Thruster Report

Magnetic Field: **500 mT**
Anode Power: **486 W**
Anode Current: **6.0 A**
Propellant: **Argon 1.999 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
15.2 mN	11.9 %	776.8 sec	15	2.10	2.1 mN	1.0 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	0.8 mN	0.4 mN	0.1 mN	0.4 mN	0.2 mN	0.1 mN
DOF	6	6	6	31	4	4

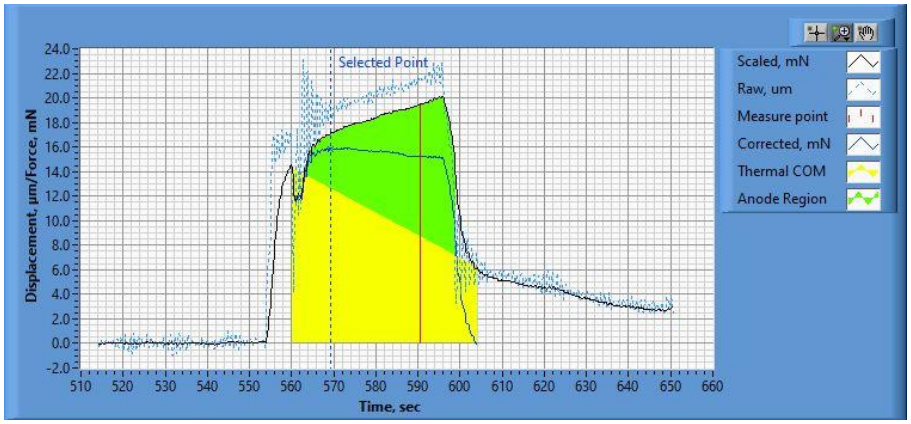

Figure 1. Thrust Plot

File Name: Philtech Data 2024.09.19_12.37.51.csv

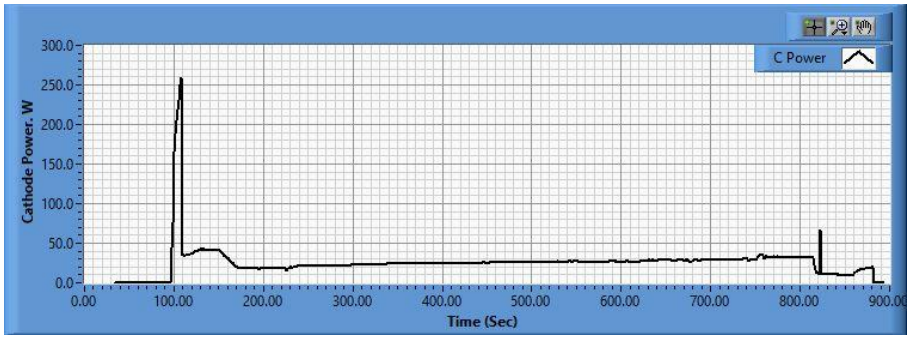

Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.09.19_12.33.29.csv

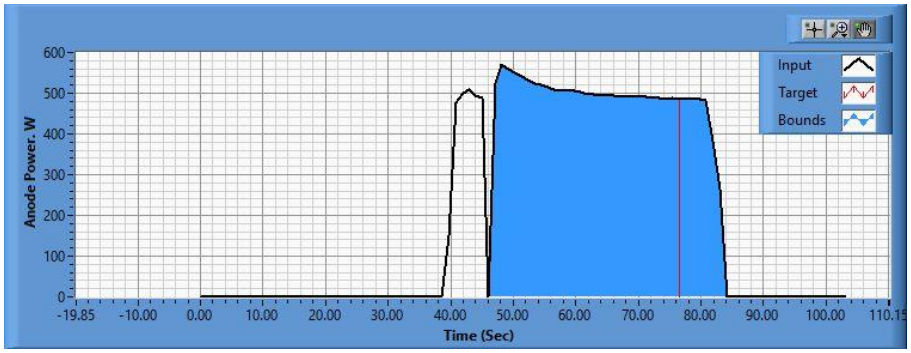

Figure 3. Anode Power Plot

File Name: PSU A Data 2024.09.19_12.46.25.csv

Pre-Cal. Information

File Name: Baseline_Magnet_Philtech Data 2024.09.19_09.21.44.csv

Start/Stop times (24 h): 09:21:55 09:25:40
Sensitivity: 1.32 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
0.240 mN	-0.013 mN/s	0.756	0.834 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
-0.2 mN	13.2 mN	26.9 mN	41.8 mN	52.9 mN	68.0 mN	52.7 mN	41.3 mN	26.7 mN	12.4 mN	-0.0 mN

Post-Cal. Information

File Name: Philtech Data 2024.09.19_12.37.51.csv

Start/Stop times (24 h): 12:51:27 12:55:14
Sensitivity: 1.30 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-2.935 mN	-0.010 mN/s	0.772	0.758 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	13.0 mN	26.6 mN	41.0 mN	52.5 mN	68.1 mN	52.4 mN	41.0 mN	26.4 mN	12.6 mN	-0.3 mN