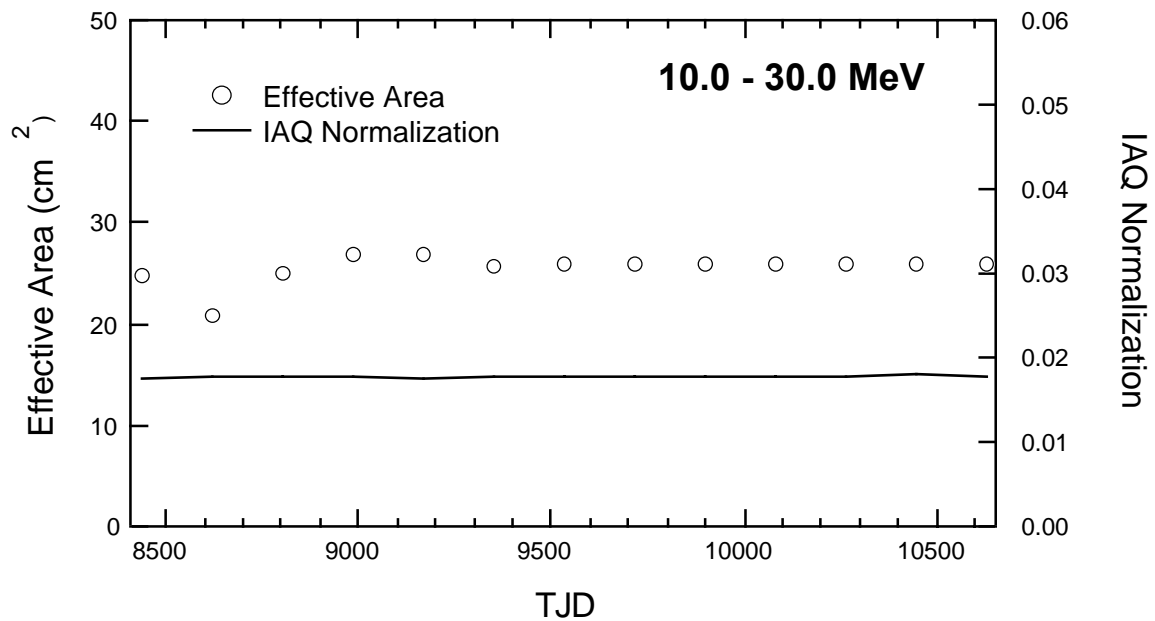
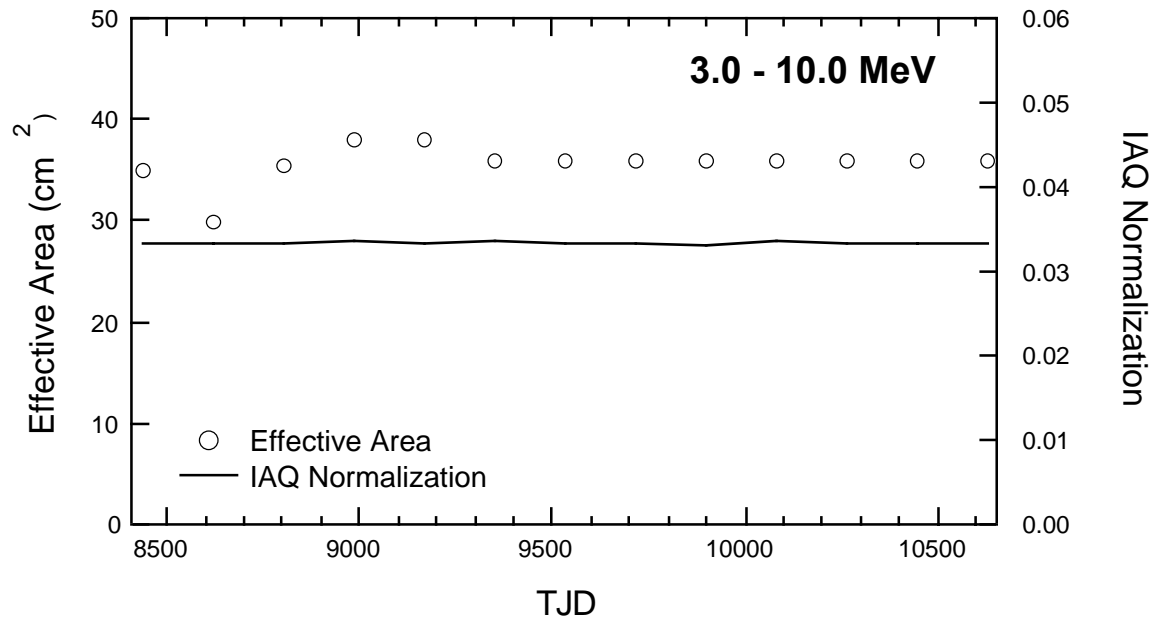


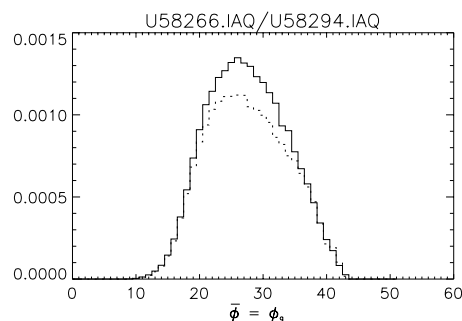
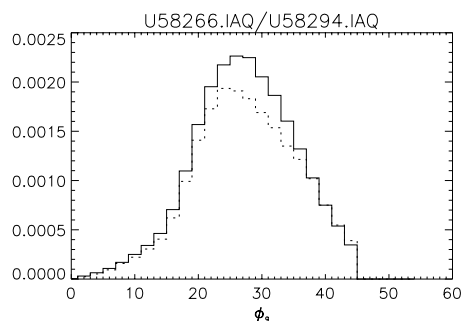
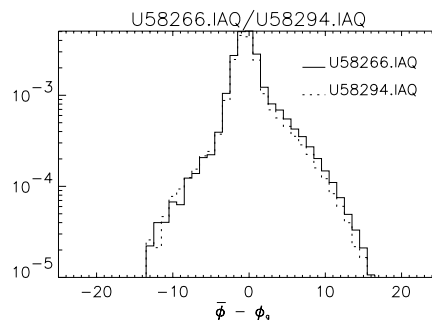
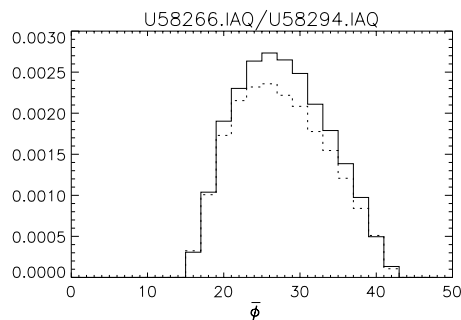
Detector Threshold Effects

- Past indications that the loss of signal in D2 was beginning to impact the low-energy PSF.
- Used SIM to incorporate the detector threshold configurations into the simulated PSFs.
- Threshold configurations determined (IFCTHR) at 6-month intervals between July, 1991 (VP 4.0) and July, 1997 (VP 622.0).
- PSFs generate for each of the four standard energy bands (0.75-1.0, 1.0-3.0, 3.0-10.0, and 10.0-30.0 MeV).
- Impact on PSFs was evaluated using:
 - Effective area (from SIM)
 - IAQ normalization
- Three important effects:
 - Module on/off status
 - Instrument Configuration
 - Detector thresholds (loss of D2 signal)

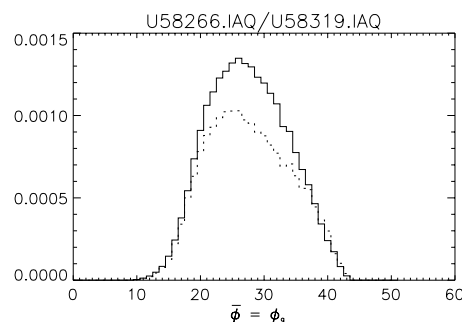
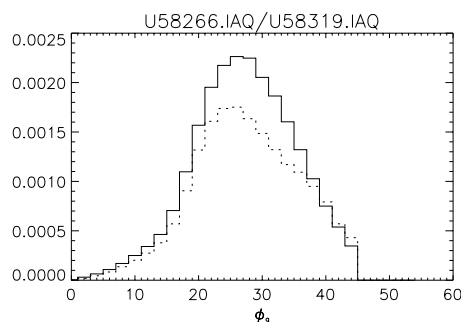
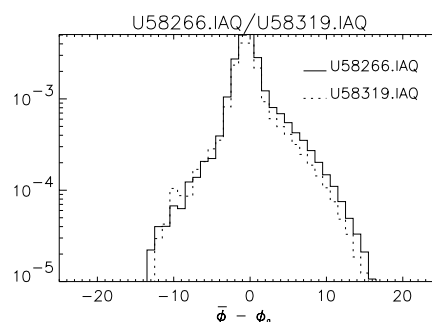
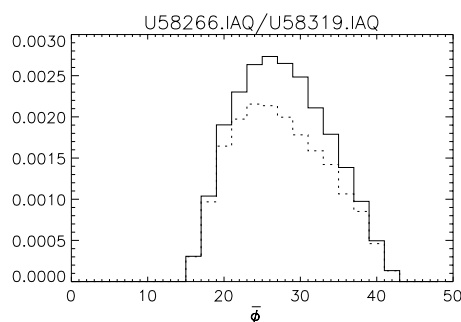
PSF Comparisons



0.75-1.0 MeV PSF Comparison



01-Jul-1991 versus 01-Jul-1994



01-Jul-1991 versus 01-Jul-1997

Summary of Results

- The following table summarizes the relative IAQ normalization factors.
- There has been no significant impact on the PSFs above 1 MeV (<2%).
- There has been a significant impact on the lowest energy PSF (0.75-1.0 MeV), at a level of ~20% in July, 1996. Estimated to be ~25-30% at the present time.

TJD	Date	0.75-1.0 MeV	1-3 MeV	3-10 MeV	10-30 MeV
8438	01-Jul-1991	1.00	1.00	1.00	1.00
8622	01-Jan-1992	0.98	1.00	1.00	1.01
8804	01-Jul-1992	0.90	0.99	1.00	1.01
8988	01-Jan-1993	0.93	1.00	1.01	1.01
9169	01-Jul-1993	0.90	0.99	1.00	1.00
9353	01-Jan-1994	0.90	0.99	1.01	1.00
9534	01-Jul-1994	0.88	0.99	1.00	1.01
9718	01-Jan-1995	0.87	0.99	1.00	1.01
9899	01-Jul-1995	0.84	0.98	1.00	1.00
10083	01-Jan-1996	0.82	0.98	1.01	1.00
10265	01-Jul-1996	0.82	0.98	1.00	1.01