Thruster Report

Magnetic Field: **199 mT**
Anode Power: **128 W**
Anode Current: **2.0 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
2.3 mN	1.1 %	119.5 sec	13	2.11	2.8 mN	1.3 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	1.1 mN	0.5 mN	0.2 mN	0.4 mN	0.2 mN	0.2 mN
DOF	6	6	6	31	4	4

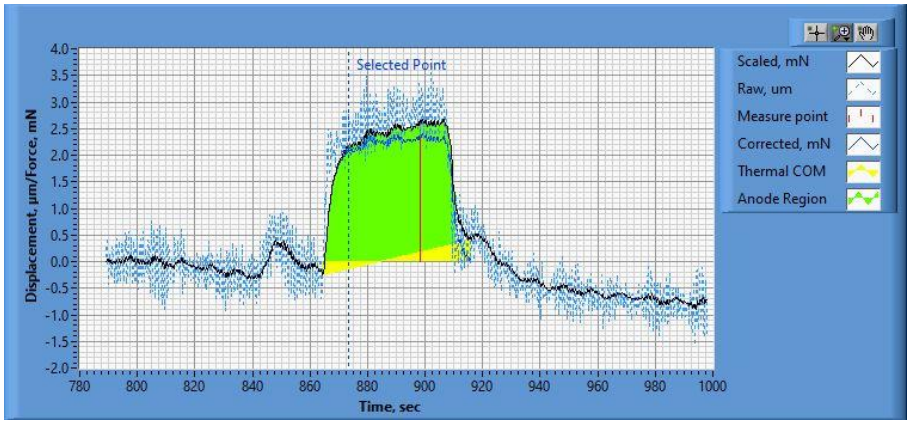

Figure 1. Thrust Plot

File Name: Philtech Data 2024.09.18_09.33.37.csv

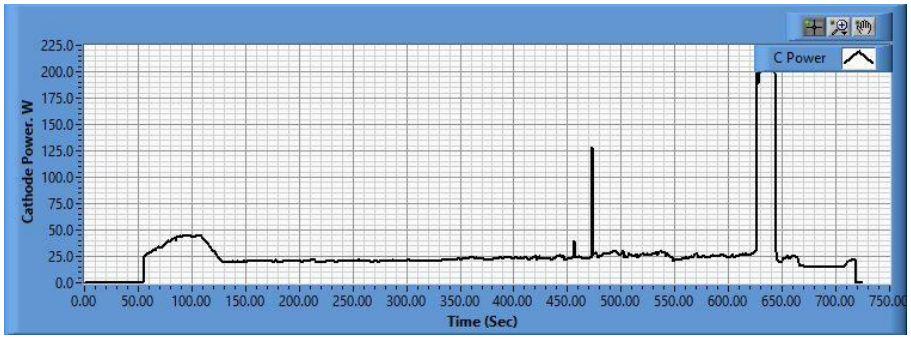

Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.09.18_09.36.57.csv

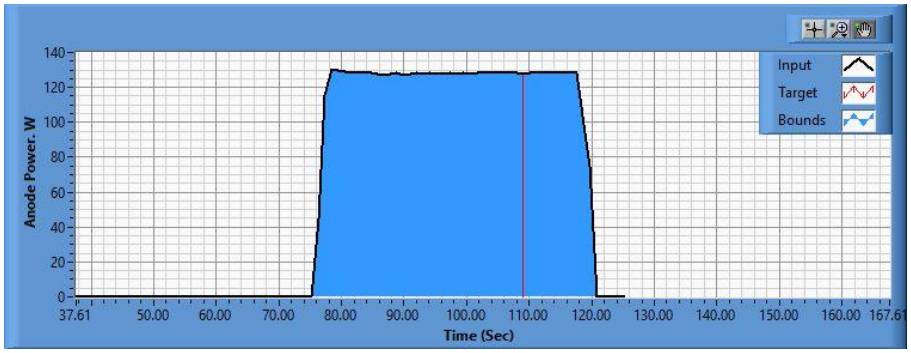

Figure 3. Anode Power Plot

File Name: PSU A Data 2024.09.18_09.46.46.csv

Pre-Cal. Information

File Name: BaseLine_with_Magnet_Philtech Data 2024.09.18_09.28.52.csv

Start/Stop times (24 h): 09:29:04 09:32:49
Sensitivity: 1.29 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-0.836 mN	0.009 mN/s	0.777	1.150 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	13.1 mN	27.7 mN	40.9 mN	51.9 mN	67.9 mN	51.3 mN	40.6 mN	26.7 mN	12.6 mN	-0.1 mN

Post-Cal. Information

File Name: Philtech Data 2024.09.18_09.33.37.csv

Start/Stop times (24 h): 09:52:17 09:56:02
Sensitivity: 1.29 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
2.284 mN	0.002 mN/s	0.775	1.198 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	13.1 mN	27.6 mN	40.8 mN	51.6 mN	68.0 mN	51.2 mN	40.7 mN	26.7 mN	12.6 mN	-0.0 mN