

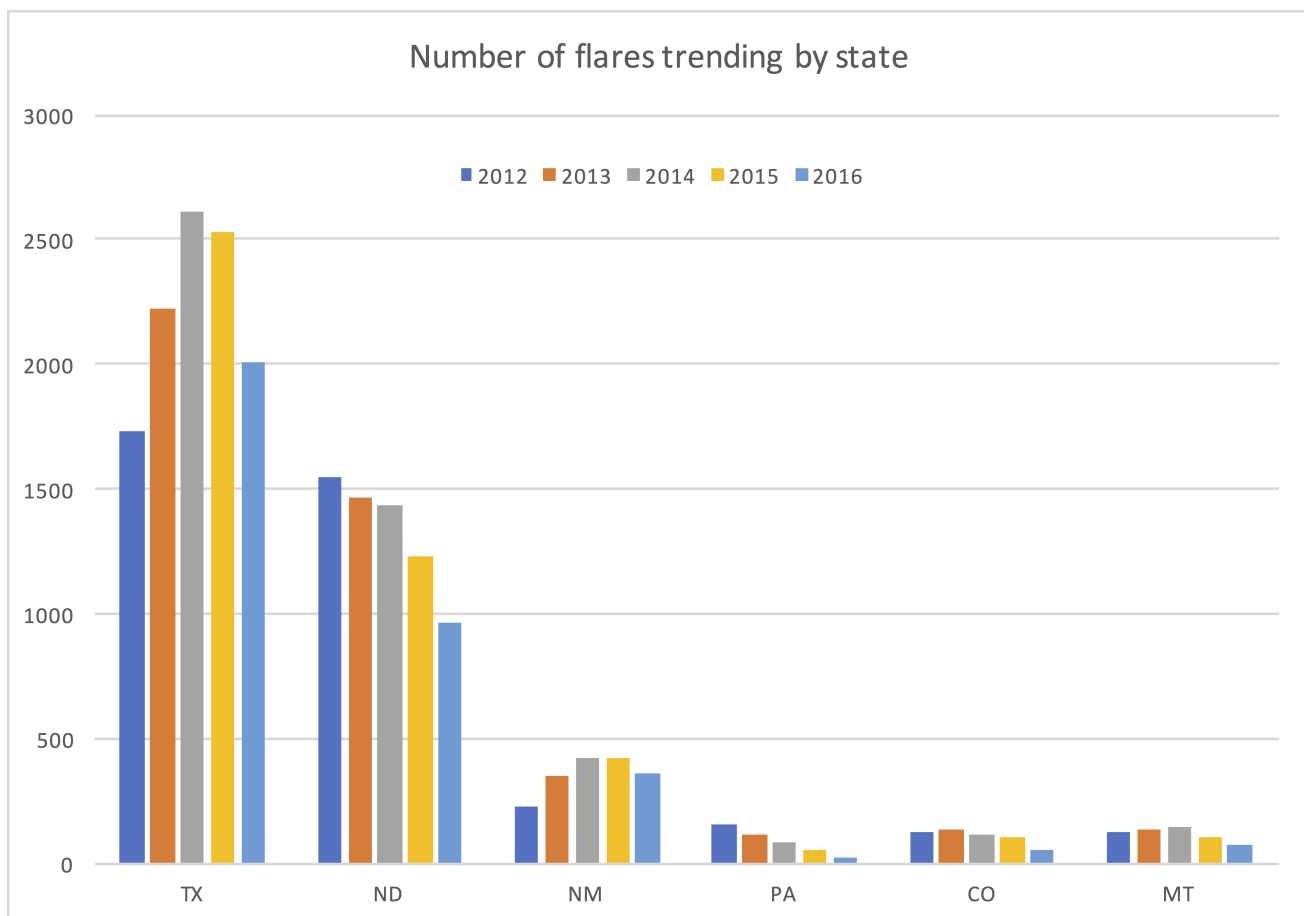
## Five-year Survey of the U.S. Natural Gas Flaring Observed from Space with VIIRS

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The five-year survey of natural gas flaring in 2012-2016 has been completed with nighttime Visible Infrared Imaging Radiometer Suite (VIIRS) data. The survey identifies flaring site locations, annual duty cycle, and provides an estimate of the flared gas volumes in methane equivalents. VIIRS is particularly well-suited for detecting and measuring the radiant emissions from gas flares through the collection of shortwave and near-infrared data at night, recording the peak radiant emissions from flares. The total flared gas volume is estimated at 140 +/-30 billion cubic meters (BCM) per year, corresponding to 3.5% of global natural gas production. While Russia leads in terms of flared gas volume (>20 BCM), the U.S. has the largest number of flares (8,199 of 19,057 worldwide). The two countries have opposite trends in flaring: while for the U.S. the peak was reached in 2015, for Russia it was the minimum. On the regional scale in the U.S., Texas has the maximum number of flares (3749), with North Dakota, the second highest, having one half of this number (2,003). The number of flares for most of the states has decreased in the last 3 years following the trend in oil prices. The presentation will compare the global estimates, and regional trends observed in the U.S. regions.



**Figure 1.** Number of flares trending in 2012-2016 for the U.S. states with more than 100 flares.