

In addition to the RCS plots for each problem, the data files for selected references are included. The data file format is shown in the table below

Frequency (Hz)	Theta	Phi	RCS (dB)
7000000000.00	90.00	0.00	-42.470146
7000000000.00	90.00	0.50	-42.472772
7000000000.00	90.00	1.00	-42.481293
7000000000.00	90.00	1.50	-42.495569
7000000000.00	90.00	2.00	-42.515470
7000000000.00	90.00	2.50	-42.541625
7000000000.00	90.00	3.00	-42.573573
7000000000.00	90.00	3.50	-42.612388
7000000000.00	90.00	4.00	-42.657847
7000000000.00	90.00	4.50	-42.710325
7000000000.00	90.00	5.00	-42.770493
7000000000.00	90.00	5.50	-42.838445

The data files provided as reference for this problem were found using the COMPASS-EM code [1].

Names for data files have the format: 'ref_rcs.I.C.s**S**.f**F**.**p**.txt'.

Here,

- **S** $\in \{2,7\}$ corresponds to the benchmark problem size $D = .6$ m, 19.2 m
- **F** $\in \{1,4,6\}$ corresponds to 10 MHz, 80 MHz, 320 MHz
- **p** $\in \{H,V\}$ for HH and VV polarization

In addition, two reference data files 'ref_rcs.I.C.s2.f4.**p**.unusual.txt' are provided. These correspond to unusual scattering problem, case 2, described in the ProblemDescription document

References

[1] G. Kaur (2015) COMPASS-EM: Comprehensive program for analytical scattering solutions for electromagnetics. [Online]. Available: <http://web.corral.tacc.utexas.edu/BioEM-Benchmarks/COMPASS-EM/index.html>