Revisiting R_b — A very preliminary look

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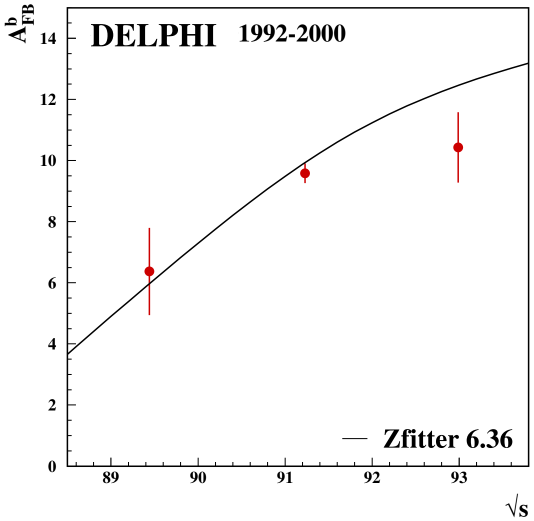
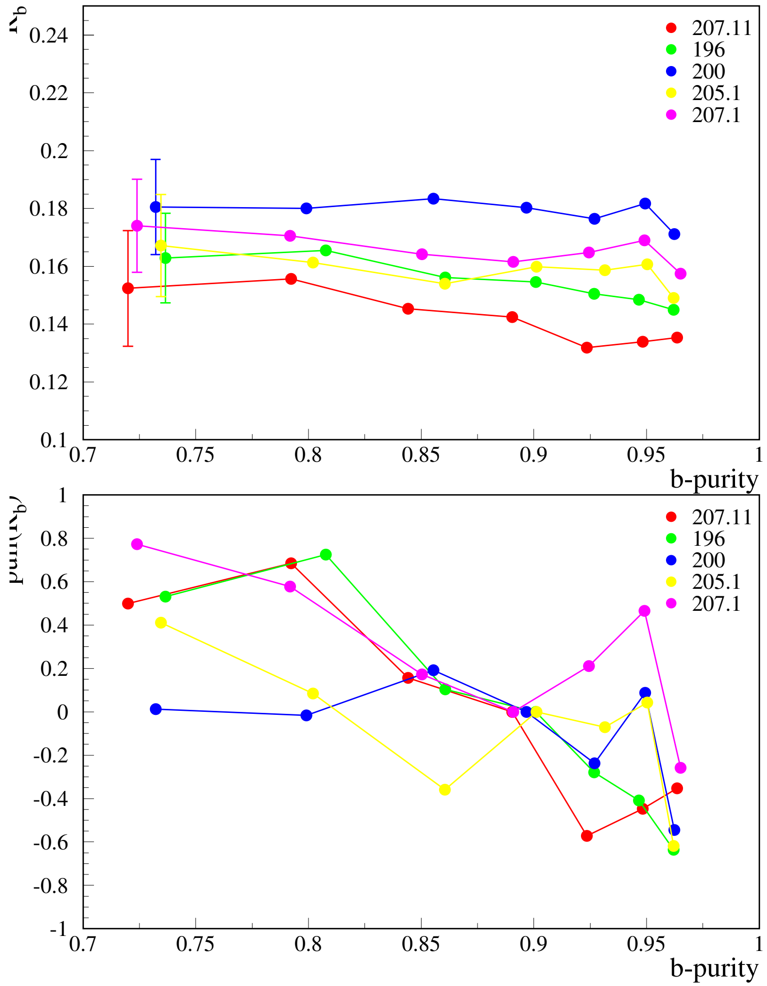


The new result

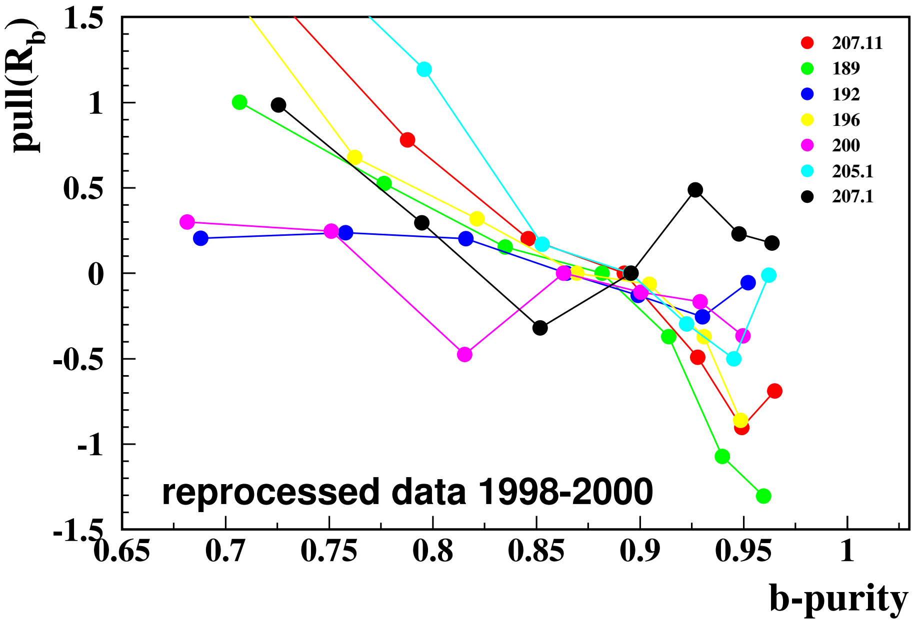
$\sqrt{s}$/GeV	winter 01	winter 03
189	0.1725(103)	0.1684(100)
192	0.1735(260)	0.1922(274)
196	0.1550(144)	0.1665(149)
200	0.1739(156)	0.1906(162)
202	0.1781(222)	0.1968(229)
205 E1	0.1657(166)	0.1805(175)
207 E1	0.1687(155)	0.1872(167)
207 U1	0.1417(187)	0.1511(173)

What we're worried about: b-purity stability

Situation in 2001



Situation now



- Mind the different y scale
- Plot needs syst. errors and uncorr. stat. errors
- However: 2000 E1 is in reasonable shape.

Conclusions

- Current results with LEP2 reprocessing, kk2f generator, b-tag tuning+calibration
- Technical: migration to linux
- Only b-tag control plots studied, so this is highly preliminary !
- Result from $A_{\mathsf{FB}}^{b,\,0}$'s c calibration:
  At $P_b \sim 75\,\%$ ε_{c} is underestimated by 15-20 %.
  Prelim. LEP 2 R_b: $\Delta\varepsilon_{\mathsf{c}} = 10\,\%$

A few worrying effects

- shift upward in 1999 and 2000E processing
- b purity stability worse, esp. for 189 GeV, 196 GeV and U1.

▶ However: 2000 E1 is in reasonable shape.