

The INCA discharge file contains a time ordered, space delimited list of INCA instrument collimator discharges. The first line of each INCA discharge file will be the column labels. There are four columns and the first is the UTC for each value. The second column, INCA_HVcurr is the INCA high voltage current monitor value in mA. The INCA_poscol_num_dis is the INCA positive collimator number of discharges and INCA_negcol_num_dis is the INCA negative collimator number of discharges. Both values are in counted discharges. Values are only recorded in the file if either the negative or positive collimator had a discharge.

Typically discharges are registered on both the positive and the negative counters for a single discharge event. This is because most discharges are across the gaps between positive and negative plates. The discharges are thought to be dominated by dust hits on the high voltage deflection plates, as well as by discharge of water vapor created as previous dust hits deposited on the deflection plates evaporates, which is why discharge rates often rise when the spacecraft attitude moves the collimator/deflection system from shadow into sunlight.

These discharges do not appear to have any measurable effect on the quality of the MIMI science data. They do, however, result in interference in the RPWS plasma wave data.

UTC	INCA_HVcurr	INCA_poscol_num_dis	INCA_negcol_num_dis
2016-200T04:26:17.460	41.121150	1.0000000	1.0000000
2016-200T23:12:41.028	41.121150	1.0000000	1.0000000
2016-201T14:30:00.677	41.121150	1.0000000	1.0000000
2016-201T18:27:52.586	41.608920	1.0000000	1.0000000
2016-202T18:44:56.027	41.121150	1.0000000	1.0000000
2016-204T14:37:27.019	41.608920	0.0000000	3.0000000
2016-204T19:03:02.917	41.121150	1.0000000	1.0000000
2016-204T19:08:22.915	41.121150	0.0000000	1.0000000
2016-205T04:21:58.703	41.121150	1.0000000	1.0000000
2016-206T15:12:37.902	23.561430	1.0000000	0.0000000
2016-207T10:02:13.469	32.341290	2.0000000	2.0000000
2016-207T11:33:57.434	27.463590	1.0000000	1.0000000
2016-207T13:23:49.392	27.463590	1.0000000	1.0000000
2016-207T14:36:21.364	27.463590	1.0000000	1.0000000
2016-207T15:40:21.339	26.975820	1.0000000	1.0000000
2016-207T17:31:17.297	26.975820	1.0000000	1.0000000
2016-207T17:34:29.295	26.975820	1.0000000	1.0000000
2016-213T12:40:04.098	45.023310	1.0000000	0.0000000
2016-213T13:26:58.080	41.121150	0.0000000	1.0000000
2016-215T10:55:28.034	41.608920	0.0000000	1.0000000
2016-219T06:01:01.940	43.560000	1.0000000	0.0000000
2016-219T21:41:50.580	44.535540	0.0000000	1.0000000
2016-221T22:43:41.452	24.049200	1.0000000	2.0000000
2016-224T13:40:44.005	42.096690	0.0000000	1.0000000
2016-224T16:03:39.950	40.633380	1.0000000	1.0000000
2016-224T18:15:55.900	41.121150	1.0000000	1.0000000
2016-224T18:21:15.898	41.121150	1.0000000	1.0000000
2016-224T21:07:39.834	41.121150	1.0000000	1.0000000
2016-224T22:04:11.812	41.121150	1.0000000	1.0000000
2016-224T23:35:55.777	41.121150	1.0000000	1.0000000
2016-225T00:05:47.766	41.121150	1.0000000	1.0000000
2016-225T00:53:47.747	41.121150	1.0000000	1.0000000
2016-225T00:59:07.745	42.096690	1.0000000	1.0000000
2016-225T13:52:27.449	40.633380	1.0000000	1.0000000
2016-225T15:46:35.405	41.121150	1.0000000	1.0000000
2016-225T18:30:51.342	40.633380	1.0000000	1.0000000
2016-225T18:36:11.340	40.633380	1.0000000	1.0000000
2016-225T20:07:55.305	40.633380	1.0000000	1.0000000
2016-228T00:40:58.097	36.243450	1.0000000	1.0000000
2016-229T20:45:13.084	40.145610	1.0000000	1.0000000