

Karst and Caves in Myanmar

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Sinterlaken - 14. Nationaler Kongress
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www.myanmarcaves.com



Karst and Limestone in Myanmar

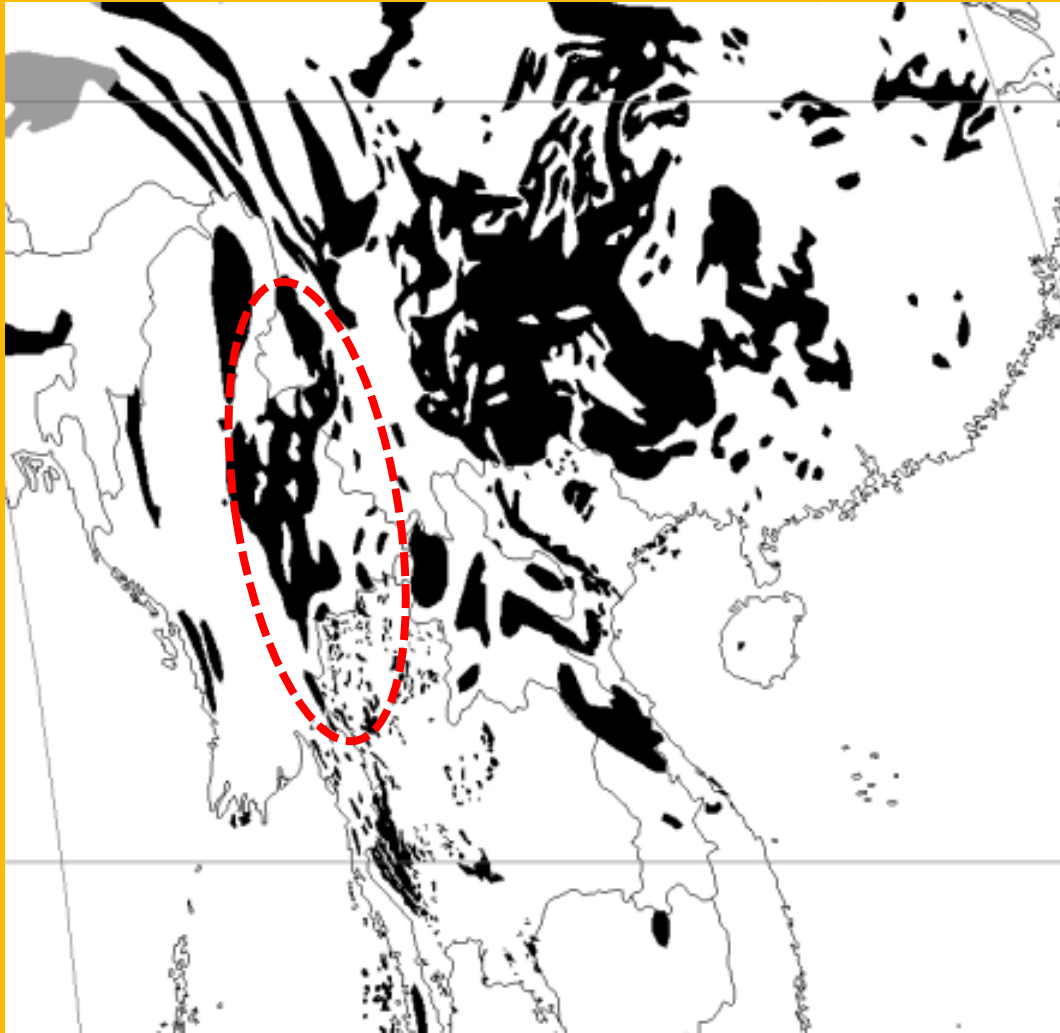


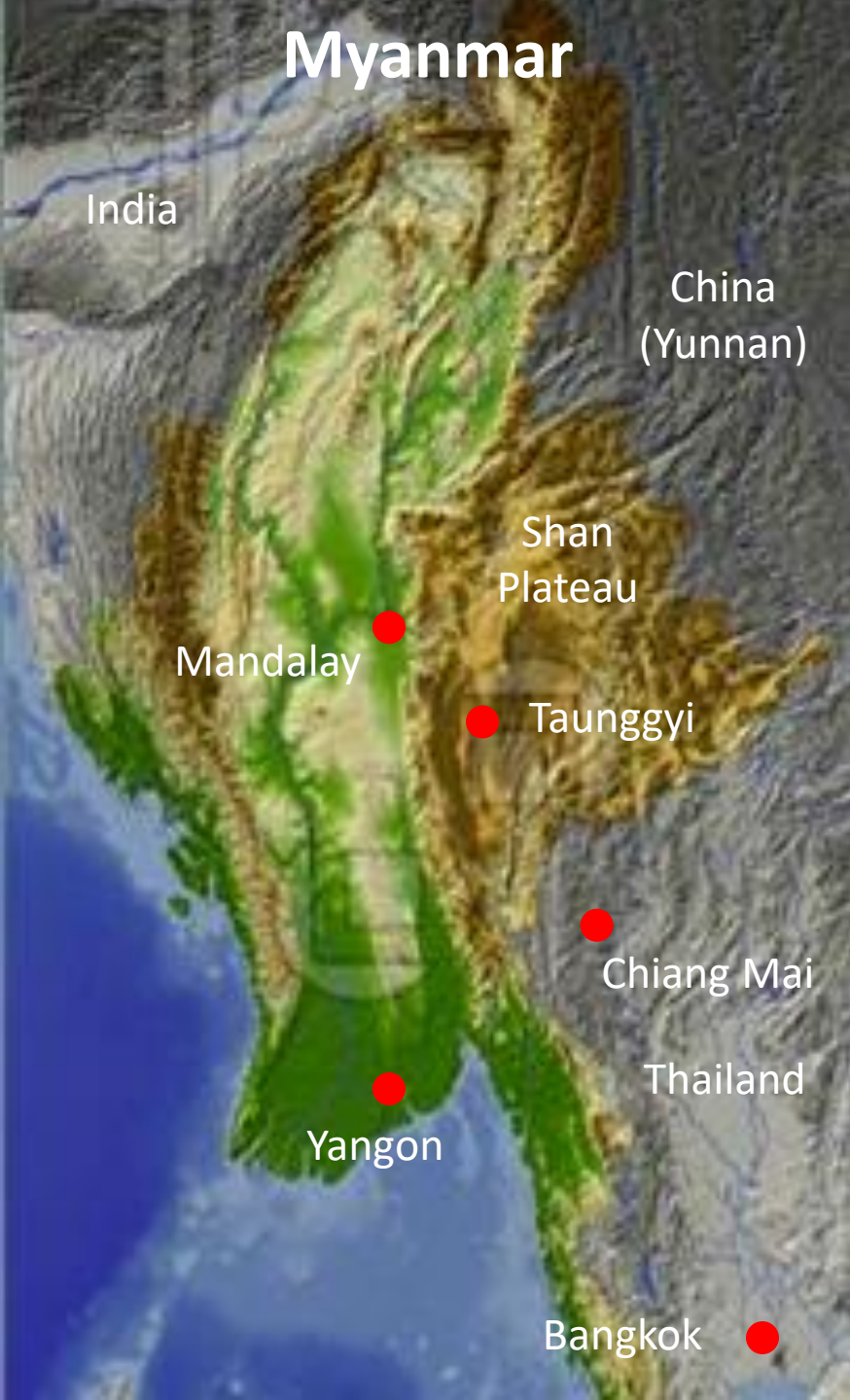
Table 20.2 Protected karst areas in Southeast Asia

Country	Karst area (km ²)	Protected karst
Burma	80,000	650
Cambodia	20,000	0
Indonesia	145,000	22,000
Laos	30,000	3,000
Malaysia	18,000	8,000
PNG	50,000	0
Philippines	35,000	10,000
Thailand	20,000	5,000
Vietnam	60,000	4,000
Total	458,000	53,150

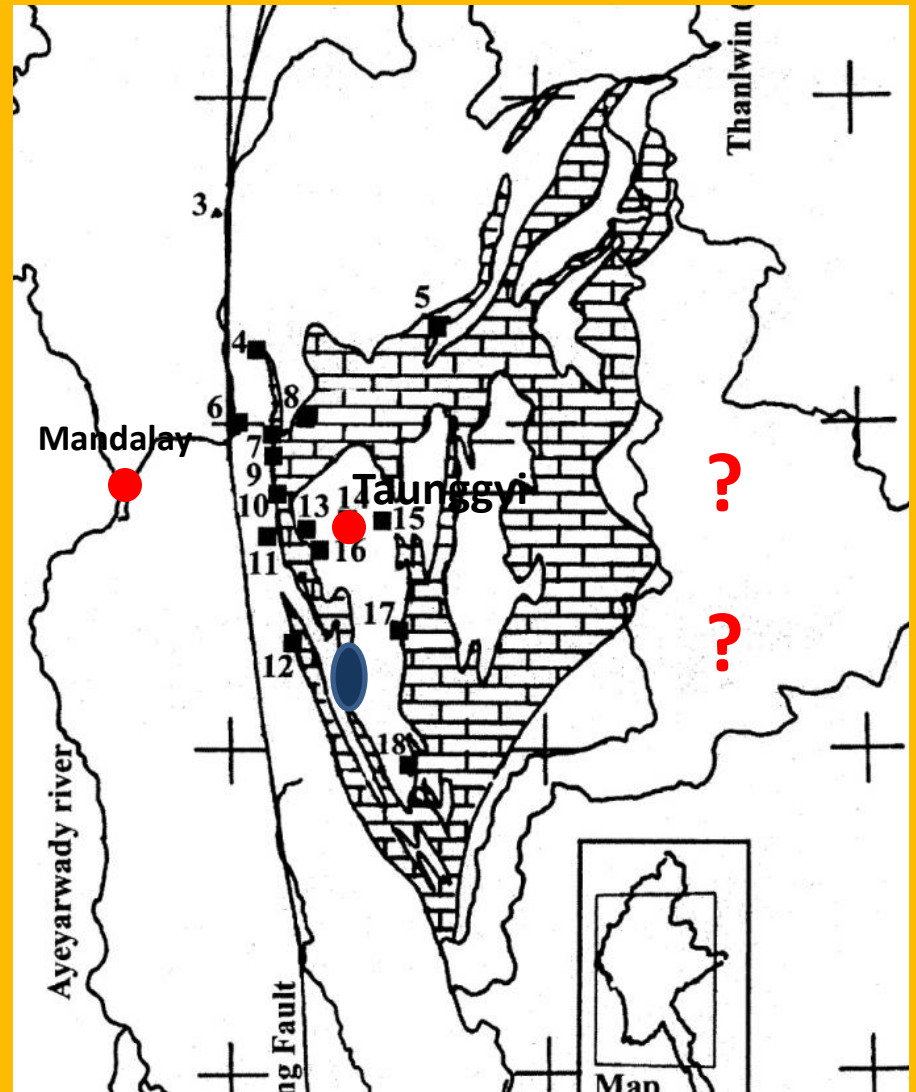
Source: Day and Ulrich 2000

- Large area of karst in SE-Asia (10%), Myanmar has a significant portion
- A formerly white spot for karst research due to the political isolation

Myanmar



Karst Shan Plateau



Landscape on Shan plateau

North-South trending karst ridges up to 1800 m asl



Myanmar Cave Documentation Project



- European-Myanmar Project since 2009
- 51 members of 13 nations
- Swiss / British based international expedition teams
- FSE EuroSpeleo Project



Overview of Caving areas

Lashio/Kutkai

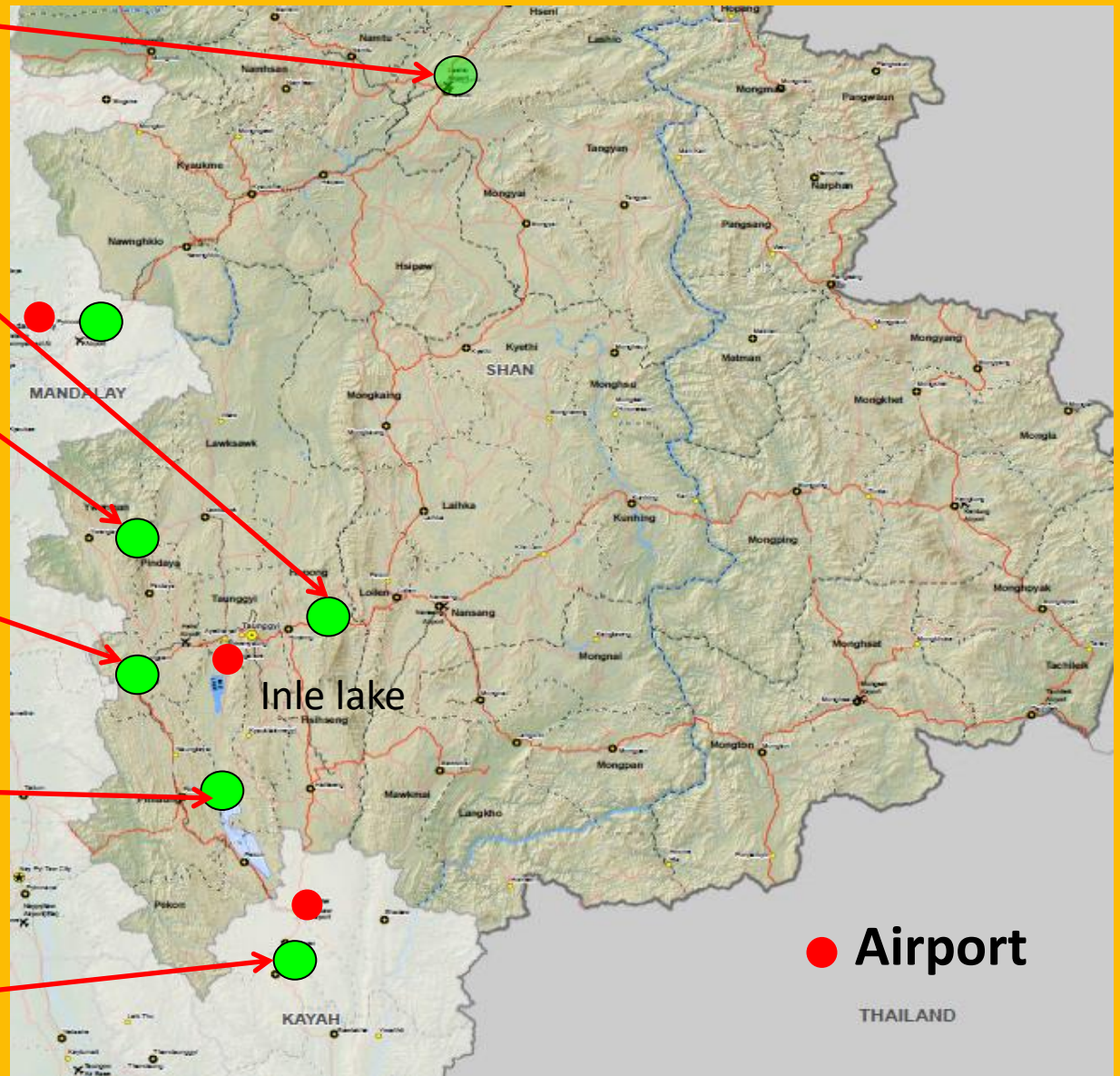
Hopon –
river caves &
monasteries

Ywangan –
Depressions with
rivers

Kalaw –
Conglomerate
caves

Pinlaung – deep
caves to plateau
edge

Kayah –
large river caves



350 km

Longest Caves of Myanmar

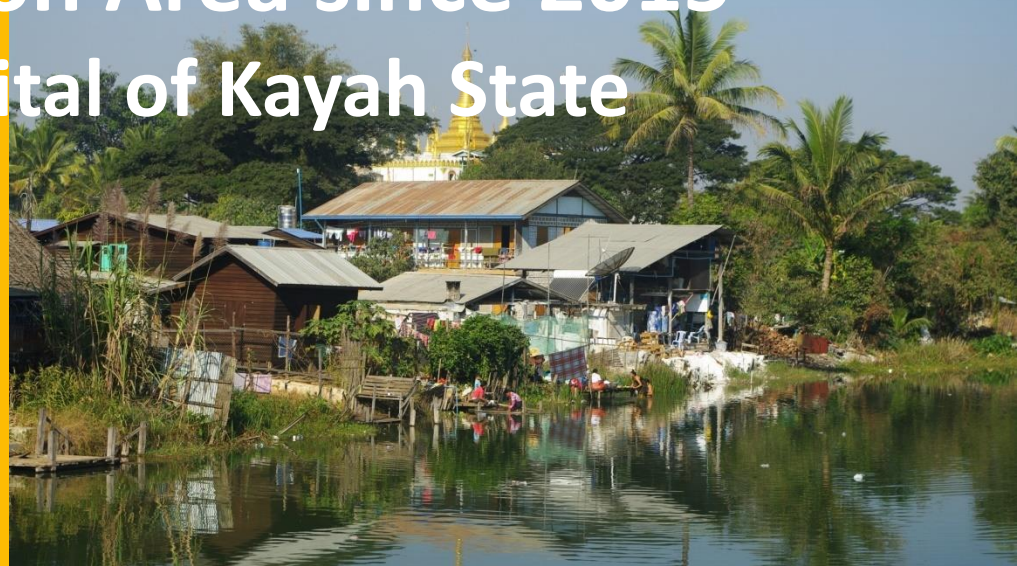
No.	Name	State	District	Length (m)	Year
1	Khauk Khaung (Stone Cave)	Shan	Ywangan	4790	2012-14
2	Phruno River Cave	Kayah	Hpruso	4580	2016-17
3	Red River Cave	Kayah	Bawlakhe	4095	2015-16
4	Namun Spring Cave	Shan	Pinlaung	2628	2013-14
5	Kyet Cave	Kayah	Loikaw	2194	2015
6	Stone Spring Cave	Shan	Ywangan	1917	2014
7	Ho Hwe Cave	Shan	Hopon	1857	2018-19
8	Mondowa Gu	Shan	Taunggyi	1770	1998
9	Hopon Spring Cave	Shan	Hopon	1655	2011
10	Na Gar Gu (Dragon Cave)	Shan	Ywangan	1654	2014

11 years – 16 expeditions – 80 km passage

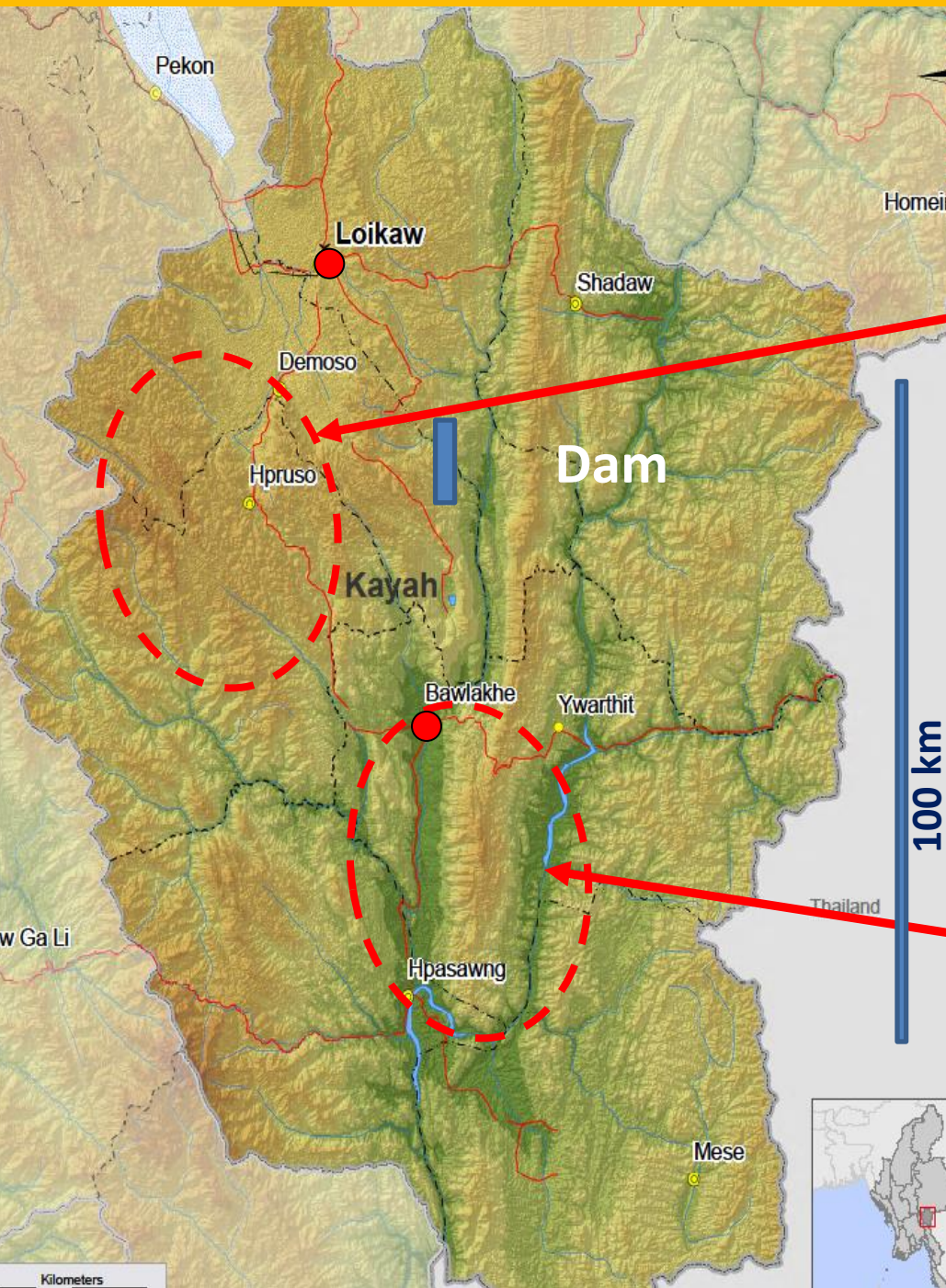
Karst Database with about 700 Objects

Main Expedition Area since 2015

Loikaw – Capital of Kayah State



Kayah State



Hpruso plateau karst 900-1500 m asl



Salween river 150 m asl

Rivers in lowland Bawlakhe



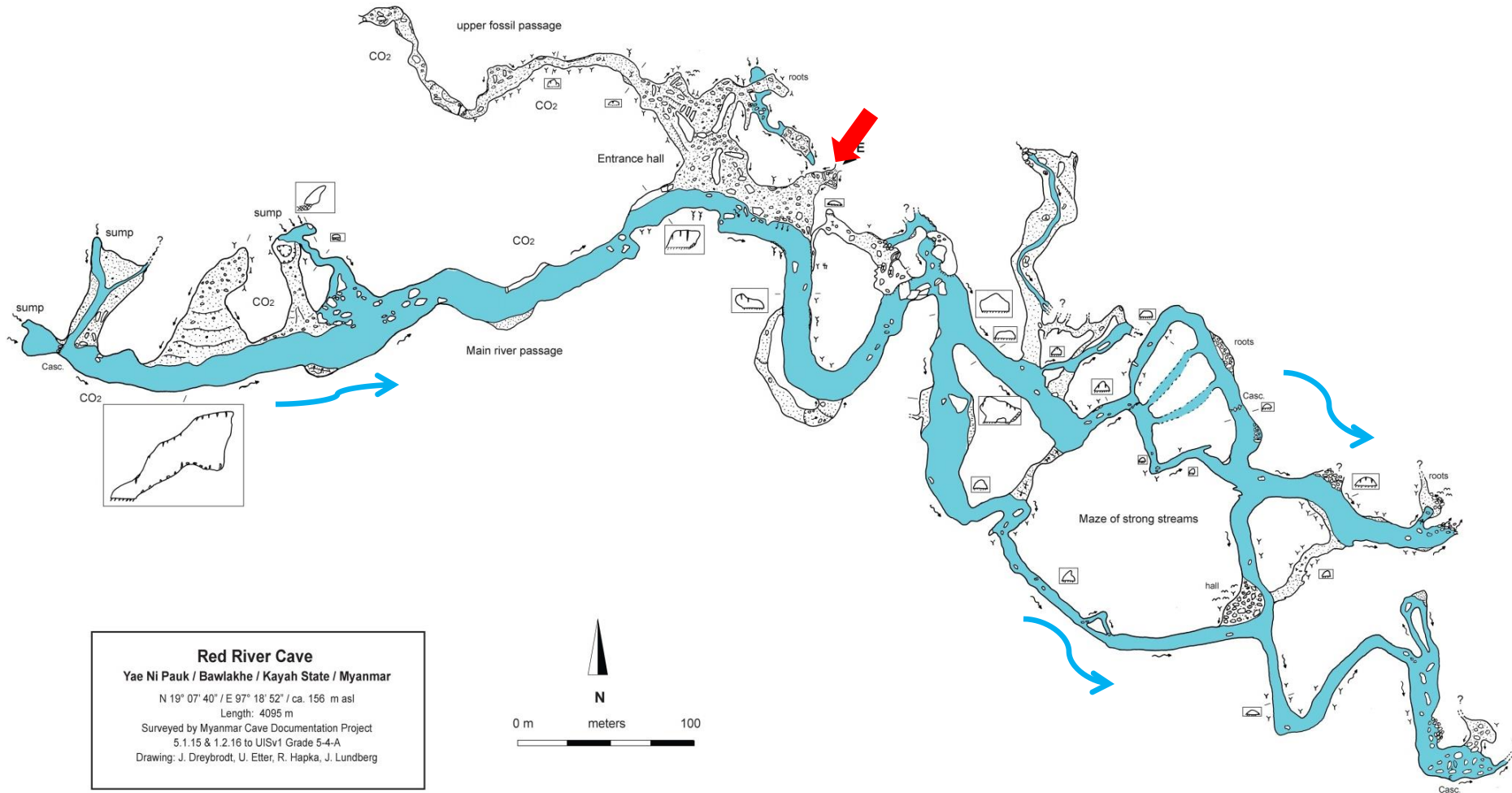




Video Red River Cave - Exploration down river

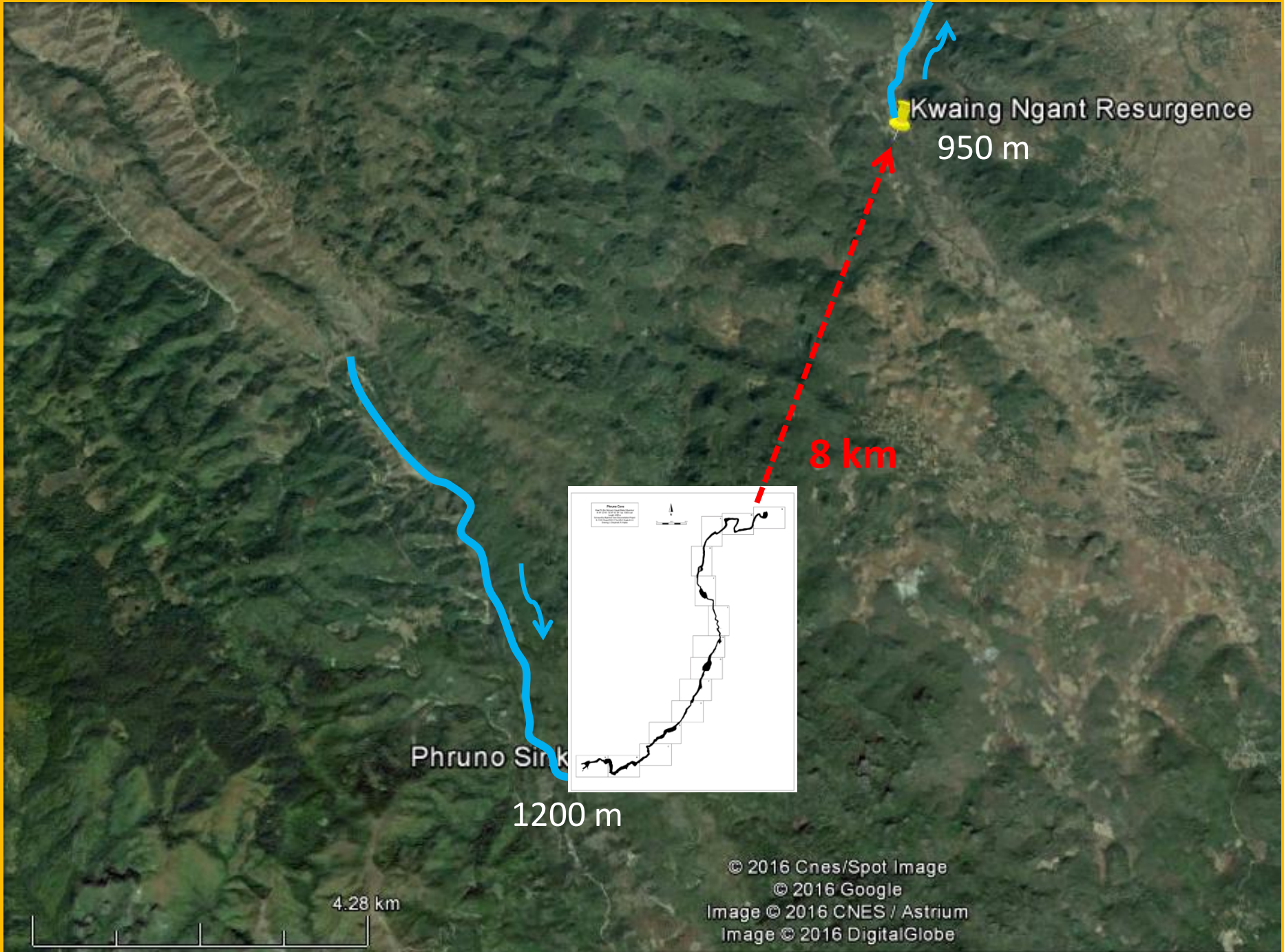
Map Red River Cave

4095 m



Karst of Hpruso

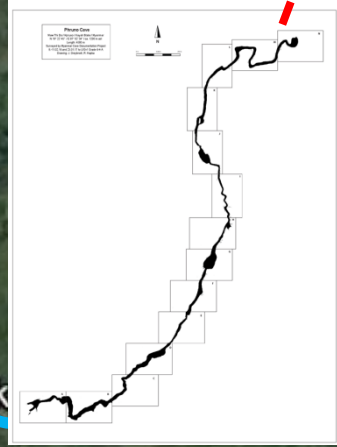




Kwaing Ngant Resurgence
950 m

8 km

Phruno Sink
1200 m



4.28 km

© 2016 Cnes/Spot Image
© 2016 Google
Image © 2016 CNES / Astrium
Image © 2016 DigitalGlobe



This «little» stream charges > 5 cbm/s to Phruno Cave and exists towards Demeso township



Phil Bence





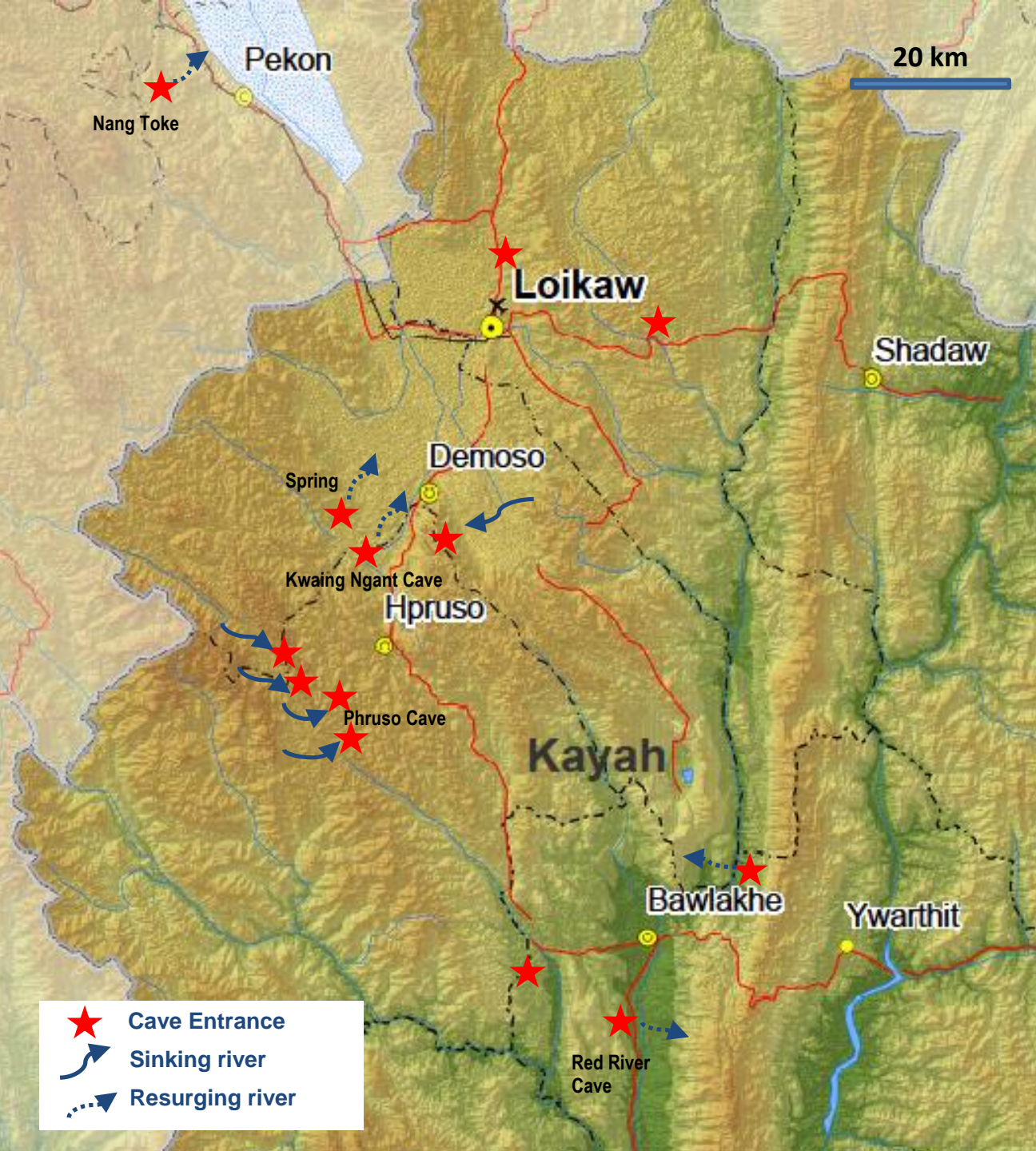
Kayah Phruno River Cave (4.5km up to now)







Resurgence Kwaing Ngant



Hydrogeology in Kayah Karst

Location of
sinks and
resurgences



Resort Construction

Presentation to Kayah State Government





Plan for Karst conservation



Education & Research (SDG 4, 17)

- Karst workshops at universities with student field trips to enhance knowledge
- Karst monitoring with data loggers, measurement of river systems

Water Supply (SDG 6, 17)

- Hydrogeological modelling, calculation of recharge for groundwater supply management
- Identification of key areas for drinking water supply

Ecotourism (SDG 4, 8)

- Karst and cave development for ecotourism based on IUCN practises

Biodiversity (SDG 15)

- Research on fauna, ie. bats, white blind fish, and cave geckos in Kayah

FB Event: Meeting of the cave & karst community

MYANMAR CAVE EXPLORERS MEETUP

*Climb O'Clock
Yangon*

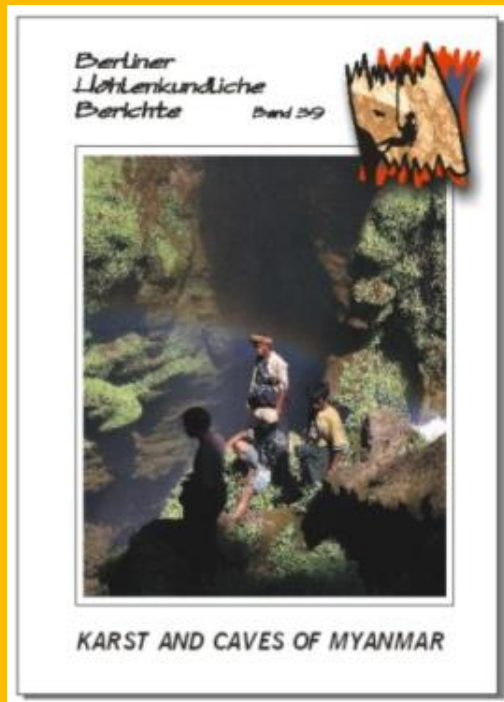
Myanmar Cave Survey

23/FEB/
2019

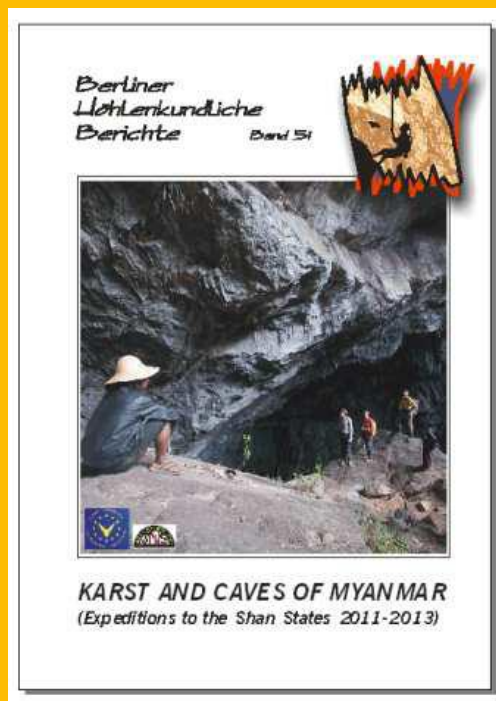


Publications & Documentary

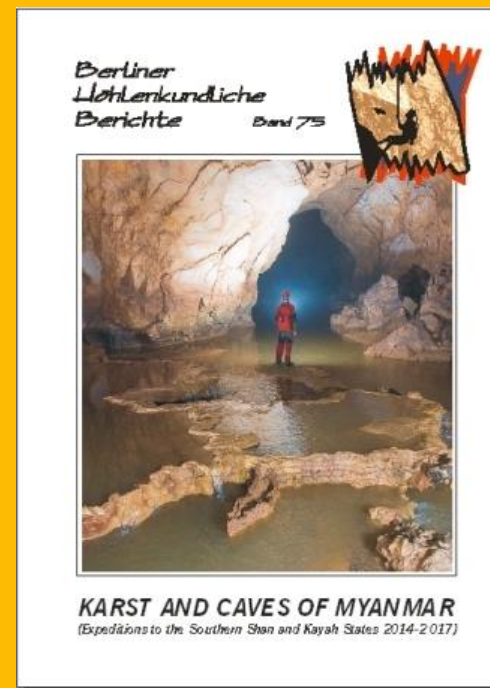
2010



2013



2018



Documentary Movie
by Phil Bence
28 min
2016

firstSTEPS
KAYAH - BIRMANIE
ကယားပြည်နယ်



**Thank you?
Questions ?**

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