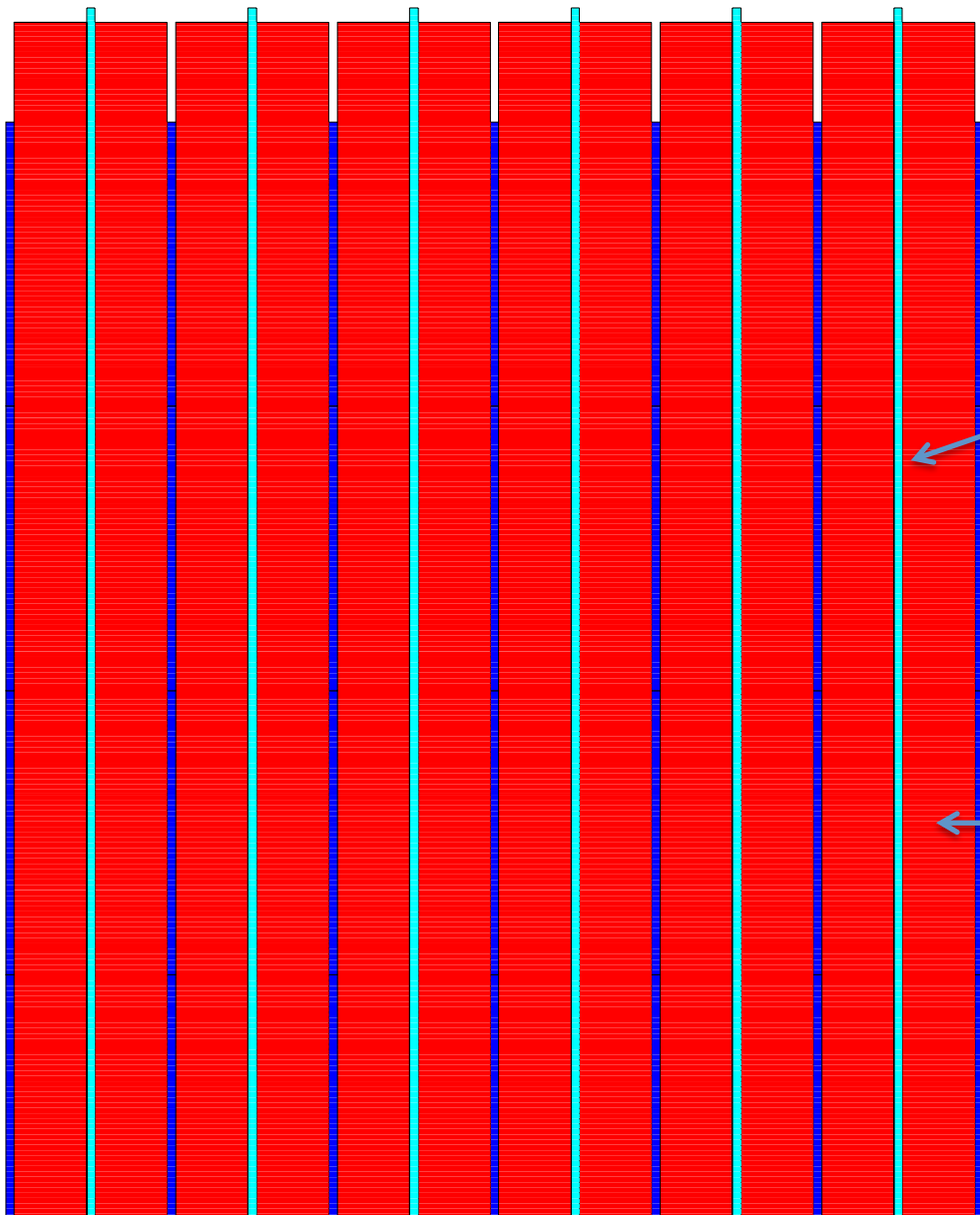


MRD Data from Bob's Simulation

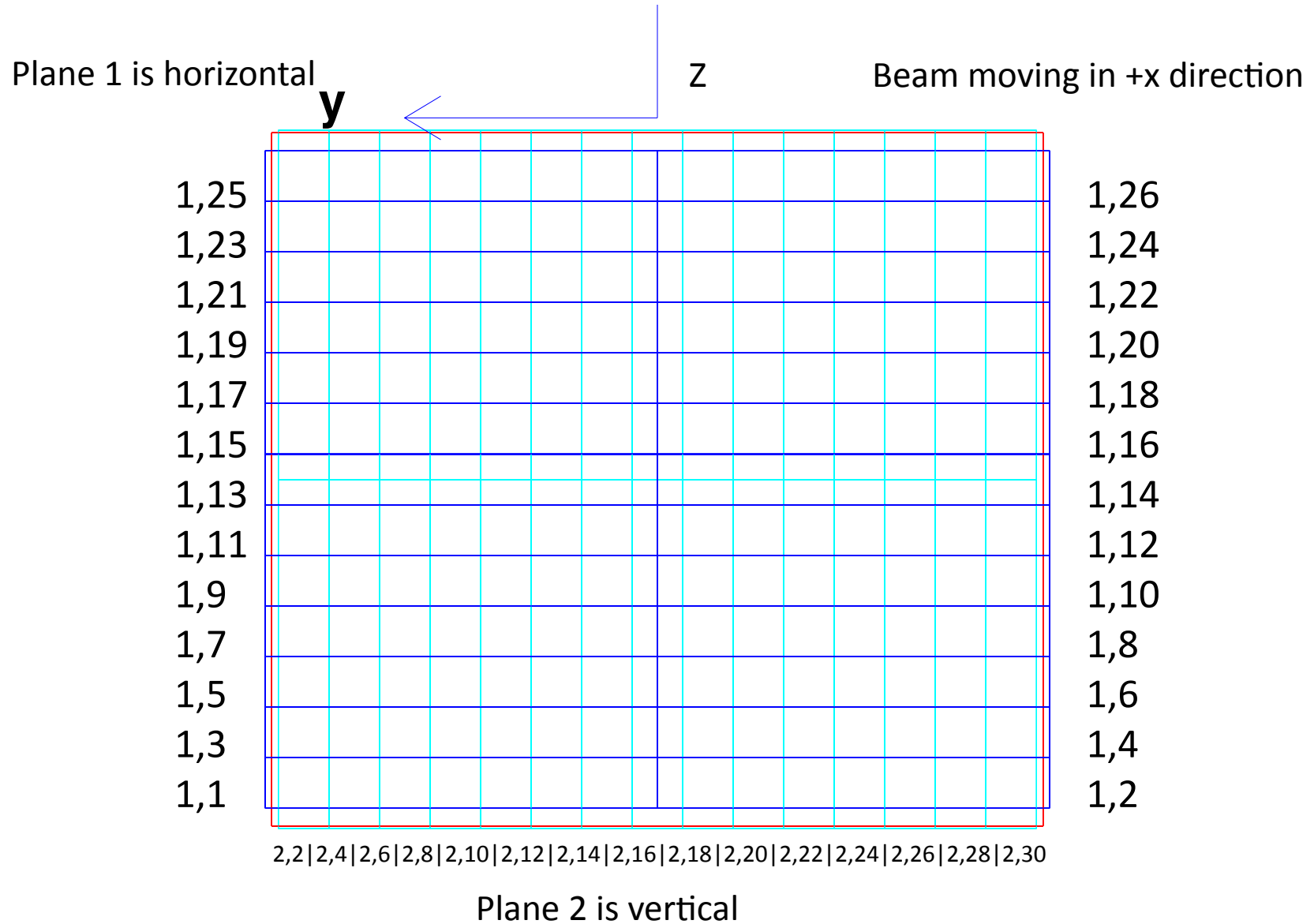
- 12 planes of 2 inch iron plates, and 13 planes of scintillator strips
- vertical scintillator strips are $0.6 \times 138 \times 20$, with 13 strips in two sections, for a total of 182 vertical strips in 7 planes
- horizontal strips are $0.6 \times 155 \times 20$, with 15 strips in two sections, for a total of 180 vertical strips in 6 planes



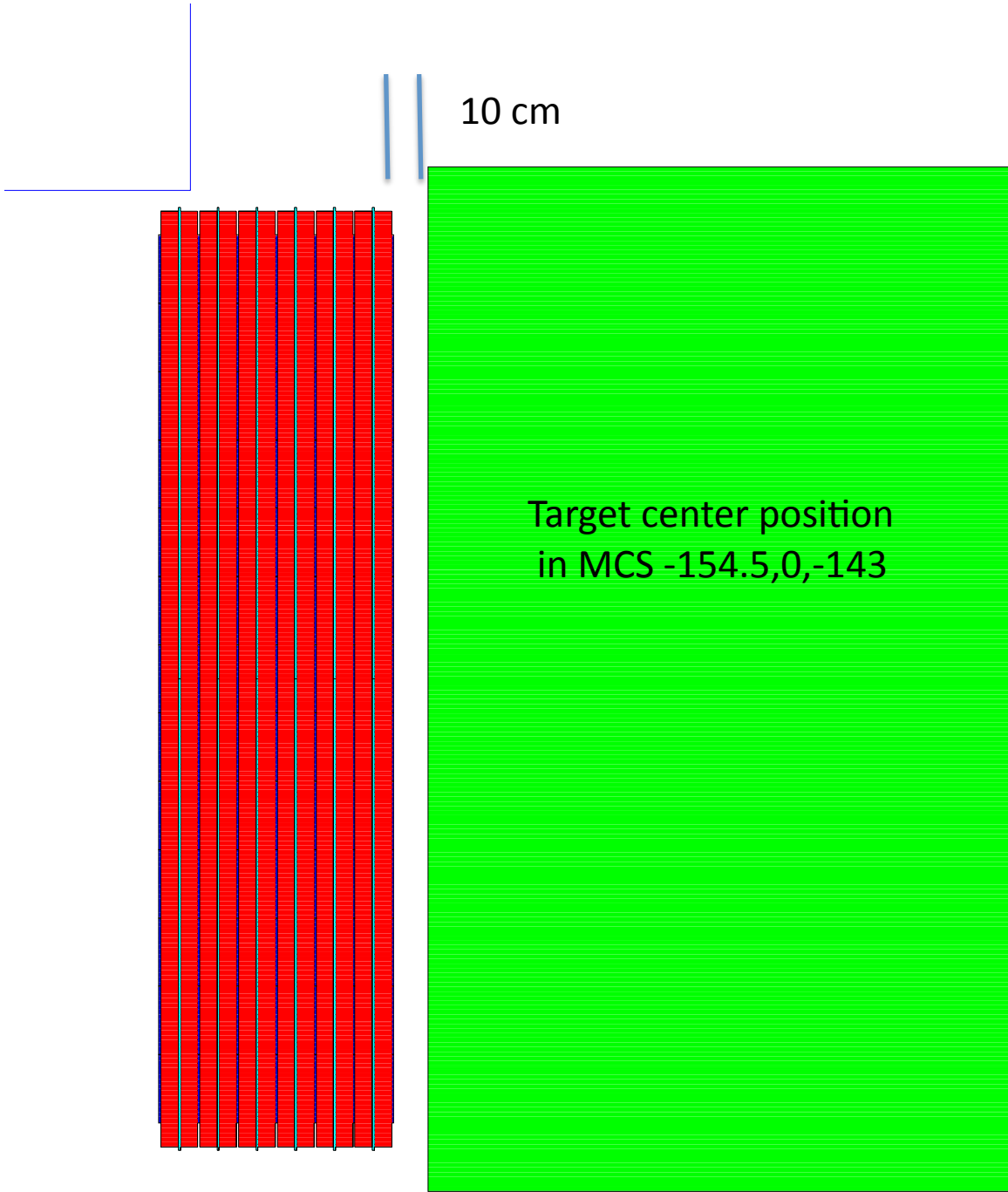
Initial horizontal plane

Vertical plane

Iron plate



The file scin_geo.txt contains the coordinates of the center of each strip in the master coordinate system. Strip designation are in the plane#,strip# format shown above



MRD event data format

```
$begin 2
$nuance 3
$track 14 1221.68005 0. 0. 1. -1
$track 8016 14890. -999. -999. -999. -1
$track 2212 916.049011 -0.190154999 0.671079993 -0.716584027 -1
$track 2212 1107.76001 0.523652017 0.693051994 0.49544701 -2
$track 211 223.699997 -0.892866015 0.109480001 0.436811 -2
$track 13 806.260986 -0.235917002 -0.374336004 0.896781027 0
$vertex -143.280029 146.49736 -135.223618
$track 2212 1107.76001 0.523652017 0.693051994 0.49544701 0
$track 211 223.699997 -0.892866015 0.109480001 0.436811 0
```

Mimic NUANCE event info.
Vertex in MCS

```
$headerend 2
```

```
T 8 319.125 163.943
V 28 1.715 3.377
V 58 4.235 3.818
V 88 3.258 4.262
V 118 6.229 4.748
H 11 0.606 3.162
H 35 4.414 3.593
H 61 3.294 4.041
H 87 5.108 4.495
```

"T" = Target, #planes hit, E dep in target, Ech dep in target

```
$end event 2
```

Each hit plane: "H" or "V" and strip number (1-180 H or 1-182 V), Edep, T in n.s.