

THE AMAZON. SUMMIT TO SEA

The Road From Chimborazo Expedition Plan.

ABSTRACT

From the closest point on Earth to the sun, all the way to the thundering Atlantic Ocean. Gravity will take us, cascading and meandering for 3000 miles across a vast continent. It was a dream, started by a father, to be finished by his son.

John Bathgate
Expedition Leader



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Introduction

The Amazon or Rio Amazonas is the greatest river on Earth. It discharges more water into the oceans than the next 7 largest independent rivers and is fed by over a **thousand tributaries**. It is arguably the **longest river** on the planet, surpassing the Nile by some 100km but this statement is only accepted in certain circles. It is accepted in mine.

When **conquistador** Francisco de Orellana¹ entered the Amazon in 1542, it gained its modern name. The Spanish explores were unable to return up stream on the Coca River and were forced to follow the flow into larger rivers and deep into the rain forest. On this journey they encountered and **battled** with many tribes, including the Tapuyas, who's **warrior women** were described by Orellana as Amazons.² Orellana and his men made it to the mouth after 7 months and thus proved the navigability of the river, essentially turning it into a highway for future European settlers. The conquistadors were unforgivably brutal in their colonialist methods, a travesty that should never be forgotten. But one cannot help but find respect for the courage, resourcefulness and sense of adventure found in these early explorers and their achievements.

The mighty river is fed by tributaries from Guyana, Venezuela, Columbia, Ecuador, Peru, Bolivia and of course Brazil. One of these tributaries happens to begin on the highest place on the planet³. That is to say, the **highest source** on the planet feeds the **greatest river** in the world. The snows that fall on the glacial summit of **Volcán Chimborazo**, a giant of the Ecuadorian Andes at 20,548ft, will melt, trickle, then tumble and thunder and finally meander for 5000 kilometres to the **Atlantic Ocean**. For much of this astonishing journey the water slides through the Amazon Basin, 5.5 million square kilometres of rainforest that plays an extremely important role in limiting **climate change** and nurtures an abundance of weird and wonderful **wildlife**.

As the **glacier** on the Chimborazo summit creaks and moans, with the mountain's consent, we'll turn that sharp breath of air into steadfast resolution. As the melting ice **cascades** through the high Andes, we'll traverse its glens and gorges. As it brings life and nutrients to farmland on the highland slopes, we'll learn and enjoy the **cultures** that it enables. As it rumbles through Riobamba city, we'll let our hair down and as thunders through the gorges of **Baños** like a stampede of white Criollo⁴, we'll have our guard up. Finally, as it slips surreptitiously through countless miles of unknown ecological miracles like a **giant anaconda**, we intend to become at one with it. We will live only by its leave; we will learn only what it allows us to learn; we will toil, and we will become.

¹ Charged by the infamous Pizarro to explore down the Coca River in Peru in search of cinnamon trees. Orellana was under orders to find the mouth of the Coca River and return. Pizarro eventually abandoned the expedition and returned to Quito, Ecuador with just 80 men left alive from the original 4220.

² The Amazons, a fierce band of warrior women of ancient Greek legend, described by Greek historian Herodotus around 400BC.

³ The summit of Volcan Chimborazo is the farthest point on Earth from its centre, due to the Earth being slightly oval and wider around the equator. Chimborazo sits only 1 degree south of the equator.

⁴ Criollo Horse, a breed of South American horse evolved from those brought by the first conquistadors in the 15th century.



Born David Lindsay Bathgate 19/01/1941.

As a child having read Exploration Fawcett, he was hooked on the **Amazon** and its rainforest.

1966 at 25 he was on an expedition to climb Alpamayo in the Cordillera Blanca in the **Peruvian Andes**. He met an Austrian by the name Fred Allert who lived out there and inquired of him about Amazon travel.

When he arrived home from the '66 expedition having learned so much about the area, the call of the Amazon was ever stronger. In 1968 Dad planned a four-man **expedition to Huandoy** to climb the South face. (Huandoy being dubbed the Eiger of the Andes).



Figure 1- Dad on '66 on the Alpamayo Expedition



Figure 2 - South face of Nevado Huandoy Pico Sur (6160m) in Peru's Cordillera Blanca. Image from: alpinist web page.

In Llanganuco Valley he collected 60 different species of plant for the Botanical Gardens in Edinburgh. A collection still **treasured** today.

Unfortunately, success evaded them on the mountain due to poor conditions and the rock, 20 000ft up on Huandoy's south face being "**unjustifiably dangerous**". They made the tough decision to stop the expedition as the risk to life was too severe and besides the expedition had been a great success regardless. The South face was not climbed for another decade and unfortunately **lives were lost** in the process.⁵

Dad and Don Whillans had planned to travel down the Amazon after the expedition. On returning to Lima the other two, Brian Robertson and Ian MacEacheran flew off to Yosemite in California and dad sent the **plant specimens** back to the UK. After a few days of rejuvenation, he and Don were on a bus through the winding valleys of the Andes to Cerro di Pasco a small mining town. Then down to Tingo Maria a town remoter still, in **Peru**.



Figure 3 - Dad and Don paddle a canoe on the Hallaga.

⁵ In 1976 the face was eventually climbed during a joint effort by three expeditions from Japan, Italy and France.



Figure 4 - The raft that took them down the Hallaga.

A final bus and hitch hike trip took them to a small village on the banks of the **Huallaga River** and they were ready to take to the water. This water bourn leg began in slender canoes. When the river widened the canoes were replaced by a balsa raft that was used to transport pigs downstream where everything was sold (raft wood included).

The raft was dismantled in Tarapoto and then dad and Don were forced to drive round the Pongos de Mazarichi to

Urimaguas as these **rapids** were too dangerous to pass. A rare section of the journey where land travel is preferred to water by the locals.

The Hallaga swept them into the Amazon River, and they eventually landed on the banks at **Iquitos** after many adventures. The boat that they had banked on being there was not and the Booth Line office in Iquitos confirmed it would not arrive. They had to make their own way to Belem via a **paddle steamer**. When they arrived in Belém, Booth line gave them back a rebate for the trip and they were able to enjoy the fruits of the coastal city like **tribal chiefs**. They returned across the Atlantic on the *Clement*, a Booth Line ship, destination Liverpool and arrived on Friday 19th of October 1968. They had been on expedition since 21st of May.



Figure 5 - The pigs being offloaded at Tarapoto



Figure 6 - A native of the Amazon Basin.

During this time, my dad had the idea to travel the length of the Amazon from its highest peak, a feat to this day **not yet attempted**. In his 80th year, coinciding with the year I leave the Royal Marines, he's laid the idea out in front of me. He has planted a seed and cultivated it in the form of old maps, dusty books, scribbled expedition diaries and **mysterious** stories. This seed has matured into a giant *Dinizea excelsa*⁶, casting shade over all other thoughts in my head. There is so much to discover on this journey, I simply can't see past it.

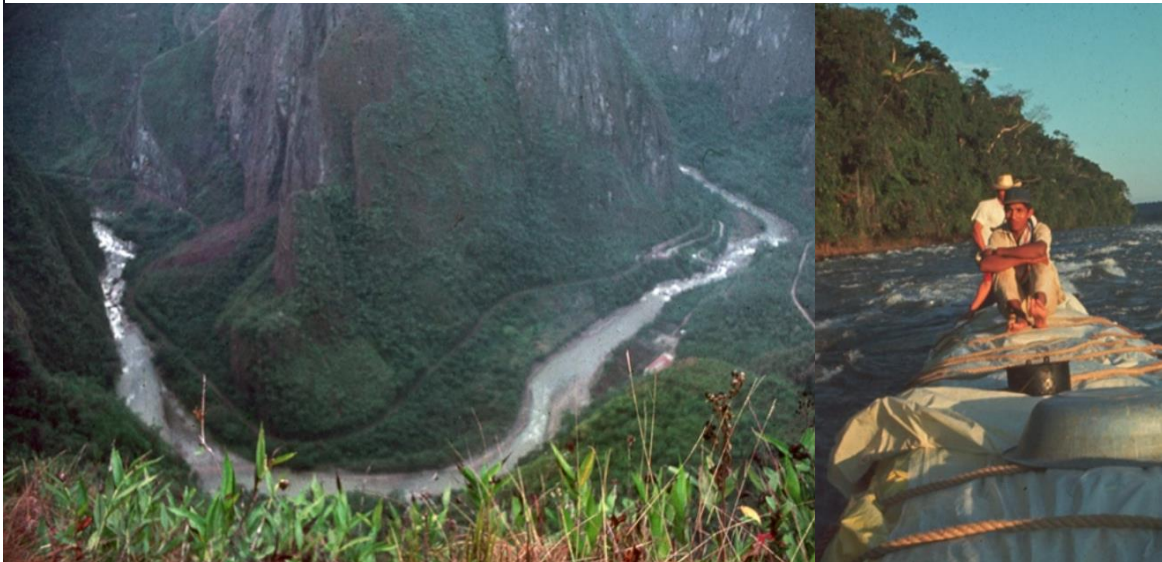
⁶ A giant tree of the Amazon rainforest. The largest recorded so far is 88.5m tall. To put that in perspective, the tallest Oak in the UK is in Wiltshire in the National Trust Stourhead Estate and stands at 40.4m, less than half the size of the *Dinizea excelsa*.



Above - Left, Aticama Desert Peru.

Middle- a not so small caiman.

Right- a native of the Amazon Basin.



Above – Clockwise from top left: 1 - The Urubamba from the slopes of Machu Picchu. 2 – Canoe transport on the Huallaga. 3 - a Hallaga raftsmen. 4- A businessman transporting his briefcases along the Amazon.



1; I need **adventure.** I think that the lack of danger for western humans in everyday life is a leading cause of depression. I have no proof, no university thesis, just this theory. Humans have been **evolving** with risk of early death for 60 000 years. Up until not too long ago we would go to bed every night lucky not to have been in a fight to the death that day. Maybe fending off raiders or chasing down dinner. Imagine, actually struggling for your life. Imagine the adrenaline. This was the reality for most of the evolution of homo sapiens and is still a reality in some places today. I appreciate that our **peaceful** lifestyle is far more beneficial now, we die old and well fed, what's not to like about that? But I wonder, do we enjoy the **good times** as much as our ancestors did? What have we got to fill the gaping hole that was once filled with death-defying **adrenaline**? Computer games? Rugby? Military service? I've tried. For some people it can no doubt be filled by base jumping or free solo climbing. For me that gap needs to be filled by adventure in uncontrolled environments. In my opinion, the only way that adventure can be enjoyed, is with the existence of wilderness.



Figure 7 – Me bobbing off the coast of an uninhabited Indian Ocean Island during my time as a Royal Marine Commando.



Figure 8 – A slide from the air. "A sea of green."

2; I need to help draw attention to mass **deforestation in the Amazon Basin.** The wilderness is vanishing. Plants that could provide the cure to cancer are being cleared and burned before we discover their potential properties. It's the most biologically diverse place on the planet⁷ and we are clearing it for burgers and gold rings. Diversity of little more than cows and grass. Is the "**sea of green**" that my dad described back in 1968 going to be there in 2023 or am I already too late?

⁷ National Geographic: "The Amazon has an incredibly rich ecosystem – there are around **40,000 plant species, 1,300 bird species, 3,000 types of fish, 430 mammals** and a whopping **2.5 million different insects**." – These figures just keep on growing.



I **want** to convey that this expedition is not about conquering anything. I see too many accounts today of privileged tourists 'conquering' challenges at great expense to locals, wildlife and bank balances. I am a privileged individual with an **extreme** number of opportunities. I do not intend to conquer anything. I will **learn**, I'll **grow**, I'll **help**, I'll **appreciate**, I'll soak it up. I will **live** and, dare I say it? I'll **achieve**. I will not dwell when I make mistakes, I'll learn so I can **succeed**. But that success, although self-invigorating in the making, hopefully isn't just for me. With all that we in the west have, the **least resourceful humans** our race has ever seen, I think a little less conquering and a little more learning is in order.

"To live life!"

Reasons **3,4,5,6...** Contradiction alert: White water rapids, mountain views, **ancient civilisation**, volcanos, cuisine, nightlife, caves, tidal waves, culture shocks, self-affirmation... That list is endless. Yes, that is the list of selfish reasons that pull me there. I can't discount them, I am human. Ancient civilisation, grand **Inca** cities so colourful and sinister, retaken by **mother earth**. The secrets, the absolute peace that comes to me from just fantasising about it. Just a one in a million chance of stumbling across something like that is enough of a draw on its own. Then the tales of **uncontacted tribes**? I need to stop I'm getting over excited!

Mission Statement

The team is to travel from Volcán Chimborazo summit to Belem in the direction in which water flows. We can make any ascent within the gully/valley/glen/basin of the stream/tributary/river but must stay as close to the watercourse as possible. If we deviate and are thought to be out with the gully/valley/glen/basin that our river has flowed into, the journey must be recommenced from any point/or behind such point from where the deviation was made.

Parameters:

- We must make it from Chimborazo summit to Belem.
- We may use any form of transport so long as the rules of our mission are adhered to.
- For science we must ethically collect reptilian sound samples for use in an Edinburgh University dissertation. We must also collect a microplastic river-water sample at every campsite along our route.
- We must seek to learn the interactions between indigenous people and the natural environment in order to create an ideology we can bring back to western culture.
- We must blog (weekly) our mental and physical health throughout the expedition.
- We must not in any way bring harm though negligence or on purpose to wildlife or habitats except when catching only enough food that we can use.
- We must in no way bring harm or disruption through negligence or on purpose to any local settlements, isolated communities or local people along the way.
- We must document our adventure to provide footage for our sponsors. Adventurous footage to prove the connection between positive mental health and time spent outdoors.
- We must document as far as possible the struggles for indigenous populations, habitats and wildlife focusing on deforestation along the route.
- We must donate 40% of all donations to our chosen charities.



It is our intent to record frog calls at every evening stopping point for the research purposes of Moira Matheson, an Ecology student at Edinburgh University. This data can be used to determine river health and will be used in Moira’s final year dissertation. Along side this data we aim to test river water for the presence of micro-plastics, a unique study recommended to us by legendary Entomologist George McGavin. With this information we can create an accurate picture of river health all the way down our route and determine why the data changes in relation to the surrounding land uses. (EG – pristine forest, mining, deforestation, agriculture, etc.)

It is also important to me that we attempt to find **ancient ruins** of some kind. The Inca Empire began with the unification of four provinces in the Peruvian Highlands during the 13th century.⁸ There are reports of distant settlements expanding into the Amazon Basin. The thought of discovering **Inca** ruins unknown to westerners is beyond **exciting** and highly unlikely but I still believe that 14 days of this expedition should be assigned to following any leads we might come across.

There are **South American laws** against approaching uncontacted tribes and these will be adhered to. We do not intend to bring any kind of suffering to isolated communities through negligence and therefor proper research will be carried out to ensure we **act accordingly**. However, there are native populations that live along the riverways that are approachable and still hold true to their ancient traditions. It is our intent to live with these peoples and learn from them **an understanding of the forest**. These people have lived in harmony with the natural environment for thousands of years. We hope to develop what we learn into an ethos for **Summit to Sea Charity** and apply this message to western society and culture on completion of the expedition. During these interactions we also expect to learn of their struggles regarding **deforestation** and territory depletion.

Timeline

Pre-Expedition:

Date	Goal	Information
08/22	Finish Plan	GIS Maps, Word document
07/22-12/22	Funding / Expenses?	Video, Word document, custom beg letter. Funding (charities, foundations, Television, Royal Botanical Gardens, TISO, Royal Marines Charity)
07/22-12/22	Equipment	(Go-Pro, Satellite Phone, Clothing- Rab/North face, Canoe, Tiso/Cottswald (tents, bags, mozzie nets, boots), food, cooker, gas...
09/22-11/22	Canoe Build	Need a welder, need equipment

⁸ Native - Tawantinsuyu, meaning “four parts together.”



07/22-	Team Members, background team	Ian, Ben, Jake, Liam, George, Ric, Jack, Andy, Moira? Needs to be invited in ample time. As soon as the plan is finalized. George, Gavin, Kat, Seb, Claire, Malcolm, growing...
01/23	Travel booked	People & Equipment. Canoes packed with kit delivered to Mera.
01/23	Visa, Permissions	Ecuador, Colombia, Peru, Brazil. Pastaza river permissions. Local farmers and later, tribes.
11/22-	Adventure Sports	Mountain guides? White water guides?
01/23	Practice Run	Make sure they float as soon as they are built. Then longer run (days)
01/23-02/23	Adjustments	Make any necessary adjustments to canoes having found faults during practice run.
02/23	Final runout	Final run to test adjustments. Make any last-minute changes.
03/23	Kit muster, load all kit.	Muster all equipment, tick sheet to be made. Load up canoes for transit.
04/23	Travel to	Travel to Ecuador, via Columbia. Put some fat on the bones.
05/23	Start Expedition	Ready to go at the bottom of Volcan Chimborazo.

On Expedition:

Documenting everything.

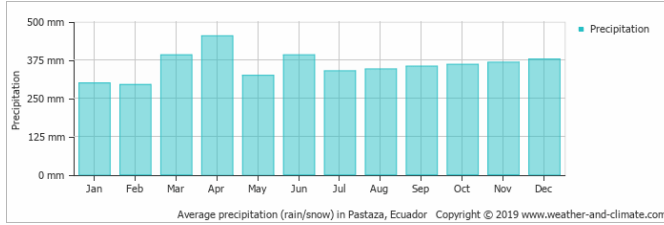
Date	Checkpoint	Information
04/23	Arrive in Ecuador	Fly into Quito. Recce route Acclimatize
05/23	Begin Stage 1	Summit Chimborazo follow river to Mera. School Talk. Visit Ancient ruins & Nature Reserves Science studies throughout Waterfall abseils/tree climbs
06/23	Begin Stage 2	Boat Pickup Mera, paddle to San Lorenzo. Cuavas de los Toyas Pristine wilderness exploration Indigenous meetings Science studies throughout Tree Climb
07/23	Begin Stage 3	San Lorenzo resupply, paddle to Iquitos. Boat Upgrade Indigenous meetings Science studies throughout Tree Climb



Figure 9 - Amazon Tributaries



Riobamba



Humidity stays around 90% year-round. There are between 50 to 100 sun hours per month with far more sun hours coming between the months of August to November.

Figure 10 - Average monthly rainfall, Riobamba.

It rains a minimum of 23 days per month year-round with the driest month being February. This is often light rain except in March, April and June.

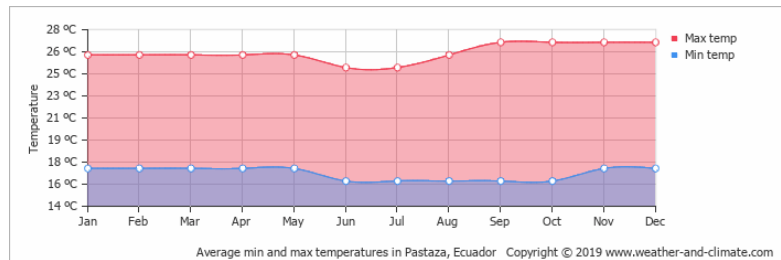


Figure 11 - Average day and night temperatures, Riobamba.

Mera

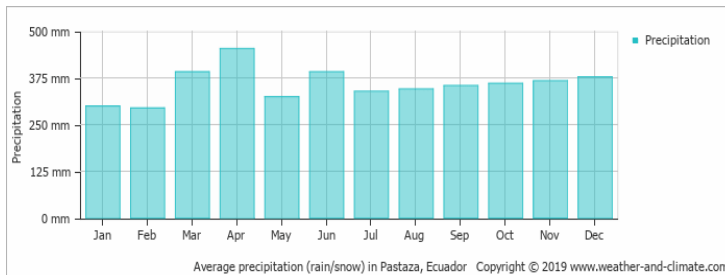


Figure 12 - Rainfall calendar, Mera, Ecuadorian Andes foothills.

The ability to canoe the Rio Pastaza will depend on rainfall. The rivers can be more dangerous during wet season due high volumes of water. Conversely, during dry season they can be dry, potentially causing craft damage by rocks or more severe drops in rapids. The beginning of Stage 2 will

be met with extreme caution. By June when rain fall becomes heavy, we will be well into the Pastaza flats and confident in our craft by then.

Relative humidity is around 90% all year round in this region. Temperatures are between 25°C and 28° during the day and 16°C to 18°C at night.

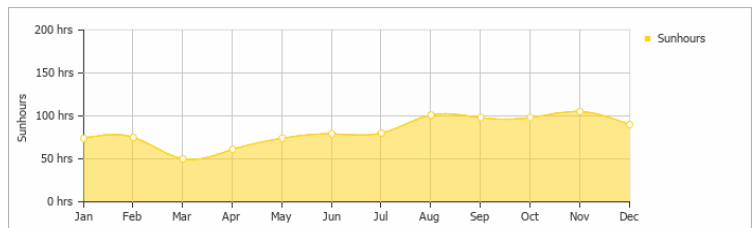


Figure 13 - Annual sun hours, Mera

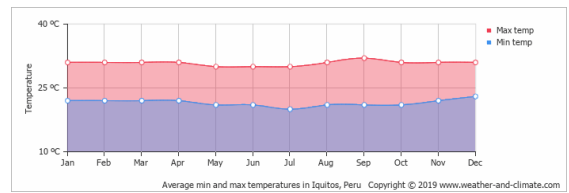
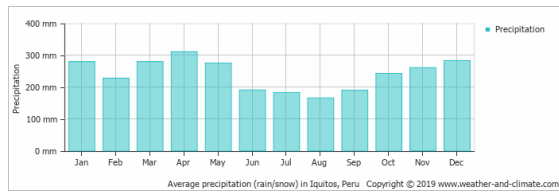
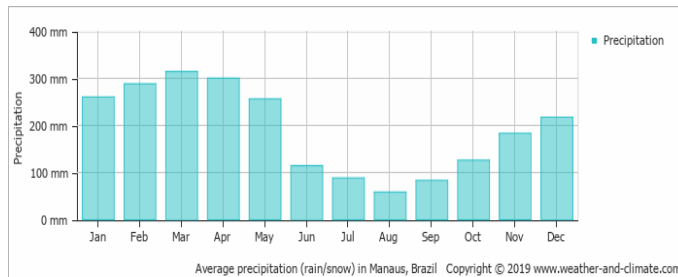


Figure 14 - Left - Average rainfall. Figure 14 - Right - Average day/night temperatures. Iquitos, Peru.

Manaus



Relative humidity in Manaus stays between 75% and 90%. Day temperatures range between 30 °C and 32°C. The region is slightly warmer between May and November.

Figure 15 - Average monthly rainfall Manaus

There are far more dry days of no rain between June and December with July, August and September having the fewest days of rain.

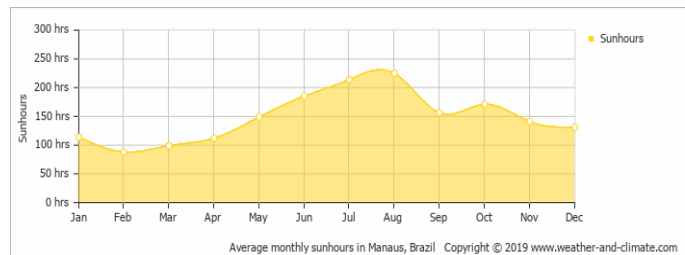
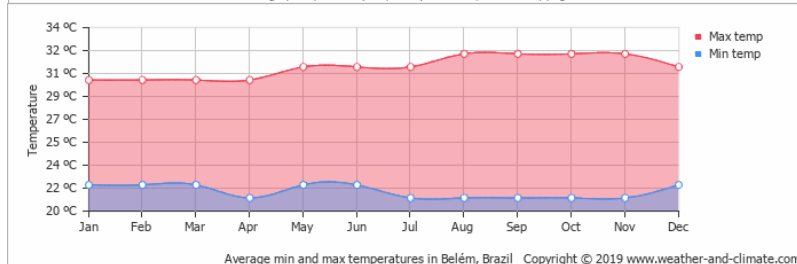
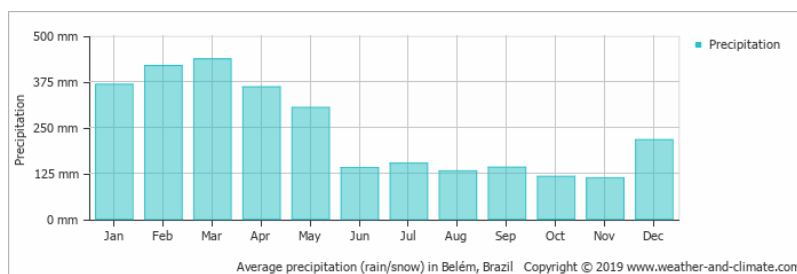


Figure 16 - Monthly sun hours, Manaus.

Belem



On average, the temperatures are always high. Rainy season falls in the months of January – Ma. March is the wettest month. November is the driest month. August is the sunniest month. Humidity stays between 82% and 90%.

Figure 17 - Average precipitation in Belem. Figure 18 – Average day and night temperatures.

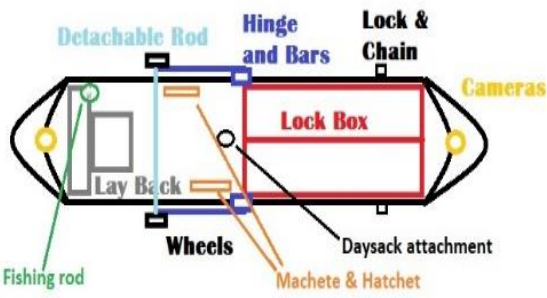


Equipment

EQUIPMENT	QUANTITY	COST PER PERSON	GROUP TOTAL	BRAND	MODEL	SIZES
Sunglasses x 5	5	£149.04	£745.20	Bolle	Cat 4 Adventuror	All Lrg
Sunglasses x 7	7	£206.00	£1,442.00	Bolle	Cat3	All Lrg
Boots x 9	9	£210.00	£1,890.00	Scarpa	Mezcalito	11M, 11M, 11M, 11M, 11M, 10M, 10M, 9M, 8M
Baselayer x 5 (need 1 more)	5	£45.00	£225.00	Berghaus	Mountain Guide	L,L,L,L,L
Midlayer x 5	5	£170.00	£850.00	Berghaus	Fleece Mountain Guide Mid	L,L,L,L,L
Down jacket x 5	5	£170.00	£850.00	Berghaus	Seeker	L,L,L,L,L
Waterproof x 5	9	£200.00	£1,800.00	Berghaus	Delluge Pro	L,L,L,L,L,L,L,L,M
Crampons x 5	5	£99.00	£495.00	Grivel	Monte Rosa	11,11,11,10,10
Trousers x 5	5	£160.00	£800.00	Berghaus	Rugged Mountain Pant	33/34, 34/32, 34/,34, 32/34, 34/32
Trousers x 7	7	£80.00	£560.00	Berghaus	Ortler Pant	33/34, 34/32, 34/32, 32/32, 32/32, 32/34, 36/32
Shorts x 7	7	£65.00	£455.00	Berghaus	Ortler Short	33/34, 34/32, 34/32, 32/32, 32/32, 32/34, 36/33
Rucksack x 6	6	£175.00	£1,050.00	Deuter	Aircontact X	All longback
Hat x 5	5	£35.00	£175.00	Berghaus	Beanie and cap	All Lrg
Gloves x 5	5	£65.00	£325.00	Berghaus	Waterproof All Weather Multi Activity Glove with Fusion Control	9/10, 9/10, 9/10, 9/10, 8/9
Underwear x 9	9	£30.00	£270.00	Artilect	Men's Triplepack	L,L,L,L,L,L,L,L,M
Camelback x 9	9	£37.50	£337.50	Hydropack	Shapeshift 3L	All Lrg
Flask x 9	9	£17.00	£153.00		360	360 All Lrg
Socks x18	18	£25.00	£450.00	Bridgedale & Lorpen	Mountain & Jungle	All 8/12
Ice Axe x 5	5	£125.00	£625.00	Grivel	Various	All same
Climbing rope x 1	1	£180.00	£180.00	Mammut	9 point 0	100M
Harness/descender/crab x 3	3	£95.00	£285.00	Grivel Petzle	Viper 2	Lrg
Poncho x 2	2	£75.00	£150.00	Sea to Summit	Jungle Tarp	
Sleeping bag summer x 6	6	£125.00	£750.00	Sea to Summit	Spark Sp0	Adult Lrg
Roll mat x 6	6	£39.99	£239.94	Sea to Summit	Ultra Light SI	Adult Lrg
1 man Tent x 6	6	£199.00	£1,194.00	Wild Country	Zephyros Compact	Adult Lrg
Drone x 1	2	£859.00	£859.00	DJI	Mavic Mini 3	
Cameras x9	9	£546.00	£4,915.00	Insta360	X3	
Solar charger x2	2	£82.99	£165.98	Bigblue	28W Solar Charger	
Alternative charger	1	£556.99	556.99	Jackery	Explorer 240 Portable Power Station + SolarSaga 100W Solar Panel	
Carabiner x 5	5	£45.00	£225.00	DMM	Spector 2 6 pack	
Leatherman x6	6	£135.00	£810.00	Leatherman	Wave	



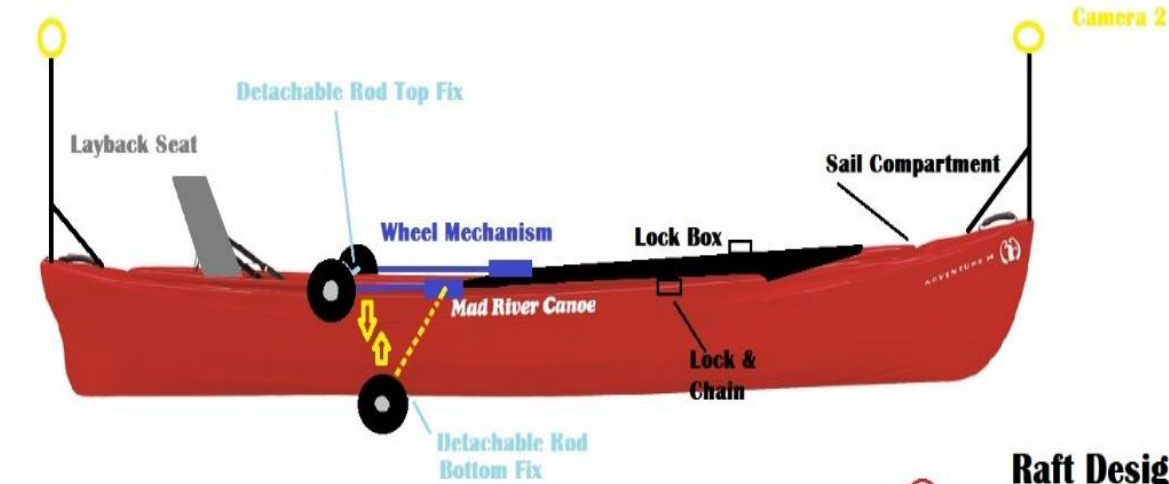
Chlorine tabs packs x9	9	-	-	Tiso	Tiso	
Sat Phone / GPS	1	£699.98	£699.98	Garmin	inReach Mini 2 Satellite Communicator	
Walky Talky (Pair)	1	£100.98	£100.98	MOTOROLLA	TLKR T92 H20 (twin)	
Head Torch x6	6	£97.00	£582.00	Petzl	Charlet Swift RL 900	
Spare Batteries	1	£449.98	£449.98	RidgeMonkey	Vault C-Smart Wireless Powerpack 77850mAh	
Dry Bags x7	7	£50.00	£350.00	Exped	Classic Drybags 4 pack	
Personal First Aid Kit x9	9	£29.99	£269.91	Lifesystems	Waterproof First Aid Kit	
14 days expedition food x7	7	£356.58	£2,496.06	Expedition Foods	Expedition Foods Emergency Rations for 2 Weeks	
Cooking Equipment	1 set	£100	£100	Tiso	Tiso	
Satellite Communicator	2	£314.99	£629.98	Garmin	Inreach Mini 2	
Watch x5	5	£895.99	£4,479.95	Garmin	Fenix 7X Sapphire Solar	
Compass	6	29.90	179.4	Silva	4 Militaire	
Total:		£8,127.9	£33,609.86			
STAGE 2 ONWARD						
Canoe 1	1	£1,325.00	£1,325.00	Venture	Ranger 162 Adventure Touring Family Canoe - Dark Green	
Canoe 2	1	£1,325.00	£1,325.00	Venture	Ranger 162 Adventure Touring Family Canoe - Dark Green	
Kayak x2	2	£895.00	£1,790.00	Pyranha	Fusion 2	L,L
Machete x 3	3	£41.99	£125.97	Highlander	Kukri	
Fishing gear	1	£50.00	£50.00	-	-	
Crossbow	1	£364.95	£364.95	EK Archery	Accelerator 410+ Compound Crossbow	
Hammock x 6	6	£145.00	£870.00	Highlander	Crusader HAMMOCK	Adult Lrg
Raincoat x9	7	£160.00	£1,440.00	Berghaus	Delluge	L,L,L,L,L,L,M
Paddles x4	4	£50.00	£200.00	Hou Canoes	Plane Wood Canoe Paddle	
Kayak Paddle x2	2	£140.00	£280.00	Maverick	G1 4-Piece Paddle	
Water Filter x3	3	£287.59	£862.77	Katadyn	Micro Filter	
Bouyancy Aid x 6	6	£60.00	£360.00	Palms	Universal PFD Adult	L,L,L,L,L,L,M
helmet x5	5	83.99	419.95	Grivel	Duetto	
Boat Build kit	1	-	-	-	-	
Total:		£4,928.52	£9,413.64			
Multi-stage Total:		£13,056.42	£43,023.5			



Canoe Requirements

- A lockable, floatable equipment box in front half
- Elevated cameras front and back
- Cushioned chair with back rest
- Hinged wheel mechanism with inflatable tyres for stability in rapids
- Chain and lock welded for security
- Detachable rod with locking pins to lock wheels above or below
- Sail with quick deploy chord running to coxwain
- Machete & hatchet sheaths at coxwain armlength
- Personal daysack carabina attachment
- Solar charger panel
- Fishing rod cylinder near rear

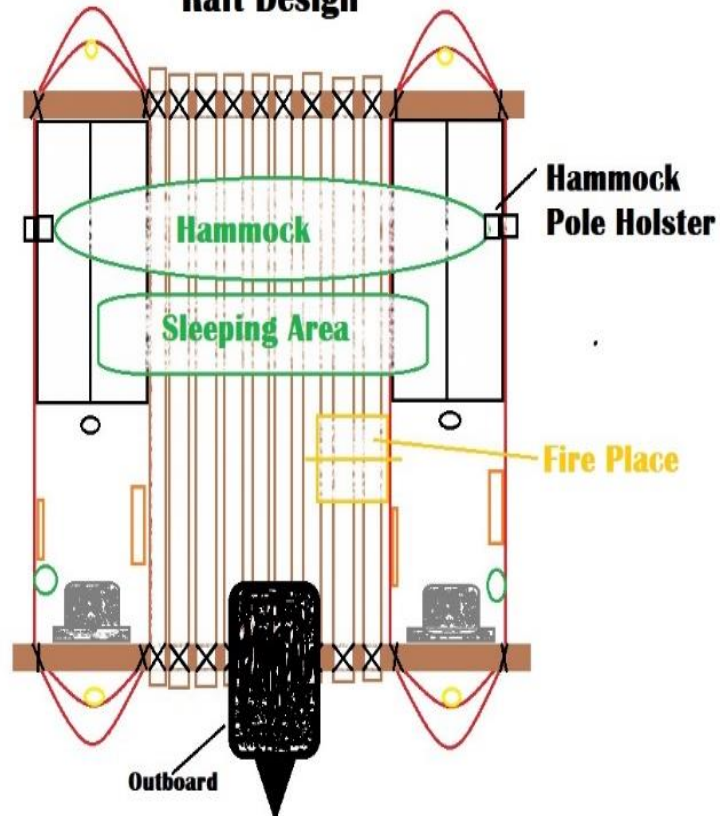
Canoe Side Profile



Raft Requirements

- Outboard if found in Iquitos
- Lengths of sapling wood and paracord
- Hammock station in centre
- Metal fire platform and spit
- Sleeping area
- Canoe 1 requires a hammock pole holster on port side welded on the lock and chain strong point. Canoe 2 needs the same on the starboard side. Each canoe will carry a hammock pole until raft is built.

Raft Design





By the Rivers

- ✓ **Volcán Chimborazo** glacier melts into the Rio Chimborazo
- ✓ **Rio Chimborazo** flows to San Juan into the Rio Chibunga.
- ✓ **Rio Chibunga** flows past Riobamba and enters the Rio Chambo at Chambo.
- ✓ **Rio Chambo** flows into the Rio Pastaza South of Penipe.
- ✓ **Rio Pastaza** flows into the Marañón. (Crosses the Peruvian border)
- ✓ **Marañón River** (Meets the **Huallaga**, Dad's tributary) 25km south of Punta Arenas.
- ✓ The **Marañón** meets the **Ucayali** River north of Nauta Town. Becomes the Amazon.
- ✓ **The Amazon** flows all the way to the **Atlantic Ocean**. On the way it passes Iquitos in **Peru**, skirts the **Colombian** border before flowing into **Brazil**.





Time: Timings have been determined depending on distance and speed. Each stage is calculated differently. A rough guide is to say that we will travel at 20km per day whilst walking and 60km per day whilst paddling. **Speed:** This will be extremely varied depending on terrain, access, river conditions, respite stops and additional activities (e.g. Scientific work). **Distance:** Distances have been taken using QGIS as the stages move through different CRS zones. The distances are not exact and only used as guidelines due to the many forks and meanders in the rivers.

Stage 1 (+171km) (34 DAYS)

Volcán Chimborazo to Source – 8.3+ km

Rio Chimborazo source to Rio Chibunga – 29 km

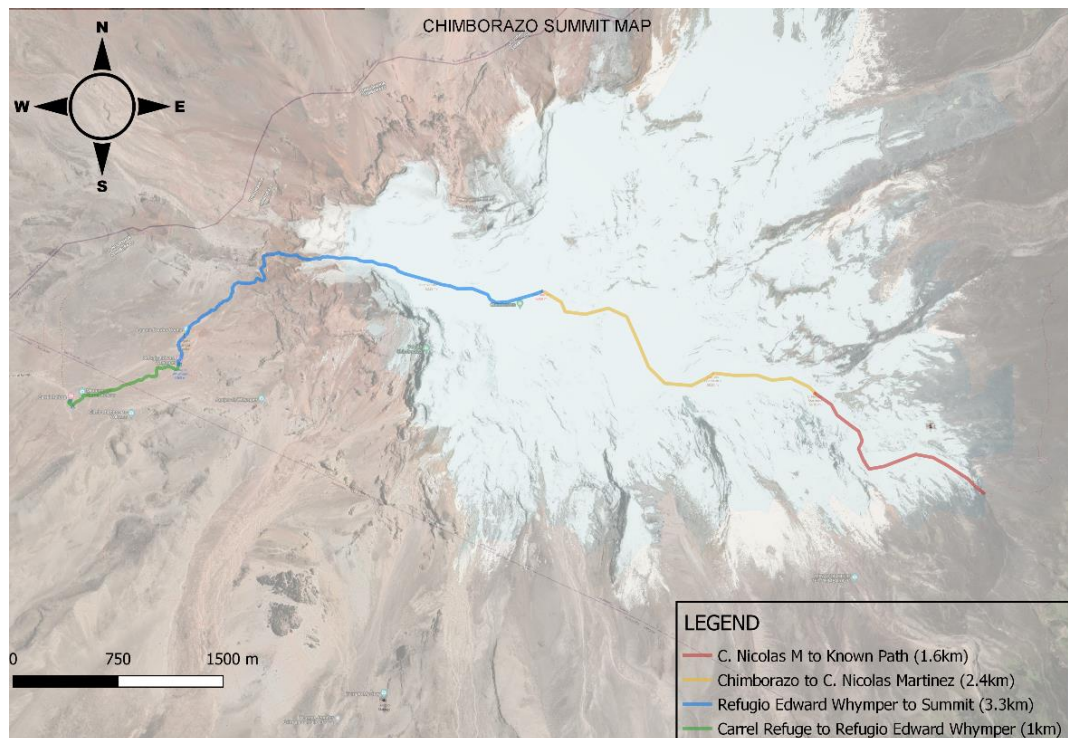
Rio Chibunga to Rio Chambo – 33.2 km

Rio Chambo to Rio Pastaza – 50.5 km

Rio Pastaza to Shell (Canoes) – 57.6km



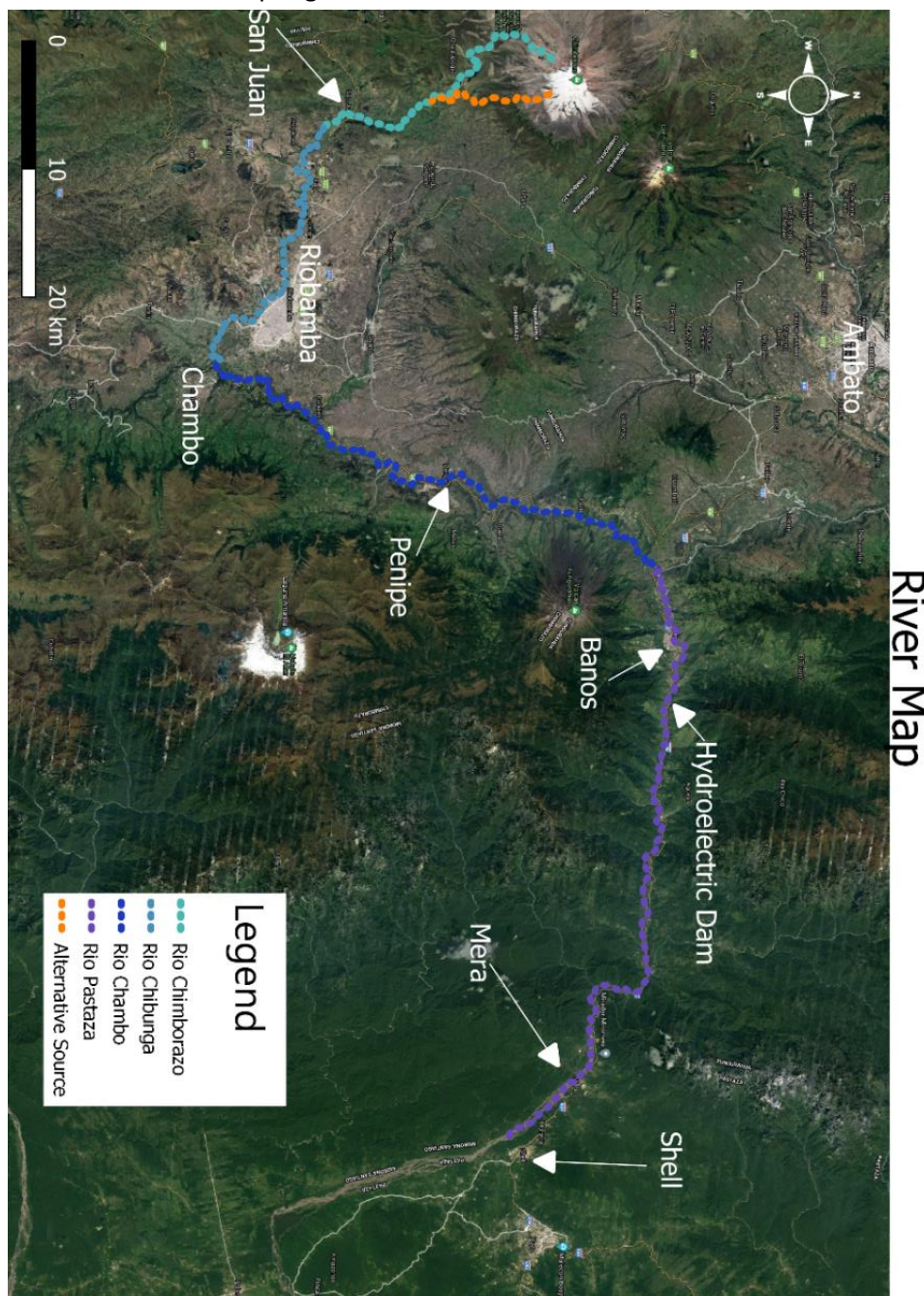
1.1 Volcán Chimborazo. 8.3km. (4 DAYS)

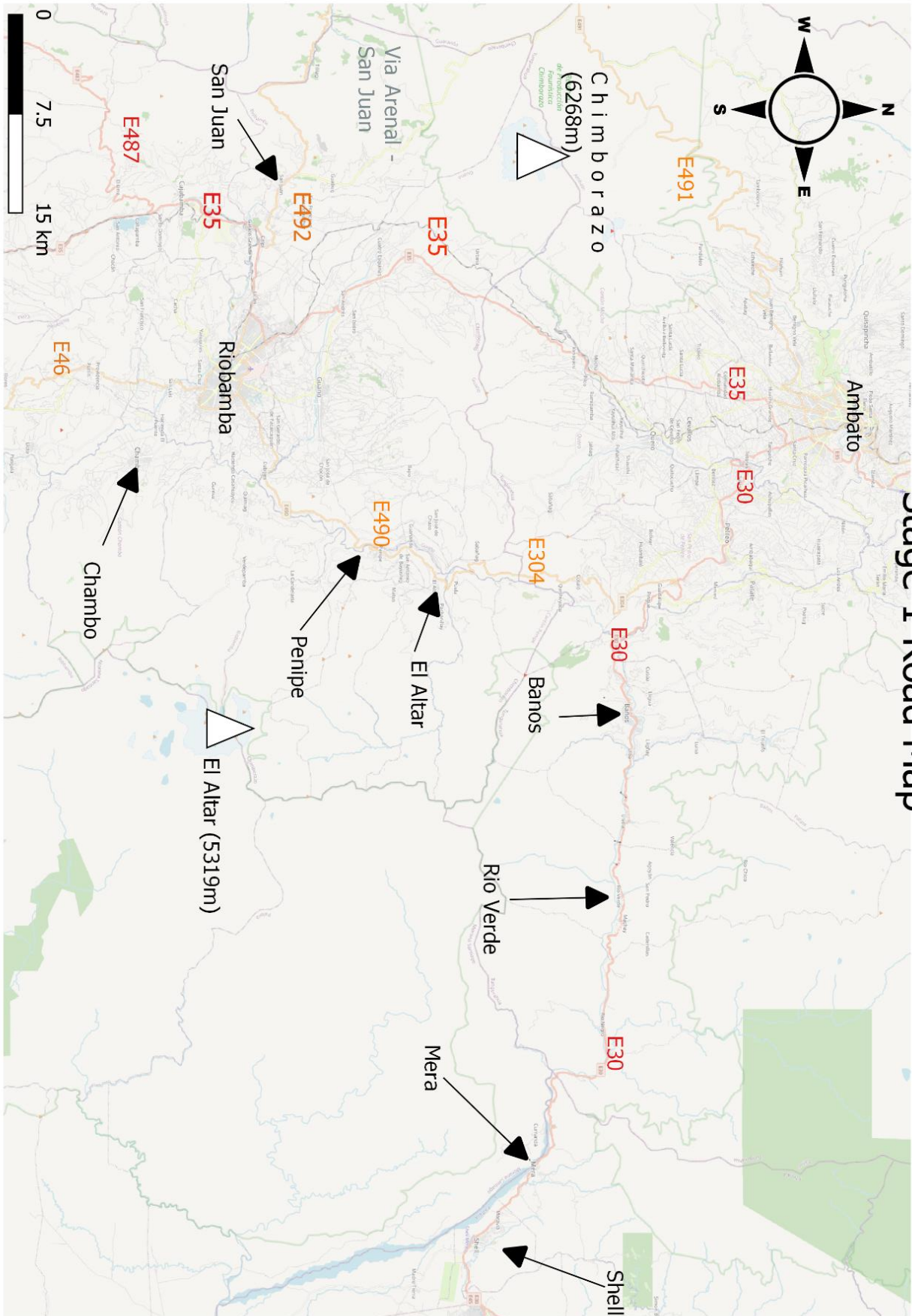


- **MAPS OBTAINED IN ECUADOR. Guide: Nicolás Vélez, Ecuadorian climber ([Nature Me](#)) 4-day glacier traverse.**
- **Refugio Carrel (4850m) to Refugio Whymper (5060m).** Distance -1km. Bearing ENE. Altitude gain - 210m.

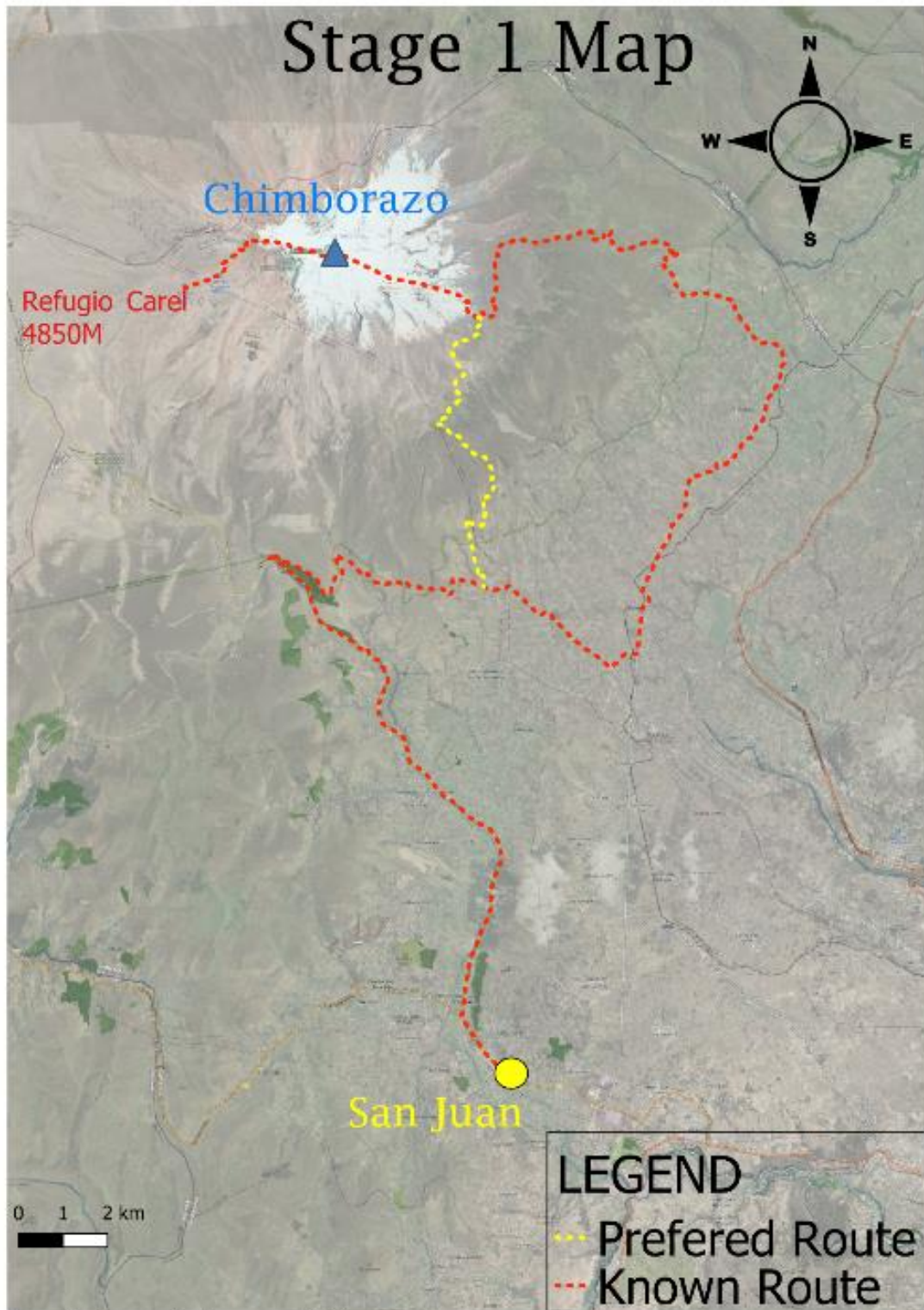


- **Refugio Whympfer (5060m) - Chimborazo Summit (6268m).** Distance - 3.3km. Bearing NNE. Altitude gain - 1208m.
First 1.6km on mountain side, snaking North. Second 1.6km on glacier and turning Eastwards towards summit. Pass over Pico Veintimilla (false summit) heading East to summit.
- **Chimborazo Summit (6268m) – C. Nicolas Martinez (5570m).** Distance 2.4km. Bearing ESE. Altitude drop – 698m. Make way over glacier. Avalanche risk. Head East then veer South East towards the C. Nicolas M for last few hundred meters.
- **C. Nicolas Martinez (5570m) – Known Path.** Bearing SE. Descend off glacier through gully running Southeast. Distance – 1.6km. Altitude drop – roughly 3-400m. Find path/safe ground to begin heading West to source of the Rio Chimborazo.
- **Total Distance – 8.3km.** Undetermined additional distances, potentially backtracking a lot when attempting to find the source.





Stage 1 Road Map



Source to San Juan: Find the source. Log LAT/LONG, then follow it South to San Juan via Cuartel de los Incas. 17.4km as crow flies. Up to 7 days exploring the upper Rio Chimborazo in the Ecuadorian highlands, many paths, and some roads. Find the very source of the Rio Chimborazo, where the glacier becomes running water. Judging by aerial photographs this is likely directly south of the main summit. The gullies here lead into Rio Chimborazo.



Rio Chimborazo



There will be gullies and gorges for most of the northern part of this section. The land will then begin to show signs of agriculture in the valley floors. The presence of roads, shops, lodges and B&Bs in the area means help will never be too far away. Opportunities for waterfall abseils and additional climbing. Social opportunities (schools, farmers, locals).



1.3 Rio Chibunga. 33.2km. 10 DAYS

San Juan to Riobamba. 17km to city centre as crow flies. 2 days maximum. Arable land and good roads.

Riobamba 7 days – Recuperate, replenish lost fat from the initial hike. Climbing opportunity: Volcán el Altar (Sublime Mountain), an extinct horseshoe volcano with a crater called **Laguna Amarilla**. Post climb equipment exchange at Nature Me lock up.





Riobamba to Baños. – Heading North along river. Good roads.

First map: **Chambo to Panpipe**, roughly **30km**. Road **490** follows the river. Views of **Volcán El Altar** to the East. The **Rio Pastaza** flows from El Altar, flowing west into the Rio Chambo. It joins the Chambo (becoming the Pastaza) about 5km South of Penipe .

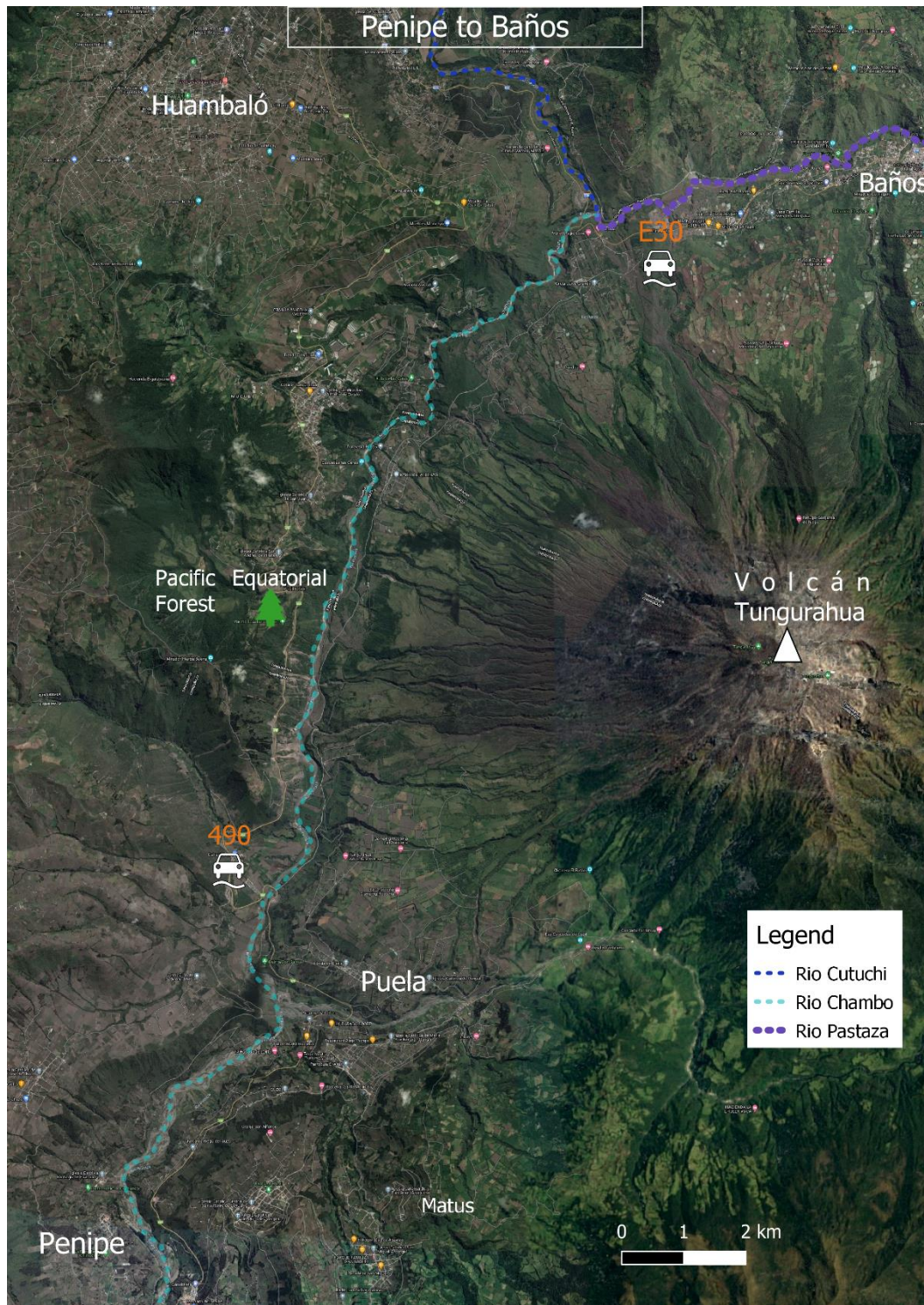




Second Map: **Penipe to Baños. Pastaza**

Hiking opportunity. Volcán Tungurahua, (5016m) to the East is an active stratovolcano and is Ecuador's 10th highest peak. Translates to "Throat of Fire."

Follow the river North along the 490 then use the E30 road into Baños.





Beautiful steep sided valley all the way.

Baños - Río Verde: (15km) Along the Pastaza heading East.

Baños is an adventure sports hub. There we will try to hire a white-water raft and do as much of the rapids down to Rio Verde or beyond. There is a good road **E30** for walking and hitchhiking. North of Rio Verde is waterfall **Agoyán**, worth seeing.



Río Verde - Río Negro: (15km)



Continue with the flow. Almost holiday mode with plenty restaurants and photo opportunities along the way. Enjoy the last of the mountains. In a few days they will drop away at Mera and we will leave the Andes behind. The last valley opening out into the vast Amazon Basin.



The Amazon: Summit to Sea
Río Negro – Shell Mera: (20km)

2023

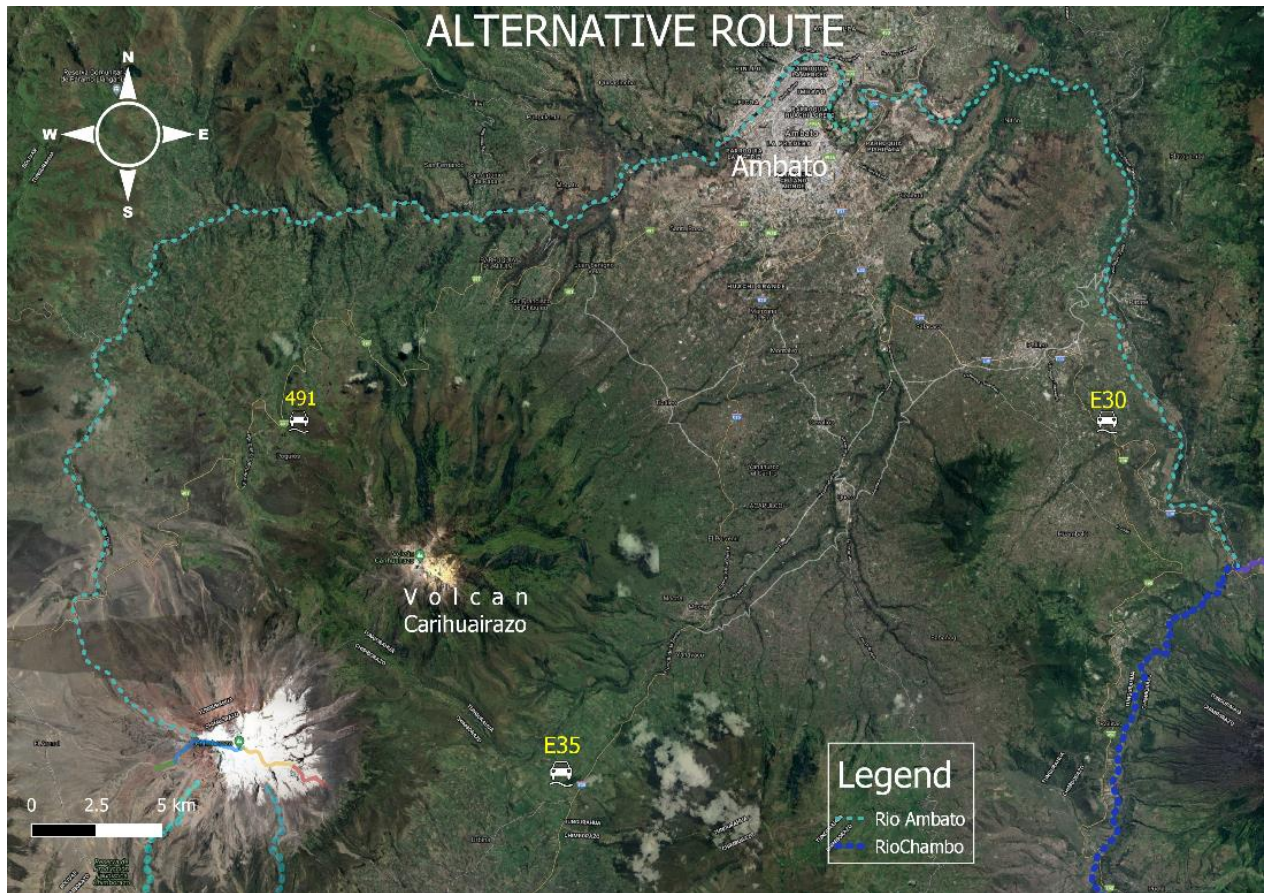
Heading South then curving East again. The valley is opening. Wait to see the cliffs of Mera!

Use time in Mera to study the river and gain valuable knowledge from the locals. It may be the last major civilization for a while. Pick up the canoes then bring them back to **Via a Cumanda Bridge** that comes off the **E30** then spans the Pastaza. This is a potential put in spot.





Stage 1 (Alternative, Rio Ambato)



106km Begin South of where **Via a Flores** meets **Via Ambato Guaranda**. Also, there is the Chimborazo Reserve entrance. B&B there: **Criadero de Truchas Los Pinos**.

106km along the **Rio Ambato**, from Northwest Chimborazo glacier, through Ambato then into the Pastaza. Follow the road, **Via Flores**, then **Via Aguajan** into **Ambato**.

The **Via Las Vinas** road follows the **Rio Ambato** out of **Ambato**. Follow the **Rio Ambato** into the **Rio Cutuchi**.

Follow the Rio Cutuchi into the **Rio Pastaza**. The tributaries join West of and up stream of **Baños**.

This route start point could be the route into the mountain that we use. Decision to be made on the ground.

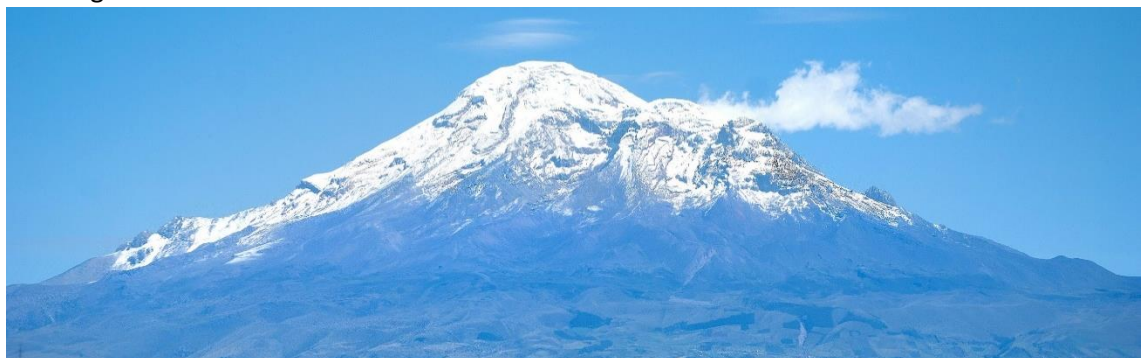


Figure 17 – Chimborazo from Riobamba. Photo credit: David Torres Costales.



Rio Pastaza Schematic Information

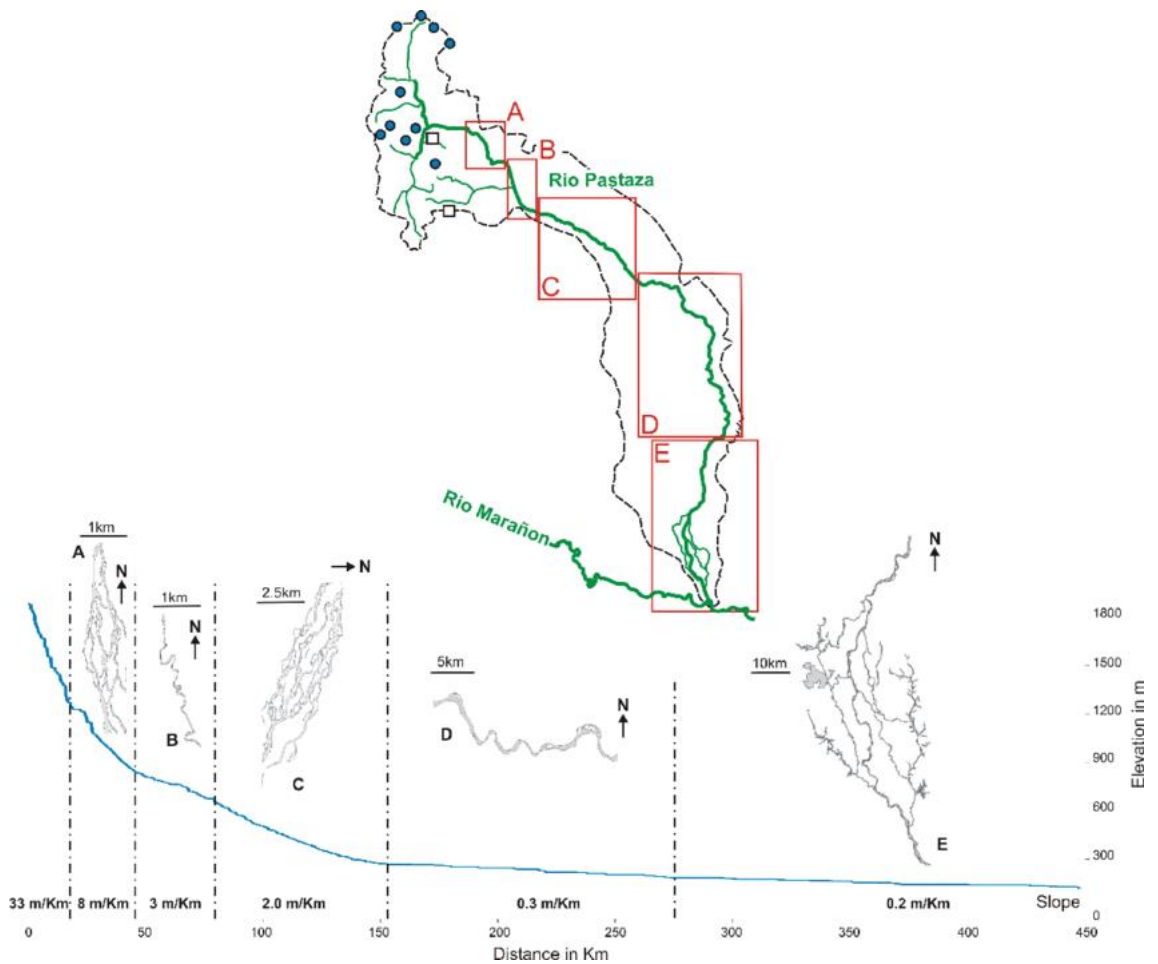


Figure 18 - Schematic map of Rio Pastaza and drainage basin.

Information to note. River is dropping by 8m per 1km at area Alpha and becoming easier thereafter, giving us a good chance of a put in spot within area Alpha. Definite canoe launch spot by area Charlie. Decision to be made on the ground.

The Amazon: Summit to Sea
Stage 2 (620 km) (35 DAYS)
Mera to San Lorenzo



2023



Between Copataza and San Lorenzo there is a wealth of untouched wilderness that looks incredibly exciting. It's likely the most remote and isolated part of the trip so we'll be keeping the caiman wrestling to a minimum.

When in Andoas we have crossed into **Peru**.

Mera – Copataza – The last of civilisation. E45 crosses at *Laberintos del Chiquaza (Tourism)*.

Copataza – A collection of small settlements to the north of the river. Runway.

Andoas Oil town – Medical Centre on the left bank. (East)

Andoas - Bank in the village on the right. (West bank). At some point after Andoas and before San Lorenzo is where we'd like to stay with and learn from indigenous Amazonians.

At: **004° 25' 13" S, 76° 36' 51" W** we have a decision to make. Right takes us past C.P Ullpayau 46km off main tributary or left along the main tributary. Then, if we go left. At: **004° 27'11" S, 76° 35' 29" W** we have a decision to make. Right will take us to

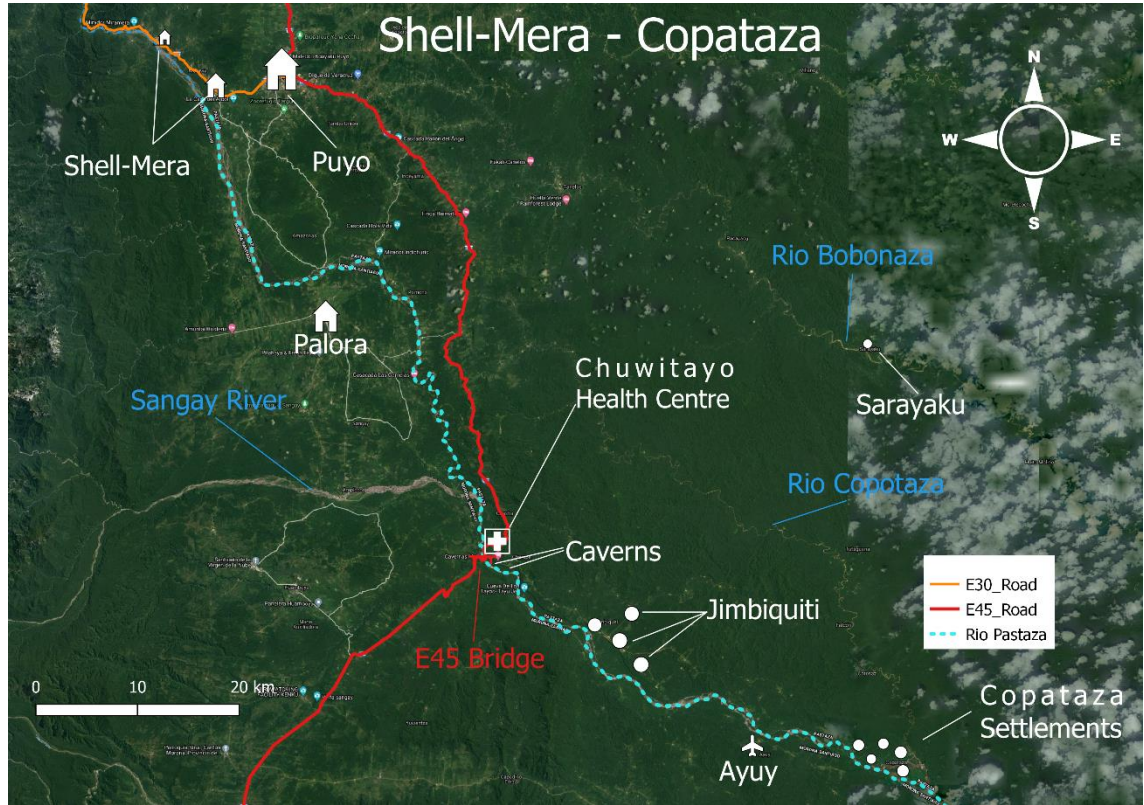
Centro Poblado and the walk to San Lorenzo, left (66km) into some very remote, lagunes and rainforest. Then onto the **Pastaza** far beyond **the San Lorenzo** turn off point. Decision will be based on our supply situation.

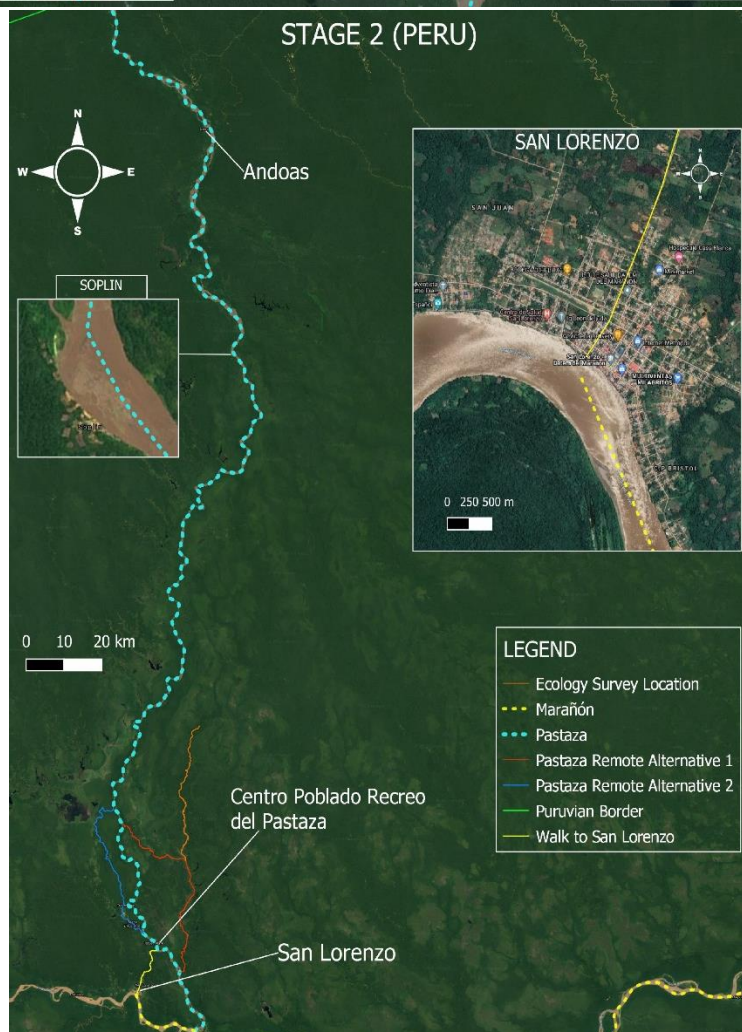
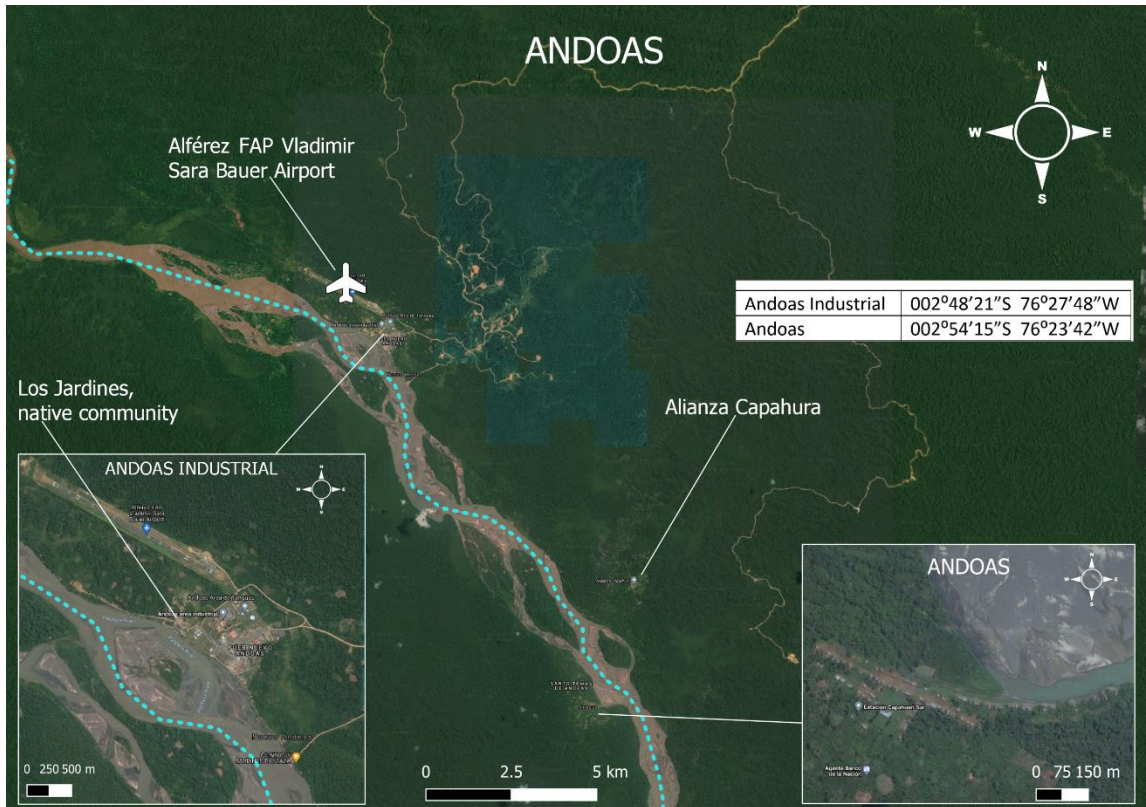
C.P Ullpayau – If we do take the first deviation this is the only major settlement on the tributary. Looks like military or industry. No further information.

Centro Poblado Recreo del Pastaza (004° 43'58" S 76° 30'38" W) to San Lorenzo (004° 49'48" S 76° 33'13" W) is 14.5km walk.

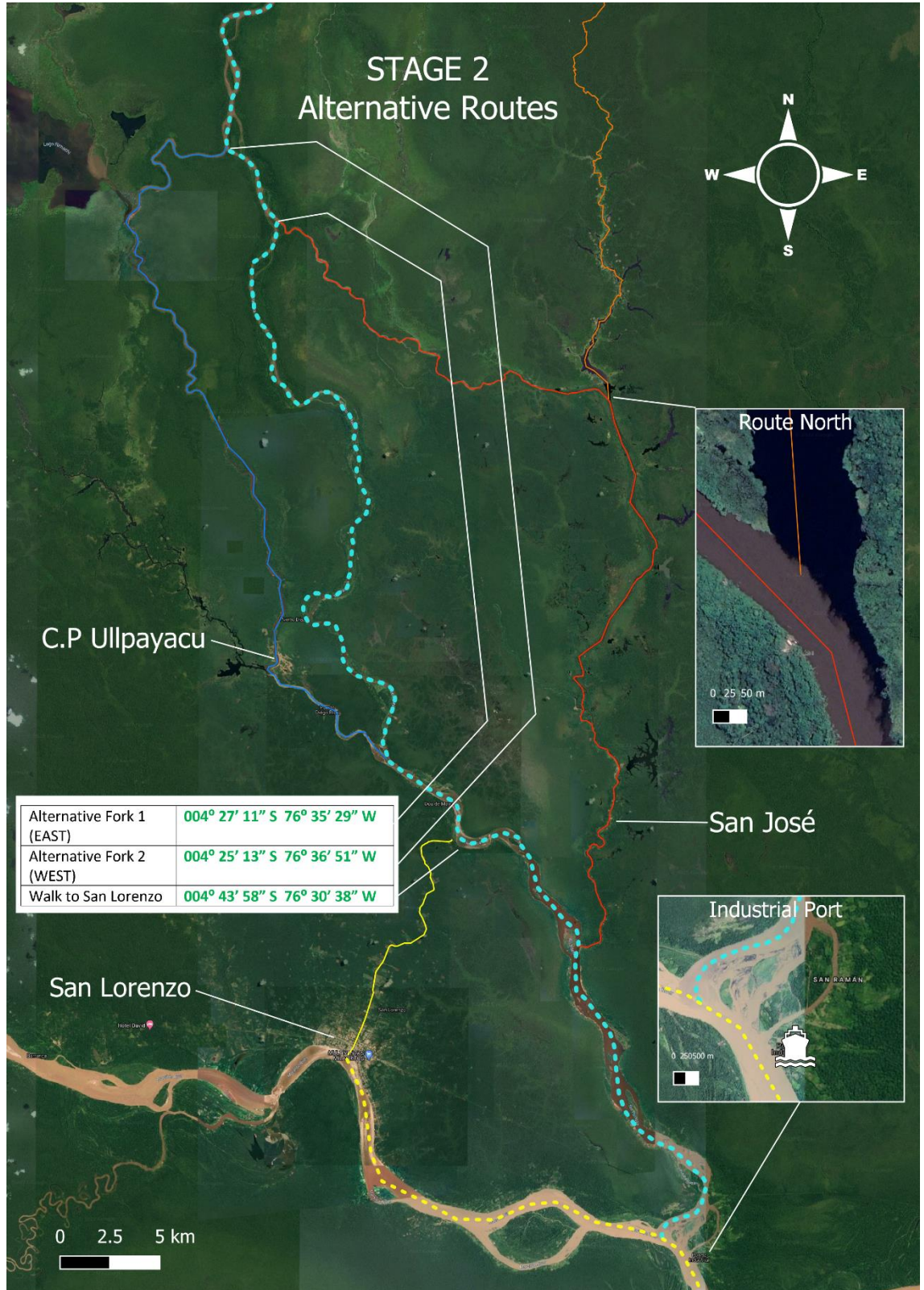


There are a few tourist attractions and small towns along this **70km** section. After the **E45 bridge** expect only industry for another **60km** to **Copataza**. (A village we may go by without even knowing it is there.) After that it is wilderness until Andoas. About 216 km as the crow flies between **Palora** and **Andoas** the two closest medical centres.











The Amazon: Summit to Sea
Stage 3 (640 km) (20 DAYS)
San Lorenzo to Iquitos

2023



512.5km on the Marañón to where it meets the Ucayali. There it becomes the Amazon.

San Lorenzo - (004° 49'48" S 76° 33'13" W) Large town, all amenities.

San Isidro – Small settlement, North bank.

Punta Arenas – (004° 55'30" S 75° 29'51" W) Small settlement, North bank.

San José de Saramuro – At **(004° 43'57" S 74° 58'21" W)** take the left fork (North) to visit this town. A 5.5km long island splits the river and the town is on the North fork.

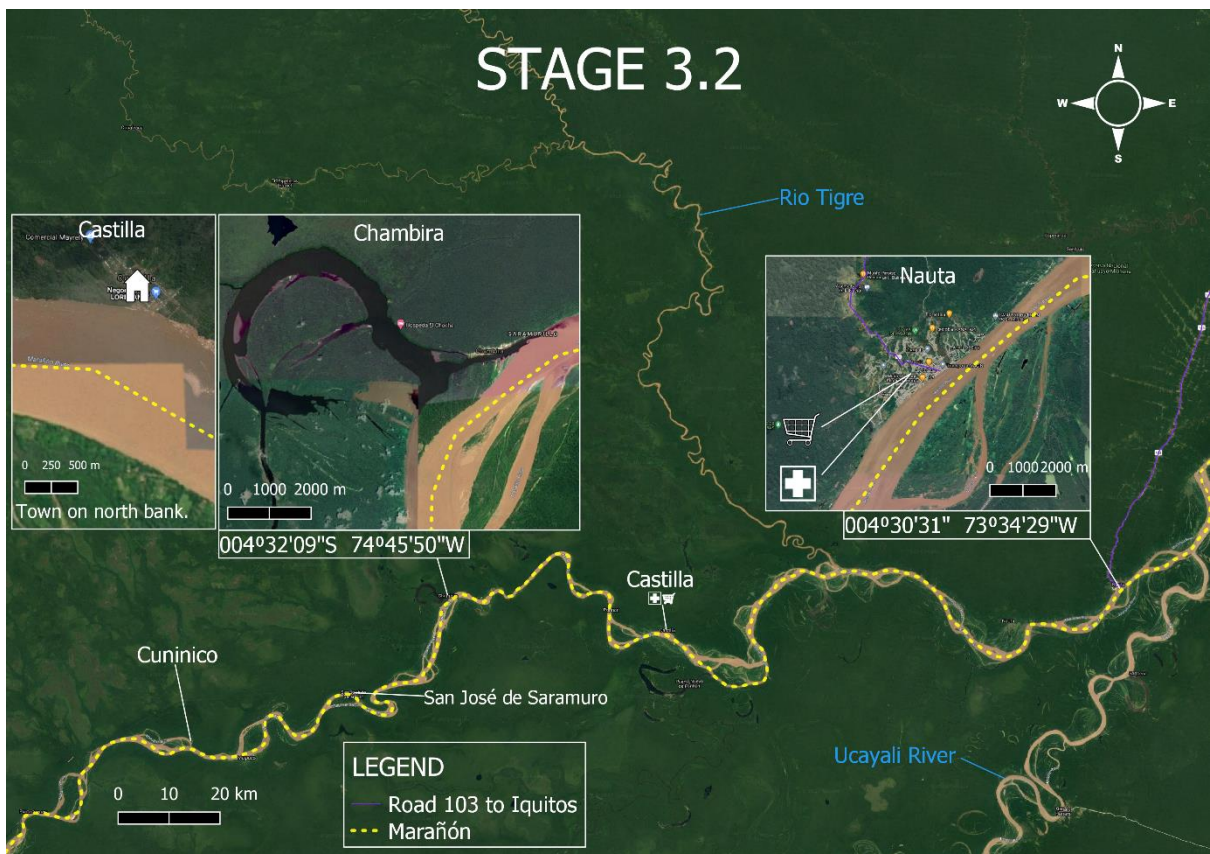
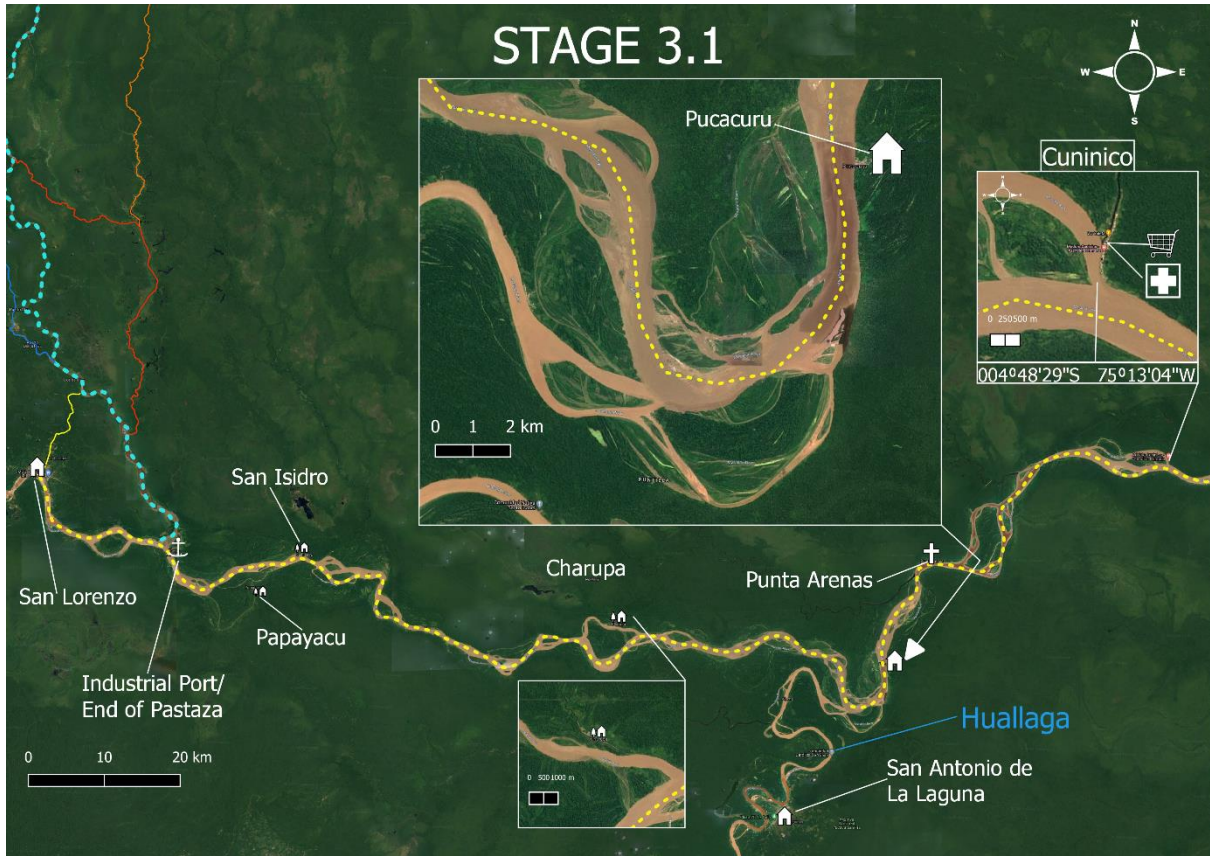
Santa Rita de Castilla – Medium settlement North bank. Shops.

Nauta & Puerto Franco – Quite a large settlement, North bank. Supermarket. From here there is also a road to Iquitos, roughly 100km. After Nauta, at **(004° 26'49" S 73° 26'59" W)** the Marañón meets the Ucayali and becomes the Amazon. **We've have made it from Chimborazo to the Amazon!!!!**

127.5 km on the Amazon to Iquitos.

Iquitos – 3°44'56.83"S, 73°15'13.79"W. (5 DAYS) recuperation. Population 470 000.

- Here we need to try and find an outboard engine and build a raft for more comfort on the long sections of wide river. [Canoe/raft plan.](#)
- Meet with Moira, 1-week intensive frog species study at her chosen reserve.









The Amazon: Summit to Sea
Stage 4 (2099km) (39 DAYS)
Iquitos to Manaus

2023



4.1 Iquitos - Leticia (372km) (7 DAYS)



Iquitos – Leave with a luxury raft and outboard engine.

Pebas – North bank at the mouth of a river. **(003° 19'11" S 71° 51'33" W)**
Hospital & Bank.

San Pablo de Loreto – Village on the South bank for a change. **(004° 01'09" S 71° 06'11" W)** There's a bank.

Puerto Nariño – Lots of B&Bs along this 100km stretch of Columbia on the North bank.

Leticia - 4°12'55.01"S, 69°56'26.02"W
Population 50 000. Hospital, Airport, shops, restaurants, banks...

Everything we need in Leticia, popular tourist destination.

Place Name	Latitude	Longitude
Barcelos	-0.97499347	-62.92389592
Coari	-4.079971905	-63.12998153
Crato	-7.46389972	-63.03996118
Eirunepe	-6.66002114	-69.87380762
Fonte Boa	-2.513814271	-66.09160954
Itacoatiara	-3.140029278	-58.43998356
Manacapuru	-3.289580873	-60.6199797
Manaus	-3.100031719	-60.00001754
Manicore	-5.812165915	-61.29748356
Maues	-3.389626446	-57.72002751
Natal	-6.983825664	-60.26994938
Novo Airao	-2.620784486	-60.94378422
Parintins	-2.610035788	-56.74000981
Sao Gabriel Da Cachoeira	-0.133236065	-67.08330611
Tefe	-3.36001585	-64.69998906
Tonantins	-2.872707093	-67.80189274

Table 4 - Lat and Longs for Brazilian Amazonian towns.





Leticia – As we leave Leticia, we enter Brazil. The 4th and final border crossing of the expedition.

Belém do Solimõe – Village on the North Bank

São Paulo de Olivença – (003° 27'44" S 68° 57@01" W) University town on the South bank.

Santo Antônio do Içá – 25km after the town Amaturà, the river turns North, when this happens take the next two left forks, first one at (003° 10'23" S 67° 56' 29" W). (Two large 5km long islands in a row). Still heading north, the **Putumayo** enters the Amazon to our West. 3km after that we reach the town on our left as the river joins back up with itself after the second island.

Tonantins – 33km North of Santo Antônio do Içá, this town is on the West bank. Medium sized town.

Jutai – Around 160km from Tonantins. South bank, at mouth of **Jutai river**. Hospital and post office. (002° 44'33" S 66° 46'08" W)

Fonte Boa – (002° 30'26" S 66° 06'55" W) Behind an island on the South bank. **Airport**, shops, restaurants...





Above map titled wrong. Correct Title 4.2.2.



4.3 Fonte Boa – Coari (448km) (8 DAYS)



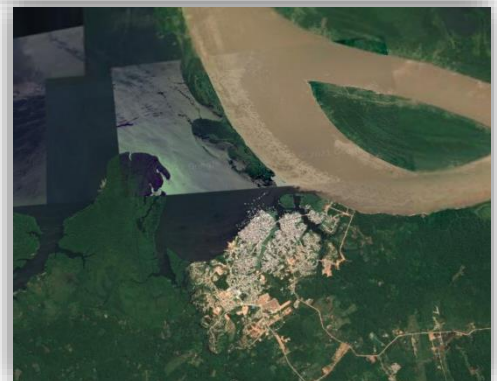
Fonte Boa – Leave the town and after 90km when heading North there will be a fork at: (002° 29'55" S 65° 24'55" W) take right hand route otherwise we'll end up in the Japurá, possibly get lost and potentially re-join the Amazon past Tefé. Keep taking right forks until Tefé.

Tefé – 240km from Fonte Boa. River entrance on right, 21km after Alvarães. The **X** on the picture is at (003° 20'14" S 64° 40'23" W). Tefé is a medium sized university town with a few shops for supplies.

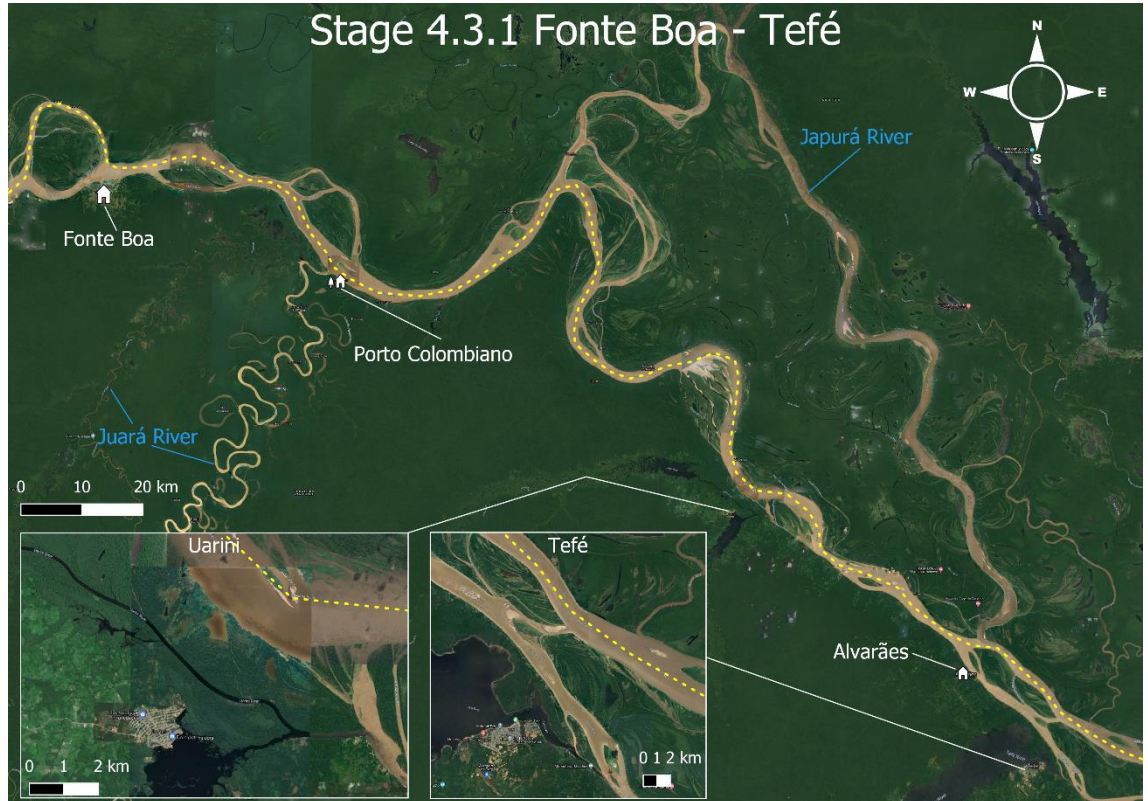


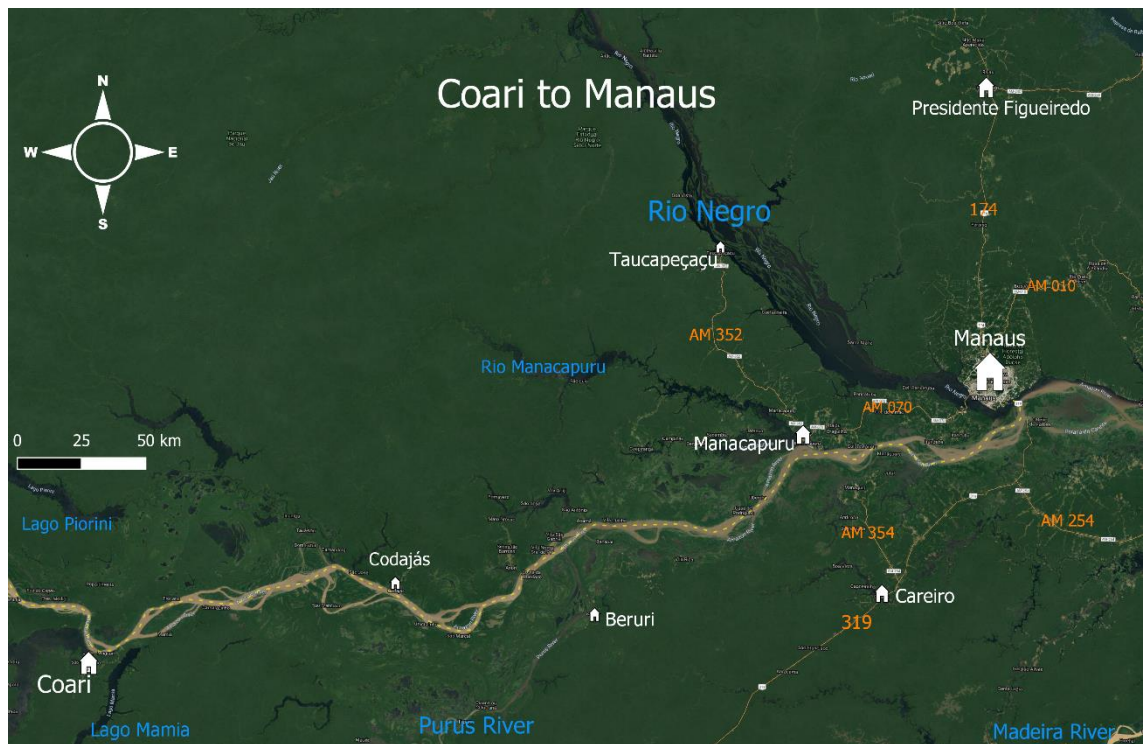
Tefe. Above

Coari – (004° 04'29" S 63° 08'12" W) 212km from Tefé. On the South bank where the Rio Coari Grande meets the Amazon. Plenty shops for supplies.



Coari. Above





Coari – Roughly **125km** to Codajás. No major settlements on the way.

Codajás – Medium town on the North bank. **(003° 50'33" S 62° 04'02" W)**

Manacapuru – **190km** from Codajás. Quite a major settlement on the North bank at the mouth of the Rio Manacapuru. There is a road **AM070** to Manaus from there.

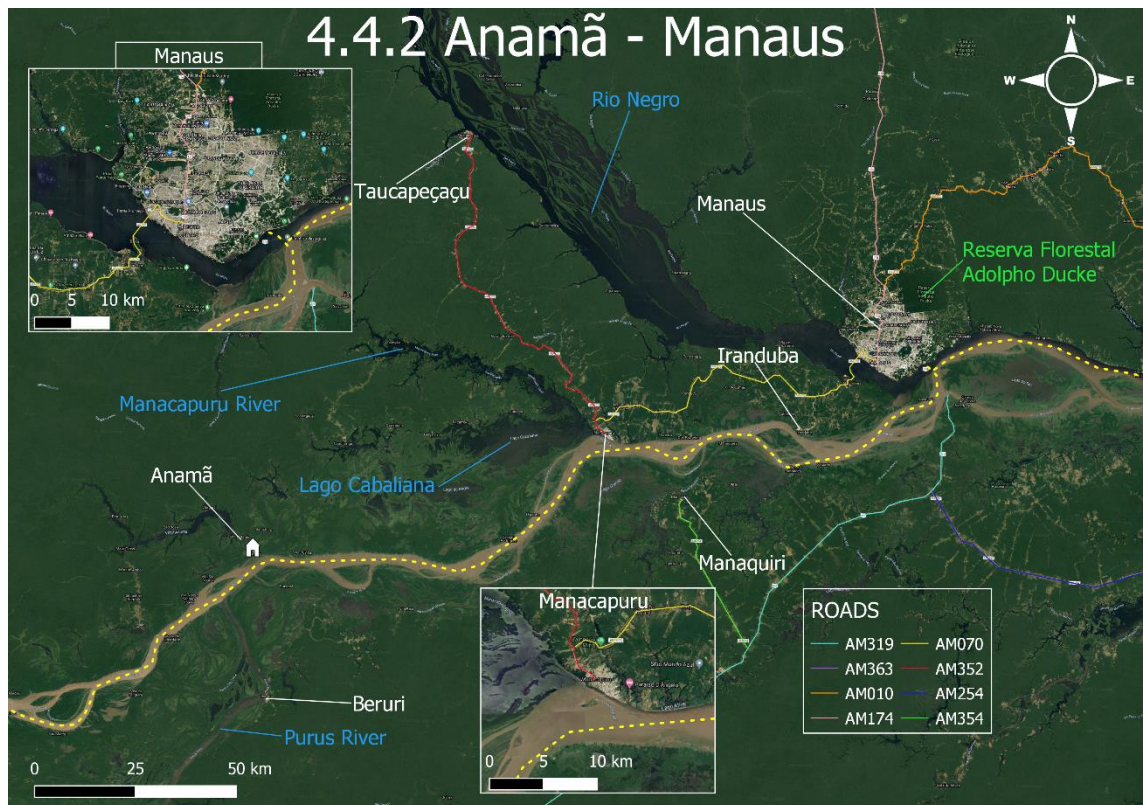
Manaus – **(003° 07'38" S 60° 01'12" W)** Population **2.2 million**. The capital of Amazonia. Lots to do and see. Will spend a maximum of **7DAYS** if we want. The town to the North, **Presidente Figueiredo** is surrounded by waterfalls and lagoons. Quite road trip! Nature visit.



Figure 19 - Amazonas flag.



Figure 20 – Manaus, Rio Negro. Photo credit - Lore Chano





Stage 5 (1598km) (40 DAYS)

Manaus to Belem.

Tidal Bore – The Pororoca. Towards the latter end of Stage 5 we will be up against the Pororoca, a tidal wave that travels against the river flow and is most powerful during spring tides. It can travel as far as 800km from the Atlantic Ocean up the Amazon river-system.

5.1 Manaus to Parintins (440km) (8 DAYS)

There are many towns along this stretch. Some are on the Amazon riverbank; others are along the **Uatumã** and **Madeira** tributaries or the **Paraná do Urari**, or **Paraná do Ramos**. There are many scattered villages too. Parintins population around 80 000.

Manaus – Caizônia - 100km. Caizônia on the North bank.

Caizônia - Itacoatiara - 81km. Itacoatiara on the North bank.

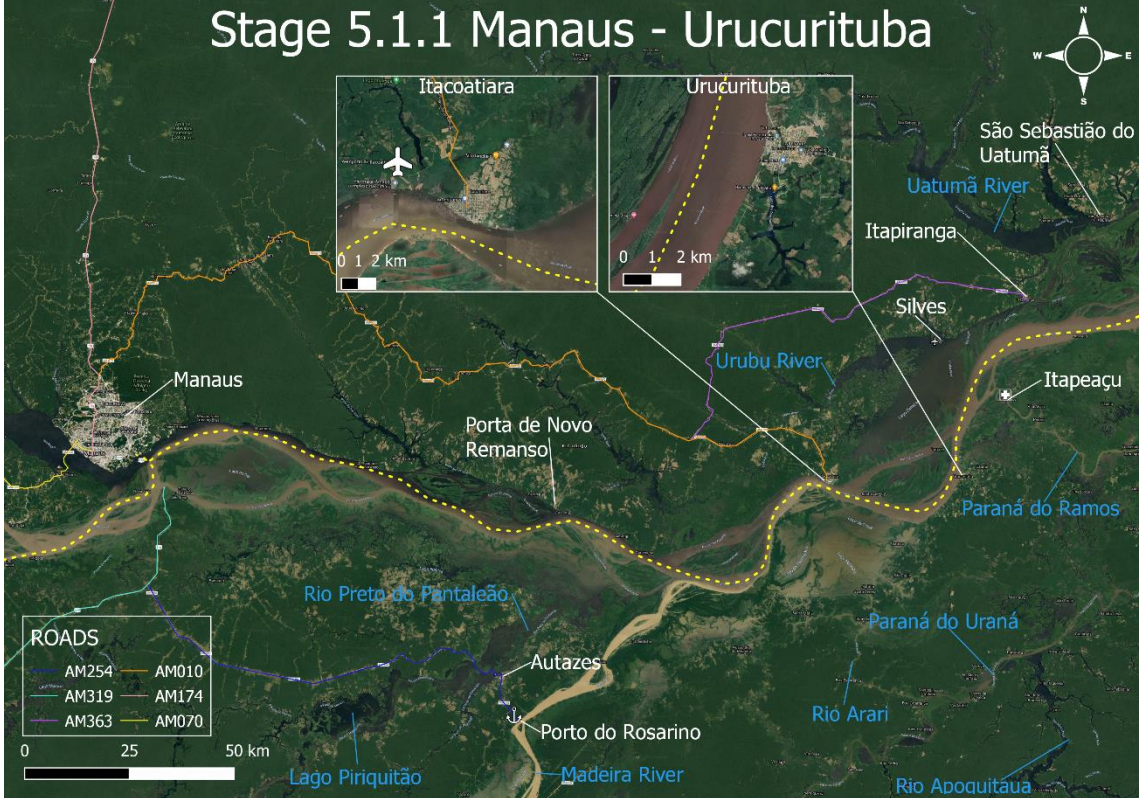
Itacoatiara – Parintins - 250km. Parintins is on the South side of main river.

Parintins (002° 37'34" S 56° 44'30" W) - Located on the South bank or on the Island of Tupinambarana. Originally a native settlement.





Stage 5.1.1 Manaus - Urucurituba



Stage 5.1.2 Urucurituba - Parintins





5.2 Parintins to Santarém (260 km) (10 DAYS)

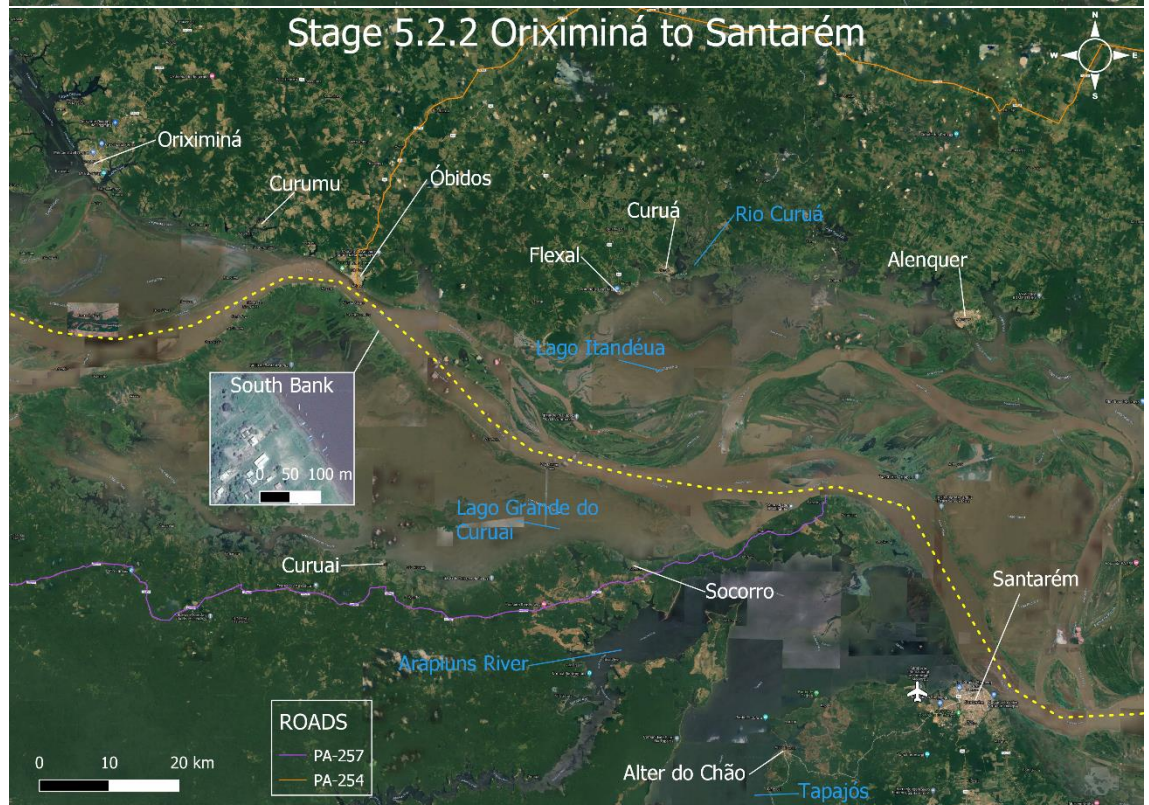
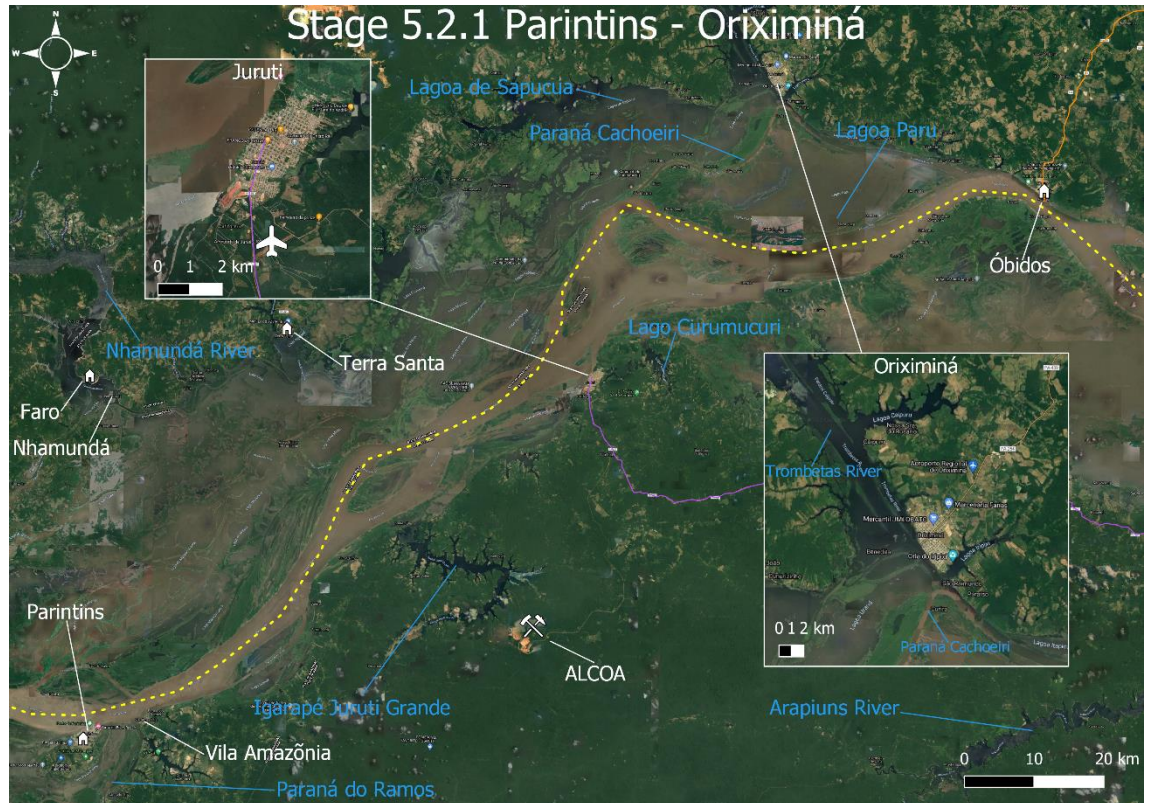
Parintins – Juruti – 92km. Juruti is on the South Bank. Road **PA-257** goes East for 125km to **Socorro**.

Juruti – Óbidos – 75km. Óbidos is on the South bank. **163** road leads North, then West, then South for 70km to **Oriximiná**

Óbidos – Santarém at (002° 25'00" S 54° 42'52" W). - 120km. South Bank, population 306 500.



Santarém was founded by Portuguese colonists in 1661. Originally named New **Santarém**. It is one of the oldest cities in the Brazilian Amazon so most definitely worth a stop for a few days. It also has over 100km of natural beaches made beautiful by the crystalline waters of the **Tapajós River**. (5 DAYS)





Santarém – Monte Alegre – 108km. At the end of the north straight. On the Northwest bank. Large town. Has an airport.

Monte Alegre – Prainha – 73km. Small town on the North bank.

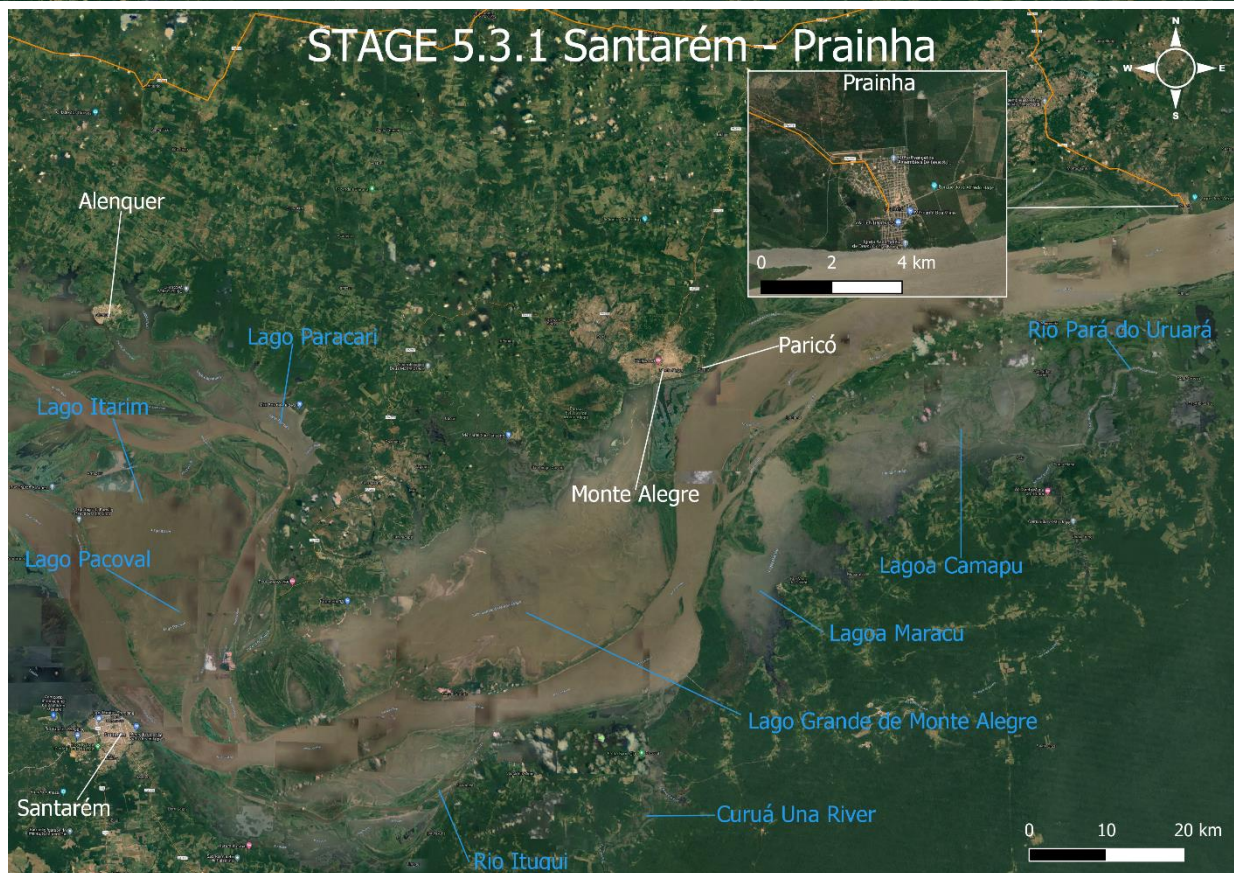
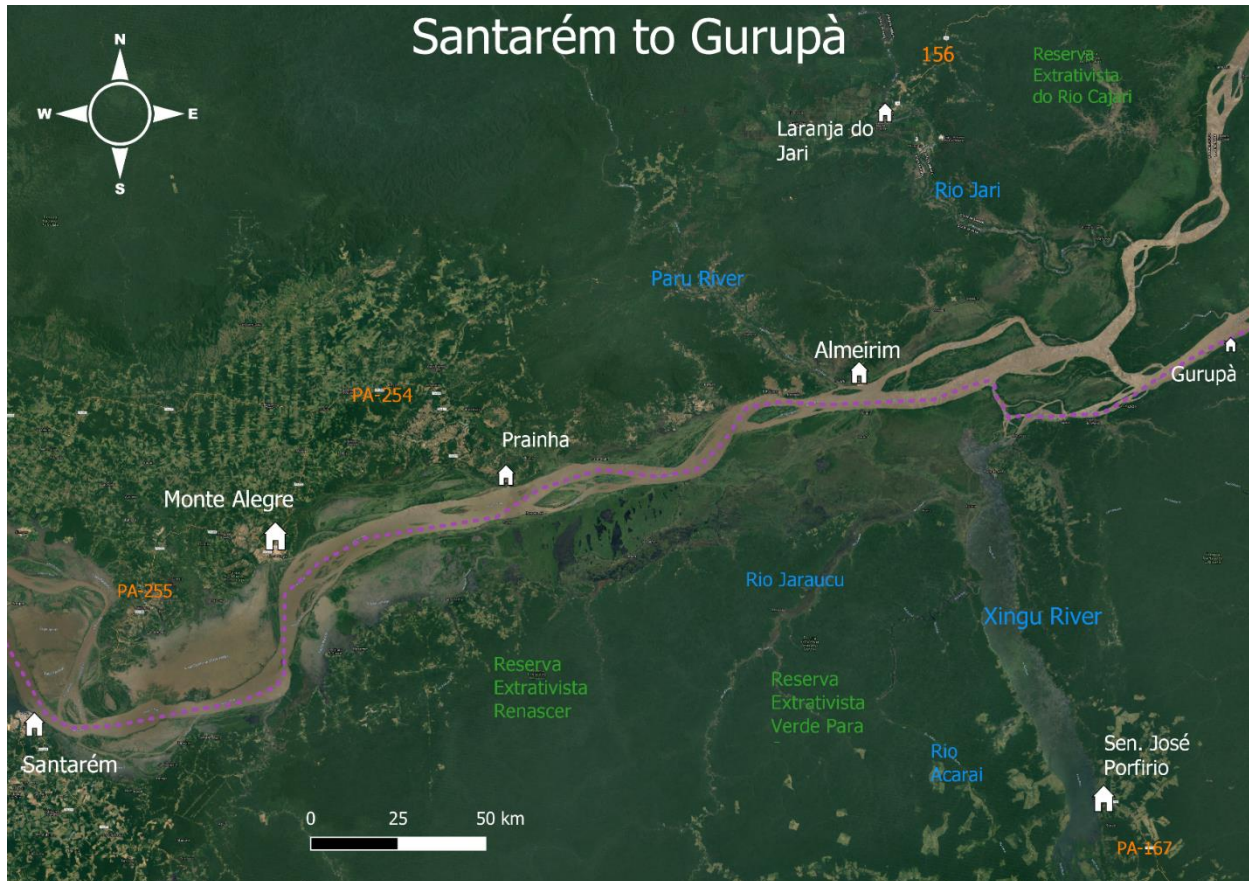
Prainha – Almeirim – 115km. Medium Town on the North bank behind an island. From Prainha take all the left forks so as not to miss it.

Almeirim – Gurupá – 117km. From Almeirim onwards, take all the right forks so as to take the correct tributary to Gurupá. The first major right fork is straight away at Almeirim and the second major right fork is after **65km**. Hug south bank.

Gurupá – (001° 24'39" S 51° 39@07" W) Small town on the South bank of the river. A few shops and cafes.



Figure 21 - Gurupa from the water







There are so many different options at the mouth that this number is just one estimate.



Due to the many options, we will be using local advice and knowledge to navigate this section.

The mouth contributes to nearly 20% of the world's fresh water discharge into the oceans. It could be said to be over 180km wide when including the islands. The **Baía de Marajó** where **Belém** is situated is 20km wide when measured from the islands North of Belém to the massive Island of Marajó to the North.

Ilha de Marajó is comparable in size to Switzerland.

Gurupá - Breves – (200km) Breves is at **(001° 41'19" S 50° 29'15" W)** on the East bank of the river. Substantial town of 100 000 people.

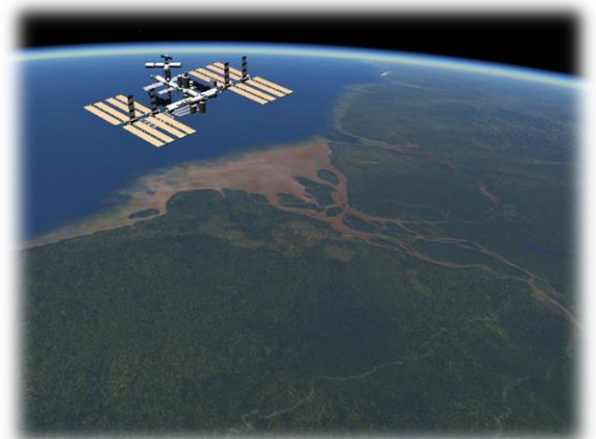
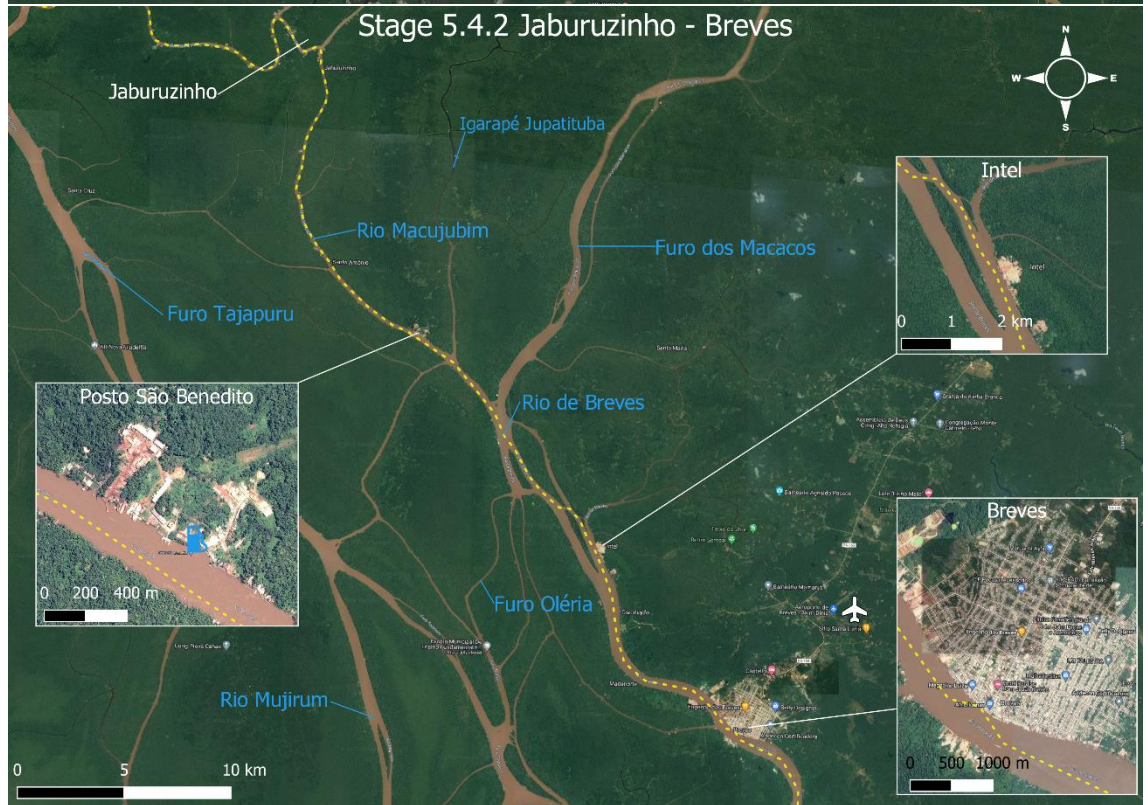
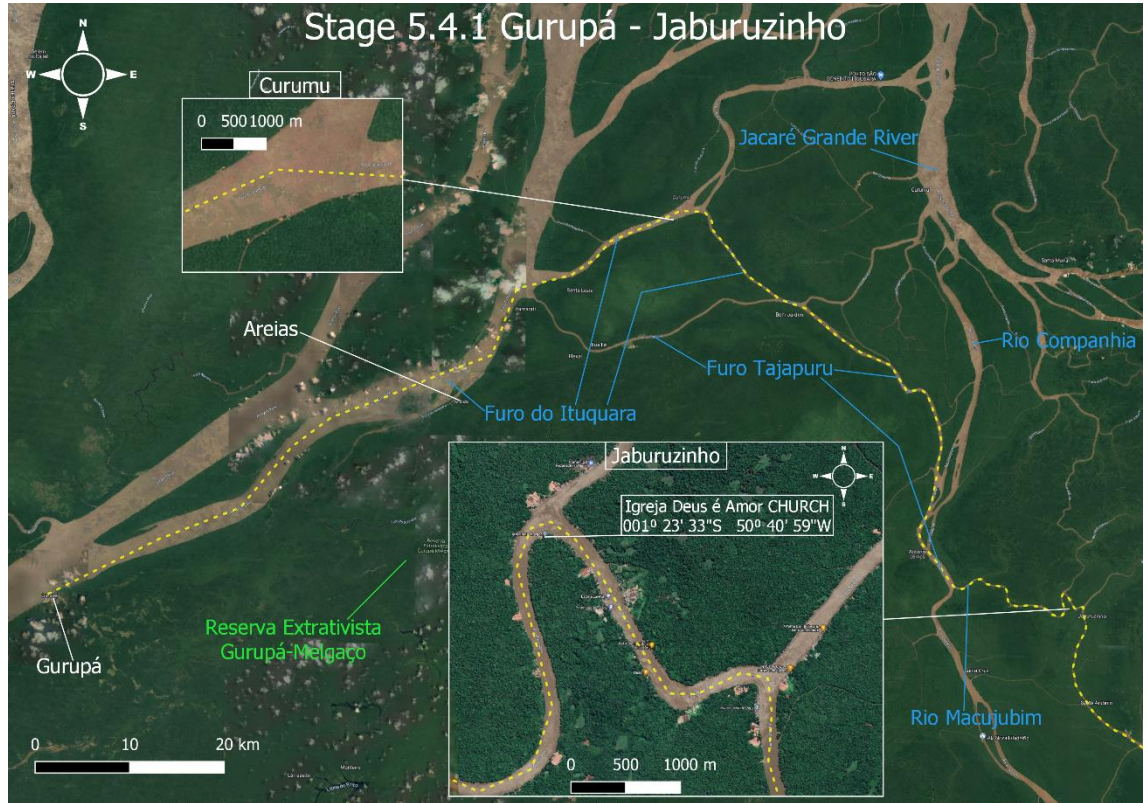
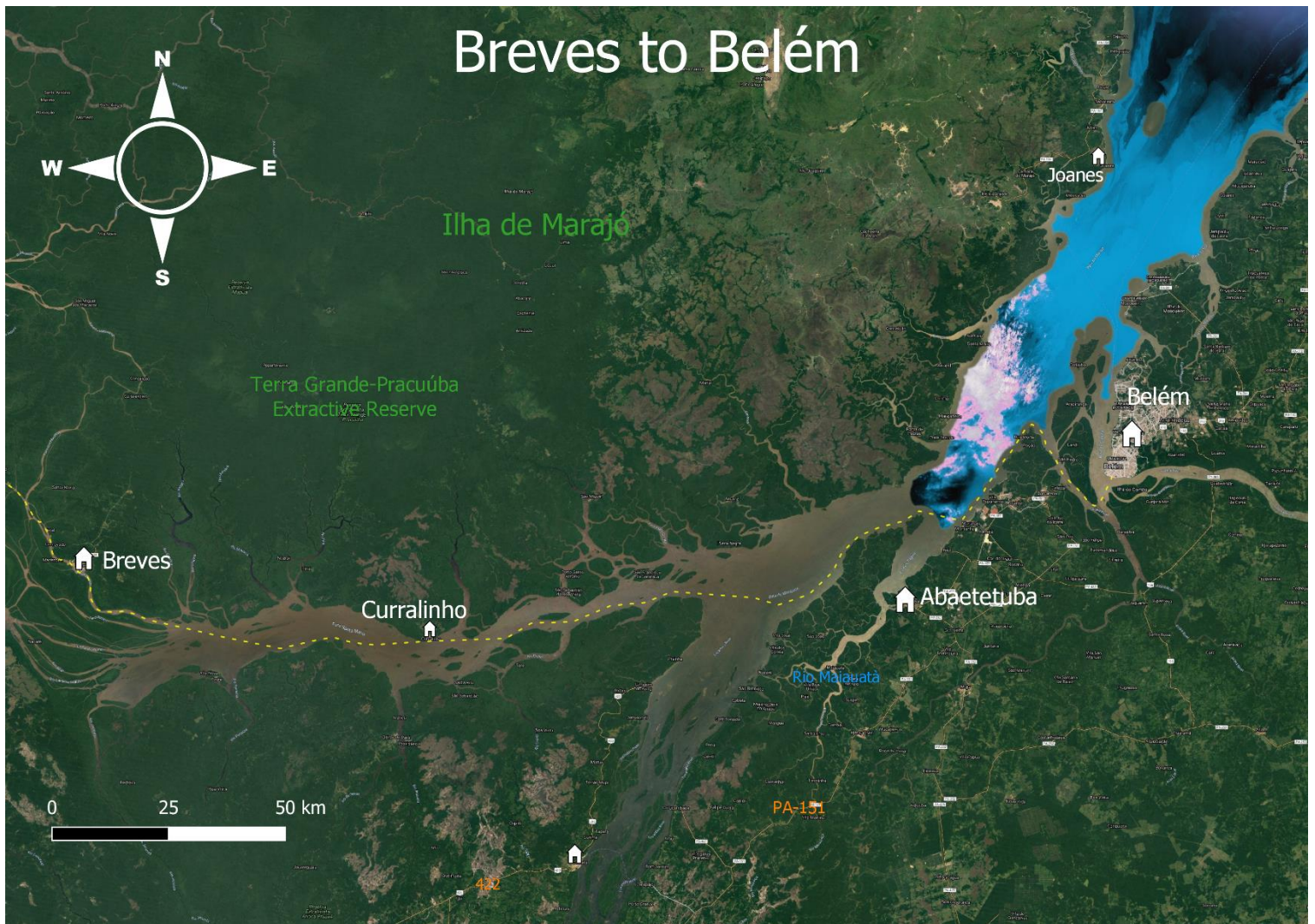


Figure 22 - The mouth of the Amazon. Credit - SnowBrains.com





Breves - Curralinho - (97km) Curralinho is at **(001° 48'52" S 49° 47'50" W)** Major settlement on the North bank.

Curralinho - Belém – (175km) Belém is at **(001° 28'09" S 48° 30'17" W)**

Belém – Population 1 500 000, provincial capital. Founded in 1616, the first European colony on the Amazon.



We have made it. (Touching wood as I type this!) From Chimborazo to The Atlantic. A time for relaxation and reflection. Hopefully, some reunions with the land crew team members, family and friends. If we can get Dad out for this meeting it would make the trip.

Feel the coastal breeze on our faces and remember that mountain top air of Chimborazo not too long ago... Writing and reflection. **5128 km and 168 days?**



Recognitions

The idea for this expedition and all the initial advice came from my dad, David Bathgate. The plan was put together and all aspects researched by John Bathgate.

All maps were created in QGIS by John Bathgate. Google Hybrid and Open Street Map were used in creating these maps and coming up with the expedition plan.

Team Members:

David Bathgate	Patron	Climber, explorer, writer, artist, adventurer.
John Bathgate	Expedition Leader	Royal Marine Commando, paddler, navigator.
Ben Bathgate	Expedition Member	Climber, rope access specialist.
Ian Roberts	Expedition Member	Royal Marine Commando, paddler, blogger.
Liam Schneider	Expedition Member	Doctor, climber.
Jake Morley	Expedition Member	Paddler, plant scientist.
Moira Matheson	Expedition Member	Aspiring ecologist. Edinburgh University.
Cara Gilles	Expedition Member	Science help, social media.

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Big Blue PR	Support	PR, media, fundraising & business
Shadow Technical Solutions	Advisor	Communications
Nature Me	Advisor	Climbing, local boats, fixer.
Salango Kayaks	Boat Builder	Building our canoes

Many thanks to our sponsors and suppliers. Without their support this expedition would not be possible.

Many thanks to the team members, all contributing in their own unique ways!

The plan is written from the perspective of John Bathgate. All views and opinions contained within are mine alone.

Thank you for your interest and please follow our progress!

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