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ADDITIONAL HISTORICAL BRIGHTENINGS
 OF VY AQUARII ?

Very recently the eruptive variable VY Aquarii became known to have undergone 8 outbursts (1907,1929,1934,1941?,1942,1958,1962 and 1973), see Richter (1983), Liller (1983) and references therein.

Examining more than 1000 plates of the Sonneberg sky patrol (mostly taken by H. Huth), I could find some further weak impressions at the extreme plate limit near the position of the variable. Although I cannot rule out that there might be misinterpreted agglomerations of grains or disfigured images of the close comparison star 5 of Vogt (1980) among them, the increased interest in the object induced me not to withhold any piece of evidence, however, problematical it may be. The purpose of this note is to invite further investigation by authors having access to other plate archives.

The comparison stars used are those given by Vogt (1980). The following table lists the observed brightenings, combined into groups of equal outburst cycles.

UT	m	pg	remarks	UT	m	pg	remarks
1929 July	5.5	13.0:		1934 Aug	6.5	14.5::	
	10.5	[12.2		1935 Aug	26.5	13.1::?	
	13.5	13.1:		1939 Aug	15.5	13.1::	
	14.5	[13.1			15.6	13.3::	
	15.5	[13.1			16.4	14.2::	
Aug	6.4	[13.1			17.4	[14.5	
	7.5	[13.1		1940 Aug	30.4	14.5::	
	10.5	[12.2		Sep	3.4	12.6::	1
	10.5	12.2::			5.4	13.1:	
	11.4	[13.1			5.4	[13.1:	
	13.5	[13.1			6.4	13.7::	
	27.4	14.1:		1941 July	2.5	13.1::	
1934 July	16.5	[13.1			23.5	[14.5	
	17.5	13.3::		1942 Sep	16.5	13.1::?	
Aug	5.5	[13.1			30.4	14.5::	

UT	m	pg	remarks	UT	m	pg	remarks
1942 Oct	4.4	[13.1		1965 Sep	22.4	13.7:	
	12.4	[13.1			22.4	[13.8	1
	13.3	[13.1			22.4	14.5::	
1946 Aug	28.5	13.1::?			22.4	13.6::	
	31.4	13.7::			22.4	14.5::	
1950 Aug	10.4	14.5::			23.5	13.6:: ?	
	13.4	[13.1			24.4	[14.5	
	15.5	13.1: ?		1966 June	21.5	13.1:: ?	
	20.4	[13.1			22.5	13.6:	
	20.4	13.5::			22.5	[13.8	
1954 Nov	15.2	12.7::		July	10.4	13.1::	
	16.3	13.1			23.5	13.9::	
	23.2	14.5:: ?			23.5	14.5::	
1958 July	11.5	10.5			24.5	13.9:	
	11.5	10.5			24.5	14.5::	
	12.5	10.5		1967 Oct	25.3	[13.1	
	12.5	10.8			25.3	13.1::	
	18.5	11.3			28.3	[13.1	
	19.5	11.3			28.3	13.1:	
	25.5	[14.5			28.3	13.1::	
Aug	10.4	[14.6			28.3	12.6::	
	17.4	13.8::?		1973 May	28.5	13.1::	
	18.4	[14.6		June	5.5	12.2::	
1962	published elsewhere				26.5	[13.1	
1964 Aug	5.5	[14.5		July	29.5	9.3	
	6.5	[13.1			29.5	9.4	
	8.5	13.6:			29.5	9.4	
	8.5	[14.5			29.5	9.5	1
	8.5	13.5::			31.5	10.1	
	9.5	13.6::			31.5	9.7	
	14.4	[13.1			31.5	10.5	1
1964 Oct	1.4	[14.7		Aug	5.4	10.4	
	2.4	14.5::			5.4	10.4	
	3.4	[13.1			5.4	10.8	
	4.3	14.5:			5.5	11.2	
	4.3	[13.8	1		23.5	[14.5	
	4.3	13.1::			25.4	13.1::	
	4.3	14.5::			26.4	[14.5	
	11.4	[14.7					

remarks: 1 = panchromatic

This list shows that during the periods of eruption observed by Liller (1983) our sky patrol plates exhibit only moderately increased magnitudes.

In addition to the 8 outbursts that have hitherto been known, the following observations of increased brightness seem to be reliable: August 1939,

August 1940, October 1964, September 1965, July 1966 and October 1967. The other observations are doubtful. Our plates taken since 1973 are without a trace of this star.

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