

mean light curve: IM Aquilae

n	mean phase	mean brightness	n	mean phase	mean brightness	n	mean phase	mean brightness	n	mean phase	mean brightness
10	P '0012	s 9.7	10	P '2805	s 11.1	5	P '6144	s 11.1	10	P '7350	s 4.4
10	'0447	9.9	10	'3420	10.8	5	'6378	10.4	10	'7661	5.4
10	'0919	9.8	10	'4246	11.3	5	'6612	8.5	10	'8171	6.3
10	'1464	10.6	10	'4662	11.4	5	'6820	6.2	10	'8722	7.4
10	'1966	10.7	10	'5176	11.4	5	'6988	5.6	10	'9204	8.2
10	'2403	10.6	10	'5736	11.3	5	'7096	4.5	10	'9555	8.9

rising branch: IM Aquilae

J.D. -2420000	brightness	E	O-C	J.D. -2420000	brightness	E	O-C
d 7901.996	s 7.9	o	d '000	d 7989.728	s 8.3	192	d -'.002
28.944	10.9	59	+'.002	8014.853	8.9	247	-'.007
57.754	5.9	122	'000	15.786	5.4	249	-'.004
78.292	11.7	167	+'.002	64.682	4.9	356	-'.005
83.778	10.6	179	-.001	8774.328	6.9	1909	-'.002
84.721	5.2	181	+'.003	79.335	10.1	1920	-'.007
85.611	9.8	183	'000	9049.412	10.4	2511	+'.010
'636	6.9	183	+'.012	74.524	11.0	2566	-'.008
88.355	8.9	189	-.001	'549	9.4	2566	+'.010
'376	4.9	189	+'.001	9106.515	10.9	2636	-'.004

Remark on the apsidal motion of AG Persei, by *P. Th. Oosterhoff*.

In *B.A.N.* 8, 286 MARTIN has proved the existence of apsidal motion in the eclipsing variable AG Persei. He derived a period of 53 years and an increase in the longitude of periastron from 48°.7 to 122°.9 for the observations by HUFFER and by himself respectively. Consequently the ratio between the widths of primary and secondary minimum should be smaller than unity for both series of observations. This ratio is found to be .91 for the Madison and 1.07 for the Leiden observations. These values are very uncertain, but if the reversal should prove genuine, it would lead to a period of 20 years, which also gives a fair representation. With the inclination *i* equal to 78° we find:

	<i>e</i> cos $\varpi$	<i>e</i> sin $\varpi$	<i>e</i>
HUFFER:	+ .0338	+ .0386	.051
MARTIN:	- .0278	- .0277	.039

As *e* cos  $\varpi$  is by far the more accurate, we compute  $\varpi$  from *e* cos  $\varpi$  with an adopted value of *e*.

	$\varpi$ for J.D. 2424134	$\varpi$ for J.D. 2424946	$\varpi$ for J.D. 2428946	P	$\Delta$ phase
<i>e</i> = .04	352.9	32.2	226.0	20.3	.0021
<i>e</i> = .05	9.2	47.5	236.2	20.9	.0036
<i>e</i> = .06	17.8	55.7	242.4	21.1	.0047

For J.D. 2424134 the longitude of periastron was found to be 42° ± 16° by LUYTEN<sup>1</sup>). This value, though rather uncertain, indicates a larger eccentricity.

MARTIN has also computed the change in phase of both minima for the observations by HUFFER in three consecutive oppositions. With his period of 53 years the variation per year should be P.0014. Of the values in the last column above, the first is in no way contradictory to the observed values, but the last two seem less probable, which indicates a smaller eccentricity. Additional observations are urgently needed.

<sup>1</sup>) *Publ. Minn.* II, No. 2, 1935. LUYTEN used the spectroscopic observations by PLASKETT (*Publ. Dom. Ap. Obs.* 3, 188, 1925).