Thruster Report

Magnetic Field: **199 mT**
Anode Power: **293 W**
Anode Current: **4.0 A**
Propellant: **Argon 1.500 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
4.5 mN	2.3 %	302.6 sec	27	2.07	2.8 mN	1.4 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	0.7 mN	0.8 mN	0.5 mN	0.5 mN	0.5 mN	0.3 mN
DOF	6	6	6	31	4	4

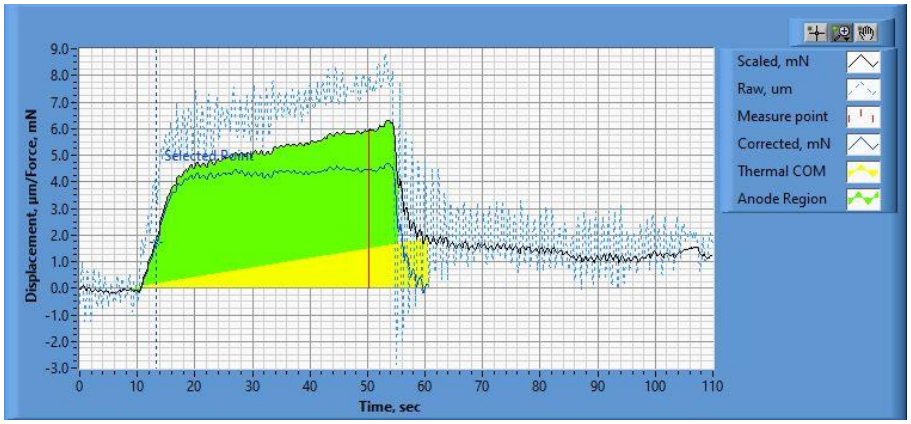

Figure 1. Thrust Plot

File Name: Philtech Data 2024.10.09_19.51.58.csv

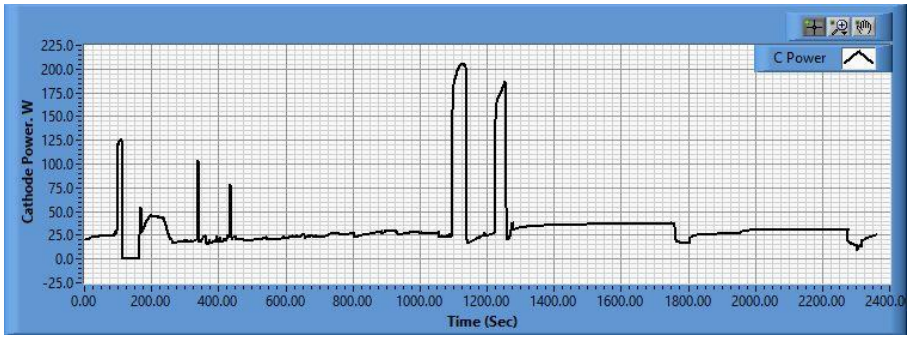

Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.10.09_19.14.13.csv

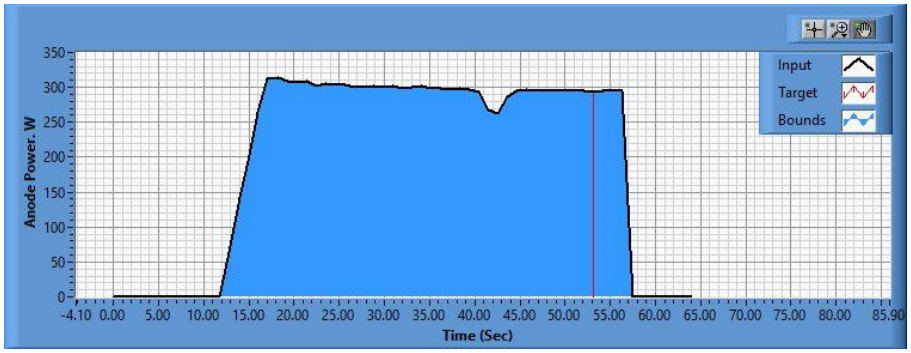

Figure 3. Anode Power Plot

File Name: PSU A Data 2024.10.09_19.51.55.csv

Pre-Cal. Information

File Name: CAlibration_with_magnet_and_Cathode_Philtech Data 2024.10.09_19.38.31.csv

Start/Stop times (24 h): 19:38:34 19:42:19
Sensitivity: 1.53 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
0.438 mN	-0.003 mN/s	0.654	0.814 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
-0.0 mN	37.6 mN	74.4 mN	110.5 mN	146.8 mN	184.9 mN	147.1 mN	110.9 mN	75.6 mN	36.4 mN	0.5 mN

Post-Cal. Information

File Name: Philtech Data 2024.10.09_19.51.58.csv

Start/Stop times (24 h): 19:56:15 19:59:58
Sensitivity: 1.55 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-3.559 mN	0.005 mN/s	0.646	1.387 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
-0.4 mN	35.6 mN	71.6 mN	108.1 mN	143.7 mN	183.6 mN	144.7 mN	109.5 mN	74.0 mN	36.1 mN	-0.7 mN