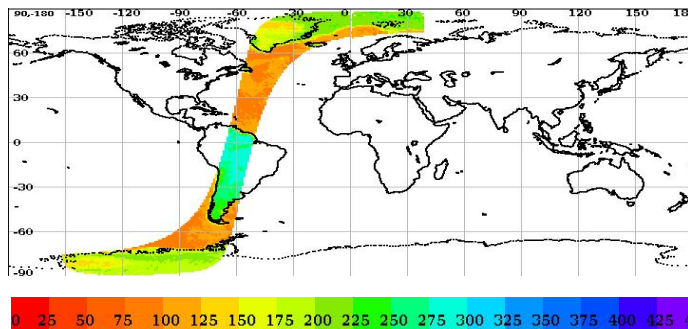


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

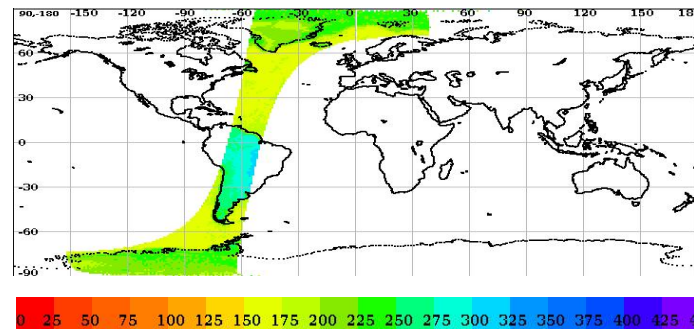
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 2760 | 2761 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 404 | 36 | 04-04-2017 | 04-04-2017 |
| Direction | WVC Size(km) | Processor Version | |
| NS | 50 | 1.1.1 | |

Brightness Temperature

Inner Beam (HH)

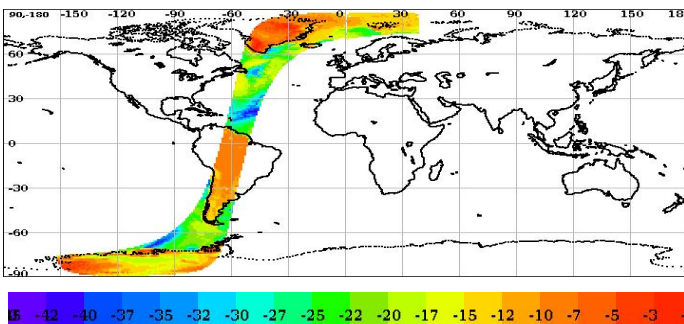


Outer Beam (VV)

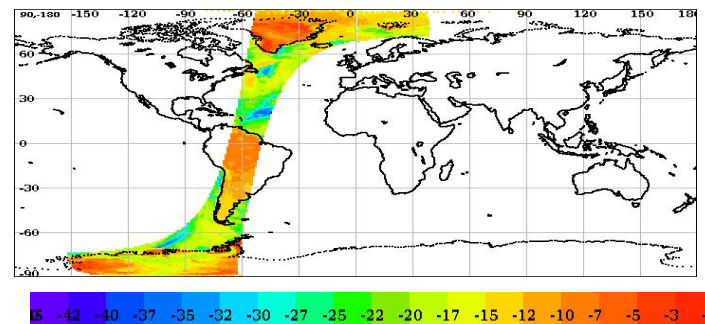


Sigma0(dB)

Inner Beam (HH)



Outer Beam (VV)



Invariant Site Sigma-0 Statistics for Ascending/Descending, Fore/Aft in HH/VV beams

| Site Name | Center Lat | Center Lon | Beam | Node | ScanDir | Sigma0 Min | Sigma0 Max | Sigma0 Mean | Sigma0 Std | BT Min | BT Max | BT Mean | BT Std |
|-------------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| GreenLand_2 | 77.50 | -41.50 | Inner | ASC | Aft | -6.35 | -3.55 | -5.23 | 0.86 | 125.07 | 178.10 | 150.81 | 14.82 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Aft | -6.43 | -3.77 | -4.77 | 0.69 | 172.07 | 205.36 | 196.25 | 9.56 |
| GreenLand_2 | 77.50 | -41.50 | Inner | ASC | Fore | -7.63 | -1.11 | -4.25 | 1.66 | 132.71 | 163.72 | 150.28 | 9.43 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Fore | -7.14 | -4.14 | -5.27 | 0.92 | 182.87 | 247.95 | 210.09 | 23.63 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Aft | -14.00 | -6.95 | -10.29 | 1.45 | 145.09 | 198.55 | 179.07 | 13.01 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Aft | -12.01 | -8.87 | -10.70 | 0.90 | 188.96 | 245.98 | 211.29 | 14.88 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Fore | -14.68 | -7.86 | -10.43 | 1.72 | 160.22 | 210.76 | 179.66 | 13.58 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Fore | -15.05 | -9.66 | -11.74 | 1.08 | 181.07 | 254.74 | 211.97 | 16.61 |
| Amazon_3 | -6.00 | -61.00 | Inner | ASC | Aft | -10.46 | -5.24 | -8.28 | 0.84 | 257.07 | 313.93 | 280.01 | 14.25 |
| Amazon_3 | -6.00 | -61.00 | Outer | ASC | Aft | -11.61 | -6.46 | -9.18 | 0.99 | 265.83 | 344.98 | 297.16 | 17.19 |
| Amazon_3 | -6.00 | -61.00 | Inner | ASC | Fore | -16.81 | -5.01 | -8.57 | 2.29 | 239.93 | 306.80 | 277.49 | 14.04 |
| Amazon_3 | -6.00 | -61.00 | Outer | ASC | Fore | -14.58 | -8.04 | -9.98 | 1.39 | 240.05 | 299.75 | 270.99 | 15.86 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Aft | -10.56 | -6.72 | -8.41 | 0.99 | 132.31 | 193.98 | 157.99 | 15.53 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Aft | -10.88 | -7.18 | -8.63 | 0.82 | 180.19 | 229.20 | 205.86 | 15.04 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Fore | -14.20 | -4.24 | -8.68 | 2.14 | 128.48 | 187.16 | 166.77 | 13.24 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Fore | -11.13 | -6.54 | -8.56 | 1.24 | 185.72 | 251.49 | 223.22 | 16.67 |
| Amazon_2 | -3.00 | -61.00 | Inner | ASC | Aft | -15.26 | -4.98 | -9.01 | 1.76 | 205.66 | 313.53 | 253.69 | 25.50 |
| Amazon_2 | -3.00 | -61.00 | Outer | ASC | Aft | -17.46 | -6.57 | -9.88 | 1.65 | 234.36 | 317.42 | 275.68 | 18.83 |
| Amazon_2 | -3.00 | -61.00 | Inner | ASC | Fore | -16.36 | -5.67 | -9.41 | 2.29 | 205.95 | 318.65 | 253.27 | 25.13 |
| Amazon_2 | -3.00 | -61.00 | Outer | ASC | Fore | -17.01 | -7.14 | -10.53 | 1.95 | 227.62 | 306.39 | 258.94 | 18.30 |
| Amazon_1 | 0.00 | -67.00 | Outer | ASC | Aft | -8.77 | -8.52 | -8.64 | 0.13 | 253.42 | 290.60 | 272.01 | 18.59 |

Level-2A Cell-wise Deviations*

| Static Parameter Statistics (variations over the cell grid) for the Inner and Outer Beam | | | | | | | | | | | | |
|--|-----------------|---------|--------------|---------|---------|--------------|-----------------|---------|--------------|---------|---------|--------------|
| Parameter | Inner Beam (HH) | | | | | | Outer Beam (VV) | | | | | |
| | Aft | | | Fore | | | Aft | | | Fore | | |
| | Min Rng | Max Rng | Bad Occ. (%) | Min Rng | Max Rng | Bad Occ. (%) | Min Rng | Max Rng | Bad Occ. (%) | Min Rng | Max Rng | Bad Occ. (%) |
| Kpa | 0.00 | 0.07 | 0.00 | 0.00 | 0.07 | 0.00 | 0.00 | 0.07 | 0.00 | 0.00 | 0.07 | 0.00 |
| Kpb | 0.00 | 0.09 | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.09 | 0.00 |
| Kpc | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Inc. Angle(deg) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Delta Azi.Angle(deg) | 0.00 | 38.79 | 24.72 | 0.00 | 32.48 | 23.31 | 0.00 | 354.40 | 12.79 | 0.00 | 53.00 | 11.46 |

| Category wise Dynamic Parameter Statistics (Variations over the Cell grid) | | | | | | | | | | | | | |
|--|-------------------|---------|---------|--------------|----------|---------|--------------|----------|---------|--------------|-----------|---------|--------------|
| Parameter | Beam | Sea Aft | | | Sea Fore | | | Land Aft | | | Land Fore | | |
| | | Min Rng | Max Rng | Bad Occ. (%) | Min Rng | Max Rng | Bad Occ. (%) | Min Rng | Max Rng | Bad Occ. (%) | Min Rng | Max Rng | Bad Occ. (%) |
| SNR(dB) | Inner (HH) | 0.00 | 48.93 | 5.26 | 0.00 | 48.39 | 6.46 | 0.00 | 45.82 | 0.08 | 0.00 | 28.07 | 0.11 |
| | Outer (VV) | 0.00 | 44.49 | 4.04 | 0.00 | 43.07 | 6.54 | 0.00 | 25.33 | 0.07 | 0.00 | 33.73 | 0.18 |
| Sigma0(dB) | Inner (HH) | 0.00 | 51.52 | 4.99 | 0.00 | 46.57 | 5.73 | 0.00 | 42.65 | 0.08 | 0.00 | 27.79 | 0.07 |
| | Outer (VV) | 0.00 | 43.98 | 4.03 | 0.00 | 43.00 | 4.71 | 0.00 | 24.49 | 0.09 | 0.00 | 33.52 | 0.05 |

| Parameter Specifications with in a cell | | | | | | | |
|---|-----|-----|-----|------------|----------|------------------|-------------|
| Parameter | Kpa | Kpb | Kpc | Inci (deg) | SNR (dB) | Delta Azi. (deg) | Sigma0 (dB) |
| Range | 1.0 | 1.0 | 1.0 | 3.0 | 20.0 | 10.0 | 20.0 |

■ Normal
 ■ Deviation
 ■ Alarming
 ■ High

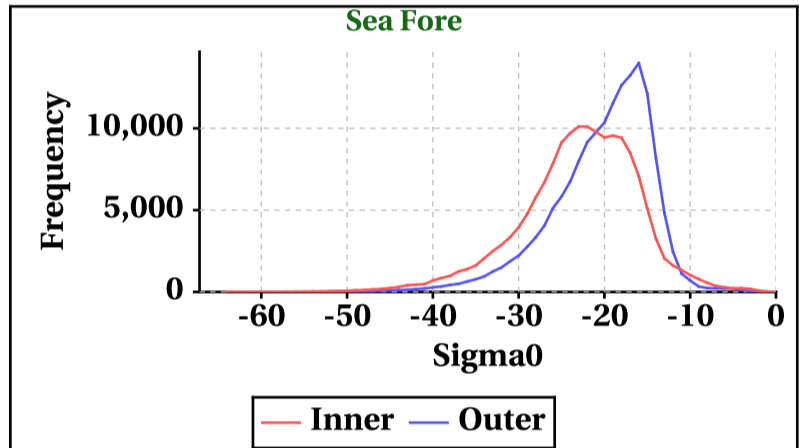
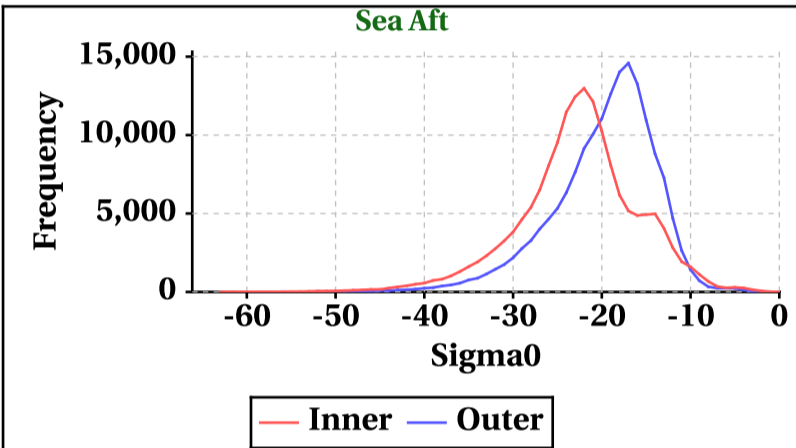
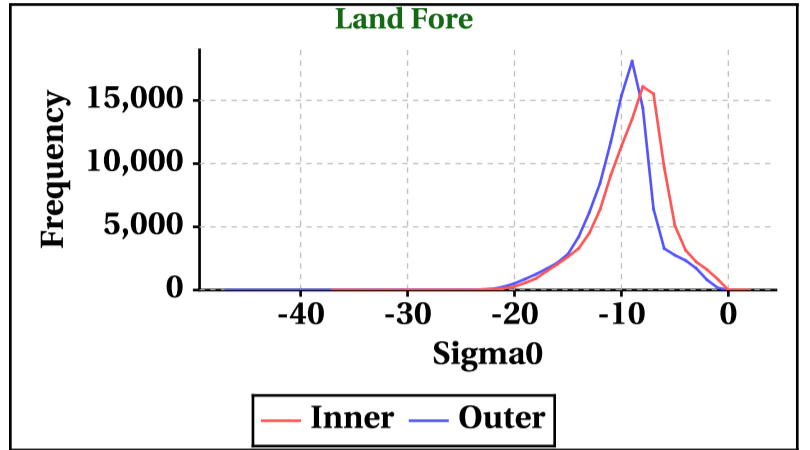
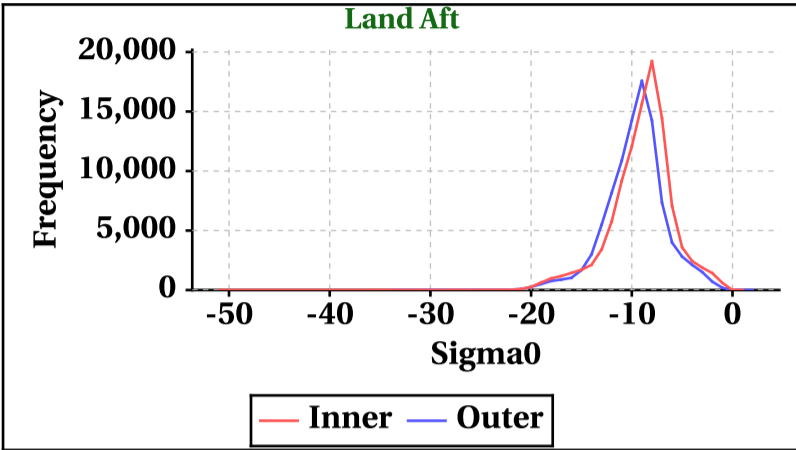
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -51 | -37 | -63 | -64 |
| Max | 1 | 2 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -34 | -47 | -59 | -60 |
| Max | 2 | -1 | -1 | -1 |



Brightness Temperature(K)

| Inner Beam(HH) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 371 | 342 | 273 | 278 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 416 | 358 | 321 | 290 |

