current/length before BC2

current after BC2, before BC3

current after BC3, after DOGLEG

current after DOGLEG

before BC2

after BC2 / before BC3

after BC3 / before LOLA

ACC1 Amplitude: 151.6 [MV] Phase: -6.8 [deg]
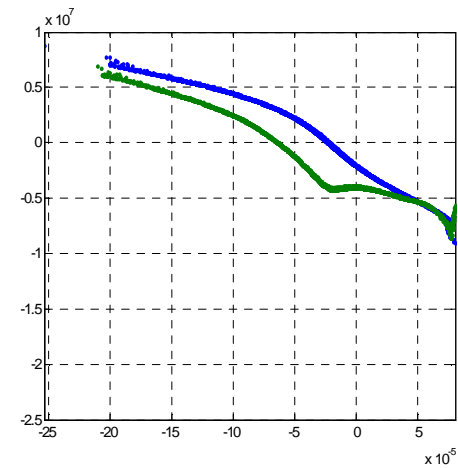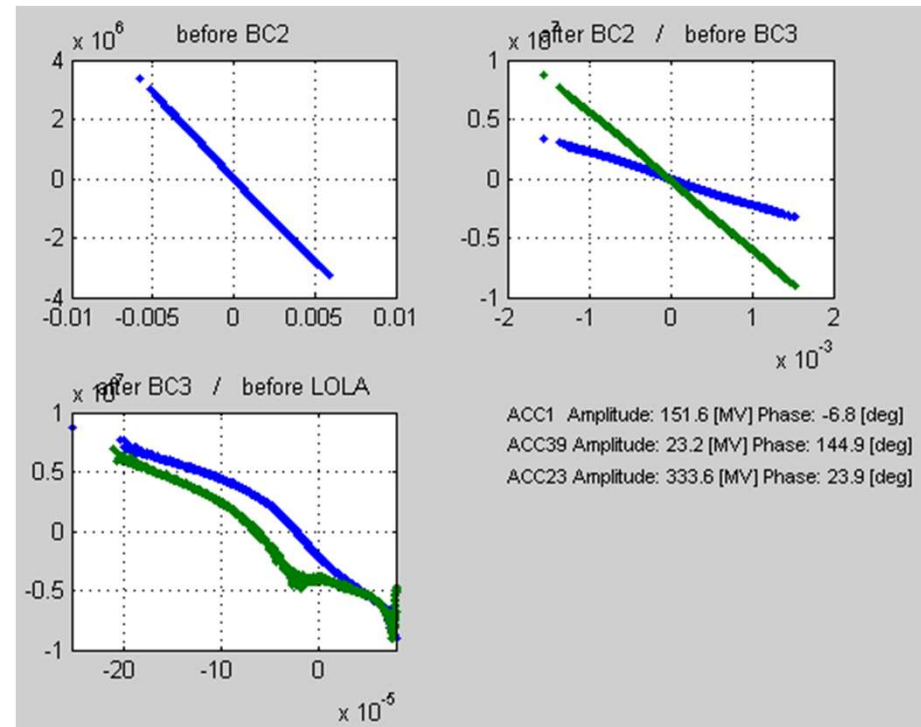ACC39 Amplitude: 23.2 [MV] Phase: 144.9 [deg]
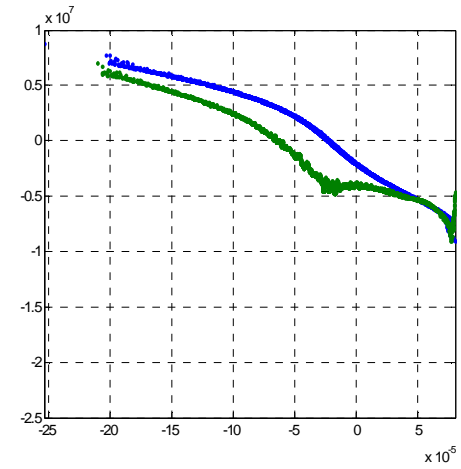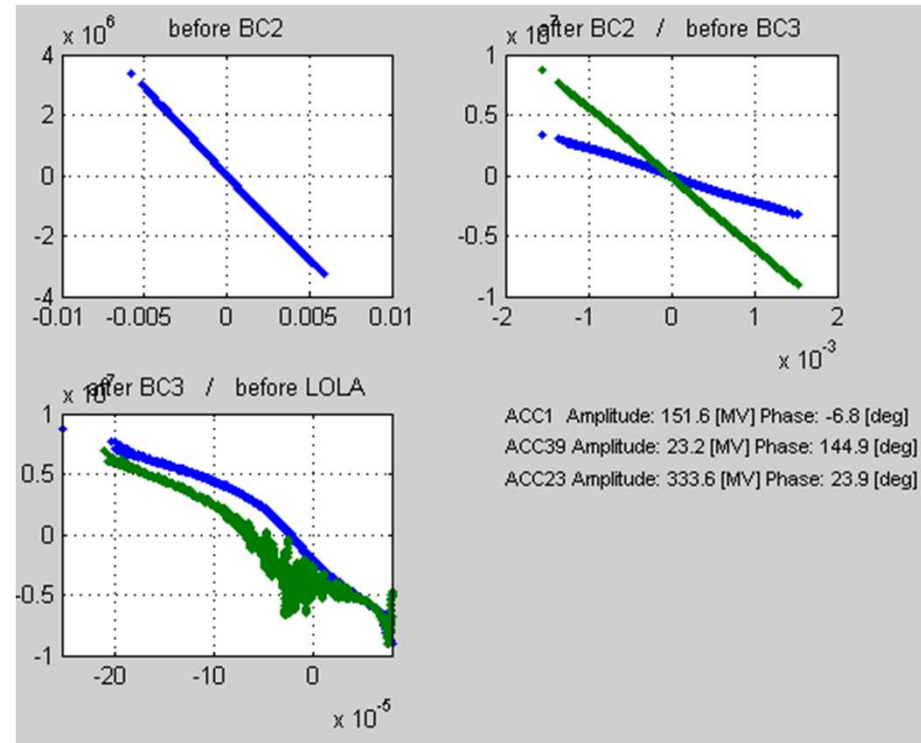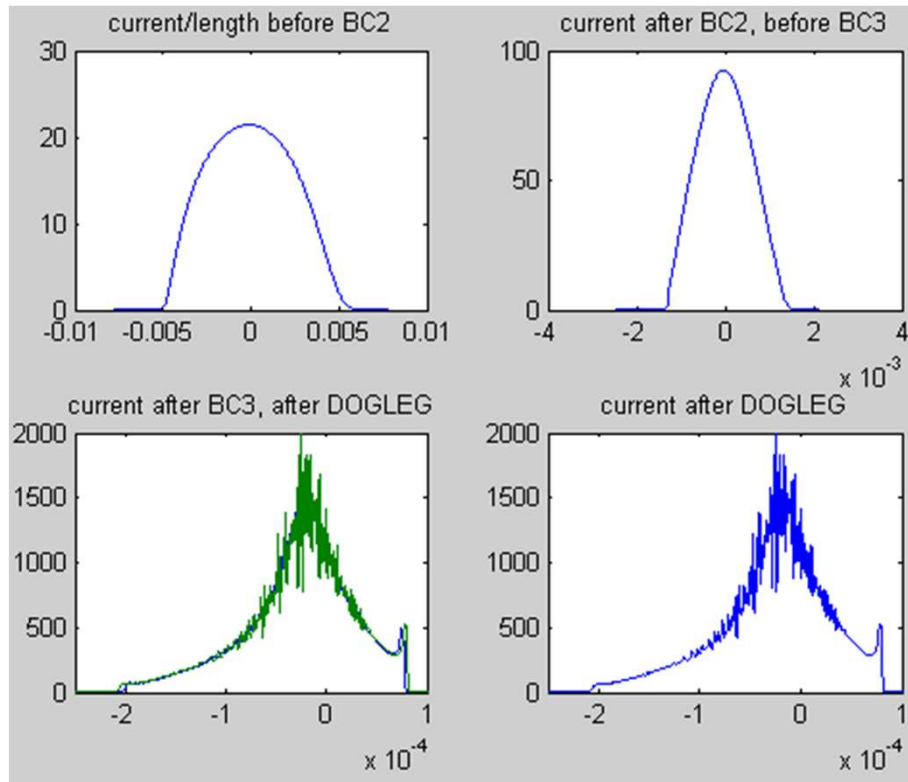ACC23 Amplitude: 333.6 [MV] Phase: 23.9 [deg]

10E6 particles, 500pC
moderate filtering

current/length before BC2

current after BC2, before BC3

current after BC3, after DOGLEG

current after DOGLEG

before BC2

after BC2 / before BC3

after BC3 / before LOLA

ACC1 Amplitude: 151.6 [MV] Phase: -6.8 [deg]
ACC39 Amplitude: 23.2 [MV] Phase: 144.9 [deg]
ACC23 Amplitude: 333.6 [MV] Phase: 23.9 [deg]

10E6 particles, 500pC

```
%--- numerical parameters for wake --------------------------------------
action1{1}='update'; action1{2}=[1 1]; action1{3}=[0.5,1000,15, 2,0.5,30.0E-6];
action2{1}='update'; action2{2}=[1 1]; action2{3}=[0.5,1000,15, 2,0.5,15.0E-6];
action3{1}='update'; action3{2}=[1 1]; action3{3}=[0.5,1000,15, 2,0.5, 0.5E-6];
action4{1}='update'; action4{2}=[1 1]; action4{3}=[0.5,1000,15, 2,0.5, 0.5E-6];
```
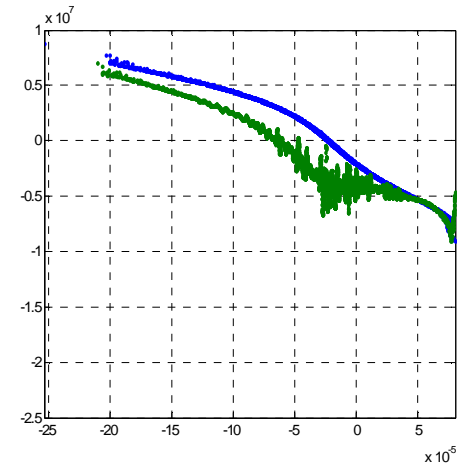
current/length before BC2

current after BC2, before BC3

current after BC3, after DOGLEG

current after DOGLEG

before BC2

after BC2 / before BC3

after BC3 / before LOLA

ACC1 Amplitude: 151.6 [MV] Phase: -6.8 [deg]
ACC39 Amplitude: 23.2 [MV] Phase: 144.9 [deg]
ACC23 Amplitude: 333.6 [MV] Phase: 23.9 [deg]

10E6 particles, 500pC

```
%--- numerical parameters for wake -------------------------------
action1{1}='update'; action1{2}=[1 1]; action1{3}=[0.5,1000,15, 2,0.5,30.0E-6];
action2{1}='update'; action2{2}=[1 1]; action2{3}=[0.5,1000,15, 2,0.5, 7.5E-6];
action3{1}='update'; action3{2}=[1 1]; action3{3}=[0.5,1000,15, 2,0.5, 0.5E-6];
action4{1}='update'; action4{2}=[1 1]; action4{3}=[0.5,1000,15, 2,0.5, 0.5E-6];
```

2% modulation at cathode
wavelength = 0.3 mm

10E6 particles, 500pC

```
%--- numerical parameters for wake ---------------------------
action1(1)='update'; action1(2)=[1 1]; action1(3)=[0.5,1000,15, 2,0.5,30.0E-6];
action2(1)='update'; action2(2)=[1 1]; action2(3)=[0.5,1000,15, 2,0.5,15.0E-6];
action3(1)='update'; action3(2)=[1 1]; action3(3)=[0.5,1000,15, 2,0.5, 0.5E-6];
action4(1)='update'; action4(2)=[1 1]; action4(3)=[0.5,1000,15, 2,0.5, 0.5E-6];
```
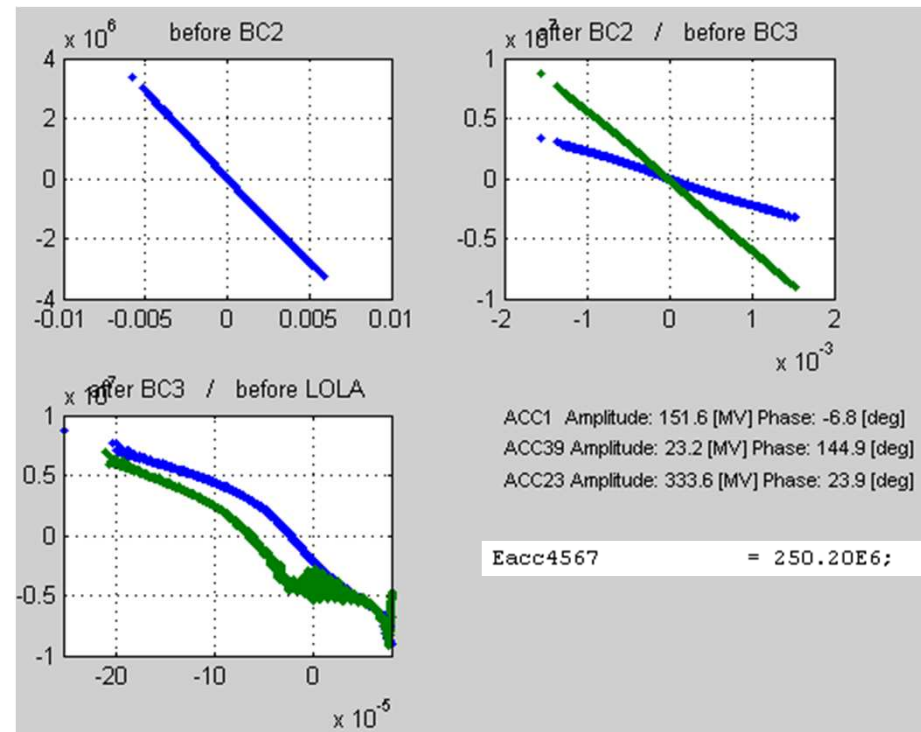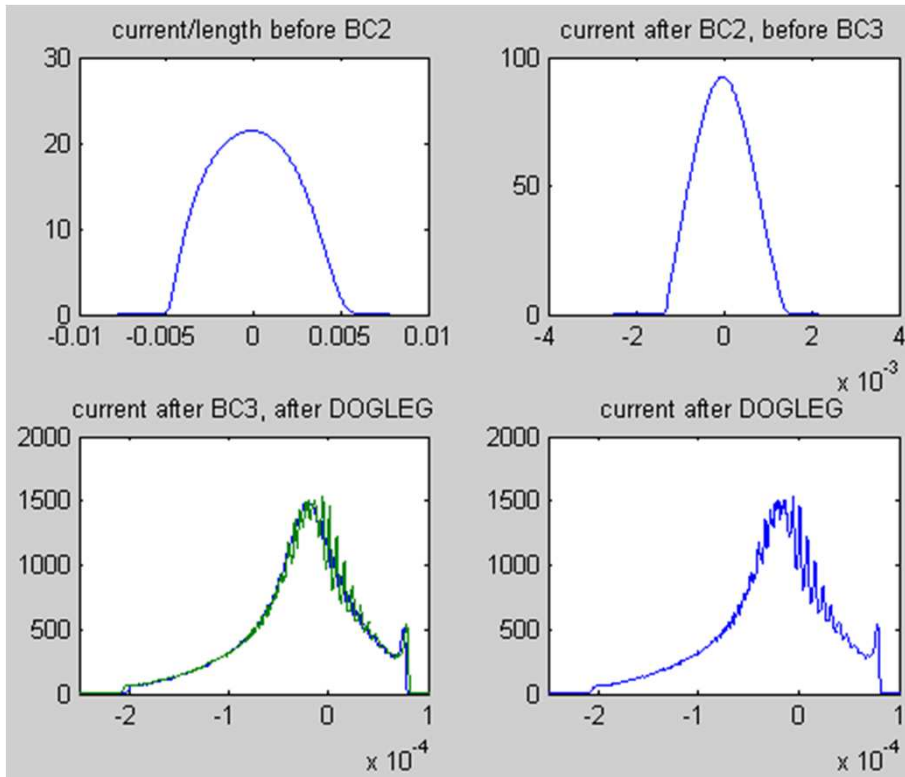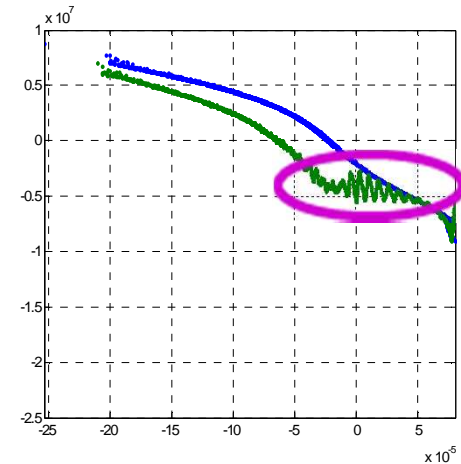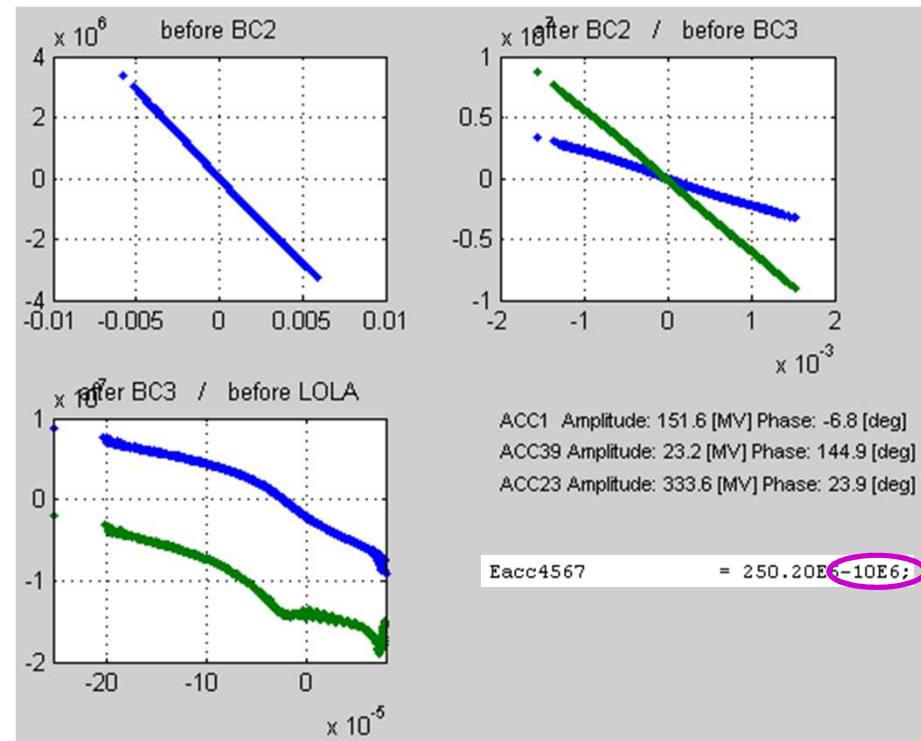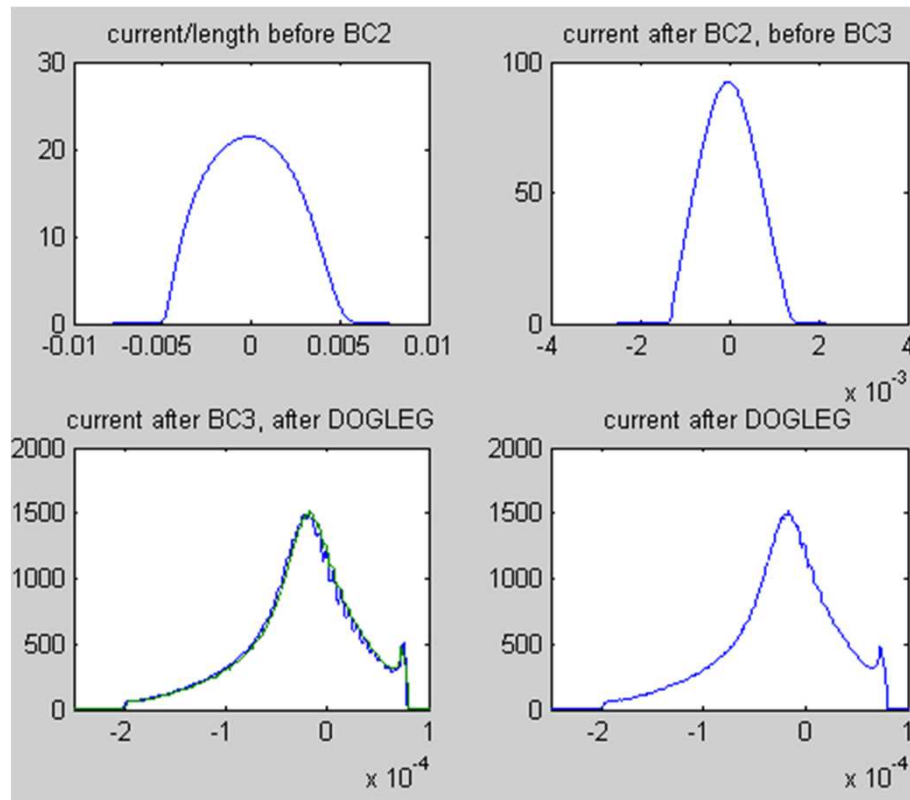
uB is amplified in Dogleg !!!
different Dogleg-r56 for different energy: next page

2% modulation at cathode
wavelength = 0.3 mm

10E6 particles, 500pC

```
%--- numerical parameters for wake ------------------------------
action1{1}='update'; action1{2}=[1 1]; action1{3}=[0.5,1000,15, 2,0.5,30.0E-6];
action2{1}='update'; action2{2}=[1 1]; action2{3}=[0.5,1000,15, 2,0.5,15.0E-6];
action3{1}='update'; action3{2}=[1 1]; action3{3}=[0.5,1000,15, 2,0.5, 0.5E-6];
action4{1}='update'; action4{2}=[1 1]; action4{3}=[0.5,1000,15, 2,0.5, 0.5E-6];
```