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## 3.5 Development of Coordinate Systems SUSANNE M. HOFFMANN

Humboldt Universität Berlin Exzellenzcluster Topoi Hannoversche Str. 6, 10115 Berlin

akademeia@exopla.net



Part of the Almagest celestial map in ecliptical coordinates (©Susanne M. Hoffmann, 1015)

Our modern coordinate systems root in ancient astronomy. The first coordinate system preserved is the data in ecliptical coordinates in the Almagest Star Catalogue (150 CE) featuring longitude and latitude for each star. In any earlier texts in Greek and Babylonian mathematical astronomy we find different positioning systems for stars: some of them use the local horizon as frame of reference, some use the shapes of constellations in a broad variaty of culturally different constellation outlines. At least, after analyzing many texts from ancient papyri and clay tablets we can tell a story of development from the early and raw Babylonian equatorial system in MUL.APIN to the detailed ecliptical system in the Almagest.