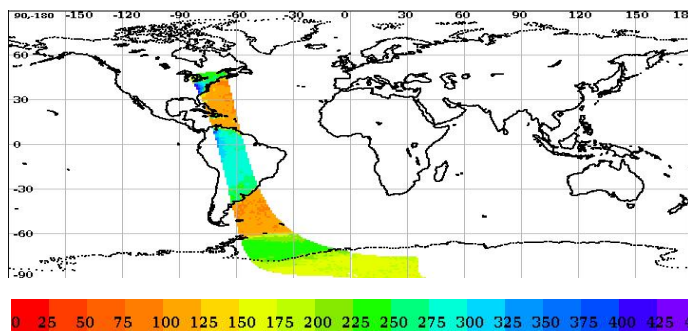


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

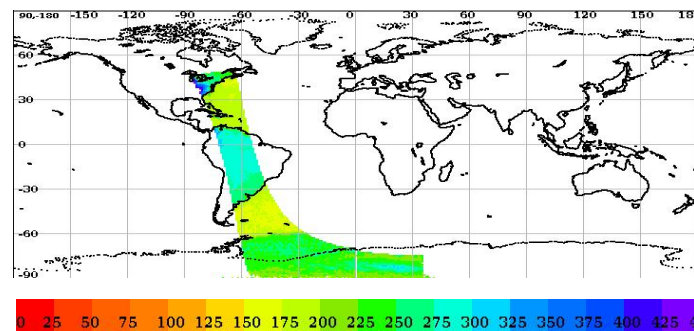
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 5869 | 5870 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 313 | 36 | 05-11-2017 | 05-11-2017 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 50 | v1.1.2 | |

Brightness Temperature

Inner Beam (HH)

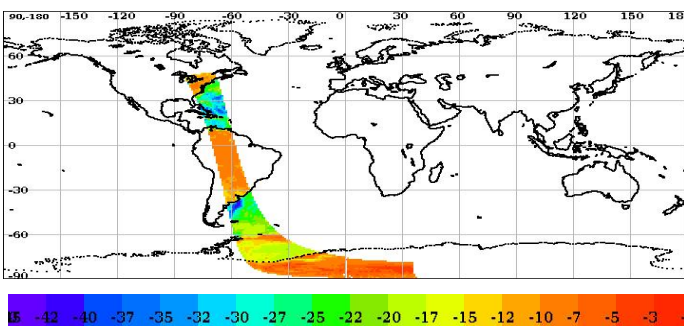


Outer Beam (VV)

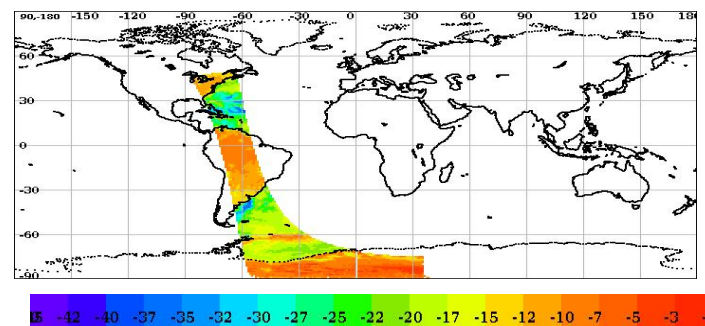


Sigma0(dB)

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 | Inner | ASC | Aft | -10.92 | -6.33 | -8.50 | 0.94 | 250.72 | 316.56 | 285.15 | 17.34 |
| Amazon_3 | -6.00 | -61.00 | Outer | ASC | Aft | -10.92 | -7.59 | -9.18 | 0.70 | 251.43 | 319.78 | 289.78 | 17.35 |
| Amazon_3 | -6.00 | -61.00 | Inner | ASC | Fore | -15.75 | -5.36 | -8.11 | 1.59 | 255.98 | 336.53 | 292.56 | 17.47 |
| Amazon_3 | -6.00 | -61.00 | Outer | ASC | Fore | -11.89 | -7.07 | -9.01 | 0.99 | 251.94 | 327.17 | 289.51 | 19.16 |
| Amazon_2 | -3.00 | -61.00 | Inner | ASC | Aft | -13.29 | -5.34 | -9.05 | 1.46 | 206.54 | 321.78 | 267.52 | 20.39 |
| Amazon_2 | -3.00 | -61.00 | Outer | ASC | Aft | -15.15 | -8.18 | -10.24 | 1.39 | 245.37 | 311.80 | 279.49 | 17.15 |
| Amazon_2 | -3.00 | -61.00 | Inner | ASC | Fore | -23.06 | -4.57 | -9.02 | 2.34 | 221.33 | 302.62 | 270.23 | 19.83 |
| Amazon_2 | -3.00 | -61.00 | Outer | ASC | Fore | -14.50 | -6.18 | -9.87 | 1.49 | 235.30 | 306.28 | 272.05 | 15.39 |
| Amazon_1 | 0.00 | -67.00 | Inner | ASC | Aft | -13.33 | -3.61 | -7.93 | 1.41 | 278.98 | 377.04 | 317.62 | 18.10 |
| Amazon_1 | 0.00 | -67.00 | Outer | ASC | Aft | -12.13 | -7.09 | -8.97 | 0.96 | 238.18 | 320.04 | 293.81 | 17.72 |
| Amazon_1 | 0.00 | -67.00 | Inner | ASC | Fore | -11.26 | -5.24 | -7.83 | 1.14 | 260.25 | 328.98 | 293.02 | 14.52 |
| Amazon_1 | 0.00 | -67.00 | Outer | ASC | Fore | -11.19 | -6.04 | -8.71 | 0.91 | 258.30 | 339.11 | 292.71 | 15.42 |

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 | 32.58 | 16.02 | 0.00 | 24.15 | 12.76 | 0.00 | 151.67 | 13.40 | 0.00 | 15.94 | 11.36 |

| 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 | 44.08 | 9.87 | 0.00 | 47.55 | 8.12 | 0.00 | 35.63 | 0.40 | 0.00 | 31.05 | 0.40 |
| | Outer (VV) | 0.00 | 40.80 | 6.37 | 0.00 | 43.20 | 5.73 | 0.00 | 31.38 | 0.08 | 0.00 | 22.71 | 0.04 |
| Sigma0(dB) | Inner (HH) | 0.00 | 43.26 | 8.53 | 0.00 | 44.49 | 7.18 | 0.00 | 34.35 | 0.29 | 0.00 | 30.37 | 0.24 |
| | Outer (VV) | 0.00 | 40.86 | 5.76 | 0.00 | 44.05 | 5.37 | 0.00 | 29.47 | 0.08 | 0.00 | 19.61 | 0.00 |

| 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 | | | | | | | |

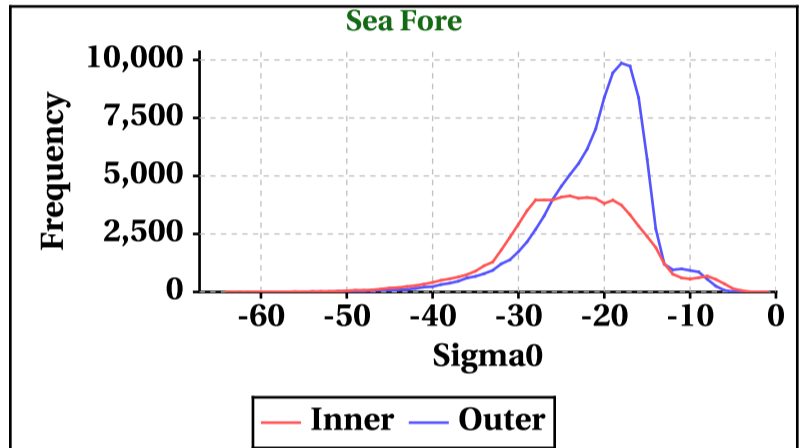
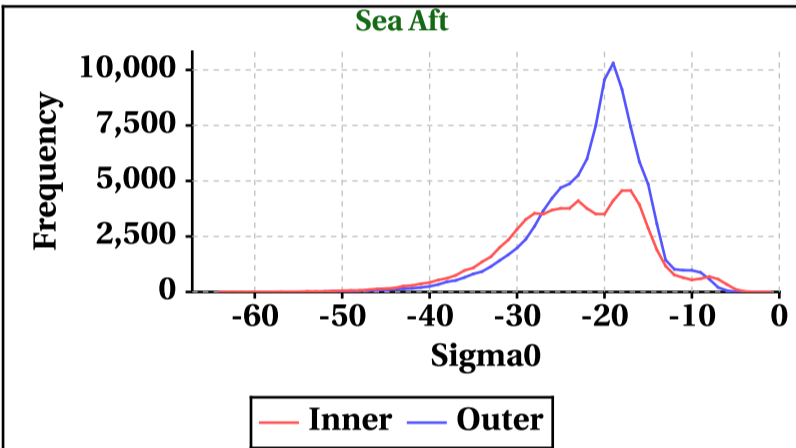
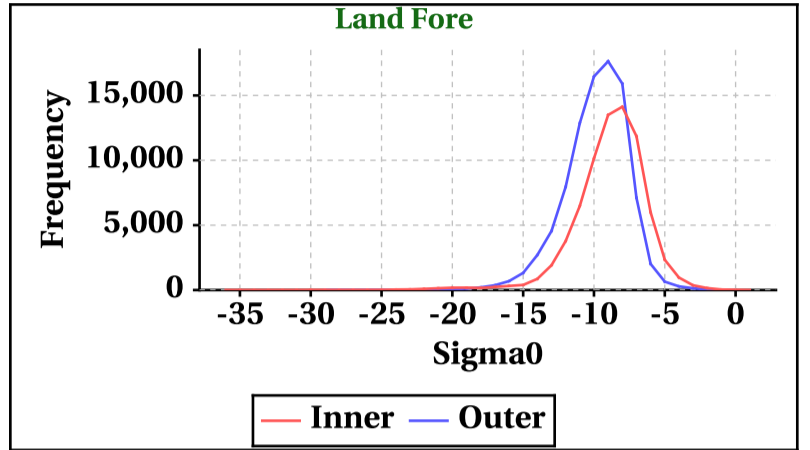
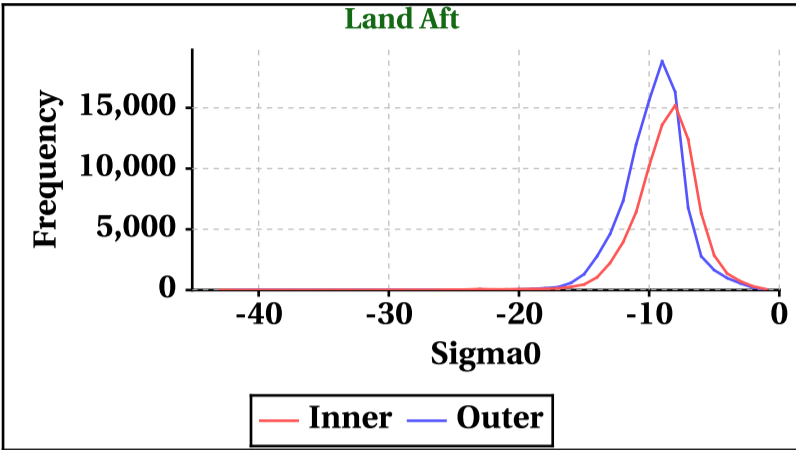
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -43 | -36 | -64 | -64 |
| Max | -1 | 1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -42 | -29 | -60 | -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 | 500 | 500 | 436 | 338 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 500 | 500 | 485 | 353 |

