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# New variable stars in Perseus: area of 2°.3×2°.3, center α=02h00m δ=59°00′. Part I

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| # | Name | Other | Coord (J2000) | Type | Max | Min | System | Period | Epoch (JD) | type | Sp | Comment | L.Curve | Find.Chart | Data |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 2MASS 01523716+5856271 | 01:52:37.17, +58:56:27.3 | EA | 13.591 | 13.704 | | 4.2056529 | 2456219.342 | min | | | 17863.png | ch17863.png | out17863.dat |
| 2 | | 2MASS 01523787+5906593 | 01:52:37.90, +59:06:59.8 | EA | 15.555 | 16.11 | | 1.829427 | 2456968.249 | min | | Comm. 2 | 21076.png | ch21076.png | out21076.dat |
| 3 | | 2MASS 01525558+5758028 | 01:52:55.62, +57:58:03.2 | BY: | 13.614 | 13.66 | | 0.877824 | 2458041.685 | min | | | 00048.png | ch00048.png | out00048.dat |
| 4 | | 2MASS 01525736+5924128 | 01:52:57.40, +59:24:13.0 | EW | 14.871 | 15.068 | | 0.284103 | 2456967.141 | min | | Comm. 4 | 27255.png | ch27255.png | out27255.dat |
| 5 | | 2MASS 01542471+5806375 | 01:54:24.72, +58:06:37.9 | EA | 12.734 | 13.017 | | 2.947915 | 2457993.355 | min | | Comm. 5 | 02238.png | ch02238.png | out02238.dat |
| 6 | | 2MASS 01550686+5956116 | 01:55:06.87, +59:56:11.9 | EW | 15.457 | 15.457 | | 0.672292 | 2456967.555 | min | | Comm. 6 | 31996.png | ch31996.png | out31996.dat |
| 7 | | 2MASS 01552768+5812112 | 01:55:27.73, +58:12:11.3 | BY: | 13.609 | 13.673 | | 0.340049: | 2456967.157 | max | | | 03663.png | ch03663.png | out03663.dat |
| 8 | | 2MASS 01553673+5806051 | 01:55:36.75, +58:06:05.5 | EA | 12.591 | 12.866 | | 2.131429 | 2456967.249 | min | | Comm. 8 | 01802.png | ch01802.png | out01802.dat |
| 9 | | 2MASS 01554562+5914448 | 01:55:45.63, +59:14:45.0 | EA | 14.202 | 14.414 | | 2.853126 | 2458036.198 | min | | | 21913.png | ch21913.png | out21913.dat |
| 10 | | 2MASS 01571684+5809047 | 01:57:16.84, +58:09:04.8 | EA | 15.088 | 15.492 | | 0.942553 | 2457994.259 | min | | Comm. 10 | 02498.png | ch02498.png | out02498.dat |
| 11 | | 2MASS 01574428+6010049 | 01:57:44.29, +60:10:04.7 | EW | 14.997 | 15.605 | | 0.2810319 | 2456219.55 | min | | Comm. 11 | 26209.png | ch26209.png | out26209.dat |
| 12 | | 2MASS 01584060+5833226 | 01:58:40.62, +58:33:22.8 | EA | 14.443 | 14.535 | | 0.912906 | 2456219.314 | min | | | 09448.png | ch09448.png | out09448.dat |
| 13 | | 2MASS 02002726+5811506 | 02:00:27.23, +58:11:50.4 | EW | 15.887 | 16.119 | | 0.395088 | 2456227.322 | min | | Comm. 13 | 02790.png | ch02790.png | out02790.dat |
| 14 | | 2MASS 02034839+5838072 | 02:03:48.40, +58:38:07.5 | EA | 13.631 | 13.727 | | 1.666808 | 2456928.433 | min | | | 10104.png | ch10104.png | out10104.dat |
| 15 | | 2MASS 02035862+5859236 | 02:03:58.70, +58:59:24.2 | SR | 12.763 | 13.165 | | 94 | 2456892.4 | other | | | 16651.png | ch16651.png | out16651.dat |
| 16 | | 2MASS 02042874+5945477 | 02:04:28.77, +59:45:47.9 | EA | 12.973 | 13.282 | | 0.916802 | 2458055.325 | min | | Comm. 16 | 36513.png | ch36513.png | out36513.dat |
| 17 | | 2MASS 02045130+5910113 | 02:04:51.29, +59:10:11.7 | EW | 14.134 | 14.233 | | 1.054604 | 2456181.701 | min | | Comm. 17 | 19691.png | ch19691.png | out19691.dat |
| 18 | | 2MASS 02050113+5955042 | 02:05:01.19, +59:55:05.4 | RRAB | 15.556 | 16.357 | | 0.3662276 | 2457994.221 | max | | | 33831.png | ch33831.png | out33831.dat |
| 19 | | 2MASS 02060139+5851318 | 02:06:01.40, +58:51:32.1 | EA | 13.477 | 13.867 | | 4.82119 | 2456929.375 | min | | Comm. 19 | 13652.png | ch13652.png | out13652.dat |
| 20 | | 2MASS 02065780+5820331 | 02:06:57.81, +58:20:33.2 | EA | 14.376 | 14.747 | | 1.72346 | 2456227.453 | min | | Comm. 20 | 04354.png | ch04354.png | out04354.dat |
| 21 | | 2MASS 02074006+5958080 | 02:07:40.03, +59:58:07.9 | EA | 15.082 | 15.754 | | 1.4103931 | 2456182.334 | min | | Comm. 21 | 33057.png | ch33057.png | out33057.dat |

## Comments:

02. $Min_{II} = 16^{m}.07$.

04. $Min_{II} = 15^{m}.01$.

05. $Min_{II} = 13^{m}.00$.

06. $Min_{II} = 15^{m}.61$.

08. $Min_{II} = 12^{m}.87$.

10. $Min_{II} = 15^{m}.15$.

11. $Min_{II} = 15^{m}.6$:.

13. $Min_{II} = 16^{m}.119$.

16. $Min_{II} = 13^{m}.06$.

17. $Min_{II} = 14^{m}.24$.

19. $Min_{II} = 13^{m}.86$. $Min_{I} - Min_{II} = 0.52$ P.

20. $Min_{II} = 14^{m}.43$.

21. $Min_{II} = 15^{m}.11$.

## Remarks:

We give a list of new variable stars in Perseus: area of 2°.3×2°.3, centered at α=02h00m δ=59°00′.
Our observations of the area in Perseus were performed at the observatory of Reshetnev Siberian State University of Science and Technology with a Hamilton telescope (D = 400 mm, F = 915 mm), equipped with an FLI ML9000 CCD chip (3056×3056 pixels, pixel size 12 μm). Exposures of all frames were 30 seconds. CCD-images were 2°.3 × 2°.3 square.
All unfiltered CCD-observations were obtained in the autumns of 2012, 2013, 2014 and 2017.
The magnitudes were referred to the unfiltered red band from the UCAC4 catalog (Zacharias et al., 2013) using VaSTpackage (Sokolovsky & Lebedev, 2018). We also used VaST to search for new variable stars. To find periods, we applied WinEfk software provided by Dr. V.P. Goranskij.
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