

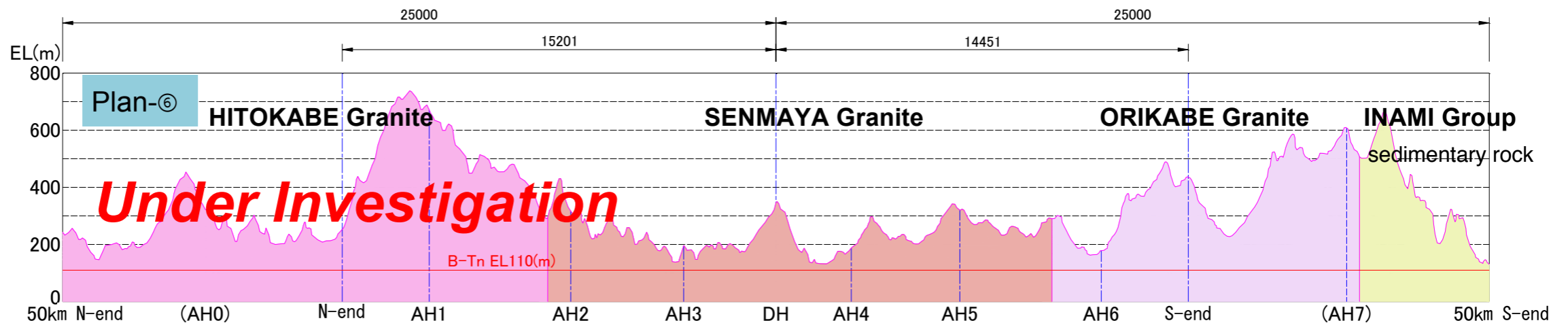
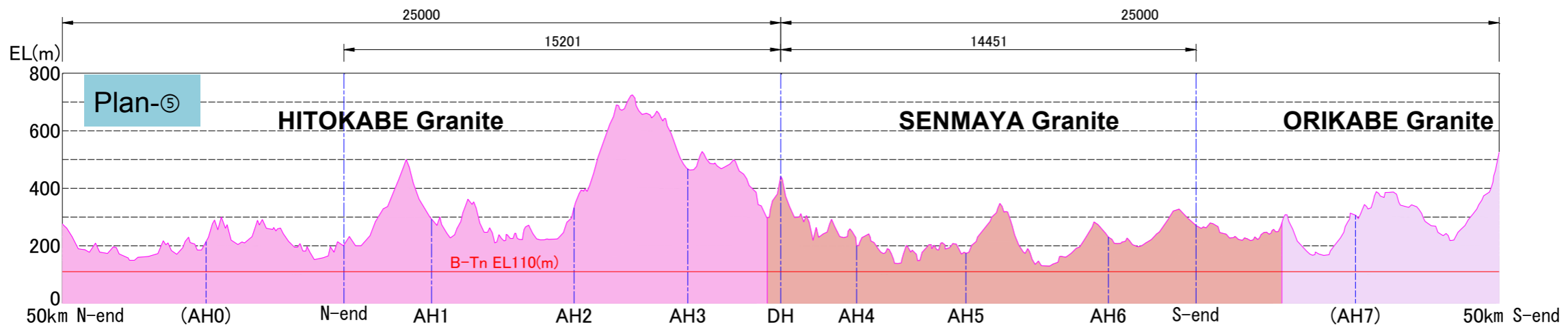
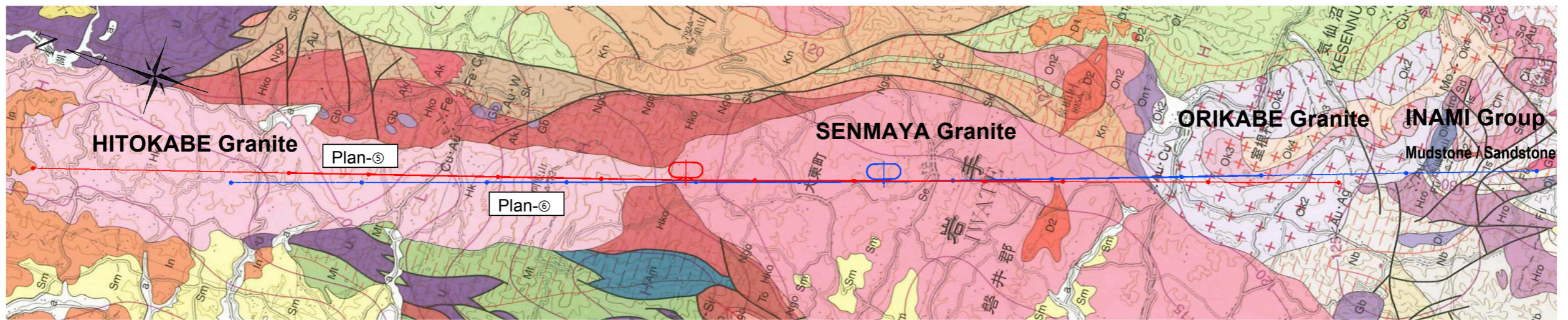
Kitakami Site

Tomo SANUKI
(Tohoku University)

To those who attended Kitakami tour on Oct. 15, 2011

- We presented two candidate roots;
Plan-5 & Plan-6

Two candidate ML/DR alignments (Plan-⑤ & Plan-⑥)



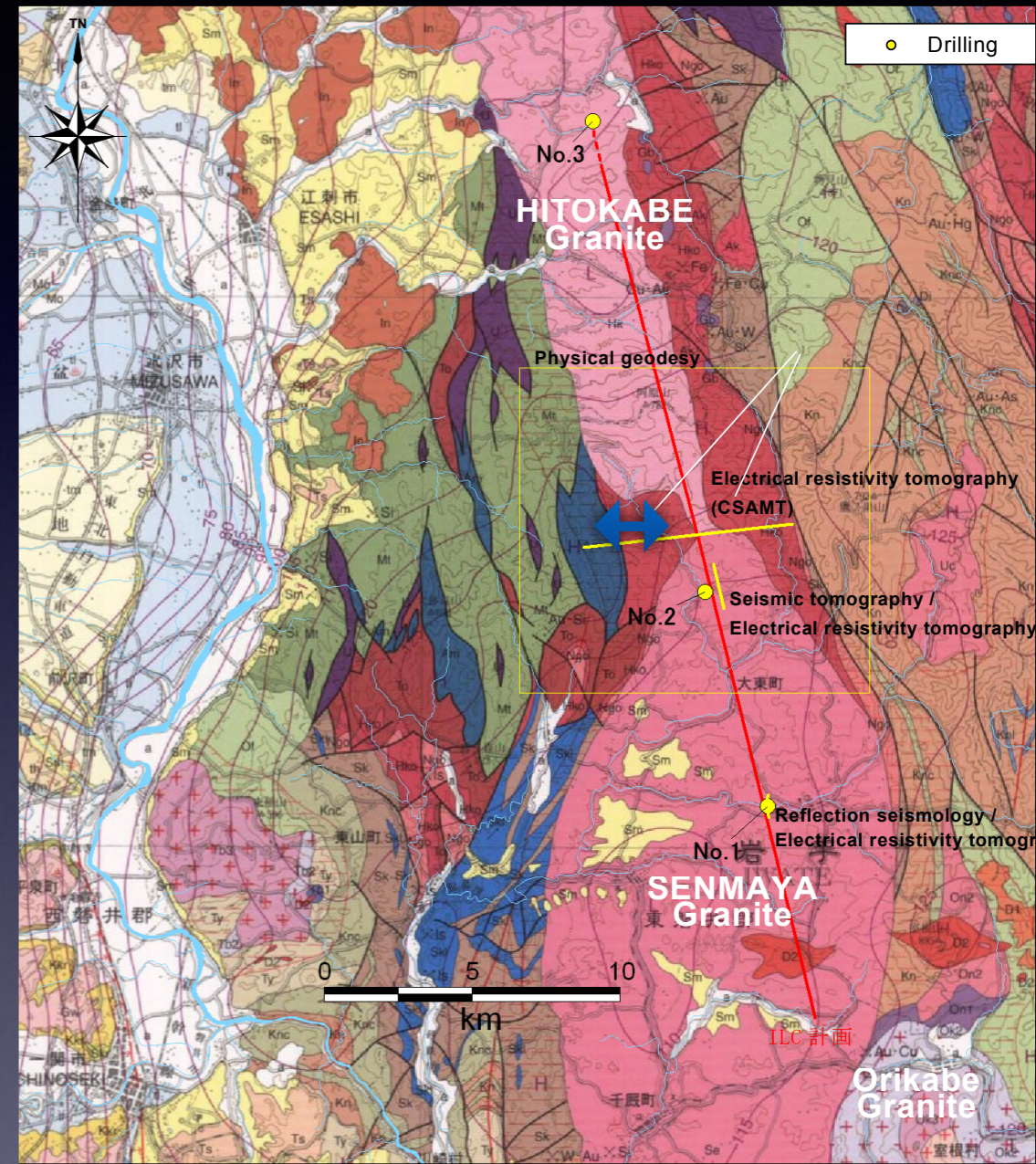
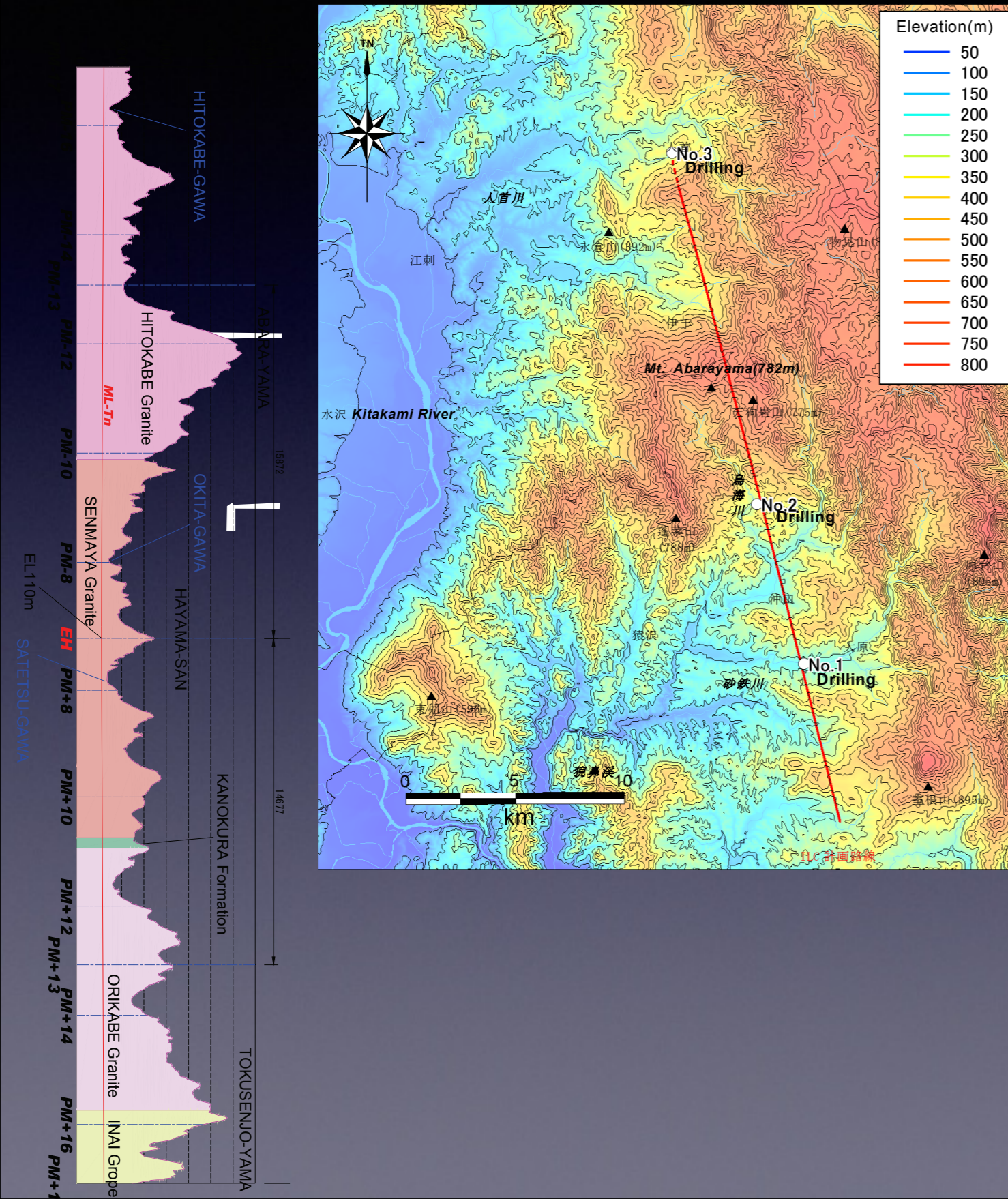
To those who attended Kitakami tour on Oct. 15, 2011

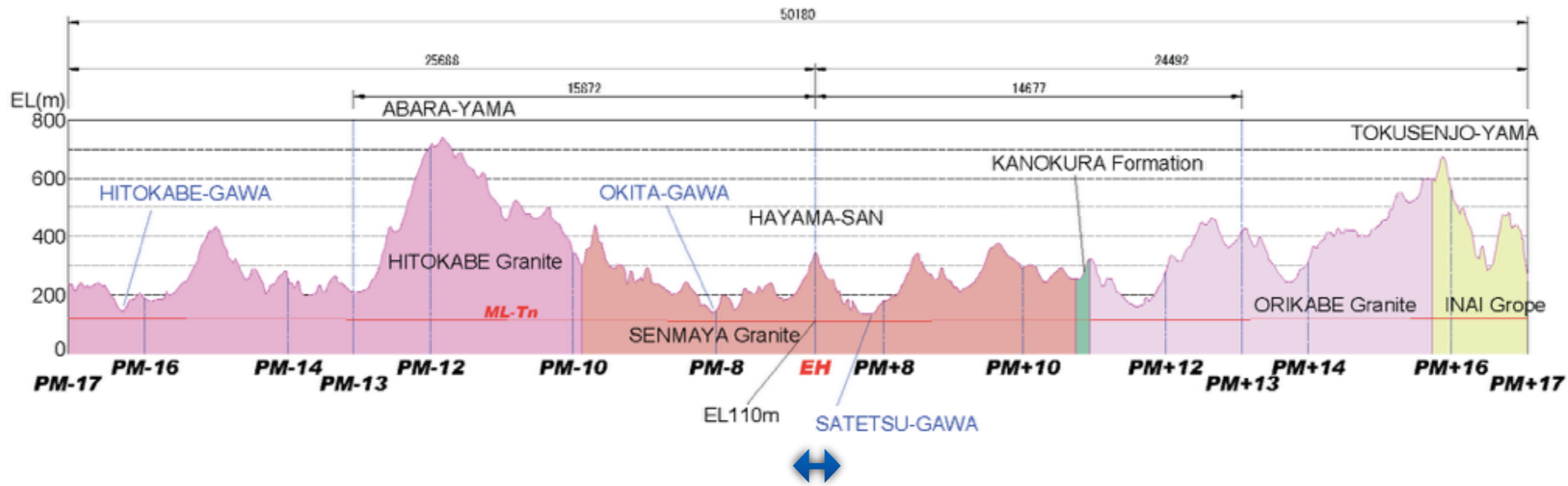
- We presented two candidate roots;
Plan-5 & Plan-6
- We decided Plan-6 is a baseline

Arrangement of ML

We decided Plan-6 is a baseline. How?

1. Decided IP location as an anchor point, in terms of
 - geology (Senmaya granite has few cracks)
 - topography (Earth covering)
2. Minimized the cost of access tunnels;
 - ideal topography for entrance
 - as short access tunnels as possible



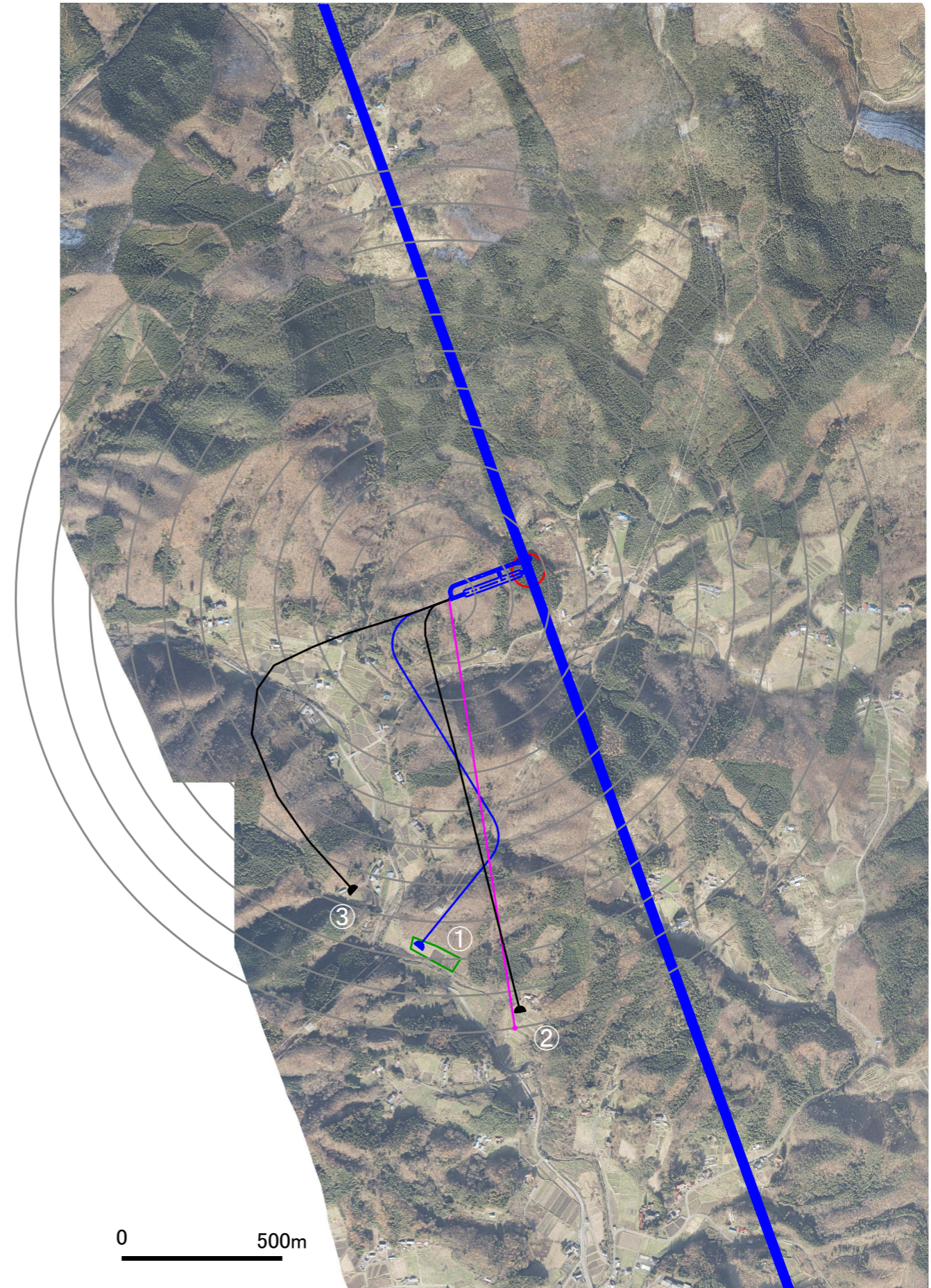


~1km (N-S)

Portal of access tunnel

Example:

- | | | | |
|---|---------|---------|----------|
| ① | L=1303m | EL=230m | 勾配=-9.0% |
| ② | L=1303m | EL=230m | 勾配=-9.0% |
| ③ | L=1525m | EL=250m | 勾配=-9.0% |

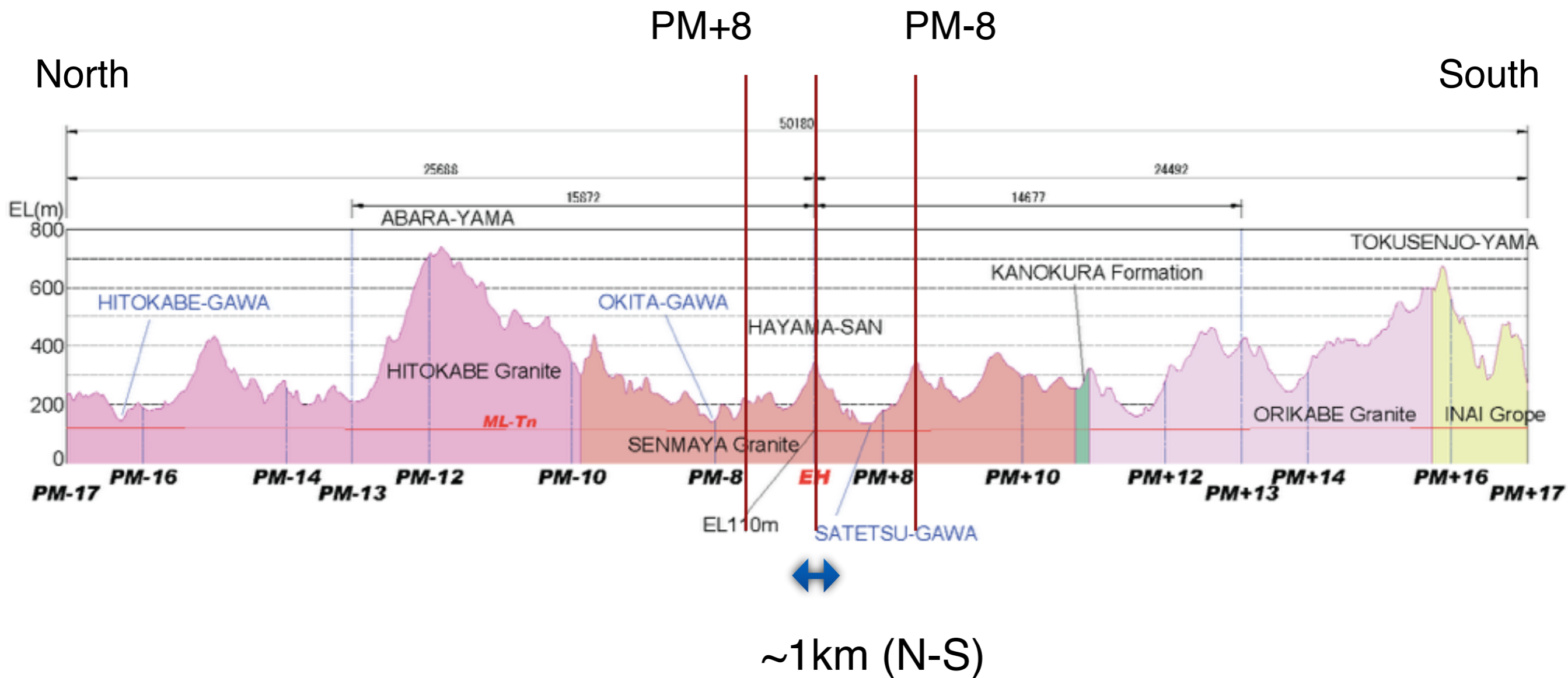


Portal

- Rather flat configuration / topography
- Can find SOME places easily, which are ideal for the portal

Possible change

FLIP e+ / e- ??



Current Plan

Flipped e+/e-

B-Tn 交点 EL(m)		現行案					e-~e+入れ替え案				
		理論値		配置案			理論値		配置案		
		地表交点	最短距離	地表交点	距離	實質勾配	地表交点	最短距離	地表交点	距離	實質勾配
50e-	120.537	170	549.6	210	1190	-7.5%	140	216.3	80	500	8.1%
AT0	126.902	170	478.9	190	710	-8.9%	180	590.0	150	1000	-2.3%
AT1	124.684	180	614.6	220	1070	-8.9%	270	1614.6	260	1500	-9.0%
30e-	116.100	200	932.2	220	1160	-9.0%	220	1154.4	220	1330	-7.8%
AT2	122.466	260	1528.2	260	1530	-9.0%	220	1083.7	220	1100	-8.9%
AT3	120.248	230	1219.5	240	1330	-9.0%	200	886.1	200	950	-8.4%
AT4	118.028	150	355.2	150	360	-8.9%	190	799.7	180	740	-8.4%
DH頂設	131.000	131	500.0	131	500	0.0%	131	500.0	131	500	0.0%
DH底設	98.500	170	1134.9	160	980	-6.3%	170	1134.9	160	980	-6.3%
DR(A)	110.000	200	1000.0	190	900	-8.9%	200	1000.0	190	900	-8.9%
AT5	118.028	150	355.2	160	570	-7.4%	150	355.2	150	470	-6.8%
AT6	120.195	230	1220.1	230	1220	-9.0%	200	886.7	230	1220	-9.0%
AT7	122.413	180	639.9	180	640	-9.0%	320	2195.4	320	2200	-9.0%
30e+	116.048	220	1155.0	210	1200	-7.8%	220	1155.0	220	1180	-8.8%
AT8	124.632	230	1170.8	230	1170	-9.0%	190	726.3	190	750	-8.7%
AT9	126.850	240	1257.2	230	1500	-6.9%	180	590.6	180	660	-8.1%
50e+	120.484	170	550.2	90	970	3.1%	160	439.1	160	480	8.2%
計		14721.4		17060			15388.1		16520		
				-666.7 理論値差					540 配置案差		

Possible plans to be considered

- Flip
- Rotate
- Shift to the North