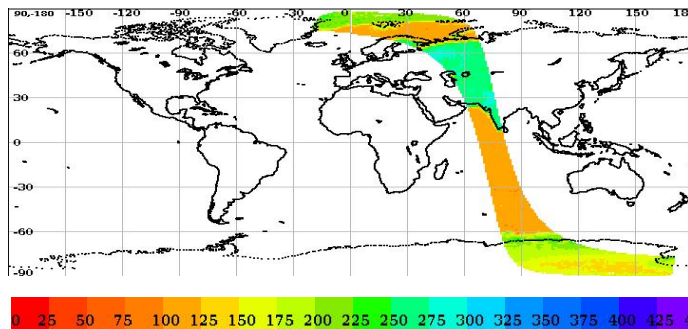


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

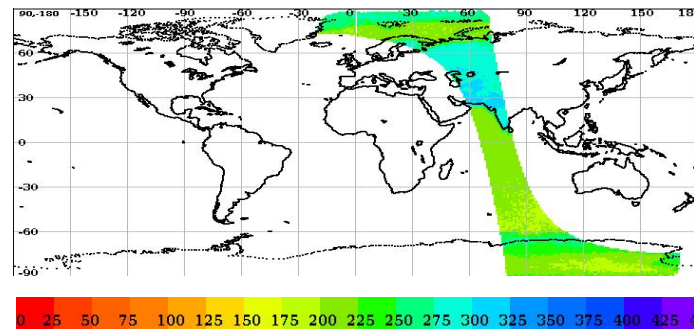
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 95 | 96 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 404 | 36 | 02-10-2016 | 02-10-2016 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 50 | 1.0 | |

Brightness Temperature

Inner Beam (HH)

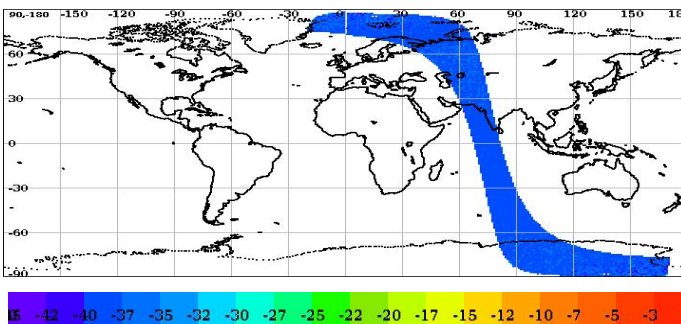


Outer Beam (VV)

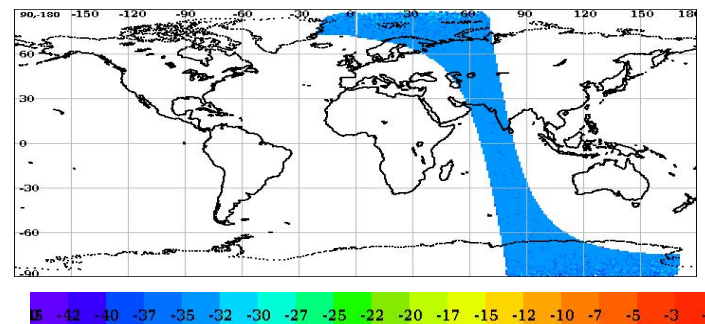


Sigma0(dB)

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 |
|-----------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| ROK | 23.00 | 73.60 | Inner | DSC | Aft | -70.27 | -30.98 | -38.21 | 6.13 | 239.89 | 315.48 | 276.43 | 15.54 |
| ROK | 23.00 | 73.60 | Outer | DSC | Aft | -55.18 | -27.95 | -34.64 | 4.67 | 265.20 | 327.77 | 299.91 | 14.12 |
| ROK | 23.00 | 73.60 | Inner | DSC | Fore | -58.99 | -30.04 | -37.18 | 4.44 | 236.01 | 311.76 | 273.75 | 15.90 |
| ROK | 23.00 | 73.60 | Outer | DSC | Fore | -49.63 | -27.02 | -33.83 | 4.61 | 260.85 | 322.01 | 294.35 | 14.05 |
| ANT_1 | -75.00 | 121.00 | Inner | DSC | Aft | -42.97 | -32.07 | -37.55 | 2.76 | 158.79 | 208.15 | 174.85 | 14.93 |
| ANT_1 | -75.00 | 121.00 | Outer | DSC | Aft | -49.15 | -28.42 | -34.06 | 5.30 | 180.82 | 240.00 | 215.32 | 18.31 |
| ANT_1 | -75.00 | 121.00 | Inner | DSC | Fore | -45.18 | -32.11 | -36.96 | 3.41 | 141.69 | 192.03 | 166.18 | 16.01 |
| ANT_1 | -75.00 | 121.00 | Outer | DSC | Fore | -47.34 | -28.55 | -36.12 | 5.04 | 186.48 | 242.93 | 216.35 | 13.04 |

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 | 45.91 | 25.39 | 0.00 | 47.07 | 25.43 | 0.00 | 28.33 | 14.07 | 0.00 | 25.78 | 14.57 |

| 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 | 59.12 | 27.08 | 0.00 | 58.49 | 25.81 | 0.00 | 54.68 | 27.82 | 0.00 | 52.21 | 26.24 |
| | Outer (VV) | 0.00 | 55.34 | 23.49 | 0.00 | 51.48 | 21.57 | 0.00 | 49.58 | 23.61 | 0.00 | 49.31 | 21.31 |
| Sigma0(dB) | Inner (HH) | 0.00 | 59.44 | 27.41 | 0.00 | 58.41 | 26.21 | 0.00 | 54.60 | 28.12 | 0.00 | 52.09 | 26.93 |
| | Outer (VV) | 0.00 | 55.63 | 23.84 | 0.00 | 51.78 | 21.78 | 0.00 | 49.44 | 24.05 | 0.00 | 49.82 | 21.84 |

| 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 | | | | | | | |

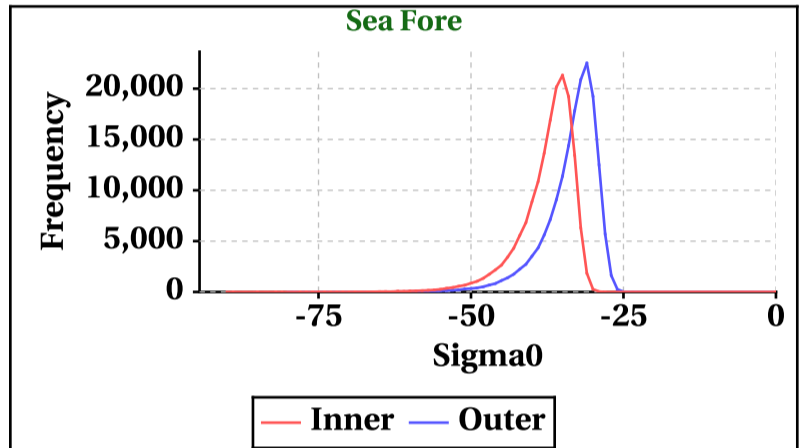
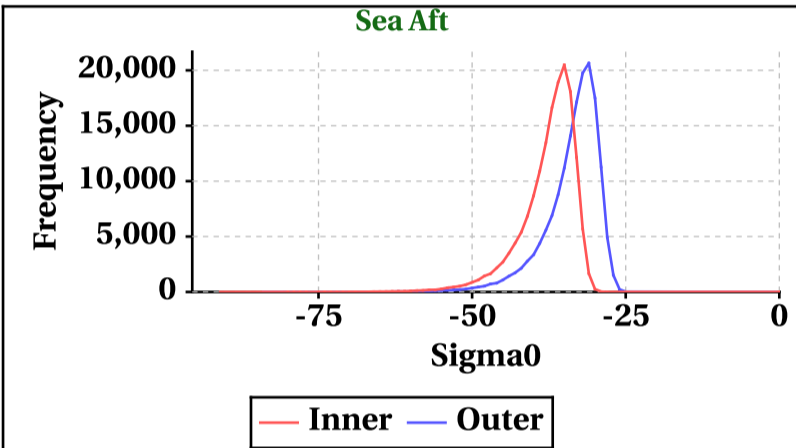
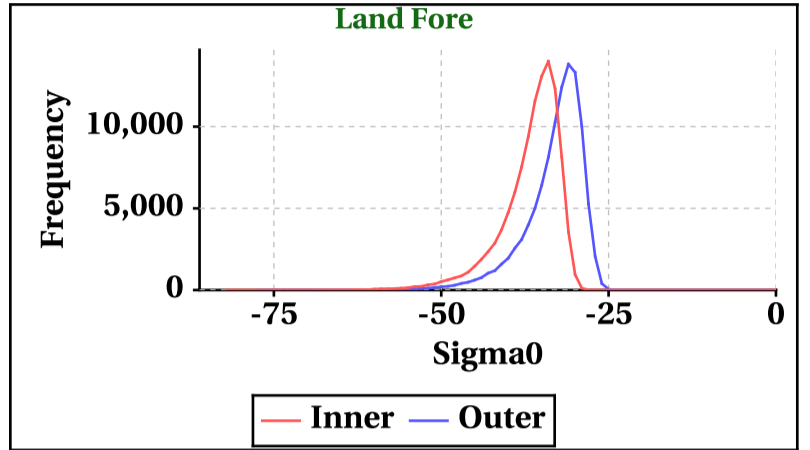
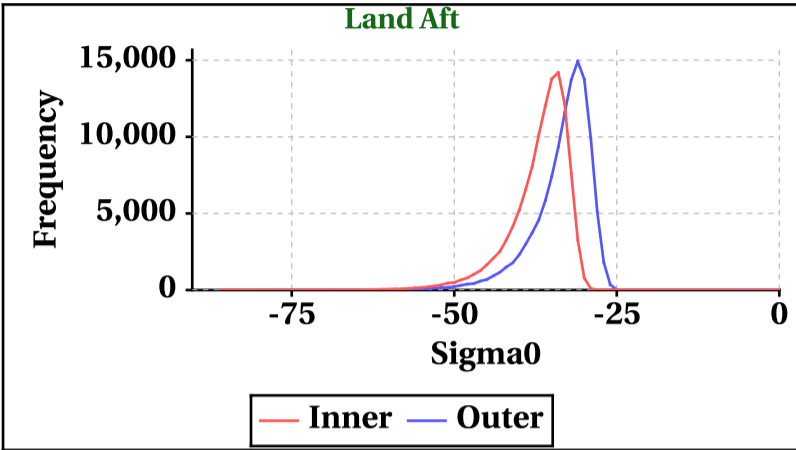
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -86 | -82 | -91 | -90 |
| Max | -1 | -1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -78 | -77 | -84 | -80 |
| 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 | 500 | 346 | 307 | 313 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 500 | 402 | 329 | 337 |

