



Kuiluu Expedition 2018

Report on Exploratory Climbing in the Tien Shan,
Kyrgyzstan

17th August to 9th September 2018
Report written by Jon Burgess & Rob Reynolds

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Introduction

This report documents the 2018 mountaineering expedition to the Kuiluu range, part of the Tien Shan in South Eastern Kyrgyzstan. The aim was to explore the mountaineering potential of this little visited part of the Kuiluu range and to make a first ascent of a previously unclimbed mountain.

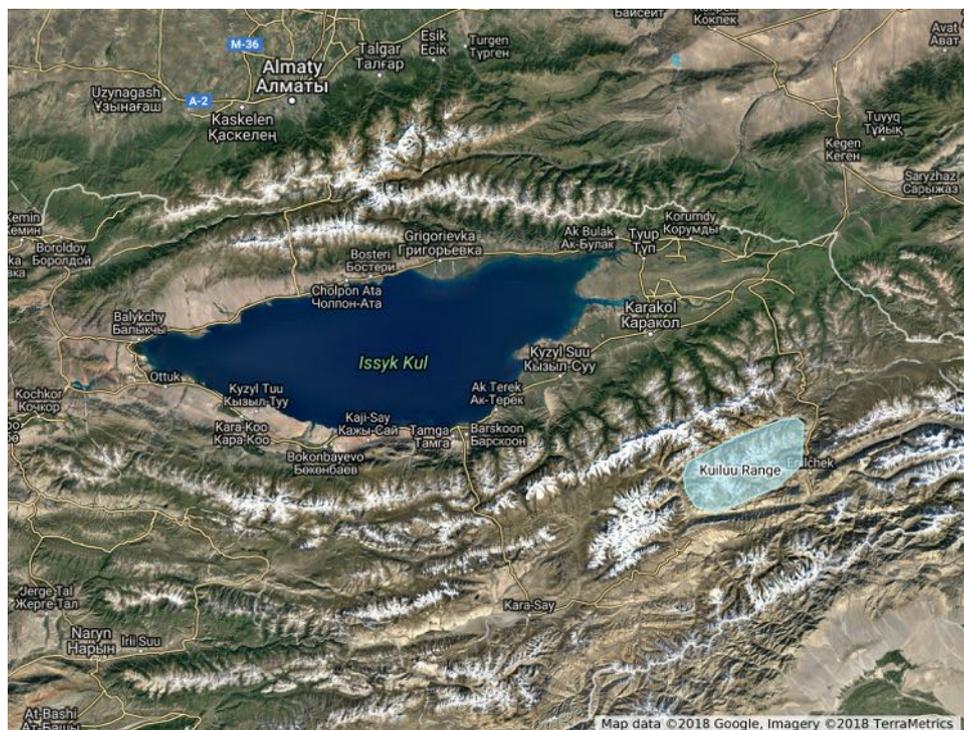
Kyrgyzstan

Kyrgyzstan is a mountainous country in Central Asia, sandwiched between Kazakhstan to the North, China to the South and East and Uzbekistan and Tajikistan to the West. The Tien Shan Mountains run from China, through Kyrgyzstan, covering some 80% of the country. As a former soviet state, access to the country was very limited to westerners until 1991 when the country gained its independence with the collapse of the USSR. For this reason and the natural attraction of climbers to the highest peaks such as Khan Tengri, Peak Pobedi and Lenin Peak, there is still huge potential for first ascents and exploration. Add to this the distinct lack of bureaucracy and ease of access to the mountains from the capital, Bishkek, Kyrgyzstan becomes an ideal destination for a climbing expedition, especially one short on time and money!



Kuiluu

We were pretty open to ideas on exactly what our objective should be. We had narrowed it down to a few potential ranges and with the help of Vladimir from ITMC we settled on the Kuiluu range. Kuiluu is a little visited range in the South East of Kyrgyzstan, south of the Terskey Ala-Too range. The highest peak in the range is Constitucia (Konstituzii) Peak at 5281m and there is still plenty plenty of potential for first ascents in the region of 4500m-5000m.



As research progressed, the Oroy valley stood out.

As far as we can tell, this valley has seen no previous mountaineering expeditions. At the head of the valley is the Oroy glacier, which is surrounded by a cirque of unclimbed peaks of around 4600m-4900m. We decided to focus our efforts here.

Expedition Team

Jon Burgess (35) - Expedition organiser

Climbing experience:

Many years hiking, scrambling and climbing in the UK. Leading trad climbs to Severe, sport 6A Winter climbing (only up to Scottish grade II) in Scotland
Several trips to the European Alps, ascents including:

- Bishorn, Valais Alps (F)
- Pigne d'Arolla, Valais Alps (F)
- Mont Blanc de Cheilon, Valais Alps - retreated 100m from summit due to poor conditions (PD)
- Grand Paradiso, Italy (PD)
- Traverse Aiguille du Crochues, Chamonix (PD)
- Arête à Laurence, Mont Blanc massif (PD)
- Arête des Cosmiques, Mont Blanc massif (AD)
- Aiguille d'Entrèves, Mont Blanc massif (AD)

Rob Reynolds (35) - General dogs body and comic relief

Climbing experience:

- Essentially the same experience as Jon.

Expedition Ethics

We aimed to minimise any negative impact on the environment and tried to positively impact the local economy (especially the brewer of Arpa beer). The glaringly obvious exception is that we flew half way around the world and therefore contributed a significant amount of CO₂ to the atmosphere. Once in Kyrgyzstan, we made use of a local agent to help support us with logistics. We stayed in locally run accommodation and bought the majority of our supplies for the mountains in the local market (Osh Bazaar).

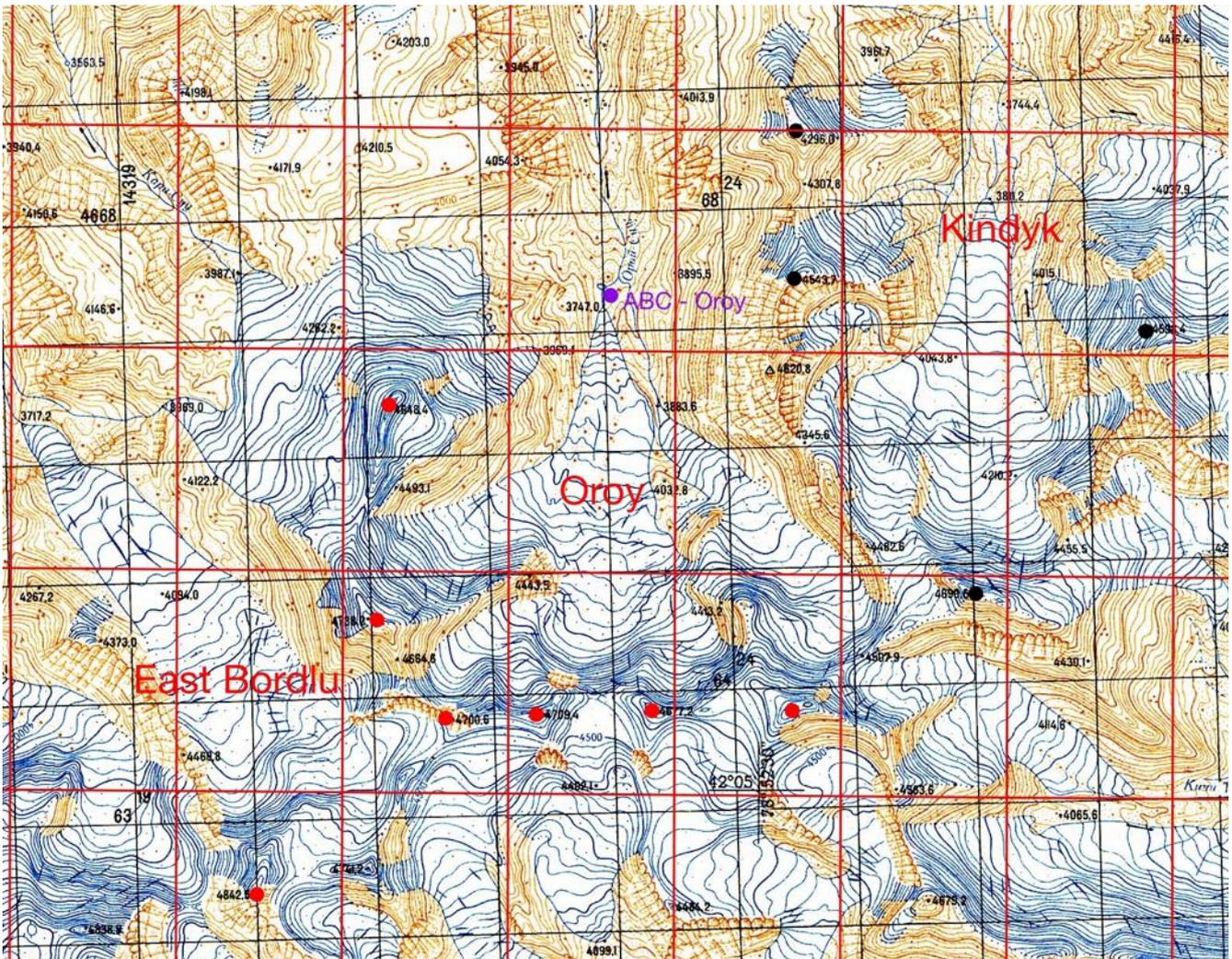
We applied a "leave no trace" philosophy as much as possible during our time in the mountains. Human waste was buried using the "cat hole" technique where possible. Used paper was burnt. All other waste, including food waste, was carried back out with us and disposed of properly in Bishkek. When washing, we used Sea to Summit biodegradable "wilderness wash", which claims to be completely biodegradable and environmentally friendly.

In the end our route did not require the use of any technical climbing equipment beyond ice axe and crampons. However, we planned to apply the same "leave no trace" principles to the climbing, for example, by not bolting or cleaning routes.

Preparation

Research and Previous Expeditions

The first recorded climbing expedition to Kuiluu was in 1937 by A. Letavet, making the first ascent of Constitucia, the highest peak in the range. Subsequent expeditions have largely concentrated on the far Western end of the range, particularly the Karator and Bardytor valleys. The most recent expedition was by a British team (Tortoisebutler expedition) in 2016 to the Kindyk valley. As far as we can tell, the neighbouring Oroy valley has not seen a single climbing expedition, and this is where we focused our efforts. Full details of our research is available in [Appendix A - History of Kuiluu](#).



Oroy Glacier showing unclimbed (red) and climbed peaks (black) and planned ABC

Logistics

We flew from London Heathrow to Bishkek via Istanbul with Turkish Airlines. This had two benefits, firstly they have a pretty generous checked baggage allowance, even for economy seats - 30kg per person. We managed to keep within this limit and avoid paying excess baggage charges... just. The second benefit is that with a long enough lay-over (ours was 21 hours), Turkish airlines offer a free tour of Istanbul (tours of various lengths and itineraries run every day), including transfers to/from the airport and free meals (we were treated to breakfast and lunch overlooking the Bosphorus).

We used ITMC, a Bishkek based trekking and mountaineering outfit, to help organise logistics within Kyrgyzstan. ITMC took care of airport transfers, transport to Kuiluu (Mayzas), and accommodation in Karakol. We also bought our gas canisters and borrowed horse panniers from them. Their expertise made organising the expedition a lot easier and they were invaluable with our permit issue, saving the expedition.

Kuiluu is in the South East of Kyrgyzstan and we planned to take two days to reach the valley. The first leg was a 400km drive from Bishkek to Karakol, along the north shore of Lake Issyk-Kul. Karakol proved to be popular with fellow travellers as it is a good base for forays into the mountains, particularly trekking in the Terskey Ala-Too Mountains. The second leg required a 4x4 to take us 100km south to the Kuiluu range, as far as Mayzas. The 4x4 was not able to take us all the way to base camp, but as ITMC had informed us, shepherds make use of the Kuiluu valley to graze their livestock in the summer months and there is a shepherds hut at Mayzas, near the entrance to the Kuiluu valley. We arranged for the 4x4 to drop us there and we negotiated with the shepherds to help us carry our kit the rest of the way on horseback.

Maps

We made extensive use of Google Earth during the planning stages, and this proved a very useful tool. However, it has its limitations.

Printed maps of Kyrgyzstan are pretty hard to come by, the former Soviet Union to the rescue! During the cold war, the USSR attempted to map the entire world, large quantities of high quality and accurate maps were produced during the 70s and 80s. With the collapse of the USSR, many of these maps found their way into various collections, some of which have been made available on line. We obtained maps of Kuiluu at 1:100,000 and 1:50,000.

We found these maps to be a great resource and found the surveying to be very accurate, except of course for the glaciated regions which have been affected by glacial retreat. However, the datum and grid used are not in common use today and certainly not available as an option on our Garmin GPS. However, John Proctor (from the Jiptik 2016 expedition) has devised a method for overlaying a WGS84 latitude/longitude grid onto the maps using Google Earth and some regression analysis to work out the appropriate translation matrix. With the WGS84 grid overlaid, it was a fairly easy task to use Google Earth to export the map in KMZ 'tiles' which could then be imported into our Garmin Etrex 30x as a custom map.

Training

Our planned objectives weren't overly technical, so cardiovascular fitness was our priority. Rob is in the fortunate position of having a very active job and maintains a reasonable level of fitness all year; he supplemented this with some running. Jon isn't so lucky, sitting at a desk all week. Aerobic training by cycling the 42 miles to work and back a couple of times a week and running was supplemented by strength training in the gym and longer endurance training at the weekend. Regular technical climbing was sacrificed in preference to fitness and endurance training, but we did head out into the hills at every opportunity with training weekends to Snowdonia, Brecon Beacons, Swanage and the Lake District.

Medical

As Kuiluu is remote, 2 days overland to the nearest medical treatment, we ensured that both of us had some degree of first aid training. Rob has trauma first aid training as part of his job (tree surgeon). Jon attended a two day expedition medicine course (provided by the Expedition Care Programme) and we both attended a one day clinic on high altitude medicine as part of the Arc'teryx Alpine Academy, held at the Aiguille du Midi, Chamonix.



We took a fairly comprehensive first aid and medical kit, the contents of which we based on advice from the Travel at High Altitude guide (MedEx (2008), Travel at High Altitude, ISBN: 0-901100-76-5), the Expedition Care Programme, Nomad Travel and Jon's wife Jo (a medical doctor). Prescription medications (POMs) were obtained through Nomad Travel, which has a specialist pharmacy and are familiar with supporting expeditions to remote areas.

Prescription Medications (POMs)

Altitude Medication:

- Acetazolamide (Diamox) 250mg x 34 - Prevention and treatment of Acute Mountain Sickness (AMS)
- Dexamethasone 2mg x 40 treatment of High Altitude Cerebral Oedema (HACE)
- Nifedipine 10mg x 56 - treatment of High Altitude Pulmonary Oedema (HAPE)

Antibiotics:

- Ciprofloxacin 500mg x 6 (3 day course) - Treatment of infective diarrhoea
- Azithromycin 500mg x 3 (3 day course) - Treatment of infective diarrhoea (Rob has a penicillin allergy)
- Flucloxacillin 500mg x 28 (7 day course) - Treatment of soft tissue infections
- Clarithromycin 250mg x 14 (7 day course) - Treatment of soft tissue infections (Rob has a penicillin allergy)
- Amoxicillin 500mg x 21 (7 day course) - Treatment of chest infections

Non Prescription Medications:

- Loperamide 6mg x 32 - Diarrhoea
- Rehydration salts x 6 sachets
- Ibuprofen 200mg x 32
- Paracetamol 500mg x 32
- Chlorphenamine (Piriton) 4mg x 32

Dressings:

- Bandages of assorted sizes
- Micropore tape
- Self adhesive plasters - assorted sizes
- Non adherent dressing pads
- Antiseptic wipes
- Sanitary towels (recommended by a paramedic (and mountaineer) for dressing large wounds)
- Gaffer tape
- Climbing finger tape
- Antiseptic cream (Savlon)

Vaccinations:

At the time of our expedition, the NHS vaccination advice (www.fitfortravel.nhs.uk) for Kyrgyzstan just recommended that the standard primary courses of vaccinations for life in Britain are up to date with any boosters. In addition, vaccines for Hepatitis A; Hepatitis B; Rabies and Typhoid may be considered. Jon was up to date with standard vaccines and had an in date Hepatitis A vaccine and decided that was sufficient. Rob went the whole hog and got vaccines for: Typhoid, Tetanus, Rabies and Hepatitis A.

Food

We planned to get most of our supplies in Bishkek, but we did take out some items with us. We had freeze dried meals from our sponsor Expedition Foods and also took out instant mashed potato and cup-a-soups. These we saved for our time at Advanced Base Camp, so that we could concentrate on climbing. Everything else was bought at Osh Bazaar or Norodny supermarkets in Bishkek. Rob is a pragmatic vegetarian, and was willing to suspend his ethics for the trip. We intended to supplement the staples of pasta and rice with cured sausage for flavour and as a source of protein and fat, hoping to find something similar to salami. We could only find Kyrgyz sausage, which as far as we could tell is not cured in any way, so we decided against this as we would not have any way of keeping it fresh. We did buy enormous amounts of nuts and dried fruit (even found curious tasting glacé tomatoes), biscuits and sweets. We also bought a selection of herbs, spices and dried tomatoes in a vain attempt to make dinner interesting. We bought flour to make bread and porridge oats (for breakfast and to make flapjack), coffee creamer (we couldn't find dried milk anywhere) and honey. The lack of something satiating such as meat or cheese was sorely missed by the end of two weeks and something that we would work on for a future trip; we were well and truly sick of our failed attempts to cook rice and thankful for the cup-a-soup, instant mash and freeze dried meals!



Equipment

We tried to keep the expedition as light weight as possible, especially as there were only two of us to ferry kit around. We took two tents: one small tent to be used as a kit store at basecamp and a two man mountain tent for sleeping at basecamp and advanced base camp. We gave ourselves a good margin and took Down sleeping bags rated to -22C with us; probably overkill but we both appreciated having somewhere warm to retreat to. We took a mixture of stoves, all gas and compatible with screw type canisters; a larger stove for basecamp cooking and an MSR reactor stove system for higher on the mountain.

We took two multi rated ropes, so we could travel lightweight on the glacier with a single rope or use a double rope system on more technical climbs if needed. We also took a full climbing rack with ice screws etc. and plenty of tat for abseils. In the end, we used one rope, once, and really appreciated lugging all that equipment half way round the world and most of the way up a mountain!

Somehow we managed to both stay within the 30kg airline checked baggage allowance! Full details of the equipment taken can be found in [Appendix C - Equipment](#).

Communications

We rented a Thuraya XT-Lite satellite phone from Global Telecast Communications. Phone calls worked well, however text messages were very unreliable. None of our messages to ITMC or the blog updates got through. Text to email seemed to be the most unreliable, normal SMS messages worked better. We didn't have a problem receiving messages.

Visas and Permits

No visas are required for British nationals to enter Kyrgyzstan as a tourist. However, a permit is required to enter the military border zone on the Southern border with China. One of the reasons we had picked the Kuiluu range was the lack of any permits required. However, this turned out to be false, as the border zone has expanded in recent years and the military check point is now north of Kuiluu. The border has moved within the last two years, the previous expedition to Kuiluu in 2016 did not need permits. Thankfully our in country agent, ITMC, managed to sort out permits for us and saved the expedition.

Finances

The expedition was fully paid for by us, except for some free and discounted meals from Expedition Foods. Costs were largely inline with expectations and the budget we drew up before the trip.

	Team size: 2	1.3	USD to GBP rate
	USD	GBP	Per Person
Flights			£502.00
Insurance - Austrian Alpine Club			£51.25
Medical supplies		£85.44	£42.72
Expedition food - Freeze dried meals		£60.00	£30.00
Accommodation Bishkek - 4 nights hostel	US\$ 108.00	£83.08	£41.54
Horses - Mayzas to Oroy		£130.00	£65.00
Petty Cash - Supplies in Bishkek, meals out (x7) and beer money		£145.00	£72.50
Money transfer fee	US\$ 40.00	£30.77	£15.38
Satellite Phone rental		£157.00	£78.50
Satellite phone calls		£82.00	£41.00
Airport transfers (ITMC)	US\$ 60.00	£46.15	£23.08
Accommodation Karakol - 2 nights CBT homestay (ITMC)	US\$ 60.00	£46.15	£23.08
Gas - 10 x 230g canisters (ITMC)	US\$ 70.00	£53.85	£26.92
Land transport and logistics (ITMC)	US\$1,020.00	£784.62	£392.31
Sub Total - ITMC bill	US\$1,210.00	£930.77	£465.38
Total			£1405.28

Expedition

Summary

We arrived at Manas International Airport early in the morning and spent the next two days in the capital, Bishkek, adjusting to the new culture and sorting out the remaining logistics. We visited

Lilia from ITMC to make final arrangements. Our last task before leaving Bishkek was to pick up supplies for 16 days in the mountains. We had freeze dried meals from our sponsor Expedition Foods for our summit attempts, the rest of the food we bought at the colourful Osh Bazaar.



Our next destination was Karakol, a popular base for trekking and mountaineering in the South East of Kyrgyzstan. A 6 hour drive from Bishkek, on gradually deteriorating roads along the north shore of lake Issyk Kul. After a night spent at a local hotel we're picked up by Nicolai in an old Soviet 4x4 for the 100km drive deep into the

Tien Shan. We drove through a stunning alpine valley, dotted with yurts, before climbing the 3500m pass over the Terskey Ala-Too mountains.

To our surprise we came to a military post. Nicolai drove up confidently, came to a stop and calmly said to us papers please... what papers? The border area with China is a military controlled zone and special permits are required to enter. ITMC had assured us that Kuiluu wasn't in the military area and we didn't need permits, the barriers and armed guard said otherwise...

So no permits... We made use of the satellite phone, finally we get through to Lilia and after much passing of the sat phone between the border guard, Nicolai and us it turns out that we can go through if we pay the 10,000 som that it costs to attain a permit! Lilia said the paperwork would follow and she would reimburse us the cost of the permit when we were back in Bishkek. Nicolai would pay the shepherds on his return as we didn't have the cash for both the permit and the horses. Unbeknownst to ITMC and pretty much anyone outside of Kuiluu, the border had moved within the last two years. Previous expeditions to Kuiluu had not needed permits. Lilia had contacted the relevant government department in Bishkek explaining the situation. To our relief, they were willing to organise the necessary paperwork for us to continue with our the expedition.



We finally arrived at the shepherds hut at Mayzas a short way up the Kuiluu valley, the end of the road for the 4x4. We're greeted with a look of surprise from Sibeeri (mum) and her 3 children. Nicolai explains that we need help taking our climbing equipment the remaining 16km to the mouth of the Oroy valley, our proposed basecamp. A child is dispatched on horseback to fetch the shepherd whose horses we hope to use for transport. Within 10 minutes a posse of family members arrive, no doubt curious about who it was waiting on their doorstep. We found ourselves invited in for refreshments. Soon it was time for Nicolai, and our last link with the arranged plan to leave... this is it, we have our phrase book, hand signals and the smiles on our faces to try and communicate. We break out our bottle of Valhalla we had been saving and share it with the family, which breaks the ice. Games, dinner, laughter and conversation ensued, with the help from Berbede the eldest son (10) who was learning english at school. With dark approaching we were made welcome to stay in the hut, sharing the floor of the single room with the family. We slept with the memories from the day, such an incredible experience, utterly humbled by this families generosity.



At dawn we load the horses with our kit and after a hearty breakfast of mutton stew, head up the valley to basecamp. There are wolves in the nearby forest and golden eagles nesting in the surrounding peaks, layers of sedimentary rock creating multicoloured bands on the mountainsides. The neighbouring valley to our own has a distinctive hillock at the valley mouth eagerly described and highlighted as a belly button by Syrtbay, the shepherd. Syrtbay had brought Berbede with him and he shared a bottle of mares milk with us, thick and creamy, the milk is memorably strange! We bid farewell to the shepherds at the mouth of the Oroy valley (3000m), the horses could take us no further.

The next day we moved camp 350m up and a mile further into the valley; basecamp needed to be higher. We found an ideal spot close to the river with a fantastic view of the mountains. We

intended to explore the upper valley and glacier to identify potential routes to the summits of the now visible mountains, but the weather turns for the worse and we find ourselves trapped at basecamp between the mountains and the wolves! A few days pass and we finally move higher up the mountain; along the way we discover we had not been alone at basecamp. We find fresh wolf prints amongst our own on the river bed not far from camp. Surprised, but still confident we can cope, we finally find a location suitable for an advanced base camp. From here we identify a peak that seems to be our best chance of achieving a summit.



Summit day finally arrives. We wake before dawn to perfectly clear skies and head off with barely suppressed excitement. From the col we climbed what can only be described as the worst hill climb either of us had ever done. The 400m of 45 degree ice with thin patches of windslab took a heart thumping 2 hours to negotiate. We were greeted to an astounding view but this was no place to hang around. After getting a GPS waypoint for the summit, and taking some photos, we descended. Back at the col we celebrated, mission complete!

With our final day at ABC, we explored higher up the glacier, identifying potential for further first ascents. Then the slow and reluctant process of returning to civilisation began, providing plenty of time to reflect on our adventure. One thing we're sure of though... we will go back to Kyrgyzstan!

Life in the Mountains

Basecamp:

We set up an initial basecamp at the mouth of the Oroy valley (N42°10.3' E78°51.3', 3026m), exactly as planned, but also as far as the shepherds and their horses could take us. After a recce further into the valley the following day, we realised that basecamp needed to be higher. The entrance of the Oroy valley is guarded by a steep 200m high slope; we wanted to be above that to make access to the mountains easier and to aid acclimatisation. So we moved all of our equipment to a new and improved site 1.6km further into the valley and 350m higher at (N42°09.4' E78°51.5, 3349m'). We set up camp on flat ground with easy access to the river and shelter provided by some large boulders.



Water:

The only water available at both basecamp sites was from the glacial Oroy river. The water ran fairly clear until about midday, when it changed into a raging torrent, murky and grey with sediment. We did our best to collect all the water for the day early in the morning, although even then there was sediment in the water, so every drop had to be filtered. We had neglected to bring a large water container and so utilised an assortment of empty bottles and pans to collect water. We used an MSR Miniworks ceramic filter, which was really hard and laborious work filtering water each morning. However, the benefit was easy cleaning and maintenance, something we had to do every day to keep the filter working. No water filter is really designed to cope with silted up glacial water, but the MSR survived admirably with regular cleaning.

We would recommend taking a gravity fed system paired with a maintainable filter and a large container to make life considerably easier. After filtering the water was purified with a chlorine tablet for drinking (these didn't taste too bad, much like tap water really) or was boiled for cooking or making tea.

Cooking:

At basecamp we made use of the larger cook system (Primus multifuel), it was large enough to cook for the both of us in one pan. For breakfast we made porridge with honey and dried fruit. We were generally on the go during the day and just snacked on trail mix and biscuits. Dinner normally consisted of pasta or rice, mixed with nuts and a cup-a-soup or spices. This is where we let ourselves down a bit; we could have done with the protein, fat and calories of some cured meat or cheese. By the end of the trip, energy levels were pretty low. We wouldn't recommend this diet, although we both lost a lot of weight!



We fared better at ABC. We ate the flapjack we made for breakfast, which minimised faff in the mornings. We snacked on the go with trail mix and were normally back at camp by mid afternoon in time for a cup-a-soup and instant mashed potato. Dinner was an 800 kcal freeze dried meal from Expedition Foods.

Toilet:

As there were only two of us, we decided not to construct a dedicated latrine, favouring instead the 'cat-hole' technique. This worked well at our lowest basecamp but the tussocks of grass that made up most of the terrain at the higher base camp made this impossible. However, there was an abundance of boulders near camp which provided ample pre-made holes. At ABC, our only option was to move rocks on the moraine. We burnt any paper used and always found a site well away from the river and downstream of camp.

Wildlife:

The local fauna certainly kept us on our toes... We knew there were wolves and bears in Kuiluu; the shepherds had confirmed as much. We expected basecamp and certainly ABC to be too high for this to be an issue, something supported by reports from previous expeditions. At first, we only saw marmots, lots of marmots, and the odd eagle or two. Our main concern was keeping our food safe. We stored the food in sealed bags in a separate tent from where we were sleeping, and didn't have an issue. However, after a few nights at the higher basecamp we found evidence of bears and wolves...



We found what we convinced ourselves were old bear prints at the edge of the river bed. Although still well defined, the prints were much shallower than our own and that part of the river bed probably hadn't been disturbed since the spring thaw. Of much more concern were the fresh wolf prints we found amongst our own in the river bed close to base camp. These prints weren't there when we arrived and so at least one wolf had been through or very close to basecamp while we were there. However, although clearly curious enough to venture up into the valley to investigate the strange smells (us, the food or the horse panniers), they weren't interested enough to have a go! We found more bear and wolf prints by ABC and fresh wolf prints, this time of a much smaller wolf, following our tracks all the way up to the glacier.

When we returned to the higher base camp after our foray at ABC, we found what looked like a deposit from a bear, although we're not sure. There was also a large area of freshly flattened grass, not flattened by us though. We never saw either bear or wolf though and our food store remained undisturbed.

On the last night at our lower basecamp, while lying in our tent, something jabbed Rob in the shoulder forcibly through the side of the tent. Again, we saw nothing when we plucked up the courage to peer out of the tent! By the end of the trip we may not have managed as much climbing as we had expected, but we had become quite adept at tracking animals!

The climb

Wolf Peak (карышкыр чокусу / karishkır chokusu) - 4631m
Pk 4648.4 on 1:50,000 Soviet Map
N42° 06.701' E78° 50.235'
North ridge - PD

From the col the North ridge is an approximately 400m 45 degree ice and snow slope all the way to the summit. In poor conditions, this is difficult to protect.

The Ascent

We wake at 5am to perfectly clear skies, the coldest morning of the expedition. We follow the stream to the col we had reconnoitred the day before, the first rays of sunshine reflecting off the mountain above us. After 2.5hrs we reach the foot of the remaining obstacle between us and the summit, a 45 degree slope of ice and thinly layered snow, 400m high. We decided that there was no way to protect our movement up the slope, a rope would only ensure that should one of us slip, we would both fall. We left the rope and climbing rack at the col. Armed with just ice axe and crampons we headed off, enjoying the freedom of climbing



unencumbered by rope and heavy packs. We zigged and zagged our way up the mountain appreciating the feeling and sound of steel biting into ice. Using both walking pole and ice axe made the going a little easier, even so there were instances where the sound of hollow ice or creaking snow gave brief moments of alarm. The solid and reassuring granite of Chamonix that we were both used to was sorely missed. The higher we climbed the more wind slab we began to find; we stayed to the windward side of the slope to avoid the worst of it.

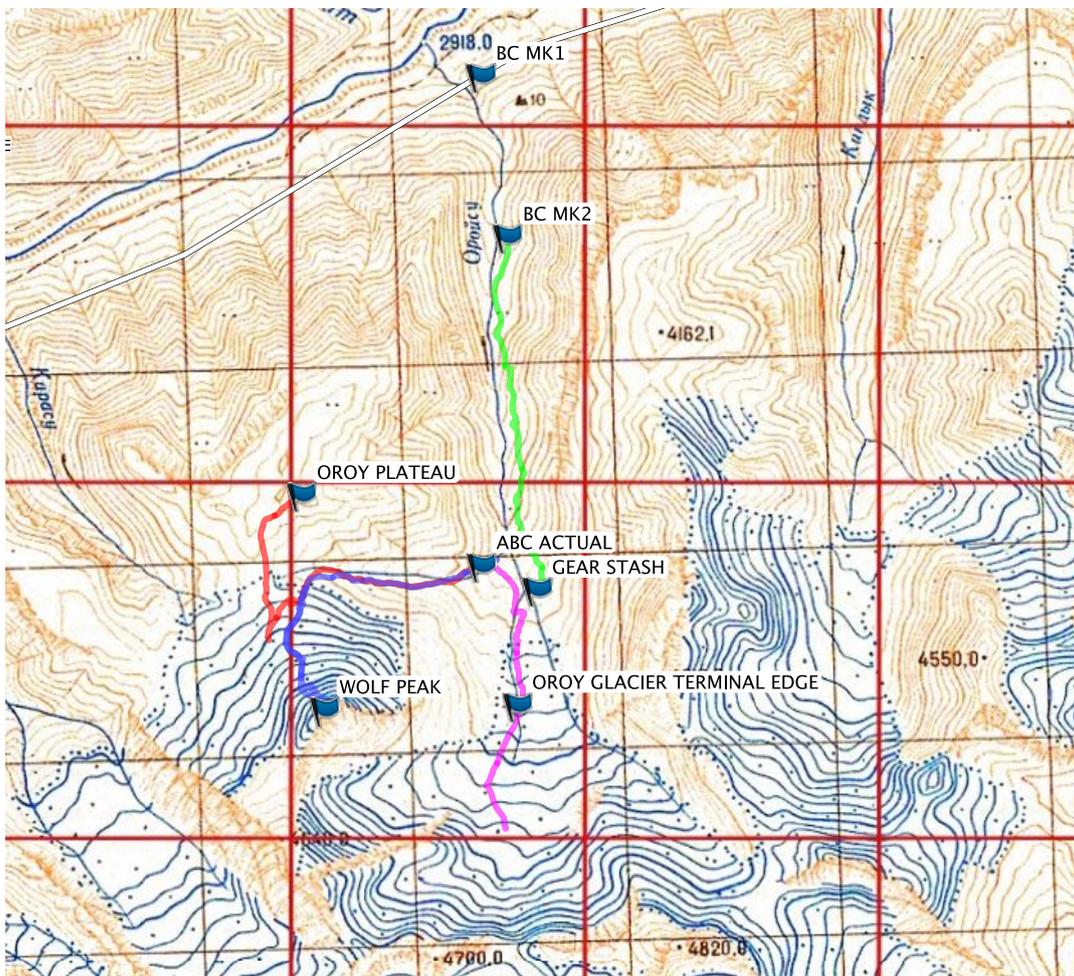


Finally, the summit loomed 50m distant. All the feelings of excitement, stubborn determination, pushing beyond the daily norm to achieve something for ourselves, and a little nervous fear, had got us this far. We had done it, cresting the summit to stand atop the mountain, just below the lip of a small cornice – awesome. We didn't stay long, just enough time to take a GPS waypoint and a few photos. We had reached

the summit, at 4631m, the highest either of us had climbed, but the 400m ice slope beneath our feet reminded us that we were only halfway. It was time to descend.



Rob at the summit of Wolf Peak



GPS tracks showing Wolf Peak, camps and recce onto the glacier

Future potential

Most of the peaks (OK, all but one) of the cirque at the head of the Oroy valley remain unclimbed. We explored the upper reaches of the glacier to recce potential routes for a future expedition. We identified a couple of routes that looked to be within our humble abilities and plenty of potential for a stronger team.



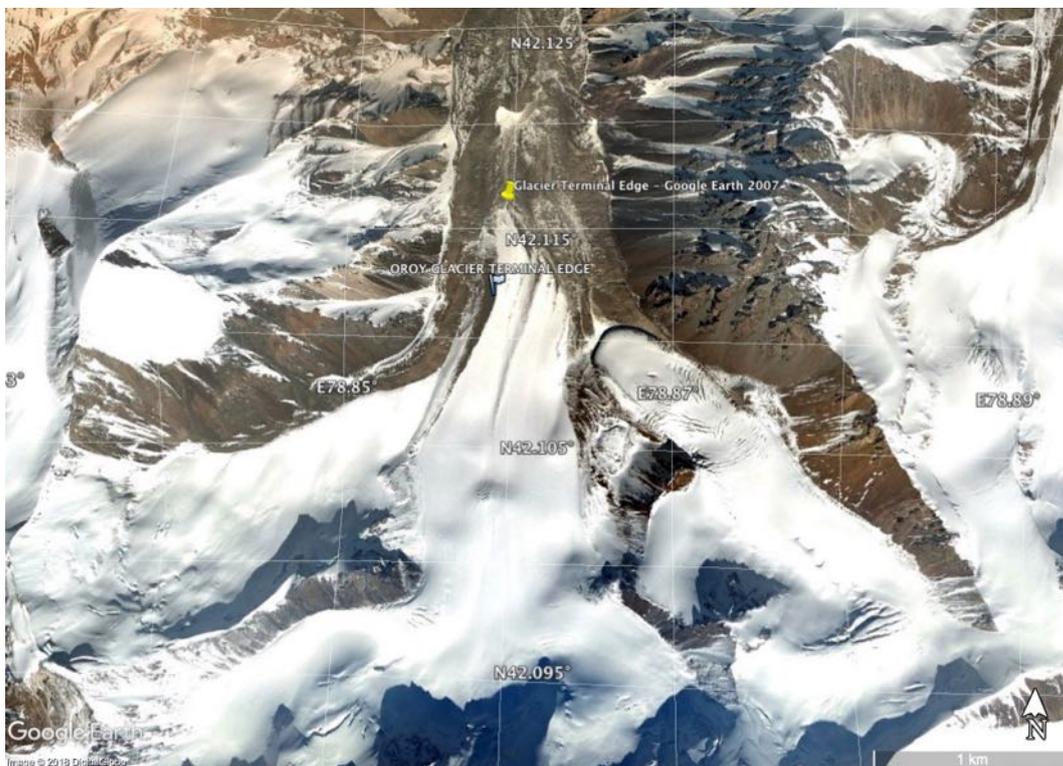
View from the Oroy glacier looking south to the cirque of unclimbed peaks at the head of the valley

Glacial Retreat



Photograph taken from where the terminal edge of the glacier was on the Soviet Military map.

Compared to the Soviet Maps (c.1980) and even the satellite images on Google Earth, the glacier has retreated significantly. Looking at the satellite images from Google Earth, a lot of this has happened within the last 10 years.



Satellite image (2007) from Google Earth with the current glacier terminal edge waypoint

Acknowledgements

Special thanks to all those who helped make the expedition a success:

- ITMC - in particular Lilia who made organising the logistics so easy, and to our drivers Mikhail and Nicolai.
- Syrtbay and his family for their unbelievable hospitality
- Joanne Burgess for support and medical advice
- Pete Morris for our daily weather forecast, delivered via satellite phone
- Tim Parker for lending us some of his kit and being willing to update the blog for us, even if none of the satellite phone messages got through!
- Expedition Foods for the free and discounted freeze dried meals



#FuellingChampions
www.expeditionfoods.com

Thanks also goes to previous teams to Kyrgyzstan and their very helpful and informative reports, in particular:

- John Proctor from the Jiptik 2014 expedition for publishing the method to overlay a WGS84 grid onto the 30-40 year old Soviet military maps (see <https://jiptik.wordpress.com/2016/09/02/the-power-of-the-matrix-not-the-film/>)
- Andrew Vine and Miles Gould of the Tortoisebutler expedition to the Kyndik valley in 2016 - the neighbouring valley to Oroy in the Kuiluu range. (see <http://elvum.net/kindyk/report.pdf>)

Contact

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Appendices

A. History of Expeditions to Kuiluu

Date	Expedition	Valley/region	Peaks climbed	Reference
1937	Черепов И. A. Letavet	Konstitutsii	pik 5281 (Konstitutsii)	Kuiluu Range info form ITMC
1956	Гаврилов Б. B. Gavrilov	Karator and Sarytor/ Aiutor	pik 4655 pik 4686 pik 4781 (Karpinskogo) pik 5056 (Parkhomenko) pik 5101 (Mensy) pik 5203 (Obrutcheva/ Karator)	Kuiluu Range info form ITMC
1997	Anglo- American ref to be found	Valley immediately to the west of the ISM 2000 expedition to Kotur valley		TBD
1998	ISM - Pat Littlejohn	Karator	Weather prevented climbing anything of significance	ISM - Mountain Info High Magazine, August 2000
2000	ISM - Pat Littlejohn Viktor Saunders	Karator	pik 4161 pik 4201 pik 4275 pik 4390 pik 4800 (Humani)	Kuiluu Range info form ITMC
2000	ISM - Pat Littlejohn Vladimir Komissarov	Karator/Ashuutor	pik 4290 (N & S) pik 4825 (Pietro Segantini)	Kuiluu Range info form ITMC
2000	ISM - Pat Littlejohn Pat Littlejohn	Karator/Ashuutor	pik 4551 pik 4732 (Krenintor) pik 4872 (Altyntoo) pik 4920 (Tsarevitch) pik 5091 (Matershinnitsa) (PL + Viktor Saunders)	Kuiluu Range info form ITMC
2000	ISM - Pat Littlejohn	Karator/Ashuutor	See above two entries for the same expedition	http:// publications.americanalpineclub.org/articles/ 12200134102/Asia- Kyrgyzstan-Terskey-Alatau- Kuilu-Range-Exploration- and-Various-Ascents (AAJ 2001)

Date	Expedition	Valley/region	Peaks climbed	Reference
2003	Kyle Amstadter	Karator	pik 4800 (Milo) pik 4750 (Misha)	http://publications.americanalpineclub.org/articles/12200334700/Asia-Kyrgyzstan-Tien-Shan-Kuilu-Range-Peak-Milo-pik-400-and-Peak-Misha-pik-4750-Ski-Descents (AAJ 2003)
2005	Spanish/ Mexican/ Dutch	Karator	First ascents unknown	http://publications.americanalpineclub.org/articles/12200534001/Asia-Kyrgyzstan-Tien-Shan-Borkoldoy-Kuilu-Range-First-Ascents (AAJ 2005)
2006	Suchorukov Michail	Bardytor	pik 4775	Kuiluu Range info form ITMC
2009	ISM - Pat Littlejohn Pat Littlejohn, Adrian Nelhams	Bardytor	pik 4375	Kuiluu Range info form ITMC
2009	ISM - Pat Littlejohn Vladimir Komissarov	Bardytor	pik 4710	Kuiluu Range info form ITMC
2009	ISM - Pat Littlejohn	Bardytor	pik 5020 (Ak Sakal) pik 4434 (Bakshi) pik 4755 (Koopsyz)	ISM trip report - Kuiluu & Son Kul Expedition 2009 https://www.alpin-ism.com/news/kuilu-son-kul-expedition-2009
2009	Moscow State University	Ekichat and Taldysu passes	None - traverse of the range.	http://kostya-sergin.narod.ru/pohod/pohod2009/asia2009/index.html
2016	Tortoisebutler	Kindyk	pik 4605 - Tulku Chokusu (Fox Peak) - C pik 4714 - Karga Chokusu (Crow Peak) - A pik 4554 - Too Chokusu (Camel Peak) pik 4444 - Suurdun Chokusu (Marmot Peak)	Tortoisebutler Kindyk 2016 http://elvum.net/kindyk/report.pdf

B. Expedition Diary

17th August - We left London Heathrow, heading for Istanbul.

18th August - We arrived in Istanbul for a 21 hour layover. We made use of our time and joined onto one of Turkish Airlines free tours of the city, visiting the 'Blue Mosque', Topkapi palace and after a lunch over looking the Bosphorus, Hagia Sophia.

19th August - We arrived in Bishkek early in the morning. We checked into City Hostel on Chui avenue and after a quick shower we headed out to explore the city.

20th August - We visited Lilia at the ITMC office to finalise plans and then we headed to Osh Bazaar to buy most of our supplies. Anything we couldn't get in the Bazaar, we picked up at a Narodny (народный) supermarket (there are several in the city, a bit like a co-op).

21st August - We're picked up at 9am by Mikhail and drive along the northern shores of lake Issyk-Kul to Karakol. Mikhail is a machine behind the wheel and we dispatched the 400km with ease, arriving in Karakol mid afternoon. ITMC had booked us into the Altamira hotel in the centre of town. We spent the evening in Karakol Coffee amongst fellow travellers for beer and pizza.

22nd August - We were picked up by Nicolai in an ancient looking UAZ 4x4 for our journey to Kuiluu. We head south from Karakol and over the Terskey Ala-Too mountains. After our unexpected visit to the military checkpoint and ITMC organising permits for us we finally arrive at the shepherds hut at Mayzas.

23rd August - Sunny and hot - Trekking 16km to basecamp at the entrance of Oroy valley with the help of Syrtbay, Berbede and the horses.

24th August - Started dry but weather deteriorated by late afternoon - Recce into Oroy valley and then we decided to move basecamp 1.6km and 350m higher into the Oroy valley to improve access for the rest of the trip.

25th August - Sunny and warm day - Day at the new basecamp to take stock and to acclimatise. We had a bath, cooked bread and made flapjack. We discussed our plan of attack over the next few days. We aimed to spend two days moving kit higher up the mountain to establish an ABC.

26th August - Clear early on but rapidly deteriorated to poor visibility and snow - We moved our first load of kit high onto the moraine at about 3700m. Poor weather forced us back down without a chance to recce the glacier or any routes.

27th August - Thick fog which cleared by late morning - This was to be our second attempt to establish ABC. Jon was unwell and feeling progressively worse, so even when the fog eventually burnt off, we decided to stay at basecamp, unsure if it was AMS or a bug...

28th August - Poor weather again - more snow and zero visibility higher on the mountain - Jon was feeling much better, so despite the poor weather, we decided to do another load carry. We found a set of bear prints in the river bed on the way up. No other sign of bears in the valley. On our way back down we found a fresh set of wolf prints amongst our own, running through an area of the river bed close to basecamp. We were hoping to finally establish ABC the next day, which we thought would certainly be too high to be bothered by the local fauna! We kept the ice axes and knives to hand that night...

29th August - Good weather at last - We have a good forecast for the next few days. The delays have mounted up and we now only have a small window of a few days at ABC. We establish ABC in a small amphitheatre at the foot of a peak on the western side of the valley; a peak that looks to be our best shot at achieving a summit.

30th August - Good weather continues - Our first day high on the mountain with good visibility. We recce the possible routes up what we have by now nicknamed "Wolf Peak". We climb as far as the col at approx 4100m, the north ridge looked like a broad 45 degree snow slope and so we were confident that this would be the best route up the next day. We then headed south up onto the

broad plateau that looms above the south western end of the Oroy valley. This is at 4213 and command fantastic views over Oroy, Bordlu and Bardytor valleys.

31st August - Good weather continues - First ascent of Wolf Peak (4631m), wahey!

1st September - Clear weather in the morning - We only have time and supplies for one more day at ABC before we need to start heading back down the mountain. Unfortunately this means we don't have the time to climb another mountain, but after yesterdays success, we're content to explore the glacier more and scout out the potential for future trips to the area. We pick up our foot prints from a few days previously, this time they are accompanied by yet more wolf prints. Smaller this time, thankfully.

2nd September - Clear weather in the morning, cloudy in the afternoon - We break camp and load carry back to basecamp in two trips.

3rd September - Clear in the morning, cloudy in the afternoon. Getting colder with a biting wind - Rest day at basecamp - time to sort out kit and do some washing!

4th September - Fine weather continues, probably the coldest morning yet. Windy again - We break camp and move our camp back down to the Kuiluu valley ready for our rendezvous with Syrtbay. Late afternoon, we were greeted by a surprise visitor. The shepherd from the hut on the opposite side of the Kuiluu valley had come over to meet us, curious about the bright orange tent that had appeared on the hillside!

5th September - Overcast in the morning, wet and windy in the afternoon - We had left a spare day to explore further up the Kuiluu valley. We headed out to explore but with deteriorating weather, we retreated after about 5km. Over 16 hours holed up in the tent followed, but by now we're used to spending inordinate amounts of time in the tent.

6th September - Overcast but at least dry - Syrtbay and Berbede arrive bang on time with the horses and we head back to Mayzas. Nicolai meets us at about 2pm for our return trip to Karakol. We take Sibeeri and the three kids back with us, their home is in a village near Karakol and school has started. Syrtbay stayed at Mayzas to look after the livestock. Back in Karakol we drop our kit off at the hotel and head straight out for pizza and beer at Karakol Coffee.

7th September - Mikhail picked us up at 9am for the return to Bishkek, arriving early in the afternoon. We visited Lilia at ITMC for a debrief, but mainly to thank her for everything. We head out for a celebratory meal at Arzu.

8th September - We have a spare day in Bishkek which we spent exploring the city a bit more, buying silly hats at a department store and chilling out at various cafes and bars.

9th September - Return to the UK

C. Equipment

Item	Comments
Misc:	
Books and Games	We took a good book each, a pack of cards and a travel chess set. These all helped while away the hours (many, many hours) spent holed up in the tent.
Cameras, chargers, spare batteries and tripod.	Jon forgot his camera (although not the charger, spare battery and tripod) in the frenzy of packing before leaving for the airport. Rob's camera broke on the first day in the mountains. Luckily, our phones took reasonable pictures.
Rechargeable AA batteries and USB charger	
Spare AA and AAA alkaline batteries	
Solar panel - Anker 21W 3 panel	This was brilliant. We never had an issue charging any device, even overcast conditions. It successfully charged a phone in thick fog.
Power bank (USB) - 10,000 mAh	
Repair kit - e.g. small sewing kit, gaffer tape, super glue	
Multitool - leatherman	
Altimeter watch - Suunto Core	
Satellite phone - Rented from Global Telesat Communications - Thuraya xt-lite.	We had lots of issues with this. Receiving messages was fine, but sending was another matter. Many messages didn't make it through. We seemed to have better luck sending sms messages rather than sms->emails. None of our messages to ITMC or our blog (a friend in the UK willing to update it for us) got through.
GPS - Garmin Etrex 30x	
Technical Clothes:	
Baselayers	We each took: 3 x technical boxers (Rab and Sue Me) 3 x pairs of socks 2 x long sleeved base layers (merino) 2 x short sleeved base layers (merino)
Polartech fleece	
Softshell/windstopper jacket	
Softshell trousers x 2	
Waterproof jacket	
Waterproof trousers	
Belay jacket	

Item	Comments
Gaiters	
Beanie x 2	
Buff	
Gloves - liner, thin, thick	
Mountain boots - B3s	Both of us have pair of La Sportiva Nepal Cube GTXs
Baseball cap	
Sunglasses	Both of us used Julbo cat 4 glacier glasses. We should have taken a spare pair, as Jon lost his on the Moraine while load carrying to ABC. This could have been a disaster, but luckily we found them a couple of days later thanks to the tracks of a wolf that had followed us!
Climbing kit:	
Helmet	
Harness	
Climbing rack	1 x set of DMM nuts 1 x set of DMM offset nuts 3 x DMM cams Several slings of various lengths 4 x ice screws 2 x Petzl microtraxion 10 x quick draws 4 x alpine draws 10m abseil tat Abolokov threader Karabiners, belay plates etc. None of this was used in the end, despite carrying a small rack up to the col at 4200m.
2 x 50m thin single ropes	We used one rope when exploring the glacier.
Crampons	Petzl Vasak Grivel G12
Ice axe	DMM Cirque
Trekking pole	
Knife	
Bivvy bag	Brought incase a route demanded a bivvy. In the end, we used the bivvy bags for storing kit at our gear stash while moving to/from ABC.
Camping equipment:	
Mountain Hardwear Trango 2 tent	Used as the main sleeping tent at Basecamp and ABC
Terra Nova Voyager tent	Used for kit and food storage at basecamp
Camping mat	Thermarest xlite Exped Airmat Lite 5M

Item	Comments
Sleeping bag	Alpkit Alpine Dream 800 Rab Andes 800 Both bags are rated to at least -22C and were overkill for the conditions. But we would take them again as they made sleeping very comfortable!
Sleeping bag liner	
MSR Windburner stove	This stove performed very well up to about 4000m (didn't test it any higher), despite the cold, wind and dodgy gas. Happily boiling water and using the entirety of a gas canister. Our other stoves didn't work so well and would only work with a full gas canister.
Primus multifuel stove	Large stove and pan system that we used at basecamp for cooking our meals, as the pan was large enough for two. It needed a fairly full canister and to be well sheltered from any wind, it did not like the cold or altitude.
Misc. cooking	Small chopping board Small knife Cutlery and sporks Mugs We didn't bother with bowls or plates just using the pans from the stove systems.
Lighter/piezoelectric igniter/fire steel	We took a selection of fire lighting methods. The best was the simple fire steel. The usually reliable piezoelectric igniter refused to light the Coleman gas canisters (dodgy Russian gas).
Water filter - MSR Miniworks	Ceramic filter - this was well and was truly abused filtering glacial runoff. Hard and slow work, but the filter was easily cleaned and maintained in the field. The glacial sediment had to be cleaned off every day to keep the filter running smoothly. A gravity fed system would have saved a lot of effort.
Selection of empty water bottles	We neglected to take out a large water container, and instead had a selection of empty bottles of mineral water, soft drinks etc. A single large container, large enough for a full days water requirements would have been useful, so that water could be collected once in the morning when the river was running relatively clear.
Chlorine tablets	Filtered water was either boiled for cooking or we added chlorine tabs. Probably overkill, although even at ABC there were animal tracks and droppings. They didn't taste that bad, similar to tap water really.
Water bottle and flask each	
Solar light	An Aldi special, a little USB/solar rechargeable LED lantern - light weight and diffuse light. Great light for the tent at basecamp.
Head torch x 2 each	