

# UN-SPIDER RSO Indonesia

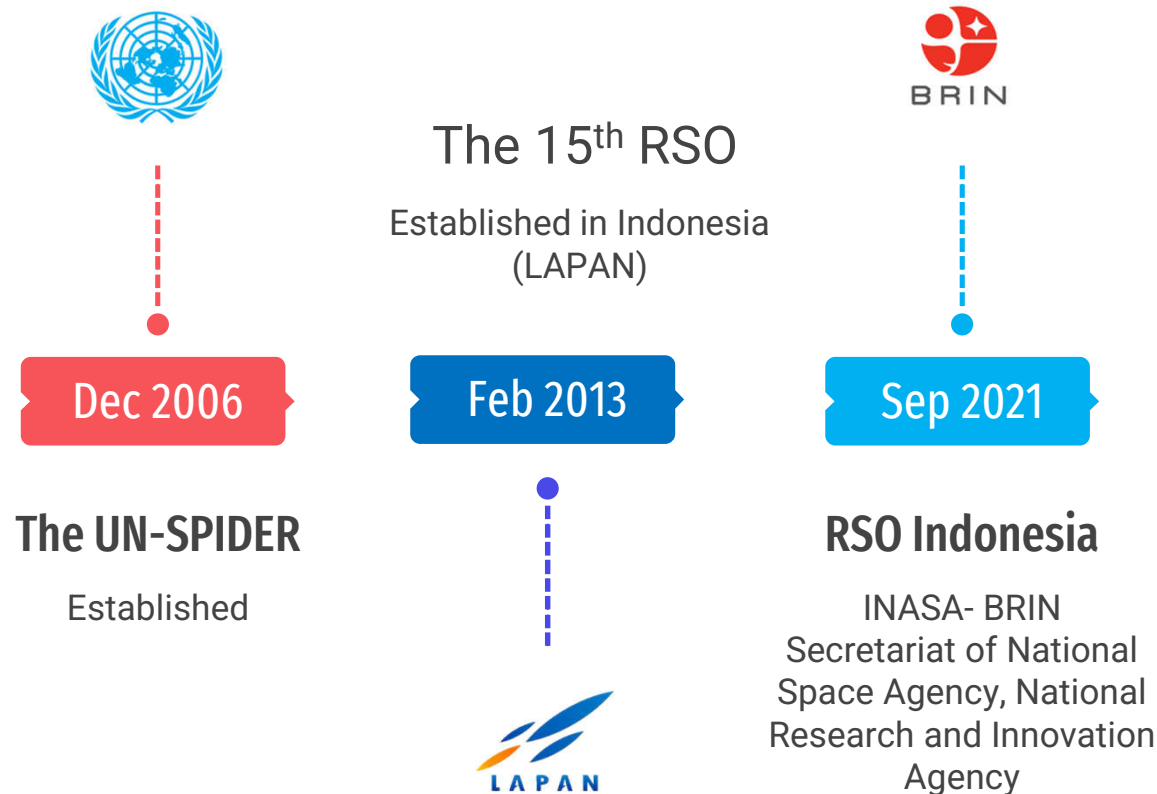
Status and updates (2021-2022)



# Outline

- RSO-Indonesia history and re-organization structure
- RSO-Indonesia activities
- Future plans

# Indonesia RSO UN-SPIDER history and the structure

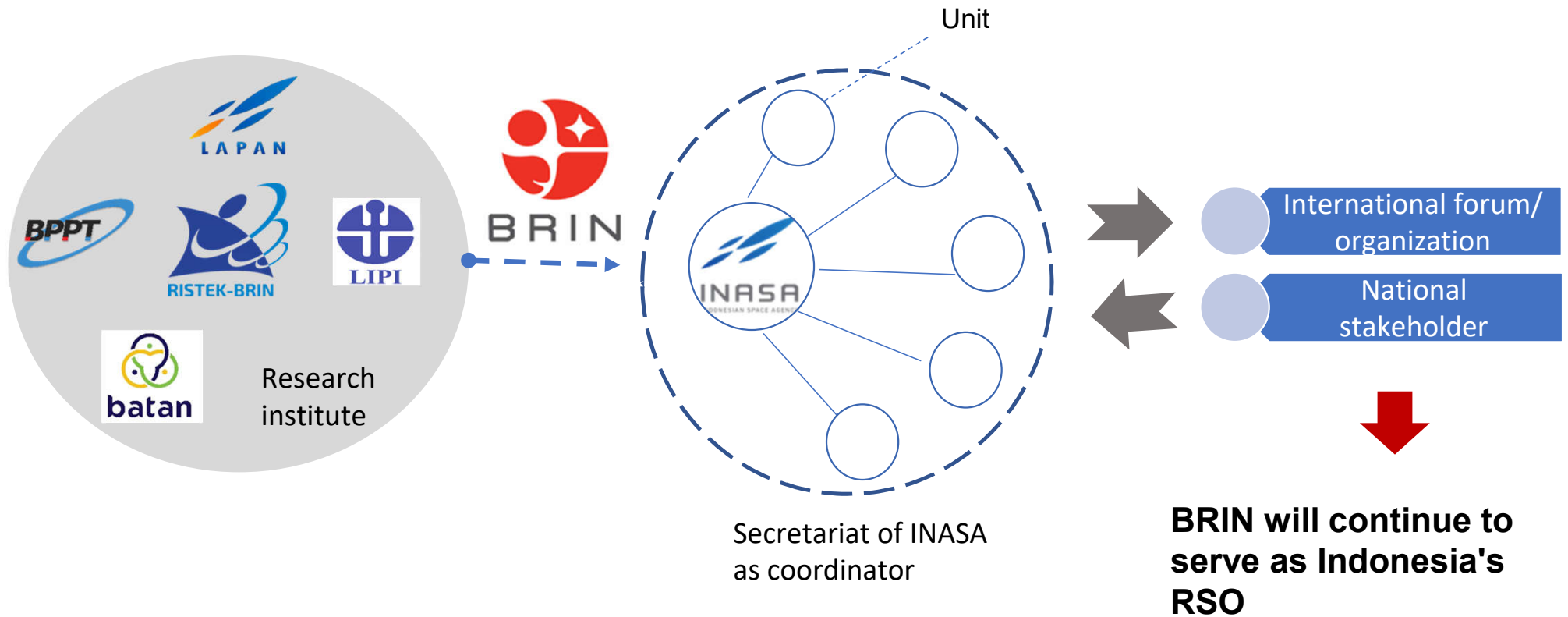


## Notes

- Do we need to renew the agreement?
- We will provide a detail about (new) RSO Indonesia

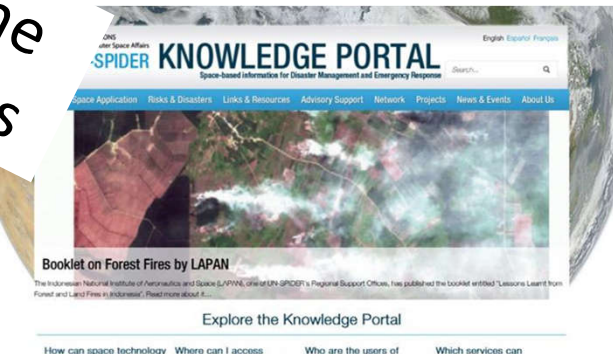


## RSO-Indonesia new structure





Host the meeting



Regular annual meeting



Involved in workshop/trainings



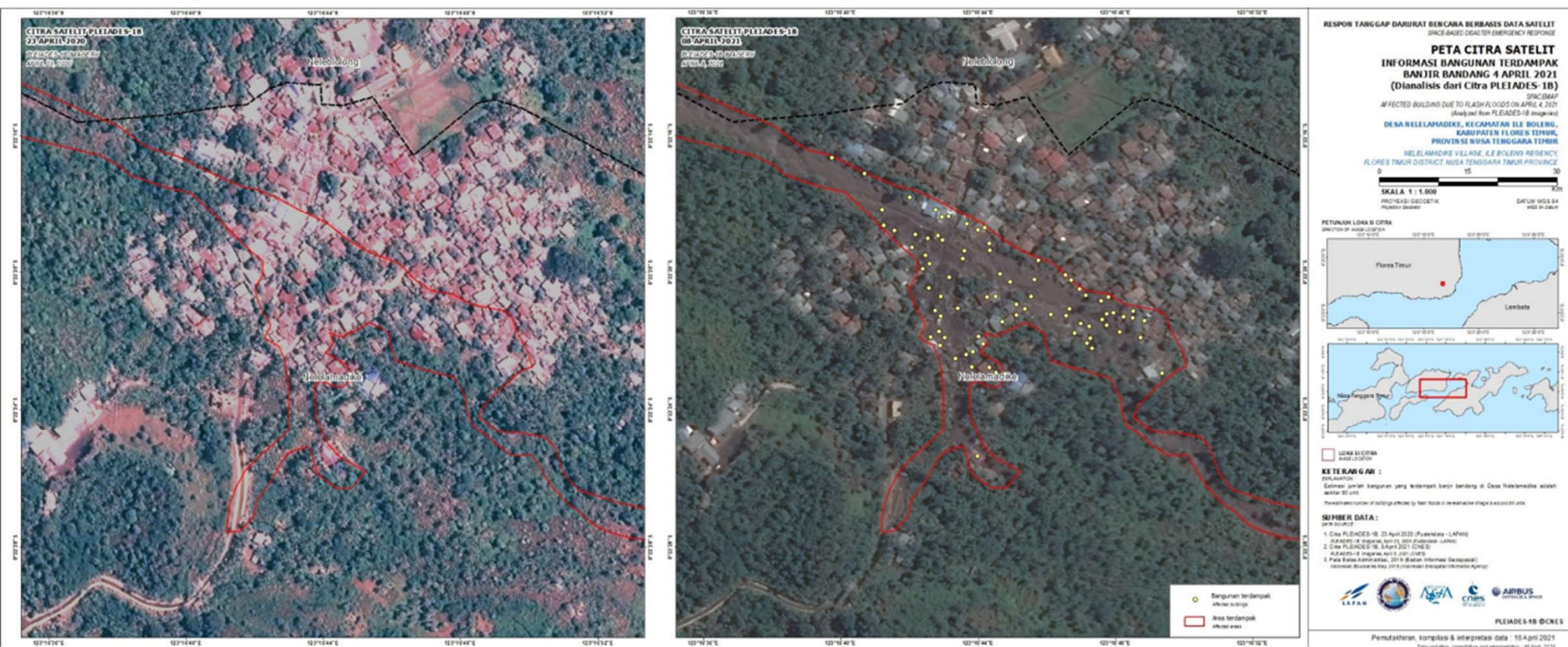
# Overview the RSO-Indonesia Activities

# Activities in 2021-2022

Research and information related to disaster management or emergency response  
(Cyclone, volcano eruption, fires, tidal flood-land subsidence, oil spill)



# Seroja cyclone damage assessment

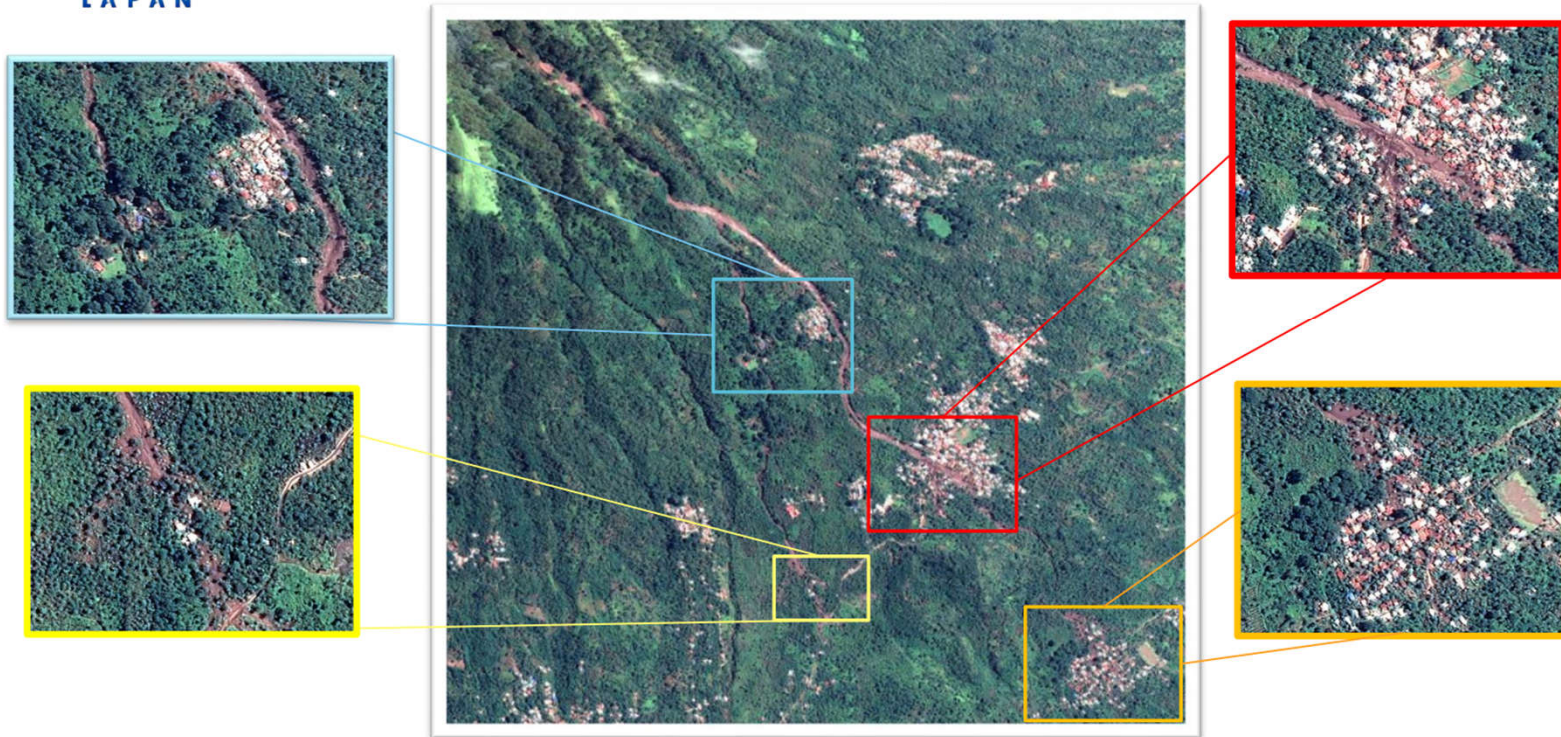




# Seroja cyclone damage assessment (April 2021)

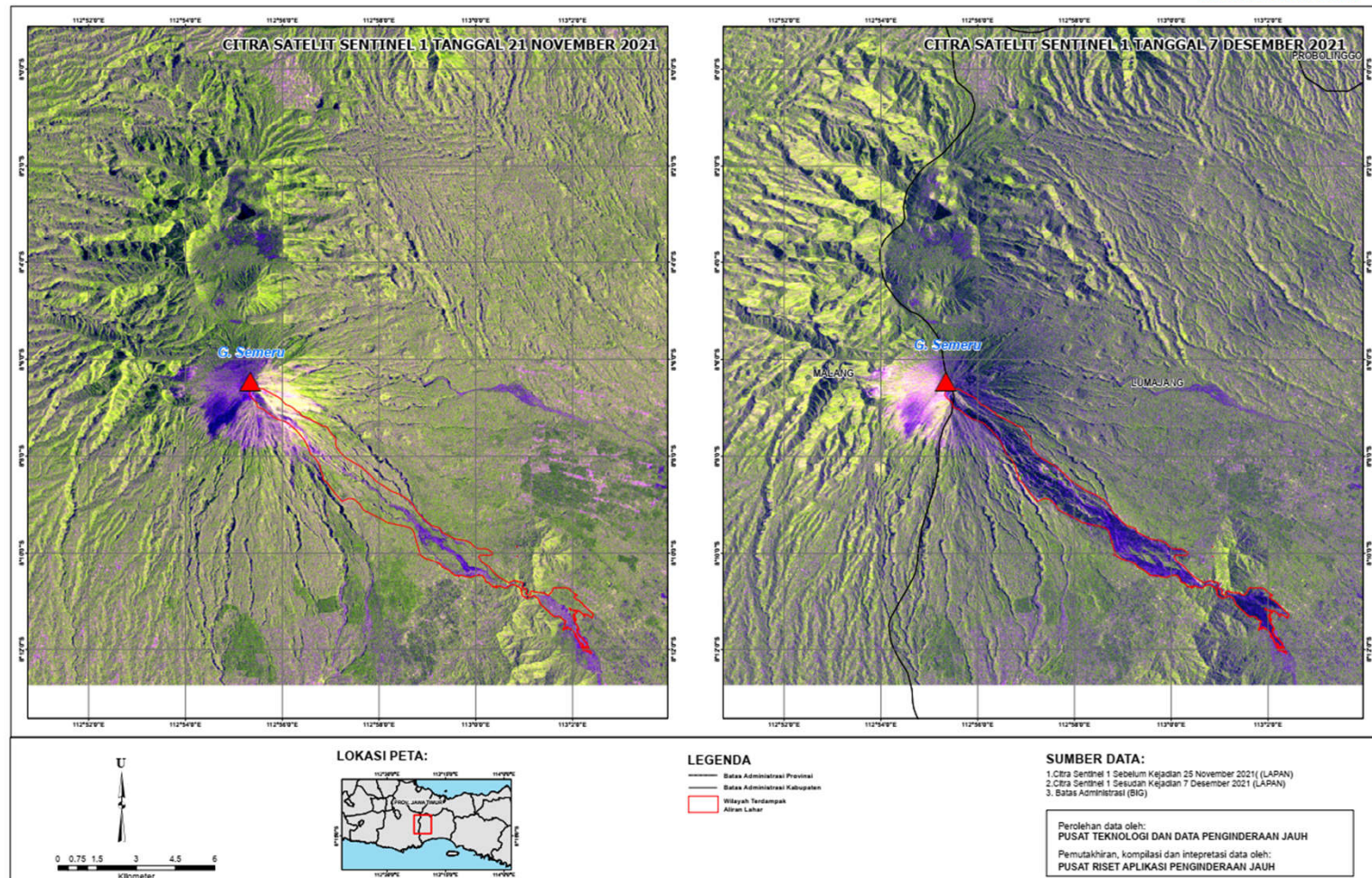


Pleiades-1B 8 April 2021



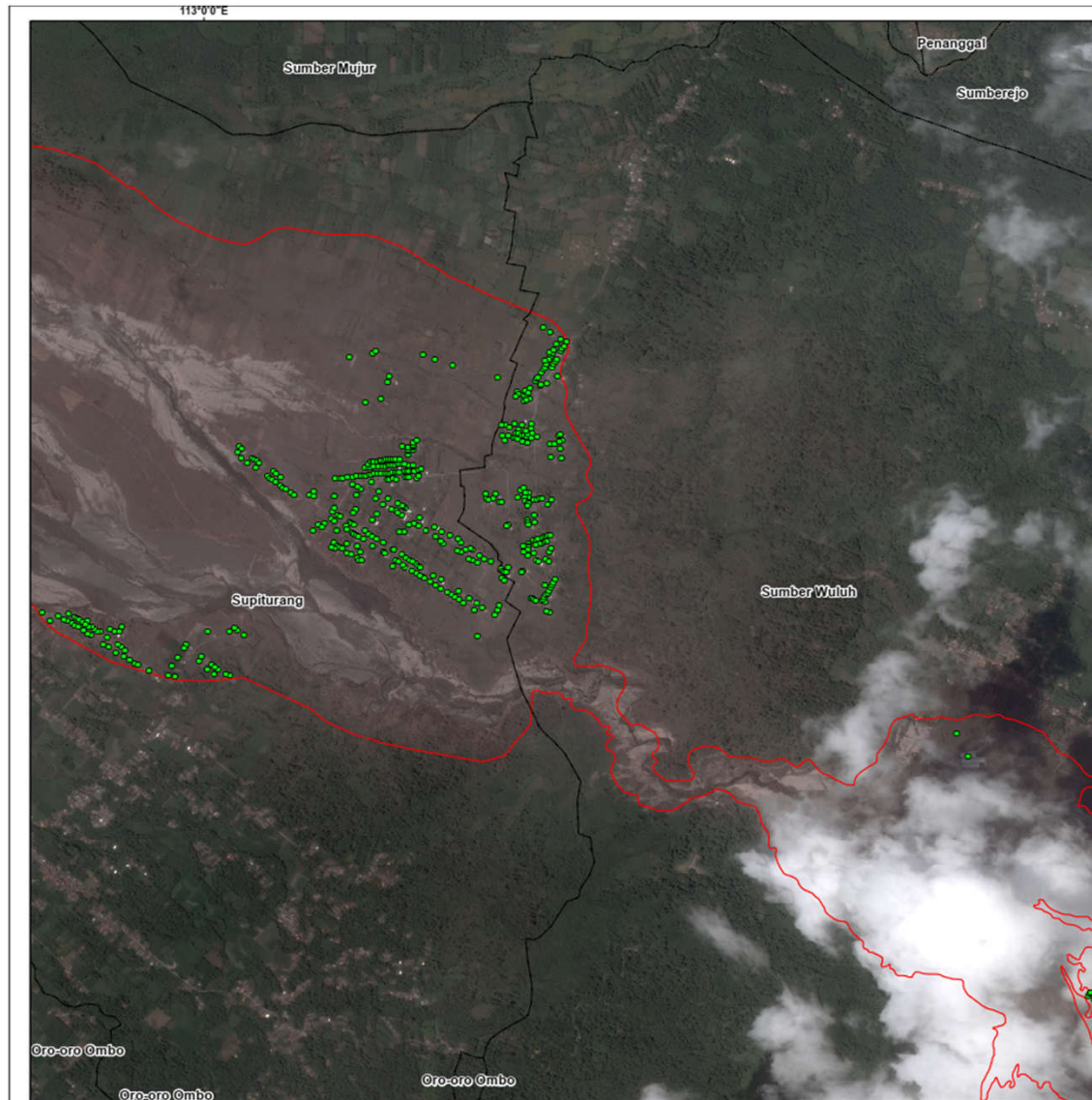


# Semeru volcano eruption (Dec 2021)





# Semeru volcano eruption (Dec 2021)









## INFORMASI ESTIMASI TITIK BANGUNAN TERDAMPAK LAHAR SEMERU BERBASIS DATA SATELIT PENGINDERAAN JAUH PROV. JAWA TIMUR





LOKASI CITRA

**Legenda:**

- Titik Bangunan
- Batas Area Terdampak Aliran Lahar
- Batas Desa

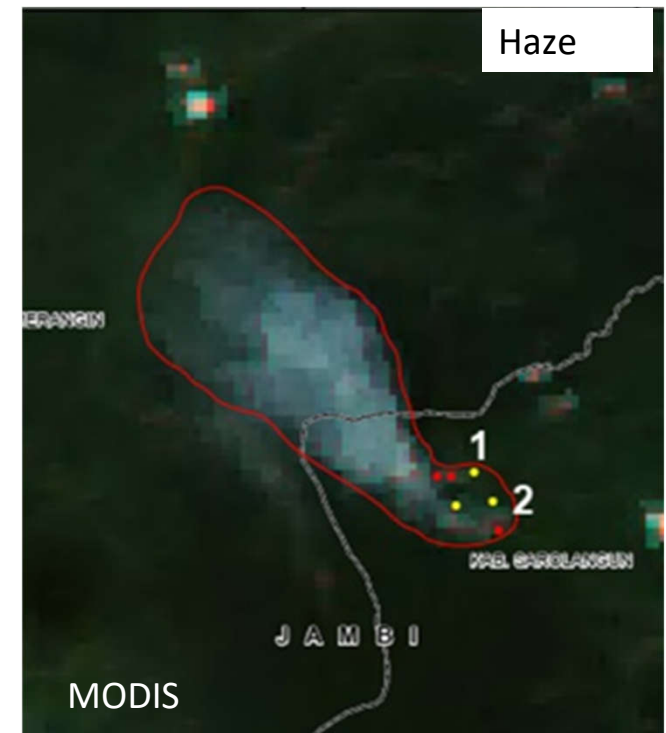
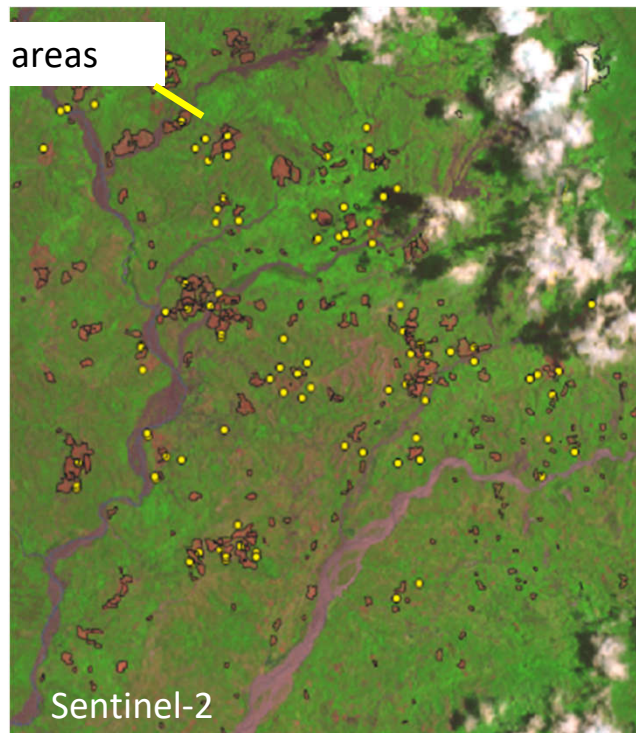
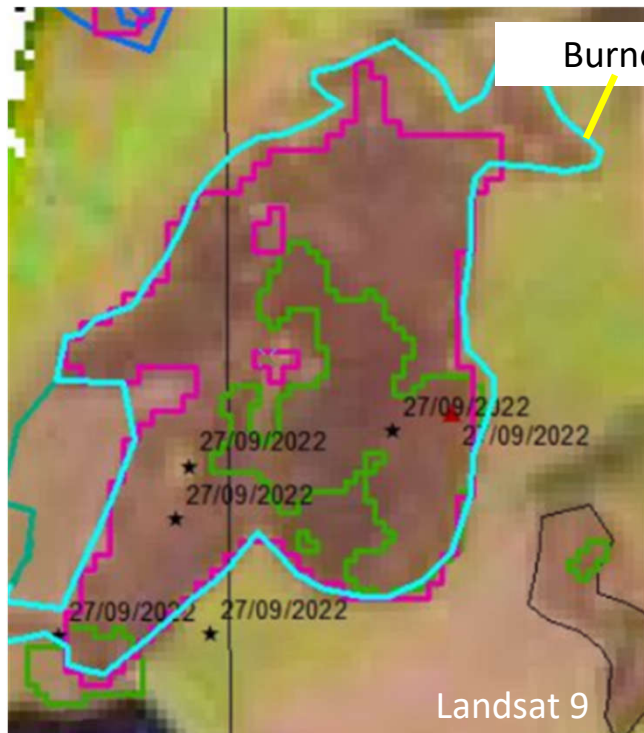
**Keterangan:**

Informasi update estimasi bangunan terdampak sekitar area lahar Gunung Semeru diperoleh dengan menggunakan citra Pleiades sebelum kejadian pada tanggal 26 Juli 2020. Sedangkan untuk area terdampak lahar dengan menggunakan citra Pleiades sesudah kejadian pada tanggal 11 Desember 2021. Berdasarkan hasil didapatkan 473 bangunan yang terdampak lahar Gunung Semeru, dengan area paling parah yaitu Desa Supturang dengan 468 bangunan terdampak.

**Sumber Data:**

Citra : Citra Pleiades tanggal 26 Juli 2020  
Citra Pleiades tanggal 11 Desember 2021  
Batas Desa : Peta Batas Administrasi Indonesia (BIG)

Perekaman data oleh:  
**PUSAT TEKNOLOGI DAN DATA PENGINDERAAN JAUH**  
Pemutakhiran, kompilasi & interpretasi data oleh:  
**PUSAT RISET APLIKASI PENGINDERAAN JAUH**



## Fires monitoring

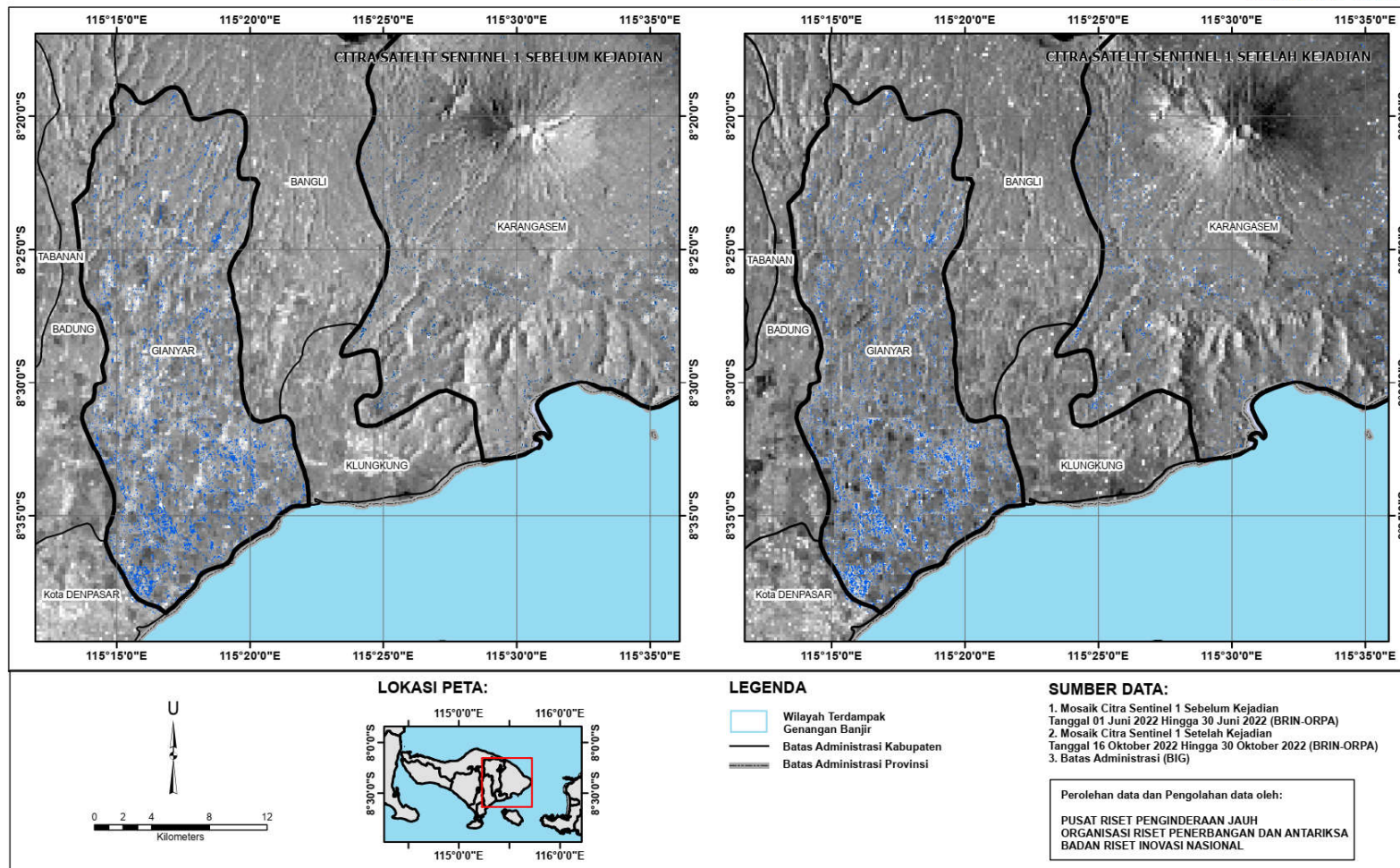
Toward automatic national burned area mapping using multi sensor/method approaches

## A lesson learnt: UN-SPIDER recommended practice

- The UN-SPIDER recommended practice of mapping burn severity was widely used.
- The fire regime is different
- Our team is tasked with determining the best practices for Indonesia



# Flood in Bali, 2022





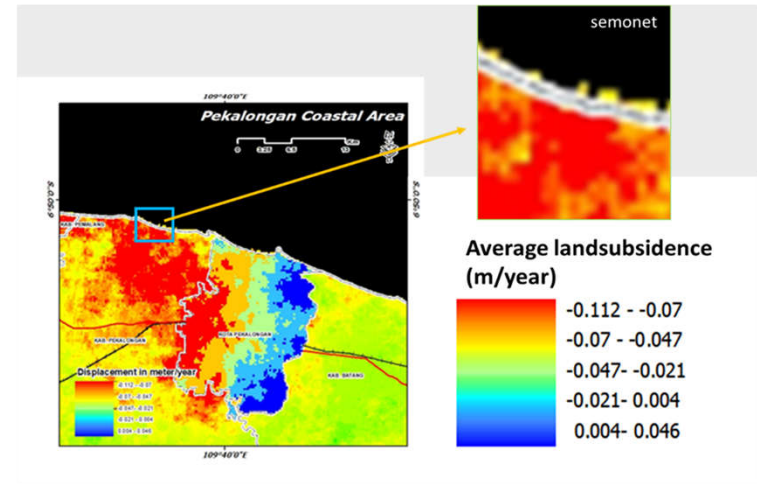
Condition of the abrasion in Semonet, Pekalongan, Central Java



Drone taken on Aug 14, 2022

As of Aug 2022, most of the inhabitants already relocated to safer places (around 40 families) in the south. Only one family left. Currently, the location can only be accessed by boat.

## Tidal Flood, abrasion and land subsidence



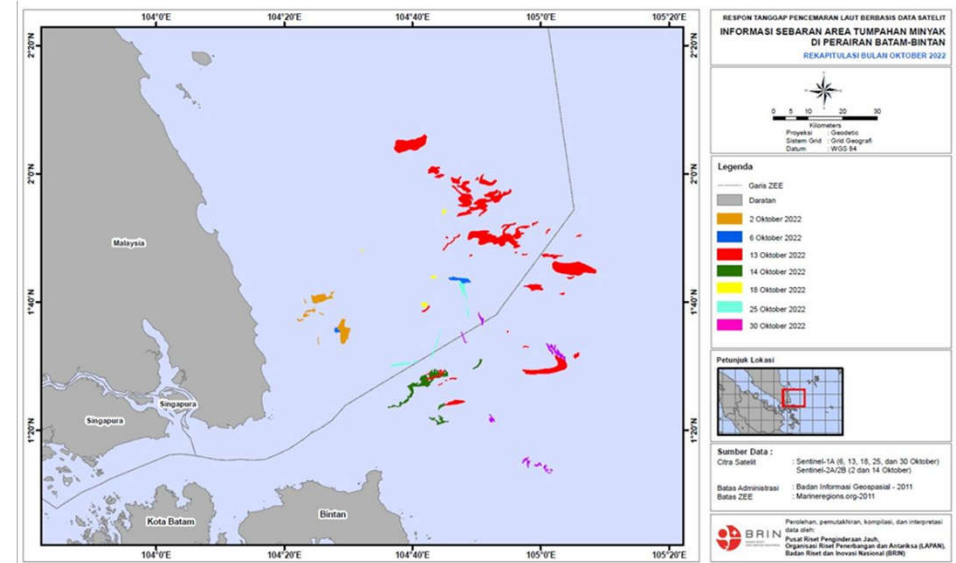
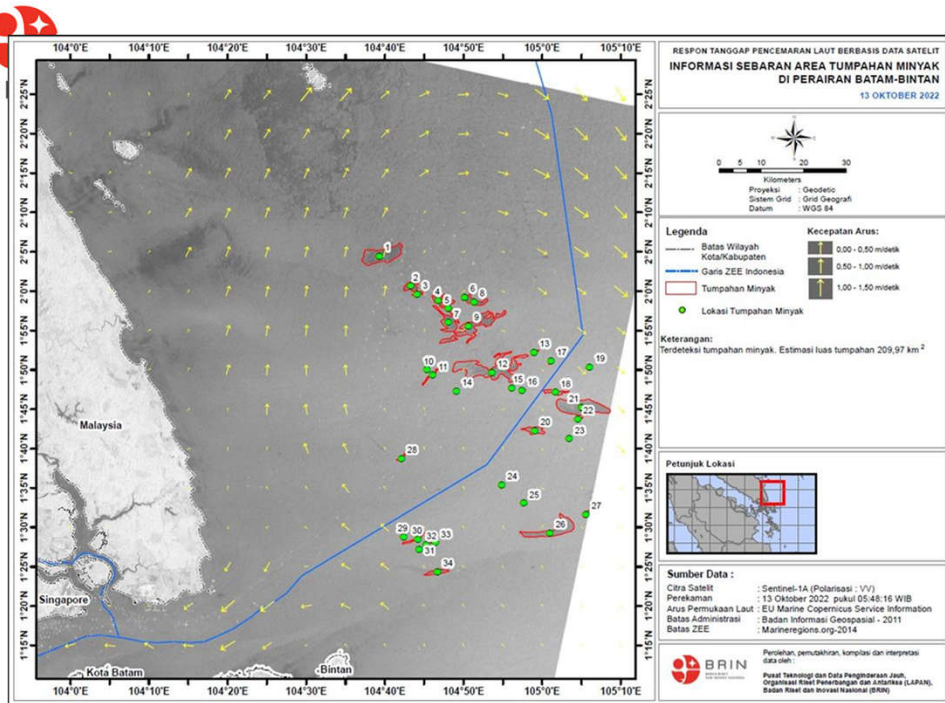
The land subsidence in Pekalongan extracted from Sentinel-1



The settlement below the water surface (river)



Source:Chulafak et al., 2022



Source: BRIN

# Oil spill monitoring



# Future plans

- Disaster emergency response
- Technical assistance for stakeholders
- Shared knowledge (our research or practices)
- Capacity building
- Open to any collaboration with UN-SPIDER and other RSOs





# Contact

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