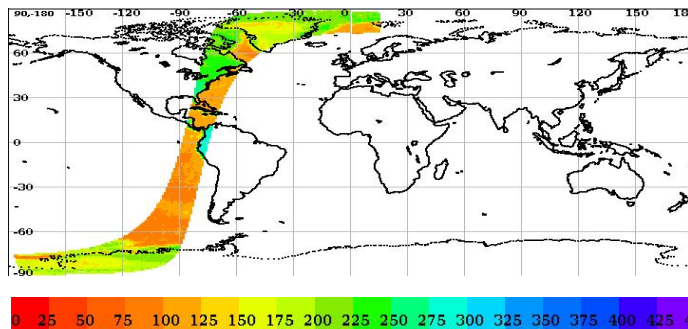


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

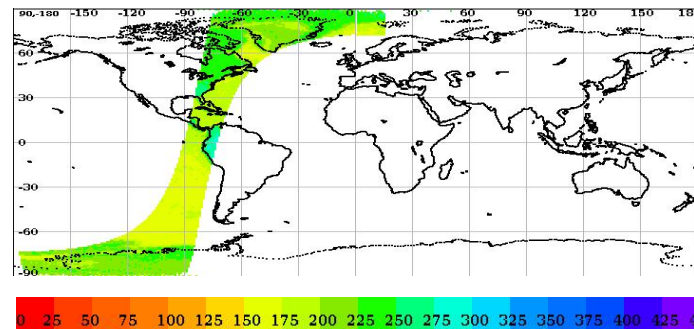
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 6588 | 6589 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 405 | 36 | 24-12-2017 | 25-12-2017 |
| Direction | WVC Size(km) | Processor Version | |
| NS | 50 | v1.1.2 | |

Brightness Temperature

Inner Beam (HH)

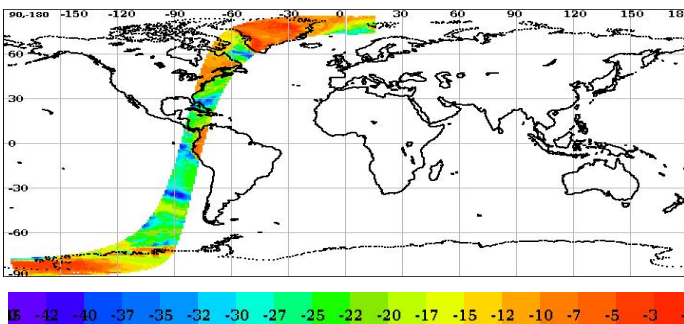


Outer Beam (VV)

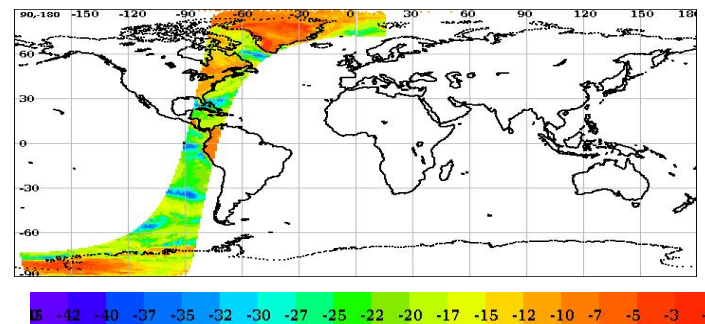


Sigma0(dB)

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 | Inner | DSC | Aft | -6.66 | -4.43 | -5.44 | 0.66 | 136.73 | 182.13 | 160.37 | 13.47 |
| GreenLand_2 | 77.50 | -41.50 | Outer | DSC | Aft | -5.46 | -3.59 | -4.57 | 0.49 | 178.77 | 235.77 | 215.41 | 16.60 |
| GreenLand_2 | 77.50 | -41.50 | Inner | DSC | Fore | -6.28 | -2.73 | -4.42 | 1.28 | 152.38 | 172.50 | 164.70 | 6.82 |
| GreenLand_2 | 77.50 | -41.50 | Outer | DSC | Fore | -6.17 | -4.12 | -5.22 | 0.68 | 179.64 | 231.85 | 214.65 | 15.93 |
| GreenLand_3 | 71.55 | -42.45 | Inner | DSC | Aft | -14.48 | -8.83 | -10.63 | 1.14 | 172.47 | 226.62 | 196.02 | 11.91 |
| GreenLand_3 | 71.55 | -42.45 | Outer | DSC | Aft | -12.33 | -10.00 | -11.02 | 0.63 | 193.54 | 261.42 | 227.51 | 18.11 |
| GreenLand_3 | 71.55 | -42.45 | Inner | DSC | Fore | -12.79 | -9.28 | -10.93 | 0.86 | 152.13 | 220.05 | 183.72 | 17.87 |
| GreenLand_3 | 71.55 | -42.45 | Outer | DSC | Fore | -14.16 | -9.70 | -11.51 | 0.80 | 198.35 | 235.89 | 218.70 | 7.78 |
| GreenLand_1 | 74.69 | -42.50 | Inner | DSC | Aft | -10.61 | -7.31 | -8.64 | 0.82 | 154.50 | 193.13 | 176.54 | 10.24 |
| GreenLand_1 | 74.69 | -42.50 | Outer | DSC | Aft | -10.14 | -7.11 | -8.63 | 0.89 | 200.53 | 243.99 | 225.71 | 11.90 |
| GreenLand_1 | 74.69 | -42.50 | Inner | DSC | Fore | -9.93 | -6.95 | -8.39 | 0.93 | 141.48 | 206.04 | 174.11 | 18.47 |
| GreenLand_1 | 74.69 | -42.50 | Outer | DSC | Fore | -9.87 | -7.21 | -8.42 | 0.77 | 213.39 | 239.47 | 223.40 | 6.99 |

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 | 24.97 | 14.28 | 0.00 | 37.86 | 15.63 | 0.00 | 356.53 | 13.73 | 0.00 | 80.47 | 13.43 |

| 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 | 48.52 | 8.60 | 0.00 | 47.84 | 6.43 | 0.00 | 24.82 | 0.13 | 0.00 | 28.44 | 0.19 |
| | Outer (VV) | 0.00 | 41.36 | 5.76 | 0.00 | 44.23 | 5.59 | 0.00 | 38.20 | 0.29 | 0.00 | 25.39 | 0.25 |
| Sigma0(dB) | Inner (HH) | 0.00 | 47.23 | 7.65 | 0.00 | 48.93 | 5.97 | 0.00 | 22.59 | 0.10 | 0.00 | 24.96 | 0.09 |
| | Outer (VV) | 0.00 | 43.48 | 5.27 | 0.00 | 44.68 | 4.98 | 0.00 | 37.06 | 0.19 | 0.00 | 26.03 | 0.16 |

| 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

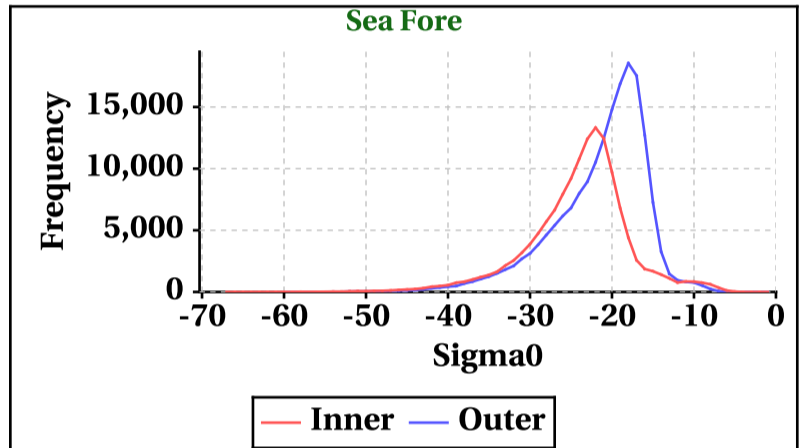
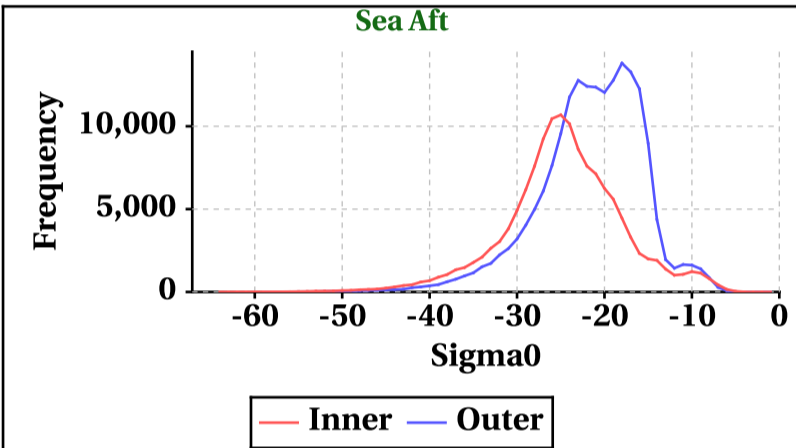
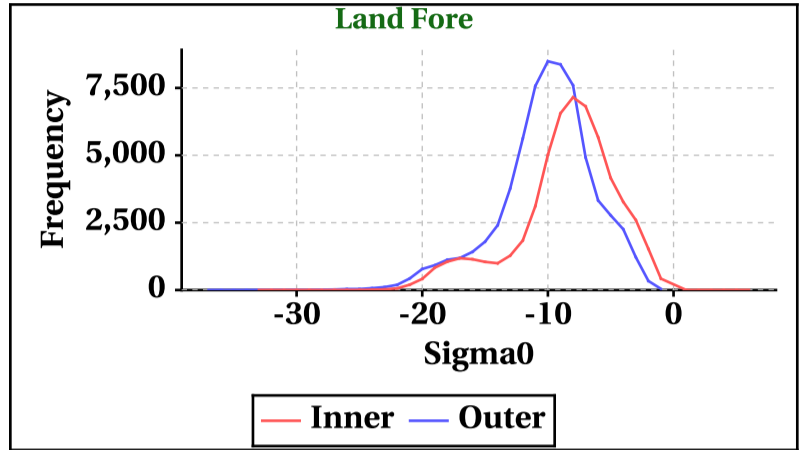
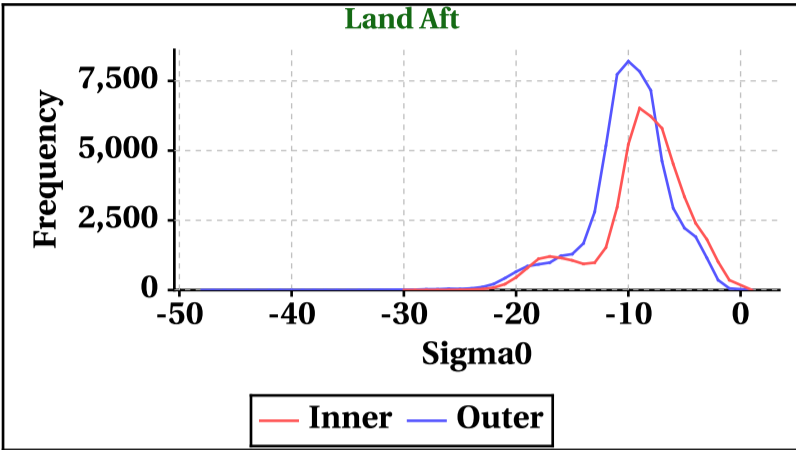
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -30 | -33 | -64 | -67 |
| Max | 1 | 6 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -48 | -37 | -59 | -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 | 341 | 344 | 288 | 285 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 339 | 343 | 304 | 294 |

