Thruster Report

Magnetic Field: **265 mT**
Anode Power: **283 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
5.5 mN	3.6 %	376.0 sec	19	2.09	3.8 mN	1.8 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	1.1 mN	0.9 mN	0.3 mN	0.3 mN	0.3 mN	1.0 mN
DOF	6	6	6	31	4	4

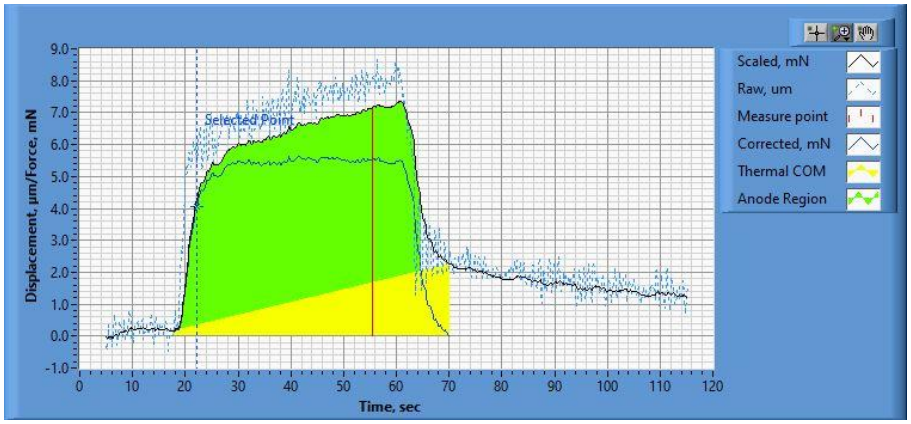

Figure 1. Thrust Plot

File Name: Philtech Data 2024.10.01_15.03.02.csv

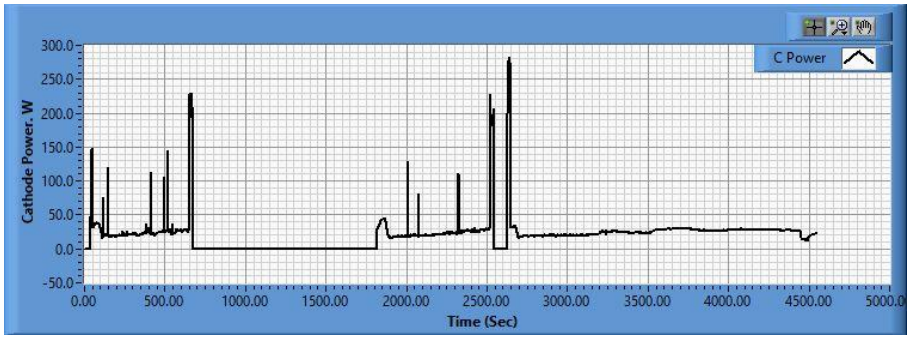

Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.10.01_13.49.12.csv

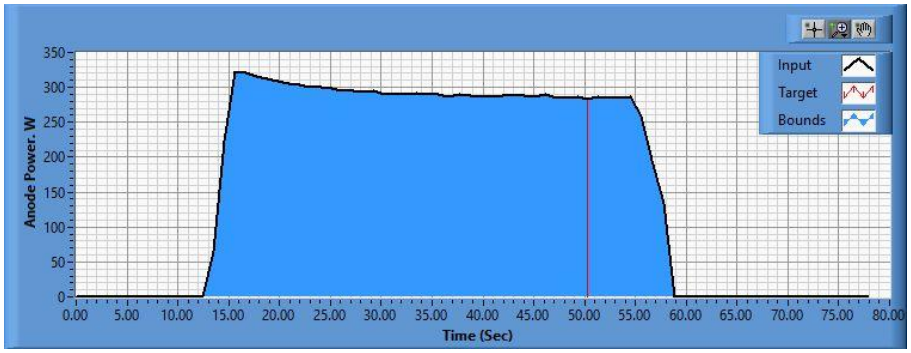

Figure 3. Anode Power Plot

File Name: PSU A Data 2024.10.01_15.03.07.csv

Pre-Cal. Information

File Name: BaseLine_with_Magnet_and_Cathode_Philtech Data 2024.10.01_14.58.14.csv

Start/Stop times (24 h): 14:58:20 15:02:05
Sensitivity: 1.33 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-0.453 mN	-0.031 mN/s	0.751	1.246 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
-0.6 mN	37.4 mN	75.8 mN	109.9 mN	146.7 mN	185.1 mN	145.4 mN	109.7 mN	74.7 mN	35.3 mN	-0.2 mN

Post-Cal. Information

File Name: Philtech Data 2024.10.01_15.03.02.csv

Start/Stop times (24 h): 15:07:25 15:11:10
Sensitivity: 1.32 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-7.542 mN	-0.003 mN/s	0.757	1.328 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	36.2 mN	74.2 mN	108.6 mN	145.3 mN	185.0 mN	144.9 mN	109.2 mN	74.7 mN	36.0 mN	-0.1 mN