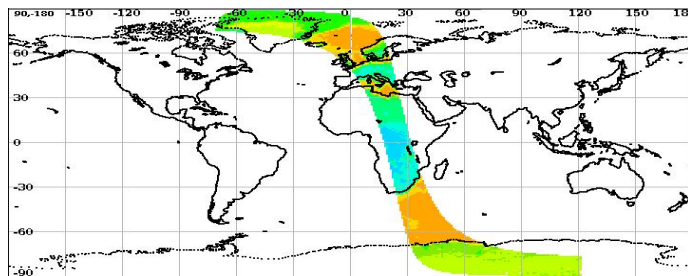


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

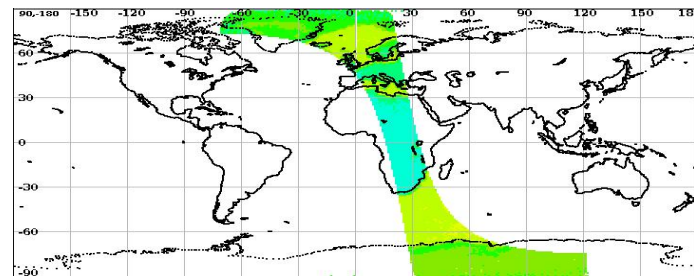
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 18002 | 18003 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 812 | 72 | 19-02-2020 | 20-02-2020 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 25 | v1.1.4 | |

Brightness Temperature

Inner Beam (HH)

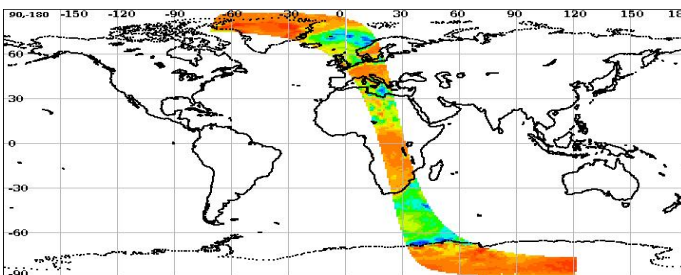


Outer Beam (VV)

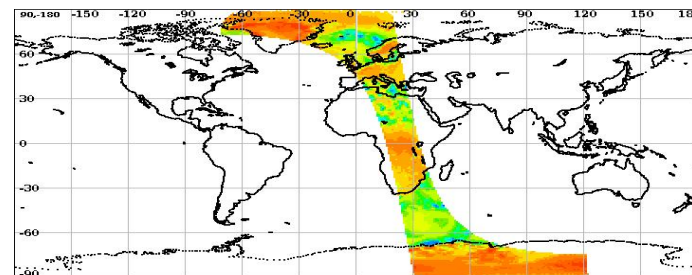


Sigma0(dB)

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 | -8.70 | -8.70 | -8.70 | 0.00 | 188.53 | 188.53 | 188.53 | 0.00 |
| GreenLand_2 | 77.50 | -41.50 | Inner | ASC | Aft | -8.36 | -4.25 | -5.41 | 1.09 | 165.62 | 210.69 | 175.89 | 13.70 |
| GreenLand_2 | 77.50 | -41.50 | Inner | ASC | Fore | -8.81 | -4.26 | -5.85 | 1.13 | 140.93 | 195.08 | 172.57 | 12.34 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Fore | -6.93 | -4.00 | -5.31 | 0.86 | 207.83 | 250.27 | 230.24 | 12.75 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Aft | -13.92 | -9.83 | -11.26 | 0.97 | 206.75 | 266.60 | 232.96 | 16.32 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Fore | -13.22 | -10.03 | -11.64 | 0.66 | 200.55 | 268.64 | 234.01 | 12.34 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Aft | -11.82 | -7.57 | -9.46 | 1.03 | 171.46 | 212.47 | 193.76 | 11.15 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Aft | -11.66 | -7.28 | -9.62 | 1.00 | 208.07 | 277.13 | 245.12 | 17.30 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Fore | -11.34 | -6.77 | -9.26 | 1.05 | 169.44 | 222.55 | 195.01 | 13.20 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Fore | -11.10 | -5.17 | -8.66 | 1.30 | 219.04 | 278.38 | 245.60 | 15.77 |
| Sahara | 19.10 | 14.30 | Inner | ASC | Aft | -39.90 | -18.19 | -27.37 | 4.04 | 218.44 | 306.85 | 263.35 | 19.18 |
| Sahara | 19.10 | 14.30 | Outer | ASC | Aft | -44.48 | -20.39 | -27.66 | 4.95 | 243.20 | 324.88 | 287.16 | 14.95 |
| Sahara | 19.10 | 14.30 | Inner | ASC | Fore | -39.32 | -19.18 | -26.92 | 3.50 | 225.76 | 306.38 | 261.20 | 16.15 |
| Sahara | 19.10 | 14.30 | Outer | ASC | Fore | -49.76 | -19.14 | -27.28 | 4.52 | 253.24 | 337.35 | 295.64 | 15.35 |

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 | 22.09 | 5.91 | 0.00 | 24.80 | 7.50 | 0.00 | 177.05 | 2.20 | 0.00 | 58.08 | 3.27 |

| 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 | 41.72 | 1.05 | 0.00 | 39.99 | 1.45 | 0.00 | 44.53 | 0.20 | 0.00 | 41.03 | 0.19 |
| | Outer (VV) | 0.00 | 41.84 | 1.13 | 0.00 | 45.22 | 1.76 | 0.00 | 39.80 | 0.36 | 0.00 | 37.95 | 0.52 |
| Sigma0(dB) | Inner (HH) | 0.00 | 40.95 | 1.01 | 0.00 | 40.37 | 1.35 | 0.00 | 43.10 | 0.19 | 0.00 | 41.73 | 0.17 |
| | Outer (VV) | 0.00 | 39.51 | 1.04 | 0.00 | 41.30 | 1.39 | 0.00 | 38.33 | 0.32 | 0.00 | 41.24 | 0.39 |

| 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

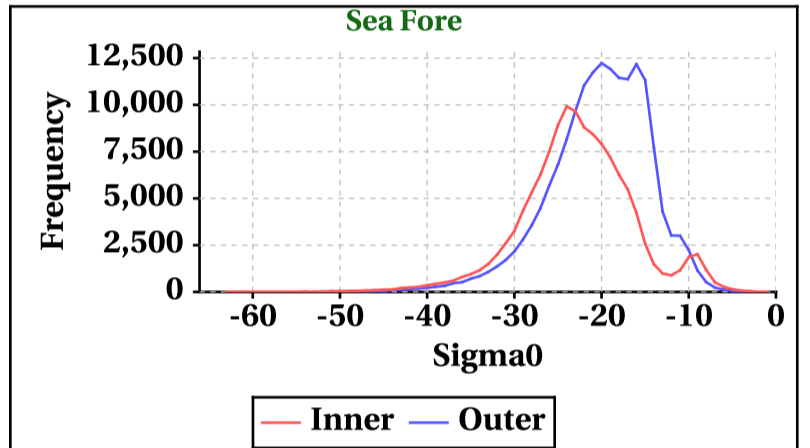
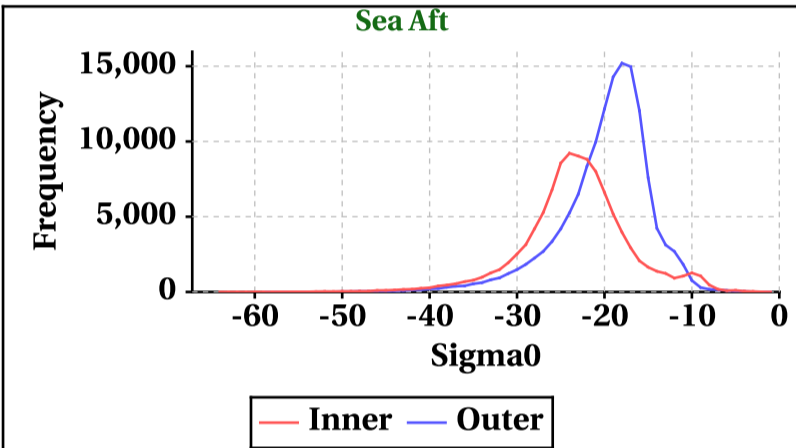
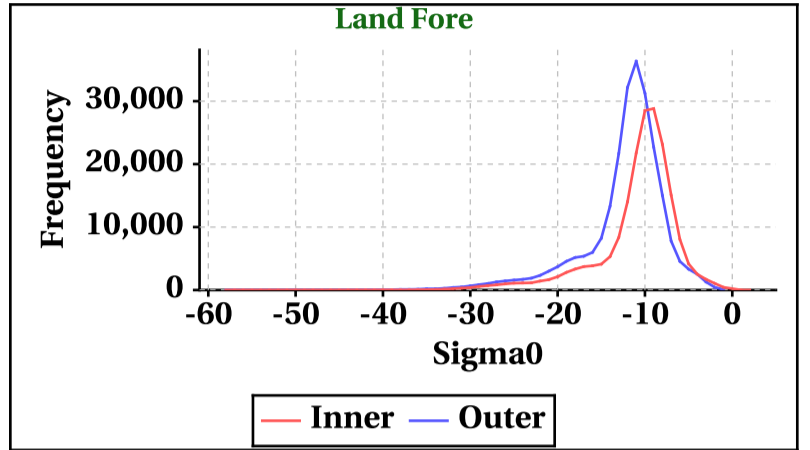
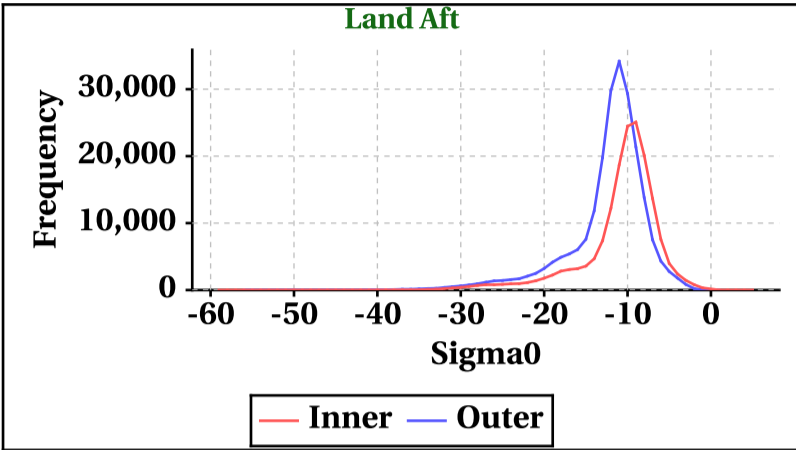
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -59 | -58 | -64 | -63 |
| Max | 5 | 2 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -56 | -58 | -59 | -60 |
| 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 | 393 | 500 | 292 | 301 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 367 | 417 | 306 | 304 |

