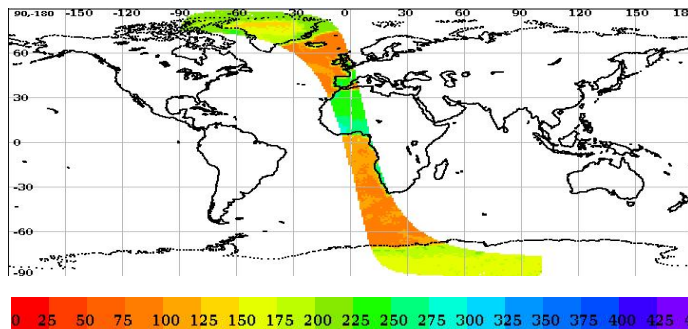


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

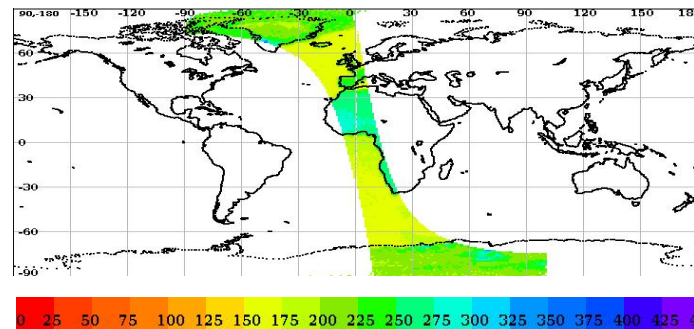
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 2344 | 2345 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 404 | 36 | 06-03-2017 | 06-03-2017 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 50 | 1.1.1 | |

Brightness Temperature

Inner Beam (HH)

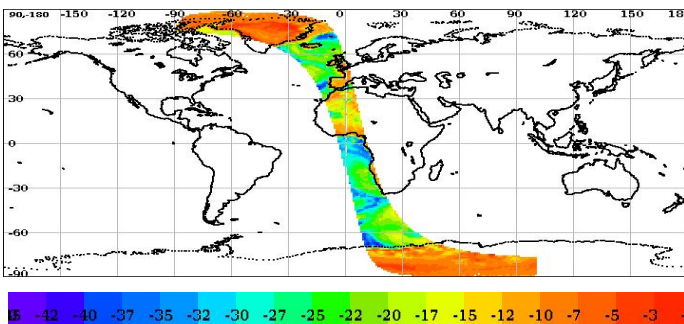


Outer Beam (VV)

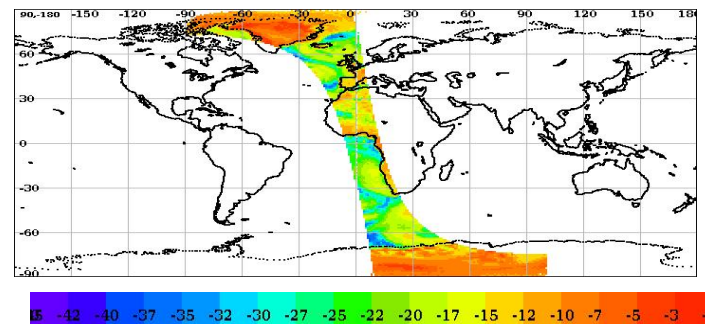


Sigma0(dB)

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 | -6.37 | -4.42 | -5.21 | 0.64 | 139.49 | 196.44 | 160.79 | 17.68 |
| GreenLand_2 | 77.50 | -41.50 | Outer | DSC | Aft | -5.68 | -4.10 | -4.93 | 0.41 | 202.25 | 219.91 | 211.75 | 6.21 |
| GreenLand_2 | 77.50 | -41.50 | Inner | DSC | Fore | -6.10 | -4.00 | -4.94 | 0.69 | 131.74 | 149.02 | 138.51 | 5.66 |
| GreenLand_2 | 77.50 | -41.50 | Outer | DSC | Fore | -5.34 | -3.58 | -4.28 | 0.57 | 182.99 | 217.57 | 204.24 | 11.15 |
| GreenLand_3 | 71.55 | -42.45 | Inner | DSC | Aft | -12.61 | -7.90 | -10.56 | 1.00 | 133.24 | 205.61 | 182.16 | 17.74 |
| GreenLand_3 | 71.55 | -42.45 | Outer | DSC | Aft | -12.86 | -7.24 | -10.71 | 1.38 | 203.24 | 252.74 | 224.52 | 14.74 |
| GreenLand_3 | 71.55 | -42.45 | Inner | DSC | Fore | -12.55 | -7.44 | -9.82 | 1.04 | 147.10 | 207.98 | 180.86 | 12.91 |
| GreenLand_3 | 71.55 | -42.45 | Outer | DSC | Fore | -13.65 | -7.54 | -10.74 | 1.35 | 190.86 | 264.48 | 220.09 | 19.71 |
| GreenLand_1 | 74.69 | -42.50 | Inner | DSC | Aft | -10.42 | -6.32 | -8.76 | 0.85 | 144.62 | 192.78 | 171.93 | 11.86 |
| GreenLand_1 | 74.69 | -42.50 | Outer | DSC | Aft | -10.81 | -6.25 | -8.53 | 1.08 | 194.49 | 278.54 | 228.20 | 19.70 |
| GreenLand_1 | 74.69 | -42.50 | Inner | DSC | Fore | -10.96 | -5.66 | -8.47 | 1.36 | 121.01 | 187.89 | 161.06 | 17.25 |
| GreenLand_1 | 74.69 | -42.50 | Outer | DSC | Fore | -11.82 | -6.74 | -8.29 | 1.12 | 192.82 | 246.59 | 223.65 | 14.68 |

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 | 33.82 | 24.39 | 0.00 | 37.96 | 25.49 | 0.00 | 157.61 | 12.86 | 0.00 | 49.57 | 13.52 |

| 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 | 50.94 | 6.97 | 0.00 | 48.28 | 8.35 | 0.00 | 29.28 | 0.20 | 0.00 | 28.26 | 0.64 |
| | Outer (VV) | 0.00 | 45.49 | 6.65 | 0.00 | 42.63 | 8.30 | 0.00 | 41.37 | 0.74 | 0.00 | 43.56 | 1.42 |
| Sigma0(dB) | Inner (HH) | 0.00 | 51.62 | 6.62 | 0.00 | 49.66 | 7.24 | 0.00 | 34.78 | 0.14 | 0.00 | 26.12 | 0.23 |
| | Outer (VV) | 0.00 | 45.11 | 6.59 | 0.00 | 38.45 | 6.42 | 0.00 | 41.97 | 0.55 | 0.00 | 41.88 | 0.63 |

| 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 | | | | | | | |

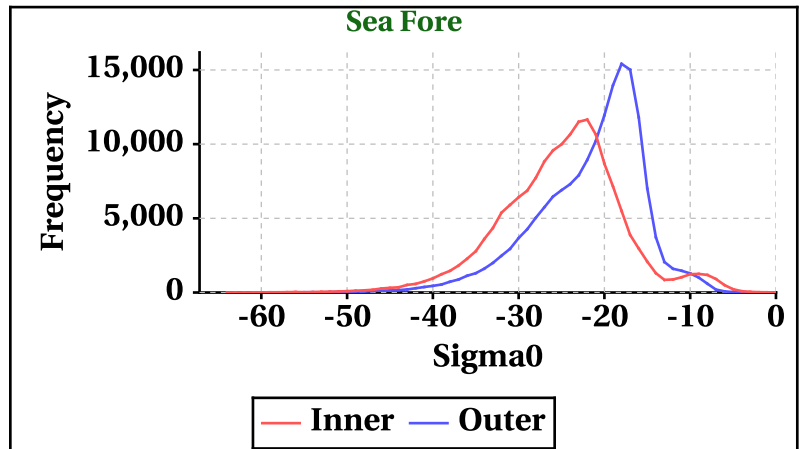
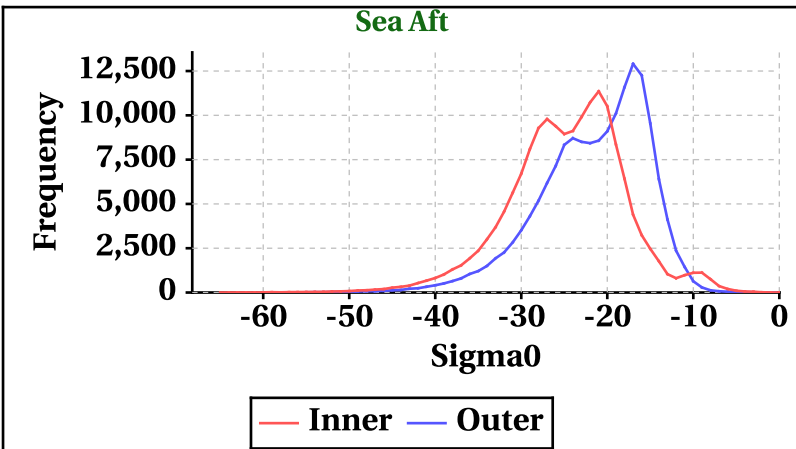
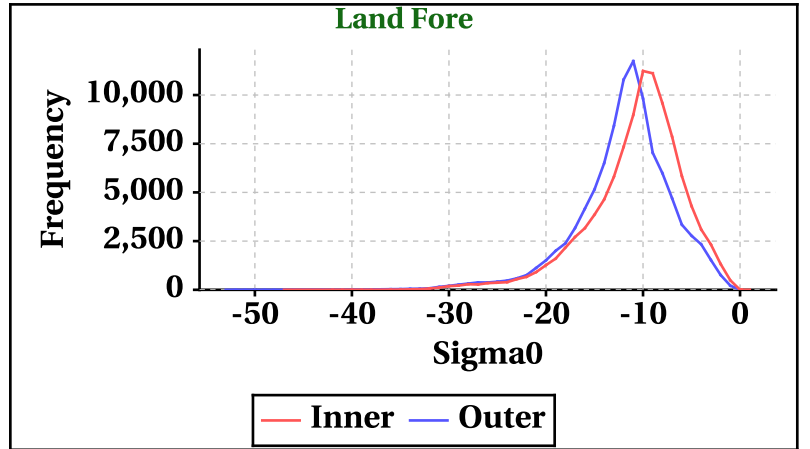
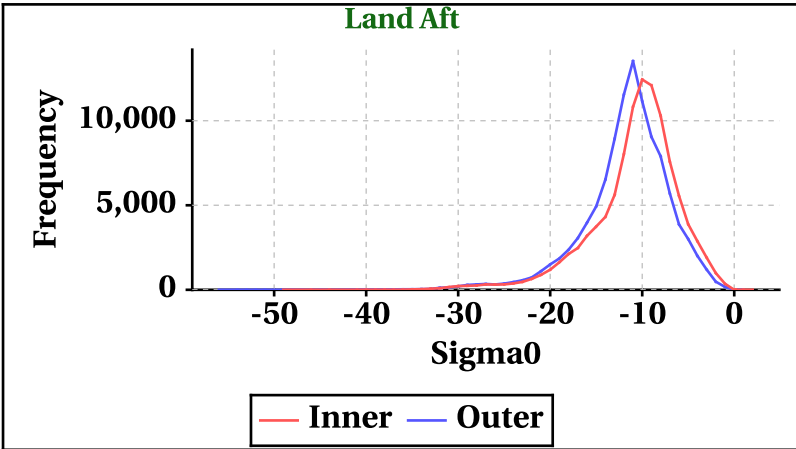
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -49 | -47 | -65 | -64 |
| Max | 2 | 1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -56 | -53 | -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 | 336 | 338 | 271 | 274 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 500 | 385 | 500 | 296 |

