

PION IRRADIATION RUN 2014 at PSI

12/05/2014 - 02/06/2014

The experimental hardness factor for 300 MeV/c pions is = 1.11

Due to the uncertainty on the hardness factor, the equivalent fluences shall be quoted with an error of +/- 20 %

The Temperature during irradiation ranged from 25 °C to 26.5 °C

Many thanks to PSI for providing us this pion beam line.

Dear user please don't forget to add this acknowledgement note into your publications:

"This work was performed at the proton accelerator, Paul Scherrer Institut, Villigen, Switzerland."

| SET # | Sample ID | Comment | User | Req. Fluence [$\mu\text{g}/\text{cm}^2$] | Detector Size [mm x mm] | Time IN | Time OUT | AI # | Achieved Flu. [$\mu\text{g}/\text{cm}^2$] | Error [+/- %] |
|-------|---|--|--------------|---|----------------------------|------------------|------------------|----------------|--|------------------|
| 1889 | CVD diamond PLT 579 | back for measurement if possible | Cerv | 1.00E+14 | 10x10 | 20/05/2014 16:12 | 23/05/2014 16:01 | 3003-3012-3013 | 1.00E+14 | 7 |
| 1890 | CVD diamond PLT 552 | back for measurement if possible, otherwise 5e14 | Cerv | 5.00E+14 | 10x10 | 20/05/2014 16:12 | 30/05/2014 18:45 | 3003-3011 | 3.63E+14 | 7 |
| 1891 | 3 n-type MCz diodes with different numer of guad-rings (3,4,16) | if different, better less | Muenstermann | 1.00E+13 | 10x10 | 20/05/2014 16:12 | 21/05/2014 01:07 | 2951 | 1.07E+13 | 7 |
| 1892 | 4 n-type MCz diodes with different numer of guad-rings (1,2,4,16) | if different, better less | Muenstermann | 1.00E+14 | 10x10 | 20/05/2014 16:12 | 23/05/2014 16:01 | 3003-3012-3013 | 1.00E+14 | 7 |
| 1893 | 4 n-type MCz diodes with different numer of guad-rings (0,1,3,16) | if different, better less | Muenstermann | 5.00E+14 | 10x10 | 20/05/2014 10:22 | 30/05/2014 00:31 | 2981 | 2.76E+14 | 7 |
| 1894 | 2 n-type MCz diodes with different numer of guad-rings (2,16) | if different, better less | Muenstermann | 1.00E+15 | 10x10 | 20/05/2014 10:22 | 02/06/2014 06:00 | 2980 | 4.26E+14 | 7 |
| 1895 | 1 n-type Fz ATLAS FEI-I4 single chip | HIGHEST possible | Muenstermann | 1.00E+15 | 20x20 | 20/05/2014 10:22 | 02/06/2014 06:00 | 2950 | 3.57E+14 | 7 |
| 1896 | 1 n-type MCz ATLAS FEI-I4 single chip | HIGHEST possible | Muenstermann | 1.00E+15 | 20x20 | 20/05/2014 10:22 | 02/06/2014 06:00 | 2950 | 3.57E+14 | 7 |
| 1897 | 261636-8-42, 271713-26-50, 271713-26-51, 261636-10-17, MCz200N_05_DiodeL_3, MCz200Y_01_DiodeL_2, FTH200Y_02_Diode_1, FTH200N_23_DiodeL_5 | AJ-1,2,14,15,16 | Junkes | 1.60E+11 | 5x5 | 20/05/2014 16:12 | 20/05/2014 16:16 | from SEC | 1.34E+11 | 7 |
| 1898 | 8364-07-60, 8364-02-36 | AJ-3 | Junkes | 3.20E+11 | 5x5 | 20/05/2014 16:12 | 20/05/2014 16:39 | from SEC | 2.74E+11 | 7 |
| 1899 | 8364-06-7, 8364-02-52 | AJ-4 | Junkes | 1.10E+13 | 5x5 | 20/05/2014 16:12 | 21/05/2014 01:07 | 2951 | 1.07E+13 | 7 |
| 1900 | 261636-8-43, 261636-14-51, 8364-07-65, 261636-10-18, 8364-02-38, 261636-4-43, 271713-28-08, 271713-28-09, FTH200N_24_DiodeL_5, MCz200Y_02_DiodeL_3, MCz200N_05_DiodeL_8, FTH200Y_02_Diode_2 | AJ-5,6,7,17,18,19 | Junkes | 3.20E+13 | 5x5 | 20/05/2014 16:12 | 21/05/2014 10:27 | 2952 | 3.70E+13 | 7 |
| 1901 | 261636-10-24, 261636-4-44, 261636-14-52, 261636-8-44, 271713-28-51, 8364-02-29-3, 8364-07-45-1, MCz200Y_01_Diode_1, FTH200Y_03_Diode_2, MCz200N_04_Diode_2, FTH200N_01_Diode_2, FZ120Y_01_DiodeL_8, FZ120N_07_DiodeL_8, FZ200Y_04_DiodeL_11, FZ200N_05_DiodeL_11 | AJ-8,9,11,20,21,27,29 | Junkes | 3.20E+14 | 5x5 | 20/05/2014 10:22 | 26/05/2014 22:46 | 2982 | 1.71E+14 | 7 |
| 1902 | 271713-28-53, 8364-02-29-4, 261636-10-29-2, 8364-07-45-2, 261636-13-20-2, MCz200Y_02_Diode_1, FTH200Y_03_Diode_1, MCz200Y_05_DiodeS_14, FTH200Y_03_DiodeS_13, MCz200N_09_DiodeS_13, FTH200N_24_DiodeL_2, FTH200N_03_DiodeS_14, FZ120N_03_DiodeL_8, FZ200N_07_DiodeL_8, FZ120Y_05_DiodeL_8, FZ200Y_06_DiodeL_2 | AJ-10,12,13,22,23,26,28 | Junkes | 1.10E+15 | 5x5 | 20/05/2014 10:22 | 02/06/2014 06:00 | 2979 | 5.44E+14 | 7 |
| 1903 | W7-J3 | | Mandic | 1.00E+14 | 10x10 | 20/05/2014 16:12 | 23/05/2014 16:01 | 3003-3012-3013 | 1.00E+14 | 7 |
| 1904 | W7-D11 | | Mandic | 2.00E+14 | 10x10 | 20/05/2014 10:22 | 24/05/2014 21:42 | 2983 | 1.11E+14 | 7 |
| 1905 | W7-F7, W678-P2 | | Mandic | 5.00E+14 | 10x10 | 20/05/2014 10:22 | 30/05/2014 00:31 | 2981 | 2.76E+14 | 7 |
| 1906 | W7-D3, W678-P12 | | Mandic | 1.00E+15 | 10x10 | 20/05/2014 10:22 | 02/06/2014 06:00 | 2980 | 4.26E+14 | 7 |
| 1907 | AIDA 2012 - Cz-n and Fz-n | | Vaikus | 1.00E+11 | 10x10 | 20/05/2014 16:12 | 20/05/2014 16:16 | from SEC | 1.34E+11 | 7 |
| 1908 | AIDA 2012 - Cz-n and Fz-n | | Vaikus | 3.00E+11 | 10x10 | 20/05/2014 16:12 | 20/05/2014 16:39 | from SEC | 2.74E+11 | 7 |
| 1909 | AIDA 2012 - Cz-n and Fz-n | | Vaikus | 1.00E+12 | 10x10 | 20/05/2014 16:12 | 20/05/2014 18:01 | from SEC | 7.68E+11 | 7 |
| 1910 | AIDA 2012 - Cz-n and Fz-n | | Vaikus | 3.00E+12 | 10x10 | 20/05/2014 16:12 | 20/05/2014 18:54 | from SEC | 2.41E+12 | 7 |
| 1911 | AIDA 2012 - Cz-n and Fz-n | | Vaikus | 1.00E+13 | 10x10 | 20/05/2014 16:12 | 21/05/2014 01:07 | 2951 | 1.07E+13 | 7 |
| 1912 | AIDA 2012 - Cz-n and Fz-n | | Vaikus | 3.00E+13 | 10x10 | 20/05/2014 16:12 | 21/05/2014 10:27 | 2952 | 3.70E+13 | 7 |
| 1913 | AIDA 2012 - Cz-n and Fz-n | | Vaikus | 1.00E+14 | 10x10 | 20/05/2014 16:12 | 23/05/2014 16:01 | 3003-3012-3013 | 1.00E+14 | 7 |
| 1914 | AIDA 2012 - Cz-n and Fz-n | | Vaikus | 3.00E+14 | 10x10 | 20/05/2014 10:22 | 26/05/2014 22:46 | 2982 | 1.71E+14 | 7 |
| 1915 | AIDA 2012 - Cz-n and Fz-n | | Vaikus | 1.00E+15 | 10x10 | 20/05/2014 10:22 | 02/06/2014 06:00 | 2980 | 4.26E+14 | 7 |
| 1916 | AIDA 2012 - Cz-n and Fz-n | MAX | Vaikus | 3.00E+15 | 10x10 | 20/05/2014 10:22 | 02/06/2014 06:00 | 2953 | 5.12E+14 | 7 |
| 1917 | 2 diodes of W331 | | Gallrapp | 1.00E+11 | 5x5 | 20/05/2014 16:12 | 20/05/2014 16:16 | from SEC | 1.34E+11 | 7 |
| 1918 | 2 diodes of W331 | | Gallrapp | 3.00E+11 | 5x5 | 20/05/2014 16:12 | 20/05/2014 16:39 | from SEC | 2.74E+11 | 7 |
| 1919 | 2 diodes of W331 | | Gallrapp | 1.00E+12 | 5x5 | 20/05/2014 16:12 | 20/05/2014 18:01 | from SEC | 7.68E+11 | 7 |
| 1920 | 2 diodes of W331 | | Gallrapp | 3.00E+12 | 5x5 | 20/05/2014 16:12 | 20/05/2014 18:54 | from SEC | 2.41E+12 | 7 |
| 1921 | 2 diodes of W331 | | Gallrapp | 1.00E+13 | 5x5 | 20/05/2014 16:12 | 21/05/2014 01:07 | 2951 | 1.07E+13 | 7 |
| 1922 | 2 diodes of W331 | | Gallrapp | 3.00E+13 | 5x5 | 20/05/2014 16:12 | 21/05/2014 10:27 | 2952 | 3.70E+13 | 7 |
| 1923 | 2 diodes of W331 | | Gallrapp | 1.00E+14 | 5x5 | 20/05/2014 16:12 | 23/05/2014 16:01 | 3003-3012-3013 | 1.00E+14 | 7 |
| 1924 | 2 diodes of W331 | | Gallrapp | 3.00E+14 | 5x5 | 20/05/2014 10:22 | 26/05/2014 22:46 | 2982 | 1.71E+14 | 7 |
| 1925 | 2 diodes of W331 | | Gallrapp | 1.00E+15 | 5x5 | 20/05/2014 10:22 | 02/06/2014 06:00 | 2980 | 4.26E+14 | 7 |
| 1926 | 2 diodes of W331 | MAX | Gallrapp | 3.00E+15 | 5x5 | 20/05/2014 10:22 | 02/06/2014 06:00 | 2953 | 5.12E+14 | 7 |
| 1927 | 2 diodes 25um HPK - monitor APD | | Heering | 2.00E+11 | 5x5 and 10x10 | 20/05/2014 16:12 | 20/05/2014 16:39 | from SEC | 2.74E+11 | 7 |
| 1928 | M200P_01_Badd_1, FTH200P_01_Badd_1, MCz200N_10_Badd_2, FTH200N_25_Badd_2 | AJ-24, 25 | Junkes | 1.10E+15 | 27 x 6 (tilted) | 20/05/2014 10:22 | 02/06/2014 06:00 | 2949 | 3.72E+14 | 7 |
| 1929 | 4 bump-bonded pixel detectors (8243-08/011, 8244-03/23) | | Rohe | 1.50E+15 | 10x10 | 20/05/2014 10:22 | 02/06/2014 06:00 | 2979 | 5.44E+14 | 7 |
| 1930 | 4 bump-bonded pixel detectors (8243-08/011, 8244-03/23) | | Rohe | 3.00E+15 | 10x10 | 20/05/2014 10:22 | 02/06/2014 06:00 | 2953 | 5.12E+14 | 7 |
| 1931 | ESA SEU Monitor | | Garcia Alia | 1.00E+11 | 20x20 | 20/05/2014 21:34 | 21/05/2014 10:27 | 3002 | 1.36E+13 | 7 |
| | | | | | 10x10 | 20/05/2014 21:34 | 21/05/2014 10:27 | 3002.1 | 9.38E+12 | 7 |
| | | | | | 10x10 | 20/05/2014 21:34 | 21/05/2014 10:27 | 3002.2 | 1.80E+13 | 7 |
| | | | | | 10x10 | 20/05/2014 21:34 | 21/05/2014 10:27 | 3002.3 | 1.38E+13 | 7 |
| | | | | | 10x10 | 20/05/2014 21:34 | 21/05/2014 10:27 | 3002.4 | 1.33E+13 | 7 |