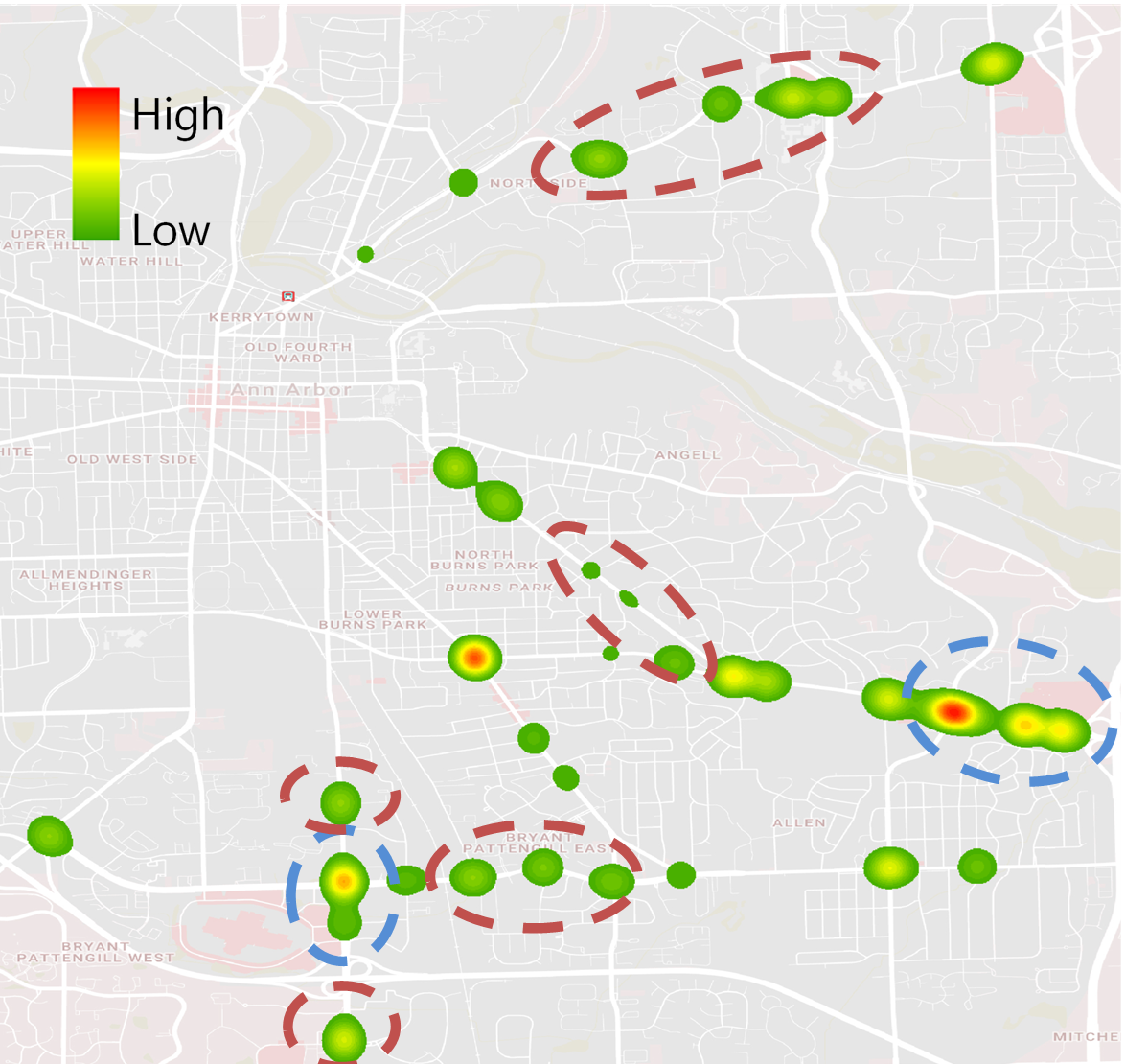
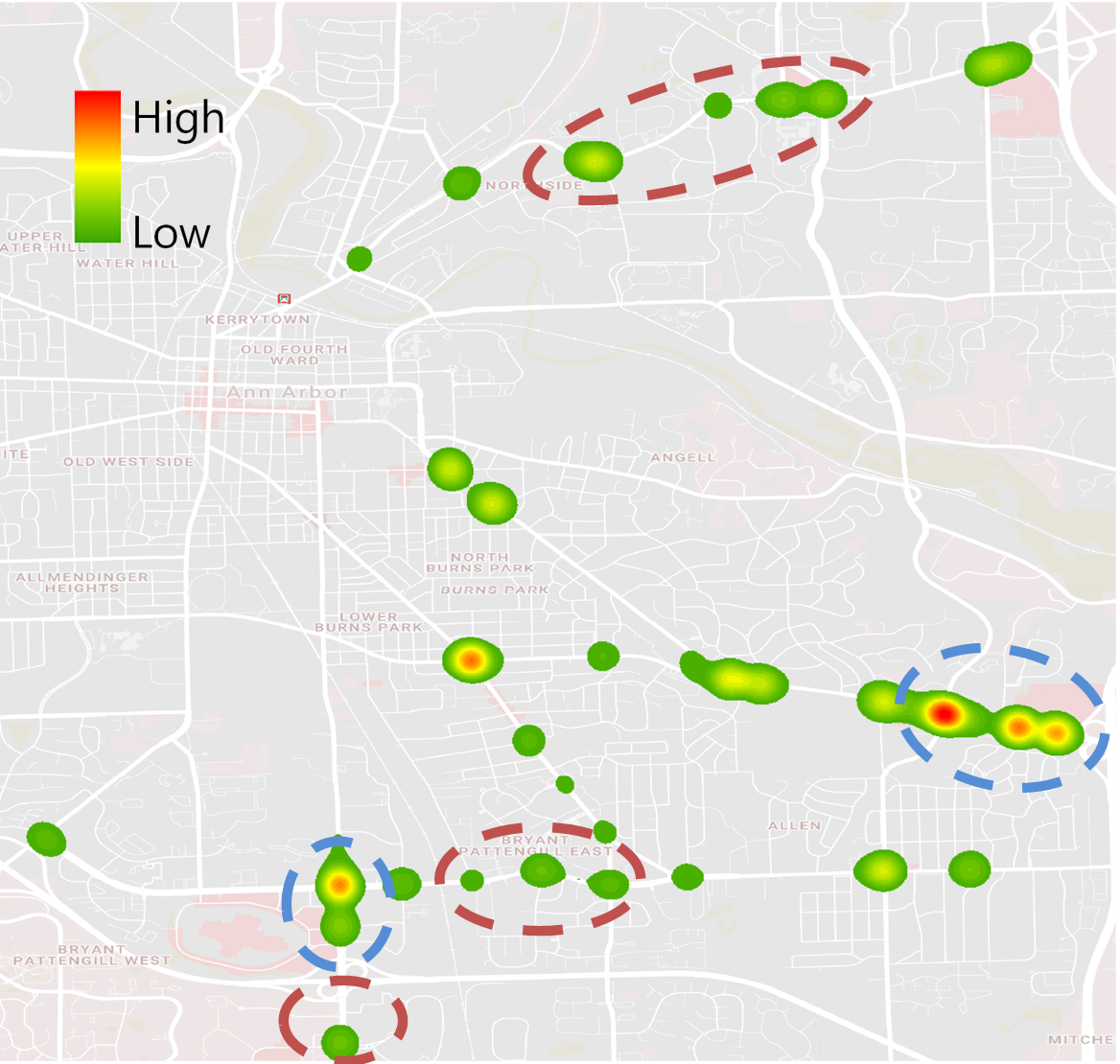
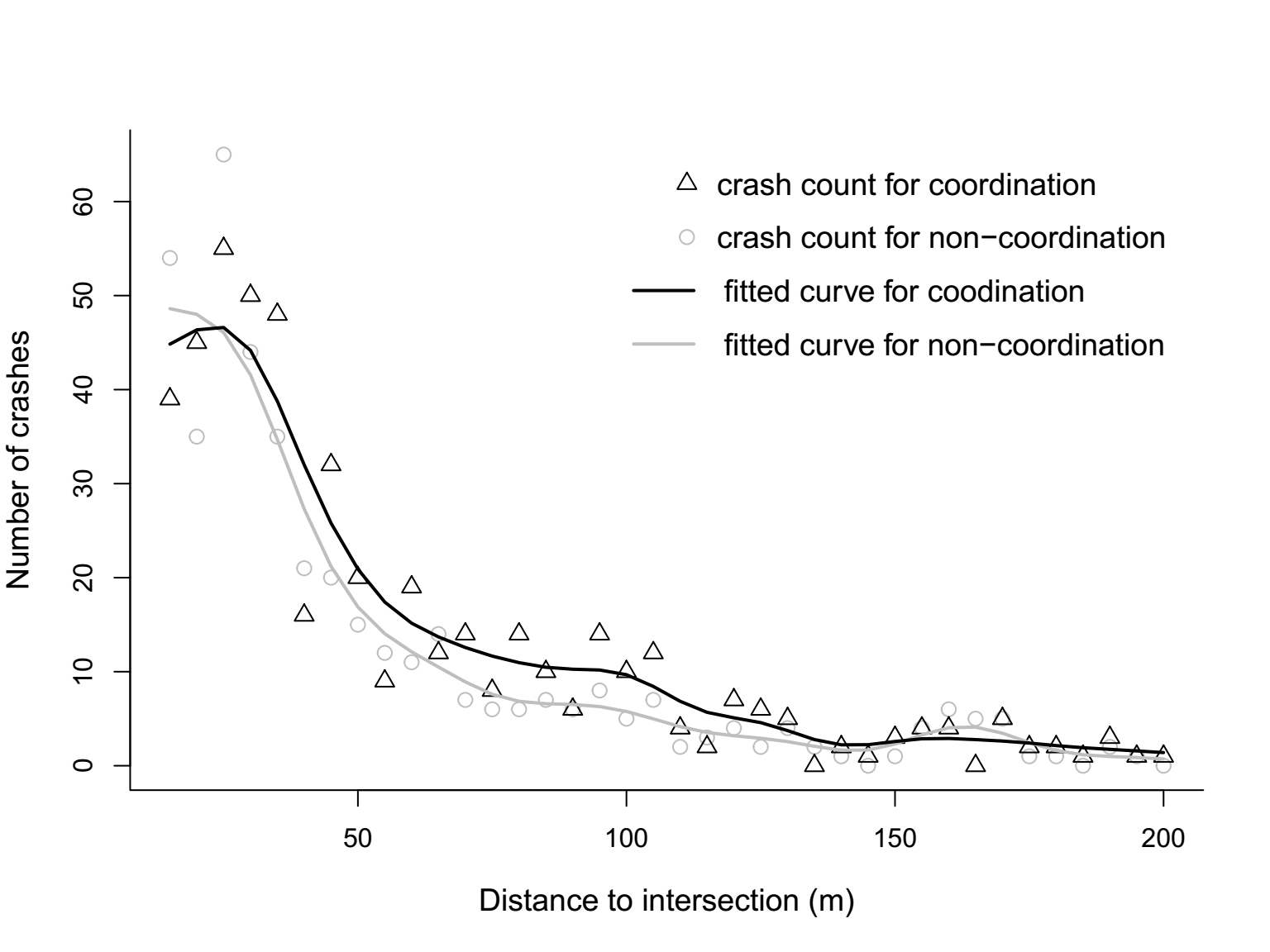
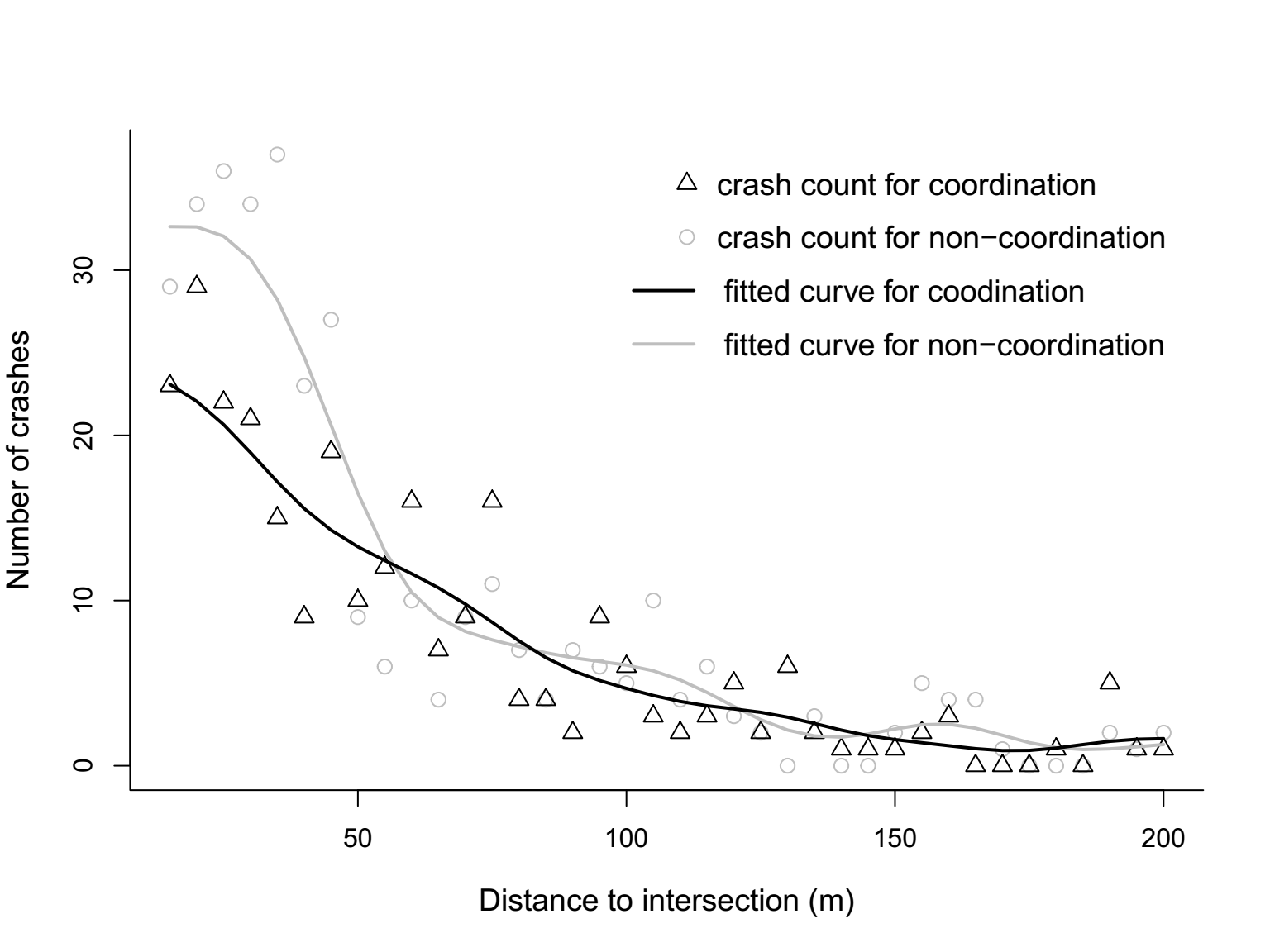
Table A1 Descriptive statistics of crash data

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Disaggregation | Before coordination | |  | After coordination | |
| N | % |  | N | % |
| Time of day |  |  |  |  |  |
| Peak hours | 211 | 27.4 |  | 218 | 28.8 |
| Non-peak hours | 558 | 72.6 |  | 540 | 71.2 |
| Crash type |  |  |  |  |  |
| Rear-end | 380 | 49.4 |  | 423 | 55.8 |
| Angle | 165 | 21.5 |  | 174 | 23.0 |
| Side-swipe | 79 | 10.3 |  | 93 | 12.3 |
| Head on | 49 | 6.4 |  | 38 | 5.0 |
| Miscellaneous Multiple Vehicle | 41 | 5.3 |  | 9 | 1.2 |
| Others | 55 | 7.2 |  | 21 | 2.8 |
| Speed limit |  |  |  |  |  |
| ≥40 mi/h | 347 | 45.1 |  | 272 | 35.9 |
| <40 mi/h | 422 | 54.9 |  | 486 | 64.1 |
| Severity |  |  |  |  |  |
| Incapacitating injury | 1 | 0.1 |  | 3 | 0.4 |
| Non-incapacitating injury | 24 | 3.1 |  | 20 | 2.6 |
| Possible injury | 132 | 17.2 |  | 133 | 17.5 |
| Property damage only | 612 | 79.6 |  | 602 | 79.4 |
| Total | 769 | 100.0 |  | 758 | 100.0 |



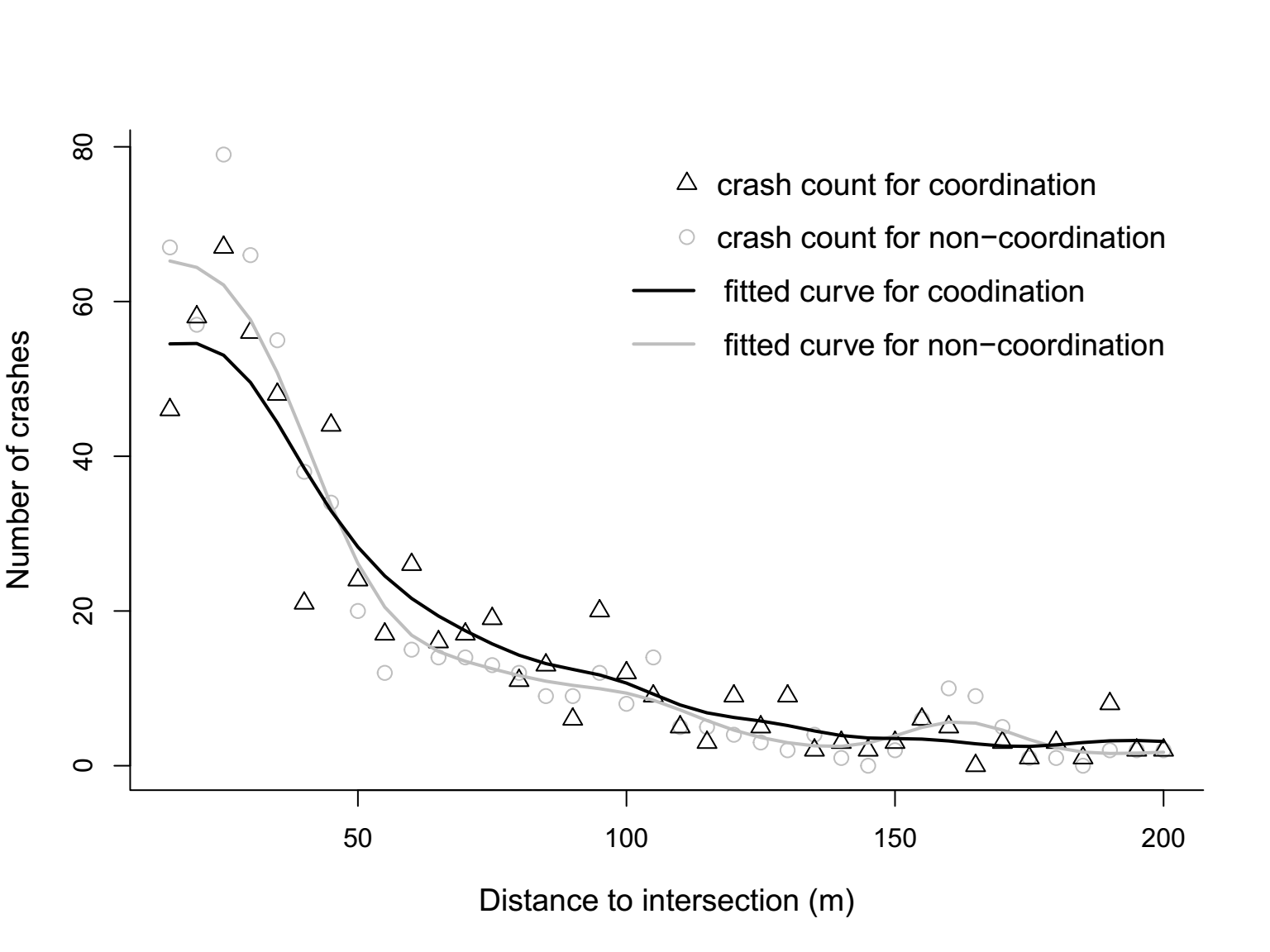
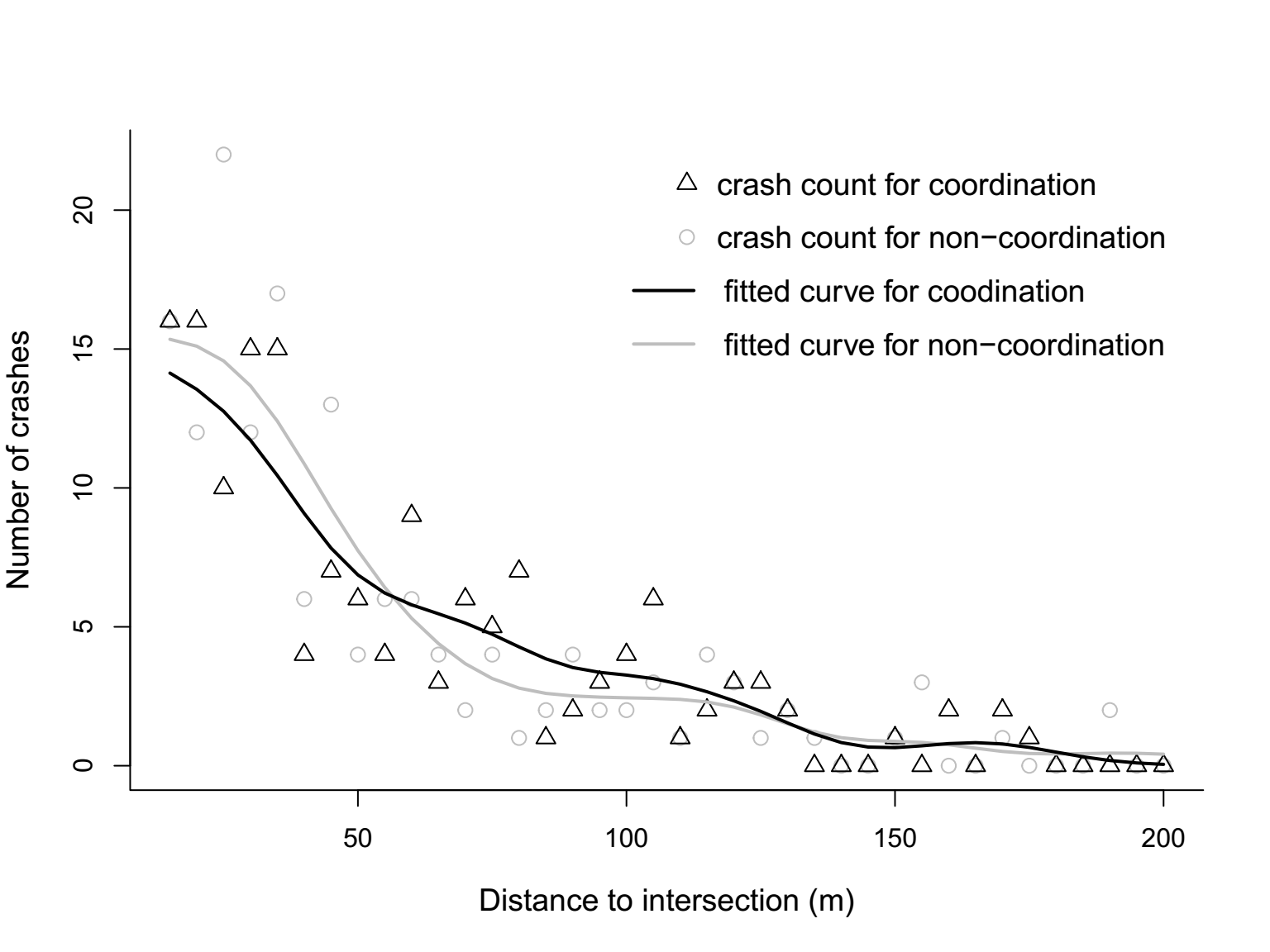
(a) before signal coordination (b) after signal coordination

**Fig. A1** Crash distribution on the heat map



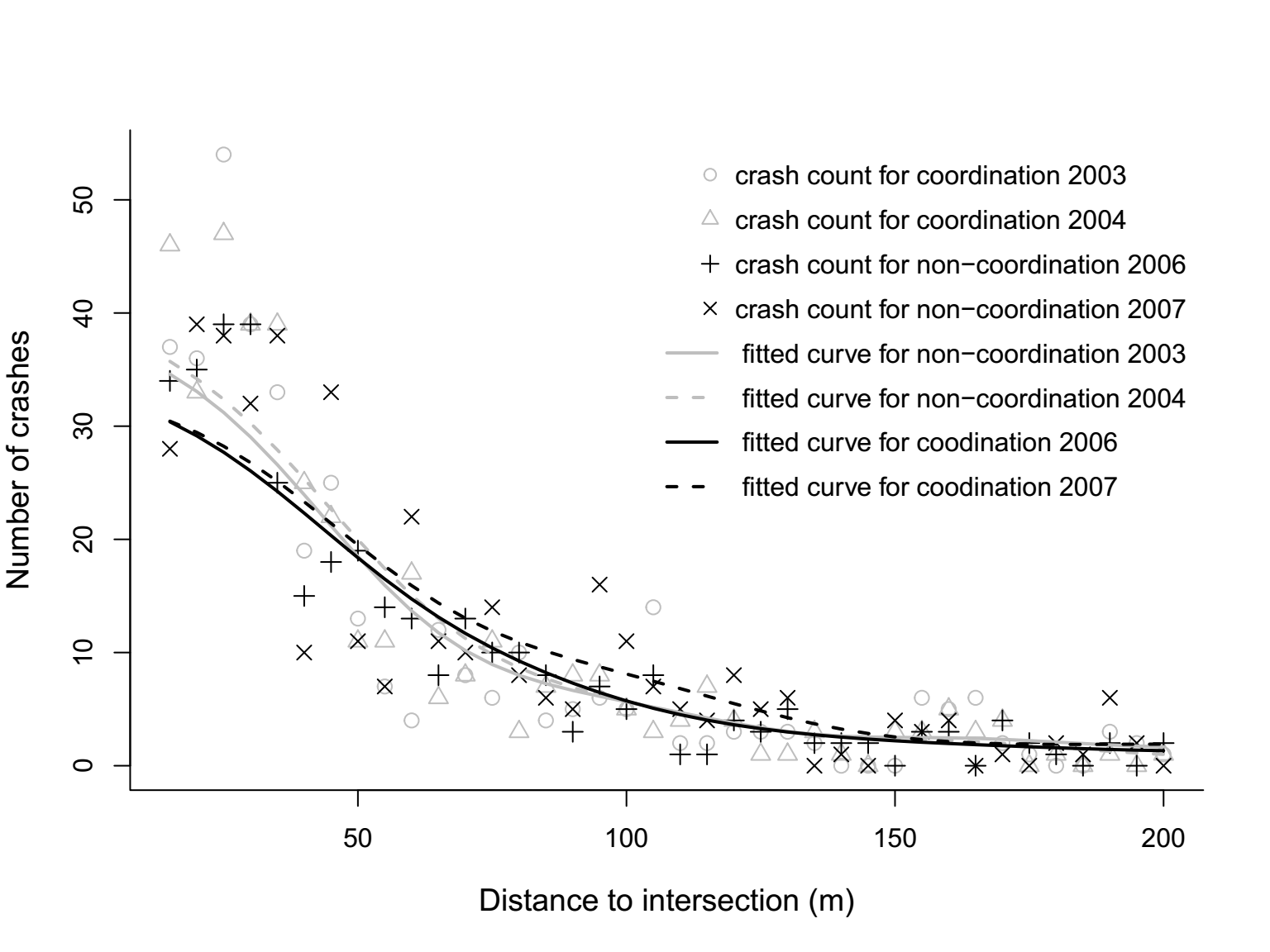
(a) ≥40 mi/h (b) <40 mi/h

**Fig. A2** Kernel regression disaggregated by speed limit

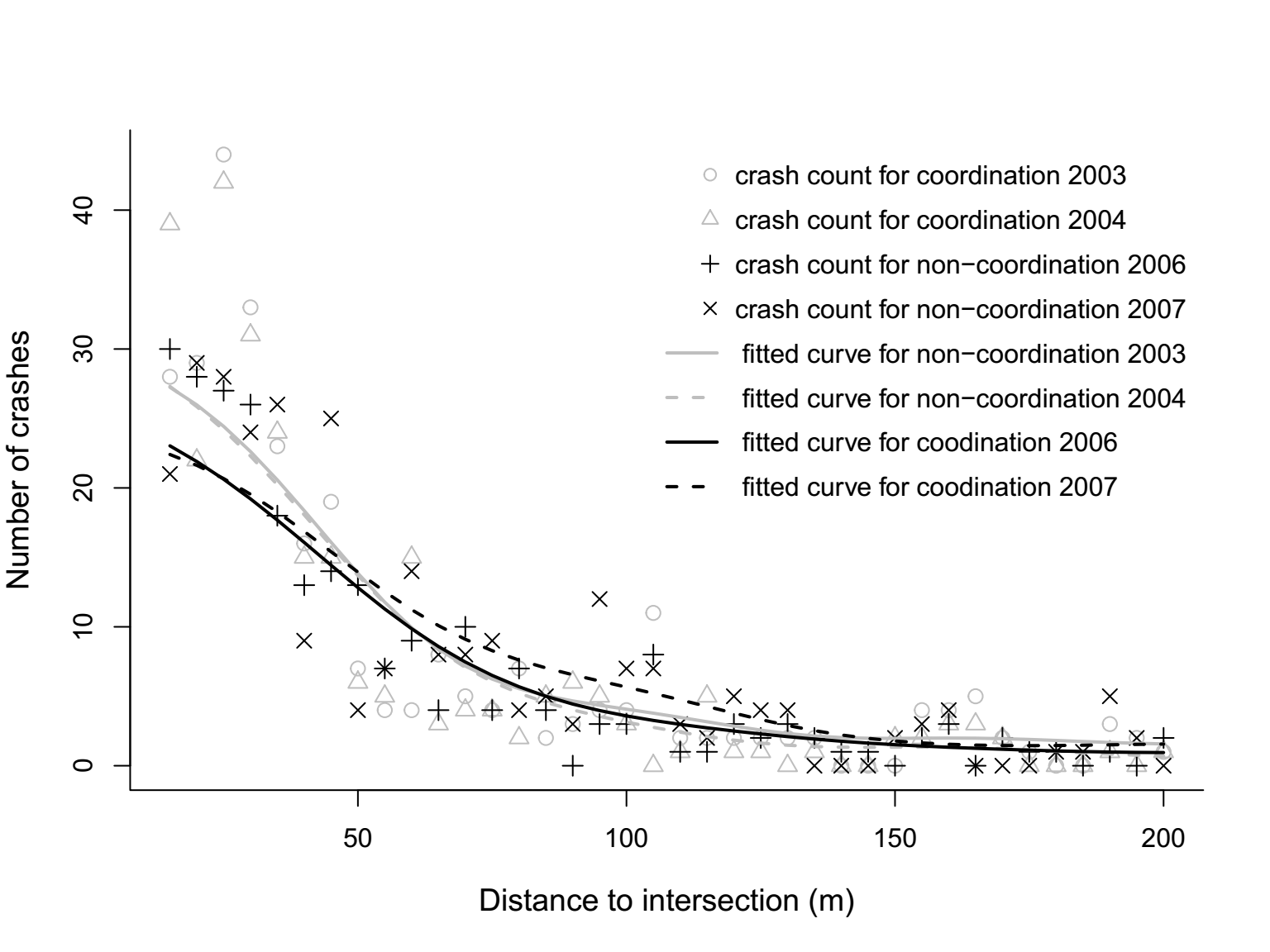
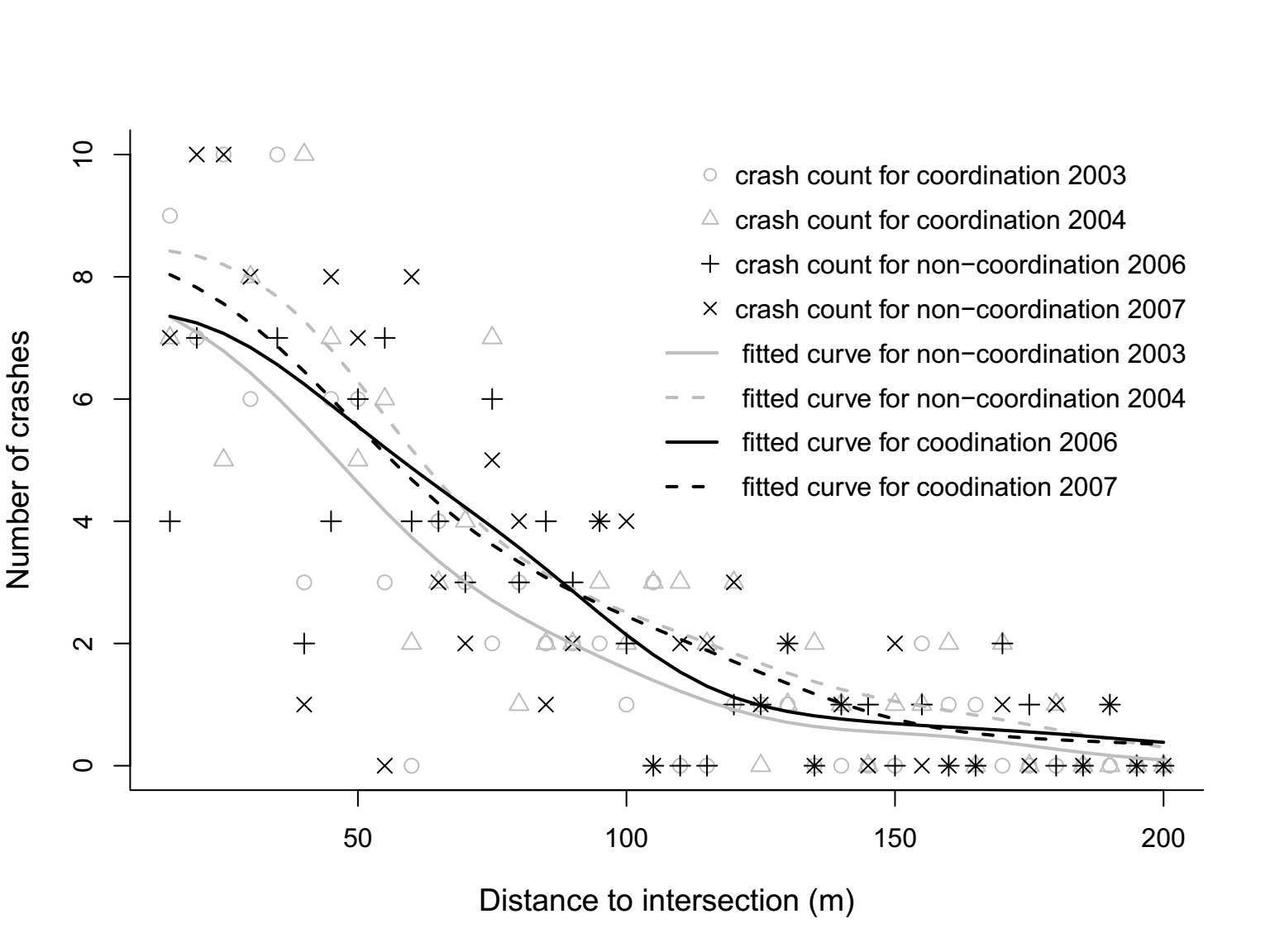


(a) injury (b) PDO

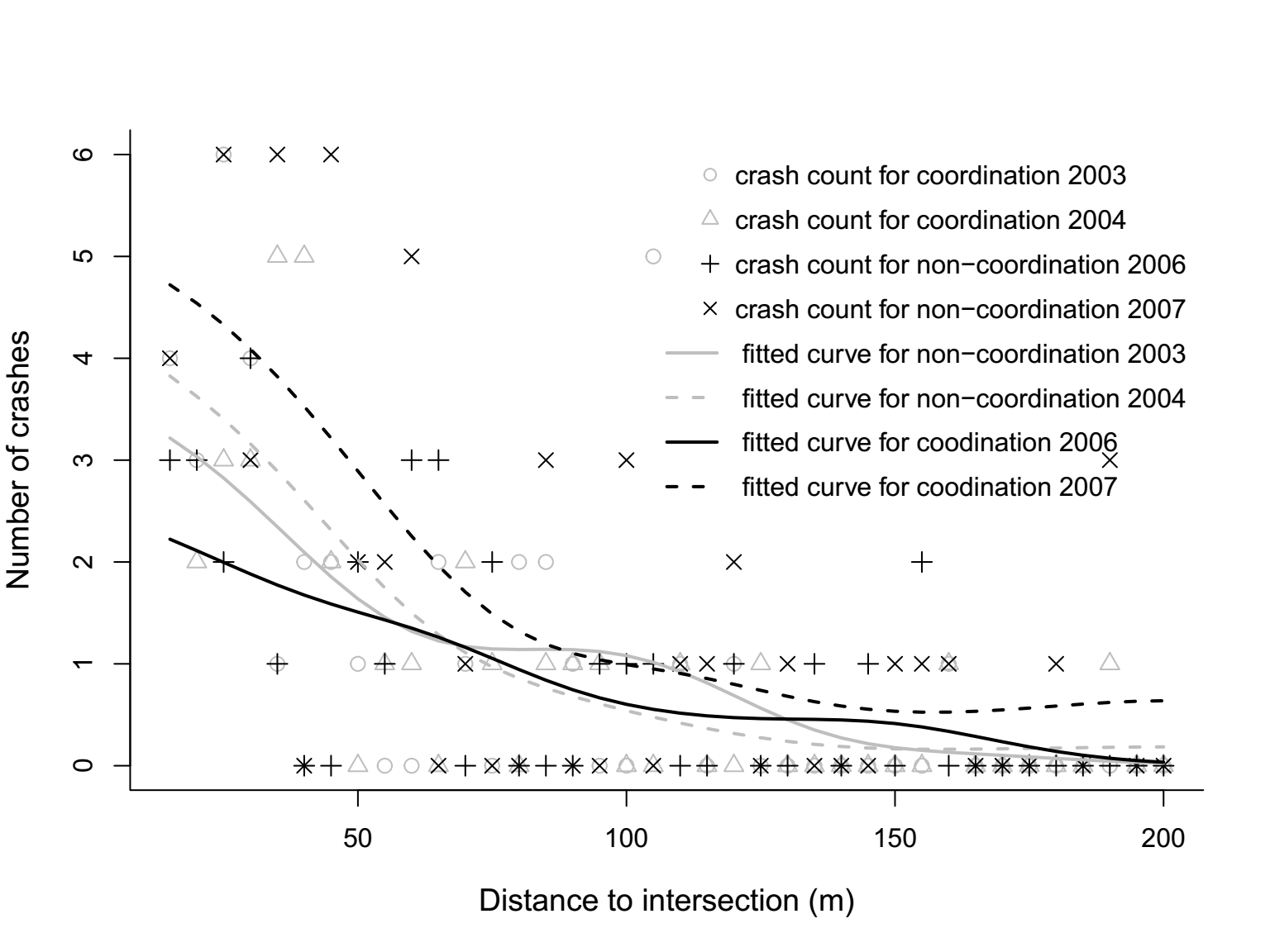
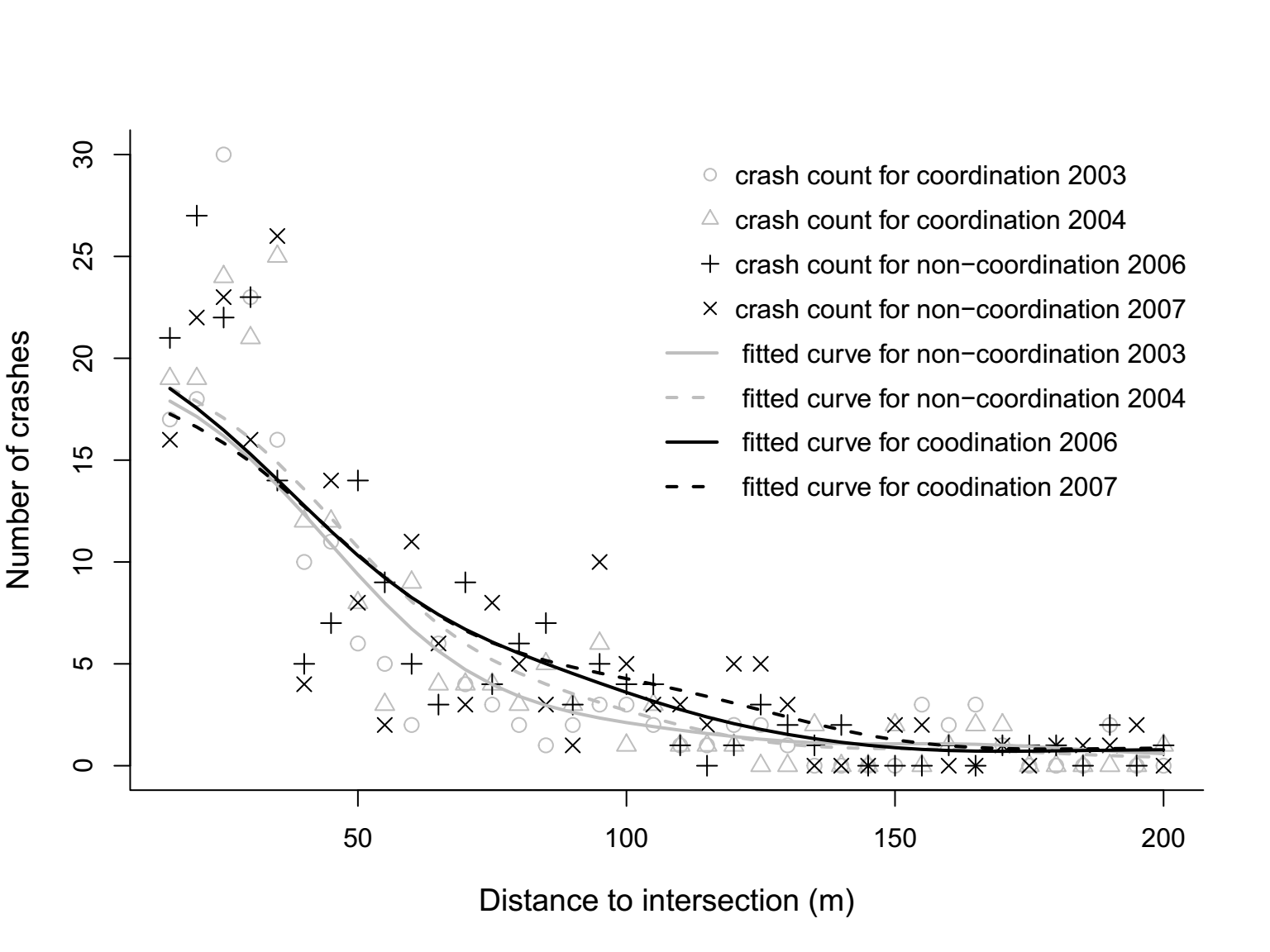
**Fig. A3** Kernel regression disaggregated by injury severity



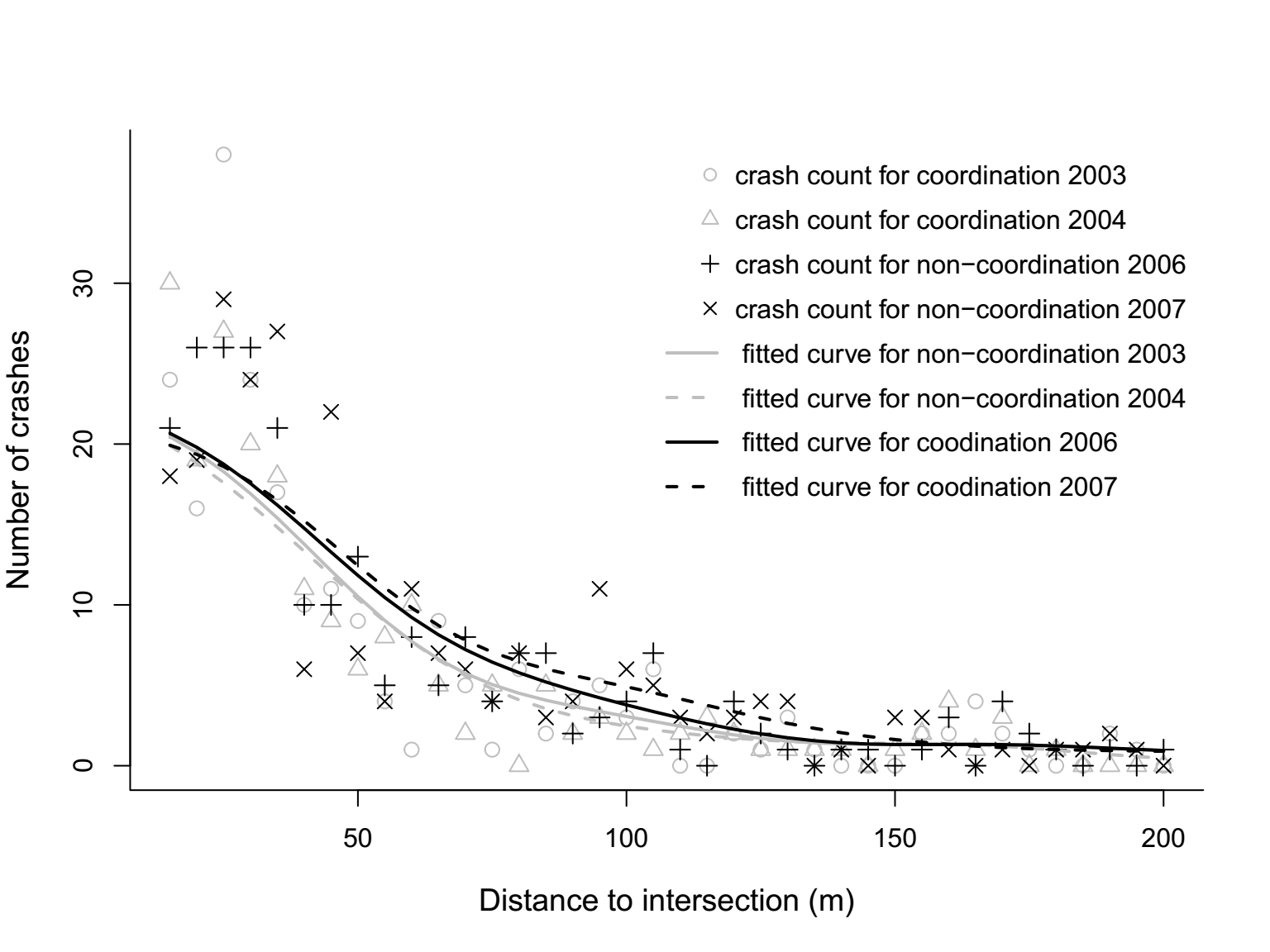
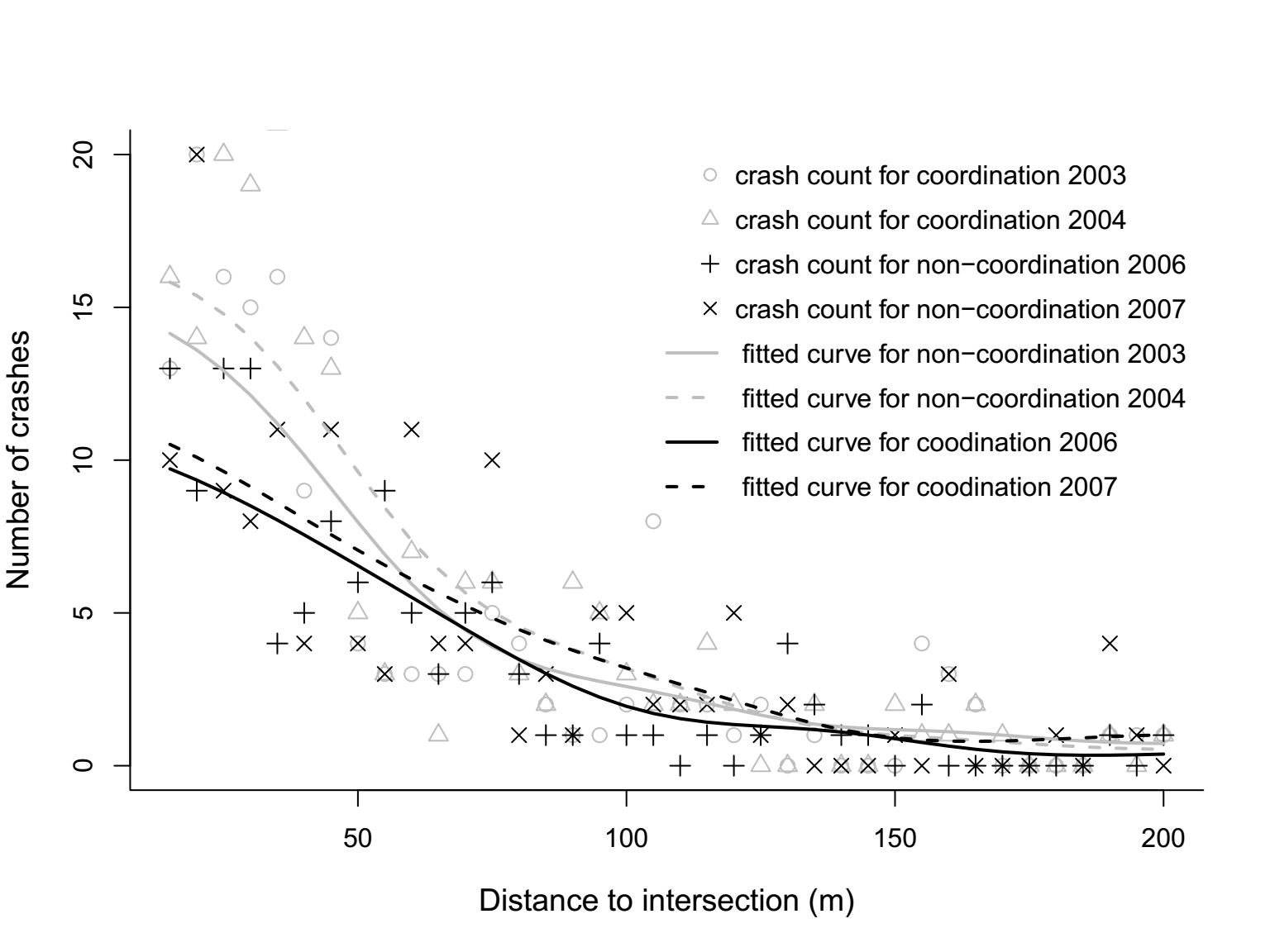
(a) overall crashes



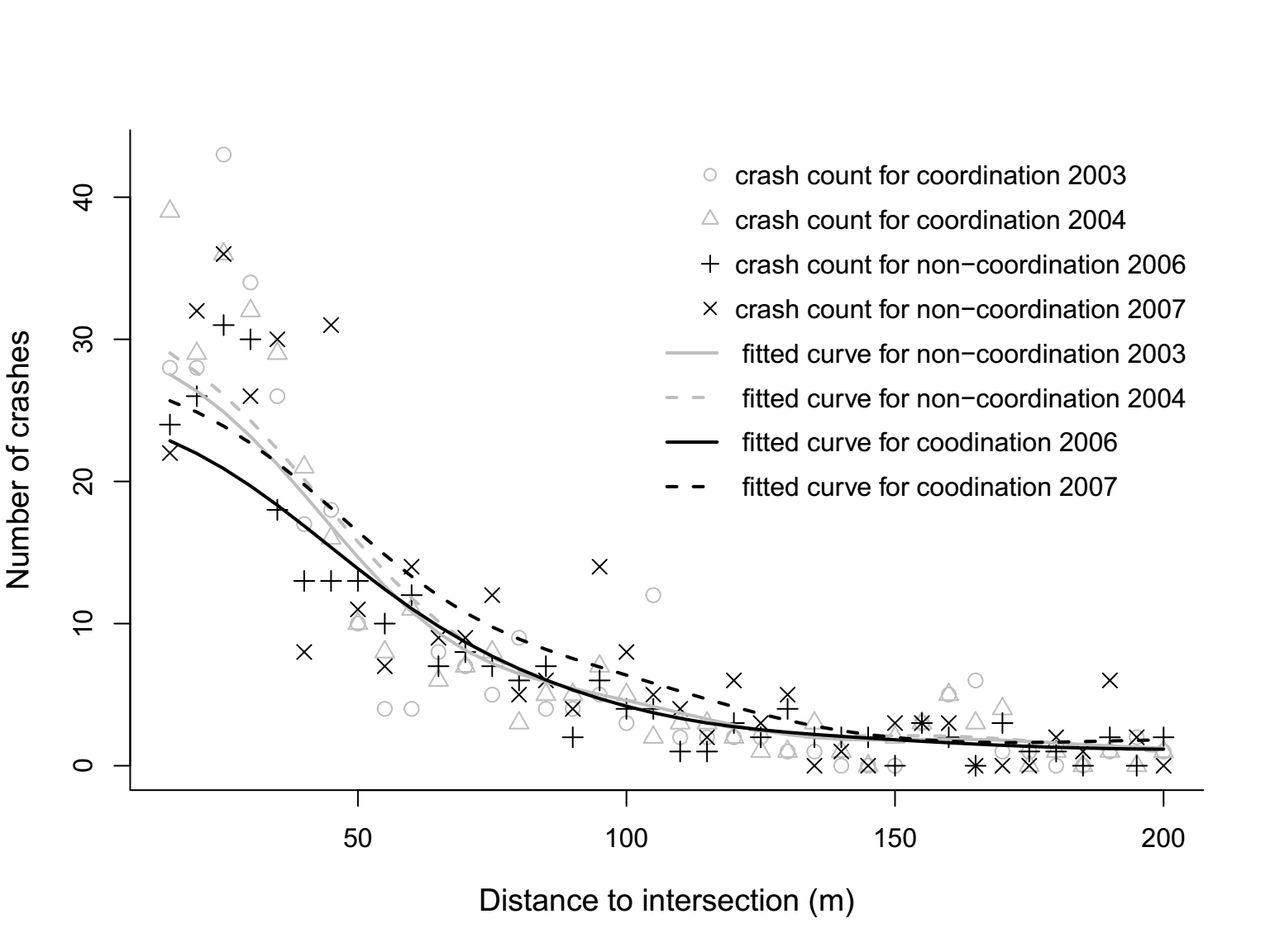
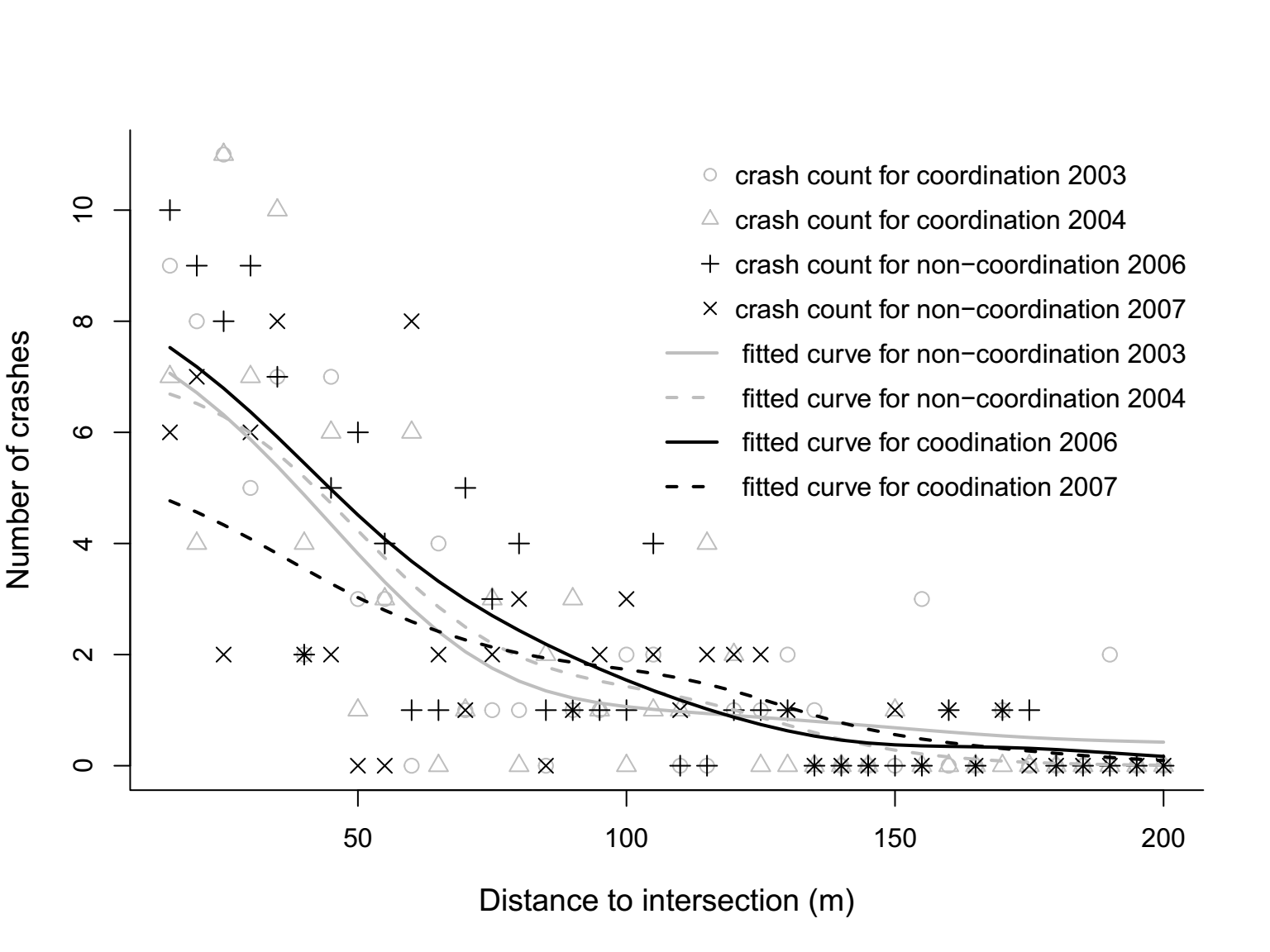
(b) peak hours (c) non-peak hours



(d) rear-end crashes (e) side-swipe crashes



(f) ≥40 mi/h (g) <40 mi/h



(h) injury crashes (i) PDO crashes

**Fig. A4** Kernel regression disaggregated by year