

Seismic forecast for Whole Japan 2025-February – 2025-December

Seismic forecast trend, latitude trend, longitude trend

We use solar system bodies position in order to forecast by deep learning a forecast for : Magnitude, Latitude, Longitude.

Graph Reading:

Each time point represent the beginning of the time slot.

Example:

Time graph resolution: 7 days

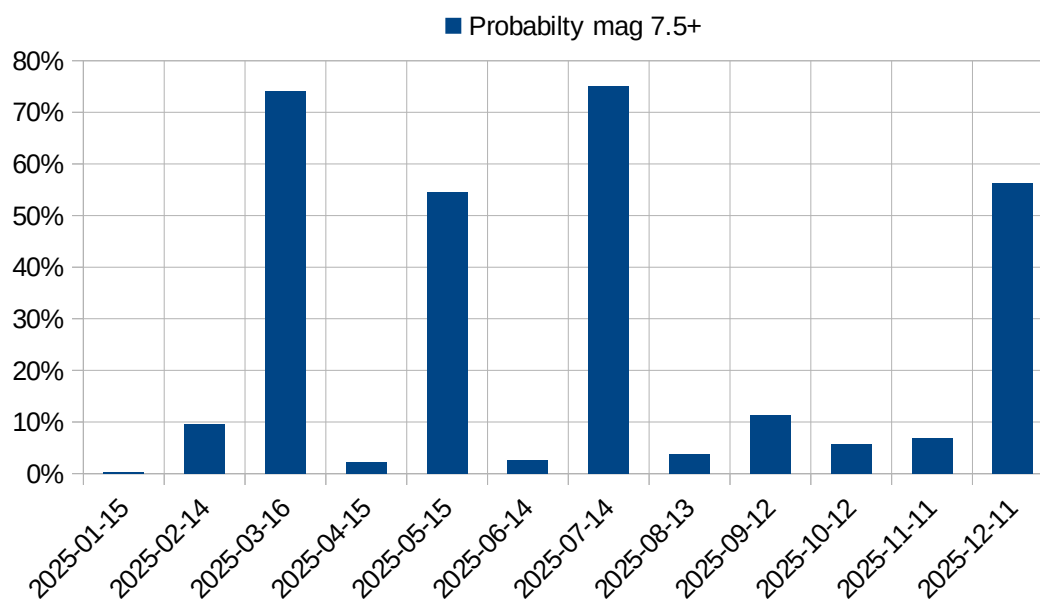
2024-12-05 = 2024-12-05 until 2024-12-11

Page	Forecast type	Check type
3	Magnitude trend	Forecast
4	Magnitude past test	Real vs validation
5	Latitude trend	Forecast
6	Latitude past test	Real vs validation
7	Longitude trend	Forecast
8	Longitude past test	Real vs validation

Quality Check: Earthquake magnitude forecast:
7.5+ probability for JAPAN.WHOLE



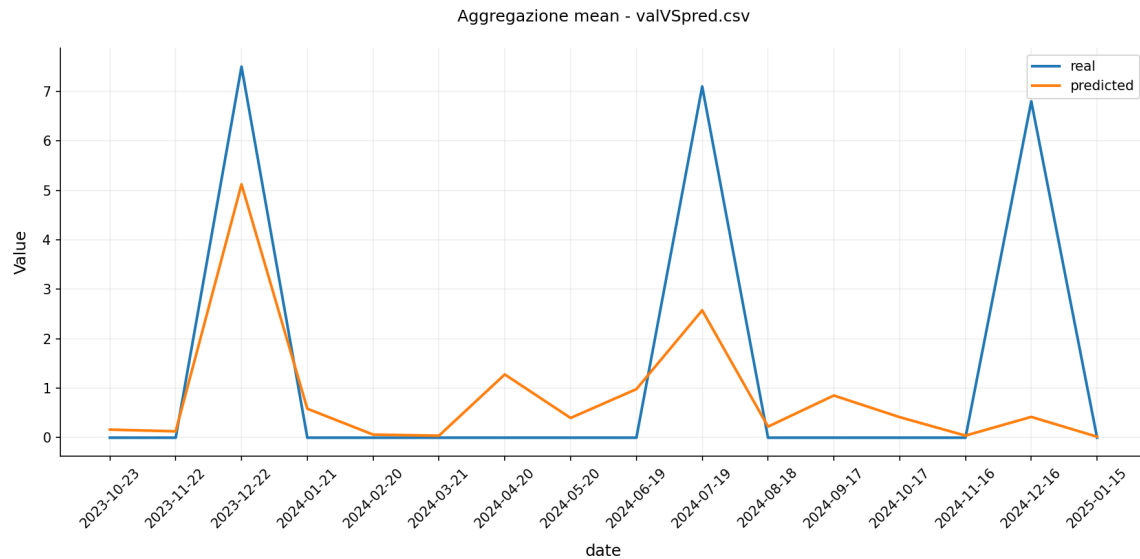
Magnitude for Whole Japan 2025-February – 2025-December



Each time point represent the beginning of the time slot.

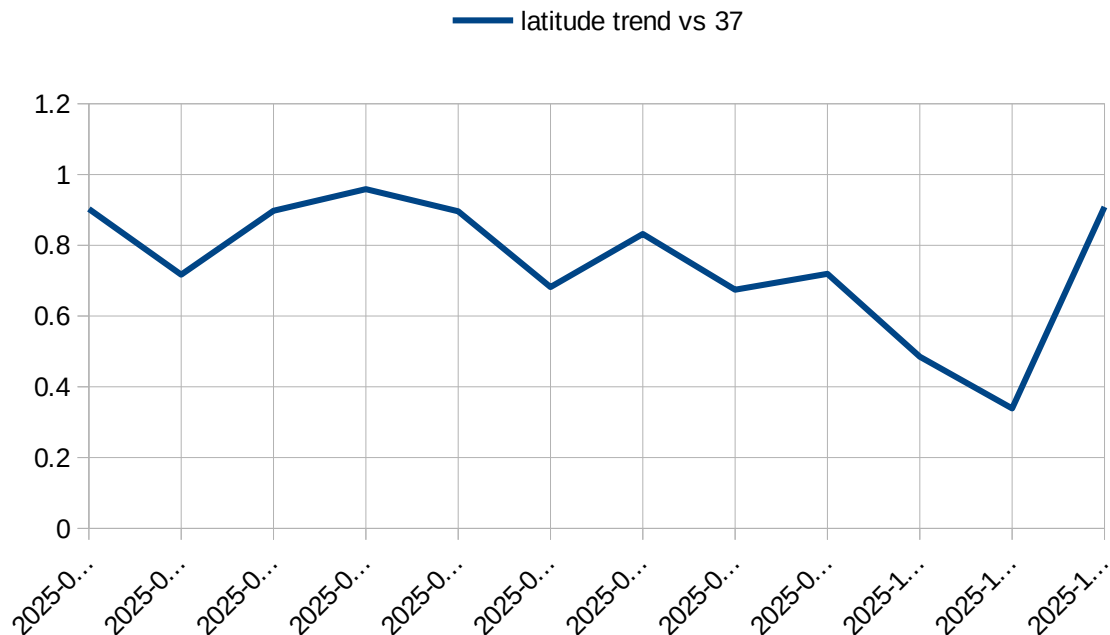
date	Probabilty mag 7.5+
2025-01-15	0%
2025-02-14	10%
2025-03-16	74%
2025-04-15	2%
2025-05-15	54%
2025-06-14	3%
2025-07-14	75%
2025-08-13	4%
2025-09-12	11%
2025-10-12	6%
2025-11-11	7%
2025-12-11	56%

Magnitude past check for Whole Japan



Each time point represent the beginning of the time slot.

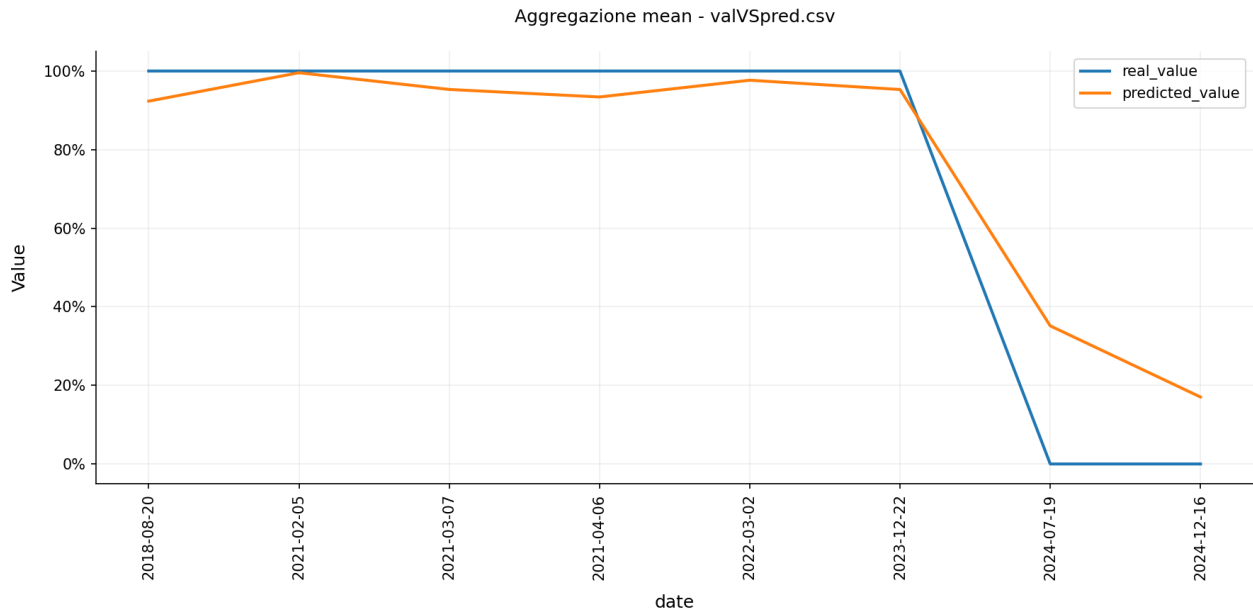
latitude forecast for Japan Trend (vs 37.0) 2025-February – 2025-December



Each time point represent the beginning of the time slot.

date	trend direction
2025-01-15	
2025-02-14	DOWN
2025-03-16	UP
2025-04-15	UP
2025-05-15	DOWN
2025-06-14	DOWN
2025-07-14	UP
2025-08-13	DOWN
2025-09-12	UP
2025-10-12	DOWN
2025-11-11	DOWN
2025-12-11	UP

latitude check for Japan Trend (vs 37.0)

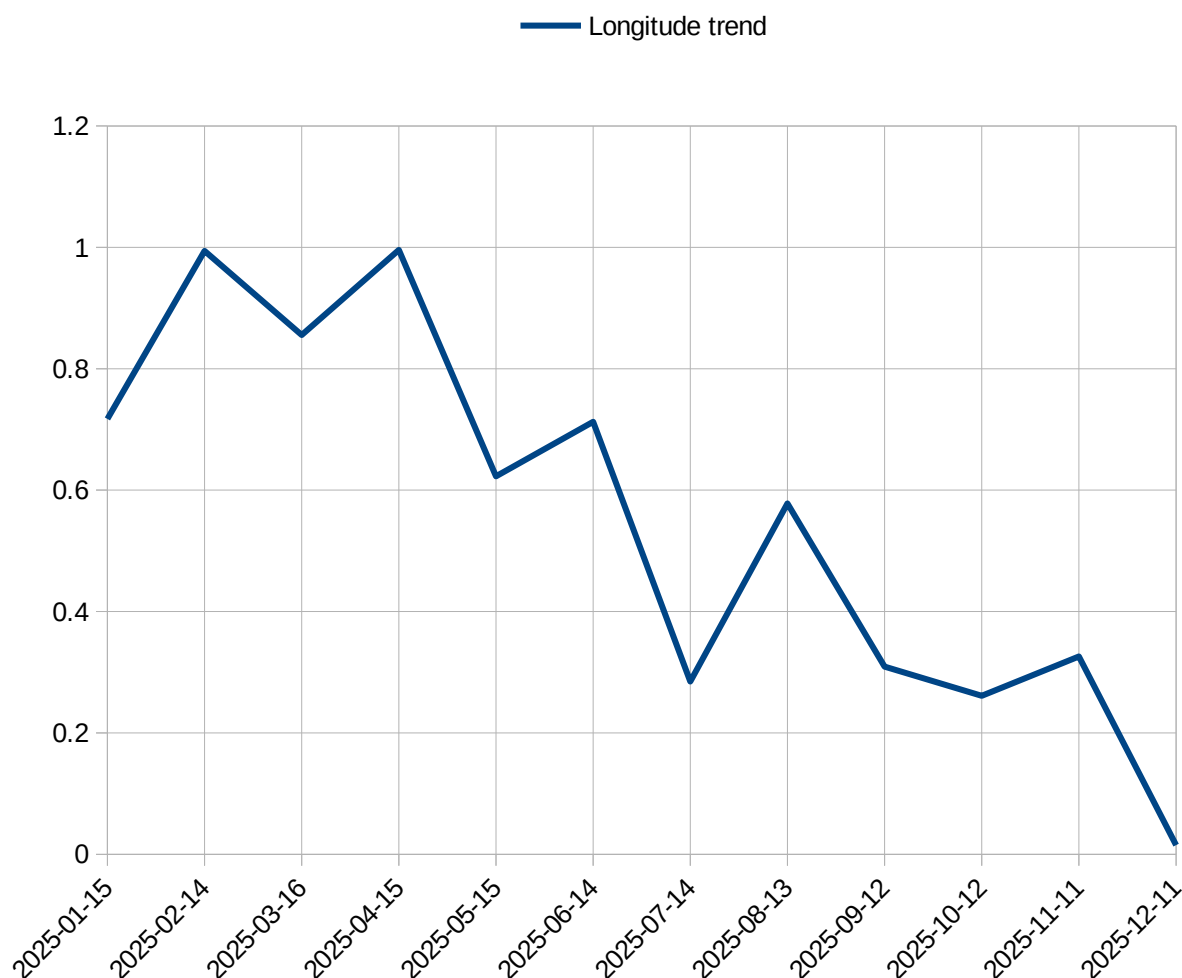


Each time point represent the beginning of the time slot.

longitude forecast for Japan

Trend (vs 138.0)

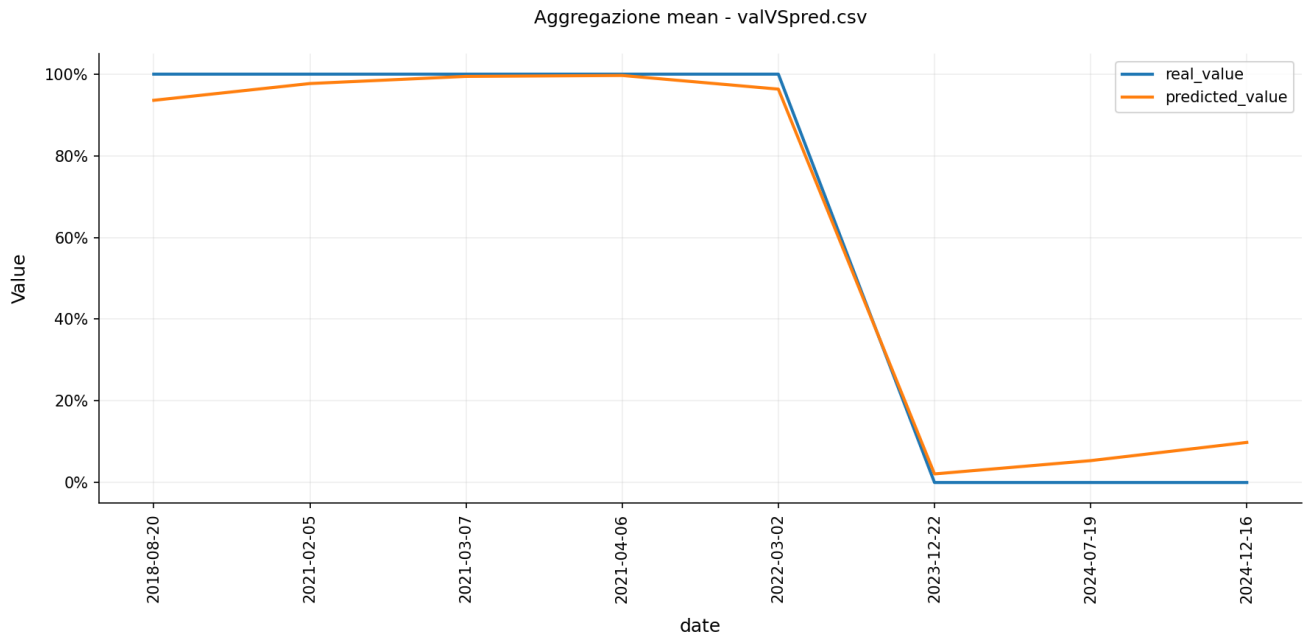
2025-February – 2025-December



Each time point represent the beginning of the time slot.

date	Trend vs 138
2025-01-15	
2025-02-14	DOWN
2025-03-16	UP
2025-04-15	DOWN
2025-05-15	UP
2025-06-14	DOWN
2025-07-14	UP
2025-08-13	DOWN
2025-09-12	UP
2025-10-12	UP
2025-11-11	DOWN
2025-12-11	UP

longitude check for Japan Trend (vs 138.0)



Each time point represent the beginning of the time slot.

Training Signature json files

MAGNITUDE

```
{
  "test_csv": "Aloptimizer/NNtestFull.csv",
  "metric_mode": "full",
  "astroParams_path": "Aloptimizer/astromical_info.json",
  "hyperParams_path": "Aloptimizer/hyperparams.json",
  "protoQuery_path": "Aloptimizer/QRTrain_ConfigJSOut.json",
  "protoParams_path": "Aloptimizer/protoparams.json",
  "validation_csv": "Aloptimizer/NNvalidFull.csv",
  "lockCombination": "",
  "results_csv": "Aloptimizer/models/FORECAST:WHOLE-JAPAN_20250127.015726/optimization_results.csv",
  "study_name": "Forecast-Whole-Japan",
  "direction": "minimize",
  "n_trials": 9999999,
  "timeout": 3600,
  "sampler": "TPESampler",
  "pruner": "MedianPruner",
  "save_dir": "Aloptimizer/models/FORECAST:WHOLE-JAPAN_20250127.015726",
  "save_pattern": "trial_{trial_id}",
  "log_validation": true,
  "log_training": true,
  "random_seed": 17,
  "make_train_graph": true,
  "make_valid_graph": true,
  "save_top_n": 4,
  "save_source_params": true,
  "save_compact": true,
  "archive_format": "",
  "exclude_fields": "random,Index*,id,place,latitude,longitude,depth,magType,nst,gap,dmin,rms,net,#auto#",
  "target_col": "mag",
  "target_col_binary_val": 6.5,
  "validation_target_col_binary_val": 6.5,
  "training_verbose": 0,
  "max_astro_columns": 5000,
  "min_bodies": 4,
  "max_bodies": 6,
  "min_ephemeridi": 3,
  "max_ephemeridi": 5,
  "scaling_method": "minmax",
  "decimal_places": 2,
  "save_astrofolds": true
}
```

Training Signature json files

LONGITUDE

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"test_csv": "Aloptimizer/NNtest.csv",
"metric_mode": "full",
"astroParams_path": "Aloptimizer/astromical_info.json",
"hyperParams_path": "Aloptimizer/hyperparams.json",
"protoQuery_path": "Aloptimizer/QRTrain_ConfigJSOut.json",
"protoParams_path": "Aloptimizer/protoparams.json",
"validation_csv": "Aloptimizer/NNvalidate6+.csv",
"lockCombination": "",
"results_csv": "Aloptimizer/models/FORECAST:WHOLE-JAPAN_20250129.094012/optimization_results.csv",
"study_name": "Forecast-Whole-Japan",
"direction": "minimize",
"n_trials": 9999999,
"timeout": 3600,
"sampler": "TPESampler",
"pruner": "MedianPruner",
"save_dir": "Aloptimizer/models/FORECAST:WHOLE-JAPAN_20250129.094012",
"save_pattern": "trial_{trial_id}",
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"log_training": true,
"random_seed": 17,
"make_train_graph": true,
"make_valid_graph": true,
"save_top_n": 7,
"save_source_params": true,
"save_compact": false,
"archive_format": "",
"exclude_fields": "random,Index*,id,place,mag,latitude,depth,magType,nst,gap,dmin,rms,net,#auto#",
"target_col": "longitude",
"target_col_binary_val": 138.0,
"validation_target_col_binary_val": 138.0,
"training_verbose": 0,
"max_astro_columns": 5000,
"min_bodies": 4,
"max_bodies": 6,
"min_ephemeridi": 3,
"max_ephemeridi": 5,
"scaling_method": "minmax",
"decimal_places": 2,
"save_astrofolds": true
}
```

Training Signature json files

LATITUDE

```
{
  "test_csv": "Aloptimizer/NNtest.csv",
  "metric_mode": "full",
  "astroParams_path": "Aloptimizer/astromical_info.json",
  "hyperParams_path": "Aloptimizer/hyperparams.json",
  "protoQuery_path": "Aloptimizer/QRTrain_ConfigJSOut.json",
  "protoParams_path": "Aloptimizer/protoparams.json",
  "validation_csv": "Aloptimizer/NNvalidate6+.csv",
  "lockCombination": "",
  "results_csv": "Aloptimizer/models/FORECAST:WHOLE-JAPAN_20250129.003341/optimization_results.csv",
  "study_name": "Forecast-Whole-Japan",
  "direction": "minimize",
  "n_trials": 9999999,
  "timeout": 3600,
  "sampler": "TPESampler",
  "pruner": "MedianPruner",
  "save_dir": "Aloptimizer/models/FORECAST:WHOLE-JAPAN_20250129.003341",
  "save_pattern": "trial_{trial_id}",
  "log_validation": true,
  "log_training": true,
  "random_seed": 17,
  "make_train_graph": true,
  "make_valid_graph": true,
  "save_top_n": 4,
  "save_source_params": true,
  "save_compact": false,
  "archive_format": "",
  "exclude_fields": "random,Index*,id,place,mag,longitude,depth,magType,nst,gap,dmin,rms,net,#auto#",
  "target_col": "latitude",
  "target_col_binary_val": 37.0,
  "validation_target_col_binary_val": 37.0,
  "training_verbose": 0,
  "max_astro_columns": 5000,
  "min_bodies": 4,
  "max_bodies": 6,
  "min_ephemeridi": 3,
  "max_ephemeridi": 5,
  "scaling_method": "minmax",
  "decimal_places": 2,
  "save_astrofolds": true
}
```