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Alignment of the muon flux spectrometer in FairShip using the survey measurements

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Abstract

This note describes the alignment of the muon-flux spectrometer using the survey data and its implementation in FairShip.

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Contents

1 Muon flux spectrometer

The muon flux spectrometer, as implemented in FairShip, is shown in Figure 1.

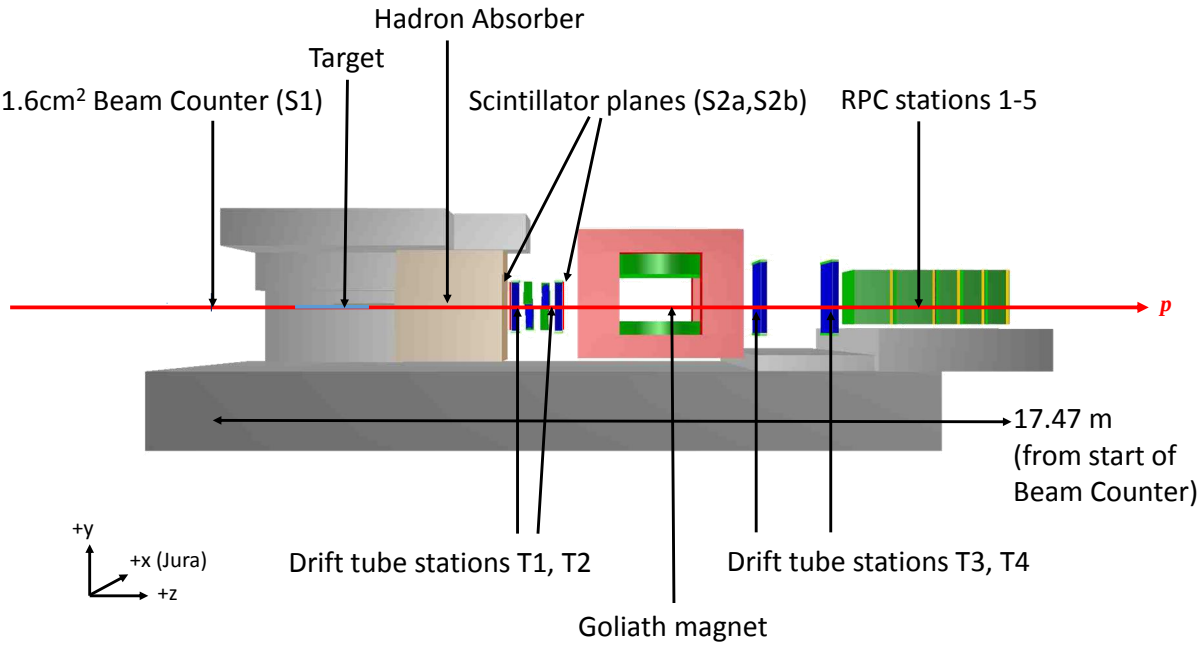


Figure 1: Layout of the spectrometer to measure the μ-flux. The FairShip coordinate system is also shown.

A $10 \times 10 \times 154.3$ cm^3 cylindrical replica of the SHiP target was placed in front of a hadron absorber made of iron blocks ($240 \times 240 \times 240$ cm^3). The target was surrounded by iron and concrete shielding blocks. A beam counter scintillator was placed in front of the shielding.

Downstream of the hadron absorber there are four drift tube tracking stations, two placed upstream of the Goliath magnet and two downstream. The drift tubes were read out by 5 TDCs, numbered from 0 to 4.

The muon tagger is placed behind the 2 downstream drift tube stations. It consists of 5 planes of resistive plate chambers (RPCs) interleaved with 1×80 cm and 3×40 cm thick iron slabs. In addition to this, a 80 cm thick iron slab is positioned immediately upstream of the first chamber.

The two upstream tracking stations were centered on the beam line, whereas the two downstream stations and the RPCs were centered on the Goliath opening.

The purpose of this note is to provide a record of how the survey measurements were used for the geometry of the muon flux detector in FairShip. The fine alignment using software and the use of the drift tube RT relations from the data for the reconstruction are beyond the scope of this document.

2 Survey measurements

2.1 Drift tubes

The results of the survey measurements are reported in [1] for the drift tube stations and [2] for the RPCs. The origin of the survey measurement coordinate system is on

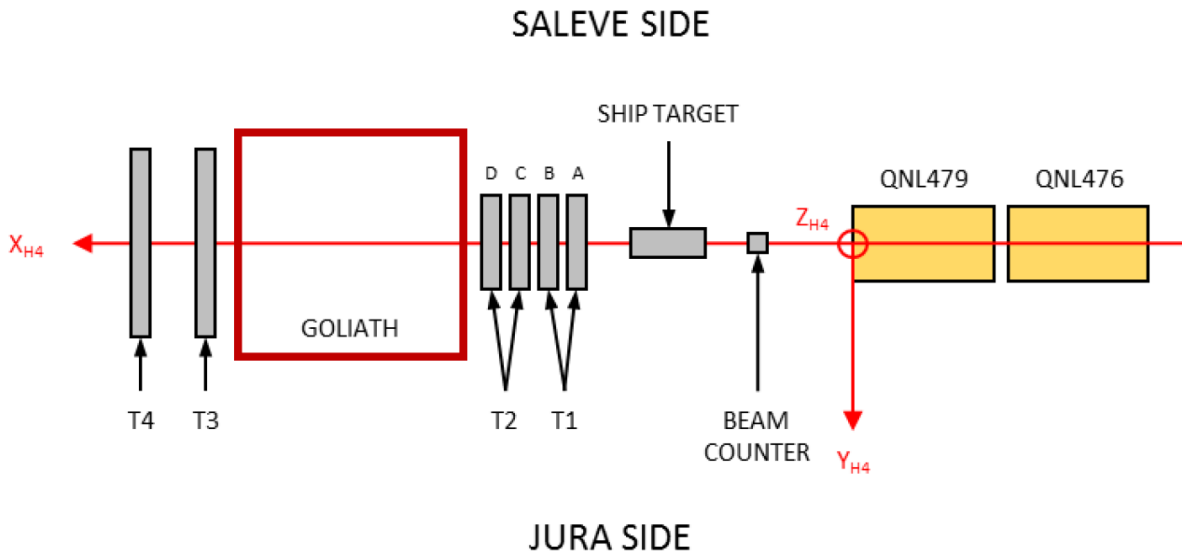


Figure 2: Top view of the survey coordinate system and measured elements.

the beam axis centered at QNL479 (see Figure 2). In FairShip, the origin ($z = 0$) is centered on the beam axis at the exit point of the hadron absorber. The distance from this exit point to the downstream target flange was not measured by the survey. However we measured the length of the hadron absorber by hand to be 240.5 cm. This means a translation in $z_{\text{FairShip}} = z_{\text{Survey}} - (6.49110(\text{end of target}) + 2.40499) = \text{z}_{\text{Survey}} - 8.89609$ m must be applied to the survey data to obtain FairShip coordinates. The FairShip axes are obtained by two 90° rotations first around the survey z axis, then around the new x axis. The survey measurements in FairShip coordinates for the beam counter, the target and the drift tube stations that have been obtained by applying the transformations (1)

$$\begin{aligned} z_{\text{FairShip}} &= x_{\text{Survey}} - 8.89609 \text{ m} \\ x_{\text{FairShip}} &= y_{\text{Survey}} \\ y_{\text{FairShip}} &= z_{\text{Survey}} \end{aligned} \tag{1}$$

to the data in section 4 of [1] are reported in Table 1.

Table 1: Survey measurements for beamcounter, target and drifttube stations, in FairShip coordinates

Names	z [m]	x [m]	y [m]	Names	z [m]	x [m]	y [m]
BEAMCOUNTER							
BC_U	-6.08047	0.00106	0.0705	BC_D	-5.88243	-0.00068	0.0704
TARGET							
ST_U_01	-3.94883	0.09104	0.0632	ST_D_01	-2.40521	-0.02757	0.1063
ST_U_02	-3.9486	-0.08122	0.0737	ST_D_02	-2.40465	0.10784	0.0214
ST_U_03	-3.94784	-0.09147	-0.0593	ST_D_03	-2.4049	-0.08706	0.0660
ST_U_04	-3.94796	0.08446	-0.0698	ST_D_04	-2.40533	-0.10903	-0.0025
ST_U_CE	-3.9483001	0.0005729	0.0008	ST_D_CE	-2.4049403	0.0004401	0.0004
DRIFTTUBES							
T1_MA_01	0.15657	0.24429	0.7102	T2_MC_01	0.84628	0.75884	0.1730
T1_MA_02	0.15411	-0.20778	0.7092	T2_MC_02	0.84721	0.53265	0.5657
T1_MA_03	0.16029	-0.20754	-0.6495	T2_MC_03	0.84201	-0.63737	-0.1104
T1_MA_04	0.16175	0.24364	-0.6503	T2_MC_04	0.8448	-0.41206	-0.5021
T1_MB_01	0.64155	-0.50437	0.5647	T2_MD_01	1.33528	0.23847	0.7078
T1_MB_02	0.6427	-0.72931	0.1728	T2_MD_02	1.33148	-0.21207	0.7087
T1_MB_03	0.64589	0.44463	-0.4995	T2_MD_03	1.33241	-0.21572	-0.6488
T1_MB_04	0.64744	0.66931	-0.1073	T2_MD_04	1.33415	0.23613	-0.6495
T3_B01	5.67508	0.92852	-0.6818	T4_B01	7.64747	0.91836	-0.6848
T3_B02	5.67426	0.59256	-0.6823	T4_B02	7.64572	0.58237	-0.6867
T3_B03	5.67384	0.42446	-0.6844	T4_B03	7.64472	0.41438	-0.6875
T3_B04	5.67254	0.0884	-0.6854	T4_B04	7.64276	0.07852	-0.6883
T3_B05	5.67243	-0.08129	-0.6836	T4_B05	7.6428	-0.08878	-0.6890
T3_B06	5.67329	-0.41716	-0.6840	T4_B06	7.64349	-0.42474	-0.6884
T3_B07	5.67351	-0.58586	-0.6864	T4_B07	7.64387	-0.59364	-0.6888
T3_B08	5.67319	-0.92164	-0.6845	T4_B08	7.64409	-0.92953	-0.6877
T3_T01	5.67716	0.92532	0.8931	T4_T01	7.64882	0.92072	0.8899
T3_T02	5.67804	0.58933	0.8914	T4_T02	7.64952	0.58445	0.8884
T3_T03	5.6785	0.42116	0.8907	T4_T03	7.64992	0.41675	0.8873
T3_T04	5.67892	0.08519	0.8905	T4_T04	7.65133	0.08036	0.8862
T3_T05	5.67949	-0.08389	0.8899	T4_T05	7.65186	-0.08756	0.8862
T3_T06	5.68084	-0.41975	0.8888	T4_T06	7.65362	-0.42338	0.8862
T3_T07	5.68204	-0.58962	0.8908	T4_T07	7.65464	-0.59188	0.8866
T3_T08	5.68513	-0.92563	0.8896	T4_T08	7.65569	-0.92803	0.8869

2.2 RPC stations

The results of the survey measurements for the RPC measurements are reported in [2]. Table 2 shows the RPC survey measurements in FairShip coordinates obtained by applying the translations from Subsection 2.1 above.

Table 2: Survey measurements for RPC stations in FairShip coordinates

Names	z [m]	x [m]	y [m]
RPCs			
RPC1_L	8.78621	1.1611	1.1909
RPC1_R	8.79031	-1.2679	1.2145
RPC2_L	9.73581	1.1640	1.1926
RPC2_R	9.73991	-1.2650	1.2065
RPC3_L	10.28951	1.1644	1.1933
RPC3_R	10.29411	-1.2646	1.2021
RPC4_L	10.84101	1.1610	1.1938
RPC4_R	10.84491	-1.2670	1.1979
RPC5_L	11.38911	1.1677	1.1945
RPC5_R	11.39301	-1.2614	1.1943

3 Drift tube alignment

3.1 Tube Positions within a Module

The tubes have an outer diameter of 38 mm and an inner diameter of 36.3 mm. The pitch between two tubes in a layer is 42 mm. Each module consists of 4 layers with 12 tubes each. The layers are staggered as shown in Figure 3, the second layer is shifted by half a pitch (21 mm) w.r.t. the first one. The third layer is then shifted by -11 mm w.r.t. the second layer, and the fourth layer is again shifted by half a pitch relative to the third layer.

Since the modules are not symmetric, an arbitrary center of the module is chosen in the middle of the second and third layer of tubes in a way that there are six tubes on each side for these layers. The position of this point is indicated by the red marker in Figure 3.

Using this information, the coordinates of each tube relative to the module's center can be calculated as follows:

$$\begin{aligned} x &= (5 - n) \cdot 42\,\text{mm} + x_l \\ z &= z_l, \end{aligned}$$

where n is the tube number from 0 to 11, x_l and z_l are individual offsets for each layer summarized in Table 3.

Except for T2, all modules have the same orientation. The modules of T2 are rotated by 180 ° around y. Furthermore, The modules T1B and T2A are rotated by a stereo angle around z (nominally $-60°$ and $60°$ respectively).

The short modules of T1/2 have a length of 1100 mm (including the end-plates), whereas the long modules of T3/4 have a length of 1600 mm.

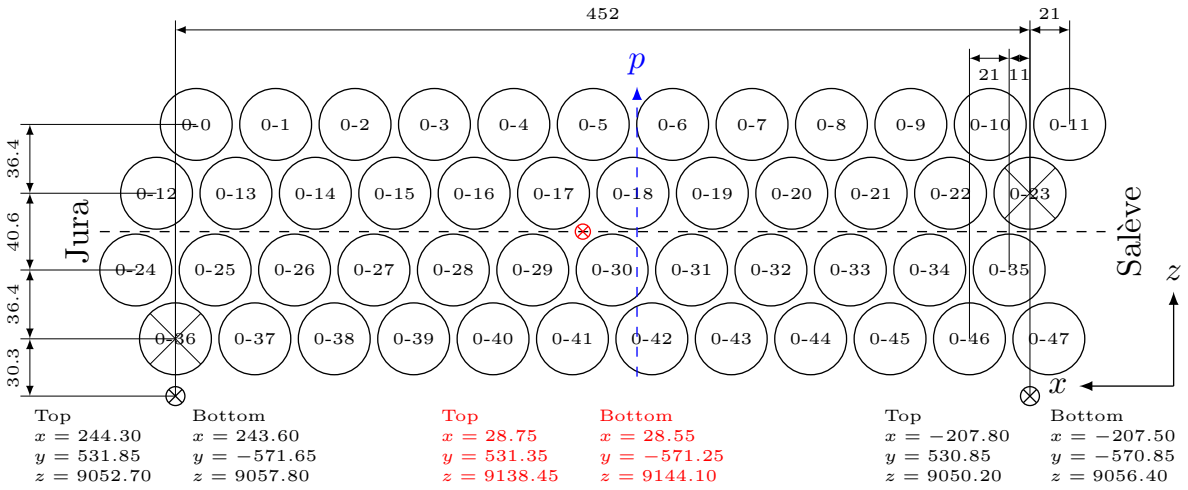


Figure 3: Layout of the y module of T1. The numbers in the circles represent the TDC number and channel connected to that tube. The coordinates are derived from the survey results (without the subtraction of 8896.09 mm), after subtraction of the nominal y displacements resulting from the mounting of the survey target (see the last column of Table 5). All measures in mm. The center coordinates (red) are the mean value of the coordinates derived from the left and right measurement.

Table 3: Staggering parameters of a module

Layer	x_l [mm]	z_l [mm]
0	5.5	-56.7
1	26.5	-20.3
2	15.5	20.3
3	-5.5	56.7

3.2 T1 and T2

The survey targets could not be directly attached to the drift tube modules. Screws and threads with known positions were identified on the modules and bolts were built to connect the survey targets. The survey points were different for the modules of T3/4.

For T1 and T2, the adapters were connected to the pull rods on top of the upper and below the lower end-plate. The rods are separated by $x = 452\,\text{mm}$ at $z = -87\,\text{mm}$ from the center of the module (see Figure 3). One rod is located at the same x-coordinate as the outer tube of the first layer ($x_{n,l} = 215.5\,\text{mm}$), the other at the x-coordinate of the opposite outer tube of the third layer ($x_{n,r} = -236.5\,\text{mm}$) (see Table 4).

The adapters replaced the screws holding the rods. The bolts for the upper and lower points had different lengths. The length of the lower bolts is 5 cm. For the upper bolts it is 15 cm to bypass the front-end electronics attached to the upper end-plate. Furthermore,

Table 4: Nominal location of the alignment spots on modules T1/2. Modules marked with * are stereo modules. This table shows the unrotated positions.

Module	x [mm]	z [mm]
T1A	215.5	-87
T1A	-236.5	-87
T1B*	215.5	87
T1B*	-236.5	87
T2A*	236.5	-87
T2A*	-215.5	-87
T2B	236.5	87
T2B	-215.5	87

Table 5: Nominal displacement of the survey target center from the alignment position on the end-plate

Module	offset [mm]	bolt [mm]	target [mm]	displacement y [mm]
T1A up	8.35	150	20	178.35
T1A bottom	8.65	50	20	78.65
T1B up	–	150	20	170.00
T1B bottom	–	50	20	70.00
T2A up	–	150	20	170.00
T2A bottom	–	50	20	70.00
T2B up	7.30	150	20	177.30
T2B bottom	8.45	50	20	78.45

for the modules holding a scintillator, an additional offset is added by the scintillator's support structure. Figure 4(a) shows how the bolts are attached to the end-plates.

The resulting offsets are summarized in Table 5. For the initial alignment, the bolts were considered as an ideal extension in y. Figure 4(b) shows the schematic front view of the module with the bolts and survey target attached. The arbitrary center for y is chosen in the middle of the tubes, so the y-coordinates for the alignment spots are: $y_{n,t} = 720\,\text{mm}$ and $y_{n,b} = -620\,\text{mm}$. The vertical distance is 1340 mm.

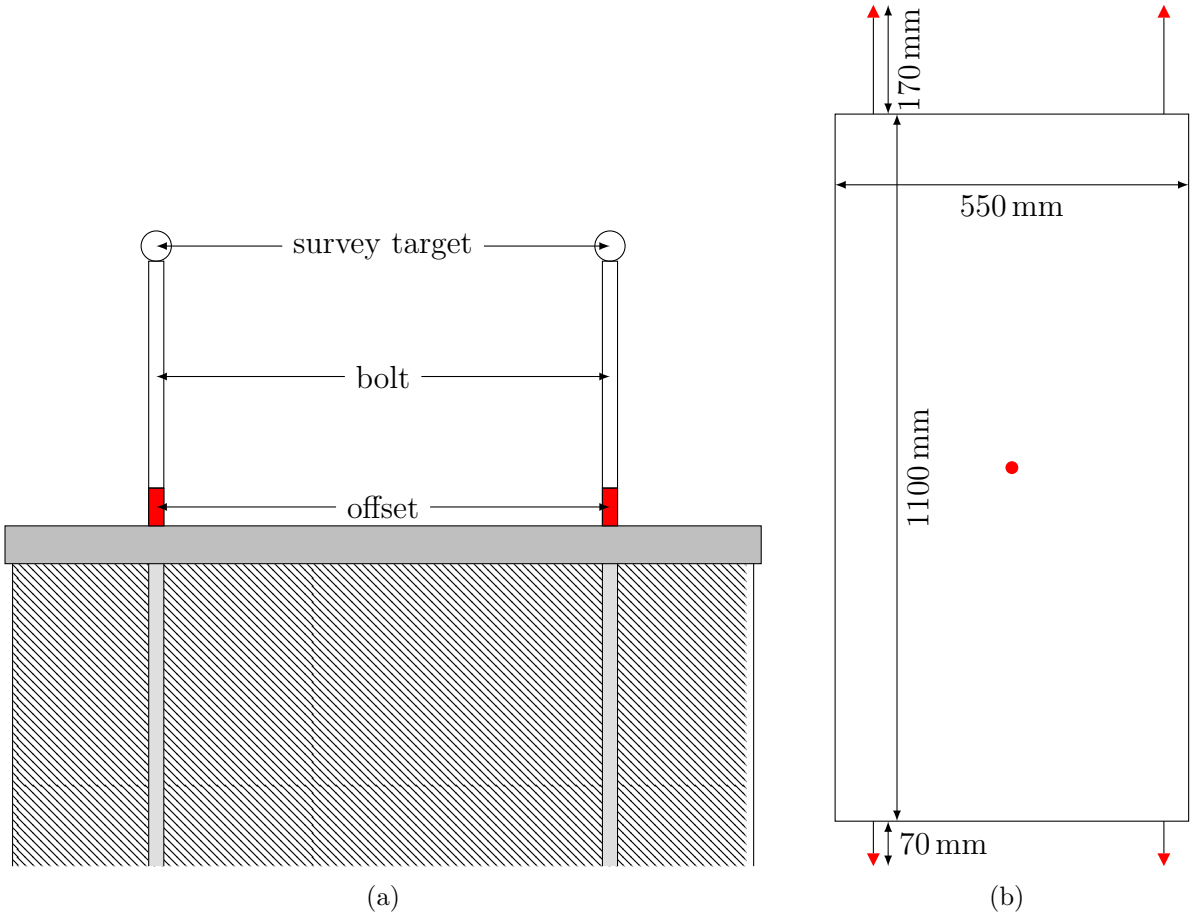


Figure 4: (a) Attachment of the survey target to the end-plates of the small modules (T1 and T2) via bolts. The scintillator supports add and extra offset for modules T1A and T2B. The offsets, bolts and survey targets lead to displacements in y. (b) Red triangles indicate the nominal positions of the targets.

3.3 Comparison to Survey

A first quick test can be done by looking at the distances of the alignment spots in the survey results. The results for T1 for the short sides are 451.709 mm and 452.000 mm and agree quite well with the nominal values. On the long side the results are 1352.53 mm and 1352.9 mm which is off by more than 12 mm. This offset remains yet to be understood[1]. For now the length of each bolt is assumed 6 mm longer, giving the following nominal (un-rotated) coordinates in mm:

$$\begin{aligned} r_{n,tl} &= (215.5, 726.0) \\ r_{n,tr} &= (-236.5, 726.0) \\ r_{n,bl} &= (215.5, -626.0) \\ r_{n,br} &= (-236.5, -626.0) \end{aligned}$$

3.3.1 Obtaining the Stereo Angle

The stereo angle can be easily obtained by looking at the survey results of either the Jura or Salève side. The connecting line of these compared to the y-axis gives the stereo angle:

$$\begin{aligned} \alpha &= \tan^{-1}\left(\frac{-\Delta x}{\Delta y}\right) \\ \alpha_{\text{left}} &= \tan^{-1}\left(\frac{504.544 + 669.285}{564.599 + 107.278}\right) = 1.051 \text{ rad} \equiv 60.214^\circ \\ \alpha_{\text{right}} &= \tan^{-1}\left(\frac{729.384 + 444.630}{172.827 + 499.492}\right) = 1.051 \text{ rad} \equiv 60.202^\circ \end{aligned}$$

of which the average is 60.208°.

3.3.2 Rotation and Translation of the Module

To get from the nominal coordinates (x_n, y_n) to the actual position (x_a, y_a), a rotation by the stereo angle α and a subsequent translation has to be applied.

$$\begin{pmatrix} x_a \\ y_a \end{pmatrix} = \begin{pmatrix} \cos\alpha & -\sin\alpha \\ \sin\alpha & \cos\alpha \end{pmatrix} \cdot \begin{pmatrix} x_n \\ y_n \end{pmatrix} + \begin{pmatrix} \Delta x \\ \Delta y \end{pmatrix}$$

Separating the unknown translation of the module, one gets:

$$\begin{aligned} \Delta x &= x_a - x_n \cos\alpha + y_n \sin\alpha \\ \Delta y &= y_a - x_n \sin\alpha - y_n \cos\alpha \end{aligned}$$

This can be done for all four alignment points. The individual results are presented in Table 6.

[1] The assumption is that two nuts accidentally remained on the thread where the bolts are connected, adding an additional 6 mm on each end.

Table 6: Translation for the four alignment points of T1 (stereo)

i	Δx [mm]	Δy [mm]
0	18.4308	16.864
1	18.1693	17.3527
2	18.8726	16.782
3	18.949	16.7353

Table 7: Translation for the four alignment points of T2 (stereo)

i	Δx [mm]	Δy [mm]
0	11.8165	15.0193
1	11.5546	16.2098
2	12.4665	15.861
3	11.7004	15.8275

The calculations give consistent results within 1 mm. The mean values in mm are:

$$\Delta x = 18.61 \pm 0.37$$
$$\Delta y = 16.93 \pm 0.28$$

3.3.3 Results for T2

The same calculations have been done for T2. Note that the geometry of T2 is rotated by 180° around the x-axis w.r.t. the rest of the detector. Hence the nominal position of the alignment points (and the tubes/staggering) changes. The stereo angle for T2 is found to be

$$\alpha = -1.04743 \text{ rad} \equiv -60.0135°.$$

The translation parameters are shown Table 7, the mean values in mm are:

$$\Delta x = 11.88 \pm 0.40$$
$$\Delta y = 15.73 \pm 0.50$$

3.4 Wire Positions

The actual wire positions for the top and bottom of the tube can now be derived from the nominal wire positions using the parameters found for translation and rotation:

$$
\begin{aligned}
x_{w,t} &= x_n \cos\alpha - 550\,\text{mm} \cdot \sin\alpha + \Delta x \\
x_{w,b} &= x_n \cos\alpha + 550\,\text{mm} \cdot \sin\alpha + \Delta x \\
y_{w,t} &= x_n \sin\alpha + 550\,\text{mm} \cdot \cos\alpha + \Delta y \\
y_{w,b} &= x_n \sin\alpha - 550\,\text{mm} \cdot \cos\alpha + \Delta y
\end{aligned}
$$

If one is interested in the x-coordinate if the intersection of the wire with the $y = 0$ plane, this can be obtained by looking at the line equation for the wire, eg

$$
\begin{pmatrix} x_w \\ y_w \end{pmatrix} = \begin{pmatrix} x_{w,b} \\ y_{w,b} \end{pmatrix} + n \begin{pmatrix} x_{w,t} - x_{w,b} \\ y_{w,t} - y_{w,b} \end{pmatrix}
$$

and setting $y_w = 0$. Hence

$$
n_0 = \frac{-y_{w,b}}{y_{w,t} - y_{w,b}}
$$

and thus

$$
\begin{aligned}
x_{w,0} &= x_{w,b} - \frac{y_{w,b}}{y_{w,t} - y_{w,b}} \cdot (x_{w,t} - x_{w,b}) \\
&= \frac{x_n + \Delta x \cdot \cos\alpha + \Delta y \cdot \sin\alpha}{\cos\alpha}.
\end{aligned}
$$

The z-positions can be directly derived from the survey. For T1, there is an offset of 87 mm between the center of the module and the alignment spot, wheres for T2 this offset is -87 mm. For an initial value of z, the average of the four survey measurement is taken. The following values in mm are calculated:

$$
\begin{aligned}
z_{0,\text{T1}} &= 9453.46 \pm 2.75 \\
z_{0,\text{T2}} &= 9828.20 \pm 2.20.
\end{aligned}
$$

The large error of these values originates from a slight tilt of the modules, which has not yet been taken into account.

Table 8: Nominal position of the threads and displacement by the bolts and survey target for T3 and T4 w.r.t. the module's center

	x [mm]	z [mm]	displacement z [mm]
T3	152.5	100.3	70
T3	-183.9	100.3	70
T4	141.5	-100.3	-70
T4	-194.5	-100.3	-70

3.5 T3 and T4

For T3 and T4, there were screw threads on the front side of the end-plates used to fix the bolts for the survey target. 50 mm long bolts were used, again an additional 20 mm offset was added by the survey target itself. For T3, this offset is along the z-axis, for T4 it is in the opposite direction (negative z-axis). The end-plates have a thickness of 25 mm, the bolts were fixed in the center, 12.5 mm below/above the top/bottom of the module.

The z-position of the screw thread is 43.3 mm away from the center of the outer tube layer. There is one thread each at the x-coordinate of the third and eleventh tube of the second layer for T3 and the third layer for T4. Table 8 summarizes the coordinates of the alignment spots for modules in T3 and T4.

3.6 Initial Alignment Quality Checks

To get a feeling of the quality of the initial alignment, some quick checks were derived form the survey results (which have an accuracy of 0.5 mm).

The survey results were not corrected by the nominal displacements as presented above. The following things were calculated and compared to the nominal values:

- distance between neighboring alignment spots, cf. "distance x" and "distance y" in Table 9.
- the angle between the lines connecting the top and the bottom spots (in x along the end-plates) as an indication for possible torsion, cf. "torsion x" in Table 9.
- the angle between the lines connecting the left and right spots (along the tubes) as an indication for possible torsion
- the angle between the latter lines w.r.t. to the y-axis as an indication for a tilt of the module, cf. "tilt left/right" in Table 9.
- distance of an survey coordinate to the plane created by the remaining three coordinates
- distance of the survey coordinates to a common plane at equal distance to these coordinates, cf. "offset mean" in Table 9.

Table 9: Selected results from the initial alignment checks. Note, that the displacements from mounting the scintillators are not considered. The stereo angle of the stereo modules can clearly be identified.

Module		distance x [mm]	distance y [mm]	torsion x [°]	tilt left [°]	tilt right [°]	offset mean [mm]
nominal		452	1352+				
0	top/left	452.157	1360.47	0.259299	0.221114	0.260825	0.24468
	bottom/right	451.216	1358.68				
1	top/left	451.709	1352.53	0.397671	60.2144	60.2018	0.778566
	bottom/right	452	1352.9				
2	top/left	453.163	1351.7	0.469026	60.0456	59.9816	0.922708
	bottom/right	451.655	1351.39				
3	top/left	450.636	1357.31	0.260562	0.110087	0.158765	0.511613
	bottom/right	451.912	1357.47				
nominal		336	1575				
4	top/left	336.267	1574.67	0.422327	0.0986707	0.157594	0.612453
	bottom/right	336.004	1575.03				
5	top/left	336.404	1574.79	0.579784	0.207784	0.319244	0.846713
	bottom/right	335.86	1574.48				
6	top/left	335.855	1575.18	0.199083	0.332634	0.371621	0.266821
	bottom/right	335.958	1574.7				
7	top/left	336.176	1575.47	0.197861	0.39672	0.425237	0.208303
	bottom/right	335.889	1574.66				
8	top/left	335.986	1574.83	0.358845	0.138431	0.180352	0.426324
	bottom/right	335.968	1573.6				
9	top/left	335.947	1575.12	0.325234	0.207607	0.259154	0.428482
	bottom/right	336.064	1575.95				
10	top/left	335.806	1573.53	0.141132	0.274726	0.290973	0.124069
	bottom/right	335.865	1572.86				
11	top/left	336.034	1577.13	0.776127	0.338577	0.458395	0.858111
	bottom/right	335.785	1574.14				

3.7 Survey measurements corrected for adapter positions

Table 10 contains (in FairShip coordinates) the drift tube measurements from the survey in Table 1 corrected for the offsets due to the adapter positions.

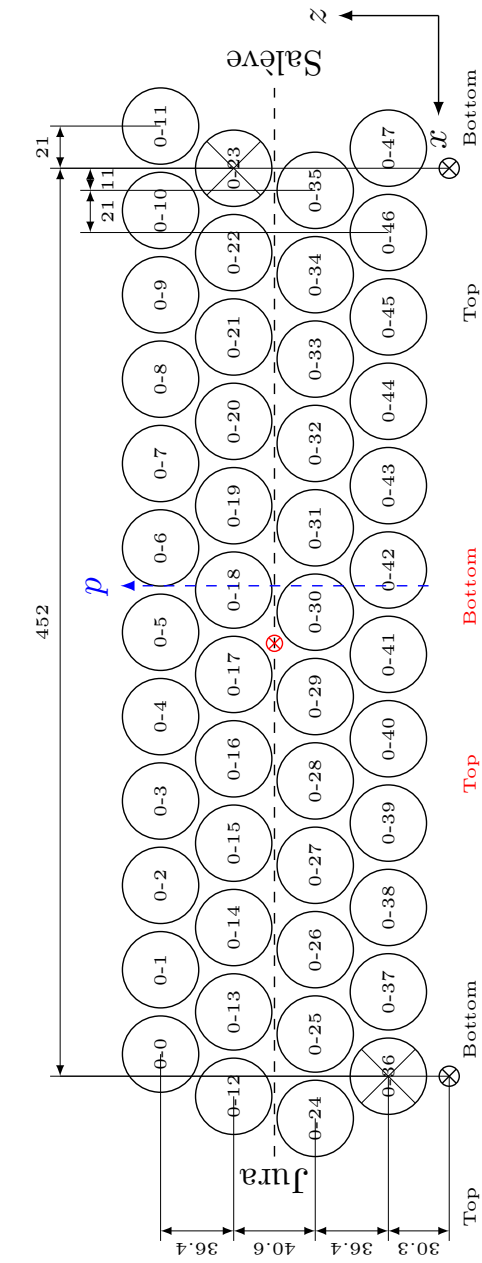
Table 10: Survey measurements, corrected for the adapter positions for the drift tube stations, in FairShip coordinates

Names	z [m]	x [m]	y [m]	Names	z [m]	x [m]	y [m]
T1_MA_01	0.15657	0.24429	0.53183	T2_MC_01	0.84628	0.75884	0.1730
T1_MA_02	0.15411	-0.20778	0.5308	T2_MC_02	0.84721	0.53265	0.5657
T1_MA_03	0.16029	-0.20754	-0.57086	T2_MC_03	0.84201	-0.63737	-0.1104
T1_MA_04	0.16175	0.24364	-0.57163	T2_MC_04	0.8448	-0.41206	-0.5021
T1_MB_01	0.64155	-0.50437	0.5647	T2_MD_01	1.33528	0.23847	0.53054
T1_MB_02	0.6427	-0.72931	0.1728	T2_MD_02	1.33148	-0.21207	0.53137
T1_MB_03	0.64589	0.44463	-0.4995	T2_MD_03	1.33241	-0.21572	-0.57034
T1_MB_04	0.64744	0.66931	-0.1073	T2_MD_04	1.33415	0.23613	-0.57104
T3_B01	5.74508	0.92852	-0.69427	T4_B01	7.57747	0.91836	-0.6973
T3_B02	5.74426	0.59256	-0.69476	T4_B02	7.57572	0.58237	-0.69917
T3_B03	5.74384	0.42446	-0.69687	T4_B03	7.57472	0.41438	-0.69996
T3_B04	5.74254	0.0884	-0.69791	T4_B04	7.57276	0.07852	-0.70076
T3_B05	5.74243	-0.08129	-0.69609	T4_B05	7.5728	-0.08878	-0.70149
T3_B06	5.74329	-0.41716	-0.69651	T4_B06	7.57349	-0.42474	-0.70092
T3_B07	5.74351	-0.58586	-0.69885	T4_B07	7.57387	-0.59364	-0.70129
T3_B08	5.74319	-0.92164	-0.69699	T4_B08	7.57409	-0.92953	-0.7002
T3_T01	5.74716	0.92532	0.90557	T4_T01	7.57882	0.92072	0.90237
T3_T02	5.74804	0.58933	0.90385	T4_T02	7.57952	0.58445	0.90086
T3_T03	5.7485	0.42116	0.90323	T4_T03	7.57992	0.41675	0.89982
T3_T04	5.74892	0.08519	0.90303	T4_T04	7.58133	0.08036	0.8987
T3_T05	5.74949	-0.08389	0.90241	T4_T05	7.58186	-0.08756	0.89867
T3_T06	5.75084	-0.41975	0.90133	T4_T06	7.58362	-0.42338	0.89874
T3_T07	5.75204	-0.58962	0.90325	T4_T07	7.58464	-0.59188	0.89914
T3_T08	5.75513	-0.92563	0.9021	T4_T08	7.58569	-0.92803	0.89941

3.8 Drift tube detector id to channel mapping

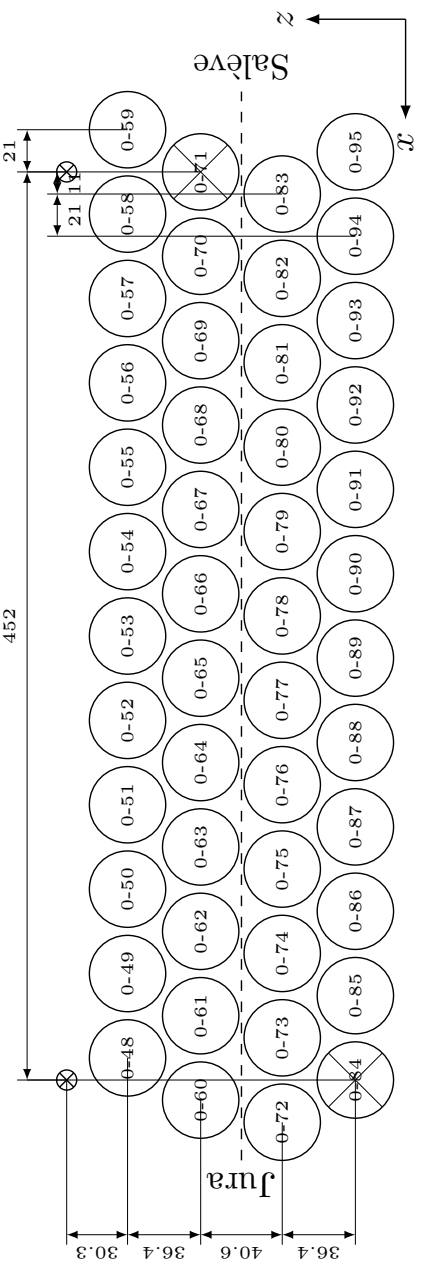
The tables in this section contain the mapping of the FairShip detector id to the TDC-channel number used for the signal readout, together with their FairShip z and x (at $y = 0$) coordinates.

Table 11: DT (drifttube) FairShip detector ID vs TDC channel number, Station 1 x.



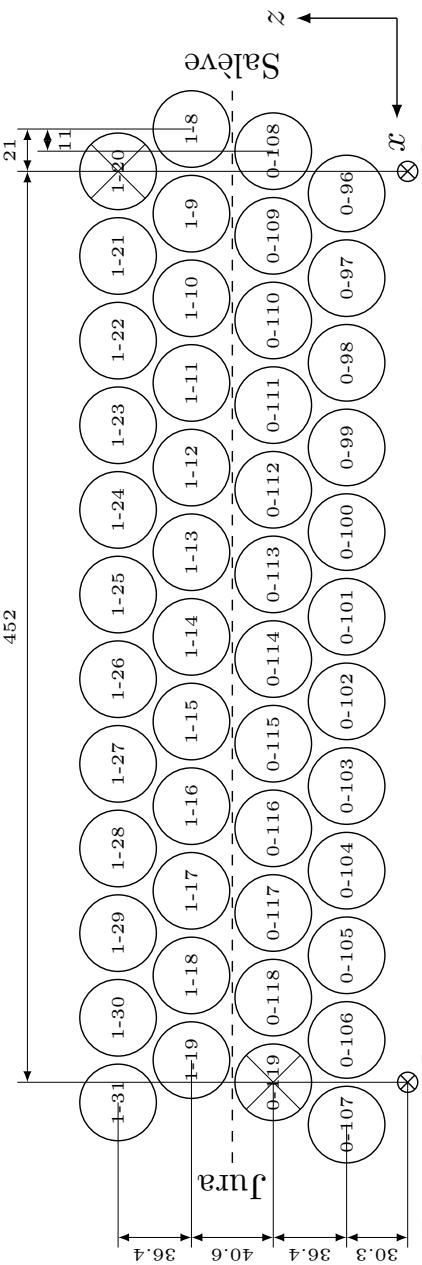
FairShip	TDC	z (cm)	x (cm)	FairShip	TDC	z (cm)	x (cm)	FairShip	TDC	z (cm)	x (cm)	FairShip	TDC	z (cm)	x (cm)
10002001	0-47	19.32	-21.77	10012001	0-35	22.96	-19.68	10102001	0-23	27.02	-20.78	10112001	0-11	30.66	-22.88
10002002	0-46	19.32	-17.57	10012002	0-34	22.96	-15.48	10102002	0-22	27.02	-16.58	10112002	0-10	30.66	-18.68
10002003	0-45	19.32	-13.37	10012003	0-33	22.96	-11.28	10102003	0-21	27.02	-12.38	10112003	0-9	30.66	-14.48
10002004	0-44	19.32	-9.17	10012004	0-32	22.96	-7.08	10102004	0-20	27.02	-8.18	10112004	0-8	30.66	-10.28
10002005	0-43	19.32	-4.97	10012005	0-31	22.96	-2.88	10102005	0-19	27.02	-3.98	10112005	0-7	30.66	-6.08
10002006	0-42	19.32	-0.77	10012006	0-30	22.96	1.32	10102006	0-18	27.02	0.22	10112006	0-6	30.66	-1.88
10002007	0-41	19.32	3.43	10012007	0-29	22.96	5.52	10102007	0-17	27.02	4.42	10112007	0-5	30.66	2.32
10002008	0-40	19.32	7.63	10012008	0-28	22.96	9.72	10102008	0-16	27.02	8.62	10112008	0-4	30.66	6.52
10002009	0-39	19.32	11.83	10012009	0-27	22.96	13.92	10102009	0-15	27.02	12.82	10112009	0-3	30.66	10.72
10002010	0-38	19.32	16.03	10012010	0-26	22.96	18.12	10102010	0-14	27.02	17.02	10112010	0-2	30.66	14.92
10002011	0-37	19.32	20.23	10012011	0-25	22.96	22.32	10102011	0-13	27.02	21.22	10112011	0-1	30.66	19.12
10002012	0-36	19.32	24.43	10012012	0-24	22.96	26.52	10102012	0-12	27.02	25.42	10112012	0-0	30.66	23.32

Table 12: DT FairShip detector ID vs TDC channel number, Station 1 u.



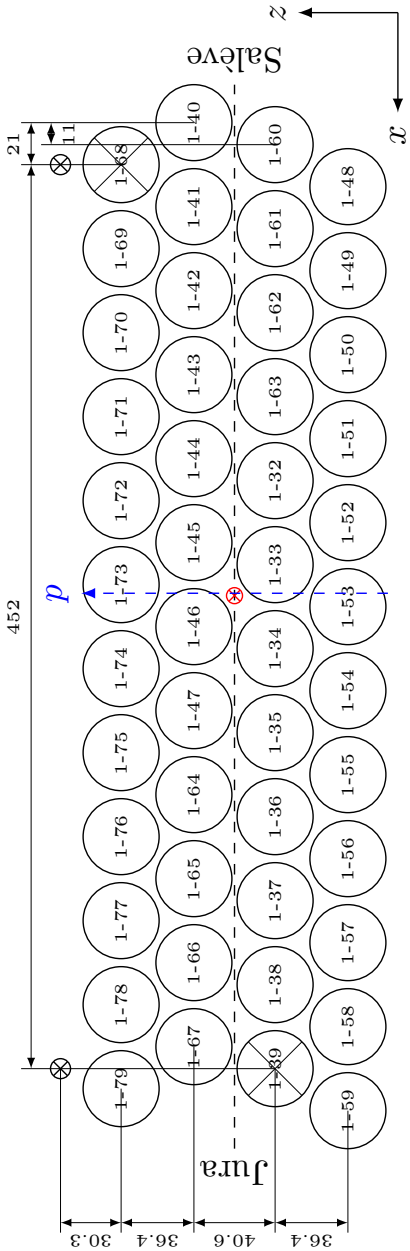
FairShip	TDC	z (cm)	x (cm)	FairShip	TDC	z (cm)	x (cm)	FairShip	TDC	z (cm)	x (cm)	FairShip	TDC	z (cm)	x (cm)
11002001	0-95	50.5382	-5.1207	11012001	0-83	54.1782	-4.0768	11102001	0-71	58.2383	-4.6236	11112001	0-59	61.8783	-5.6675
11002002	0-94	50.5382	-3.0329	11012002	0-82	54.1782	-1.9890	11102002	0-70	58.2383	-2.5358	11112002	0-58	61.8783	-3.5797
11002003	0-93	50.5382	-0.9451	11012003	0-81	54.1782	0.0988	11102003	0-69	58.2383	-0.4480	11112003	0-57	61.8783	-1.4919
11002004	0-92	50.5382	1.1427	11012004	0-80	54.1782	2.1866	11102004	0-68	58.2383	1.6398	11112004	0-56	61.8783	0.5959
11002005	0-91	50.5382	3.2304	11012005	0-79	54.1782	4.2743	11102005	0-67	58.2383	3.7275	11112005	0-55	61.8783	2.6836
11002006	0-90	50.5382	5.3182	11012006	0-78	54.1782	6.3621	11102006	0-66	58.2383	5.8153	11112006	0-54	61.8783	4.7714
11002007	0-89	50.5382	7.4060	11012007	0-77	54.1782	8.4499	11102007	0-65	58.2383	7.9031	11112007	0-53	61.8783	6.8592
11002008	0-88	50.5382	9.4938	11012008	0-76	54.1782	10.5377	11102008	0-64	58.2383	9.9909	11112008	0-52	61.8783	8.9470
11002009	0-87	50.5382	11.5816	11012009	0-75	54.1782	12.6254	11102009	0-63	58.2383	12.0786	11112009	0-51	61.8783	11.0348
11002010	0-86	50.5382	13.6693	11012010	0-74	54.1782	14.7132	11102010	0-62	58.2383	14.1664	11112010	0-50	61.8783	13.1225
11002011	0-85	50.5382	15.7571	11012011	0-73	54.1782	16.8010	11102011	0-61	58.2383	16.2542	11112011	0-49	61.8783	15.2103
11002012	0-84	50.5382	17.8449	11012012	0-72	54.1782	18.8888	11102012	0-60	58.2383	18.3420	11112012	0-48	61.8783	17.2981

Table 13: DT FairShip detector ID vs TDC channel number, Station 2 v.



FairShip	TDC	z (cm)	x (cm)	FairShip	TDC	z (cm)	x (cm)	FairShip	TDC	z (cm)	x (cm)	FairShip	TDC	z (cm)	x (cm)
20002001	0-96	88.0127	-7.9495	20012001	0-108	91.6527	-8.9999	20102001	1-8	95.7127	-9.5502	20112001	1-20	99.3527	-8.4997
20002002	0-97	88.0127	-5.8487	20012002	0-109	91.6527	-6.8991	20102002	1-9	95.7127	-7.4493	20112002	1-21	99.3527	-6.3989
20002003	0-98	88.0127	-3.7478	20012003	0-110	91.6527	-4.7982	20102003	1-10	95.7127	-5.3485	20112003	1-22	99.3527	-4.2980
20002004	0-99	88.0127	-1.6470	20012004	0-111	91.6527	-2.6974	20102004	1-11	95.7127	-3.2476	20112004	1-23	99.3527	-2.1972
20002005	0-100	88.0127	0.4539	20012005	0-112	91.6527	-0.5965	20102005	1-12	95.7127	-1.1468	20112005	1-24	99.3527	-0.0963
20002006	0-101	88.0127	2.5547	20012006	0-113	91.6527	1.5043	20102006	1-13	95.7127	0.9541	20112006	1-25	99.3527	2.0045
20002007	0-102	88.0127	4.6556	20012007	0-114	91.6527	3.6052	20102007	1-14	95.7127	3.0549	20112007	1-26	99.3527	4.1054
20002008	0-103	88.0127	6.7564	20012008	0-115	91.6527	5.7060	20102008	1-15	95.7127	5.1558	20112008	1-27	99.3527	6.2062
20002009	0-104	88.0127	8.8573	20012009	0-116	91.6527	7.8069	20102009	1-16	95.7127	7.2566	20112009	1-28	99.3527	8.3071
20002010	0-105	88.0127	10.9581	20012010	0-117	91.6527	9.9077	20102010	1-17	95.7127	9.3575	20112010	1-29	99.3527	10.4079
20002011	0-106	88.0127	13.0590	20012011	0-118	91.6527	12.0085	20102011	1-18	95.7127	11.4583	20112011	1-30	99.3527	12.5087
20002012	0-107	88.0127	15.1598	20012012	0-119	91.6527	14.1094	20102012	1-19	95.7127	13.5592	20112012	1-31	99.3527	14.6096

Table 14: DT FairShip detector ID vs TDC channel number, Station 2 x.



FairShip	TDC	z (cm)	x (cm)	FairShip	TDC	z (cm)	x (cm)	FairShip	TDC	z (cm)	x (cm)	FairShip	TDC	z (cm)	x (cm)
21002001	1-48	119.412	-20.47	21012001	1-60	123.052	-22.57	21102001	1-40	127.112	-23.67	21112001	1-68	130.752	-21.57
21002002	1-49	119.412	-16.27	21012002	1-61	123.052	-18.37	21102002	1-41	127.112	-19.47	21112002	1-69	130.752	-17.37
21002003	1-50	119.412	-12.07	21012003	1-62	123.052	-14.17	21102003	1-42	127.112	-15.27	21112003	1-70	130.752	-13.17
21002004	1-51	119.412	-7.87	21012004	1-63	123.052	-9.97	21102004	1-43	127.112	-11.07	21112004	1-71	130.752	-8.97
21002005	1-52	119.412	-3.67	21012005	1-32	123.052	-5.77	21102005	1-44	127.112	-6.87	21112005	1-72	130.752	-4.77
21002006	1-53	119.412	0.53	21012006	1-33	123.052	-1.57	21102006	1-45	127.112	-2.67	21112006	1-73	130.752	-0.57
21002007	1-54	119.412	4.73	21012007	1-34	123.052	2.63	21102007	1-46	127.112	1.53	21112007	1-74	130.752	3.63
21002008	1-55	119.412	8.93	21012008	1-35	123.052	6.83	21102008	1-47	127.112	5.73	21112008	1-75	130.752	7.83
21002009	1-56	119.412	13.13	21012009	1-36	123.052	11.03	21102009	1-64	127.112	9.93	21112009	1-76	130.752	12.03
21002010	1-57	119.412	17.33	21012010	1-37	123.052	15.23	21102010	1-65	127.112	14.13	21112010	1-77	130.752	16.23
21002011	1-58	119.412	21.53	21012011	1-38	123.052	19.43	21102011	1-66	127.112	18.33	21112011	1-78	130.752	20.43
21002012	1-59	119.412	25.73	21012012	1-39	123.052	23.63	21102012	1-67	127.112	22.53	21112012	1-79	130.752	24.63

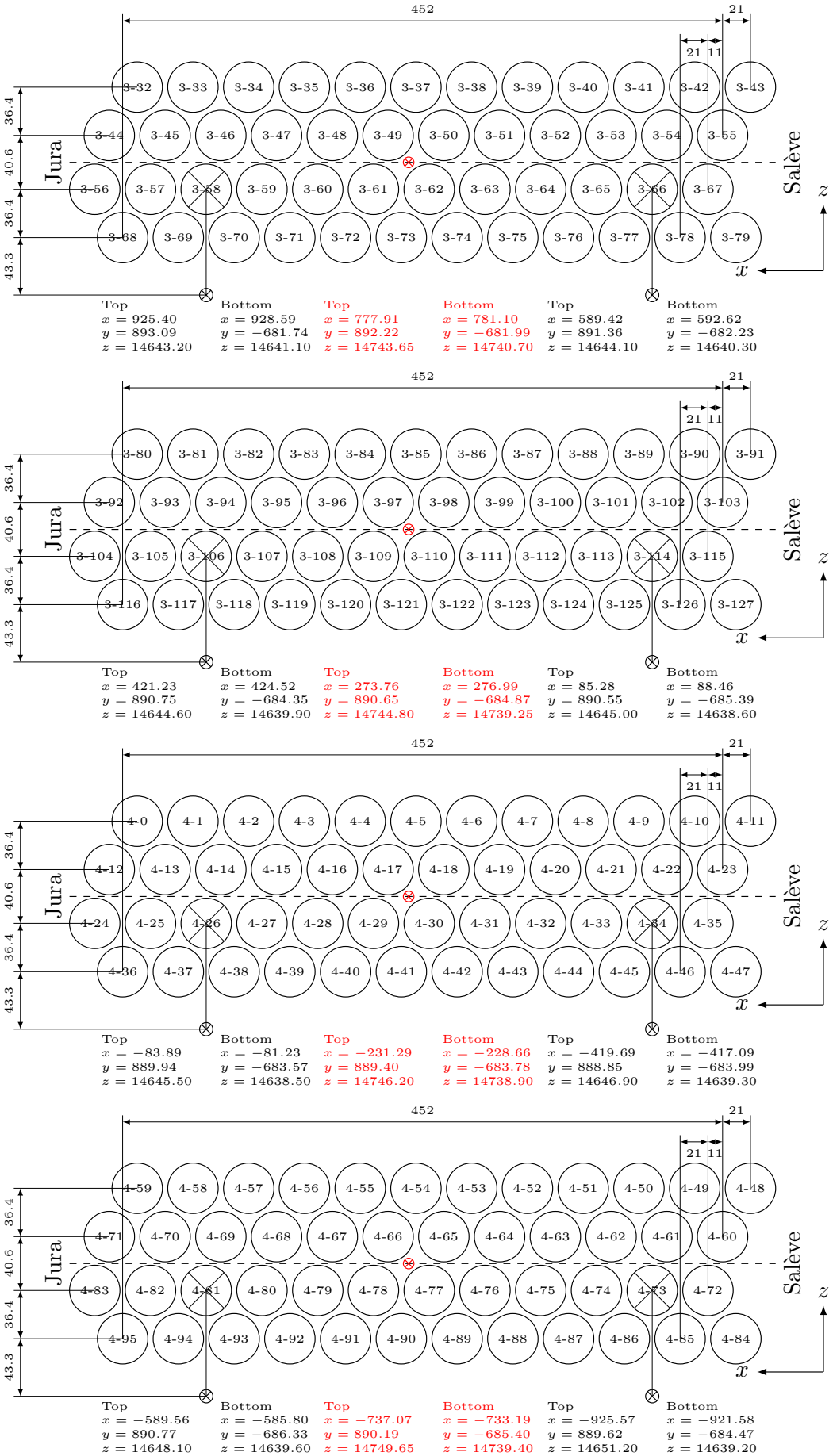


Figure 5: 4 DT station T3 modules.

Table 15: DT FairShip detector ID vs TDC channel number, Station 3.

FairShip	TDC	z (cm)	x (cm)	FairShip	TDC	z (cm)	x (cm)	FairShip	TDC	z (cm)	x (cm)	FairShip	TDC	z (cm)	x (cm)
30002001	4-84	579.645	-98.6575	30012001	4-72	583.285	-96.5575	30102001	4-60	587.345	-97.6575	30112001	4-48	590.985	-99.7575
30002002	4-85	579.645	-94.4575	30012002	4-73	583.285	-92.3575	30102002	4-61	587.345	-93.4575	30112002	4-49	590.985	-95.5575
30002003	4-86	579.645	-90.2575	30012003	4-74	583.285	-88.1575	30102003	4-62	587.345	-89.2575	30112003	4-50	590.985	-91.3575
30002004	4-87	579.645	-86.0575	30012004	4-75	583.285	-83.9575	30102004	4-63	587.345	-85.0575	30112004	4-51	590.985	-87.1575
30002005	4-88	579.645	-81.8575	30012005	4-76	583.285	-79.7575	30102005	4-64	587.345	-80.8575	30112005	4-52	590.985	-82.9575
30002006	4-89	579.645	-77.6575	30012006	4-77	583.285	-75.5575	30102006	4-65	587.345	-76.6575	30112006	4-53	590.985	-78.7575
30002007	4-90	579.645	-73.4575	30012007	4-78	583.285	-71.3575	30102007	4-66	587.345	-72.4575	30112007	4-54	590.985	-74.5575
30002008	4-91	579.645	-69.2575	30012008	4-79	583.285	-67.1575	30102008	4-67	587.345	-68.2575	30112008	4-55	590.985	-70.3575
30002009	4-92	579.645	-65.0575	30012009	4-80	583.285	-62.9575	30102009	4-68	587.345	-64.0575	30112009	4-56	590.985	-66.1575
30002010	4-93	579.645	-60.8575	30012010	4-81	583.285	-58.7575	30102010	4-69	587.345	-59.8575	30112010	4-57	590.985	-61.9575
30002011	4-94	579.645	-56.6575	30012011	4-82	583.285	-54.5575	30102011	4-70	587.345	-55.6575	30112011	4-58	590.985	-57.7575
30002012	4-95	579.645	-52.4575	30012012	4-83	583.285	-50.3575	30102012	4-71	587.345	-51.4575	30112012	4-59	590.985	-53.5575
30002013	4-47	579.4475	-48.139	30012013	4-35	583.0875	-46.039	30102013	4-23	587.1475	-47.139	30112013	4-11	590.7875	-49.239
30002014	4-46	579.4475	-43.939	30012014	4-34	583.0875	-41.839	30102014	4-22	587.1475	-42.939	30112014	4-10	590.7875	-45.039
30002015	4-45	579.4475	-39.739	30012015	4-33	583.0875	-37.639	30102015	4-21	587.1475	-38.739	30112015	4-9	590.7875	-40.839
30002016	4-44	579.4475	-35.539	30012016	4-32	583.0875	-33.439	30102016	4-20	587.1475	-34.539	30112016	4-8	590.7875	-36.639
30002017	4-43	579.4475	-31.339	30012017	4-31	583.0875	-29.239	30102017	4-19	587.1475	-30.339	30112017	4-7	590.7875	-32.439
30002018	4-42	579.4475	-27.139	30012018	4-30	583.0875	-25.039	30102018	4-18	587.1475	-26.139	30112018	4-6	590.7875	-28.239
30002019	4-41	579.4475	-22.939	30012019	4-29	583.0875	-20.839	30102019	4-17	587.1475	-21.939	30112019	4-5	590.7875	-24.039
30002020	4-40	579.4475	-18.739	30012020	4-28	583.0875	-16.639	30102020	4-16	587.1475	-17.739	30112020	4-4	590.7875	-19.839
30002021	4-39	579.4475	-14.539	30012021	4-27	583.0875	-12.439	30102021	4-15	587.1475	-13.539	30112021	4-3	590.7875	-15.639
30002022	4-38	579.4475	-10.339	30012022	4-26	583.0875	-8.239	30102022	4-14	587.1475	-9.339	30112022	4-2	590.7875	-11.439
30002023	4-37	579.4475	-6.139	30012023	4-25	583.0875	-4.039	30102023	4-13	587.1475	-5.139	30112023	4-1	590.7875	-7.239
30002024	4-36	579.4475	-1.939	30012024	4-24	583.0875	0.161	30102024	4-12	587.1475	-0.939	30112024	4-0	590.7875	-3.039
30002025	3-127	579.395	2.387	30012025	3-115	583.035	4.487	30102025	3-103	587.095	3.387	30112025	3-91	590.735	1.287
30002026	3-126	579.395	6.587	30012026	3-114	583.035	8.687	30102026	3-102	587.095	7.587	30112026	3-90	590.735	5.487
30002027	3-125	579.395	10.787	30012027	3-113	583.035	12.887	30102027	3-101	587.095	11.787	30112027	3-89	590.735	9.687
30002028	3-124	579.395	14.987	30012028	3-112	583.035	17.087	30102028	3-100	587.095	15.987	30112028	3-88	590.735	13.887
30002029	3-123	579.395	19.187	30012029	3-111	583.035	21.287	30102029	3-99	587.095	20.187	30112029	3-87	590.735	18.087
30002030	3-122	579.395	23.387	30012030	3-110	583.035	25.487	30102030	3-98	587.095	24.387	30112030	3-86	590.735	22.287
30002031	3-121	579.395	27.587	30012031	3-109	583.035	29.687	30102031	3-97	587.095	28.587	30112031	3-85	590.735	26.487
30002032	3-120	579.395	31.787	30012032	3-108	583.035	33.887	30102032	3-96	587.095	32.787	30112032	3-84	590.735	30.687
30002033	3-119	579.395	35.987	30012033	3-107	583.035	38.087	30102033	3-95	587.095	36.987	30112033	3-83	590.735	34.887
30002034	3-118	579.395	40.187	30012034	3-106	583.035	42.287	30102034	3-94	587.095	41.187	30112034	3-82	590.735	39.087
30002035	3-117	579.395	44.387	30012035	3-105	583.035	46.487	30102035	3-93	587.095	45.387	30112035	3-81	590.735	43.287
30002036	3-116	579.395	48.587	30012036	3-104	583.035	50.687	30102036	3-92	587.095	49.587	30112036	3-80	590.735	47.487
30002037	3-79	52.802	50.2	30012037	3-67	583.05	54.902	30102037	3-55	587.11	53.802	30112037	3-43	590.75	51.702
30002038	3-78	57.002	54.4	30012038	3-66	583.05	59.102	30102038	3-54	587.11	58.002	30112038	3-42	590.75	55.902
30002039	3-77	61.202	58.6	30012039	3-65	583.05	63.302	30102039	3-53	587.11	62.202	30112039	3-41	590.75	60.102
30002040	3-76	65.402	62.8	30012040	3-64	583.05	67.502	30102040	3-52	587.11	66.402	30112040	3-40	590.75	64.302
30002041	3-75	69.602	67.0	30012041	3-63	583.05	71.702	30102041	3-51	587.11	70.602	30112041	3-39	590.75	68.502
30002042	3-74	73.802	71.2	30012042	3-62	583.05	75.902	30102042	3-50	587.11	74.802	30112042	3-38	590.75	72.702
30002043	3-73	78.002	75.4	30012043	3-61	583.05	80.102	30102043	3-49	587.11	79.002	30112043	3-37	590.75	76.902
30002044	3-72	82.202	79.6	30012044	3-60	583.05	84.302	30102044	3-48	587.11	83.202	30112044	3-36	590.75	81.102
30002045	3-71	86.402	83.8	30012045	3-59	583.05	88.502	30102045	3-47	587.11	87.402	30112045	3-35	590.75	85.302
30002046	3-70	90.602	88.0	30012046	3-58	583.05	92.702	30102046	3-46	587.11	91.602	30112046	3-34	590.75	89.502
30002047	3-69	94.802	92.2	30012047	3-57	583.05	96.902	30102047	3-45	587.11	95.802	30112047	3-33	590.75	93.702
30002048	3-68	99.002	96.4	30012048	3-56	583.05	101.102	30102048	3-44	587.11	100.002	30112048	3-32	590.75	97.902

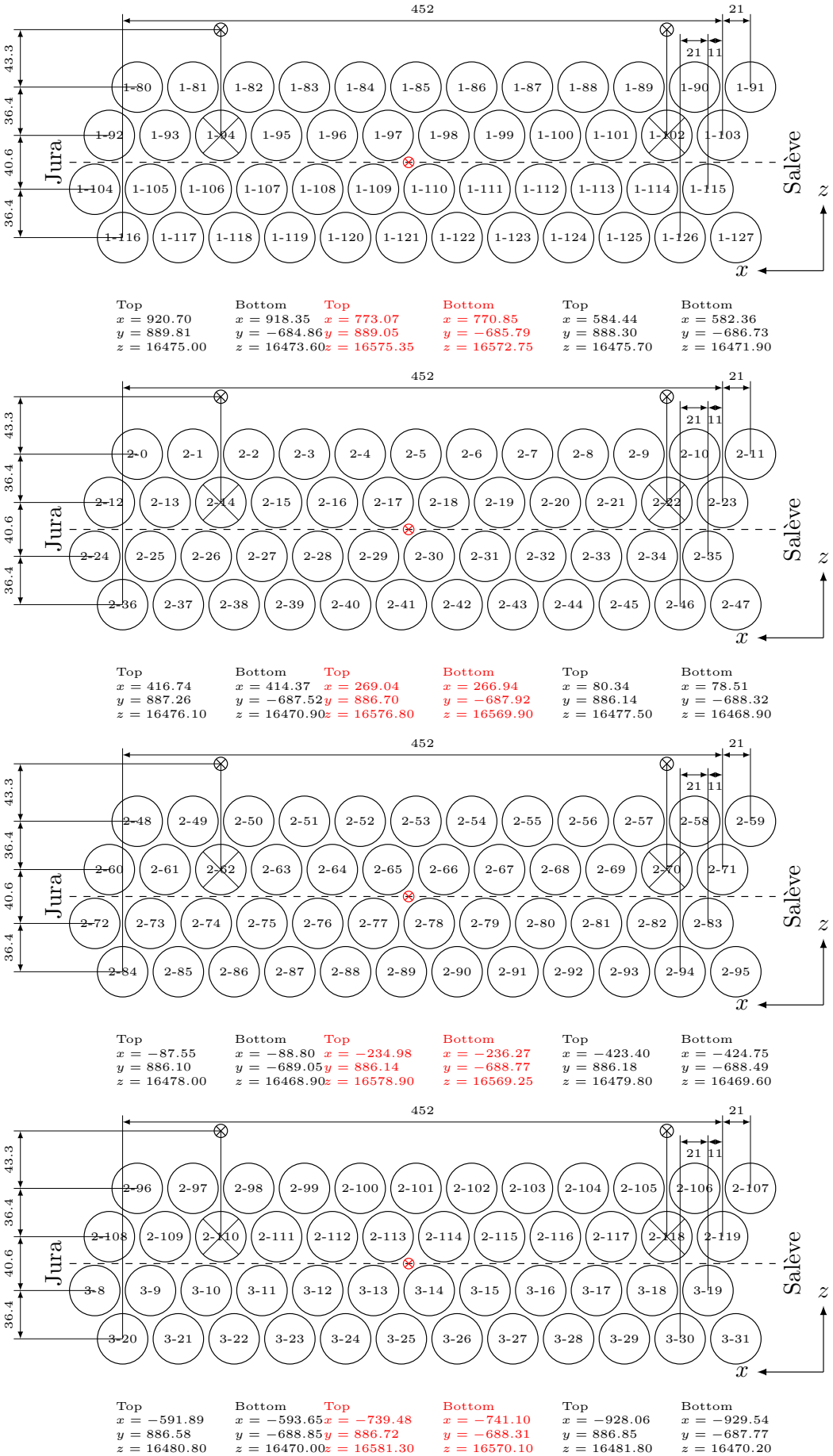


Figure 6: DT station T4 modules

Table 16: DT FairShip detector ID vs TDC channel number, Station 4.

FairShip	TDC	z (cm)	x (cm)	FairShip	TDC	z (cm)	x (cm)	FairShip	TDC	z (cm)	x (cm)	FairShip	TDC	z (cm)	x (cm)
40002001	3-31	742.7625	-98.08	40012001	3-19	746.4025	-98.9	40102001	2-119	750.4625	-97.08	40112001	2-107	754.1025	-99.18
40002002	3-30	742.7625	-93.88	40012002	3-18	746.4025	-94.7	40102002	2-118	750.4625	-92.88	40112002	2-106	754.1025	-94.98
40002003	3-29	742.7625	-89.68	40012003	3-17	746.4025	-90.5	40102003	2-117	750.4625	-88.68	40112003	2-105	754.1025	-90.78
40002004	3-28	742.7625	-85.48	40012004	3-16	746.4025	-86.3	40102004	2-116	750.4625	-84.48	40112004	2-104	754.1025	-86.58
40002005	3-27	742.7625	-81.28	40012005	3-15	746.4025	-82.1	40102005	2-115	750.4625	-80.28	40112005	2-103	754.1025	-82.38
40002006	3-26	742.7625	-77.08	40012006	3-14	746.4025	-77.9	40102006	2-114	750.4625	-76.08	40112006	2-102	754.1025	-78.18
40002007	3-25	742.7625	-72.88	40012007	3-13	746.4025	-73.7	40102007	2-113	750.4625	-71.88	40112007	2-101	754.1025	-73.98
40002008	3-24	742.7625	-68.68	40012008	3-12	746.4025	-69.5	40102008	2-112	750.4625	-67.68	40112008	2-100	754.1025	-69.78
40002009	3-23	742.7625	-64.48	40012009	3-11	746.4025	-65.3	40102009	2-111	750.4625	-63.48	40112009	2-99	754.1025	-65.58
40002010	3-22	742.7625	-60.28	40012010	3-10	746.4025	-61.1	40102010	2-110	750.4625	-59.28	40112010	2-98	754.1025	-61.38
40002011	3-21	742.7625	-56.08	40012011	3-9	746.4025	-56.9	40102011	2-109	750.4625	-55.08	40112011	2-97	754.1025	-57.18
40002012	3-20	742.7625	-51.88	40012012	3-8	746.4025	-52.7	40102012	2-108	750.4625	-50.88	40112012	2-96	754.1025	-52.98
40002013	2-95	742.6	-47.6075	40012013	2-83	746.24	-45.5075	40102013	2-71	750.3	-46.6075	40112013	2-59	753.94	-48.7075
40002014	2-94	742.6	-43.4075	40012014	2-82	746.24	-41.3075	40102014	2-70	750.3	-42.4075	40112014	2-58	753.94	-44.5075
40002015	2-93	742.6	-39.2075	40012015	2-81	746.24	-37.1075	40102015	2-69	750.3	-38.2075	40112015	2-57	753.94	-40.3075
40002016	2-92	742.6	-35.0075	40012016	2-80	746.24	-32.9075	40102016	2-68	750.3	-34.0075	40112016	2-56	753.94	-36.1075
40002017	2-91	742.6	-30.8075	40012017	2-79	746.24	-28.7075	40102017	2-67	750.3	-29.8075	40112017	2-55	753.94	-31.9075
40002018	2-90	742.6	-26.6075	40012018	2-78	746.24	-24.5075	40102018	2-66	750.3	-25.6075	40112018	2-54	753.94	-27.7075
40002019	2-89	742.6	-22.4075	40012019	2-77	746.24	-20.3075	40102019	2-65	750.3	-21.4075	40112019	2-53	753.94	-23.5075
40002020	2-88	742.6	-18.2075	40012020	2-76	746.24	-16.1075	40102020	2-64	750.3	-17.2075	40112020	2-52	753.94	-19.3075
40002021	2-87	742.6	-14.0075	40012021	2-75	746.24	-11.9075	40102021	2-63	750.3	-13.0075	40112021	2-51	753.94	-15.1075
40002022	2-86	742.6	-9.8075	40012022	2-74	746.24	-7.7075	40102022	2-62	750.3	-8.8075	40112022	2-50	753.94	-10.9075
40002023	2-85	742.6	-5.6075	40012023	2-73	746.24	-3.5075	40102023	2-61	750.3	-4.6075	40112023	2-49	753.94	-6.7075
40002024	2-84	742.6	-1.4075	40012024	2-72	746.24	0.6925	40102024	2-60	750.3	-0.4075	40112024	2-48	753.94	-2.5075
40002025	2-47	742.5275	2.7425	40012025	2-35	746.1675	4.8425	40102025	2-23	750.2275	3.7425	40112025	2-11	753.8675	1.6425
40002026	2-46	742.5275	6.9425	40012026	2-34	746.1675	9.0425	40102026	2-22	750.2275	7.9425	40112026	2-10	753.8675	5.8425
40002027	2-45	742.5275	11.1425	40012027	2-33	746.1675	13.2425	40102027	2-21	750.2275	12.1425	40112027	2-9	753.8675	10.0425
40002028	2-44	742.5275	15.3425	40012028	2-32	746.1675	17.4425	40102028	2-20	750.2275	16.3425	40112028	2-8	753.8675	14.2425
40002029	2-43	742.5275	19.5425	40012029	2-31	746.1675	21.6425	40102029	2-19	750.2275	20.5425	40112029	2-7	753.8675	18.4425
40002030	2-42	742.5275	23.7425	40012030	2-30	746.1675	25.8425	40102030	2-18	750.2275	24.7425	40112030	2-6	753.8675	22.6425
40002031	2-41	742.5275	27.9425	40012031	2-29	746.1675	30.0425	40102031	2-17	750.2275	28.9425	40112031	2-5	753.8675	26.8425
40002032	2-40	742.5275	32.1425	40012032	2-28	746.1675	34.2425	40102032	2-16	750.2275	33.1425	40112032	2-4	753.8675	31.0425
40002033	2-39	742.5275	36.3425	40012033	2-27	746.1675	38.4425	40102033	2-15	750.2275	37.3425	40112033	2-3	753.8675	35.2425
40002034	2-38	742.5275	40.5425	40012034	2-26	746.1675	42.6425	40102034	2-14	750.2275	41.5425	40112034	2-2	753.8675	39.4425
40002035	2-37	742.5275	44.7425	40012035	2-25	746.1675	46.8425	40102035	2-13	750.2275	45.7425	40112035	2-1	753.8675	43.6425
40002036	2-36	742.5275	48.9425	40012036	2-24	746.1675	51.0425	40102036	2-12	750.2275	49.9425	40112036	2-0	753.8675	47.8425
40002037	1-127	742.5975	53.14	40012037	1-115	746.2375	55.24	40102037	1-103	750.2975	54.14	40112037	1-91	753.9375	52.04
40002038	1-126	742.5975	57.34	40012038	1-114	746.2375	59.44	40102038	1-102	750.2975	58.34	40112038	1-90	753.9375	56.24
40002039	1-125	742.5975	61.54	40012039	1-113	746.2375	63.64	40102039	1-101	750.2975	62.54	40112039	1-89	753.9375	60.44
40002040	1-124	742.5975	65.74	40012040	1-112	746.2375	67.84	40102040	1-100	750.2975	66.74	40112040	1-88	753.9375	64.64
40002041	1-123	742.5975	69.94	40012041	1-111	746.2375	72.04	40102041	1-99	750.2975	70.94	40112041	1-87	753.9375	68.84
40002042	1-122	742.5975	74.14	40012042	1-110	746.2375	76.24	40102042	1-98	750.2975	75.14	40112042	1-86	753.9375	73.04
40002043	1-121	742.5975	78.34	40012043	1-109	746.2375	80.44	40102043	1-97	750.2975	79.34	40112043	1-85	753.9375	77.24
40002044	1-120	742.5975	82.54	40012044	1-108	746.2375	84.64	40102044	1-96	750.2975	83.54	40112044	1-84	753.9375	81.44
40002045	1-119	742.5975	86.74	40012045	1-107	746.2375	88.84	40102045	1-95	750.2975	87.74	40112045	1-83	753.9375	85.64
40002046	1-118	742.5975	90.94	40012046	1-106	746.2375	93.04	40102046	1-94	750.2975	91.94	40112046	1-82	753.9375	89.84
40002047	1-117	742.5975	95.14	40012047	1-105	746.2375	97.24	40102047	1-93	750.2975	96.14	40112047	1-81	753.9375	94.04
40002048	1-116	742.5975	99.34	40012048	1-104	746.2375	101.44	40102048	1-92	750.2975	100.34	40112048	1-80	753.9375	98.24

3.9 Drift tube alignment implemented in FairShip

The dimensions of the drift tube detectors can be specified in the standard FairShip way by modifying the geometry file in `geometry/charm-geometry_config.py`. By running the `compareAlignment()` method from `charmdet/drifttubeMonitoring.py` one can see that the x and z coordinates of the drift tubes in FairShip correspond to within 0.00001 mm with the survey measurements.

4 RPC alignment

4.1 RPC dimensions

The muon tagger is made up by five identical RPC stations. Each station has external dimensions of (195.5 $\times$ 125.0 $\times$ 8.0) cm^3 and consists of two parallel planes, a positively-charged anode and a negatively-charged cathode, separated by a single gas gap 2 mm-thick. The RPCs are operated in avalanche mode and are read out by means of orthogonal strip panels: negative polarity signals are extracted from the horizontal strips (116, in total) while positive ones from the vertical strips (184, in total) that are instrumenting the detector. Both horizontal and vertical strips are characterized by a pitch of about 10 mm and a thickness of about 6 mm. The RPC outer box is made by a honeycomb aluminium panel, 2.5 cm-thick. A schematic layout of one RPC station is shown in Figure 7. Figure 8 shows a detailed schema of the RPC z cross-section with the sizes of the gaps, electrodes, strips and grounding planes. RPC dimensions as implemented in FairShip are reported in Table 17.

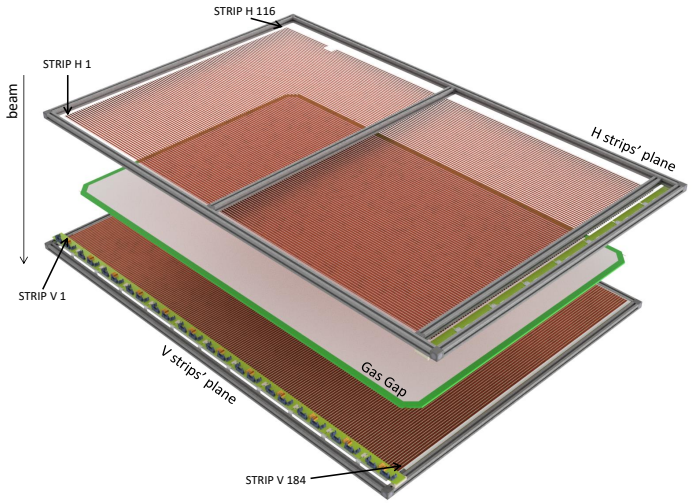


Figure 7: Schematic layout of the RPC xy planes

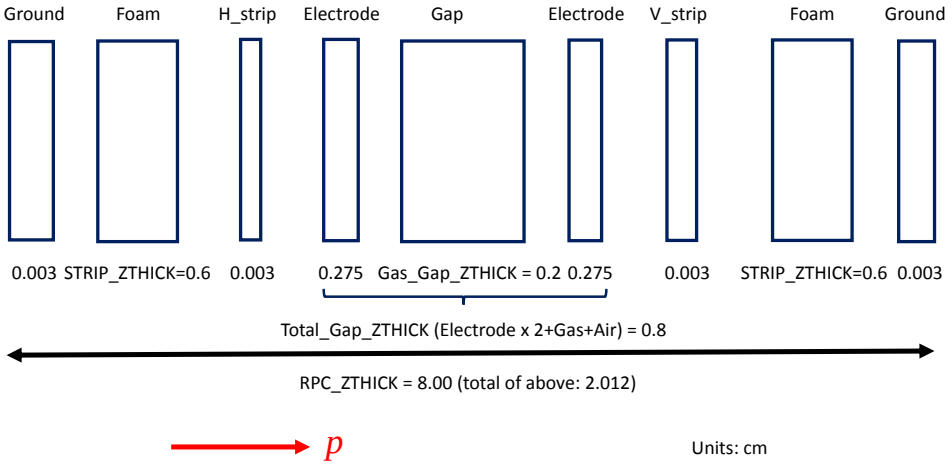
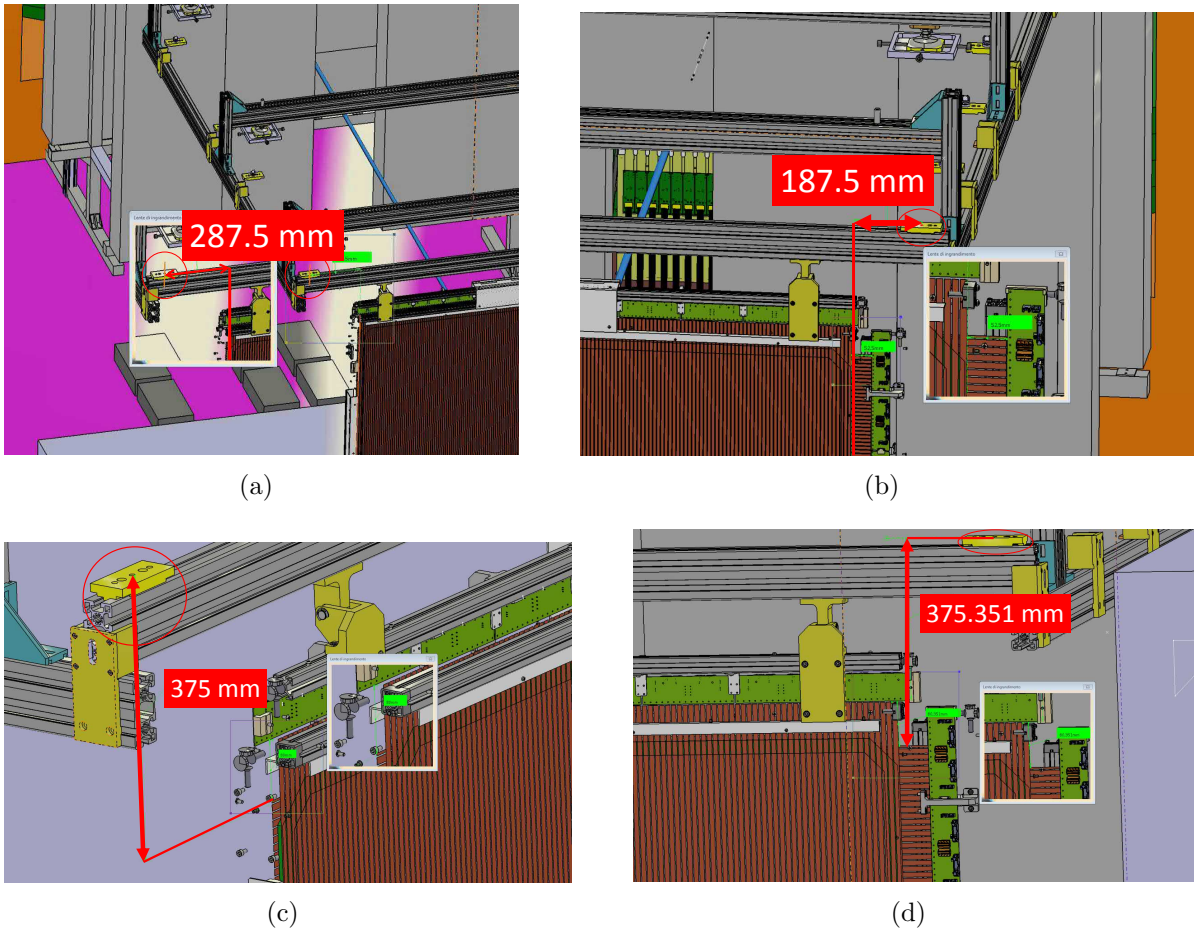


Figure 8: Schematic layout of the RPC z cross-section. The red arrow indicates the direction of the beam.

Table 17: RPC dimensions

Name	Value[cm]
RPC X LENGTH (box dimension)	195.5
RPC Y LENGTH (box dimension)	125.0
RPC Z THICKNESS (box dimension)	8.0
Internal V_strip (Vertical) width	0.8625
Measured left external V_strip width (beam along z, out from the V plane)	0.9625
Measured Right external V_strip width (beam along z, out from the V plane)	0.86
Internal H_strip (Horizontal) width	0.8625
Measured external H_strip width in cm (nominal 0.4375)	0.3
Total_Gap_ZTHICK	0.8
STRIP_ZTHICK	0.6
Offset between adjacent H strips	0.1983
Offset between adjacent V strips	0.2
STRIP PITCH H and V	1.0625



(a) (b)

(c) (d)

Figure 9: Attachment of the survey targets to RPC frame (beam coming out of the center of the plane). (a,c) Right x, y (b,d) Left x, y

Table 18: Nominal offsets of the RPC adapters in FairShip coordinates

Offset	x[mm]	y[mm]
Left	-187.5	395.351
Right	287.5	395

4.2 Nominal adapter positions

For the RPCs, the adapters were placed on the horizontal frame bars from which the RPCs were suspended. The FairShip z-origin of the RPCS corresponds to its center (in z). The nominal x and y positions from the adapters can be seen from Figure 9. The adapters are mounted on top of the yellow objects on top of the horizontal suspension bar. The offsets of the adapters (including the 20 mm for the adapter bolt) to the RPCs are given in Table 18.

Table 19: RPC station survey measurements corrected for the adapter positions. The FairShip values are given within parenthesis.

Names	z (average=FairShip)[m]	x (FairShip)[m]	y (FairShip)[m]
RPCs			
RPC1_L	8.78621(8.78826)	0.9736(0.976988)	0.795549(0.80269)
RPC1_R	8.79031(8.78826)	-0.9804(-0.976988)	0.8195(0.80269)
RPC2_L	9.73581(9.73786)	0.9765(0.976988)	0.797249(0.80269)
RPC2_R	9.73991(9.73786)	-0.9775(-0.976988)	0.8071(0.80269)
RPC3_L	10.28951(10.29181)	0.9769(0.976988)	0.797949(0.80269)
RPC3_R	10.29411(10.29181)	-0.9771(-0.976988)	0.8071(0.80269)
RPC4_L	10.84101(10.84296)	0.9735(0.976988)	0.798449(0.80269)
RPC4_R	10.84491(10.84296)	-0.9795(-0.976988)	0.8021(0.80269)
RPC5_L	11.38911(11.39106)	0.9802(0.976988)	0.799149(0.80269)
RPC5_R	11.39301(11.39106)	-0.9739(-0.976988)	0.7993(0.80269)

4.3 Comparison between the survey measurements and FairShip

Table 19 contains a comparison between the survey measurements (correcting for the nominal positions of the survey adapters) and what is implemented in FairShip. The differences are $\leq$ 1cm which is of the same order as the nominal resolution of the RPC stations. For completeness, we have given the endpoint coordinates of the RPC horizontal and vertical strips as implemented in FairShip in Annex A.

5 Conclusions

This note records how the results from the survey measurements of the drifttube and RPC stations were used in the muon flux detector geometry in FairShip. The survey measurements have been used to position the detector elements accurately in FairShip.

References

[1] B. Cumer, *H4 TEST - MEASUREMENT OF THE MUON FLUX SETUP ON H4 BEAM LINE*, Measurement of July 04th-06th, 2018, CERN EDMS 2001697 v.1.

[2] B. Cumer, *H4 TEST - MEASUREMENT OF THE CHARMCROSS SECTION SETUP ON H4 BEAM LINE*, Measurement of July 25th-27th, 2018, CERN EDMS 2010858 v.1.

A RPC strip endpoint coordinates

DetectorID	x-top	x-bot	y-top	y-bot	z-top	z-bot
RPC station 1						
Horizontal strips						
10001	97.69875	-97.69875	80.11905	80.11905	878.425206	878.425206
10002	97.69875	-97.69875	79.3395	79.3395	878.425206	878.425206
10003	97.69875	-97.69875	78.2787	78.2787	878.425206	878.425206
10004	97.69875	-97.69875	77.2179	77.2179	878.425206	878.425206
10005	97.69875	-97.69875	76.1571	76.1571	878.425206	878.425206
10006	97.69875	-97.69875	75.0963	75.0963	878.425206	878.425206
10007	97.69875	-97.69875	74.0355	74.0355	878.425206	878.425206
10008	97.69875	-97.69875	72.9747	72.9747	878.425206	878.425206
10009	97.69875	-97.69875	71.9139	71.9139	878.425206	878.425206
10010	97.69875	-97.69875	70.8531	70.8531	878.425206	878.425206
10011	97.69875	-97.69875	69.7923	69.7923	878.425206	878.425206
10012	97.69875	-97.69875	68.7315	68.7315	878.425206	878.425206
10013	97.69875	-97.69875	67.6707	67.6707	878.425206	878.425206
10014	97.69875	-97.69875	66.6099	66.6099	878.425206	878.425206
10015	97.69875	-97.69875	65.5491	65.5491	878.425206	878.425206
10016	97.69875	-97.69875	64.4883	64.4883	878.425206	878.425206
10017	97.69875	-97.69875	63.4275	63.4275	878.425206	878.425206
10018	97.69875	-97.69875	62.3667	62.3667	878.425206	878.425206
10019	97.69875	-97.69875	61.3059	61.3059	878.425206	878.425206
10020	97.69875	-97.69875	60.2451	60.2451	878.425206	878.425206
10021	97.69875	-97.69875	59.1843	59.1843	878.425206	878.425206
10022	97.69875	-97.69875	58.1235	58.1235	878.425206	878.425206
10023	97.69875	-97.69875	57.0627	57.0627	878.425206	878.425206
10024	97.69875	-97.69875	56.0019	56.0019	878.425206	878.425206
10025	97.69875	-97.69875	54.9411	54.9411	878.425206	878.425206
10026	97.69875	-97.69875	53.8803	53.8803	878.425206	878.425206
10027	97.69875	-97.69875	52.8195	52.8195	878.425206	878.425206
10028	97.69875	-97.69875	51.7587	51.7587	878.425206	878.425206
10029	97.69875	-97.69875	50.6979	50.6979	878.425206	878.425206
10030	97.69875	-97.69875	49.6371	49.6371	878.425206	878.425206
10031	97.69875	-97.69875	48.5763	48.5763	878.425206	878.425206
10032	97.69875	-97.69875	47.5155	47.5155	878.425206	878.425206
10033	97.69875	-97.69875	46.4547	46.4547	878.425206	878.425206
10034	97.69875	-97.69875	45.3939	45.3939	878.425206	878.425206
10035	97.69875	-97.69875	44.3331	44.3331	878.425206	878.425206
10036	97.69875	-97.69875	43.2723	43.2723	878.425206	878.425206
10037	97.69875	-97.69875	42.2115	42.2115	878.425206	878.425206
10038	97.69875	-97.69875	41.1507	41.1507	878.425206	878.425206
10039	97.69875	-97.69875	40.0899	40.0899	878.425206	878.425206
10040	97.69875	-97.69875	39.0291	39.0291	878.425206	878.425206
10041	97.69875	-97.69875	37.9683	37.9683	878.425206	878.425206
10042	97.69875	-97.69875	36.9075	36.9075	878.425206	878.425206
10043	97.69875	-97.69875	35.8467	35.8467	878.425206	878.425206
10044	97.69875	-97.69875	34.7859	34.7859	878.425206	878.425206
10045	97.69875	-97.69875	33.7251	33.7251	878.425206	878.425206
10046	97.69875	-97.69875	32.6643	32.6643	878.425206	878.425206
10047	97.69875	-97.69875	31.6035	31.6035	878.425206	878.425206
10048	97.69875	-97.69875	30.5427	30.5427	878.425206	878.425206
10049	97.69875	-97.69875	29.4819	29.4819	878.425206	878.425206
10050	97.69875	-97.69875	28.4211	28.4211	878.425206	878.425206
10051	97.69875	-97.69875	27.3603	27.3603	878.425206	878.425206
10052	97.69875	-97.69875	26.2995	26.2995	878.425206	878.425206
10053	97.69875	-97.69875	25.2387	25.2387	878.425206	878.425206
10054	97.69875	-97.69875	24.1779	24.1779	878.425206	878.425206
10055	97.69875	-97.69875	23.1171	23.1171	878.425206	878.425206
10056	97.69875	-97.69875	22.0563	22.0563	878.425206	878.425206
10057	97.69875	-97.69875	20.9955	20.9955	878.425206	878.425206
10058	97.69875	-97.69875	19.9347	19.9347	878.425206	878.425206
10059	97.69875	-97.69875	18.8739	18.8739	878.425206	878.425206
10060	97.69875	-97.69875	17.8131	17.8131	878.425206	878.425206
10061	97.69875	-97.69875	16.7523	16.7523	878.425206	878.425206
10062	97.69875	-97.69875	15.6915	15.6915	878.425206	878.425206
10063	97.69875	-97.69875	14.6307	14.6307	878.425206	878.425206
10064	97.69875	-97.69875	13.5699	13.5699	878.425206	878.425206
10065	97.69875	-97.69875	12.5091	12.5091	878.425206	878.425206
10066	97.69875	-97.69875	11.4483	11.4483	878.425206	878.425206
10067	97.69875	-97.69875	10.3875	10.3875	878.425206	878.425206
10068	97.69875	-97.69875	9.3267	9.3267	878.425206	878.425206
10069	97.69875	-97.69875	8.2659	8.2659	878.425206	878.425206
10070	97.69875	-97.69875	7.2051	7.2051	878.425206	878.425206
10071	97.69875	-97.69875	6.1443	6.1443	878.425206	878.425206
10072	97.69875	-97.69875	5.0835	5.0835	878.425206	878.425206
10073	97.69875	-97.69875	4.0227	4.0227	878.425206	878.425206
10074	97.69875	-97.69875	2.9619	2.9619	878.425206	878.425206
10075	97.69875	-97.69875	1.9011	1.9011	878.425206	878.425206
10076	97.69875	-97.69875	0.8403	0.8403	878.425206	878.425206
10077	97.69875	-97.69875	-0.2205	-0.2205	878.425206	878.425206
10078	97.69875	-97.69875	-1.2813	-1.2813	878.425206	878.425206
10079	97.69875	-97.69875	-2.3421	-2.3421	878.425206	878.425206
10080	97.69875	-97.69875	-3.4029	-3.4029	878.425206	878.425206
10081	97.69875	-97.69875	-4.4637	-4.4637	878.425206	878.425206

10082	97.69875	-97.69875	-5.5245	-5.5245	878.425206	878.425206
10083	97.69875	-97.69875	-6.5853	-6.5853	878.425206	878.425206
10084	97.69875	-97.69875	-7.6461	-7.6461	878.425206	878.425206
10085	97.69875	-97.69875	-8.7069	-8.7069	878.425206	878.425206
10086	97.69875	-97.69875	-9.7677	-9.7677	878.425206	878.425206
10087	97.69875	-97.69875	-10.8285	-10.8285	878.425206	878.425206
10088	97.69875	-97.69875	-11.8893	-11.8893	878.425206	878.425206
10089	97.69875	-97.69875	-12.9501	-12.9501	878.425206	878.425206
10090	97.69875	-97.69875	-14.0109	-14.0109	878.425206	878.425206
10091	97.69875	-97.69875	-15.0717	-15.0717	878.425206	878.425206
10092	97.69875	-97.69875	-16.1325	-16.1325	878.425206	878.425206
10093	97.69875	-97.69875	-17.1933	-17.1933	878.425206	878.425206
10094	97.69875	-97.69875	-18.2541	-18.2541	878.425206	878.425206
10095	97.69875	-97.69875	-19.3149	-19.3149	878.425206	878.425206
10096	97.69875	-97.69875	-20.3757	-20.3757	878.425206	878.425206
10097	97.69875	-97.69875	-21.4365	-21.4365	878.425206	878.425206
10098	97.69875	-97.69875	-22.4973	-22.4973	878.425206	878.425206
10099	97.69875	-97.69875	-23.5581	-23.5581	878.425206	878.425206
10100	97.69875	-97.69875	-24.6189	-24.6189	878.425206	878.425206
10101	97.69875	-97.69875	-25.6797	-25.6797	878.425206	878.425206
10102	97.69875	-97.69875	-26.7405	-26.7405	878.425206	878.425206
10103	97.69875	-97.69875	-27.8013	-27.8013	878.425206	878.425206
10104	97.69875	-97.69875	-28.8621	-28.8621	878.425206	878.425206
10105	97.69875	-97.69875	-29.9229	-29.9229	878.425206	878.425206
10106	97.69875	-97.69875	-30.9837	-30.9837	878.425206	878.425206
10107	97.69875	-97.69875	-32.0445	-32.0445	878.425206	878.425206
10108	97.69875	-97.69875	-33.1053	-33.1053	878.425206	878.425206
10109	97.69875	-97.69875	-34.1661	-34.1661	878.425206	878.425206
10110	97.69875	-97.69875	-35.2269	-35.2269	878.425206	878.425206
10111	97.69875	-97.69875	-36.2877	-36.2877	878.425206	878.425206
10112	97.69875	-97.69875	-37.3485	-37.3485	878.425206	878.425206
10113	97.69875	-97.69875	-38.4093	-38.4093	878.425206	878.425206
10114	97.69875	-97.69875	-39.4701	-39.4701	878.425206	878.425206
10115	97.69875	-97.69875	-40.5309	-40.5309	878.425206	878.425206
10116	97.69875	-97.69875	-41.31045	-41.31045	878.425206	878.425206
Vertical strips						
11001	97.26875	97.26875	80.26905	-41.46045	879.228206	879.228206
11002	96.2075	96.2075	80.26905	-41.46045	879.228206	879.228206
11003	95.145	95.145	80.26905	-41.46045	879.228206	879.228206
11004	94.0825	94.0825	80.26905	-41.46045	879.228206	879.228206
11005	93.02	93.02	80.26905	-41.46045	879.228206	879.228206
11006	91.9575	91.9575	80.26905	-41.46045	879.228206	879.228206
11007	90.895	90.895	80.26905	-41.46045	879.228206	879.228206
11008	89.8325	89.8325	80.26905	-41.46045	879.228206	879.228206
11009	88.77	88.77	80.26905	-41.46045	879.228206	879.228206
11010	87.7075	87.7075	80.26905	-41.46045	879.228206	879.228206
11011	86.645	86.645	80.26905	-41.46045	879.228206	879.228206
11012	85.5825	85.5825	80.26905	-41.46045	879.228206	879.228206
11013	84.52	84.52	80.26905	-41.46045	879.228206	879.228206
11014	83.4575	83.4575	80.26905	-41.46045	879.228206	879.228206
11015	82.395	82.395	80.26905	-41.46045	879.228206	879.228206
11016	81.3325	81.3325	80.26905	-41.46045	879.228206	879.228206
11017	80.27	80.27	80.26905	-41.46045	879.228206	879.228206
11018	79.2075	79.2075	80.26905	-41.46045	879.228206	879.228206
11019	78.145	78.145	80.26905	-41.46045	879.228206	879.228206
11020	77.0825	77.0825	80.26905	-41.46045	879.228206	879.228206
11021	76.02	76.02	80.26905	-41.46045	879.228206	879.228206
11022	74.9575	74.9575	80.26905	-41.46045	879.228206	879.228206
11023	73.895	73.895	80.26905	-41.46045	879.228206	879.228206
11024	72.8325	72.8325	80.26905	-41.46045	879.228206	879.228206
11025	71.77	71.77	80.26905	-41.46045	879.228206	879.228206
11026	70.7075	70.7075	80.26905	-41.46045	879.228206	879.228206
11027	69.645	69.645	80.26905	-41.46045	879.228206	879.228206
11028	68.5825	68.5825	80.26905	-41.46045	879.228206	879.228206
11029	67.52	67.52	80.26905	-41.46045	879.228206	879.228206
11030	66.4575	66.4575	80.26905	-41.46045	879.228206	879.228206
11031	65.395	65.395	80.26905	-41.46045	879.228206	879.228206
11032	64.3325	64.3325	80.26905	-41.46045	879.228206	879.228206
11033	63.27	63.27	80.26905	-41.46045	879.228206	879.228206
11034	62.2075	62.2075	80.26905	-41.46045	879.228206	879.228206
11035	61.145	61.145	80.26905	-41.46045	879.228206	879.228206
11036	60.0825	60.0825	80.26905	-41.46045	879.228206	879.228206
11037	59.02	59.02	80.26905	-41.46045	879.228206	879.228206
11038	57.9575	57.9575	80.26905	-41.46045	879.228206	879.228206
11039	56.895	56.895	80.26905	-41.46045	879.228206	879.228206
11040	55.8325	55.8325	80.26905	-41.46045	879.228206	879.228206
11041	54.77	54.77	80.26905	-41.46045	879.228206	879.228206
11042	53.7075	53.7075	80.26905	-41.46045	879.228206	879.228206
11043	52.645	52.645	80.26905	-41.46045	879.228206	879.228206
11044	51.5825	51.5825	80.26905	-41.46045	879.228206	879.228206
11045	50.52	50.52	80.26905	-41.46045	879.228206	879.228206
11046	49.4575	49.4575	80.26905	-41.46045	879.228206	879.228206
11047	48.395	48.395	80.26905	-41.46045	879.228206	879.228206
11048	47.3325	47.3325	80.26905	-41.46045	879.228206	879.228206
11049	46.27	46.27	80.26905	-41.46045	879.228206	879.228206
11050	45.2075	45.2075	80.26905	-41.46045	879.228206	879.228206
11051	44.145	44.145	80.26905	-41.46045	879.228206	879.228206
11052	43.0825	43.0825	80.26905	-41.46045	879.228206	879.228206

11053	42.02	42.02	80.26905	-41.46045	879.228206	879.228206
11054	40.9575	40.9575	80.26905	-41.46045	879.228206	879.228206
11055	39.895	39.895	80.26905	-41.46045	879.228206	879.228206
11056	38.8325	38.8325	80.26905	-41.46045	879.228206	879.228206
11057	37.77	37.77	80.26905	-41.46045	879.228206	879.228206
11058	36.7075	36.7075	80.26905	-41.46045	879.228206	879.228206
11059	35.645	35.645	80.26905	-41.46045	879.228206	879.228206
11060	34.5825	34.5825	80.26905	-41.46045	879.228206	879.228206
11061	33.52	33.52	80.26905	-41.46045	879.228206	879.228206
11062	32.4575	32.4575	80.26905	-41.46045	879.228206	879.228206
11063	31.395	31.395	80.26905	-41.46045	879.228206	879.228206
11064	30.3325	30.3325	80.26905	-41.46045	879.228206	879.228206
11065	29.27	29.27	80.26905	-41.46045	879.228206	879.228206
11066	28.2075	28.2075	80.26905	-41.46045	879.228206	879.228206
11067	27.145	27.145	80.26905	-41.46045	879.228206	879.228206
11068	26.0825	26.0825	80.26905	-41.46045	879.228206	879.228206
11069	25.02	25.02	80.26905	-41.46045	879.228206	879.228206
11070	23.9575	23.9575	80.26905	-41.46045	879.228206	879.228206
11071	22.895	22.895	80.26905	-41.46045	879.228206	879.228206
11072	21.8325	21.8325	80.26905	-41.46045	879.228206	879.228206
11073	20.77	20.77	80.26905	-41.46045	879.228206	879.228206
11074	19.7075	19.7075	80.26905	-41.46045	879.228206	879.228206
11075	18.645	18.645	80.26905	-41.46045	879.228206	879.228206
11076	17.5825	17.5825	80.26905	-41.46045	879.228206	879.228206
11077	16.52	16.52	80.26905	-41.46045	879.228206	879.228206
11078	15.4575	15.4575	80.26905	-41.46045	879.228206	879.228206
11079	14.395	14.395	80.26905	-41.46045	879.228206	879.228206
11080	13.3325	13.3325	80.26905	-41.46045	879.228206	879.228206
11081	12.27	12.27	80.26905	-41.46045	879.228206	879.228206
11082	11.2075	11.2075	80.26905	-41.46045	879.228206	879.228206
11083	10.145	10.145	80.26905	-41.46045	879.228206	879.228206
11084	9.0825	9.0825	80.26905	-41.46045	879.228206	879.228206
11085	8.02	8.02	80.26905	-41.46045	879.228206	879.228206
11086	6.9575	6.9575	80.26905	-41.46045	879.228206	879.228206
11087	5.895	5.895	80.26905	-41.46045	879.228206	879.228206
11088	4.8325	4.8325	80.26905	-41.46045	879.228206	879.228206
11089	3.77	3.77	80.26905	-41.46045	879.228206	879.228206
11090	2.7075	2.7075	80.26905	-41.46045	879.228206	879.228206
11091	1.645	1.645	80.26905	-41.46045	879.228206	879.228206
11092	0.5825	0.5825	80.26905	-41.46045	879.228206	879.228206
11093	-0.48	-0.48	80.26905	-41.46045	879.228206	879.228206
11094	-1.5425	-1.5425	80.26905	-41.46045	879.228206	879.228206
11095	-2.605	-2.605	80.26905	-41.46045	879.228206	879.228206
11096	-3.6675	-3.6675	80.26905	-41.46045	879.228206	879.228206
11097	-4.73	-4.73	80.26905	-41.46045	879.228206	879.228206
11098	-5.7925	-5.7925	80.26905	-41.46045	879.228206	879.228206
11099	-6.855	-6.855	80.26905	-41.46045	879.228206	879.228206
11100	-7.9175	-7.9175	80.26905	-41.46045	879.228206	879.228206
11101	-8.98	-8.98	80.26905	-41.46045	879.228206	879.228206
11102	-10.0425	-10.0425	80.26905	-41.46045	879.228206	879.228206
11103	-11.105	-11.105	80.26905	-41.46045	879.228206	879.228206
11104	-12.1675	-12.1675	80.26905	-41.46045	879.228206	879.228206
11105	-13.23	-13.23	80.26905	-41.46045	879.228206	879.228206
11106	-14.2925	-14.2925	80.26905	-41.46045	879.228206	879.228206
11107	-15.355	-15.355	80.26905	-41.46045	879.228206	879.228206
11108	-16.4175	-16.4175	80.26905	-41.46045	879.228206	879.228206
11109	-17.48	-17.48	80.26905	-41.46045	879.228206	879.228206
11110	-18.5425	-18.5425	80.26905	-41.46045	879.228206	879.228206
11111	-19.605	-19.605	80.26905	-41.46045	879.228206	879.228206
11112	-20.6675	-20.6675	80.26905	-41.46045	879.228206	879.228206
11113	-21.73	-21.73	80.26905	-41.46045	879.228206	879.228206
11114	-22.7925	-22.7925	80.26905	-41.46045	879.228206	879.228206
11115	-23.855	-23.855	80.26905	-41.46045	879.228206	879.228206
11116	-24.9175	-24.9175	80.26905	-41.46045	879.228206	879.228206
11117	-25.98	-25.98	80.26905	-41.46045	879.228206	879.228206
11118	-27.0425	-27.0425	80.26905	-41.46045	879.228206	879.228206
11119	-28.105	-28.105	80.26905	-41.46045	879.228206	879.228206
11120	-29.1675	-29.1675	80.26905	-41.46045	879.228206	879.228206
11121	-30.23	-30.23	80.26905	-41.46045	879.228206	879.228206
11122	-31.2925	-31.2925	80.26905	-41.46045	879.228206	879.228206
11123	-32.355	-32.355	80.26905	-41.46045	879.228206	879.228206
11124	-33.4175	-33.4175	80.26905	-41.46045	879.228206	879.228206
11125	-34.48	-34.48	80.26905	-41.46045	879.228206	879.228206
11126	-35.5425	-35.5425	80.26905	-41.46045	879.228206	879.228206
11127	-36.605	-36.605	80.26905	-41.46045	879.228206	879.228206
11128	-37.6675	-37.6675	80.26905	-41.46045	879.228206	879.228206
11129	-38.73	-38.73	80.26905	-41.46045	879.228206	879.228206
11130	-39.7925	-39.7925	80.26905	-41.46045	879.228206	879.228206
11131	-40.855	-40.855	80.26905	-41.46045	879.228206	879.228206
11132	-41.9175	-41.9175	80.26905	-41.46045	879.228206	879.228206
11133	-42.98	-42.98	80.26905	-41.46045	879.228206	879.228206
11134	-44.0425	-44.0425	80.26905	-41.46045	879.228206	879.228206
11135	-45.105	-45.105	80.26905	-41.46045	879.228206	879.228206
11136	-46.1675	-46.1675	80.26905	-41.46045	879.228206	879.228206
11137	-47.23	-47.23	80.26905	-41.46045	879.228206	879.228206
11138	-48.2925	-48.2925	80.26905	-41.46045	879.228206	879.228206
11139	-49.355	-49.355	80.26905	-41.46045	879.228206	879.228206
11140	-50.4175	-50.4175	80.26905	-41.46045	879.228206	879.228206

11141	-51.48	-51.48	80.26905	-41.46045	879.228206	879.228206
11142	-52.5425	-52.5425	80.26905	-41.46045	879.228206	879.228206
11143	-53.605	-53.605	80.26905	-41.46045	879.228206	879.228206
11144	-54.6675	-54.6675	80.26905	-41.46045	879.228206	879.228206
11145	-55.73	-55.73	80.26905	-41.46045	879.228206	879.228206
11146	-56.7925	-56.7925	80.26905	-41.46045	879.228206	879.228206
11147	-57.855	-57.855	80.26905	-41.46045	879.228206	879.228206
11148	-58.9175	-58.9175	80.26905	-41.46045	879.228206	879.228206
11149	-59.98	-59.98	80.26905	-41.46045	879.228206	879.228206
11150	-61.0425	-61.0425	80.26905	-41.46045	879.228206	879.228206
11151	-62.105	-62.105	80.26905	-41.46045	879.228206	879.228206
11152	-63.1675	-63.1675	80.26905	-41.46045	879.228206	879.228206
11153	-64.23	-64.23	80.26905	-41.46045	879.228206	879.228206
11154	-65.2925	-65.2925	80.26905	-41.46045	879.228206	879.228206
11155	-66.355	-66.355	80.26905	-41.46045	879.228206	879.228206
11156	-67.4175	-67.4175	80.26905	-41.46045	879.228206	879.228206
11157	-68.48	-68.48	80.26905	-41.46045	879.228206	879.228206
11158	-69.5425	-69.5425	80.26905	-41.46045	879.228206	879.228206
11159	-70.605	-70.605	80.26905	-41.46045	879.228206	879.228206
11160	-71.6675	-71.6675	80.26905	-41.46045	879.228206	879.228206
11161	-72.73	-72.73	80.26905	-41.46045	879.228206	879.228206
11162	-73.7925	-73.7925	80.26905	-41.46045	879.228206	879.228206
11163	-74.855	-74.855	80.26905	-41.46045	879.228206	879.228206
11164	-75.9175	-75.9175	80.26905	-41.46045	879.228206	879.228206
11165	-76.98	-76.98	80.26905	-41.46045	879.228206	879.228206
11166	-78.0425	-78.0425	80.26905	-41.46045	879.228206	879.228206
11167	-79.105	-79.105	80.26905	-41.46045	879.228206	879.228206
11168	-80.1675	-80.1675	80.26905	-41.46045	879.228206	879.228206
11169	-81.23	-81.23	80.26905	-41.46045	879.228206	879.228206
11170	-82.2925	-82.2925	80.26905	-41.46045	879.228206	879.228206
11171	-83.355	-83.355	80.26905	-41.46045	879.228206	879.228206
11172	-84.4175	-84.4175	80.26905	-41.46045	879.228206	879.228206
11173	-85.48	-85.48	80.26905	-41.46045	879.228206	879.228206
11174	-86.5425	-86.5425	80.26905	-41.46045	879.228206	879.228206
11175	-87.605	-87.605	80.26905	-41.46045	879.228206	879.228206
11176	-88.6675	-88.6675	80.26905	-41.46045	879.228206	879.228206
11177	-89.73	-89.73	80.26905	-41.46045	879.228206	879.228206
11178	-90.7925	-90.7925	80.26905	-41.46045	879.228206	879.228206
11179	-91.855	-91.855	80.26905	-41.46045	879.228206	879.228206
11180	-92.9175	-92.9175	80.26905	-41.46045	879.228206	879.228206
11181	-93.98	-93.98	80.26905	-41.46045	879.228206	879.228206
11182	-95.0425	-95.0425	80.26905	-41.46045	879.228206	879.228206
11183	-96.105	-96.105	80.26905	-41.46045	879.228206	879.228206
RPC station 2						
Horizontal strips						
20001	97.69875	-97.69875	80.11905	80.11905	973.385206	973.385206
20002	97.69875	-97.69875	79.3395	79.3395	973.385206	973.385206
20003	97.69875	-97.69875	78.2787	78.2787	973.385206	973.385206
20004	97.69875	-97.69875	77.2179	77.2179	973.385206	973.385206
20005	97.69875	-97.69875	76.1571	76.1571	973.385206	973.385206
20006	97.69875	-97.69875	75.0963	75.0963	973.385206	973.385206
20007	97.69875	-97.69875	74.0355	74.0355	973.385206	973.385206
20008	97.69875	-97.69875	72.9747	72.9747	973.385206	973.385206
20009	97.69875	-97.69875	71.9139	71.9139	973.385206	973.385206
20010	97.69875	-97.69875	70.8531	70.8531	973.385206	973.385206
20011	97.69875	-97.69875	69.7923	69.7923	973.385206	973.385206
20012	97.69875	-97.69875	68.7315	68.7315	973.385206	973.385206
20013	97.69875	-97.69875	67.6707	67.6707	973.385206	973.385206
20014	97.69875	-97.69875	66.6099	66.6099	973.385206	973.385206
20015	97.69875	-97.69875	65.5491	65.5491	973.385206	973.385206
20016	97.69875	-97.69875	64.4883	64.4883	973.385206	973.385206
20017	97.69875	-97.69875	63.4275	63.4275	973.385206	973.385206
20018	97.69875	-97.69875	62.3667	62.3667	973.385206	973.385206
20019	97.69875	-97.69875	61.3059	61.3059	973.385206	973.385206
20020	97.69875	-97.69875	60.2451	60.2451	973.385206	973.385206
20021	97.69875	-97.69875	59.1843	59.1843	973.385206	973.385206
20022	97.69875	-97.69875	58.1235	58.1235	973.385206	973.385206
20023	97.69875	-97.69875	57.0627	57.0627	973.385206	973.385206
20024	97.69875	-97.69875	56.0019	56.0019	973.385206	973.385206
20025	97.69875	-97.69875	54.9411	54.9411	973.385206	973.385206
20026	97.69875	-97.69875	53.8803	53.8803	973.385206	973.385206
20027	97.69875	-97.69875	52.8195	52.8195	973.385206	973.385206
20028	97.69875	-97.69875	51.7587	51.7587	973.385206	973.385206
20029	97.69875	-97.69875	50.6979	50.6979	973.385206	973.385206
20030	97.69875	-97.69875	49.6371	49.6371	973.385206	973.385206
20031	97.69875	-97.69875	48.5763	48.5763	973.385206	973.385206
20032	97.69875	-97.69875	47.5155	47.5155	973.385206	973.385206
20033	97.69875	-97.69875	46.4547	46.4547	973.385206	973.385206
20034	97.69875	-97.69875	45.3939	45.3939	973.385206	973.385206
20035	97.69875	-97.69875	44.3331	44.3331	973.385206	973.385206
20036	97.69875	-97.69875	43.2723	43.2723	973.385206	973.385206
20037	97.69875	-97.69875	42.2115	42.2115	973.385206	973.385206
20038	97.69875	-97.69875	41.1507	41.1507	973.385206	973.385206
20039	97.69875	-97.69875	40.0899	40.0899	973.385206	973.385206
20040	97.69875	-97.69875	39.0291	39.0291	973.385206	973.385206
20041	97.69875	-97.69875	37.9683	37.9683	973.385206	973.385206
20042	97.69875	-97.69875	36.9075	36.9075	973.385206	973.385206
20043	97.69875	-97.69875	35.8467	35.8467	973.385206	973.385206

20044	97.69875	-97.69875	34.7859	34.7859	973.385206	973.385206
20045	97.69875	-97.69875	33.7251	33.7251	973.385206	973.385206
20046	97.69875	-97.69875	32.6643	32.6643	973.385206	973.385206
20047	97.69875	-97.69875	31.6035	31.6035	973.385206	973.385206
20048	97.69875	-97.69875	30.5427	30.5427	973.385206	973.385206
20049	97.69875	-97.69875	29.4819	29.4819	973.385206	973.385206
20050	97.69875	-97.69875	28.4211	28.4211	973.385206	973.385206
20051	97.69875	-97.69875	27.3603	27.3603	973.385206	973.385206
20052	97.69875	-97.69875	26.2995	26.2995	973.385206	973.385206
20053	97.69875	-97.69875	25.2387	25.2387	973.385206	973.385206
20054	97.69875	-97.69875	24.1779	24.1779	973.385206	973.385206
20055	97.69875	-97.69875	23.1171	23.1171	973.385206	973.385206
20056	97.69875	-97.69875	22.0563	22.0563	973.385206	973.385206
20057	97.69875	-97.69875	20.9955	20.9955	973.385206	973.385206
20058	97.69875	-97.69875	19.9347	19.9347	973.385206	973.385206
20059	97.69875	-97.69875	18.8739	18.8739	973.385206	973.385206
20060	97.69875	-97.69875	17.8131	17.8131	973.385206	973.385206
20061	97.69875	-97.69875	16.7523	16.7523	973.385206	973.385206
20062	97.69875	-97.69875	15.6915	15.6915	973.385206	973.385206
20063	97.69875	-97.69875	14.6307	14.6307	973.385206	973.385206
20064	97.69875	-97.69875	13.5699	13.5699	973.385206	973.385206
20065	97.69875	-97.69875	12.5091	12.5091	973.385206	973.385206
20066	97.69875	-97.69875	11.4483	11.4483	973.385206	973.385206
20067	97.69875	-97.69875	10.3875	10.3875	973.385206	973.385206
20068	97.69875	-97.69875	9.3267	9.3267	973.385206	973.385206
20069	97.69875	-97.69875	8.2659	8.2659	973.385206	973.385206
20070	97.69875	-97.69875	7.2051	7.2051	973.385206	973.385206
20071	97.69875	-97.69875	6.1443	6.1443	973.385206	973.385206
20072	97.69875	-97.69875	5.0835	5.0835	973.385206	973.385206
20073	97.69875	-97.69875	4.0227	4.0227	973.385206	973.385206
20074	97.69875	-97.69875	2.9619	2.9619	973.385206	973.385206
20075	97.69875	-97.69875	1.9011	1.9011	973.385206	973.385206
20076	97.69875	-97.69875	0.8403	0.8403	973.385206	973.385206
20077	97.69875	-97.69875	-0.2205	-0.2205	973.385206	973.385206
20078	97.69875	-97.69875	-1.2813	-1.2813	973.385206	973.385206
20079	97.69875	-97.69875	-2.3421	-2.3421	973.385206	973.385206
20080	97.69875	-97.69875	-3.4029	-3.4029	973.385206	973.385206
20081	97.69875	-97.69875	-4.4637	-4.4637	973.385206	973.385206
20082	97.69875	-97.69875	-5.5245	-5.5245	973.385206	973.385206
20083	97.69875	-97.69875	-6.5853	-6.5853	973.385206	973.385206
20084	97.69875	-97.69875	-7.6461	-7.6461	973.385206	973.385206
20085	97.69875	-97.69875	-8.7069	-8.7069	973.385206	973.385206
20086	97.69875	-97.69875	-9.7677	-9.7677	973.385206	973.385206
20087	97.69875	-97.69875	-10.8285	-10.8285	973.385206	973.385206
20088	97.69875	-97.69875	-11.8893	-11.8893	973.385206	973.385206
20089	97.69875	-97.69875	-12.9501	-12.9501	973.385206	973.385206
20090	97.69875	-97.69875	-14.0109	-14.0109	973.385206	973.385206
20091	97.69875	-97.69875	-15.0717	-15.0717	973.385206	973.385206
20092	97.69875	-97.69875	-16.1325	-16.1325	973.385206	973.385206
20093	97.69875	-97.69875	-17.1933	-17.1933	973.385206	973.385206
20094	97.69875	-97.69875	-18.2541	-18.2541	973.385206	973.385206
20095	97.69875	-97.69875	-19.3149	-19.3149	973.385206	973.385206
20096	97.69875	-97.69875	-20.3757	-20.3757	973.385206	973.385206
20097	97.69875	-97.69875	-21.4365	-21.4365	973.385206	973.385206
20098	97.69875	-97.69875	-22.4973	-22.4973	973.385206	973.385206
20099	97.69875	-97.69875	-23.5581	-23.5581	973.385206	973.385206
20100	97.69875	-97.69875	-24.6189	-24.6189	973.385206	973.385206
20101	97.69875	-97.69875	-25.6797	-25.6797	973.385206	973.385206
20102	97.69875	-97.69875	-26.7405	-26.7405	973.385206	973.385206
20103	97.69875	-97.69875	-27.8013	-27.8013	973.385206	973.385206
20104	97.69875	-97.69875	-28.8621	-28.8621	973.385206	973.385206
20105	97.69875	-97.69875	-29.9229	-29.9229	973.385206	973.385206
20106	97.69875	-97.69875	-30.9837	-30.9837	973.385206	973.385206
20107	97.69875	-97.69875	-32.0445	-32.0445	973.385206	973.385206
20108	97.69875	-97.69875	-33.1053	-33.1053	973.385206	973.385206
20109	97.69875	-97.69875	-34.1661	-34.1661	973.385206	973.385206
20110	97.69875	-97.69875	-35.2269	-35.2269	973.385206	973.385206
20111	97.69875	-97.69875	-36.2877	-36.2877	973.385206	973.385206
20112	97.69875	-97.69875	-37.3485	-37.3485	973.385206	973.385206
20113	97.69875	-97.69875	-38.4093	-38.4093	973.385206	973.385206
20114	97.69875	-97.69875	-39.4701	-39.4701	973.385206	973.385206
20115	97.69875	-97.69875	-40.5309	-40.5309	973.385206	973.385206
20116	97.69875	-97.69875	-41.31045	-41.31045	973.385206	973.385206
Vertical strips						
21001	97.26875	97.26875	80.26905	-41.46045	974.188206	974.188206
21002	96.2075	96.2075	80.26905	-41.46045	974.188206	974.188206
21003	95.145	95.145	80.26905	-41.46045	974.188206	974.188206
21004	94.0825	94.0825	80.26905	-41.46045	974.188206	974.188206
21005	93.02	93.02	80.26905	-41.46045	974.188206	974.188206
21006	91.9575	91.9575	80.26905	-41.46045	974.188206	974.188206
21007	90.895	90.895	80.26905	-41.46045	974.188206	974.188206
21008	89.8325	89.8325	80.26905	-41.46045	974.188206	974.188206
21009	88.77	88.77	80.26905	-41.46045	974.188206	974.188206
21010	87.7075	87.7075	80.26905	-41.46045	974.188206	974.188206
21011	86.645	86.645	80.26905	-41.46045	974.188206	974.188206
21012	85.5825	85.5825	80.26905	-41.46045	974.188206	974.188206
21013	84.52	84.52	80.26905	-41.46045	974.188206	974.188206
21014	83.4575	83.4575	80.26905	-41.46045	974.188206	974.188206

21015	82.395	82.395	80.26905	-41.46045	974.188206	974.188206
21016	81.3325	81.3325	80.26905	-41.46045	974.188206	974.188206
21017	80.27	80.27	80.26905	-41.46045	974.188206	974.188206
21018	79.2075	79.2075	80.26905	-41.46045	974.188206	974.188206
21019	78.145	78.145	80.26905	-41.46045	974.188206	974.188206
21020	77.0825	77.0825	80.26905	-41.46045	974.188206	974.188206
21021	76.02	76.02	80.26905	-41.46045	974.188206	974.188206
21022	74.9575	74.9575	80.26905	-41.46045	974.188206	974.188206
21023	73.895	73.895	80.26905	-41.46045	974.188206	974.188206
21024	72.8325	72.8325	80.26905	-41.46045	974.188206	974.188206
21025	71.77	71.77	80.26905	-41.46045	974.188206	974.188206
21026	70.7075	70.7075	80.26905	-41.46045	974.188206	974.188206
21027	69.645	69.645	80.26905	-41.46045	974.188206	974.188206
21028	68.5825	68.5825	80.26905	-41.46045	974.188206	974.188206
21029	67.52	67.52	80.26905	-41.46045	974.188206	974.188206
21030	66.4575	66.4575	80.26905	-41.46045	974.188206	974.188206
21031	65.395	65.395	80.26905	-41.46045	974.188206	974.188206
21032	64.3325	64.3325	80.26905	-41.46045	974.188206	974.188206
21033	63.27	63.27	80.26905	-41.46045	974.188206	974.188206
21034	62.2075	62.2075	80.26905	-41.46045	974.188206	974.188206
21035	61.145	61.145	80.26905	-41.46045	974.188206	974.188206
21036	60.0825	60.0825	80.26905	-41.46045	974.188206	974.188206
21037	59.02	59.02	80.26905	-41.46045	974.188206	974.188206
21038	57.9575	57.9575	80.26905	-41.46045	974.188206	974.188206
21039	56.895	56.895	80.26905	-41.46045	974.188206	974.188206
21040	55.8325	55.8325	80.26905	-41.46045	974.188206	974.188206
21041	54.77	54.77	80.26905	-41.46045	974.188206	974.188206
21042	53.7075	53.7075	80.26905	-41.46045	974.188206	974.188206
21043	52.645	52.645	80.26905	-41.46045	974.188206	974.188206
21044	51.5825	51.5825	80.26905	-41.46045	974.188206	974.188206
21045	50.52	50.52	80.26905	-41.46045	974.188206	974.188206
21046	49.4575	49.4575	80.26905	-41.46045	974.188206	974.188206
21047	48.395	48.395	80.26905	-41.46045	974.188206	974.188206
21048	47.3325	47.3325	80.26905	-41.46045	974.188206	974.188206
21049	46.27	46.27	80.26905	-41.46045	974.188206	974.188206
21050	45.2075	45.2075	80.26905	-41.46045	974.188206	974.188206
21051	44.145	44.145	80.26905	-41.46045	974.188206	974.188206
21052	43.0825	43.0825	80.26905	-41.46045	974.188206	974.188206
21053	42.02	42.02	80.26905	-41.46045	974.188206	974.188206
21054	40.9575	40.9575	80.26905	-41.46045	974.188206	974.188206
21055	39.895	39.895	80.26905	-41.46045	974.188206	974.188206
21056	38.8325	38.8325	80.26905	-41.46045	974.188206	974.188206
21057	37.77	37.77	80.26905	-41.46045	974.188206	974.188206
21058	36.7075	36.7075	80.26905	-41.46045	974.188206	974.188206
21059	35.645	35.645	80.26905	-41.46045	974.188206	974.188206
21060	34.5825	34.5825	80.26905	-41.46045	974.188206	974.188206
21061	33.52	33.52	80.26905	-41.46045	974.188206	974.188206
21062	32.4575	32.4575	80.26905	-41.46045	974.188206	974.188206
21063	31.395	31.395	80.26905	-41.46045	974.188206	974.188206
21064	30.3325	30.3325	80.26905	-41.46045	974.188206	974.188206
21065	29.27	29.27	80.26905	-41.46045	974.188206	974.188206
21066	28.2075	28.2075	80.26905	-41.46045	974.188206	974.188206
21067	27.145	27.145	80.26905	-41.46045	974.188206	974.188206
21068	26.0825	26.0825	80.26905	-41.46045	974.188206	974.188206
21069	25.02	25.02	80.26905	-41.46045	974.188206	974.188206
21070	23.9575	23.9575	80.26905	-41.46045	974.188206	974.188206
21071	22.895	22.895	80.26905	-41.46045	974.188206	974.188206
21072	21.8325	21.8325	80.26905	-41.46045	974.188206	974.188206
21073	20.77	20.77	80.26905	-41.46045	974.188206	974.188206
21074	19.7075	19.7075	80.26905	-41.46045	974.188206	974.188206
21075	18.645	18.645	80.26905	-41.46045	974.188206	974.188206
21076	17.5825	17.5825	80.26905	-41.46045	974.188206	974.188206
21077	16.52	16.52	80.26905	-41.46045	974.188206	974.188206
21078	15.4575	15.4575	80.26905	-41.46045	974.188206	974.188206
21079	14.395	14.395	80.26905	-41.46045	974.188206	974.188206
21080	13.3325	13.3325	80.26905	-41.46045	974.188206	974.188206
21081	12.27	12.27	80.26905	-41.46045	974.188206	974.188206
21082	11.2075	11.2075	80.26905	-41.46045	974.188206	974.188206
21083	10.145	10.145	80.26905	-41.46045	974.188206	974.188206
21084	9.0825	9.0825	80.26905	-41.46045	974.188206	974.188206
21085	8.02	8.02	80.26905	-41.46045	974.188206	974.188206
21086	6.9575	6.9575	80.26905	-41.46045	974.188206	974.188206
21087	5.895	5.895	80.26905	-41.46045	974.188206	974.188206
21088	4.8325	4.8325	80.26905	-41.46045	974.188206	974.188206
21089	3.77	3.77	80.26905	-41.46045	974.188206	974.188206
21090	2.7075	2.7075	80.26905	-41.46045	974.188206	974.188206
21091	1.645	1.645	80.26905	-41.46045	974.188206	974.188206
21092	0.5825	0.5825	80.26905	-41.46045	974.188206	974.188206
21093	-0.48	-0.48	80.26905	-41.46045	974.188206	974.188206
21094	-1.5425	-1.5425	80.26905	-41.46045	974.188206	974.188206
21095	-2.605	-2.605	80.26905	-41.46045	974.188206	974.188206
21096	-3.6675	-3.6675	80.26905	-41.46045	974.188206	974.188206
21097	-4.73	-4.73	80.26905	-41.46045	974.188206	974.188206
21098	-5.7925	-5.7925	80.26905	-41.46045	974.188206	974.188206
21099	-6.855	-6.855	80.26905	-41.46045	974.188206	974.188206
21100	-7.9175	-7.9175	80.26905	-41.46045	974.188206	974.188206
21101	-8.98	-8.98	80.26905	-41.46045	974.188206	974.188206
21102	-10.0425	-10.0425	80.26905	-41.46045	974.188206	974.188206

21103	-11.105	-11.105	80.26905	-41.46045	974.188206	974.188206
21104	-12.1675	-12.1675	80.26905	-41.46045	974.188206	974.188206
21105	-13.23	-13.23	80.26905	-41.46045	974.188206	974.188206
21106	-14.2925	-14.2925	80.26905	-41.46045	974.188206	974.188206
21107	-15.355	-15.355	80.26905	-41.46045	974.188206	974.188206
21108	-16.4175	-16.4175	80.26905	-41.46045	974.188206	974.188206
21109	-17.48	-17.48	80.26905	-41.46045	974.188206	974.188206
21110	-18.5425	-18.5425	80.26905	-41.46045	974.188206	974.188206
21111	-19.605	-19.605	80.26905	-41.46045	974.188206	974.188206
21112	-20.6675	-20.6675	80.26905	-41.46045	974.188206	974.188206
21113	-21.73	-21.73	80.26905	-41.46045	974.188206	974.188206
21114	-22.7925	-22.7925	80.26905	-41.46045	974.188206	974.188206
21115	-23.855	-23.855	80.26905	-41.46045	974.188206	974.188206
21116	-24.9175	-24.9175	80.26905	-41.46045	974.188206	974.188206
21117	-25.98	-25.98	80.26905	-41.46045	974.188206	974.188206
21118	-27.0425	-27.0425	80.26905	-41.46045	974.188206	974.188206
21119	-28.105	-28.105	80.26905	-41.46045	974.188206	974.188206
21120	-29.1675	-29.1675	80.26905	-41.46045	974.188206	974.188206
21121	-30.23	-30.23	80.26905	-41.46045	974.188206	974.188206
21122	-31.2925	-31.2925	80.26905	-41.46045	974.188206	974.188206
21123	-32.355	-32.355	80.26905	-41.46045	974.188206	974.188206
21124	-33.4175	-33.4175	80.26905	-41.46045	974.188206	974.188206
21125	-34.48	-34.48	80.26905	-41.46045	974.188206	974.188206
21126	-35.5425	-35.5425	80.26905	-41.46045	974.188206	974.188206
21127	-36.605	-36.605	80.26905	-41.46045	974.188206	974.188206
21128	-37.6675	-37.6675	80.26905	-41.46045	974.188206	974.188206
21129	-38.73	-38.73	80.26905	-41.46045	974.188206	974.188206
21130	-39.7925	-39.7925	80.26905	-41.46045	974.188206	974.188206
21131	-40.855	-40.855	80.26905	-41.46045	974.188206	974.188206
21132	-41.9175	-41.9175	80.26905	-41.46045	974.188206	974.188206
21133	-42.98	-42.98	80.26905	-41.46045	974.188206	974.188206
21134	-44.0425	-44.0425	80.26905	-41.46045	974.188206	974.188206
21135	-45.105	-45.105	80.26905	-41.46045	974.188206	974.188206
21136	-46.1675	-46.1675	80.26905	-41.46045	974.188206	974.188206
21137	-47.23	-47.23	80.26905	-41.46045	974.188206	974.188206
21138	-48.2925	-48.2925	80.26905	-41.46045	974.188206	974.188206
21139	-49.355	-49.355	80.26905	-41.46045	974.188206	974.188206
21140	-50.4175	-50.4175	80.26905	-41.46045	974.188206	974.188206
21141	-51.48	-51.48	80.26905	-41.46045	974.188206	974.188206
21142	-52.5425	-52.5425	80.26905	-41.46045	974.188206	974.188206
21143	-53.605	-53.605	80.26905	-41.46045	974.188206	974.188206
21144	-54.6675	-54.6675	80.26905	-41.46045	974.188206	974.188206
21145	-55.73	-55.73	80.26905	-41.46045	974.188206	974.188206
21146	-56.7925	-56.7925	80.26905	-41.46045	974.188206	974.188206
21147	-57.855	-57.855	80.26905	-41.46045	974.188206	974.188206
21148	-58.9175	-58.9175	80.26905	-41.46045	974.188206	974.188206
21149	-59.98	-59.98	80.26905	-41.46045	974.188206	974.188206
21150	-61.0425	-61.0425	80.26905	-41.46045	974.188206	974.188206
21151	-62.105	-62.105	80.26905	-41.46045	974.188206	974.188206
21152	-63.1675	-63.1675	80.26905	-41.46045	974.188206	974.188206
21153	-64.23	-64.23	80.26905	-41.46045	974.188206	974.188206
21154	-65.2925	-65.2925	80.26905	-41.46045	974.188206	974.188206
21155	-66.355	-66.355	80.26905	-41.46045	974.188206	974.188206
21156	-67.4175	-67.4175	80.26905	-41.46045	974.188206	974.188206
21157	-68.48	-68.48	80.26905	-41.46045	974.188206	974.188206
21158	-69.5425	-69.5425	80.26905	-41.46045	974.188206	974.188206
21159	-70.605	-70.605	80.26905	-41.46045	974.188206	974.188206
21160	-71.6675	-71.6675	80.26905	-41.46045	974.188206	974.188206
21161	-72.73	-72.73	80.26905	-41.46045	974.188206	974.188206
21162	-73.7925	-73.7925	80.26905	-41.46045	974.188206	974.188206
21163	-74.855	-74.855	80.26905	-41.46045	974.188206	974.188206
21164	-75.9175	-75.9175	80.26905	-41.46045	974.188206	974.188206
21165	-76.98	-76.98	80.26905	-41.46045	974.188206	974.188206
21166	-78.0425	-78.0425	80.26905	-41.46045	974.188206	974.188206
21167	-79.105	-79.105	80.26905	-41.46045	974.188206	974.188206
21168	-80.1675	-80.1675	80.26905	-41.46045	974.188206	974.188206
21169	-81.23	-81.23	80.26905	-41.46045	974.188206	974.188206
21170	-82.2925	-82.2925	80.26905	-41.46045	974.188206	974.188206
21171	-83.355	-83.355	80.26905	-41.46045	974.188206	974.188206
21172	-84.4175	-84.4175	80.26905	-41.46045	974.188206	974.188206
21173	-85.48	-85.48	80.26905	-41.46045	974.188206	974.188206
21174	-86.5425	-86.5425	80.26905	-41.46045	974.188206	974.188206
21175	-87.605	-87.605	80.26905	-41.46045	974.188206	974.188206
21176	-88.6675	-88.6675	80.26905	-41.46045	974.188206	974.188206
21177	-89.73	-89.73	80.26905	-41.46045	974.188206	974.188206
21178	-90.7925	-90.7925	80.26905	-41.46045	974.188206	974.188206
21179	-91.855	-91.855	80.26905	-41.46045	974.188206	974.188206
21180	-92.9175	-92.9175	80.26905	-41.46045	974.188206	974.188206
21181	-93.98	-93.98	80.26905	-41.46045	974.188206	974.188206
21182	-95.0425	-95.0425	80.26905	-41.46045	974.188206	974.188206
21183	-96.105	-96.105	80.26905	-41.46045	974.188206	974.188206
RPC station 3						
Horizontal strips						
30001	97.69875	-97.69875	80.11905	80.11905	1028.780206	1028.780206
30002	97.69875	-97.69875	79.3395	79.3395	1028.780206	1028.780206
30003	97.69875	-97.69875	78.2787	78.2787	1028.780206	1028.780206
30004	97.69875	-97.69875	77.2179	77.2179	1028.780206	1028.780206
30005	97.69875	-97.69875	76.1571	76.1571	1028.780206	1028.780206

30006	97.69875	-97.69875	75.0963	75.0963	1028.780206	1028.780206
30007	97.69875	-97.69875	74.0355	74.0355	1028.780206	1028.780206
30008	97.69875	-97.69875	72.9747	72.9747	1028.780206	1028.780206
30009	97.69875	-97.69875	71.9139	71.9139	1028.780206	1028.780206
30010	97.69875	-97.69875	70.8531	70.8531	1028.780206	1028.780206
30011	97.69875	-97.69875	69.7923	69.7923	1028.780206	1028.780206
30012	97.69875	-97.69875	68.7315	68.7315	1028.780206	1028.780206
30013	97.69875	-97.69875	67.6707	67.6707	1028.780206	1028.780206
30014	97.69875	-97.69875	66.6099	66.6099	1028.780206	1028.780206
30015	97.69875	-97.69875	65.5491	65.5491	1028.780206	1028.780206
30016	97.69875	-97.69875	64.4883	64.4883	1028.780206	1028.780206
30017	97.69875	-97.69875	63.4275	63.4275	1028.780206	1028.780206
30018	97.69875	-97.69875	62.3667	62.3667	1028.780206	1028.780206
30019	97.69875	-97.69875	61.3059	61.3059	1028.780206	1028.780206
30020	97.69875	-97.69875	60.2451	60.2451	1028.780206	1028.780206
30021	97.69875	-97.69875	59.1843	59.1843	1028.780206	1028.780206
30022	97.69875	-97.69875	58.1235	58.1235	1028.780206	1028.780206
30023	97.69875	-97.69875	57.0627	57.0627	1028.780206	1028.780206
30024	97.69875	-97.69875	56.0019	56.0019	1028.780206	1028.780206
30025	97.69875	-97.69875	54.9411	54.9411	1028.780206	1028.780206
30026	97.69875	-97.69875	53.8803	53.8803	1028.780206	1028.780206
30027	97.69875	-97.69875	52.8195	52.8195	1028.780206	1028.780206
30028	97.69875	-97.69875	51.7587	51.7587	1028.780206	1028.780206
30029	97.69875	-97.69875	50.6979	50.6979	1028.780206	1028.780206
30030	97.69875	-97.69875	49.6371	49.6371	1028.780206	1028.780206
30031	97.69875	-97.69875	48.5763	48.5763	1028.780206	1028.780206
30032	97.69875	-97.69875	47.5155	47.5155	1028.780206	1028.780206
30033	97.69875	-97.69875	46.4547	46.4547	1028.780206	1028.780206
30034	97.69875	-97.69875	45.3939	45.3939	1028.780206	1028.780206
30035	97.69875	-97.69875	44.3331	44.3331	1028.780206	1028.780206
30036	97.69875	-97.69875	43.2723	43.2723	1028.780206	1028.780206
30037	97.69875	-97.69875	42.2115	42.2115	1028.780206	1028.780206
30038	97.69875	-97.69875	41.1507	41.1507	1028.780206	1028.780206
30039	97.69875	-97.69875	40.0899	40.0899	1028.780206	1028.780206
30040	97.69875	-97.69875	39.0291	39.0291	1028.780206	1028.780206
30041	97.69875	-97.69875	37.9683	37.9683	1028.780206	1028.780206
30042	97.69875	-97.69875	36.9075	36.9075	1028.780206	1028.780206
30043	97.69875	-97.69875	35.8467	35.8467	1028.780206	1028.780206
30044	97.69875	-97.69875	34.7859	34.7859	1028.780206	1028.780206
30045	97.69875	-97.69875	33.7251	33.7251	1028.780206	1028.780206
30046	97.69875	-97.69875	32.6643	32.6643	1028.780206	1028.780206
30047	97.69875	-97.69875	31.6035	31.6035	1028.780206	1028.780206
30048	97.69875	-97.69875	30.5427	30.5427	1028.780206	1028.780206
30049	97.69875	-97.69875	29.4819	29.4819	1028.780206	1028.780206
30050	97.69875	-97.69875	28.4211	28.4211	1028.780206	1028.780206
30051	97.69875	-97.69875	27.3603	27.3603	1028.780206	1028.780206
30052	97.69875	-97.69875	26.2995	26.2995	1028.780206	1028.780206
30053	97.69875	-97.69875	25.2387	25.2387	1028.780206	1028.780206
30054	97.69875	-97.69875	24.1779	24.1779	1028.780206	1028.780206
30055	97.69875	-97.69875	23.1171	23.1171	1028.780206	1028.780206
30056	97.69875	-97.69875	22.0563	22.0563	1028.780206	1028.780206
30057	97.69875	-97.69875	20.9955	20.9955	1028.780206	1028.780206
30058	97.69875	-97.69875	19.9347	19.9347	1028.780206	1028.780206
30059	97.69875	-97.69875	18.8739	18.8739	1028.780206	1028.780206
30060	97.69875	-97.69875	17.8131	17.8131	1028.780206	1028.780206
30061	97.69875	-97.69875	16.7523	16.7523	1028.780206	1028.780206
30062	97.69875	-97.69875	15.6915	15.6915	1028.780206	1028.780206
30063	97.69875	-97.69875	14.6307	14.6307	1028.780206	1028.780206
30064	97.69875	-97.69875	13.5699	13.5699	1028.780206	1028.780206
30065	97.69875	-97.69875	12.5091	12.5091	1028.780206	1028.780206
30066	97.69875	-97.69875	11.4483	11.4483	1028.780206	1028.780206
30067	97.69875	-97.69875	10.3875	10.3875	1028.780206	1028.780206
30068	97.69875	-97.69875	9.3267	9.3267	1028.780206	1028.780206
30069	97.69875	-97.69875	8.2659	8.2659	1028.780206	1028.780206
30070	97.69875	-97.69875	7.2051	7.2051	1028.780206	1028.780206
30071	97.69875	-97.69875	6.1443	6.1443	1028.780206	1028.780206
30072	97.69875	-97.69875	5.0835	5.0835	1028.780206	1028.780206
30073	97.69875	-97.69875	4.0227	4.0227	1028.780206	1028.780206
30074	97.69875	-97.69875	2.9619	2.9619	1028.780206	1028.780206
30075	97.69875	-97.69875	1.9011	1.9011	1028.780206	1028.780206
30076	97.69875	-97.69875	0.8403	0.8403	1028.780206	1028.780206
30077	97.69875	-97.69875	-0.2205	-0.2205	1028.780206	1028.780206
30078	97.69875	-97.69875	-1.2813	-1.2813	1028.780206	1028.780206
30079	97.69875	-97.69875	-2.3421	-2.3421	1028.780206	1028.780206
30080	97.69875	-97.69875	-3.4029	-3.4029	1028.780206	1028.780206
30081	97.69875	-97.69875	-4.4637	-4.4637	1028.780206	1028.780206
30082	97.69875	-97.69875	-5.5245	-5.5245	1028.780206	1028.780206
30083	97.69875	-97.69875	-6.5853	-6.5853	1028.780206	1028.780206
30084	97.69875	-97.69875	-7.6461	-7.6461	1028.780206	1028.780206
30085	97.69875	-97.69875	-8.7069	-8.7069	1028.780206	1028.780206
30086	97.69875	-97.69875	-9.7677	-9.7677	1028.780206	1028.780206
30087	97.69875	-97.69875	-10.8285	-10.8285	1028.780206	1028.780206
30088	97.69875	-97.69875	-11.8893	-11.8893	1028.780206	1028.780206
30089	97.69875	-97.69875	-12.9501	-12.9501	1028.780206	1028.780206
30090	97.69875	-97.69875	-14.0109	-14.0109	1028.780206	1028.780206
30091	97.69875	-97.69875	-15.0717	-15.0717	1028.780206	1028.780206
30092	97.69875	-97.69875	-16.1325	-16.1325	1028.780206	1028.780206
30093	97.69875	-97.69875	-17.1933	-17.1933	1028.780206	1028.780206

30094	97.69875	-97.69875	-18.2541	-18.2541	1028.780206	1028.780206
30095	97.69875	-97.69875	-19.3149	-19.3149	1028.780206	1028.780206
30096	97.69875	-97.69875	-20.3757	-20.3757	1028.780206	1028.780206
30097	97.69875	-97.69875	-21.4365	-21.4365	1028.780206	1028.780206
30098	97.69875	-97.69875	-22.4973	-22.4973	1028.780206	1028.780206
30099	97.69875	-97.69875	-23.5581	-23.5581	1028.780206	1028.780206
30100	97.69875	-97.69875	-24.6189	-24.6189	1028.780206	1028.780206
30101	97.69875	-97.69875	-25.6797	-25.6797	1028.780206	1028.780206
30102	97.69875	-97.69875	-26.7405	-26.7405	1028.780206	1028.780206
30103	97.69875	-97.69875	-27.8013	-27.8013	1028.780206	1028.780206
30104	97.69875	-97.69875	-28.8621	-28.8621	1028.780206	1028.780206
30105	97.69875	-97.69875	-29.9229	-29.9229	1028.780206	1028.780206
30106	97.69875	-97.69875	-30.9837	-30.9837	1028.780206	1028.780206
30107	97.69875	-97.69875	-32.0445	-32.0445	1028.780206	1028.780206
30108	97.69875	-97.69875	-33.1053	-33.1053	1028.780206	1028.780206
30109	97.69875	-97.69875	-34.1661	-34.1661	1028.780206	1028.780206
30110	97.69875	-97.69875	-35.2269	-35.2269	1028.780206	1028.780206
30111	97.69875	-97.69875	-36.2877	-36.2877	1028.780206	1028.780206
30112	97.69875	-97.69875	-37.3485	-37.3485	1028.780206	1028.780206
30113	97.69875	-97.69875	-38.4093	-38.4093	1028.780206	1028.780206
30114	97.69875	-97.69875	-39.4701	-39.4701	1028.780206	1028.780206
30115	97.69875	-97.69875	-40.5309	-40.5309	1028.780206	1028.780206
30116	97.69875	-97.69875	-41.31045	-41.31045	1028.780206	1028.780206
Vertical strips						
31001	97.26875	97.26875	80.26905	-41.46045	1029.583206	1029.583206
31002	96.2075	96.2075	80.26905	-41.46045	1029.583206	1029.583206
31003	95.145	95.145	80.26905	-41.46045	1029.583206	1029.583206
31004	94.0825	94.0825	80.26905	-41.46045	1029.583206	1029.583206
31005	93.02	93.02	80.26905	-41.46045	1029.583206	1029.583206
31006	91.9575	91.9575	80.26905	-41.46045	1029.583206	1029.583206
31007	90.895	90.895	80.26905	-41.46045	1029.583206	1029.583206
31008	89.8325	89.8325	80.26905	-41.46045	1029.583206	1029.583206
31009	88.77	88.77	80.26905	-41.46045	1029.583206	1029.583206
31010	87.7075	87.7075	80.26905	-41.46045	1029.583206	1029.583206
31011	86.645	86.645	80.26905	-41.46045	1029.583206	1029.583206
31012	85.5825	85.5825	80.26905	-41.46045	1029.583206	1029.583206
31013	84.52	84.52	80.26905	-41.46045	1029.583206	1029.583206
31014	83.4575	83.4575	80.26905	-41.46045	1029.583206	1029.583206
31015	82.395	82.395	80.26905	-41.46045	1029.583206	1029.583206
31016	81.3325	81.3325	80.26905	-41.46045	1029.583206	1029.583206
31017	80.27	80.27	80.26905	-41.46045	1029.583206	1029.583206
31018	79.2075	79.2075	80.26905	-41.46045	1029.583206	1029.583206
31019	78.145	78.145	80.26905	-41.46045	1029.583206	1029.583206
31020	77.0825	77.0825	80.26905	-41.46045	1029.583206	1029.583206
31021	76.02	76.02	80.26905	-41.46045	1029.583206	1029.583206
31022	74.9575	74.9575	80.26905	-41.46045	1029.583206	1029.583206
31023	73.895	73.895	80.26905	-41.46045	1029.583206	1029.583206
31024	72.8325	72.8325	80.26905	-41.46045	1029.583206	1029.583206
31025	71.77	71.77	80.26905	-41.46045	1029.583206	1029.583206
31026	70.7075	70.7075	80.26905	-41.46045	1029.583206	1029.583206
31027	69.645	69.645	80.26905	-41.46045	1029.583206	1029.583206
31028	68.5825	68.5825	80.26905	-41.46045	1029.583206	1029.583206
31029	67.52	67.52	80.26905	-41.46045	1029.583206	1029.583206
31030	66.4575	66.4575	80.26905	-41.46045	1029.583206	1029.583206
31031	65.395	65.395	80.26905	-41.46045	1029.583206	1029.583206
31032	64.3325	64.3325	80.26905	-41.46045	1029.583206	1029.583206
31033	63.27	63.27	80.26905	-41.46045	1029.583206	1029.583206
31034	62.2075	62.2075	80.26905	-41.46045	1029.583206	1029.583206
31035	61.145	61.145	80.26905	-41.46045	1029.583206	1029.583206
31036	60.0825	60.0825	80.26905	-41.46045	1029.583206	1029.583206
31037	59.02	59.02	80.26905	-41.46045	1029.583206	1029.583206
31038	57.9575	57.9575	80.26905	-41.46045	1029.583206	1029.583206
31039	56.895	56.895	80.26905	-41.46045	1029.583206	1029.583206
31040	55.8325	55.8325	80.26905	-41.46045	1029.583206	1029.583206
31041	54.77	54.77	80.26905	-41.46045	1029.583206	1029.583206
31042	53.7075	53.7075	80.26905	-41.46045	1029.583206	1029.583206
31043	52.645	52.645	80.26905	-41.46045	1029.583206	1029.583206
31044	51.5825	51.5825	80.26905	-41.46045	1029.583206	1029.583206
31045	50.52	50.52	80.26905	-41.46045	1029.583206	1029.583206
31046	49.4575	49.4575	80.26905	-41.46045	1029.583206	1029.583206
31047	48.395	48.395	80.26905	-41.46045	1029.583206	1029.583206
31048	47.3325	47.3325	80.26905	-41.46045	1029.583206	1029.583206
31049	46.27	46.27	80.26905	-41.46045	1029.583206	1029.583206
31050	45.2075	45.2075	80.26905	-41.46045	1029.583206	1029.583206
31051	44.145	44.145	80.26905	-41.46045	1029.583206	1029.583206
31052	43.0825	43.0825	80.26905	-41.46045	1029.583206	1029.583206
31053	42.02	42.02	80.26905	-41.46045	1029.583206	1029.583206
31054	40.9575	40.9575	80.26905	-41.46045	1029.583206	1029.583206
31055	39.895	39.895	80.26905	-41.46045	1029.583206	1029.583206
31056	38.8325	38.8325	80.26905	-41.46045	1029.583206	1029.583206
31057	37.77	37.77	80.26905	-41.46045	1029.583206	1029.583206
31058	36.7075	36.7075	80.26905	-41.46045	1029.583206	1029.583206
31059	35.645	35.645	80.26905	-41.46045	1029.583206	1029.583206
31060	34.5825	34.5825	80.26905	-41.46045	1029.583206	1029.583206
31061	33.52	33.52	80.26905	-41.46045	1029.583206	1029.583206
31062	32.4575	32.4575	80.26905	-41.46045	1029.583206	1029.583206
31063	31.395	31.395	80.26905	-41.46045	1029.583206	1029.583206
31064	30.3325	30.3325	80.26905	-41.46045	1029.583206	1029.583206

31065	29.27	29.27	80.26905	-41.46045	1029.583206	1029.583206
31066	28.2075	28.2075	80.26905	-41.46045	1029.583206	1029.583206
31067	27.145	27.145	80.26905	-41.46045	1029.583206	1029.583206
31068	26.0825	26.0825	80.26905	-41.46045	1029.583206	1029.583206
31069	25.02	25.02	80.26905	-41.46045	1029.583206	1029.583206
31070	23.9575	23.9575	80.26905	-41.46045	1029.583206	1029.583206
31071	22.895	22.895	80.26905	-41.46045	1029.583206	1029.583206
31072	21.8325	21.8325	80.26905	-41.46045	1029.583206	1029.583206
31073	20.77	20.77	80.26905	-41.46045	1029.583206	1029.583206
31074	19.7075	19.7075	80.26905	-41.46045	1029.583206	1029.583206
31075	18.645	18.645	80.26905	-41.46045	1029.583206	1029.583206
31076	17.5825	17.5825	80.26905	-41.46045	1029.583206	1029.583206
31077	16.52	16.52	80.26905	-41.46045	1029.583206	1029.583206
31078	15.4575	15.4575	80.26905	-41.46045	1029.583206	1029.583206
31079	14.395	14.395	80.26905	-41.46045	1029.583206	1029.583206
31080	13.3325	13.3325	80.26905	-41.46045	1029.583206	1029.583206
31081	12.27	12.27	80.26905	-41.46045	1029.583206	1029.583206
31082	11.2075	11.2075	80.26905	-41.46045	1029.583206	1029.583206
31083	10.145	10.145	80.26905	-41.46045	1029.583206	1029.583206
31084	9.0825	9.0825	80.26905	-41.46045	1029.583206	1029.583206
31085	8.02	8.02	80.26905	-41.46045	1029.583206	1029.583206
31086	6.9575	6.9575	80.26905	-41.46045	1029.583206	1029.583206
31087	5.895	5.895	80.26905	-41.46045	1029.583206	1029.583206
31088	4.8325	4.8325	80.26905	-41.46045	1029.583206	1029.583206
31089	3.77	3.77	80.26905	-41.46045	1029.583206	1029.583206
31090	2.7075	2.7075	80.26905	-41.46045	1029.583206	1029.583206
31091	1.645	1.645	80.26905	-41.46045	1029.583206	1029.583206
31092	0.5825	0.5825	80.26905	-41.46045	1029.583206	1029.583206
31093	-0.48	-0.48	80.26905	-41.46045	1029.583206	1029.583206
31094	-1.5425	-1.5425	80.26905	-41.46045	1029.583206	1029.583206
31095	-2.605	-2.605	80.26905	-41.46045	1029.583206	1029.583206
31096	-3.6675	-3.6675	80.26905	-41.46045	1029.583206	1029.583206
31097	-4.73	-4.73	80.26905	-41.46045	1029.583206	1029.583206
31098	-5.7925	-5.7925	80.26905	-41.46045	1029.583206	1029.583206
31099	-6.855	-6.855	80.26905	-41.46045	1029.583206	1029.583206
31100	-7.9175	-7.9175	80.26905	-41.46045	1029.583206	1029.583206
31101	-8.98	-8.98	80.26905	-41.46045	1029.583206	1029.583206
31102	-10.0425	-10.0425	80.26905	-41.46045	1029.583206	1029.583206
31103	-11.105	-11.105	80.26905	-41.46045	1029.583206	1029.583206
31104	-12.1675	-12.1675	80.26905	-41.46045	1029.583206	1029.583206
31105	-13.23	-13.23	80.26905	-41.46045	1029.583206	1029.583206
31106	-14.2925	-14.2925	80.26905	-41.46045	1029.583206	1029.583206
31107	-15.355	-15.355	80.26905	-41.46045	1029.583206	1029.583206
31108	-16.4175	-16.4175	80.26905	-41.46045	1029.583206	1029.583206
31109	-17.48	-17.48	80.26905	-41.46045	1029.583206	1029.583206
31110	-18.5425	-18.5425	80.26905	-41.46045	1029.583206	1029.583206
31111	-19.605	-19.605	80.26905	-41.46045	1029.583206	1029.583206
31112	-20.6675	-20.6675	80.26905	-41.46045	1029.583206	1029.583206
31113	-21.73	-21.73	80.26905	-41.46045	1029.583206	1029.583206
31114	-22.7925	-22.7925	80.26905	-41.46045	1029.583206	1029.583206
31115	-23.855	-23.855	80.26905	-41.46045	1029.583206	1029.583206
31116	-24.9175	-24.9175	80.26905	-41.46045	1029.583206	1029.583206
31117	-25.98	-25.98	80.26905	-41.46045	1029.583206	1029.583206
31118	-27.0425	-27.0425	80.26905	-41.46045	1029.583206	1029.583206
31119	-28.105	-28.105	80.26905	-41.46045	1029.583206	1029.583206
31120	-29.1675	-29.1675	80.26905	-41.46045	1029.583206	1029.583206
31121	-30.23	-30.23	80.26905	-41.46045	1029.583206	1029.583206
31122	-31.2925	-31.2925	80.26905	-41.46045	1029.583206	1029.583206
31123	-32.355	-32.355	80.26905	-41.46045	1029.583206	1029.583206
31124	-33.4175	-33.4175	80.26905	-41.46045	1029.583206	1029.583206
31125	-34.48	-34.48	80.26905	-41.46045	1029.583206	1029.583206
31126	-35.5425	-35.5425	80.26905	-41.46045	1029.583206	1029.583206
31127	-36.605	-36.605	80.26905	-41.46045	1029.583206	1029.583206
31128	-37.6675	-37.6675	80.26905	-41.46045	1029.583206	1029.583206
31129	-38.73	-38.73	80.26905	-41.46045	1029.583206	1029.583206
31130	-39.7925	-39.7925	80.26905	-41.46045	1029.583206	1029.583206
31131	-40.855	-40.855	80.26905	-41.46045	1029.583206	1029.583206
31132	-41.9175	-41.9175	80.26905	-41.46045	1029.583206	1029.583206
31133	-42.98	-42.98	80.26905	-41.46045	1029.583206	1029.583206
31134	-44.0425	-44.0425	80.26905	-41.46045	1029.583206	1029.583206
31135	-45.105	-45.105	80.26905	-41.46045	1029.583206	1029.583206
31136	-46.1675	-46.1675	80.26905	-41.46045	1029.583206	1029.583206
31137	-47.23	-47.23	80.26905	-41.46045	1029.583206	1029.583206
31138	-48.2925	-48.2925	80.26905	-41.46045	1029.583206	1029.583206
31139	-49.355	-49.355	80.26905	-41.46045	1029.583206	1029.583206
31140	-50.4175	-50.4175	80.26905	-41.46045	1029.583206	1029.583206
31141	-51.48	-51.48	80.26905	-41.46045	1029.583206	1029.583206
31142	-52.5425	-52.5425	80.26905	-41.46045	1029.583206	1029.583206
31143	-53.605	-53.605	80.26905	-41.46045	1029.583206	1029.583206
31144	-54.6675	-54.6675	80.26905	-41.46045	1029.583206	1029.583206
31145	-55.73	-55.73	80.26905	-41.46045	1029.583206	1029.583206
31146	-56.7925	-56.7925	80.26905	-41.46045	1029.583206	1029.583206
31147	-57.855	-57.855	80.26905	-41.46045	1029.583206	1029.583206
31148	-58.9175	-58.9175	80.26905	-41.46045	1029.583206	1029.583206
31149	-59.98	-59.98	80.26905	-41.46045	1029.583206	1029.583206
31150	-61.0425	-61.0425	80.26905	-41.46045	1029.583206	1029.583206
31151	-62.105	-62.105	80.26905	-41.46045	1029.583206	1029.583206
31152	-63.1675	-63.1675	80.26905	-41.46045	1029.583206	1029.583206

31153	-64.23	-64.23	80.26905	-41.46045	1029.583206	1029.583206
31154	-65.2925	-65.2925	80.26905	-41.46045	1029.583206	1029.583206
31155	-66.355	-66.355	80.26905	-41.46045	1029.583206	1029.583206
31156	-67.4175	-67.4175	80.26905	-41.46045	1029.583206	1029.583206
31157	-68.48	-68.48	80.26905	-41.46045	1029.583206	1029.583206
31158	-69.5425	-69.5425	80.26905	-41.46045	1029.583206	1029.583206
31159	-70.605	-70.605	80.26905	-41.46045	1029.583206	1029.583206
31160	-71.6675	-71.6675	80.26905	-41.46045	1029.583206	1029.583206
31161	-72.73	-72.73	80.26905	-41.46045	1029.583206	1029.583206
31162	-73.7925	-73.7925	80.26905	-41.46045	1029.583206	1029.583206
31163	-74.855	-74.855	80.26905	-41.46045	1029.583206	1029.583206
31164	-75.9175	-75.9175	80.26905	-41.46045	1029.583206	1029.583206
31165	-76.98	-76.98	80.26905	-41.46045	1029.583206	1029.583206
31166	-78.0425	-78.0425	80.26905	-41.46045	1029.583206	1029.583206
31167	-79.105	-79.105	80.26905	-41.46045	1029.583206	1029.583206
31168	-80.1675	-80.1675	80.26905	-41.46045	1029.583206	1029.583206
31169	-81.23	-81.23	80.26905	-41.46045	1029.583206	1029.583206
31170	-82.2925	-82.2925	80.26905	-41.46045	1029.583206	1029.583206
31171	-83.355	-83.355	80.26905	-41.46045	1029.583206	1029.583206
31172	-84.4175	-84.4175	80.26905	-41.46045	1029.583206	1029.583206
31173	-85.48	-85.48	80.26905	-41.46045	1029.583206	1029.583206
31174	-86.5425	-86.5425	80.26905	-41.46045	1029.583206	1029.583206
31175	-87.605	-87.605	80.26905	-41.46045	1029.583206	1029.583206
31176	-88.6675	-88.6675	80.26905	-41.46045	1029.583206	1029.583206
31177	-89.73	-89.73	80.26905	-41.46045	1029.583206	1029.583206
31178	-90.7925	-90.7925	80.26905	-41.46045	1029.583206	1029.583206
31179	-91.855	-91.855	80.26905	-41.46045	1029.583206	1029.583206
31180	-92.9175	-92.9175	80.26905	-41.46045	1029.583206	1029.583206
31181	-93.98	-93.98	80.26905	-41.46045	1029.583206	1029.583206
31182	-95.0425	-95.0425	80.26905	-41.46045	1029.583206	1029.583206
31183	-96.105	-96.105	80.26905	-41.46045	1029.583206	1029.583206
RPC station 4						
Horizontal strips						
40001	97.69875	-97.69875	80.11905	80.11905	1083.895206	1083.895206
40002	97.69875	-97.69875	79.3395	79.3395	1083.895206	1083.895206
40003	97.69875	-97.69875	78.2787	78.2787	1083.895206	1083.895206
40004	97.69875	-97.69875	77.2179	77.2179	1083.895206	1083.895206
40005	97.69875	-97.69875	76.1571	76.1571	1083.895206	1083.895206
40006	97.69875	-97.69875	75.0963	75.0963	1083.895206	1083.895206
40007	97.69875	-97.69875	74.0355	74.0355	1083.895206	1083.895206
40008	97.69875	-97.69875	72.9747	72.9747	1083.895206	1083.895206
40009	97.69875	-97.69875	71.9139	71.9139	1083.895206	1083.895206
40010	97.69875	-97.69875	70.8531	70.8531	1083.895206	1083.895206
40011	97.69875	-97.69875	69.7923	69.7923	1083.895206	1083.895206
40012	97.69875	-97.69875	68.7315	68.7315	1083.895206	1083.895206
40013	97.69875	-97.69875	67.6707	67.6707	1083.895206	1083.895206
40014	97.69875	-97.69875	66.6099	66.6099	1083.895206	1083.895206
40015	97.69875	-97.69875	65.5491	65.5491	1083.895206	1083.895206
40016	97.69875	-97.69875	64.4883	64.4883	1083.895206	1083.895206
40017	97.69875	-97.69875	63.4275	63.4275	1083.895206	1083.895206
40018	97.69875	-97.69875	62.3667	62.3667	1083.895206	1083.895206
40019	97.69875	-97.69875	61.3059	61.3059	1083.895206	1083.895206
40020	97.69875	-97.69875	60.2451	60.2451	1083.895206	1083.895206
40021	97.69875	-97.69875	59.1843	59.1843	1083.895206	1083.895206
40022	97.69875	-97.69875	58.1235	58.1235	1083.895206	1083.895206
40023	97.69875	-97.69875	57.0627	57.0627	1083.895206	1083.895206
40024	97.69875	-97.69875	56.0019	56.0019	1083.895206	1083.895206
40025	97.69875	-97.69875	54.9411	54.9411	1083.895206	1083.895206
40026	97.69875	-97.69875	53.8803	53.8803	1083.895206	1083.895206
40027	97.69875	-97.69875	52.8195	52.8195	1083.895206	1083.895206
40028	97.69875	-97.69875	51.7587	51.7587	1083.895206	1083.895206
40029	97.69875	-97.69875	50.6979	50.6979	1083.895206	1083.895206
40030	97.69875	-97.69875	49.6371	49.6371	1083.895206	1083.895206
40031	97.69875	-97.69875	48.5763	48.5763	1083.895206	1083.895206
40032	97.69875	-97.69875	47.5155	47.5155	1083.895206	1083.895206
40033	97.69875	-97.69875	46.4547	46.4547	1083.895206	1083.895206
40034	97.69875	-97.69875	45.3939	45.3939	1083.895206	1083.895206
40035	97.69875	-97.69875	44.3331	44.3331	1083.895206	1083.895206
40036	97.69875	-97.69875	43.2723	43.2723	1083.895206	1083.895206
40037	97.69875	-97.69875	42.2115	42.2115	1083.895206	1083.895206
40038	97.69875	-97.69875	41.1507	41.1507	1083.895206	1083.895206
40039	97.69875	-97.69875	40.0899	40.0899	1083.895206	1083.895206
40040	97.69875	-97.69875	39.0291	39.0291	1083.895206	1083.895206
40041	97.69875	-97.69875	37.9683	37.9683	1083.895206	1083.895206
40042	97.69875	-97.69875	36.9075	36.9075	1083.895206	1083.895206
40043	97.69875	-97.69875	35.8467	35.8467	1083.895206	1083.895206
40044	97.69875	-97.69875	34.7859	34.7859	1083.895206	1083.895206
40045	97.69875	-97.69875	33.7251	33.7251	1083.895206	1083.895206
40046	97.69875	-97.69875	32.6643	32.6643	1083.895206	1083.895206
40047	97.69875	-97.69875	31.6035	31.6035	1083.895206	1083.895206
40048	97.69875	-97.69875	30.5427	30.5427	1083.895206	1083.895206
40049	97.69875	-97.69875	29.4819	29.4819	1083.895206	1083.895206
40050	97.69875	-97.69875	28.4211	28.4211	1083.895206	1083.895206
40051	97.69875	-97.69875	27.3603	27.3603	1083.895206	1083.895206
40052	97.69875	-97.69875	26.2995	26.2995	1083.895206	1083.895206
40053	97.69875	-97.69875	25.2387	25.2387	1083.895206	1083.895206
40054	97.69875	-97.69875	24.1779	24.1779	1083.895206	1083.895206
40055	97.69875	-97.69875	23.1171	23.1171	1083.895206	1083.895206

40056	97.69875	-97.69875	22.0563	22.0563	1083.895206	1083.895206
40057	97.69875	-97.69875	20.9955	20.9955	1083.895206	1083.895206
40058	97.69875	-97.69875	19.9347	19.9347	1083.895206	1083.895206
40059	97.69875	-97.69875	18.8739	18.8739	1083.895206	1083.895206
40060	97.69875	-97.69875	17.8131	17.8131	1083.895206	1083.895206
40061	97.69875	-97.69875	16.7523	16.7523	1083.895206	1083.895206
40062	97.69875	-97.69875	15.6915	15.6915	1083.895206	1083.895206
40063	97.69875	-97.69875	14.6307	14.6307	1083.895206	1083.895206
40064	97.69875	-97.69875	13.5699	13.5699	1083.895206	1083.895206
40065	97.69875	-97.69875	12.5091	12.5091	1083.895206	1083.895206
40066	97.69875	-97.69875	11.4483	11.4483	1083.895206	1083.895206
40067	97.69875	-97.69875	10.3875	10.3875	1083.895206	1083.895206
40068	97.69875	-97.69875	9.3267	9.3267	1083.895206	1083.895206
40069	97.69875	-97.69875	8.2659	8.2659	1083.895206	1083.895206
40070	97.69875	-97.69875	7.2051	7.2051	1083.895206	1083.895206
40071	97.69875	-97.69875	6.1443	6.1443	1083.895206	1083.895206
40072	97.69875	-97.69875	5.0835	5.0835	1083.895206	1083.895206
40073	97.69875	-97.69875	4.0227	4.0227	1083.895206	1083.895206
40074	97.69875	-97.69875	2.9619	2.9619	1083.895206	1083.895206
40075	97.69875	-97.69875	1.9011	1.9011	1083.895206	1083.895206
40076	97.69875	-97.69875	0.8403	0.8403	1083.895206	1083.895206
40077	97.69875	-97.69875	-0.2205	-0.2205	1083.895206	1083.895206
40078	97.69875	-97.69875	-1.2813	-1.2813	1083.895206	1083.895206
40079	97.69875	-97.69875	-2.3421	-2.3421	1083.895206	1083.895206
40080	97.69875	-97.69875	-3.4029	-3.4029	1083.895206	1083.895206
40081	97.69875	-97.69875	-4.4637	-4.4637	1083.895206	1083.895206
40082	97.69875	-97.69875	-5.5245	-5.5245	1083.895206	1083.895206
40083	97.69875	-97.69875	-6.5853	-6.5853	1083.895206	1083.895206
40084	97.69875	-97.69875	-7.6461	-7.6461	1083.895206	1083.895206
40085	97.69875	-97.69875	-8.7069	-8.7069	1083.895206	1083.895206
40086	97.69875	-97.69875	-9.7677	-9.7677	1083.895206	1083.895206
40087	97.69875	-97.69875	-10.8285	-10.8285	1083.895206	1083.895206
40088	97.69875	-97.69875	-11.8893	-11.8893	1083.895206	1083.895206
40089	97.69875	-97.69875	-12.9501	-12.9501	1083.895206	1083.895206
40090	97.69875	-97.69875	-14.0109	-14.0109	1083.895206	1083.895206
40091	97.69875	-97.69875	-15.0717	-15.0717	1083.895206	1083.895206
40092	97.69875	-97.69875	-16.1325	-16.1325	1083.895206	1083.895206
40093	97.69875	-97.69875	-17.1933	-17.1933	1083.895206	1083.895206
40094	97.69875	-97.69875	-18.2541	-18.2541	1083.895206	1083.895206
40095	97.69875	-97.69875	-19.3149	-19.3149	1083.895206	1083.895206
40096	97.69875	-97.69875	-20.3757	-20.3757	1083.895206	1083.895206
40097	97.69875	-97.69875	-21.4365	-21.4365	1083.895206	1083.895206
40098	97.69875	-97.69875	-22.4973	-22.4973	1083.895206	1083.895206
40099	97.69875	-97.69875	-23.5581	-23.5581	1083.895206	1083.895206
40100	97.69875	-97.69875	-24.6189	-24.6189	1083.895206	1083.895206
40101	97.69875	-97.69875	-25.6797	-25.6797	1083.895206	1083.895206
40102	97.69875	-97.69875	-26.7405	-26.7405	1083.895206	1083.895206
40103	97.69875	-97.69875	-27.8013	-27.8013	1083.895206	1083.895206
40104	97.69875	-97.69875	-28.8621	-28.8621	1083.895206	1083.895206
40105	97.69875	-97.69875	-29.9229	-29.9229	1083.895206	1083.895206
40106	97.69875	-97.69875	-30.9837	-30.9837	1083.895206	1083.895206
40107	97.69875	-97.69875	-32.0445	-32.0445	1083.895206	1083.895206
40108	97.69875	-97.69875	-33.1053	-33.1053	1083.895206	1083.895206
40109	97.69875	-97.69875	-34.1661	-34.1661	1083.895206	1083.895206
40110	97.69875	-97.69875	-35.2269	-35.2269	1083.895206	1083.895206
40111	97.69875	-97.69875	-36.2877	-36.2877	1083.895206	1083.895206
40112	97.69875	-97.69875	-37.3485	-37.3485	1083.895206	1083.895206
40113	97.69875	-97.69875	-38.4093	-38.4093	1083.895206	1083.895206
40114	97.69875	-97.69875	-39.4701	-39.4701	1083.895206	1083.895206
40115	97.69875	-97.69875	-40.5309	-40.5309	1083.895206	1083.895206
40116	97.69875	-97.69875	-41.31045	-41.31045	1083.895206	1083.895206
Vertical strips						
41001	97.26875	97.26875	80.26905	-41.46045	1084.698206	1084.698206
41002	96.2075	96.2075	80.26905	-41.46045	1084.698206	1084.698206
41003	95.145	95.145	80.26905	-41.46045	1084.698206	1084.698206
41004	94.0825	94.0825	80.26905	-41.46045	1084.698206	1084.698206
41005	93.02	93.02	80.26905	-41.46045	1084.698206	1084.698206
41006	91.9575	91.9575	80.26905	-41.46045	1084.698206	1084.698206
41007	90.895	90.895	80.26905	-41.46045	1084.698206	1084.698206
41008	89.8325	89.8325	80.26905	-41.46045	1084.698206	1084.698206
41009	88.77	88.77	80.26905	-41.46045	1084.698206	1084.698206
41010	87.7075	87.7075	80.26905	-41.46045	1084.698206	1084.698206
41011	86.645	86.645	80.26905	-41.46045	1084.698206	1084.698206
41012	85.5825	85.5825	80.26905	-41.46045	1084.698206	1084.698206
41013	84.52	84.52	80.26905	-41.46045	1084.698206	1084.698206
41014	83.4575	83.4575	80.26905	-41.46045	1084.698206	1084.698206
41015	82.395	82.395	80.26905	-41.46045	1084.698206	1084.698206
41016	81.3325	81.3325	80.26905	-41.46045	1084.698206	1084.698206
41017	80.27	80.27	80.26905	-41.46045	1084.698206	1084.698206
41018	79.2075	79.2075	80.26905	-41.46045	1084.698206	1084.698206
41019	78.145	78.145	80.26905	-41.46045	1084.698206	1084.698206
41020	77.0825	77.0825	80.26905	-41.46045	1084.698206	1084.698206
41021	76.02	76.02	80.26905	-41.46045	1084.698206	1084.698206
41022	74.9575	74.9575	80.26905	-41.46045	1084.698206	1084.698206
41023	73.895	73.895	80.26905	-41.46045	1084.698206	1084.698206
41024	72.8325	72.8325	80.26905	-41.46045	1084.698206	1084.698206
41025	71.77	71.77	80.26905	-41.46045	1084.698206	1084.698206
41026	70.7075	70.7075	80.26905	-41.46045	1084.698206	1084.698206

41027	69.645	69.645	80.26905	-41.46045	1084.698206	1084.698206
41028	68.5825	68.5825	80.26905	-41.46045	1084.698206	1084.698206
41029	67.52	67.52	80.26905	-41.46045	1084.698206	1084.698206
41030	66.4575	66.4575	80.26905	-41.46045	1084.698206	1084.698206
41031	65.395	65.395	80.26905	-41.46045	1084.698206	1084.698206
41032	64.3325	64.3325	80.26905	-41.46045	1084.698206	1084.698206
41033	63.27	63.27	80.26905	-41.46045	1084.698206	1084.698206
41034	62.2075	62.2075	80.26905	-41.46045	1084.698206	1084.698206
41035	61.145	61.145	80.26905	-41.46045	1084.698206	1084.698206
41036	60.0825	60.0825	80.26905	-41.46045	1084.698206	1084.698206
41037	59.02	59.02	80.26905	-41.46045	1084.698206	1084.698206
41038	57.9575	57.9575	80.26905	-41.46045	1084.698206	1084.698206
41039	56.895	56.895	80.26905	-41.46045	1084.698206	1084.698206
41040	55.8325	55.8325	80.26905	-41.46045	1084.698206	1084.698206
41041	54.77	54.77	80.26905	-41.46045	1084.698206	1084.698206
41042	53.7075	53.7075	80.26905	-41.46045	1084.698206	1084.698206
41043	52.645	52.645	80.26905	-41.46045	1084.698206	1084.698206
41044	51.5825	51.5825	80.26905	-41.46045	1084.698206	1084.698206
41045	50.52	50.52	80.26905	-41.46045	1084.698206	1084.698206
41046	49.4575	49.4575	80.26905	-41.46045	1084.698206	1084.698206
41047	48.395	48.395	80.26905	-41.46045	1084.698206	1084.698206
41048	47.3325	47.3325	80.26905	-41.46045	1084.698206	1084.698206
41049	46.27	46.27	80.26905	-41.46045	1084.698206	1084.698206
41050	45.2075	45.2075	80.26905	-41.46045	1084.698206	1084.698206
41051	44.145	44.145	80.26905	-41.46045	1084.698206	1084.698206
41052	43.0825	43.0825	80.26905	-41.46045	1084.698206	1084.698206
41053	42.02	42.02	80.26905	-41.46045	1084.698206	1084.698206
41054	40.9575	40.9575	80.26905	-41.46045	1084.698206	1084.698206
41055	39.895	39.895	80.26905	-41.46045	1084.698206	1084.698206
41056	38.8325	38.8325	80.26905	-41.46045	1084.698206	1084.698206
41057	37.77	37.77	80.26905	-41.46045	1084.698206	1084.698206
41058	36.7075	36.7075	80.26905	-41.46045	1084.698206	1084.698206
41059	35.645	35.645	80.26905	-41.46045	1084.698206	1084.698206
41060	34.5825	34.5825	80.26905	-41.46045	1084.698206	1084.698206
41061	33.52	33.52	80.26905	-41.46045	1084.698206	1084.698206
41062	32.4575	32.4575	80.26905	-41.46045	1084.698206	1084.698206
41063	31.395	31.395	80.26905	-41.46045	1084.698206	1084.698206
41064	30.3325	30.3325	80.26905	-41.46045	1084.698206	1084.698206
41065	29.27	29.27	80.26905	-41.46045	1084.698206	1084.698206
41066	28.2075	28.2075	80.26905	-41.46045	1084.698206	1084.698206
41067	27.145	27.145	80.26905	-41.46045	1084.698206	1084.698206
41068	26.0825	26.0825	80.26905	-41.46045	1084.698206	1084.698206
41069	25.02	25.02	80.26905	-41.46045	1084.698206	1084.698206
41070	23.9575	23.9575	80.26905	-41.46045	1084.698206	1084.698206
41071	22.895	22.895	80.26905	-41.46045	1084.698206	1084.698206
41072	21.8325	21.8325	80.26905	-41.46045	1084.698206	1084.698206
41073	20.77	20.77	80.26905	-41.46045	1084.698206	1084.698206
41074	19.7075	19.7075	80.26905	-41.46045	1084.698206	1084.698206
41075	18.645	18.645	80.26905	-41.46045	1084.698206	1084.698206
41076	17.5825	17.5825	80.26905	-41.46045	1084.698206	1084.698206
41077	16.52	16.52	80.26905	-41.46045	1084.698206	1084.698206
41078	15.4575	15.4575	80.26905	-41.46045	1084.698206	1084.698206
41079	14.395	14.395	80.26905	-41.46045	1084.698206	1084.698206
41080	13.3325	13.3325	80.26905	-41.46045	1084.698206	1084.698206
41081	12.27	12.27	80.26905	-41.46045	1084.698206	1084.698206
41082	11.2075	11.2075	80.26905	-41.46045	1084.698206	1084.698206
41083	10.145	10.145	80.26905	-41.46045	1084.698206	1084.698206
41084	9.0825	9.0825	80.26905	-41.46045	1084.698206	1084.698206
41085	8.02	8.02	80.26905	-41.46045	1084.698206	1084.698206
41086	6.9575	6.9575	80.26905	-41.46045	1084.698206	1084.698206
41087	5.895	5.895	80.26905	-41.46045	1084.698206	1084.698206
41088	4.8325	4.8325	80.26905	-41.46045	1084.698206	1084.698206
41089	3.77	3.77	80.26905	-41.46045	1084.698206	1084.698206
41090	2.7075	2.7075	80.26905	-41.46045	1084.698206	1084.698206
41091	1.645	1.645	80.26905	-41.46045	1084.698206	1084.698206
41092	0.5825	0.5825	80.26905	-41.46045	1084.698206	1084.698206
41093	-0.48	-0.48	80.26905	-41.46045	1084.698206	1084.698206
41094	-1.5425	-1.5425	80.26905	-41.46045	1084.698206	1084.698206
41095	-2.605	-2.605	80.26905	-41.46045	1084.698206	1084.698206
41096	-3.6675	-3.6675	80.26905	-41.46045	1084.698206	1084.698206
41097	-4.73	-4.73	80.26905	-41.46045	1084.698206	1084.698206
41098	-5.7925	-5.7925	80.26905	-41.46045	1084.698206	1084.698206
41099	-6.855	-6.855	80.26905	-41.46045	1084.698206	1084.698206
41100	-7.9175	-7.9175	80.26905	-41.46045	1084.698206	1084.698206
41101	-8.98	-8.98	80.26905	-41.46045	1084.698206	1084.698206
41102	-10.0425	-10.0425	80.26905	-41.46045	1084.698206	1084.698206
41103	-11.105	-11.105	80.26905	-41.46045	1084.698206	1084.698206
41104	-12.1675	-12.1675	80.26905	-41.46045	1084.698206	1084.698206
41105	-13.23	-13.23	80.26905	-41.46045	1084.698206	1084.698206
41106	-14.2925	-14.2925	80.26905	-41.46045	1084.698206	1084.698206
41107	-15.355	-15.355	80.26905	-41.46045	1084.698206	1084.698206
41108	-16.4175	-16.4175	80.26905	-41.46045	1084.698206	1084.698206
41109	-17.48	-17.48	80.26905	-41.46045	1084.698206	1084.698206
41110	-18.5425	-18.5425	80.26905	-41.46045	1084.698206	1084.698206
41111	-19.605	-19.605	80.26905	-41.46045	1084.698206	1084.698206
41112	-20.6675	-20.6675	80.26905	-41.46045	1084.698206	1084.698206
41113	-21.73	-21.73	80.26905	-41.46045	1084.698206	1084.698206
41114	-22.7925	-22.7925	80.26905	-41.46045	1084.698206	1084.698206

41115	-23.855	-23.855	80.26905	-41.46045	1084.698206	1084.698206
41116	-24.9175	-24.9175	80.26905	-41.46045	1084.698206	1084.698206
41117	-25.98	-25.98	80.26905	-41.46045	1084.698206	1084.698206
41118	-27.0425	-27.0425	80.26905	-41.46045	1084.698206	1084.698206
41119	-28.105	-28.105	80.26905	-41.46045	1084.698206	1084.698206
41120	-29.1675	-29.1675	80.26905	-41.46045	1084.698206	1084.698206
41121	-30.23	-30.23	80.26905	-41.46045	1084.698206	1084.698206
41122	-31.2925	-31.2925	80.26905	-41.46045	1084.698206	1084.698206
41123	-32.355	-32.355	80.26905	-41.46045	1084.698206	1084.698206
41124	-33.4175	-33.4175	80.26905	-41.46045	1084.698206	1084.698206
41125	-34.48	-34.48	80.26905	-41.46045	1084.698206	1084.698206
41126	-35.5425	-35.5425	80.26905	-41.46045	1084.698206	1084.698206
41127	-36.605	-36.605	80.26905	-41.46045	1084.698206	1084.698206
41128	-37.6675	-37.6675	80.26905	-41.46045	1084.698206	1084.698206
41129	-38.73	-38.73	80.26905	-41.46045	1084.698206	1084.698206
41130	-39.7925	-39.7925	80.26905	-41.46045	1084.698206	1084.698206
41131	-40.855	-40.855	80.26905	-41.46045	1084.698206	1084.698206
41132	-41.9175	-41.9175	80.26905	-41.46045	1084.698206	1084.698206
41133	-42.98	-42.98	80.26905	-41.46045	1084.698206	1084.698206
41134	-44.0425	-44.0425	80.26905	-41.46045	1084.698206	1084.698206
41135	-45.105	-45.105	80.26905	-41.46045	1084.698206	1084.698206
41136	-46.1675	-46.1675	80.26905	-41.46045	1084.698206	1084.698206
41137	-47.23	-47.23	80.26905	-41.46045	1084.698206	1084.698206
41138	-48.2925	-48.2925	80.26905	-41.46045	1084.698206	1084.698206
41139	-49.355	-49.355	80.26905	-41.46045	1084.698206	1084.698206
41140	-50.4175	-50.4175	80.26905	-41.46045	1084.698206	1084.698206
41141	-51.48	-51.48	80.26905	-41.46045	1084.698206	1084.698206
41142	-52.5425	-52.5425	80.26905	-41.46045	1084.698206	1084.698206
41143	-53.605	-53.605	80.26905	-41.46045	1084.698206	1084.698206
41144	-54.6675	-54.6675	80.26905	-41.46045	1084.698206	1084.698206
41145	-55.73	-55.73	80.26905	-41.46045	1084.698206	1084.698206
41146	-56.7925	-56.7925	80.26905	-41.46045	1084.698206	1084.698206
41147	-57.855	-57.855	80.26905	-41.46045	1084.698206	1084.698206
41148	-58.9175	-58.9175	80.26905	-41.46045	1084.698206	1084.698206
41149	-59.98	-59.98	80.26905	-41.46045	1084.698206	1084.698206
41150	-61.0425	-61.0425	80.26905	-41.46045	1084.698206	1084.698206
41151	-62.105	-62.105	80.26905	-41.46045	1084.698206	1084.698206
41152	-63.1675	-63.1675	80.26905	-41.46045	1084.698206	1084.698206
41153	-64.23	-64.23	80.26905	-41.46045	1084.698206	1084.698206
41154	-65.2925	-65.2925	80.26905	-41.46045	1084.698206	1084.698206
41155	-66.355	-66.355	80.26905	-41.46045	1084.698206	1084.698206
41156	-67.4175	-67.4175	80.26905	-41.46045	1084.698206	1084.698206
41157	-68.48	-68.48	80.26905	-41.46045	1084.698206	1084.698206
41158	-69.5425	-69.5425	80.26905	-41.46045	1084.698206	1084.698206
41159	-70.605	-70.605	80.26905	-41.46045	1084.698206	1084.698206
41160	-71.6675	-71.6675	80.26905	-41.46045	1084.698206	1084.698206
41161	-72.73	-72.73	80.26905	-41.46045	1084.698206	1084.698206
41162	-73.7925	-73.7925	80.26905	-41.46045	1084.698206	1084.698206
41163	-74.855	-74.855	80.26905	-41.46045	1084.698206	1084.698206
41164	-75.9175	-75.9175	80.26905	-41.46045	1084.698206	1084.698206
41165	-76.98	-76.98	80.26905	-41.46045	1084.698206	1084.698206
41166	-78.0425	-78.0425	80.26905	-41.46045	1084.698206	1084.698206
41167	-79.105	-79.105	80.26905	-41.46045	1084.698206	1084.698206
41168	-80.1675	-80.1675	80.26905	-41.46045	1084.698206	1084.698206
41169	-81.23	-81.23	80.26905	-41.46045	1084.698206	1084.698206
41170	-82.2925	-82.2925	80.26905	-41.46045	1084.698206	1084.698206
41171	-83.355	-83.355	80.26905	-41.46045	1084.698206	1084.698206
41172	-84.4175	-84.4175	80.26905	-41.46045	1084.698206	1084.698206
41173	-85.48	-85.48	80.26905	-41.46045	1084.698206	1084.698206
41174	-86.5425	-86.5425	80.26905	-41.46045	1084.698206	1084.698206
41175	-87.605	-87.605	80.26905	-41.46045	1084.698206	1084.698206
41176	-88.6675	-88.6675	80.26905	-41.46045	1084.698206	1084.698206
41177	-89.73	-89.73	80.26905	-41.46045	1084.698206	1084.698206
41178	-90.7925	-90.7925	80.26905	-41.46045	1084.698206	1084.698206
41179	-91.855	-91.855	80.26905	-41.46045	1084.698206	1084.698206
41180	-92.9175	-92.9175	80.26905	-41.46045	1084.698206	1084.698206
41181	-93.98	-93.98	80.26905	-41.46045	1084.698206	1084.698206
41182	-95.0425	-95.0425	80.26905	-41.46045	1084.698206	1084.698206
41183	-96.105	-96.105	80.26905	-41.46045	1084.698206	1084.698206
RPC station 5						
Horizontal strips						
50001	97.69875	-97.69875	80.11905	80.11905	1138.705206	1138.705206
50002	97.69875	-97.69875	79.3395	79.3395	1138.705206	1138.705206
50003	97.69875	-97.69875	78.2787	78.2787	1138.705206	1138.705206
50004	97.69875	-97.69875	77.2179	77.2179	1138.705206	1138.705206
50005	97.69875	-97.69875	76.1571	76.1571	1138.705206	1138.705206
50006	97.69875	-97.69875	75.0963	75.0963	1138.705206	1138.705206
50007	97.69875	-97.69875	74.0355	74.0355	1138.705206	1138.705206
50008	97.69875	-97.69875	72.9747	72.9747	1138.705206	1138.705206
50009	97.69875	-97.69875	71.9139	71.9139	1138.705206	1138.705206
50010	97.69875	-97.69875	70.8531	70.8531	1138.705206	1138.705206
50011	97.69875	-97.69875	69.7923	69.7923	1138.705206	1138.705206
50012	97.69875	-97.69875	68.7315	68.7315	1138.705206	1138.705206
50013	97.69875	-97.69875	67.6707	67.6707	1138.705206	1138.705206
50014	97.69875	-97.69875	66.6099	66.6099	1138.705206	1138.705206
50015	97.69875	-97.69875	65.5491	65.5491	1138.705206	1138.705206
50016	97.69875	-97.69875	64.4883	64.4883	1138.705206	1138.705206
50017	97.69875	-97.69875	63.4275	63.4275	1138.705206	1138.705206

50018	97.69875	-97.69875	62.3667	62.3667	1138.705206	1138.705206
50019	97.69875	-97.69875	61.3059	61.3059	1138.705206	1138.705206
50020	97.69875	-97.69875	60.2451	60.2451	1138.705206	1138.705206
50021	97.69875	-97.69875	59.1843	59.1843	1138.705206	1138.705206
50022	97.69875	-97.69875	58.1235	58.1235	1138.705206	1138.705206
50023	97.69875	-97.69875	57.0627	57.0627	1138.705206	1138.705206
50024	97.69875	-97.69875	56.0019	56.0019	1138.705206	1138.705206
50025	97.69875	-97.69875	54.9411	54.9411	1138.705206	1138.705206
50026	97.69875	-97.69875	53.8803	53.8803	1138.705206	1138.705206
50027	97.69875	-97.69875	52.8195	52.8195	1138.705206	1138.705206
50028	97.69875	-97.69875	51.7587	51.7587	1138.705206	1138.705206
50029	97.69875	-97.69875	50.6979	50.6979	1138.705206	1138.705206
50030	97.69875	-97.69875	49.6371	49.6371	1138.705206	1138.705206
50031	97.69875	-97.69875	48.5763	48.5763	1138.705206	1138.705206
50032	97.69875	-97.69875	47.5155	47.5155	1138.705206	1138.705206
50033	97.69875	-97.69875	46.4547	46.4547	1138.705206	1138.705206
50034	97.69875	-97.69875	45.3939	45.3939	1138.705206	1138.705206
50035	97.69875	-97.69875	44.3331	44.3331	1138.705206	1138.705206
50036	97.69875	-97.69875	43.2723	43.2723	1138.705206	1138.705206
50037	97.69875	-97.69875	42.2115	42.2115	1138.705206	1138.705206
50038	97.69875	-97.69875	41.1507	41.1507	1138.705206	1138.705206
50039	97.69875	-97.69875	40.0899	40.0899	1138.705206	1138.705206
50040	97.69875	-97.69875	39.0291	39.0291	1138.705206	1138.705206
50041	97.69875	-97.69875	37.9683	37.9683	1138.705206	1138.705206
50042	97.69875	-97.69875	36.9075	36.9075	1138.705206	1138.705206
50043	97.69875	-97.69875	35.8467	35.8467	1138.705206	1138.705206
50044	97.69875	-97.69875	34.7859	34.7859	1138.705206	1138.705206
50045	97.69875	-97.69875	33.7251	33.7251	1138.705206	1138.705206
50046	97.69875	-97.69875	32.6643	32.6643	1138.705206	1138.705206
50047	97.69875	-97.69875	31.6035	31.6035	1138.705206	1138.705206
50048	97.69875	-97.69875	30.5427	30.5427	1138.705206	1138.705206
50049	97.69875	-97.69875	29.4819	29.4819	1138.705206	1138.705206
50050	97.69875	-97.69875	28.4211	28.4211	1138.705206	1138.705206
50051	97.69875	-97.69875	27.3603	27.3603	1138.705206	1138.705206
50052	97.69875	-97.69875	26.2995	26.2995	1138.705206	1138.705206
50053	97.69875	-97.69875	25.2387	25.2387	1138.705206	1138.705206
50054	97.69875	-97.69875	24.1779	24.1779	1138.705206	1138.705206
50055	97.69875	-97.69875	23.1171	23.1171	1138.705206	1138.705206
50056	97.69875	-97.69875	22.0563	22.0563	1138.705206	1138.705206
50057	97.69875	-97.69875	20.9955	20.9955	1138.705206	1138.705206
50058	97.69875	-97.69875	19.9347	19.9347	1138.705206	1138.705206
50059	97.69875	-97.69875	18.8739	18.8739	1138.705206	1138.705206
50060	97.69875	-97.69875	17.8131	17.8131	1138.705206	1138.705206
50061	97.69875	-97.69875	16.7523	16.7523	1138.705206	1138.705206
50062	97.69875	-97.69875	15.6915	15.6915	1138.705206	1138.705206
50063	97.69875	-97.69875	14.6307	14.6307	1138.705206	1138.705206
50064	97.69875	-97.69875	13.5699	13.5699	1138.705206	1138.705206
50065	97.69875	-97.69875	12.5091	12.5091	1138.705206	1138.705206
50066	97.69875	-97.69875	11.4483	11.4483	1138.705206	1138.705206
50067	97.69875	-97.69875	10.3875	10.3875	1138.705206	1138.705206
50068	97.69875	-97.69875	9.3267	9.3267	1138.705206	1138.705206
50069	97.69875	-97.69875	8.2659	8.2659	1138.705206	1138.705206
50070	97.69875	-97.69875	7.2051	7.2051	1138.705206	1138.705206
50071	97.69875	-97.69875	6.1443	6.1443	1138.705206	1138.705206
50072	97.69875	-97.69875	5.0835	5.0835	1138.705206	1138.705206
50073	97.69875	-97.69875	4.0227	4.0227	1138.705206	1138.705206
50074	97.69875	-97.69875	2.9619	2.9619	1138.705206	1138.705206
50075	97.69875	-97.69875	1.9011	1.9011	1138.705206	1138.705206
50076	97.69875	-97.69875	0.8403	0.8403	1138.705206	1138.705206
50077	97.69875	-97.69875	-0.2205	-0.2205	1138.705206	1138.705206
50078	97.69875	-97.69875	-1.2813	-1.2813	1138.705206	1138.705206
50079	97.69875	-97.69875	-2.3421	-2.3421	1138.705206	1138.705206
50080	97.69875	-97.69875	-3.4029	-3.4029	1138.705206	1138.705206
50081	97.69875	-97.69875	-4.4637	-4.4637	1138.705206	1138.705206
50082	97.69875	-97.69875	-5.5245	-5.5245	1138.705206	1138.705206
50083	97.69875	-97.69875	-6.5853	-6.5853	1138.705206	1138.705206
50084	97.69875	-97.69875	-7.6461	-7.6461	1138.705206	1138.705206
50085	97.69875	-97.69875	-8.7069	-8.7069	1138.705206	1138.705206
50086	97.69875	-97.69875	-9.7677	-9.7677	1138.705206	1138.705206
50087	97.69875	-97.69875	-10.8285	-10.8285	1138.705206	1138.705206
50088	97.69875	-97.69875	-11.8893	-11.8893	1138.705206	1138.705206
50089	97.69875	-97.69875	-12.9501	-12.9501	1138.705206	1138.705206
50090	97.69875	-97.69875	-14.0109	-14.0109	1138.705206	1138.705206
50091	97.69875	-97.69875	-15.0717	-15.0717	1138.705206	1138.705206
50092	97.69875	-97.69875	-16.1325	-16.1325	1138.705206	1138.705206
50093	97.69875	-97.69875	-17.1933	-17.1933	1138.705206	1138.705206
50094	97.69875	-97.69875	-18.2541	-18.2541	1138.705206	1138.705206
50095	97.69875	-97.69875	-19.3149	-19.3149	1138.705206	1138.705206
50096	97.69875	-97.69875	-20.3757	-20.3757	1138.705206	1138.705206
50097	97.69875	-97.69875	-21.4365	-21.4365	1138.705206	1138.705206
50098	97.69875	-97.69875	-22.4973	-22.4973	1138.705206	1138.705206
50099	97.69875	-97.69875	-23.5581	-23.5581	1138.705206	1138.705206
50100	97.69875	-97.69875	-24.6189	-24.6189	1138.705206	1138.705206
50101	97.69875	-97.69875	-25.6797	-25.6797	1138.705206	1138.705206
50102	97.69875	-97.69875	-26.7405	-26.7405	1138.705206	1138.705206
50103	97.69875	-97.69875	-27.8013	-27.8013	1138.705206	1138.705206
50104	97.69875	-97.69875	-28.8621	-28.8621	1138.705206	1138.705206
50105	97.69875	-97.69875	-29.9229	-29.9229	1138.705206	1138.705206

50106	97.69875	-97.69875	-30.9837	-30.9837	1138.705206	1138.705206
50107	97.69875	-97.69875	-32.0445	-32.0445	1138.705206	1138.705206
50108	97.69875	-97.69875	-33.1053	-33.1053	1138.705206	1138.705206
50109	97.69875	-97.69875	-34.1661	-34.1661	1138.705206	1138.705206
50110	97.69875	-97.69875	-35.2269	-35.2269	1138.705206	1138.705206
50111	97.69875	-97.69875	-36.2877	-36.2877	1138.705206	1138.705206
50112	97.69875	-97.69875	-37.3485	-37.3485	1138.705206	1138.705206
50113	97.69875	-97.69875	-38.4093	-38.4093	1138.705206	1138.705206
50114	97.69875	-97.69875	-39.4701	-39.4701	1138.705206	1138.705206
50115	97.69875	-97.69875	-40.5309	-40.5309	1138.705206	1138.705206
50116	97.69875	-97.69875	-41.31045	-41.31045	1138.705206	1138.705206
Vertical strips						
51001	97.26875	97.26875	80.26905	-41.46045	1139.508206	1139.508206
51002	96.2075	96.2075	80.26905	-41.46045	1139.508206	1139.508206
51003	95.145	95.145	80.26905	-41.46045	1139.508206	1139.508206
51004	94.0825	94.0825	80.26905	-41.46045	1139.508206	1139.508206
51005	93.02	93.02	80.26905	-41.46045	1139.508206	1139.508206
51006	91.9575	91.9575	80.26905	-41.46045	1139.508206	1139.508206
51007	90.895	90.895	80.26905	-41.46045	1139.508206	1139.508206
51008	89.8325	89.8325	80.26905	-41.46045	1139.508206	1139.508206
51009	88.77	88.77	80.26905	-41.46045	1139.508206	1139.508206
51010	87.7075	87.7075	80.26905	-41.46045	1139.508206	1139.508206
51011	86.645	86.645	80.26905	-41.46045	1139.508206	1139.508206
51012	85.5825	85.5825	80.26905	-41.46045	1139.508206	1139.508206
51013	84.52	84.52	80.26905	-41.46045	1139.508206	1139.508206
51014	83.4575	83.4575	80.26905	-41.46045	1139.508206	1139.508206
51015	82.395	82.395	80.26905	-41.46045	1139.508206	1139.508206
51016	81.3325	81.3325	80.26905	-41.46045	1139.508206	1139.508206
51017	80.27	80.27	80.26905	-41.46045	1139.508206	1139.508206
51018	79.2075	79.2075	80.26905	-41.46045	1139.508206	1139.508206
51019	78.145	78.145	80.26905	-41.46045	1139.508206	1139.508206
51020	77.0825	77.0825	80.26905	-41.46045	1139.508206	1139.508206
51021	76.02	76.02	80.26905	-41.46045	1139.508206	1139.508206
51022	74.9575	74.9575	80.26905	-41.46045	1139.508206	1139.508206
51023	73.895	73.895	80.26905	-41.46045	1139.508206	1139.508206
51024	72.8325	72.8325	80.26905	-41.46045	1139.508206	1139.508206
51025	71.77	71.77	80.26905	-41.46045	1139.508206	1139.508206
51026	70.7075	70.7075	80.26905	-41.46045	1139.508206	1139.508206
51027	69.645	69.645	80.26905	-41.46045	1139.508206	1139.508206
51028	68.5825	68.5825	80.26905	-41.46045	1139.508206	1139.508206
51029	67.52	67.52	80.26905	-41.46045	1139.508206	1139.508206
51030	66.4575	66.4575	80.26905	-41.46045	1139.508206	1139.508206
51031	65.395	65.395	80.26905	-41.46045	1139.508206	1139.508206
51032	64.3325	64.3325	80.26905	-41.46045	1139.508206	1139.508206
51033	63.27	63.27	80.26905	-41.46045	1139.508206	1139.508206
51034	62.2075	62.2075	80.26905	-41.46045	1139.508206	1139.508206
51035	61.145	61.145	80.26905	-41.46045	1139.508206	1139.508206
51036	60.0825	60.0825	80.26905	-41.46045	1139.508206	1139.508206
51037	59.02	59.02	80.26905	-41.46045	1139.508206	1139.508206
51038	57.9575	57.9575	80.26905	-41.46045	1139.508206	1139.508206
51039	56.895	56.895	80.26905	-41.46045	1139.508206	1139.508206
51040	55.8325	55.8325	80.26905	-41.46045	1139.508206	1139.508206
51041	54.77	54.77	80.26905	-41.46045	1139.508206	1139.508206
51042	53.7075	53.7075	80.26905	-41.46045	1139.508206	1139.508206
51043	52.645	52.645	80.26905	-41.46045	1139.508206	1139.508206
51044	51.5825	51.5825	80.26905	-41.46045	1139.508206	1139.508206
51045	50.52	50.52	80.26905	-41.46045	1139.508206	1139.508206
51046	49.4575	49.4575	80.26905	-41.46045	1139.508206	1139.508206
51047	48.395	48.395	80.26905	-41.46045	1139.508206	1139.508206
51048	47.3325	47.3325	80.26905	-41.46045	1139.508206	1139.508206
51049	46.27	46.27	80.26905	-41.46045	1139.508206	1139.508206
51050	45.2075	45.2075	80.26905	-41.46045	1139.508206	1139.508206
51051	44.145	44.145	80.26905	-41.46045	1139.508206	1139.508206
51052	43.0825	43.0825	80.26905	-41.46045	1139.508206	1139.508206
51053	42.02	42.02	80.26905	-41.46045	1139.508206	1139.508206
51054	40.9575	40.9575	80.26905	-41.46045	1139.508206	1139.508206
51055	39.895	39.895	80.26905	-41.46045	1139.508206	1139.508206
51056	38.8325	38.8325	80.26905	-41.46045	1139.508206	1139.508206
51057	37.77	37.77	80.26905	-41.46045	1139.508206	1139.508206
51058	36.7075	36.7075	80.26905	-41.46045	1139.508206	1139.508206
51059	35.645	35.645	80.26905	-41.46045	1139.508206	1139.508206
51060	34.5825	34.5825	80.26905	-41.46045	1139.508206	1139.508206
51061	33.52	33.52	80.26905	-41.46045	1139.508206	1139.508206
51062	32.4575	32.4575	80.26905	-41.46045	1139.508206	1139.508206
51063	31.395	31.395	80.26905	-41.46045	1139.508206	1139.508206
51064	30.3325	30.3325	80.26905	-41.46045	1139.508206	1139.508206
51065	29.27	29.27	80.26905	-41.46045	1139.508206	1139.508206
51066	28.2075	28.2075	80.26905	-41.46045	1139.508206	1139.508206
51067	27.145	27.145	80.26905	-41.46045	1139.508206	1139.508206
51068	26.0825	26.0825	80.26905	-41.46045	1139.508206	1139.508206
51069	25.02	25.02	80.26905	-41.46045	1139.508206	1139.508206
51070	23.9575	23.9575	80.26905	-41.46045	1139.508206	1139.508206
51071	22.895	22.895	80.26905	-41.46045	1139.508206	1139.508206
51072	21.8325	21.8325	80.26905	-41.46045	1139.508206	1139.508206
51073	20.77	20.77	80.26905	-41.46045	1139.508206	1139.508206
51074	19.7075	19.7075	80.26905	-41.46045	1139.508206	1139.508206
51075	18.645	18.645	80.26905	-41.46045	1139.508206	1139.508206
51076	17.5825	17.5825	80.26905	-41.46045	1139.508206	1139.508206

51077	16.52	16.52	80.26905	-41.46045	1139.508206	1139.508206
51078	15.4575	15.4575	80.26905	-41.46045	1139.508206	1139.508206
51079	14.395	14.395	80.26905	-41.46045	1139.508206	1139.508206
51080	13.3325	13.3325	80.26905	-41.46045	1139.508206	1139.508206
51081	12.27	12.27	80.26905	-41.46045	1139.508206	1139.508206
51082	11.2075	11.2075	80.26905	-41.46045	1139.508206	1139.508206
51083	10.145	10.145	80.26905	-41.46045	1139.508206	1139.508206
51084	9.0825	9.0825	80.26905	-41.46045	1139.508206	1139.508206
51085	8.02	8.02	80.26905	-41.46045	1139.508206	1139.508206
51086	6.9575	6.9575	80.26905	-41.46045	1139.508206	1139.508206
51087	5.895	5.895	80.26905	-41.46045	1139.508206	1139.508206
51088	4.8325	4.8325	80.26905	-41.46045	1139.508206	1139.508206
51089	3.77	3.77	80.26905	-41.46045	1139.508206	1139.508206
51090	2.7075	2.7075	80.26905	-41.46045	1139.508206	1139.508206
51091	1.645	1.645	80.26905	-41.46045	1139.508206	1139.508206
51092	0.5825	0.5825	80.26905	-41.46045	1139.508206	1139.508206
51093	-0.48	-0.48	80.26905	-41.46045	1139.508206	1139.508206
51094	-1.5425	-1.5425	80.26905	-41.46045	1139.508206	1139.508206
51095	-2.605	-2.605	80.26905	-41.46045	1139.508206	1139.508206
51096	-3.6675	-3.6675	80.26905	-41.46045	1139.508206	1139.508206
51097	-4.73	-4.73	80.26905	-41.46045	1139.508206	1139.508206
51098	-5.7925	-5.7925	80.26905	-41.46045	1139.508206	1139.508206
51099	-6.855	-6.855	80.26905	-41.46045	1139.508206	1139.508206
51100	-7.9175	-7.9175	80.26905	-41.46045	1139.508206	1139.508206
51101	-8.98	-8.98	80.26905	-41.46045	1139.508206	1139.508206
51102	-10.0425	-10.0425	80.26905	-41.46045	1139.508206	1139.508206
51103	-11.105	-11.105	80.26905	-41.46045	1139.508206	1139.508206
51104	-12.1675	-12.1675	80.26905	-41.46045	1139.508206	1139.508206
51105	-13.23	-13.23	80.26905	-41.46045	1139.508206	1139.508206
51106	-14.2925	-14.2925	80.26905	-41.46045	1139.508206	1139.508206
51107	-15.355	-15.355	80.26905	-41.46045	1139.508206	1139.508206
51108	-16.4175	-16.4175	80.26905	-41.46045	1139.508206	1139.508206
51109	-17.48	-17.48	80.26905	-41.46045	1139.508206	1139.508206
51110	-18.5425	-18.5425	80.26905	-41.46045	1139.508206	1139.508206
51111	-19.605	-19.605	80.26905	-41.46045	1139.508206	1139.508206
51112	-20.6675	-20.6675	80.26905	-41.46045	1139.508206	1139.508206
51113	-21.73	-21.73	80.26905	-41.46045	1139.508206	1139.508206
51114	-22.7925	-22.7925	80.26905	-41.46045	1139.508206	1139.508206
51115	-23.855	-23.855	80.26905	-41.46045	1139.508206	1139.508206
51116	-24.9175	-24.9175	80.26905	-41.46045	1139.508206	1139.508206
51117	-25.98	-25.98	80.26905	-41.46045	1139.508206	1139.508206
51118	-27.0425	-27.0425	80.26905	-41.46045	1139.508206	1139.508206
51119	-28.105	-28.105	80.26905	-41.46045	1139.508206	1139.508206
51120	-29.1675	-29.1675	80.26905	-41.46045	1139.508206	1139.508206
51121	-30.23	-30.23	80.26905	-41.46045	1139.508206	1139.508206
51122	-31.2925	-31.2925	80.26905	-41.46045	1139.508206	1139.508206
51123	-32.355	-32.355	80.26905	-41.46045	1139.508206	1139.508206
51124	-33.4175	-33.4175	80.26905	-41.46045	1139.508206	1139.508206
51125	-34.48	-34.48	80.26905	-41.46045	1139.508206	1139.508206
51126	-35.5425	-35.5425	80.26905	-41.46045	1139.508206	1139.508206
51127	-36.605	-36.605	80.26905	-41.46045	1139.508206	1139.508206
51128	-37.6675	-37.6675	80.26905	-41.46045	1139.508206	1139.508206
51129	-38.73	-38.73	80.26905	-41.46045	1139.508206	1139.508206
51130	-39.7925	-39.7925	80.26905	-41.46045	1139.508206	1139.508206
51131	-40.855	-40.855	80.26905	-41.46045	1139.508206	1139.508206
51132	-41.9175	-41.9175	80.26905	-41.46045	1139.508206	1139.508206
51133	-42.98	-42.98	80.26905	-41.46045	1139.508206	1139.508206
51134	-44.0425	-44.0425	80.26905	-41.46045	1139.508206	1139.508206
51135	-45.105	-45.105	80.26905	-41.46045	1139.508206	1139.508206
51136	-46.1675	-46.1675	80.26905	-41.46045	1139.508206	1139.508206
51137	-47.23	-47.23	80.26905	-41.46045	1139.508206	1139.508206
51138	-48.2925	-48.2925	80.26905	-41.46045	1139.508206	1139.508206
51139	-49.355	-49.355	80.26905	-41.46045	1139.508206	1139.508206
51140	-50.4175	-50.4175	80.26905	-41.46045	1139.508206	1139.508206
51141	-51.48	-51.48	80.26905	-41.46045	1139.508206	1139.508206
51142	-52.5425	-52.5425	80.26905	-41.46045	1139.508206	1139.508206
51143	-53.605	-53.605	80.26905	-41.46045	1139.508206	1139.508206
51144	-54.6675	-54.6675	80.26905	-41.46045	1139.508206	1139.508206
51145	-55.73	-55.73	80.26905	-41.46045	1139.508206	1139.508206
51146	-56.7925	-56.7925	80.26905	-41.46045	1139.508206	1139.508206
51147	-57.855	-57.855	80.26905	-41.46045	1139.508206	1139.508206
51148	-58.9175	-58.9175	80.26905	-41.46045	1139.508206	1139.508206
51149	-59.98	-59.98	80.26905	-41.46045	1139.508206	1139.508206
51150	-61.0425	-61.0425	80.26905	-41.46045	1139.508206	1139.508206
51151	-62.105	-62.105	80.26905	-41.46045	1139.508206	1139.508206
51152	-63.1675	-63.1675	80.26905	-41.46045	1139.508206	1139.508206
51153	-64.23	-64.23	80.26905	-41.46045	1139.508206	1139.508206
51154	-65.2925	-65.2925	80.26905	-41.46045	1139.508206	1139.508206
51155	-66.355	-66.355	80.26905	-41.46045	1139.508206	1139.508206
51156	-67.4175	-67.4175	80.26905	-41.46045	1139.508206	1139.508206
51157	-68.48	-68.48	80.26905	-41.46045	1139.508206	1139.508206
51158	-69.5425	-69.5425	80.26905	-41.46045	1139.508206	1139.508206
51159	-70.605	-70.605	80.26905	-41.46045	1139.508206	1139.508206
51160	-71.6675	-71.6675	80.26905	-41.46045	1139.508206	1139.508206
51161	-72.73	-72.73	80.26905	-41.46045	1139.508206	1139.508206
51162	-73.7925	-73.7925	80.26905	-41.46045	1139.508206	1139.508206
51163	-74.855	-74.855	80.26905	-41.46045	1139.508206	1139.508206
51164	-75.9175	-75.9175	80.26905	-41.46045	1139.508206	1139.508206

51165	-76.98	-76.98	80.26905	-41.46045	1139.508206	1139.508206
51166	-78.0425	-78.0425	80.26905	-41.46045	1139.508206	1139.508206
51167	-79.105	-79.105	80.26905	-41.46045	1139.508206	1139.508206
51168	-80.1675	-80.1675	80.26905	-41.46045	1139.508206	1139.508206
51169	-81.23	-81.23	80.26905	-41.46045	1139.508206	1139.508206
51170	-82.2925	-82.2925	80.26905	-41.46045	1139.508206	1139.508206
51171	-83.355	-83.355	80.26905	-41.46045	1139.508206	1139.508206
51172	-84.4175	-84.4175	80.26905	-41.46045	1139.508206	1139.508206
51173	-85.48	-85.48	80.26905	-41.46045	1139.508206	1139.508206
51174	-86.5425	-86.5425	80.26905	-41.46045	1139.508206	1139.508206
51175	-87.605	-87.605	80.26905	-41.46045	1139.508206	1139.508206
51176	-88.6675	-88.6675	80.26905	-41.46045	1139.508206	1139.508206
51177	-89.73	-89.73	80.26905	-41.46045	1139.508206	1139.508206
51178	-90.7925	-90.7925	80.26905	-41.46045	1139.508206	1139.508206
51179	-91.855	-91.855	80.26905	-41.46045	1139.508206	1139.508206
51180	-92.9175	-92.9175	80.26905	-41.46045	1139.508206	1139.508206
51181	-93.98	-93.98	80.26905	-41.46045	1139.508206	1139.508206
51182	-95.0425	-95.0425	80.26905	-41.46045	1139.508206	1139.508206
51183	-96.105	-96.105	80.26905	-41.46045	1139.508206	1139.508206

Table 20: RPC detector IDs and strip endpoint coordinates in FairShip. Units are cm.