

DIAGRAMATIC APPROACHES TO ECLIPSES IN THE 13TH-15TH LATIN SOURCES

MATTHIEU HUSSON AND CLÉMENT CARTIER

We can identify several types of technical diagrams produced in 13th-15th Latin sources pertaining to modes of eclipse reckonings. Some diagrams represent the basic conditions under which eclipses occur. They are found for instance in the manuscript traditions of works like Sacrobosco's *De Sphera*. Others are directly related to the use of astronomical tables and procedures meant to compute the parameters of an eclipse. They derive in part from the tradition of the *Almagest*. But they also circulated in different rewriting of this fundamental text produced by medieval astronomers. A third type of diagrams, also prescribed in Ptolemy's *Almagest* and usually included in eclipse canons, represent the different phases of an eclipse once some of its parameters have already been computed. They also allow us to read other parameters, such as the "inclinaison" of the eclipse. Finally, a fourth type of diagrams concerns instruments used for eclipse computations. This tradition is likely more original to Latin sources. It begins in the late 13th century and is linked to that of planetary equatoria and astrolabes. In this paper, we wish to study and contextualize the emergence of this later types of graphical production related to eclipses as a first step to understand their uses in astronomical practices. We ask questions about its (genetic?) relations to the other types of eclipse diagrams and to other instruments. We also ask questions related to the drawing on a page of instruments which might have existed outside of the book.