
Appendix for the Report

Dosimetric Assessment of the Siemens S-46 (FCC ID: PWX-S46) According to the FCC Requirements

SAR Distribution Plots

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The test results only relate to the items tested.
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1 SAR Distribution Plots, Test side ambient conditions.

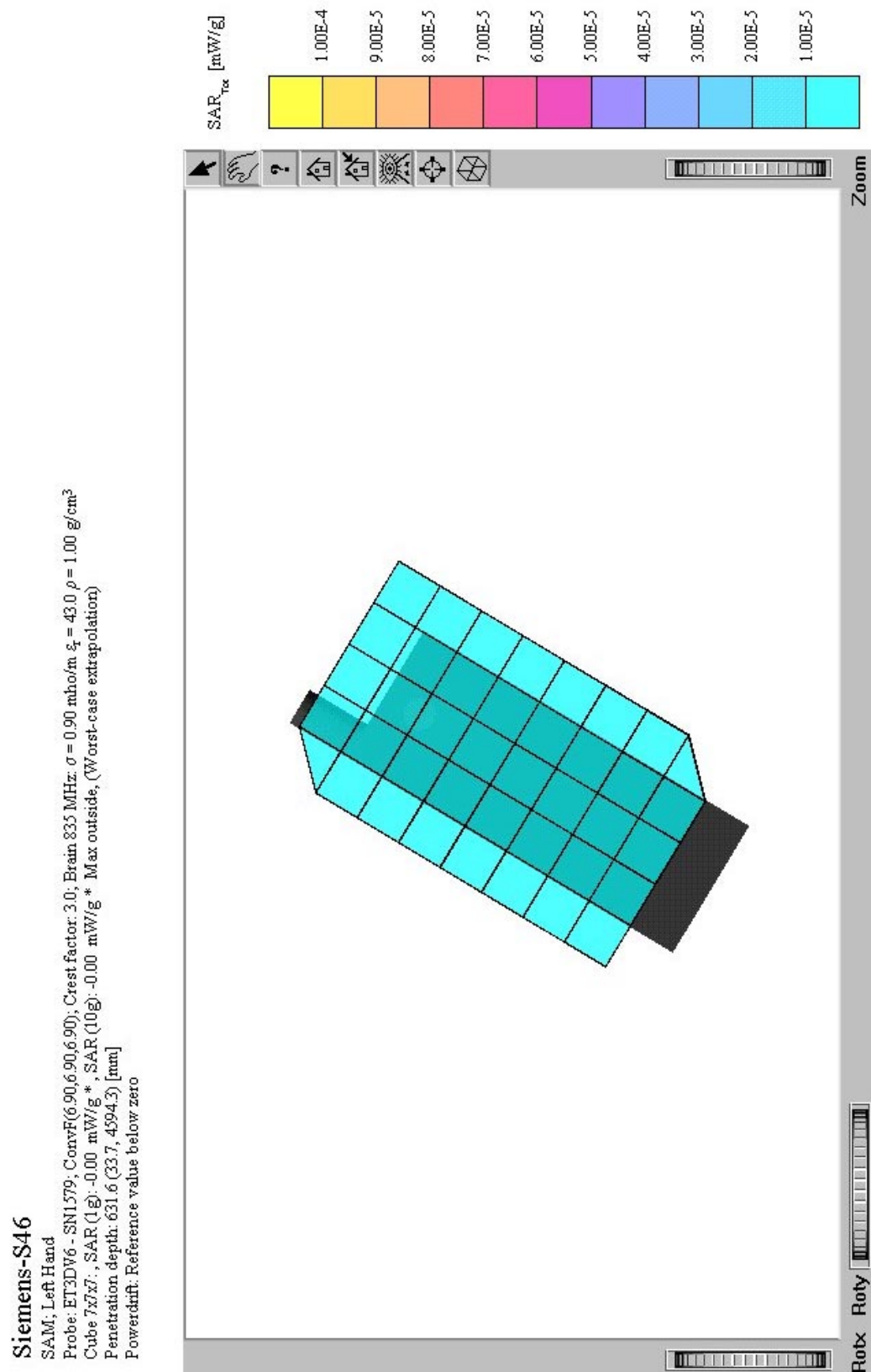


Fig. 1: Test side ambient measurements, 800 MHz, head position.

Siemens-S46

SAM; Flat
Probe: ET3DV6 - SN1579; ConvF(6.60,6.60); Crest factor: 3.0; body 835 MHz; $\sigma = 0.99$ mho/m $\epsilon_r = 55.1$ $\rho = 1.00$ g/cm³
Cube 7x7x7; SAR(1g): -0.00 mW/g *, SAR(10g): -0.00 mW/g * Max outside, (Worst-case extrapolation)
Penetration depth: 1426.8 (38.3, 12385.4) [mm]
Powerdrift: Reference value below zero

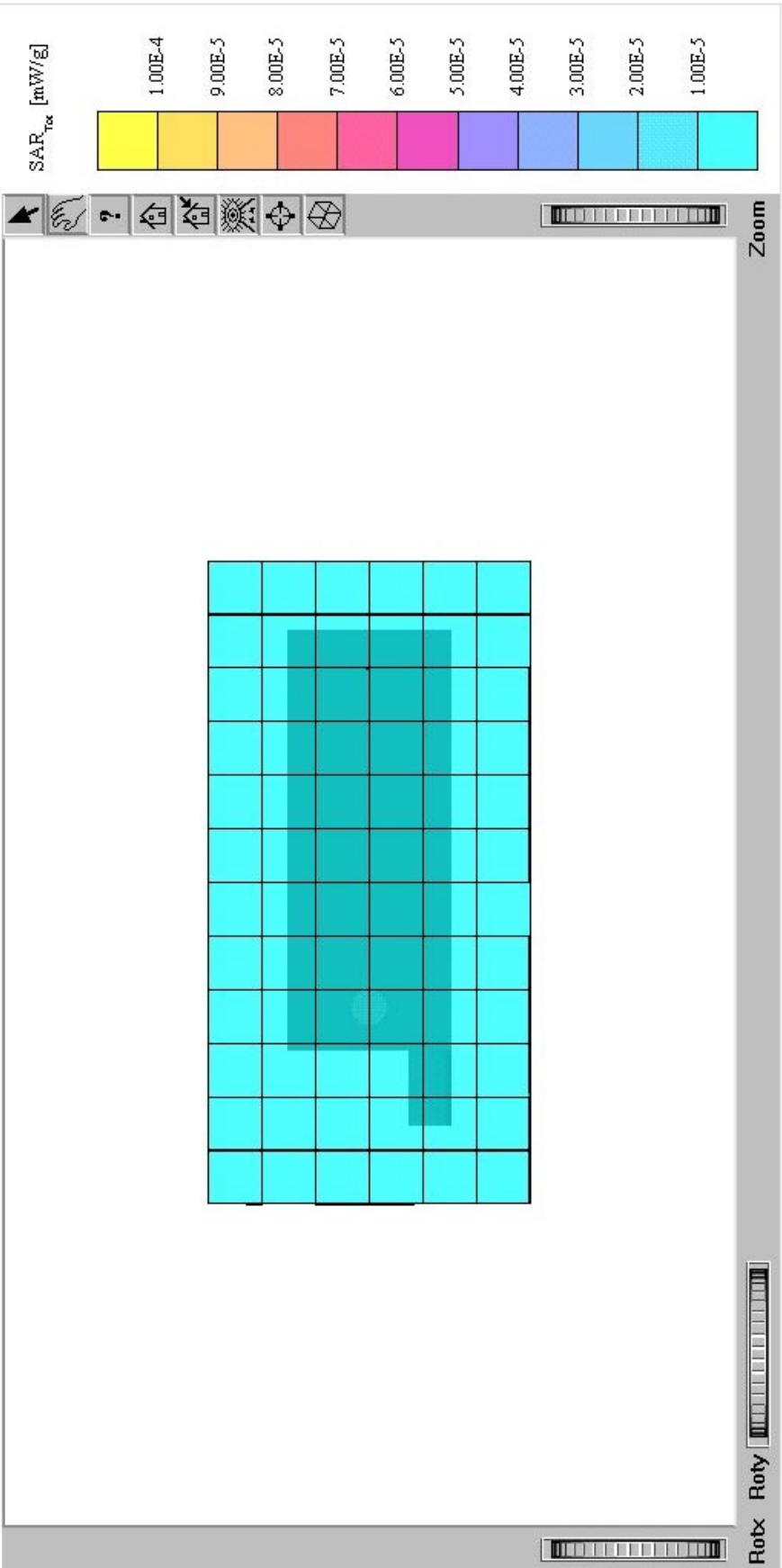


Fig. 2: Test side ambient measurements, 800 MHz, body worn position.

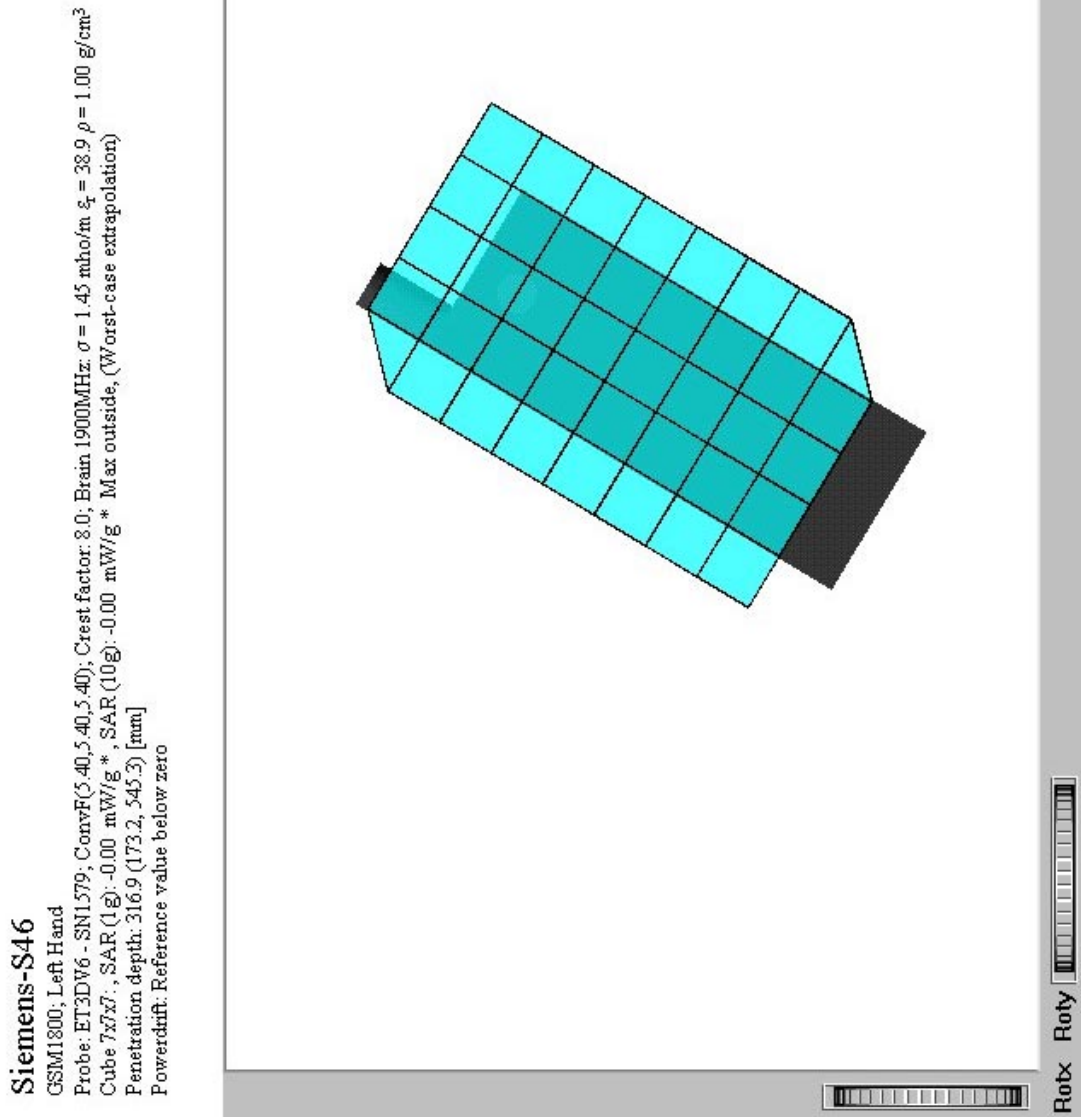


Fig. 3: Test side ambient measurements, 1900 MHz, head position.

Siemens-S46

GSM1800, Flat

Probe: ET3DW6 - SN1579; ConvF(4.90,4.90,4.90); Crest factor: 8.0; body 1900 MHz: $\sigma = 1.57$ nhol/m $\epsilon_r = 53.1$ $\rho = 1.00$ g/cm³

Cube 7x7x7; SAR(1g): -0.00 mW/g * SAR(10g): -0.00 mW/g * Max outside, (Worst-case extrapolation)

Penetration depth: 463.5 (49.5, 1849.9) [mm]

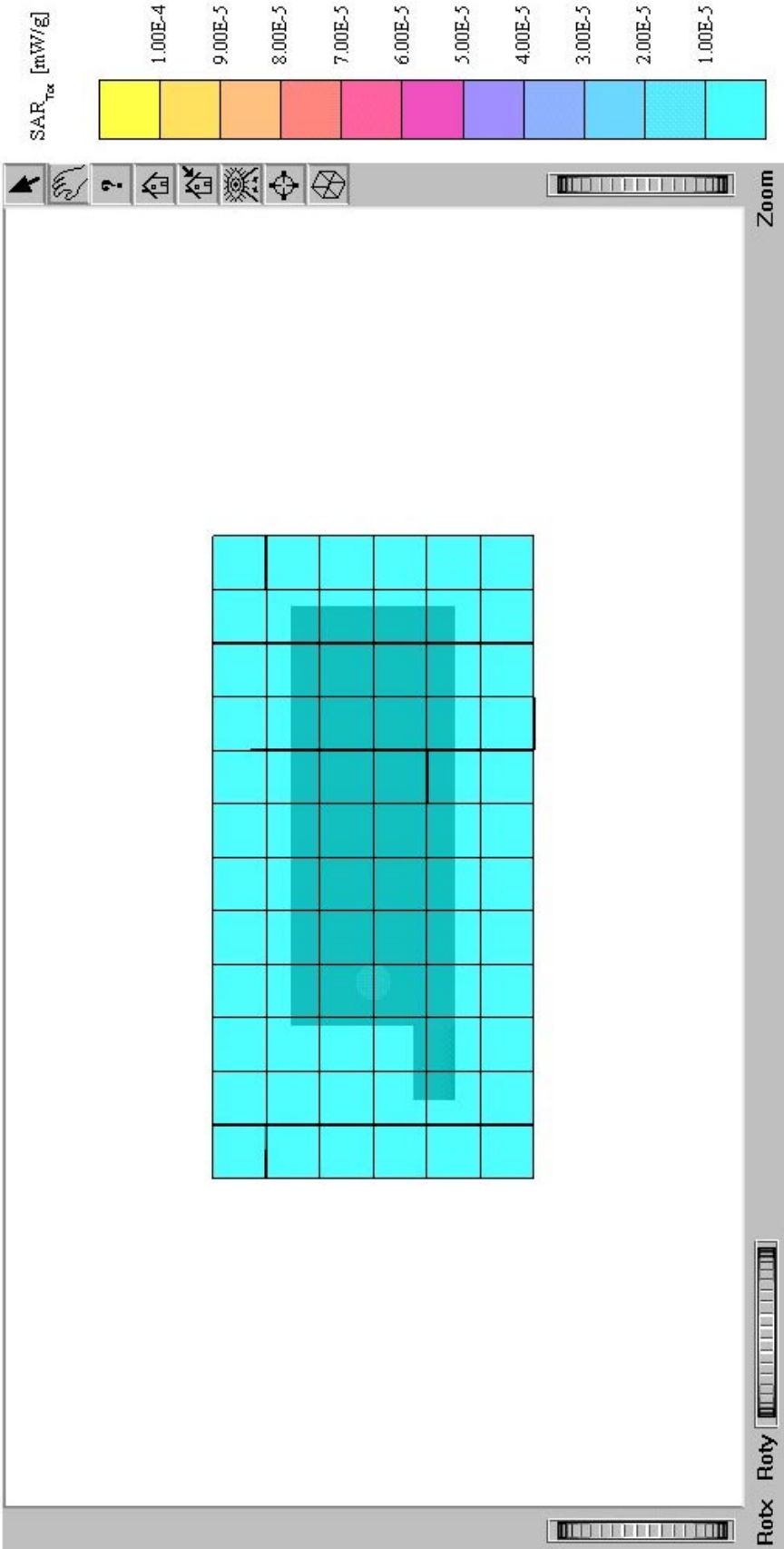


Fig. 4: Test side ambient measurements, 1900MHz, body worn position.

2 SAR Distribution Plots, TDMA 800

Since the SAR distribution is similar for the different channels, only the worst case plots were shown for the different positions.

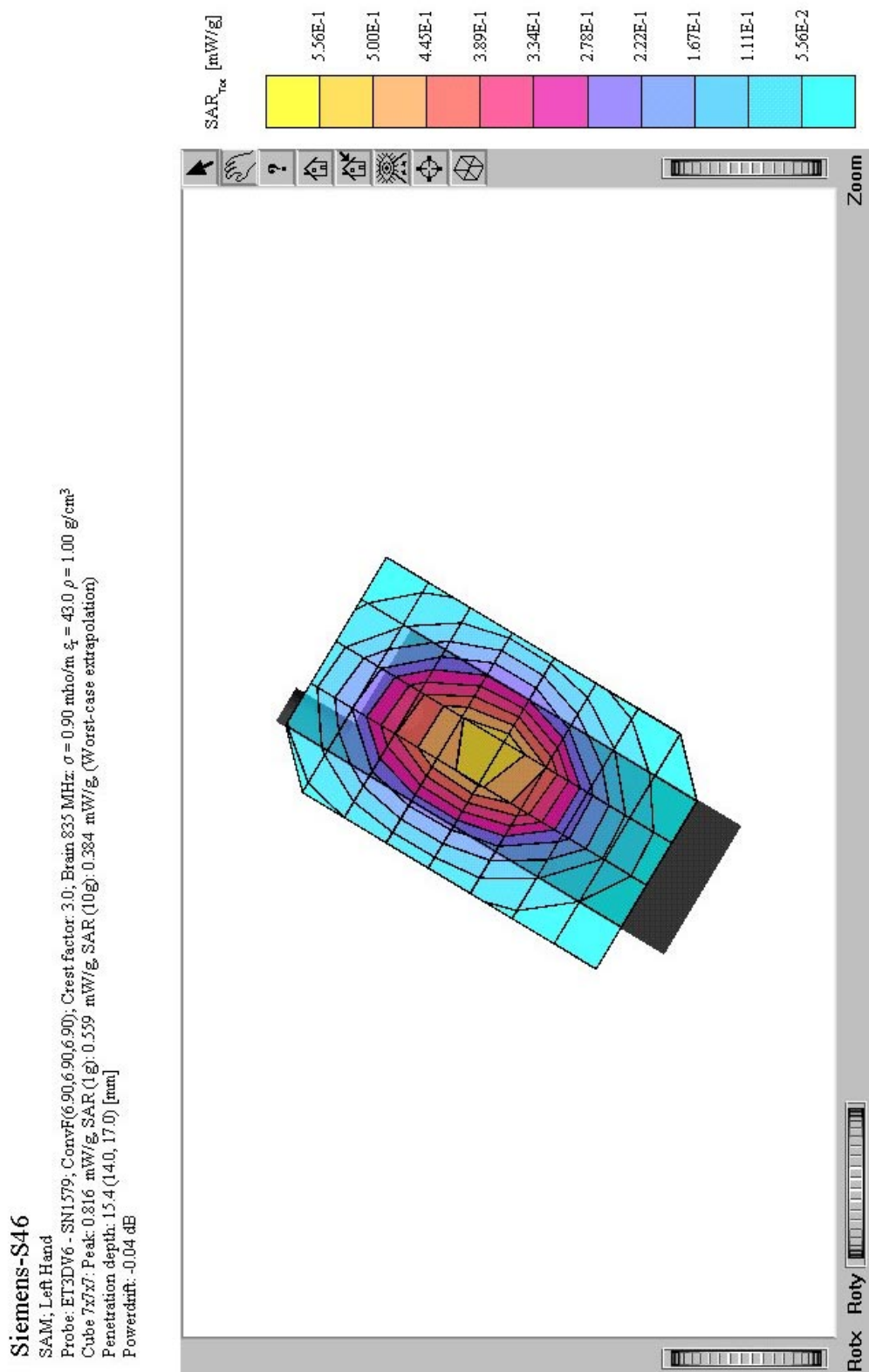


Fig. 5: SAR distribution, TDMA 800, channel 383, cheek position, left side.

Siemens-S46

SAM; Left Hand

Probe: ET3DV6 - SN1579; ConvF(690,690,690); Crest factor: 3.0; Brain 835 MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 43.0$ $\rho = 1.00$ g/cm³

Cube 7x7x7; Peak: 0.540 mW/g; SAR (1g): 0.335 mW/g; SAR (10g): 0.222 mW/g * Max outside, (Worst-case extrapolation)

Penetration depth: 12.4 (11.2, 13.8) [mm]

Powerdrift: 0.01 dB

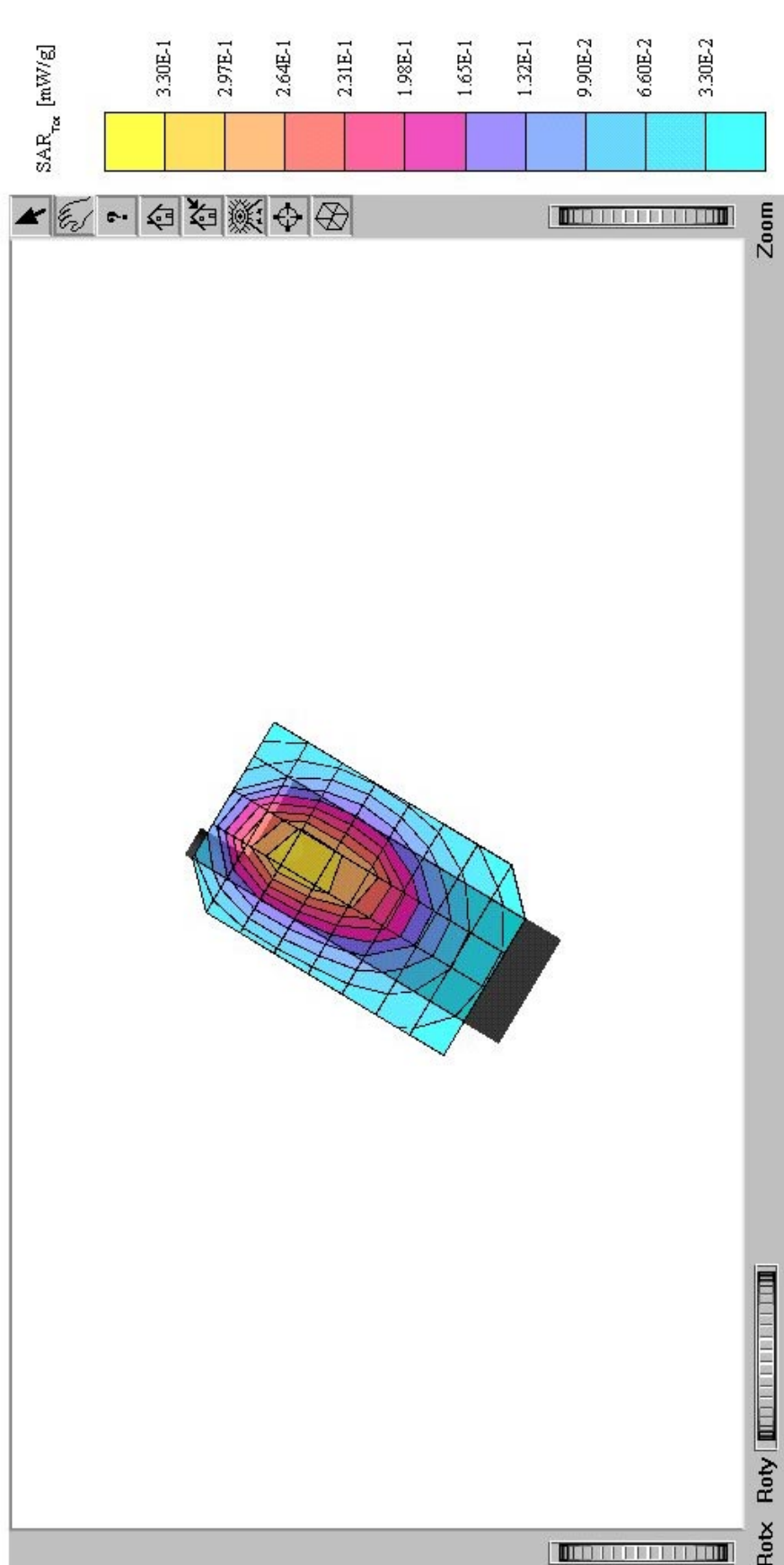


Fig. 6: SAR distribution, TDMA 800, channel 383, tilted position, left side.

Siemens-S46

SAM, Right Hand

Probe: ET3DW6 - SN1579; ConvF(6.90,6.90,6.90); Crest factor: 3.0; Brain 835 MHz; $\sigma = 0.90$ mho/m $\epsilon_r = 43.0$ $\rho = 1.00$ g/cm³

Cube 7x7x7: Peak: 0.912 mW/g, SAR (1g): 0.622 mW/g, SAR (10g): 0.427 mW/g (Worst-case extrapolation)

Penetration depth: 15.2 (13.7, 16.9) [mm]

Powerdft: -0.04 dB

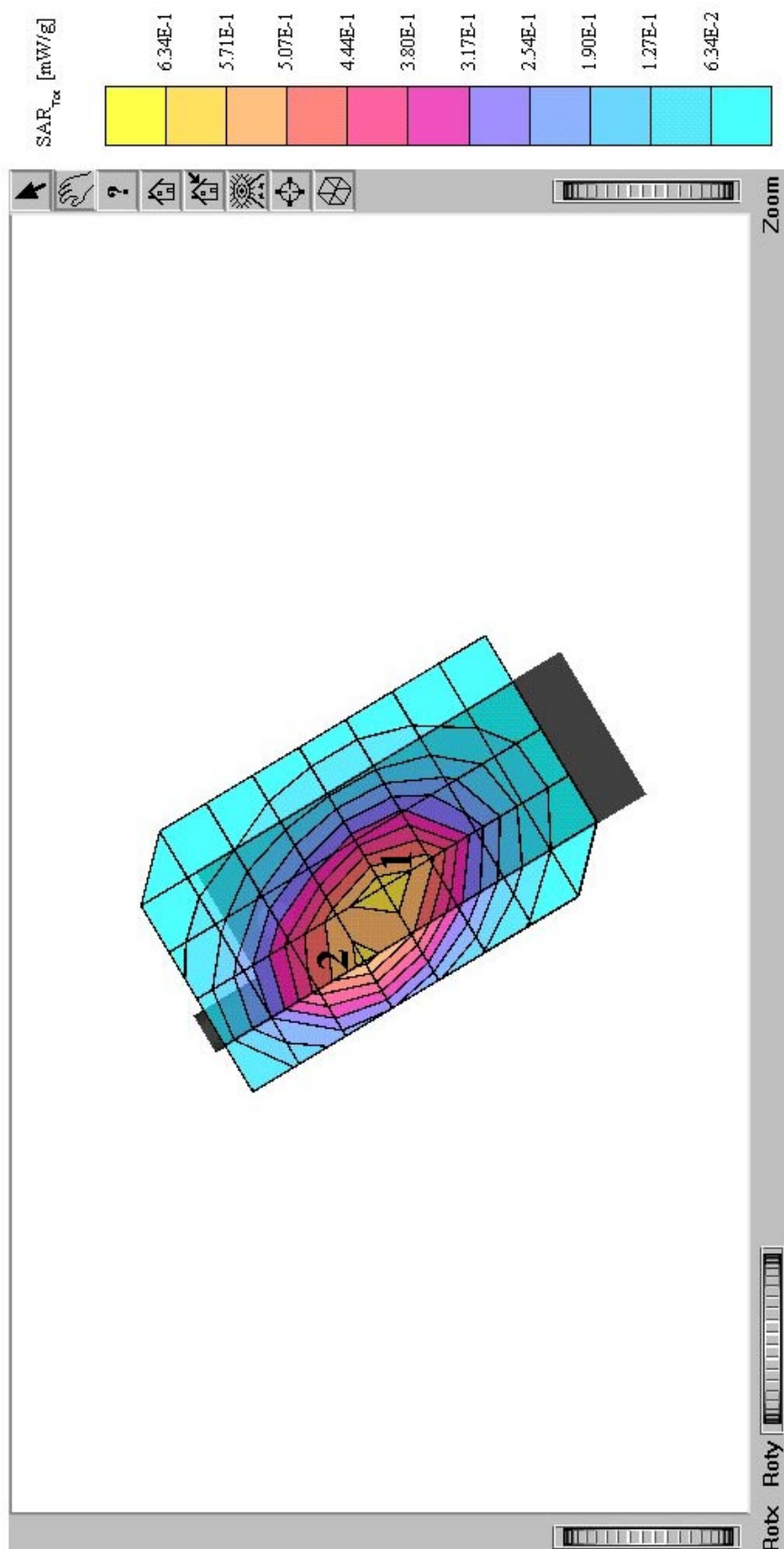


Fig. 7: Worst case SAR distribution, TDMA 800, channel 799, cheek position, right side.
Cube 2: 0.612 W/kg.

Siemens-S46

SAM; Right Hand

Probe: ET3DV6 - SN1579; ConvF(690,690,690); Crest factor: 3.0; Brain 835 MHz; $\sigma = 0.90$ mho/m $\epsilon_r = 43.0$ $\rho = 1.00$ g/cm³

Cube 7x7x7; Peak: 0.581 mW/g; SAR (1g): 0.357 mW/g; SAR (10g): 0.237 mW/g (Worst-case extrapolation)

Penetration depth: 12.3 (11.4, 13.5) [mm]

Powerdft: 0.06 dB

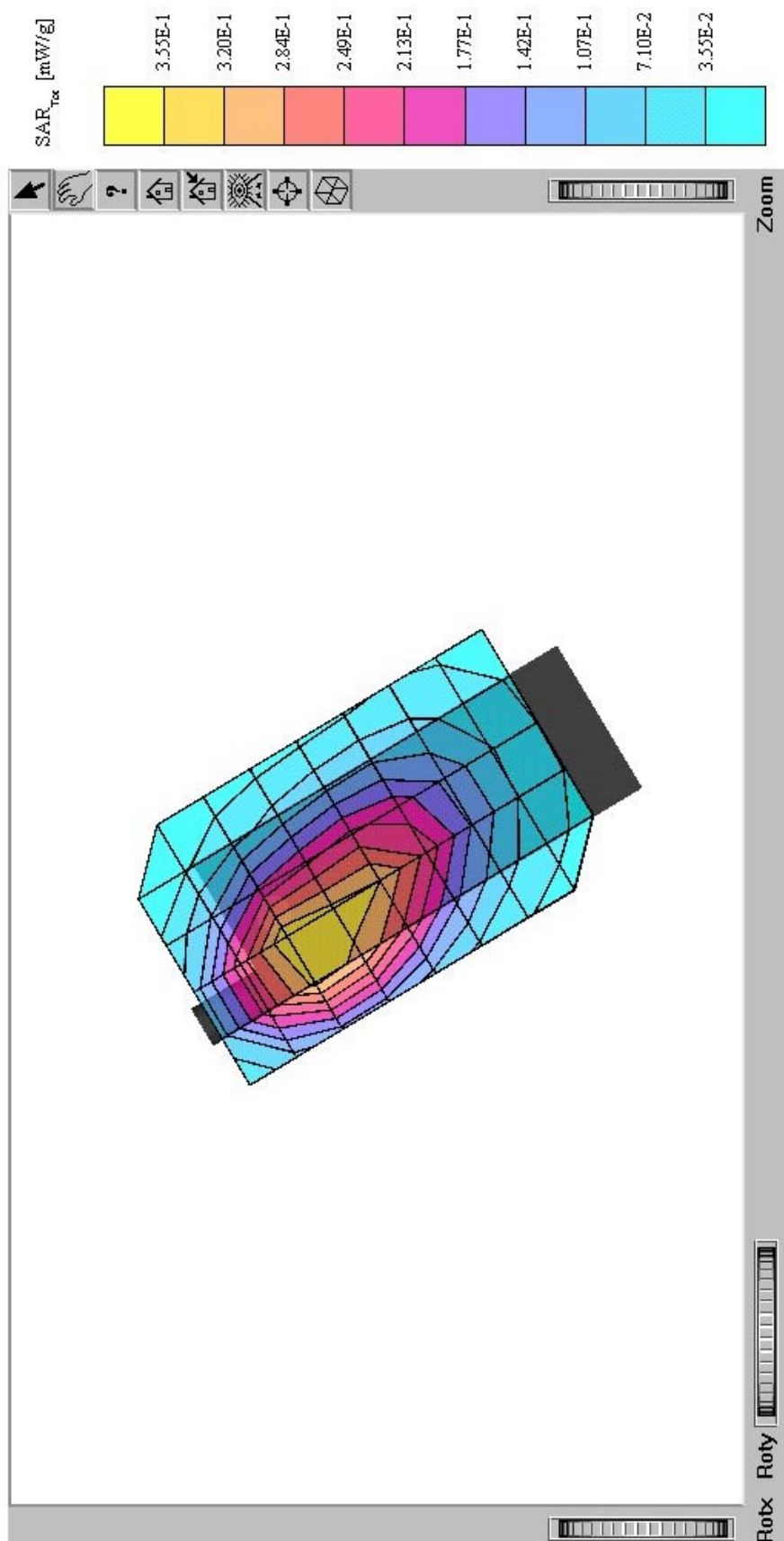


Fig. 8: SAR distribution, TDMA 800, channel 383, tilted position, right side.

Siemens S46

SAM, Flat

Probe: ET3DV6 - SN1579; ConvF(6.60,6.60,6.60); Crest factor: 3.0; body 835 MHz: $\sigma = 0.99$ mho/m $\epsilon_r = 55.1$ $\rho = 1.00$ g/cm³

Cube 7x7x7: Peak: 0.257 mW/g, SAR(1g): 0.179 mW/g, SAR(10g): 0.127 mW/g, (Worst-case extrapolation)

Penetration depth: 15.5 (14.4, 16.8) [mm]

Powerdrift: -0.18 dB

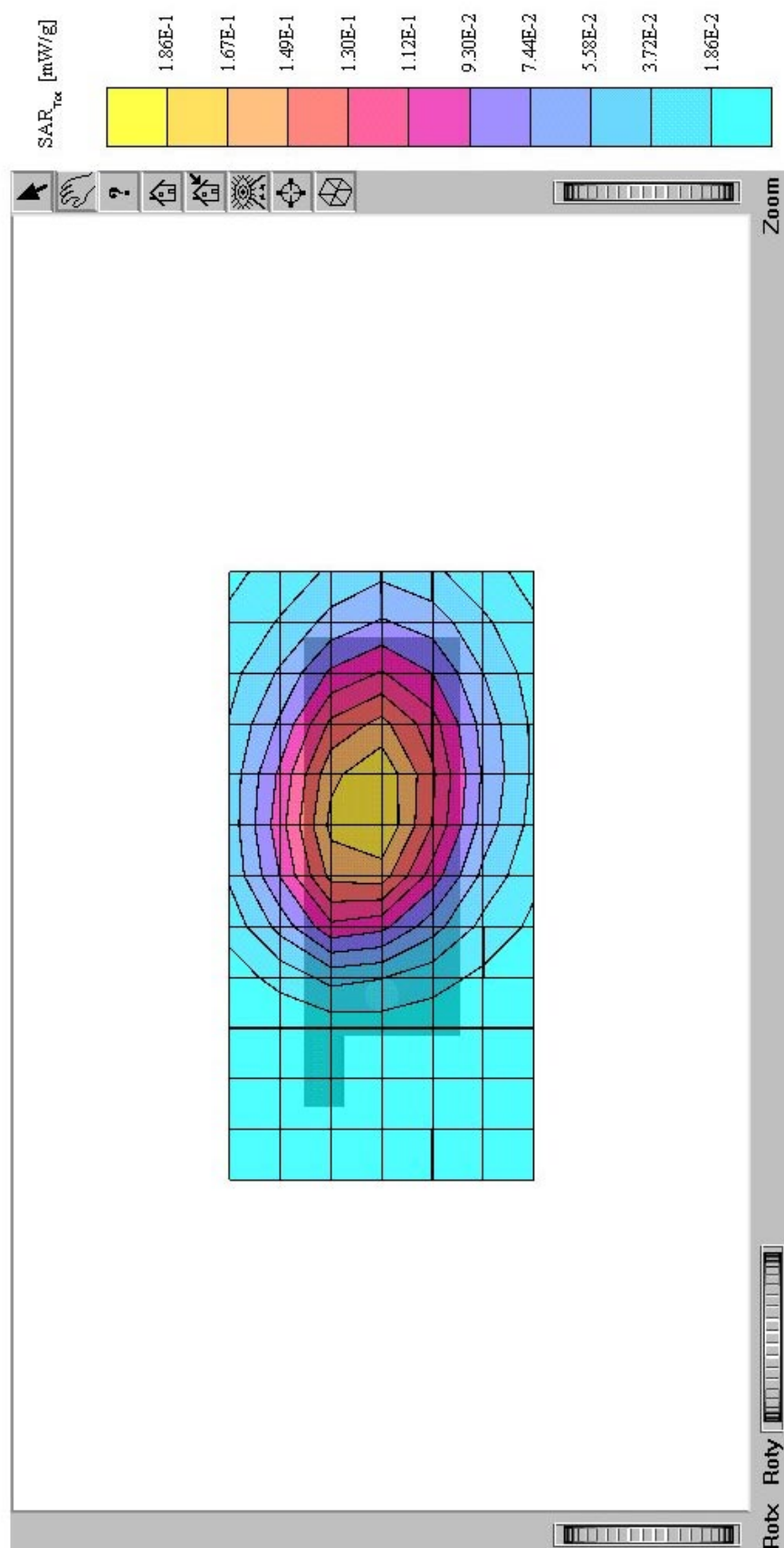


Fig. 9: Worst case SAR distribution, TDMA 800, channel 383, body worn configuration, Belt Clip with Headset.

Siemens S46

SAM; Flat

Probe: ET3DV6 - SN1579; ConvF(6.60,6.60,6.60); Crest factor: 3.0; body 835 MHz; $\sigma = 0.99$ mho/m $\epsilon_r = 55.1$ $\rho = 1.00$ g/cm³

Cube 7x7x7; Peak: 0.408 mW/g; SAR(1g): 0.278 mW/g; SAR(10g): 0.199 mW/g; (Worst-case extrapolation)

Penetration depth: 16.0 (14.2, 17.7) [mm]

Powerdrift: 0.02 dB

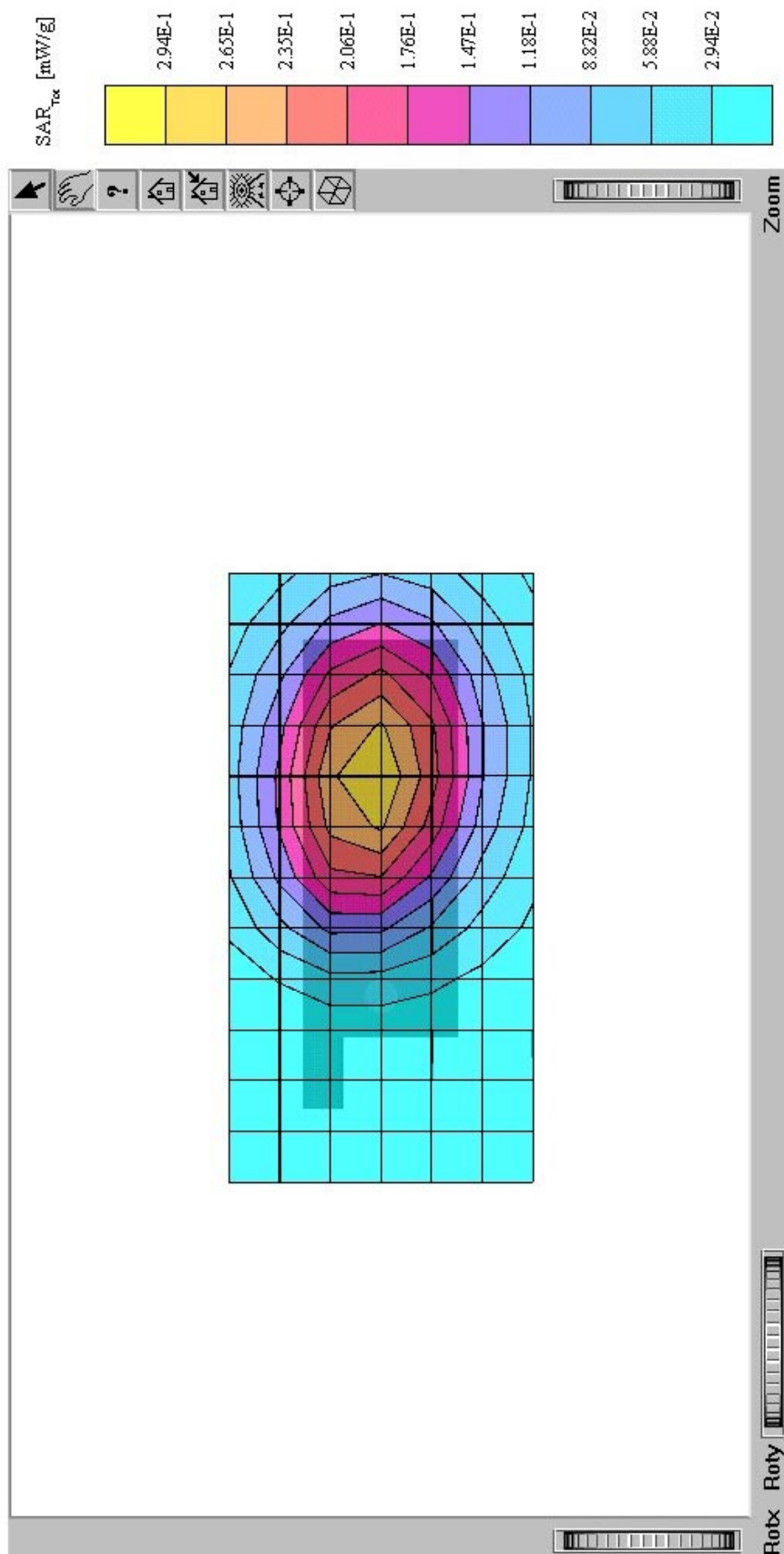


Fig. 10: Worst case SAR distribution, TDMA 800, channel 799, body worn configuration, Belt Clip with MP3 Player USB.

3 SAR Distribution Plots, TDMA 1900

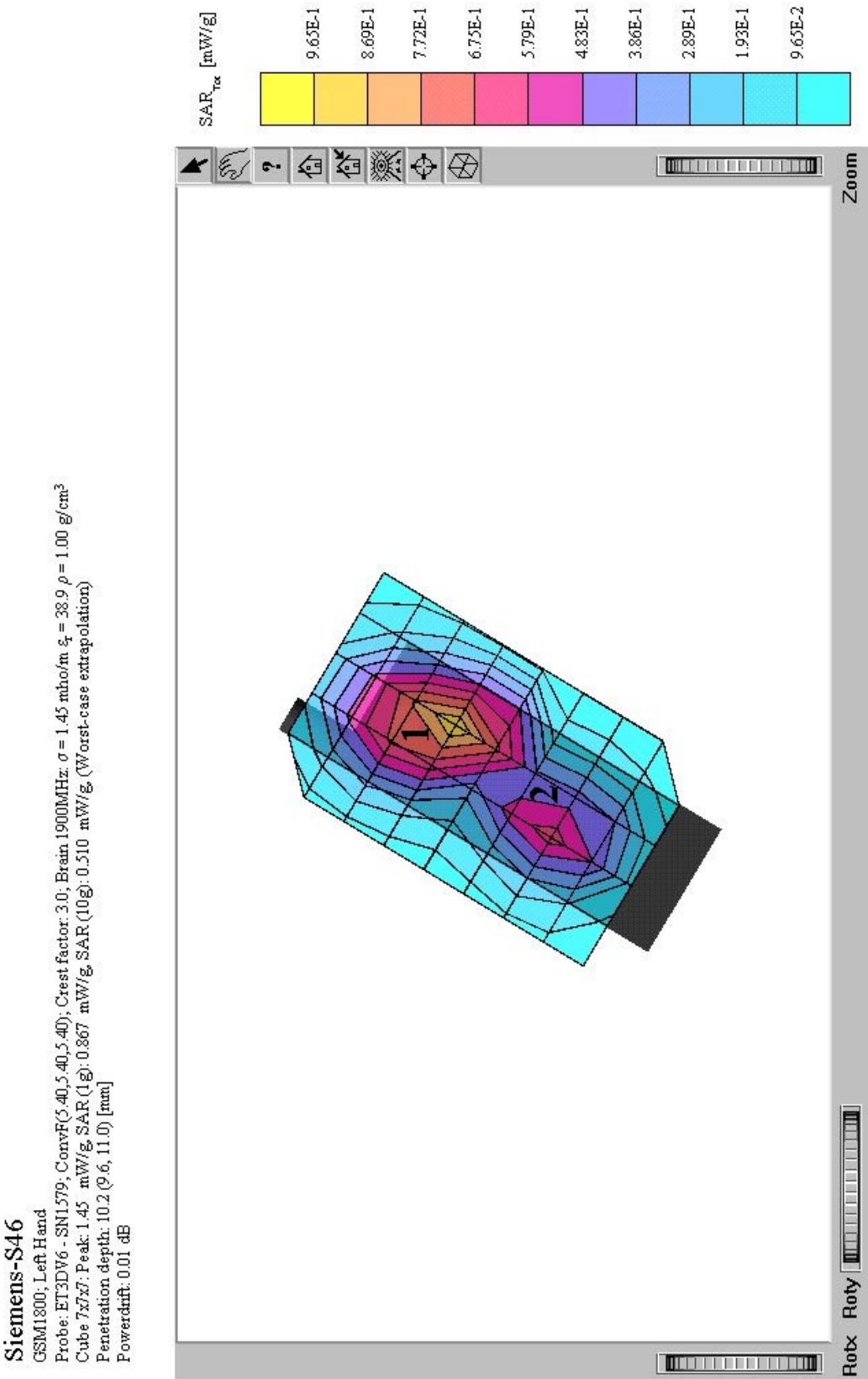


Fig. 11: SAR distribution, TDMA 1900, channel 1000, cheek position, left side Cube 2: 0.632 W/kg.

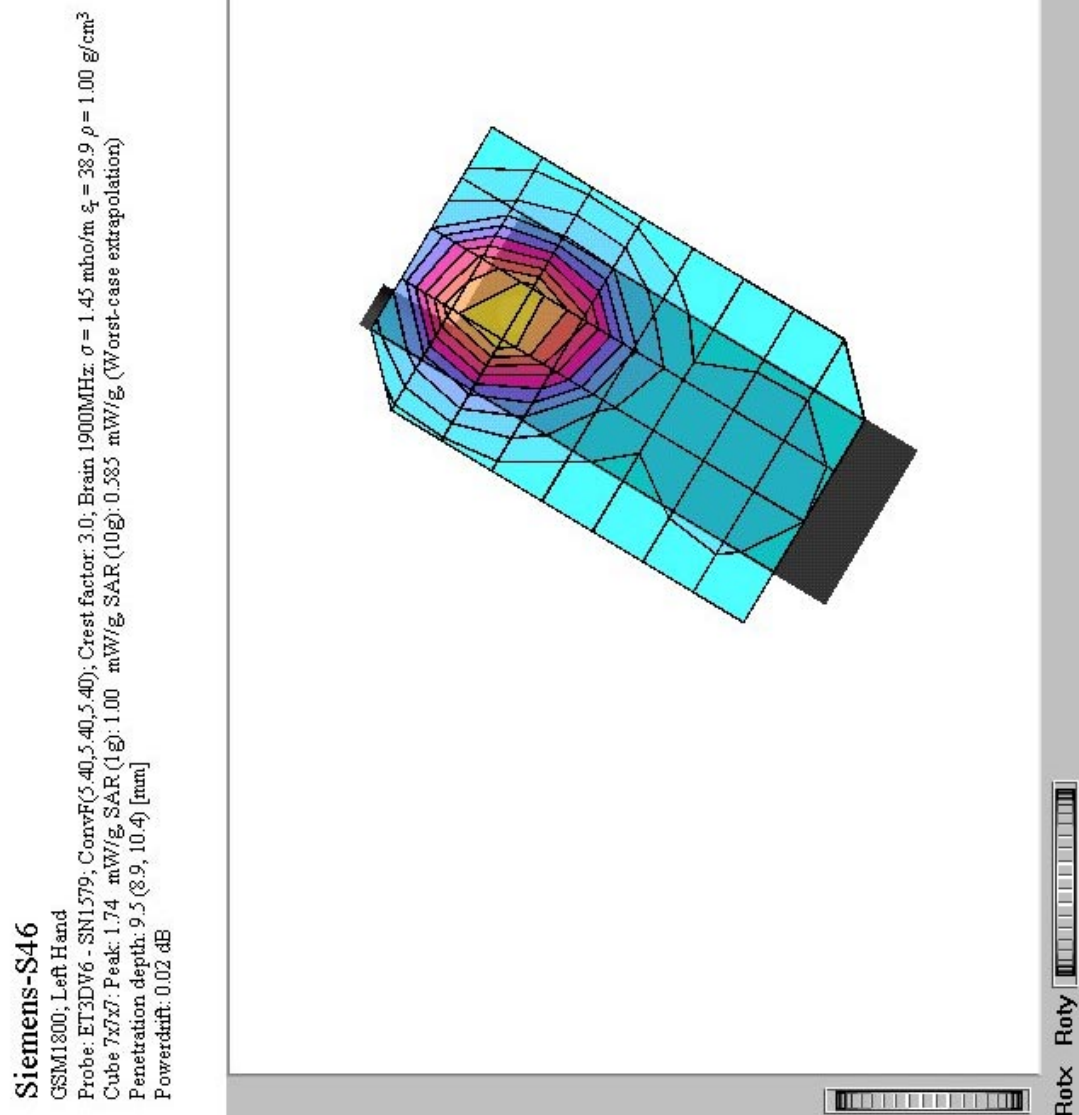


Fig. 12: SAR distribution, TDMA 1900, channel 1000, Tilted position, left side.

Siemens-S46

GSM1800, Right Hand

Probe: ET3DY6 - SN1579; ConvF(5.40, 5.40, 5.40); Crest factor: 3.0; Brain 1900MHz: $\sigma = 1.45$ mho/m $\epsilon_r = 38.9$ $\rho = 1.00$ g/cm³

Cube 7x7x7: Peak: 1.72 mW/g SAR (1g): 1.03 mW/g SAR (10g): 0.610 mW/g (Worst-case extrapolation)

Penetration depth: 10.1 (9.7, 10.8) [mm]

Powerdrift: 0.01 dB

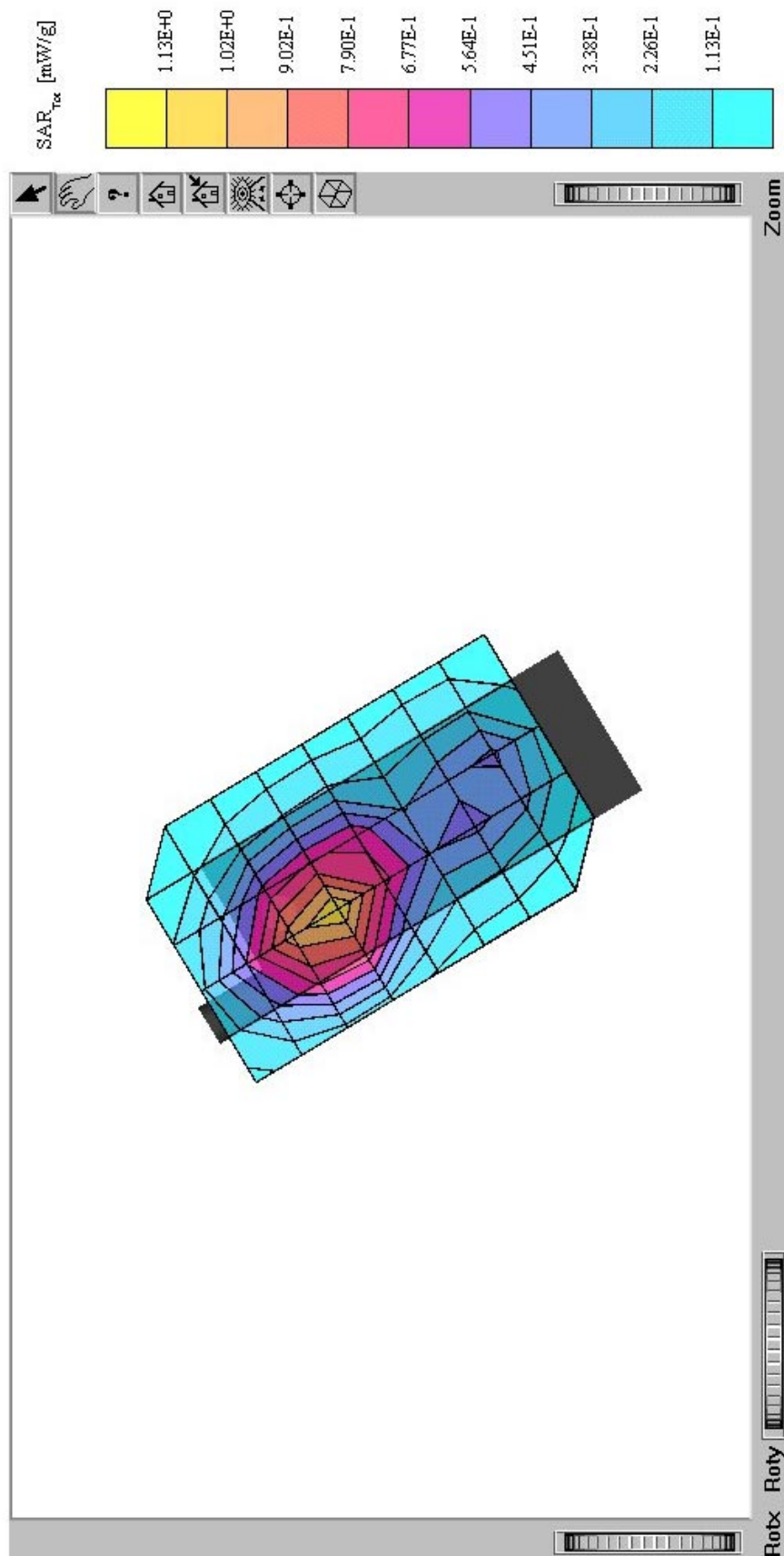


Fig. 13: SAR distribution, TDMA 1900, channel 1000, cheek position, right side.

Siemens-S46

GSM1800; Right Hand

Probe: ET3DV6 - SN1579; ConvF(5.40,5.40,5.40); Crest factor: 3.0; Brain 1900MHz: $\sigma = 1.45$ mho/m $\epsilon_r = 38.9$ $\rho = 1.00$ g/cm³

Cube 7x7x7; Peak: 1.97 mW/g; SAR (1g): 0.644 mW/g; SAR (10g): 0.644 mW/g; (Worst-case extrapolation)

Penetration depth: 9.3 (8.7, 10.3) [mm]

Powerdrift: -0.01 dB

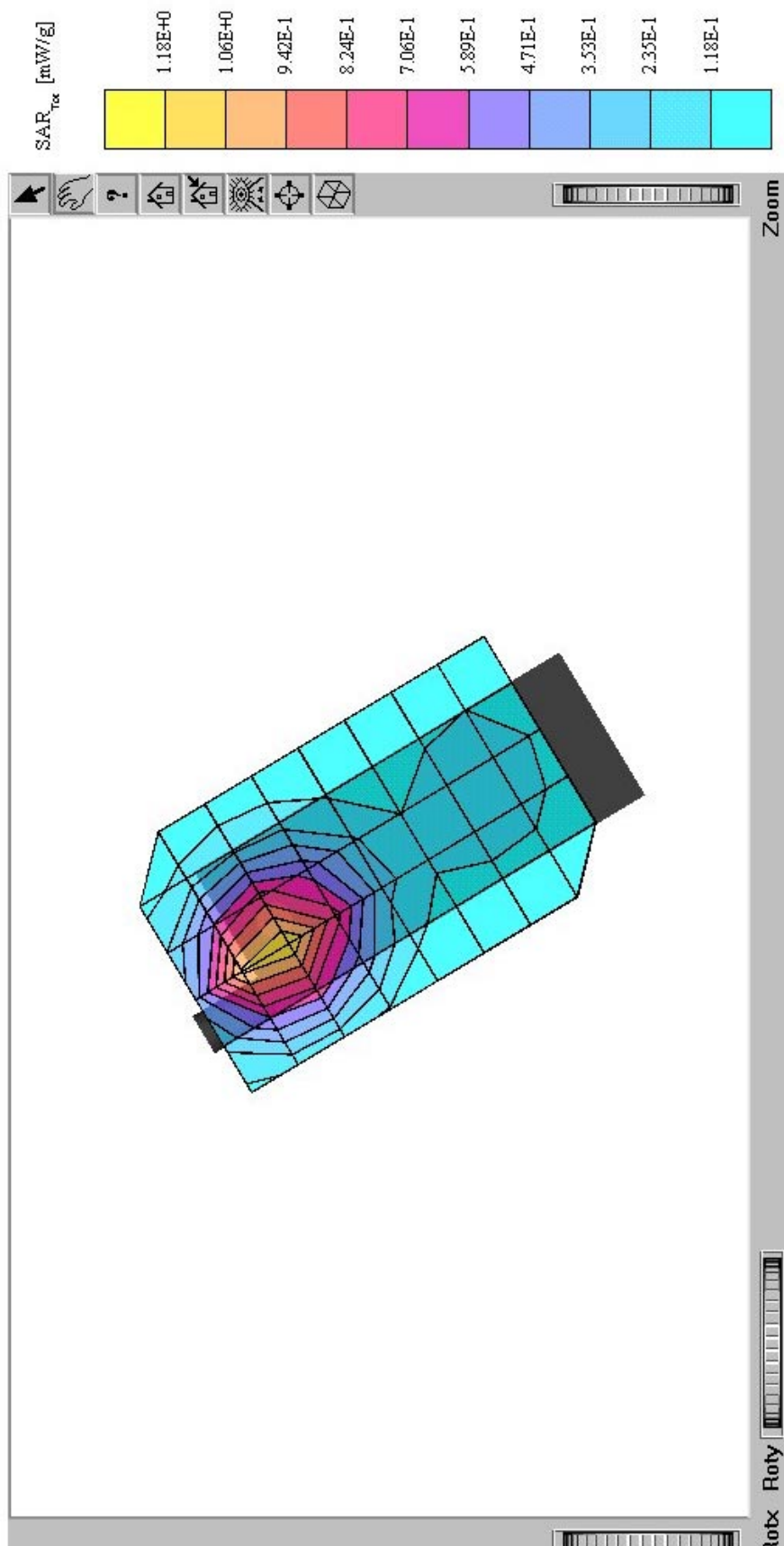


Fig. 14: SAR distribution, TDMA 1900, channel 1000, Tilted position, right side.

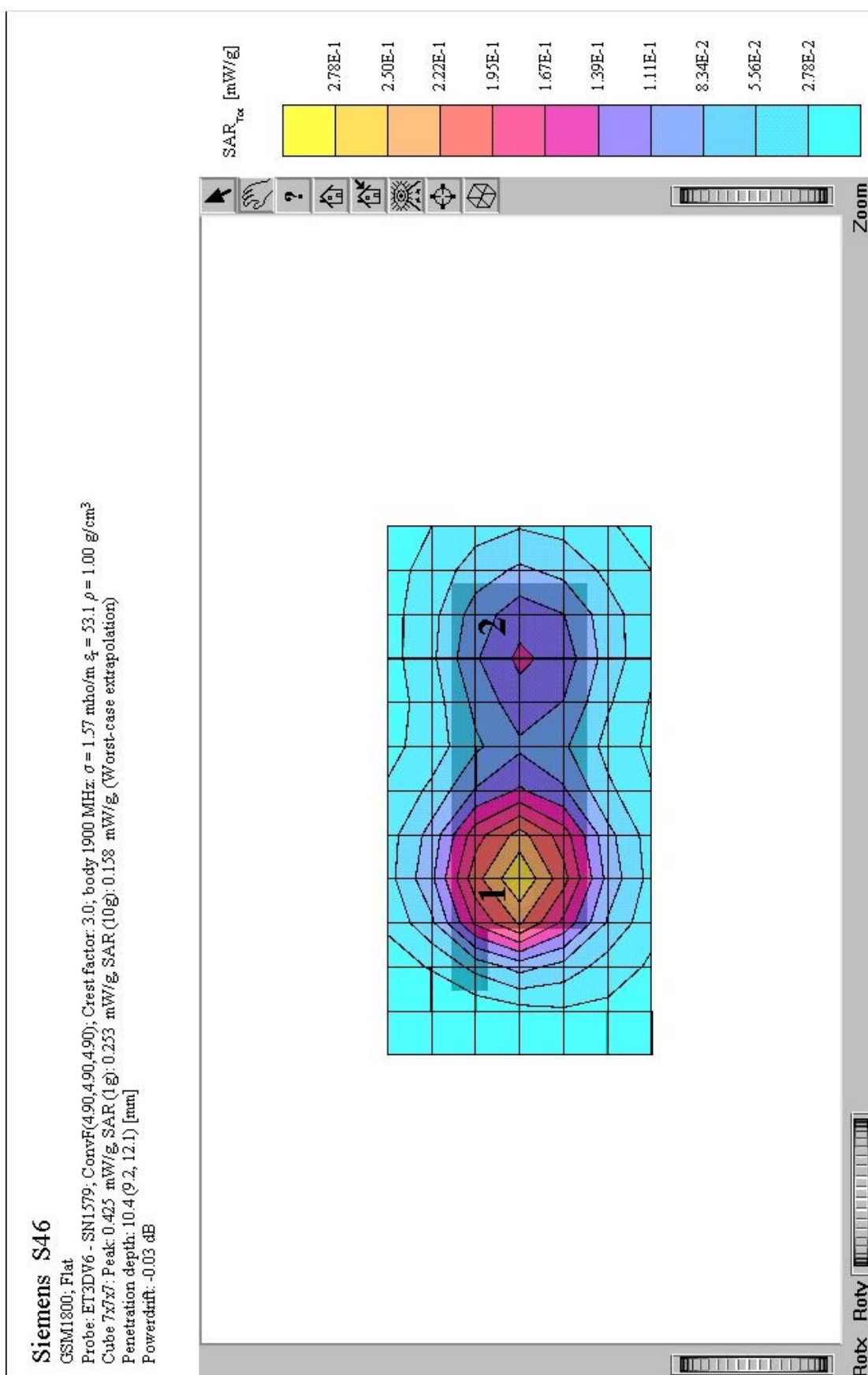


Fig. 15: Worst case SAR distribution, TDMA 1900, channel 0002, body worn configuration, Belt Clip with Headset. Cube 2: 0.135 W/kg.

Siemens S46

GSM1800, Flat

Probe: ET3DV6 - SN1579; ConvF(490,490,490); Crest factor: 3.0; body 1900 MHz: $\sigma = 1.57$ mho/m $\epsilon_r = 53.1$ $\rho = 1.00$ g/cm³

Cube 7x7x7: Peak: 0.458 mW/g SAR (1g): 0.262 mW/g SAR (10g): 0.139 mW/g (Worst-case extrapolation)

Penetration depth: 9.6 (8.6, 11.2) [mm]

Powerdrift: -0.01 dB

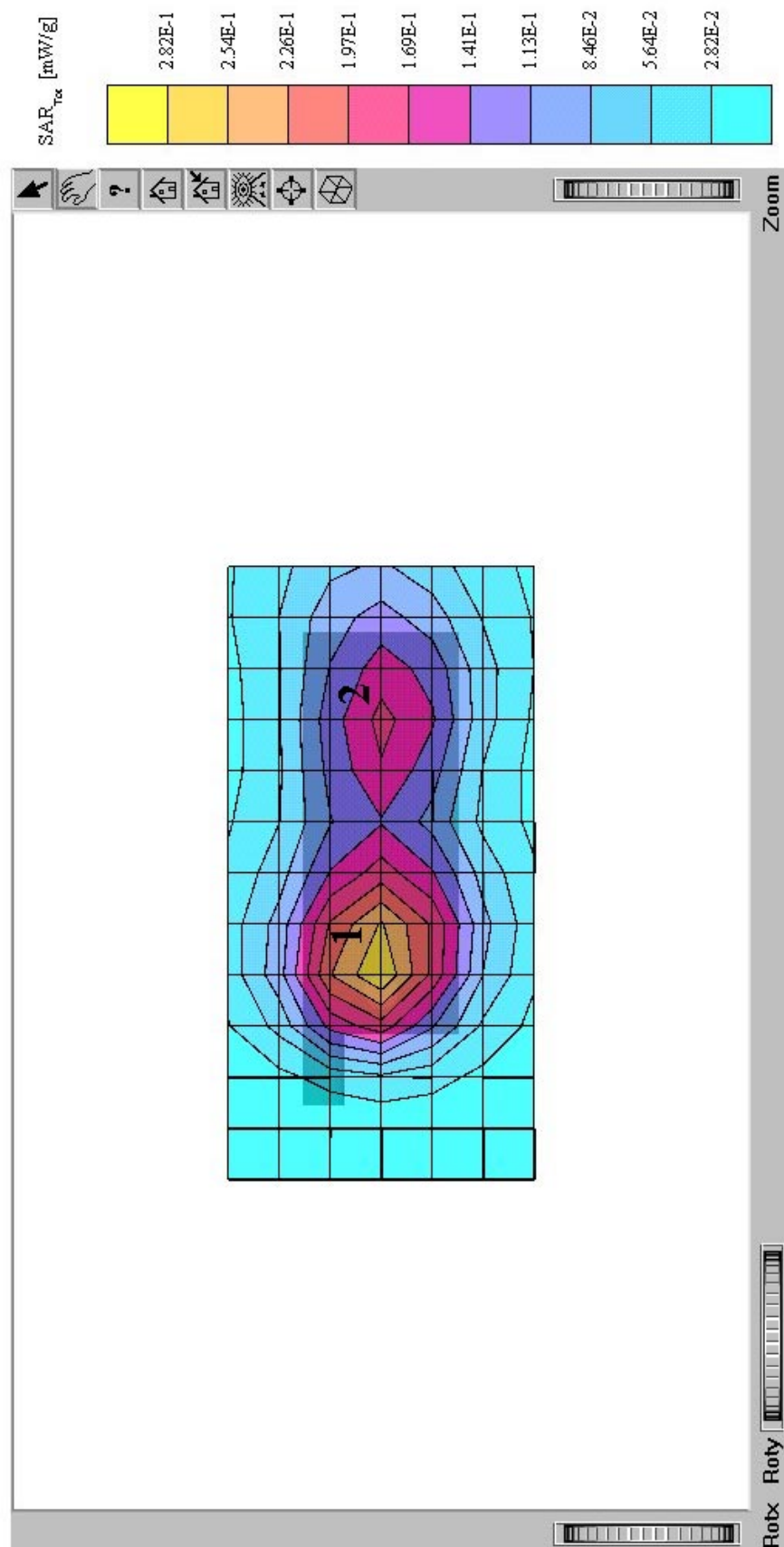


Fig. 16: Worst case SAR distribution, TDMA 1900, channel 1998, body worn configuration, Belt Clip with MP3 Player USB. Cube 2: 0.163 W/kg.

4 SAR Distribution Plots, PCS 1900

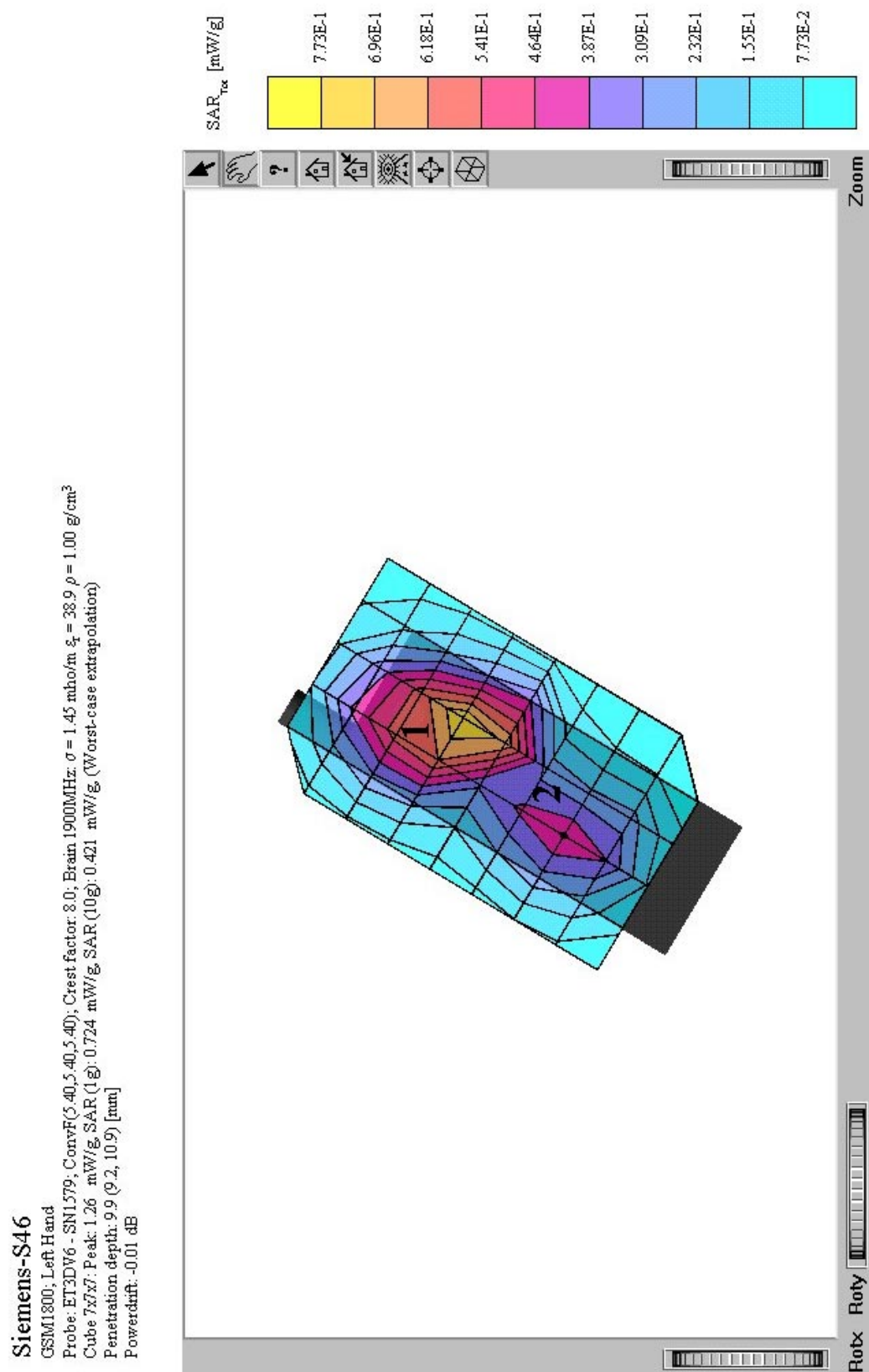


Fig. 17: SAR distribution, PCS 1900, channel 661, cheek position, left side. Cube 2: 0.328 W/kg

Siemens-S46

GSM1800; Left Hand

Probe: ET3DV6 - SN1579; ConvF(540,540,540); Crest factor: 8.0; Brain 1900MHz: $\sigma = 1.45$ mho/m $\epsilon_r = 38.9$ $\rho = 1.00$ g/cm³

Cube 7x7x7; Peak: 1.41 mW/g; SAR (1g): 0.809 mW/g; SAR (10g): 0.470 mW/g (Worst-case extrapolation)

Penetration depth: 9.3 (8.7, 10.2) [mm]

Powerdift: -0.01 dB

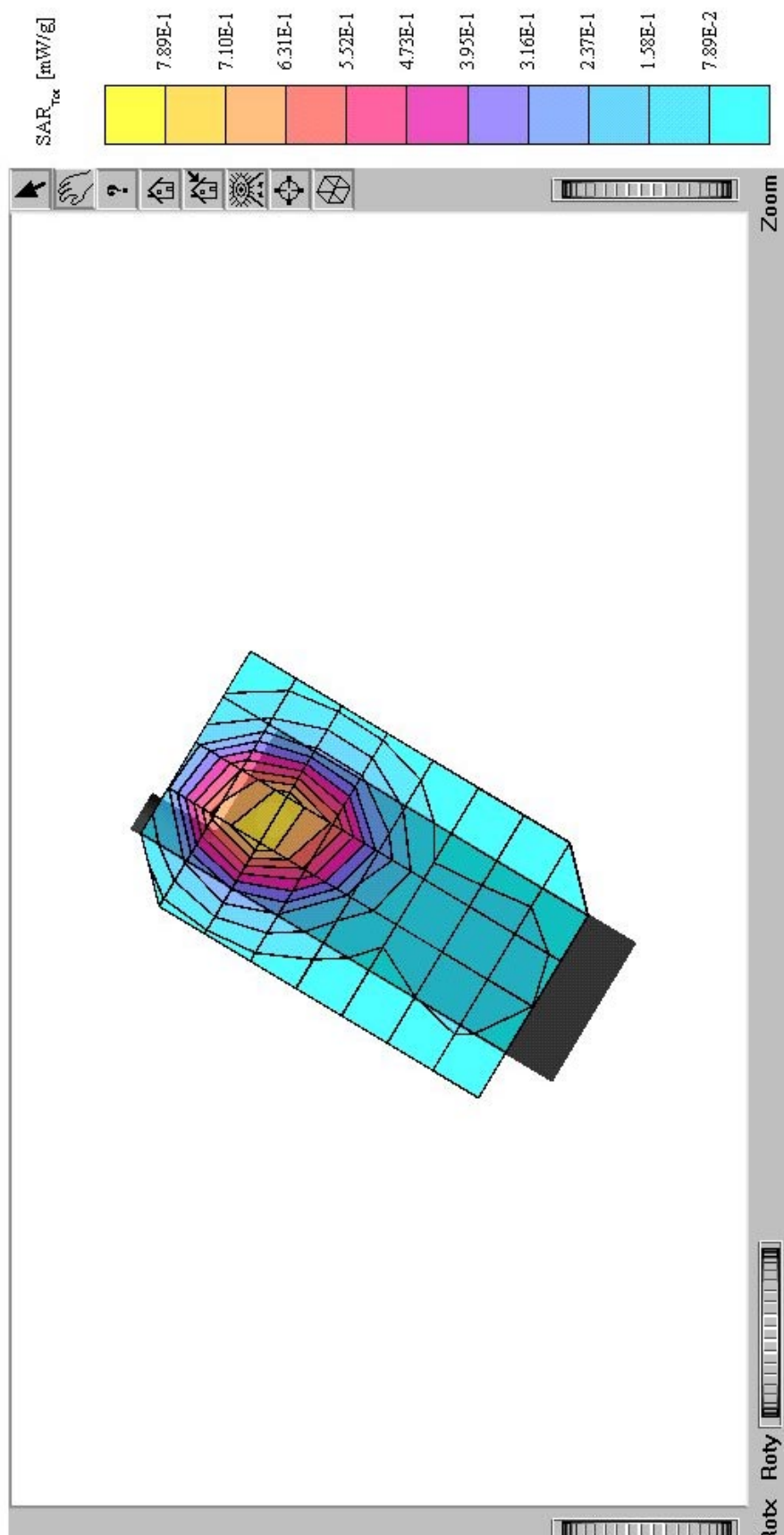


Fig. 18: SAR distribution, PCS 1900, channel 661, tilted position, left side.

Siemens-S46

GSM1800; Right Hand

Probe: ET3DV6 - SN1579; ConvF(5 40,5 40,5 40); Crest factor: 8.0; Brain 1900MHz: $\sigma = 1.45$ mho/m $\epsilon_r = 38.9$ $\rho = 1.00$ g/cm³

Cube 7x7x7: Peak: 1.22 mW/g SAR (1g): 0.738 mW/g SAR (10g): 0.442 mW/g (Worst-case extrapolation)

Penetration depth: 10.3 (9.8, 11.0) [mm]

Powerdrift: 0.01 dB

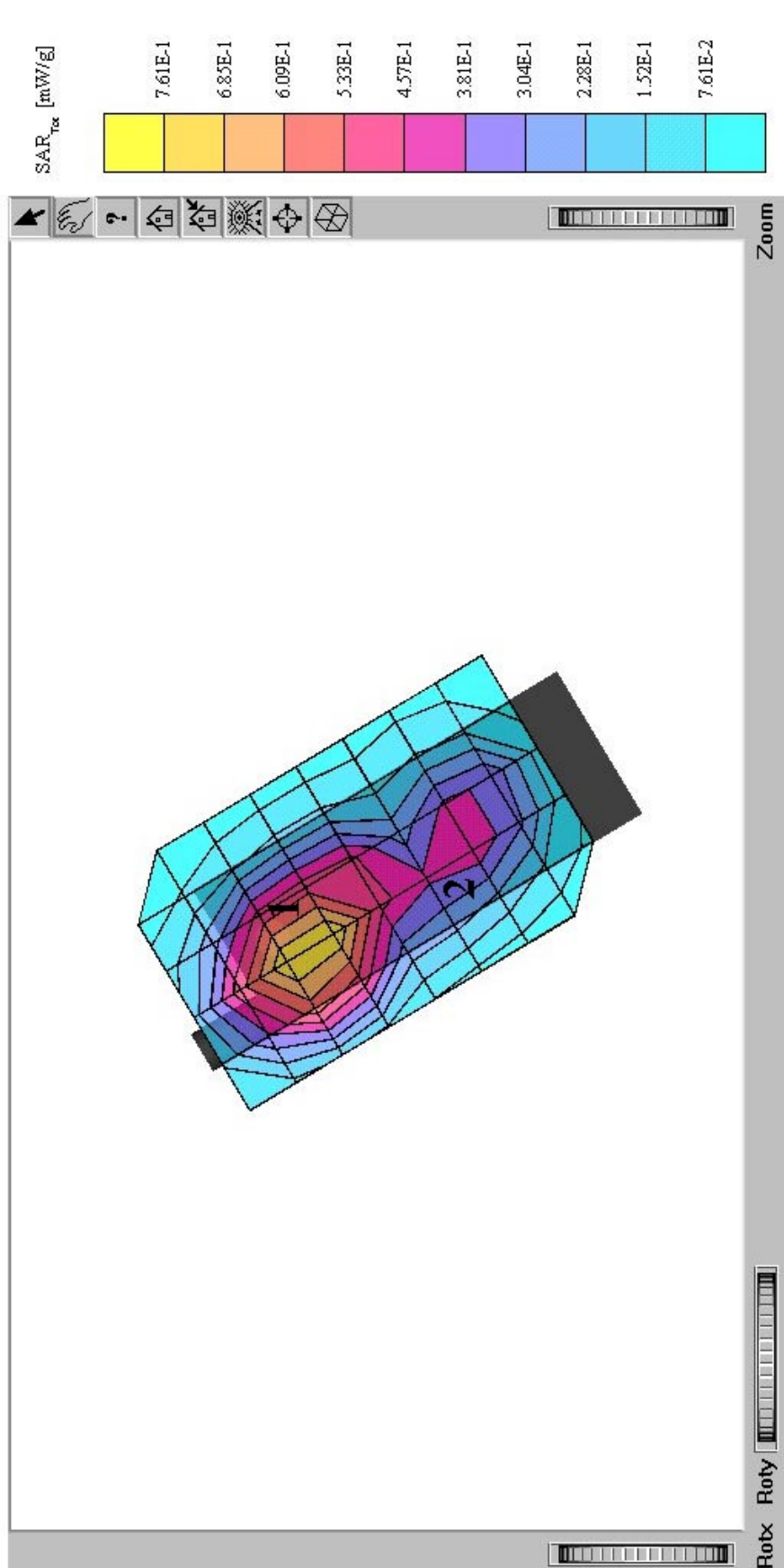


Fig. 19: SAR distribution, PCS 1900, channel 661, cheek position, right side. Cube 2: 0.484 W/kg.

Siemens-S46

GSM1800; Right Hand

Probe: ET3DV6 - SN1579; ConvF(340,540,540); Crest factor: 8.0; Brain 1900MHz: $\sigma = 1.45$ mho/m $\epsilon_r = 38.9$ $\rho = 1.00$ g/cm³

Cube 7x7x7: Peak: 1.64 mW/g, SAR (1g): 0.929 mW/g, SAR (10g): 0.531 mW/g (Worst-case extrapolation)

Penetration depth: 9.3 (8.6, 10.3) [mm]

Powerdrift: 0.02 dB

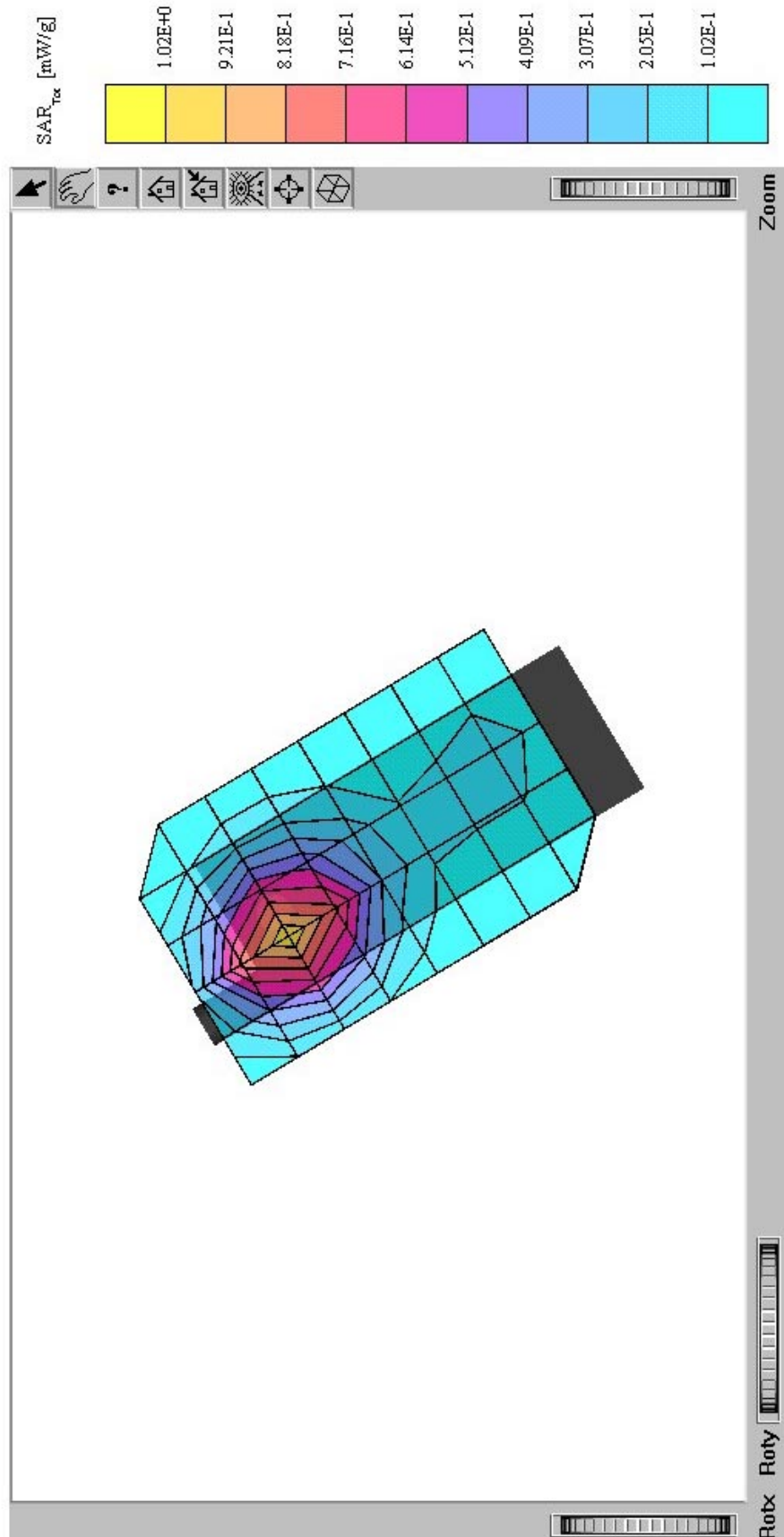


Fig. 20: Worst case SAR distribution, PCS 1900, channel 512, Tilted position, right side.

Siemens S46

GSM1800; Flat

Probe: ET3DV6 - SN1579; ConvF(490,490,4.90); Crest factor: 3.0; body 1900 MHz; $\sigma = 1.57$ mho/m $\epsilon_r = 53.1$ $\rho = 1.00$ g/cm³

Cube 7x7x7; Peak: 0.368 mW/g; SAR (1g): 0.219 mW/g; SAR (10g): 0.137 mW/g (Worst-case extrapolation)

Penetration depth: 10.3 (9.2, 11.7) [mm]

Powerdrift: -0.07 dB

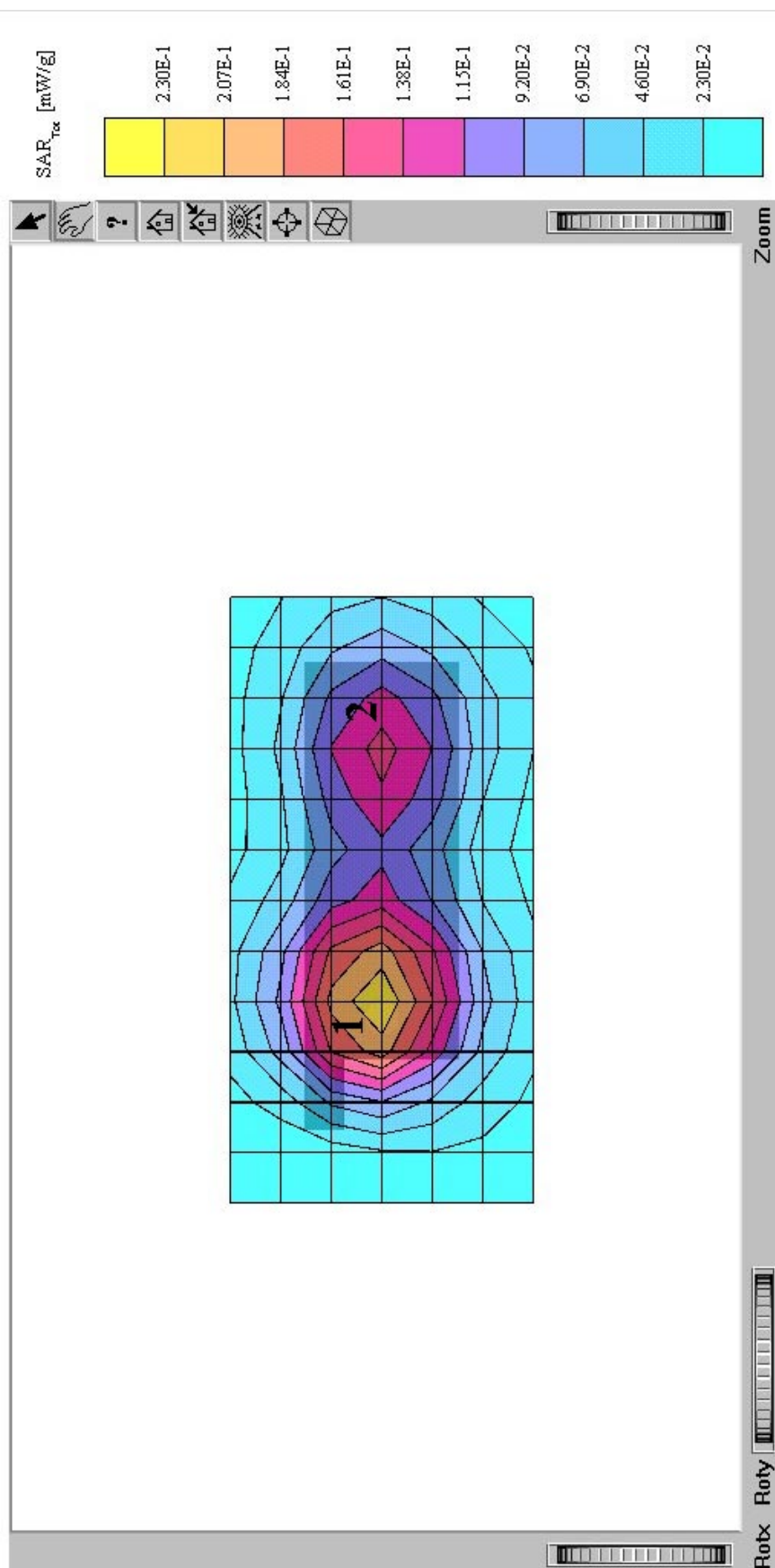


Fig. 21: Worst case SAR distribution, PCS 1900, channel 512, body worn configuration, Belt Clip with Headset. Cube 2: 0.131 W/kg.

Siemens S46

GSM1800; Flat

Probe: ET3DV6 - SN1579; ConvF(490,490,490); Crest factor: 3.0; body 1900 MHz: $\sigma = 1.57$ mho/m $\epsilon_r = 53.1$ $\rho = 1.00$ g/cm³

Cube 7x7x7: Peak: 0.306 mW/g SAR(1g): 0.181 mW/g SAR(10g): 0.113 mW/g (Worst-case extrapolation)

Penetration depth: 10.4 (9.3, 11.9) [mm]

Powerdrift: -0.00 dB

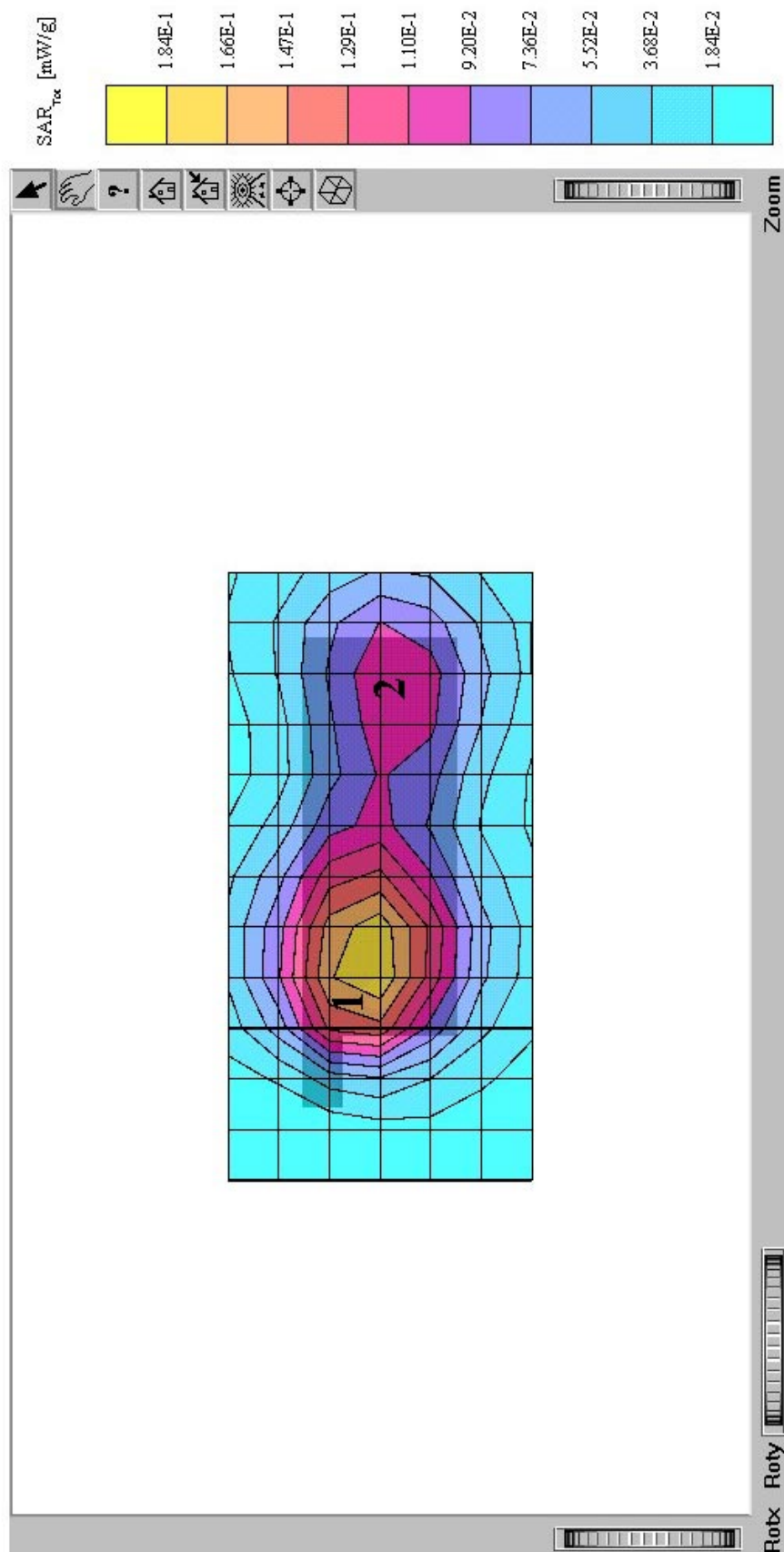


Fig. 22: Worst case SAR distribution, PCS 1900, channel 512, body worn configuration, Belt Clip with MP3 Player USB. Cube 2: 0.105 W/kg.