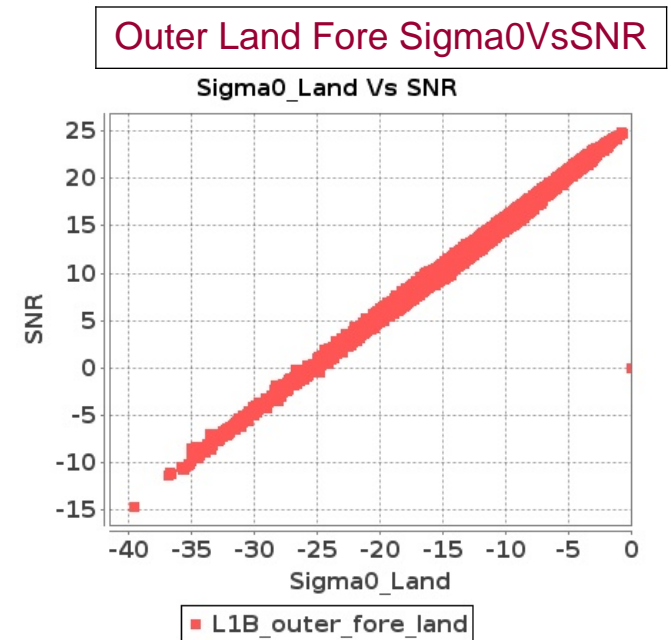
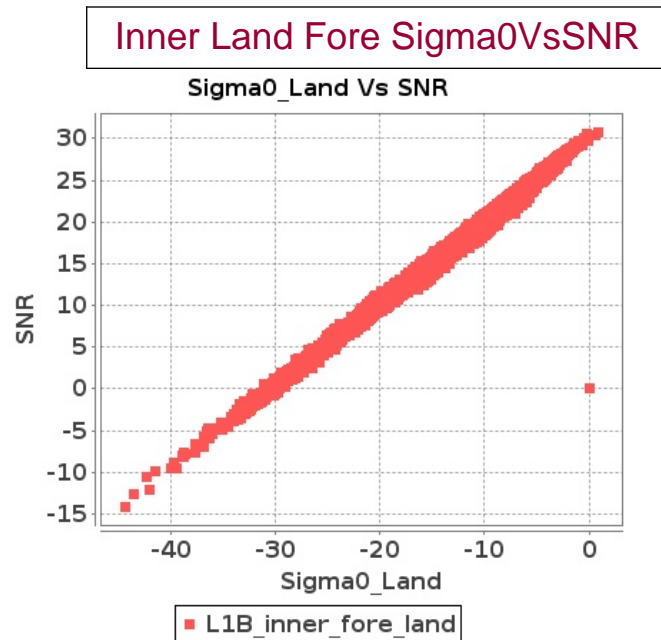
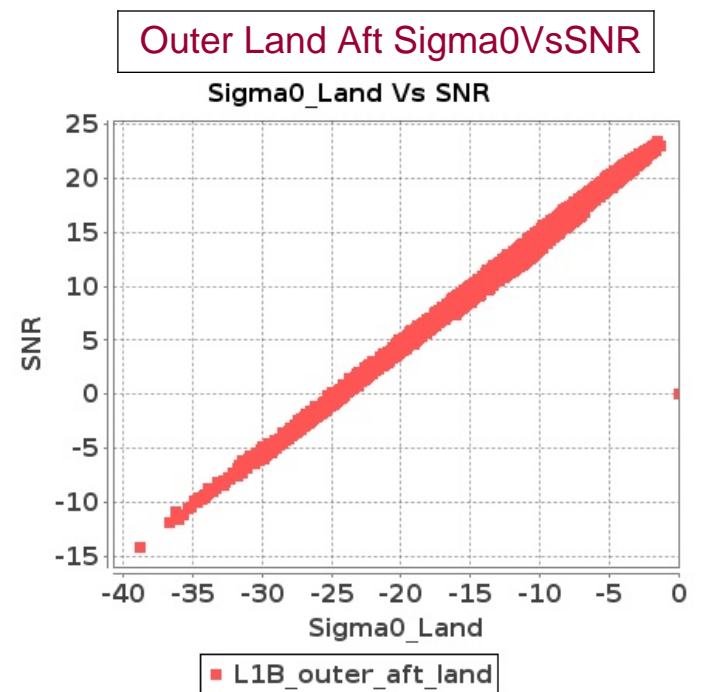
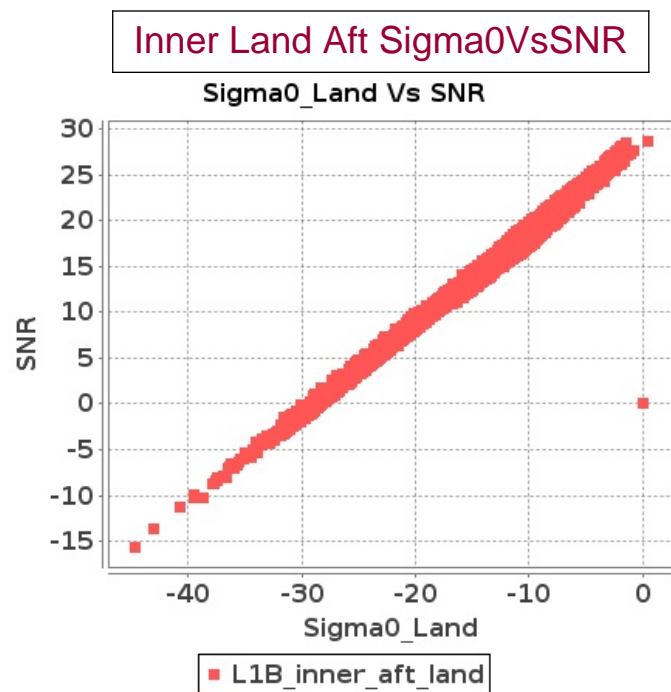
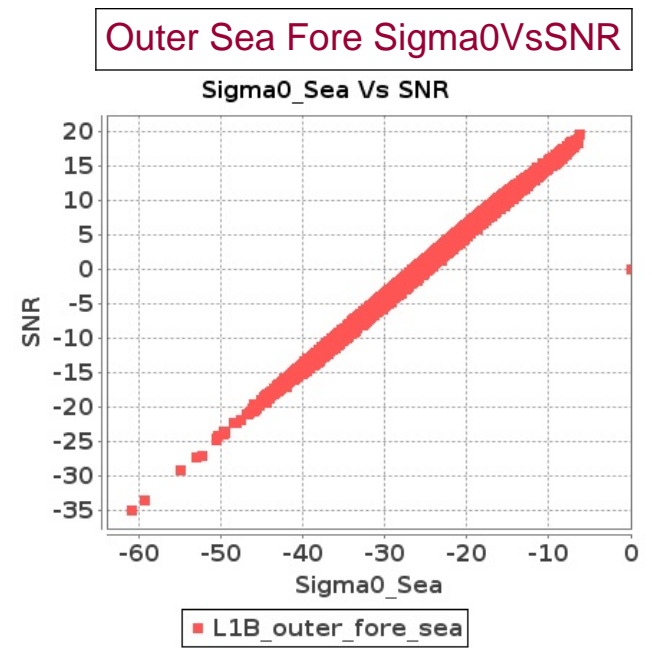
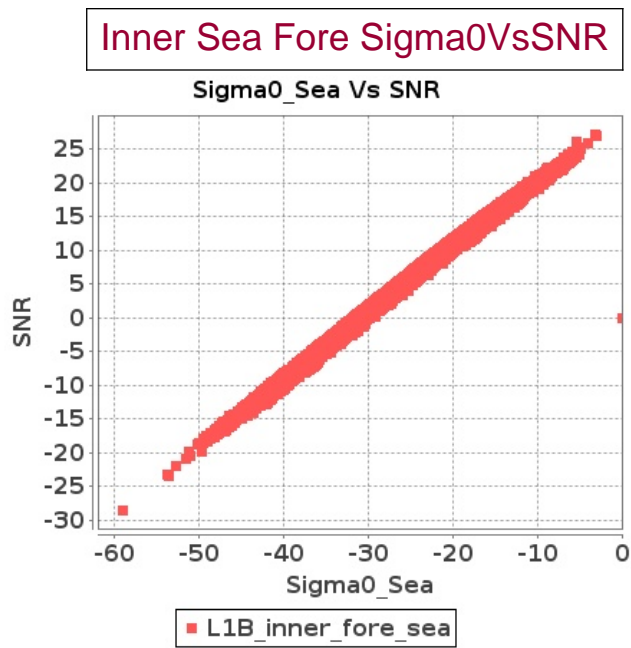
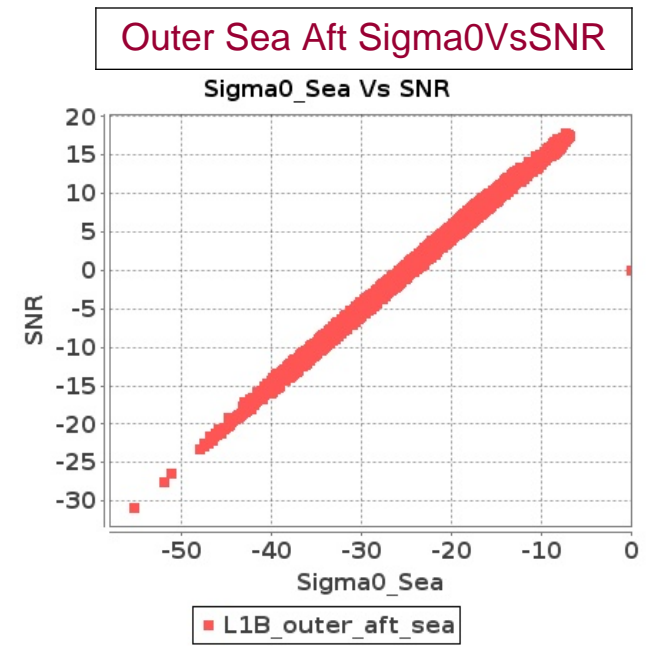
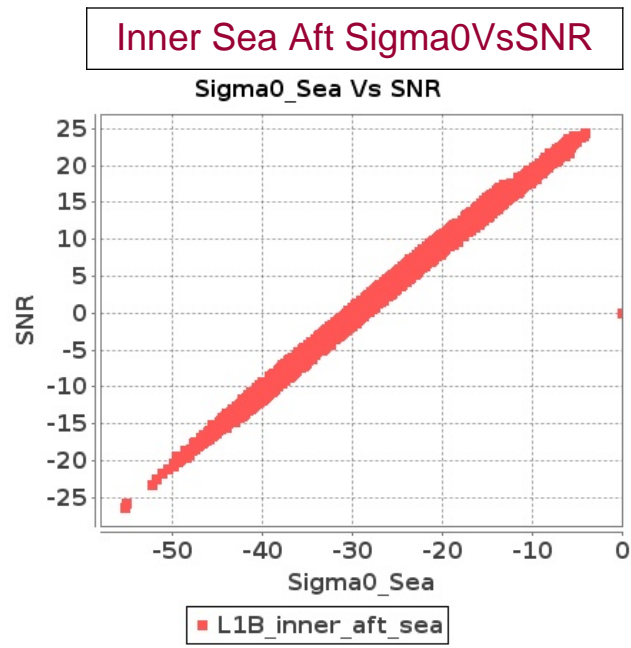
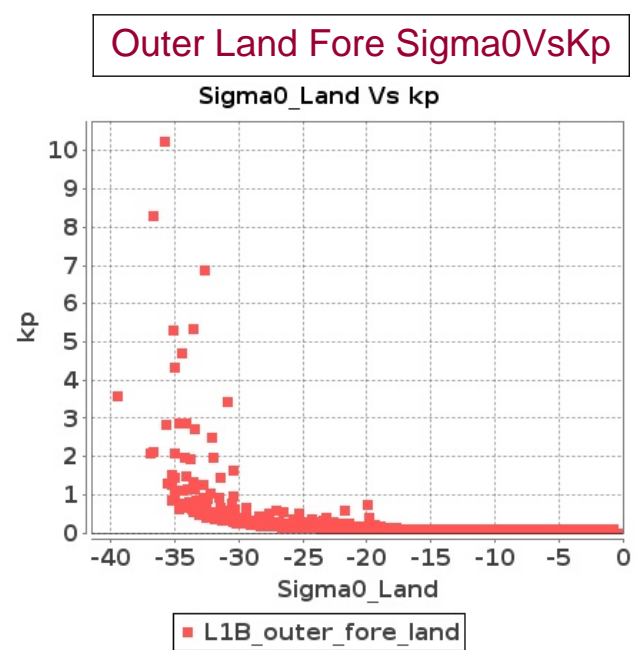
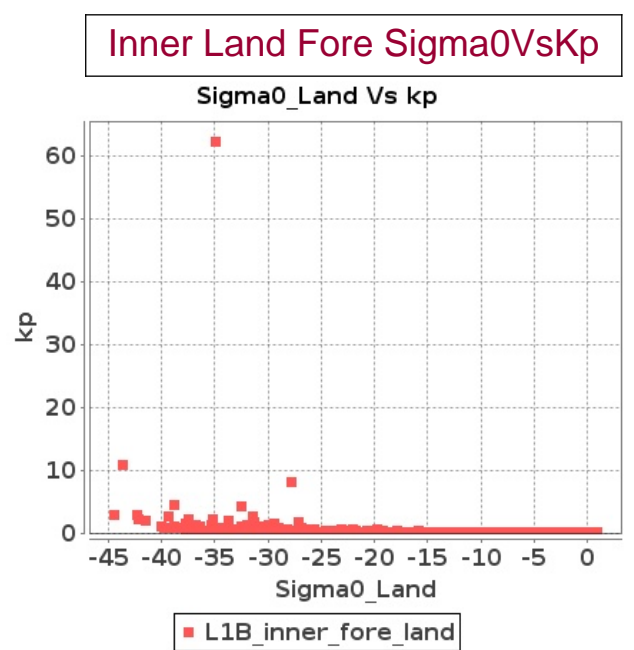
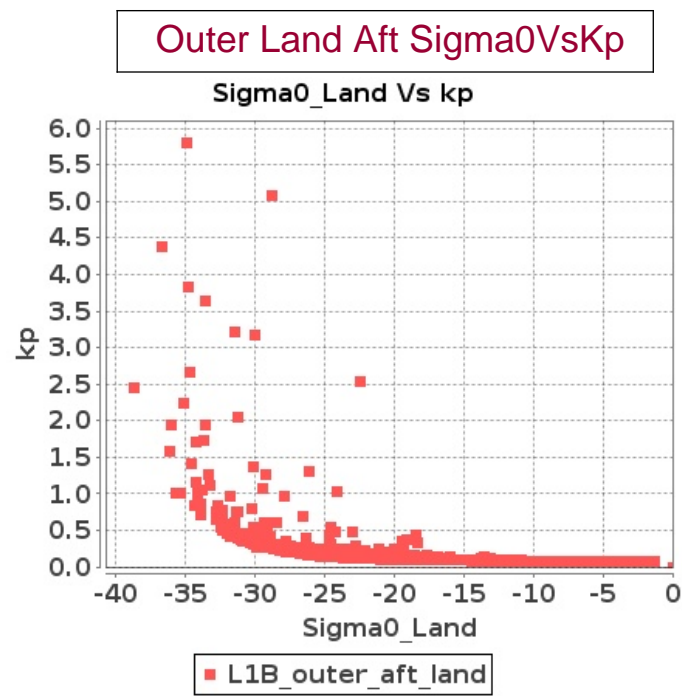
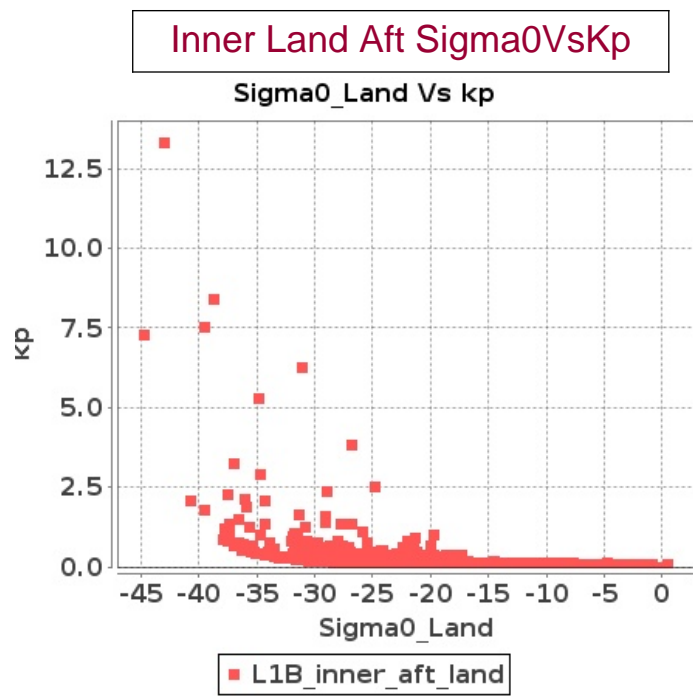
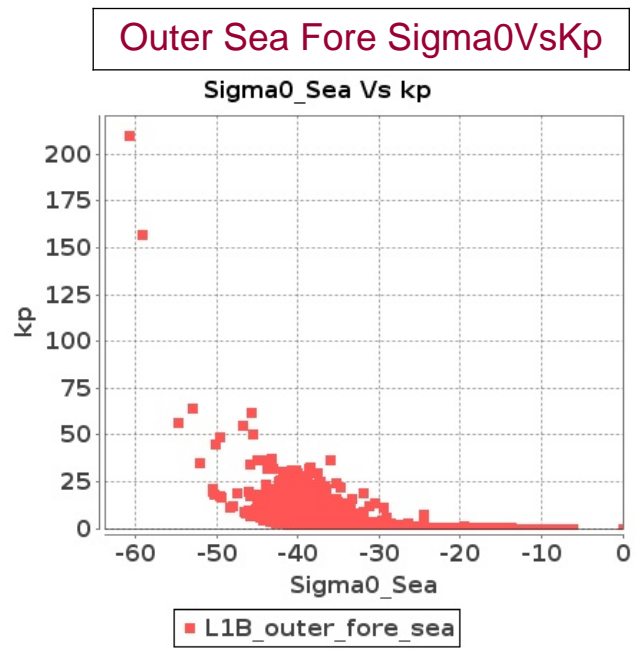
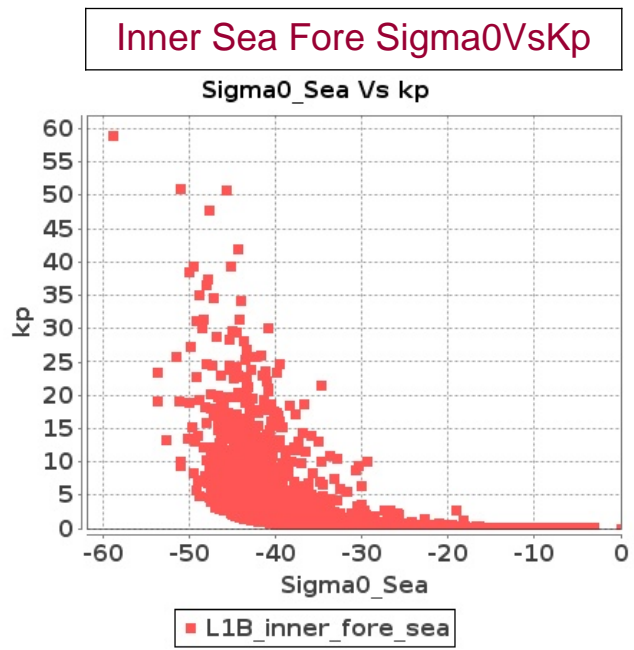
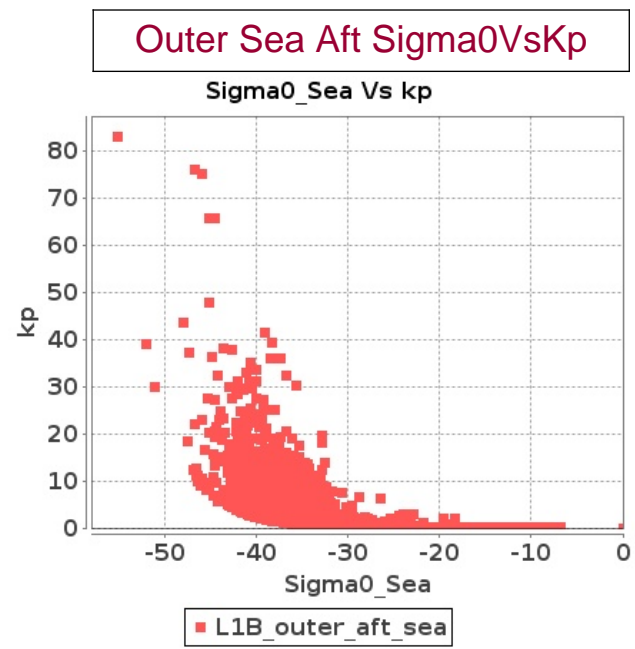
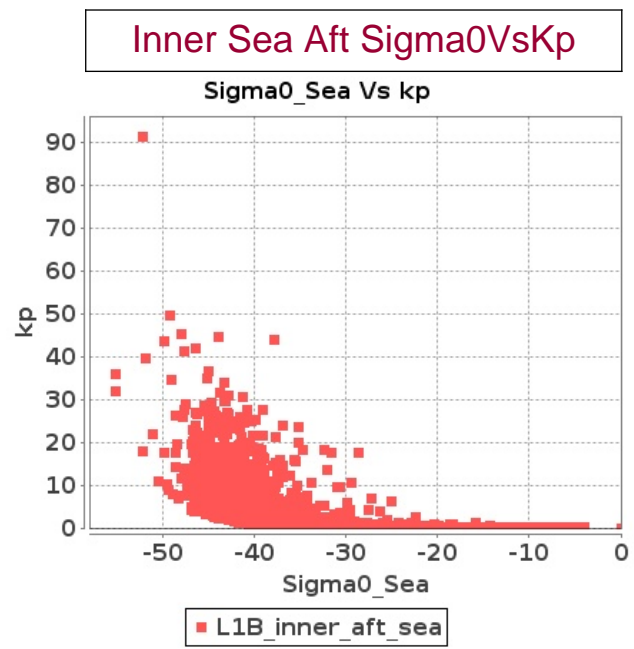


# SCATSAT-1 Scatterometer Level-1B Data Quality Cycle wise Report

Report between 15-SEP-2017 To 16-SEP-2017





# SCATSAT-1 Scatterometer Level-1B Data Quality Cycle wise Report

Report between 15-SEP-2017 To 16-SEP-2017

|       |             |           |      |      | Inner           |        |           |               |         |           |          |          |           |          |         |           |
|-------|-------------|-----------|------|------|-----------------|--------|-----------|---------------|---------|-----------|----------|----------|-----------|----------|---------|-----------|
|       |             |           |      |      | Incidence Angle |        |           | Azimuth Angle |         |           | Range    |          |           | X-Factor |         |           |
| Sr No | Start Orbit | End Orbit | Dir. | Ver. | Min             | Max    | BadOcc(%) | Min           | Max     | BadOcc(%) | Min      | Max      | BadOcc(%) | Min      | Max     | BadOcc(%) |
| 1     | 5130        | 5131      | SN   | 1    | 48.908          | 49.389 | 0.0       | 0.003         | 1.809   | 0.165     | 1054.8   | 1073.136 | 0.0       | -92.099  | -89.492 | 0.0       |
| 2     | 5130        | 5131      | SN   | 1    | 48.908          | 49.389 | 0.0       | 0.003         | 1.809   | 0.165     | 1054.8   | 1073.136 | 0.0       | -92.099  | -89.492 | 0.0       |
| 3     | 5130        | 5131      | NS   | 2    | 48.744          | 49.273 | 0.0       | 0.003         | 1.798   | 0.173     | 1022.864 | 1069.136 | 10.299    | -92.023  | -89.105 | 0.0       |
| 4     | 5130        | 5131      | SN   | 1    | 48.908          | 49.389 | 0.0       | 0.003         | 1.809   | 0.169     | 1054.8   | 1073.136 | 0.0       | -92.099  | -89.492 | 0.0       |
| 5     | 5131        | 5132      | NS   | 2    | 48.749          | 49.278 | 0.0       | 0.003         | 1.803   | 0.162     | 1023.064 | 1069.4   | 10.522    | -91.963  | -89.112 | 0.0       |
| 6     | 5131        | 5132      | SN   | 1    | 48.919          | 49.389 | 0.0       | 0.003         | 261.345 | 0.156     | 1054.488 | 1073.256 | 0.0       | -91.994  | -89.538 | 0.0       |
| 7     | 5131        | 5132      | SN   | 1    | 48.919          | 49.389 | 0.0       | 0.003         | 261.345 | 0.155     | 1054.488 | 1073.256 | 0.0       | -91.994  | -89.538 | 0.0       |
| 8     | 5131        | 5132      | SN   | 2    | 48.919          | 49.389 | 0.0       | 0.003         | 261.345 | 0.155     | 1054.488 | 1073.256 | 0.0       | -91.994  | -89.538 | 0.0       |
| 9     | 5131        | 5132      | NS   | 1    | 48.749          | 49.278 | 0.0       | 0.003         | 1.803   | 0.162     | 1023.064 | 1069.4   | 10.522    | -91.963  | -89.112 | 0.0       |
| 10    | 5132        | 5133      | NS   | 1    | 48.756          | 49.258 | 0.0       | 0.003         | 1.803   | 0.163     | 1023.12  | 1069.552 | 10.257    | -92.05   | -89.114 | 0.0       |
| 11    | 5132        | 5133      | SN   | 1    | 48.874          | 49.416 | 0.0       | 0.003         | 1.809   | 0.157     | 1054.672 | 1073.336 | 0.0       | -92.123  | -89.54  | 0.0       |
| 12    | 5132        | 5133      | SN   | 1    | 48.874          | 49.416 | 0.0       | 0.003         | 1.809   | 0.155     | 1054.672 | 1073.336 | 0.0       | -92.123  | -89.54  | 0.0       |
| 13    | 5133        | 5134      | SN   | 1    | 48.879          | 49.436 | 0.0       | 0.003         | 1.809   | 0.155     | 1054.376 | 1073.288 | 0.0       | -92.23   | -89.539 | 0.0       |
| 14    | 5133        | 5134      | NS   | 1    | 48.746          | 49.269 | 0.0       | 0.003         | 1.803   | 0.171     | 1023.664 | 1069.528 | 10.25     | -92.013  | -89.107 | 0.0       |
| 15    | 5133        | 5134      | SN   | 1    | 48.879          | 49.436 | 0.0       | 0.003         | 1.809   | 0.158     | 1054.376 | 1073.288 | 0.0       | -92.23   | -89.539 | 0.0       |
| 16    | 5134        | 5135      | SN   | 1    | 48.878          | 49.423 | 0.0       | 0.003         | 1.803   | 0.154     | 1054.312 | 1073.312 | 0.0       | -92.068  | -89.539 | 0.0       |
| 17    | 5134        | 5135      | NS   | 1    | 48.742          | 49.274 | 0.0       | 0.003         | 5.879   | 0.182     | 1023.912 | 1069.512 | 10.788    | -91.939  | -89.102 | 0.0       |
| 18    | 5135        | 5136      | SN   | 1    | 48.885          | 49.423 | 0.0       | 0.003         | 1.809   | 0.164     | 1054.408 | 1073.272 | 0.0       | -92.135  | -89.54  | 0.0       |
| 19    | 5135        | 5136      | NS   | 2    | 48.744          | 49.269 | 0.0       | 0.003         | 5.851   | 0.194     | 1023.12  | 1069.464 | 11.281    | -91.955  | -89.112 | 0.0       |
| 20    | 5135        | 5136      | SN   | 1    | 48.885          | 49.423 | 0.0       | 0.003         | 1.809   | 0.157     | 1054.408 | 1073.272 | 0.0       | -92.135  | -89.54  | 0.0       |
| 21    | 5136        | 5137      | NS   | 1    | 48.761          | 49.283 | 0.0       | 0.003         | 1.798   | 0.166     | 1023.368 | 1069.52  | 12.48     | -92.19   | -89.11  | 0.0       |
| 22    | 5136        | 5137      | SN   | 1    | 48.911          | 49.401 | 0.0       | 0.003         | 1.809   | 0.161     | 1054.552 | 1073.432 | 0.0       | -92.004  | -89.503 | 0.0       |
| 23    | 5136        | 5137      | SN   | 1    | 48.911          | 49.401 | 0.0       | 0.003         | 1.809   | 0.168     | 1054.552 | 1073.432 | 0.0       | -91.996  | -89.503 | 0.0       |
| 24    | 5137        | 5138      | SN   | 1    | 48.922          | 49.392 | 0.0       | 0.003         | 1.809   | 0.157     | 1054.264 | 1073.656 | 0.0       | -92.06   | -89.536 | 0.0       |
| 25    | 5137        | 5138      | NS   | 1    | 48.729          | 49.287 | 0.0       | 0.003         | 1.798   | 0.169     | 1022.792 | 1069.704 | 12.783    | -92.063  | -89.104 | 0.0       |
| 26    | 5137        | 5138      | SN   | 1    | 48.922          | 49.392 | 0.0       | 0.003         | 1.809   | 0.169     | 1054.264 | 1073.656 | 0.0       | -92.06   | -89.536 | 0.0       |
| 27    | 5138        | 5139      | SN   | 1    | 48.911          | 49.394 | 0.0       | 0.003         | 1.809   | 0.152     | 1055.16  | 1073.736 | 0.0       | -92.008  | -89.525 | 0.0       |
| 28    | 5138        | 5139      | NS   | 2    | 48.737          | 49.258 | 0.0       | 0.003         | 5.879   | 0.187     | 1023.344 | 1069.736 | 12.734    | -92.012  | -89.109 | 0.0       |
| 29    | 5139        | 5140      | NS   | 1    | 48.756          | 49.291 | 0.0       | 0.003         | 1.803   | 0.17      | 1022.92  | 1069.664 | 13.481    | -92.014  | -89.109 | 0.0       |
| 30    | 5144        | 5145      | SN   | 1    | 48.88           | 49.401 | 0.0       | 0.003         | 1.809   | 0.165     | 1055.808 | 1074.336 | 0.0       | -92.131  | -89.54  | 0.0       |
| 31    | 5145        | 5146      | NS   | 2    | 48.74           | 49.3   | 0.0       | 0.003         | 5.868   | 0.178     | 1022.52  | 1070.208 | 12.939    | -92.002  | -89.096 | 0.0       |
| 32    | 5145        | 5146      | SN   | 1    | 48.914          | 49.396 | 0.0       | 0.003         | 1.809   | 0.16      | 1054.936 | 1074.248 | 0.0       | -92.043  | -89.541 | 0.0       |

| Parameter Specifications | Parameters | Inc.Angle | Azi. Angle | Range  | X-Factor |
|--------------------------|------------|-----------|------------|--------|----------|
|                          | Min        | 47.1      | 0.0        | 1025.0 | -100.0   |
|                          | Max        | 49.9      | 0.0        | 1095.7 | -80.0    |

Normal     
  Deviations  
 Alarming     
  High Errors

|    |      |      |    |   |        |        |     |       |       |       |          |          |        |         |         |     |
|----|------|------|----|---|--------|--------|-----|-------|-------|-------|----------|----------|--------|---------|---------|-----|
| 33 | 5145 | 5146 | SN | 1 | 48.914 | 49.396 | 0.0 | 0.003 | 1.809 | 0.16  | 1054.936 | 1074.248 | 0.0    | -92.043 | -89.541 | 0.0 |
| 34 | 5145 | 5146 | NS | 2 | 48.74  | 49.3   | 0.0 | 0.003 | 5.868 | 0.178 | 1022.52  | 1070.208 | 12.952 | -92.002 | -89.096 | 0.0 |
| 35 | 5145 | 5146 | SN | 1 | 48.914 | 49.396 | 0.0 | 0.003 | 1.809 | 0.162 | 1054.936 | 1074.248 | 0.0    | -92.043 | -89.541 | 0.0 |
| 36 | 5146 | 5147 | NS | 2 | 48.756 | 49.274 | 0.0 | 0.003 | 1.798 | 0.162 | 1022.608 | 1070.384 | 13.377 | -92.072 | -89.103 | 0.0 |
| 37 | 5146 | 5147 | SN | 1 | 48.881 | 49.396 | 0.0 | 0.003 | 1.809 | 0.153 | 1054.76  | 1074.384 | 0.0    | -91.99  | -89.547 | 0.0 |
| 38 | 5146 | 5147 | SN | 1 | 48.881 | 49.396 | 0.0 | 0.003 | 1.809 | 0.154 | 1054.76  | 1074.384 | 0.0    | -91.99  | -89.547 | 0.0 |
| 39 | 5146 | 5147 | SN | 1 | 48.881 | 49.396 | 0.0 | 0.003 | 1.809 | 0.154 | 1054.76  | 1074.384 | 0.0    | -91.99  | -89.547 | 0.0 |
| 40 | 5146 | 5147 | NS | 1 | 48.757 | 49.273 | 0.0 | 0.003 | 1.798 | 0.162 | 1022.688 | 1070.392 | 13.402 | -92.042 | -89.103 | 0.0 |
| 41 | 5147 | 5148 | SN | 1 | 48.874 | 49.423 | 0.0 | 0.003 | 1.809 | 0.156 | 1054.76  | 1074.328 | 0.0    | -92.284 | -89.546 | 0.0 |
| 42 | 5147 | 5148 | SN | 1 | 48.874 | 49.423 | 0.0 | 0.003 | 1.809 | 0.158 | 1054.76  | 1074.328 | 0.0    | -92.284 | -89.546 | 0.0 |
| 43 | 5147 | 5148 | NS | 2 | 48.731 | 49.264 | 0.0 | 0.003 | 1.803 | 0.165 | 1022.472 | 1070.416 | 13.078 | -92.031 | -89.108 | 0.0 |
| 44 | 5148 | 5149 | SN | 1 | 48.875 | 49.442 | 0.0 | 0.003 | 1.803 | 0.158 | 1054.672 | 1074.28  | 0.0    | -92.076 | -89.545 | 0.0 |
| 45 | 5148 | 5149 | SN | 1 | 48.875 | 49.442 | 0.0 | 0.003 | 1.803 | 0.154 | 1054.672 | 1074.28  | 0.0    | -92.076 | -89.545 | 0.0 |
| 46 | 5148 | 5149 | NS | 1 | 48.772 | 49.261 | 0.0 | 0.003 | 1.803 | 0.168 | 1022.592 | 1070.376 | 13.701 | -92.159 | -89.066 | 0.0 |
| 47 | 5149 | 5150 | NS | 1 | 48.741 | 49.276 | 0.0 | 0.003 | 1.803 | 0.169 | 1022.88  | 1070.36  | 13.794 | -92.098 | -89.105 | 0.0 |
| 48 | 5149 | 5150 | SN | 1 | 48.891 | 49.413 | 0.0 | 0.003 | 1.803 | 0.154 | 1054.704 | 1074.288 | 0.0    | -92.083 | -89.546 | 0.0 |
| 49 | 5149 | 5150 | SN | 1 | 48.891 | 49.413 | 0.0 | 0.003 | 1.803 | 0.155 | 1054.704 | 1074.288 | 0.0    | -92.083 | -89.546 | 0.0 |
| 50 | 5150 | 5151 | SN | 1 | 48.877 | 49.442 | 0.0 | 0.003 | 1.803 | 0.165 | 1053.808 | 1074.336 | 0.0    | -92.191 | -89.539 | 0.0 |
| 51 | 5150 | 5151 | SN | 1 | 48.877 | 49.442 | 0.0 | 0.003 | 1.803 | 0.16  | 1053.808 | 1074.336 | 0.0    | -92.191 | -89.539 | 0.0 |
| 52 | 5150 | 5151 | NS | 1 | 48.751 | 49.27  | 0.0 | 0.003 | 1.803 | 0.165 | 1022.56  | 1070.36  | 14.477 | -91.554 | -88.654 | 0.0 |
| 53 | 5151 | 5152 | SN | 1 | 48.919 | 49.429 | 0.0 | 0.003 | 1.809 | 0.162 | 1055.072 | 1074.696 | 0.0    | -92.659 | -89.549 | 0.0 |
| 54 | 5151 | 5152 | NS | 1 | 48.722 | 49.26  | 0.0 | 0.003 | 1.798 | 0.167 | 1022.624 | 1070.528 | 15.154 | -91.988 | -89.102 | 0.0 |
| 55 | 5152 | 5153 | NS | 2 | 48.738 | 49.299 | 0.0 | 0.003 | 1.798 | 0.169 | 1022.768 | 1070.656 | 15.379 | -92.324 | -89.064 | 0.0 |
| 56 | 5152 | 5153 | SN | 2 | 48.905 | 49.399 | 0.0 | 0.003 | 1.809 | 0.155 | 1055.624 | 1074.728 | 0.0    | -92.007 | -89.512 | 0.0 |
| 57 | 5152 | 5153 | SN | 1 | 48.905 | 49.399 | 0.0 | 0.003 | 1.809 | 0.155 | 1055.624 | 1074.728 | 0.0    | -92.007 | -89.512 | 0.0 |
| 58 | 5152 | 5153 | NS | 1 | 48.738 | 49.299 | 0.0 | 0.003 | 1.798 | 0.169 | 1022.768 | 1070.656 | 15.383 | -92.324 | -89.064 | 0.0 |
| 59 | 5153 | 5154 | NS | 2 | 48.731 | 49.26  | 0.0 | 0.003 | 5.868 | 0.187 | 1022.464 | 1070.64  | 15.833 | -91.936 | -89.103 | 0.0 |
| 60 | 5153 | 5154 | NS | 3 | 48.731 | 49.26  | 0.0 | 0.003 | 5.868 | 0.187 | 1022.464 | 1070.64  | 15.833 | -91.936 | -89.103 | 0.0 |
| 61 | 5153 | 5154 | SN | 1 | 48.917 | 49.433 | 0.0 | 0.003 | 1.809 | 0.154 | 1055.16  | 1074.768 | 0.0    | -92.034 | -89.553 | 0.0 |
| 62 | 5154 | 5155 | NS | 1 | 48.759 | 49.288 | 0.0 | 0.003 | 5.862 | 0.183 | 1022.344 | 1070.584 | 16.198 | -91.807 | -89.102 | 0.0 |

| Parameter Specifications | Parameters | Inc.Angle | Azi. Angle | Range  | X-Factor |
|--------------------------|------------|-----------|------------|--------|----------|
|                          | Min        | 47.1      | 0.0        | 1025.0 | -100.0   |
|                          | Max        | 49.9      | 0.0        | 1095.7 | -80.0    |

■ Normal      ■ Deviations  
■ Alarming      ■ High Errors

| Inner |             |           |      |         |         |        |            |         |        |            |         |        |            |         |        |            |       |         |            |       |         |            |       |        |            |       |        |            |
|-------|-------------|-----------|------|---------|---------|--------|------------|---------|--------|------------|---------|--------|------------|---------|--------|------------|-------|---------|------------|-------|---------|------------|-------|--------|------------|-------|--------|------------|
| SNR   |             |           |      |         |         |        |            |         |        |            |         |        |            | Kp      |        |            |       |         |            |       |         |            |       |        |            |       |        |            |
|       |             |           |      | Sea Aft |         |        | Sea Fore   |         |        | Land Aft   |         |        | Land Fore  |         |        | Sea Aft    |       |         | Sea Fore   |       |         | Land Aft   |       |        | Land Fore  |       |        |            |
| SrNo  | Start Orbit | End Orbit | Dir. | Ver.    | Min     | Max    | BadOcc (%) | Min     | Max    | BadOcc (%) | Min     | Max    | BadOcc (%) | Min     | Max    | BadOcc (%) | Min   | Max     | BadOcc (%) | Min   | Max     | BadOcc (%) | Min   | Max    | BadOcc (%) | Min   | Max    | BadOcc (%) |
| 1     | 5130        | 5131      | SN   | 1       | -34.776 | 24.81  | 2.154      | -34.437 | 26.234 | 5.503      | -22.608 | 34.481 | 7.542      | -26.936 | 30.094 | 13.652     | 0.103 | 253.697 | 2.264      | 0.103 | 234.652 | 1.493      | 0.102 | 15.474 | 0.078      | 0.103 | 41.785 | 0.05       |
| 2     | 5130        | 5131      | SN   | 1       | -34.776 | 24.81  | 2.151      | -34.437 | 26.234 | 5.502      | -22.608 | 34.481 | 7.539      | -26.936 | 30.094 | 13.635     | 0.103 | 253.697 | 2.26       | 0.103 | 234.652 | 1.493      | 0.102 | 15.474 | 0.078      | 0.103 | 41.785 | 0.05       |
| 3     | 5130        | 5131      | NS   | 2       | -34.574 | 26.601 | 1.042      | -34.908 | 27.984 | 0.446      | -4.693  | 30.006 | 10.926     | -4.488  | 33.962 | 28.449     | 0.103 | 246.645 | 6.124      | 0.103 | 261.537 | 5.155      | 0.103 | 0.335  | 0.0        | 0.102 | 0.324  | 0.0        |
| 4     | 5130        | 5131      | SN   | 1       | -34.776 | 24.81  | 0.622      | -34.437 | 26.234 | 5.281      | -22.608 | 34.481 | 7.542      | -26.936 | 30.094 | 13.652     | 0.103 | 253.697 | 2.084      | 0.103 | 234.652 | 1.559      | 0.102 | 15.474 | 0.078      | 0.103 | 41.785 | 0.05       |
| 5     | 5131        | 5132      | NS   | 2       | -34.425 | 26.624 | 0.422      | -34.963 | 27.339 | 1.07       | -8.157  | 32.478 | 7.284      | -5.731  | 32.0   | 25.167     | 0.103 | 233.975 | 1.597      | 0.103 | 264.89  | 1.246      | 0.102 | 0.636  | 0.0        | 0.102 | 0.401  | 0.0        |
| 6     | 5131        | 5132      | SN   | 1       | -34.144 | 24.403 | 0.827      | -34.58  | 24.964 | 2.496      | -21.263 | 28.36  | 7.8        | -16.426 | 30.184 | 5.171      | 0.103 | 219.352 | 1.947      | 0.103 | 242.463 | 1.512      | 0.103 | 11.376 | 0.004      | 0.103 | 3.789  | 0.007      |
| 7     | 5131        | 5132      | SN   | 1       | -34.144 | 24.403 | 0.826      | -34.58  | 24.964 | 2.492      | -21.263 | 28.36  | 7.8        | -16.426 | 30.184 | 5.171      | 0.103 | 219.352 | 1.956      | 0.103 | 242.463 | 1.51       | 0.103 | 11.376 | 0.004      | 0.103 | 3.789  | 0.007      |
| 8     | 5131        | 5132      | SN   | 2       | -34.144 | 24.403 | 0.826      | -34.58  | 24.964 | 2.492      | -21.263 | 28.36  | 7.8        | -16.426 | 30.184 | 5.171      | 0.103 | 219.352 | 1.956      | 0.103 | 242.463 | 1.51       | 0.103 | 11.376 | 0.004      | 0.103 | 3.789  | 0.007      |
| 9     | 5131        | 5132      | NS   | 1       | -34.425 | 26.624 | 0.422      | -34.963 | 27.339 | 1.07       | -8.157  | 32.478 | 7.284      | -5.731  | 32.0   | 25.167     | 0.103 | 233.975 | 1.597      | 0.103 | 264.89  | 1.246      | 0.102 | 0.636  | 0.0        | 0.102 | 0.401  | 0.0        |
| 10    | 5132        | 5133      | NS   | 1       | -34.6   | 24.415 | 0.251      | -34.56  | 25.916 | 0.673      | -10.326 | 28.57  | 7.501      | -20.881 | 29.494 | 20.455     | 0.103 | 243.581 | 2.415      | 0.103 | 241.405 | 2.368      | 0.103 | 0.993  | 0.0        | 0.103 | 10.426 | 0.003      |
| 11    | 5132        | 5133      | SN   | 1       | -34.665 | 23.293 | 0.034      | -34.933 | 25.311 | 0.992      | 6.501   | 28.163 | 12.455     | 8.271   | 29.203 | 8.44       | 0.103 | 247.275 | 1.902      | 0.103 | 263.012 | 1.593      | 0.103 | 0.118  | 0.0        | 0.103 | 0.113  | 0.0        |
| 12    | 5132        | 5133      | SN   | 1       | -34.665 | 23.293 | 0.038      | -34.933 | 25.311 | 1.264      | 3.422   | 28.163 | 12.453     | 3.107   | 29.203 | 8.423      | 0.103 | 247.275 | 1.873      | 0.103 | 263.012 | 1.682      | 0.103 | 0.135  | 0.0        | 0.103 | 0.137  | 0.0        |
| 13    | 5133        | 5134      | SN   | 1       | -34.724 | 22.426 | 0.002      | -34.721 | 25.479 | 1.37       | 6.482   | 26.711 | 10.622     | 5.446   | 28.646 | 7.918      | 0.103 | 250.692 | 3.526      | 0.103 | 250.496 | 3.171      | 0.103 | 0.118  | 0.0        | 0.103 | 0.122  | 0.0        |
| 14    | 5133        | 5134      | NS   | 1       | -34.69  | 23.722 | 0.483      | -33.769 | 24.805 | 0.868      | -11.636 | 28.785 | 4.728      | -11.813 | 30.954 | 12.836     | 0.103 | 248.695 | 3.163      | 0.103 | 201.207 | 2.263      | 0.103 | 1.312  | 0.001      | 0.103 | 1.363  | 0.001      |
| 15    | 5133        | 5134      | SN   | 1       | -34.724 | 21.682 | 0.0        | -34.721 | 25.479 | 0.956      | 6.482   | 26.711 | 10.631     | 5.446   | 28.646 | 8.002      | 0.103 | 250.692 | 3.45       | 0.103 | 250.496 | 3.189      | 0.103 | 0.118  | 0.0        | 0.103 | 0.122  | 0.0        |
| 16    | 5134        | 5135      | SN   | 1       | -34.982 | 23.358 | 0.045      | -34.473 | 25.855 | 1.445      | 6.485   | 27.942 | 13.166     | 8.6     | 28.934 | 16.738     | 0.103 | 266.058 | 4.358      | 0.103 | 236.611 | 2.973      | 0.103 | 0.118  | 0.0        | 0.103 | 0.112  | 0.0        |
| 17    | 5134        | 5135      | NS   | 1       | -34.577 | 23.795 | 0.489      | -33.494 | 24.191 | 0.581      | -5.187  | 27.969 | 4.102      | -2.989  | 29.523 | 16.301     | 0.103 | 242.357 | 1.61       | 0.103 | 188.854 | 1.073      | 0.103 | 0.364  | 0.0        | 0.103 | 0.256  | 0.0        |
| 18    | 5135        | 5136      | SN   | 1       | -34.311 | 23.244 | 0.001      | -34.793 | 25.492 | 0.386      | 6.655   | 27.854 | 13.476     | 3.543   | 29.488 | 12.303     | 0.103 | 227.907 | 3.718      | 0.103 | 254.697 | 2.895      | 0.103 | 0.117  | 0.0        | 0.103 | 0.134  | 0.0        |
| 19    | 5135        | 5136      | NS   | 2       | -34.114 | 24.183 | 0.694      | -34.134 | 25.083 | 0.881      | -10.434 | 29.565 | 5.316      | -8.552  | 30.168 | 15.153     | 0.103 | 217.822 | 1.566      | 0.103 | 218.824 | 1.69       | 0.103 | 1.015  | 0.002      | 0.103 | 0.688  | 0.0        |
| 20    | 5135        | 5136      | SN   | 1       | -34.311 | 24.008 | 0.138      | -34.793 | 25.561 | 1.368      | 6.655   | 27.854 | 12.594     | 3.543   | 29.488 | 12.17      | 0.103 | 227.907 | 3.739      | 0.103 | 254.697 | 2.807      | 0.103 | 0.117  | 0.0        | 0.103 | 0.134  | 0.0        |
| 21    | 5136        | 5137      | NS   | 1       | -34.473 | 24.192 | 0.683      | -34.736 | 26.1   | 1.147      | 7.844   | 28.416 | 12.239     | 7.861   | 30.407 | 24.948     | 0.103 | 236.583 | 1.112      | 0.103 | 251.418 | 0.814      | 0.103 | 0.114  | 0.0        | 0.103 | 0.114  | 0.0        |
| 22    | 5136        | 5137      | SN   | 1       | -34.784 | 24.147 | 0.217      | -34.572 | 25.376 | 2.313      | -15.361 | 30.875 | 8.472      | -22.187 | 32.356 | 10.996     | 0.103 | 254.21  | 6.028      | 0.103 | 242.037 | 4.521      | 0.103 | 2.983  | 0.002      | 0.102 | 14.052 | 0.002      |
| 23    | 5136        | 5137      | SN   | 1       | -34.784 | 24.147 | 0.145      | -34.572 | 24.765 | 0.827      | -15.361 | 30.875 | 8.551      | -22.187 | 32.356 | 10.963     | 0.103 | 254.21  | 6.281      | 0.103 | 242.037 | 4.638      | 0.103 | 2.983  | 0.002      | 0.102 | 14.052 | 0.002      |
| 24    | 5137        | 5138      | SN   | 1       | -33.251 | 24.582 | 0.242      | -34.592 | 25.807 | 2.785      | -7.691  | 31.683 | 10.549     | -9.198  | 31.279 | 16.988     | 0.103 | 178.572 | 3.157      | 0.103 | 243.17  | 2.81       | 0.102 | 0.58   | 0.0        | 0.103 | 0.785  | 0.0        |
| 25    | 5137        | 5138      | NS   | 1       | -34.623 | 24.262 | 1.03       | -34.354 | 24.291 | 0.527      | 4.545   | 28.575 | 8.808      | 5.936   | 29.613 | 25.966     | 0.103 | 244.956 | 3.623      | 0.103 | 230.217 | 2.732      | 0.103 | 0.127  | 0.0        | 0.103 | 0.12   | 0.0        |
| 26    | 5137        | 5138      | SN   | 1       | -33.251 | 24.582 | 0.009      | -34.592 | 25.807 | 0.054      | -7.691  | 31.683 | 11.031     | -9.198  | 31.279 | 16.978     | 0.103 | 178.572 | 3.382      | 0.103 | 243.17  | 2.985      | 0.102 | 0.58   | 0.0        | 0.103 | 0.785  | 0.0        |
| 27    | 5138        | 5139      | SN   | 1       | -34.277 | 25.195 | 0.241      | -34.762 | 26.253 | 2.375      | -18.14  | 28.693 | 14.233     | -2.907  | 30.701 | 17.104     | 0.103 | 226.14  | 4.297      | 0.103 | 252.904 | 3.047      | 0.103 | 5.584  | 0.002      | 0.103 | 0.253  | 0.0        |
| 28    | 5138        | 5139      | NS   | 2       | -33.415 | 24.432 | 1.022      | -34.926 | 24.372 | 0.754      | -15.525 | 27.588 | 14.331     | -7.379  | 30.555 | 34.108     | 0.103 | 185.471 | 1.956      | 0.103 | 262.674 | 1.39       | 0.103 | 3.094  | 0.003      | 0.103 | 0.546  | 0.0        |
| 29    | 5139        | 5140      | NS   | 1       | -31.662 | 24.205 | 1.14       | -34.925 | 25.074 | 0.777      | -20.706 | 31.558 | 11.3       | -24.17  | 31.398 | 23.343     | 0.103 | 123.911 | 1.103      | 0.103 | 262.55  | 0.584      | 0.103 | 10.017 | 0.02       | 0.103 | 22.137 | 0.013      |
| 30    | 5144        | 5145      | SN   | 1       | -34.912 | 24.827 | 1.465      | -34.541 | 26.018 | 4.981      | -28.438 | 27.263 | 7.021      | -23.519 | 31.29  | 10.558     | 0.103 | 261.822 | 2.177      | 0.103 | 240.364 | 1.809      | 0.103 | 59.018 | 0.05       | 0.103 | 19.066 | 0.058      |
| 31    | 5145        | 5146      | NS   | 2       | -34.569 | 26.021 | 1.064      | -34.334 | 28.153 | 1.397      | 1.096   | 30.167 | 8.467      | 6.074   | 33.863 | 30.003     | 0.103 | 241.899 | 3.575      | 0.103 | 229.158 | 3.228      | 0.103 | 0.159  | 0.0        | 0.102 | 0.119  | 0.0        |
| 32    | 5145        | 5146      | SN   | 1       | -34.784 | 24.992 | 1.349      | -33.57  | 25.575 | 3.705      | -17.928 | 30.567 | 8.606      | -12.892 | 30.547 | 6.992      | 0.103 | 254.159 | 1.671      | 0.103 | 192.205 | 1.172      | 0.103 | 5.32   | 0.009      | 0.103 | 1.725  | 0.004      |
| 33    | 5145        | 5146      | SN   | 1       | -34.784 | 24.992 | 1.349      | -33.57  | 25.575 | 3.68       | -17.928 | 30.567 | 8.618      | -12.892 | 30.547 | 6.992      | 0.103 | 254.159 | 1.671      | 0.103 | 192.205 | 1.174      | 0.103 | 5.32   | 0.009      | 0.103 | 1.725  | 0.004      |

| Parameter Specifications | Parameters | SNR   | Kp  |
|--------------------------|------------|-------|-----|
|                          | Min        | -65.0 | 0.0 |
|                          | Max        | 22.0  | 1.0 |

- Normal
- Deviations
- Alarming
- High Errors

|    |      |      |    |   |         |        |       |         |        |       |         |        |        |         |        |        |       |         |       |       |         |       |       |        |       |       |        |       |
|----|------|------|----|---|---------|--------|-------|---------|--------|-------|---------|--------|--------|---------|--------|--------|-------|---------|-------|-------|---------|-------|-------|--------|-------|-------|--------|-------|
| 34 | 5145 | 5146 | NS | 2 | -34.569 | 26.021 | 1.065 | -34.334 | 28.153 | 1.369 | 1.096   | 30.167 | 8.467  | 6.074   | 33.863 | 30.003 | 0.103 | 241.899 | 3.582 | 0.103 | 229.158 | 3.235 | 0.103 | 0.159  | 0.0   | 0.102 | 0.119  | 0.0   |
| 35 | 5145 | 5146 | SN | 1 | -34.784 | 24.992 | 1.208 | -33.57  | 25.574 | 3.274 | -17.928 | 30.567 | 8.618  | -12.892 | 30.547 | 6.992  | 0.103 | 254.159 | 1.713 | 0.103 | 192.205 | 1.189 | 0.103 | 5.32   | 0.009 | 0.103 | 1.725  | 0.004 |
| 36 | 5146 | 5147 | NS | 2 | -32.955 | 23.707 | 0.282 | -33.833 | 25.363 | 0.868 | -3.477  | 29.163 | 7.935  | -13.556 | 29.769 | 21.926 | 0.103 | 166.836 | 1.584 | 0.103 | 204.198 | 1.476 | 0.103 | 0.276  | 0.0   | 0.103 | 1.996  | 0.002 |
| 37 | 5146 | 5147 | SN | 1 | -34.762 | 23.987 | 0.15  | -34.635 | 25.329 | 1.799 | -16.981 | 28.58  | 9.976  | -15.666 | 29.8   | 6.459  | 0.103 | 252.902 | 1.613 | 0.103 | 259.399 | 1.286 | 0.103 | 4.295  | 0.015 | 0.103 | 3.194  | 0.007 |
| 38 | 5146 | 5147 | SN | 1 | -34.762 | 23.987 | 0.134 | -34.635 | 24.916 | 1.345 | -16.981 | 28.58  | 9.976  | -15.666 | 29.8   | 6.459  | 0.103 | 252.902 | 1.644 | 0.103 | 259.399 | 1.242 | 0.103 | 4.295  | 0.015 | 0.103 | 3.194  | 0.007 |
| 39 | 5146 | 5147 | SN | 1 | -34.762 | 23.987 | 0.134 | -34.635 | 24.916 | 1.343 | -16.981 | 28.58  | 9.976  | -15.666 | 29.8   | 6.459  | 0.103 | 252.902 | 1.642 | 0.103 | 259.399 | 1.24  | 0.103 | 4.295  | 0.015 | 0.103 | 3.194  | 0.007 |
| 40 | 5146 | 5147 | NS | 1 | -32.7   | 23.707 | 0.281 | -33.853 | 25.363 | 0.866 | -3.477  | 29.163 | 7.933  | -13.558 | 29.769 | 21.928 | 0.103 | 157.354 | 1.586 | 0.103 | 205.108 | 1.477 | 0.103 | 0.276  | 0.0   | 0.103 | 1.997  | 0.002 |
| 41 | 5147 | 5148 | SN | 1 | -34.014 | 22.399 | 0.013 | -34.651 | 25.801 | 1.362 | 5.508   | 27.353 | 10.057 | 4.853   | 28.321 | 5.504  | 0.103 | 212.855 | 1.847 | 0.103 | 246.499 | 1.356 | 0.103 | 0.122  | 0.0   | 0.103 | 0.125  | 0.0   |
| 42 | 5147 | 5148 | SN | 1 | -34.014 | 22.32  | 0.007 | -34.318 | 25.803 | 1.05  | 7.219   | 27.353 | 10.076 | 4.853   | 28.321 | 5.464  | 0.103 | 212.855 | 1.866 | 0.103 | 228.334 | 1.352 | 0.103 | 0.115  | 0.0   | 0.103 | 0.125  | 0.0   |
| 43 | 5147 | 5148 | NS | 2 | -34.131 | 23.75  | 0.269 | -34.253 | 24.452 | 0.587 | -4.798  | 28.199 | 6.905  | -4.746  | 29.727 | 18.037 | 0.103 | 218.689 | 5.82  | 0.103 | 224.954 | 4.205 | 0.103 | 0.341  | 0.0   | 0.103 | 0.338  | 0.0   |
| 44 | 5148 | 5149 | SN | 1 | -34.519 | 21.618 | 0.0   | -34.86  | 26.083 | 0.949 | 6.3     | 28.027 | 15.141 | 4.873   | 28.792 | 18.776 | 0.103 | 239.141 | 3.436 | 0.103 | 258.658 | 2.828 | 0.103 | 0.119  | 0.0   | 0.103 | 0.125  | 0.0   |
| 45 | 5148 | 5149 | SN | 1 | -34.519 | 22.755 | 0.015 | -34.86  | 26.083 | 1.489 | 4.957   | 28.027 | 15.032 | 4.873   | 28.792 | 18.11  | 0.103 | 239.141 | 3.426 | 0.103 | 258.658 | 2.843 | 0.103 | 0.125  | 0.0   | 0.103 | 0.125  | 0.0   |
| 46 | 5148 | 5149 | NS | 1 | -33.721 | 23.857 | 0.491 | -32.536 | 24.901 | 0.778 | -8.154  | 27.319 | 3.849  | -8.985  | 31.853 | 12.786 | 0.103 | 199.04  | 1.846 | 0.103 | 151.505 | 1.244 | 0.103 | 0.635  | 0.0   | 0.102 | 0.751  | 0.0   |
| 47 | 5149 | 5150 | NS | 1 | -33.8   | 24.336 | 0.59  | -34.424 | 25.073 | 0.508 | -7.326  | 27.769 | 4.712  | -5.201  | 29.335 | 14.39  | 0.103 | 202.686 | 2.557 | 0.103 | 233.951 | 2.071 | 0.103 | 0.54   | 0.0   | 0.103 | 0.365  | 0.0   |
| 48 | 5149 | 5150 | SN | 1 | -34.917 | 23.501 | 0.149 | -34.761 | 25.874 | 1.502 | 6.719   | 27.464 | 13.749 | 7.09    | 29.46  | 15.997 | 0.103 | 262.071 | 2.898 | 0.103 | 252.814 | 2.566 | 0.103 | 0.117  | 0.0   | 0.103 | 0.116  | 0.0   |
| 49 | 5149 | 5150 | SN | 1 | -34.917 | 23.501 | 0.118 | -34.761 | 25.874 | 1.412 | 6.719   | 27.464 | 13.759 | 7.09    | 29.46  | 15.997 | 0.103 | 262.071 | 2.904 | 0.103 | 252.814 | 2.568 | 0.103 | 0.117  | 0.0   | 0.103 | 0.116  | 0.0   |
| 50 | 5150 | 5151 | SN | 1 | -34.963 | 24.313 | 0.24  | -34.816 | 25.512 | 1.062 | 6.737   | 29.458 | 8.938  | 7.168   | 31.059 | 10.534 | 0.103 | 264.884 | 3.696 | 0.103 | 256.068 | 3.198 | 0.103 | 0.117  | 0.0   | 0.103 | 0.116  | 0.0   |
| 51 | 5150 | 5151 | SN | 1 | -34.963 | 24.311 | 0.33  | -34.816 | 25.512 | 1.71  | 6.737   | 29.458 | 8.912  | 7.168   | 31.059 | 10.571 | 0.103 | 264.884 | 3.62  | 0.103 | 256.068 | 3.202 | 0.103 | 0.117  | 0.0   | 0.103 | 0.116  | 0.0   |
| 52 | 5150 | 5151 | NS | 1 | -34.145 | 25.032 | 0.452 | -34.708 | 26.176 | 0.922 | -8.487  | 29.714 | 9.426  | -7.049  | 30.503 | 18.003 | 0.103 | 219.396 | 1.429 | 0.103 | 249.73  | 1.067 | 0.103 | 0.679  | 0.0   | 0.103 | 0.512  | 0.0   |
| 53 | 5151 | 5152 | SN | 1 | -34.761 | 23.211 | 0.116 | -34.88  | 25.472 | 2.512 | -8.887  | 31.762 | 10.117 | -6.715  | 33.702 | 13.73  | 0.103 | 252.82  | 6.239 | 0.103 | 259.856 | 5.172 | 0.102 | 0.736  | 0.0   | 0.102 | 0.481  | 0.0   |
| 54 | 5151 | 5152 | NS | 1 | -34.914 | 24.239 | 0.781 | -34.603 | 25.479 | 0.814 | 7.406   | 31.059 | 7.243  | 6.304   | 30.199 | 16.57  | 0.103 | 261.847 | 2.148 | 0.103 | 253.805 | 1.629 | 0.103 | 0.115  | 0.0   | 0.103 | 0.119  | 0.0   |
| 55 | 5152 | 5153 | NS | 2 | -34.872 | 24.375 | 0.794 | -34.95  | 24.168 | 0.525 | 3.221   | 28.177 | 10.908 | 6.666   | 30.034 | 38.527 | 0.103 | 259.352 | 4.341 | 0.103 | 264.064 | 3.187 | 0.103 | 0.136  | 0.0   | 0.103 | 0.117  | 0.0   |
| 56 | 5152 | 5153 | SN | 2 | -34.413 | 24.404 | 0.301 | -34.591 | 25.555 | 2.588 | -22.266 | 28.422 | 13.731 | -13.7   | 30.198 | 19.117 | 0.103 | 233.371 | 4.09  | 0.103 | 243.142 | 3.457 | 0.103 | 14.311 | 0.002 | 0.103 | 2.06   | 0.002 |
| 57 | 5152 | 5153 | SN | 1 | -34.413 | 24.404 | 0.301 | -34.591 | 25.555 | 2.588 | -22.266 | 28.422 | 13.731 | -13.7   | 30.198 | 19.117 | 0.103 | 233.371 | 4.09  | 0.103 | 243.142 | 3.457 | 0.103 | 14.311 | 0.002 | 0.103 | 2.06   | 0.002 |
| 58 | 5152 | 5153 | NS | 1 | -34.872 | 24.375 | 0.794 | -34.95  | 24.168 | 0.524 | 3.221   | 28.177 | 10.908 | 6.666   | 30.034 | 38.526 | 0.103 | 259.352 | 4.341 | 0.103 | 264.064 | 3.182 | 0.103 | 0.136  | 0.0   | 0.103 | 0.117  | 0.0   |
| 59 | 5153 | 5154 | NS | 2 | -34.866 | 24.293 | 0.969 | -34.397 | 24.615 | 0.731 | -24.311 | 27.934 | 10.911 | -23.284 | 30.583 | 27.293 | 0.103 | 259.015 | 1.358 | 0.103 | 232.503 | 1.148 | 0.103 | 22.867 | 0.076 | 0.103 | 18.063 | 0.032 |
| 60 | 5153 | 5154 | NS | 3 | -34.866 | 24.293 | 0.969 | -34.397 | 24.615 | 0.731 | -24.311 | 27.934 | 10.911 | -23.284 | 30.583 | 27.293 | 0.103 | 259.015 | 1.358 | 0.103 | 232.503 | 1.148 | 0.103 | 22.867 | 0.076 | 0.103 | 18.063 | 0.032 |
| 61 | 5153 | 5154 | SN | 1 | -34.957 | 26.793 | 0.374 | -34.003 | 27.894 | 2.469 | -5.598  | 29.574 | 13.99  | -6.638  | 30.219 | 15.109 | 0.103 | 264.542 | 3.162 | 0.103 | 212.302 | 2.53  | 0.103 | 0.392  | 0.0   | 0.103 | 0.474  | 0.0   |
| 62 | 5154 | 5155 | NS | 1 | -33.817 | 24.2   | 1.393 | -34.6   | 25.091 | 1.176 | 2.349   | 28.739 | 14.353 | 0.294   | 32.916 | 23.467 | 0.103 | 203.46  | 1.48  | 0.103 | 243.608 | 1.049 | 0.103 | 0.144  | 0.0   | 0.102 | 0.171  | 0.0   |

|                          |            |       |     |
|--------------------------|------------|-------|-----|
| Parameter Specifications | Parameters | SNR   | Kp  |
|                          | Min        | -65.0 | 0.0 |
|                          | Max        | 22.0  | 1.0 |

|                                                                                                |                                                                                                   |
|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
|  Normal   |  Deviations  |
|  Alarming |  High Errors |

|       |             |           |      |      | Outer           |        |           |               |        |           |          |          |           |          |         |           |
|-------|-------------|-----------|------|------|-----------------|--------|-----------|---------------|--------|-----------|----------|----------|-----------|----------|---------|-----------|
|       |             |           |      |      | Incidence Angle |        |           | Azimuth Angle |        |           | Range    |          |           | X-Factor |         |           |
| Sr No | Start Orbit | End Orbit | Dir. | Ver. | Min             | Max    | BadOcc(%) | Min           | Max    | BadOcc(%) | Min      | Max      | BadOcc(%) | Min      | Max     | BadOcc(%) |
| 1     | 5130        | 5131      | SN   | 1    | 57.77           | 58.283 | 0.0       | 0.003         | 1.974  | 0.197     | 1238.744 | 1262.384 | 0.0       | -93.534  | -91.972 | 0.0       |
| 2     | 5130        | 5131      | SN   | 1    | 57.77           | 58.283 | 0.0       | 0.003         | 1.974  | 0.198     | 1238.744 | 1262.384 | 0.0       | -93.534  | -91.972 | 0.0       |
| 3     | 5130        | 5131      | NS   | 2    | 57.548          | 58.127 | 0.0       | 0.003         | 1.969  | 0.181     | 1199.904 | 1256.608 | 29.158    | -93.544  | -91.502 | 0.0       |
| 4     | 5130        | 5131      | SN   | 1    | 57.77           | 58.283 | 0.0       | 0.003         | 1.974  | 0.202     | 1238.744 | 1262.384 | 0.0       | -93.534  | -91.972 | 0.0       |
| 5     | 5131        | 5132      | NS   | 2    | 57.558          | 58.117 | 0.0       | 0.003         | 1.963  | 0.173     | 1199.848 | 1256.92  | 29.685    | -93.597  | -91.509 | 0.0       |
| 6     | 5131        | 5132      | SN   | 1    | 57.755          | 58.286 | 0.0       | 0.003         | 1.969  | 0.189     | 1238.248 | 1262.544 | 0.0       | -93.449  | -92.025 | 0.0       |
| 7     | 5131        | 5132      | SN   | 1    | 57.755          | 58.286 | 0.0       | 0.003         | 1.969  | 0.189     | 1238.248 | 1262.544 | 0.0       | -93.449  | -92.025 | 0.0       |
| 8     | 5131        | 5132      | SN   | 2    | 57.755          | 58.286 | 0.0       | 0.003         | 1.969  | 0.189     | 1238.248 | 1262.544 | 0.0       | -93.449  | -92.025 | 0.0       |
| 9     | 5131        | 5132      | NS   | 1    | 57.558          | 58.117 | 0.0       | 0.003         | 1.963  | 0.173     | 1199.848 | 1256.92  | 29.686    | -93.597  | -91.509 | 0.0       |
| 10    | 5132        | 5133      | NS   | 1    | 57.556          | 58.124 | 0.0       | 0.003         | 1.963  | 0.172     | 1200.088 | 1257.12  | 30.417    | -93.581  | -91.51  | 0.0       |
| 11    | 5132        | 5133      | SN   | 1    | 57.74           | 58.28  | 0.0       | 0.003         | 1.969  | 0.185     | 1238.664 | 1262.56  | 0.0       | -93.45   | -92.026 | 0.0       |
| 12    | 5132        | 5133      | SN   | 1    | 57.74           | 58.28  | 0.0       | 0.003         | 1.969  | 0.183     | 1238.664 | 1262.56  | 0.0       | -93.447  | -92.026 | 0.0       |
| 13    | 5133        | 5134      | SN   | 1    | 57.754          | 58.305 | 0.0       | 0.003         | 1.969  | 0.184     | 1237.984 | 1262.504 | 0.0       | -93.639  | -92.025 | 0.0       |
| 14    | 5133        | 5134      | NS   | 1    | 57.539          | 58.112 | 0.0       | 0.003         | 1.963  | 0.178     | 1200.376 | 1257.096 | 29.636    | -93.543  | -91.506 | 0.0       |
| 15    | 5133        | 5134      | SN   | 1    | 57.754          | 58.305 | 0.0       | 0.003         | 1.969  | 0.187     | 1237.984 | 1262.504 | 0.0       | -93.639  | -92.025 | 0.0       |
| 16    | 5134        | 5135      | SN   | 1    | 57.739          | 58.313 | 0.0       | 0.003         | 1.969  | 0.183     | 1237.984 | 1262.872 | 0.0       | -93.628  | -92.025 | 0.0       |
| 17    | 5134        | 5135      | NS   | 1    | 57.552          | 58.123 | 0.0       | 0.003         | 32.88  | 0.221     | 1200.496 | 1257.08  | 31.821    | -93.664  | -91.497 | 0.0       |
| 18    | 5135        | 5136      | SN   | 1    | 57.757          | 58.314 | 0.0       | 0.003         | 1.98   | 0.194     | 1238.248 | 1262.488 | 0.0       | -93.519  | -92.025 | 0.0       |
| 19    | 5135        | 5136      | NS   | 2    | 57.563          | 58.114 | 0.0       | 0.003         | 35.125 | 0.262     | 1200.336 | 1257.016 | 32.386    | -93.539  | -91.508 | 0.0       |
| 20    | 5135        | 5136      | SN   | 1    | 57.757          | 58.314 | 0.0       | 0.003         | 1.98   | 0.186     | 1238.248 | 1262.488 | 0.0       | -93.519  | -92.025 | 0.0       |
| 21    | 5136        | 5137      | NS   | 1    | 57.549          | 58.124 | 0.0       | 0.003         | 1.963  | 0.176     | 1200.272 | 1257.088 | 32.089    | -93.636  | -91.506 | 0.0       |
| 22    | 5136        | 5137      | SN   | 1    | 57.75           | 58.309 | 0.0       | 0.003         | 1.974  | 0.194     | 1238.344 | 1262.696 | 0.0       | -93.569  | -92.004 | 0.0       |
| 23    | 5136        | 5137      | SN   | 1    | 57.75           | 58.309 | 0.0       | 0.003         | 1.974  | 0.202     | 1238.344 | 1262.696 | 0.0       | -93.569  | -92.004 | 0.0       |
| 24    | 5137        | 5138      | SN   | 1    | 57.773          | 58.285 | 0.0       | 0.003         | 1.974  | 0.188     | 1238.88  | 1263.008 | 0.0       | -93.635  | -92.023 | 0.0       |
| 25    | 5137        | 5138      | NS   | 1    | 57.534          | 58.111 | 0.0       | 0.003         | 1.969  | 0.181     | 1199.664 | 1257.304 | 32.051    | -93.597  | -91.5   | 0.0       |
| 26    | 5137        | 5138      | SN   | 1    | 57.773          | 58.285 | 0.0       | 0.003         | 1.974  | 0.204     | 1238.88  | 1263.008 | 0.0       | -93.635  | -92.023 | 0.0       |
| 27    | 5138        | 5139      | SN   | 1    | 57.771          | 58.288 | 0.0       | 0.003         | 1.974  | 0.183     | 1239.12  | 1263.36  | 0.0       | -93.728  | -92.01  | 0.0       |
| 28    | 5138        | 5139      | NS   | 2    | 57.537          | 58.111 | 0.0       | 0.003         | 34.502 | 0.224     | 1200.272 | 1257.344 | 31.686    | -93.517  | -91.486 | 0.0       |
| 29    | 5139        | 5140      | NS   | 1    | 57.513          | 58.113 | 0.0       | 0.003         | 1.963  | 0.18      | 1199.688 | 1257.248 | 32.822    | -93.553  | -91.505 | 0.0       |
| 30    | 5144        | 5145      | SN   | 1    | 57.751          | 58.293 | 0.0       | 0.003         | 1.974  | 0.2       | 1239.056 | 1263.816 | 0.0       | -93.506  | -92.013 | 0.0       |
| 31    | 5145        | 5146      | NS   | 2    | 57.537          | 58.116 | 0.0       | 0.003         | 35.296 | 0.214     | 1199.128 | 1257.928 | 30.233    | -93.593  | -91.485 | 0.0       |
| 32    | 5145        | 5146      | SN   | 1    | 57.761          | 58.29  | 0.0       | 0.003         | 1.974  | 0.19      | 1238.8   | 1263.696 | 0.0       | -93.433  | -92.017 | 0.0       |
| 33    | 5145        | 5146      | SN   | 1    | 57.761          | 58.29  | 0.0       | 0.003         | 1.974  | 0.19      | 1238.8   | 1263.696 | 0.0       | -93.433  | -92.017 | 0.0       |
| 34    | 5145        | 5146      | NS   | 2    | 57.537          | 58.116 | 0.0       | 0.003         | 35.296 | 0.215     | 1199.128 | 1257.928 | 30.266    | -93.593  | -91.485 | 0.0       |

| Parameter Specifications | Parameters | Inc.Angle | Azi. Angle | Range  | X-Factor |
|--------------------------|------------|-----------|------------|--------|----------|
|                          | Min        | 57.3      | 0.0        | 1210.0 | -100.0   |
|                          | Max        | 58.9      | 0.0        | 1280.0 | -80.0    |

|                                                |                                                  |
|------------------------------------------------|--------------------------------------------------|
| <span style="color: green;">■</span> Normal    | <span style="color: yellow;">■</span> Deviations |
| <span style="color: orange;">■</span> Alarming | <span style="color: red;">■</span> High Errors   |

|    |      |      |    |   |        |        |     |       |        |       |          |          |        |         |         |     |
|----|------|------|----|---|--------|--------|-----|-------|--------|-------|----------|----------|--------|---------|---------|-----|
| 35 | 5145 | 5146 | SN | 1 | 57.761 | 58.29  | 0.0 | 0.003 | 180.82 | 0.194 | 1238.8   | 1263.696 | 0.0    | -93.433 | -92.017 | 0.0 |
| 36 | 5146 | 5147 | NS | 2 | 57.542 | 58.114 | 0.0 | 0.003 | 1.963  | 0.172 | 1199.304 | 1258.136 | 31.195 | -93.571 | -91.492 | 0.0 |
| 37 | 5146 | 5147 | SN | 1 | 57.758 | 58.299 | 0.0 | 0.003 | 1.974  | 0.181 | 1238.4   | 1263.84  | 0.0    | -93.483 | -92.033 | 0.0 |
| 38 | 5146 | 5147 | SN | 1 | 57.758 | 58.299 | 0.0 | 0.003 | 1.974  | 0.184 | 1238.4   | 1263.84  | 0.0    | -93.483 | -92.033 | 0.0 |
| 39 | 5146 | 5147 | SN | 1 | 57.758 | 58.299 | 0.0 | 0.003 | 1.974  | 0.183 | 1238.4   | 1263.84  | 0.0    | -93.483 | -92.033 | 0.0 |
| 40 | 5146 | 5147 | NS | 1 | 57.54  | 58.115 | 0.0 | 0.003 | 1.963  | 0.172 | 1199.472 | 1258.144 | 31.201 | -93.521 | -91.492 | 0.0 |
| 41 | 5147 | 5148 | SN | 1 | 57.743 | 58.289 | 0.0 | 0.003 | 1.974  | 0.182 | 1238.352 | 1263.776 | 0.0    | -93.605 | -92.031 | 0.0 |
| 42 | 5147 | 5148 | SN | 1 | 57.743 | 58.289 | 0.0 | 0.003 | 1.974  | 0.185 | 1238.352 | 1263.776 | 0.0    | -93.727 | -92.031 | 0.0 |
| 43 | 5147 | 5148 | NS | 2 | 57.539 | 58.118 | 0.0 | 0.003 | 1.963  | 0.175 | 1199.392 | 1258.184 | 31.013 | -93.52  | -91.504 | 0.0 |
| 44 | 5148 | 5149 | SN | 1 | 57.733 | 58.316 | 0.0 | 0.003 | 1.969  | 0.188 | 1238.336 | 1263.76  | 0.0    | -93.63  | -92.031 | 0.0 |
| 45 | 5148 | 5149 | SN | 1 | 57.733 | 58.316 | 0.0 | 0.003 | 1.969  | 0.183 | 1238.336 | 1263.76  | 0.0    | -93.63  | -92.031 | 0.0 |
| 46 | 5148 | 5149 | NS | 1 | 57.555 | 58.116 | 0.0 | 0.003 | 1.963  | 0.181 | 1200.12  | 1258.136 | 32.385 | -93.774 | -91.47  | 0.0 |
| 47 | 5149 | 5150 | NS | 1 | 57.521 | 58.126 | 0.0 | 0.003 | 1.963  | 0.18  | 1199.752 | 1258.12  | 33.246 | -93.602 | -91.502 | 0.0 |
| 48 | 5149 | 5150 | SN | 1 | 57.743 | 58.316 | 0.0 | 0.003 | 1.969  | 0.182 | 1238.296 | 1263.8   | 0.0    | -93.489 | -92.031 | 0.0 |
| 49 | 5149 | 5150 | SN | 1 | 57.743 | 58.316 | 0.0 | 0.003 | 1.969  | 0.183 | 1238.296 | 1263.8   | 0.0    | -93.489 | -92.031 | 0.0 |
| 50 | 5150 | 5151 | SN | 1 | 57.762 | 58.312 | 0.0 | 0.003 | 1.974  | 0.194 | 1238.544 | 1263.8   | 0.0    | -93.557 | -92.029 | 0.0 |
| 51 | 5150 | 5151 | SN | 1 | 57.762 | 58.312 | 0.0 | 0.003 | 1.974  | 0.19  | 1238.544 | 1263.8   | 0.0    | -93.557 | -92.029 | 0.0 |
| 52 | 5150 | 5151 | NS | 1 | 57.547 | 58.115 | 0.0 | 0.003 | 1.963  | 0.18  | 1199.776 | 1258.128 | 33.156 | -93.385 | -91.121 | 0.0 |
| 53 | 5151 | 5152 | SN | 1 | 57.771 | 58.304 | 0.0 | 0.003 | 1.974  | 0.196 | 1238.936 | 1264.136 | 0.0    | -93.973 | -92.034 | 0.0 |
| 54 | 5151 | 5152 | NS | 1 | 57.53  | 58.116 | 0.0 | 0.003 | 1.963  | 0.175 | 1199.408 | 1258.32  | 32.52  | -93.555 | -91.497 | 0.0 |
| 55 | 5152 | 5153 | NS | 2 | 57.536 | 58.115 | 0.0 | 0.003 | 1.969  | 0.178 | 1199.496 | 1258.464 | 33.197 | -93.601 | -91.453 | 0.0 |
| 56 | 5152 | 5153 | SN | 2 | 57.707 | 58.303 | 0.0 | 0.003 | 1.974  | 0.185 | 1239.288 | 1264.272 | 0.0    | -93.799 | -92.008 | 0.0 |
| 57 | 5152 | 5153 | SN | 1 | 57.707 | 58.303 | 0.0 | 0.003 | 1.974  | 0.185 | 1239.288 | 1264.272 | 0.0    | -93.799 | -92.008 | 0.0 |
| 58 | 5152 | 5153 | NS | 1 | 57.536 | 58.115 | 0.0 | 0.003 | 1.969  | 0.178 | 1199.496 | 1258.464 | 33.207 | -93.601 | -91.453 | 0.0 |
| 59 | 5153 | 5154 | NS | 2 | 57.527 | 58.115 | 0.0 | 0.003 | 35.257 | 0.225 | 1198.832 | 1258.448 | 33.153 | -93.609 | -91.499 | 0.0 |
| 60 | 5153 | 5154 | NS | 3 | 57.527 | 58.115 | 0.0 | 0.003 | 35.257 | 0.225 | 1198.832 | 1258.448 | 33.153 | -93.609 | -91.499 | 0.0 |
| 61 | 5153 | 5154 | SN | 1 | 57.77  | 58.318 | 0.0 | 0.003 | 1.974  | 0.183 | 1238.968 | 1264.312 | 0.0    | -93.498 | -92.039 | 0.0 |
| 62 | 5154 | 5155 | NS | 1 | 57.556 | 58.116 | 0.0 | 0.003 | 35.208 | 0.217 | 1199.096 | 1258.376 | 33.825 | -93.529 | -91.499 | 0.0 |

|                          |            |           |            |        |          |
|--------------------------|------------|-----------|------------|--------|----------|
| Parameter Specifications | Parameters | Inc.Angle | Azi. Angle | Range  | X-Factor |
|                          | Min        | 57.3      | 0.0        | 1210.0 | -100.0   |
|                          | Max        | 58.9      | 0.0        | 1280.0 | -80.0    |

|                                                                                                |                                                                                                   |
|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
|  Normal   |  Deviations  |
|  Alarming |  High Errors |



|      |             |           |      |      | Outer   |        |            |          |        |            |          |        |            |           |        |            |         |         |            |          |         |            |          |        |            |           |         |            |
|------|-------------|-----------|------|------|---------|--------|------------|----------|--------|------------|----------|--------|------------|-----------|--------|------------|---------|---------|------------|----------|---------|------------|----------|--------|------------|-----------|---------|------------|
|      |             |           |      |      | SNR     |        |            |          |        |            |          |        |            |           |        |            | Kp      |         |            |          |         |            |          |        |            |           |         |            |
|      |             |           |      |      | Sea Aft |        |            | Sea Fore |        |            | Land Aft |        |            | Land Fore |        |            | Sea Aft |         |            | Sea Fore |         |            | Land Aft |        |            | Land Fore |         |            |
| SrNo | Start Orbit | End Orbit | Dir. | Ver. | Min     | Max    | BadOcc (%) | Min      | Max    | BadOcc (%) | Min      | Max    | BadOcc (%) | Min       | Max    | BadOcc (%) | Min     | Max     | BadOcc (%) | Min      | Max     | BadOcc (%) | Min      | Max    | BadOcc (%) | Min       | Max     | BadOcc (%) |
| 1    | 5130        | 5131      | SN   | 1    | -34.761 | 18.097 | 0.0        | -34.915  | 19.79  | 0.0        | -24.312  | 22.938 | 0.089      | -24.209   | 24.118 | 0.232      | 0.083   | 206.423 | 2.118      | 0.083    | 213.898 | 1.676      | 0.083    | 18.678 | 0.043      | 0.083     | 18.235  | 0.024      |
| 2    | 5130        | 5131      | SN   | 1    | -34.761 | 18.097 | 0.0        | -34.915  | 19.79  | 0.0        | -24.312  | 22.938 | 0.089      | -24.209   | 24.118 | 0.231      | 0.083   | 206.423 | 2.114      | 0.083    | 213.898 | 1.675      | 0.083    | 18.678 | 0.043      | 0.083     | 18.235  | 0.023      |
| 3    | 5130        | 5131      | NS   | 2    | -34.784 | 21.166 | 0.0        | -34.974  | 22.044 | 0.001      | -3.638   | 23.3   | 0.077      | -2.079    | 24.344 | 0.665      | 0.083   | 207.577 | 4.986      | 0.083    | 216.834 | 4.525      | 0.083    | 0.229  | 0.0        | 0.083     | 0.183   | 0.0        |
| 4    | 5130        | 5131      | SN   | 1    | -34.761 | 18.048 | 0.0        | -34.915  | 19.79  | 0.0        | -24.312  | 22.938 | 0.089      | -24.209   | 24.118 | 0.232      | 0.083   | 206.423 | 1.813      | 0.083    | 213.898 | 1.739      | 0.083    | 18.678 | 0.043      | 0.083     | 18.235  | 0.024      |
| 5    | 5131        | 5132      | NS   | 2    | -33.71  | 20.764 | 0.0        | -34.4    | 21.938 | 0.0        | -6.42    | 22.97  | 0.048      | -5.662    | 24.361 | 0.352      | 0.083   | 162.077 | 1.787      | 0.083    | 189.968 | 1.47       | 0.083    | 0.37   | 0.0        | 0.083     | 0.322   | 0.0        |
| 6    | 5131        | 5132      | SN   | 1    | -32.498 | 19.352 | 0.0        | -34.803  | 19.361 | 0.0        | -17.716  | 24.557 | 0.07       | -14.993   | 24.168 | 0.374      | 0.083   | 122.596 | 1.35       | 0.083    | 208.437 | 1.293      | 0.083    | 4.244  | 0.006      | 0.083     | 2.242   | 0.002      |
| 7    | 5131        | 5132      | SN   | 1    | -32.498 | 19.352 | 0.0        | -34.803  | 19.361 | 0.0        | -17.716  | 24.557 | 0.07       | -14.993   | 24.168 | 0.374      | 0.083   | 122.596 | 1.348      | 0.083    | 208.437 | 1.291      | 0.083    | 4.244  | 0.006      | 0.083     | 2.242   | 0.002      |
| 8    | 5131        | 5132      | SN   | 2    | -32.498 | 19.352 | 0.0        | -34.803  | 19.361 | 0.0        | -17.716  | 24.557 | 0.07       | -14.993   | 24.168 | 0.374      | 0.083   | 122.596 | 1.348      | 0.083    | 208.437 | 1.291      | 0.083    | 4.244  | 0.006      | 0.083     | 2.242   | 0.002      |
| 9    | 5131        | 5132      | NS   | 1    | -33.71  | 20.764 | 0.0        | -34.4    | 21.938 | 0.0        | -6.42    | 22.97  | 0.048      | -5.662    | 24.361 | 0.352      | 0.083   | 162.077 | 1.787      | 0.083    | 189.968 | 1.47       | 0.083    | 0.37   | 0.0        | 0.083     | 0.322   | 0.0        |
| 10   | 5132        | 5133      | NS   | 1    | -34.289 | 18.092 | 0.0        | -33.757  | 18.782 | 0.0        | -6.373   | 22.169 | 0.007      | -23.262   | 23.813 | 0.245      | 0.083   | 185.171 | 1.813      | 0.083    | 163.834 | 1.695      | 0.083    | 0.367  | 0.0        | 0.083     | 14.676  | 0.027      |
| 11   | 5132        | 5133      | SN   | 1    | -34.906 | 17.22  | 0.0        | -34.47   | 18.646 | 0.0        | 2.361    | 22.631 | 0.049      | 2.471     | 23.156 | 0.223      | 0.084   | 213.469 | 1.528      | 0.083    | 193.071 | 1.382      | 0.083    | 0.116  | 0.0        | 0.083     | 0.115   | 0.0        |
| 12   | 5132        | 5133      | SN   | 1    | -34.906 | 17.498 | 0.0        | -34.47   | 18.963 | 0.0        | 2.361    | 22.631 | 0.049      | 2.471     | 23.156 | 0.222      | 0.083   | 213.469 | 1.505      | 0.083    | 193.071 | 1.427      | 0.083    | 0.116  | 0.0        | 0.083     | 0.115   | 0.0        |
| 13   | 5133        | 5134      | SN   | 1    | -34.278 | 17.631 | 0.0        | -34.772  | 18.73  | 0.0        | 1.32     | 23.057 | 0.296      | 2.706     | 22.983 | 0.825      | 0.083   | 184.698 | 2.946      | 0.083    | 206.956 | 2.565      | 0.083    | 0.126  | 0.0        | 0.083     | 0.114   | 0.0        |
| 14   | 5133        | 5134      | NS   | 1    | -34.728 | 18.205 | 0.0        | -33.958  | 18.416 | 0.0        | -18.106  | 22.797 | 0.023      | -30.561   | 23.526 | 0.226      | 0.083   | 204.898 | 1.952      | 0.083    | 171.608 | 1.58       | 0.083    | 4.522  | 0.003      | 0.083     | 78.536  | 0.032      |
| 15   | 5133        | 5134      | SN   | 1    | -34.278 | 17.28  | 0.0        | -34.772  | 18.704 | 0.0        | 1.32     | 23.057 | 0.296      | 2.706     | 22.983 | 0.856      | 0.084   | 184.698 | 2.921      | 0.083    | 206.956 | 2.606      | 0.083    | 0.126  | 0.0        | 0.083     | 0.114   | 0.0        |
| 16   | 5134        | 5135      | SN   | 1    | -34.979 | 16.931 | 0.0        | -34.908  | 18.874 | 0.0        | 1.752    | 22.501 | 0.051      | 3.393     | 23.474 | 1.063      | 0.084   | 217.035 | 3.834      | 0.083    | 213.557 | 2.975      | 0.083    | 0.122  | 0.0        | 0.083     | 0.109   | 0.0        |
| 17   | 5134        | 5135      | NS   | 1    | -33.876 | 18.317 | 0.0        | -32.055  | 18.416 | 0.0        | -23.222  | 22.916 | 0.034      | -17.86    | 24.036 | 0.151      | 0.083   | 168.401 | 1.54       | 0.083    | 110.742 | 1.069      | 0.083    | 14.54  | 0.009      | 0.083     | 4.276   | 0.008      |
| 18   | 5135        | 5136      | SN   | 1    | -34.987 | 17.534 | 0.0        | -34.994  | 19.189 | 0.0        | 1.25     | 22.286 | 0.043      | -0.569    | 22.811 | 0.041      | 0.083   | 217.478 | 3.543      | 0.083    | 217.812 | 3.141      | 0.083    | 0.127  | 0.0        | 0.083     | 0.152   | 0.0        |
| 19   | 5135        | 5136      | NS   | 2    | -34.95  | 18.369 | 0.0        | -34.133  | 18.049 | 0.0        | -27.083  | 23.328 | 0.093      | -27.193   | 23.416 | 0.551      | 0.083   | 215.617 | 1.645      | 0.083    | 178.661 | 1.726      | 0.083    | 35.295 | 0.115      | 0.083     | 36.187  | 0.047      |
| 20   | 5135        | 5136      | SN   | 1    | -34.987 | 17.534 | 0.0        | -34.994  | 19.189 | 0.0        | 1.25     | 22.286 | 0.039      | -0.569    | 22.811 | 0.04       | 0.083   | 217.478 | 3.598      | 0.083    | 217.812 | 3.041      | 0.083    | 0.127  | 0.0        | 0.083     | 0.152   | 0.0        |
| 21   | 5136        | 5137      | NS   | 1    | -34.476 | 18.153 | 0.0        | -34.665  | 20.026 | 0.0        | 3.07     | 22.959 | 0.293      | 3.06      | 24.361 | 1.628      | 0.083   | 193.341 | 0.904      | 0.083    | 201.909 | 0.831      | 0.083    | 0.111  | 0.0        | 0.083     | 0.111   | 0.0        |
| 22   | 5136        | 5137      | SN   | 1    | -34.86  | 17.86  | 0.0        | -34.676  | 19.059 | 0.0        | -4.187   | 23.804 | 0.544      | -6.081    | 24.028 | 1.29       | 0.083   | 211.194 | 5.008      | 0.083    | 202.432 | 4.221      | 0.083    | 0.25   | 0.0        | 0.083     | 0.347   | 0.0        |
| 23   | 5136        | 5137      | SN   | 1    | -34.86  | 17.35  | 0.0        | -34.676  | 18.354 | 0.0        | -4.187   | 23.804 | 0.556      | -6.081    | 24.028 | 1.291      | 0.084   | 211.194 | 5.243      | 0.083    | 202.432 | 4.427      | 0.083    | 0.25   | 0.0        | 0.083     | 0.347   | 0.0        |
| 24   | 5137        | 5138      | SN   | 1    | -34.976 | 18.187 | 0.0        | -34.226  | 19.225 | 0.0        | -5.413   | 23.577 | 0.381      | -4.89     | 24.276 | 1.384      | 0.083   | 216.884 | 3.569      | 0.083    | 182.513 | 3.661      | 0.083    | 0.308  | 0.0        | 0.083     | 0.281   | 0.0        |
| 25   | 5137        | 5138      | NS   | 1    | -34.951 | 18.326 | 0.0        | -34.711  | 18.281 | 0.0        | 0.874    | 23.221 | 0.214      | 2.602     | 24.523 | 1.373      | 0.083   | 215.696 | 3.186      | 0.083    | 204.078 | 2.716      | 0.083    | 0.131  | 0.0        | 0.083     | 0.114   | 0.0        |
| 26   | 5137        | 5138      | SN   | 1    | -34.976 | 18.187 | 0.0        | -34.226  | 19.225 | 0.0        | -5.413   | 23.577 | 0.406      | -4.89     | 24.276 | 1.287      | 0.083   | 216.884 | 3.794      | 0.083    | 182.513 | 4.029      | 0.083    | 0.308  | 0.0        | 0.083     | 0.281   | 0.0        |
| 27   | 5138        | 5139      | SN   | 1    | -33.74  | 18.792 | 0.0        | -34.181  | 19.117 | 0.0        | -26.19   | 23.457 | 0.292      | -5.227    | 24.294 | 0.702      | 0.083   | 163.199 | 3.86       | 0.083    | 180.606 | 3.43       | 0.083    | 28.747 | 0.027      | 0.083     | 0.298   | 0.0        |
| 28   | 5138        | 5139      | NS   | 2    | -34.75  | 18.179 | 0.0        | -34.668  | 18.724 | 0.0        | -18.932  | 21.966 | 0.0        | -12.11    | 25.108 | 2.872      | 0.083   | 205.952 | 1.318      | 0.083    | 202.085 | 0.928      | 0.083    | 5.455  | 0.028      | 0.083     | 1.186   | 0.006      |
| 29   | 5139        | 5140      | NS   | 1    | -34.923 | 18.868 | 0.0        | -34.502  | 19.174 | 0.0        | -20.955  | 22.911 | 0.01       | -25.177   | 24.892 | 2.823      | 0.083   | 214.322 | 1.445      | 0.083    | 194.52  | 1.04       | 0.083    | 8.656  | 0.045      | 0.083     | 22.776  | 0.027      |
| 30   | 5144        | 5145      | SN   | 1    | -34.47  | 18.204 | 0.0        | -34.687  | 20.077 | 0.0        | -24.753  | 22.849 | 0.038      | -32.208   | 23.318 | 0.037      | 0.083   | 193.082 | 1.947      | 0.083    | 202.966 | 1.574      | 0.083    | 20.667 | 0.012      | 0.083     | 114.702 | 0.011      |
| 31   | 5145        | 5146      | NS   | 2    | -33.987 | 20.602 | 0.0        | -34.832  | 21.776 | 0.0        | -0.847   | 23.069 | 0.021      | -0.809    | 24.059 | 0.383      | 0.083   | 172.745 | 2.825      | 0.083    | 209.829 | 2.823      | 0.083    | 0.157  | 0.0        | 0.083     | 0.156   | 0.0        |
| 32   | 5145        | 5146      | SN   | 1    | -34.258 | 18.878 | 0.0        | -33.153  | 19.523 | 0.0        | -16.441  | 23.266 | 0.071      | -20.586   | 24.427 | 0.29       | 0.083   | 183.894 | 1.596      | 0.083    | 142.577 | 1.134      | 0.083    | 3.102  | 0.007      | 0.083     | 7.956   | 0.004      |

| Parameter Specifications | Parameters | SNR   | Kp  | Normal   | Deviations  |
|--------------------------|------------|-------|-----|----------|-------------|
|                          | Min        | -65.0 | 0.0 | Alarming | High Errors |
|                          | Max        | 22.0  | 1.0 |          |             |

|    |      |      |    |   |         |        |     |         |        |     |         |        |       |         |        |       |       |         |       |       |         |       |       |        |       |       |         |       |
|----|------|------|----|---|---------|--------|-----|---------|--------|-----|---------|--------|-------|---------|--------|-------|-------|---------|-------|-------|---------|-------|-------|--------|-------|-------|---------|-------|
| 33 | 5145 | 5146 | SN | 1 | -34.258 | 18.877 | 0.0 | -33.177 | 19.523 | 0.0 | -16.441 | 23.266 | 0.071 | -20.586 | 24.427 | 0.29  | 0.083 | 183.894 | 1.596 | 0.083 | 143.379 | 1.135 | 0.083 | 3.102  | 0.007 | 0.083 | 7.956   | 0.004 |
| 34 | 5145 | 5146 | NS | 2 | -33.987 | 20.602 | 0.0 | -34.832 | 21.776 | 0.0 | -0.847  | 23.069 | 0.021 | -0.809  | 24.059 | 0.383 | 0.083 | 172.745 | 2.831 | 0.083 | 209.829 | 2.829 | 0.083 | 0.157  | 0.0   | 0.083 | 0.156   | 0.0   |
| 35 | 5145 | 5146 | SN | 1 | -34.258 | 18.436 | 0.0 | -33.153 | 19.525 | 0.0 | -16.441 | 23.266 | 0.071 | -20.586 | 24.427 | 0.29  | 0.083 | 183.894 | 1.63  | 0.083 | 142.577 | 1.122 | 0.083 | 3.102  | 0.007 | 0.083 | 7.956   | 0.004 |
| 36 | 5146 | 5147 | NS | 2 | -34.017 | 18.405 | 0.0 | -34.81  | 18.707 | 0.0 | -10.131 | 23.345 | 0.035 | -24.379 | 23.954 | 0.328 | 0.083 | 173.923 | 1.338 | 0.083 | 208.831 | 1.338 | 0.083 | 0.776  | 0.0   | 0.083 | 18.96   | 0.034 |
| 37 | 5146 | 5147 | SN | 1 | -33.69  | 18.866 | 0.0 | -34.762 | 19.131 | 0.0 | -11.611 | 23.278 | 0.325 | -12.736 | 23.878 | 0.921 | 0.083 | 161.375 | 1.62  | 0.083 | 206.51  | 1.644 | 0.083 | 1.064  | 0.003 | 0.083 | 1.359   | 0.012 |
| 38 | 5146 | 5147 | SN | 1 | -33.69  | 18.866 | 0.0 | -34.762 | 19.131 | 0.0 | -11.611 | 23.278 | 0.325 | -12.736 | 23.878 | 0.921 | 0.083 | 161.375 | 1.648 | 0.083 | 206.51  | 1.644 | 0.083 | 1.064  | 0.003 | 0.083 | 1.359   | 0.012 |
| 39 | 5146 | 5147 | SN | 1 | -33.69  | 18.866 | 0.0 | -34.762 | 19.131 | 0.0 | -11.611 | 23.278 | 0.325 | -12.736 | 23.878 | 0.921 | 0.083 | 161.375 | 1.646 | 0.083 | 206.51  | 1.641 | 0.083 | 1.064  | 0.003 | 0.083 | 1.359   | 0.012 |
| 40 | 5146 | 5147 | NS | 1 | -32.841 | 18.405 | 0.0 | -34.286 | 18.707 | 0.0 | -10.136 | 23.345 | 0.035 | -24.379 | 23.952 | 0.328 | 0.083 | 132.712 | 1.337 | 0.083 | 185.035 | 1.334 | 0.083 | 0.777  | 0.0   | 0.083 | 18.964  | 0.034 |
| 41 | 5147 | 5148 | SN | 1 | -34.354 | 17.276 | 0.0 | -34.92  | 18.932 | 0.0 | 1.75    | 22.857 | 0.053 | 1.041   | 23.0   | 0.273 | 0.084 | 187.982 | 1.57  | 0.083 | 214.149 | 1.397 | 0.083 | 0.122  | 0.0   | 0.083 | 0.129   | 0.0   |
| 42 | 5147 | 5148 | SN | 1 | -34.354 | 17.276 | 0.0 | -34.92  | 18.931 | 0.0 | 1.75    | 22.857 | 0.053 | 1.041   | 23.0   | 0.278 | 0.084 | 187.982 | 1.584 | 0.083 | 214.149 | 1.36  | 0.083 | 0.122  | 0.0   | 0.083 | 0.129   | 0.0   |
| 43 | 5147 | 5148 | NS | 2 | -34.346 | 18.088 | 0.0 | -34.994 | 18.547 | 0.0 | -26.424 | 22.65  | 0.017 | -32.598 | 23.491 | 0.288 | 0.083 | 194.098 | 4.406 | 0.083 | 217.848 | 3.576 | 0.083 | 30.326 | 0.13  | 0.083 | 125.495 | 0.109 |
| 44 | 5148 | 5149 | SN | 1 | -34.516 | 17.385 | 0.0 | -34.383 | 18.874 | 0.0 | 1.761   | 22.477 | 0.12  | 3.295   | 23.597 | 1.51  | 0.084 | 195.114 | 4.221 | 0.083 | 189.273 | 3.689 | 0.083 | 0.122  | 0.0   | 0.083 | 0.109   | 0.0   |
| 45 | 5148 | 5149 | SN | 1 | -34.516 | 17.385 | 0.0 | -34.383 | 18.903 | 0.0 | 1.761   | 22.477 | 0.119 | 3.295   | 23.597 | 1.407 | 0.084 | 195.114 | 4.14  | 0.083 | 189.273 | 3.713 | 0.083 | 0.122  | 0.0   | 0.083 | 0.109   | 0.0   |
| 46 | 5148 | 5149 | NS | 1 | -32.151 | 18.558 | 0.0 | -32.751 | 18.803 | 0.0 | -9.048  | 23.196 | 0.093 | -8.043  | 23.693 | 0.245 | 0.083 | 113.228 | 1.415 | 0.083 | 129.973 | 1.307 | 0.083 | 0.62   | 0.0   | 0.083 | 0.506   | 0.0   |
| 47 | 5149 | 5150 | NS | 1 | -34.283 | 18.227 | 0.0 | -34.289 | 18.402 | 0.0 | -13.377 | 22.673 | 0.032 | -13.446 | 23.481 | 0.306 | 0.083 | 184.931 | 1.926 | 0.083 | 185.178 | 1.777 | 0.083 | 1.565  | 0.012 | 0.083 | 1.589   | 0.012 |
| 48 | 5149 | 5150 | SN | 1 | -33.775 | 17.257 | 0.0 | -34.823 | 19.248 | 0.0 | 1.541   | 22.484 | 0.026 | 3.164   | 23.168 | 0.4   | 0.084 | 164.543 | 2.503 | 0.083 | 209.395 | 2.406 | 0.083 | 0.124  | 0.0   | 0.083 | 0.11    | 0.0   |
| 49 | 5149 | 5150 | SN | 1 | -33.775 | 17.157 | 0.0 | -34.823 | 19.248 | 0.0 | 1.541   | 22.484 | 0.027 | 3.164   | 23.168 | 0.4   | 0.084 | 164.543 | 2.511 | 0.083 | 209.395 | 2.384 | 0.083 | 0.124  | 0.0   | 0.083 | 0.11    | 0.0   |
| 50 | 5150 | 5151 | SN | 1 | -34.597 | 16.799 | 0.0 | -34.532 | 19.414 | 0.0 | 1.017   | 23.413 | 0.366 | 4.931   | 23.775 | 0.815 | 0.084 | 198.764 | 3.88  | 0.083 | 195.84  | 3.433 | 0.083 | 0.129  | 0.0   | 0.083 | 0.101   | 0.0   |
| 51 | 5150 | 5151 | SN | 1 | -34.597 | 17.662 | 0.0 | -34.894 | 19.414 | 0.0 | 1.017   | 23.413 | 0.359 | 4.931   | 23.775 | 0.815 | 0.083 | 198.764 | 3.913 | 0.083 | 212.819 | 3.518 | 0.083 | 0.129  | 0.0   | 0.083 | 0.101   | 0.0   |
| 52 | 5150 | 5151 | NS | 1 | -34.769 | 18.487 | 0.0 | -34.532 | 18.92  | 0.0 | -27.491 | 23.006 | 0.341 | -18.072 | 23.77  | 1.193 | 0.083 | 206.828 | 2.503 | 0.083 | 195.803 | 2.094 | 0.083 | 38.764 | 0.078 | 0.083 | 4.488   | 0.072 |
| 53 | 5151 | 5152 | SN | 1 | -34.704 | 18.349 | 0.0 | -34.869 | 19.106 | 0.0 | -6.466  | 23.849 | 0.736 | -7.648  | 25.733 | 1.854 | 0.083 | 203.739 | 4.279 | 0.083 | 211.661 | 4.266 | 0.083 | 0.373  | 0.0   | 0.083 | 0.468   | 0.0   |
| 54 | 5151 | 5152 | NS | 1 | -34.885 | 18.043 | 0.0 | -34.937 | 19.264 | 0.0 | 2.134   | 22.826 | 0.11  | 1.792   | 24.271 | 1.177 | 0.083 | 212.385 | 2.05  | 0.083 | 215.005 | 1.671 | 0.083 | 0.118  | 0.0   | 0.083 | 0.121   | 0.0   |
| 55 | 5152 | 5153 | NS | 2 | -34.83  | 18.597 | 0.0 | -34.687 | 18.482 | 0.0 | 0.958   | 22.749 | 0.015 | 1.851   | 24.861 | 1.783 | 0.083 | 209.743 | 3.496 | 0.083 | 202.906 | 3.321 | 0.083 | 0.13   | 0.0   | 0.083 | 0.121   | 0.0   |
| 56 | 5152 | 5153 | SN | 2 | -34.829 | 18.193 | 0.0 | -34.724 | 20.51  | 0.0 | -30.572 | 23.351 | 0.289 | -20.462 | 24.525 | 1.017 | 0.083 | 209.7   | 2.526 | 0.083 | 204.65  | 2.458 | 0.083 | 78.71  | 0.065 | 0.083 | 7.732   | 0.007 |
| 57 | 5152 | 5153 | SN | 1 | -34.829 | 18.193 | 0.0 | -34.724 | 20.51  | 0.0 | -30.572 | 23.351 | 0.289 | -20.462 | 24.525 | 1.017 | 0.083 | 209.7   | 2.526 | 0.083 | 204.65  | 2.458 | 0.083 | 78.71  | 0.065 | 0.083 | 7.732   | 0.007 |
| 58 | 5152 | 5153 | NS | 1 | -34.83  | 18.597 | 0.0 | -34.687 | 18.482 | 0.0 | 0.958   | 22.749 | 0.015 | 1.851   | 24.861 | 1.776 | 0.083 | 209.743 | 3.496 | 0.083 | 202.906 | 3.321 | 0.083 | 0.13   | 0.0   | 0.083 | 0.121   | 0.0   |
| 59 | 5153 | 5154 | NS | 2 | -34.524 | 18.419 | 0.0 | -34.229 | 18.765 | 0.0 | -20.739 | 21.909 | 0.0   | -16.52  | 24.576 | 3.067 | 0.083 | 195.498 | 1.35  | 0.083 | 182.664 | 1.195 | 0.083 | 8.239  | 0.028 | 0.083 | 3.159   | 0.013 |
| 60 | 5153 | 5154 | NS | 3 | -34.524 | 18.419 | 0.0 | -34.229 | 18.765 | 0.0 | -20.739 | 21.909 | 0.0   | -16.52  | 24.576 | 3.067 | 0.083 | 195.498 | 1.35  | 0.083 | 182.664 | 1.195 | 0.083 | 8.239  | 0.028 | 0.083 | 3.159   | 0.013 |
| 61 | 5153 | 5154 | SN | 1 | -34.996 | 20.656 | 0.0 | -34.83  | 21.635 | 0.0 | -5.507  | 23.428 | 0.32  | -8.462  | 23.674 | 0.335 | 0.083 | 217.907 | 3.682 | 0.083 | 209.746 | 2.843 | 0.083 | 0.313  | 0.0   | 0.083 | 0.55    | 0.0   |
| 62 | 5154 | 5155 | NS | 1 | -34.631 | 18.815 | 0.0 | -34.342 | 19.403 | 0.0 | 1.485   | 22.625 | 0.038 | 0.707   | 24.564 | 2.7   | 0.083 | 200.357 | 0.73  | 0.083 | 187.469 | 0.602 | 0.083 | 0.124  | 0.0   | 0.083 | 0.133   | 0.0   |

| Parameter Specifications | Parameters | SNR   | Kp  |
|--------------------------|------------|-------|-----|
|                          | Min        | -65.0 | 0.0 |
|                          | Max        | 22.0  | 1.0 |

|                                                                                                |                                                                                                   |
|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
|  Normal   |  Deviations  |
|  Alarming |  High Errors |