Thruster Report

Magnetic Field: **199 mT**
Anode Power: **728 W**
Anode Current: **10.0 A**
Propellant: **Argon 1.499 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
11.4 mN	6.0 %	777.1 sec	15	2.10	6.7 mN	3.2 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	0.7 mN	0.8 mN	0.5 mN	1.3 mN	1.6 mN	2.2 mN
DOF	6	6	6	31	4	4

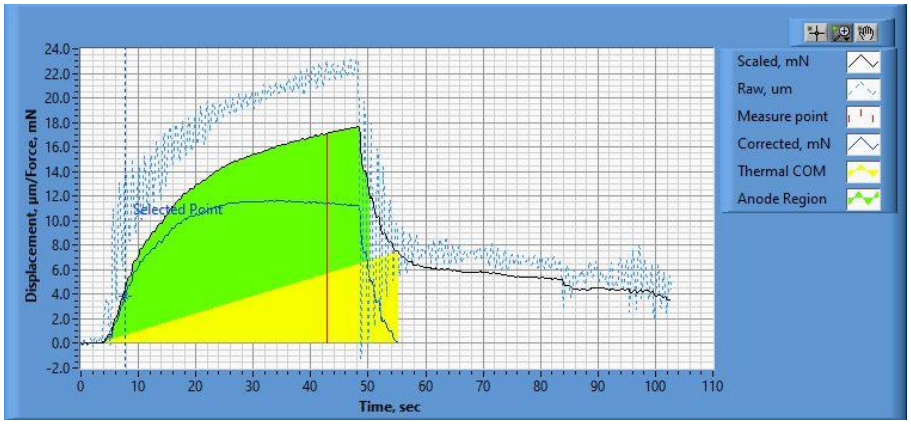

Figure 1. Thrust Plot

File Name: Philtech Data 2024.10.10_20.15.36.csv

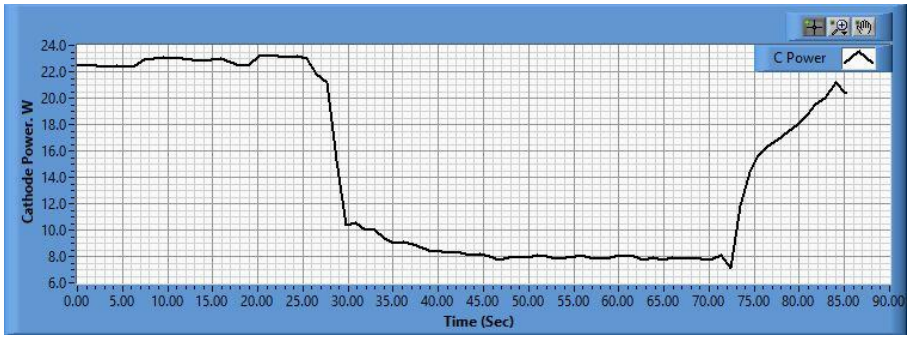

Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.10.10_20.15.12.csv

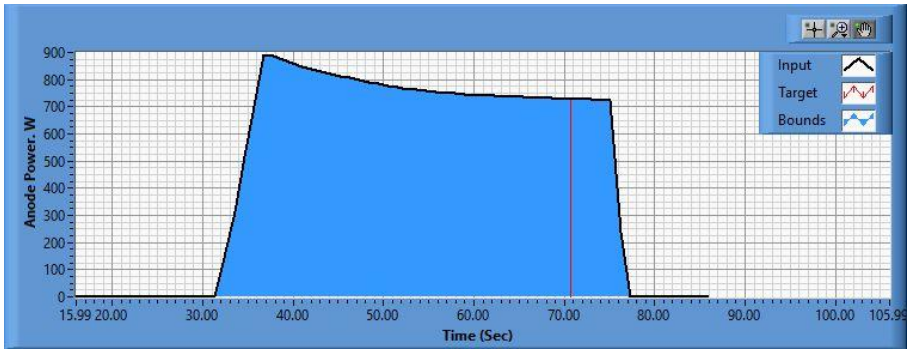

Figure 3. Anode Power Plot

File Name: PSU A Data 2024.10.10_20.15.08.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 2024.10.10_20.15.36.csv

Start/Stop times (24 h): 20:19:34 20:21:30
Sensitivity: 1.50 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-6.117 mN	-0.068 mN/s	0.668	1.449 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	35.8 mN	72.4 mN	107.3 mN	143.2 mN	183.1 mN	143.9 mN	107.2 mN	71.4 mN	36.1 mN	-3.0 mN