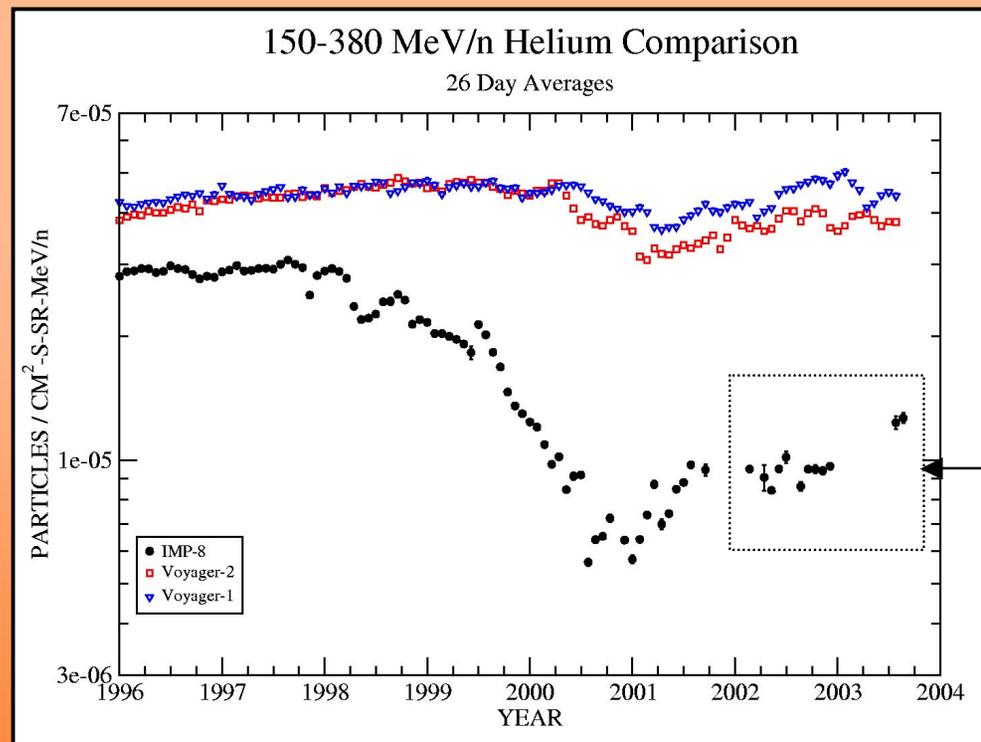




IMP-8's Data Are Flowing Again

- Data from key instruments are being captured and processed to support the correlative needs of Voyager and Ulysses missions
 - IMP-8 is unique as a well-established and well-calibrated baseline for heliospheric energetic particles at 1AU
 - Current operating instruments include APL, Goddard, and Chicago (now UNH) energetic particles, plus MIT plasma experiment

The 1 AU cosmic ray baseline for Voyager CRS observations from the IMP-8 GME (Goddard) experiment





Current IMP-8 Operations and Status

- **Data acquisition supported by one station only (Canberra)**
 - Commanding from Wallops or Santiago
 - > No control center, so commanding is "blind" until data are processed
 - Low-cost (but slow) re-engineering of ground segment to minimize costs
 - > Old documentation caused some confusion initially
 - > Full flow of 2002-2003 data to PIs not established until summer 2003
 - Apparent bad uplink in January 2003 commanding of IMP-8
 - > Left spacecraft transmitter "on" but key instruments "off"
 - > Status of instruments was not confirmed until data processed by PI
 - > All cosmic ray instruments were "off" mid-January to mid-August 2003
- **All supported instruments are now operating and processing normally**
 - Data now being analyzed from October 2003 solar and geostorm events