

STEREO model Rheometry

Oswald, T.H., W. Macher, G. Fischer, H.O. Rucker

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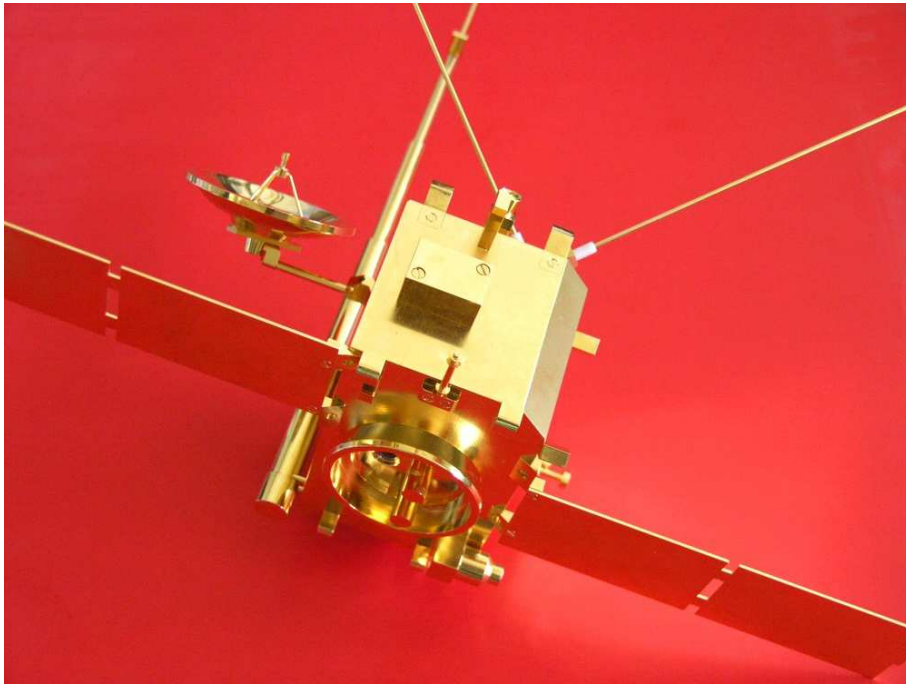


Figure 1: Rheometry model

%beginabstract

1 Results

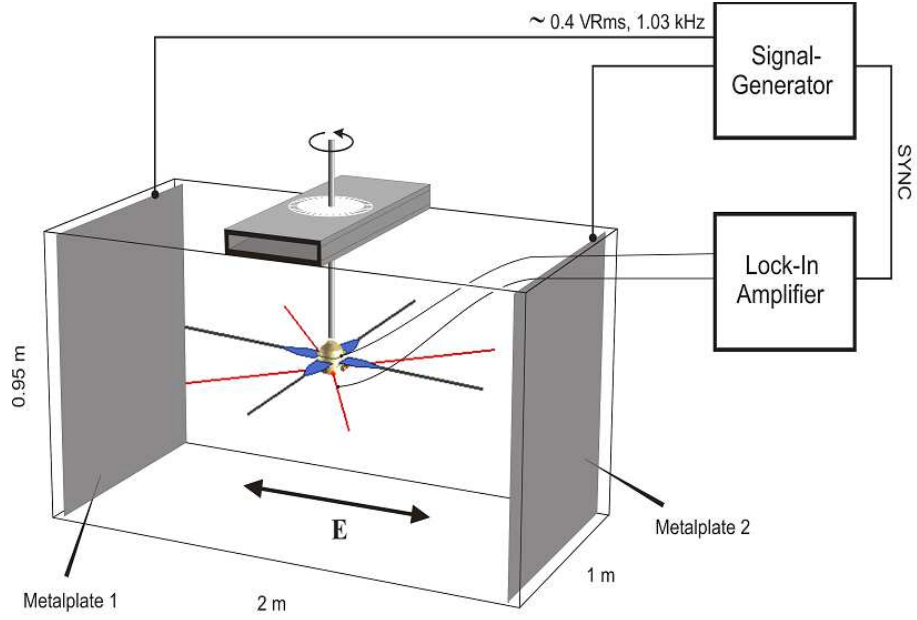


Figure 2: Water tank

Table 1: Results of the Rheometry in comparison with the numerical results of S/C A at 100kHz, HGA 0°, without capacities.

		Rheometry	ASAP	Physical antennas
E1	length/m	3.35	2.80	6.00
	$\zeta/^\circ$	132.32	135.81	125.26
	$\xi/^\circ$	21.43	20.17	0.0
E2	length/m	5.46	4.38	6.00
	$\zeta/^\circ$	121.46	121.11	125.26
	$\xi/^\circ$	127.01	127.11	120.0
E3	length/m	4.01	3.50	6.00
	$\zeta/^\circ$	130.64	128.78	125.26
	$\xi/^\circ$	-141.29	-142.57	-120.0

Table 2: Results of the Rheometry in comparison with the numerical results of S/C A at 100kHz, HGA 90° (to boom tip), without capacities.

		Rheometry	ASAP	Physical antennas
E1	length/m	3.35	<u>2.79</u>	6.00
	$\zeta/^\circ$	131.75	134.85	125.26
	$\xi/^\circ$	21.48	20.66	0.0
E2	length/m	5.46	4.36	6.00
	$\zeta/^\circ$	121.09	120.57	125.26
	$\xi/^\circ$	127.53	126.59	120.0
E3	length/m	4.04	3.39	6.00
	$\zeta/^\circ$	130.61	128.50	125.26
	$\xi/^\circ$	-141.40	-142.95	-120.0

Table 3: Results of the Rheometry in comparison with the numerical results of S/C A at 100kHz, HGA -90° (to panel), without capacities.

		Rheometry	ASAP	Physical antennas
E1	length/m	3.37	<u>2.81</u>	6.00
	$\zeta/^\circ$	132.21	136.33	125.26
	$\xi/^\circ$	20.93	19.55	0.0
E2	length/m	5.45	4.37	6.00
	$\zeta/^\circ$	121.36	121.52	125.26
	$\xi/^\circ$	126.95	127.32	120.0
E3	length/m	4.10	3.54	6.00
	$\zeta/^\circ$	130.82	129.06	125.26
	$\xi/^\circ$	-140.86	-141.96	-120.0

Table 4: Results of the Rheometry in comparison with the numerical results of S/C B at 100kHz, HGA 0°, without capacities.

		Rheometry	ASAP	Physical antennas
E1	length/m	3.34	3.13	6.00
	$\zeta/^\circ$	132.88	134.16	125.26
	$\xi/^\circ$	20.26	17.2	0.0
E2	length/m	5.47	4.64	6.00
	$\zeta/^\circ$	121.07	121.32	125.26
	$\xi/^\circ$	127.67	126.36	120.0
E3	length/m	4.14	3.79	6.00
	$\zeta/^\circ$	130.46	128.39	125.26
	$\xi/^\circ$	-141.5	-139.80	-120.0

Table 5: Results of the Rheometry in comparison with the numerical results of S/C B at 100kHz, HGA 90° (to boom tip), without capacities.

		Rheometry	ASAP	Physical antennas
E1	length/m	3.35	3.12	6.00
	$\zeta/^\circ$	132.66	133.40	125.26
	$\xi/^\circ$	20.27	17.72	0.0
E2	length/m	5.45	4.63	6.00
	$\zeta/^\circ$	120.82	120.86	125.26
	$\xi/^\circ$	127.24	125.93	120.0
E3	length/m	4.08	3.70	6.00
	$\zeta/^\circ$	130.31	128.16	125.26
	$\xi/^\circ$	-141.62	-140.11	-120.0

Table 6: Results of the Rheometry in comparison with the numerical results of S/C B at 100kHz, HGA -90° (to panel), without capacities.

		Rheometry	ASAP	Physical antennas
E1	length/m	3.34	3.14	6.00
	$\zeta/^\circ$	132.49	134.57	125.26
	$\xi/^\circ$	19.77	16.74	0.0
E2	length/m	5.45	4.64	6.00
	$\zeta/^\circ$	121.20	121.68	125.26
	$\xi/^\circ$	127.51	126.53	120.0
E3	length/m	4.15	3.83	6.00
	$\zeta/^\circ$	130.65	128.62	125.26
	$\xi/^\circ$	-141.02	-139.28	-120.0

Table 7: Comparison of Rheometry results of S/C A and B, HGA 0°

		A	B	Physical antennas
E1	length/m	3.35	3.34	6.00
	$\zeta/^\circ$	132.32	132.88	125.26
	$\xi/^\circ$	21.43	20.26	0.0
E2	length/m	5.46	5.47	6.00
	$\zeta/^\circ$	121.46	121.07	125.26
	$\xi/^\circ$	127.01	127.67	120.0
E3	length/m	4.01	4.14	6.00
	$\zeta/^\circ$	130.64	130.46	125.26
	$\xi/^\circ$	-141.29	-141.5	-120.0

Table 8: Comparison of Rheometry results of S/C A and B, HGA 90°

		A	B	Physical antennas
E1	length/m	3.35	3.35	6.00
	$\zeta/^\circ$	131.75	132.66	125.26
	$\xi/^\circ$	21.48	20.27	0.0
E2	length/m	5.46	5.45	6.00
	$\zeta/^\circ$	121.09	120.82	125.26
	$\xi/^\circ$	127.53	127.24	120.0
E3	length/m	4.04	4.08	6.00
	$\zeta/^\circ$	130.61	130.31	125.26
	$\xi/^\circ$	-141.40	-141.62	-120.0

Table 9: Comparison of Rheometry results of S/C A and B, HGA -90°

		A	B	Physical antennas
E1	length/m	3.37	3.34	6.00
	$\zeta/^\circ$	132.21	132.49	125.26
	$\xi/^\circ$	20.93	19.77	0.0
E2	length/m	5.45	5.45	6.00
	$\zeta/^\circ$	121.36	121.20	125.26
	$\xi/^\circ$	126.95	127.51	120.0
E3	length/m	4.10	4.15	6.00
	$\zeta/^\circ$	130.82	130.65	125.26
	$\xi/^\circ$	-140.86	-141.02	-120.0

Table 10: Comparison of numerical results of S/C A and B at 100kHz, HGA 0°

		A	B	Physical antennas
E1	length/m	2.80	3.13	6.00
	$\zeta/^\circ$	135.81	134.16	125.26
	$\xi/^\circ$	20.17	17.2	0.0
E2	length/m	4.38	4.64	6.00
	$\zeta/^\circ$	121.11	121.32	125.26
	$\xi/^\circ$	127.11	126.36	120.0
E3	length/m	3.50	3.79	6.00
	$\zeta/^\circ$	128.78	128.39	125.26
	$\xi/^\circ$	-142.57	-139.80	-120.0

Table 11: Comparison of numerical results of S/C A and B at 100kHz, HGA 90°

		A	B	Physical antennas
E1	length/m	2.79	3.12	6.00
	$\zeta/^\circ$	134.85	133.39	125.26
	$\xi/^\circ$	20.66	17.72	0.0
E2	length/m	4.36	4.63	6.00
	$\zeta/^\circ$	120.57	120.86	125.26
	$\xi/^\circ$	126.59	125.93	120.0
E3	length/m	3.39	3.70	6.00
	$\zeta/^\circ$	128.50	128.16	125.26
	$\xi/^\circ$	-142.95	-140.11	-120.0

Table 12: Comparison of numerical results of S/C A and B at 100kHz, HGA -90°

		A	B	Physical antennas
E1	length/m	2.81	3.14	6.00
	$\zeta/^\circ$	136.33	134.57	125.26
	$\xi/^\circ$	19.55	16.74	0.0
E2	length/m	4.37	4.64	6.00
	$\zeta/^\circ$	121.52	121.68	125.26
	$\xi/^\circ$	127.32	126.53	120.0
E3	length/m	3.54	3.83	6.00
	$\zeta/^\circ$	129.06	128.62	125.26
	$\xi/^\circ$	-141.96	-139.28	-120.0

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