CubeSat Mission Design for Vision Alignment System Mission

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Abstract

Virtual Telescope is a next generation telescope that consist of two satellites in formation flying in space. These two satellites align with the target and hold their alignment. In this study, mission concept and mission requirement are analyzed for CANYVAL-X(CubeSat Astronomy by NASA and Yonsei using Virtual Telescope ALignment-eXperimet) that demonstrate Vision Alignment System which is a core technology for Virtual Telescope in space environment. The subsystems of the two cubesats are also designed. The results show that each CubeSat design satisfied mission requirements.