

What Happens on WASDE Days

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USDA's World Agricultural Supply and Demand Estimates (WASDE) report is one of the biggest scheduled information shocks in grain markets. It releases once a month at 11:00 a.m. Central Time and updates expectations about global crop production, use, trade, and stocks.

Using minute-by-minute corn and soybean futures data from 2013–2023, this fact sheet looks at how intraday volatility behaves on WASDE days compared with typical days. The goal is to give traders, elevators, and risk managers a simple advice for handling the sharp (but short-lived) volatility around the release.

At a Glance

- **Why it matters:** WASDE releases concentrate a lot of new information in one moment. Execution decisions around 11:00 a.m. can have a big impact on prices paid or received.
- **Link to volatility:** On average, corn and soybean futures are

quieter than normal through the morning, then show a sharp volatility spike in the first 5–15 minutes after the 11:00 a.m. Central release, before cooling down within about an hour.

- **Rule of thumb:** Treat 11:00–11:15 a.m. as a “high-variance window.” That is when quotes move fastest and spreads/basis can jump the most. The rest of the day usually looks closer to normal.
- **Planning tip:** Before the report, keep position sizes smaller and avoid leaving stray orders. Right after the report, avoid large “all-at-once” orders and re-check spreads and basis once markets calm.

What's Happening

- **USDA → Markets:** WASDE updates world supply-and-demand estimates for major crops. When new information differs from what markets expected, prices adjust quickly.
- **Quiet mornings:** On WASDE days, many traders hold back during the 8:30–10:45 a.m.

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session. Market volatility is often lower than on comparable non-report days.

- **The release window:** At 11:00 a.m., the report hits and order flow jumps. Quotes update rapidly, depth can thin, and small differences in timing can matter.
- **Cool-down:** After the first rush, volatility declines. By roughly 12:00 p.m., intraday patterns usually look more like an ordinary trading day again.

The Data

Using 1-minute corn and soybean futures prices from 2013–2023 (years with the same release time and trading hours), three types of days were compared (the report day, the day before, and the day after). The main findings are:

- **Shape, not all-day chaos:** The prices of natural gas and nitrogen fertilizer usually move together. When gas prices increase, fertilizer prices tend to go up as well (see Figure 1).
- From 8:30 to about 10:45 a.m., volatility on WASDE days is often a bit lower than average, which indicates many market participants are waiting.
- At 11:00 a.m., volatility spikes sharply for about 5–15 minutes, then declines toward baseline over the next 30–60 minutes.

- **Timing:** The bulk of the “extra” volatility is packed into the first minutes after 11:00 a.m. The day before and the day after the report generally show intraday patterns similar to ordinary days.
- **Practical message:** The risk is concentrated, not spread evenly throughout the session. Managing execution well around that 11:00–11:15 window matters more than treating the whole day as unusually volatile.

What Producers, Elevators, and Risk Managers Can Do

If you trade frequently (hedgers, merchandisers, proprietary desks)

- **Before 11:00 a.m.:**
 - Keep size modest and avoid leaving unnecessary resting orders.
 - Make sure someone is explicitly responsible for watching the screen and managing orders around the release.
- **11:00–11:15 a.m.:**
 - Avoid big “all-at-once” orders if possible; work in smaller pieces.
 - Expect wider and faster-moving bid–ask spreads and more slippage risk.
- **Stops and limits:**
 - Avoid tight stops right into the release; give more room or pause new stops until the first spike passes.

Table 1. Report-Day Timeline: What to Do and Why

Time	What to Do	Why It Matters	When to Act
10:30 a.m.	Final check of positions, working orders, and team roles.	Avoids surprises and stray orders heading into the release.	30 minutes before the report.
10:55–11:00 a.m.	Tighten risk; cancel non-essential orders; confirm who hits the keys.	Reduces unintended fills in the first seconds after the report.	Just before the release.
11:00–11:15 a.m.	Avoid big orders; if you must trade, use smaller clips.	This is the spike window with the highest slippage risk.	Immediately after the report.
11:20–11:40 a.m.	Re-mark spreads and basis; refresh producer quotes.	Markets usually cool; this is a better window for multi-leg pricing.	Once the initial spike has passed.
12:00 p.m.+	Resume more typical size and activity if conditions look normal.	By this point, volatility often looks closer to an ordinary day.	After confirming markets have settled.

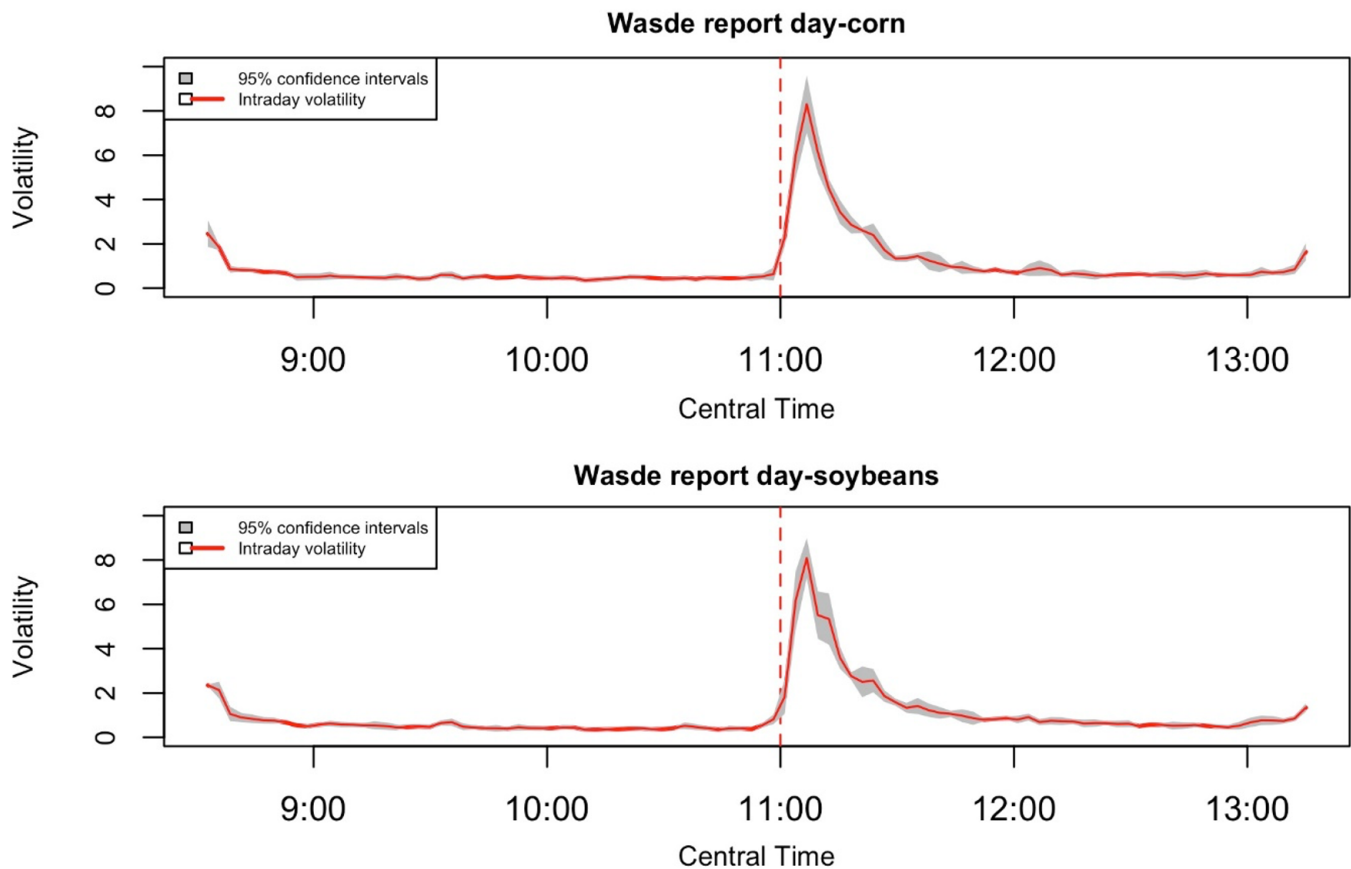


Figure 1. Intraday volatility on WASDE release days (corn and soybeans). Minute-by-minute volatility with a 95% confidence band (gray). The vertical dashed line marks the 11:00 a.m. Central Time release. Both markets are relatively quiet into late morning, show a sharp 5–15 minute spike right after 11:00, and then settle toward baseline within about an hour; the exact height of the spike varies by month.

If you run an elevator or hedge for a business

- **Avoid the rush when you can:** If timing is not urgent, wait 5–15 minutes after 11:00 a.m. before pricing spreads, basis contracts, or multi-leg hedges.
- **Update quotes:** Once markets cool (roughly 11:20–11:40), re-mark spreads and basis before giving farmer quotes or committing large volume.
- **Communication:** Let customers know ahead of time how you handle WASDE days. For example, “no firm quotes” for a few minutes after 11:00.

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If you manage risk/budgets (co-ops, lenders, large farms)

- **Scenario tests:** Focus your stress tests on the midday window around 11:00, not the whole session.
- **Margins and liquidity:** Plan for a short, sharp margin call or cash need rather than an all-day drain.
- **Simple playbook:** Write down a brief WASDE-day checklist so everyone on the team knows their role each month.

References

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