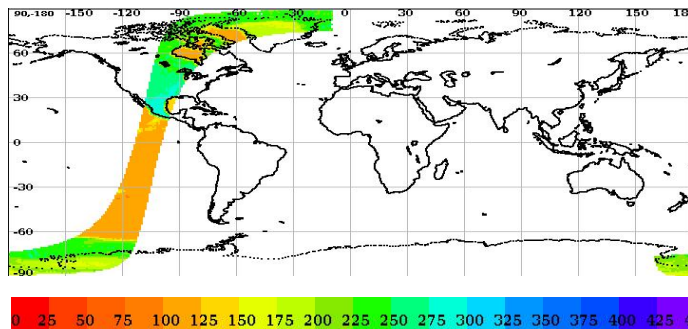


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

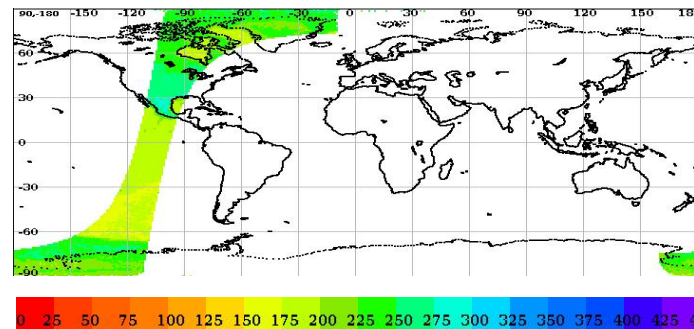
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 16362 | 16363 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 812 | 72 | 29-10-2019 | 29-10-2019 |
| Direction | WVC Size(km) | Processor Version | |
| NS | 25 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

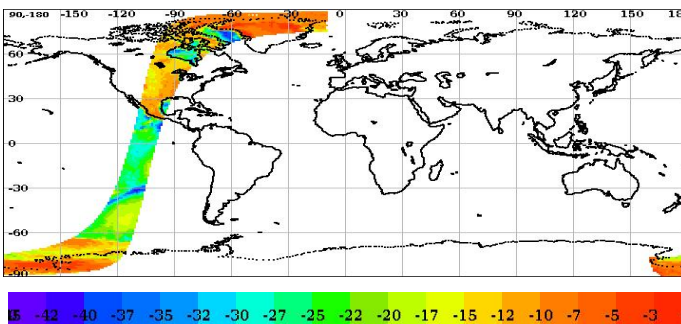


Outer Beam (VV)

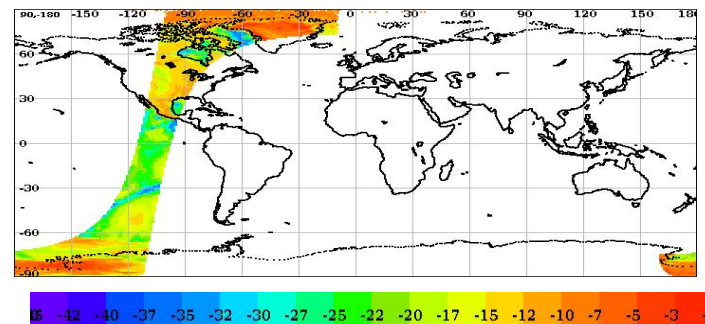


Sigma0(dB)

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 | DSC | Aft | -6.71 | -3.73 | -5.39 | 0.80 | 159.18 | 182.55 | 166.96 | 7.19 |
| GreenLand_2 | 77.50 | -41.50 | Outer | DSC | Aft | -6.35 | -4.17 | -5.08 | 0.60 | 207.56 | 239.72 | 224.30 | 11.02 |
| GreenLand_2 | 77.50 | -41.50 | Inner | DSC | Fore | -19.81 | -1.43 | -6.99 | 5.01 | 144.88 | 263.22 | 203.34 | 35.43 |
| GreenLand_3 | 71.55 | -42.45 | Outer | DSC | Aft | -13.80 | -8.71 | -10.60 | 0.98 | 189.67 | 257.48 | 229.79 | 14.23 |
| GreenLand_3 | 71.55 | -42.45 | Outer | DSC | Fore | -12.74 | -9.06 | -10.54 | 0.75 | 202.55 | 274.65 | 232.55 | 16.35 |
| GreenLand_1 | 74.69 | -42.50 | Inner | DSC | Aft | -11.23 | -7.66 | -9.08 | 0.77 | 156.03 | 217.33 | 190.37 | 13.36 |
| GreenLand_1 | 74.69 | -42.50 | Outer | DSC | Aft | -10.79 | -7.80 | -9.27 | 0.72 | 197.44 | 270.60 | 232.89 | 18.96 |
| GreenLand_1 | 74.69 | -42.50 | Inner | DSC | Fore | -11.08 | -6.46 | -8.85 | 1.00 | 160.38 | 219.79 | 185.00 | 15.15 |
| GreenLand_1 | 74.69 | -42.50 | Outer | DSC | Fore | -21.47 | -6.26 | -9.65 | 3.03 | 203.02 | 264.72 | 239.43 | 13.63 |

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 | 255.12 | 6.38 | 0.00 | 24.67 | 7.01 | 0.00 | 353.83 | 2.49 | 0.00 | 73.04 | 3.14 |

| 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 | 42.69 | 1.24 | 0.00 | 44.05 | 1.33 | 0.00 | 31.50 | 0.15 | 0.00 | 45.96 | 0.38 |
| | Outer (VV) | 0.00 | 37.49 | 1.46 | 0.00 | 40.94 | 1.90 | 0.00 | 29.17 | 0.05 | 0.00 | 33.48 | 0.14 |
| Sigma0(dB) | Inner (HH) | 0.00 | 43.29 | 1.26 | 0.00 | 41.36 | 1.25 | 0.00 | 30.97 | 0.11 | 0.00 | 46.27 | 0.36 |
| | Outer (VV) | 0.00 | 35.52 | 1.35 | 0.00 | 40.78 | 1.57 | 0.00 | 26.05 | 0.03 | 0.00 | 30.87 | 0.08 |

| 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

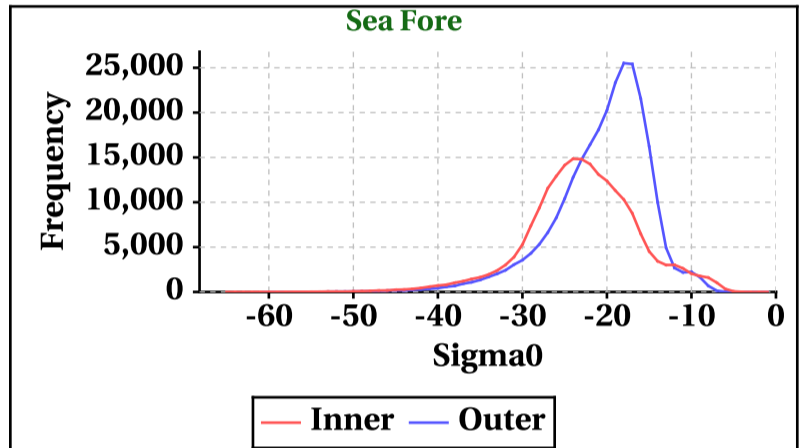
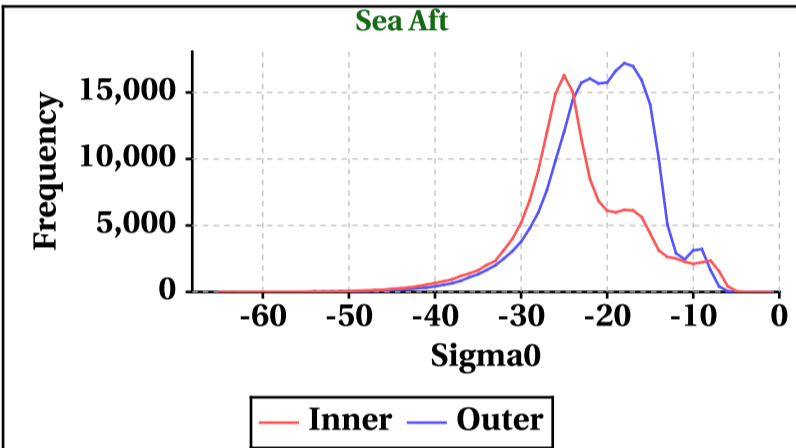
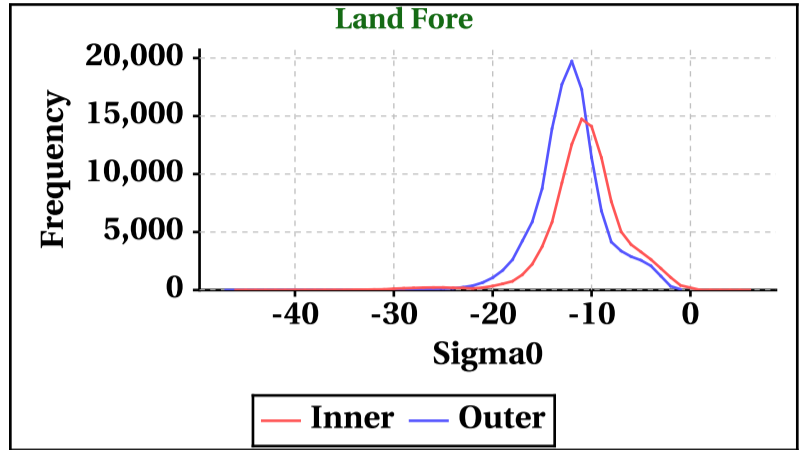
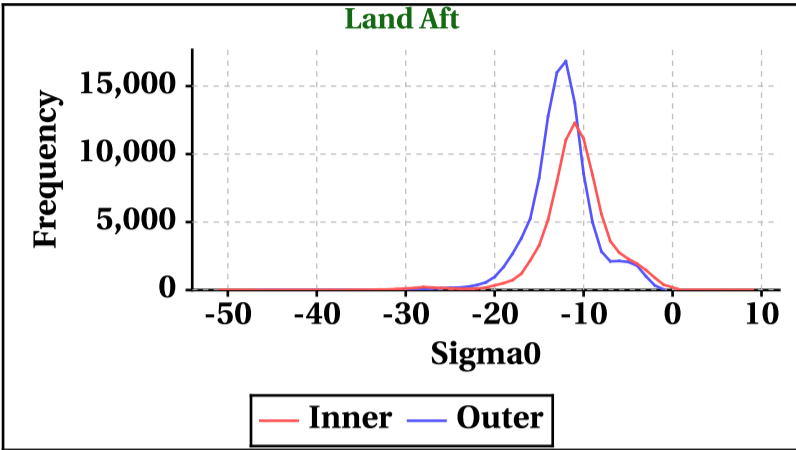
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -51 | -46 | -65 | -65 |
| Max | 9 | 6 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -47 | -47 | -58 | -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 | 354 | 353 | 311 | 305 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 342 | 344 | 313 | 314 |

