

Ten previously unreported variable stars with a high northern declination

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Abstract:

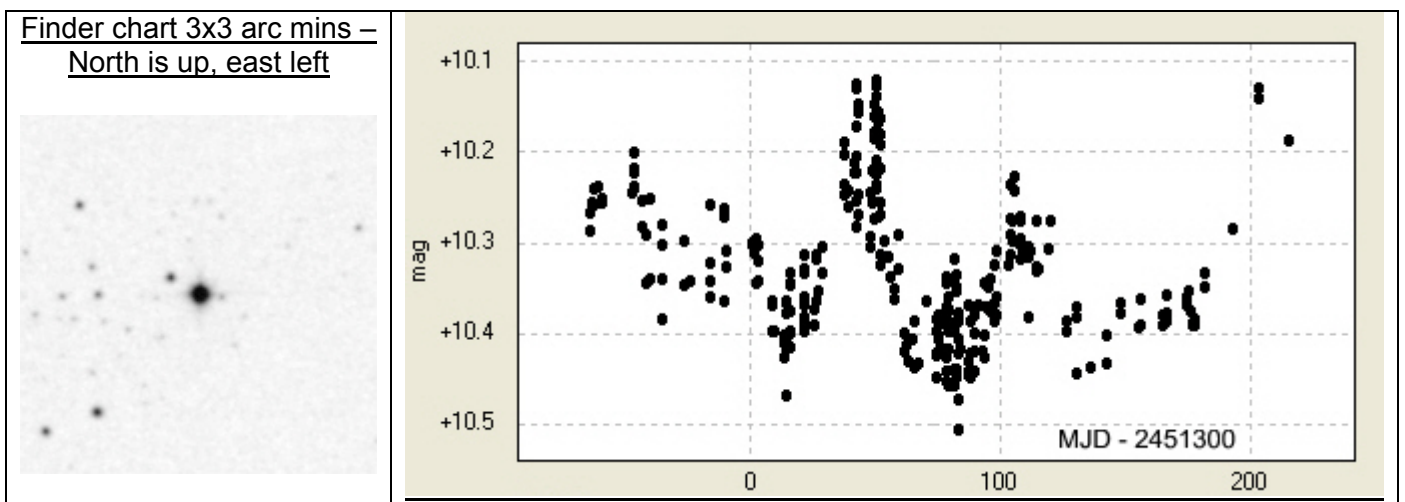
A further search for variable stars has been conducted in the publicly available data of the Northern Sky Variability Survey (NSVS). The statistical properties of the star; the magnitude, magnitude scatter and median error were entered into a multi-factor algorithm to evaluate the most promising stars for further examination and analysis. The default settings for the NSVS user interface were used except, following the suggestion of Wils, Lloyd and Bernhard (2006), the APINCOMPL flag was set and the RADECFLIP flags unset. Only stars not listed in the “Combined General Catalogue of Variable Stars (Samus+ 2004)”, or in the “Suspected Variable stars and Supplement”, or in “Red Variables in the NSVS (Williams+, 2004)” or identified as variable in Simbad or identified in the International Variable Star Index have been included.

Notes:

The quoted magnitudes can be regarded as CR mags – that is resulting from an unfiltered, red sensitive CCD, using R band magnitudes.

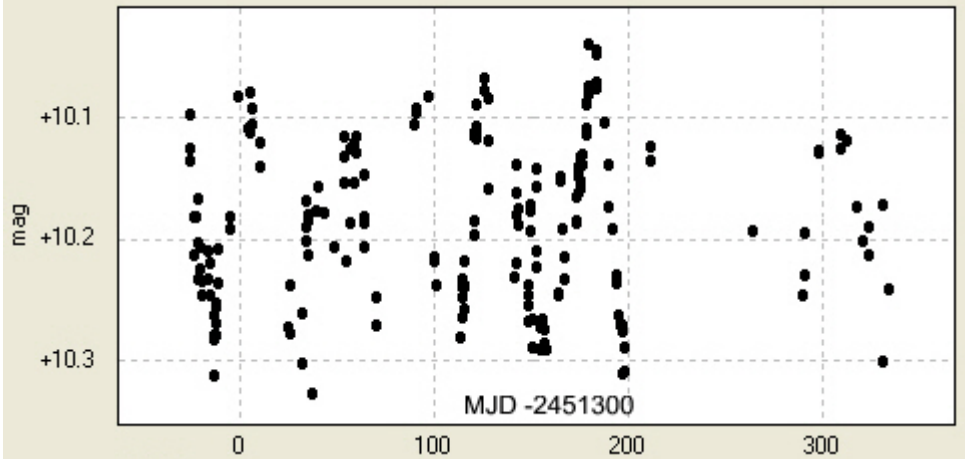
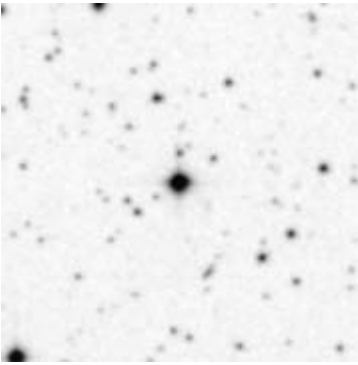
| # | Identity | Simbad Name | Named Star Position | Type and amplitude | Links |
|----|------------------------|---------------------------------|-------------------------|------------------------------|--|
| 1 | USNO-B1.0 1554-008230 | IRAS 00251+6509 | 00 27 57.22 +65 26 17.1 | Type I – 0.35mag | NSVS data NSVS data |
| 2 | GSC 04295-00813 | IRAS 00275+6826 | 00 30 26.50 +68 42 59.1 | Type SR (c85 days) - 0.25mag | NSVS data |
| 3 | GSC 04304-00387 | IRAS 00512+7213 | 00 54 35.58 +72 29 34.1 | Type I – 0.40mag | NSVS data NSVS data |
| 4 | GSC 04497-02077 | IRAS 01113+7800 | 01 15 34.96 +78 16 23.1 | Type I – 0.40mag | NSVS data |
| 5 | USNO-B1.0 1579-0033715 | IRAS 01148+6740 | 01 18 20.42 +67 56 00.6 | Type I – 0.40mag | NSVS data NSVS data |
| 6 | GSC 04315-01269 | IRAS 02095+7013 | 02 13 49.41 +70 27 46.0 | Type I – 0.45mag | NSVS data |
| 7 | USNO-B1.0 1567-0052071 | IRAS 02252+6630 | 02 29 21.38 +66 44 14.6 | Type I – 0.30mag | NSVS data NSVS data |
| 8 | GSC 04509-00375 | IRC +70042 | 03 25 17.66 +75 01 03.1 | Type I – 0.45mag | NSVS data |
| 9 | GSC 04331-00984 | BIS 138 | 03 55 23.69 +69 34 09.6 | Type I – 0.50mag | NSVS data NSVS data |
| 10 | GSC 04340-01148 | DO 27996 | 04 14 44.76 +74 52 01.1 | Type I – 0.40mag | NSVS data NSVS data |

Star #1 - USNO-B1.0 1554-008230



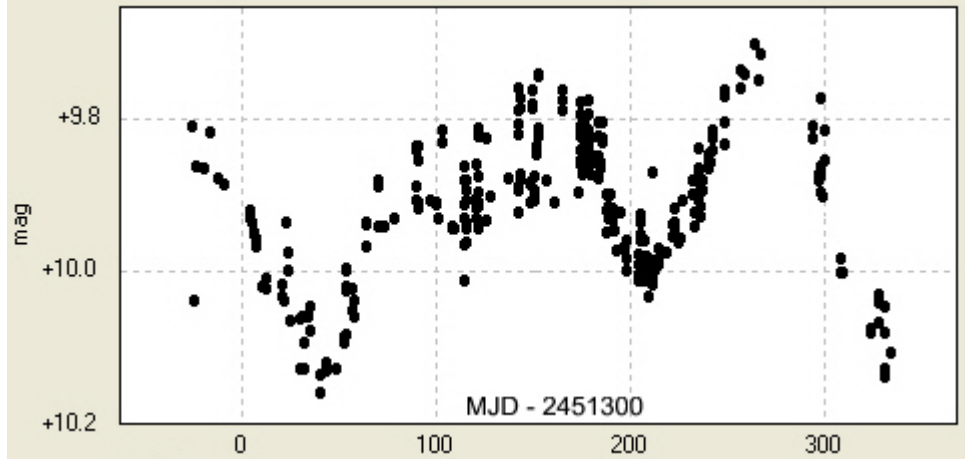
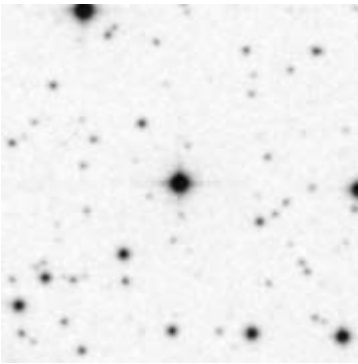
Star #2 - GSC 04295-00813

Finder chart 3x3 arc mins –
North is up, east left



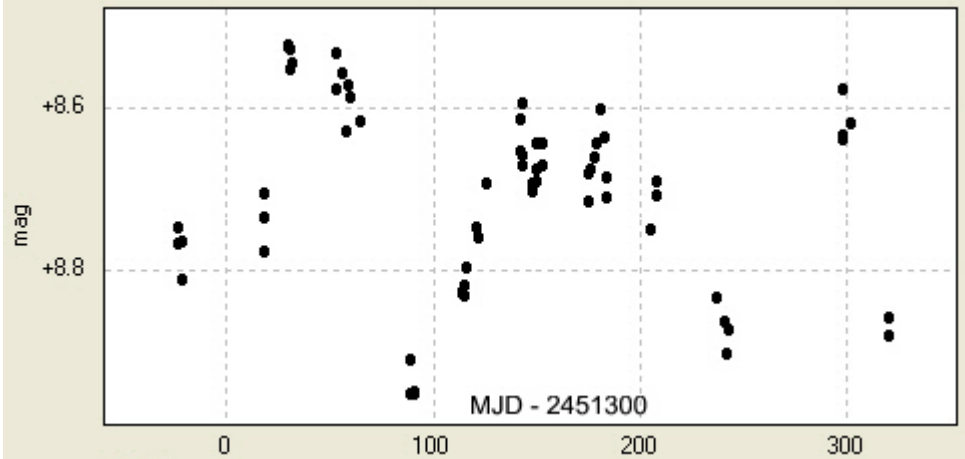
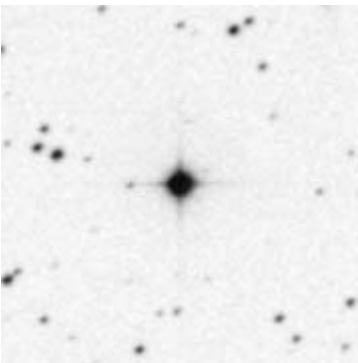
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Finder chart 3x3 arc mins –
North is up, east left



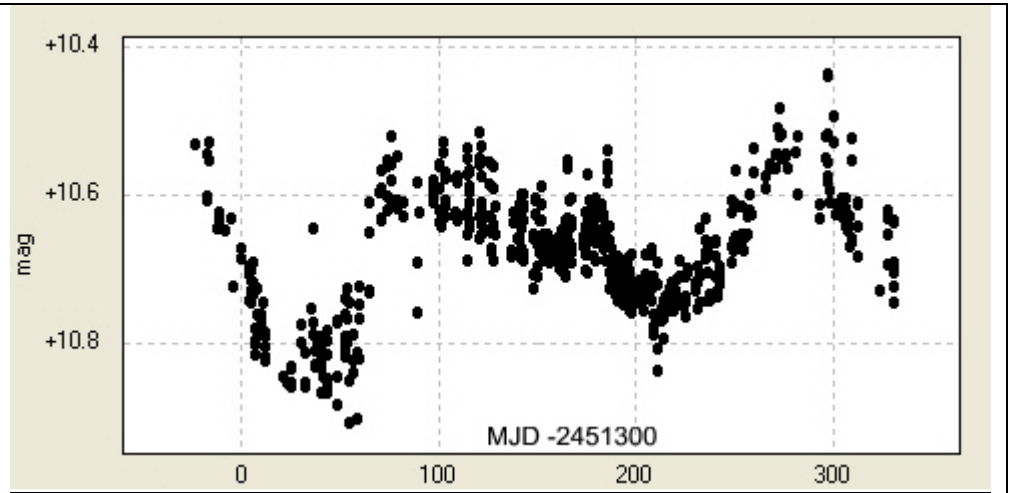
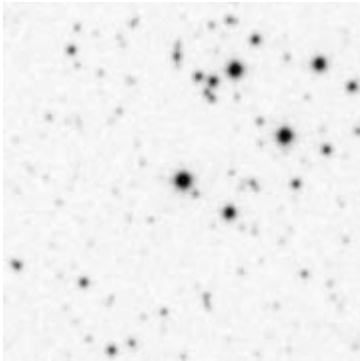
Star #4 - GSC 04497-02077

Finder chart 3x3 arc mins –
North is up, east left



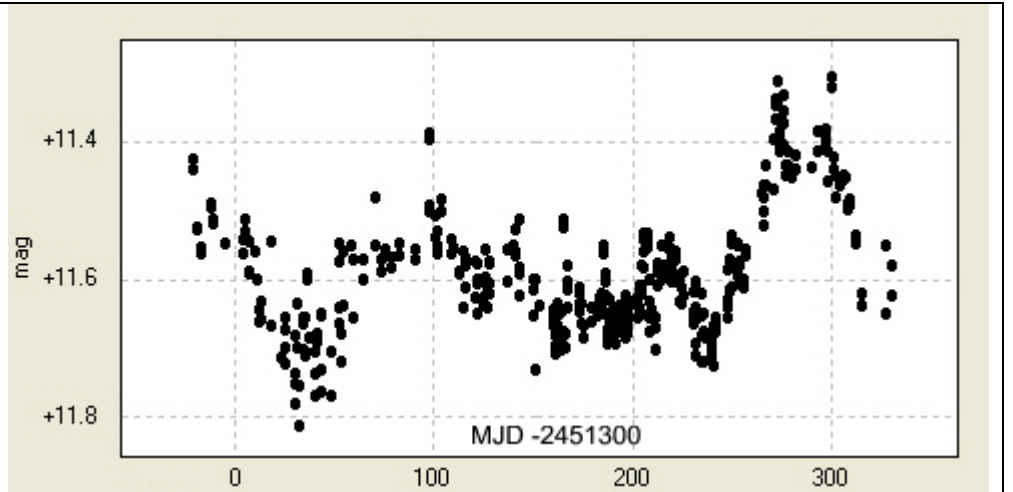
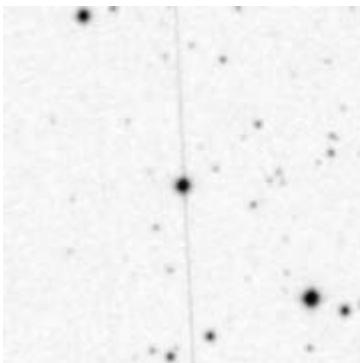
Star #5 - USNO-B1.0 1579-0033715

Finder chart 3x3 arc mins –
North is up, east left



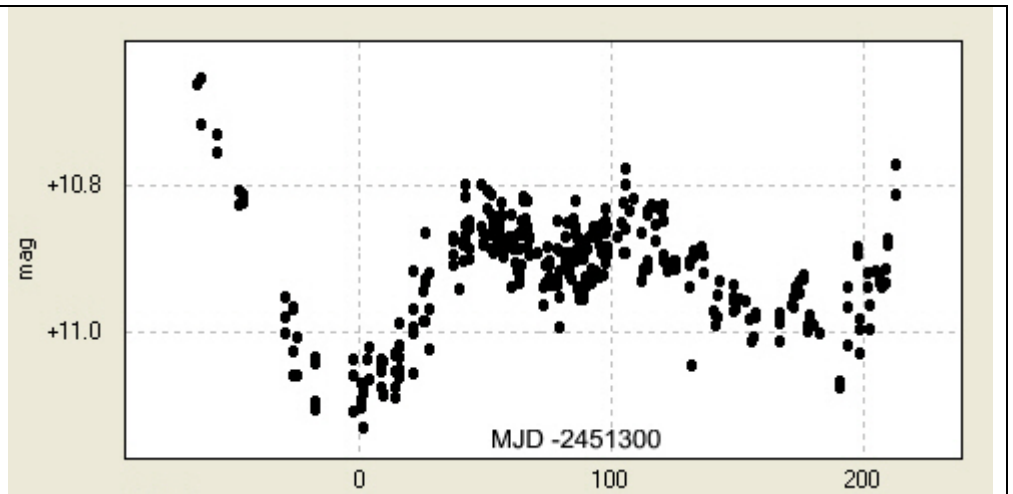
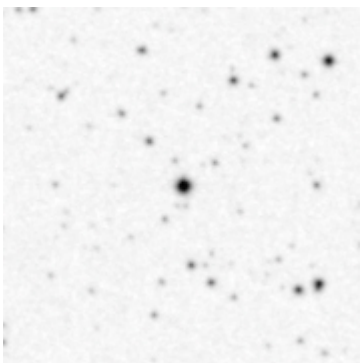
Star #6 - GSC 04315-01269

Finder chart 3x3 arc mins –
North is up, east left



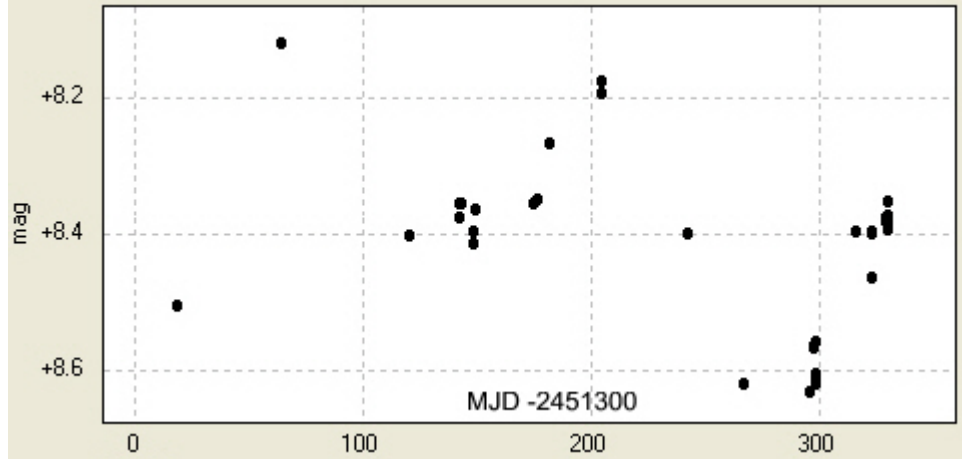
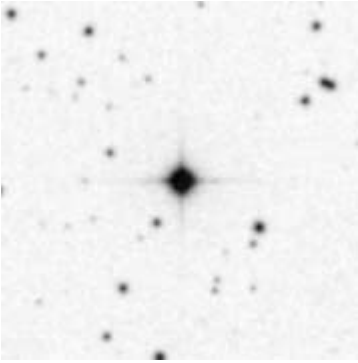
Star #7 - USNO-B1.0 1567-0052071

Finder chart 3x3 arc mins –
North is up, east left



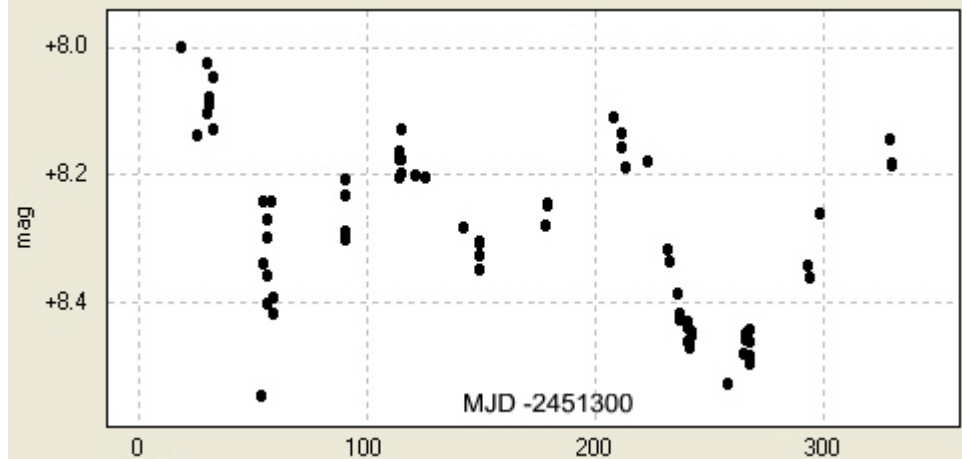
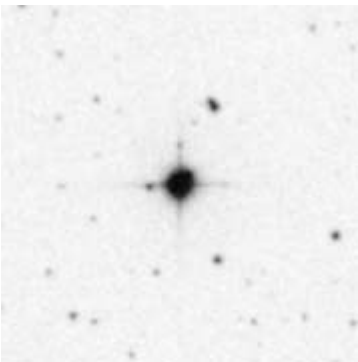
Star #8 - GSC 04509-00375

Finder chart 3x3 arc mins –
North is up, east left



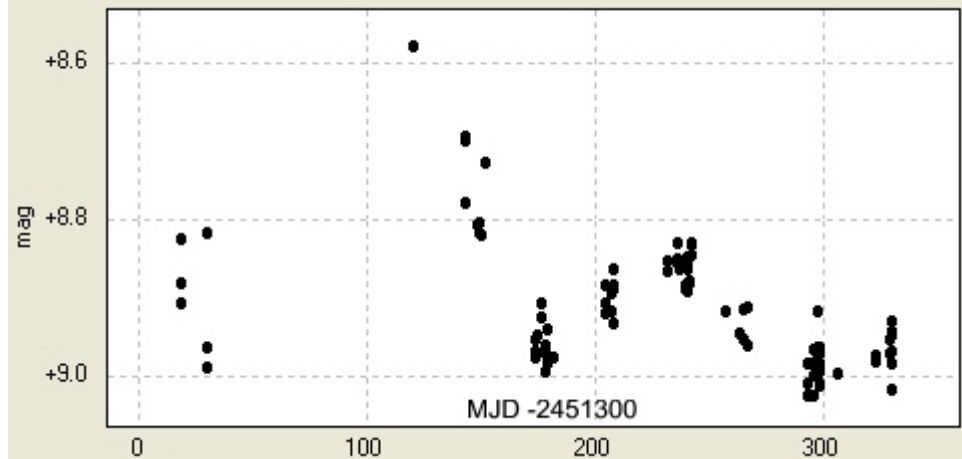
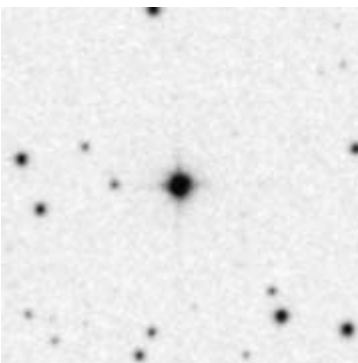
Star #9 - GSC 04331-00984

Finder chart 3x3 arc mins –
North is up, east left



Star #10 - GSC 04340-01148

Finder chart 3x3 arc mins –
North is up, east left



References

A Catalogue of RR Lyrae Stars from the Northern Sky Variability Survey
Patrick Wils, Christopher Lloyd, Klaus Bernhard

Monthly Notes Royal Astronomical Society 000, 1–25 (2006)

Websites

The Northern Sky Variability Study

<http://skydot.lanl.gov/nsvs/nsvs.php>

The Simbad Astronomical Database

<http://simbad.harvard.edu/Simbad>

The Combined General Catalogue of Variable Stars

<http://vizier.hia.nrc.ca/viz-bin/VizieR?-source=II/250>

Red variables in the NSVS (Williams+, 2004)

<http://vizier.u-strasbg.fr/viz-bin/VizieR?-source=J/AJ/128/2965>

The International Variable Star Index

<http://www.aavso.org/vsx/>