

11-18 November 2022

Online, Hosted by Japan Meteorological Agency



#### **AOMSUC-12 Training Event**

#### **Summary of Pre-Survey**

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Statistics of the 38 attendees who have answered the Pre-Survey at

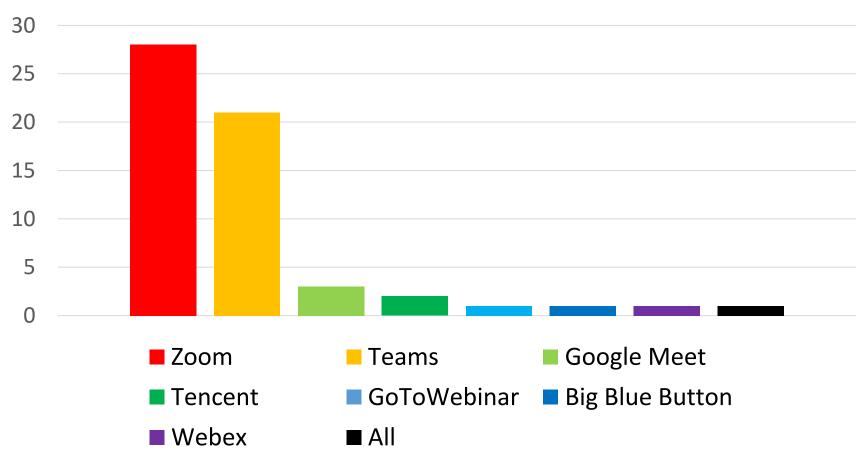
https://forms.office.com/Pages/AnalysisPage.aspx?AnalyzerToken=d8HK1zYeR

U2QlJRZA6F0REGeg6iiBDzS&id=GlTAmwgqvku91np2E-

BB0TLx1LGEAkJGvcz9GolxwTpUQUFBTElLU05BQkdXNEQ0QjJVSkgzWjhGMi4u

**Graph 1: Preferred Online Conferencing Software for Satellite Meteorology Training Sessions** 

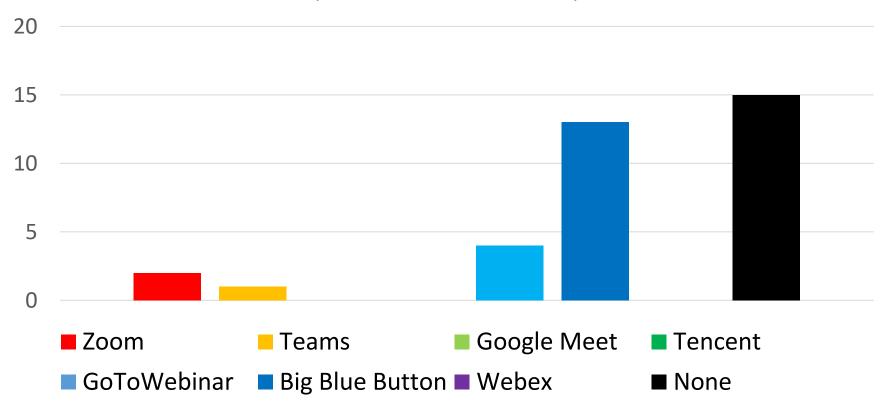
(38 attendees answered)



**Note:** 19 attendees are comfortable in using more than one online conferencing software

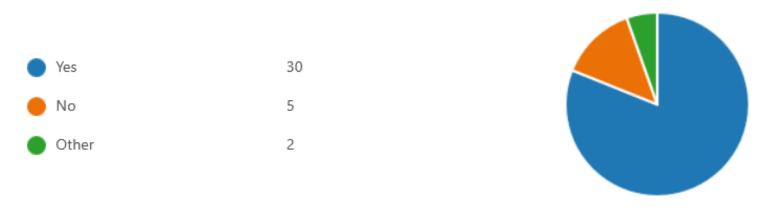
Graph 2: Which online conferencing software is not suitable for you, considering your network and security protocols?

(36 attendees answered)



**Note:** 5 attendees have difficulty using more than one online conferencing software

3. Is your Internet connection adequate to obtain satellite data equivalent to direct broadcast?

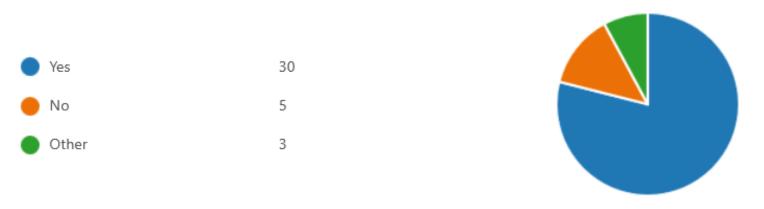


37 attendees have answered this question.

Additional comments (classified as "Other" in the Forms survey):

- Sometimes slow speed
- Yes at my organisation office, no at my home office

4. Do you have the computing power to process the satellite data as delivered by your satellite provider?



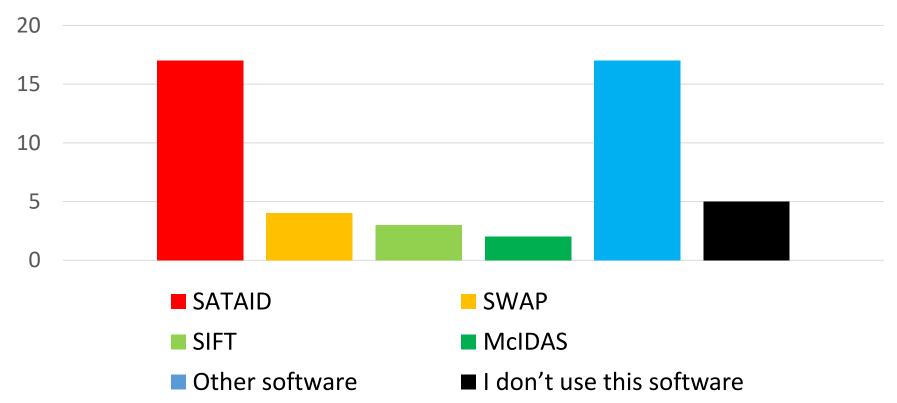
38 attendees have answered this question.

Additional comments (classified as "Other" in the Forms survey):

- Yes at office, no at home
- Yes, but not very good
- JMA satellite received station

## Graph 3: What satellite image visualisation software (e.g., SATAID, SIFT, SWAP, etc.) do you use?

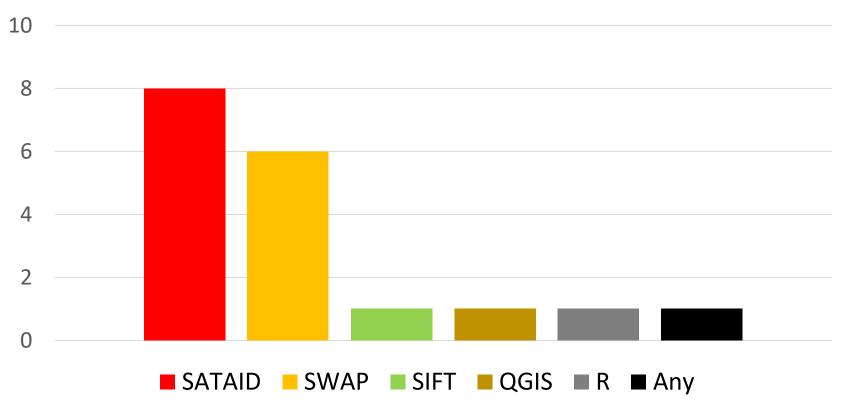
(36 attendees answered this question)



Other software includes: AWIPS, ENVI, ESA SNAP, ERDAS-Imagine, EUMETRAIN tool, Geo2Grid / Polar2Grid, inhouse software, MATLAB, MetConnect, Python MatplotLib, Python, QGIS, R, TerrSet, Visual Weather, Websites

# Graph 4: If you do not use satellite image visualisation software, then what satellite image visualisation software would be useful for you?

(26 attendees answered this question)

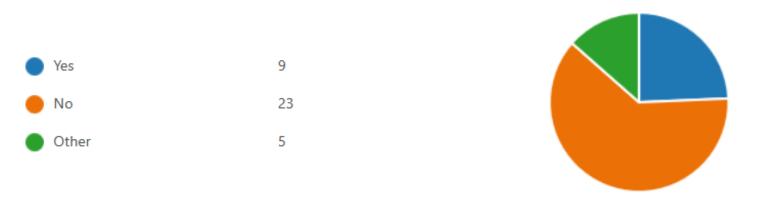


Question 6: If you do not use satellite image visualisation software, then what satellite image visualisation software (e.g., SATAID, SIFT, SWAP, etc.) would be useful for you?

Additional comments made by the attendees answering the Pre-Survey included:

- One (satellite image visualisation software) that installs without IT help; that does not have a lot of spin-up time; that does not need a lot of IT support; that I can easily add text or draw features; that allows overlays (not just of satellite imagery- other types of observations and features; an easy way to save cases... Things that may be useful for a trainer.
- SATAID for Himawari8 should be very interesting for Vietnam
- SATAID on personal computer
- I think better for the trainers to use other software, so we can compare with SATAID. For this case, especially for RBG analysis.

### 7. Are there any limitations in using image visualisation software such as SATAID, SIFT or SWAP?



37 attendees have answered this question. Additional comments included:

- You didn't leave room for comments: The limitation of SIFT is that other
  meteorological fields cannot be overlaid. If we teach with a tool, we want
  it to be something that can be useful in the operational setting, not just
  for one type of observation.
- There may be installation issues. I will investigate.
- Less flexible for further analysis
- I have yet to install it but none are expected

### **Question 8:** What Satellite Meteorology Training Topics would you like to participate in? (part 1)

Any satellite meteorology topics (9 attendees mentioned this)

#### Forecasting and analysis (9 attendees mentioned this)

- Tropical weather and ocean forecasting
- Weather analysis and forecasting using meteorological satellite data
- Application of satellite data in forecasting high impact weather, including Tropical Cyclone Forecasting (5 attendee)
- NWP
- Satellite weather application and cases (case studies?)

#### RGB composite image topics (5 attendees mentioned this)

- 1. Creation of RGB images on the fly
- 2. RGB analysis and interpretation
- 3. RGB in tropical region
- 4. RGB products and active fire classification algorithms
- 5. RGB and RDCA.

### Question 8: What Satellite Meteorology Training Topics would you like to participate in? (part 2)

#### Rainfall determination using satellite data (5 attendees mentioned this)

- 1. Rainfall nowcasting using satellite image
- 2. Quantitative Precipitation Estimation, Rainfall nowcasting
- 3. I like to participate in the topic for rainfall estimation using satellites and radar data
- 4. Topic about how to know rainfall nowcasting using satellite especially in coastal area but also have an influence from mountain/valley breeze
- 5. Satellite Imageries application for rainfall estimation

#### Other satellite meteorology topics

- Interpretation of different satellite bands (IR and WV)
- Satellite interpretation and high resolution satellite products that can be applicable in the Solomon Islands.
- Resolving parallax errors and making corrections
- How to be competent in identify different clouds
- Creation of 3D imagery

### **Question 8:** What Satellite Meteorology Training Topics would you like to participate in? (part 3)

#### Other satellite meteorology topics (continued)

- Atmospheric Remote Sensing.
- Passive Microwave and Infrared Atmospheric Sounding.
- Radiative Transfer Modelling/Simulations.
- Atmospheric Data Visualisation.
- Satellite (image) usage for air navigation
- Space weather, machine learning and AI.
- Training lecture from CMA

### **Question 9:** Do you have any additional questions or comments regarding the AOMSUC-12 Training? (pt 1)

#### **The Training Event Arrangements**

- Will it be an interactive event or conference-like? Are there technical requirements for the participants? Could the event be joined also after it starts or only at the beginning of the day?
- Is anyone looking at ways to address language gaps? Who is the target audience? (forecaster, trainer, general user, other, some combination?)\*
- More face-to-face training on application of satellite data
- I would be grateful to AOMSUC-12 Organizers, if after the completion of AOMSUC-12 training event a certificate of participation can be provided to attendees? Many thanks in advance.

<sup>\*(</sup>BZ comment) I have attached the results of the Socrative Quiz question "Which of these options best describe the work you do?" as posed to AOMSUC-10 Training Event in Appendix 1.

### **Question 9:** Do you have any additional questions or comments regarding the AOMSUC-12 Training? (pt 2)

#### Additional comments

- It is a privilege of learning new ideas and techniques.
- Interested to learn about any new developments in satellite imagery from Himawari and GOES series
- It is my first time to join this kind of training so it will be a benefit for me in developing my knowledge.
- We need high resolution satellite images
- Will likely not be able to participate in entire event due to time difference and change to JPSS-2 launch date

### **Appendix 1:** Participants backgrounds as determined from the Socrative Quiz conducted during the AOMSUC-10 Training Event.

See also

http://www.virtuallab.bom.gov.au/index.php/download\_file/view/1519/300/

#### Appendix 4: Participants background

Which of the below options best describe the work you do	Number of responses
Manager of Forecasters	8
Tropical Cyclone Forecaster	4
Other Forecaster	9
Satellite Systems	6
Researcher	4
Other	3

**Table 2:** Answers to the question "Which of these options best describe the work you do?" as posed to AOMSUC-10 Training Event attendees during session 4 on Monday.