



Controlled Oil Burn Data for the Deep Water Horizon Gulf Oil Spill

National Oceanic & Atmospheric Admin. (NOAA)

Air Resources Laboratory (ARL)



DWH controlled oil burn record processing

- Received raw burn record data for April 28 - July 19, 2010 from Edwin Levin (NOAA/O R&R), in the excel format.
- Burn record Lat. /Long checked (mapped & QA'ed)
- Does NOT include flaring data by Q4000 & oil burned during initial explosion
- Total burn volume is 219986 barrel in minimum estimation, and 309457 barrel in maximum estimation

- Data Description

“Burn_Data_Release_20100719_v1.txt” includes estimated information for missing values

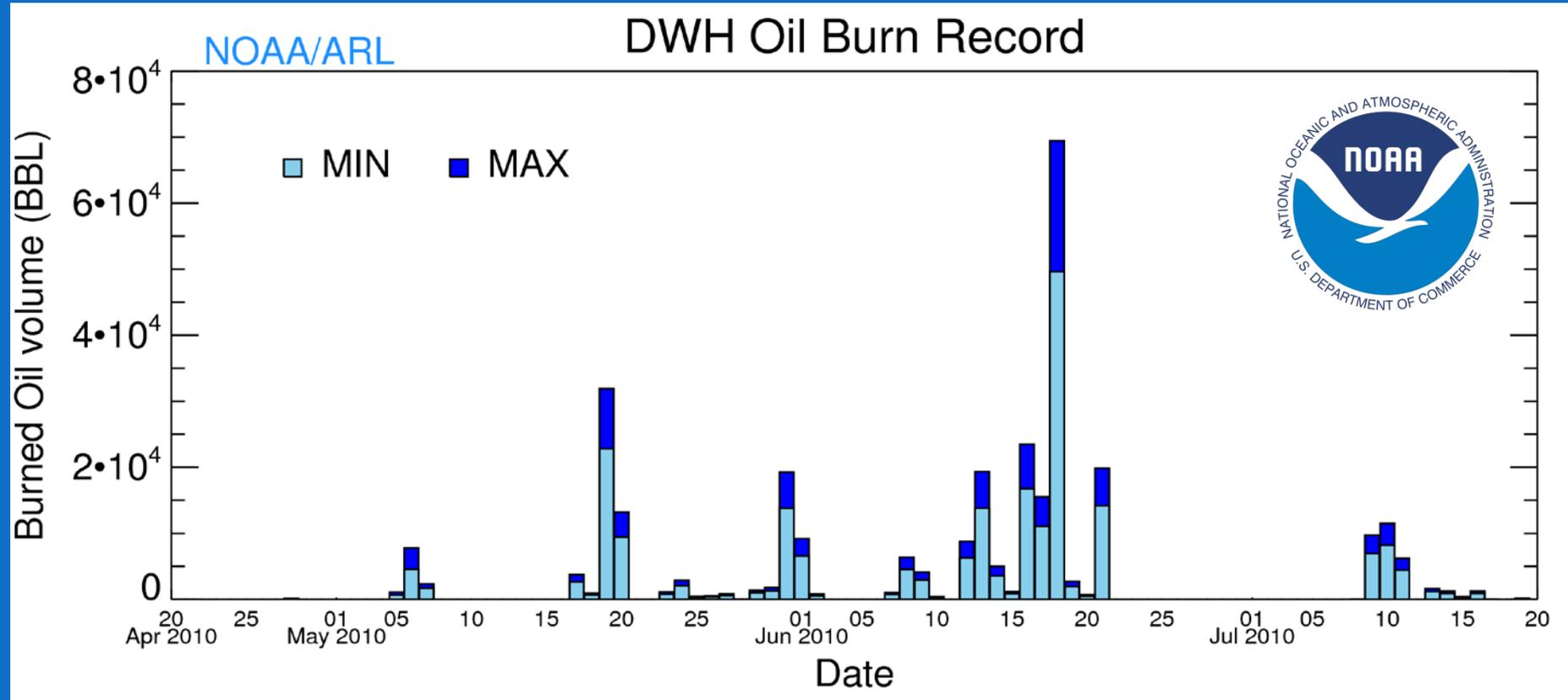
Treatment of Missing values for air quality modeling

- Missing latitude/longitude were replaced with DWH incident location
- Missing burn durations were estimated from volume/duration regression (page 5)
- Missing burn starting time was filled with 2PM local time (time of highest probability, page4)
- Burn #289 was removed as no information was provided

Contact : NOAA/ARL Daewon Byun & Hyun Cheol Kim

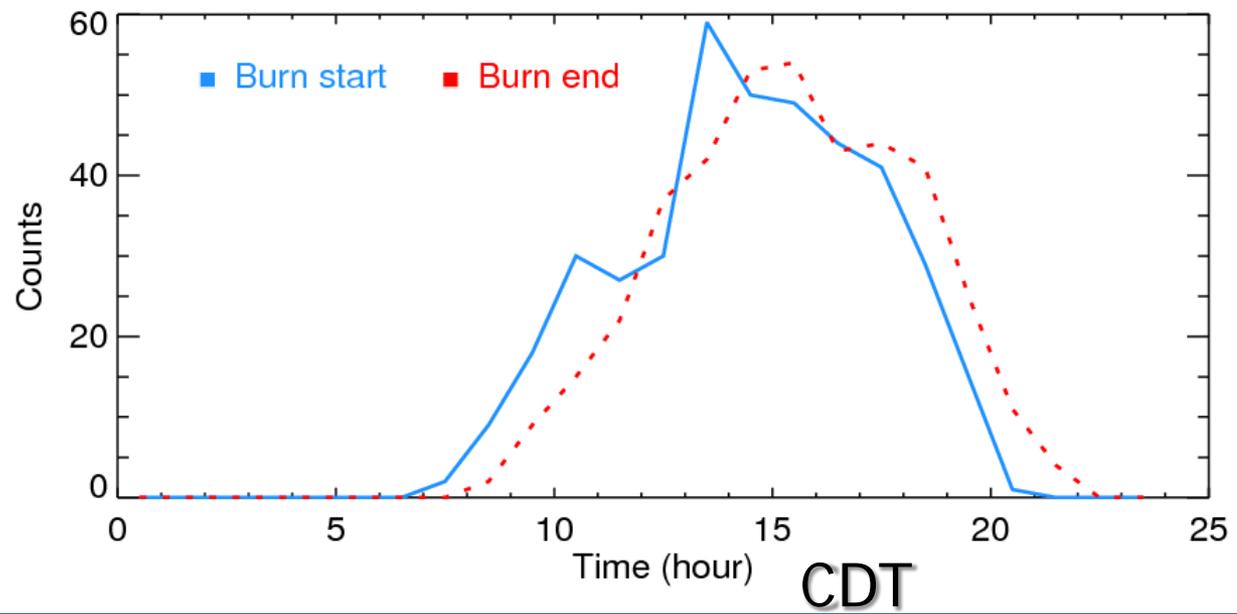


Volume of oil burned each day in barrels



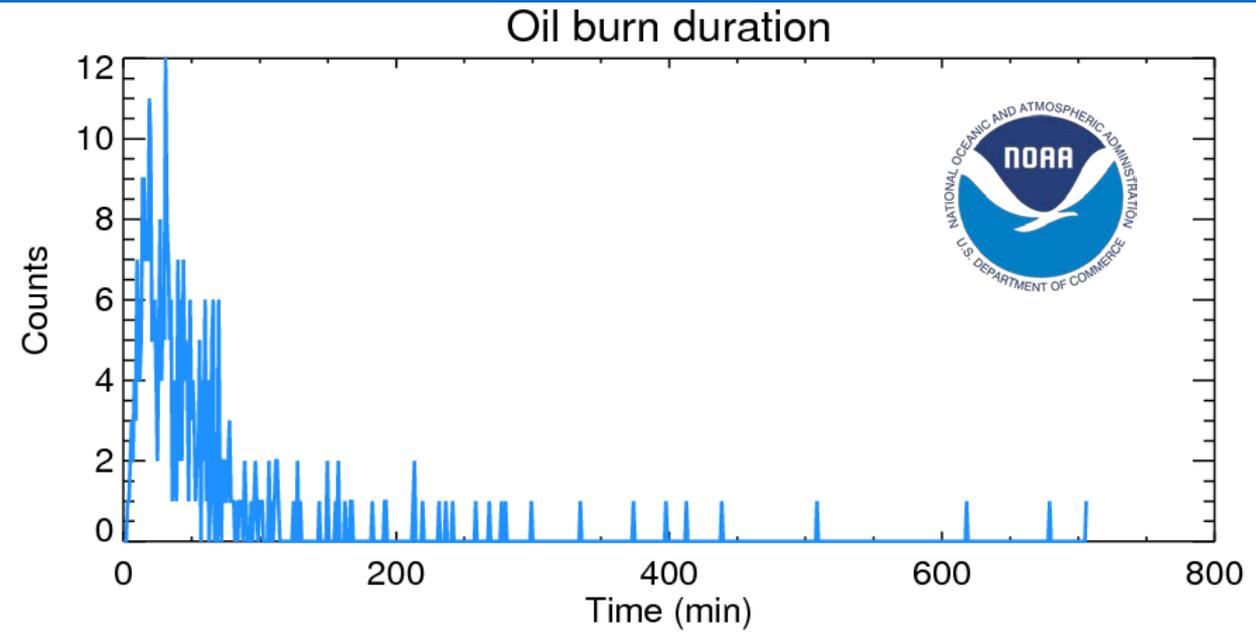
✓ Total estimation : 219986 BBL (min) 309457 BBL (max)

Oil burn Starts & Ends



Oil burn start/end times

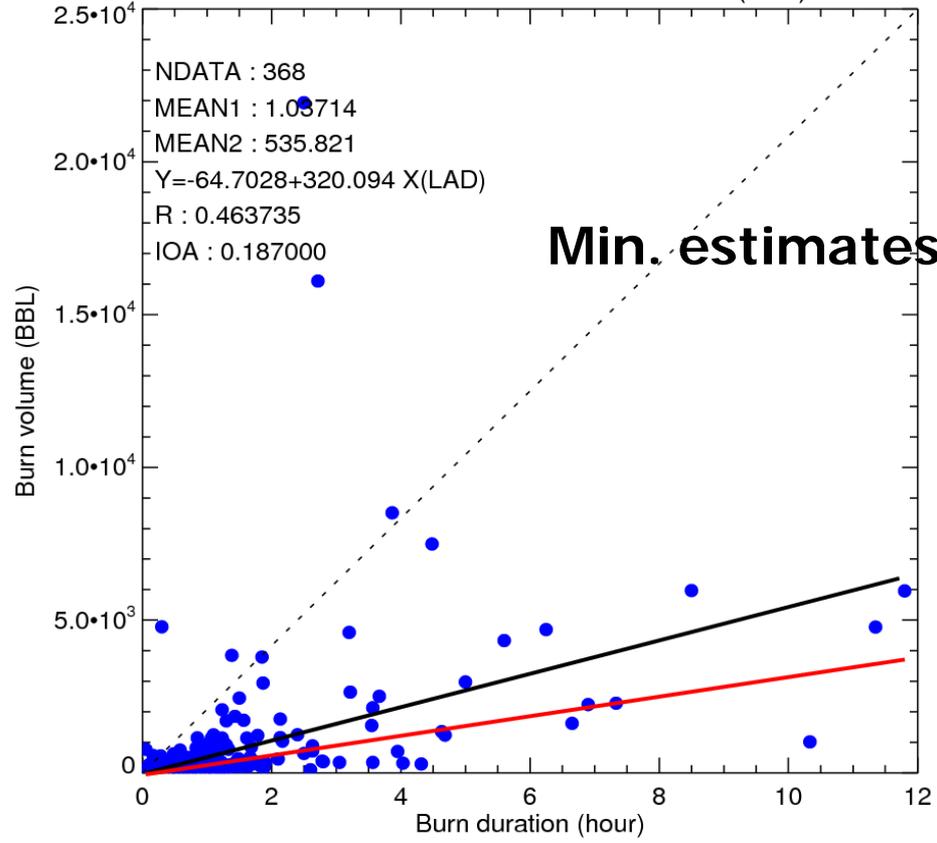
Oil burn duration



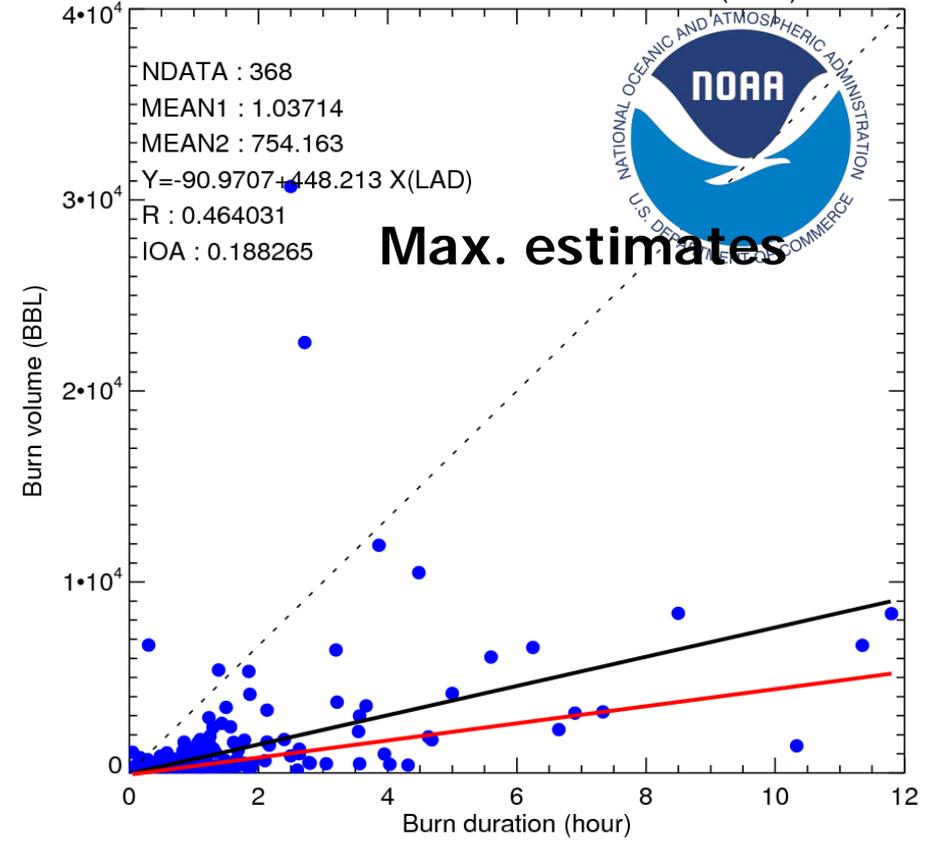


Duration and min/max volume of oil burned

DWH Oil burn duration vs volume (min)



DWH Oil burn duration vs volume (max)



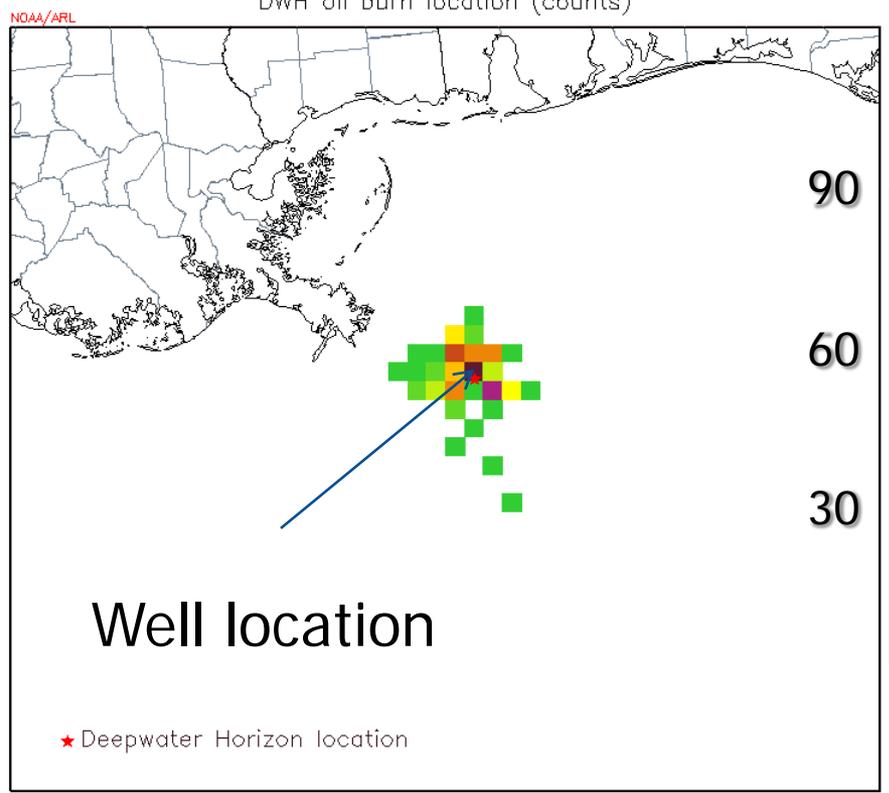


Oil burn locations used for air quality modeling

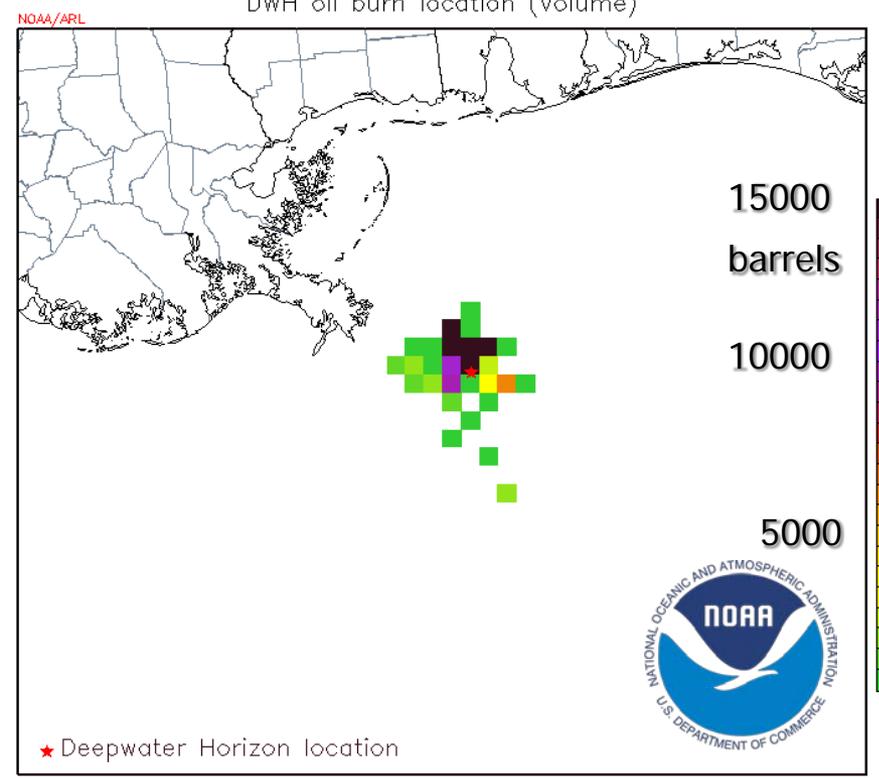
Burn Counts at each 12x12 km cell

Burn volume (barrels)

DWH oil burn location (counts)



DWH oil burn location (Volume)



✓ Numbers are gridded into the NAQFC 12km CONUS domain