

COMPASS Y2K Testing

- **Y2K testing is intended to cover four transition points:**
 - Dec 31, 1999 to Jan 1, 2000
This is the standard 'Y2K problem'
 - Feb 28, 2000 to Feb 29, 2000
This covers the fact that 2000 is a leap year (not every centennial year is a leap year)
 - Dec 30, 2000 - Dec 31, 2000
This again deals with the fact that 2000 is a leap year
 - Dec 31, 2000 to Jan 1, 2001
This again deals with the fact that 2000 is a leap year

- **Leap Year Definition:**
 - When year is divisible by 4 (last was 1996).
 - Centennial years only when divisible by 400 (1900 was *not* a leap year; 2000 is a leap year).

COMPASS Y2K Testing

- For COMPTEL, the data used is four days from VP 724.5 (July 13-16, 1998), an observation of Geminga with Crab 10° of-axis. These are TJD 11007-11010.
- Three time intervals used to cover all four transition points :
 - TJD 11542 - 11545 (Dec 30, 1999 to Jan 2, 2000)
 - TJD 11601 - 11604 (Feb 27, 2000 to Mar 1, 2000)
 - TJD 11908 - 11911 (Dec 29, 2000 to Jan 1, 2001)
- Data received and processed (without time shifting) at MPE, except for TJD 11543.
- Comparison of processing statistics reveals
 - All three Y2K datasets show same statistics
 - In each case, the second two days of the Y2K intervals differs from the baseline.
 - Needs to be investigated!

Remaining Actions

- **Need to generate a baseline set of standard data products (EVP, DRI, etc.) for 13-Jul-1998 (TJD 11007) to 16-July-1998 (TJD 11010).**
- **Provide to SSC, for each of the three time intervals :**
 - Single EVP dataset (EVPSEL)
 - Standard DRI datasets (DRG, DRX plus four DRE)
 - TIM dataset
 - OAD for each day
 - HKD for each day
 - PBS for each day
- **Perform comparison tests for each datatype :**
 - Binned energy loss spectra
 - Event time history
 - Direct comparisons of DRG, DRX, DRE
 - Direct comparisons of TIM
 - Time histories of select OAD parameters
 - Time histories of select HKD parameters
 - Time history of PBS data - low range
 - Binned spectrum of PBS data - low range
 - Time history of PBS data - high range
 - Binned spectrum of PBS data - high range
 - Others?