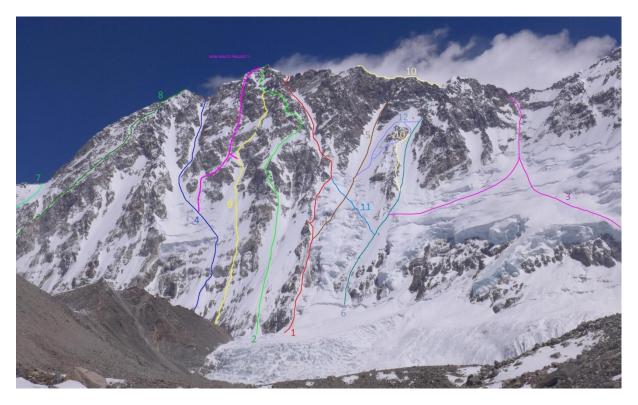
By Rodolphe Popier

1/ Goal of the expedition

The pair aimed to open a new logical direct route located between the Korean 2001 and the Loretan/Troillet/Kurtyka 1990 routes. This coveted line was for instance the objective of GMHM back in 2013 and 2014. This year, 2016, Göttler had never been on Shisha Pangma. Steck had been there in 2011 (with official success via the combined Wielicki/Girona routes in 10h30) and 2014 (without success via the north side). Why was he returning there a 3rd time? For convenience (with Khumbu's preliminary comfort during acclimatization...), for habit (like Eiger, Cholatse North faces...), or something else?



The routes on the SW face of Shisha. New route aimed by Steck and Göttler in pink on the left, between 4 and 9, using a huge dihedral. Credits: GMHM.

2/ Short expedition overview

After acclimatizing for 4 weeks in the Khumbu, regularly using a GPS tracker to show their daily travels on Facebook, the pair, accompanied by Dan Patitucci and his wife Jeanine, went to China to the south base camp of Shisha Pangma. From there, Steck and Göttler would sporadically post Facebook news and pictures (21 Avril Steck fcbk "We start trekking to basecamp now. We are now off 3G so we will not be able to post so frequently anymore.").

They spent one night at 6900m for their last acclimatization trip. Since they were facing difficult weather conditions, and since their primary objective required several days of stable good weather, (expeditions on the north side in the same season had to retreat for that reason), the pair would try for day trips "only", these to take place on both the classic Girona and British routes.

31/ GIRONA ROUTE, 14.05.2016

311/ An odd communication

First observation; neither Steck nor Göttler mentioned anything about Steck's own official ascent by the same route in 2011, Steck himself mentioning simply "*we climbed up the face on an easy route to 7800m in a 10h push*".

Steck (fcbk 16 May): "We are back in basecamp. we just took advantage of one day of good weather. <u>We climbed up the face on an easy route to 7800m in a 10h push.</u> A lot of fun. But conditions were difficult. lots of trailbreaking and blue ice. the descent turned out to be difficult with zero visibility. David and i had a great day out. It's just cool to climb with such a great partner. so far we were climbing running all the time. no sitting around. now we hoping for the big weather window like all the others around the 20! for sure now we are perfect acclimatized!"

Or in a slightly more condescending way: "*Now the pictures to David and my little climb up on Shisha Pangma South face*" (Facebook 18.05.2016). As far as I could read on the Internet, it was impossible to find a single mention of his climb of the Girona of 2011. WHY NOT MENTION IT? WHY RETURN THERE, WHY DO THE SAME ROUTE TWICE AND NOT TRY THE LORETAN FOR INSTANCE?

312/ Reconstructing the day track based on the pictures

Reading comments from Göttler, I first logically thought that they went to just short of the top: "Almost doesn't mean the top (...) 200m short of the summit" and that the 2011 timing (10h30) could be somewhat confirmed:

Göttler (fcbk 18 May): "Late update from 14th: "<u>Almost" doesn't mean the top</u>, but for us it was a long and exciting day! Even with the deep snow and tough conditions. Thanks to @steckueli machine like trail-breaking quality we reached 7800m via the Girona Route <u>200m short of the summit</u>."

Were they really so close to the top?

However, in discussion with Steck, trying to collect as many first quantitative then qualitative details as possible without much success, he sent me a picture of the plateau entrance. This I immediately connected with Steck's comment (28.05.2016): "We turned around at 13.00 <u>on</u> <u>the Summit Plateau</u>." (was he confusing things between the summit and that plateau?) and Göttler's comments going in the same way.

Then, with the other pictures published on Facebook (with both climbers' comments), and here and there on the Internet, I could reconstruct their precise track on that day (I don't explain here the whole path/details by which I went to reconstruct this – if necessary I can provide them any time).

Set	Picture Name	Source	Description	Altitude estimation (GE/Pic)	Picture time (EXIF data)	Real time (+4h45)
				6700, 6750m		
PIC1	IMG_0714	Ueli's website	Ueli or David traversing at dawn	?	2h03'18'' PM	6h48'18''
PIC2			Ueli in the Wielicki	7050m		
PIC3			Ueli traversing towards the exit	7450m		
			David on the ridge after exiting			
PIC4			out of the Girona	7580m		
		Ueli's				
PIC5	IMG_0704	website/Patitucci	Ueli on the ridge	7630m	6h59'39/54/5	11h44'39/54/59''
		Ueli's sending				
PIC6	IMG_5489	from KTM	1st (main) plateau	7740m	8h14 (AM)	12h59
PIC7	IMG_0719	Ueli's website	High point at plateau	7750m	8h19'13'' AM	13h04'13''
PIC7	IMG_5492	Ueli's website	High point at plateau	7750m	approx id	approx id

I first used the image properties of the picture that Steck sent me to determine this: 8h14AM and linked it to the timing that he first sent me (13h, see beginning of next part). The other pictures' EXIF data give a much satisfying plausible time progress (they most likely carried one camera for 2 to be lighter), I came to the conclusion that **the camera had been set on 4h45 time difference** (meaning camera was set at German/Swiss winter time).



<u>PIC1:</u> from Steck's website. EXIF data at 6h48'18'', which is correct knowing 5h12am was time of sunrise for that day. Altitude is hard to deduce here, however I came to the conclusion it was likely around 6700/6750m (Google Earth = GE).



<u>PIC2</u>: facebook picture with Steck's comment: "*Trailbreaking or blue ice. Nothing really good*". No EXIF data available. That picture could be located at around 7050m (GE).



<u>PIC3</u>: facebook picture with Steck's comment: « *Traversing toward the exit* ». No EXIF data available. That picture could be located at around 7450m (GE).



<u>PIC4</u>: facebook picture with Steck's comment: "*David on the Ridge*". No EXIF data available, as same picture circulated and was published on news websites using it straight from Facebook. That picture could be located at around 7580m (GE/pictures crosschecks).

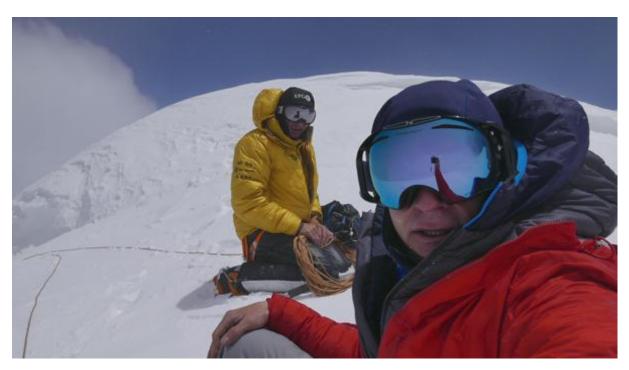


<u>PIC5</u>: Facebook picture with Steck's comment: "*On the Ridge, still sunny. After we got a complete whiteout*". Steck's website could give me the EXIF data: 11h44'39". That picture could be located on the ridge, at around 7630m (GE/pictures crosschecks), short below Wielicki's exit (around 7675m).



<u>PIC6</u>: sent by Steck from Kathmandu. It's located about 7740m at the very entrance to the plateau after exiting from the ridge lower section. Spanish who did the first ascent of the Girona Corredor in 1995, then Simone Moro who tried the Girona in 2004 estimated the plateau's altitude at about 7700m.

EXIF DATA: 12h59, somewhat corresponding to 1pm high point sent by Steck.



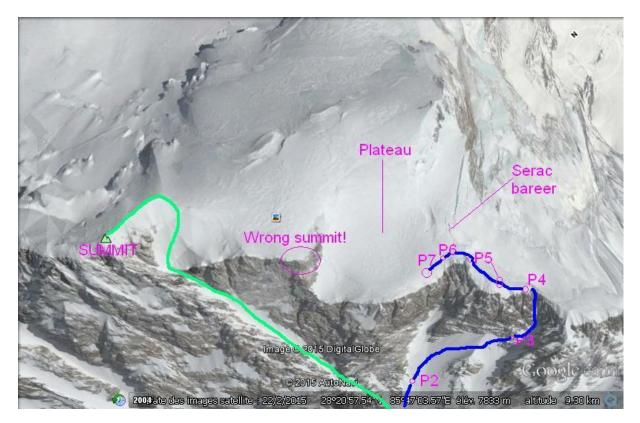
However, might they have been further?

<u>PIC7</u>: from Steck's website. EXIF data shows: 13h04'13". Meaning 5 minutes after reaching the plateau's entrance from the ridge exit, and the time when the pair was meant to have stopped. I tried to identify the surrounding peaks from their sunglasses lenses to be sure they stopped here, which barely worked because of the poor definition of the pictures, but matched for peak F 7740m (see following pictures to localize it). With better definition pictures, it would have likely matched better.



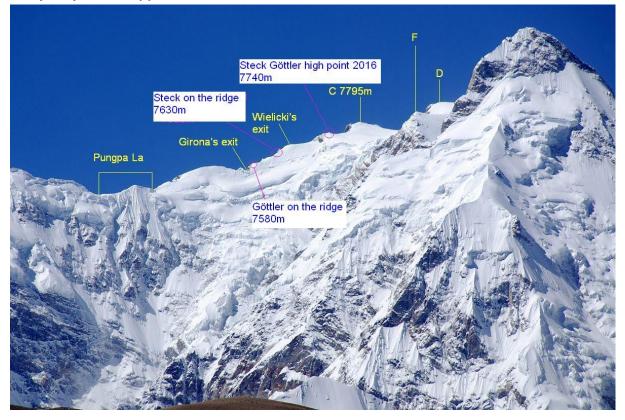
<u>PIC7 bis</u>: from Steck's website. EXIF data shows similar time as the previous one. Knowing that there wouldn't be much sense to take pictures of themselves at anything other than the high point or summit, and having been shot 5 minutes after reaching the plateau (that one being in deep snow according to Steck), it means they stopped there that day.

Eventually had to go back to my first assumptions. That point at the beginning of the "summit plateau", "200m short of the summit" was indeed not "almost" at the top but **at about a third of the distance of the whole section that they needed to cross from Girona's exit to the top.** Following GE image clearly shows it.

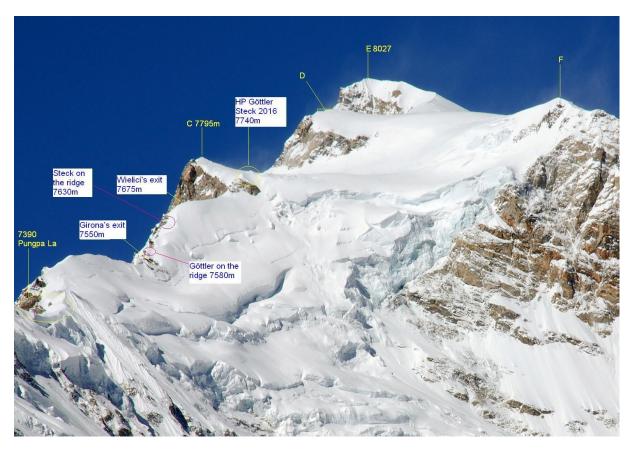


Green track shows the British route, blue one the Girona's. Attempt in 2016 stopped at almost a third of the SE ridge section from the exit of the Girona to the top. Credits: Googlearth.

Following pictures show a tiny pointy snowy peak left of the plateau's entrance. It's very likely they have stopped there, about 7740/7750m.



This view clearly shows the proper south-east "ridge" section of Shisha before it turns into the first big plateau. Credits: Mountain Of Travel Photos.



This view allows us to clearly see the "summit" reached that day by the German Swiss duo. Also the peak F 7740 on the right which I could recognize in the sunglass lenses of Steck (PIC7 bis). Credits: Mountain Of Travel Photos.

Having too many indicators telling me that this description was too vague, I went to ask Steck more questions (regarding his 2011 ascent, I had already asked him many times previously to describe to me the ridge to the top section – which he never did, to start with the big plateau and next smaller one at the exit of the British route, etc...for some reasons, in 2016 he was now able to describe at least the "summit plateau"). Extract of the conversation follows, being based on the PIC6 showing the "summit plateau":

Popier

Okay, sounds good.

Did you have such a drastic acceleration from 7300m than you had in 2011? or were you rather faster below 7300m this time ? Or same speed? all way along ?

This picture was taken from the plateau I guess: is it the summit behind?

Cheers, Rollo

Steck

Yes its summit behind.

And I don t know about the speed. It was completely different because of the snow. And of course you go easy in the beginning so you still have power higher up. But the Speed is just feeling and not measured.... But normally it feels slow in the beginning.

Good night I go to sleep now

Knowing that the "plateau's summit" isn't the summit, **how could Steck ignore such info?** Back to 2011 he was meant to have had clear skies all day long in order to discover that...**This could only add to my impression that he may have never even reached the plateau back in 2011,** but was possibly stopped by deep snow conditions on the ridge, likely by the same "nightmarish" ones he had to cope with to join the Pungpa La's saddle (snow to the hips and avalanche danger there...)?

• Establishing the day timing based on Steck's infos and EXIF data of their pictures

First, Steck confirmed for me their timing in the following terms:

"Infos: We start 1 am inABC **3 am** we were crossing the Bergschrund We turned around at **13.00** on the Summit Plateau. The descent was very difficult because we had sometimes zero visibility. We lost also the tracks because of the wind they were gone. We were back in ABC around 22.00

Please note we did not use a chronometer. It means the times can be + / - 10 min."

Knowing that neither Steck nor Göttler used a GPS tracking system (why?), any timings I would establish would have to be based on the EXIF time differences.

That difference could be properly established **<u>between PIC5</u>** and **PIC6**, but the conclusion first left me with surprise:

110 (7740-7630) / 1,233 (12h59'-11h44'39''=1h14'21'') = **89m/h**

In fact, when asking for qualitative details from Steck, he answered me this: "We climbed further then the serac (PIC5). We were at the plateau (PIC6) where you traverse to the right on the flat. So. After the serac you keep quite a bit climbing.... (...) Still good weather the clouds were moving from behind very fast! And the plateau was very deep snow...."

That speed is a "normal one" at this altitude in such conditions, even more if considering the track had to be made intermittently previously (PIC 5 showing it; Steck told me he never had snow above the knees that time) and after having climbed the whole face in a few hours...

Further speculative calculations would tend to indicate a faster speed in the lower part, on the face, which seems somewhat logical, knowing that the route on the face was already familiar and that Steck had more acclimatization than in 2011.

Estimation between PIC1 (6h48) and PIC5 (11h44) = 4h56' ou 4,93 PLUS between rimaye (3h) and 6700/6750 PIC1.

7630/6700	930/4,93=188m/h		
7630/6750	880/4,93=178m/h		
6700/6100	600/3,8= 157	m/h	
6750/6100	650/3,8=171m/h		

If putting PIC1 whether at 6700 or 6750m, one can see the speed evolution between rimaye, PIC5 and plateau. Configuration 6750 (171=>178=>89) seeming more plausible than 6700's one (157=>188=>89) at a first glance.

I guessed them to have been faster than during Steck's 2011 solo attempt (not more than 150m/h on the face that time), to which Steck answered positively: "You never know. **But just** calculation for myself we would be faster. But you can only know if you have done it!"

5600	6100	500	01:00	03:00	02:00	2,00	250,00
6100	7630	1530	03:00	11:44	08:45	8,75	174,86
7630	7740	110	11:44	12:59	01:14	1,233	89,21
6100	7750	1650	03:00	13:00	10:00	10	165,00
7750	5600	-2150	13:05	22:00	08:55	8,91	-241,30

ANY FURTHER RELEVANT CALCULATIONS WOULD REQUIRE KNOWING EXIF DETAILS FROM ORIGINAL PICTURES 2, 3 and 4. I tried in every diplomatic way to obtain it from either Steck or Göttler, in particular when they met with Billi Bierling in Kathmandu, but both decided not to share it.

In any case, and with these few calculations, <u>it tends to show a decrease in speed, at</u> <u>least from the ridge part</u>...whatever conditions are meant to have been all the way <u>along!</u> In 2011, those were meant to be excellent all the way along (according to Steck), not explaining at all why Steck was meant to have doubled his speed on the upper part...

Average speed for that day run: 1640m (7740-6100)/10h = 164m/h

Average speed for 2011 run: 1927m (8027-6100)/10,5= 183m/h

32/ BRITISH ROUTE, 23.05.2016

The pair went for a new attempt on Shisha Pangma, this time on the British route. The pair started sooner, likely to avoid another early probable white out? In fact on his Facebook, Steck declared about P2: "Unfortunately at 11.00am we had to turn back again because of bad weather" (I first wrongly understood they stopped at 11am on Girona). High point estimated at 7600m by Steck that time.

Set	Picture Name	Source	Description	Altitude estimation (GE/Pic)	Picture Time (EXIF data)	Real time (+4h45)
P1	IMG_0736	Ueli's website	above the attack, night time	approx 6330m (GE)	9h54'19'' PM	2h39'19''
P2	IMG_0739	Ueli's facebook and website	an icy hole somewhere below 6990m!	unknown	12h47'03/07'' AM	5h32'
Ρ4	IMG_5567	Ueli's facebook and website	Ueli in the first mixed pitch of the butress giving access to the pea pod couloir	6990m (GE)	1h42'44'' AM	6h27'44''



<u>P1</u>: from Steck's website, with no comments. EXIF data showing it to have been taken at 2h39'19''. Shot at around 6330m (GEarth estimation/pictures crosschecks)...



<u>P2</u>: from Steck's Facebook: "*Early morning still good weather. Unfortunately at 11.00am we had to turn back again because of bad weather*". EXIF data showing 5h32, clearly fitting with 5h07am sunrise on that day. Impossible, however, to deduce the altitude.



<u>P3</u>: from Steck's Facebook: "All the way up fresh snow" (doesn't seem like a very appropriate comment, considering this picture in particular where snow doesn't even apparently reach the ankle). NO EXIF DATA available. Shot roughly around 6750m (GE).



<u>P4</u>: from Steck's Facebook: "*Nice climbing on the British route*". Patitucci's website gave the EXIF data. Exact location is known, as shown on Antoine Bletton's picture following, and altitude around 6990m.

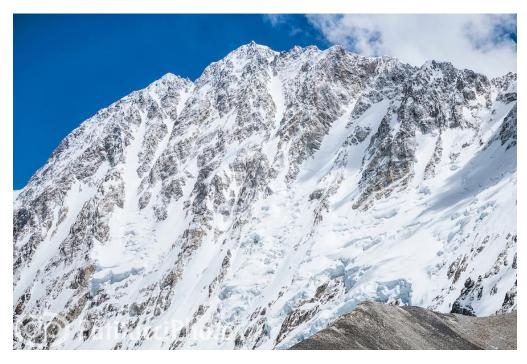




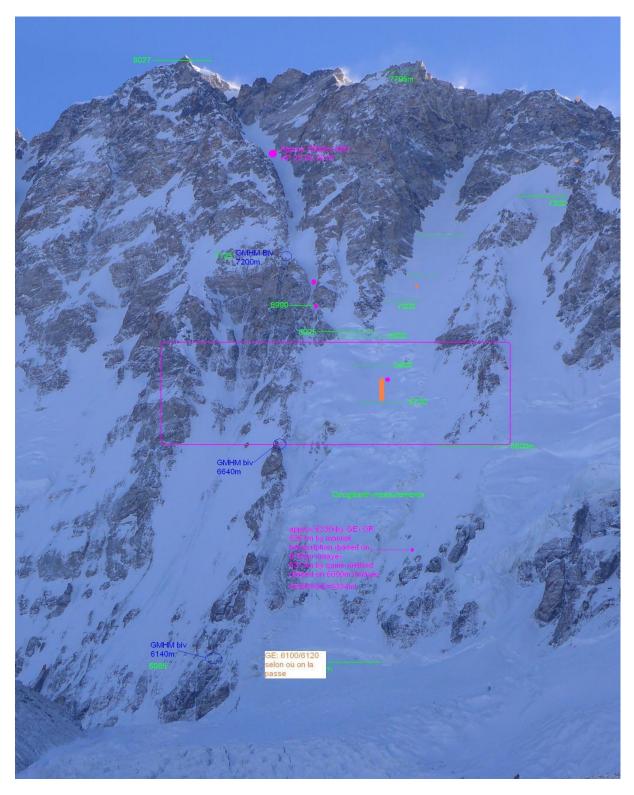
In comparison, Seb Moatti climbing the same section. Steck climbed left, precisely above the belaying climber's helmet. Credits: GMHM.



<u>P5</u>: Beginning of the pea pod. Shows Göttler exiting from the mixed ground section at roughly 7050m, maybe a little more. NO EXIF data available.



<u>P6</u>: from Patitucci's website. Exif data: 23 Mai, 10h47AM. Meaning shortly before both decided to go down. First clouds arriving.



Orange dots for Girona attempt (14 May), pink one for British attempt (23 May).

Green altitudes from GoogleEarth (GE). Blue data from GMHM measurements (altimeter). Peak 7795m from Chinese map (impossible to extract precise data from it).

Hard to find a satisfying reliable methodology to properly estimate the altitude of the pictures: arbitrarily choose to merge different types of data (between Googlearth, Altimeters and maps), likely for the point 6330m of P1...

Credits: GMHM.

• Timing estimations

The most obvious/reliable calculation to make is between P4 beginning of the mixed section and the high point:

610m (7600-6990)/ 4,53h (11h-6h27'44''=4h32'16'') = **134m/h**

Which is very likely slower than on the Girona at the same altitude, having to climb the 60 to 80m somewhat mixed buttress (3 pitches) giving access to the pea pod...

A second calculation can be done between P1 and P4:

660m (6990-6330=660)/3,8h (6h27'44'-2h39'19''=3h48'25'') = 173m/h

This speed seems slightly slower than during the Girona attempt few days before.

A last global calculation can be done between P1 and the high point as follows:

1270 (7600-6330) / 8,33 (11h-2h39'19''=8h20'41'')= 152m/h

Same conclusion; they likely went a bit slower than during the Girona attempt, due to the buttress mixed section for sure, and perhaps also because of the condition of the route or weather conditions or fatigue?

6080	6990	910	01:00	06:27:44	05:27:44	5,45	166,97
6990	7600	610	06:27:44	10:43	04:15:59	4,25	143,53
6080	7600	1520	01:00	10:43	09:43	9,71	156, 54

***A problem is to find the **departure time from the rimaye**. We can try to estimate it through a purely speculative calculation exercise:

If starting from rimaye (6100) at 1am: 230m (6330-6100) / 1,65h (1h39) = 139m/h which looks a bit slow even if reasonable for starting.

If 1am departure, rough overall timing calculation: 1500m (7600/6100) / 10h (11h-1h) =**150m/h**, which is fitting with reliable 152m/h previous measurement (Also note that it's slower than on Girona day with average 163m/h).

***Addendum Steck's Movescount timing account :

This data was published on Steck's movescount. I found it after the team of Kilian Jornet (Everest 2016 attempt) offered me to go on that website to calculate any of their speeds!

www.movescount.com/fr/moves/move106969549

Caution:

- Altitudes are not 100% reliable with Movescount. Only timing is.
- Moreover, the GPS tracker shows here a very oscillating trace (thus showing 1h09'08'' down, which can't be corresponding to reality).

Altitude Max: 7595 (7440m on movescount's map). Altitude Min 5947m (6080m on movescount's map), rather 6100m in reality. Exact timing on the way up: 9h43'43''

AVERAGE SUUNTO SPEED ON THAT DAY: 1648m/9,71h=169m/h

If putting on the chronometer at the proper rimaye (6100m): 1500m/9,71h=<u>154m/h</u> Both these timings are corresponding with other of Steck's timings, first back in 2011 up to 7288m (147), and this year also on the Girona (163).

Some further detailed calculation can be made from the map and tracker. Using website altitudes this time only, as it's not possible to report detailed points of the website onto other maps (no precise maps existing).

From 6080 to 6880: 800m/3,4 = **235m/h**

From 6880 to 6970 (CRUX?): 90m/2,01=44m/h

From 6970 to 7600 (Pea pod): 630/4,28=**147m/h.** That last quite matching with the aforementioned 134 m/h (6990m to 7600m)

It clearly shows a decreasing speed with altitude, apart from the slower crux section.

4/ CONCLUSION

No traces of any 300m/h speed or more, even a 250m/h, at all, whether below on the face or whether higher on the ridge, during these 2 fast attempts, something approximately around 90-150m/h for the highest parts.

Conditions can always explain anything, in any sense. If conditions were so perfect in 2011, why not climbing faster in the lower part back then? In name of that so called strategy to explode in higher part (check report 2011)?

Seems Steck has gained a few more physical capabilities since then, himself feeling to have been faster this time with Göttler on the Girona (indeed, something about 175m/h for the face, which is faster in comparison to average 147m/h of 2011). How could he have reached 300-350m/h back in 2011 when having slightly lower physical aptitudes, acclimatization and knowledge of the route?

It seemed quite clear up to this point that Steck couldn't describe the final part of his climb of 2011. In 2016 however, he would begin to speak about the "summit plateau". The fact that he didn't recognize the summit correctly on his own picture can only add to my assumption that he may have never even reached the plateau back in 2011.