

Uygur calendar fragments

N° 88 (in the *T'u-lu-fom K'ao-ku chi*)

This fragment in Uygur is part of a manuscript-scroll which was acquired by Huang Wenpi during one of his archaeological expeditions in Sinkiang.¹ The dates of the fragment are fixed according to the Sogdian and the Chinese calendars. The first table relates to the Metal-Tiger year (39, Chin. *rén-yín*) and the second to the Metal-Rabbit year (40, Chin. *gui-mǎo*). This Rabbit year corresponds to eighth year of the Uygur ruler, Būgü Bilgä tängri ilig, who reigned around the end of the tenth century. The first day of Nausarđic of the metal rabbit year is a Sunday. These data are sufficient to conclude that the above calendar is about the years A.D. 1002 and 1003.²

- 1 [altınč ödtä ekki yüz] altı yegirmi qolu ärtmištä
[MYŠBW C CXŠ'PT] ay bir yangısı kičig
[W'T RWC TYR ZMNW altın]č suβ xutluy kui layzın
[künkä küntüz MYDNC'TY a]ltınč ödtä ° ° ZYMTYC
[ram ay bir ya]ngısı uluy W'T RWC N'XYD ZMNW üçünč
- 6 [suβ] qutluy kui yılan künkä ° tünlä NYMY'XŠPH
altınč ö-dtä ° ° 'XŠWMŠPYC ekkinti ay bir
yangısı kičig R'M RWC KYW'N ZMNW altınč suβ
xutluy zim it künkä küntüz MYDNC'TY yettinč
ödtä ° yüz tört älig xolu ärtmišta °
- 11 bešinč altın qutluy kui-i taβışyan yılqı lıyzır
bügü bilgä tängri ellig sanı ° säkkiz ° kün tängri
bun sanı ° toquz on taqı bir TSW ° ° törtünč °
WPNCY 'RTWXWŠT RWC ellänür ° ° ay tängri bun s(a)nı
toquz (öd ?) taħı üç PNCW ° ° SFT' yorımaħ bu yıl
- 16 WŠFN' RWC ol ° ° taħı yemä ay tängri-ning bun sanı
PNCW öntürmäk bu yıl saħtımız ° yetti otuz san
ol ° ° N'WSRD MYR ZMNW baštınxı suβ xutluy
ti uđ künkä ° ° N'WSRDYNC ü(č)ünč ay bir yangısı
kičig BΓ'Y RWC M'XW ZMNW ° üçünč suβ xutluy
- 21 zim luu künkä küntüz XWYRSNY ekkinti ö-dtä
ekki [säkkiz o]n x[o]lu ärtmištä ° ° XWRSYNYNC törtünč
ay bir yangısı ° uluy BΓ'Y RWC TYR ZMNW altınč
suβ xutluy zim it künkä ° tünlä ΓR'NXŠ'MY
[ekkinti] ö-dtä ekki säkkiz on xolu ärtmištä ° °
- 26 [NYSNYC] bešinč ay bir yangısı kičig ΓWŠ DŠCY
[RWC XWRMZ]T ZMNW ° üçünč ryač xutluy tsin taβışyan
[künkä küntüz XW]YRSYNY ekkinti ö-dtä ekki yüz altı
[ye]girmi q[o]lu [ärt]mištä ° ° PS'KYNC altınč ay bir
yangısı uluy ΓWŠ DŠCY RWC KYW'N³ ZMNW altınč
- 31 rı(a)č xutluy tsin taqıru künkä tünlä ΓR'NXŠ'MY
ekkinti ö-dtä ekki yüz altı yegirmi qolu ärtmištä

¹ . He published it in his report entitled *T'u-lu-fom K'ao-ku chi* 'Archaeological notes of Turfan' in 1954 (n° 88, 101-103, pl. 95-97). The text was transcribed and translated by James Hamilton, with commentary: "Calendriers manichéens ouïghours de 988, 989 et 1003", *Mélanges offerts à Louis Bazin*, Paris, 1992, 7-23. See also Yoshida Yutaka, "Sogudo-go zatsuroku II", *Oriente*, 31-32, 1988, 165-76.

² . Hamilton, 8.

³ . Hamilton : kww'n.

- ◦ ŠN'XNTYNC yettinč ay bir yangısı ◦ kičig ΓWŠ
RWC MYR ZMNW ◦ üçünč ɣač xutluγ qı-ı bars
künkä küntüz XWYRSYNY ekkinti ödtä ◦ M'ZYTTYC
36 säkkizinč ay bir yangısı ◦ uluγ XWŠ RWC WNX'N ZMNW
altınč ɣ(a)č xutluγ qı bečin künkä ◦ ◦ tünlä
ΓR'N 'XŠ'MY ekkinti ö-đtä ◦ ◦ BΓK'NC toqzunč
ay bir yangısı kičig TYŠ RWC TYR ZMNW üçünč
ot qutluγ ki uđ künkä küntüz XWRSYNY üçünč
41 ö-đtä ◦ yüz tört älig qolu ärtmištä
''P'NC onunč ay bir yangısı uluγ TYŠ RWC N'XY-D
ZMNW ◦ altınč ot xutluγ ki qoyn künkä tünlä
ΓR'NXŠ'MY üçünč ö-đtä yüz tört älig xolu
ärtmištä ◦ ◦ BWTC bir yegirminč ay bir yangısı
46 kičig M'XW RWC KYW'N ZMNW üçünč ot xutluγ
buu küskü künkä küntüz XWRSYNY üçünč ödtä
ekki yüz säkkiz toquz on qolu ärtmištä ◦ ◦ MYŠBWTC
CXŠ'PT ay bir yangısı uluγ M'XW RWC M'XW
ZMNW altınč ot xutluγ buu yont künkä ◦ tünlä
51 [ΓR'NXŠ'MY üçünč ödtä ekki yüz] säkkiz toquz on
[qolu ärtmištä ZYMTYC ram ay b]ir yangısı

‘... in the 6th hour, 216 ratu passed.

Məşβōyc: month Caxšapat, the first day of which, small, is on the day of Vāt (22nd day), a Wednesday, the day of the 6th küi, determined by the element Water and Pig, in the 6th hour of the day, at midday.

Žimdic: 1st (lunar) month, the first day of which, big, is on the day of Vāt, a Friday, the day of the 3rd küi, that of the Water-Serpent, in the 6th hour of the night, at midnight.

°Xšūmic: 2nd mont, the first day of which, small, is on the day Rām (21st day), a Saturday, the day of the 6th žim, that of the Water-Dog, in the 7th hour of the day, at midday, 144 ratu passed.

The calendar relates to the year of the 5th küi, a year of the Metal-Rabbit.

The number of the celestial king Bügü Bilgä is 8.

The basic number of the Sun God is 90 and a quarter.

On the fourth epagomenal (day), the day of Artuxušt, he reigns.

The basic number of the Moon God is 9 and three-fifths.

The march of the days passed in this year ends on the day of Vəšaynā (20th day).

Moreover, we calculated the increase in fifths of the basic number of the Moon God for this year: it is the number 27.

The New Year is a Sunday, the day of the 1st ti, that of the Water-Ox.

Nausarđic: 3rd month, the first day of which, small, is on the day of Bəγə (16th day), a Monday, the day of the 3rd zim, that of Water-Dragon, in the 2nd hour of the day, at sunrise, 72 ratu passed.

Xorežnic: 4th month, the first day of which, big, is on the day of Bəγə, a Wednesday, the day of the 6th zim, that of Water-Dog, in the 2nd hour of the night, at deep evening, 72 ratu passed.

Nisanic: 5th month, the first day of which, small, is on the day of Γōš dašci (15th day), a Thursday, the day of the 3rd tsin, that of Wood-Rabbit, in the second hour of the day, at sunrise, 216 ratu passed.

Pusākic: 6th month, the first day of which, big, is on the day of Γōš
 ḍašci, a Saturday, the day of the 6th tsin, that of Wood-Roster, in the
 second hour of the night, at deep evening, 216 ratu passed.

Šnāxandic: 7th month, the first day of which, small, is on the day of
 Γōš (14th day), a Sunday, the day of the 3rd q1, that of Wood-Tiger, in
 the 2nd hour of the day, at sunrise.

Məzēx(an)dic: 8th month, the first day of which, big, is on the day
 of Γōš, a Tuesday, in the 2nd hour of the 6th q1, that of Wood-Monkey,
 in the 2nd hour of the night, at deep evening.

Bayākānc: 9th month, the first day of which, small, is on the day of
 Tiš (13th day), a Wednesday, the day of the 3rd ki, that of the Fire-Ox,
 in the 3rd hour of the day, at sunrise, 144 ratu passed.

Āpānc: 10th month, the first day of which, big, is on the day of Tiš,
 a Friday, the day of the 6th ki, that of the Fire-Sheep, in the 3rd hour of
 the night, at deep evening, 144 ratu passed.

Bōγc: 11th month, the first day of which, small, is on the day of
 Māx (12th day), a Saturday, the day of the 3rd buu, that of the Fire-
 Rabbit, in the 3rd hour of the day, at sunrise, 288 ratu passed.

Məšβōγc: month Caxšāpat, the first day of which, big, is on the
 day of Māx, a Monday, the day of the 6th buu, that of the Fire-Horse,
 in the 3rd hour of the night, at deep evening, 288 ratu passed.’

We can reconstruct the calendar table of these years thus:

Sogd. m.	Lun. m.	length	Sogd. d.	w. d.	cycle	daytime	hour	ratu	lunation
Žimdic	1	big	3	Sat.	6	night	10	288	29d11h24m
°Xšūmic	2	small	3	Mon.	36	day	10	72	29d12h
Vepancak	2*	big	2	Tu.	5	night	10	72	29d18h48m
Nausarōdic	3	big	27	Th.	35	night	5	0	29d12h24m
Xorežnic	4	small	26	Fr.	4	day	5	144	29d12h
Nisanic	5	big	26	Sun.	34	night	5	144	29d11h24m
Pusākic	6	small	25	Mon.	3	day	5	288	29d12h
Šnāxandic	7 big	25	Wed.	33	night	5	288	29d12h24m	
Məzēxandic	8	small	24	Th.	2	day	6	72	29d12h
Bayākānc	9	big	24	Sat.	32	night	6	72	29d12h24m
Āpānc	10	small	23	Sun.	1	day	6	216	29d12h
Bōγc	11	big	23	Tu.	31	night	6	216	29d11h24m
Məšβōγc	12	small	22	Wed.	60	day	6	0	29d12h
Žimdic	1	big	22	Fr.	30	night	6	0	29d13h24m
°Xšūmic	2	small	21	Sat.	59	day	7	144	29d18h48m
Vepancak									
Nausarōdic	3	small	16	Mon.	29	day	2	72	29d12h
Xorežnic	4	big	16	Wed.	59	night	2	72	29d12h24m
Nisanic	5	small	15	Th.	28	day	2	216	29d12h
Pusākic	6	big	15	Sat.	58	night	2	216	29d11h24m
Šnāxandic	7 small	14	Sun.	27	day	2	0	29d12h	
Məzēxandic	8	big	14	Tu.	57	night	2	0	29d13h24m
Bayākānc	9	small	13	Wed.	26	day	3	144	29d12h
Āpānc	10	big	13	Fr.	56	night	3	144	29d12h24m
Bōγc	11	small	12	Sat.	25	day	3	288	29d12h
Məšβōγc	12	big	12	Mon.	55	night	3	288	29d11h24m
Žimdic	1	small	11	Tu.	24	day	3	72	29d12h
°Xšūmic	2	big	11	Th.	54	night	3	72	29d18h48m
Vepancak									
Nausarōdic	3	small	5	Mon.	23	day	10	0	29d12h24m
Xorežnic	4	big	5	Sun.	53	night	10	144	29d12h

Tiger year:

XI. Žimdic

The first day of Žimdic is 1002 January 15, Thursday, and its 3rd day is January 17, Saturday (M1. Chin. 62-39-01-03 jī-sì 6).

New Moon : January 16, 15:10 (Qočo). We see that the New Light in Qočo became visible two days after the Dark Moon. The Chinese Metal-Tiger year began on January 15, Thursday.

XII. °Xšūmic

The first day of °Xšūmic is 1002 February 14, Saturday, and its 3rd day is February 16, Monday (M2. Chin. 62-39-02-03 jī-hài 36).

New Moon: February 15, 09:48 (Qočo), Sunday.

Spring equinox: 1002, March 15, 16 :43

Epagomenae. The first additional day is 1002, March 16, Monday. The 2nd additional day is 1002, March 17, Tuesday (M2*. Chin. 62-39-2*-02 wù-chén 5).

New Moon: March 17, 03:53 (Qočo).

I. Nausarđic

The first day of Nausarđic is 1002, March 21, Saturday, and its 27th day is April 16, Thursday (M3. Chin. 62-39-03-03 wù-xū 35)

New Moon: April 15, 19:55.

II. Xorežnic

The first day of Xorežnic is 1002, Monday, April 20, and its 26th day is May 15, Friday (M4. Chin. 62-39-04-02 dīng-mǎo 4)

New Moon: May 15, 09:13.

III. Nisanic

The first day of Nisanic is 1002, May 20, Wednesday, and its 26th day is June 14, Sunday (M5. Chin. 62-39-05-03 dīng-yǒu 34).

New Moon: June 13, 20:04.

Summer solstice: 1002, June 17, 03:13.

IV. Pusākic

The first day of Pusākic is 1002, June 19, Friday, and its 25th day is July 13, Monday (M6. Chin. 62-39-06-02 bīng-yín 3).

New Moon: July 13, 05:18.

V. Šnāxandic

The first day of Šnāxandic is 1002, July 19, Sunday, and its 25th day is August 12, Wednesday (M7. Chin. 62-39-07-03 bīng-shēn 33)

New Moon: August 11, 13:49.

VI. Xazānānc

The first day of Məzəxandic is 1002, August 18, and its 24th day is September 10, Thursday (M8. Chin. 62-39-08-02 yǐ-chǒu 2)

New Moon: September 9, 22:24.

Autumn equinox: 1002, September 18, 06 :44

VII. Bayakānc

The first day of Bayakānc is 1002, September 17, Thursday, and its 24th day is October 10, Saturday (M9. Chin. 62-39-09-03 yǐ-wèi 32).

New Moon: October 9, 07:35.

VIII. Āpānc

The first day of Āpānc is 1002, October 17, Saturday, and its 23rd day is November 8, Sunday (M10. Chin. 62-39-10-03 jiǎ-zǐ 1).

New Moon: November 7, 17:51.

IX. Bōyic

The first day of Bōyc is 1002, November 16, Monday, and its 23rd day is December 8, Tuesday (M11. Chin. 62-39-11-03 jiǎ-wǔ 31)
New Moon: December 7, 5:41.

X. Məšβōyc

The first day of Məšβōyc is 1002, December 16, Wednesday, and its 22nd day is 1003, January 6, Wednesday (M12. Chin. 62-39-12-03 guǐ-hài 60).

New Moon: January 5, 19:27

Winter solstice: 1002, December 16, 11 :19.

The lunar year was a long year, with 13 months.

Rabbit year:

XI. Žimdic

The first day of Žimdic is 1003, January 15, and its 22nd day is 1003, February 5, Friday (M1. Chin. 62-40-01-03 guǐ-sì 30)

New Moon: January 5, 19:27.

The Chinese Metal-Rabbit year (guǐ-mǎo) began on February 3, Wednesday.

XII. °Xšūmic

The first day of °Xšūmic is 1003 February 14, Sunday, and its 21st day is March 6, Saturday (M2. Chin. 62-40-02-02 rén-xū 59)

New Moon: March 6, 03:54

Epagomenae. The first additional day is 1003, March 16, Tuesday, and the 4th additional day is March 19, Friday. The number of days from this day to the summer solstice (June 17) is 90.

Spring equinox: 1003, March 16, 00 :31

I. Nausarđic

The first day of Nausarđic is 1003, March 21, Sunday, and its 16th day is April 5, Monday (M3. Chin. 62-40-03-03 rén-chén 29).

New Moon: April 4, 20:43.

II. Xorežnic

The first day of Xorežnic is 1003, April 20, Tuesday, and its 16th day is May 5, Wednesday (M4. Chin. 62-40-04-03 rén-xū 59).

New Moon: May 4, 12:35.

III. Nisanic

The first day of Nisanic is 1003, May 20, Thursday, and its 15th day is June 3, Thursday (M5. Chin. 62-40-05-02 xīn-mǎo 28).

New Moon: June 2, 03:00.

Summer solstice: 1003, June 17, 09:01.

IV. Pusākic

The first day of Pusākic is 1003, June 19, Saturday, and its 15th day is July 3, Saturday (M6. Chin. 62-40-06-03 xīn-yōu 58).

New Moon: July 2, 15:54.

V. Šnāxandic

The first day of Šnāxandic is 1003, July 19, Monday, and its 14th day is August 1, Sunday (M7. Chin. 62-40-07-02 gēng-yín 27).

New Moon: August 1, 03:27.

VI. Xazānānc

The first day of Məzēxandic is 1003, August 18, and its 14th day is August 31, Tuesday (M8. Chin. 62-40-08-03 gēng-shēn 57)

New Moon: August 30, 13:54.

Autumn equinox: 1003, September 18, 12 :39.

VII. Bayakānc

The first day of Bayakānc is 1003, September 17, Friday, and its 13th day is September 29, Wednesday (M9. Chin. 62-40-09-02 jǐ-chōu 26).

New Moon: September 28, 23:42

VIII. Āpānc

The first day of Āpānc is 1003, October 17, Sunday, and its 13th day is October 29, Friday (M10. Chin. 62-40-10-03 jǐ-wèi 56)

New Moon: October 28, 09:25.

IX. Bōγic

The first day of Bōγic is 1003, November 16, Tuesday and its 12th day is November 27, Saturday (M11. Chin. 62-40-11-03 wù-zǐ 25).

New Moon: November 26, 19:40.

X. Məšβōγc

The first day of Məšβōγc is 1003, December 16, Thursday, and its 12th day is December 27, Monday (M12. Chin. 62-40-12-03 wù-wǔ 55).

New Moon: December 26, 06:52.

Winter solstice: 1003, December 16, 17:06.

The lunar year was a normal year, with 12 months.

Dragon year:

XI. Žimdic

The first day of Žimdic is 1004, January 15, and its 11th day is 1004, January 25, Tuesday (M1. Chin. 62-41-01-03 dīng-hài 24).

New Moon: 1004, January 24, 19:11.

The Chinese Fire-Dragon year (jiǎ-chén) began on January 23, Sunday.

XII. ʰXšūmic

The first day of ʰXšūmic is 1004 February 14, Monday, and its 11th day is February 24, Thursday (M2. Chin. 62-41-02-03 dīng-sì 54).

New Moon: February 23, 08:27.

Spring equinox: 1004, March 15, 02:20

Epagomenae. The 1st additional day is 1004, March 15, Wednesday.

I. Nausarōic

The first day of Nausarōic is 1004, March 20, Monday, and its 5th day is March 24, Friday (M3. Chin. 62-41-03-02 bǐng-xū 23)

New Moon: March 23, 22:28

II. Xorežnic

The first day of Xorežnic is 1004, April 19, Wednesday, and its 5th day is April 23, Sunday (M4. Chin. 62-41-04-03 bǐng-chén 53).

New Moon: April 22, 13:06.

III. Nisanic

The first day of Nisanic is 1004, May 19, Friday, and its 4th day is May 22, Monday (M5. Chin. 62-41-05-03 yǐ-yōu 22).

New Moon: May 22, 04:12

Summer solstice: 1004, June 16, 14:55.

383d 6h 48m

354d 8h 48m

(Raham Asha)