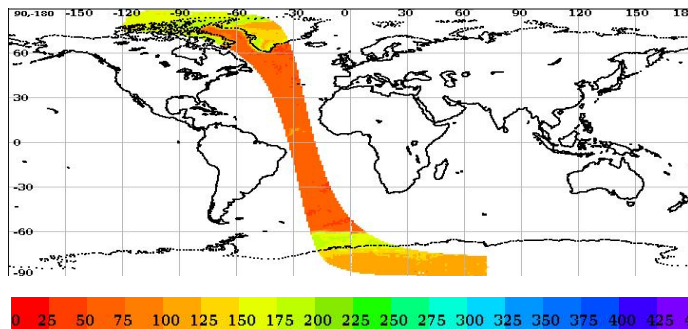


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

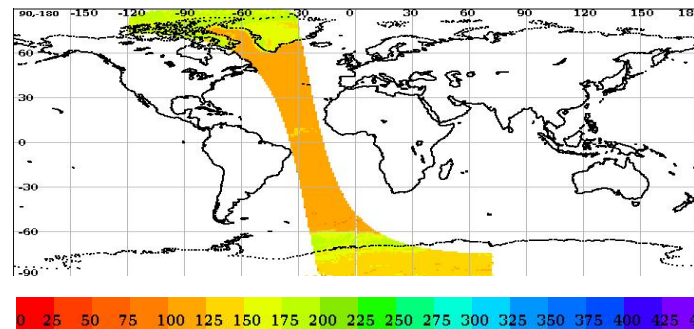
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 14669 | 14670 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 812 | 72 | 04-07-2019 | 04-07-2019 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 25 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

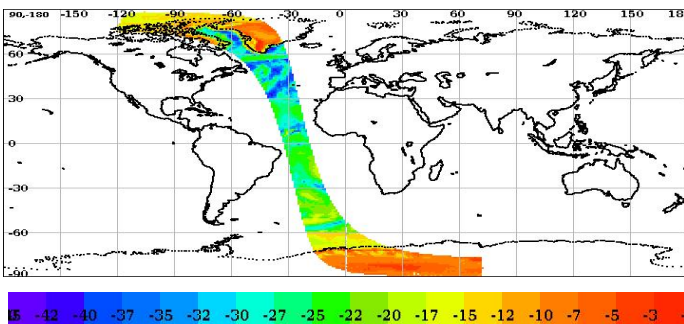


Outer Beam (VV)

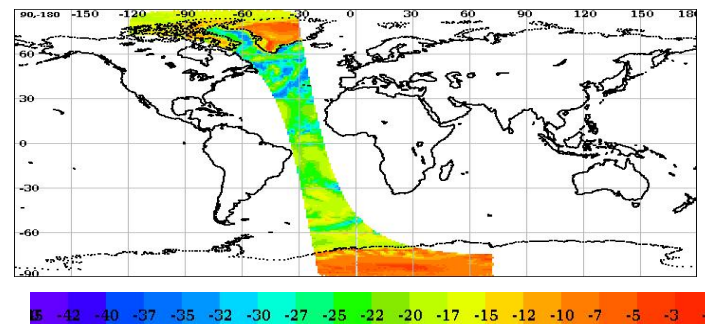


Sigma0(dB)

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 | -9.95 | -2.91 | -5.53 | 1.41 | 80.47 | 143.56 | 114.79 | 15.41 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Aft | -7.93 | -4.28 | -5.83 | 0.90 | 129.18 | 196.33 | 158.06 | 19.05 |
| GreenLand_2 | 77.50 | -41.50 | Inner | ASC | Fore | -6.56 | -2.97 | -5.30 | 0.80 | 93.37 | 150.84 | 119.07 | 14.96 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Fore | -7.11 | -3.74 | -5.49 | 0.94 | 119.28 | 174.59 | 157.43 | 14.74 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Aft | -13.34 | -9.73 | -11.22 | 0.91 | 104.81 | 166.85 | 139.10 | 15.89 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Aft | -14.73 | -10.45 | -12.54 | 0.92 | 138.63 | 203.58 | 167.17 | 12.23 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Fore | -15.28 | -9.71 | -11.49 | 1.25 | 102.03 | 159.41 | 135.07 | 14.88 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Fore | -13.85 | -10.30 | -11.85 | 0.87 | 127.61 | 182.99 | 153.53 | 13.04 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Aft | -11.05 | -7.42 | -9.35 | 0.83 | 100.85 | 160.24 | 132.49 | 13.39 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Aft | -11.43 | -7.87 | -9.35 | 0.86 | 133.26 | 186.42 | 161.37 | 14.20 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Fore | -11.15 | -7.34 | -9.23 | 0.93 | 110.51 | 149.59 | 129.75 | 10.00 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Fore | -11.14 | -6.16 | -8.96 | 1.15 | 140.61 | 187.43 | 164.73 | 11.83 |

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 | 22.10 | 5.85 | 0.00 | 24.83 | 7.26 | 0.00 | 131.36 | 2.44 | 0.00 | 64.78 | 3.41 |

| 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 | 37.91 | 1.16 | 0.00 | 38.25 | 1.58 | 0.00 | 31.58 | 0.04 | 0.00 | 27.42 | 0.06 |
| | Outer (VV) | 0.00 | 39.49 | 1.68 | 0.00 | 36.63 | 1.82 | 0.00 | 24.11 | 0.02 | 0.00 | 29.15 | 0.02 |
| Sigma0(dB) | Inner (HH) | 0.00 | 37.90 | 1.16 | 0.00 | 37.38 | 1.44 | 0.00 | 32.26 | 0.04 | 0.00 | 26.03 | 0.04 |
| | Outer (VV) | 0.00 | 37.66 | 1.58 | 0.00 | 37.30 | 1.65 | 0.00 | 22.39 | 0.02 | 0.00 | 30.03 | 0.01 |

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

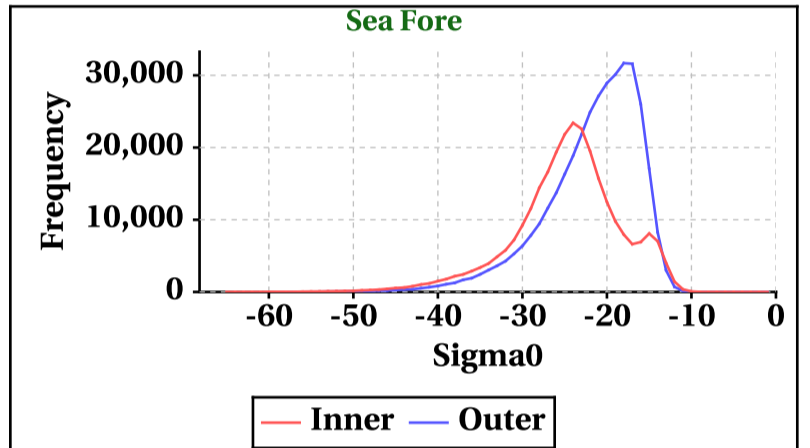
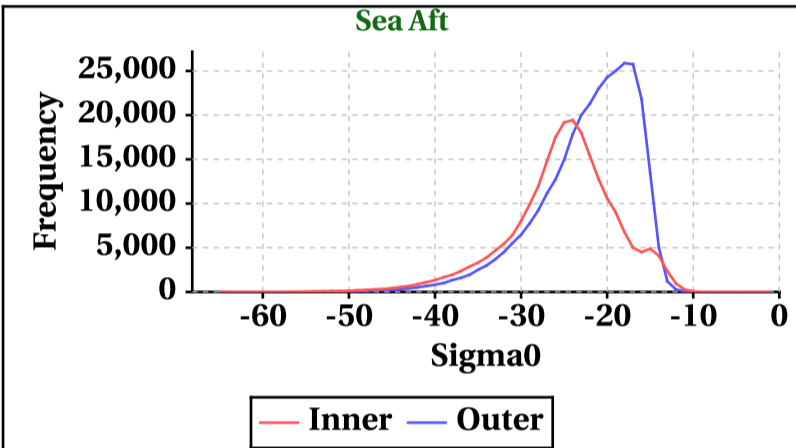
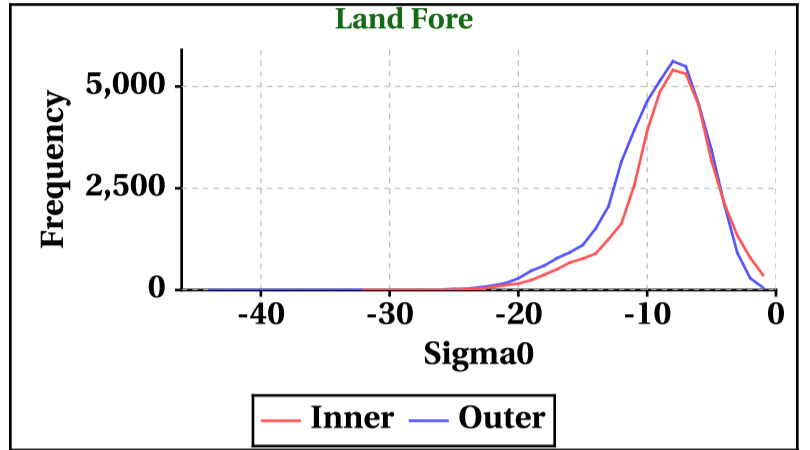
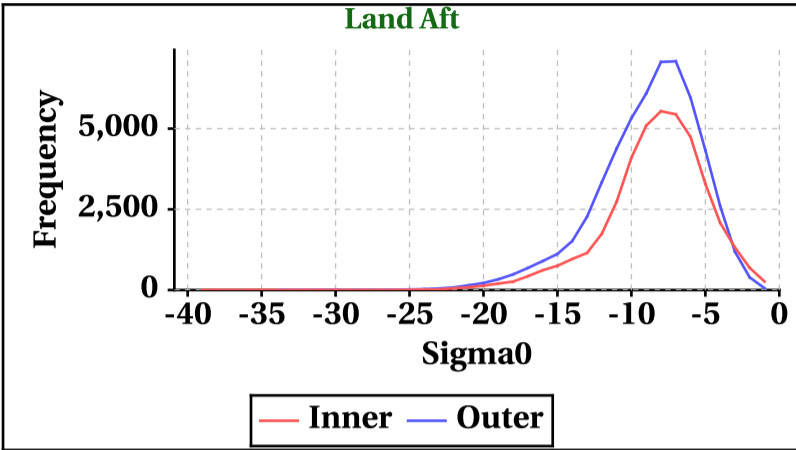
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -39 | -32 | -65 | -65 |
| Max | -1 | -1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -34 | -44 | -60 | -59 |
| 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 | 238 | 240 | 230 | 237 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 252 | 243 | 246 | 241 |

