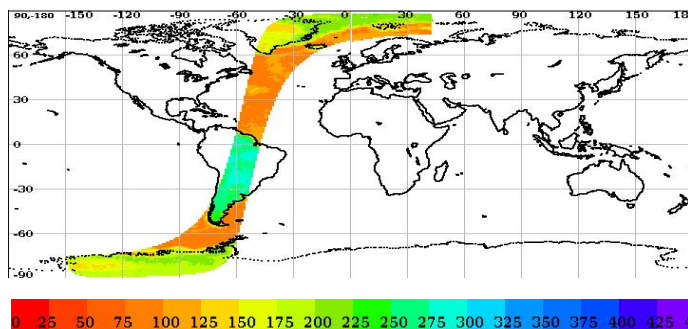


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

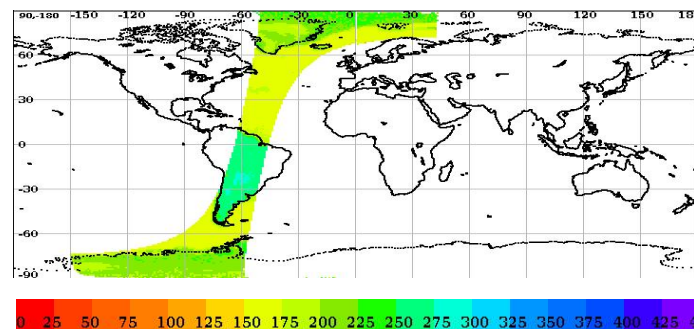
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 1673 | 1674 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 812 | 72 | 19-01-2017 | 19-01-2017 |
| Direction | WVC Size(km) | Processor Version | |
| NS | 25 | 1.1.1 | |

Brightness Temperature

Inner Beam (HH)

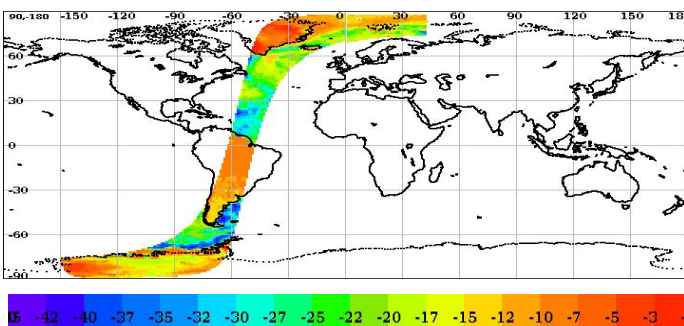


Outer Beam (VV)

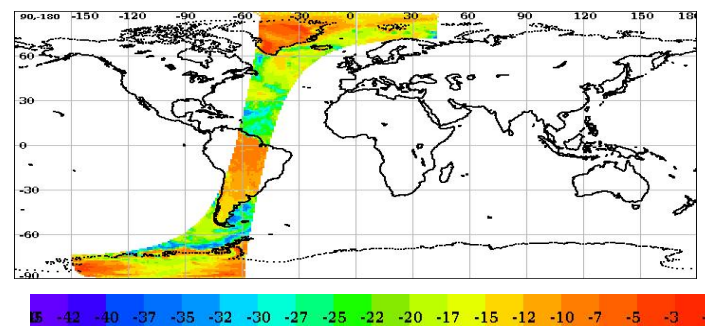


Sigma0(dB)

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 | Inner | ASC | Aft | -7.51 | -1.29 | -5.21 | 1.38 | 115.43 | 187.74 | 149.37 | 14.04 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Aft | -6.93 | -3.48 | -5.35 | 0.87 | 184.11 | 223.20 | 195.87 | 10.05 |
| GreenLand_2 | 77.50 | -41.50 | Inner | ASC | Fore | -9.25 | -2.05 | -5.25 | 1.67 | 113.15 | 173.06 | 145.12 | 13.20 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Fore | -7.49 | -2.13 | -4.86 | 1.40 | 151.87 | 216.14 | 190.22 | 17.10 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Aft | -13.79 | -7.16 | -10.35 | 1.43 | 146.68 | 200.82 | 173.98 | 14.18 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Aft | -12.45 | -8.22 | -10.95 | 0.93 | 181.39 | 250.07 | 213.24 | 17.44 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Fore | -14.30 | -7.07 | -10.14 | 1.79 | 147.71 | 213.79 | 175.99 | 14.66 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Fore | -15.52 | -7.66 | -11.27 | 1.37 | 166.74 | 239.76 | 210.93 | 11.53 |
| Amazon_3 | -6.00 | -61.00 | Inner | ASC | Aft | -10.96 | -5.41 | -8.23 | 1.03 | 240.52 | 322.08 | 280.99 | 15.09 |
| Amazon_3 | -6.00 | -61.00 | Outer | ASC | Aft | -13.39 | -5.96 | -9.15 | 1.04 | 246.37 | 310.95 | 278.21 | 15.62 |
| Amazon_3 | -6.00 | -61.00 | Inner | ASC | Fore | -14.05 | -4.46 | -8.41 | 2.07 | 219.07 | 311.47 | 272.84 | 18.47 |
| Amazon_3 | -6.00 | -61.00 | Outer | ASC | Fore | -14.91 | -6.46 | -9.82 | 1.55 | 235.23 | 315.14 | 272.50 | 15.97 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Aft | -11.93 | -5.35 | -8.82 | 1.47 | 127.64 | 182.88 | 159.77 | 12.54 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Aft | -12.60 | -5.40 | -8.57 | 1.32 | 171.37 | 237.97 | 208.76 | 17.13 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Fore | -14.25 | -4.59 | -8.88 | 2.01 | 136.01 | 189.45 | 160.27 | 14.57 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Fore | -13.64 | -5.24 | -8.92 | 1.52 | 179.95 | 246.21 | 204.34 | 12.90 |
| Amazon_2 | -3.00 | -61.00 | Inner | ASC | Aft | -13.29 | -4.53 | -8.96 | 1.44 | 187.13 | 311.54 | 259.16 | 23.68 |
| Amazon_2 | -3.00 | -61.00 | Outer | ASC | Aft | -15.62 | -6.64 | -9.85 | 1.51 | 220.72 | 295.86 | 262.12 | 16.62 |
| Amazon_2 | -3.00 | -61.00 | Inner | ASC | Fore | -17.32 | -4.69 | -9.02 | 2.07 | 197.06 | 311.92 | 261.59 | 23.11 |
| Amazon_2 | -3.00 | -61.00 | Outer | ASC | Fore | -20.14 | -6.45 | -10.50 | 2.01 | 217.70 | 308.54 | 260.79 | 17.88 |

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 | 24.83 | 13.49 | 0.00 | 24.83 | 13.79 | 0.00 | 337.29 | 4.21 | 0.00 | 89.49 | 4.07 |

| 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 | 41.75 | 2.39 | 0.00 | 42.00 | 2.83 | 0.00 | 24.00 | 0.01 | 0.00 | 21.05 | 0.01 |
| | Outer (VV) | 0.00 | 40.98 | 2.22 | 0.00 | 40.94 | 3.48 | 0.00 | 28.87 | 0.00 | 0.00 | 31.24 | 0.05 |
| Sigma0(dB) | Inner (HH) | 0.00 | 45.28 | 2.33 | 0.00 | 43.95 | 2.32 | 0.00 | 22.38 | 0.01 | 0.00 | 18.58 | 0.00 |
| | Outer (VV) | 0.00 | 45.88 | 2.26 | 0.00 | 40.33 | 2.36 | 0.00 | 23.06 | 0.01 | 0.00 | 25.28 | 0.01 |

| 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

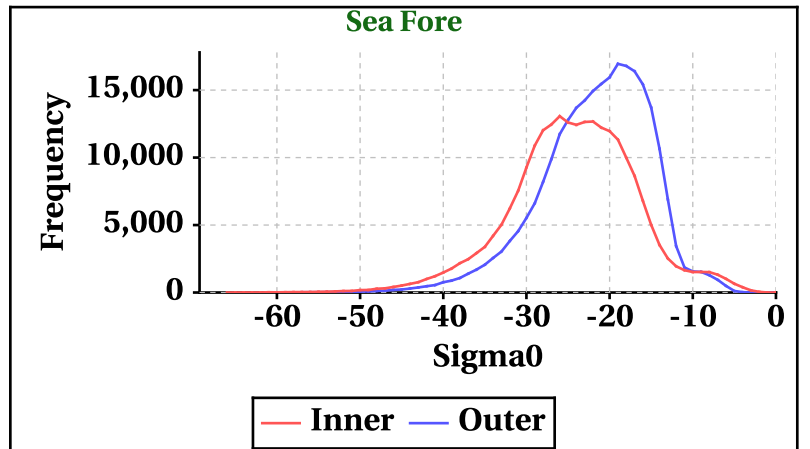
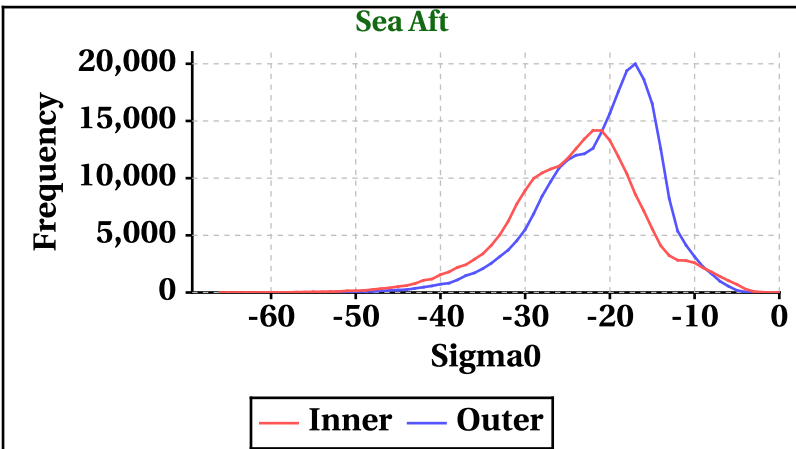
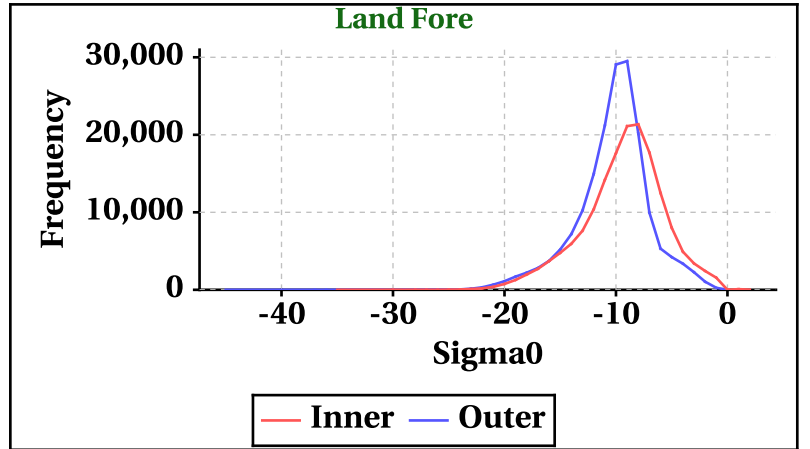
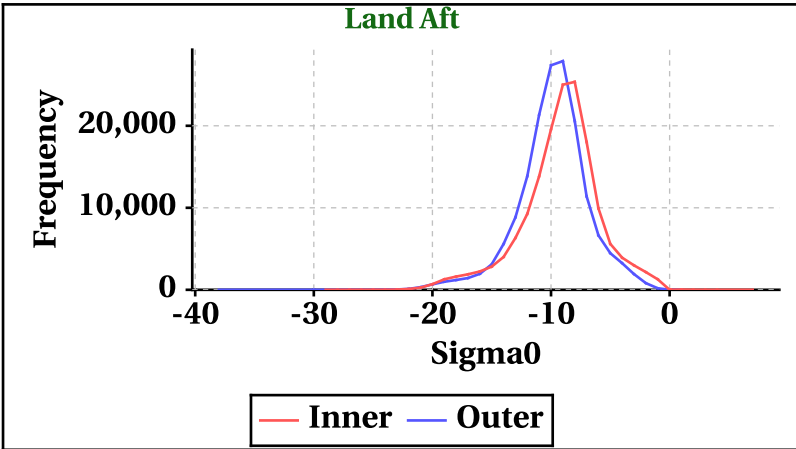
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -29 | -35 | -66 | -66 |
| Max | 7 | 2 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -38 | -45 | -61 | -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 | 351 | 344 | 274 | 265 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 358 | 339 | 296 | 291 |

