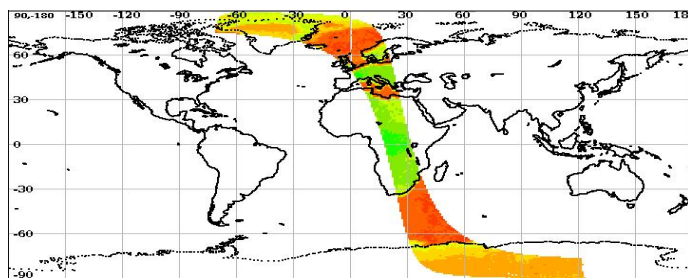


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

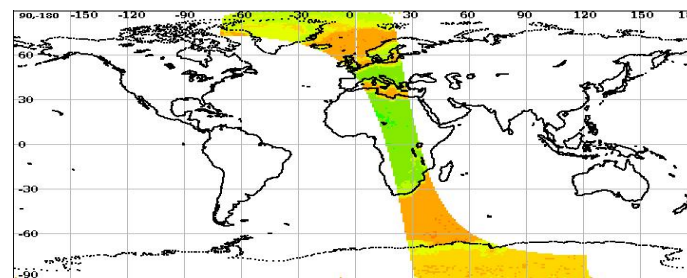
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 14522 | 14523 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 813 | 72 | 24-06-2019 | 24-06-2019 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 25 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

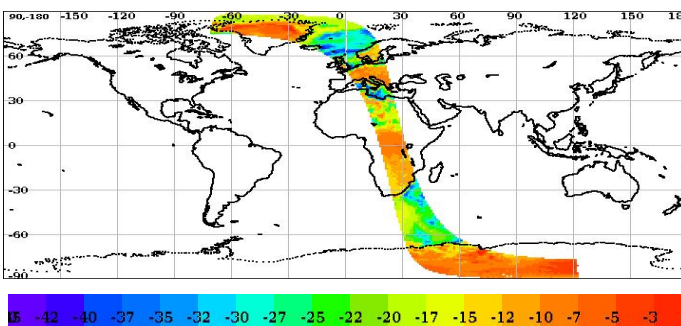


Outer Beam (VV)

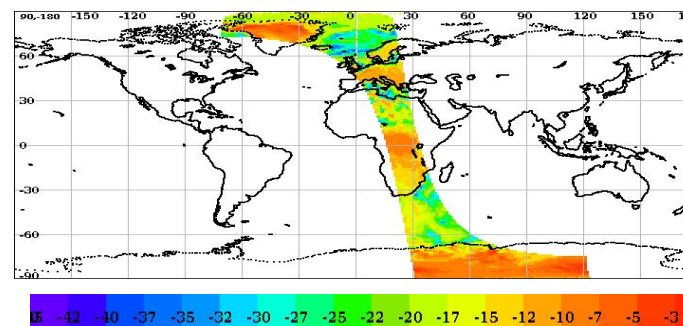


Sigma0(dB)

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 |
|-------------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| ANT_1 | -75.00 | 121.00 | Outer | ASC | Aft | -10.23 | -6.49 | -7.92 | 1.22 | 116.12 | 154.35 | 135.56 | 11.21 |
| GreenLand_2 | 77.50 | -41.50 | Inner | ASC | Aft | -7.45 | -4.13 | -5.70 | 1.07 | 106.99 | 142.38 | 122.31 | 11.37 |
| GreenLand_2 | 77.50 | -41.50 | Inner | ASC | Fore | -7.86 | -3.84 | -5.82 | 0.99 | 93.20 | 139.27 | 117.93 | 14.16 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Fore | -6.15 | -3.55 | -4.92 | 0.70 | 133.41 | 190.56 | 167.49 | 16.65 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Aft | -15.37 | -9.70 | -12.45 | 1.07 | 139.23 | 185.62 | 168.42 | 12.81 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Fore | -14.88 | -11.18 | -12.56 | 0.71 | 144.35 | 231.24 | 175.29 | 18.40 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Aft | -11.02 | -7.79 | -9.60 | 0.75 | 104.04 | 152.37 | 130.12 | 13.46 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Aft | -13.99 | -6.67 | -9.74 | 1.53 | 123.85 | 200.49 | 160.00 | 18.04 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Fore | -12.69 | -7.00 | -9.52 | 1.33 | 107.65 | 163.02 | 132.34 | 12.88 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Fore | -12.90 | -6.79 | -9.40 | 1.21 | 135.68 | 195.40 | 164.55 | 13.90 |
| Sahara | 19.10 | 14.30 | Inner | ASC | Aft | -48.23 | -18.70 | -26.45 | 4.36 | 168.09 | 237.58 | 202.43 | 17.28 |
| Sahara | 19.10 | 14.30 | Outer | ASC | Aft | -59.69 | -17.18 | -26.88 | 5.68 | 182.89 | 254.70 | 228.35 | 15.04 |
| Sahara | 19.10 | 14.30 | Inner | ASC | Fore | -41.97 | -17.22 | -26.43 | 4.02 | 155.98 | 244.27 | 202.72 | 14.49 |
| Sahara | 19.10 | 14.30 | Outer | ASC | Fore | -41.51 | -19.61 | -26.53 | 4.55 | 185.95 | 256.42 | 222.52 | 15.25 |

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 | 22.12 | 5.98 | 0.00 | 24.28 | 7.51 | 0.00 | 192.44 | 2.29 | 0.00 | 67.89 | 3.70 |

| 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 | 47.29 | 2.23 | 0.00 | 46.75 | 2.75 | 0.00 | 32.48 | 0.15 | 0.00 | 42.66 | 0.20 |
| | Outer (VV) | 0.00 | 44.57 | 2.13 | 0.00 | 43.27 | 2.49 | 0.00 | 43.87 | 0.34 | 0.00 | 39.66 | 0.44 |
| Sigma0(dB) | Inner (HH) | 0.00 | 49.11 | 2.23 | 0.00 | 45.38 | 2.55 | 0.00 | 33.15 | 0.15 | 0.00 | 41.85 | 0.16 |
| | Outer (VV) | 0.00 | 42.55 | 2.00 | 0.00 | 39.57 | 2.11 | 0.00 | 42.72 | 0.30 | 0.00 | 36.59 | 0.33 |

| 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

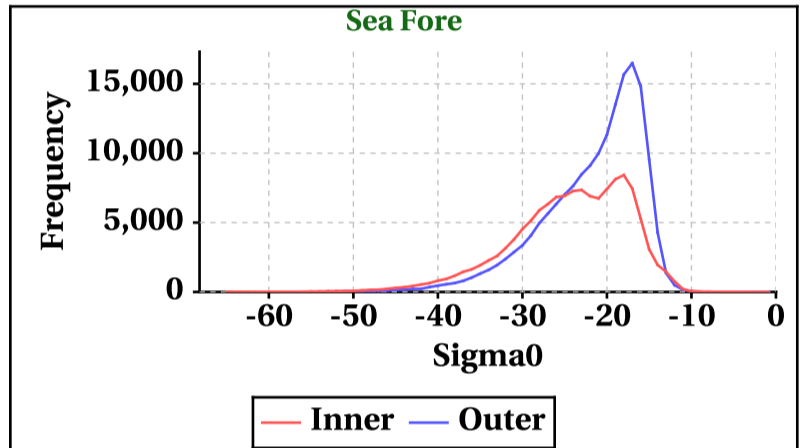
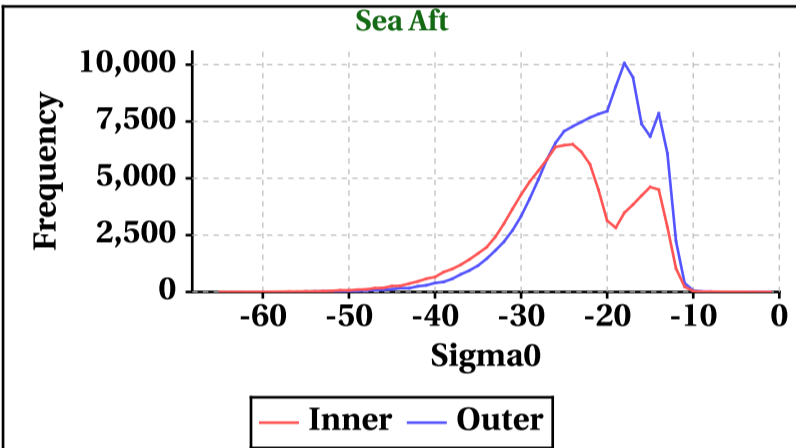
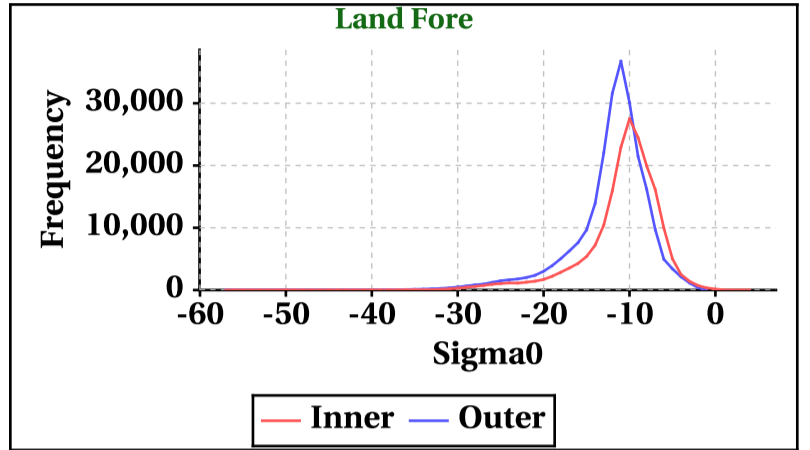
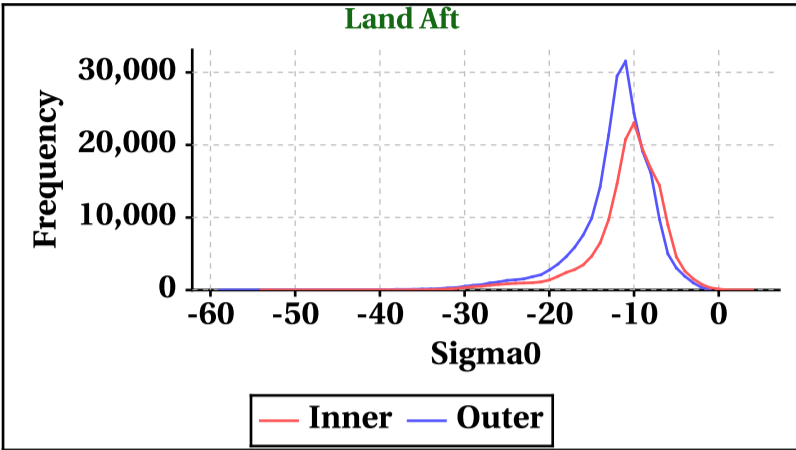
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -54 | -57 | -65 | -65 |
| Max | 4 | 4 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -59 | -57 | -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 | 291 | 288 | 228 | 223 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 310 | 453 | 227 | 232 |

