



Zcash Metrics and Analytics Dashboard

Primary Contact:	Aristarchus
Amount requested:	\$25,000 USD (upon completion of grant)
Grant Description:	<p>This grant is intended to fund the launch of a version 1.0 Zcash real time data and analytics webpage.</p> <p>Currently, many important Zcash metrics are available from Messari and Coinmetrics, but they are behind paywalls. This minor grant will fund an open data website freely providing some metrics that are currently only available from Messari and Coinmetrics, and some metrics that are not available at all to my knowledge. I think that the Zcash community should not depend on 3rd parties for data about our network. The data should be freely accessible and the code to produce the relevant graphs should be open source.</p> <p>In the spirit of the 'Minor' grants program, it is my intention to use this Minor Grant build this version 1.0 and then get community feedback. Then, if there is demand for a version 2.0, I would be happy to submit a larger grant to build a version 2.0 with new features and improvements.</p> <p>Key Deliverables:</p> <p>Shielded Pool Size charts as a function of time/block number, for several time ranges (e.g all time, last year, month, day etc.). There</p>

	<p>will be charts of both aggregate shielded ZEC across all pools, as well as individual pools.</p> <p>Block time spacing charts and analytics (useful for identifying possible irregular miner behaviors such as 'selfish mining'/delayed block propagation.). These will include both raw data and statistics to identify anomalous miner behavior. Anomalous miner behaviors include things such as incorrect block time stamps and broadcasting mined blocks with a delay or only to select peers.</p> <p>Various Shielded Transaction Metrics: Totals over time of each tx version/type, tx sizes in bytes, tx number of inputs and outputs.</p> <p>Mining difficulty as a function of time/block number, for several time ranges (e.g all time, last year, month, day etc.). Will also include the cost to launch a successful 51% attack as a function of time.</p> <p>All of the above features will be delivered before requesting payment.</p> <p>This version 1.0 will be a simple light weight website intended to load quickly, unlike most block explorers.</p> <p>Full support will be provided for at least 1 year.</p>
Team:	<p>One-man team: Aristarchus</p> <p>I am a long time Zcasher and a big believer in the Zcash goal to empower everyone with sound, private money they can fully control.</p> <p>I have many years of programming and 'data science' experience, and have previously created Zcash metric plots that were well-received by Zcashers on Twitter.</p>