AC dipole in MADX thin-lens tracking module and MADX-SixTrack convertor

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17 November, 2009

MADX code

In sequence

hac: hacdipole,l:= 0,volt:=0.03,lag:= 0,freq:=0.295,
ramp1=1000,ramp2=3000,ramp3=5000,ramp4=7000;

In the code

```
do itrack = 1, ktrack
px = track(2,itrack)+ vrf * sin(phirf + omega * turn)
track(2,itrack) = px
enddo
```

200 ms (2000 turns) ramp up, 200 ms flat-top, 200 ms ramp down

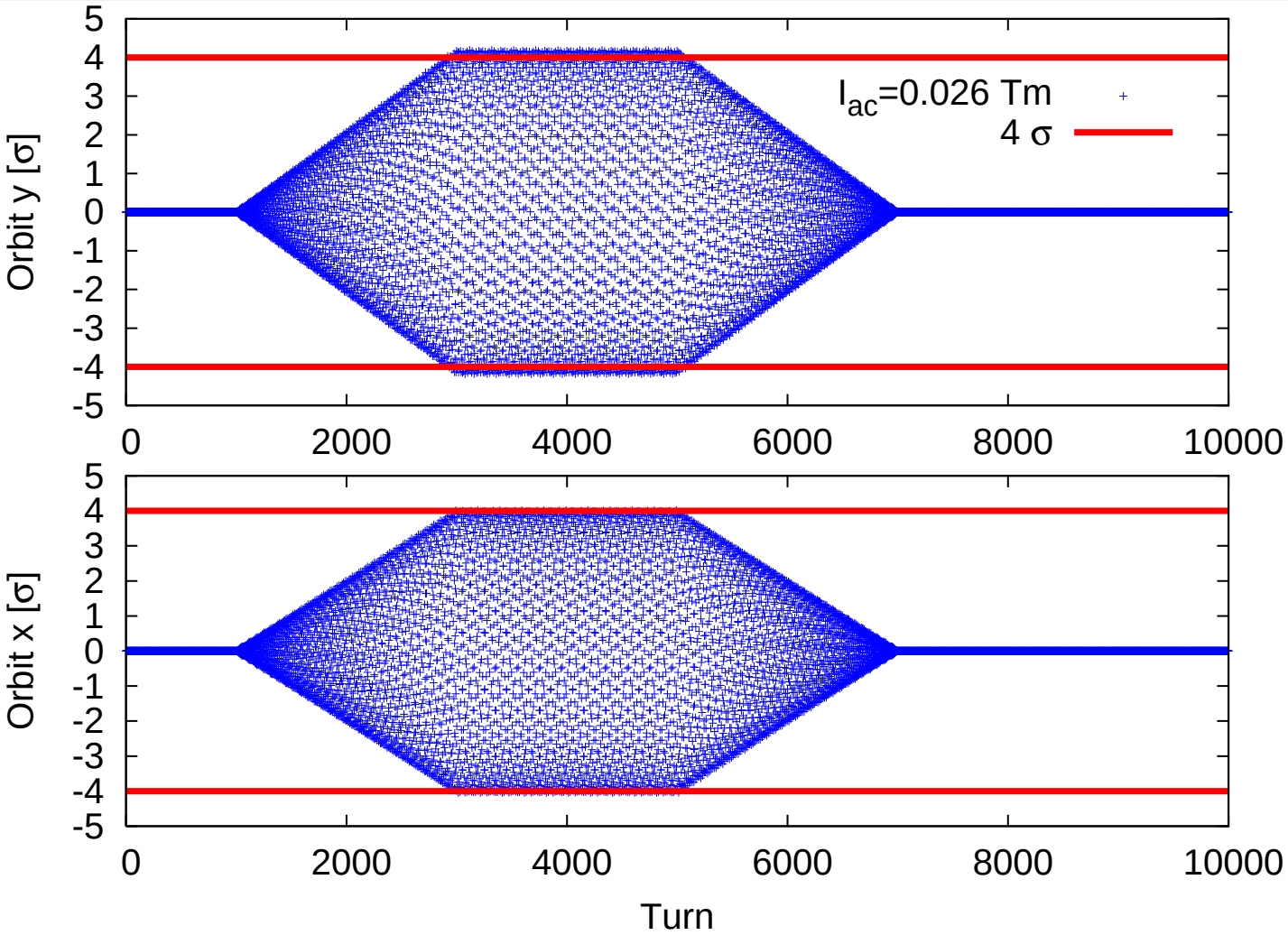
c6t convertor

hac: hacdipole,l:= 0,volt:=0.03,lag:= 0,freq:=0.295,

converted to

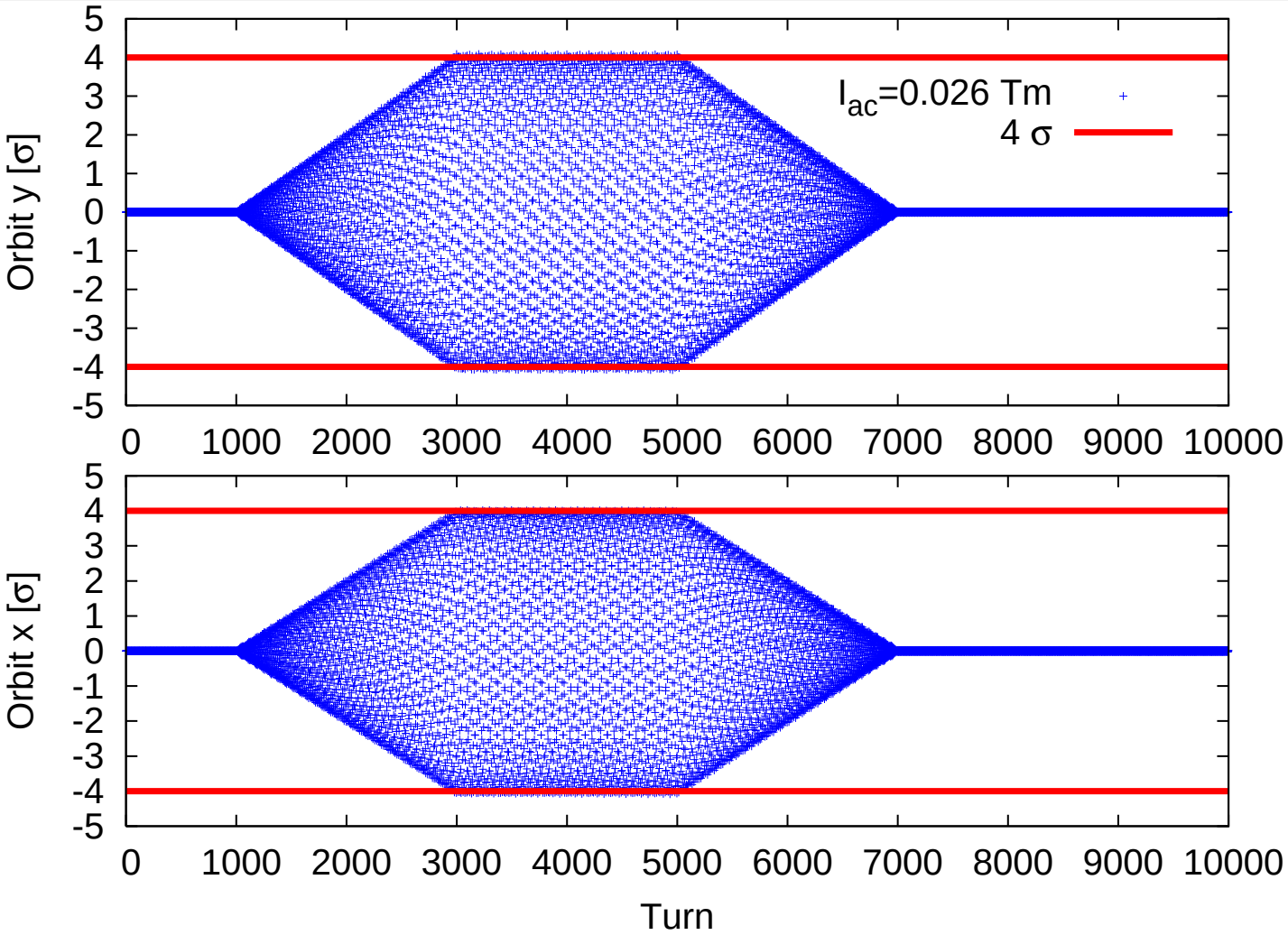
hac.b1 16 3.000e-02 2.9500e-01 0.000e+00

Check by MADX tracking, 7 TeV, β_{ac}= 200 m



$Q_{ac} = 0.295/0.305, B * L = 0.026\,Tm$

Check by SixTrack tracking, 7 TeV, β_{ac}= 200 m



$Q_{ac} = 0.295/0.305, B * L = 0.026\,Tm$