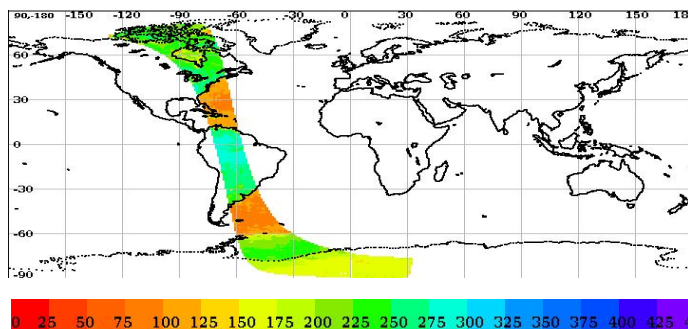


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

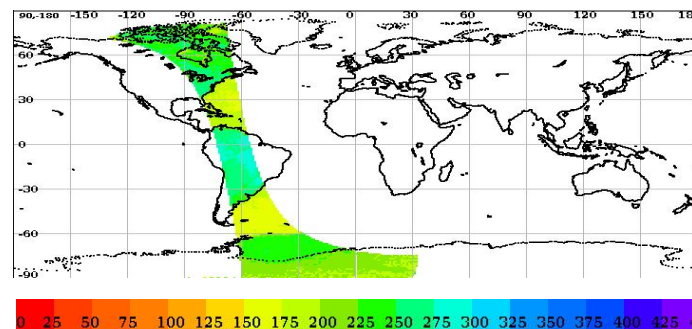
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 3564 | 3565 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 771 | 72 | 30-05-2017 | 30-05-2017 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 25 | v1.1.2 | |

Brightness Temperature

Inner Beam (HH)

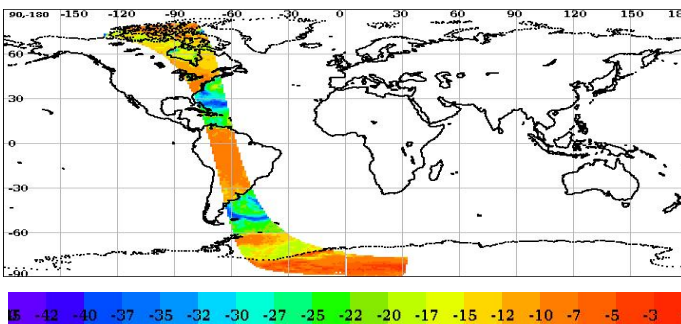


Outer Beam (VV)

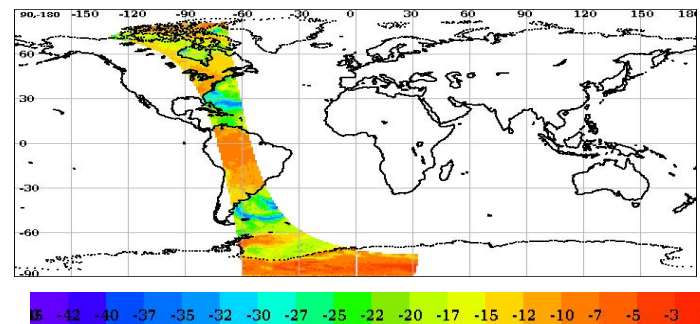


Sigma0(dB)

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 |
|-----------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| Amazon_3 | -6.00 | -61.00 | Inner | DSC | Aft | -11.16 | -5.03 | -8.34 | 1.18 | 237.39 | 308.84 | 280.39 | 15.15 |
| Amazon_3 | -6.00 | -61.00 | Outer | DSC | Aft | -14.19 | -6.77 | -9.57 | 1.05 | 244.85 | 311.44 | 280.37 | 16.43 |
| Amazon_3 | -6.00 | -61.00 | Inner | DSC | Fore | -14.31 | -4.04 | -8.29 | 1.72 | 239.08 | 314.72 | 278.98 | 17.66 |
| Amazon_3 | -6.00 | -61.00 | Outer | DSC | Fore | -12.22 | -7.05 | -9.37 | 1.06 | 240.71 | 302.58 | 269.55 | 13.34 |
| Amazon_2 | -3.00 | -61.00 | Inner | DSC | Aft | -14.92 | -5.45 | -9.26 | 1.73 | 187.21 | 299.02 | 249.72 | 26.43 |
| Amazon_2 | -3.00 | -61.00 | Outer | DSC | Aft | -14.20 | -8.04 | -10.49 | 1.37 | 222.02 | 305.99 | 267.23 | 22.34 |
| Amazon_2 | -3.00 | -61.00 | Inner | DSC | Fore | -16.80 | -3.54 | -8.96 | 2.30 | 211.15 | 295.44 | 246.88 | 21.42 |
| Amazon_2 | -3.00 | -61.00 | Outer | DSC | Fore | -18.99 | -6.35 | -10.50 | 1.95 | 229.72 | 294.43 | 260.75 | 15.70 |
| Amazon_1 | 0.00 | -67.00 | Inner | DSC | Aft | -11.05 | -3.86 | -7.72 | 1.34 | 237.59 | 325.63 | 281.99 | 15.58 |
| Amazon_1 | 0.00 | -67.00 | Outer | DSC | Aft | -10.99 | -6.38 | -8.54 | 0.98 | 242.08 | 315.72 | 276.59 | 15.41 |
| Amazon_1 | 0.00 | -67.00 | Inner | DSC | Fore | -11.39 | -3.52 | -7.45 | 1.32 | 241.10 | 329.75 | 287.69 | 18.47 |
| Amazon_1 | 0.00 | -67.00 | Outer | DSC | Fore | -11.69 | -6.35 | -8.48 | 1.02 | 228.80 | 305.65 | 270.49 | 14.66 |

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 | 25.78 | 8.27 | 0.00 | 47.10 | 7.76 | 0.00 | 143.94 | 1.71 | 0.00 | 11.65 | 1.72 |

| 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 | 39.04 | 2.71 | 0.00 | 43.69 | 2.11 | 0.00 | 48.15 | 0.39 | 0.00 | 49.63 | 0.39 |
| | Outer (VV) | 0.00 | 37.88 | 1.83 | 0.00 | 41.78 | 1.77 | 0.00 | 40.47 | 0.18 | 0.00 | 41.48 | 0.24 |
| Sigma0(dB) | Inner (HH) | 0.00 | 37.78 | 2.44 | 0.00 | 43.43 | 1.88 | 0.00 | 45.26 | 0.35 | 0.00 | 51.25 | 0.40 |
| | Outer (VV) | 0.00 | 35.69 | 1.63 | 0.00 | 42.33 | 1.61 | 0.00 | 39.23 | 0.19 | 0.00 | 37.38 | 0.20 |

| 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 | | | | | | | |

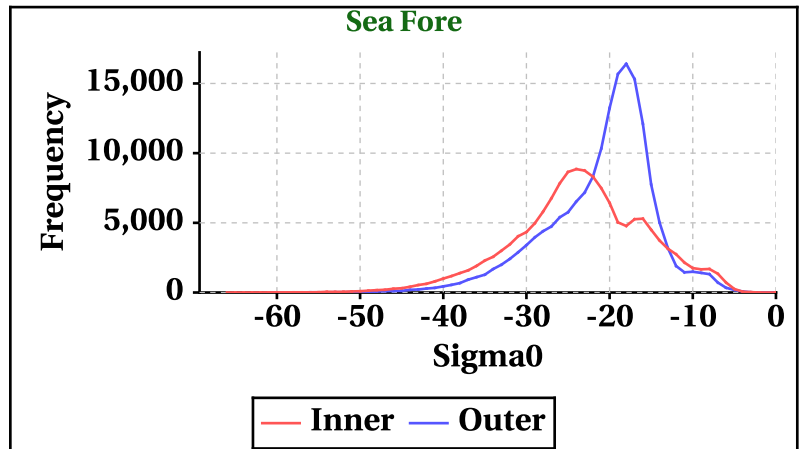
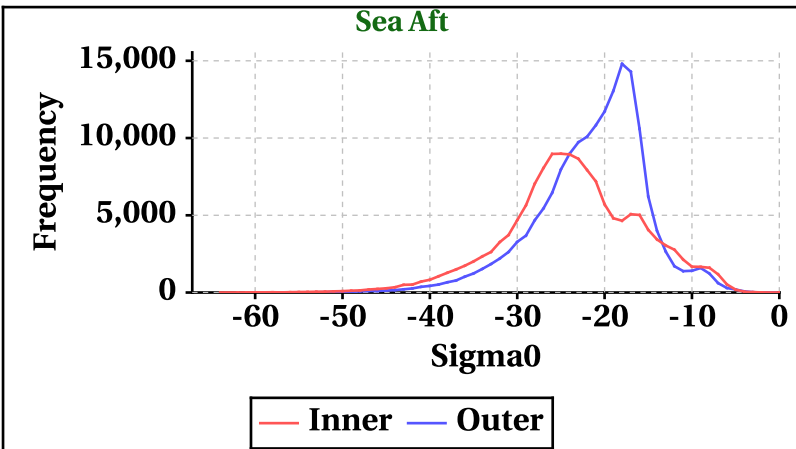
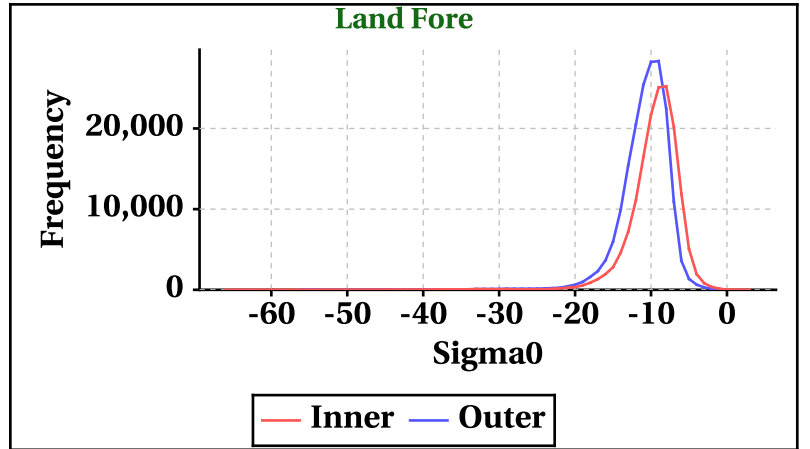
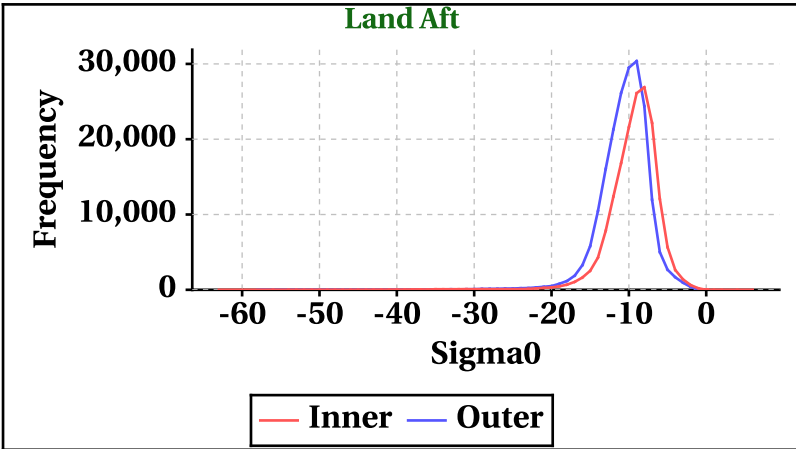
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -63 | -66 | -64 | -66 |
| Max | 6 | 3 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -58 | -56 | -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 | 354 | 349 | 298 | 299 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 362 | 342 | 312 | 302 |

