Here I summarise the time of the measurements taken for both ETMX and ETMY:

1. **ETMY:**

|  |  |  |
| --- | --- | --- |
| Injection identifier | Start time | End time |
| 1 | '2014-08-07 07:00:00' | '2014-08-07 08:25:00' |
| 11 | '2014-08-08 18:00:00' | '2014-08-08 19:30:00' |
| 21 | '2014-08-10 00:00:00' | '2014-08-10 02:00:00' |
| 22 | '2014-08-11 20:30:00' | '2014-08-11 23:00:00' |
| 23 | '2014-08-12 17:17:00' | '2014-08-12 19:20:00' |
| 24 | '2014-08-13 21:40:00' | '2014-08-13 23:30:00' |
| 25 | '2014-08-15 21:30:00' | '2014-08-15 23:00:00' |
| 27 | '2014-08-18 21:00:00' | '2014-08-18 23:30:00' |
| 28 | '2014-08-20 19:30:00' | '2014-08-20 21:30:00' |
| 31 | '2014-08-21 18:30:00' | '2014-08-21 20:30:00' |
| 32 | '2014-08-22 03:00:00' | '2014-08-22 06:00:00' |
| 33 | '2014-08-22 18:00:00' | '2014-08-22 20:00:00' |
| 34 | '2014-08-23 04:00:00' | '2014-08-23 06:30:00' |
| 35 | '2014-08-23 20:20:00' | '2014-08-23 22:20:00' |
| 36 | '2014-08-24 09:00:00' | '2014-08-24 10:30:00' |
| 37 | '2014-08-26 20:10:00' | '2014-08-26 22:14:00' |
| 41 | '2014-08-27 04:30:00' | '2014-08-27 06:20:00' |
| 42 | '2014-08-27 18:30:00' | '2014-08-27 20:25:00' |
| 43 | '2014-08-28 04:40:00' | '2014-08-28 05:55:00' |
| 44 | '2014-08-29 05:45:00' | '2014-08-29 06:45:00' |

Next we show the effective voltage (or rather the VBIAS values that provides a null deflection of the ETM) and the slope of the curve VBIAS vs normalised deflection. **Note that the values 0 represent missing data:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Injection identifier** | **Pitch** | | | | | | | | | | | | | | **Yaw** | | | | | | | | | | |
| **Veff [V]** | | | | | | | **slope [10-7 µrad/V]** | | | | | | | **Veff [V]** | | | | | **slope [10-7 µrad/V]** | | | | | |
| **UL** | | **UR** | **LR** | | | **LL** | **UL** | | **UR** | **LR** | | **LL** | | | **UL** | **UR** | **LR** | **LL** | **UL** | **UR** | | | **LR** | **LL** |
| **1** | 112 | 52 | | | 123 | 0 | | -2.585 | 1.89 | | | -2.65 | | 0 | 125 | | 103 | 144 | 0 | -2.21 | | 2.34 | 2.32 | | 0 |
| **11** | 34 | 0 | | | 33 | 0 | | -2.61 | 0 | | | -2.63 | | 0 | 72 | | 0 | 48 | 0 | -2.30 | | 0 | 2.37 | | 0 |
| **21** | 43 | 11 | | | 31 | 0 | | -2.63 | 2.35 | | | -2.655 | | 0 | 77 | | 1 | 54 | 0 | -2.25 | | 2.54 | 2.365 | | 0 |
| **22** | 123 | 65 | | | 85 | 61 | | -2.565 | 2.1605 | | | -2.612 | | 2.154 | 177 | | 70 | 100 | 54 | -2.178 | | 2.428 | 2.374 | | -2.271 |
| **23** | 228 | -169 | | | 153 | -130 | | -2.606 | 2.305 | | | -2.635 | | 2.053 | 320 | | -11 | 227 | -39 | -2.226 | | 2.489 | 2.308 | | -2.215 |
| **24** | 226 | -11 | | | 164 | 0 | | -2.6014 | 2.2564 | | | -2.6454 | | 0 | 305 | | 33 | 201 | 0 | -2.2153 | | 2.4904 | 2.3825 | | 0 |
| **25** | 220 | -184 | | | 169 | 0 | | -1.8133 | 1.5825 | | | -1.8588 | | 0 | 320 | | -71 | 242 | 0 | -1.5542 | | 1.6861 | 1.6895 | | 0 |
| **27** | 172 | 66 | | | 141 | -20 | | -1.8914 | 1.4807 | | | -1.9162 | | 1.3259 | 244 | | 59 | 186 | -4 | -1.5477 | | 1.6539 | 1.6863 | | -1.5204 |
| **28** | 66 | -112 | | | 149 | -151 | | -1.8818 | 1.4592 | | | -1.7518 | | 1.3438 | 176 | | -33 | 208 | -108 | -1.5377 | | 1.6262 | 1.5921 | | -1.5104 |
| **31** | 129 | -107 | | | 136 | -177 | | -1.8801 | 1.6476 | | | -1.8173 | | 1.4952 | 221 | | -25 | 206 | -112 | -1.6318 | | 1.7435 | 1.6707 | | -1.6348 |
| **32** | 129 | -98 | | | 128 | -181 | | -1.9422 | 1.6343 | | | -1.9633 | | 1.5172 | 222 | | -36 | 195 | -124 | -1.5521 | | 1.7176 | 1.7391 | | -1.5803 |
| **33** | 122 | -104 | | | 129 | -152 | | -1.8755 | 1.6965 | | | -1.9328 | | 1.4842 | 222 | | -27 | 200 | -115 | -1.6808 | | 1.8183 | 1.6694 | | -1.5777 |
| **34** | 125 | -117 | | | 144 | -144 | | -1.9015 | 1.5796 | | | -1.8463 | | 1.6146 | 223 | | -27 | 198 | -97 | -1.6031 | | 1.8974 | 1.6622 | | -1.6913 |
| **35** | 111 | -97 | | | 125 | -172 | | -1.899 | 1.6292 | | | -1.9760 | | 1.5228 | 230 | | -43 | 194 | -126 | -1.5566 | | 1.8185 | 1.7215 | | -1.6291 |
| **36** | 133 | -113 | | | 128 | -179 | | -1.8283 | 1.6288 | | | -1.832 | | 1.6099 | 197 | | -13 | 182 | -112 | -1.7421 | | 1.8119 | 1.7176 | | -1.6877 |
| **37** | 120 | -116 | | | 138.5 | -168 | | -1.9634 | 1.6849 | | | -1.8192 | | 1.4909 | 236 | | -31 | 198 | -111 | -1.6411 | | 1.7698 | 1.6637 | | -1.662 |
| **41** | 117 | -121 | | | 118 | -134 | | -1.9207 | 1.6613 | | | -1.9249 | | 1.5882 | 210 | | -26 | 167 | -103 | -1.5644 | | 1.7857 | 1.7186 | | -1.7255 |
| **42** | 116 | -78.6 | | | 0 | -153 | | -1.8947 | 1.469 | | | 0 | | 1.4585 | 218.5 | | -22.5 | 0 | -115.5 | -1.613 | | 1.7441 | 0 | | -1.5701 |
| **43** | 118 | -86 | | | 93 | -130 | | -1.8042 | 1.4887 | | | -1.9206 | | 1.4757 | 187 | | -28 | 158 | -87.5 | -1.6060 | | 1.7312 | 1.6495 | | -1.5438 |
| **44** | 139 | -22 | | | 73 | -16 | | -1.8740 | 1.6530 | | | -1.5804 | | 1.4821 | 146 | | -6 | 114 | -42 | -1.6610 | | 1.7374 | 1.3904 | | -1.6016 |

1. **ETMX:**

|  |  |  |
| --- | --- | --- |
| Injection identifier | Start time | End time |
| 1 | '2014-08-16 04:00:00' | '2014-08-16 05:30:00' |
| 2 | '2014-08-19 01:20:00' | '2014-08-19 03:30:00' |
| 3 | '2014-08-20 19:30:00' | '2014-08-20 21:50:00' |
| 11 | '2014-08-21 18:30:00' | '2014-08-21 19:50:00' |
| 12 | '2014-08-22 03:00:00' | '2014-08-22 05:00:00' |
| 13 | '2014-08-22 18:00:00' | '2014-08-22 20:00:00' |
| 21 | '2014-08-23 04:20:00' | '2014-08-23 05:30:00' |
| 22 | '2014-08-23 20:15:00' | '2014-08-23 22:00:00' |
| 23 | '2014-08-24 09:10:00' | '2014-08-24 10:10:00' |
| 24 | '2014-08-26 20:10:00' | '2014-08-26 22:00:00' |
| 25 | '2014-08-27 04:30:00' | '2014-08-27 05:50:00' |
| 26 | '2014-08-27 18:30:00' | '2014-08-27 20:25:00' |
| 27 | '2014-08-29 05:30:00' | '2014-08-29 06:45:00' |

Next we show the effective voltage (or rather the VBIAS values that provides a null deflection of the ETM) and the slope of the curve VBIAS vs normalised deflection**:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Injection identifier** | **Pitch** | | | | | | | | | | | | | | **Yaw** | | | | | | | | | | |
| **Veff [V]** | | | | | | **slope [10-7 µrad/V]** | | | | | | | | **Veff [V]** | | | | | **slope [10-7 µrad/V]** | | | | | |
| **UL** | | **UR** | **LR** | **LL** | | **UL** | | | **UR** | | **LR** | **LL** | | | **UL** | **UR** | **LR** | **LL** | **UL** | **UR** | | | **LR** | **LL** |
| **1** | 27 | 24 | | 42 | | 42 | | -1.5217 | -1.4697 | | 1.1381 | | | 1.320 | 31 | | 20 | 43 | 36 | -1.7726 | | 1.5631 | 1.5498 | | -1.7523 |
| **2** | 47 | 27 | | 44 | | 45 | | -1.4957 | -1.4823 | | 1.1597 | | | 1.3208 | 50 | | 21 | 33 | 40 | -1.7629 | | 1.5270 | 1.6476 | | -1.7287 |
| **3** | 52 | 43 | | 65 | | 73 | | -1.5087 | -1.4598 | | 1.1450 | | | 1.2718 | 50 | | 41 | 39 | 56 | -1.7780 | | 1.5215 | 1.6333 | | -1.8404 |
| **11** | 54 | 45 | | 60 | | 74 | | -1.5323 | -1.4399 | | 1.1846 | | | 1.2979 | 50 | | 44 | 36 | 60 | -1.7868 | | 1.4754 | 1.6887 | | -1.7231 |
| **12** | 56 | 36 | | 56 | | 75 | | -1.4900 | -1.4847 | | 1.1536 | | | 1.3075 | 41 | | 44 | 26 | 72 | -1.7005 | | 1.6140 | 1.6420 | | -1.7344 |
| **13** | 49 | 34 | | 46 | | 71 | | -1.531 | -1.4790 | | 1.1701 | | | 1.3217 | 50 | | 53 | 35 | 82 | -1.8022 | | 1.4918 | 1.5905 | | -1.7184 |
| **21** | 53 | 37.5 | | 62 | | 66 | | -1.478 | -1.4403 | | 1.1073 | | | 1.2048 | 47 | | 39 | 67 | 42 | -1.7636 | | 1.5308 | 1.5125 | | -1.6396 |
| **22** | 34 | 29 | | 116 | | 87 | | -1.4889 | -1.4715 | | 1.0992 | | | 1.1582 | 34 | | 34 | 98 | 104 | -1.7234 | | 1.5451 | 1.5742 | | -1.6419 |
| **23** | 56 | 46 | | 55 | | 73.5 | | -1.4727 | -1.4265 | | 1.0760 | | | 1.2074 | 64 | | 37 | 61 | 60 | -1.7046 | | 1.5446 | 1.5275 | | -1.6559 |
| **24** | 56 | 37 | | 110 | | 55 | | -1.4424 | -1.4757 | | 1.1619 | | | 1.1828 | 64 | | 31 | 103 | 103 | -1.6798 | | 1.6048 | 1.5588 | | -1.5737 |
| **25** | 61 | 53 | | 21 | | 51 | | -1.4651 | -1.4132 | | 1.1377 | | | 1.2359 | 71 | | 51 | 35 | 64 | -1.7385 | | 1.5219 | 1.5898 | | -1.6116 |
| **26** | 68 | 43 | | 50 | | -47 | | -1.452 | -1.4802 | | 1.1973 | | | 1.1414 | 61 | | 47 | 87 | 46 | -1.6925 | | 1.6163 | 1.5799 | | -1.6489 |
| **27** | 33 | 14 | | -4 | | -4 | | -1.4509 | -1.4664 | | 1.1538 | | | 1.2985 | 46 | | 20 | -6 | 10 | -1.8494 | | 1.6049 | 1.4928 | | -1.7718 |