Satellite Observation Data Utilization Contest

Jul. 2025

WNI WxBUNKA Foundation

Introduction

In the Asia-Pacific region, the frequency of heavy rain disasters due to climate change is increasing. In this situation, it is necessary to reduce heavy rain disasters, and it is becoming important to increase the number of people who can obtain meteorological data and take action using it.

Our foundation will lead a program to train meteorological engineers in the Asia-Pacific region and hold a satellite data acquisition contest. Through this initiative, we will support the improvement of literacy in using meteorological data, the sharing of meteorological information services, and the improvement of meteorological business capabilities, leading to the reduction of heavy rain disasters caused by climate change.

Contents of the event

How the contest works: Participants will obtain cloud image data from weather observation satellites orbiting in space, and will compete based on the appearance of the images and whether they have captured the correct phenomenon.

How to obtain data

Target data

Weather, ocean temperature, ocean color, vegetation, disaster prevention, etc. *You can start by looking at what kind of data is available.

Data source

Data from weather observation satellites must be collected using a receiving device. Use a satellite that provides free weather data (NOAA/meteo/Fuun, etc.).

How to obtain data

Provide from foundation: Receiving kit

Raspberry Pi*1, USB tuner for digital TV.TV antennas.

*Programs required for: Regulations will be provided by the Foundation.

Application and Schedule

Eligible applicants: Students from science and technology universities in the Asia-Pacific region (one or more students, Groups are acceptable)

Application to contest process:

①Application begins \rightarrow ②Selection of application content \rightarrow ③Send the receiving kit to the approved team \rightarrow ④Assemble the receiving kit and set up the program \rightarrow ⑤Receive satellite data \rightarrow ⑥Data analysis \rightarrow ⑦Select the best image and create a Report \rightarrow ⑧ Send to the secretariat \rightarrow ⑨Select by the selection committee

→ ① Determine the winner *The winner will be awarded a prize.

Schedule:

End of July 2025 application deadline \rightarrow August 2025 selection of application content \rightarrow Late August kit delivery \rightarrow September-December 2025 kit assembly, data acquisition, analysis, report submission.

- → January 2026 final selection, winner decision.
- * The prize for the winner will be a field trip to Japan's meteorological institutions and companies.

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End of July 2025. Weather satellites (geostationary and orbiting) B. Satellite data reception October-December 2025 1) Receiving antenna 2 Tuner Data collection 3 Raspberry Pi Report submission C. Satellite image analysis December 2025

A. Prepare and submit application

Figure. Process from application to receiving satellite images to submitting report