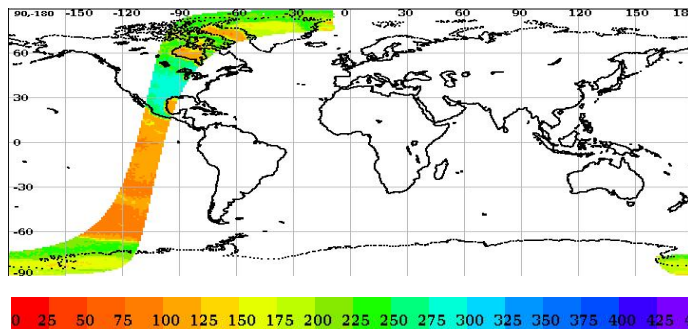


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

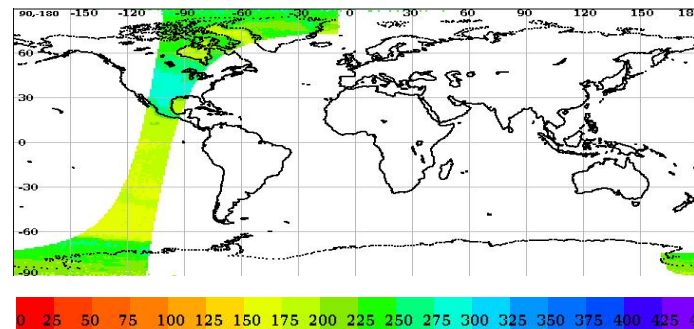
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 4269 | 4270 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 811 | 72 | 17-07-2017 | 17-07-2017 |
| Direction | WVC Size(km) | Processor Version | |
| NS | 25 | v1.1.2 | |

Brightness Temperature

Inner Beam (HH)

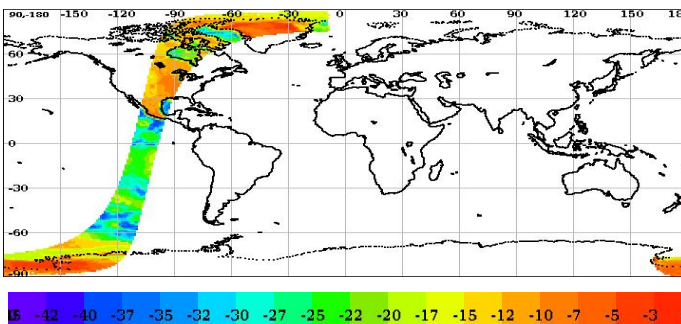


Outer Beam (VV)

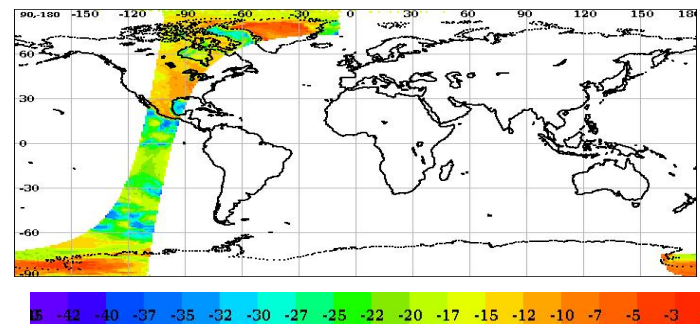


Sigma0(dB)

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 | -9.32 | -3.06 | -5.05 | 1.59 | 138.96 | 185.15 | 166.98 | 15.81 |
| GreenLand_2 | 77.50 | -41.50 | Outer | DSC | Aft | -6.29 | -4.23 | -5.13 | 0.61 | 196.04 | 231.09 | 212.72 | 9.61 |
| GreenLand_2 | 77.50 | -41.50 | Inner | DSC | Fore | -7.25 | -3.93 | -5.15 | 1.02 | 145.42 | 182.49 | 164.19 | 10.70 |
| GreenLand_3 | 71.55 | -42.45 | Outer | DSC | Aft | -14.96 | -8.88 | -11.54 | 1.10 | 199.03 | 255.80 | 228.29 | 13.83 |
| GreenLand_3 | 71.55 | -42.45 | Outer | DSC | Fore | -18.76 | -8.14 | -11.75 | 1.64 | 199.91 | 258.61 | 232.45 | 15.13 |
| GreenLand_1 | 74.69 | -42.50 | Inner | DSC | Aft | -12.65 | -5.19 | -8.79 | 1.59 | 149.81 | 217.68 | 181.49 | 15.98 |
| GreenLand_1 | 74.69 | -42.50 | Outer | DSC | Aft | -11.00 | -6.52 | -8.76 | 0.99 | 193.71 | 244.36 | 220.51 | 13.92 |
| GreenLand_1 | 74.69 | -42.50 | Inner | DSC | Fore | -11.22 | -5.32 | -8.45 | 1.40 | 151.00 | 215.84 | 190.32 | 15.19 |
| GreenLand_1 | 74.69 | -42.50 | Outer | DSC | Fore | -10.84 | -5.12 | -8.35 | 1.00 | 211.48 | 254.15 | 235.48 | 10.19 |

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 | 26.84 | 8.85 | 0.00 | 25.78 | 8.64 | 0.00 | 351.74 | 2.78 | 0.00 | 56.02 | 2.44 |

| 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 | 49.81 | 3.10 | 0.00 | 41.96 | 2.55 | 0.00 | 46.62 | 0.58 | 0.00 | 41.47 | 0.75 |
| | Outer (VV) | 0.00 | 42.44 | 2.25 | 0.00 | 41.07 | 2.10 | 0.00 | 43.96 | 0.35 | 0.00 | 35.19 | 0.36 |
| Sigma0(dB) | Inner (HH) | 0.00 | 48.67 | 2.73 | 0.00 | 41.17 | 2.22 | 0.00 | 46.41 | 0.58 | 0.00 | 40.72 | 0.70 |
| | Outer (VV) | 0.00 | 41.16 | 2.05 | 0.00 | 40.42 | 1.83 | 0.00 | 46.25 | 0.34 | 0.00 | 35.66 | 0.30 |

| 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

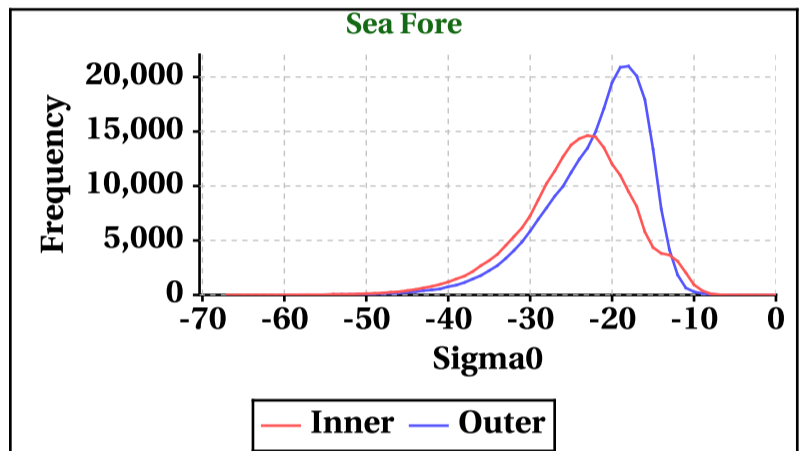
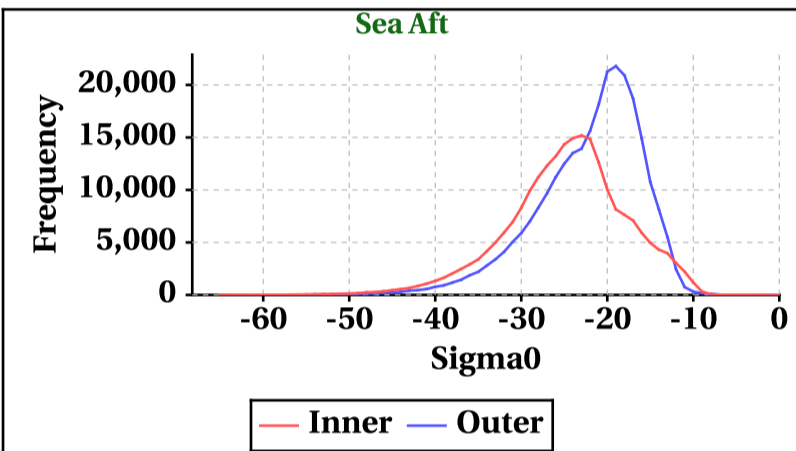
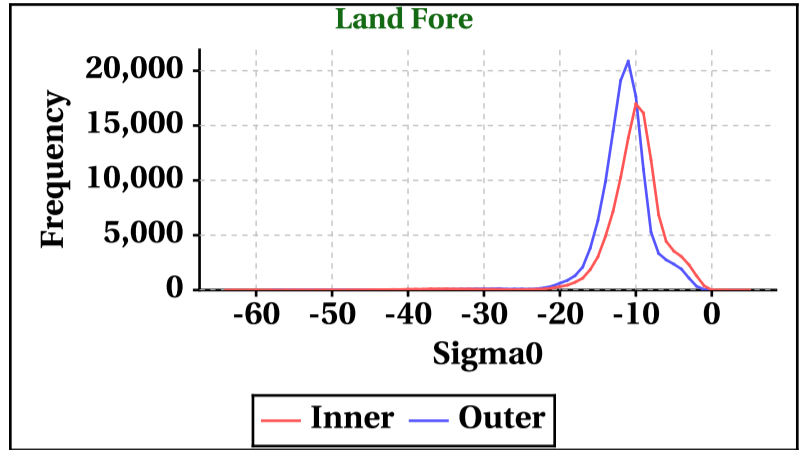
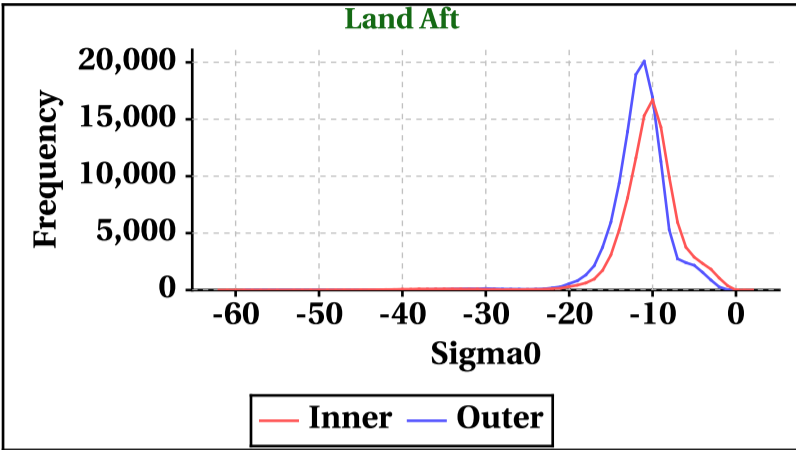
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -62 | -64 | -65 | -67 |
| Max | 2 | 5 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -59 | -58 | -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 | 363 | 352 | 303 | 286 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 389 | 345 | 332 | 315 |

