Dyson Labs | Bitcoin Mining Mission Cost Study

Generated for: Calvin Rnglad (cengland2020@gmail.com)
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Orbit: Exolaunch/Delphini-1 (Transporter SSO, 575 km, 97.6Â°)

Mission Parameters:
- First Name: Calvin
- Last Name: Rnglad
- Email: cengland2020@gmail.com
- Phone: 3
- Signed up for updates?: Yes
- Interested Services:
- Budget: 23
- How did you hear about us?:
- Message: eee
- Timestamp: 7/2/2025 13:16:03
- Launch Cost Regime: early
- Satellite Class: MW-class
- Satellite Mass (kg): 10000
- Satellite Power (W): 1000000
- Solar Array Area (m²): 3640
- GEO/ISR Relay Used: Yes

Key Results:
- BTC mined (total): 50.0333
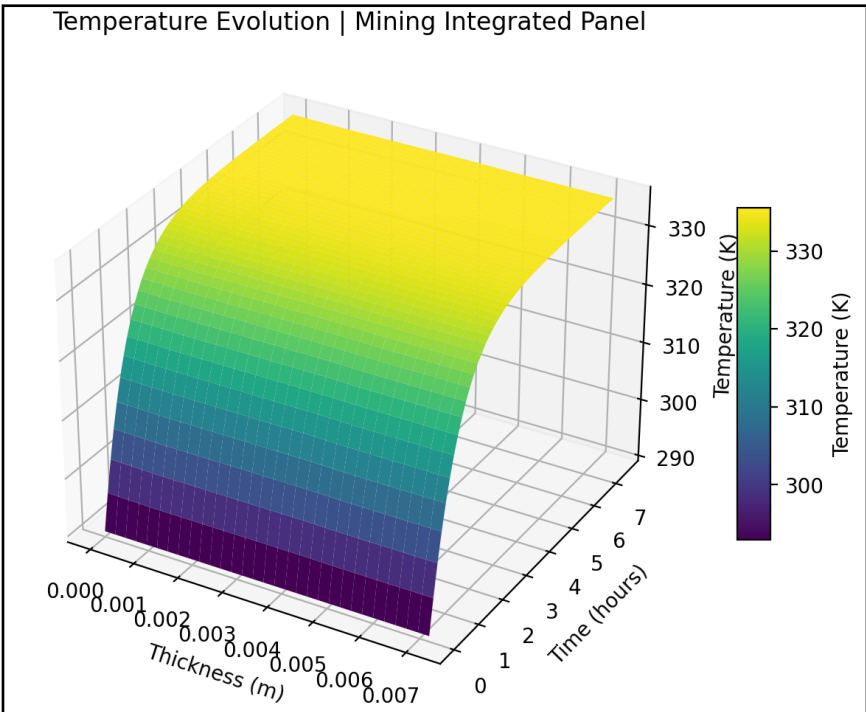- Power draw (W): 999999
- Net profit: $-27,740,380

Cost Summary:
- Bus: $10,000,000
- Payload: $1,700,000
- Launch: $5,000,000
- Integration: $5,000,000
- Communication: $8,000,000
- Overhead: $8,000,000
- Contingency: 15%
- Total Mission Cost: $34,155,000

Thermal Summary:
- Max board temp (°C): 62
- Min board temp (°C): 17
- Avg board temp (°C): 56

RF Link Summary:
- Total passes analyzed: 1774
- Total downlink data (GB): 0.79
- Total uplink data (GB): 1.59
- Total downlink contact time (hr): 176.34
- Total uplink contact time (hr): 352.69
- Downlink % of mission: 24.49%
- Uplink % of mission: 48.98%
- Note: GEO/ISR relay enabled: comms/mining at 100% regardless of regime/orbit.
- Effective Comms Fraction (%): 100.0
- Regime-Adjusted Mining Fraction (%): 100.0
- Launch Regime: Early
- GEO/ISR Relay Enabled: Yes

Temperature Evolution | Mining Integrated Panel

Comparison of Orbits within Database

Sunlight Fraction

Avg Power (W/m²)

TID (krad over 5yr)

Eclipse Minutes

Launch Cost ($)

Weighted Score by Orbit — Best Orbit in Database

ISS · SSO, 705 km, 98.2Â° · GOES-16 (GEO) · /Delphini-1 (Transpo... · nerDove (Transporter... · (Transporter SSO, 57...