Thruster Report

Magnetic Field: **265 mT**
Anode Power: **536 W**
Anode Current: **8.0 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
12.7 mN	7.6 %	649.3 sec	17	2.09	2.4 mN	1.2 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	0.9 mN	0.5 mN	0.2 mN	0.5 mN	0.2 mN	0.1 mN
DOF	6	6	6	31	4	4

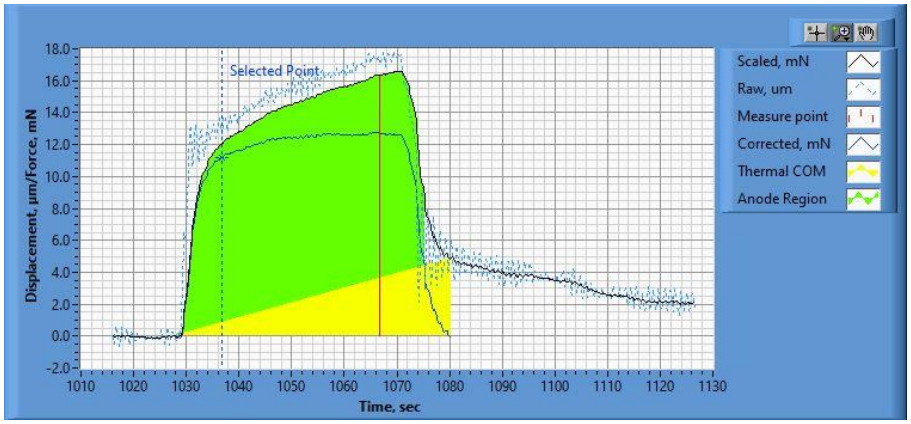

Figure 1. Thrust Plot

File Name: Philtech Data 2024.09.17_15.35.44.csv

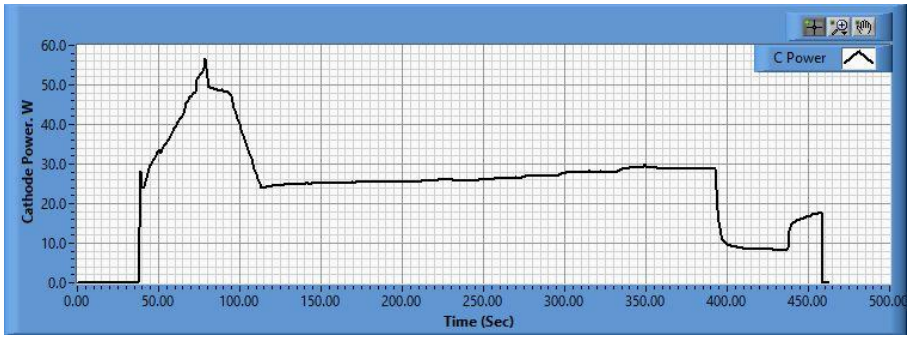

Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.09.17_15.46.20.csv

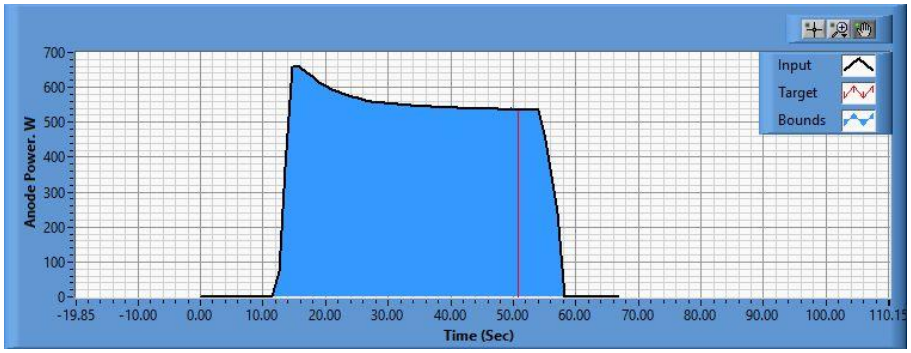

Figure 3. Anode Power Plot

File Name: PSU A Data 2024.09.17_15.52.40.csv

Pre-Cal. Information

File Name: BaseLine_Magnet_Philtech Data 2024.09.17_13.36.23.csv

Start/Stop times (24 h): 13:36:24 13:40:10
Sensitivity: 1.27 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-0.404 mN	-0.003 mN/s	0.786	0.872 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	12.9 mN	27.2 mN	41.3 mN	52.8 mN	67.9 mN	52.0 mN	40.5 mN	26.8 mN	12.6 mN	0.3 mN

Post-Cal. Information

File Name: PostThrust Philtech Data 2024.09.17_15.35.44.csv

Start/Stop times (24 h): 15:35:45 15:39:30
Sensitivity: 1.26 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-0.087 mN	-0.000 mN/s	0.794	1.054 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	12.8 mN	28.4 mN	41.9 mN	53.2 mN	68.0 mN	52.3 mN	41.3 mN	27.2 mN	12.0 mN	0.2 mN