

# Recent Minima of 267 Recently Discovered Eclipsing Variable Stars

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**Abstract** The AAVSO Eclipsing Variable Section has received observations of newly discovered variable stars that have not yet been listed in the GCVS. This paper contains times of minima for these eclipsing variables.

## 1. Recent observations

The accompanying list contains times of minima calculated from recent CCD observations made by participants in the AAVSO's eclipsing binary program.

Many of these eclipsing stars are recent discoveries by all-sky surveys. Many of them have precise periods derived from the survey data but not all of them are accurate. Most of the stars in this paper have little or no published times of minima in literature, so these times of minima were observed to help determine accurate orbital periods for these stars. Further observations are encouraged to check the stability and further refine the accuracy of these periods so these stars can eventually be added to the GCVS. In a few cases, these stars happened to be in the field of another variable during a time series observing run.

This list will be web-archived and made available through the AAVSO ftp site at <ftp://ftp.aavso.org/public/datasets/gsamj472nongcv.txt>. These observations were reduced by

the observers or the writer using the method of Kwee and van Woerden (1956) or the Fourier Fit in Minima 2.5 (Nelson 2007). The standard error is included. Column F indicates the filter used. A "C" indicates a clear filter.

Many of these stars have multiple identifications from various catalogs. The AAVSO AUID (AAVSO Unique Identifier) is also included in this table to provide a unique identification for each variable.

## References

- Kwee, K. K., and van Woerden, H. 1956, *Bull. Astron. Inst. Netherlands*, **12**, 327.
- Nelson, B. 2007, Software by Bob Nelson (<https://www.variablestarsouth.org/software-by-bob-nelson>).
- Watson, C., Henden, A. A., and Price, C. A. 2014, AAVSO International Variable Star Index VSX (Watson+, 2006–2014; <http://www.aavso.org/vsx>).

Table 1. Recent times of minima of stars in the AAVSO eclipsing binary program.

<i>Star</i>	<i>AUID</i>	<i>JD (min) Hel. 2400000 +</i>	<i>F</i>	<i>Observer</i>	<i>Standard Error (day)</i>
ISWASP J022311.92+425529.9	000-BJX-274	57306.7373	V	V. Petriew	0.0005
ISWASP J022311.92+425529.9	000-BJX-274	57306.8808	V	V. Petriew	0.0005
ISWASP J022311.92+425529.9	000-BJX-274	57309.7345	V	V. Petriew	0.0005
ISWASP J022311.92+425529.9	000-BJX-274	57309.8770	V	V. Petriew	0.0004
ISWASP J182358.52+351518.2	000-BLY-330	57569.7731	V	V. Petriew	0.0005
ISWASP J182358.52+351518.2	000-BLY-330	57573.7458	V	V. Petriew	0.0007
ISWASP J182358.52+351518.2	000-BLY-330	57575.7310	V	V. Petriew	0.0016
ISWASP J182358.52+351518.2	000-BLY-330	57575.8840	V	V. Petriew	0.0009
ISWASP J211703.96+404916.8	000-BLY-378	57930.8061	V	V. Petriew	0.0011
ISWASP J211703.96+404916.8	000-BLY-378	57932.7629	V	V. Petriew	0.0010
ISWASP J211703.96+404916.8	000-BLY-378	57954.8292	V	V. Petriew	0.0010
ISWASP J211703.96+404916.8	000-BLY-378	57960.8356	V	V. Petriew	0.0007
ISWASP J211703.96+404916.8	000-BLY-378	57961.8121	V	V. Petriew	0.0010
ISWASP J211703.96+404916.8	000-BLY-378	57968.7958	V	V. Petriew	0.0010
ISWASP J211703.96+404916.8	000-BLY-378	57975.7800	V	V. Petriew	0.0010
ISWASP J211703.96+404916.8	000-BLY-378	57975.9195	V	V. Petriew	0.0008
ISWASP J211703.96+404916.8	000-BLY-378	57979.8299	V	V. Petriew	0.0007
ISWASP J211703.96+404916.8	000-BLY-378	58323.8247	V	V. Petriew	0.0012
ISWASP J211703.96+404916.8	000-BLY-378	58325.7803	V	V. Petriew	0.0012
ISWASP_J211703.96+404916.8	000-BLY-378	57577.7330	V	V. Petriew	0.0021
ISWASP_J211703.96+404916.8	000-BLY-378	57577.8748	V	V. Petriew	0.0007
ISWASP_J211703.96+404916.8	000-BLY-378	57584.8581	V	V. Petriew	0.0007
ISWASP_J211703.96+404916.8	000-BLY-378	57586.8126	V	V. Petriew	0.0009

*Table continued on following pages*

Table 1. Recent times of minima of stars in the AAVSO eclipsing binary program, cont.

<i>Star</i>	<i>AUID</i>	<i>JD (min) Hel. 2400000 +</i>	<i>F</i>	<i>Observer</i>	<i>Standard Error (day)</i>
1SWASP_J211703.96+404916.8	000-BLY-378	57590.8613	V	V. Petriew	0.0009
1SWASP_J211703.96+404916.8	000-BLY-378	57594.7730	V	V. Petriew	0.0010
1SWASP_J211703.96+404916.8	000-BLY-378	57594.9129	V	V. Petriew	0.0010
1SWASP_J211703.96+404916.8	000-BLY-378	57597.7071	V	V. Petriew	0.0009
1SWASP_J211703.96+404916.8	000-BLY-378	57597.8456	V	V. Petriew	0.0010
1SWASP_J211703.96+404916.8	000-BLY-378	57599.8003	V	V. Petriew	0.0012
1SWASP_J211703.96+404916.8	000-BLY-378	57601.8964	V	V. Petriew	0.0007
ASAS J003953+2626.6	000-BLX-779	57357.5991	V	V. Petriew	0.0005
ASAS J003953+2626.6	000-BLX-779	57358.6314	V	V. Petriew	0.0004
ASAS J003953+2626.6	000-BLX-779	57361.5530	V	V. Petriew	0.0003
ASAS J003953+2626.6	000-BLX-779	57361.7249	V	V. Petriew	0.0010
ASAS J003953+2626.6	000-BLX-779	57362.5850	V	V. Petriew	0.0004
ASAS J041529+3129.9	000-BMC-816	57696.8157	V	V. Petriew	0.0006
ASAS J041529+3129.9	000-BMC-816	57696.9906	V	V. Petriew	0.0016
ASAS J041529+3129.9	000-BMC-816	57711.6855	V	V. Petriew	0.0010
ASAS J041529+3129.9	000-BMC-816	57711.8719	V	V. Petriew	0.0004
ASAS J092544+2542.6	000-BLX-470	57349.0144	V	V. Petriew	0.0004
ASAS J092544+2542.6	000-BLX-470	57362.0315	V	V. Petriew	0.0008
ASAS J092544+2542.6	000-BLX-470	57390.7810	V	V. Petriew	0.0006
ASAS J092544+2542.6	000-BLX-470	57390.9145	V	V. Petriew	0.0007
ASAS J092544+2542.6	000-BLX-470	57391.0522	V	V. Petriew	0.0007
ASAS J092544+2542.6	000-BLX-470	57757.0535	V	V. Petriew	0.0009
ASAS J092544+2542.6	000-BLX-470	57785.8022	V	V. Petriew	0.0004
ASAS J092544+2542.6	000-BLX-470	57785.9383	V	V. Petriew	0.0003
ASAS J092544+2542.6	000-BLX-470	57792.7171	V	V. Petriew	0.0005
ASAS J092544+2542.6	000-BLX-470	57792.8542	V	V. Petriew	0.0005
ASAS J092933+0929.0	000-BLT-858	57102.6665	V	V. Petriew	0.0004
ASAS J132229+1543.0	000-BLX-452	57492.6908	V	V. Petriew	0.0007
ASAS J150239+1546.5	000-BLP-887	57109.7895	V	V. Petriew	0.0021
ASAS J150239+1546.5	000-BLP-887	57109.9521	V	V. Petriew	0.0045
ASAS J184728+2621.4	000-BLX-425	57190.7575	V	V. Petriew	0.0003
ASAS J184728+2621.4	000-BLX-425	57199.8084	V	V. Petriew	0.0004
ASAS J184728+2621.4	000-BLX-425	57200.7873	V	V. Petriew	0.0005
ASAS J192826+3939.6	000-BLX-710	57237.8089	V	V. Petriew	0.0002
ASAS J192826+3939.6	000-BLX-710	57238.7711	V	V. Petriew	0.0002
ASAS J192826+3939.6	000-BLX-710	57238.9040	V	V. Petriew	0.0003
ASAS J193512+4146.4	000-BJH-676	56546.3060	C	Y. Ogmen	0.0001
ASAS J195751+4512.7	000-BLX-709	57226.8718	V	V. Petriew	0.0009
ASAS J195751+4512.7	000-BLX-709	57234.6946	V	V. Petriew	0.0009
ASAS J195751+4512.7	000-BLX-709	57235.7728	V	V. Petriew	0.0003
ASAS J195751+4512.7	000-BLX-709	57236.8519	V	V. Petriew	0.0003
ASAS_J053803+2734.8	000-BML-463	57719.7628	V	V. Petriew	0.0001
CSS_J022048.7+332751	000-BLX-773	57304.7650	V	V. Petriew	0.0001
CSS_J024657.7+343112	000-BLX-772	57275.8134	V	V. Petriew	0.0006
CSS_J024657.7+343112	000-BLX-772	57303.8807	V	V. Petriew	0.0005
CSS_J152658.4+403531	000-BLX-619	57498.7689	V	V. Petriew	0.0001
CSS_J152658.4+403531	000-BLX-619	57498.9002	V	V. Petriew	0.0001
CSS_J160353.4+353058	000-BLX-913	57525.7393	V	V. Petriew	0.0004
CSS_J160353.4+353058	000-BLX-913	57525.8664	V	V. Petriew	0.0003
GSC 02707-01173	000-BCN-774	58012.3927	V	T. Arranz	0.0003
GSC 03374-00372	000-BMF-212	57717.7642	V	V. Petriew	0.0005
GSC 03374-00372	000-BMF-212	57718.9751	V	V. Petriew	0.0008
GSC 03704-01240	000-BLX-929	57316.7591	V	V. Petriew	0.0016
GSC 03704-01240	000-BLX-929	57321.7139	V	V. Petriew	0.0034
GSC 03704-01240	000-BLX-929	57342.7716	V	V. Petriew	0.0011
GSC 03704-01240	000-BLX-929	57349.7063	V	V. Petriew	0.0011
GSC 03704-01240	000-BLX-929	57349.9559	V	V. Petriew	0.0015
GSC 3028 0134	000-BMV-507	58205.8272	Ic	K. Alton	0.0001
GSC 3028 0134	000-BMV-507	58205.8282	V	K. Alton	0.0004
GSC 3028 0134	000-BMV-507	58208.9002	Ic	K. Alton	0.0006
GSC 3028 0134	000-BMV-507	58208.9013	V	K. Alton	0.0001
GSC 3028 0134	000-BMV-507	58208.9032	B	K. Alton	0.0009
GSC 3028 0134	000-BMV-507	58211.9746	V	K. Alton	0.0006
GSC 3028 0134	000-BMV-507	58211.9752	Ic	K. Alton	0.0003
GSC 3028 0134	000-BMV-507	58211.9772	B	K. Alton	0.0003
GSC 3028 0134	000-BMV-507	58217.9612	Ic	K. Alton	0.0006

Table continued on following pages

Table 1. Recent times of minima of stars in the AAVSO eclipsing binary program, cont.

<i>Star</i>	<i>AUID</i>	<i>JD (min)</i> <i>Hel.</i> <i>2400000 +</i>	<i>F</i>	<i>Observer</i>	<i>Standard</i> <i>Error</i> <i>(day)</i>
GSC 3028 0134	000-BMV-507	58217.9621	V	K. Alton	0.0007
GSC 3028 0134	000-BMV-507	58217.9633	B	K. Alton	0.0004
GSC 3028-0134	000-BMV-507	58205.8261	B	K. Alton	0.0007
GSC 3253 0322	000-BMZ-962	58396.8892	Ic	K. Alton	0.0004
GSC 3253 0322	000-BMZ-962	58396.8898	B	K. Alton	0.0003
GSC 3253 0322	000-BMZ-962	58396.8918	V	K. Alton	0.0004
GSC 3253 0322	000-BMZ-962	58398.8322	V	K. Alton	0.0001
GSC 3253 0322	000-BMZ-962	58398.8326	Ic	K. Alton	0.0002
GSC 3253 0322	000-BMZ-962	58398.8332	B	K. Alton	0.0004
GSC 3253 0322	000-BMZ-962	58400.7740	Ic	K. Alton	0.0003
GSC 3253 0322	000-BMZ-962	58400.7751	V	K. Alton	0.0001
GSC 3253 0322	000-BMZ-962	58400.7760	B	K. Alton	0.0001
GSC 3253 0322	000-BMZ-962	58400.9228	B	K. Alton	0.0005
GSC 3253 0322	000-BMZ-962	58400.9237	Ic	K. Alton	0.0001
GSC 3253 0322	000-BMZ-962	58400.9248	V	K. Alton	0.0003
GSC 3253 0322	000-BMZ-962	58401.8203	Ic	K. Alton	0.0001
GSC 3253 0322	000-BMZ-962	58401.8208	B	K. Alton	0.0001
GSC 3253 0322	000-BMZ-962	58401.8213	V	K. Alton	0.0003
GSC 4394 1100	000-BMZ-960	58223.7848	V	K. Alton	0.0001
GSC 4394 1100	000-BMZ-960	58223.7857	B	K. Alton	0.0003
GSC 4394 1100	000-BMZ-960	58226.7244	V	K. Alton	0.0002
GSC 4394 1100	000-BMZ-960	58226.7247	Ic	K. Alton	0.0002
GSC 4394 1100	000-BMZ-960	58226.7255	B	K. Alton	0.0007
GSC 4394 1100	000-BMZ-960	58226.8625	B	K. Alton	0.0005
GSC 4394 1100	000-BMZ-960	58226.8632	V	K. Alton	0.0002
GSC 4394 1100	000-BMZ-960	58226.8651	Ic	K. Alton	0.0004
GSC 4394 1100	000-BMZ-960	58229.6617	V	K. Alton	0.0006
GSC 4394 1100	000-BMZ-960	58229.6627	B	K. Alton	0.0001
GSC 4394 1100	000-BMZ-960	58229.6637	Ic	K. Alton	0.0003
GSC 4394 1100	000-BMZ-960	58229.8022	Ic	K. Alton	0.0004
GSC 4394 1100	000-BMZ-960	58229.8032	V	K. Alton	0.0001
GSC 4394 1100	000-BMZ-960	58229.8042	B	K. Alton	0.0002
GSC 4394-1100	000-BMZ-960	58223.7837	Ic	K. Alton	0.0003
KIC 4656194	000-BLX-575	57237.7561	V	V. Petriew	0.0030
KIC 4656194	000-BLX-575	57238.7134	V	V. Petriew	0.0027
KIC 4656194	000-BLX-575	57238.8075	V	V. Petriew	0.0018
KIC 4656194	000-BLX-575	57238.9050	V	V. Petriew	0.0037
NSV 19494	000-BLV-211	57123.7293	V	V. Petriew	0.0009
NSV 19494	000-BLV-211	57130.6720	V	V. Petriew	0.0008
NSVS 10464245	000-BGZ-513	57499.7251	V	V. Petriew	0.0003
NSVS 10464245	000-BGZ-513	57499.8617	V	V. Petriew	0.0003
NSVS 1825826	000-BMB-887	58025.8958	V	V. Petriew	0.0003
NSVS 1932777	000-BLX-708	57316.7817	V	V. Petriew	0.0002
NSVS 1932777	000-BLX-708	57316.9345	V	V. Petriew	0.0002
NSVS 1932777	000-BLX-708	57342.7028	V	V. Petriew	0.0002
NSVS 1932777	000-BLX-708	57342.8562	V	V. Petriew	0.0002
NSVS 1932777	000-BLX-708	57342.8562	V	V. Petriew	0.0002
NSVS 1932777	000-BLX-708	57349.5653	V	V. Petriew	0.0002
NSVS 1932777	000-BLX-708	57349.7164	V	V. Petriew	0.0002
NSVS 1932777	000-BLX-708	57349.8704	V	V. Petriew	0.0002
NSVS 2423495	000-BLX-456	57443.5834	V	V. Petriew	0.0004
NSVS 2423495	000-BLX-456	57460.7467	V	V. Petriew	0.0004
NSVS 2443858	000-BLP-236	57083.7530	V	V. Petriew	0.0002
NSVS 2569022	000-BBR-218	57449.6605	V	V. Petriew	0.0003
NSVS 2569022	000-BBR-218	57461.7487	V	V. Petriew	0.0005
NSVS 2569022	000-BBR-218	57473.6929	V	V. Petriew	0.0007
NSVS 2729390	000-BLX-354	57480.7407	V	V. Petriew	0.0002
NSVS 2729390	000-BLX-354	57480.9144	V	V. Petriew	0.0002
NSVS 3752379	000-BML-464	58036.7809	V	V. Petriew	0.0007
NSVS 3752379	000-BML-464	58043.6757	V	V. Petriew	0.0001
NSVS 3752379	000-BML-464	58051.6607	V	V. Petriew	0.0002
NSVS 4333194	000-BLS-738	57314.8380	V	V. Petriew	0.0003
NSVS 4333194	000-BLS-738	57314.9816	V	V. Petriew	0.0002
NSVS 4333194	000-BLS-738	57354.8333	V	V. Petriew	0.0002
NSVS 4333194	000-BLS-738	57354.9771	V	V. Petriew	0.0002
NSVS 4333194	000-BLS-738	57355.8400	V	V. Petriew	0.0002

Table continued on following pages

Table 1. Recent times of minima of stars in the AAVSO eclipsing binary program, cont.

<i>Star</i>	<i>AUID</i>	<i>JD (min) Hel. 2400000 +</i>	<i>F</i>	<i>Observer</i>	<i>Standard Error (day)</i>
NSVS 4333194	000-BLS-738	57355.9848	V	V. Petriew	0.0002
NSVS 4333194	000-BLS-738	57356.7033	V	V. Petriew	0.0002
NSVS 4333194	000-BLS-738	57356.8479	V	V. Petriew	0.0002
NSVS 4333194	000-BLS-738	57356.9918	V	V. Petriew	0.0002
NSVS 4666563	000-BMY-869	57739.7689	V	V. Petriew	0.0002
NSVS 4666563	000-BMY-869	57740.7984	V	V. Petriew	0.0002
NSVS 4666563	000-BMY-869	57740.9698	V	V. Petriew	0.0002
NSVS 4666563	000-BMY-869	57744.7442	V	V. Petriew	0.0002
NSVS 4922327	000-BNB-318	57835.6793	V	V. Petriew	0.0005
NSVS 4922327	000-BNB-318	57835.8825	V	V. Petriew	0.0003
NSVS 4922327	000-BNB-318	57846.6484	V	V. Petriew	0.0006
NSVS 4993806	000-BLX-472	57444.8553	V	V. Petriew	0.0004
NSVS 4993806	000-BLX-472	57444.9966	V	V. Petriew	0.0003
NSVS 5079550	000-BLX-454	57474.8433	V	V. Petriew	0.0005
NSVS 5079550	000-BLX-454	57474.9836	V	V. Petriew	0.0005
NSVS 5138234	000-BNB-313	57844.8766	V	V. Petriew	0.0002
NSVS 5138234	000-BNB-313	57846.8216	V	V. Petriew	0.0002
NSVS 5138234	000-BNB-313	57847.7059	V	V. Petriew	0.0002
NSVS 5138234	000-BNB-313	57847.8827	V	V. Petriew	0.0002
NSVS 5138234	000-BNB-313	57848.7670	V	V. Petriew	0.0002
NSVS 5138234	000-BNB-313	57848.9444	V	V. Petriew	0.0002
NSVS 5138234	000-BNB-313	57855.8411	V	V. Petriew	0.0002
NSVS 5886937	000-BLM-950	57591.8193	V	V. Petriew	0.0004
NSVS 5943354	000-BLX-696	57242.7600	V	V. Petriew	0.0003
NSVS 5943354	000-BLX-696	57242.9152	V	V. Petriew	0.0006
NSVS 5943354	000-BLX-696	57253.8569	V	V. Petriew	0.0003
NSVS 5943354	000-BLX-696	57257.9058	V	V. Petriew	0.0011
NSVS 5943354	000-BLX-696	57976.7369	V	V. Petriew	0.0004
NSVS 5943354	000-BLX-696	57976.8790	V	V. Petriew	0.0006
NSVS 5943354	000-BLX-696	57978.8368	V	V. Petriew	0.0006
NSVS 6143186	000-BLX-778	57355.6889	V	V. Petriew	0.0003
NSVS 6143186	000-BLX-778	57356.6172	V	V. Petriew	0.0003
NSVS 6571865	000-BLX-774	57303.7601	V	V. Petriew	0.0002
NSVS 6571865	000-BLX-774	57303.9270	V	V. Petriew	0.0002
NSVS 6601998	000-BLX-928	57319.8448	V	V. Petriew	0.0002
NSVS 6731062	000-BLX-776	57312.7873	V	V. Petriew	0.0001
NSVS 6731062	000-BLX-776	57312.9362	V	V. Petriew	0.0001
NSVS 6731062	000-BLX-776	57313.8237	V	V. Petriew	0.0001
NSVS 6731062	000-BLX-776	57313.9705	V	V. Petriew	0.0001
NSVS 6731062	000-BLX-776	57317.8165	V	V. Petriew	0.0002
NSVS 6731062	000-BLX-776	57317.9652	V	V. Petriew	0.0001
NSVS 6731062	000-BLX-776	57333.7914	V	V. Petriew	0.0002
NSVS 6731062	000-BLX-776	57333.9393	V	V. Petriew	0.0001
NSVS 6731062	000-BLX-776	57334.8271	V	V. Petriew	0.0001
NSVS 6731062	000-BLX-776	57334.9746	V	V. Petriew	0.0002
NSVS 6731062	000-BLX-776	57339.7076	V	V. Petriew	0.0002
NSVS 7377756	000-BMZ-610	57760.8591	V	V. Petriew	0.0002
NSVS 7377756	000-BMZ-610	57761.0035	V	V. Petriew	0.0001
NSVS 7377756	000-BMZ-610	57771.8037	V	V. Petriew	0.0002
NSVS 7377756	000-BMZ-610	57771.9476	V	V. Petriew	0.0002
NSVS 7440793	000-BLX-457	57441.7305	V	V. Petriew	0.0004
NSVS 7440793	000-BLX-457	57441.8578	V	V. Petriew	0.0004
NSVS 7440793	000-BLX-457	57459.6536	V	V. Petriew	0.0006
NSVS 7456642	000-BLX-453	57417.8420	V	V. Petriew	0.0002
NSVS 7456642	000-BLX-453	57418.0161	V	V. Petriew	0.0002
NSVS 7456642	000-BLX-453	57418.8840	V	V. Petriew	0.0002
NSVS 7456642	000-BLX-453	57474.6271	V	V. Petriew	0.0019
NSVS 7456642	000-BLX-453	57475.6703	V	V. Petriew	0.0002
NSVS 7874563	000-BLV-212	57122.7765	V	V. Petriew	0.0004
NSVS 7874563	000-BLV-212	57123.8564	V	V. Petriew	0.0005
NSVS 7874563	000-BLV-212	57132.9269	V	V. Petriew	0.0010
NSVS 7874563	000-BLV-212	57166.8372	V	V. Petriew	0.0004
NSVS 8110779	000-BLY-331	57569.7561	V	V. Petriew	0.0002
NSVS 8110779	000-BLY-331	57573.7509	V	V. Petriew	0.0003
NSVS 8110779	000-BLY-331	57575.8129	V	V. Petriew	0.0003
NSVS 8183892	000-BLX-663	57210.8288	V	V. Petriew	0.0001

Table continued on next page

Table 1. Recent times of minima of stars in the AAVSO eclipsing binary program, cont.

<i>Star</i>	<i>AUID</i>	<i>JD (min)</i> <i>Hel.</i> <i>2400000 +</i>	<i>F</i>	<i>Observer</i>	<i>Standard</i> <i>Error</i> <i>(day)</i>
NSVS 8183892	000-BLX-663	57211.7856	V	V. Petriew	0.0001
NSVS 8183892	000-BLX-663	57212.7424	V	V. Petriew	0.0001
NSVS 8183892	000-BLX-663	57212.9020	V	V. Petriew	0.0002
NSVS 8183892	000-BLX-663	57213.8587	V	V. Petriew	0.0001
ROTSE1 J140627.09+372840.5	000-BLX-352	57486.6681	V	V. Petriew	0.0006
ROTSE1 J140627.09+372840.5	000-BLX-352	57486.8146	V	V. Petriew	0.0004
ROTSE1 J143554.74+284045.7	000-BLX-336	57489.7758	V	V. Petriew	0.0002
ROTSE1 J153727.94+254022.9	000-BMY-927	57883.8291	V	V. Petriew	0.0009
ROTSE1 J153727.94+254022.9	000-BMY-927	57888.8099	V	V. Petriew	0.0008
ROTSE1 J153727.94+254022.9	000-BMY-927	57891.7539	V	V. Petriew	0.0009
ROTSE1 J153727.94+254022.9	000-BMY-927	57896.7408	V	V. Petriew	0.0010
ROTSE1 J153727.94+254022.9	000-BMY-927	57903.7588	V	V. Petriew	0.0010
ROTSE1 J153727.94+254022.9	000-BMY-927	57905.7969	V	V. Petriew	0.0009
ROTSE1 J155551.87+331100.5	000-BLX-846	57513.8032	V	V. Petriew	0.0006
ROTSE1 J161118.72+353818.9	000-BLX-162	57508.7259	V	V. Petriew	0.0014
ROTSE1 J161118.72+353818.9	000-BLX-162	57508.8754	V	V. Petriew	0.0025
ROTSE1 J161118.72+353818.9	000-BLX-162	57509.8295	V	V. Petriew	0.0003
ROTSE1 J161118.72+353818.9	000-BLX-162	57140.7979	V	V. Petriew	0.0014
ROTSE1 J161118.72+353818.9	000-BLX-162	57141.7508	V	V. Petriew	0.0014
ROTSE1 J161118.72+353818.9	000-BLX-162	57141.9115	V	V. Petriew	0.0032
ROTSE1 J161118.72+353818.9	000-BLX-162	57144.9241	V	V. Petriew	0.0031
ROTSE1 J161118.72+353818.9	000-BLX-162	57145.7245	V	V. Petriew	0.0012
ROTSE1 J161118.72+353818.9	000-BLX-162	57145.8801	V	V. Petriew	0.0012
ROTSE1 J161118.72+353818.9	000-BLX-162	57146.8343	V	V. Petriew	0.0013
ROTSE1 J161118.72+353818.9	000-BLX-162	57152.7124	V	V. Petriew	0.0024
ROTSE1 J161118.72+353818.9	000-BLX-162	57152.8725	V	V. Petriew	0.0017
ROTSE1 J161118.72+353818.9	000-BLX-162	57162.7207	V	V. Petriew	0.0025
ROTSE1 J161118.72+353818.9	000-BLX-162	57162.8797	V	V. Petriew	0.0014
ROTSE1 J162406.50+344241.7	000-BLX-901	57523.8117	V	V. Petriew	0.0004
ROTSE1 J162406.50+344241.7	000-BLX-901	57533.7436	V	V. Petriew	0.0004
ROTSE1 J162406.50+344241.7	000-BLX-901	57538.8155	V	V. Petriew	0.0004
ROTSE1 J173334.66+391012.9	000-BLX-355	57169.7587	V	V. Petriew	0.0018
ROTSE1 J173334.66+391012.9	000-BLX-355	57177.7963	V	V. Petriew	0.0011
ROTSE1 J173334.66+391012.9	000-BLX-355	57184.8216	V	V. Petriew	0.0037
ROTSE1 J173334.66+391012.9	000-BLX-355	57540.7788	V	V. Petriew	0.0016
S_J182320.7+351132	000-BLY-332	CS57569.7928	V	V. Petriew	0.0093
S_J182320.7+351132	000-BLY-332	CS57573.7523	V	V. Petriew	0.0002
S_J182320.7+351132	000-BLY-332	CS57575.8019	V	V. Petriew	0.0001
T-CrB0-01199	000-BLX-907	57524.7563	V	V. Petriew	0.0007
T-CrB0-01199	000-BLX-907	57524.8823	V	V. Petriew	0.0009
VSX_J005225.3+503636	000-BKN-470	58743.8782	V	K. Menzies	0.0003
WHAT236 50	000-BLX-501	57184.8221	V	V. Petriew	0.0010
WHAT236 50	000-BLX-501	57497.7449	V	V. Petriew	0.0012
WHAT236 50	000-BLX-501	57497.8675	V	V. Petriew	0.0012
WISE J211738.0+405313	000-BND-257	57594.7551	V	V. Petriew	0.0019
WISE J211738.0+405313	000-BND-257	57599.7593	V	V. Petriew	0.0007