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**NONVARIABILITY AMONG λ BOOTIS STARS III.:
CTIO (1995) AND McDONALD (1995) DATA**

This is the third and last paper on constant λ Bootis stars from our survey (Paunzen et al. 1996 and Kuschnig et al. 1996). Up to now we have presented 18 λ Bootis stars with an upper limit for nonvariability. In this paper we add 6 new λ Bootis stars.

The observations were performed at CTIO in April 1995 (observer: E. Paunzen) with the 0.6m Lowell telescope and at McDonald Observatory in August 1995 (observer: G. Handler) with the 0.9m telescope. The data were corrected for the sky background, deadtime and extinction. The upper limit for nonvariability was derived by a standard Fourier technique using the differential data of the program and one comparison star (the latter marked with an asterisk in Table 1). Table 1 lists the results for both observing runs.

Table 1. Program and comparison stars

Star	Site/Observer	JD	hours	m_V	Spec.	Upper limit [b]
HD 81290	CTIO/EP	2449842	4	8.9	λ Boo	0.002
HD 82517				7.7	A2V *	
HD 125162	McD/GH	2449936	3	4.2	λ Boo	0.008
		2449940	2			
HD 124675				4.5	A8IV *	
HD 149303	McD/GH	2449939	3	5.6	λ Boo	0.003
HD 149081				6.5	A1V *	
HD 149630				4.2	B9V	
HD 156954	CTIO/EP	2449839	4	7.7	λ Boo	0.003
HD 156392				8.2	F2V *	
HD 171948	McD/GH	2450008	4	6.7	λ Boo	0.003
HD 171569				7.1	A0 *	
HD 171739				7.6	A0	
HD 192424	McD/GH	2449939	4	7.1	λ Boo	0.004
HD 193668				7.0	B9 *	

We also present data on the prototype of this group, λ Bootis (HD 125162) itself. The upper level of nonvariability is quite high (8 mmag in Strömgren b) due to the rather poor quality of both nights. Recent spectroscopy indicates nonradial pulsation with a very low amplitude (Bohlender 1996).

From the results of all three papers we conclude a typically achieved limit for nonvariability in the relevant frequency range (0 to 150 c/d) of about 3 mmag in Strömgren b .

Our survey is still ongoing. Nevertheless we are preparing a detailed analysis on the pulsation behaviour of λ Bootis stars.

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