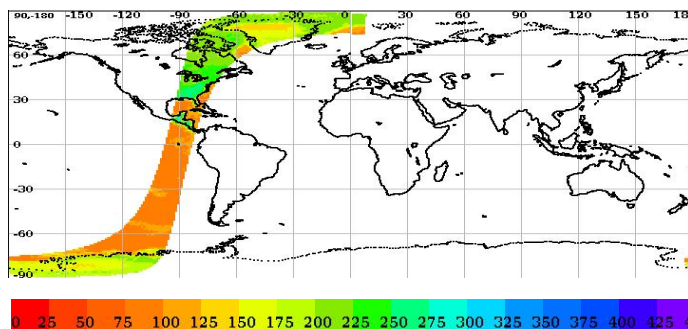


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

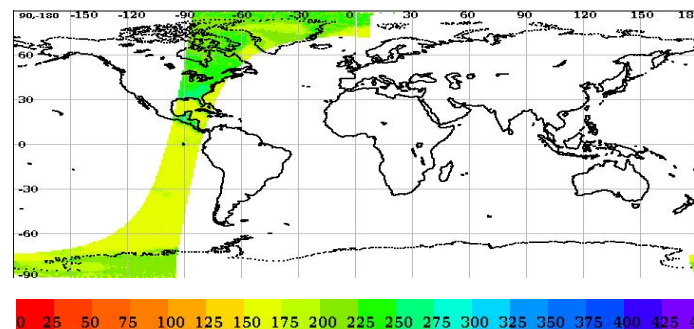
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 1573 | 1574 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 812 | 72 | 12-01-2017 | 12-01-2017 |
| Direction | WVC Size(km) | Processor Version | |
| NS | 25 | 1.1.0 | |

Brightness Temperature

Inner Beam (HH)

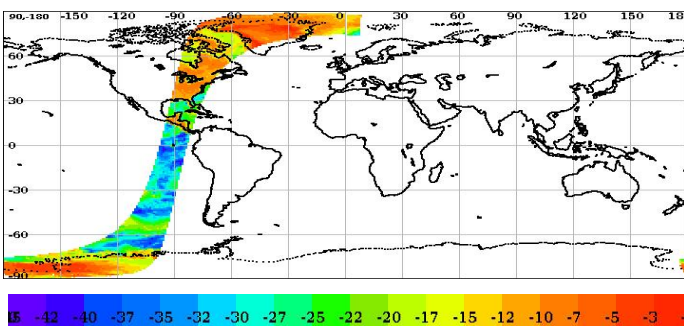


Outer Beam (VV)

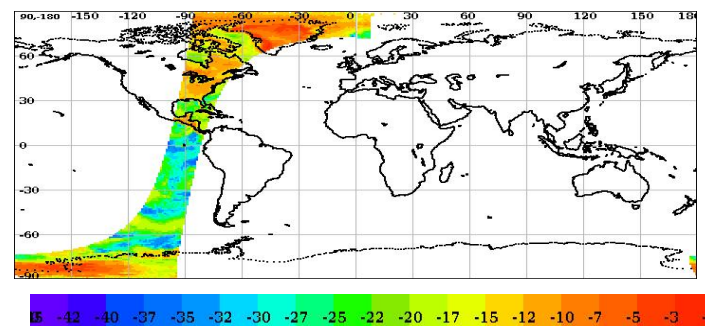


Sigma0(dB)

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 | -6.08 | -3.36 | -4.81 | 0.79 | 123.54 | 171.11 | 144.93 | 11.42 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Aft | -5.74 | -3.64 | -4.90 | 0.59 | 156.08 | 208.59 | 186.80 | 14.26 |
| GreenLand_2 | 77.50 | -41.50 | Inner | ASC | Fore | -7.22 | -3.23 | -4.74 | 1.07 | 132.55 | 181.61 | 157.22 | 14.50 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Fore | -5.22 | -3.61 | -4.35 | 0.62 | 162.32 | 207.01 | 190.22 | 16.56 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Aft | -13.73 | -7.19 | -10.17 | 1.13 | 152.14 | 202.99 | 176.67 | 12.23 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Aft | -13.95 | -8.06 | -10.59 | 1.38 | 188.46 | 232.18 | 209.16 | 11.04 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Fore | -13.04 | -7.97 | -10.12 | 1.06 | 143.63 | 204.19 | 184.70 | 16.10 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Fore | -13.40 | -7.78 | -10.95 | 1.33 | 179.37 | 250.45 | 210.76 | 15.42 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Aft | -10.87 | -6.82 | -8.79 | 0.91 | 143.48 | 182.73 | 160.33 | 10.70 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Aft | -10.36 | -6.05 | -8.79 | 1.03 | 189.21 | 233.15 | 209.66 | 11.01 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Fore | -10.15 | -6.48 | -8.17 | 0.96 | 132.14 | 203.21 | 165.64 | 16.64 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Fore | -11.84 | -5.99 | -8.33 | 1.34 | 166.38 | 252.60 | 212.39 | 20.71 |

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 | 34.60 | 13.40 | 0.00 | 34.16 | 13.38 | 0.00 | 21.73 | 4.44 | 0.00 | 19.85 | 4.35 |

| 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 | 45.79 | 3.52 | 0.00 | 49.24 | 4.12 | 0.00 | 34.30 | 0.31 | 0.00 | 37.03 | 0.36 |
| | Outer (VV) | 0.00 | 49.54 | 3.22 | 0.00 | 50.56 | 4.66 | 0.00 | 43.41 | 0.20 | 0.00 | 35.09 | 0.25 |
| Sigma0(dB) | Inner (HH) | 0.00 | 47.41 | 3.52 | 0.00 | 49.29 | 3.60 | 0.00 | 35.33 | 0.30 | 0.00 | 37.23 | 0.29 |
| | Outer (VV) | 0.00 | 46.35 | 3.52 | 0.00 | 50.16 | 3.44 | 0.00 | 42.56 | 0.16 | 0.00 | 29.13 | 0.08 |

| 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

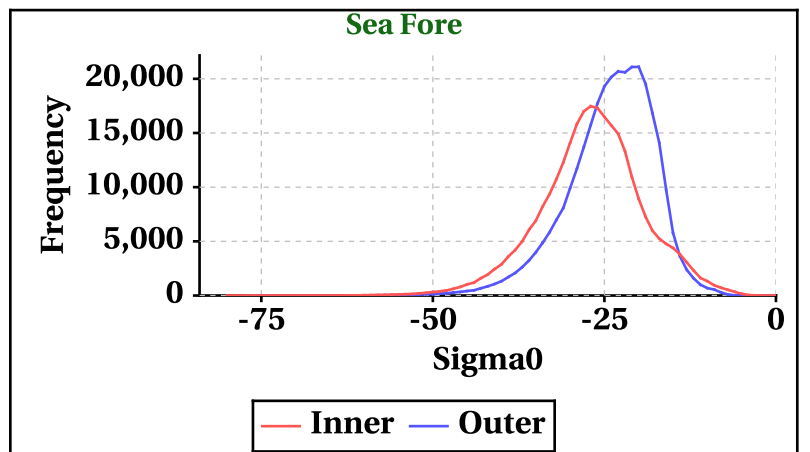
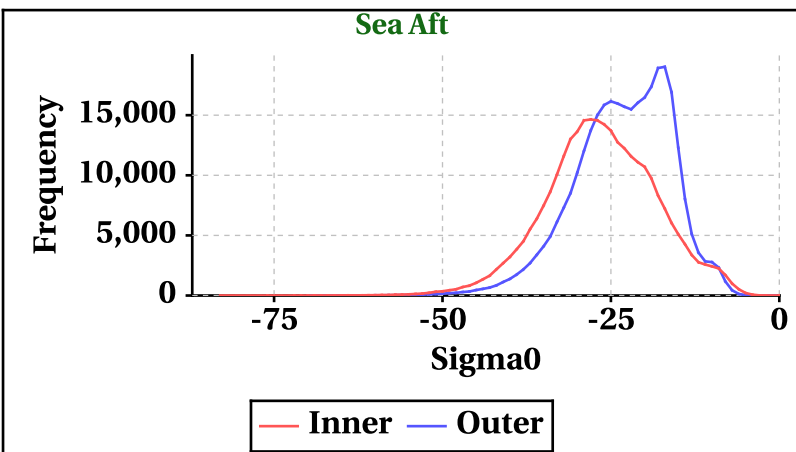
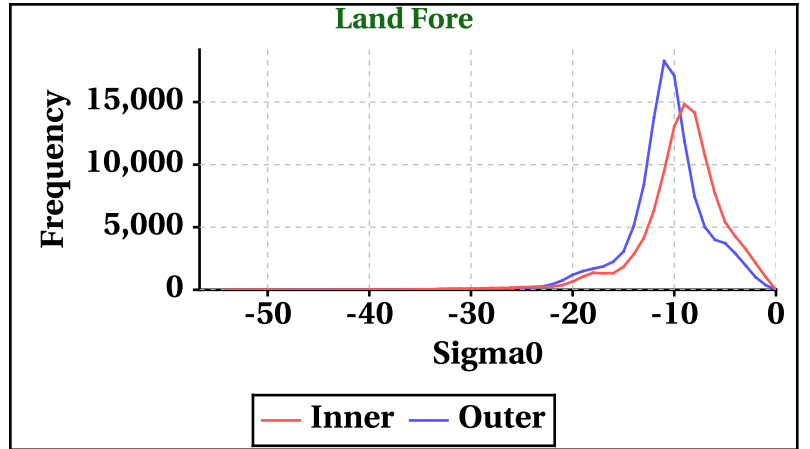
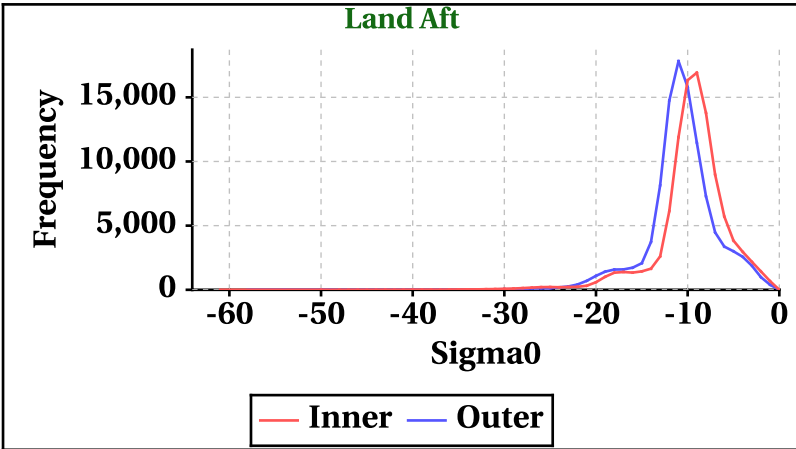
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -61 | -54 | -83 | -80 |
| Max | -1 | -1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -58 | -48 | -70 | -77 |
| 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 | 317 | 314 | 289 | 276 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 315 | 313 | 285 | 285 |

