

[FormatInfo]  
format\_ver=1

[GeoMain]  
adm=USA  
sat\_name=SkyTerra-1  
long\_nom=-95.000  
n\_diag=1

[COHeader]  
beam\_id=RU12  
emi\_rcp=R  
polar\_disc=C  
reason=C  
n\_bore=1  
n\_cont=9

[B1]  
gain=0.00  
p=-76.119;36.524

[C1]  
gain=-2  
n\_point=39  
p1=-73.939;40.568  
p2=-73.231;40.320  
p3=-72.577;39.861  
p4=-72.539;39.819  
p5=-72.076;39.038  
p6=-72.075;39.034  
p7=-71.954;38.253  
p8=-72.011;37.471  
p9=-72.228;36.694  
p10=-72.597;35.922  
p11=-73.114;35.154  
p12=-73.672;34.516  
p13=-73.797;34.391  
p14=-74.675;33.689  
p15=-74.774;33.628  
p16=-75.548;33.222  
p17=-76.354;32.943  
p18=-77.108;32.831  
p19=-77.817;32.880  
p20=-78.487;33.094  
p21=-79.101;33.475  
p22=-79.117;33.488  
p23=-79.656;34.177  
p24=-79.677;34.221  
p25=-79.905;34.899  
p26=-79.984;35.635  
p27=-79.902;36.388  
p28=-79.655;37.157  
p29=-79.233;37.944  
p30=-78.617;38.752  
p31=-78.557;38.814  
p32=-77.651;39.589  
p33=-77.522;39.679

p34=-76.559;40.196  
p35=-75.725;40.485  
p36=-75.640;40.511  
p37=-74.777;40.626  
p38=-73.966;40.575  
p39=-73.939;40.568

[C2]

gain=-4  
n\_point=55  
p1=-73.259;42.283  
p2=-72.492;42.122  
p3=-71.759;41.811  
p4=-71.358;41.534  
p5=-71.108;41.324  
p6=-70.645;40.738  
p7=-70.568;40.600  
p8=-70.315;39.936  
p9=-70.225;39.445  
p10=-70.192;39.137  
p11=-70.231;38.341  
p12=-70.389;37.553  
p13=-70.653;36.771  
p14=-71.018;35.996  
p15=-71.481;35.229  
p16=-72.044;34.467  
p17=-72.216;34.271  
p18=-72.744;33.711  
p19=-73.324;33.189  
p20=-73.613;32.960  
p21=-74.271;32.505  
p22=-74.795;32.207  
p23=-75.133;32.034  
p24=-75.938;31.722  
p25=-76.703;31.528  
p26=-77.433;31.446  
p27=-78.134;31.472  
p28=-78.809;31.610  
p29=-79.458;31.866  
p30=-79.750;32.041  
p31=-80.079;32.274  
p32=-80.531;32.721  
p33=-80.663;32.887  
p34=-80.989;33.419  
p35=-81.180;33.877  
p36=-81.266;34.130  
p37=-81.399;34.855  
p38=-81.418;35.593  
p39=-81.325;36.344  
p40=-81.118;37.110  
p41=-80.790;37.893  
p42=-80.327;38.692  
p43=-80.037;39.087  
p44=-79.693;39.512  
p45=-78.942;40.265  
p46=-78.836;40.357  
p47=-77.912;41.040

p48=-77.584;41.235  
p49=-76.919;41.590  
p50=-75.956;41.973  
p51=-75.112;42.191  
p52=-75.026;42.213  
p53=-74.135;42.314  
p54=-73.286;42.288  
p55=-73.259;42.283

[C3]

gain=-6  
n\_point=69  
p1=-71.332;43.255  
p2=-71.128;43.187  
p3=-70.419;42.799  
p4=-70.009;42.462  
p5=-69.792;42.250  
p6=-69.361;41.648  
p7=-69.276;41.486  
p8=-69.028;40.830  
p9=-68.935;40.374  
p10=-68.885;40.017  
p11=-68.887;39.209  
p12=-68.998;38.408  
p13=-69.013;38.353  
p14=-69.207;37.615  
p15=-69.501;36.830  
p16=-69.872;36.053  
p17=-70.211;35.474  
p18=-70.321;35.284  
p19=-70.852;34.522  
p20=-71.471;33.768  
p21=-71.694;33.530  
p22=-72.204;33.019  
p23=-72.778;32.516  
p24=-73.084;32.275  
p25=-73.726;31.822  
p26=-74.209;31.532  
p27=-74.596;31.318  
p28=-75.412;30.953  
p29=-75.929;30.780  
p30=-76.188;30.697  
p31=-76.932;30.539  
p32=-77.649;30.470  
p33=-78.343;30.488  
p34=-79.016;30.594  
p35=-79.283;30.674  
p36=-79.668;30.797  
p37=-80.301;31.109  
p38=-80.616;31.324  
p39=-80.911;31.554  
p40=-81.346;31.998  
p41=-81.493;32.181  
p42=-81.824;32.687  
p43=-82.028;33.107  
p44=-82.144;33.388  
p45=-82.340;34.101

p46=-82.433;34.810  
p47=-82.436;34.827  
p48=-82.435;35.564  
p49=-82.343;36.315  
p50=-82.158;37.080  
p51=-81.873;37.860  
p52=-81.817;37.975  
p53=-81.476;38.656  
p54=-80.953;39.470  
p55=-80.611;39.906  
p56=-80.271;40.305  
p57=-79.524;41.043  
p58=-79.384;41.164  
p59=-78.477;41.859  
p60=-78.170;42.057  
p61=-77.455;42.475  
p62=-76.455;42.939  
p63=-76.277;43.001  
p64=-75.479;43.269  
p65=-74.531;43.480  
p66=-73.615;43.577  
p67=-72.737;43.564  
p68=-71.906;43.436  
p69=-71.332;43.255

[C4]

gain=-8  
n\_point=77  
p1=-70.411;44.197  
p2=-69.845;43.941  
p3=-69.168;43.475  
p4=-69.077;43.389  
p5=-68.583;42.843  
p6=-68.398;42.559  
p7=-68.118;41.995  
p8=-68.020;41.728  
p9=-67.838;40.901  
p10=-67.831;40.814  
p11=-67.798;40.081  
p12=-67.869;39.267  
p13=-67.974;38.749  
p14=-68.031;38.463  
p15=-68.271;37.667  
p16=-68.585;36.879  
p17=-68.966;36.100  
p18=-69.413;35.330  
p19=-69.531;35.157  
p20=-69.927;34.567  
p21=-70.513;33.812  
p22=-71.022;33.239  
p23=-71.184;33.064  
p24=-71.960;32.322  
p25=-72.133;32.173  
p26=-72.882;31.584  
p27=-73.102;31.427  
p28=-73.990;30.870  
p29=-74.031;30.849

p30=-74.822;30.451  
p31=-75.612;30.138  
p32=-75.721;30.106  
p33=-76.370;29.915  
p34=-77.101;29.776  
p35=-77.809;29.713  
p36=-78.497;29.727  
p37=-79.167;29.818  
p38=-79.781;29.981  
p39=-79.819;29.992  
p40=-80.456;30.254  
p41=-81.075;30.621  
p42=-81.081;30.626  
p43=-81.675;31.119  
p44=-81.841;31.292  
p45=-82.249;31.796  
p46=-82.370;31.972  
p47=-82.744;32.664  
p48=-82.783;32.762  
p49=-83.001;33.367  
p50=-83.160;34.081  
p51=-83.202;34.482  
p52=-83.234;34.807  
p53=-83.227;35.544  
p54=-83.139;36.294  
p55=-82.968;37.058  
p56=-82.709;37.836  
p57=-82.502;38.301  
p58=-82.353;38.629  
p59=-81.891;39.440  
p60=-81.307;40.263  
p61=-81.301;40.270  
p62=-80.552;41.123  
p63=-80.215;41.452  
p64=-79.592;42.001  
p65=-79.151;42.347  
p66=-78.315;42.913  
p67=-78.105;43.044  
p68=-77.076;43.588  
p69=-76.376;43.879  
p70=-76.063;44.006  
p71=-75.071;44.310  
p72=-74.103;44.508  
p73=-73.165;44.604  
p74=-72.263;44.599  
p75=-71.403;44.491  
p76=-70.594;44.275  
p77=-70.411;44.197

[C5]

gain=-10  
n\_point=85  
p1=-70.010;45.129  
p2=-69.347;44.877  
p3=-68.635;44.458  
p4=-68.464;44.317  
p5=-68.005;43.900

p6=-67.674;43.477  
p7=-67.478;43.171  
p8=-67.225;42.633  
p9=-67.087;42.208  
p10=-66.985;41.793  
p11=-66.898;40.959  
p12=-66.899;40.876  
p13=-66.919;40.134  
p14=-67.038;39.317  
p15=-67.238;38.509  
p16=-67.273;38.405  
p17=-67.502;37.710  
p18=-67.832;36.921  
p19=-68.222;36.140  
p20=-68.537;35.602  
p21=-68.671;35.368  
p22=-69.174;34.604  
p23=-69.742;33.849  
p24=-70.236;33.271  
p25=-70.384;33.100  
p26=-71.106;32.359  
p27=-71.407;32.083  
p28=-71.939;31.623  
p29=-72.414;31.251  
p30=-72.923;30.891  
p31=-73.329;30.625  
p32=-74.149;30.162  
p33=-74.183;30.144  
p34=-74.992;29.770  
p35=-75.765;29.491  
p36=-76.025;29.421  
p37=-76.511;29.289  
p38=-77.233;29.160  
p39=-77.934;29.102  
p40=-78.617;29.113  
p41=-79.284;29.195  
p42=-79.761;29.310  
p43=-79.935;29.351  
p44=-80.573;29.582  
p45=-81.196;29.907  
p46=-81.251;29.943  
p47=-81.803;30.334  
p48=-82.100;30.601  
p49=-82.393;30.898  
p50=-82.700;31.272  
p51=-82.958;31.652  
p52=-83.138;31.954  
p53=-83.456;32.647  
p54=-83.482;32.725  
p55=-83.680;33.351  
p56=-83.817;34.065  
p57=-83.871;34.726  
p58=-83.877;34.791  
p59=-83.867;35.529  
p60=-83.784;36.278  
p61=-83.623;37.041  
p62=-83.382;37.818

p63=-83.312;37.989  
p64=-83.057;38.610  
p65=-82.635;39.419  
p66=-82.099;40.246  
p67=-82.088;40.260  
p68=-81.434;41.093  
p69=-80.984;41.580  
p70=-80.600;41.965  
p71=-79.907;42.576  
p72=-79.539;42.864  
p73=-78.843;43.363  
p74=-78.125;43.802  
p75=-77.790;43.995  
p76=-76.749;44.498  
p77=-75.946;44.802  
p78=-75.723;44.886  
p79=-74.713;45.177  
p80=-73.727;45.367  
p81=-72.769;45.463  
p82=-71.845;45.464  
p83=-70.961;45.370  
p84=-70.127;45.174  
p85=-70.010;45.129

[C6]

gain=-15  
n\_point=97  
p1=-70.052;47.011  
p2=-69.182;46.864  
p3=-68.345;46.617  
p4=-67.578;46.258  
p5=-67.523;46.223  
p6=-66.873;45.803  
p7=-66.414;45.365  
p8=-66.262;45.207  
p9=-65.777;44.496  
p10=-65.755;44.457  
p11=-65.411;43.628  
p12=-65.378;43.508  
p13=-65.219;42.766  
p14=-65.180;42.269  
p15=-65.157;41.912  
p16=-65.196;41.068  
p17=-65.285;40.492  
p18=-65.319;40.234  
p19=-65.503;39.411  
p20=-65.756;38.597  
p21=-66.067;37.794  
p22=-66.429;37.000  
p23=-66.836;36.216  
p24=-67.290;35.441  
p25=-67.792;34.675  
p26=-68.350;33.917  
p27=-68.468;33.773  
p28=-68.949;33.168  
p29=-69.615;32.426  
p30=-69.836;32.203

p31=-70.350;31.692  
p32=-70.948;31.158  
p33=-71.177;30.963  
p34=-71.934;30.374  
p35=-72.122;30.239  
p36=-72.841;29.758  
p37=-73.248;29.519  
p38=-73.692;29.267  
p39=-74.501;28.879  
p40=-74.705;28.798  
p41=-75.278;28.567  
p42=-76.027;28.330  
p43=-76.752;28.163  
p44=-77.459;28.056  
p45=-77.619;28.045  
p46=-78.149;28.004  
p47=-78.775;28.012  
p48=-78.823;28.013  
p49=-79.485;28.076  
p50=-80.134;28.200  
p51=-80.771;28.393  
p52=-81.267;28.607  
p53=-81.395;28.662  
p54=-82.010;29.002  
p55=-82.355;29.246  
p56=-82.613;29.440  
p57=-83.112;29.900  
p58=-83.202;29.993  
p59=-83.681;30.565  
p60=-83.775;30.699  
p61=-84.122;31.241  
p62=-84.323;31.641  
p63=-84.459;31.925  
p64=-84.710;32.620  
p65=-84.817;33.046  
p66=-84.888;33.325  
p67=-85.003;34.040  
p68=-85.049;34.766  
p69=-85.033;35.502  
p70=-84.955;36.251  
p71=-84.815;37.013  
p72=-84.608;37.788  
p73=-84.326;38.577  
p74=-83.959;39.383  
p75=-83.725;39.805  
p76=-83.504;40.205  
p77=-82.950;41.047  
p78=-82.597;41.504  
p79=-82.271;41.909  
p80=-81.501;42.735  
p81=-81.440;42.796  
p82=-80.415;43.711  
p83=-80.414;43.712  
p84=-79.330;44.516  
p85=-79.103;44.662  
p86=-78.247;45.186  
p87=-77.309;45.662



p88=-77.171;45.731  
p89=-76.097;46.187  
p90=-75.038;46.538  
p91=-74.097;46.772  
p92=-73.995;46.798  
p93=-72.968;46.984  
p94=-71.967;47.082  
p95=-71.000;47.093  
p96=-70.073;47.015  
p97=-70.052;47.011

[C7]

gain=-20  
n\_point=167  
p1=-56.187;57.113  
p2=-55.308;56.736  
p3=-54.288;56.387  
p4=-53.507;56.115  
p5=-53.342;55.986  
p6=-52.621;55.437  
p7=-52.020;55.041  
p8=-51.915;54.883  
p9=-51.463;54.164  
p10=-51.347;53.927  
p11=-51.260;53.279  
p12=-51.224;52.796  
p13=-51.296;52.225  
p14=-51.415;51.671  
p15=-51.613;50.952  
p16=-51.756;50.566  
p17=-52.111;49.504  
p18=-52.115;49.494  
p19=-52.643;48.435  
p20=-52.858;47.790  
p21=-53.034;47.418  
p22=-53.477;46.422  
p23=-53.630;45.961  
p24=-53.885;45.454  
p25=-54.352;44.502  
p26=-54.642;43.773  
p27=-54.748;43.578  
p28=-55.294;42.660  
p29=-55.813;41.763  
p30=-56.301;40.885  
p31=-56.716;40.110  
p32=-56.769;40.026  
p33=-57.327;39.174  
p34=-57.877;38.339  
p35=-58.426;37.517  
p36=-58.979;36.708  
p37=-59.538;35.912  
p38=-60.093;35.139  
p39=-60.103;35.127  
p40=-60.770;34.347  
p41=-61.404;33.580  
p42=-62.008;32.826  
p43=-62.591;32.084

p44=-62.597;32.076  
p45=-63.292;31.344  
p46=-63.918;30.618  
p47=-64.241;30.253  
p48=-64.599;29.899  
p49=-65.291;29.187  
p50=-65.572;28.907  
p51=-66.045;28.482  
p52=-66.730;27.837  
p53=-66.792;27.785  
p54=-67.634;27.092  
p55=-67.765;26.986  
p56=-68.539;26.405  
p57=-68.724;26.269  
p58=-69.512;25.724  
p59=-69.628;25.647  
p60=-70.485;25.117  
p61=-70.601;25.047  
p62=-71.301;24.676  
p63=-71.835;24.373  
p64=-72.099;24.246  
p65=-72.867;23.887  
p66=-73.229;23.702  
p67=-73.618;23.552  
p68=-74.346;23.278  
p69=-74.949;23.032  
p70=-75.067;22.998  
p71=-75.760;22.821  
p72=-76.444;22.662  
p73=-77.118;22.524  
p74=-77.782;22.413  
p75=-78.437;22.336  
p76=-78.569;22.329  
p77=-79.080;22.308  
p78=-79.591;22.306  
p79=-79.717;22.308  
p80=-80.344;22.356  
p81=-80.965;22.435  
p82=-81.581;22.539  
p83=-82.194;22.662  
p84=-82.804;22.804  
p85=-82.980;22.854  
p86=-83.403;23.036  
p87=-84.001;23.284  
p88=-84.378;23.446  
p89=-84.595;23.582  
p90=-85.186;23.928  
p91=-85.389;24.050  
p92=-85.772;24.344  
p93=-86.226;24.662  
p94=-86.360;24.777  
p95=-86.946;25.255  
p96=-86.974;25.280  
p97=-87.530;25.814  
p98=-87.620;25.905  
p99=-88.115;26.425  
p100=-88.211;26.536

p101=-88.700;27.114  
p102=-88.744;27.173  
p103=-89.182;27.818  
p104=-89.282;27.962  
p105=-89.547;28.470  
p106=-89.859;29.034  
p107=-89.899;29.128  
p108=-90.136;29.794  
p109=-90.398;30.466  
p110=-90.424;30.537  
p111=-90.566;31.147  
p112=-90.716;31.836  
p113=-90.867;32.533  
p114=-90.957;32.974  
p115=-90.987;33.238  
p116=-91.040;33.954  
p117=-91.067;34.678  
p118=-91.065;35.413  
p119=-91.035;36.159  
p120=-90.976;36.916  
p121=-90.889;37.685  
p122=-90.775;38.467  
p123=-90.633;39.263  
p124=-90.530;39.742  
p125=-90.431;40.073  
p126=-90.155;40.900  
p127=-89.858;41.743  
p128=-89.532;42.604  
p129=-89.510;42.652  
p130=-89.045;43.486  
p131=-88.571;44.389  
p132=-88.496;44.520  
p133=-87.933;45.317  
p134=-87.449;46.056  
p135=-87.272;46.271  
p136=-86.500;47.254  
p137=-86.355;47.434  
p138=-85.587;48.271  
p139=-85.217;48.669  
p140=-84.553;49.326  
p141=-84.032;49.806  
p142=-83.331;50.424  
p143=-82.805;50.836  
p144=-81.840;51.576  
p145=-81.535;51.779  
p146=-80.240;52.599  
p147=-79.923;52.799  
p148=-78.924;53.310  
p149=-77.541;54.031  
p150=-77.372;54.116  
p151=-76.176;54.589  
p152=-74.761;55.132  
p153=-73.566;55.593  
p154=-73.282;55.681  
p155=-71.852;56.064  
p156=-70.391;56.421  
p157=-68.899;56.749

p158=-67.386;57.042  
p159=-65.868;57.284  
p160=-64.367;57.459  
p161=-62.906;57.557  
p162=-61.496;57.577  
p163=-60.135;57.532  
p164=-58.813;57.436  
p165=-57.524;57.300  
p166=-56.264;57.130  
p167=-56.187;57.113

[C8]

gain=-20  
n\_point=145  
p1=-65.749;53.711  
p2=-65.367;53.716  
p3=-64.188;53.684  
p4=-63.057;53.584  
p5=-62.017;53.378  
p6=-61.172;52.973  
p7=-61.136;52.945  
p8=-60.213;52.683  
p9=-59.467;52.189  
p10=-59.308;51.985  
p11=-58.769;51.654  
p12=-58.334;50.985  
p13=-58.279;50.928  
p14=-57.794;50.202  
p15=-57.714;49.985  
p16=-57.458;49.337  
p17=-57.365;48.991  
p18=-57.283;48.314  
p19=-57.229;48.005  
p20=-57.309;47.076  
p21=-57.303;47.027  
p22=-57.355;46.074  
p23=-57.476;45.664  
p24=-57.509;45.136  
p25=-57.799;44.207  
p26=-57.931;43.878  
p27=-58.011;43.305  
p28=-58.324;42.413  
p29=-58.718;41.576  
p30=-58.725;41.531  
p31=-58.970;40.679  
p32=-59.360;39.830  
p33=-59.810;38.992  
p34=-60.291;38.167  
p35=-60.787;37.354  
p36=-61.293;36.553  
p37=-61.813;35.764  
p38=-62.353;34.985  
p39=-62.938;34.215  
p40=-63.636;33.449  
p41=-63.664;33.422  
p42=-64.208;32.702  
p43=-64.872;31.959

p44=-65.336;31.541  
p45=-65.612;31.222  
p46=-66.347;30.495  
p47=-66.647;30.246  
p48=-67.114;29.777  
p49=-67.795;29.210  
p50=-67.953;29.064  
p51=-68.816;28.359  
p52=-68.838;28.342  
p53=-69.675;27.663  
p54=-69.819;27.552  
p55=-70.623;26.973  
p56=-70.733;26.891  
p57=-71.597;26.331  
p58=-71.675;26.287  
p59=-72.428;25.818  
p60=-72.907;25.604  
p61=-73.215;25.429  
p62=-73.975;25.103  
p63=-74.604;24.915  
p64=-74.704;24.871  
p65=-75.430;24.610  
p66=-76.131;24.442  
p67=-76.816;24.324  
p68=-77.490;24.240  
p69=-78.032;24.193  
p70=-78.155;24.176  
p71=-78.814;24.128  
p72=-79.461;24.132  
p73=-79.698;24.154  
p74=-80.100;24.168  
p75=-80.735;24.220  
p76=-81.363;24.310  
p77=-81.982;24.453  
p78=-82.589;24.693  
p79=-82.641;24.719  
p80=-83.202;24.890  
p81=-83.804;25.179  
p82=-84.024;25.323  
p83=-84.403;25.507  
p84=-84.980;25.941  
p85=-84.992;25.949  
p86=-85.585;26.383  
p87=-85.772;26.568  
p88=-86.169;26.947  
p89=-86.395;27.203  
p90=-86.746;27.640  
p91=-86.904;27.845  
p92=-87.310;28.495  
p93=-87.315;28.504  
p94=-87.731;29.152  
p95=-87.881;29.487  
p96=-88.071;29.816  
p97=-88.344;30.488  
p98=-88.432;30.790  
p99=-88.604;31.167  
p100=-88.806;31.855

p101=-88.920;32.552  
p102=-88.943;32.766  
p103=-89.066;33.258  
p104=-89.161;33.973  
p105=-89.198;34.697  
p106=-89.192;35.433  
p107=-89.150;36.179  
p108=-89.071;36.937  
p109=-88.950;37.708  
p110=-88.776;38.491  
p111=-88.526;39.289  
p112=-88.266;39.887  
p113=-88.201;40.103  
p114=-87.910;40.932  
p115=-87.519;41.779  
p116=-87.185;42.336  
p117=-87.040;42.646  
p118=-86.564;43.532  
p119=-86.090;44.190  
p120=-85.934;44.442  
p121=-85.252;45.377  
p122=-84.976;45.686  
p123=-84.422;46.341  
p124=-83.848;46.899  
p125=-83.376;47.340  
p126=-82.709;47.903  
p127=-82.069;48.381  
p128=-81.553;48.764  
p129=-80.397;49.463  
p130=-80.379;49.474  
p131=-79.168;50.231  
p132=-78.317;50.629  
p133=-77.948;50.842  
p134=-76.678;51.455  
p135=-75.472;51.880  
p136=-75.446;51.893  
p137=-74.097;52.468  
p138=-72.804;52.856  
p139=-71.535;53.142  
p140=-70.279;53.358  
p141=-70.201;53.368  
p142=-68.971;53.603  
p143=-67.714;53.737  
p144=-66.515;53.767  
p145=-65.749;53.711

[C9]

gain=-20  
n\_point=105  
p1=-69.043;48.058  
p2=-68.503;47.982  
p3=-67.625;47.766  
p4=-66.815;47.446  
p5=-66.479;47.254  
p6=-66.072;47.030  
p7=-65.414;46.496  
p8=-65.307;46.380

p9=-64.847;45.837  
p10=-64.638;45.492  
p11=-64.400;45.011  
p12=-64.249;44.605  
p13=-64.096;43.978  
p14=-64.046;43.724  
p15=-63.975;42.852  
p16=-63.980;42.654  
p17=-63.990;41.992  
p18=-64.103;41.141  
p19=-64.180;40.792  
p20=-64.271;40.303  
p21=-64.498;39.475  
p22=-64.785;38.658  
p23=-65.124;37.851  
p24=-65.505;37.054  
p25=-65.927;36.268  
p26=-66.388;35.491  
p27=-66.891;34.723  
p28=-67.444;33.964  
p29=-67.728;33.612  
p30=-68.036;33.213  
p31=-68.674;32.471  
p32=-69.137;31.989  
p33=-69.379;31.735  
p34=-70.149;31.007  
p35=-70.277;30.895  
p36=-71.002;30.285  
p37=-71.286;30.063  
p38=-71.974;29.568  
p39=-72.212;29.405  
p40=-73.077;28.878  
p41=-73.122;28.854  
p42=-73.902;28.438  
p43=-74.590;28.140  
p44=-74.688;28.096  
p45=-75.449;27.810  
p46=-76.184;27.598  
p47=-76.899;27.448  
p48=-77.229;27.402  
p49=-77.597;27.345  
p50=-78.281;27.296  
p51=-78.950;27.303  
p52=-79.360;27.343  
p53=-79.606;27.364  
p54=-80.253;27.473  
p55=-80.889;27.644  
p56=-81.513;27.888  
p57=-81.620;27.941  
p58=-82.130;28.188  
p59=-82.728;28.574  
p60=-82.735;28.580  
p61=-83.332;29.048  
p62=-83.516;29.222  
p63=-83.918;29.638  
p64=-84.122;29.880  
p65=-84.488;30.383

p66=-84.598;30.547  
p67=-84.973;31.224  
p68=-85.036;31.364  
p69=-85.274;31.910  
p70=-85.491;32.605  
p71=-85.535;32.807  
p72=-85.654;33.310  
p73=-85.756;34.025  
p74=-85.795;34.751  
p75=-85.777;35.487  
p76=-85.705;36.236  
p77=-85.577;36.996  
p78=-85.388;37.770  
p79=-85.132;38.558  
p80=-84.798;39.362  
p81=-84.447;40.044  
p82=-84.378;40.182  
p83=-83.885;41.020  
p84=-83.325;41.805  
p85=-83.271;41.879  
p86=-82.548;42.760  
p87=-82.226;43.103  
p88=-81.663;43.667  
p89=-81.131;44.147  
p90=-80.571;44.605  
p91=-80.033;45.014  
p92=-79.181;45.581  
p93=-78.934;45.739  
p94=-77.832;46.355  
p95=-77.287;46.610  
p96=-76.730;46.872  
p97=-75.633;47.299  
p98=-74.550;47.628  
p99=-74.019;47.751  
p100=-73.475;47.886  
p101=-72.417;48.069  
p102=-71.385;48.169  
p103=-70.385;48.188  
p104=-69.425;48.122  
p105=-69.043;48.058