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Current status of development of solar coronagraph system

Jihun Kim¹, Seonghwan Choi¹, Ji-hye Baek¹, Jongyeob Park¹, Su-Chan Bong¹, Bi-Ho Jang¹, Heesu Yang², Young-Soo Kim¹ and Kyungsuk Cho¹¹Korea Astronomy & Space Science Institute, South Korea²Seoul National University, South Korea

Korea Astronomy and Space Science Institute (KASI) have been developing the solar coronagraph system which will be installed on the International Space Station (ISS) in 2021 (figure1). We have adapted and studied the compact coronagraph system proposed by NASA. We have developed a prototype of the compact coronagraph in which we can observe the solar coronagraph without the occulters. It was used for the Total Solar Eclipse (TSE) observation in 2016. Even we could not obtain the satisfactory result in the observation due to poor environment, we could obtain lessons and learns. We have a plan to develop another prototype of coronagraph system to test filter wheel, polarizer, and CCD, and it will be used for the TSE in 2017. After the TSE observation, we have a plan to develop the coronagraph system used in the balloon air-borne to demonstrate for the space model. In this poster, we introduce the progress and current status of the project and focus on optical design works for Total Solar Eclipse (TSE) observation.

Biography

Jihun Kim has completed his PhD in 2013 and Post-doctoral studies at College of Optical Science and Engineering, University of Arizona. Currently, he is the Senior Researcher at Korea Astronomy and Space Science Institute (KASI) and working on Solar Coronagraph which will be built on International Space Station (ISS). He has been involved to various telescope projects including ground-based and space telescope. His expertise is in "Optical designing, testing and performance evaluation". He has performed simulations of Adaptive Optics (AO) of ground-based telescope.

jihun@kasi.re.ke