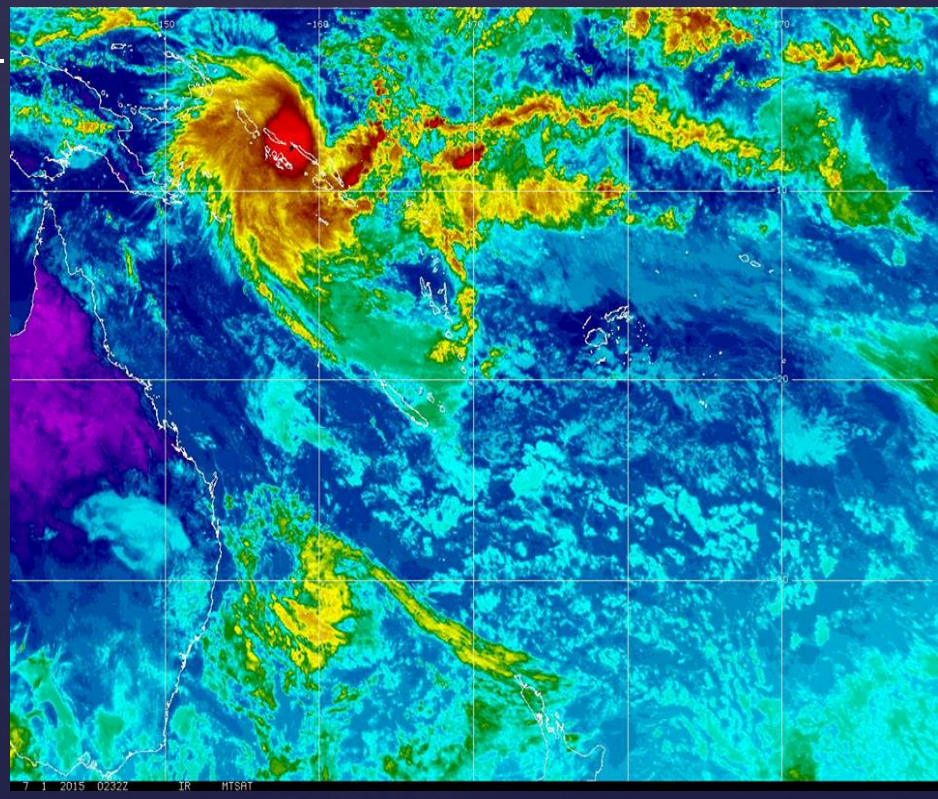
SIMS's expectations of new-generation satellites for hazard monitoring

6th Asia/Oceania Meteorological Satellite User Conference
Tokyo, Japan, 9 -13th November 2015

SIMS's top three hazards that can be monitored by satellite

HAZARD 1: TROPICAL CYCLONE

- TC RAQUEL (1st July 2015) – deaths stands at a total of eight (8) people
- 164 damage houses, 34 totally destroyed,
- Total of 1,047 communities affected, total population of 126,187 were affected.



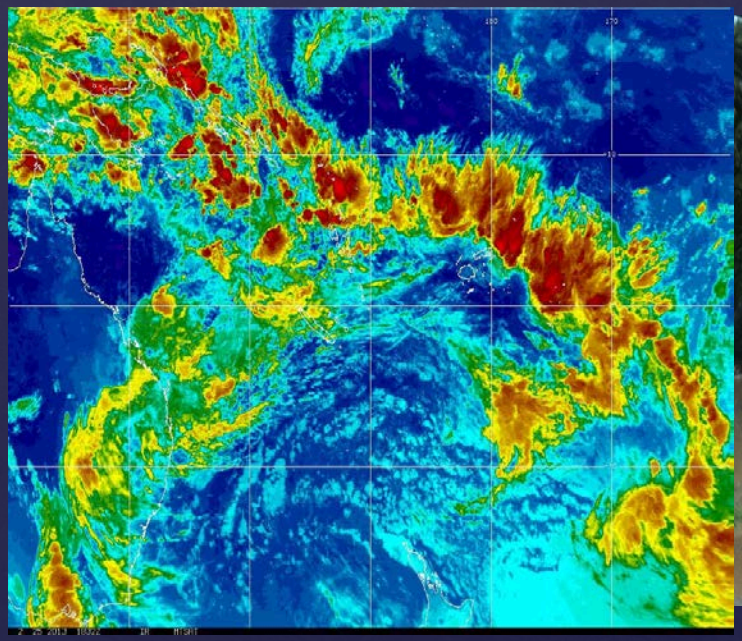
HAZARD 2: TORRENTIAL RAIN

- After torrential rain On 2nd and 3rd of April 2014 , severe flash flood affected the Solomon Islands, especially the capital Honiara and it left 22 people dead.

- 1,100 homes severely damage with 260 totally destroyed. Left around 10, 092 people homeless.

HAZARD 3: MONSOON ACTIVITY

- Flooding on low lying areas caused by heavy rain due to presence of a monsoon trough(26th February. 2013) . Damage to homes, infrastructures and aviation hazards (cancellation of flights)



SIMS's expectations of new series of satellites for hazard monitoring

Hazard 1: tropical cyclones	**Multi-spectral bands:** New signals derived from multi-spectral-band observations will support issuance of more effective warnings.
Hazard 2: Torrential rain	**Multi spectral bands:** New signals derived from multi-spectral band observation before extremely heavy rainfall are expected to be useful. **High spatial resolution:** These high resolution visible and infrared bands will help clarify atmospheric structure , hence we are able to identify areas of expected heavy rainfall.

SIMS's expectations of new series of satellites for hazard monitoring

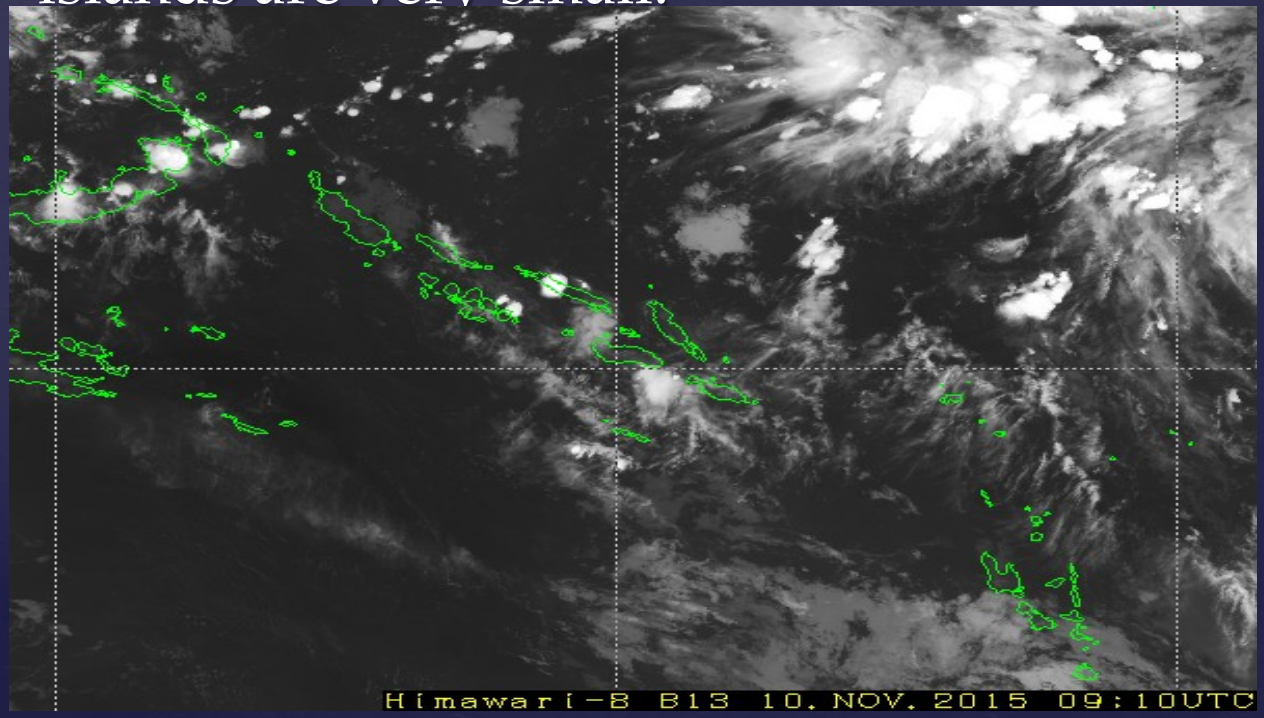
Hazard 3: Monsoon activity	**Rapid scanning:** Data from rapid scanning observation will enable early detection of rapid cloud formations and or convections. **High spatial resolution:** These high resolution visible and infrared bands will help clarify atmospheric structure , hence we are able to identify areas of expected heavy rainfall.

SIMS's requirements to get desired benefits from the new generation of satellites

Major hazard	Features of new generation GEO met. satellite
Hazard 1: tropical cyclones	**Training in imagery analysis:** -Training would support the retrieval of new signals from multi-spectral band observation. -help forecasters to understands the different bands and identify features.
Hazard 2: Torrential rain	**Easy-to-understand product:** - using a product made with multi-spectral band data that indicates new signals prior to extremely heavy rain. - Saves time and energy during severe weather events **Training in imagery analysis:**
Hazard 3: Monsoon activity	**Easy-to-understand product:** -same as above **Training in imagery analysis:** -same as above

SIMS's plans/expectations for utilization of new-generation geostationary meteorological satellite data

- Develop individual satellite sector over Solomon Islands domain (more higher resolution) since some of our islands are very small.



- Develop and integrate satellite data with other weather models and observations with overlaying capabilities (one stop shop)

- Improve Internet access and or other means of receiving satellite data without internet

- Satellite Training and education


Thank iu tumas