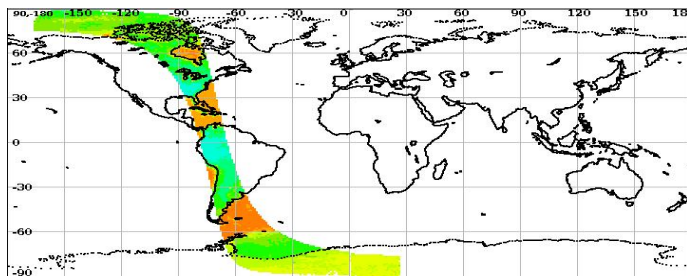


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

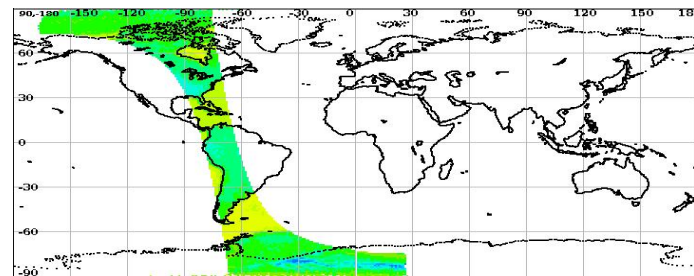
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 4057 | 4058 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 405 | 36 | 03-07-2017 | 03-07-2017 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 50 | v1.1.2 | |

Brightness Temperature

Inner Beam (HH)

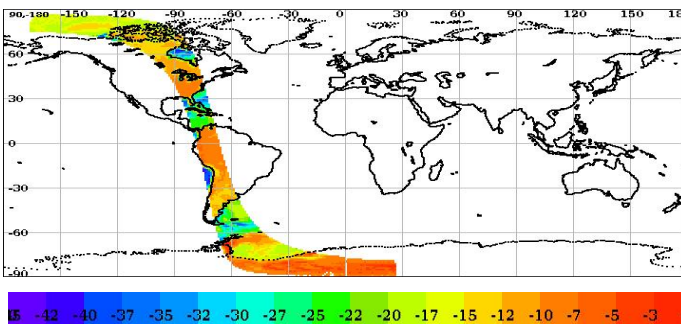


Outer Beam (VV)

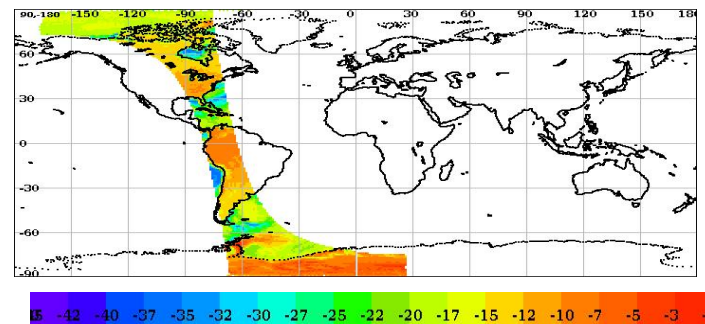


Sigma0(dB)

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 |
|-----------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| Amazon_3 | -6.00 | -61.00 | Outer | ASC | Fore | -9.09 | -9.09 | -9.09 | 0.00 | 272.50 | 272.50 | 272.50 | 0.00 |
| Amazon_1 | 0.00 | -67.00 | Inner | ASC | Aft | -10.58 | -5.55 | -7.97 | 0.88 | 237.26 | 320.29 | 276.81 | 16.57 |
| Amazon_1 | 0.00 | -67.00 | Outer | ASC | Aft | -10.97 | -5.81 | -8.57 | 0.83 | 234.22 | 334.06 | 282.58 | 18.66 |
| Amazon_1 | 0.00 | -67.00 | Inner | ASC | Fore | -12.42 | -4.27 | -7.96 | 1.44 | 227.88 | 317.60 | 276.09 | 16.03 |
| Amazon_1 | 0.00 | -67.00 | Outer | ASC | Fore | -11.80 | -5.29 | -8.81 | 1.13 | 232.73 | 326.16 | 272.94 | 18.96 |

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 | 31.04 | 15.26 | 0.00 | 54.86 | 15.11 | 0.00 | 174.99 | 11.27 | 0.00 | 79.34 | 11.70 |

| 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 | 46.42 | 11.50 | 0.00 | 48.77 | 10.22 | 0.00 | 52.24 | 1.31 | 0.00 | 44.75 | 1.96 |
| | Outer (VV) | 0.00 | 42.70 | 8.28 | 0.00 | 45.96 | 7.35 | 0.00 | 43.14 | 0.86 | 0.00 | 40.56 | 1.07 |
| Sigma0(dB) | Inner (HH) | 0.00 | 47.55 | 11.00 | 0.00 | 50.43 | 9.65 | 0.00 | 54.27 | 1.28 | 0.00 | 47.71 | 1.85 |
| | Outer (VV) | 0.00 | 46.02 | 8.18 | 0.00 | 45.53 | 6.77 | 0.00 | 42.30 | 0.77 | 0.00 | 41.86 | 1.03 |

| 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

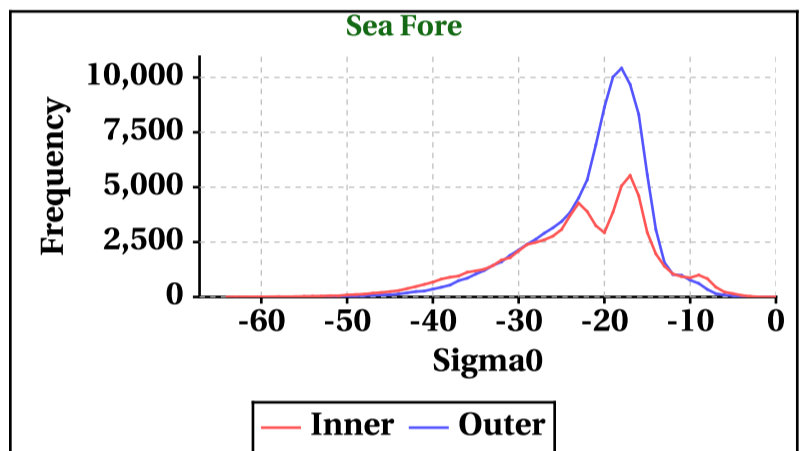
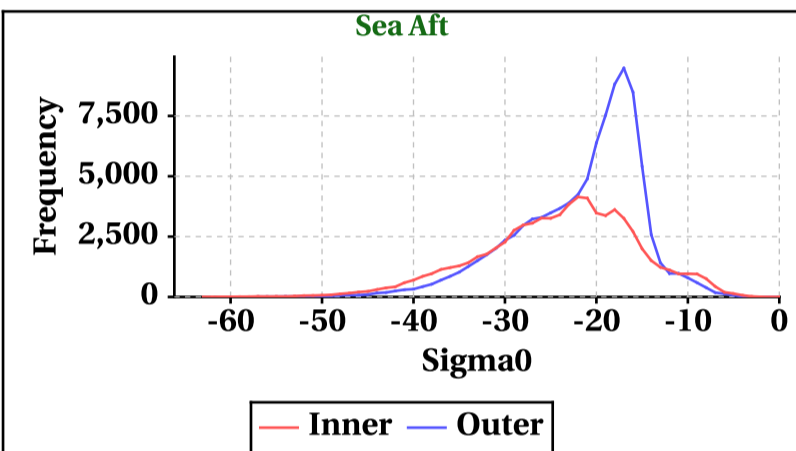
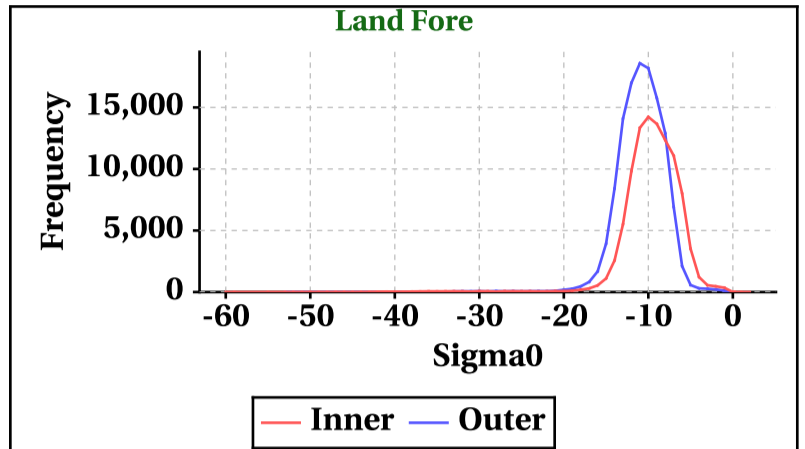
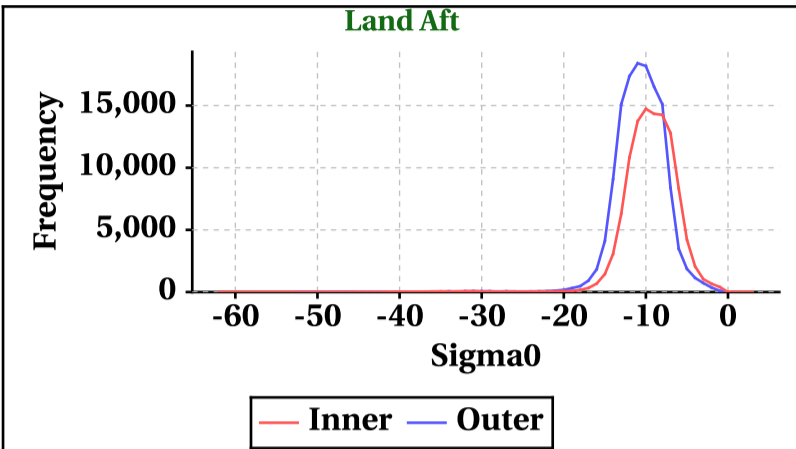
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -62 | -60 | -63 | -64 |
| Max | 3 | 2 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -53 | -53 | -60 | -59 |
| 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 | 349 | 344 | 317 | 301 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 500 | 340 | 407 | 311 |

