

Position	Direction	Original Direction	Position	Direction
1	1011		22	0100
2	1010		23	0101
3	1000		24	0001
4	1100		25	1000
5	1001		26	0000
6	1010		27	1010
7	1010		28	0100
8	1000		29	1101
9	1110		30	1011
10	1011		31	0110
11	1000		32	0011
12	1110		33	1010
13	1111		34	0110
14	0001		35	1011
15	0100		36	0010
16	0101		37	0010
17	0101		38	0110
18	1101		39	0011
19	0101		40	01010
20	1001		41	1010
21	0010		42	0110

Positions =

1	2	3	4		5	6	7	8	9		10	11	12		13
		14	15		16			17		18		19			
	20	21	22		23			24	25	26	27	28			29
30	31		32	33	34		35	36	37	38		39	40	41	42

→ Observations :-

- As we increased no. of observation Probability of most likely sequence increased and as we increased error rate Probability of most likely sequence decreased.
- localization error \uparrow $\epsilon \uparrow$
localization error \downarrow observation \uparrow