

MODEL 1: (GEO + ML Methods)

```
pip install sense2vec
```

```
prodigy sense2vec.teach terms_method /Users/sashaqanderson/Dropbox/USGS/NER_Work/s2v_old --seeds  
"decision tree, decision trees, random forest, random forests, linear regression, regression, water balance, water  
balance, aqueous model, subduction zone, species occurrence, transport model, sliding block, nonlinear  
regression, chemical equilibrium, flow velocity, heat transport, linear sorption, Lagrangian transport, Hayes,  
bayesian, differential equation"
```

```
prodigy sense2vec.teach terms_method /Users/sashaqanderson/Dropbox/USGS/NER_Work/s2v_old --seeds  
"regression"
```

```
prodigy terms.to-patterns terms_method --label METHOD
```

```
prodigy db-out terms_method > /Users/sashaqanderson/Dropbox/USGS/NER_Work/method_patterns.jsonl
```

```
Prodigy ner.manual method_data blank:en /Users/sashaqanderson/Dropbox/USGS/NER_Work/ner_text.jsonl --  
label METHOD
```

```
prodigy db-out method_data > /Users/sashaqanderson/Dropbox/USGS/method_data_model.jsonl
```

```
python -m spacy pretrain /Users/sashaqanderson/Dropbox/USGS/NER_Work/ner_text.jsonl en_vectors_web_lg  
/Users/sashaqanderson/Dropbox/USGS/NER_Work/pretrain_model2/ --use-vectors
```

```
prodigy ner.batch-train method_data en_vectors_web_lg --init-tok2vec  
/Users/sashaqanderson/Dropbox/USGS/NER_Work/pretrain_model2/model999.bin
```

```
Prodigy ner.batch-train method_data en_vectors_web_lg --init-tok2vec  
/Users/sashaqanderson/Dropbox/USGS/NER_Work/pretrain_model2/model999.bin --output tmp_model --eval-  
split 0.2 --label METHOD
```

40% Accuracy

```
Prodigy ner.make-gold method_data_correct ./tmp_model  
/Users/sashaqanderson/Dropbox/USGS/NER_Work/ner_text.jsonl --label METHOD
```

```
Prodigy ner.batch-train method_data_correct en_vectors_web_lg --init-tok2vec  
/Users/sashaqanderson/Dropbox/USGS/NER_Work/pretrain_model2/model999.bin --output method_model --  
eval-split 0.2 --label METHOD --n-iter 20
```

64% Accuracy