

## New Eclipsing Binary Stars

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#	Name	Other	Coord (J2000)	Type	Max	Min	System	Period	Epoch (JD)	type	Sp	Comment	L.Curve	Find.Chart	Data
1		GSC 04660-00039	19 36 53.64, +88 27 23.2	EW	14.0	14.7	R	0.313848	2451532.668	min		<a href="#">Comm. 1</a>	<a href="#">01.jpg</a>	<a href="#">chart01.jpg</a>	<a href="#">NSVS 49390</a>
2		GSC 04648-03469	19 54 43.14, +83 15 50.7	EW	12.75	13.05	R	0.420825	2451354.607	min		<a href="#">Comm. 2</a>	<a href="#">02.jpg</a>	<a href="#">chart02.jpg</a>	<a href="#">NSVS 1253065</a>
3		GSC 04450-00232	20 05 29.44, +71 10 21.3	EW	14.15	14.8	R	0.430210	2451376.134	min		<a href="#">Comm. 3</a>	<a href="#">03.jpg</a>	<a href="#">chart03.jpg</a>	<a href="#">NSVS 1229070</a> <a href="#">NSVS 1325437</a>
4		GSC 04585-02754	20 07 04.56, +75 14 25.7	EW	11.44	11.75	R	0.555168	2451458.006	min		<a href="#">Comm. 4</a>	<a href="#">04.jpg</a>	<a href="#">chart04.jpg</a>	<a href="#">NSVS 1225366</a> <a href="#">NSVS 1262901</a> <a href="#">NSVS 1295609</a>
5		GSC 04454-00967	20 17 42.00, +72 31 56.6	EA	12.7	13.05	R	3.0166	2451843.890	min		<a href="#">Comm. 5</a>	<a href="#">05.jpg</a>	<a href="#">chart05.jpg</a>	<a href="#">NSVS 1231678</a> <a href="#">NSVS 1331762</a>
6		GSC 04450-00972	20 18 53.80, +70 17 32.1	EW	13.55	14.2	R	0.354497	2451459.651	min		<a href="#">Comm. 6</a>	<a href="#">06.jpg</a>	<a href="#">chart06.jpg</a>	<a href="#">NSVS 1234646</a> <a href="#">NSVS 1328850</a>
7		GSC 04458-00954	20 22 26.02, +74 04 32.9	EW	13.4	14.1	R	0.321451	2451389.509	min		<a href="#">Comm. 7</a>	<a href="#">07.jpg</a>	<a href="#">chart07.jpg</a>	<a href="#">NSVS 1231195</a> <a href="#">NSVS 1335419</a>
8		GSC 04585-00214	20 26 11.99, +75 56 00.8	EW	13.45	14.1	R	0.311412	2451318.641	min		<a href="#">Comm. 8</a>	<a href="#">08.jpg</a>	<a href="#">chart08.jpg</a>	<a href="#">NSVS 1267335</a> <a href="#">NSVS 1301733</a>
9		GSC 04597-01594	20 34 02.63, +81 30 59.7	EW	12.23	12.45	R	0.351332	2451442.711	min		<a href="#">Comm. 9</a>	<a href="#">09.jpg</a>	<a href="#">chart09.jpg</a>	<a href="#">NSVS 29671</a> <a href="#">NSVS 1260751</a> <a href="#">NSVS 1310529</a>
10		GSC 04464-02596	20 49 05.10, +70 19 19.6	EW	14.15	14.8	R	0.336323	2451330.632	min		<a href="#">Comm. 10</a>	<a href="#">10.jpg</a>	<a href="#">chart10.jpg</a>	<a href="#">NSVS 1340237</a>
11		GSC 04464-01183	20 54 43.71, +69 59 58.4	EW	13.4	13.85	R	0.260118	2451325.650	min		<a href="#">Comm. 11</a>	<a href="#">11.jpg</a>	<a href="#">chart11.jpg</a>	<a href="#">NSVS 1342218</a>
12		GSC 04251-01559	20 55 41.64, +62 44 35.4	EB	10.12	10.4	R	0.707009	2451459.518	min		<a href="#">Comm. 12</a>	<a href="#">12.jpg</a>	<a href="#">chart12.jpg</a>	<a href="#">NSVS 3307170</a>
13		GSC 03179-00125	20 55 44.77, +43 28 28.5	EW	12.45	12.77	R	0.530922	2451504.898	min		<a href="#">Comm. 13</a>	<a href="#">13.jpg</a>	<a href="#">chart13.jpg</a>	<a href="#">NSVS 5762991</a> <a href="#">NSVS 5877031</a>
14		GSC 03956-01048	20 57 21.47, +55 30 04.4	EW:	12.9	13.4	R	1.1232	2451323.843	min		<a href="#">Comm. 14</a>	<a href="#">14.jpg</a>	<a href="#">chart14.jpg</a>	<a href="#">NSVS 3259907</a>
15		GSC 04247-00169	21 01 45.44, +61 40 08.9	EW	13.25	13.6	R	0.418772	2451508.736	min		<a href="#">Comm. 15</a>	<a href="#">15.jpg</a>	<a href="#">chart15.jpg</a>	<a href="#">NSVS 3311090</a>
16		GSC 04251-01104	21 02 37.32, +62 50 55.2	EB	12.5	13.05	R	0.531977	2451502.746	min		<a href="#">Comm. 16</a>	<a href="#">16.jpg</a>	<a href="#">chart16.jpg</a>	<a href="#">NSVS 3311272</a>
17		GSC 04586-01412	21 11 40.71, +76 40 09.9	EW	14.0	14.7	R	0.288957	2451330.685	min		<a href="#">Comm. 17</a>	<a href="#">17.jpg</a>	<a href="#">chart17.jpg</a>	<a href="#">NSVS 1276727</a> <a href="#">NSVS 1314176</a>
18		GSC 04590-01164	21 13 47.57, +78 05 46.3	EW	13.55	14.0	R	0.493470	2451361.811	min		<a href="#">Comm. 18</a>	<a href="#">18.jpg</a>	<a href="#">chart18.jpg</a>	<a href="#">NSVS 114079</a> <a href="#">NSVS 1274341</a> <a href="#">NSVS 1315261</a>
19		GSC 04590-01050	21 15 31.19, +78 00 54.7	EW:	14.3	15.2	R	0.386163	2451475.790	min		<a href="#">Comm. 19</a>	<a href="#">19.jpg</a>	<a href="#">chart19.jpg</a>	<a href="#">NSVS 114133</a> <a href="#">NSVS 1274805</a> <a href="#">NSVS 1315612</a>

### Comments:

1. MinII = 14.6.
2. MinII = 13.0.
3. MinII = 14.8.

4. MinII = 11.65.
5. MinII = 12.85.
6. MinII = 14.2.
7. MinII = 13.95.
8. MinII = 14.0.
9. MinII = 12.42.
10. MinII = 14.7.
11. MinII = 13.8.
12. 1RXS J205540.0+624439. MinII = 10.23.
13. MinII = 12.72.
14. MinII = 13.35.
15. MinII = 13.55.
16. MinII = 12.65.
17. MinII = 14.6.
18. MinII = 13.9.
19. MinII = 14.9.

**Remarks:**

I announce the discovery of 19 new eclipsing binaries found in the public data release from the Northern Sky Variability Survey (NSVS; Wozniak et al., 2004; see also <http://skydot.lanl.gov/nsvs/>).

These observations were analyzed using the period-search software developed by Dr.V.P.Goranskij for Windows environment. The coordinates were drawn from the 2MASS catalog.

**References:**

Wozniak, P.R., Vestrand, W.T., Akerlof, C.W. et al., 2004, Astron. J., 127, 2436