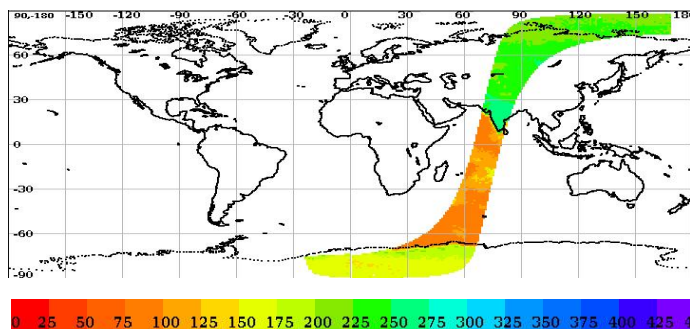


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

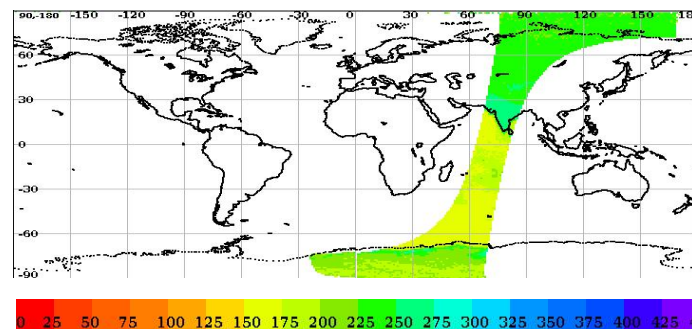
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 2407 | 2408 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 812 | 72 | 11-03-2017 | 11-03-2017 |
| Direction | WVC Size(km) | Processor Version | |
| NS | 25 | 1.1.1 | |

Brightness Temperature

Inner Beam (HH)

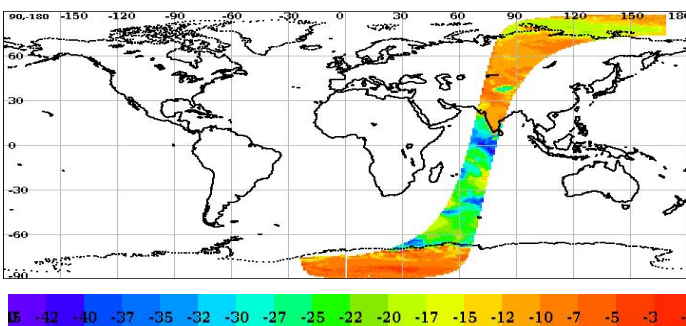


Outer Beam (VV)

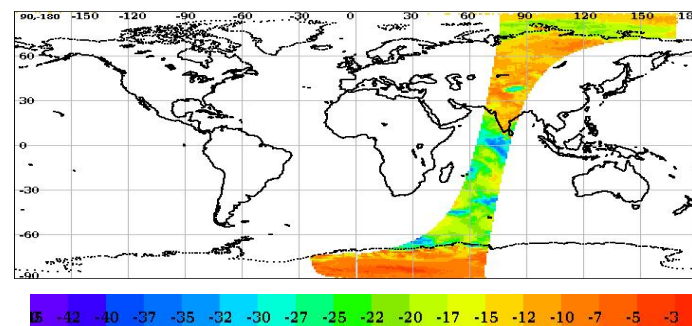


Sigma0(dB)

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 |
|-----------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| ROK | 23.00 | 73.60 | Inner | ASC | Aft | -12.00 | -7.29 | -10.03 | 0.99 | 213.66 | 292.20 | 260.17 | 15.96 |
| ROK | 23.00 | 73.60 | Outer | ASC | Aft | -13.64 | -6.68 | -11.58 | 1.27 | 232.76 | 305.78 | 263.43 | 13.78 |
| ROK | 23.00 | 73.60 | Inner | ASC | Fore | -17.71 | -7.04 | -10.81 | 2.64 | 226.91 | 282.24 | 255.71 | 13.62 |
| ROK | 23.00 | 73.60 | Outer | ASC | Fore | -16.64 | -8.03 | -11.87 | 1.42 | 241.02 | 292.92 | 264.56 | 11.72 |

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 | 26.75 | 12.76 | 0.00 | 27.07 | 13.22 | 0.00 | 351.93 | 4.21 | 0.00 | 62.34 | 3.75 |

| 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 | 42.16 | 2.06 | 0.00 | 46.17 | 2.78 | 0.00 | 25.53 | 0.06 | 0.00 | 49.36 | 0.16 |
| | Outer (VV) | 0.00 | 36.85 | 1.90 | 0.00 | 38.16 | 3.48 | 0.00 | 33.28 | 0.08 | 0.00 | 30.70 | 0.22 |
| Sigma0(dB) | Inner (HH) | 0.00 | 42.43 | 2.13 | 0.00 | 44.28 | 2.37 | 0.00 | 24.73 | 0.04 | 0.00 | 46.07 | 0.09 |
| | Outer (VV) | 0.00 | 35.87 | 1.82 | 0.00 | 37.73 | 2.28 | 0.00 | 31.42 | 0.06 | 0.00 | 30.43 | 0.12 |

| 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 | | | | | | | |

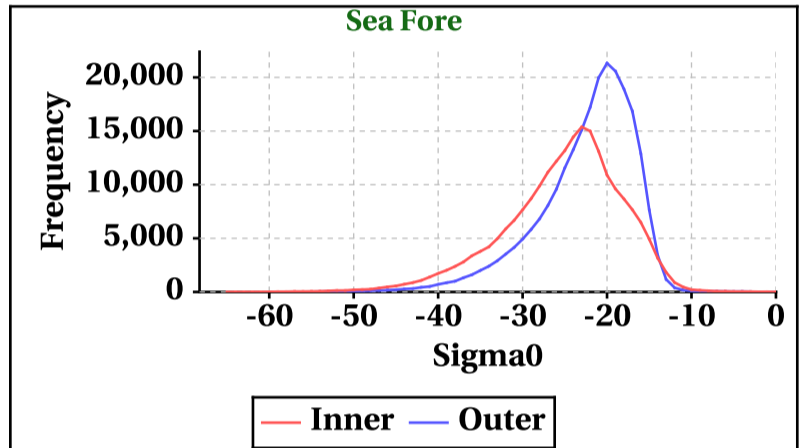
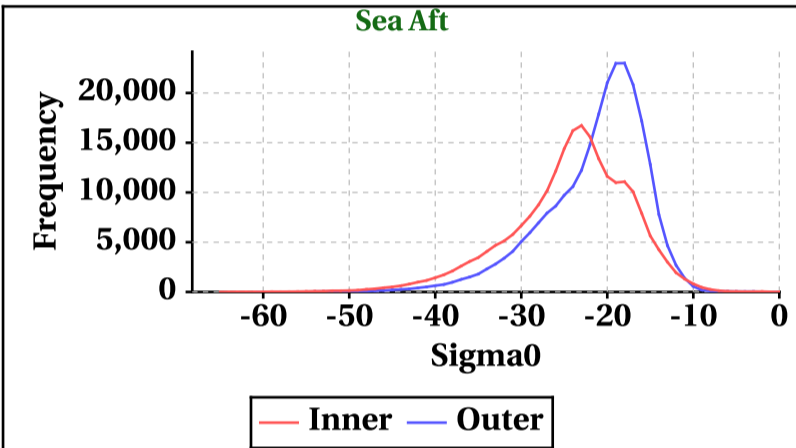
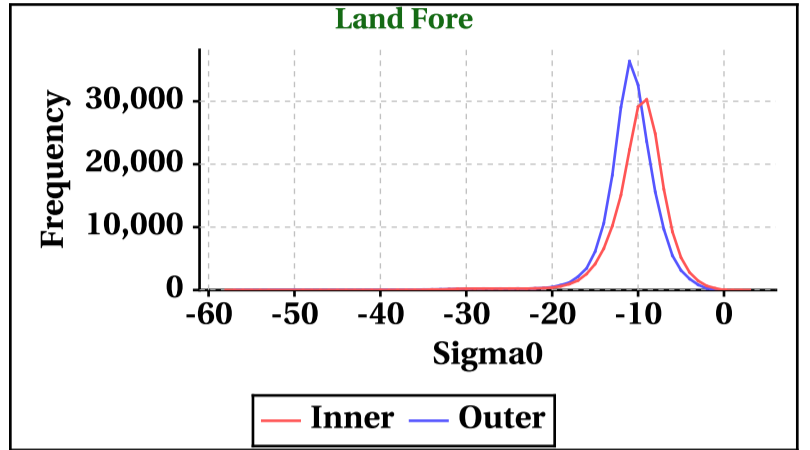
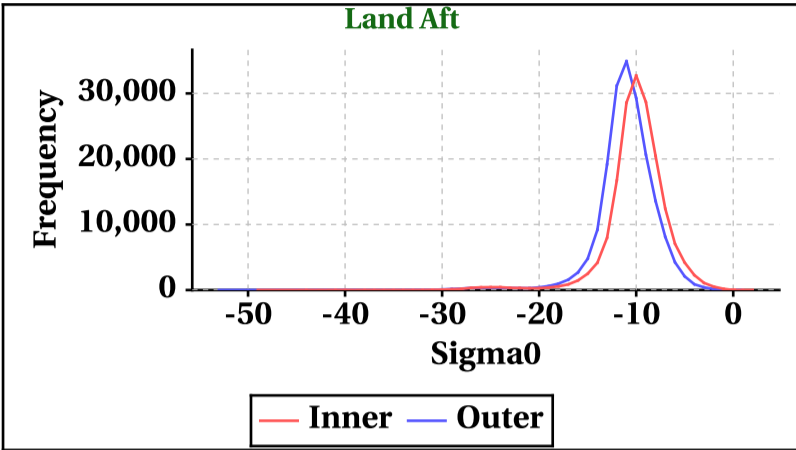
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -49 | -58 | -65 | -65 |
| Max | 2 | 3 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -53 | -57 | -61 | -59 |
| 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 | 335 | 334 | 295 | 284 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 480 | 484 | 404 | 288 |

