BABYLONIAN CHRONOLOGY

626 B.C.–A.D. 75

BY

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III

TABLES FOR THE RESTATEMENT OF BABYLONIAN DATES IN TERMS OF THE JULIAN CALENDAR

ALL the dates in the following tables have been calculated by the new-moon tables of Karl Schoch in S. Langdon and J. K. Fotheringham, *The Venus Tablets of Ammizaduga* (London, 1928). Special care has been exercised in checking every sequence of three or more thirty-day months and of three twenty-nine-day months.[1]

Accuracy of the tables. As all dates are calculated their accuracy depends upon the accuracy of Schoch's tables. Upon these O. Neugebauer has recently cast some doubt as the result of his own investigations into the visibility of Mercury and his discovery that Schoch's *arcus visionis* was in part derived from calculated rather than observed Babylonian data.[2] How this error might affect Schoch's computations for the number of hours which must elapse after conjunction for the crescent to be visible has not yet been determined. Until this has been done we cannot be fully confident of our results in critical cases, that is when the number of hours from conjunction to 6 p.m. of the probable day of visibility is nearly the same as the number of hours required for visibility according to Schoch's table. Accordingly it is possible that a certain number of dates in our tables may be wrong by one day, but as they are purely for historical purposes, this uncertainty is unimportant. It should be noted that there is a slight additional element of uncertainty for biblical dates given in the Babylonian calendar, since the new moon was visible at Jerusalem thirty-seven minutes before it was visible at Babylon and therefore upon occasion the new month could begin a day earlier at Jerusalem. Our tables are accurate as stated for sites in Babylonia between 31·5° and 33·5° in latitude and tend to grow slightly less exact as these limits are exceeded (cf. Schoch, *op. cit.* p. 94). Ancient errors of observation are, of course, also possible. The degrees of uncertainty of the unattested intercalary months (shown in *italics*) may be ascertained by checking Plate I.

[1] Schoch (*op. cit.* p. 98) is wrong when he states that three successive months of twenty-nine days are impossible and infers that the same is true of more than three thirty-day months. Cf. Johann Schaumberger in *SSB*, Ergänzungsheft 3 (1935) p. 255.

[2] O. Neugebauer, "The Babylonian Method for the Computation of the Last Visibilities of Mercury," *Proceedings of the American Philosophical Society* 95 (1951) pp. 110–16.

Use of the tables.—The dates as given are civil days, from midnight to midnight, although in actual practice the Babylonian day began in each case with the preceding sunset. The dates given are those of the first day of each month. Leap years are indicated by italicizing the last figure of the year when it is first given, e.g. 62*5*. The accession year of every king is shown as the last year of his predecessor. In the interest of economy of space, months are designated here not by Roman numerals, as used elsewhere in this work, but by Arabic numerals; thus 4/5 is April 5.

The arrangement in the tables is that of the Babylonian calendar, which began in the spring. The Macedonian calendar, however, began in the fall, six months earlier. Hence it must be borne in mind that each year of the Macedonian Seleucid era overlapped two Babylonian years, the *second* of which bore the same number as the Macedonian year.

The month names of the calendars used at various times in this period up to A.D. 75/76 are to be correlated with the Babylonian names as follows.[3]

BABYLONIAN	HEBREW	MACEDONIAN	OLD PERSIAN	ACHAEMENID ELAMITE
Nisanu	Nisan	Artemisios	Adukanish	Hadukannash
Aiaru	Iyyar	Daisios	Thuravahara	Turmar
Simanu	Sivan	Panemos	Thaigarchish	Sakurrisish
Duzu	Tammuz	Loös	Garmapada	Karmabadash
Abu	Ab	Gorpiaios		Turnabasish
Ululu	Elul	Hyperberetaios		Qarbashiyash
Tashritu	Tishri	Dios	Bagayadish	Bagiyatish
Arahsamnu	Heshvan	Apellaios		Marqashanash
Kislimu	Kislev	Audynaios	Açiyadiya	Hashiyatish
Tebetu	Tebeth	Peritios	Anamaka	Hanamakash
Shabatu	Shebat	Dystros		Samimash
Addaru	Adar	Xanthikos	Viyakhna	Mikannash

In the tables the Babylonian month names, abbreviated to their first three letters, are used.

[3] For the Old Persian and Achaemenid Elamite correlations cf. Poebel in *AJSL* LV (1938) 139. In A.D. 46/47 it is probable that the correlation between the Babylonian and the Macedonian calendars was altered by the insertion of an additional month into the cycle of the Greek months. On this see R. H. McDowell, *Coins from Seleucia on the Tigris* (Ann Arbor, 1935) pp. 147–53 and A. T. Olmstead, "The chronology of Jesus' life," *Anglican Theological Review* XXIV (1942) 3 f.

NABOPOLASSAR

Year b.c.	Nis	Aia	Sim	Duz	Abu	Ulu	U II	Tas	Ara	Kis		Teb		Sha	Add	A II
Ac 626	4/5	5/5	6/4	7/3	8/2	8/31		9/29	10/29	11/27		12/27	625	1/25	2/24	
1 625	3/24	4/23	5/23	6/21	7/21	8/19		9/18	10/18	11/16		12/16	624	1/14	2/12	
2 624	3/14	4/12	5/12	6/10	7/10	8/9		9/7	10/7	11/6		12/5	623	1/4	2/2	3/3
3 623	4/2	5/1	5/31	6/29	7/29	8/27		9/26	10/26	11/25		12/24	622	1/23	2/21	
4 622	3/22	4/21	5/20	6/18	7/18	8/16		9/15	10/15	11/14		12/13	621	1/12	2/11	
5 621	3/11	4/9	5/9	6/7	7/6	8/5	9/3	10/3	11/2	12/2	620	1/1			1/30	3/1
6 620	3/30	4/28	5/28	6/26	7/25	8/24		9/22	10/22	11/21		12/21	619	1/19	2/18	
7 619	3/19	4/18	5/17	6/16	7/15	8/13		9/12	10/12	11/10		12/10	618	1/8	2/7	3/8
8 618	4/7	5/7	6/5	7/5	8/3	9/1		10/1	10/31	11/29		12/28	617	1/27	2/25	
9 617	3/26	4/25	5/24	6/23	7/23	8/21		9/20	10/19	11/18		12/17	616	1/15	2/14	
10 616	3/15	4/14	5/13	6/12	7/12	8/11	9/9	10/9	11/7	12/7	615	1/5			2/3	3/5
11 615	4/3	5/3	6/1	7/1	7/31	8/30		9/28	10/28	11/26		12/26	614	1/24	2/22	
12 614	3/24	4/22	5/21	6/20	7/20	8/19		9/18	10/17	11/16		12/15	613	1/13	2/12	3/12
13 613	4/11	5/10	6/8	7/8	8/7	9/5		10/5	11/4	12/3	612	1/2			1/31	3/2
14 612	3/31	4/30	5/29	6/27	7/27	8/26		9/24	10/24	11/22		12/22	611	1/21	2/19	
15 611	3/21	4/19	5/19	6/17	7/16	8/15	9/13	10/13	11/11	12/11	610	1/10			2/9	3/10
16 610	4/9	5/8	6/7	7/6	8/5	9/3		10/2	11/1	11/30		12/30	609	1/29	2/27	
17 609	3/28	4/27	5/26	6/25	7/24	8/23		9/21	10/20	11/19		12/18	608	1/17	2/15	
18 608	3/17	4/16	5/15	6/14	7/14	8/12		9/10	10/10	11/8		12/8	607	1/6	2/5	
19 607	3/6	4/5	5/4	6/3	7/3	8/1	8/31	9/29	10/29	11/27		12/27	606	1/25	2/24	
20 606	3/25	4/24	5/23	6/22	7/21	8/20		9/19	10/18	11/17		12/17	605	1/15	2/13	3/14
21 605	4/12	5/11	6/10	7/9	8/8	9/7		10/7	11/5	12/5	604	1/4			2/2	3/3

NEBUCHADNEZZAR II

Year b.c.	Nis	Aia	Sim	Duz	Abu	Ulu	U II	Tas	Ara	Kis		Teb		Sha	Add	A II
1 604	4/2	5/1	5/30	6/29	7/28	8/27		9/26	10/25	11/24		12/24	603	1/23	2/21	
2 603	3/22	4/21	5/20	6/18	7/17	8/16	9/15	10/15	11/13	12/13	602	1/12			2/10	3/12
3 602	4/10	5/10	6/8	7/7	8/6	9/4		10/4	11/3	12/2	601	1/1			1/30	2/29
4 601	3/30	4/28	5/28	6/26	7/25	8/24		9/22	10/22	11/21		12/20	600	1/19	2/17	
5 600	3/19	4/17	5/17	6/15	7/15	8/13	9/12	10/10	11/9	12/9	599	1/8			2/6	3/7
6 599	4/6	5/6	6/5	7/4	8/3	9/2		10/1	10/31	11/29		12/28	598	1/27	2/25	
7 598	3/27	4/25	5/25	6/23	7/23	8/22	9/21	10/20	11/19	12/18	597	1/16			2/15	3/15
8 597	4/13	5/13	6/11	7/11	8/10	9/9		10/9	11/7	12/6	596	1/5			2/3	3/5
9 596	4/3	5/2	6/1	6/30	7/30	8/29	9/28	10/28	11/26	12/25	595	1/24			2/22	3/24
10 595	4/22	5/21	6/20	7/19	8/18	9/17		10/16	11/15	12/15	594	1/13			2/12	3/13

	YEAR B.C.	NIS	AJA	SIM	DUZ	ABU	ULU	U II	TAS	ARA	KIS	TEB	SHA	ADD	A II
11	594	4/12	5/11	6/9	7/9	8/7	9/6		10/6	11/4	12/4	593 1/2	2/1	3/2	3/31
12	593	4/30	5/29	6/27	7/27	8/25	9/24		10/23	11/22	12/21	592 1/20	2/19	3/21	
13	592	4/19	5/19	6/17	7/17	8/15	9/13		10/13	11/11	12/10	591 1/9	2/8	3/10	
14	591	4/8	5/8	6/7	7/6	8/5	9/3		10/2	11/1	11/30	12/29	590 1/28	2/27	3/28
15	590	4/27	5/27	6/25	7/25	8/23	9/22		10/21	11/20	12/19	589 1/18	2/16	3/16	
16	589	4/15	5/15	6/13	7/13	8/11	9/10		10/10	11/8	12/8	588 1/6	2/5	3/6	
17	588	4/4	5/4	6/2	7/2	7/31	8/30		9/29	10/29	11/27	12/27	587 1/25	2/24	3/25
18	587	4/23	5/23	6/21	7/21	8/19	9/18		10/18	11/17	12/16	586 1/15	2/13	3/15	
19	586	4/13	5/12	6/11	7/10	8/8	9/7		10/7	11/6	12/6	585 1/4	2/3	3/3	
20	585	4/2	5/1	5/30	6/29	7/28	8/26		9/25	10/25	11/24	12/23	584 1/22	2/21	
21	584	3/22	4/21	5/20	6/18	7/18	8/16	9/14	10/14	11/13	12/13	583 1/11	2/10	3/11	
22	583	4/10	5/9	6/8	7/7	8/6	9/4		10/4	11/2	12/2	12/31	582 1/30	2/28	
23	582	3/30	4/29	5/28	6/27	7/26	8/25		9/23	10/23	11/21	12/21	581 1/19	2/18	3/18
24	581	4/17	5/16	6/15	7/15	8/13	9/12		10/12	11/10	12/9	580 1/8	2/6	3/7	
25	580	4/6	5/5	6/4	7/4	8/3	9/1		10/1	10/31	11/29	12/28	579 1/27	2/25	
26	579	3/26	4/25	5/24	6/23	7/23	8/22		9/20	10/20	11/19	12/18	578 1/16	2/15	3/16
27	578	4/14	5/14	6/12	7/12	8/10	9/9		10/9	11/8	12/7	577 1/6	2/4	3/5	
28	577	4/3	5/2	6/1	6/30	7/30	8/28		9/27	10/27	11/25	12/25	576 1/24	2/22	3/24
29	576	4/22	5/21	6/20	7/19	8/18	9/16		10/16	11/14	12/14	575 1/13	2/11	3/13	
30	575	4/12	5/11	6/9	7/9	8/7	9/6		10/5	11/4	12/3	574 1/2	1/31	3/2	
31	574	4/1	4/30	5/30	6/28	7/28	8/26	9/25	10/24	11/22	12/22	573 1/20	2/19	3/20	
32	573	4/19	5/18	6/17	7/16	8/15	9/13		10/13	11/11	12/10	572 1/9	2/7	3/9	
33	572	4/8	5/7	6/6	7/6	8/4	9/3		10/2	11/1	11/30	12/29	571 1/28	2/26	3/28
34	571	4/26	5/26	6/25	7/24	8/23	9/22		10/21	11/20	12/19	570 1/18	2/16	3/17	
35	570	4/16	5/15	6/14	7/13	8/12	9/10		10/10	11/9	12/9	569 1/7	2/6	3/6	
36	569	4/4	5/4	6/2	7/1	7/31	8/30		9/28	10/28	11/27	12/27	568 1/25	2/24	3/25
37	568	4/23	5/23	6/21	7/20	8/19	9/17		10/17	11/16	12/16	567 1/15	2/13	3/15	
38	567	4/13	5/12	6/11	7/10	8/8	9/7		10/6	11/5	12/5	566 1/4	2/2	3/4	
39	566	4/2	5/2	5/31	6/29	7/29	8/27		9/26	10/25	11/24	12/24	565 1/22	2/21	
40	565	3/22	4/20	5/20	6/18	7/17	8/16		9/14	10/14	11/13	12/12	564 1/11	2/9	
41	564	3/11	4/9	5/9	6/7	7/7	8/5	9/4	10/4	11/2	12/2	12/31	563 1/29	2/28	
42	563	3/29	4/28	5/28	6/26	7/26	8/25		9/23	10/23	11/21	12/21	562 1/19	2/17	3/19
43	562	4/17	5/17	6/15	7/15	8/14	9/13		10/13	11/11	12/10	561 1/9	2/7	3/7	

AMEL-MARDUK

	YEAR B.C.	NIS	AJA	SIM	DUZ	ABU	ULU	U II	TAS	ARA	KIS	TEB	SHA	ADD	A II
1	561	4/6	5/5	6/3	7/3	8/2	9/1		10/1	10/30	11/29	12/28	560 1/27	2/25	
2	560	3/26	4/24	5/24	6/22	7/22	8/21		9/20	10/20	11/18	12/18	559 1/16	2/15	3/16