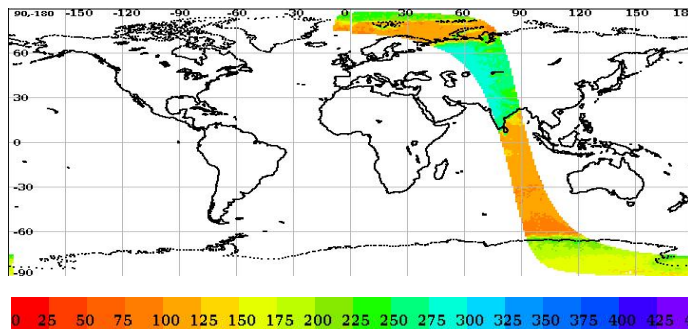


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

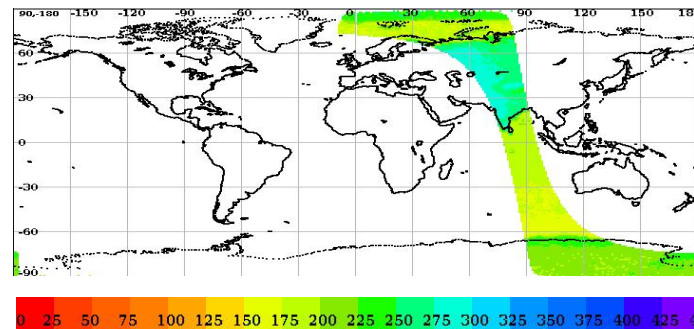
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 9952 | 9953 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 405 | 36 | 13-08-2018 | 13-08-2018 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 50 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

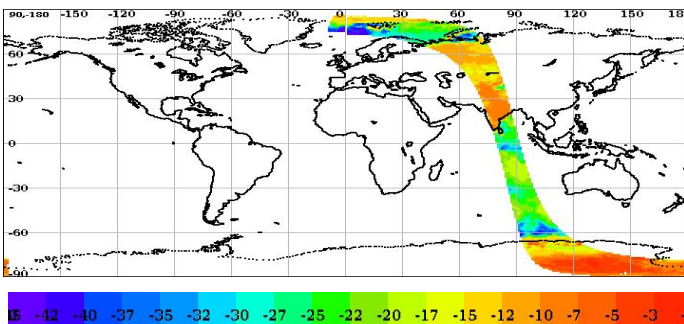


Outer Beam (VV)

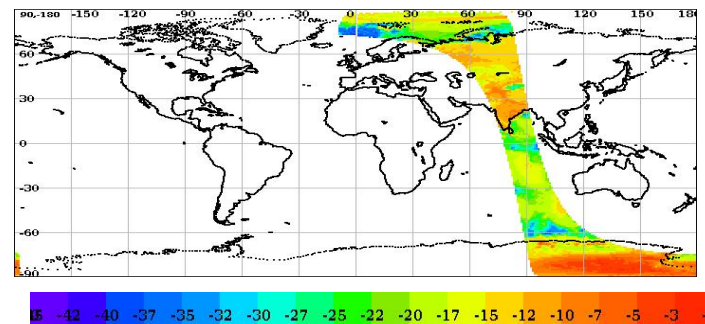


Sigma0(dB)

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 | -12.72 | -8.04 | -9.84 | 0.93 | 253.53 | 325.40 | 285.20 | 14.79 |
| ROK | 23.00 | 73.60 | Outer | ASC | Aft | -13.77 | -9.11 | -11.27 | 0.82 | 255.47 | 314.55 | 287.48 | 15.91 |
| ROK | 23.00 | 73.60 | Inner | ASC | Fore | -15.05 | -7.04 | -9.50 | 1.24 | 240.76 | 340.89 | 286.37 | 18.74 |
| ROK | 23.00 | 73.60 | Outer | ASC | Fore | -14.33 | -8.93 | -11.39 | 0.97 | 252.10 | 323.17 | 285.47 | 15.15 |
| ANT_1 | -75.00 | 121.00 | Inner | ASC | Aft | -9.06 | -5.43 | -7.13 | 1.25 | 142.42 | 194.59 | 169.19 | 13.23 |
| ANT_1 | -75.00 | 121.00 | Outer | ASC | Aft | -9.64 | -7.08 | -8.28 | 0.68 | 172.41 | 208.08 | 195.41 | 11.53 |
| ANT_1 | -75.00 | 121.00 | Inner | ASC | Fore | -9.49 | -5.66 | -7.32 | 1.06 | 137.36 | 193.67 | 174.95 | 17.92 |
| ANT_1 | -75.00 | 121.00 | Outer | ASC | Fore | -9.40 | -4.85 | -7.61 | 1.02 | 196.72 | 224.99 | 211.20 | 9.28 |

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 | 31.09 | 13.08 | 0.00 | 23.80 | 12.78 | 0.00 | 134.94 | 11.28 | 0.00 | 67.92 | 13.45 |

| 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 | 42.48 | 2.98 | 0.00 | 41.93 | 5.30 | 0.00 | 35.85 | 0.31 | 0.00 | 37.26 | 0.46 |
| | Outer (VV) | 0.00 | 38.45 | 2.93 | 0.00 | 43.00 | 4.64 | 0.00 | 35.79 | 0.33 | 0.00 | 37.04 | 0.57 |
| Sigma0(dB) | Inner (HH) | 0.00 | 43.87 | 3.09 | 0.00 | 41.40 | 4.78 | 0.00 | 36.19 | 0.31 | 0.00 | 37.66 | 0.34 |
| | Outer (VV) | 0.00 | 36.76 | 2.80 | 0.00 | 42.73 | 4.18 | 0.00 | 33.99 | 0.34 | 0.00 | 32.94 | 0.37 |

| 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

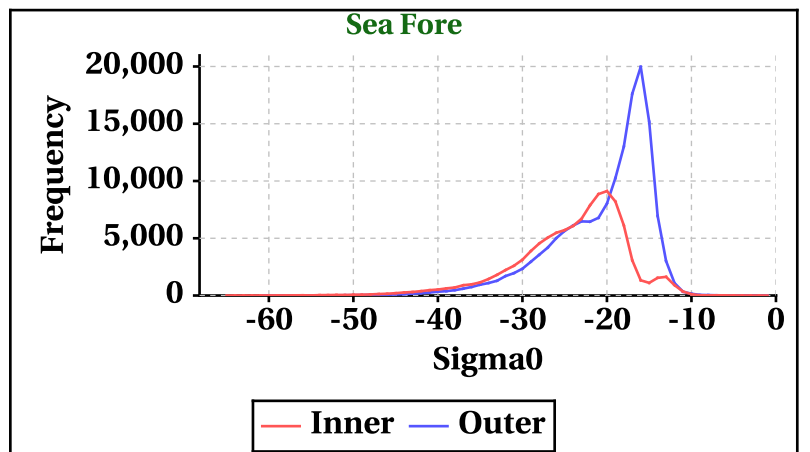
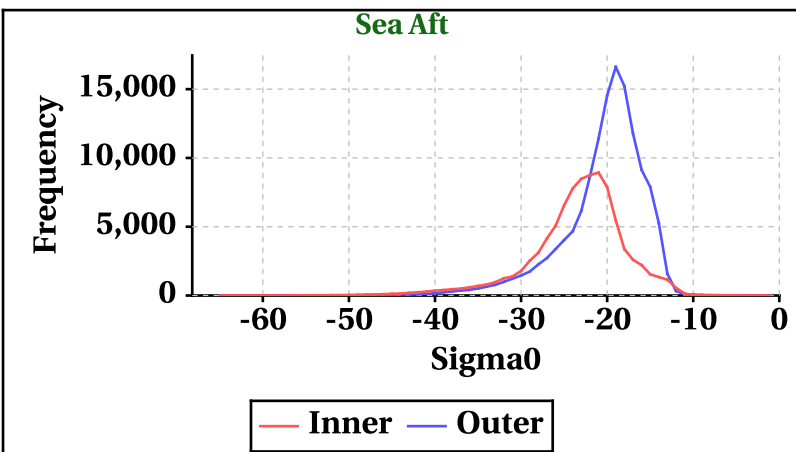
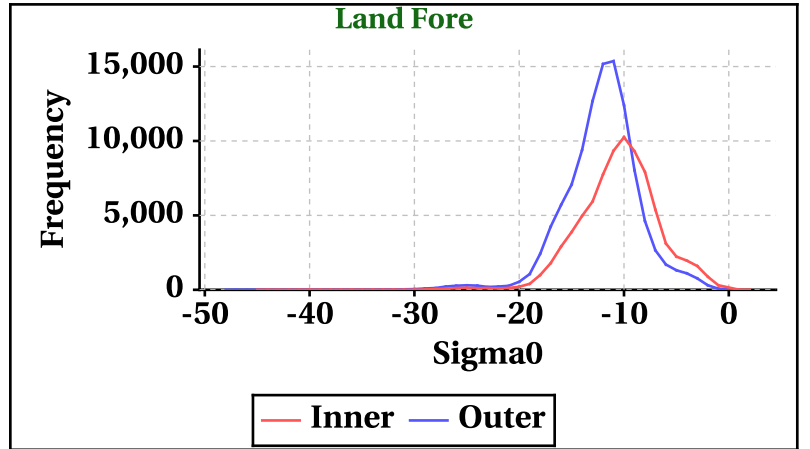
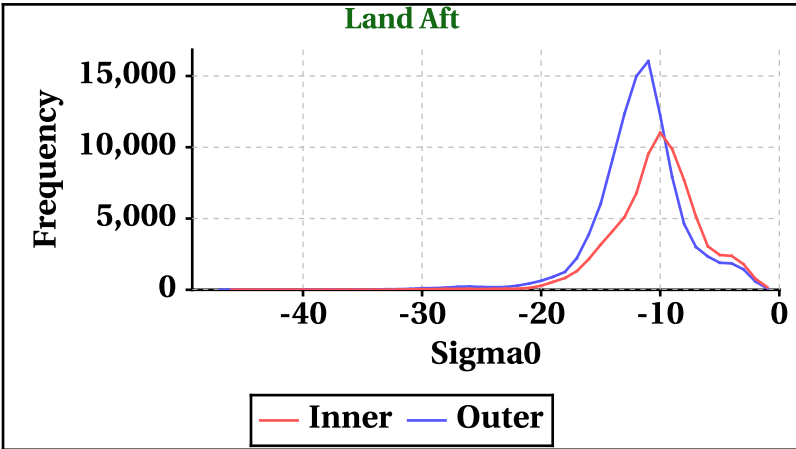
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -46 | -45 | -65 | -65 |
| Max | -1 | 2 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -47 | -48 | -59 | -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 | 354 | 351 | 284 | 293 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 428 | 422 | 303 | 304 |

