SUB MARINE CONSULTING



Some experiments with the UWATEC *G2* TEK and the iX3M 2

SUB MARINE CONSULTING

under water: saturation graphs

**LHS: Perdix** 







SUB MARINE CONSULTING







SUB MARINE CONSULTING

MUSKEL KNOCHE

6.Gewebesättigung

under water:

"NDL" and saturation graph

Scubapro / UWATEC

LHS: G2 TEK

RHS: G2

(more info on slide # 6)



SUB MARINE CONSULTING





SUB MARINE CONSULTING

"NDL" Scubapro / UWATEC

LHS: G2 TEK

RHS: G2



"NO FLY" & "DESAT" →

The *G2* TEK was put on purpose to less oxygen & more nitrogen than the G2 to



compensate for the different calculation with the GF 100/100 of the G2 TEK with the MB Level = L0 of the G2 (Thus the difference in "MOD" ...). But anyway the G2 TEK had longer "NDL" and went always quicker into NDL = 99 and had shorter "NO FLY" than the G2 ...

diving in Crete







21/10/2024 09:00



during SI:

"NO FLY" ranges from 3 to 10 h for the same dive





after ca.
15 dives
in Crete →





battery-jump from: 38 % to 0%! within 1 day OFF! RATIO IX3M2 DEEP

S/N: 073083

OS 5.2.6.2/016

ASSEMBLED: 22.05.2024

UORKTIME: 52H 50M

SUB MARINE CONSULTING

Transfer of the logged dives from the iX3M 2 DEEP to a WIN® 11 PC @ our <u>lab</u> via RATIO Toolbox 1.8.8

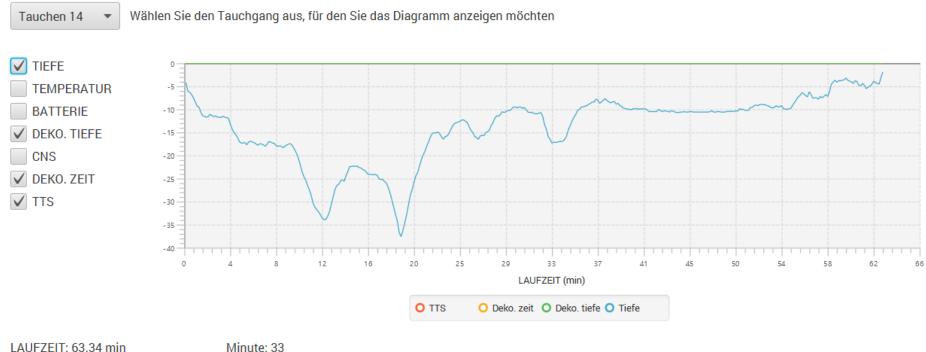
(with WIN® 10 or WIN® 7 it won't work properly: i.e. the "exported" dives went directly to the Desktop and could not be displayed!):

Hier können Sie ausgewählte Tauchgänge in ein Format exportieren, das für Analyse- und Archivierungszwecke geeignet ist.							
A Hauptsächlich & Benutze	er <b>( )</b> Upgrade	Radio	Ф Tauchgänge				
Sie können Tauchgänge von 1 bis 1	4 exportieren. Bitte wäh	nlen Sie einen aus.					
Tauchgangsnummer zum exportiere	en: 7						
Lesetauchgang:	17%						Abbrechen

... and all the dives had to be exported ONE-after-the-OTHER!

SUB MARINE CONSULTING

#### **RATIO Toolbox 1.8.8:**



LAUFZEIT: 63.34 min MAXIMALE TIEFE: 38.27 m DURCH. TIEFE: 13.92 m

MODUS: OC

ALGORITHMUS: BUL16C

PS: 0

Tiefe(m): -17.2 TTS(min): 23

ZNS: 2

Tiefe Erster Halt(m): -0.0 Zeit Erster Halt(min): 0

Display of dive #14:

the "TTS" of 23 min @ 33 minutes into the dive <u>isn't!</u>
It is not the "time-to-surface" (TTS; as it is <u>defined:</u> TTS = sum of all stop times + ascent time) but instead sort of "NDL" ...

SUB MARINE CONSULTING

**Again: Display of dive #14:** 

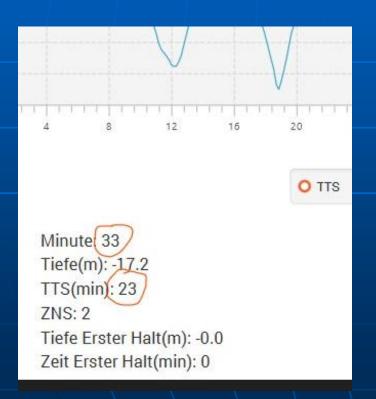
... just for a comparison with SUBSURFACE 6.0.5276:



SUB MARINE CONSULTING

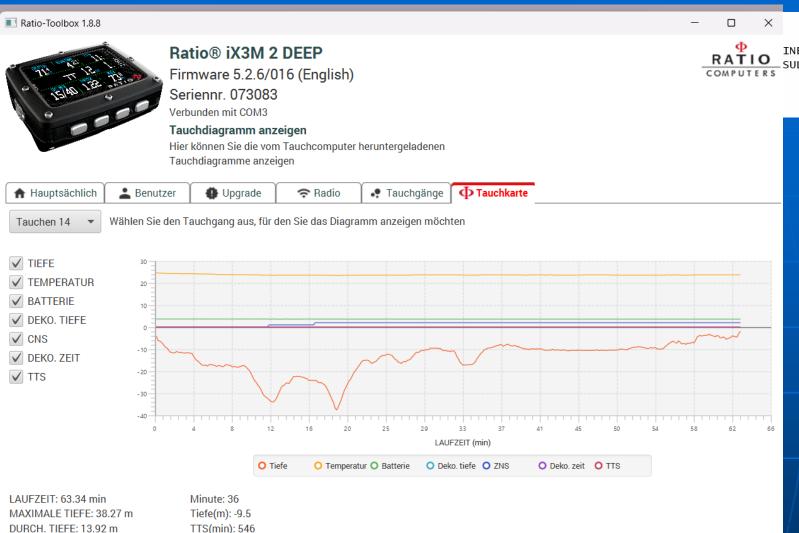
Again: Display of dive #14: the "TTS" of 23 min @ 33 minutes into the dive <u>isn't!</u> It is not the "TTS" but instead sort of "NDL" ...

#### **RATIO Toolbox:**



## comparison with SUBSURFACE 6.0.5276:





DURCH. TIEFE: 13.92 m

MODUS: OC

ALGORITHMUS: BUL16C

PS: 0

TTS(min): 546

ZNS: 2

Tiefe Erster Halt(m): -0.0 Zeit Erster Halt(min): 0

Display of dive #14:

the "TTS" of 546 min @ 36 minutes into the dive is also nebech! Again: it is not the "TTS" but instead sort of wrong "NDL" ... Should read "99" or the like ...



# more tests & benchmarks @ RESEARCHGATE:

→ On the reliability of dive computer generated run-times;
Part XIII:

https://dx.doi.org/10.13140/RG.2.2.13820.96647

→ On the reliability of dive computer generated run-times;
Part XIV:

https://dx.doi.org/10.13140/RG.2.2.26626.29120