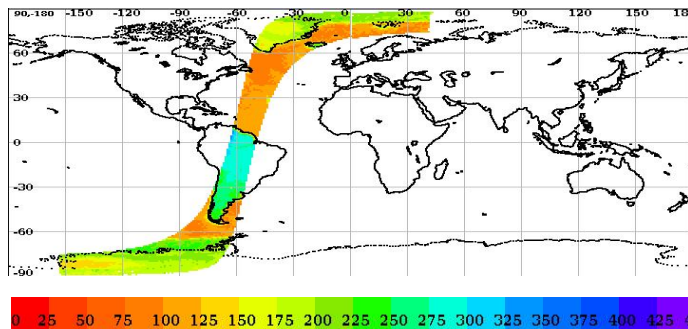


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

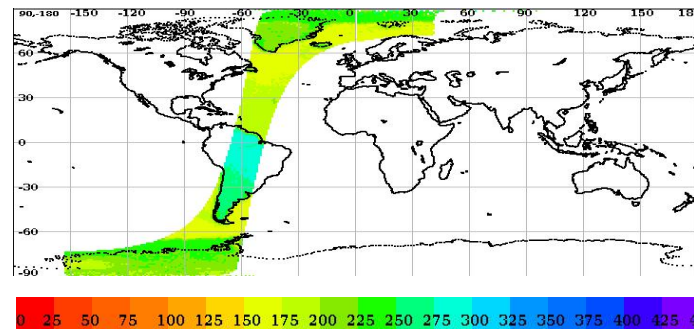
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 5253 | 5254 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 406 | 36 | 23-09-2017 | 23-09-2017 |
| Direction | WVC Size(km) | Processor Version | |
| NS | 50 | v1.1.2 | |

Brightness Temperature

Inner Beam (HH)

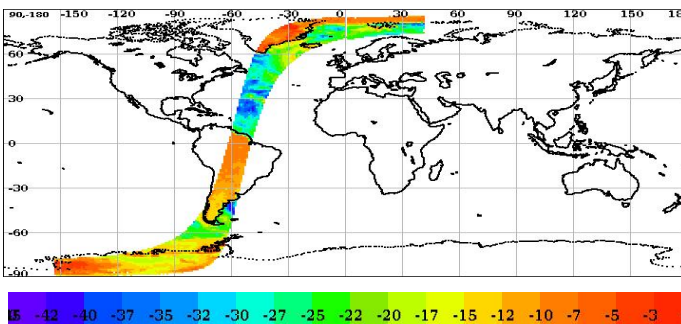


Outer Beam (VV)

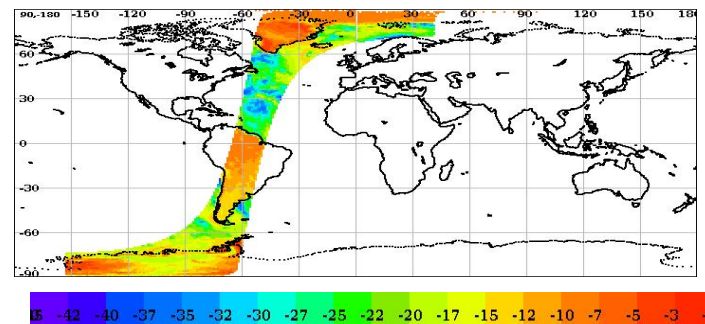


Sigma0(dB)

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 |
|-------------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| GreenLand_2 | 77.50 | -41.50 | Outer | DSC | Aft | -7.50 | -4.22 | -5.21 | 1.00 | 188.53 | 243.70 | 216.85 | 18.72 |
| GreenLand_2 | 77.50 | -41.50 | Outer | DSC | Fore | -6.13 | -2.71 | -4.87 | 1.06 | 183.84 | 239.57 | 216.99 | 15.57 |
| GreenLand_3 | 71.55 | -42.45 | Outer | DSC | Aft | -15.05 | -7.54 | -11.46 | 1.50 | 198.04 | 253.01 | 222.17 | 15.07 |
| GreenLand_3 | 71.55 | -42.45 | Outer | DSC | Fore | -13.96 | -10.24 | -12.03 | 1.01 | 187.66 | 255.91 | 219.84 | 18.14 |
| Amazon_3 | -6.00 | -61.00 | Inner | DSC | Aft | -11.59 | -6.32 | -8.24 | 1.00 | 254.60 | 325.24 | 296.78 | 17.24 |
| Amazon_3 | -6.00 | -61.00 | Outer | DSC | Aft | -12.99 | -7.82 | -9.41 | 0.88 | 239.75 | 323.13 | 287.80 | 17.50 |
| Amazon_3 | -6.00 | -61.00 | Inner | DSC | Fore | -12.44 | -3.27 | -8.42 | 1.77 | 239.50 | 322.15 | 286.18 | 17.82 |
| Amazon_3 | -6.00 | -61.00 | Outer | DSC | Fore | -13.01 | -7.24 | -9.39 | 1.24 | 247.49 | 319.76 | 283.44 | 14.32 |
| GreenLand_1 | 74.69 | -42.50 | Outer | DSC | Aft | -11.29 | -7.41 | -8.88 | 1.01 | 207.46 | 252.49 | 224.20 | 13.27 |
| GreenLand_1 | 74.69 | -42.50 | Outer | DSC | Fore | -11.09 | -6.46 | -8.78 | 1.02 | 195.78 | 260.28 | 226.20 | 17.32 |
| Amazon_2 | -3.00 | -61.00 | Inner | DSC | Aft | -15.49 | -3.85 | -8.56 | 1.50 | 229.34 | 345.60 | 275.99 | 25.74 |
| Amazon_2 | -3.00 | -61.00 | Outer | DSC | Aft | -14.14 | -6.95 | -9.61 | 1.20 | 231.94 | 309.24 | 271.38 | 16.90 |
| Amazon_2 | -3.00 | -61.00 | Inner | DSC | Fore | -17.87 | -4.73 | -8.74 | 2.23 | 216.16 | 314.38 | 268.27 | 20.69 |
| Amazon_2 | -3.00 | -61.00 | Outer | DSC | Fore | -15.17 | -6.12 | -9.87 | 1.77 | 236.45 | 310.35 | 278.84 | 17.32 |

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 | 27.29 | 14.00 | 0.00 | 29.43 | 15.92 | 0.00 | 150.37 | 14.81 | 0.00 | 159.04 | 15.02 |

| 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 | 59.30 | 9.75 | 0.00 | 40.69 | 9.19 | 0.00 | 41.53 | 0.28 | 0.00 | 41.44 | 0.22 |
| | Outer (VV) | 0.00 | 42.66 | 7.39 | 0.00 | 44.85 | 7.69 | 0.00 | 24.25 | 0.12 | 0.00 | 25.14 | 0.11 |
| Sigma0(dB) | Inner (HH) | 0.00 | 58.45 | 8.75 | 0.00 | 42.52 | 8.34 | 0.00 | 41.68 | 0.07 | 0.00 | 44.21 | 0.11 |
| | Outer (VV) | 0.00 | 41.10 | 7.02 | 0.00 | 42.09 | 7.07 | 0.00 | 23.78 | 0.07 | 0.00 | 22.08 | 0.06 |

| 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

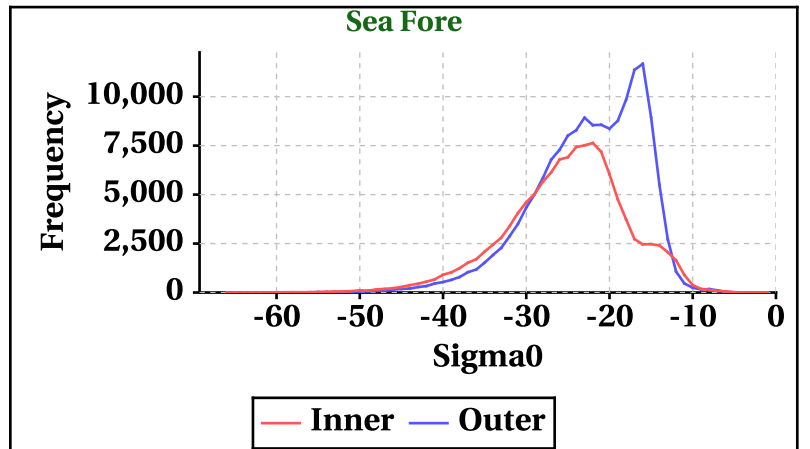
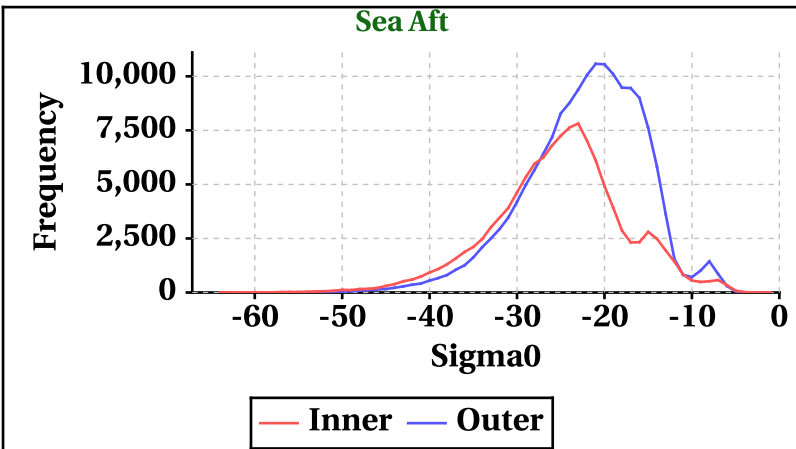
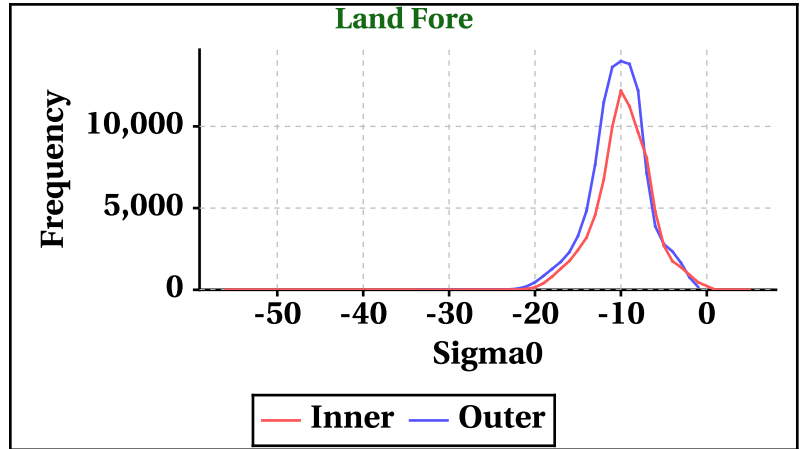
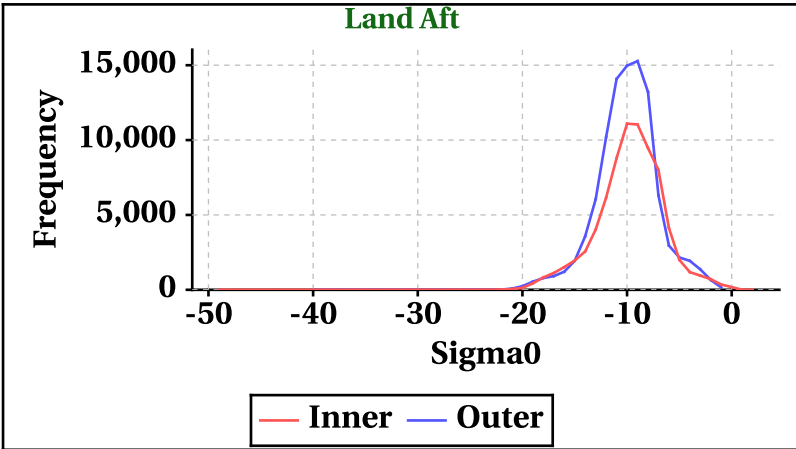
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -49 | -56 | -64 | -66 |
| Max | 2 | 5 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -40 | -34 | -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 | 435 | 385 | 284 | 276 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 352 | 354 | 305 | 291 |

