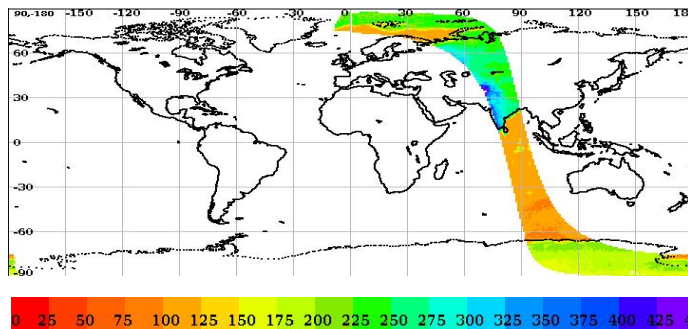


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

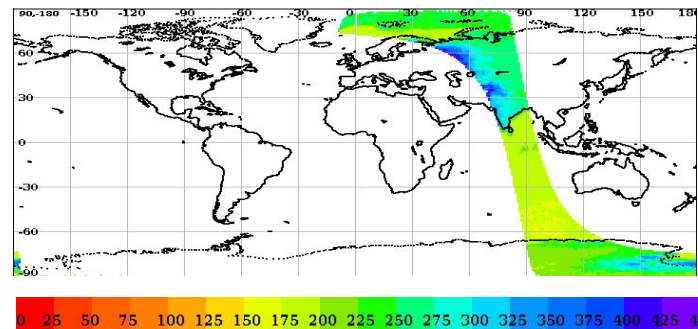
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 12649 | 12650 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 405 | 36 | 15-02-2019 | 15-02-2019 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 50 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

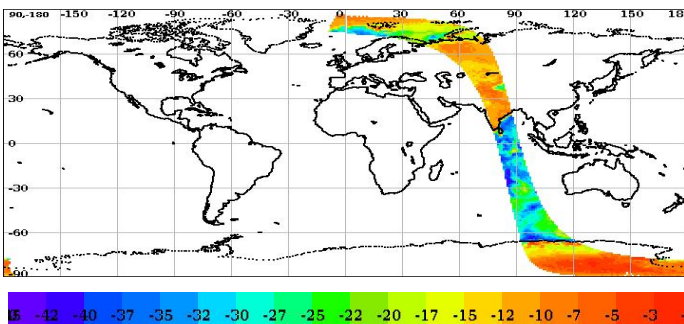


Outer Beam (VV)

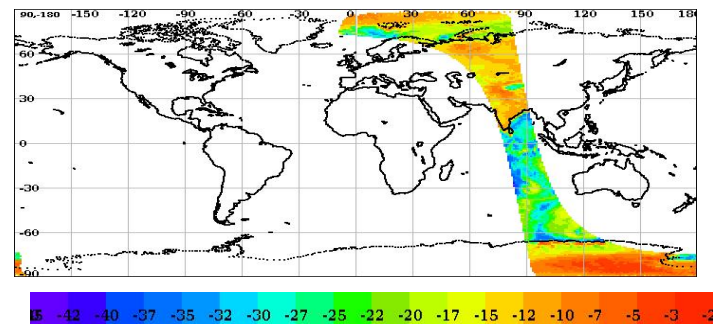


Sigma0(dB)

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 | -14.93 | -9.33 | -11.00 | 1.20 | 330.57 | 422.84 | 378.34 | 24.20 |
| ROK | 23.00 | 73.60 | Outer | ASC | Aft | -14.48 | -9.54 | -12.12 | 0.99 | 288.88 | 400.87 | 347.11 | 23.04 |
| ROK | 23.00 | 73.60 | Inner | ASC | Fore | -12.22 | -8.95 | -10.22 | 0.79 | 323.57 | 410.64 | 365.90 | 23.32 |
| ROK | 23.00 | 73.60 | Outer | ASC | Fore | -14.46 | -8.64 | -11.80 | 0.99 | 249.69 | 346.75 | 303.67 | 20.86 |
| ANT_1 | -75.00 | 121.00 | Inner | ASC | Aft | -9.34 | -5.86 | -7.95 | 0.85 | 169.05 | 207.37 | 188.64 | 10.64 |
| ANT_1 | -75.00 | 121.00 | Outer | ASC | Aft | -10.01 | -6.48 | -8.29 | 0.91 | 224.01 | 275.00 | 244.53 | 14.76 |
| ANT_1 | -75.00 | 121.00 | Inner | ASC | Fore | -10.76 | -5.42 | -7.81 | 1.36 | 145.60 | 202.78 | 172.75 | 14.69 |
| ANT_1 | -75.00 | 121.00 | Outer | ASC | Fore | -9.97 | -6.88 | -8.40 | 0.86 | 184.79 | 231.03 | 201.89 | 11.71 |

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 | 32.27 | 12.31 | 0.00 | 86.25 | 12.48 | 0.00 | 143.24 | 11.02 | 0.00 | 269.29 | 13.18 |

| 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 | 46.69 | 10.21 | 0.00 | 45.85 | 10.81 | 0.00 | 27.76 | 0.15 | 0.00 | 29.57 | 0.21 |
| | Outer (VV) | 0.00 | 41.95 | 9.30 | 0.00 | 49.41 | 10.85 | 0.00 | 31.01 | 0.44 | 0.00 | 38.07 | 0.49 |
| Sigma0(dB) | Inner (HH) | 0.00 | 45.63 | 10.26 | 0.00 | 49.02 | 10.36 | 0.00 | 28.68 | 0.15 | 0.00 | 28.13 | 0.14 |
| | Outer (VV) | 0.00 | 43.38 | 9.18 | 0.00 | 46.25 | 10.50 | 0.00 | 30.62 | 0.36 | 0.00 | 36.86 | 0.19 |

| 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

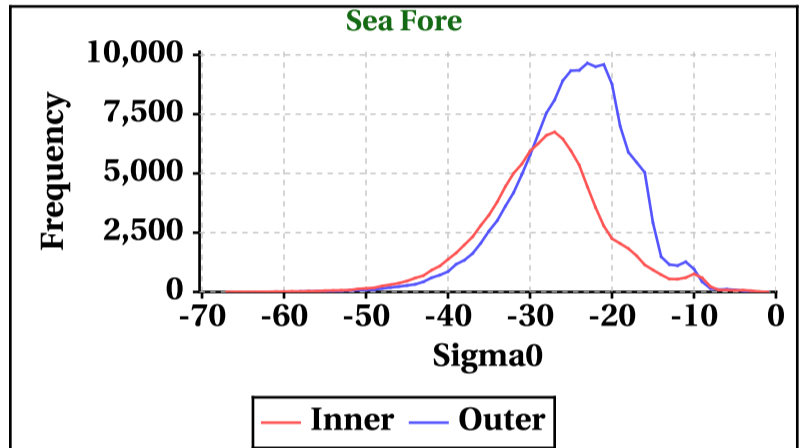
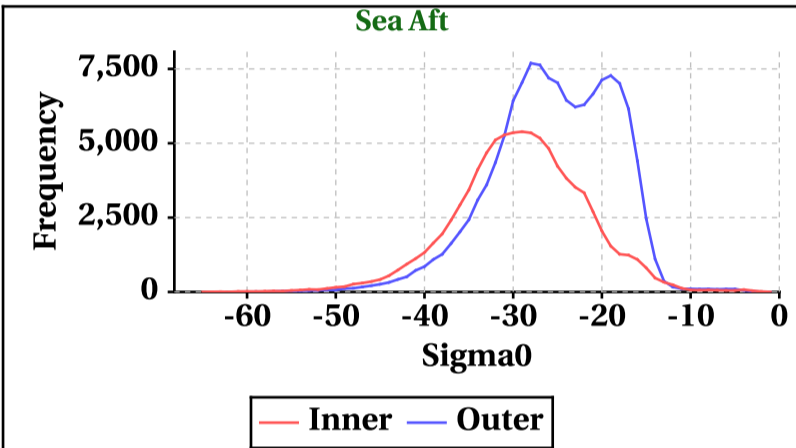
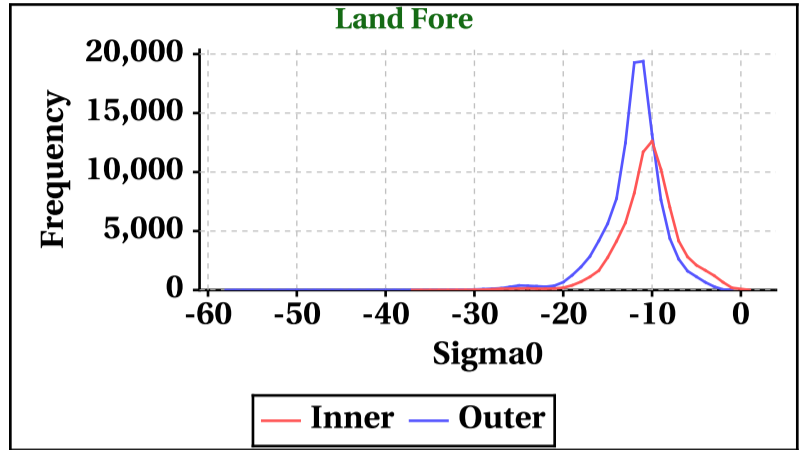
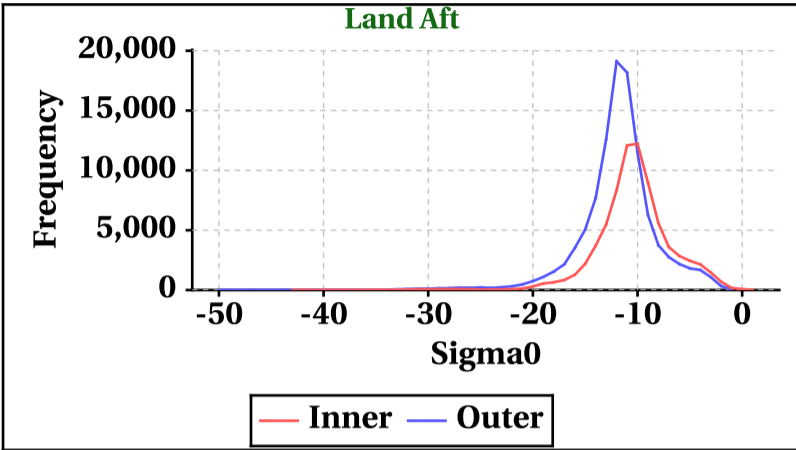
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -43 | -37 | -65 | -67 |
| Max | 1 | 1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -50 | -58 | -60 | -60 |
| 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 | 500 | 293 | 310 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 500 | 500 | 498 | 425 |

