A list of solutions for the zodiacs from Athribis under less strict conditions

In order to verify the stability of the exhaustive astronomical solution as found for the zodiacs from Athribis in Chron3, Chapter 18, in relation to possible variations in their decipherment, we have conducted a series of additional astronomical calculations under less strict interpretation conditions. Namely, we allowed for random order of planets inside planetary groups located in the solar vicinity. Apart from that, we have made the stipulations for the disposition of such planets across constellations a lot less rigid. However, we found no new exhaustive solutions for the Athribis zodiacs.

This means that the complete solution as discovered for the zodiacs from Athribis by the authors (15-16 May 1230 A.D. for the Upper Zodiac, and 8-11 February 1268 A.D. for the Lower) is resilient to the influence of significant variations in the decipherment of the zodiacs, which makes the solution a great deal more reliable.

Below we provide detailed lists of astronomical datings discovered for the Athribis zodiacs under substantially more lax interpretation conditions – namely, the following:

In case of the Upper Zodiac, we shall look for each and every solution with random order of planets inside the compact group found underneath Taurus, disregarding the conditions of their visibility from the Earth. This group consists of the Sun drawn as a circle, Mercury as a two-faced man with a rod, and another planet drawn as a bird. We ascribed the number 4 to the last planet in Chron3, Chapter 18:7.1. It is identified as different planets in different interpretations – Jupiter, Saturn or Mars, qv in Chron3, Chapter 18:1.1.

In the Lower Zodiac of Athribis we also find a compact group of planetary figures that includes the Sun. There are four of them this time, forming a line under three constellations – Capricorn, Aquarius and Sagittarius. Bear in mind that in our calculations we only allowed for random order of invisible planets, qv in Chron3, Chapter 18. The Sun would naturally be considered as such, seeing as how we're referring to nocturnal celestial observations when the Sun is below the horizon.

This time we shall be more inclusive and consider the solutions with random planetary order inside the group. Moreover, we shall allow for the possibility that the symbols grouped closely around the solar circle refer to members of a single near-solar group. That is to say, individual planets from said group don't necessarily have to be located in the zodiacal constellations drawn above them. In other words, the near-solar planets shall only be linked to constellations by proxy of the Sun, the assumption being that

the author of the Athribis zodiacs had only made an effort to provide accurate ecliptic coordinates in case of the Sun, simply drawing the figures of the three other planets nearby, paying no attention to the constellations above them.

It has to be noted that this approach doesn't change anything in case of the Upper Zodiac, since we find all the near-solar planets under one and the same constellation of Taurus. However, the conditions for decipherment will become a lot less strict in case of the Lower Zodiac, since each of the three near-solar planets can wind up in any point of three constellations -Capricorn, Aquarius and Pisces, whose signs we find above the entire group of near-solar planets.

Another explanation for this laissez-faire approach to the interpretation of the Lower Zodiac from Athribis (far-fetched to a certain extent) is assumed insufficiency of space under the solar circle for the purpose of placing all three planetary figures there; this might be the reason why the planets had to be drawn on the sides of the Sun. This could place them in other constellations.

The corresponding input data files can be found in Annex 4 (see data codes AVA, AVB, AVC, AVD, AVE and AVF for the Upper Zodiac of Athribis, and data codes ANO, ANP, ANO, ANR, ANS and ANT for the Lower. As before, the time interval chosen for calculations spans the period between 500 B.C. and the present. The tables below contain full datings of all the solutions, also specifying planetary order in every case. Asterisks mark concurrence between the planetary order specified in the zodiac and the one suggested by the solution. Planets in parentheses were invisible because of their close propinquity with the Sun.

The system used for counting the years before Christ is astronomical and not historical. For instance, the year -244 refers to 245 B.C.

All the datings, the post-1582 ones included, are given according to the Julian calendar (or the "old style"). The reason is that accounting for the calendar leap in 1582 shall only introduce unnecessary complications into the computations. The readers can easily convert Julian dates into Gregorian ones, should they so desire. Both styles coincide in cases of the pre-1582 dates.

The abbreviation "Avg. dev." refers to the average deviation of the planets from their respective "best points" in arc degrees. See CHRON3, Chapter 16:11 for more on "best points". In case of the Lower Zodiac, the average deviation was calculated in relation to individual best points, including those for planets from the group found under Capricorn, Aquarius and Pisces. We chose the following best points: 9.5 for planet #3, 10.0 for the Sun, 10.5 for Venus and 11.0 for Mercury.

Interpretation A₁

The Upper Zodiac	The Lower Zodiac
of Athribis	of Athribis
Data code: AVA	Data code: ANO

Year -244, 21-23 May Avg. dev. = 14Mars Sun Mercury*

No solutions

Year 76, 24 April. Avg. dev. = 17(Mercury Sun) Mars

Year 373, 10-11 May Avg. dev. = 8Mercury (Mars Sun)

Year 990, 27-28 May Avg. dev. = 7Mercury (Sun Mars)

Year 1227, 20 April Avg. dev. = 17Sun Mercury Mars

Year 1227, 18 May Avg. dev. = 13Mercury Sun Mars

Year 1345, 3 June Avg. dev. = 13Mercury Sun Mars

Year 1844, 8 May Avg. dev. = 8Sun Mercury Mars Year 1962, 21-22 May Avg. dev. = 13 Mars Sun Mercury *

Thus, identification A1 doesn't yield a single pair of datings for the Athribis zodiacs, even under less strict interpretation conditions.

Interpretation A₂

of Athribis	of Athribis
Data code: AVB	Data code: ANP
	Year -406, 5-7 February

Avg. dev. = 13
Mars Venus Mercury Sun

Year 211, 28-29 January Avg. dev. = 11 Venus Mars Sun Mercury

Year 271, 26 January Avg. dev. = 15 Mars Sun Mercury Venus

Year 408, 13 May Avg. dev = 19 Saturn Sun Mercury* Year 448, 18-20 January Avg. dev = 10 (Mars Venus Sun) Mercury

Year 448, 14-16 February Avg. dev. = 13 Mars (Mercury Sun Venus)

Year 1065, 3-4 February Avg. dev. = 9 Venus (Sun Mars) Mercury

Year 1125, 31 Jan – 1 Feb Avg. dev. = 8 Mars Sun Venus Mercury

Year 1302, 25-26 January Avg. dev. = 13 (Sun Mercury Mars) Venus Interpretation A2 yields no new solutions under less rigid conditions. The one we see here (408 and 448) already came up and was studied in Chron3, Chapter 18. As we recollect, it was rejected due to poor correspondence between the planetary positions and the Upper Zodiac as well as incomplete correlation to the secondary horoscope of summer solstice in the Lower Zodiac.

Interpretation A₃

The Upper Zodiac	The Lower Zodiac
of Athribis	of Athribis
Data code: AVC	Data code: ANQ

Year -292, 5-8 February Avg. dev. = 10 Jupiter Mercury Sun Venus

Year -447, 16-17 May Avg. dev = 14 Mars Sun Mercury*

Year 170, 5-6 May Avg. dev = 7 Mercury Sun Mars

> Year 1002, 12-14 January Avg. dev. = 18 (Venus Sun) Mercury Jupiter

Year 1002, 9-10 February Avg. dev. = 19 Venus Mercury (Sun Jupiter)

Year 1239, 1-2 February Avg. dev. = 18 Venus Mercury (Sun Jupiter)

Year 1938, 18 May Avg. dev = 13 Mercury Sun Mars

As we see from the table, there isn't a single pair of reasonably close dates for the zodiacs from Athribis. The difference between the dates from the Upper and the Lower Zodiac exceeds 150 years at any rate.

Interpretation A4

The Lower Zodiac The Upper Zodiac of Athribis of Athribis Data code: ANR Data code: AVD

Year -328, 10-11 May Avg. dev = 19Saturn Sun Mercury*

> Year 5, 24-26 January Avg. dev. = 10Venus Mercury (Jupiter Sun)

> Year 242, 15-16 January Avg. dev. = 12Mercury (Jupiter Sun) Venus

> Year 242, 11-12 February Avg. dev. = 13Jupiter (Sun Mercury) Venus

Year 1262, 20-23 May Avg. dev = 6Saturn Sun Mercury*

> Year 1773, 5-6 February Avg. dev. = 17Venus Mercury Sun Jupiter

As we can see, identification A4 doesn't give us a single solution for the Athribis zodiac. The difference between the closest datings of both zodiacs is 300 years at least, which is obvious from the table.

Interpretation A5

The Upper Zodiac The Lower Zodiac of Athribis of Athribis Data code: AVE Data code: ANS

> Year -440, 24-25 January Avg. dev. = 13Mars Venus Sun Mercury

Year 177, 13-15 January

Avg. dev. = 14Mars (Mercury Sun) Venus

Year 177, 10-11 February Avg. dev. = 10Mars (Venus Sun) Mercury

Year 237, 7-8 February Avg. dev. = 13Mars Sun Venus Mercury*

Year 414, 1-3 February Avg. dev. = 11Venus Mars Sun Mercury

Year 1091, 18-20 January Avg. dev. = 16Mars (Mercury Sun) Venus

Year 1091, 14-16 February Avg. dev. = 16Mars Sun Mercury Venus

Year 1230, 15-16 May Avg. dev = 7Sun Jupiter Mercury*

> Year 1268, 9-10 February Avg. dev. = 8Mars (Venus Sun Mercury)

Year 1328, 6-8 February Avg. dev. = 12Mars Sun Venus Mercury

The table can give us two new versions for the Lower Zodiac's dating, while that of the Upper Zodiac shall remain the same:

- 1) 1230 for the Upper Zodiac and 1091 for the Lower;
- 2) 1230 for the Upper Zodiac and 1328 for the Lower.

Both these solutions are but modifications of the exhaustive solution that we came up with for the zodiacs of Athribis. On the other hand, both of them blatantly violate the order of clearly visible planets in the Lower Zodiac, and therefore cannot be regarded as valid solutions of the Athribis zodiacs.

Interpretation A6

The Upper Zodiac of Athribis Data code: AVF

The Lower Zodiac of Athribis Data code: ANT

Year -452, 10-11 January Avg. dev. = 10(Saturn Sun Venus) Mercury*

Year -452, 5-7 February Avg. dev. = 12Saturn Mercury (Sun Venus)

Year 79, 21-22 May Avg. dev = 15Jupiter Sun Mercury*

> Year 224 25-27 December Avg. dev. = 16(Sun Mercury) Saturn Venus

Year 225, 21-23 January Avg. dev. = 8(Saturn Sun Venus) Mercury*

Year 256, 12 May Avg. dev. = 19Jupiter Sun Mercury*

Year 459, 18 May Year 462, 7-10 February Avg. dev = 12Avg. dev = 14(Mercury Sun Jupiter) Venus Mercury Saturn Sun

Year 696, 9-10 May Year 462, 4-6 January Avg. dev = 6Avg. dev = 17Mercury (Sun Jupiter) (Venus Sun) Mercury Saturn

Year 699, 31 Jan – 2 Feb Avg. dev. = 10Mercury (Sun Venus) Saturn

> Year 842, 11 February Avg. dev. = 19Saturn (Sun Mercury) Venus

Year 1313, 26-29 May Avg. dev. = 10Mercury (Sun Jupiter)

Year 1847, 2-3 June Avg. dev. = 15(Sun Jupiter) Mercury

Apart from the pair of dates we already considered and rejected in Chron3, Chapter 18:1.3 (256 and 225), we see two other pairs of close datings:

1) 459 for the Upper Zodiac and 462 for the Lower;

2) 696 for the Upper Zodiac and 699 for the Lower.

However, both of them manifestly fail to correspond with the order of visible planets specified in the Lower Zodiac. Moreover, both dates are mediaeval.

Thus, there are no solutions for the zodiacs from Athribis to be found anywhere near the beginning of the new era, which is the epoch that the Scaligerite researchers date them to, their trust in consensual ancient Egyptian chronology infallible ([1340:2]). Apart from that, we discovered that the abovementioned variations in the decipherment of the Athribis zodiacs don't give us a single exhaustive solution whose precision would approximate the one that we discovered.