Current Status of Movement of the Iitate 60-cm Telescope to Haleakala, Hawaii

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We are now conducting the replacement of the Iitate 60-cm telescope from the Iitate Observatory, Fukushima to the summit of Mt. Haleakala, Hawaii. We have an unique 60-cm Cassegrain and Coude telescope at our Iitate Observatory in Fukushima to measure faint emission in the vicinity of a planet. Due to the relatively high radiation level (3.5 uSv/hr at present) which was caused by the nuclear plant accident at the huge earthquake on March 11, 2011, our research and education activities at the Iitate Observatory have been limited. We have a facility of 40-cm telescope at the summit of Mt. Haleakala, and have operated for a few years. Thus, we discussed with the member of Hawaii University on the possibility of movement of our 60-cm Iitate telescope to the summit, and got their permission as a collaboration work. Since then, we designed the dome facility, including the reinforcement, which will be installed on the old building at the summit of Haleakala. We also executed the Faculty Use Agreement between Tohoku University and Hawaii University, and submitted the Conservation District Use Applications (CDUA) to Department of Land and Natural Resources (DLNR) in the Hawaii state. We will complete the construction of the dome facility by the end of this May of the beginning of this June, and will install the Iitate 60-cm telescope by the end of this October. A visible high-resolution Echelle spectrograph (R~50000), a near-infrared high-resolution Echelle spectrograph (R~20000, 1-4 um), and an ultra-high resolution mid-infrared heterodyne spectrometer (R>10000000, 8-10 um) will be installed on the telescope. Using these instruments with the 60-cm telescope, we plan to carry out the campaign measurement of Jupiter with the EUV telescope on the EXCEED satellite which will be launched this August.