The "solution" of this problem which is usually suggested by chronologists of the 16–18th centuries (we took it from the book of R. R. Newton [321]) is as follows:

1) 272 B.C. (-271), October 12. Venus "touched" the star η-Virgo, but the distance between Venus and the star did not exceed 15' (!).

2) 272 B.C., January 18 (or 16). Mars "touched" the star β-Scorpio. But actually the distance between Mars and the star was about 50' on January 18, and about 15' on January 16 (!).

3) 241 B.C., September 4. Jupiter "covered" the star δ-Cancer. But the calculation shows that the distance between Jupiter and the star at this moment was more than 25'.

4) 229 B.C., March 1. Saturn was at a distance of "2 units" (digits) from the star γ-Virgo. But (as we have discussed above) the authenticity of this observation depends of the meaning of the term "digit".

It is quite clear that this cannot be considered as a solution of the problem. We must state that the chronologists (who studied the Almagest) did not satisfy the conditions of Ptolemy. Besides, they based their "solution" not on the correspondence between the data given by Ptolemy and modern calculations, and not even on the time distances between successive observations given by Ptolemy, but on the doubtful interpretation of the names of the months which were given by Ptolemy. They also based their "solution" on astronomical characteristics (such as longitude of the sun, the time of the observation, the longitude of the planet, etc.) *calculated by Ptolemy* with the help of his approximate theory (he wrote that he *calculated* these characteristics). Consequently, all these latest calculations of Ptolemy were added by him to the ancient information about these occultations. Of course, such calculations cannot be used for independent datings of ancient observations. Besides, as we have seen from our analysis, the chronologists have totally ignored the real ancient data which were *quoted* by Ptolemy and which he did not calculate. These data are: the year of the occultation and the fact of the occultation itself.

Let us note that the first (medieval) solution ideally agrees with the independent dating of the star catalogue of the Almagest [312–314]. Let us recall that this dating of the star catalogue was obtained on the basis of a very detailed and consistent statistical analysis of the whole star catalogue. If we consider the Almagest as the entire scientific text (as historians do), we must consider only the first (medieval) solution as the real one. But it would be dishonest to hide the second (ancient) solution, which is at a distance of about 1200 years from the first one and whose existence can lead to further hypothethes. Note that this solution does not coincide with the traditional one. Its appearance can be explained by different reasons, e.g., by a periodicity in the effect of the occultations of stars by planets. Namely, the plane configuration of the earth and the planets changes with time in accordance with an approximately periodic law. This configuration determines such astronomical events as occultations of the stars by planets (which are visible from the earth). Thus, it is quite natural that we have found two solutions to our problem (Fig. 125).