

## ORIENTATION OF CHURCHES IN JUSTINIAN PRIMA

Christian churches are most often oriented approximately in the east-west direction. Those whose orientation precisely coincides with this direction are very rare. There has long been a debate about whether the axial direction of a particular church is determined by some astronomical event, which would justify a deviation from the geographical east. The reasons for the orientation of a church towards some astronomically significant direction cannot be found in church teachings. The only case when the church fathers are interested in astronomical events is the determination of Easter, because this holiday is determined in the calendar based on the day of the first full moon after the vernal equinox. Church leaders are also interested in the calendar issue: the Roman Catholic Church uses the Gregorian calendar, and the Orthodox Church uses the Julian or neo-Julian calendar, because everyone already knows that the old Julian calendar lags behind the natural solar calendar. In this paper, we conducted an experiment. We first examined the orientation of a significant (archiepiscopal) church, built by the famous Byzantine ruler (Justinian) in the sixth century AD. We assumed that the powerful ruler had access to top protomasters, who knew all the secrets of their craft and were capable of complex tasks, including leaving a permanent record of the holiday to which it was dedicated in the foundations of the church. We then examined four more churches in the same early medieval settlement in order to verify our conclusions.

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