

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



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%

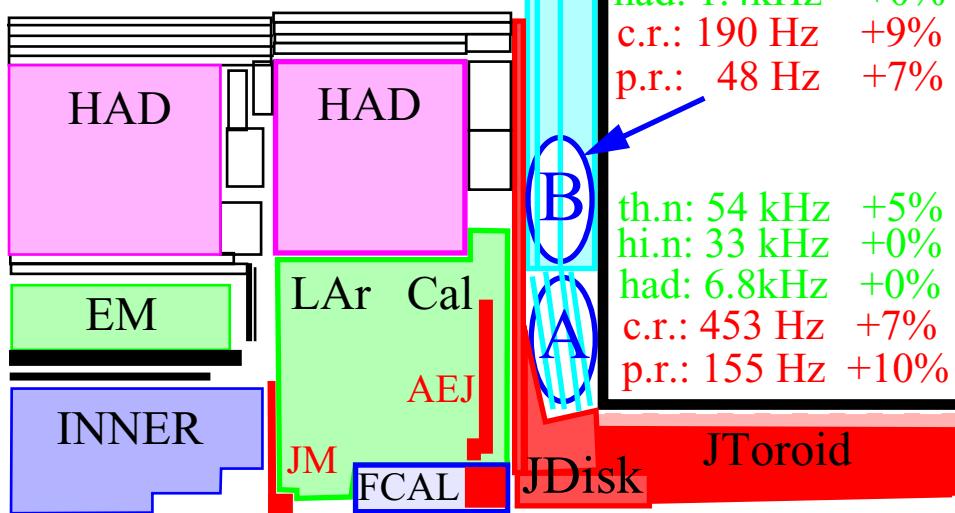


th.n: 9.3kHz	+143%
hi.n: 994 Hz	+31%
had: 145 Hz	+2%
c.r.: 77 Hz	+209%
p.r.: 14 Hz	+121%

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. = 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
= $0.1 \cdot 0.0117\gamma + (\mu + p + \pi + 0.25e)/2$

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

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%

