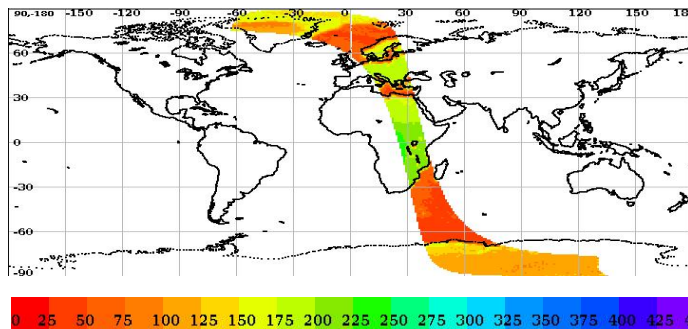


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

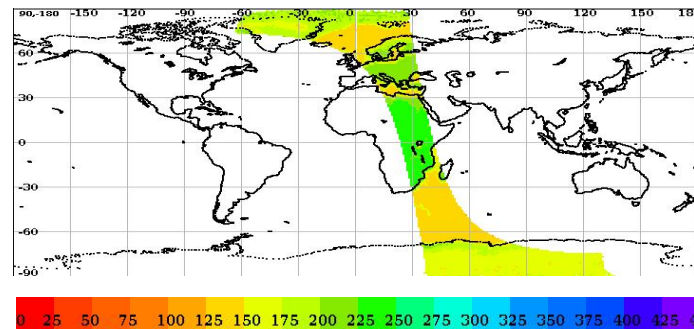
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 1285 | 1286 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 405 | 36 | 23-12-2016 | 24-12-2016 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 50 | 1.0 | |

Brightness Temperature

Inner Beam (HH)

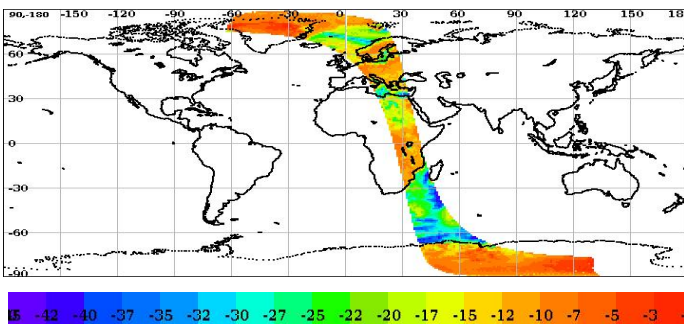


Outer Beam (VV)

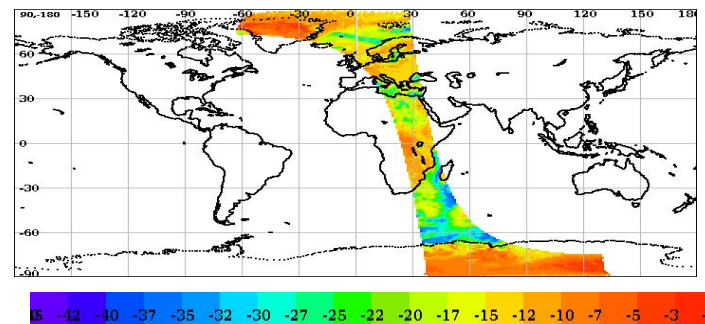


Sigma0(dB)

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 |
|-------------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| ANT_1 | -75.00 | 121.00 | Inner | DSC | Aft | -7.65 | -3.11 | -6.06 | 0.98 | 63.18 | 156.21 | 109.69 | 19.79 |
| ANT_1 | -75.00 | 121.00 | Outer | DSC | Aft | -11.37 | -5.65 | -8.39 | 1.04 | 136.30 | 186.86 | 159.10 | 14.01 |
| ANT_1 | -75.00 | 121.00 | Inner | DSC | Fore | -7.77 | -3.16 | -5.83 | 1.00 | 88.59 | 132.44 | 109.74 | 11.22 |
| GreenLand_2 | 77.50 | -41.50 | Inner | DSC | Fore | -6.24 | -3.39 | -4.71 | 1.05 | 70.31 | 118.49 | 91.47 | 16.65 |
| GreenLand_2 | 77.50 | -41.50 | Outer | DSC | Fore | -5.73 | -3.39 | -4.83 | 0.69 | 140.22 | 195.23 | 171.09 | 17.25 |
| GreenLand_1 | 74.69 | -42.50 | Inner | DSC | Aft | -12.35 | -4.63 | -8.38 | 1.58 | 93.48 | 139.65 | 113.38 | 12.42 |
| GreenLand_1 | 74.69 | -42.50 | Outer | DSC | Aft | -9.85 | -6.23 | -8.53 | 1.28 | 155.11 | 206.88 | 188.97 | 17.02 |
| GreenLand_1 | 74.69 | -42.50 | Inner | DSC | Fore | -11.73 | -4.31 | -8.46 | 1.57 | 91.79 | 139.66 | 115.56 | 11.51 |
| GreenLand_1 | 74.69 | -42.50 | Outer | DSC | Fore | -10.32 | -6.32 | -8.54 | 0.94 | 161.12 | 217.15 | 184.10 | 15.14 |

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 | 43.40 | 24.75 | 0.00 | 40.24 | 25.25 | 0.00 | 25.70 | 14.65 | 0.00 | 24.83 | 15.10 |

| 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 | 52.18 | 8.98 | 0.00 | 52.66 | 9.04 | 0.00 | 55.09 | 1.10 | 0.00 | 46.20 | 1.13 |
| | Outer (VV) | 0.00 | 52.03 | 10.11 | 0.00 | 48.52 | 9.87 | 0.00 | 32.67 | 0.67 | 0.00 | 37.90 | 1.02 |
| Sigma0(dB) | Inner (HH) | 0.00 | 52.99 | 9.09 | 0.00 | 88.27 | 9.13 | 0.00 | 95.49 | 1.23 | 0.00 | 95.46 | 1.19 |
| | Outer (VV) | 0.00 | 52.38 | 10.05 | 0.00 | 48.58 | 9.76 | 0.00 | 33.36 | 0.67 | 0.00 | 37.71 | 0.99 |

| 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

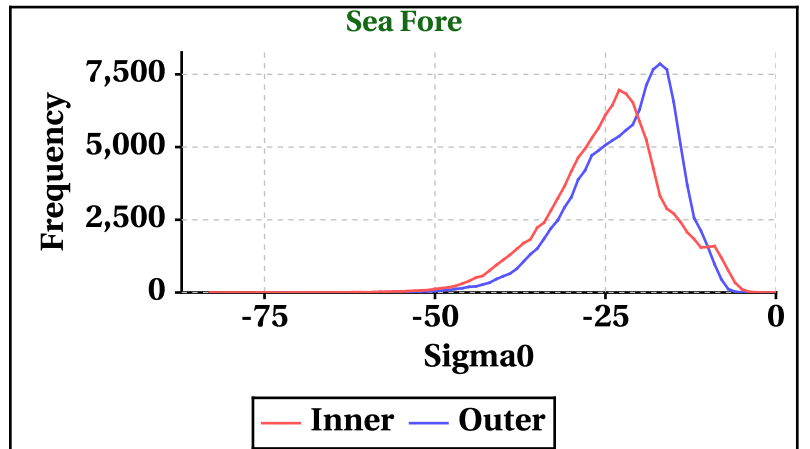
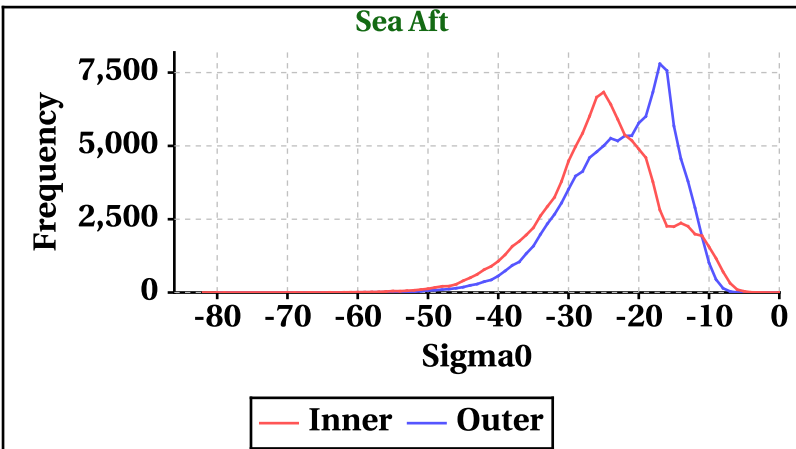
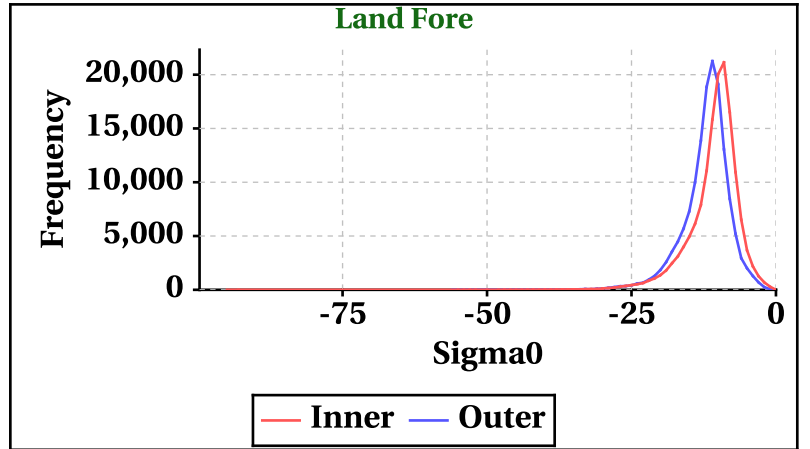
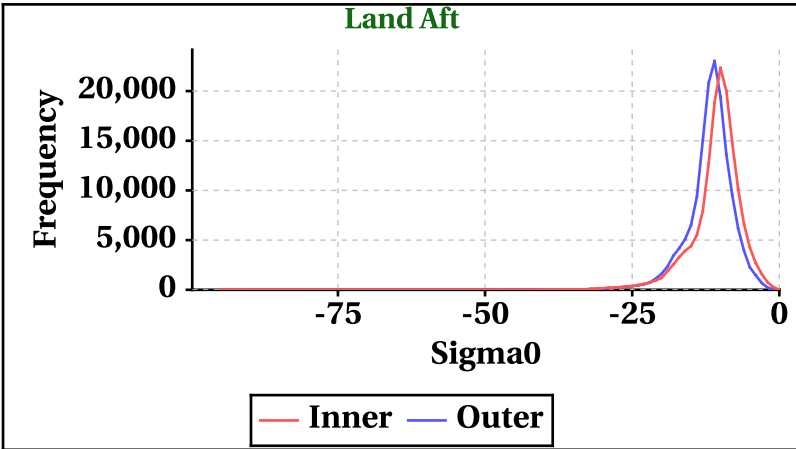
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -95 | -95 | -82 | -83 |
| Max | -1 | -1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -50 | -56 | -80 | -76 |
| 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 | 308 | 363 | 500 | 500 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 307 | 500 | 251 | 437 |

