Deutscher Akkreditierungs Rat

TTI-P-G 158

Appendix for the Report

Dosimetric Assessment of the Siemens C56 (FCC ID: PWX-C56) According to the FCC Requirements

SAR Distribution Plots

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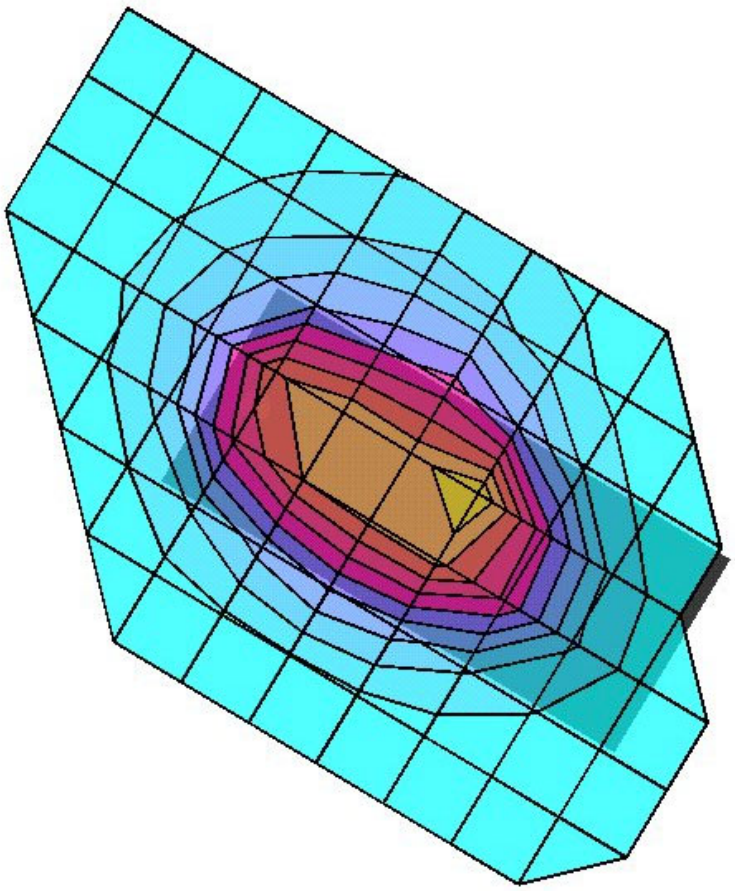
1 SAR Distribution Plots, GSM850 (Head)



Siemens C56
SAM GSM830; Left Hand
Probe: ET3DV6 - SN1579; ConvF(6.80,6.80,6.80); Crest factor: 8.0; Brain 835 MHz: σ = 0.88 mho/m ε_r = 40.6 ρ = 1.00 g/cm^3
Cube 7x7x7: Peak: 1.23 mW/g, SAR (1g): 0.762 mW/g, SAR (10g): 0.504 mW/g, (Worst-case extrapolation)
Penetration depth: 13.5 (11.3, 16.1) [mm]
Powerdrift: -0.01 dB

Fig. 1: SAR distribution, GSM850, channel 189, cheek position, left side of head.

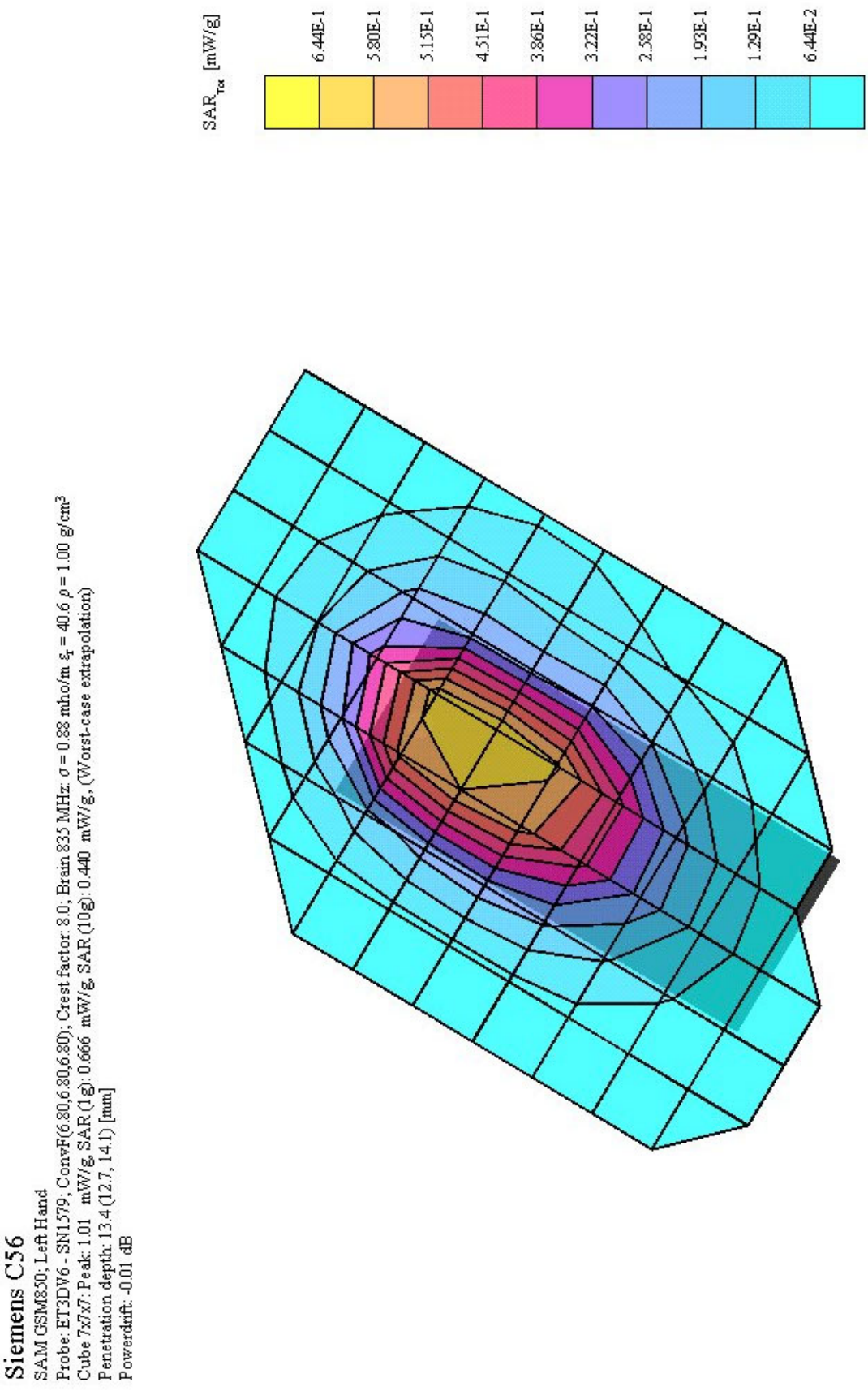


Fig. 2: SAR distribution, GSM850, channel 189, tilted position, left side of head.

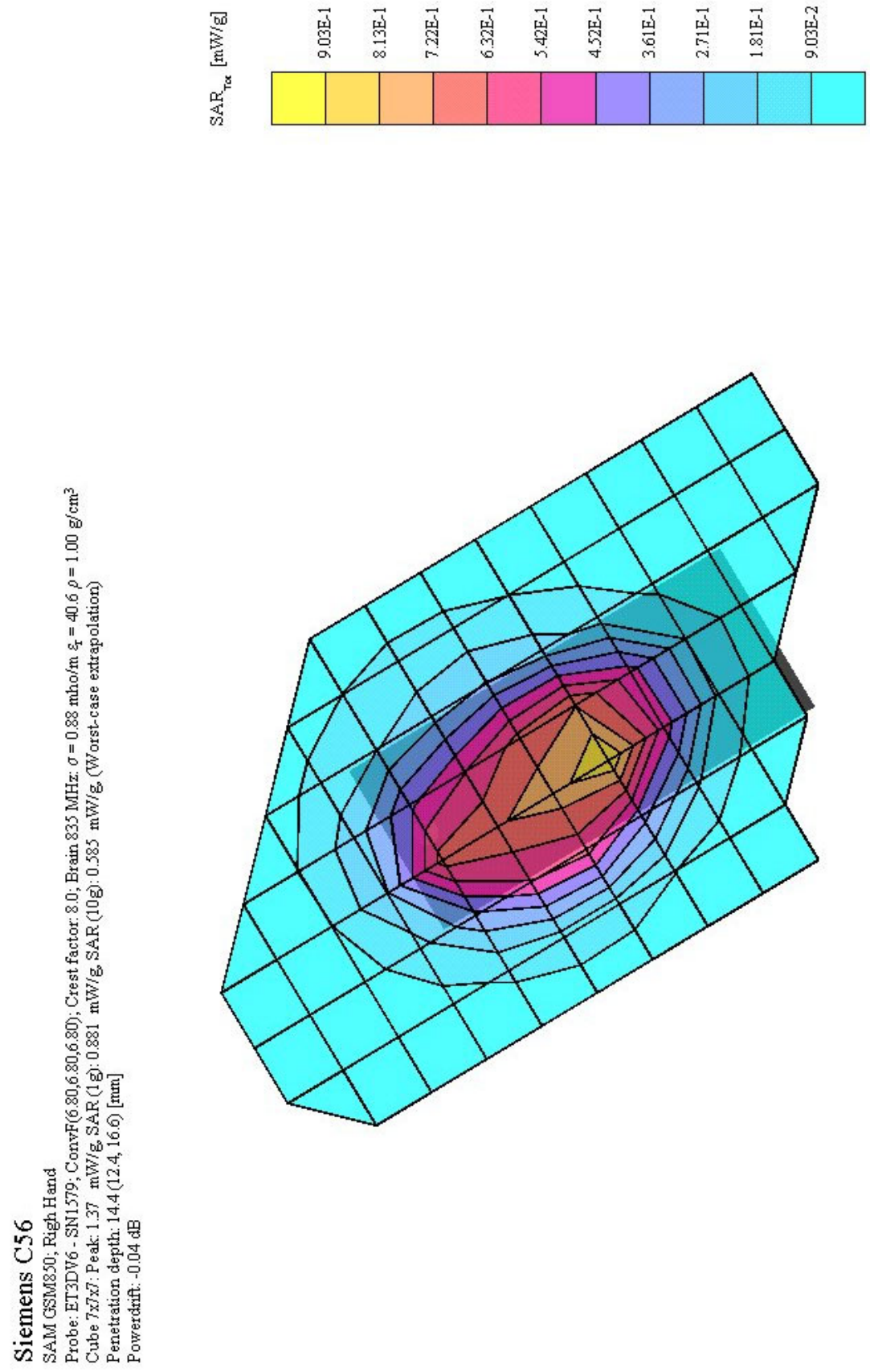


Fig. 3: Worst case SAR distribution, GSM850, channel 251, cheek position, right side of head. Since the plots are similar for this configuration, only the worst case is shown.

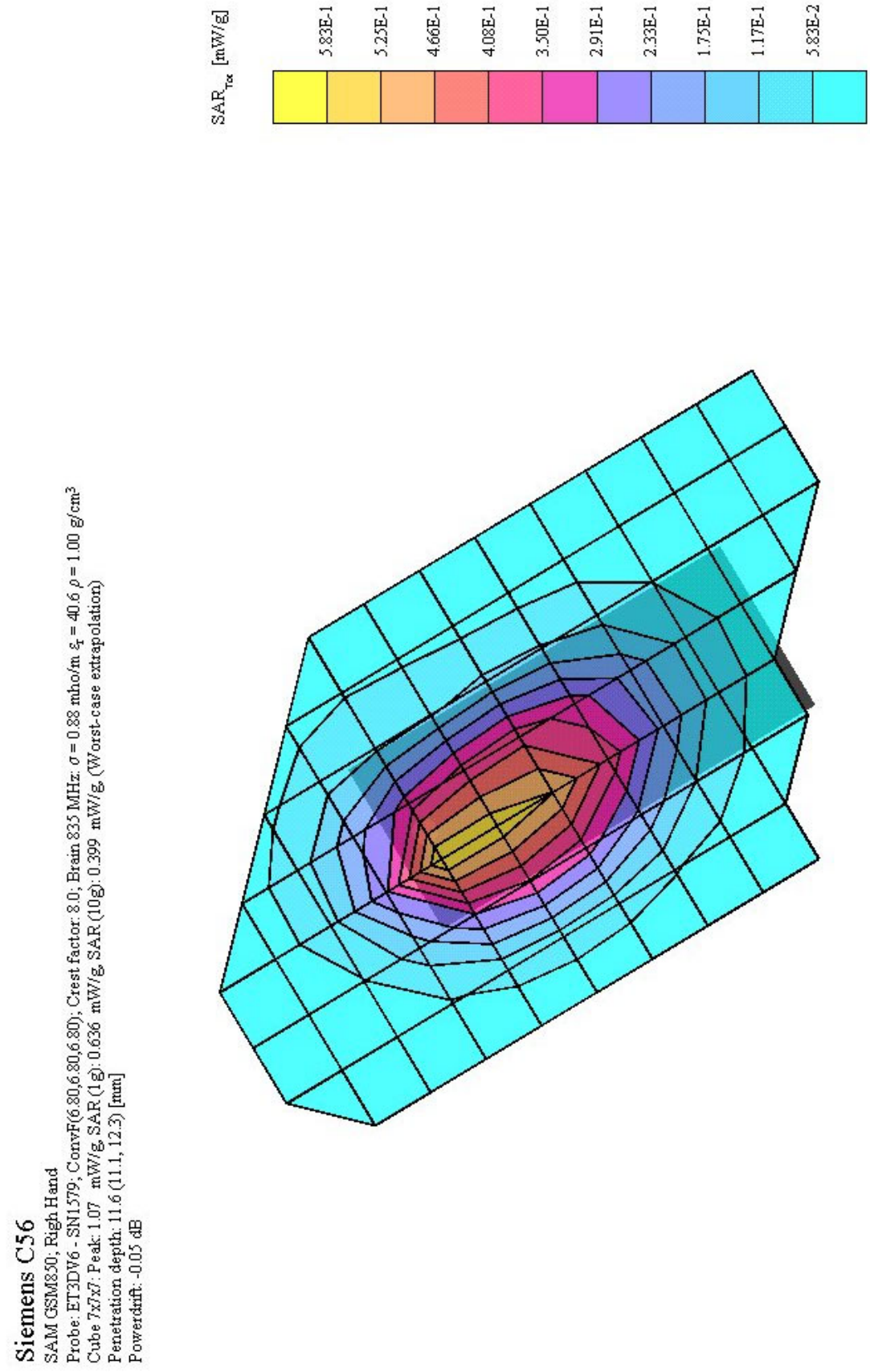
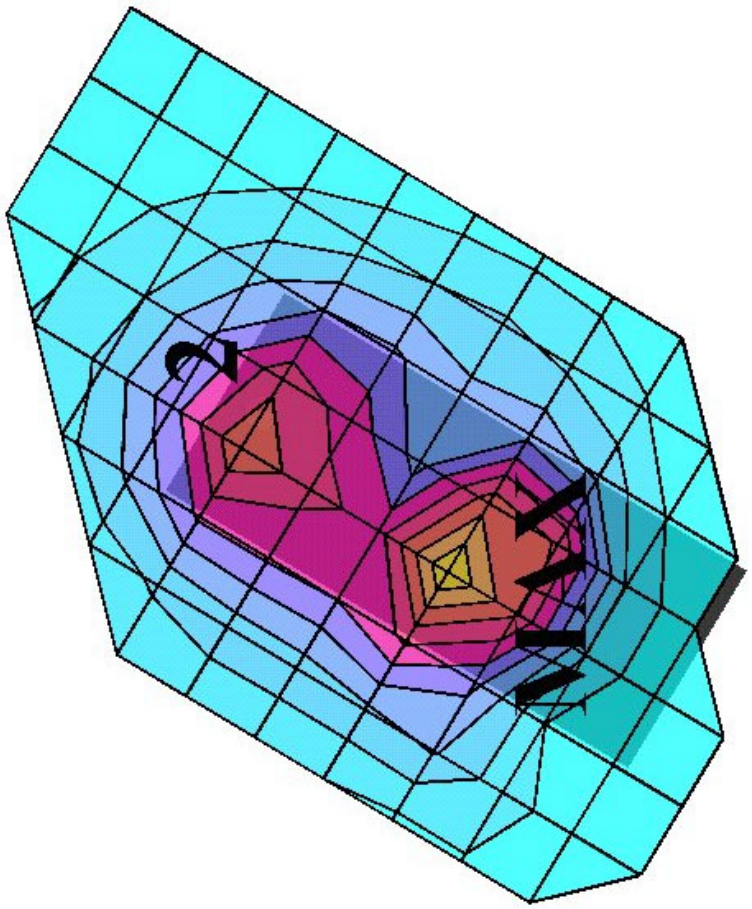


Fig. 4: SAR distribution, GSM850, channel 189, tilted position, right side of head.

2 SAR Distribution Plots, PCS1900 (Head)



Siemens C56
SAM PCS1900; Left Hand
Probe: ET3DV6 - SN1579; ConvF(5.20,5.20,5.20); Crest factor: 8.0; Brain 1900MHz: σ = 1.43 mho/m ε_r = 38.9 ρ = 1.00 g/cm^3
Cube 7x7x7: Peak: 0.304 mW/g, SAR (1g): 0.285 mW/g, SAR (10g): 0.171 mW/g, (Worst-case extrapolation)
Penetration depth: 11.2 (10.7, 11.8) [mm]
Powerdrift: -0.06 dB

Fig. 5: SAR distribution, PCS1900, channel 661, cheek position, left side of head. Cube 2: 0.217 W/kg.

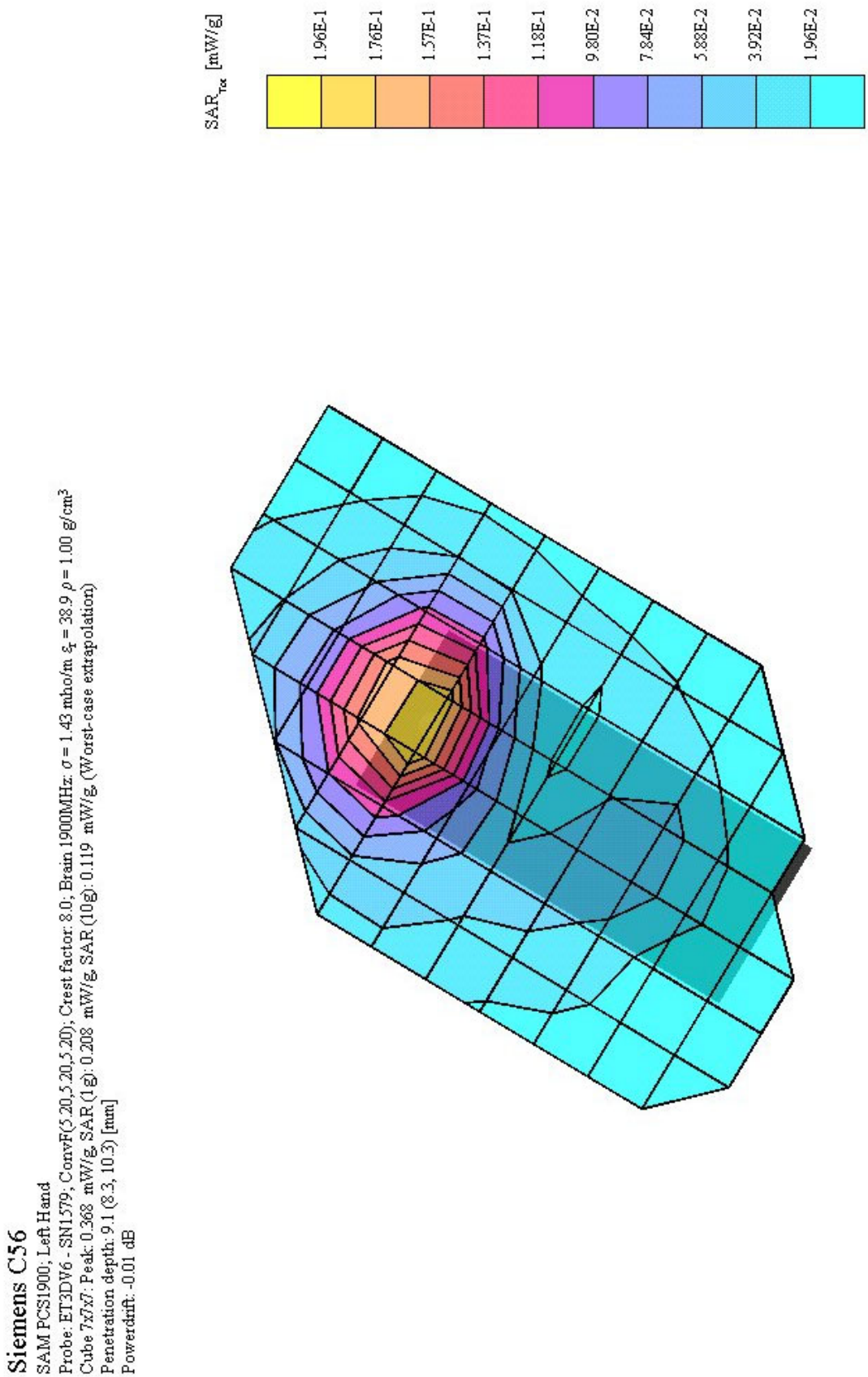


Fig. 6: SAR distribution, PCS1900, channel 661, tilted position, left side of head.

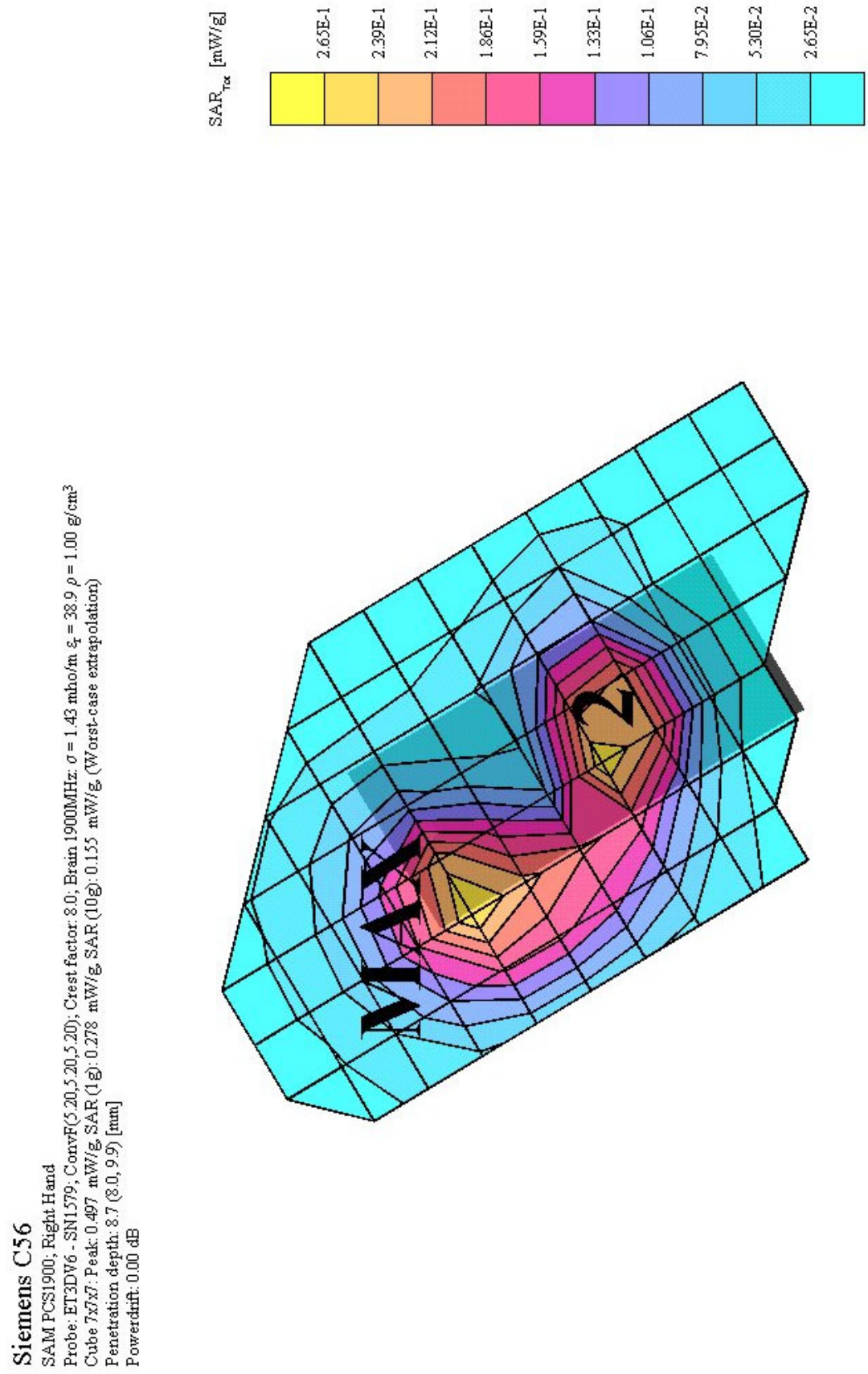


Fig. 7: SAR distribution, PCS1900, channel 661, cheek position, right side of head. Cube 2: 0.265 W/kg.

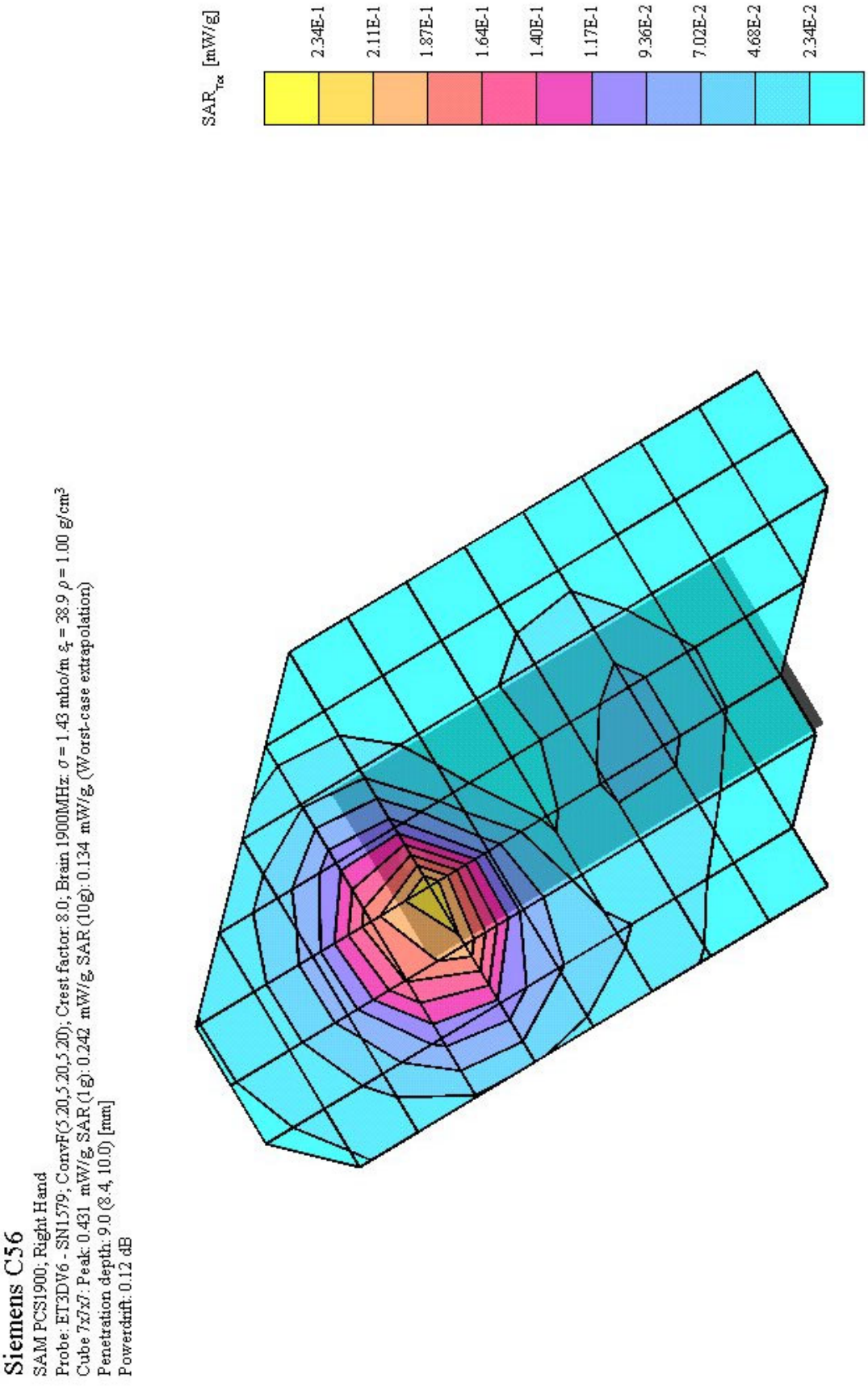


Fig. 8: SAR distribution, PCS1900, channel 661, tilted position, right side of head.

3 SAR Distribution PlotsGSM850 (Body)

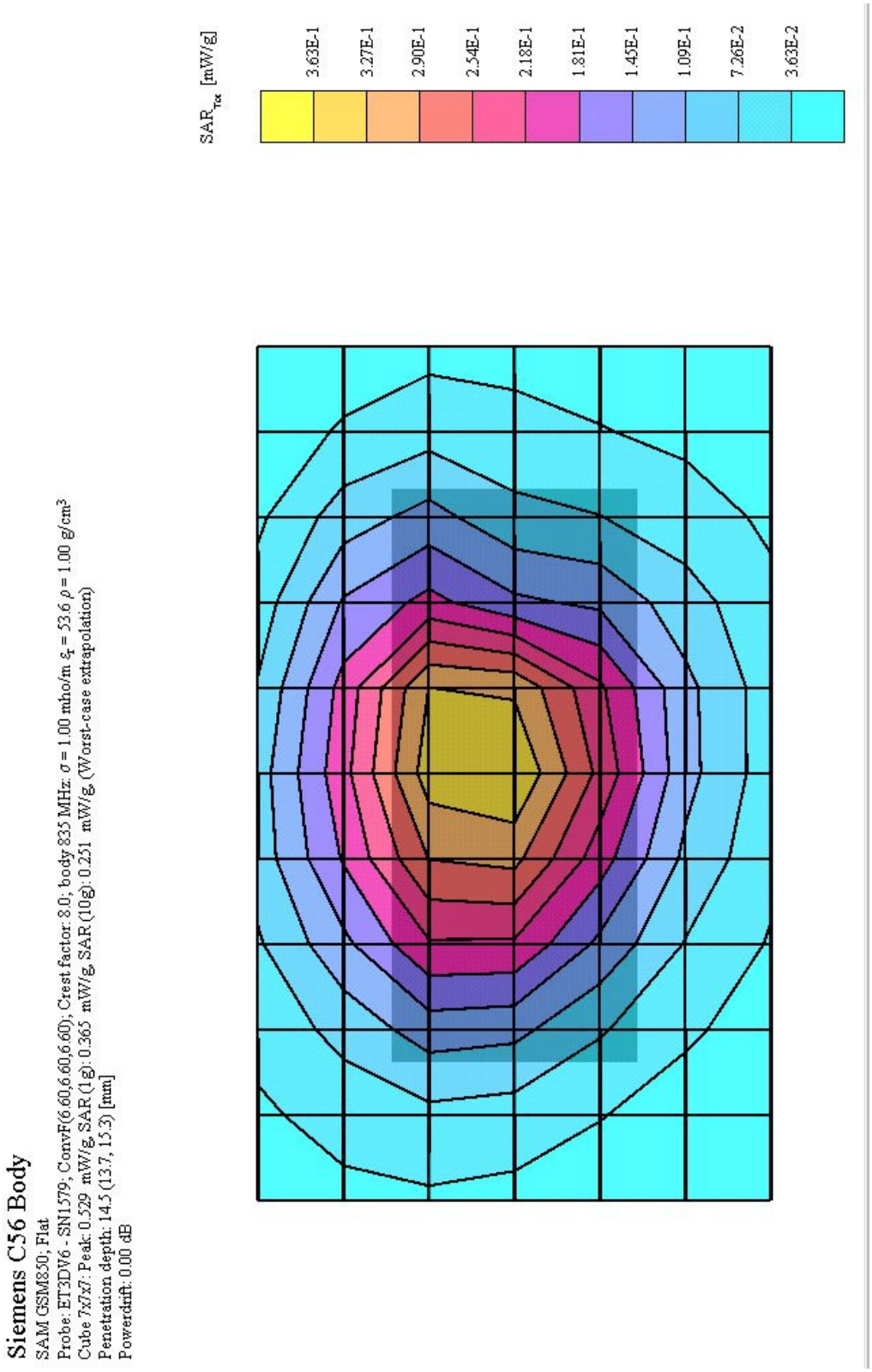


Fig. 9: Worst case SAR distribution, GSM850, channel 128, body worn configuration, Belt Clip with Headset (Talk mode, 1 TX slot). Since the plots are similar for this configuration, only the worst case is shown.

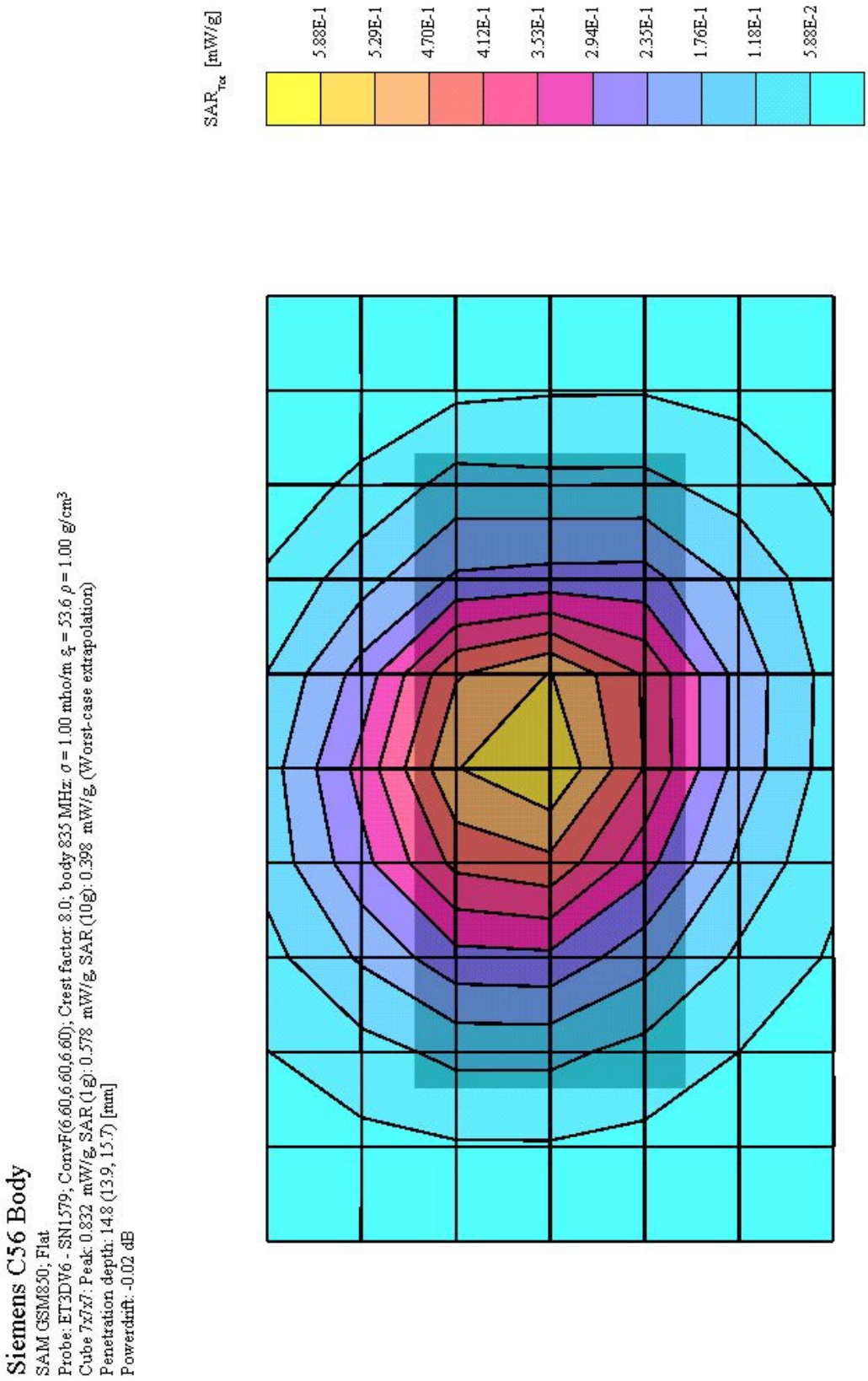
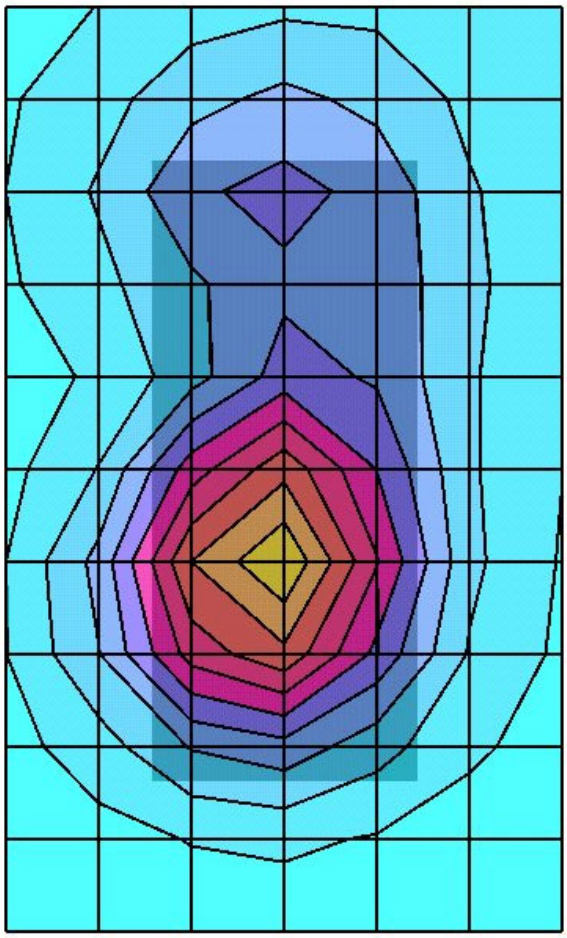


Fig. 10: Worst case SAR distribution, GSM850, channel 128, body worn configuration, Belt Clip without Headset (GPRS mode, 1 TX slot). Since the plots are similar for this configuration, only the worst case is shown.

4 SAR Distribution Plots, PCS1900 (Body)



Siemens C56 Body
SAM PCS1900; Flat
Probe: ET3DV6 - SN1579; ConvF(4.80,4.80,4.80); Crest factor: 8.0; body 1900 MHz: σ = 1.52 mho/m ε_r = 51.7 ρ = 1.00 g/cm^3
Cube 7x7x7: Peak: 0.534 mW/g, SAR (1g): 0.322 mW/g, SAR (10g): 0.198 mW/g, (Worst-case extrapolation)
Penetration depth: 11.1 (9.7, 12.9) [mm]
Powerdrift: 0.09 dB

Fig. 11: SAR distribution, PCS1900, channel 512, body worn configuration, Belt Clip with Headset (Talk mode, 1 TX slot). Since the plots are similar for this configuration, only the worst case is shown.

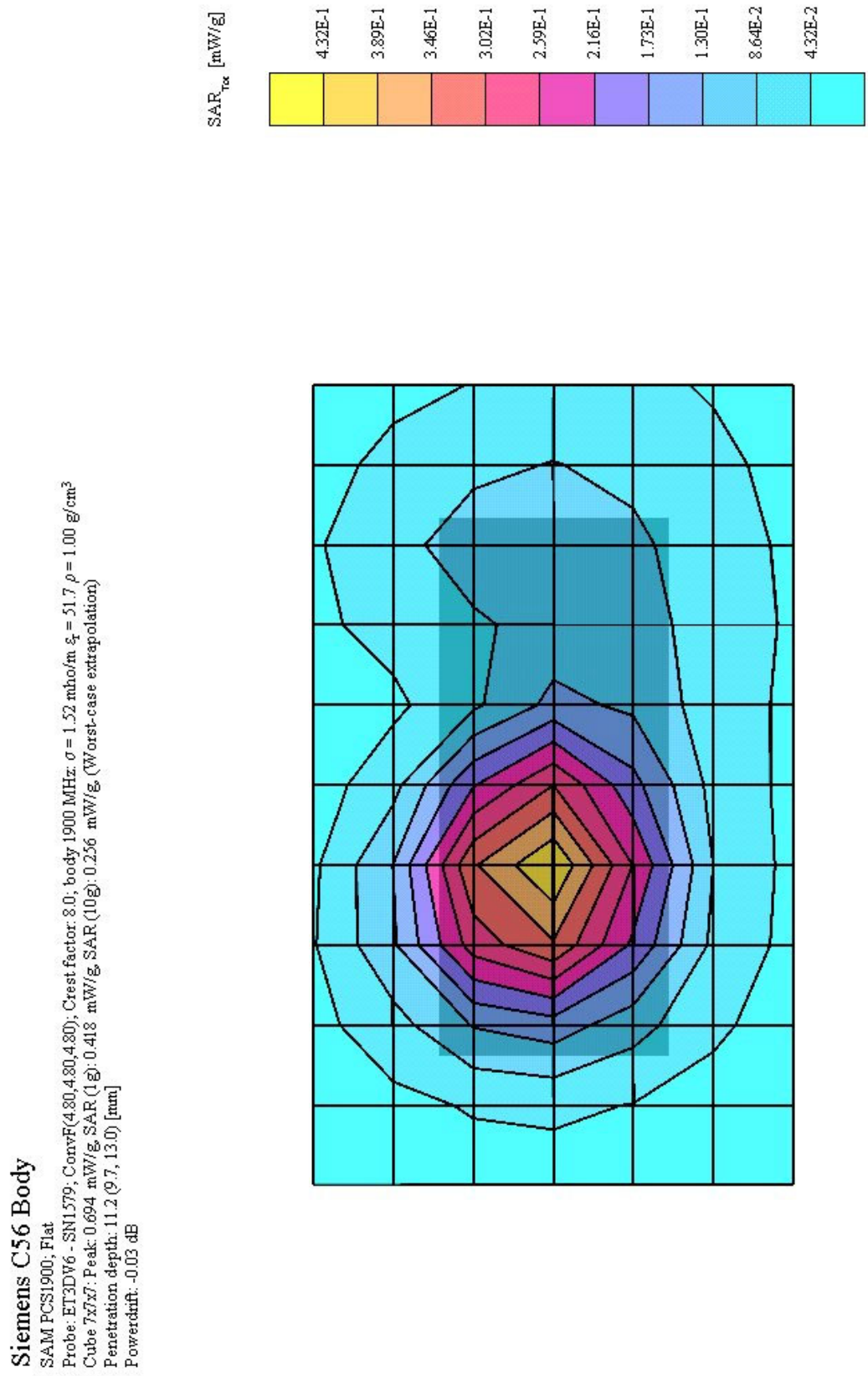


Fig. 12: SAR distribution, PCS1900, channel 512, body worn configuration, Belt Clip without Headset (GPRS mode, 1 TX slot), Since the plots are similar for this configuration, only the worst case is shown.

5 SAR z-axis scans (Validation)

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

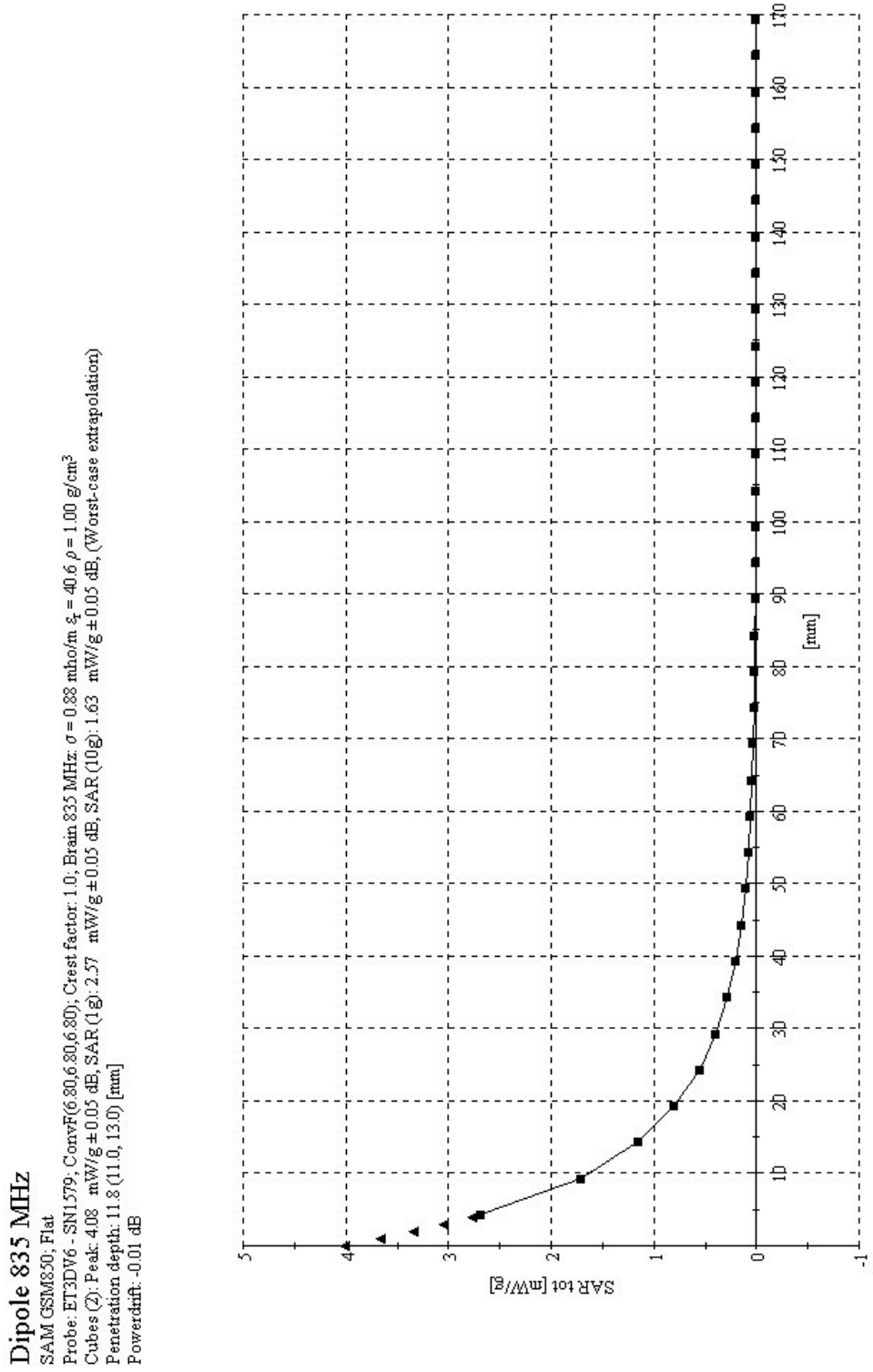


Fig. 13: SAR versus liquid depth, 835 MHz, Validation Head.

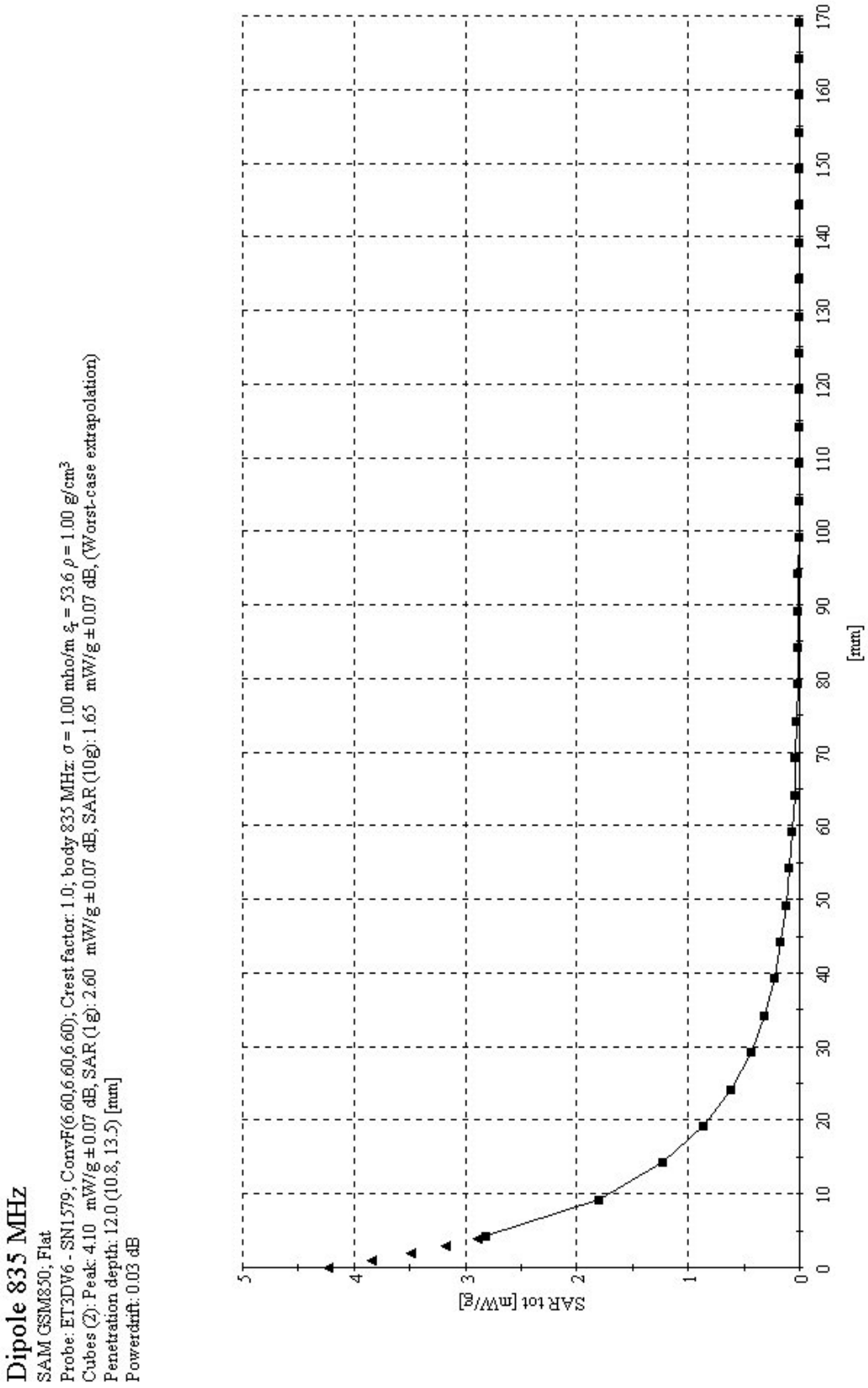


Fig. 14: SAR versus liquid depth, 835 MHz, Validation Body

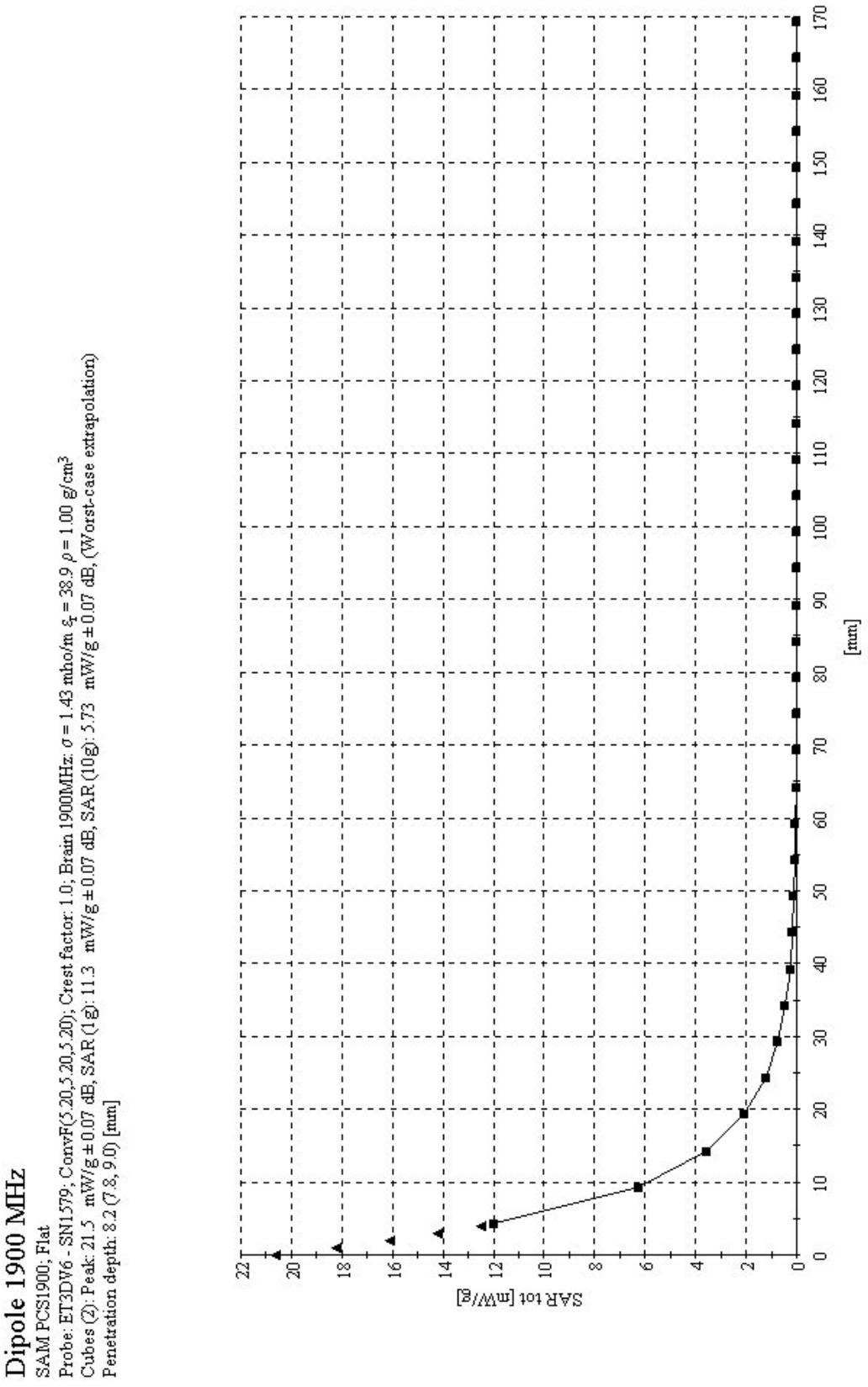


Fig. 15: SAR versus liquid depth, 1900 MHz, Validation Head.

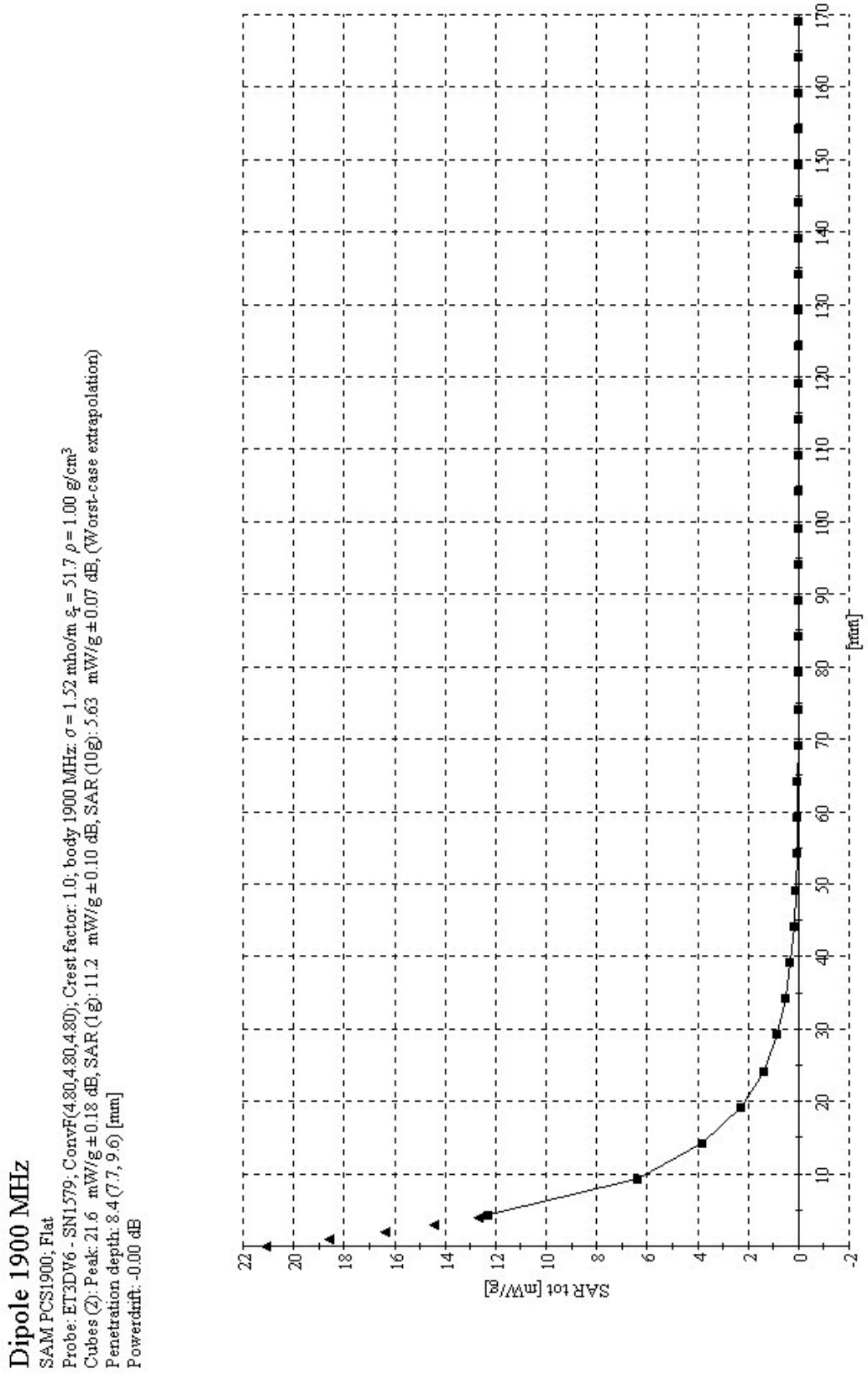


Fig. 16: SAR versus liquid depth, 1900 MHz, Validation Body

6 SAR z-axis scans (Measurements)

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

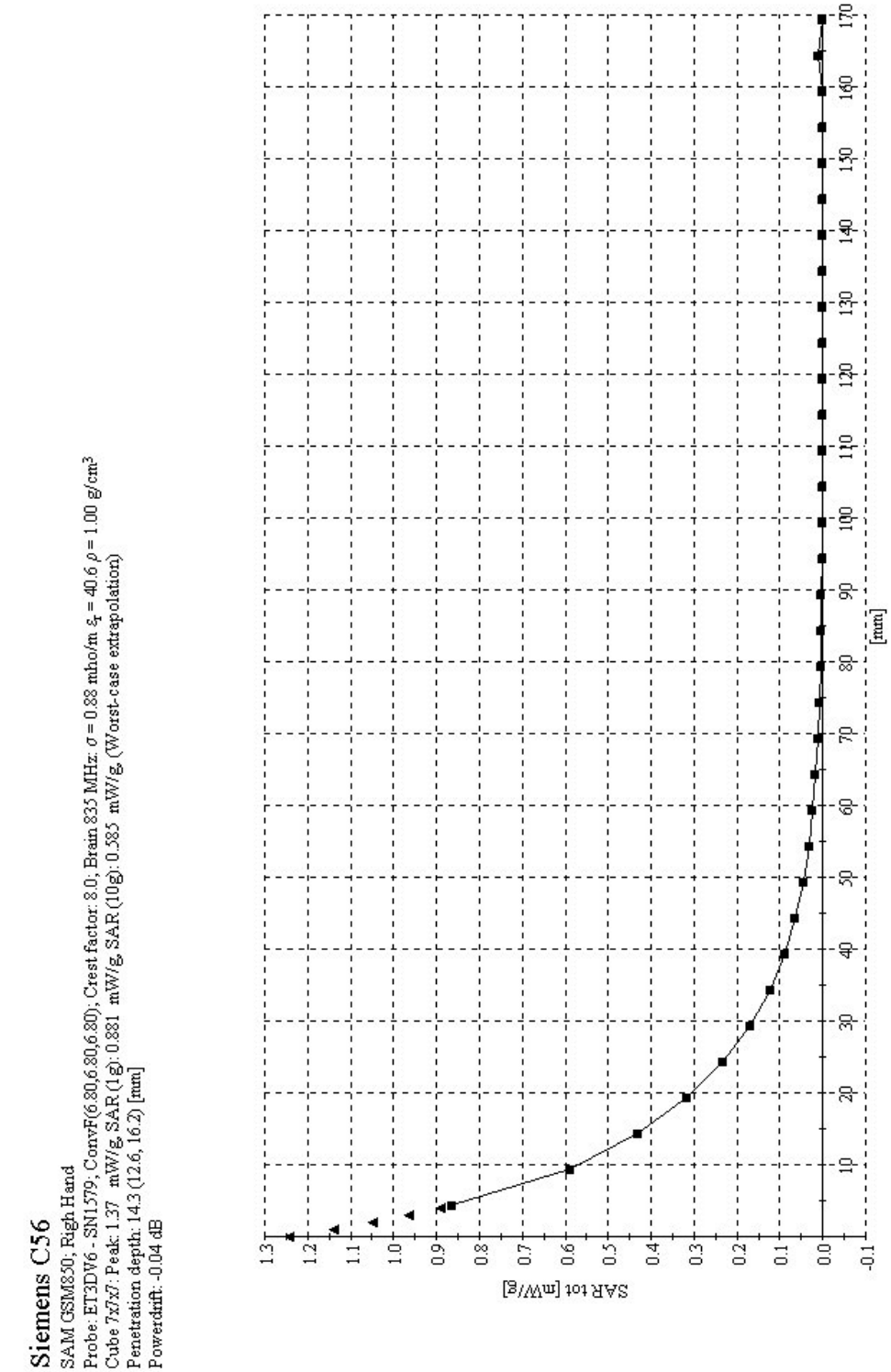


Fig. 17: SAR versus liquid depth, GSM850, channel 251, cheek position, right side of head.

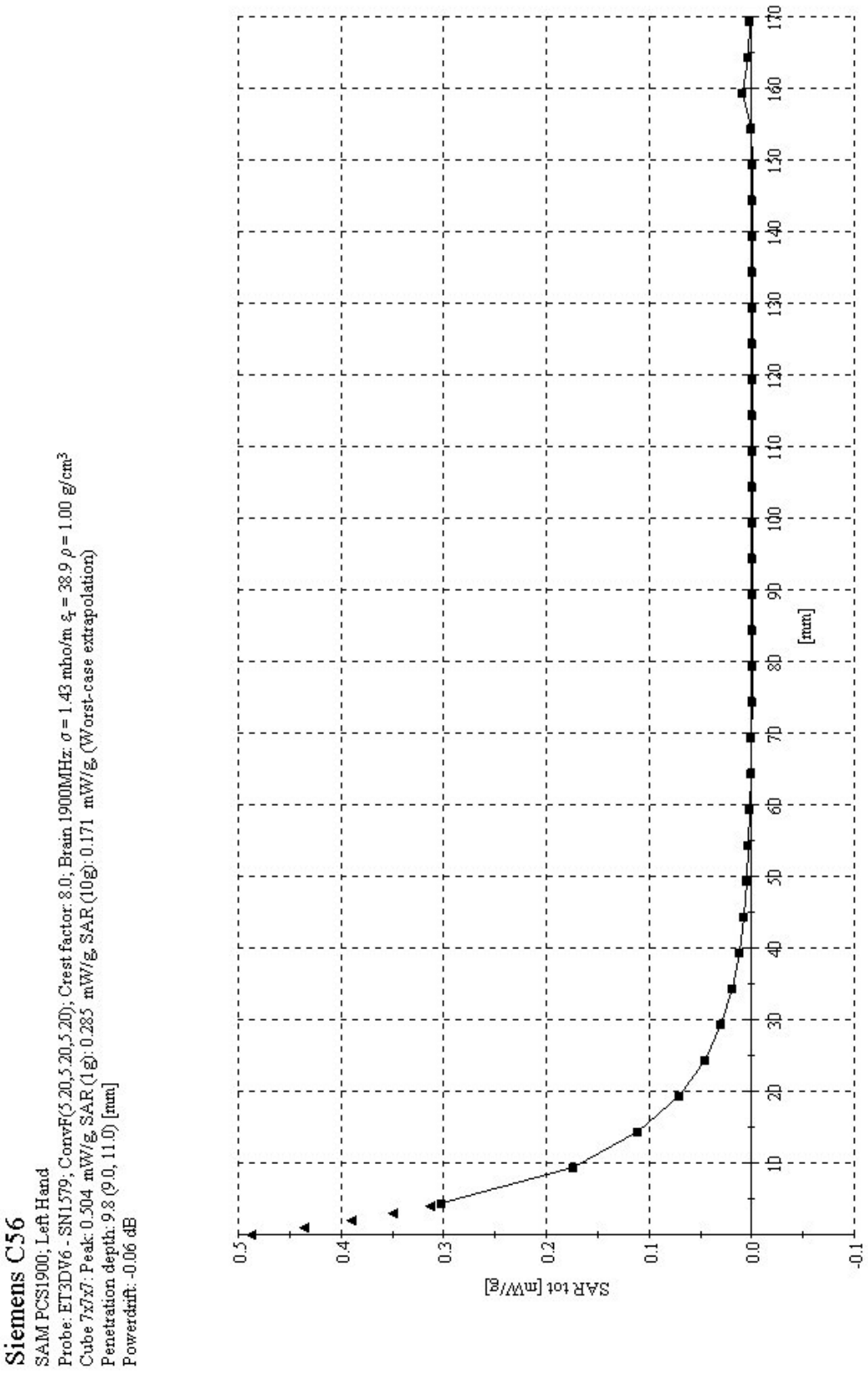


Fig. 18: SAR versus liquid depth, PCS 1900, channel 661, cheek position, left side of head.

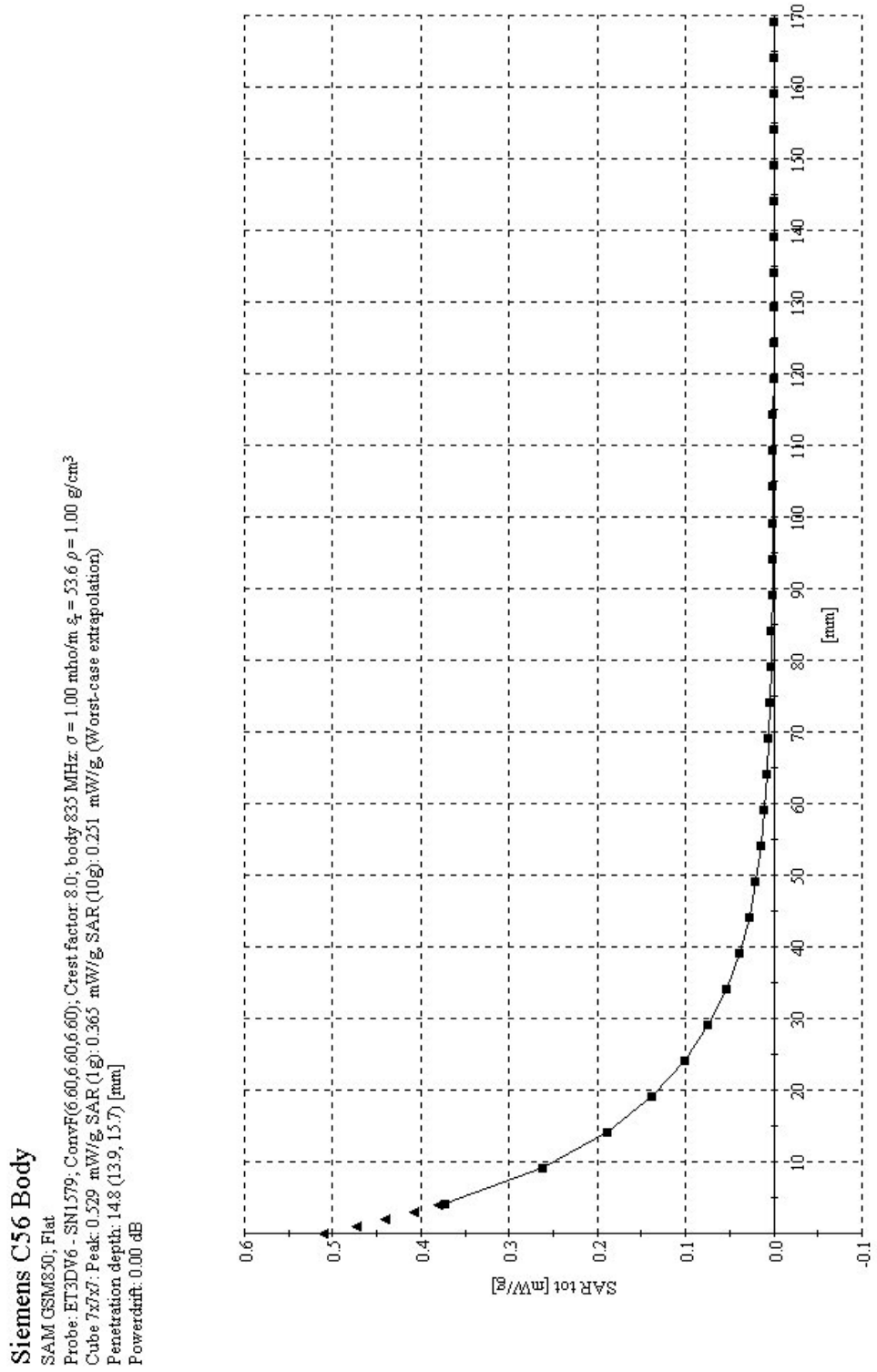


Fig. 19: SAR versus liquid depth, GSM850, channel 128, body worn configuration, Belt Clip with Headset (Talk mode, 1 TX slot).

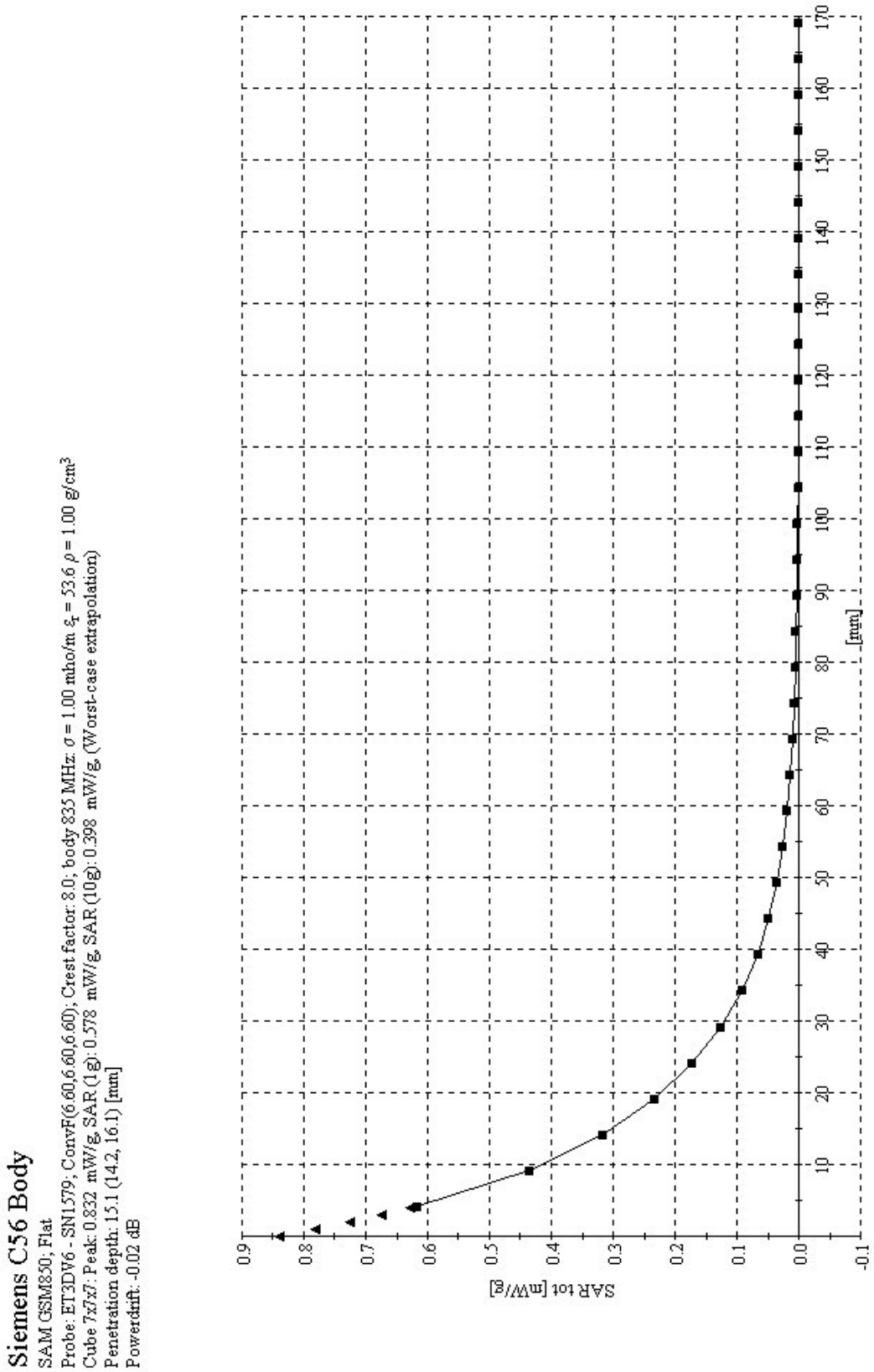


Fig. 20: SAR versus liquid depth, GSM850, channel 128, body worn configuration, Belt Clip without Headset (GPRS mode, 1 TX slot).

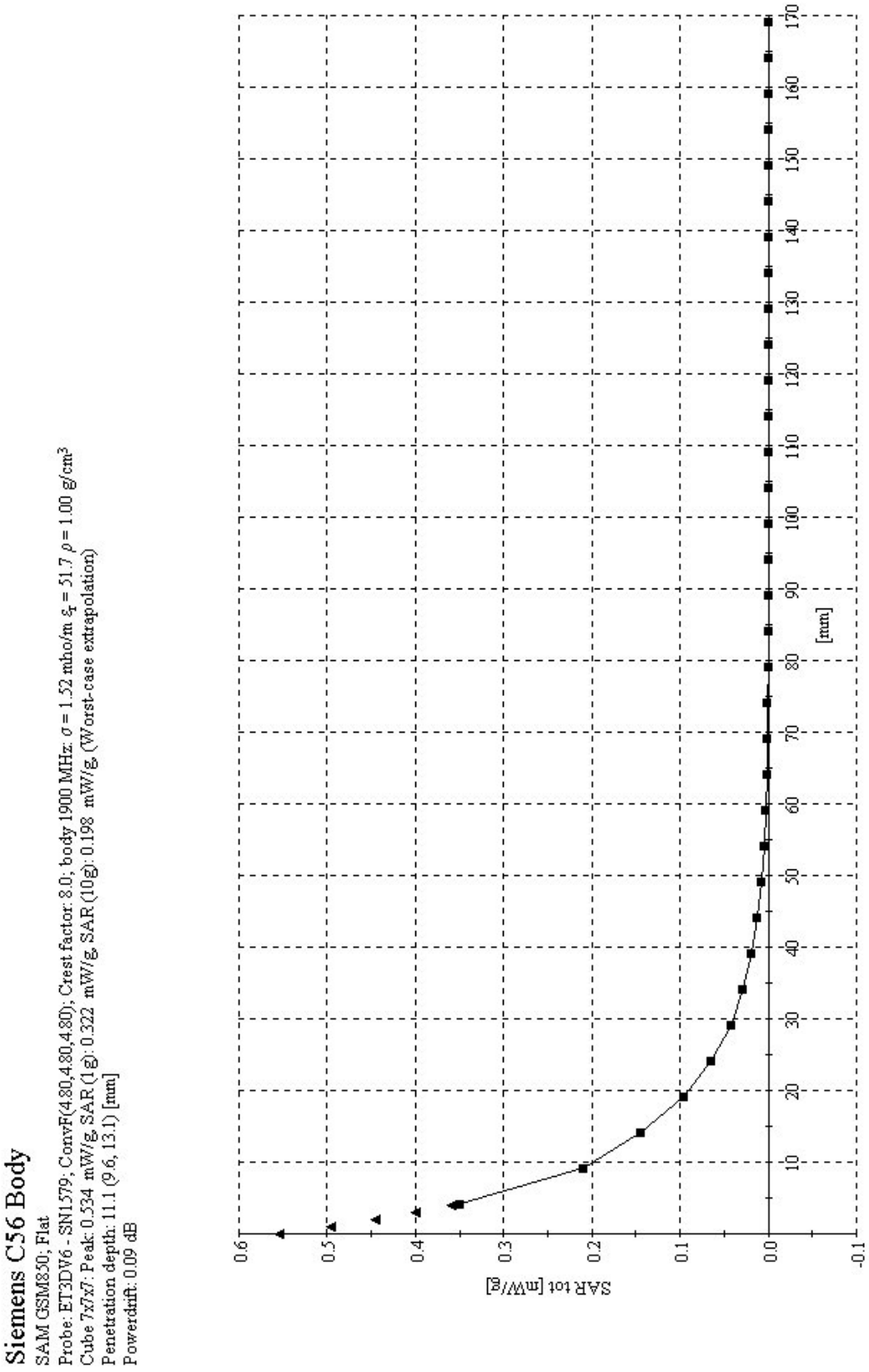


Fig. 21: SAR versus liquid depth, PCS 1900, channel 512, body worn configuration, Belt Clip with Headset (Talk mode, 1 TX slot).

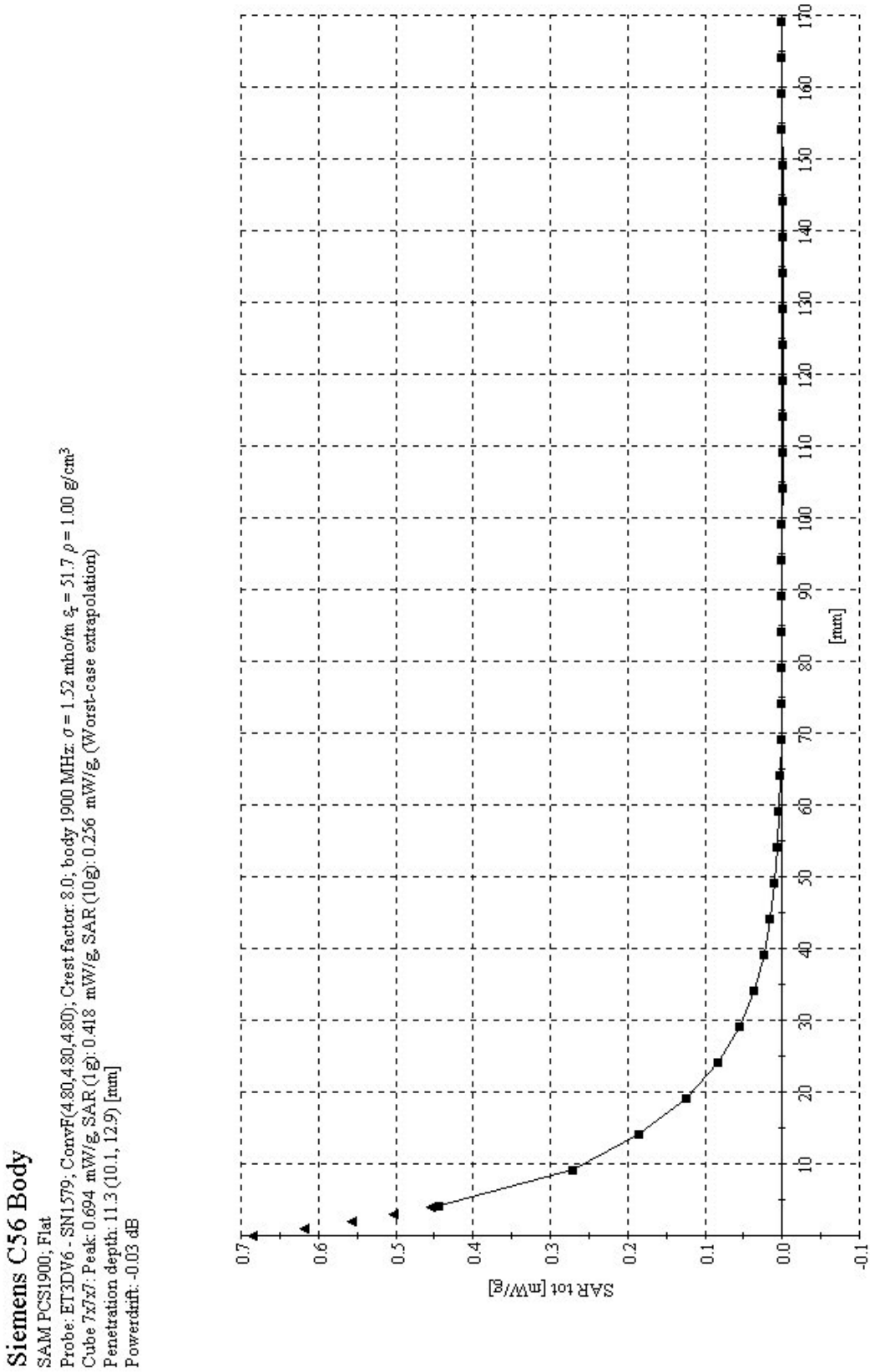


Fig. 22: SAR versus liquid depth, PCS 1900, channel 512, body worn configuration, Belt Clip without Headset (GPRS mode, 1 TX slot).