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2019 (46th) Light the Fire

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Start-Up Space 2019

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Start-Up Space 2019

- Analyzes 21st century investment trends
- Focus: investors, investment in new companies with private financing
- Bryce produced the original of this report in 2016 with funding from a grant program of the NASA Ames Emerging Space Office
- The report was so well received that Bryce has updated it every year since 2016 and intends to continue in 2020



21st Century Investments in Start-Up Space

- ✓ \$21.8 billion of investment since 2000 includes:
 - \$8.4 billion in early and late stage venture capital
 - \$3.1 billion in seed financing
 - \$4.7 billion in debt financing
- ✓ 220+ new angel- and venture-backed space companies
- ✓ 700+ investors in start-up space



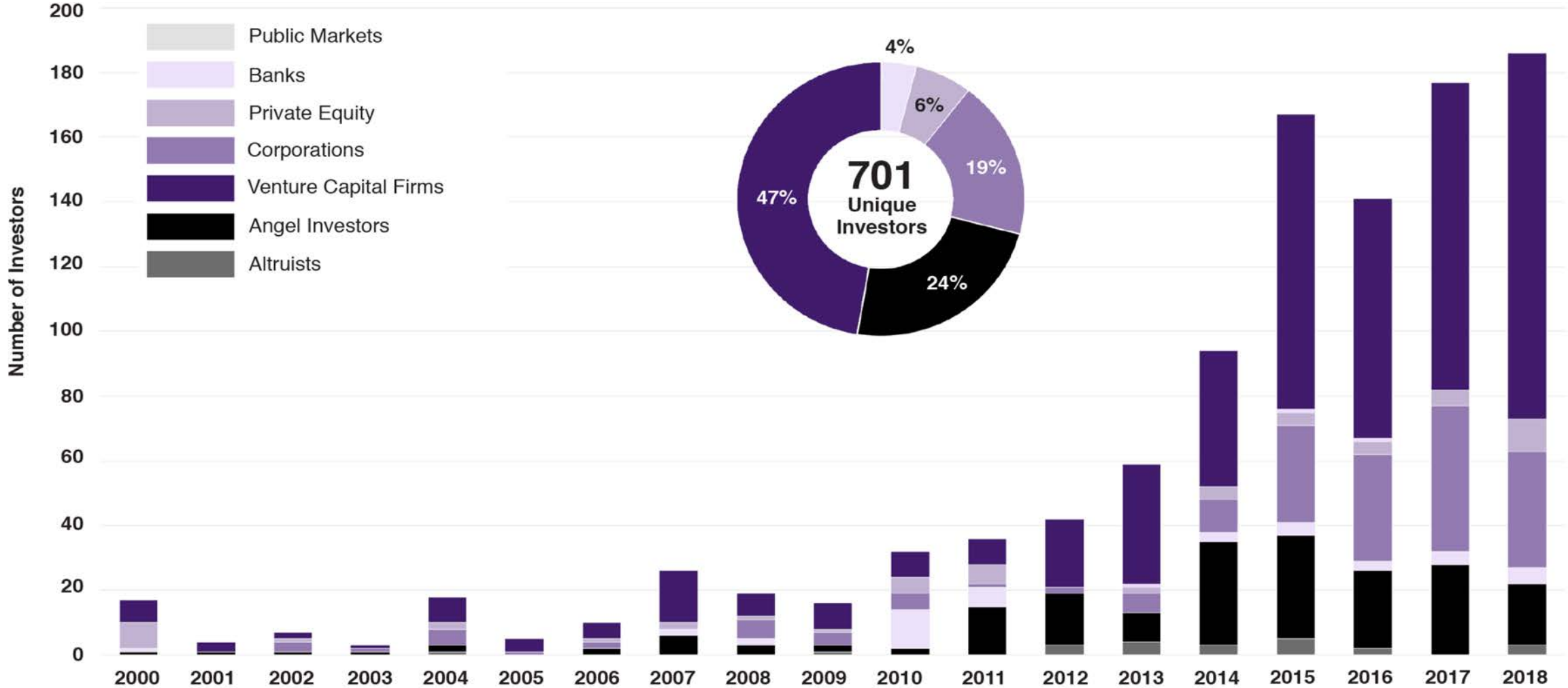
Investment by Type (2016-2018)

Investment Type	2016 (millions)	Change	2017 (millions)	Change	2018 (millions)
Seed/Prize/Grant	\$447.7	22%	\$548.3	44%	\$791.7
Venture Capital	\$1,617.8	2%	\$1,642.8	22%	\$2,002.4
Private Equity	\$0	0%	\$0.0		\$85.0
Acquisition	\$962.5	-63%	\$360.0	-72%	\$100.0
Public Offering	\$0	0%	\$0.0	0%	\$0.0
Total Investment	\$3,028.0	-16%	\$2,551.0	17%	\$2,979.1
Debt Financing	\$1.9	159%	\$5.0	5010%	\$254.0
Total with Debt	\$3,030.0	-16%	\$2,556.0	26%	\$3,233.1

21st Century Investments in Space Ventures

Investment Type	2000-2006 (millions)	2006-2012 (millions)	2012-2018 (millions)	Total 2000-2018 (millions)
Seed/Prize/Grant	\$742.0	\$201.9	\$2,170.3	\$3,114.2
Venture Capital	\$327.9	\$519.6	\$7,543.5	\$8,390.9
Private Equity	\$234.2	\$1,300.8	\$301.0	\$1,835.9
Acquisition	\$0.0	\$584.0	\$3,098.3	\$3,682.3
Public Offering	\$0.0	\$0.0	\$23.4	\$23.4
Total Investment	\$1,304.1	\$2,606.3	\$13,136.4	\$17,046.8
Debt Financing	\$710.0	\$3,388.4	\$637.8	\$4,736.2
Total with Debt	\$2,014.1	\$5,994.6	\$13,774.2	\$21,782.9

Number of Investors by Type (2000-2018)



Multiple VCs Investing in Start-Up Space

- 1
- 2
- 3 Data Collective
- 4
- 5
- 6
- 7 FRESKO CAPITAL
- 8
- 9
- 10 khosla ventures
- 11
- 12
- 13
- 14
- 15
- 16 NORWEST VENTURE PARTNERS
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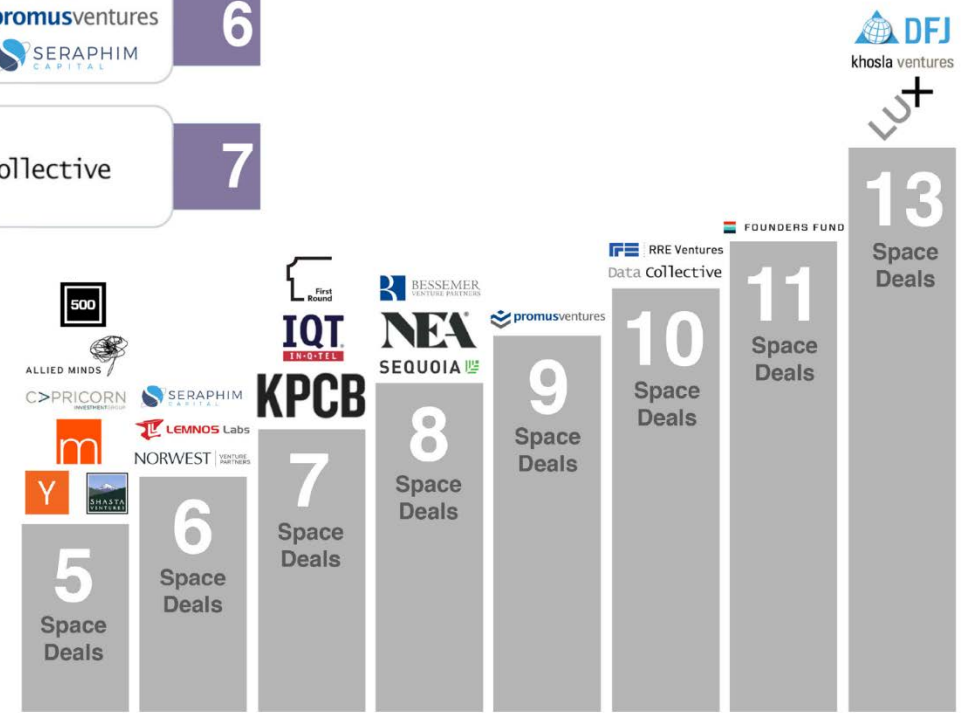
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Data collective

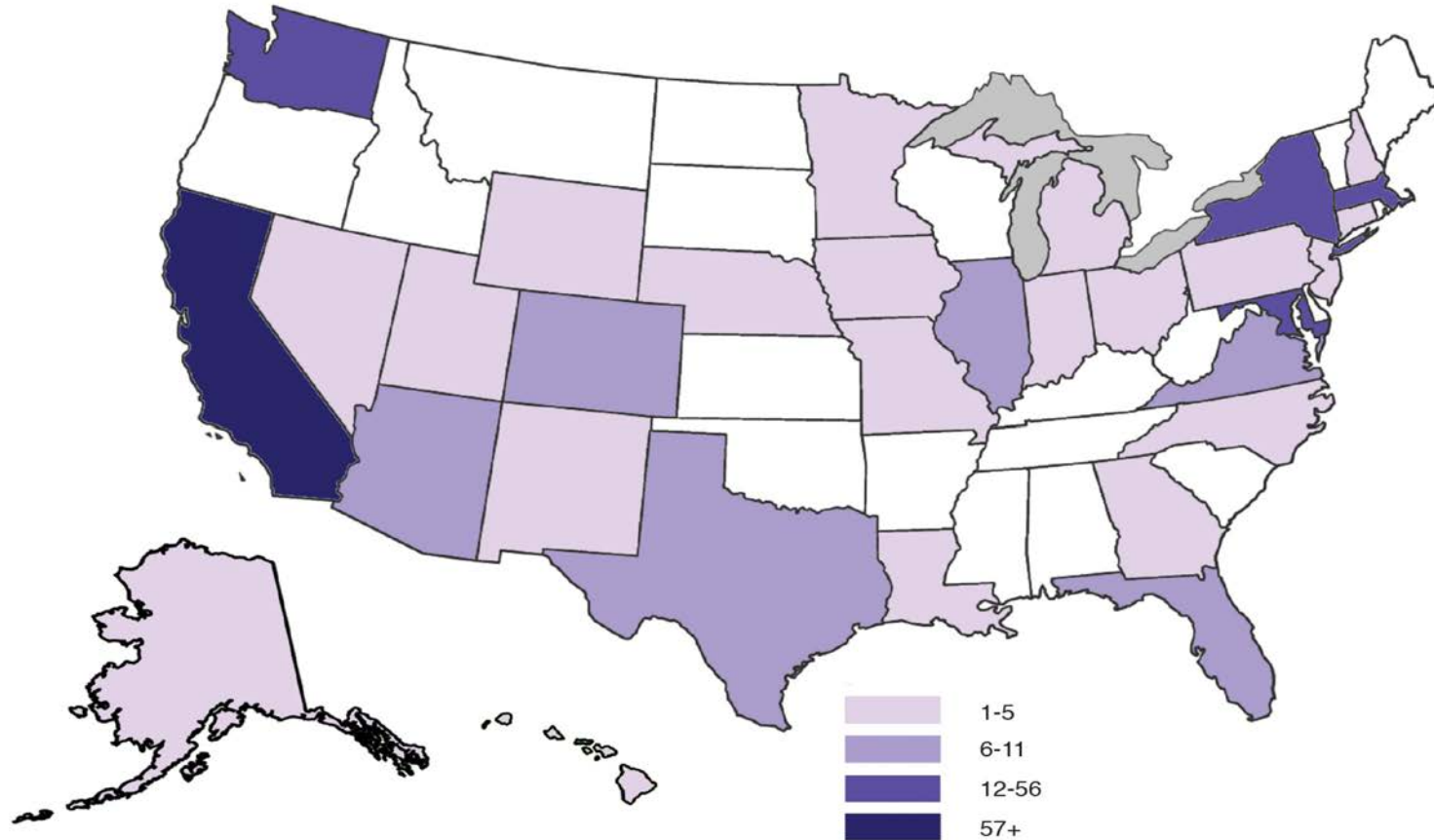


Number of Funded Start-Up Space Ventures by Year Founded*

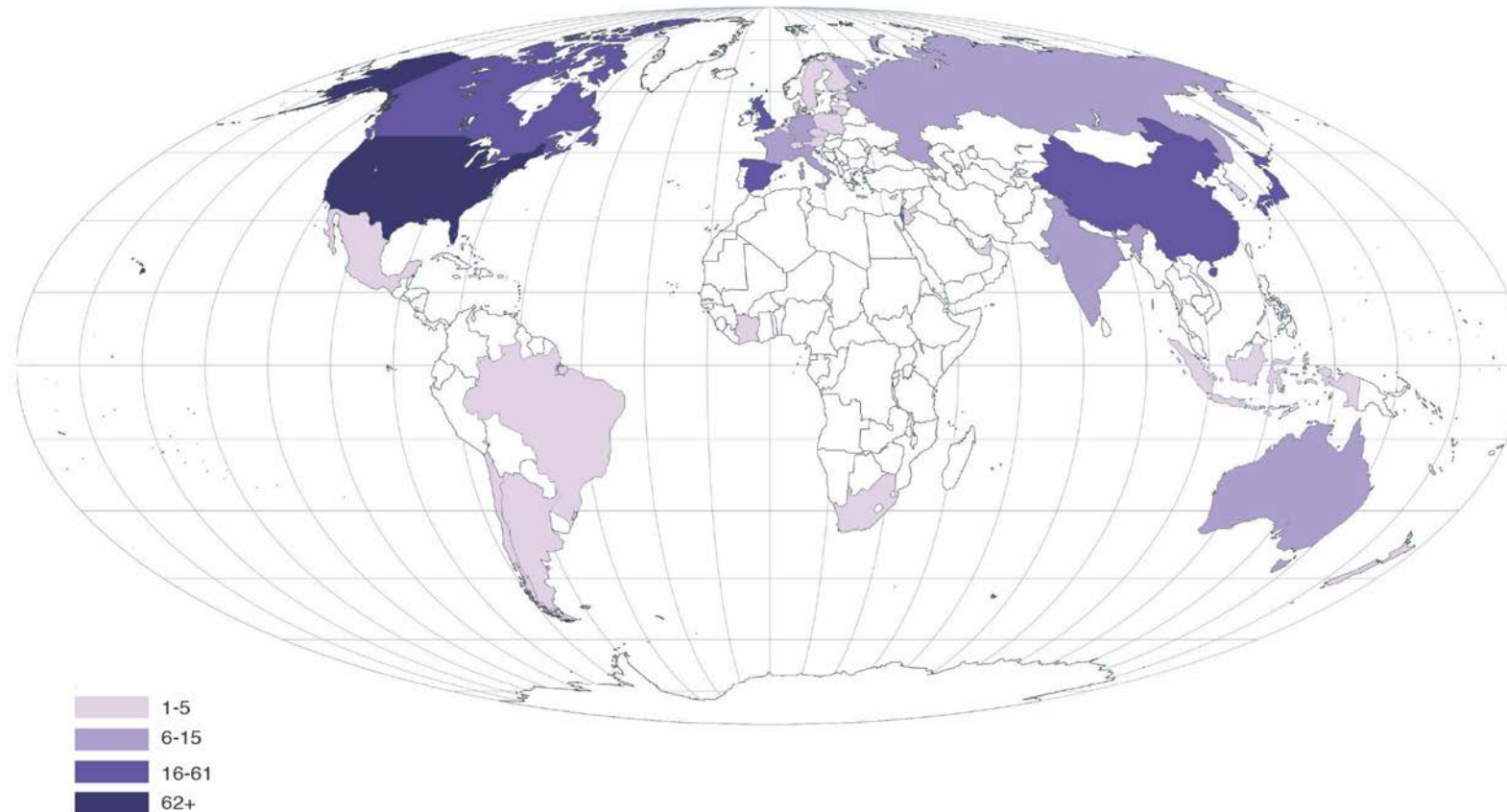


Bryce anticipates that the number of reported start-up space companies founded in 2018 (2) will likely increase in the future

U.S. Start-up Space Investors



Since 2000, investors in space companies are primarily headquartered in the United States (382), representing about 54% of the total; California is home to nearly half of these investors

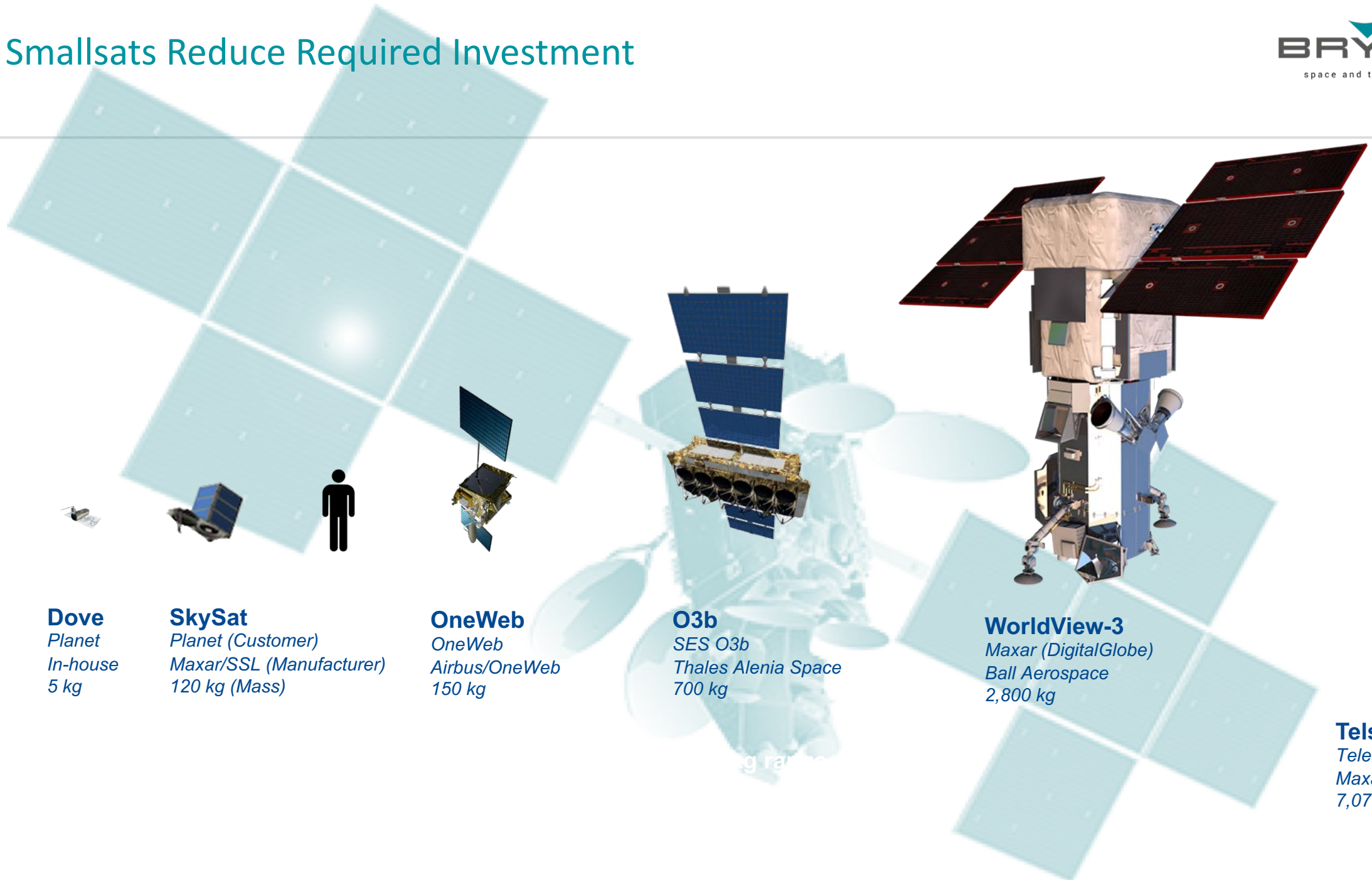


Since 2000, there have been 315 non-U.S. investors in start-up space companies, based in 37 countries. The United Kingdom is home to 15 percent of non-U.S. investors (60), followed by Japan (50) and China (39)

Commercial Human Spaceflight: Billionaires and Buzz



Smallsats Reduce Required Investment



- ✔ SpaceX is the only undisputed space unicorn, a private company with a valuation of \$1 billion or more
 - SpaceX now valued at \$30.5b
 - Within the top ten most valuable privately held companies in the United States
- ✔ OneWeb, Planet, and Rocket Lab have been reported by some sources to be unicorns
- ✔ Mapbox and Kymeta may be on the path





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