Scatterometer Stability

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Stability Check Metrics

• Sigma0/Expected Sigma0 over the Ocean
• Sigma0 versus time over DOME-C
• Sigma0 verses time over the AMAZON
Sigma0/Expected Sigma0

- Land and Ice are excluded
- Strong RFI is excluded.
- Negative sigma0 is excluded
- Incidence angle is constrained to be within .4 deg of nominal to exclude maneuvers.
- The Expected sigma0 is computed from external wind speed and direction using a model for 2 cases:
  - NCEP wind speed and direction is used.
  - F17 matchups for wind speed and NCEP direction is used. (The model was generated using F17 data)
- The difference between the measured Sigma0 and the model Sigma0 is calculated for co-pol data, and averaged over 1 day.
- The difference is also calculated separately for ascending and descending data.
Measured Sigma0/Expected Sigma0

F17

JPL V1.2 Ocean [If f17 wind available]
Measured Simga0/Expected Sigma0

7 day avg F17

JPL V1.2 Ocean [If f17 wind available]
Measured Simgka0/Expected Sigma0
V pol ascending/descending F17

JPL V1.2 Ocean [If f17 wind available]
Measured Sigma0/Expected Sigma0
7 day avg V pol ascending/descending F17

JPL V1.2 Ocean [If f17 wind available]
Measured Simga0/Expected Sigma0
H pol ascending/descending F17

JPL V1.2 Ocean [If f17 wind available]
Measured Simga0/Expected Sigma0
7 day avg H pol ascending/descending F17

JPL V1.2 Ocean [If f17 wind available]
Measured Simga0/Expected Sigma0
HH Beam 1 F17
Measured Simga0/Expected Sigma0
HH Beam 2 F17
Measured Simga0/Expected Sigma0
HH Beam 3 F17
Measured Simga0/Expected Sigma0
VV Beam 1 F17

2011-08-26T00:29 to 2011-11-12T09:06
Measured Sigma0/Expected Sigma0
VV Beam 2 F17
Measured Sigma0/Expected Sigma0
VV Beam 3 F17

2011-08-26T00:29 to 2011-11-12T09:06