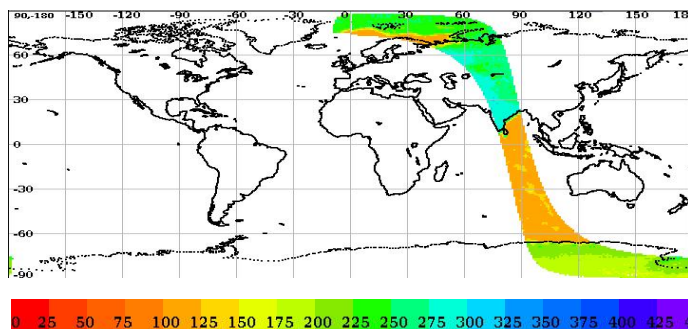


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

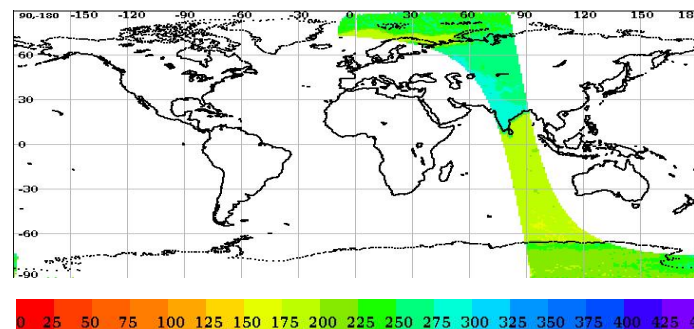
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 18681 | 18682 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 812 | 72 | 06-04-2020 | 06-04-2020 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 25 | v1.1.4 | |

Brightness Temperature

Inner Beam (HH)

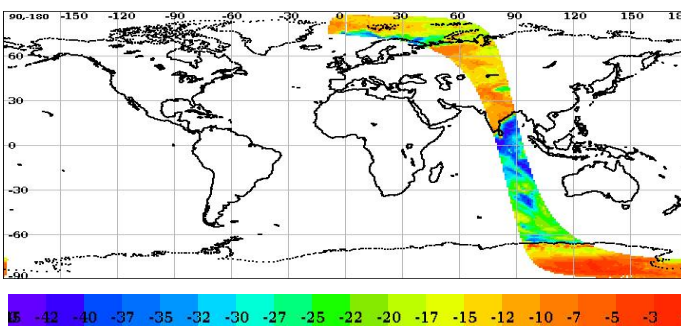


Outer Beam (VV)

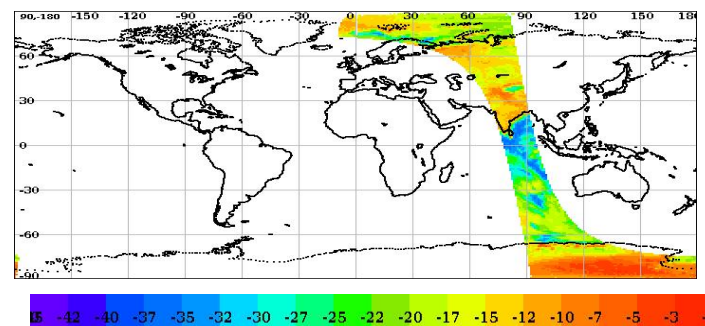


Sigma0(dB)

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 | -13.19 | -8.15 | -10.81 | 1.04 | 265.45 | 323.21 | 292.52 | 15.27 |
| ROK | 23.00 | 73.60 | Outer | ASC | Aft | -15.72 | -8.47 | -11.99 | 1.03 | 251.63 | 337.08 | 297.35 | 16.59 |
| ROK | 23.00 | 73.60 | Inner | ASC | Fore | -11.63 | -8.62 | -10.19 | 0.78 | 263.96 | 331.18 | 294.34 | 17.12 |
| ROK | 23.00 | 73.60 | Outer | ASC | Fore | -16.37 | -8.67 | -12.11 | 1.24 | 243.69 | 327.87 | 290.40 | 19.48 |
| ANT_1 | -75.00 | 121.00 | Inner | ASC | Aft | -9.17 | -5.39 | -7.47 | 0.99 | 181.13 | 209.10 | 195.71 | 10.11 |
| ANT_1 | -75.00 | 121.00 | Outer | ASC | Aft | -11.01 | -7.09 | -8.60 | 0.87 | 190.92 | 246.27 | 216.88 | 14.65 |
| ANT_1 | -75.00 | 121.00 | Inner | ASC | Fore | -10.10 | -4.76 | -7.41 | 1.29 | 164.13 | 225.52 | 187.25 | 15.90 |
| ANT_1 | -75.00 | 121.00 | Outer | ASC | Fore | -11.11 | -6.94 | -8.48 | 0.84 | 180.70 | 238.88 | 212.03 | 15.92 |

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 | 23.27 | 5.82 | 0.00 | 132.86 | 6.90 | 0.00 | 130.89 | 2.03 | 0.00 | 70.77 | 3.11 |

| 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 | 45.20 | 2.47 | 0.00 | 51.62 | 3.00 | 0.00 | 40.70 | 0.10 | 0.00 | 41.64 | 0.10 |
| | Outer (VV) | 0.00 | 37.73 | 2.53 | 0.00 | 37.07 | 3.15 | 0.00 | 39.58 | 0.10 | 0.00 | 30.71 | 0.11 |
| Sigma0(dB) | Inner (HH) | 0.00 | 45.05 | 2.51 | 0.00 | 52.10 | 3.04 | 0.00 | 41.00 | 0.09 | 0.00 | 41.02 | 0.08 |
| | Outer (VV) | 0.00 | 39.29 | 2.72 | 0.00 | 36.41 | 3.31 | 0.00 | 38.64 | 0.08 | 0.00 | 31.98 | 0.08 |

| 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

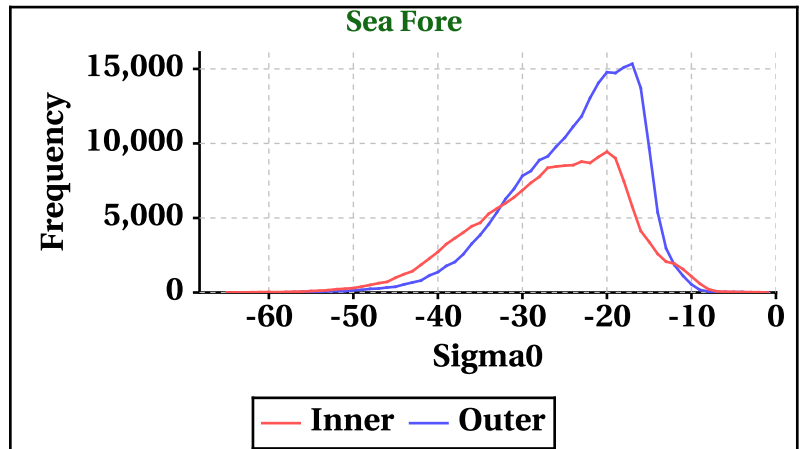
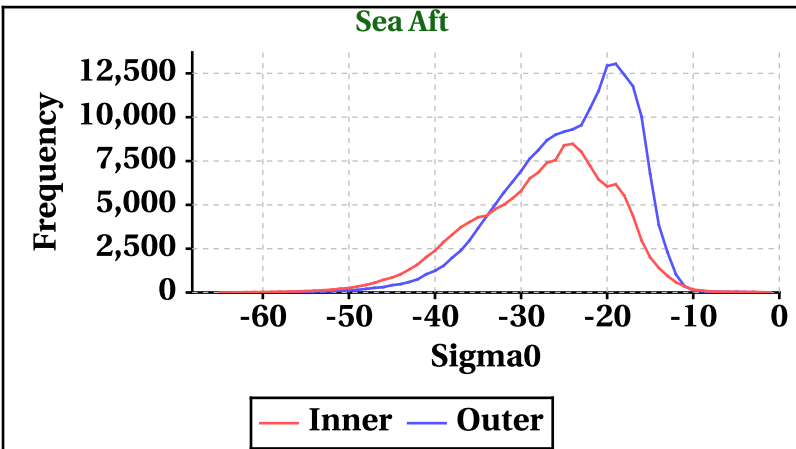
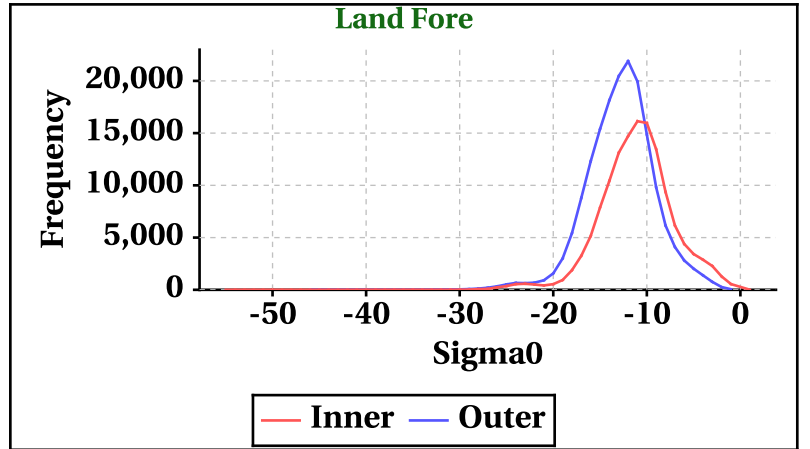
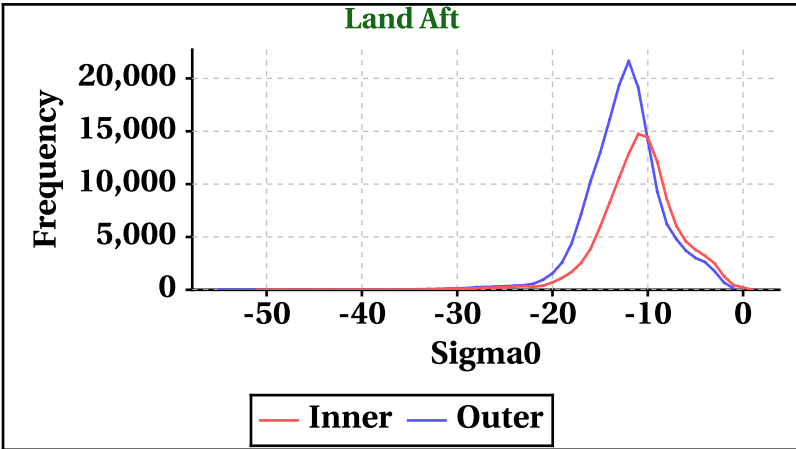
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -51 | -55 | -65 | -65 |
| Max | 1 | 1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -55 | -46 | -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 | 365 | 360 | 324 | 319 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 434 | 404 | 334 | 308 |

