

**STAR ATLAS**

# State of the Economy

ATMTA, Inc.

Department of Economics

# Q3 2025



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## Executive Summary

Economic uncertainty paved the way for new all-time highs across key metrics this quarter. The Faction Infrastructure Contract (FIC) loop continued to emit the most ATLAS of the three available, driving record spikes in ATLAS emissions even as average daily emissions fell to lower levels. Despite heightened volatility and concentration among top redeemers, the relationship between emissions and secondary token prices remains insignificant, pointing to the continuation of broader macroeconomic forces impacting the Star Atlas ecosystem.

Census results revealed a decisive redistribution of wealth. Overall population contracted slightly, yet aggregate wealth rose, powered by sharp gains among citizens who now command more than a quarter of the ecosystem's total wealth. Residents, by contrast, lost ground both in absolute and relative terms, underscoring a widening gap between these two employed groups. Non-resident groups remained large in number, but their influence stagnated outside of modest currency gains.

Star Atlas Gross Domestic Product (GDP) dropped by a significantly smaller margin than the previous period, reflecting primarily token price volatility rather than weakening fundamentals. ONI retained its position as the largest contributor to aggregate GDP, though USTUR continued to deliver the highest per-capita output, consistent with its smaller but more efficient player base. The introduction of Ink through UE5 arena gameplay marked one of the most significant additions to the Star Atlas economy this quarter, expanding the role that skill plays in the broader resource ecosystem.

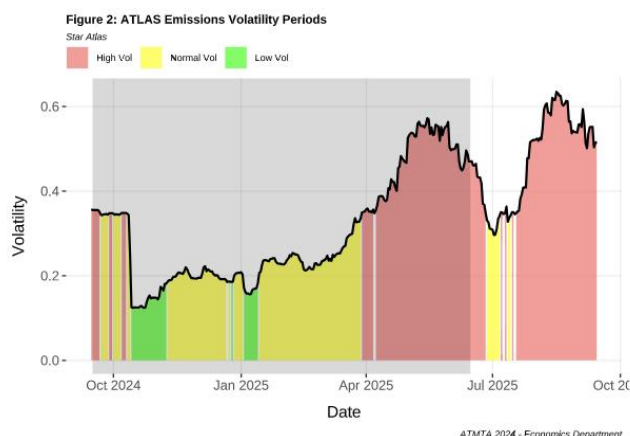
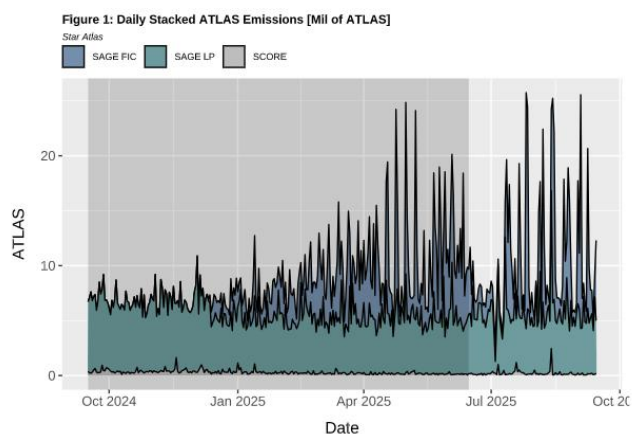
### Key Highlights:

- Daily ATLAS emissions dropped by an average of 10.5%, with simultaneous record high volatility observed throughout the quarter.
- The citizen group increased its wealth to new heights, owning over a quarter of aggregate wealth within the Star Atlas ecosystem.
- The Star Atlas GDP contracted this quarter by 26%, primarily due to token volatility.
- Earnings per dollar across wealth groups showed that high wealth accounts between 1k-10k outperformed the whale and medium wealth groups.
- Holosim captured a unique subset of active players, negligibly impacting the Starbased active user base.

Holosim's first season successfully launched, introducing quests, combat, and fleet engagements to a free-to-play environment. Participation metrics confirmed it served as a complement rather than a substitute for Starbased, and the quest system proved engaging beyond raw rewards, with freighting emerging as the most time-efficient career. Combat incentives beckoned the most aggressive players across factions, with large fighting forces consolidating around the MUD-ONI border.

## Emissions and Activity

This quarter saw some of the largest ATLAS emission spikes in Star Atlas history, driven by continuous improvements in individual production efficiency. This trend was reinforced by the growing role of the Faction Infrastructure Contract (FIC) production loop that took off at the start of the year, significantly outpacing the Loyalty Point (LP) loop. Figure 1 highlights this shift, placing it in the context of earlier periods when LP emissions served as the primary source of earnings within Star Atlas Golden Era (SAGE) Starbased.



Despite episodic spikes, average daily emissions fell to 10.2 million ATLAS, down roughly 10.5% quarter over quarter. Figure 2 records a new all-time high in emissions volatility, shaped by order-based redemptions and the cadence of FIC refills, a dynamic identified last quarter.<sup>1</sup> These fluctuations highlight the system's sensitivity to operational cycles, with output clustering around refill windows rather than being evenly distributed.

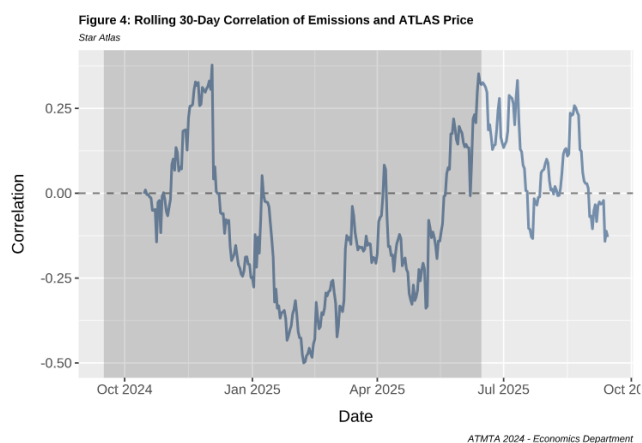
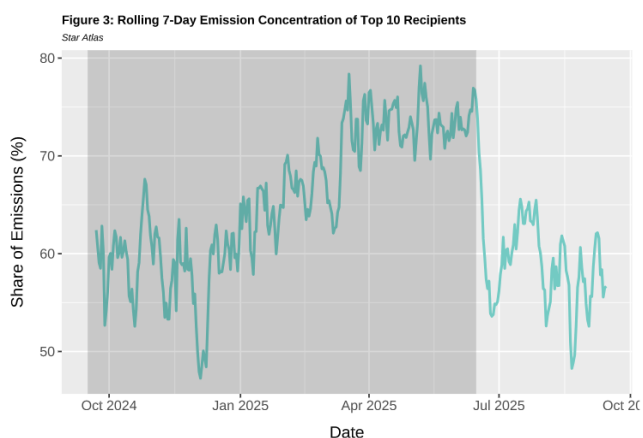


Figure 3 shows that emissions remain concentrated, with the top 10 redeemers capturing approximately 59% of daily output, an improvement compared to the previous quarter, which saw a concentration of over 70%. This pattern underscores how well-capitalized players dominate capture and shape supply in SAGE, aided by a relatively low threshold for

<sup>1</sup> Volatility is calculated using a 30-day rolling standard deviation of daily ATLAS emissions log returns, with groups defined by sample quartiles (High Vol >75th percentile, Low Vol <25th percentile)

self-sufficiency. Figure 4 tempers concern around this concentration and heightened volatility, revealing an erratic, often weak correlation coefficient between emissions and the ATLAS market price historically, and over the current quarter.<sup>2</sup> Daily emissions consistently remain below 5% of equivalent daily token volume, further undermining its impact.

## The Star Atlas Census

This quarter reinforced last period's trajectory as wealth share continued to consolidate among the most engaged groups. Total population slightly reduced from 146,032 to 145,159 (-0.6%), even as aggregate wealth rose from \$88.97M to \$98.82M (+11.1%). Citizens captured the bulk of the upside, while residents and most non-resident groups either stagnated or ceded share.

Table 1: Star Atlas Census (09-15-2025)

| Category                        | Currency | NFT Owner | Voter | Employed | Freq   | Frac  | Wealth | WShare |
|---------------------------------|----------|-----------|-------|----------|--------|-------|--------|--------|
| <b>Nonresident Currency</b>     | Y        |           |       |          | 73772  | 49.4  | 16.58  | 13.76  |
| <b>Nonresident NFT</b>          | Y        | Y         |       |          | 7996   | 5.4   | 6.42   | 5.33   |
|                                 |          | Y         |       |          | 26247  | 17.6  | 6.28   | 5.21   |
| <b>Nonresident Locked POLIS</b> | Y        |           | Y     |          | 2518   | 1.7   | 3.72   | 3.09   |
|                                 | Y        | Y         | Y     |          | 1136   | 0.8   | 3.85   | 3.19   |
| <b>Residents</b>                |          | Y         |       | Y        | 9200   | 6.2   | 5.87   | 4.88   |
|                                 | Y        | Y         |       | Y        | 20441  | 16.5  | 24.05  | 37.94  |
| <b>Citizens</b>                 | Y        | Y         | Y     | Y        | 3849   | 2.6   | 32.05  | 26.61  |
| <b>Total</b>                    |          |           |       |          | 145159 | 100.0 | 98.82  | 100.00 |

<sup>a</sup> Exclude wallets with <\$0.10 in total market value

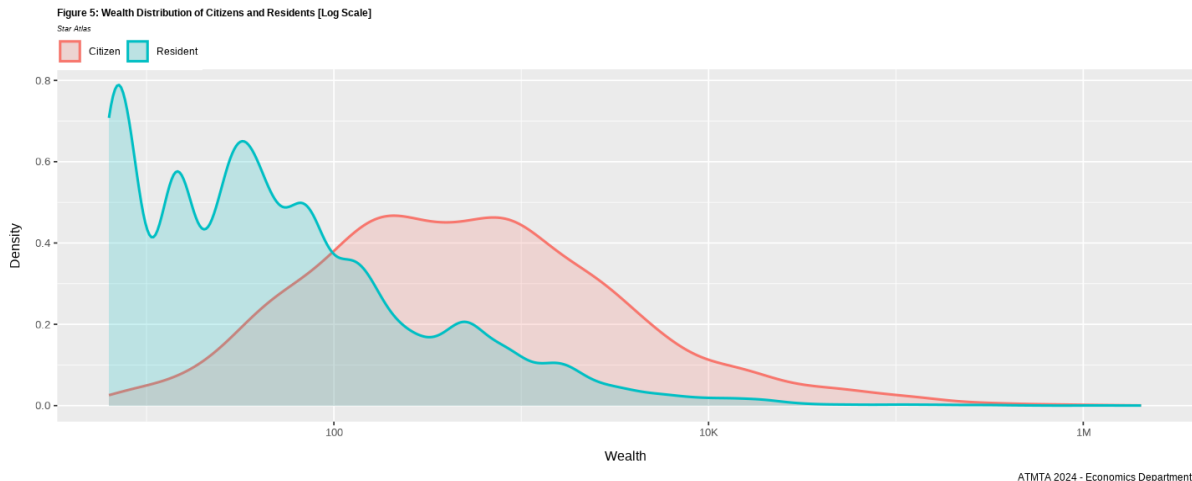
<sup>b</sup> Wealth measured in millions of USDC

Non-resident currency holders remained the largest population segment this quarter, representing ~49% of the ecosystem. Their wealth expanded modestly, from \$12.81M to \$16.58M (+29.4%), and their share of total wealth increased from 11.6% to 13.8%. Non-resident NFT holders' population also grew from 21,890 to 26,247 (+20%) due to shifts from residency but saw only marginal wealth gains \$6.11M to \$6.28M, causing their wealth share to decline from 5.5% to 5.2%. Locked POLIS participants, once the breakout winners of the prior quarter, plateaued. Their population decreased slightly from 1,161 to 1,136, and wealth increased from \$3.59M to \$3.85M, with a simultaneous reduction in wealth share from 3.3% to 3.2%.

Citizens and resident groups sharply diverged. Residents, despite numbering more than 20,000, saw their wealth base contract from \$29.31M to \$24.05M (-17.9%), with their wealth share reducing from 46.0% to 38.0%. In contrast, citizens saw a healthy increase, with wealth jumping from \$24.21M to \$32.05M (+32%), raising their share from 21.9% to 26.6%.

<sup>2</sup> Rolling 30-day correlation between log daily ATLAS emissions and log percentage change in price. No additional covariates were used for this measure.

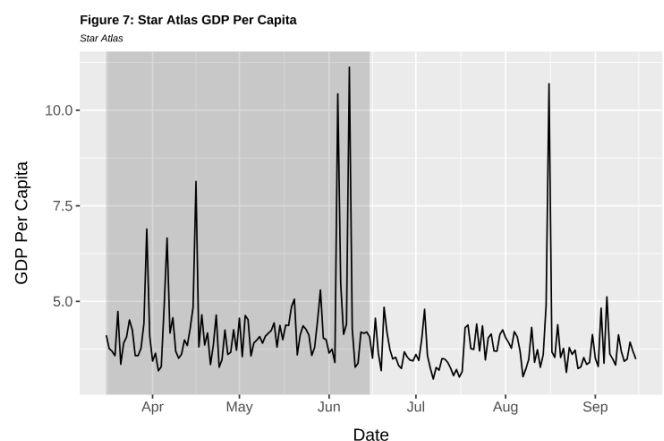
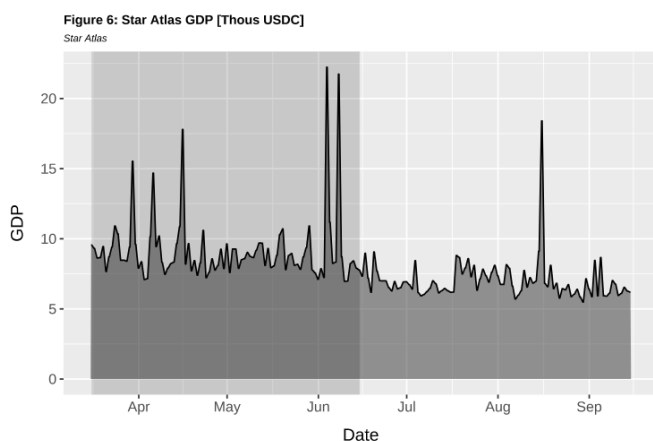
Examining these two groups more closely, Figure 5 contrasts the wealth distributions of citizens and residents, revealing distinct patterns of concentration. Citizens exhibit a broader, heavier right tail, signaling a higher density of large accounts and confirming their status as one of the most capital-dense cohorts in the ecosystem. Residents, by contrast, cluster more tightly in the lower tiers, with far fewer accounts extending into the upper brackets.



The divergence becomes most apparent beyond the mid-range. While there's meaningful overlap around  $\sim 10$  -  $10^3$ , the curves separate above  $\sim 10^3$ . Citizens maintain a persistent upper-tail presence as residents thin out quickly. The result is a growing skew in capital intensity. Residents dominate the lower-wealth mass, while citizens anchor the high-wealth tail, pointing to limited upward mobility for residents and continued consolidation at the top.

## Star Atlas Gross Domestic Product

The Star Atlas gross domestic product (GDP) contracted once again this quarter, but not nearly as aggressively, and almost entirely due to token price volatility. Aggregate GDP totaled \$645,526, with a daily average of \$7,017, reflecting a further decline from the previous quarter's already suppressed levels by 26%.



GDP per capita averaged \$3.78 this quarter, down from \$4.45 previously, underscoring the ongoing contraction in individual productivity. This trend is consistent with census findings, where wealth shifts between groups indicated uneven participation in economic activity, with some groups consolidating their impact on the ecosystem even as overall output declined.

Figure 8: Stacked Star Atlas GDP by Faction [Thous USDC]

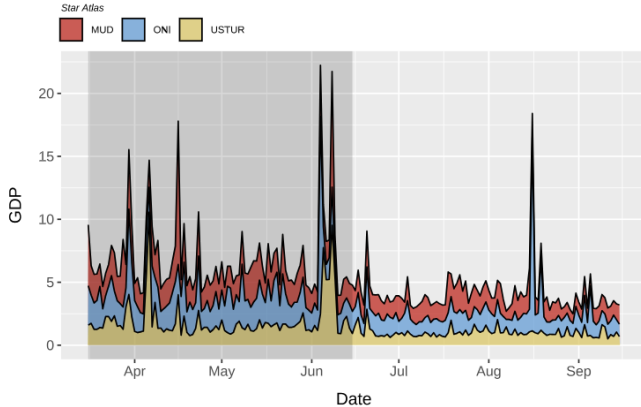
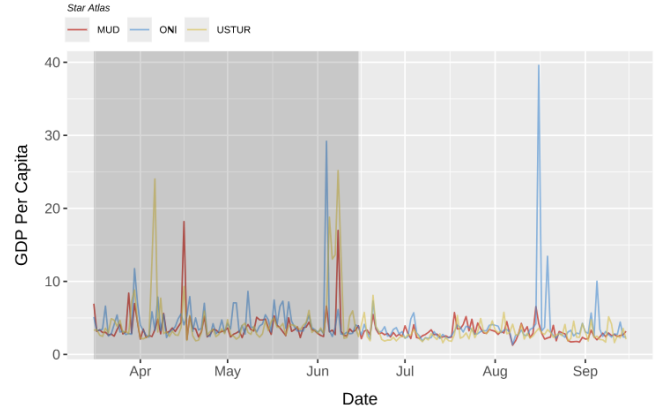


Figure 9: Star Atlas GDP Per Capita by Faction



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At the faction level, the composition of economic strength also shifted. ONI led total GDP at \$230,771, followed by MUD at \$218,198 and USTUR at \$182,874, marking a continued reversal from earlier periods when MUD dominated. On a per-capita basis, however, USTUR continued to outperform at \$4.66, compared to ONI's \$4.49 and MUD's \$3.84. These results align with broader demographic patterns, where USTUR's smaller but more capital-efficient base sustained higher output per participant.

## Starbased Activity and Earnings

Popular discussion throughout the quarter centered on the topic of net earnings and the pressures resulting from volatile market conditions. In Starbased, ONI continued to lead in daily average net earnings, attaining \$7.39 on average, ahead of USTUR at \$4.82 and MUD at \$4.39, as seen in Figure 10. However, ONI only sustained a mediocre number of active players generating positive earnings, averaging 115 daily, compared to MUD at 173 and USTUR at 111.

Figure 10: Daily Average Earnings by Faction (3-Day Rolling Average)

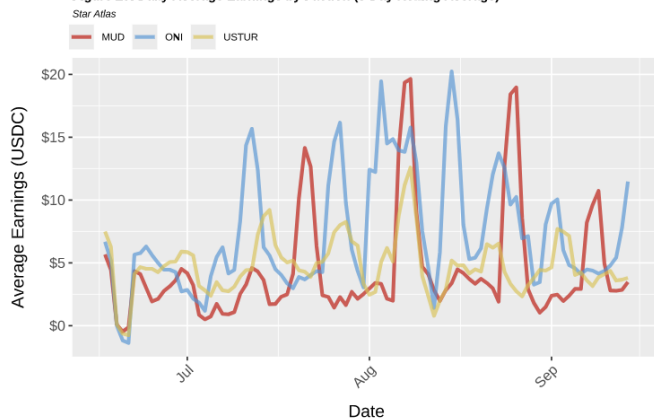
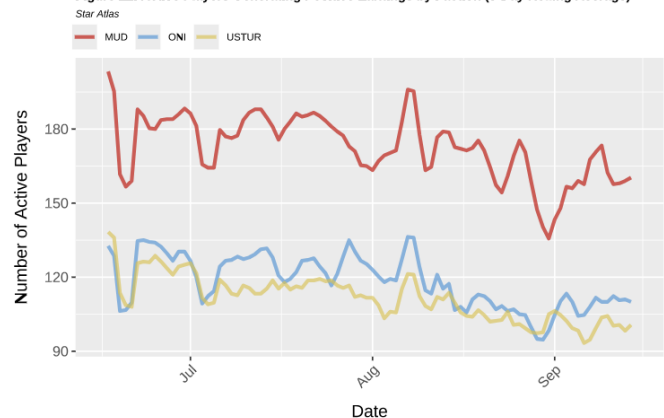


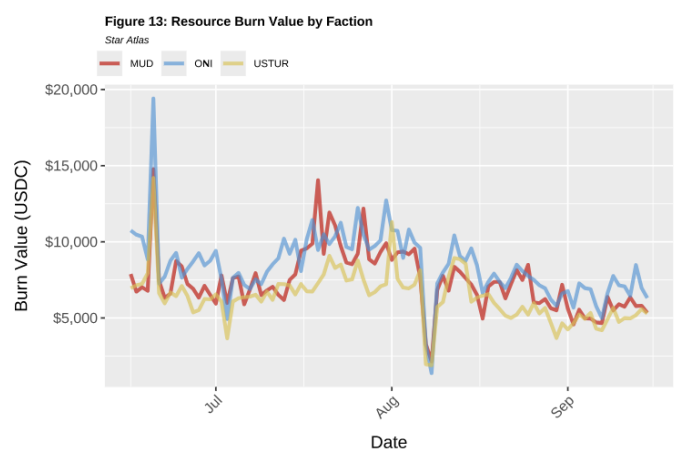
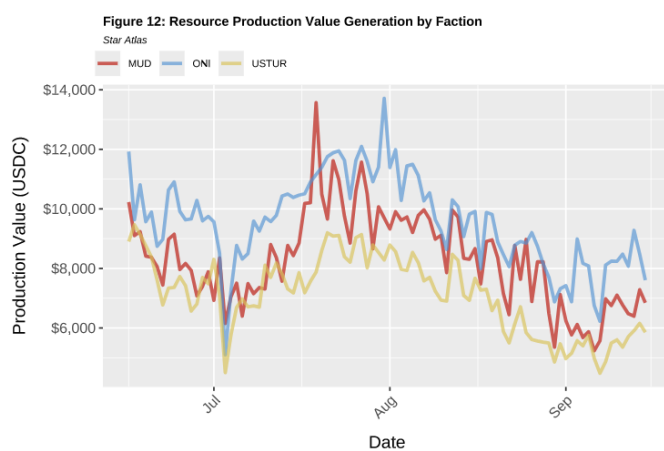
Figure 11: Active Players Generating Positive Earnings by Faction (3-Day Rolling Average)



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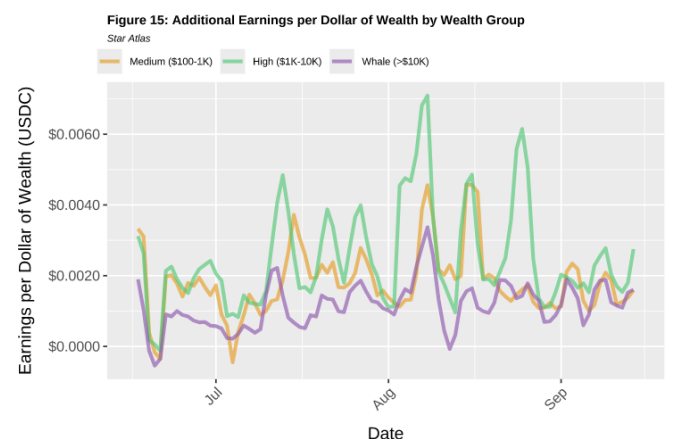
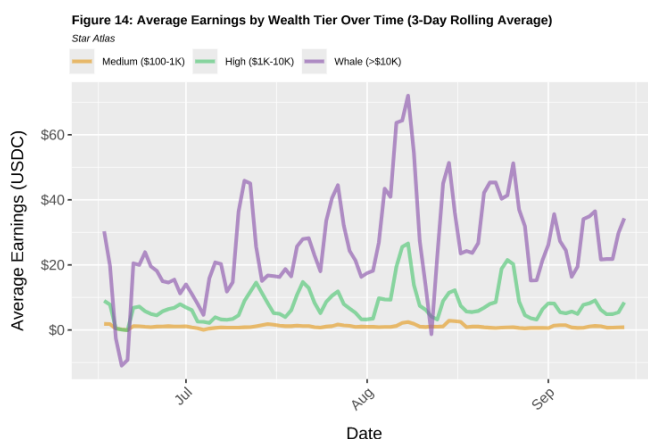
While MUD's larger active base appeared strong in absolute terms, earnings distribution suggests that ONI players were more productive per capita, reflected in the GDP figures discussed above. USTUR maintained a smaller but steady core, underscoring its reputation for efficiency over MUD despite fewer players.

Production value generation in Figure 12 further highlighted ONI's strength, with an average of \$9,570 daily compared to \$8,290 for MUD and \$7,120 for USTUR. ONI consistently produced the highest aggregate value while also maintaining a narrower variance, signaling stability alongside its scale advantage. Burn activity reinforced this trend, with ONI leading at \$8,430 in average daily burn, ahead of MUD at \$7,390 and USTUR at \$6,380 in Figure 13. These results point to ONI's central role in absorbing resource emissions and driving sinks, strengthening its long-term economic footprint.



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Wealth-tier analysis reveals additional structural insights. Whale-tier accounts (>\$10K) were the most productive, as seen in Figure 15, averaging net earnings of \$26.38, followed by the high tier with \$7.77. Medium-tier accounts (\$100–\$1K) captured only \$1.02 on average, highlighting the concentration of value creation in the high whale-range group.



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When measured in efficiency terms, a different picture is revealed. High-tier accounts achieved the highest earnings per dollar of wealth at 0.00253, beating out medium-tier

accounts at 0.00176, while whales trailed at just 0.00116. This indicates diminishing marginal returns at the top end, where scale did not translate proportionally into earnings this quarter. Instead, efficiency clustered among medium and high-range accounts, underscoring the importance of strategic deployment over raw fleet size.

Table 2: Ink Airdrop Summary Statistics

| Airdrop  | Recipients           | Market Data    |           |
|----------|----------------------|----------------|-----------|
|          | Number of Recipients | Ink Airdropped | Ink Price |
| <b>1</b> | 377                  | 13836339       | 20.3357   |

The new Ink resource earned through UE5 arena gameplay unlocked a new dimension of skill-based earnings.<sup>3</sup> Contributions to the new phantom starbases enabled exposure to the LP emissions pool at a scale unreachable in a lower wealth bracket. Table 2 provides summary stats captured after the first Ink airdrop, with a total of 377 recipients and close to 14 million Ink emitted. Ink is also the most expensive Star Atlas resource on the market to date due to its scarcity.

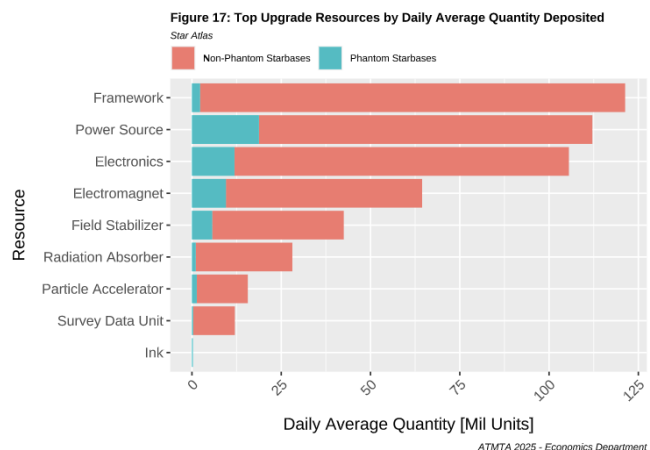
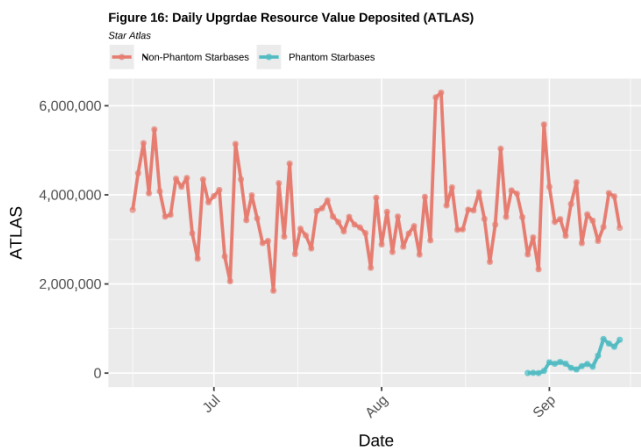


Figure 16 showcases the ATLAS value of resources deposited into the new phantom starbases per day compared to legacy starbases, with Ink included in the aggregation, totaling approximately 4.8 million ATLAS. As legacy starbases reach max level, phantom starbase deposits will continue to climb, and eventually overtake the burn value deposited into legacy starbases, leading up to the release of the C4 update. Figure 17 breaks out the daily average of preferred resources used for starbase upgrading across the same period, with Power Sources proving as an early leader in phantom starbase resource deposits.

<sup>3</sup> Download Star Atlas on the epic games store to start earning Ink

## Holosim Free-To-Play

The launch of Holosim season 1, chapter 1, brought a fresh set of highly anticipated Solana mainnet features to a free-to-play web-based experience on a Solana blockchain fork coined Atlasnet, developed by the Star Atlas team.<sup>4</sup> Quests, combat, and more became available to players looking to dip their toes into the Star Atlas ecosystem, test strategy, and take part in experiences akin to what's to come in the next Star Atlas gameplay update, C4.

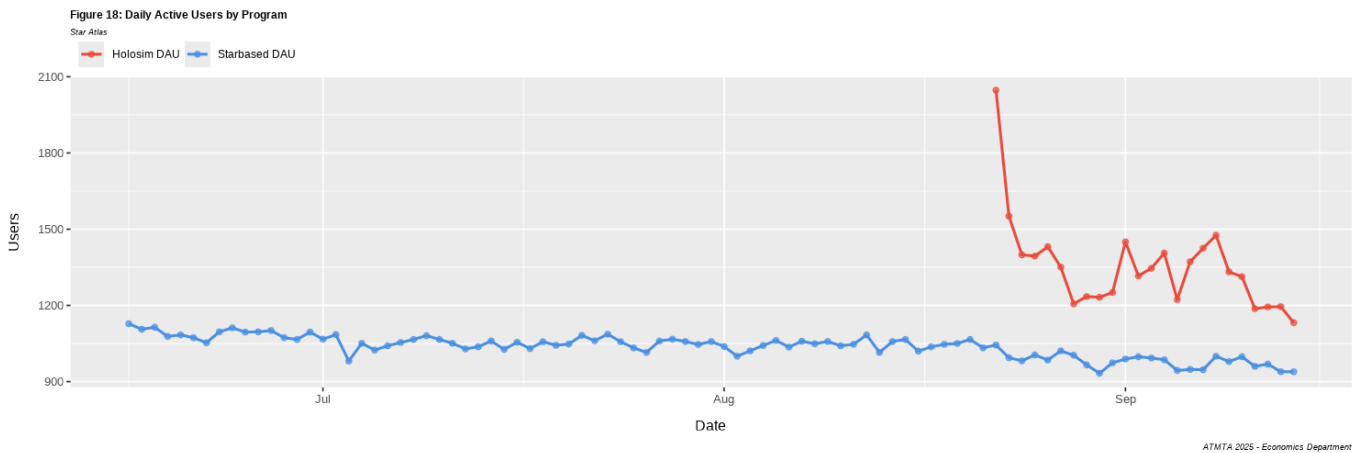
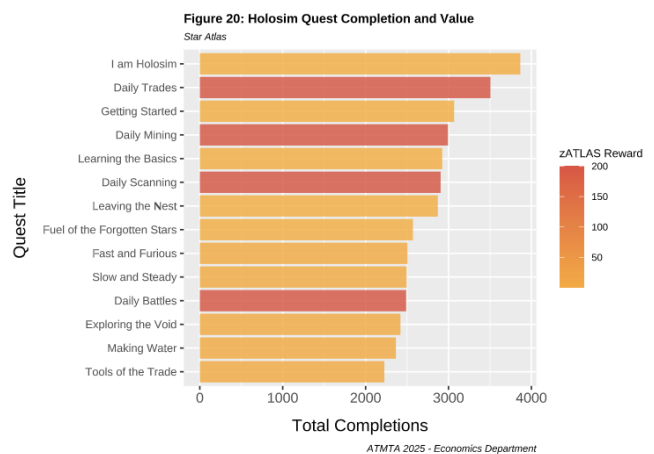
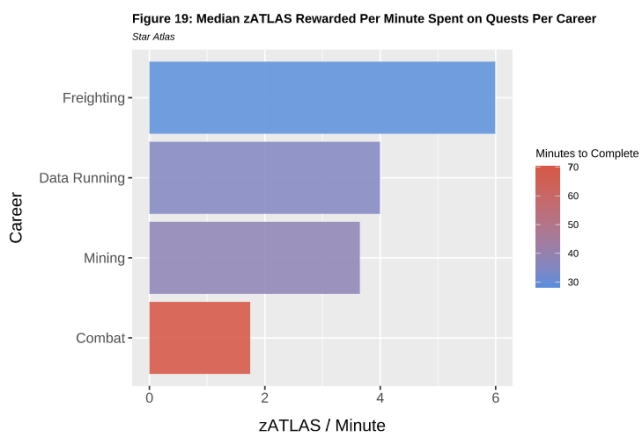


Figure 18 highlights the user base actively participating in the Holosim product, compared to the Starbased product. As anticipated, Holosim did not act as a substitute product, but instead a complementary product, retaining a strong user base with no tradeoff seen in Starbased active users.



The quest system, one of the core features mentioned above, was a driver for participation in Holosim this quarter. Figure 19 highlights the zATLAS earnings per minute, per career for each of these quest groups.<sup>5</sup> The median minutes to complete

<sup>4</sup> The Atlasnet sidechain was originally developed to test Solana programs internally. It now supports Holosim's free-to-play environment and will eventually evolve into the Z.ink blockchain later down the line.

<sup>5</sup> zATLAS is the Atlasnet ATLAS token equivalent, untradeable on secondary markets.

quests within the group are visualized through the colors displayed on each bar, and the length of the bar indicates the zATLAS per minute invested in quests in that group. Freightling is the most valuable quest career in terms of return on time, bringing in approximately 6 zATLAS per minute.

Figure 20 measures the quantity of completions and the respective zATLAS reward. The lack of sharp drop-offs at points of value indicates that the quest system is engaging users on a level deeper than the motivation for the reward, a trend not yet observable in the mainnet SAGE product.

Figure 21: Holosim Fleet vs Fleet Combat Success Rates by Outcome

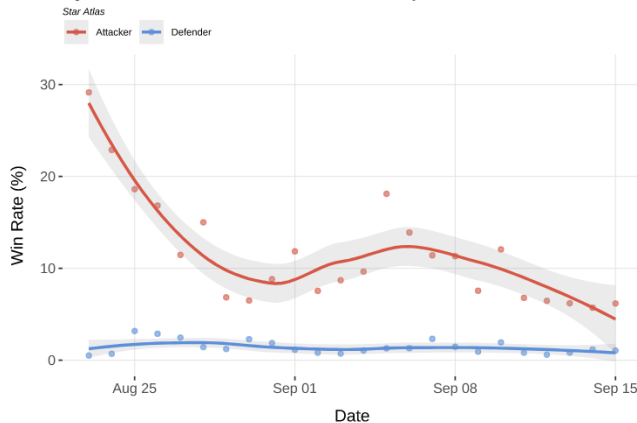
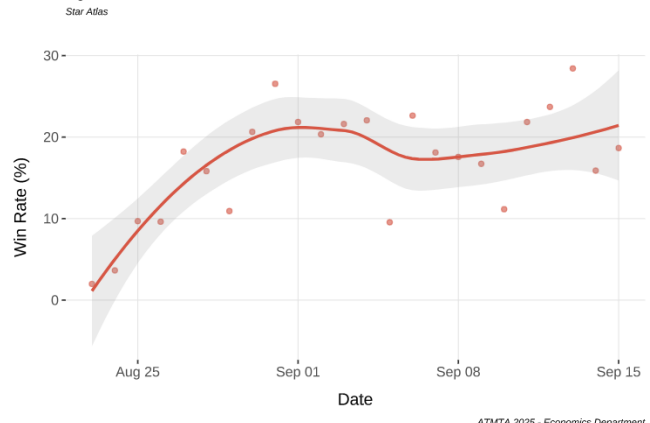


Figure 22: Holosim Starbase Attacker Success Rate



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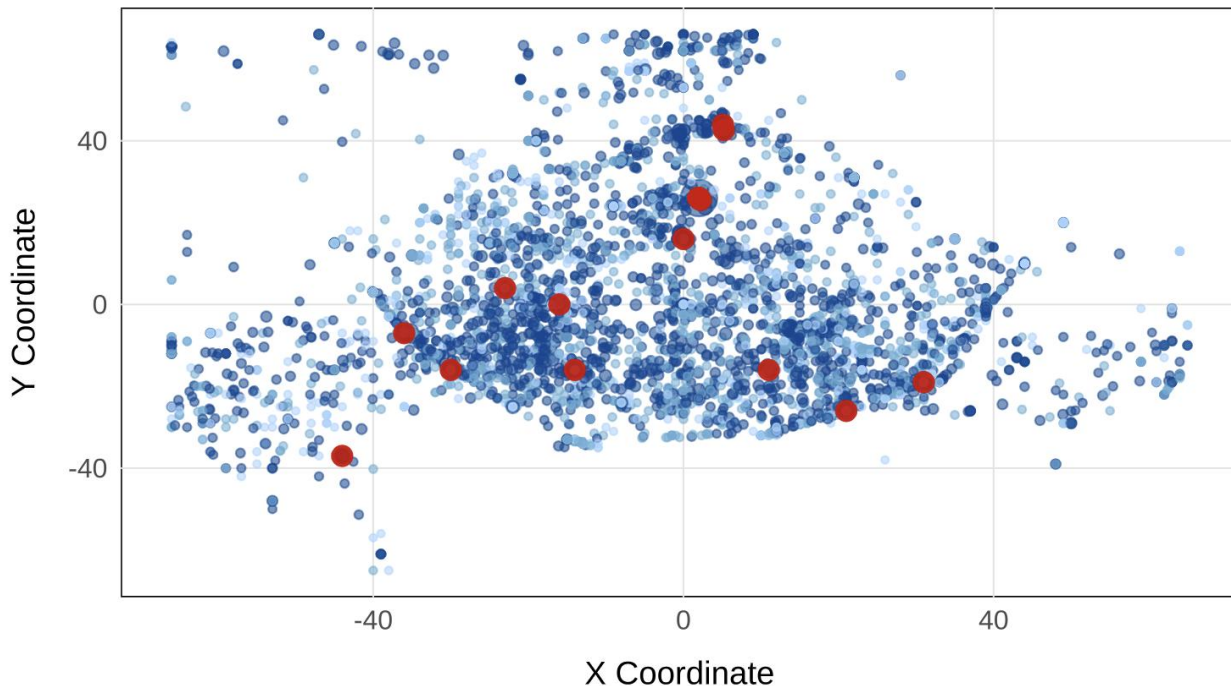
Combat, another core feature in Holosim, introduced fleet-versus-fleet and fleet-versus-starbase engagements. Figure 21 tracks fleet-vs-fleet outcomes. Defender win rates held near 1.4% throughout the period as expected, while attacker win rates trended lower over time, averaging 11.6% for the period.<sup>6</sup> Figure 22 shows a notably higher average attacker win rate against starbases at 19.3%, largely driven by player-identified farming exploits. Both series display clear outliers.

<sup>6</sup> A win is defined as a combat engagement where the opposing fleet/starbase reaches 0 HP

**Figure 23: Fleet Aggression Map by Intensity**

Star Atlas

Low Medium High Top 20



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Figure 23 shows a map of fleets engaging in the combat loop, categorized by their individual aggressiveness measure: low, medium, and high.<sup>7</sup> The coordinates where the most aggressive 20 fleets operate are also highlighted, as a caution sign for more passive players. Notable areas include the border between MUD and ONI, and the edge of the cataclysm between MUD and USTUR. The border between ONI and USTUR was relatively peaceful in comparison to these high activity zones.

## Conclusion

This quarter, over 10,000 unique users interacted with Star Atlas ecosystem programs, contributing towards record-high emissions volatility and a shift in census wealth, favoring the most actively engaged groups. The continuation of the downtrend in GDP was largely due to decreases in token prices as opposed to decreases in burn activity.

The launch of Ink and phantom starbases provided skill-oriented and end-game users with viable options to continue engaging in the SAGE economy, leading up to the release of the C4 update. Earnings and burn data underscored ONI's continued dominance in scale, while USTUR sustained per-capita efficiency advantages, and

<sup>7</sup> Aggressiveness is measured using the frequency of combat initializations over the period.

MUD struggled to keep pace. Meanwhile, wealth-tier analysis highlighted the efficiency of medium and high-tier accounts and the diminishing returns faced by whales.

As economic refinements to SAGE and Holosim continue to be released leading up to the launch of the C4 gameplay update, economic indicators such as the Gini Coefficient help to ensure that imbalances are identified, and the foundations for long-term economic health remain intact through unpredictable changes to the macro environment.