Thruster Report

Magnetic Field: **265 mT**
Anode Power: **402 W**
Anode Current: **6.0 A**
Propellant: **Argon 2.000 mg/s**

Thruster Details: Nagoya magnet, LaB6 cathode, 1 mm orifice, copper anode, 80 mm internal diameter. Anode data repaired where there were four dropout points.

Thrust	Thrust Eff.	ISP	Total DOF	Coverage Factor	Exp. Uncertainty	Std. Uncertainty
9.2 mN	5.3 %	470.4 sec	21	2.08	2.8 mN	1.3 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	0.9 mN	0.5 mN	0.2 mN	0.6 mN	0.5 mN	0.2 mN
DOF	6	6	6	31	4	4

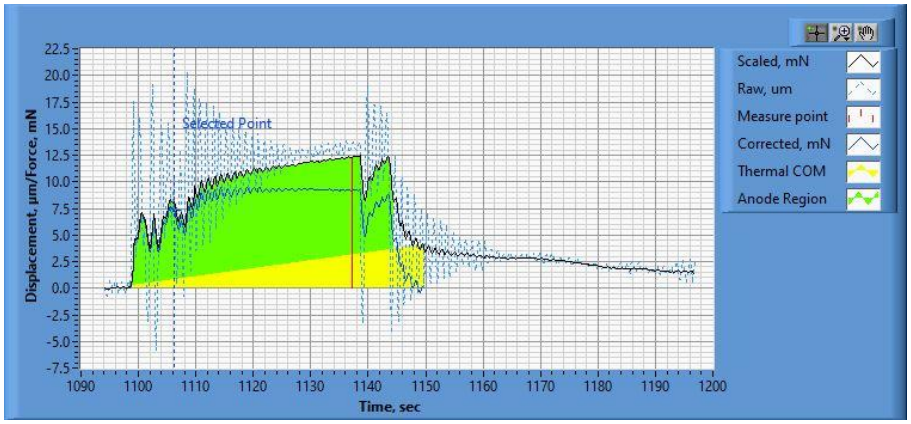

Figure 1. Thrust Plot

File Name: Philtech Data 2024.09.17_15.05.33.csv

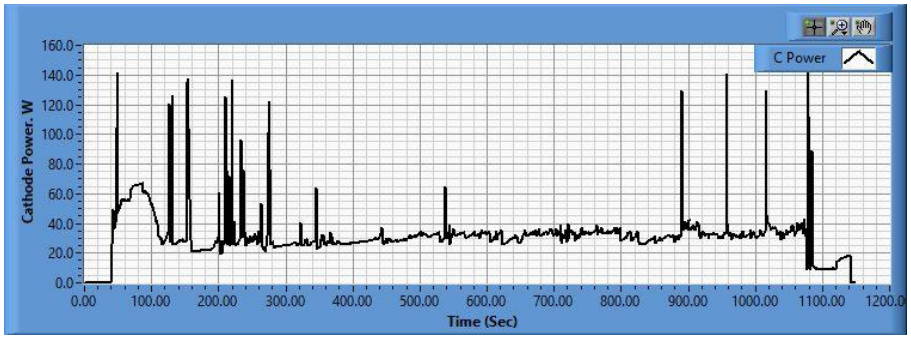

Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.09.17_15.05.56.csv

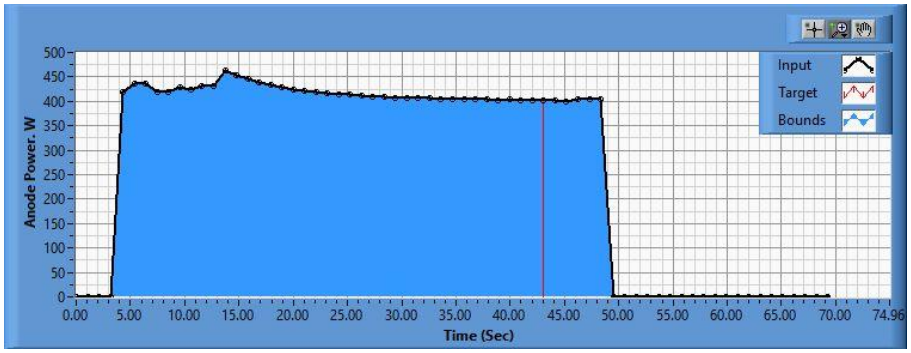

Figure 3. Anode Power Plot

File Name: PSU A Data 2024.09.17_15.23.47 - repaired.csv

Pre-Cal. Information

File Name: BaseLine_Magnet_Philtech Data 2024.09.18_08.52.58.csv

Start/Stop times (24 h): 08:53:08 08:56:53
Sensitivity: 1.31 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-0.654 mN	-0.007 mN/s	0.762	1.060 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	13.4 mN	28.2 mN	41.5 mN	52.3 mN	67.8 mN	52.1 mN	41.2 mN	27.1 mN	12.8 mN	0.1 mN

Post-Cal. Information

File Name: PostThrust Philtech Data 2024.09.17_15.05.33.csv

Start/Stop times (24 h): 15:05:40 15:09:25
Sensitivity: 1.25 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
0.183 mN	-0.000 mN/s	0.798	1.036 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	12.7 mN	28.3 mN	41.6 mN	52.8 mN	67.6 mN	52.3 mN	41.1 mN	27.2 mN	12.6 mN	0.7 mN