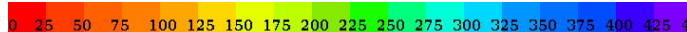
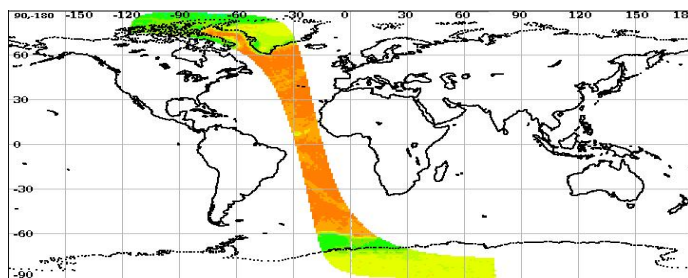


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

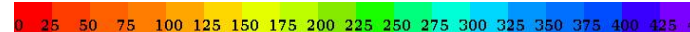
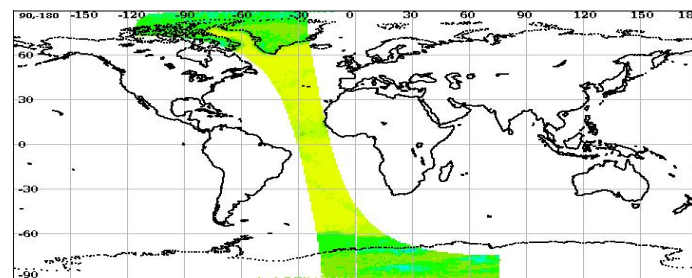
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 4055 | 4056 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 812 | 72 | 02-07-2017 | 02-07-2017 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 25 | v1.1.2 | |

Brightness Temperature

Inner Beam (HH)

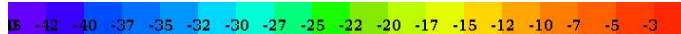
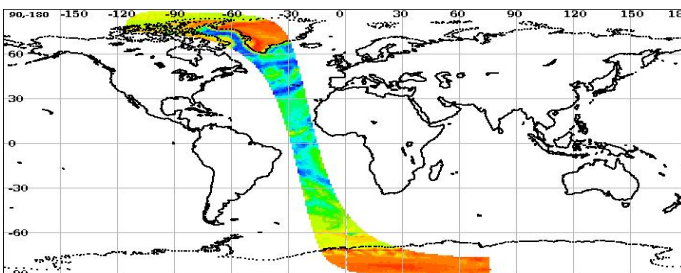


Outer Beam (VV)

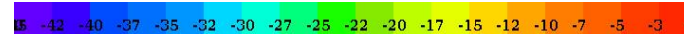
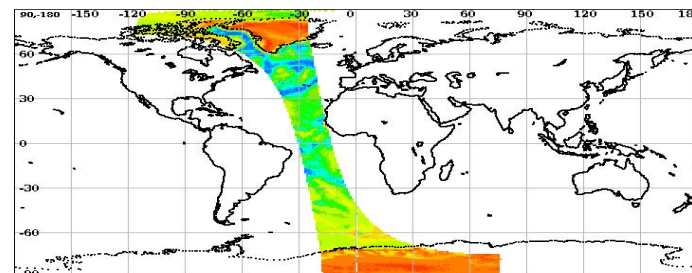


Sigma0(dB)

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 | -8.56 | -2.80 | -5.17 | 1.36 | 150.58 | 191.01 | 168.40 | 11.51 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Aft | -8.90 | -2.94 | -5.26 | 1.35 | 200.67 | 243.86 | 220.12 | 13.73 |
| GreenLand_2 | 77.50 | -41.50 | Inner | ASC | Fore | -7.72 | -1.96 | -4.93 | 1.34 | 143.19 | 184.01 | 160.34 | 10.26 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Fore | -6.35 | -3.26 | -4.71 | 0.98 | 181.73 | 233.50 | 208.41 | 15.30 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Aft | -13.23 | -8.42 | -10.65 | 1.08 | 168.36 | 212.94 | 197.39 | 11.06 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Aft | -16.26 | -9.74 | -11.64 | 1.12 | 205.08 | 246.03 | 229.29 | 10.36 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Fore | -14.60 | -6.68 | -10.28 | 1.60 | 166.58 | 219.19 | 195.69 | 15.19 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Fore | -15.31 | -9.02 | -10.87 | 1.24 | 189.42 | 243.07 | 229.52 | 12.30 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Aft | -11.58 | -6.71 | -8.82 | 1.06 | 149.22 | 200.92 | 172.12 | 14.02 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Aft | -13.60 | -5.81 | -9.05 | 1.52 | 186.96 | 268.59 | 224.66 | 17.52 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Fore | -12.52 | -5.17 | -8.68 | 1.62 | 151.75 | 196.66 | 172.51 | 13.65 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Fore | -11.39 | -4.90 | -8.70 | 1.14 | 204.76 | 250.17 | 221.31 | 12.22 |

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 | 25.82 | 9.01 | 0.00 | 26.85 | 9.01 | 0.00 | 212.99 | 2.89 | 0.00 | 70.38 | 3.20 |

| 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 | 48.28 | 3.17 | 0.00 | 42.09 | 2.50 | 0.00 | 21.88 | 0.03 | 0.00 | 22.64 | 0.06 |
| | Outer (VV) | 0.00 | 38.74 | 2.60 | 0.00 | 38.31 | 2.20 | 0.00 | 26.07 | 0.02 | 0.00 | 19.25 | 0.00 |
| Sigma0(dB) | Inner (HH) | 0.00 | 53.36 | 2.79 | 0.00 | 39.85 | 2.24 | 0.00 | 20.86 | 0.01 | 0.00 | 22.22 | 0.03 |
| | Outer (VV) | 0.00 | 36.53 | 2.40 | 0.00 | 40.54 | 2.03 | 0.00 | 24.99 | 0.01 | 0.00 | 16.30 | 0.00 |

| 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

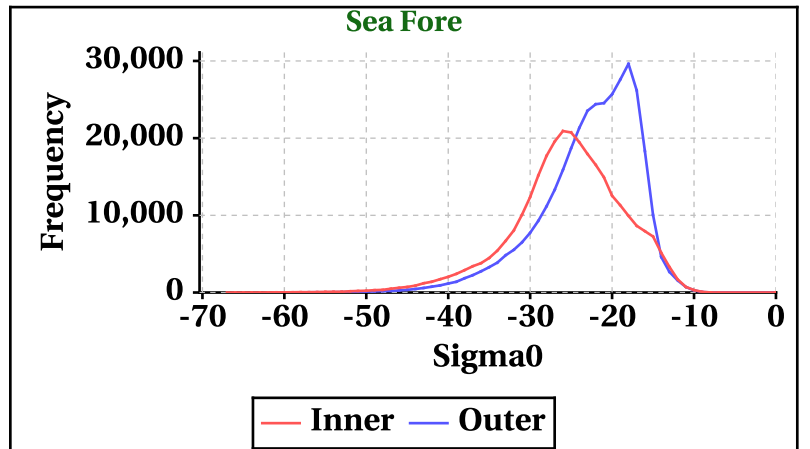
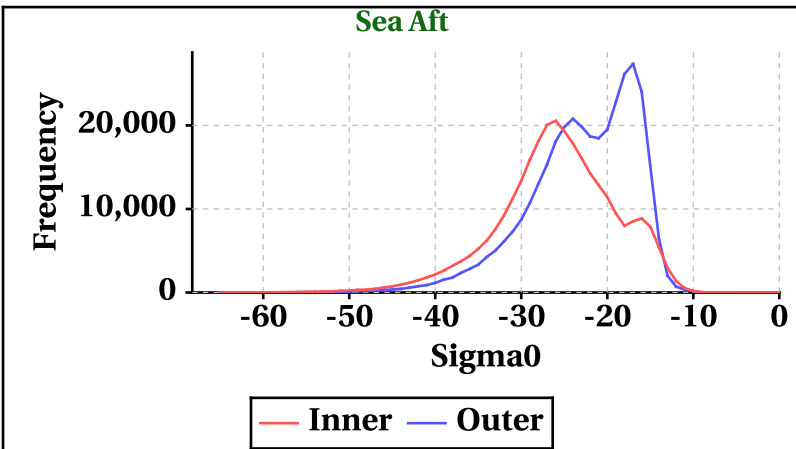
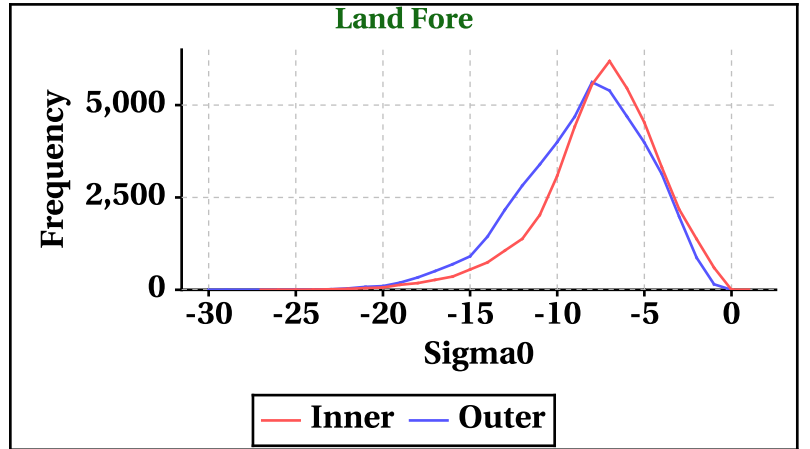
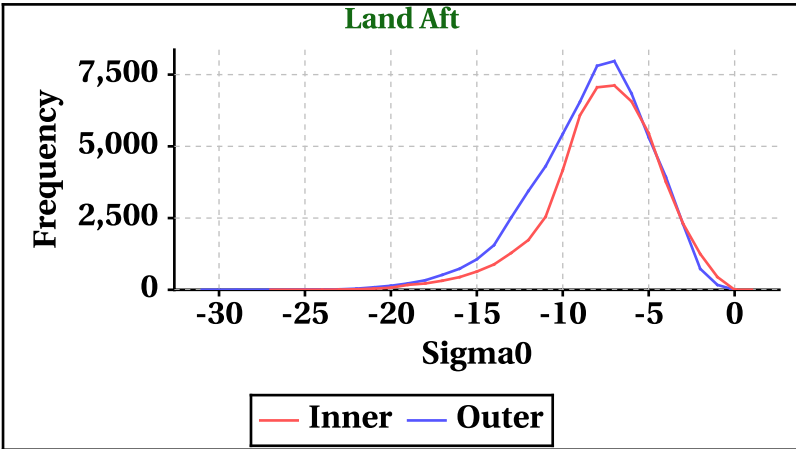
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -27 | -27 | -65 | -67 |
| Max | 1 | 1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -31 | -30 | -61 | -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 | 291 | 291 | 297 | 295 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 500 | 319 | 500 | 301 |

