

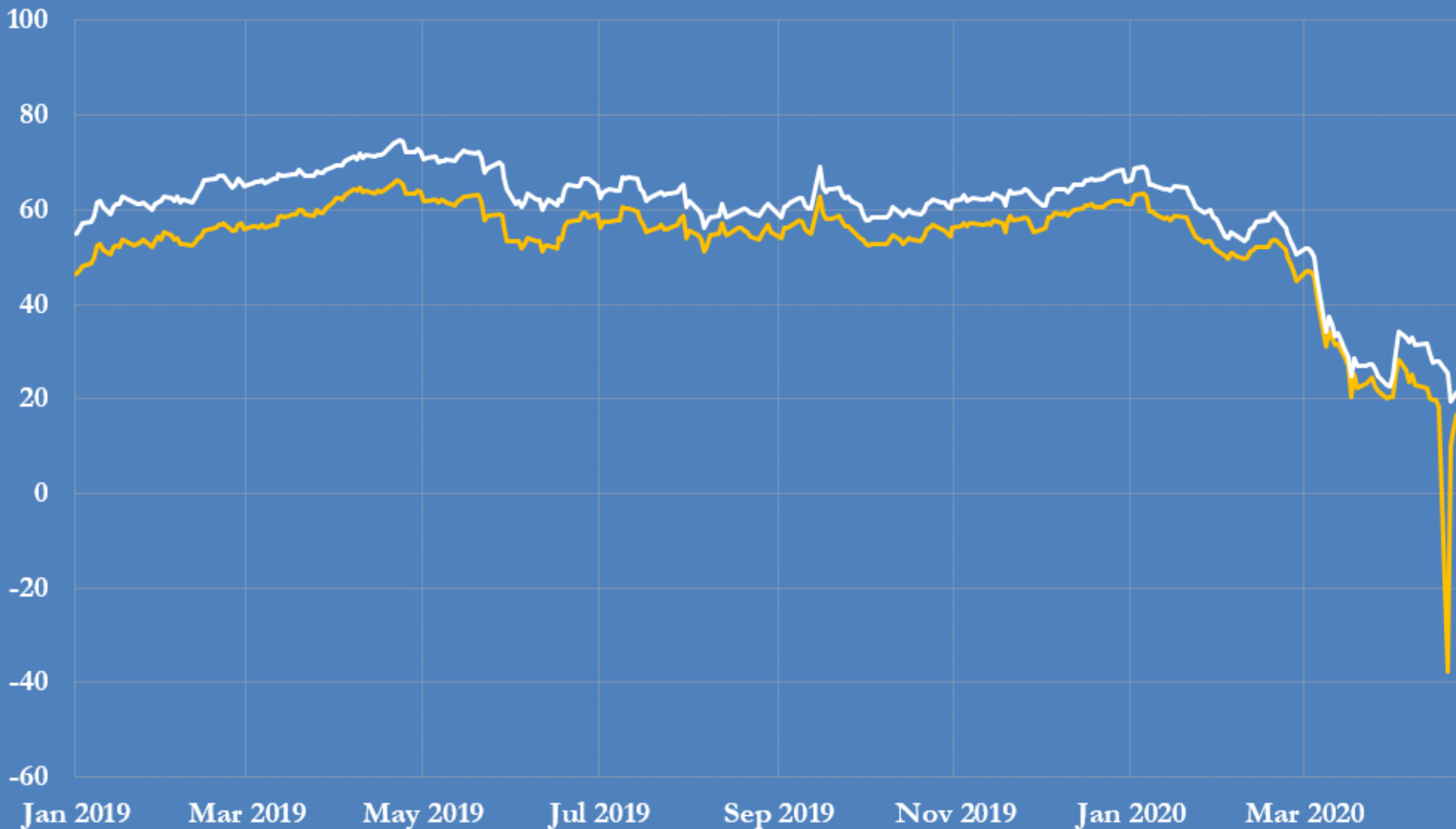
# U.S. light sweet crude oil futures

## Selected indicators

JOHN KEMP  
REUTERS  
24 April 2020

# Brent and WTI, front-month futures prices, 2019-2020

U.S.\$ per barrel, note front-month Brent is often one-month ahead of WTI

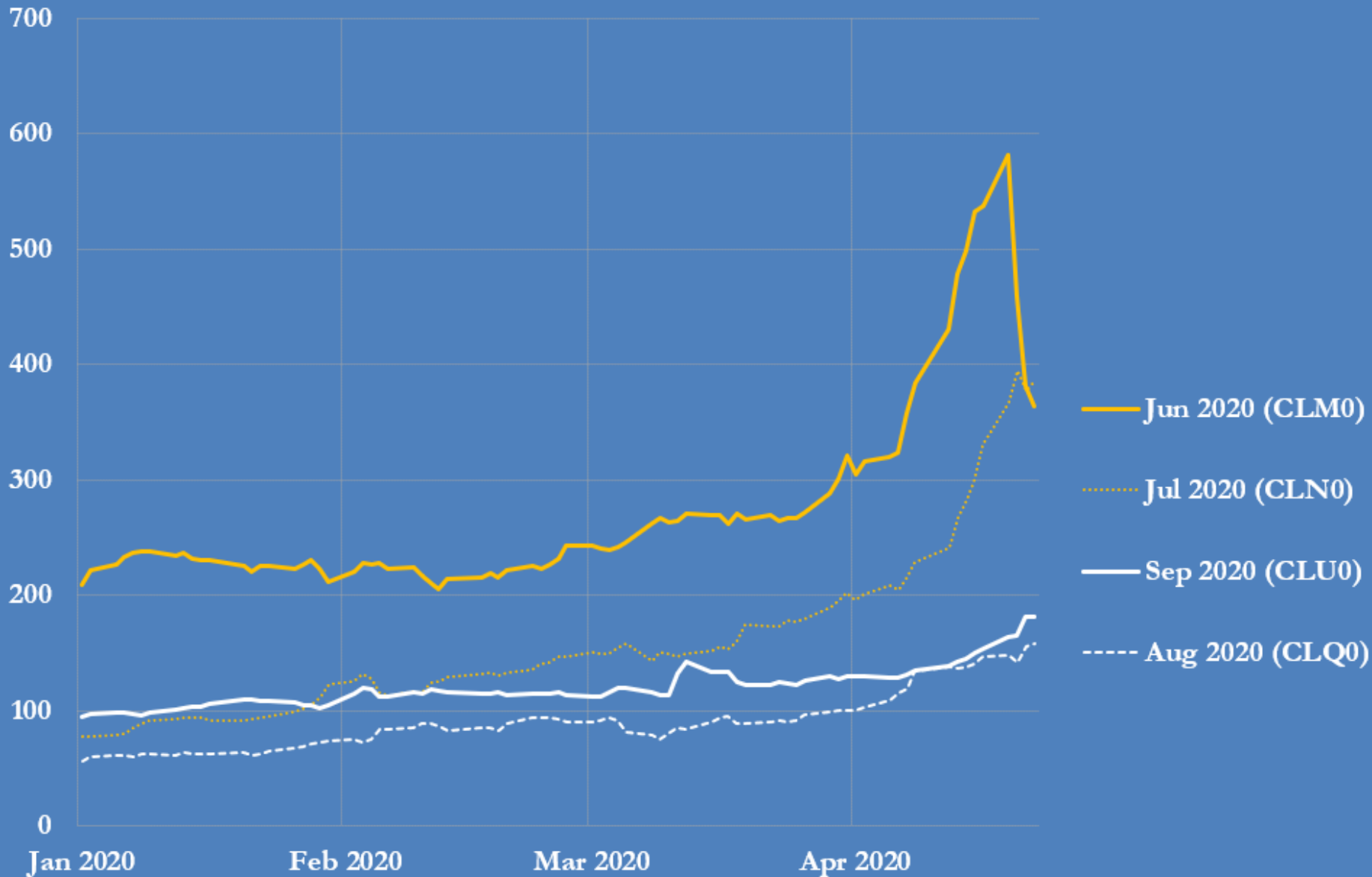


— NYMEX WTI

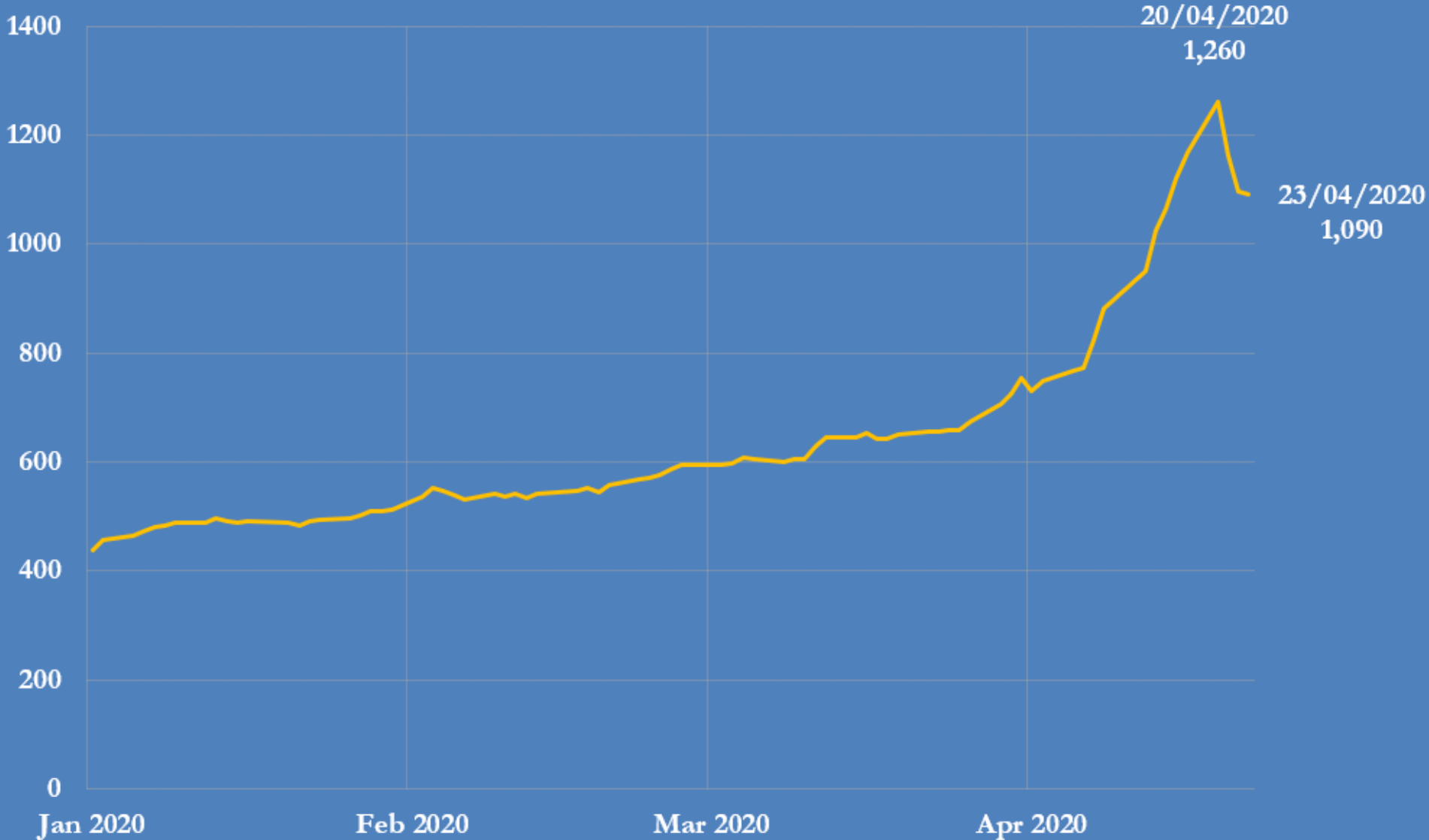
— ICE Brent

Source: CME Group, ICE Futures Europe  
@JKempEnergy

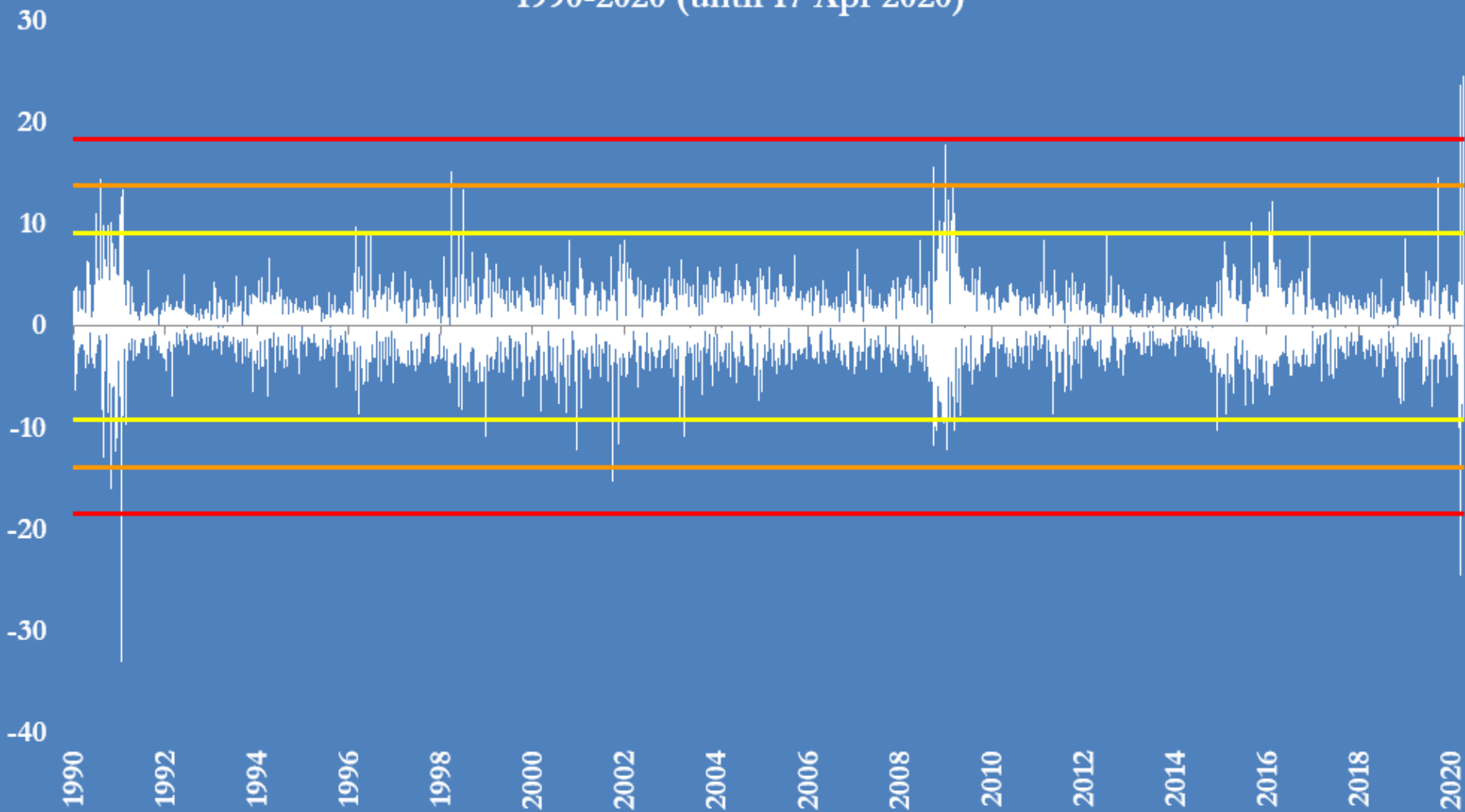
# Contracts outstanding in U.S. crude futures, selected months million barrels for delivery at Cushing



# Total contracts outstanding in U.S. crude futures for Jun-Sep 2020 million barrels for delivery at Cushing



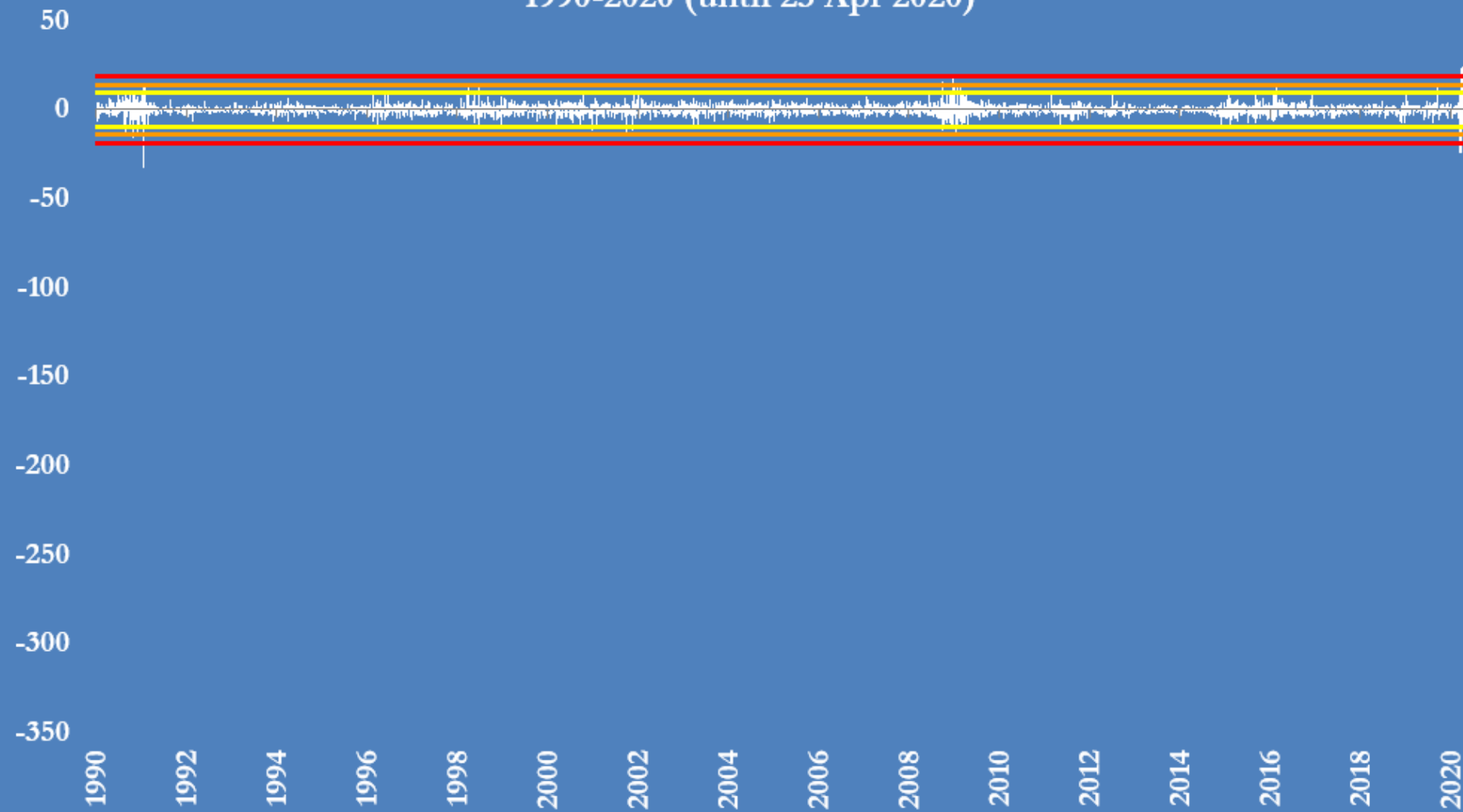
# WTI volatility: daily percent change in front month futures price 1990-2020 (until 17 Apr 2020)



- WTI 1st Month Futures One-Day Percent Change
- Mean percent change + / - 2 standard deviations
- Mean percent change + / - 3 standard deviations
- Mean Percent Change + / - 4 standard deviations

Source: CME Group  
@JKEmpEnergy

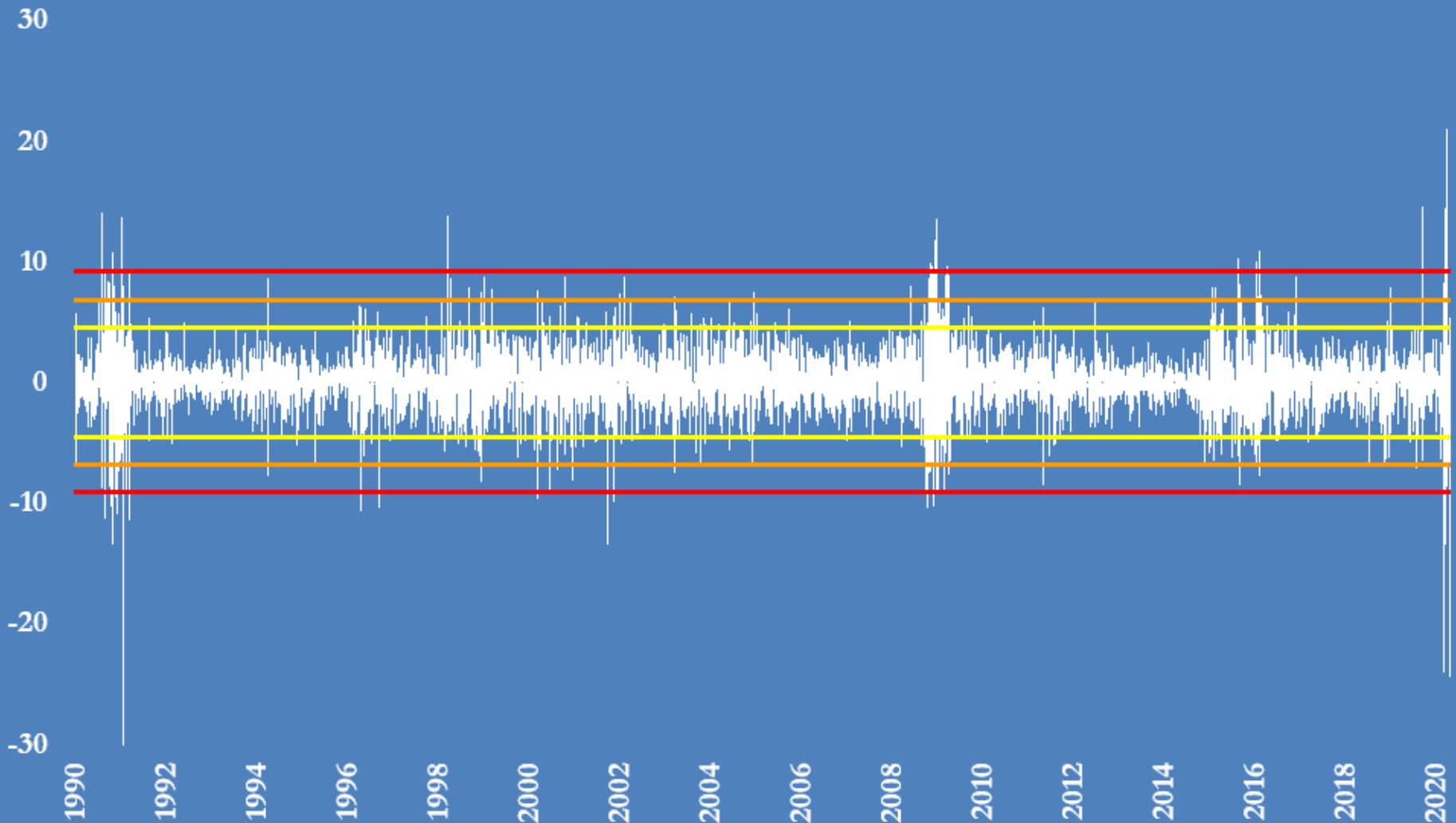
# WTI volatility: daily percent change in front month futures price 1990-2020 (until 23 Apr 2020)



- WTI 1st Month Futures One-Day Percent Change
- Mean percent change + / - 2 standard deviations
- Mean percent change + / - 3 standard deviations
- Mean Percent Change + / - 4 standard deviations

Source: CME Group  
@JKEmpEnergy

# Brent: daily percent change in front month futures price 1990-2020 (until 23 Apr 2020)



- Brent 1st Month Futures One-Day Percent Change
- Mean percent change + / - 2 standard deviations
- Mean percent change + / - 3 standard deviations
- Mean Percent Change + / - 4 standard deviations

Source: ICE Futures Europe  
@JKempEnergy