

# LIST OF PUBLICATIONS

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The texts denoted with **blue** are connected to a web-site, where the refereed articles can be uploaded.

## REFEREED ARTICLES

48. **Jetsu, L., 2021**, “**Say hello to Algol’s new companion candidates**” *The Astrophysical Journal*, accepted
47. **Jetsu, L., 2020**, “**About ten stars orbit eclipsing binary XZ And**”, *JAAVSO*, submitted
46. **Jetsu, L., 2020**, “**Discrete Chi-square Method for Detecting Many Signals**” *Open Journal of Astrophysics*, **3:1**, 1-20
45. **Jetsu, L., 2019**, “**Real light curves of FK Comae Berenices: Farewell flip-flop**”, *MNRAS*, submitted
44. Willamo, T., Hackman, T., Lehtinen, J. J., Käpylä, M. J., Ilyin, I., Henry, G. W., **Jetsu, L.**, Kochukhov, O. and Piskunov, N. **2019**, “**Long-term spot monitoring of the young solar analogue V889 Herculis**”. *Astronomy & Astrophysics*, **622**, A170, 1-10
43. Porceddu, S., **Jetsu, L.**, Markkanen, J., Lyytinen, J., Kajatkari, P., Lehtinen, J. and Toivari-Viitala, J., **2018**, “**Algol as Horus in the Cairo Calendar: the possible means and the motives of the observations**”, *Open Astronomy*, **28**, 232-263
42. Siltala, L., **Jetsu, L.**, Hackman, T., Henry, G.W., Immonen, L., Kajatkari, P., Lankinen, J., Lehtinen, J., Monira, S., Nikbakhsh, S., Viitanen, A., Viuhio, J. and Willamo, T. **2017**, “**Time series analysis of the long-term photometry of BM Canum Venaticorum**”, *Astronomische Nachrichten*, **338**, 453-463
41. **Jetsu, L.**, Henry, G.W., and Lehtinen, J. **2017**, “**General Model for Light curves of Chromospherically Active Binary Stars**”, *The Astrophysical Journal*, **838**, A122, 1-20
40. Lehtinen, J., **Jetsu, L.**, Hackman, T., Kajatkari, P. and Henry, G.W. **2016**, “**Activity trends in young solar-type stars**”, *Astronomy & Astrophysics*, **588**, A38, 1-24
39. **Jetsu, L.**, and Porceddu, S. **2015**, “**Shifting Milestones of Natural Sciences: The Ancient Egyptian discovery of Algol’s Period Confirmed**”, *PLOS ONE*, **10(12)**: e0144140
38. Kajatkari, P., **Jetsu, L.**, Cole, E., Joutsiniemi, S-L., Lehtinen, J., Mäkelä, V., Porceddu, S., Ryyänen, K. Solea, V., Hackman T., and Henry, G.W. **2015**, “**Periodicity in some light curves of solar analogue V362 CMa**”, *Astronomy & Astrophysics*, **577**, A84, 1-5
37. Kajatkari, P., Hackman, T., **Jetsu, L.**, Lehtinen, J., and Henry, G.W. **2014**, “**Spot activity of the RS CVn star  $\sigma$  Geminorum**”, *Astronomy & Astrophysics*, **562**, A107, 1-10
36. Lindborg, M., Mantere, M.J., Olsper, N., Pelt, J., Hackman, T., Henry, G.W., **Jetsu, L.**, and Strassmeier, K.G. **2013**, “**Multiperiodicity, modulations and flip - flops in variable star light curves: II. Analysis of II Peg photometry during 19792010**”, *Astronomy & Astrophysics*, **559**, A97, 1-10
35. **Jetsu, L.**, Porceddu, S., Lyytinen, J., Kajatkari, P., Lehtinen, J., Markkanen, T., and Toivari-Viitala, J. **2013**, “**Did the Ancient Egyptians Record the Period of the Eclipsing Binary Algol – The Raging One?**”, *The Astrophysical Journal*, **773**, A1, 1-14
34. Hackman, T., Pelt, J., Mantere, M.J., **Jetsu, L.**, Korhonen, H., Granzer, T., Kajatkari, P., Lehtinen, J., and Strassmeier, K.G. **2013** “**Flip-flops of FK Comae Berenices**”, *Astronomy & Astrophysics*, **553**, A40, 1-13.
33. Lehtinen, J., **Jetsu, L.**, Hackman, T., Kajatkari, P., and Henry, G.W. **2012**, “**Spot activity of LQ Hya from photometry between 1988 and 2011**”, *Astronomy & Astrophysics*, **542**, A38, 1-8.
32. Hackman, T., Mantere, M.J., **Jetsu, L.**, Ilyin, I., Kajatkari, P., Kochukhov, O., Lehtinen, J., Lindborg, M., Piskunov, N., Tuominen, I. **2011**, “**Spot activity of II Peg**”, *Astronomische Nachrichten*, **332**, 859-865.
31. **Jetsu, L.**, **2011**, “**Some studies of terrestrial impact cratering rate**”, *Baltic Astronomy*, **20**, 289-296.
30. Lehtinen, J., **Jetsu, L.**, Hackman, T., Kajatkari, P., and Henry, G.W. **2011**, “**The continuous periods search method and its application to the young solar analogue HD 116956**”, *Astronomy & Astrophysics*, **527**, A136, 1-14.

29. Lyytinen, J., **Jetsu, L.**, Kajatkari, P., and Porceddu, S. **2009**, “**Detection of real periodicity in the terrestrial impact crater record: quantity and quality requirements**”, *Astronomy & Astrophysics*, **499**, 601-613.
28. Porceddu, S., **Jetsu, L.**, Markkanen, T., and Toivari-Viitala, J. **2008**, “**Evidence of periodicity in ancient Egyptian calendars of lucky and unlucky days**”, *Cambridge Archeological Journal*, **18:3**, 327-339.
27. Lyytinen, J., Johansson, P., **Jetsu, L.**, Esko, E., Hackman, T., Hall, D.S., Henry, G.W., Kontinen, S., Könönen, P., Maisala, S., Palviainen, A., and Ryyänen, K. **2002**, “**Time series analysis of V511 Lyrae photometry**”, *Astronomy & Astrophysics*, **383**, 197-201.
26. Hackman, T., **Jetsu, L.**, and Tuominen, I. **2001**, “**Surface imaging of HD 199178 (V1794 Cygni)**”, *Astronomy & Astrophysics*, **374**, 171-181.
25. **Jetsu, L.**, Hackman, T., Hall, D.S., Henry, G.W., Kokko, M., and You, J. **2000**, “**Time series analysis of V 815 Herculis photometry between 1984 and 1998**”, *Astronomy & Astrophysics*, **362**, 223-235.
24. **Jetsu, L.**, and Pelt, J. **2000**, “**Spurious periods in the terrestrial impact crater record**”, *Astronomy & Astrophysics*, **353**, 409-418.
23. **Jetsu, L.**, and Pelt, J. **1999**, “**Three stage period analysis and complementary methods**”, *Astronomy & Astrophysics, Supplement Series*, **139**, 629-643.
22. **Jetsu, L.**, Tuominen, I., Bopp, B.W., Ezhkova, O.V., Grankin, K.N., Hackman, T., Heckert, P.A., Ibragimov, M.A., Kondratiev, V.B., Mel’nikov, S.Yu., Oja, T., Nations, H.L., and Shevchenko, V.S. **1999**, “**Photometry of V 1794 Cygni between 1975 and 1995**”, *Astronomy & Astrophysics, Supplement Series*, **139**, 513-524.
21. **Jetsu, L.**, Pelt, J., and Tuominen, I. **1999**, “**Time series analysis of V 1794 Cygni long-term photometry**”, *Astronomy & Astrophysics*, **351**, 212-224.
20. Kahanpää, **Jetsu, L.**, Alha, L., Ezhkova, O.V., Grankin, K.N., Hackman, T., Ibragimov, M.A., Kokko, M., Kondratiev, V.B., Laakso, T., Lindroos, O., Mel’nikov, S.Yu., Nikula, P.O., Pesonen, J., Schultz, J., Shevchenko, V.S., Tuominen, I., Tyynelä, J., and Virtanen, J. **1999**, “**Time series analysis of V 368 Cephei photometry**”, *Astronomy & Astrophysics*, **350**, 513-516.
19. **Jetsu, L.**, Pagano, I., Moss, D., Rodono, M., Lanza, A.F., and Tuominen, I. **1997**, “**Period changes of AR Lacertae between 1900 and 1989**”, *Astronomy & Astrophysics*, **326**, 698-708.
18. **Jetsu, L.**, **1997**, “**The “human” statistics of terrestrial impact cratering rate**”, *Astronomy & Astrophysics*, **321**, L33-L36.
17. **Jetsu, L.**, Pohjolainen, S., Pelt, J., and Tuominen, I. **1997**, “**Is the longitudinal distribution of solar flares non-uniform?**” *Astronomy & Astrophysics*, **318**, 293-307.
16. **Jetsu, L.**, **1996**, “**The active longitudes of  $\lambda$  Andromedae,  $\sigma$  Geminorum, II Pegasi and V 711 Tauri**”, *Astronomy & Astrophysics*, **314**, 153-164.
15. **Jetsu, L.**, and Pelt, J. **1996**, “**Searching for periodicity in weighted time point series**”, *Astronomy & Astrophysics, Supplement Series*, **118**, 587-594.
14. Shcherbakov, A.G., Shcherbakova, Z.A., Tuominen, I., and **Jetsu, L.**, **1996**, “**He I  $\lambda$  10830 line as an indicator of solar chromospheric activity**”, *Astronomy & Astrophysics*, **309**, 655-660.
13. **Jetsu, L.**, Tuominen, I., Grankin, K.N., Mel’nikov, S.Yu., and Shevchenko, V.S. **1994**, “**New flip-flop of FK Comae Berenices**”, *Astronomy & Astrophysics*, **282**, L9-L12
12. **Jetsu, L.**, Tuominen, I., Antov, A., Bopp, B.W., Chugainov, P.F., Grankin, K.N., Linnaluoto, S., Mel’nikov, S.Yu., Nations, H.L., Panov, K.P., and Shevchenko, V.S. **1994**, “**Collected photometry of FK Comae Berenices**”, *Astronomy & Astrophysics, Supplement Series*, **103**, 183-188.
11. **Jetsu, L.**, Pelt, J., and Tuominen, I. **1993**, “**Spot and flare activity of FK Comae Berenices: long-term photometry**”, *Astronomy & Astrophysics*, **278**, 449-462.
10. **Jetsu, L.**, **1993**, “**A decade of photometry of LQ Hydrae**”, *Astronomy & Astrophysics*, **276**, 345-352.
9. **Jetsu, L.**, Kokko, M., and Tuominen, I. **1992**, “**Long-term stability of the light curves of CQ Ursae Majoris**”, *Astronomy & Astrophysics*, **265**, 547-554.
8. **Jetsu, L.**, Anttila, R., Dmitrienko, E., Grankin, K.N., Huovelin, J., Mel’nikov, S.Yu., Shevchenko, V.S., and Tuominen, I. **1992**, “**The FK Comae-type candidate 1E 1751 + 7046: UBVR photometry**”, *Astronomy & Astrophysics*, **262**, 188-194.
7. **Jetsu, L.**, Savanov, I., and Tuominen, I. **1991**, “**The variations of the H $\alpha$  line of HD199178**”, *Lecture Notes in Physics*, **380**, 486-488.
6. **Jetsu, L.**, Pelt, J., Tuominen, I., and Nations, H. **1991**, “**The spot activity of FK Comae Berenices**”, *Lecture Notes in Physics*, **380**, 381-383
5. **Jetsu, L.**, Huovelin, J., Savanov, I., and Tuominen, I. **1991**, “**The H $\alpha$  line of HD199178**”, *Astronomy & Astrophysics*, **248**, 574-580.
4. **Jetsu, L.**, Vilhu, O., and la Dous, C. **1990**, “**uvby-photometry of AB Doradus**”, *Astronomy & Astrophysics, Supplement Series*, **85**, 1127-1140.

3. **Jetsu, L.**, Huovelin, J., Tuominen, I., Bopp, B.W., Efi- mov, Yu.S., Linnaluoto, S., Nations, H.L, Piirola, V., Shak- hovskoy, N.M., and Virtanen, H. **1990**, “**Col- lected photometric and polarimetric observations of HD199178**”, *Astronomy & Astrophysics, Supplement Series*, **85**, 813-837.
2. **Jetsu, L.**, Huovelin, J., Tuominen, I., Vilhu, O., Bopp, B.W., and Piirola V. **1990**, “**Rotational and long- term variations of HD199178: a double period activity cycle**”, *Astronomy & Astrophysics*, **236**, 423-439.
1. Shcherbakov, A.G., Tuominen, I., **Jetsu, L.**, Katsova, M.M., and Poutanen, M. **1990**, “**Activity modulation of Capella as observed in He I  $\lambda 10830\text{\AA}$** ”, *Astronomy & Astrophysics*, **235**, 205-210.
6. **Jetsu, L.**, Tuominen, I. and Pelt, J. **1993**, “Time series analysis of FK Comae and LQ Hydrae”, In *Applications of time series analysis in astronomy and meteorology* (O. Lessi, Ed., Padova, SM Legatoria), 199 – 202.
5. **Jetsu, L.**, and Tuominen, I. **1992**, “Photometry of 1E 1751 + 7046”, In Seventh Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun (M.S. Giampapa, and J.A. Bookbinder, Eds.) *ASP Conf. Series*, Vol **26**, 276 – 278.
4. Kokko, M., and **Jetsu, L.**, **1991**, “Long-term UBV photometry of CQ Uma.” *Proceedings of Finnish Astro- nomical Society 1991*, 12 – 14.
3. Hakala, P., Piirola, V., Vilhu, O., Huovelin, J., and **Jetsu, L.**, **1990**, “UBVRI-photometry and X-ray dips of V471 Tau.” In 23. *ESLAB Symposium on Two Topics in X-ray Astronomy Vol 1: X-ray binaries*, 419 – 421.

#### MONOGRAPHS

2. **Jetsu, L.**, and Palviainen, A. **2005**, Research seminar: “Exoplanets and astrobiology” University of Helsinki, Observatory Report, **3/2005**
1. **Jetsu, L.**, **1994**, PhD Thesis: “Time dependent phe- nomena in the photometry of starspots”, University of Helsinki, Observatory Report, **1/1994**
2. **Jetsu, L.**, Huovelin, J., Tuominen, I., Vilhu, O., Pi- irola, V., and Bopp B.W. **1990**, “Long-term photom- etry of HD 199178”, In Sixth Cambridge Workshop on Cool Stars, Stel- lar Systems, and the Sun (G. Waller- stein, Ed.) *ASP Conf. Series*, Vol **9**, 152 – 154.
1. **Jetsu, L.**, **1990**, “Photometric variability of HD82552”, *Proceedings of Finnish Astronomical Society 1990*, 5 – 7.

#### NON-REFEREED ARTICLES

12. Lehtinen, J., **Jetsu, L.**, Hackman, T., and Henry, G.W., **2016**, “Rotation And Spot Activity Of Young Solar- Type Stars From Long-Term Photometric Monitoring“, *The 19th Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun (CS19)*, Uppsala, Sweden
11. **Jetsu, L.**, Porceddu, S., Lyytinen, J., Kajatkari, P. Lehtinen, J., Markkanen, T., and Toivari-Viitala, J. **2014**, “Did the ancient egyptians discover Algol?“, In Setting a New Standard in the Analysis of Binary Stars, *European Astronomical Society Publication Series*, **64**, 403 – 404.
10. Hackman, T., **Jetsu, L.**, **2003**, “Surface Imaging of HD 199178: High latitude spot and differential rotation“, In *12th Cambridge Workshop on Cool Stars, Stellar Sys- tems, and the Sun* (A. Brown, G.M. Harper, and T.R. Ayres, Eds.), CD935
9. Hackman, T., **Jetsu, L.**, and Tuominen, I. **1999**, “Sur- face imaging of V1794 Cyg (HD 199178)“, *Astrophysics with the NOT*, (H. Karttunen, V. Piirola, Eds., Confer- ence Proceedings, University of Turku) 230 – 233.
8. **Jetsu, L.**, Pohjolainen, S., Pelt, J., and Tuominen, I. **1996**, “Longitudinal distribution of major solar flares“, In Ninth Cambridge Workshop on Cool Stars, Stellar Sys- tems, and the Sun (R. Pallavicini, and A. Dupree, Eds.) *ASP Conf. Series*, Vol. **109**, 135 – 136.
7. **Jetsu, L.**, L. **1996**, “Active longitudes of  $\sigma$  Geminorum: another flip-flop?“ *IAU Symposium 176, Stellar Surface Structures, Poster Proceedings* (K. Strassmeier, Ed., University of Vienna Institute for Astronomy, Austria) 63 – 65.