FOS DEAD AND NOISY DIODES UPDATE

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Abstract. This paper lists all the known dead, noisy, and suspect diodes for both the FOS/RED and FOS/BLUE detectors as of the end of April 1995.

Key words: FOS, HST Instruments, Dead diodes

1. Introduction

In this paper we present a summary of all the known and suspected dead and noisy diodes on both fo the FOS detectors. When one of the 512 diodes on either side is noticed to become noisy or ceases to collect data, the FOS team initiates a monitor on the suspected diode. If there are 3 separate occurances of unusual behavior, the diode will be flagged as dead or noisy, and will be turned off. As the FOS team does not regularly monitor all the data coming down from the telescope, we rely on observers to warn us of possible dead or noisy diodes, as well as spot-checks of our own. A dead or noisy diode would appear in a spectrum as an absorbtion or emission feature that is exactly (OVERSCAN *NXSTEPS) pixels wide. (In our usual mode for obtaining spectra, this would be 20 pixels in width.) A further discussion on how to identify possible problem diodes can be found in the *HST Data Handbook*, pp 234-236.

TABLE I

FOS/BLUE suspect and dead diodes

Disabled Dead Diode	Disabled Noisy Diode	Disabled Cross-wired Diode	Enabled possibly bad	Date Reported
49	31	47	8	Sept 1992
101	73	55	138	Jan 1993
223	144		139	
284	201		209/210	Aug 1992
292	218		381	Aug 1993
409	225		421	
441	235		426	Nov 1991
471	241			
	268			
	398			
	415			
	427			
	451			
	465			
	472			
	497			
8	16	2	7	

TABLE II
FOS/RED suspect and dead diodes

Disabled Dead Diode	Disabled Noisy Diode	Enabled possibly bad	Date Reported
2	110	97	July 1994
6	189	114/115	July 1994 (2x)
29	285	116	July 1994
197	380	142	May 1993
212	381	153	Dec 1991
308	405	174	Sept 1992
486	409	225	Feb 1995
	412	258/259	Oct 1993
		261	July 1991
		285	Mar 1995
		289	Mar 1995 (2x)
		410	Apr 1993
7	8	11	