

# Xe Activation 1/2020

## This Round:

- 5.09993E17 particles
  - 106438 pulses to NIF from
  - 9:30 to 11:40 (1/17)
  - ~ 5E12 particles per pulse
  - (25mA, 32 micro sec) at 15Hz
  - **Survey: ~0.1 mR/foot**

## Expectation using 4/19 numbers:

- 2x the neutrons
- 25 mL @ 400 psig → 0.18430 g/mL → 4.6 g
- 25 mL @ 450 psig → 0.21293 g/mL → 5.3 g
- → total 10 g Xe (71% of prev. activation)
- ~28 kBq (bottles + Xe) -- upper limit, longer cool-down time now than 4/2019

## March 2018:

- 9.982E17 particles (~2x)
  - 6 hrs on 3/21 ; 45 min on 3/22
  - [3/23 08:00] ~2 mR/foot.
  - [3/26 14:45] 0.8 mR/foot.

## April 2019:

- 2.05E17 particles (~1/2x)
  - 2 hrs on 4/25
  - [5/03 11:15] ~ 18.8 kBq as measured by HPGe
  - 2 bottles @ 500-600 psig each
  - → 50 mL → 575 psia → 0.28459 g/mL → 14 g Xe