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Supplement of

Brief Communication: Newly developing rift in Larsen C Ice Shelf presents significant risk to stability

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Table 1. List of Landsat images used for this study and the data points of rift extension and rift width (relative to Nov. 2010) derived from the images.

Date	Sensor	Width (m)	Extension (m)
2010-11-15	Landsat 7	50	0
2011-03-14	Landsat 7	60	445
2012-01-05	Landsat 7	57	3,060
2012-02-22	Landsat 7	74	6,090
2012-12-22	Landsat 7	85	8,330
2013-03-12	Landsat 7	100	8,320
2013-11-08	Landsat 8	140	8,670
2013-12-17	Landsat 8	168	8,810
2014-01-11	Landsat 8	171	8,920
2014-08-30	Landsat 8	199	28,910
2014-11-02	Landsat 8	204	29,230
2014-12-04	Landsat 8	211	29,290
2014-12-13	Landsat 8	215	29,620
2015-01-30	Landsat 8	222	30,000

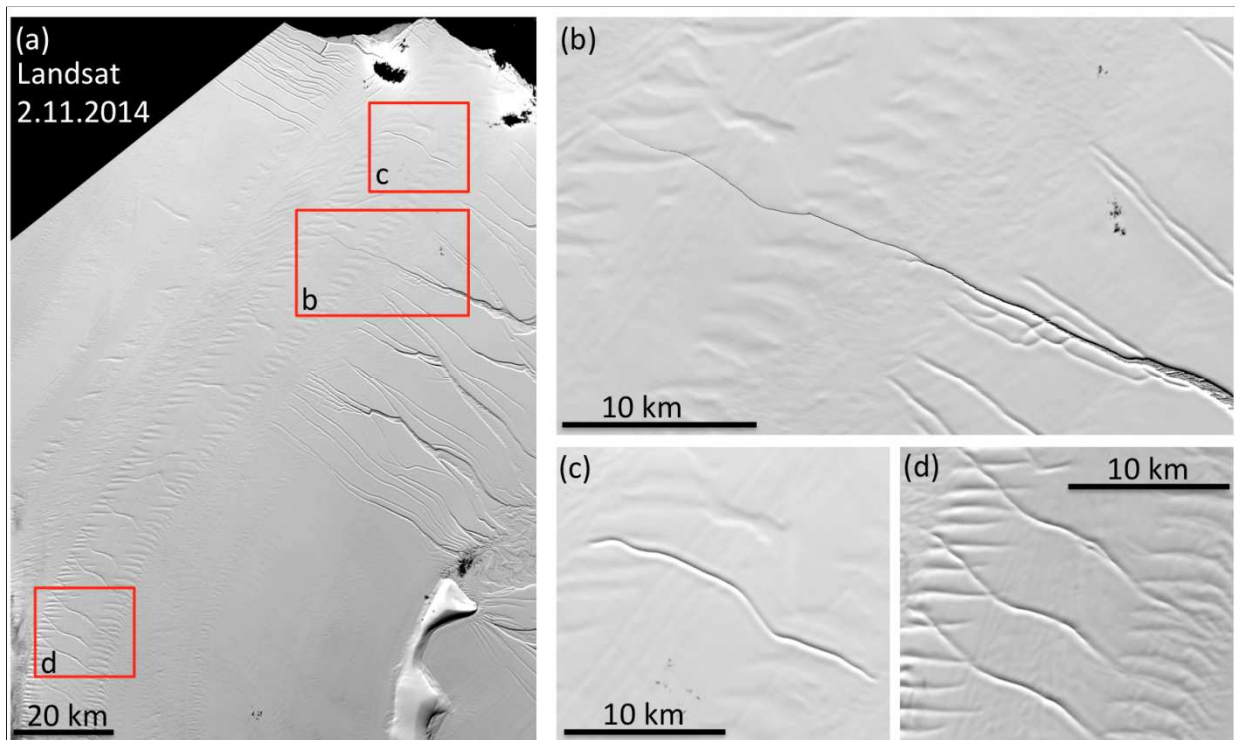


Figure S1: Landsat image from November 2014. (a) Overview over the southern part of the Larsen C Ice shelf. Note that the feature in box c is not aligned to features on the southern (right) side of the suture zone. The red boxes indicate the locations of panels b-d. (b) The new rift is an open fracture, widening towards the south. (c) The feature downstream has a smooth surface and is stalled on both sides. (d) Surface features of basal crevasses originating close to the grounding line. Ground based radar measurements confirmed that they are basal crevasses (Luckman et al., 2012). Note the similarity to the feature shown in (c).