Initial Analysis results of Glacial Situation In Myanmar using ALOS-2/PALSAR-2

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Introduction

- **Summary of data used in this analysis**

Analysis 1

Obs. date	Mode	Satellite/Sensor	Pol.	Flight Direction	Off-nadir angle	Beam Direction	Data Credit
2016/02/19	WBD	ALOS-2 /PALSAR-2	HH+ HV	Descending	35.2	Right	JAXA
2016/02/25	WBD	ALOS-2 /PALSAR-2	HH+ HV	Descending	34.7	Left	JAXA
2016/01/03	-	LANDSAT-8 /OLI	-	-	-	-	USGS

Analysis 2

Obs. date	Mode	Satellite/Sensor	Pol.	Flight Direction	Off-nadir angle	Beam Direction	Data Credit
2015/12/06	WBD	ALOS-2 /PALSAR-2	HH+ HV	Descending	35.2	Right	JAXA
2016/02/28	WBD	ALOS-2 /PALSAR-2	HH+ HV	Descending	35.2	Right	JAXA

Analysis 1

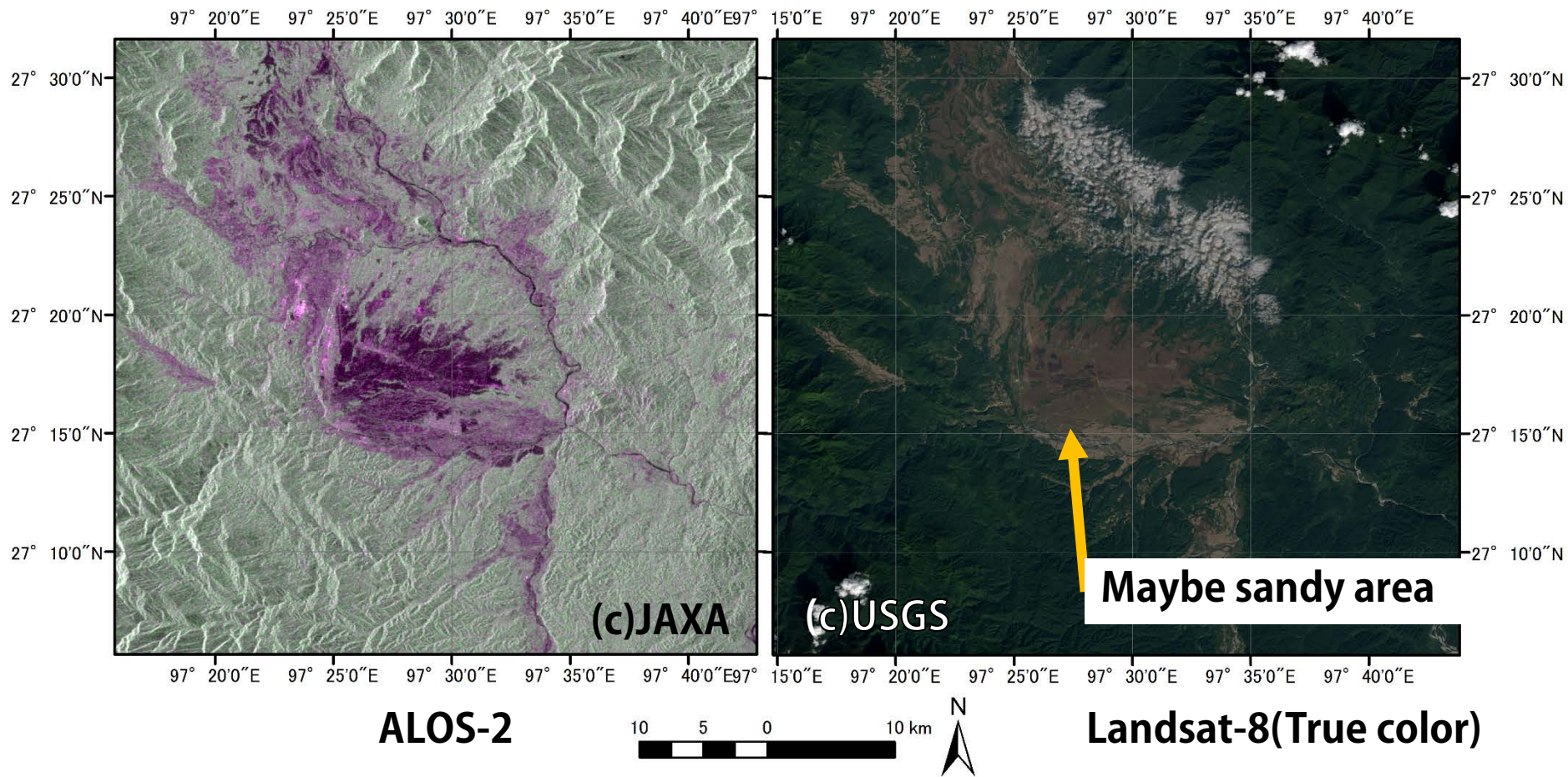- **Full Scene of ALOS-2(2016/2/25)**
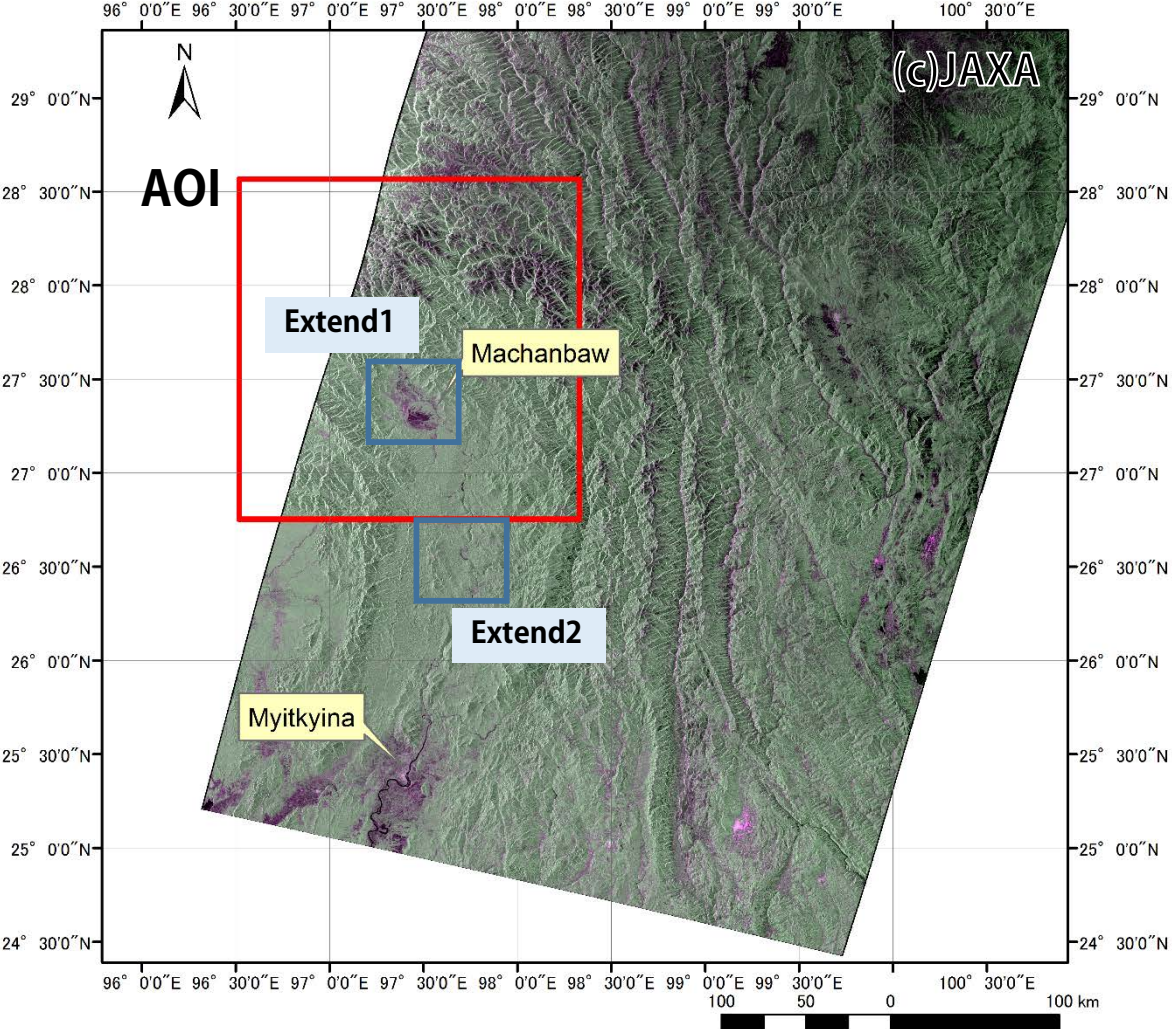
R:G:B=HH:HV:HH

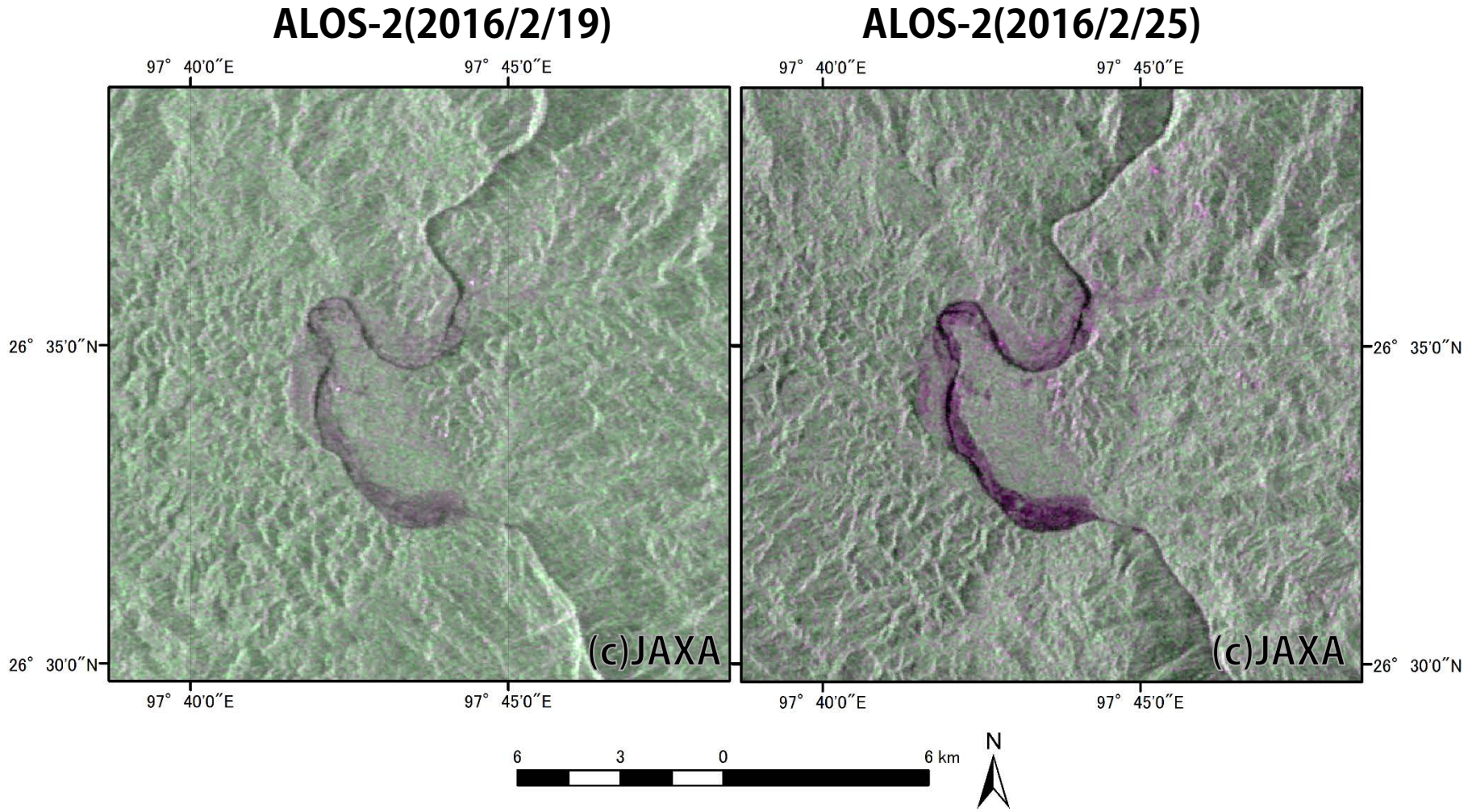**Significant (or Deadly) Glacial Lake is <u>NOT</u> identified**

Analysis 1 Extend 1

- **The Area of dark in ALOS-2 (usually water area)**
- **Compare with Landsat-8**

ALOS-2

Landsat-8(True color)

Maybe sandy area

(c)JAXA   (c)USGS

- **This area is <u>NOT</u> water area (Maybe "smooth" land)**

Analysis 1 Extend 2

- ## River channel Expansion Area

ALOS-2(2016/2/19)　　　　　**ALOS-2(2016/2/25)**

(c)JAXA　　　　(c)JAXA

- # We detect some river channels expansion, but cannot identify the origin.

Analysis 2

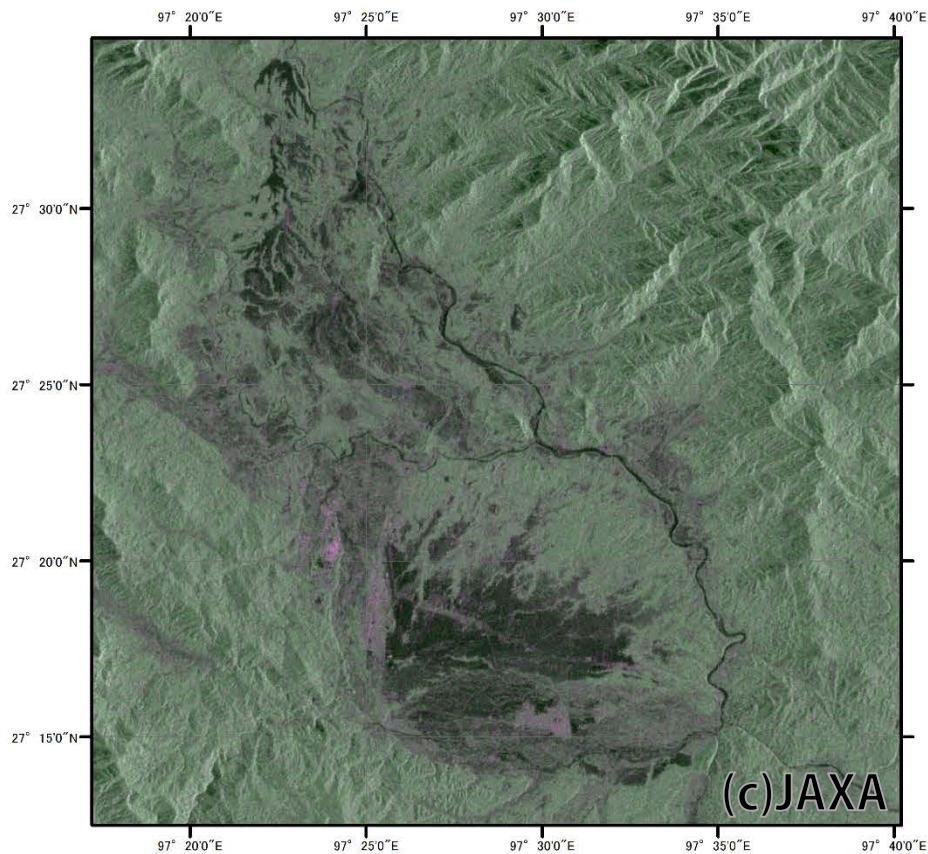- **ALOS-2 image covered AOI (2016/2/28 observed)**
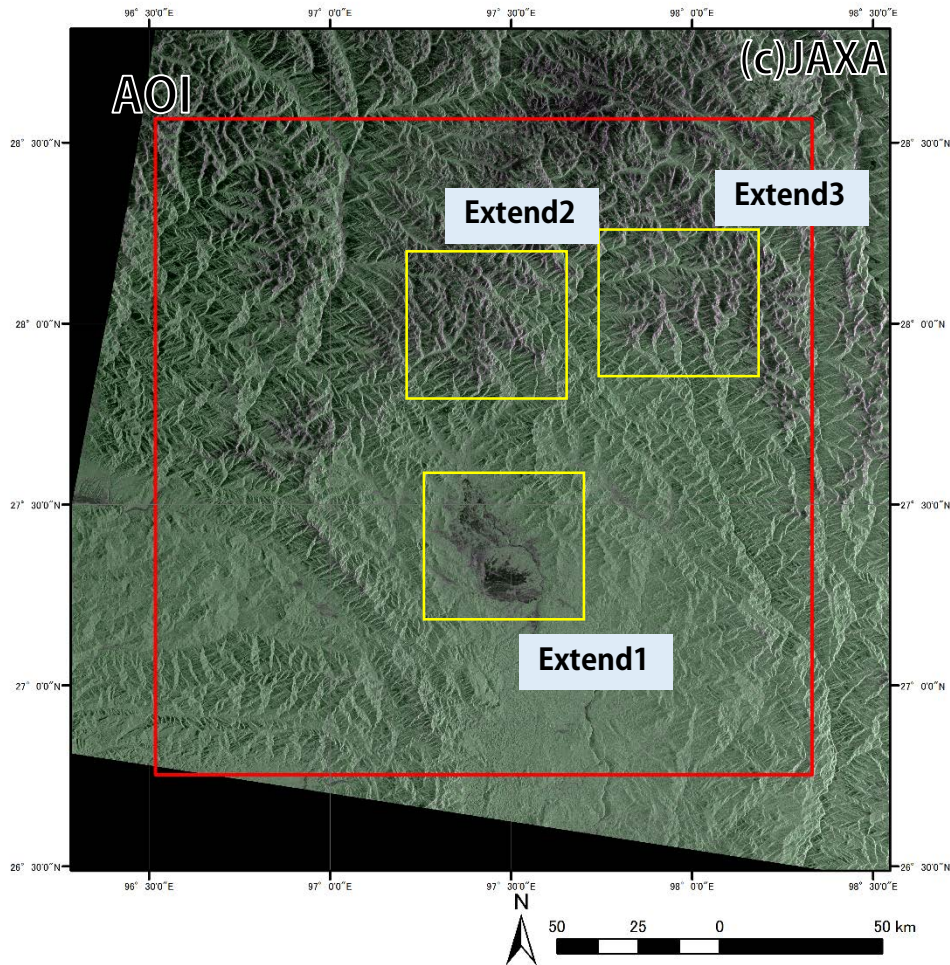
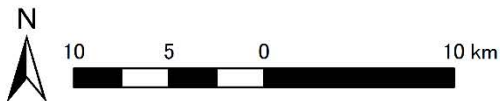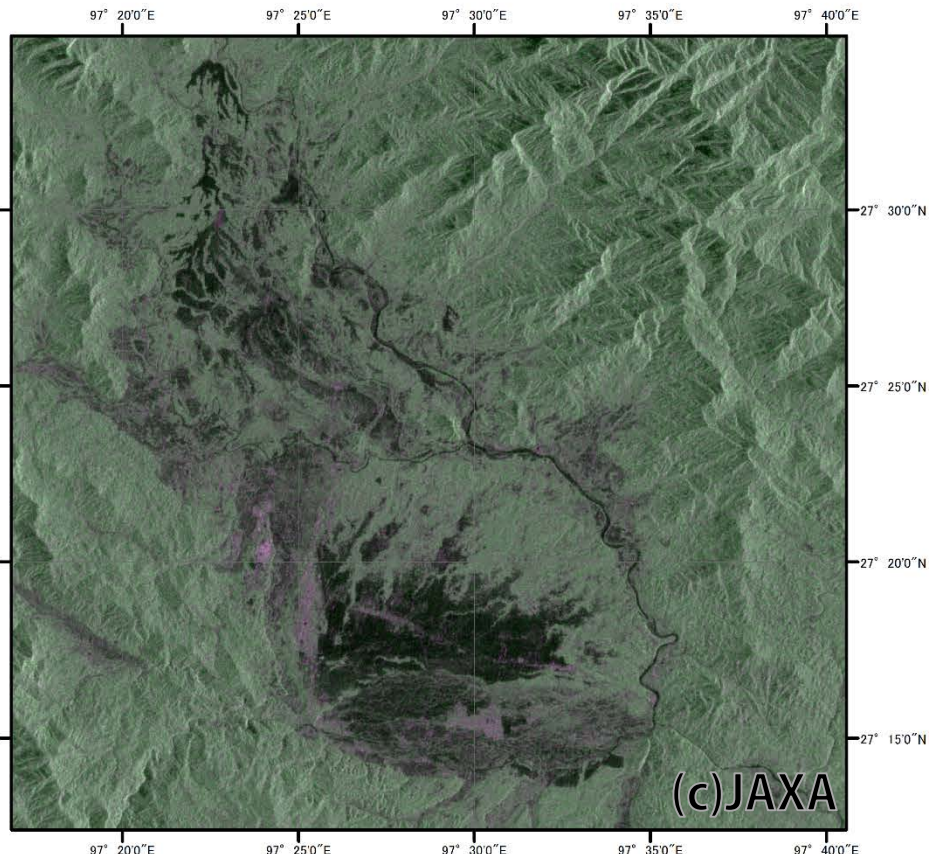**This scene covers whole area of AOI.**
R:G:B=HH:HV:HH

But unfortunately we can NOT identify the significant glacier lakes by foreshortening effects, radar shadow effects, or others.
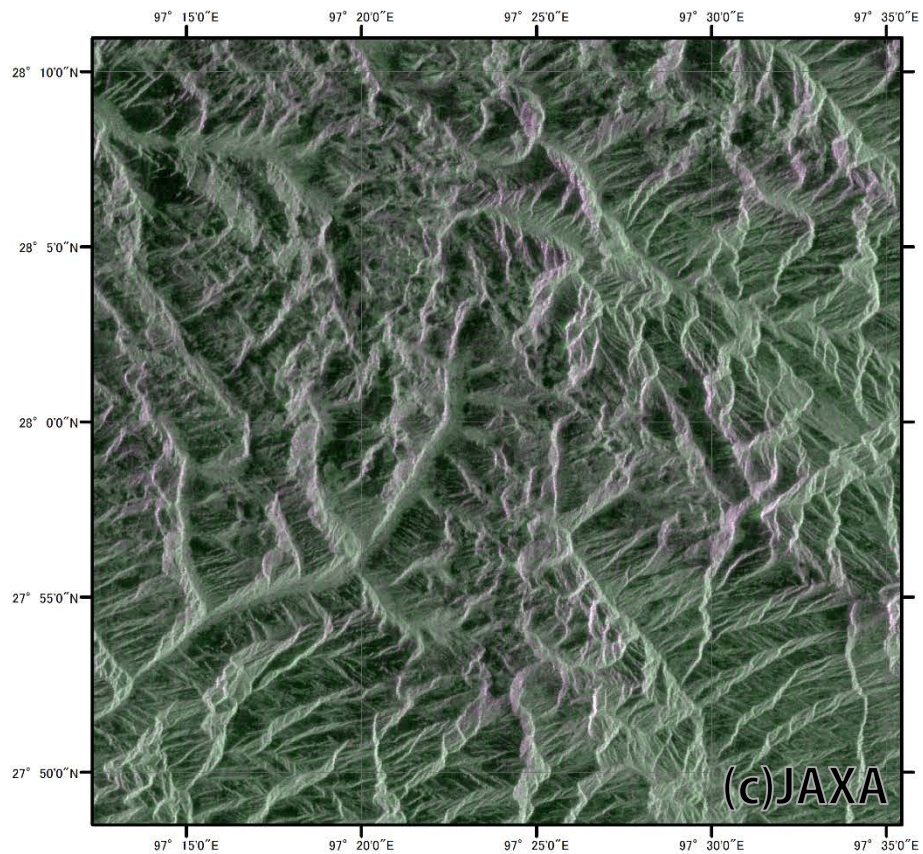
Analysis 2 Extend 1
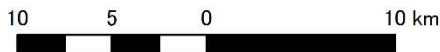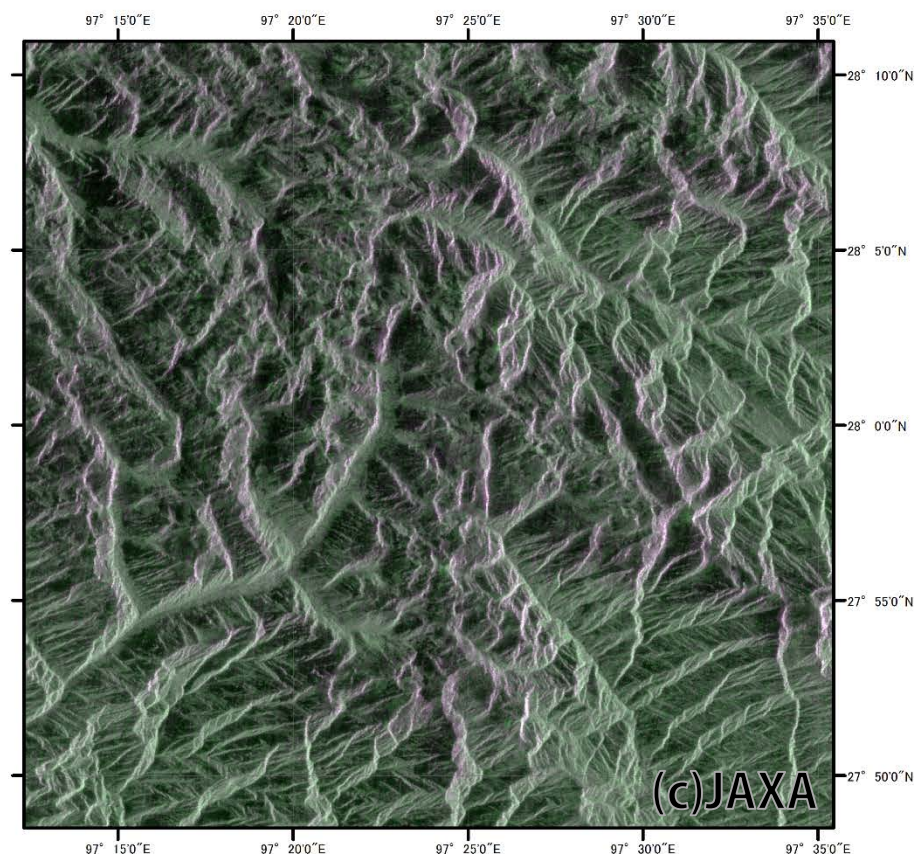
ALOS-2(2015/12/6)   ALOS-2(2016/2/28)

(c)JAXA   (c)JAXA

N

10   5   0   10 km

No significant change area detected.
(A little color change may be caused by a little
                          change of soil water.)
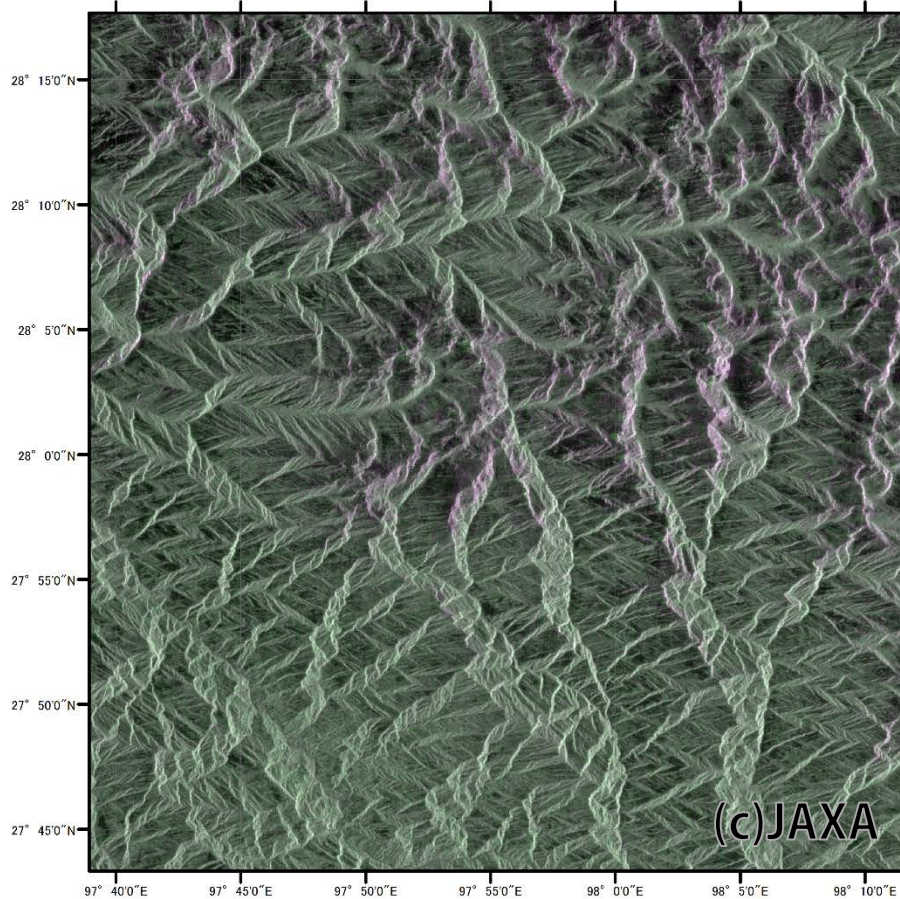
Analysis 2 Extend 2
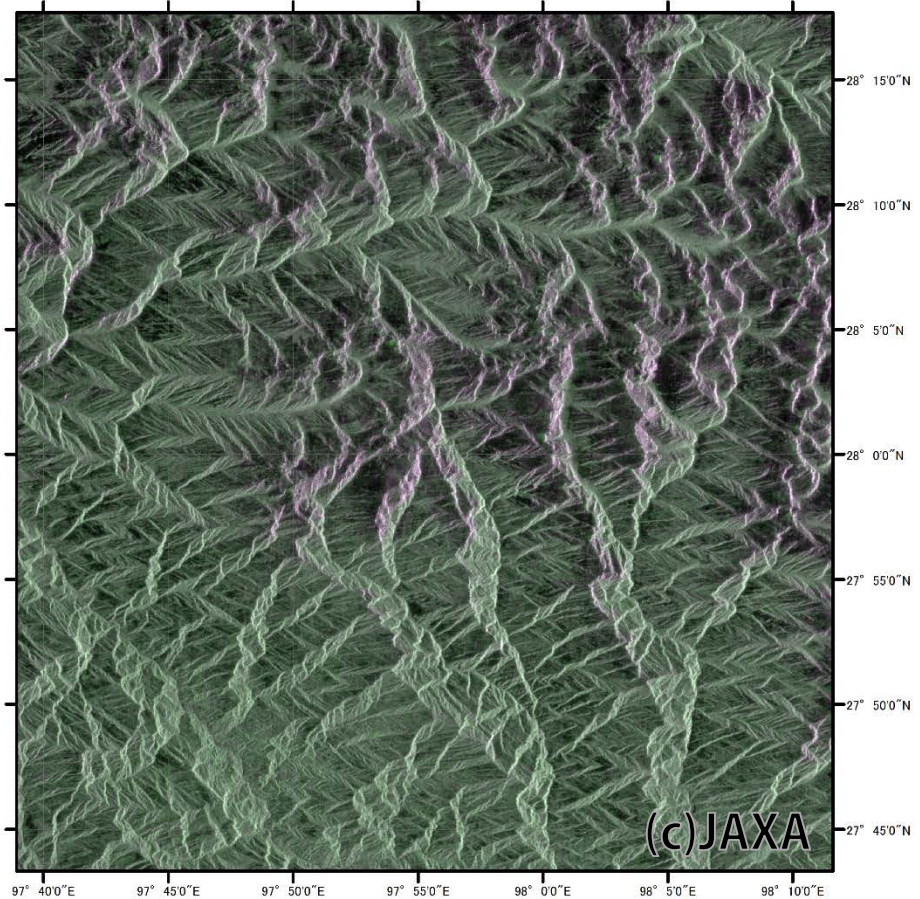
ALOS-2(2015/12/6)   ALOS-2(2016/2/28)

(c)JAXA

(c)JAXA

N

10   5   0   10 km

No significant change area detected.
(A little color change may be caused by a little
change of local incidence angle.)

Analysis 2 Extend 3

ALOS-2(2015/12/6)   ALOS-2(2016/2/28)

No significant change area detected.
(A little color change may be caused by a little
change of local incidence angle.)

Conclusion

- **We analyzed ALOS-2 emergency observation data and planed observation about Myanmar Glacier.**

- **Significant (or Deadly) Glacial Lake is <u>NOT</u> identified in this analysis.**

- **We can NOT identify the origin of river expansion in this analysis.**