

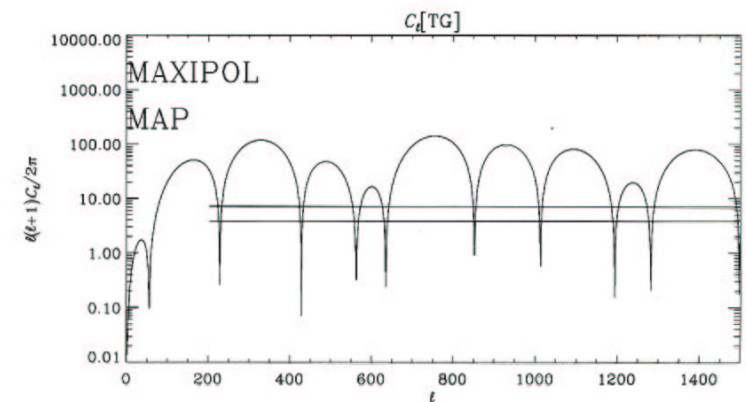
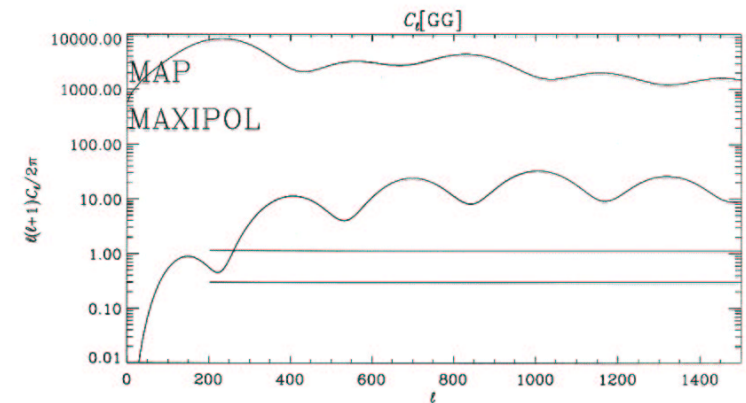
## MAXIPOL: Measuring the Polarization Anisotropy of the Cosmic Microwave Background Radiation



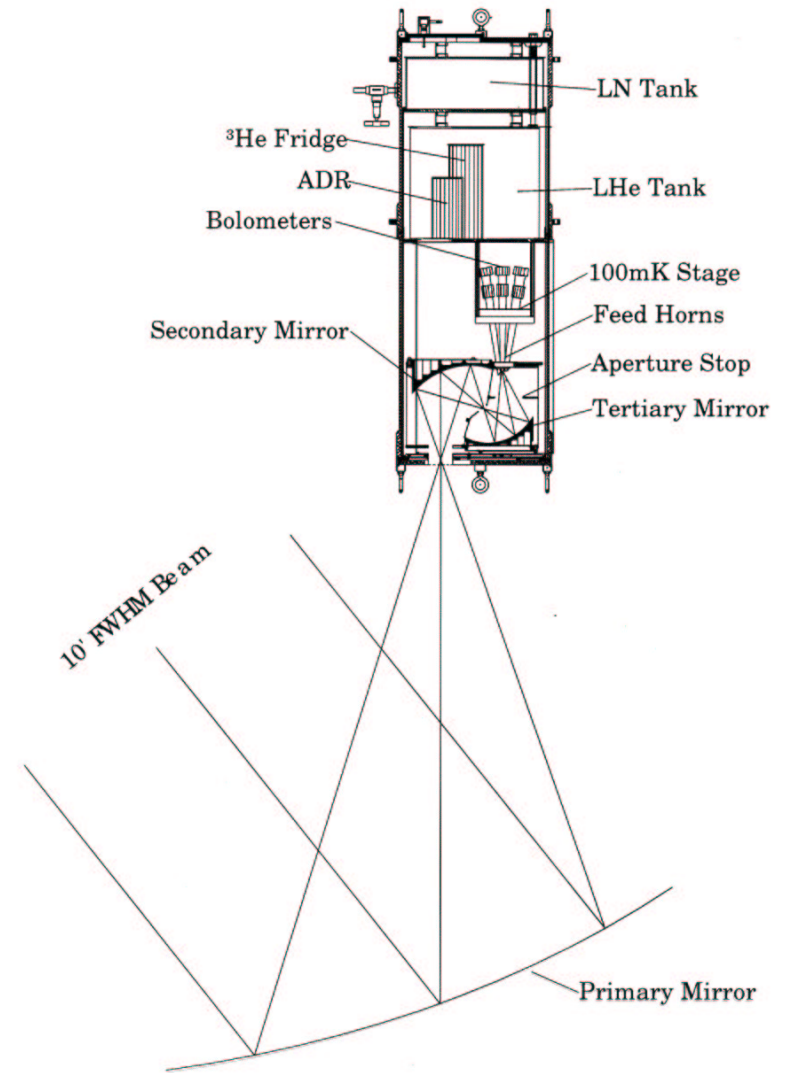
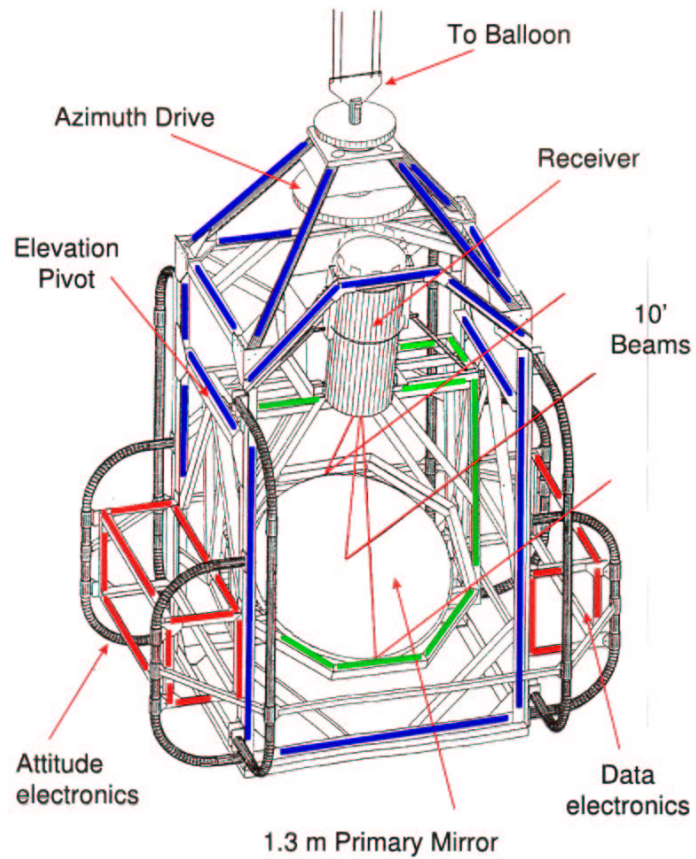
Brad Johnson  
University of Minnesota

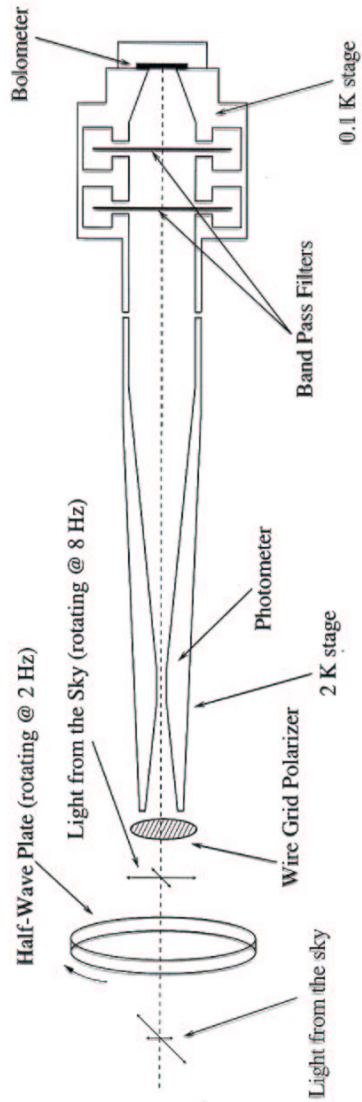
Matt Abroe<sup>2</sup>, Peter Ade<sup>3</sup>, Jamie Bock<sup>4</sup>, Julian Borrill<sup>1,6</sup>  
 Jeff Collins<sup>1</sup>, Pedro Ferreira<sup>5</sup>, Shaul Hanany<sup>2</sup>, Andrew Jaffe<sup>9</sup>,  
 Trevor Lanting<sup>1</sup>, Adrian Lee<sup>1</sup>, Tomotake Matsumura<sup>2</sup>,  
 Bahman Rabbii<sup>1</sup>, Tom Renbarger<sup>2</sup>, Paul Richards<sup>1</sup>,  
 George Smoot<sup>1,6,7</sup>, Radek Stompor<sup>1,7,8</sup>  
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2. University of Minnesota
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5. University of Oxford
6. Division of Physics, LBNL
7. Space Sciences Laboratory, UCB
8. Copernicus Astronomical Center
9. Imperial College



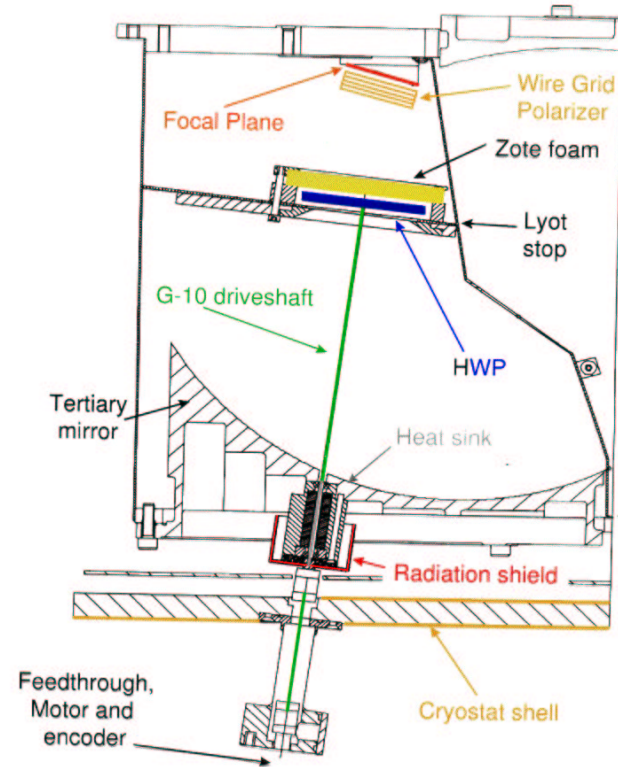
### MAXIPOL Instrument



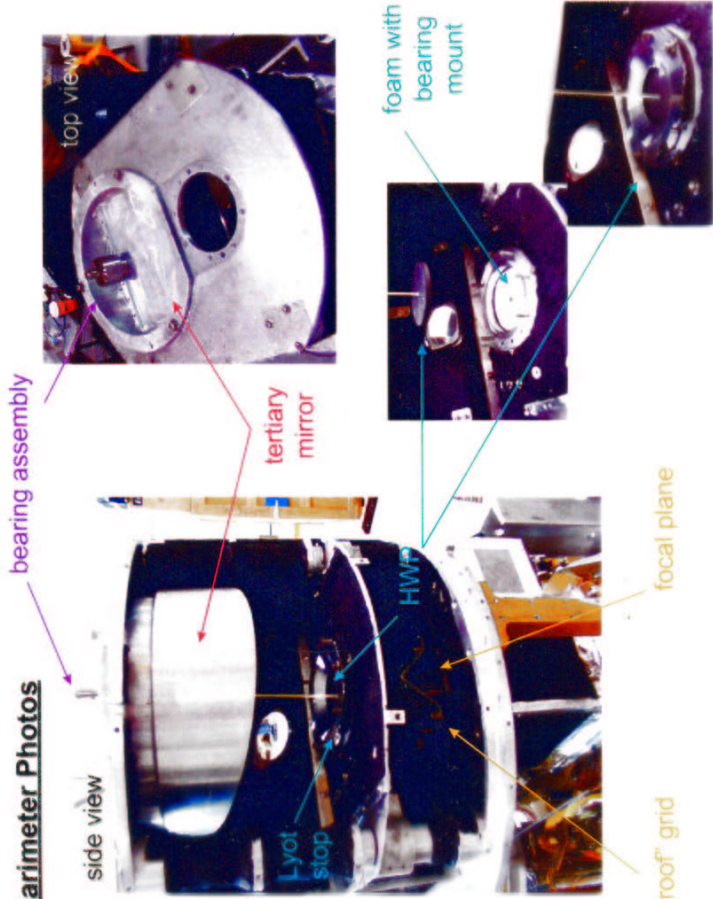


- \* standard astronomical technique.
- \* strong rejection of systematic errors
- \*  $I, Q \rightarrow U$  maps from QNS detector  $\rightarrow$  no bolometer cross calibration

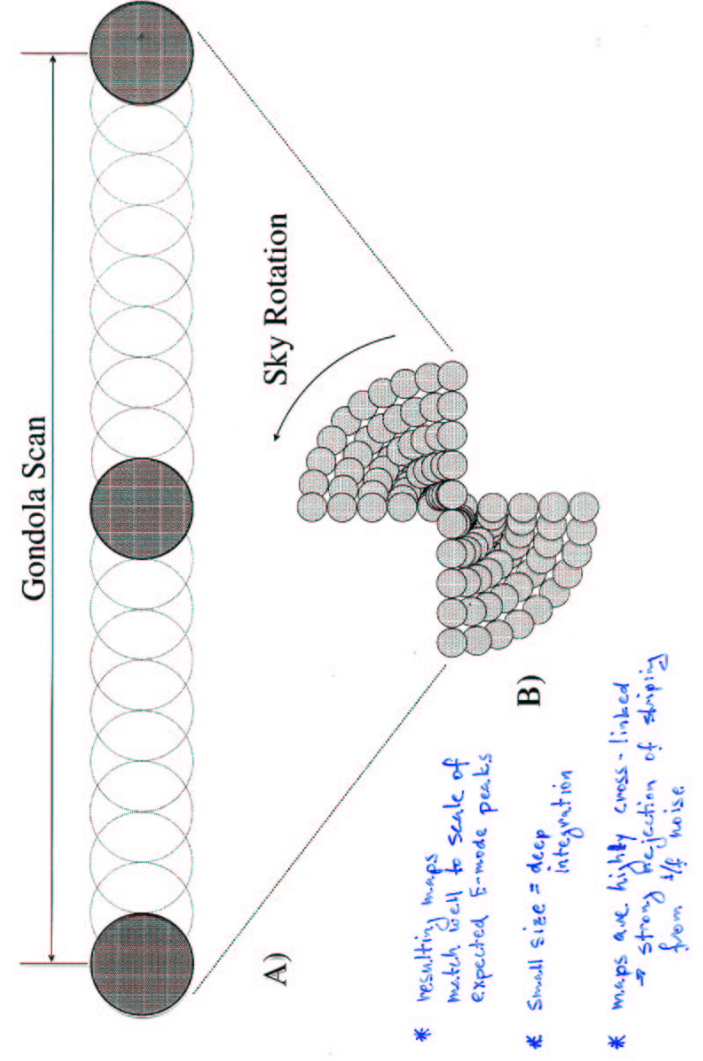
### MAXIPOL Polarimeter

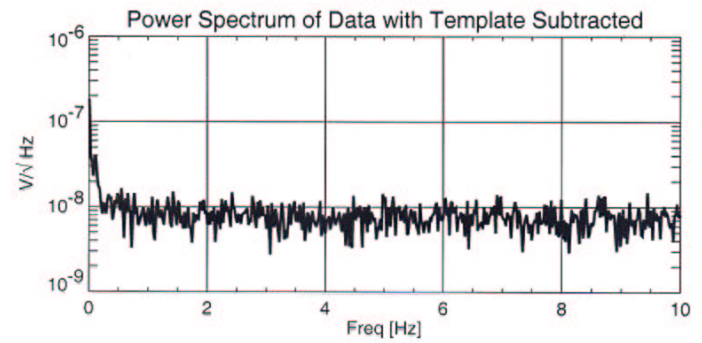
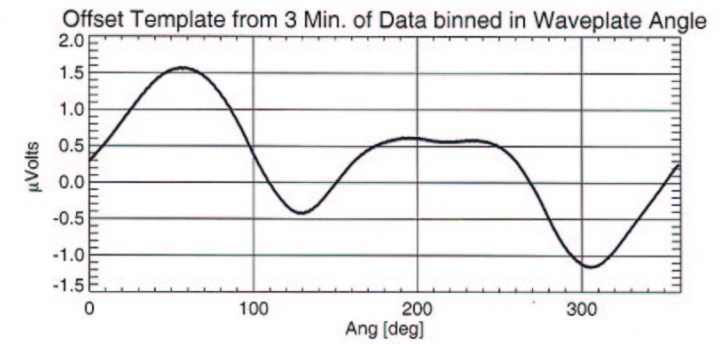
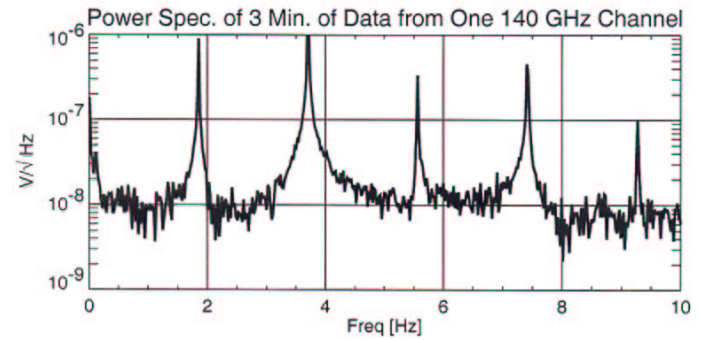
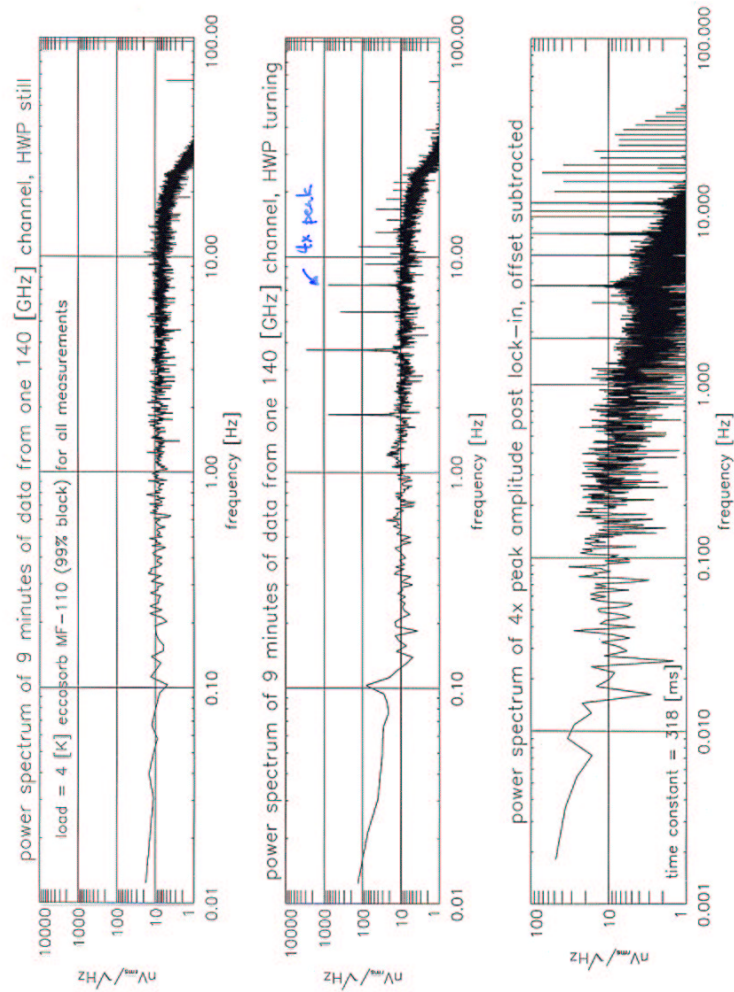


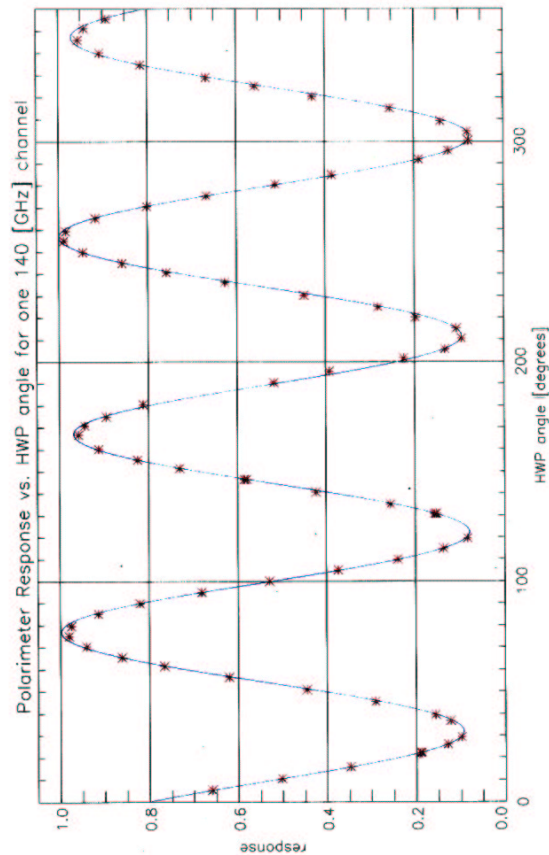
**Polarimeter Photos**



Scan Strategy







### Future Work

- The MAXIPOL payload is integrated and awaiting launch from NASA's National Scientific Ballooning Facility in Ft. Sumner, New Mexico
- The fall launch season is approaching -- September 2002
- Weather permitting, we expect to have a data set in hand by October 2002.
- We plan to launch the payload twice in the next few years.
- Data analysis pipeline is currently being constructed.

