

Kabru: Controversy and Climbing

Located five miles south-southwest of the main summit of Kangchenjunga lies Kabru II, a 24,317 ft (7412 m) peak that is positioned on a NE-SW oriented ridge lying between the Yalung Glacier on the west and the Talung Glacier on the east. Kabru is not an isolated summit, it is one of a number of peaks of roughly similar height on the ridge which forms the international border between Nepal and India (the state of Sikkim). The ridge is the northern high-altitude extension of the Singalila Ridge which slowly emerges from the northern Gangetic Plain some 45 miles to the south. According to Abbey (1996) the name 'Kabru' translates to 'white avalanche'.

The Himalayan Index, a list of mountaineering ascents and attempts maintained by the Alpine Club, indicates attempts on Kabru II in 1883 by Graham, again in 1907 by Aas; with a reconnaissance in 1920 by Raeburn. Credit for the first ascent is given to the 1935 Cooke Expedition. However, in the late 19th century it did appear to the mountaineering community that Kabru II had been climbed. Here is how the story and resulting controversy unfolded.

On a June night in 1884, William Graham was introduced at a meeting of the Royal Geographical Society, 1 Savile Row, London, and heralded as the man, with his two Swiss guides, as reaching the highest elevation then known to have been obtained by any human; breaking the previous record by some 1,700 ft (520 m). His presentation regarding his expedition was very well received by luminaries such as Sir. Joseph Hooker, Douglas Freshfield, and General Richard Strachey. Although not specifically declared that night, it certainly appeared by what was said after the presentation by those in attendance, that Kabru II had been climbed. Within a decade other prominent mountaineers began to dispute Graham's claims of the ascent.

Graham Expedition of 1883

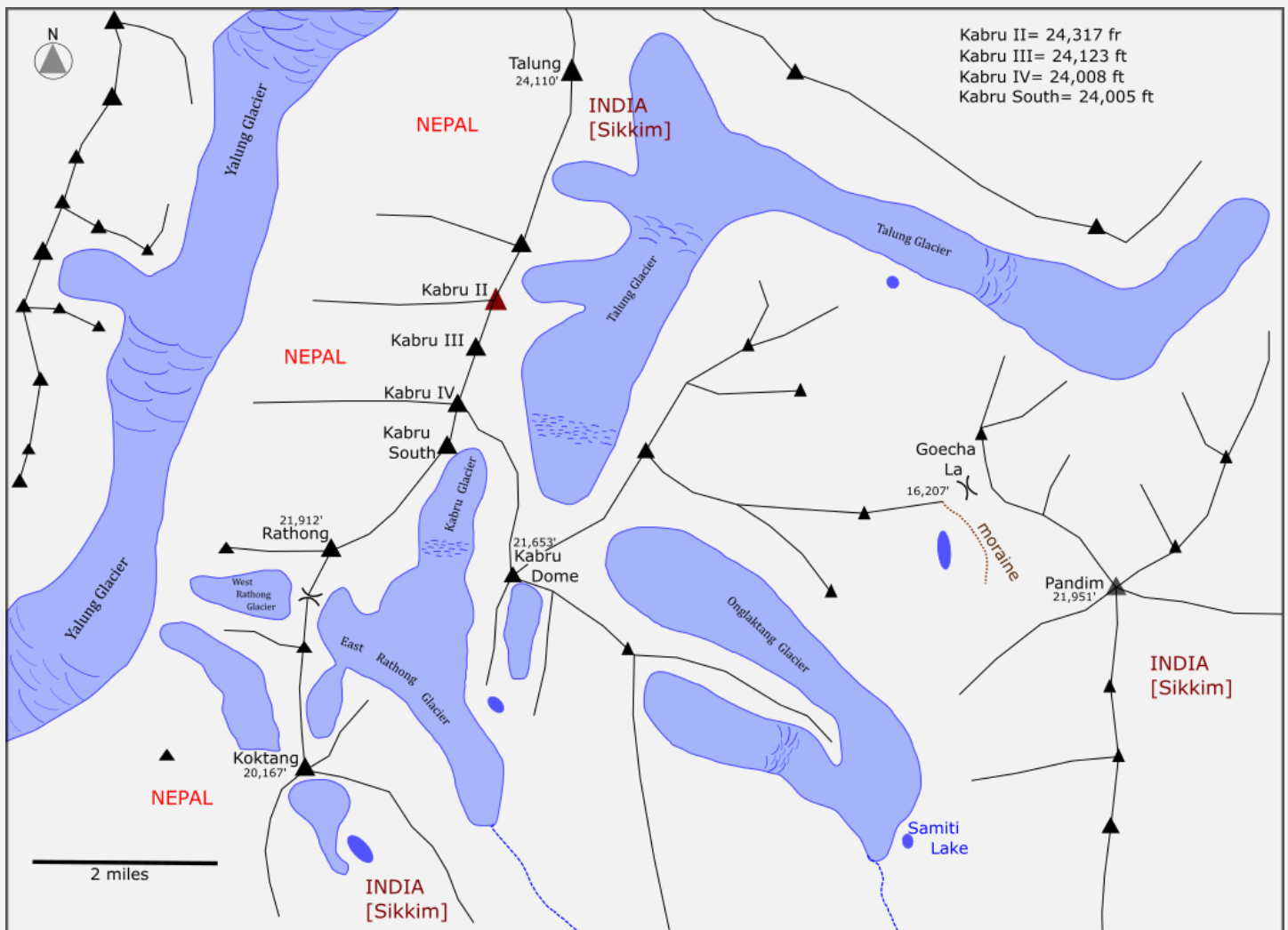
William Graham, was a 24-year-old Englishman who had made many difficult ascents in the Alps prior to sailing for India in the winter of 1883. When he was not in the Alps, he was back in England training to be a lawyer. It is not clear how he planned his small expedition; in other words, did he have clear objective before he arrived in India or did, he make plans extemporaneously? He does not tell us but he did make a bee-line for Kabru after disembarking at Bombay. The reason he was attracted to Kabru, he says, was the relatively ease of access when compared to other parts of the Himalaya. Another reason that Kabru attracted attention in the late 19th century is that its' upper slopes are visible from Darjeeling, some 45 miles to the south.

Graham made a reconnaissance of the southeastern region of Kangchenjunga beginning in late March of 1883; he was accompanied by the Swiss guide Joseph Inboden. Their first destination was the Kang La (16,680 ft, 5084 m) situated on the border with Nepal. They crossed into Nepal and set up camp, based on his description, along the moraine of the Yalung Glacier, although he does not explicitly use this name. The next morning Graham and Inboden climbed a peak to the west of their camp (unnamed) which they summited after five and half hours of effort. Based on his barometer reading, Graham estimates the elevation of this peak at just over 20,000 ft (6095 m). There are several peaks to the west of the Yalung Glacier that they could have ascended that are in this height range. After this venture the two Europeans and their porters returned to Sikkim via the Kang La. They approached the ridge on which Kabru lies from the southeast via Guicho La (16,215 ft, 4942 m), reaching the terminus of the Talung Glacier during a snowstorm; he does not name the glacier, he describes it as "...the great glacier, which flows almost due east Kangchenjunga (more on this below). The weather remained stormy for a number of days and it was too early in the season for any serious climbing; so Graham decided to return to Darjeeling. Inboden, who was sick and a bit homesick, returned to Switzerland while Graham transferred his operations over to the Kumaon-Garhwal region of the western Himalaya.

During that summer Graham, now accompanied by the Swiss guides: Emil Boss and Ulrich Kauffmann, attempted to penetrate the middle and upper Risha Ganga Gorge, they also made an attempt to climb

Dunagiri (23,182 ft, 7066 m), eventually reaching within 500 ft (150 m) of the summit before turning around. They did summit a nearby peak they named, Monal Peak (A₂₁ on their map), which they listed as 22,516 ft (6863 m). They had reached the summit from their high camp at 18,000 ft (5490 m); a very substantial gain in elevation. The party carried an aneroid barometer in order to estimate elevations. [see the note at the end of this paper regarding barometer readings]

The trio returned to Darjeeling later that summer in order to make their attempt on Kabru II. It took nine days to trek to Jongri (now spelled Dzongri), a shepherd's encampment south of Guicho La during early September; Graham reported that the ticks, flies and mosquitos were very much in abundance. The team crossed Guicho La in hopes of climbing Pandim (21,951 ft, 6691 m) as a warm-up to Kabru. However, the imposing north side of Pandim as well as the western slopes were well beyond the skill level of the climbers. Hence the party retreated back to their basecamp located in the Okhalthang Valley, probably located near a site known today as Thangsing. In the following days they moved east setting up another camp at 18,000 ft (5490 m); next morning the trio climbed a very steep glacier in route to the summit of Jubonu. Graham listed the summit of Jubonu in the 21,300-21,400 ft range (6492-6523 m) based on the map he had (Great Trigonometrical Survey of India). However, this is where we run into some difficulties with Graham's account. The peak he refers to is most likely now called Jopuno (or it can be spelled: Jhopuno) and is surveyed at 19,700 ft (6005 m); a good 1,600 ft (490 m) lower than he suggests. Inaccuracies were common place in estimating elevations by explorers and mountaineers during this period; however, they were typically half to a third of Graham's error.



By October 6th the climbers were ready to start their assault on Kabru; Graham's description of the climb is vague and difficult to follow. They ascended the "eastern glacier of Kabru", which we can only assume is the Talung Glacier. Graham goes on to say "we climbed up the highest moraine I have seen (fully 800 ft, 245 m) to the base of the eastern cliff of Kabru. There is only one route to the higher slopes, and that we could not find in the mists". The climbers set up camp during a heavy snowstorm. The next morning the weather had improved so they "pushed straight up the face of the ridge". Their plan was to camp on the ridge from which they would make a summit assault. By midday they were on an arete but soon discovered a "chasm in the arete", The 'ridge; they had ascended during the morning hours turned out to be a detached buttress. Their only option was to descend and find a new line.

While descending they met up with their porters who were making their way up the ridge. The entire party now "turned north along the steep snow slope, finding at last a small ledge just big enough to accommodate the Whympert Tent (~18,500 ft, 5640 m). The porters spent the night here as well. By 4:30 AM the climbers were off toward the summit. They first encountered a couloir containing loose snow, this was followed by a section of steep ice, then steep snow and finally by some 1,000 ft (300 m) of "delightful rock-work". Graham describes the latter as "forming a perfect staircase". What the climbers found next was an ice slope which varied from 45° to 60°, but covered in three to four inches of refrozen snow. Kauffmann cut steps up this imposing slope. By 12:15 they had arrived at what Graham calls the "lower summit". He assigned it an elevation "at least 23,700 ft" (7224 m). The weather was perfect for a summit climb, they could see far to the west, Graham thought he saw Mt. Everest from this lofty point.

"The actual summit was connected with ours by a short arete, and rose about 300 feet (90 m) of the steepest ice I have seen". It took the trio one and half hours to climb this arete. "The summit was cleft by three gashes, and into one of these we got. The absolute summit was a little more than a pillar of ice, and rose at most 30 or 40 feet (10-13 m) above us still, but, independently of the extreme difficulty and danger of attempting it, we had no time". The climbers left a bottle at their high point and then started the long descent. They did not arrive back at their camp until 10 PM, making it a 17.5-hour day; a major accomplishment in anyone's book.

Fueled by their success, the climbers decided to cross the Kang La into Nepal and see if they could find something suitable to climb. They scrambled up what Graham calls a 19,000 ft (5790 m) peak, which he does not name, located just west of the pass. From this vantage point they could see Junoo (Jannu) but wisely decided not attempt this extremely formidable summit. A search on Google Earth and relevant maps does not indicate any peaks west of the passes that are anywhere close to 19,000 ft. It does appear, from this and aforementioned estimations of elevation, that Graham was led to believe that he was a lot higher than he actually was on numerous occasions. In any case this signified the end of the climbing and the expedition returned to Darjeeling.

Not only had Graham climbed several high peaks, but his expedition was one of the earliest, if not the earliest, to venture into the Himalaya from outside the region, with the express intent of mountaineering rather than scientific inquiry of topographic surveying. All seemed well with the 25-year-old mountaineer. The first hint of criticism came in the form of a letter to the editor of the *Pioneer Mail* in July of 1884. The *Pioneer Mail* is a daily English language newspaper in India which is still in existence. The author of the article in question remained anonymous but called himself 'wander' with early 30 years of experience wandering the Himalaya. This mysterious author brings up a number of points in an effort to show that Graham and Co. did not actually climb Kabru II. Some of the arguments themselves are weak as noted by a 2009 article in the *Alpine Journal* by Blaser and Hughes, who defend Graham's claim of climbing high on Karbu II. Back on that June night of 1884, the members of the Alpine Club in attendance, seemed to give credit to Graham and guides for the ascent even though they were 30-40 ft below the highest point.

However, the *Pioneer Mail* article opened the door for latter speculation that they trio had climbed a much lower mountain and had mistaken it for Kabru II. Two luminaries who disputed Graham's climb were

Drs. Thomas Conway and Hunter Workman, both of which laid claim to reaching the highest elevation on a mountain during the first decade of the 20th century. There was considerable bantering in the *Alpine Journal* and *Geographical Journal* during the first decade of the 20th century. The controversy was never totally laid to rest, but with strong support upholding the climb by Dr. Thomas Longstaff and Douglas Freshfield, it slowly faded. Graham had made some sketches of the topography and included his own estimates of elevation, he left these with the Survey of India and unfortunately, they do not accompany the written accounts of his climb. He did not take any photographic equipment as well- which in that day and age would have been very heavy and cumbersome.

Rubenson & Aas

The second attempt on Kabru II was in the autumn of 1907 by two Norwegians, Monrad Aas and C. Rubenson. Their prior climbing experiences were limited; Aas had climbed in Norway but not outside, while Rubenson had virtual no climbing experience at all. This raises the question why would Aas would attempt a difficult route with a person with little experience?

By October of 1907 the two men had established their basecamp at Jongri and decided that they would pursue a route on the southeastern side of the ridge (they had reached Jongri the previous autumn as part of a reconnaissance). They set up Camp 1 near the confluence of the Kabru Glacier with the East Rathong Glacier at approximately 16,000 ft (4875 m). From here they climbed on “loose rock” on the eastern margin of the glacier; this took them to ~18,000 ft (5480 m). Above this point they “skirted the mountain named on Freshfields map Dome Peak”. This was essentially a continuation on the eastern margin of the Kabru Glacier. They set up Camp 2 at roughly 19,500 ft (5943 m).

Above Camp 2 the climbing became serious; the glacier, which to this point they had been able to avoid but were now forced to deal with, was broken up and steep. Rubenson says, “I must confess that it looked hopeless at first, and I didn’t think it possible for loaded coolies at all”. Over the subsequent five days the pair of climbers cut steps up the ice, the route serpentine around crevasses. During this period the two climbers were able to train some of the porters in the art of ice craft. The Norwegians opinion of the abilities of the porters was high, noting that they did not require, when compared to Europeans, “all sorts of delicacies to titivate their appetite.”

They established Camp 3 (~21,500 ft, 6550 m) in the upper icefall and switched out of their hobnailed climbing boots into non-nailed boots because the nails were conducting too much cold to their feet. It was from this new camp that they made a summit attempt. On their first summit attempt, progress was slow due to the steepness of the slope and the fact that they had to negotiate the crossing of a very large crevasse. The net result was that they did not have enough time to push to the summit during daylight. Hence, they decided to descend to Camp 3 reaching it before nightfall. After this first attempt, they decided to move Camp 3 higher in order to give themselves a better chance of reaching the summit in a single push.

It was now October 20th and the air temperatures in the morning hours were around -29° C (-20° F). For their second summit attempt they selected a different route; their first objective was a saddle on the ridge near what they call the Southwest Peak. As they gained access to the ridge the wind increased significantly, so they took temporary shelter near the Northeast Peak. From here they could see a slope that led to higher ground; they spent the next two hours on this steep slope of ice and rock. It was now 6 PM and they were on “top of a heap of black rocks only to discover that this was not the summit”. They eyed a snow ridge some 50 to 60 feet higher, but at this late hour, with the sun already setting, they turned around. They note that “the cold was almost unbearable”, being Norwegians, they knew what cold was.

Their description of the ridge is vague; what they refer to as the Southwest Peak and the Northeast Peak are most likely undulations along this ridge which is festooned with numerous pinnacles, and may not correspond to any of the major peaks recognized today. They estimated their ultimate elevation at 23,900 ft (7285 m). From their account of the expedition, we are not sure if they had a barometer or not. Their height

estimates may have been based on crude maps. They did note that on several occasions they were able to see the lights of Darjeeling to the east.

The descent was eventful; at one point the pair were on a steep icy slope when Rubenson, who was in the rear, lost his footing and shot down the slope out of control. Aas was able to self-arrest and check the slide but the five-strand rope they were using was badly frayed. Fortunately, Rubenson was unhurt and the descent continued, they reached Camp 3 well into the night. The remainder of the descent was however without incident. Upon returning to Camp 1, Aas discovered that he had six frostbitten toes. That was not the only medical issue that hit this expedition. At basecamp the two climbers learned that an English boy who had accompanied the expedition as far as basecamp had died of what might have been diphtheria. Additionally, on the return trek, a porter unexpectedly died; the lack of symptoms suggest it might have been from heart disease. Due to his frostbitten toes, Aas was carried back to Darjeeling, but eventually made a full recovery.

Here was a second high climb of Kabru yet it is difficult to pinpoint their route high on the ridge and where they ultimately turned around. This is in large part due to a lack of quality maps; there were some crude maps available from the Survey of India, but as noted by Graham, they were of poor quality above treeline. It is worth noting that the 1994 Indian Army Expedition followed this same route along the eastern edge of the Kabru Glacier (Abbey, 1996). This expedition gained access to the ridge between Kabru South and Kabru North, which might be the same saddle that Rubenson refers to; although the latter expedition used fixed ropes on this stretch of the route.

Cooke & Schoberth

The third attempt and one that finally settled the question of climbing Kabru was that of C. Cooke and G. Schoberth, both Brits with considerable alpine mountaineering experience. They were also able to recruit a handful of Darjeeling porters (Sherpas) who had worked at high altitudes before, including two that had been on Mt. Everest expeditions. In mid-October 1935 the party setup basecamp near the East Rathong Glacier and then proceeded to establish a string of five camps along the now familiar eastern margin of the Kabru Glacier. They found the upper icefall a challenging affair, but were eventually able to surmount the difficulties and gain the neve fields lying to the southeast of Kabru. Camp 6 was their ultimate camp in the vicinity of 22,500 ft (6860 m).

On summit day, November 18th, soon after starting Schoberth decided to turn back as his persistent cough was worsening; he was also worried about potential frostbite. Cooke venture on solo. He worked his way up through the rocks on the SE side of North Kabru to the summit ridge. From the ridge he could see “three rounded summits appeared ahead, one behind the other, and I wondered which was the summit and whether the third, which looked considerably farther off, could be the point marked 7,395 m (24,262 ft) on Kurz’s map”. He ended up traversing the first two summits and then making his way to the third. Cooke writes, “...I found myself quicker than I expected on the top and looking down a tremendous abyss to the Talung Glacier below with the unnamed peak a half mile or so along the ridge and about 300 feet (90 m) lower.” Kabru had finally been climbed. Cooke returned to civilization with photographs and a clear description of the climbing route.

Analysis

Was criticism from ‘Wander’ generated because Graham commented in his presentation to the *Geographical Society*, on the poor quality of the Survey of India maps? It is highly probable that ‘Wander’ was in some connected with the Survey of India and did not take kindly to the comments/criticism leveled at the organizations’ maps by Graham, even if the comments were meant to be constructive. It is equally probable that the objections raised to the validity of the climb by Conway and Workman were fueled by their own desire to lay claim to the title of having climbed to the highest elevation. Dr. Conway and Co. had climbed close to 23,000 ft in 1892 on a peak they dubbed, Pioneer Peak; which is actually a satellite peak of Baltoro

Kangri, located in the eastern Karakoram. As it turns out, Dr. Workman's claim was weak because his own estimate of elevation on Pioneer Peak (slopes of Spantik, totally different than Conway's Pioneer Peak) in 1903 was far too high, he was probably only around 22,000, not just shy of 24,000 ft that he claims. He had climbed higher on Nun Kun in 1906, probably in the vicinity of 22,700 ft.

Not surprising then, one element of the Graham expedition that is suspect were the estimates of elevation; the values that he states that we compare to modern values, indicates that they were far too high. As we have illustrated, this was not an uncommon problem; in fact, it plagued virtually every expedition for decades to come. Most elevations cited by explorers/mountaineers based on readings from barometers during the early decades of exploration in the Himalaya, were too high by 500 to 1,000 ft, sometimes more. Despite the problems with estimating elevations, there are some nagging questions in my mind regarding the validity of the Graham climb:

1. Looking at Google Earth imagery it is difficult to impossible to following the route as described by Graham on the eastern slopes. Yes, ice does change but where is the 1,000 ft (300 m) of rock that he likens to a staircase?
2. It is interesting that the trio of climbers met with the porters after they turned around on the arete. Porters at this time were not trained in ice craft, they probably were not provided with hobnail boots or sunglasses for glacier travel. They were also on their own (no European), so it is difficult to believe that they climbed anything very difficult. This was long before Sherpas were trained as high-altitude porters.

Additionally, one might ask: How does the summit area as described by Graham mesh with the descriptions of Aas and then Cooke? It is hard to make comparisons as Graham appeared to climb from the east and the latter two expeditions basically approached from the south or southeast. The Graham Expedition may have climbed to the Kabru ridge or they may have been on climbing something else. In any case without sketches, maps or photographs, we will never know his exact route. He has to be given a certain amount of credit however for pushing the edge of the envelope; he was one of the first to climb hard and high in the Himalaya.

H. Raeburn spent much of the summer of 1920 wandering around the eastern slopes of Kangchenjunga, including the area around Kabru. He analyzed Graham's claims and notes: "The four peaks they ascended were in every case the extreme southern outliers of the two southerly prongs of Kabru and of the Pandim group, and were mainly rock peaks. None, I think, much, if at all, exceeded 20,000 ft (6095 m) in height. Certainly Jubonu, which Graham made 21,300 ft (6492 m), is triangulated nearly 2,000 ft (610 m) lower." Raeburn goes on to suggest that Graham and party actually never entered the Yalung Valley, and only crossed the Nepal border by a few hundred yards. The reason for all of this confusion Raeburn suggests, is because "...Graham's basic error was the fundamental one of mistaking Kabru for Kangchenjunga, it is easy from his dates and times and compass directions to understand where he was and what peaks his party ascended."

At first glance it may see very difficult to mistake Kabru for Kangchenjunga, however, when your deep in a valley looking up at a steep angle, and the maps you're working from are highly inaccurate, it is certainly possible. This explanation goes a long way in explaining some of the objections of the Kabru ascent I noted above. For example, it certainly appears that back in the spring when Graham and Inboden crossed the Goecha La, they descended to the Talung Glacier. The peak immediately to his west he refers to as Kangchenjunga, which in reality is Kabru. He also says "We thus succeeded in seeing both the northern flanks of Kangchenjunga..." They were too far south to see anything on the northern side of Kangchenjunga. I would have to agree with Raeburn, Graham confused Kabru with Kangchenjunga. Although one would think that

when they are high on the ridge on a clear day that they would see the errors of their ways if they were on the wrong mountain!

Kudos to the Alpine Club for assigning the first ascent to Cooke's expedition. Regarding the Rubenson and Aas expedition, it does appear that the two men did make a valiant effort on Kabru II, just missing out on making the first ascent.

Note: In order to extract a height measurement from the reading of a barometer carried to some unknown elevation, the pressure has to be compared to a known station within the region. This of course is not done until after the expedition when the data from a long-term meteorological station is obtained. In Graham's case he notes he compared his values to those at Calcutta. Atmospheric pressure decreases fairly uniformly with height; however, it also varies as weather systems move across a given region (i.e.- 'high' and 'low' pressure systems); these variations can throw off a measurement by hundreds of feet. In addition, pressure is a function of air temperature, so if there are deviations from the standard model of atmospheric conditions, these perturbations will also generate values that are too high or too low.

References

- Abbey, A. Kabru-Mountain of the Gods. *Himalayan Journal*. Vol.52 (1996): (online)
- Blaser, W., Hughes, G. Kabru 1883. *Alpine Journal*. (2009) p.217-228
- Cooke, C.R. The Ascent of Kabru. *Himalayan Journal*. Vol.8 (1936): (online)
- Graham, W. W. Travel and Ascents in the Himalayas. *Proceedings of the Royal Geographical Society and Monthly Record of Geography*. vol.6, no. 8 (1884): p.429-447.
- Raeburn, H. The Southerly Walls of Kangchenjunga and the Rathong Pass. *Alpine Journal*. Vol.34 (1921/1922) p.33-50.
- Rubenson, C. An Ascent of Kabru. *Alpine Journal*. Vol.24 (1908-1909): 63-67.