

2018 Puncak Jaya Plateau Expedition to West Papua

Detailed description of objectives:

Overview: This is the first caving expedition to a high plateau of limestone to the east of the highest mountain in Oceania (Puncak Jaya or Carstenz Pyramid), which is located in West Papua (ex Irian Jaya). This plateau has an unusually high density of river sinks and resurgences visible on Google Earth satellite images, and over 2 km of depth potential to the south. The terrain is often open grassland or simply bare limestone, rather than the dense jungle associated with lower elevations in Papua New Guinea or West Papua. This more open terrain allows sinks and resurgences to be seen on satellite images, and will assist with accessing them (although it will still be arduous and at high elevations).

This high (> 3000 and up to 5,000 m) limestone plateau extends ~70 miles on either side of Puncak Jaya, from Illaga to Wanghete. It has a depth potential in excess of 2 km, and we believe it is one of the major remaining targets for cave exploration worldwide. The density of sinks and resurgence is exceptional, and they are visible on satellite images due to the lack of dense jungle at such elevations. The peak of Puncak Jaya lies about half way along the plateau, near to the Freeport Mine that is the world's second largest copper mine.



Figure 1. Photograph of the terrain of the high plateau area to the east of Illaga, on the trekking route to Puncak Jaya in the background. Much of this terrain is relatively open, although it is at 3500 m altitude.

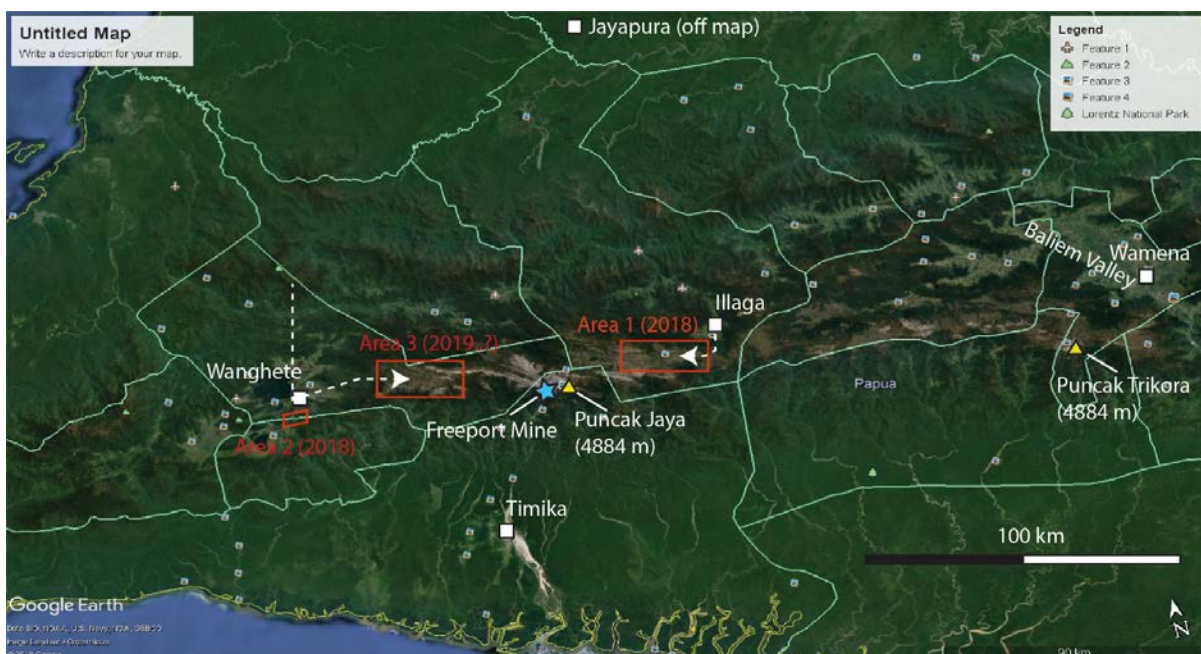


Figure 2. Overview map of areas of interest, major towns, and peaks in Irian Jaya

1. Primary aim is western part of plateau: In this expedition we primarily seek to explore the western part of the plateau that lies between Puncak Jaya and Illaga. This area was chosen for initial reconnaissance, because it lies on the established trekking route from Illaga to Puncak Jaya. We feel that being close to this established route will help with permits. We have been corresponding regularly (watsapp etc) with the owner of Trekpapua (Mac - see <https://trek-papua.com/>) who can arrange access from Illaga. He regularly runs trips to climb Puncak Jaya from this route. Reaching the area will involve a charter flight to Illaga, and then a ~20km walk (with 1500m ascent) from Illaga, which typically takes 2-3 days. We would have a base camp, from which we will make day trips.

We will first focus on 3 big river sinks (and numerous other small sinks) that lie almost on the trekking route. These sinks appear to feed a large resurgence that is 400 m lower, and up to 12 km away, located in a gorge closer to Illaga. We will also visit this resurgence and gorge.



Figure 3. Series of major river sinks in Area 1, located to the east of Illaga.

We will then visit a series of 6 major resurgence and sinks that lie further to the west and south, which are clearly visible in the open grasslands and bar rock on satellite images. Reaching these locations will involve walking up to 15 km (round trip) from a base camp. If they look good, we may have satellite camps.

Finally, we would visit a second area on the far (eastern) side of the resurgence-gorge, where there appear to be a number of very large sink holes. This can be done on the return walk to Illaga.

We have a team of 8 people, and 10 days in the field to achieve these aims, so we will see how many can be achieved. The area is at elevations of ~3500m, so we will need to acclimatise; and the temperature can reach freezing at night. But the terrain is open, and not the dense jungle seen elsewhere. So it is more feasible to reach and find targets. We will employ a local guide, who already knows some cavers we see on satellite images. A second trekking company is gathering entrance photographs for us, of places they know, one of which they describe as a gate to hell (...). The more obvious targets contain rivers, but not of the scale seen in other expeditions. But water levels may be an issue, although our initial target here is mainly reconnaissance. We will carry a relatively small amount of rope (< 200m) and a hand bolting kit. We have two qualified expedition doctors.

Area 2 near Wanghete: However, Talling and a few others will spend a final week near Wanghete, which is a town from which the eastern part of the plateau is accessed (fig. 1). They will scope out plans for accessing this eastern area in 2019. They also aim to reach a particularly large river resurgence, which is at a relatively low elevation, just 3 km from a significant town. Thus, a second subsidiary aim is further reconnaissance.

Area 3 - Eastern Part of Plateau (reconnaissance for 2019): The area to the east of Puncak Jaya (area 3 on Fig. 1) has even more sinks and resurgences on satellite images, but it is somewhat more difficult to reach (~30 km) and it does not lie on a trekking route that trekking companies know well. We enquired whether one could walk the full length of the high plateau from west to east. But it is also not possible to bypass the large Freeport Mine (Fig. 1), around which there is fighting connected to the Free Papua movement. We would thus like to go to this eastern part of the plateau in a future visit, accessing it from Wanghete, potentially in 2019. But in 2018, we only have 3 weeks and can thus only explore one main area.



Figure 4. Big resurgence near the town of Wanghete, at a lower elevation in area 3. It is about a 150m pitch down to river level.

Previous work in the area and key publications:

Previous expeditions to West Papua (Irian Jaya) have gone to entirely different areas. They have often focussed on the Beliem Valley near Wamena, such as in the spectacular UK Caves of Thunder expeditions and other French, Dutch, and Italian expeditions. Previous UK and Italian expeditions visited the Puncak Trikora area, whilst Italian cavers recently found very large river caves in the dense jungle of the Bird's Head Peninsula. But we are aware of no previous expeditions to the Puncat Jaya (Carstenz Pyramid) plateau.

Publications, Web Sites and Expeditions:

1984 UK reconnaissance expedition – see Cave Science 13, 25.

1985 Indonesia Expedition (Wanuga) – Caves and Caving No. 29.

1988 Caves of the Cloud Mountains Expedition – Cave Science 17, 39 (Trikora, Wolo, Illugwa, Pugima, Pauli, Usilimo, Koropun and Lake Gulanggun).

1990 Japanese expedition to Trikora and Illugwa

1990. UK High Trikora expedition – Roo Walters et al. (Aleya, Lake Gulanggun, East Baliem, Wanuga, Wanema) – Caves and Caving 52.

1991 Spanish Expedition to Wolo area

1992: Boothroyd, et al., 1993. Caves of Thunder: Irian Jaya Expedition 1992.

1999 Italian Expedition to Baliem Valley Italians: www.boegan.it/lattivita/estero/nuevo-guinea/1999-irian-jaya/

2000 Italian expedition (Gruppo Speleologico Bergamasco le Nottole) to Puncak Trikora and Baliem Valley: 2000 Italians www.nottole.it/naturali_oltrefrontiera_papua.html

2003, 2005 French expedition to Baliem Valley

2017-15 Italian expeditions to the Bird's Head Peninsula, and previous expeditions to Seram Island:

<http://darknessbelow.co.uk/news-exploring-large-river-caves-in-west-papua/>

<http://www.acheloos.it/>

The leader of this expedition Andrea Benassi has been in touch.

I have also emailed Al Warild, Dave Gill, Andy Eavis (who may have some aerial photos) et al.

People

Confirmed Team

(1) Pete Talling (expedition leader): 49, University Professor: Previous expeditions to Myanmar (6), China (9), Yemen, Croatia, Spain (4), Austria (5), New Zealand, Philippines, Kyrgyzstan, East Timor etc.

(2) Fleur Loveridge, University Lecturer: Previous expeditions to Myanmar (6), China (6), Spain (10, one as leader), Croatia, Slovenia, Yemen, Austria (5), New Zealand, East Timor etc.

(3) Richard Gregson, retired doctor: age 62. approximate number of caving expeditions 10 including one to Southern Sarawak, but mostly Spain. Also tourist trips to Georgia USA and France. Author of Beneath the Mountains.

(4) Sarah Gregson, retired doctor: age 59 approximate number of caving expeditions 7 again mostly Spain but including one to Anlung in south-west China

(5) Andrew Atkinson, IT specialist. Age 46: numerous expeditions to Austria (~10), Myanmar, China, Mexico, USA, Australia etc.

(6) Andy Chapman, Teacher and Machine Tools: Age 43. Numerous expedition including Krubera to -1800, Austria (3), Picos, Mexico (3), East Timor.

(7) Roxanne Ramsey. Doctor. : Age 30. Expedition to Dachstein and CUCC in Austria.

(8) Avelina Wright, Solicitor. Age 31: Expedition to Kyrgyzstan, Picos, and numerous tourist trips (e.g. Cueto Coventosa, Gandara)

Those who are seriously considering it – but not confirmed:

(9) Simon Flower

(10) Mike Futtrell

(11) Andrea Futtrell

(12) Chris Densham

West Papua Expedition – Initial Draft Schedule

We will fly out on August 26th 2018 (= Day 1)

Days 1-2: Fly UK to Bali (£650), and then to Timika or Jayapura (£120). Stay in Hotel.

Days 3-4: Check we have first level of approval, meet trek guide team:

Day 5: Take Charter flight to Illaga (arranged by trekking company)

Days 6-7: Walk from Illaga to caving area that is 20-30km west of Illaga, towards Puncak Jaya. This is a > 3500m high and relatively open (grassland not jungle) plateau with temperatures that can reach freezing.

Days 8-17 (10 full days): Caving in the field. With a central camp near the main river sinks, and prospecting days in grassland terrain that range up to 5-8 km from camp.

Day 18-19: Take Charter flight from Illaga to Timika or Jayapura (arranged by trekking company)

Day 20-21: Fly back to UK from Timika or Jayapura via Bali.

Note on terrain and conditions: We will have about a 20 km walk from Illaga, initially through moderate jungle but then across rugged grasslands (as in Fig. 1). This is the standard trekking route to Puncak Jaya from Illaga. We will then set up a base camp, and start checking the nearest sinks and resurgences as day trips. It may be worth having splinter camps, if we get permissions. Note that the area is about 3500m; it can near freezing at night, and rains most days. The river levels may be important, and September is after the rainiest period of March. But it always rains.

Note on guide and permits: Trek Papua (trekpapua.com) are arranging the three type of permit that are needed for trekking in this area, which include a central government permit, a local police permit, and local religious permit. They have got these permissions many times in the past for people climbing Puncak Jaya along the same route. But getting permits will probably be our key concern.

Travel arrangements: We will fly from the UK to Bali in Indonesia (£650), and then take an internal flight to Jayapura (£100). Trek Papua will then arrange a charter flight from Jayapura to Illaga. We will pick up provisions and a local guide in Illaga, before walking ~20 km to the west to camp in the caving area. We will return via a charter flight from Illaga, and then a flight from Jayapura to Bali, and then the UK.