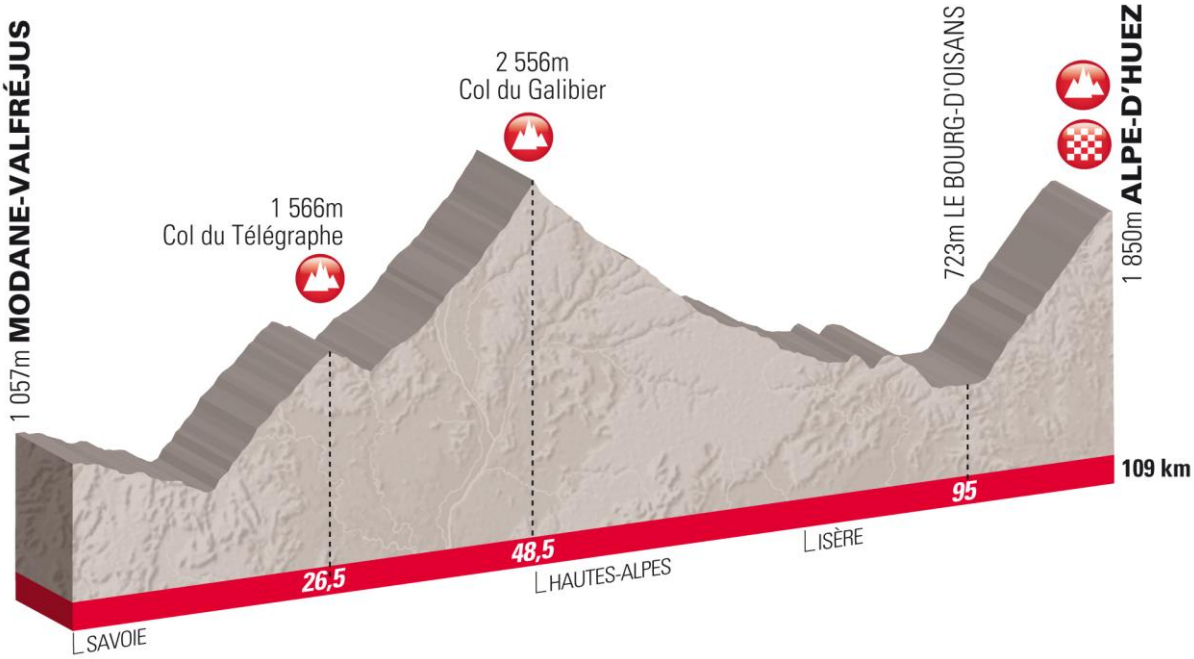
2011 Etape du Tour Report

Mondane Valfrejus to Alpe d'Huez - 109Km (70.1m) ~3660m ascent

Near perfect weather, sunny, warm, light east wind (7kph).



The ride

I started in third pen as number 1330, crossing the start line about 10mins after the first rider. The ride broke down into distinct sections:

Start to the Foot of Col de Telegraph: Mostly downhill pushing through many riders. Somehow lost one water bottle over bump. Difficult to have gone faster due to traffic.

Distance (miles)	Gradient %	Speed (mph)	Ave. Watts	Time
10.4	About -3%	32.3	140 (target 200)	19m 18s

Col de Telegraph: Good climb at 10.4mph at 270W, bang on plan. Saw at halfway my power average was near 285W so eased up to save some reserves. Felt very comfortable.

Distance (miles)	Gradient %	Speed (mph)	Ave. Watts	Time
7.4	7.3%	10.4	270 (target 270)	43m 47s

Telegraph to Galibier descent: Easy and took some food.

Distance (miles)	Gradient %	Speed (mph)	Ave. Watts	Time
3.3	About -5%	27.0	163 (target 200)	7m17s

Col de Galibier: Really quite comfortable, but lost time getting water at the beginning of the climb and sagged due to lack of concentration in last five km to bring average down to 245W. This was disappointing as 250W was the target. No water left at summit.

Distance (miles)	Gradient %	Speed (mph)	Ave. Watts	Time
10.9	6.9%	9.3	245 (target 250)	1:10:22

Galibier to Alpe d'Huez: Hairy descent with a bunch of about ten riders, but very comfortable indeed. Held back as didn't wish to get dehydrated. Had headache at the end due to lack of water, but not serious. Ate a little. Very bad cramping of hip flexure muscles and IT bands (thighs) on both legs shortly after summit, but just kept turning the legs and after 10mins it eased and eventually disappeared.

Distance (miles)	Gradient %	Speed (mph)	Ave. Watts	Time
29.6	About -3%	28.8	126 (target 200)	1:01:37

Alpe d'Huez: Had to stop for water and get some on the move from spectators at the beginning. Once this water kicked in I felt great. Average spoilt by chain off in last mile or so. Really should have gone harder.

Distance (miles)	Gradient %	Speed (mph)	Ave. Watts	Time
8.5	7.9%	8.1	238 (target 250)	1:02:47

Overall: Well in truth compared to training and my form in March this was a disappointing ride in terms of power. The goal back then was 275W, 265W, 255W for the three climbs, but I adjusted these down due to lack of form. However looking at it realistically this ride was pretty good in terms of average speed (15.9mph) and 10th in my age group is, well, wonderful. It's also quite possible that the Powertap was reading a little low, so maybe I did come closer to these goals than the readings suggest (see Appendix).

Distance (miles)	Gradient %	Speed (mph)	Ave. Watts	Time
70.1	-	15.9	210 (target 235)	**4:24:24**


1330
cervelo

Equipment

I used a Cervelo RS, a very light bike (about 7kg with the training wheels I used). The key feature was to equip it with a mountain bike cassette (11-32) and associated derailleur from SRAM along with a compact 50-34 front chainset. This without doubt was a sensible decision, allowing me to keep my cadence above 80 at all times. It seems to me that 90% of Etape riders use gears that are too high and exhaust themselves grinding up the mountains at 50rpm. I carried a gas cylinder, spare tube, two bottles, a mobile phone and food all of which made my overall weight some 78kg.

Lost time

There were a number of stops:

Stop	Reason	Time lost (estimate)
Col de Galibier (foot)	Drink – Needed to fill bottle as lost one full litre during first kilometre	45 sec – Avoidable if gone to plan
Alpe d'Huez (foot)	Drink – Needed to get water as had none left	30 sec – Avoidable if gone to plan
Alpe d'Huez (summit)	Chain off changing from big ring back to small	30 sec – Avoidable if bike better prepared
	Total avoidable lost time	***~1 min 45 secs***

Planning was used to good effect to avoid stops. In essence this was to (a) avoid having to pee; (b) avoid having to stop more than 15sec for water; (c) never have the chain fall off.

(a) Avoiding a pee was achieved by:

- Drinking regularly all the day before so 100% hydrated through to bed time.
- Having a small 250ml drink with electrolyte on waking.
- Having breakfast two and a half hours before the start, but with only one small cup of tea and a small fruit juice (total 300ml).
- Peeing 10 mins before the start.

(b) Minimising drinks stop:

To be achieved by carrying two one litre bottles, these to last the first 2.5 hours, then getting replacements from a helper at the top of the Galibier to drink for the rest of the route. This fell apart as a bottle bounced out in the first few kilometres and so I needed to stop at a feed station to refill. Here they also gave me a half litre bottle so I had ample for the climb. In fact I threw this away with 8 km to go of the climb as I had enough in the other bottle to get me to the top where I would take on new supplies. Unfortunately my helper had been unable to pedal up to the top (the police would not let him through) so I was empty at this point and made the decision not to stop until Alpe d'Huez. I did get an encouraging cheer from my bottle suppliers when I whizzed past on the descent.

(c) Keeping the chain on:

The chain off up Alpe d'Huez was completely self-inflicted (poor adjustment of a 'finger' that prevents this happening – I knew this needed adjustment, but forgot to do it), but I did better than Andy Schleck and only lost 20-30secs.

Nutrition

I do not consider nutrition to have been a limiter in anyway, but hydration was almost, but not, a disaster mainly because it was a short(ish) event.

The day before I was very careful with hydration, sipping water all day. I did not eat very much, but had a good evening meal with some pasta and lots of vegetables. On race day I had:

Time/Distance	**Food/Drink**	**Grams CHO**
Awake (3.45am)	250ml of water	
Breakfast (4.00am)	Small natural yogurt with honey Bread and jam, pain aux chocolate, peach Small glass orange juice (150ml) Small tea (150ml)	
6am to 7am	Nothing but half an energy bar	
5am to 7am	Multiple toilet stops – very successful in emptying the gut and a very last minute pee	
7am to 7.30am	First 20 mins nothing	
Start to top of Col de Telegraph	700ml of 'Perpetulum' sugar and electrolyte mix with water in bottle	60g CHO 0.7 *L* H2O
Summit Col de Telegraph (9.30am)	Energy bar	70g
Climb of Galibier (finish about 10:40am)	Small banana Energy gel 700ml of water	15g CHO 22g CHO 0.7 *L* H2O
Galibier to start of Alpe d'Huez	1 High Five gel with caffeine (at end) 300ml of water	22g CHO 0.3 *L* H2O
Climb of Alpe d'Huez	0.5 litre of 'Go' sugar and electrolyte mix 50% of an energy bar Water from spectators	35g 35g 1 *L* H2O
	Race Total (0.6 litre of water per hour (target 0.8L), about 60g CHO per hour – bang on target)	**260g CHO** **2.7 *L* H2O**

My feeling was that an extra 750ml of electrolyte only water consumed on the Col de Telegraph would have countered the cramping experienced after the summit and the sugar mix that I had instead would have been perfect for the big descent and given me a 100% good feeling during the ride with regards nutrition and hydration. This didn't work out, but things were not so bad really.

Summary of training for the Etape

I was in OK shape at the end of last season, but certainly not anywhere near my best due to tendonitis acting as a limiter and forcing a reduced schedule. Things jogged along until November

when I started training again. Broadbrush I averaged ten hours of riding a week along with two hours in the gym. I had a week's riding (60m+ per day for a week) in New Zealand in January and another five days in Majorca in February. Up to this point at no stage did I attempt any high intensity work (all at 70% of maximum heart beat or below), interesting as I then did my best ever time trial, not that I do many (2-3 per year):

Month	Hours on bike	Hours in gym	Intensity mix	Comments
November	About 7	1	Low intensity about 140bps heartrate	Started in earnest the second week of November. Lots of 2hr and 3hr rides at 140bps (my maximum is 180bps)
December	About 12	1	Low intensity	As for November but kept it going the whole month
Jan	9-11	1	Low intensity	8 days in New Zealand, more gym work, lots of long rides at low intensity, mostly on my Tacx virtual trainer
Feb	9-10	2	Low intensity	6 days in Majorca – did include a 20min uphill TT (302W) and a 125m ride on the last day with a 265W 40min climb at 70miles followed by a 255W 40min climb at 90 miles. Otherwise more Tacx turbo rides as too cold to venture out
March	About 10	2	Low (60%) and medium intensity (40%)	Did a 25m TT just over the hour at 287W, my best by a long way, otherwise a mix of low and medium intensity. Best form of my life.
April	10,4,19,12	2	As for March	Mix of turbo for climbing and real world, Managed a good number of 20mph 60 and 80mile solo rides.
May	7,12,12,12	2	Low intensity with a little medium (140-150bps)	Cracked ribs at Hoghill race –severely restricted training for six weeks after – no core, no high intensity, but low intensity was possible. Form evaporated.
June	7,19,7,27	2	50-50 in terms of low and high intensity	3 Pyrenean stages of Tour de France on consecutive days in last week.

Taper of training

Day before	6km – 3km downhill, 3km climbing at 210W Light massage for an hour	Was to be an hour but had mechanical issues
Sat 9th	Nothing	Nothing
Fri 8th	Spin	30mins
Thurs 7th	Deep tissue massage	60 mins
Wed 6th	Five 3min repeats within a steady ride	90 mins – still tired
Tues 5th	Build from low heart beat to high in 15min steps	90 mins – tired from Monday
Mon 4th	Tacx virtual reality turbo simulation – 52m of the Etape starting at the foot of the Telegraph to the	3hrs 38min – Telegraph at 260W, Galibier at 250W, Huez

	finish. Full on assault.	at 240W. Overall average 235W. Good ride.
Sun 3rd	Core and light weights (power) in gym 30mins spin after	90mins
Sat 2nd	Interval training 3min/3min x6 at 350W Followed by 45 mins of core training	90mins

Taper worked well, legs felt very good indeed for the Etape ride.

Is a better time possible?

To take riding the Etape up another level would require the following:

- **Loss of my weight** from today's 148-152 lbs to, say, 142 lbs. Including the bike and kit my all up weight was ~172lbs (78kg). A loss of 8lbs would save nearly 5% weight, translating to about 3.5% increase in speed for all climbs above 5% gradient or so. About three hours of the Etape was at this gradient, so about 6 mins gain would be delivered (3.5% of 180mins):
    - Wheels with tubular tyres can save 1.5lbs
    - Taking a risk with punctures can save 0.5lbs
    - The rest would need to come from body weight. A loss of 6lbs is possible, but only if there is a real motivation as I'm pretty thin as it is. Frankly for the professionals.
- **Cramping:** In all four Etapes this has been a major problem. True I could hold back at the start/first half of the race, but then one risks missing out on fast bunches. I believe that the use of magnesium salts in the first water bottle helps considerably. It was a shame this flew out off the bike in the first few kilometres. Perhaps no cramping would have saved just a minute or so in this year's Etape but not much as it went away quickly enough.
- **Power** – I think I'm good for 275W for three hours if I have a little recovery between each hour as one has on a descent, but only at my very best. I believe the crash I had at the beginning of May that hurt my ribs is the cause of breathing problems that seems to be a limiter at the moment at the very top end. The training of my top end planned for May and June was more or less halted by this. Is 275W for such a long time dreaming? In late March I managed a 287W one hour time trial. In late February after four days of riding several hours each day I managed 265W and 255W up 45min climbs in Majorca, with the first climb being tackled after 90 miles of riding, so I don't think I'm dreaming. I also did 250W for three hours continuously a week after completing the Etape. If I'd managed 270W for all three climbs I believe that I would have saved about 12 mins.
- **Endurance** – it's not bad at all, just the cramping was a limiter more than absolute endurance.
- **Trial races:** I think to be in tiptop shape and attack with more self-believe and confidence a number of road races (long distance or at least sportives) would be good. This would help with bike handling and riding in a group, important on the descents as I believe here I could go much faster. The descents were about 29mph, but 35mph is possible for me. The 200W required for this is something I have delivered on the Tacx virtual reality trainer in between strong climbing performances. It does need superb bike handling as charging down mountains is not for the faint hearted. There was 70mins of descent, assuming a 4mph

increase in speed would give a whole ten minutes. I'd probably need a bigger top gear to deliver this and be in a faster group

Note:

The trend in Etape performance has been:

	Distance	Ascent	Time	Overall Position	Group Position	Medal	Time to Gold Medal
2007 Foix-Loudenville	125m	4800m	≈ 7:30	≈ 1200	≈ 450	Bronze	+60 min
2008 Pau to Hautacam	103m	2800m	≈ 6:27	384	43	Silver	+7 min
2009 Montelemar to Mont Ventoux	104m	3300m	6:36	562	73	Silver	+6 min
2010	DNS – Ankle injury						
2011 Mondane to Alpe d'Huez	70.1m	3660m	4:24	175	10	Gold	-36 min

The analysis above adds up to maybe being able to do the 2011 ride 30 mins quicker, that's one hour under the gold time – pretty extreme. It suggests an ultimate time I think I'm capable of that would have been just sub 4 hours. I think the extra power is possible (+12mins); the extra descending speed only possible with a group going that fast and a lot of focus on improving this (+10mins); the loss of weight is very hard, but half of this is feasible (3mins). Sub-four hours would be utterly mega, but promote me from 175th to 25th and from 10th in my group to 3rd. Nice to ponder, but given the effort required and time constraints, retirement seems a better option as really one would need to live like a pro bike rider.

For completeness here's a photo of the time schedule for the medals – only posted at registration the day before

Catégories	Distance	Médaille «OR»		Médaille «ARGENT»	
		Temps	Vitesse Km/h	Temps	Vitesse Km/h
A	109,5	04:15:00	25,8	05:00:00	21,9
B	109,5	04:30:00	24,3	05:15:00	20,9
C	109,5	04:45:00	23,1	05:30:00	19,9
D	109,5	05:00:00	21,9	05:45:00	19
E	109,5	05:20:00	20,5	06:00:00	18,25
F1	109,5	05:00:00	21,9	05:45:00	19
F2	109,5	05:30:00	19,9	6:10:00	17,7

Thanks to PbScience (Dan Henchy and Helen Carter) for coaching me along, Tim Williams for the best advice on just how to ride a bike properly, John and Felix Barker for coming to watch and help out and Lyndon Wainright-Noble for all those sessions in the gym. Five years of effort for one ride!

Tony Purnell,

23 July 2011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