

# Cadastral Survey for the effective management of Cave in South Korea

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## I. Remarkable Issues

- Inaccurate location without cadastral survey
  - Old-fashioned surveying skills
  - Without cadastral concept



Increased Traffic & various development cause  
**danger of cave's collapse**



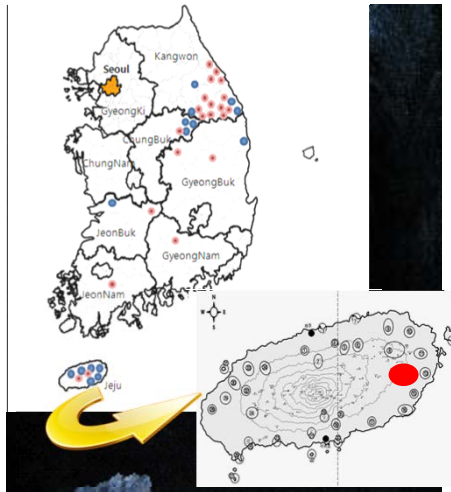
'Stability & limit of cave development!'



2

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## II. Cadastral survey



- Susan cave, Jeju island
  - Korea Cadastral Survey Corp.
  - UNESCO World Heritage
  - Lava cave
  - Length of 4.5Km
  - Only small entrance
  - Not close-loop but double-run loop

3

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## II. Cadastral survey



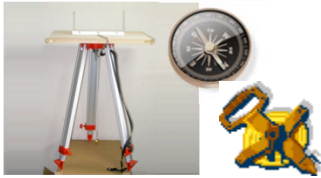
on-site inspection point

4

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## II. Why difference

KCEI (the past)		KCSC (the future)
Private Institute	Organization	Government agency
Only reference data	Object	Land ownership Land use
Old-fashioned	Surveying skill	'State-of-the-art'
Plane-table, compass, ruler, poles, ...		Total station Terrestrial LiDAR



VS

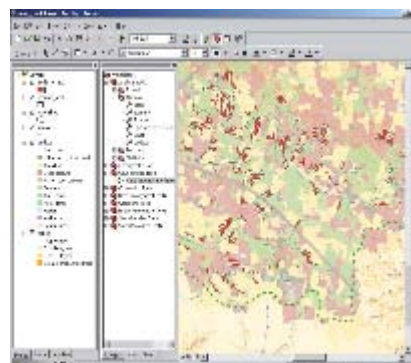


5

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## III. Conclusion

- Cave location with cadastral survey
  - Limit of weight & Signal
  - Improve the stability
  - Protect the land ownership
- Introduction of 'CIMS'
  - Based on the cadastral survey
  - Preservation & management



6

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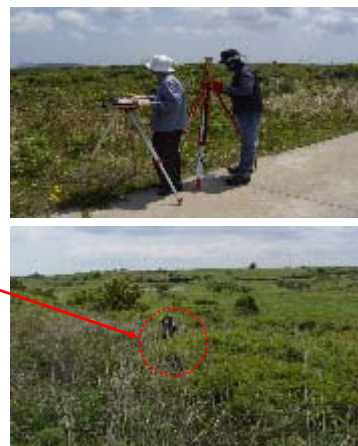
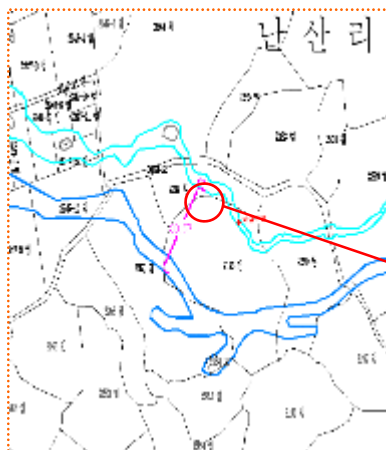
Thank you for your attention!

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7

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## On-site inspection



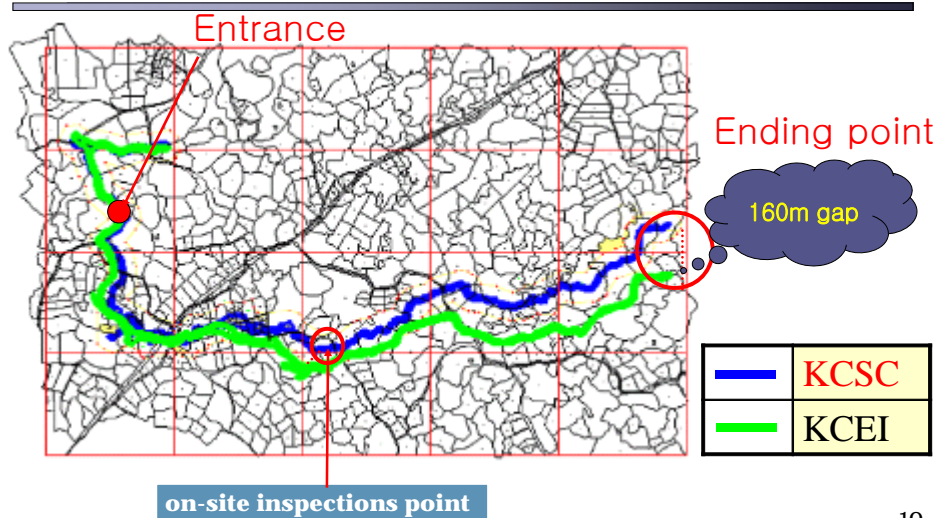
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## On-site inspection



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## II. Cadastral survey



10

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