



Test & Certification Center (TCC) - Dallas



Accredited Laboratory
Certificate Number: 1819-01

APPENDIX A: VALIDATION SCANS

Dipole 835 MHz, Head Validation

SAM 1 (Cellular - Brain Tissue)

Frequency: 835 MHz; Crest factor: 1.0

Cellular Band - Brain Tissue: $\sigma = 0.89$ mho/m $\epsilon_r = 41.4$ $\rho = 1.00$ g/cm³

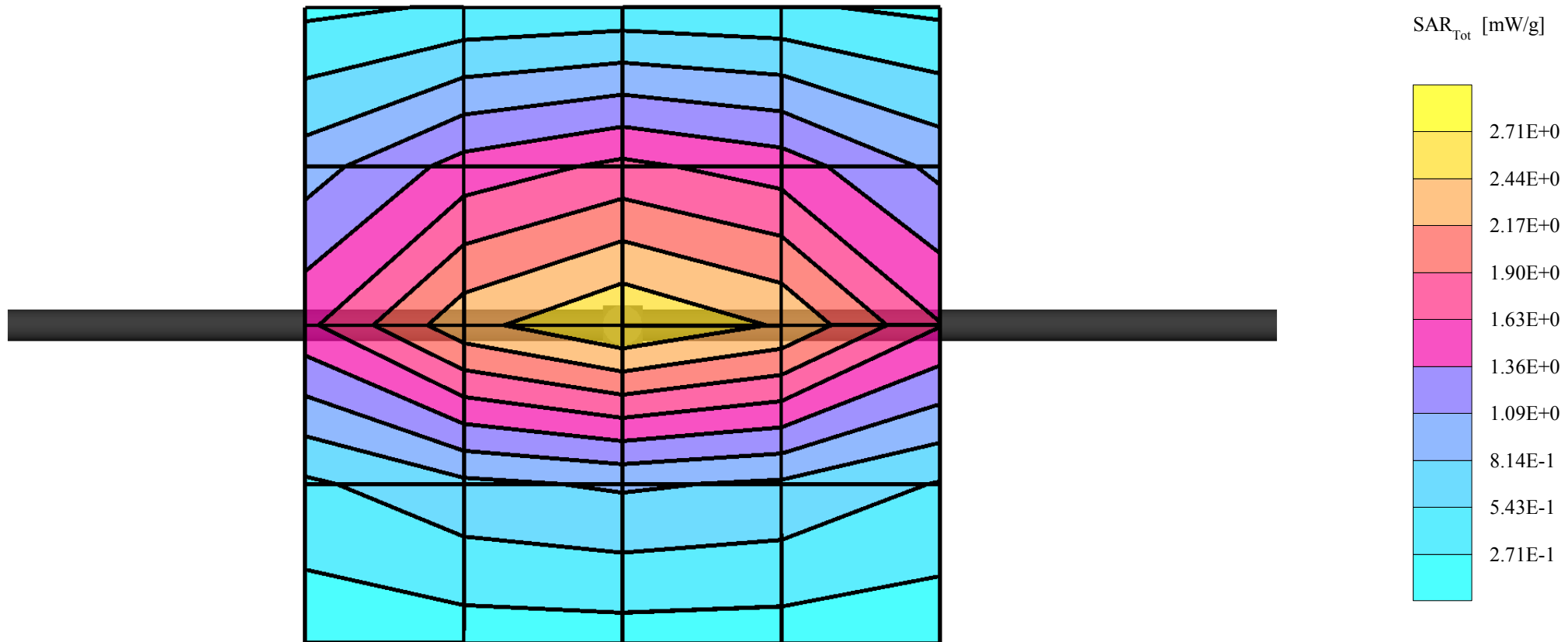
Probe: ET3DV6 - SN1504; ConvF(6.20,6.20,6.20)

Cubes (2): Peak: 3.75 mW/g ± 0.12 dB, SAR (1g): 2.53 mW/g ± 0.11 dB, SAR (10g): 1.67 mW/g ± 0.11 dB, (Advanced extrapolation)

Penetration depth: 13.3 (12.8, 13.8) [mm]

Powerdrift: -0.05 dB

Liquid Temperature (°C): 21.5



Dipole 835 MHz, Head Validation

SAM 1 (Cellular - Brain Tissue)

Frequency: 835 MHz; Crest factor: 1.0

Cellular Band - Brain Tissue: $\sigma = 0.89$ mho/m $\epsilon_r = 41.4$ $\rho = 1.00$ g/cm³

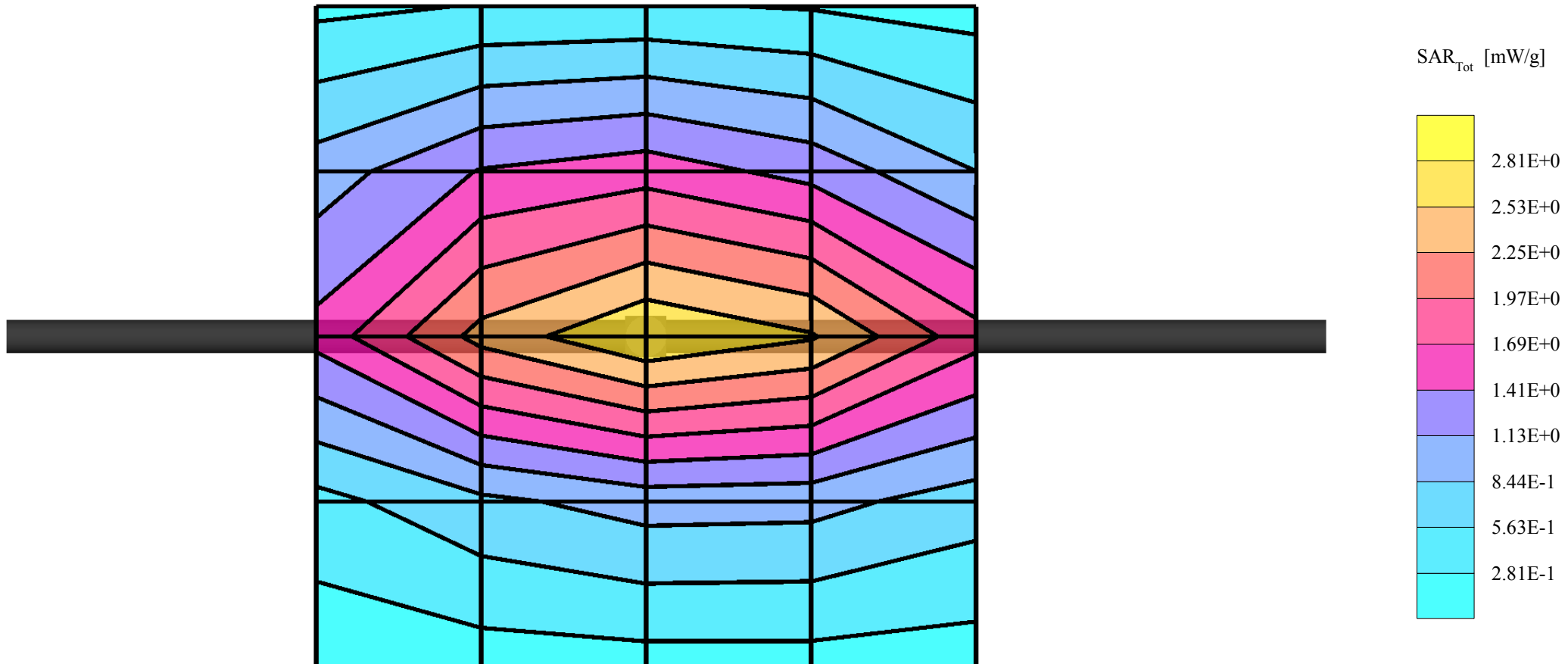
Probe: ET3DV6 - SN1504; ConvF(6.20,6.20,6.20)

Cubes (2): Peak: 3.79 mW/g ± 0.08 dB, SAR (1g): 2.55 mW/g ± 0.09 dB, SAR (10g): 1.67 mW/g ± 0.09 dB, (Advanced extrapolation)

Penetration depth: 13.1 (12.6, 13.8) [mm]

Powerdrift: -0.04 dB

Liquid Temperature (°C): 21.5



Dipole 835 MHz, Head Validation

SAM 1 (Cellular - Brain Tissue)

Frequency: 835 MHz; Crest factor: 1.0

Validation 835MHz - Brain Tissue: $\sigma = 0.89$ mho/m $\epsilon_r = 40.8$ $\rho = 1.00$ g/cm³

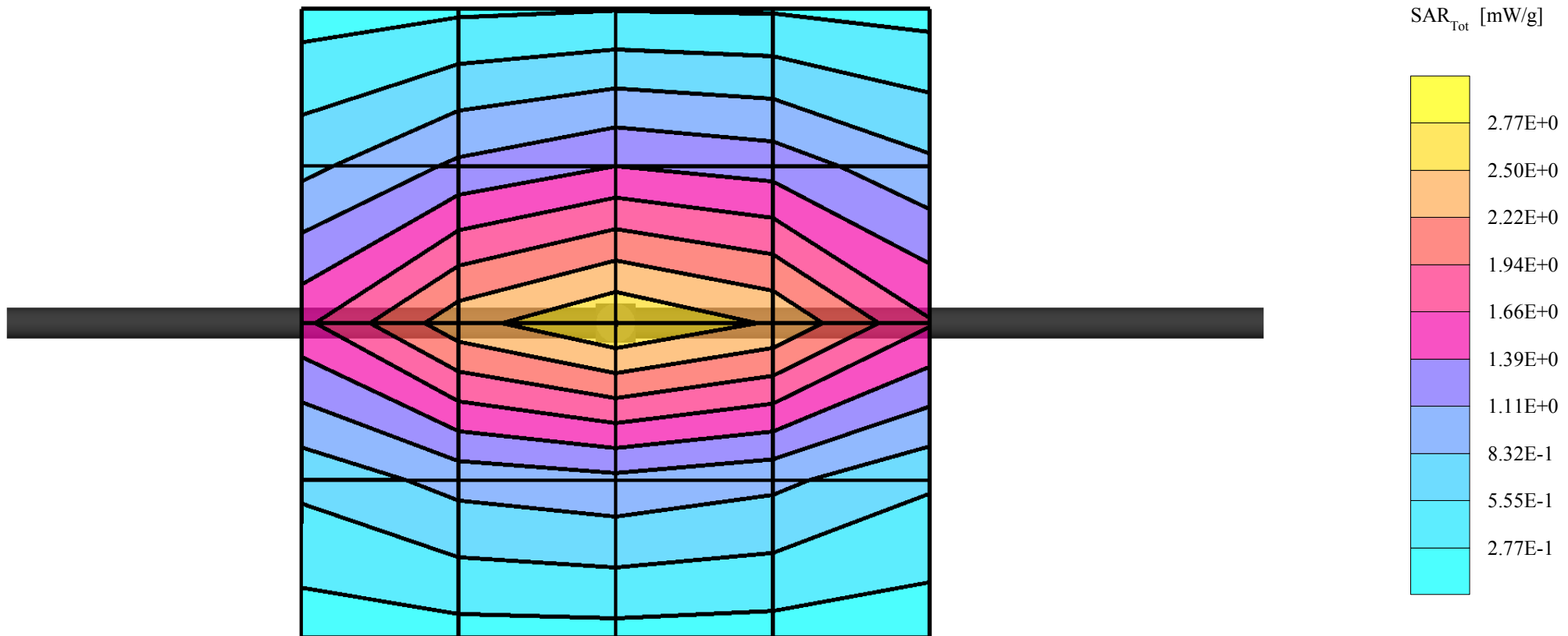
Probe: ET3DV6 - SN1504; ConvF(6.20,6.20,6.20)

Cubes (2): Peak: 3.66 mW/g ± 0.08 dB, SAR (1g): 2.46 mW/g ± 0.09 dB, SAR (10g): 1.62 mW/g ± 0.09 dB, (Advanced extrapolation)

Penetration depth: 13.2 (12.6, 13.8) [mm]

Powerdrift: -0.04 dB

Liquid Temperature (°C): 21.1



Dipole 835 MHz, Head Validation

SAM 1 (Cellular - Brain Tissue)

Frequency: 835 MHz; Crest factor: 1.0

Validation 835MHz - Brain Tissue: $\sigma = 0.87$ mho/m $\epsilon_r = 41.0$ $\rho = 1.00$ g/cm³

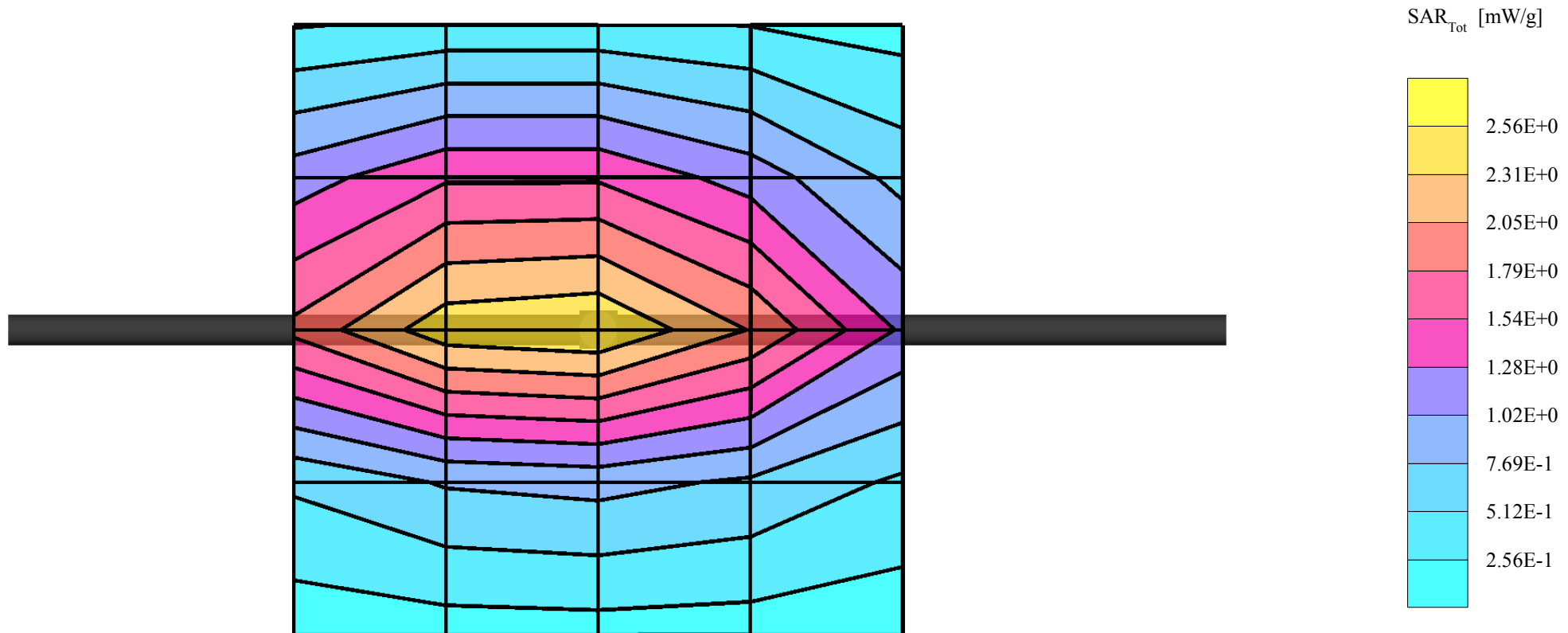
Probe: ET3DV6 - SN1504; ConvF(6.20,6.20,6.20)

Cubes (2): Peak: 3.54 mW/g ± 0.09 dB, SAR (1g): 2.40 mW/g ± 0.10 dB, SAR (10g): 1.58 mW/g ± 0.11 dB, (Advanced extrapolation)

Penetration depth: 13.2 (12.8, 13.8) [mm]

Powerdrift: -0.01 dB

Liquid Temperature (°C): 21.0



Dipole 835 MHz, Head Validation

SAM 1 (Cellular - Brain Tissue)

Frequency: 835 MHz; Crest factor: 1.0

Validation 835MHz - Brain Tissue: $\sigma = 0.90$ mho/m $\epsilon_r = 41.8$ $\rho = 1.00$ g/cm³

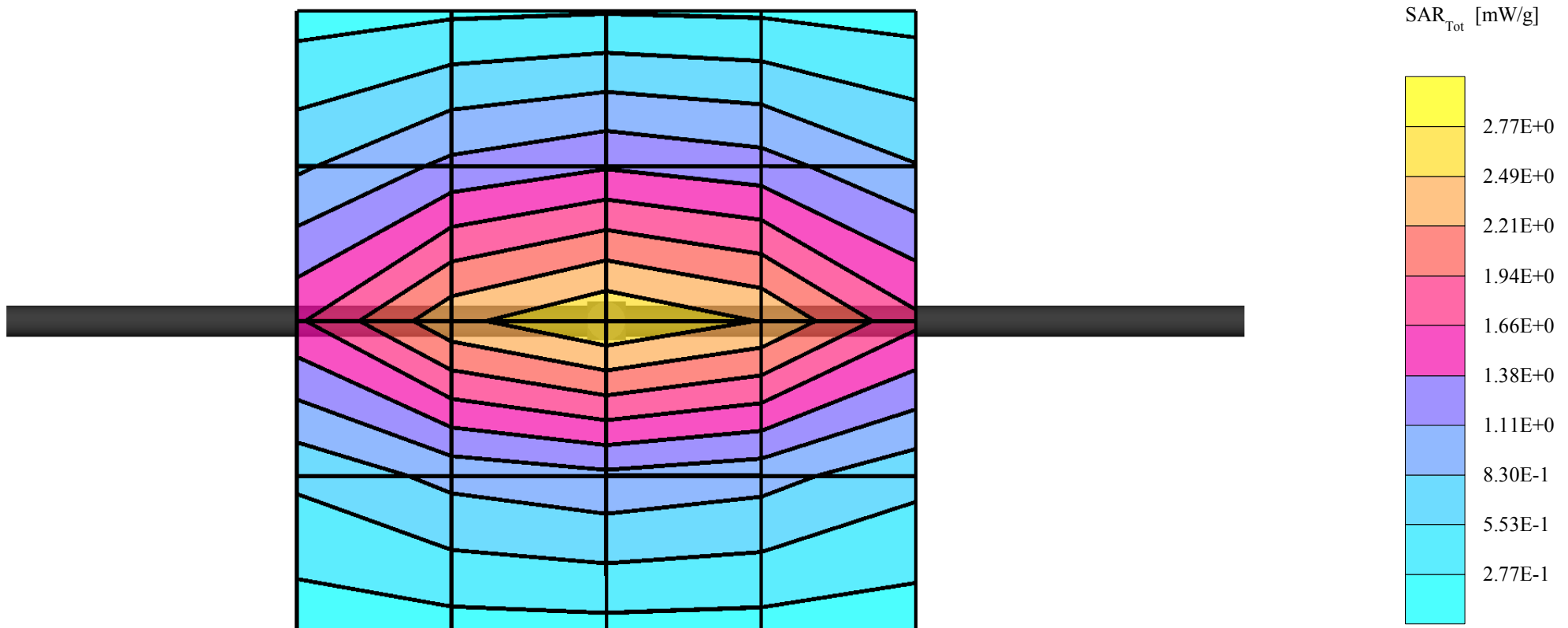
Probe: ET3DV6 - SN1504; ConvF(6.20,6.20,6.20)

Cubes (2): Peak: 3.66 mW/g ± 0.07 dB, SAR (1g): 2.46 mW/g ± 0.08 dB, SAR (10g): 1.62 mW/g ± 0.09 dB, (Advanced extrapolation)

Penetration depth: 13.1 (12.6, 13.7) [mm]

Powerdrift: 0.02 dB

Liquid Temperature (°C): 21.9



Dipole 835 MHz, Head Validation

SAM 1 (Cellular - Brain Tissue)

Frequency: 835 MHz; Crest factor: 1.0

Validation 835MHz - Brain Tissue: $\sigma = 0.89$ mho/m $\epsilon_r = 40.9$ $\rho = 1.00$ g/cm³

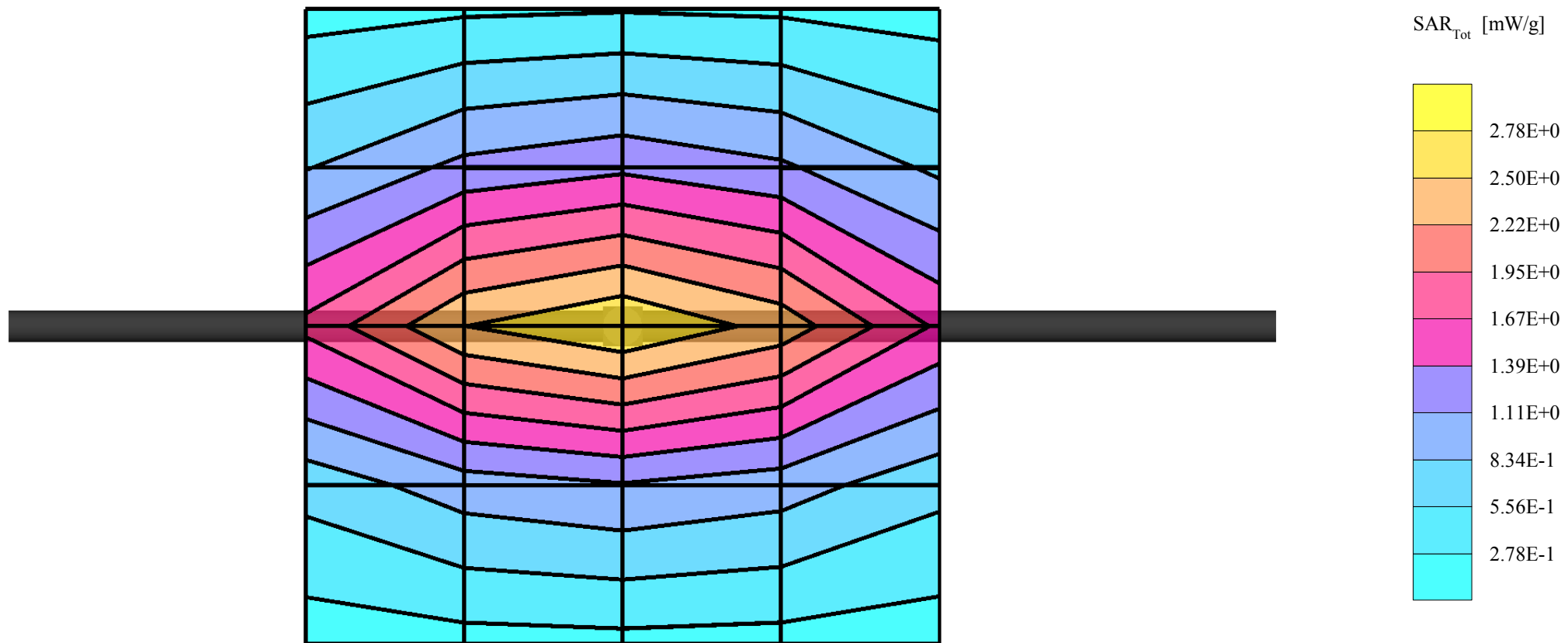
Probe: ET3DV6 - SN1504; ConvF(6.20,6.20,6.20)

Cubes (2): Peak: 3.66 mW/g ± 0.09 dB, SAR (1g): 2.47 mW/g ± 0.10 dB, SAR (10g): 1.62 mW/g ± 0.10 dB, (Advanced extrapolation)

Penetration depth: 13.1 (12.6, 13.7) [mm]

Powerdrift: -0.01 dB

Liquid Temperature (°C): 20.2



Dipole 835 MHz, Head Validation

SAM 1 (Cellular - Brain Tissue)

Frequency: 835 MHz; Crest factor: 1.0

Validation 835MHz - Brain Tissue: $\sigma = 0.88$ mho/m $\epsilon_r = 40.8$ $\rho = 1.00$ g/cm³

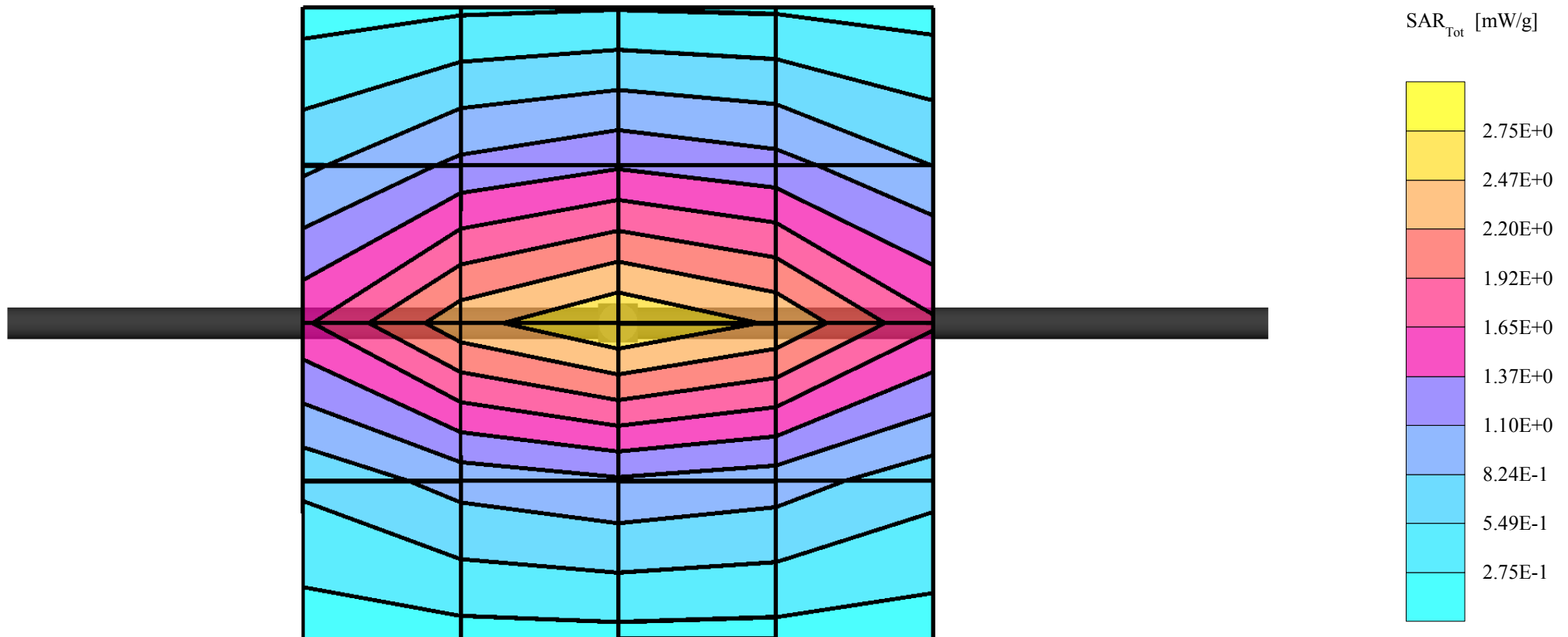
Probe: ET3DV6 - SN1504; ConvF(6.20,6.20,6.20)

Cubes (2): Peak: 3.62 mW/g ± 0.09 dB, SAR (1g): 2.43 mW/g ± 0.10 dB, SAR (10g): 1.60 mW/g ± 0.10 dB, (Advanced extrapolation)

Penetration depth: 13.1 (12.6, 13.8) [mm]

Powerdrift: -0.10 dB

Liquid Temperature (°C): 21.0



Dipole 1900 MHz, Head Validation

SAM 3 (PCS - Brain / Muscle Tissue)

Frequency: 1900 MHz; Crest factor: 1.0

Validation 1900MHz - Brain Tissue: $\sigma = 1.46$ mho/m $\epsilon_r = 40.3$ $\rho = 1.00$ g/cm³

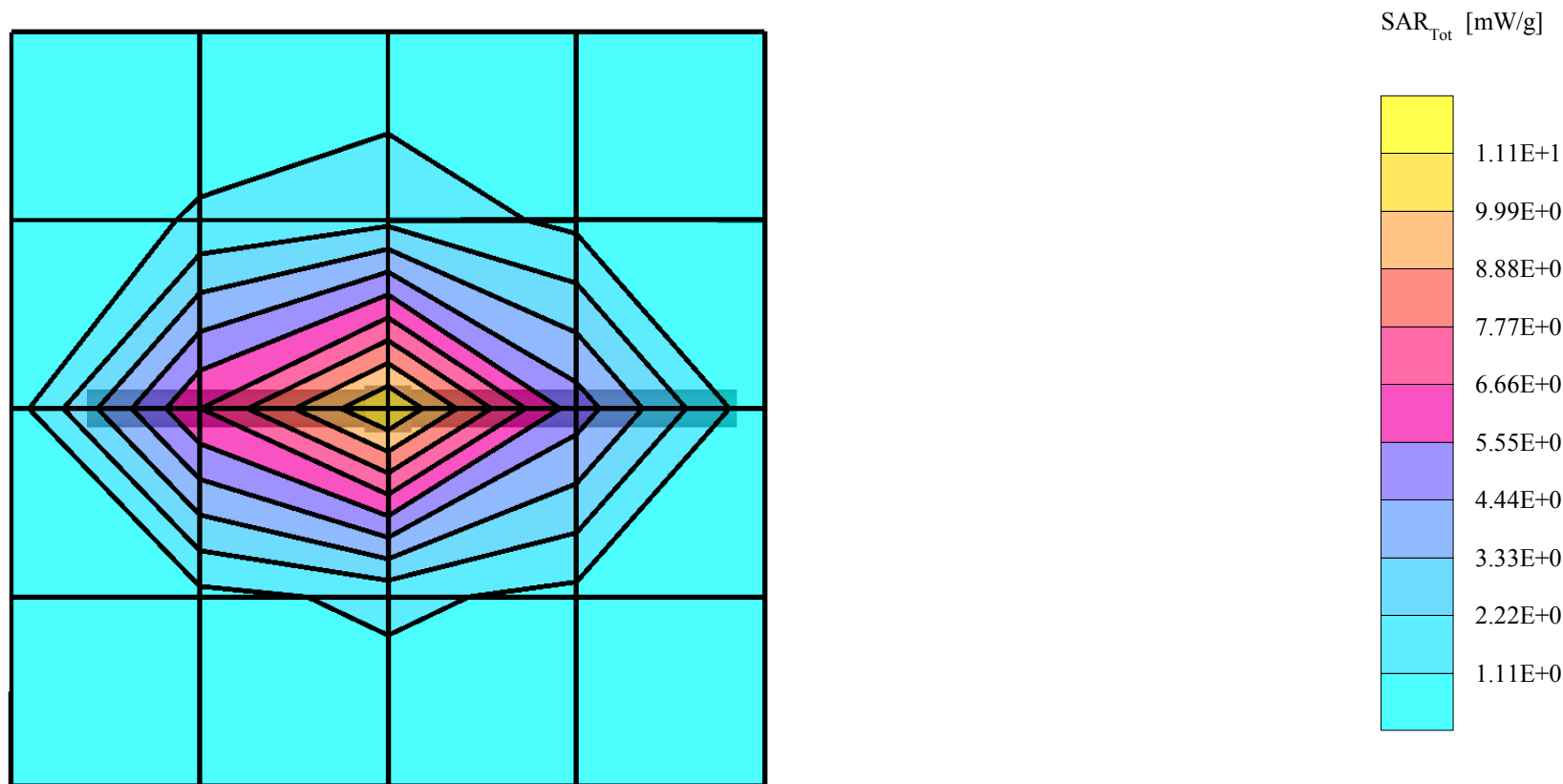
Probe: ET3DV6 - SN1504; ConvF(5.00,5.00,5.00)

Cubes (2): Peak: 16.6 mW/g ± 0.13 dB, SAR (1g): 9.24 mW/g ± 0.11 dB, SAR (10g): 4.80 mW/g ± 0.09 dB, (Advanced extrapolation)

Penetration depth: 8.4 (8.3, 8.7) [mm]

Powerdrift: 0.05 dB

Liquid Temperature (°C): 19.3



Dipole 835 MHz, Body Validation

SAM 2 (Cellular - Muscle Tissue)

Frequency: 835 MHz; Crest factor: 1.0

Validation 835MHz - Muscle Tissue: $\sigma = 0.96$ mho/m $\epsilon_r = 54.5$ $\rho = 1.00$ g/cm³

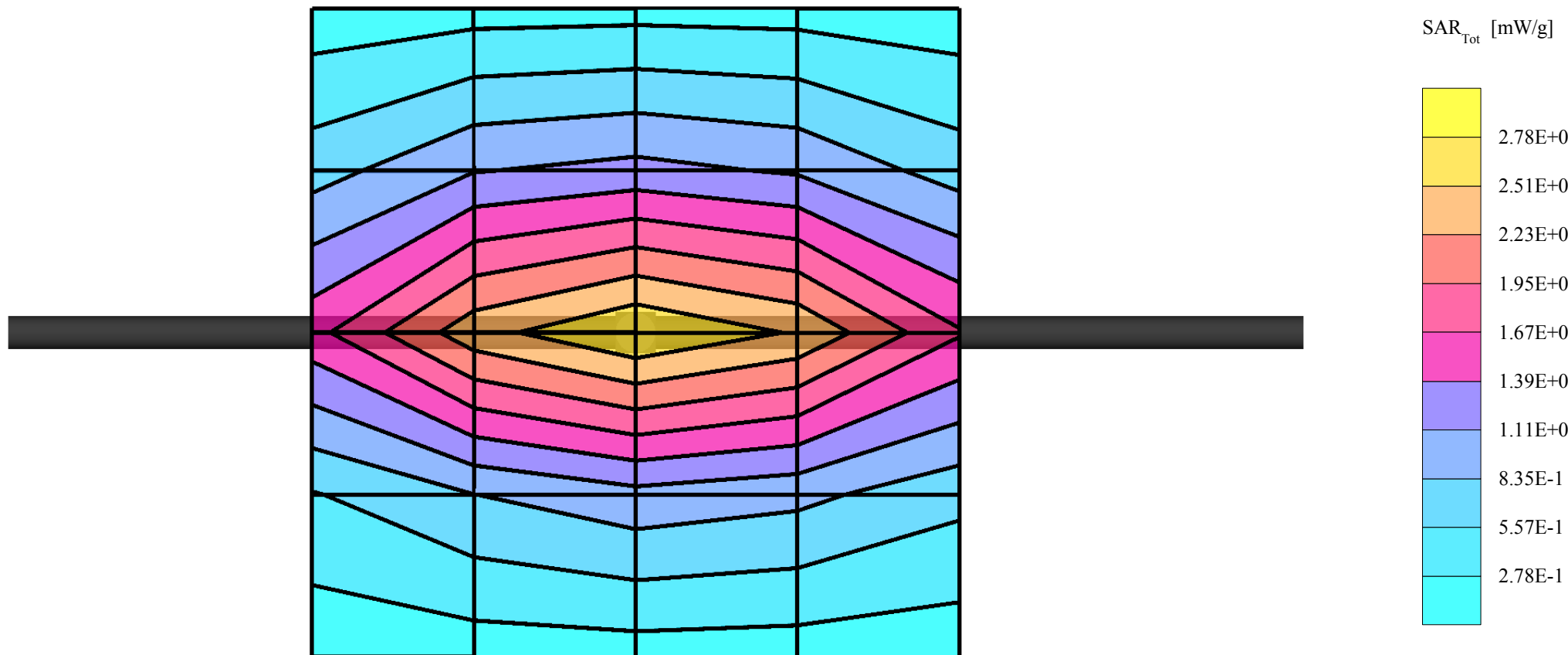
Probe: ET3DV6 - SN1504; ConvF(6.20,6.20,6.20)

Cubes (2): Peak: 3.57 mW/g ± 0.10 dB, SAR (1g): 2.45 mW/g ± 0.10 dB, SAR (10g): 1.63 mW/g ± 0.10 dB, (Advanced extrapolation)

Penetration depth: 13.9 (13.5, 14.4) [mm]

Powerdrift: -0.02 dB

Liquid Temperature (°C): 21.2



Dipole 1900 MHz, Body Validation

SAM 3 (PCS - Brain / Muscle Tissue)

Frequency: 1900 MHz; Crest factor: 1.0

PCS Band - Muscle Tissue: $\sigma = 1.58$ mho/m $\epsilon_r = 51.0$ $\rho = 1.00$ g/cm³

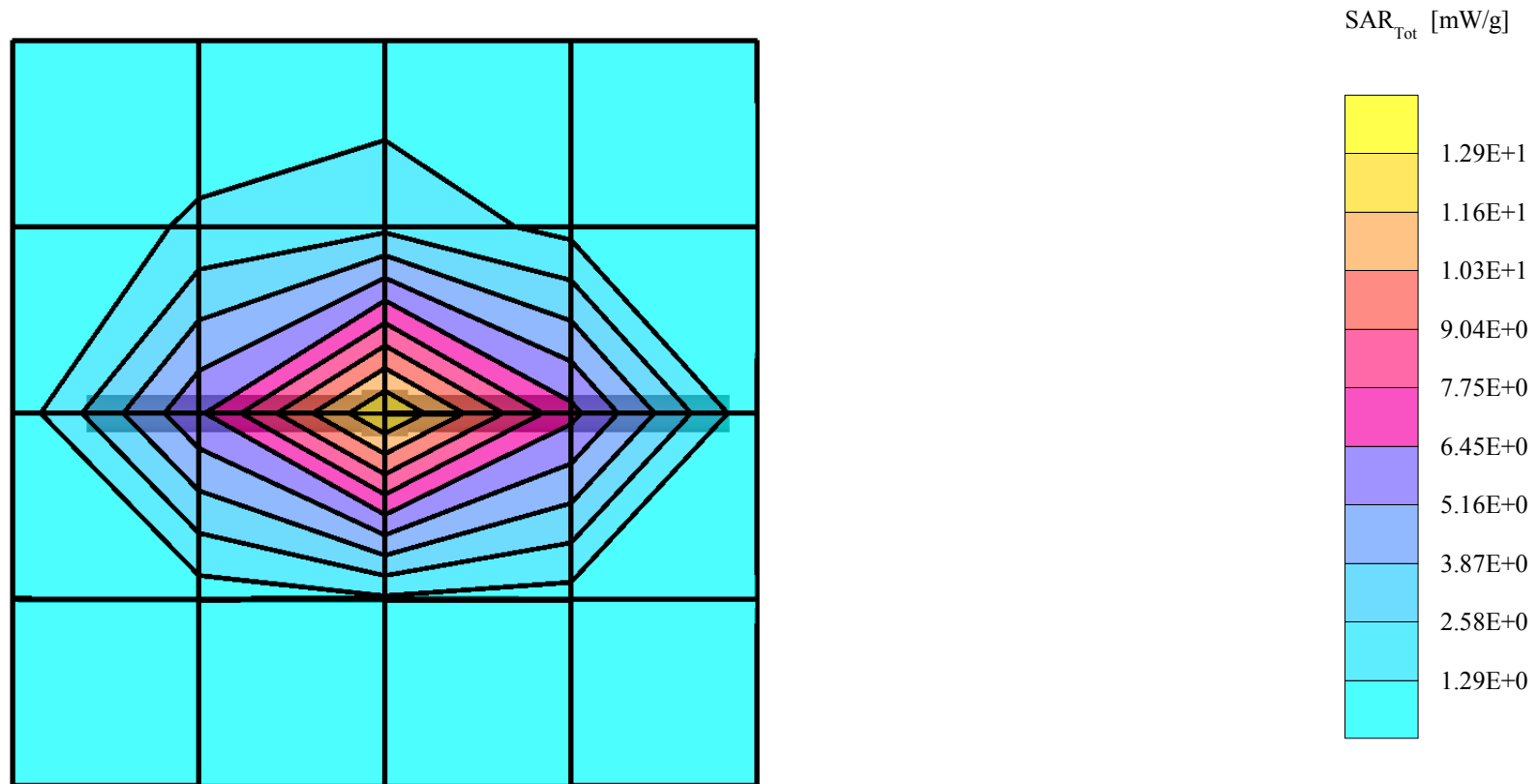
Probe: ET3DV6 - SN1504; ConvF(4.50,4.50,4.50)

Cubes (2): Peak: 18.6 mW/g ± 0.13 dB, SAR (1g): 10.6 mW/g ± 0.10 dB, SAR (10g): 5.53 mW/g ± 0.09 dB, (Advanced extrapolation)

Penetration depth: 9.0 (8.9, 9.2) [mm]

Powerdrift: 0.01 dB

Liquid Temperature (°C): 22.0





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APPENDIX B: MEASUREMENT SCANS

RH-25, AMPS 800, Channel 991, Left Cheek Position with BLD-3 Battery (Black Lead-Free Screws)

SAM 1 (Cellular - Brain Tissue) Phantom

Frequency: 824 MHz; Crest factor: 1.0

Cellular Band - Brain Tissue: $\sigma = 0.89$ mho/m $\epsilon_r = 41.4$ $\rho = 1.00$ g/cm³

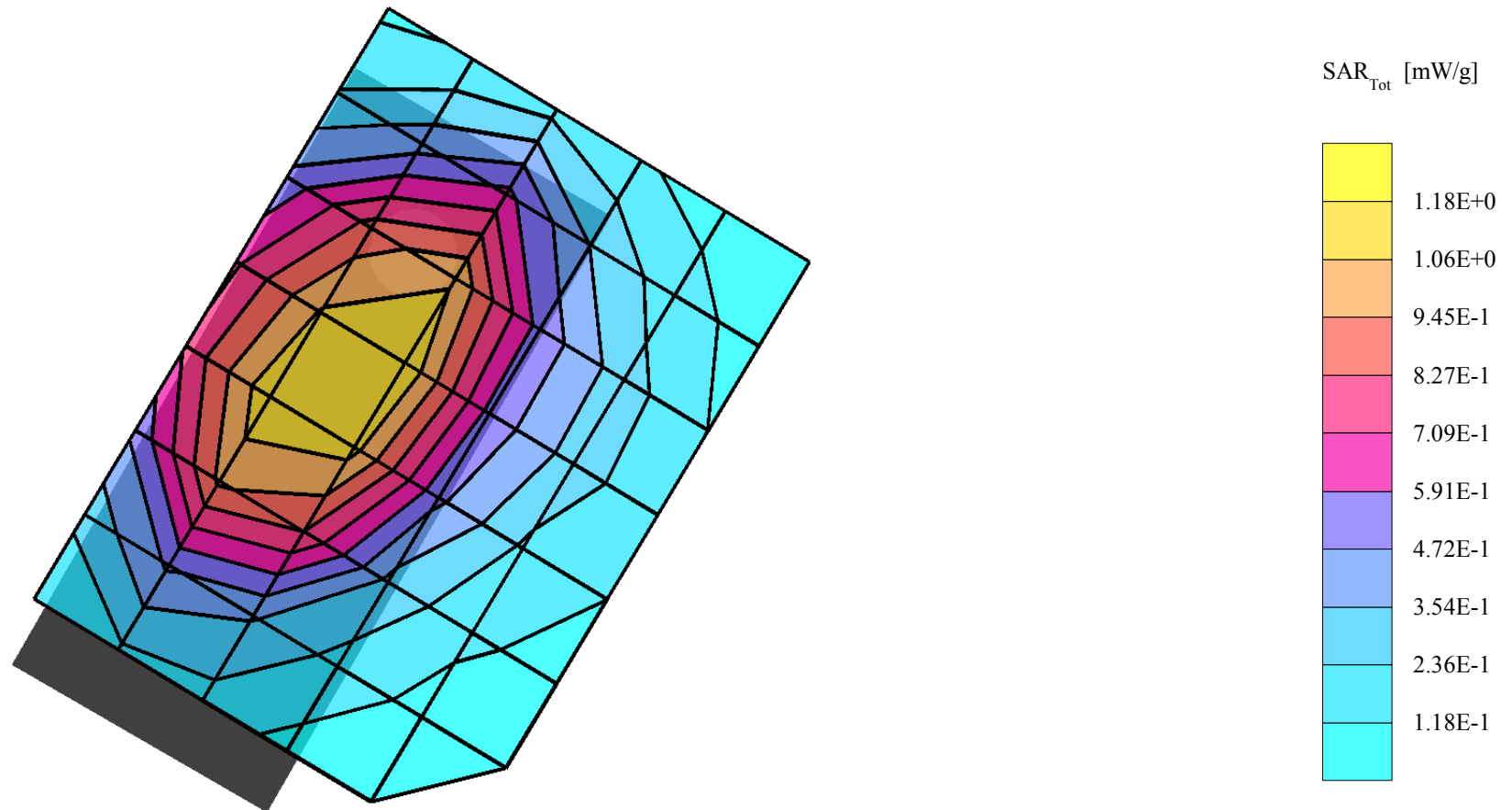
Probe: ET3DV6 - SN1504; ConvF(6.20,6.20,6.20)

Cube 5x5x7: SAR (1g): 1.18 mW/g, SAR (10g): 0.832 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Powerdrift: -0.06 dB

Liquid Temperature (°C): 21.5



RH-25, AMPS 800, Channel 384, Left Tilt Position with BLD-3 Battery (Black Lead-Free Screws)

SAM 1 (Cellular - Brain Tissue) Phantom

Frequency: 836.5 MHz; Crest factor: 1.0

Cellular Band - Brain Tissue: $\sigma = 0.89$ mho/m $\epsilon_r = 41.4$ $\rho = 1.00$ g/cm³

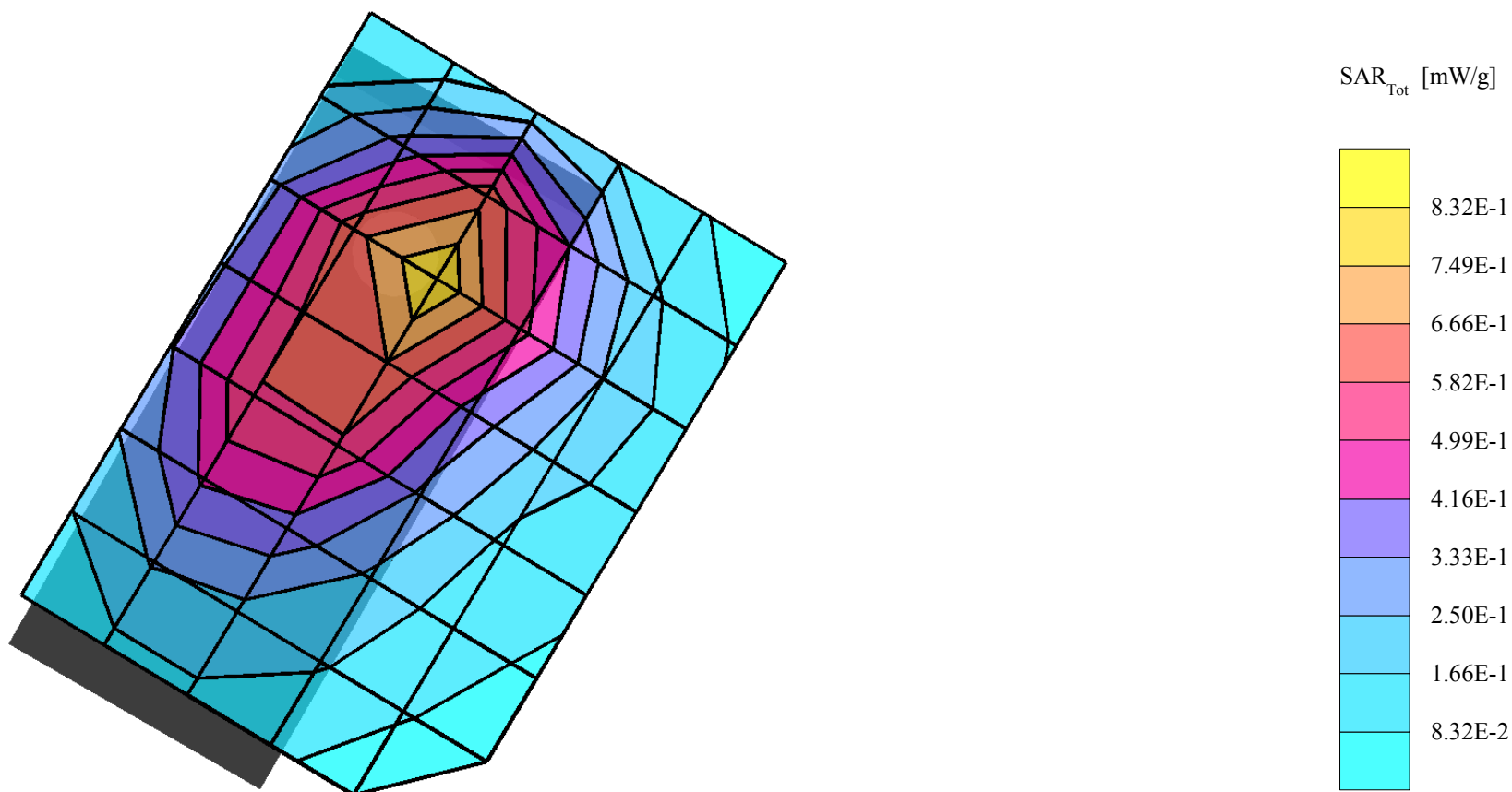
Probe: ET3DV6 - SN1504; ConvF(6.20,6.20,6.20)

Cube 5x5x7: SAR (1g): 0.791 mW/g, SAR (10g): 0.477 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Powerdrift: -0.35 dB

Liquid Temperature (°C): 21.5



RH-25, AMPS 800, Channel 991, Right Cheek Position with BLD-3 Battery (Black Lead-Free Screws)

SAM 1 (Cellular - Brain Tissue) Phantom

Frequency: 824 MHz; Crest factor: 1.0

Cellular Band - Brain Tissue: $\sigma = 0.89$ mho/m $\epsilon_r = 41.4$ $\rho = 1.00$ g/cm³

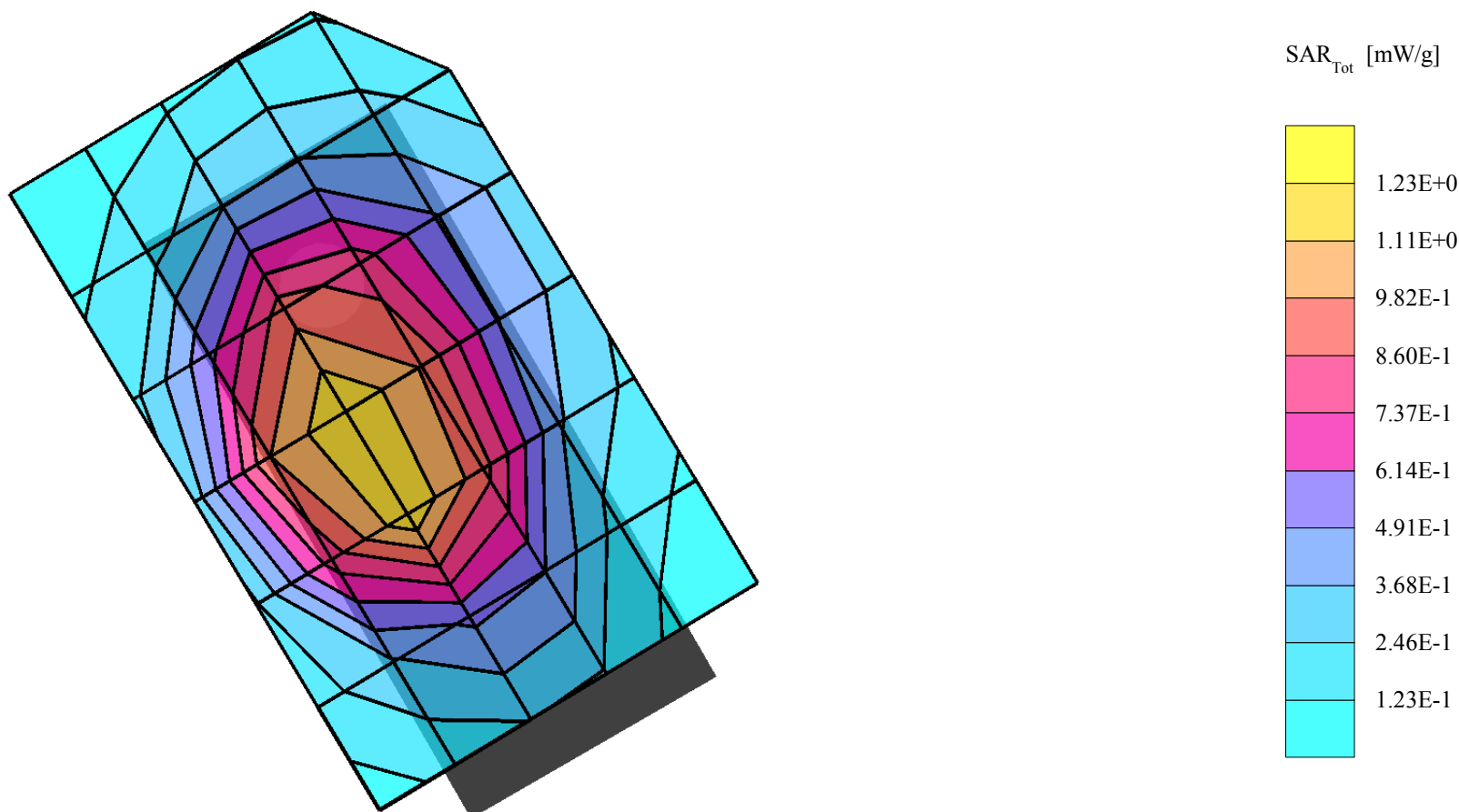
Probe: ET3DV6 - SN1504; ConvF(6.20,6.20,6.20)

Cubes (2): SAR (1g): 1.15 mW/g ± 0.08 dB, SAR (10g): 0.804 mW/g ± 0.09 dB, (Worst-case extrapolation)

Coarse: Dx = 19.0, Dy = 14.0, Dz = 10.0

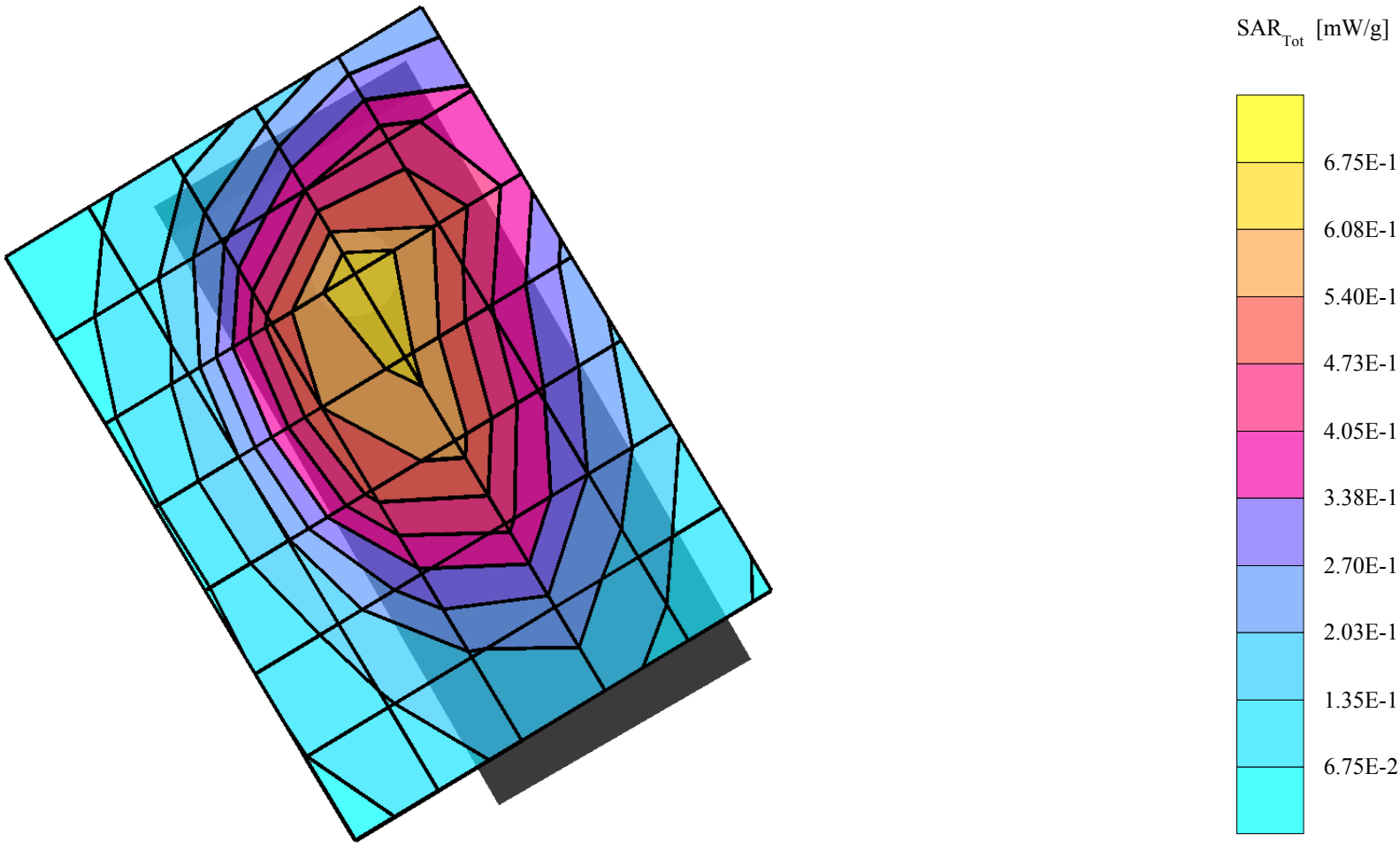
Powerdrift: -0.14 dB

Liquid Temperature (°C): 21.5



RH-25, AMPS 800, Channel 384, Right Tilt Position with BLD-3 Battery (Silver Lead-Free Screws)

SAM 1 (Cellular - Brain Tissue) Phantom
Frequency: 837 MHz; Crest factor: 1.0
Cellular Band - Brain Tissue: $\sigma = 0.88$ mho/m $\epsilon_r = 40.8$ $\rho = 1.00$ g/cm³
Probe: ET3DV6 - SN1504; ConvF(6.20,6.20,6.20)
Cube 5x5x7: SAR (1g): 0.640 mW/g, SAR (10g): 0.434 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Powerdrift: -0.28 dB
Liquid Temperature (°C): 21.0



RH-25, TDMA 1900, Channel 1998, Left Cheek Position with BLD-3 Battery (Black Lead-Free Screws)

SAM 3 (PCS - Brain / Muscle Tissue) Phantom

Frequency: 1910 MHz; Crest factor: 3.0

PCS Band - Brain Tissue: $\sigma = 1.44$ mho/m $\epsilon_r = 40.3$ $\rho = 1.00$ g/cm³

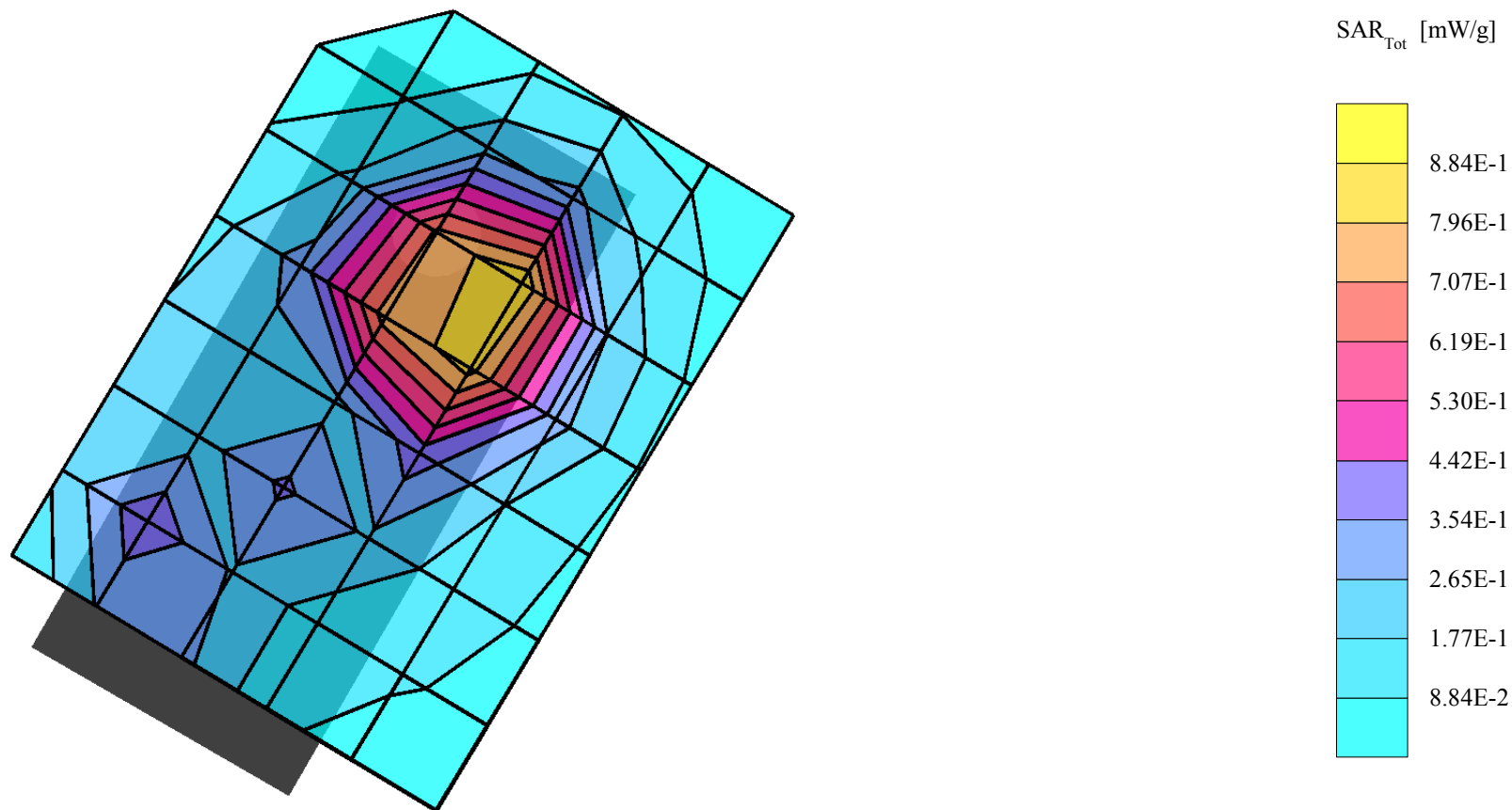
Probe: ET3DV6 - SN1504; ConvF(5.00,5.00,5.00)

Cube 5x5x7: SAR (1g): 1.06 mW/g, SAR (10g): 0.540 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Powerdrift: -0.01 dB

Liquid Temperature (°C): 19.3



RH-25, TDMA 1900, Channel 1998, Left Tilt Position with BLD-3 Battery (Black Lead-Free Screws)

SAM 3 (PCS - Brain / Muscle Tissue) Phantom

Frequency: 1910 MHz; Crest factor: 3.0

PCS Band - Brain Tissue: $\sigma = 1.44$ mho/m $\epsilon_r = 40.3$ $\rho = 1.00$ g/cm³

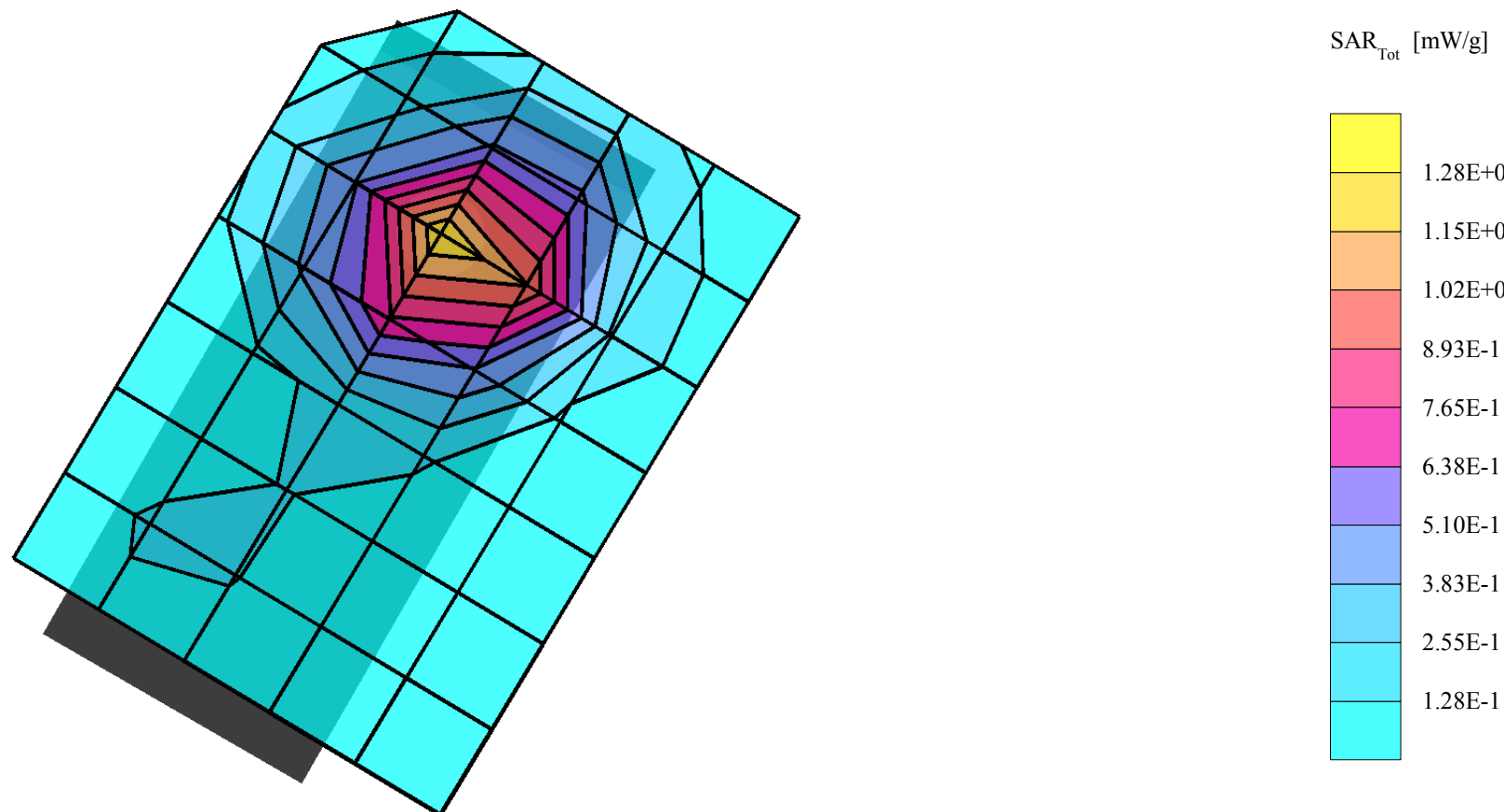
Probe: ET3DV6 - SN1504; ConvF(5.00,5.00,5.00)

Cube 5x5x7: SAR (1g): 1.25 mW/g, SAR (10g): 0.659 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Powerdrift: -0.07 dB

Liquid Temperature (°C): 19.3



RH-25, TDMA 1900, Channel 999, Right Cheek Position with BLD-3 Battery (Black Lead-Free Screws)

SAM 3 (PCS - Brain / Muscle Tissue) Phantom

Frequency: 1880 MHz; Crest factor: 3.0

PCS Band - Brain Tissue: $\sigma = 1.44$ mho/m $\epsilon_r = 40.3$ $\rho = 1.00$ g/cm³

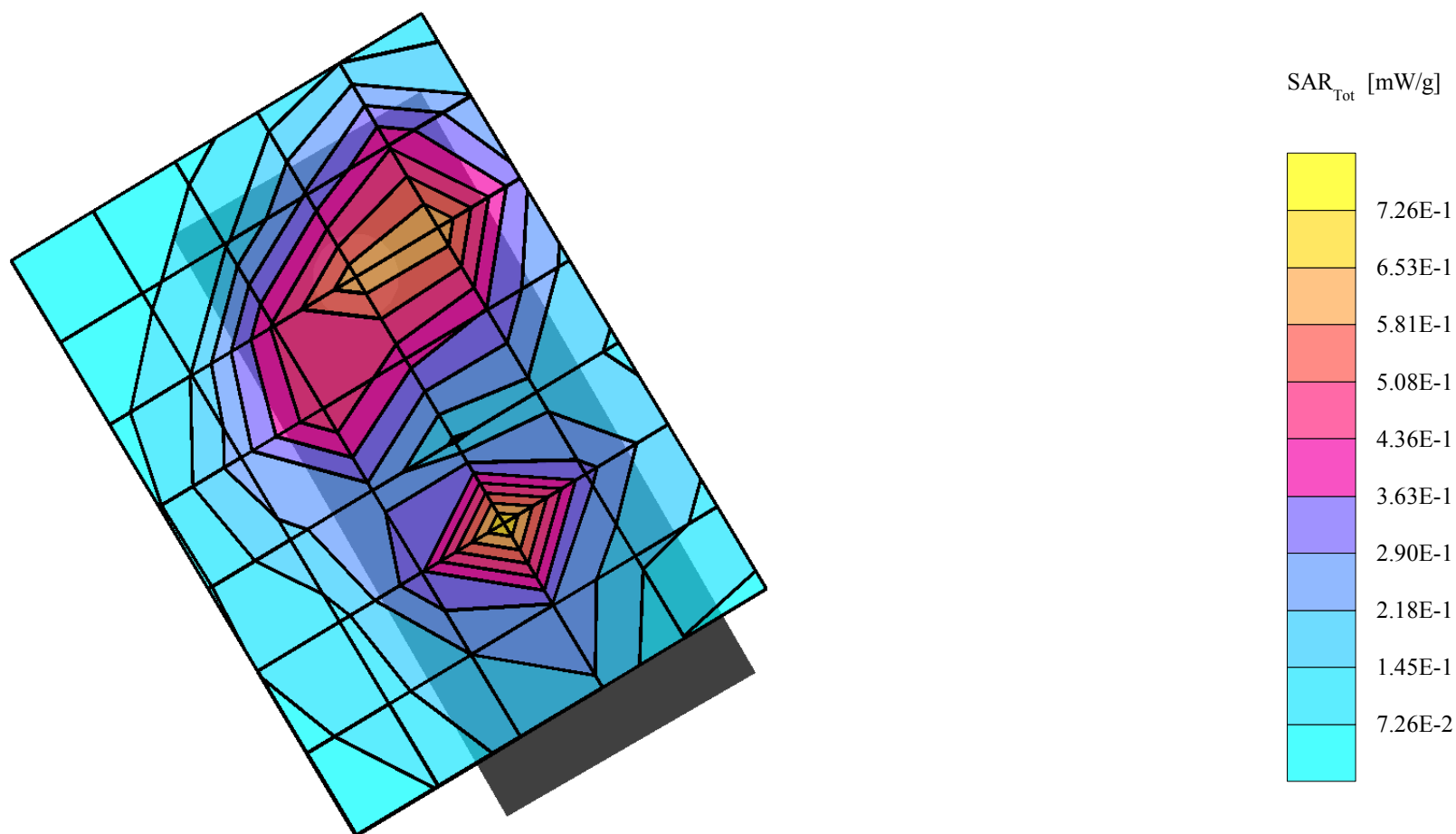
Probe: ET3DV6 - SN1504; ConvF(5.00,5.00,5.00)

Cube 5x5x7: SAR (1g): 0.598 mW/g, SAR (10g): 0.310 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Powerdrift: -0.18 dB

Liquid Temperature (°C): 19.3



RH-25, TDMA 1900, Channel 1998, Right Tilt Position with BLD-3 Battery (Black Lead-Free Screws)

SAM 3 (PCS - Brain / Muscle Tissue) Phantom

Frequency: 1910 MHz; Crest factor: 3.0

PCS Band - Brain Tissue: $\sigma = 1.44$ mho/m $\epsilon_r = 40.3$ $\rho = 1.00$ g/cm³

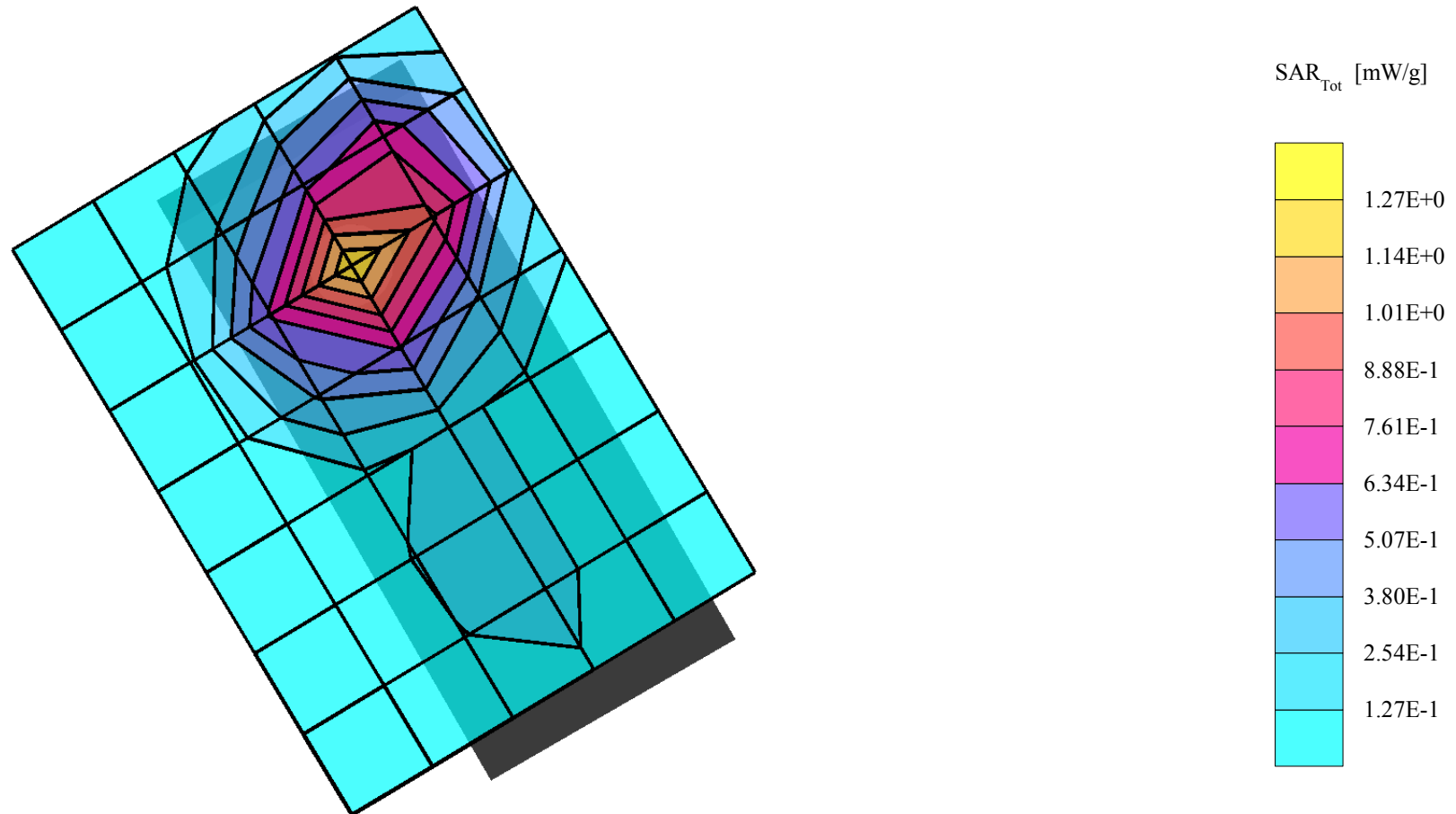
Probe: ET3DV6 - SN1504; ConvF(5.00,5.00,5.00)

Cube 5x5x7: SAR (1g): 1.16 mW/g, SAR (10g): 0.638 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Powerdrift: -0.04 dB

Liquid Temperature (°C): 19.3



RH-25, AMPS 800, Channel 384, Flat Position with 1.5cm Spacer, BLD-3 Battery and HS-5 Headset (Silver Lead-Free Screws)

SAM 2 (Cellular - Muscle Tissue) Phantom

Frequency: 837 MHz; Crest factor: 1.0

Cellular Band - Muscle Tissue: $\sigma = 0.96$ mho/m $\epsilon_r = 54.5$ $\rho = 1.00$ g/cm³

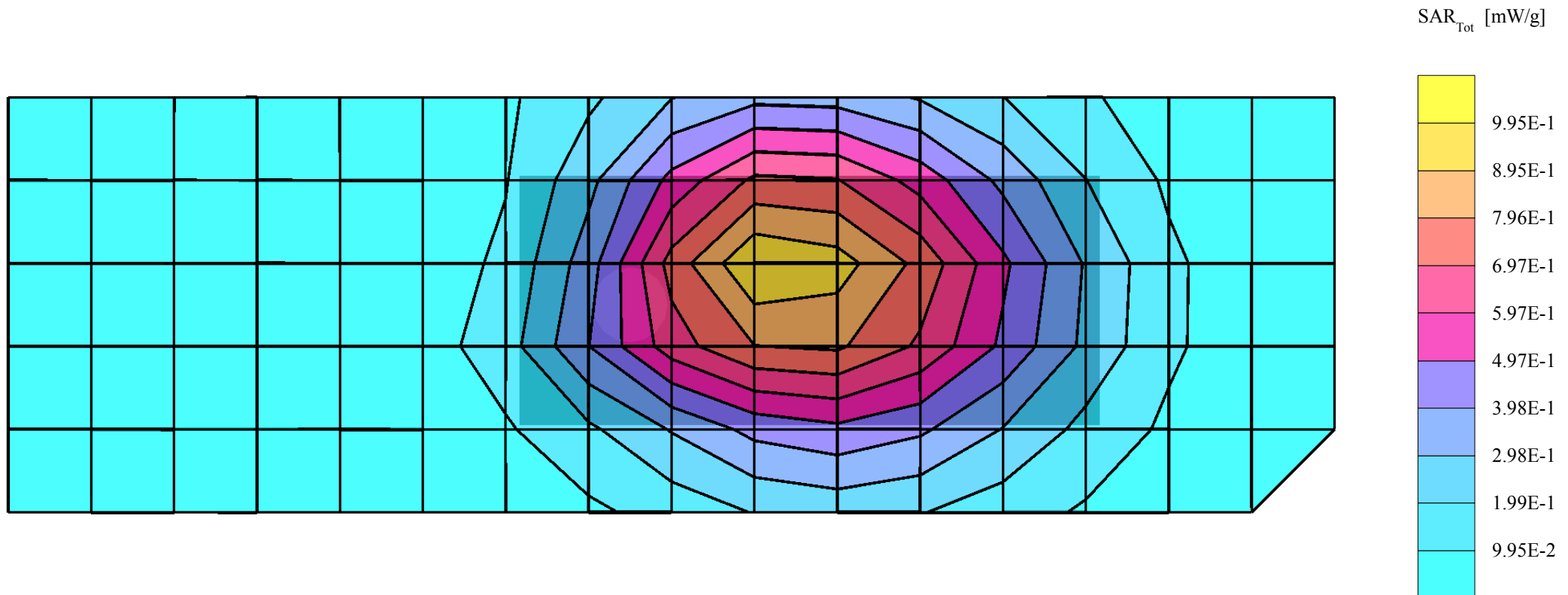
Probe: ET3DV6 - SN1504; ConvF(6.20,6.20,6.20)

Cube 5x5x7: SAR (1g): 0.943 mW/g, SAR (10g): 0.665 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 12.0

Powerdrift: -0.18 dB

Liquid Temperature (°C): 21.2



RH-25, TDMA 1900, Channel 2, Flat Position with 1.5cm Spacer, BLD-3 Battery and HS-5 Headset (Black Lead-Free Screws)

SAM 3 (PCS - Brain / Muscle Tissue) Phantom

Frequency: 1850 MHz; Crest factor: 3.0

PCS Band - Muscle Tissue: $\sigma = 1.56$ mho/m $\epsilon_r = 51.0$ $\rho = 1.00$ g/cm³

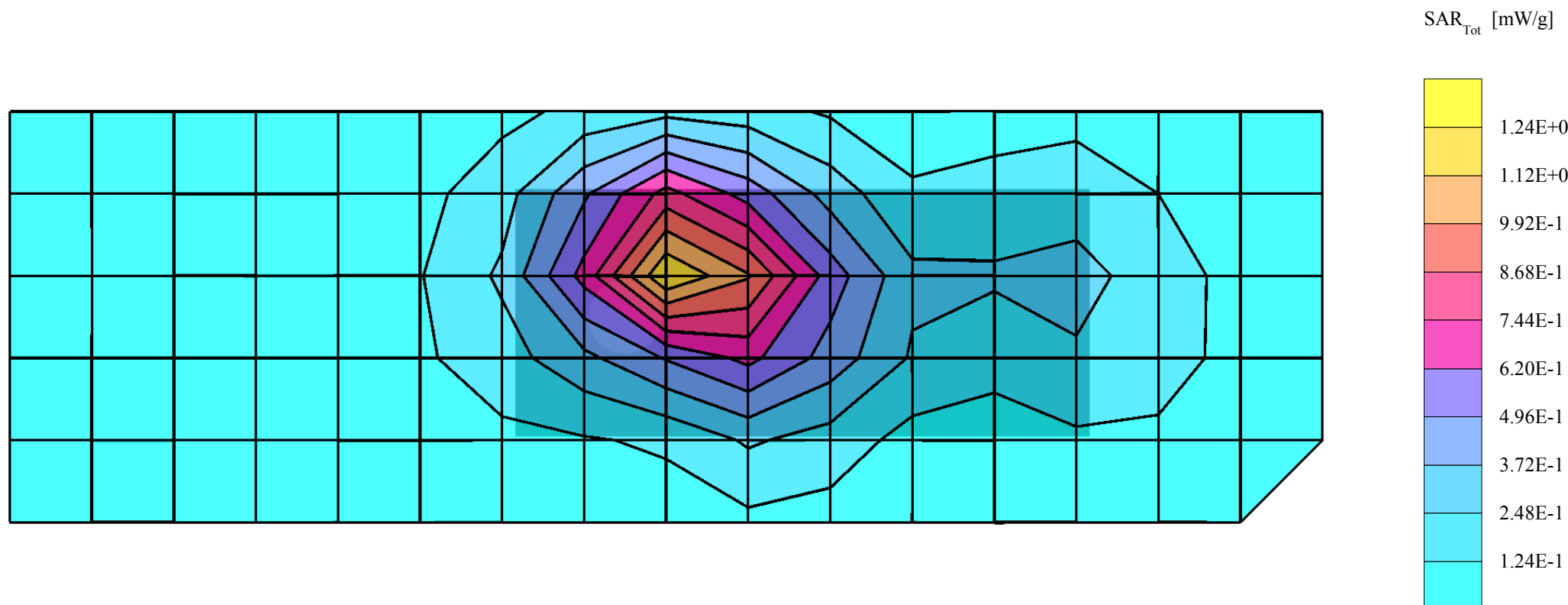
Probe: ET3DV6 - SN1504; ConvF(4.50,4.50,4.50)

Cube 5x5x7: SAR (1g): 1.19 mW/g, SAR (10g): 0.652 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 12.0

Powerdrift: -0.03 dB

Liquid Temperature (°C): 22.0



RH-25, AMPS 800, Channel 991, Left Cheek Position with BLD-3 Battery (Black Lead-Free Screws)

SAM 1 (Cellular - Brain Tissue) Phantom

Frequency: 824 MHz; Crest factor: 1.0

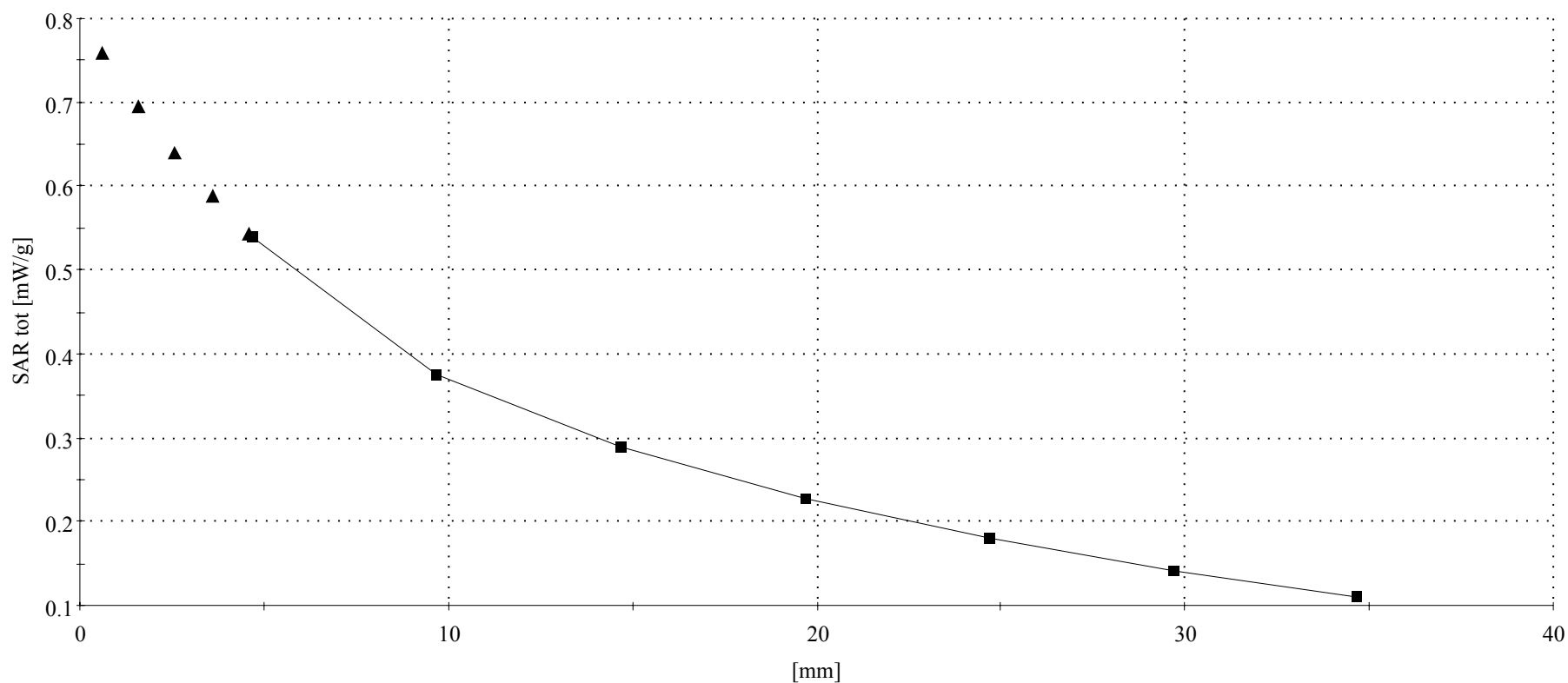
Cellular Band - Brain Tissue: $\sigma = 0.89$ mho/m $\epsilon_r = 41.4$ $\rho = 1.00$ g/cm³

Probe: ET3DV6 - SN1504; ConvF(6.20,6.20,6.20)

Cube 5x5x7: SAR (1g): 1.18 mW/g, SAR (10g): 0.832 mW/g, (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

Liquid Temperature (°C): 21.5



RH-25, TDMA 1900, Channel 1998, Left Tilt Position with BLD-3 Battery (Black Screws)

SAM 3 (PCS - Brain / Muscle Tissue) Phantom

Frequency: 1910 MHz; Crest factor: 3.0

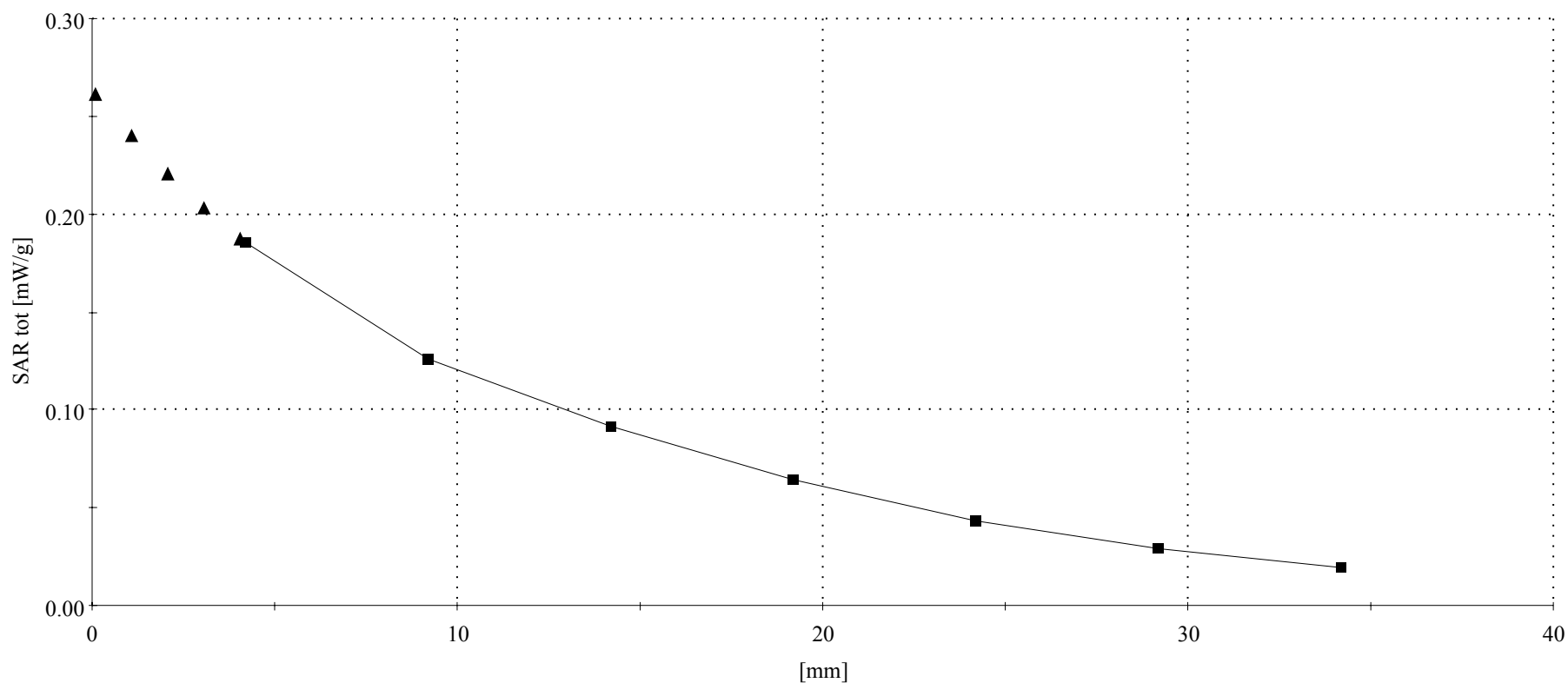
PCS Band - Brain Tissue: $\sigma = 1.44$ mho/m $\epsilon_r = 40.3$ $\rho = 1.00$ g/cm³

Probe: ET3DV6 - SN1504; ConvF(5.00,5.00,5.00)

Cube 5x5x7: SAR (1g): 1.25 mW/g, SAR (10g): 0.659 mW/g, (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

Liquid Temperature (°C): 19.3



RH-25, AMPS 800, Channel 384, Flat Position with 1.5cm Spacer, BLD-3 Battery and HS-5 Headset (Silver Lead-Free Screws)

SAM 2 (Cellular - Muscle Tissue) Phantom

Frequency: 837 MHz; Crest factor: 1.0

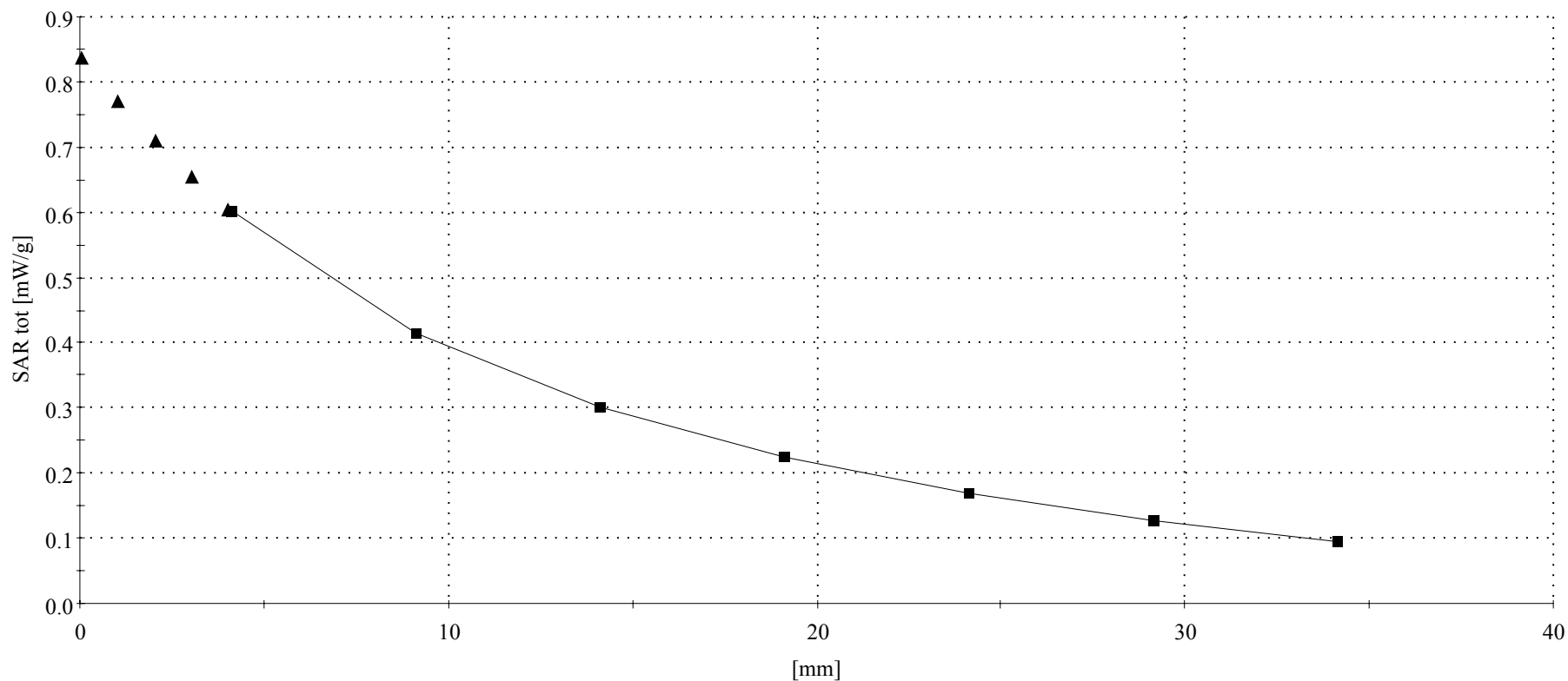
Cellular Band - Muscle Tissue: $\sigma = 0.96$ mho/m $\epsilon_r = 54.5$ $\rho = 1.00$ g/cm³

Probe: ET3DV6 - SN1504; ConvF(6.20,6.20,6.20)

Cube 5x5x7: SAR (1g): 0.943 mW/g, SAR (10g): 0.665 mW/g, (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

Liquid Temperature (°C): 21.2



RH-25, TDMA 1900, Channel 2, Flat Position with 1.5cm Spacer, BLD-3 Battery and HS-5 Headset (Black Lead-Free Screws)

SAM 3 (PCS - Brain / Muscle Tissue) Phantom

Frequency: 1850 MHz; Crest factor: 3.0

PCS Band - Muscle Tissue: $\sigma = 1.56$ mho/m $\epsilon_r = 51.0$ $\rho = 1.00$ g/cm³

Probe: ET3DV6 - SN1504; ConvF(4.50,4.50,4.50)

Cube 5x5x7: SAR (1g): 1.19 mW/g, SAR (10g): 0.652 mW/g, (Worst-case extrapolation)

Cube 5x5x7: Dx = 8.0, Dy = 8.0, Dz = 5.0

Liquid Temperature (°C): 22.0

