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Leoscope: Measurement using Volunteer Nodes

aka "Planetlab for Starlink"

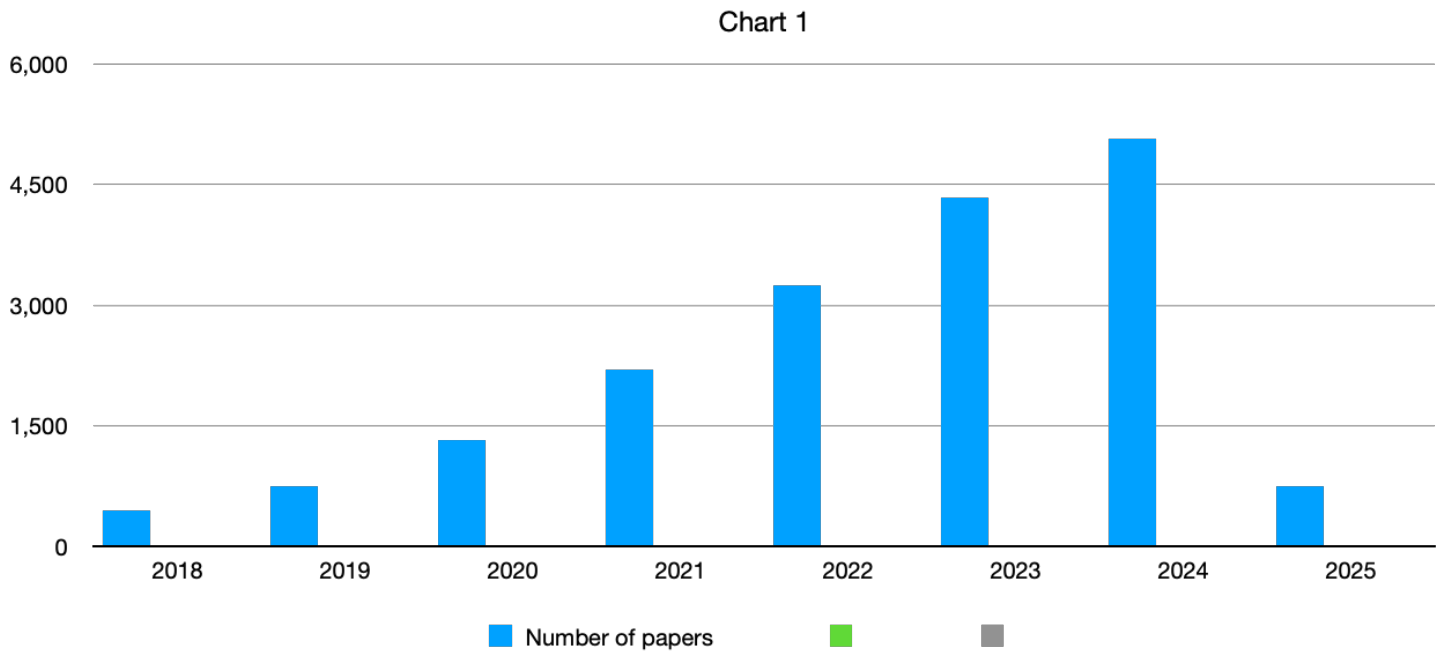

Table 1

	Number of papers		
2018	442		
2019	751		
2020	1,320		
2021	2,200		
2022	3,240		
2023	4,340		
2024	5,060		
2025	751		

LEOSCOPE ARCHITECTURE

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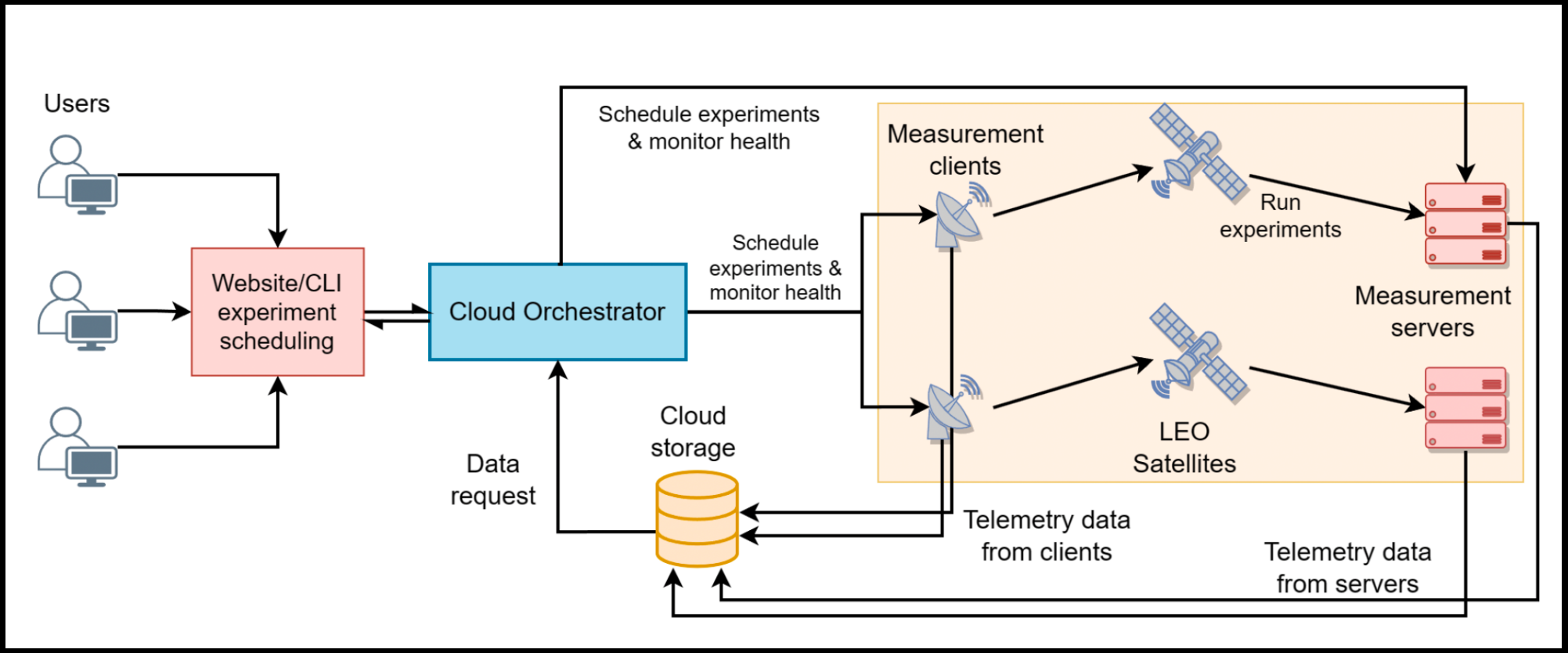

Leoscope is adapted to LEO Measurement needs

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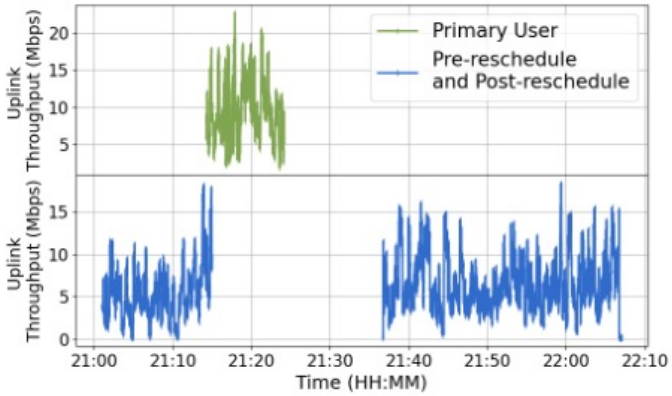
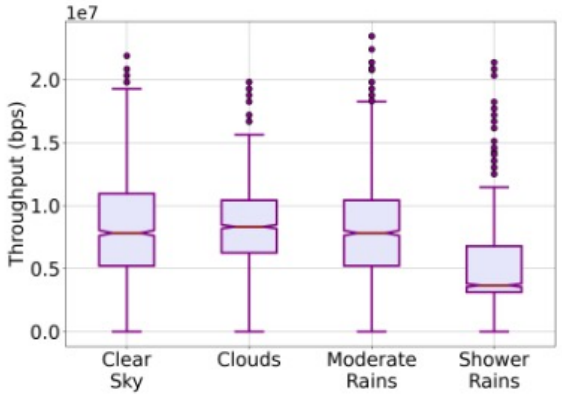
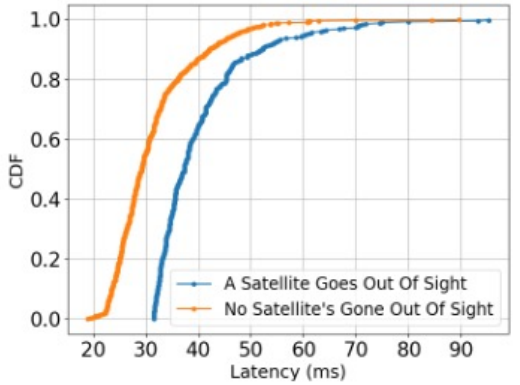


(a)



(b)



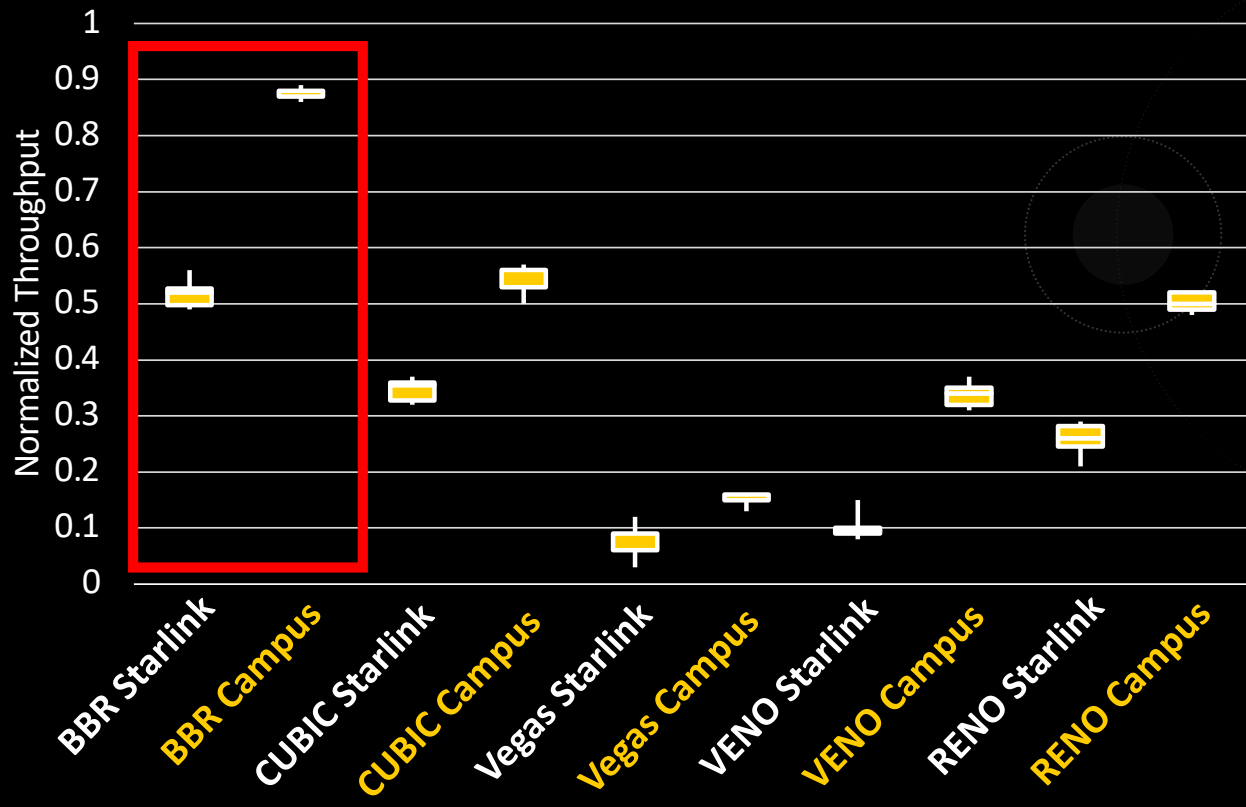
(c)

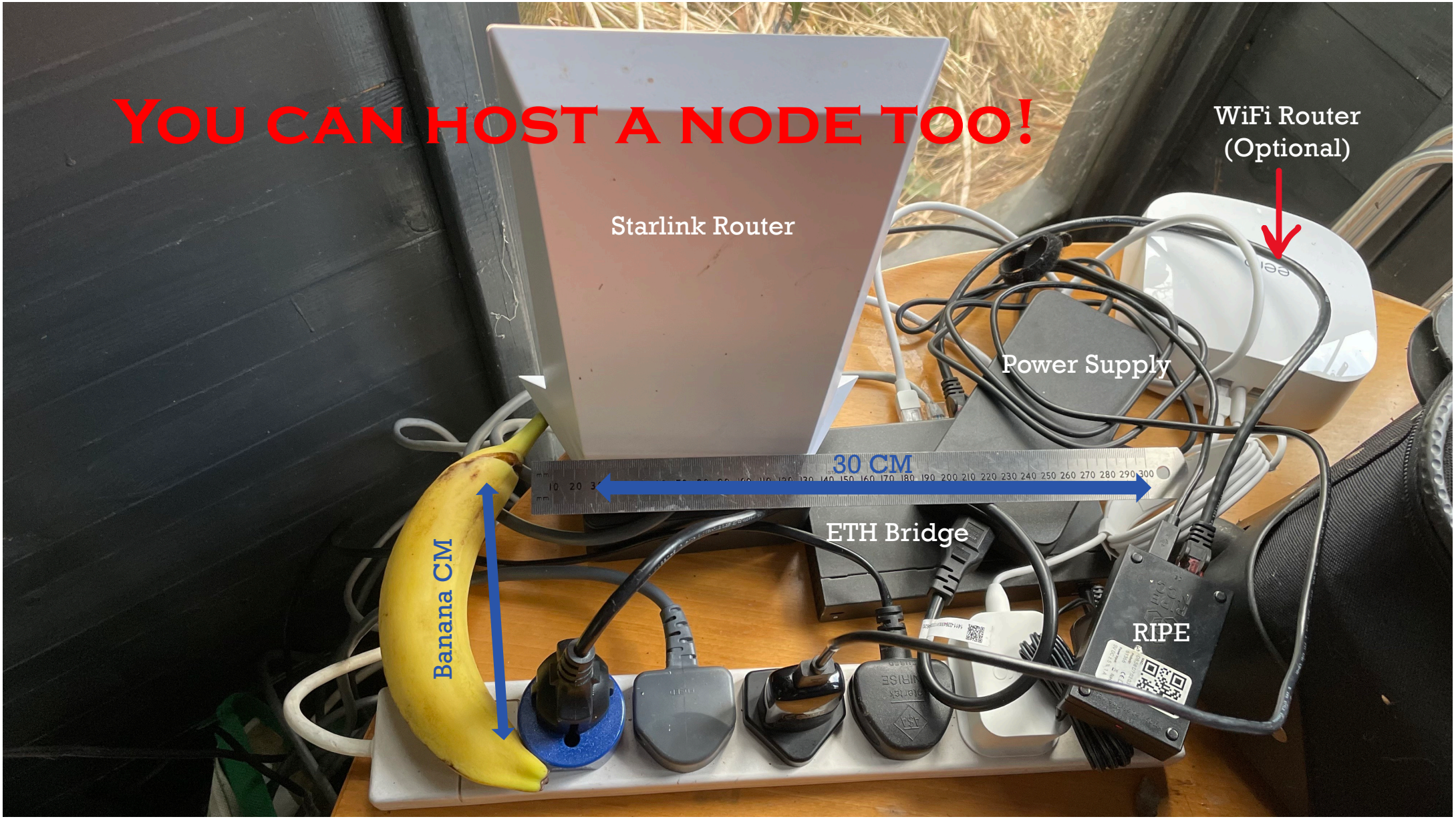
TCP Congestion Control on Starlink

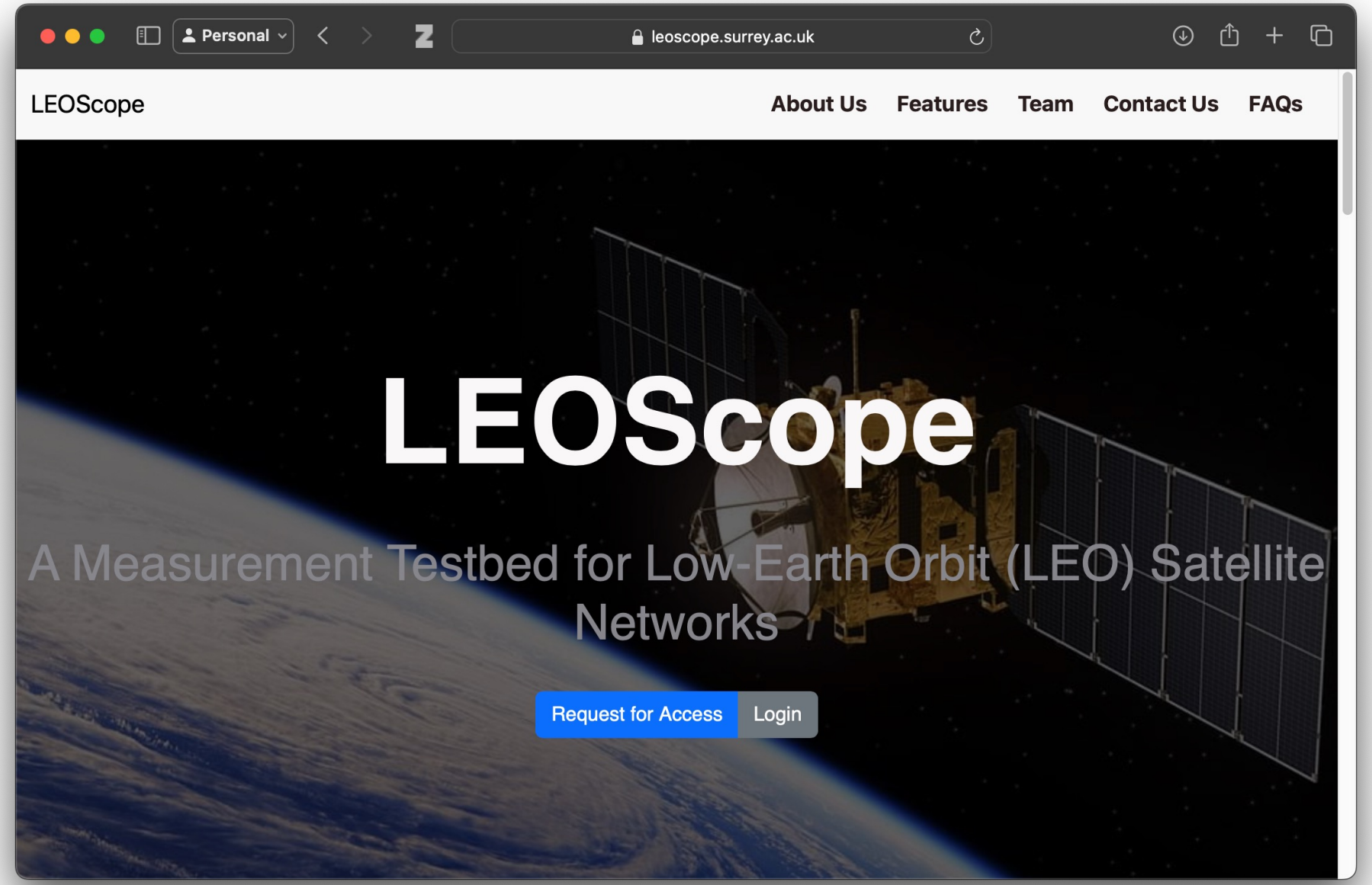
BBR achieves much higher throughput than the other algorithms.

Yet, it only achieves 50% of the overall capacity

This suggests that perhaps the loss rate on Starlink can be too high, even for protocols explicitly designed for packet losses




You can host a node too!
Starlink Router
WiFi Router
(Optional)
Power Supply
30 CM
ETH Bridge
Banana CM
RIPE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