

Satellite-based agro-met Information for farming to assist recoveries from disasters

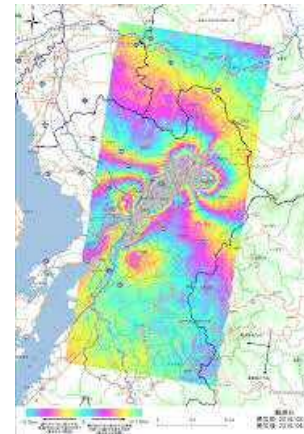
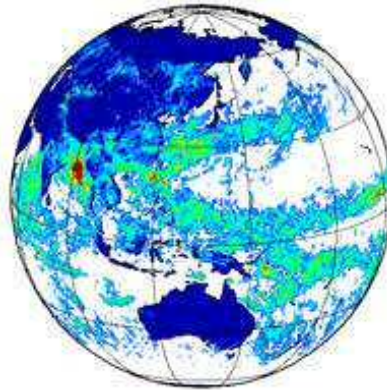
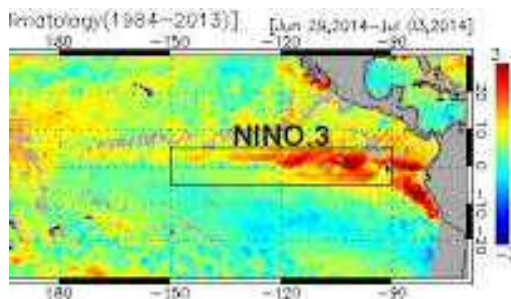
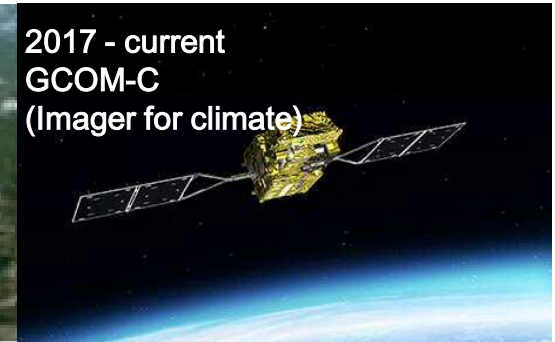
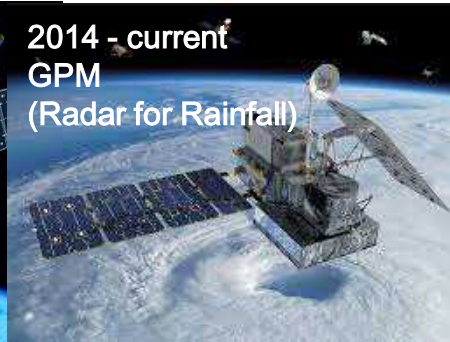
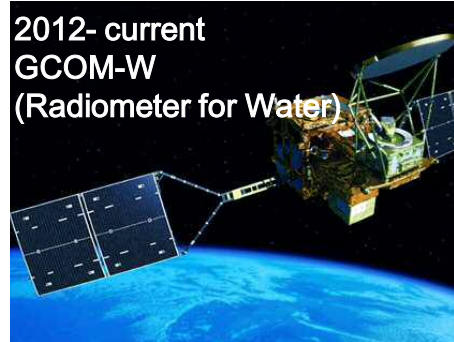
Japan-India Workshop on Disaster Risk Reduction 2019



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About RESTEC



RESTEC works for Japanese satellite missions entrusted by ministries of Japan and Japan Aerospace Exploration Agency (JAXA)

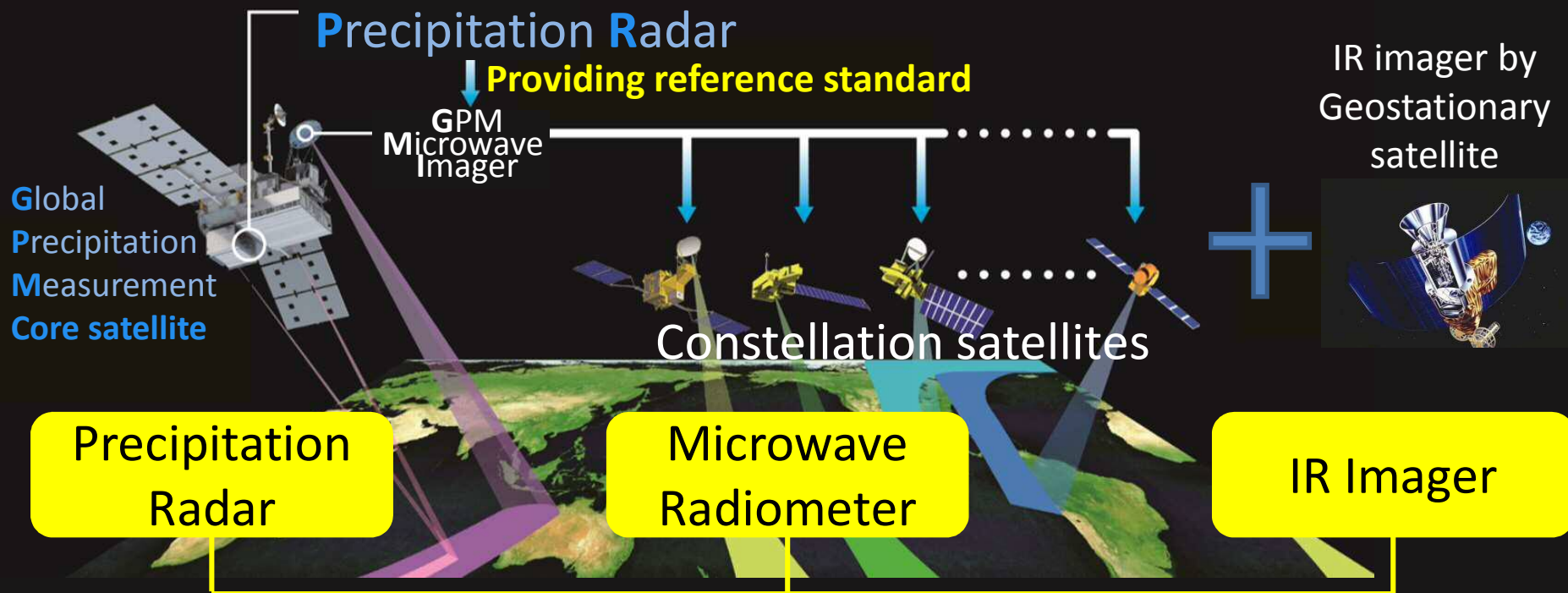
RESTEC develops algorithm, software and applications using Earth Observation satellite data (+ Met, Climate and Socio-Economic)



GSMCP Global Satellite Mapping of Precipitation

Dual-Frequency
Precipitation Radar

↓ Providing reference standard



Multi-satellite Rainfall Product

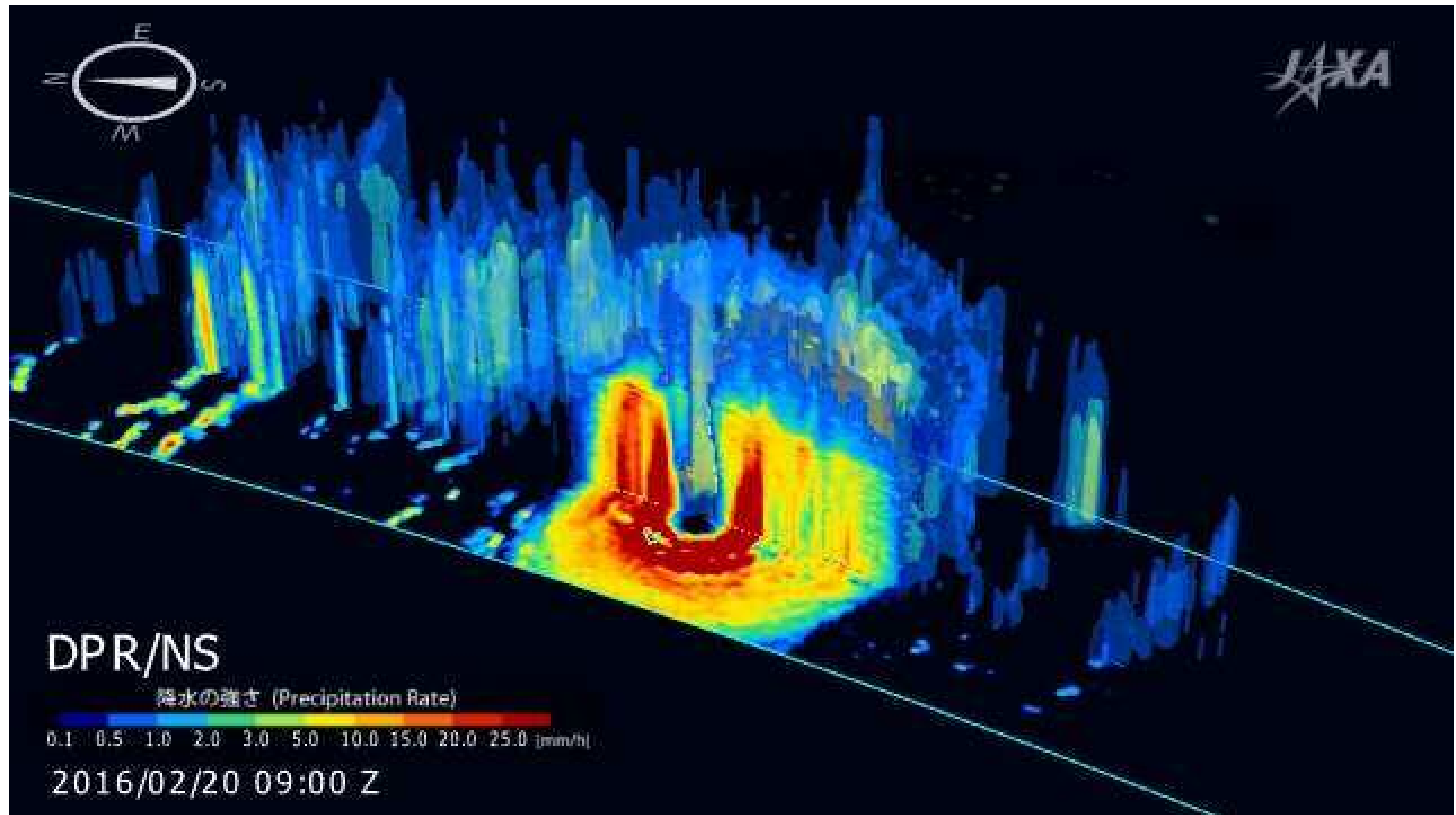
- hourly global rainfall data
- 0.1x0.1deg. lat/lon
- In near real time



distribution



TC Winston monitoring by Dual-frequency Precipitation Radar (DPR) onboard GPM core satellite

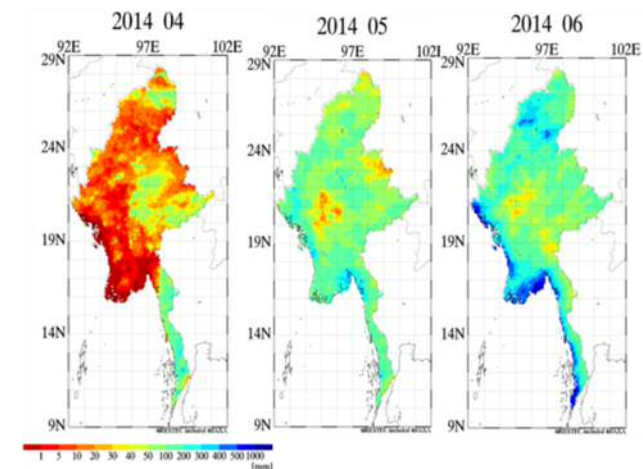
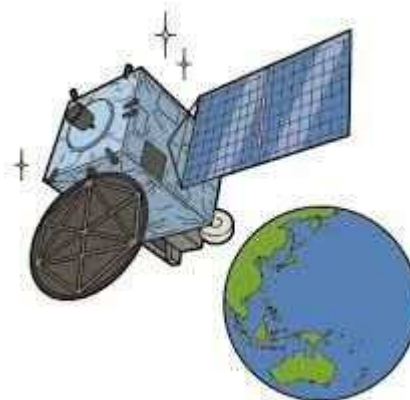


New technology for Weather Index Insurance



SOMPO utilize data from satellite to measure rainfall amount

SOMPO utilize data from satellite provided by **Japan Aerospace Exploration Agency (JAXA)** with the cooperation and technology of **Remote Sensing Technology Center of Japan (RESTEC)** to develop **Weather Index Insurance in Myanmar**



Outline of Prototype Product for WIIM

Target Crop	Rice/Sesame
Target Area	Phase1: Central Dry Zone (CDZ) Phase2: Whole area of Myanmar
Target Risk	Drought/Flood
Insured	Farmers* *Borrowing money for farming operations from bank or micro finance institution.
Policy Period	Set by each division (based on each farming activity)
Index	Cumulative rainfall by GSMaP during Policy Period
Insurance Conditions * Payout Amount * Premium Level (Probability of Covered Drought)	We design conditions that meet farmers' needs. (Relevant organizations' advices are appreciated.)

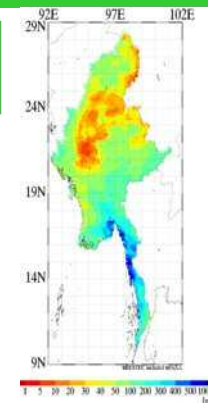
Image of GSMaP provided by JAXA



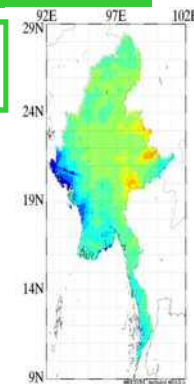
'Global Rainfall Map in Near-Real-Time (GSMaP_NRT) by JAXA Global Rainfall Watch' was produced and distributed by the Earth Observation Research Center, JAXA.
<http://sharaku.eorc.jaxa.jp/GSMaP/index.htm>

Image of rainfall calculated based on GSMaP

May 2005
Drought Year



May 2010
Normal Year





➤ Condition of prototype for rice farmers in XXXXX township

Policy Period (Observation Period)	4month in rainy season
Index	Cumulative Rainfall* during Observation Period (* Average value in XXXXX township)
Payout Condition	When index is below threshold
Threshold	X mm
Compensation	XXXXXX kyat/acre
Premium	XXXXXX kyat/acre (XXXX % of Loan principal*)

➤ Image of insurance payout

*Loan principal: XXXXXX kyat/acre

	Policy Period	Payout
Case1	 No Drought Index > X mm	None
Case2	 Drought Index < X mm	XXXXXX kyat/acre (XX% of Loan principal)

New Project : Prototype on “Cyclone Guard Insurance” by SOMPO

Core prototype design about the index-based “cyclone guard insurance” is described as below.

