

## Thruster Report

**Magnetic Field:** 265 mT  
**Anode Power:** 605 W  
**Anode Current:** 8.0 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
11.3 mN	7.1 %	771.1 sec	19	2.09	2.8 mN	1.4 mN

### Thrust-Stand Uncertainty Components

	Scale	Hysteresis	Repeatability	Noise	Offset	Drift
Value	0.8 mN	0.7 mN	0.3 mN	0.3 mN	0.8 mN	0.0 mN
DOF	6	6	6	31	4	4

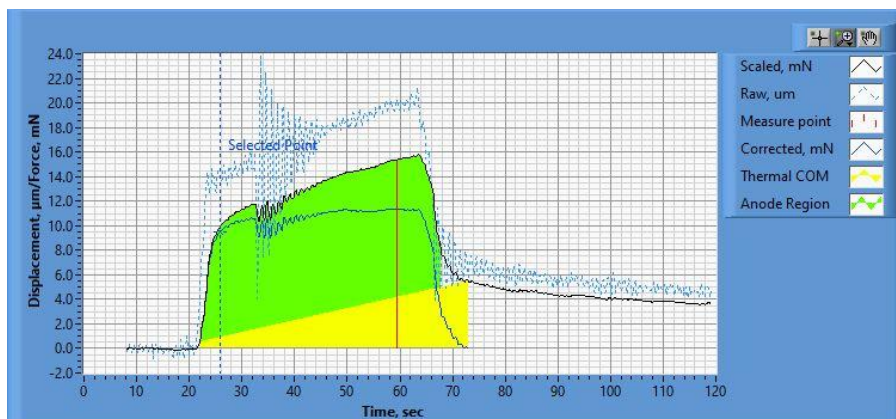


Figure 1. Thrust Plot

File Name: Philtech Data 2024.10.09\_14.11.09.csv

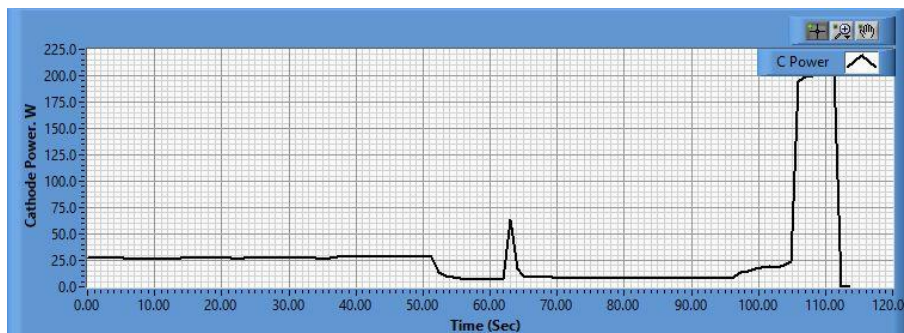
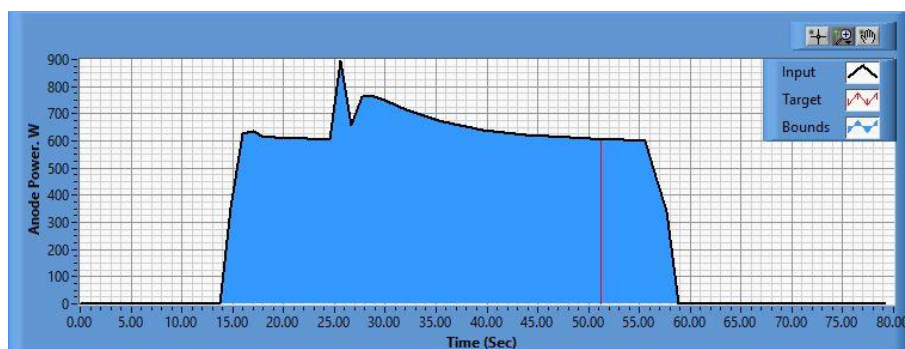


Figure 2. Cathode Power Plot

File Name: PSU C Data 2024.10.09\_14.10.39.csv

**Figure 3. Anode Power Plot**

File Name: PSU A Data 2024.10.09\_14.11.17.csv

**Pre-Cal. Information**

File Name: Philtech Data 2024.10.09\_14.11.09.csv

Start/Stop times (24 h): 14:15:26 14:19:23

Sensitivity: 1.53  $\mu\text{m}/\text{mN}$ 

Offset	Drift	Scale Factor	Scale Std.Dev
-6.798 mN	-0.012 mN/s	0.653	0.963 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
-0.8 mN	36.1 mN	73.8 mN	109.0 mN	146.1 mN	184.9 mN	145.9 mN	109.6 mN	74.3 mN	35.3 mN	0.5 mN

**Post-Cal. Information**

File Name: Philtech Data 2024.10.09\_14.11.09.csv

Start/Stop times (24 h): 14:15:26 14:19:23

Sensitivity: 1.53  $\mu\text{m}/\text{mN}$ 

Offset	Drift	Scale Factor	Scale Std.Dev
-6.798 mN	-0.012 mN/s	0.653	0.963 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
-0.8 mN	36.1 mN	73.8 mN	109.0 mN	146.1 mN	184.9 mN	145.9 mN	109.6 mN	74.3 mN	35.3 mN	0.5 mN

