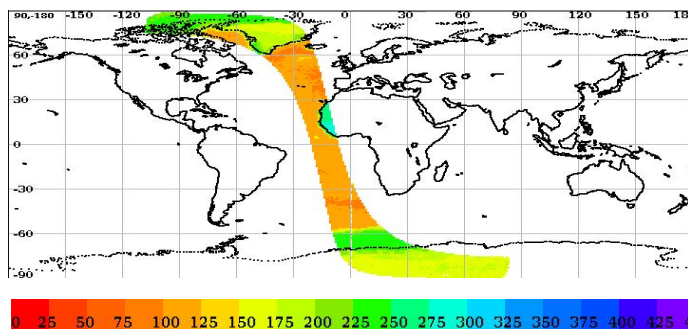


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

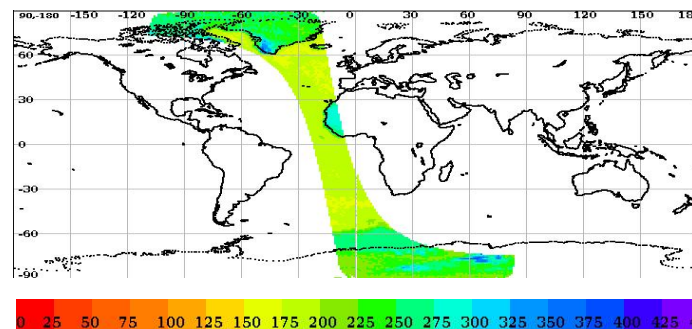
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 10681 | 10682 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 812 | 72 | 02-10-2018 | 02-10-2018 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 25 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

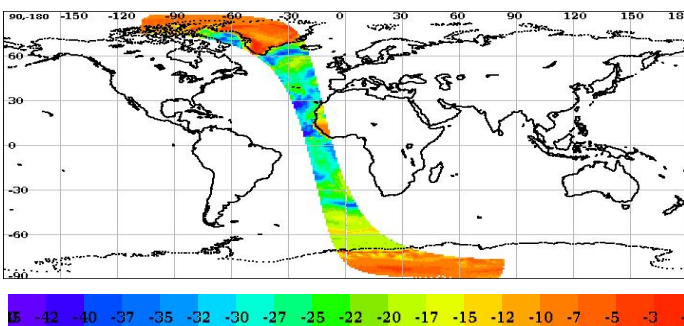


Outer Beam (VV)

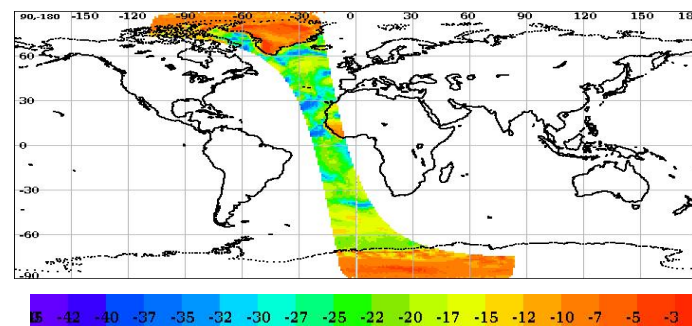


Sigma0(dB)

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 | Inner | ASC | Aft | -7.68 | -4.56 | -6.15 | 1.00 | 131.69 | 187.21 | 162.35 | 15.82 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Aft | -6.92 | -4.40 | -5.52 | 0.82 | 247.74 | 296.14 | 269.19 | 16.89 |
| GreenLand_2 | 77.50 | -41.50 | Inner | ASC | Fore | -7.45 | -4.40 | -5.43 | 0.87 | 143.88 | 192.58 | 163.88 | 13.66 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Fore | -6.08 | -2.20 | -4.61 | 1.11 | 193.33 | 248.74 | 222.70 | 21.45 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Aft | -13.24 | -10.59 | -11.44 | 0.62 | 164.33 | 228.59 | 199.78 | 18.20 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Aft | -14.55 | -10.51 | -12.02 | 0.96 | 223.21 | 292.49 | 259.89 | 14.79 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Fore | -14.34 | -8.84 | -11.27 | 1.20 | 174.63 | 218.86 | 193.42 | 10.28 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Fore | -13.97 | -9.45 | -11.63 | 0.96 | 209.67 | 269.88 | 231.41 | 19.13 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Aft | -10.95 | -8.36 | -9.47 | 0.64 | 159.17 | 219.13 | 188.82 | 16.79 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Aft | -11.12 | -8.00 | -9.52 | 0.89 | 241.76 | 278.07 | 256.30 | 11.42 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Fore | -11.54 | -7.06 | -8.90 | 1.16 | 147.21 | 188.84 | 170.72 | 11.67 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Fore | -12.58 | -6.68 | -8.96 | 1.26 | 210.66 | 260.41 | 229.97 | 15.94 |

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 | 23.19 | 5.50 | 0.00 | 189.31 | 6.74 | 0.00 | 115.59 | 2.01 | 0.00 | 255.39 | 3.14 |

| 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 | 40.66 | 1.14 | 0.00 | 43.76 | 1.73 | 0.00 | 27.92 | 0.02 | 0.00 | 21.39 | 0.02 |
| | Outer (VV) | 0.00 | 38.26 | 1.53 | 0.00 | 44.45 | 2.13 | 0.00 | 28.27 | 0.21 | 0.00 | 31.10 | 0.25 |
| Sigma0(dB) | Inner (HH) | 0.00 | 40.55 | 1.14 | 0.00 | 41.47 | 1.59 | 0.00 | 27.34 | 0.02 | 0.00 | 20.46 | 0.02 |
| | Outer (VV) | 0.00 | 38.61 | 1.42 | 0.00 | 42.90 | 1.83 | 0.00 | 30.49 | 0.16 | 0.00 | 28.57 | 0.18 |

| 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 | | | | | | | |

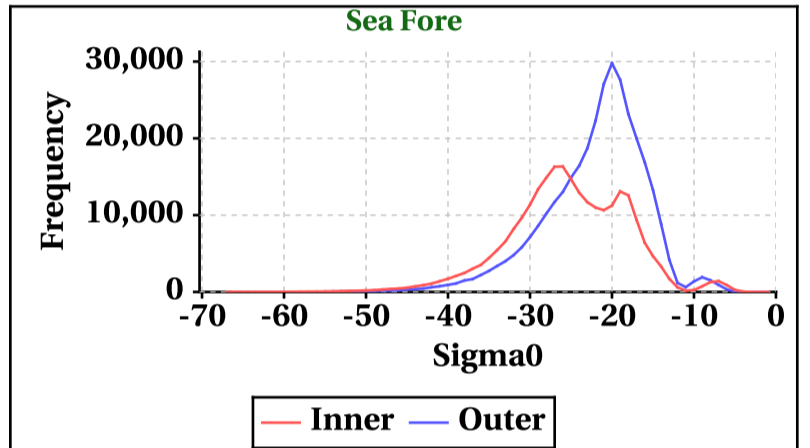
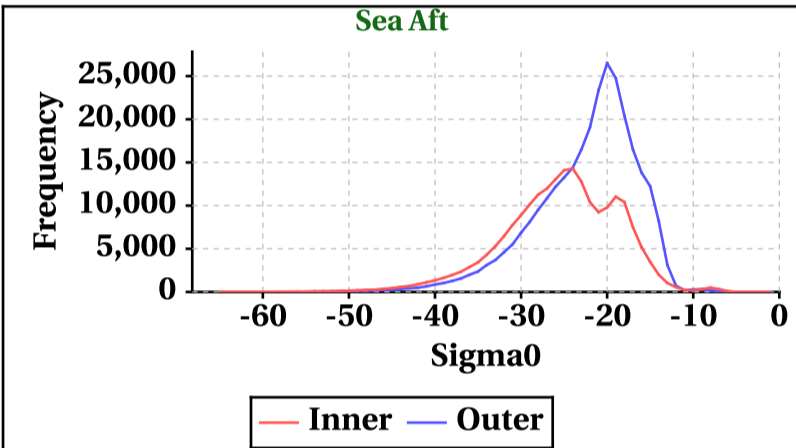
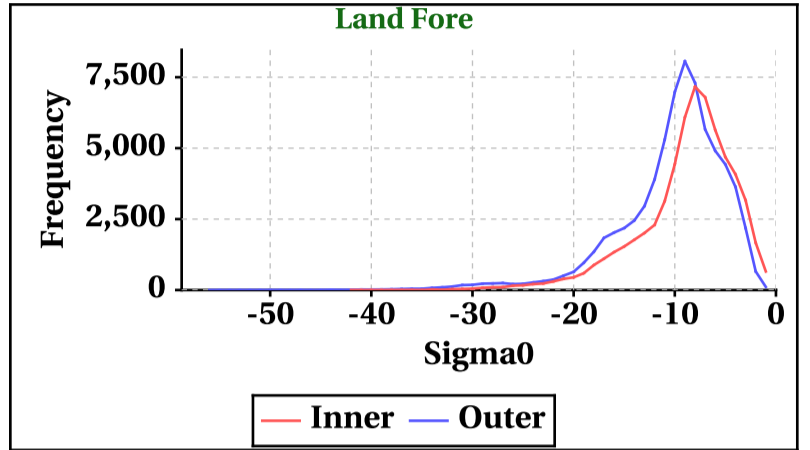
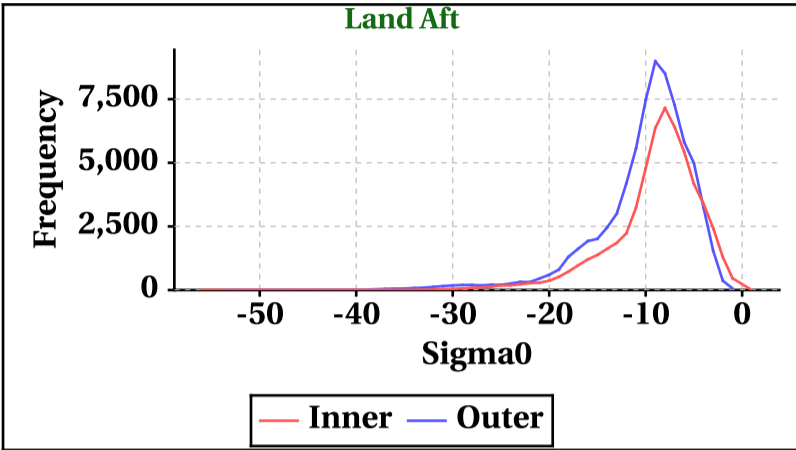
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -56 | -42 | -65 | -67 |
| Max | 1 | -1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -54 | -56 | -60 | -61 |
| 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 | 364 | 345 | 311 | 316 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 500 | 500 | 500 | 500 |

