

GROUND ENGINEERING CONSULTANTS LTD.

CIVIL & GEOENVIRONMENTAL ENGINEERS

415 - 7TH AVENUE • REGINA • SASKATCHEWAN • S4N 4P1
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FILE: [REDACTED]

September 10, 2021

Deer Valley Hamlet Board

[REDACTED]
DEER VALLEY, Saskatchewan
S2V 1B7

ATTENTION: [REDACTED]

Dear Sir:

SUBJECT: MONITORING OF SLOPE INCLINOMETERS

[REDACTED]
DEER VALLEY, SASKATCHEWAN

This letter presents the results of the recent slope inclinometer monitoring conducted at the above captioned property. A total of three (3) inclinometers were installed in June 2012 at the locations shown on the attached site plan. The inclinometers were last read on October 26, 2015.

The inclinometers were read on September 1, 2021. The monitoring results are summarized on the attached plots which show cumulative and incremental displacement of the casing since installation.

A cumulative displacement of 23 mm has been measured at a depth of 14.0 metres below grade (Elevation 519.0 metres, Geodetic) in Inclinometer 201. A cumulative displacement of 11 mm had been measured at the same depth during the previous monitoring in 2015.

A cumulative displacement of approximately 3 mm has been measured at a depth of 13.0 metres below grade (Elevation 527.0 metres, Geodetic) in Inclinometer 202. A cumulative displacement of 2 mm had been measured at the same depth during the previous monitoring in 2015. Displacements of 1 and 2 mm were also detected at depths of 24 and 34 metres below grade, respectively (Elevations 516.0 and 506.0 metres, Geodetic) in Inclinometer 202. There was no evidence of movement previously noted at these depths in Inclinometer 202.

Consistent with previous monitoring, there was no evidence of deflection/movement detected in Inclinometer 203 which would be indicative of active slope movement.

The movement detected in Inclinometers 201 and 202 indicate that ongoing creep type movement of the slope is occurring in these areas.

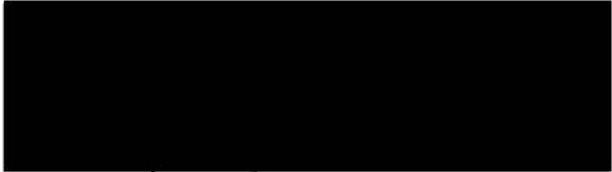
A MEMBER FIRM OF THE ASSOCIATION OF CONSULTING ENGINEERING COMPANIES - SASKATCHEWAN

• SOIL MECHANICS AND FOUNDATION CONSULTANTS • SITE INVESTIGATIONS • FOUNDATION DESIGN • SPECIFICATIONS • CONSTRUCTION SUPERVISION • INSPECTION AND LABORATORY TESTING SERVICES • SOILS • CONCRETE • ASPHALT • PAVEMENT DESIGN AND EVALUATION • SLOPE STABILITY • REPORTS • SEEPAGE CONTROL BARRIERS FOR MUNICIPAL AND INDUSTRIAL WASTE CONTAINMENT • ENVIRONMENTAL SITE ASSESSMENTS



We trust that this letter is satisfactory for your purposes. If you have any questions, please contact this office.

Yours very truly
Ground Engineering Consultants Ltd.



SH:ss
Attach.

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SH771 Office (1 copy)



2021 AIR PHOTO

SCALE: 1:2000

GROUND ENGINEERING CONSULTANTS LTD.

CIVIL & GEOENVIRONMENTAL ENGINEERS
415-7th AVENUE
REGINA, SASKATCHEWAN, CANADA

SITE PLAN SHOWING LOCATION OF INCLINOMETERS

DEER VALLEY, SASKATCHEWAN

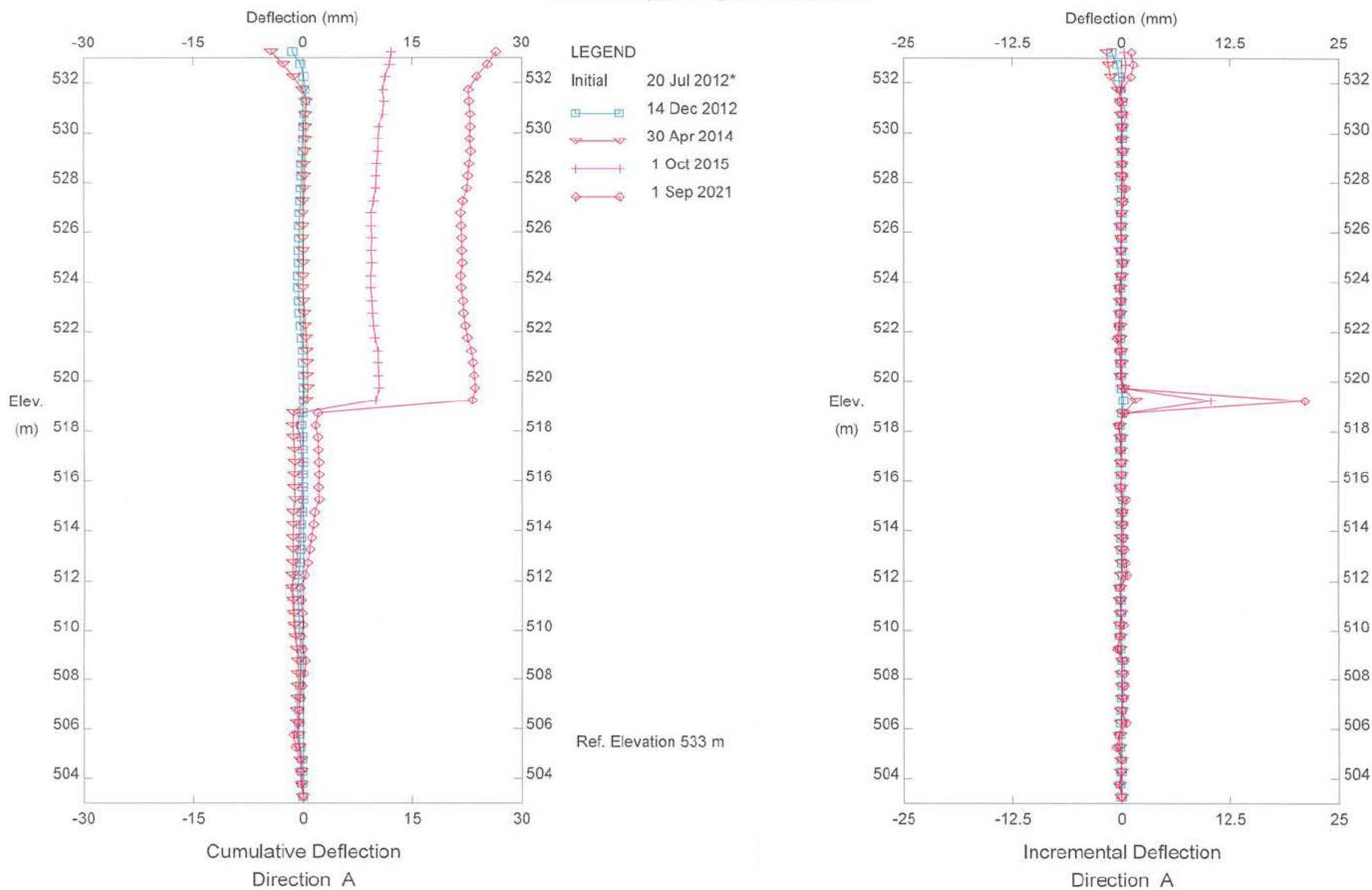
CLIENT:
DEER VALLEY HAMLET BOARD

APPROVED:

DATE:
SEPTEMBER 10, 2021

DWG. No.:
GE-0005-1

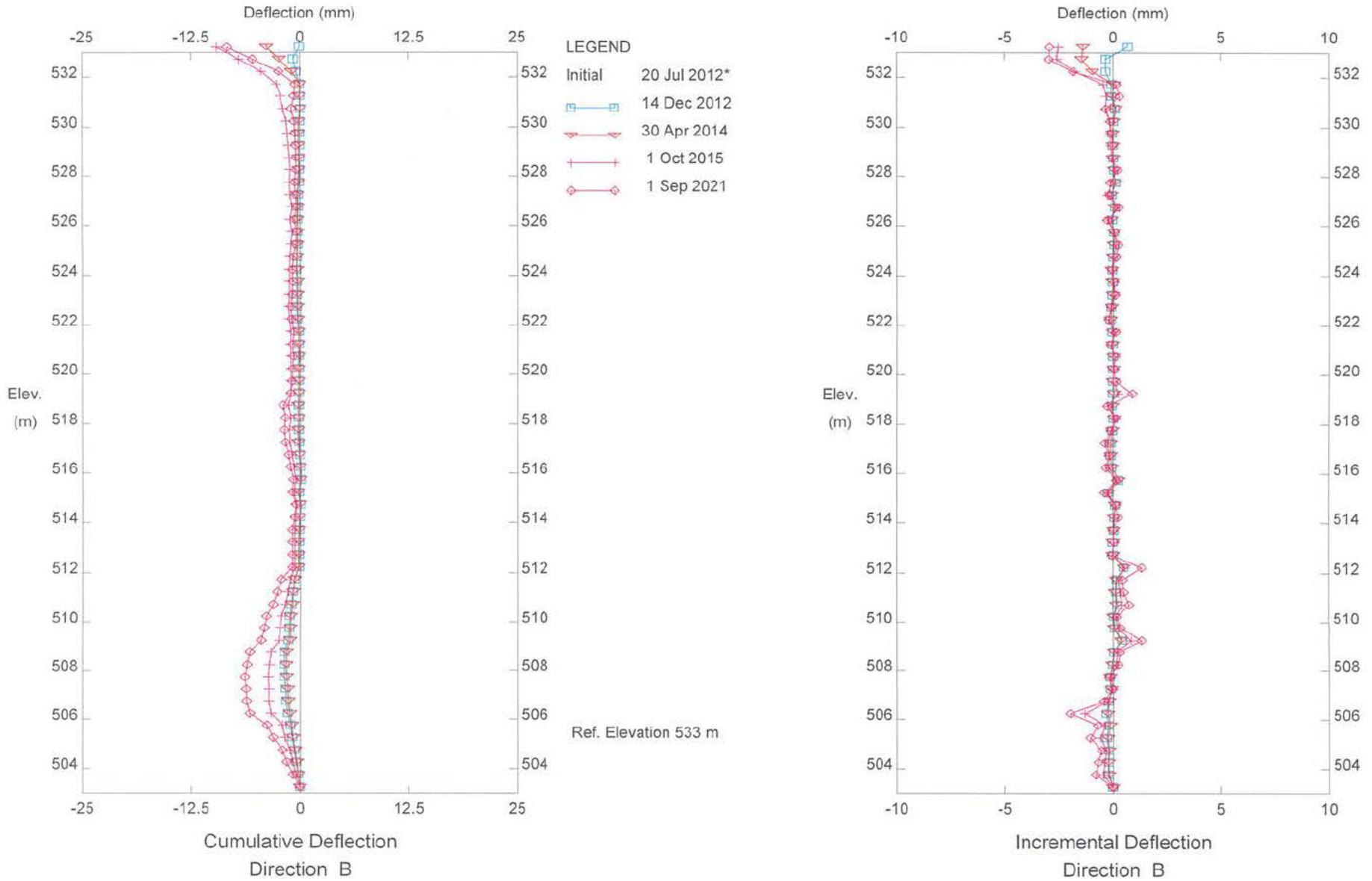
Z:\PROJECT DIRECTOR\2020 ENG FILES\1005 WHITE TAIL RIDGE SUBDIVISION\1. INCORPORATION\1. DRAWINGS\0005 WHITE TAIL 2021 WESTRIDGE.DWG



GE-0005, Inclinometer 201

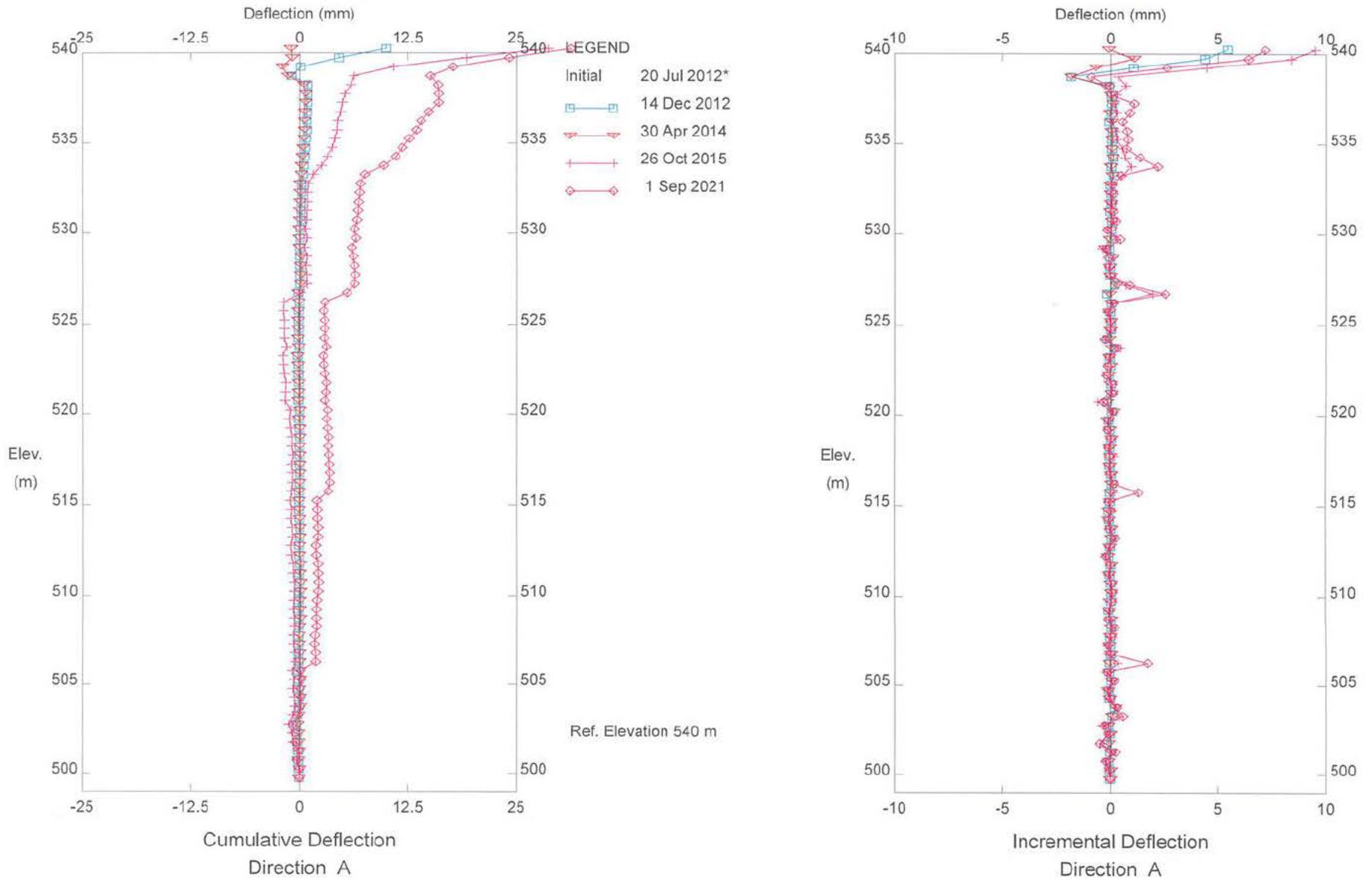


Sets marked * include zero shift and/or rotation corrections.



GE-0005, Inclinometer 201

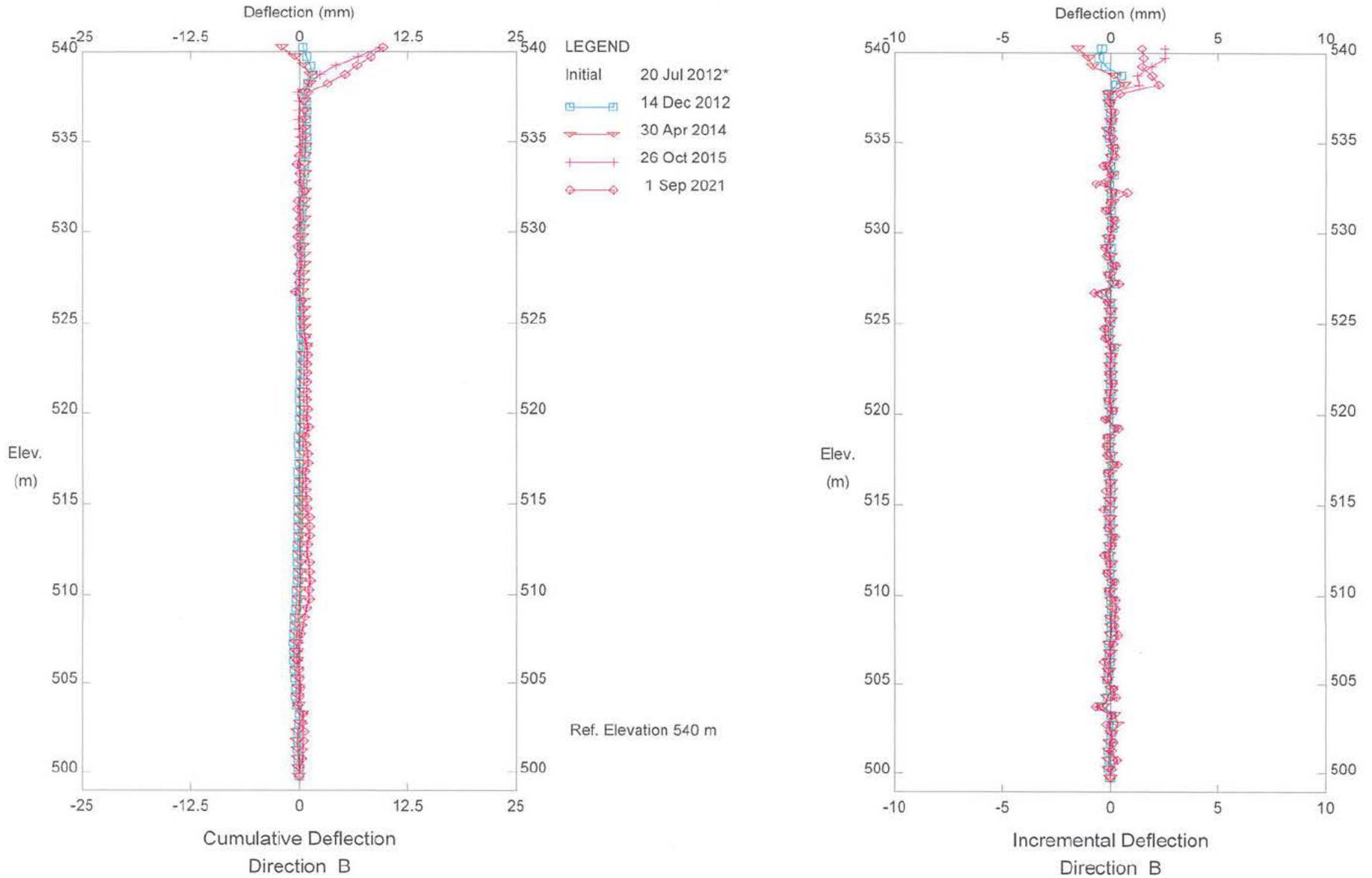
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GE-0005, Inclinator 202



Sets marked * include zero shift and/or rotation corrections.

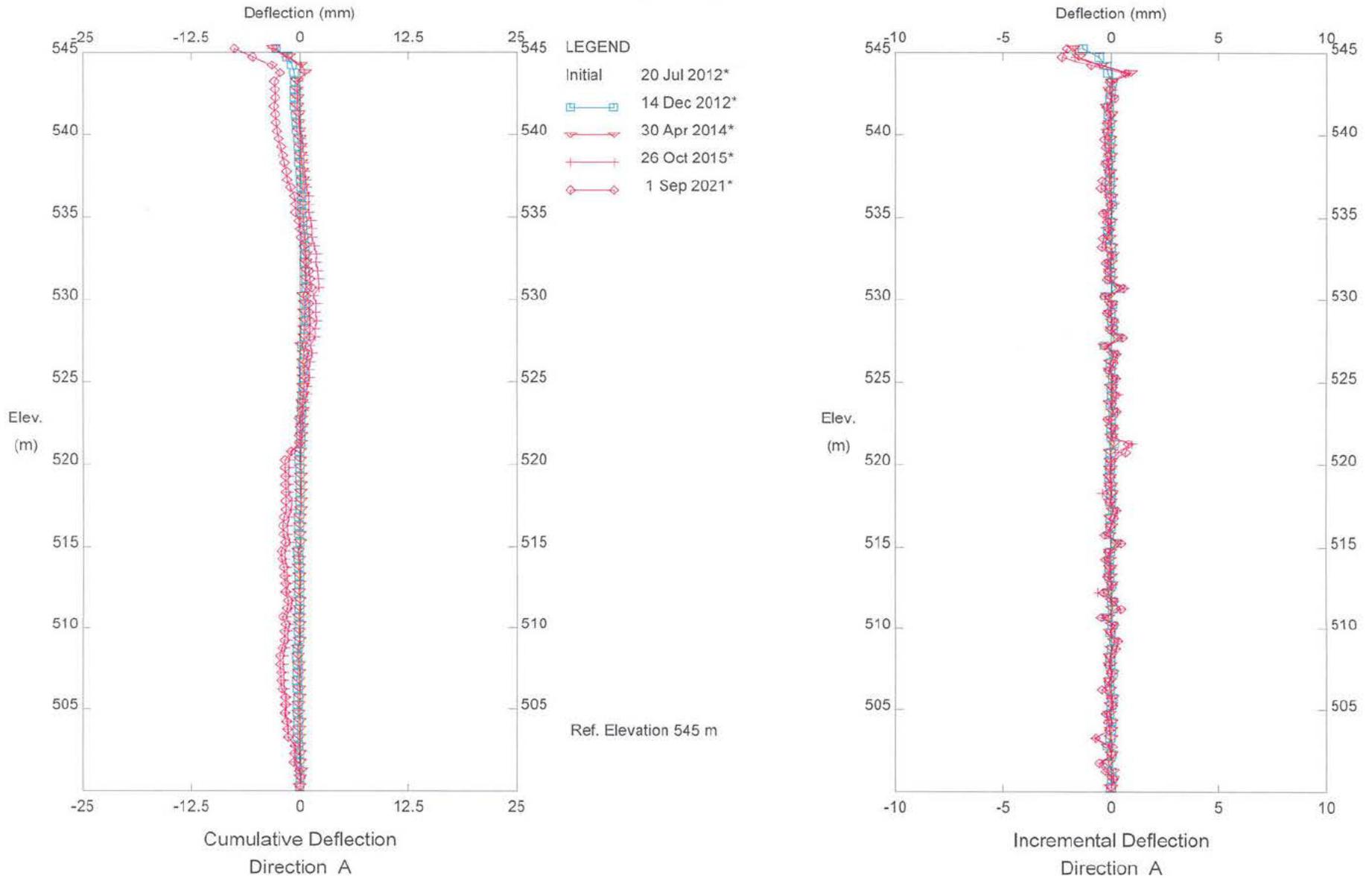


GE-0005, Inclinometer 202



Sets marked * include zero shift and/or rotation corrections.

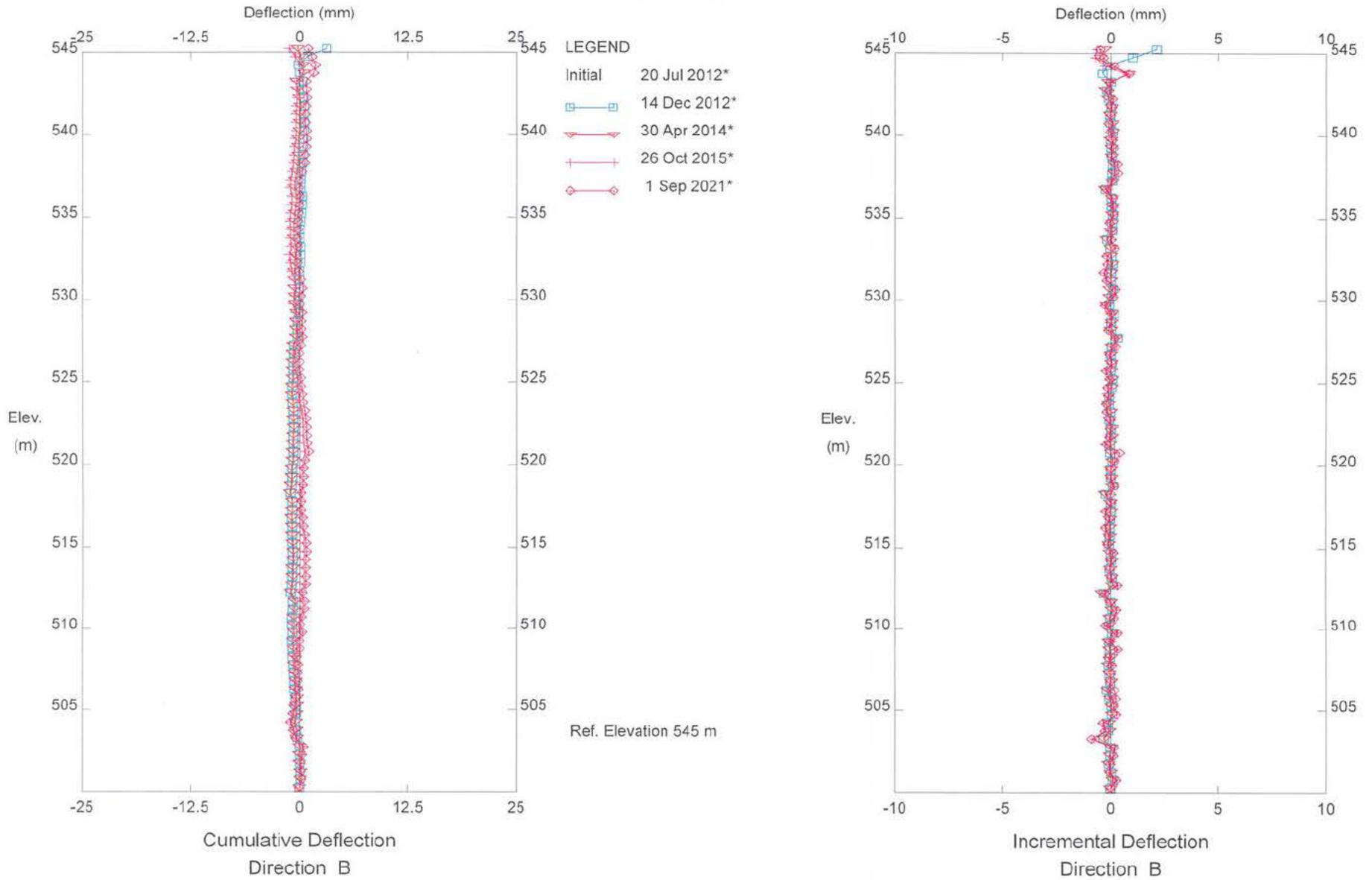
Ground Engineering Consultants Ltd.



GE-0005, Inclinometer 203



Sets marked * include zero shift and/or rotation corrections.



GE-0005, Inclinometer 203



Sets marked * include zero shift and/or rotation corrections.