Risk aWhere™ FAQs Updated October 14, 2015

1. How is the Risk aWhere solution different from reports weather-only services typically provide?

Answer: Our reports are informed by scientific interpretation of recent and forecast weather with real time agronomic models providing our customers with crop specific and interpretable information based on a much greater spatial and temporal fidelity than any other source. This information helps guide & make proactive buying decisions; unlike anything a typical weather-only service provider could produce. aWhere covers the complete growing area of each commodity to more fully understand the impact of weather on production across the globe.

2. What makes Risk aWhere a unique product?

Answer:

Risk aWhere is the only agronomics platform that integrates weather variability, plant science and commercial activity to help make smart and timely purchasing and investment decisions. For example, aWhere has an exclusive agreement with Colorado State University to process a global, hourly, satellite derived rainfall product. These satellite data combine with other observed data (on-the ground meteorological stations) and proven, proprietary spatially robust procedures to create a foundational localized weather database that spans the globe. We monitor crop production for each commodity across the planet.

Our reports are informed by scientific interpretation of historical and forecast weather with real time agronomic models providing our customers with unique information which helps with **proactive decision making**.

3. How can Risk aWhere help me make better purchasing decisions?

Answer: Risk aWhere reports provide specific information for production regions that:
- o Rely more on data science techniques, rather than forecasting methodologies
- o Combine disparate data sets in new ways, not typically found in standard market or weather analysis
- o Generate crop and geography specific insights and recommendations
- *The data – and aWhere indices* – that support the Risk aWhere reports are also available by subscription.
  - o Risk aWhere index customers access aWhere indices across their regions of interest via a robust API. In this way, the interpretation of these agronomic triggers can be further refined by customer internal data teams
  - o Risk aWhere data customers subscribe to the raw weather data via API. With access to the full depth and breadth of the agricultural meteorological data, Risk aWhere data customers can create their own proprietary insight to guide their unique position in the market

4. Who should utilize Risk aWhere?

Answer: Risk managers, growers, traders, commodity/equity analysts and consumer packaged goods (CPG) planners, anyone with exposure to commodity price variability and/or who's business fortunes have ties to weather variability

5. When are the reports delivered?

Answer: Reports are delivered weekly (Wednesday morning) via email in PDF format.

6. What makes these reports and data exceptional?

Answer: The combination of unprecedented spatial and temporal fidelity (aWhere generates a virtual weather station every 5 arc-min or about every 9 km (5 miles) across the globe), agronomic models, and data describing the spatial extent of each commodity (each crop) results in an information source a complete generation ahead of what is currently available from the scattered meteorological stations offered by other weather-only data services.

7. What is the difference between the free report and the paid reports?

Answer: The free reports provide a higher level summary whereas the paid reports provide more in-depth interpretations of weather related patterns and events, as they relate to current market behavior. Our detailed weather data (covering the whole production area) are utilized as inputs to various agronomic models which the paid reports express as information key to communicating commodity risk.

8. Why should I choose aWhere over other more traditional market sources?

Answer: aWhere has the world's best, and most complete, global weather data platform that is specifically tuned to the agricultural user, whether it be farmer, analyst, supply chain professional or commodity trader. Our data is available in aggregations which allow users to develop quantifiable metrics that are specific to their crop and geography of interest. This allows for insights to be gleaned before they become news, by which time they are already consumed and reflected in prices.

9. What specific indices offer interpretable value?

Answer: P/PET (Precipitation / Potential Evapotranspiration)

- o Generates crop by location by season specific insight
- o PET – the 'evaporative demand on the crop – provides an integrated examination of sun, wind, humidity and temperature (Penman-Montieth) that combined with rainfall interprets crop stress specific to each location
- o The histogram of P/PET indices show the distribution across a production area of crop stress – a statistically valid data aggregation simply not possible when utilizing a handful of on-the-ground weather observations

10. What is a 'Z-Score' and how can I utilize this in my analysis?

Answer: Our Z-score calculation is based on multiple dependent calculations:

A *negative* Z-score means that the current period is below normal (or average) whereas a *positive* Z-score means that the current period is above normal.

- Z-scores between -1 and 1 are more common and would generally cover most years (~68% of the time)
- Z-scores between -2 and -1 or between 1 and 2 would be less frequent (~27% of the time).
- Z-scores above 2 or below -2 would be less frequent and occur only around 5% of the time.

Once we know the standard deviation and average across all of the periods, we can determine how far away from an average the current period is.   (The average accumulation of precipitation and PET over a number of years (minimum 7 years) for the custom period; the standard deviation of that accumulation of precipitation and PET over the number of years for the custom period).

The further away a current periods accumulation is from the normal value is important because it can indicate potential crop stress (too little water or too much water) that would be impactful to potential crop yields. These guidelines assume that the data distribution is normal and are meant to facilitate normalization of our data but we cannot guarantee that all custom periods will be sourced by an underlying normal distribution and relate to the percentages presented earlier so please also review our actual differences and percent differences values as additional means to serve decision making.