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Glacier surge as a trigger for the fastest delta growth in the Arctic

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Supplementary Table 1 – remote sensing data used for delimitation of the delta extent and quantification of delta axis length

| date | source | Planet images available for cross check | axis length (m) | satellite image ID |
|-------------|---------------------------------|--|----------------------------|--|
| 03.06.2020 | Sentinel-2 optical False colour | | 0.0 | 2020-06-03-00_00_2020-06-03-23_59_Sentinel-2_L2A_False_color |
| 10.06.2020 | Sentinel-2 optical False colour | | 33.9 | 2020-06-10-00_00_2020-06-10-23_59_Sentinel-2_L2A_False_color |
| 16.06.2020 | Sentinel-2 optical False colour | | 43.2 | 2020-06-22-00_00_2020-06-22-23_59_Sentinel-2_L2A_False_color |
| 22.06.2020 | Sentinel-2 optical False colour | X | 122.3 | 2020-06-22-00_00_2020-06-22-23_59_Sentinel-2_L2A_False_color |
| 30.06.2020 | Sentinel-2 optical False colour | | 173.6 | 2020-06-30-00_00_2020-06-30-23_59_Sentinel-2_L2A_False_color |
| 01.07.2020 | Sentinel-2 optical False colour | X | 177.4 | 2020-07-01-00_00_2020-07-01-23_59_Sentinel-2_L2A_False_color |
| 24.07.2020 | Sentinel-1 SAR | | 239.5 | 2020-07-24-00_00_2020-07-24-23_59_Sentinel-1_AWS-EW-HHHV_HH_-_decibel_gamma0 |
| 25.07.2020 | Sentinel-2 optical False colour | | 324.6 | 2020-07-25-00_00_2020-07-25-23_59_Sentinel-2_L2A_False_color |
| 29.07.2020 | Sentinel-2 optical False colour | | 356.9 | 2020-07-29-00_00_2020-07-29-23_59_Sentinel-2_L2A_False_color |
| 28.07.2020 | Sentinel-2 optical False colour | X | 364.6 | 2020-07-28-00_00_2020-07-28-23_59_Sentinel-2_L2A_False_color |
| 27.07.2020 | Sentinel-2 optical False colour | X | 372.8 | 2020-07-27-00_00_2020-07-27-23_59_Sentinel-2_L2A_False_color |
| 30.07.2020 | Sentinel-2 optical False colour | | 376.5 | 2020-07-30-00_00_2020-07-30-23_59_Sentinel-2_L2A_False_color |
| 31.07.2020 | Sentinel-2 optical False colour | X | 378.3 | 2020-07-31-00_00_2020-07-31-23_59_Sentinel-2_L2A_False_color |
| 03.08.2020 | Sentinel-2 optical False colour | | 381.2 | 2020-08-03-00_00_2020-08-03-23_59_Sentinel-2_L2A_False_color |
| 01.08.2020 | Sentinel-2 optical False colour | X | 385.9 | 2020-08-01-00_00_2020-08-01-23_59_Sentinel-2_L2A_False_color |
| 05.08.2020 | Sentinel-2 optical False colour | | 390.3 | 2020-08-05-00_00_2020-08-05-23_59_Sentinel-2_L2A_False_color |
| 02.08.2020 | Sentinel-2 optical False colour | | 391.6 | 2020-08-02-00_00_2020-08-02-23_59_Sentinel-2_L2A_False_color |
| 04.08.2020 | Sentinel-2 optical False colour | | 406.2 | 2020-08-04-00_00_2020-08-04-23_59_Sentinel-2_L2A_False_color |
| 19.09.2020 | Sentinel-2 optical False colour | | 407.9 | 2020-09-19-00_00_2020-09-19-23_59_Sentinel-2_L2A_False_color |
| 23.08.2020 | Sentinel-2 optical False colour | X | 435.4 | 2020-08-23-00_00_2020-08-23-23_59_Sentinel-2_L2A_False_color |
| 10.10.2020 | Sentinel-1 SAR | | 442.2 | 2020-10-10-00_00_2020-10-10-23_59_Sentinel-1_AWS-EW-HHHV_HH_-_decibel_gamma0 |
| 18.09.2020 | Sentinel-2 NDWI | | 446.4 | 2020-09-18-00_00_2020-09-18-23_59_Sentinel-2_L2A_NDWI |
| 25.08.2020 | Sentinel-2 optical False colour | X | 448.5 | 2020-08-25-00_00_2020-08-25-23_59_Sentinel-2_L2A_False_color |
| 15.11.2020 | Sentinel-1 SAR | | 459.9 | 2020-11-15-00_00_2020-11-15-23_59_Sentinel-1_AWS-EW-HHHV_HH_-_decibel_gamma0 |
| 22.08.2020 | Sentinel-2 optical False colour | | 470.0 | 2020-08-22-00_00_2020-08-22-23_59_Sentinel-2_L2A_False_color |
| 10.09.2021 | Sentinel-2 optical False colour | | 478.4 | 2021-09-10-00_00_2021-09-10-23_59_Sentinel-2_L2A_False_color |
| 08.08.2021 | Sentinel-2 optical False colour | X | 478.5 | 2021-08-08-00_00_2021-08-08-23_59_Sentinel-2_L2A_False_color |
| 19.07.2021 | Sentinel-2 optical False colour | | 492.1 | 2021-07-19-00_00_2021-07-19-23_59_Sentinel-2_L2A_False_color |
| 26.06.2021 | Sentinel-2 optical False colour | | 496.3 | 2021-06-26-00_00_2021-06-26-23_59_Sentinel-2_L2A_False_color |
| 19.08.2021 | Sentinel-2 optical False colour | X | 500.5 | 2021-08-19-00_00_2021-08-19-23_59_Sentinel-2_L2A_False_color |

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|------------|---------------------------------|---|-------|--|
| 15.09.2021 | Sentinel-2 NDWI | | 501.1 | 2021-09-15-00_00_2021-09-15-23_59_Sentinel-2_L2A_NDWI |
| 14.08.2021 | Sentinel-2 optical False colour | X | 503.2 | 2021-08-14-00_00_2021-08-14-23_59_Sentinel-2_L2A_False_color |
| 03.09.2021 | Sentinel-2 optical False colour | | 507.8 | 2021-09-03-00_00_2021-09-03-23_59_Sentinel-2_L2A_False_color |
| 28.08.2021 | Sentinel-2 optical False colour | X | 519.3 | 2021-08-28-00_00_2021-08-28-23_59_Sentinel-2_L2A_False_color |
| 03.06.2022 | Sentinel-2 optical False colour | | 543.1 | 2022-06-03-00_00_2022-06-03-23_59_Sentinel-2_L2A_False_color |
| 27.08.2022 | Sentinel-2 optical False colour | | 569.2 | 2022-08-27-00_00_2022-08-27-23_59_Sentinel-2_L2A_False_color |
| 25.06.2022 | Sentinel-2 optical False colour | X | 575.5 | 2022-06-25-00_00_2022-06-25-23_59_Sentinel-2_L2A_False_color |
| 31.07.2022 | Sentinel-2 optical False colour | | 585.3 | 2022-07-31-00_00_2022-07-31-23_59_Sentinel-2_L2A_False_color |
| 16.07.2022 | Sentinel-2 optical False colour | | 585.5 | 2022-07-16-00_00_2022-07-16-23_59_Sentinel-2_L2A_False_color |
| 28.08.2022 | Sentinel-2 optical False colour | | 588.4 | 2022-08-28-00_00_2022-08-28-23_59_Sentinel-2_L2A_False_color |
| 23.08.2022 | Sentinel-2 optical False colour | X | 600.1 | 2022-08-23-00_00_2022-08-23-23_59_Sentinel-2_L2A_False_color |
| 08.07.2022 | Sentinel-2 optical False colour | | 600.4 | 2022-07-08-00_00_2022-07-08-23_59_Sentinel-2_L2A_False_color |
| 09.07.2022 | Sentinel-2 optical False colour | | 610.7 | 2022-07-09-00_00_2022-07-09-23_59_Sentinel-2_L2A_False_color |