

ÖSTERREICHISCHE AKADEMIE DER WISSENSCHAFTEN
PHILOSOPHISCHE-HISTORISCHE KLASSE
DENKSCHRIFTEN, 299. BAND

ASTRONOMICAL DIARIES AND RELATED TEXTS FROM BABYLONIA

Volume V

Lunar and Planetary Texts

EDITED BY
HERMANN HUNGER

INCLUDING MATERIALS BY
ABRAHAM J. SACHS

WITH AN APPENDIX BY
JOHN M. STEELE



VERLAG DER ÖSTERREICHISCHEN AKADEMIE DER WISSENSCHAFTEN
WIEN 2001

Table of Eclipses

Text	Tablet	Lines	Date	Type	Record	Comments
1	BM 41985	Obv. 2 Obv. 3-4 Obv. 5 Obv. 6 Obv. 7 Obv. 8	-746 Feb 6 -746 Aug 2 -745 Jan 26 -745 Jul 22 -744 Jan 15 -744 Jul 10	Lunar Lunar Lunar Lunar Lunar Lunar	Observation Observation Observation Observation Prediction Prediction	
2	BM 32238	Obv. I', 1'-3' Obv. II', 1'-3' Obv. III', 1'-3' Obv. IV' 1' Obv. 5', 1'-3' Rev. I', 1'-2' Rev. II', 1'-3' Rev. II', 4'-14' Rev. III', 1' Rev. III', 2'-10' Rev. IV', 1'-2' Rev. V', 1'-4' Rev V', 5'-12'	-730 Apr 9 -712 Apr 19 -694 May 1 -676 May 11 -658 May 22 -388 Oct 31 -370 May 17 -370 Nov 11 -352 May 28 -352 Nov 22 -334 Dec 3 -316 Jun 18 -316 Dec 13	Lunar Lunar Lunar Lunar Lunar Lunar Lunar Lunar Lunar Lunar Lunar Lunar Lunar Lunar	Prediction Observation Observation Prediction Prediction Prediction Observation Observation Prediction Observation Prediction Observation Observation	Wrongly filed? cf. BM 35333 (Diary)
3	BM 35115 + 35789 + 45640	Obv. I', 1' Obv. I', 2'-5' Obv. II', 1-6 Obv. II', 8-9 Obv. II', 1'-4' Obv. II', 5'-6' Obv. III', 1-4 Obv. III', 5-6 Obv. III', 1'-3' Obv. III', 4'-6' Obv. IV', 1-4 Obv. IV', 5-8 Obv. V', 1-6 Rev. I', 1'-2' Rev. I', 3'-8' Rev. I', 9'-12' Rev. II', 1' Rev. II', 2'-8' Rev. II', 9'-11' Rev. II', 12'-13' Rev. II', 14'-15' Rev. III', 1'-2' Rev. III', 3'-9' Rev. III', 10'-11' Rev. III', 12'-20' Rev. III', 2'-5'	-702 Sep 23 -701 Mar 20 -685 Apr 22 -685 Oct 15 -684 Oct 3 -683 Mar 30 -667 May 2 -667 Oct 23 -666 Oct 15 -665 Apr 10 -649 May 13 -649 Nov 6 -631 May 24 -414 Mar 26 -414 Sep 19 -413 Mar 16 -397 Oct 12 -396 Apr 5 -396 Sep 30 -395 Mar 26 -395 Sep 13 -379 Oct 24 -378 Apr 17 -378 Oct 11 -377 Apr 6 -359 Apr 17	Lunar Lunar	Prediction Observation Observation Prediction Observation Prediction Prediction Prediction Prediction Observation Observation Prediction Observation Prediction Observation Observation Prediction Observation Prediction Observation Prediction Observation Observation Observation Observation	Wrongly filed? Wrongly filed? Wrongly filed?
4	BM 32234	Obv. I', 1'-8' Obv. II', 1'-2' Obv. II', 3'-5' Obv. II', 6'-7'	-608 Sep 4 -590 Mar 22 -590 Sep 15 -589 Mar 12	Lunar Lunar Lunar Lunar	Observation Observation Prediction Prediction	cf. BM 38462 (Eclipse Text) cf. BM 38462 (Eclipse Text) cf. BM 38462 (Eclipse Text)

Text	Tablet	Lines	Date	Type	Record	Comments
		Obv. III', 1'-8'	-572 Apr 2	Lunar	Observation	
		Obv. III', 9'-11'	-572 Sep 25	Lunar	Prediction	
		Obv. III', 12'-13'	-571 Mar 22	Lunar	Unclear	
		Obv. IV', 2'-8'	-554 Oct 6	Lunar	Observation	
		Obv. IV', 9'	-553 Apr 3	Lunar	Unclear	
		Obv. V', 1'-3'	-536 Apr 23	Lunar	Observation	
		Obv. V', 4'-10'	-536 Oct 17	Lunar	Observation	
		Rev. I', 1'-4'	-518 Oct 28	Lunar	Prediction	
		Rev. II', 1'-6'	-500 Nov 7	Lunar	Observation	
		Rev. III', 1'-6'	-482 Nov 19	Lunar	Observation	
		Rev. IV', 1'-3'	-464 Jun 5	Lunar	Observation	
		Rev. IV', 5'-9'	-464 Nov 29	Lunar	Observation	
		Rev. V', 1'-2'	-446 Dec 11	Lunar	Unclear	
5	BM 38357	Obv. I, 4'-10'	-611 Nov 5	Lunar	Observation	
		Obv. II, 7'-15'	-609 Sep 15	Lunar	Observation	
		Rev. I, 1-9	-607 Aug 24	Lunar	Observation	Date Uncertain
6	BM 38462	Obv. I, 1	-603 Jun 13	Lunar	Prediction	
		Obv. I, 2	-603 Dec 6	Lunar	Prediction	
		Obv. I, 3	-602 May 3	Lunar	Prediction	
		Obv. I, 4-6	-602 Oct 27	Lunar	Observation	
		Obv. I, 7	-601 Apr 22	Lunar	Prediction	
		Obv. I, 7	-601 Oct 17	Lunar	Prediction	
		Obv. I, 8-10	-600 Apr 11	Lunar	Observation	
		Obv. I, 11	-600 Oct 5	Lunar	Prediction	
		Obv. I, 12	-599 Mar 31	Lunar	Prediction	
		Obv. I, 12	-599 Sep 24	Lunar	Prediction	
		Obv. I, 13-15	-598 Feb 20	Lunar	Observation	
		Obv. II, 1-2	-594 Nov 27	Lunar	Observation	
		Obv. II, 3-4	-593 May 23	Lunar	Observation	
		Obv. II, 4	-593 Nov 17	Lunar	Prediction	
		Obv. II, 5	-592 May 12	Lunar	Prediction	
		Obv. II, 5	-592 Nov 5	Lunar	Prediction	
		Obv. II, 6-7	-591 Apr 2	Lunar	Observation	
		Obv. II, 8	-591 Sep 26	Lunar	Prediction	
		Obv. II, 9	-590 Mar 22	Lunar	Observation	cf. BM 32234 (Eclipse Text)
		Obv. II, 10	-590 Sep 15	Lunar	Prediction	cf. BM 32234 (Eclipse Text)
		Obv. II, 11'	-589 Mar 12	Lunar	Prediction	cf. BM 32234 (Eclipse Text)
		Obv. II, 12	-589 Sep 4	Lunar	Prediction	
		Obv. II, 12	-588 Feb 29	Lunar	Prediction	
		Obv. II, 13	-588 Jul 25	Lunar	Prediction	
		Obv. II, 14-15	-587 Jan 19	Lunar	Observation	
		Obv. II, 16	-587 Jul 15	Lunar	Prediction	
		Obv. II, 17-18	-586 Jan 8	Lunar	Observation	
		Rev. III, 1'-2'	-579 Feb 19	Lunar	Observation	
		Rev. III, 3'	-579 Aug 15	Lunar	Observation	
		Rev. III, 4'	-578 Feb 8	Lunar	Unclear	
		Rev. III, 5'	-578 Aug 4	Lunar	Prediction	
		Rev. III, 5'	-577 Jan 28	Lunar	Prediction	
		Rev. III, 6'	-577 Jun 25	Lunar	Prediction	
		Rev. III, 6'	-577 Dec 19	Lunar	Prediction	
		Rev. III, 7'-9'	-576 Jun 14	Lunar	Observation	
		Rev. III, 10'-12'	-576 Dec 8	Lunar	Observation	
		Rev. III, 13'-14'	-575 Jun 3	Lunar	Observation	

Text	Tablet	Lines	Date	Type	Record	Comments
7	BM 41536	II', 1'	-562 Mar 13	Lunar	Unclear	
		II', 2'-4'	-562 Sep 5	Lunar	Observation	
		II', 5'-8'	-561 Mar 3	Lunar	Observation	
8	BM 36879	Obv. I, 13'	-528 Nov 17	Lunar	Observation	
		Rev. I, 1'	-527 Nov 6	Lunar	Prediction	
		Rev. I, 2'	-526 Apr 4	Lunar	Prediction	
		Rev. I, 3'	-526 Sep 27	Lunar	Prediction	
		Rev. I, 4'	-525 Mar 24	Lunar	Prediction	
		Rev. I, 5'	-525 Sep 17	Lunar	Observation	
9	BM 34684	Rev. I', 1'-3'	-441 Mar 25	Lunar	Observation	
	BM 34787	Rev. I', 6'	-440 Mar 13	Lunar	Prediction	
		Rev. I', 7'	-440 Aug 7	Lunar	Prediction	
		Rev. I', 8'-10'	-439 Feb 2	Lunar	Observation	
		Rev. I', 11'	-439 Jul 28	Lunar	Prediction	
		Rev. II', 4'-5'	-423 Sep 28	Lunar	Observation	
		Rev. II', 6'	-422 Mar 27	Lunar	Prediction	
		Rev. II', 7'	-422 Aug 20	Lunar	Prediction	
		Rev. II', 8'	-421 Feb 13	Lunar	Prediction	
		Rev. II', 9'	-421 Aug 18	Lunar	Prediction	
		Rev. II', 10'-12'	-420 Feb 2	Lunar	Observation	
		Obv. I'	-409 Jun 28	Lunar	Prediction	
		Obv. 3'-5'	-409 Dec 21	Lunar	Observation	
		Obv. 6'-7'	-408 Jun 16	Lunar	Observation	
		Obv. 8'	-408 Nov 11	Lunar	Prediction	
		Obv. 9'	-407 May 7	Lunar	Prediction	
		Obv. 10'-12'	-407 Oct 31	Lunar	Observation	
		Rev. III', 1-3	-406 Apr 26	Lunar	Prediction	
		Rev. III', 4-6	-406 Oct 21	Lunar	Observation	
		Rev. III', 7-8	-405 Apr 15	Lunar	Observation	
		Rev. III', 9-10	-405 Oct 10	Lunar	Observation	
10	BM 37088 + 37652	I', 1'-2'	-382 Dec 23	Lunar	Prediction	
		I', 3'-4'	-381 Jun 18	Lunar	Observation	
		I', 5'-6'	-381 Dec 12	Lunar	Observation	
		II', 1'-3'	-363 Jan 2	Lunar	Observation	
		II', 4'-5'	-363 Jun 29	Lunar	Observation	
		II', 6'-8'	-363 Dec 23	Lunar	Observation	
		II', 9'-10'	-362 Jun 18	Lunar	Observation	
11	BM 71537	Rev. I, 7'	-374 Feb 18	Solar	Prediction	
		Obv. I, 1'-4'	-374 Aug 13	Solar	Prediction	
		Obv. I, 5'-7'	-373 Feb 7	Solar	Prediction	
		Obv. I, 8'-10'	-373 Jul 4	Solar	Prediction	
		Obv. I, 11'-12'	-373 Dec 29	Solar	Prediction	
		Rev. II, 2'-4'	-357 Mar 11	Solar	Prediction	
		Rev. II, 5'-6'	-357 Sep 4	Solar	Prediction	
		Rev. II, 7'	-356 Feb 29	Solar	Unclear	
		Obv. II, 1'-4'	-356 Aug 23	Solar	Prediction	
		Obv. II, 5'-6'	-355 Feb 18	Solar	Prediction	
		Obv. II, 8'-10'	-355 Jul 16	Solar	Prediction	
		Obv. II, 11'-12'	-354 Jan 8	Solar	Prediction	
		Obv. II, 13'-14'	-354 Jul 4	Solar	Prediction	
		Rev. III, 2'-4'	-339 Mar 24	Solar	Prediction	
		Rev. III, 4'-6'	-339 Sep 15	Solar	Unclear	
		Rev. III, 7'	-338 Mar 11	Solar	Prediction	
		Obv. III, 1'-4'	-338 Sep 4	Solar	Observation	

cf. BM 36913 (Diary)

Text	Tablet	Lines	Date	Type	Record	Comments
		Obv. III, 5'-7'	-337 Mar 1	Solar	Prediction	
		Obv. III, 8'	-337 Jul 24	Solar	Prediction	
		Obv. III, 11'	-336 Jan 20	Solar	Prediction	
		Obv. IV, 6'-7'	-319 Mar 11	Solar	Prediction	
		Obv. IV, 8'-10'	-319 Aug 4	Solar	Prediction	
		Obv. IV, 11'-12'	-318 Jan 30	Solar	Prediction	
12	BM 36612 + 37043 + 37107	Rev. II, 1 Rev. II, 2 Rev. II, 3-8	-327 Jan 24 -327 Jul 20 -326 Jan 14	Lunar Lunar Lunar	Prediction Prediction Observation	cf. BM 36612 (Eclipse Text)
		Rev. II, 9-11 Rev. II, 12-15	-326 Jul 9 -325 Jan 3	Lunar Lunar	Observation Observation	
13	BM 37276	Rev. 1-2 Rev. 3 Rev. 4 Rev. 5-6		Solar Solar Solar Solar ?	Unclear Prediction Prediction Unclear	
14	BM 41800		-283 Mar 17	Lunar	Observation	
15	BM 48090	1'-3' 4'-5' 6'-7' 8'-9' 10'	-279 Dec 26 -278 Jun 19 -278 Nov 15 -277 May 10 -277 Nov 3	Lunar Lunar Lunar Lunar Lunar	Prediction Prediction Prediction Prediction Prediction	
16	BM 34236	Obv. II', 1	-194 Nov 16	Lunar	Prediction	cf. BM 42053 (Eclipse Text)
		Obv. II', 2-3 Obv. II', 4-6 Rev. I', 1'-3' Rev. I', 4'	-193 May 11 -193 Nov 5 -159 Jan 26 -159 Jul 23	Lunar Lunar Lunar Lunar	Prediction Observation Observation Prediction	cf. BM 34048 (Goal-year Text)
17	BM 42053	Obv. 1'-2'	-194 Jun 20	Lunar	Prediction	cf. BM 41477 (Diary)
		Obv. 3'	-194 Nov 15	Lunar	Unclear	cf. BM 34048 (Goal-year Text)
		Rev. 1-3	-177 Jul 12	Lunar	Observation	cf. BM 34236 (Eclipse Text)
18	BM 33643		-189 Feb 28	Lunar	Observation	cf. BM 34048 (Goal-year Text)
19	BM 33812		-189 Mar 14	Solar	Observation	
20	BM 41129		-153 Mar 21	Lunar	Observation	
21	BM 33982		-128 Nov 5	Lunar	Observation	
22	BM 45845		-119 Jun 1	Lunar	Observation	cf. BM 35759 + ... (Diary)

Text	Tablet	Lines	Date	Type	Record	Comments
23	BM 34963 + 35198 + 35238	Obv. IV, 6'-8' Rev. V, 1'-7' Rev. VII, 13'14' Rev. VII, 17'-20'	-88 Sep 15 -88 Sep 29 -86 Feb 14 -86 Feb 28	Lunar Solar Solar Lunar	Observation Observation Prediction Observation	cf. BM Rm 695 + ... (Diary)
24	BM 42145		-80 Apr 21	Lunar	Observation	cf. BM 46227 (Diary) cf. BM 42025 (Horoscope)
25	BM 33562A		-79 Apr 10	Lunar	Observation	
26	BM 42073		-79 Oct 5	Lunar	Observation	
27	BM 45628		-66 Jan 19	Lunar	Observation	Duplicate of BM 41565
28	BM 41565		-66 Jan 19	Lunar	Observation	Duplicate of BM 45628
29	BM 34940		-65 Jan 8	Lunar	Observation	
30	BM 32845		-65 Dec 28	Lunar	Observation	
31	BM 35606		-9 Jun 30	Solar	Observation	
32	84-2-11 frag.			Lunar	Observation	Undated
33	BM 45667 + 45856			Lunar		Undated list of consecutive lunar eclipse possibilities
34	BM 34576	Rev. 28'-32'			Saros Tablet	Undated lunar eclipse report?
35	BM 32363	I', 5' II', 1'-2' II', 3'-4' II', 5'-6' III', 1'-2' III', 3'-4' III', 5'-6' III', 7'-8' IV', 1' IV', 3'-4' IV, 5'-6' IV, 7' IV', 9'-10' IV', 11' V', 1' V', 3'-4' V', 5'-6' V', 7'-8' V', 9'-10' V', 11'-12' V', 13'-14' VI', 1'-2' VI', 3'-4'	-663 Aug 3 -646 Oct 4 -645 Mar 1 -645 Aug 25 -628 Oct 15 -627 Mar 11 -627 Sep 4 -626 Mar 1 -610 Oct 26 -609 Mar 22 -609 Sep 16 -609 Mar 11 -608 Sep 4 -607 Mar 1 -592 Nov 5 -591 Apr 2 -591 Sep 26 -590 Mar 22 -590 Sep 15 -589 Mar 12 -589 Sep 4 -574 Nov 17 -573 Apr 13	Lunar Lunar	Calculation Calculation	Theoretical Text