

# Astronomy & Astrophysics L<sup>A</sup>T<sub>E</sub>X template

## Subtitle

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### ABSTRACT

*Context.* Optional, leave empty if necessary. The heading “Context” is used when needed to give background information on the research conducted in the paper

*Aims.* Mandatory. The objectives of the paper are defined here.

*Methods.* Mandatory. The methods of the investigation are outlined here

*Results.* Mandatory. The results are summarized here.

*Conclusions.* Optional, leave empty if necessary. “Conclusions” can be used to explicit the general conclusions that can be drawn from the paper.

**Key words.** giant planet formation –  $\kappa$ -mechanism – stability of gas spheres

## 1. Introduction

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## 2. Citations and maths examples

20 In this section the one-zone model of Baker (1966), originally used to study the Cepheid pulsation mechanism, will be briefly reviewed, see Fig. 2, Table 4 and Eq. (3). For the one-zone-model Baker obtains necessary conditions for dynamical, secular and vibrational (or pulsational) stability (Eqs. (34a, b, c) in Baker 1966).

$$\tau_{\text{co}} = \frac{E_{\text{th}}}{L_{r0}}, \quad (1)$$

and the *local free-fall time*

$$\tau_{\text{ff}} = \sqrt{\frac{3\pi}{32G} \frac{4\pi r_0^3}{3M_r}}, \quad (2)$$

Baker’s  $K$  and  $\sigma_0$  have the following form:

$$\sigma_0 = \frac{\pi}{\sqrt{8}} \frac{1}{\tau_{\text{ff}}} \quad (3)$$

$$K = \frac{\sqrt{32}}{\pi} \frac{1}{\delta} \frac{\tau_{\text{ff}}}{\tau_{\text{co}}}; \quad (4)$$

where  $E_{\text{th}} \approx m(P_0/\rho_0)$  has been used and

$$\delta = -\left(\frac{\partial \ln \rho}{\partial \ln T}\right)_P, \quad e = mc^2 \quad (5)$$

is a thermodynamical quantity which is of order 1 and equal to 1 for nonreacting mixtures of classical perfect gases. The physical meaning of  $\sigma_0$  and  $K$  is clearly visible in the equations above.  $\sigma_0$  represents a frequency of the order one per free-fall time.  $K$  is proportional to the ratio of the free-fall time and the cooling time. Substituting into Baker’s criteria, using thermodynamic identities and definitions of thermodynamic quantities,

$$\Gamma_1 = \left(\frac{\partial \ln P}{\partial \ln \rho}\right)_S, \quad \chi_\rho = \left(\frac{\partial \ln P}{\partial \ln \rho}\right)_T, \quad \kappa_P = \left(\frac{\partial \ln \kappa}{\partial \ln P}\right)_T$$

$$\nabla_{\text{ad}} = \left(\frac{\partial \ln T}{\partial \ln P}\right)_S, \quad \chi_T = \left(\frac{\partial \ln P}{\partial \ln T}\right)_\rho, \quad \kappa_T = \left(\frac{\partial \ln \kappa}{\partial \ln T}\right)_T$$

## 3. Figures examples

Examples of figures using graphicx. The guide “Using Imported Graphics in L<sup>A</sup>T<sub>E</sub>X2<sub>ε</sub>” by Keith Reckdahl is available on a lot of L<sup>A</sup>T<sub>E</sub>X public servers or CTAN mirrors.

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\*\* NASA fellow (shows the usage of elements in the author field)

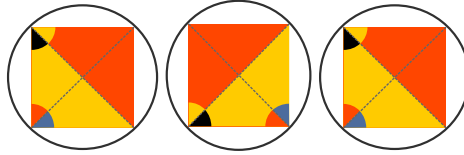


Fig. 1: A onecolumn \figure\* with six graphics

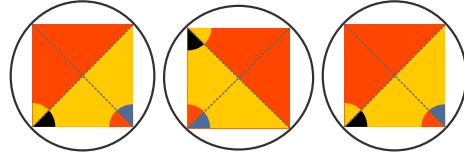


Fig. 1: continued.

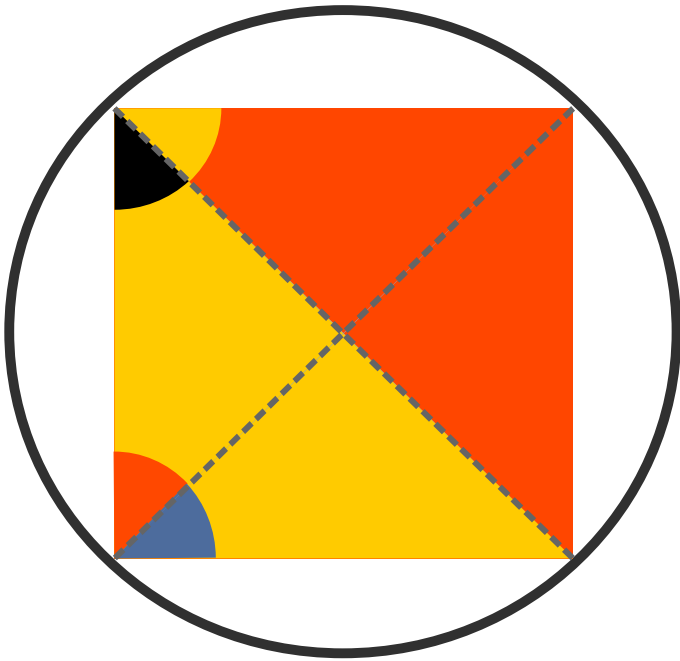


Fig. 2: Figure as large as the column width

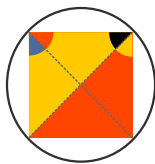


Fig. 3: Rotated figure

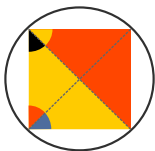


Fig. 4. Figure with caption on the right side



Fig. 5: Figure with a new BoundingBox

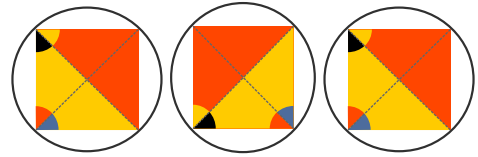


Fig. 6: A figure including three graphics

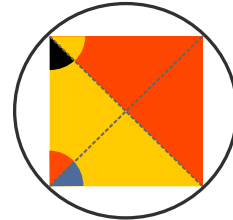


Fig. 7: Continued figure numbering

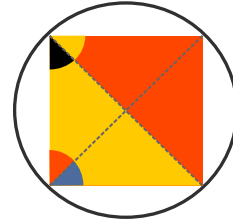


Fig. 7: continued.

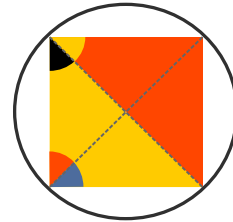


Fig. 7: continued.

#### 4. Tables examples

The jump in table numbering below is caused by the command `\longtable*`. This command only works in the onecolumn environment. For this reason, we recommend either:

- placing your long tables in onecolumn appendices (cf. ?? and E.1),
- or using the longtab environment as illustrated by tables 2 and 3. Note that the longtab environment will preserve the table numbering and automatically places long tables after the appendices. They will be moved inside the appendices by the Publisher, if necessary.

Table 1: Simple A&A Table

HJD	<i>E</i>	Method#2	Method#3
1	50	−837	970
2	47	877	230

Table 4: Table with notes

Star	Spectral type	RA(J2000)
69	B1 V	09 15 54.046
LS 1267 (86)	O8 V	09 15 52.787
24.6	7.58	1.37
MO 2-119	B0.5 V	09 15 33.7
LS 1269	O8.5 V	09 15 56.60

**Notes.** The top panel shows likely members of Pismis 11. The bottom panel displays stars outside the clusters.

Table 5: Table with multiple notes

Star	Spectral type	RA(J2000)
69	B1 V	09 15 54.046
LS 1267 (86)	O8 V	11.07 <sup>a</sup>
24.6	7.58 <sup>l</sup>	1.37 <sup>a</sup>
MO 2-119	B0.5 V	11.74 <sup>c</sup>
LS 1269	O8.5 V	10.85 <sup>d</sup>

**Notes.** The top panel shows likely members of Pismis 11. The bottom panel displays stars outside the clusters.

<sup>(a)</sup> Photometry for MF13, LS 1267 and HD 80077 from Dupont et al.

<sup>(b)</sup> Photometry for LS 1262, LS 1269 from Durand et al. <sup>(c)</sup> Photometry for MO2-119 from Mathieu et al.

Table 6: Table with references

SN name	Epoch (with respect to <i>B</i> maximum)	Bands
1981B	0	<i>UBV</i>
1990N	2, 7	<i>UBVRI</i>
1991M	3	<i>VRI</i>
SNe 91bg-like		
1991bg	1, 2	<i>BVRI</i>
1999by	−5, −4, −3, 3, 4, 5	<i>UBVRI</i>
SNe 91T-like		
1991T	−3, 0	<i>UBVRI</i>
2000cx	−3, −2, 0, 1, 5	<i>UBVRI</i>

**References.** (1) Zheng (1997); (2) Mizuno (1980); (3) Balluch (1988); (4) Cox (1980); (5) Cox (1969); (6) Tscharnuter (1987); (7) Terlevich (1992); (8) Yorke (1980a).

#### 5. Conclusions

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*Acknowledgements.* Part of this work was supported by ESO, project number Ts 17/2–1.

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70 **Appendix A: Wide tables and figures after an appendix title: recommended method**

In the PDF output, floats should be placed under their own appendix, not before the title, nor after the title of the next appendix. In short appendices, one-column floats `{figure*}` or `{table*}` will generate a blank page. To prevent this behaviour, we recommend to switch to `\onecolumn` and set the `[ht!]` parameter in your floats: please check the L<sup>A</sup>T<sub>E</sub>Xcode of this appendix.

In case you have a lot of floating objects for little text and the L<sup>A</sup>T<sub>E</sub>Xengine moves the floats away from their context, the command `\FloatBarrier` of the “placeins” package will empty the float buffer and place all stored floats in the continuity. If you still encounter problems with wide floats placement, just use the `\onecolumn` environment throughout the appendices.

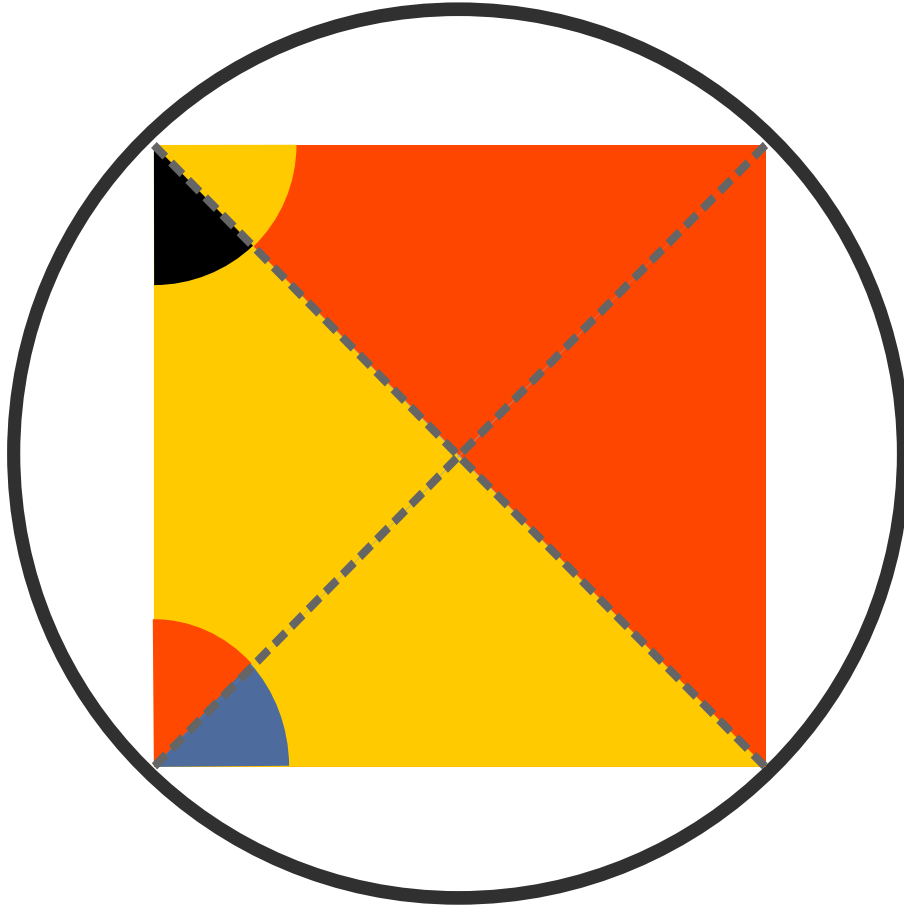


Fig. A.1: A one-column `{figure*}[ht!]` after a section title. If text follows like below, it is easier to finish the section in `\onecolumn`. If needed, you may revert to `\twocolumn` when reaching the next page.

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**Appendix B: Wide tables and figures after an appendix title: alternate method**

To prevent a blank page, a second method is to insert the appendix title after declaring the onecolumn float. This method should be reserved to appendices containing only one-column floats{figure\*} or {table\*} and no text.

Table B.1: A one-column {table\*}

ISO-L1551	$F_{6.7}$ [mJy]	$\alpha_{6.7-14.3}$	YSO type <sup>d</sup>	Status	Comments
<i>New YSO candidates</i>					
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	Mid
2	0.79:	0.97:	Class II ?	New	
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	Mid
2	0.79:	0.97:	Class II ?	New	
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	Mid
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5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	Mid
2	0.79:	0.97:	Class II ?	New	
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	
3	4.95 ± 0.68	3.18	Class II / III	New	Mid
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	
3	4.95 ± 0.68	3.18	Class II / III	New	Mid
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	
3	4.95 ± 0.68	3.18	Class II / III	New	Mid
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1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
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1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	
2	0.79:	0.97:	Class II ?	New	Mid
3	4.95 ± 0.68	3.18	Class II / III	New	
5	1.44 ± 0.33	1.88	Class II	New	
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New	

90 **Appendix C: Long tables in appendices**

For long tables (multipage) in appendices, we use the method described in appendix A. For long landscape tables, please refer to Appendix E.

### Appendix D: Rotated single page tables

To prevent a blank page with {sidewaystable\*}, we use the method described in appendix B: declare the table first, and the section second.

Table D.1: A rotated table with {sidewaystable*}				
ISO-L1551	$F_{6.7}$ [mJy]	$\alpha_{6.7-14.3}$	YSO type <sup>d</sup>	Status
<i>New YSO candidates</i>				
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New
2	0.79:	0.97:	Class II ?	New
3	4.95 ± 0.68	3.18	Class II / III	New
5	1.44 ± 0.33	1.88	Class II	New
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New
2	0.79:	0.97:	Class II ?	New
3	4.95 ± 0.68	3.18	Class II / III	New
5	1.44 ± 0.33	1.88	Class II	New
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New
2	0.79:	0.97:	Class II ?	New
3	4.95 ± 0.68	3.18	Class II / III	New
5	1.44 ± 0.33	1.88	Class II	New
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New
2	0.79:	0.97:	Class II ?	New
3	4.95 ± 0.68	3.18	Class II / III	New
5	1.44 ± 0.33	1.88	Class II	New
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New
2	0.79:	0.97:	Class II ?	New
3	4.95 ± 0.68	3.18	Class II / III	New
5	1.44 ± 0.33	1.88	Class II	New
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New
2	0.79:	0.97:	Class II ?	New
3	4.95 ± 0.68	3.18	Class II / III	New
5	1.44 ± 0.33	1.88	Class II	New
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New
2	0.79:	0.97:	Class II ?	New
3	4.95 ± 0.68	3.18	Class II / III	New
5	1.44 ± 0.33	1.88	Class II	New
1	1.56 ± 0.47	–	Class II <sup>c</sup>	New
2	0.79:	0.97:	Class II ?	New
3	4.95 ± 0.68	3.18	Class II / III	New
5	1.44 ± 0.33	1.88	Class II	New
<i>Previously known YSOs</i>				
61	0.89 ± 0.58	1.77	Class I	HH 30
96	38.34 ± 0.71	37.5	Class II	MHO 5
				Circumstellar disk
				Spectral type

## Appendix E: Rotated long tables in appendices

For rotated long tables in appendices, we use the method described in appendix A, combined with {landscape}.

Table E.1: A long landscape table

Catalogue	$M_V$	Spectral	Distance	Mode	Count Rate
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86 <sup>1</sup>	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686

<sup>1</sup> Source not included in the HRI catalog. See Sect. 5.4.2 for details.



Table E.1: continued.

Catalogue	$M_V$	Spectral	Distance	Mode	Count Rate
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230

Table 2: A long table using the longtab environment

Catalogue	$M_V$	Spectral	Distance	Mode	Count Rate
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86 <sup>2</sup>	5.92	K0 V	10.91	S	0.058230
	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170</

<sup>2</sup> Source not included in the HRI catalog. See Sect. 5.4.2 for details.

Table 2: continued.

Catalogue	$M_V$	Spectral	Distance	Mode	Count Rate
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230

Table 3: A long landscape table using the longtab environment

Catalogue	$M_V$	Spectral	Distance	Mode	Count Rate
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86 <sup>3</sup>	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170

<sup>3</sup> Source not included in the HRI catalog. See Sect. 5.4.2 for details.

Table 3: continued.

Catalogue	$M_V$	Spectral	Distance	Mode	Count Rate
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230
Gl 33	6.37	K2 V	7.46	S	0.043170
Gl 66AB	6.26	K2 V	8.15	S	0.260478
Gl 68	5.87	K1 V	7.47	P	0.026610
				H	0.008686
Gl 86	5.92	K0 V	10.91	S	0.058230