



**SERAPHIM**  
SPACE INVESTMENT TRUST PLC

# SERAPHIM SPACE INVESTMENT TRUST PLC

INTERIM REPORT – Six months ended 31 December 2023

# SIX MONTHS TO 31 DEC 2023

## HEADLINES



**Will Whitehorn**

Chair  
Seraphim Space  
Investment Trust plc

- Portfolio valuation increased by £10.5m to £198.0m
- Portfolio fair value up at 101.0% of cost
- 3 new investments (£2.5m) and 3 follow-on transactions (£3.3m)
- NAV per share up from 92.90p to 94.57p
- Net assets of £224m and market capitalisation of £82m as at 31 Dec 2023
- Period end liquid resources of £27m (12% of NAV)
- Well capitalised portfolio with 60% of the portfolio by fair value being fully funded, and the remainder of the portfolio having 12 months average cash runway from 31 Dec 2023<sup>1</sup>

**94.57<sub>p</sub>**

NAV per share  
at 31 Dec 2023; was 92.90p at 30 Jun 2023

**34.4<sub>p</sub>**

Share price  
at 31 Dec 2023; an increase of 27%  
over the Period from 27.0p at 30 Jun  
2023



*Past performance is not a reliable indicator of future results. The value of shares and income from them can go up and down as a result of market and currency fluctuations*

*Note: <sup>1</sup> Fair value weighted average number of months of cash runway from 31 Dec 2023 for the portfolio companies that are not fully funded, representing 40% of fair value.*

*Source: Portfolio company data.*

# SERAPHIM PLAYBOOK

## HEADLINES



**Mark Boggett**

Chief Executive Officer



**James Bruegger**

Chief Investment Officer



**Sarah Shackleton**

Chief Operating Officer

Proprietary Deal flow



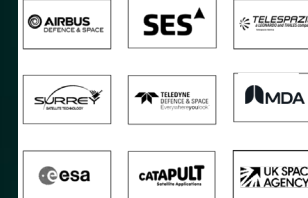
Unique Model

Investment Fund



Accelerator Programme

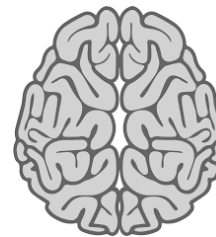
Industry Backing



Investment Committee Top Entrepreneurs



Information Asymmetry



Thought Leaders



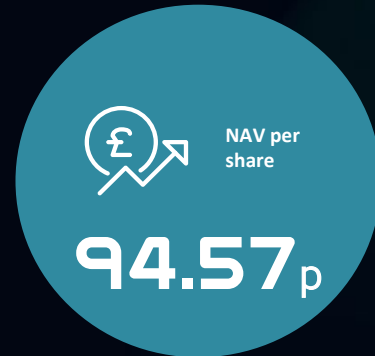
Global VC Investor Ecosystem



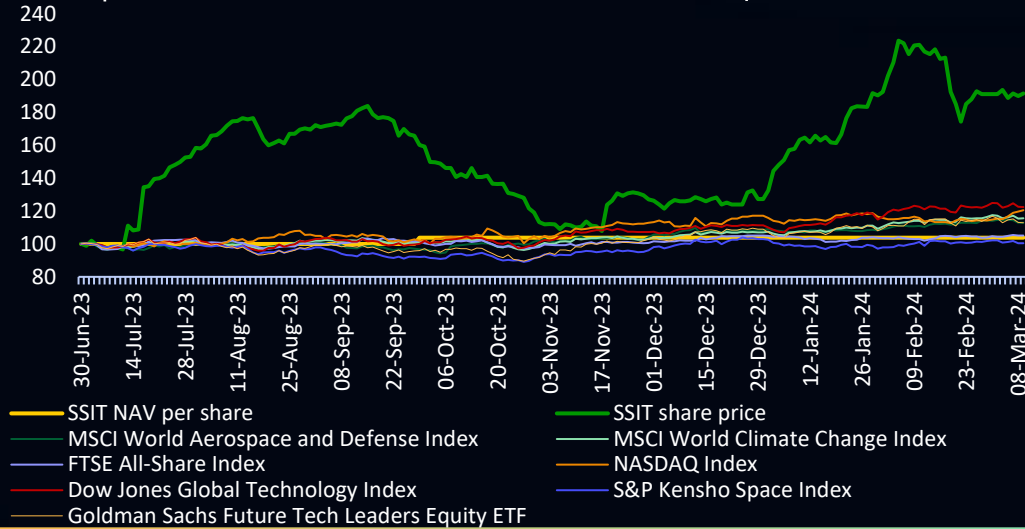
Value-add Investors on Investee Boards



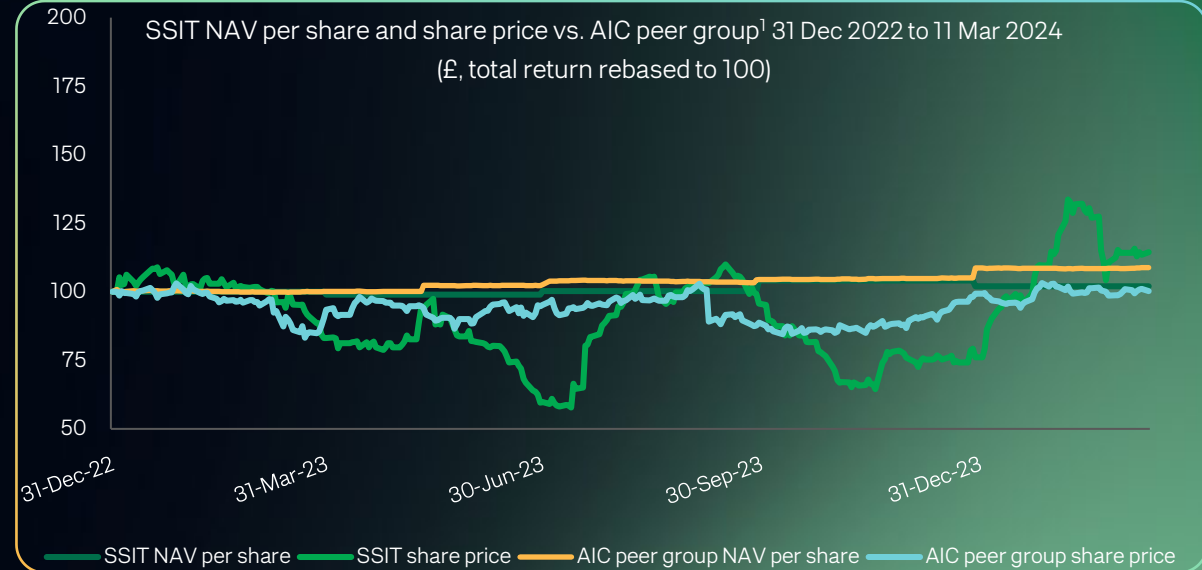
# FINANCIAL HIGHLIGHTS AS AT 31 DEC 2023



SSIT share price vs. various indices from 31 Dec 2022 to 11 Mar 2024 (£, total return rebased to 100)



SSIT NAV per share and share price vs. AIC peer group<sup>1</sup> 31 Dec 2022 to 11 Mar 2024 (£, total return rebased to 100)



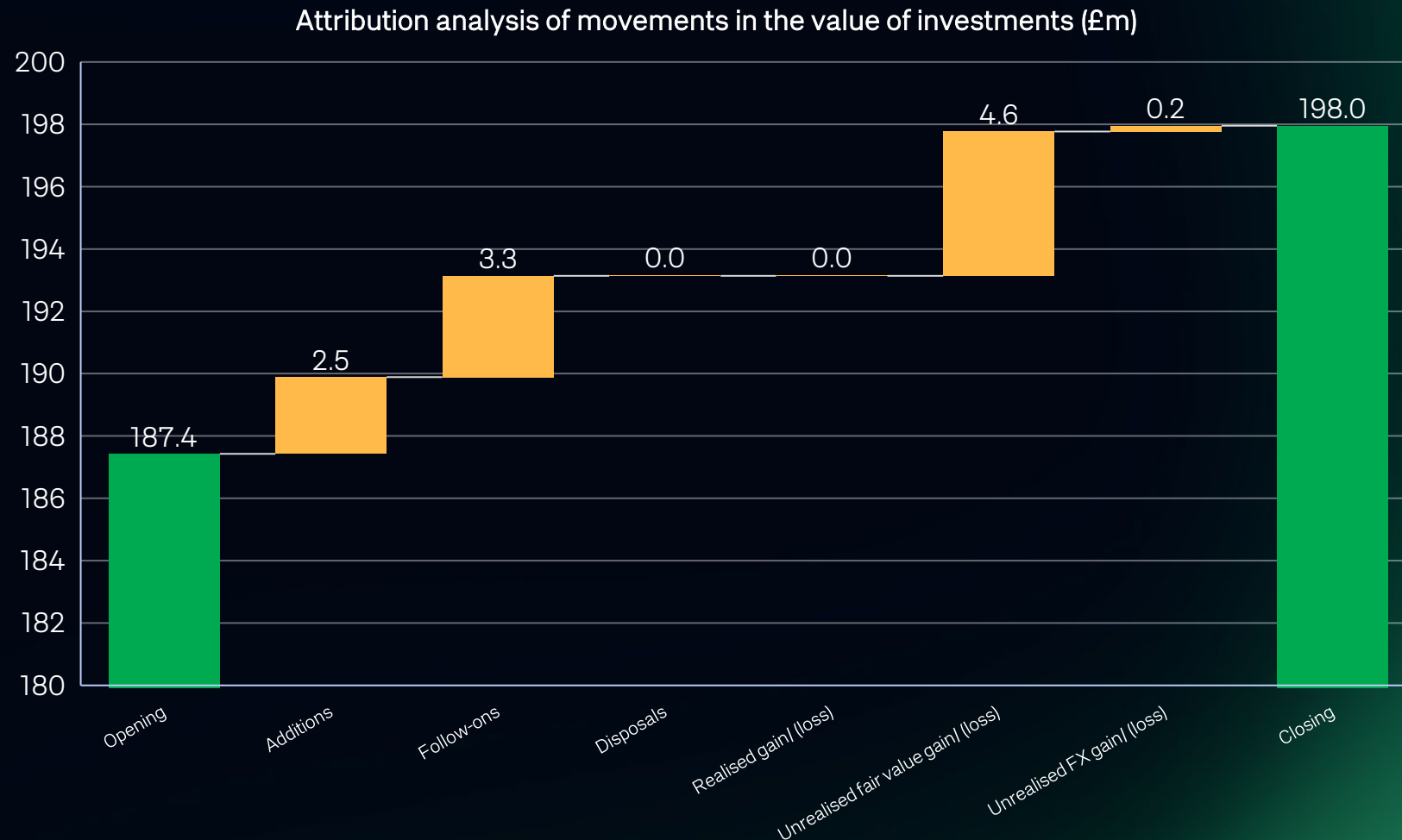
Source: Refinitiv  
Note: <sup>1</sup> AIC peer group is average of AIC Growth Capital peer group

Past performance is not a reliable indicator of future results. The value of shares and income from them can go up and down as a result of market and currency fluctuations.



# ATTRIBUTION ANALYSIS

## 6 MONTHS TO 31 DEC 2023



**101%**

Portfolio fair value vs. cost

**£198M**

Fair value of portfolio as at  
31 Dec 2023

**£5.7M**

Aggregate cost of investments during  
period

# BALANCE SHEET AS AT 31 DEC 2023

£1.9M

increase in NAV  
(1% increase)

£27M

liquid resources  
(12% of NAV)

£1M

share buy-backs in the Period

NAV bridge (£m)



# PORTFOLIO SNAPSHOT

## 6 MONTHS TO 31 DEC 2023

**£198M**

Fair value  
(30 June 2023: £187m)

**85%**

Top 10 investments as % of fair value  
(30 June 2023: 86%)

**121%**

Private portfolio fair value vs. initial cost  
(30 June 2023: 119%)

**13%**

Listed portfolio fair value vs. initial cost  
(30 June 2023: 13%)

**\$185M+**

Total money raised by  
portfolio companies<sup>1,2</sup>

**60%**

Percentage of portfolio by fair value  
that is fully funded<sup>1</sup>

**23**

Number of portfolio companies that are  
fully funded or have 12 months or more  
of cash runway<sup>1</sup>

**12MTHS**

Average cash runway of the portfolio that is  
not fully funded from 31 December 2023<sup>1,3</sup>



## H1 FY23/24 INVESTMENTS

Investments made during the period

Company	Segment	HQ	Type	Cost £m
ALL.SPACE	Downlink	UK	Follow-on	2.8
Skylo	Downlink	US	New investment	1.6
2 early stage investments			New investment	0.9
2 early stage investments			Follow-on	0.5
Total				5.7

6

Transactions completed

3

New investments

£5.7M

Cash deployed

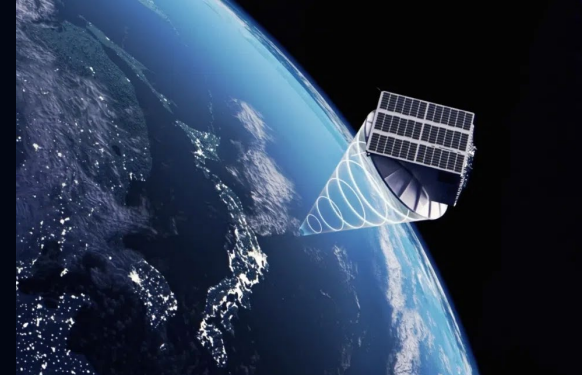


# RECENT KEY PORTFOLIO DEVELOPMENTS



## ICEYE

Continued growth of both its data and missions businesses with four new satellites deployed, adding to its own SAR constellation, and key customer Baysat ordering an additional two SAR satellites. The company has now achieved profitability at EBITDA level.



## Tomorrow.io

Completed the second close of its Series E funding round, bringing total proceeds to \$99m. Published peer reviewed research shows that precipitation data from its two pathfinder satellites is roughly on par with the leading ground-based weather radars, offering a more cost-effective solution and enabling global coverage.



## D-Orbit

Successfully launched its 12th and 13th ION Satellite Carrier missions, making the company the clear global leader in orbital transfer vehicles.



## HawkEye 360

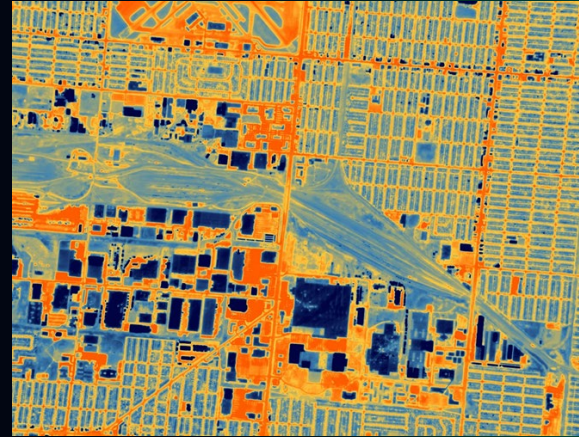
Announced the second and final close of the company's Series D-1 funding round, bringing the total Series D-1 to \$68m. The company used part of the proceeds to acquire RF Solutions, a provider of secure, precise, geospatial intelligence from Maxar Intelligence.

## RECENT KEY PORTFOLIO DEVELOPMENTS (CONT...)



### Voyager

Entered a joint venture with Airbus to develop the Starlab space station, significantly expanding its access to the European market. Northrop Grumman's termination of its independent space station program and its subsequent partnership with Voyager has had several benefits, bringing increased NASA funding, improving the competitive landscape and strengthening Voyager's Starlab space station.

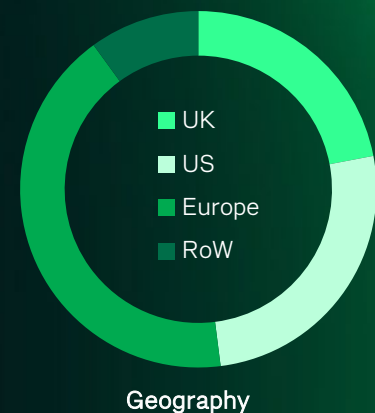
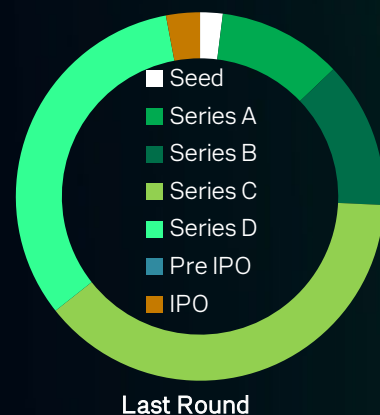
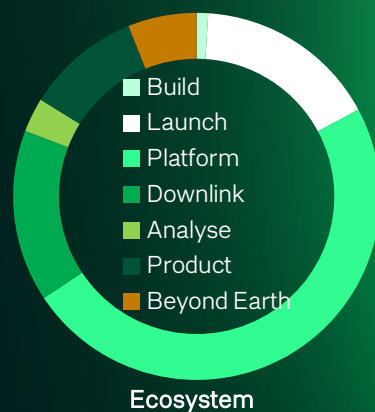
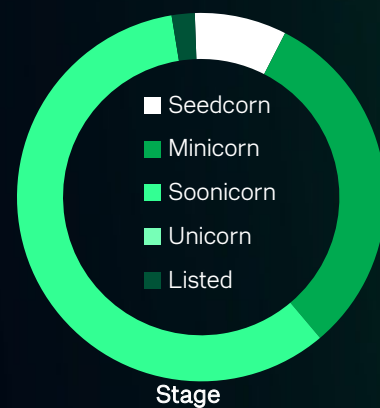


### SatVu

Successfully commissioned its first satellite and entered commercial operations. However, the satellite experienced an anomaly after around six months of operations which led to a failure of the satellite that will impact commercial operations until another satellite can be launched. The company is working on the matter with its suppliers and in parallel is progressing development of its second satellite.

# PORTFOLIO AS AT 31 DEC 2023

Summary by value

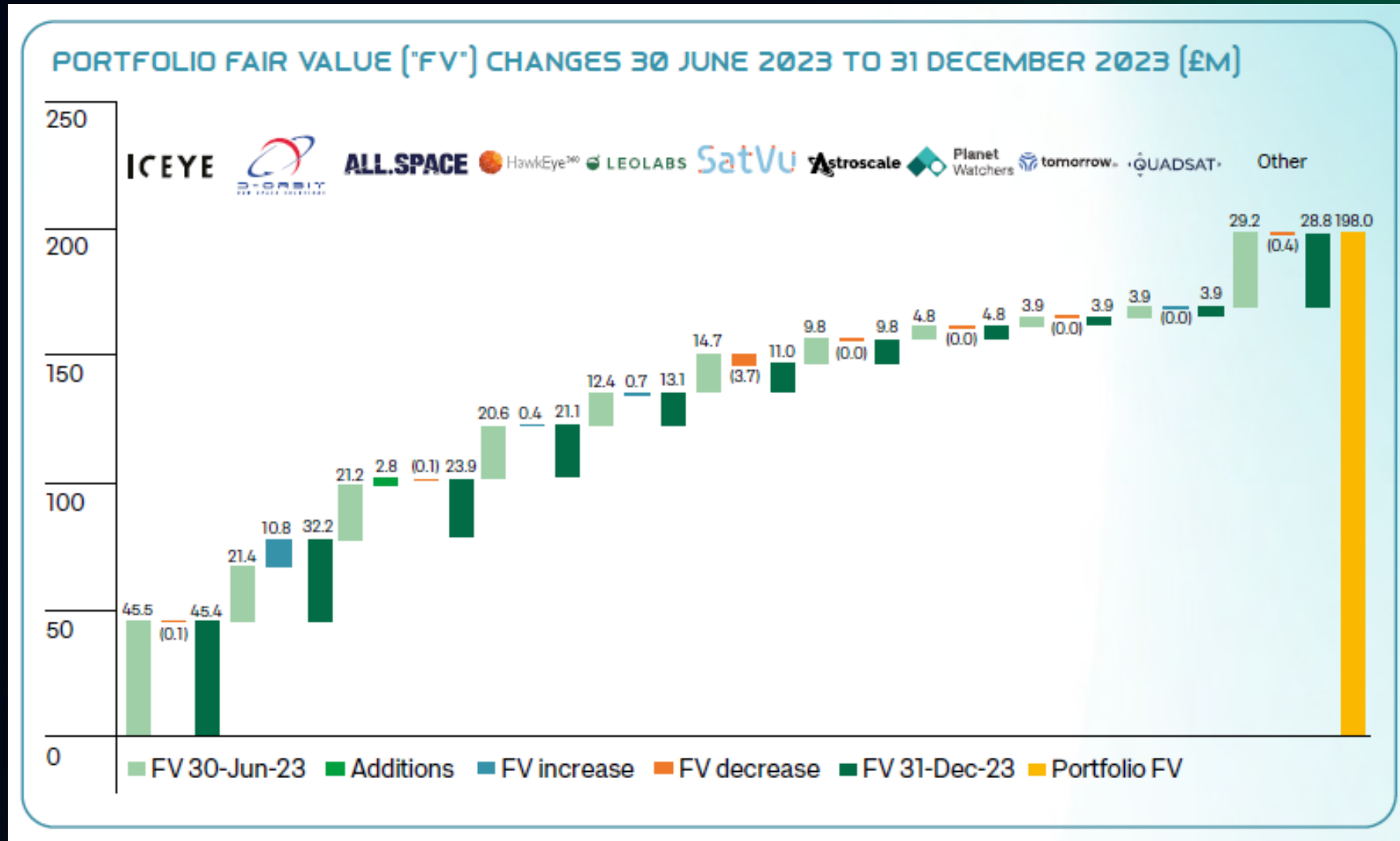


## NET ASSET VALUE

Company	FV €m	NAV
ICEYE	45.4	20.2%
D-Orbit	32.2	14.4%
ALL.SPACE	23.9	10.7%
HawkEye 360	21.1	9.4%
LeoLabs	13.1	5.8%
SatVu	11.0	4.9%
Astroscale	9.8	4.4%
PlanetWatchers	4.8	2.1%
Tomorrow.io	3.9	1.8%
QuadSAT	3.9	1.7%
<b>Sub Total Top 10</b>	<b>169.1</b>	<b>75.4%</b>
Other Investments	28.8	12.8%
<b>Total Investments</b>	<b>198.0</b>	<b>88.2%</b>
Cash	26.8	11.9%
Performance Fee Provision	-	-
Net Current Assets / (Liabilities)	-0.4	-0.2%
<b>Net Asset Value</b>	<b>224.3</b>	<b>100.0%</b>



# FAIR VALUE CHANGE





## H1 FY23/24 REVIEW

- Investment in SpaceTech remained resilient over the past 12 months despite economic uncertainty. While the general VC investment saw a 35% drop in investment between 2022 and 2023, SpaceTech substantially outperformed. 2023 saw total investment of \$6.8bn, effectively in line with 2022.
- In terms of M&A, well financed NewSpace businesses have been the most prolific acquirers by number of deals throughout 2023. However, the largest transactions were conducted by Private Equity and Corporates including L3 Harris' completion of the Aerojet acquisition, BAE's acquisition of Ball Aerospace, KKR's OHB take-private, Advent's Maxar take-private and the Eutelsat and Oneweb merger.

## OUTLOOK FOR REST OF FY23/24

- We expect the current geopolitical climate to continue which will see further de-coupling of supply chains and the rise of sovereign capabilities, both driving investment in technological capabilities including SpaceTech.
- In its shadow, we expect climate and sustainability consideration continue to drive further investment in the sector.
- SSIT continues to be well capitalised with a cash position of £27m at the end of the Period, and 82% of the portfolio by fair value has a robust cash runway, with 60% fully funded based on latest projections from the companies' management teams and 22% funded for 12 months or more from 31 December 2023.



# APPENDIX



# TOP 10 INVESTMENTS



<b>Web:</b>	iceye.com
<b>HQ:</b>	Finland
<b>Taxonomy:</b>	Platform / Earth Observation
<b>Status:</b>	Private; Soonicorn
<b>Stake category:</b>	>5-10%
<b>Fair value vs. cost:</b>	115%
<b>Valuation method:</b>	Premium to price of recent investment

ICEYE operates the world's first and largest constellation of miniaturised satellites that use radar to image the earth both during the day and night, even through cloud. ICEYE's radar technology has the ability to monitor change in near real-time.

Total estimated long term addressable market: \$10bn+

Key sectors addressed:  
insurance, defence, climate



<b>Web:</b>	dorbit.space
<b>HQ:</b>	Italy
<b>Taxonomy:</b>	Launch / In-orbit Services
<b>Status:</b>	Private, Soonicorn
<b>Stake category:</b>	>5-10%
<b>Fair value vs. cost:</b>	275%
<b>Valuation method:</b>	Calibrated price of future investment

D-Orbit is the market leader in the space logistics and orbital transportation services industry.

Total estimated long term addressable market: \$1-5bn

Key sectors addressed:  
space logistics, datacentres



<b>Web:</b>	all.space
<b>HQ:</b>	UK
<b>Taxonomy:</b>	Downlink / Ground Terminals
<b>Status:</b>	Private; Minicorn
<b>Stake category:</b>	>10-15%
<b>Fair value vs. cost:</b>	108%
<b>Valuation method:</b>	Partial write down to price of recent investment

ALL.SPACE is aiming to create a mesh network of satellite connectivity by developing an antenna capable of connecting to any satellite in any constellation in any orbit.

Total estimated long term addressable market: \$10bn+

Key sectors addressed:  
communications, defence, transport



<b>Web:</b>	he360.com
<b>HQ:</b>	US
<b>Taxonomy:</b>	Platform / Earth Observation
<b>Status:</b>	Private, Soonicorn
<b>Stake category:</b>	0-5%
<b>Fair value vs. cost:</b>	113%
<b>Valuation method:</b>	Calibrated price of recent investment

HawkEye 360 operates the world's largest satellite constellation collecting radio frequency signals to identify and geolocate previously invisible activities.

Total estimated long term addressable market: \$10bn+

Key sectors addressed:  
maritime ,defence



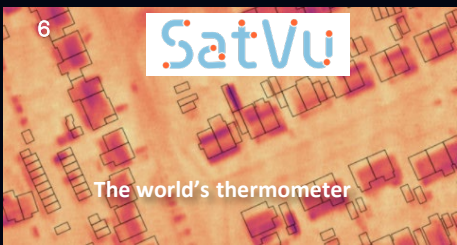
<b>Web:</b>	leolabs.space
<b>HQ:</b>	US
<b>Taxonomy:</b>	Product / Data Platforms
<b>Status:</b>	Private; Minicorn
<b>Stake category:</b>	0-5%
<b>Fair value vs. cost:</b>	112%
<b>Valuation method:</b>	Calibrated price of recent investment

LeoLabs is providing the mapping service for space by deploying a network of ground-based antennas capable of detecting objects as small as 2cm as far as 1,000km away.

Total estimated long term addressable market: \$1-5bn

Key sectors addressed:  
space, insurance, defence

# TOP 10 INVESTMENTS

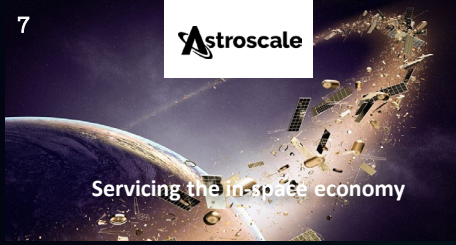


<b>Web:</b>	satellitevu.com
<b>HQ:</b>	UK
<b>Taxonomy:</b>	Platform / Earth Observation
<b>Status:</b>	Private; Minicorn
<b>Stake category:</b>	>15-25%
<b>Fair value vs. cost:</b>	163%
<b>Valuation method:</b>	Calibrated price of recent investment

SatVu is aiming to monitor the temperature of any building on the planet in near real time to determine valuable insights into economic activity, energy efficiency and carbon footprint.

Total estimated long term addressable market: \$1-5bn

Key sectors addressed: energy, property



<b>Web:</b>	astroscale.com
<b>HQ:</b>	Japan
<b>Taxonomy:</b>	Beyond Earth / In-orbit Services
<b>Status:</b>	Private; Soonicorn
<b>Stake category:</b>	0-5%
<b>Fair value vs. cost:</b>	104%
<b>Valuation method:</b>	Calibrated price of recent investment

Astroscale is a global leader of space sustainability solutions. It is currently developing a set of capabilities around satellite monitoring, refuelling, upgrading, repairing and disposal to enable a vibrant in-orbit economy.

Total estimated long term addressable market: \$1-5bn

Key sectors addressed: space, defence



<b>Web:</b>	planetwatchers.com
<b>HQ:</b>	UK
<b>Taxonomy:</b>	Analyse / Data Analytics
<b>Status:</b>	Private; Seedcorn
<b>Stake category:</b>	>25-50%
<b>Fair value vs. cost:</b>	86%
<b>Valuation method:</b>	Partial write down to price of recent investment

PlanetWatchers has developed an AI-enabled analytics platform using satellite radar imagery for crop monitoring, insurance and automated insurance claims assessments.

Total estimated long term addressable market: \$5-10bn

Key sectors addressed: agriculture, insurance, climate



<b>Web:</b>	tomorrow.io
<b>HQ:</b>	US
<b>Taxonomy:</b>	Platform / Data Platforms
<b>Status:</b>	Private; Soonicorn
<b>Stake category:</b>	0-5%
<b>Fair value vs. cost:</b>	93%
<b>Valuation method:</b>	Calibrated price of recent investment

Tomorrow.io is powering actionable weather insights around the world. The company's mission is to help countries, businesses and individuals better manage their weather-related challenges with the best information and insights.

Total estimated long term addressable market: \$30+bn

Key sectors addressed: logistics, aviation, maritime, government civil, government defence



<b>Web:</b>	quadsat.com
<b>HQ:</b>	Denmark
<b>Taxonomy:</b>	Downlink / Communications
<b>Status:</b>	Private; Seedcorn
<b>Stake category:</b>	>10-15%
<b>Fair value vs. cost:</b>	151%
<b>Valuation method:</b>	Calibrated price of recent investment

QuadSAT has developed a novel technique for testing and calibrating satellite antennas by using drones to mimic the position and movement of satellites. Helping ensure antennas perform optimally and avoid signals interference has broad applicability across both the satellite communication and broader terrestrial telecoms industry..

Total estimated long term addressable market: \$1-5bn

Key sectors addressed: space, telecoms



# FURTHER INFORMATION

## Company Information

### Board of Directors

- [Will Whitehorn](#) (Non-executive Director / Chair)
- [Sue Inglis](#) (Non-executive Director / Senior Independent Director)
- [Christina McComb](#) (Non-executive Director / Management Engagement Committee Chair)
- [Angela Lane](#) (Non-executive Director / Audit Committee Chair)

### Manager

Seraphim Space Manager LLP, One Fleet Place, London, EC4M 7WS

### Brokers

- Deutsche Numis, 45 Gresham Street, London, EC2V 7AF
- J.P. Morgan Securities plc, 25 Bank Street, Canary Wharf, London, E14 5JP

### Contact Details

Registered Office - 5th Floor 20 Fenchurch Street, London, EC3M 3BY

### Key Financials as at 31 Dec 2023

NAV per share	95p
Share price	34p
Share price premium/ (discount) to NAV	-64%

Net assets	£224m
Market capitalisation	£82m
Ticker code	SSIT
Management fees	1.25% NAV
Gearing	None

### Calendar

Q3 results	6 Jun 2024
Full year results	15 Oct 2024

## Environmental social and governance matters

Seraphim Space Manager LLP is a signatory to the United Nations backed Principles of Responsible Investment. The PRI is the world’s leading proponent of responsible investing <https://www.unpri.org/>

### Website

<https://investors.seraphim.vc> is constantly being updated to ensure that you can always access Seraphim Space Investment Trust Plc latest data and information on your computer or mobile device in a transparent, convenient and intuitive manner.

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