Focus on CENA Validation results

Christine Goulet
Pacific Earthquake Engineering Research center
UC Berkeley
goulet@berkeley.edu


CENA validation events

<table>
<thead>
<tr>
<th>Region</th>
<th>Event Name</th>
<th>Year</th>
<th>Mw</th>
<th># Records &lt; 200 km (*&lt;1000 km)</th>
<th># Selected Records</th>
<th>Note on Selection</th>
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<tbody>
<tr>
<td>WUS</td>
<td>Loma Prieta</td>
<td>1989</td>
<td>59</td>
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<tr>
<td>WUS</td>
<td>Northridge</td>
<td>1994</td>
<td>6.73</td>
<td>124</td>
<td>39</td>
<td>All stations within 10 km selected</td>
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<tr>
<td>WUS</td>
<td>Landers</td>
<td>1992</td>
<td>7.22</td>
<td>69</td>
<td>40</td>
<td>All stations within 100 km selected</td>
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<tr>
<td>WUS</td>
<td>Whittier Narrows</td>
<td>1987</td>
<td>5.89</td>
<td>95</td>
<td>39</td>
<td>Truncate stations at 40 km</td>
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<td>WUS</td>
<td>North Palm Springs</td>
<td>1986</td>
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<td>JAPAN</td>
<td>Tottori</td>
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<td>Niigata</td>
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<td>Chino Hills</td>
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<td>CENA</td>
<td>Saguenay</td>
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<td>5.81</td>
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<td>Riviere-du-Loup</td>
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<td>4.6</td>
<td>98*</td>
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<td>CENA</td>
<td>Mineral, VA</td>
<td>2011</td>
<td>5.68</td>
<td>94*</td>
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<td>All records selected, use only within 300 km</td>
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</tbody>
</table>
CENA Validation Results

- Results not as good as for ATR simulations
- Can’t fully resolve Saguenay! Need to capture it in our range of forward simulations...
- Need to better understand misfits in the context of rules for forward simulations in CENA
  - Extrapolation to Mw~8.2 (consider small CA events: small CENA events)?
  - Appropriate range of input parameters?

WUS sample results

Combined GOF Plot for WHITTIER
50 Realizations
ExSM Method

Combined GOF Plot for LOMAP
50 Realizations
GP Method

Combined GOF Plot for Landers
50 Realizations
SDSU Method

Combined GOF Plot for NR
50 Realizations
UCSB Method
Mineral

Combined GOF Plot for Mineral
50 Realizations
EXSIM Method

Combined GOF Plot for Mineral
50 Realizations
GP Method

Combined GOF Plot for Mineral
50 Realizations
UCSB Method

Combined GOF Plot for Mineral
50 Realizations
SDSU Method

Riviere-du-Loup

Combined GOF Plot for RDL1K
50 Realizations
EXSIM Method

Combined GOF Plot for RDL1K
50 Realizations
GP Method

Combined GOF Plot for RDL1K
50 Realizations
SDSU Method