

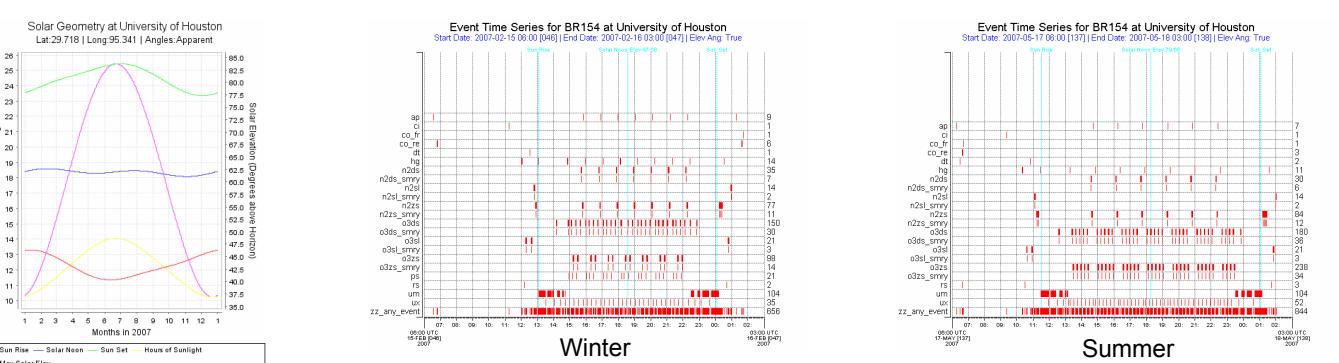


NOAA-EPA Brewer Network Website Diagnostic and Monitoring Tools

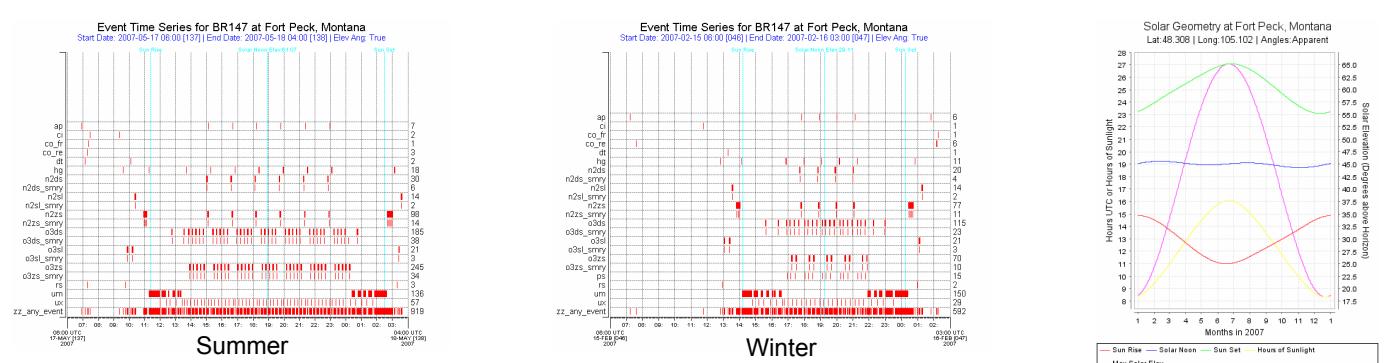
<http://esrl.noaa.gov/gmd/grad/neubrew/>
Scott Stierle, Patrick Disterhoff and Peter Kiedron



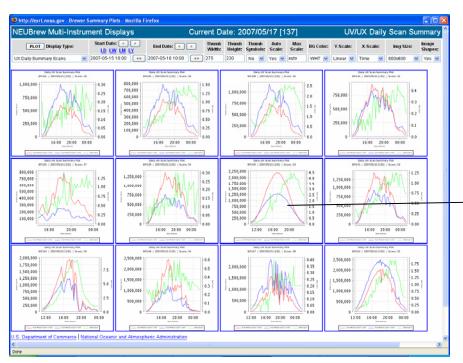
Schedule Characteristics at Lower Latitude Station



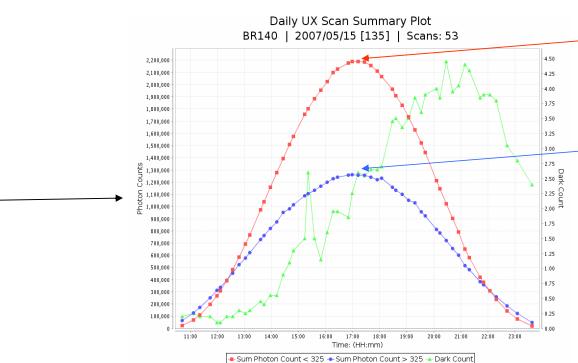
Schedule Characteristics at Higher Latitude Station



Daily Integrated Summaries of Extended UV Scans

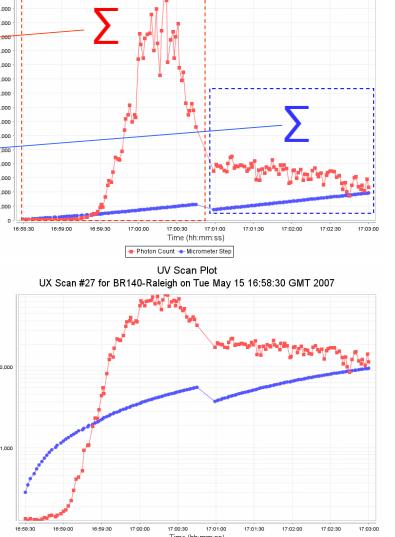


Daily UV Summaries of network instruments. Graph can be expanded by clicking on the image.



Daily summary comprised of 53 individual extended UV scans. Each point on the red trace represents the sum of all photon counts below 325.5 nm for an individual scan. Each point on the blue trace represents the sum of all photon counts above 325 nm for an individual scan. The above example illustrates a cloudless clear-air day.

UV Scan Plot

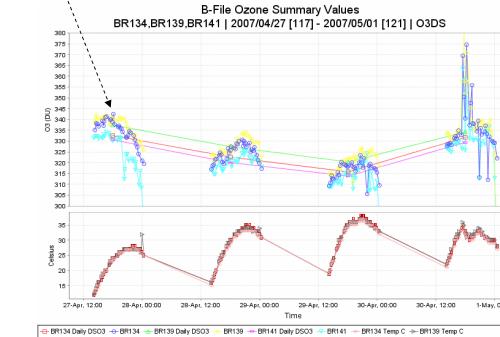
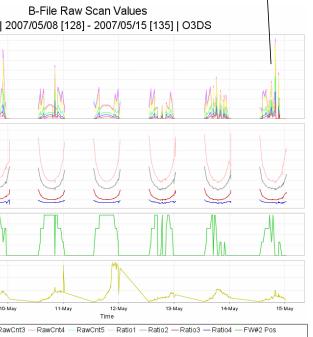
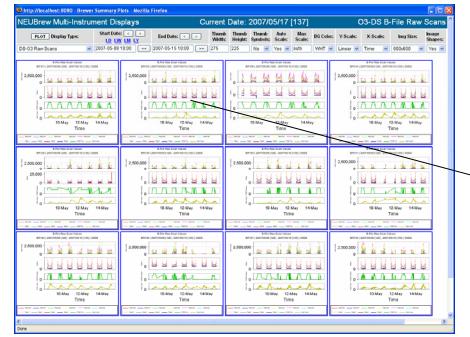
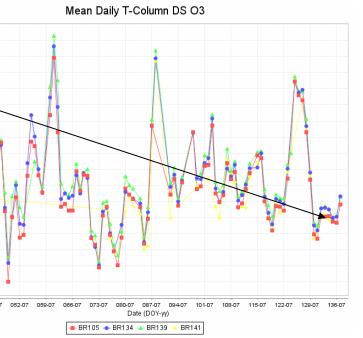
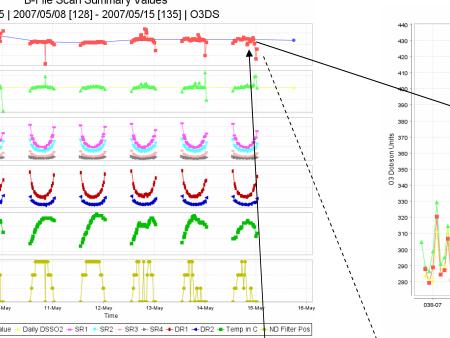
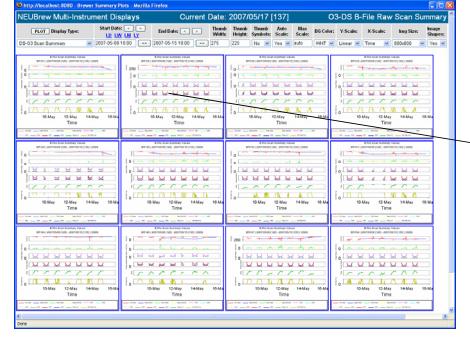


Individual UV Spectral Scans

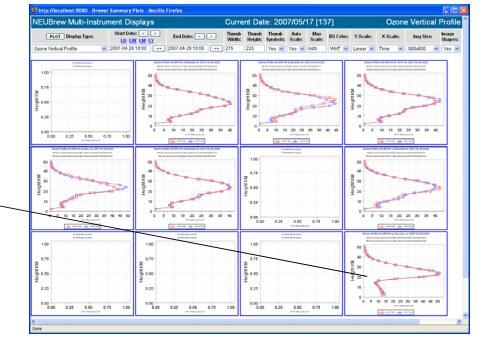
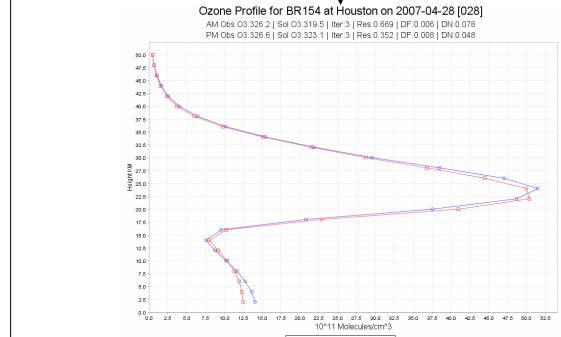
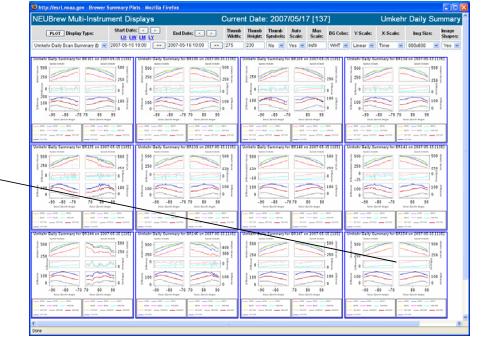
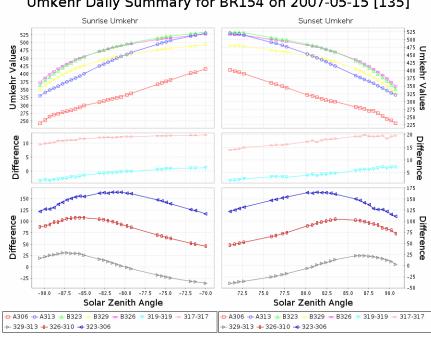


UV Scan display showing each UV spectral scan made during a given day. Graph can be expanded by clicking on the image.

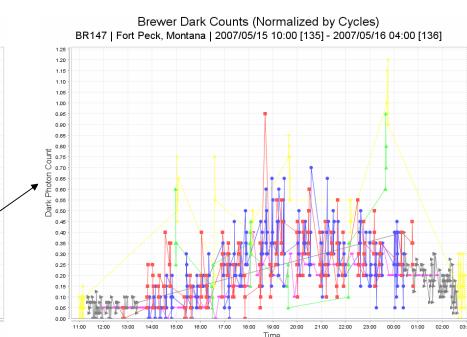
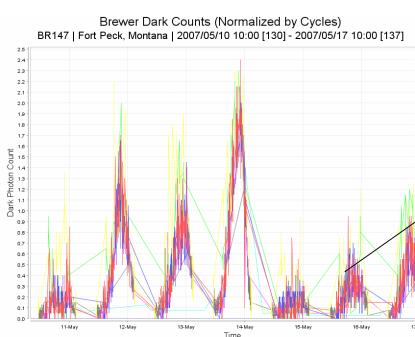
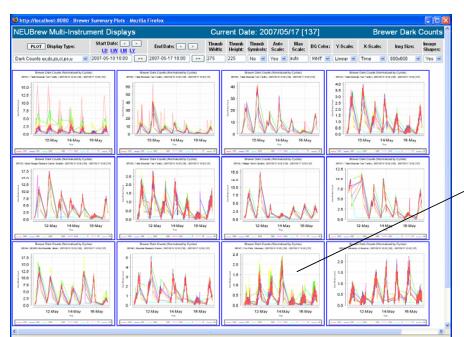
Direct Sun Ozone Measurements



Umkehr Ozone Profiles

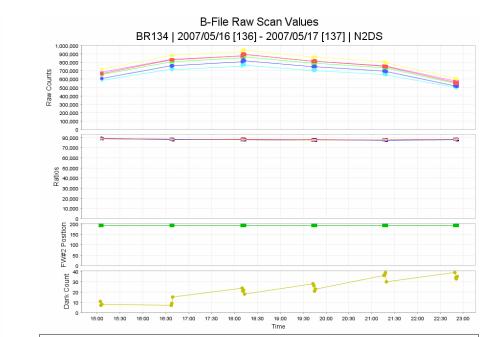
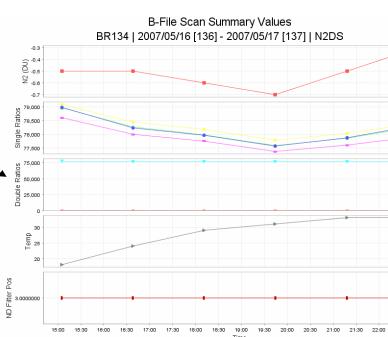
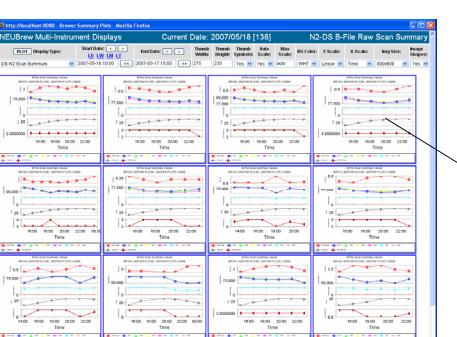


Brewer Measurement Dark Count Comparisons



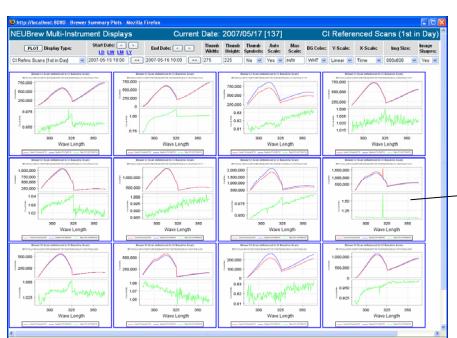
Monitoring Dark Count trends to verify proper operation of the Brewer's Slit-Mask and Photomultiplier Tube.

Direct Sun NO₂ Measurements

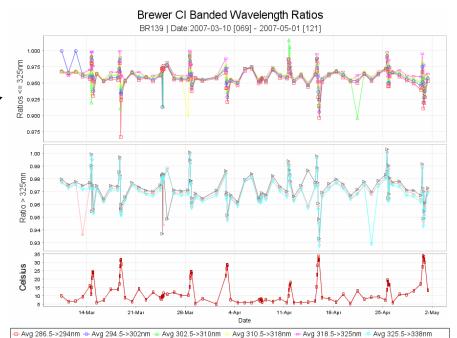


Raw NO₂ Data are currently being collected with the intent of reprocessing these data as algorithms are defined.

Internal Halogen Lamp Scans and Long-term Time Series



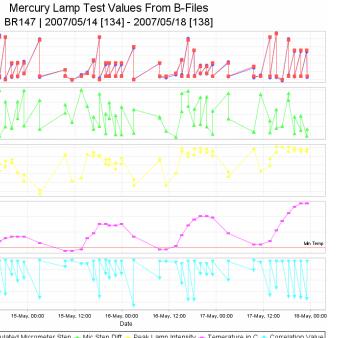
Generating a ratio for CI scans compared to an instrument's baseline reference CI scan.



Averaging CI ratios into 8 wavelength bands.

Long-term monitoring of an instrument's CI ratio trends.

Internal Mercury Lamp Scans



Periodic scans of the Mercury Lamp help maintain the stability of UV and Ozone retrievals.



Long-term Monitoring and Display of Brewer Generated Daily Average Statistics

