Thruster Report

Magnetic Field: **1000 mT**
Anode Power: **824 W**
Anode Current: **6.0 A**
Propellant: **Argon 1.500 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
18.2 mN	13.5 %	1239.5 sec	20	2.08	3.7 mN	1.8 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	0.7 mN	1.1 mN	0.4 mN	0.3 mN	0.7 mN	0.9 mN
DOF	6	6	6	31	4	4

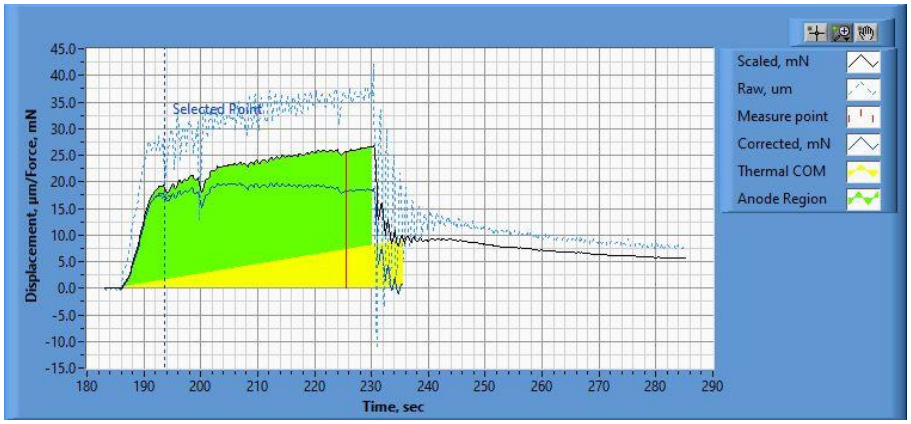

Figure 1. Thrust Plot

File Name: Philtech Data 2024.11.14_09.05.24.csv

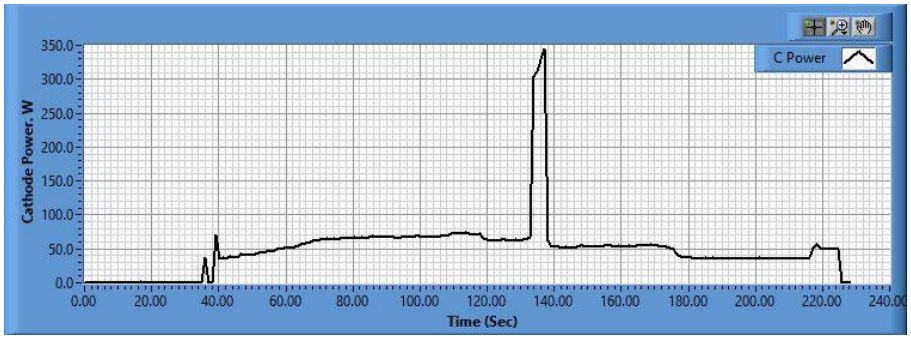

Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.11.14_09.05.38.csv

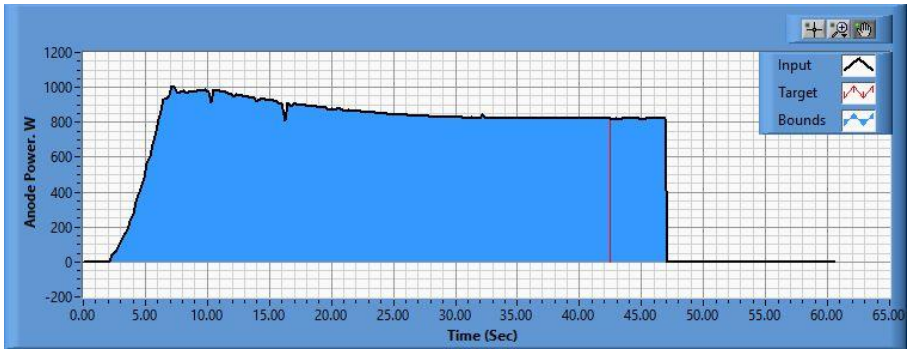

Figure 3. Anode Power Plot

File Name: PSU A Data 2024.11.14_09.08.27.csv

Pre-Cal. Information

File Name: MagnetOn_Flow15_Philtech Data 2024.11.08_13.55.45.csv

Start/Stop times (24 h): 13:55:51 13:59:37
Sensitivity: 1.63 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
0.431 mN	-0.001 mN/s	0.613	1.245 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
-1.1 mN	20.7 mN	38.6 mN	59.6 mN	79.9 mN	100.8 mN	78.2 mN	58.5 mN	37.1 mN	20.2 mN	0.2 mN

Post-Cal. Information

File Name: Philtech Data 2024.11.14_09.05.24.csv

Start/Stop times (24 h): 09:12:31 09:16:32
Sensitivity: 1.67 um/mN

Offset	Drift	Scale Factor	Scale Std.Dev
-2.735 mN	-0.027 mN/s	0.598	1.263 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	19.2 mN	37.8 mN	60.1 mN	81.6 mN	101.2 mN	79.9 mN	58.7 mN	37.5 mN	20.8 mN	0.4 mN