

A male athlete is shown in profile, running towards the right. He is wearing a white tank top with red and blue details and a red and white striped long-sleeved shirt underneath. His skin is glistening with sweat. In the background, the large, ornate dome of the Finnish Parliament building (Eduskunta) is visible, topped with a golden spire. The sky is a clear, pale blue. The overall scene suggests a high-endurance athletic event in a city setting.

Pajulahti Endurance Seminar, 18.10.2024



Disclaimer

The statements made are based on subjective experience from me and my coach and are not scientifically proven.

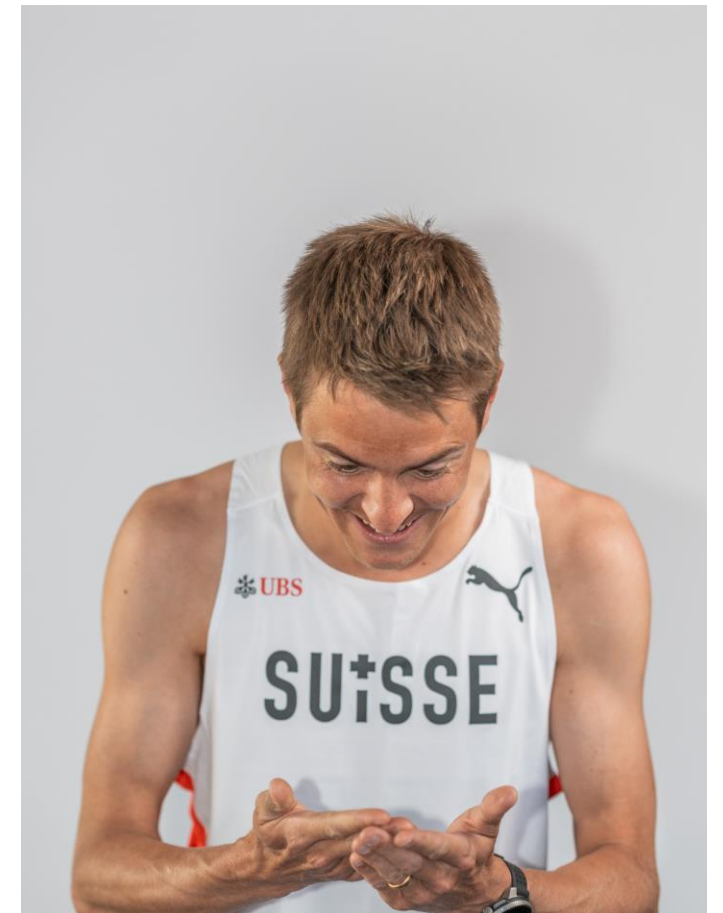
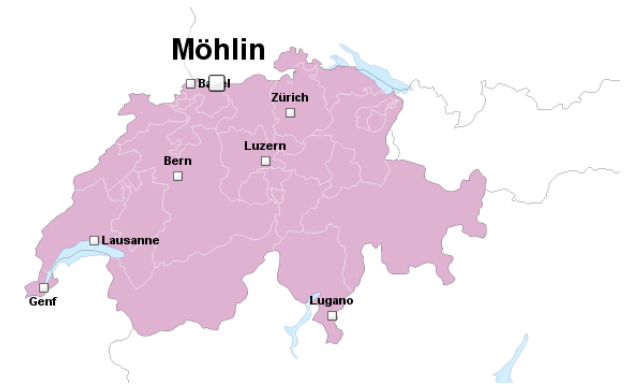


Agenda

- Who I am?
- My beginnings
- Training principles / philosophy season planning
- Example from practice

Who I am?

- Age: 34
- Work: 40% Swiss railway company
- Orienteering:
 - 8x World champion
 - 9x European champion
 - 6x Overall world cup winner
- Athletics:
 - 3 days world record holder over 50km on the treadmill (2020)
 - 2.07.44 Marathon (April, 2024)
 - 30th place at the olympics in Paris in Marathon (August 2024)



My beginnings

- sporty family
(hiking, climbing)
- Football
- Gymnastics
- Orienteering (13 years)



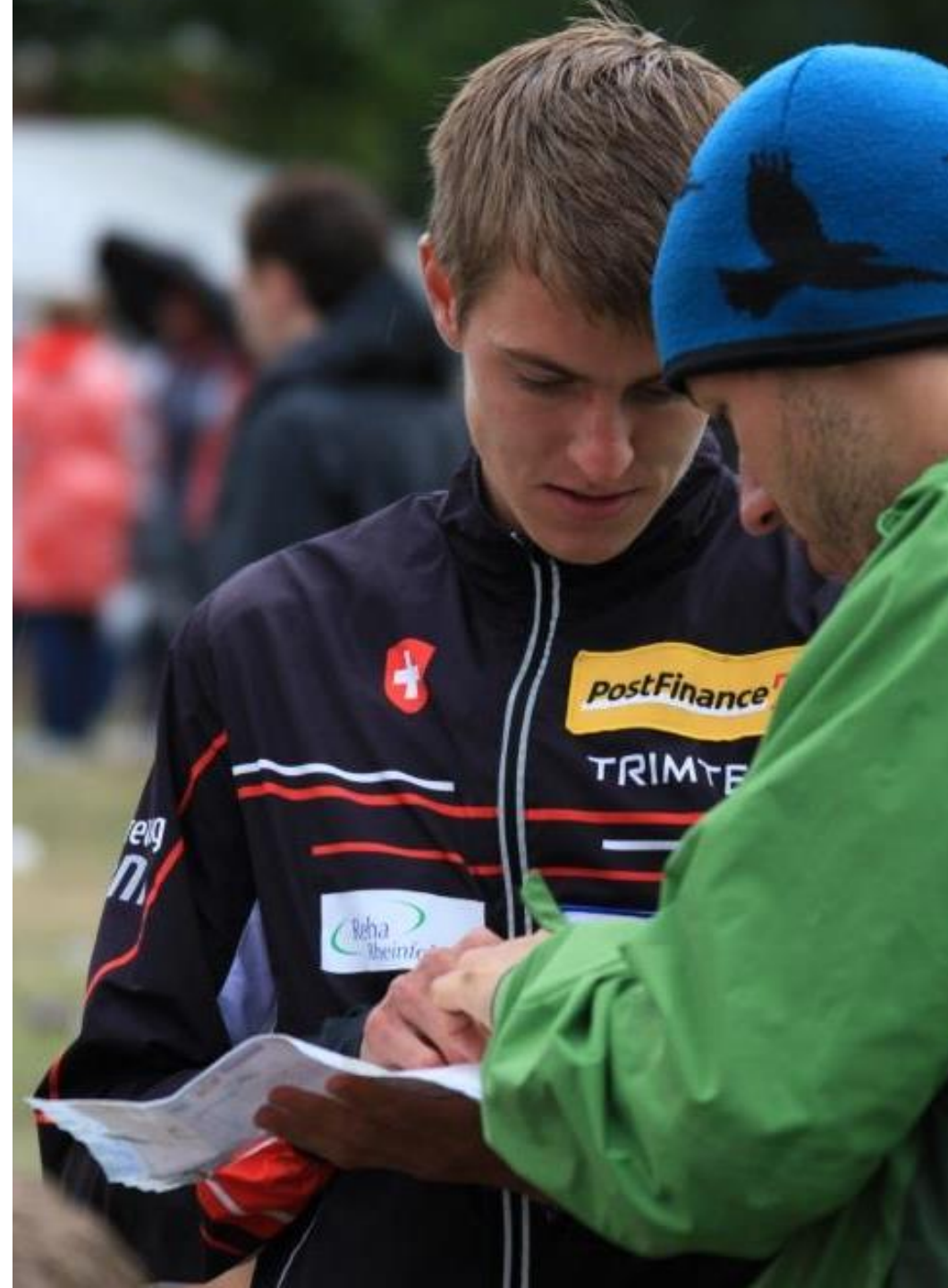
I am an allround endurance athlete

- **50km: 2h56min36sec** (treadmill)
- 42.195km: 2h07min44sec (street)
- 31km, 2200↗, 1100↘: 2h36min (Trail, Sierre-Zinal)
- 16.6km, 530↗: 1h33min (Orienteering, long)
- 10km: 29min54sec (street)
- 7km, 300 ↗: 37min (Orienteering, middle)
- 5km: 14min16sec (track)
- **2.1km: 7min10sec** (Orienteering, KO- Sprint)



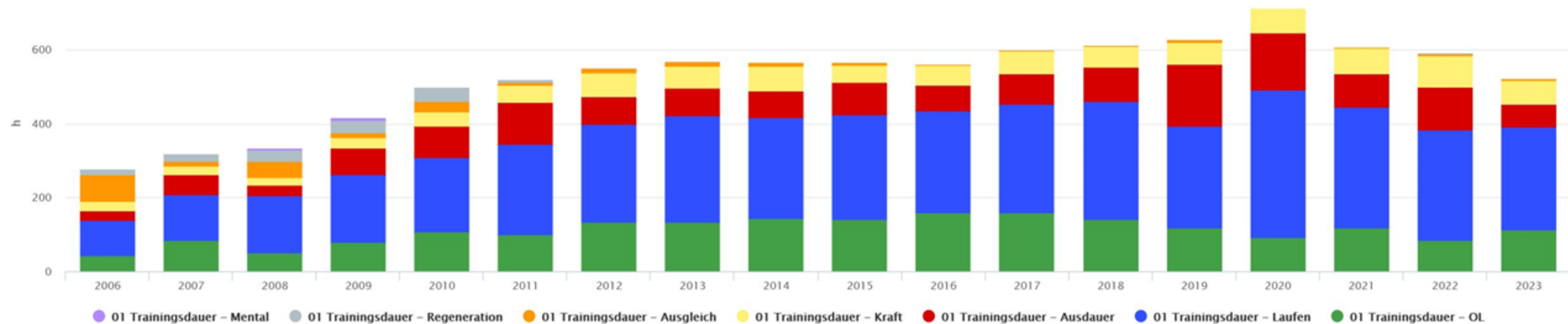
Working with my coach

- National team coach
 - Personal advisor (same since 2003)
 - Dialogue and discussion
 - Season planning
 - Block planning
 - Daily planning
- Strength coach
- Athletics coach



Career planning principles

- Increase training volume by a maximum of 10 - 20 % / year
- Increase number of units before duration of units
- Increase volume before intensity



How much did I train effectively per week?

- Age 13-15: 3-5h per week
- Age 16: 6h per week
- Age 17: 7h per week
- Age 18: **8h per week -> train every day**
- Age 19: 9h per week
- Age 20: **10h per -> two trainings a day on some days.**



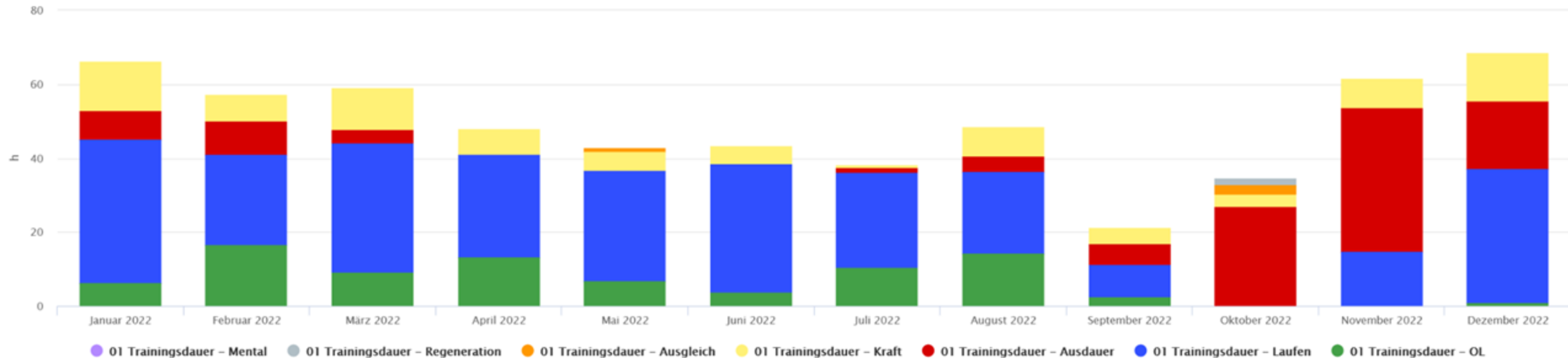
Career planning principles

- Running is central to orienteering
- You need to develop your speed as a teenager (track training!)
- No specialization (or as late as possible)



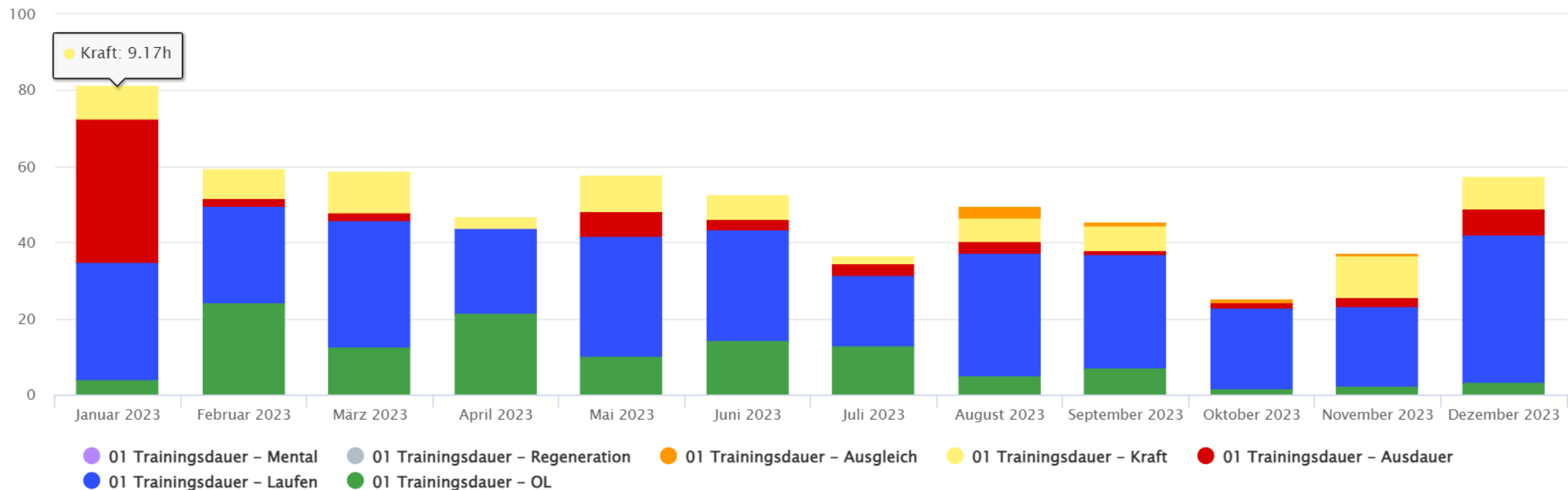
Orienteering season planning principles

- Basic period until March
- After that it will be “difficult” (too many competitions)!
- Consciously plan training periods and select specific competitions
- Block planning as a good tool: consider OLMU!

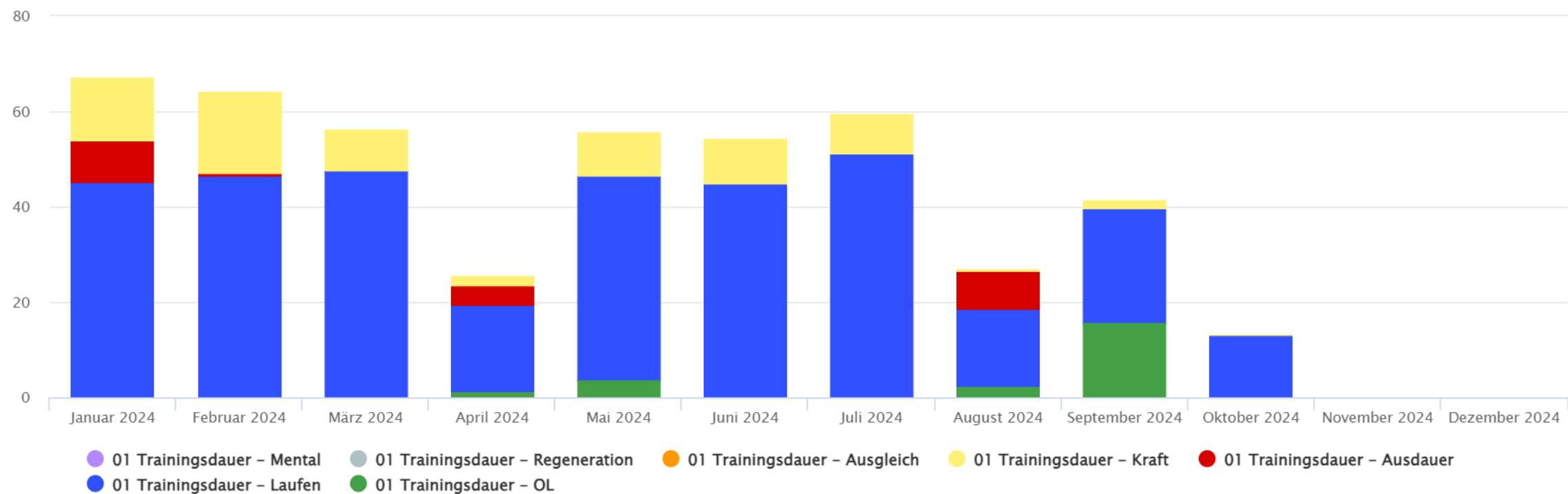


Orienteering season planning principles

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Marathon season planning principles



Block planning 2023 (part 1)

Until 9. February	Physical basis (Achieve the same amount of running time as before injury)
9.-28. February:	Back to the forest (map, motor skills)
March 1-April 16:	Preparation for World Cup
April 17-May 1:	Focus on top performance World Cup
May 2-May 22:	Transition period
May 23-June 13:	Altitude training camp
June 14-25:	Last competitions
June 26-July 11:	Fine tuning
July 11-16:	World Championships

Training philosophy basic period

- 80% extensive / 20% intensive (but this is rarely achieved)
- Typically 3 intensive units spread over the week (alternative sub-threshold + threshold on the same day or motor blocks)
- Change of surface (“never” the same shoe twice in a row)
- Each training session has its “character” (e.g. flat asphalt or cross-country/trails with lots of climbing)



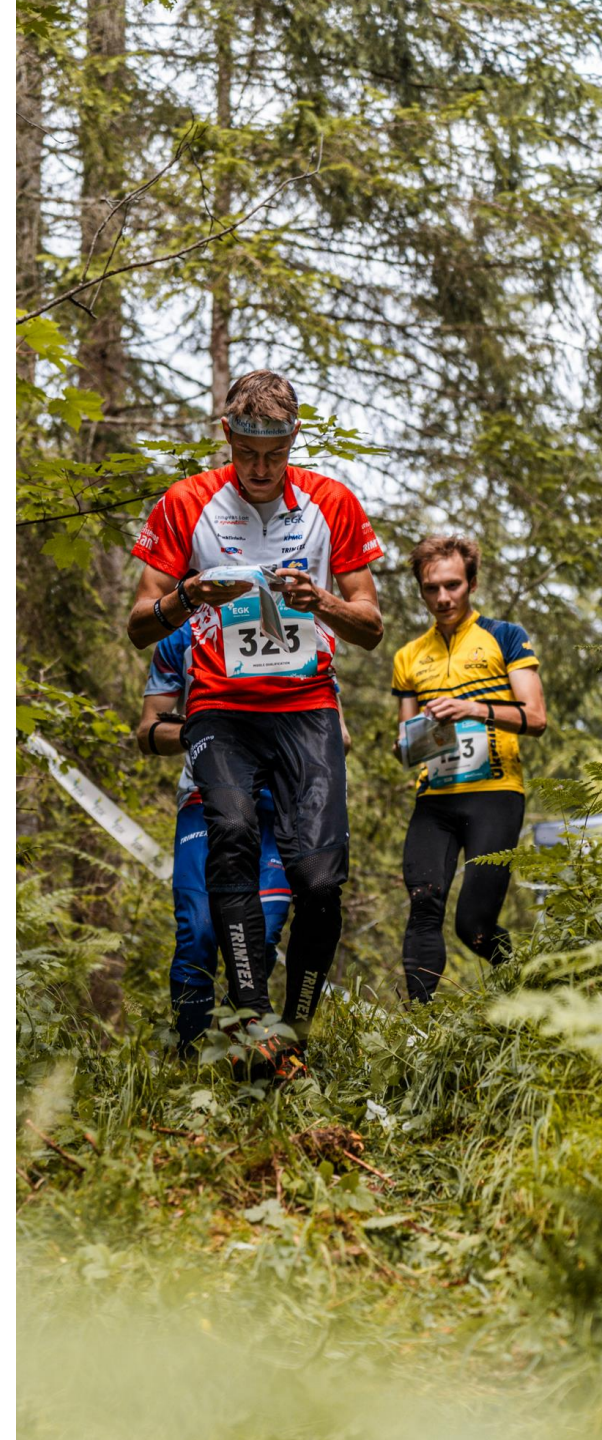
Training philosophy Basic period

- Running has priority over alternative training
- 2x strength training per week
- Foot gymnastics & stretching
- Weekly physio
- Sufficient sleep: 8 hours + training volume per day



Training philosophy preparation period

- 80% extensive / 20% intensive (more likely to be achieved)
- Typically 3-4 intensive sessions spread over the week (alternative sub-threshold + threshold on the same day)
- Training volume lower than in the basic phase
- As many training sessions as possible geared towards the requirements of the target competition



Training philosophy Preparation period

- No alternative training
- Core strength, foot gymnastics & stretching
- Weekly physio
- Sufficient sleep: 8 hours + training volume per day



Adaptation to requirements



Training philosophy Competition period

- Training volume significantly lower than in the basic phase
- Tapering too early rather than too late
- Activation before competition (for orienteering)
- Rest as much as possible and don't get nervous if you are doing nothing (marathon)





Examples from practice

Basic endurance

“Philosophy for orienteering”

- «old school» Basic endurance -> At the upper limit
- 2x 1h than 1x 2h
- Variety of terrain (flat, hills, off-road)
- Control the pace on flat terrain , on inclines by feeling
- Little volume on days I make a hard session



Basic endurance

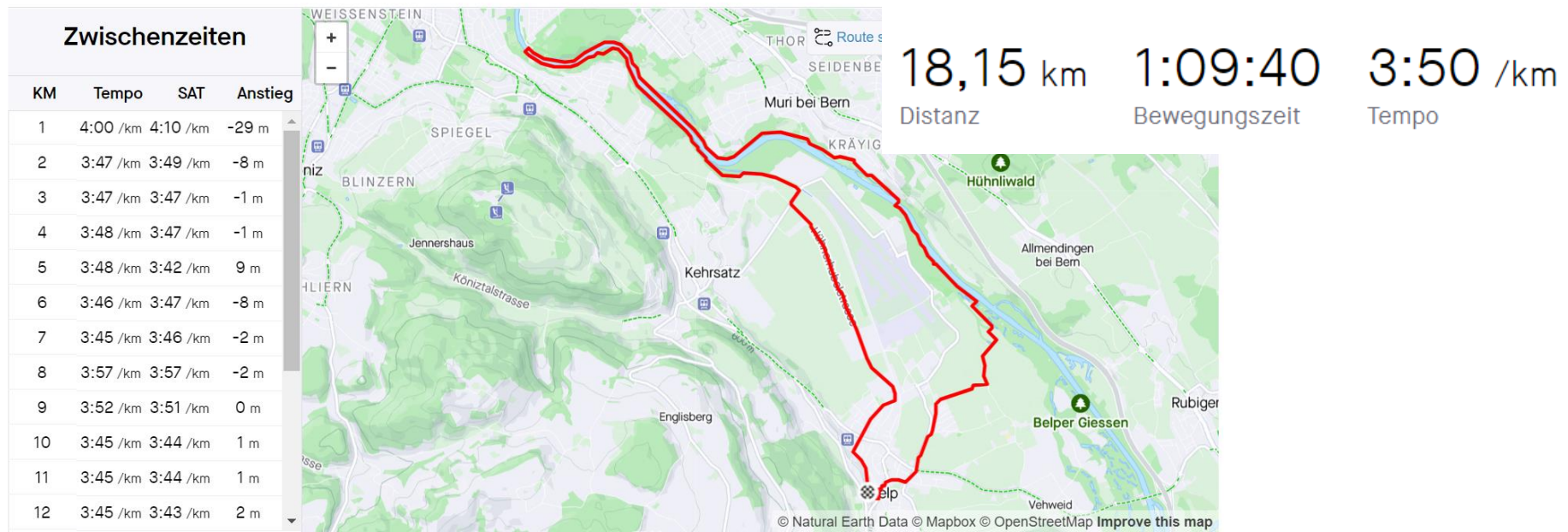
“Philosophy for marathon”

- Roughly 180-190 km
- Flat and on hard ground
- < 4min/km

Basic endurance - practical example

Trainingsempfehlung

Belastungsart	Herzfrequenz	km/h	min/km	Dauer
Regeneration	< 115	< 13.9	> 04:19	
Locker	115 - 140	13.9 - 18.0	04:19 - 03:20	
Mittel	140 - 150	18.0 - 20.0	03:20 - 03:00	
Schnell	150 - 158	20.0 - 21.4	03:00 - 02:48	
Intervall	> 158	> 21.4	< 02:48	



Speed

«Philosophy orienteering»

- 20-40min intensity per workout
- 3 fast units per week:
 - Track
 - Interval form
 - Speed endurance
- I train mostly at the limit and not threshold
- I want to train in groups
- I change the profile
- I change the surface



Speed - Practical examples Orienteering

Winter training

- 2*(300m, 100 jogging, 200m) 3' rest
5' rest
3*(1000m, 800m, 400m) 2' rest
4' series break
= 7.6km ~ 20min fast
- 6*4min hill, 2' rest
- Crescendo 30min
3min30sec/km -> 3min00sec/km

Competition period

- 2*(200,100jogging,300)
2rest, 4min SP,
2*(300,100jogging,200) 2P`, 4min SP,
1*(400, 300, 150) 1.15 rest
Pace: 2min30sec/km
- 5*2min flat, 90sec rest
- 4*4min, 2min rest

Speed

«Philosophy marathon»

- 3 hard sessions per week
 - Longrun (30-38km)
 - Threshold training (1'/1')
 - Interval (3*(3km,2km,1km))

New stimuli «Motorenblock»

Trainingsplan Woche		Kraft	RLT	MT	ST	Kraft	RLT	MT	ST	Kraft	RLT	MT	ST	Kraft	RLT	MT	ST	Kraft	RLT	MT	ST	Kraft	RLT	MT	ST	Kraft	RLT	MT	ST		
		Montag 14.12.15				Dienstag 15.12.15				Mittwoch 16.12.15				Donnerstag 17.12.15				Freitag 18.12.15				Samstag 19.12.15				Sonntag 20.12.15					
Morgen	Dauer	02:00													00:40		00:20		00:40		00:25		00:30		00:30		00:45				
	Inhalt	Kombitraining												Intermittierendes Intervall 4x10x15"/15"P				Intervall 6x4', 2' Pause				OL Wettkampf				DL extensiv					
Mittag	Dauer																														
Nami	Dauer		01:00				01:20				00:50				00:30		00:30						00:30		00:30						
	Inhalt	DL extensiv				DL extensiv				OL Training				Schneller DL: 3*10' je 2' Trabpause								OL Wettkampf									
Abend	Dauer																														
Kraft-/Tempototal		02:00	01:00	00:00	00:00	00:00	01:20	00:00	00:00	00:00	00:50	00:00	00:00	00:00	01:10	00:00	00:50	00:00	00:40	00:00	00:25	00:00	01:00	00:00	01:00	00:00	00:45	00:00	00:00		
Tagestotal		03:00	Ausdauer 01:00			01:20	Ausdauer 01:20			00:50	Ausdauer 00:50			02:00	Ausdauer 02:00			01:05	Ausdauer 01:05			02:00	Ausdauer 02:00			00:45	Ausdauer 00:45				
																		Mitteltempo		0%		Total Mitteltempo (MT)				00:00		Krafttotal		02:00	
																		Schnelles Tempo		25%		Total schnelles Tempo (ST)				02:15		Total Ausd.		09:00	
																		Tempo		25%		Tempototal				02:15		Wochentotal		11:00	

New stimuli «Motorenblock»

Trainingsplan		Kraft	RLT	MT	ST	Kraft	RLT	MT	ST	Kraft	RLT	MT	ST	Kraft	RLT	MT	ST	Kraft	RLT	MT	ST	Kraft	RLT	MT	ST	Kraft	RLT	MT	ST		
Woche		Montag 21.12.15				Dienstag 22.12.15				Mittwoch 23.12.15				Donnerstag 24.12.15				Freitag 25.12.15				Samstag 26.12.15				Sonntag 27.12.15					
Morgen	Dauer		00:40		00:20		00:40		00:25		00:30		00:25					02:00					01:40				00:50				
	Inhalt	Intermittierendes Intervall 2*10*40"fast/20" easy				Intervall 8x1000m in 3'00, 90" Pause				6*4' in the forest. 2' Pause								Kombitraining				DL extensiv				DL extensiv					
Mittag	Dauer																														
	Inhalt																														
Nami	Dauer		00:30		00:30						00:30		00:35		00:45												01:30				
	Inhalt	3* Gurten Gredi in 10', Bahnfahrt (5') Pause								schneller DL 35' quer/weg wechsel				DL extensiv												Bike / Langlauf					
Abend	Dauer																														
	Inhalt																														
Kraft-/Tempototal		00:00	01:10	00:00	00:50	00:00	00:40	00:00	00:25	00:00	01:00	00:00	01:00	00:00	00:45	00:00	00:00	02:00	00:00	00:00	00:00	00:00	01:40	00:00	00:00	00:00	00:00	02:20	00:00	00:00	
Tagestotal		02:00	Ausdauer 02:00			01:05	Ausdauer 01:05			02:00	Ausdauer 02:00			00:45	Ausdauer 00:45			02:00	Ausdauer 00:00			01:40	Ausdauer 01:40			02:20	Ausdauer 02:20				
																		Mitteltempo		0%		Total Mitteltempo (MT)				00:00		Krafttotal		02:00	
																		Schnelles Tempo		23%		Total schnelles Tempo (ST)				02:15		Total Ausd.		09:50	
																		Tempo		23%		Tempototal				02:15		Wochentotal		11:50	



Tapering

Woche 13	1.Einheit	2.Einheit	Trainings h	Regeneration	Umfang
Montag	15km DL 1	10km Footing			25
Dienstag	25'EL-8x1km Strasse/T90"-25'AL-S				25
Mittwoch	15km DL 1	30' RumpfStabi			25
Donnerstag	15km DL 1	10km Footing			25
Freitag	18km DL 1				18
Samstag	15km DL 1	10km Footing anschliessend 30' RumpfStabi			25
Sonntag	Entleerungslauf 25km				25
			0	0	168

Dienstag Zielzeiten 2'50-2'55"

Sonntag Zielzeit 1h35'

Woche 14	1.Einheit	2.Einheit	Trainings h	Regeneration	Umfang
Montag	15km DL 1				15
Dienstag	20'EL-20'Marathonpacetest-20'AL-S				15
Mittwoch	Ruhetag				0
Donnerstag	60'DL1-4x100mSt.-L.-S				15.5
Freitag	Ruhetag				0
Samstag	30'DL reg.-4x100mSt.-L.-S				7.5
Sonntag	Paris Marathon				47
			0	0	100

Strength Philosophy (orienteering + marathon)

- Injury prevention
- Leg strength with weights only plays a central role for me in winter
- Jumps, core strength, foot gymnastics throughout the year
- Strength not on the same day as intensive endurance units
- Strength²



Strength – Practical examples

- Warm up (jogging)
- Sprints
- Stair jumps (2*12*15)
- 3 series of strength exercises with core and jumps
- Sprints

- Warm up (floorball)
- Hurdle jumps
- 3 series of strength exercises followed by jumps

- Warm up
- Agility course with jumps and sprints
- 3 series of strength exercises followed by jumps

- Core strength
- Jumps
- 3 series of strength exercises followed by jumps
- Stair sprints

Alternative endurance «philosophy orienteering»

- As much running as possible
 - Fast sessions by foot
 - More alternative hours in winter time
- Biking, road cycling, spinning, cross-country skiing in winter, rarely aqua jogging
- Support the strength component
- Enjoy training



Alternative endurance Philosophy marathon

- Run as much as possible
 - Otherwise take a day off!



Recovery - Philosophy

- Not “finished” after training
 - Get changed immediately
 - Drink and eat immediately
- No fancy “toys”
- Physio
- Stretching
- At least 9 hours of sleep
- Training break at the end of the year
(3-4 weeks depending on my mood)



Recovery - Practical examples

- Mental recovery is just as important as physical recovery!
-> Switch off from sport (work, hobby)
- “1 hour on the sofa with a chocolate bar beats any massage”



Take home message

1. Priority number 1 is to stay injury-free!
-> Continuity in training
2. “Old school”: lots of basic endurance in “high speed”!
3. The mix and the timing of training units (duration, effort) is crucial, not the individual unit.

