Figure 5.3: The point of impact of an ICBM depends on the duration of its rocket boost. The trajectories on this map show where a missile from North Korea would land if the rocket booster were disabled by an intercept at various times after launch (in seconds). This illustration shows the problem of shortfall, whereby disabling the rocket booster may still result in the missile landing on friendly territory.

The upper figure shows where a liquid-propellant ICBM would land depending on intercept time. Impact at the targeted destination occurs if the missile is not intercepted within 240 seconds from launch. The lower two figures show the impact points for two different types of solid-propellant missiles. They would hit their targets if not intercepted within 170 seconds from launch.