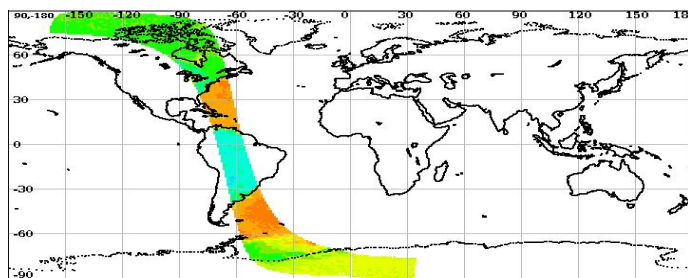


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

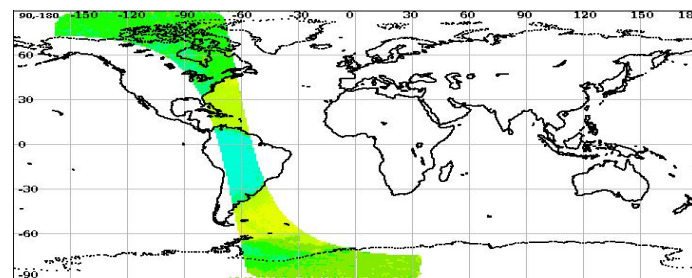
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 11727 | 11728 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 405 | 36 | 14-12-2018 | 14-12-2018 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 50 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

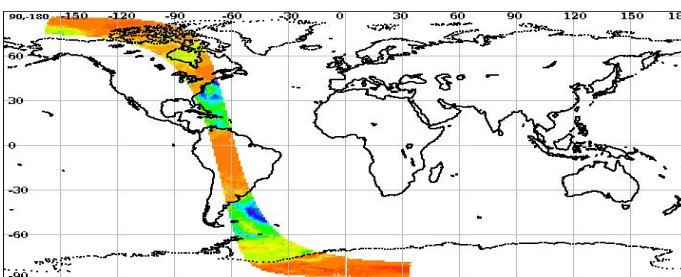


Outer Beam (VV)

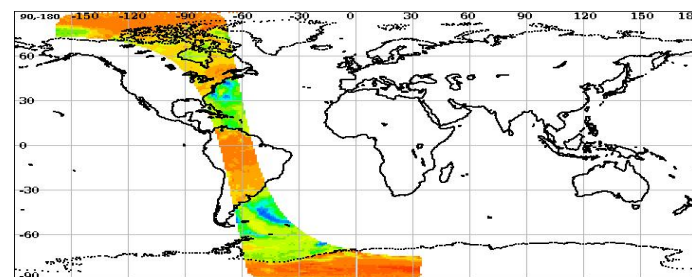


Sigma0(dB)

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 |
|-----------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| Amazon_3 | -6.00 | -61.00 | Inner | ASC | Aft | -10.33 | -7.09 | -8.40 | 0.74 | 250.82 | 331.71 | 289.61 | 18.79 |
| Amazon_3 | -6.00 | -61.00 | Outer | ASC | Aft | -11.68 | -7.52 | -9.39 | 0.68 | 241.55 | 318.26 | 281.00 | 17.84 |
| Amazon_3 | -6.00 | -61.00 | Inner | ASC | Fore | -10.73 | -5.57 | -8.17 | 0.93 | 258.76 | 342.75 | 293.12 | 18.39 |
| Amazon_3 | -6.00 | -61.00 | Outer | ASC | Fore | -11.17 | -7.19 | -9.16 | 0.83 | 252.84 | 349.69 | 284.78 | 20.07 |
| Amazon_2 | -3.00 | -61.00 | Inner | ASC | Aft | -12.29 | -6.48 | -9.07 | 1.24 | 226.63 | 318.96 | 274.05 | 19.64 |
| Amazon_2 | -3.00 | -61.00 | Outer | ASC | Aft | -13.87 | -7.16 | -10.06 | 1.13 | 235.43 | 317.48 | 274.74 | 17.44 |
| Amazon_2 | -3.00 | -61.00 | Inner | ASC | Fore | -12.30 | -5.78 | -9.22 | 1.32 | 228.94 | 323.21 | 269.56 | 23.18 |
| Amazon_2 | -3.00 | -61.00 | Outer | ASC | Fore | -14.25 | -7.24 | -10.14 | 1.19 | 246.47 | 329.13 | 280.91 | 18.62 |
| Amazon_1 | 0.00 | -67.00 | Inner | ASC | Aft | -10.53 | -6.76 | -8.56 | 0.86 | 248.87 | 341.35 | 293.56 | 20.20 |
| Amazon_1 | 0.00 | -67.00 | Outer | ASC | Aft | -12.17 | -6.45 | -9.16 | 1.00 | 241.71 | 329.85 | 287.14 | 19.13 |
| Amazon_1 | 0.00 | -67.00 | Inner | ASC | Fore | -13.14 | -5.52 | -8.33 | 1.27 | 262.52 | 331.18 | 294.48 | 15.71 |
| Amazon_1 | 0.00 | -67.00 | Outer | ASC | Fore | -13.07 | -7.43 | -9.57 | 1.09 | 256.09 | 316.89 | 290.94 | 14.27 |

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 | 31.22 | 13.00 | 0.00 | 23.87 | 12.92 | 0.00 | 143.88 | 9.60 | 0.00 | 178.99 | 12.27 |

| 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 | 46.59 | 2.94 | 0.00 | 51.24 | 3.44 | 0.00 | 42.73 | 0.53 | 0.00 | 43.99 | 0.54 |
| | Outer (VV) | 0.00 | 43.77 | 3.31 | 0.00 | 38.67 | 3.70 | 0.00 | 37.73 | 0.20 | 0.00 | 32.10 | 0.30 |
| Sigma0(dB) | Inner (HH) | 0.00 | 47.21 | 3.02 | 0.00 | 51.73 | 3.28 | 0.00 | 43.97 | 0.64 | 0.00 | 44.22 | 0.48 |
| | Outer (VV) | 0.00 | 44.71 | 3.22 | 0.00 | 38.07 | 3.24 | 0.00 | 36.43 | 0.20 | 0.00 | 31.48 | 0.27 |

| 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

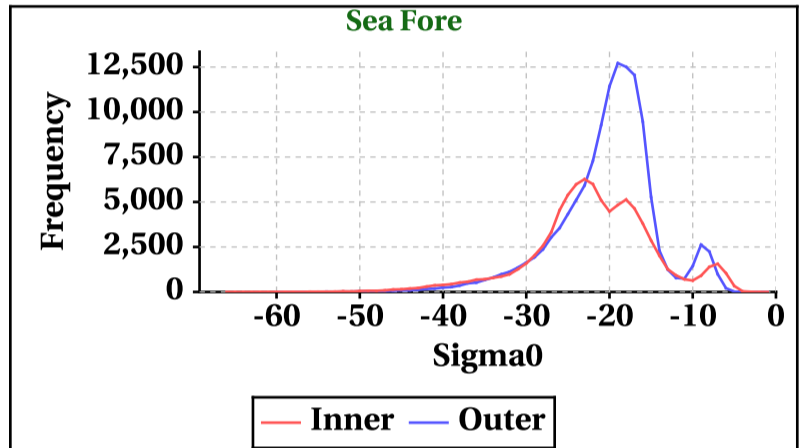
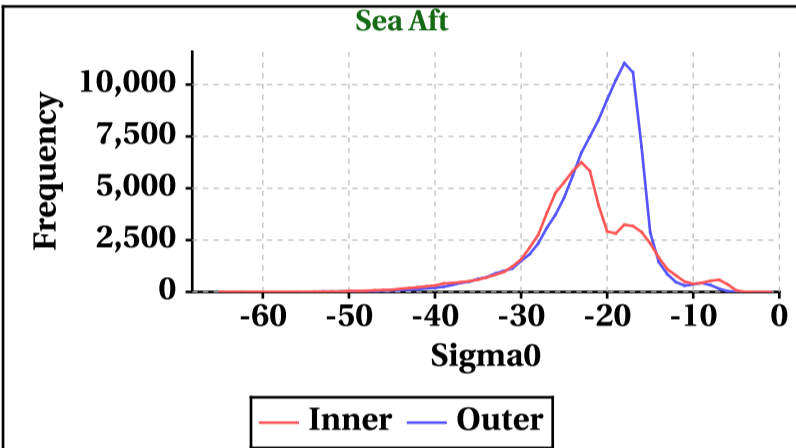
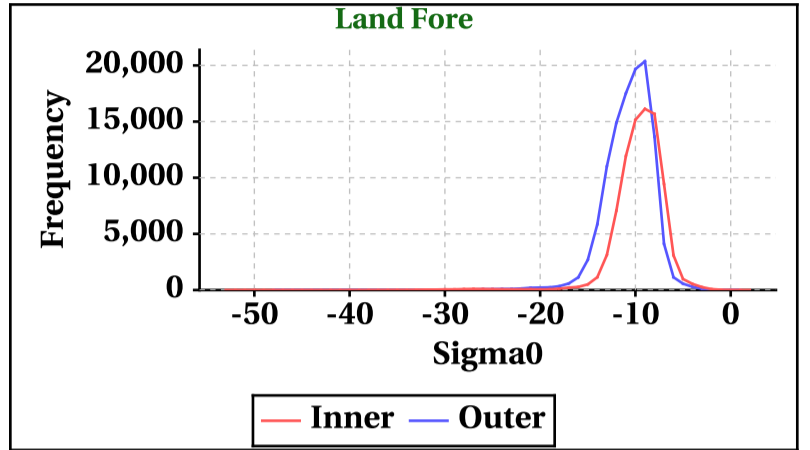
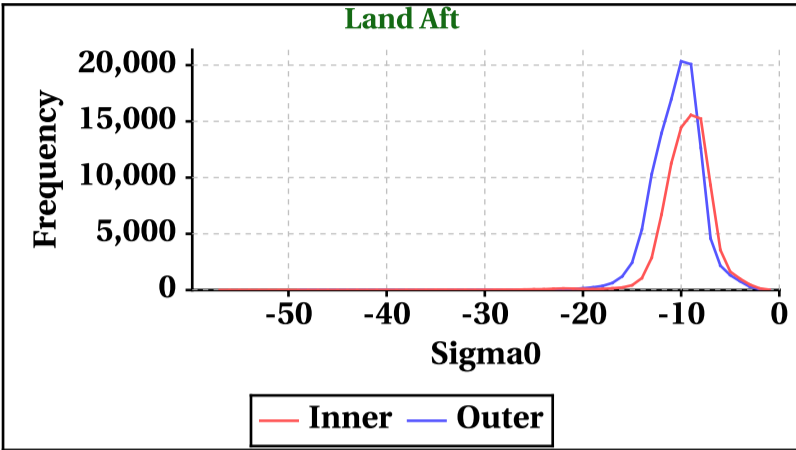
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -57 | -53 | -65 | -66 |
| Max | -1 | 2 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -49 | -48 | -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 | 365 | 367 | 303 | 305 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 367 | 402 | 315 | 321 |

