





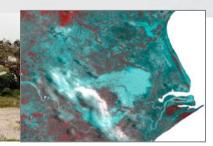
# **ISRO: DPN Report -2019**

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#### **Decision Support Centre, NRSC-ISRO**

ISRO Disaster Management Support (DMS) Programme established Decision Support Centre (DSC) at National Remote Sensing Centre (NRSC), ISRO as a delivery point for space and aerial enabled inputs for disaster management

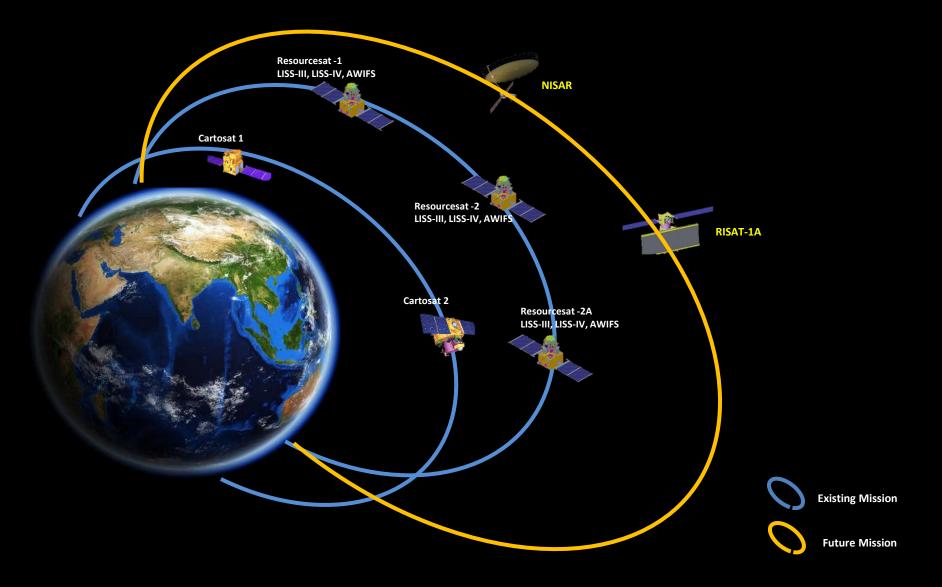
#### **Major Activities**

- Near real time monitoring of disasters (floods, cyclones, forest fires, landslides, earthquakes)
- Generation of vulnerability and hazard zonation maps and provide information for planning disaster mitigation measures.
- Provides comprehensive disaster specific multi-scale database through NDEM
- Providing inputs to MHA, NDMA, CWC, IMD, Central & SDMA
- Disaster Early Warning
- Capacity Building
- Sentinel and Charter activities





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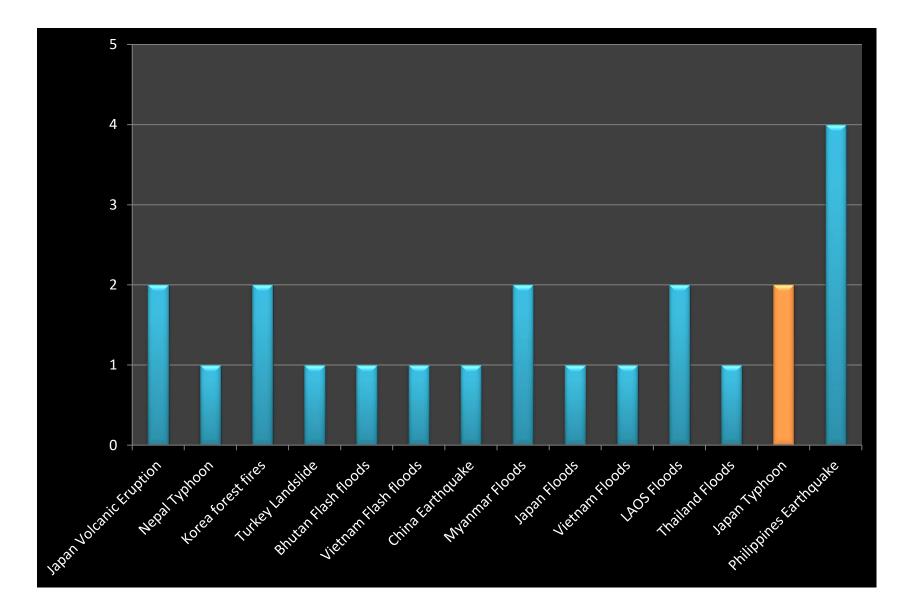
#### **Sentinel Asia Emergency Requests : 2019**

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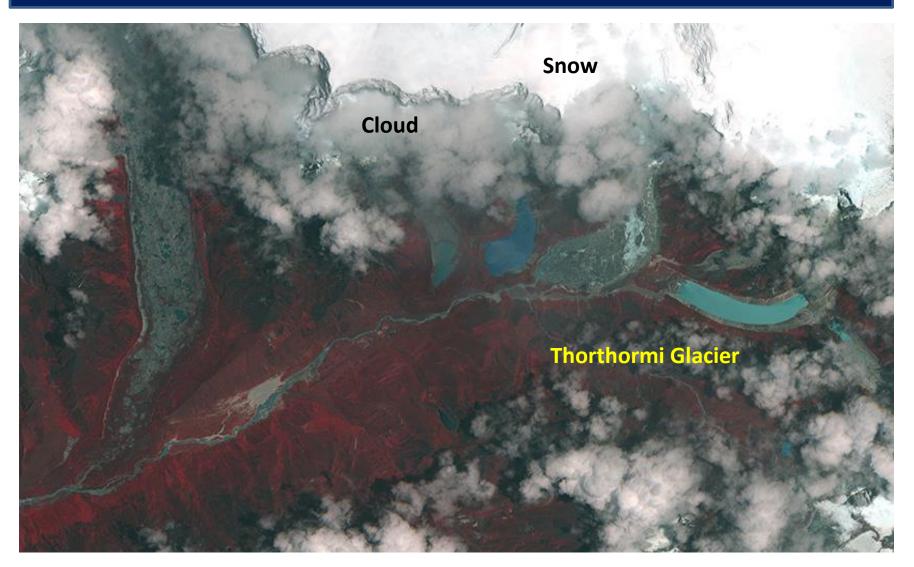


# ISRO Support to Asia Pacific Countries (Sentinel Asia) nrsc Responding to SA Emergency Requests

S.No	Event	Date	Satellite Data Used	Utilisation
1	Japan Volcanic Eruption	Jan-19	Resourcesat-2A	Useful
2	Nepal Typhoon	Apr-19	Resourcesat-2 AWiFS	Useful
3	Korea forest fires	Apr-19	Resourcesat-2 AWiFS	Useful
4	Turkey Landslide	May-19	Resourcesat-2 LISS IV FMX	Useful
5	Bhutan Flash floods	Jun-19	Resourcesat-2A LISS IV FMX	Useful
6	Vietnam Flash floods	Jun-19	Resourcesat-2 AWiFS	Useful
7	China Earthquake	Jun-19	Resourcesat-2 LISS IV FMX	Useful
8	Myanmar Floods	Aug-19	Resourcesat-2/2A AWiFS	Useful
9	Japan Floods	Aug-19	Resourcesat-2 AWiFS	Useful
10	Vietnam Floods	Sep-19	Resourcesat-2A AWiFS	Useful
11	LAOS Floods	Sep-19	Resourcesat-2 AWiFS	Useful
12	Thailand Floods	Sep-19	Resourcesat-2 AWiFS	Useful
13	Japan Typhoon	Oct-19	Resourcesat-2 AWiFS	Cloudy
14	Philippines Earthquake	Oct-19	Resourcesat-2A LISS IV FMX	useful



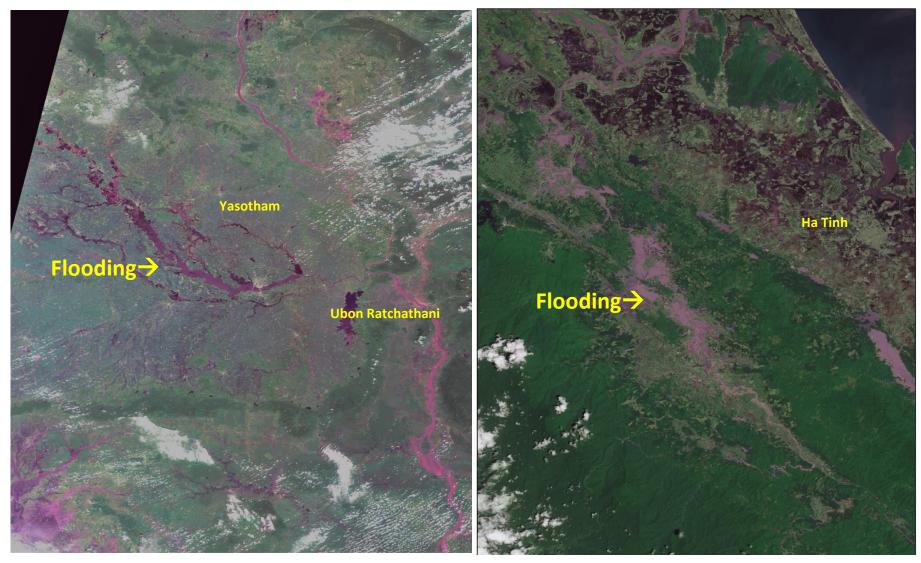
### Bhutan Flash Floods - 2019



Resourcesat-2A LISS IV FMX June 29, 2019



### Thailand And Vietnam Floods - 2019



Floods in Thailand Resourcesat-2 September 24, 2019 Floods in Vietnam Resourcesat -2A September 27, 2019



# ISRO Responding to SA Emergency Requests (In recent years)

2016			2017		
Taiwan Earthquake	February-2016		Indonesia Floods	February-2017	
Myanmar Glof	February-2016		Nepal Flash Floods	April-2017	
Fiji Tropical Cyclone	February-2016		Sri Lanka Floods	May-2017	
Bandung Indonesia Floods	March-2016		Sri Lanka Floods	May-2017	
Mt.Apo Firest Fires Philippines	March-2016		Sri Lanka Floods	May-2017	
Taiwan Oilspill	March-2016		Taiwan Flash Flood	June-2017	
Pakistan Landslide	April-2016		Bangladesh Landslides	June-2017	
Japan Earthquake	April-2016		China Landslides	June-2017	
Myanmar Earthquake	April-2016		Vietnam Typhoon	July-2017	
Sri Lanka Floods	May-2016		Vietnam Floods	July-2017	
Indonesia Landslide	June-2016		Vietnam Floods	August-2017	
Bangladesh Floods	August-2016		Nepal-Floods	August-2017	
Bhutan Floods	August-2016		China Earthquake	August-2017	
Myanmar Floods	August-2016		Nepal-Floods	August-2017	
Taiwan Typhoon	September-2016		Bangladesh-Floods	August-2017	
Philippines Tropical Cyclone	September-2016		Vietnam-Floods	August-2017	
Indonesia Landslides	September-2016		Vietnam-Floods	September-2017	
Taiwan Typhoon	September-2016		Taiwan-Floods	October-2017	
Philippines Typhoon	October-2016		Philippines-Floods	October-2017	
Indonesia Eq	December-2016		Vietnam-Floods	October-2017	
Nepal Flash Flood	December-2016		Korea-Earthquake	November-2017	

# ISRO Responding to SA Emergency Requests (In recent years)

2018					
Philippines Volcanic Eruption	January-2018				
Papua New Gunea Volcanic Eruption	January-2018				
Taiwan Earthquake	February-2018				
Korea Earthquake	February-2018				
Tonga Tropical Cyclone	February-2018				
Sri Lanka Floods	May-2018				
Vietnam Floods	June-2018				
Japan Floods	July-2018				
Japan Floods	July-2018				
Thailand Oil Spill	July-2018				
Vietnam Floods	July-2018				
Laos Floods	July-2018				
Myanmar Floods	July-2018				
Indonesia Earthquake	July-2018				
Indonesia Earthquake	July-2018				
Indonesia Earthquake	July-2018				
Indonesia Earthquake	August-2018				

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2018					
Thailand Floods	August-2018				
Taiwan Floods	August-2018				
Vietnam Floods	August-2018				
Myanmar Floods	September-2018				
Japan Earthquake	September-2018				
Vietnam Typhoon	September-2018				
Philippines Typhoon	September-2018				
Indonesia Earthquake	September-2018				
Vietnam Typhoon	December-2018				
Indonesia Tsunami	December-2018				
Sri Lanka Floods	December-2018				

