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274 RECORD(S) (1 - 10)
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Doc ID	COORDINATOR	1ST AUTHOR	TITLE	COROT PROG.	TYPE	JOURNAL / LOCATION	ACCESS LEVEL	1ST SUBMIT	LAST UPDATE	E.B. DECISION	STATUS
305	Hans DEEG	Hannu Parviainen	CoRoT-27b: a massive and dense planet on a short-period orbit	EXO	Article	A&A	Corot	31/10/13	18/11/13	14/11/13	Accepted
306	Ann Marie Cody	Ann Marie Cody	CSI 2264: Simultaneous optical and infrared light curves of young disk-bearing stars in NGC 2264 with CoRoT and Spitzer--evidence for multiple origins of variability	AP	Article	Astronomical Journal	Restricted	12/11/13	12/11/13	12/11/13	Accepted
301	Eike Guenther	Eike Guenther	High angular resolution imaging and infrared spectroscopy of CoRoT candidates	EXO	Article	A&A Volume 556, A75 (2013)	Corot	02/08/13	31/10/13	02/08/13	Accepted
303	Ann Marie Cody	John Stauffer	CSI 2264: Characterizing accretion-burst dominated light curves for young stars in NGC 2264	AP	Article	Astronomical Jounal	Restricted	30/10/13	31/10/13	31/10/13	Accepted
304	Ann Marie Cody	Ann Marie Cody	Dynamic Young Stars and their Disks: A Temporal View of NGC 2264	AP	Proceedings	EPJ Web of Conferences	Restricted	31/10/13	31/10/13	31/10/13	Accepted
300	Annie BAGLIN	Margit Paparo	CoRoT 102749568: mode identification in a δ Scuti star based on regular spacings	AP	Article	A and A	Public	10/07/13	18/10/13	10/07/13	Accepted

CSI NGC2264

Coordinated Synoptic Investigation of NGC2264

Mapping YSO Inner Disk Structure in NGC 2264 with
Simultaneous Spitzer and CoRoT Time Series Photometry

<http://csi2264.ipac.caltech.edu>

CSI 2264: SIMULTANEOUS OPTICAL AND INFRARED LIGHT CURVES OF YOUNG DISK-BEARING STARS IN NGC 2264— EVIDENCE FOR MULTIPLE ORIGINS OF VARIABILITY*

Ann Marie Cody¹, John Stauffer¹, Annie Baglin², et al.

AJ, in print

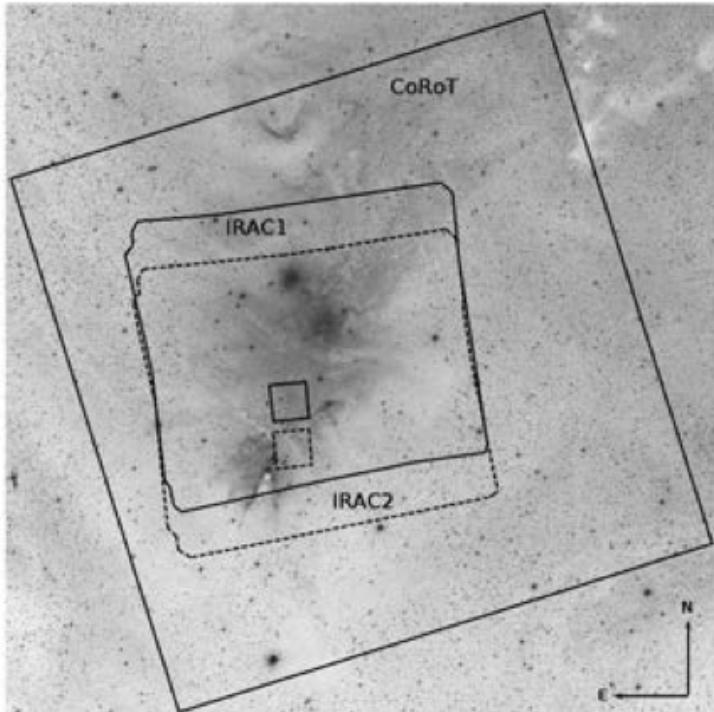


Figure 1. Field of view for *Spitzer* and *CoRoT* observations of NGC 2264 as part of the CSI 2264 campaign, overlaid on a Digitized Sky Survey image. The two small boxes representing the fields of staring observations in *Spitzer*/IRAC channel 1 (solid line) and channel 2 (dashed line). The *CoRoT* field of view is approximately 1.3 degrees across.

CSI 2264: SIMULTANEOUS OPTICAL AND INFRARED LIGHT CURVES OF YOUNG DISK-BEARING STARS IN NGC 2264—EVIDENCE FOR MULTIPLE ORIGINS OF VARIABILITY*

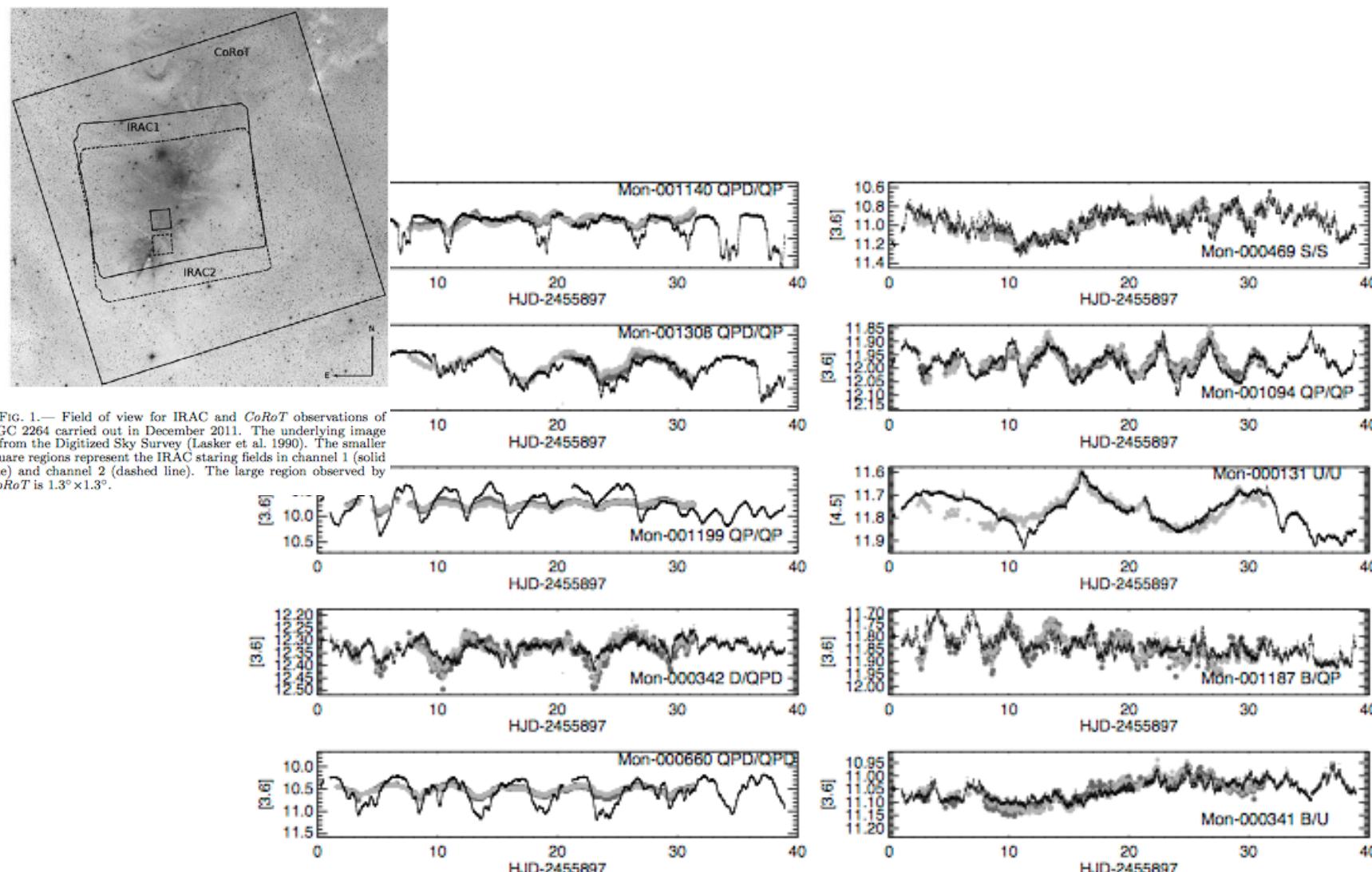


FIG. 37.— Light curves with correlated optical and infrared behavior. Small black points are *CoRoT* data, light grey points are 3.6 μm data, and dark grey points are 4.5 μm data (sometimes hidden behind the 3.6 μm points). Labels show the Mon id along with the optical and infrared morphologies, respectively; morphology abbreviations are the same as in Table 4.

CSI 2264: CHARACTERIZING ACCRETION-BURST DOMINATED LIGHT CURVES FOR YOUNG STARS IN NGC 2264*

John Stauffer¹, Ann Marie Cody¹, Silvia Alencar², et al.

AJ, in print

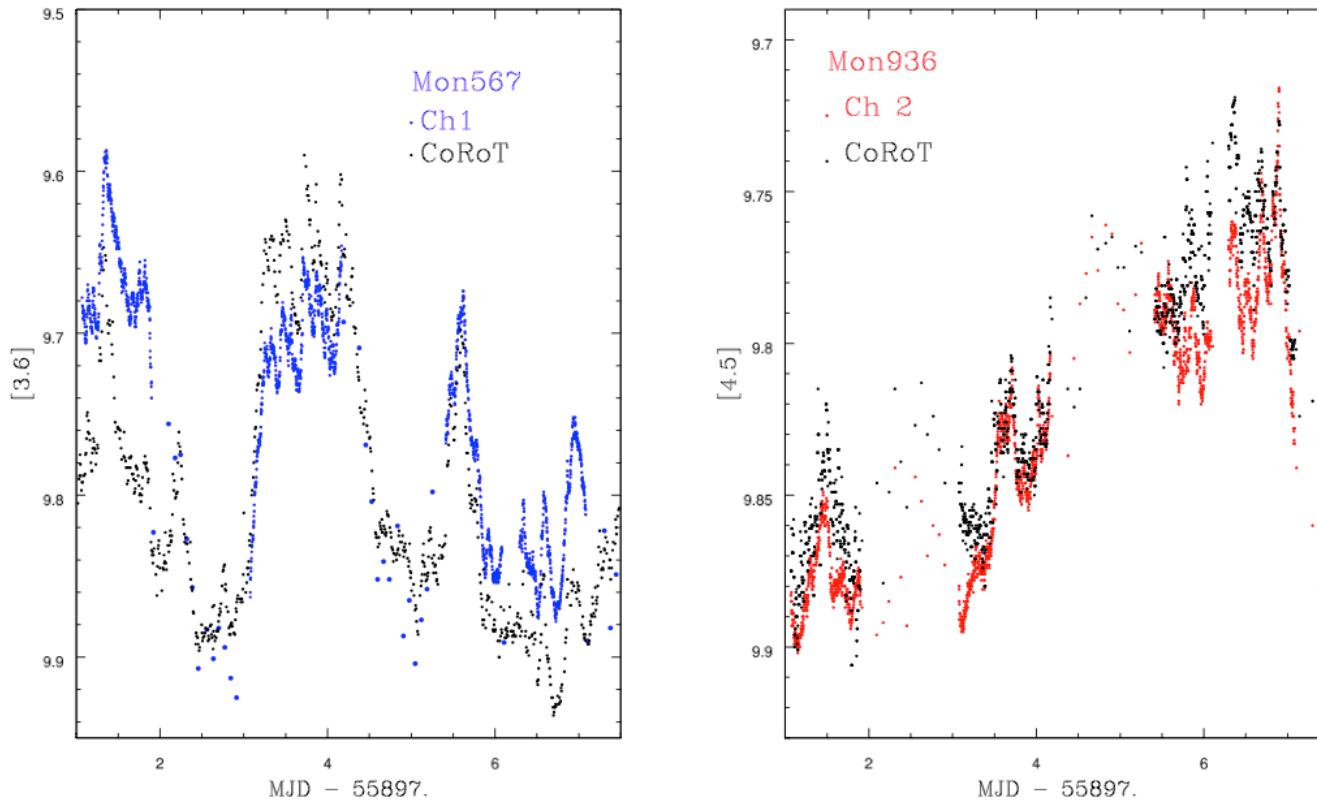


FIG. 2.— *Spitzer* and *CoRoT* data for two stars from Table 1 (Mon-000567, left, and Mon-000936, right) where we have IRAC staring-mode (high-cadence) data, illustrating the often very good correlation between the optical and IR light curve shapes. Ch1 and Ch2 refer respectively to IRAC’s 3.6 and 4.5 μm channels. For Mon 936, which is faint in the optical, we have rebinned the *CoRoT* data to 20 minute sampling, centered on the nearest IRAC data point.

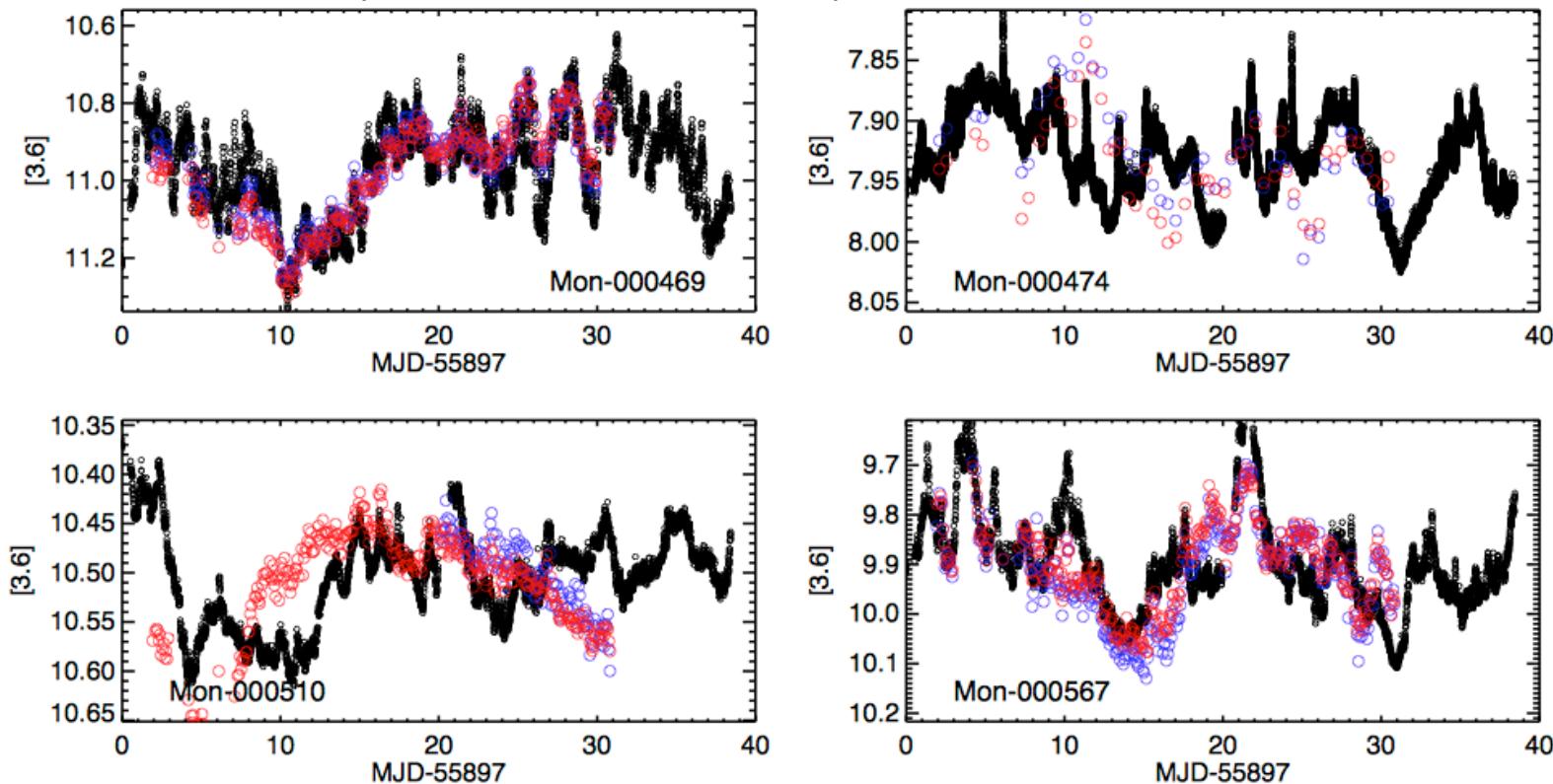


FIG. 22.— 2011 light curves for stars with both *Spitzer* and *CoRoT* data. Blue circles are *Spitzer* 3.6 μm , red circles are *Spitzer* 4.5 μm , and black dots are *CoRoT* data. See discussion in §5.4. In most cases, there is a fair correlation between the shape and amplitudes of the light curves at the two wavelengths.

Proceedings / AAS meeting #223:

Dynamic Young Stars and their Disks: A Temporal View of NGC 2264★

Ann Marie Cody^{1,a}, Jérôme Bouvier², John Stauffer¹, and The CSI Team³

Analysis of star-disk interaction in young stellar systems

[Fonseca, N. N. J.; Alencar, S. H. P.; Bouvier, J.](#)

Spitzer and Variable Young Stars: Shining a Spotlight on Circumstellar Disks

[Cody, Ann Marie; CSI 2264 Team](#)

CoRoT 102749568: mode identification in a δ Scuti star based on regular spacings★
M. Paparó1,★★, Zs. Bognár1, J. M. Benkő1, et al. A&A 2013,

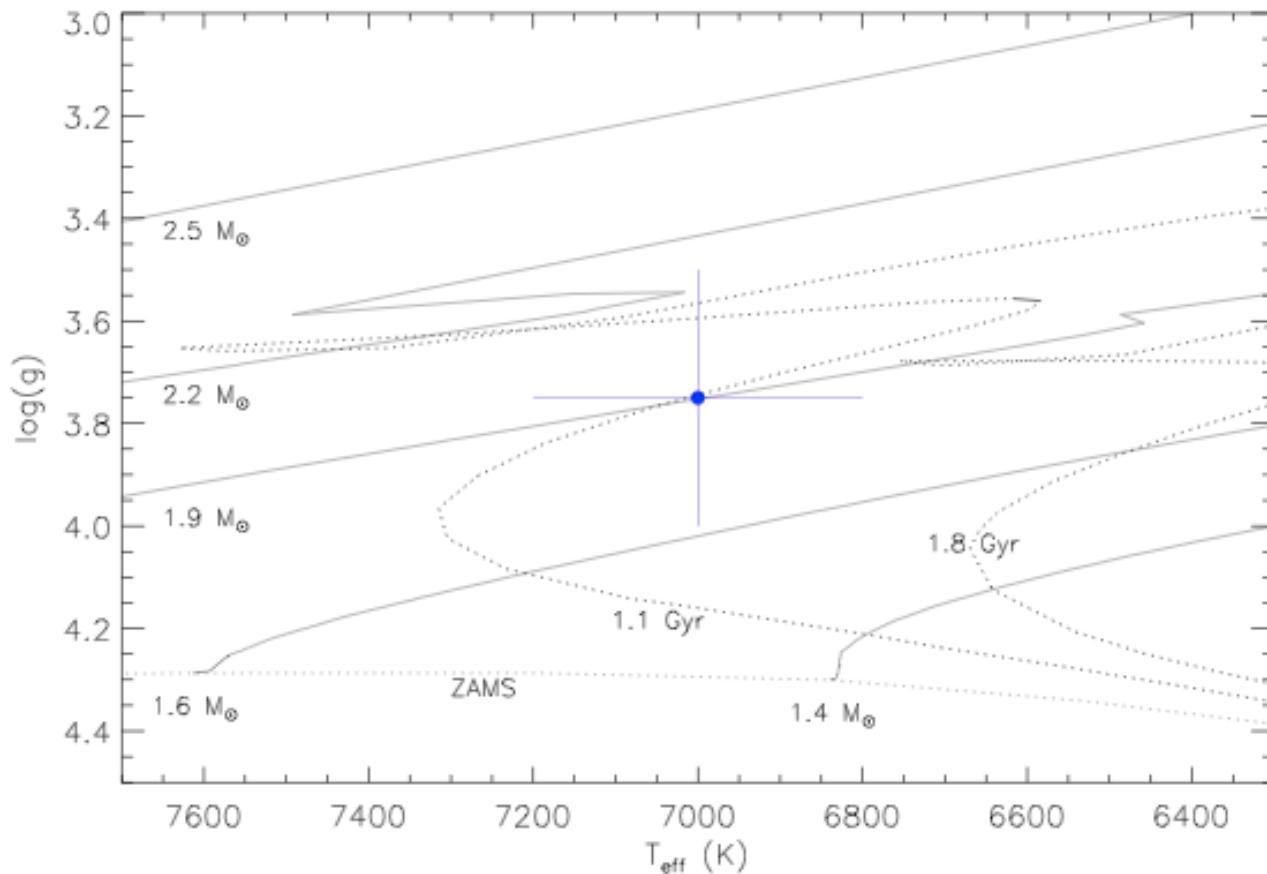


Fig. 7. Surface gravity vs. effective temperature diagram of CoRoT 102749568 (blue dot with error bars). The Girardi et al. (2000) evolutionary tracks for 1.4 , 1.6 , 1.9 , 2.2 , and $2.5 M_{\odot}$ are over-plotted with continuous lines. Both the zero-age main sequence line, and the isochrones for 1.1 and 1.8 Gyr are shown with dotted lines.

CoRoT target HD 51844: a delta Scuti star in a binary system with periastron brightening

Hareter, M.; Paparo, M.

A&A submitted 2013arXiv1309.4314H

Abstract

The star HD 51844 was observed in CoRoT LRa02 as a Seismo target which turned out to be an SB2 system. The 117 days long light curve revealed delta Scuti pulsation in the range of 6 to 15 d⁻¹ where four frequencies have amplitudes larger than 1.4 mmag and a rich frequency spectrum with amplitudes lower than 0.6 mmag. Additionally, the light curve exhibits a brightening event recurring every 33.5 days with a maximum of 3 mmag and a duration of about 5 days. Thus, this star can be considered as a heartbeat candidate. The radial velocities from spectroscopy confirmed an eccentric binary system with nearly identical masses and physical parameters. The brightening event of the light curve coincides with the maximum radial velocity separation showing that the brightening is in fact caused by tidal distortion and/or reflected light. One component displays large line profile variations, while the other does not show significant variation. The frequency analysis revealed a quintuplet structure of the four highest-amplitude frequencies, which is due to the orbital motion of the pulsating star.

CoRoT[★] 223992193: A new, low-mass, pre-main sequence eclipsing binary with evidence of a circumbinary disk

E. Gillen^{1,★★}, S. Aigrain¹, A. McQuillan^{1,2}, J. Bouvier³, S. Hodgkin⁴, S. H. P. Alencar⁵, C. Terquem¹, J. Southworth⁶, N. P. Gibson⁷, A. Cody⁸, M. Lendl⁹, M. Morales-Calderón¹⁰, F. Favata¹¹, J. Stauffer⁸, and G. Micela¹²

A&A in press

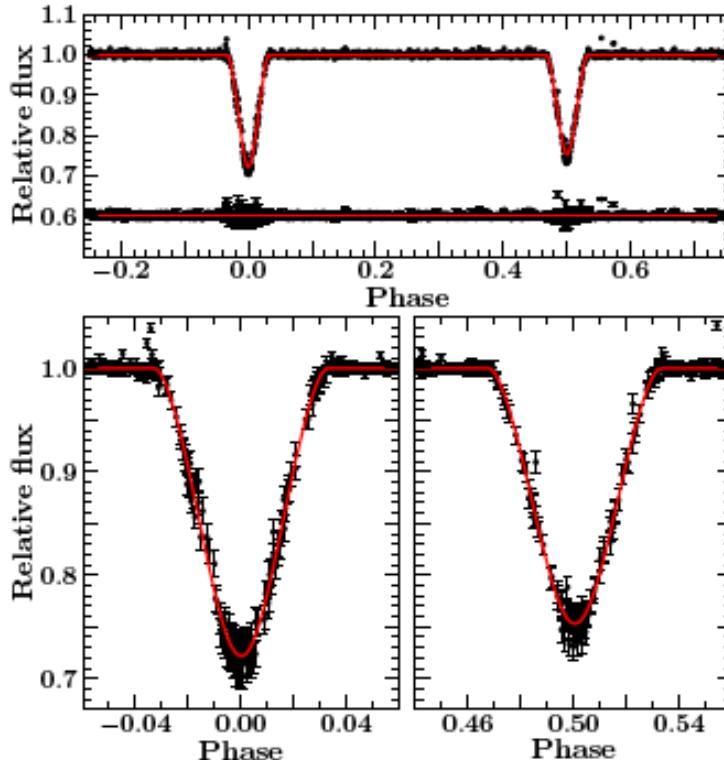


Fig. 6. Top: Phase folded, detrended CoRoT light curve (black points, 2008 observation) with the JKTEBOP best-fit model shown in red. The residuals of the best-fit model are also shown, with a vertical offset for clarity. Phase zero marks the centre of the primary eclipse. The bottom panels show zooms on the primary and secondary eclipses (left and right, respectively).

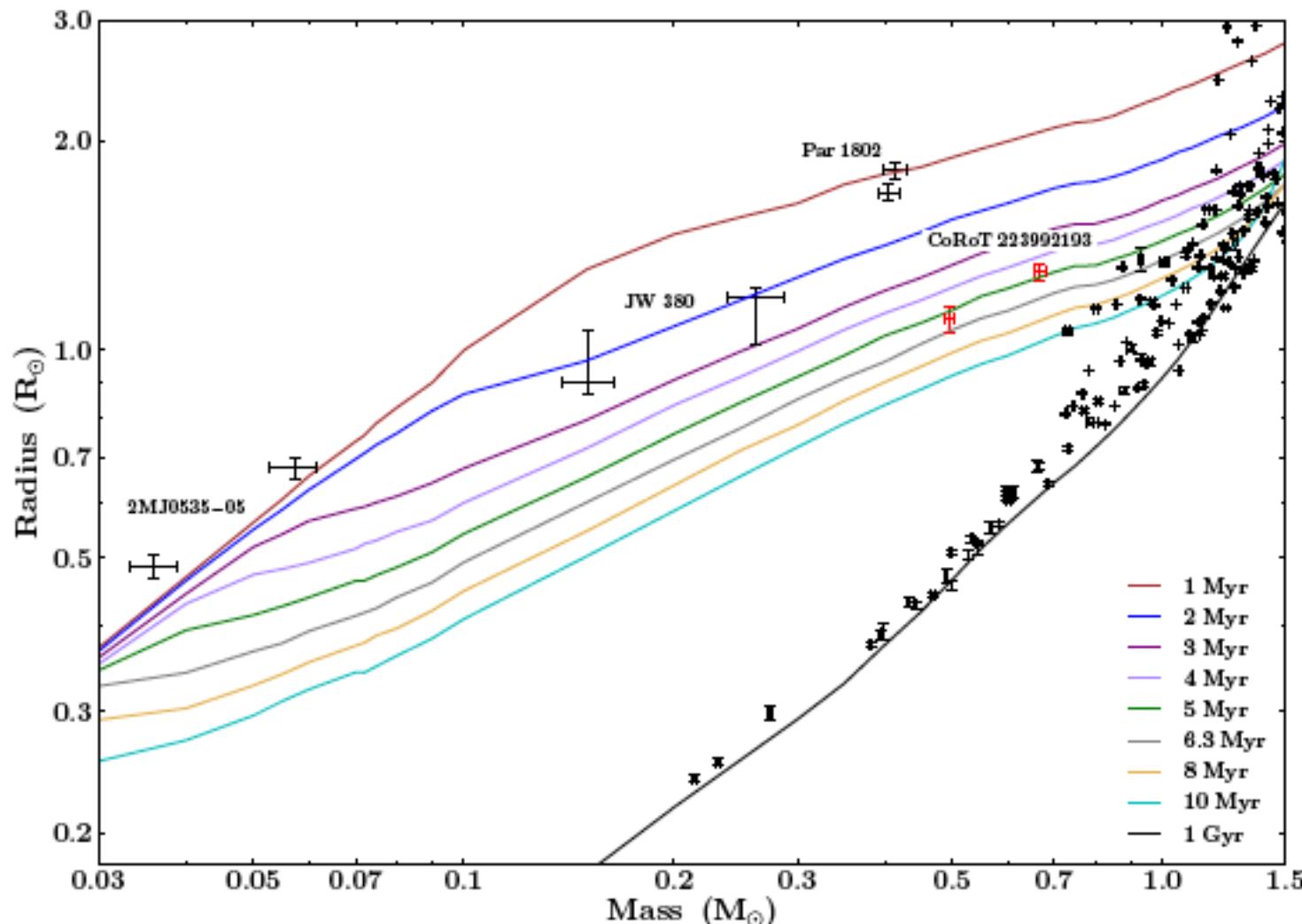


Fig. 1. Mass-radius relation for low-mass EBs. The black points show measurements for stars with masses $< 1.5 M_{\odot}$ in detached EBs¹, and the lines show, from top to bottom, the theoretical isochrones of Baraffe et al. (1998, BCAH98) for 1, 2, 3, 4, 5, 6.3, 8, 10 Myr and 1 Gyr (brown, blue, purple, lilac, green, grey, ochre, cyan and black, respectively. $Y = 0.282$, $[M/H] = 0$, mixing length $\alpha = 1.9$). The components of the new system presented in this paper are shown in red. Note that it lies in a very sparsely populated region of the diagram, making it a valuable test of PMS stellar evolution models. For comparison, we have also labelled the three lowest mass systems known in the Orion Nebula Cluster (see Table 1 for details. For clarity, the higher mass systems are not labelled).

CoRoT Seismo Target HD51844: a Scuti in an eccentric binary system showing periastron brightening ?

M. Hareter¹, M. Paparó¹, T. Borkovits^{2;3}, P. Lampens⁴, A. García Hernández⁵, M. Rainer⁶, P. De Cat⁴, P. Marcos Arenal⁷, J. Vos⁷, E. Poretti⁶, A. Baglin⁸, E. Michel⁸, and W. Weiss⁹

A&A submitted

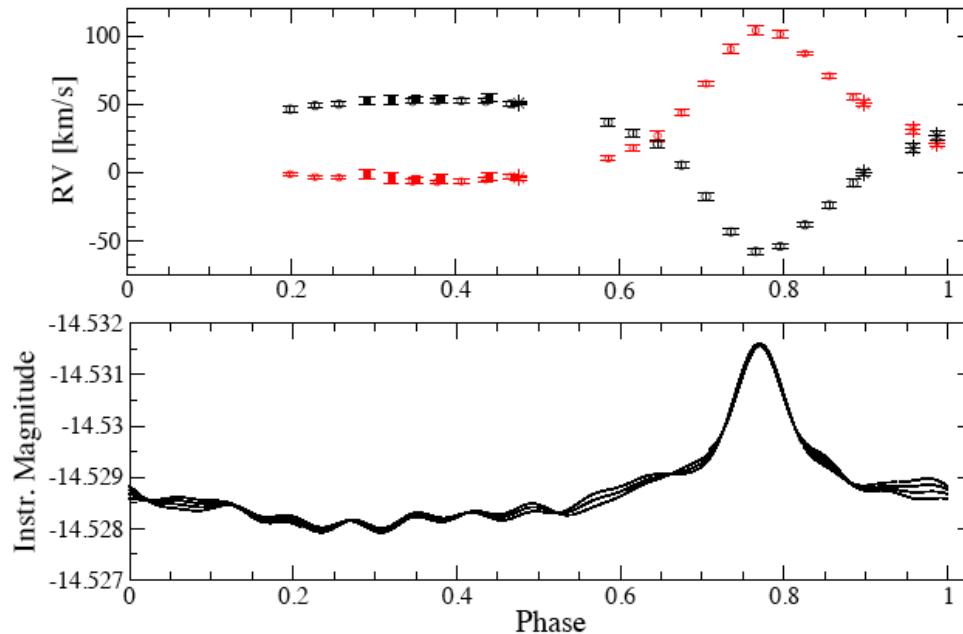


Fig. 7. Radial velocity curves (upper panel) compared to the binary light curve (bottom panel). The RVs determined from the HERMES spectra are marked by open circles, the RVs from the McDonald spectra are depicted by filled squares and the RVs from the HARPS spectra are indicated by asterisks.

Variability survey in the CoRoT SRa01 field: Implications of eclipsing binary distribution on cluster formation in NGC 2264

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R. Chini^{3,4}, P. Eigmüller², P. Kabath⁵, S. Kirste², R. Lemke³, M. Murphy⁶, H. Rauer^{2,7},
and R. Titz-Weider²

ApJ in press

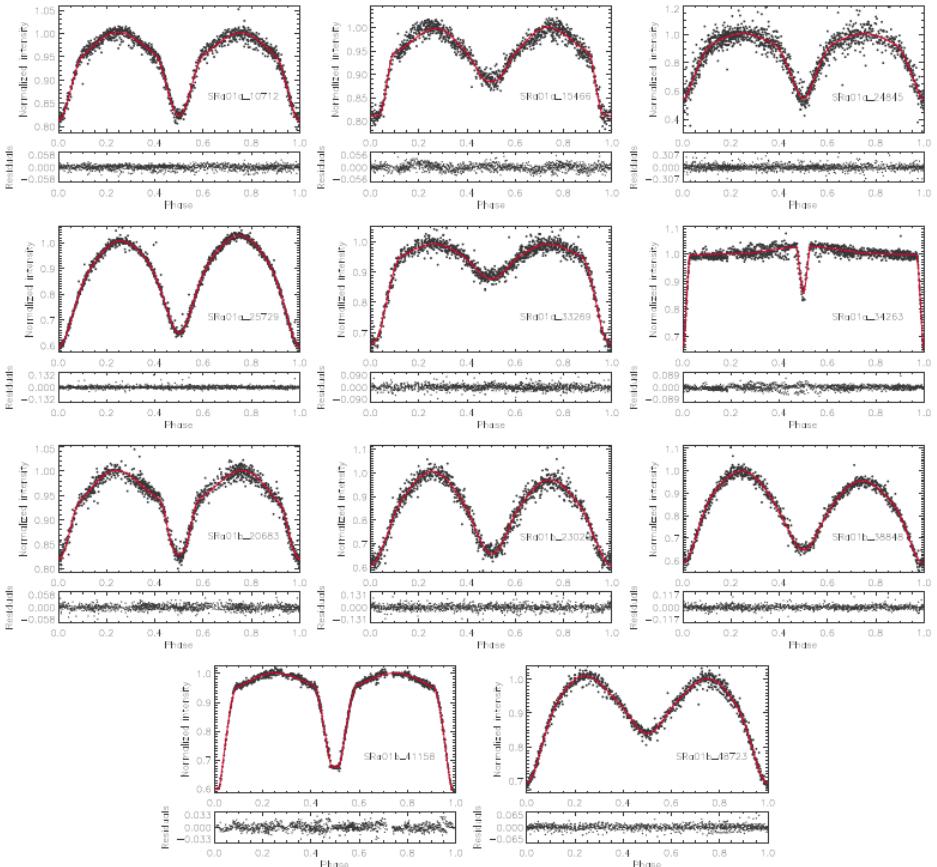
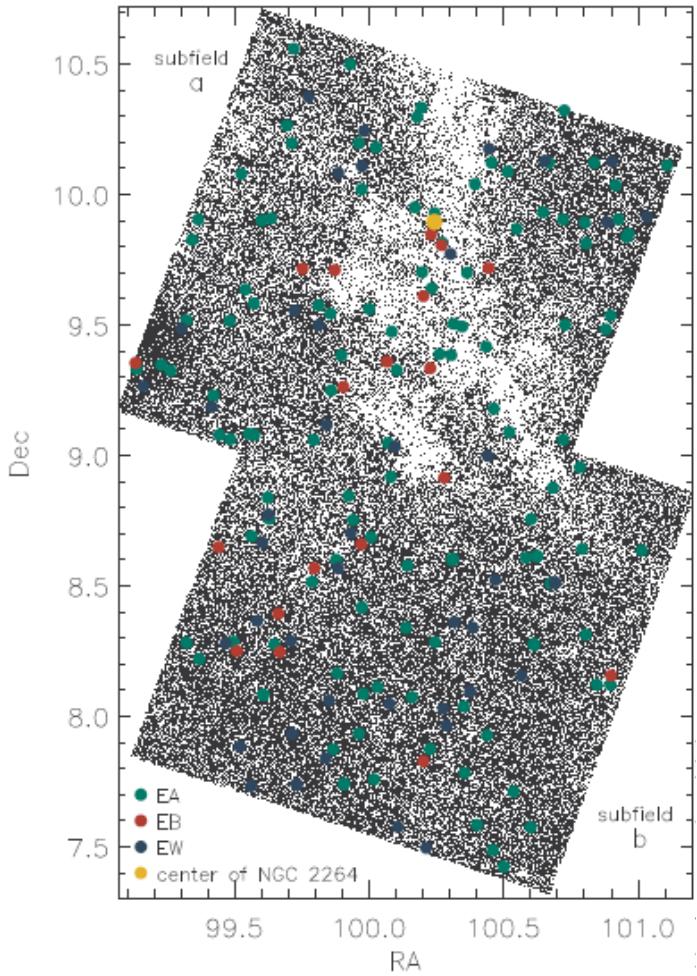


Fig. 3.— Results of the light curve modeling of the selected eclipsing binaries. Diamonds represent the raw observations, while the solid lines (colored red in the online version) are the fits. The lower panels show the residuals.

Fig. 5.— The map of the eclipsing binary systems in our two subfields. All observed stars are plotted with black dots. The circles (colored green in the online version) show the positions of EAs, stars (red circles in the online version) represent EBs and the triangles (blue circles in the online version) are EWs. The square (yellow circle in the online version) is the center of NGC 2264.

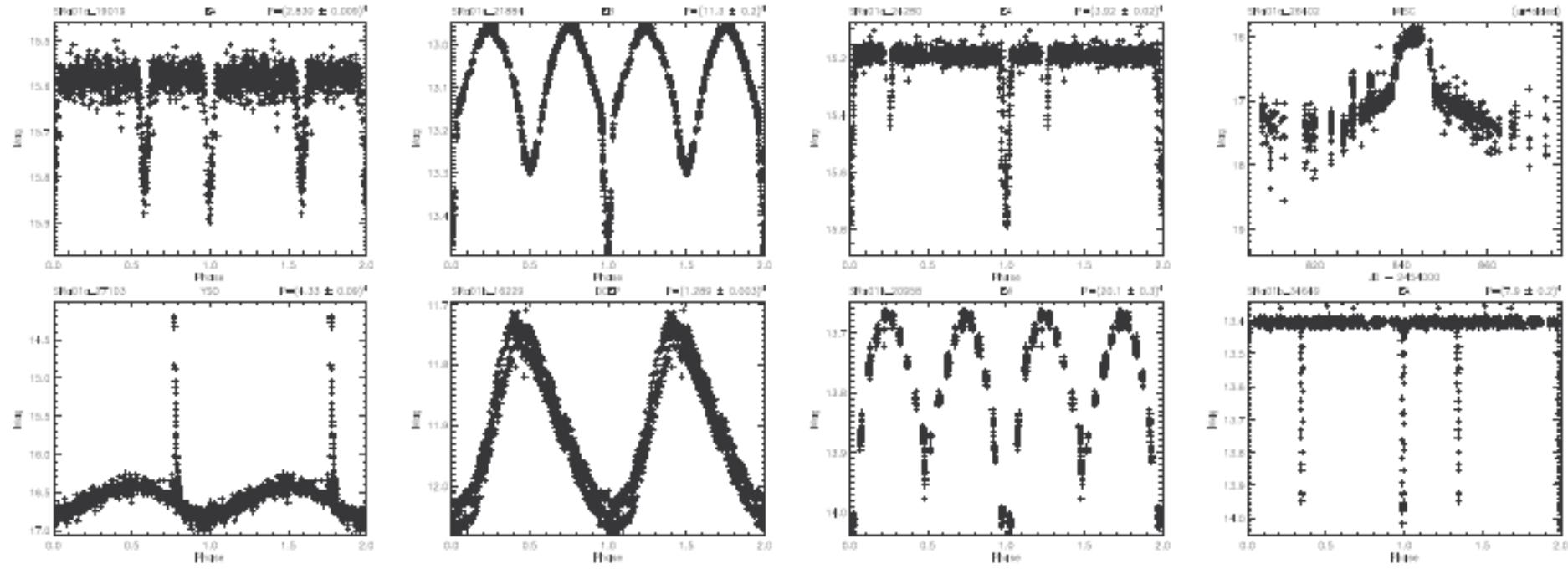


Fig. 4.— Light curves of interesting variable stars. For a short description of these objects see Section 6.

Measuring stellar differential rotation with high-precision space-borne photometry

Authors: A. F. Lanza(1), M. L. Das Chagas(1, 2), and J. R. De Medeiros(2)

A&A submitted

We apply our method to the Sun and eight other stars for which previous spot modelling has been performed to compare our results with previous ones. We find that autocorrelation is a simple method for selecting stars with a coherent rotational signal that is a prerequisite to a successful measurement of differential rotation through spot modelling. For a proper MCMC analysis, it is necessary to take into account the strong correlations among different parameters that exist in spot modelling. For the planet-hosting star Kepler-30, we derive a lower limit to the relative amplitude of the differential rotation of $\Delta P/P = 0.0523 \pm 0.0016$. We confirm that the Sun as a star in the optical passband is not suitable for a measurement of the differential rotation owing to the rapid evolution of its photospheric active regions.

In general, our method performs well in comparison with more sophisticated and time-consuming approaches.

CP star surface mapping & spectroscopy

Hans-Erich Fröhlich, Theresia Lüftinger, Ernst Paunzen, Werner W. Weiss

Ongoing work

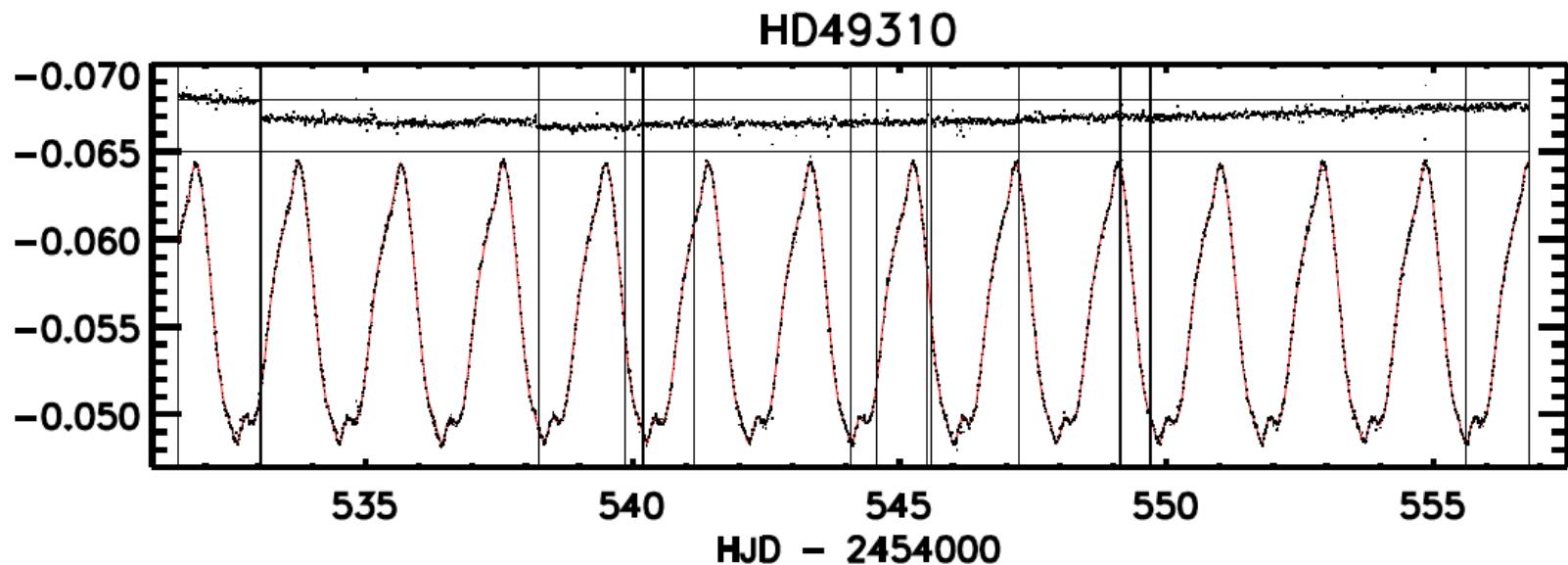


Fig. 1. The 2417 data points fitted by a six-spot model (red line). In the upper part the residuals (arbitrary offset) are shown. Jumps and linear trends are accounted for automatically by using a likelihood function which integrates over all possible magnitude offsets and linear trends. This is done for each part of the light curve individually

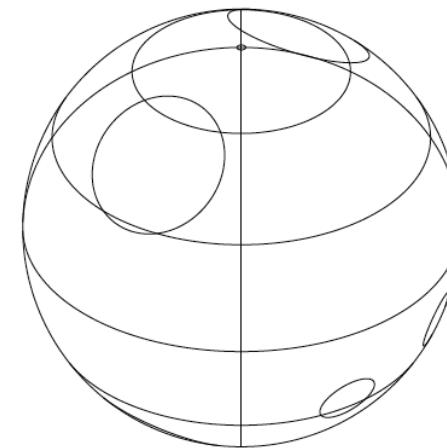
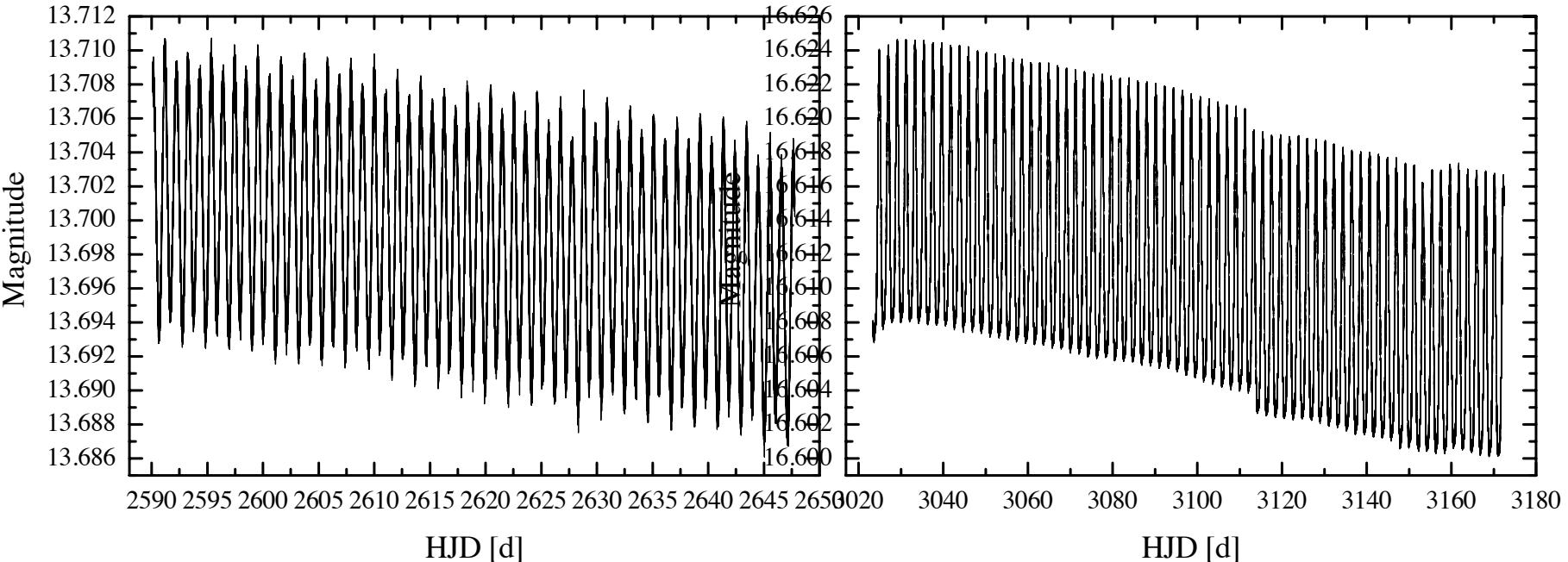
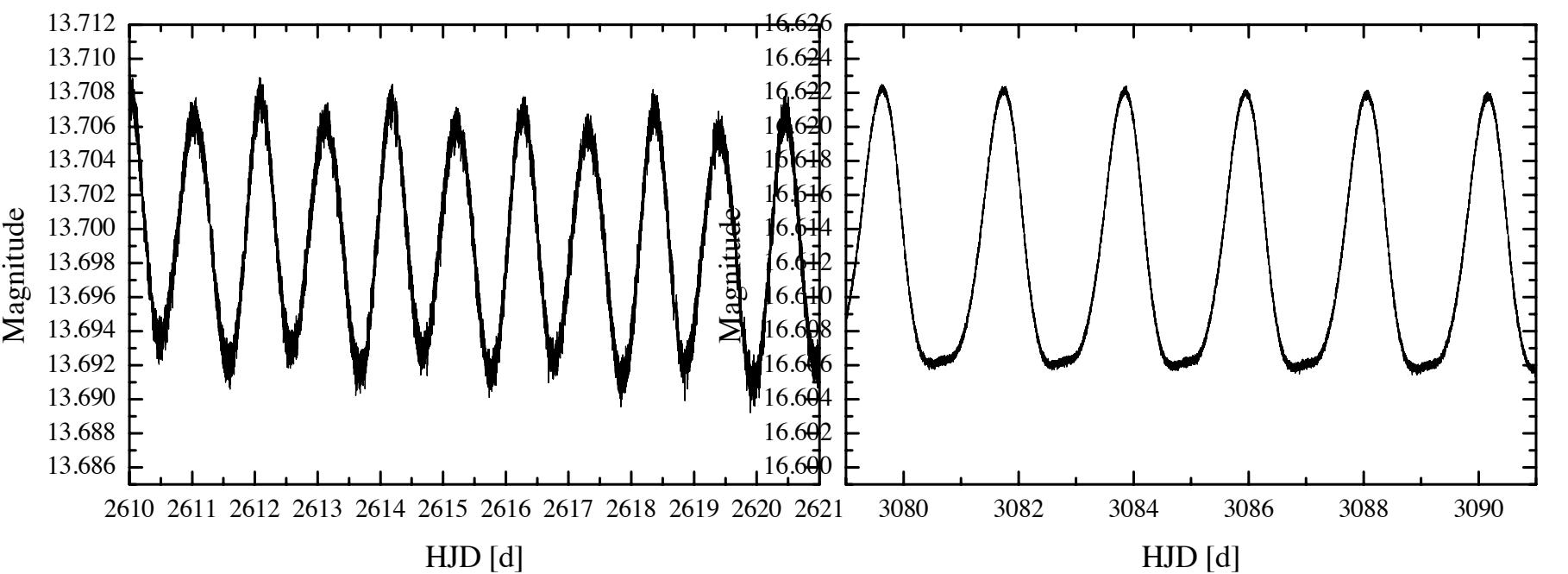
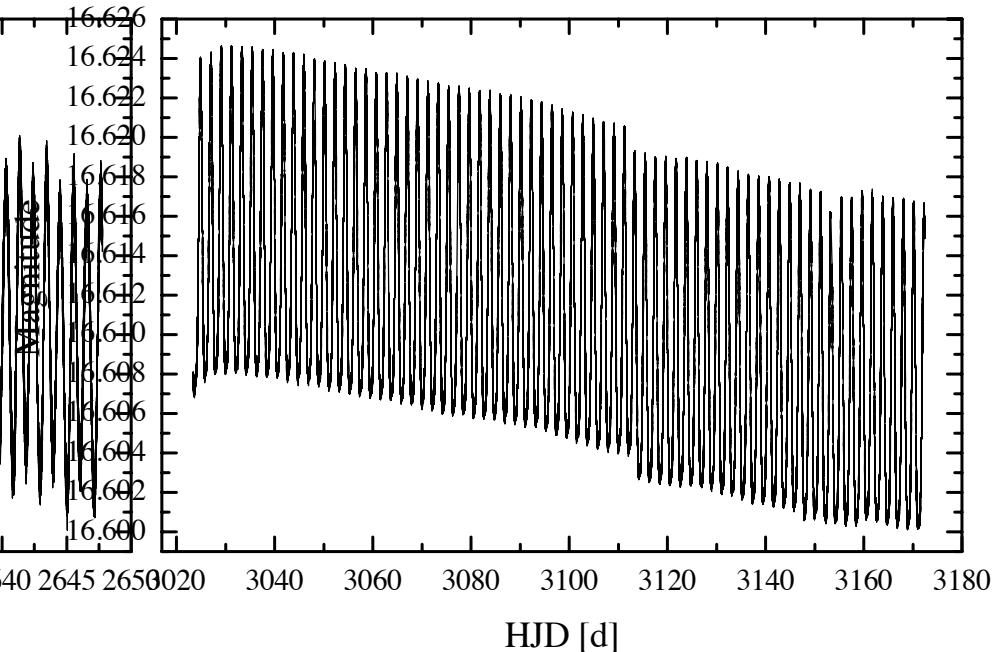


Fig. 2. Four of the six spots are in view at JD 2454531.48

HD 50773: Ap Sr, 138597 data points

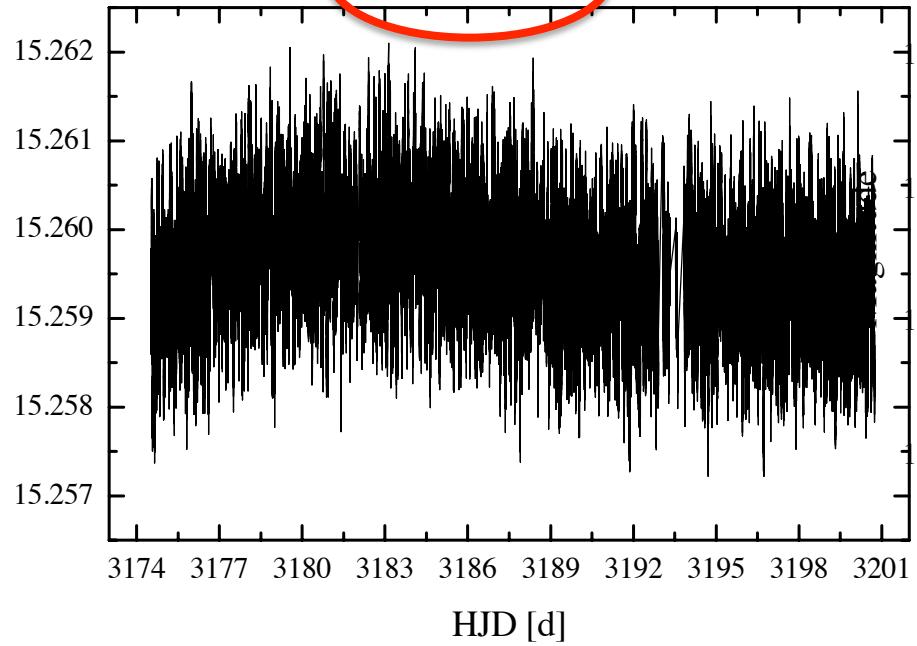


HD 171586: A0 SrCrEu, 359775 data points

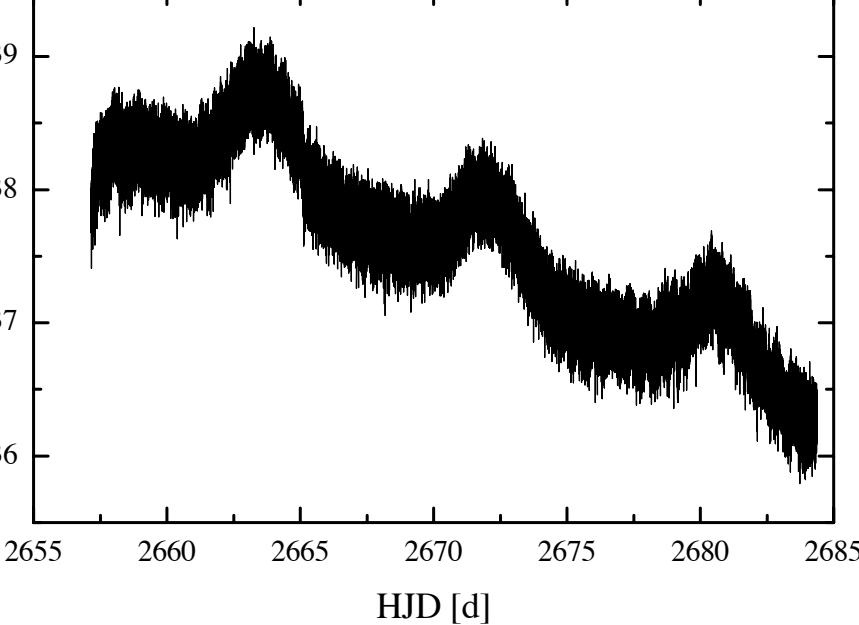


HD 175446: lambda Bootis, 61449 data points

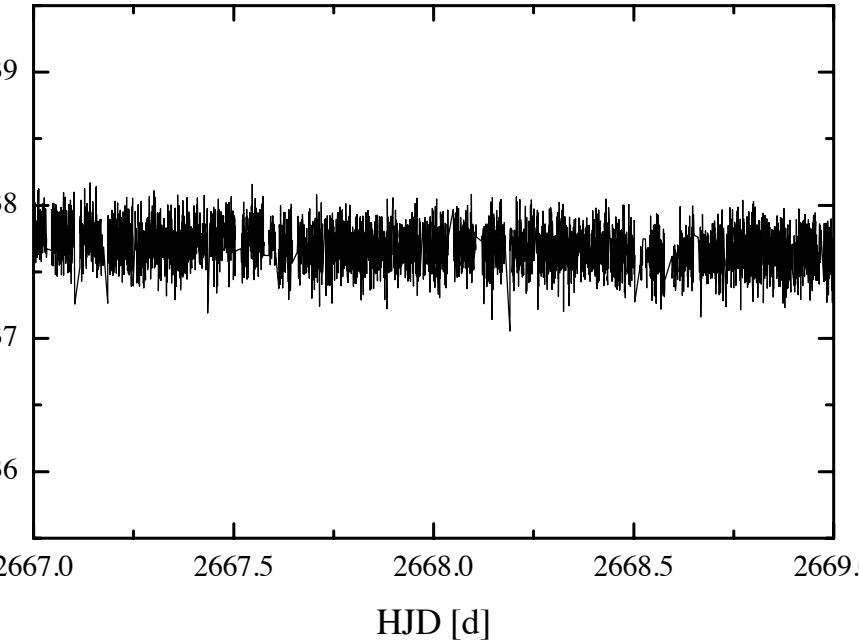
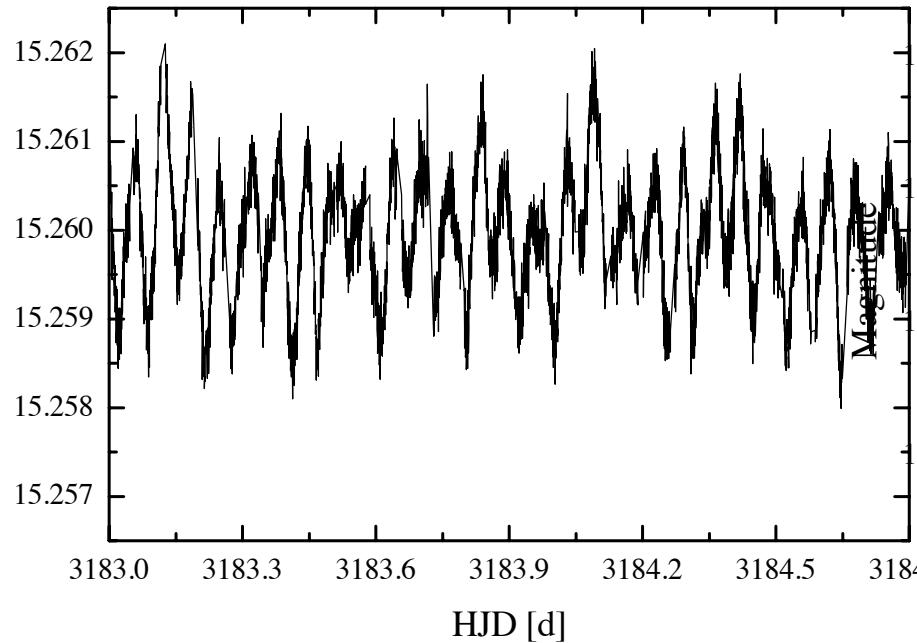
Magnitude



HD 175543: A5 SiSr, 66017 data points



Magnitude



Characterisation of γ Dor – δ Scuti Hybrid Stars in CoRoT LRa01

M. Hareter¹ and W. W. Weiss¹

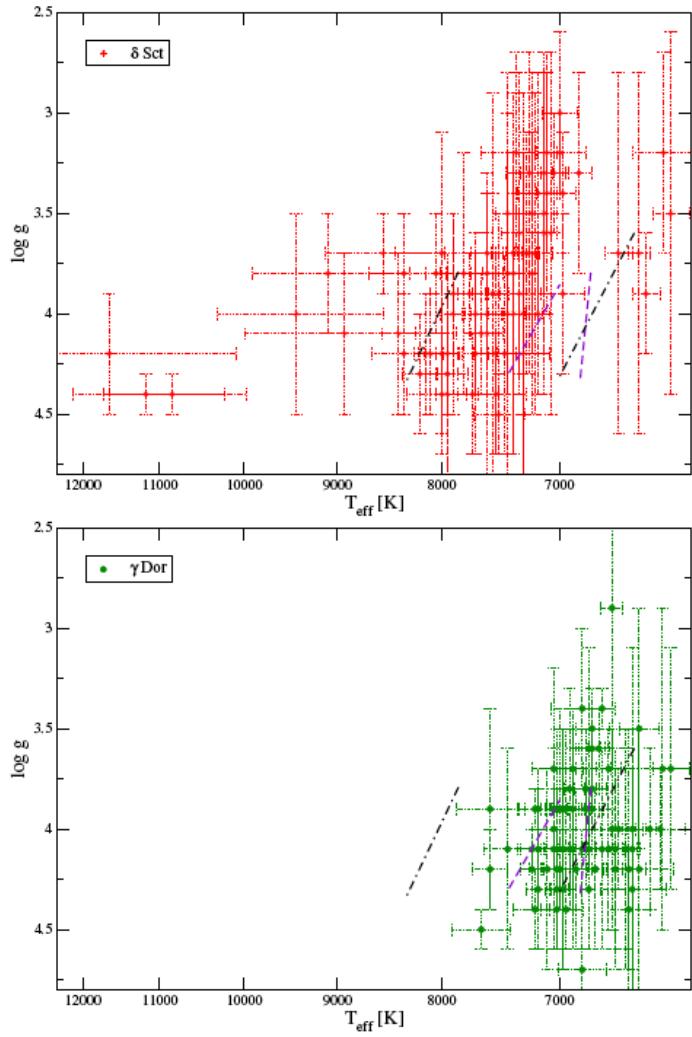


Fig. 4. $\log g$ vs. T_{eff} diagram of pure δ Sct (upper panel) and γ Dor stars (lower panel). The dash dotted lines indicate the δ Sct Instability strip from ? and the dashed lines show the theoretical γ Dor instability domain for $\alpha_{\text{MLT}} = 2.0 \text{ km s}^{-1}$ from the same source.

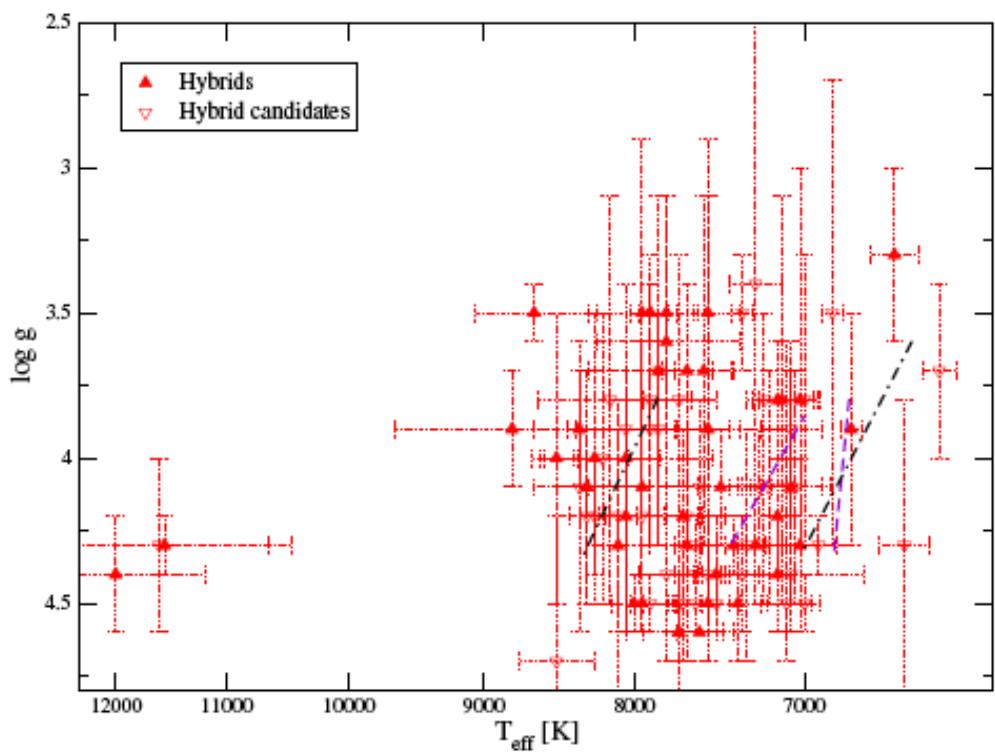


Fig. 5. Same as Fig. 4 but for hybrid stars.

In preparation

The γ Dor, δ Scuti, and Hybrid Star Instability Strips

M. Hareter¹ and A. Kaiser, PhD Theses

e.g. IRa01

