

TCR.txt

```
[FormatInfo]
format_ver=1
[GeoMain]
ntc_id=1
adm=USA
sat_name=VIASAT-1
long_nom=-115.10
n_diag=1
[COHeader]
beam_id=TCR
emi_rcp=R
polar_disc=C
reason=C
n_bore=1
n_cont=14
[B1]
gain=0.00
p=-103.2740;44.3960
[C1]
gain=-2.00
n_point=27
P1=-112.2840;39.7370
P2=-112.1310;39.3140
P3=-112.0820;38.8940
P4=-112.0990;38.4780
P5=-112.1630;38.0650
P6=-112.2760;37.6550
P7=-112.4300;37.3150
P8=-112.4740;37.2480
P9=-112.8100;36.9220
P10=-113.0460;36.8430
P11=-113.1780;36.8100
P12=-113.3230;36.8420
P13=-113.5410;36.9060
P14=-113.8920;37.2420
P15=-113.9000;37.2540
P16=-114.0580;37.6470
P17=-114.1300;38.0560
P18=-114.1310;38.4690
P19=-114.0690;38.8850
P20=-113.9390;39.3060
P21=-113.8610;39.4630
P22=-113.6750;39.7310
P23=-113.4690;39.9340
P24=-113.0800;40.1210
P25=-112.6970;40.0880
P26=-112.3260;39.8000
P27=-112.2840;39.7370
[C2]
gain=-6.00
n_point=45
P1=-112.4880;41.0330
P2=-112.2720;40.9670
P3=-111.8950;40.7150
P4=-111.7850;40.6010
P5=-111.5350;40.2420
P6=-111.4950;40.1710
P7=-111.3440;39.7440
P8=-111.2740;39.3210
P9=-111.2610;38.9010
P10=-111.2870;38.4840
P11=-111.3430;38.0710
P12=-111.4300;37.6610
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TCR.txt

P13=-111.5630;37.2540
 P14=-111.7120;36.9500
 P15=-111.7640;36.8500
 P16=-112.0720;36.4490
 P17=-112.1010;36.4200
 P18=-112.4750;36.1370
 P19=-112.6680;36.0490
 P20=-112.8410;35.9810
 P21=-113.2020;35.9330
 P22=-113.5610;35.9840
 P23=-113.7060;36.0450
 P24=-113.9180;36.1450
 P25=-114.2760;36.4330
 P26=-114.2830;36.4400
 P27=-114.5740;36.8390
 P28=-114.6350;36.9620
 P29=-114.7620;37.2410
 P30=-114.8750;37.6460
 P31=-114.9300;38.0560
 P32=-114.9370;38.4680
 P33=-114.8980;38.8840
 P34=-114.8090;39.3050
 P35=-114.6550;39.7290
 P36=-114.6180;39.7980
 P37=-114.4160;40.1570
 P38=-114.2290;40.3910
 P39=-114.0350;40.5900
 P40=-113.8360;40.7520
 P41=-113.4420;40.9710
 P42=-113.2350;41.0290
 P43=-113.0480;41.0790
 P44=-112.6580;41.0800
 P45=-112.4880;41.0330
 [C3]
 gain=-8.00
 n_point=49
 P1=-111.8120;41.0380
 P2=-111.5060;40.7300
 P3=-111.4120;40.6050
 P4=-111.1810;40.1740
 P5=-111.1580;40.1030
 P6=-111.0440;39.7470
 P7=-110.9750;39.3240
 P8=-110.9580;38.9030
 P9=-110.9790;38.4870
 P10=-111.0330;38.0740
 P11=-111.1240;37.6640
 P12=-111.2590;37.2560
 P13=-111.3390;37.0890
 P14=-111.4500;36.8530
 P15=-111.7230;36.4510
 P16=-111.7380;36.4340
 P17=-112.1160;36.0640
 P18=-112.1320;36.0530
 P19=-112.4860;35.8310
 P20=-112.8490;35.7010
 P21=-113.2090;35.6610
 P22=-113.5670;35.7040
 P23=-113.9230;35.8400
 P24=-114.2260;36.0440
 P25=-114.2790;36.0860
 P26=-114.6150;36.4400
 P27=-114.6380;36.4710

TCR.txt

P28=-114.8720;36.8390
 P29=-115.0000;37.1370
 P30=-115.0460;37.2410
 P31=-115.1620;37.6460
 P32=-115.2220;38.0560
 P33=-115.2350;38.4680
 P34=-115.2020;38.8840
 P35=-115.1170;39.3050
 P36=-115.0000;39.6380
 P37=-114.9700;39.7290
 P38=-114.7560;40.1570
 P39=-114.6150;40.3550
 P40=-114.4320;40.5890
 P41=-114.2230;40.7970
 P42=-113.9280;41.0270
 P43=-113.8290;41.0950
 P44=-113.4330;41.2870
 P45=-113.0380;41.3840
 P46=-112.6450;41.3900
 P47=-112.2560;41.2990
 P48=-111.8750;41.0910
 P49=-111.8120;41.0380
 [C4]
 gain=-10.00
 n_point=57
 P1=-112.0450;41.4770
 P2=-111.8590;41.3870
 P3=-111.4850;41.0760
 P4=-111.4540;41.0410
 P5=-111.1350;40.6070
 P6=-111.1260;40.5900
 P7=-110.9270;40.1760
 P8=-110.8020;39.7490
 P9=-110.7990;39.7310
 P10=-110.7270;39.3260
 P11=-110.7020;38.9060
 P12=-110.7180;38.4890
 P13=-110.7720;38.0760
 P14=-110.8670;37.6660
 P15=-110.9510;37.4230
 P16=-111.0050;37.2590
 P17=-111.1930;36.8550
 P18=-111.3660;36.5850
 P19=-111.4530;36.4530
 P20=-111.7530;36.1120
 P21=-111.8120;36.0550
 P22=-112.1280;35.7960
 P23=-112.3680;35.6580
 P24=-112.4950;35.5850
 P25=-112.8570;35.4610
 P26=-113.2150;35.4210
 P27=-113.5720;35.4620
 P28=-113.9270;35.5940
 P29=-114.0200;35.6520
 P30=-114.2820;35.8130
 P31=-114.5400;36.0440
 P32=-114.6400;36.1470
 P33=-114.8760;36.4390
 P34=-115.0000;36.6430
 P35=-115.1180;36.8390
 P36=-115.2890;37.2410
 P37=-115.3680;37.5340
 P38=-115.4040;37.6470

TCR.txt

P39=-115.4760;38.0560
P40=-115.4960;38.4680
P41=-115.4650;38.8850
P42=-115.3790;39.2960
P43=-115.3770;39.3050
P44=-115.2470;39.7290
P45=-115.0350;40.1570
P46=-115.0000;40.2090
P47=-114.7410;40.5890
P48=-114.6120;40.7320
P49=-114.3100;41.0260
P50=-114.2190;41.1020
P51=-113.8230;41.3660
P52=-113.5930;41.4690
P53=-113.4260;41.5470
P54=-113.0290;41.6480
P55=-112.6340;41.6600
P56=-112.2430;41.5770
P57=-112.0450;41.4770
[C5]
gain=-20.00
n_point=81
P1=-111.4480;42.8350
P2=-111.3770;42.7660
P3=-111.1820;42.3810
P4=-111.0280;42.0220
P5=-111.0060;41.9320
P6=-110.7700;41.4890
P7=-110.6820;41.3450
P8=-110.5350;41.0500
P9=-110.3460;40.6250
P10=-110.3420;40.6150
P11=-110.1560;40.1850
P12=-110.0390;39.7580
P13=-110.0330;39.7240
P14=-109.9190;39.3350
P15=-109.8680;38.9150
P16=-109.8670;38.4980
P17=-109.9110;38.0850
P18=-110.0040;37.6750
P19=-110.1840;37.2670
P20=-110.2280;37.2060
P21=-110.3820;36.8620
P22=-110.6450;36.4720
P23=-110.6520;36.4600
P24=-110.9450;36.0610
P25=-111.0390;35.9500
P26=-111.2970;35.6660
P27=-111.4230;35.5070
P28=-111.6760;35.2730
P29=-111.8010;35.0880
P30=-112.0310;34.8830
P31=-112.1750;34.6360
P32=-112.3230;34.4970
P33=-112.5400;34.2980
P34=-112.8960;34.1390
P35=-113.2480;34.1140
P36=-113.5970;34.1940
P37=-113.9450;34.4070
P38=-114.0270;34.4910
P39=-114.2930;34.7350
P40=-114.3820;34.8740
P41=-114.6450;35.1260

TCR.txt

P42=-114.7360;35.2610
P43=-115.0000;35.5330
P44=-115.0950;35.6510
P45=-115.3600;35.9610
P46=-115.4410;36.0440
P47=-115.7240;36.4120
P48=-115.7560;36.4400
P49=-116.0720;36.8400
P50=-116.0940;36.8830
P51=-116.3980;37.2430
P52=-116.4700;37.3890
P53=-116.6420;37.6490
P54=-116.8060;38.0590
P55=-116.8660;38.3730
P56=-116.8840;38.4720
P57=-116.8920;38.8890
P58=-116.8840;38.9540
P59=-116.8270;39.3080
P60=-116.6730;39.7320
P61=-116.5330;39.9780
P62=-116.4170;40.1590
P63=-116.1580;40.4150
P64=-116.0080;40.5900
P65=-115.7770;40.7650
P66=-115.5030;41.0260
P67=-115.3910;41.1030
P68=-115.0000;41.4320
P69=-114.9600;41.4670
P70=-114.6050;41.7550
P71=-114.3770;41.9130
P72=-114.2060;42.0750
P73=-113.8030;42.3420
P74=-113.7510;42.3650
P75=-113.3940;42.6850
P76=-113.1030;42.8230
P77=-112.9830;42.9220
P78=-112.5720;43.0930
P79=-112.1650;43.1220
P80=-111.7650;43.0190
P81=-111.4480;42.8350
[C6]
gain=-4.00
n_point=66
P1=-112.3660;40.5640
P2=-112.2200;40.4570
P3=-112.0860;40.3360
P4=-111.9660;40.2020
P5=-111.8650;40.0520
P6=-111.7890;39.8880
P7=-111.7280;39.7180
P8=-111.6810;39.5440
P9=-111.6510;39.3650
P10=-111.6320;39.1860
P11=-111.6240;39.0060
P12=-111.6260;38.8250
P13=-111.6350;38.6450
P14=-111.6520;38.4650
P15=-111.6740;38.2860
P16=-111.7020;38.1080
P17=-111.7360;37.9300
P18=-111.7760;37.7540
P19=-111.8250;37.5810
P20=-111.8830;37.4100

TCR.txt

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P21=-111.9520;37.2430
P22=-112.0330;37.0810
P23=-112.1260;36.9260
P24=-112.2390;36.7850
P25=-112.3640;36.6550
P26=-112.5000;36.5370
P27=-112.6520;36.4390
P28=-112.8170;36.3660
P29=-112.9920;36.3200
P30=-113.1710;36.3020
P31=-113.3510;36.3140
P32=-113.5270;36.3530
P33=-113.6940;36.4210
P34=-113.8470;36.5170
P35=-113.9850;36.6340
P36=-114.1090;36.7650
P37=-114.2220;36.9060
P38=-114.3130;37.0620
P39=-114.3920;37.2240
P40=-114.4520;37.3950
P41=-114.5030;37.5680
P42=-114.5410;37.7440
P43=-114.5660;37.9230
P44=-114.5820;38.1030
P45=-114.5870;38.2830
P46=-114.5810;38.4640
P47=-114.5670;38.6440
P48=-114.5440;38.8230
P49=-114.5100;39.0000
P50=-114.4680;39.1760
P51=-114.4150;39.3480
P52=-114.3510;39.5170
P53=-114.2810;39.6830
P54=-114.1930;39.8400
P55=-114.0860;39.9860
P56=-113.9820;40.1320
P57=-113.8590;40.2670
P58=-113.7150;40.3740
P59=-113.5690;40.4810
P60=-113.4170;40.5770
P61=-113.2450;40.6330
P62=-113.0680;40.6730
P63=-112.8880;40.6890
P64=-112.7090;40.6740
P65=-112.5330;40.6320
P66=-112.3660;40.5640
[C7]
gain=-15.00
n_point=65
P1=-111.5810;41.8330
P2=-111.3410;41.6260
P3=-111.1330;41.3850
P4=-110.9450;41.1290
P5=-110.7800;40.8570
P6=-110.6320;40.5750
P7=-110.5100;40.2810
P8=-110.4100;39.9790
P9=-110.3260;39.6730
P10=-110.2670;39.3600
P11=-110.2350;39.0440
P12=-110.2280;38.7260
P13=-110.2450;38.4080
P14=-110.2860;38.0930

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TCR.txt

P15=-110.3530;37.7820
P16=-110.4470;37.4780
P17=-110.5670;37.1830
P18=-110.7070;36.8980
P19=-110.8650;36.6220
P20=-111.0430;36.3590
P21=-111.2400;36.1080
P22=-111.4550;35.8740
P23=-111.6830;35.6530
P24=-111.9300;35.4530
P25=-112.1920;35.2720
P26=-112.4610;35.1030
P27=-112.7560;34.9860
P28=-113.0690;34.9270
P29=-113.3870;34.9260
P30=-113.6990;34.9850
P31=-113.9920;35.1080
P32=-114.2570;35.2840
P33=-114.5080;35.4790
P34=-114.7440;35.6920
P35=-114.9630;35.9220
P36=-115.1620;36.1690
P37=-115.3470;36.4280
P38=-115.5220;36.6940
P39=-115.6710;36.9740
P40=-115.8070;37.2620
P41=-115.9240;37.5580
P42=-116.0070;37.8650
P43=-116.0570;38.1790
P44=-116.0770;38.4960
P45=-116.0700;38.8140
P46=-116.0310;39.1300
P47=-115.9550;39.4390
P48=-115.8420;39.7360
P49=-115.7030;40.0220
P50=-115.5430;40.2960
P51=-115.3590;40.5560
P52=-115.1550;40.8000
P53=-114.9430;41.0370
P54=-114.7100;41.2540
P55=-114.4670;41.4590
P56=-114.2110;41.6480
P57=-113.9400;41.8140
P58=-113.6580;41.9600
P59=-113.3730;42.1020
P60=-113.0680;42.1920
P61=-112.7530;42.2360
P62=-112.4350;42.2290
P63=-112.1260;42.1570
P64=-111.8400;42.0170
P65=-111.5810;41.8330
[C8]
gain=-2.00
n_point=25
P1=-102.6830;45.8730
P2=-102.4930;45.8210
P3=-102.1360;45.5030
P4=-102.0740;45.4010
P5=-101.9340;44.9190
P6=-101.9470;44.5580
P7=-101.9560;44.4380
P8=-102.0370;44.2090
P9=-102.1310;43.9590

TCR.txt

P10=-102.5060;43.4780
 P11=-102.6730;43.3390
 P12=-103.1410;43.1250
 P13=-103.5600;43.1140
 P14=-103.9410;43.2800
 P15=-104.0970;43.4310
 P16=-104.2710;43.7060
 P17=-104.3450;43.8920
 P18=-104.3910;44.3640
 P19=-104.2900;44.8460
 P20=-104.0170;45.3390
 P21=-103.8900;45.4780
 P22=-103.3690;45.8380
 P23=-103.3030;45.8530
 P24=-102.9090;45.9220
 P25=-102.6830;45.8730
 [C9]
 gain=-15.00
 n_point=61
 P1=-101.2360;47.9650
 P2=-101.0120;47.8600
 P3=-100.6390;47.5720
 P4=-100.5440;47.4690
 P5=-100.3080;47.1640
 P6=-100.1960;46.9690
 P7=-100.0440;46.5580
 P8=-100.0140;46.4690
 P9=-99.9250;45.9720
 P10=-99.9240;45.5120
 P11=-99.9220;45.4790
 P12=-99.9600;44.9910
 P13=-100.0630;44.5060
 P14=-100.2210;44.0260
 P15=-100.4370;43.5490
 P16=-100.5600;43.3400
 P17=-100.7080;43.0760
 P18=-101.0440;42.6060
 P19=-101.2320;42.3930
 P20=-101.4780;42.1380
 P21=-101.7730;41.8800
 P22=-102.0730;41.6710
 P23=-102.2600;41.5490
 P24=-102.7150;41.3320
 P25=-103.1460;41.2060
 P26=-103.2310;41.1940
 P27=-103.5630;41.1380
 P28=-103.9650;41.1360
 P29=-104.1750;41.1680
 P30=-104.3550;41.1920
 P31=-104.7360;41.3030
 P32=-105.1020;41.4980
 P33=-105.2150;41.5840
 P34=-105.4560;41.7780
 P35=-105.6740;42.0200
 P36=-105.7920;42.1800
 P37=-105.9680;42.4650
 P38=-106.1000;42.7760
 P39=-106.1580;42.9180
 P40=-106.2740;43.3770
 P41=-106.3160;43.8430
 P42=-106.3120;43.9940
 P43=-106.3090;44.3160
 P44=-106.2400;44.7970

TCR.txt

P45=-106.1050;45.2850
P46=-106.0760;45.3570
P47=-105.9130;45.7810
P48=-105.6440;46.2850
P49=-105.3980;46.6250
P50=-105.2630;46.8010
P51=-104.8210;47.2520
P52=-104.7300;47.3280
P53=-104.2770;47.6640
P54=-103.8570;47.8740
P55=-103.7580;47.9260
P56=-103.2530;48.1060
P57=-102.7670;48.1980
P58=-102.2970;48.2210
P59=-101.8450;48.1760
P60=-101.4170;48.0530
P61=-101.2360;47.9650
[C10]
gain=-20.00
n_point=65
P1=-101.4180;48.4880
P2=-101.2930;48.4600
P3=-100.8720;48.3060
P4=-100.4810;48.0650
P5=-100.4030;47.9970
P6=-100.1210;47.7420
P7=-99.9330;47.4940
P8=-99.8120;47.2740
P9=-99.6750;46.9900
P10=-99.5860;46.5680
P11=-99.5620;46.4870
P12=-99.5030;45.9900
P13=-99.5390;45.4950
P14=-99.6040;45.1150
P15=-99.6150;45.0050
P16=-99.7270;44.5190
P17=-99.9020;44.0380
P18=-99.9750;43.8910
P19=-100.1170;43.5600
P20=-100.3700;43.0880
P21=-100.6940;42.6180
P22=-100.7850;42.5070
P23=-101.0740;42.1520
P24=-101.3660;41.8600
P25=-101.5650;41.6880
P26=-101.8780;41.4400
P27=-102.2630;41.2220
P28=-102.3460;41.1700
P29=-102.7920;40.9790
P30=-103.2150;40.8750
P31=-103.6260;40.8240
P32=-104.0260;40.8210
P33=-104.4160;40.8670
P34=-104.7970;40.9640
P35=-105.1660;41.1290
P36=-105.1880;41.1430
P37=-105.5260;41.3630
P38=-105.7540;41.5720
P39=-105.8720;41.6950
P40=-106.1140;42.0110
P41=-106.2000;42.1580
P42=-106.3590;42.4570
P43=-106.4950;42.8670

TCR.txt

P44=-106.5100;42.9100
P45=-106.6160;43.3690
P46=-106.6500;43.8360
P47=-106.6300;44.3090
P48=-106.5610;44.7900
P49=-106.4450;45.2770
P50=-106.2800;45.7720
P51=-106.0480;46.2760
P52=-105.8470;46.5910
P53=-105.7260;46.7890
P54=-105.3080;47.3120
P55=-105.2430;47.3820
P56=-104.6960;47.8500
P57=-104.6870;47.8570
P58=-104.1460;48.2130
P59=-103.6410;48.3910
P60=-103.5510;48.4130
P61=-103.1360;48.5480
P62=-102.6500;48.6200
P63=-102.1800;48.6280
P64=-101.7260;48.5770
P65=-101.4180;48.4880
[C11]
gain=-4.00
n_point=66
P1=-102.0790;46.3050
P2=-101.9350;46.1970
P3=-101.8090;46.0710
P4=-101.6970;45.9300
P5=-101.6020;45.7790
P6=-101.5400;45.6100
P7=-101.4820;45.4420
P8=-101.4480;45.2660
P9=-101.4280;45.0870
P10=-101.4200;44.9090
P11=-101.4310;44.7300
P12=-101.4550;44.5520
P13=-101.4920;44.3770
P14=-101.5420;44.2050
P15=-101.6010;44.0360
P16=-101.6720;43.8720
P17=-101.7580;43.7140
P18=-101.8550;43.5640
P19=-101.9610;43.4190
P20=-102.0750;43.2820
P21=-102.1970;43.1500
P22=-102.3190;43.0190
P23=-102.4660;42.9190
P24=-102.6230;42.8300
P25=-102.7750;42.7360
P26=-102.9390;42.6650
P27=-103.1120;42.6150
P28=-103.2880;42.5800
P29=-103.4660;42.5690
P30=-103.6460;42.5810
P31=-103.8220;42.6160
P32=-103.9930;42.6720
P33=-104.1520;42.7530
P34=-104.2980;42.8560
P35=-104.4420;42.9630
P36=-104.5390;43.1150
P37=-104.6400;43.2620
P38=-104.7300;43.4150

TCR.txt

P39=-104.7960;43.5840
 P40=-104.8440;43.7560
 P41=-104.8770;43.9320
 P42=-104.8950;44.1100
 P43=-104.8970;44.2890
 P44=-104.8840;44.4680
 P45=-104.8570;44.6450
 P46=-104.8160;44.8190
 P47=-104.7610;44.9900
 P48=-104.6940;45.1560
 P49=-104.6140;45.3160
 P50=-104.5230;45.4700
 P51=-104.4210;45.6170
 P52=-104.3170;45.7640
 P53=-104.2010;45.8990
 P54=-104.0530;46.0030
 P55=-103.9120;46.1140
 P56=-103.7740;46.2260
 P57=-103.6200;46.3180
 P58=-103.4550;46.3890
 P59=-103.2850;46.4430
 P60=-103.1100;46.4860
 P61=-102.9330;46.5130
 P62=-102.7550;46.5100
 P63=-102.5760;46.4920
 P64=-102.3980;46.4620
 P65=-102.2320;46.3990
 P66=-102.0790;46.3050
 [C12]
 gain=-6.00
 n_point=66
 P1=-101.9880;46.8090
 P2=-101.8020;46.6950
 P3=-101.6260;46.5660
 P4=-101.4610;46.4230
 P5=-101.3500;46.2350
 P6=-101.2410;46.0470
 P7=-101.1460;45.8510
 P8=-101.0990;45.6370
 P9=-101.0510;45.4240
 P10=-101.0400;45.2060
 P11=-101.0330;44.9880
 P12=-101.0570;44.7710
 P13=-101.0830;44.5550
 P14=-101.1360;44.3430
 P15=-101.2000;44.1350
 P16=-101.2780;43.9310
 P17=-101.3700;43.7340
 P18=-101.4750;43.5420
 P19=-101.5930;43.3590
 P20=-101.7220;43.1830
 P21=-101.8570;43.0100
 P22=-102.0130;42.8590
 P23=-102.1830;42.7220
 P24=-102.3450;42.5770
 P25=-102.5320;42.4630
 P26=-102.7270;42.3650
 P27=-102.9290;42.2840
 P28=-103.1390;42.2240
 P29=-103.3540;42.1870
 P30=-103.5730;42.1750
 P31=-103.7910;42.1900
 P32=-104.0030;42.2380

TCR.txt

P33=-104.2070;42.3160
P34=-104.4050;42.4110
P35=-104.5840;42.5330
P36=-104.7330;42.6940
P37=-104.8810;42.8540
P38=-104.9920;43.0410
P39=-105.0870;43.2380
P40=-105.1750;43.4370
P41=-105.2210;43.6500
P42=-105.2630;43.8640
P43=-105.2790;44.0820
P44=-105.2770;44.3000
P45=-105.2580;44.5170
P46=-105.2200;44.7320
P47=-105.1660;44.9430
P48=-105.0970;45.1500
P49=-105.0110;45.3500
P50=-104.9110;45.5440
P51=-104.8000;45.7320
P52=-104.6780;45.9130
P53=-104.5300;46.0740
P54=-104.3820;46.2330
P55=-104.2240;46.3830
P56=-104.0490;46.5140
P57=-103.8620;46.6260
P58=-103.6720;46.7350
P59=-103.4740;46.8250
P60=-103.2660;46.8910
P61=-103.0520;46.9400
P62=-102.8360;46.9630
P63=-102.6180;46.9590
P64=-102.4000;46.9420
P65=-102.1860;46.9010
P66=-101.9880;46.8090
[C13]
gain=-8.00
n_point=66
P1=-101.3660;46.8830
P2=-101.2010;46.6950
P3=-101.0490;46.4970
P4=-100.9360;46.2770
P5=-100.8420;46.0460
P6=-100.7740;45.8060
P7=-100.7330;45.5600
P8=-100.7150;45.3110
P9=-100.7190;45.0610
P10=-100.7430;44.8130
P11=-100.7850;44.5670
P12=-100.8450;44.3240
P13=-100.9210;44.0870
P14=-101.0130;43.8550
P15=-101.1200;43.6290
P16=-101.2430;43.4120
P17=-101.3790;43.2030
P18=-101.5300;43.0040
P19=-101.6940;42.8160
P20=-101.8670;42.6360
P21=-102.0490;42.4670
P22=-102.2560;42.3260
P23=-102.4640;42.1890
P24=-102.6850;42.0720
P25=-102.9170;41.9800
P26=-103.1570;41.9120

TCR.txt

P27=-103.4030;41.8720
 P28=-103.6520;41.8610
 P29=-103.9020;41.8820
 P30=-104.1450;41.9350
 P31=-104.3810;42.0180
 P32=-104.5990;42.1380
 P33=-104.7980;42.2890
 P34=-104.9860;42.4530
 P35=-105.1340;42.6540
 P36=-105.2760;42.8590
 P37=-105.3780;43.0870
 P38=-105.4670;43.3200
 P39=-105.5300;43.5610
 P40=-105.5700;43.8070
 P41=-105.5870;44.0570
 P42=-105.5830;44.3060
 P43=-105.5580;44.5540
 P44=-105.5120;44.8000
 P45=-105.4470;45.0400
 P46=-105.3650;45.2770
 P47=-105.2620;45.5040
 P48=-105.1520;45.7280
 P49=-105.0140;45.9350
 P50=-104.8660;46.1360
 P51=-104.7100;46.3300
 P52=-104.5360;46.5090
 P53=-104.3450;46.6700
 P54=-104.1480;46.8240
 P55=-103.9400;46.9600
 P56=-103.7140;47.0680
 P57=-103.4870;47.1700
 P58=-103.2480;47.2450
 P59=-103.0050;47.2990
 P60=-102.7570;47.3290
 P61=-102.5070;47.3280
 P62=-102.2590;47.3000
 P63=-102.0160;47.2440
 P64=-101.7830;47.1550
 P65=-101.5670;47.0300
 P66=-101.3660;46.8830
 [C14]
 gain=-10.00
 n_point=66
 P1=-101.4890;47.3730
 P2=-101.2560;47.2250
 P3=-101.0510;47.0410
 P4=-100.8720;46.8320
 P5=-100.7330;46.5930
 P6=-100.6150;46.3450
 P7=-100.5330;46.0820
 P8=-100.4790;45.8120
 P9=-100.4530;45.5370
 P10=-100.4500;45.2610
 P11=-100.4670;44.9860
 P12=-100.5050;44.7130
 P13=-100.5630;44.4440
 P14=-100.6420;44.1800
 P15=-100.7380;43.9210
 P16=-100.8530;43.6710
 P17=-100.9810;43.4270
 P18=-101.1250;43.1910
 P19=-101.2840;42.9670
 P20=-101.4580;42.7530

TCR.txt

P21=-101.6440;42.5490
P22=-101.8530;42.3690
P23=-102.0600;42.1880
P24=-102.2890;42.0350
P25=-102.5270;41.8960
P26=-102.7790;41.7840
P27=-103.0400;41.6990
P28=-103.3100;41.6390
P29=-103.5840;41.6110
P30=-103.8600;41.6120
P31=-104.1320;41.6590
P32=-104.3970;41.7310
P33=-104.6490;41.8430
P34=-104.8800;41.9930
P35=-105.0880;42.1730
P36=-105.2750;42.3750
P37=-105.4310;42.6010
P38=-105.5670;42.8410
P39=-105.6750;43.0940
P40=-105.7580;43.3570
P41=-105.8070;43.6280
P42=-105.8360;43.9020
P43=-105.8370;44.1780
P44=-105.8170;44.4530
P45=-105.7760;44.7250
P46=-105.7100;44.9930
P47=-105.6300;45.2570
P48=-105.5260;45.5120
P49=-105.4050;45.7600
P50=-105.2650;45.9970
P51=-105.1110;46.2260
P52=-104.9390;46.4410
P53=-104.7470;46.6390
P54=-104.5530;46.8350
P55=-104.3350;47.0020
P56=-104.1040;47.1540
P57=-103.8690;47.2960
P58=-103.6180;47.4110
P59=-103.3590;47.5050
P60=-103.0930;47.5780
P61=-102.8200;47.6210
P62=-102.5460;47.6380
P63=-102.2700;47.6230
P64=-101.9980;47.5770
P65=-101.7370;47.4890
P66=-101.4890;47.3730

TCL.txt

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[FormatInfo]
format_ver=1
[GeoMain]
ntc_id=1
adm=USA
sat_name=VIASAT-1
long_nom=-115.10
n_diag=1
[COHeader]
beam_id=TCL
emi_rcp=R
polar_disc=C
reason=C
n_bore=1
n_cont=14
[B1]
gain=0.00
p=-103.2740;44.3960
[C1]
gain=-2.00
n_point=23
P1=-112.3820;39.3120
P2=-112.3490;39.2640
P3=-112.2160;38.8930
P4=-112.1740;38.4770
P5=-112.2270;38.0640
P6=-112.3720;37.6540
P7=-112.4200;37.5700
P8=-112.7100;37.2470
P9=-112.8020;37.1700
P10=-113.1710;37.0700
P11=-113.5350;37.1890
P12=-113.5930;37.2430
P13=-113.8830;37.6480
P14=-113.8930;37.6760
P15=-113.9810;38.0570
P16=-113.9800;38.4690
P17=-113.8860;38.8860
P18=-113.8710;38.9210
P19=-113.6310;39.3070
P20=-113.4810;39.4700
P21=-113.0950;39.6580
P22=-112.7150;39.6090
P23=-112.3820;39.3120
[C2]
gain=-4.00
n_point=33
P1=-112.5840;40.1640
P2=-112.3160;40.0110
P3=-112.0920;39.7390
P4=-111.9590;39.4900
P5=-111.8940;39.3160
P6=-111.8120;38.8960
P7=-111.8010;38.4800
P8=-111.8510;38.0670
P9=-111.9620;37.6570
P10=-112.0570;37.4340
P11=-112.1540;37.2500
P12=-112.4470;36.8550
P13=-112.4590;36.8460
P14=-112.8210;36.6010
P15=-113.1860;36.5220
P16=-113.5480;36.6000
```

TCL.txt

```
P17=-113.8870;36.8400
P18=-113.9070;36.8580
P19=-114.1590;37.2420
P20=-114.2640;37.5050
P21=-114.3090;37.6470
P22=-114.3720;38.0560
P23=-114.3670;38.4690
P24=-114.2940;38.8850
P25=-114.2460;39.0280
P26=-114.1380;39.3050
P27=-113.8770;39.7300
P28=-113.8550;39.7570
P29=-113.4650;40.0900
P30=-113.2820;40.1600
P31=-113.0760;40.2340
P32=-112.6920;40.2160
P33=-112.5840;40.1640
[C3]
gain=-6.00
n_point=41
P1=-112.4670;40.5970
P2=-112.2930;40.5260
P3=-111.9230;40.1890
P4=-111.9080;40.1680
P5=-111.6850;39.7420
P6=-111.5840;39.3890
P7=-111.5670;39.3180
P8=-111.5170;38.8990
P9=-111.5210;38.4820
P10=-111.5720;38.0690
P11=-111.6710;37.6590
P12=-111.6780;37.6400
P13=-111.8200;37.2520
P14=-112.0360;36.8480
P15=-112.0860;36.7750
P16=-112.3860;36.4470
P17=-112.4660;36.3760
P18=-112.8340;36.1750
P19=-113.1970;36.1110
P20=-113.5570;36.1690
P21=-113.9150;36.3620
P22=-114.0010;36.4410
P23=-114.2720;36.7530
P24=-114.3280;36.8390
P25=-114.5130;37.2410
P26=-114.6190;37.6470
P27=-114.6310;37.7440
P28=-114.6670;38.0560
P29=-114.6600;38.4680
P30=-114.6250;38.6990
P31=-114.5980;38.8850
P32=-114.4790;39.3050
P33=-114.2820;39.7290
P34=-114.2360;39.8040
P35=-113.9640;40.1580
P36=-113.8450;40.2810
P37=-113.4530;40.5500
P38=-113.3230;40.5920
P39=-113.0620;40.6760
P40=-112.6740;40.6720
P41=-112.4670;40.5970
[C4]
gain=-10.00
```

TCL.txt

```
n_point=66
P1=-111.7770;40.9430
P2=-111.6100;40.7680
P3=-111.4570;40.5800
P4=-111.3480;40.3630
P5=-111.2480;40.1420
P6=-111.1800;39.9090
P7=-111.1240;39.6740
P8=-111.0910;39.4330
P9=-111.0710;39.1920
P10=-111.0660;38.9490
P11=-111.0730;38.7070
P12=-111.0910;38.4650
P13=-111.1200;38.2240
P14=-111.1590;37.9850
P15=-111.2080;37.7480
P16=-111.2690;37.5130
P17=-111.3380;37.2810
P18=-111.4190;37.0520
P19=-111.5120;36.8280
P20=-111.6230;36.6130
P21=-111.7450;36.4030
P22=-111.8990;36.2150
P23=-112.0540;36.0290
P24=-112.2420;35.8770
P25=-112.4390;35.7350
P26=-112.6570;35.6280
P27=-112.8860;35.5520
P28=-113.1260;35.5130
P29=-113.3680;35.5160
P30=-113.6050;35.5670
P31=-113.8350;35.6450
P32=-114.0440;35.7670
P33=-114.2410;35.9090
P34=-114.4160;36.0760
P35=-114.5690;36.2640
P36=-114.7100;36.4610
P37=-114.8200;36.6770
P38=-114.9190;36.8980
P39=-114.9920;37.1300
P40=-115.0540;37.3640
P41=-115.1010;37.6020
P42=-115.1290;37.8430
P43=-115.1430;38.0850
P44=-115.1410;38.3270
P45=-115.1250;38.5690
P46=-115.0940;38.8100
P47=-115.0470;39.0470
P48=-114.9910;39.2840
P49=-114.9210;39.5160
P50=-114.8380;39.7440
P51=-114.7350;39.9630
P52=-114.6220;40.1770
P53=-114.4790;40.3740
P54=-114.3360;40.5700
P55=-114.1700;40.7450
P56=-113.9820;40.8990
P57=-113.7890;41.0450
P58=-113.5770;41.1650
P59=-113.3550;41.2610
P60=-113.1210;41.3240
P61=-112.8800;41.3540
P62=-112.6380;41.3470
```

TCL.txt

```
P63=-112.4000;41.3020
P64=-112.1730;41.2170
P65=-111.9620;41.0970
P66=-111.7770;40.9430
[C5]
gain=-8.00
n_point=66
P1=-112.5370;41.0070
P2=-112.3290;40.9440
P3=-112.1380;40.8400
P4=-111.9620;40.7130
P5=-111.8050;40.5650
P6=-111.6850;40.3810
P7=-111.5660;40.2010
P8=-111.4750;40.0030
P9=-111.4050;39.7970
P10=-111.3510;39.5870
P11=-111.3150;39.3720
P12=-111.2930;39.1560
P13=-111.2830;38.9390
P14=-111.2850;38.7220
P15=-111.2970;38.5050
P16=-111.3180;38.2880
P17=-111.3480;38.0730
P18=-111.3880;37.8590
P19=-111.4380;37.6480
P20=-111.4980;37.4390
P21=-111.5700;37.2340
P22=-111.6550;37.0340
P23=-111.7470;36.8370
P24=-111.8660;36.6540
P25=-111.9840;36.4730
P26=-112.1220;36.3040
P27=-112.2870;36.1620
P28=-112.4540;36.0240
P29=-112.6460;35.9220
P30=-112.8480;35.8420
P31=-113.0610;35.7980
P32=-113.2780;35.7900
P33=-113.4930;35.8190
P34=-113.7000;35.8850
P35=-113.8970;35.9780
P36=-114.0710;36.1070
P37=-114.2340;36.2510
P38=-114.3790;36.4120
P39=-114.4970;36.5950
P40=-114.6080;36.7820
P41=-114.6940;36.9810
P42=-114.7720;37.1840
P43=-114.8280;37.3940
P44=-114.8710;37.6070
P45=-114.8990;37.8220
P46=-114.9130;38.0390
P47=-114.9160;38.2560
P48=-114.9060;38.4740
P49=-114.8850;38.6900
P50=-114.8510;38.9050
P51=-114.8040;39.1170
P52=-114.7440;39.3260
P53=-114.6680;39.5290
P54=-114.5850;39.7300
P55=-114.4790;39.9200
P56=-114.3690;40.1080
```

TCL.txt

```
P57=-114.2450;40.2860
P58=-114.0950;40.4440
P59=-113.9430;40.5980
P60=-113.7710;40.7320
P61=-113.5830;40.8410
P62=-113.3890;40.9400
P63=-113.1800;40.9980
P64=-112.9670;41.0380
P65=-112.7500;41.0410
P66=-112.5370;41.0070
[C6]
gain=-15.00
n_point=65
P1=-112.2600;41.9170
P2=-111.9790;41.8200
P3=-111.7200;41.6740
P4=-111.4850;41.4910
P5=-111.2920;41.2640
P6=-111.1040;41.0350
P7=-110.9520;40.7780
P8=-110.8280;40.5080
P9=-110.7370;40.2240
P10=-110.6720;39.9340
P11=-110.6280;39.6400
P12=-110.6130;39.3430
P13=-110.6170;39.0450
P14=-110.6350;38.7480
P15=-110.6640;38.4520
P16=-110.7040;38.1570
P17=-110.7540;37.8630
P18=-110.8160;37.5720
P19=-110.8910;37.2840
P20=-110.9800;37.0000
P21=-111.0800;36.7200
P22=-111.2000;36.4470
P23=-111.3500;36.1900
P24=-111.5230;35.9490
P25=-111.7100;35.7170
P26=-111.9290;35.5170
P27=-112.1590;35.3280
P28=-112.4150;35.1740
P29=-112.6860;35.0530
P30=-112.9740;34.9810
P31=-113.2710;34.9600
P32=-113.5670;34.9920
P33=-113.8520;35.0760
P34=-114.1170;35.2110
P35=-114.3630;35.3780
P36=-114.5920;35.5680
P37=-114.7930;35.7870
P38=-114.9820;36.0170
P39=-115.1460;36.2660
P40=-115.2880;36.5260
P41=-115.4020;36.8010
P42=-115.4980;37.0830
P43=-115.5690;37.3720
P44=-115.6130;37.6670
P45=-115.6350;37.9630
P46=-115.6390;38.2610
P47=-115.6260;38.5580
P48=-115.5980;38.8540
P49=-115.5500;39.1480
P50=-115.4780;39.4370
```

TCL.txt

```
P51=-115.3850;39.7200
P52=-115.2860;40.0010
P53=-115.1610;40.2710
P54=-115.0080;40.5250
P55=-114.8290;40.7640
P56=-114.6450;40.9970
P57=-114.4260;41.1980
P58=-114.2090;41.4020
P59=-113.9640;41.5710
P60=-113.7050;41.7180
P61=-113.4300;41.8310
P62=-113.1450;41.9170
P63=-112.8520;41.9670
P64=-112.5540;41.9640
P65=-112.2600;41.9170
[C7]
gain=-20.00
n_point=65
P1=-111.7070;42.3190
P2=-111.4230;42.1300
P3=-111.1910;41.8790
P4=-110.9800;41.6100
P5=-110.8020;41.3190
P6=-110.6370;41.0200
P7=-110.5010;40.7070
P8=-110.3970;40.3810
P9=-110.3160;40.0500
P10=-110.2640;39.7120
P11=-110.2450;39.3710
P12=-110.2530;39.0300
P13=-110.2800;38.6890
P14=-110.3210;38.3500
P15=-110.3750;38.0130
P16=-110.4400;37.6770
P17=-110.5210;37.3460
P18=-110.6180;37.0180
P19=-110.7240;36.6930
P20=-110.8610;36.3800
P21=-111.0300;36.0830
P22=-111.2240;35.8020
P23=-111.4330;35.5330
P24=-111.6690;35.2860
P25=-111.9220;35.0560
P26=-112.1960;34.8520
P27=-112.4740;34.6530
P28=-112.7900;34.5280
P29=-113.1230;34.4510
P30=-113.4610;34.4700
P31=-113.7920;34.5540
P32=-114.0960;34.7070
P33=-114.3690;34.9120
P34=-114.6380;35.1220
P35=-114.8800;35.3630
P36=-115.1140;35.6120
P37=-115.3230;35.8820
P38=-115.5220;36.1600
P39=-115.6900;36.4570
P40=-115.8500;36.7590
P41=-115.9730;37.0780
P42=-116.0540;37.4090
P43=-116.0990;37.7480
P44=-116.1290;38.0880
P45=-116.1300;38.4300
```

TCL.txt

```

P46=-116.1100;38.7710
P47=-116.0770;39.1110
P48=-116.0170;39.4470
P49=-115.9190;39.7740
P50=-115.7750;40.0840
P51=-115.6280;40.3920
P52=-115.4440;40.6790
P53=-115.2360;40.9500
P54=-115.0020;41.1990
P55=-114.7570;41.4370
P56=-114.4920;41.6520
P57=-114.2160;41.8540
P58=-113.9350;42.0480
P59=-113.6400;42.2190
P60=-113.3240;42.3480
P61=-113.0070;42.4780
P62=-112.6770;42.5620
P63=-112.3360;42.5720
P64=-112.0100;42.4770
P65=-111.7070;42.3190
[C8]
gain=-2.00
n_point=21
P1=-102.0960;45.4000
P2=-101.9730;44.9180
P3=-102.0310;44.4360
P4=-102.2740;43.9540
P5=-102.6130;43.5950
P6=-102.8280;43.4680
P7=-103.0880;43.3590
P8=-103.5080;43.3520
P9=-103.7090;43.4420
P10=-103.8840;43.5540
P11=-104.1160;43.8980
P12=-104.1770;44.1590
P13=-104.2030;44.3690
P14=-104.1100;44.8510
P15=-103.9700;45.1170
P16=-103.8150;45.3450
P17=-103.4060;45.6840
P18=-102.9280;45.8440
P19=-102.5060;45.7720
P20=-102.1430;45.4770
P21=-102.0960;45.4000
[C9]
gain=-4.00
n_point=31
P1=-102.6510;46.3730
P2=-102.3600;46.3290
P3=-101.9740;46.1100
P4=-101.7920;45.9030
P5=-101.6520;45.6640
P6=-101.5630;45.4180
P7=-101.5160;44.9330
P8=-101.5910;44.4510
P9=-101.7840;43.9700
P10=-102.1170;43.4910
P11=-102.2480;43.3590
P12=-102.7400;43.0080
P13=-102.7510;43.0020
P14=-103.1990;42.8640
P15=-103.6120;42.8700
P16=-103.9020;42.9740

```

TCL.txt

```
P17=-103.9970;43.0130
P18=-104.3480;43.3310
P19=-104.4110;43.4230
P20=-104.6020;43.8850
P21=-104.6220;44.0510
P22=-104.6490;44.3570
P23=-104.5750;44.8380
P24=-104.3770;45.3290
P25=-104.3460;45.3780
P26=-103.9920;45.8320
P27=-103.7630;46.0340
P28=-103.2550;46.3070
P29=-102.9650;46.3630
P30=-102.7890;46.3930
P31=-102.6510;46.3730
[C10]
gain=-8.00
n_point=41
P1=-101.6980;46.9120
P2=-101.3760;46.6450
P3=-101.2150;46.4230
P4=-101.0700;46.1520
P5=-100.9830;45.9320
P6=-100.8930;45.4420
P7=-100.8950;45.2220
P8=-100.8940;44.9560
P9=-100.9770;44.4720
P10=-101.1420;43.9920
P11=-101.3300;43.6380
P12=-101.3960;43.5150
P13=-101.7560;43.0400
P14=-101.9540;42.8430
P15=-102.3180;42.5640
P16=-102.4580;42.4710
P17=-102.9170;42.2710
P18=-103.3450;42.1900
P19=-103.7510;42.2060
P20=-104.1380;42.3170
P21=-104.4430;42.5030
P22=-104.5040;42.5410
P23=-104.8470;42.8970
P24=-104.8830;42.9480
P25=-105.1180;43.4040
P26=-105.1470;43.5050
P27=-105.2460;43.8690
P28=-105.2770;44.3410
P29=-105.2250;44.8210
P30=-105.0910;45.3100
P31=-104.8560;45.8080
P32=-104.6160;46.1480
P33=-104.4790;46.3170
P34=-104.0490;46.7070
P35=-103.8360;46.8410
P36=-103.5290;47.0110
P37=-103.0400;47.1650
P38=-102.5780;47.2010
P39=-102.1430;47.1320
P40=-101.7410;46.9470
P41=-101.6980;46.9120
[C11]
gain=-10.00
n_point=47
P1=-101.9800;47.4160
```

TCL.txt

```
P2=-101.6440;47.2850
P3=-101.2720;46.9980
P4=-101.2140;46.9300
P5=-100.9460;46.5710
P6=-100.8750;46.4360
P7=-100.7070;45.9420
P8=-100.6990;45.8920
P9=-100.6330;45.4520
P10=-100.6510;44.9650
P11=-100.7410;44.4810
P12=-100.8970;44.0010
P13=-101.1250;43.5240
P14=-101.4510;43.0500
P15=-101.4960;42.9980
P16=-101.9070;42.5770
P17=-102.0460;42.4610
P18=-102.5290;42.1630
P19=-102.6970;42.1000
P20=-102.9780;41.9920
P21=-103.4010;41.9220
P22=-103.8040;41.9450
P23=-104.1760;42.0570
P24=-104.1880;42.0610
P25=-104.5600;42.2490
P26=-104.8340;42.4920
P27=-104.9090;42.5670
P28=-105.1770;42.9410
P29=-105.2310;43.0490
P30=-105.3860;43.3980
P31=-105.4880;43.8620
P32=-105.4900;43.9070
P33=-105.5290;44.3340
P34=-105.4890;44.8150
P35=-105.3710;45.3030
P36=-105.1620;45.8000
P37=-105.1080;45.8920
P38=-104.8500;46.3060
P39=-104.4950;46.7050
P40=-104.3610;46.8260
P41=-103.9500;47.1320
P42=-103.4570;47.3660
P43=-103.4390;47.3740
P44=-102.9520;47.5050
P45=-102.4890;47.5280
P46=-102.0540;47.4490
P47=-101.9800;47.4160
[C12]
gain=-15.00
n_point=55
P1=-101.4340;47.9570
P2=-101.0510;47.7330
P3=-100.7880;47.4600
P4=-100.7030;47.3690
P5=-100.4460;46.9590
P6=-100.4020;46.8660
P7=-100.2450;46.4600
P8=-100.1820;46.1210
P9=-100.1490;45.9640
P10=-100.1160;45.4720
P11=-100.1580;44.9830
P12=-100.2550;44.4990
P13=-100.4000;44.0190
P14=-100.5980;43.5430
```

TCL.txt

```
P15=-100.8640;43.0700
P16=-101.1580;42.6810
P17=-101.2220;42.5990
P18=-101.6920;42.1310
P19=-101.7170;42.1100
P20=-102.2110;41.7610
P21=-102.4280;41.6600
P22=-102.6680;41.5450
P23=-103.1010;41.4200
P24=-103.5140;41.3770
P25=-103.9130;41.4030
P26=-104.2960;41.5070
P27=-104.4840;41.6020
P28=-104.6670;41.6800
P29=-105.0250;41.9330
P30=-105.1260;42.0330
P31=-105.3670;42.2910
P32=-105.5020;42.4760
P33=-105.6860;42.8050
P34=-105.7510;42.9270
P35=-105.9180;43.3850
P36=-105.9600;43.6120
P37=-106.0160;43.8500
P38=-106.0560;44.3220
P39=-106.0270;44.8020
P40=-105.9370;45.2890
P41=-105.7770;45.7840
P42=-105.5300;46.2890
P43=-105.4370;46.4320
P44=-105.1880;46.8030
P45=-104.8340;47.1920
P46=-104.6860;47.3290
P47=-104.2810;47.6460
P48=-103.8630;47.8740
P49=-103.7570;47.9310
P50=-103.2500;48.1180
P51=-102.7640;48.2060
P52=-102.2990;48.2120
P53=-101.8570;48.1360
P54=-101.4440;47.9640
P55=-101.4340;47.9570
[C13]
gain=-6.00
n_point=66
P1=-101.5830;46.3130
P2=-101.4640;46.1570
P3=-101.3680;45.9870
P4=-101.2920;45.8060
P5=-101.2360;45.6190
P6=-101.1930;45.4280
P7=-101.1820;45.2320
P8=-101.1790;45.0370
P9=-101.1920;44.8420
P10=-101.2230;44.6480
P11=-101.2660;44.4570
P12=-101.3230;44.2700
P13=-101.3930;44.0870
P14=-101.4760;43.9100
P15=-101.5710;43.7380
P16=-101.6730;43.5710
P17=-101.7850;43.4110
P18=-101.9170;43.2660
P19=-102.0530;43.1250
```

TCL.txt

```
P20=-102.1950;42.9910
P21=-102.3500;42.8710
P22=-102.5180;42.7690
P23=-102.6910;42.6800
P24=-102.8710;42.6030
P25=-103.0600;42.5430
P26=-103.2510;42.5160
P27=-103.4470;42.5030
P28=-103.6440;42.5070
P29=-103.8330;42.5540
P30=-104.0190;42.6200
P31=-104.1910;42.7110
P32=-104.3520;42.8230
P33=-104.5000;42.9500
P34=-104.6140;43.1100
P35=-104.7250;43.2710
P36=-104.8190;43.4410
P37=-104.8760;43.6300
P38=-104.9320;43.8170
P39=-104.9630;44.0100
P40=-104.9770;44.2060
P41=-104.9760;44.4010
P42=-104.9570;44.5960
P43=-104.9310;44.7910
P44=-104.8790;44.9790
P45=-104.8200;45.1660
P46=-104.7450;45.3460
P47=-104.6560;45.5210
P48=-104.5570;45.6900
P49=-104.4470;45.8520
P50=-104.3240;46.0040
P51=-104.1910;46.1480
P52=-104.0490;46.2820
P53=-103.8930;46.4000
P54=-103.7310;46.5110
P55=-103.5590;46.6050
P56=-103.3780;46.6800
P57=-103.1940;46.7440
P58=-103.0030;46.7890
P59=-102.8080;46.8100
P60=-102.6120;46.8080
P61=-102.4170;46.7860
P62=-102.2260;46.7420
P63=-102.0440;46.6700
P64=-101.8730;46.5740
P65=-101.7180;46.4550
P66=-101.5830;46.3130
[C14]
gain=-20.00
n_point=66
P1=-101.1740;48.4430
P2=-100.8670;48.2740
P3=-100.6020;48.0470
P4=-100.3730;47.7820
P5=-100.1640;47.5020
P6=-100.0220;47.1820
P7=-99.8910;46.8580
P8=-99.7940;46.5210
P9=-99.7560;46.1730
P10=-99.7270;45.8250
P11=-99.7220;45.4750
P12=-99.7530;45.1260
P13=-99.8110;44.7810
```

TCL.txt

P14=-99.8920;44.4400
P15=-99.9920;44.1050
P16=-100.1130;43.7770
P17=-100.2540;43.4570
P18=-100.4160;43.1460
P19=-100.6030;42.8510
P20=-100.8050;42.5640
P21=-101.0270;42.2940
P22=-101.2580;42.0310
P23=-101.5180;41.7970
P24=-101.7920;41.5780
P25=-102.0890;41.3950
P26=-102.4000;41.2340
P27=-102.7260;41.1060
P28=-103.0640;41.0150
P29=-103.4110;40.9710
P30=-103.7610;40.9700
P31=-104.1080;41.0180
P32=-104.4440;41.1180
P33=-104.7660;41.2550
P34=-105.0650;41.4360
P35=-105.3360;41.6570
P36=-105.5800;41.9080
P37=-105.7930;42.1860
P38=-105.9770;42.4830
P39=-106.1320;42.7980
P40=-106.2570;43.1240
P41=-106.3480;43.4620
P42=-106.4120;43.8060
P43=-106.4510;44.1540
P44=-106.4560;44.5040
P45=-106.4280;44.8530
P46=-106.3720;45.1980
P47=-106.2890;45.5380
P48=-106.1780;45.8700
P49=-106.0420;46.1930
P50=-105.8820;46.5040
P51=-105.7030;46.8050
P52=-105.5020;47.0910
P53=-105.2860;47.3670
P54=-105.0340;47.6100
P55=-104.7790;47.8490
P56=-104.4950;48.0530
P57=-104.1970;48.2380
P58=-103.8820;48.3910
P59=-103.5600;48.5250
P60=-103.2240;48.6250
P61=-102.8810;48.6930
P62=-102.5320;48.7220
P63=-102.1820;48.7150
P64=-101.8340;48.6690
P65=-101.4970;48.5770
P66=-101.1740;48.4430

TMR.txt

```
[FormatInfo]
format_ver=1
[GeoMain]
ntc_id=1
adm=USA
sat_name=VIASAT-1
long_nom=-115.10
n_diag=1
[COHeader]
beam_id=TMR
emi_rcp=E
polar_disc=C
reason=C
n_bore=1
n_cont=14
[B1]
gain=0.00
p=-103.2740;44.3960
[C1]
gain=-2.00
n_point=27
P1=-112.4890;39.7360
P2=-112.3320;39.6530
P3=-112.0130;39.3150
P4=-111.9710;39.2370
P5=-111.8460;38.8960
P6=-111.8130;38.4800
P7=-111.8950;38.0670
P8=-112.0420;37.7620
P9=-112.1110;37.6560
P10=-112.4280;37.3490
P11=-112.6210;37.2470
P12=-112.8020;37.1730
P13=-113.1690;37.1460
P14=-113.5210;37.2430
P15=-113.5330;37.2480
P16=-113.8950;37.5500
P17=-113.9700;37.6480
P18=-114.1550;38.0560
P19=-114.2110;38.4690
P20=-114.1410;38.8850
P21=-113.9360;39.3060
P22=-113.8620;39.3990
P23=-113.4740;39.7210
P24=-113.4480;39.7310
P25=-113.0890;39.8400
P26=-112.7070;39.8240
P27=-112.4890;39.7360
[C2]
gain=-4.00
n_point=37
P1=-112.1220;40.1660
P2=-111.9310;40.0260
P3=-111.6830;39.7420
P4=-111.5740;39.5630
P5=-111.4600;39.3190
P6=-111.3550;38.9000
P7=-111.3400;38.4840
P8=-111.4100;38.0700
P9=-111.5660;37.6600
P10=-111.6870;37.4580
P11=-111.8370;37.2520
P12=-112.0760;37.0100
```

TMR.txt

P13=-112.3090;36.8460
P14=-112.4510;36.7620
P15=-112.8200;36.6390
P16=-113.1840;36.6150
P17=-113.5460;36.6880
P18=-113.8530;36.8400
P19=-113.9060;36.8710
P20=-114.2670;37.2100
P21=-114.2920;37.2410
P22=-114.5270;37.6470
P23=-114.6290;37.9600
P24=-114.6570;38.0560
P25=-114.6960;38.4680
P26=-114.6510;38.8850
P27=-114.6230;38.9730
P28=-114.5080;39.3050
P29=-114.2520;39.7290
P30=-114.2370;39.7480
P31=-113.8490;40.1090
P32=-113.7650;40.1590
P33=-113.4590;40.3150
P34=-113.0710;40.4070
P35=-112.6850;40.3960
P36=-112.3040;40.2780
P37=-112.1220;40.1660
[C3]
gain=-6.00
n_point=45
P1=-112.0320;40.6000
P2=-111.9050;40.5280
P3=-111.5380;40.1930
P4=-111.5200;40.1710
P5=-111.2440;39.7450
P6=-111.1890;39.6160
P7=-111.0800;39.3230
P8=-111.0020;38.9030
P9=-110.9960;38.4870
P10=-111.0600;38.0730
P11=-111.1950;37.6630
P12=-111.3200;37.4180
P13=-111.4130;37.2550
P14=-111.7160;36.8700
P15=-111.7360;36.8500
P16=-112.0960;36.5500
P17=-112.2780;36.4480
P18=-112.4670;36.3480
P19=-112.8320;36.2410
P20=-113.1940;36.2180
P21=-113.5540;36.2770
P22=-113.9140;36.4270
P23=-113.9350;36.4410
P24=-114.2730;36.6840
P25=-114.4270;36.8390
P26=-114.6340;37.1030
P27=-114.7250;37.2410
P28=-114.9130;37.6470
P29=-115.0000;37.9750
P30=-115.0210;38.0560
P31=-115.0580;38.4680
P32=-115.0210;38.8850
P33=-115.0000;38.9640
P34=-114.9080;39.3050
P35=-114.7060;39.7290

TMR.txt

P36=-114.6180;39.8580
P37=-114.3760;40.1570
P38=-114.2300;40.3010
P39=-113.8390;40.5830
P40=-113.8230;40.5910
P41=-113.4480;40.7570
P42=-113.0560;40.8370
P43=-112.6680;40.8310
P44=-112.2830;40.7320
P45=-112.0320;40.6000
[C4]
gain=-8.00
n_point=51
P1=-112.1190;41.0360
P2=-111.8840;40.9260
P3=-111.5110;40.6350
P4=-111.4830;40.6040
P5=-111.1520;40.1930
P6=-111.1400;40.1740
P7=-110.9210;39.7480
P8=-110.8190;39.4340
P9=-110.7860;39.3260
P10=-110.7200;38.9060
P11=-110.7190;38.4890
P12=-110.7800;38.0760
P13=-110.9060;37.6650
P14=-110.9410;37.5910
P15=-111.0990;37.2580
P16=-111.3500;36.8830
P17=-111.3730;36.8530
P18=-111.7360;36.4720
P19=-111.7620;36.4510
P20=-112.1110;36.1940
P21=-112.4090;36.0510
P22=-112.4790;36.0160
P23=-112.8430;35.9130
P24=-113.2030;35.8890
P25=-113.5620;35.9410
P26=-113.8350;36.0450
P27=-113.9190;36.0760
P28=-114.2770;36.2920
P29=-114.4460;36.4400
P30=-114.6370;36.6290
P31=-114.8070;36.8390
P32=-115.0000;37.1470
P33=-115.0540;37.2410
P34=-115.2220;37.6470
P35=-115.3190;38.0560
P36=-115.3530;38.4680
P37=-115.3250;38.8850
P38=-115.2300;39.3050
P39=-115.0540;39.7290
P40=-115.0000;39.8190
P41=-114.7830;40.1570
P42=-114.6150;40.3570
P43=-114.3740;40.5890
P44=-114.2250;40.7160
P45=-113.8320;40.9600
P46=-113.6630;41.0280
P47=-113.4380;41.1200
P48=-113.0440;41.1990
P49=-112.6530;41.1950
P50=-112.2660;41.1060

TMR.txt

P51=-112.1190;41.0360
[C5]
gain=-15.00
n_point=69
P1=-111.6130;41.9270
P2=-111.4390;41.8200
P3=-111.1230;41.4850
P4=-111.0690;41.4330
P5=-110.7870;41.0470
P6=-110.7120;40.9390
P7=-110.5270;40.6130
P8=-110.3730;40.2820
P9=-110.3290;40.1830
P10=-110.1770;39.7560
P11=-110.0860;39.3330
P12=-110.0740;39.2190
P13=-110.0290;38.9130
P14=-110.0270;38.4970
P15=-110.0840;38.0830
P16=-110.1900;37.7320
P17=-110.2040;37.6720
P18=-110.3590;37.2650
P19=-110.5860;36.8600
P20=-110.6230;36.8070
P21=-110.8590;36.4580
P22=-111.0220;36.2550
P23=-111.1970;36.0590
P24=-111.4060;35.8340
P25=-111.6090;35.6630
P26=-111.7820;35.4990
P27=-112.1380;35.2700
P28=-112.1500;35.2600
P29=-112.5140;35.0480
P30=-112.8720;34.9450
P31=-113.2280;34.9160
P32=-113.5820;34.9530
P33=-113.9350;35.0700
P34=-114.2270;35.2620
P35=-114.2880;35.2920
P36=-114.6430;35.5640
P37=-114.7230;35.6510
P38=-115.0000;35.9250
P39=-115.0970;36.0440
P40=-115.3620;36.3870
P41=-115.4010;36.4400
P42=-115.6550;36.8390
P43=-115.7310;36.9950
P44=-115.8660;37.2420
P45=-116.0200;37.6480
P46=-116.1130;38.0570
P47=-116.1140;38.0740
P48=-116.1720;38.4700
P49=-116.1590;38.8860
P50=-116.1310;39.0150
P51=-116.0880;39.3060
P52=-115.9570;39.7300
P53=-115.7680;40.0780
P54=-115.7300;40.1570
P55=-115.4410;40.5890
P56=-115.3880;40.6520
P57=-115.0640;41.0260
P58=-115.0000;41.0910
P59=-114.6070;41.4430

TMR.txt

P60=-114.5750;41.4670
P61=-114.2100;41.7490
P62=-113.9010;41.9140
P63=-113.8110;41.9770
P64=-113.4090;42.1660
P65=-113.0070;42.2660
P66=-112.6070;42.2930
P67=-112.2100;42.2440
P68=-111.8200;42.0910
P69=-111.6130;41.9270
[C6]
gain=-20.00
n_point=63
P1=-111.1200;43.2330
P2=-110.8730;42.8950
P3=-110.7670;42.4920
P4=-110.6960;42.0810
P5=-110.5750;41.6820
P6=-110.4310;41.2890
P7=-110.2710;40.9030
P8=-110.1110;40.5170
P9=-109.9680;40.1240
P10=-109.8280;39.7310
P11=-109.7410;39.3220
P12=-109.6690;38.9110
P13=-109.6340;38.4950
P14=-109.6830;38.0800
P15=-109.8230;37.6870
P16=-109.9660;37.2940
P17=-110.1740;36.9320
P18=-110.3990;36.5800
P19=-110.6460;36.2430
P20=-110.9030;35.9130
P21=-111.1680;35.5910
P22=-111.4240;35.2610
P23=-111.6600;34.9160
P24=-111.8660;34.5520
P25=-112.1180;34.2190
P26=-112.4480;33.9660
P27=-112.8380;33.8180
P28=-113.2530;33.7820
P29=-113.6620;33.8640
P30=-114.0350;34.0510
P31=-114.3390;34.3350
P32=-114.5860;34.6720
P33=-114.8060;35.0280
P34=-115.0490;35.3680
P35=-115.2960;35.7050
P36=-115.5420;36.0430
P37=-115.7800;36.3860
P38=-116.0070;36.7370
P39=-116.2300;37.0900
P40=-116.4260;37.4580
P41=-116.6230;37.8260
P42=-116.7680;38.2180
P43=-116.8360;38.6300
P44=-116.8310;39.0470
P45=-116.7380;39.4540
P46=-116.5480;39.8250
P47=-116.3320;40.1820
P48=-116.0700;40.5080
P49=-115.7980;40.8240
P50=-115.5200;41.1360

TMR.txt

P51=-115.2240;41.4320
P52=-114.9260;41.7240
P53=-114.6220;42.0100
P54=-114.3100;42.2880
P55=-114.0120;42.5810
P56=-113.7080;42.8680
P57=-113.4150;43.1660
P58=-113.0700;43.4010
P59=-112.6870;43.5660
P60=-112.2760;43.6350
P61=-111.8610;43.5970
P62=-111.4650;43.4620
P63=-111.1200;43.2330
[C7]
gain=-10.00
n_point=65
P1=-112.3600;41.4540
P2=-112.1040;41.3750
P3=-111.8610;41.2620
P4=-111.6400;41.1100
P5=-111.4330;40.9400
P6=-111.2500;40.7430
P7=-111.0800;40.5360
P8=-110.9330;40.3110
P9=-110.8020;40.0770
P10=-110.6950;39.8310
P11=-110.6100;39.5760
P12=-110.5460;39.3160
P13=-110.5070;39.0500
P14=-110.4900;38.7820
P15=-110.4960;38.5140
P16=-110.5260;38.2470
P17=-110.5780;37.9840
P18=-110.6510;37.7260
P19=-110.7480;37.4750
P20=-110.8640;37.2340
P21=-111.0000;37.0020
P22=-111.1530;36.7820
P23=-111.3220;36.5730
P24=-111.5070;36.3790
P25=-111.7040;36.1970
P26=-111.9180;36.0340
P27=-112.1440;35.8910
P28=-112.3850;35.7730
P29=-112.6400;35.6880
P30=-112.9010;35.6300
P31=-113.1690;35.6100
P32=-113.4360;35.6370
P33=-113.6970;35.6960
P34=-113.9490;35.7880
P35=-114.1840;35.9170
P36=-114.4040;36.0700
P37=-114.6090;36.2440
P38=-114.7950;36.4370
P39=-114.9630;36.6460
P40=-115.1180;36.8660
P41=-115.2460;37.1010
P42=-115.3610;37.3440
P43=-115.4600;37.5930
P44=-115.5330;37.8510
P45=-115.5830;38.1150
P46=-115.6080;38.3820
P47=-115.6090;38.6500

TMR.txt

P48=-115.5840;38.9170
P49=-115.5330;39.1810
P50=-115.4550;39.4380
P51=-115.3570;39.6870
P52=-115.2340;39.9260
P53=-115.0990;40.1580
P54=-114.9390;40.3730
P55=-114.7660;40.5780
P56=-114.5750;40.7670
P57=-114.3670;40.9370
P58=-114.1510;41.0950
P59=-113.9200;41.2310
P60=-113.6760;41.3450
P61=-113.4210;41.4270
P62=-113.1590;41.4850
P63=-112.8920;41.5130
P64=-112.6240;41.5030
P65=-112.3600;41.4540

[C8]

gain=-2.00

n_point=27

P1=-102.4540;45.8800
P2=-102.0970;45.6510
P3=-101.9180;45.4060
P4=-101.8110;45.0780
P5=-101.7850;44.9240
P6=-101.8400;44.4420
P7=-102.0260;43.9620
P8=-102.1430;43.7870
P9=-102.3890;43.4820
P10=-102.7010;43.2180
P11=-103.1250;42.9970
P12=-103.1740;42.9770
P13=-103.6010;42.9230
P14=-103.8510;42.9760
P15=-103.9960;43.0170
P16=-104.3520;43.3110
P17=-104.4260;43.4220
P18=-104.5730;43.8860
P19=-104.5580;44.3600
P20=-104.3830;44.8440
P21=-104.0330;45.3390
P22=-103.8900;45.4760
P23=-103.3760;45.8110
P24=-103.2200;45.8550
P25=-102.9070;45.9290
P26=-102.4750;45.8900
P27=-102.4540;45.8800

[C9]

gain=-6.00

n_point=45

P1=-101.8410;46.9070
P2=-101.7600;46.8810
P3=-101.3770;46.6410
P4=-101.1730;46.4250
P5=-101.0440;46.2380
P6=-100.9020;45.9350
P7=-100.8090;45.5210
P8=-100.7960;45.4460
P9=-100.8020;44.9590
P10=-100.8960;44.4750
P11=-101.0680;43.9950
P12=-101.3220;43.5170

TMR.txt

P13=-101.3860;43.4270
P14=-101.6760;43.0420
P15=-101.9810;42.7310
P16=-102.1740;42.5680
P17=-102.4870;42.3470
P18=-102.9510;42.1150
P19=-103.0340;42.0890
P20=-103.3870;41.9890
P21=-103.8020;41.9540
P22=-104.1990;42.0050
P23=-104.3340;42.0540
P24=-104.5790;42.1490
P25=-104.9390;42.4060
P26=-105.0170;42.4880
P27=-105.2680;42.8430
P28=-105.3190;42.9370
P29=-105.4680;43.3960
P30=-105.5100;43.7990
P31=-105.5150;43.8620
P32=-105.4740;44.3360
P33=-105.3480;44.8180
P34=-105.2960;44.9400
P35=-105.1300;45.3090
P36=-104.8000;45.8090
P37=-104.6520;45.9790
P38=-104.2970;46.3220
P39=-104.1020;46.4770
P40=-103.5850;46.7800
P41=-103.3850;46.8550
P42=-103.0930;46.9580
P43=-102.6230;47.0310
P44=-102.1780;47.0060
P45=-101.8410;46.9070
[C10]
gain=-8.00
n_point=49
P1=-102.3800;47.4020
P2=-102.0720;47.3870
P3=-101.6460;47.2800
P4=-101.2500;47.0740
P5=-101.0840;46.9340
P6=-100.8940;46.7440
P7=-100.6940;46.4430
P8=-100.5990;46.2260
P9=-100.5080;45.9500
P10=-100.4480;45.4590
P11=-100.4630;45.1920
P12=-100.4760;44.9710
P13=-100.5770;44.4870
P14=-100.7500;44.0060
P15=-100.8660;43.7780
P16=-100.9920;43.5290
P17=-101.3120;43.0540
P18=-101.5520;42.7760
P19=-101.7390;42.5820
P20=-102.0890;42.2830
P21=-102.3430;42.1100
P22=-102.5730;41.9700
P23=-103.0250;41.7740
P24=-103.4550;41.6680
P25=-103.8660;41.6370
P26=-104.2630;41.6800
P27=-104.6440;41.8010

TMR.txt

P28=-105.0090;42.0170
P29=-105.0320;42.0360
P30=-105.3550;42.3580
P31=-105.4420;42.4770
P32=-105.6670;42.9150
P33=-105.6720;42.9290
P34=-105.7930;43.3880
P35=-105.8250;43.8540
P36=-105.7820;44.3290
P37=-105.6670;44.8100
P38=-105.4730;45.3000
P39=-105.1840;45.7990
P40=-105.1050;45.9070
P41=-104.7710;46.3090
P42=-104.5310;46.5400
P43=-104.1520;46.8320
P44=-103.9950;46.9380
P45=-103.4840;47.1970
P46=-102.9930;47.3470
P47=-102.6430;47.3930
P48=-102.5220;47.4090
P49=-102.3800;47.4020
[C11]
gain=-10.00
n_point=53
P1=-101.1910;47.4440
P2=-101.1460;47.4230
P3=-100.7740;47.1380
P4=-100.6150;46.9520
P5=-100.4520;46.7070
P6=-100.3290;46.4570
P7=-100.2110;46.0280
P8=-100.1950;45.9620
P9=-100.1570;45.4700
P10=-100.2030;44.9820
P11=-100.3140;44.4970
P12=-100.4850;44.0160
P13=-100.7170;43.5390
P14=-101.0230;43.0640
P15=-101.0760;42.9980
P16=-101.4090;42.5930
P17=-101.6590;42.3480
P18=-101.9240;42.1240
P19=-102.1700;41.9410
P20=-102.6390;41.6740
P21=-102.6940;41.6520
P22=-103.0850;41.4950
P23=-103.5100;41.3980
P24=-103.9190;41.3710
P25=-104.3140;41.4110
P26=-104.6960;41.5220
P27=-104.8380;41.5930
P28=-105.0640;41.7120
P29=-105.4170;42.0030
P30=-105.4390;42.0260
P31=-105.7470;42.4450
P32=-105.7620;42.4700
P33=-105.9560;42.9220
P34=-106.0240;43.2330
P35=-106.0560;43.3820
P36=-106.0850;43.8480
P37=-106.0430;44.3220
P38=-105.9350;44.8040

TMR.txt

P39=-105.7550;45.2930
P40=-105.6020;45.5850
P41=-105.4920;45.7910
P42=-105.1320;46.2990
P43=-104.9910;46.4580
P44=-104.6200;46.8180
P45=-104.4350;46.9720
P46=-103.9070;47.3120
P47=-103.8150;47.3550
P48=-103.3960;47.5470
P49=-102.9050;47.6830
P50=-102.4320;47.7370
P51=-101.9790;47.7150
P52=-101.5480;47.6140
P53=-101.1910;47.4440
[C12]
gain=-15.00
n_point=61
P1=-100.7660;47.9830
P2=-100.5490;47.8550
P3=-100.1940;47.5190
P4=-100.1660;47.4850
P5=-99.8830;47.0590
P6=-99.8430;46.9830
P7=-99.6740;46.4830
P8=-99.6550;46.3570
P9=-99.5970;45.9860
P10=-99.6080;45.4920
P11=-99.6850;45.0020
P12=-99.8120;44.5160
P13=-99.9850;44.0350
P14=-100.2050;43.5570
P15=-100.4830;43.0840
P16=-100.7160;42.7660
P17=-100.8280;42.6130
P18=-101.2470;42.1460
P19=-101.3100;42.0850
P20=-101.7860;41.6800
P21=-101.8290;41.6470
P22=-102.3090;41.3350
P23=-102.5690;41.2130
P24=-102.7610;41.1200
P25=-103.1950;40.9750
P26=-103.6110;40.8970
P27=-104.0150;40.8760
P28=-104.4080;40.9100
P29=-104.7890;41.0040
P30=-105.1050;41.1450
P31=-105.1600;41.1670
P32=-105.5220;41.3870
P33=-105.7270;41.5720
P34=-105.8690;41.7150
P35=-106.0930;42.0110
P36=-106.1950;42.1890
P37=-106.3320;42.4570
P38=-106.4700;42.9110
P39=-106.4790;42.9660
P40=-106.5560;43.3710
P41=-106.5740;43.8380
P42=-106.5350;44.3110
P43=-106.4430;44.7920
P44=-106.2950;45.2800
P45=-106.0780;45.7770

TMR.txt

P46=-105.9620;45.9810
P47=-105.7930;46.2820
P48=-105.4080;46.7970
P49=-105.3500;46.8620
P50=-104.8880;47.3240
P51=-104.7860;47.4130
P52=-104.2470;47.7900
P53=-104.0970;47.8670
P54=-103.7230;48.0660
P55=-103.2180;48.2410
P56=-102.7290;48.3370
P57=-102.2540;48.3710
P58=-101.7960;48.3450
P59=-101.3550;48.2560
P60=-100.9400;48.0900
P61=-100.7660;47.9830
[C13]
gain=-20.00
n_point=69
P1=-100.7400;48.5140
P2=-100.3920;48.3400
P3=-100.0160;48.0560
P4=-99.9730;48.0140
P5=-99.6710;47.6940
P6=-99.5380;47.5100
P7=-99.3810;47.1810
P8=-99.2970;47.0060
P9=-99.1990;46.5020
P10=-99.1940;46.3760
P11=-99.1480;46.0040
P12=-99.1930;45.5090
P13=-99.2980;45.0170
P14=-99.4430;44.5310
P15=-99.6240;44.0490
P16=-99.8440;43.5710
P17=-100.1160;43.0970
P18=-100.2590;42.8980
P19=-100.4340;42.6270
P20=-100.8090;42.1610
P21=-100.9020;42.0620
P22=-101.2620;41.6970
P23=-101.4470;41.5330
P24=-101.8630;41.2350
P25=-101.9390;41.1770
P26=-102.4030;40.9120
P27=-102.7930;40.7680
P28=-102.8420;40.7440
P29=-103.2700;40.6060
P30=-103.6800;40.5470
P31=-104.0790;40.5380
P32=-104.4690;40.5750
P33=-104.8500;40.6610
P34=-104.9710;40.7100
P35=-105.2230;40.8010
P36=-105.5870;40.9930
P37=-105.7680;41.1290
P38=-105.9410;41.2670
P39=-106.2160;41.5620
P40=-106.2810;41.6460
P41=-106.5130;42.0020
P42=-106.5990;42.1940
P43=-106.7130;42.4490
P44=-106.8300;42.9030

TMR.txt

P45=-106.8600;43.1580
P46=-106.8960;43.3640
P47=-106.9170;43.8300
P48=-106.8870;44.3040
P49=-106.8140;44.7840
P50=-106.6970;45.2710
P51=-106.5240;45.7660
P52=-106.3840;46.0530
P53=-106.2930;46.2700
P54=-106.0380;46.7810
P55=-105.7290;47.1970
P56=-105.6470;47.3030
P57=-105.1500;47.8190
P58=-105.1270;47.8380
P59=-104.5940;48.2640
P60=-104.3260;48.3890
P61=-104.0680;48.5380
P62=-103.5550;48.7270
P63=-103.0630;48.8200
P64=-102.5820;48.8620
P65=-102.1130;48.8600
P66=-101.6550;48.8120
P67=-101.2150;48.7120
P68=-100.7950;48.5470
P69=-100.7400;48.5140
[C14]
gain=-4.00
n_point=66
P1=-101.9180;46.3890
P2=-101.7670;46.2660
P3=-101.6210;46.1390
P4=-101.4890;45.9960
P5=-101.3970;45.8260
P6=-101.3210;45.6460
P7=-101.2550;45.4640
P8=-101.2330;45.2710
P9=-101.2260;45.0770
P10=-101.2270;44.8840
P11=-101.2560;44.6900
P12=-101.2940;44.5000
P13=-101.3470;44.3140
P14=-101.4150;44.1310
P15=-101.4930;43.9530
P16=-101.5850;43.7820
P17=-101.6830;43.6140
P18=-101.7880;43.4510
P19=-101.9170;43.3060
P20=-102.0470;43.1610
P21=-102.1820;43.0220
P22=-102.3280;42.8930
P23=-102.4880;42.7830
P24=-102.6510;42.6780
P25=-102.8170;42.5770
P26=-102.9950;42.5020
P27=-103.1810;42.4440
P28=-103.3680;42.3950
P29=-103.5630;42.3750
P30=-103.7560;42.3720
P31=-103.9500;42.3940
P32=-104.1390;42.4390
P33=-104.3190;42.5120
P34=-104.4830;42.6150
P35=-104.6320;42.7400

TMR.txt

P36=-104.7670;42.8790
P37=-104.8780;43.0390
P38=-104.9650;43.2120
P39=-105.0340;43.3950
P40=-105.0830;43.5820
P41=-105.1100;43.7750
P42=-105.1180;43.9680
P43=-105.1000;44.1630
P44=-105.0770;44.3550
P45=-105.0300;44.5430
P46=-104.9740;44.7300
P47=-104.9060;44.9110
P48=-104.8170;45.0840
P49=-104.7240;45.2550
P50=-104.6150;45.4150
P51=-104.4920;45.5660
P52=-104.3700;45.7170
P53=-104.2420;45.8630
P54=-104.0840;45.9770
P55=-103.9270;46.0920
P56=-103.7730;46.2090
P57=-103.6040;46.3060
P58=-103.4270;46.3870
P59=-103.2440;46.4530
P60=-103.0570;46.5040
P61=-102.8650;46.5370
P62=-102.6720;46.5510
P63=-102.4780;46.5430
P64=-102.2850;46.5160
P65=-102.1010;46.4550
P66=-101.9180;46.3890

TML.txt

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[FormatInfo]
format_ver=1
[GeoMain]
ntc_id=1
adm=USA
sat_name=VIASAT-1
long_nom=-115.10
n_diag=1
[COHeader]
beam_id=TML
emi_rcp=E
polar_disc=C
reason=C
n_bore=1
n_cont=14
[B1]
gain=0.00
p=-103.2740;44.3960
[C1]
gain=-2.00
n_point=25
P1=-112.2390;39.3140
P2=-111.9860;38.9380
P3=-111.9660;38.8950
P4=-111.8880;38.4790
P5=-111.9280;38.0660
P6=-112.0410;37.7710
P7=-112.0990;37.6560
P8=-112.4310;37.2860
P9=-112.4920;37.2480
P10=-112.8040;37.1020
P11=-113.1710;37.0650
P12=-113.5350;37.1620
P13=-113.6610;37.2430
P14=-113.8970;37.4580
P15=-114.0300;37.6470
P16=-114.1780;38.0560
P17=-114.1930;38.4690
P18=-114.0730;38.8860
P19=-113.8650;39.2140
P20=-113.7780;39.3060
P21=-113.4800;39.5160
P22=-113.0960;39.6330
P23=-112.7160;39.6000
P24=-112.3430;39.4120
P25=-112.2390;39.3140
[C2]
gain=-4.00
n_point=37
P1=-112.9060;40.1620
P2=-112.6950;40.1490
P3=-112.3160;40.0140
P4=-111.9460;39.7480
P5=-111.9380;39.7400
P6=-111.6360;39.3180
P7=-111.5930;39.2190
P8=-111.4820;38.8990
P9=-111.4310;38.4830
P10=-111.4700;38.0700
P11=-111.5980;37.6590
P12=-111.6850;37.4950
P13=-111.8390;37.2520
P14=-112.0760;36.9900
```

TML.txt

P15=-112.2610;36.8470
P16=-112.4530;36.7230
P17=-112.8210;36.5900
P18=-113.1850;36.5590
P19=-113.5470;36.6280
P20=-113.9070;36.8060
P21=-113.9520;36.8400
P22=-114.2680;37.1480
P23=-114.3390;37.2410
P24=-114.5500;37.6470
P25=-114.6300;37.9460
P26=-114.6560;38.0560
P27=-114.6680;38.4680
P28=-114.6250;38.6980
P29=-114.5870;38.8850
P30=-114.3970;39.3050
P31=-114.2400;39.5230
P32=-114.0460;39.7300
P33=-113.8530;39.8870
P34=-113.4650;40.0860
P35=-113.1300;40.1610
P36=-113.0780;40.1720
P37=-112.9060;40.1620
[C3]
gain=-6.00
n_point=43
P1=-111.8520;40.1690
P2=-111.5570;39.8630
P3=-111.4710;39.7430
P4=-111.2510;39.3210
P5=-111.2150;39.2030
P6=-111.1320;38.9020
P7=-111.0950;38.4860
P8=-111.1330;38.0720
P9=-111.2460;37.6620
P10=-111.3150;37.5140
P11=-111.4440;37.2550
P12=-111.7160;36.8850
P13=-111.7470;36.8500
P14=-112.0960;36.5410
P15=-112.2500;36.4480
P16=-112.4680;36.3270
P17=-112.8330;36.2120
P18=-113.1950;36.1840
P19=-113.5550;36.2380
P20=-113.9140;36.3830
P21=-114.0030;36.4410
P22=-114.2740;36.6390
P23=-114.4680;36.8390
P24=-114.6350;37.0610
P25=-114.7490;37.2410
P26=-114.9210;37.6470
P27=-115.0000;38.0120
P28=-115.0100;38.0560
P29=-115.0240;38.4680
P30=-115.0000;38.6180
P31=-114.9590;38.8850
P32=-114.8090;39.3050
P33=-114.6190;39.6230
P34=-114.5460;39.7290
P35=-114.2330;40.0620
P36=-114.1110;40.1570
P37=-113.8440;40.3380

TML.txt

P38=-113.4540;40.5020
P39=-113.0650;40.5730
P40=-112.6790;40.5560
P41=-112.2960;40.4470
P42=-111.9210;40.2290
P43=-111.8520;40.1690
[C4]
gain=-15.00
n_point=65
P1=-111.6220;41.4810
P2=-111.4660;41.3810
P3=-111.1430;41.0440
P4=-111.0990;40.9990
P5=-110.8110;40.6100
P6=-110.7440;40.5070
P7=-110.5560;40.1800
P8=-110.4080;39.8350
P9=-110.3700;39.7540
P10=-110.2270;39.3310
P11=-110.1540;38.9120
P12=-110.1370;38.4950
P13=-110.1710;38.0820
P14=-110.2580;37.6720
P15=-110.4080;37.2640
P16=-110.6170;36.9050
P17=-110.6400;36.8600
P18=-110.9160;36.4580
P19=-111.0170;36.3370
P20=-111.2660;36.0590
P21=-111.4020;35.9170
P22=-111.7000;35.6620
P23=-111.7780;35.5900
P24=-112.1470;35.3360
P25=-112.2980;35.2690
P26=-112.5110;35.1420
P27=-112.8700;35.0250
P28=-113.2260;34.9880
P29=-113.5800;35.0210
P30=-113.9340;35.1340
P31=-114.1440;35.2620
P32=-114.2870;35.3290
P33=-114.6420;35.5910
P34=-114.7030;35.6510
P35=-115.0000;35.9280
P36=-115.1030;36.0440
P37=-115.3620;36.3630
P38=-115.4220;36.4400
P39=-115.6830;36.8390
P40=-115.7300;36.9360
P41=-115.9030;37.2420
P42=-116.0510;37.6480
P43=-116.1120;37.9490
P44=-116.1440;38.0570
P45=-116.1830;38.4700
P46=-116.1400;38.8860
P47=-116.1300;38.9200
P48=-116.0450;39.3060
P49=-115.8580;39.7290
P50=-115.7650;39.8650
P51=-115.5900;40.1570
P52=-115.3860;40.3990
P53=-115.2240;40.5890
P54=-115.0000;40.8090

TML.txt

P55=-114.7480;41.0260
P56=-114.6100;41.1410
P57=-114.2150;41.4070
P58=-114.0930;41.4680
P59=-113.8180;41.6320
P60=-113.4190;41.7850
P61=-113.0210;41.8630
P62=-112.6250;41.8740
P63=-112.2310;41.8140
P64=-111.8440;41.6560
P65=-111.6220;41.4810
[C5]
gain=-20.00
n_point=63
P1=-112.0700;42.8030
P2=-111.7170;42.6600
P3=-111.4330;42.4000
P4=-111.2140;42.0850
P5=-111.0040;41.7640
P6=-110.8250;41.4240
P7=-110.6390;41.0880
P8=-110.4670;40.7440
P9=-110.2920;40.4020
P10=-110.1300;40.0540
P11=-109.9870;39.6970
P12=-109.8450;39.3410
P13=-109.7660;38.9650
P14=-109.7060;38.5860
P15=-109.6810;38.2030
P16=-109.7760;37.8330
P17=-109.8990;37.4690
P18=-110.0720;37.1270
P19=-110.2930;36.8120
P20=-110.5100;36.4950
P21=-110.7560;36.2000
P22=-111.0050;35.9080
P23=-111.2660;35.6260
P24=-111.5300;35.3480
P25=-111.7880;35.0630
P26=-112.0660;34.7990
P27=-112.3450;34.5370
P28=-112.6550;34.3100
P29=-113.0130;34.1750
P30=-113.3960;34.1630
P31=-113.7660;34.2650
P32=-114.0900;34.4690
P33=-114.3830;34.7150
P34=-114.6540;34.9880
P35=-114.9080;35.2760
P36=-115.1640;35.5620
P37=-115.4150;35.8530
P38=-115.6560;36.1520
P39=-115.8960;36.4520
P40=-116.1190;36.7640
P41=-116.3420;37.0780
P42=-116.5390;37.4070
P43=-116.7200;37.7450
P44=-116.8290;38.1130
P45=-116.8840;38.4930
P46=-116.8690;38.8770
P47=-116.7890;39.2530
P48=-116.6270;39.6000
P49=-116.4140;39.9200

TML.txt

P50=-116.1740;40.2180
P51=-115.9030;40.4920
P52=-115.6250;40.7560
P53=-115.3430;41.0170
P54=-115.0530;41.2690
P55=-114.7570;41.5140
P56=-114.4550;41.7510
P57=-114.1410;41.9720
P58=-113.8350;42.2040
P59=-113.5070;42.4050
P60=-113.1840;42.6120
P61=-112.8270;42.7550
P62=-112.4500;42.8200
P63=-112.0700;42.8030
[C6]
gain=-10.00
n_point=65
P1=-112.0010;40.9830
P2=-111.7790;40.8520
P3=-111.5750;40.6960
P4=-111.3920;40.5160
P5=-111.2240;40.3220
P6=-111.0710;40.1150
P7=-110.9470;39.8900
P8=-110.8330;39.6600
P9=-110.7410;39.4190
P10=-110.6720;39.1720
P11=-110.6250;38.9190
P12=-110.6030;38.6630
P13=-110.6030;38.4060
P14=-110.6270;38.1500
P15=-110.6730;37.8970
P16=-110.7430;37.6490
P17=-110.8350;37.4100
P18=-110.9450;37.1770
P19=-111.0760;36.9560
P20=-111.2220;36.7440
P21=-111.3840;36.5450
P22=-111.5630;36.3590
P23=-111.7520;36.1860
P24=-111.9570;36.0300
P25=-112.1740;35.8920
P26=-112.4060;35.7810
P27=-112.6480;35.6960
P28=-112.8990;35.6380
P29=-113.1550;35.6150
P30=-113.4110;35.6310
P31=-113.6630;35.6830
P32=-113.9070;35.7630
P33=-114.1370;35.8770
P34=-114.3540;36.0150
P35=-114.5530;36.1780
P36=-114.7400;36.3550
P37=-114.9070;36.5510
P38=-115.0610;36.7560
P39=-115.1930;36.9770
P40=-115.3120;37.2050
P41=-115.4090;37.4430
P42=-115.4920;37.6860
P43=-115.5460;37.9380
P44=-115.5790;38.1930
P45=-115.5840;38.4500
P46=-115.5650;38.7060

TML.txt

P47=-115.5180;38.9590
P48=-115.4460;39.2060
P49=-115.3500;39.4440
P50=-115.2400;39.6770
P51=-115.1050;39.8950
P52=-114.9540;40.1040
P53=-114.7830;40.2950
P54=-114.6010;40.4770
P55=-114.4050;40.6430
P56=-114.1940;40.7910
P57=-113.9720;40.9200
P58=-113.7380;41.0270
P59=-113.4960;41.1150
P60=-113.2470;41.1780
P61=-112.9920;41.2070
P62=-112.7350;41.2040
P63=-112.4810;41.1640
P64=-112.2350;41.0890
P65=-112.0010;40.9830
[C7]
gain=-8.00
n_point=66
P1=-111.8050;40.5260
P2=-111.6290;40.3810
P3=-111.4650;40.2220
P4=-111.3280;40.0380
P5=-111.1980;39.8510
P6=-111.0910;39.6490
P7=-111.0020;39.4390
P8=-110.9290;39.2220
P9=-110.8790;38.9990
P10=-110.8450;38.7740
P11=-110.8320;38.5460
P12=-110.8390;38.3170
P13=-110.8680;38.0910
P14=-110.9150;37.8670
P15=-110.9810;37.6490
P16=-111.0650;37.4360
P17=-111.1640;37.2300
P18=-111.2840;37.0360
P19=-111.4130;36.8480
P20=-111.5660;36.6770
P21=-111.7200;36.5090
P22=-111.8970;36.3640
P23=-112.0790;36.2270
P24=-112.2780;36.1140
P25=-112.4830;36.0130
P26=-112.7010;35.9450
P27=-112.9240;35.8950
P28=-113.1520;35.8800
P29=-113.3790;35.8940
P30=-113.6040;35.9370
P31=-113.8190;36.0150
P32=-114.0240;36.1140
P33=-114.2190;36.2320
P34=-114.4010;36.3700
P35=-114.5670;36.5280
P36=-114.7190;36.6980
P37=-114.8550;36.8820
P38=-114.9730;37.0770
P39=-115.0820;37.2780
P40=-115.1640;37.4910
P41=-115.2350;37.7080

TML.txt

P42=-115.2810;37.9320
P43=-115.3100;38.1590
P44=-115.3170;38.3870
P45=-115.3040;38.6150
P46=-115.2710;38.8410
P47=-115.2150;39.0630
P48=-115.1420;39.2790
P49=-115.0440;39.4850
P50=-114.9340;39.6850
P51=-114.8020;39.8710
P52=-114.6600;40.0510
P53=-114.5030;40.2160
P54=-114.3310;40.3670
P55=-114.1490;40.5050
P56=-113.9550;40.6250
P57=-113.7510;40.7280
P58=-113.5370;40.8090
P59=-113.3170;40.8690
P60=-113.0910;40.9010
P61=-112.8620;40.9080
P62=-112.6350;40.8870
P63=-112.4120;40.8370
P64=-112.1980;40.7580
P65=-111.9950;40.6530
P66=-111.8050;40.5260

[C8]

gain=-2.00

n_point=25

P1=-102.1630;45.8900
P2=-102.0520;45.8180
P3=-101.7830;45.4100
P4=-101.7560;45.2820
P5=-101.7280;44.9260
P6=-101.8340;44.4430
P7=-102.0800;43.9600
P8=-102.1080;43.9250
P9=-102.5610;43.4770
P10=-102.6570;43.4080
P11=-103.1220;43.2080
P12=-103.5470;43.1740
P13=-103.9370;43.2990
P14=-104.0990;43.4310
P15=-104.2780;43.6750
P16=-104.3670;43.8910
P17=-104.4020;44.3640
P18=-104.2810;44.8470
P19=-103.9970;45.3400
P20=-103.8950;45.4540
P21=-103.4020;45.8500
P22=-103.3600;45.8750
P23=-102.8830;46.0250
P24=-102.4430;46.0130
P25=-102.1630;45.8900

[C9]

gain=-4.00

n_point=33

P1=-101.7500;46.4040
P2=-101.5060;46.1880
P3=-101.3330;45.9190
P4=-101.2270;45.6030
P5=-101.1910;45.4310
P6=-101.2020;44.9450
P7=-101.3200;44.4600

TML.txt

P8=-101.5420;43.9780
P9=-101.7440;43.6810
P10=-101.8850;43.4980
P11=-102.3110;43.0970
P12=-102.4240;43.0180
P13=-102.7960;42.8060
P14=-103.2430;42.6620
P15=-103.6620;42.6340
P16=-104.0570;42.7210
P17=-104.4270;42.9320
P18=-104.4550;42.9590
P19=-104.7570;43.3630
P20=-104.7830;43.4130
P21=-104.9060;43.8770
P22=-104.9090;44.3500
P23=-104.8000;44.8320
P24=-104.5750;45.3240
P25=-104.2630;45.7600
P26=-104.2050;45.8260
P27=-103.7130;46.2450
P28=-103.5410;46.3440
P29=-103.2060;46.5070
P30=-102.7300;46.6230
P31=-102.2840;46.6160
P32=-101.8710;46.4860
P33=-101.7500;46.4040
[C10]
gain=-6.00
n_point=41
P1=-101.6580;46.9140
P2=-101.3520;46.7260
P3=-101.0790;46.4280
P4=-101.0170;46.3310
P5=-100.8500;45.9370
P6=-100.7930;45.5750
P7=-100.7780;45.4470
P8=-100.8160;44.9590
P9=-100.9430;44.4740
P10=-101.1540;43.9920
P11=-101.2990;43.7580
P12=-101.4580;43.5130
P13=-101.8800;43.0350
P14=-101.9140;43.0040
P15=-102.4240;42.6190
P16=-102.5410;42.5570
P17=-102.8900;42.3900
P18=-103.3270;42.2720
P19=-103.7420;42.2490
P20=-104.1380;42.3160
P21=-104.5150;42.4840
P22=-104.5360;42.5000
P23=-104.8670;42.7920
P24=-104.9830;42.9450
P25=-105.1770;43.3400
P26=-105.2010;43.4020
P27=-105.2870;43.8680
P28=-105.2760;44.3410
P29=-105.1740;44.8220
P30=-104.9790;45.3130
P31=-104.6950;45.7800
P32=-104.6720;45.8130
P33=-104.2040;46.3250
P34=-104.1200;46.3980

TML.txt

```
P35=-103.5910;46.7580
P36=-103.3710;46.8560
P37=-103.0890;46.9720
P38=-102.6130;47.0700
P39=-102.1610;47.0660
P40=-101.7390;46.9570
P41=-101.6580;46.9140
[C11]
gain=-8.00
n_point=49
P1=-102.0180;47.4140
P2=-101.6310;47.3310
P3=-101.2310;47.1370
P4=-100.9950;46.9380
P5=-100.8740;46.8120
P6=-100.6420;46.4450
P7=-100.5810;46.2860
P8=-100.4860;45.9510
P9=-100.4540;45.4590
P10=-100.5000;45.0660
P11=-100.5110;44.9700
P12=-100.6440;44.4850
P13=-100.7150;44.3200
P14=-100.8500;44.0030
P15=-101.1320;43.5240
P16=-101.4720;43.0920
P17=-101.5110;43.0480
P18=-102.0180;42.5810
P19=-102.0290;42.5730
P20=-102.5060;42.2660
P21=-102.9070;42.0930
P22=-102.9610;42.0710
P23=-103.3920;41.9660
P24=-103.8050;41.9440
P25=-104.2000;42.0020
P26=-104.3380;42.0530
P27=-104.5790;42.1460
P28=-104.9410;42.3950
P29=-105.0330;42.4870
P30=-105.2760;42.8030
P31=-105.3530;42.9360
P32=-105.5200;43.3940
P33=-105.5490;43.5830
P34=-105.5870;43.8600
P35=-105.5700;44.3340
P36=-105.4730;44.8150
P37=-105.2940;45.3050
P38=-105.1840;45.5110
P39=-105.0220;45.8030
P40=-104.6290;46.3120
P41=-104.5660;46.3780
P42=-104.0400;46.8350
P43=-104.0150;46.8540
P44=-103.4930;47.1590
P45=-102.9940;47.3410
P46=-102.7240;47.3900
P47=-102.5160;47.4280
P48=-102.0610;47.4240
P49=-102.0180;47.4140
[C12]
gain=-10.00
n_point=49
P1=-101.1030;47.4480
```

TML.txt

P2=-100.7580;47.1900
P3=-100.5600;46.9550
P4=-100.4360;46.7570
P5=-100.3000;46.4580
P6=-100.2070;46.0390
P7=-100.1920;45.9620
P8=-100.1790;45.4690
P9=-100.2500;44.9800
P10=-100.3890;44.4940
P11=-100.5920;44.0120
P12=-100.8670;43.5330
P13=-100.9710;43.3910
P14=-101.2190;43.0580
P15=-101.5760;42.6820
P16=-101.6820;42.5840
P17=-102.0940;42.2600
P18=-102.3430;42.1100
P19=-102.5700;41.9830
P20=-103.0180;41.8080
P21=-103.4440;41.7170
P22=-103.8540;41.6970
P23=-104.2500;41.7460
P24=-104.6310;41.8710
P25=-104.9150;42.0380
P26=-104.9960;42.0910
P27=-105.3430;42.4270
P28=-105.3830;42.4790
P29=-105.6390;42.9300
P30=-105.6560;42.9780
P31=-105.7820;43.3880
P32=-105.8330;43.8540
P33=-105.8080;44.3280
P34=-105.7160;44.8090
P35=-105.5530;45.2980
P36=-105.3080;45.7960
P37=-105.0500;46.1740
P38=-104.9540;46.3040
P39=-104.4710;46.8120
P40=-104.4590;46.8230
P41=-103.9290;47.2210
P42=-103.6690;47.3600
P43=-103.4100;47.4930
P44=-102.9110;47.6610
P45=-102.4320;47.7380
P46=-101.9730;47.7340
P47=-101.5380;47.6480
P48=-101.1320;47.4680
P49=-101.1030;47.4480
[C13]
gain=-15.00
n_point=59
P1=-100.7250;47.9840
P2=-100.5410;47.8810
P3=-100.1810;47.5570
P4=-100.1230;47.4860
P5=-99.8710;47.0930
P6=-99.8160;46.9840
P7=-99.6710;46.4830
P8=-99.6590;46.3470
P9=-99.6160;45.9850
P10=-99.6500;45.4900
P11=-99.7520;44.9990
P12=-99.9050;44.5120

TML.txt

P13=-100.1100;44.0300
P14=-100.3710;43.5510
P15=-100.5890;43.2340
P16=-100.6950;43.0760
P17=-101.0870;42.6040
P18=-101.2100;42.4790
P19=-101.5870;42.1350
P20=-101.7420;42.0100
P21=-102.2270;41.6930
P22=-102.2840;41.6650
P23=-102.6860;41.4620
P24=-103.1220;41.3200
P25=-103.5410;41.2460
P26=-103.9470;41.2280
P27=-104.3410;41.2660
P28=-104.7240;41.3650
P29=-105.0940;41.5440
P30=-105.1560;41.5860
P31=-105.4530;41.7930
P32=-105.6740;42.0200
P33=-105.7930;42.1710
P34=-105.9810;42.4650
P35=-106.1030;42.7590
P36=-106.1660;42.9170
P37=-106.2690;43.3770
P38=-106.2960;43.8440
P39=-106.2690;44.2500
P40=-106.2660;44.3170
P41=-106.1810;44.7980
P42=-106.1660;44.8450
P43=-106.0410;45.2860
P44=-105.8400;45.7820
P45=-105.5530;46.2880
P46=-105.4320;46.4570
P47=-105.1730;46.8030
P48=-104.8430;47.1530
P49=-104.6450;47.3300
P50=-104.2870;47.6170
P51=-103.8430;47.8750
P52=-103.7580;47.9260
P53=-103.2400;48.1530
P54=-102.7440;48.2810
P55=-102.2640;48.3380
P56=-101.8000;48.3310
P57=-101.3550;48.2590
P58=-100.9350;48.1070
P59=-100.7250;47.9840
[C14]
gain=-20.00
n_point=66
P1=-100.5590;48.4380
P2=-100.2330;48.2640
P3=-99.9350;48.0460
P4=-99.6780;47.7800
P5=-99.4610;47.4820
P6=-99.3030;47.1480
P7=-99.2100;46.7910
P8=-99.1840;46.4220
P9=-99.1620;46.0530
P10=-99.2040;45.6860
P11=-99.2800;45.3250
P12=-99.3840;44.9710
P13=-99.5090;44.6230

TML.txt

P14=-99.6540;44.2830
P15=-99.8200;43.9520
P16=-100.0050;43.6330
P17=-100.2010;43.3200
P18=-100.4060;43.0120
P19=-100.6320;42.7200
P20=-100.8740;42.4410
P21=-101.1270;42.1720
P22=-101.4010;41.9250
P23=-101.6930;41.6970
P24=-101.9990;41.4920
P25=-102.3230;41.3130
P26=-102.6600;41.1610
P27=-103.0080;41.0380
P28=-103.3690;40.9600
P29=-103.7370;40.9210
P30=-104.1060;40.9220
P31=-104.4740;40.9620
P32=-104.8310;41.0550
P33=-105.1730;41.1950
P34=-105.4980;41.3700
P35=-105.7860;41.6010
P36=-106.0320;41.8770
P37=-106.2390;42.1820
P38=-106.4020;42.5130
P39=-106.5090;42.8670
P40=-106.5840;43.2290
P41=-106.6200;43.5960
P42=-106.6190;43.9650
P43=-106.5870;44.3330
P44=-106.5290;44.6980
P45=-106.4490;45.0590
P46=-106.3450;45.4130
P47=-106.2190;45.7610
P48=-106.0660;46.0970
P49=-105.8910;46.4220
P50=-105.7040;46.7410
P51=-105.4820;47.0360
P52=-105.2430;47.3180
P53=-104.9810;47.5780
P54=-104.7140;47.8340
P55=-104.4180;48.0550
P56=-104.1130;48.2620
P57=-103.7760;48.4170
P58=-103.4380;48.5660
P59=-103.0860;48.6780
P60=-102.7230;48.7460
P61=-102.3550;48.7800
P62=-101.9860;48.7820
P63=-101.6170;48.7530
P64=-101.2540;48.6840
P65=-100.9000;48.5800
P66=-100.5590;48.4380

BNR.txt

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[FormatInfo]
format_ver=1
[GeoMain]
ntc_id=1
adm=USA
sat_name=VIASAT-1
long_nom=-115.10
n_diag=1
[COHeader]
beam_id=BNR
emi_rcp=R
polar_disc=C
reason=C
n_bore=1
n_cont=14
[B1]
gain=0.00
p=-103.2740;44.3960
[C1]
gain=-2.00
n_point=27
P1=-112.2840;39.7370
P2=-112.1310;39.3140
P3=-112.0820;38.8940
P4=-112.0990;38.4780
P5=-112.1630;38.0650
P6=-112.2760;37.6550
P7=-112.4300;37.3150
P8=-112.4740;37.2480
P9=-112.8100;36.9220
P10=-113.0460;36.8430
P11=-113.1780;36.8100
P12=-113.3230;36.8420
P13=-113.5410;36.9060
P14=-113.8920;37.2420
P15=-113.9000;37.2540
P16=-114.0580;37.6470
P17=-114.1300;38.0560
P18=-114.1310;38.4690
P19=-114.0690;38.8850
P20=-113.9390;39.3060
P21=-113.8610;39.4630
P22=-113.6750;39.7310
P23=-113.4690;39.9340
P24=-113.0800;40.1210
P25=-112.6970;40.0880
P26=-112.3260;39.8000
P27=-112.2840;39.7370
[C2]
gain=-6.00
n_point=45
P1=-112.4880;41.0330
P2=-112.2720;40.9670
P3=-111.8950;40.7150
P4=-111.7850;40.6010
P5=-111.5350;40.2420
P6=-111.4950;40.1710
P7=-111.3440;39.7440
P8=-111.2740;39.3210
P9=-111.2610;38.9010
P10=-111.2870;38.4840
P11=-111.3430;38.0710
P12=-111.4300;37.6610
```

BNR.txt

P13=-111.5630;37.2540
P14=-111.7120;36.9500
P15=-111.7640;36.8500
P16=-112.0720;36.4490
P17=-112.1010;36.4200
P18=-112.4750;36.1370
P19=-112.6680;36.0490
P20=-112.8410;35.9810
P21=-113.2020;35.9330
P22=-113.5610;35.9840
P23=-113.7060;36.0450
P24=-113.9180;36.1450
P25=-114.2760;36.4330
P26=-114.2830;36.4400
P27=-114.5740;36.8390
P28=-114.6350;36.9620
P29=-114.7620;37.2410
P30=-114.8750;37.6460
P31=-114.9300;38.0560
P32=-114.9370;38.4680
P33=-114.8980;38.8840
P34=-114.8090;39.3050
P35=-114.6550;39.7290
P36=-114.6180;39.7980
P37=-114.4160;40.1570
P38=-114.2290;40.3910
P39=-114.0350;40.5900
P40=-113.8360;40.7520
P41=-113.4420;40.9710
P42=-113.2350;41.0290
P43=-113.0480;41.0790
P44=-112.6580;41.0800
P45=-112.4880;41.0330
[C3]
gain=-8.00
n_point=49
P1=-111.8120;41.0380
P2=-111.5060;40.7300
P3=-111.4120;40.6050
P4=-111.1810;40.1740
P5=-111.1580;40.1030
P6=-111.0440;39.7470
P7=-110.9750;39.3240
P8=-110.9580;38.9030
P9=-110.9790;38.4870
P10=-111.0330;38.0740
P11=-111.1240;37.6640
P12=-111.2590;37.2560
P13=-111.3390;37.0890
P14=-111.4500;36.8530
P15=-111.7230;36.4510
P16=-111.7380;36.4340
P17=-112.1160;36.0640
P18=-112.1320;36.0530
P19=-112.4860;35.8310
P20=-112.8490;35.7010
P21=-113.2090;35.6610
P22=-113.5670;35.7040
P23=-113.9230;35.8400
P24=-114.2260;36.0440
P25=-114.2790;36.0860
P26=-114.6150;36.4400
P27=-114.6380;36.4710

BNR.txt

P28=-114.8720;36.8390
P29=-115.0000;37.1370
P30=-115.0460;37.2410
P31=-115.1620;37.6460
P32=-115.2220;38.0560
P33=-115.2350;38.4680
P34=-115.2020;38.8840
P35=-115.1170;39.3050
P36=-115.0000;39.6380
P37=-114.9700;39.7290
P38=-114.7560;40.1570
P39=-114.6150;40.3550
P40=-114.4320;40.5890
P41=-114.2230;40.7970
P42=-113.9280;41.0270
P43=-113.8290;41.0950
P44=-113.4330;41.2870
P45=-113.0380;41.3840
P46=-112.6450;41.3900
P47=-112.2560;41.2990
P48=-111.8750;41.0910
P49=-111.8120;41.0380
[C4]
gain=-10.00
n_point=57
P1=-112.0450;41.4770
P2=-111.8590;41.3870
P3=-111.4850;41.0760
P4=-111.4540;41.0410
P5=-111.1350;40.6070
P6=-111.1260;40.5900
P7=-110.9270;40.1760
P8=-110.8020;39.7490
P9=-110.7990;39.7310
P10=-110.7270;39.3260
P11=-110.7020;38.9060
P12=-110.7180;38.4890
P13=-110.7720;38.0760
P14=-110.8670;37.6660
P15=-110.9510;37.4230
P16=-111.0050;37.2590
P17=-111.1930;36.8550
P18=-111.3660;36.5850
P19=-111.4530;36.4530
P20=-111.7530;36.1120
P21=-111.8120;36.0550
P22=-112.1280;35.7960
P23=-112.3680;35.6580
P24=-112.4950;35.5850
P25=-112.8570;35.4610
P26=-113.2150;35.4210
P27=-113.5720;35.4620
P28=-113.9270;35.5940
P29=-114.0200;35.6520
P30=-114.2820;35.8130
P31=-114.5400;36.0440
P32=-114.6400;36.1470
P33=-114.8760;36.4390
P34=-115.0000;36.6430
P35=-115.1180;36.8390
P36=-115.2890;37.2410
P37=-115.3680;37.5340
P38=-115.4040;37.6470

BNR.txt

P39=-115.4760;38.0560
P40=-115.4960;38.4680
P41=-115.4650;38.8850
P42=-115.3790;39.2960
P43=-115.3770;39.3050
P44=-115.2470;39.7290
P45=-115.0350;40.1570
P46=-115.0000;40.2090
P47=-114.7410;40.5890
P48=-114.6120;40.7320
P49=-114.3100;41.0260
P50=-114.2190;41.1020
P51=-113.8230;41.3660
P52=-113.5930;41.4690
P53=-113.4260;41.5470
P54=-113.0290;41.6480
P55=-112.6340;41.6600
P56=-112.2430;41.5770
P57=-112.0450;41.4770
[C5]
gain=-20.00
n_point=81
P1=-111.4480;42.8350
P2=-111.3770;42.7660
P3=-111.1820;42.3810
P4=-111.0280;42.0220
P5=-111.0060;41.9320
P6=-110.7700;41.4890
P7=-110.6820;41.3450
P8=-110.5350;41.0500
P9=-110.3460;40.6250
P10=-110.3420;40.6150
P11=-110.1560;40.1850
P12=-110.0390;39.7580
P13=-110.0330;39.7240
P14=-109.9190;39.3350
P15=-109.8680;38.9150
P16=-109.8670;38.4980
P17=-109.9110;38.0850
P18=-110.0040;37.6750
P19=-110.1840;37.2670
P20=-110.2280;37.2060
P21=-110.3820;36.8620
P22=-110.6450;36.4720
P23=-110.6520;36.4600
P24=-110.9450;36.0610
P25=-111.0390;35.9500
P26=-111.2970;35.6660
P27=-111.4230;35.5070
P28=-111.6760;35.2730
P29=-111.8010;35.0880
P30=-112.0310;34.8830
P31=-112.1750;34.6360
P32=-112.3230;34.4970
P33=-112.5400;34.2980
P34=-112.8960;34.1390
P35=-113.2480;34.1140
P36=-113.5970;34.1940
P37=-113.9450;34.4070
P38=-114.0270;34.4910
P39=-114.2930;34.7350
P40=-114.3820;34.8740
P41=-114.6450;35.1260

BNR.txt

P42=-114.7360;35.2610
P43=-115.0000;35.5330
P44=-115.0950;35.6510
P45=-115.3600;35.9610
P46=-115.4410;36.0440
P47=-115.7240;36.4120
P48=-115.7560;36.4400
P49=-116.0720;36.8400
P50=-116.0940;36.8830
P51=-116.3980;37.2430
P52=-116.4700;37.3890
P53=-116.6420;37.6490
P54=-116.8060;38.0590
P55=-116.8660;38.3730
P56=-116.8840;38.4720
P57=-116.8920;38.8890
P58=-116.8840;38.9540
P59=-116.8270;39.3080
P60=-116.6730;39.7320
P61=-116.5330;39.9780
P62=-116.4170;40.1590
P63=-116.1580;40.4150
P64=-116.0080;40.5900
P65=-115.7770;40.7650
P66=-115.5030;41.0260
P67=-115.3910;41.1030
P68=-115.0000;41.4320
P69=-114.9600;41.4670
P70=-114.6050;41.7550
P71=-114.3770;41.9130
P72=-114.2060;42.0750
P73=-113.8030;42.3420
P74=-113.7510;42.3650
P75=-113.3940;42.6850
P76=-113.1030;42.8230
P77=-112.9830;42.9220
P78=-112.5720;43.0930
P79=-112.1650;43.1220
P80=-111.7650;43.0190
P81=-111.4480;42.8350
[C6]
gain=-4.00
n_point=66
P1=-112.3660;40.5640
P2=-112.2200;40.4570
P3=-112.0860;40.3360
P4=-111.9660;40.2020
P5=-111.8650;40.0520
P6=-111.7890;39.8880
P7=-111.7280;39.7180
P8=-111.6810;39.5440
P9=-111.6510;39.3650
P10=-111.6320;39.1860
P11=-111.6240;39.0060
P12=-111.6260;38.8250
P13=-111.6350;38.6450
P14=-111.6520;38.4650
P15=-111.6740;38.2860
P16=-111.7020;38.1080
P17=-111.7360;37.9300
P18=-111.7760;37.7540
P19=-111.8250;37.5810
P20=-111.8830;37.4100

BNR.txt

P21=-111.9520;37.2430
P22=-112.0330;37.0810
P23=-112.1260;36.9260
P24=-112.2390;36.7850
P25=-112.3640;36.6550
P26=-112.5000;36.5370
P27=-112.6520;36.4390
P28=-112.8170;36.3660
P29=-112.9920;36.3200
P30=-113.1710;36.3020
P31=-113.3510;36.3140
P32=-113.5270;36.3530
P33=-113.6940;36.4210
P34=-113.8470;36.5170
P35=-113.9850;36.6340
P36=-114.1090;36.7650
P37=-114.2220;36.9060
P38=-114.3130;37.0620
P39=-114.3920;37.2240
P40=-114.4520;37.3950
P41=-114.5030;37.5680
P42=-114.5410;37.7440
P43=-114.5660;37.9230
P44=-114.5820;38.1030
P45=-114.5870;38.2830
P46=-114.5810;38.4640
P47=-114.5670;38.6440
P48=-114.5440;38.8230
P49=-114.5100;39.0000
P50=-114.4680;39.1760
P51=-114.4150;39.3480
P52=-114.3510;39.5170
P53=-114.2810;39.6830
P54=-114.1930;39.8400
P55=-114.0860;39.9860
P56=-113.9820;40.1320
P57=-113.8590;40.2670
P58=-113.7150;40.3740
P59=-113.5690;40.4810
P60=-113.4170;40.5770
P61=-113.2450;40.6330
P62=-113.0680;40.6730
P63=-112.8880;40.6890
P64=-112.7090;40.6740
P65=-112.5330;40.6320
P66=-112.3660;40.5640
[C7]
gain=-15.00
n_point=65
P1=-111.5810;41.8330
P2=-111.3410;41.6260
P3=-111.1330;41.3850
P4=-110.9450;41.1290
P5=-110.7800;40.8570
P6=-110.6320;40.5750
P7=-110.5100;40.2810
P8=-110.4100;39.9790
P9=-110.3260;39.6730
P10=-110.2670;39.3600
P11=-110.2350;39.0440
P12=-110.2280;38.7260
P13=-110.2450;38.4080
P14=-110.2860;38.0930

BNR.txt

P15=-110.3530;37.7820
P16=-110.4470;37.4780
P17=-110.5670;37.1830
P18=-110.7070;36.8980
P19=-110.8650;36.6220
P20=-111.0430;36.3590
P21=-111.2400;36.1080
P22=-111.4550;35.8740
P23=-111.6830;35.6530
P24=-111.9300;35.4530
P25=-112.1920;35.2720
P26=-112.4610;35.1030
P27=-112.7560;34.9860
P28=-113.0690;34.9270
P29=-113.3870;34.9260
P30=-113.6990;34.9850
P31=-113.9920;35.1080
P32=-114.2570;35.2840
P33=-114.5080;35.4790
P34=-114.7440;35.6920
P35=-114.9630;35.9220
P36=-115.1620;36.1690
P37=-115.3470;36.4280
P38=-115.5220;36.6940
P39=-115.6710;36.9740
P40=-115.8070;37.2620
P41=-115.9240;37.5580
P42=-116.0070;37.8650
P43=-116.0570;38.1790
P44=-116.0770;38.4960
P45=-116.0700;38.8140
P46=-116.0310;39.1300
P47=-115.9550;39.4390
P48=-115.8420;39.7360
P49=-115.7030;40.0220
P50=-115.5430;40.2960
P51=-115.3590;40.5560
P52=-115.1550;40.8000
P53=-114.9430;41.0370
P54=-114.7100;41.2540
P55=-114.4670;41.4590
P56=-114.2110;41.6480
P57=-113.9400;41.8140
P58=-113.6580;41.9600
P59=-113.3730;42.1020
P60=-113.0680;42.1920
P61=-112.7530;42.2360
P62=-112.4350;42.2290
P63=-112.1260;42.1570
P64=-111.8400;42.0170
P65=-111.5810;41.8330
[C8]
gain=-2.00
n_point=25
P1=-102.6830;45.8730
P2=-102.4930;45.8210
P3=-102.1360;45.5030
P4=-102.0740;45.4010
P5=-101.9340;44.9190
P6=-101.9470;44.5580
P7=-101.9560;44.4380
P8=-102.0370;44.2090
P9=-102.1310;43.9590

BNR.txt

P10=-102.5060;43.4780
P11=-102.6730;43.3390
P12=-103.1410;43.1250
P13=-103.5600;43.1140
P14=-103.9410;43.2800
P15=-104.0970;43.4310
P16=-104.2710;43.7060
P17=-104.3450;43.8920
P18=-104.3910;44.3640
P19=-104.2900;44.8460
P20=-104.0170;45.3390
P21=-103.8900;45.4780
P22=-103.3690;45.8380
P23=-103.3030;45.8530
P24=-102.9090;45.9220
P25=-102.6830;45.8730
[C9]
gain=-15.00
n_point=61
P1=-101.2360;47.9650
P2=-101.0120;47.8600
P3=-100.6390;47.5720
P4=-100.5440;47.4690
P5=-100.3080;47.1640
P6=-100.1960;46.9690
P7=-100.0440;46.5580
P8=-100.0140;46.4690
P9=-99.9250;45.9720
P10=-99.9240;45.5120
P11=-99.9220;45.4790
P12=-99.9600;44.9910
P13=-100.0630;44.5060
P14=-100.2210;44.0260
P15=-100.4370;43.5490
P16=-100.5600;43.3400
P17=-100.7080;43.0760
P18=-101.0440;42.6060
P19=-101.2320;42.3930
P20=-101.4780;42.1380
P21=-101.7730;41.8800
P22=-102.0730;41.6710
P23=-102.2600;41.5490
P24=-102.7150;41.3320
P25=-103.1460;41.2060
P26=-103.2310;41.1940
P27=-103.5630;41.1380
P28=-103.9650;41.1360
P29=-104.1750;41.1680
P30=-104.3550;41.1920
P31=-104.7360;41.3030
P32=-105.1020;41.4980
P33=-105.2150;41.5840
P34=-105.4560;41.7780
P35=-105.6740;42.0200
P36=-105.7920;42.1800
P37=-105.9680;42.4650
P38=-106.1000;42.7760
P39=-106.1580;42.9180
P40=-106.2740;43.3770
P41=-106.3160;43.8430
P42=-106.3120;43.9940
P43=-106.3090;44.3160
P44=-106.2400;44.7970

BNR.txt

P45=-106.1050;45.2850
P46=-106.0760;45.3570
P47=-105.9130;45.7810
P48=-105.6440;46.2850
P49=-105.3980;46.6250
P50=-105.2630;46.8010
P51=-104.8210;47.2520
P52=-104.7300;47.3280
P53=-104.2770;47.6640
P54=-103.8570;47.8740
P55=-103.7580;47.9260
P56=-103.2530;48.1060
P57=-102.7670;48.1980
P58=-102.2970;48.2210
P59=-101.8450;48.1760
P60=-101.4170;48.0530
P61=-101.2360;47.9650
[C10]
gain=-20.00
n_point=65
P1=-101.4180;48.4880
P2=-101.2930;48.4600
P3=-100.8720;48.3060
P4=-100.4810;48.0650
P5=-100.4030;47.9970
P6=-100.1210;47.7420
P7=-99.9330;47.4940
P8=-99.8120;47.2740
P9=-99.6750;46.9900
P10=-99.5860;46.5680
P11=-99.5620;46.4870
P12=-99.5030;45.9900
P13=-99.5390;45.4950
P14=-99.6040;45.1150
P15=-99.6150;45.0050
P16=-99.7270;44.5190
P17=-99.9020;44.0380
P18=-99.9750;43.8910
P19=-100.1170;43.5600
P20=-100.3700;43.0880
P21=-100.6940;42.6180
P22=-100.7850;42.5070
P23=-101.0740;42.1520
P24=-101.3660;41.8600
P25=-101.5650;41.6880
P26=-101.8780;41.4400
P27=-102.2630;41.2220
P28=-102.3460;41.1700
P29=-102.7920;40.9790
P30=-103.2150;40.8750
P31=-103.6260;40.8240
P32=-104.0260;40.8210
P33=-104.4160;40.8670
P34=-104.7970;40.9640
P35=-105.1660;41.1290
P36=-105.1880;41.1430
P37=-105.5260;41.3630
P38=-105.7540;41.5720
P39=-105.8720;41.6950
P40=-106.1140;42.0110
P41=-106.2000;42.1580
P42=-106.3590;42.4570
P43=-106.4950;42.8670

BNR.txt

P44=-106.5100;42.9100
P45=-106.6160;43.3690
P46=-106.6500;43.8360
P47=-106.6300;44.3090
P48=-106.5610;44.7900
P49=-106.4450;45.2770
P50=-106.2800;45.7720
P51=-106.0480;46.2760
P52=-105.8470;46.5910
P53=-105.7260;46.7890
P54=-105.3080;47.3120
P55=-105.2430;47.3820
P56=-104.6960;47.8500
P57=-104.6870;47.8570
P58=-104.1460;48.2130
P59=-103.6410;48.3910
P60=-103.5510;48.4130
P61=-103.1360;48.5480
P62=-102.6500;48.6200
P63=-102.1800;48.6280
P64=-101.7260;48.5770
P65=-101.4180;48.4880
[C11]
gain=-4.00
n_point=66
P1=-102.0790;46.3050
P2=-101.9350;46.1970
P3=-101.8090;46.0710
P4=-101.6970;45.9300
P5=-101.6020;45.7790
P6=-101.5400;45.6100
P7=-101.4820;45.4420
P8=-101.4480;45.2660
P9=-101.4280;45.0870
P10=-101.4200;44.9090
P11=-101.4310;44.7300
P12=-101.4550;44.5520
P13=-101.4920;44.3770
P14=-101.5420;44.2050
P15=-101.6010;44.0360
P16=-101.6720;43.8720
P17=-101.7580;43.7140
P18=-101.8550;43.5640
P19=-101.9610;43.4190
P20=-102.0750;43.2820
P21=-102.1970;43.1500
P22=-102.3190;43.0190
P23=-102.4660;42.9190
P24=-102.6230;42.8300
P25=-102.7750;42.7360
P26=-102.9390;42.6650
P27=-103.1120;42.6150
P28=-103.2880;42.5800
P29=-103.4660;42.5690
P30=-103.6460;42.5810
P31=-103.8220;42.6160
P32=-103.9930;42.6720
P33=-104.1520;42.7530
P34=-104.2980;42.8560
P35=-104.4420;42.9630
P36=-104.5390;43.1150
P37=-104.6400;43.2620
P38=-104.7300;43.4150

BNR.txt

P39=-104.7960;43.5840
P40=-104.8440;43.7560
P41=-104.8770;43.9320
P42=-104.8950;44.1100
P43=-104.8970;44.2890
P44=-104.8840;44.4680
P45=-104.8570;44.6450
P46=-104.8160;44.8190
P47=-104.7610;44.9900
P48=-104.6940;45.1560
P49=-104.6140;45.3160
P50=-104.5230;45.4700
P51=-104.4210;45.6170
P52=-104.3170;45.7640
P53=-104.2010;45.8990
P54=-104.0530;46.0030
P55=-103.9120;46.1140
P56=-103.7740;46.2260
P57=-103.6200;46.3180
P58=-103.4550;46.3890
P59=-103.2850;46.4430
P60=-103.1100;46.4860
P61=-102.9330;46.5130
P62=-102.7550;46.5100
P63=-102.5760;46.4920
P64=-102.3980;46.4620
P65=-102.2320;46.3990
P66=-102.0790;46.3050
[C12]
gain=-6.00
n_point=66
P1=-101.9880;46.8090
P2=-101.8020;46.6950
P3=-101.6260;46.5660
P4=-101.4610;46.4230
P5=-101.3500;46.2350
P6=-101.2410;46.0470
P7=-101.1460;45.8510
P8=-101.0990;45.6370
P9=-101.0510;45.4240
P10=-101.0400;45.2060
P11=-101.0330;44.9880
P12=-101.0570;44.7710
P13=-101.0830;44.5550
P14=-101.1360;44.3430
P15=-101.2000;44.1350
P16=-101.2780;43.9310
P17=-101.3700;43.7340
P18=-101.4750;43.5420
P19=-101.5930;43.3590
P20=-101.7220;43.1830
P21=-101.8570;43.0100
P22=-102.0130;42.8590
P23=-102.1830;42.7220
P24=-102.3450;42.5770
P25=-102.5320;42.4630
P26=-102.7270;42.3650
P27=-102.9290;42.2840
P28=-103.1390;42.2240
P29=-103.3540;42.1870
P30=-103.5730;42.1750
P31=-103.7910;42.1900
P32=-104.0030;42.2380

BNR.txt

P33=-104.2070;42.3160
P34=-104.4050;42.4110
P35=-104.5840;42.5330
P36=-104.7330;42.6940
P37=-104.8810;42.8540
P38=-104.9920;43.0410
P39=-105.0870;43.2380
P40=-105.1750;43.4370
P41=-105.2210;43.6500
P42=-105.2630;43.8640
P43=-105.2790;44.0820
P44=-105.2770;44.3000
P45=-105.2580;44.5170
P46=-105.2200;44.7320
P47=-105.1660;44.9430
P48=-105.0970;45.1500
P49=-105.0110;45.3500
P50=-104.9110;45.5440
P51=-104.8000;45.7320
P52=-104.6780;45.9130
P53=-104.5300;46.0740
P54=-104.3820;46.2330
P55=-104.2240;46.3830
P56=-104.0490;46.5140
P57=-103.8620;46.6260
P58=-103.6720;46.7350
P59=-103.4740;46.8250
P60=-103.2660;46.8910
P61=-103.0520;46.9400
P62=-102.8360;46.9630
P63=-102.6180;46.9590
P64=-102.4000;46.9420
P65=-102.1860;46.9010
P66=-101.9880;46.8090
[C13]
gain=-8.00
n_point=66
P1=-101.3660;46.8830
P2=-101.2010;46.6950
P3=-101.0490;46.4970
P4=-100.9360;46.2770
P5=-100.8420;46.0460
P6=-100.7740;45.8060
P7=-100.7330;45.5600
P8=-100.7150;45.3110
P9=-100.7190;45.0610
P10=-100.7430;44.8130
P11=-100.7850;44.5670
P12=-100.8450;44.3240
P13=-100.9210;44.0870
P14=-101.0130;43.8550
P15=-101.1200;43.6290
P16=-101.2430;43.4120
P17=-101.3790;43.2030
P18=-101.5300;43.0040
P19=-101.6940;42.8160
P20=-101.8670;42.6360
P21=-102.0490;42.4670
P22=-102.2560;42.3260
P23=-102.4640;42.1890
P24=-102.6850;42.0720
P25=-102.9170;41.9800
P26=-103.1570;41.9120

BNR.txt

P27=-103.4030;41.8720
P28=-103.6520;41.8610
P29=-103.9020;41.8820
P30=-104.1450;41.9350
P31=-104.3810;42.0180
P32=-104.5990;42.1380
P33=-104.7980;42.2890
P34=-104.9860;42.4530
P35=-105.1340;42.6540
P36=-105.2760;42.8590
P37=-105.3780;43.0870
P38=-105.4670;43.3200
P39=-105.5300;43.5610
P40=-105.5700;43.8070
P41=-105.5870;44.0570
P42=-105.5830;44.3060
P43=-105.5580;44.5540
P44=-105.5120;44.8000
P45=-105.4470;45.0400
P46=-105.3650;45.2770
P47=-105.2620;45.5040
P48=-105.1520;45.7280
P49=-105.0140;45.9350
P50=-104.8660;46.1360
P51=-104.7100;46.3300
P52=-104.5360;46.5090
P53=-104.3450;46.6700
P54=-104.1480;46.8240
P55=-103.9400;46.9600
P56=-103.7140;47.0680
P57=-103.4870;47.1700
P58=-103.2480;47.2450
P59=-103.0050;47.2990
P60=-102.7570;47.3290
P61=-102.5070;47.3280
P62=-102.2590;47.3000
P63=-102.0160;47.2440
P64=-101.7830;47.1550
P65=-101.5670;47.0300
P66=-101.3660;46.8830
[C14]
gain=-10.00
n_point=66
P1=-101.4890;47.3730
P2=-101.2560;47.2250
P3=-101.0510;47.0410
P4=-100.8720;46.8320
P5=-100.7330;46.5930
P6=-100.6150;46.3450
P7=-100.5330;46.0820
P8=-100.4790;45.8120
P9=-100.4530;45.5370
P10=-100.4500;45.2610
P11=-100.4670;44.9860
P12=-100.5050;44.7130
P13=-100.5630;44.4440
P14=-100.6420;44.1800
P15=-100.7380;43.9210
P16=-100.8530;43.6710
P17=-100.9810;43.4270
P18=-101.1250;43.1910
P19=-101.2840;42.9670
P20=-101.4580;42.7530

BNR.txt

P21=-101.6440;42.5490
P22=-101.8530;42.3690
P23=-102.0600;42.1880
P24=-102.2890;42.0350
P25=-102.5270;41.8960
P26=-102.7790;41.7840
P27=-103.0400;41.6990
P28=-103.3100;41.6390
P29=-103.5840;41.6110
P30=-103.8600;41.6120
P31=-104.1320;41.6590
P32=-104.3970;41.7310
P33=-104.6490;41.8430
P34=-104.8800;41.9930
P35=-105.0880;42.1730
P36=-105.2750;42.3750
P37=-105.4310;42.6010
P38=-105.5670;42.8410
P39=-105.6750;43.0940
P40=-105.7580;43.3570
P41=-105.8070;43.6280
P42=-105.8360;43.9020
P43=-105.8370;44.1780
P44=-105.8170;44.4530
P45=-105.7760;44.7250
P46=-105.7100;44.9930
P47=-105.6300;45.2570
P48=-105.5260;45.5120
P49=-105.4050;45.7600
P50=-105.2650;45.9970
P51=-105.1110;46.2260
P52=-104.9390;46.4410
P53=-104.7470;46.6390
P54=-104.5530;46.8350
P55=-104.3350;47.0020
P56=-104.1040;47.1540
P57=-103.8690;47.2960
P58=-103.6180;47.4110
P59=-103.3590;47.5050
P60=-103.0930;47.5780
P61=-102.8200;47.6210
P62=-102.5460;47.6380
P63=-102.2700;47.6230
P64=-101.9980;47.5770
P65=-101.7370;47.4890
P66=-101.4890;47.3730

BNL.txt

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[FormatInfo]
format_ver=1
[GeoMain]
ntc_id=1
adm=USA
sat_name=VIASAT-1
long_nom=-115.10
n_diag=1
[COHeader]
beam_id=BNL
emi_rcp=R
polar_disc=C
reason=C
n_bore=1
n_cont=14
[B1]
gain=0.00
p=-103.2740;44.3960
[C1]
gain=-2.00
n_point=23
P1=-112.3820;39.3120
P2=-112.3490;39.2640
P3=-112.2160;38.8930
P4=-112.1740;38.4770
P5=-112.2270;38.0640
P6=-112.3720;37.6540
P7=-112.4200;37.5700
P8=-112.7100;37.2470
P9=-112.8020;37.1700
P10=-113.1710;37.0700
P11=-113.5350;37.1890
P12=-113.5930;37.2430
P13=-113.8830;37.6480
P14=-113.8930;37.6760
P15=-113.9810;38.0570
P16=-113.9800;38.4690
P17=-113.8860;38.8860
P18=-113.8710;38.9210
P19=-113.6310;39.3070
P20=-113.4810;39.4700
P21=-113.0950;39.6580
P22=-112.7150;39.6090
P23=-112.3820;39.3120
[C2]
gain=-4.00
n_point=33
P1=-112.5840;40.1640
P2=-112.3160;40.0110
P3=-112.0920;39.7390
P4=-111.9590;39.4900
P5=-111.8940;39.3160
P6=-111.8120;38.8960
P7=-111.8010;38.4800
P8=-111.8510;38.0670
P9=-111.9620;37.6570
P10=-112.0570;37.4340
P11=-112.1540;37.2500
P12=-112.4470;36.8550
P13=-112.4590;36.8460
P14=-112.8210;36.6010
P15=-113.1860;36.5220
P16=-113.5480;36.6000
```

BNL.txt

P17=-113.8870;36.8400
P18=-113.9070;36.8580
P19=-114.1590;37.2420
P20=-114.2640;37.5050
P21=-114.3090;37.6470
P22=-114.3720;38.0560
P23=-114.3670;38.4690
P24=-114.2940;38.8850
P25=-114.2460;39.0280
P26=-114.1380;39.3050
P27=-113.8770;39.7300
P28=-113.8550;39.7570
P29=-113.4650;40.0900
P30=-113.2820;40.1600
P31=-113.0760;40.2340
P32=-112.6920;40.2160
P33=-112.5840;40.1640
[C3]
gain=-6.00
n_point=41
P1=-112.4670;40.5970
P2=-112.2930;40.5260
P3=-111.9230;40.1890
P4=-111.9080;40.1680
P5=-111.6850;39.7420
P6=-111.5840;39.3890
P7=-111.5670;39.3180
P8=-111.5170;38.8990
P9=-111.5210;38.4820
P10=-111.5720;38.0690
P11=-111.6710;37.6590
P12=-111.6780;37.6400
P13=-111.8200;37.2520
P14=-112.0360;36.8480
P15=-112.0860;36.7750
P16=-112.3860;36.4470
P17=-112.4660;36.3760
P18=-112.8340;36.1750
P19=-113.1970;36.1110
P20=-113.5570;36.1690
P21=-113.9150;36.3620
P22=-114.0010;36.4410
P23=-114.2720;36.7530
P24=-114.3280;36.8390
P25=-114.5130;37.2410
P26=-114.6190;37.6470
P27=-114.6310;37.7440
P28=-114.6670;38.0560
P29=-114.6600;38.4680
P30=-114.6250;38.6990
P31=-114.5980;38.8850
P32=-114.4790;39.3050
P33=-114.2820;39.7290
P34=-114.2360;39.8040
P35=-113.9640;40.1580
P36=-113.8450;40.2810
P37=-113.4530;40.5500
P38=-113.3230;40.5920
P39=-113.0620;40.6760
P40=-112.6740;40.6720
P41=-112.4670;40.5970
[C4]
gain=-10.00

BNL.txt

```
n_point=66
P1=-111.7770;40.9430
P2=-111.6100;40.7680
P3=-111.4570;40.5800
P4=-111.3480;40.3630
P5=-111.2480;40.1420
P6=-111.1800;39.9090
P7=-111.1240;39.6740
P8=-111.0910;39.4330
P9=-111.0710;39.1920
P10=-111.0660;38.9490
P11=-111.0730;38.7070
P12=-111.0910;38.4650
P13=-111.1200;38.2240
P14=-111.1590;37.9850
P15=-111.2080;37.7480
P16=-111.2690;37.5130
P17=-111.3380;37.2810
P18=-111.4190;37.0520
P19=-111.5120;36.8280
P20=-111.6230;36.6130
P21=-111.7450;36.4030
P22=-111.8990;36.2150
P23=-112.0540;36.0290
P24=-112.2420;35.8770
P25=-112.4390;35.7350
P26=-112.6570;35.6280
P27=-112.8860;35.5520
P28=-113.1260;35.5130
P29=-113.3680;35.5160
P30=-113.6050;35.5670
P31=-113.8350;35.6450
P32=-114.0440;35.7670
P33=-114.2410;35.9090
P34=-114.4160;36.0760
P35=-114.5690;36.2640
P36=-114.7100;36.4610
P37=-114.8200;36.6770
P38=-114.9190;36.8980
P39=-114.9920;37.1300
P40=-115.0540;37.3640
P41=-115.1010;37.6020
P42=-115.1290;37.8430
P43=-115.1430;38.0850
P44=-115.1410;38.3270
P45=-115.1250;38.5690
P46=-115.0940;38.8100
P47=-115.0470;39.0470
P48=-114.9910;39.2840
P49=-114.9210;39.5160
P50=-114.8380;39.7440
P51=-114.7350;39.9630
P52=-114.6220;40.1770
P53=-114.4790;40.3740
P54=-114.3360;40.5700
P55=-114.1700;40.7450
P56=-113.9820;40.8990
P57=-113.7890;41.0450
P58=-113.5770;41.1650
P59=-113.3550;41.2610
P60=-113.1210;41.3240
P61=-112.8800;41.3540
P62=-112.6380;41.3470
```

BNL.txt

P63=-112.4000;41.3020
P64=-112.1730;41.2170
P65=-111.9620;41.0970
P66=-111.7770;40.9430
[C5]
gain=-8.00
n_point=66
P1=-112.5370;41.0070
P2=-112.3290;40.9440
P3=-112.1380;40.8400
P4=-111.9620;40.7130
P5=-111.8050;40.5650
P6=-111.6850;40.3810
P7=-111.5660;40.2010
P8=-111.4750;40.0030
P9=-111.4050;39.7970
P10=-111.3510;39.5870
P11=-111.3150;39.3720
P12=-111.2930;39.1560
P13=-111.2830;38.9390
P14=-111.2850;38.7220
P15=-111.2970;38.5050
P16=-111.3180;38.2880
P17=-111.3480;38.0730
P18=-111.3880;37.8590
P19=-111.4380;37.6480
P20=-111.4980;37.4390
P21=-111.5700;37.2340
P22=-111.6550;37.0340
P23=-111.7470;36.8370
P24=-111.8660;36.6540
P25=-111.9840;36.4730
P26=-112.1220;36.3040
P27=-112.2870;36.1620
P28=-112.4540;36.0240
P29=-112.6460;35.9220
P30=-112.8480;35.8420
P31=-113.0610;35.7980
P32=-113.2780;35.7900
P33=-113.4930;35.8190
P34=-113.7000;35.8850
P35=-113.8970;35.9780
P36=-114.0710;36.1070
P37=-114.2340;36.2510
P38=-114.3790;36.4120
P39=-114.4970;36.5950
P40=-114.6080;36.7820
P41=-114.6940;36.9810
P42=-114.7720;37.1840
P43=-114.8280;37.3940
P44=-114.8710;37.6070
P45=-114.8990;37.8220
P46=-114.9130;38.0390
P47=-114.9160;38.2560
P48=-114.9060;38.4740
P49=-114.8850;38.6900
P50=-114.8510;38.9050
P51=-114.8040;39.1170
P52=-114.7440;39.3260
P53=-114.6680;39.5290
P54=-114.5850;39.7300
P55=-114.4790;39.9200
P56=-114.3690;40.1080

BNL.txt

P57=-114.2450;40.2860
P58=-114.0950;40.4440
P59=-113.9430;40.5980
P60=-113.7710;40.7320
P61=-113.5830;40.8410
P62=-113.3890;40.9400
P63=-113.1800;40.9980
P64=-112.9670;41.0380
P65=-112.7500;41.0410
P66=-112.5370;41.0070
[C6]
gain=-15.00
n_point=65
P1=-112.2600;41.9170
P2=-111.9790;41.8200
P3=-111.7200;41.6740
P4=-111.4850;41.4910
P5=-111.2920;41.2640
P6=-111.1040;41.0350
P7=-110.9520;40.7780
P8=-110.8280;40.5080
P9=-110.7370;40.2240
P10=-110.6720;39.9340
P11=-110.6280;39.6400
P12=-110.6130;39.3430
P13=-110.6170;39.0450
P14=-110.6350;38.7480
P15=-110.6640;38.4520
P16=-110.7040;38.1570
P17=-110.7540;37.8630
P18=-110.8160;37.5720
P19=-110.8910;37.2840
P20=-110.9800;37.0000
P21=-111.0800;36.7200
P22=-111.2000;36.4470
P23=-111.3500;36.1900
P24=-111.5230;35.9490
P25=-111.7100;35.7170
P26=-111.9290;35.5170
P27=-112.1590;35.3280
P28=-112.4150;35.1740
P29=-112.6860;35.0530
P30=-112.9740;34.9810
P31=-113.2710;34.9600
P32=-113.5670;34.9920
P33=-113.8520;35.0760
P34=-114.1170;35.2110
P35=-114.3630;35.3780
P36=-114.5920;35.5680
P37=-114.7930;35.7870
P38=-114.9820;36.0170
P39=-115.1460;36.2660
P40=-115.2880;36.5260
P41=-115.4020;36.8010
P42=-115.4980;37.0830
P43=-115.5690;37.3720
P44=-115.6130;37.6670
P45=-115.6350;37.9630
P46=-115.6390;38.2610
P47=-115.6260;38.5580
P48=-115.5980;38.8540
P49=-115.5500;39.1480
P50=-115.4780;39.4370

BNL.txt

P51=-115.3850;39.7200
P52=-115.2860;40.0010
P53=-115.1610;40.2710
P54=-115.0080;40.5250
P55=-114.8290;40.7640
P56=-114.6450;40.9970
P57=-114.4260;41.1980
P58=-114.2090;41.4020
P59=-113.9640;41.5710
P60=-113.7050;41.7180
P61=-113.4300;41.8310
P62=-113.1450;41.9170
P63=-112.8520;41.9670
P64=-112.5540;41.9640
P65=-112.2600;41.9170
[C7]
gain=-20.00
n_point=65
P1=-111.7070;42.3190
P2=-111.4230;42.1300
P3=-111.1910;41.8790
P4=-110.9800;41.6100
P5=-110.8020;41.3190
P6=-110.6370;41.0200
P7=-110.5010;40.7070
P8=-110.3970;40.3810
P9=-110.3160;40.0500
P10=-110.2640;39.7120
P11=-110.2450;39.3710
P12=-110.2530;39.0300
P13=-110.2800;38.6890
P14=-110.3210;38.3500
P15=-110.3750;38.0130
P16=-110.4400;37.6770
P17=-110.5210;37.3460
P18=-110.6180;37.0180
P19=-110.7240;36.6930
P20=-110.8610;36.3800
P21=-111.0300;36.0830
P22=-111.2240;35.8020
P23=-111.4330;35.5330
P24=-111.6690;35.2860
P25=-111.9220;35.0560
P26=-112.1960;34.8520
P27=-112.4740;34.6530
P28=-112.7900;34.5280
P29=-113.1230;34.4510
P30=-113.4610;34.4700
P31=-113.7920;34.5540
P32=-114.0960;34.7070
P33=-114.3690;34.9120
P34=-114.6380;35.1220
P35=-114.8800;35.3630
P36=-115.1140;35.6120
P37=-115.3230;35.8820
P38=-115.5220;36.1600
P39=-115.6900;36.4570
P40=-115.8500;36.7590
P41=-115.9730;37.0780
P42=-116.0540;37.4090
P43=-116.0990;37.7480
P44=-116.1290;38.0880
P45=-116.1300;38.4300

BNL.txt

P46=-116.1100;38.7710
P47=-116.0770;39.1110
P48=-116.0170;39.4470
P49=-115.9190;39.7740
P50=-115.7750;40.0840
P51=-115.6280;40.3920
P52=-115.4440;40.6790
P53=-115.2360;40.9500
P54=-115.0020;41.1990
P55=-114.7570;41.4370
P56=-114.4920;41.6520
P57=-114.2160;41.8540
P58=-113.9350;42.0480
P59=-113.6400;42.2190
P60=-113.3240;42.3480
P61=-113.0070;42.4780
P62=-112.6770;42.5620
P63=-112.3360;42.5720
P64=-112.0100;42.4770
P65=-111.7070;42.3190

[C8]

gain=-2.00

n_point=21

P1=-102.0960;45.4000
P2=-101.9730;44.9180
P3=-102.0310;44.4360
P4=-102.2740;43.9540
P5=-102.6130;43.5950
P6=-102.8280;43.4680
P7=-103.0880;43.3590
P8=-103.5080;43.3520
P9=-103.7090;43.4420
P10=-103.8840;43.5540
P11=-104.1160;43.8980
P12=-104.1770;44.1590
P13=-104.2030;44.3690
P14=-104.1100;44.8510
P15=-103.9700;45.1170
P16=-103.8150;45.3450
P17=-103.4060;45.6840
P18=-102.9280;45.8440
P19=-102.5060;45.7720
P20=-102.1430;45.4770
P21=-102.0960;45.4000

[C9]

gain=-4.00

n_point=31

P1=-102.6510;46.3730
P2=-102.3600;46.3290
P3=-101.9740;46.1100
P4=-101.7920;45.9030
P5=-101.6520;45.6640
P6=-101.5630;45.4180
P7=-101.5160;44.9330
P8=-101.5910;44.4510
P9=-101.7840;43.9700
P10=-102.1170;43.4910
P11=-102.2480;43.3590
P12=-102.7400;43.0080
P13=-102.7510;43.0020
P14=-103.1990;42.8640
P15=-103.6120;42.8700
P16=-103.9020;42.9740

BNL.txt

P17=-103.9970;43.0130
P18=-104.3480;43.3310
P19=-104.4110;43.4230
P20=-104.6020;43.8850
P21=-104.6220;44.0510
P22=-104.6490;44.3570
P23=-104.5750;44.8380
P24=-104.3770;45.3290
P25=-104.3460;45.3780
P26=-103.9920;45.8320
P27=-103.7630;46.0340
P28=-103.2550;46.3070
P29=-102.9650;46.3630
P30=-102.7890;46.3930
P31=-102.6510;46.3730
[C10]
gain=-8.00
n_point=41
P1=-101.6980;46.9120
P2=-101.3760;46.6450
P3=-101.2150;46.4230
P4=-101.0700;46.1520
P5=-100.9830;45.9320
P6=-100.8930;45.4420
P7=-100.8950;45.2220
P8=-100.8940;44.9560
P9=-100.9770;44.4720
P10=-101.1420;43.9920
P11=-101.3300;43.6380
P12=-101.3960;43.5150
P13=-101.7560;43.0400
P14=-101.9540;42.8430
P15=-102.3180;42.5640
P16=-102.4580;42.4710
P17=-102.9170;42.2710
P18=-103.3450;42.1900
P19=-103.7510;42.2060
P20=-104.1380;42.3170
P21=-104.4430;42.5030
P22=-104.5040;42.5410
P23=-104.8470;42.8970
P24=-104.8830;42.9480
P25=-105.1180;43.4040
P26=-105.1470;43.5050
P27=-105.2460;43.8690
P28=-105.2770;44.3410
P29=-105.2250;44.8210
P30=-105.0910;45.3100
P31=-104.8560;45.8080
P32=-104.6160;46.1480
P33=-104.4790;46.3170
P34=-104.0490;46.7070
P35=-103.8360;46.8410
P36=-103.5290;47.0110
P37=-103.0400;47.1650
P38=-102.5780;47.2010
P39=-102.1430;47.1320
P40=-101.7410;46.9470
P41=-101.6980;46.9120
[C11]
gain=-10.00
n_point=47
P1=-101.9800;47.4160

BNL.txt

P2=-101.6440;47.2850
P3=-101.2720;46.9980
P4=-101.2140;46.9300
P5=-100.9460;46.5710
P6=-100.8750;46.4360
P7=-100.7070;45.9420
P8=-100.6990;45.8920
P9=-100.6330;45.4520
P10=-100.6510;44.9650
P11=-100.7410;44.4810
P12=-100.8970;44.0010
P13=-101.1250;43.5240
P14=-101.4510;43.0500
P15=-101.4960;42.9980
P16=-101.9070;42.5770
P17=-102.0460;42.4610
P18=-102.5290;42.1630
P19=-102.6970;42.1000
P20=-102.9780;41.9920
P21=-103.4010;41.9220
P22=-103.8040;41.9450
P23=-104.1760;42.0570
P24=-104.1880;42.0610
P25=-104.5600;42.2490
P26=-104.8340;42.4920
P27=-104.9090;42.5670
P28=-105.1770;42.9410
P29=-105.2310;43.0490
P30=-105.3860;43.3980
P31=-105.4880;43.8620
P32=-105.4900;43.9070
P33=-105.5290;44.3340
P34=-105.4890;44.8150
P35=-105.3710;45.3030
P36=-105.1620;45.8000
P37=-105.1080;45.8920
P38=-104.8500;46.3060
P39=-104.4950;46.7050
P40=-104.3610;46.8260
P41=-103.9500;47.1320
P42=-103.4570;47.3660
P43=-103.4390;47.3740
P44=-102.9520;47.5050
P45=-102.4890;47.5280
P46=-102.0540;47.4490
P47=-101.9800;47.4160
[C12]
gain=-15.00
n_point=55
P1=-101.4340;47.9570
P2=-101.0510;47.7330
P3=-100.7880;47.4600
P4=-100.7030;47.3690
P5=-100.4460;46.9590
P6=-100.4020;46.8660
P7=-100.2450;46.4600
P8=-100.1820;46.1210
P9=-100.1490;45.9640
P10=-100.1160;45.4720
P11=-100.1580;44.9830
P12=-100.2550;44.4990
P13=-100.4000;44.0190
P14=-100.5980;43.5430

BNL.txt

P15=-100.8640;43.0700
P16=-101.1580;42.6810
P17=-101.2220;42.5990
P18=-101.6920;42.1310
P19=-101.7170;42.1100
P20=-102.2110;41.7610
P21=-102.4280;41.6600
P22=-102.6680;41.5450
P23=-103.1010;41.4200
P24=-103.5140;41.3770
P25=-103.9130;41.4030
P26=-104.2960;41.5070
P27=-104.4840;41.6020
P28=-104.6670;41.6800
P29=-105.0250;41.9330
P30=-105.1260;42.0330
P31=-105.3670;42.2910
P32=-105.5020;42.4760
P33=-105.6860;42.8050
P34=-105.7510;42.9270
P35=-105.9180;43.3850
P36=-105.9600;43.6120
P37=-106.0160;43.8500
P38=-106.0560;44.3220
P39=-106.0270;44.8020
P40=-105.9370;45.2890
P41=-105.7770;45.7840
P42=-105.5300;46.2890
P43=-105.4370;46.4320
P44=-105.1880;46.8030
P45=-104.8340;47.1920
P46=-104.6860;47.3290
P47=-104.2810;47.6460
P48=-103.8630;47.8740
P49=-103.7570;47.9310
P50=-103.2500;48.1180
P51=-102.7640;48.2060
P52=-102.2990;48.2120
P53=-101.8570;48.1360
P54=-101.4440;47.9640
P55=-101.4340;47.9570
[C13]
gain=-6.00
n_point=66
P1=-101.5830;46.3130
P2=-101.4640;46.1570
P3=-101.3680;45.9870
P4=-101.2920;45.8060
P5=-101.2360;45.6190
P6=-101.1930;45.4280
P7=-101.1820;45.2320
P8=-101.1790;45.0370
P9=-101.1920;44.8420
P10=-101.2230;44.6480
P11=-101.2660;44.4570
P12=-101.3230;44.2700
P13=-101.3930;44.0870
P14=-101.4760;43.9100
P15=-101.5710;43.7380
P16=-101.6730;43.5710
P17=-101.7850;43.4110
P18=-101.9170;43.2660
P19=-102.0530;43.1250

BNL.txt

P20=-102.1950;42.9910
P21=-102.3500;42.8710
P22=-102.5180;42.7690
P23=-102.6910;42.6800
P24=-102.8710;42.6030
P25=-103.0600;42.5430
P26=-103.2510;42.5160
P27=-103.4470;42.5030
P28=-103.6440;42.5070
P29=-103.8330;42.5540
P30=-104.0190;42.6200
P31=-104.1910;42.7110
P32=-104.3520;42.8230
P33=-104.5000;42.9500
P34=-104.6140;43.1100
P35=-104.7250;43.2710
P36=-104.8190;43.4410
P37=-104.8760;43.6300
P38=-104.9320;43.8170
P39=-104.9630;44.0100
P40=-104.9770;44.2060
P41=-104.9760;44.4010
P42=-104.9570;44.5960
P43=-104.9310;44.7910
P44=-104.8790;44.9790
P45=-104.8200;45.1660
P46=-104.7450;45.3460
P47=-104.6560;45.5210
P48=-104.5570;45.6900
P49=-104.4470;45.8520
P50=-104.3240;46.0040
P51=-104.1910;46.1480
P52=-104.0490;46.2820
P53=-103.8930;46.4000
P54=-103.7310;46.5110
P55=-103.5590;46.6050
P56=-103.3780;46.6800
P57=-103.1940;46.7440
P58=-103.0030;46.7890
P59=-102.8080;46.8100
P60=-102.6120;46.8080
P61=-102.4170;46.7860
P62=-102.2260;46.7420
P63=-102.0440;46.6700
P64=-101.8730;46.5740
P65=-101.7180;46.4550
P66=-101.5830;46.3130
[C14]
gain=-20.00
n_point=66
P1=-101.1740;48.4430
P2=-100.8670;48.2740
P3=-100.6020;48.0470
P4=-100.3730;47.7820
P5=-100.1640;47.5020
P6=-100.0220;47.1820
P7=-99.8910;46.8580
P8=-99.7940;46.5210
P9=-99.7560;46.1730
P10=-99.7270;45.8250
P11=-99.7220;45.4750
P12=-99.7530;45.1260
P13=-99.8110;44.7810

BNL.txt

P14=-99.8920;44.4400
P15=-99.9920;44.1050
P16=-100.1130;43.7770
P17=-100.2540;43.4570
P18=-100.4160;43.1460
P19=-100.6030;42.8510
P20=-100.8050;42.5640
P21=-101.0270;42.2940
P22=-101.2580;42.0310
P23=-101.5180;41.7970
P24=-101.7920;41.5780
P25=-102.0890;41.3950
P26=-102.4000;41.2340
P27=-102.7260;41.1060
P28=-103.0640;41.0150
P29=-103.4110;40.9710
P30=-103.7610;40.9700
P31=-104.1080;41.0180
P32=-104.4440;41.1180
P33=-104.7660;41.2550
P34=-105.0650;41.4360
P35=-105.3360;41.6570
P36=-105.5800;41.9080
P37=-105.7930;42.1860
P38=-105.9770;42.4830
P39=-106.1320;42.7980
P40=-106.2570;43.1240
P41=-106.3480;43.4620
P42=-106.4120;43.8060
P43=-106.4510;44.1540
P44=-106.4560;44.5040
P45=-106.4280;44.8530
P46=-106.3720;45.1980
P47=-106.2890;45.5380
P48=-106.1780;45.8700
P49=-106.0420;46.1930
P50=-105.8820;46.5040
P51=-105.7030;46.8050
P52=-105.5020;47.0910
P53=-105.2860;47.3670
P54=-105.0340;47.6100
P55=-104.7790;47.8490
P56=-104.4950;48.0530
P57=-104.1970;48.2380
P58=-103.8820;48.3910
P59=-103.5600;48.5250
P60=-103.2240;48.6250
P61=-102.8810;48.6930
P62=-102.5320;48.7220
P63=-102.1820;48.7150
P64=-101.8340;48.6690
P65=-101.4970;48.5770
P66=-101.1740;48.4430

BCNR.txt

```
[FormatInfo]
format_ver=1
[GeoMain]
ntc_id=1
adm=USA
sat_name=VIASAT-1
long_nom=-115.10
n_diag=1
[COHeader]
beam_id=BCNR
emi_rcp=E
polar_disc=C
reason=C
n_bore=1
n_cont=6
[B1]
gain=0.00
p=-115.1000;45.9440
[C1]
gain=-2.00
n_point=20
P1=-41.3460;56.6750
P2=-63.2380;49.1650
P3=-77.4620;37.3400
P4=-85.5870;28.2450
P5=-92.4490;20.9080
P6=-93.0180;20.3690
P7=-100.9830;14.4380
P8=-103.5100;13.1880
P9=-108.2330;11.2540
P10=-115.1000;10.1370
P11=-121.9530;10.7460
P12=-129.1230;13.1650
P13=-129.2130;13.2150
P14=-137.3390;18.5920
P15=-139.5360;20.4350
P16=-147.6860;28.3940
P17=-150.7950;31.8640
P18=-156.7470;37.6390
P19=-176.3600;50.2380
P20=169.9280;53.6470
[C2]
gain=-4.00
n_point=23
P1=-36.5930;39.5220
P2=-63.0820;29.5860
P3=-73.4240;21.3890
P4=-73.7630;21.0710
P5=-82.4310;13.5580
P6=-85.8240;10.7970
P7=-91.6270;6.6090
P8=-94.2260;4.9340
P9=-101.5230;1.3790
P10=-106.0770;0.0000
P11=-108.3910;-0.6600
P12=-115.1000;-1.4180
P13=-121.8100;-1.0100
P14=-126.1290;0.0000
P15=-128.6730;0.6250
P16=-135.9310;3.7100
P17=-140.8840;6.6310
P18=-144.1370;8.7740
P19=-150.5260;13.6290
```

BCNR.txt

P20=-155.3120;17.5810
P21=-159.9520;21.2340
P22=-172.8410;30.0010
P23=165.9440;36.6460
[C3]
gain=-6.00
n_point=24
P1=-34.9440;25.9700
P2=-50.2850;22.3050
P3=-63.4920;15.2090
P4=-65.0690;14.0750
P5=-75.0110;6.8090
P6=-77.4420;5.0340
P7=-84.7580;0.0000
P8=-86.5110;-1.1340
P9=-94.2130;-5.2510
P10=-97.5840;-6.5600
P11=-101.3640;-7.9970
P12=-108.2760;-9.6220
P13=-115.1000;-10.2440
P14=-121.9320;-9.9150
P15=-128.8630;-8.6060
P16=-134.9280;-6.5770
P17=-136.0310;-6.2040
P18=-143.7190;-2.5370
P19=-147.9580;0.0000
P20=-152.6170;2.9560
P21=-158.3390;6.8570
P22=-165.3130;11.6280
P23=-169.6250;14.2320
P24=164.5000;22.8300
[C4]
gain=-8.00
n_point=25
P1=-34.2020;13.7000
P2=-42.9960;12.5900
P3=-56.9150;7.1110
P4=-66.6850;1.4420
P5=-68.9190;0.0000
P6=-77.4110;-5.3890
P7=-79.7520;-6.7430
P8=-85.8990;-10.2030
P9=-92.9910;-13.3320
P10=-93.5610;-13.5870
P11=-100.8550;-15.9910
P12=-108.0020;-17.4060
P13=-115.1000;-17.9510
P14=-122.2100;-17.6690
P15=-129.3940;-16.5370
P16=-136.7420;-14.4560
P17=-139.4210;-13.3730
P18=-144.4560;-11.3840
P19=-152.9620;-7.0190
P20=-153.3650;-6.7830
P21=-163.4980;-0.8930
P22=-165.0450;0.0000
P23=-179.6170;7.2310
P24=176.5480;8.6110
P25=163.9010;10.7820
[C5]
gain=-10.00
n_point=24
P1=-33.9480;2.2330

BCNR.txt

P2=-47.0680;0.0000
P3=-49.2770;-0.6880
P4=-63.1270;-7.0000
P5=-65.7700;-8.4390
P6=-75.5810;-13.7420
P7=-75.9540;-13.9510
P8=-84.4850;-18.1440
P9=-90.5930;-20.4370
P10=-92.4000;-21.1620
P11=-100.0300;-23.3730
P12=-107.5770;-24.6800
P13=-115.1000;-25.1870
P14=-122.6420;-24.9340
P15=-130.2430;-23.8970
P16=-137.9660;-21.9910
P17=-142.0770;-20.5130
P18=-145.9790;-19.2180
P19=-154.6490;-15.4460
P20=-157.7960;-13.8370
P21=-164.9270;-10.3690
P22=-171.7400;-7.0830
P23=178.7320;-3.3660
P24=163.7420;-0.9400
[C6]
gain=-15.00
n_point=19
P1=-35.0710;-27.4200
P2=-50.8400;-29.3340
P3=-54.8310;-30.1900
P4=-65.2140;-33.6290
P5=-76.2140;-36.9650
P6=-77.7110;-37.3210
P7=-86.0300;-39.8920
P8=-95.6990;-41.9470
P9=-105.3800;-43.1770
P10=-115.1000;-43.6710
P11=-124.8720;-43.4610
P12=-134.7160;-42.5290
P13=-144.6760;-40.8050
P14=-154.8890;-38.1630
P15=-156.4980;-37.6200
P16=-166.5650;-35.1310
P17=176.7490;-31.3000
P18=174.3790;-30.9900
P19=165.1780;-30.5280