoch 86 ...



[2023-11-21 20:37:00.299802]: Generating random images for epoch 86 ...



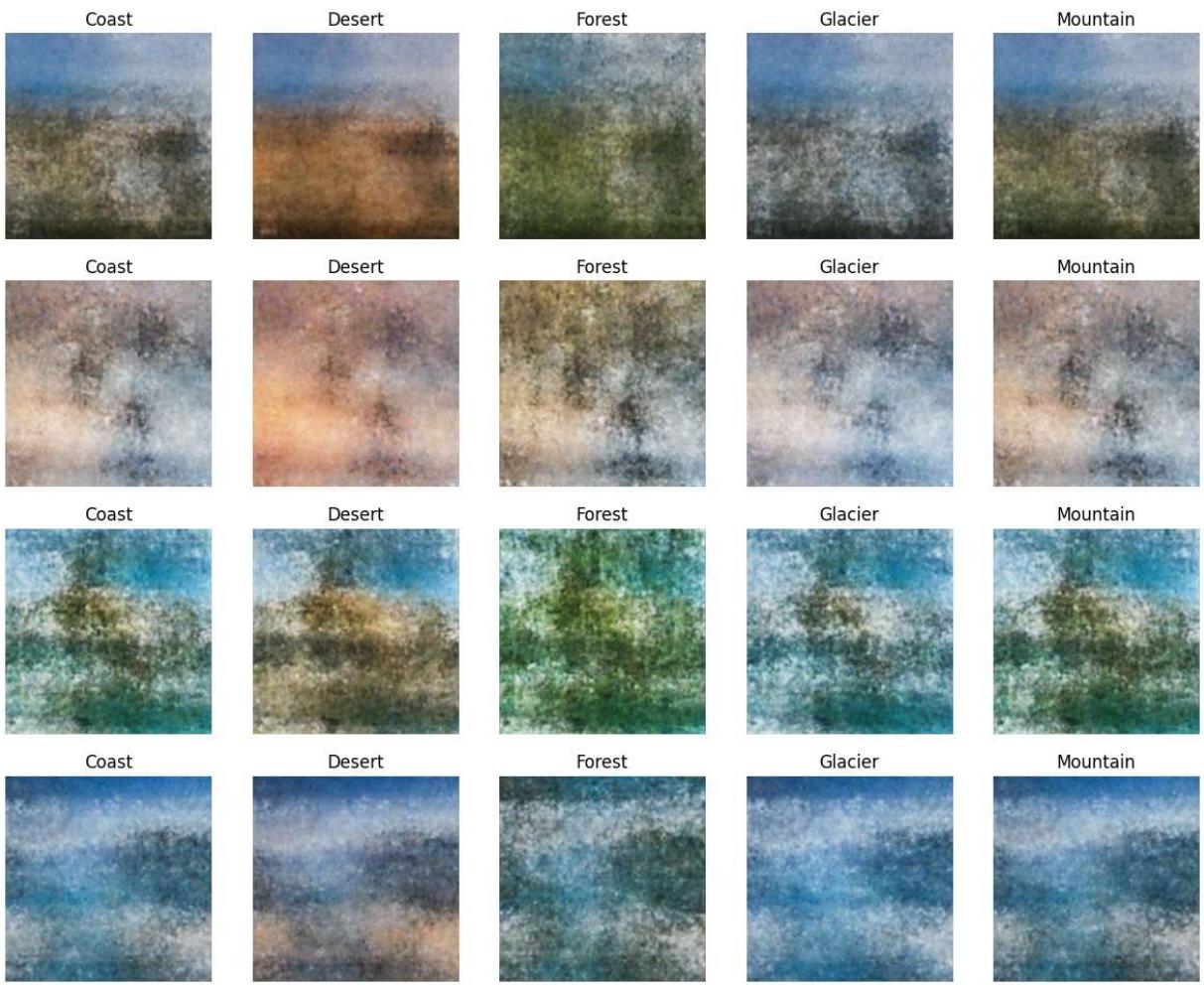
300/300 [=====] - 123s 409ms/step - loss: 168.8081 - reconstruction\_error: 108.1015 - regularization\_error: 60.7066 - val\_loss: 237.3432 - val\_reconstruction\_error: 181.0428 - val\_regularization\_error: 56.4851  
Epoch 87/100

300/300 [=====] - ETA: 0s - loss: 168.4449 - reconstruction\_error: 107.7299 - regularization\_error: 60.7150

[2023-11-21 20:39:05.812180]: Generating fixed images for epoch 87 ...



[2023-11-21 20:39:07.317309]: Generating random images for epoch 87 ...



300/300 [=====] - 125s 415ms/step - loss: 168.4449 - reconstruction\_error: 107.7299 - regularization\_error: 60.7150 - val\_loss: 240.7804 - val\_reconstruction\_error: 183.3889 - val\_regularization\_error: 57.5829  
Epoch 88/100

300/300 [=====] - ETA: 0s - loss: 168.0983 - reconstruction\_error: 107.3475 - regularization\_error: 60.7508

[2023-11-21 20:41:13.402714]: Generating fixed images for epoch 88 ...



[2023-11-21 20:41:14.578157]: Generating random images for epoch 88 ...



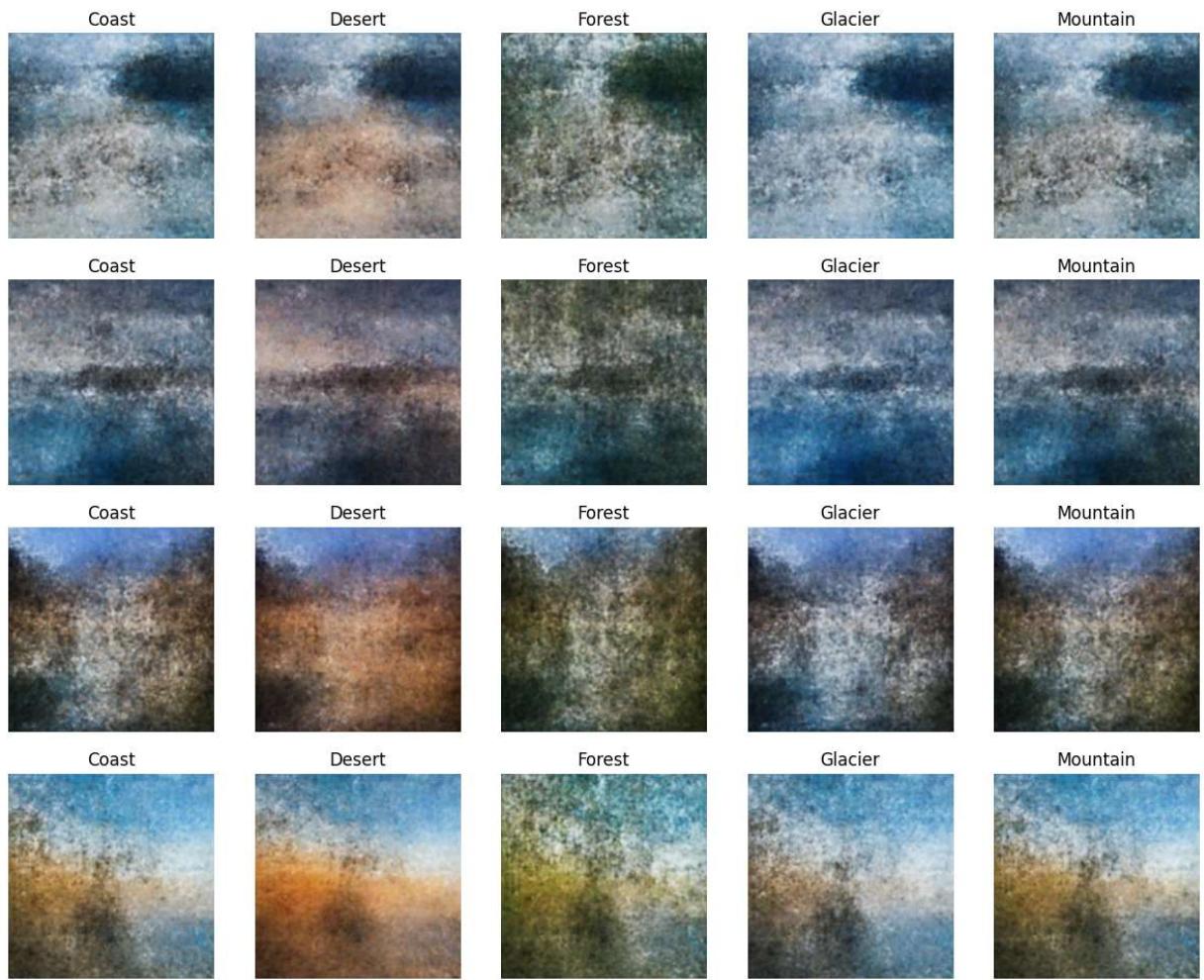
300/300 [=====] - 127s 422ms/step - loss: 168.0983 - reconstruction\_error: 107.3475 - regularization\_error: 60.7508 - val\_loss: 238.7191 - val\_reconstruction\_error: 182.2860 - val\_regularization\_error: 56.6384  
Epoch 89/100

300/300 [=====] - ETA: 0s - loss: 167.6181 - reconstruction\_error: 106.8390 - regularization\_error: 60.7792

[2023-11-21 20:43:21.315655]: Generating fixed images for epoch 89 ...



[2023-11-21 20:43:22.449915]: Generating random images for epoch 89 ...



300/300 [=====] - 128s 428ms/step - loss: 167.6181 - reconstruction\_error: 106.8390 - regularization\_error: 60.7792 - val\_loss: 239.6404 - val\_reconstruction\_error: 182.0798 - val\_regularization\_error: 57.7885

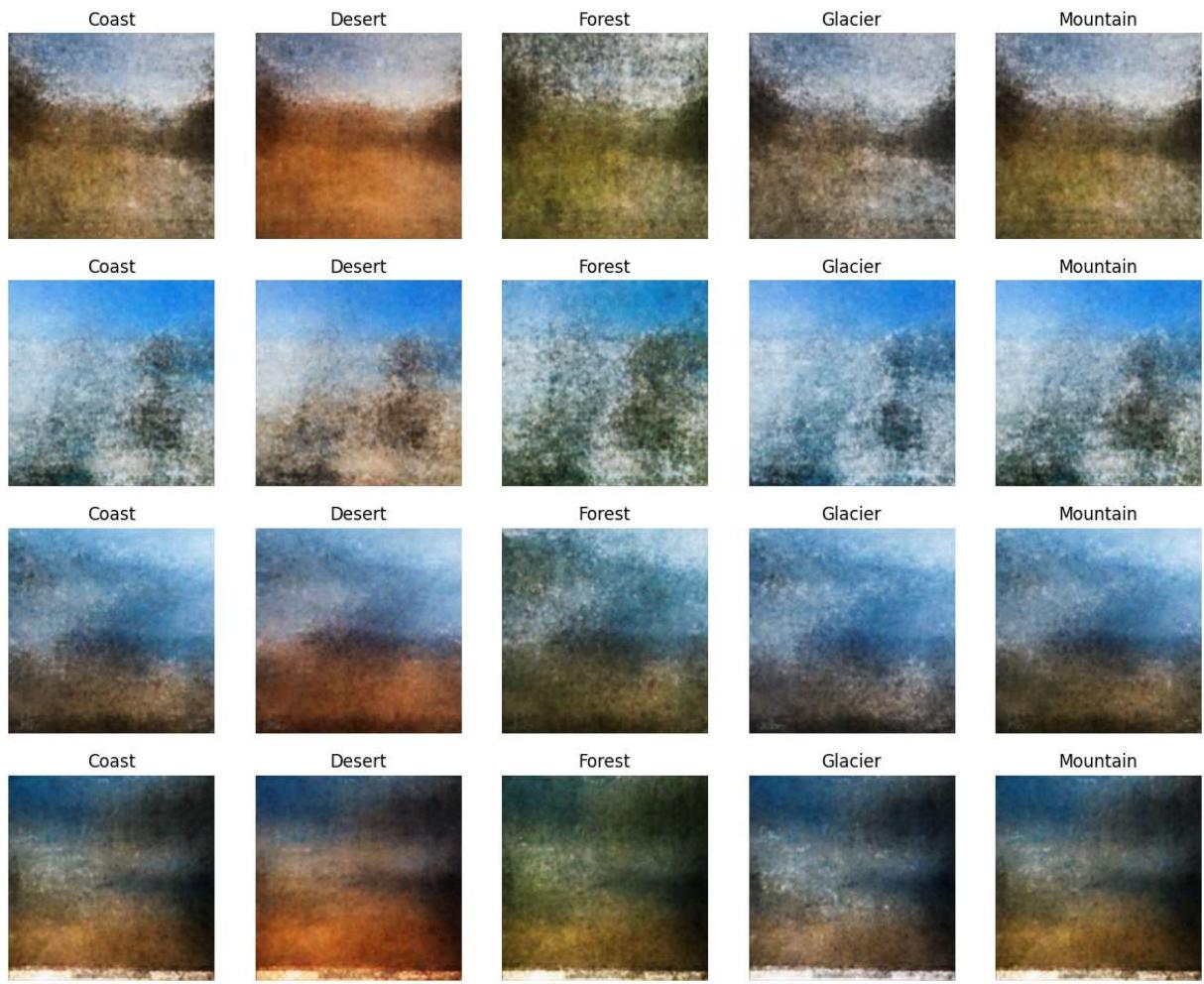
Epoch 90/100

300/300 [=====] - ETA: 0s - loss: 167.3041 - reconstruction\_error: 106.4111 - regularization\_error: 60.8931

[2023-11-21 20:45:22.148539]: Generating fixed images for epoch 90 ...



[2023-11-21 20:45:23.537323]: Generating random images for epoch 90 ...



300/300 [=====] - 120s 401ms/step - loss: 167.3041 - reconstruction\_error: 106.4111 - regularization\_error: 60.8931 - val\_loss: 240.4925 - val\_reconstruction\_error: 182.9933 - val\_regularization\_error: 57.7271

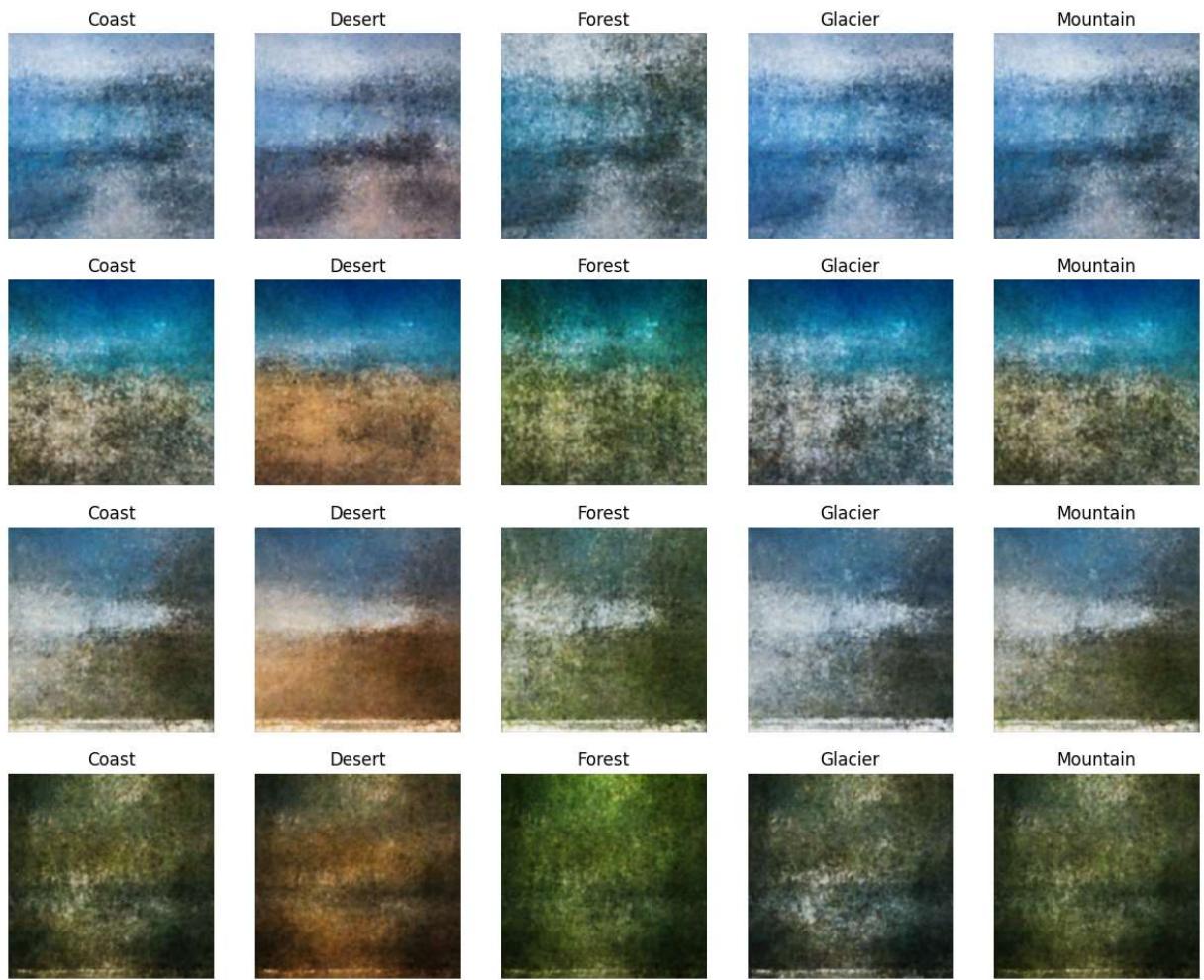
Epoch 91/100

300/300 [=====] - ETA: 0s - loss: 166.9556 - reconstruction\_error: 106.0331 - regularization\_error: 60.9226

[2023-11-21 20:47:28.278567]: Generating fixed images for epoch 91 ...



[2023-11-21 20:47:29.372332]: Generating random images for epoch 91 ...



300/300 [=====] - 127s 422ms/step - loss: 166.9556 - reconstruction\_error: 106.0331 - regularization\_error: 60.9226 - val\_loss: 239.7527 - val\_reconstruction\_error: 184.5220 - val\_regularization\_error: 55.4237

Epoch 92/100

300/300 [=====] - ETA: 0s - loss: 166.8725 - reconstruction\_error: 105.9043 - regularization\_error: 60.9682

[2023-11-21 20:49:31.952663]: Generating fixed images for epoch 92 ...



[2023-11-21 20:49:33.127865]: Generating random images for epoch 92 ...



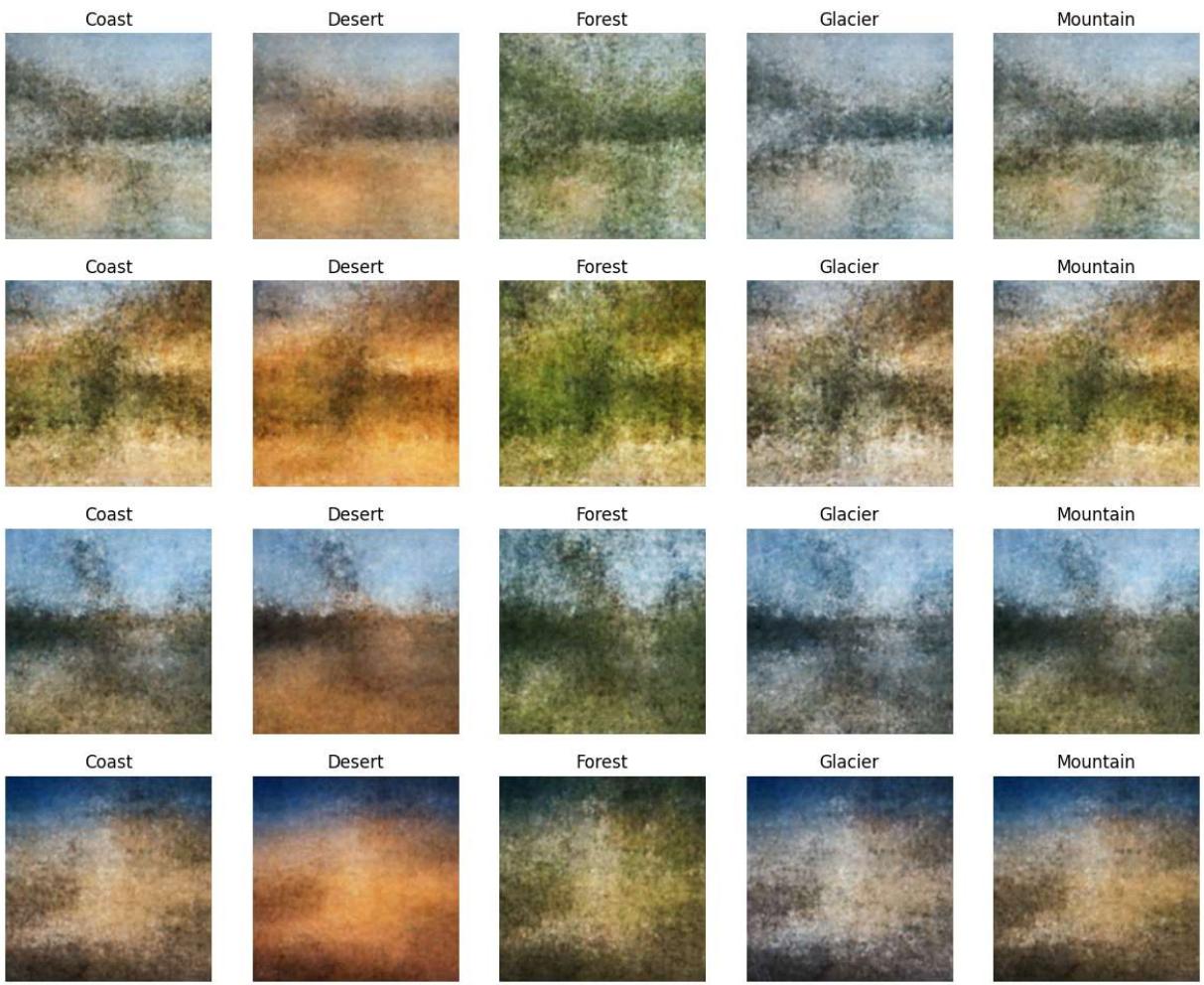
300/300 [=====] - 123s 410ms/step - loss: 166.8725 - reconstruction\_error: 105.9043 - regularization\_error: 60.9682 - val\_loss: 240.0649 - val\_reconstruction\_error: 181.1260 - val\_regularization\_error: 59.1330  
Epoch 93/100

300/300 [=====] - ETA: 0s - loss: 166.0862 - reconstruction\_error: 105.2341 - regularization\_error: 60.8521

[2023-11-21 20:51:42.572603]: Generating fixed images for epoch 93 ...



[2023-11-21 20:51:44.299545]: Generating random images for epoch 93 ...



300/300 [=====] - 131s 438ms/step - loss: 166.0862 - reconstruction\_error: 105.2341 - regularization\_error: 60.8521 - val\_loss: 238.6734 - val\_reconstruction\_error: 182.1797 - val\_regularization\_error: 56.6994

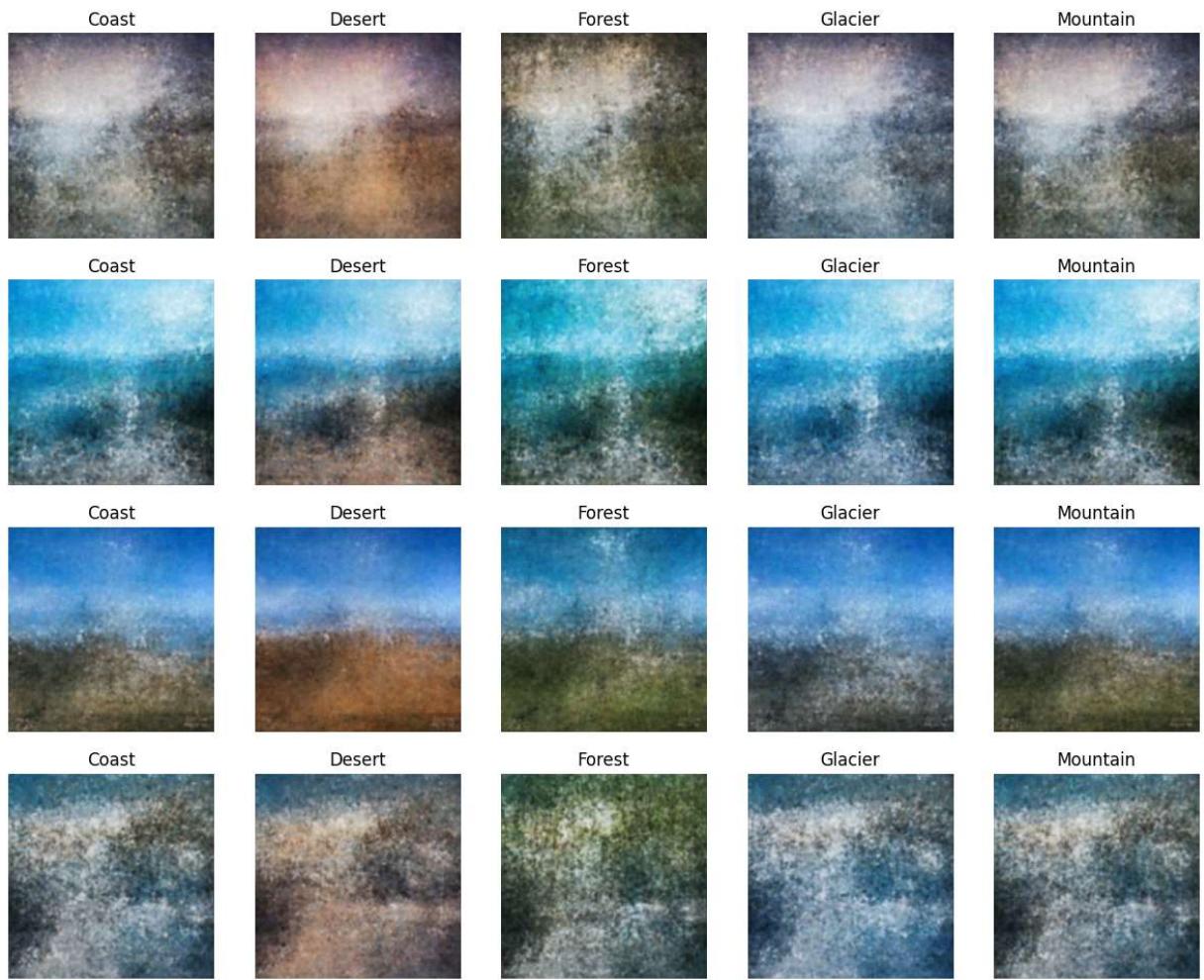
Epoch 94/100

300/300 [=====] - ETA: 0s - loss: 165.7567 - reconstruction\_error: 104.8466 - regularization\_error: 60.9100

[2023-11-21 20:53:46.945934]: Generating fixed images for epoch 94 ...



[2023-11-21 20:53:48.264106]: Generating random images for epoch 94 ...



300/300 [=====] - 125s 415ms/step - loss: 165.7567 - reconstruction\_error: 104.8466 - regularization\_error: 60.9100 - val\_loss: 240.8390 - val\_reconstruction\_error: 184.2160 - val\_regularization\_error: 56.7673

Epoch 95/100

300/300 [=====] - ETA: 0s - loss: 165.5252 - reconstruction\_error: 104.5134 - regularization\_error: 61.0117

[2023-11-21 20:55:40.542616]: Generating fixed images for epoch 95 ...



[2023-11-21 20:55:42.233605]: Generating random images for epoch 95 ...



300/300 [=====] - 114s 379ms/step - loss: 165.5252 - reconstruction\_error: 104.5134 - regularization\_error: 61.0117 - val\_loss: 240.7409 - val\_reconstruction\_error: 182.2634 - val\_regularization\_error: 58.6645

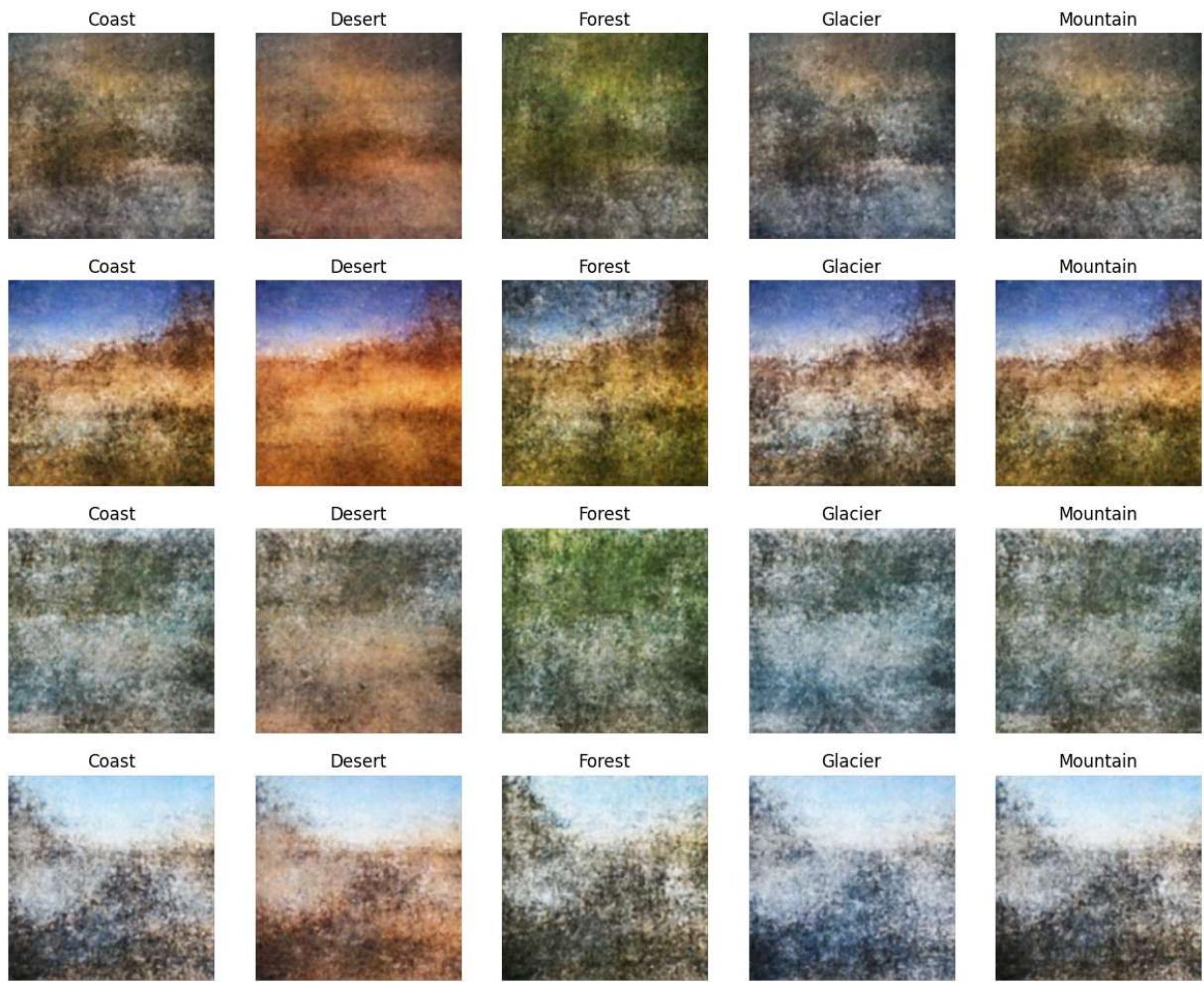
Epoch 96/100

300/300 [=====] - ETA: 0s - loss: 165.1296 - reconstruction\_error: 104.0741 - regularization\_error: 61.0555

[2023-11-21 20:57:41.308377]: Generating fixed images for epoch 96 ...



[2023-11-21 20:57:42.404479]: Generating random images for epoch 96 ...



300/300 [=====] - 119s 397ms/step - loss: 165.1296 - reconstruction\_error: 104.0741 - regularization\_error: 61.0555 - val\_loss: 242.7648 - val\_reconstruction\_error: 183.0420 - val\_regularization\_error: 59.9698  
Epoch 97/100

300/300 [=====] - ETA: 0s - loss: 164.6859 - reconstruction\_error: 103.6411 - regularization\_error: 61.0448

[2023-11-21 21:00:06.069364]: Generating fixed images for epoch 97 ...



[2023-11-21 21:00:07.139050]: Generating random images for epoch 97 ...



300/300 [=====] - 123s 407ms/step - loss: 164.6859 - reconstruction\_error: 103.6411 - regularization\_error: 61.0448 - val\_loss: 238.5554 - val\_reconstruction\_error: 181.5765 - val\_regularization\_error: 57.2040

Epoch 98/100

300/300 [=====] - ETA: 0s - loss: 164.5880 - reconstruction\_error: 103.3647 - regularization\_error: 61.2233

[2023-11-21 21:02:15.360226]: Generating fixed images for epoch 98 ...



[2023-11-21 21:02:16.584931]: Generating random images for epoch 98 ...



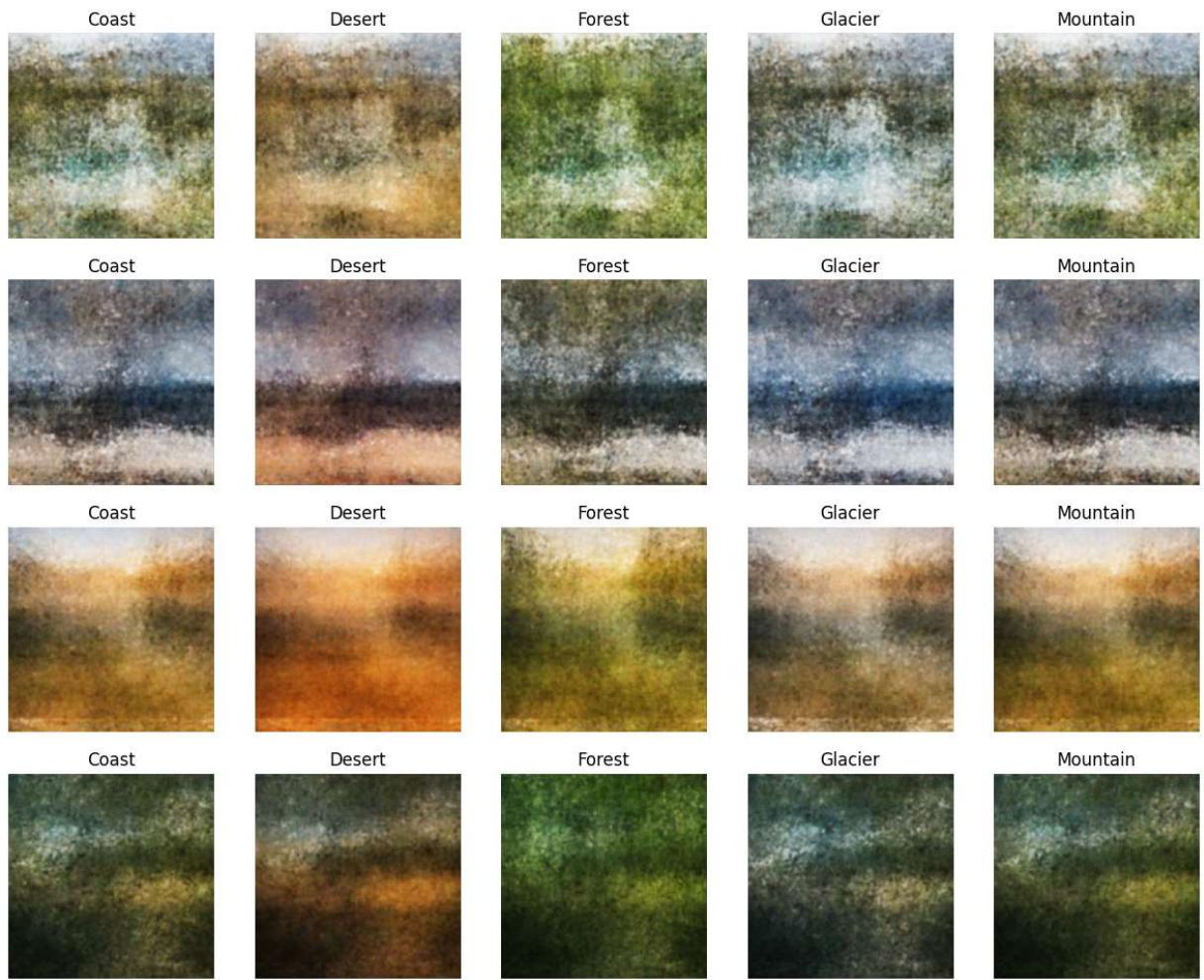
300/300 [=====] - 130s 433ms/step - loss: 164.5880 - reconstruction\_error: 103.3647 - regularization\_error: 61.2233 - val\_loss: 242.7407 - val\_reconstruction\_error: 184.0309 - val\_regularization\_error: 58.9238  
Epoch 99/100

300/300 [=====] - ETA: 0s - loss: 164.1285 - reconstruction\_error: 102.9684 - regularization\_error: 61.1601

[2023-11-21 21:04:23.756206]: Generating fixed images for epoch 99 ...



[2023-11-21 21:04:25.376547]: Generating random images for epoch 99 ...



300/300 [=====] - 128s 427ms/step - loss: 164.1285 - reconstruction\_error: 102.9684 - regularization\_error: 61.1601 - val\_loss: 239.9279 - val\_reconstruction\_error: 183.4428 - val\_regularization\_error: 56.6958

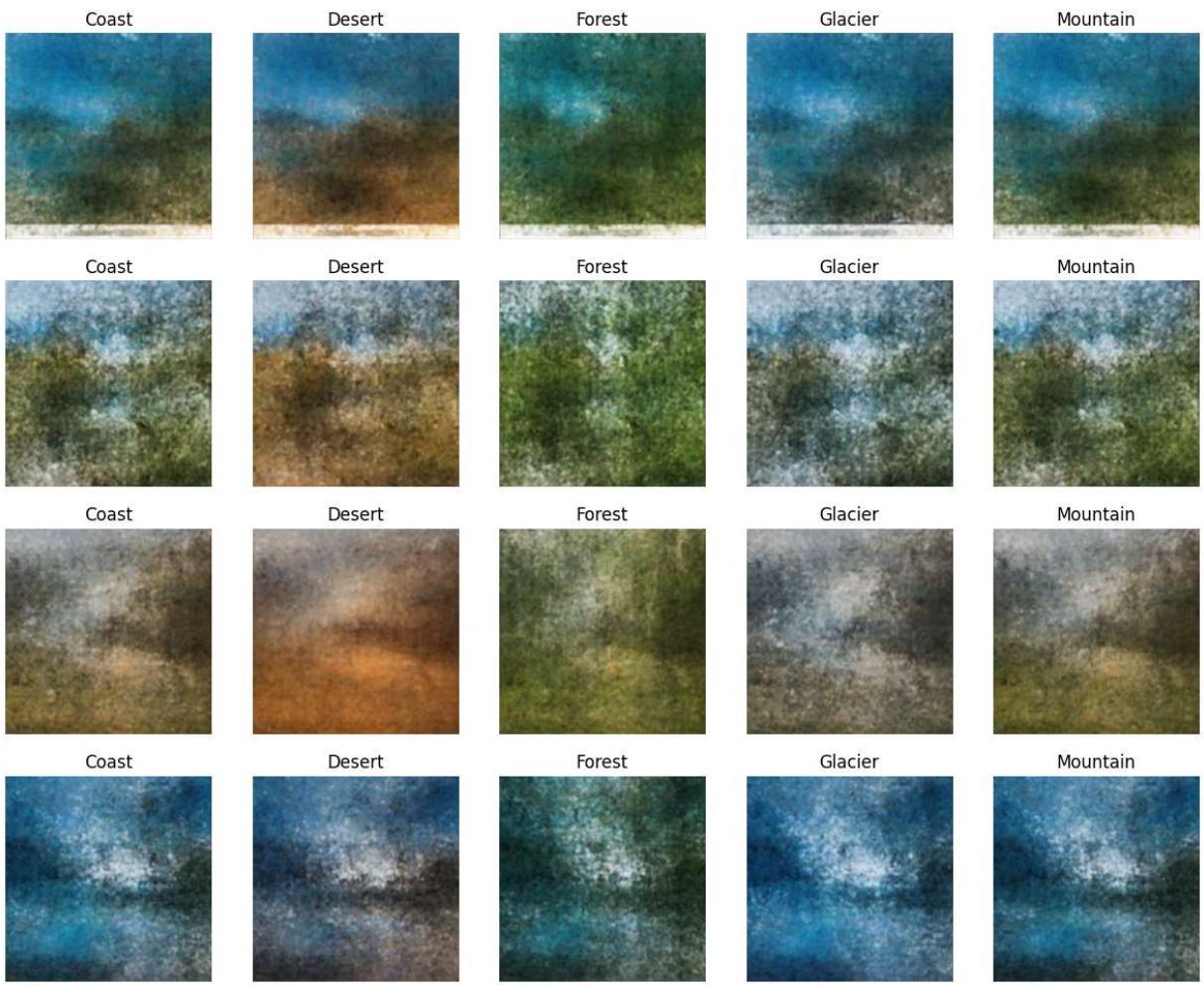
Epoch 100/100

300/300 [=====] - ETA: 0s - loss: 163.8395 - reconstruction\_error: 102.7511 - regularization\_error: 61.0885

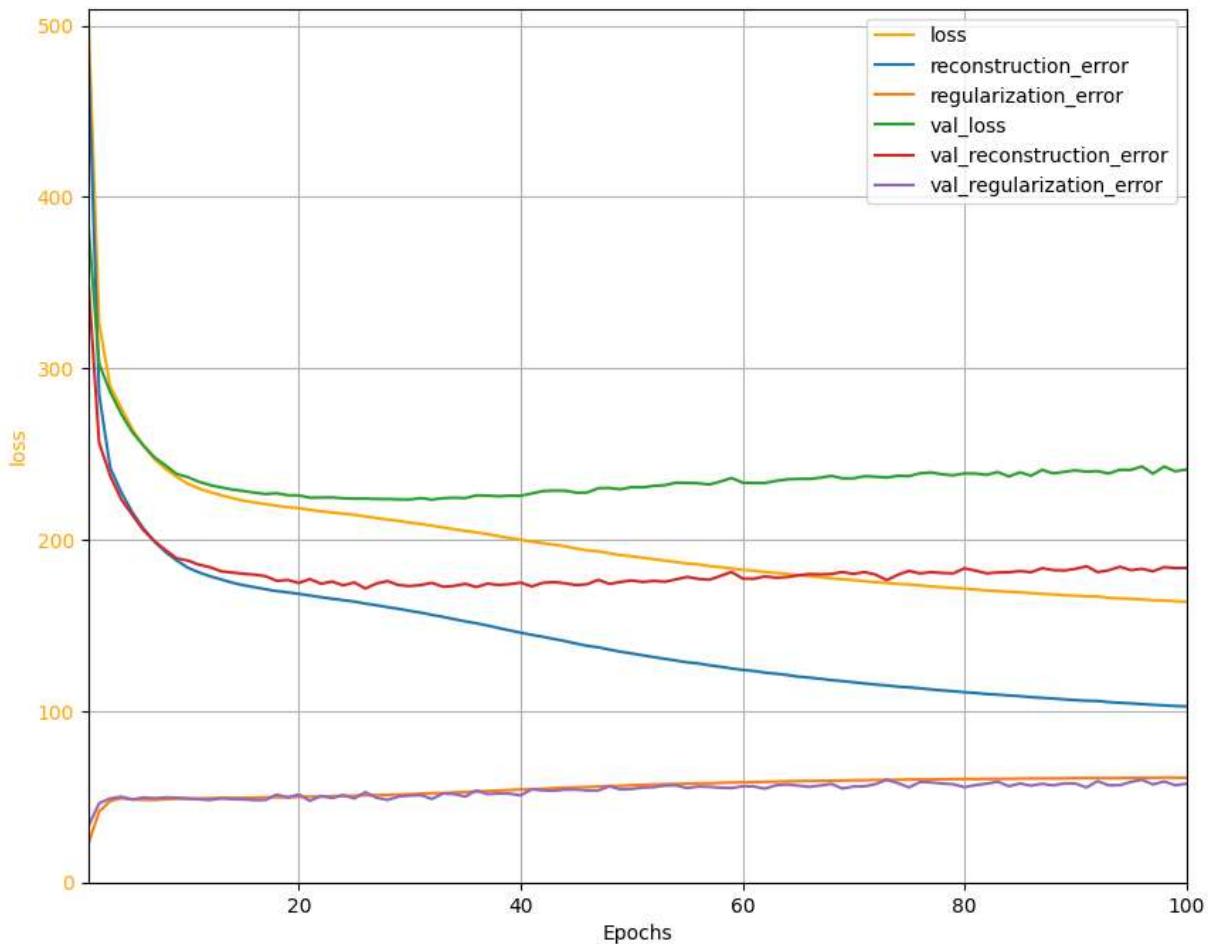
[2023-11-21 21:06:33.385207]: Generating fixed images for epoch 100 ...



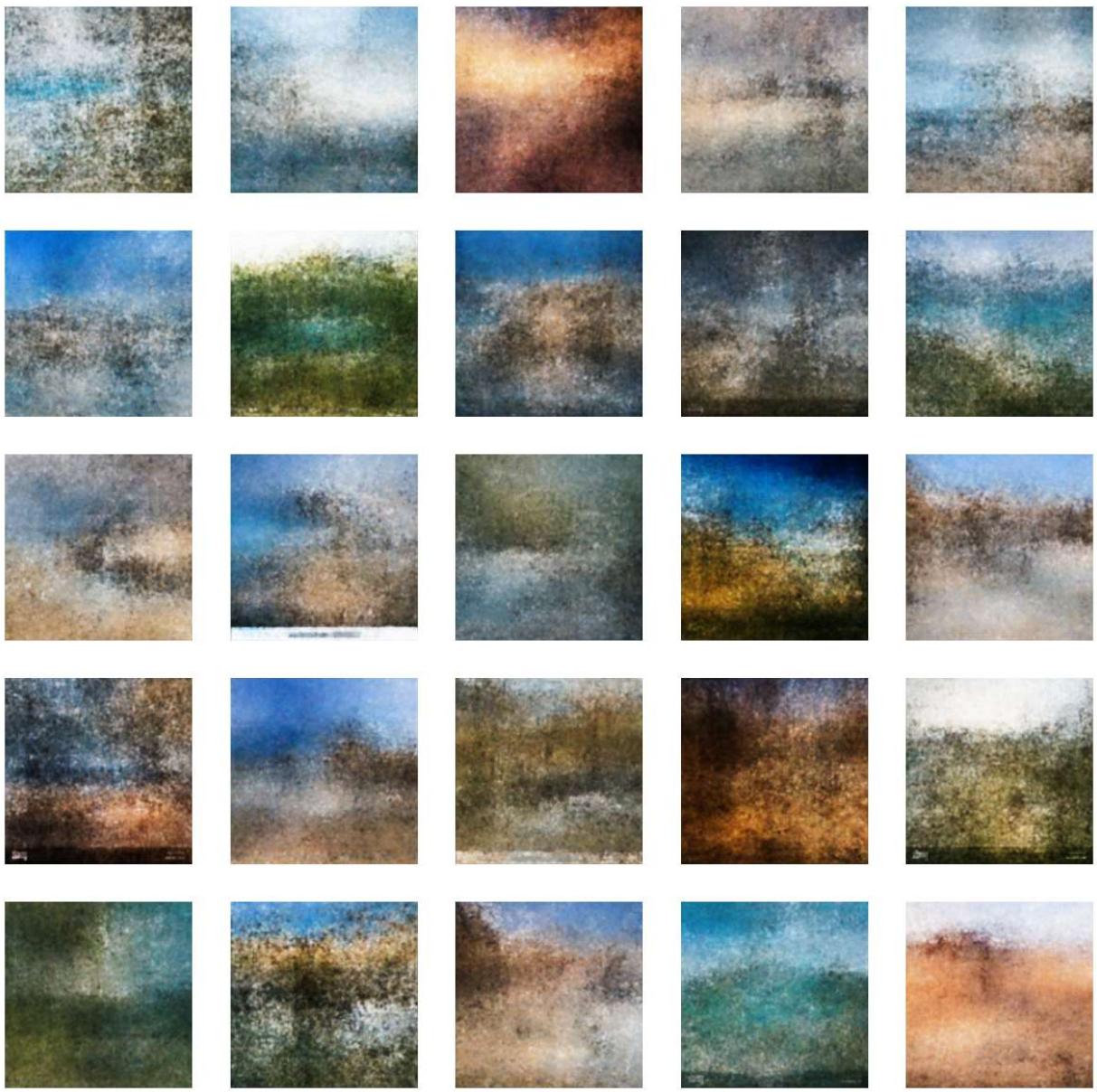
[2023-11-21 21:06:34.569771]: Generating random images for epoch 100 ...



300/300 [=====] - 130s 433ms/step - loss: 163.8395 - reconstruction\_error: 102.7511 - regularization\_error: 61.0885 - val\_loss: 241.0027 - val\_reconstruction\_error: 183.5758 - val\_regularization\_error: 57.6175



Coasts



Deserts



Forests

**Glaciers**

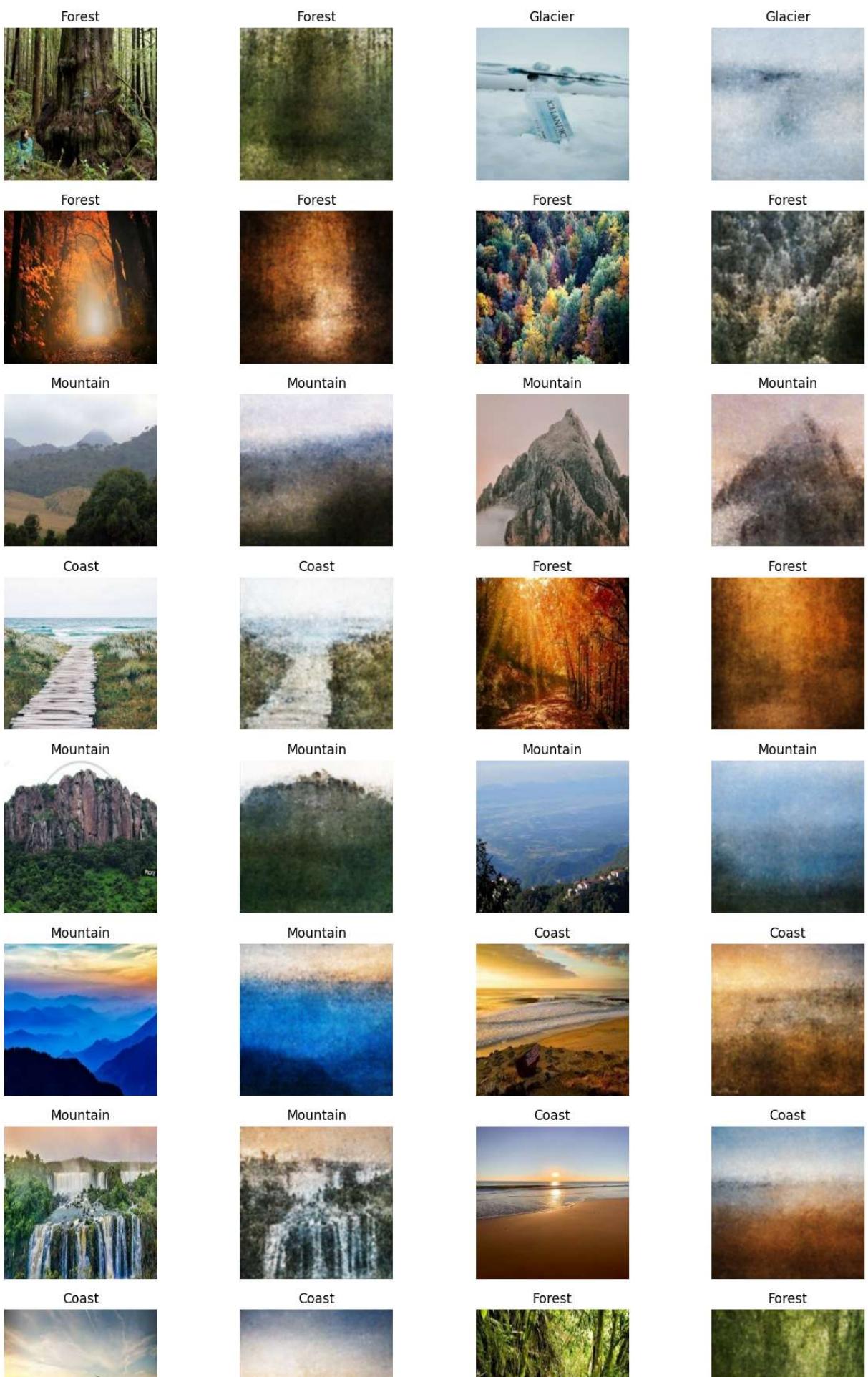


**Mountains**



Reconstruction & Regularization







## Performance Summary

```
[2023-11-21 21:10:00.270968]: Configuration
[2023-11-21 21:10:00.271045]: - Preprocessing:
[2023-11-21 21:10:00.272277]:   - Dataset Size: 12000
[2023-11-21 21:10:00.377443]:   - Image Size: (256, 256, 3)
[2023-11-21 21:10:00.489579]:   - Label Size: (5,)
[2023-11-21 21:10:00.490460]: - Augmentations:
[2023-11-21 21:10:00.490550]:   - Grayscale: No
[2023-11-21 21:10:00.490619]:   - Cut Out: No
[2023-11-21 21:10:00.492138]: - Architecture:
[2023-11-21 21:10:00.492174]:   - # Classes: 5
[2023-11-21 21:10:00.492235]:   - Code Size: 200
[2023-11-21 21:10:00.492274]:   - CNN Activation: relu
[2023-11-21 21:10:00.494844]:   - Latent Activation: None
[2023-11-21 21:10:00.494915]:   - Output Activation: sigmoid
[2023-11-21 21:10:00.494956]: - Training:
[2023-11-21 21:10:00.495006]:   - Training Set Size: 9600
[2023-11-21 21:10:00.495044]:   - Validation Size: 1200
[2023-11-21 21:10:00.497881]:   - Test Size: 1200
[2023-11-21 21:10:00.497921]:   - Shuffle Size: 1024
[2023-11-21 21:10:00.498008]:   - Batch Size: 32
[2023-11-21 21:10:00.498065]:   - Max Epochs: 100
[2023-11-21 21:10:00.500626]:   - Patience: 200
[2023-11-21 21:10:00.500742]:   - KL Coefficient: 1
[2023-11-21 21:10:00.503319]:   - Optimizer: <keras.src.optimizers.adam.Adam object
at 0x7efc10560af0>
[2023-11-21 21:10:00.503471]:   - Learning Rate: 0.0001
[2023-11-21 21:10:00.503612]:   - Pre-trained: No

[2023-11-21 21:10:00.503770]: Reconstruction & Regularization
[2023-11-21 21:10:00.503868]: Training loss: 163.172653
[2023-11-21 21:10:00.503962]: - Reconstruction Error: 101.882774
[2023-11-21 21:10:00.504055]: - Regularization Error: 61.289936
[2023-11-21 21:10:00.504147]: Validation loss: 241.717834
[2023-11-21 21:10:00.504237]: - Reconstruction Error: 184.340546
[2023-11-21 21:10:00.504329]: - Regularization Error: 57.617512
[2023-11-21 21:10:00.504420]: Test loss: 238.468307
[2023-11-21 21:10:00.504512]: - Reconstruction Error: 181.366272
[2023-11-21 21:10:00.504602]: - Regularization Error: 57.146614

[2023-11-21 21:10:00.504725]: Generation Quality
[2023-11-21 21:10:00.504818]: Coast | accuracy: 3.12% | loss: 21.473
[2023-11-21 21:10:00.504907]: Desert | accuracy: 82.03% | loss: 0.968
[2023-11-21 21:10:00.504997]: Forest | accuracy: 85.16% | loss: 0.964
[2023-11-21 21:10:00.505085]: Glacier | accuracy: 0.00% | loss: 33.223
[2023-11-21 21:10:00.505173]: Mountain | accuracy: 0.78% | loss: 21.797
[2023-11-21 21:10:00.505262]: -----
[2023-11-21 21:10:00.505354]: Average | accuracy: 34.22% | loss: 15.685
```