Thruster Report

Magnetic Field: **750 mT**
Anode Power: **386 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
12.4 mN	9.9 %	630.0 sec	9	2.14	4.9 mN	2.3 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	1.1 mN	0.6 mN	0.3 mN	0.3 mN	0.4 mN	1.8 mN
DOF	6	6	6	31	4	4

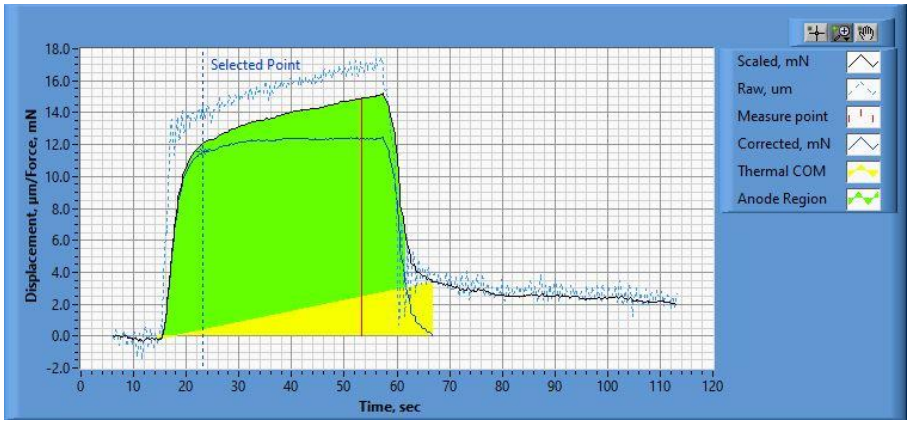

Figure 1. Thrust Plot

File Name: Philtech Data 2024.09.30_16.38.01.csv

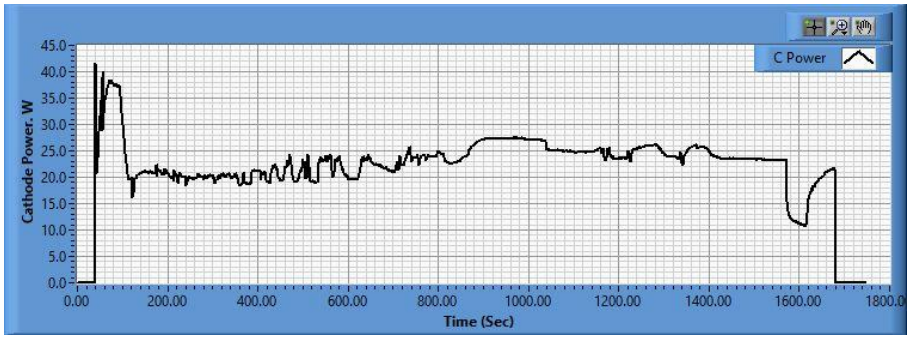

Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.09.30_16.12.04.csv

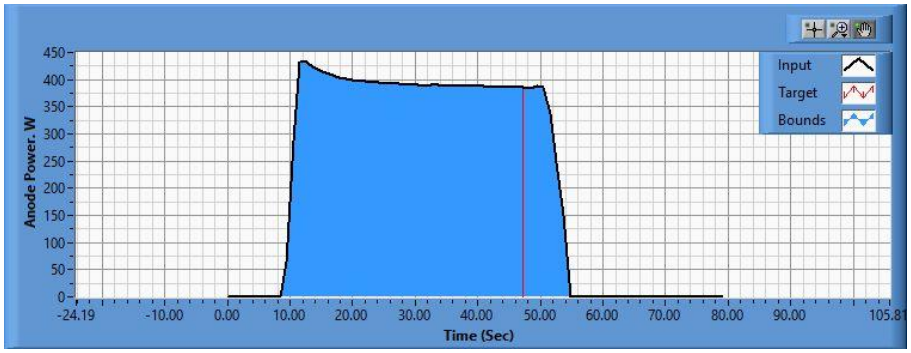

Figure 3. Anode Power Plot

File Name: PSU A Data 2024.09.30_16.38.07.csv

Pre-Cal. Information

File Name: BaseLine_with_Magnet_and_CathodePhiltech Data 2024.09.30_16.32.18.csv

Start/Stop times (24 h): 16:32:24 16:36:09
Sensitivity: 1.37 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
0.141 mN	-0.057 mN/s	0.729	1.176 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
-0.5 mN	37.4 mN	74.9 mN	110.8 mN	145.6 mN	184.9 mN	145.6 mN	111.0 mN	75.1 mN	36.5 mN	0.3 mN

Post-Cal. Information

File Name: Philtech Data 2024.09.30_16.38.01.csv

Start/Stop times (24 h): 16:42:27 16:46:14
Sensitivity: 1.33 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-14.372 mN	-0.003 mN/s	0.754	1.427 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	36.3 mN	73.9 mN	109.4 mN	144.3 mN	185.0 mN	144.9 mN	110.7 mN	75.0 mN	36.0 mN	-0.0 mN