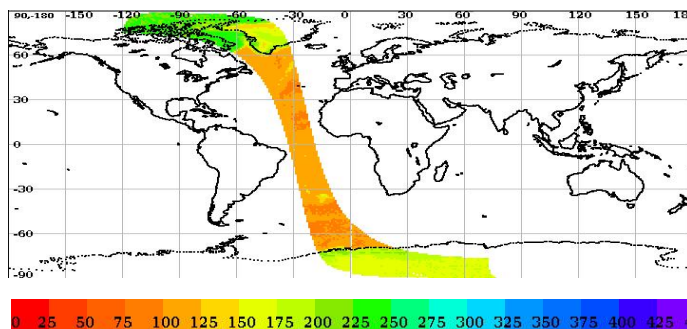


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

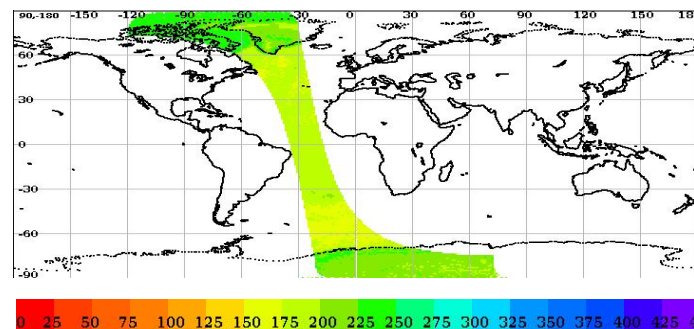
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 13190 | 13191 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 405 | 36 | 24-03-2019 | 24-03-2019 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 50 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

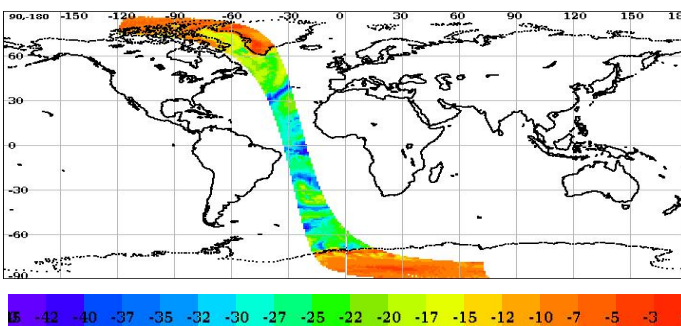


Outer Beam (VV)

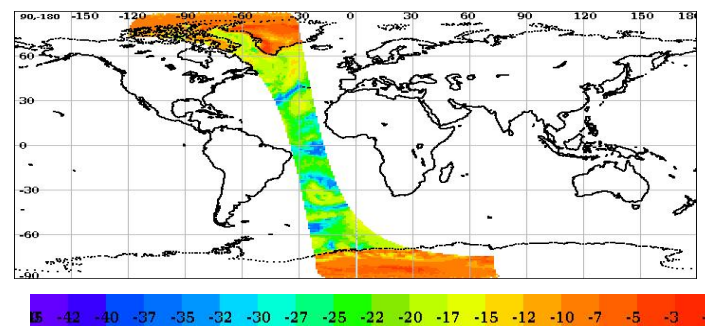


Sigma0(dB)

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 | Outer | ASC | Aft | -6.30 | -4.32 | -5.27 | 0.55 | 176.90 | 231.09 | 209.67 | 16.16 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Fore | -6.18 | -4.02 | -5.23 | 0.63 | 160.83 | 229.16 | 204.88 | 17.84 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Aft | -14.18 | -10.62 | -12.29 | 0.91 | 161.35 | 227.91 | 202.93 | 15.66 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Aft | -16.02 | -10.04 | -12.76 | 1.15 | 197.27 | 272.66 | 226.20 | 16.49 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Fore | -13.83 | -8.87 | -11.42 | 1.17 | 166.37 | 240.44 | 195.56 | 17.69 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Fore | -14.72 | -10.40 | -12.23 | 0.96 | 203.18 | 254.35 | 221.34 | 11.11 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Aft | -13.52 | -8.81 | -10.13 | 1.08 | 194.41 | 247.64 | 221.11 | 15.52 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Fore | -11.78 | -7.14 | -8.94 | 1.03 | 184.61 | 259.44 | 221.73 | 14.77 |

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 | 31.57 | 12.75 | 0.00 | 25.36 | 12.90 | 0.00 | 168.68 | 11.86 | 0.00 | 50.34 | 14.10 |

| 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 | 46.17 | 4.05 | 0.00 | 44.37 | 4.22 | 0.00 | 19.30 | 0.00 | 0.00 | 29.56 | 0.42 |
| | Outer (VV) | 0.00 | 38.93 | 4.05 | 0.00 | 42.99 | 5.58 | 0.00 | 20.44 | 0.08 | 0.00 | 23.57 | 0.31 |
| Sigma0(dB) | Inner (HH) | 0.00 | 46.67 | 3.95 | 0.00 | 43.73 | 3.93 | 0.00 | 18.68 | 0.00 | 0.00 | 27.50 | 0.30 |
| | Outer (VV) | 0.00 | 41.38 | 4.10 | 0.00 | 42.52 | 5.05 | 0.00 | 19.04 | 0.00 | 0.00 | 20.47 | 0.04 |

| 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

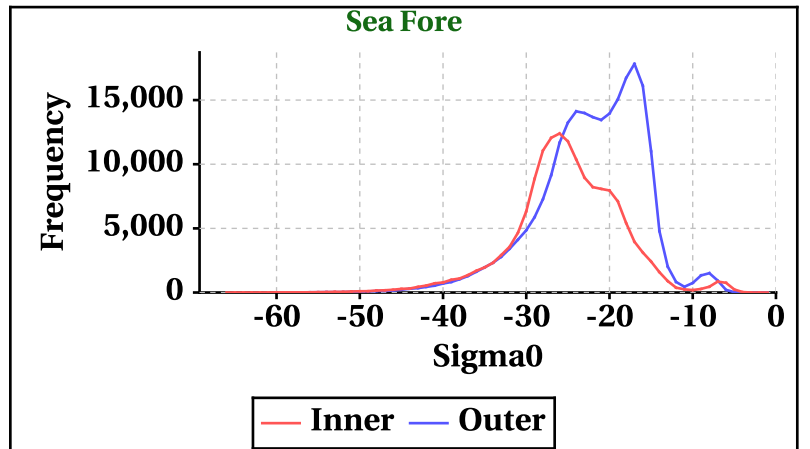
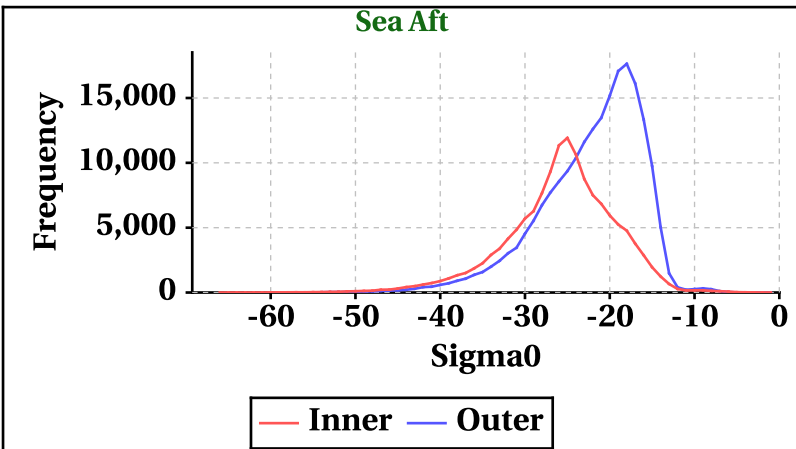
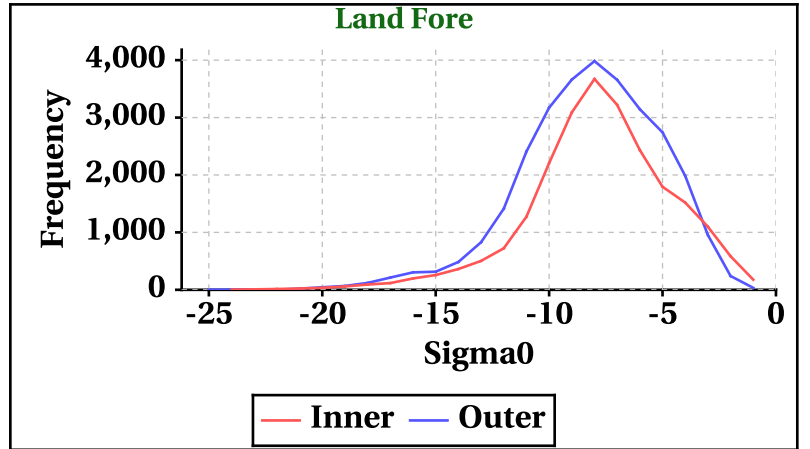
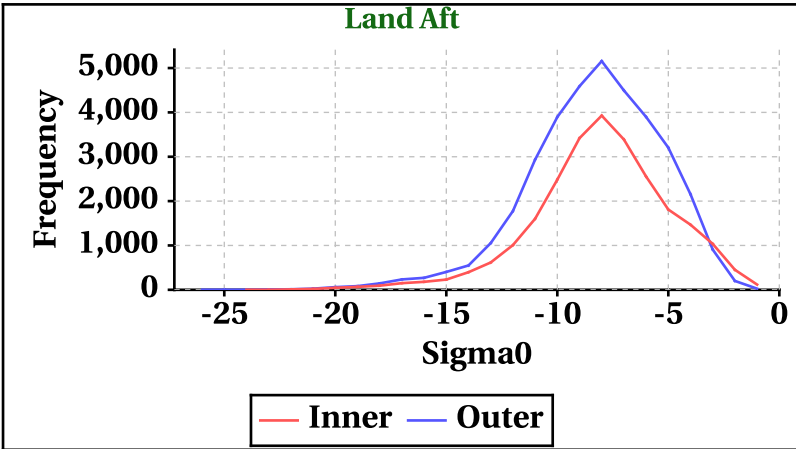
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -24 | -24 | -66 | -66 |
| Max | -1 | -1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -26 | -25 | -59 | -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 | 278 | 269 | 288 | 286 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 297 | 297 | 308 | 298 |

