

# The Sublime Karst of Papua New Guinea

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Caves and Karst



# Why the Karst of Papua New Guinea ?

- 📖 It includes some of the most rugged and challenging landscapes of the world
- 📖 They are absolute treasure-houses of geo-climatic history, and of remarkable biodiversity



# Why “Sublime”

- 📖 The term has long been used to describe landscapes which are so striking in character as to provoke an intense emotional response
- 📖 This may be because of their beauty, or simply, as in Papua New Guinea, because of their frightening scale

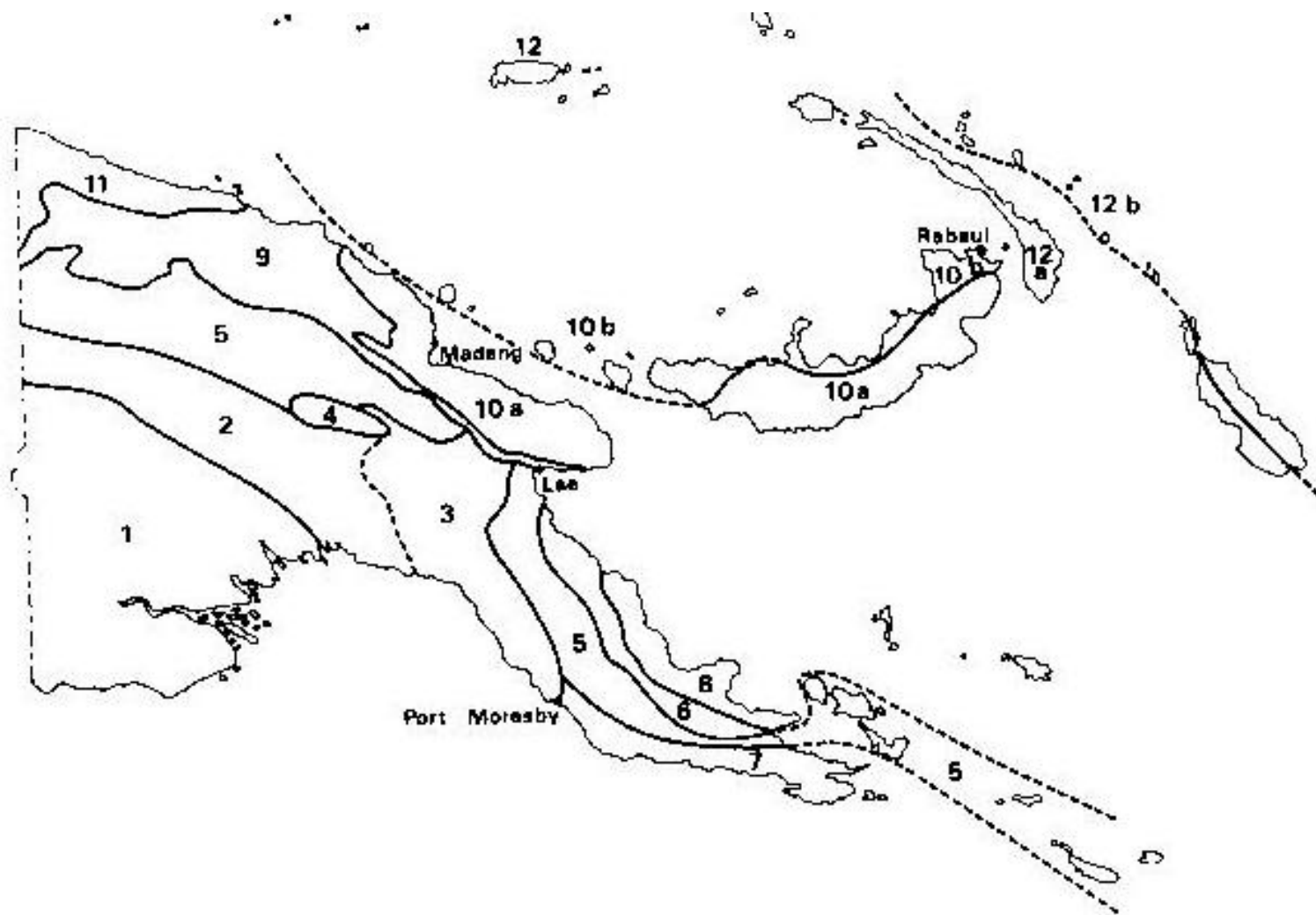


# The Geological Base

- 📖 The geology has a complex and tortured history
- 📖 Papua New Guinea is located on the collision zone between the Australian and Pacific Crustal plates
- 📖 So, it has experienced violent movements, including volcanoes, folding of strata, earthquakes and tsunamis



The dotted line shows the position of the crustal boundary



# This means that . . .

- 📁 The total country has been fragmented and changed throughout its geological history
- 📁 This not only affects the rocky base
- 📁 But means that biological evolution has also been fragmented, hence the remarkable biodiversity of the country



The brick-like patterns show the location of the limestones



# Why World Heritage ?

- 📁 Because they are of *Universal Human Interest* and deserve recognition as such
- 📁 Recommended at Mulu Symposium 2001



# A Serial Nomination . . .

📁 Several widely separated sites, but all of related character:

📁 Nakanai

📁 Muller Plateau

📁 Telefomin and the Hindenberg Wall



# Does size matter?

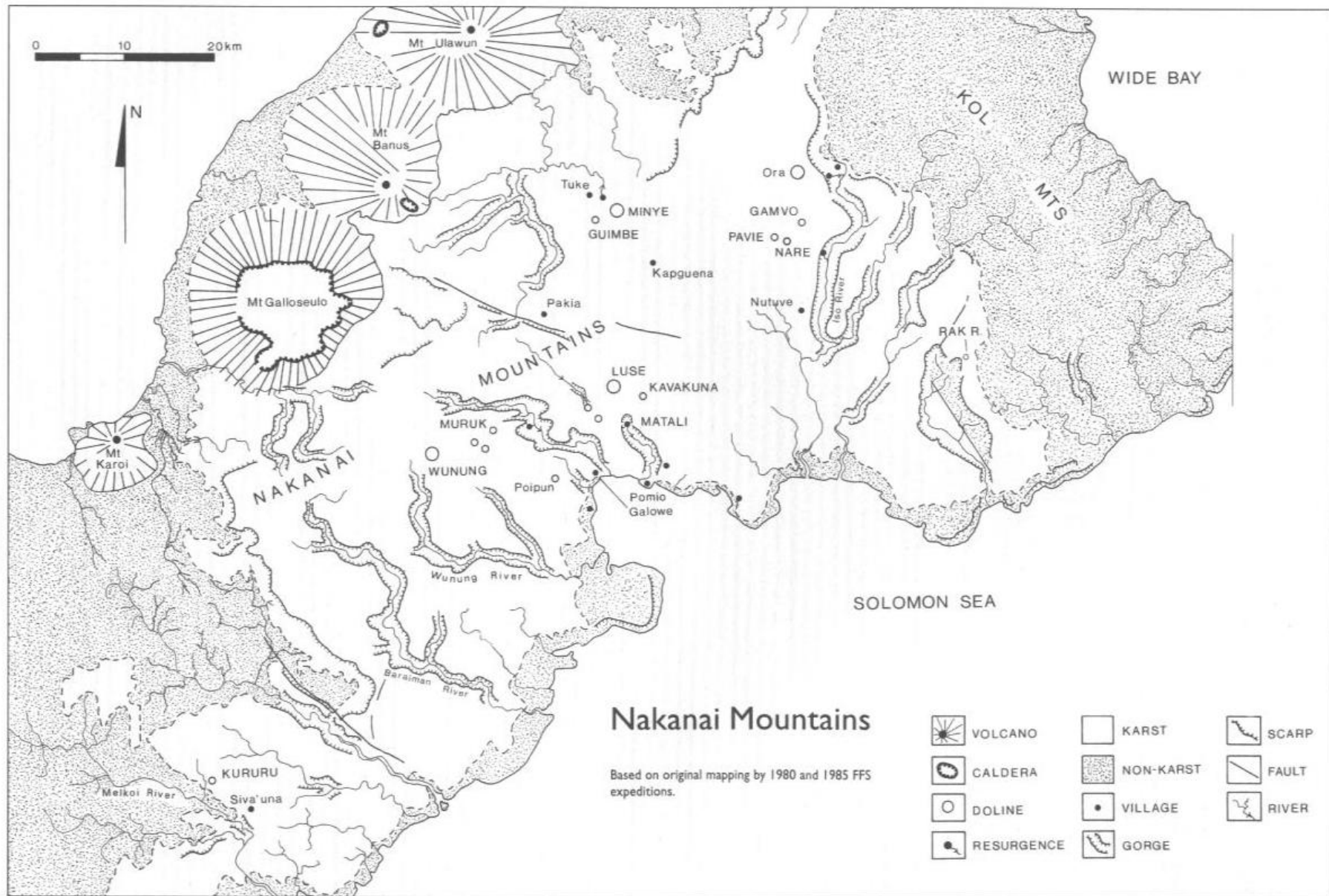
- 📁 Size is often quoted as an indication of importance and people seem to like the idea
- 📁 In the context of World Heritage, it is only really important because it provides space for greater diversity of features



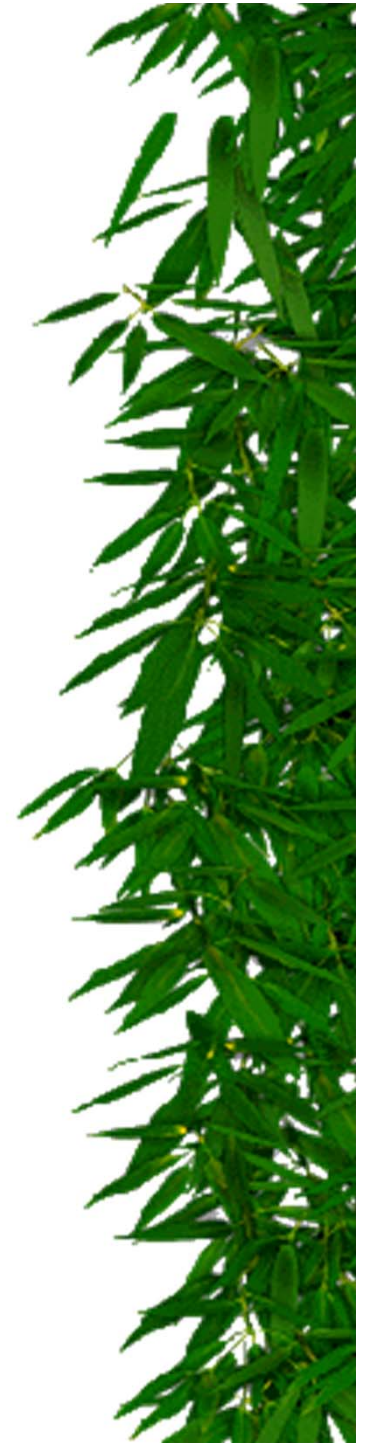
# Nakanai

- 🏠 Enormous dolines (collapse depressions) provide a spectacular landscape

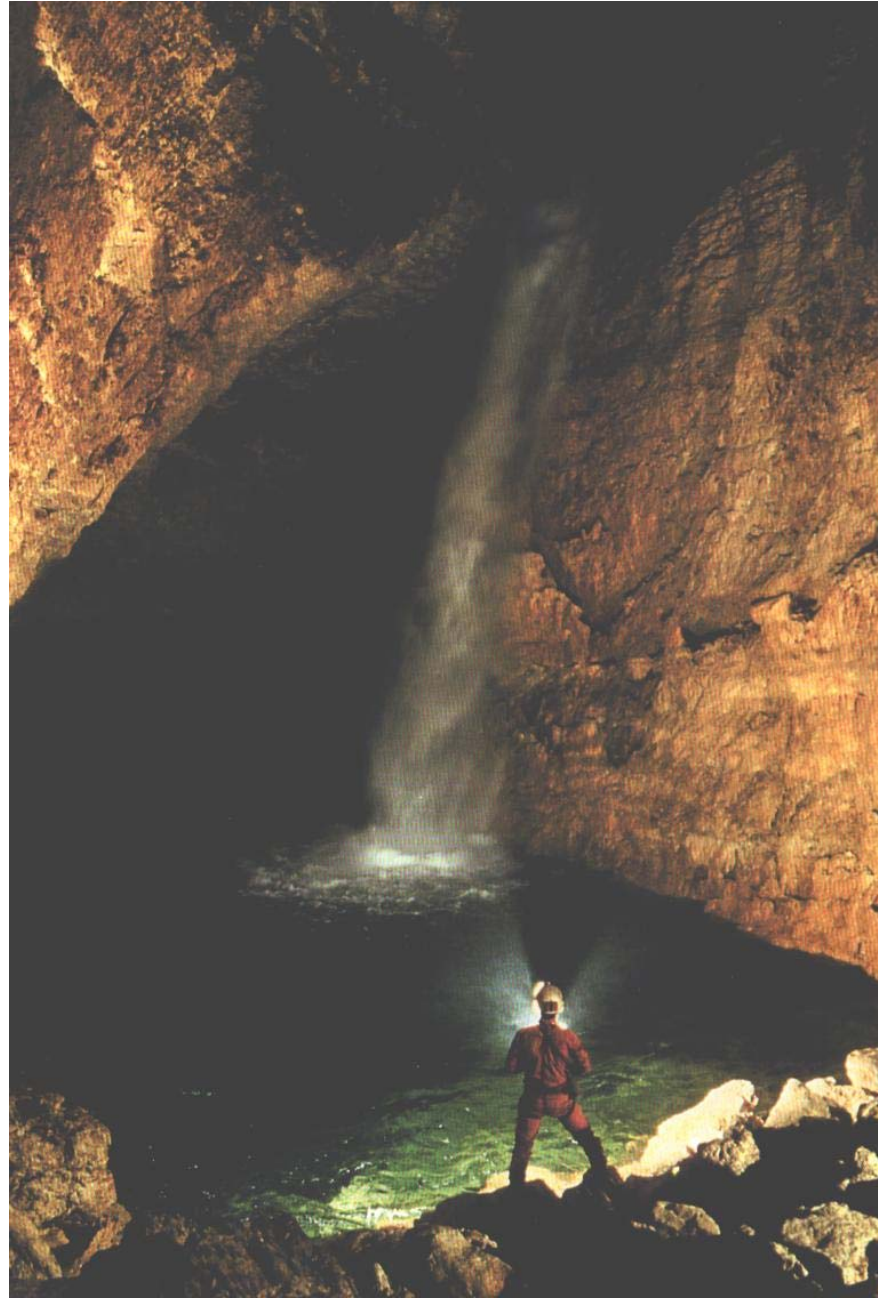




Extremely deep caves  
usually with immense rivers







# Even at the best, a Challenging Environment

- 📁 Part-way into the  
deepest Cave in the  
Southern Hemisphere
- 📁 Muruk is 1,178 metres  
deep



# With great biodiversity

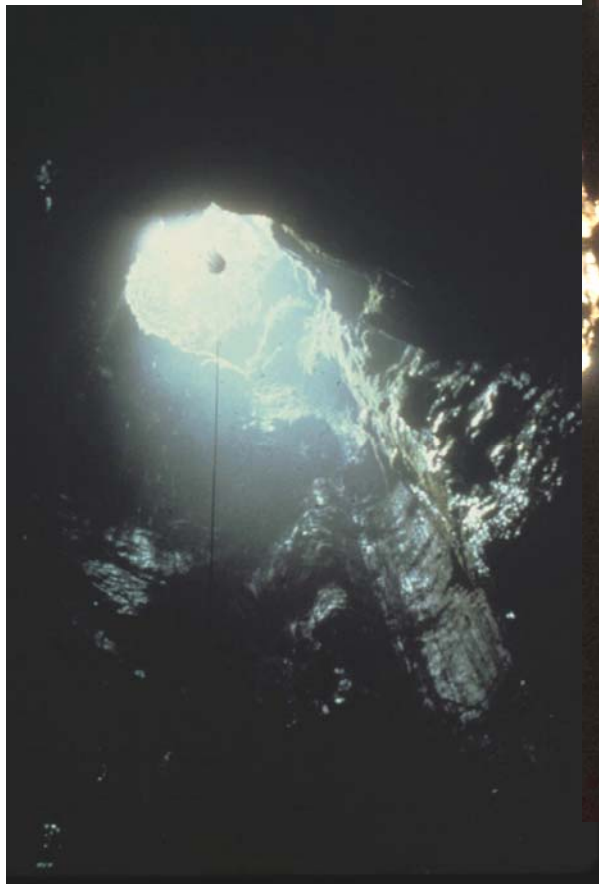


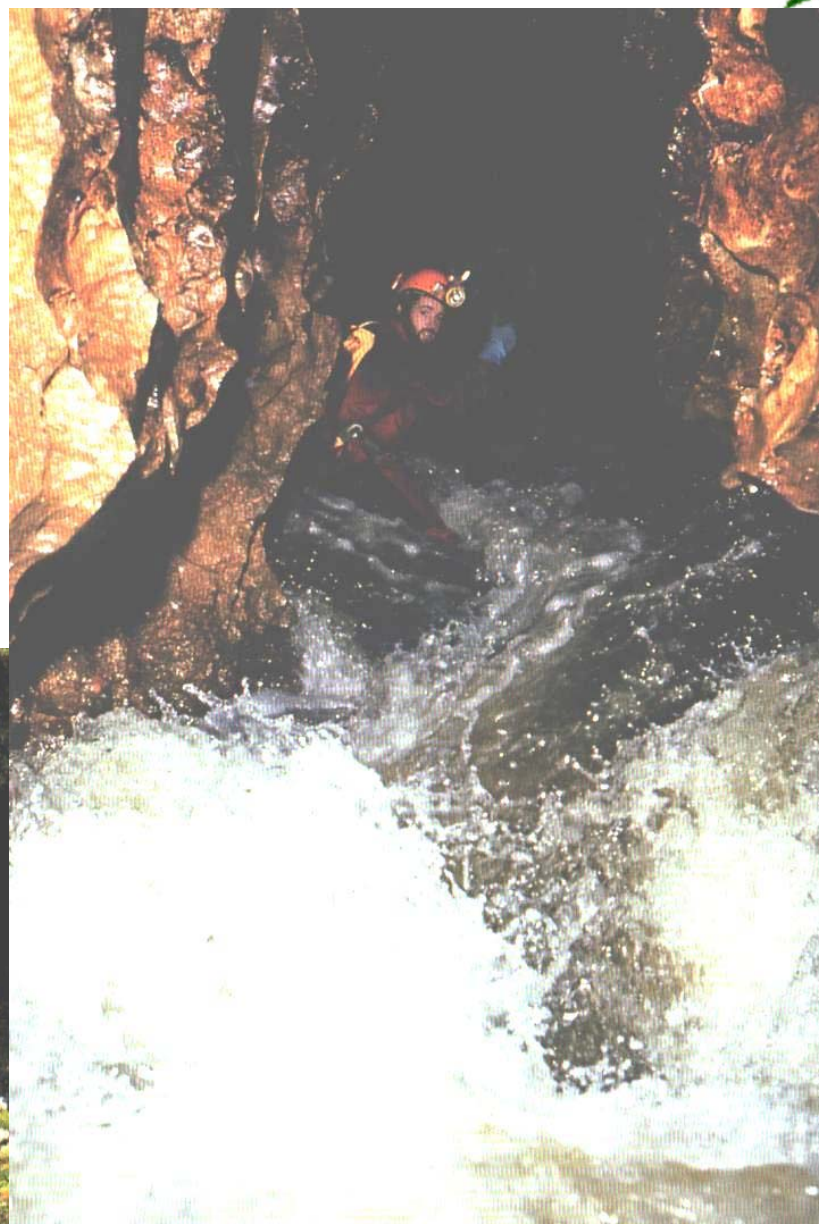
# Muller Plateau

- 📁 Extensively investigated
- 📁 Spectacular landscapes and very complex large caves
- 📁 Important for biodiversity on surface and underground



Again, truly big and challenging  
caves . . .





The caves are currently the longest known in Papua New Guinea

📁 Atea Kanada is c. 34.5 km in length

📁 Mamo Kanada has reached c. 54.8 km., but there is still much more to be explored.



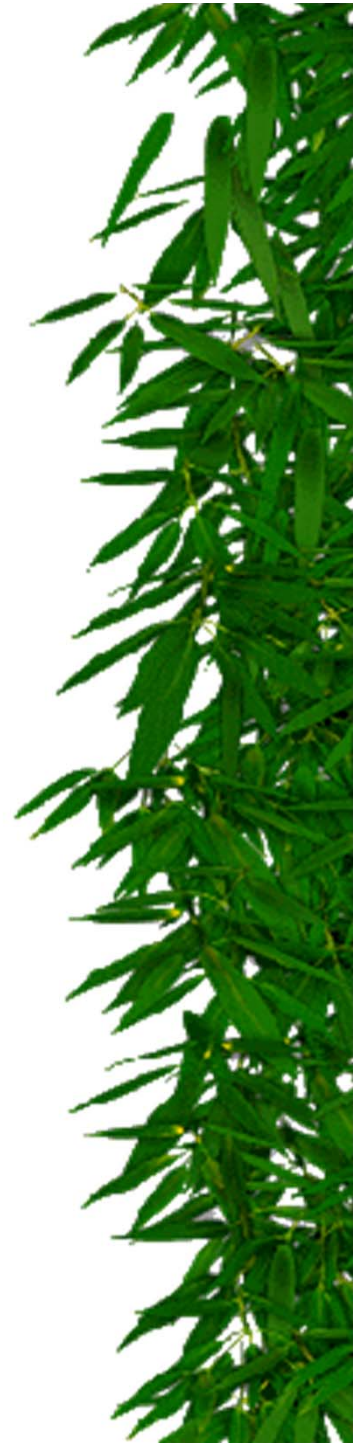
More is known about the Muller Plateau caves than any other

- 📁 The geological structure is mapped in detail and well understood
- 📁 More cave-dwelling fauna has been collected here than from any other area
- 📁 But the major gap in knowledge is that of the forest and its fauna



# Telefomin and the Hindenburg Wall

- 📁 Remarkable landscape features
- 📁 Complex caves with important biota, fossils and evidence of past history, including glaciation and marine transgression







## Climbing on the Hindenburg Wall



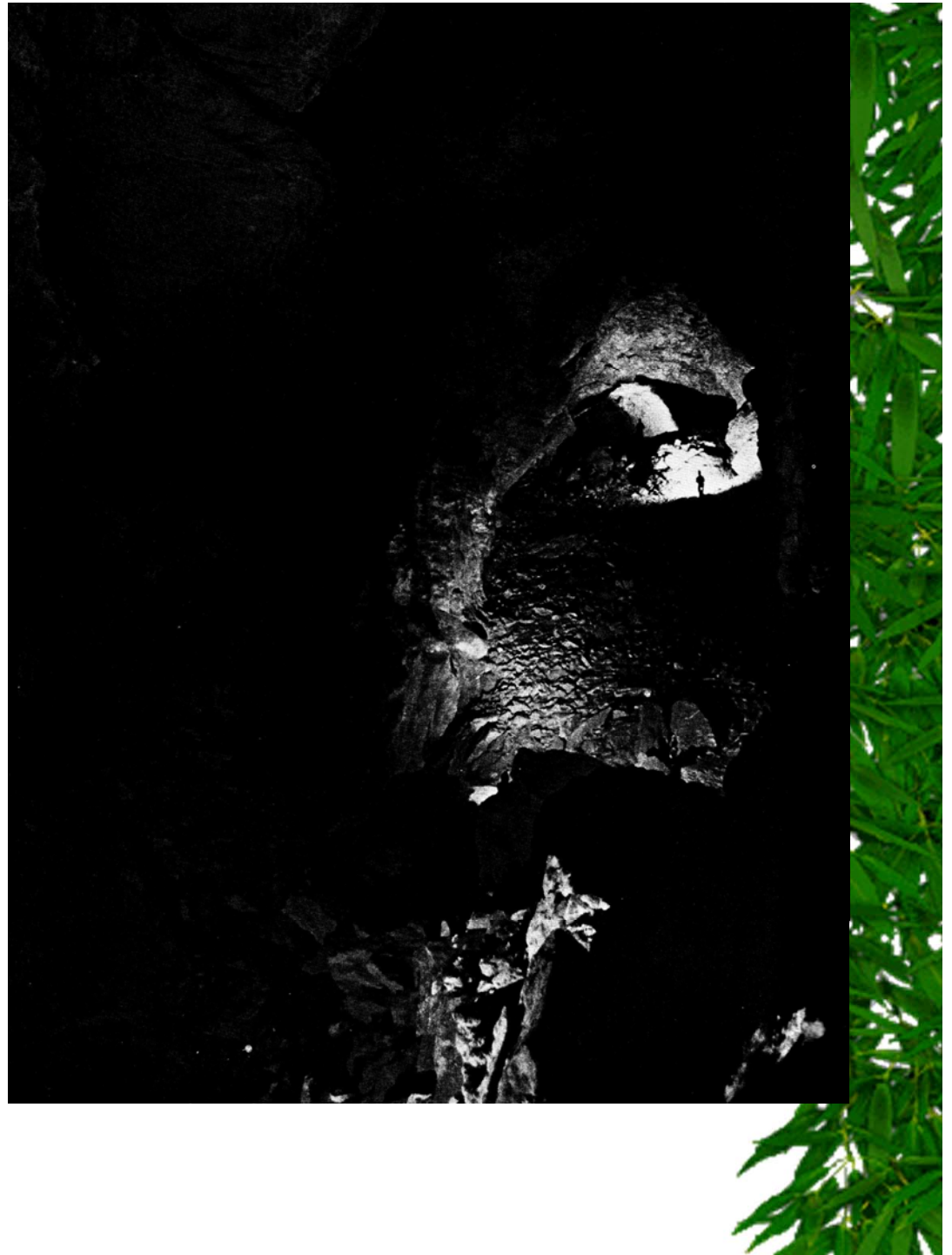
# Two very special Features

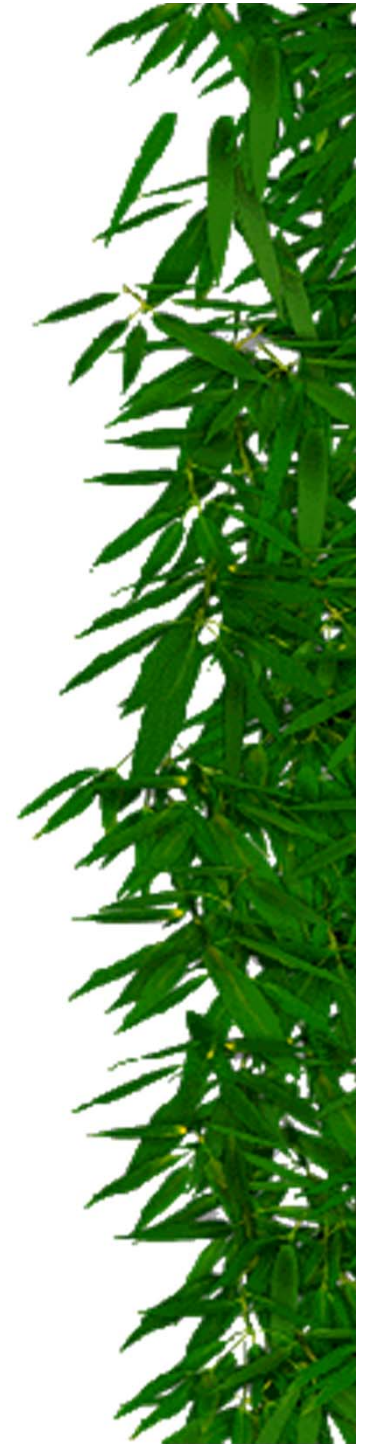
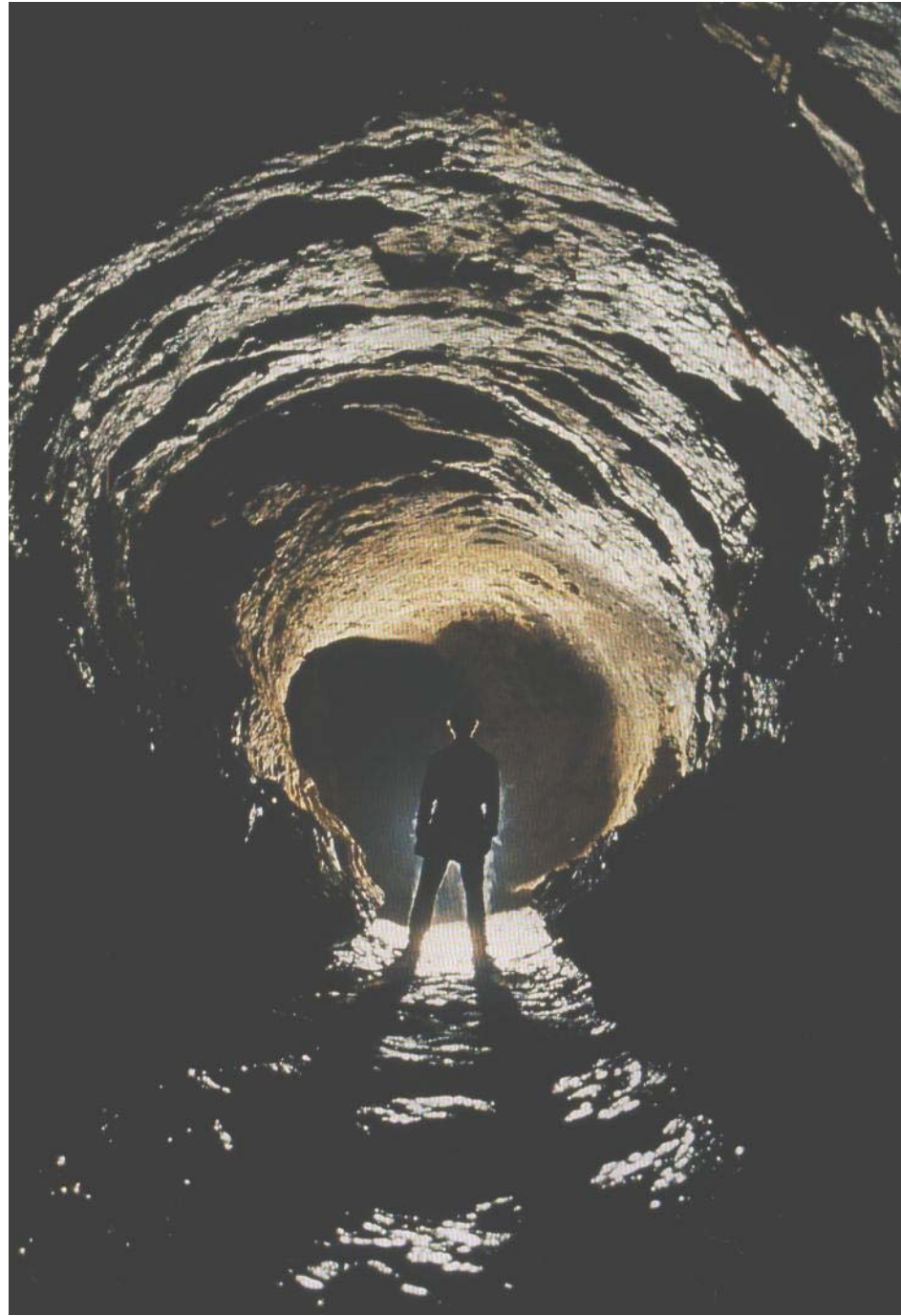
- 📖 Extensive use of the caves by inhabitants of the region, hence rock art and other artifacts
- 📖 Troglobitic fauna from marine ancestors



Exploration in the  
immensity of  
Seminum Tem

Some 24.5 km. in  
length





Some other areas demand further study and assessment :

- 📁 Kikori – Darai region of polygonal karst
- 📁 Whiteman and Raulei Ranges of New Britain
- 📁 Karsts of New Ireland



# A Basis for Action

- 📖 We believe that Papua New Guinea can now make the key decisions according to your own patterns of decision-making
- 📖 We can only provide support and information about each site and advice on management to preserve the wonderful values of the Papua New Guinea Karst



# So, What steps have to be taken?

- 📁 Landholders must agree and request action by Local Government
- 📁 Local Government must agree and request establishment of a conservation area under national legislation
- 📁 Forward through Provincial Government to National Government



# National Government must pursue two lines of action

- 📁 Establish a conservation area and ensure that the necessary processes are followed
- 📁 Place the site on the tentative listing of sites to be nominated for World Heritage Inscription
- 📁 Prepare the necessary documentation for nomination of the site



## We Suggest:

- 📁 That Tentative Listing be sought for the serial nomination of multiple sites as described above
- 📁 But that each site be progressively and separately nominated
- 📁 Commencing with Nakanai, probably then the Muller Plateau; any others to follow

