



| Wide Field Camera (WFC) Level 1B Scans Information<br>Half orbit (Day) geolocated data radiances |         |                                     |                                      |                               |                   |
|--|---------|-------------------------------------|--------------------------------------|-------------------------------|-------------------|
| Release Date   | Version | Data Date Range                     | Product Quality Statement            | Data Detail Quality Statement | Maturity Level    |
| December 2011  | 3.02    | November 1, 2011 to present         | <a href="#">3.02 Version Summary</a> | <a href="#">QS 3.01, 3.02</a> | Validated Stage 1 |
| November 2010  | 3.01    | June 13, 2006 to October 31, 2011   | <a href="#">3.01 Version Summary</a> | <a href="#">QS 3.01, 3.02</a> | Validated Stage 1 |
| December 8, 2006   | 1.10    | June 13, 2006 to September 21, 2010 | <a href="#">1.10 Version Summary</a> | <a href="#">QS 1.10</a>       | Provisional       |

**Data Release Date:** December 2011  
**Version:** 3.02  
**Data Date Range:** November 1, 2011 to present

The CALIPSO Team is releasing Version 3.02 which represents a transition of the Lidar, IIR, and WFC processing and browse code to a new cluster computing system. No algorithm changes were introduced and very minor changes were observed between V 3.01 and V 3.02 as a result of the compiler and computer architecture differences. Version 3.02 is being released in a forward processing mode beginning November 1, 2011.

**Data Release Date:** November 2010  
**Version:** 3.01  
**Data Date Range:** June 13, 2006 to October 31, 2011

WFC Level 1B Scans Version 3.01 includes new metadata parameters and corrections to several minor software bugs. Specifically, the Orbit Number and Path Number metadata parameters are now included to facilitate improved subsetting capabilities.

**Data Release Date:** December 8, 2006  
**Version:** 1.10  
**Data Date Range:** June 13, 2006 to September 21, 2010

The WFC is currently fully functional and operating nominally. To date, the WFC data quality assessments have been focused on two primary areas: geolocation and radiometric accuracy. Post-launch checks of the WFC geolocation identified both along-track and cross-track biases in the reported WFC pixel locations. These systematic offsets were on the order of several 100 meters and were attributed to a small, uncharacterized misalignment of the WFC relative to the spacecraft platform. Geolocation corrections have been implemented in the Level 1 ground processing to eliminate these biases. WFC geolocation accuracy for the V1.10 data release is estimated to be better than 50 m. The initial assessment of the WFC radiometric performance was based on comparisons with the well-calibrated Aqua MODIS Channel 1 data. Preliminary comparisons indicated that the WFC radiometric measurements were biased high relative to MODIS by about 10%. Further investigation revealed that an offset in the reported WFC exposure time was the likely cause of this bias. A review of pre-launch ground test data and results from diagnostic experiments performed on-orbit confirmed that the true WFC exposure time is about 0.4 ms longer than reported. Accounting for this exposure time offset results in about a 9% reduction in the magnitude of the WFC radiance values. This correction has been implemented in the Level 1 processing for the V1.10 data release. The WFC V1.10 radiometric measurements now exhibit excellent agreement with MODIS, with differences typically less than 2% over bright targets.