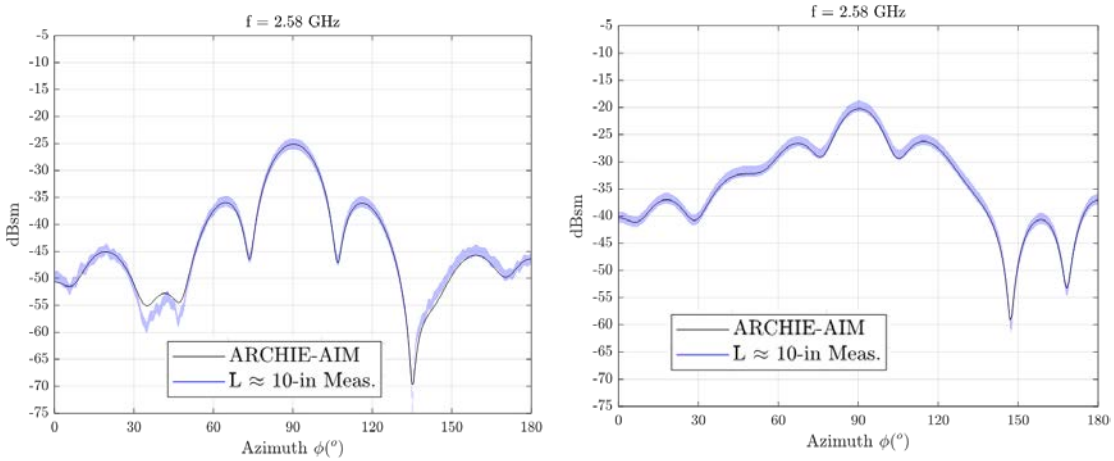

Figure 1: The HH ($\sigma_{\phi\phi,\mathrm{dB}}$, left) and VV ($\sigma_{\theta\theta,\mathrm{dB}}$, right) polarized RCS for the Resin EXPEDITE-RCS of length L= 9.1875 in at frequency f = 2.58 GHz.

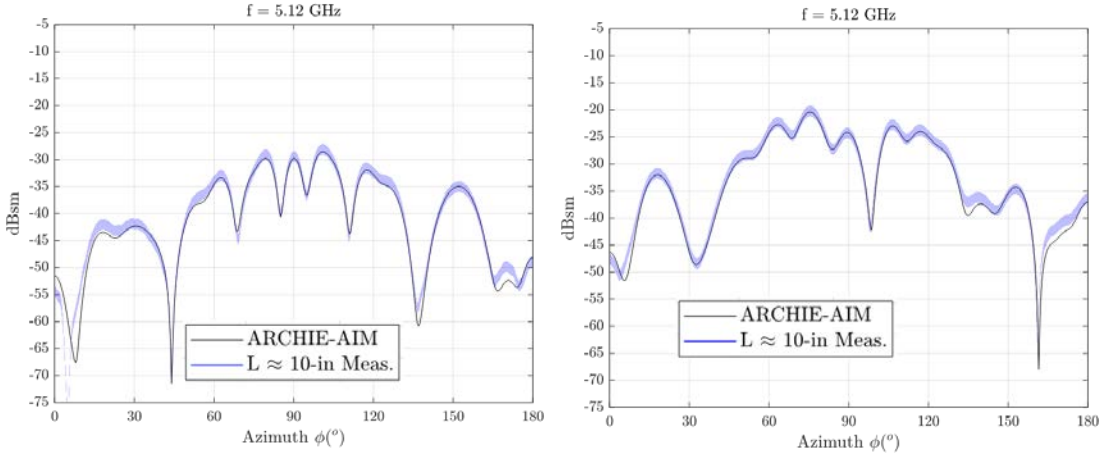

Figure 2: The HH ($\sigma_{\phi\phi,\mathrm{dB}}$, left) and VV ($\sigma_{\theta\theta,\mathrm{dB}}$, right) polarized RCS for the Resin EXPEDITE-RCS of length L= 9.1875 in at frequency f = 5.12 GHz.

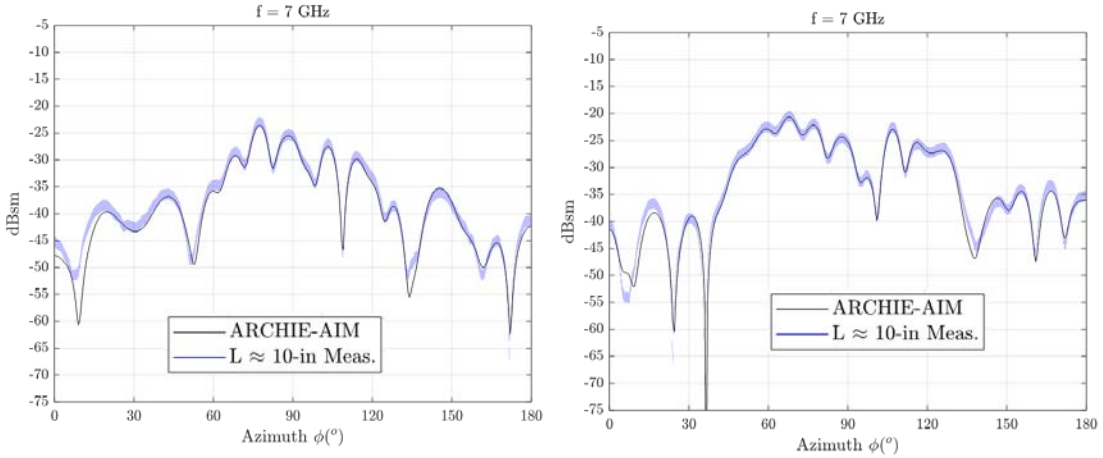

Figure 3: The HH ($\sigma_{\phi\phi,\mathrm{dB}}$, left) and VV ($\sigma_{\theta\theta,\mathrm{dB}}$, right) polarized RCS for the Resin EXPEDITE-RCS of length L= 9.1875 in at frequency f = 7 GHz.

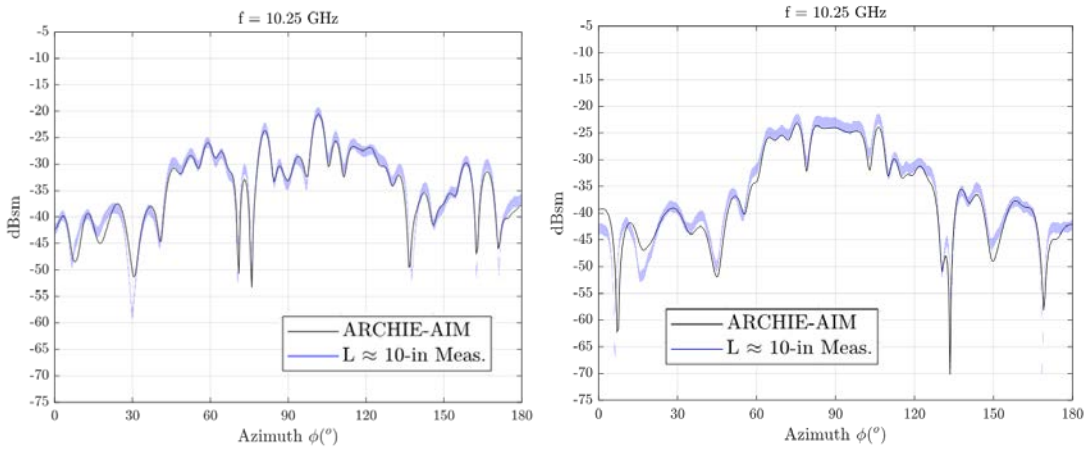

Figure 4: The HH ($\sigma_{\phi\phi,\mathrm{dB}}$, left) and VV ($\sigma_{\theta\theta,\mathrm{dB}}$, right) polarized RCS for the Resin EXPEDITE-RCS of length L= 9.1875 in at frequency f = 10.25 GHz.

The above RCS results are that of the reference measurement and simulation data in the benchmark suite.

Notes

1. The measurement data are provided at every 0.25^{o} in the azimuthal range; the simulation data are at every 0.5^{o}.
2. The simulation data were calculated by using the ARCHIE-AIM code, a frequency-domain FFT-accelerated integral-equation solver developed at UT Austin [2]-[4].

References

[1] J. T. Kelley, D. A. Chamulak, C. C. Courtney, and A. E. Yilmaz, "Rye Canyon radar cross-section measurements of benchmark almond targets," *IEEE Ant. Popag. Soc. Mag.*, Feb. 2020.

[2] M. F. Wu, G. Kaur, and A. E. Yılmaz, "A multiple-grid adaptive integral method for multi-region problems," *IEEE Trans. Antennas Propag.*, vol. 58, no. 5, pp. 1601-1613, May 2010.

[3] F. Wei and A. E. Yılmaz, "A more scalable and efficient parallelization of the adaptive integral method part I: algorithm," *IEEE Trans. Antennas Propag.*, vol. 62, no.2, pp. 714-726, Feb. 2014.

[4] J. W. Massey, V. Subramanian, C. Liu, and A. E. Yılmaz, "Analyzing UHF band antennas near humans with a fast integral-equation method," in *Proc. EUCAP*, Apr. 2016.