Thruster Report

Magnetic Field: **133 mT**
Anode Power: **575 W**
Anode Current: **10.0 A**
Propellant: **Argon 2.000 mg/s**

Thruster Details: Nagoya magnet, LaB6 cathode, 1 mm orifice, copper anode, 80 mm internal diameter.

Thrust	Thrust Eff.	ISP	Total DOF	Coverage Factor	Exp. Uncertainty	Std. Uncertainty
8.7 mN	3.3 %	444.5 sec	11	2.12	3.1 mN	1.5 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	1.2 mN	0.5 mN	0.4 mN	0.3 mN	0.3 mN	0.1 mN
DOF	6	6	6	31	4	4

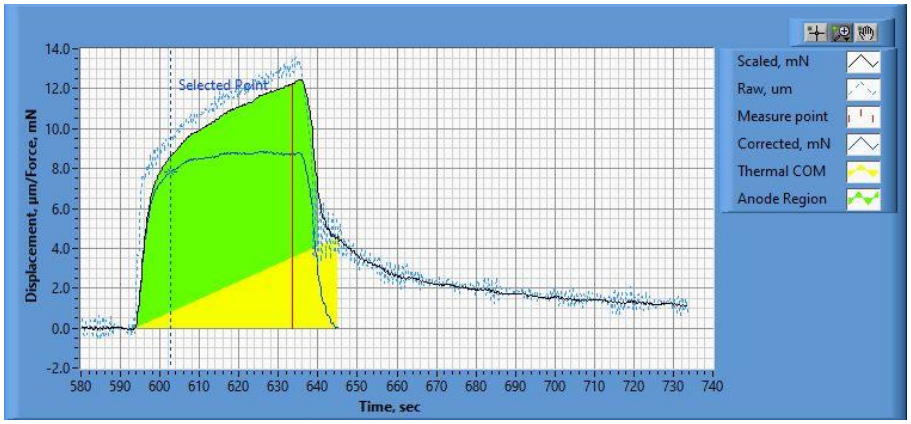

Figure 1. Thrust Plot

File Name: Philtech Data 2024.09.19_17.58.17.csv

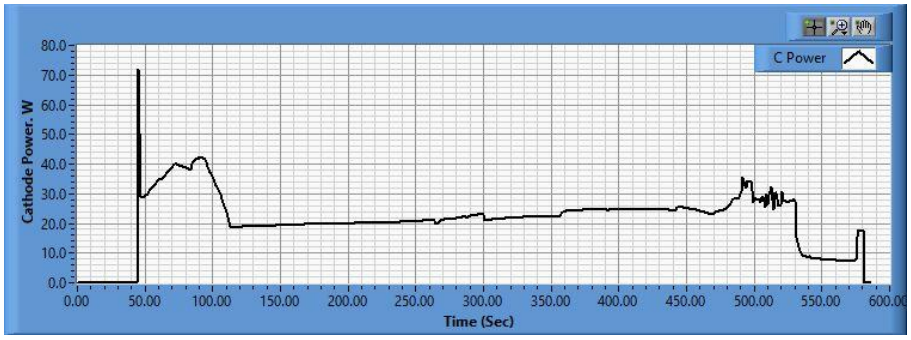

Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.09.19_17.59.20.csv

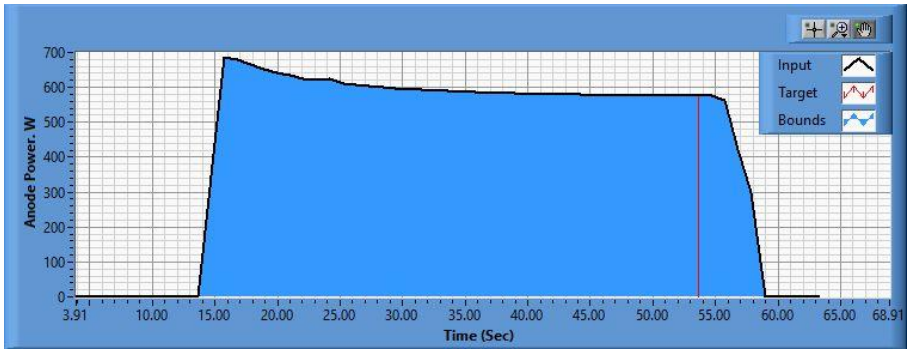

Figure 3. Anode Power Plot

File Name: PSU A Data 2024.09.19_18.07.57.csv

Pre-Cal. Information

File Name: BaseLine_Magnet_Philtech Data 2024.09.19_15.41.13.csv

Start/Stop times (24 h): 15:41:17 15:45:02
Sensitivity: 1.27 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
0.005 mN	0.002 mN/s	0.789	1.555 mN

Plateau values:

Weight 0	Weight 1	Weight 2	Weight 3	Weight 4	Weight 5	Weight 4	Weight 3	Weight 2	Weight 1	Weight 0
-0.3 mN	12.9 mN	29.6 mN	40.7 mN	52.0 mN	68.0 mN	51.3 mN	40.0 mN	28.4 mN	11.9 mN	-0.1 mN

Post-Cal. Information

File Name: Philtech Data 2024.09.19_17.58.17.csv

Start/Stop times (24 h): 18:13:03 18:16:43
Sensitivity: 1.27 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-6.338 mN	0.004 mN/s	0.788	1.227 mN

Plateau values:

Weight 0	Weight 1	Weight 2	Weight 3	Weight 4	Weight 5	Weight 4	Weight 3	Weight 2	Weight 1	Weight 0
-0.3 mN	12.8 mN	27.5 mN	40.1 mN	51.5 mN	68.1 mN	51.1 mN	40.1 mN	26.8 mN	12.4 mN	0.4 mN