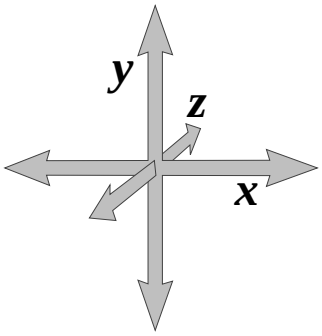
a Brycian QTVR Object Guide

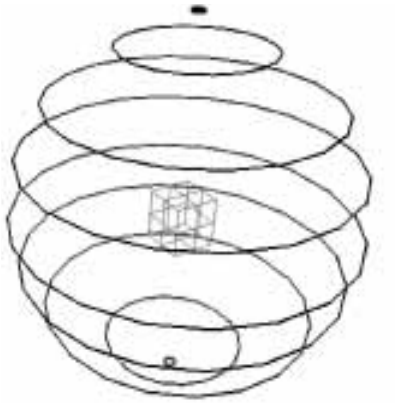
In order to create QTVR objects, rendering software needs to have XYZ and angular data information input into it's camera controls that corresponds to a spherical path around the object being recorded.

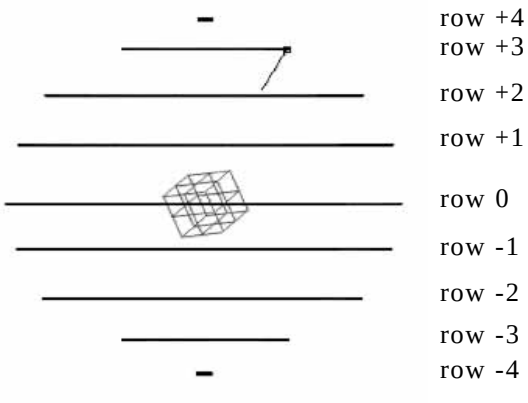
In this sample, i have based my measurements upon an equatorial path 1200 Bryce 2 units in diameter, with camera points spaced every 22.5 degrees.

The object to be recorded is stationed at coordinates 0,0,0.

I have only calculated the points for the upper hemisphere. Rows -1 though -4's camera points can be inferred by inverting the y offset data (600 becomes -600) and reflecting the x angle data across the x axis (90° becomes 270°, 67.5° becomes 292.5°, 45° becomes 315° & 22.5° becomes 337.5°).

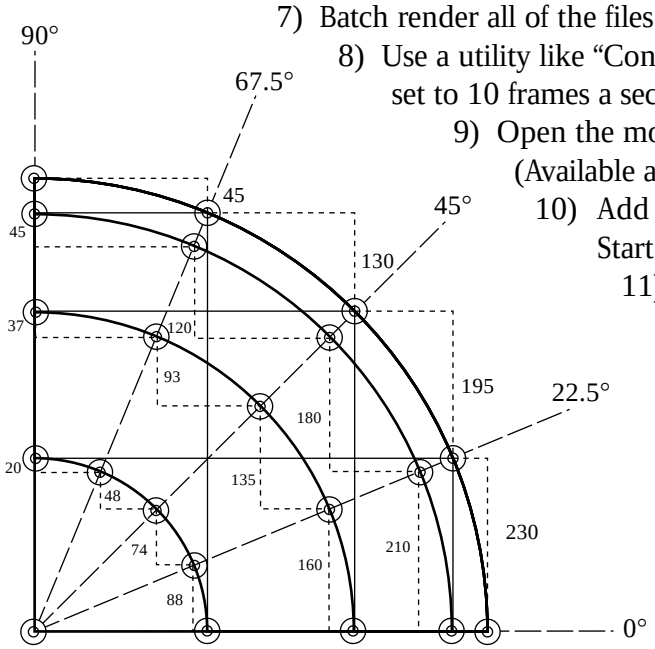






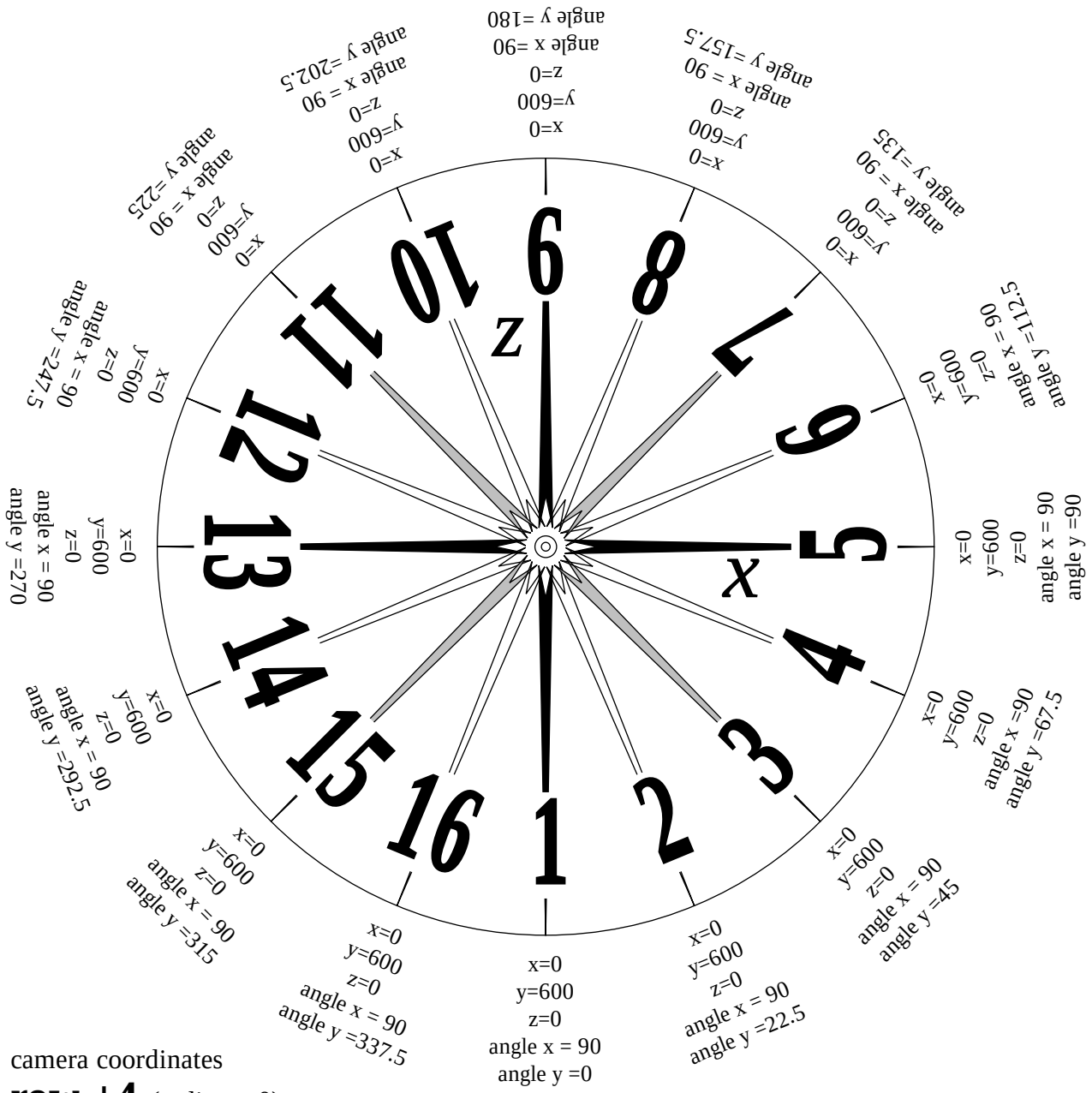
The process is fairly simple:

1) Create and save a 320 x 240 master scene file in Bryce 2 with the main object at 0,0,0.
2) Enter in the numeric camera data for the first point (row +4, position 1). Make 1 render pass.
   Early versions of Bryce 2 do not support the entry of negative values, you must paste in a negative symbol.
3) Save the scene as Filename.01
4) Enter data for the next point (row +4, position 2). Make 1 render pass.
5) Save the scene as Filename.02
6) Continue until you have created and saved all 144 files.
7) Batch render all of the files.
8) Use a utility like “Convert To Movie™” and convert all of the .p files into a movie, set to 10 frames a second, key frame every frame.
9) Open the movie file with the “Make QTVR Object” tool.
   (Available at http://qtvr.quicktime.apple.com)
10) Add the navigation data. (For this example; 9 rows, 16 columns, Start Hpan 0, End Hpan 360, Start Vpan 90, End Vpan -90)
11) Spin your Brycian QTVR Object!



This chart can be used to visualize an overhead section or the outer arc can emulate a side section (values in Bryce units)

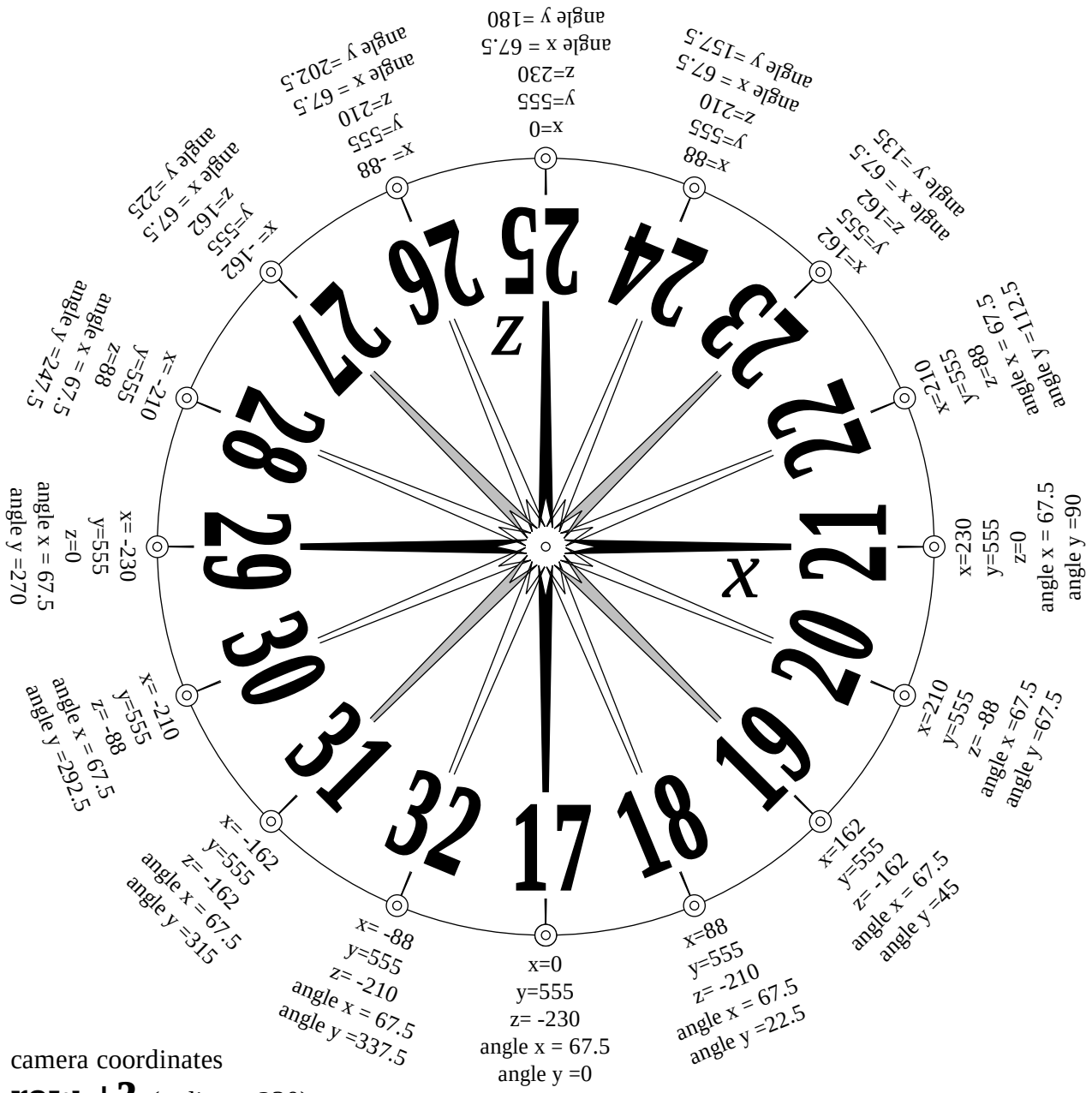
Bryce 2's Edit Camera window. Numeric data from the following pages is input here



camera coordinates

row +4 (radius = 0)

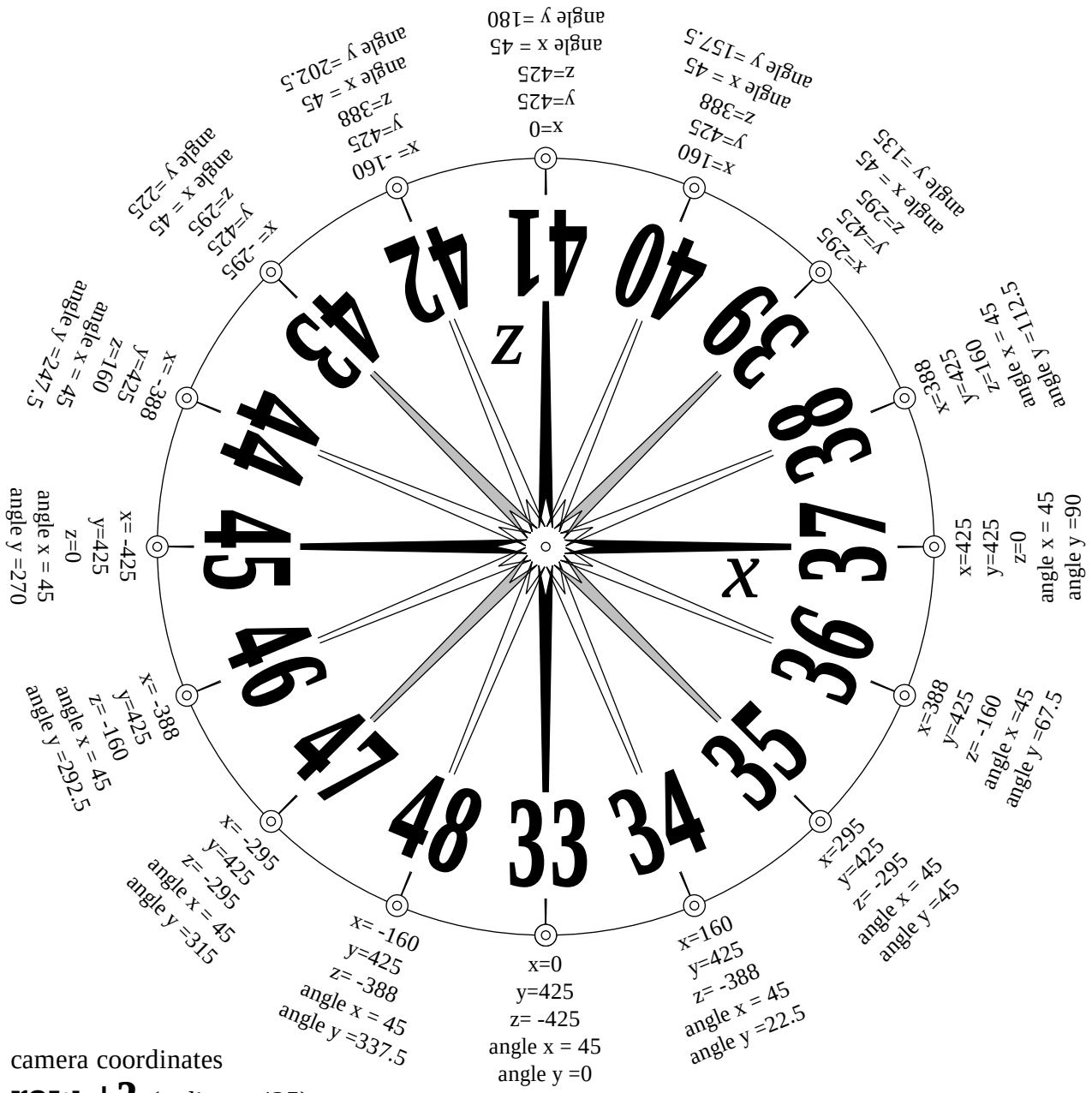
position	x	y	z	angle x	angle y
1	0	600	0	90	0
2	0	600	0	90	22.5
3	0	600	0	90	45
4	0	600	0	90	67.5
5	0	600	0	90	90
6	0	600	0	90	112.5
7	0	600	0	90	135
8	0	600	0	90	157.5
9	0	600	0	90	180
10	0	600	0	90	202.5
11	0	600	0	90	225
12	0	600	0	90	247.5
13	0	600	0	90	270
14	0	600	0	90	292.5
15	0	600	0	90	315
16	0	600	0	90	337.5



camera coordinates

row +3 (radius = 230)

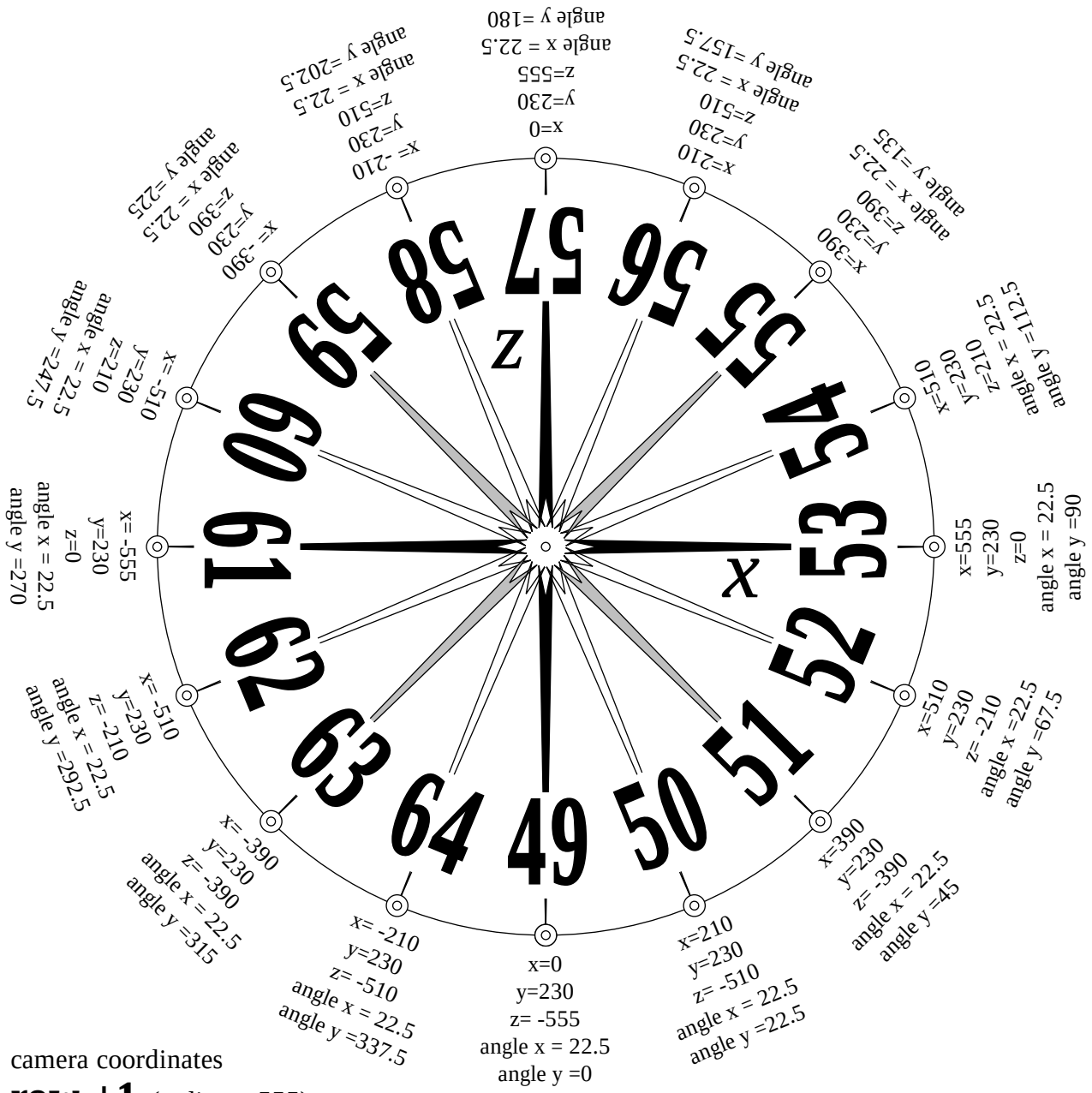
position	x	y	z	angle x	angle y
17	0	555	-230	67.5	0
18	88	555	-210	67.5	22.5
19	162	555	-162	67.5	45
20	210	555	-88	67.5	67.5
21	230	555	0	67.5	90
22	210	555	88	67.5	112.5
23	162	555	162	67.5	135
24	88	555	210	67.5	157.5
25	0	555	230	67.5	180
26	-88	555	210	67.5	202.5
27	-162	555	162	67.5	225
28	-210	555	88	67.5	247.5
29	-230	555	0	67.5	270
30	-210	555	-88	67.5	292.5
31	-162	555	-162	67.5	315
32	-88	555	-210	67.5	337.5



camera coordinates

row +2 (radius = 425)

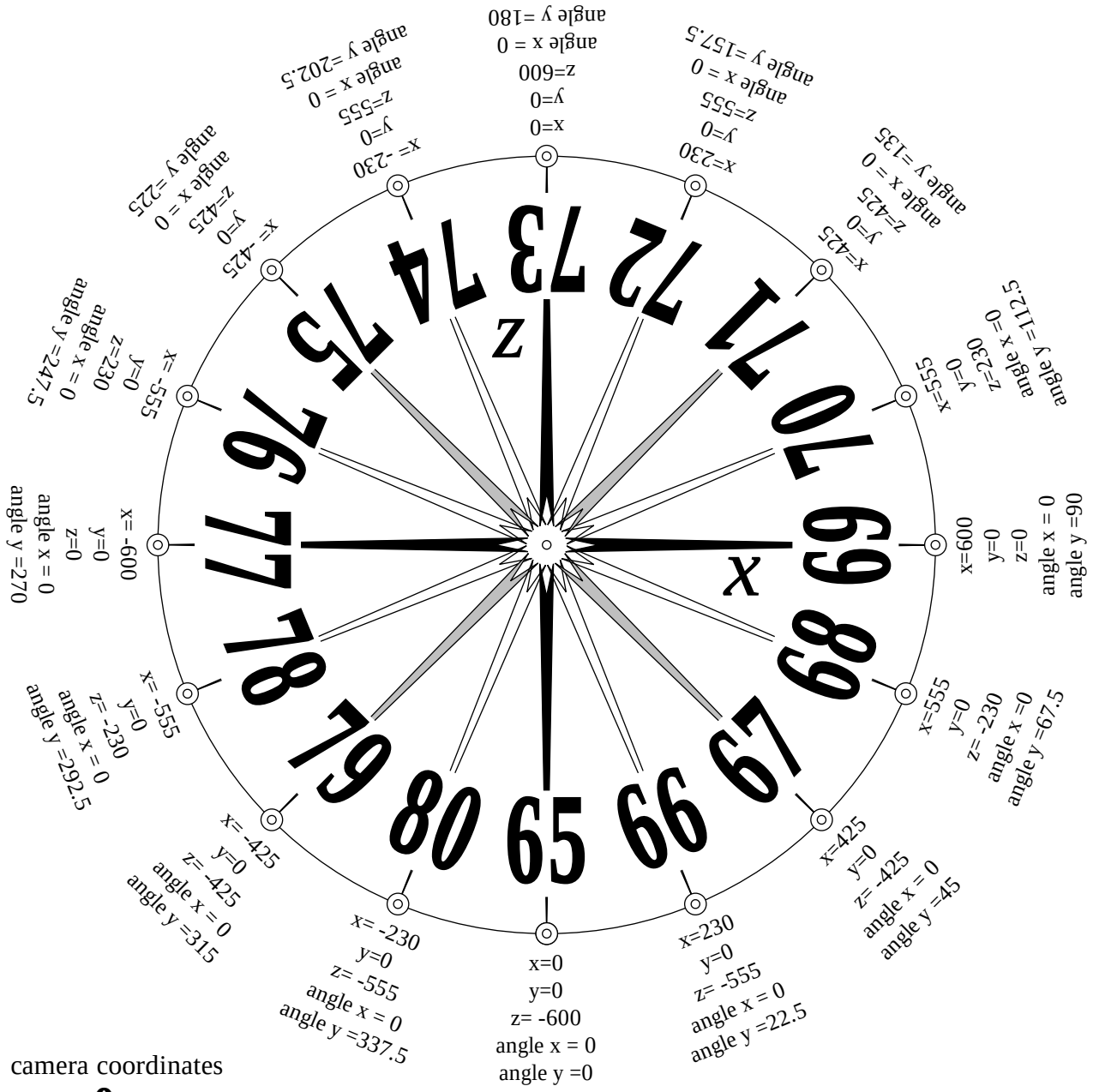
position	x	y	z	angle x	angle y
33	0	425	-425	45	0
34	160	425	-388	45	22.5
35	295	425	-295	45	45
36	388	425	-160	45	67.5
37	425	425	0	45	90
38	388	425	160	45	112.5
39	295	425	295	45	135
40	160	425	388	45	157.5
41	0	425	425	45	180
42	-160	425	388	45	202.5
43	-295	425	295	45	225
44	-388	425	160	45	247.5
45	-425	425	0	45	270
46	-388	425	-160	45	292.5
47	-295	425	-295	45	315
48	-160	425	-388	45	337.5



camera coordinates

row +1 (radius = 555)

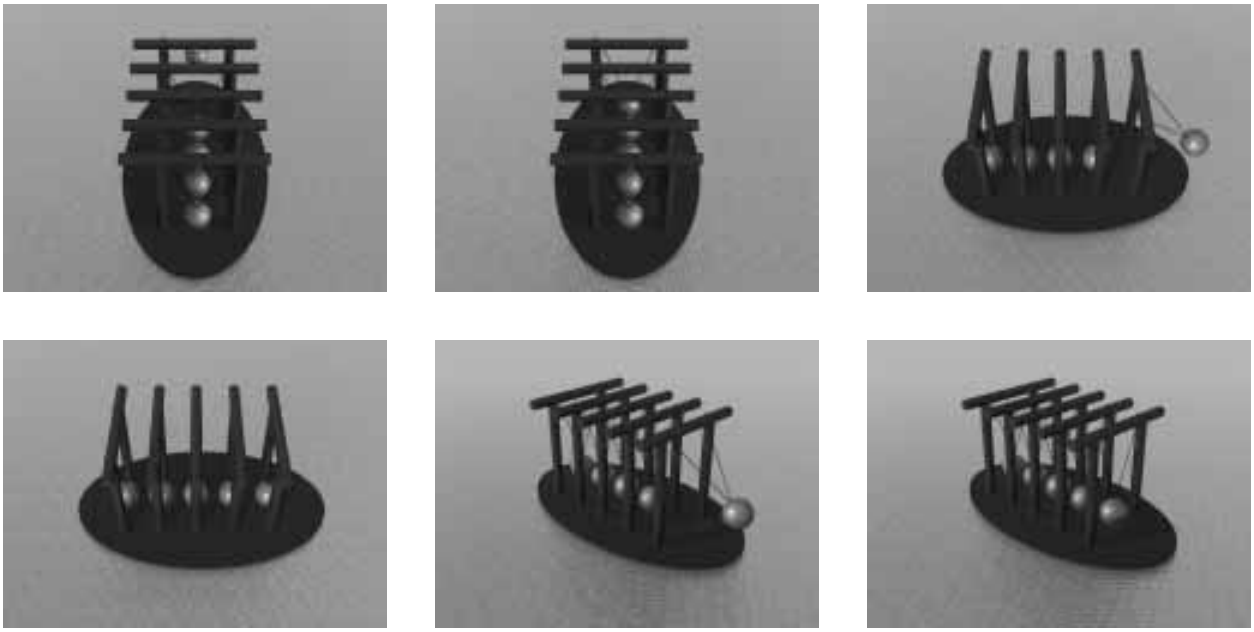
position	x	y	z	angle x	angle y
49	0	230	-555	22.5	0
50	210	230	-510	22.5	22.5
51	390	230	-390	22.5	45
52	510	230	-210	22.5	67.5
53	555	230	0	22.5	90
54	510	230	210	22.5	112.5
55	390	230	390	22.5	135
56	210	230	510	22.5	157.5
57	0	230	555	22.5	180
58	-210	230	510	22.5	202.5
59	-390	230	390	22.5	225
60	-510	230	210	22.5	247.5
61	-555	230	0	22.5	270
62	-510	230	-210	22.5	292.5
63	-390	230	-390	22.5	315
64	-210	230	-510	22.5	337.5



camera coordinates

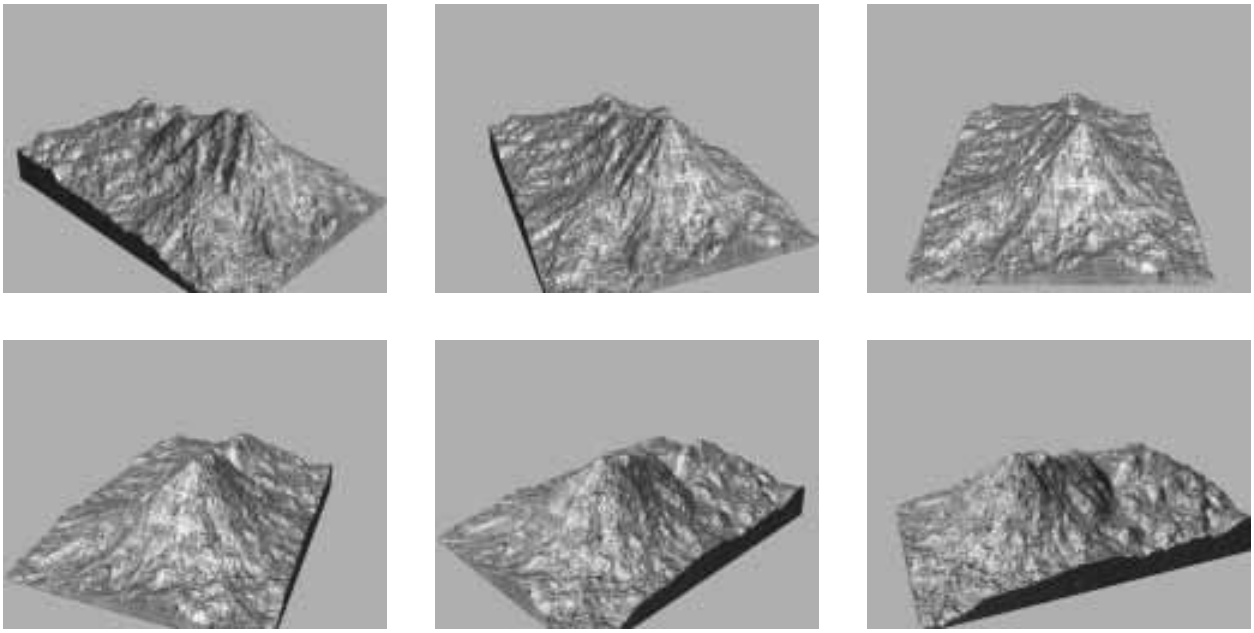
row 0 (radius = 600)

position	x	y	z	angle x	angle y
65	0	0	-600	0	0
66	230	0	-555	0	22.5
67	425	0	-425	0	45
68	555	0	-230	0	67.5
69	600	0	0	0	90
70	555	0	230	0	112.5
71	425	0	425	0	135
72	230	0	555	0	157.5
73	0	0	600	0	180
74	-230	0	555	0	202.5
75	-425	0	425	0	225
76	-555	0	230	0	247.5
77	-600	0	0	0	270
78	-555	0	-230	0	292.5
79	-425	0	-425	0	315
80	-230	0	-555	0	337.5



Bryce objects can be made to animate in QTVR if you create a loop of animation. This sample uses 8 frames of animation for each camera point...

80 camera points (hemisphere) x 8 animation frames per point = 640 frames to render!



Digital terrain data can be imported into Bryce's terrain editor and turned into navigatable QTVR mountain models.

Enjoy!

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