

Supplementary Materials:

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Table 1. Sentinel-1 data used for the Iran database and event analysis.

Sentinel-1 Files	Use
S1A_IW_SLC__1SSV_20161007T025342_20161007T025409_013378_01558A_7701	Database
S1A_IW_SLC__1SSV_20161031T025342_20161031T025409_013728_01607A_6645	Database
S1A_IW_SLC__1SSV_20161124T025342_20161124T025409_014078_016B56_00C4	Database
S1A_IW_SLC__1SSV_20161218T025341_20161218T025408_014428_017659_642A	Database
S1A_IW_SLC__1SSV_20170111T025339_20170111T025406_014778_018110_0B42	Database
S1A_IW_SLC__1SSV_20170204T025339_20170204T025405_015128_018BD6_158C	Database
S1A_IW_SLC__1SDV_20170216T025338_20170216T025405_015303_019160_4EFF	Database
S1A_IW_SLC__1SDV_20170228T025338_20170228T025405_015478_0196B5_160B	Database
S1A_IW_SLC__1SDV_20170312T025338_20170312T025405_015653_019BFE_38A7	Database
S1A_IW_SLC__1SDV_20170324T025338_20170324T025405_015828_01A130_DE28	Database
S1A_IW_SLC__1SDV_20170405T025339_20170405T025406_016003_01A662_52EE	Database
S1A_IW_SLC__1SDV_20170417T025340_20170417T025406_016178_01ABC0_B7F7	Database
S1A_IW_SLC__1SDV_20170429T025340_20170429T025407_016353_01B10E_E617	Database
S1A_IW_SLC__1SDV_20170511T025341_20170511T025408_016528_01B656_9927	Database
S1A_IW_SLC__1SDV_20170523T025341_20170523T025408_016703_01BBC0_8CAB	Database
S1A_IW_SLC__1SDV_20170604T025342_20170604T025409_016878_01C12A_1C7F	Database
S1A_IW_SLC__1SDV_20170616T025343_20170616T025410_017053_01C68F_BCA0	Database
S1A_IW_SLC__1SDV_20170628T025343_20170628T025410_017228_01CBDF_5708	Database
S1A_IW_SLC__1SDV_20170710T025344_20170710T025411_017403_01D127_500B	Database
S1A_IW_SLC__1SDV_20170722T025345_20170722T025412_017578_01D679_5C45	Database
S1A_IW_SLC__1SDV_20170803T025345_20170803T025412_017753_01DBD1_3197	Database
S1A_IW_SLC__1SDV_20170815T025346_20170815T025413_017928_01E126_CD88	Database
S1A_IW_SLC__1SDV_20170827T025347_20170827T025414_018103_01E671_1B41	Database
S1A_IW_SLC__1SDV_20170908T025347_20170908T025414_018278_01EBC8_E91A	Database
S1A_IW_SLC__1SDV_20170920T025348_20170920T025415_018453_01F12A_6D29	Database
S1A_IW_SLC__1SDV_20171002T025348_20171002T025415_018628_01F68E_E67A	Database
S1A_IW_SLC__1SDV_20171014T025348_20171014T025415_018803_01FBDE_ABA1	Database
S1A_IW_SLC__1SDV_20171026T025348_20171026T025415_018978_02012E_ED5B	Database
S1A_IW_SLC__1SDV_20171107T025348_20171107T025415_019153_02069A_D2C6	Pre-Event
S1A_IW_SLC__1SDV_20171119T025348_20171119T025415_019328_020C14_14AF	Event

Table 2. Sentinel-1 data used for the Quebrada del Toro database and event detection.

Sentinel-1 Files	Use
S1A_IW_SLC__1SDV_20160129T094422_20160129T094450_009707_00E2BC_18C4	Database
S1A_IW_SLC__1SDV_20160129T094422_20160129T094450_009707_00E2BC_6E70	Database
S1A_IW_SLC__1SDV_20160129T094448_20160129T094515_009707_00E2BC_130B	Database
S1A_IW_SLC__1SDV_20160129T094448_20160129T094515_009707_00E2BC_3F2E	Database
S1A_IW_SLC__1SDV_20160129T094513_20160129T094540_009707_00E2BC_10B6	Database
S1A_IW_SLC__1SDV_20160129T094513_20160129T094540_009707_00E2BC_ACC4	Database
S1A_IW_SLC__1SDV_20160901T094433_20160901T094501_012857_0144C4_CEEE	Database
S1A_IW_SLC__1SDV_20160901T094459_20160901T094526_012857_0144C4_C8B5	Database
S1A_IW_SLC__1SDV_20160901T094524_20160901T094551_012857_0144C4_17DD	Database
S1A_IW_SLC__1SSV_20141018T094438_20141018T094505_002882_003436_3039	Database
S1A_IW_SLC__1SSV_20141018T094503_20141018T094531_002882_003436_78FE	Database

S1A_IW_SLC__1SSV_20141018T094529_20141018T094556_002882_003436_4D70	Database
S1A_IW_SLC__1SSV_20141111T094438_20141111T094505_003232_003BB7_BEB5	Database
S1A_IW_SLC__1SSV_20141111T094503_20141111T094531_003232_003BB7_EB75	Database
S1A_IW_SLC__1SSV_20141111T094529_20141111T094556_003232_003BB7_81A7	Database
S1A_IW_SLC__1SSV_20141205T094437_20141205T094504_003582_0043B0_A88E	Database
S1A_IW_SLC__1SSV_20141205T094502_20141205T094530_003582_0043B0_AA7D	Database
S1A_IW_SLC__1SSV_20141205T094528_20141205T094555_003582_0043B0_B7BB	Database
S1A_IW_SLC__1SSV_20141229T094437_20141229T094504_003932_004B9F_1577	Database
S1A_IW_SLC__1SSV_20141229T094501_20141229T094529_003932_004B9F_41BE	Database
S1A_IW_SLC__1SSV_20141229T094527_20141229T094554_003932_004B9F_1D7B	Database
S1A_IW_SLC__1SSV_20150122T094436_20150122T094503_004282_005364_0A87	Database
S1A_IW_SLC__1SSV_20150122T094501_20150122T094529_004282_005364_C6FF	Database
S1A_IW_SLC__1SSV_20150122T094526_20150122T094553_004282_005364_3524	Database
S1A_IW_SLC__1SSV_20150215T094435_20150215T094502_004632_005B63_0D5B	Database
S1A_IW_SLC__1SSV_20150215T094500_20150215T094527_004632_005B63_5F74	Database
S1A_IW_SLC__1SSV_20150215T094525_20150215T094553_004632_005B63_21F3	Database
S1A_IW_SLC__1SSV_20150227T094435_20150227T094502_004807_005FA1_0DDD	Database
S1A_IW_SLC__1SSV_20150227T094500_20150227T094528_004807_005FA1_5FF1	Database
S1A_IW_SLC__1SSV_20150227T094526_20150227T094553_004807_005FA1_F8DF	Database
S1A_IW_SLC__1SSV_20150323T094436_20150323T094503_005157_006807_385C	Database
S1A_IW_SLC__1SSV_20150323T094501_20150323T094528_005157_006807_BFC6	Database
S1A_IW_SLC__1SSV_20150323T094525_20150323T094553_005157_006807_A8B2	Database
S1A_IW_SLC__1SSV_20150416T094436_20150416T094503_005507_00708A_ED30	Database
S1A_IW_SLC__1SSV_20150416T094501_20150416T094528_005507_00708A_A953	Database
S1A_IW_SLC__1SSV_20150416T094526_20150416T094554_005507_00708A_0FB1	Database
S1A_IW_SLC__1SSV_20150603T094439_20150603T094506_006207_008195_7352	Database
S1A_IW_SLC__1SSV_20150603T094504_20150603T094531_006207_008195_EE7F	Database
S1A_IW_SLC__1SSV_20150603T094529_20150603T094557_006207_008195_C41E	Database
S1A_IW_SLC__1SSV_20150627T094422_20150627T094449_006557_008B9B_49B2	Database
S1A_IW_SLC__1SSV_20150627T094447_20150627T094514_006557_008B9B_5E88	Database
S1A_IW_SLC__1SSV_20150627T094511_20150627T094538_006557_008B9B_BF07	Database
S1A_IW_SLC__1SSV_20150627T094536_20150627T094604_006557_008B9B_9B2E	Database
S1A_IW_SLC__1SSV_20150721T094422_20150721T094449_006907_00955F_3343	Database
S1A_IW_SLC__1SSV_20150721T094447_20150721T094514_006907_00955F_D2BA	Database
S1A_IW_SLC__1SSV_20150721T094512_20150721T094539_006907_00955F_B61A	Database
S1A_IW_SLC__1SSV_20150721T094537_20150721T094604_006907_00955F_D8A8	Database
S1A_IW_SLC__1SSV_20150814T094423_20150814T094450_007257_009F0B_B557	Database
S1A_IW_SLC__1SSV_20150814T094448_20150814T094515_007257_009F0B_F14E	Database
S1A_IW_SLC__1SSV_20150814T094513_20150814T094540_007257_009F0B_4FCC	Database
S1A_IW_SLC__1SSV_20150814T094538_20150814T094606_007257_009F0B_9C36	Database
S1A_IW_SLC__1SSV_20150907T094424_20150907T094451_007607_00A896_DA7B	Database
S1A_IW_SLC__1SSV_20150907T094449_20150907T094516_007607_00A896_BC89	Database
S1A_IW_SLC__1SSV_20150907T094514_20150907T094541_007607_00A896_3532	Database
S1A_IW_SLC__1SSV_20150907T094539_20150907T094607_007607_00A896_6B1E	Database
S1A_IW_SLC__1SSV_20151001T094425_20151001T094452_007957_00B1F7_7A80	Database
S1A_IW_SLC__1SSV_20151001T094450_20151001T094517_007957_00B1F7_FA15	Database
S1A_IW_SLC__1SSV_20151001T094515_20151001T094542_007957_00B1F7_3428	Database
S1A_IW_SLC__1SSV_20151001T094539_20151001T094607_007957_00B1F7_D39E	Database
S1A_IW_SLC__1SSV_20151212T094443_20151212T094510_009007_00CEA7_7ECE	Database
S1A_IW_SLC__1SSV_20151212T094508_20151212T094536_009007_00CEA7_91F3	Database
S1A_IW_SLC__1SSV_20151212T094534_20151212T094601_009007_00CEA7_AEFF	Database
S1A_IW_SLC__1SSV_20160105T094442_20160105T094509_009357_00D890_BDA1	Database

S1A_IW_SLC__1SSV_20160105T094507_20160105T094535_009357_00D890_0076	Database
S1A_IW_SLC__1SSV_20160105T094533_20160105T094600_009357_00D890_0939	Database
S1A_IW_SLC__1SSV_20160317T094442_20160317T094509_010407_00F6D3_1BD6	Database
S1A_IW_SLC__1SSV_20160317T094507_20160317T094535_010407_00F6D3_0CCF	Database
S1A_IW_SLC__1SSV_20160317T094532_20160317T094559_010407_00F6D3_F54F	Database
S1A_IW_SLC__1SSV_20160410T094443_20160410T094510_010757_010106_A4A3	Database
S1A_IW_SLC__1SSV_20160410T094507_20160410T094535_010757_010106_C0D6	Database
S1A_IW_SLC__1SSV_20160410T094533_20160410T094600_010757_010106_CAA1	Database
S1A_IW_SLC__1SSV_20160504T094444_20160504T094510_011107_010BD1_D675	Database
S1A_IW_SLC__1SSV_20160504T094508_20160504T094536_011107_010BD1_7BB4	Database
S1A_IW_SLC__1SSV_20160504T094534_20160504T094601_011107_010BD1_71D5	Database
S1A_IW_SLC__1SSV_20160528T094448_20160528T094515_011457_011735_5AC9	Database
S1A_IW_SLC__1SSV_20160528T094513_20160528T094539_011457_011735_AB7C	Database
S1A_IW_SLC__1SSV_20160528T094537_20160528T094605_011457_011735_221F	Database
S1A_IW_SLC__1SSV_20160715T094450_20160715T094517_012157_012D83_3644	Database
S1A_IW_SLC__1SSV_20160715T094450_20160715T094517_012157_012D83_C727	Database
S1A_IW_SLC__1SSV_20160715T094515_20160715T094542_012157_012D83_016C	Database
S1A_IW_SLC__1SSV_20160715T094515_20160715T094542_012157_012D83_47D6	Database
S1A_IW_SLC__1SSV_20160715T094540_20160715T094608_012157_012D83_72E6	Database
S1A_IW_SLC__1SSV_20160715T094541_20160715T094608_012157_012D83_09E1	Database
S1A_IW_SLC__1SSV_20160808T094452_20160808T094519_012507_013910_D86D	Database
S1A_IW_SLC__1SSV_20160808T094517_20160808T094545_012507_013910_19FC	Database
S1A_IW_SLC__1SSV_20160808T094542_20160808T094609_012507_013910_E050	Database
S1B_IW_SLC__1SSV_20161001T094413_20161001T094440_002311_003E83_80D8	Database
S1B_IW_SLC__1SSV_20161001T094438_20161001T094505_002311_003E83_614B	Database
S1B_IW_SLC__1SSV_20161001T094502_20161001T094529_002311_003E83_D6D4	Database
S1B_IW_SLC__1SSV_20161025T094413_20161025T094440_002661_0047F8_49DF	Database
S1B_IW_SLC__1SSV_20161025T094438_20161025T094505_002661_0047F8_3A02	Database
S1B_IW_SLC__1SSV_20161025T094502_20161025T094529_002661_0047F8_B125	Database
S1B_IW_SLC__1SSV_20161118T094412_20161118T094439_003011_0051E3_414C	Database
S1B_IW_SLC__1SSV_20161118T094437_20161118T094504_003011_0051E3_ED6D	Database
S1B_IW_SLC__1SSV_20161118T094502_20161118T094529_003011_0051E3_938A	Database
S1B_IW_SLC__1SDV_20161212T094412_20161212T094439_003361_005BD5_065C	Database
S1B_IW_SLC__1SDV_20161212T094437_20161212T094504_003361_005BD5_22BA	Database
S1B_IW_SLC__1SDV_20161212T094501_20161212T094528_003361_005BD5_CDC7	Database
S1B_IW_SLC__1SDV_20170105T094410_20170105T094437_003711_006601_AAAC	Detection
S1B_IW_SLC__1SDV_20170105T094435_20170105T094502_003711_006601_4CA3	Detection
S1B_IW_SLC__1SDV_20170105T094459_20170105T094526_003711_006601_29C4	Detection
S1B_IW_SLC__1SDV_20170129T094409_20170129T094436_004061_007055_C743	Detection
S1B_IW_SLC__1SDV_20170129T094434_20170129T094501_004061_007055_F718	Detection
S1B_IW_SLC__1SDV_20170129T094459_20170129T094526_004061_007055_97E8	Detection
S1B_IW_SLC__1SDV_20170222T094409_20170222T094436_004411_007ACF_1AFA	Detection
S1B_IW_SLC__1SDV_20170222T094434_20170222T094501_004411_007ACF_00A7	Detection
S1B_IW_SLC__1SDV_20170222T094459_20170222T094526_004411_007ACF_9A7D	Detection
S1B_IW_SLC__1SDV_20170306T094409_20170306T094436_004586_007FE9_15E6	Detection
S1B_IW_SLC__1SDV_20170306T094434_20170306T094501_004586_007FE9_E3A6	Detection
S1B_IW_SLC__1SDV_20170306T094458_20170306T094525_004586_007FE9_927A	Detection
S1B_IW_SLC__1SDV_20170318T094409_20170318T094436_004761_008514_6EAB	Detection
S1B_IW_SLC__1SDV_20170318T094434_20170318T094501_004761_008514_3E6B	Detection
S1B_IW_SLC__1SDV_20170318T094459_20170318T094526_004761_008514_BE4A	Detection
S1B_IW_SLC__1SDV_20170330T094409_20170330T094436_004936_008A16_182B	Detection
S1B_IW_SLC__1SDV_20170330T094434_20170330T094501_004936_008A16_372D	Detection

S1B_IW_SLC__1SDV_20170330T094459_20170330T094526_004936_008A16_AA67	Detection
S1B_IW_SLC__1SDV_20170411T094410_20170411T094437_005111_008F1E_D8BE	Detection
S1B_IW_SLC__1SDV_20170411T094435_20170411T094502_005111_008F1E_7E4A	Detection
S1B_IW_SLC__1SDV_20170411T094459_20170411T094526_005111_008F1E_2E1D	Detection
S1B_IW_SLC__1SDV_20170423T094410_20170423T094437_005286_00942F_778F	Detection
S1B_IW_SLC__1SDV_20170423T094435_20170423T094502_005286_00942F_3DD5	Detection
S1B_IW_SLC__1SDV_20170423T094500_20170423T094527_005286_00942F_0EE4	Detection
S1B_IW_SLC__1SDV_20170505T094411_20170505T094438_005461_00992C_B4C1	Detection
S1B_IW_SLC__1SDV_20170505T094436_20170505T094503_005461_00992C_E7CB	Detection
S1B_IW_SLC__1SDV_20170505T094501_20170505T094528_005461_00992C_3955	Detection
S1B_IW_SLC__1SDV_20170517T094412_20170517T094439_005636_009DF5_3B5D	Detection
S1B_IW_SLC__1SDV_20170517T094436_20170517T094503_005636_009DF5_EE0B	Detection
S1B_IW_SLC__1SDV_20170517T094501_20170517T094528_005636_009DF5_3831	Detection
S1B_IW_SLC__1SDV_20170529T094412_20170529T094439_005811_00A302_43E2	Detection
S1B_IW_SLC__1SDV_20170529T094437_20170529T094504_005811_00A302_5037	Detection
S1B_IW_SLC__1SDV_20170529T094502_20170529T094529_005811_00A302_64DF	Detection
S1B_IW_SLC__1SDV_20170610T094413_20170610T094440_005986_00A819_1F82	Detection
S1B_IW_SLC__1SDV_20170610T094438_20170610T094505_005986_00A819_55C0	Detection
S1B_IW_SLC__1SDV_20170610T094503_20170610T094530_005986_00A819_624F	Detection
S1B_IW_SLC__1SDV_20170622T094414_20170622T094441_006161_00AD34_9BB9	Detection
S1B_IW_SLC__1SDV_20170622T094438_20170622T094505_006161_00AD34_20D5	Detection
S1B_IW_SLC__1SDV_20170622T094503_20170622T094530_006161_00AD34_D860	Detection
S1B_IW_SLC__1SDV_20170704T094414_20170704T094441_006336_00B23B_00E6	Detection
S1B_IW_SLC__1SDV_20170704T094439_20170704T094506_006336_00B23B_81C1	Detection
S1B_IW_SLC__1SDV_20170704T094504_20170704T094531_006336_00B23B_DC1A	Detection
S1B_IW_SLC__1SDV_20170716T094415_20170716T094442_006511_00B734_473F	Detection
S1B_IW_SLC__1SDV_20170716T094440_20170716T094507_006511_00B734_14EC	Detection
S1B_IW_SLC__1SDV_20170716T094505_20170716T094532_006511_00B734_FACC	Detection
S1B_IW_SLC__1SDV_20170728T094416_20170728T094443_006686_00BC2F_76C9	Detection
S1B_IW_SLC__1SDV_20170728T094441_20170728T094508_006686_00BC2F_392D	Detection
S1B_IW_SLC__1SDV_20170728T094505_20170728T094532_006686_00BC2F_585B	Detection
S1B_IW_SLC__1SDV_20170809T094416_20170809T094443_006861_00C140_0663	Detection
S1B_IW_SLC__1SDV_20170809T094441_20170809T094508_006861_00C140_41AA	Detection
S1B_IW_SLC__1SDV_20170809T094506_20170809T094533_006861_00C140_1E39	Detection
S1B_IW_SLC__1SDV_20170821T094417_20170821T094444_007036_00C657_2E3C	Detection
S1B_IW_SLC__1SDV_20170821T094442_20170821T094509_007036_00C657_EE99	Detection
S1B_IW_SLC__1SDV_20170821T094507_20170821T094534_007036_00C657_4AB0	Detection
S1B_IW_SLC__1SDV_20170902T094417_20170902T094444_007211_00CB68_1AE7	Detection
S1B_IW_SLC__1SDV_20170902T094442_20170902T094509_007211_00CB68_B41B	Detection
S1B_IW_SLC__1SDV_20170902T094507_20170902T094534_007211_00CB68_80C9	Detection
S1B_IW_SLC__1SDV_20170914T094418_20170914T094445_007386_00D08C_B8B9	Detection
S1B_IW_SLC__1SDV_20170914T094443_20170914T094510_007386_00D08C_E1D3	Detection
S1B_IW_SLC__1SDV_20170914T094508_20170914T094535_007386_00D08C_A1C8	Detection
S1B_IW_SLC__1SDV_20170926T094418_20170926T094445_007561_00D598_DBC6	Detection
S1B_IW_SLC__1SDV_20170926T094443_20170926T094510_007561_00D598_6F25	Detection
S1B_IW_SLC__1SDV_20170926T094508_20170926T094535_007561_00D598_410E	Detection
S1B_IW_SLC__1SDV_20171008T094419_20171008T094446_007736_00DA9E_CAFE	Detection
S1B_IW_SLC__1SDV_20171008T094443_20171008T094510_007736_00DA9E_D658	Detection
S1B_IW_SLC__1SDV_20171008T094508_20171008T094535_007736_00DA9E_13F8	Detection
S1B_IW_SLC__1SDV_20171020T094419_20171020T094446_007911_00DF97_7714	Detection
S1B_IW_SLC__1SDV_20171020T094444_20171020T094511_007911_00DF97_DD1B	Detection
S1B_IW_SLC__1SDV_20171020T094508_20171020T094535_007911_00DF97_3116	Detection

S1B_IW_SLC__1SDV_20171101T094419_20171101T094446_008086_00E49F_BF2A	Detection
S1B_IW_SLC__1SDV_20171101T094444_20171101T094511_008086_00E49F_6E5B	Detection
S1B_IW_SLC__1SDV_20171101T094508_20171101T094535_008086_00E49F_C305	Detection
S1B_IW_SLC__1SDV_20171113T094418_20171113T094445_008261_00E9CE_FEDF	Detection
S1B_IW_SLC__1SDV_20171113T094443_20171113T094510_008261_00E9CE_BE74	Detection
S1B_IW_SLC__1SDV_20171113T094508_20171113T094535_008261_00E9CE_9E7A	Detection
S1B_IW_SLC__1SDV_20171125T094418_20171125T094445_008436_00EF1F_A2A3	Detection
S1B_IW_SLC__1SDV_20171125T094443_20171125T094510_008436_00EF1F_8205	Detection
S1B_IW_SLC__1SDV_20171125T094508_20171125T094535_008436_00EF1F_8235	Detection
S1B_IW_SLC__1SDV_20171207T094418_20171207T094445_008611_00F4AE_5011	Detection
S1B_IW_SLC__1SDV_20171207T094443_20171207T094510_008611_00F4AE_78FA	Detection
S1B_IW_SLC__1SDV_20171207T094507_20171207T094534_008611_00F4AE_8BC0	Detection

Table S1: Sentinel-1 data used for the Iran database and event analysis, Table S2: Sentinel-1 data used for the Quebrada del Toro database and event detection.