

Radiation levels in the LHC (R2E-related)

Week 12 (21.3.2011 00:00h- 27.3.2011 23:59h)

Comments:					
- Locations with cumulated fluences <HEH/cm2 are those where the RadMons counts (@5V) are statistically not relevant					
- RadMon readings in shielded areas are strongly affected by the thermal neutron component					
Uncertainties:					
Tunnel locations - factor of 2x					
Shielded areas - factor of 3x					
RRs	<i>tunnel</i>			<i>shielded areas</i>	
	HEH (cm-2/week)	HEH (cm-2/2011)	BLM dose (mGy/week)	HEH (cm-2/week)	HEH (cm-2/2011)
73	<1,00E+6	<1,00E+6	3.61E+02	<1,00E+6	<1,00E+6
77	1.73E+06	5.18E+06	3.06E+02	<1,00E+6	<1,00E+6
53	<1,00E+6	1.73E+06	2.34E+02	<1,00E+6	<1,00E+6
57	<1,00E+6	<1,00E+6	2.33E+02	<1,00E+6	<1,00E+6
13	<1,00E+6	<1,00E+6	2.55E+02	<1,00E+6	<1,00E+6
17	<1,00E+6	<1,00E+6	2.53E+02	<1,00E+6	<1,00E+6
UJs	<i>tunnel</i>			<i>shielded areas</i>	
	HEH (cm-2/week)	HEH (cm-2/2011)	BLM dose (mGy/week)	HEH (cm-2/week)	HEH (cm-2/2011)
14 (13, tun)	5.15E+08	7.20E+08	1.85E+03	<1,00E+6	1.38E+06
16 (17, tun)	7.95E+08	1.07E+09	3.16E+03	<1,00E+6	1.24E+06
22	6.91E+07	1.40E+08	3.24E+02	N/A	N/A
23	3.45E+06	8.64E+06	2.13E+02	<1,00E+6	<1,00E+6
87	5.53E+07	7.77E+07	1.52E+02	<1,00E+6	<1,00E+6
88	6.39E+07	1.85E+08	1.56E+02	N/A	N/A
32	<1,00E+6	<1,00E+6	2.42E+02	N/A	N/A
33	<1,00E+6	<1,00E+6	N/A	<1,00E+6	<1,00E+6
56	2.50E+08	3.51E+08	1.25E+03	<1,00E+6	<1,00E+6
REs	<i>tunnel/side</i>			<i>shielded areas</i>	
	HEH (cm-2/week)	HEH (cm-2/2011)	BLM dose (mGy/week)	HEH (cm-2/week)	HEH (cm-2/2011)
28	<1,00E+6	<1,00E+6	1.87E+02	<1,00E+6	<1,00E+6
38	<1,00E+6	<1,00E+6	2.21E+02	<1,00E+6	<1,00E+6
62	<1,00E+6	<1,00E+6	1.96E+02	<1,00E+6	<1,00E+6
68	<1,00E+6	<1,00E+6	1.92E+02	<1,00E+6	<1,00E+6
78	1.31E+06	1.31E+06	1.93E+02	<1,00E+6	<1,00E+6
US85/UX85	<i>cavern UX85</i>			<i>cavern US85</i>	
	HEH (cm-2/week)	HEH (cm-2/2011)		HEH (cm-2/week)	HEH (cm-2/2011)
	1.09E+06	2.17E+06		<1,00E+6	<1,00E+6
R34 R74/76 R771	<i>tunnel</i>				
	HEH (cm-2/week)	HEH (cm-2/2011)	BLM dose (mGy/week)		
	3.21E+08	5.35E+08	2.50E+03	N/A	
1.68E+09	2.09E+09	2.83E+04	N/A		
3.12E+09	3.86E+09	2.91E+03	N/A		
P2 right (27) P2 left (23) P8 right (87) P8 left (83)	<i>tunnel (RA)</i>			<i>shielded areas (UA)</i>	
	HEH (cm-2/week)	HEH (cm-2/2011)	BLM dose (mGy/week)	HEH (cm-2/week)	HEH (cm-2/2011)
	1.19E+08	6.96E+08	2.63E+02	<1,00E+6	<1,00E+6
	3.14E+07	6.94E+07	2.59E+02	<1,00E+6	<1,00E+6
1.45E+08	3.34E+08	7.35E+02	<1,00E+6	<1,00E+6	
N/A	N/A	5.69E+02	<1,00E+6	<1,00E+6	
Additional points of interest (losses observed in 'unusual' locations)					
UXC55 8R5 9R5 11R5 UPS54 11L1 8L1 ARC	<i>tunnel</i>			<i>shielded areas</i>	
	HEH (cm-2/week)	HEH (cm-2/2011)	BLM dose (mGy/week)	HEH (cm-2/week)	HEH (cm-2/2011)
	4.93E+07	7.74E+07	N/A	N/A	N/A
	7.26E+07	8.98E+07	4.30E+02	N/A	N/A
	1.38E+07	2.76E+07	2.48E+02	N/A	N/A
	1.55E+07	2.25E+07	2.94E+02	N/A	N/A
	N/A	N/A	N/A	<1,00E+6	<1,00E+6
	1.55E+07	1.73E+07	3.10E+02	N/A	N/A
	5.10E+08	6.89E+08	3.30E+02	N/A	N/A
32R4	N/A	N/A	4.99E+02		
33R4	N/A	N/A	2.76E+02		
32L8	N/A	N/A	4.24E+02		
11R3	N/A	N/A	6.06E+02		
11L4	<1,00E+6	<1,00E+6	3.27E+02		