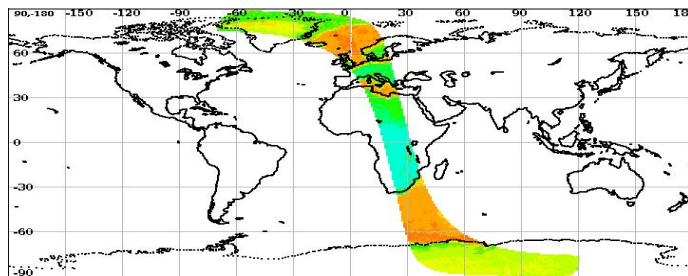


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

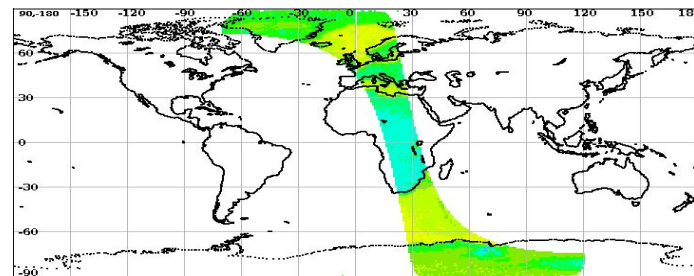
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 12260 | 12261 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 404 | 36 | 19-01-2019 | 19-01-2019 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 50 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

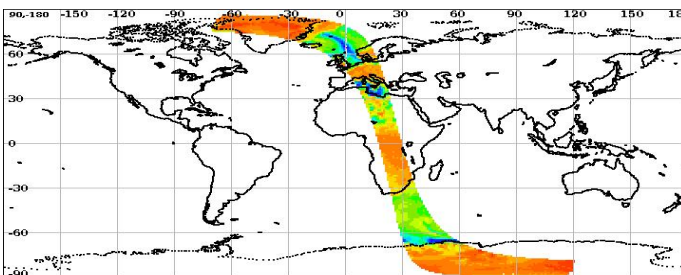


Outer Beam (VV)

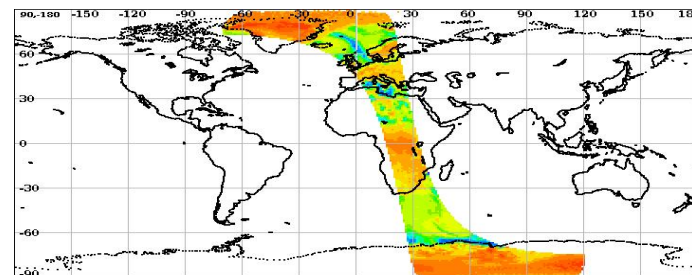


Sigma0(dB)

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 | -6.88 | -4.80 | -5.90 | 0.62 | 165.12 | 192.45 | 174.96 | 8.40 |
| GreenLand_2 | 77.50 | -41.50 | Inner | ASC | Fore | -7.96 | -4.17 | -6.21 | 1.02 | 127.02 | 179.12 | 150.84 | 15.68 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Fore | -7.65 | -3.32 | -5.34 | 1.13 | 212.22 | 252.13 | 234.51 | 14.83 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Aft | -14.56 | -9.82 | -12.22 | 1.05 | 220.45 | 296.58 | 255.36 | 17.71 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Fore | -14.70 | -11.23 | -12.89 | 0.70 | 190.45 | 251.46 | 228.31 | 14.96 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Aft | -11.77 | -7.02 | -9.99 | 1.13 | 166.09 | 206.68 | 183.38 | 10.92 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Aft | -13.86 | -5.27 | -9.75 | 2.13 | 222.92 | 305.27 | 263.96 | 19.73 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Fore | -14.00 | -6.47 | -10.72 | 1.53 | 156.05 | 207.94 | 174.17 | 11.63 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Fore | -13.53 | -7.16 | -10.03 | 1.29 | 217.07 | 263.72 | 234.34 | 13.12 |
| Sahara | 19.10 | 14.30 | Inner | ASC | Aft | -37.83 | -19.08 | -27.59 | 4.30 | 218.39 | 278.73 | 248.70 | 15.86 |
| Sahara | 19.10 | 14.30 | Outer | ASC | Aft | -42.46 | -20.45 | -27.66 | 4.84 | 247.05 | 311.74 | 282.94 | 19.12 |
| Sahara | 19.10 | 14.30 | Inner | ASC | Fore | -35.05 | -20.33 | -27.17 | 3.48 | 212.57 | 283.84 | 251.70 | 13.56 |
| Sahara | 19.10 | 14.30 | Outer | ASC | Fore | -50.23 | -19.46 | -27.64 | 5.50 | 253.45 | 318.33 | 285.05 | 15.68 |

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 | 30.60 | 12.18 | 0.00 | 26.00 | 12.76 | 0.00 | 143.85 | 8.12 | 0.00 | 60.97 | 10.38 |

| 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 | 46.26 | 6.94 | 0.00 | 51.83 | 8.86 | 0.00 | 39.48 | 0.66 | 0.00 | 48.44 | 0.83 |
| | Outer (VV) | 0.00 | 42.76 | 5.82 | 0.00 | 45.11 | 7.15 | 0.00 | 40.37 | 1.54 | 0.00 | 46.72 | 1.73 |
| Sigma0(dB) | Inner (HH) | 0.00 | 45.79 | 6.96 | 0.00 | 50.21 | 8.70 | 0.00 | 39.76 | 0.61 | 0.00 | 47.60 | 0.69 |
| | Outer (VV) | 0.00 | 42.72 | 5.65 | 0.00 | 45.66 | 7.07 | 0.00 | 39.88 | 1.40 | 0.00 | 45.19 | 1.39 |

| 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

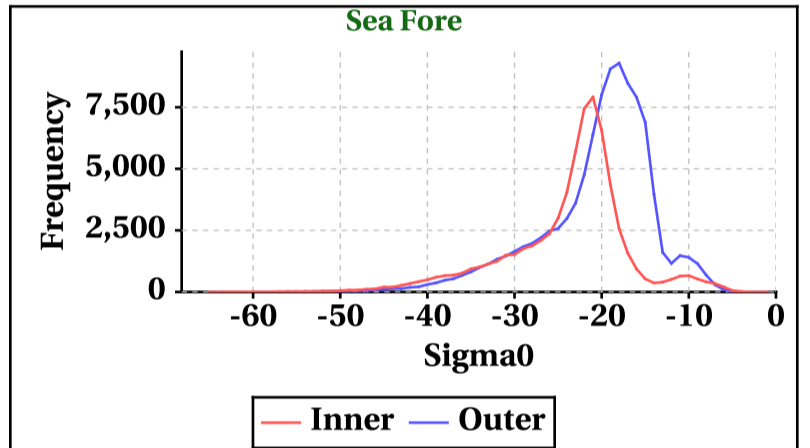
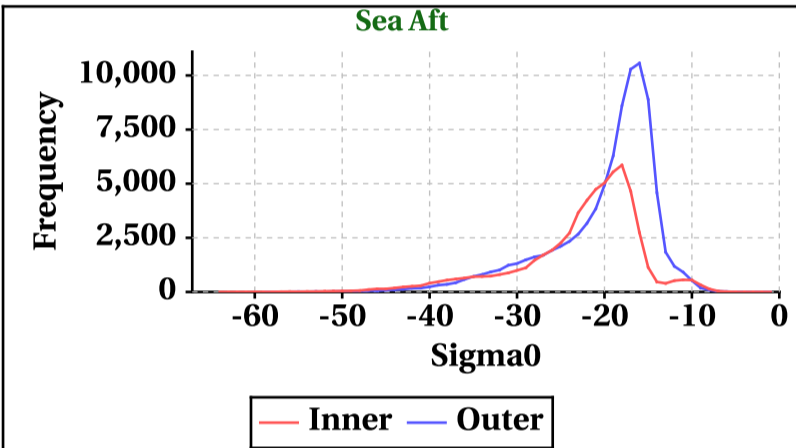
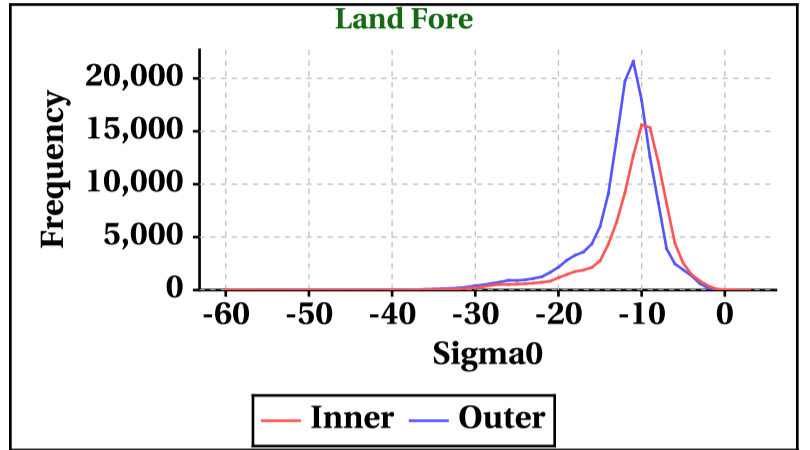
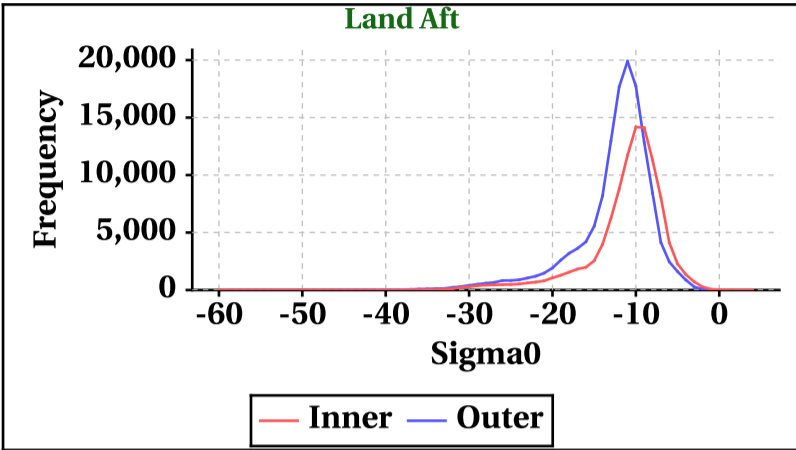
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -60 | -60 | -64 | -65 |
| Max | 4 | 3 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -59 | -56 | -59 | -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 | 366 | 363 | 294 | 292 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 500 | 500 | 351 | 299 |

