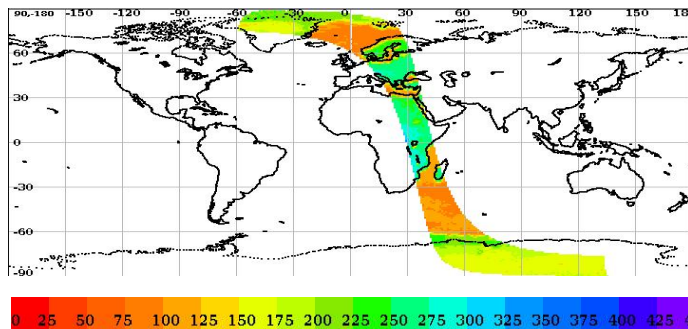


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

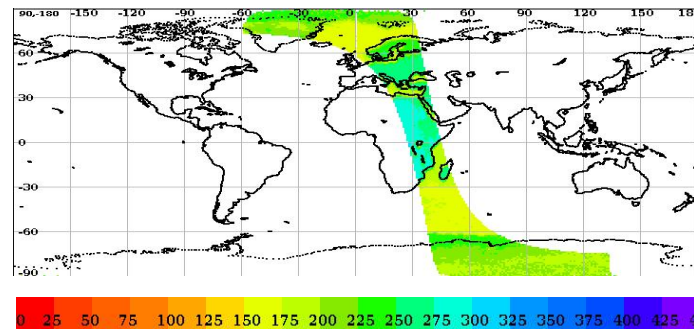
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 4850 | 4851 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 405 | 36 | 26-08-2017 | 26-08-2017 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 50 | v1.1.2 | |

Brightness Temperature

Inner Beam (HH)

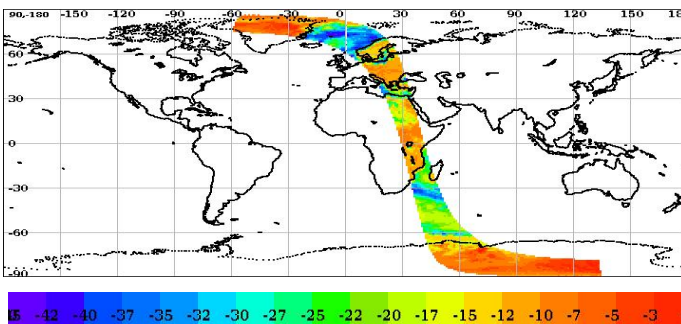


Outer Beam (VV)

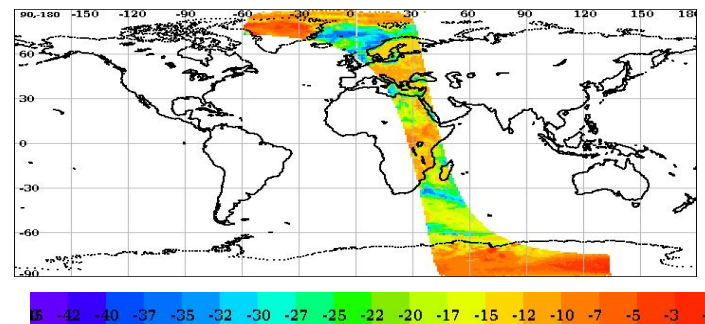


Sigma0(dB)

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 |
|-------------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| ANT_1 | -75.00 | 121.00 | Outer | ASC | Aft | -9.80 | -5.54 | -7.77 | 1.01 | 167.99 | 218.38 | 194.75 | 12.84 |
| GreenLand_2 | 77.50 | -41.50 | Inner | ASC | Fore | -8.14 | -2.92 | -5.00 | 1.23 | 137.48 | 185.67 | 162.87 | 13.84 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Fore | -5.59 | -2.80 | -4.53 | 0.78 | 174.44 | 232.62 | 207.52 | 17.90 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Aft | -10.61 | -5.31 | -8.42 | 1.22 | 140.02 | 197.73 | 172.94 | 15.64 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Fore | -11.28 | -4.96 | -8.75 | 1.35 | 143.73 | 215.54 | 173.89 | 14.68 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Fore | -11.19 | -5.44 | -8.49 | 1.33 | 204.05 | 255.37 | 224.60 | 11.65 |

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 | 37.24 | 16.38 | 0.00 | 26.74 | 14.17 | 0.00 | 164.14 | 14.53 | 0.00 | 75.11 | 14.69 |

| 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 | 49.96 | 12.13 | 0.00 | 53.92 | 12.03 | 0.00 | 39.44 | 1.17 | 0.00 | 41.27 | 1.47 |
| | Outer (VV) | 0.00 | 40.85 | 9.11 | 0.00 | 44.79 | 9.26 | 0.00 | 44.39 | 1.13 | 0.00 | 40.68 | 1.10 |
| Sigma0(dB) | Inner (HH) | 0.00 | 50.87 | 11.07 | 0.00 | 55.39 | 10.98 | 0.00 | 39.08 | 0.99 | 0.00 | 41.07 | 1.20 |
| | Outer (VV) | 0.00 | 43.02 | 8.53 | 0.00 | 45.21 | 8.95 | 0.00 | 46.54 | 0.79 | 0.00 | 40.76 | 0.82 |

| 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

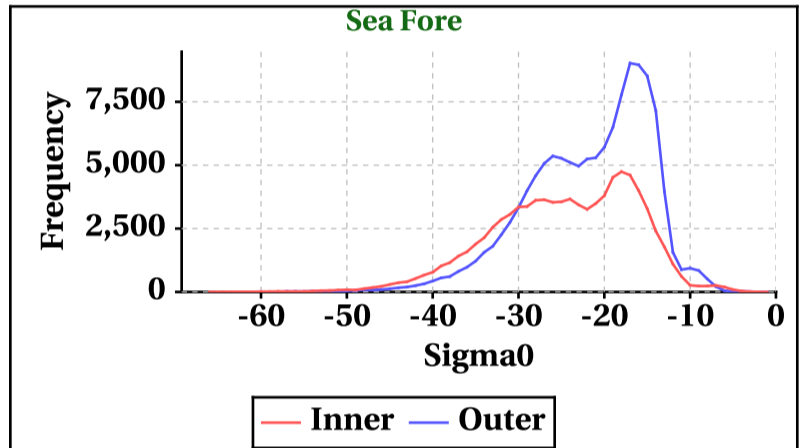
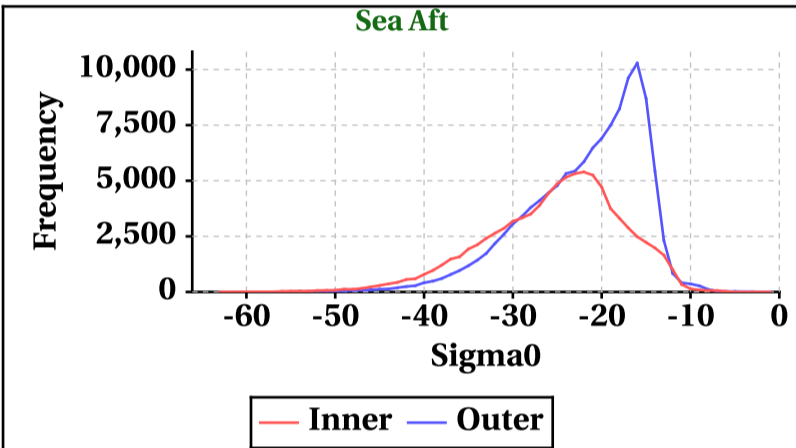
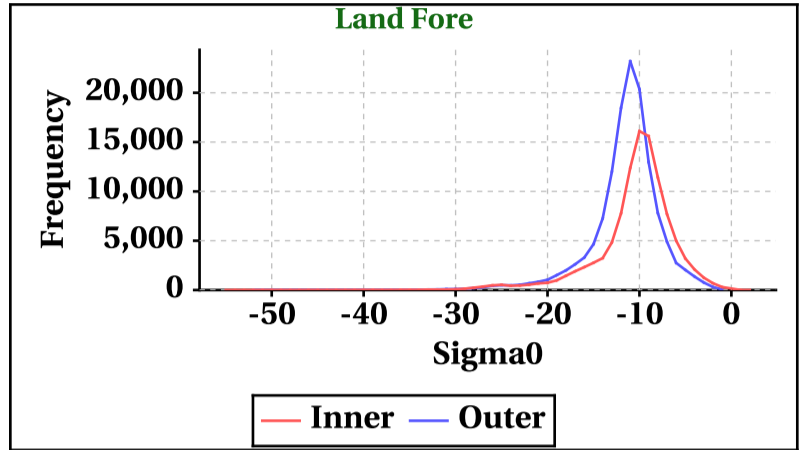
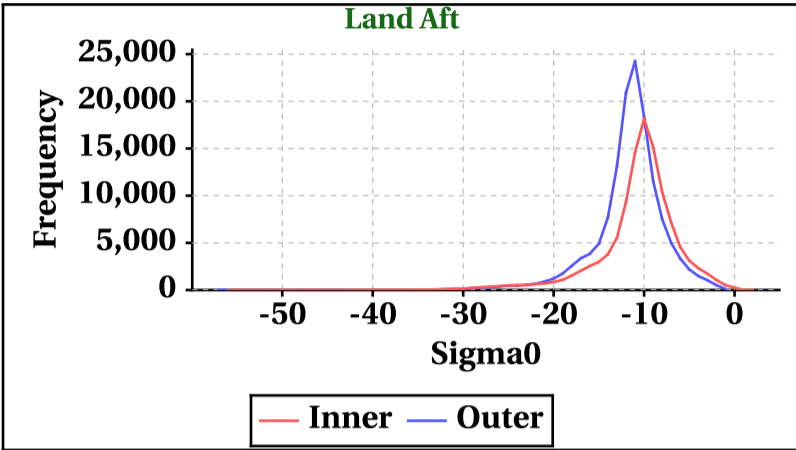
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -56 | -55 | -63 | -66 |
| Max | 2 | 2 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -57 | -52 | -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 | 417 | 500 | 298 | 500 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 500 | 500 | 411 | 500 |

