

Canadian Space Agency Visiting Report

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The John H. Chapman Space Centre of the Canadian Space Agency (CSA) locates in Montreal Canada and is next to the Saint-Hubert Airport. The detail information is found in the web page, http://www.asccsa.gc.ca/eng/about/default.asp. The figure 1 is the beautifully-designed main entrance of the facility. I visited there to have a meeting on a satellite to ground laser communication experiment.

I had been in Ottawa to attend a conference at that time, so I used a train of the VIA Rail Canada from Ottawa to Montreal. It took about 2 hours. The trundling along the rail gave me an enjoyable short trip. The ticket to get on the train had been bought through an internet service before I had left Japan.

Among the various research and development activities of CSA, I had a chance to see an operation test of a rover. The test was conducted indoors when I came to the laboratory. They have a test field outside where undulating landscape is simulated by using sand and rock.

The optical ground station shown in the figure 2 is constructed in the area next to the building. In the dome, there is a telescope to be used as an antenna for optical communications. Almost nothing prevents the sight of the surrounding area of the optical ground station. With this facility, satellite-to-ground laser communication experiments will be carried out. When the demonstration is conducted, a laser beam is emitted from the telescope to a satellite and the telescope receives a downlinked laser beam from the satellite.



Fig. 1 Main entrance



Fig. 2 Optical ground station