Instructions for use

The spreadsheet is protected. Changes are allowed only in designated cells

Work only on "Tasks" page, ignore other pages

Cells that can be changed are shown in CLEAR background

Protected cells are greyed out

Please enter the actual duration of each actvity: enter times as HH:MM

Indicate completed activities with 100% in the corresponding column (enter 100, not 1)

The activities' names and descriptions can and should be changed to reflect the actual conditions

The GANTT charts are updated automatically as the activities are completed

Err:527 or charts not updating/no bars is caused by slow recalculation: JUST PRESS F9 to update worksheet (repeat as needed)

Please DON'T unprotect the document and make changes, ask the authors (see below)

Please ASK Oscar Rondon, Garth Huber or Cornel Butuceanu if you are unsure about any item

Zero Field Calibrations

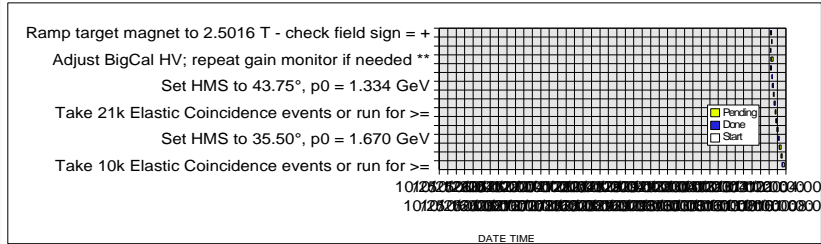| Info	No.	Activity Name - Zero Field Calibrations	Duration	Start	Finish	Complete	Done	Pending	Beam on Target
→	100	Elastic Calibrations	120:00	10/30 00:00	11/03 23:59	87%	08:49	15:10	
	200	Set HMS to electrons	00:20	10/30 00:00	10/30 00:20	0%	00:00	00:20	
	201	Beam energy measurement	03:00	10/30 00:00	10/30 03:00	0%	00:00	03:00	
	202	HMS focal plane checkout; use C disk target	30:00	10/30 03:00	10/31 09:00	0%	00:00	06:00	
	203	Ask for 1 cm slow raster	00:10	10/31 09:00	10/31 09:10		00:00	00:10	
→	300	BigCal field OFF gain monitor ADC's	00:15	10/31 09:10	10/31 09:25		00:00	00:15	
✔	310	Set HMS to protons 46.50°, p0 = 1.233 GeV. **Start this at #300.**	00:00	10/31 09:10	10/31 09:10	100%	00:00	00:00	
✔	311	Take 11k Elastic Coincidence events or run for >=	00:00	10/31 09:10	10/31 09:10	100%	00:00	00:00	00:00
	312	Set HMS to protons 43.1°, p0 = 1.360 GeV	00:30	10/31 09:10	10/31 09:40		00:00	00:30	
	313	Take 17k Elastic Coincidence events or run for >=	00:26	10/31 09:40	10/31 10:06		00:00	00:26	00:26
	314	Set HMS to 41.00°, p0 = 1.443 GeV	00:30	10/31 10:06	10/31 10:36		00:00	00:30	
	315	Take 21k Elastic Coincidence events or run for >=	00:45	10/31 10:36	10/31 11:21		00:00	00:45	01:11
	316	Set HMS to 38.25°, p0 = 1.555 GeV	00:30	10/31 11:21	10/31 11:51		00:00	00:30	
	317	Take 26k Elastic Coincidence events or run for >=	01:22	10/31 11:51	10/31 13:13		00:00	01:22	02:33
	318	Set HMS to 35.50°, p0 = 1.670 GeV	00:30	10/31 13:13	10/31 13:43		00:00	00:30	
	319	Take 32k Elastic Coincidence events or run for >=	02:30	10/31 13:43	10/31 16:13		00:00	02:30	05:03
	320	Set HMS to 32.75°, p0 = 1.789 GeV	00:30	10/31 16:13	10/31 16:43		00:00	00:30	
	321	Take 18k Elastic Coincidence events or run for >=	03:00	10/31 16:43	10/31 19:43		00:00	03:00	08:03
	322	Set HMS to 30.00°, p0 = 1.907 GeV	00:30	10/31 19:43	10/31 20:13		00:00	00:30	
	323	Take 4k Elastic Coincidence events or run for >=	04:30	10/31 20:13	11/01 00:43		00:00	04:30	12:33

* Standard HMS momentum change time = 00:30

NOTE: Scale counts by 1.5 for CH2 target
Times already scaled with CH2/NH3 rate factor   0.667

Half Field 0deg Calibrations
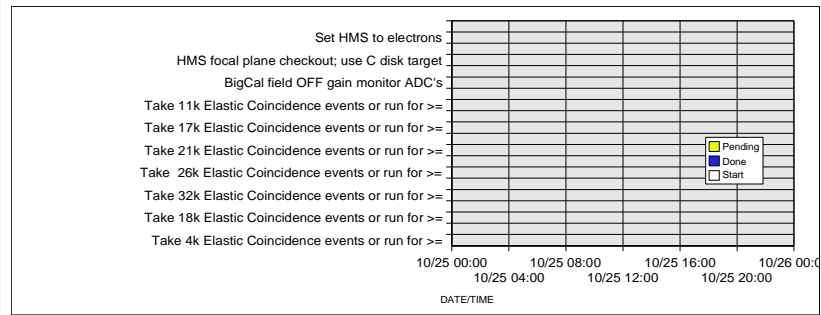
Info	No.	Activity Name - Half Field 0deg Calibrations	Duration	Start	Finish	Complete	Done	Pending	Beam on Target
	350	Ramp target magnet to 2.5016 T - check field sign = +	00:30	11/01 00:43	11/01 01:13		00:00	00:30	
	351	Ask for 1 uA beam, 1 cm slow raster, centered	00:10	11/01 01:13	11/01 01:23		00:00	00:10	
	352	BigCal half field gain monitor ADC's	00:15	11/01 00:43	11/01 00:58		00:00	00:15	
	353	Adjust BigCal HV; repeat gain monitor if needed **	01:00	11/01 00:58	11/01 01:58		00:00	01:00	
	354	Set HMS to 46.50°, p0 = 1.233 GeV. **Start this at #350.**	00:30	11/01 00:43	11/01 01:13		00:00	00:30	
	355	Take 9k Elastic Coincidence events or run for >=	00:13	11/01 01:23	11/01 01:36		00:00	00:13	00:13
	356	Set HMS to 43.75°, p0 = 1.334 GeV	00:30	11/01 01:36	11/01 02:06		00:00	00:30	
	357	Take 18k Elastic Coincidence events or run for >=	00:17	11/01 02:06	11/01 02:23		00:00	00:17	00:30
	358	Set HMS to 41.00°, p0 = 1.443 GeV	00:30	11/01 02:23	11/01 02:53		00:00	00:30	
	359	Take 21k Elastic Coincidence events or run for >=	00:30	11/01 02:53	11/01 03:23		00:00	00:30	01:00
	360	Set HMS to 38.25°, p0 = 1.555 GeV	00:30	11/01 03:23	11/01 03:53		00:00	00:30	
	361	Take 13k Elastic Coincidence events or run for >=	00:28	11/01 03:53	11/01 04:21		00:00	00:28	01:28
	362	Set HMS to 35.50°, p0 = 1.670 GeV	00:30	11/01 04:21	11/01 04:51		00:00	00:30	
	363	Take 17k Elastic Coincidence events or run for >=	00:51	11/01 04:51	11/01 05:42		00:00	00:51	02:19
	364	Set HMS to 32.75°, p0 = 1.789 GeV	00:30	11/01 05:42	11/01 06:12		00:00	00:30	
	365	Take 10k Elastic Coincidence events or run for >=	01:00	11/01 06:12	11/01 07:12		00:00	01:00	03:19

** Set as 100% complete if it was actually done

Full Field 0deg Calibrations

Info	No.	Activity Name - Full Field 0deg Calibrations	Duration	Start	Finish	Complete	Done	Pending	Beam on Target
	400	Ramp target magnet to 5.0033 T - check field sign = +	00:30	11/01 07:12	11/01 07:42		00:00	00:30	
	401	Ask for 1 uA beam, 1 cm slow raster, centered	00:10	11/01 07:42	11/01 07:52		00:00	00:10	
	402	BigCal full field gain monitor ADC's	00:15	11/01 07:12	11/01 07:27		00:00	00:15	
	403	Adjust BigCal HV; repeat gain monitor if needed **	01:00	11/01 07:27	11/01 08:27		00:00	01:00	
	404	Set HMS to 43.75°, p0 = 1.334 GeV. **Start this at #400**	00:30	11/01 07:12	11/01 07:42		00:00	00:30	
	405	Take 19k Elastic Coincidence events or run for >=	00:20	11/01 07:52	11/01 08:12		00:00	00:20	00:20

Info	No.	Activity Name	Duration	Start	Finish	Complete	Done	Pending	Beam on Target
	406	Set HMS to 41.00°, p0 = 1.443 GeV	00:30	11/01 08:12	11/01 08:42		00:00	00:30	
	407	Take 24k Elastic Coincidence events or run for >=	00:32	11/01 08:42	11/01 09:14		00:00	00:32	00:52
	408	Set HMS to 38.25°, p0 = 1.555 GeV	00:30	11/01 09:14	11/01 09:44		00:00	00:30	
	409	Take 29k Elastic Coincidence events or run for >=	01:00	11/01 09:44	11/01 10:44		00:00	01:00	01:52
	410	Set HMS to 35.50°, p0 = 1.670 GeV	00:30	11/01 10:44	11/01 11:14		00:00	00:30	
	411	Take 37k Elastic Coincidence events or run for >=	01:47	11/01 11:14	11/01 13:01		00:00	01:47	03:39
	412	Set HMS to 32.75°, p0 = 1.789 GeV	00:30	11/01 13:01	11/01 13:31		00:00	00:30	
	413	Take 22k Elastic Coincidence events or run for >=	02:00	11/01 13:31	11/01 15:31		00:00	02:00	05:39
	414	Set HMS to 30.00°, p0 = 1.907 GeV	00:30	11/01 15:31	11/01 16:01		00:00	00:30	
	415	Take 8k Elastic Coincidence events or run for >=	03:47	11/01 16:01	11/01 19:48		00:00	03:47	09:26
	416	Target work: anneal - TE - polarize	08:00	11/01 19:48	11/02 03:48		00:00	08:00	

** Set as 100% complete if it was actually done

Info	No.	Activity Name - Half Field 180deg Calibrations	Duration	Start	Finish	Complete	Done	Pending	Beam on Target
	500	Ramp magnet down; Hall access to reverse lead polarity at target PS	02:00	11/02 03:48	11/02 05:48		00:00	02:00	
	501	Ramp target magnet to 2.5016 T - check field sign = -	00:30	11/02 05:48	11/02 06:18		00:00	00:30	
	502	Ask for 1 uA beam, 1 cm slow raster, centered	00:10	11/02 06:18	11/02 06:28		00:00	00:10	
	503	BigCal half field gain monitor ADC's.	00:15	11/02 03:48	11/02 04:03		00:00	00:15	
	504	Adjust BigCal HV; repeat gain monitor if needed **	01:00	11/02 04:03	11/02 05:03		00:00	01:00	
	505	Set HMS to 46.50°, p0 = 1.233 GeV. Start this at #500	00:30	11/02 03:48	11/02 04:18		00:00	00:30	
	506	Take 9k Elastic Coincidence events or run for >=	00:13	11/02 06:28	11/02 06:41		00:00	00:13	00:13
	507	Set HMS to 43.75°, p0 = 1.334 GeV	00:30	11/02 06:41	11/02 07:11		00:00	00:30	
	508	Take 18k Elastic Coincidence events or run for >=	00:17	11/02 07:11	11/02 07:28		00:00	00:17	00:30
	509	Set HMS to 41.00°, p0 = 1.443 GeV	00:30	11/02 07:28	11/02 07:58		00:00	00:30	
	510	Take 22k Elastic Coincidence events or run for >=	00:31	11/02 07:58	11/02 08:29		00:00	00:31	01:01
	511	Set HMS to 38.25°, p0 = 1.555 GeV	00:30	11/02 08:29	11/02 08:59		00:00	00:30	
	512	Take 13k Elastic Coincidence events or run for >=	00:28	11/02 08:59	11/02 09:27		00:00	00:28	01:29
	513	Set HMS to 35.50°, p0 = 1.670 GeV	00:30	11/02 09:27	11/02 09:57		00:00	00:30	
	514	Take 17k Elastic Coincidence events or run for >=	00:51	11/02 09:57	11/02 10:48		00:00	00:51	02:20
	515	Set HMS to 32.75°, p0 = 1.789 GeV	00:30	11/02 10:48	11/02 11:18		00:00	00:30	
	516	Take 10k Elastic Coincidence events or run for >=	00:58	11/02 11:18	11/02 12:16		00:00	00:58	03:18

** Set as 100% complete if it was actually done
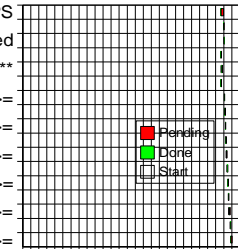
Info	No.	Activity Name - Full Field 180deg Calibrations	Duration	Start	Finish	Complete	Done	Pending	Beam on Target
	600	Ramp target magnet to 5.0033 T - check field sign = -	00:30	11/02 12:16	11/02 12:46		00:00	00:30	
	601	Ask for 1 uA beam, 1 cm slow raster, centered	00:10	11/02 12:46	11/02 12:56		00:00	00:10	
	602	BigCal full field gain monitor ADC's if needed **	00:15	11/02 12:16	11/02 12:31		00:00	00:15	
	603	Adjust BigCal HV; repeat gain monitor if needed **	01:00	11/02 12:31	11/02 13:31		00:00	01:00	
	604	Set HMS to 43.75°, p0 = 1.334 GeV. Start this at #600.	00:30	11/02 12:16	11/02 12:46		00:00	00:30	
	605	Take 19k Elastic Coincidence events or run for >=	00:20	11/02 12:56	11/02 13:16		00:00	00:20	00:20
	606	Set HMS to 41.00°, p0 = 1.443 GeV	00:30	11/02 13:16	11/02 13:46		00:00	00:30	
	607	Take 24k Elastic Coincidence events or run for >=	00:32	11/02 13:46	11/02 14:18		00:00	00:32	00:52
	608	Set HMS to 38.25°, p0 = 1.555 GeV	00:30	11/02 14:18	11/02 14:48		00:00	00:30	
	609	Take 29k Elastic Coincidence events or run for >=	01:00	11/02 14:48	11/02 15:48		00:00	01:00	01:52
	610	Set HMS to 35.50°, p0 = 1.670 GeV	00:30	11/02 15:48	11/02 16:18		00:00	00:30	
	611	Take 37k Elastic Coincidence events or run for >=	01:47	11/02 16:18	11/02 18:05		00:00	01:47	03:39
	612	Set HMS to 32.75°, p0 = 1.789 GeV	00:30	11/02 18:05	11/02 18:35		00:00	00:30	
	613	Take 22k Elastic Coincidence events or run for >=	02:00	11/02 18:35	11/02 20:35		00:00	02:00	05:39
	614	Set HMS to 30.00°, p0 = 1.907 GeV	00:30	11/02 20:35	11/02 21:05		00:00	00:30	
	615	Take 8k Elastic Coincidence events or run for >=	03:45	11/02 21:05	11/03 00:50		00:00	03:45	09:24
	616	Target work: anneal - TE - polarize	08:00	11/03 00:50	11/03 08:50		00:00	08:00	

Ramp magnet down; Hall access to reverse lead polarity at target PS
Ask for 1 uA beam, 1 cm slow raster, centered
Adjust BigCal HV; repeat gain monitor if needed **
Take 9k Elastic Coincidence events or run for >=
Take 18k Elastic Coincidence events or run for >=
Take 22k Elastic Coincidence events or run for >=
Take 13k Elastic Coincidence events or run for >=
Take 17k Elastic Coincidence events or run for >=
Take 10k Elastic Coincidence events or run for >=

10/27 00:00 10/31 00:00

DATE/TIME

Ramp target magnet to 5.0033 T - check field sign = -
BigCal full field gain monitor ADC's if needed **
Set HMS to 43.75°, p0 = 1.334 GeV. Start this at #600.
Set HMS to 41.00°, p0 = 1.443 GeV
Set HMS to 38.25°, p0 = 1.555 GeV
Set HMS to 35.50°, p0 = 1.670 GeV
Set HMS to 32.75°, p0 = 1.789 GeV
Set HMS to 30.00°, p0 = 1.907 GeV
Target work: anneal - TE - polarize
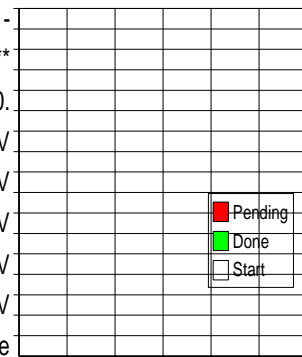
10/27 00:00   10/27 18:00   10/28 12:

** If #602,603 are not needed, set BigCal HV as in #403 and set 602, 603 = 100% complete

DATE/TIME

Chart 1

Elastic Calibrations
Set HMS to electrons
Beam energy measurement
HMS focal plane checkout; use C disk target
Ask for 1 uA beam, 1 cm slow raster
BigCal field OFF gain monitor ADC's
Set HMS to protons 46.50°, p0 = 1.233 GeV. Start this at #300.
Take 11k Elastic Coincidence events or run for >=
Set HMS to protons 43.1°, p0 = 1.360 GeV   Start this at #300.
Take 17k Elastic Coincidence events or run for >=
Set HMS to 41.00°, p0 = 1.443 GeV
Take 21k Elastic Coincidence events or run for >=
Set HMS to 38.25°, p0 = 1.555 GeV
Take 26k Elastic Coincidence events or run for >=
Set HMS to 35.50°, p0 = 1.670 GeV
Take 32k Elastic Coincidence events or run for >=
Set HMS to 32.75°, p0 = 1.789 GeV
Take 18k Elastic Coincidence events or run for >=
Set HMS to 30.00°, p0 = 1.907 GeV
Take 4k Elastic Coincidence events or run for >=

Legend: Pending, Done, Start

DATE/TIME

Chart 2

Ask for 1 uA beam, 1 cm slow raster, centered
Adjust BigCal HV; repeat gain monitor if needed **
Take 9k Elastic Coincidence events or run for >=
Take 18k Elastic Coincidence events or run for >=
Take 21k Elastic Coincidence events or run for >=
Take 13k Elastic Coincidence events or run for >=
Take 17k Elastic Coincidence events or run for >=
Take 10k Elastic Coincidence events or run for >=

Legend: Pending, Done, Start

DATE TIME

Chart 3

Ramp target magnet to 5.0033 T - check field sign = +
BigCal full field gain monitor ADC's
Set HMS to 43.75°, p0 = 1.334 GeV. Start this at #400
Set HMS to 41.00°, p0 = 1.443 GeV
Set HMS to 38.25°, p0 = 1.555 GeV
Set HMS to 35.50°, p0 = 1.670 GeV
Set HMS to 32.75°, p0 = 1.789 GeV
Set HMS to 30.00°, p0 = 1.907 GeV
Target work: anneal - TE - polarize

Legend: Pending, Done, Start

DATE/TIME

Ramp magnet down; Hall access to reverse lead polarity at target PS
Ask for 1 uA beam, 1 cm slow raster, centered
Adjust BigCal HV; repeat gain monitor if needed **
Take 9k Elastic Coincidence events or run for >=
Take 18k Elastic Coincidence events or run for >=
Take 22k Elastic Coincidence events or run for >=
Take 13k Elastic Coincidence events or run for >=
Take 17k Elastic Coincidence events or run for >=
Take 10k Elastic Coincidence events or run for >=

Pending
Done
Start

12/30 00:00 01/24 00:00 02/18 00:00

DATE/TIME

Ramp target magnet to 5.0033 T - check field sign = -
BigCal full field gain monitor ADC's if needed **
Set HMS to 43.75°, p0 = 1.334 GeV. Start this at #600.
Set HMS to 41.00°, p0 = 1.443 GeV
Set HMS to 38.25°, p0 = 1.555 GeV
Set HMS to 35.50°, p0 = 1.670 GeV
Set HMS to 32.75°, p0 = 1.789 GeV
Set HMS to 30.00°, p0 = 1.907 GeV
Target work: anneal - TE - polarize

Pending
Done
Start

12/30 00:00 10/24 08:00 08/17 16:00 06/11 00:00 04/05 08:00

DATE/TIME