Thruster Report

Magnetic Field: **750 mT**
Anode Power: **845 W**
Anode Current: **8.0 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
26.4 mN	20.6 %	1345.6 sec	15	2.10	3.3 mN	1.6 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	1.2 mN	0.9 mN	0.4 mN	0.2 mN	0.2 mN	0.3 mN
DOF	6	6	6	31	4	4

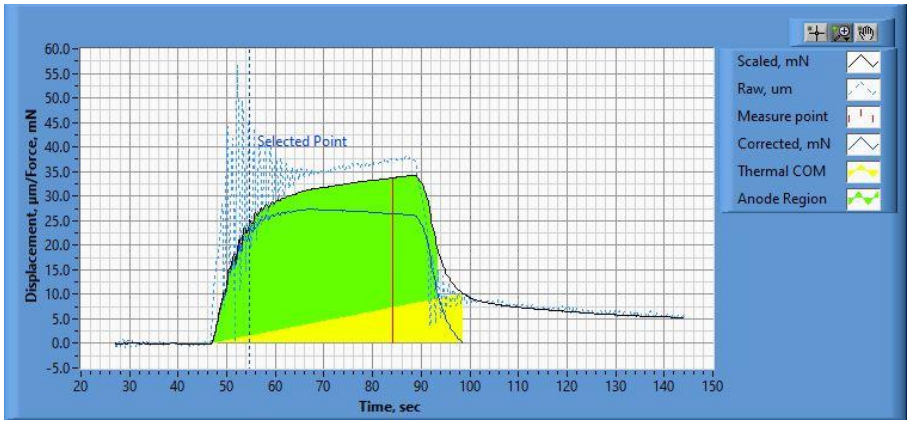

Figure 1. Thrust Plot

File Name: Philtech Data 2024.09.30_13.55.18.csv

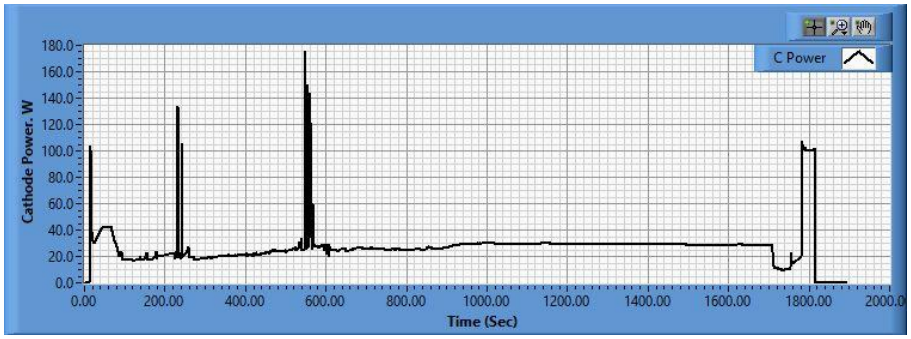

Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.09.30_13.27.35.csv

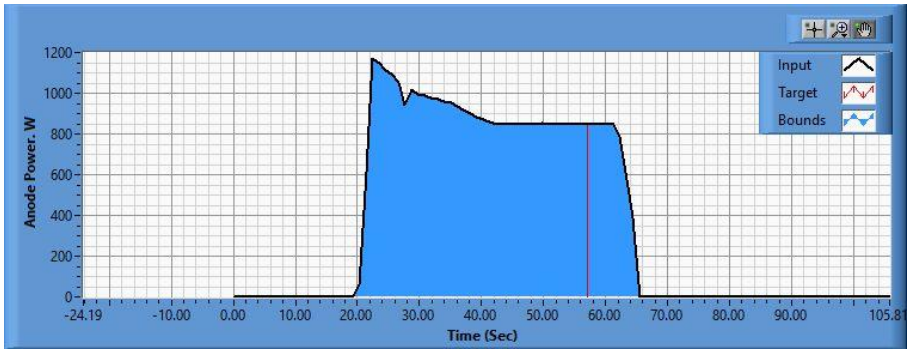

Figure 3. Anode Power Plot

File Name: PSU A Data 2024.09.30_13.55.45.csv

Pre-Cal. Information

File Name: BaseLine_with_Magnet_and_Cathode_Philtech Data 2024.09.30_11.21.43.csv

Start/Stop times (24 h): 11:21:54 11:25:39
Sensitivity: 1.30 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
0.247 mN	0.005 mN/s	0.766	1.190 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
-0.1 mN	37.0 mN	73.9 mN	109.7 mN	145.7 mN	185.1 mN	145.7 mN	110.9 mN	75.7 mN	37.1 mN	-0.3 mN

Post-Cal. Information

File Name: Philtech Data 2024.09.30_13.55.18.csv

Start/Stop times (24 h): 14:00:29 14:04:12
Sensitivity: 1.32 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-0.429 mN	-0.003 mN/s	0.759	1.612 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
0.3 mN	36.9 mN	73.5 mN	109.4 mN	143.8 mN	185.1 mN	144.2 mN	109.9 mN	74.6 mN	36.3 mN	-0.2 mN