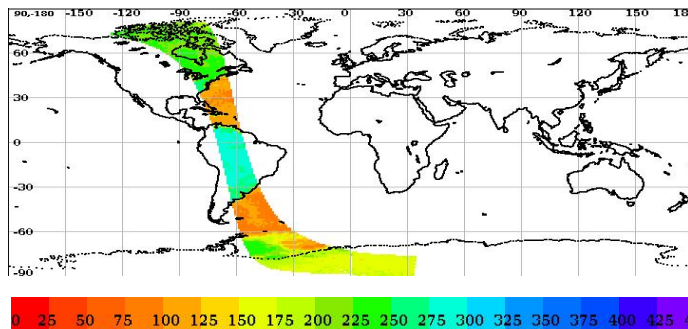


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

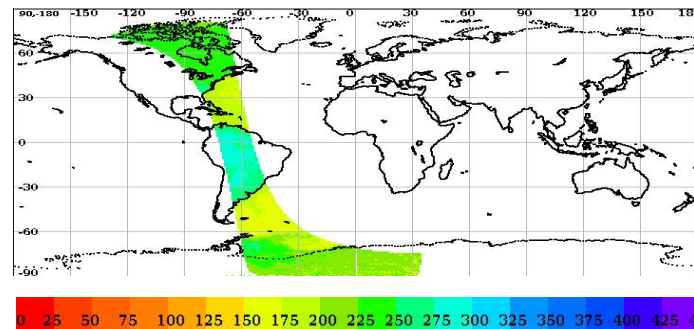
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 6594 | 6595 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 385 | 36 | 25-12-2017 | 25-12-2017 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 50 | v1.1.2 | |

Brightness Temperature

Inner Beam (HH)

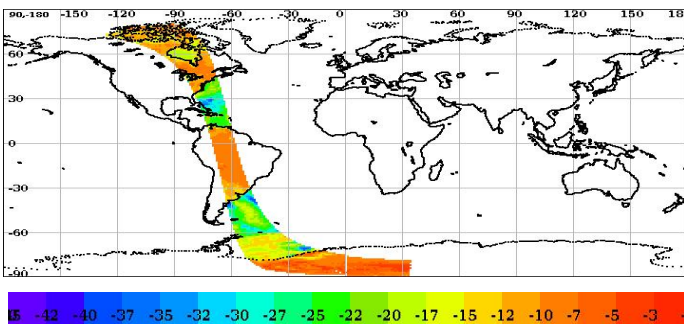


Outer Beam (VV)

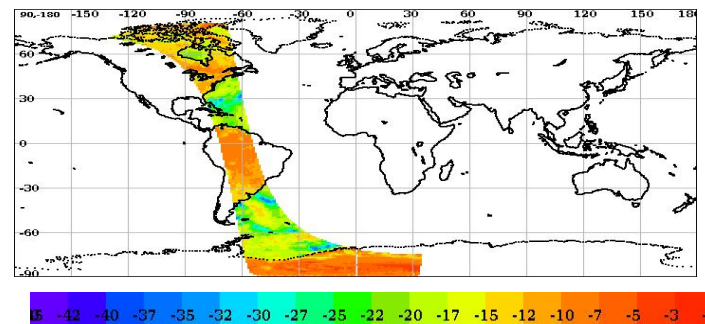


Sigma0(dB)

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 |
|-----------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| Amazon_3 | -6.00 | -61.00 | Inner | ASC | Aft | -13.27 | -5.65 | -8.73 | 1.47 | 254.50 | 319.75 | 286.16 | 15.90 |
| Amazon_3 | -6.00 | -61.00 | Outer | ASC | Aft | -12.16 | -7.47 | -9.53 | 0.70 | 246.12 | 320.14 | 277.62 | 17.18 |
| Amazon_3 | -6.00 | -61.00 | Inner | ASC | Fore | -13.96 | -4.14 | -8.15 | 1.61 | 239.56 | 323.98 | 283.26 | 18.11 |
| Amazon_3 | -6.00 | -61.00 | Outer | ASC | Fore | -13.37 | -7.53 | -9.36 | 1.14 | 238.21 | 307.08 | 279.80 | 14.29 |
| Amazon_2 | -3.00 | -61.00 | Inner | ASC | Aft | -12.12 | -5.42 | -8.51 | 1.47 | 217.11 | 311.31 | 261.18 | 21.41 |
| Amazon_2 | -3.00 | -61.00 | Outer | ASC | Aft | -12.20 | -6.51 | -9.49 | 1.11 | 234.74 | 318.26 | 267.56 | 17.48 |
| Amazon_2 | -3.00 | -61.00 | Inner | ASC | Fore | -13.17 | -3.79 | -8.16 | 1.85 | 217.89 | 319.90 | 260.49 | 19.97 |
| Amazon_2 | -3.00 | -61.00 | Outer | ASC | Fore | -12.03 | -6.87 | -9.39 | 1.25 | 238.43 | 309.46 | 273.17 | 18.08 |
| Amazon_1 | 0.00 | -67.00 | Inner | ASC | Aft | -13.55 | -4.95 | -7.83 | 1.40 | 242.54 | 334.07 | 288.13 | 17.06 |
| Amazon_1 | 0.00 | -67.00 | Outer | ASC | Aft | -11.10 | -6.32 | -8.62 | 0.89 | 253.15 | 318.85 | 280.59 | 17.16 |
| Amazon_1 | 0.00 | -67.00 | Inner | ASC | Fore | -10.81 | -5.19 | -7.57 | 1.03 | 228.87 | 333.09 | 293.49 | 20.09 |
| Amazon_1 | 0.00 | -67.00 | Outer | ASC | Fore | -11.13 | -6.56 | -8.42 | 0.89 | 249.58 | 318.08 | 290.79 | 16.95 |

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 | 38.87 | 15.74 | 0.00 | 24.82 | 14.83 | 0.00 | 145.96 | 13.56 | 0.00 | 249.83 | 11.48 |

| 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 | 47.48 | 6.15 | 0.00 | 39.69 | 3.83 | 0.00 | 43.58 | 0.78 | 0.00 | 41.22 | 0.62 |
| | Outer (VV) | 0.00 | 37.74 | 3.94 | 0.00 | 42.24 | 3.91 | 0.00 | 35.74 | 0.48 | 0.00 | 39.59 | 0.33 |
| Sigma0(dB) | Inner (HH) | 0.00 | 46.76 | 4.88 | 0.00 | 38.60 | 3.05 | 0.00 | 42.03 | 0.61 | 0.00 | 38.86 | 0.60 |
| | Outer (VV) | 0.00 | 37.23 | 3.41 | 0.00 | 39.77 | 3.34 | 0.00 | 33.87 | 0.39 | 0.00 | 37.25 | 0.26 |

| 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 | | | | | | | |

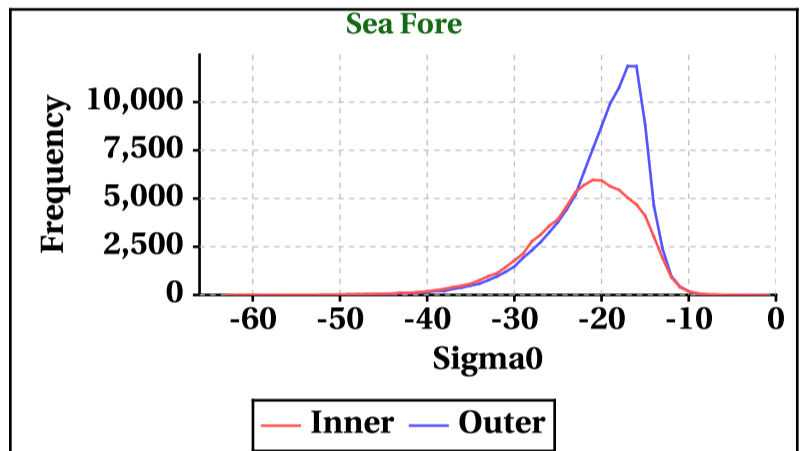
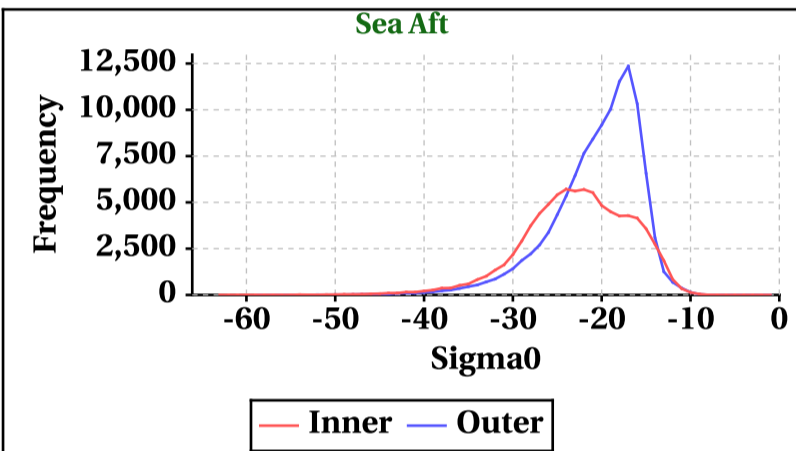
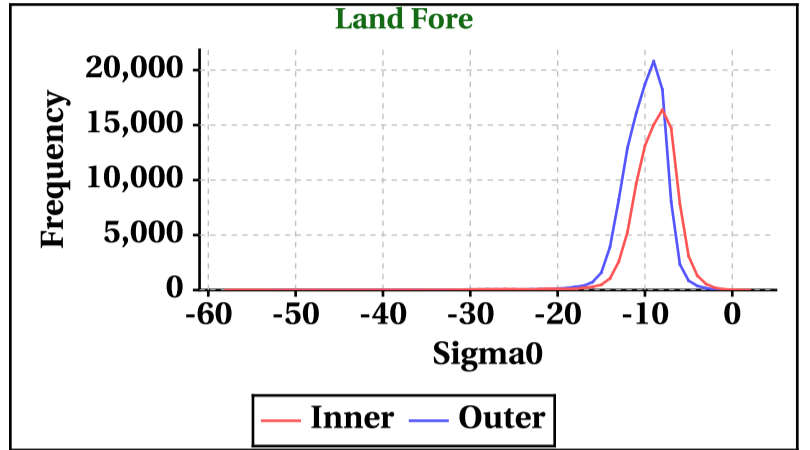
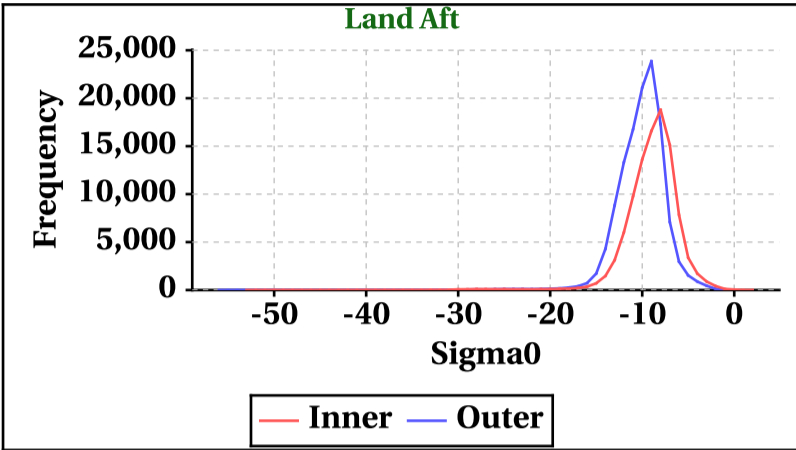
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -53 | -58 | -63 | -63 |
| Max | 2 | 2 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -56 | -53 | -59 | -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 | 355 | 362 | 300 | 296 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 345 | 351 | 307 | 303 |

