

## Supplemental Information for SBP-BRIMS Submission

### Fine-Scale Prediction of People's Home Location using Social Media Footprints

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#### Data descriptions for Fig.3

Days	Start date	End Date	Total footprints used	Number of training/test instances generated	Number of users represented
7	2014-05-16	2014-05-23	26,132	2,886	383
14	2014-05-16	2014-05-30	56,762	5,589	470
21	2014-05-16	2014-06-06	90,422	8,681	535
30	2014-05-16	2014-06-15	128,322	11,815	681
90	2014-05-16	2014-08-14	419,950	31,669	850
180	2014-05-16	2014-11-12	759,163	53,795	1058
270	2014-05-16	2015-02-10	1,041,359	68,805	1,195

#### Data descriptions for Fig.4

Days	Start date	End Date	Total footprints used	Number of training/test instances generated	Number of users represented
7	2014-06-30	2014-07-07	24,440	3,095	502
	2014-08-14	2014-08-21	35,669	3,997	542
	2014-09-28	2014-10-05	24,439	3,104	436
	2014-11-12	2014-11-19	21,885	3,049	449
	2014-12-27	2015-01-03	21,140	2,368	437
30	2014-06-30	2014-07-30	135,373	12,768	706
	2014-08-14	2014-09-13	135,216	12,664	724
	2014-09-28	2014-10-28	102,935	10,077	616
	2014-11-12	2014-12-12	92,284	9,239	639
	2014-12-27	2015-01-26	97,417	8,710	658
90	2014-08-04	2014-11-02	358,941	28,317	901
	2014-10-23	2015-01-21	285,871	22,878	861
	2015-01-11	2015-04-11	236,110	19,736	838

#### Group descriptions for section 4.2

Condition	Number of users ( $G_n$ )	Condition	Number of users ( $G_r$ )
$0 \leq G_{n1} < 75$	316	$0 \leq G_{r1} < 0.6$	321
$75 \leq G_{n2} < 225$	331	$0.6 \leq G_{r2} < 1.4$	330
$225 \leq G_{n3} < 475$	298	$1.4 \leq G_{r3} < 2.75$	301
$475 \leq G_{n4}$	323	$2.75 \leq G_{r4}$	316