

# Correction of higher amounts of astigmatism during Orthokeratology

impossible – fascinating – challenging

Michael Baertschi, M.S.Optom., M.Med.Educ., FAAO

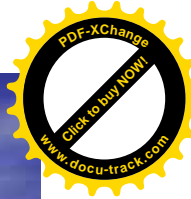
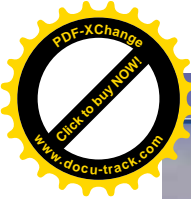
Nina Mueller, Dipl. Ing. Augenoptik, FAAO

Michael Wyss, Dipl. Augenoptiker, FAAO

*freedom to see*

KONTAKTLINSEN UND OPTOMETRIE MICHAEL BÄRTSCHI NINA MÜLLER MICHAEL WYSS

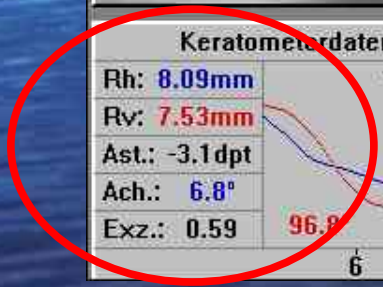
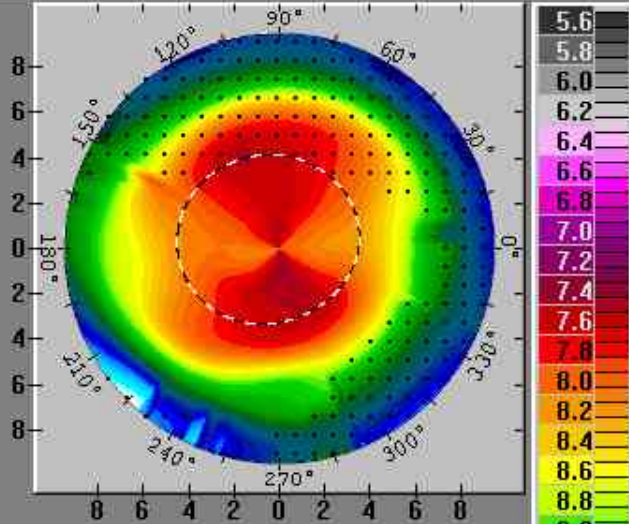
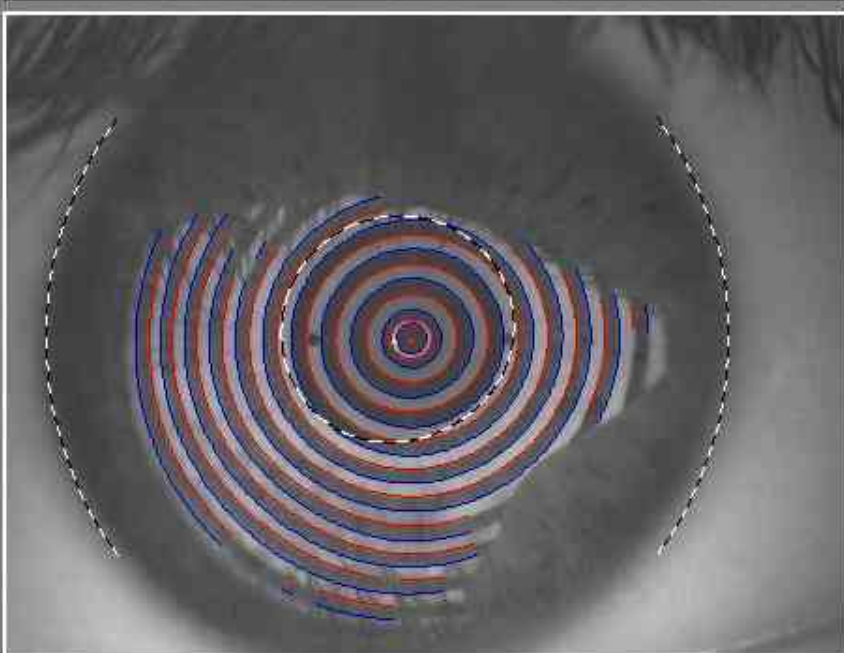




**HAAG STREIT - KERATOGRAPH**

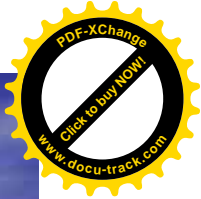
Patient Untersuchung Darstellung Kontaktlinsenanpassung Einstellungen Sonstiges Drucken

Name:  Unt. Dat.: 26.02.04  
Geb. Dat.: 19.12.82 Auge: Rechts Unt. Zeit: 10:06



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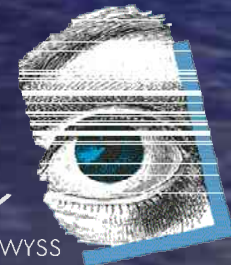


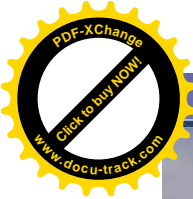
# Impossible

- With Ortho-K we only make the flattest meridian of the cornea flatter, which lead in reducing the myopia.
- But this means also to increase, and not to reduce, the Astigmatism.

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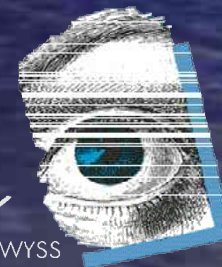


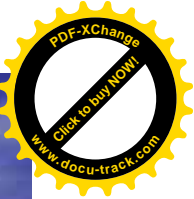
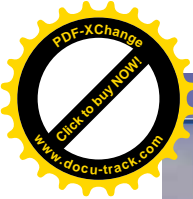
## ... after all, what if!

- The flatter Meridian should only be flattened as much as the amount of myopia makes it necessary.
- The other Meridian has to be flattened massively, to reduce the amount of astigmatism completely.

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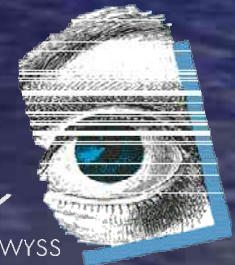


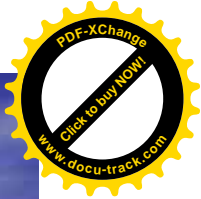
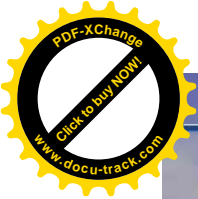
# That's fascinating!

- The flatter Meridian should only be flattened as much as the amount of myopia makes it necessary.
- The other Meridian has to be flattened massively, to reduce the amount of astigmatism completely.

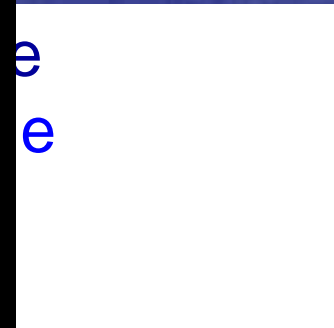
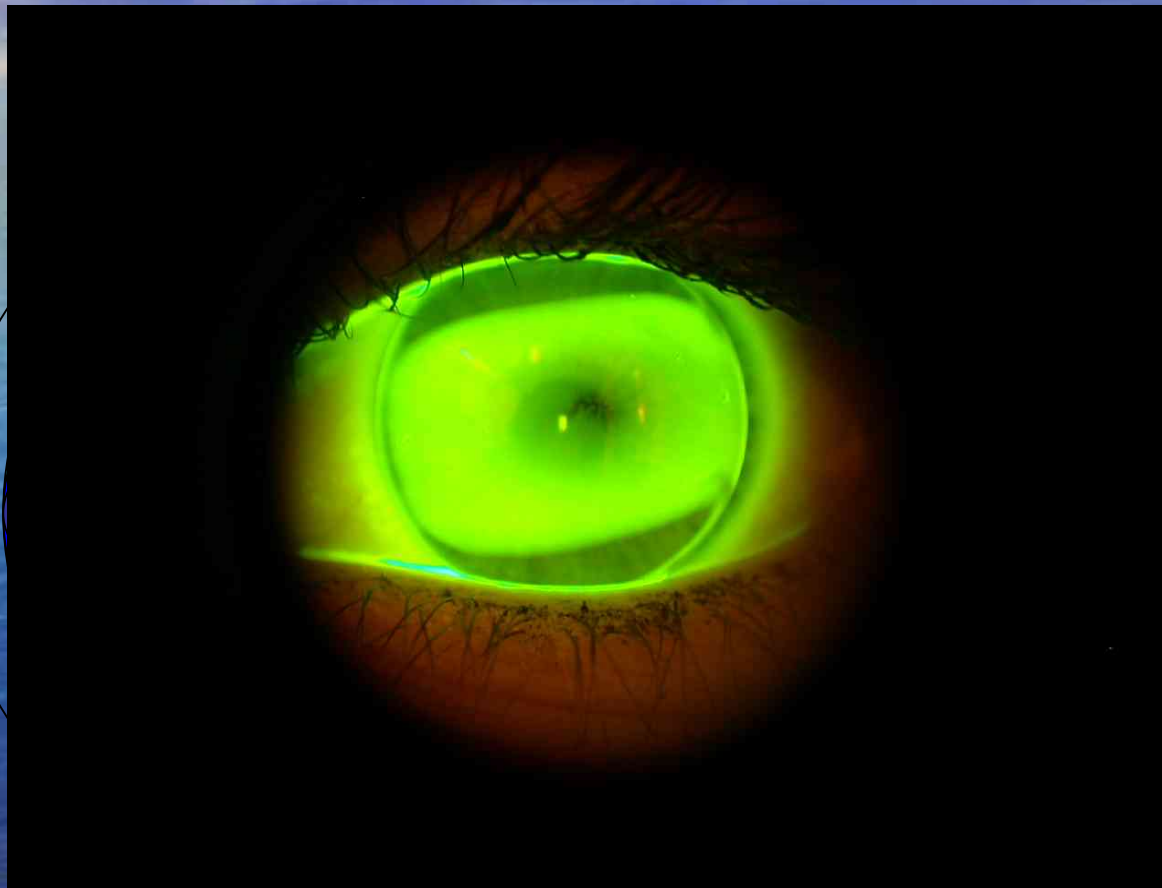
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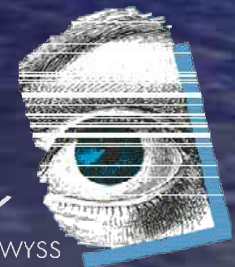


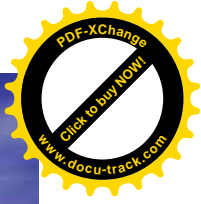
# FSAOK (1. Generation)



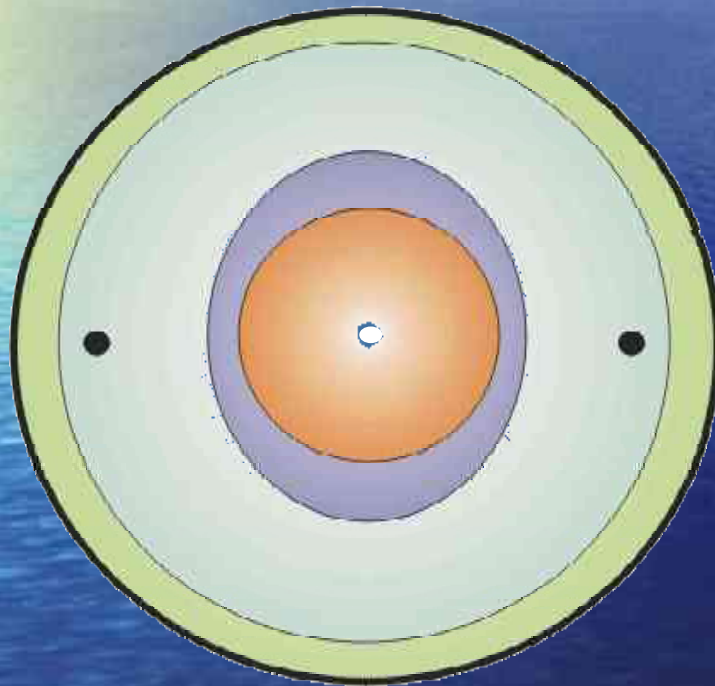
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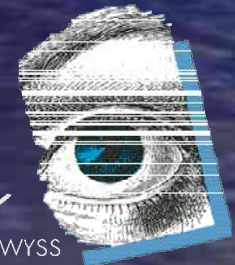
# FOKX 2. Generation



-  Optic-zone
-  Reverse-zone
-  Toric Landing-zone
-  Bevel

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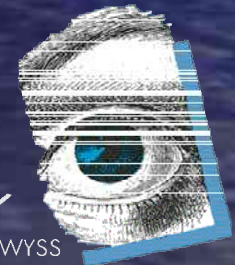


# Challenging

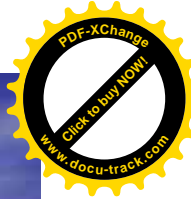
- The second highest amount of Astigmatism ever, corrected in our clinic - a case report.

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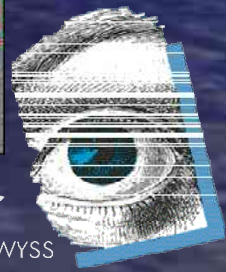
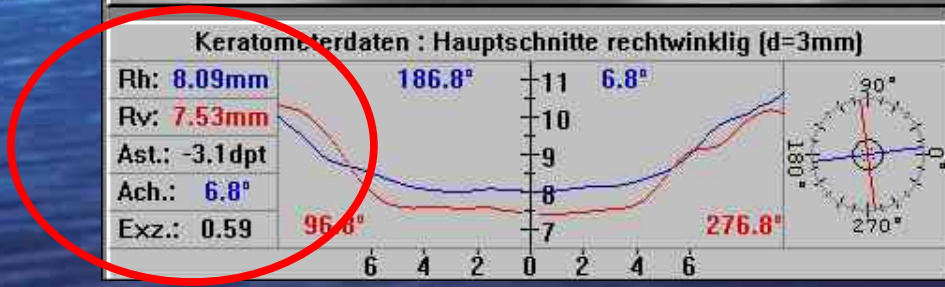
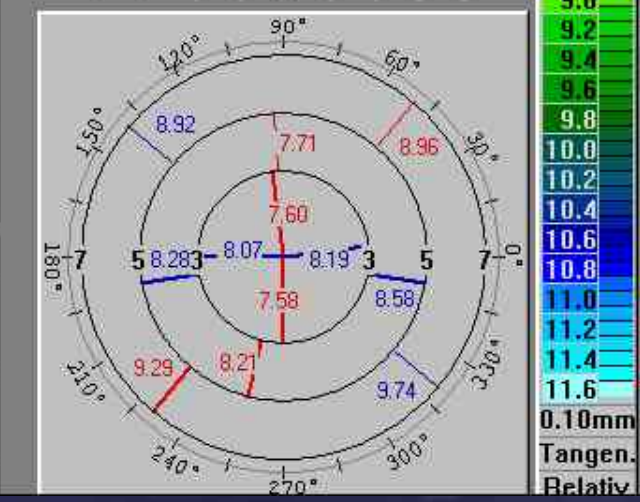
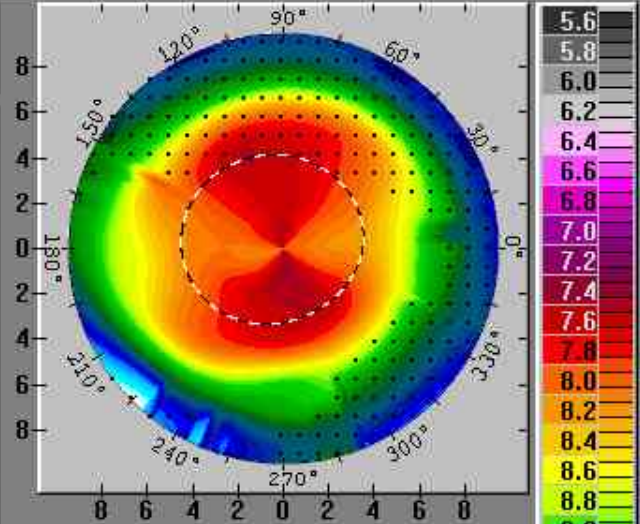
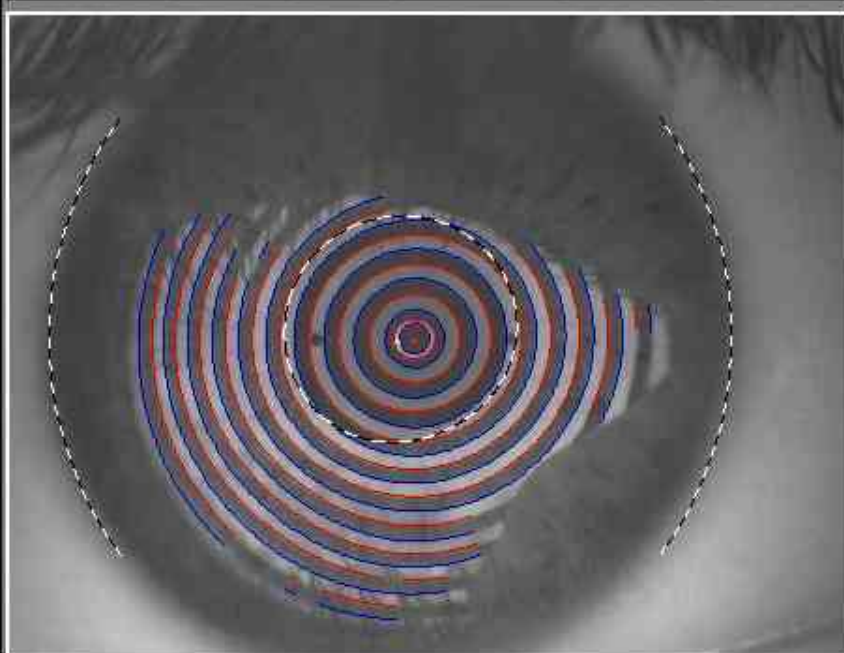




**HAAG STREIT - KERATOGRAPH**

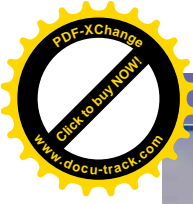
Patient Untersuchung Darstellung Kontaktlinsenanpassung Einstellungen Sonstiges Drucken

Name:  Unt. Dat.: 26.02.04  
Geb. Dat.: 19.12.82 Auge: Rechts Unt. Zeit: 10:06



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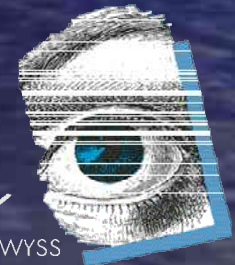
# Challenging

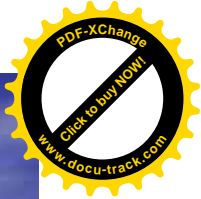
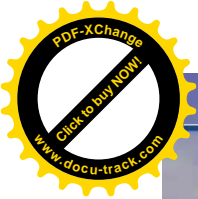
- Subjective Refraction:

sph: -4.25D cyl: -3.75D x: 8° Vacc: 20/22

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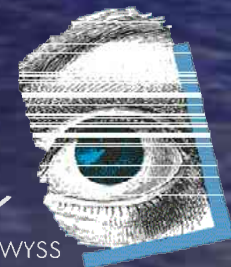
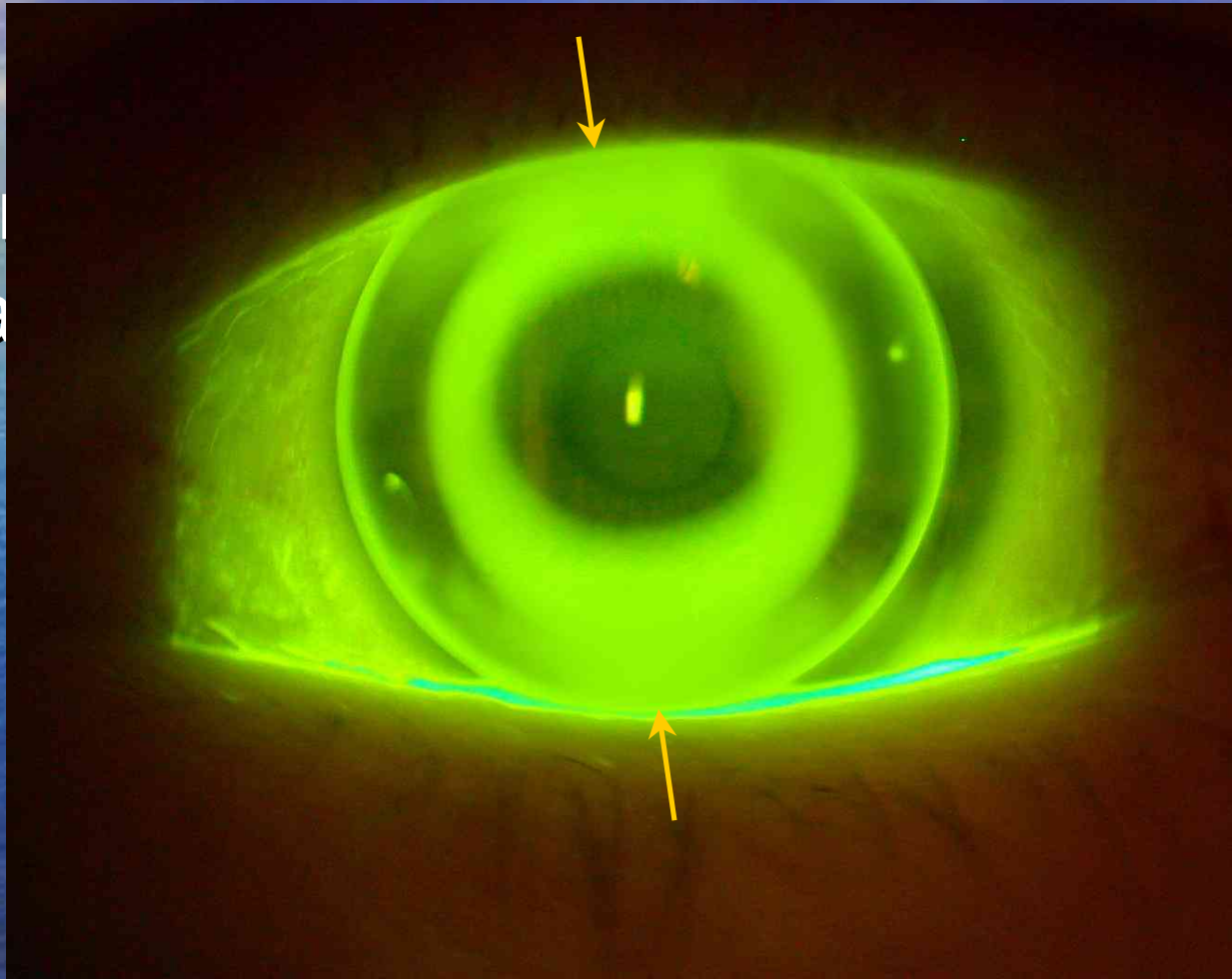
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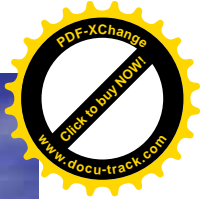
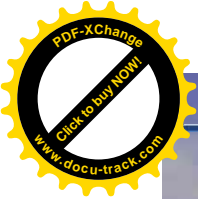
# Challenging

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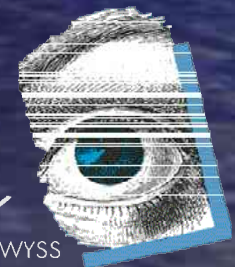
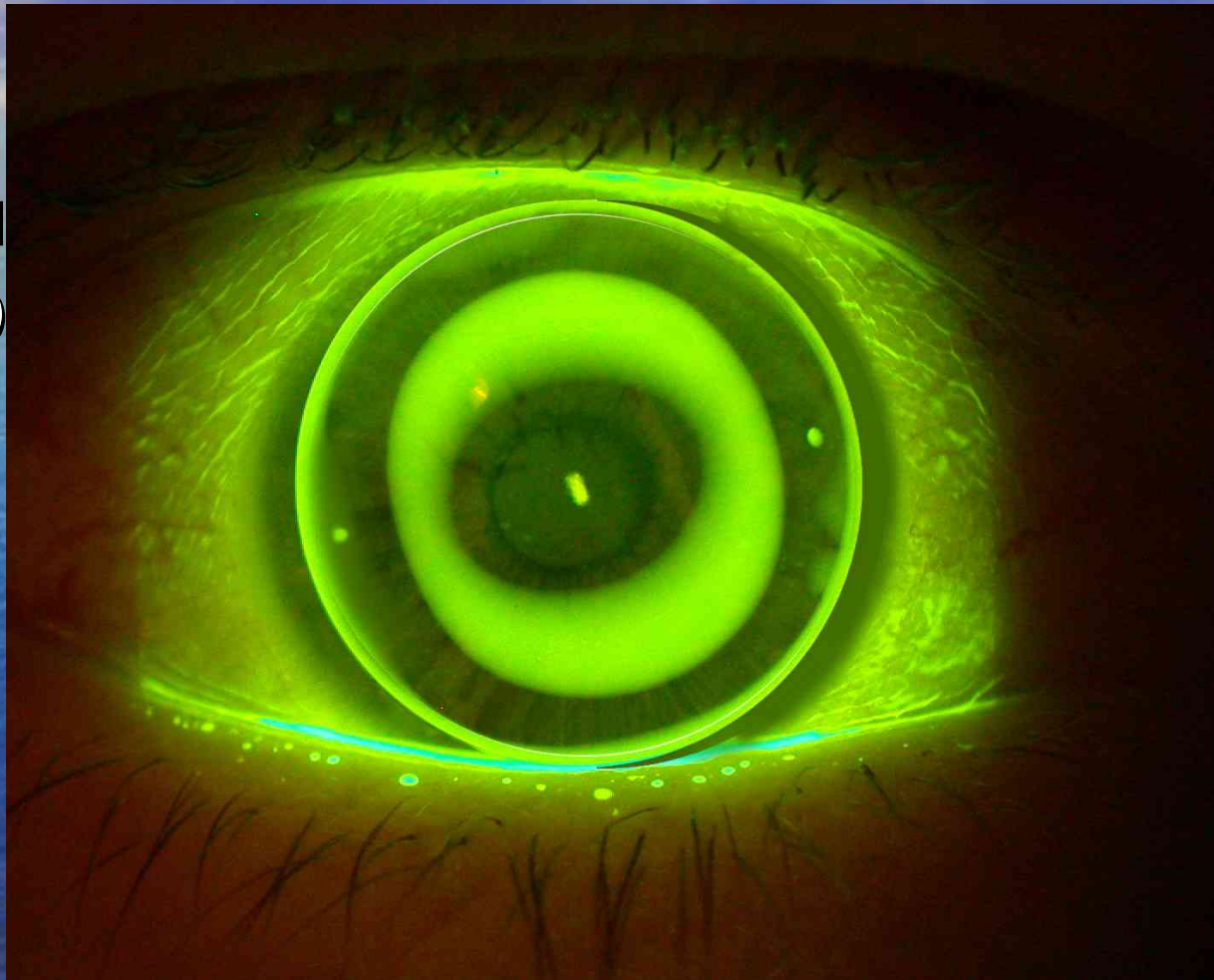
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# Challenging

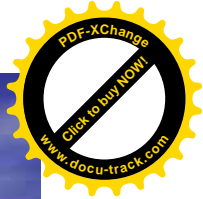
- Flu  
FO

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# Challenging

Name:	<input type="text"/>	① 26.02.04 10:06 Rechts ▾	② 23.04.04 08:40 Rechts ▾	5.7
Vorname:	<input type="text"/>			5.9
Geb. Dat.:	19.12.82			6.1
Unt. Dat.:	23.04.04			6.3
Auge:	Rechts			6.5
				6.7
		6.9	7.1	
		7.3	7.5	
		7.7	7.9	
		8.1	8.3	
		8.5	8.7	
		8.9		

**Differenz (mm)**

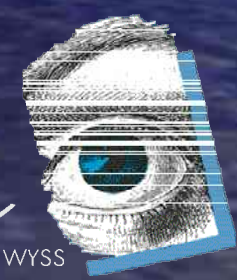
Bild

A: ① ② ③ ④

B: ① ② ③ ④

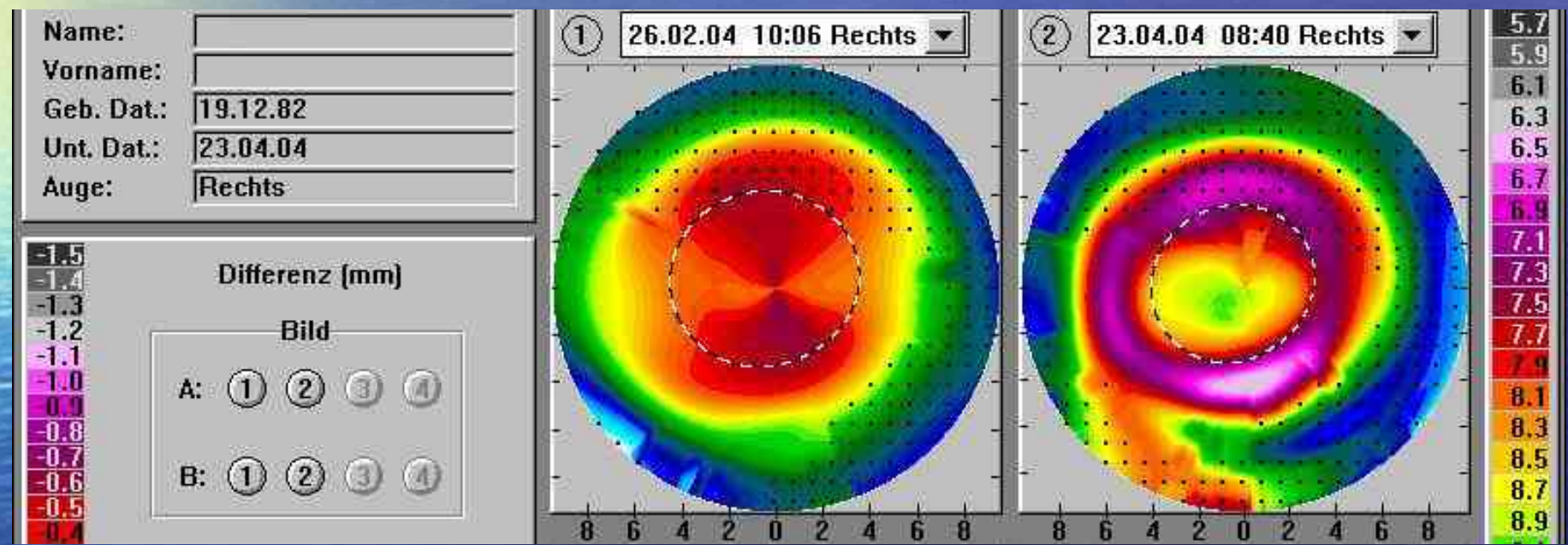
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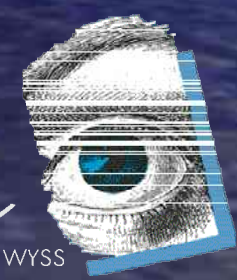


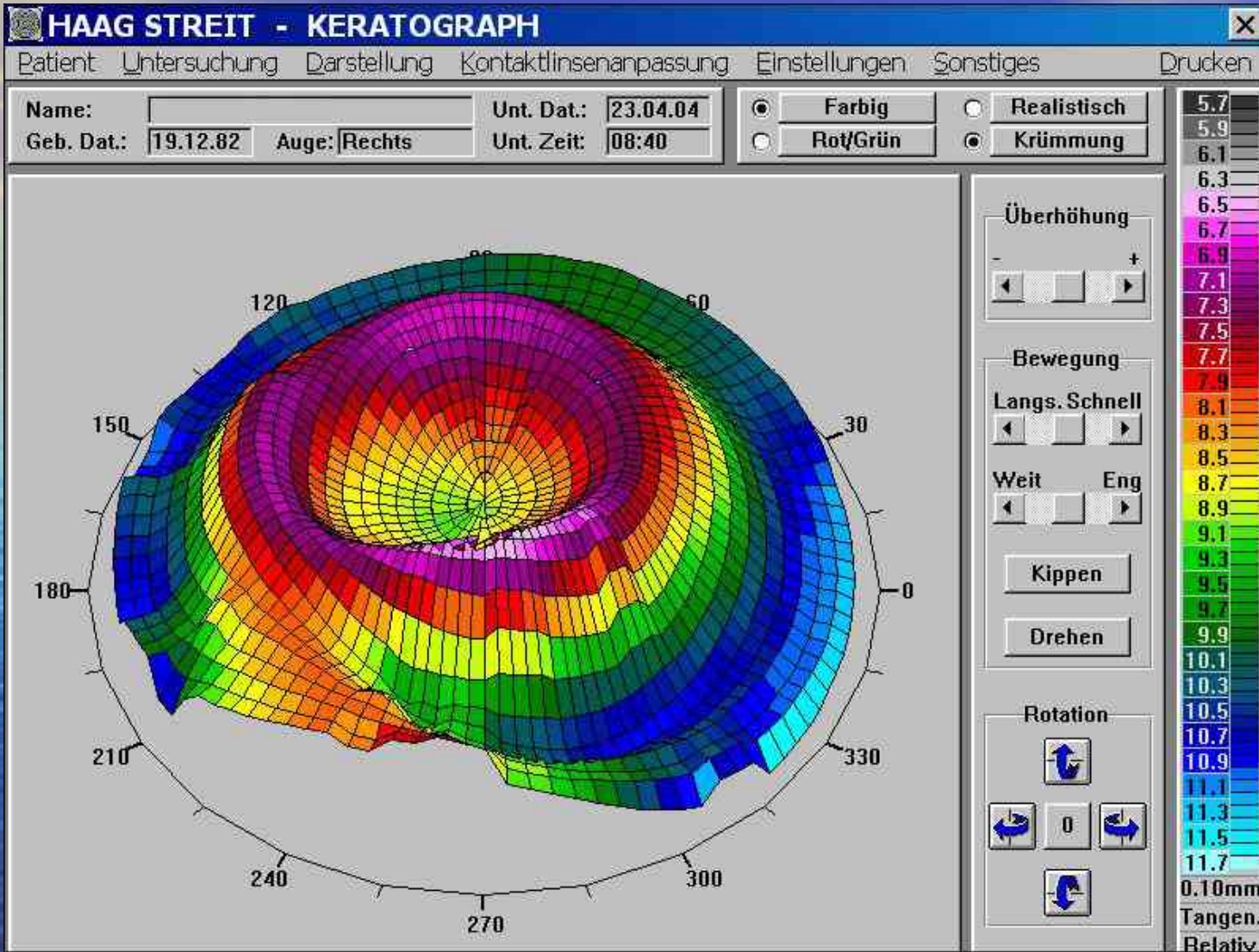
# Challenging



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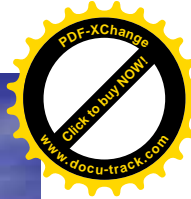




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KONTAKTLINSEN UND OPTOMETRIE MICHAEL BÄRTSCHI NINA MÜLLER MICHAEL WYSS





**HAAG STREIT - KERATOGRAPH**

Patient: Untersuchung Darstellung Kontaktlinsenanpassung Einstellungen Sonstiges Drucken

Name:  Unt. Dat.: 23.04.04  Farbig  Realistisch  
 Geb. Dat.: 19.12.82 Auge: Rechts Unt. Zeit: 08:40  Rot/Grün  Krümmung

Überhöhung:  -  +

Bewegung: Langs. Schnell

Weit Eng

Kippen

Drehen

Rotation:

5.7  
5.9  
6.1  
6.3  
6.5  
6.7  
6.9  
7.1  
7.3  
7.5  
7.7  
7.9  
8.1  
8.3  
8.5  
8.7  
8.9  
9.1  
9.3  
9.5  
9.7  
9.9  
10.1  
10.3  
10.5  
10.7  
10.9  
11.1  
11.3  
11.5  
11.7  
0.10mm  
Tangen.  
Relativ

Astigmatismus

Myopia

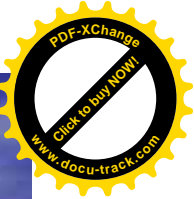
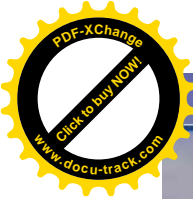
270—300—330—360—390—420—450—480—510—540—570—600—630—660—690—720—750—780—810—840—870—900

Railway Tracks



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# Challenging

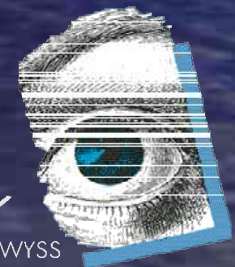
- Subjective Refraction (post-OK) :

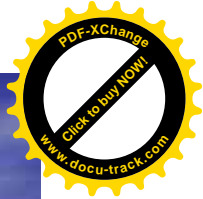
sph: plan cyl: -0.50 x: 8°

Vasc: 20/20

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KONTAKTLINSEN UND OPTOMETRIE MICHAEL BÄRTSCHI NINA MÜLLER MICHAEL WYSS





falco  
FALCO LINSEN

# Keep the future in sight



TH

e!

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