TTI-P-G 158

Appendix for the Report

Dosimetric Assessment of the Alcatel One Touch 556 (FCC ID: RAD007) According to the FCC Requirements

SAR Distribution Plots

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1 SAR Distribution Plots, PCS 1900 Head

Test Laboratory: IMST GmbH; File Name: 629dplm_1.da4

DUT: Alcatel ; Type: OT 556; Serial: 354077000005629

Program Name: Cheek Left

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz; σ = 1.44 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(4.93, 4.93, 4.93); Calibrated: 21.05.2004
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 16.06.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Cheek Left/Area Scan (7x10x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 6.37 V/m; Power Drift = -0.168 dB

Maximum value of SAR (measured) = 0.185 mW/g

Cheek Left/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.37 V/m; Power Drift = -0.168 dB

Maximum value of SAR (measured) = 0.213 mW/g

Peak SAR (extrapolated) = 0.308 W/kg

SAR(1 g) = 0.194 mW/g; SAR(10 g) = 0.110 mW/g

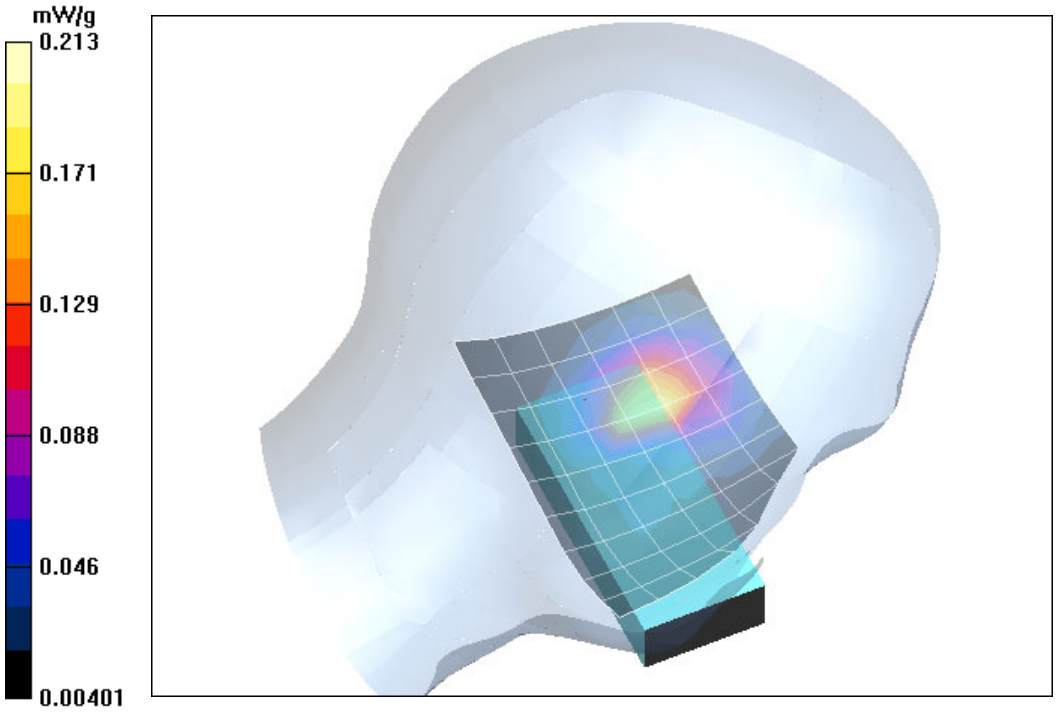

Fig. 1: SAR distribution for PCS 1900, channel 661, cheek position, left side of head. (14.07.2004; Ambient Temperature: 21.4° C; Liquid Temperature : 20.5° C).

Test Laboratory: IMST GmbH; File Name: 629prm_1.da4

DUT: Alcatel ; Type: OT 556; Serial: 354077000005629

Program Name: Tilted Left

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz; σ = 1.44 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(4.93, 4.93, 4.93); Calibrated: 21.05.2004
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 16.06.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Tilted Left/Area Scan (7x10x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 7.22 V/m; Power Drift = 0.056 dB

Maximum value of SAR (measured) = 0.141 mW/g

Tilted Left/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.22 V/m; Power Drift = 0.056 dB

Maximum value of SAR (measured) = 0.153 mW/g

Peak SAR (extrapolated) = 0.215 W/kg

SAR(1 g) = 0.141 mW/g; SAR(10 g) = 0.084 mW/g

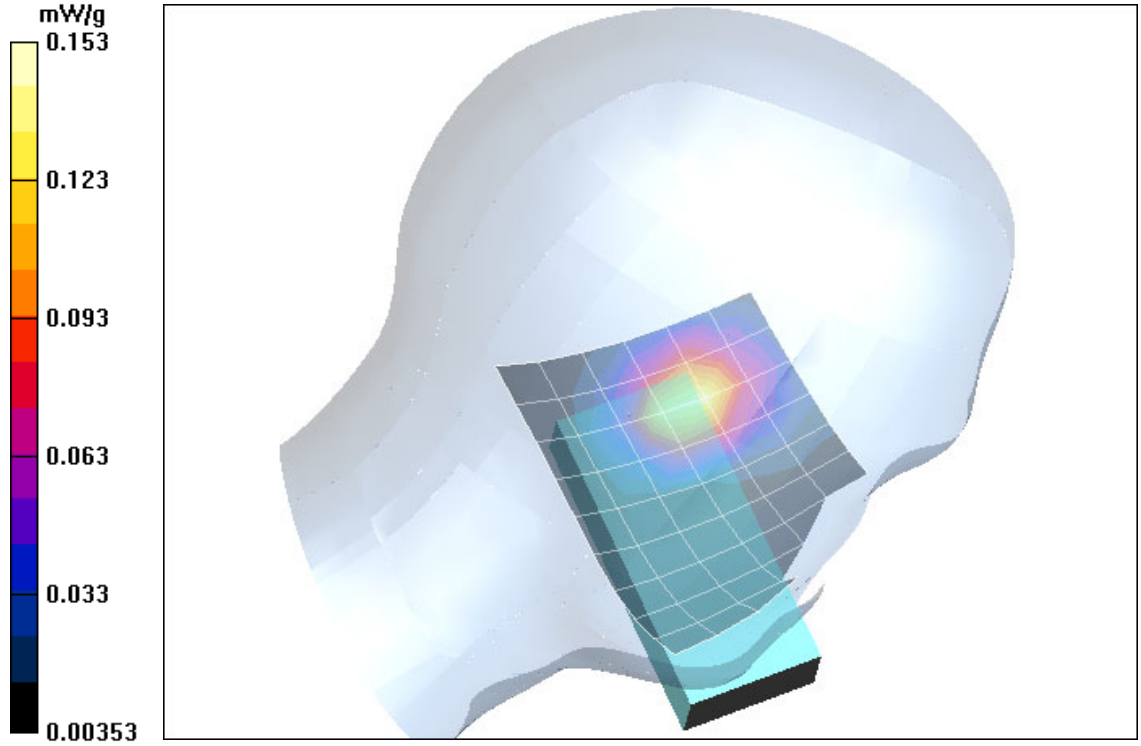

Fig. 2: SAR distribution for PCS 1900, channel 661, tilted position, left side of head. (14.07.2004; Ambient Temperature: 21.4° C; Liquid Temperature : 20.6° C).

Test Laboratory: IMST GmbH; File Name: 629prm_1.da4

DUT: Alcatel ; Type: OT 556; Serial: 354077000005629

Program Name: Cheek Right

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz; σ = 1.44 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(4.93, 4.93, 4.93); Calibrated: 21.05.2004
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 16.06.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Cheek Right/Area Scan (7x10x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 6.17 V/m; Power Drift = -0.0318 dB

Maximum value of SAR (measured) = 0.127 mW/g

Cheek Right/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.17 V/m; Power Drift = -0.0318 dB

Maximum value of SAR (measured) = 0.147 mW/g

Peak SAR (extrapolated) = 0.202 W/kg

SAR(1 g) = 0.133 mW/g; SAR(10 g) = 0.077 mW/g

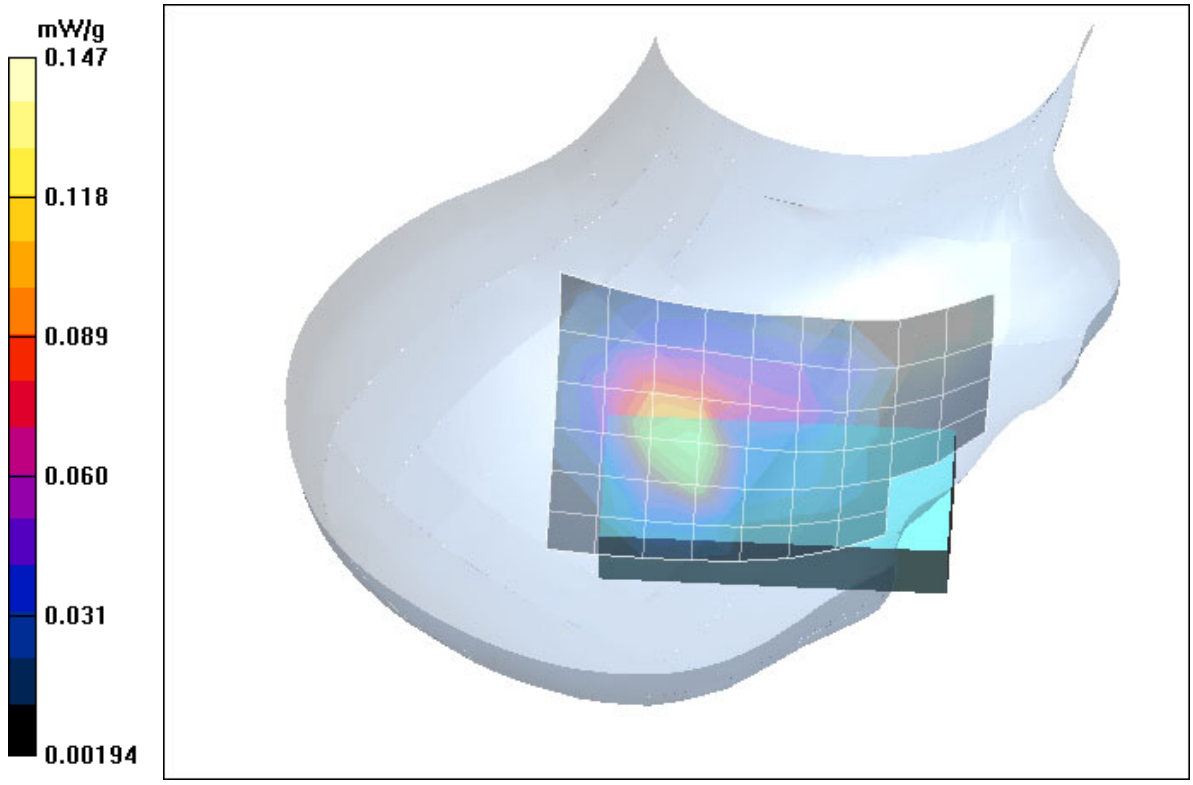

Fig. 3: SAR distribution for PCS 1900, channel 661, cheek position, right side of head. (14.07.2004; Ambient Temperature: 21.5° C; Liquid Temperature : 20.6° C).

Test Laboratory: IMST GmbH; File Name: 629prm_2.da4

DUT: Alcatel ; Type: OT 556; Serial: 354077000005629

Program Name: Tilted Right

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz; σ = 1.44 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(4.93, 4.93, 4.93); Calibrated: 21.05.2004
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 16.06.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Tilted Right/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 7.74 V/m; Power Drift = -0.0625 dB

Maximum value of SAR (measured) = 0.118 mW/g

Tilted Right/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.74 V/m; Power Drift = -0.0625 dB

Maximum value of SAR (measured) = 0.117 mW/g

Peak SAR (extrapolated) = 0.159 W/kg

SAR(1 g) = 0.107 mW/g; SAR(10 g) = 0.064 mW/g

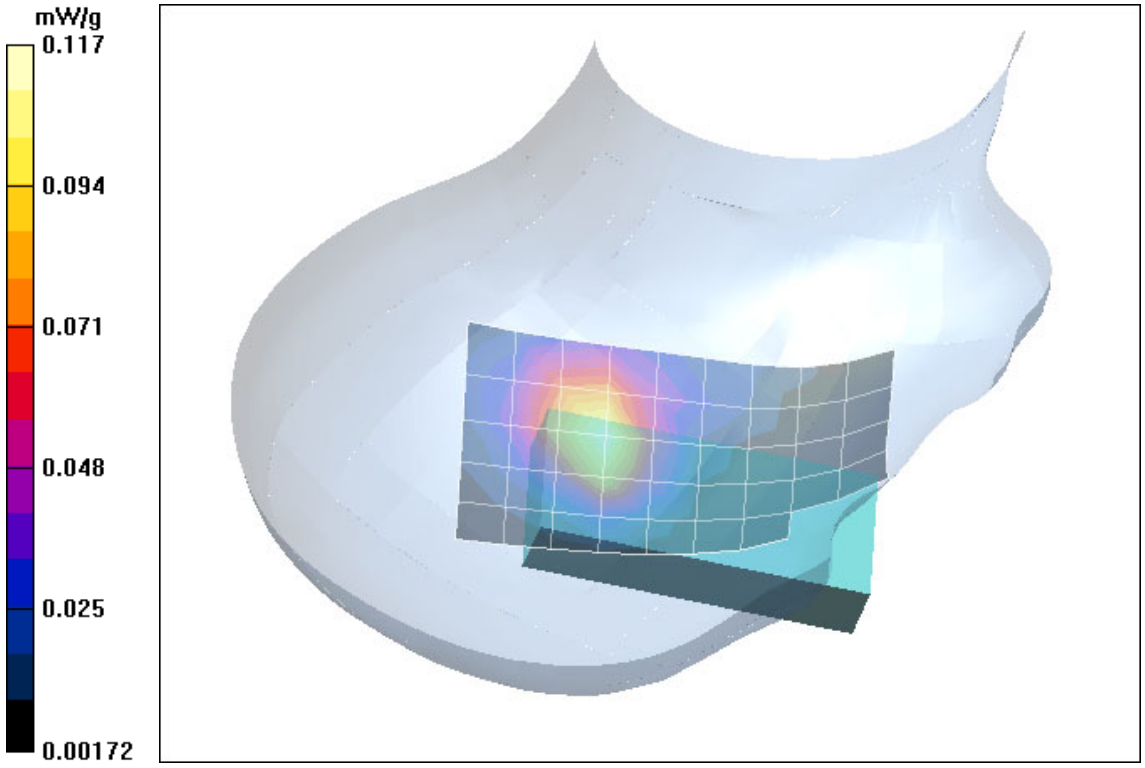

Fig. 4: SAR distribution for PCS 1900, channel 661, tilted position, right side of head. (14.07.2004; Ambient Temperature: 21.5° C; Liquid Temperature : 20.6° C).

2 SAR Distribution Plots, PCS 1900 Body with headset

Test Laboratory: IMST GmbH; File Name: 629phm_2.da4

DUT: Alcatel ; Type: OT 556; Serial: 354077000005629

Program Name: Body Worn

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 1.55$; mho/m, $\varepsilon_r = 51.8$; $\rho = 1000$ kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(4.45, 4.45, 4.45); Calibrated: 21.05.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 16.06.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body Worn/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 7.67 V/m; Power Drift = 0.023 dB

Maximum value of SAR (measured) = 0.138 mW/g

Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.67 V/m; Power Drift = 0.023 dB

Maximum value of SAR (measured) = 0.143 mW/g

Peak SAR (extrapolated) = 0.211 W/kg

SAR(1 g) = 0.133 mW/g; SAR(10 g) = 0.084 mW/g

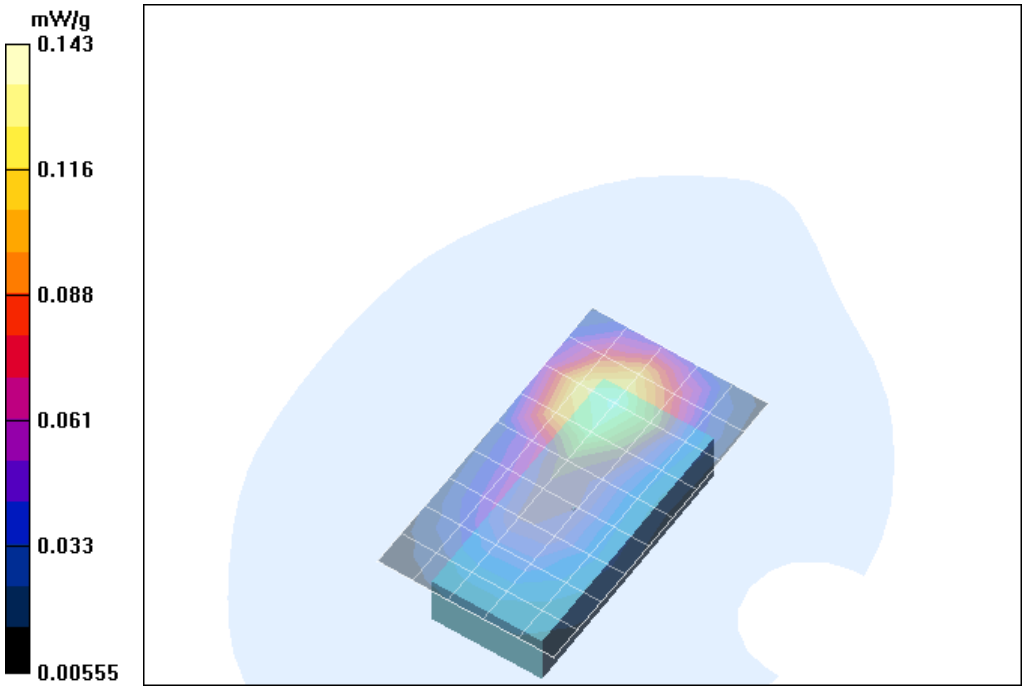

Fig. 5: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, with headset (15.07.2004; Ambient Temperature: 20.9° C; Liquid Temperature : 20.4° C).

3 SAR Distribution Plots, PCS 1900 Body

Test Laboratory: IMST GmbH; File Name: 629phm_1.da4

DUT: Alcatel ; Type: OT 556; Serial: 354077000005629

Program Name: Body Worn

Communication System: GPRS 1900; Frequency: 1880 MHz;Duty Cycle: 1:4

Medium parameters used: $\sigma = 1.55$; mho/m, $\varepsilon_r = 51.8$; $\rho = 1000$ kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1579; ConvF(4.45, 4.45, 4.45); Calibrated: 21.05.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 16.06.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body Worn/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 10.7 V/m; Power Drift = -0.002 dB

Maximum value of SAR (measured) = 0.256 mW/g

Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.7 V/m; Power Drift = -0.002 dB

Maximum value of SAR (measured) = 0.262 mW/g

Peak SAR (extrapolated) = 0.384 W/kg

SAR(1 g) = 0.243 mW/g; SAR(10 g) = 0.156 mW/g

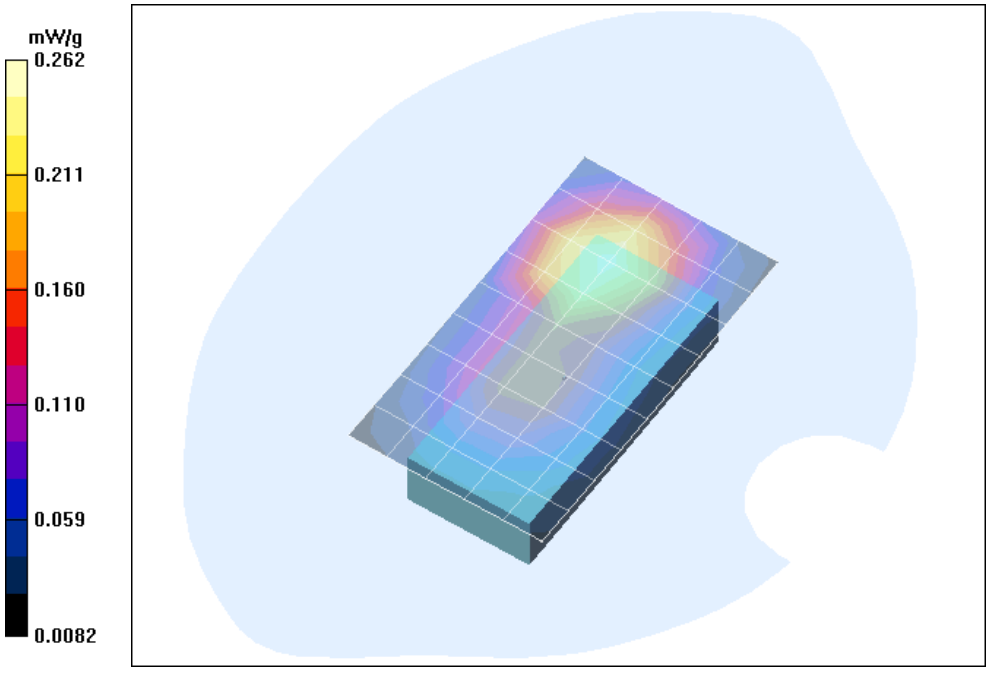

Fig. 6: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, 2TX (14.07.2004; Ambient Temperature: 20.9° C; Liquid Temperature : 20.4° C).

4 SAR z-axis scans (Validation)

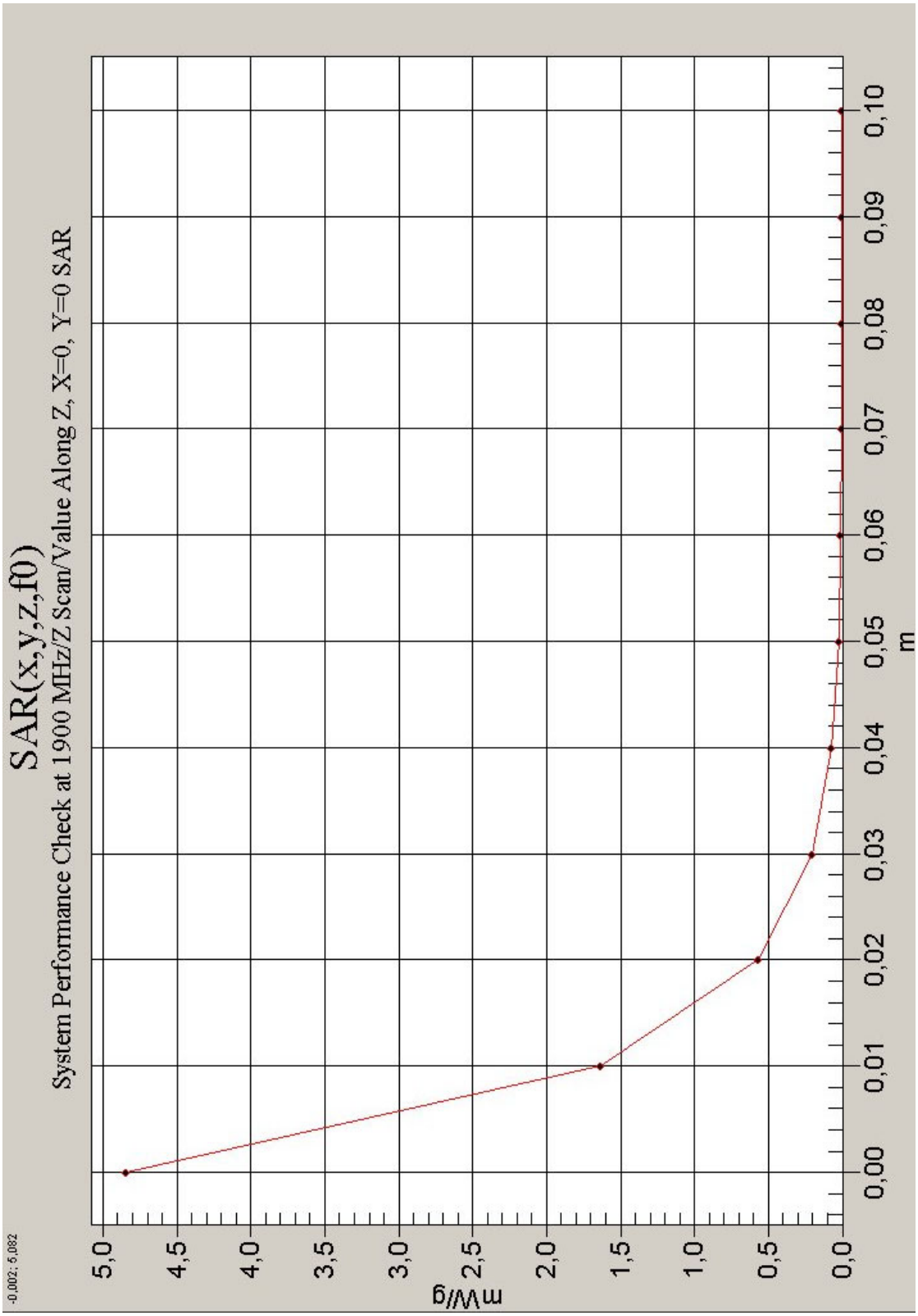

Fig. 7: SAR versus liquid depth, 1900 MHz, head (14.07.2004; Ambient Temperature: 21.0° C; Liquid Temperature : 20.4° C).

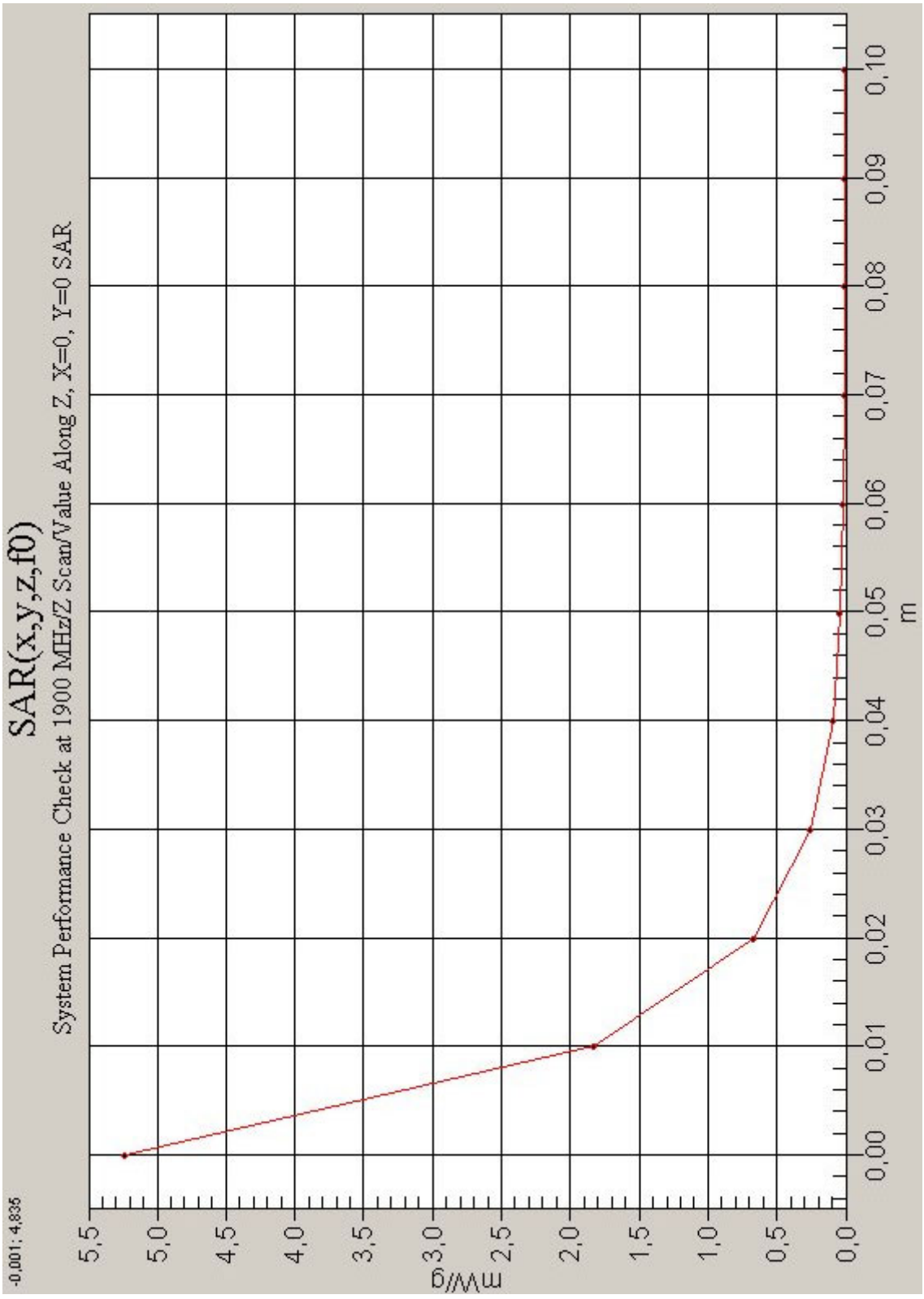

Fig. 8: SAR versus liquid depth, 1900 MHz, body (15.07.2004; Ambient Temperature: 21.1° C; Liquid Temperature : 20.6° C).

5 SAR z-axis scans (Measurements)

The following pictures show the plots of SAR versus liquid depth for the worst case values.

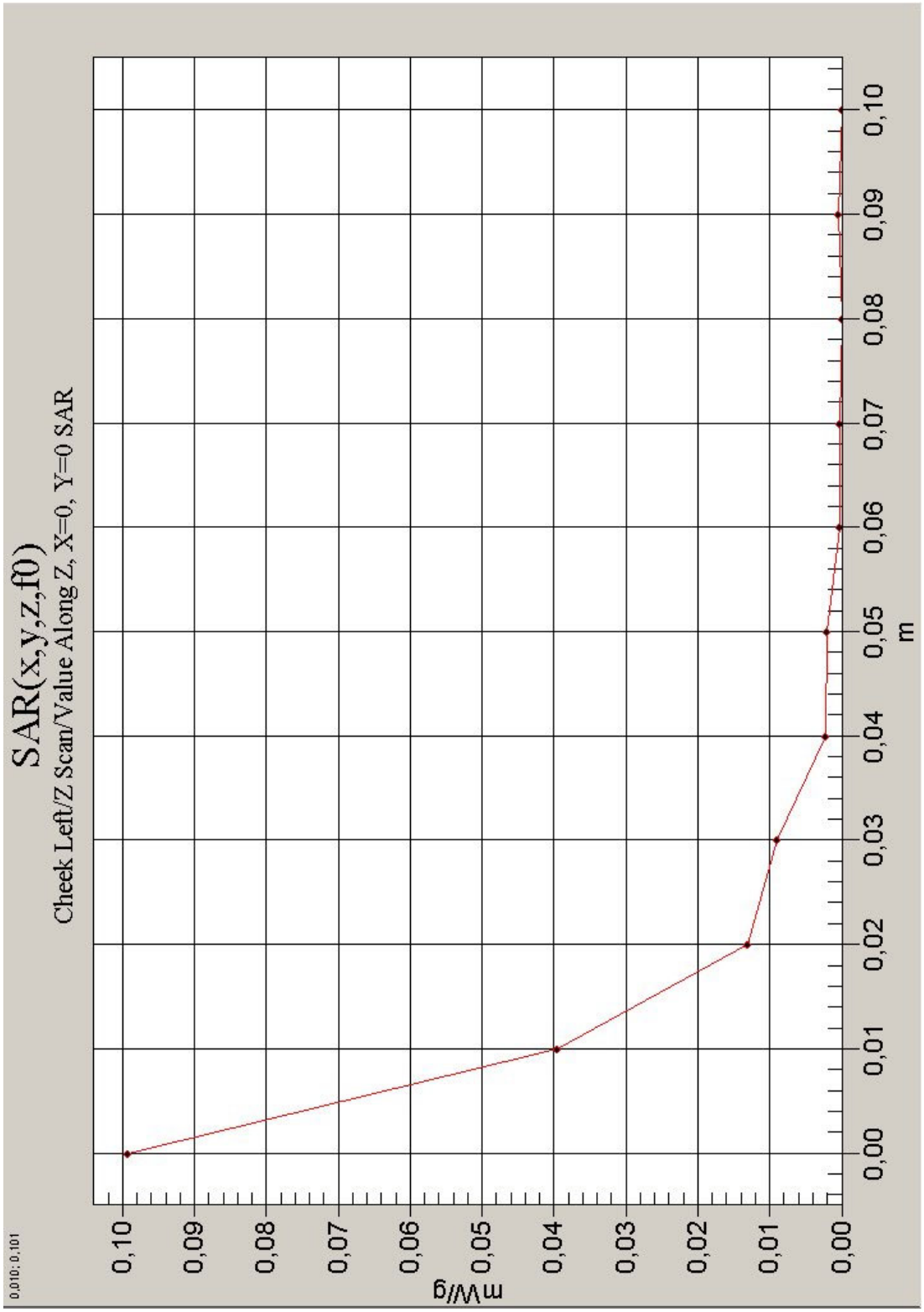

Fig. 9: SAR versus liquid depth, head: PCS 1900, channel 661, cheek position, left side of head. (14.07.2004, Ambient Temperature: 21.4° C; Liquid Temperature : 20.5° C).

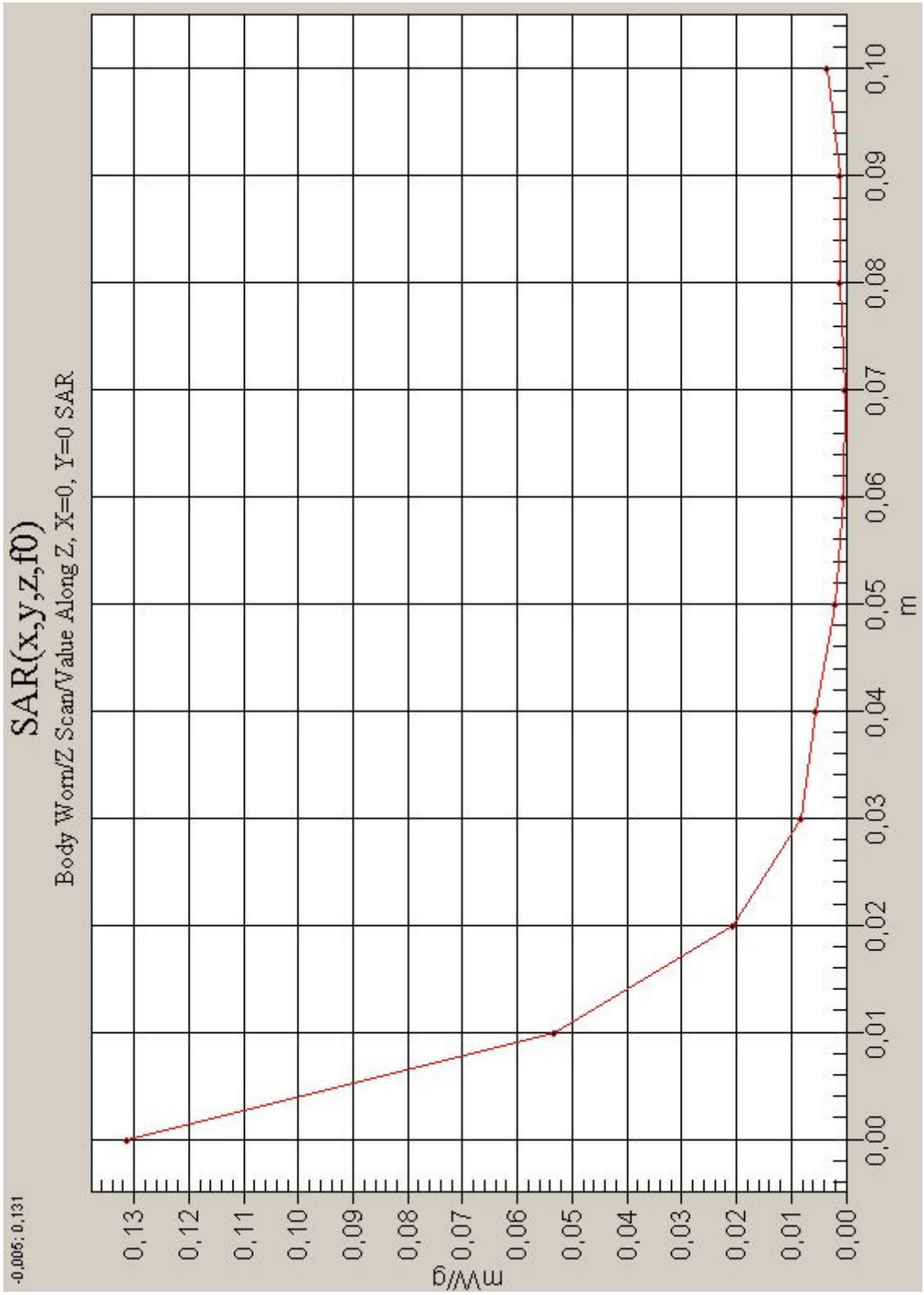

Fig. 10: SAR versus liquid depth: PCS 1900, channel 661, body worn configuration, antenna towards the phantom, 2TX (15.07.2004, Ambient Temperature: 20.9° C; Liquid Temperature : 20.4° C).