

ÖSTERREICHISCHE AKADEMIE DER WISSENSCHAFTEN
PHILOSOPHISCH-HISTORISCHE KLASSE
DENKSCHRIFTEN, 195. BAND

ASTRONOMICAL
DIARIES AND RELATED TEXTS
FROM BABYLONIA

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Volume I
Diaries from 652 B.C. to 262 B.C.



VERLAG DER ÖSTERREICHISCHEN AKADEMIE DER WISSENSCHAFTEN
WIEN 1988

Calendar

No calendaric information is preserved in this diary.

Comments

- i 1: GUR may be an unusual writing for $kur_4 = ba'lu$ "bright".
 i 5: TAR is said of a halo also in No.-567 rev. 15': its reading here is *paris* "is split, divided", see AHW. 831a mng. 7b.
 i 6: "one god was seen with the other" refers to sun and moon in opposition.
 i 8: NU PAP "I did not watch" unfortunately refers to both planetary statements.
 i 12f.: the items listed in these lines are not in chronological order.
 iv 16': The traces at the beginning of the line may be restored to $\lceil SAG \rceil KI$ "front".
 iv 20': I cannot read the sign after TIR: *ma-diš* is possible: this is written *ma-a'-diš* in iv 17' and 19'. but *ma-diš* in i 3. DIR' could be SA_3 "red": although a rainbow usually is multicolored, a (predominantly) red rainbow occurs in ACh Adad 6:5f., quoted by F. X. Kugler, SSB II 104.
 iv 21': The signs KI TU x at the end of the line do not seem to continue the words preceding them; they may be the beginning of the last line of col. iii.

No. -567

VAT 4956

Nebukadnezar II year 37

Copy: E.F.Weidner, AfO 16 Tf. XVII

I II III [] X XI XII

Photo: Pl. 1 and 3

Transcription, translation, and commentary: P.V. Neugebauer and E. F. Weidner, Ein astronomischer Beobachtungstext aus dem 37. Jahre Nebukadnezars II. (-567/66) (= Ber. über die Verh. der Königl. Sächs. Ges. der Wiss., Phil.-hist. Kl. Bd. 67/2, 1915).

Obv.:

- 1 MU-37 ^{ld}AG-NÍG-DU-ŠEŠ LUGAL TIN-TIR^{ki} BAR 30 *sin ár* GU₄-AN IGI x [*na*
]
 2 ^dSAG-UŠ *ina* IGI SIM 2 *ina še-ri* TIR-AN *ina* ŠÚ GIB GE₆ 3 *sin* 2 KÛŠ *ina* IGI
 [...]
 3 ŠUR GE₆ 9 SAG GE₆ 1 KÛŠ *sin ina* IGI ^{mul}GÌR *ár šá* UR-A GUB 9 *ina* ŠÚ *šamáš*
 TÛ[R 11]
 4 *lu* 12 ^dSAG-ME-GAR *ana* ME E₁₁ 14 DINGIR KI DINGIR IGI 4 *na* 15 ŠÚ 16
dele-bat [...]
 5 20 *ina še-ri šamáš* TÛR NIGÍN AN-BAR₇ UGU-ME ŠÈG PISAN TIR-AN *ina* NIM
 GIB x [...]
 6 TA 8 *šá* DIR-ŠE EN 28 3 KÛŠ 8 SI ILLU GIN 2/3 KÛŠ *a-na* ILLU ŠÚ [...]
 7 *ina a-mat* LUGAL GAZ^{mes} ITU BI KA₅-A *ana* URU KU₄ *su-alu u ri-šu-tú i-ša* [...]

- 8 GU₄ 1 *sin ina šamáš* GUB 4 KÛŠ *šap* MUL_x KUR EGIR *šá* MAŠ-TAB GAL IGI
ka-bar AGA *a-pi*[*r*....]
- 9 ^dGENNA *ina* IGI SIM-MAḤ GU₄-UD *šá* ŠÚ NU IGI GE₆ 1 *me-ḥi* KUR *u* ULÙ ŠÁR
 1 *kal* U₄ [... *ina* IGI]
- 10 *dele-bat ana* ŠÚ GUB 2 SI ŠÁR GIN 3 AN *ana* ALLA KU₄ 5 È 10 GU₄-UD *ina* ŠÚ
ár MAŠ-TA[B TUR]
- 11 15 ZI-IR 18 *dele-bat e* LUGAL 1 KÛŠ 4 U LÁL 26 23 *sin* NU PAP 27 20+ [x]

- 12 SIG 30 *sin ár* ALLA IGI *ka-bar* 20 *na* SI GIN *i-nu-šú* AN *u* GU₄-UD 4 KÛŠ *ina* IGI
 L[U GAL]
- 13 GU₄-UD *šap* AN *šer-tam* DIB SAG-ME-GAR *e* SI₄ *dele-bat ina* ŠÚ *ana tar-ša*
 GIŠ.KUN UR-[A]
- 14 1¹ KÛŠ GE₆ 5 SAG GE₆ *sin* 1 KÛŠ ⟨x⟩ MUL_x KUR₄ *šá* TIL GÌR UR-A *ana* NIM
 DIB GE₆ 6 SAG GE₆ [...]
- 15 SIG GE₆ 8 USAN 2 1/2 KÛŠ *sin šap* RÍN *šá* SI GUB GE₆ 9 USAN 1 KÛŠ *sin ina*
 IGI [...]
- 16 *ana* NIM DI[B] 9 *šamáš* GUB GE₆ 10 USAN 3 1/2 KÛŠ *sin e* SI₄ LÁL 12 AN 2/3
 KÛŠ ¹«e¹ [LUGAL]
- 17 [...] x 15 DINGIR KI DINGIR IGI 7.30 ¹«na AN-KU₁₀ *sin šá'* DIB¹ [...]
- 18 [... *ša*]p MUL_x KUR *šá* TIL GÌ[R UR-A]
- 19 [...] x [...]

'Rev.

- 1^r [x] x US[AN *sin* x]
- 2^r MUL_x MURUB₄ *š[á ki]-šir* 1 KÛŠ ¹«šá¹ PA-BIL 1 ¹«KÛŠ¹ x x [...]
- 3^r 5 UŠ U₄ NIM-¹«a¹ *šamáš* TÜR NIGÍN 19 *dele-bat šap-lat* MUL_x MURUB₄ *šá* SI MÁŠ
 2 1/2 ¹«KÛŠ GE₆¹ [...]
- 4^r ITU BI KI LAM *še-im* 1 GUR 2(b) ZÚ-LUM 1 GUR 1(p) 4(b) *ka-si* 1 GUR x [...]

- 5^r ZÍZ 30 *sin ina* SIM-MAḤ IGI 14,30 *na* SI GIN *i-nu-šú* ^dSAG-ME-GAR *ár ki-šir* 1
 KÛŠ *šá* PA-BI[L]
- 6^r 4 ILLU GIN 4 *dele-bat* 1/2 KÛŠ *šap*(sic) SUḤUR MÁŠ LÁL GE₆ 6 USAN *sin* TÜR
 NIGÍN MUL_x-MUL_x GU₄-AN GIGIR [...]

- 7' *sin* TÛR NIGÍN^{mul} UR-A *u*^{mul} ALLA *ina* ŠÀ {*ina* ŠÀ} TÛR LUGAL *šap sin* 1 KÛŠ
LÁL *ina* ZALÁG 3 UŠ GE₆ TAG₄ [...]
- 8' 17(text: 7) *na* NU PAP *šamáš* TÛR NIGÍN TA 4 EN 15 1 1/2 KÛŠ ILLU GIN 16
LAL GE₆ 18 18 ŠĚG PISAN DI[B ...]
- 9' *šá*^dEN TA KI-šú *ki-i ib-bat-qa 2-ta'*^{gis}MÁ^{meš} *šá gi iš' ri* SUD 22 ŠÚ-*up* GE₆ 23 [...]
- 10' *e* MUL_x TUR *šá* 3 1/2 KÛŠ *ár* SUḪUR *šá* MÁŠ GUB LÁL GE₆ 29 *a-ku₆-ku₆'-ku₆'-tu₄* *ina* ŠÚ KUR 2 DA[NNA ...]
- 11' ŠE 1 1 GUR GUR ZÛ-LUM 1 GUR 1(p) 4(b) *ka-si* 1 GUR 1 PI ŠE-GIŠ 4(b) *saḫ-l* [*e*₁₀
....]
-
- 12' ŠE 1 *sin ina šamáš* GUB EGIR^{mul} ḪUN-GÁ IGI 25 *na muš* AGA *a-pir* SI GIN
i-nu-šú^dSAG-ME-GAR [...]
- 13' NU IGI^{me} 1 ILLU GIN GE₆ 2 USAN 4 KÛŠ *sin šap* MUL_x-MUL_x LÁL GE₆ 3 SAG
GE₆ 2 1/2 KÛŠ [...]
- 14' TA 1 EN 5 8 SI ILLU GIN 6 ILLU LAL GE₆ 7 *sin* TÛR NIGÍN^{mul} ALLA *u*
LUGAL *ina* [...]
- 15' TÛR ALLA UR-A NIGÍN *ana* ULÛ TAR *ina* ŠÀ TÛR 1 KÛŠ *sin ina* IGI *ḫe-pí*
GUB 1 KÛŠ *sin* NIM GE₆ 10 U[SAN ...]
- 16' GE₆ 11 ŠÚ 11 AN DUL-*ḫat* GE₆ 12 ŠĚG *i* UGU-ME 12 DINGIR KI DINGIR IGI
1,30 *na* UGU-ME DUL-*ḫat* [...]
- 17' *ina* IGI DUR *šá* SIM-MAḪ 1/2 KÛŠ *šap dele-bat* 8 U GU₄-UD *ana* NIM DIB *ki* IGI
KUR₄ *u* NIM-*a* 1 U[Š' ...]
- 18' 6 SI *e* GU₄-UD *u* 3 S[I]' *šap dele-bat* LÁL *ù* AN 2/3 KÛŠ *šap* MUL_x KUR *šá* *ḫe-pí*
LÁL *a-na* [...]
- 19' UGU-ME DUL-*ḫat* 21 ŠÚ ILLU GIN *in* 20 *dele-bat u* GU₄-UD) *ana* DUR *šá*
SIM-MAḪ KU₄^{meš} TA [...]
- 20' *šá ana* NIM' DIB *nen-mud ina* TIL ITU *ana* ŠÚ LAL *in* 26 GU₄-UD *u dele-bat* TA
DUR *šá* A-*nu-n*[*i-tu₄* ...]
- 21' 8 U ILLU LAL-*is* ITU BI 26 UR-BAR-RA *ana* Bar-*sip*^{ki} KU₄ 2 UR.KU^{me} GAZ NU
È GA[Z ...]

Lower edge

- 1 MU-38-KÁM ^{ld}AG-NÍG-DU-ŠEŠ BAR 30 DIR KALAG-*ma* [*sin* NU IGI]
 2 (indented) MU-37-KÁM [. . .]

Left edge

- 1 [MU-37-KÁM ^{ld}AG-NÍG]-DU-ŠEŠ

Comments

1: The last sign visible can be any number from 14 to 18.

5: UGU-ME occurs also in rev. 16' and 19'. It cannot designate a part of the day (as suggested by P.V.Neugebauer and E.Weidner) because in rev. 16 it appears during the night as well as during daytime. It is rather another weather phenomenon, mentioned side by side with rain.

10: ALLA is used here not for the whole zodiacal constellation Cancer but only for Praesepe since Mars can pass through it within two days, as was remarked by P.V.Neugebauer and E.Weidner.

11: A translation "was balanced" for LÁL was proposed by A.Sachs. This expression seems to occur mostly (but not only) in those cases where both celestial bodies compared have the same longitude. It is restricted to the oldest diaries preserved so far. It probably went out of use because it was redundant: if no difference in longitude was mentioned one could conclude that there was none. - *sin* may be a mistake for the missing sign KUR "moonrise to sunrise".

13: One is inclined to regard *šer-tam* DIB as an equivalent of *ana* NIM DIB, but this is rendered uncertain by the occurrence of the latter expression in line 14 and elsewhere; in addition, *ana šerti* is expected.

5': The "elbow of Sagittarius" was identified as the cluster of stars around π Sagittarii by P.V.Neugebauer, *op.cit.* 50f.

13': in the broken part at the end of the line, a reference to the moon being close to the Normal Star α Tauri is expected.

15': The broken star name must have been α Leonis.

17': According to computation, Saturn has to be restored at the end of the line.

Calendar

| | |
|--|----------------|
| Nebukadnezar II year 36 XII ₂ 0 | -567 Mar 23/24 |
| year 37 I 0 = XII ₂ 29 | Apr 21/22 |
| II 0 = I 30 | May 21/22 |
| III 0 = II 29 | Jun 19/20 |
| X 0 = IX 30 | -566 Jan 13/14 |
| XI 0 = X 29 | Feb 11/12 |
| XII 0 = XI 30 | Mar 13/14 |
| year 38 I 0 = XII 29 | Apr 11/12 |