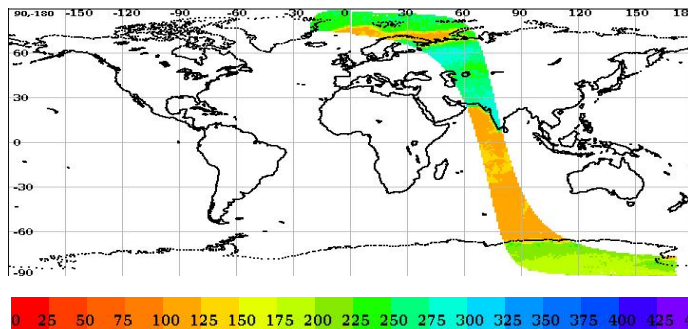


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

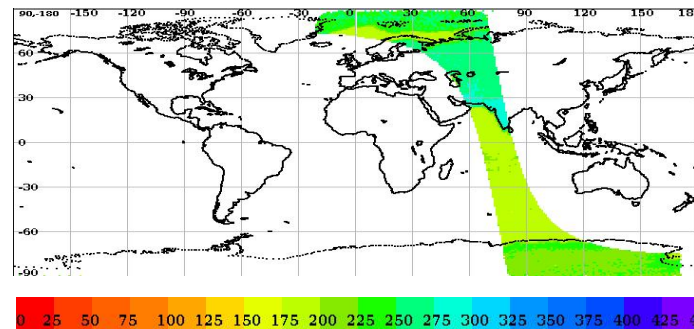
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 18145 | 18146 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 405 | 36 | 29-02-2020 | 01-03-2020 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 50 | v1.1.4 | |

Brightness Temperature

Inner Beam (HH)

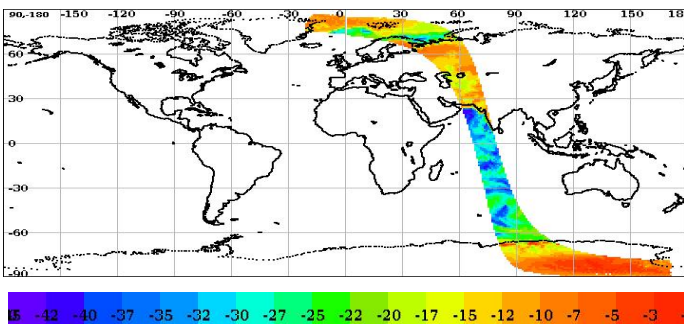


Outer Beam (VV)

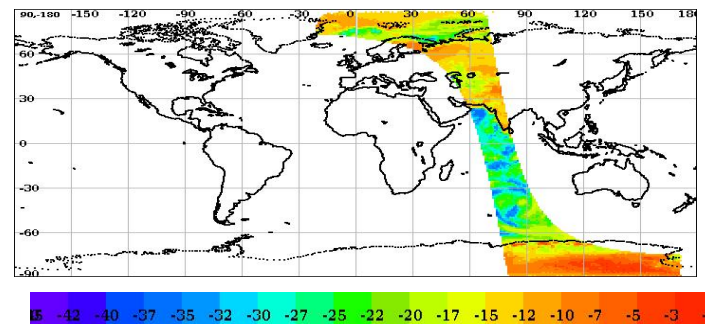


Sigma0(dB)

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 | -12.54 | -7.81 | -10.27 | 1.10 | 244.24 | 323.16 | 286.50 | 18.26 |
| ROK | 23.00 | 73.60 | Outer | ASC | Aft | -14.16 | -8.76 | -11.81 | 1.08 | 235.49 | 324.03 | 280.10 | 16.03 |
| ROK | 23.00 | 73.60 | Inner | ASC | Fore | -12.77 | -8.53 | -10.39 | 0.95 | 234.70 | 323.91 | 286.57 | 18.45 |
| ROK | 23.00 | 73.60 | Outer | ASC | Fore | -13.49 | -9.08 | -11.55 | 0.87 | 250.07 | 326.89 | 281.58 | 14.76 |
| ANT_1 | -75.00 | 121.00 | Inner | ASC | Aft | -10.79 | -5.59 | -7.75 | 1.23 | 158.62 | 235.61 | 199.11 | 18.04 |
| ANT_1 | -75.00 | 121.00 | Outer | ASC | Aft | -11.46 | -8.15 | -9.00 | 0.79 | 201.15 | 250.10 | 222.01 | 12.57 |
| ANT_1 | -75.00 | 121.00 | Inner | ASC | Fore | -9.06 | -5.29 | -7.47 | 1.10 | 173.48 | 229.24 | 194.11 | 11.60 |
| ANT_1 | -75.00 | 121.00 | Outer | ASC | Fore | -10.45 | -6.45 | -8.47 | 0.94 | 192.93 | 235.02 | 213.55 | 10.88 |

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 | 28.25 | 12.93 | 0.00 | 25.21 | 12.78 | 0.00 | 159.72 | 10.17 | 0.00 | 62.90 | 13.53 |

| 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 | 46.75 | 8.92 | 0.00 | 52.94 | 9.89 | 0.00 | 44.48 | 0.29 | 0.00 | 33.08 | 0.28 |
| | Outer (VV) | 0.00 | 42.21 | 7.52 | 0.00 | 44.34 | 9.58 | 0.00 | 37.81 | 0.13 | 0.00 | 29.82 | 0.28 |
| Sigma0(dB) | Inner (HH) | 0.00 | 47.14 | 9.21 | 0.00 | 54.26 | 9.62 | 0.00 | 43.21 | 0.24 | 0.00 | 32.44 | 0.21 |
| | Outer (VV) | 0.00 | 42.40 | 7.59 | 0.00 | 43.86 | 9.66 | 0.00 | 38.79 | 0.13 | 0.00 | 31.39 | 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

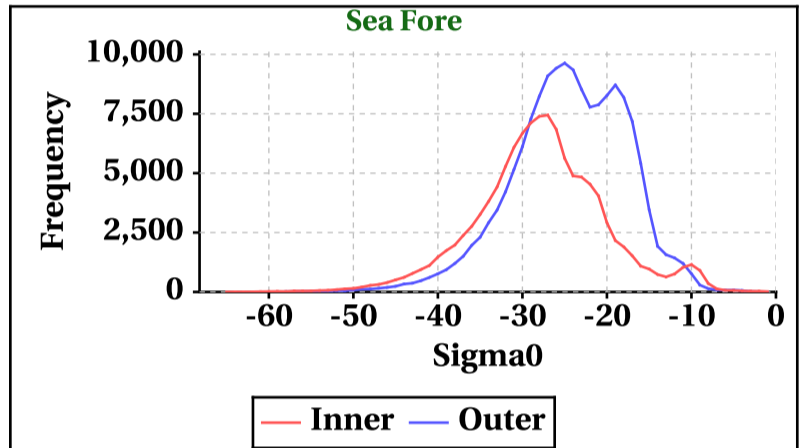
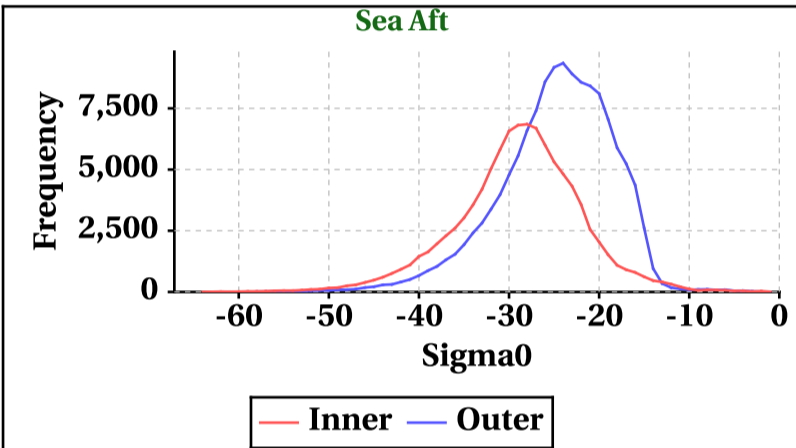
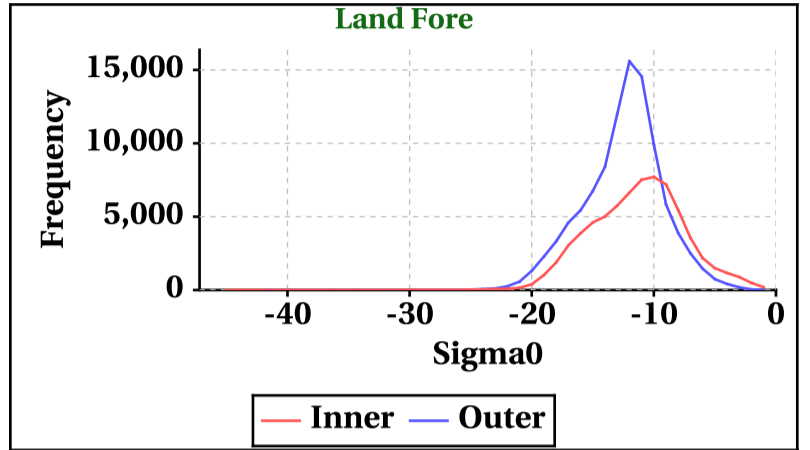
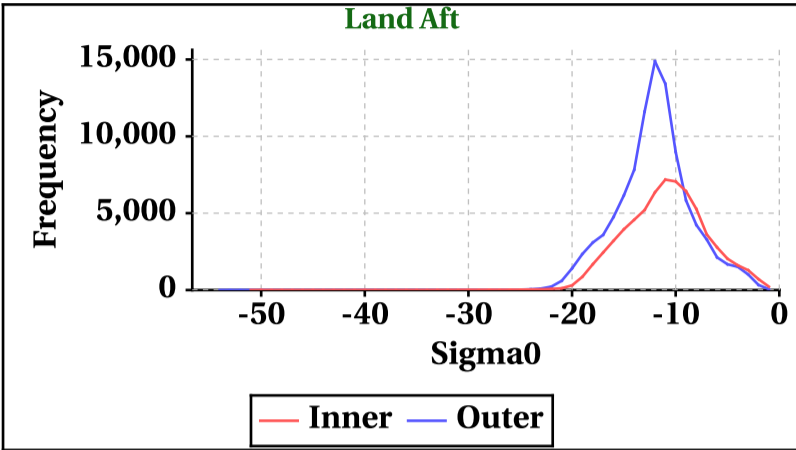
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -51 | -45 | -64 | -65 |
| Max | -1 | -1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -54 | -42 | -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 | 392 | 379 | 299 | 302 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 439 | 500 | 443 | 308 |

