

To: File
 From: Jon Hagen
 Date: April 10, 2003, 4-16-03
 Subject: Alfa backend requirements - summarized by Avinash Deshpande in a conversation following an Alfa meeting today:

	BW	Channels	Input levels	Output levels	Dump time	Misc
1. P-Alfa	300MHz	1k 300kHz res.	8 bits min	4bits max (flexible)	64usec	output after long-term mean removed in SW
2. E-Alfa (extragalactic)	200MHz min	25kHz res (8000ch)	8bit min 12 desired	16 bits min @1 sec dumps	1sec .1 (or even 1ms) for rfi excision	flexible blanking in hardware
3. G-alfa HI (galacatic HI:	1415-1425	1kHz res min =10k Channels (20k desired)	10 desired (few ok if little rfi)	10 bits	1sec	blanking not needed*
4. G-alfa spec. line	One 6MHz band +eleven 3MHz bands (all fixed)	0.5 kHz (1kHz min ~ 40k channels)	8 bits (min)	10bits	<1 sec.	blanking not needed*
5. G- alfa continuum (like P-Alfa) but w/full Stokes	300MHz	1k	8 bits (min)	16 bits	0.1 sec	blanking not needed*

*rfi excised in software