

Thruster Report

Magnetic Field: 133 mT
Anode Power: 386 W
Anode Current: 6.0 A
Propellant: Argon 1.499 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
4.9 mN	2.1 %	332.6 sec	21	2.08	2.4 mN	1.2 mN

Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	0.6 mN	0.6 mN	0.3 mN	0.3 mN	0.6 mN	0.1 mN
DOF	6	6	6	31	4	4

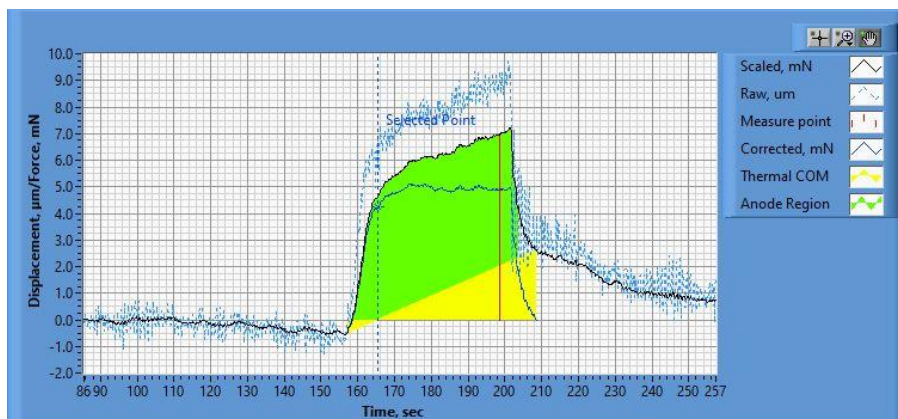


Figure 1. Thrust Plot

File Name: Philtech Data 2024.11.29_08.00.47.csv

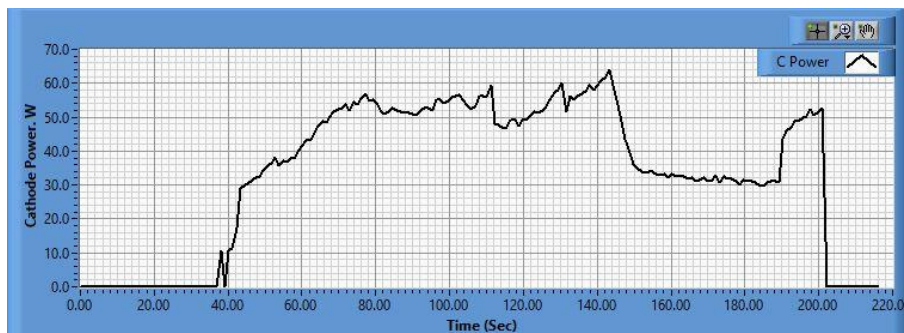
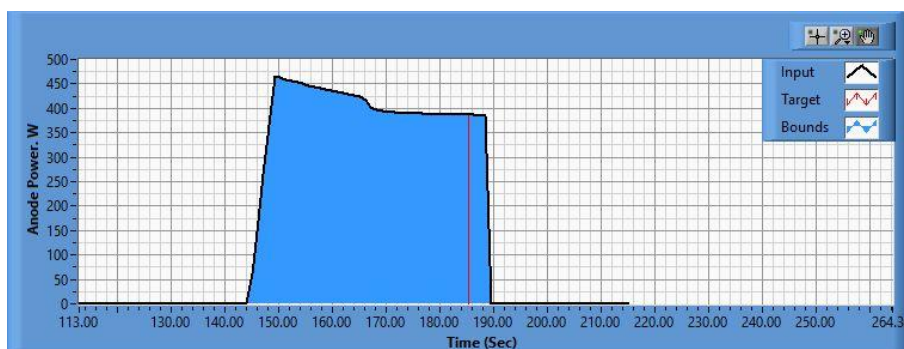


Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.11.29_08.00.59.csv

**Figure 3. Anode Power Plot**

File Name: PSU A Data 2024.11.29_08.01.00.csv

Pre-Cal. Information

File Name: Magnet_NoFlow_Philtech Data 2024.11.29_02.16.29.csv

Start/Stop times (24 h): 02:16:35 02:20:20

Sensitivity: 1.51 $\mu\text{m}/\text{mN}$

Offset	Drift	Scale Factor	Scale Std.Dev
-0.355 mN	-0.006 mN/s	0.662	1.086 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	21.2 mN	39.5 mN	59.4 mN	79.5 mN	100.9 mN	79.0 mN	59.2 mN	38.7 mN	20.8 mN	0.9 mN

Post-Cal. Information

File Name: Philtech Data 2024.11.29_08.00.47.csv

Start/Stop times (24 h): 08:07:42 08:11:24

Sensitivity: 1.52 $\mu\text{m}/\text{mN}$

Offset	Drift	Scale Factor	Scale Std.Dev
-1.365 mN	-0.003 mN/s	0.659	1.114 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
-0.4 mN	21.4 mN	39.7 mN	60.0 mN	79.9 mN	101.0 mN	78.5 mN	59.1 mN	38.0 mN	20.6 mN	0.2 mN

