



The Weekly Hash, 10/25/21

BTC Holding in \$63k Range After All-Time High; CME Futures Interest up 46% WoW

Bitcoin fell slightly off a \$65,996 all-time high set last Wednesday, and is currently at \$63,550 following this morning's gains. CME Futures contango is now 5.3% for the March 2022 contract. Overall open interest (OI) gained 46% WoW (Week on Week) to 17,120 lots (up 64% from two weeks ago). The successful launch of ProShares' BITF BTC Futures fund catalyzed this increase, but the ~3,850 lots we believe the fund holds account for just about one third of the open interest increase seen in the past 30 days.

The Commitment of Traders report shows CME positioning as of last Tuesday, the first trading day of the BTC Futures ETF. Open interest increased across all categories, but non-reportables showed the greatest OI increase of ~95% WoW. Leveraged players also increased their OI but it was largely on the short side, which increased 21% WoW to 8,300 lots.

180 blocks were mined in the last 24 hours, as of this writing, implying an observed Hashrate of over 179EH/s. After a benign 0.95% reset last week, this pace would imply a 15%+ reset next week. BTC's new highs likely brought some older capacity online, although some of the pace might be attributed to luck.

Total BTC earnings per PH/s are ~6.32 mBTC, down from ~6.39 mBTC / PH/s last week (1mBTC or milliBTC = 1/1000 BTC). Transaction fees fell 19 bps WoW to 0.9% of miner rewards, or 0.06 BTC per block. The "Mempool" currently shows low congestion levels, with ~2,000 pending transactions.

Bitcoin mining revenue dropped to \$385 / PH/s per day and \$420/MWh on last week's difficulty reset reducing earnings slightly.

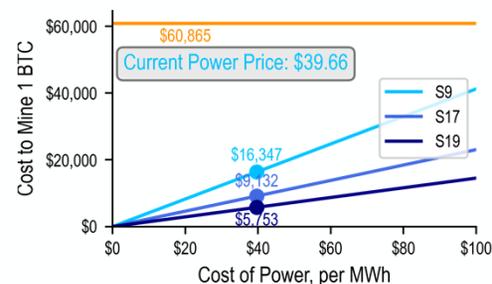
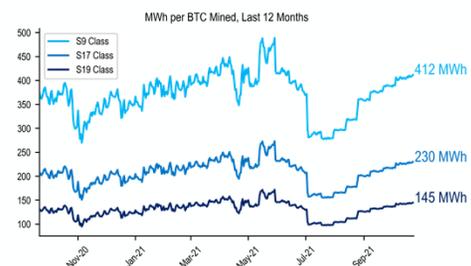
The BitOoda North American Hash Spread™ fell 3.0% from \$391 to \$380.

We define the BitOoda Hash Spread™ as the difference between the cost of power per MWh and the Bitcoin mining revenue per MWh. This gives miners a quick sense of the surplus generated by their business to cover personnel, overhead, depreciation, and profit. The weighted average around the clock U.S. wholesale industrial power price (5 markets) of \$39.66 / MWh leads to an aggregate spread of \$380.

	S9 Class	S17 Class	S19 Class
Hash Spread	\$108	\$225	\$380
Week on Week	-5.0%	-3.5%	-3.0%

Older-gen S9-class devices saw their Hash Spread™ down ~5% to \$108/MWh. S17-class devices, the bulk of the installed base, saw a hash spread of about \$225/ MWh.

It now takes 145 MWh to mine 1 BTC using S19-class rigs, while S17-class machines consume 230 MWh, and S9-class machines consume 412 MWh. This translates to \$5,743 per BTC in power expense at the current power price, mining with S19-class rigs. It costs \$16,347 to mine 1 BTC with older S9-class equipment.



Takeaways

- The recent launch of Bitcoin Futures ETFs has contributed to a new all-time high in Bitcoin price, a modest recovery in the contango, and a large increase in open interest.
- Bitcoin mining profitability is very strong given this backdrop, and should remain very attractive even as Hashrate continues to increase.
- Our year-end estimate is 198EH/s for target Hashrate, which could be at risk to the upside should new equipment continue to come online and strong prices bring more older S9-class rigs out of retirement.

Research

Sam Doctor^{ac}
 Chief Strategy Officer | Head of Research
 sam@bitooda.io
 @CryptoSamDoctor | @Sam_Doc

Mark Chin | mchin@bitooda.io

BTC Price \$63,548
 (10/25 at 10am EDT)

Obs Hashrate 179EH/s

Key Takeaways

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- Email info@bitooda.io to subscribe to our paid research tier.

Contango Bounces Back

Open Interest Rises

- The contango has edged down at the front end of the curve, but the back end steepened slightly
- March contracts trade at a 4.3% premium to spot, up from 2.5% a week ago and 1.5% 15 days ago
- CME open interest increased 64% in two weeks to 17,120 lots
- Most of the increase came in the active October and November contracts
- There is no liquidity in the out contracts, though
- We assess this reflects trading in the new BTC futures ETFs

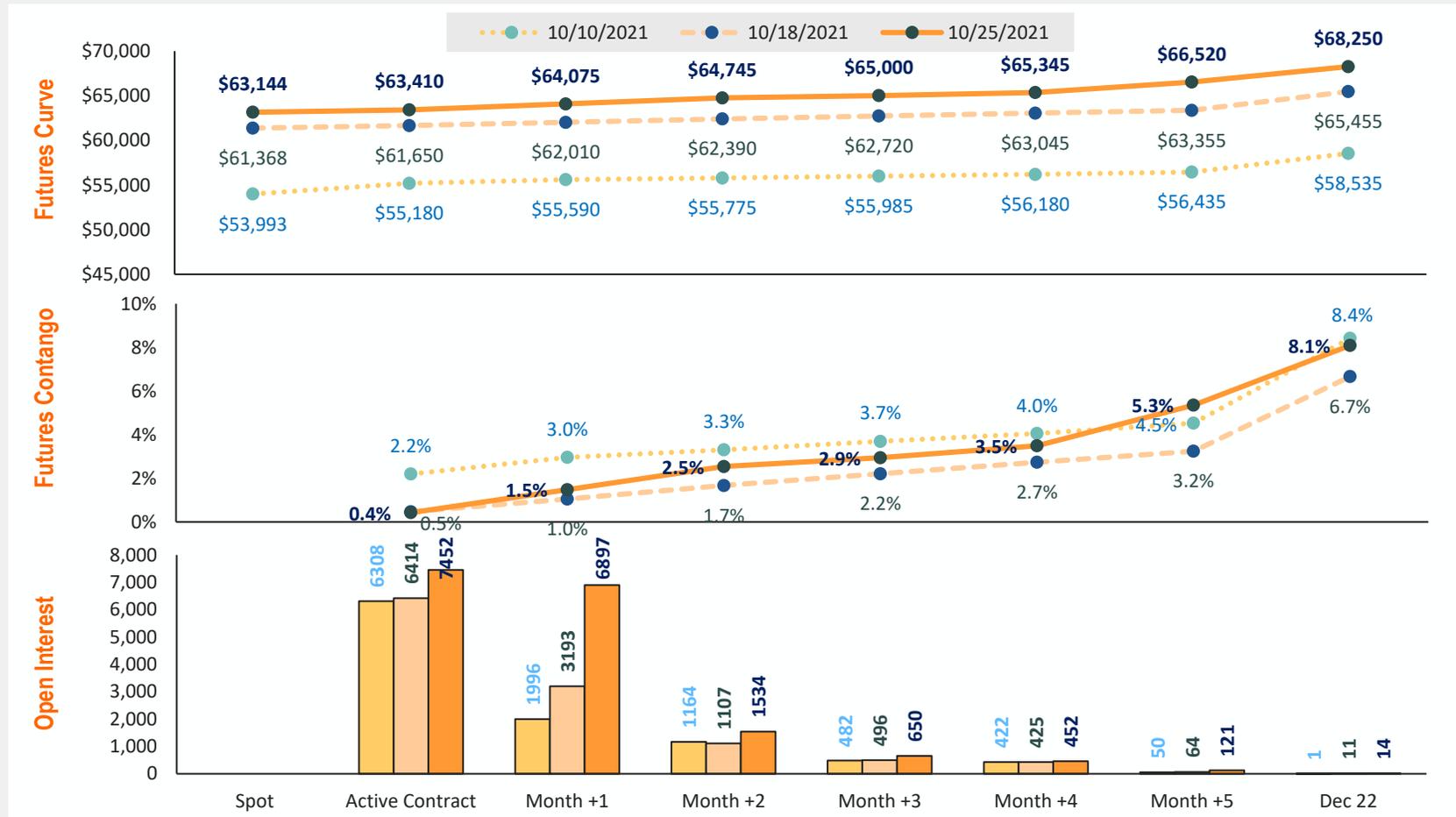


Figure: Bitcoin futures metrics

Source: Bloomberg



CME Commitment of Traders 10/19 Open Interest Pre-ETF

- The CME Bitcoin Commitment of Traders report shows that open interest was on the rise even before the launch of the ProShares BTC Futures ETF
- Commercial open interest fell on the long side and increased on the short side
- The largest gains in open interest seem to be on the non-reportable side, which ties into our view that open interest increases ahead of the ETF launch were led by positioning
- Given reporting delays, the “current” data is actually last Tuesday, or the first trading day of the Bitcoin ETF

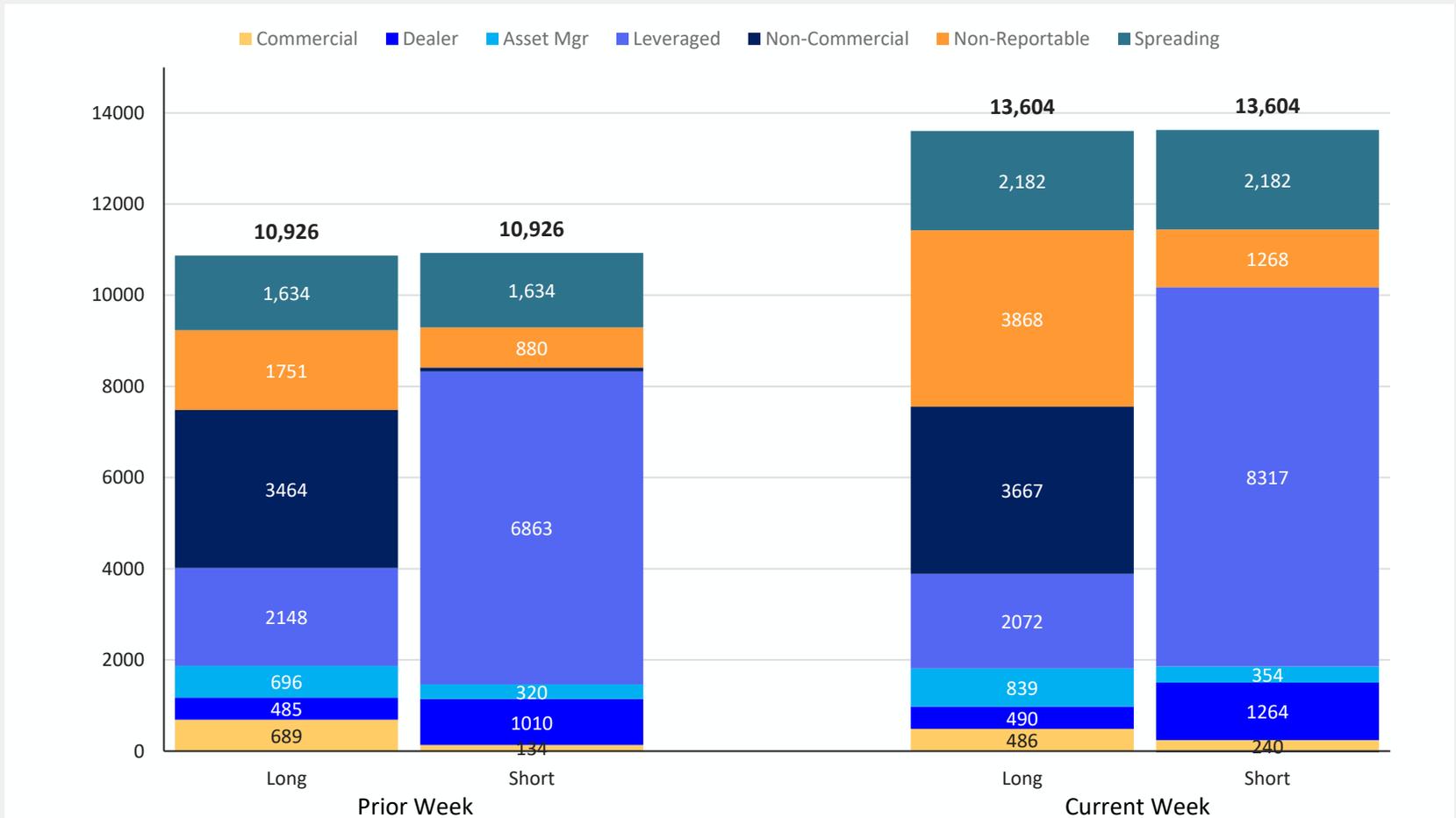


Figure: CME Bitcoin Commitment of Traders, 10/19/21 and 10/12.21

Source: Bloomberg

BitOoda Hash™ Dashboard

October 25, 2021

Definitions

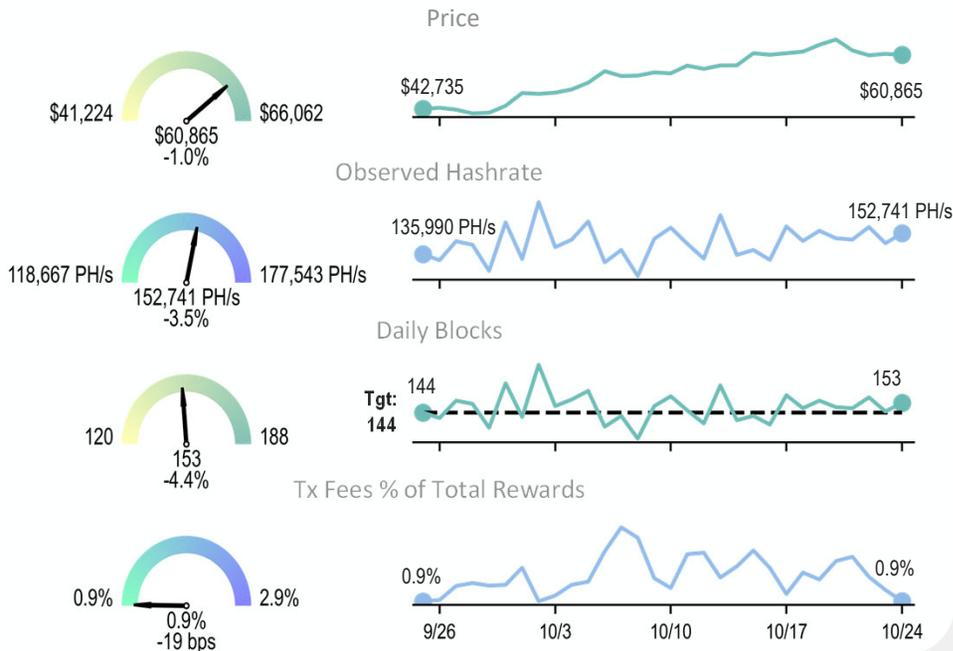
Hash Spread: the difference between the revenue per MWh from mining BTC and the weighted average cost of peak and off-peak power across 8 US zones. It is a quick measure of the profitability of US-based latest-generation mining rigs.

MWh: Megawatt hour

PH/s: Petahash per second

Tx Fees: Fees for BTC transactions

30 Day Range and 7-day % change



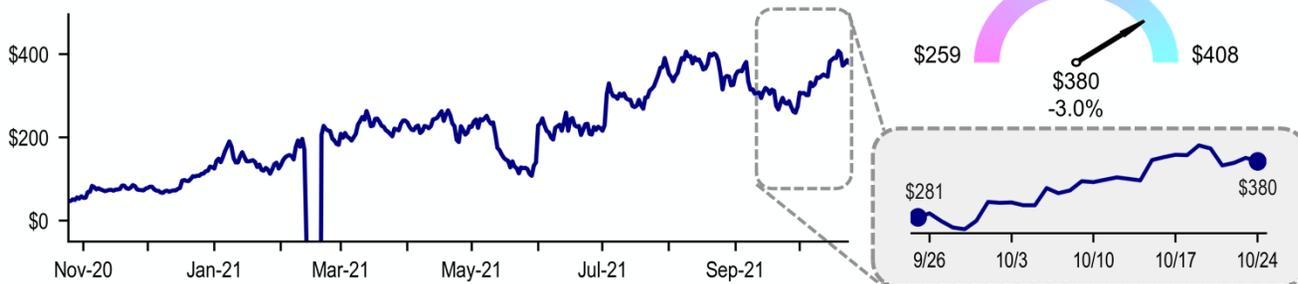
Daily Revenue per PH/s



Revenue per MWh (\$19 Class)



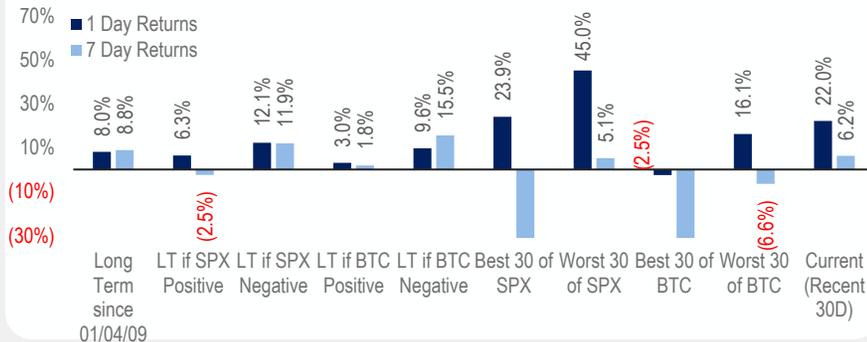
BitOoda North American Hash Spread™



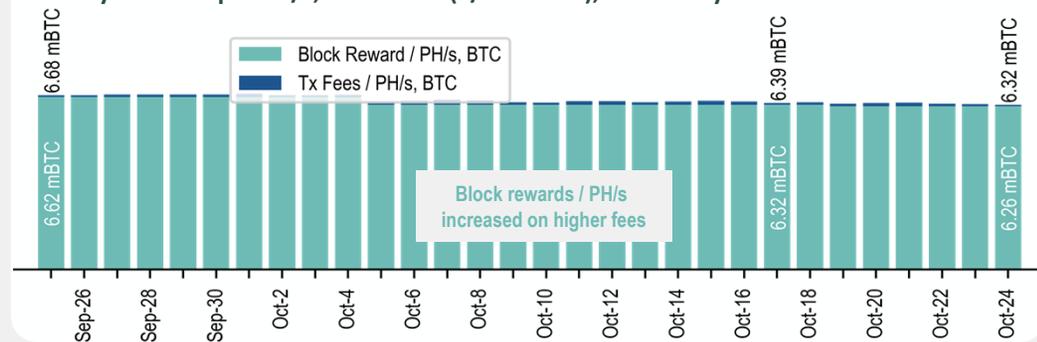
Revenue, since 2013



Historical BTC Correlation to S&P500



Daily Rewards per PH/s, in milliBTC (1/1000 BTC), last 30 days





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