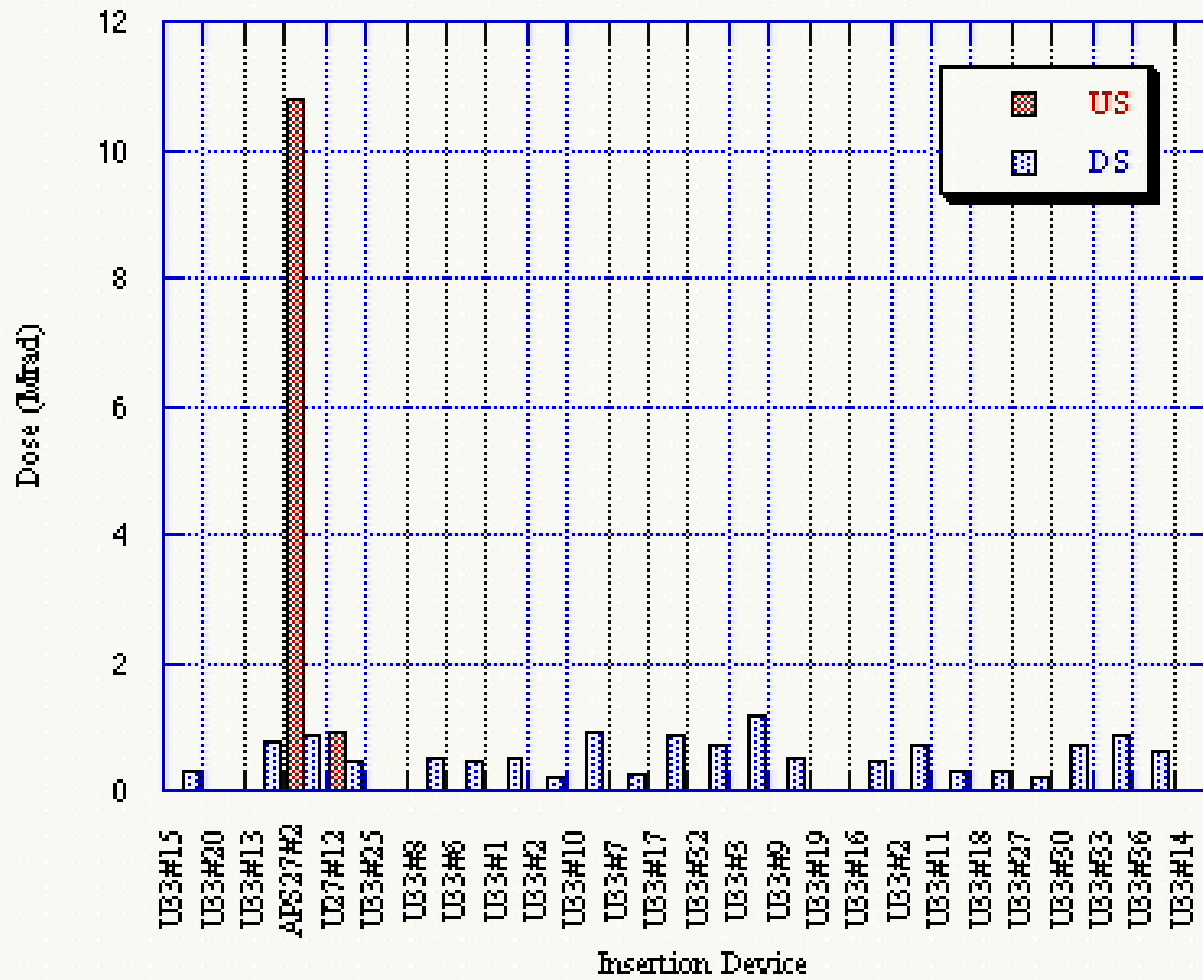
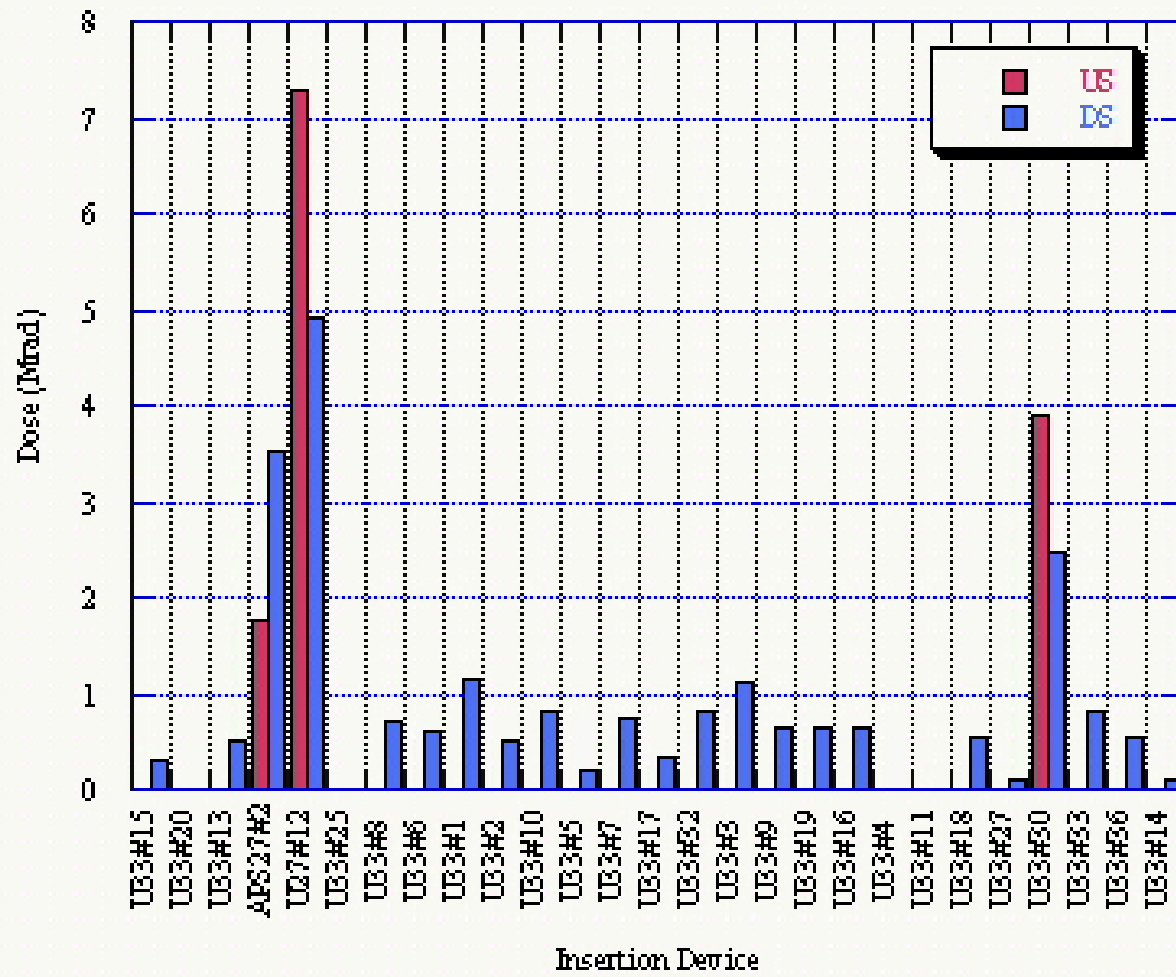


Absorbed dose on the IDs during run 2002-3



Absorbed dose on the IDs during run 2002-2



16 Jan 2003

IDs removed this shutdown:

Sector 9 U33#10

Sector 10 U33#5

Sector 13 U33#17 for gearbox repair. Replaced.

Sector 22 U33#30 Replaced.

Sector 3 both U27#12 and APS27#2

**U33#15** **Gap 11.5mm** **Sector 1 DS**

Date	RMS Phase error	3 <sup>rd</sup> harm., % of ideal	notes
1997 Sept. 9	2.88	89.8	reference
2002 May 2	5.91	82	some damage
2002 May 3	5.14	84	tuned, taper 0.040 mm

**U33#3** **Gap 11.5mm** **Sector 15 DS**

1997 Sept.	4.54	91	reference
2002 May	5.14	89	still OK

**U33#9** **Gap 11.5mm** **Sector 17 DS**

1997 Sept.3	4.86	86.1	reference
2002 Sept 25	12.99	58.0 (1 <sup>st</sup> 91.2%)	damaged
2002 Sept 25	5.78	82.8	tuned, taper 0.09 mm

**U33#4** **Gap 11.5mm** **Sector 20 DS**

1996 Sept	3.44	91.6	reference
2002 Sept	3.37	92.6	still OK

**U33#10** **Gap 11.5mm** **Sector 9 DS**

1997 Aug	4.72	84.7 (1 <sup>st</sup> 93.16%)	reference
2003 Jan	7.67	77.8 (1 <sup>st</sup> 92.35%)	some damage
2003 Jan	5.36	84.4 (1 <sup>st</sup> 92.5)	tuned, no taper

**U33#5** **Gap 11.5mm** **Sector 10 DS**

1997 Feb	4.62	89.9 (1 <sup>st</sup> 96.2%)	reference
2003 Jan	5.06	89.5 (1 <sup>st</sup> 95.9%)	still OK

**Not measured yet (they were replaced with new IDs and will be measured after the shutdown is over):**

**U33#17 from Sector 13 (removed for work on gearboxes)**

**U33#30 from Sector 22**

Sign of taper: + means the upstream end is opened to correct the device

**U27#12****Gap 10.5mm****Sector 3 DS**

Date	RMS Phase error	3 <sup>rd</sup> harm., % of ideal	notes
1997 June 23	5.45	82.6	reference
2001 Dec. 31	36.5	35.2	damaged
2002 Jan. 3	9.29	69.0	tuned, taper 0.160mm
2002 May 6	14.14	52	more damage
2002 May 7	10.81	62.4	tuned, taper 0.185mm
2002 Sept 12	15.00	49.2	more damage
2002 Sept 13	6.9	75.2	tuned, taper 0.235
2003 Jan 3	13.68	56.6	more damage
2003 Jan 3	6.4	80.4	tuned, taper 0.315 mm

**APS27#2****Gap 11.5mm****Sector 3 US**

2000 June 23	2.62	91.5	reference
2002 Jan. 8	10.79	64.2	damaged
2002 Jan. 8	3.67	86.1	tuned, taper -0.150 mm
2002 Sept 18	32.9	30.9	more damage
2002 Sept 18	5.90	74.1	tuned, taper -0.4 mm
2003 Jan 3	32.7	28 (1 <sup>st</sup> 69.5%)	more damage
2003 Jan 3	5.62	76.3	tuned, taper -0.9 mm; 3% weaker Beff overall