

# MWA 'sweet spots' and gridpoint numbers

The need for 'sweet spots' and a grid of positions that the telescope can point to is driven by the beamformer architecture. Each dipole can be delayed by an integer multiple of 435 picoseconds, where that integer ranges from 0-31, so the 'sweet spots' are the set of all of the positions on the sky where the geometric delays on every dipole on a tile are equal to an integer multiple of 435 picoseconds.

There's a table in the database that contains all of these positions. When we designed the system, we thought that some groups (like EOR) would only want to use a subset of all of the possible 'sweet spot' positions, so we allowed for multiple 'grids', each with a different name.

The set of every possible pointing with integer delays is called the 'sweet' grid:

N	az	el	delays
0	0	90	{0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0}
1	0	83.1912	{3,3,3,3,2,2,2,2,1,1,1,1,0,0,0,0}
2	90	83.1912	{0,1,2,3,0,1,2,3,0,1,2,3,0,1,2,3}
3	180	83.1912	{0,0,0,0,1,1,1,1,2,2,2,2,3,3,3,3}
4	270	83.1912	{3,2,1,0,3,2,1,0,3,2,1,0,3,2,1,0}
5	45	80.348	{3,4,5,6,2,3,4,5,1,2,3,4,0,1,2,3}
6	135	80.348	{0,1,2,3,1,2,3,4,2,3,4,5,3,4,5,6}
7	225	80.348	{3,2,1,0,4,3,2,1,5,4,3,2,6,5,4,3}
8	315	80.348	{6,5,4,3,5,4,3,2,4,3,2,1,3,2,1,0}
9	0	76.2838	{6,6,6,6,4,4,4,4,2,2,2,2,0,0,0,0}
10	90	76.2838	{0,2,4,6,0,2,4,6,0,2,4,6,0,2,4,6}
11	180	76.2838	{0,0,0,0,2,2,2,2,4,4,4,4,6,6,6,6}
12	270	76.2838	{6,4,2,0,6,4,2,0,6,4,2,0,6,4,2,0}
13	26.5651	74.6271	{6,7,8,9,4,5,6,7,2,3,4,5,0,1,2,3}
14	63.4349	74.6271	{3,5,7,9,2,4,6,8,1,3,5,7,0,2,4,6}
15	116.5651	74.6271	{0,2,4,6,1,3,5,7,2,4,6,8,3,5,7,9}
16	153.4349	74.6271	{0,1,2,3,2,3,4,5,4,5,6,7,6,7,8,9}
17	206.5651	74.6271	{3,2,1,0,5,4,3,2,7,6,5,4,9,8,7,6}
18	243.4349	74.6271	{6,4,2,0,7,5,3,1,8,6,4,2,9,7,5,3}
19	296.5651	74.6271	{9,7,5,3,8,6,4,2,7,5,3,1,6,4,2,0}
20	333.4349	74.6271	{9,8,7,6,7,6,5,4,5,4,3,2,3,2,1,0}
21	45	70.4075	{6,8,10,12,4,6,8,10,2,4,6,8,0,2,4,6}
22	135	70.4075	{0,2,4,6,2,4,6,8,4,6,8,10,6,8,10,12}
23	225	70.4075	{6,4,2,0,8,6,4,2,10,8,6,4,12,10,8,6}
24	315	70.4075	{12,10,8,6,10,8,6,4,8,6,4,2,6,4,2,0}
25	0	69.1655	{9,9,9,9,6,6,6,6,3,3,3,3,0,0,0,0}
26	90	69.1655	{0,3,6,9,0,3,6,9,0,3,6,9,0,3,6,9}
27	180	69.1655	{0,0,0,0,3,3,3,3,6,6,6,6,9,9,9,9}
28	270	69.1655	{9,6,3,0,9,6,3,0,9,6,3,0,9,6,3,0}
29	18.4349	67.9813	{9,10,11,12,6,7,8,9,3,4,5,6,0,1,2,3}
30	71.5651	67.9813	{3,6,9,12,2,5,8,11,1,4,7,10,0,3,6,9}
31	108.4349	67.9813	{0,3,6,9,1,4,7,10,2,5,8,11,3,6,9,12}
32	161.5651	67.9813	{0,1,2,3,3,4,5,6,6,7,8,9,9,10,11,12}
33	198.4349	67.9813	{3,2,1,0,6,5,4,3,9,8,7,6,12,11,10,9}
34	251.5651	67.9813	{9,6,3,0,10,7,4,1,11,8,5,2,12,9,6,3}
35	288.4349	67.9813	{12,9,6,3,11,8,5,2,10,7,4,1,9,6,3,0}
36	341.5651	67.9813	{12,11,10,9,9,8,7,6,6,5,4,3,3,2,1,0}
37	33.6901	64.6934	{9,11,13,15,6,8,10,12,3,5,7,9,0,2,4,6}
38	56.3099	64.6934	{6,9,12,15,4,7,10,13,2,5,8,11,0,3,6,9}
39	123.6901	64.6934	{0,3,6,9,2,5,8,11,4,7,10,13,6,9,12,15}
40	146.3099	64.6934	{0,2,4,6,3,5,7,9,6,8,10,12,9,11,13,15}
41	213.6901	64.6934	{6,4,2,0,9,7,5,3,12,10,8,6,15,13,11,9}
42	236.3099	64.6934	{9,6,3,0,11,8,5,2,13,10,7,4,15,12,9,6}
43	303.6901	64.6934	{15,12,9,6,13,10,7,4,11,8,5,2,9,6,3,0}
44	326.3099	64.6934	{15,13,11,9,12,10,8,6,9,7,5,3,6,4,2,0}
45	0	61.691	{12,12,12,12,8,8,8,8,4,4,4,4,0,0,0,0}
46	90	61.691	{0,4,8,12,0,4,8,12,0,4,8,12,0,4,8,12}
47	180	61.691	{0,0,0,0,4,4,4,4,8,8,8,8,12,12,12,12}
48	270	61.691	{12,8,4,0,12,8,4,0,12,8,4,0,12,8,4,0}
49	14.0362	60.7369	{12,13,14,15,8,9,10,11,4,5,6,7,0,1,2,3}
50	75.9638	60.7369	{3,7,11,15,2,6,10,14,1,5,9,13,0,4,8,12}
51	104.0362	60.7369	{0,4,8,12,1,5,9,13,2,6,10,14,3,7,11,15}
52	165.9638	60.7369	{0,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15}
53	194.0362	60.7369	{3,2,1,0,7,6,5,4,11,10,9,8,15,14,13,12}
54	255.9638	60.7369	{12,8,4,0,13,9,5,1,14,10,6,2,15,11,7,3}
55	284.0362	60.7369	{15,11,7,3,14,10,6,2,13,9,5,1,12,8,4,0}
56	345.9638	60.7369	{15,14,13,12,11,10,9,8,7,6,5,4,3,2,1,0}
57	45	59.8018	{9,12,15,18,6,9,12,15,3,6,9,12,0,3,6,9}
58	135	59.8018	{0,3,6,9,3,6,9,12,6,9,12,15,9,12,15,18}
59	225	59.8018	{9,6,3,0,12,9,6,3,15,12,9,6,18,15,12,9}
60	315	59.8018	{18,15,12,9,15,12,9,6,12,9,6,3,9,6,3,0}
61	26.5651	57.981	{12,14,16,18,8,10,12,14,4,6,8,10,0,2,4,6}
62	63.4349	57.981	{6,10,14,18,4,8,12,16,2,6,10,14,0,4,8,12}
63	116.5651	57.981	{0,4,8,12,2,6,10,14,4,8,12,16,6,10,14,18}
64	153.4349	57.981	{0,2,4,6,4,6,8,10,8,10,12,14,12,14,16,18}
65	206.5651	57.981	{6,4,2,0,10,8,6,4,14,12,10,8,18,16,14,12}
66	243.4349	57.981	{12,8,4,0,14,10,6,2,16,12,8,4,18,14,10,6}

67	296.5651	57.981	{18,14,10,6,16,12,8,4,14,10,6,2,12,8,4,0}
68	333.4349	57.981	{18,16,14,12,14,12,10,8,10,8,6,4,6,4,2,0}
69	0	53.6453	{15,15,15,15,10,10,10,10,5,5,5,0,0,0,0}
70	36.8699	53.6453	{12,15,18,21,8,11,14,17,4,7,10,13,0,3,6,9}
71	53.1301	53.6453	{9,13,17,21,6,10,14,18,3,7,11,15,0,4,8,12}
72	90	53.6453	{0,5,10,15,0,5,10,15,0,5,10,15,0,5,10,15}
73	126.8699	53.6453	{0,4,8,12,3,7,11,15,6,10,14,18,9,13,17,21}
74	143.1301	53.6453	{0,3,6,9,4,7,10,13,8,11,14,17,12,15,18,21}
75	180	53.6453	{0,0,0,0,5,5,5,5,10,10,10,10,15,15,15,15}
76	216.8699	53.6453	{9,6,3,0,13,10,7,4,17,14,11,8,21,18,15,12}
77	233.1301	53.6453	{12,8,4,0,15,11,7,3,18,14,10,6,21,17,13,9}
78	270	53.6453	{15,10,5,0,15,10,5,0,15,10,5,0,15,10,5,0}
79	306.8699	53.6453	{21,17,13,9,18,14,10,6,15,11,7,3,12,8,4,0}
80	323.1301	53.6453	{21,18,15,12,17,14,11,8,13,10,7,4,9,6,3,0}
81	11.3099	52.8056	{15,16,17,18,10,11,12,13,5,6,7,8,0,1,2,3}
82	78.6901	52.8056	{3,8,13,18,2,7,12,17,1,6,11,16,0,5,10,15}
83	101.3099	52.8056	{0,5,10,15,1,6,11,16,2,7,12,17,3,8,13,18}
84	168.6901	52.8056	{0,1,2,3,5,6,7,8,10,11,12,13,15,16,17,18}
85	191.3099	52.8056	{3,2,1,0,8,7,6,5,13,12,11,10,18,17,16,15}
86	258.6901	52.8056	{15,10,5,0,16,11,6,1,17,12,7,2,18,13,8,3}
87	281.3099	52.8056	{18,13,8,3,17,12,7,2,16,11,6,1,15,10,5,0}
88	348.6901	52.8056	{18,17,16,15,13,12,11,10,8,7,6,5,3,2,1,0}
89	21.8014	50.3239	{15,17,19,21,10,12,14,16,5,7,9,11,0,2,4,6}
90	68.1986	50.3239	{6,11,16,21,4,9,14,19,2,7,12,17,0,5,10,15}
91	111.8014	50.3239	{0,5,10,15,2,7,12,17,4,9,14,19,6,11,16,21}
92	158.1986	50.3239	{0,2,4,6,5,7,9,11,10,12,14,16,15,17,19,21}
93	201.8014	50.3239	{6,4,2,0,11,9,7,5,16,14,12,10,21,19,17,15}
94	248.1986	50.3239	{15,10,5,0,17,12,7,2,19,14,9,4,21,16,11,6}
95	291.8014	50.3239	{21,16,11,6,19,14,9,4,17,12,7,2,15,10,5,0}
96	338.1986	50.3239	{21,19,17,15,16,14,12,10,11,9,7,5,6,4,2,0}
97	45	47.8822	{12,16,20,24,8,12,16,20,4,8,12,16,0,4,8,12}
98	135	47.8822	{0,4,8,12,4,8,12,16,8,12,16,20,12,16,20,24}
99	225	47.8822	{12,8,4,0,16,12,8,4,20,16,12,8,24,20,16,12}
100	315	47.8822	{24,20,16,12,20,16,12,8,16,12,8,4,12,8,4,0}
101	30.9638	46.2671	{15,18,21,24,10,13,16,19,5,8,11,14,0,3,6,9}
102	59.0362	46.2671	{9,14,19,24,6,11,16,21,3,8,13,18,0,5,10,15}
103	120.9638	46.2671	{0,5,10,15,3,8,13,18,6,11,16,21,9,14,19,24}
104	149.0362	46.2671	{0,3,6,9,5,8,11,14,10,13,16,19,15,18,21,24}
105	210.9638	46.2671	{9,6,3,0,14,11,8,5,19,16,13,10,24,21,18,15}
106	239.0362	46.2671	{15,10,5,0,18,13,8,3,21,16,11,6,24,19,14,9}
107	300.9638	46.2671	{24,19,14,9,21,16,11,6,18,13,8,3,15,10,5,0}
108	329.0362	46.2671	{24,21,18,15,19,16,13,10,14,11,8,5,9,6,3,0}
109	0	44.656	{18,18,18,18,12,12,12,12,6,6,6,6,0,0,0,0}
110	90	44.656	{0,6,12,18,0,6,12,18,0,6,12,18,0,6,12,18}
111	180	44.656	{0,0,0,0,6,6,6,6,12,12,12,12,18,18,18,18}
112	270	44.656	{18,12,6,0,18,12,6,0,18,12,6,0,18,12,6,0}
113	9.4623	43.8504	{18,19,20,21,12,13,14,15,6,7,8,9,0,1,2,3}
114	80.5377	43.8504	{3,9,15,21,2,8,14,20,1,7,13,19,0,6,12,18}
115	99.4623	43.8504	{0,6,12,18,1,7,13,19,2,8,14,20,3,9,15,21}
116	170.5377	43.8504	{0,1,2,3,6,7,8,9,12,13,14,15,18,19,20,21}
117	189.4623	43.8504	{3,2,1,0,9,8,7,6,15,14,13,12,21,20,19,18}
118	260.5377	43.8504	{18,12,6,0,19,13,7,1,20,14,8,2,21,15,9,3}
119	279.4623	43.8504	{21,15,9,3,20,14,8,2,19,13,7,1,18,12,6,0}
120	350.5377	43.8504	{21,20,19,18,15,14,13,12,9,8,7,6,3,2,1,0}
121	18.4349	41.4255	{18,20,22,24,12,14,16,18,6,8,10,12,0,2,4,6}
122	71.5651	41.4255	{6,12,18,24,4,10,16,22,2,8,14,20,0,6,12,18}
123	108.4349	41.4255	{0,6,12,18,2,8,14,20,4,10,16,22,6,12,18,24}
124	161.5651	41.4255	{0,2,4,6,6,8,10,12,12,14,16,18,18,20,22,24}
125	198.4349	41.4255	{6,4,2,0,12,10,8,6,18,16,14,12,24,22,20,18}
126	251.5651	41.4255	{18,12,6,0,20,14,8,2,22,16,10,4,24,18,12,6}
127	288.4349	41.4255	{24,18,12,6,22,16,10,4,20,14,8,2,18,12,6,0}
128	341.5651	41.4255	{24,22,20,18,18,16,14,12,12,10,8,6,6,4,2,0}
129	38.6598	40.6123	{15,19,23,27,10,14,18,22,5,9,13,17,0,4,8,12}
130	51.3402	40.6123	{12,17,22,27,8,13,18,23,4,9,14,19,0,5,10,15}
131	128.6598	40.6123	{0,5,10,15,4,9,14,19,8,13,18,23,12,17,22,27}
132	141.3402	40.6123	{0,4,8,12,5,9,13,17,10,14,18,22,15,19,23,27}
133	218.6598	40.6123	{12,8,4,0,17,13,9,5,22,18,14,10,27,23,19,15}
134	231.3402	40.6123	{15,10,5,0,19,14,9,4,23,18,13,8,27,22,17,12}
135	308.6598	40.6123	{27,22,17,12,23,18,13,8,19,14,9,4,15,10,5,0}
136	321.3402	40.6123	{27,23,19,15,22,18,14,10,17,13,9,5,12,8,4,0}
137	26.5651	37.3163	{18,21,24,27,12,15,18,21,6,9,12,15,0,3,6,9}
138	63.4349	37.3163	{9,15,21,27,6,12,18,24,3,9,15,21,0,6,12,18}
139	116.5651	37.3163	{0,6,12,18,3,9,15,21,6,12,18,24,9,15,21,27}
140	153.4349	37.3163	{0,3,6,9,6,9,12,15,12,15,18,21,18,21,24,27}
141	206.5651	37.3163	{9,6,3,0,15,12,9,6,21,18,15,12,27,24,21,18}
142	243.4349	37.3163	{18,12,6,0,21,15,9,3,24,18,12,6,27,21,15,9}
143	296.5651	37.3163	{27,21,15,9,24,18,12,6,21,15,9,3,18,12,6,0}
144	333.4349	37.3163	{27,24,21,18,21,18,15,12,15,12,9,6,9,6,3,0}
145	0	33.912	{21,21,21,21,14,14,14,14,7,7,7,7,0,0,0,0}
146	90	33.912	{0,7,14,21,0,7,14,21,0,7,14,21,0,7,14,21}
147	180	33.912	{0,0,0,0,7,7,7,7,14,14,14,14,21,21,21,21}
148	270	33.912	{21,14,7,0,21,14,7,0,21,14,7,0,21,14,7,0}
149	8.1301	33.0368	{21,22,23,24,14,15,16,17,7,8,9,10,0,1,2,3}
150	45	33.0368	{15,20,25,30,10,15,20,25,5,10,15,20,0,5,10,15}

151	81.8699	33.0368	{3,10,17,24,2,9,16,23,1,8,15,22,0,7,14,21}
152	98.1301	33.0368	{0,7,14,21,1,8,15,22,2,9,16,23,3,10,17,24}
153	135	33.0368	{0,5,10,15,5,10,15,20,10,15,20,25,15,20,25,30}
154	171.8699	33.0368	{0,1,2,3,7,8,9,10,14,15,16,17,21,22,23,24}
155	188.1301	33.0368	{3,2,1,0,10,9,8,7,17,16,15,14,24,23,22,21}
156	225	33.0368	{15,10,5,0,20,15,10,5,25,20,15,10,30,25,20,15}
157	261.8699	33.0368	{21,14,7,0,22,15,8,1,23,16,9,2,24,17,10,3}
158	278.1301	33.0368	{24,17,10,3,23,16,9,2,22,15,8,1,21,14,7,0}
159	315	33.0368	{30,25,20,15,25,20,15,10,20,15,10,5,15,10,5,0}
160	351.8699	33.0368	{24,23,22,21,17,16,15,14,10,9,8,7,3,2,1,0}
161	33.6901	31.2488	{18,22,26,30,12,16,20,24,6,10,14,18,0,4,8,12}
162	56.3099	31.2488	{12,18,24,30,8,14,20,26,4,10,16,22,0,6,12,18}
163	123.6901	31.2488	{0,6,12,18,4,10,16,22,8,14,20,26,12,18,24,30}
164	146.3099	31.2488	{0,4,8,12,6,10,14,18,12,16,20,24,18,22,26,30}
165	213.6901	31.2488	{12,8,4,0,18,14,10,6,24,20,16,12,30,26,22,18}
166	236.3099	31.2488	{18,12,6,0,22,16,10,4,26,20,14,8,30,24,18,12}
167	303.6901	31.2488	{30,24,18,12,26,20,14,8,22,16,10,4,18,12,6,0}
168	326.3099	31.2488	{30,26,22,18,24,20,16,12,18,14,10,6,12,8,4,0}
169	15.9454	30.3331	{21,23,25,27,14,16,18,20,7,9,11,13,0,2,4,6}
170	74.0546	30.3331	{6,13,20,27,4,11,18,25,2,9,16,23,0,7,14,21}
171	105.9454	30.3331	{0,7,14,21,2,9,16,23,4,11,18,25,6,13,20,27}
172	164.0546	30.3331	{0,2,4,6,7,9,11,13,14,16,18,20,21,23,25,27}
173	195.9454	30.3331	{6,4,2,0,13,11,9,7,20,18,16,14,27,25,23,21}
174	254.0546	30.3331	{21,14,7,0,23,16,9,2,25,18,11,4,27,20,13,6}
175	285.9454	30.3331	{27,20,13,6,25,18,11,4,23,16,9,2,21,14,7,0}
176	344.0546	30.3331	{27,25,23,21,20,18,16,14,13,11,9,7,6,4,2,0}
177	23.1986	25.4582	{21,24,27,30,14,17,20,23,7,10,13,16,0,3,6,9}
178	66.8014	25.4582	{9,16,23,30,6,13,20,27,3,10,17,24,0,7,14,21}
179	113.1986	25.4582	{0,7,14,21,3,10,17,24,6,13,20,27,9,16,23,30}
180	156.8014	25.4582	{0,3,6,9,7,10,13,16,14,17,20,23,21,24,27,30}
181	203.1986	25.4582	{9,6,3,0,16,13,10,7,23,20,17,14,30,27,24,21}
182	246.8014	25.4582	{21,14,7,0,24,17,10,3,27,20,13,6,30,23,16,9}
183	293.1986	25.4582	{30,23,16,9,27,20,13,6,24,17,10,3,21,14,7,0}
184	336.8014	25.4582	{30,27,24,21,23,20,17,14,16,13,10,7,9,6,3,0}
185	0	18.4768	{24,24,24,24,16,16,16,16,8,8,8,8,0,0,0,0}
186	90	18.4768	{0,8,16,24,0,8,16,24,0,8,16,24,0,8,16,24}
187	180	18.4768	{0,0,0,0,8,8,8,8,16,16,16,16,24,24,24,24}
188	270	18.4768	{24,16,8,0,24,16,8,0,24,16,8,0,24,16,8,0}
189	7.125	17.0922	{24,25,26,27,16,17,18,19,8,9,10,11,0,1,2,3}
190	82.875	17.0922	{3,11,19,27,2,10,18,26,1,9,17,25,0,8,16,24}
191	97.125	17.0922	{0,8,16,24,1,9,17,25,2,10,18,26,3,11,19,27}
192	172.875	17.0922	{0,1,2,3,8,9,10,11,16,17,18,19,24,25,26,27}
193	187.125	17.0922	{3,2,1,0,11,10,9,8,19,18,17,16,27,26,25,24}
194	262.875	17.0922	{24,16,8,0,25,17,9,1,26,18,10,2,27,19,11,3}
195	277.125	17.0922	{27,19,11,3,26,18,10,2,25,17,9,1,24,16,8,0}
196	352.875	17.0922	{27,26,25,24,19,18,17,16,11,10,9,8,3,2,1,0}

When an observation is scheduled, it finds the closest 'sweet' grid position (by default) to the supplied RA/Dec, Az/EI or source position, and uses those delays for the beamformers.

The 'EOR1' grid only has 11 positions, and was used during the observations for the first few EoR observing seasons:

n	az	el	delays
0	0	90	{0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0}
1	90	83.1912	{0,1,2,3,0,1,2,3,0,1,2,3,0,1,2,3}
2	270	83.1912	{3,2,1,0,3,2,1,0,3,2,1,0,3,2,1,0}
3	90	76.2838	{0,2,4,6,0,2,4,6,0,2,4,6,0,2,4,6}
4	270	76.2838	{6,4,2,0,6,4,2,0,6,4,2,0,6,4,2,0}
5	90	69.1655	{0,3,6,9,0,3,6,9,0,3,6,9,0,3,6,9}
6	270	69.1655	{9,6,3,0,9,6,3,0,9,6,3,0,9,6,3,0}
7	104.0362	60.7369	{0,4,8,12,1,5,9,13,2,6,10,14,3,7,11,15}
8	255.9638	60.7369	{12,8,4,0,13,9,5,1,14,10,6,2,15,11,7,3}
9	101.3099	52.8056	{0,5,10,15,1,6,11,16,2,7,12,17,3,8,13,18}
10	281.3099	52.8056	{18,13,8,3,17,12,7,2,16,11,6,1,15,10,5,0}

You can see that EOR1 grid point 0 has the same delays (and az/el) as 'sweet' grid point 0, but EOR1 grid point 1 matches 'sweet' grid point 2, EOR grid point 2 matches 'sweet' grid point 4, etc.

The full mapping between the two is here:

EOR1	sweet	delays
0	0	[0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0]
1	2	[0,1,2,3,0,1,2,3,0,1,2,3,0,1,2,3]
2	4	[3,2,1,0,3,2,1,0,3,2,1,0,3,2,1,0]
3	10	[0,2,4,6,0,2,4,6,0,2,4,6,0,2,4,6]
4	12	[6,4,2,0,6,4,2,0,6,4,2,0,6,4,2,0]
5	26	[0,3,6,9,0,3,6,9,0,3,6,9,0,3,6,9]
6	28	[9,6,3,0,9,6,3,0,9,6,3,0,9,6,3,0]
7	51	[0,4,8,12,1,5,9,13,2,6,10,14,3,7,11,15]
8	54	[12,8,4,0,13,9,5,1,14,10,6,2,15,11,7,3]
9	83	[0,5,10,15,1,6,11,16,2,7,12,17,3,8,13,18]
10	87	[18,13,8,3,17,12,7,2,16,11,6,1,15,10,5,0]

For the first few years of MWA observations, EOR observations were scheduled with the 'EOR1' grid point numbers, but then everyone started using 'sweet' gridpoint numbers for all observations. The only important thing is what actual delays are sent to the beamformers, not what the grid point number name is.