

Change in particle flux if the washers in the nose shield would be removed. (Simulation by M. Shupe)

G

th.n: 11.2 kHz +187%
 hi.n: 1.1 kHz +53%
 had: 169 Hz +6%
 c.r.: 98 Hz +308%
 p.r.: 16 Hz +239%

th.n. = thermal neutron rate (neutrons < 100 keV)
 hi.n. = high energy neutron rate (neutrons > 100 keV)
 had = charged and neutral hadron rate > 20 MeV
 c.r. = counting rate
 = $0.0005n + 0.0117 \gamma + (\mu + p + \pi + 0.25e) / 2$
 p.r. = penetrating particle rate
 = $0.1 \cdot 0.0117 \gamma + (\mu + p + \pi + 0.25e) / 2$

F

th.n: 9.3kHz +143%
 hi.n: 994 Hz +31%
 had: 145 Hz +2%
 c.r.: 77 Hz +209%
 p.r.: 14 Hz +121%

Forward
Toroid

th.n: 33 kHz +6%
 hi.n: 11 kHz +0%
 had: 1.4kHz +0%
 c.r.: 190 Hz +9%
 p.r.: 48 Hz +7%

th.n: 54 kHz +5%
 hi.n: 33 kHz +0%
 had: 6.8kHz +0%
 c.r.: 453 Hz +7%
 p.r.: 155 Hz +10%

th.n: 25 kHz +568%
 hi.n: 1.8kHz +113%
 had: 345 Hz +3%
 c.r.: 211Hz +222%
 p.r.: 38 Hz +163%

th.n: 148 kHz +7315%
 hi.n: 79 kHz +13620%
 had: 3.8 kHz +10400%
 c.r.: 709 Hz +3576%
 p.r.: 158 Hz +3665%

th.n: 21kHz +737%
 hi.n: 1.9kHz +100%
 had: 421Hz +2%
 c.r.: 281Hz +86%
 p.r.: 50Hz +92%

