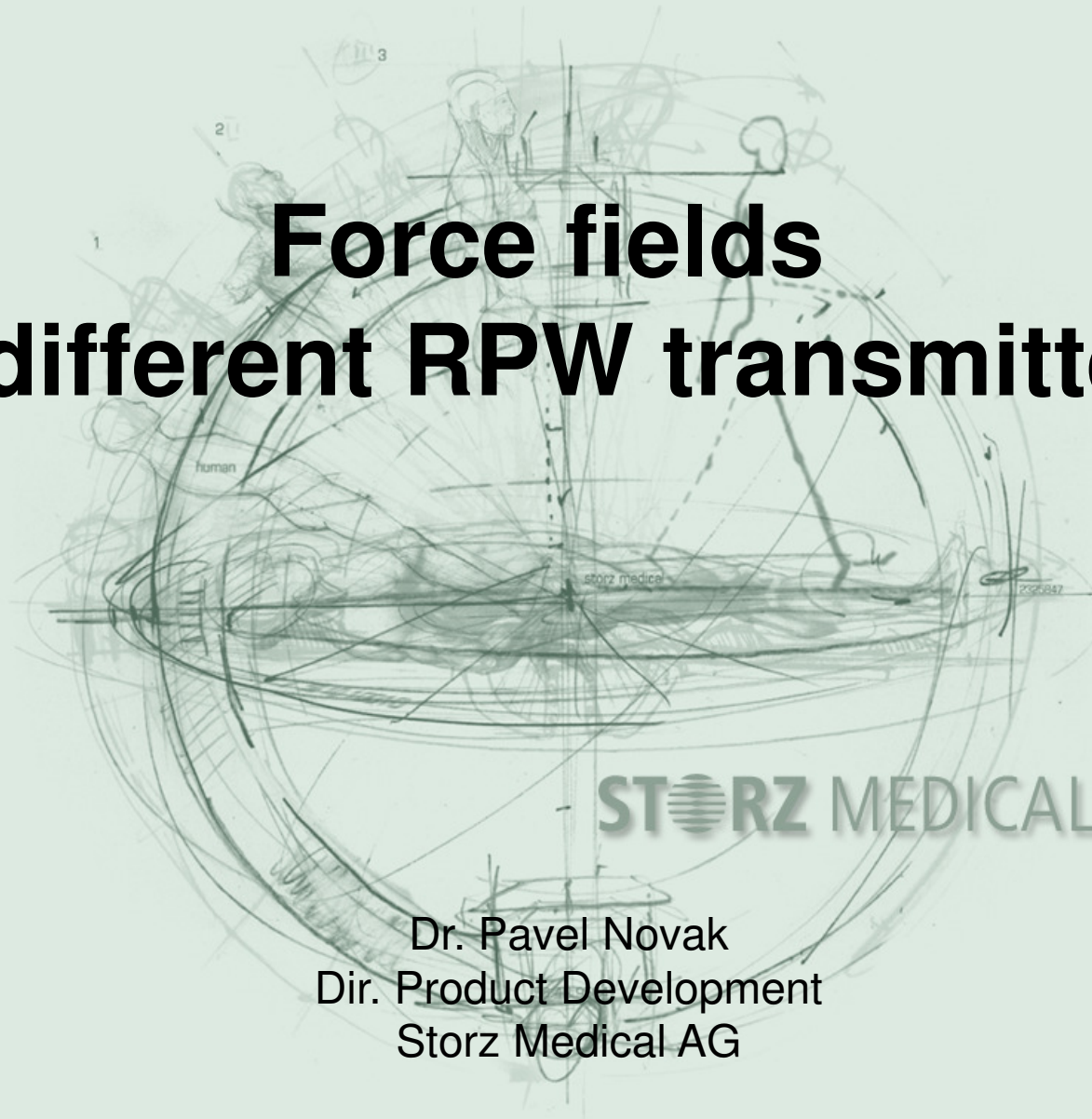


Force fields of different RPW transmitters

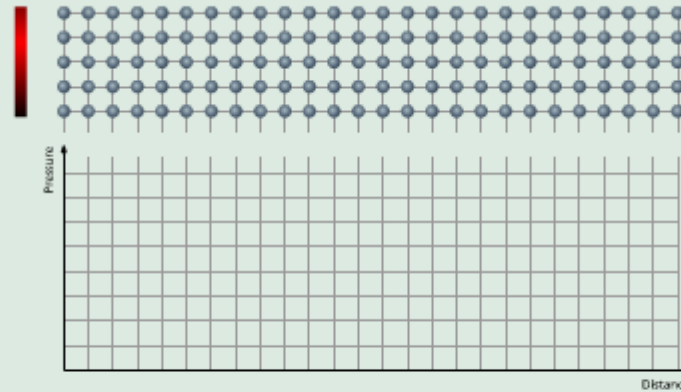


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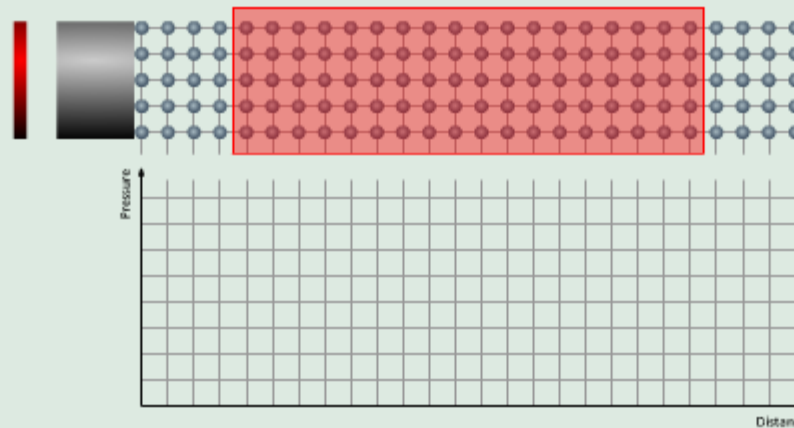
Dr. Pavel Novak
Dir. Product Development
Storz Medical AG

Shock and Pressure Waves Propagation

Shock Waves

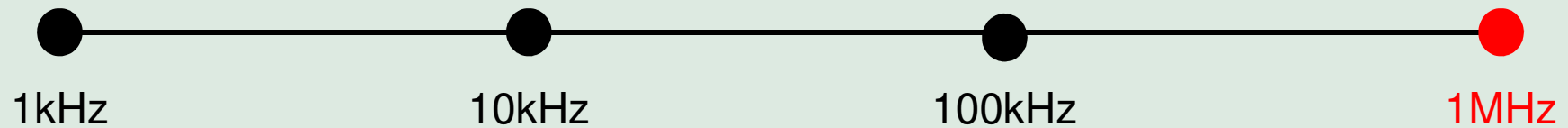
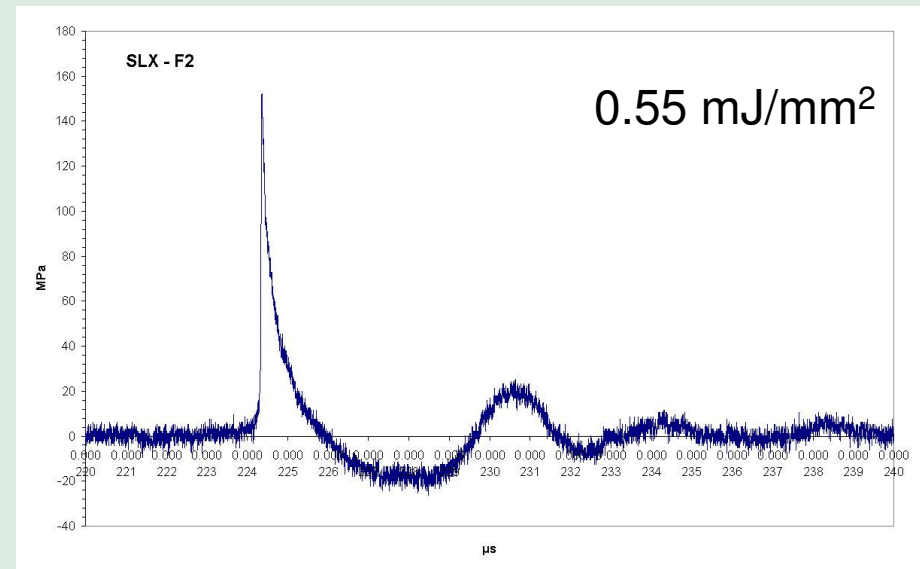


Pressure Waves

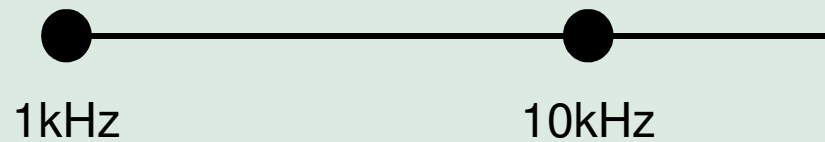
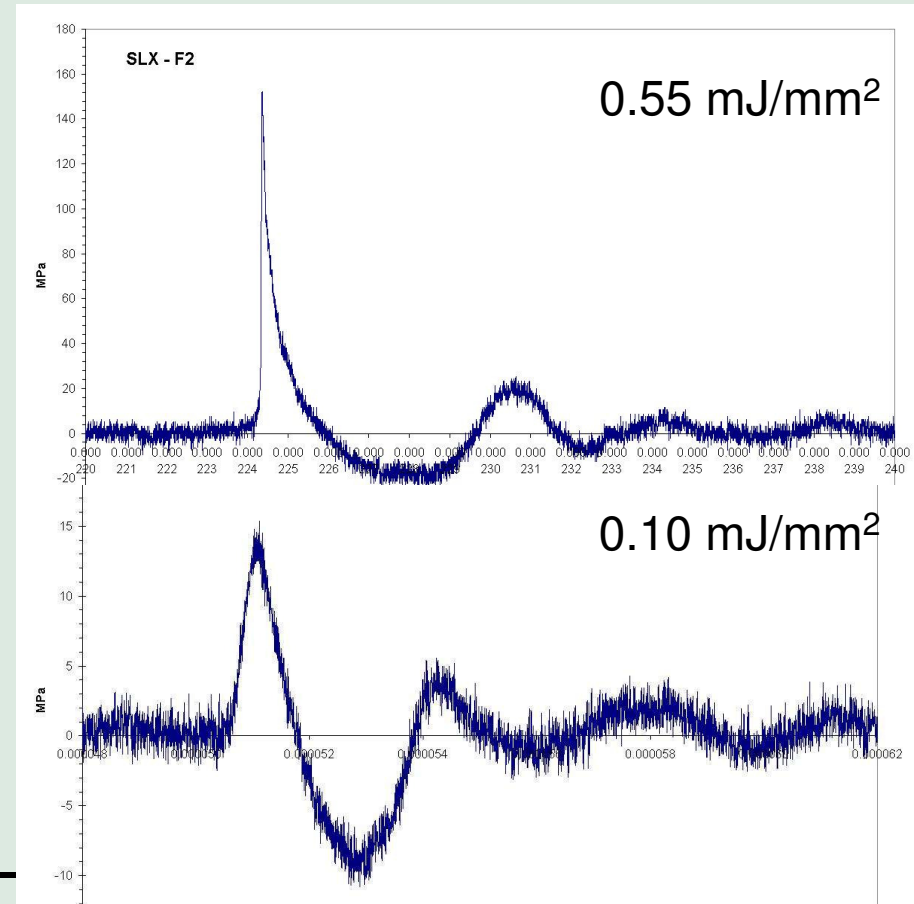


Dr.O.Wess/O.Kirstein

Radial Pressure Waves differ from Focused Shock Waves



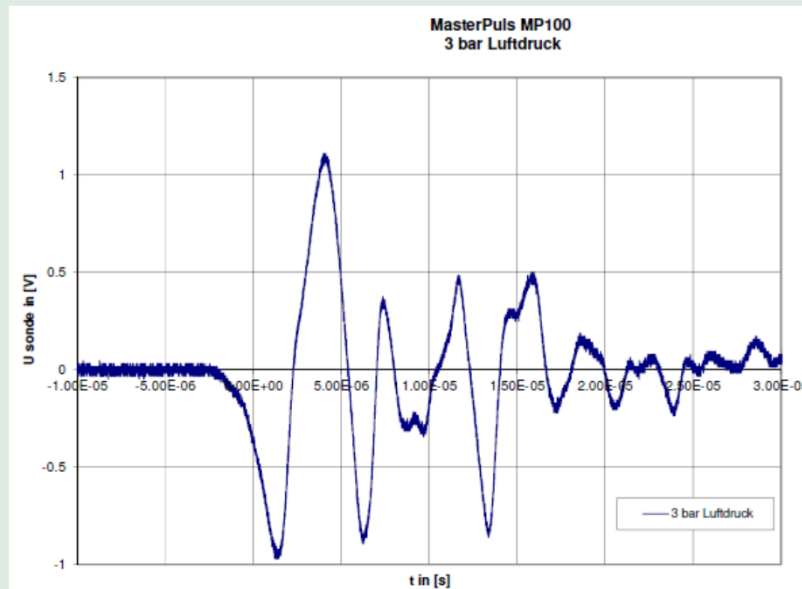
Radial Pressure Waves differ from Focused Shock Waves



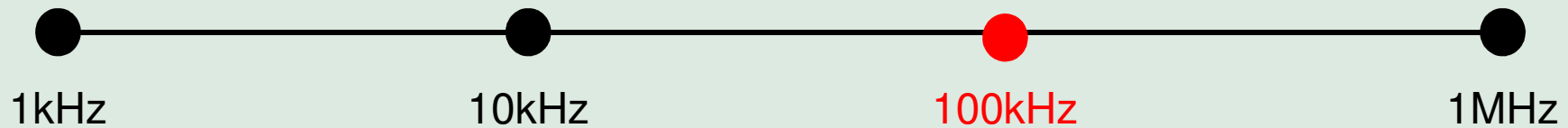
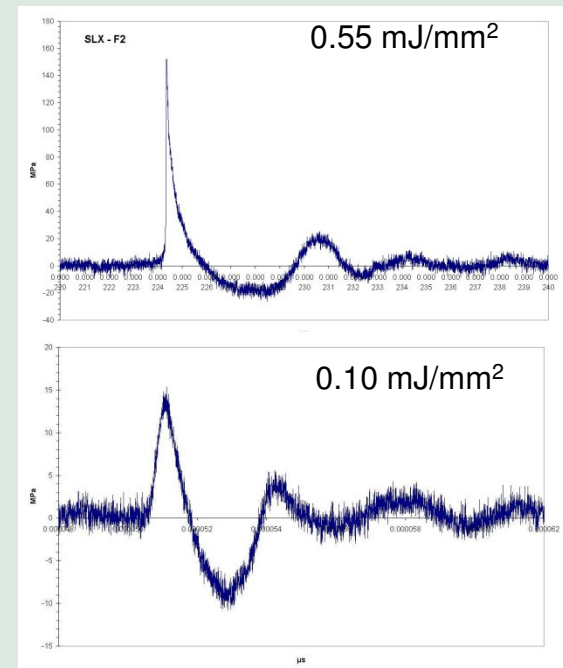
100kHz

1MHz

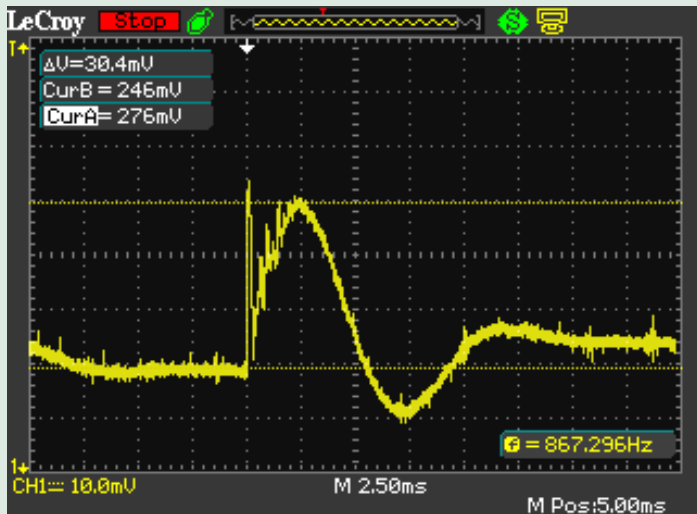
Radial Pressure Waves differ from Focused Shock Waves



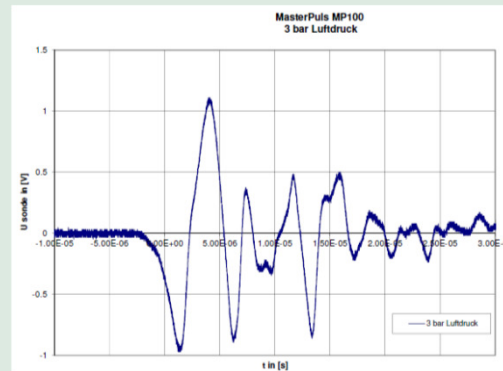
Ultrasonic pulse



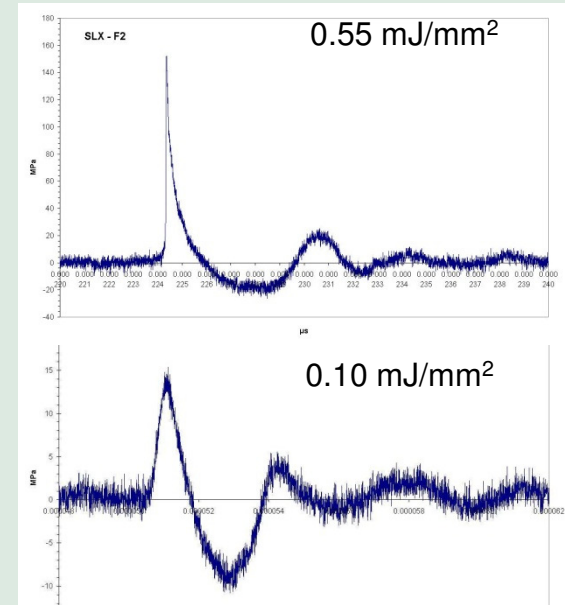
Radial Pressure Waves differ from Focused Shock Waves



Acoustic pulse



Ultrasonic pulse



Shock wave



Radial Pressure Waves Measurement

Shock waves

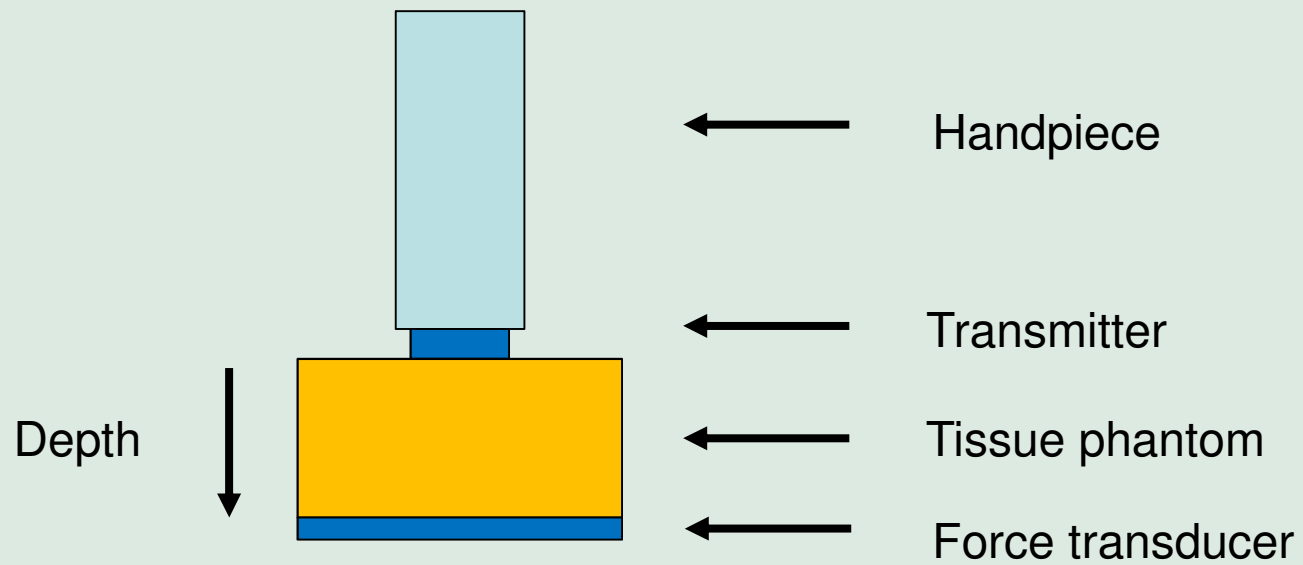
Water bath with Fiber Hydrophone

Pressure waves

- Ultrasonic pulse
- Acoustic pulse

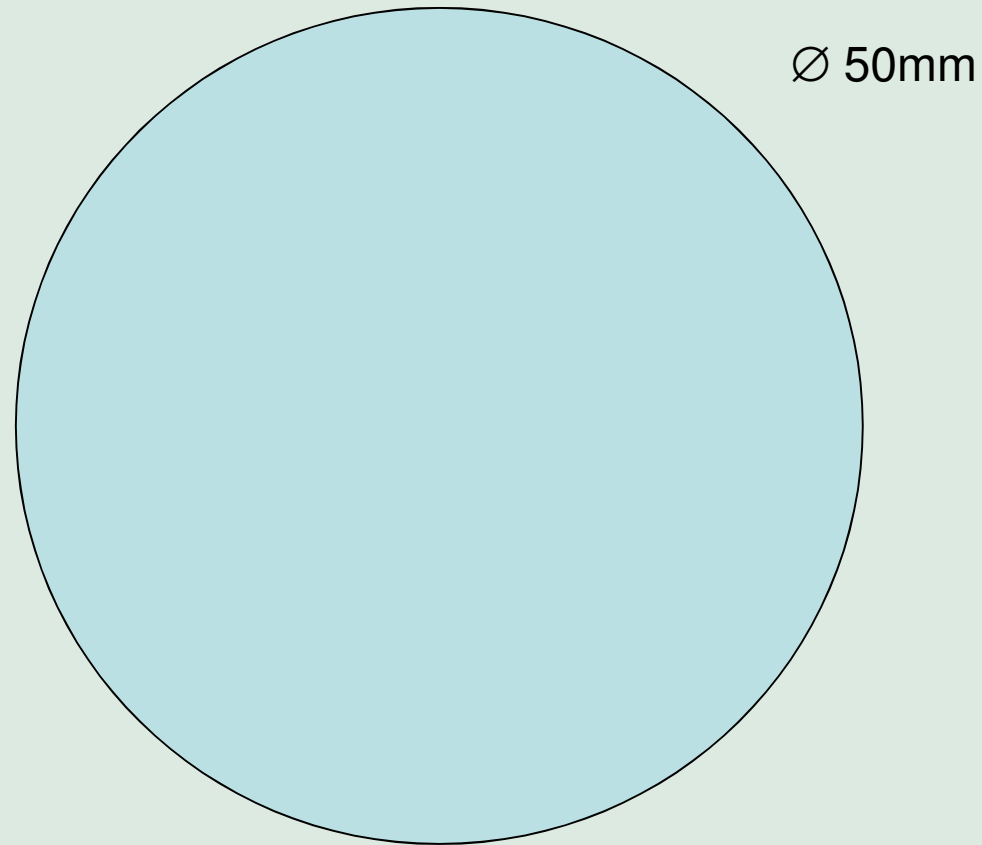
Water bath with Fiber Hydrophone
Optical measurement
Force measurement

Experimental set-up with tissue phantom: Force



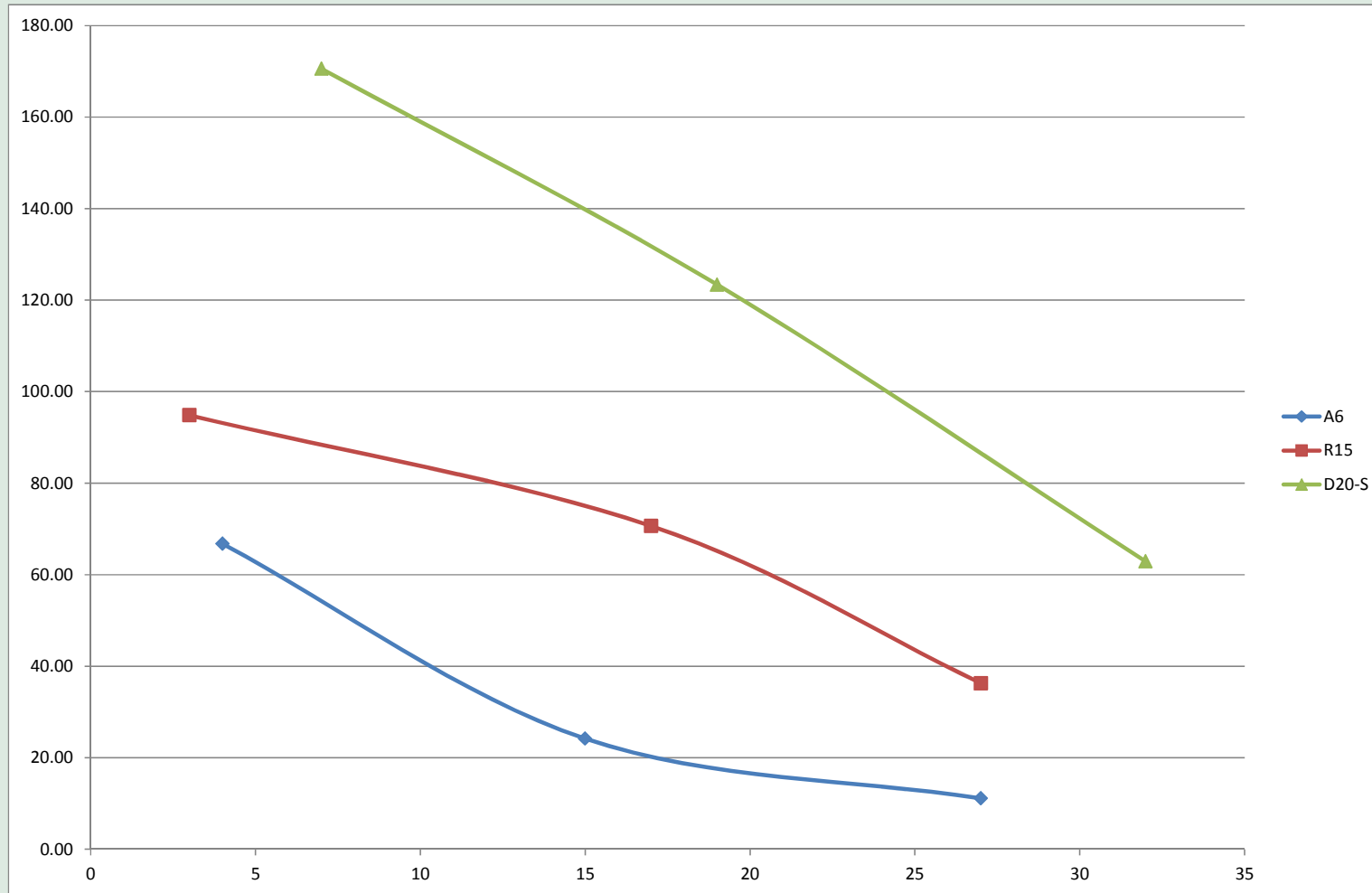
Integral measurement

Experimental set-up with tissue phantom: Force

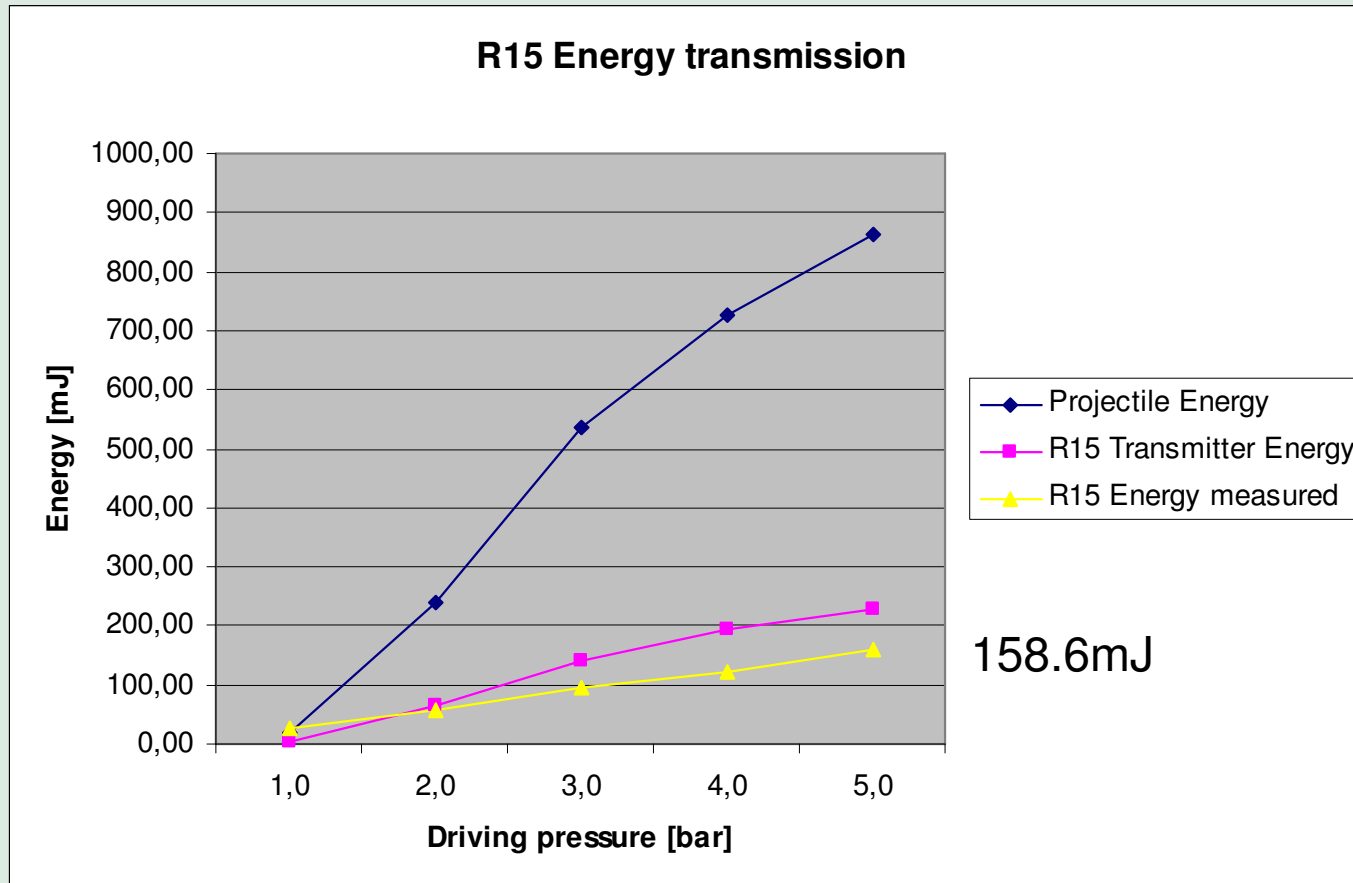


Measurement field

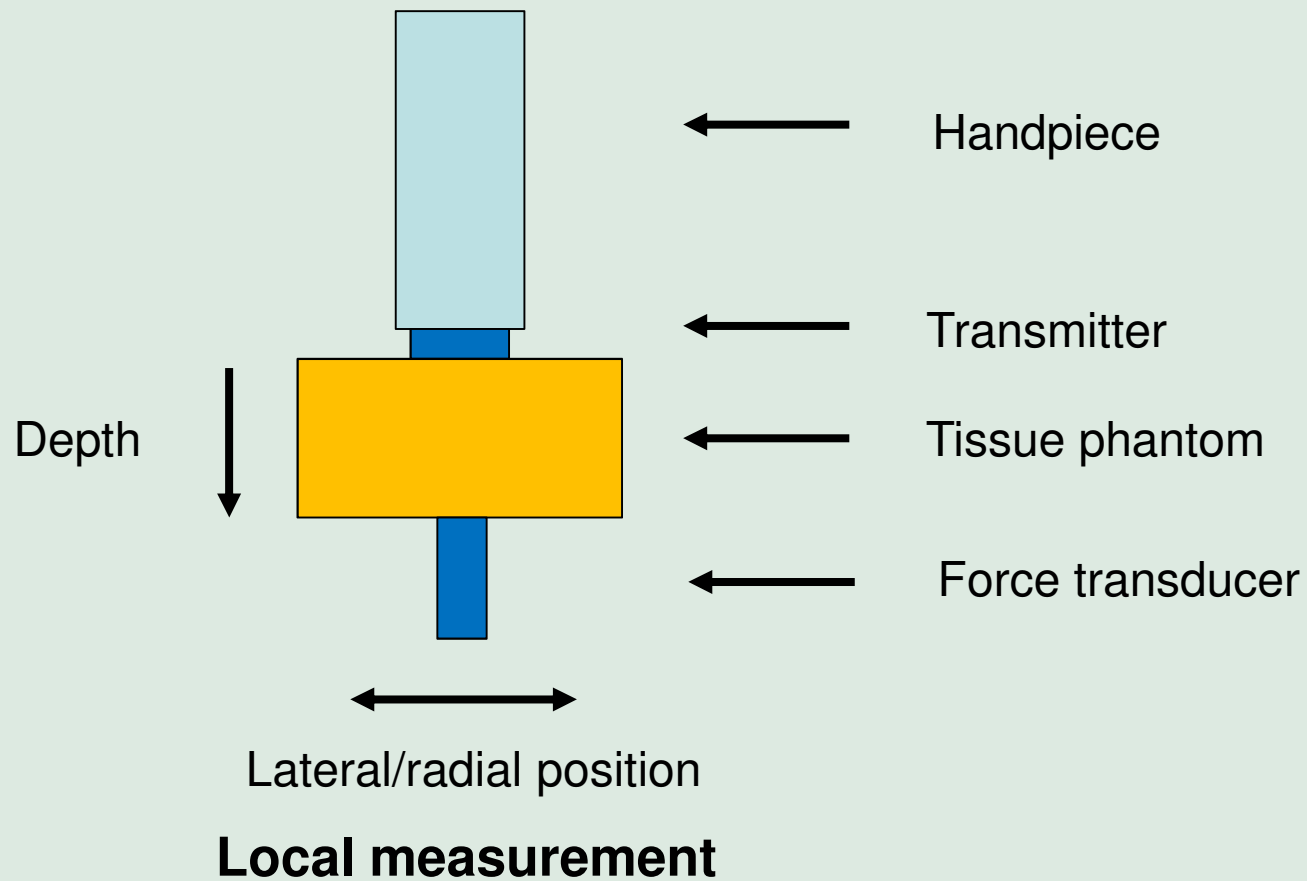
Depth (axial) profile



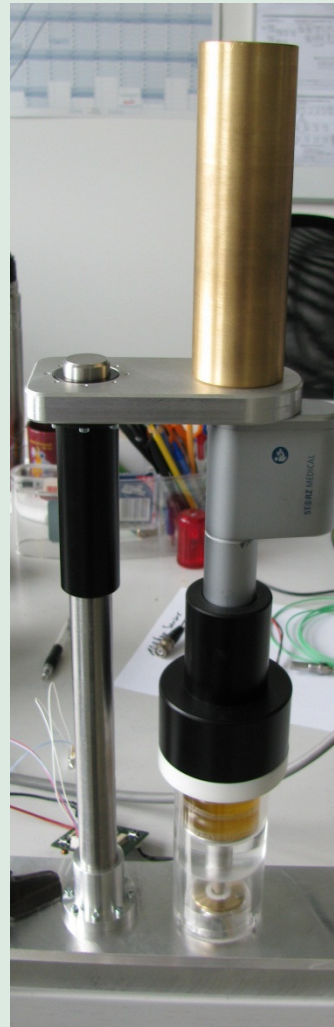
Energy transmission



Experimental set-up with tissue phantom: Force



Experimental set-up with tissue phantom: Force



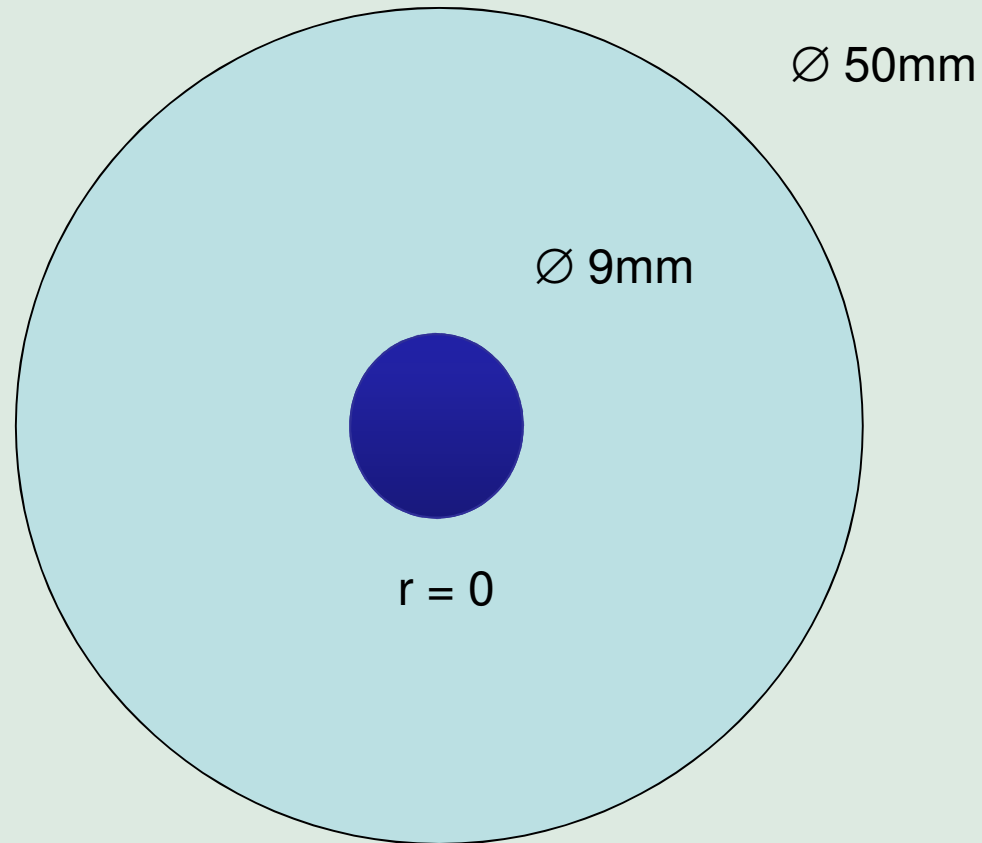
Application load

Handpiece

Tissue phantom

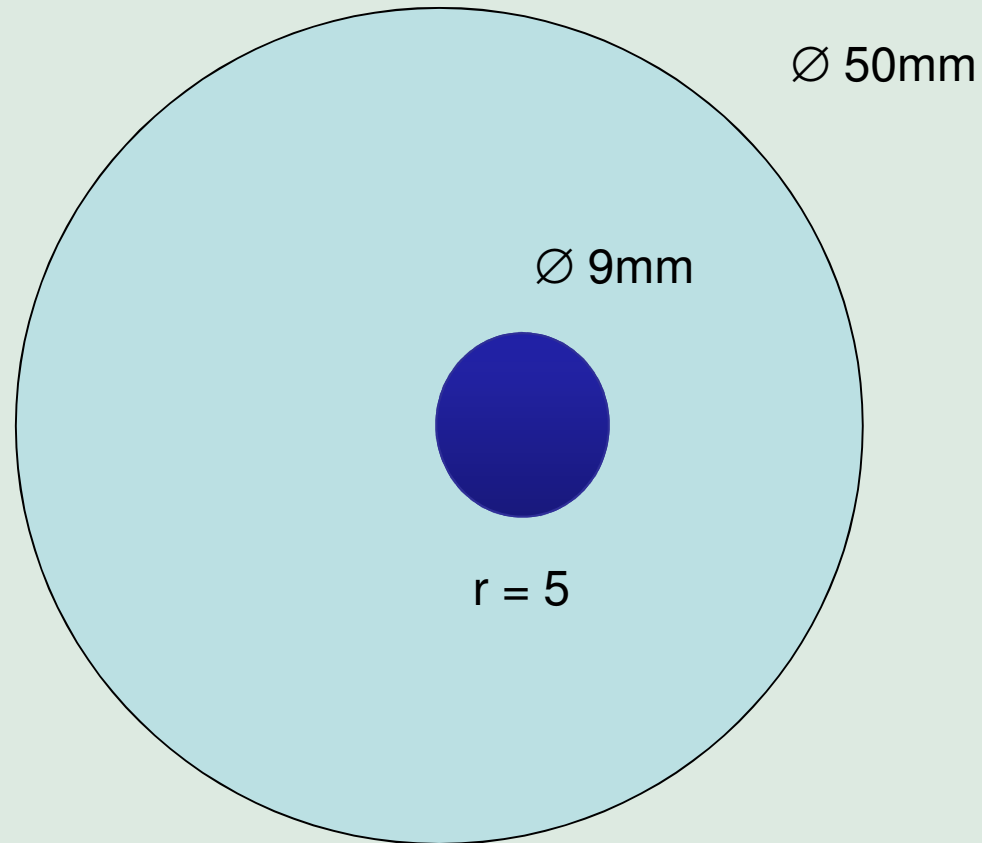
Force transducer

Experimental set-up with tissue phantom: Force



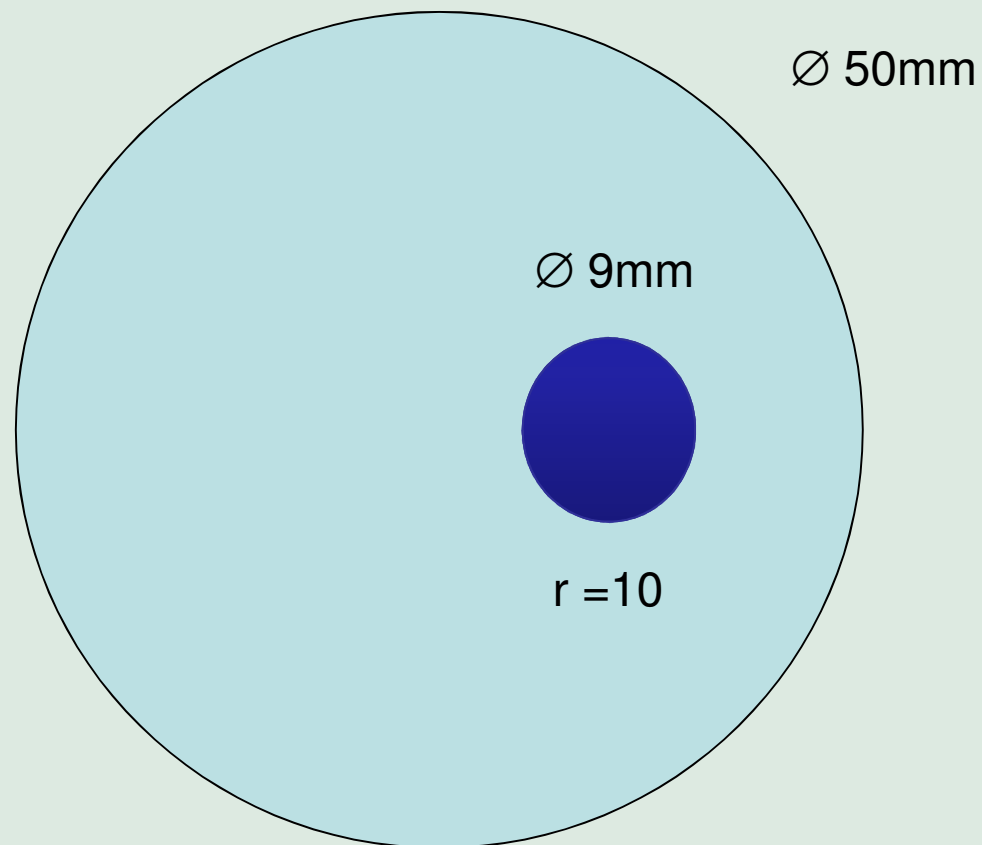
Measurement field

Experimental set-up with tissue phantom: Force



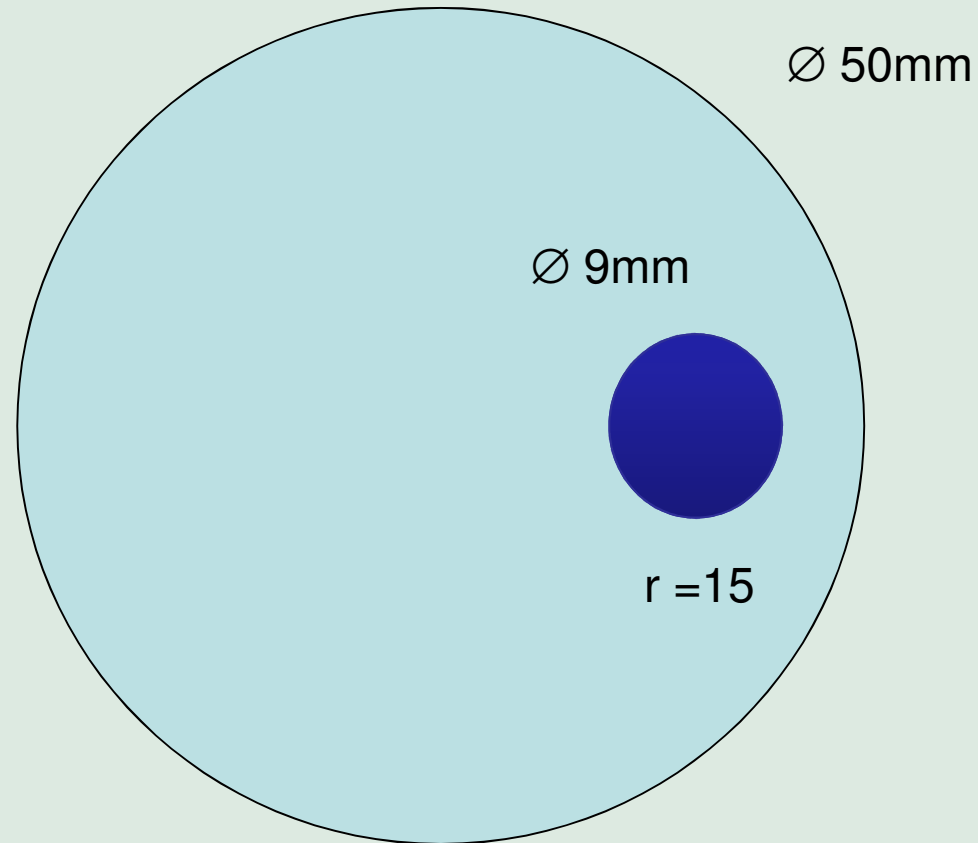
Measurement field

Experimental set-up with tissue phantom: Force



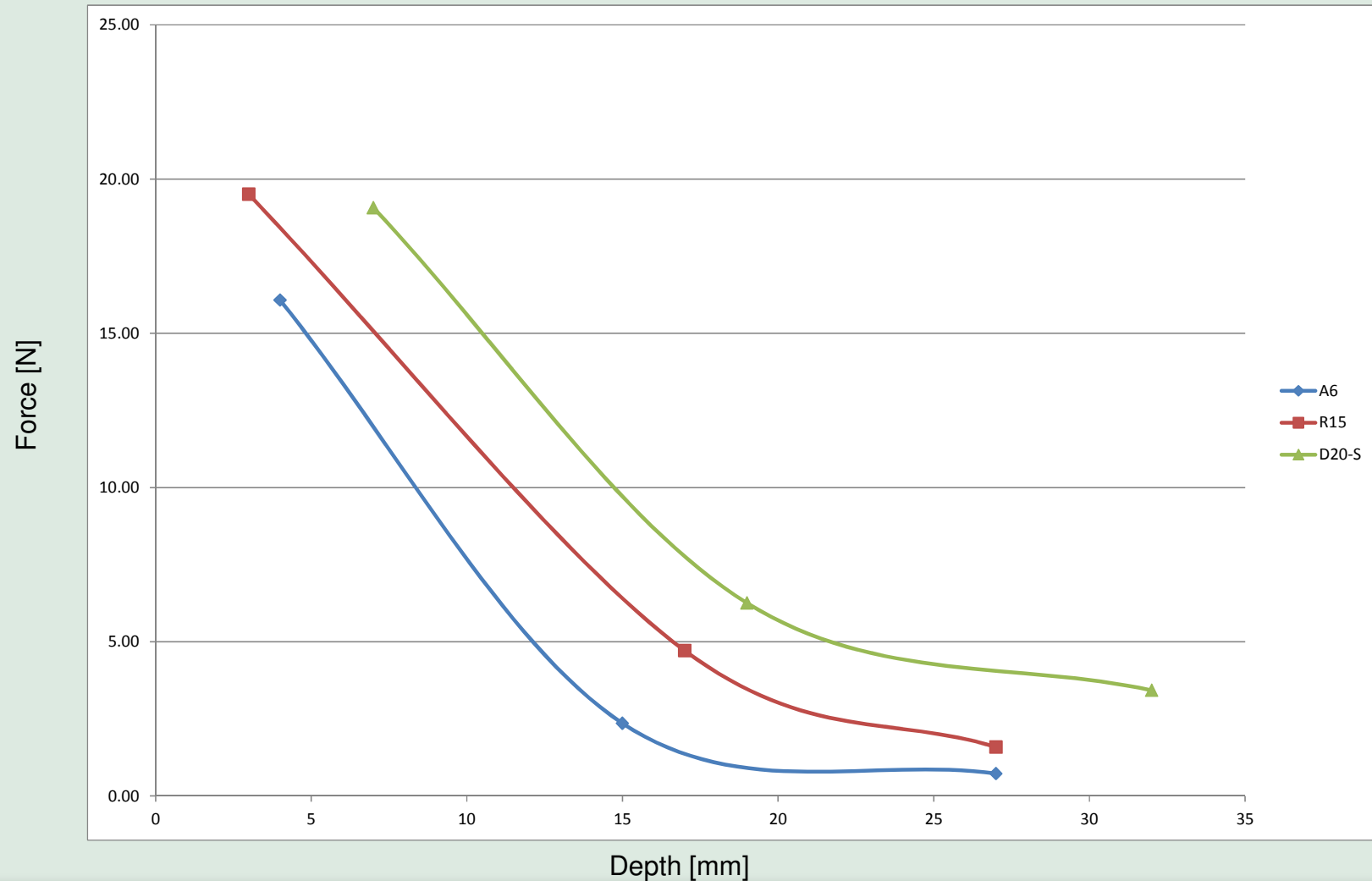
Measurement field

Experimental set-up with tissue phantom: Force

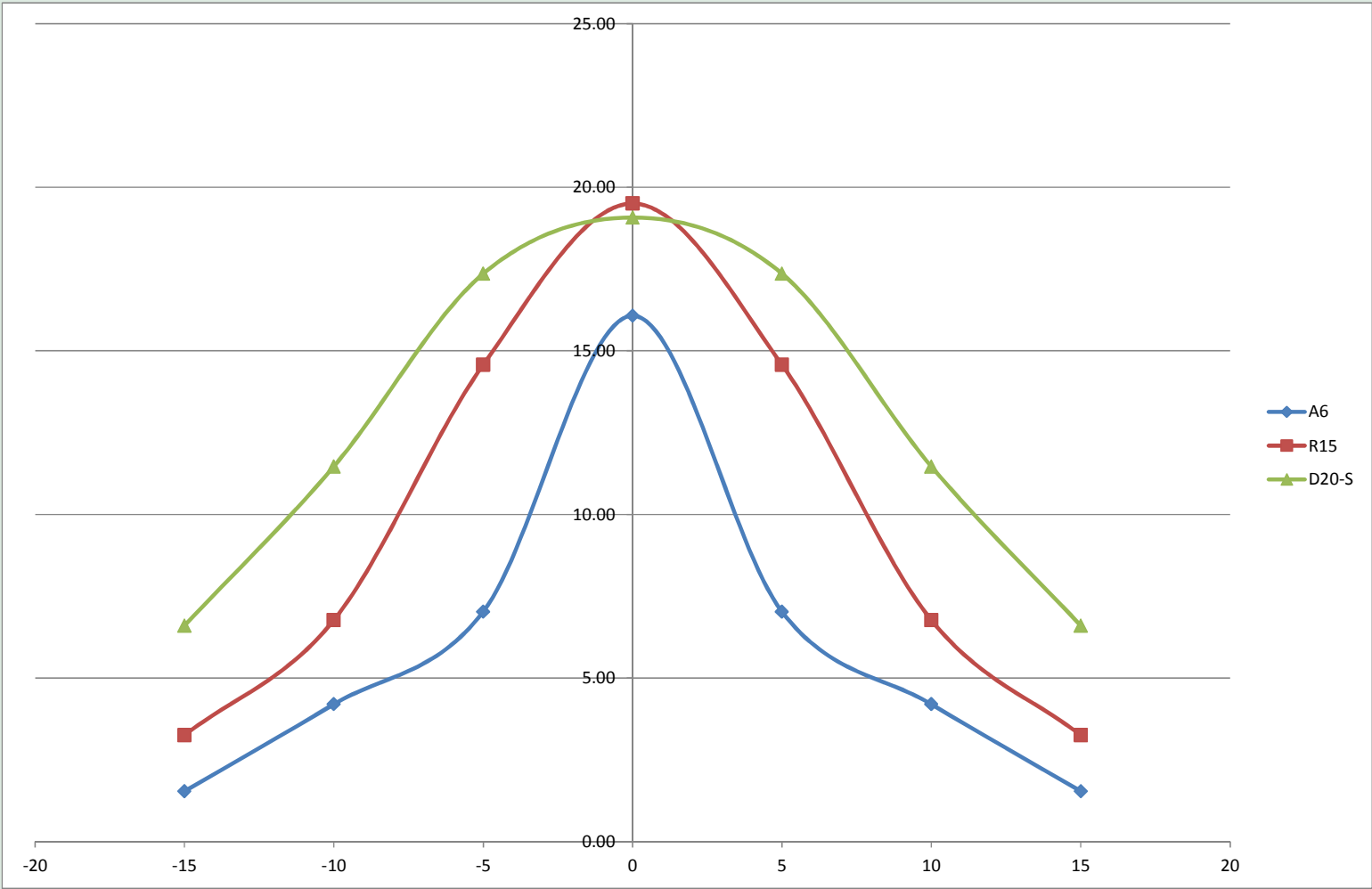


Measurement field

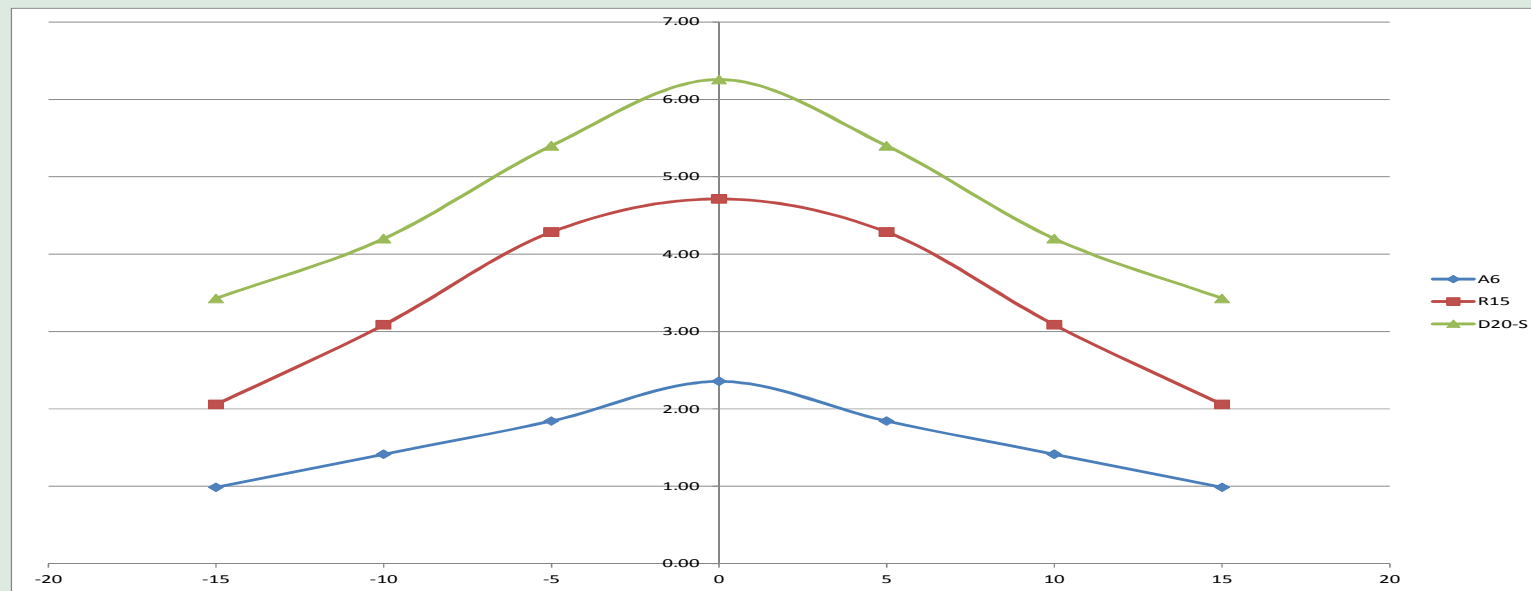
Depth (axial) profile



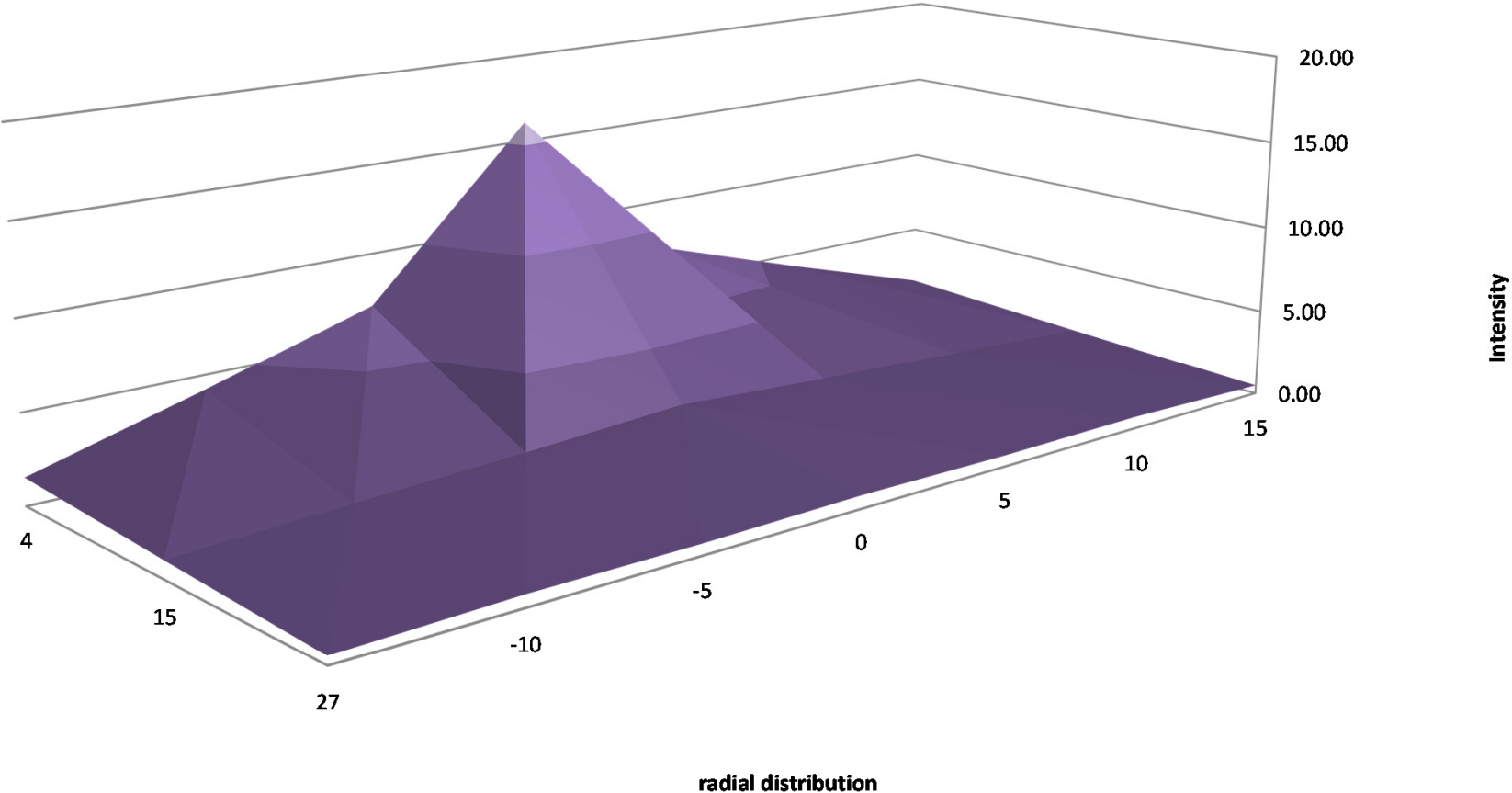
Lateral (radial) profile at depth of 5mm



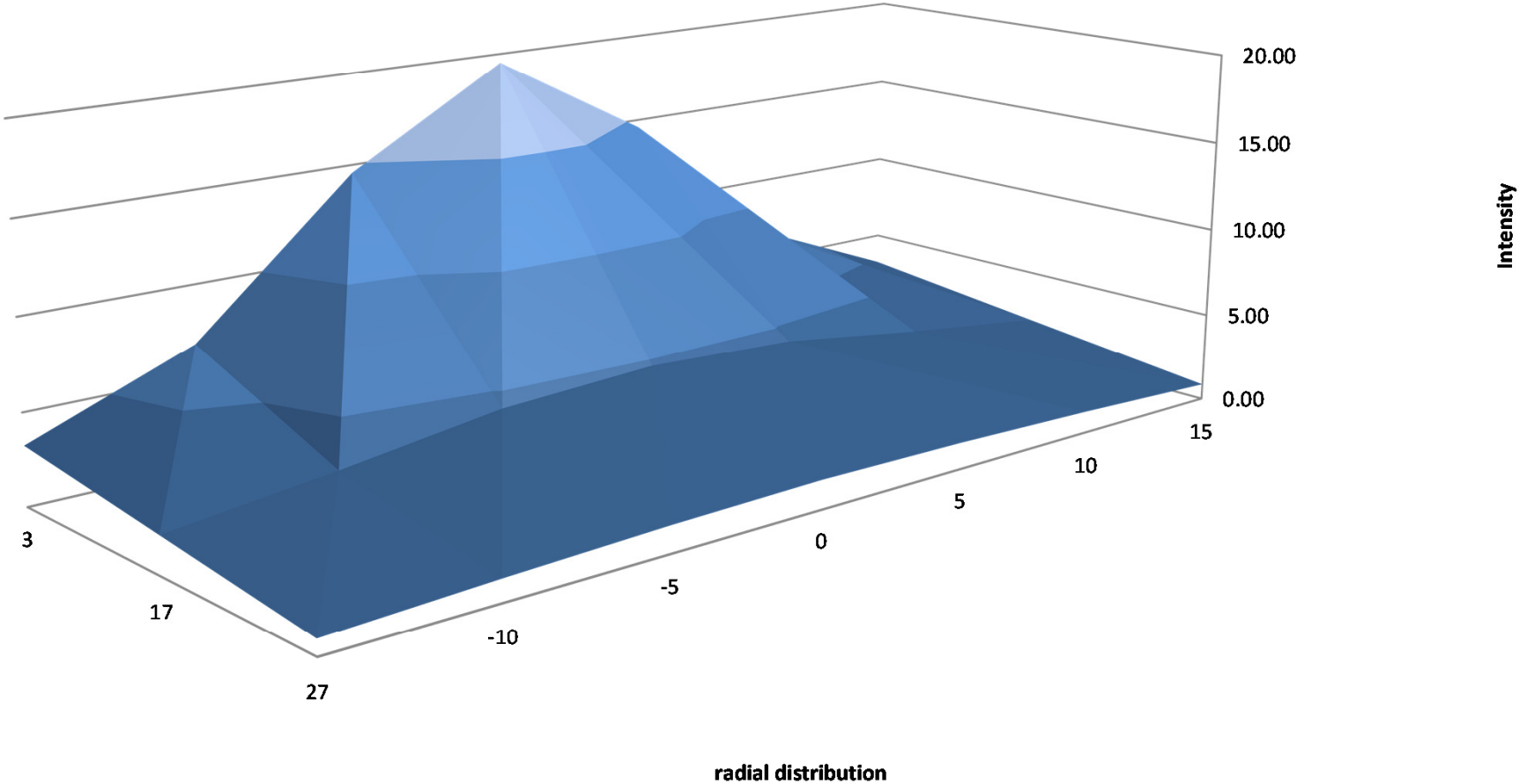
Lateral (radial) profile at depth of 18mm



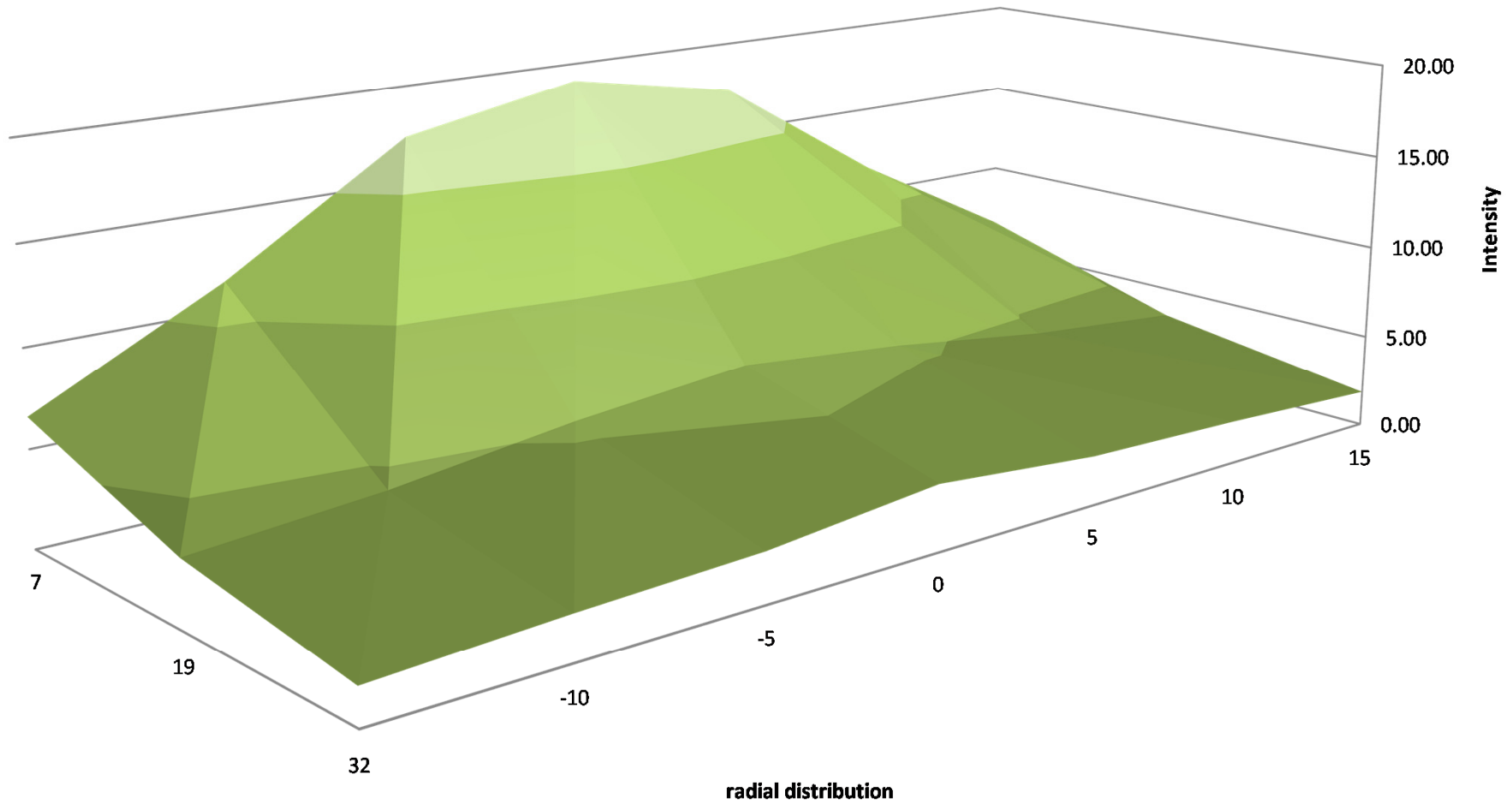
A6



R15



D20-S





Thank you

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