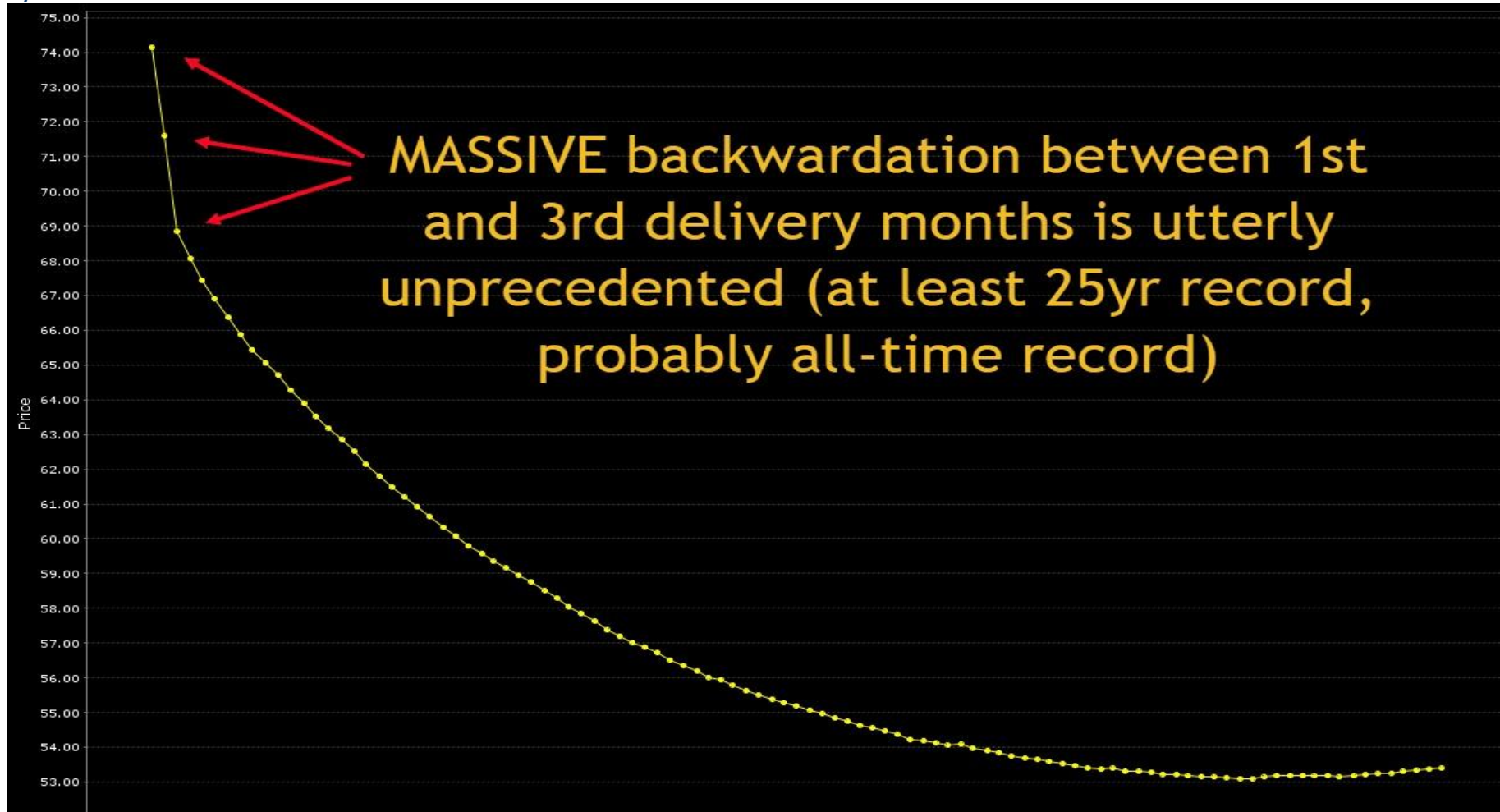




Below is a chart of the WTI “term structure” also known as the “forward strip”. Each yellow dot shows the price (as of July 5) for each delivery month. The August 2018 delivery month is the top dot with the highest price over \$74. The next two dots are September and October, 2018. The enormous vertical distance between them is *backwardation*, or the extent to which each subsequent contract trades at a discount to the earlier contracts. At one point earlier this week, backwardation from the 1st to 3rd delivery months (meaning the difference in price between them) reached \$5.90 intra-day. That is probably an all-time record and definitely at least a 25-yr record.





The below chart shows backwardation between 1st and 3rd months on a daily basis going back 25 years. The massive spike down to \$12 backwardation on Sept. 22, 2008 is an anomaly in the data that occurred on a contract expiration day, and does not meaningfully reflect a sustained price condition in the market. Once that anomaly is excluded, the chart shows that this week's backwardation in 1st to 3rd month (which reached \$5.90 at one point intraday) represents a record extreme in the 25 year period of the chart. More to the point, prior low points were associated with easily identified events such as hurricanes and wars that had a profound and immediate effect on physical oil supply. The current event is utterly unprecedented in market price magnitude, and is widely being ascribed to a relatively trivial outage of only 360k bbl/day in Canada. That widely held analysis simply doesn't make sense when far more dramatic events caused much smaller backwardation events in prior years.





The next graph shows only the months of June/July/August (so that we can focus on seasonally relevant data). As seen in the chart, the present dislocation is far bigger than any previous summertime event in the last 25 years. It is probably an all-time record. The widely acknowledged events (Syncrude, Venezuela, Libya) simply aren't big enough to explain this extraordinary backwardation event. One possible explanation is that the legalization of U.S. Crude exports combined with the still-persistent Brent-WTI spread has caused market fears of an actual tanks-run-dry situation to escalate because there continues to be financial incentive to continue exporting U.S. crude oil even with this situation wildly distorting the front of the curve with unprecedented backwardation.

