

GEANT 3.21 Simulations of Balbekov's Ring - last problems.

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Some comparative analysis with fast simulation
program (Balbekov)

GEANT321

Fast.simul.

- 1-turn surviving (100 muons, no E- P_T -correlation)

100% out

48.5% no strag/scatter.

45-48% with strag/scatter

- 15-turn surviving

28.5% with strag/scatter

- With E- P_T -correlation

89.0% no strag/scatter.

85-90% with strag/scatter

- 15-turn surviving (No absorb., no E- P_T -correlation)

6% out

22.0%

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Fast.simul.

- 15-turn surviving (Absorb., E- P_T -correlation)

8.8% no E- P_T - correl.

13.6% with E- P_T - correl. > 70%

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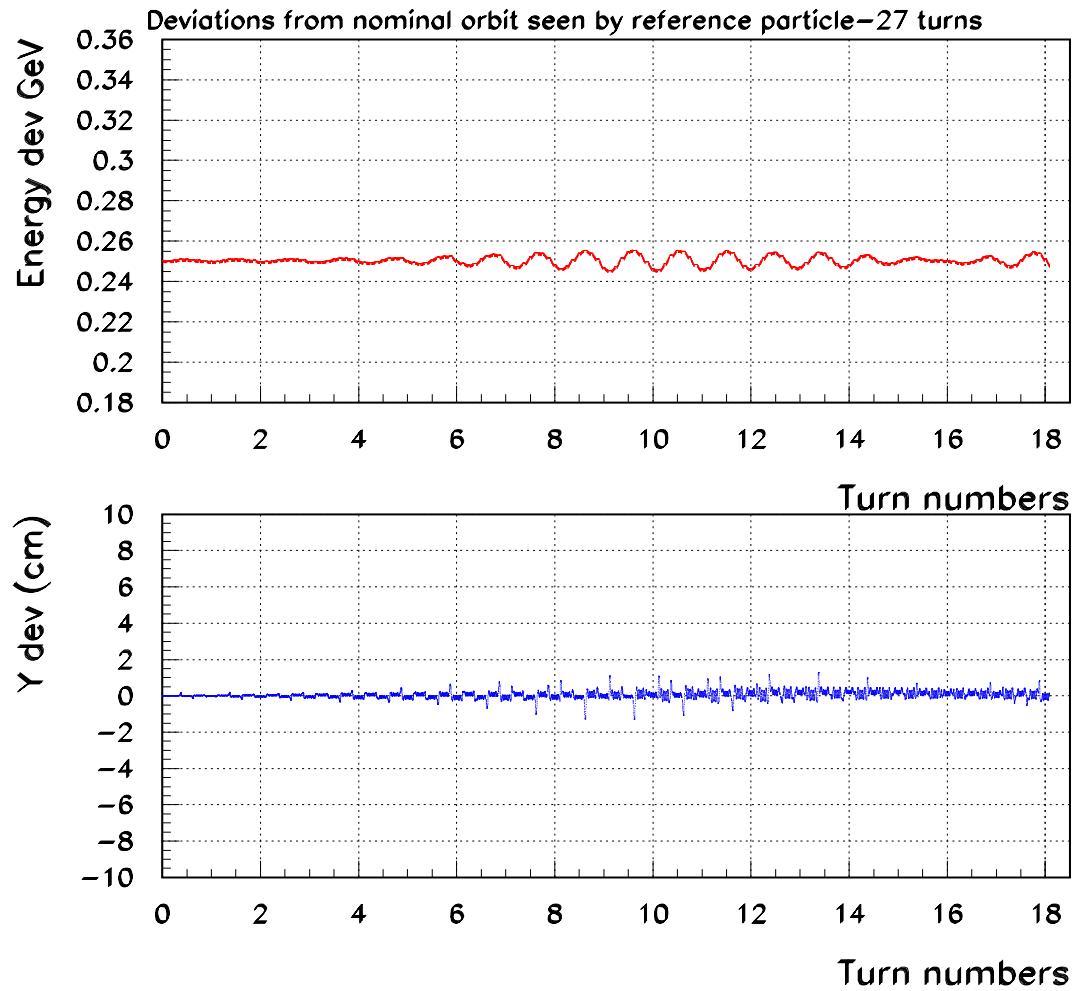


Fig.1 E and Y deviation, no absorbers, $RF_g \neq 0$, $\phi_0 = 0$,

2002/09/06 09.25

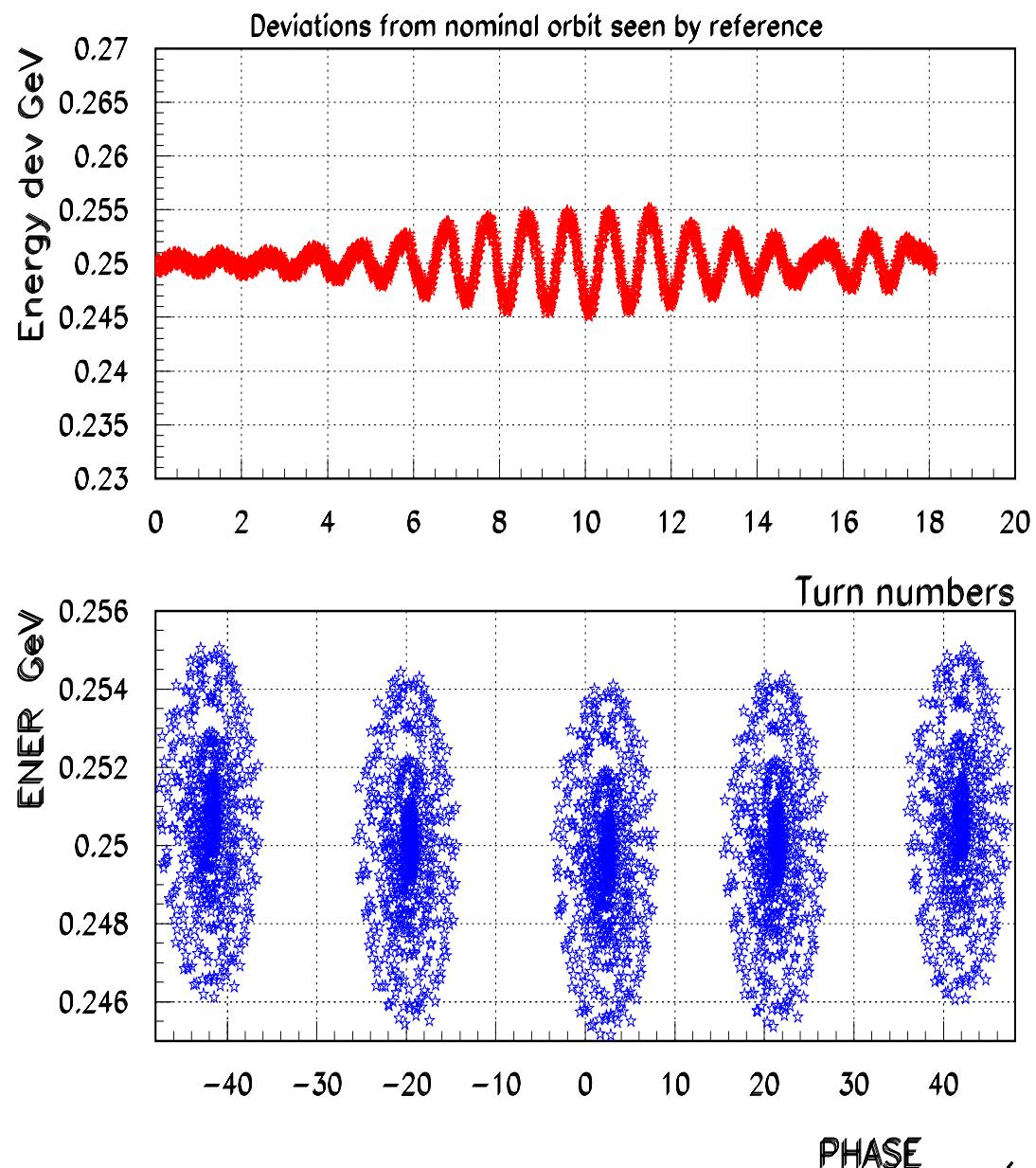


Fig.2 Phase-Energy plot in 5 points in RF's

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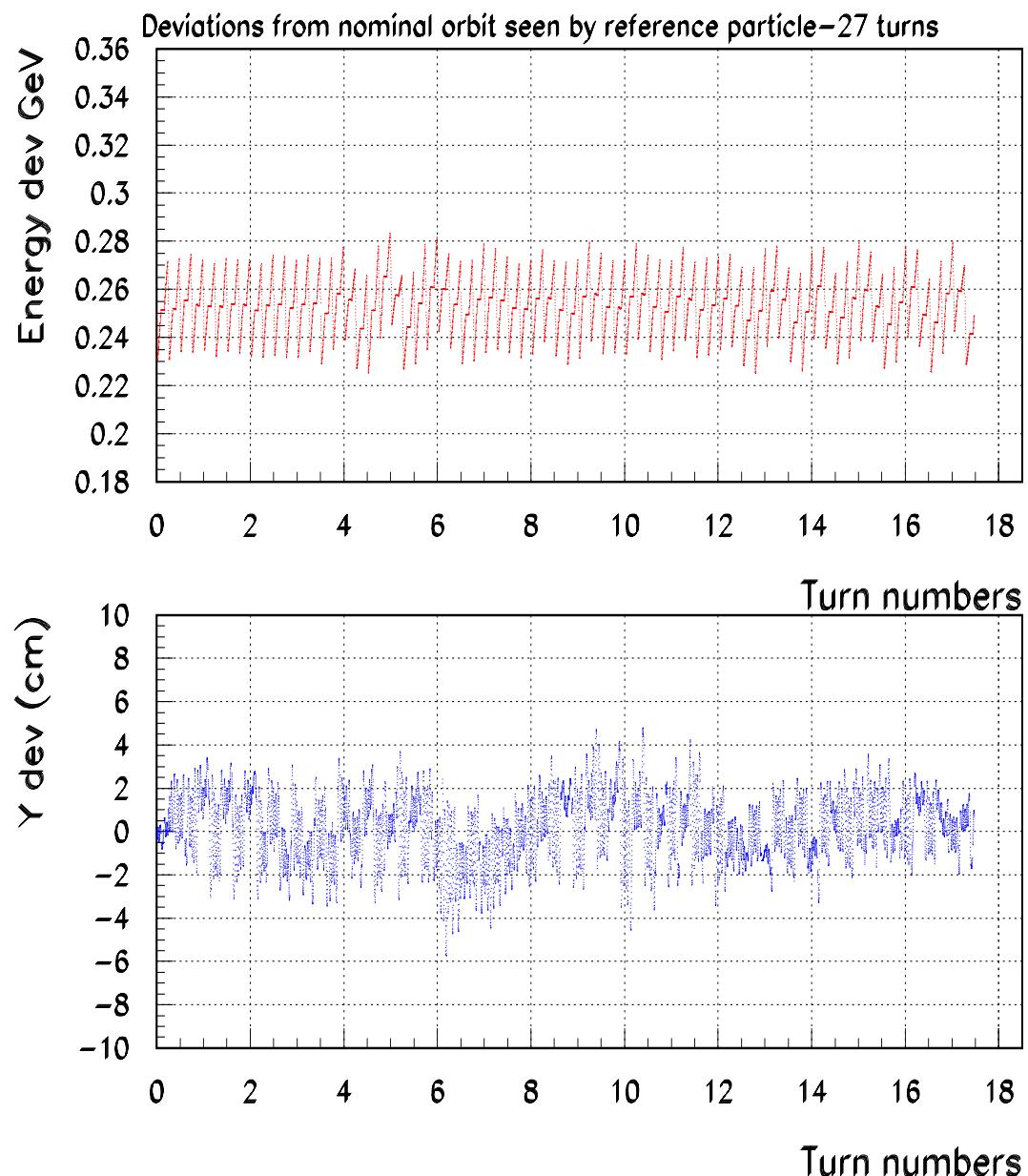


Fig.3 Energy and Y deviation for reference particle