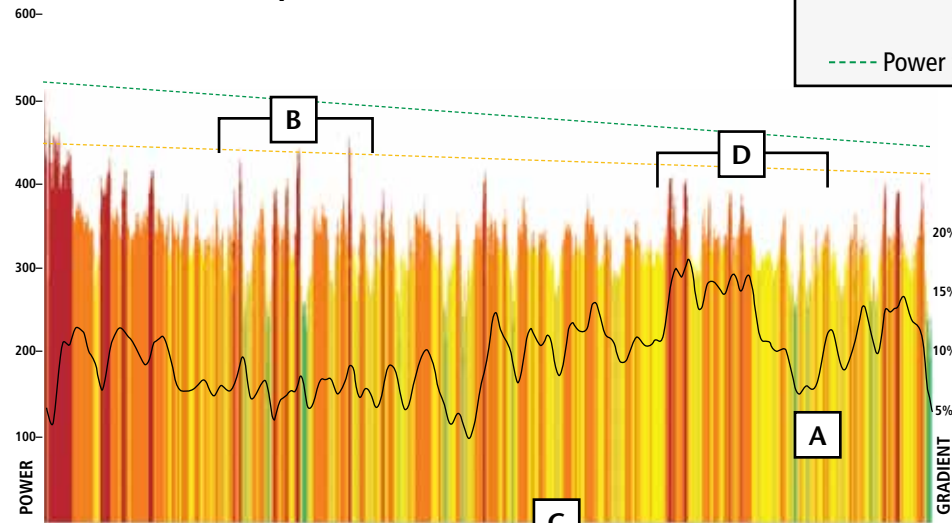


**FLAGSTAFF** | 7.3 km at 8.4% and 1,978 ft. gain



TREVOR CONNOR 30:08 • 319 W • 3.8 W/kg • 106.3% of LT • 4.6 mmol/L • 73 RPM (avg.)

**LEGEND** (colors represent power zones)

- Anaerobic capacity
- VO<sub>2</sub>max
- Anaerobic threshold range
- Sweet spot
- Aerobic endurance
- Power trendline
- Cadence trendline
- Gradient

**TREVOR CONNOR**

TIME TRIALIST  
46 YEARS OLD  
74.1 KG

**FROM THE LAB**

PHYS. THRESHOLD  
300.1 Watts  
PEAK LACTATE  
7.2 mmol/L  
LAB-MEASURED W/KG  
4.05



**A. Trevor was limited by physiological threshold**

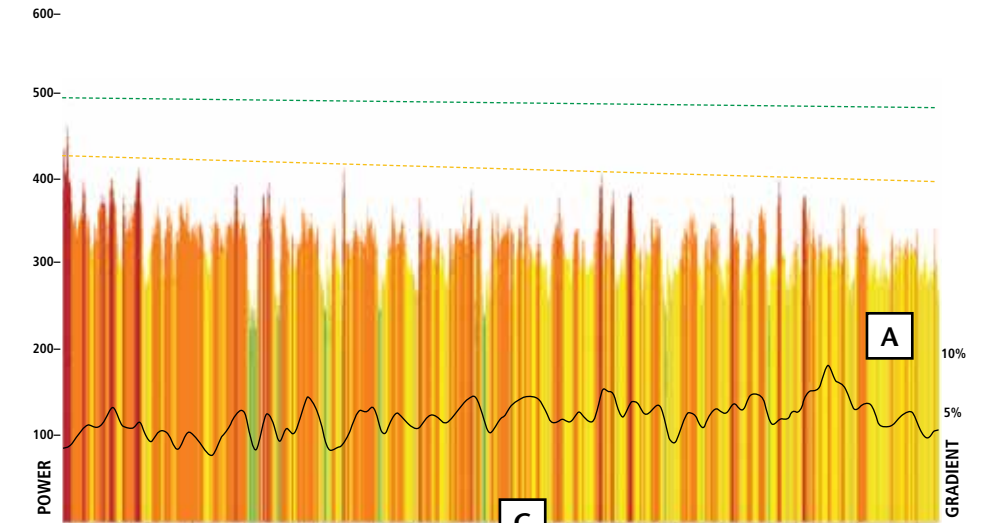
Notice how much more yellow (threshold zone) appears in his heat maps. On both climbs, his average power stayed in that zone.

**B. Trevor struggled with gradient variability**  
Notice the frequent drops in his power in the variable part of the Flagstaff climb.

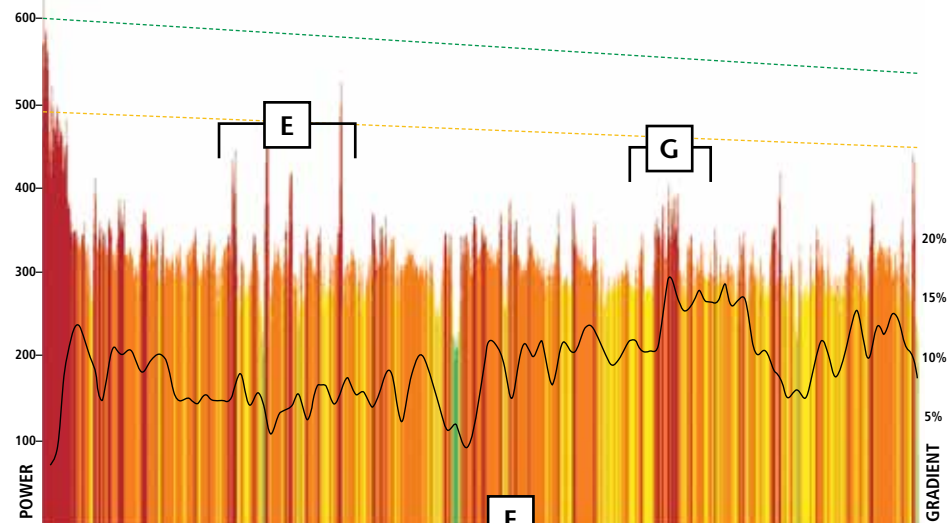
**C. Trevor was the most consistent across time trials regardless of grade or length**  
While Sepp was the most consistent within efforts, Trevor was the most consistent across efforts. He averaged the exact same power on Flagstaff and Lefthand (106.3% of threshold).

**D. Trevor paid for above-threshold efforts**  
On the steepest pitch of Flagstaff, he went above threshold. Once the climb leveled off, he experienced a significant drop in power and heart rate showing signs that he had blown up.

**LEFTHAND** | 12.1 km at 3.9% and 1,623 ft. gain



TREVOR CONNOR 29:01 • 319 W • 3.88 W/kg • 106.3% of LT • 6.1 mmol/L • 83 RPM (avg.)



CHRIS CASE 27:01 • 309 W • 4.15 W/kg • 115.6% of LT • 6.4 mmol/L • 88 RPM (avg.)

**CHRIS CASE**

CLIMBER  
40 YEARS OLD  
64.3 KG

**FROM THE LAB**

PHYS. THRESHOLD  
267.4 Watts\*  
PEAK LACTATE  
9.2 mmol/L  
LAB-MEASURED W/KG  
4.16

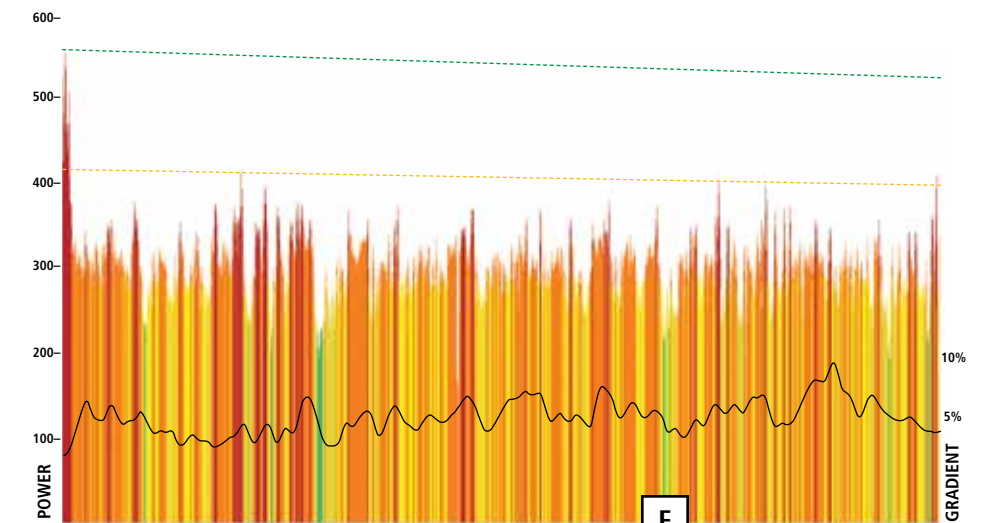
\*power meter was under-recording 6-7%



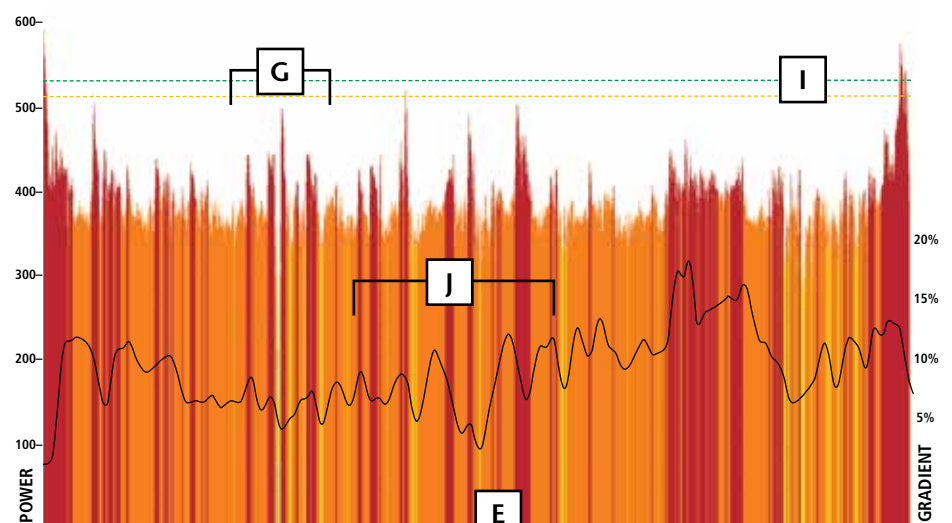
**E. By varying their efforts, the climbers rode uneven climbs well above threshold**  
On Flagstaff, Sepp and I averaged 117.5% and 115.6% of threshold respectively, an average that is outside of our threshold zone.

**F. Climbers struggle more on consistent grades**  
On the steadier Lefthand climb, Sepp and I averaged 113.5% and 109.6% of threshold yet our lactates were 9.8 and 9.4 mmol/L respectively. We were riding at lower average powers but struggling more physiologically.

**G. Climbers can produce "bursts" of power without paying a price**  
Sepp and I had extended periods of power well above threshold. We were then able to quickly return to steady threshold intensities without blowing up.



CHRIS CASE 27:30 • 293 W • 3.99 W/kg • 109.6% of LT • 9.4 mmol/L • 100 RPM (avg.)



SEPP KUSS 23:45 • 384 W • 5.07 W/kg • 117.5 % of LT • 5.6 mmol/L • 80 RPM (avg.)

**SEPP KUSS**

CLIMBER  
23 YEARS OLD  
66.4 KG

**FROM THE LAB**

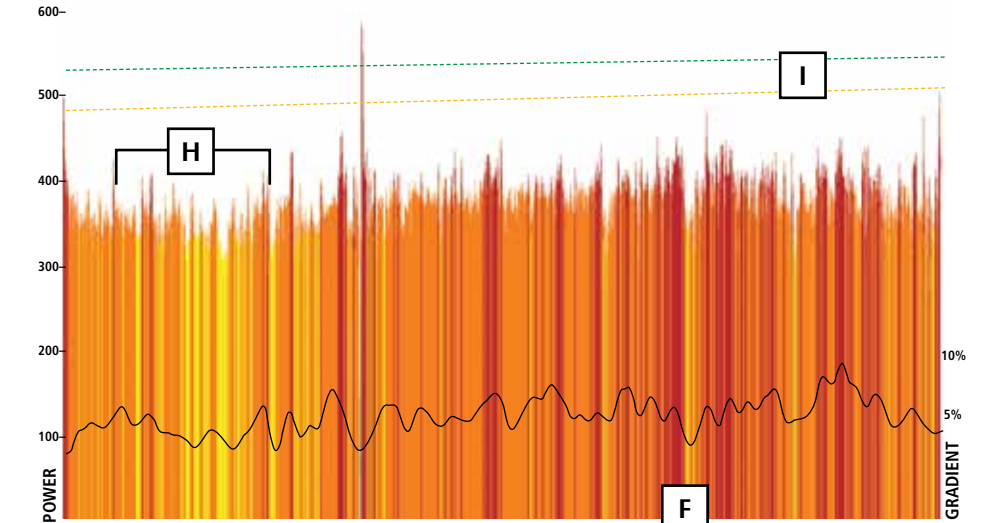
PHYS. THRESHOLD  
326.8 Watts  
PEAK LACTATE  
7.0 mmol/L  
LAB-MEASURED W/KG  
4.92



**H. Sepp was the best pacer**  
Notice how little variability there is in Sepp's power. He was also the only one to approach any of the climbs starting out easier and ramping up his effort later (Lefthand)

**I. Elite riders have a better sense of their limits**  
Sepp's power and cadence trendlines are amazingly flat. This suggests that despite those bursts of power, he had an innate sense of his limits and was able to find a good pace even when varying his power.

**J. Sepp pushed over steeps**  
All of us had points where we pushed well above threshold, but Trevor and I tended to push on the steeps. Sepp kept the steep parts steady and then pushed over the top.



SEPP KUSS 25:12 • 371 W • 4.88 W/kg • 113.5% • 9.8 mmol/L • 85 RPM (avg.)