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Variable Stars, Supplement 3, No 18, 639–642, 1979.

О переменной KX Орла

Г.А.Гарбузов

Проведены фотографические наблюдения KX Орла по Одесским, Московским и Симеизским снимкам. Отмечено три вспышки переменной. Период в 53 дня не подтвердился; вспышка, по-видимому, происходит один раз в 1000 дней.

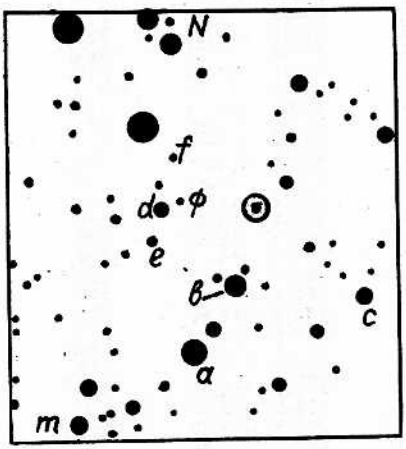
On the Variable KX Aquilae

by G.A. Garbusov

Photographic observations of KX Aql, U Gem type variable star, have been made from Odessa, Moscow and Simeiz photographs. Three flares have been observed. The 53^d period has not been confirmed; the flare seems to occur once in 1000 days.

Эта переменная принадлежит к звездам типа U Близнецов, она была открыта Хоффлейт (1932). Переменная наблюдалась мною по Одесским и Симеизским, а В.П.Цесевичем по Московским снимкам неба; всего около 550 наблюдений.

Использовано 8 звезд сравнения, данные о них приведены в таблице 1. Фотографические величины звезд сравнения получены фотометрической привязкой к стандартам NGC 6802 (Хоаг и др., 1961) и SA 87 (Сирс и др., 1930).



a	12.53	e	15.92
b	13.58	f	16.61
c	14.74	m	13.80
d	14.79	φ	17.06

Рис. 1.

Карта окрестностей переменной дана на рисунке 1.

За весь период наблюдений вспышка уверенно отмечена только три раза: JD 2436432.4–434.4, – $12^m.93$–$12^m.70$; 37964.2 – $15^m.03$; 38943.5-$13^m.23$.

Подъем блеска быстрый, менее трех дней. Промежуток между вспышками составляет соответственно 1930 и 979 дней. Хоффлейт (1932) приводит моменты двух вспышек: JD 2425152 и JD 2426272. Их разность дает 1120 дней. По-видимому, вспышка происходит не чаще одного раза в 1000 дней.

Наблюдения переменной приведены в таблицах 2, 3, 4.

Таблица 2.

Одесские наблюдения.

JD 24...	m	JD 24...	m	JD 24...	m	JD 24...	m
36083.4	(14.74	36790.5	(14.74	37853.5	(13.58	38294.3	(13.58
105.3	(14.74	791.5	(14.74	872.4	(13.58	295.3	(14.74
128.2	(14.74	806.4	(14.74	873.5	(13.80	562.5	(14.74
131.2	(14.74	807.4	(13.58	878.4	(14.74	563.5	(13.80
138.2	(14.74	809.4	(14.74	880.4	(13.58	589.5	(13.80
371.5	(14.74	817.3	(14.74	881.4	(13.58	591.5	(13.58
372.5	(14.74	834.3	(14.74	882.4	(14.74	614.4	(13.58
379.5	(14.74	837.3	(14.74	883.4	(14.74	637.3	(14.74
381.5	(14.74	840.3	(14.74	884.4	(14.74	638.3	(13.80
396.5	(14.74	862.2	(14.74	886.4	(13.58	639.4	(14.74
397.4	(14.74	863.2	(14.74	900.4	(14.74	641.4	(13.80
398.5	(14.74	868.2	(14.74	902.4	(14.74	644.3	(14.74
399.4	(14.74	37135.5	(12.53	903.4	(13.58	666.3	(14.74
400.5	(14.74	136.5	(13.58	904.4	(14.74	667.3	(13.80
401.5	(13.58	137.5	(13.58	906.4	(13.80	670.3	(14.74
402.5	(14.74	144.5	(14.74	908.4	(13.80	671.3	(14.74
404.5	(14.74	145.5	(14.74	909.3	(14.74	674.3	(14.74
406.5	(14.74	161.4	(13.58	910.3	(14.74	675.2	(14.74
407.5	(14.74	162.4	(14.74	911.3	(14.75	943.5	(13.23
408.5	(14.74	165.4	(13.80	912.3	(14.74	950.5	(13.80
410.4	(14.74	166.4	(13.80	939.3	(13.58	966.5	(14.74
423.4	(14.74	167.4	(14.74	955.2	(14.74	967.5	(13.58
424.4	(14.74	170.4	(14.74	957.3	(14.74	968.4	(13.80
428.4	(14.74	172.4	(13.80	959.2	(14.74	973.4	(13.58
429.4	(14.74	173.3	(14.74	962.2	(14.74	974.5	(12.53
432.4	12.92	174.5	(13.58	963.2	(14.74	976.4	(13.80
434.4	12.70	175.4	(14.74	964.2	15.03	993.4	(14.74
451.3	(14.74	176.4	(13.58	38210.5	(13.80	998.4	(13.58
453.4	(14.74	189.3	(14.74	228.5	(13.58	39005.4	(13.58
454.4	(14.74	192.3	(14.74	230.5	(14.74	020.3	(13.80
455.4	(14.74	195.4	(14.74	231.5	(13.58	021.3	(13.80
463.3	(14.74	196.3	(14.74	233.5	(14.74	022.3	(13.80
465.3	(13.58	197.3	(14.74	234.5	(14.74	023.3	(13.80
478.2	(14.74	199.3	(12.53	236.5	(13.80	024.3	(14.74
479.3	(14.74	204.5	(13.58	240.4	(13.58	025.3	(13.58
481.2	(14.74	218.2	(14.74	241.4	(13.80	028.3	(13.58
482.2	(14.74	461.5	(13.80	259.4	(13.58	029.3	(13.58
483.3	(14.74	472.5	(14.74	260.4	(14.74	319.4	(14.74
484.5	(14.74	473.5	(14.74	262.4	(13.80	330.5	(13.58
485.3	(14.74	493.4	(13.58	263.4	(14.74	331.4	(13.80
487.3	(14.74	496.5	(13.80	266.4	(13.80	351.4	(13.58
518.2	(14.74	501.5	(13.58	268.4	(14.74	354.4	(13.58
756.5	(14.74	523.4	(13.80	281.3	(14.74	356.3	(13.80
757.5	(14.74	524.5	(14.74	282.3	(13.80	359.4	(13.80
760.5	(14.74	525.4	(14.74	283.3	(12.53	360.4	(13.80
761.5	(14.74	544.3	(14.74	285.3	(13.58	376.3	(14.74
766.5	(14.74	547.3	(14.74	286.3	(13.80	384.3	(13.80
780.4	(14.74	549.3	(13.80	288.3	(13.80	404.2	(13.80
781.4	(14.74	555.3	(14.74	290.3	(12.53	405.2	(13.80
789.4	(14.74	848.5	(13.80	293.3	(13.80	406.2	(13.80

Таблица 2 (продолжение).

JD 24...	m	JD 24...	m	JD 24...	m	JD 24...	m
39407.2	(13.80	39741.3	(13.80	40419.4	(14.74	41867.5	(13.58
408.2	(13.80	742.3	(13.80	479.2	(13.58	893.4	(13.58
410.2	(13.80	743.4	(13.80	480.3	(13.58	896.4	(13.58
710.4	(13.80	744.4	(13.80	505.2	(13.58	42245.4	(13.80
713.4	(13.80	40059.4	(13.80	769.3	(13.80	247.5	(13.80
717.4	(13.80	062.5	(13.80	41569.3	(14.74	251.4	(14.74
733.3	(13.80	069.5	(13.80	571.3	(13.58	276.4	(14.74
734.4	(13.80	117.3	(13.80	573.3	(13.58	278.4	(14.74
737.3	(13.58	121.3	(13.58	598.3	(13.80		

Таблица 3.

Московские наблюдения В.П.Цесевича

JD 24...	m	JD 24...	m	JD 24...	m	JD 24...	m
37136.5	(15.92	39269.5	(15.92	40117.3	(16.61	41546	(14.79
154.4	(16.61	292.5	(15.92	119.3	(16.61	548.4	(15.92
159.3	(15.92	328.5	(15.92	122.3	(16.61	564.3	(15.92
160.4	(16.61	328.5	(15.92	123.3	(16.61	565.3	(15.92
163.4	(16.61	329.5	(14.79	125.3	(16.61	566.3	(14.79
165.4	(16.61	334.5	(14.79	153.2	(16.61	567.3	(14.79
166.4	(16.61	344.3	(15.92	157.4	(14.79	803.5	(14.79
168.4	(16.61	346.3	(14.79	386.5	(15.92	813.5	(15.92
175.4	(16.61	379.3	(15.92	387.5	(15.92	837.5	(15.92
176.4	(16.61	382.3	(15.92	428.5	(14.79	838.5	(14.79
194.4	(16.61	383.4	(14.79	473.3	(14.79	839.	(14.79
196.3	(16.61	384.3	(16.61	475.3	(14.79	842	(14.79
220.2	(16.61	385.3	(15.92	502.2	(15.92	860	(14.79
223.2	(16.61	.4	(15.92	.3	(15.92	869	(14.79
456.4	(14.79	387.3	(15.92	509.2	(16.61	873	(15.92
576.3	(14.79	.4	(15.92	510.3	(15.92	875	(15.92
843.5	(14.79	391.4	(15.92	511.2	(16.61	887	(14.79
877.5	(15.92	646.5	(15.92	512.3	(15.92	892	(14.79
885.5	(15.92	647.5	(15.92	747.5	(14.79	901	(14.79
887.5	(15.92	655.5	(14.79	775.5	(15.92	902	(14.79
902.3	(15.92	677.5	(14.79	779.4	(15.92	916	(14.79
38144.5	(14.79	681.5	(15.92	783.5	(15.92	918	(14.79
227.4	(15.92	686.5	(15.92	799.5	(14.79	924	(15.92
261.5	(14.79	704.3	(15.92	800.5	(14.79	928	(15.92
268.4	(14.79	708.3	(14.79	801.4	(15.92	931.	(16.61
282.3	(15.92	712.3	(15.92	802.5	(14.79	974.3	(16.61
554.5	(16.61	714.3	(15.92	806.4	(15.92	42211.4	(15.92
554.5	(16.61	716.4	(15.92	808.3	(15.92	216.5	(14.79
561.4	(15.92	730.3	(14.79	809.5	(15.92	221.4	(14.79
668.3	(15.92	745.4	(14.79	810.4	(15.92	257.5	(15.92
669.2	(15.92	746.4	(14.79	812.5	(14.79	300.4	(14.79
673.3	(15.92	764.3	(14.79	819.3	(14.79	546.4	(15.92
4.4	(15.92	765.26	(15.92	822.3	(15.92	551.5	(15.92
697.2	(16.61	.3	(15.92	823.4	(14.79	567.4	(15.92
698.2	(15.92	.4	(15.92	827.4	(14.79	577.5	(14.79
700.3	(16.61	767.26	(15.92	828.5	(14.79	579.5	(15.92
880.5	(15.92	.3	(15.92	41161.5	(14.79	597.4	(15.92
905.5	(16.61	.4	(15.92	177.4	(14.79	599.5	(16.61
910.4	(16.61	769.2	(15.92	417.5	(15.92	601.4	(15.92
916.4	(15.92	.3	(15.92	427.5	(15.92	605.4	(16.61
951.5	(15.92	.34	(15.92	452.5	(15.92	607.5	(16.61
964.4	(15.92	770.2	(15.92	454.5	(15.92	625.4	(16.61
968.5	(15.92	.3	(15.92	475.5	(15.92	626.5	(14.79
970.5	(15.92	.32	(15.92	482.5	(15.92	630.5	(15.92
972.5	(15.79	.4	(15.92	486.5	(15.92	642.5	(14.79
974.5	(15.92	778.4	(15.92	492.5	(15.92	654.3	(15.92
977.5	(15.92	968.5	(14.79	513.5	(15.92	658.4	(15.92
979.5	(15.92	.6	(15.92	514.5	(15.92	659.3	(16.61
980.5	(15.92	974.5	(15.92	518.5	(15.92	661.3	(15.92
999.4	(15.92	40033.5	(15.92	522.	(14.79	662.3	(16.61
39236.5	(15.92	036.5	(14.79	530	(15.92	665.3	(16.61
237.5	(15.92	097.5	(14.79	536	(14.79	667.3	(15.92

Таблица 3 (продолжение)

JD 24...	m	JD 24...	m	JD 24...	m	JD 24...	m
42668.4	(16.61	42749.2	(14.79	42961.4	(16.61	43047.3	(16.61
684.3	(15.92	869.6	(14.79	965.5	(15.92	063.2	(15.92
744.2	(14.79	930.4	(15.92	43039.3	(16.61	064.2	(16.61
747.2	(14.79	960.4	(16.61	045.4	(16.71		

Таблица 4

Симеизские наблюдения

JD 24...	m	JD 24...	m	JD 24...	m	JD 24...	m
32794.3	(17.06	33125.4	(17.06	33178.34	(16.61	33441.4	(15.92
797.3	(17.06	127.3	(16.61	179.2	(16.61	444.4	(15.92
798.3	(17.06	.35	(17.06	.3	(16.61	446.4	(17.06
802.3	(17.06	128.3	(16.61	184.25	(16.61	.42	(17.06
821.2	(17.06	.4	(17.06	.3	(17.06	447.4	(17.06
830.2	(17.06	146.3	(17.06	185.25	(17.06	.44	(17.06
831.2	(17.06	.34	(17.06	.3	(17.06	448.3	(17.06
851.2	(17.06	148.3	(17.06	187.3	(17.06	.4	(17.06
854.2	(17.06	151.3	(17.06	203.2	(17.06	449.3	(16.61
855.2	(17.06	.4	(17.06	205.2	(16.61	451.4	(17.06
861.2	(17.06	152.3	(17.06	206.2	(17.06	.5	(17.06
33033.5	(17.06	.32	(17.06	207.2	(17.06	36014.4	(17.06
063.5	(17.06	154.3	(17.06	.25	(17.06	.44	(17.06
084.4	(17.06	.4	(17.06	215.2	(17.06	015.4	(17.06
100.5	(17.06	157.3	(15.92	216.3	(17.06	.43	(16.61
121.3	(17.06	.35	(17.06	239.2	(17.06	016.4	(16.61
124.3	(15.92	158.3	(17.06	412.4	(16.61	022.4	(17.06
.4	(17.06	160.4	(16.61	414.4	(17.06		
125.3	(17.06	178.3	(17.06	438.4	(16.61		

Литература:

Хоаг и др., 1961 – Hoag A.A., Johnson H.L., Iriate B., Mitchell R.I., Hallam H.L., Sharpless S., Naval Obs Publ., s 2, 17, p. VII.

Хоффлейт, 1932 – Hoffleit D., HB № 887.

Сирс и др., 1930 – Seares F., Kapteyn J., Rhijn P. van, Mt Wilson Catalogue of phot. magnitudes of SA 1–139, Carnegie Inst. Publ. № 402, Washington.

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