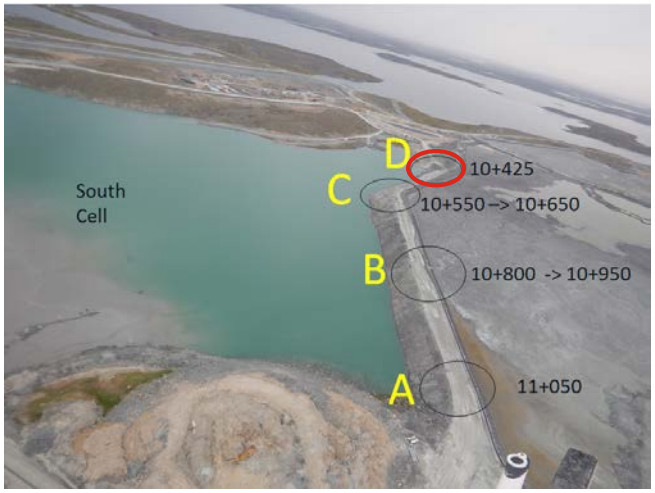
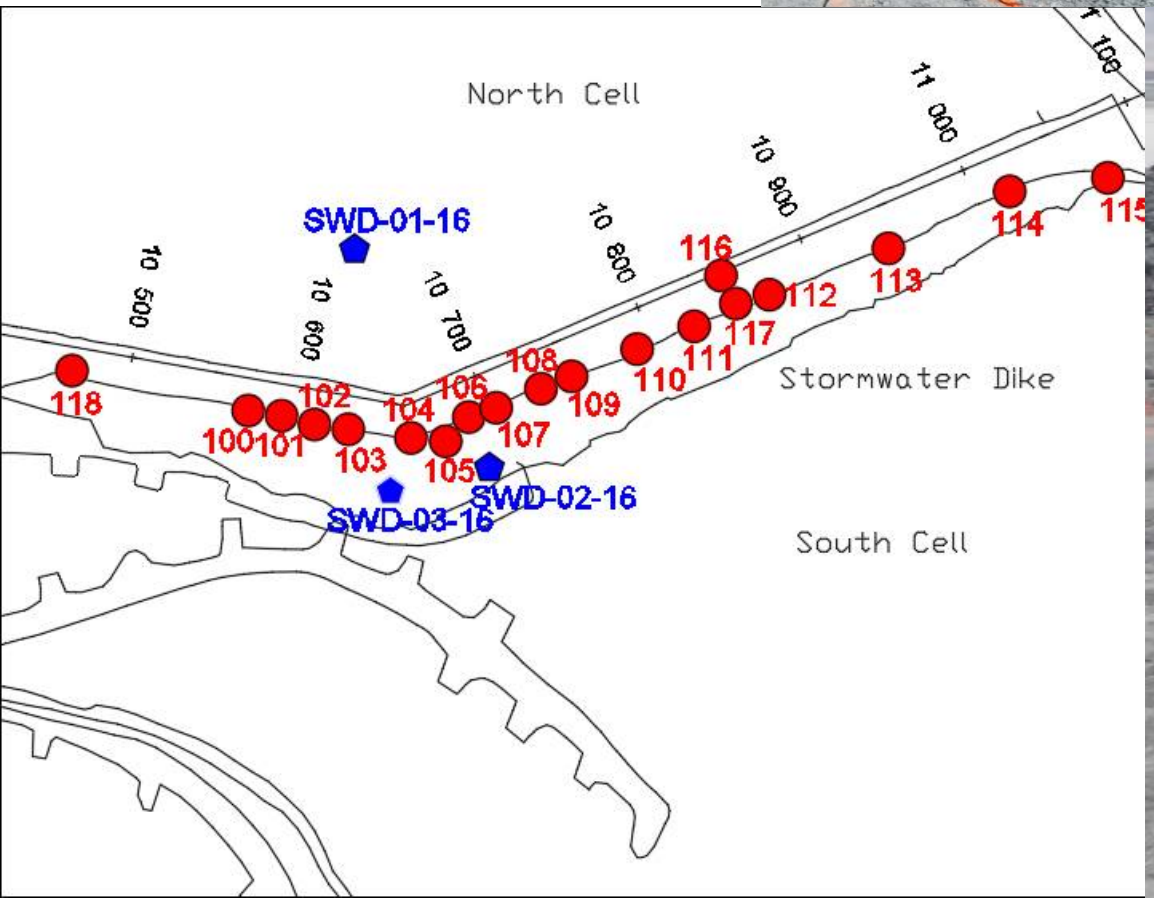
PICTURE OF MOVEMENT – 10+425

AGNICO EAGLE

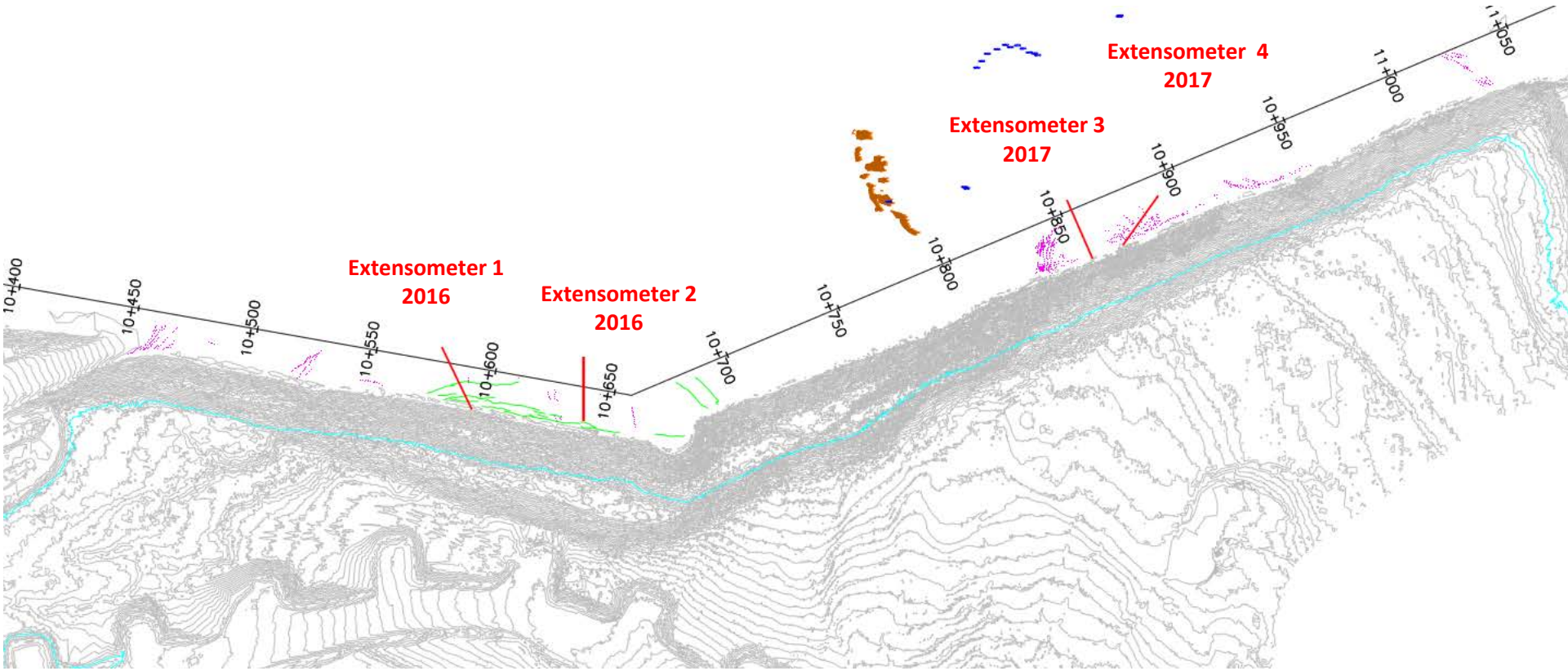


INSTRUMENTATION

- Extensometers
- Prisms on crest
- 2 piezometers and 3 thermistor



HOMEMADE EXTENSOMETERS (4X)

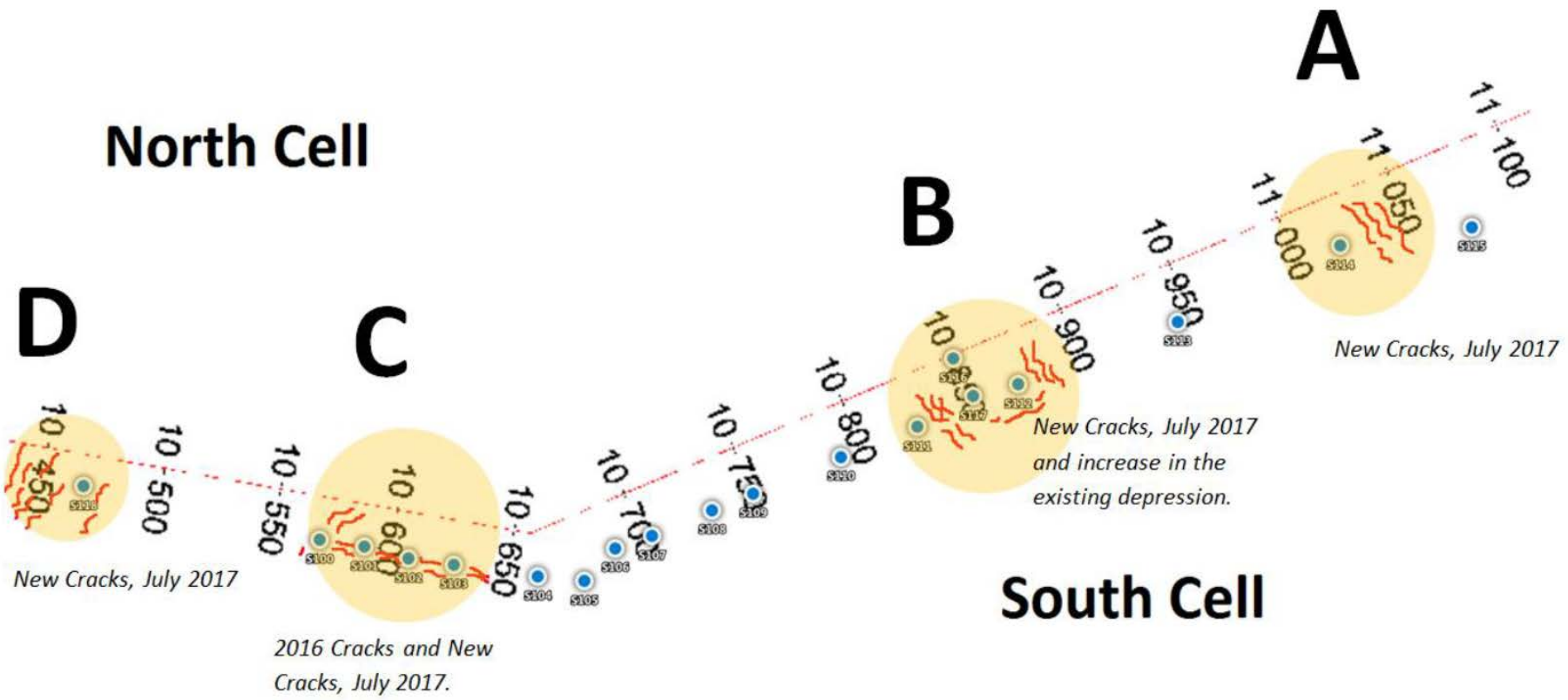


HOMEMADE EXTENSOMETERS (4X)

- No movements were recorded on any of the 4 extensometers installed in 2017

PRISMS

TOTAL OF 19 INSTALLED ON BOULDERS ON THE CREST DOWNSTREAM BUMPER OF ROAD SURFACE



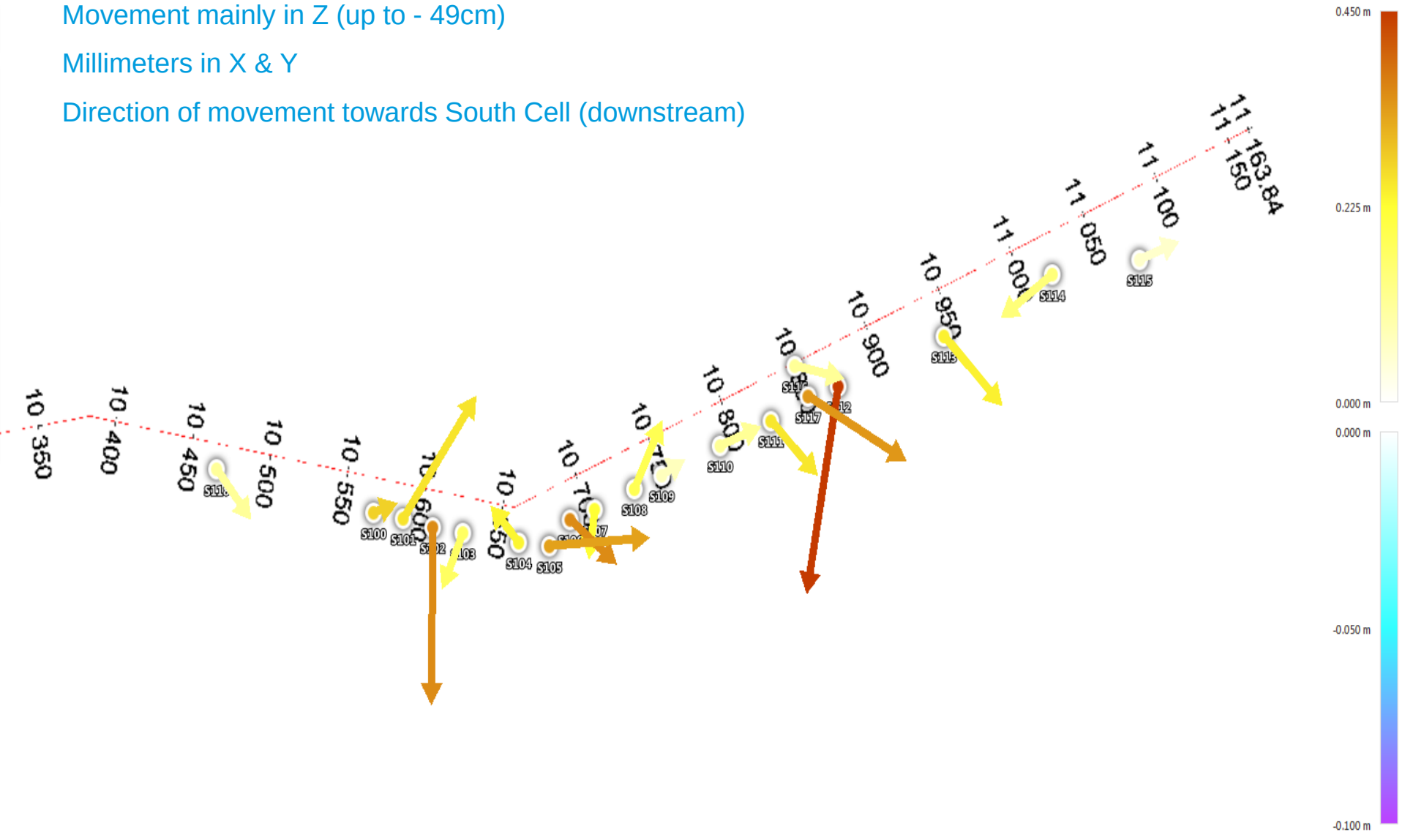
PRISMS

Cumulative displacement (3D) from May 1st to August 30th 2017

Movement mainly in Z (up to - 49cm)

Millimeters in X & Y

Direction of movement towards South Cell (downstream)



PRISMS

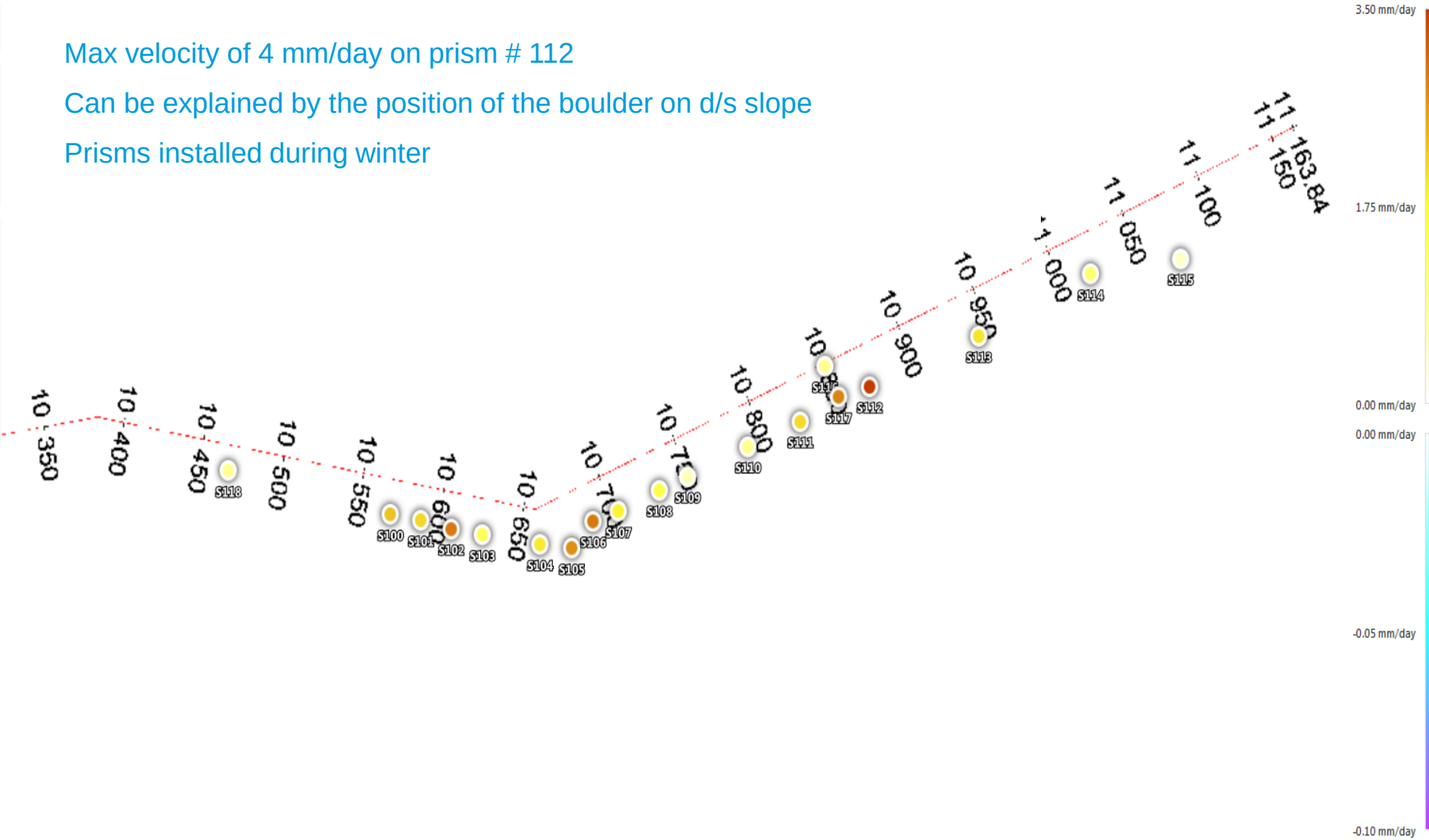
AGNICO EAGLE

Displacement Velocity from May 1st to August 30th 2017

Max velocity of 4 mm/day on prism # 112

Can be explained by the position of the boulder on d/s slope

Prisms installed during winter

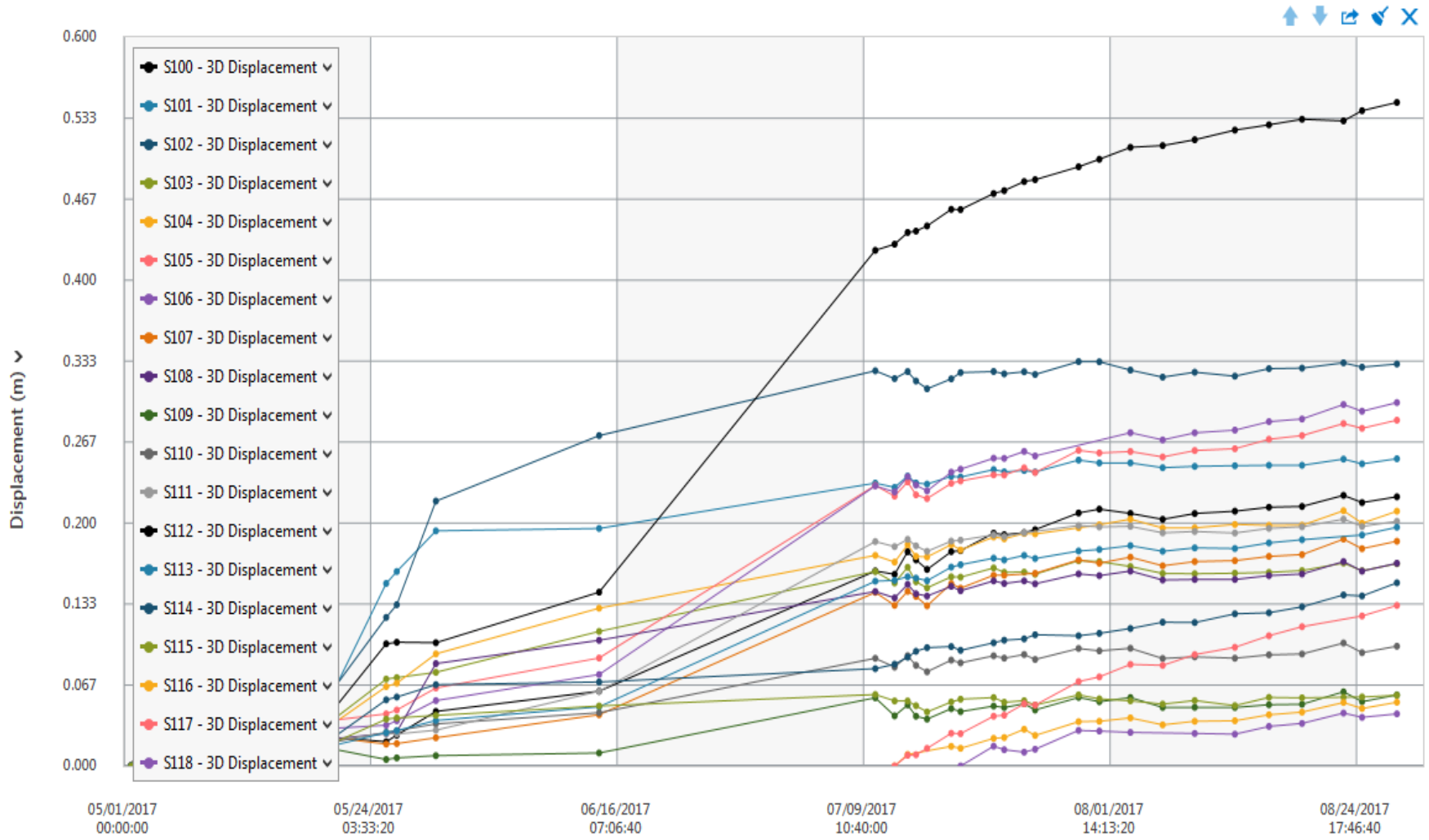


PRISMS

Cumulative Displacement (3D) since May 2017

Max movement of 55cm

Most of the movement happened at freshet



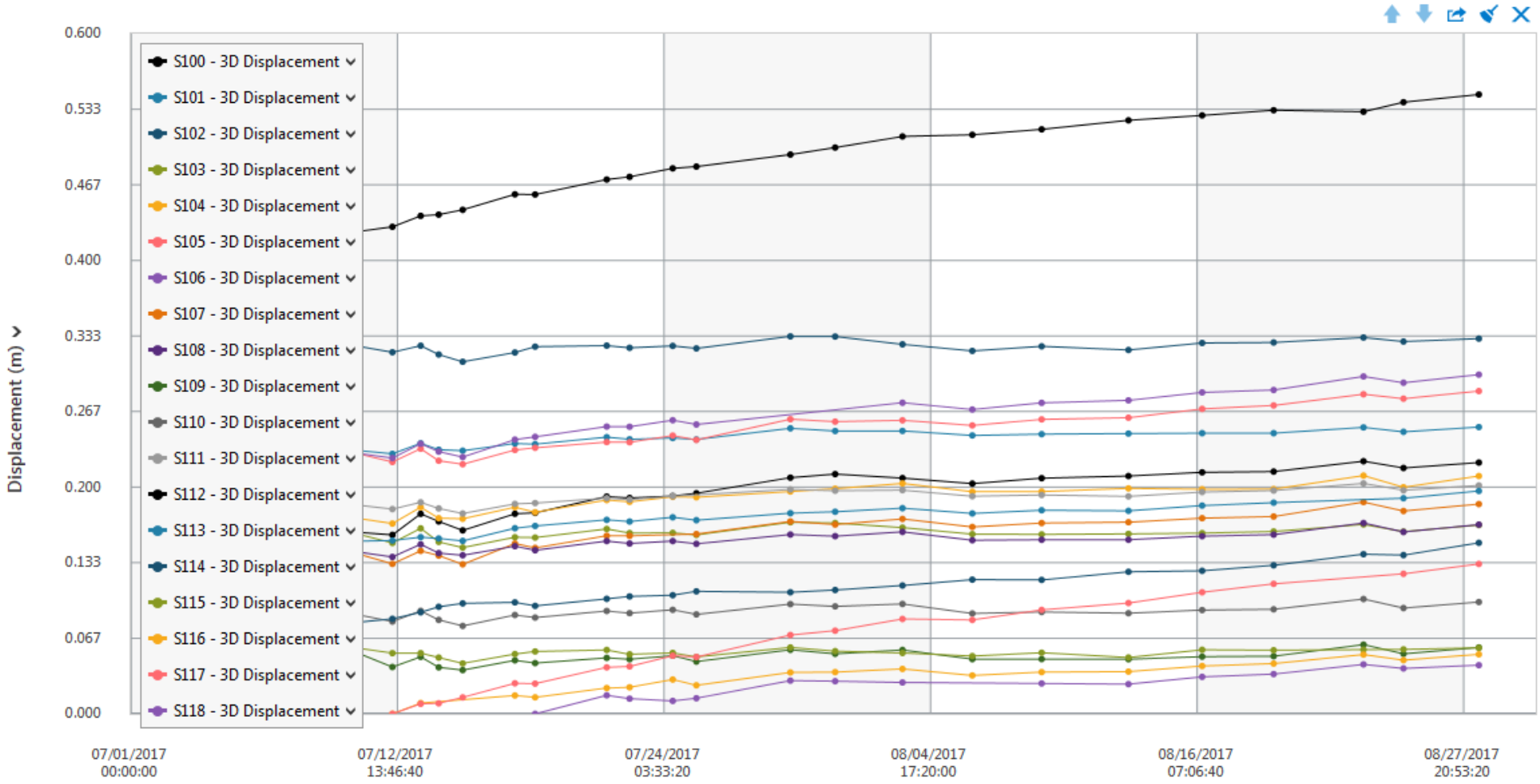
PRISMS

AGNICO EAGLE

Cumulative displacement (3D) since freshet

Still displacement but lower amplitude than considering thawing period

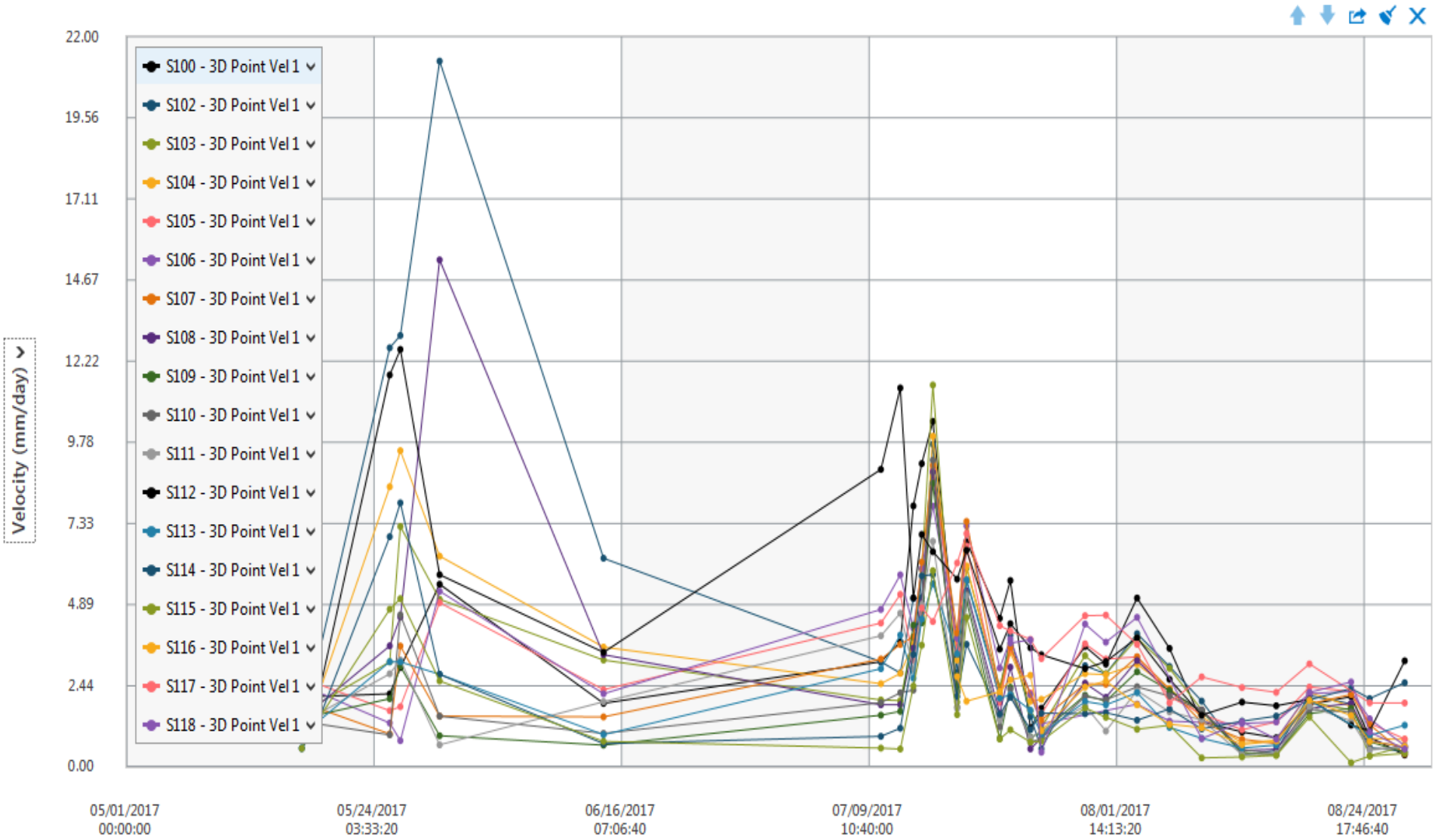
Max movement for the post-freshet period is ~5-6 cm



PRISMS

AGNICO EAGLE

3D velocity since May 2017

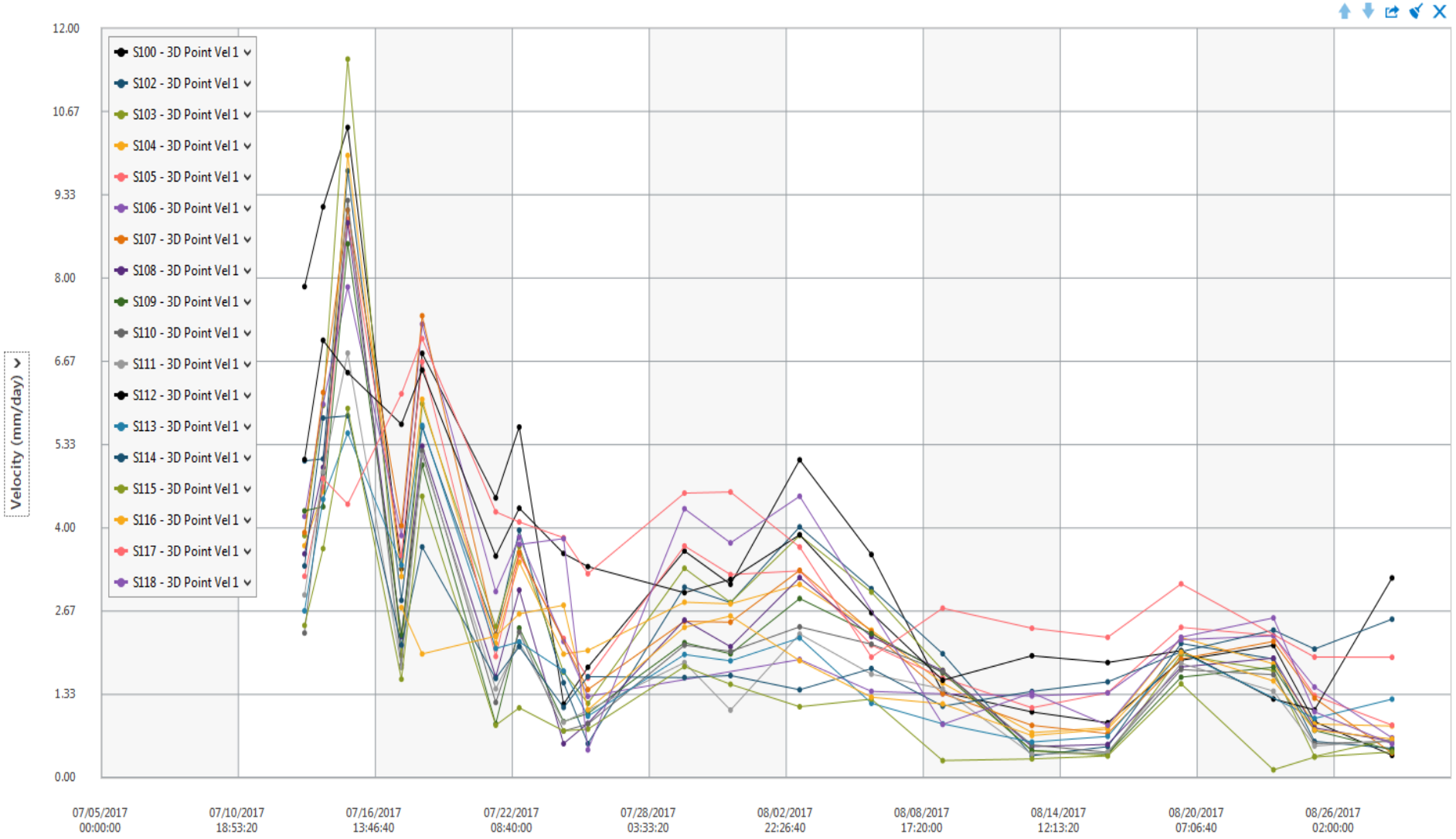


PRISMS

AGNICO EAGLE

3D velocity since freshet

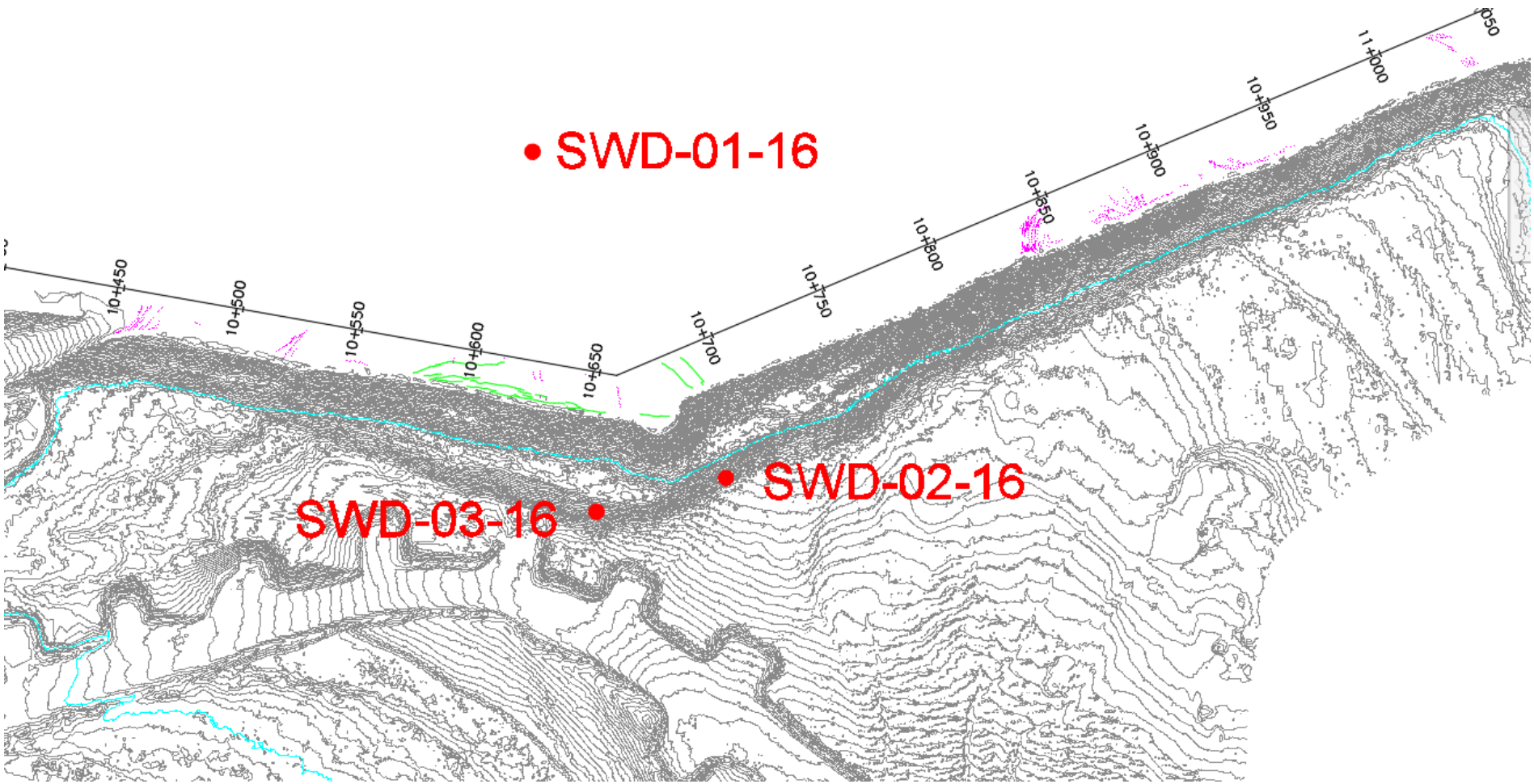
Decreasing velocity from average 5mm/day to 1.5mm/day



INSTRUMENTS MONITORING

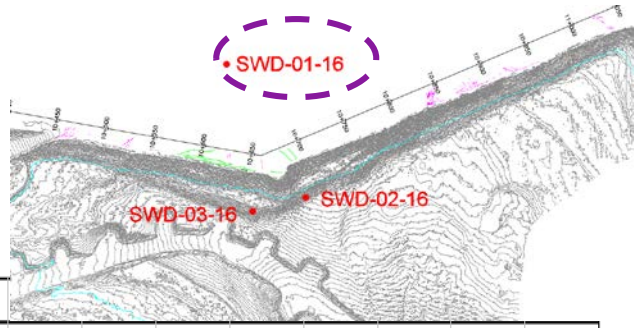
3 new thermistors installed in investigation holes from 2017

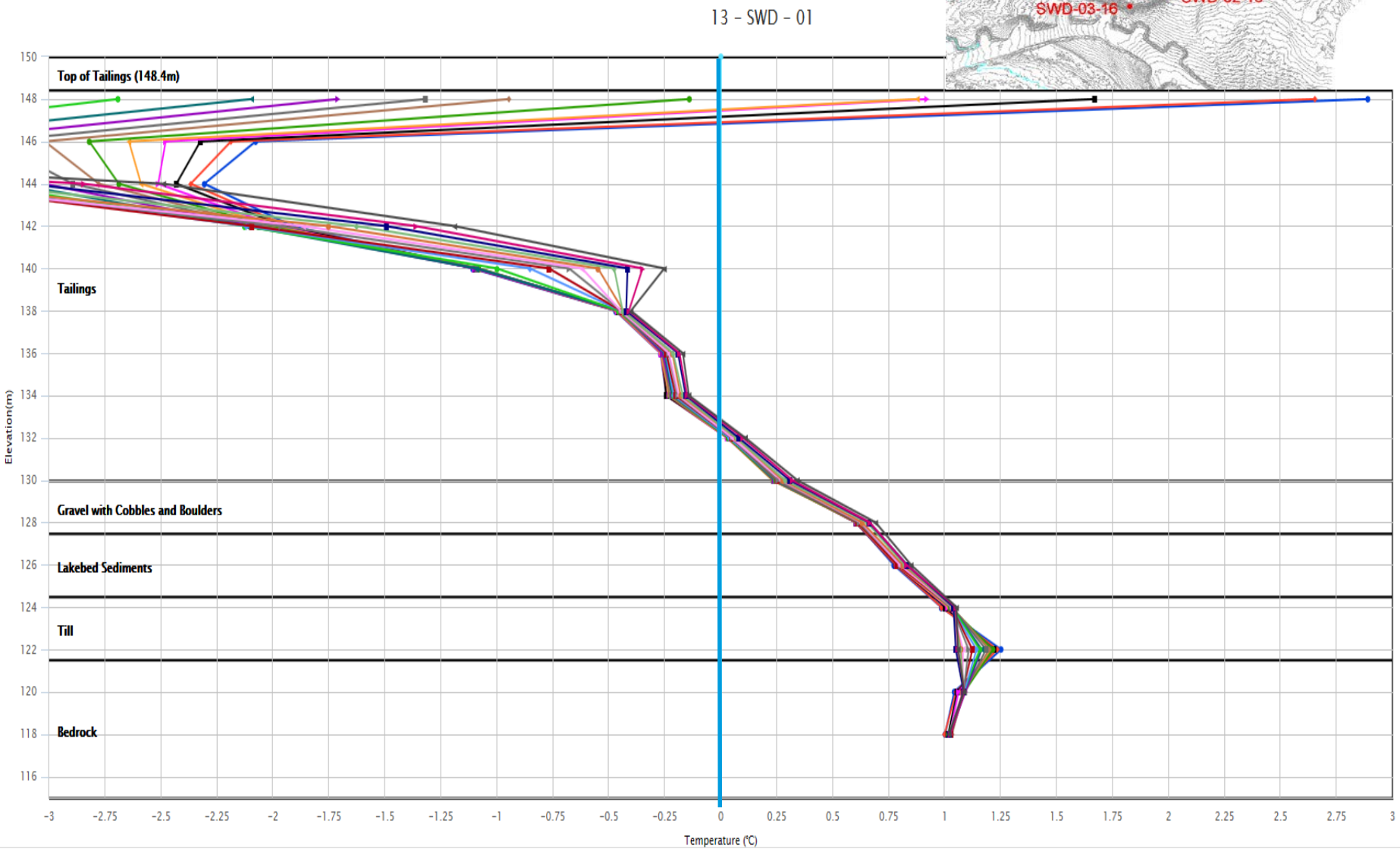
2 piezometers also installed



SWD-01

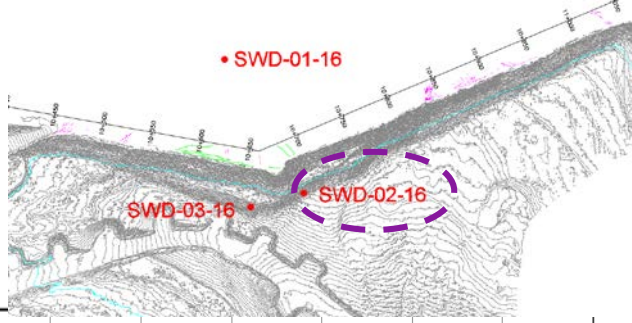
Temperature Monitoring

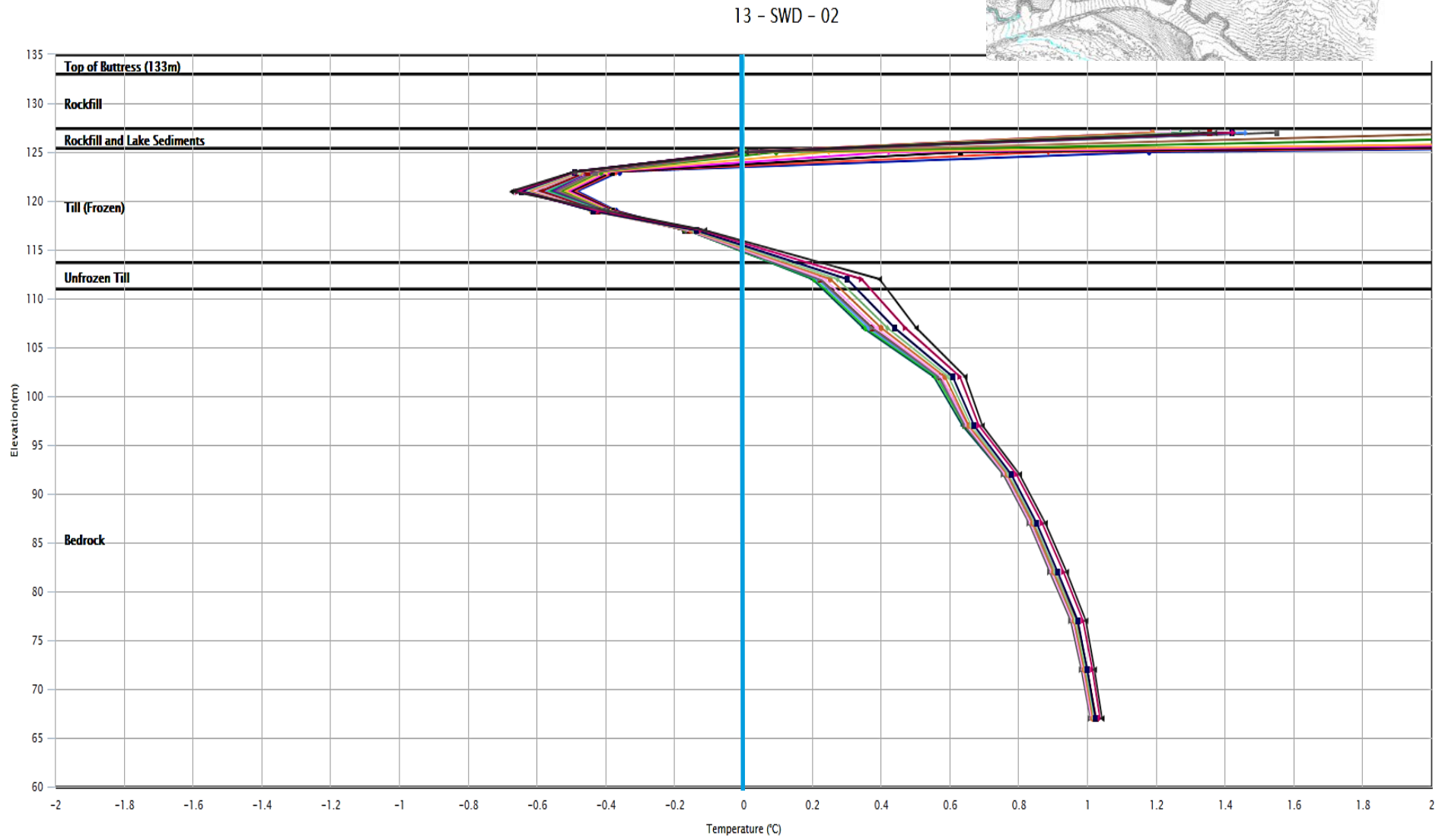




SWD-02

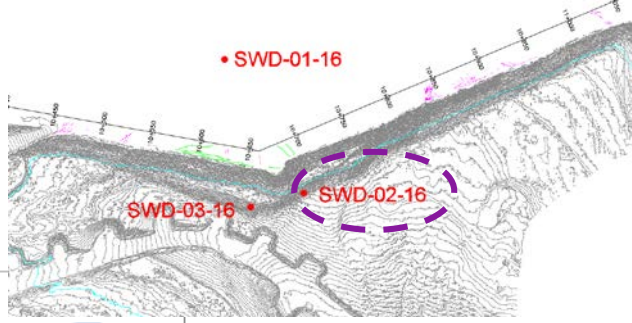
Temperature Monitoring

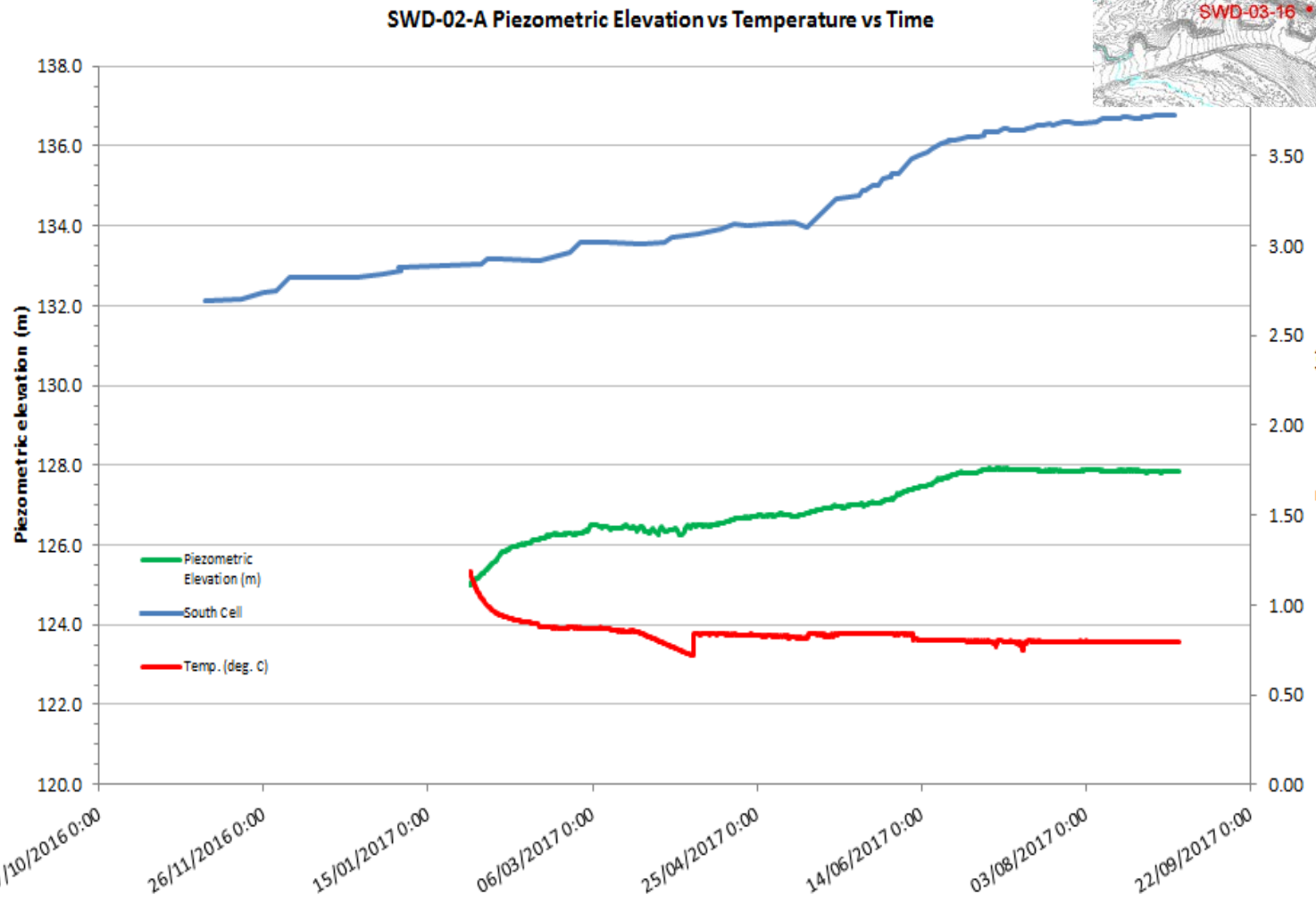


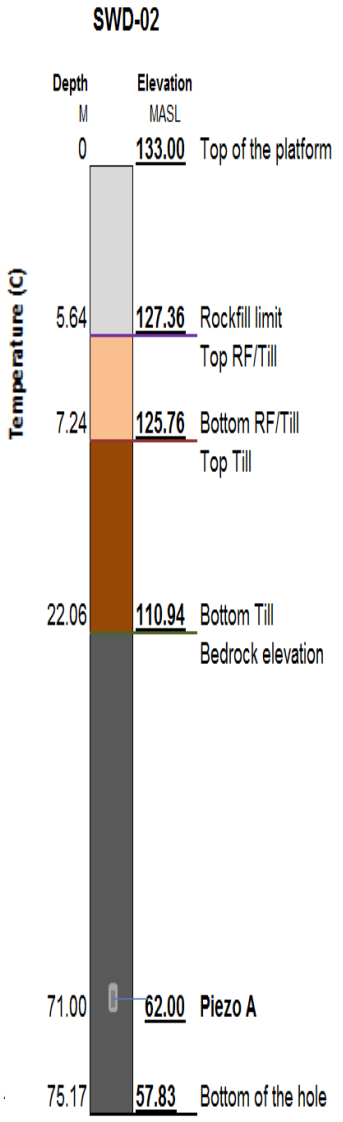


SWD-02

Piezometer SWD-02-17

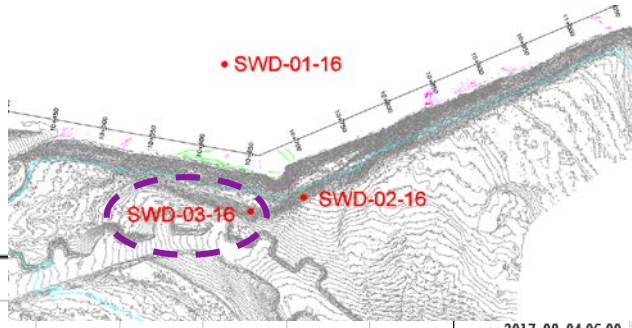


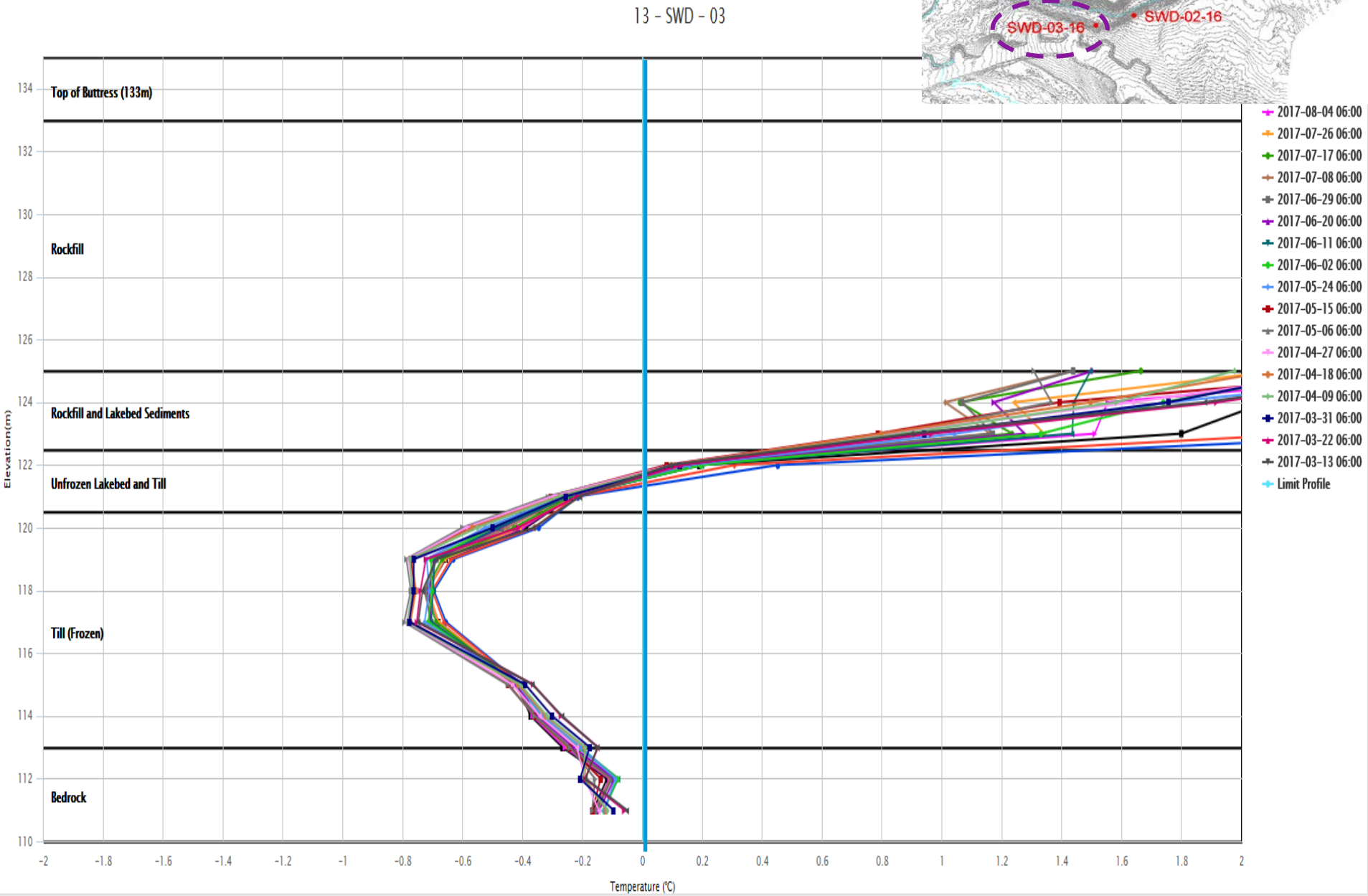




SWD-03

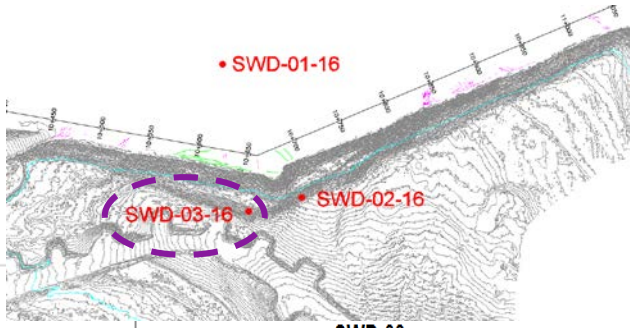
Temperature Monitoring

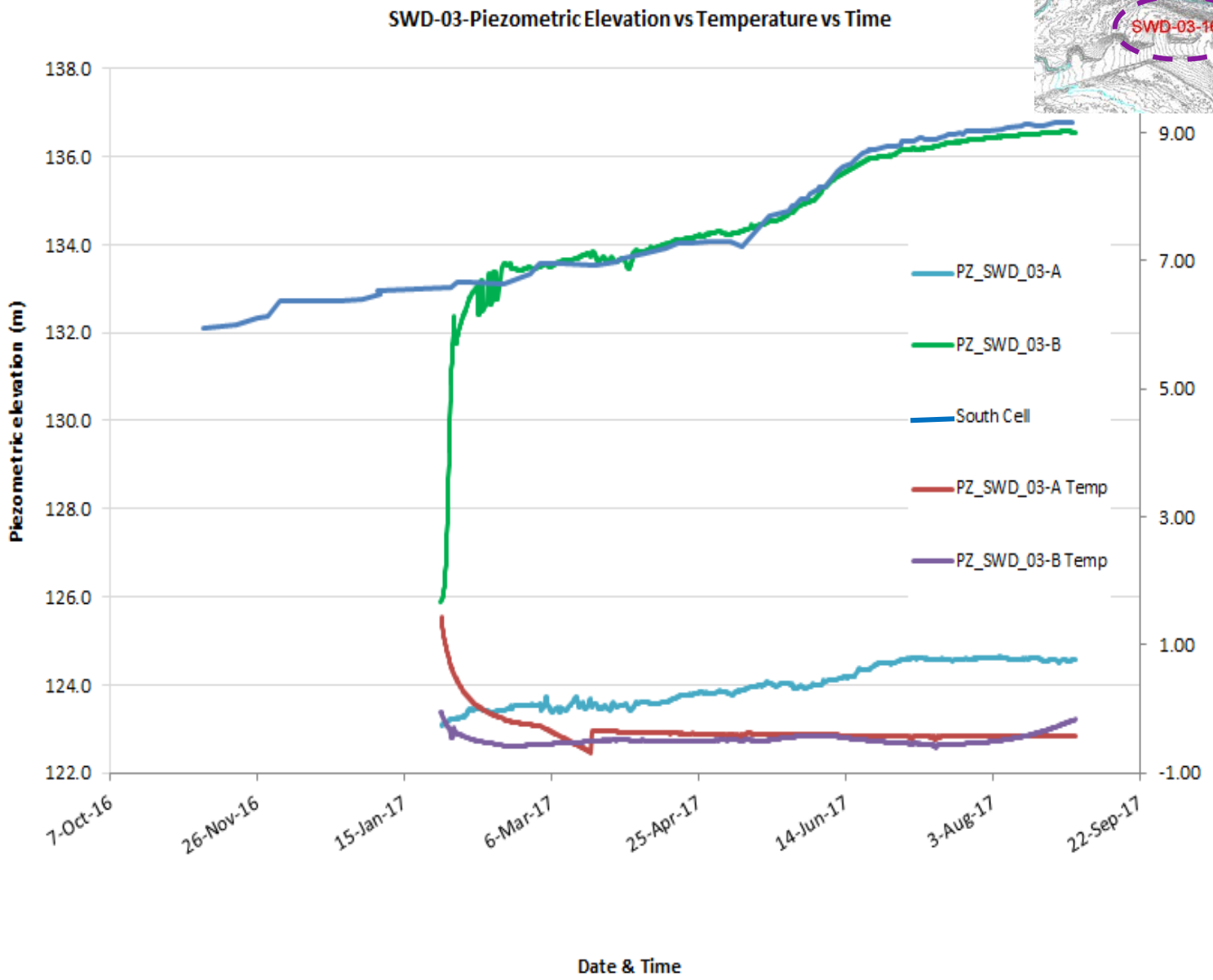


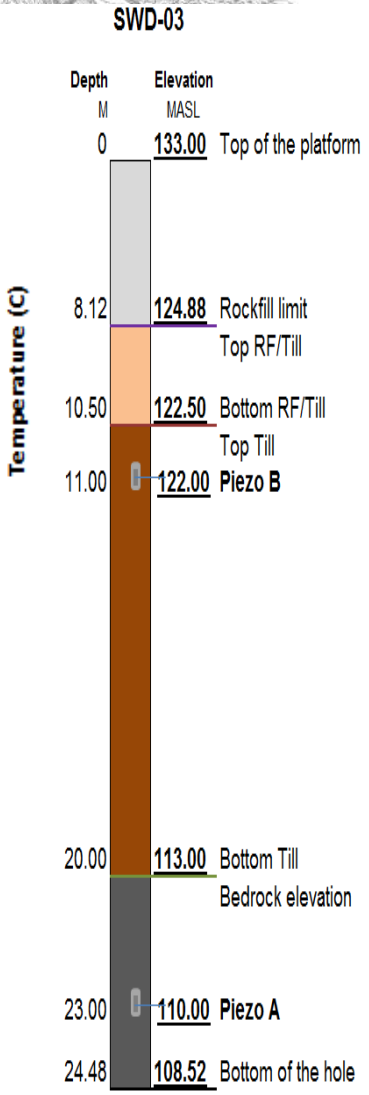


SWD-03

Piezometers SWD-03-17 A & B

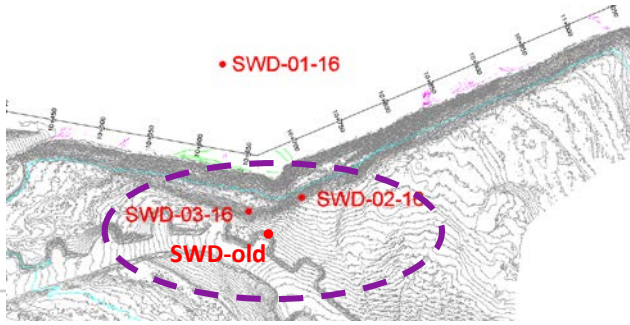


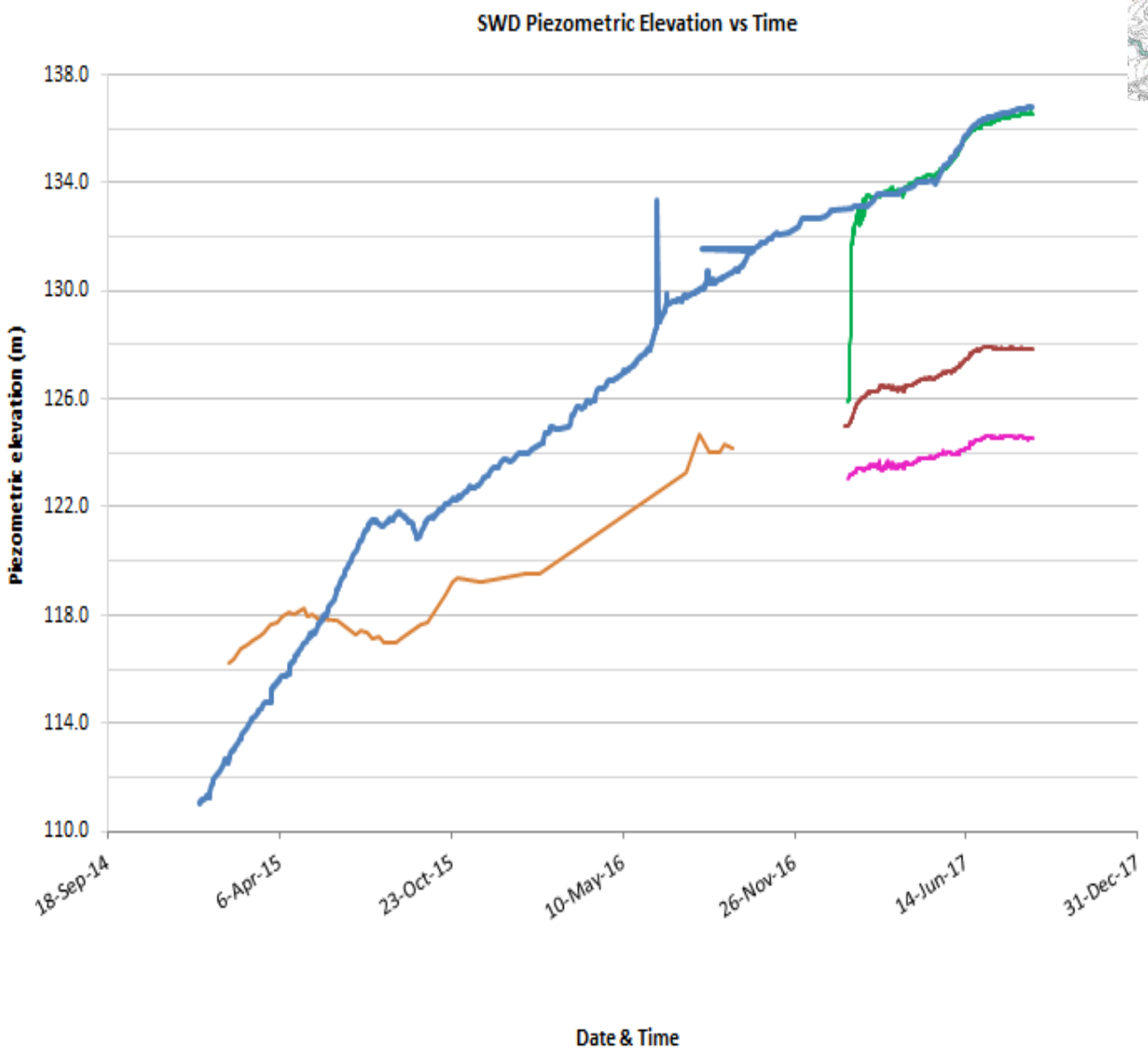


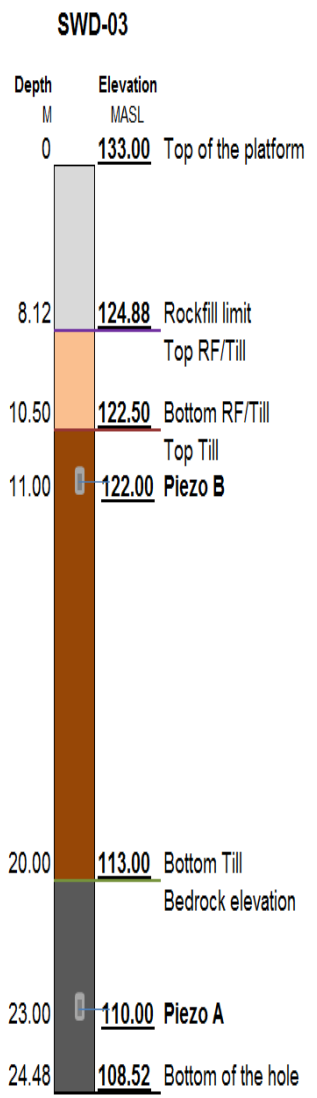


SWD

All Piezometers, present and historic







STORMWATER DIKE 2017

SUMMARY OF THE SITUATION

- The new cracks found at 10+425 and 11+050 happened when the South Cell water elevation reached the toe of the structure in these areas, same process as last year.
  - The observed cracks in those zones are smaller in amplitude compared to last year observation from 10+500 to 10+750
- The instrumentation data still shows movement but in a stabilizing trend since freshet as confirmed by the visual inspection. Creep is expected to continue to be visible until the crest of the structure freezes.
- Tailings in the North Cell are frozen for 18m.
- The structure is still in yellow tarp level and the situation is considered moving towards stability.
- Monitoring of the prisms will continue on a reduced frequency.
- Frequent visual inspection of the structure are planned for freshet 2018.
- New cracks will be filled with bentonite before temperature falls below 0ºC.

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THANK YOU

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MDRB #22

TAILINGS STORAGE FACILITIES INSTRUMENTATION REVIEW

THERMISTORS INSIDE THE TAILINGS

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NEW THERMISTORS INSIDE THE TAILINGS (INSTALLED EARLY 2017)

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THERMISTOR SD2-1 (INACTIVE)

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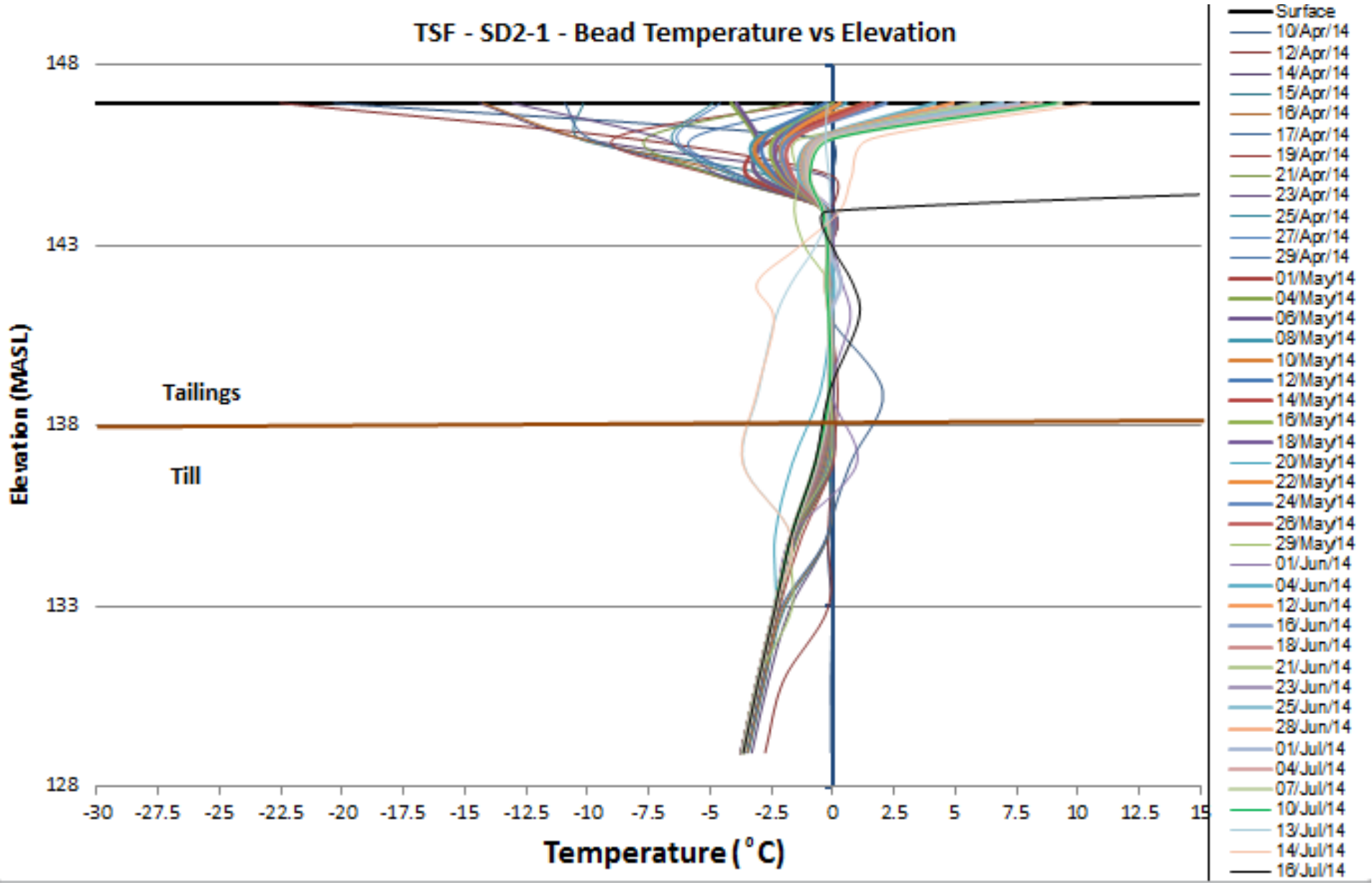
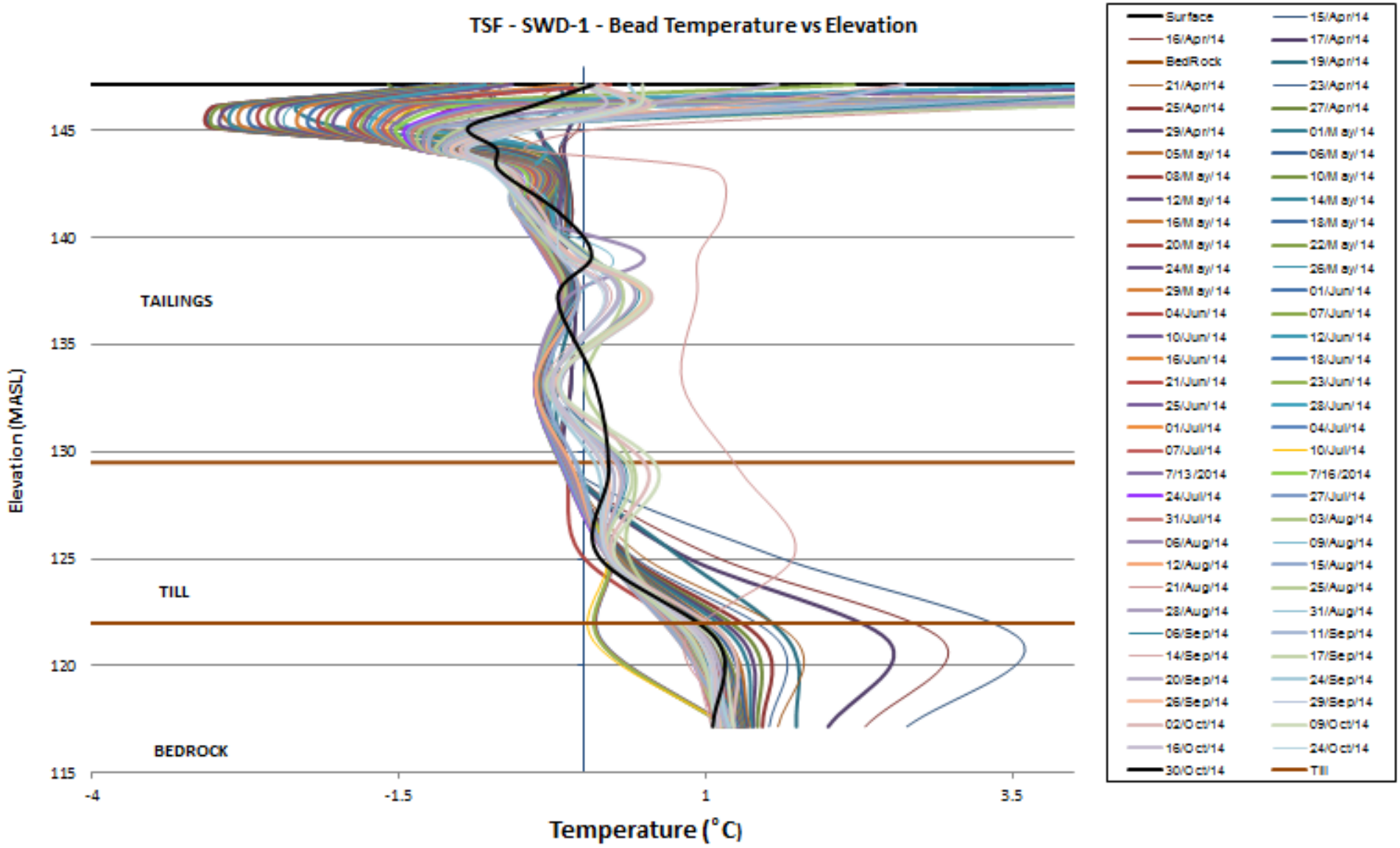
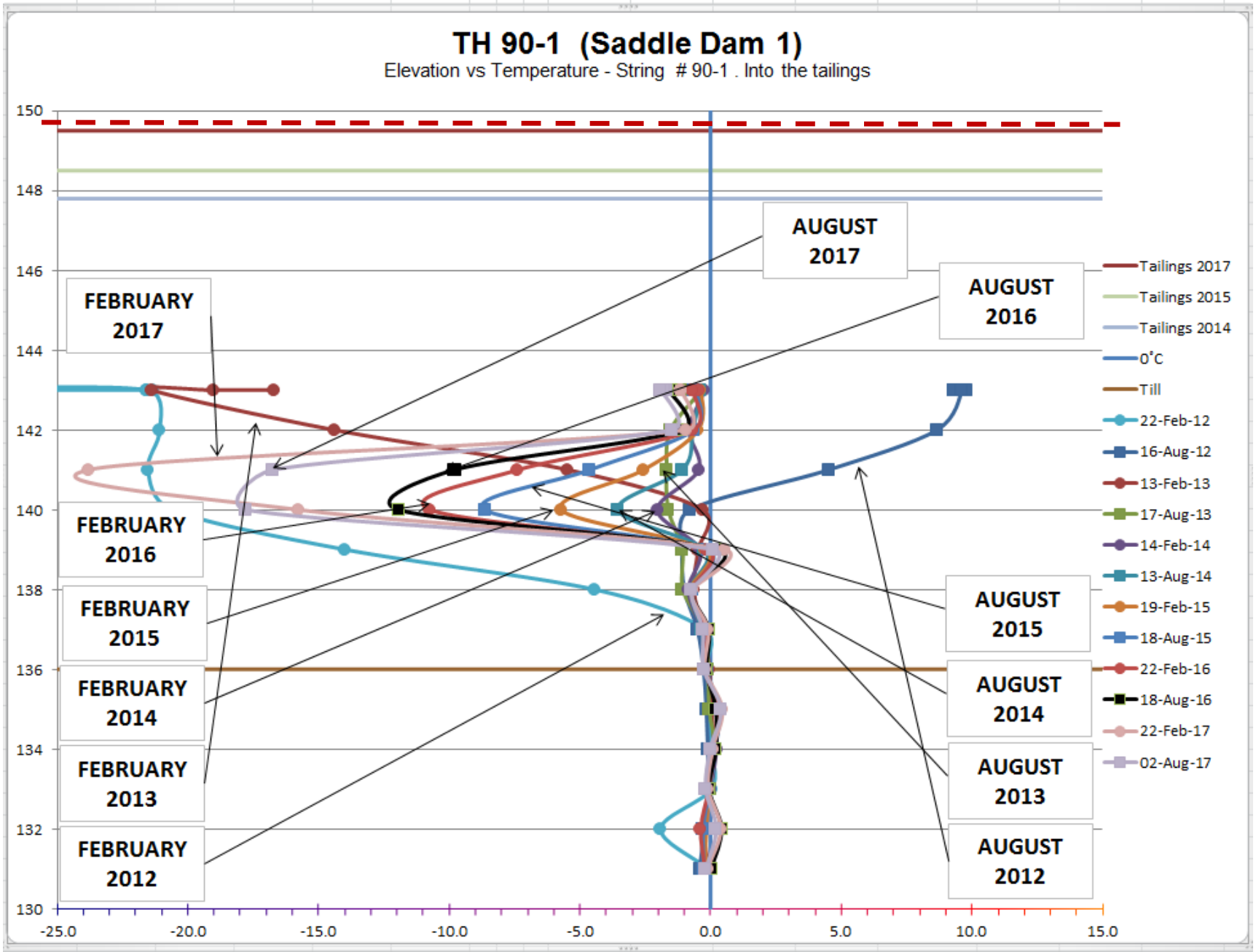


THERMISTOR SWD-1 (INACTIVE)

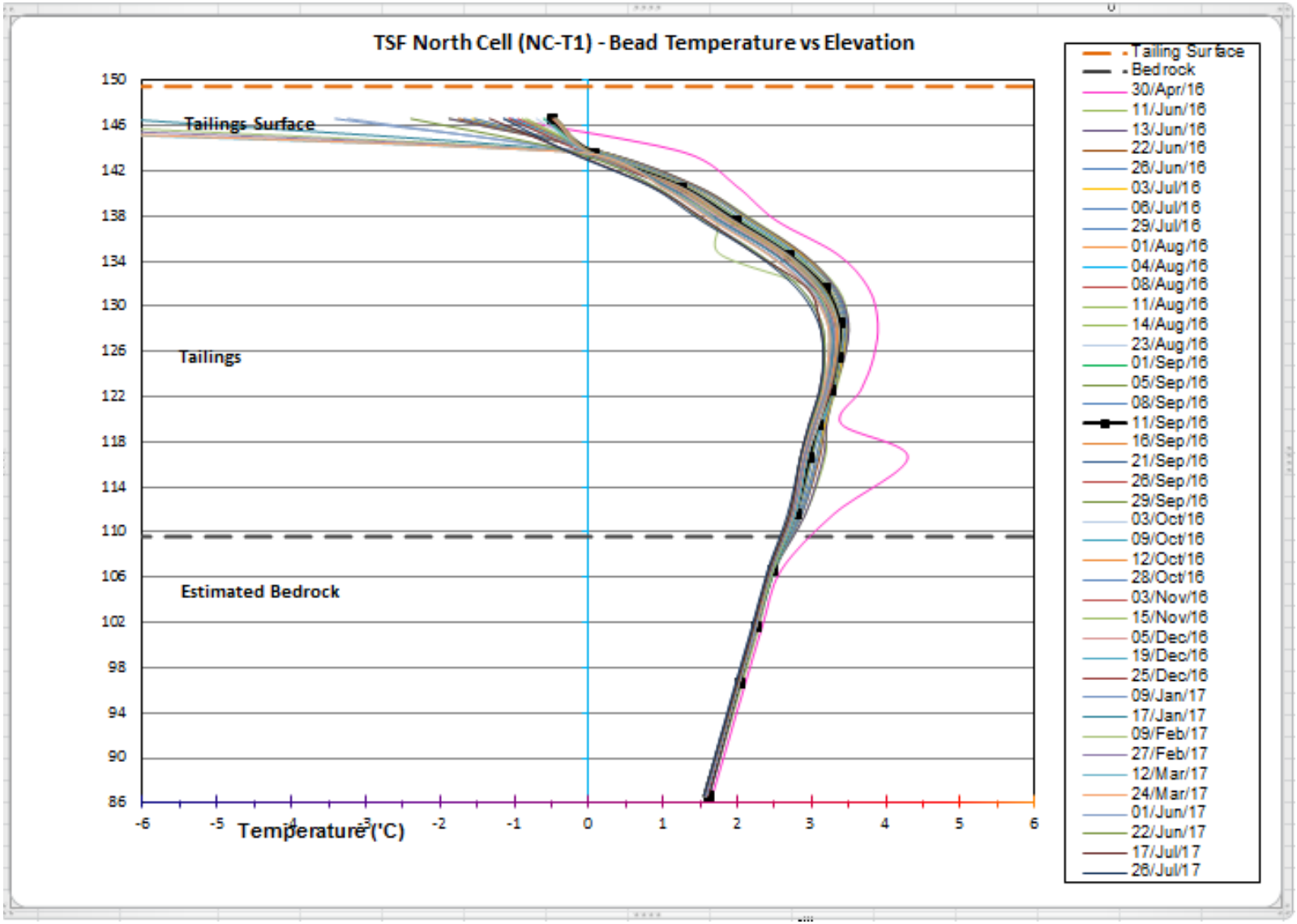


THERMISTOR 90-1 (SD-1)

AGNICO EAGLE

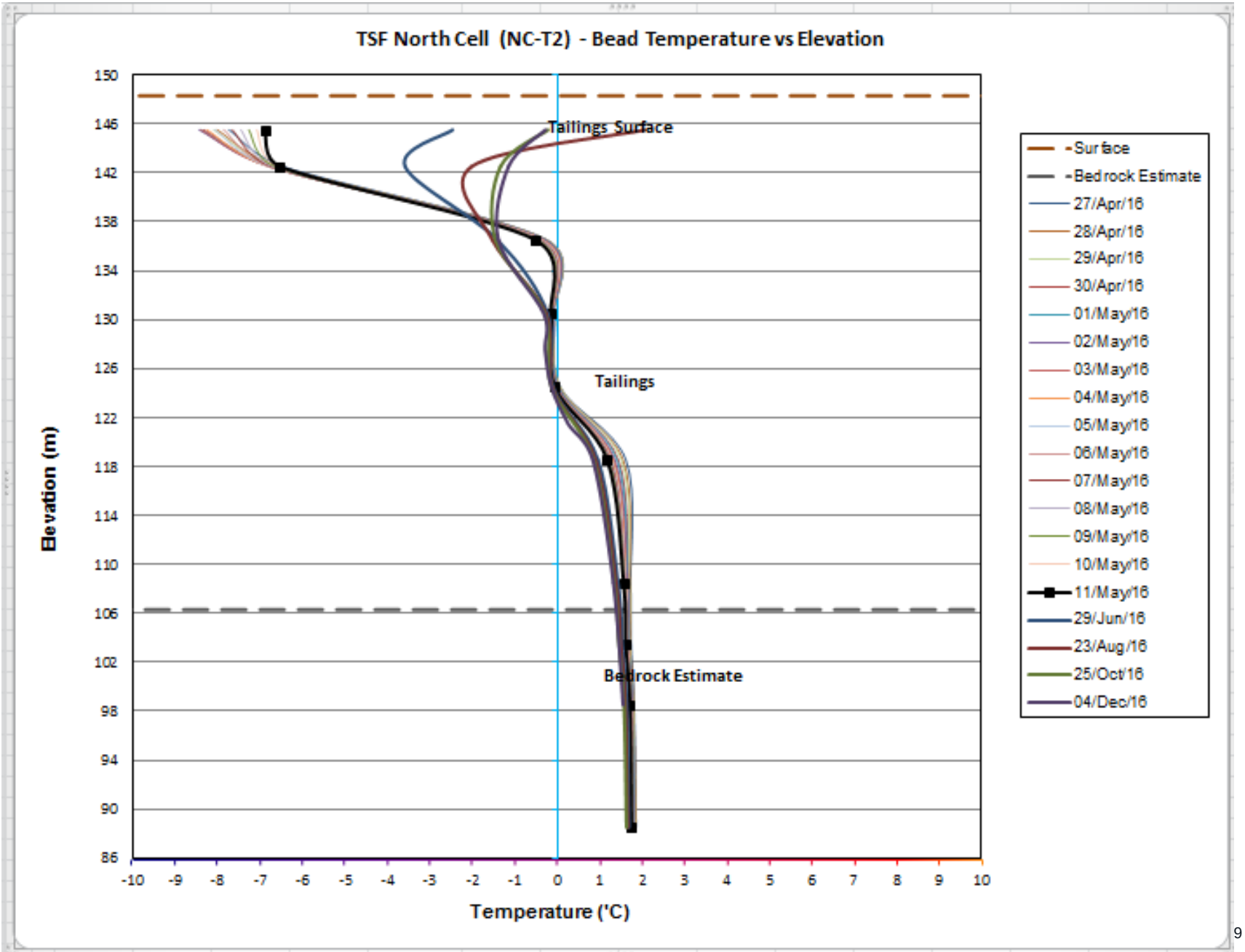


THERMISTOR NC-T1



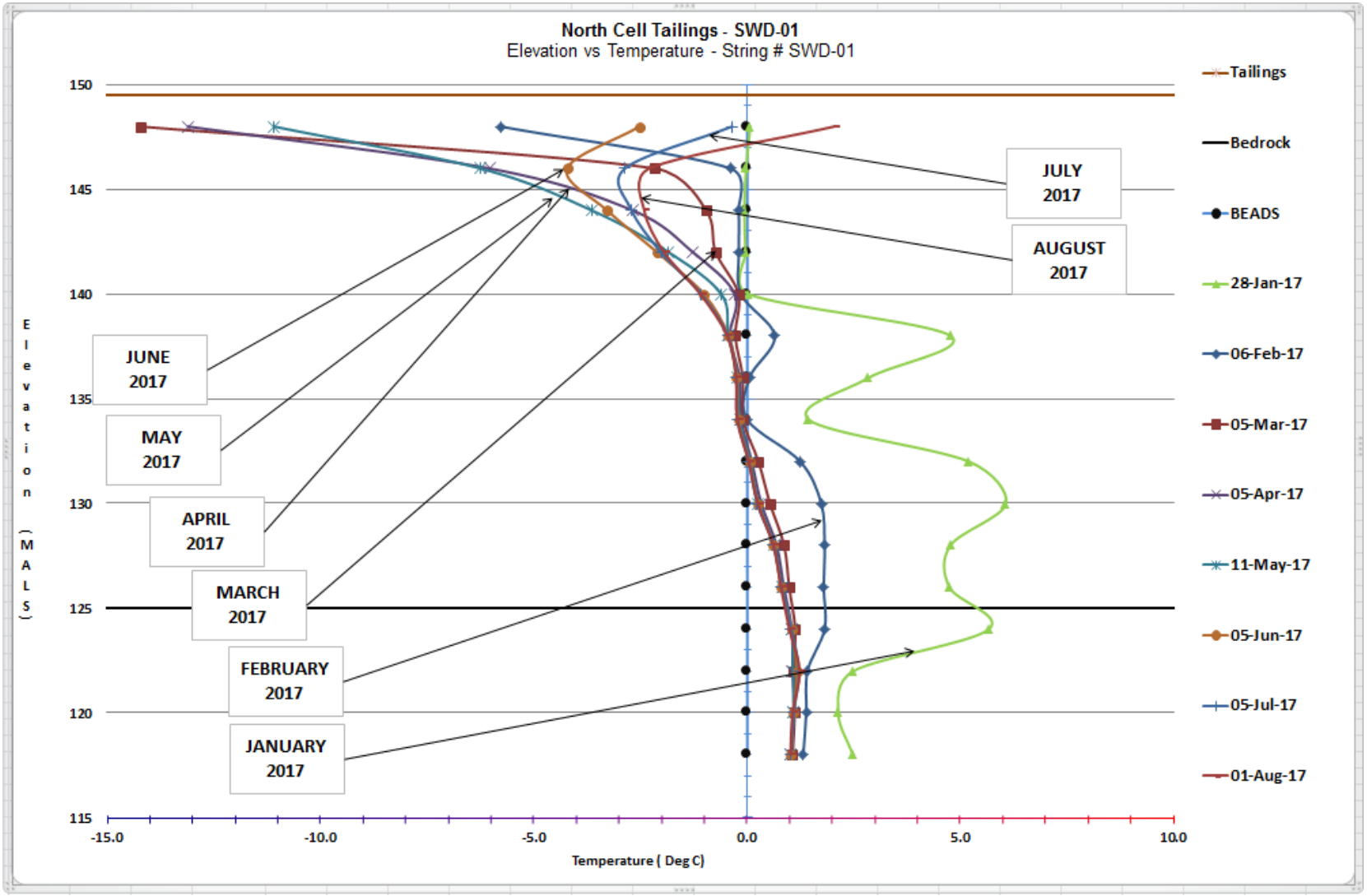
THERMISTOR NC-T2

AGNICO EAGLE

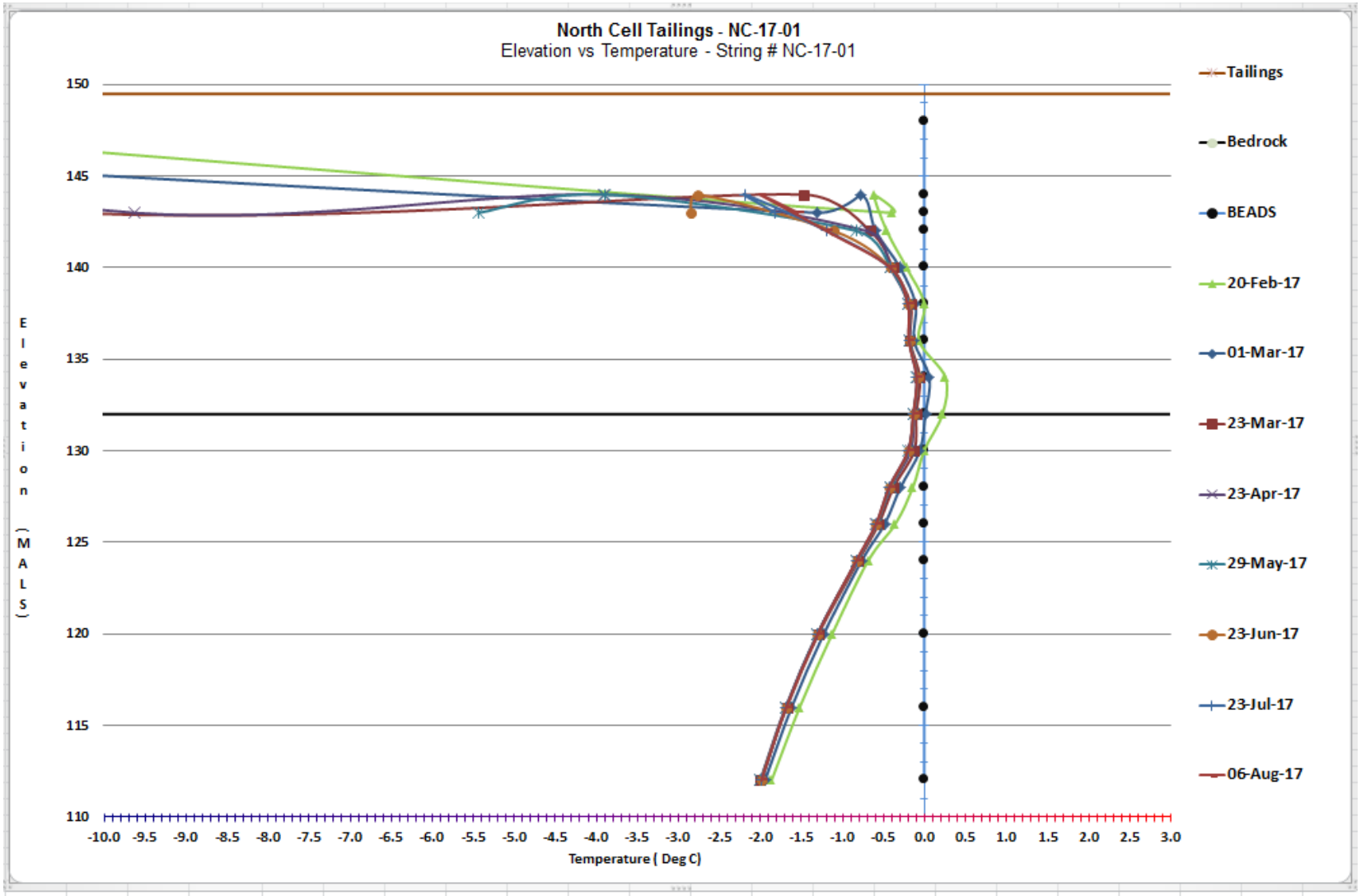


NEW THERMISTORS INSIDE THE TAILINGS (INSTALLED EARLY 2017)

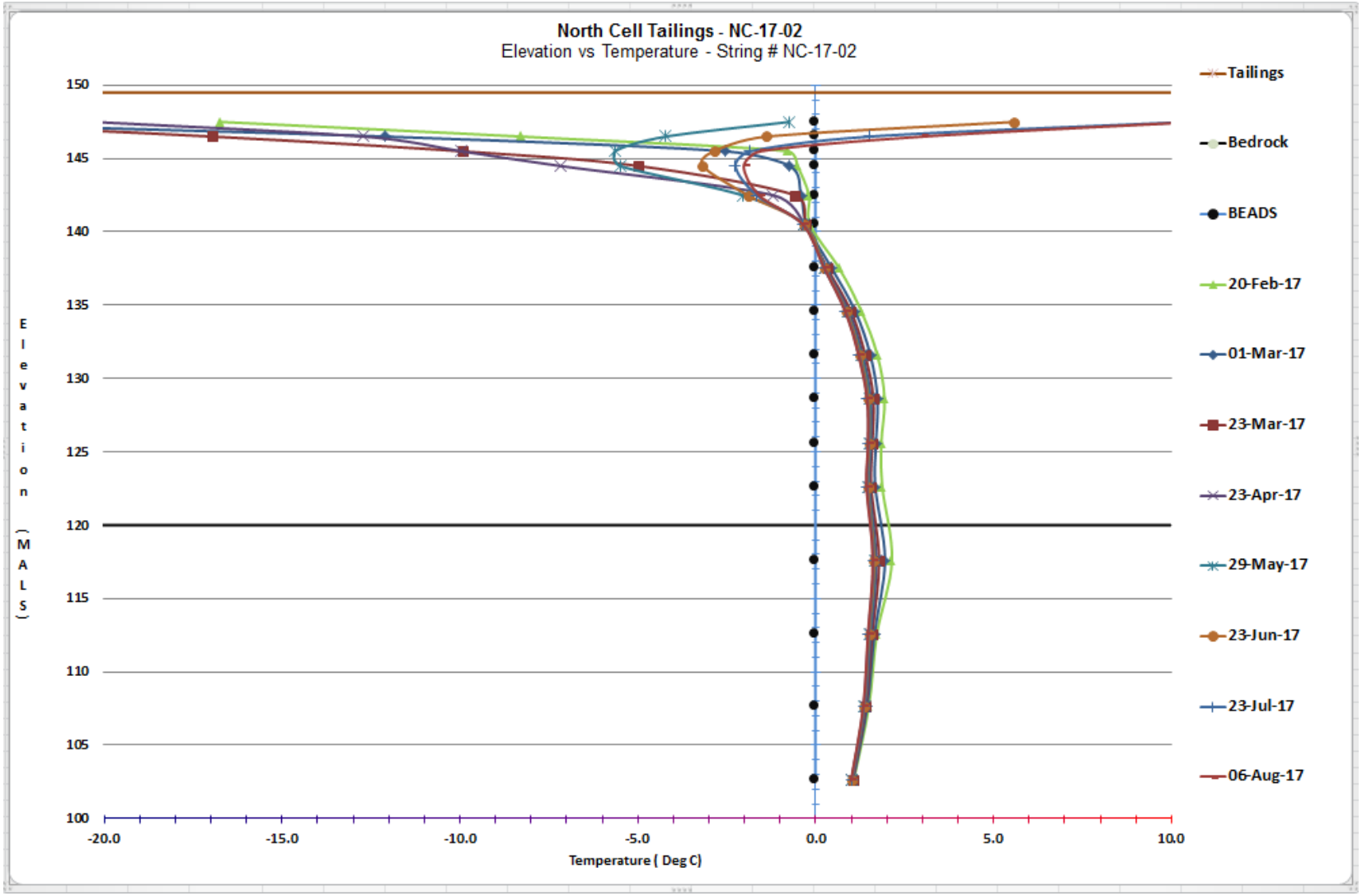
THERMISTOR SWD 01



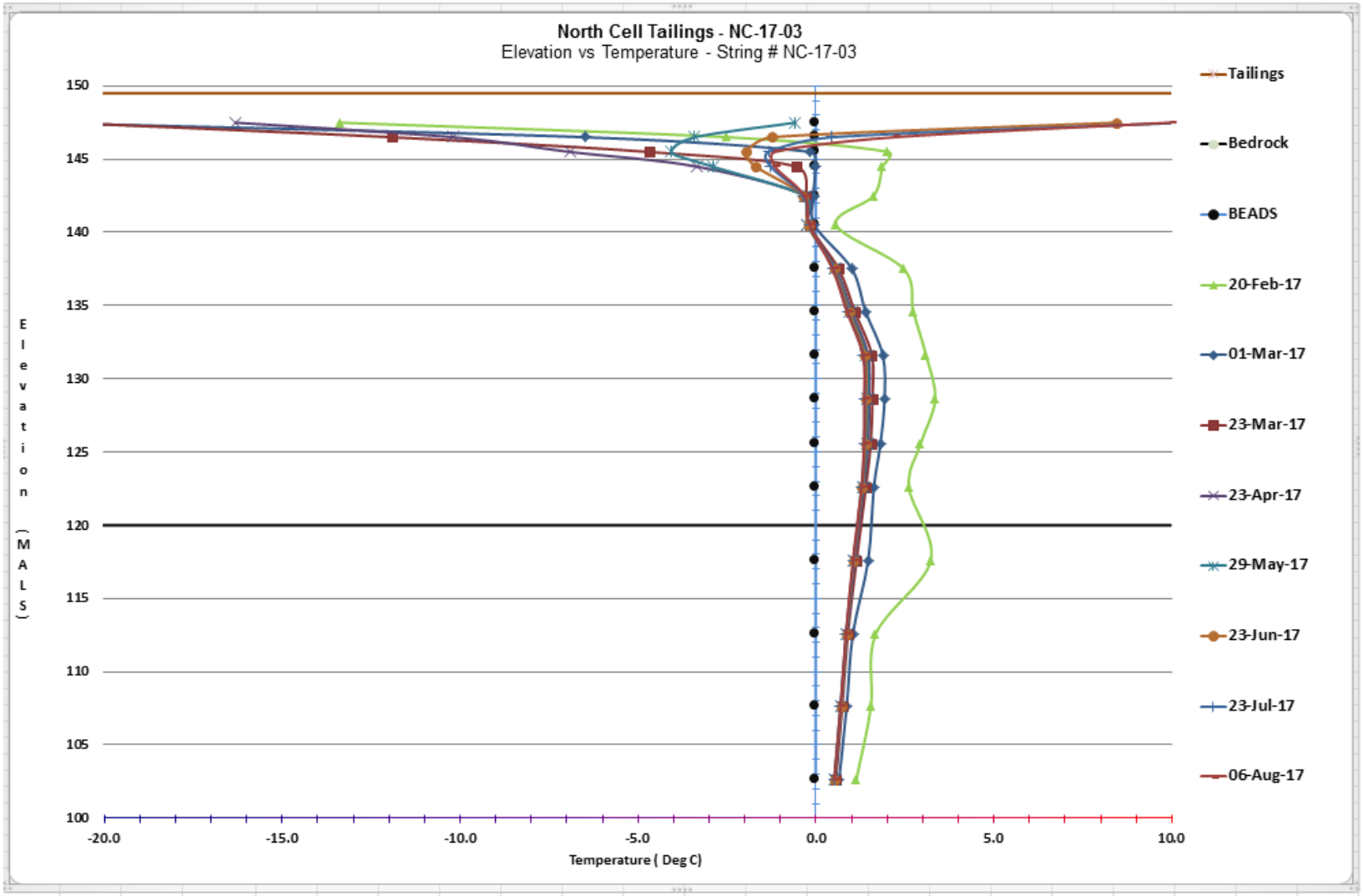
THERMISTOR NC-17-01



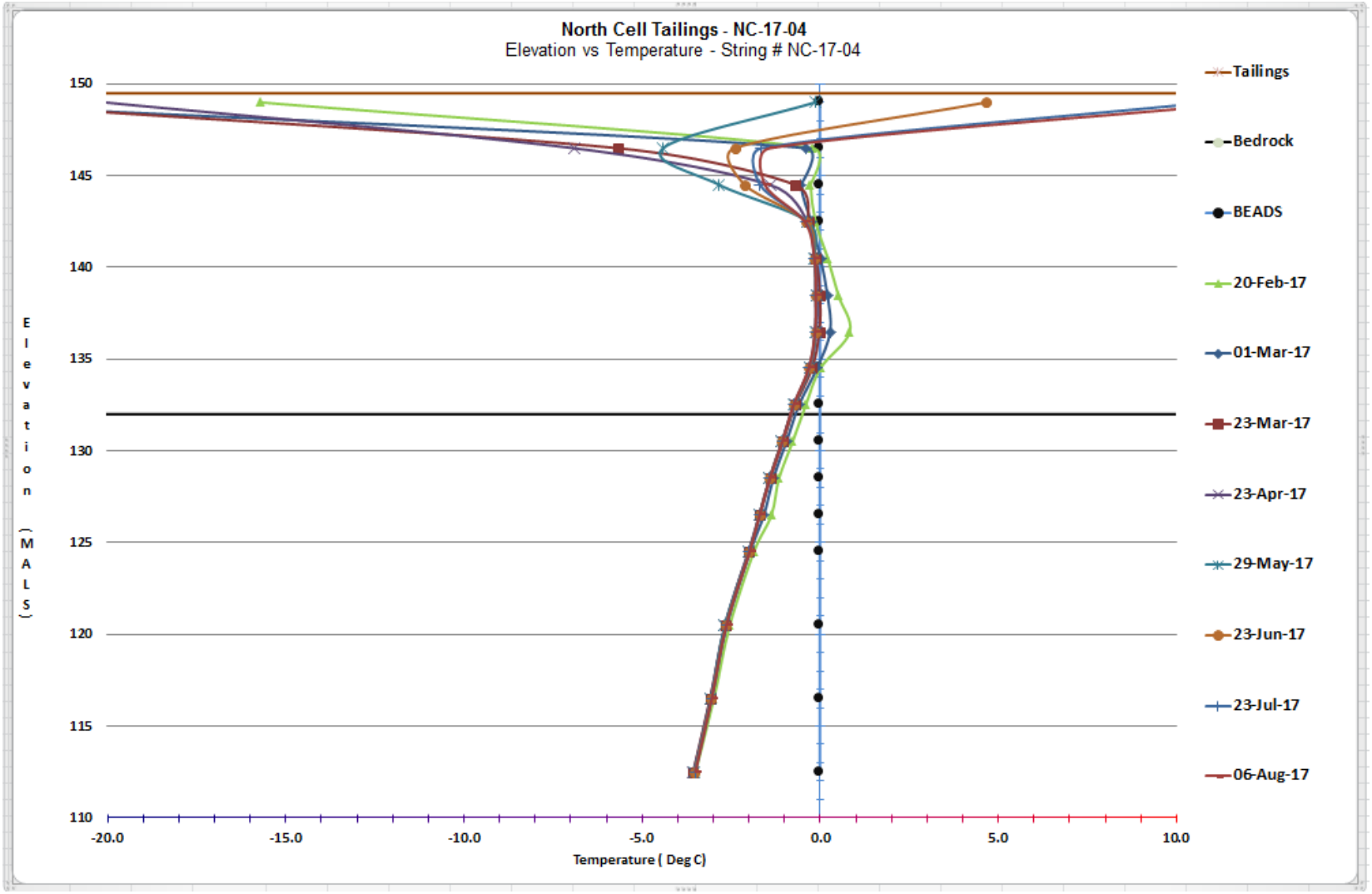
THERMISTOR NC-17-02



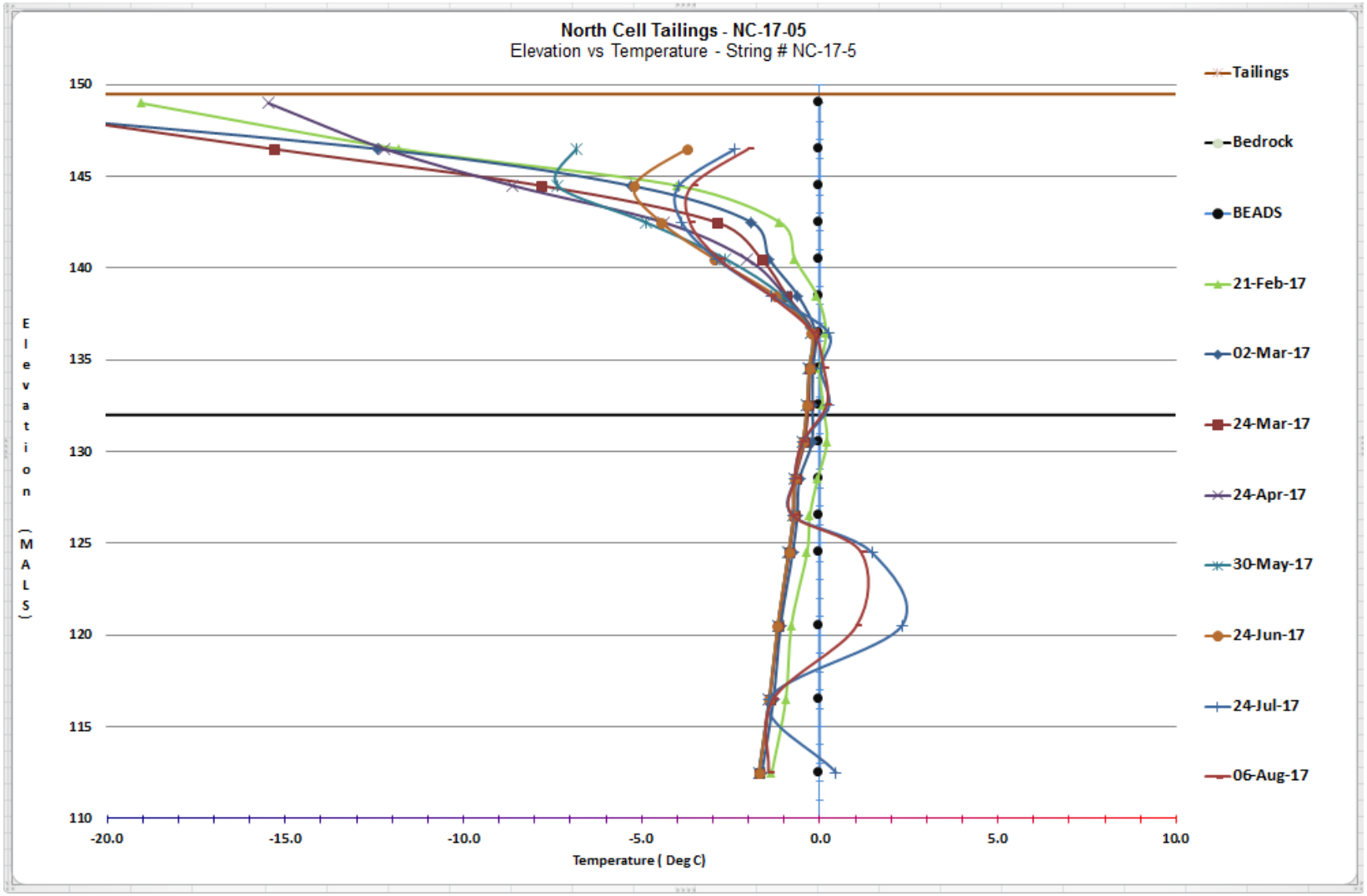
THERMISTOR NC-17-03



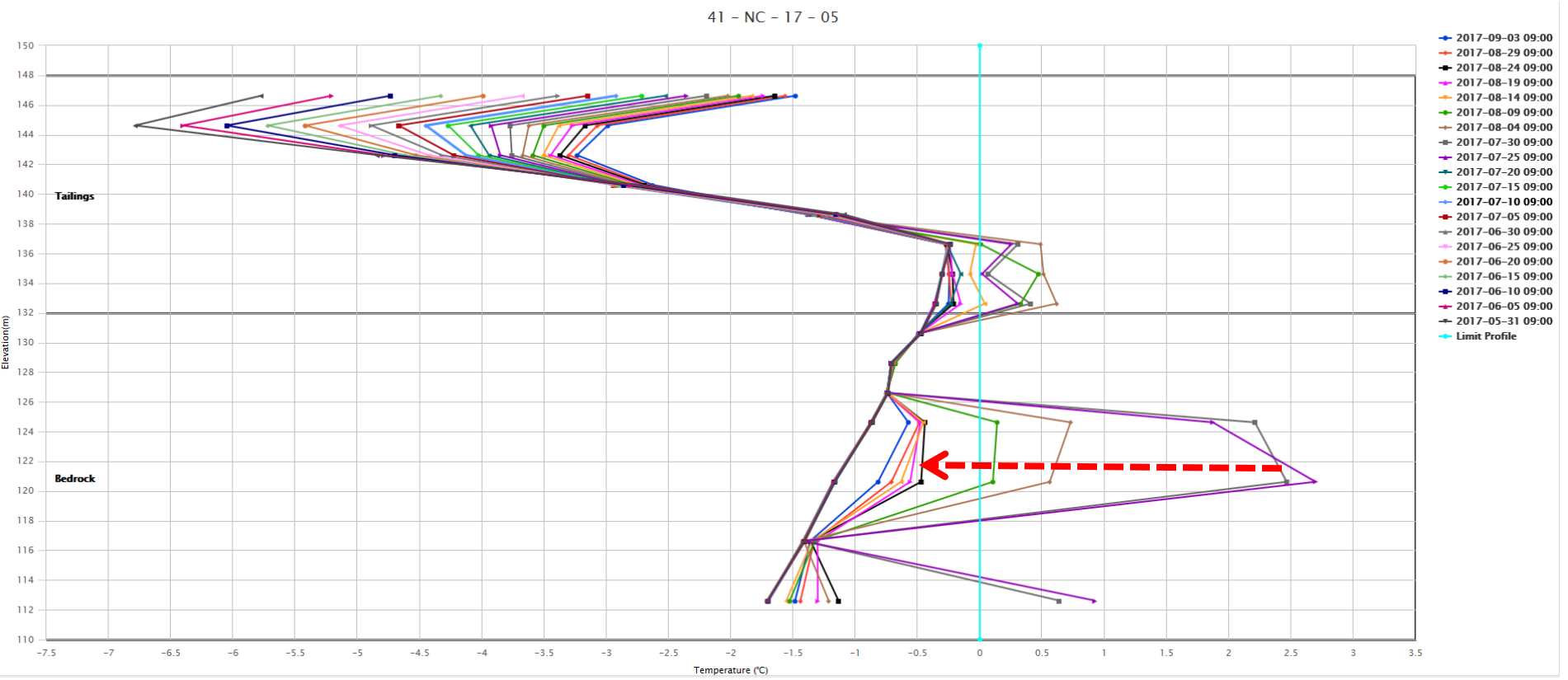
THERMISTOR NC-17-04



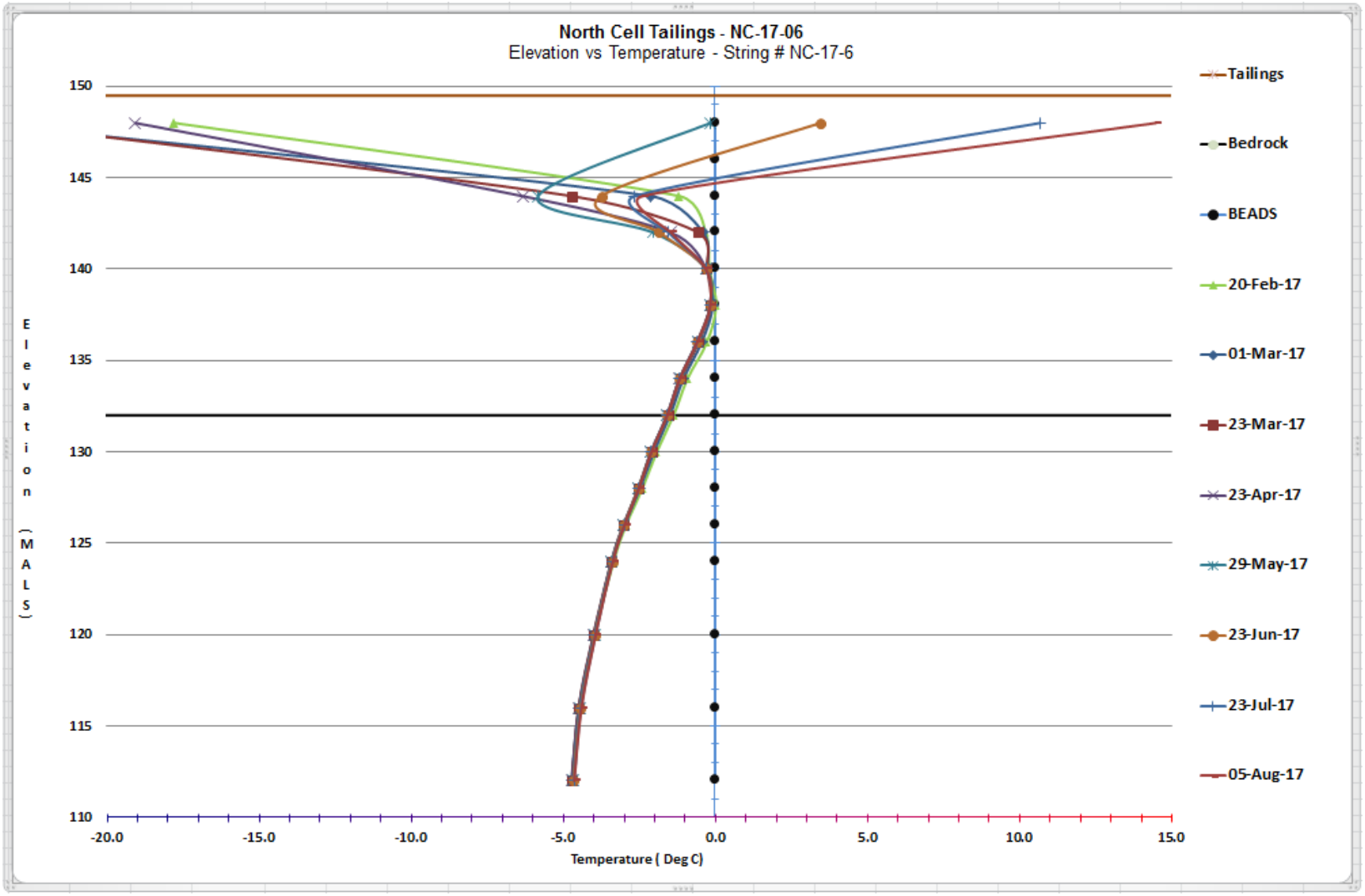
THERMISTOR NC-17-05



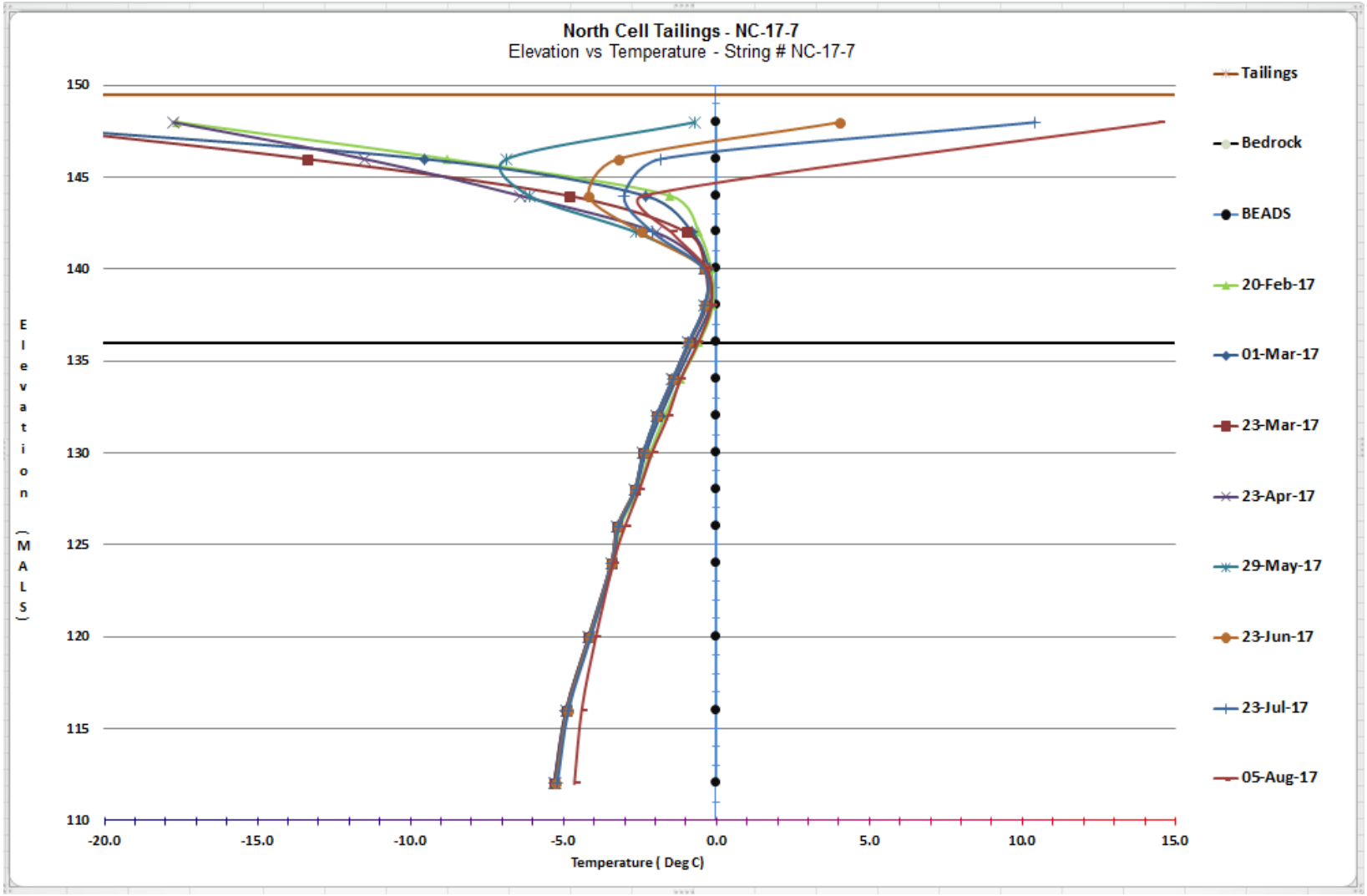
THERMISTOR NC-17-05



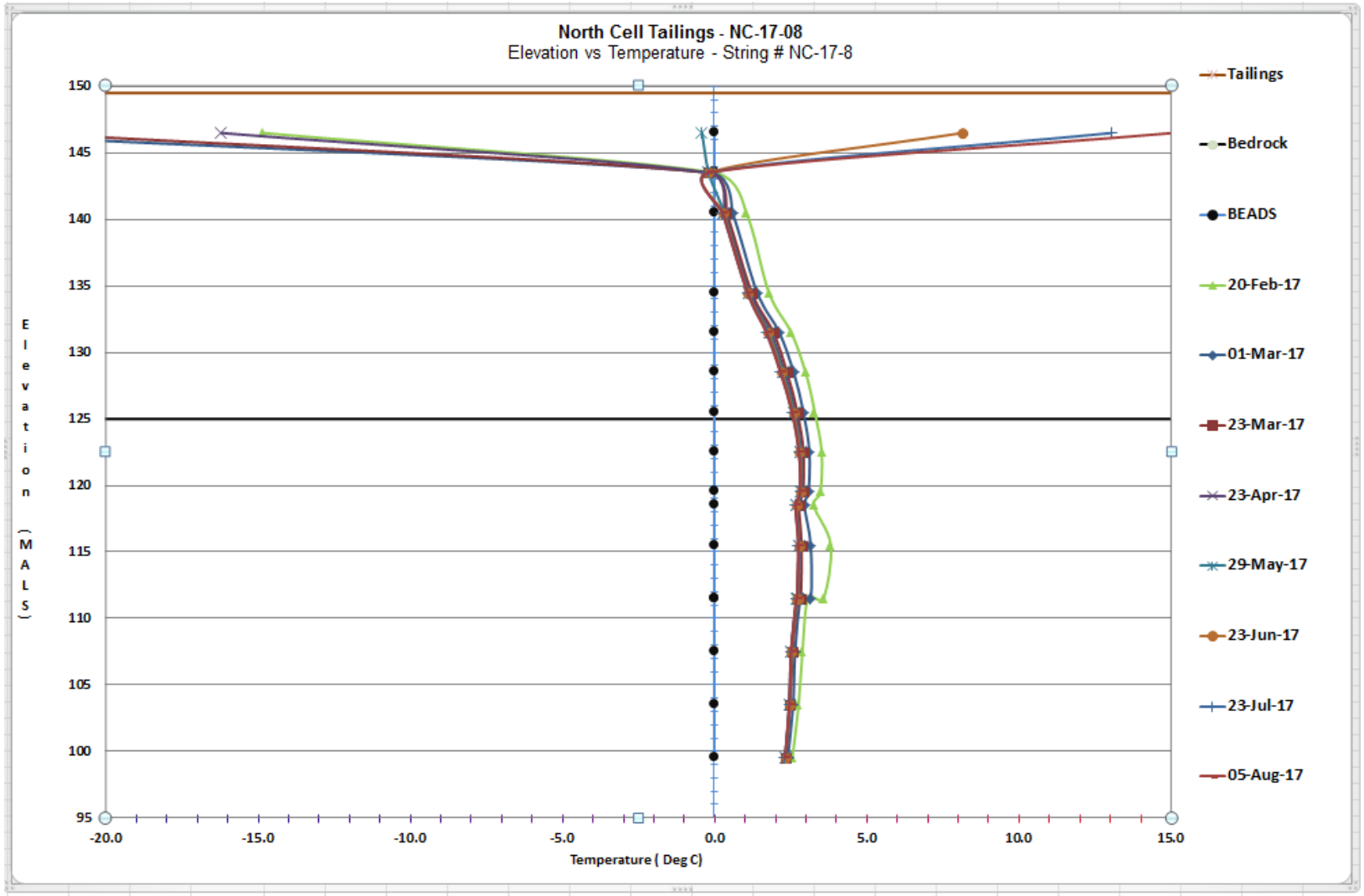
THERMISTOR NC-17-06



THERMISTOR NC-17-07



THERMISTOR NC-17-08



CONCLUSION

- The TSF instruments are read regularly and many have been automated this year. This has allowed more frequent readings and a better understanding of the slow evolution of the temperature in the tailings and structures with time.
- Most instruments at the TSF are following the trends seen in previous years. Regular interpretation of readings will continue to be done to confirm the structures are behaving as expected.
- In 2017 additional instruments were installed at Stormwater Dike to help provide more information about the behaviour of the structure following the movements observed in 2016.
- In 2017 additional instruments were also installed in the North Cell to have a better idea of the temperature distribution within the North Cell.

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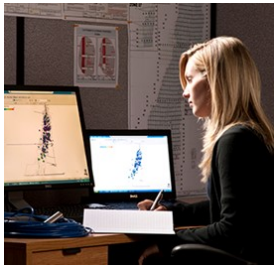

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AEM on TSX & NYSE

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info@agnicoeagle.com

agnicoeagle.com

WORLD GOLD COUNCIL

APPENDIX D

All-Weather Private Road (AWPR)

Inspection of the Facilities Along the All-Weather Private Road

Station	Name	Structure Description	Comments
0+430	PRC1	1x600 mm CSP	Culvert owned by the town and not AEM. Minor damage to outlet. Minor obstruction of the outlet. Still in good condition. No action required
0+470	PRC2	2x600 mm CSP	Culvert owned by the town and not AEM. Good condition
1+380	PRC3	1x600 mm CSP	Culvert owned by the town and not AEM. Good condition
2+550	R-00A	1x600 mm CSP	No sign of any flow. Inlet partially collapsed, outlet entirely collapsed with signs of obstruction from road material, one hole in the culvert visible from the crest of the road.
4+260	PC-14	2x600 mm CSP	These 2 culverts are too damaged to function any longer. If needed, new culvert should be installed further north.
5+200	Quarry 1		Slope remediation in progress. Rocks walls are generally clean and stable.
~5+700	unnamed	1x600 mm CSP	The inlet is partially buried in gravel.
8+750	R02 Centre Bridge	30m Acrow Panel Bridge	In good condition
8+830	PC-17A		Sign of erosion beneath the inlet and flow of water occuring beneath the culvert. The 1800 CSP were installed too high. While conditions are not perfect, they have proven stable over the past years. No sign of degradation from last year on both the inlet and outlet sides.
8+850	PC-17	2x1200 mm CSP	In good condition
9+952	PC-1	1x600 mm CSP	In good condition
10+580	R-03	1x600 mm CSP	In good condition
12+050	R-04	1x1200 mm CSP	In good condition
12+745	PC-13	1x600 mm CSP	In good condition
13+250	Quarry 2		Slope remediation in progress.
13+405	PC-2	1x600 mm CSP	In good condition
13+685	PC-3	1x600 mm CSP	In good condition
13+950	unnamed	1x600 mm CSP	In good condition
14+910	PC-4	1x600 mm CSP	In good condition

Station	Name	Structure Description	Comments
15+745	R-05A	1x1200 mm CSP	In good condition
17+600	R05 Center Bridge	30m Acrow Panel Bridge	In good condition. Minor damage to the bin wall of both abutments as a result of past snow removal activites.
18+280	PC-5	1x600 mm CSP	In good condition
18+900	PC-6	1x600 mm CSP	In good condition
20+240	PC-7A	2x600 mm CSP	In general good condition. The outlet of the northern culvert is damaged.
20+250	PC-7	1x600 mm CSP	In good condition
23+100	R06 Center Bridge	30 m Acrow Panel Bridge	In good condition
23+700	Quarry 3		A crusher is installed in this quarry. The west wall is in good and stable condition, but would need additional cleaning. AEM did not clean it due to the presence of a falcon nest.
25+900	R-07	1x1200 mm CSP	In good condition
29+420	PC-8	1x600 mm CSP	In good condition
31+300	Quarry 4		Quarry flooded. In good condition.
34+650	Quarry 5		Slope remediation in progress. Rock walls are in good and stable condition, except for a small portion on the east side.
35+690	PC-9	1x600 mm CSP	In good condition.
36+470	Quarry 6		Slope remediation in progress. The remaining rock walls are clean and stable.
36+865	PC-10	1x600 mm CSP	In good condition. The outlet is partially buried.
39+552	PC-11	1x600 mm CSP	In good condition, but almost submerged by water. The inlet is too high and water is flowing underneath it.
39+800	Quarry 7		The quarry walls are in unstable condition. Scaling is recommended before resuming activities.
41+300	PC-12	1x600 mm CSP	In good condition, almost submerged.
42+950	Quarry 8		Crushing activities occurred in 2017.
44+600	Quarry 9		Presence of unstable loose rocks and boulders along the

Station	Name	Structure Description	Comments
			steepest and highest wall section. Slope remediation in progress.
48+500	R09 Center Bridge	12m Rapid Span Bridge	In good condition
48+900	Quarry 10		Slope remediation in progress. The steep west rock wall is unstable.
53+500	Quarry 11		Slope remediation in progress. Rock walls are clean and stable.
54+950	PC-16	1x600 mm CSP	Outlet is buried and needs to be cleared.
58+300	Quarry 12		Slope remediation in progress. In general good condition.
62+060	R13 Center Bridge	12 m Rapid Span Bridge	In good condition
62+350	Quarry 13		Slope remediation is in progress. Loose blocks were observed in some portions the the rock wall.
65+700	Quarry 14		Quarry flooded, slope remediation in progress. Loose blocks were observed in some portions the the rock wall.
67+600	Quarry 15		Slope remediation in progress. Steep rock wall in realtively stable condition
67+840	R-14	3x1200 mm CSP	Middle and northern culverts show small sign of erosion at the outlet and have been damaged (collapsed) inside, below the road, but it is anticipated that they will continue to perform well. All of them were installed too high but function well. No action required.
69+200	R15 Centre Bridge	30 m Acrow Panel Bridge	Bin wall of both abutments were observed to be damaged but they are holding well. The bridge is dipping toward the west side on both north and south abutments. The foundation does not show signs of failure but is slowly settling. Its condition should be monitored.
70+400	Quarry 16		Slope remediation in progress. Presence of unstable loose rocks and boulders. A good safety berm was placed along the top of the pit crest.
72+800	Quarry 17		Slope remediation in progress. Steep rock wall in stable conditions.
73+800	R16 Centre Bridge	12m Rapid Span Bridge	In good condition
77+440	R-17	1x1200 mm CSP	In good condition

Station	Name	Structure Description	Comments
79+500	R18 Centre Bridge	12 m Rapid Span Bridge	In good condition
80+200	Quarry 18		Slope remediation in progress. Steep walls are in good condition.
80+950	R-18A	3x1200 mm CSP	In good condition. The southern culvert inlet is partially buried.
	R-18B	1X600 mm CSP	In good condition, installed above ground surface (water can flow below culvert).
83+150	R19 Centre	12m Rapid Span Bridge	Some damage to the steel containment plates and to one pile was observed, which may be associated with snow removal activity. The damage is minor and does not affect the geotechnical integrity of the bridge.
84+300	Quarry 19		Slope remediation has begun. Remaining walls are in good condition.
85+490	R-20	1x1200 mm CSP	Outlet of the culvert is slighly twisted. The middle of the culvert is slightly collapsed. The inlet is installed above the ground surface and water is able to flow beneath the culvert. No follow-up required, in stable conditions.
87+300	R-21	2x1200 mm CSP	Both culverts are slightly collapsed in the middle. Should have been installed lower to avoid erosion issue. In stable condition.
89+550	Quarry 20		Slope remediation in progress. Quarry walls are in good condition
93+400	Quarry 21		Slope remediation in progress. Quarry walls are in good condition.
93+600	R-23	1x1200 mm CSP	Minor damage near the top, but still in good condition. The culvert is installed too high and as a result there is a low flow of water through the road rockfill. The situation has been under control over the past years.
98+100	R-24	2x1200 mm CSP	Both outlet are installed too high. The outlet of the southern culvert still shows small signs of erosion, but this has been under control over the past years. Both culvert show deformation in the upper part.
99+200	Quarry 22		Slope remediation in progress. The walls are steep but in good condition.
101+950	R-25	2x600 mm CSP	One culvert is angling up toward the downstream end and natural drainage by gravity does not occur. A second culvert alongside is

Station	Name	Structure Description	Comments
			well installed and should drain water for the remainder of the season. No sign of erosion observed during the inspection.
104+400	R-26	3x1200 mm CSP	The boulder which was obstructing the inlet seems to have been moved. The culvert is on good condition, no follow-up required.
	Quarry 23		Presence of loose rocks on top of steep wall.

APPENDIX D1

Culverts Along AWPR Photographic Log

Photograph D1-1: PRC1 km 0+430

Date: September 7, 2017 **Photo Number**: 091

Description: View of culvert inlet, in good condition no sign of obstruction.

Photograph D1-2: PRC1 km 0+430

Date: September 7, 2017 **Photo Number**: 092

Description: View of culvert outlet. The outlet is slightly damaged and obstructed. The culvert is still functional and in overall good condition.

Photograph D1-3: PRC2 km 0+470

Date: September 7, 2017 **Photo Number**: 089

Description: View of culverts inlet. In good condition.

Photograph D1-4: PRC2 km 0+470

Date: September 7, 2017 **Photo Number**: 090

Description: View of culverts outlet. In good condition.

Photograph D1-5: PRC3 km 1+380

Date: September 7, 2017 **Photo Number**: 087

Description: View of culvert inlet. In good condition.

Photograph D1-6: PRC3 km 1+380

Date: September 7, 2017 **Photo Number**: 088

Description: View of culvert outlet. In good condition.

Photograph D1-7: R-00A km 2+550

Date: September 7, 2017 **Photo Number**: 085

Description: View of culvert inlet. The inlet is partially collapsed. No sign of flow.

Photograph D1-8: R-00A km 2+550

Date: September 7, 2017 **Photo Number**: 086

Description: View of culvert outlet. The outlet is collapsed and the road bed cover is too thin to provide protection. No sign of flow.

Photograph D1-9: unnamed km 5+700

Date: September 7, 2017 **Photo Number**: 081

Description: View of the culvert inlet. Good condition, inlet is short in length as the road rolling surface is at the edge of the inlet.

Photograph D1-10: unnamed km 5+700

Date: September 7, 2017 **Photo Number**: 082

Description: View of the culvert outlet. Outlet partially buried in gravel.

Photograph D1-11: PC-17A km 8+830

Date: September 7, 2017 **Photo Number**: 074

Description: View of the culverts inlet. No sign of degradation since last year.

Photograph D1-12: PC-17A km 8+830

Date: September 7, 2017 **Photo Number**: 076

Description: View of the culverts outlet. No sign of degradation since last year.

Photograph D1-13: PC-17 km 8+850

Date: September 7, 2017 **Photo Number**: 073

Description: View of the culverts inlet. Good condition.

Photograph D1-14: PC-17 km 8+850

Date: September 7, 2017 **Photo Number**: 075

Description: View of the culverts outlet (right side of the picture). Good condition.

Photograph D1-15: PC-1 km 9+952

Date: September 7, 2017 **Photo Number**: 071

Description: View of the culvert inlet. In good condition.

Photograph D1-16: PC-1 km 9+952

Date: September 7, 2017 **Photo Number**: 072

Description: View of the culvert outlet. In good condition.