COMMISSIONS 27 AND 42 OF THE IAU
INFORMATION BULLETIN ON VARIABLE STARS
Number 4310

Konkoly Observatory
Budapest
18 March 1996

HU ISSN 0374 – 0676

NONVARIABILITY AMONG λ BOOTIS STARS II.: SAAO (1994, 1995), CTIO (1994) AND IAA (1996) DATA

This is the second compilation of results, which revealed photometric stability within our extensive survey for pulsation in λ Bootis stars. The scientific background of this program is described by Weiss et al. (1994). The first list of 'constant' results was presented recently in this journal (Paunzen et al., 1996). The photometric results shown in this paper are based on four observing runs at three different sites obtained by the observers R. Kuschnig (RK) and M. Gelbmann (MG). The measurements were performed with the 50cm telescope of the South African Astrophysical Obs. (SAAO), the 60cm Lowell telescope at Cerro Tololo Inter-American Obs. (CTIO) and the 90cm telescope of the Instituto Astrofisica Andalucia (IAA). Table 1 lists all observed, confirmed or candidate (see question mark), λ Bootis and comparison stars with the date and the duration of the observations. The time series analysis was done with a standard Fourier technique (Breger, 1990) and applied to the differential photometry. The last column gives the noise level in the amplitude spectrum obtained from differential photometry (the actual comparison star is marked with an asterisk in Table 1) and is hence the upper limit of an eventual variability in the frequency range from 0 to 150 c/d.

Acknowledgement: This research was done within the working group *Asteroseismology-AMS*. Computing resources and financial support for this international collaboration were provided by the Fonds zur Förderung der wissenschaftlichen Forschung (project *S 8303-AST*) and the Hochschuljubiläumsstiftung der Stadt Wien (λ Bootis Sterne). This research has made use of the Simbad database, operated at CDS, Strasbourg, France.

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Table 1. Program and comparison stars

Star	Site/Observer	JD	hours	m_V	Spec.		Upper limit [v]
HD 31295	SAAO/RK	2449741	2.2	4.74	λ Boo		0.006
HD 31283				5.31	A3V	$\star$	
HD 30913				7.21	F2		
HD 38545	CTIO/MG	2449692	3.3	5.76	λ Boo		0.004
		2449693	5				
		2449697	3				
HD 39317				5.54	B9	$\star$	
HD 66920	SAAO/RK	2449741	1.2	6.33	λ Boo(?)		0.004
HD 64142				7.6	F3V	$\star$	
HD 66168				7.9	F8V		
HD 74873	IAA/RK	2450095	2.4	5.87	λ Boo		0.007
HD 74228				5.62	A3V	$\star$	
HD 74521				5.66	A1p		
HD 79025	CTIO/MG	2449695	3.6	6.65	λ Boo(?)		0.003
HD 78326				7.9	A0IV	$\star$	
HD 79622				8.13	K5III		
HD 82573	SAAO/RK	2449468	2.4	5.74	λ Boo(?)		0.003
HD 81712				6.8	A7V	$\star$	
HD 82724				6.8	A0V		
HD 83277	SAAO/RK	2449476	3.6	8.31	λ Boo(?)		0.004
HD 83547				8.3	A0V	$\star$	
HD 82709				7.7	A9V		
HD 91130	IAA/RK	2450097	3	5.93	λ Boo		0.009
HD 91365				5.58	A2Vn	$\star$	
HD 90840				5.77	A4V		
HD 179791	SAAO/RK	2449475	3.6	6.49	λ Boo(?)		0.003
HD 180482				5.59	A3IV		
HD 178596				5.22	F0III		