Jörg Lindenmaier

SINEWORK V

12-Channel Audio
15:20

40 consecutive sounds

Every sound has a duration of 22.5 seconds

Between every sound is a pause of 0.5 seconds

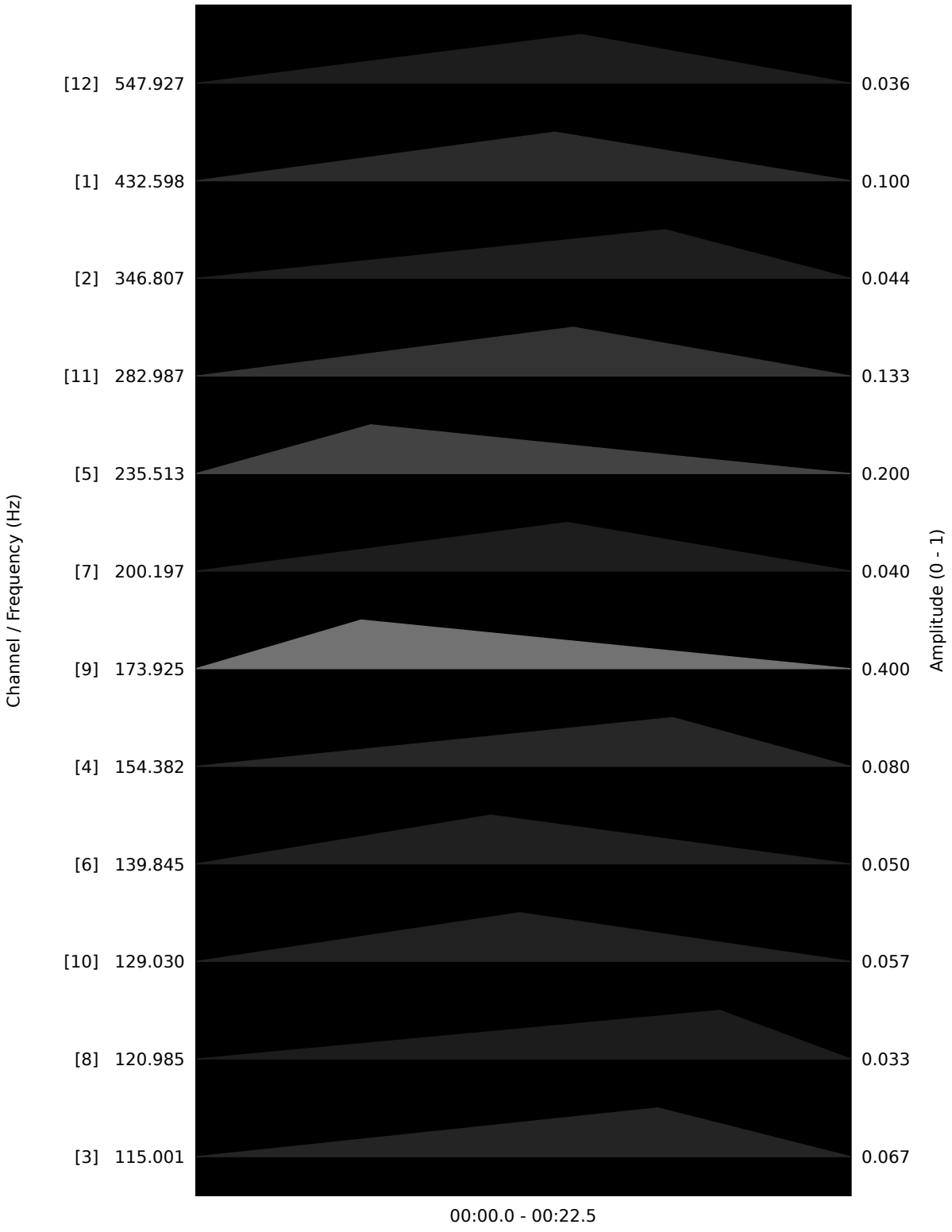
Each sound consists of 12 sine waves, which are distributed over the 12 channels

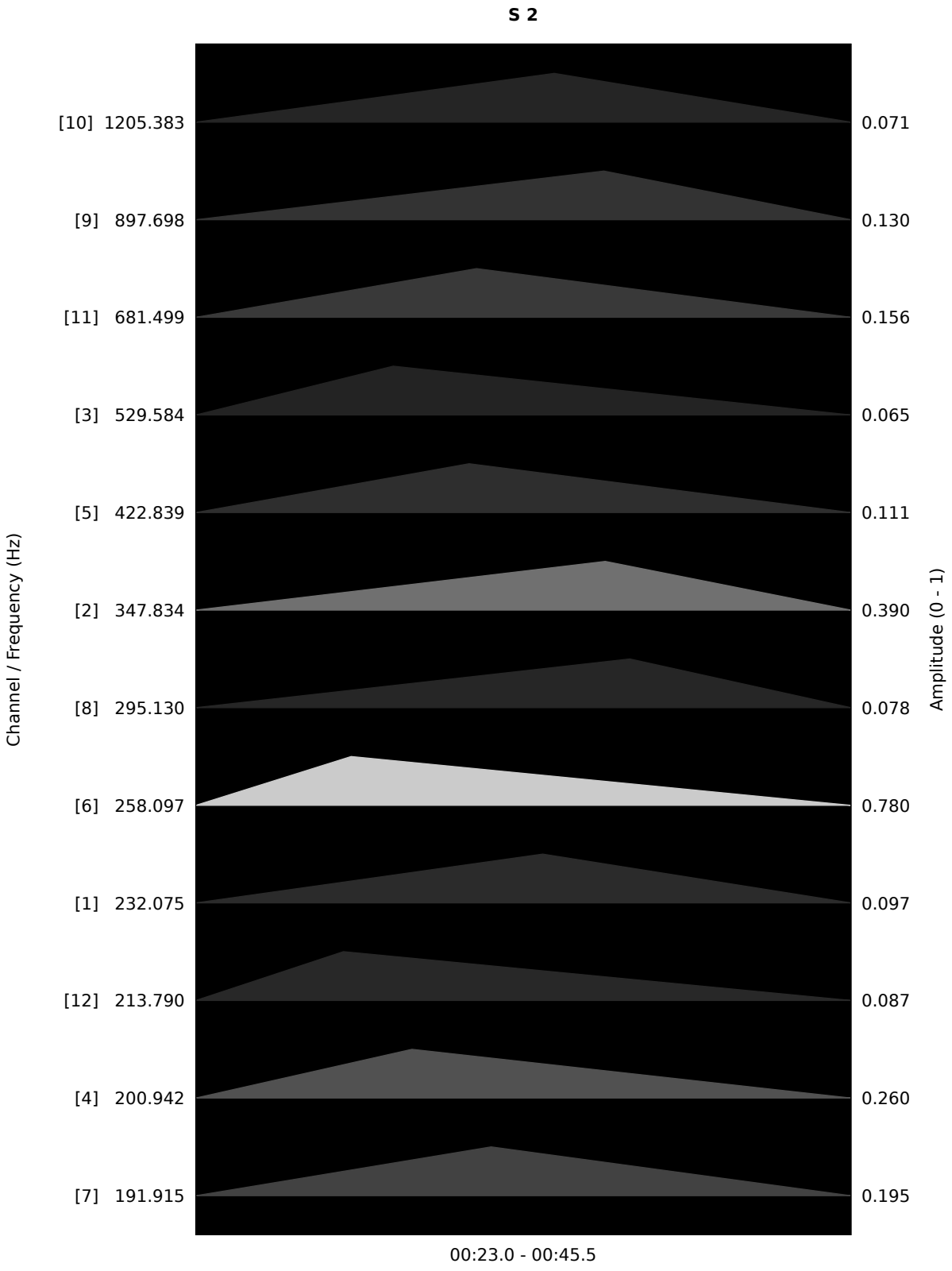
Frequency scales: slowly rising (concave) curves

Frequency range: 100.000 - 5502.381 Hz

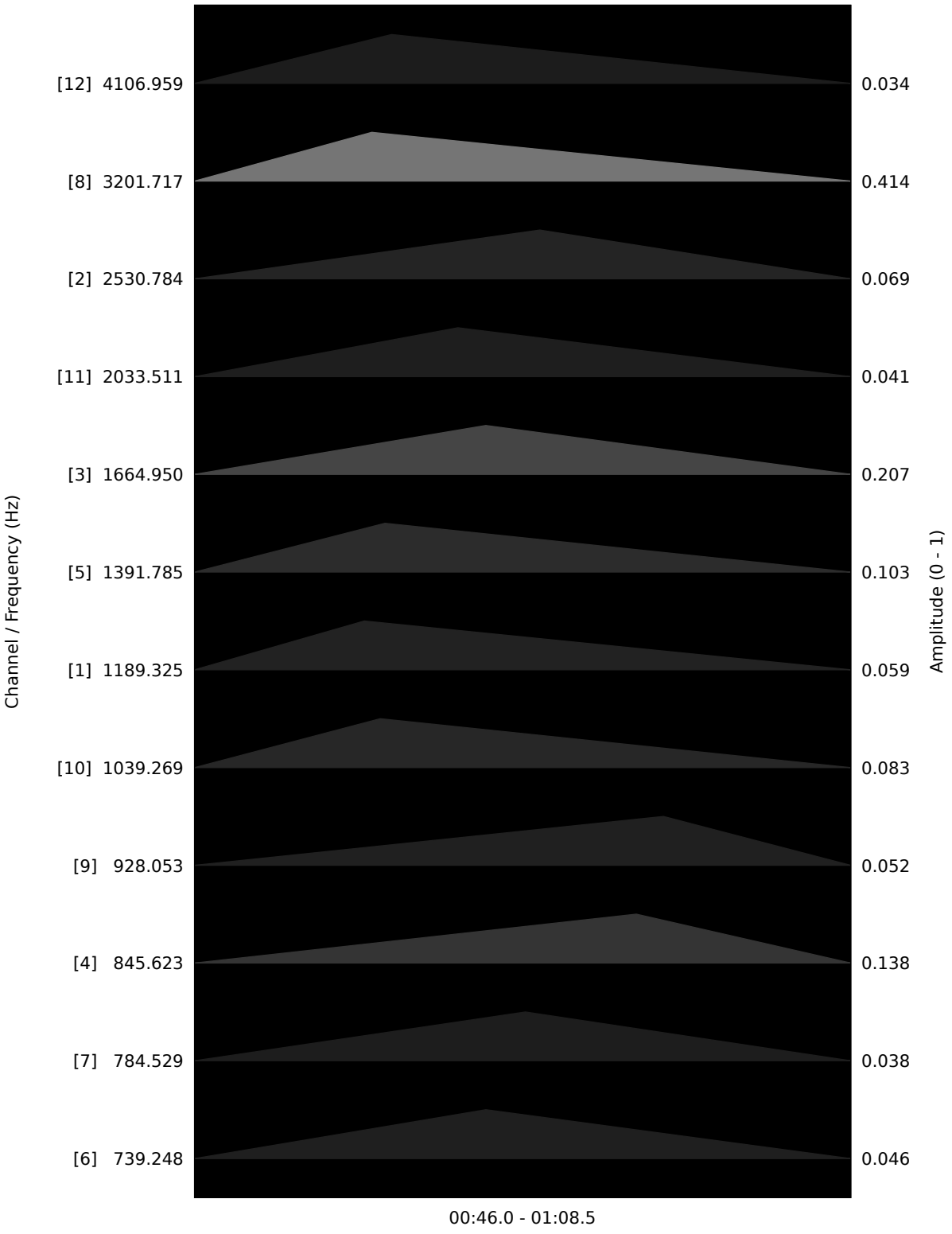
May 2020, Heilbronn

S 1

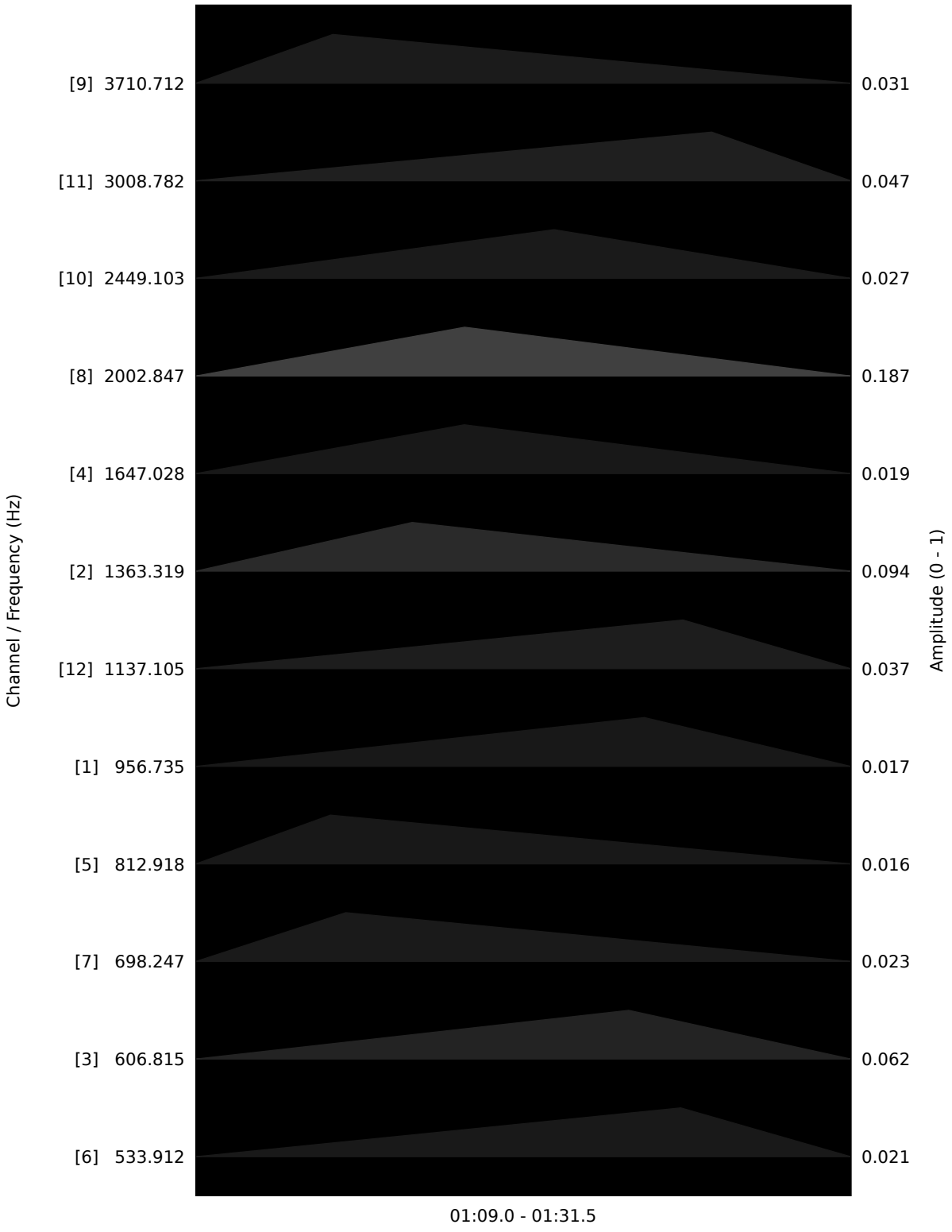

[12] 547.927
[1] 432.598
[2] 346.807
[11] 282.987
[5] 235.513
[7] 200.197
[9] 173.925
[4] 154.382
[6] 139.845
[10] 129.030
[8] 120.985
[3] 115.001
0.036
0.100
0.044
0.133
0.200
0.040
0.400
0.080
0.050
0.057
0.033
0.067
Channel / Frequency (Hz)
Amplitude (0 - 1)
00:00.0 - 00:22.5


S 2
[10] 1205.383
[9] 897.698
[11] 681.499
[3] 529.584
[5] 422.839
[2] 347.834
[8] 295.130
[6] 258.097
[1] 232.075
[12] 213.790
[4] 200.942
[7] 191.915
0.071
0.130
0.156
0.065
0.111
0.390
0.078
0.780
0.097
0.087
0.260
0.195
Channel / Frequency (Hz)
Amplitude (0 - 1)
00:23.0 - 00:45.5

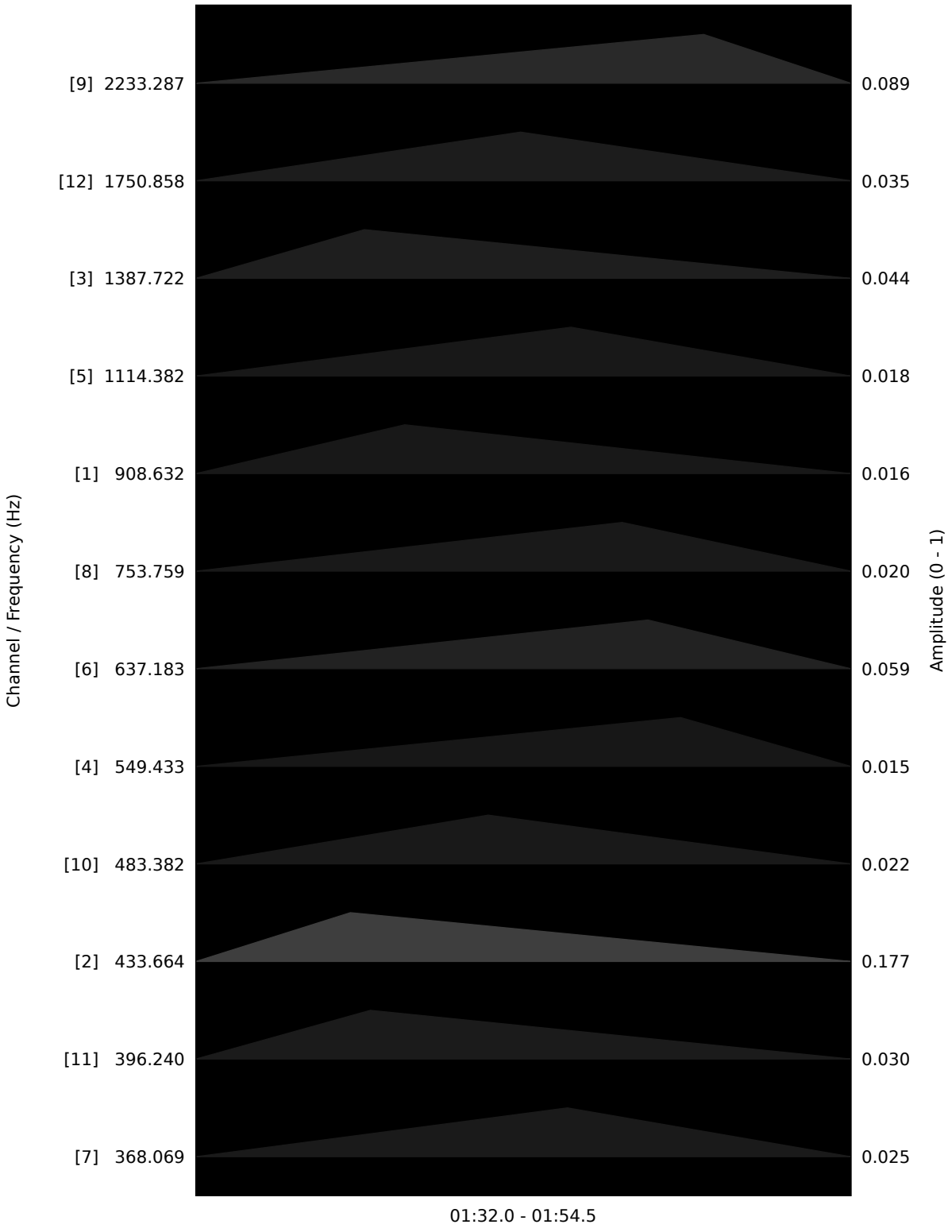
S 3


[12] 4106.959
[8] 3201.717
[2] 2530.784
[11] 2033.511
[3] 1664.950
[5] 1391.785
[1] 1189.325
[10] 1039.269
[9] 928.053
[4] 845.623
[7] 784.529
[6] 739.248
0.034
0.414
0.069
0.041
0.207
0.103
0.059
0.083
0.052
0.138
0.038
0.046
Channel / Frequency (Hz)
Amplitude (0 - 1)
00:46.0 - 01:08.5

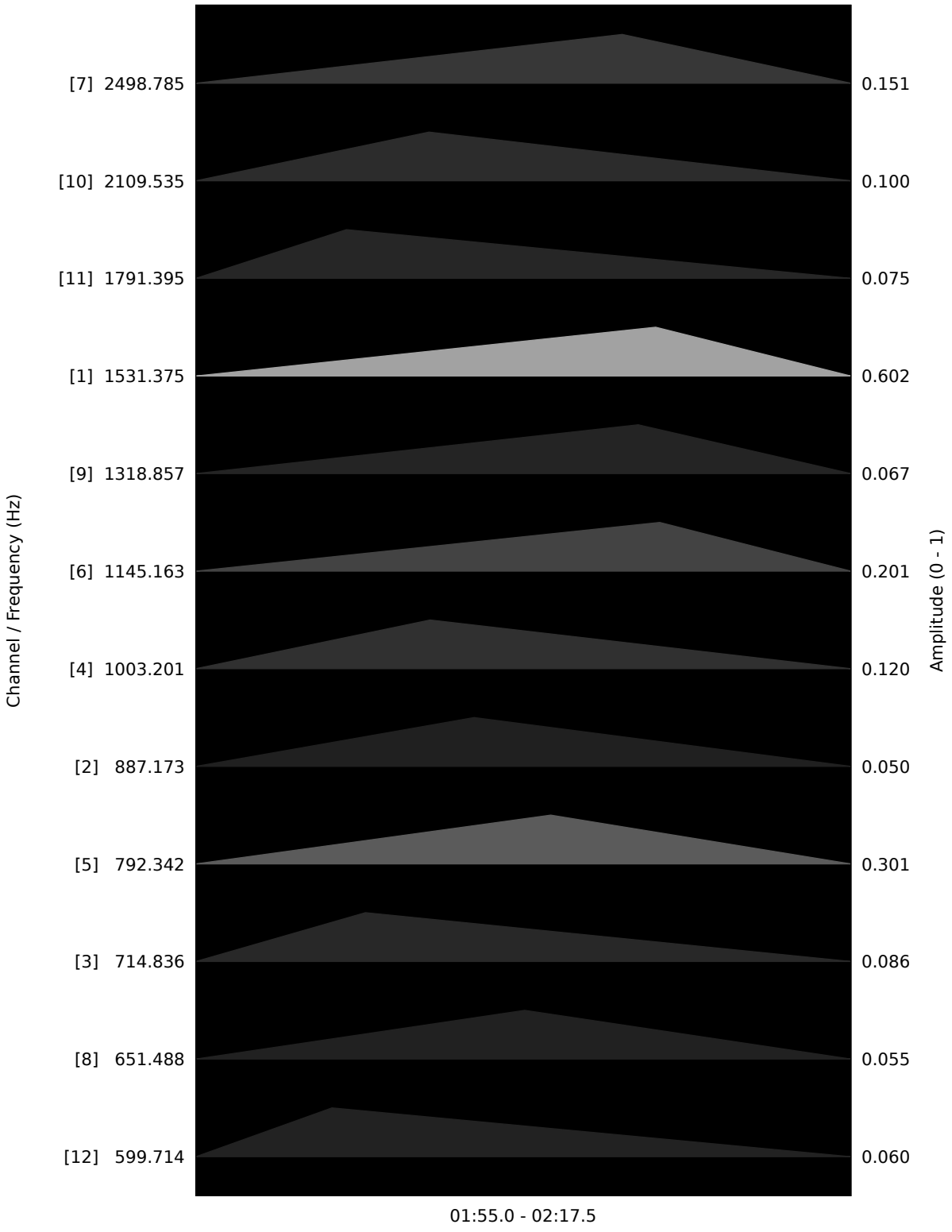
S 4


[9] 3710.712
[11] 3008.782
[10] 2449.103
[8] 2002.847
[4] 1647.028
[2] 1363.319
[12] 1137.105
[1] 956.735
[5] 812.918
[7] 698.247
[3] 606.815
[6] 533.912
0.031
0.047
0.027
0.187
0.019
0.094
0.037
0.017
0.016
0.023
0.062
0.021
Channel / Frequency (Hz)
Amplitude (0 - 1)
01:09.0 - 01:31.5

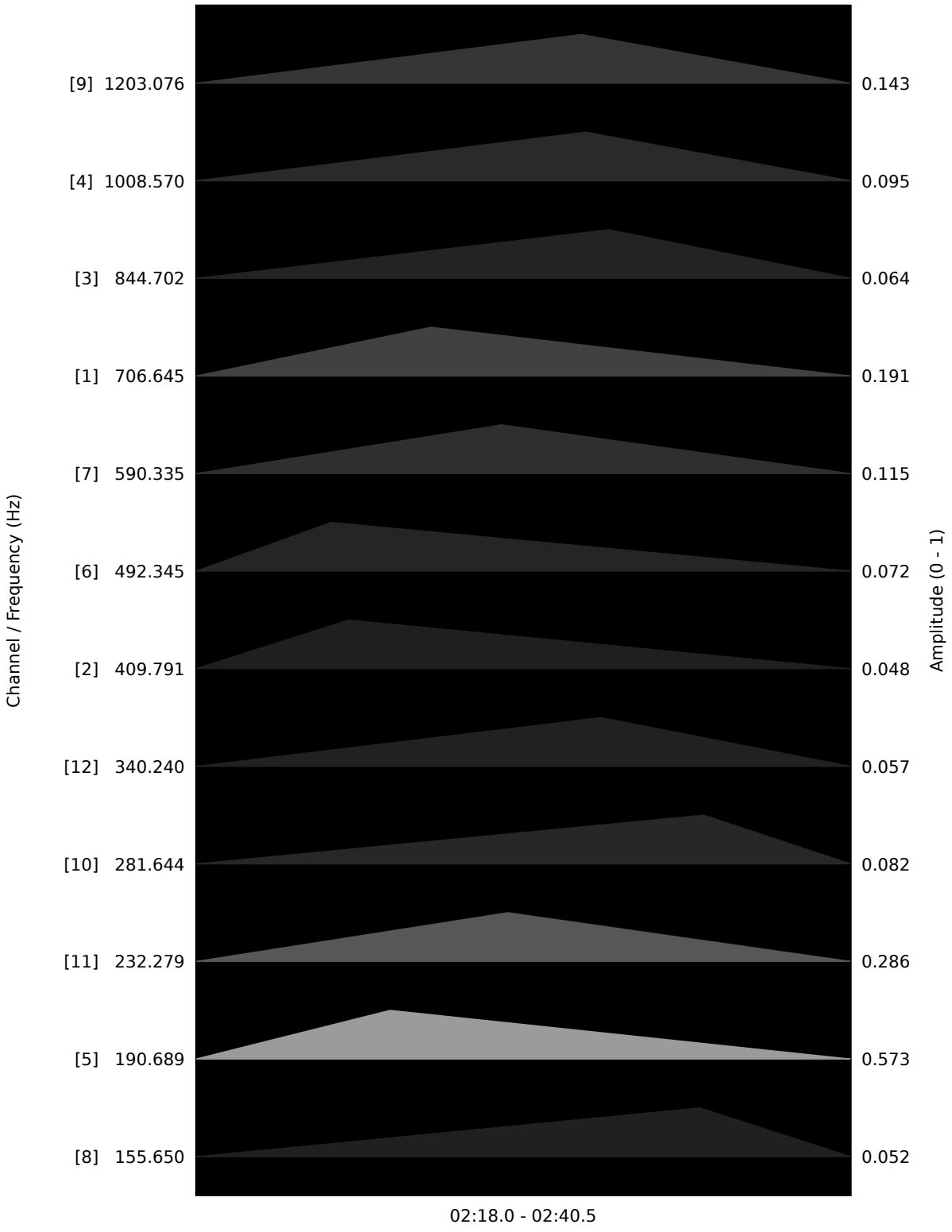
S 5


[9] 2233.287
0.089
[12] 1750.858
0.035
[3] 1387.722
0.044
[5] 1114.382
0.018
[1] 908.632
0.016
[8] 753.759
0.020
[6] 637.183
0.059
[4] 549.433
0.015
[10] 483.382
0.022
[2] 433.664
0.177
[11] 396.240
0.030
[7] 368.069
0.025
Channel / Frequency (Hz)
Amplitude (0 - 1)
01:32.0 - 01:54.5

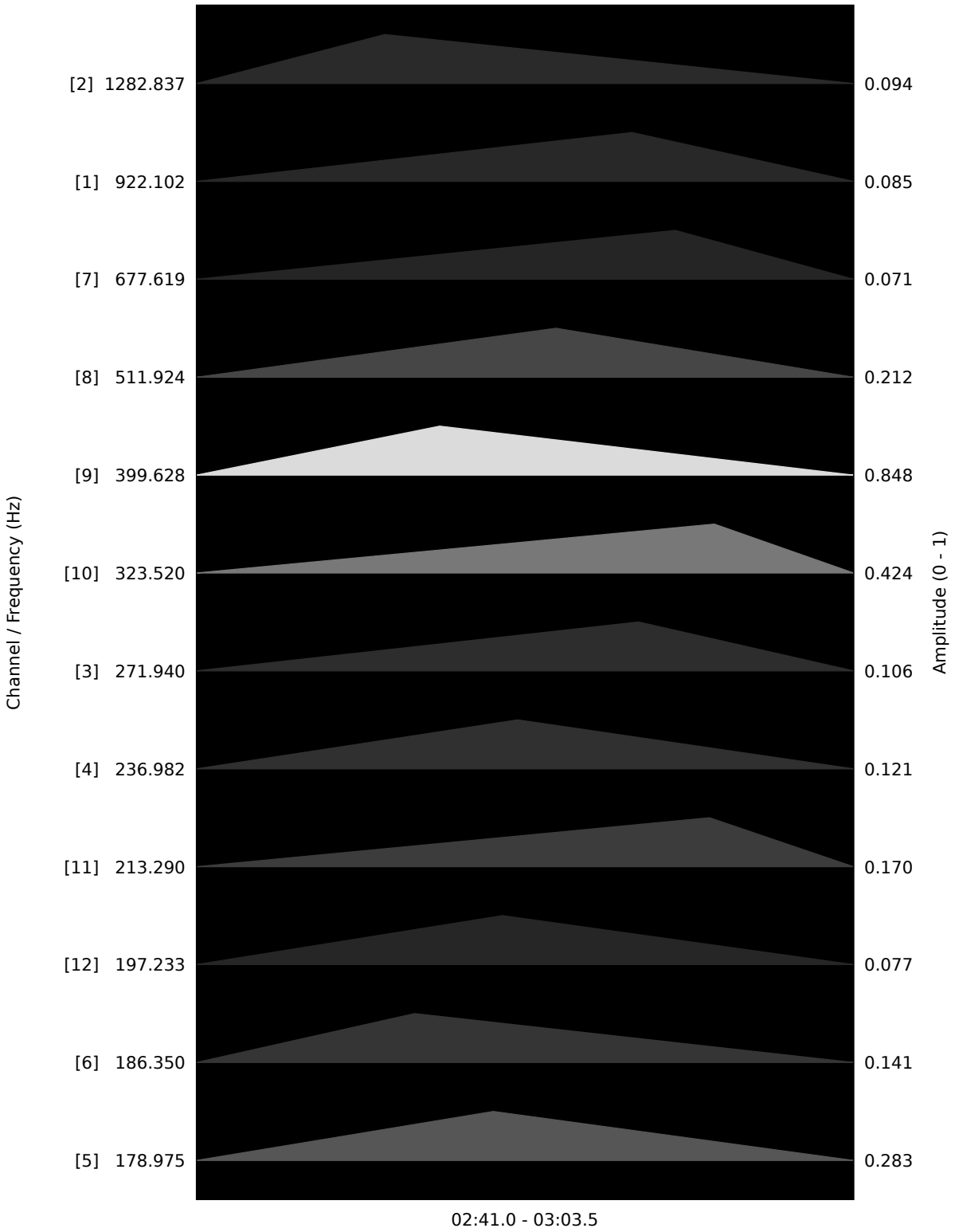
S 6


[7] 2498.785
0.151
[10] 2109.535
0.100
[11] 1791.395
0.075
[1] 1531.375
0.602
[9] 1318.857
0.067
[6] 1145.163
0.201
[4] 1003.201
0.120
[2] 887.173
0.050
[5] 792.342
0.301
[3] 714.836
0.086
[8] 651.488
0.055
[12] 599.714
0.060
Channel / Frequency (Hz)
Amplitude (0 - 1)
01:55.0 - 02:17.5

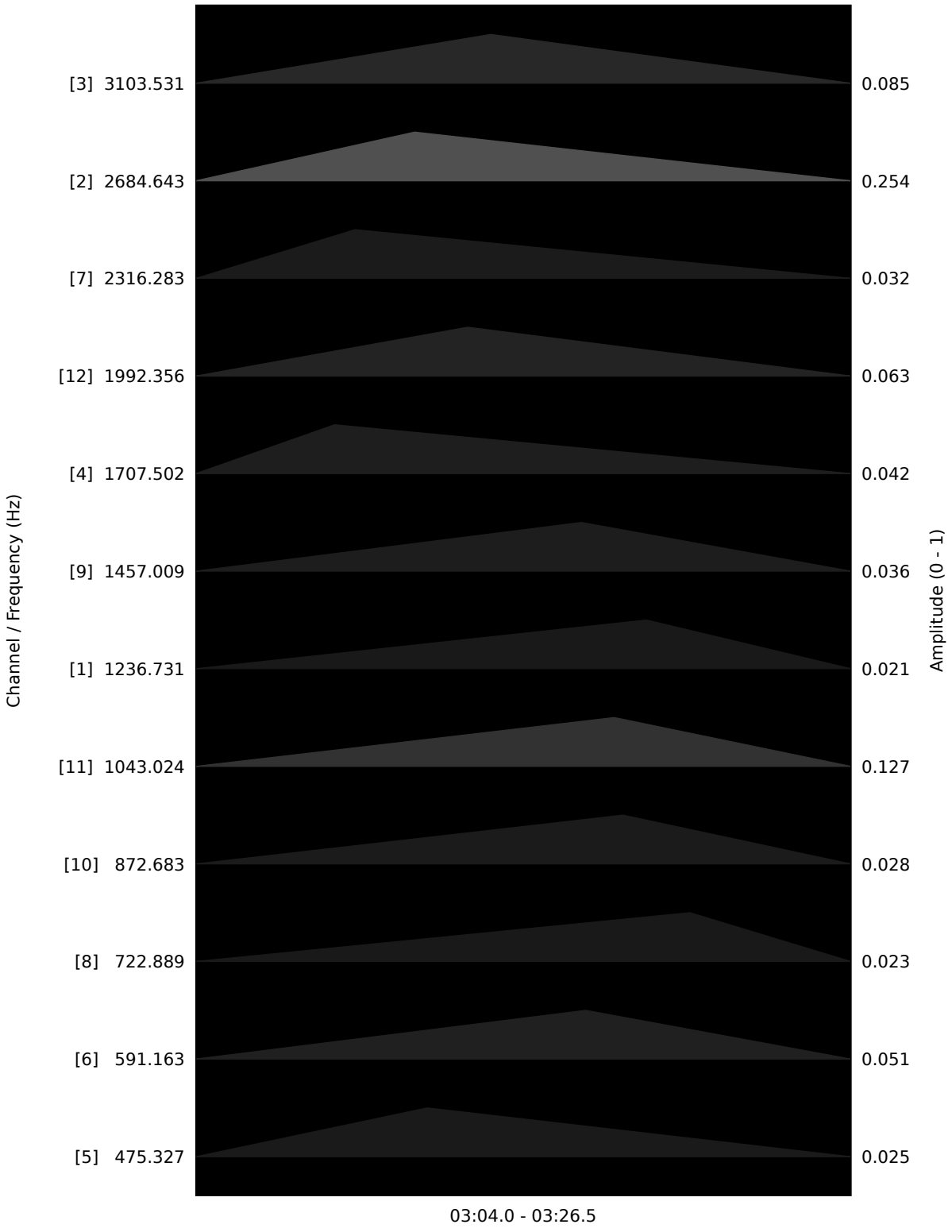
S 7


[9] 1203.076
[4] 1008.570
[3] 844.702
[1] 706.645
[7] 590.335
[6] 492.345
[2] 409.791
[12] 340.240
[10] 281.644
[11] 232.279
[5] 190.689
[8] 155.650
Channel / Frequency (Hz)
0.143
0.095
0.064
0.191
0.115
0.072
0.048
0.057
0.082
0.286
0.573
0.052
Amplitude (0 - 1)
02:18.0 - 02:40.5

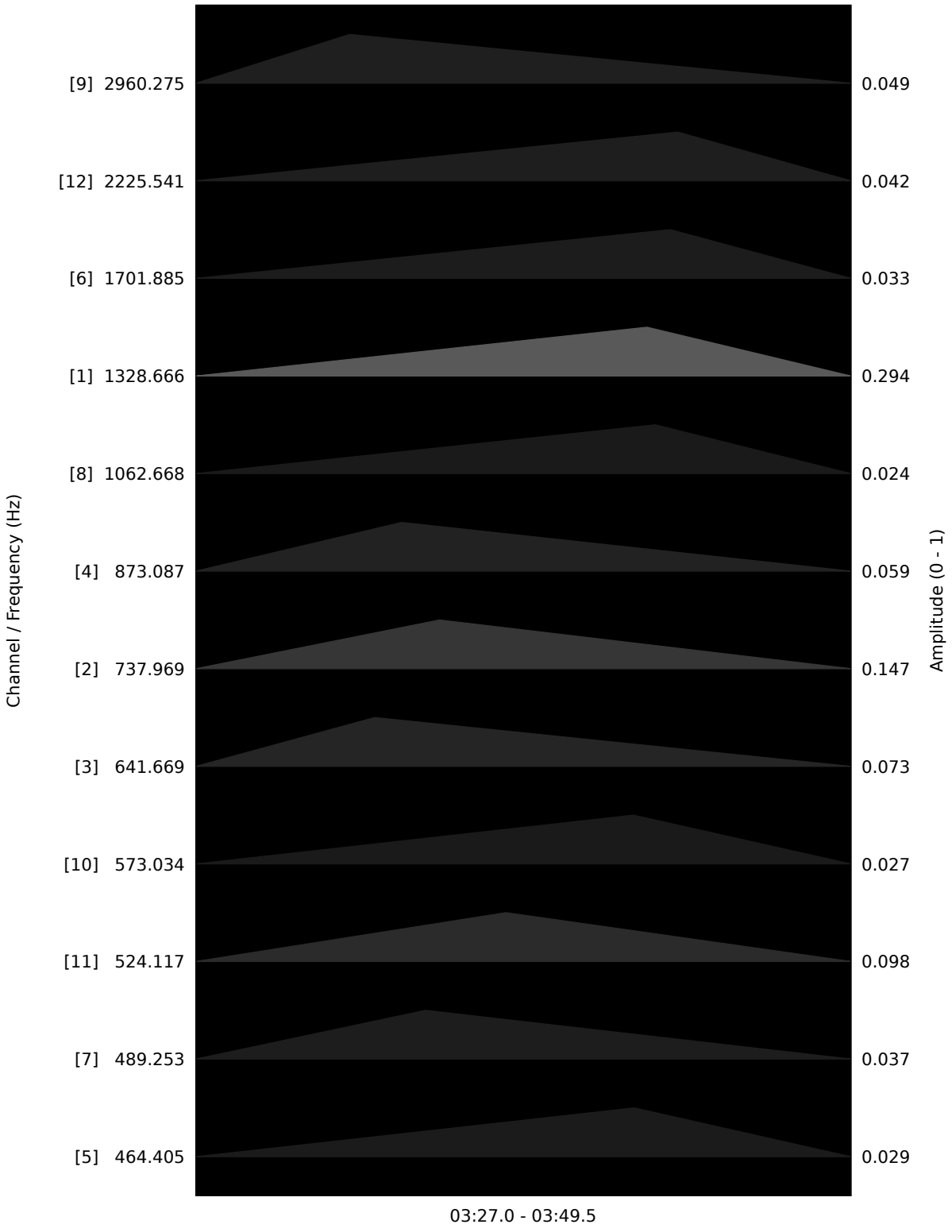
S 8


[2] 1282.837
[1] 922.102
[7] 677.619
[8] 511.924
[9] 399.628
[10] 323.520
[3] 271.940
[4] 236.982
[11] 213.290
[12] 197.233
[6] 186.350
[5] 178.975
0.094
0.085
0.071
0.212
0.848
0.424
0.106
0.121
0.170
0.077
0.141
0.283
Channel / Frequency (Hz)
Amplitude (0 - 1)
02:41.0 - 03:03.5

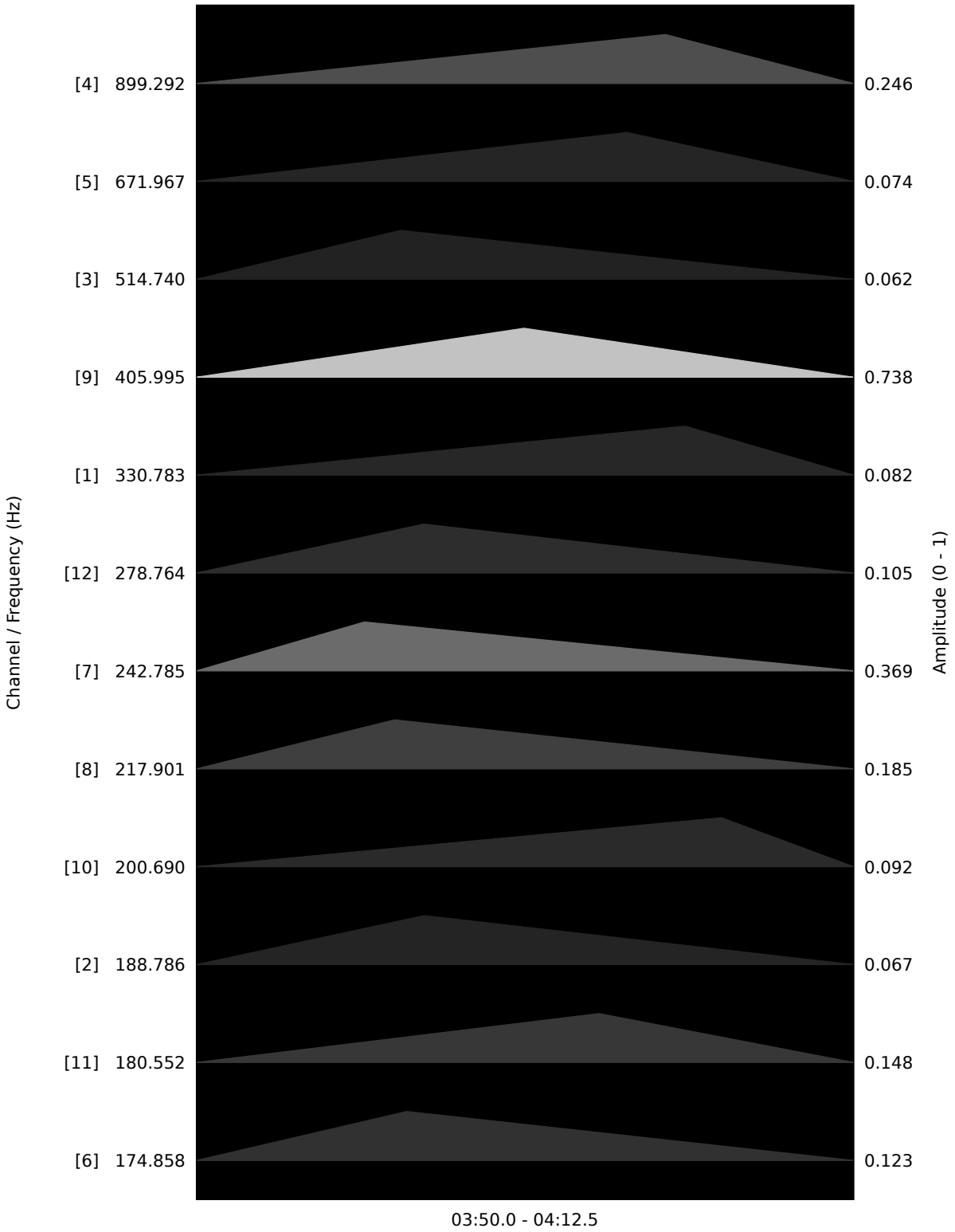
S 9


[3] 3103.531
[2] 2684.643
[7] 2316.283
[12] 1992.356
[4] 1707.502
[9] 1457.009
[1] 1236.731
[11] 1043.024
[10] 872.683
[8] 722.889
[6] 591.163
[5] 475.327
0.085
0.254
0.032
0.063
0.042
0.036
0.021
0.127
0.028
0.023
0.051
0.025
Channel / Frequency (Hz)
Amplitude (0 - 1)
03:04.0 - 03:26.5

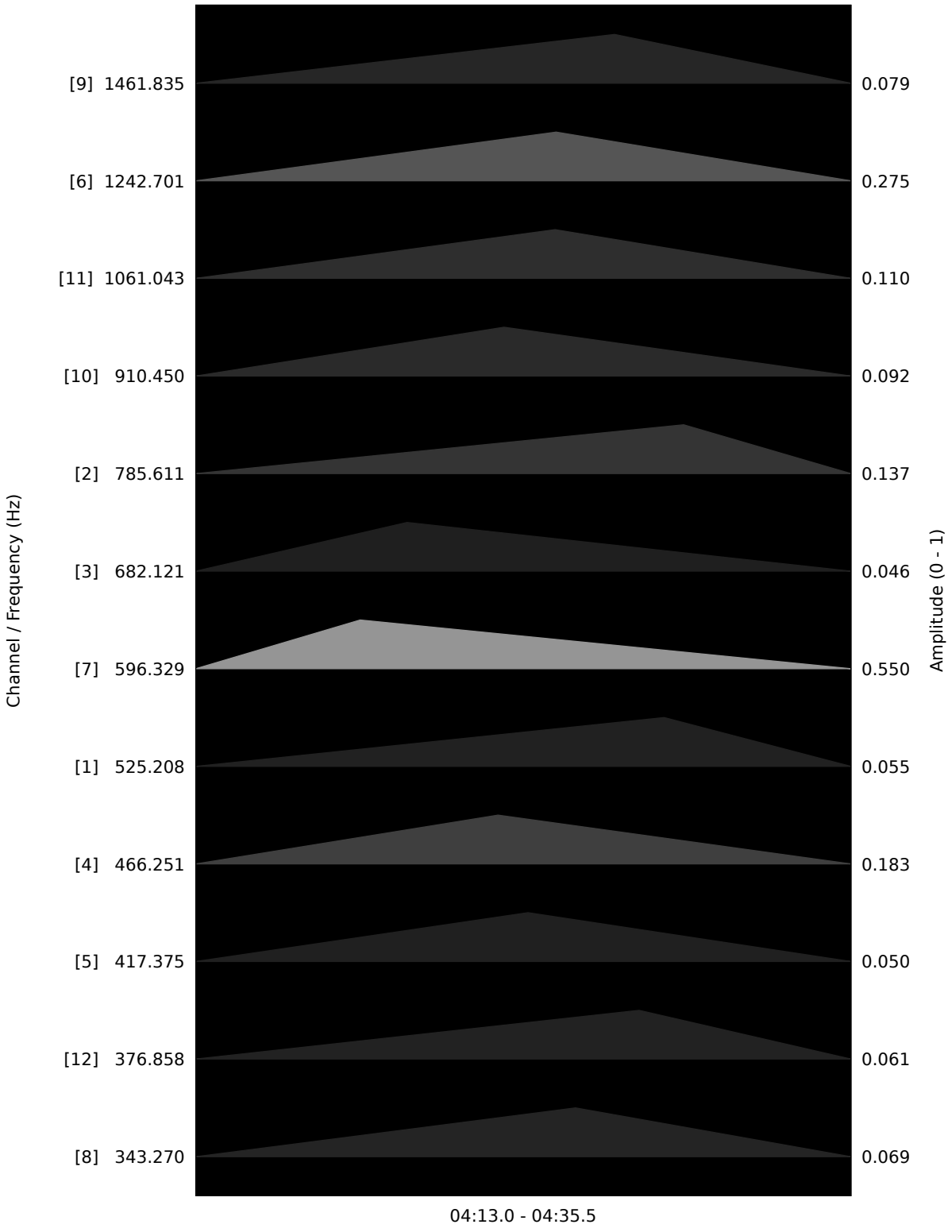
S 10


[9] 2960.275
[12] 2225.541
[6] 1701.885
[1] 1328.666
[8] 1062.668
[4] 873.087
[2] 737.969
[3] 641.669
[10] 573.034
[11] 524.117
[7] 489.253
[5] 464.405
0.049
0.042
0.033
0.294
0.024
0.059
0.147
0.073
0.027
0.098
0.037
0.029
Channel / Frequency (Hz)
Amplitude (0 - 1)
03:27.0 - 03:49.5

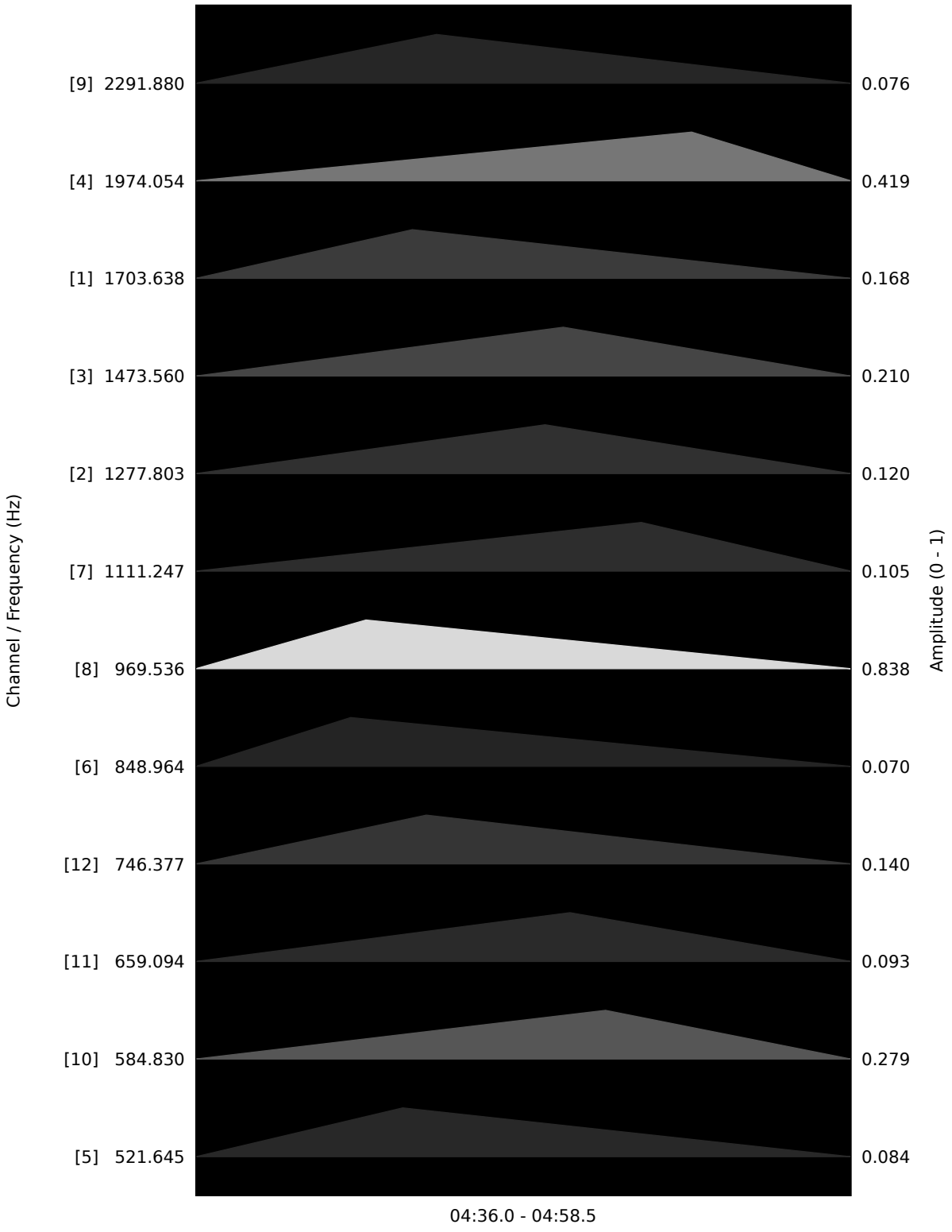
S 11


[4] 899.292
0.246
[5] 671.967
0.074
[3] 514.740
0.062
[9] 405.995
0.738
[1] 330.783
0.082
[12] 278.764
0.105
[7] 242.785
0.369
[8] 217.901
0.185
[10] 200.690
0.092
[2] 188.786
0.067
[11] 180.552
0.148
[6] 174.858
0.123
Channel / Frequency (Hz)
Amplitude (0 - 1)
03:50.0 - 04:12.5

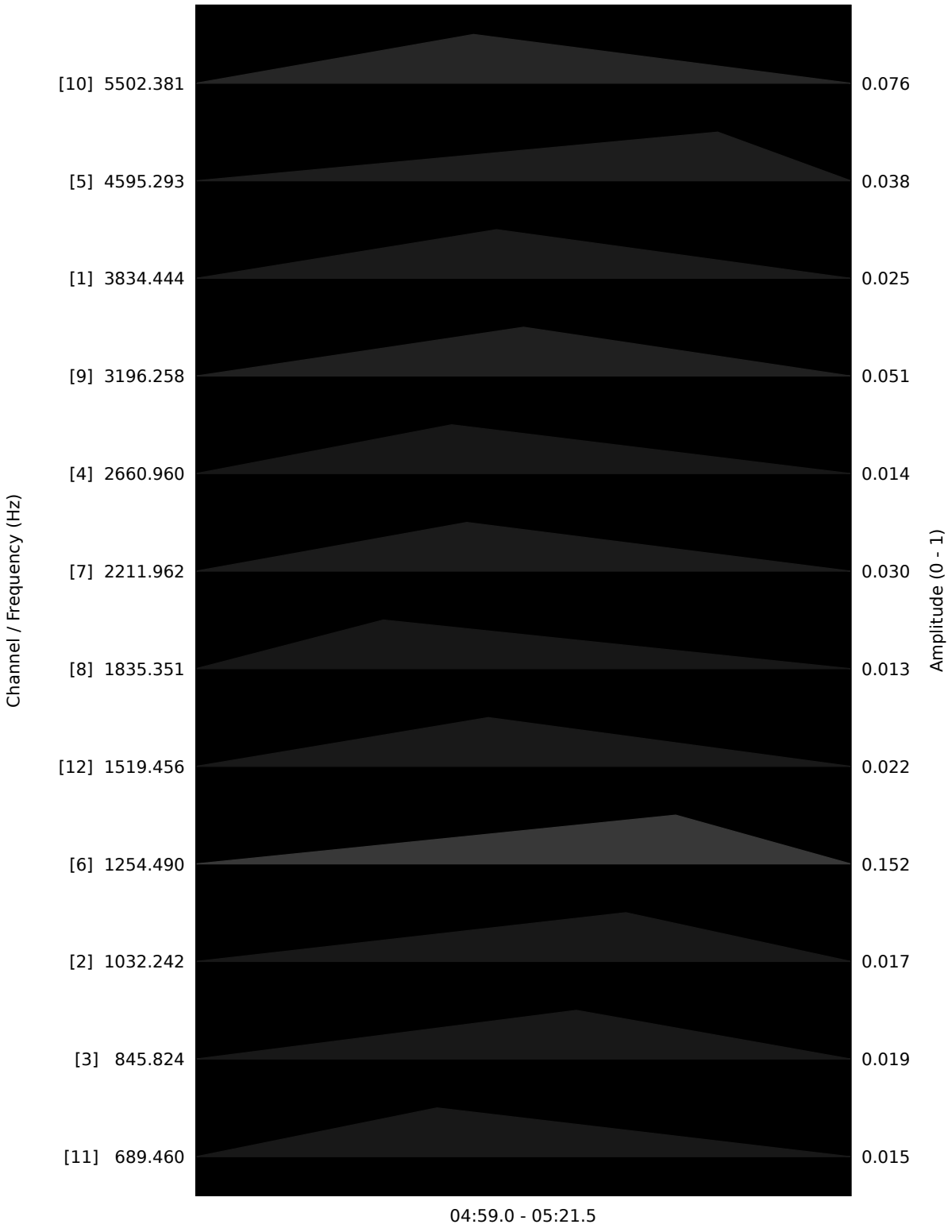
S 12


[9] 1461.835
[6] 1242.701
[11] 1061.043
[10] 910.450
[2] 785.611
[3] 682.121
[7] 596.329
[1] 525.208
[4] 466.251
[5] 417.375
[12] 376.858
[8] 343.270
0.079
0.275
0.110
0.092
0.137
0.046
0.550
0.055
0.183
0.050
0.061
0.069
Channel / Frequency (Hz)
Amplitude (0 - 1)
04:13.0 - 04:35.5

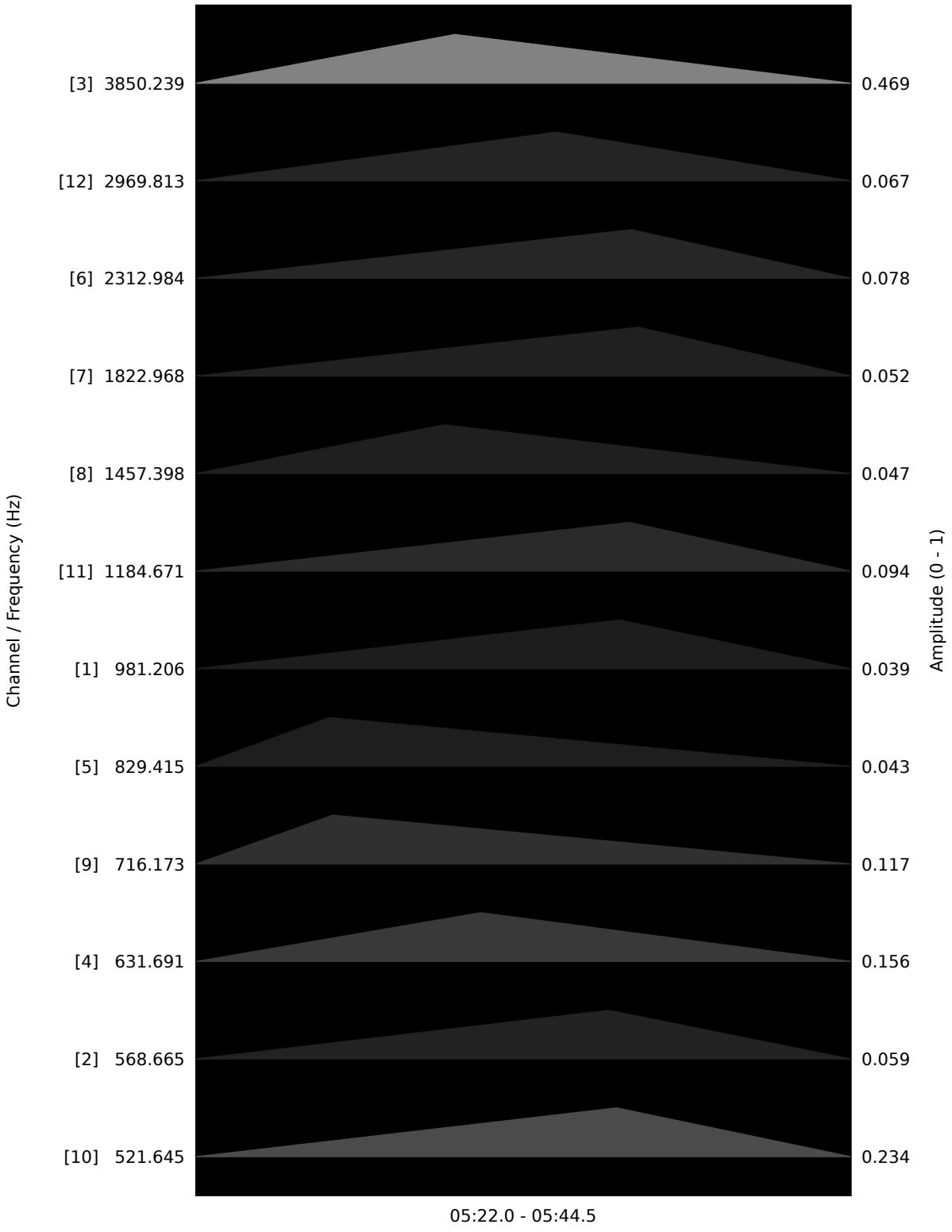
S 13


[9] 2291.880
[4] 1974.054
[1] 1703.638
[3] 1473.560
[2] 1277.803
[7] 1111.247
[8] 969.536
[6] 848.964
[12] 746.377
[11] 659.094
[10] 584.830
[5] 521.645
0.076
0.419
0.168
0.210
0.120
0.105
0.838
0.070
0.140
0.093
0.279
0.084
Channel / Frequency (Hz)
Amplitude (0 - 1)
04:36.0 - 04:58.5

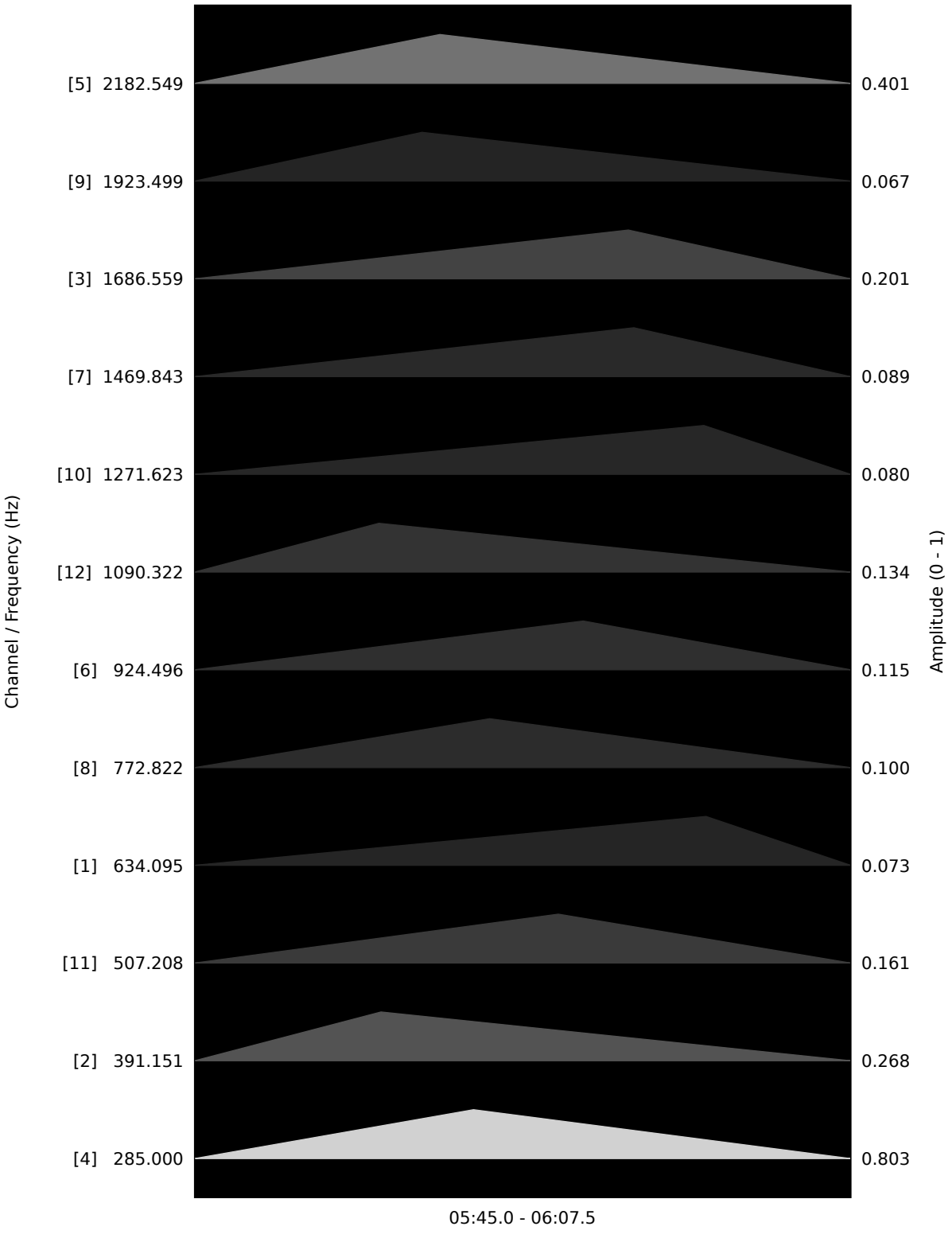
S 14


[10] 5502.381
[5] 4595.293
[1] 3834.444
[9] 3196.258
[4] 2660.960
[7] 2211.962
[8] 1835.351
[12] 1519.456
[6] 1254.490
[2] 1032.242
[3] 845.824
[11] 689.460
0.076
0.038
0.025
0.051
0.014
0.030
0.013
0.022
0.152
0.017
0.019
0.015
Channel / Frequency (Hz)
Amplitude (0 - 1)
04:59.0 - 05:21.5

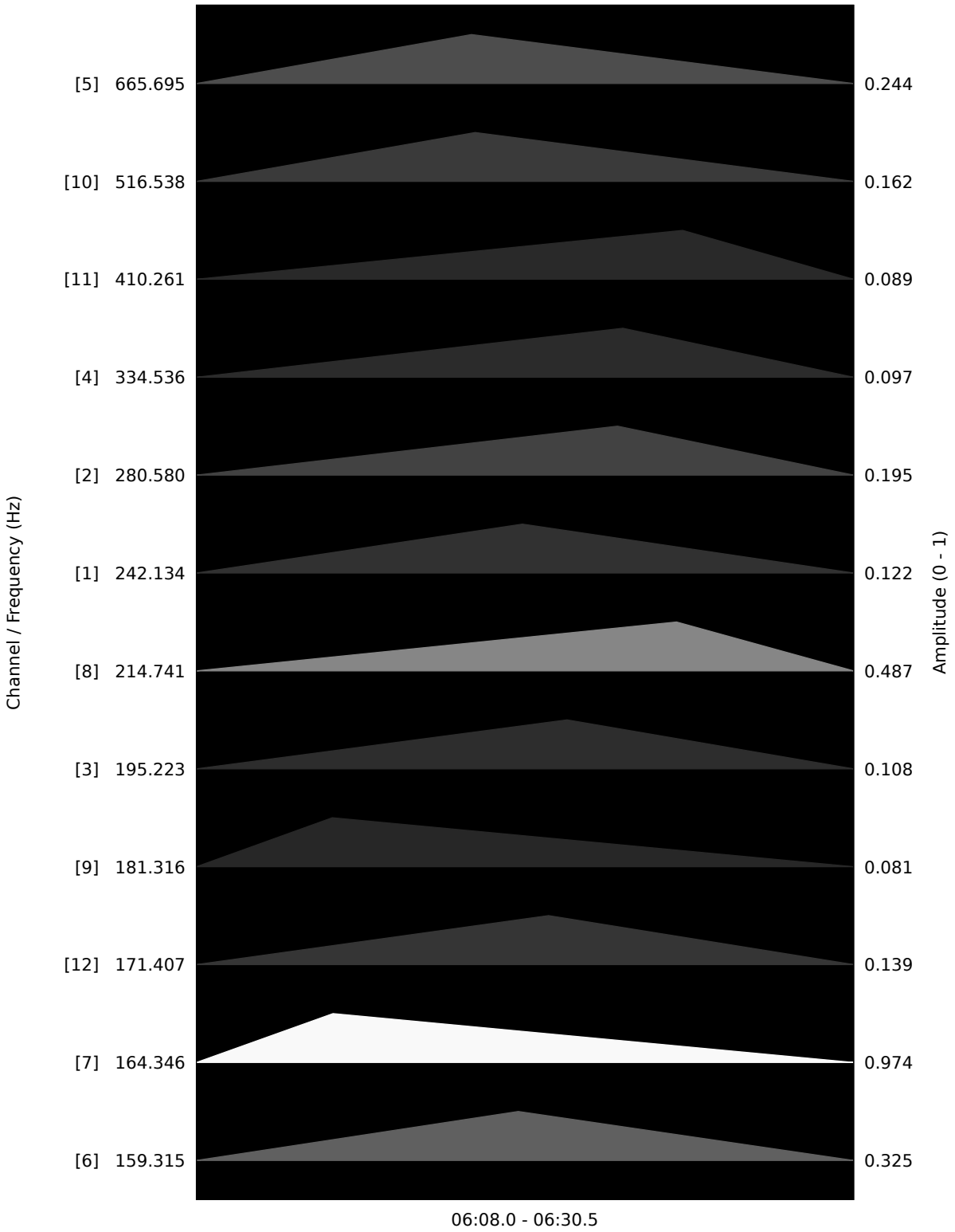
S 15


[3] 3850.239
0.469
[12] 2969.813
0.067
[6] 2312.984
0.078
[7] 1822.968
0.052
[8] 1457.398
0.047
[11] 1184.671
0.094
[1] 981.206
0.039
[5] 829.415
0.043
[9] 716.173
0.117
[4] 631.691
0.156
[2] 568.665
0.059
[10] 521.645
0.234
Channel / Frequency (Hz)
Amplitude (0 - 1)
05:22.0 - 05:44.5

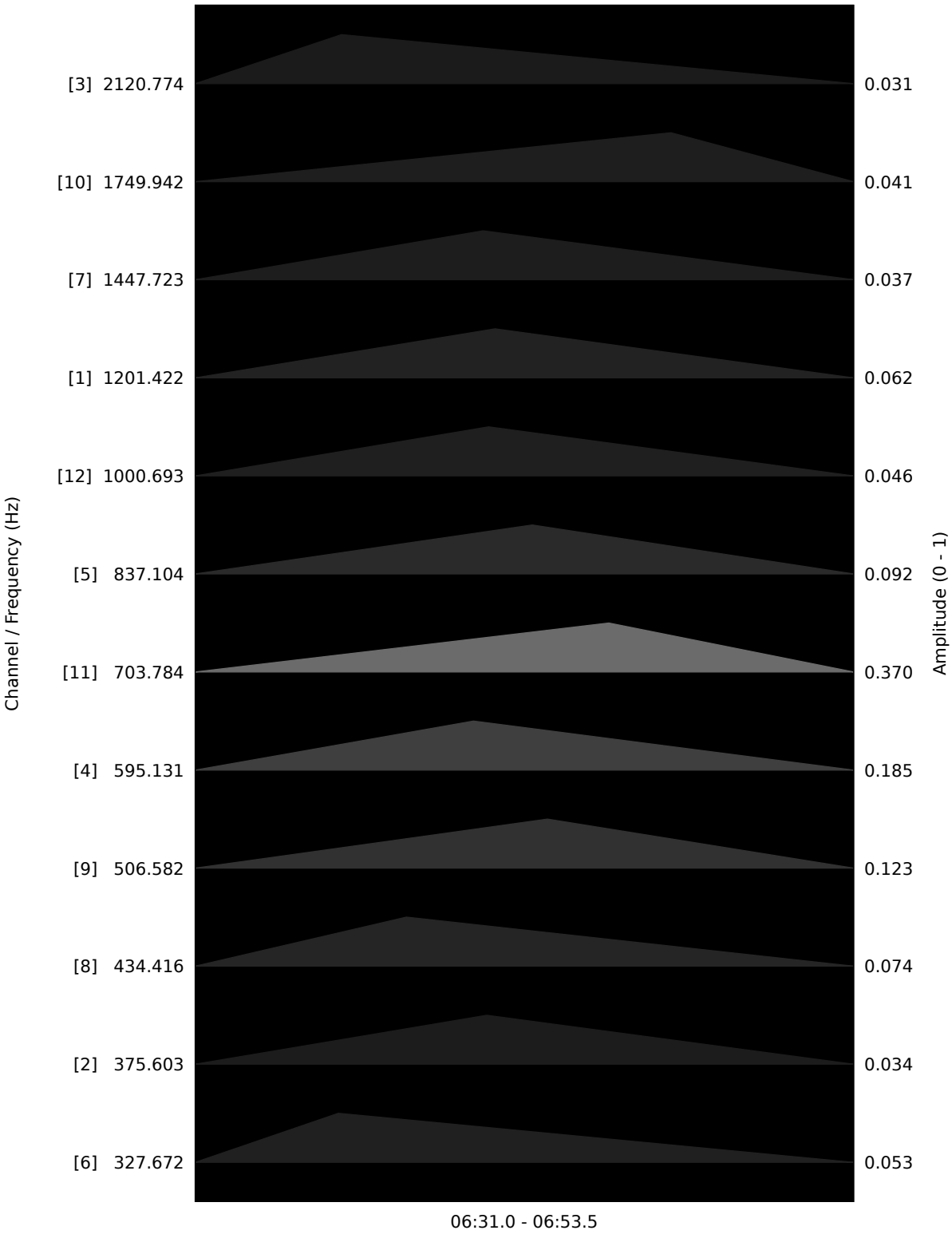
S 16


[5] 2182.549
[9] 1923.499
[3] 1686.559
[7] 1469.843
[10] 1271.623
[12] 1090.322
[6] 924.496
[8] 772.822
[1] 634.095
[11] 507.208
[2] 391.151
[4] 285.000
0.401
0.067
0.201
0.089
0.080
0.134
0.115
0.100
0.073
0.161
0.268
0.803
Channel / Frequency (Hz)
Amplitude (0 - 1)
05:45.0 - 06:07.5

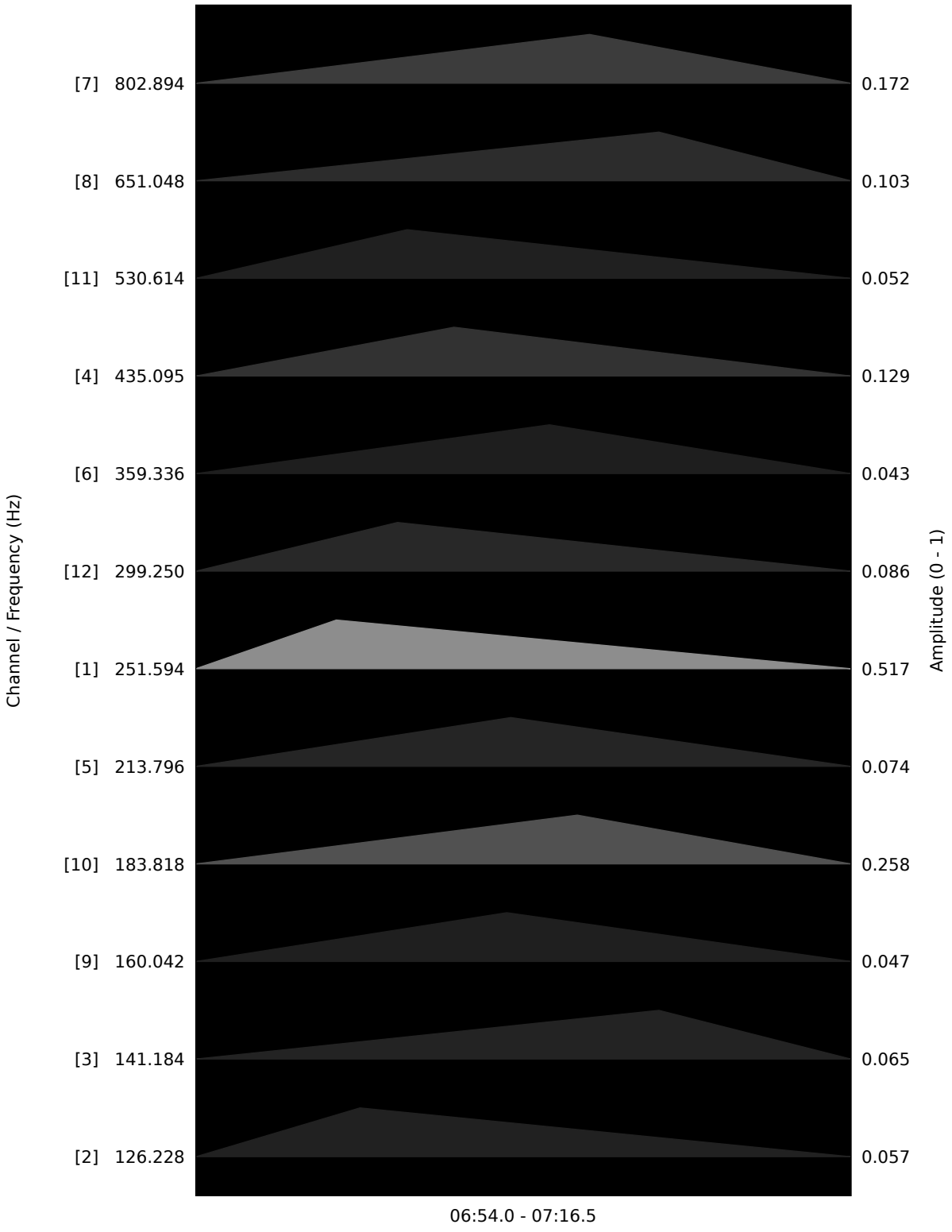
S 17


[5] 665.695
0.244
[10] 516.538
0.162
[11] 410.261
0.089
[4] 334.536
0.097
[2] 280.580
0.195
[1] 242.134
0.122
[8] 214.741
0.487
[3] 195.223
0.108
[9] 181.316
0.081
[12] 171.407
0.139
[7] 164.346
0.974
[6] 159.315
0.325
Channel / Frequency (Hz)
Amplitude (0 - 1)
06:08.0 - 06:30.5

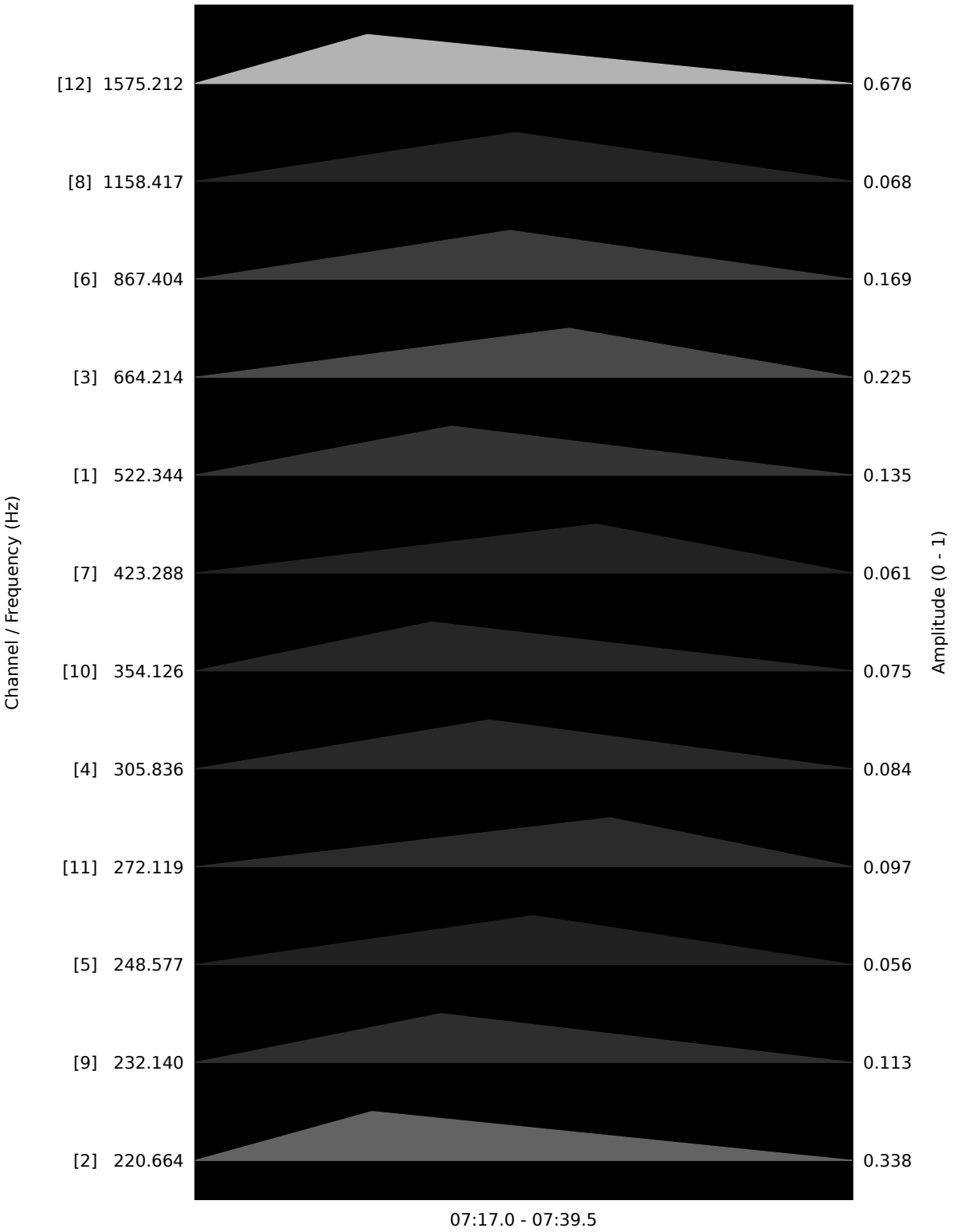
S 18


[3] 2120.774
0.031
[10] 1749.942
0.041
[7] 1447.723
0.037
[1] 1201.422
0.062
[12] 1000.693
0.046
[5] 837.104
0.092
[11] 703.784
0.370
[4] 595.131
0.185
[9] 506.582
0.123
[8] 434.416
0.074
[2] 375.603
0.034
[6] 327.672
0.053
Channel / Frequency (Hz)
Amplitude (0 - 1)
06:31.0 - 06:53.5

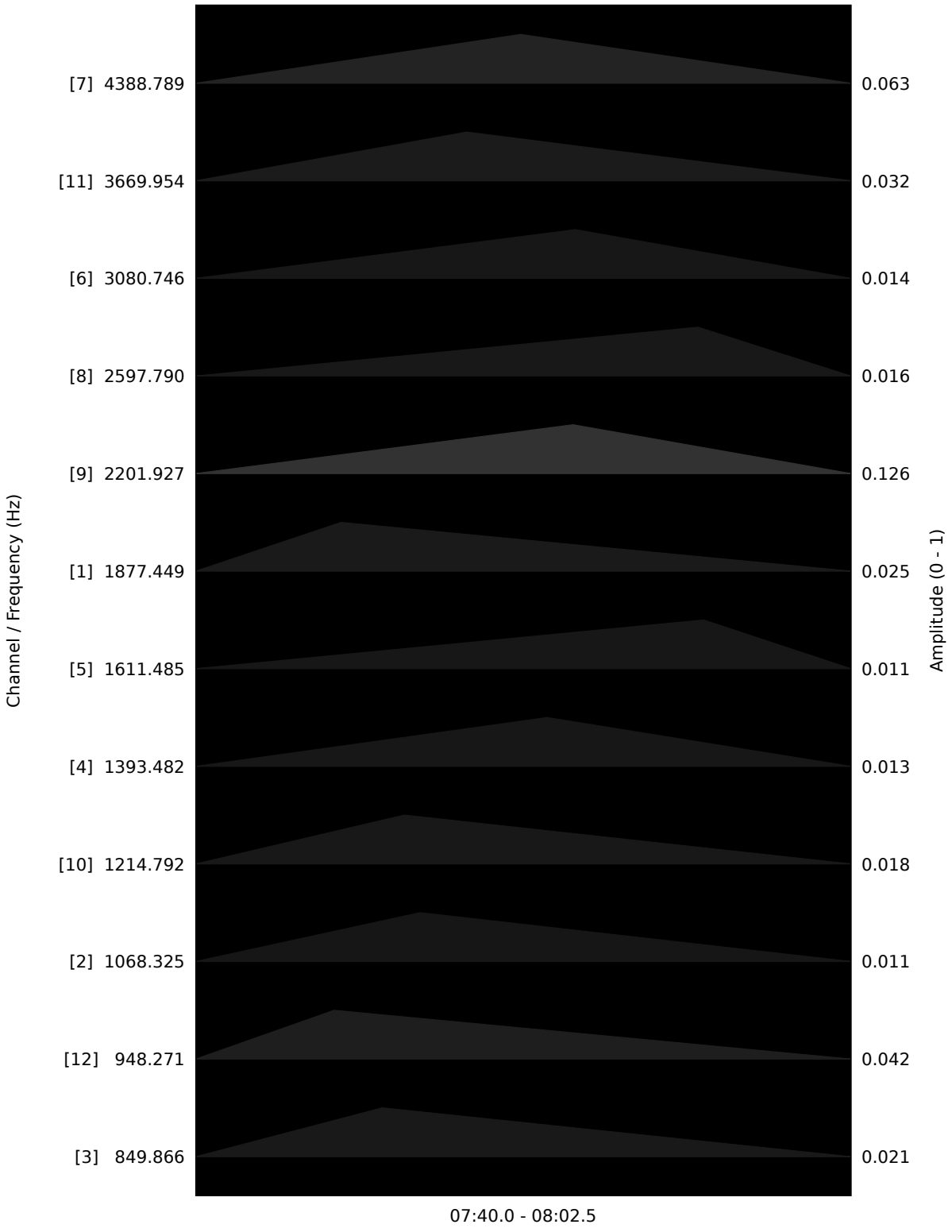
S 19


[7] 802.894
[8] 651.048
[11] 530.614
[4] 435.095
[6] 359.336
[12] 299.250
[1] 251.594
[5] 213.796
[10] 183.818
[9] 160.042
[3] 141.184
[2] 126.228
0.172
0.103
0.052
0.129
0.043
0.086
0.517
0.074
0.258
0.047
0.065
0.057
Channel / Frequency (Hz)
Amplitude (0 - 1)
06:54.0 - 07:16.5

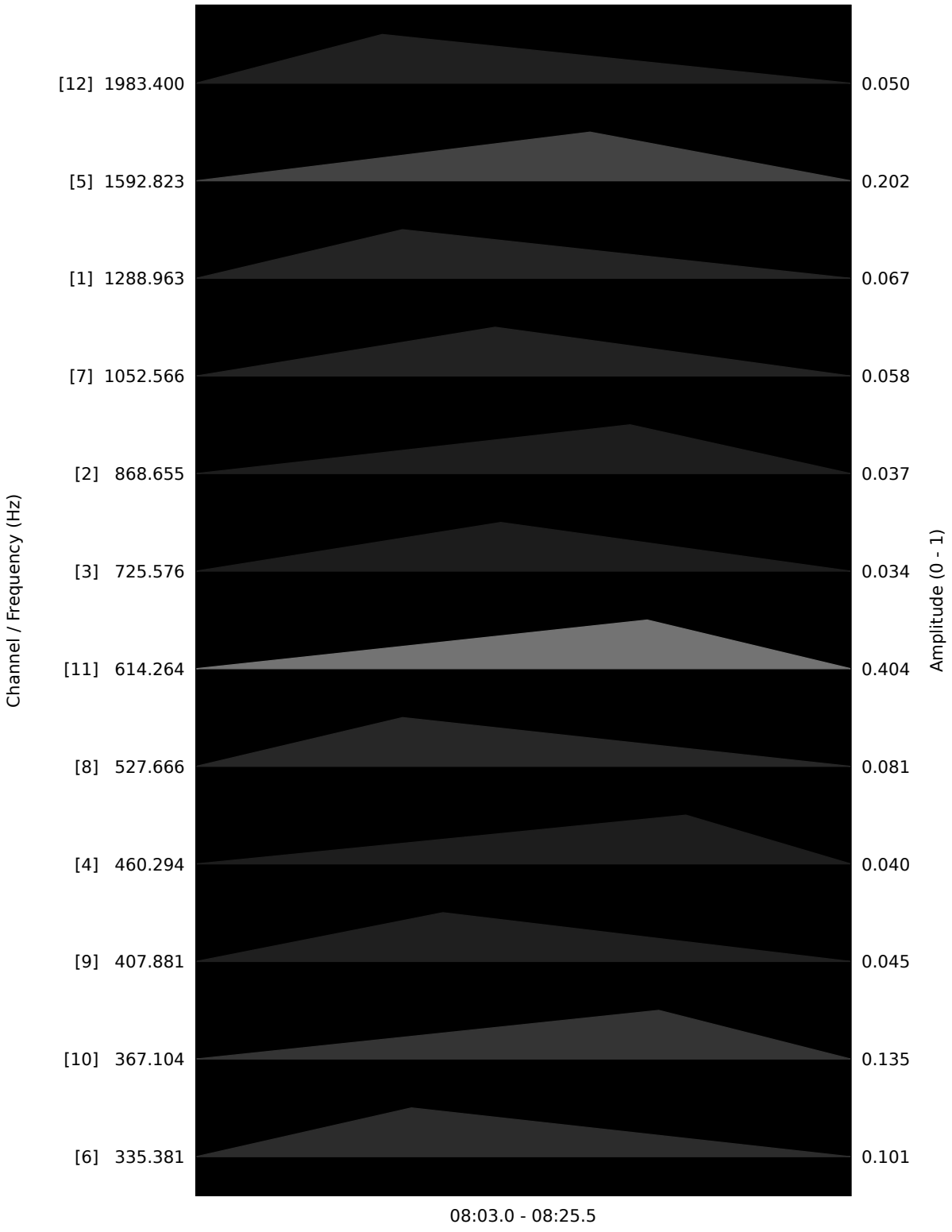
S 20


[12] 1575.212
0.676
[8] 1158.417
0.068
[6] 867.404
0.169
[3] 664.214
0.225
[1] 522.344
0.135
[7] 423.288
0.061
[10] 354.126
0.075
[4] 305.836
0.084
[11] 272.119
0.097
[5] 248.577
0.056
[9] 232.140
0.113
[2] 220.664
0.338
Channel / Frequency (Hz)
Amplitude (0 - 1)
07:17.0 - 07:39.5

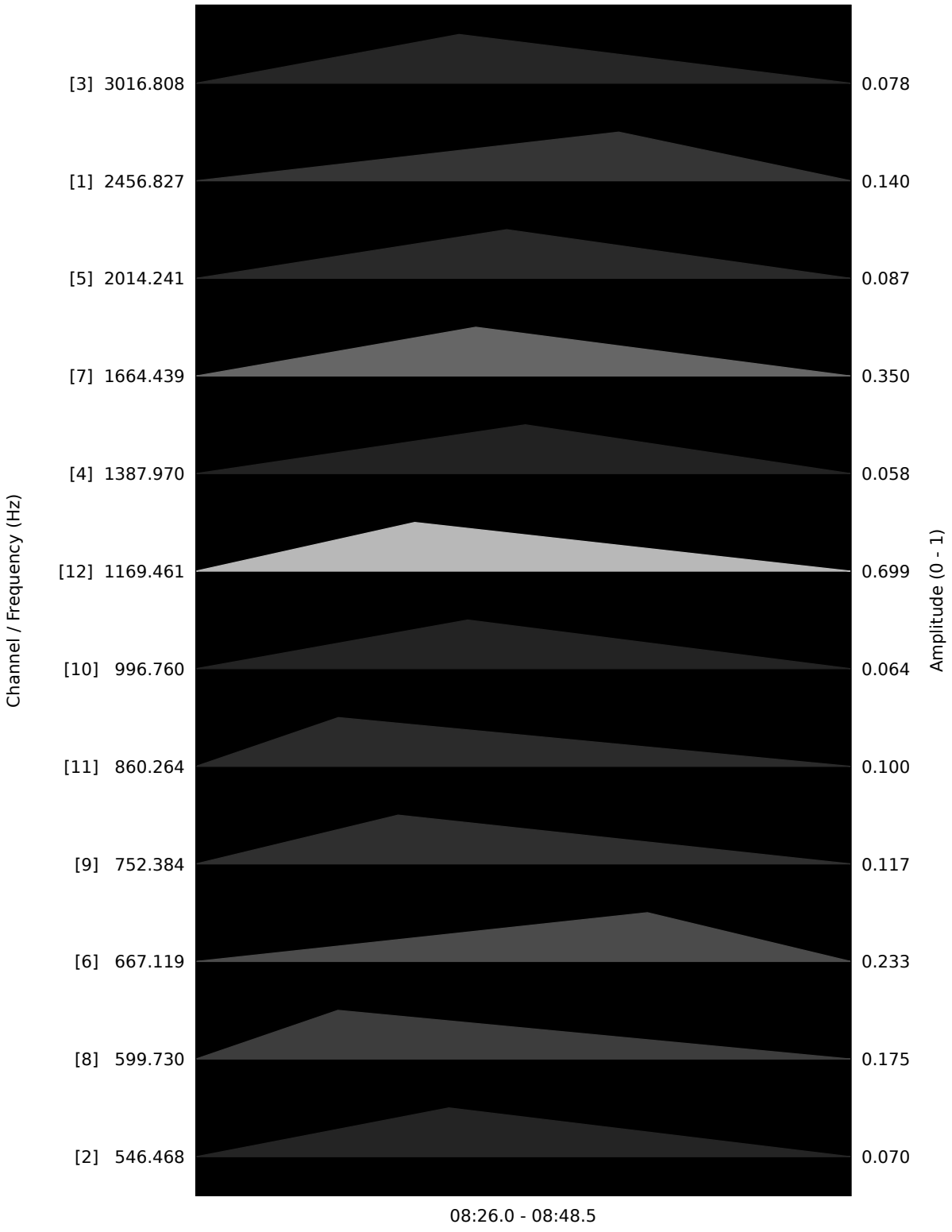
S 21


[7] 4388.789
[11] 3669.954
[6] 3080.746
[8] 2597.790
[9] 2201.927
[1] 1877.449
[5] 1611.485
[4] 1393.482
[10] 1214.792
[2] 1068.325
[12] 948.271
[3] 849.866
0.063
0.032
0.014
0.016
0.126
0.025
0.011
0.013
0.018
0.011
0.042
0.021
Channel / Frequency (Hz)
Amplitude (0 - 1)
07:40.0 - 08:02.5

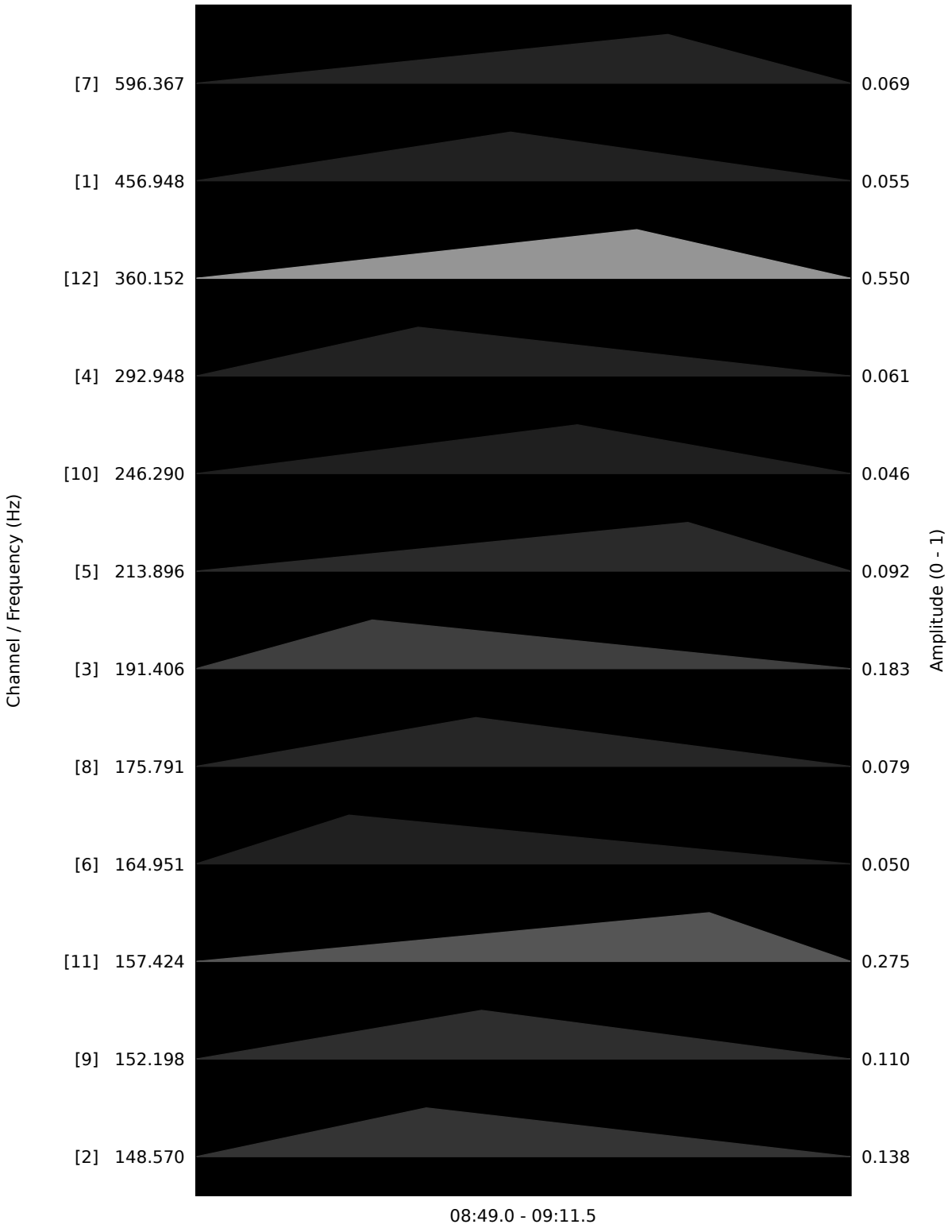
S 22


[12] 1983.400
[5] 1592.823
[1] 1288.963
[7] 1052.566
[2] 868.655
[3] 725.576
[11] 614.264
[8] 527.666
[4] 460.294
[9] 407.881
[10] 367.104
[6] 335.381
0.050
0.202
0.067
0.058
0.037
0.034
0.404
0.081
0.040
0.045
0.135
0.101
Channel / Frequency (Hz)
Amplitude (0 - 1)
08:03.0 - 08:25.5

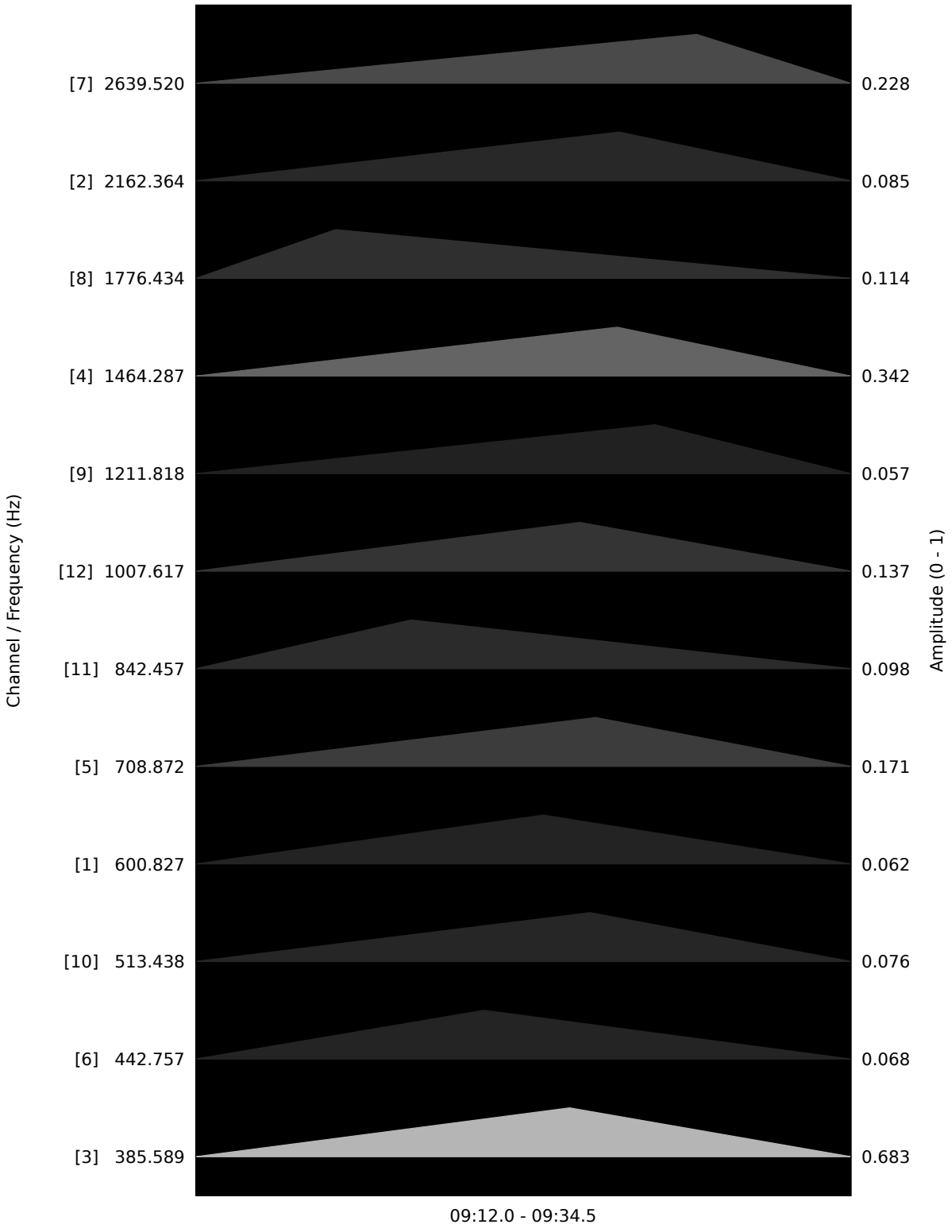
S 23


[3] 3016.808
[1] 2456.827
[5] 2014.241
[7] 1664.439
[4] 1387.970
[12] 1169.461
[10] 996.760
[11] 860.264
[9] 752.384
[6] 667.119
[8] 599.730
[2] 546.468
0.078
0.140
0.087
0.350
0.058
0.699
0.064
0.100
0.117
0.233
0.175
0.070
Channel / Frequency (Hz)
Amplitude (0 - 1)
08:26.0 - 08:48.5

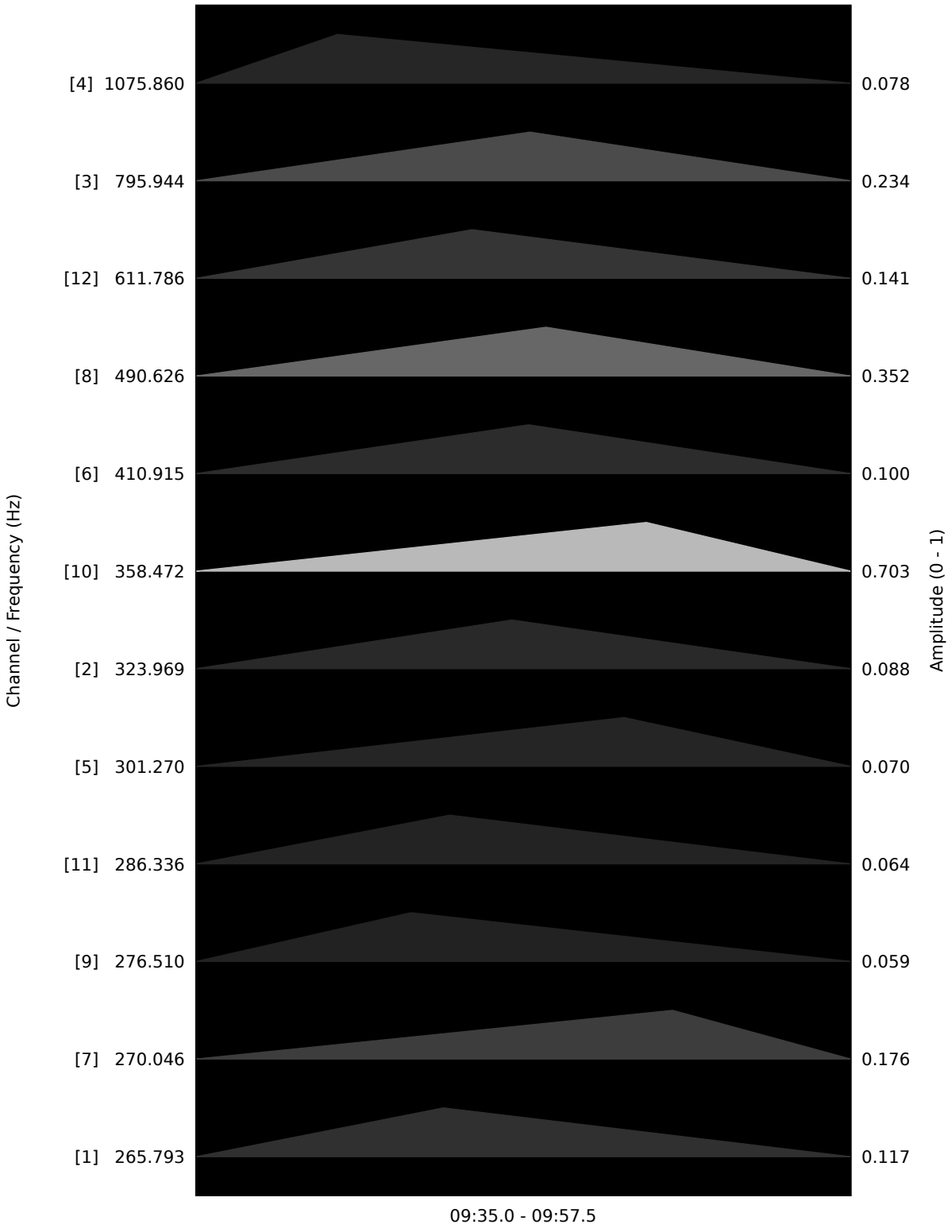
S 24


[7] 596.367
[1] 456.948
[12] 360.152
[4] 292.948
[10] 246.290
[5] 213.896
[3] 191.406
[8] 175.791
[6] 164.951
[11] 157.424
[9] 152.198
[2] 148.570
0.069
0.055
0.550
0.061
0.046
0.092
0.183
0.079
0.050
0.275
0.110
0.138
Channel / Frequency (Hz)
Amplitude (0 - 1)
08:49.0 - 09:11.5

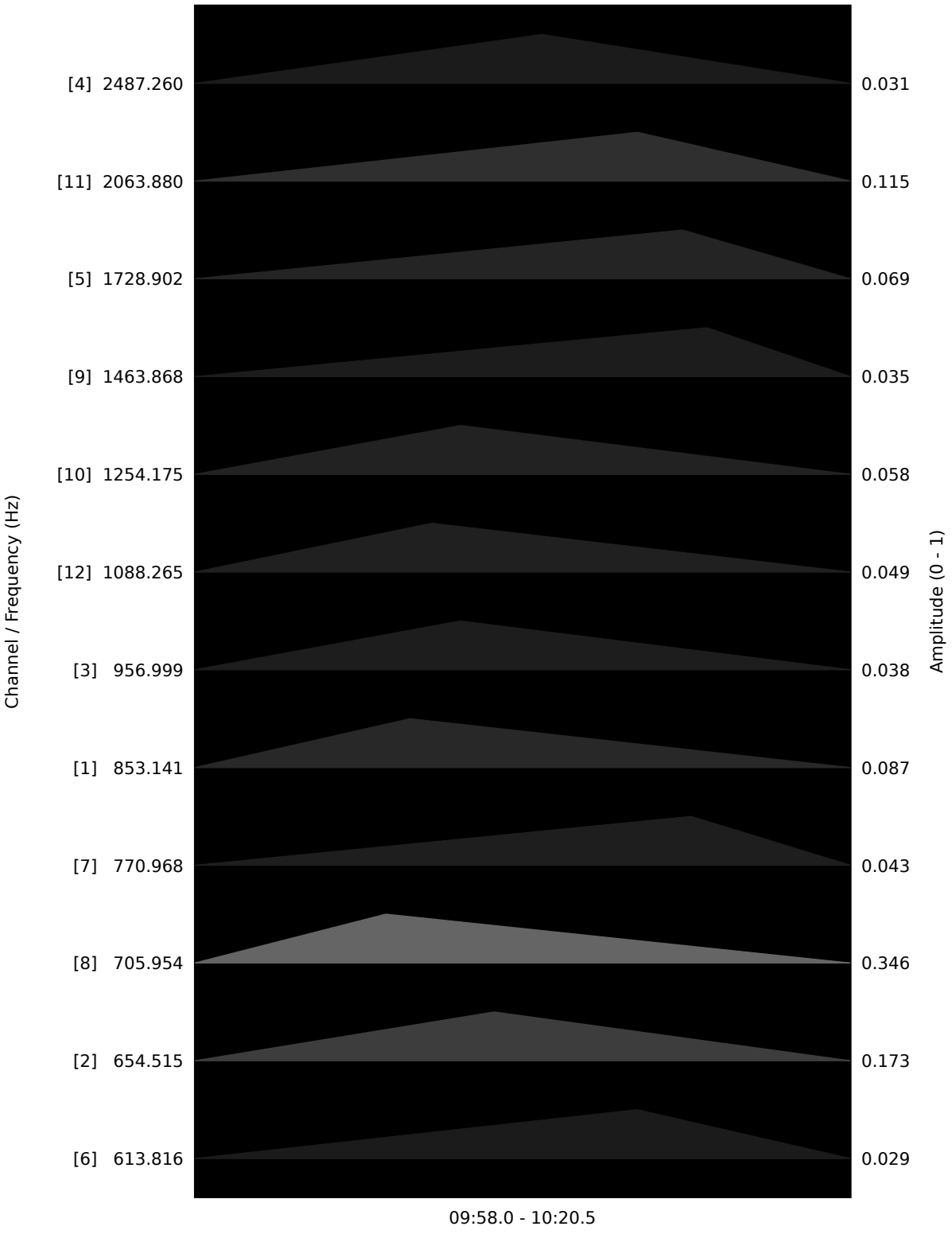
S 25


[7] 2639.520
0.228
[2] 2162.364
0.085
[8] 1776.434
0.114
[4] 1464.287
0.342
[9] 1211.818
0.057
[12] 1007.617
0.137
[11] 842.457
0.098
[5] 708.872
0.171
[1] 600.827
0.062
[10] 513.438
0.076
[6] 442.757
0.068
[3] 385.589
0.683
Channel / Frequency (Hz)
Amplitude (0 - 1)
09:12.0 - 09:34.5

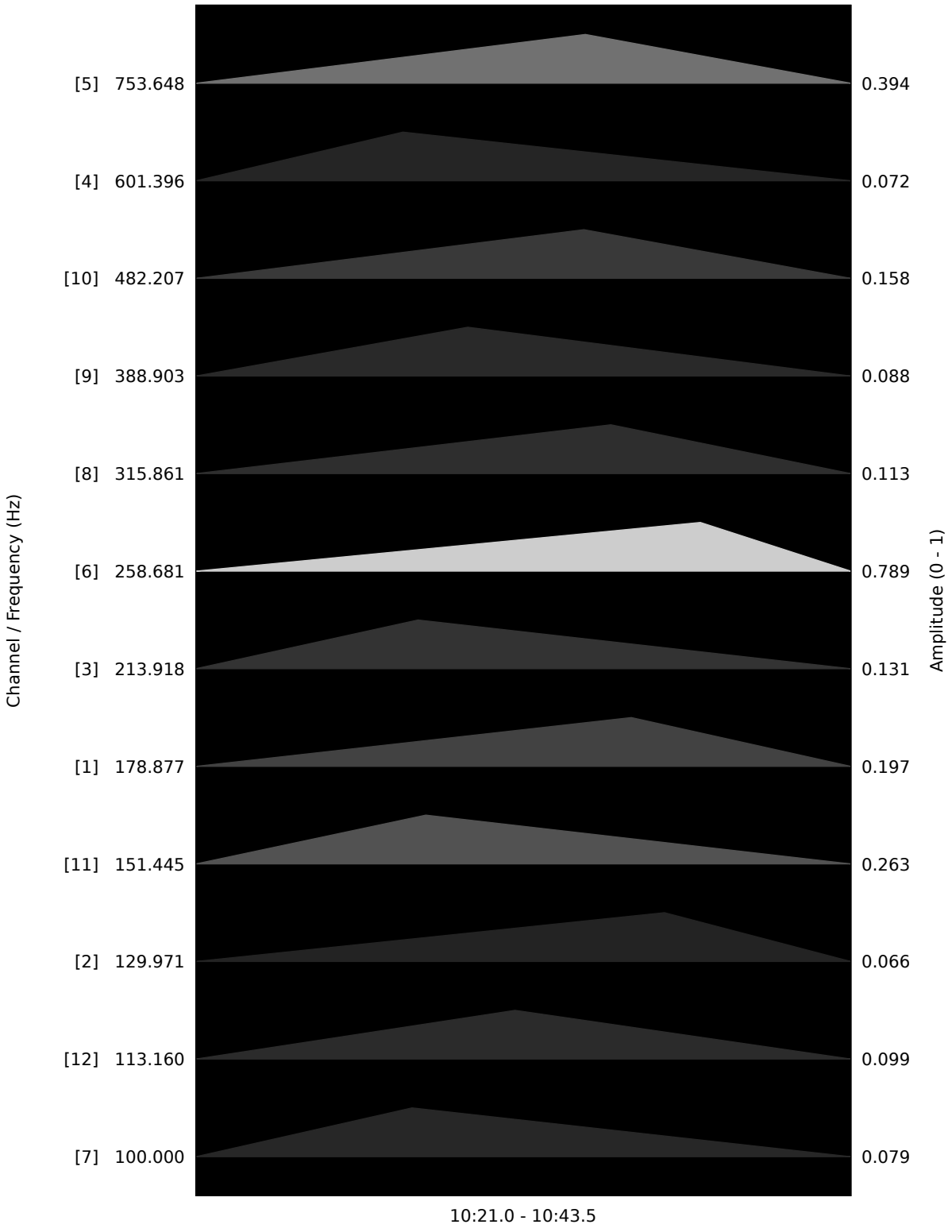
S 26


[4] 1075.860
0.078
[3] 795.944
0.234
[12] 611.786
0.141
[8] 490.626
0.352
[6] 410.915
0.100
[10] 358.472
0.703
[2] 323.969
0.088
[5] 301.270
0.070
[11] 286.336
0.064
[9] 276.510
0.059
[7] 270.046
0.176
[1] 265.793
0.117
Channel / Frequency (Hz)
Amplitude (0 - 1)
09:35.0 - 09:57.5

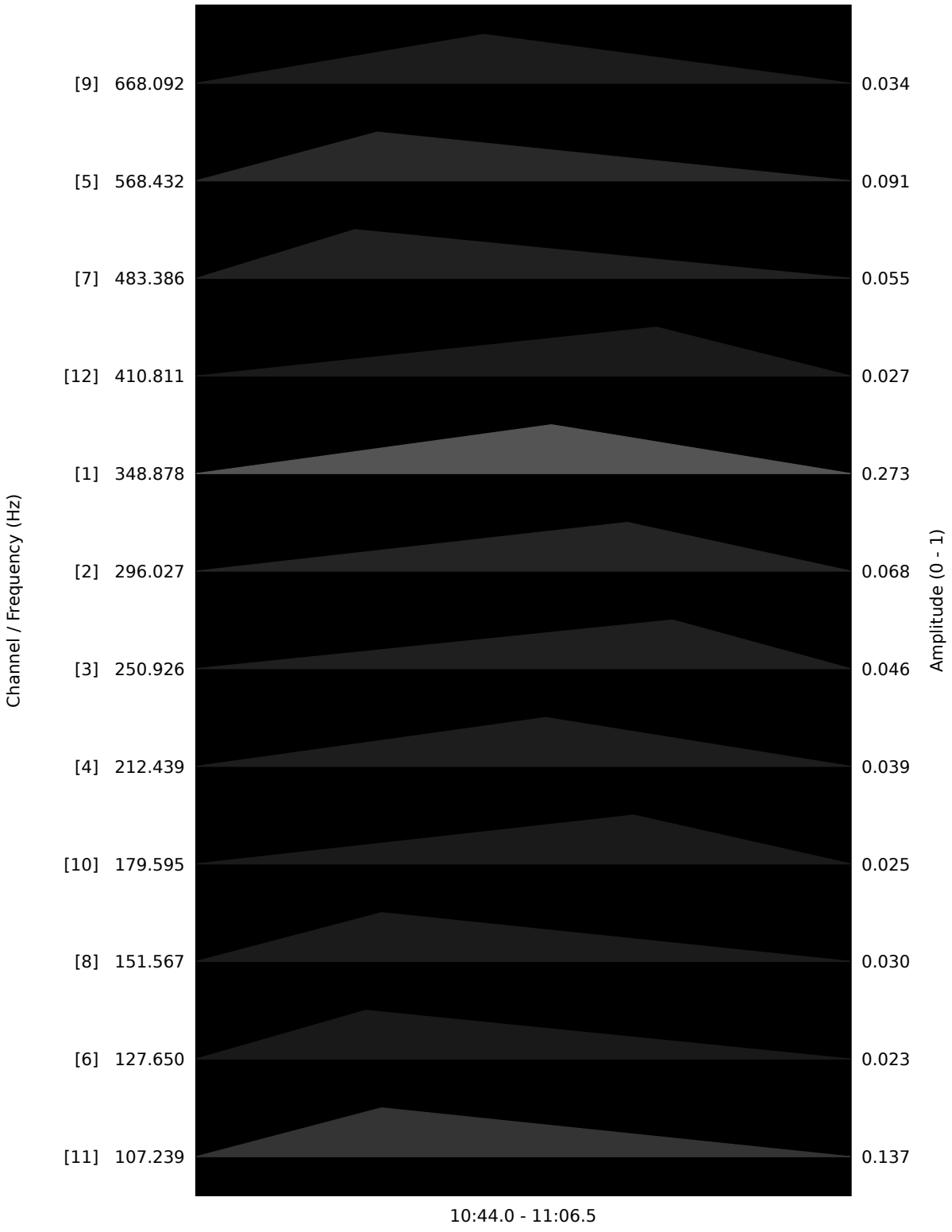
S 27


[4] 2487.260
[11] 2063.880
[5] 1728.902
[9] 1463.868
[10] 1254.175
[12] 1088.265
[3] 956.999
[1] 853.141
[7] 770.968
[8] 705.954
[2] 654.515
[6] 613.816
0.031
0.115
0.069
0.035
0.058
0.049
0.038
0.087
0.043
0.346
0.173
0.029
Channel / Frequency (Hz)
Amplitude (0 - 1)
09:58.0 - 10:20.5

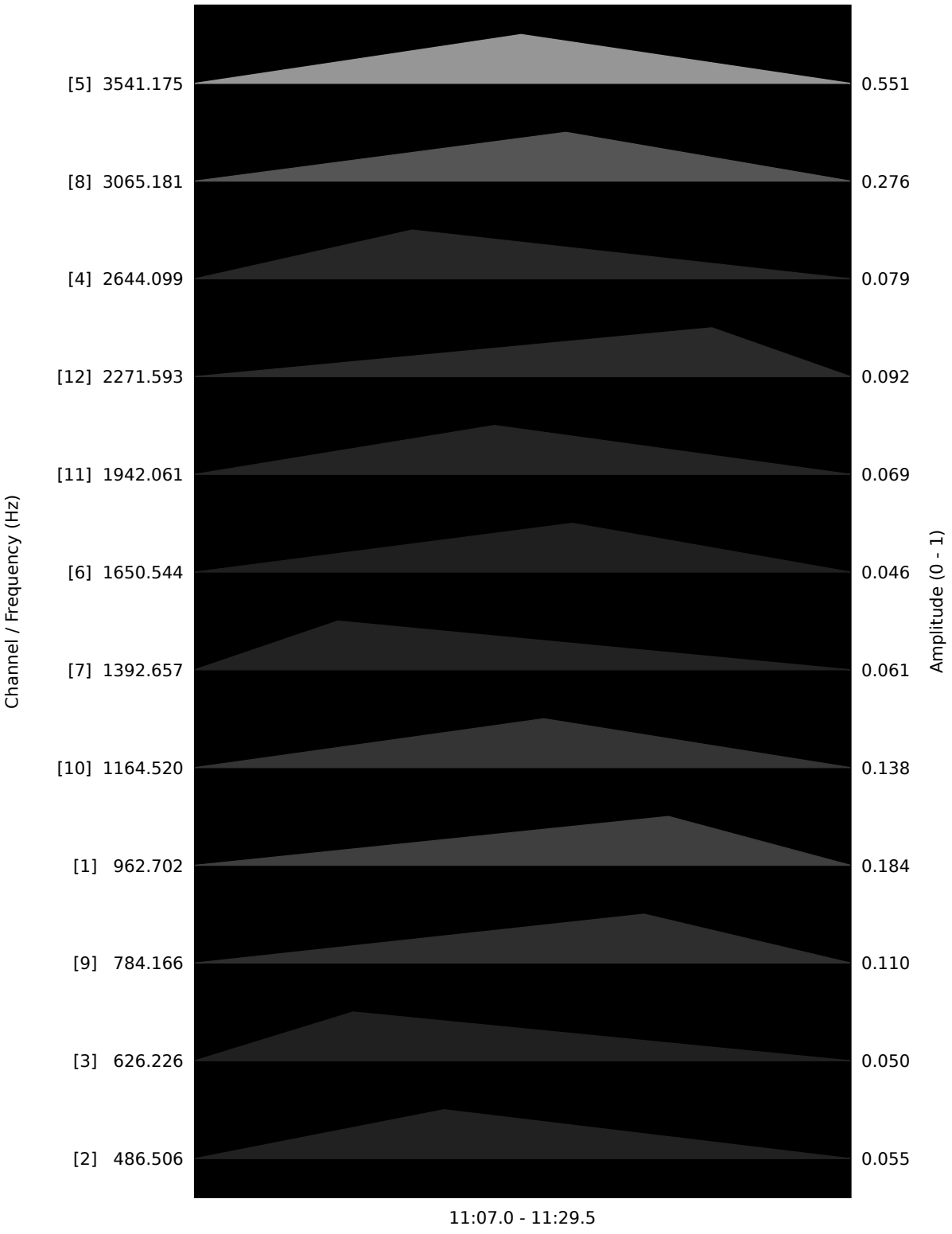
S 28


[5] 753.648
0.394
[4] 601.396
0.072
[10] 482.207
0.158
[9] 388.903
0.088
[8] 315.861
0.113
[6] 258.681
0.789
[3] 213.918
0.131
[1] 178.877
0.197
[11] 151.445
0.263
[2] 129.971
0.066
[12] 113.160
0.099
[7] 100.000
0.079
Channel / Frequency (Hz)
Amplitude (0 - 1)
10:21.0 - 10:43.5

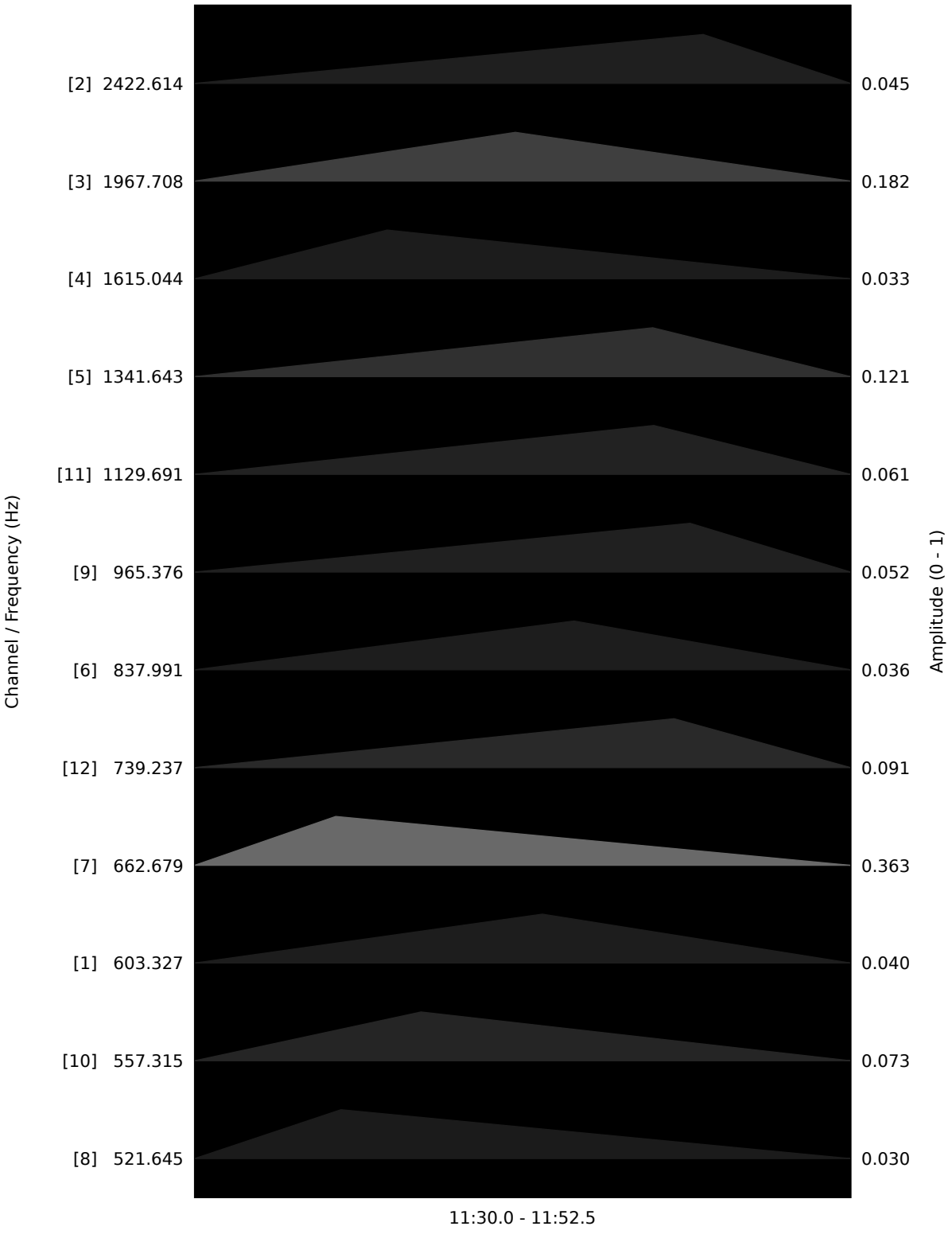
S 29


[9] 668.092
[5] 568.432
[7] 483.386
[12] 410.811
[1] 348.878
[2] 296.027
[3] 250.926
[4] 212.439
[10] 179.595
[8] 151.567
[6] 127.650
[11] 107.239
0.034
0.091
0.055
0.027
0.273
0.068
0.046
0.039
0.025
0.030
0.023
0.137
Channel / Frequency (Hz)
Amplitude (0 - 1)
10:44.0 - 11:06.5

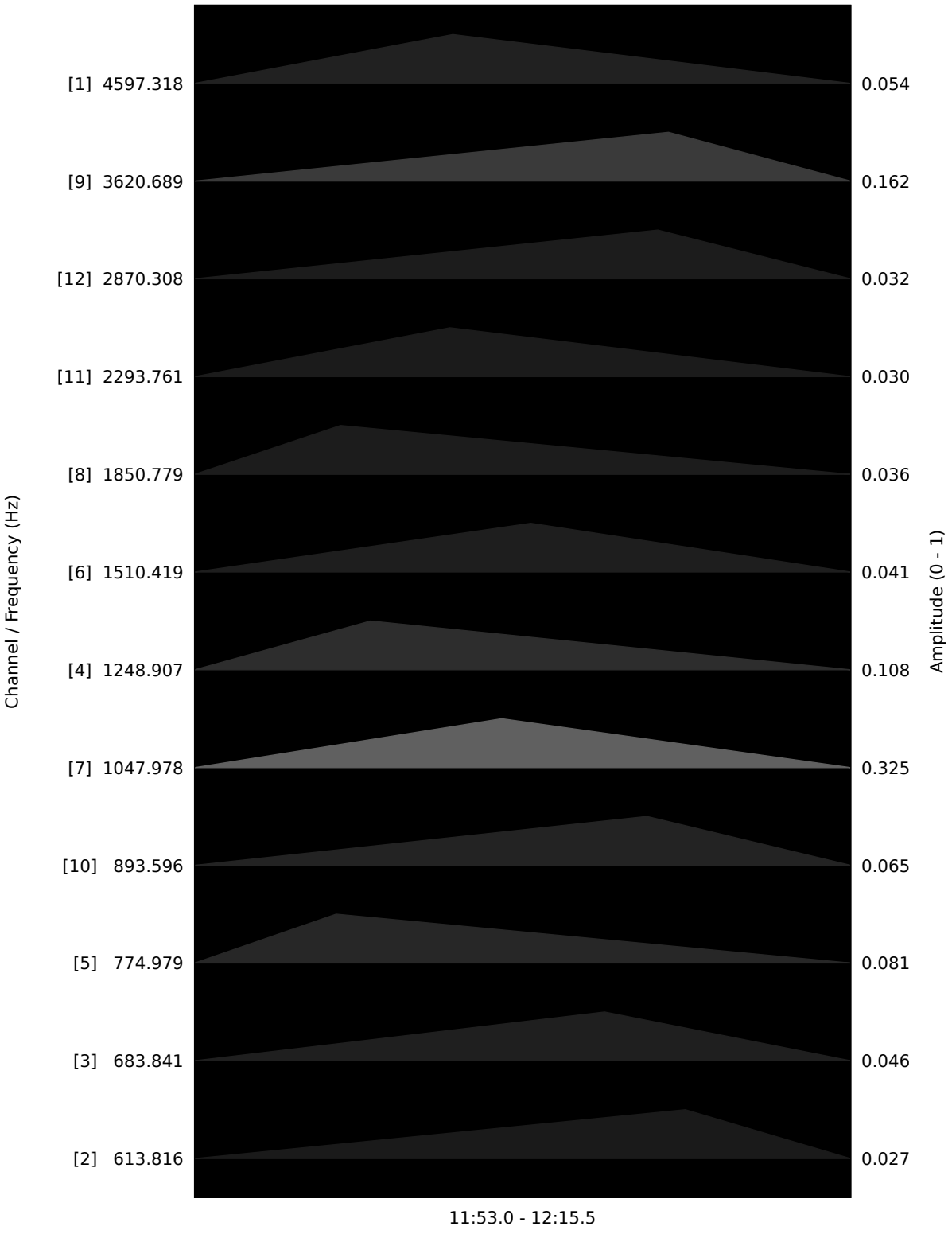
S 30


[5] 3541.175
0.551
[8] 3065.181
0.276
[4] 2644.099
0.079
[12] 2271.593
0.092
[11] 1942.061
0.069
[6] 1650.544
0.046
[7] 1392.657
0.061
[10] 1164.520
0.138
[1] 962.702
0.184
[9] 784.166
0.110
[3] 626.226
0.050
[2] 486.506
0.055
Channel / Frequency (Hz)
Amplitude (0 - 1)
11:07.0 - 11:29.5

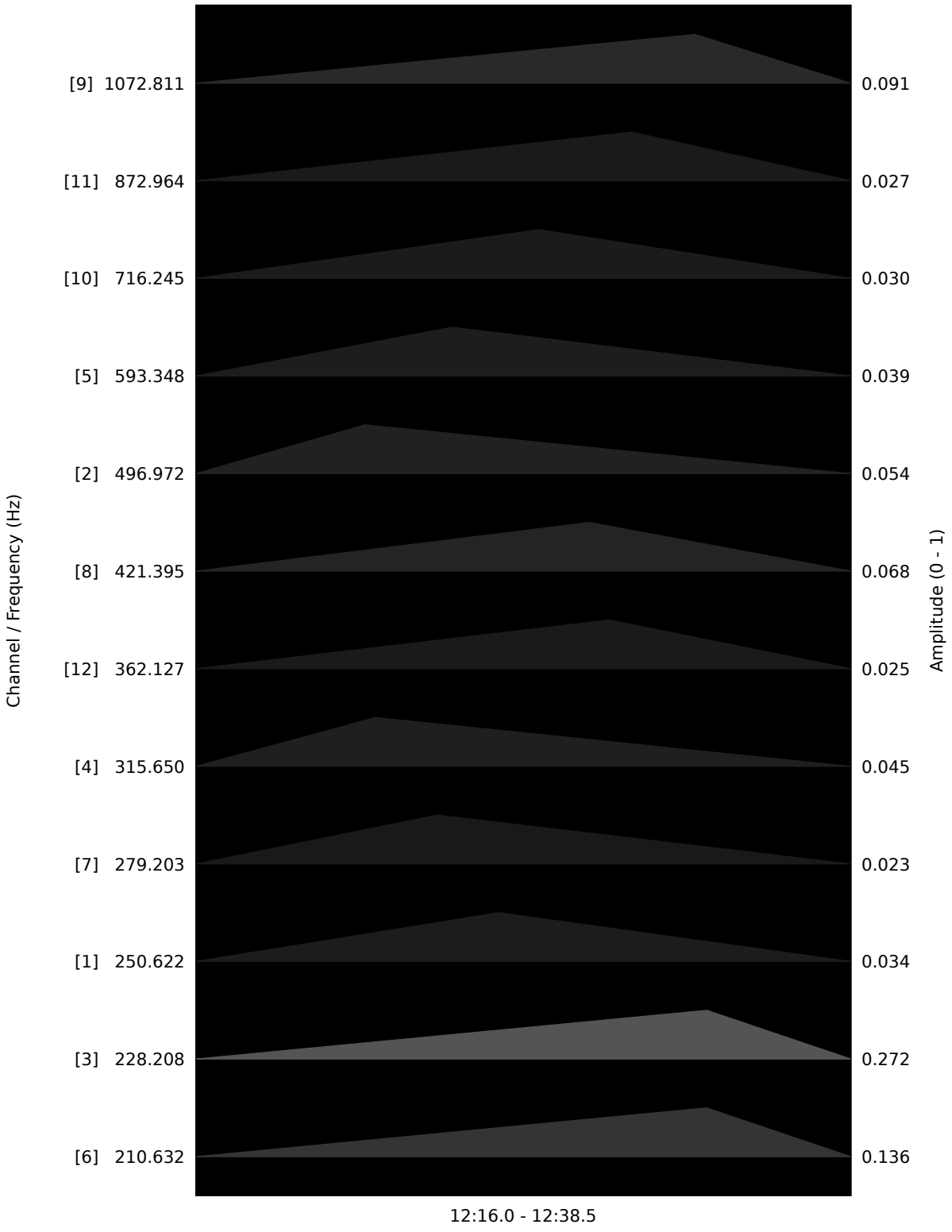
S 31


[2] 2422.614
0.045
[3] 1967.708
0.182
[4] 1615.044
0.033
[5] 1341.643
0.121
[11] 1129.691
0.061
[9] 965.376
0.052
[6] 837.991
0.036
[12] 739.237
0.091
[7] 662.679
0.363
[1] 603.327
0.040
[10] 557.315
0.073
[8] 521.645
0.030
Channel / Frequency (Hz)
Amplitude (0 - 1)
11:30.0 - 11:52.5

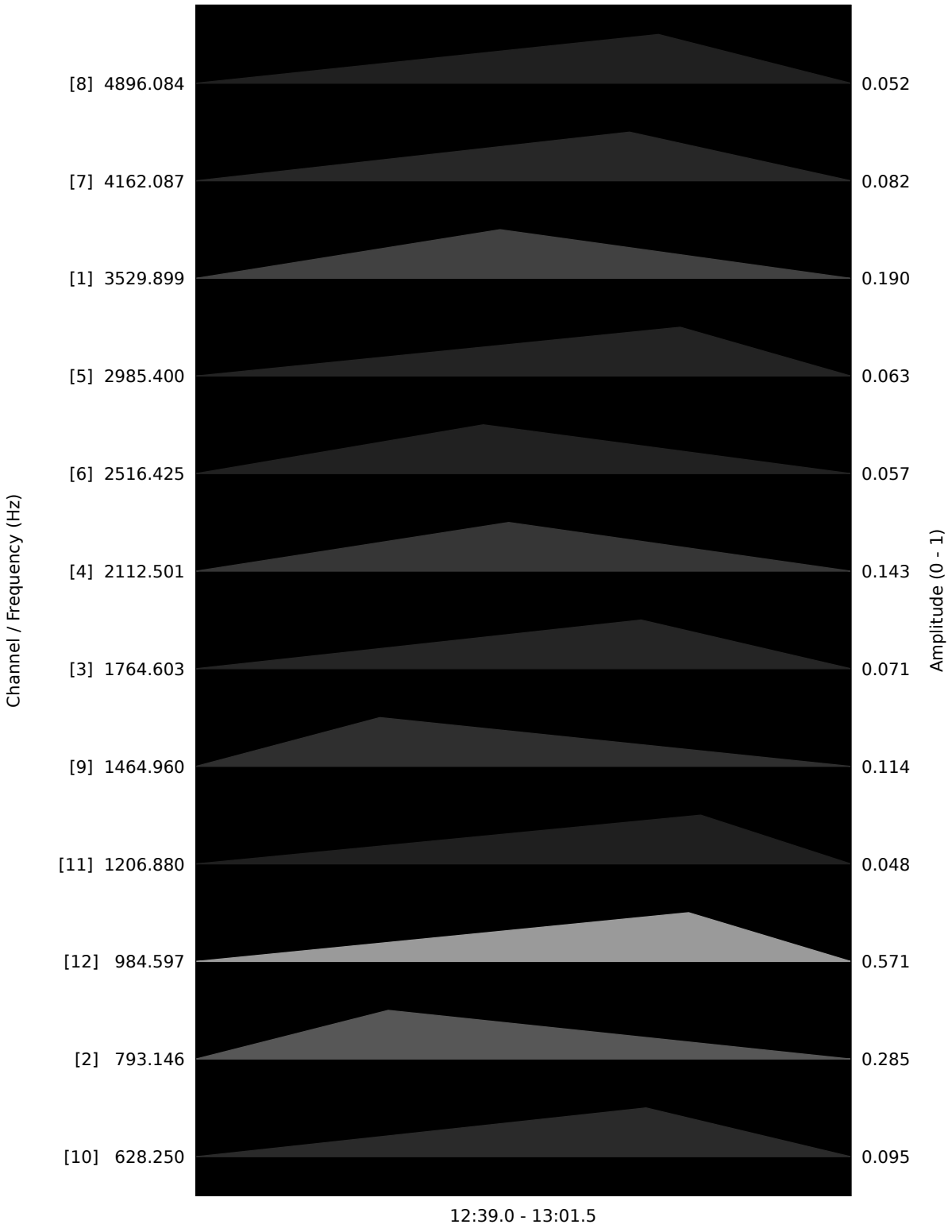
S 32


[1] 4597.318
[9] 3620.689
[12] 2870.308
[11] 2293.761
[8] 1850.779
[6] 1510.419
[4] 1248.907
[7] 1047.978
[10] 893.596
[5] 774.979
[3] 683.841
[2] 613.816
0.054
0.162
0.032
0.030
0.036
0.041
0.108
0.325
0.065
0.081
0.046
0.027
Channel / Frequency (Hz)
Amplitude (0 - 1)
11:53.0 - 12:15.5

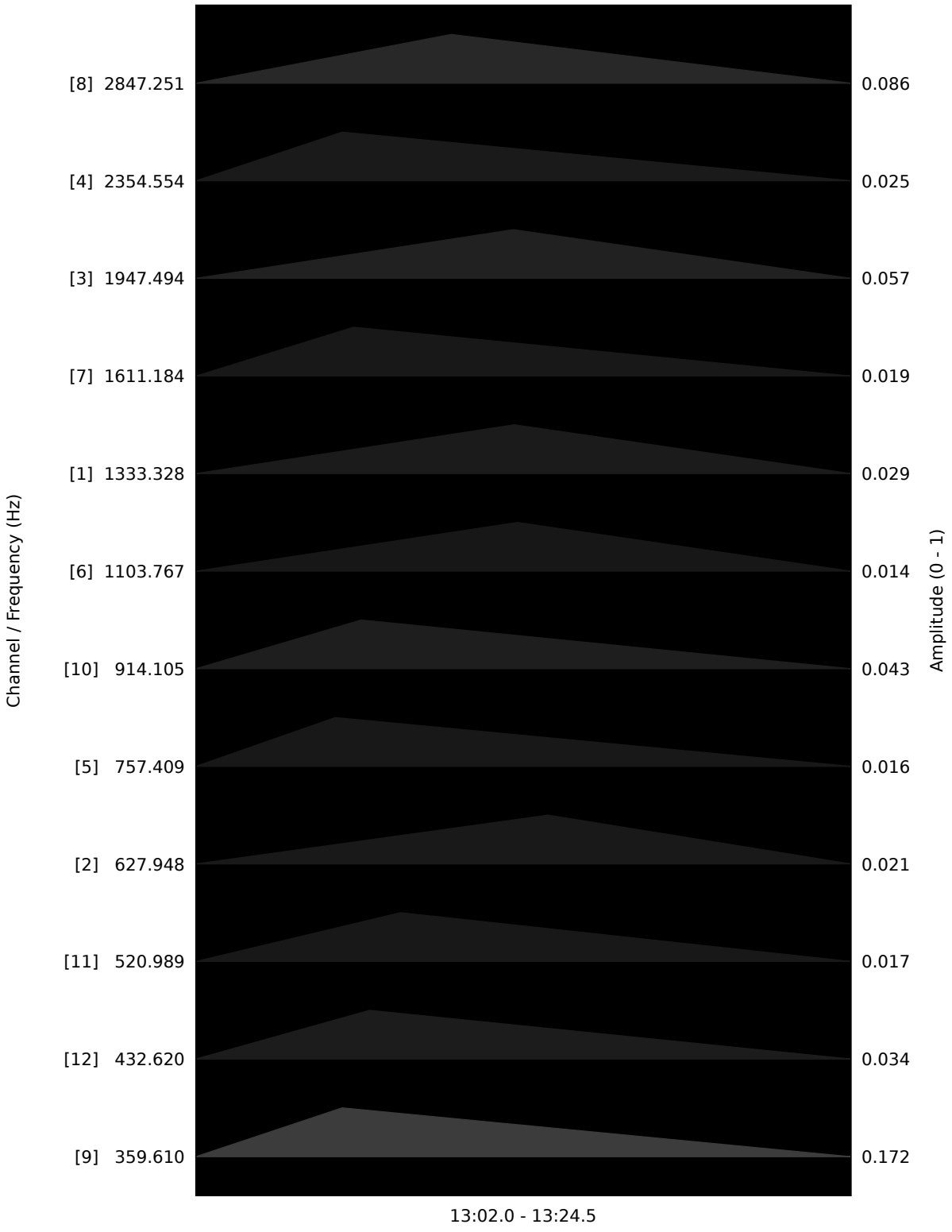
S 33


[9] 1072.811
[11] 872.964
[10] 716.245
[5] 593.348
[2] 496.972
[8] 421.395
[12] 362.127
[4] 315.650
[7] 279.203
[1] 250.622
[3] 228.208
[6] 210.632
0.091
0.027
0.030
0.039
0.054
0.068
0.025
0.045
0.023
0.034
0.272
0.136
Channel / Frequency (Hz)
Amplitude (0 - 1)
12:16.0 - 12:38.5

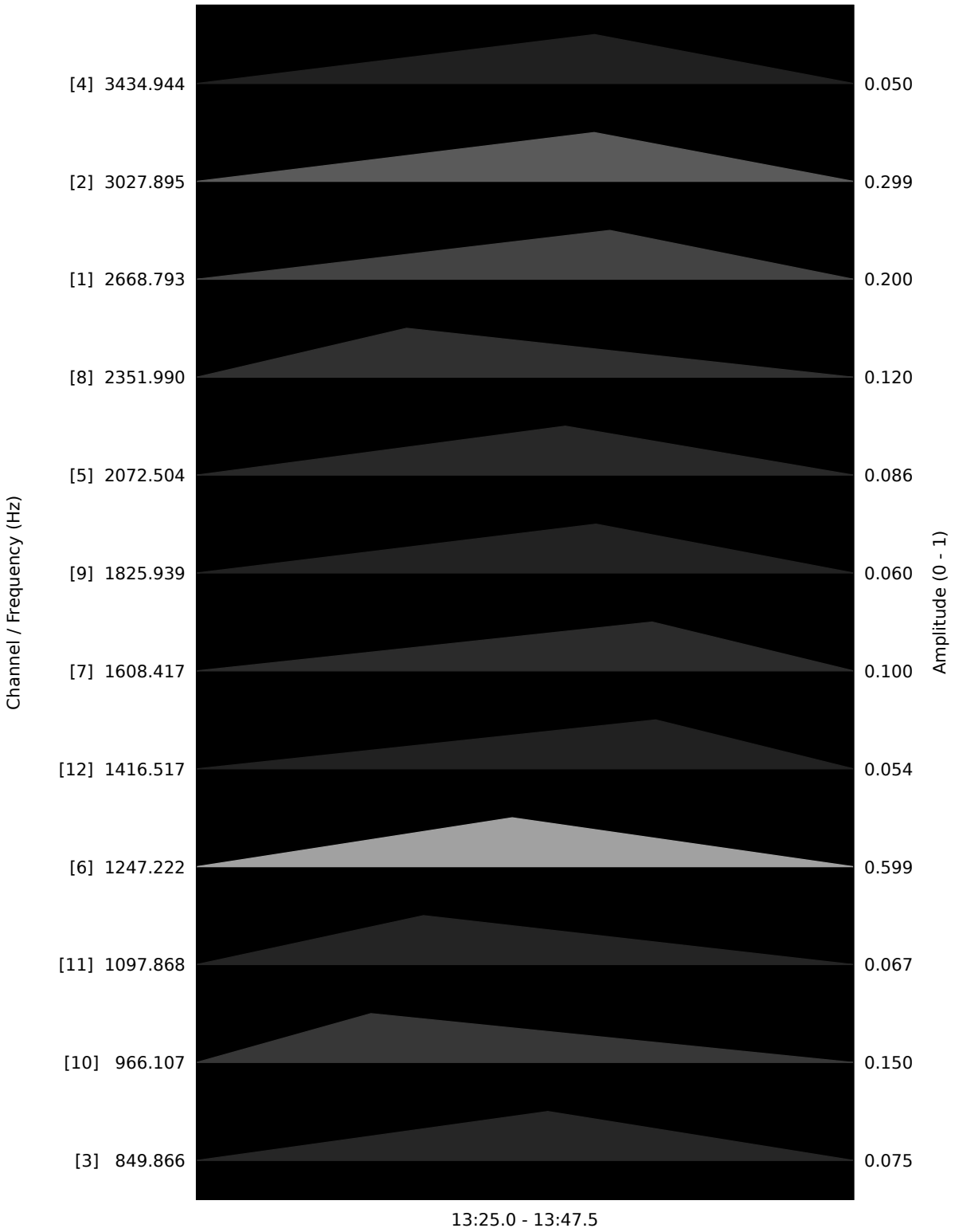
S 34


[8] 4896.084
0.052
[7] 4162.087
0.082
[1] 3529.899
0.190
[5] 2985.400
0.063
[6] 2516.425
0.057
[4] 2112.501
0.143
[3] 1764.603
0.071
[9] 1464.960
0.114
[11] 1206.880
0.048
[12] 984.597
0.571
[2] 793.146
0.285
[10] 628.250
0.095
Channel / Frequency (Hz)
Amplitude (0 - 1)
12:39.0 - 13:01.5

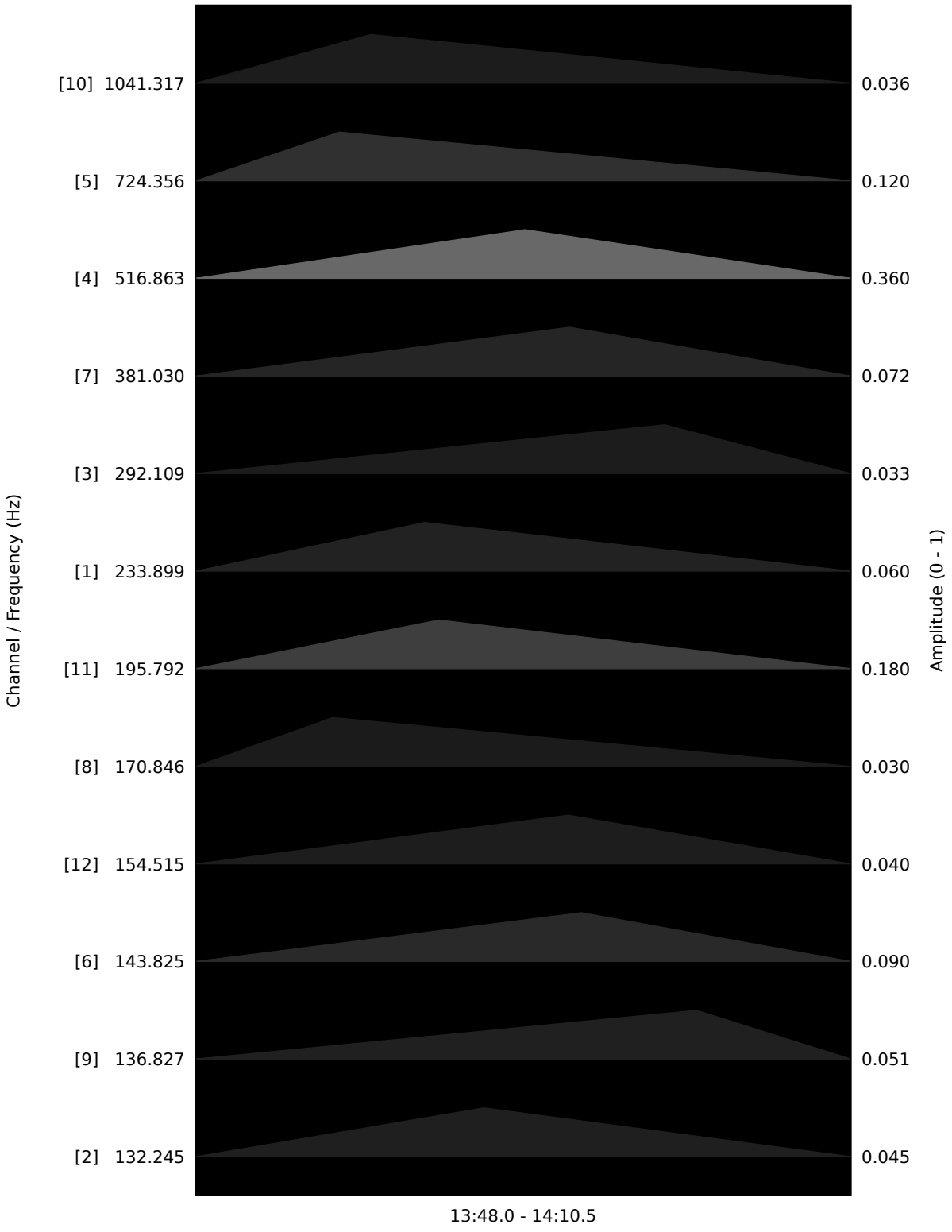
S 35


[8] 2847.251
0.086
[4] 2354.554
0.025
[3] 1947.494
0.057
[7] 1611.184
0.019
[1] 1333.328
0.029
[6] 1103.767
0.014
[10] 914.105
0.043
[5] 757.409
0.016
[2] 627.948
0.021
[11] 520.989
0.017
[12] 432.620
0.034
[9] 359.610
0.172
Channel / Frequency (Hz)
Amplitude (0 - 1)
13:02.0 - 13:24.5

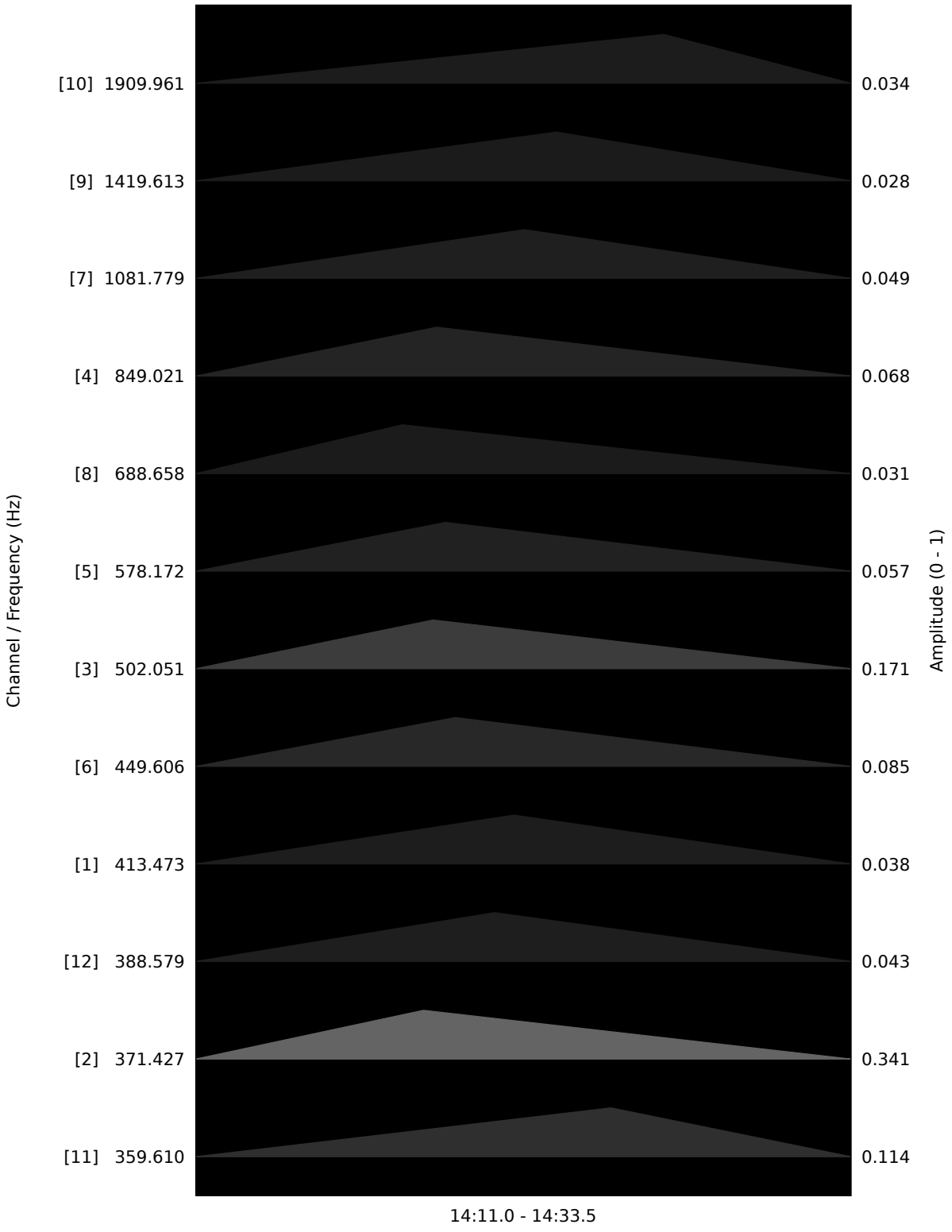
S 36


[4] 3434.944
[2] 3027.895
[1] 2668.793
[8] 2351.990
[5] 2072.504
[9] 1825.939
[7] 1608.417
[12] 1416.517
[6] 1247.222
[11] 1097.868
[10] 966.107
[3] 849.866
0.050
0.299
0.200
0.120
0.086
0.060
0.100
0.054
0.599
0.067
0.150
0.075
Channel / Frequency (Hz)
Amplitude (0 - 1)
13:25.0 - 13:47.5

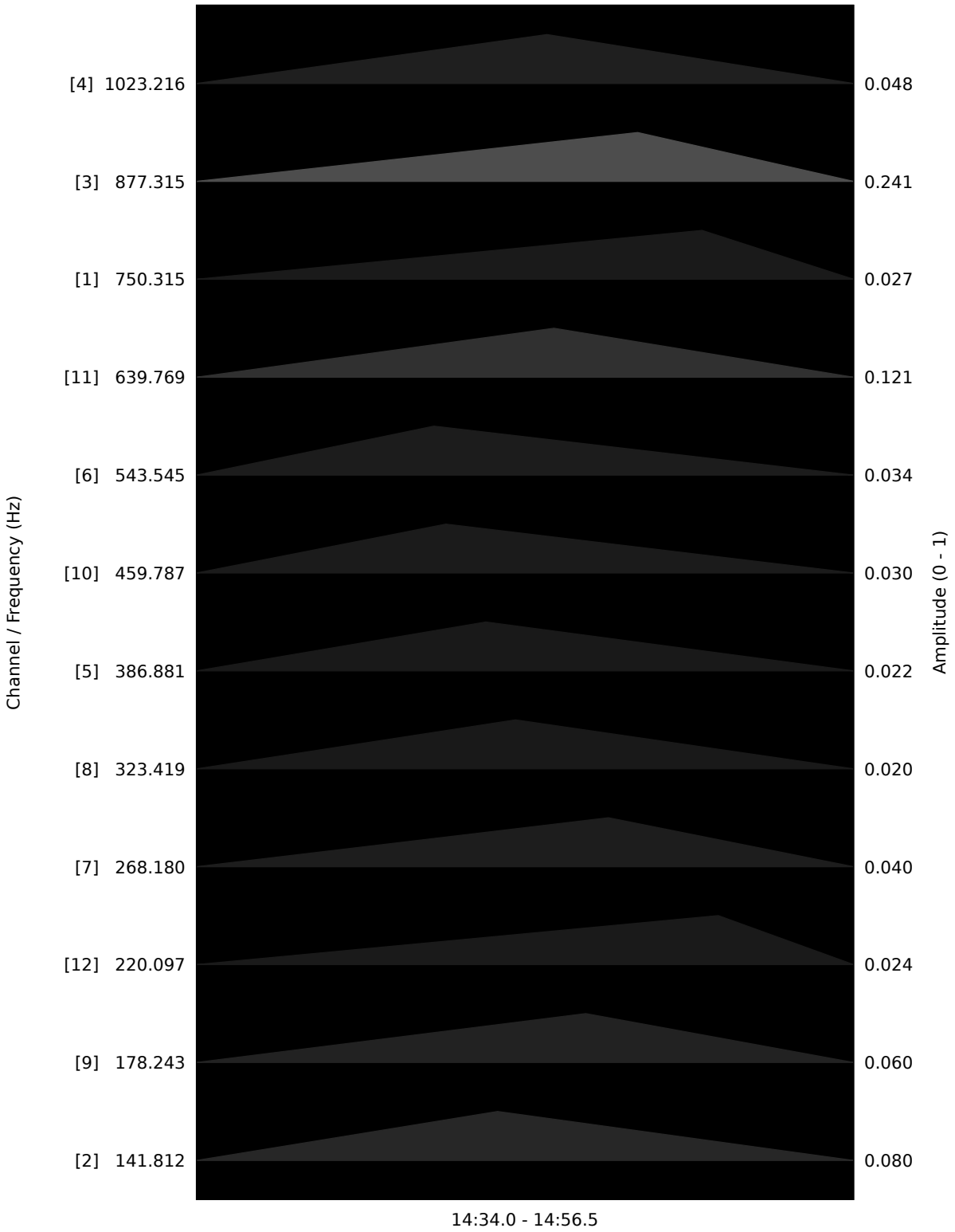
S 37


[10] 1041.317
0.036
[5] 724.356
0.120
[4] 516.863
0.360
[7] 381.030
0.072
[3] 292.109
0.033
[1] 233.899
0.060
[11] 195.792
0.180
[8] 170.846
0.030
[12] 154.515
0.040
[6] 143.825
0.090
[9] 136.827
0.051
[2] 132.245
0.045
Channel / Frequency (Hz)
Amplitude (0 - 1)
13:48.0 - 14:10.5

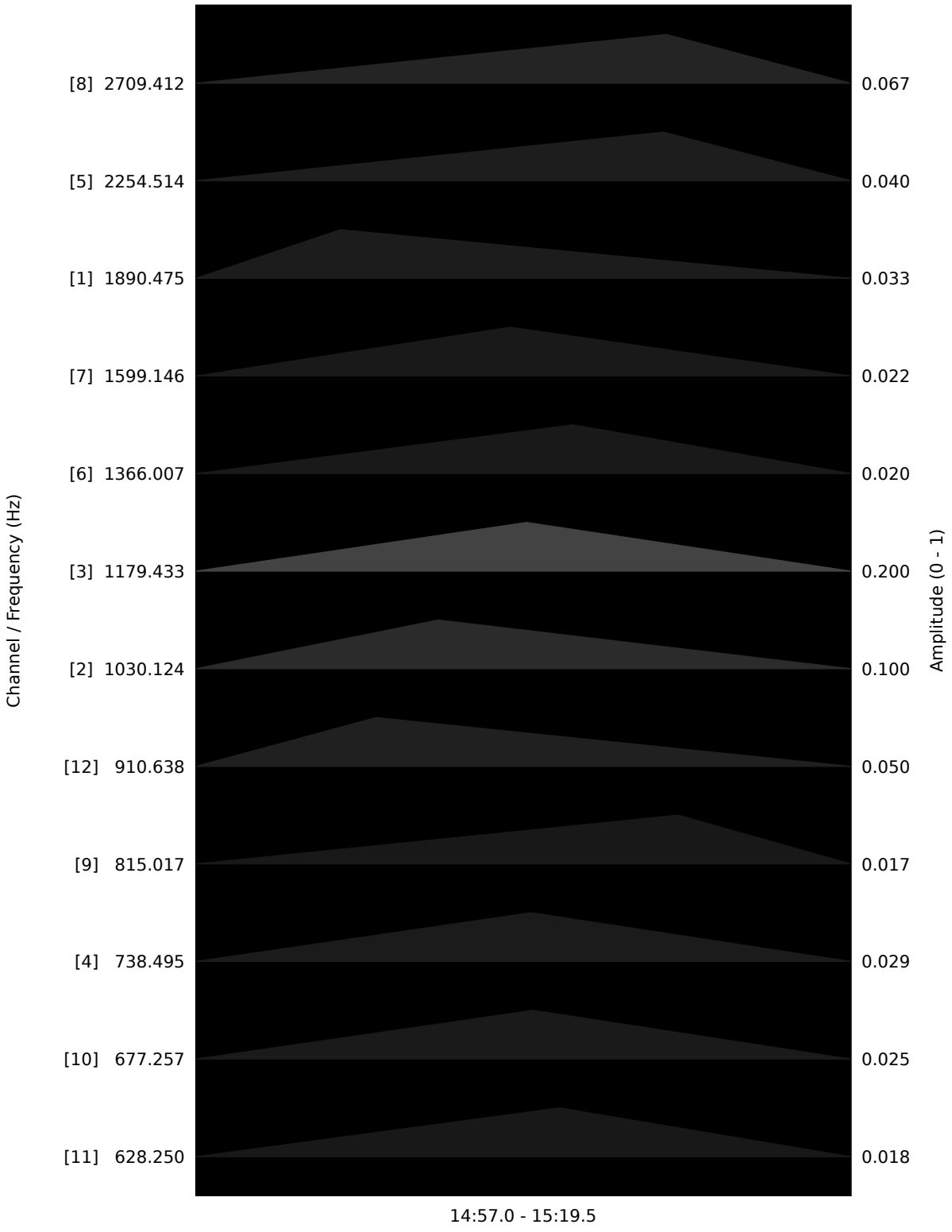
S 38


[10] 1909.961
0.034
[9] 1419.613
0.028
[7] 1081.779
0.049
[4] 849.021
0.068
[8] 688.658
0.031
[5] 578.172
0.057
[3] 502.051
0.171
[6] 449.606
0.085
[1] 413.473
0.038
[12] 388.579
0.043
[2] 371.427
0.341
[11] 359.610
0.114
Channel / Frequency (Hz)
Amplitude (0 - 1)
14:11.0 - 14:33.5

S 39


[4] 1023.216
[3] 877.315
[1] 750.315
[11] 639.769
[6] 543.545
[10] 459.787
[5] 386.881
[8] 323.419
[7] 268.180
[12] 220.097
[9] 178.243
[2] 141.812
0.048
0.241
0.027
0.121
0.034
0.030
0.022
0.020
0.040
0.024
0.060
0.080
Channel / Frequency (Hz)
Amplitude (0 - 1)
14:34.0 - 14:56.5

S 40


[8] 2709.412
[5] 2254.514
[1] 1890.475
[7] 1599.146
[6] 1366.007
[3] 1179.433
[2] 1030.124
[12] 910.638
[9] 815.017
[4] 738.495
[10] 677.257
[11] 628.250
0.067
0.040
0.033
0.022
0.020
0.200
0.100
0.050
0.017
0.029
0.025
0.018
Channel / Frequency (Hz)
Amplitude (0 - 1)
14:57.0 - 15:19.5