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A NEW EPHEMERIS FOR RW ARIETIS

The main purpose of this note is to establish new light elements for the variable star RW Arietis and put in agreement the photoelectric observations performed by Bookmyer et al. (1977) and Penston (1972). Such a problem is accessible if we do not take into consideration the photoelectric observations from JD 2439384, 2439505, 2439507, 2440335 and 2440337. These last observations could be influenced by an unknown cause.

Figure 1 shows the common light curve of RW Arietis plotted with the newly derived ephemeris

$$JD_{\max} = 2439475.6618 + 0.3543145 E.$$

Here dots and open circles represent Bookmyer's et al. (1977) and Penston's (1972) observations, respectively.

The ephemeris determined above agrees with Detre's (1937) observations, as we can see in the following table.

Max. hel. 2428000+	E	O-C
074.550	-32178	+0. ^d 020
154.273	-31953	+ .022
181.203	-31877	+ .025
183.299	-31871	- .005
407.603	-31238	+ .018
408.622	-31235	- .026
431.649	-31170	- .030
455.419	-31103	+0.001

The available observational data taken here into consideration seem to agree with the old proposal that RW Arietis is an RR Lyrae variable of type c in Bailey's classification.

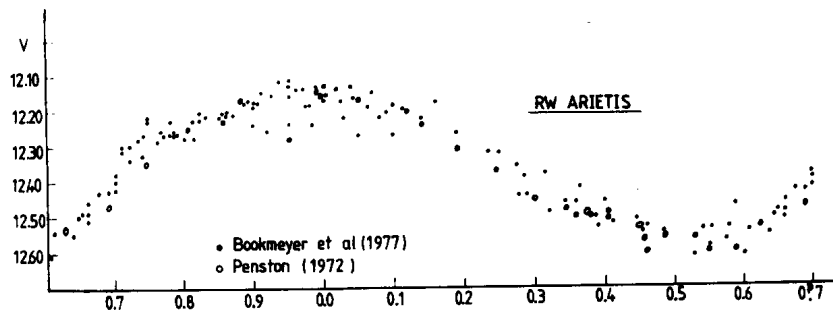


Figure 1

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