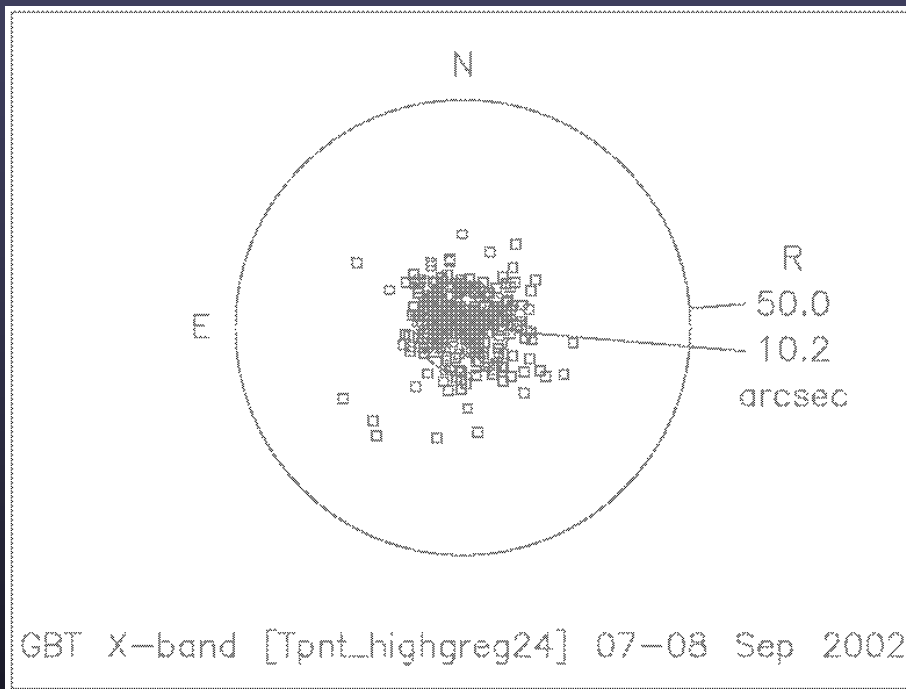


GBT Status: Current Observing Capabilities



Telescope Performance - Pointing



All-sky pointing rms $\sim 10''$

Tracking stability rms $\sim 2''$
($5''$ peak-to-peak)

Telescope Performance – Focus Tracking

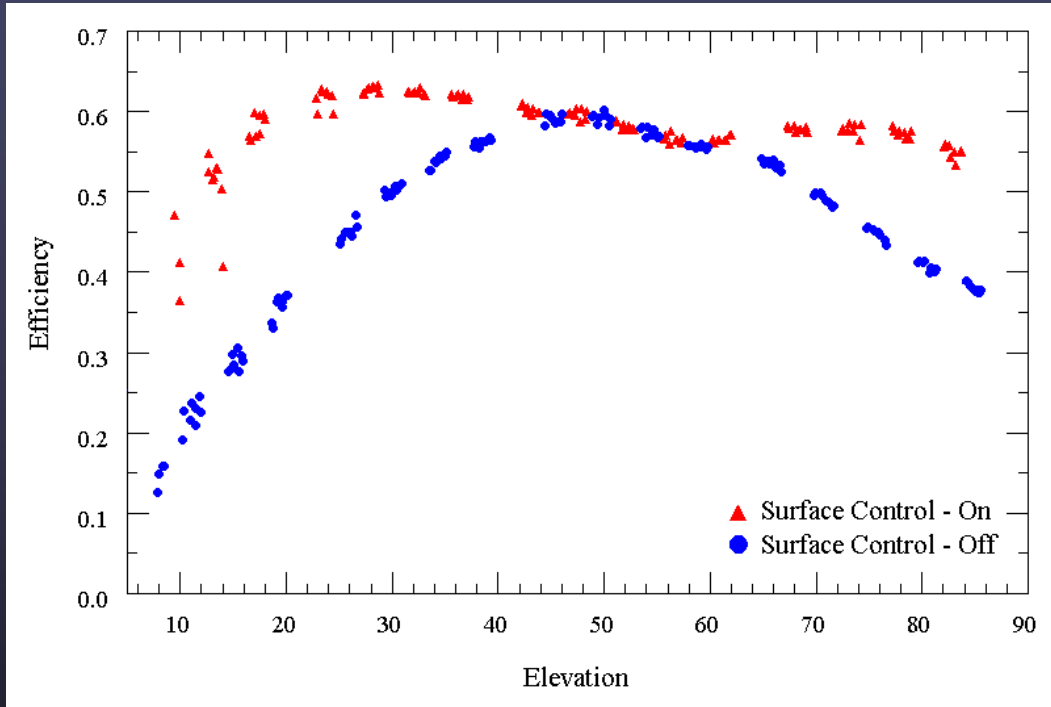


Empirical Model

PF (800 MHz)

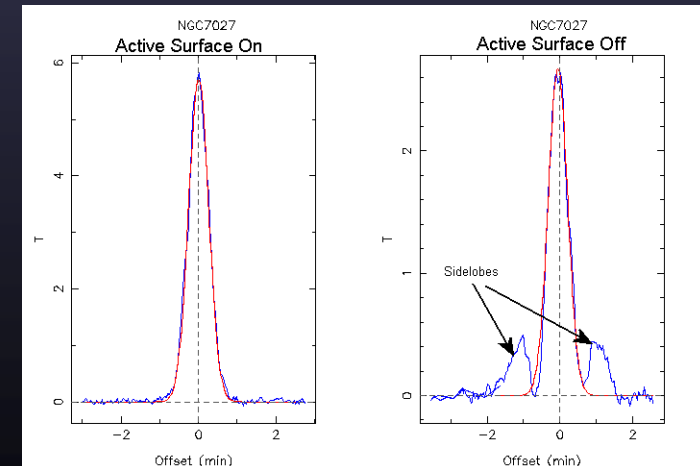
Gregorian (X-band)

Telescope Performance - Surface



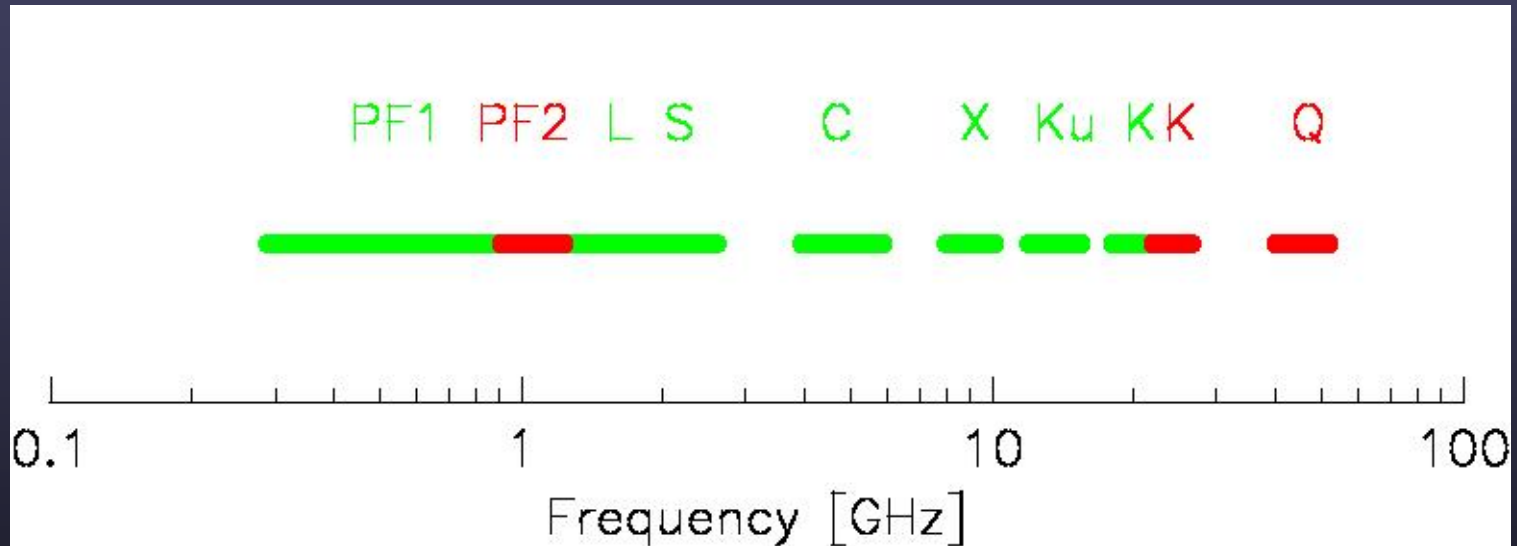
70% efficiency at long wavelengths

~60% efficiency at 20 GHz





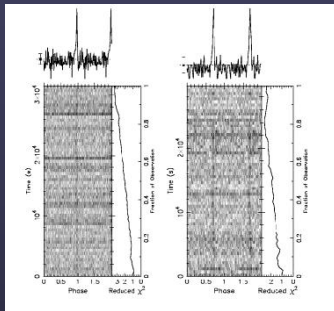
Frequency Coverage



Observing Modes

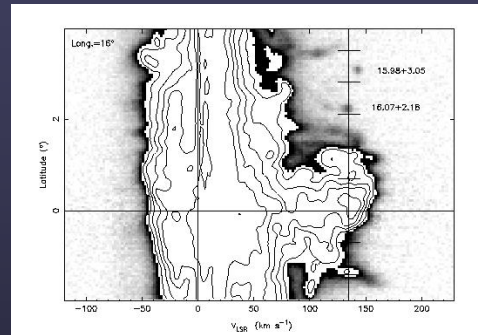


Pulsar
(SP; BCPM; GBPP)



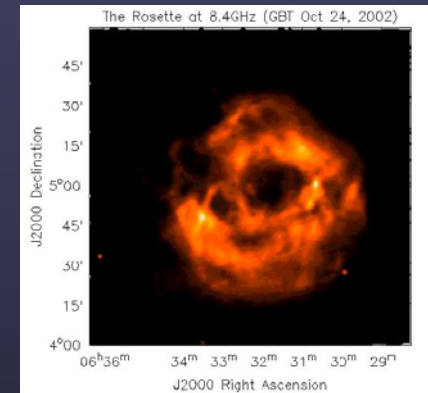
Camilo et al. (2002)

Spectral Line
(SP; Spectrometer)



Lockman (2002)

Continuum
(DCR)



GB Staff

Radar (PFS)



Campbell et al.

VLBI (VLBA)

Spectrometer Modes



Top Priority ACS modes							
Samps	Quads	Band	Channels	Spacing (kHz)	Mode String <i>(Click For Report)</i>	Hardware Checkout	Observing Checkout
12.5 MHz Modes:							
2	1	12-9Lev	8192	1.5	1N2-0A-12-9	ok	ok ✓
4	1	12-9Lev	4096	3.0	1N4-0A-12-9	ok	ok ✓
8	1	12-9Lev	2048	6.1	1N8-0A-12-9	hardware problem	
4	2	12-9Lev	8192	1.5	2N4-0A-12-9	ok	
8	4	12-9Lev	8192	1.5	A:2N4-4A-12-9 B:2N4-5B-12-9	needs multi-bank	
50 MHz Modes:							
2	1	50-9Lev	8192	6.1	1N2-0A-50-9	ok	ok ✓
4	1	50-9Lev	4096	12	1N4-0A-50-9	ok	in progress: baseline structure
8	1	50-9Lev	2048	24	1N8-0A-50-9	ok	
200 MHz Modes:							
2	1	200	8192	24	1W2-0XY-200	in progress	in progress
4	2	200	8192	24	A:1W2-0XY-200 B:1W2-0XY-200	needs multi-bank	
2	4	200	32768	6.1	4W2-6XY-200	in progress	in progress
2	2	200	16384	12	2W2-4XY-200	in progress	in progress: baseline problems
800 MHz Modes:							
2	1	800	2048	391	1W2-0XY-800	in progress	in progress
1	2	800	8192	98	2W1-4X-800	in progress	in progress
2	4	800	8192	98	A:2W1-4X-800 B:2W1-5X-800	needs multi-bank	
1	1	800	4096	195	1W1-0X-800	in progress	