Development of Observation System of Diurnal Motion of the Sun, 'ZENTEN'

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http://zenten.miyakyo-u.ac.jp

We have developed the observation system of diurnal motions of the sun, 'ZENTEN'. ZENTEN is the whole sky network camera with the fish eye lens placed toward the zenith. ZENTENs are now placed in Sendai (38 16'N,140 50'E) and Ishigaki island (24 24'N,124 50'E). They are connected to the internet and whole sky images in both areas are shown in homepage (http://zenten.miyakyo-u.ac.jp/top.html) every 10 minutes. Moreover, images are composited as a movie showing the daily motion of the sun automatically. Not only internet broadcasting of the images, but past date retrieval and downloading of images and movies are possible.

We have conducted observations and experiments using ZENTEN and earth globe camera in junior high school in order to evaluate the educational material. It would be a new method for the usage of IT tools in science educations in schools.