

Supplemental material to the manuscript:

**Seasonal and interannual variability of Columbia Glacier, Alaska (2011-2016):
ice velocity, mass flux, surface elevation and front position**

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Table S1: The acquisition dates of the TerraSAR-X/TanDEM-X image pairs used for deriving surface velocity using SAR offset tracking method.

Master data (MM/DD/YYYY)	Slave data (MM/DD/YYYY)	Time Interval (number of days)
09/07/2009	09/18/2009	11
09/23/2009	10/04/2009	11
06/07/2011	06/18/2011	11
07/10/2011	07/21/2011	11
08/12/2011	08/23/2011	11
09/30/2011	10/11/2011	11
10/11/2011	10/22/2011	11
11/13/2011	11/24/2011	11
11/30/2011	12/22/2011	22
12/11/2011	01/02/2012	22
01/02/2012	02/04/2012	33
01/13/2012	01/24/2012	11
02/15/2012	02/26/2012	11
03/02/2012	03/13/2012	11
03/08/2012	03/19/2012	11
03/30/2012	04/10/2012	11
04/04/2012	04/15/2012	11
05/13/2012	05/24/2012	11
06/09/2012	06/20/2012	11
06/15/2012	06/26/2012	11
07/01/2012	07/12/2012	11
07/07/2012	07/18/2012	11
08/14/2012	08/25/2012	11
09/11/2012	09/22/2012	11
10/03/2012	10/14/2012	11
10/08/2012	10/19/2012	11
11/05/2012	11/16/2012	11
11/10/2012	11/21/2012	11
12/02/2012	12/13/2012	11
12/08/2012	12/19/2012	11
02/12/2013	02/23/2013	11
03/11/2013	03/22/2013	11
03/17/2013	03/28/2013	11
04/02/2013	04/13/2013	11
05/05/2013	05/16/2013	11
05/11/2013	05/22/2013	11
06/13/2013	06/24/2013	11
07/16/2013	07/27/2013	11
07/21/2013	08/01/2013	11
08/12/2013	08/23/2013	11
09/09/2013	09/20/2013	11
10/17/2013	10/28/2013	11
03/20/2014	03/31/2014	11
05/20/2014	05/31/2014	11
06/22/2014	07/03/2014	11
07/19/2014	07/30/2014	11
10/15/2014	10/26/2014	11
11/28/2014	12/09/2014	11
02/08/2015	02/19/2015	11
05/23/2015	06/03/2015	11
09/10/2015	09/21/2015	11
11/04/2015	11/15/2015	11
12/18/2015	12/29/2015	11
02/11/2016	02/22/2016	11
03/04/2016	03/15/2016	11
04/06/2016	04/17/2016	11
05/09/2016	05/20/2016	11

Table S2: The acquisition dates of the bistatic TanDEM-X images used for generating TanDEM-X DEMs and for mapping glacier fronts.

Date (MM/DD/YYYY)	TanDEM-X DEM	Glacier outlines
06/18/2011	Yes	Yes
07/21/2011	Yes	Yes
08/12/2011	Yes	No
08/23/2011	No	Yes
08/28/2011	No	No
09/03/2011	Yes	No
10/11/2011	Yes	Yes
11/13/2011	Yes	Yes
12/11/2011	Yes	Yes
01/02/2012	Yes	Yes
02/04/2012	Yes	Yes
03/08/2012	Yes	Yes
03/13/2012	No	No
03/19/2012	No	No
04/10/2012	Yes	Yes
05/13/2012	Yes	Yes
06/15/2012	No	Yes
07/18/2012	Yes	Yes
08/25/2012	No	Yes
10/14/2012	Yes	Yes
11/16/2012	Yes	Yes
12/13/2012	Yes	Yes
02/12/2013	Yes	Yes
03/17/2013	Yes	Yes
04/02/2013	Yes	Yes
05/16/2013	Yes	Yes
06/13/2013	Yes	Yes
07/16/2013	Yes	Yes
08/23/2013	Yes	Yes
09/14/2013	Yes	Yes
10/17/2013	Yes	Yes
11/30/2013	Yes	Yes
02/10/2014	Yes	Yes
03/20/2014	Yes	Yes
04/17/2014	Yes	Yes
05/31/2014	Yes	Yes
06/22/2014	Yes	Yes
07/03/2014	Yes	Yes
07/30/2014	No	Yes
10/15/2014	No	Yes
11/28/2014	No	Yes
12/09/2014	No	Yes
02/19/2015	No	Yes
05/23/2015	No	Yes
08/08/2015	No	Yes
09/10/2015	No	Yes
11/04/2015	Yes	Yes
12/18/2015	No	Yes
02/11/2016	No	Yes
03/15/2016	No	Yes
04/17/2016	No	Yes
05/09/2016	No	No
05/20/2016	Yes	Yes