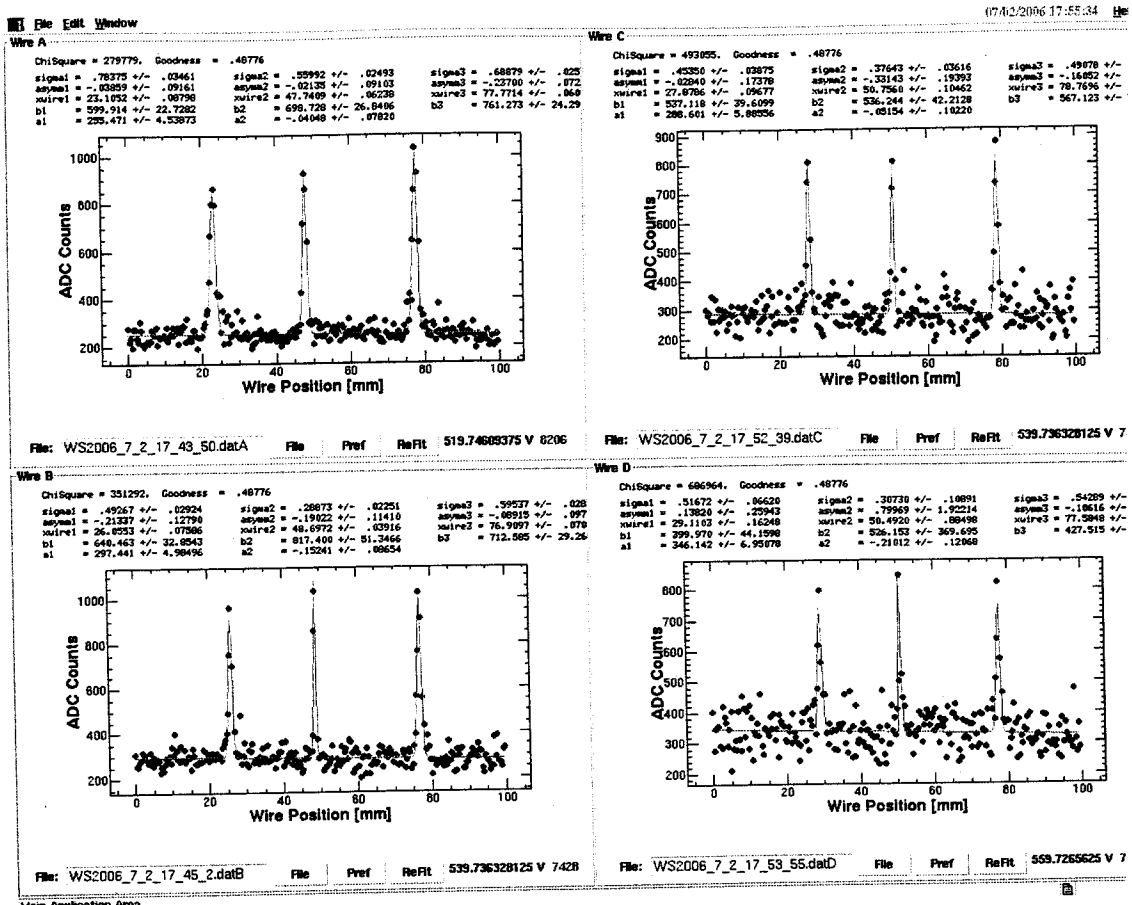
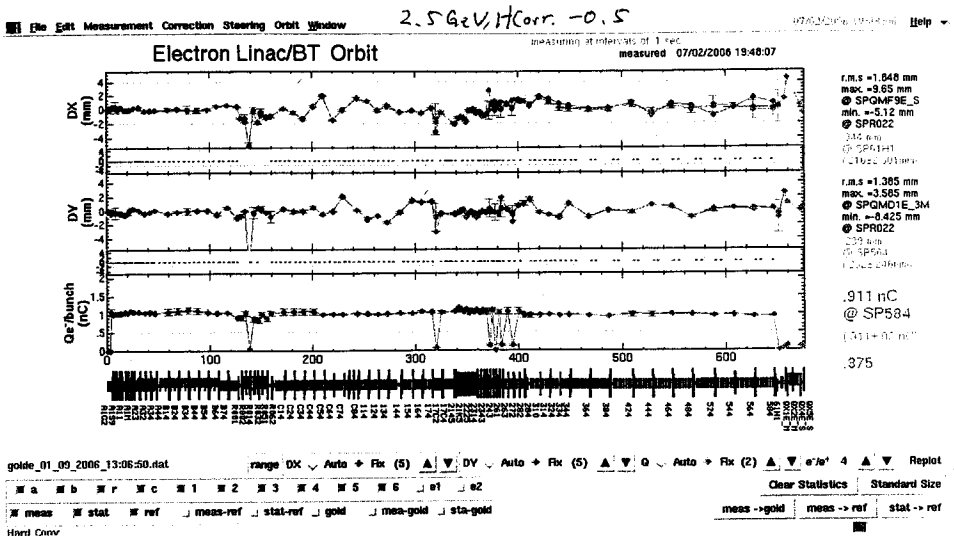


2006/07/02 B shift 5-Sec e- ~~10~~5Hz 1st 鈴木

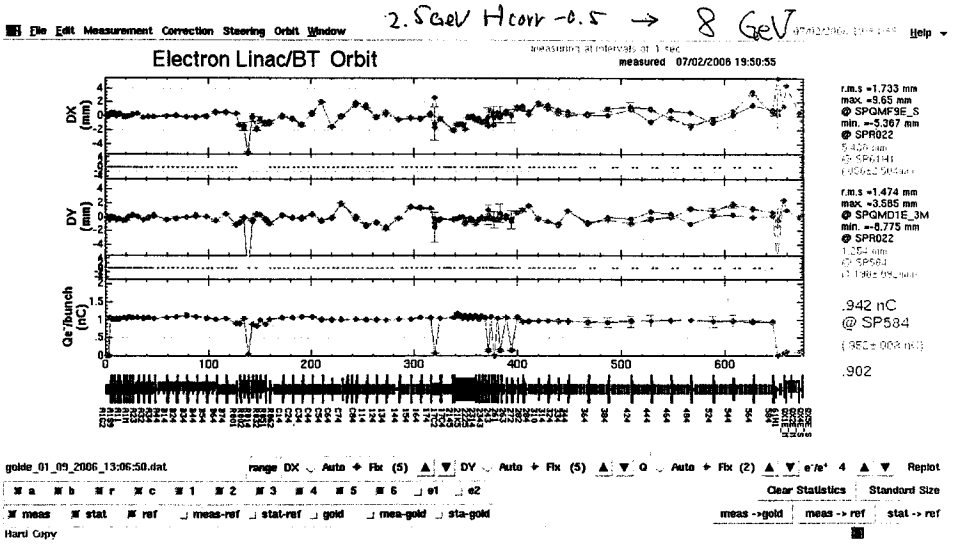
PF 8GeV

175

2.5GeV H corr. damp −0.5



そのまま 8GeV へ.



SP

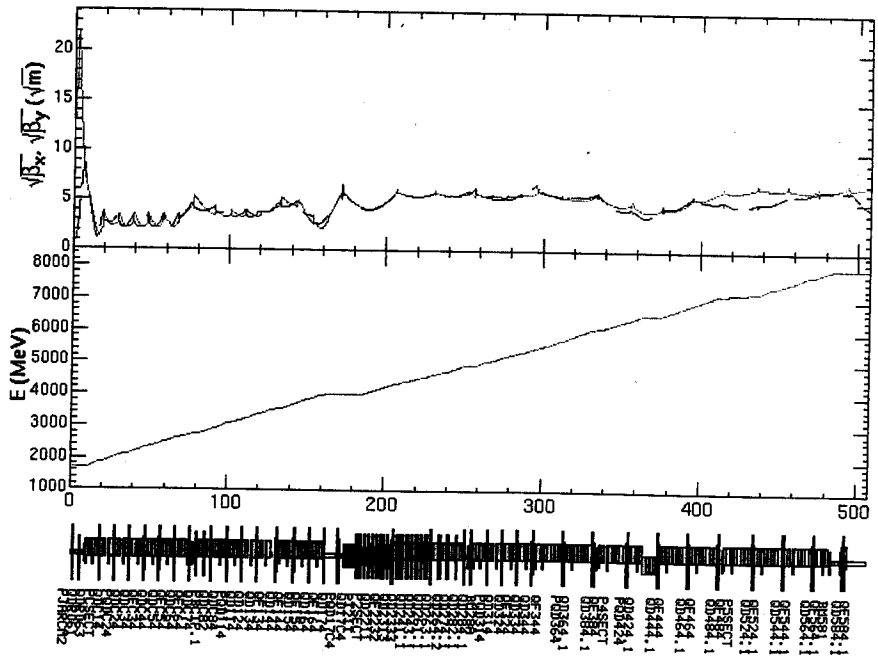
21:19:16 2.5 GeV 2.5+8 GeV (4)
21:20:59 8 GeV 補正後.

22:14:59 2.5 GeV 〃 全補正.
22:13:26 8 GeV

22:41:32 2.5 GeV 0.2nC.

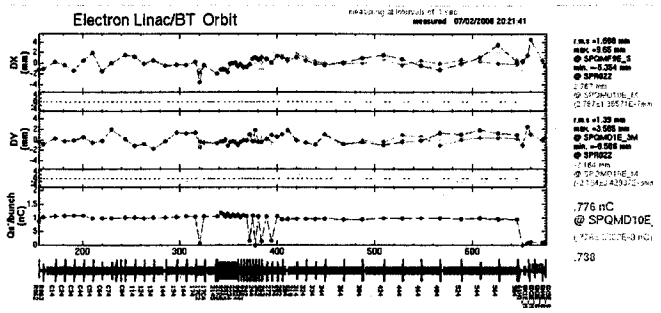
File Edit Window 07/03/2006 00:25:13 Help

8GeV

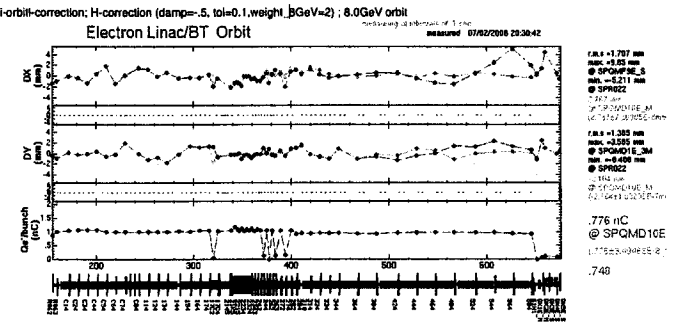


Main Application Area

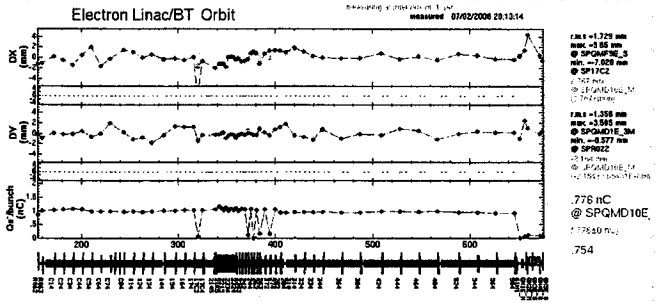
Multi-orbit-correction; H-correction (damp=.5, tol=0.1) : 8.0GeV orbit



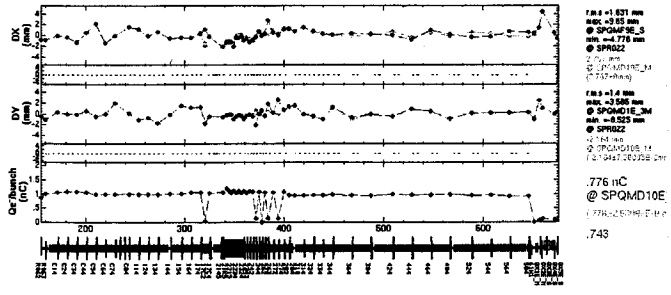
Multi-orbit-correction; H-correction (damp=.5, tol=0.1,weight_BGeV=2) ; 8.0GeV orbit



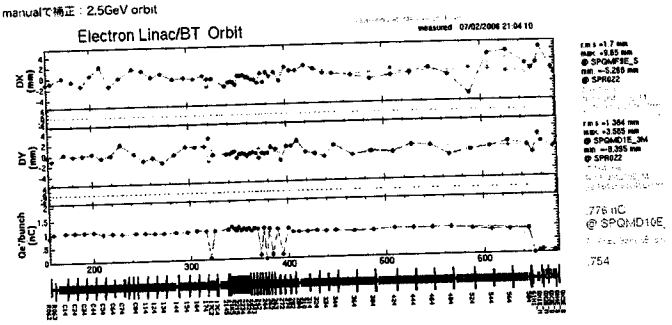
2.5 GeV 'H-correction(damp=0.5): 2.5GeV orbit



Multi-orbit-correction; H-correction (damp=.5, tol=0.1) : 2.5GeV orbit



8GeV manualで補正：2.5GeV orbit



179

File Edit Window Help

KEKB e- SAMPLE 07/02/2006 17:40:03

Energy(eV) EA1 2.0E7 EJARC 1.7E9 EPT 1.0E7 EZ1 8.5E7 E(e-) 8.0E9 E(e+) 3.5E9 ECT 1.0E7 E(AR) 3.0E9 E(PF) 2.5E9

ACC E(MeV/m) | KLY Phase/Crest

ACA11	10.784	ACB11	20.091	ACC11	21.100	AC111	20.956	AC211	.000	AC311	19.545	AC411	19.501	AC511	16.602
ACA12	10.784	ACB12	20.089	ACC12	21.096	AC112	20.952	AC212	.000	AC312	19.539	AC412	19.498	AC512	17.326
ACA21	19.889	ACB13	20.089	ACC13	21.100	AC113	20.956	AC213	.000	AC313	19.545	AC413	19.501	AC513	17.329
ACA22	19.916	ACB14	20.087	ACC14	21.096	AC114	20.952	AC214	.000	AC314	19.539	AC414	19.498	AC514	17.326
ACA23	19.916	ACB21	20.279	ACC21	20.582	AC121	19.691	AC221	19.442	AC321	17.289	AC421	21.027	AC521	14.703
ACA24	19.885	ACB22	20.277	ACC22	20.579	AC122	19.687	AC222	19.455	AC322	17.285	AC422	21.023	AC522	14.700
ACA31	22.357	ACB23	20.255	ACC23	20.582	AC123	19.691	AC223	19.455	AC323	17.289	AC423	21.027	AC523	14.703
ACA32	22.355	ACB24	20.275	ACC24	20.579	AC124	19.687	AC224	19.439	AC324	17.285	AC424	21.023	AC524	14.700
ACA33	22.355	ACB31	19.741	ACC31	18.825	AC131	21.023	AC231	19.706	AC331	16.207	AC431	18.251	AC531	18.146
ACA34	22.353	ACB32	19.739	ACC32	18.822	AC132	21.019	AC232	19.719	AC332	16.202	AC432	18.247	AC532	18.143
ACA41	20.097	ACB33	19.739	ACC33	18.825	AC133	21.023	AC233	19.719	AC333	16.207	AC433	18.251	AC533	18.146
ACA42	20.095	ACB34	19.737	ACC34	18.822	AC134	21.019	AC234	19.703	AC334	16.202	AC434	18.247	AC534	18.143
ACA43	20.095	ACB41	22.298	ACC41	19.027	AC141	19.820	AC241	19.664	AC341	17.256	AC451	19.437	AC541	20.126
ACA44	20.093	ACB42	22.296	ACC42	19.024	AC142	19.817	AC242	19.663	AC342	17.253	AC452	19.436	AC542	20.123
		ACB43	22.296	ACC43	19.027	AC143	19.820	AC243	19.663	AC343	17.256	AC453	19.437	AC543	20.562
		ACB44	22.294	ACC44	20.722	AC144	19.817	AC244	19.661	AC344	17.253	AC454	20.285	AC544	21.453
		ACB51	18.757	ACC51	18.458	AC151	22.020	AC261	18.401	AC351	19.457	AC461	20.786	AC551	19.650
		ACB52	18.756	ACC52	18.455	AC152	22.016	AC262	18.399	AC352	19.453	AC462	20.782	AC552	19.647
		ACB53	18.756	ACC53	18.458	AC153	21.557	AC263	18.399	AC353	19.457	AC463	20.786	AC553	19.650
		ACB54	18.754	ACC54	18.455	AC154	21.553	AC264	18.398	AC354	19.453	AC464	20.782	AC554	19.647
		ACB61	20.082	ACC61	19.729	AC161	20.427	AC271	18.820	AC361	20.975	AC471	20.686	AC561	17.936
		ACB62	20.102	ACC62	19.725	AC162	20.424	AC272	18.819	AC362	20.972	AC472	20.682	AC562	17.932
		ACB63	20.094	ACC63	19.729	AC163	20.427	AC273	18.814	AC363	20.975	AC473	20.686	AC563	17.936
		ACB64	20.078	ACC64	19.725	AC164	20.424	AC274	18.812	AC364	20.972	AC474	20.682	AC564	17.932
		ACB71	12.453	ACC71	16.407	AC171	20.747	AC281	18.386	AC371	18.628	AC481	20.910	AC571	20.439
		ACB72	12.452	ACC72	16.404	AC172	20.743	AC282	18.385	AC372	18.624	AC482	20.906	AC572	20.435
		ACB73	12.452	ACC73	16.060	AC173	20.747	AC283	19.595	AC373	20.290	AC483	19.197	AC573	19.168
		ACB74	12.451	ACC74	16.058	AC174	20.743	AC284	19.593	AC374	20.286	AC484	20.466	AC574	19.164
		ACB81	20.853	ACC81	21.103					AC381	20.611			AC617	.000
		ACB82	20.851	ACC82	21.099					AC382	20.607			AC618	.000
		ACB83	20.851	ACC83	21.103					AC383	20.611				
		ACB84	20.849	ACC84	19.787					AC384	20.607				

Write Enable

Save file to >>> /usr/users/control/data/transport/sabot/kbe/vacsaddata /usr/users/control/data/transport/sabot/kbe/qmfsaddata

File Edit Window Help

KEKB e- SAMPLE 07/02/2006 17:29:22

Energy(eV) EA1 2.0E7 EJARC 1.7E9 EPT 1.0E7 EZ1 8.5E7 E(e-) 2.5E9 E(e+) 3.5E9 ECT 1.0E7 E(AR) 3.0E9 E(PF) 2.5E9

ACC E(MeV/m) | KLY Phase/Crest

ACA11	10.796	ACB11	20.115	ACC11	23.471	AC111	23.319	AC211	.000	AC311	.000	AC411	-20.618	AC511	-18.450
ACA12	10.796	ACB12	20.113	ACC12	23.467	AC112	23.315	AC212	.000	AC312	.000	AC412	-20.614	AC512	-19.254
ACA21	19.914	ACB13	20.113	ACC13	23.471	AC113	23.319	AC213	.000	AC313	.000	AC413	-20.618	AC513	-19.258
ACA22	19.941	ACB14	20.111	ACC14	23.467	AC114	23.315	AC214	.000	AC314	.000	AC414	-20.614	AC514	-19.254
ACA23	19.941	ACB21	20.303	ACC21	22.895	AC121	21.911	AC221	21.639	AC321	.000	AC421	-22.249	AC521	-16.383
ACA24	19.910	ACB22	20.301	ACC22	22.891	AC122	21.908	AC222	21.653	AC322	.000	AC422	-22.245	AC522	-16.380
ACA31	22.386	ACB23	20.279	ACC23	22.895	AC123	21.911	AC223	21.653	AC323	.000	AC423	-22.249	AC523	-16.383
ACA32	22.384	ACB24	20.299	ACC24	22.891	AC124	21.908	AC224	21.635	AC324	.000	AC424	-22.245	AC524	-16.380
ACA33	22.384	ACB31	19.764	ACC31	20.940	AC131	23.394	AC231	21.933	AC331	.000	AC431	-19.351	AC531	-20.191
ACA34	22.382	ACB32	19.762	ACC32	20.936	AC132	23.390	AC232	21.947	AC332	.000	AC432	-19.347	AC532	-20.188
ACA41	20.122	ACB33	19.762	ACC33	20.940	AC133	23.394	AC233	21.947	AC333	.000	AC433	-19.351	AC533	-20.191
ACA42	20.121	ACB34	19.760	ACC34	20.936	AC134	23.390	AC234	21.929	AC334	.000	AC434	-19.347	AC534	-20.188
ACA43	20.121	ACB41	22.324	ACC41	21.165	AC141	22.056	AC241	21.886	AC341	.000	AC451	-20.626	AC541	-22.396
ACA44	20.119	ACB42	22.322	ACC42	21.162	AC142	22.052	AC242	21.885	AC342	.000	AC452	-20.624	AC542	-22.392
		ACB43	22.322	ACC43	21.165	AC143	22.056	AC243	21.885	AC343	.000	AC453	-20.626	AC543	-22.881
		ACB44	22.320	ACC44	23.050	AC144	22.052	AC244	21.882	AC344	.000	AC454	-21.525	AC544	-23.873
		ACB51	18.621	ACC51	20.532	AC151	24.503	AC261	20.480	AC351	.000	AC461	-21.976	AC551	-21.867
		ACB52	18.620	ACC52	20.528	AC152	24.499	AC262	20.479	AC352	.000	AC462	-21.972	AC552	-21.863
		ACB53	18.620	ACC53	20.532	AC153	23.988	AC263	20.479	AC353	.000	AC463	-21.976	AC553	-21.867
		ACB54	18.618	ACC54	20.528	AC154	23.984	AC264	20.477	AC354	.000	AC464	-21.972	AC554	-21.863
		ACB61	19.996	ACC61	21.945	AC161	22.731	AC271	20.947	AC361	-22.158	AC471	-21.951	AC561	-19.959
		ACB62	20.016	ACC62	21.941	AC162	22.727	AC272	20.945	AC362	-22.154	AC472	-21.947	AC562	-19.955
		ACB63	20.009	ACC63	21.945	AC163	22.731	AC273	20.939	AC363	-22.158	AC473	-21.951	AC563	-19.959
		ACB64	19.992	ACC64	21.941	AC164	22.727	AC274	20.938	AC364	-22.154	AC474	-21.947	AC564	-19.955
		ACB71	12.468	ACC71	18.251	AC171	23.087	AC281	20.464	AC371	-19.719	AC481	-22.116	AC571	-22.743
		ACB72	12.467	ACC72	18.248	AC172	23.083	AC282	20.462	AC372	-19.716	AC482	-22.112	AC572	-22.739
		ACB73	12.467	ACC73	17.866	AC173	23.087	AC283	21.810	AC373	-21.479	AC483	-20.304	AC573	-21.329
		ACB74	12.466	ACC74	17.862	AC174	23.083	AC284	21.808	AC374	-21.475	AC484	-21.647	AC574	-21.325
		ACB81	20.877	ACC81	23.474					AC381	-21.809			AC617	.000
		ACB82	20.875	ACC82	23.470					AC382	-21.806			AC618	.000
		ACB83	20.875	ACC83	23.474					AC383	-21.809				
		ACB84	20.873	ACC84	22.010					AC384	-21.806				

Write Enable

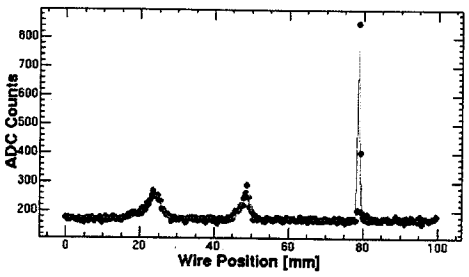
Save file to >>> /usr/users/control/data/transport/sabot/kbe/vacsaddata /usr/users/control/data/transport/sabot/kbe/qmfsaddata

File Edit Window 07/02/2006 23:14:44 Help

Wire A

ChiSquare = 9364.39 Goodness = .48776

sigma1 = 2.13492 +/- .08138	sigma2 = 1.10901 +/- .04824	sigma3 = .23299 +/- .083
asymm1 = -.37494 +/- .07060	asymm2 = -.42798 +/- .08049	asymm3 = .71578 +/- .175
xwire1 = 24.5354 +/- .18449	xwire2 = 48.8669 +/- .18890	xwire3 = 78.5691 +/- .099
b1 = 79.7718 +/- 2.54439	b2 = 93.7242 +/- 3.50253	b3 = 880.605 +/- 86.08
a1 = 172.660 +/- .90398	a2 = -.00389 +/- .01482	

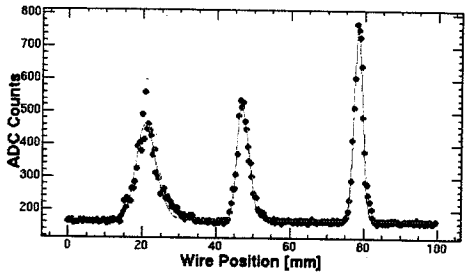


File: WS2006_7_2_22_50_2.datA File Pref ReFit 519.74609375 V 8212

Wire C

ChiSquare = 58986.6 Goodness = .48776

sigma1 = 2.68521 +/- .06388	sigma2 = 1.63180 +/- .03955	sigma3 = 1.16643 +/- .018
asymm1 = .18250 +/- .04619	asymm2 = .28349 +/- .04774	asymm3 = .06791 +/- .034
xwire1 = 20.6435 +/- .15179	xwire2 = 46.6332 +/- .09538	xwire3 = 78.3865 +/- .049
b1 = 290.615 +/- 5.74961	b2 = 350.199 +/- 7.25346	b3 = 593.591 +/- 8.567
a1 = 169.636 +/- 2.38619	a2 = -.02886 +/- .03894	

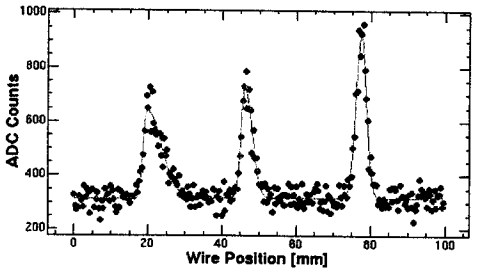


File: WS2006_7_2_23_5_9.datC File Pref ReFit 564.72412109375 V 7459

Wire B

ChiSquare = 283038. Goodness = .48776

sigma1 = 2.47097 +/- .11684	sigma2 = 1.45239 +/- .06849	sigma3 = 1.38974 +/- .045
asymm1 = .57888 +/- .07689	asymm2 = .34392 +/- .09160	asymm3 = -.03398 +/- .067
xwire1 = 19.8348 +/- .23253	xwire2 = 46.1488 +/- .16303	xwire3 = 77.5134 +/- .114
b1 = 328.687 +/- 13.1112	b2 = 416.606 +/- 16.8174	b3 = 614.522 +/- 17.25
a1 = 313.558 +/- 5.07434	a2 = .05197 +/- .08396	

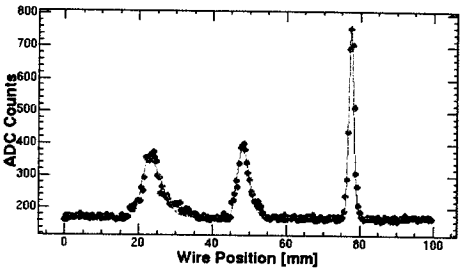


File: WS2006_7_2_22_58_28.datB File Pref ReFit 749.5337890625 V 7432

Wire D

ChiSquare = 32713.1 Goodness = .48776

sigma1 = 2.51988 +/- .07283	sigma2 = 1.62477 +/- .04835	sigma3 = .71300 +/- .011
asymm1 = .28411 +/- .05544	asymm2 = .17458 +/- .06946	asymm3 = .06005 +/- .033
xwire1 = 22.9548 +/- .17096	xwire2 = 48.0451 +/- .12831	xwire3 = 77.6801 +/- .028
b1 = 181.174 +/- 4.48222	b2 = 212.569 +/- 5.48897	b3 = 601.039 +/- 8.151
a1 = 173.741 +/- 1.71486	a2 = -.03497 +/- .02795	



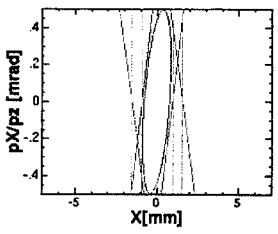
File: WS2006_7_2_23_11_13.datD File Pref ReFit 579.716796875 V 7699

Main Application Area

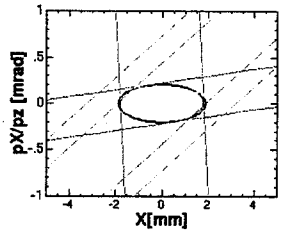
File Edit Window 07/02/2006 23:14:53 Help

Wire Scan | Optics Calculate | Matching

X phase space at Wire A



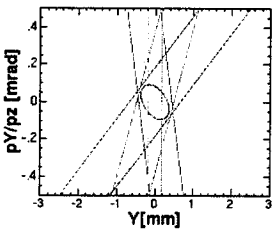
X phase space at Matching Point



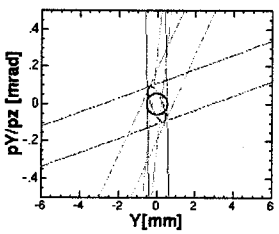
Results of Measurement

β_x @AC574+1 [m] :	8.566	β_y @AC574+1 [m] :	6.807
α_x @AC574+1 :	-.038	α_y @AC574+1 :	1.024
ε_x [m] :	3.8292E-7	ε_y [m] :	3.0581E-8
$\gamma\varepsilon_x$ [π.mm.mrad] :	1873.357	$\gamma\varepsilon_y$ [π.mm.mrad] :	149.660
Bmag x :	1.006	Bmag y :	1.799
εBmag x :	4.8468E-7	εBmag y :	6.9255E-8
γεBmag x :	2371.076	γεBmag y :	338.811

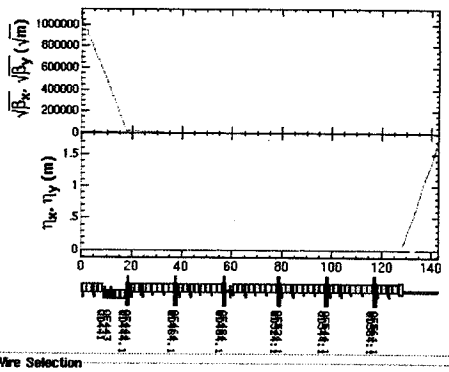
Y phase space at Wire A



Y phase space at Matching Point



Optics Plot



Wire Selection

3-wire:ABC 3-wire:ABD 3-wire:ACD 3-wire:BCD

◆ 4-wire:ABCD

Err(meas), nσ n: 0 Err(opt) (%): 0

"Calculate Optics" Save All Parameters

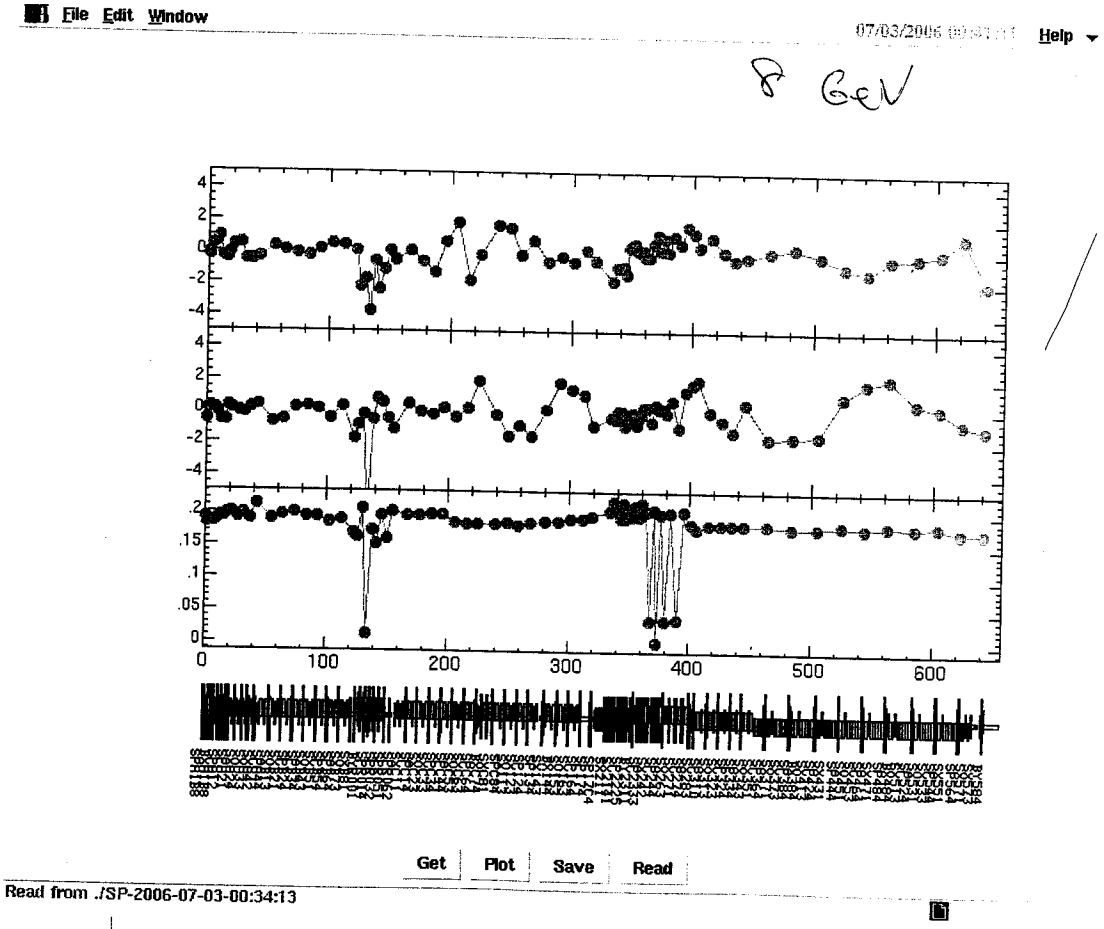
Qmag values were SAVEd to /data1/KEKB/Wire/LINAC/sector5/PF/data/Qvalue/qname_2006_7_2_22_41_13.dat0

O.K. n C

KEKBe2 - 2006-07-03-00:00:23 2.5GeV 105° coll
SP 07-03-00:02:04. Orbit

KEKBe2 - 2006-07-03-00:13:34 8.0GeV
SP 07-03-00:30:26 orbit.

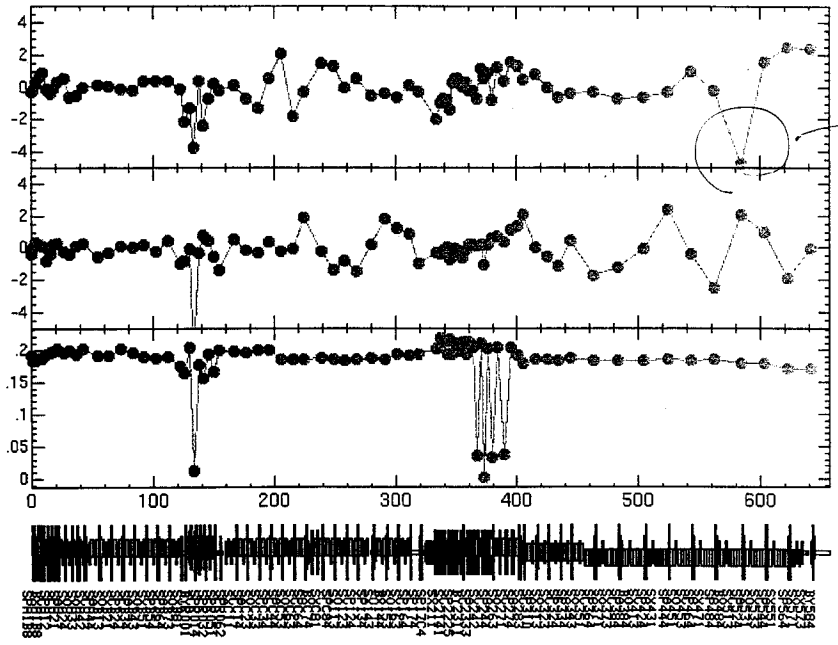
軌道補正. 8GeV SP 00:34:13
2.5GeV SP 00:37:06



File Edit Window 07/03/2006 00:36:33 Help

2.5 GeV

cell



Bump Orbit

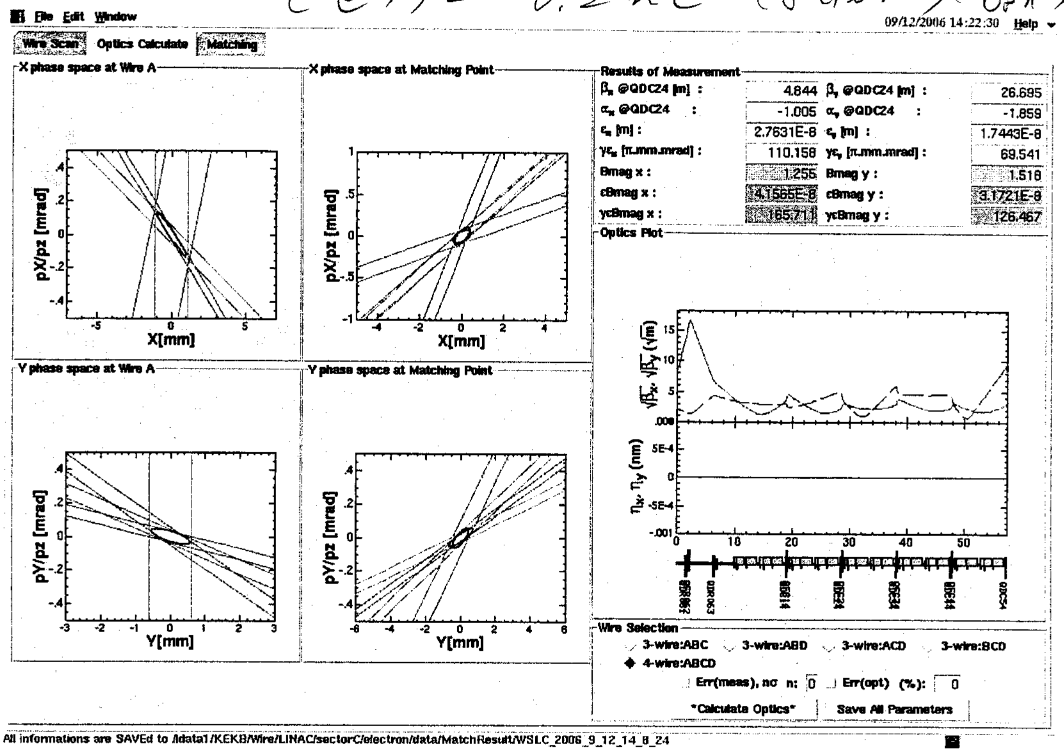
Get Plot Save Read

Save to SP-2006-07-03-00:37:06

183 昼間 | シフト

'06/9/12 Multi Energy Study 大西.飯田 | 吉川.

Cセクター 0.2nC (8GeV)(運転Opt.)



5セクター 0.2nC 8GeV (運転オプティクス)