Thruster Report

Magnetic Field: **133 mT**
Anode Power: **231 W**
Anode Current: **4.0 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
3.5 mN	1.3 %	175.9 sec	8	2.14	3.4 mN	1.6 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	1.5 mN	0.5 mN	0.2 mN	0.3 mN	0.1 mN	0.1 mN
DOF	6	6	6	31	4	4

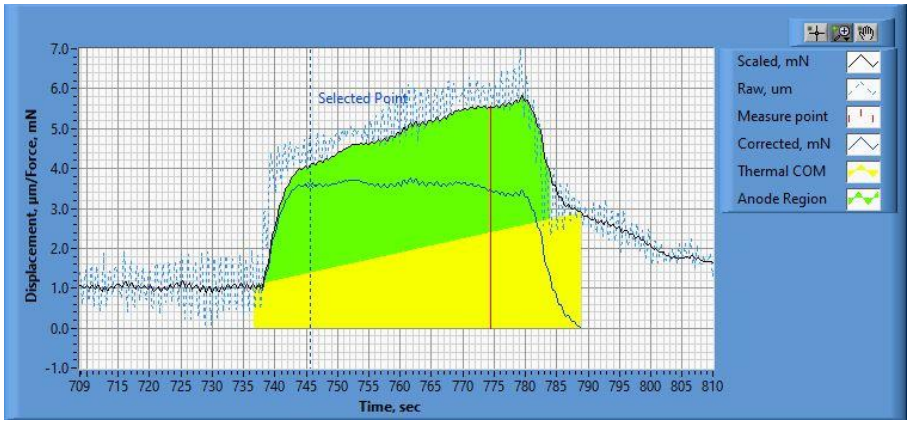

Figure 1. Thrust Plot

File Name: Philtech Data 2024.09.19_16.52.08.csv

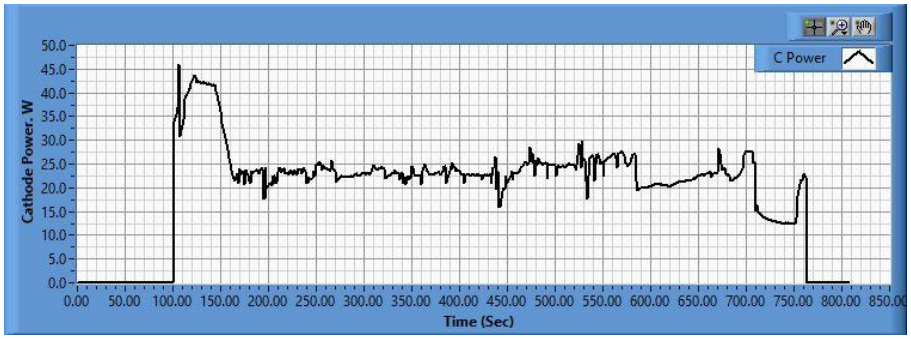

Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.09.19_16.52.37.csv

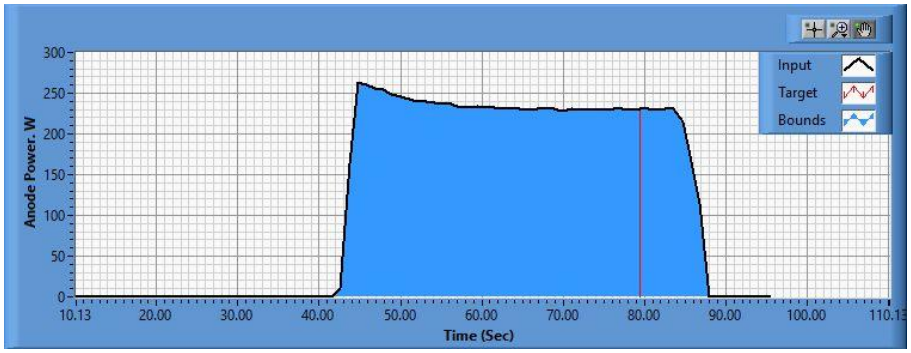

Figure 3. Anode Power Plot

File Name: PSU A Data 2024.09.19_17.03.43.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_16.52.08Cal.csv

Start/Stop times (24 h): 17:08:38 17:12:32
Sensitivity: 1.27 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-3.830 mN	0.004 mN/s	0.788	1.574 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
-0.1 mN	12.9 mN	29.3 mN	40.4 mN	51.7 mN	68.0 mN	51.2 mN	40.1 mN	28.4 mN	12.0 mN	0.0 mN