Thruster Report

Magnetic Field: **500 mT**
Anode Power: **932 W**
Anode Current: **10.0 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
18.3 mN	9.0 %	933.3 sec	18	2.09	2.7 mN	1.3 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	0.6 mN	0.9 mN	0.3 mN	0.3 mN	0.6 mN	0.0 mN
DOF	6	6	6	31	4	4

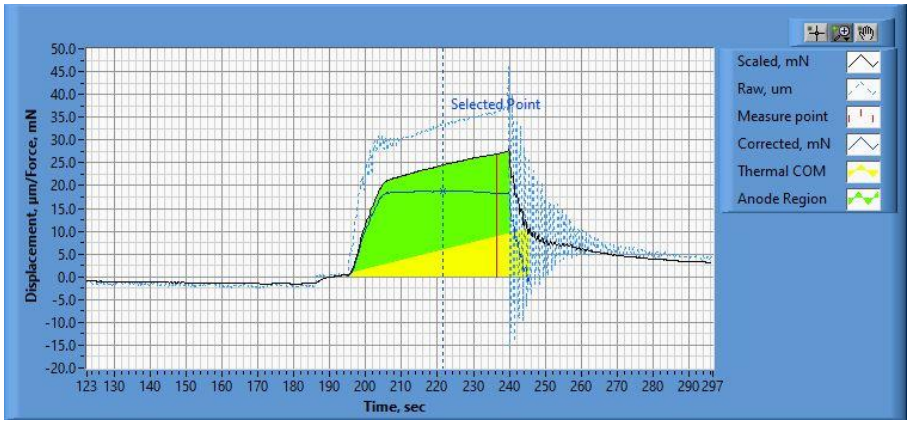

Figure 1. Thrust Plot

File Name: Philtech Data 2024.11.28_00.46.14 repaired.csv

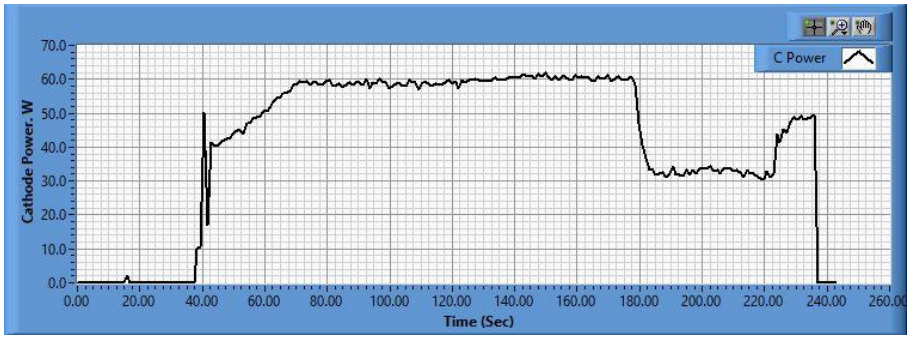

Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.11.28_00.46.31.csv

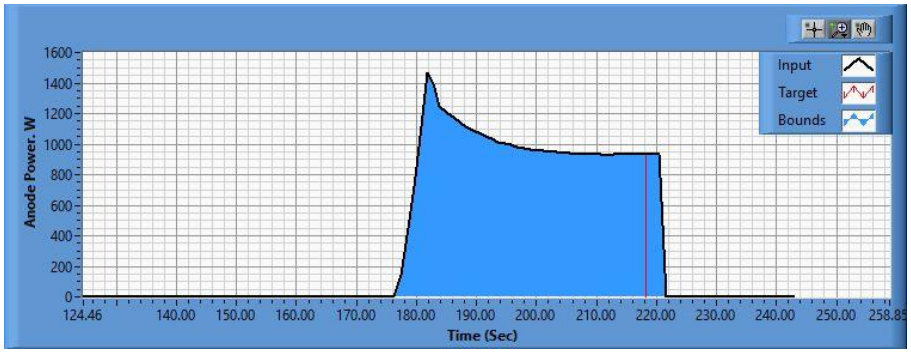

Figure 3. Anode Power Plot

File Name: PSU A Data 2024.11.28_00.46.32.csv

Pre-Cal. Information

File Name: Magnet_Flow_2_0_Philtech Data 2024.11.26_19.30.21.csv

Start/Stop times (24 h): 19:30:29 19:34:15
Sensitivity: 1.60 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-0.363 mN	-0.002 mN/s	0.624	1.240 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	21.5 mN	39.6 mN	60.0 mN	80.2 mN	101.0 mN	79.0 mN	58.6 mN	38.1 mN	21.3 mN	0.6 mN

Post-Cal. Information

File Name: Philtech Data 2024.11.28_00.46.14 repaired.csv

Start/Stop times (24 h): 00:53:39 00:57:23
Sensitivity: 1.58 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-1.318 mN	-0.002 mN/s	0.634	0.965 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	20.9 mN	39.8 mN	60.7 mN	80.1 mN	101.0 mN	79.1 mN	59.8 mN	38.8 mN	21.0 mN	1.1 mN