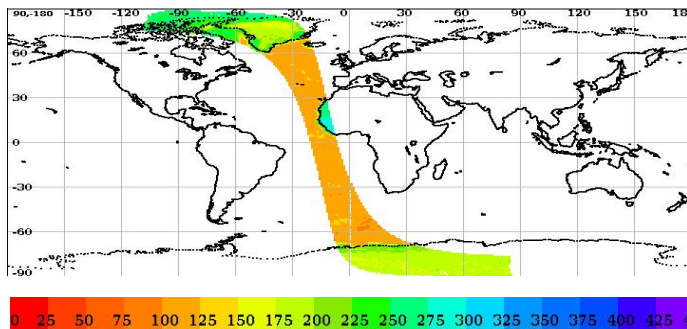


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

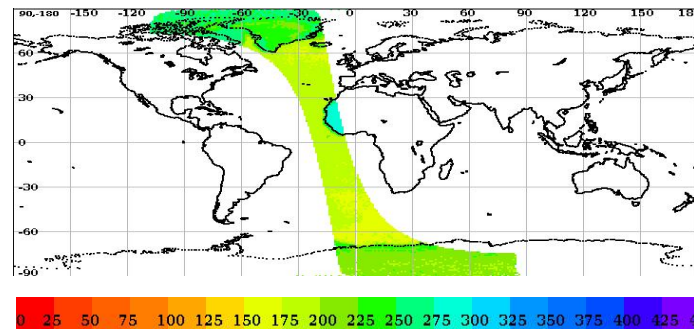
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 19207 | 19208 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 405 | 36 | 12-05-2020 | 12-05-2020 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 50 | v1.1.4 | |

Brightness Temperature

Inner Beam (HH)

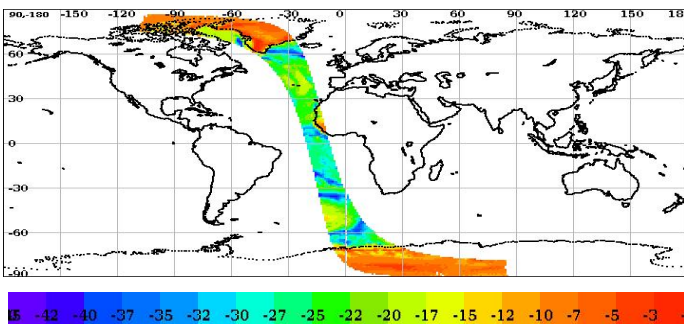


Outer Beam (VV)

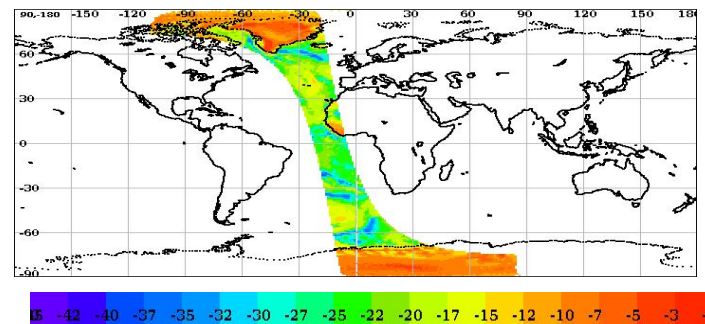


Sigma0(dB)

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 | -6.71 | -4.26 | -5.78 | 0.81 | 132.91 | 164.88 | 157.16 | 9.87 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Aft | -5.95 | -4.49 | -5.12 | 0.47 | 209.11 | 254.95 | 237.87 | 16.24 |
| GreenLand_2 | 77.50 | -41.50 | Inner | ASC | Fore | -8.56 | -4.41 | -6.09 | 1.07 | 153.34 | 199.10 | 177.10 | 10.44 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Fore | -5.85 | -4.48 | -5.28 | 0.56 | 215.30 | 253.67 | 230.84 | 11.94 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Aft | -10.70 | -8.75 | -9.80 | 0.53 | 168.56 | 223.74 | 199.76 | 14.13 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Aft | -13.28 | -10.12 | -11.30 | 0.74 | 211.17 | 252.55 | 233.99 | 13.50 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Fore | -11.23 | -7.82 | -9.72 | 1.07 | 173.39 | 221.95 | 191.45 | 12.54 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Fore | -12.43 | -8.78 | -11.07 | 0.92 | 220.48 | 257.83 | 233.91 | 9.91 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Aft | -10.56 | -7.91 | -8.97 | 0.72 | 171.57 | 218.08 | 193.83 | 15.01 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Aft | -13.13 | -7.38 | -9.89 | 1.21 | 221.07 | 262.28 | 240.95 | 11.01 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Fore | -10.44 | -6.83 | -8.74 | 0.99 | 152.33 | 210.10 | 185.78 | 17.70 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Fore | -11.29 | -7.19 | -8.93 | 1.00 | 220.55 | 262.68 | 235.14 | 12.92 |

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 | 30.17 | 13.43 | 0.00 | 179.84 | 13.17 | 0.00 | 164.21 | 10.86 | 0.00 | 79.87 | 13.68 |

| 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 | 42.24 | 3.89 | 0.00 | 51.60 | 4.77 | 0.00 | 24.95 | 0.13 | 0.00 | 33.12 | 0.37 |
| | Outer (VV) | 0.00 | 39.99 | 3.82 | 0.00 | 42.51 | 5.79 | 0.00 | 45.15 | 0.68 | 0.00 | 44.04 | 1.10 |
| Sigma0(dB) | Inner (HH) | 0.00 | 41.95 | 3.84 | 0.00 | 51.18 | 4.48 | 0.00 | 23.77 | 0.09 | 0.00 | 30.05 | 0.14 |
| | Outer (VV) | 0.00 | 39.91 | 3.62 | 0.00 | 44.29 | 4.98 | 0.00 | 42.37 | 0.63 | 0.00 | 42.52 | 0.65 |

| 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

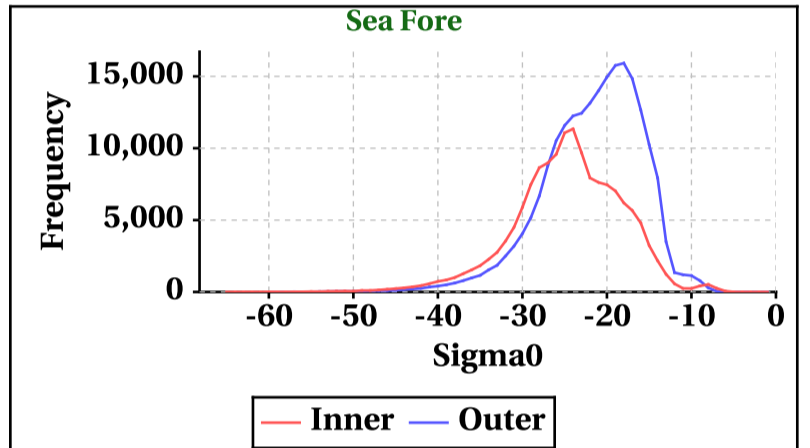
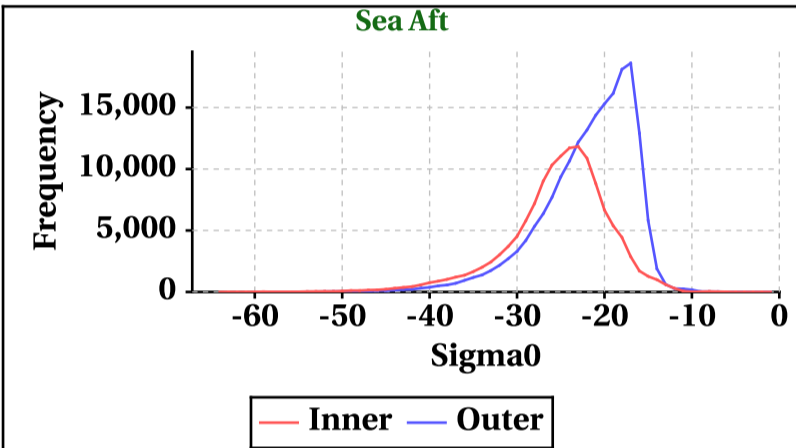
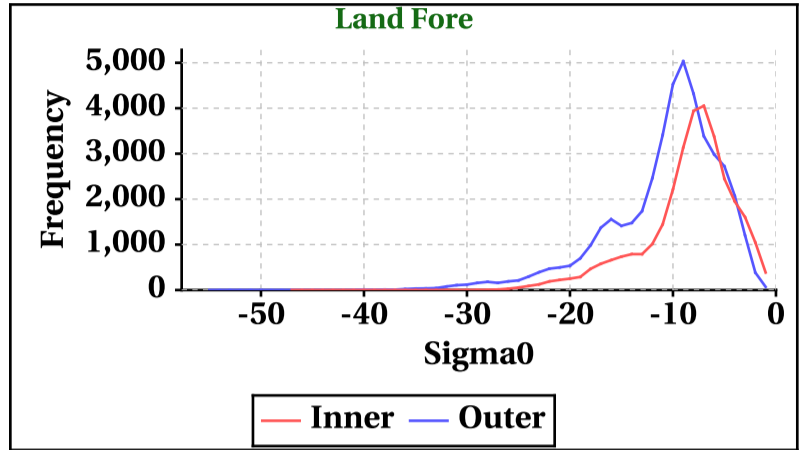
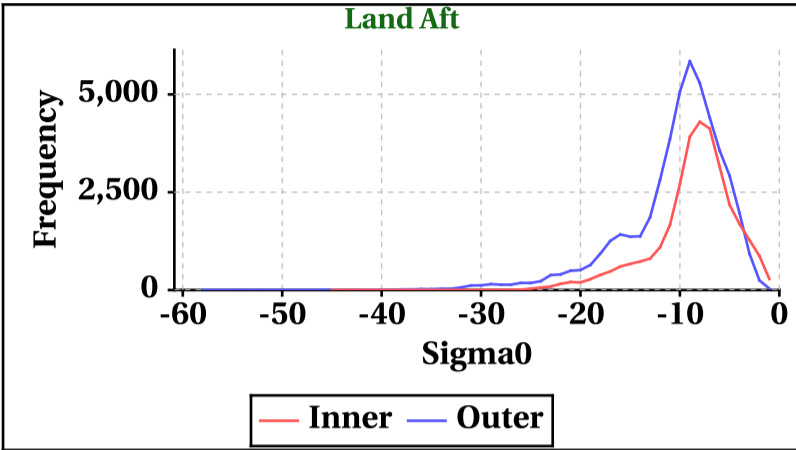
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -45 | -47 | -64 | -65 |
| Max | -1 | -1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -58 | -55 | -60 | -60 |
| Max | -1 | -1 | -1 | -1 |



Brightness Temperature(K)

| Inner Beam(HH) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 351 | 361 | 300 | 315 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 348 | 353 | 314 | 317 |

