



*Stop Watching | Start Living*

### **Our Mission**

To provide educational and affordable tools that are easy to use and reduce the barriers to enter into any market so that every individual has the opportunity to pursue their personal and financial aspirations.

This issue of *State of the Bands*<sup>™</sup> focuses on the performance of four market sectors due to their positioning within the Apocalypse Band<sup>™</sup> on the daily and weekly timeframes. These four sectors are **Metals & Mining, Public Utilities, Oil & Gas, and Technology.**

A brief overview of each of these sectors includes an examination of market movement using Arbitrage Trade's most powerful analytical tool to date: Arbitrage Atlas<sup>™</sup>. This report concludes with an in depth analysis of individual equities using the Arbitrage Atlas<sup>™</sup> indicator.



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## Selected Sectors

### Metals and Mining

The Metals and Minerals Sector consists of companies engaged in the exploration, extraction and production of precious metals and minerals including platinum, gold, silver, diamond, semiprecious stones, pearls, and other minerals and ores.



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### Utilities

The utility sector is comprised of companies that provide essential services including water, sewage, electrical power transmission, natural gas delivery, as well as operate airports, shipping ports, and dams. Utilities, as a public service, are often heavily regulated but can be very profitable.



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## Selected Sectors

### Oil and Gas

The oil and gas industry is comprised of a complex amalgamation of entities that discover, extract, process, transport, refine, manufacture, and market fuel oil, gasoline, and other petroleum products. Petroleum is used as a raw material for the manufacturing of organic and inorganic chemicals, pharmaceuticals, tires, plastics, synthetic fabrics, dyes, fertilizers, and many other everyday products.



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### Technology

The technology sector includes companies involved in the research, development, and distribution of technologically based goods and services. The industry includes businesses manufacturing computers and electronics, developing software, and providing systems and services relating to automation, information technology, mechanization, and artificial intelligence.



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## Similarity, Performance, and Volatility

### Correlation (measure of similarity)

- Range is between -1 and 1
- 1 indicates a strong positive relationship between two equities while -1 indicates a strong negative relationship between two equities.
- A result of zero indicates no relationship

### Alpha (measure of performance)

- Alpha is a measure of performance against a benchmark (usually S&P 500/SPY)
- Positive alpha means that it has outperformed its benchmark. Hence the phrase seeking Alpha



### Beta (measure of performance and volatility)

- Beta is a measure of volatility calculated in relation to a benchmark
- Positive indicates movement with the market
- Negative indicates movement opposite to market
- Beta differs from correlation because it also observes the magnitude of similarity. For example: A beta of 2 means an equity has moved in the same direction but it has moved twice as much.

### Omega (measure of performance and volatility w/ self as benchmark) (Arbitrage Only Greek)

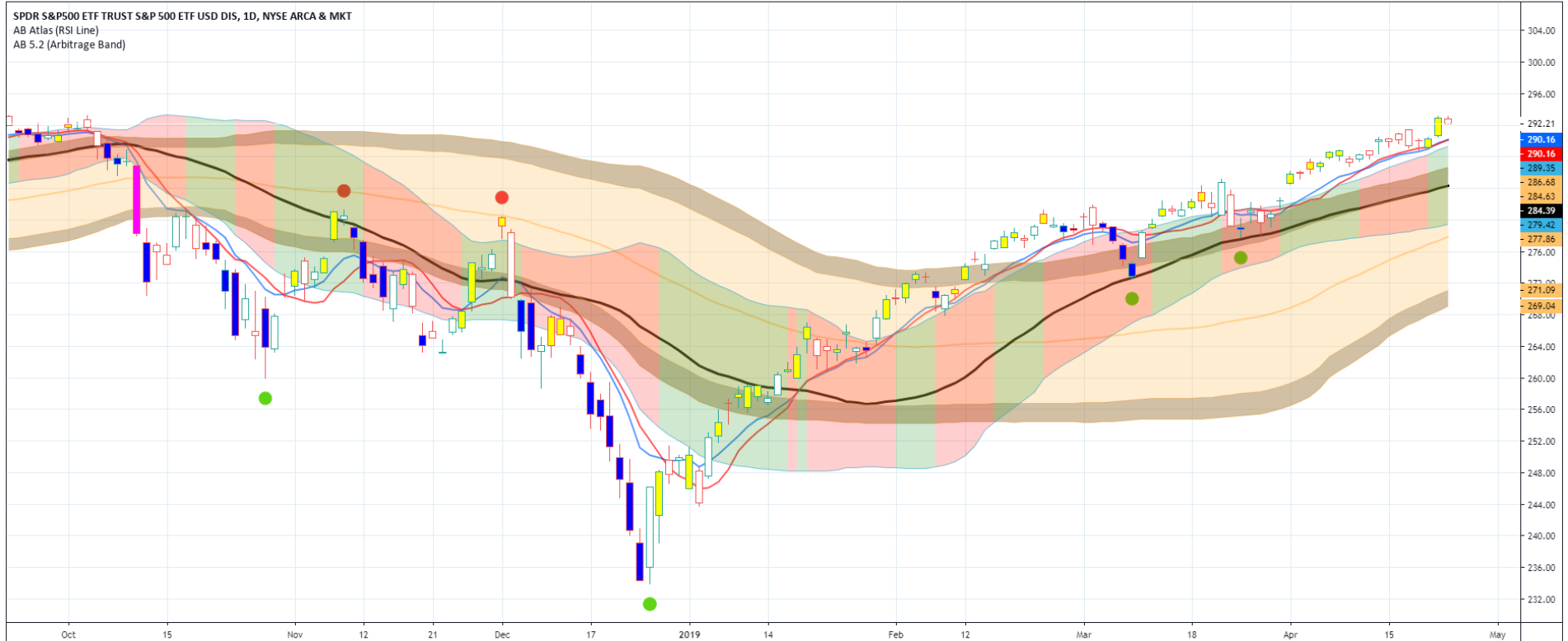
- Measures statistical probability against current volatility
- Positive indicates the current trend is sustainable
- Negative indicates the current trend is topping/bottoming

## Introducing Arbitrage Atlas™

An atlas is a handy roadmap providing directional information regarding when to change your direction to stay on course for your destination. Arbitrage Atlas™ provides the similar information for equities. Just like traffic lights, red means sell, green means buy! The red circles above the candles indicate high points, green circles below the candles indicate low points. **This information is provided in real time!**

The Daily chart for SPY below illustrates this information from 2018 to present.

edwardbell published on TradingView.com, April 24, 2019 17:15:45 CDT  
AMEX:SPY, 1D 292.21 ▼ -0.67 (-0.23%) O:292.79 H:293.16 L:292.07 C:292.21

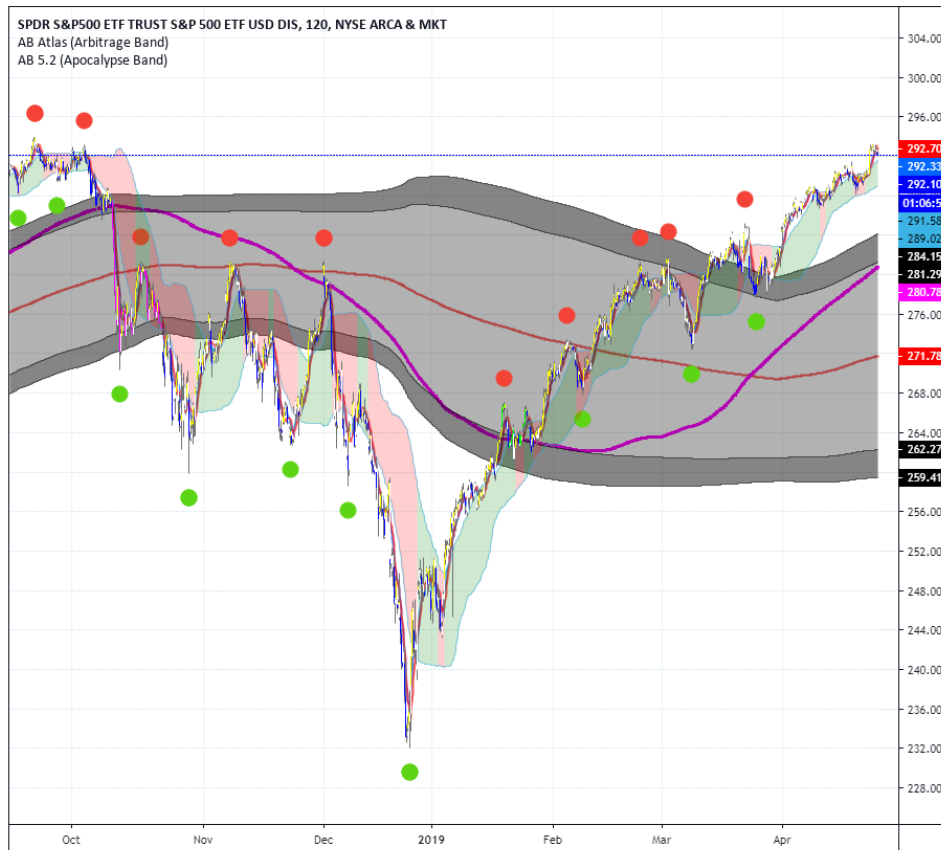


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## Arbitrage Atlas™

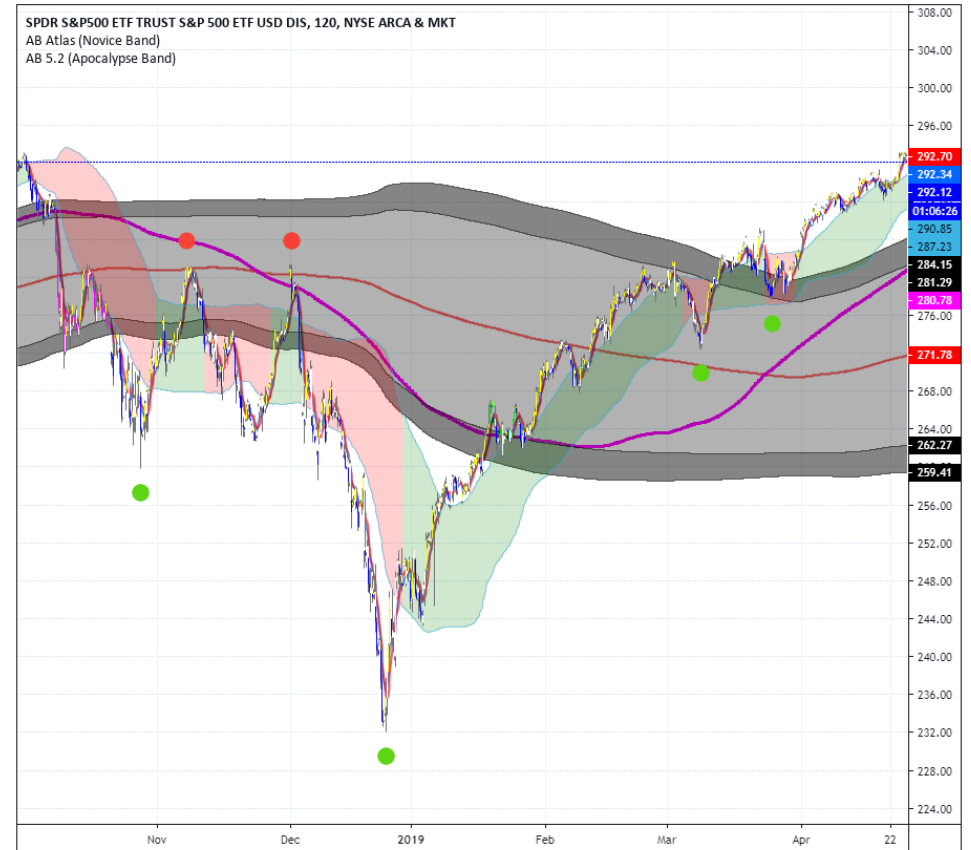
By adjusting the band on which Arbitrage Atlas™ is based, Arbitrage Atlas™ is scalable to a degree and will affect the sensitivity of the measurement. More data points are derived as the size of the band is adjusted downward. The charts below depict the same time frame, but the chart on the left uses the Arbitrage Band™ as the basis for Arbitrage Atlas™, the chart on the right uses the larger Novice Band™ for the calculation and, as such, yields fewer data points.

edwardbell published on TradingView.com, April 24, 2019 15:53:11 CDT  
 AMEX:SPY, 120 292.21 ▼ -0.67 (-0.23%) O:292.23 H:292.57 L:292.00 C:292.10



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edwardbell published on TradingView.com, April 24, 2019 15:53:43 CDT  
 AMEX:SPY, 120 292.21 ▼ -0.67 (-0.23%) O:292.23 H:292.57 L:292.00 C:292.12



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## Arbitrage Atlas™

Arbitrage Atlas™ is a powerful analytical predictor that works just as well on longer time frames. The daily chart below for SPY shows the years 2000—2009. Arbitrage Atlas™ clearly identifies the exit points prior to the correction and recession and entry points at the bottom of each of these downturns.

Note that the red and green shaded areas of the band correspond to the information provided by Arbitrage Breaker™.

edwardbell published on TradingView.com, April 24, 2019 15:27:11 CDT  
 AMEX:SPY, 1D 292.21 ▼ -0.67 (-0.23%) O:292.79 H:293.16 L:292.07 C:292.21



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## Metals & Mining & XME

The Financial Crisis of 2008 had a two-fold disastrous effect on this sector. The global financial crisis exposed the lack of real, physical demand for industrial commodities. Likewise, investment commodities also experienced an almost instantaneous collapse in global trading due to unconventional, highly-leveraged alternatives in the investment banking and hedge fund markets. Thus, there was a collapse in real demand and investment demand. On the supply side, the tightening of bank regulations reduced the number of eligible applicants who did receive financing; which also slowed funding for exploration efforts and increased the amount of time and money needed to extract & refine these basic commodities.



XME, the Materials and Mining ETF for the S&P 500, declines during the 2008 Financial Crisis.



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## Utilities & XLU

Since utility companies generally have extremely high debt levels and extremely high infrastructure costs, higher interest rates can prove to hamper expansion and development for longer periods of time, potentially resulting in slower growth rates while extended periods of low interest rates encourage long-term expansion.



“The US Federal Reserve does not expect to raise interest rates for the rest of 2019 amid slower economic growth. After a two-day meeting, monetary policymakers voted unanimously to keep the US interest rate between 2.25%-2.5% ” —The BBC



Regulatory and technological changes in the industry, which includes agreements to develop wind farms and large scale battery arrays in multiple states indicate lower costs and more flexible power management in this sector.

The impending repeal of the Clean Power Plan will remain a hot topic in the months to come.

## Oil and Gas & XOP

A broad mix of seemingly conflicting information frequently affects this sector. The Financial Crisis of 2008 had an extreme effect on the sector with plummeting prices and severe restriction of credit. Technological increases in exploration and drilling technology fueled much of the gains from 2009—2015, while management programs from OPEC and non-OPEC nations and international sanctions on Venezuela and Iran have driven prices and profitability since the beginning of this year.



In October of 2018, Arbitrage Atlas predicted the top of the oil trend and then the Christmas Eve low. Oil has been sideways for the past 6 months, but now due to this ETF's proximity to the base of the Arbitrage Intermediate Band a late May/early June rally is expected. Notice the light blue line has been traveling downward for the past 8 months within the purple band and now it is sitting at the very bottom, which indicates the equity is over sold. Since the blue line can not leave the bottom of the band, the candles will be drawn to the blue line and the blue line should become support for the remainder of the year.

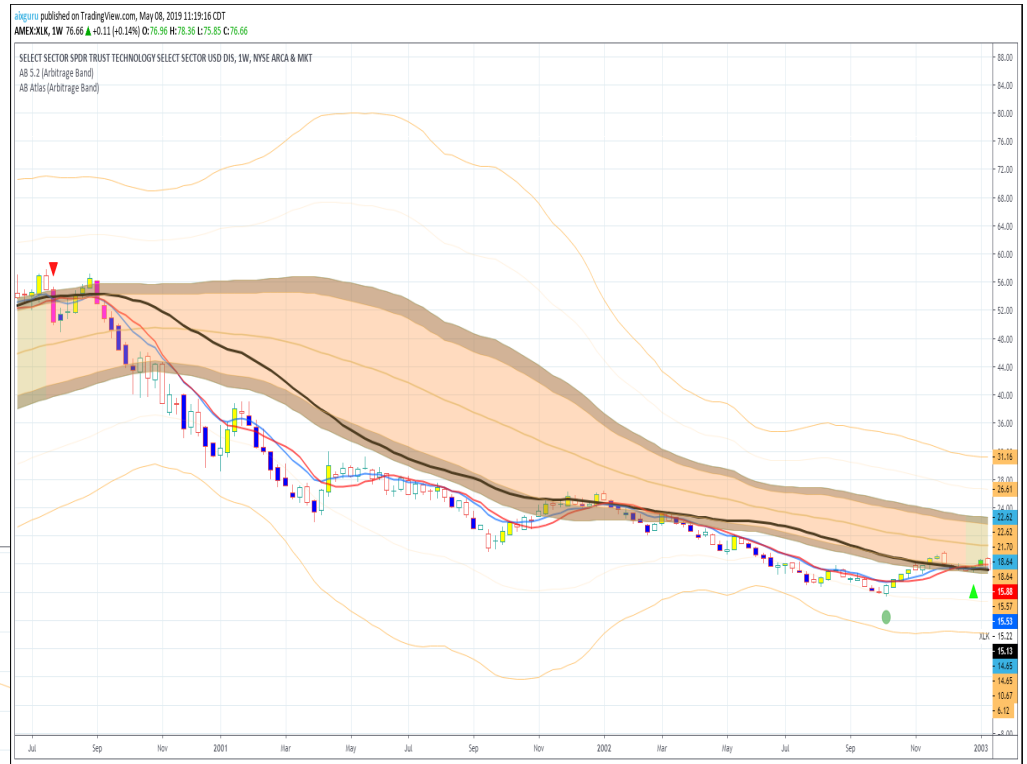
## Technology & XLK

It is unsurprising that the technology bubble burst in 2000 severely affected the sector. The losses in the market in 2008 due to the financial crisis were also mirrored in the technology sector. Technology is a leading market driver partially due to the impact it has on most other sectors.

### 2008 Financial Crisis



### 2001 Dot Com Crash



The current rate of technology advancements is accelerating, and large companies and industries not open to new technology driven innovation will be negatively impacted in the short term. This Fourth Industrial Revolution, as it is now known, will continue to usher in a service centric economy, but is this model sustainable?

## Technology & XLK Today

Just as October 4th 2018 triggered a sell signal on XLK, May 9th 2019 also triggered another sell signal. The United States has made the first move in its trade war with China, hiking tariffs on \$200 billion worth of Chinese exports.



abxguru published on TradingView.com, May 10, 2019 10:31:32 CDT  
 AMEX:XLK, 60 74.59 ▼ -1.35 (-1.78%) O:74.64 H:74.83 L:74.46 C:74.59



## Sector Rotation

Not all the sectors of the economy perform well at the same time. Sector rotation involves shifting investment assets from one sector of the economy to another. This strategy is used for capturing returns from market cycles, in essence, playing what is hot. Sector rotation may also take into account seasonal or yearly trends to maximize portfolio value.



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## Sector Forecast - Summer 2019

Sector	XME	XOP	XLU	XLK
BUY	Summer	Now	Summer	Summer
SELL	NO	NO	Now	Now
HOLD	Now	Summer	NO	NO

## Triple/Quadruple witching

Triple witching is the **quarterly** expiration of stock options, stock index futures, and stock index option contracts all occurring on the same day.

Quadruple witching refers to a date on which stock options, stock index options, stock index futures, and single stock futures expire simultaneously.

One result of this phenomenon is elevated volume, especially in the last hour of trading. Arbitrage opportunities frequently present themselves as investors are closing and rolling out of multiple positions.

Triple Witching	June 28	September	December 31
Quadruple Witching	June 21	September	December 20

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