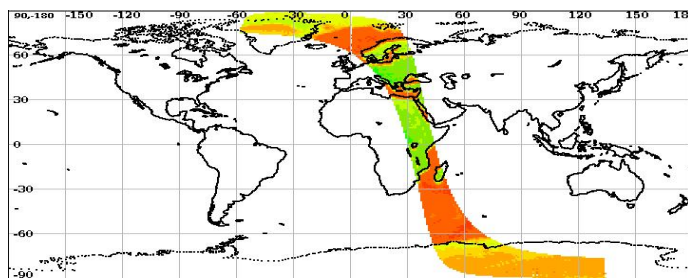


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

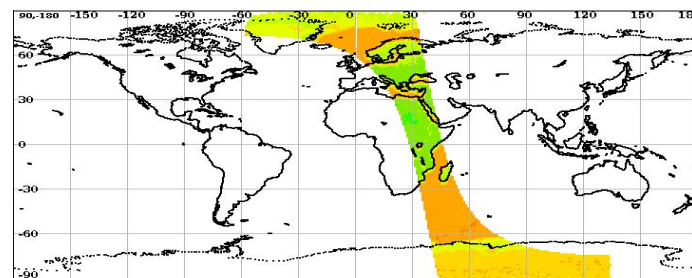
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 14681 | 14682 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 812 | 72 | 05-07-2019 | 06-07-2019 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 25 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

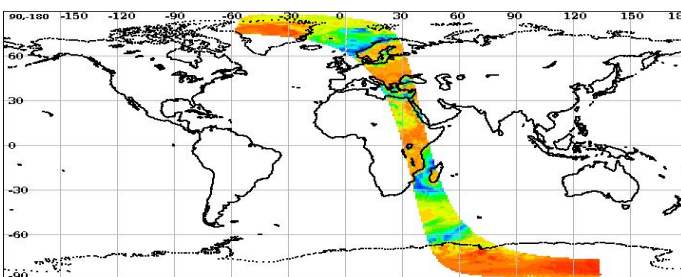


Outer Beam (VV)

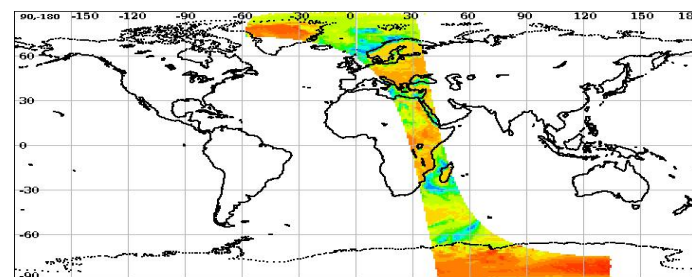


Sigma0(dB)

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 |
|-------------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| ANT_1 | -75.00 | 121.00 | Inner | ASC | Aft | -6.82 | -4.30 | -5.79 | 0.72 | 105.89 | 148.10 | 122.76 | 13.75 |
| ANT_1 | -75.00 | 121.00 | Outer | ASC | Aft | -9.95 | -4.53 | -7.66 | 1.17 | 109.80 | 156.37 | 130.73 | 12.10 |
| ANT_1 | -75.00 | 121.00 | Inner | ASC | Fore | -6.94 | -4.10 | -5.77 | 0.83 | 102.81 | 148.66 | 122.90 | 12.87 |
| GreenLand_2 | 77.50 | -41.50 | Inner | ASC | Fore | -6.65 | -4.40 | -5.39 | 0.73 | 92.47 | 144.61 | 117.41 | 16.18 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Fore | -6.36 | -3.47 | -4.83 | 0.88 | 141.79 | 194.37 | 169.38 | 16.47 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Aft | -10.09 | -6.91 | -8.42 | 0.77 | 115.61 | 153.83 | 131.26 | 10.65 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Fore | -11.01 | -6.58 | -8.62 | 0.88 | 98.83 | 160.94 | 132.93 | 13.80 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Fore | -11.58 | -6.18 | -9.17 | 1.13 | 145.51 | 198.91 | 169.00 | 12.97 |

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 | 23.38 | 5.84 | 0.00 | 267.90 | 7.21 | 0.00 | 166.50 | 2.43 | 0.00 | 256.48 | 3.39 |

| 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 | 43.48 | 2.17 | 0.00 | 49.31 | 2.67 | 0.00 | 38.65 | 0.20 | 0.00 | 38.05 | 0.31 |
| | Outer (VV) | 0.00 | 35.64 | 2.13 | 0.00 | 39.25 | 2.37 | 0.00 | 38.01 | 0.23 | 0.00 | 43.86 | 0.34 |
| Sigma0(dB) | Inner (HH) | 0.00 | 43.02 | 2.16 | 0.00 | 46.01 | 2.49 | 0.00 | 37.37 | 0.21 | 0.00 | 38.32 | 0.27 |
| | Outer (VV) | 0.00 | 35.30 | 2.06 | 0.00 | 36.99 | 2.06 | 0.00 | 37.79 | 0.20 | 0.00 | 40.58 | 0.27 |

| 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

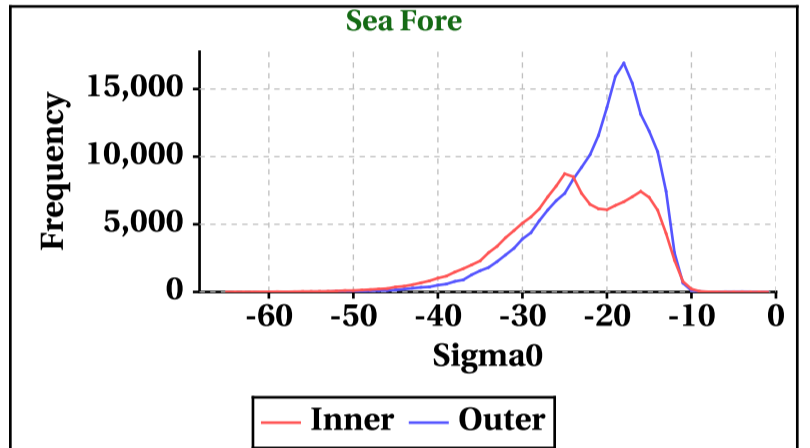
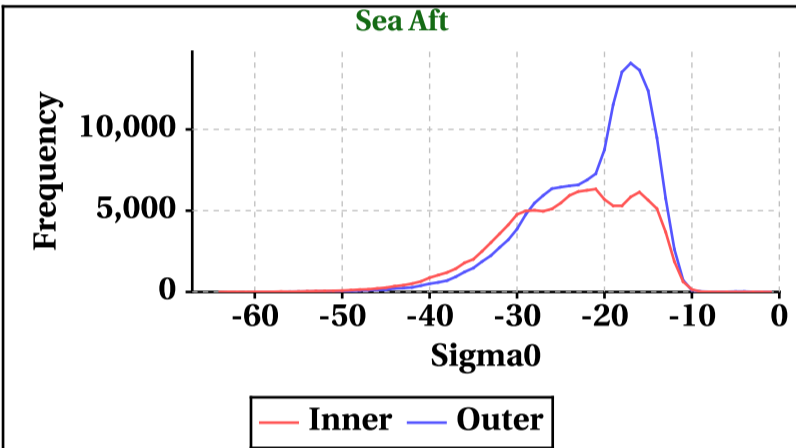
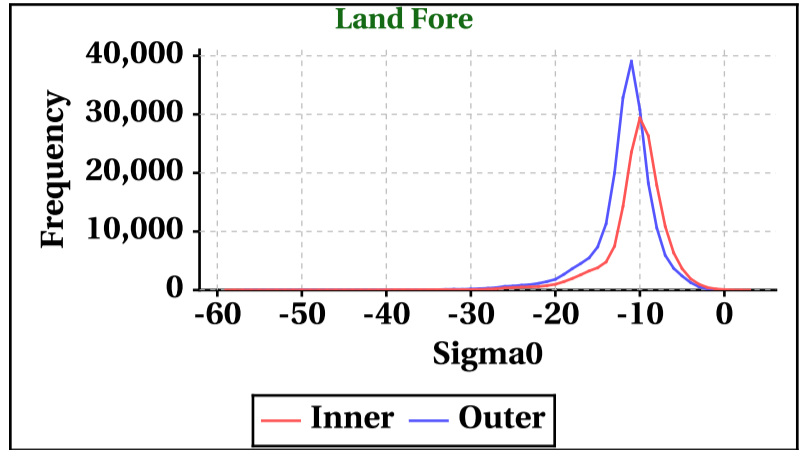
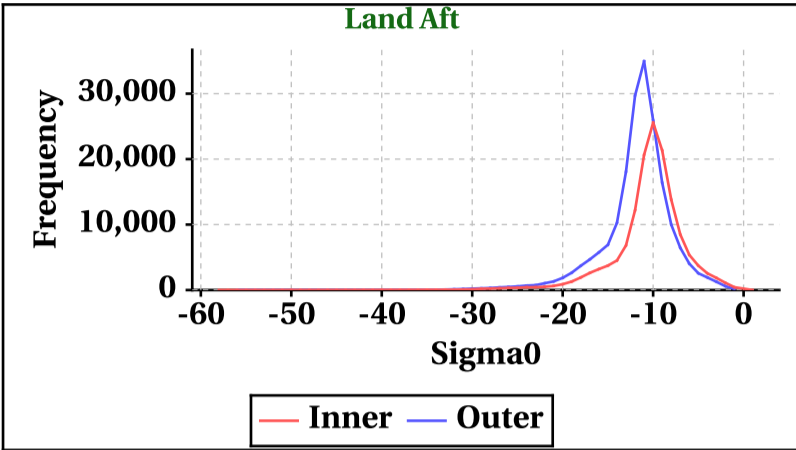
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -58 | -59 | -64 | -65 |
| Max | 1 | 3 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -56 | -57 | -60 | -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 | 297 | 281 | 219 | 226 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 322 | 286 | 226 | 243 |

