



# Performance of Sentinel Asia and importance of the Feedback

Masami SUGIURA

Senior Researcher of Asian Disaster Reduction Center (ADRC)

2013/11/29

1st Joint Project Team Meeting for Sentinel  
Asia Step-3 in Bangkok, Thailand



2013/11/29

1st Joint Project Team Meeting for  
Sentinel Asia Step-3 in Bangkok, Thailand



# Requests from survey by questionnaire 1/2

- It is difficult to understand the range of the flood from satellite imagery.
- It is difficult to request emergency observation using the web system.
- Lack of personnel and equipment for analyzing satellite images.
- Need training in order to use satellite imagery in an emergency.

→ **Capacity Building**





# Requests from survey by questionnaire 2/2

- Need for satellite images immediately after the occurrence of disaster.
  - Need to observe before a disaster occurs.
  - Need to shorten operation hours from EOR to observation.
- **Operating Systems Revision**
- Need to observe by SAR sensor.
  - Need for equipments to download large amounts of satellite imagery.

→ **Expansion of facilities**



# Recovery rate of the questionnaire 2008 - 2012



	Send	Reply	Recovery rate
2008	13	4	30.8%
2009	18	5	27.8%
2010	34	6	17.6%
2011	31	3	9.7%
2012	19	7	36.8%



# Questionnaire to collect user requirements 1/5

## Emergency Observation Request Feedback Survey (**DRAFT**)

Asian Disaster Reduction Center (ADRC)

### Introduction

Thank you for submitting an emergency observation request (EOR) to Sentinel Asia. Your feedback regarding your experience with Sentinel Asia is important for the effective operation of this system going forward. Please answer the questions below, as data regarding system performance and issues provides valuable information for system operators. Thank you for your cooperation.

Emergency Observation (Disaster Type, Country/Region):

Satellite:

Products provided by DAN and CHARTER:

Date survey was sent:

Deadline for returning the survey:

Organization and section answering the questionnaire:

Date about which the survey is asking:

← To be completed by ADRC





# Questionnaire to collect user requirements 2/5

## A. Response time

Please provide feedback regarding the response time following your EOR. If you obtained multiple types of satellite data, indicate which satellite data your responses are based upon.

Please check one of the following.

First available data       Data actually utilized

1. Between EOR and ADRC's response:

days ← to be completed by ADRC

1. Very unsatisfactory	2. Unsatisfactory	3. Satisfactory	4. Excellent
---------------------------	----------------------	--------------------	-----------------

2. Between EOR and the receipt of satellite data:

days ← to be completed by ADRC

1 Very unsatisfactory	2 Unsatisfactory	3 Satisfactory	4 Excellent
--------------------------	---------------------	-------------------	----------------

3. Between EOR and the receipt of analytical results:

days ← to be completed by ADRC

1 Very unsatisfactory	2 Unsatisfactory	3 Satisfactory	4 Excellent
--------------------------	---------------------	-------------------	----------------



# Questionnaire to collect user requirements 3/5

## B. Processing and analysis of satellite data<sup>↵</sup>

If your organization processed and analyzed the data itself, please answer the following.<sup>↵</sup>

1. Please provide feedback regarding the quality of the images provided.<sup>↵</sup>

[Name of satellite: ] ← to be completed by ADRC<sup>↵</sup>

Image resolution<sup>↵</sup>

1 <sup>↵</sup>	2 <sup>↵</sup>	3 <sup>↵</sup>	4 <sup>↵</sup>
Very unsatisfactory <sup>↵</sup>	Unsatisfactory <sup>↵</sup>	Satisfactory <sup>↵</sup>	Excellent <sup>↵</sup>

Image quality<sup>↵</sup>

1 <sup>↵</sup>	2 <sup>↵</sup>	3 <sup>↵</sup>	4 <sup>↵</sup>
Very unsatisfactory <sup>↵</sup>	Unsatisfactory <sup>↵</sup>	Satisfactory <sup>↵</sup>	Excellent <sup>↵</sup>

Positional accuracy<sup>↵</sup>

1 <sup>↵</sup>	2 <sup>↵</sup>	3 <sup>↵</sup>	4 <sup>↵</sup>
Very unsatisfactory <sup>↵</sup>	Unsatisfactory <sup>↵</sup>	Satisfactory <sup>↵</sup>	Excellent <sup>↵</sup>

Range of observations<sup>↵</sup>

1 <sup>↵</sup>	2 <sup>↵</sup>	3 <sup>↵</sup>	4 <sup>↵</sup>
Very unsatisfactory <sup>↵</sup>	Unsatisfactory <sup>↵</sup>	Satisfactory <sup>↵</sup>	Excellent <sup>↵</sup>

Appropriateness of the sensor<sup>↵</sup>

1 <sup>↵</sup>	2 <sup>↵</sup>	3 <sup>↵</sup>	4 <sup>↵</sup>
Very unsatisfactory <sup>↵</sup>	Unsatisfactory <sup>↵</sup>	Satisfactory <sup>↵</sup>	Excellent <sup>↵</sup>





## Questionnaire to collect user requirements 4/5

2. Please indicate the purpose for which you used the satellite image provided by Sentinel Asia.

↵

Did you or another section create thematic maps with geographical information (e.g., latitude/longitude grids, place names, main roads) using satellite images? (Yes/ No)

If yes, please attach the maps and explain the method.

( )

Did you or another section create disaster area maps through the interpretation and/or analysis of the images? (Yes/ No)

If yes, please attach the maps and explain the method used to create them.

( )

Did you or another section create evacuation maps through the interpretation and/or analysis of the images? (Yes/ No)

If yes, please attach the maps and explain the method used to create them.

( )

Please describe specifically any other resources you created.

( )



# Questionnaire to collect user requirements 5/5

## C. Regarding output provided, including satellite data

1. Was the provided satellite data useful in helping you understand the situation in the affected area?

1 Completely useless	2 Mostly useless	3 Somewhat useful	4 Very useful
-------------------------	---------------------	----------------------	------------------

Please state the specific reasons for your response.

2. Please state how you used the satellite data provided in a real natural disaster.

1. What is the name of institution/organization that utilized satellite images?
2. What was the purpose for which the satellite images were used?
3. For what types of activities were the satellite images used?
4. What is the name of the institution/organization to which you submit your output?
5. What outputs did you develop using satellite images?
6. Did you find any issues that need to be solved with regard to the use of satellite images?

Please provide any comments/suggestions regarding the above.

## D. Other

Please provide any other comments/suggestions regarding this Emergency Observation Request.

# Thank You For Your Attention



<http://www.adrc.asia>

2013/11/29

1st Joint Project Team Meeting for Sentinel  
Asia Step-3 in Bangkok, Thailand