04_optimizing_a_NN_architecture_for_trading

September 29, 2021

1 Train a Deep NN to predict Asset Price returns

In practice, we need to explore variations of the design options outlined above because we can rarely be sure from the outset which network architecture best suits the data.

In this section, we will explore various options to build a simple feedforward Neural Network to predict asset price returns for a one-day horizon.

1.1 Imports & Settings

```
[1]: import warnings
     warnings.filterwarnings('ignore')
```

```
[2]: %matplotlib inline

     import os, sys
     from ast import literal_eval as make_tuple
     from time import time
     from pathlib import Path
     from itertools import product
     import numpy as np
     import pandas as pd
     import matplotlib.pyplot as plt
     import statsmodels.api as sm
     from scipy.stats import spearmanr
     import seaborn as sns


     from sklearn.preprocessing import StandardScaler

     import tensorflow as tf
     from tensorflow.keras.models import Sequential
     from tensorflow.keras.layers import Dense, Dropout, Activation
```

```
[3]: gpu_devices = tf.config.experimental.list_physical_devices('GPU')
     if gpu_devices:
         print('Using GPU')
         tf.config.experimental.set_memory_growth(gpu_devices[0], True)
     else:
```

```
    print('Using CPU')
```

Using CPU

```
[4]: sys.path.insert(1, os.path.join(sys.path[0], '..'))
     from utils import MultipleTimeSeriesCV, format_time
```

```
[5]: np.random.seed(42)
     sns.set_style('whitegrid')
     idx = pd.IndexSlice
```

```
[6]: DATA_STORE = '../data/assets.h5'
```

```
[7]: results_path = Path('results')
     if not results_path.exists():
         results_path.mkdir()

     checkpoint_path = results_path / 'logs'
```

1.2 Create a stock return series to predict asset price moves

To develop our trading strategy, we use the daily stock returns for some 995 US stocks for the eight year period from 2010 to 2017, and the features developed in Chapter 12 that include volatility and momentum factors as well as lagged returns with cross-sectional and sectoral rankings.

```
[8]: data = pd.read_hdf('../12_gradient_boosting_machines/data.h5', 'model_data').
     ↪dropna().sort_index()
```

```
[9]: data.info(show_counts=True)
```

```
<class 'pandas.core.frame.DataFrame'>
MultiIndex: 1911344 entries, ('A', Timestamp('2010-04-06 00:00:00')) to ('ZION',
Timestamp('2017-11-29 00:00:00'))
Data columns (total 34 columns):
 #   Column          Non-Null Count    Dtype
---  ------          --------------    -----
 0   dollar_vol      1911344 non-null  float64
 1   dollar_vol_rank 1911344 non-null  float64
 2   rsi             1911344 non-null  float64
 3   bb_high         1911344 non-null  float64
 4   bb_low          1911344 non-null  float64
 5   NATR            1911344 non-null  float64
 6   ATR             1911344 non-null  float64
 7   PPO             1911344 non-null  float64
 8   MACD            1911344 non-null  float64
 9   sector          1911344 non-null  int64
 10  r01             1911344 non-null  float64
 11  r05             1911344 non-null  float64
```

```
12  r10             1911344 non-null  float64
13  r21             1911344 non-null  float64
14  r42             1911344 non-null  float64
15  r63             1911344 non-null  float64
16  r01dec          1911344 non-null  float64
17  r05dec          1911344 non-null  float64
18  r10dec          1911344 non-null  float64
19  r21dec          1911344 non-null  float64
20  r42dec          1911344 non-null  float64
21  r63dec          1911344 non-null  float64
22  r01q_sector     1911344 non-null  float64
23  r05q_sector     1911344 non-null  float64
24  r10q_sector     1911344 non-null  float64
25  r21q_sector     1911344 non-null  float64
26  r42q_sector     1911344 non-null  float64
27  r63q_sector     1911344 non-null  float64
28  r01_fwd         1911344 non-null  float64
29  r05_fwd         1911344 non-null  float64
30  r21_fwd         1911344 non-null  float64
31  year            1911344 non-null  int64
32  month           1911344 non-null  int64
33  weekday         1911344 non-null  int64
dtypes: float64(30), int64(4)
memory usage: 503.9+ MB
```

[10]:
```python
outcomes = data.filter(like='fwd').columns.tolist()
```

[11]:
```python
lookahead = 1
outcome= f'r{lookahead:02}_fwd'
```

[12]:
```python
X_cv = data.loc[idx[:, :'2017'], :].drop(outcomes, axis=1)
y_cv = data.loc[idx[:, :'2017'], outcome]
```

[13]:
```python
len(X_cv.index.get_level_values('symbol').unique())
```

[13]: 995

[14]:
```python
X_cv.info(null_counts=True)
```

```
<class 'pandas.core.frame.DataFrame'>
MultiIndex: 1911344 entries, ('A', Timestamp('2010-04-06 00:00:00')) to ('ZION',
Timestamp('2017-11-29 00:00:00'))
Data columns (total 31 columns):
 #   Column          Non-Null Count    Dtype
---  ------          --------------    -----
 0   dollar_vol      1911344 non-null  float64
 1   dollar_vol_rank 1911344 non-null  float64
 2   rsi             1911344 non-null  float64
```

3

```
 3   bb_high          1911344 non-null  float64
 4   bb_low           1911344 non-null  float64
 5   NATR             1911344 non-null  float64
 6   ATR              1911344 non-null  float64
 7   PPO              1911344 non-null  float64
 8   MACD             1911344 non-null  float64
 9   sector           1911344 non-null  int64
10   r01              1911344 non-null  float64
11   r05              1911344 non-null  float64
12   r10              1911344 non-null  float64
13   r21              1911344 non-null  float64
14   r42              1911344 non-null  float64
15   r63              1911344 non-null  float64
16   r01dec           1911344 non-null  float64
17   r05dec           1911344 non-null  float64
18   r10dec           1911344 non-null  float64
19   r21dec           1911344 non-null  float64
20   r42dec           1911344 non-null  float64
21   r63dec           1911344 non-null  float64
22   r01q_sector      1911344 non-null  float64
23   r05q_sector      1911344 non-null  float64
24   r10q_sector      1911344 non-null  float64
25   r21q_sector      1911344 non-null  float64
26   r42q_sector      1911344 non-null  float64
27   r63q_sector      1911344 non-null  float64
28   year             1911344 non-null  int64
29   month            1911344 non-null  int64
30   weekday          1911344 non-null  int64
dtypes: float64(27), int64(4)
memory usage: 460.1+ MB
```

1.3 Automate model generation

The following `make_model` function illustrates how to flexibly define various architectural elements
for the search process. The dense_layers argument defines both the depth and width of the network
as a list of integers. We also use dropout for regularization, expressed as a float in the range $[0, 1]$
to define the probability that a given unit will be excluded from a training iteration.

```
[15]: def make_model(dense_layers, activation, dropout):
          '''Creates a multi-layer perceptron model

          dense_layers: List of layer sizes; one number per layer
          '''

          model = Sequential()
          for i, layer_size in enumerate(dense_layers, 1):
              if i == 1:
                  model.add(Dense(layer_size, input_dim=X_cv.shape[1]))
```

```
            model.add(Activation(activation))
        else:
            model.add(Dense(layer_size))
            model.add(Activation(activation))
    model.add(Dropout(dropout))
    model.add(Dense(1))

    model.compile(loss='mean_squared_error',
                  optimizer='Adam')

    return model
```

1.4 Cross-validate multiple configurations with TensorFlow

1.4.1 Train-Test Split

We split the data into a training set for cross-validation, and keep the last 12 months with data as holdout test:

```
[16]: n_splits = 12
      train_period_length=21 * 12 * 4
      test_period_length=21 * 3
```

```
[17]: cv = MultipleTimeSeriesCV(n_splits=n_splits,
                                train_period_length=train_period_length,
                                test_period_length=test_period_length,
                                lookahead=lookahead)
```

1.4.2 Define CV Parameters

Now we just need to define our Keras classifier using the make_model function, set cross-validation (see chapter 6 on The Machine Learning Process and following for the OneStepTimeSeriesSplit), and the parameters that we would like to explore.

We pick several one- and two-layer configurations, relu and tanh activation functions, and different dropout rates. We could also try out different optimizers (but did not run this experiment to limit what is already a computationally intensive effort):

```
[18]: dense_layer_opts = [(16, 8), (32, 16), (32, 32), (64, 32)]
      activation_opts = ['tanh']
      dropout_opts = [0, .1, .2]
```

```
[19]: param_grid = list(product(dense_layer_opts, activation_opts, dropout_opts))
      np.random.shuffle(param_grid)
```

```
[20]: len(param_grid)
```

```
[20]: 12
```

To trigger the parameter search, we instantiate a GridSearchCV object, define the fit_params that will be passed to the Keras model's fit method, and provide the training data to the GridSearchCV fit method:

```python
def get_train_valid_data(X, y, train_idx, test_idx):
    x_train, y_train = X.iloc[train_idx, :], y.iloc[train_idx]
    x_val, y_val = X.iloc[test_idx, :], y.iloc[test_idx]
    return x_train, y_train, x_val, y_val
```

```python
ic = []
scaler = StandardScaler()
for params in param_grid:
    dense_layers, activation, dropout = params
    for batch_size in [64, 256]:
        print(dense_layers, activation, dropout, batch_size)
        checkpoint_dir = checkpoint_path / str(dense_layers) / activation /␣
 ↪str(dropout) / str(batch_size)
        if not checkpoint_dir.exists():
            checkpoint_dir.mkdir(parents=True, exist_ok=True)
        start = time()
        for fold, (train_idx, test_idx) in enumerate(cv.split(X_cv)):
            # get train & validation data
            x_train, y_train, x_val, y_val = get_train_valid_data(X_cv, y_cv,␣
 ↪train_idx, test_idx)

            # scale features
            x_train = scaler.fit_transform(x_train)
            x_val = scaler.transform(x_val)

            # set up dataframes to log results
            preds = y_val.to_frame('actual')
            r = pd.DataFrame(index=y_val.groupby(level='date').size().index)

            # create model based on validation parameters
            model = make_model(dense_layers, activation, dropout)

            # cross-validate for 20 epochs
            for epoch in range(20):
                model.fit(x_train,
                          y_train,
                          batch_size=batch_size,
                          epochs=1,
                          verbose=0,
                          shuffle=True,
                          validation_data=(x_val, y_val))
                model.save_weights((checkpoint_dir / f'ckpt_{fold}_{epoch}').
 ↪as_posix())
```

```python
            preds[epoch] = model.predict(x_val).squeeze()
            r[epoch] = preds.groupby(level='date').apply(lambda x:␣
→spearmanr(x.actual, x[epoch])[0]).to_frame(epoch)
            print(format_time(time()-start), f'{fold + 1:02d} | {epoch + 1:␣
→02d} | {r[epoch].mean():7.4f} | {r[epoch].median():7.4f}')
        ic.append(r.assign(dense_layers=str(dense_layers),
                            activation=activation,
                            dropout=dropout,
                            batch_size=batch_size,
                            fold=fold))

    t = time()-start
    pd.concat(ic).to_hdf(results_path / 'scores.h5', 'ic_by_day')
```

```
(64, 32) tanh 0.1 64
00:00:10 01 | 01 | -0.0051 |  0.0013
00:00:18 01 | 02 |  0.0002 | -0.0062
00:00:26 01 | 03 |  0.0110 | -0.0003
00:00:34 01 | 04 |  0.0144 |  0.0097
00:00:42 01 | 05 |  0.0070 |  0.0061
00:00:50 01 | 06 |  0.0289 |  0.0227
00:00:59 01 | 07 |  0.0156 |  0.0342
00:01:07 01 | 08 |  0.0090 |  0.0127
00:01:15 01 | 09 |  0.0084 |  0.0096
00:01:23 01 | 10 |  0.0172 |  0.0296
00:01:31 01 | 11 |  0.0165 |  0.0217
00:01:39 01 | 12 |  0.0016 |  0.0086
00:01:47 01 | 13 |  0.0191 |  0.0344
00:01:55 01 | 14 |  0.0088 |  0.0064
00:02:03 01 | 15 |  0.0058 |  0.0121
00:02:10 01 | 16 |  0.0203 |  0.0227
00:02:18 01 | 17 |  0.0220 |  0.0177
00:02:26 01 | 18 |  0.0140 |  0.0083
00:02:34 01 | 19 | -0.0011 |  0.0009
00:02:41 01 | 20 |  0.0048 |  0.0015
00:02:50 02 | 01 |  0.0008 | -0.0016
00:02:58 02 | 02 | -0.0116 | -0.0011
00:03:06 02 | 03 |  0.0050 |  0.0096
00:03:14 02 | 04 | -0.0017 |  0.0076
00:03:22 02 | 05 | -0.0000 | -0.0086
00:03:30 02 | 06 |  0.0187 |  0.0401
00:03:39 02 | 07 | -0.0055 |  0.0081
00:03:48 02 | 08 |  0.0009 |  0.0016
00:03:57 02 | 09 |  0.0085 |  0.0039
00:04:05 02 | 10 | -0.0056 |  0.0070
00:04:13 02 | 11 |  0.0095 |  0.0083
00:04:21 02 | 12 |  0.0073 | -0.0036
```

```
00:04:29 02 | 13 |   0.0066 |   0.0119
00:04:38 02 | 14 |  -0.0019 |   0.0046
00:04:46 02 | 15 |  -0.0227 |  -0.0106
00:04:54 02 | 16 |   0.0030 |   0.0049
00:05:03 02 | 17 |  -0.0115 |   0.0013
00:05:11 02 | 18 |  -0.0062 |  -0.0058
00:05:19 02 | 19 |   0.0136 |   0.0137
00:05:28 02 | 20 |   0.0096 |  -0.0055
00:05:37 03 | 01 |   0.0217 |   0.0118
00:05:45 03 | 02 |   0.0093 |   0.0221
00:05:54 03 | 03 |   0.0027 |  -0.0191
00:06:02 03 | 04 |   0.0124 |   0.0063
00:06:10 03 | 05 |   0.0031 |  -0.0039
00:06:18 03 | 06 |  -0.0156 |  -0.0395
00:06:27 03 | 07 |   0.0055 |  -0.0013
00:06:35 03 | 08 |   0.0029 |  -0.0028
00:06:43 03 | 09 |   0.0149 |   0.0163
00:06:52 03 | 10 |  -0.0103 |  -0.0060
00:07:00 03 | 11 |  -0.0265 |  -0.0366
00:07:09 03 | 12 |  -0.0069 |  -0.0074
00:07:17 03 | 13 |  -0.0134 |  -0.0183
00:07:26 03 | 14 |   0.0097 |  -0.0067
00:07:34 03 | 15 |  -0.0076 |  -0.0049
00:07:43 03 | 16 |  -0.0045 |  -0.0078
00:07:52 03 | 17 |   0.0106 |   0.0109
00:08:00 03 | 18 |  -0.0216 |  -0.0197
00:08:09 03 | 19 |  -0.0024 |   0.0017
00:08:17 03 | 20 |  -0.0069 |   0.0007
00:08:27 04 | 01 |  -0.0329 |  -0.0321
00:08:36 04 | 02 |  -0.0085 |  -0.0062
00:08:44 04 | 03 |   0.0070 |   0.0038
00:08:53 04 | 04 |  -0.0123 |  -0.0092
00:09:01 04 | 05 |   0.0141 |   0.0021
00:09:10 04 | 06 |   0.0397 |   0.0368
00:09:19 04 | 07 |   0.0160 |   0.0159
00:09:27 04 | 08 |  -0.0166 |  -0.0049
00:09:36 04 | 09 |   0.0055 |   0.0045
00:09:45 04 | 10 |  -0.0035 |  -0.0133
00:09:54 04 | 11 |   0.0236 |   0.0080
00:10:04 04 | 12 |  -0.0068 |  -0.0152
00:10:13 04 | 13 |   0.0244 |   0.0329
00:10:21 04 | 14 |   0.0323 |   0.0091
00:10:30 04 | 15 |   0.0189 |   0.0187
00:10:39 04 | 16 |   0.0270 |   0.0115
00:10:47 04 | 17 |  -0.0091 |  -0.0087
00:10:56 04 | 18 |  -0.0217 |  -0.0162
00:11:04 04 | 19 |  -0.0476 |  -0.0535
00:11:13 04 | 20 |   0.0248 |   0.0033
```

```
00:11:23 05 | 01 |   0.0176 |   0.0181
00:11:31 05 | 02 |  -0.0133 |  -0.0183
00:11:40 05 | 03 |  -0.0115 |  -0.0144
00:11:48 05 | 04 |   0.0149 |   0.0123
00:11:57 05 | 05 |   0.0087 |  -0.0025
00:12:06 05 | 06 |   0.0086 |   0.0118
00:12:14 05 | 07 |  -0.0032 |   0.0227
00:12:23 05 | 08 |   0.0021 |   0.0031
00:12:31 05 | 09 |  -0.0196 |  -0.0109
00:12:40 05 | 10 |   0.0011 |   0.0049
00:12:49 05 | 11 |  -0.0096 |  -0.0101
00:12:57 05 | 12 |  -0.0137 |  -0.0151
00:13:06 05 | 13 |   0.0036 |  -0.0083
00:13:14 05 | 14 |   0.0038 |   0.0103
00:13:23 05 | 15 |  -0.0090 |  -0.0090
00:13:32 05 | 16 |  -0.0110 |  -0.0237
00:13:41 05 | 17 |  -0.0170 |  -0.0163
00:13:51 05 | 18 |  -0.0208 |  -0.0472
00:14:00 05 | 19 |  -0.0158 |  -0.0416
00:14:09 05 | 20 |   0.0097 |   0.0196
00:14:21 06 | 01 |   0.0160 |   0.0209
00:14:32 06 | 02 |   0.0311 |   0.0189
00:14:42 06 | 03 |   0.0388 |   0.0232
00:14:53 06 | 04 |   0.0287 |   0.0140
00:15:04 06 | 05 |   0.0378 |   0.0338
00:15:14 06 | 06 |   0.0268 |   0.0211
00:15:24 06 | 07 |   0.0351 |   0.0266
00:15:34 06 | 08 |   0.0492 |   0.0299
00:15:45 06 | 09 |   0.0553 |   0.0358
00:15:55 06 | 10 |   0.0231 |   0.0139
00:16:04 06 | 11 |   0.0509 |   0.0549
00:16:14 06 | 12 |   0.0290 |   0.0130
00:16:22 06 | 13 |   0.0461 |   0.0541
00:16:30 06 | 14 |   0.0447 |   0.0471
00:16:39 06 | 15 |   0.0285 |   0.0269
00:16:47 06 | 16 |   0.0316 |   0.0406
00:16:55 06 | 17 |   0.0375 |   0.0297
00:17:04 06 | 18 |   0.0189 |   0.0198
00:17:12 06 | 19 |   0.0335 |   0.0258
00:17:20 06 | 20 |   0.0124 |  -0.0001
00:17:30 07 | 01 |  -0.0086 |  -0.0051
00:17:38 07 | 02 |  -0.0330 |  -0.0368
00:17:47 07 | 03 |  -0.0102 |  -0.0093
00:17:56 07 | 04 |   0.0154 |   0.0268
00:18:04 07 | 05 |   0.0167 |   0.0251
00:18:13 07 | 06 |   0.0351 |   0.0209
00:18:22 07 | 07 |   0.0137 |   0.0346
00:18:31 07 | 08 |   0.0083 |   0.0199
```

```
00:18:40 07 | 09 |   0.0123 |   0.0327
00:18:50 07 | 10 |   0.0364 |   0.0644
00:19:00 07 | 11 |   0.0114 |   0.0116
00:19:10 07 | 12 |   0.0249 |   0.0406
00:19:19 07 | 13 |   0.0299 |   0.0380
00:19:28 07 | 14 |   0.0158 |   0.0409
00:19:37 07 | 15 |   0.0211 |   0.0420
00:19:46 07 | 16 |   0.0051 |   0.0080
00:19:55 07 | 17 |   0.0242 |   0.0081
00:20:03 07 | 18 |  -0.0091 |   0.0219
00:20:11 07 | 19 |   0.0396 |   0.0253
00:20:19 07 | 20 |   0.0252 |   0.0255
00:20:28 08 | 01 |   0.0348 |   0.0529
00:20:36 08 | 02 |  -0.0048 |  -0.0090
00:20:44 08 | 03 |   0.0302 |   0.0346
00:20:52 08 | 04 |   0.0105 |   0.0146
00:21:01 08 | 05 |   0.0065 |   0.0023
00:21:09 08 | 06 |   0.0241 |   0.0294
00:21:16 08 | 07 |   0.0250 |   0.0208
00:21:24 08 | 08 |   0.0042 |   0.0219
00:21:32 08 | 09 |   0.0050 |  -0.0004
00:21:40 08 | 10 |   0.0101 |   0.0002
00:21:48 08 | 11 |   0.0219 |   0.0306
00:21:56 08 | 12 |   0.0137 |   0.0259
00:22:04 08 | 13 |   0.0141 |   0.0153
00:22:13 08 | 14 |   0.0269 |   0.0201
00:22:21 08 | 15 |   0.0081 |  -0.0028
00:22:29 08 | 16 |   0.0133 |   0.0099
00:22:37 08 | 17 |   0.0124 |   0.0181
00:22:46 08 | 18 |   0.0182 |   0.0367
00:22:54 08 | 19 |   0.0112 |   0.0293
00:23:01 08 | 20 |   0.0403 |   0.0490
00:23:11 09 | 01 |  -0.0044 |  -0.0233
00:23:19 09 | 02 |   0.0210 |   0.0274
00:23:27 09 | 03 |   0.0336 |   0.0255
00:23:35 09 | 04 |   0.0127 |   0.0014
00:23:43 09 | 05 |   0.0193 |   0.0180
00:23:51 09 | 06 |   0.0131 |   0.0102
00:23:59 09 | 07 |   0.0206 |   0.0308
00:24:07 09 | 08 |   0.0191 |   0.0124
00:24:15 09 | 09 |   0.0213 |   0.0235
00:24:24 09 | 10 |   0.0131 |   0.0110
00:24:32 09 | 11 |   0.0084 |   0.0018
00:24:40 09 | 12 |   0.0042 |   0.0007
00:24:47 09 | 13 |   0.0243 |   0.0269
00:24:56 09 | 14 |   0.0093 |   0.0106
00:25:04 09 | 15 |   0.0063 |   0.0068
00:25:12 09 | 16 |   0.0095 |   0.0176
```

```
00:25:20 09 | 17 |   0.0043 |   0.0161
00:25:28 09 | 18 |   0.0029 |   0.0048
00:25:36 09 | 19 |  -0.0015 |  -0.0024
00:25:44 09 | 20 |   0.0021 |   0.0113
00:25:53 10 | 01 |  -0.0095 |  -0.0189
00:26:01 10 | 02 |   0.0327 |   0.0359
00:26:09 10 | 03 |  -0.0115 |  -0.0056
00:26:17 10 | 04 |  -0.0210 |  -0.0314
00:26:25 10 | 05 |   0.0008 |  -0.0059
00:26:33 10 | 06 |   0.0245 |   0.0065
00:26:41 10 | 07 |   0.0302 |   0.0283
00:26:49 10 | 08 |   0.0057 |   0.0047
00:26:57 10 | 09 |  -0.0075 |  -0.0049
00:27:05 10 | 10 |  -0.0072 |   0.0029
00:27:13 10 | 11 |   0.0265 |   0.0271
00:27:21 10 | 12 |   0.0139 |   0.0329
00:27:29 10 | 13 |   0.0153 |   0.0079
00:27:37 10 | 14 |   0.0189 |   0.0076
00:27:45 10 | 15 |  -0.0021 |  -0.0152
00:27:53 10 | 16 |   0.0116 |  -0.0136
00:28:01 10 | 17 |  -0.0029 |  -0.0053
00:28:09 10 | 18 |   0.0194 |   0.0204
00:28:17 10 | 19 |  -0.0092 |  -0.0084
00:28:25 10 | 20 |   0.0312 |   0.0170
00:28:34 11 | 01 |   0.0142 |   0.0038
00:28:42 11 | 02 |   0.0042 |   0.0061
00:28:50 11 | 03 |   0.0084 |   0.0100
00:28:59 11 | 04 |   0.0112 |   0.0030
00:29:07 11 | 05 |   0.0169 |   0.0115
00:29:15 11 | 06 |   0.0274 |   0.0276
00:29:22 11 | 07 |   0.0251 |   0.0199
00:29:30 11 | 08 |   0.0311 |   0.0261
00:29:39 11 | 09 |   0.0182 |   0.0143
00:29:47 11 | 10 |   0.0286 |   0.0286
00:29:55 11 | 11 |  -0.0030 |  -0.0153
00:30:03 11 | 12 |   0.0414 |   0.0329
00:30:11 11 | 13 |   0.0234 |   0.0162
00:30:19 11 | 14 |   0.0320 |   0.0298
00:30:27 11 | 15 |   0.0307 |   0.0260
00:30:35 11 | 16 |   0.0298 |   0.0339
00:30:43 11 | 17 |  -0.0007 |  -0.0005
00:30:51 11 | 18 |   0.0156 |   0.0121
00:30:59 11 | 19 |   0.0222 |   0.0177
00:31:08 11 | 20 |   0.0231 |   0.0143
00:31:17 12 | 01 |   0.0076 |   0.0045
00:31:25 12 | 02 |   0.0133 |   0.0058
00:31:33 12 | 03 |   0.0094 |   0.0001
00:31:41 12 | 04 |   0.0163 |   0.0168
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00:31:49 12 | 05 |   0.0046 |   0.0050
00:31:57 12 | 06 |   0.0111 |   0.0386
00:32:05 12 | 07 |   0.0046 |  -0.0144
00:32:14 12 | 08 |   0.0085 |   0.0197
00:32:22 12 | 09 |   0.0056 |  -0.0001
00:32:30 12 | 10 |  -0.0037 |  -0.0360
00:32:38 12 | 11 |   0.0078 |   0.0028
00:32:46 12 | 12 |   0.0073 |   0.0035
00:32:54 12 | 13 |   0.0026 |   0.0058
00:33:02 12 | 14 |   0.0100 |   0.0128
00:33:10 12 | 15 |  -0.0003 |   0.0002
00:33:18 12 | 16 |  -0.0034 |  -0.0100
00:33:26 12 | 17 |  -0.0009 |  -0.0083
00:33:34 12 | 18 |  -0.0100 |  -0.0172
00:33:42 12 | 19 |  -0.0097 |  -0.0171
00:33:51 12 | 20 |  -0.0114 |  -0.0260
(64, 32) tanh 0.1 256
00:00:05 01 | 01 |   0.0119 |  -0.0027
00:00:08 01 | 02 |   0.0188 |   0.0172
00:00:11 01 | 03 |   0.0018 |   0.0017
00:00:15 01 | 04 |   0.0083 |   0.0137
00:00:18 01 | 05 |  -0.0015 |   0.0026
00:00:21 01 | 06 |   0.0061 |   0.0183
00:00:24 01 | 07 |  -0.0106 |  -0.0080
00:00:28 01 | 08 |   0.0195 |   0.0237
00:00:31 01 | 09 |  -0.0051 |  -0.0121
00:00:34 01 | 10 |   0.0137 |   0.0162
00:00:38 01 | 11 |   0.0146 |   0.0191
00:00:41 01 | 12 |   0.0203 |   0.0295
00:00:44 01 | 13 |   0.0105 |   0.0181
00:00:48 01 | 14 |   0.0119 |   0.0123
00:00:51 01 | 15 |   0.0081 |   0.0031
00:00:54 01 | 16 |   0.0090 |   0.0019
00:00:58 01 | 17 |   0.0098 |   0.0137
00:01:01 01 | 18 |   0.0088 |   0.0059
00:01:04 01 | 19 |   0.0109 |   0.0118
00:01:08 01 | 20 |   0.0010 |   0.0009
00:01:12 02 | 01 |   0.0033 |  -0.0003
00:01:15 02 | 02 |   0.0095 |   0.0368
00:01:19 02 | 03 |  -0.0104 |  -0.0189
00:01:22 02 | 04 |  -0.0133 |  -0.0014
00:01:25 02 | 05 |   0.0102 |  -0.0033
00:01:28 02 | 06 |   0.0209 |   0.0483
00:01:32 02 | 07 |   0.0106 |   0.0025
00:01:35 02 | 08 |  -0.0120 |  -0.0291
00:01:38 02 | 09 |  -0.0005 |   0.0020
00:01:42 02 | 10 |   0.0010 |   0.0020
00:01:45 02 | 11 |  -0.0005 |   0.0014
```

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00:01:48 02 | 12 |  0.0136 |  0.0156
00:01:52 02 | 13 |  0.0176 |  0.0111
00:01:55 02 | 14 |  0.0028 | -0.0083
00:01:58 02 | 15 |  0.0096 |  0.0233
00:02:02 02 | 16 | -0.0039 | -0.0022
00:02:05 02 | 17 |  0.0006 |  0.0081
00:02:08 02 | 18 | -0.0033 | -0.0034
00:02:12 02 | 19 | -0.0078 | -0.0064
00:02:15 02 | 20 |  0.0129 | -0.0009
00:02:19 03 | 01 |  0.0006 | -0.0078
00:02:23 03 | 02 |  0.0048 |  0.0032
00:02:26 03 | 03 | -0.0025 | -0.0069
00:02:30 03 | 04 |  0.0226 |  0.0300
00:02:33 03 | 05 | -0.0091 |  0.0086
00:02:36 03 | 06 |  0.0097 |  0.0107
00:02:39 03 | 07 |  0.0172 |  0.0217
00:02:43 03 | 08 |  0.0154 |  0.0149
00:02:46 03 | 09 | -0.0200 | -0.0400
00:02:50 03 | 10 | -0.0241 | -0.0427
00:02:54 03 | 11 | -0.0083 | -0.0120
00:02:57 03 | 12 |  0.0004 | -0.0203
00:03:01 03 | 13 |  0.0016 |  0.0004
00:03:05 03 | 14 | -0.0082 | -0.0282
00:03:08 03 | 15 | -0.0004 | -0.0133
00:03:12 03 | 16 |  0.0068 |  0.0135
00:03:15 03 | 17 | -0.0121 | -0.0440
00:03:19 03 | 18 |  0.0043 | -0.0100
00:03:23 03 | 19 |  0.0038 |  0.0052
00:03:26 03 | 20 |  0.0063 |  0.0077
00:03:32 04 | 01 |  0.0207 |  0.0241
00:03:35 04 | 02 | -0.0041 |  0.0075
00:03:39 04 | 03 | -0.0450 | -0.0648
00:03:43 04 | 04 |  0.0087 | -0.0041
00:03:46 04 | 05 |  0.0005 | -0.0241
00:03:50 04 | 06 | -0.0001 |  0.0110
00:03:54 04 | 07 | -0.0117 | -0.0248
00:03:57 04 | 08 |  0.0125 | -0.0197
00:04:01 04 | 09 |  0.0092 | -0.0083
00:04:05 04 | 10 |  0.0229 |  0.0255
00:04:08 04 | 11 |  0.0242 |  0.0063
00:04:12 04 | 12 | -0.0143 | -0.0230
00:04:16 04 | 13 | -0.0222 | -0.0261
00:04:19 04 | 14 |  0.0089 | -0.0113
00:04:23 04 | 15 |  0.0018 | -0.0034
00:04:27 04 | 16 | -0.0018 |  0.0089
00:04:30 04 | 17 |  0.0120 |  0.0029
00:04:34 04 | 18 | -0.0138 |  0.0051
00:04:37 04 | 19 | -0.0272 | -0.0155
```

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00:04:40 04 | 20 |   0.0084 | -0.0157
00:04:44 05 | 01 |  -0.0034 |  0.0032
00:04:48 05 | 02 |   0.0233 |  0.0297
00:04:51 05 | 03 |   0.0007 | -0.0147
00:04:55 05 | 04 |   0.0039 |  0.0097
00:04:58 05 | 05 |   0.0140 |  0.0212
00:05:01 05 | 06 |   0.0037 |  0.0037
00:05:05 05 | 07 |  -0.0052 |  0.0042
00:05:08 05 | 08 |   0.0100 |  0.0042
00:05:11 05 | 09 |   0.0155 |  0.0222
00:05:15 05 | 10 |   0.0074 |  0.0070
00:05:18 05 | 11 |   0.0063 |  0.0198
00:05:21 05 | 12 |   0.0054 | -0.0035
00:05:24 05 | 13 |   0.0018 |  0.0124
00:05:28 05 | 14 |  -0.0037 |  0.0053
00:05:31 05 | 15 |  -0.0079 |  0.0036
00:05:34 05 | 16 |   0.0003 | -0.0011
00:05:37 05 | 17 |   0.0006 | -0.0132
00:05:40 05 | 18 |   0.0032 | -0.0006
00:05:44 05 | 19 |  -0.0043 | -0.0053
00:05:47 05 | 20 |   0.0035 |  0.0066
00:05:51 06 | 01 |   0.0159 | -0.0027
00:05:55 06 | 02 |  -0.0193 | -0.0404
00:05:58 06 | 03 |   0.0241 |  0.0186
00:06:01 06 | 04 |  -0.0183 | -0.0256
00:06:05 06 | 05 |   0.0223 |  0.0153
00:06:08 06 | 06 |   0.0295 |  0.0297
00:06:12 06 | 07 |   0.0233 |  0.0397
00:06:16 06 | 08 |   0.0199 |  0.0220
00:06:19 06 | 09 |   0.0224 |  0.0176
00:06:22 06 | 10 |   0.0216 |  0.0288
00:06:25 06 | 11 |   0.0275 |  0.0382
00:06:28 06 | 12 |   0.0174 | -0.0008
00:06:32 06 | 13 |   0.0208 |  0.0278
00:06:35 06 | 14 |   0.0236 |  0.0281
00:06:38 06 | 15 |   0.0142 |  0.0166
00:06:41 06 | 16 |   0.0104 | -0.0084
00:06:45 06 | 17 |   0.0327 |  0.0212
00:06:48 06 | 18 |   0.0080 |  0.0154
00:06:51 06 | 19 |   0.0191 |  0.0286
00:06:55 06 | 20 |   0.0238 |  0.0203
00:06:60 07 | 01 |   0.0196 |  0.0165
00:07:03 07 | 02 |   0.0128 |  0.0306
00:07:06 07 | 03 |   0.0223 |  0.0254
00:07:10 07 | 04 |   0.0194 |  0.0137
00:07:13 07 | 05 |   0.0222 | -0.0005
00:07:16 07 | 06 |   0.0249 |  0.0227
00:07:20 07 | 07 |   0.0362 |  0.0333
```

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00:07:23 07 | 08 |   0.0265 |   0.0638
00:07:26 07 | 09 |   0.0140 |   0.0234
00:07:30 07 | 10 |   0.0088 | -0.0073
00:07:33 07 | 11 |   0.0036 | -0.0019
00:07:37 07 | 12 |   0.0025 | -0.0048
00:07:41 07 | 13 |   0.0299 | -0.0081
00:07:45 07 | 14 |   0.0144 |   0.0038
00:07:48 07 | 15 |   0.0180 | -0.0050
00:07:52 07 | 16 |   0.0166 | -0.0002
00:07:56 07 | 17 | -0.0061 | -0.0225
00:07:59 07 | 18 |   0.0004 | -0.0268
00:08:03 07 | 19 |   0.0114 | -0.0018
00:08:07 07 | 20 |   0.0194 | -0.0033
00:08:11 08 | 01 |   0.0005 |   0.0176
00:08:15 08 | 02 |   0.0077 |   0.0174
00:08:18 08 | 03 |   0.0099 |   0.0030
00:08:22 08 | 04 |   0.0282 |   0.0265
00:08:25 08 | 05 |   0.0358 |   0.0127
00:08:28 08 | 06 |   0.0214 |   0.0228
00:08:32 08 | 07 |   0.0378 |   0.0379
00:08:35 08 | 08 |   0.0026 |   0.0193
00:08:39 08 | 09 |   0.0258 |   0.0073
00:08:42 08 | 10 |   0.0143 |   0.0070
00:08:46 08 | 11 |   0.0150 |   0.0113
00:08:50 08 | 12 |   0.0308 |   0.0253
00:08:53 08 | 13 |   0.0238 |   0.0238
00:08:57 08 | 14 |   0.0239 |   0.0207
00:09:01 08 | 15 |   0.0256 |   0.0302
00:09:04 08 | 16 |   0.0363 |   0.0122
00:09:08 08 | 17 |   0.0315 |   0.0242
00:09:12 08 | 18 |   0.0353 |   0.0207
00:09:15 08 | 19 |   0.0210 |   0.0131
00:09:19 08 | 20 |   0.0141 |   0.0059
00:09:23 09 | 01 |   0.0041 | -0.0001
00:09:27 09 | 02 | -0.0143 | -0.0108
00:09:31 09 | 03 |   0.0030 | -0.0066
00:09:34 09 | 04 |   0.0021 |   0.0035
00:09:38 09 | 05 |   0.0151 |   0.0130
00:09:41 09 | 06 | -0.0010 | -0.0111
00:09:45 09 | 07 |   0.0341 |   0.0414
00:09:49 09 | 08 |   0.0169 |   0.0041
00:09:52 09 | 09 |   0.0259 |   0.0278
00:09:56 09 | 10 |   0.0287 |   0.0204
00:09:59 09 | 11 |   0.0166 |   0.0116
00:10:03 09 | 12 |   0.0189 |   0.0226
00:10:07 09 | 13 |   0.0208 |   0.0218
00:10:10 09 | 14 |   0.0147 |   0.0059
00:10:14 09 | 15 |   0.0158 |   0.0103
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00:10:17 09 | 16 |   0.0152 |   0.0178
00:10:21 09 | 17 |   0.0154 |   0.0128
00:10:25 09 | 18 |   0.0192 |   0.0172
00:10:28 09 | 19 |   0.0216 |   0.0297
00:10:32 09 | 20 |   0.0190 |   0.0220
00:10:37 10 | 01 |  -0.0383 |  -0.0742
00:10:41 10 | 02 |  -0.0239 |  -0.0390
00:10:45 10 | 03 |   0.0238 |   0.0204
00:10:48 10 | 04 |   0.0198 |   0.0339
00:10:52 10 | 05 |  -0.0304 |  -0.0322
00:10:55 10 | 06 |  -0.0298 |  -0.0623
00:10:59 10 | 07 |  -0.0490 |  -0.0721
00:11:03 10 | 08 |  -0.0122 |  -0.0267
00:11:06 10 | 09 |  -0.0058 |  -0.0192
00:11:10 10 | 10 |  -0.0216 |  -0.0174
00:11:14 10 | 11 |  -0.0182 |  -0.0363
00:11:17 10 | 12 |  -0.0301 |  -0.0314
00:11:21 10 | 13 |  -0.0158 |  -0.0314
00:11:25 10 | 14 |  -0.0175 |  -0.0284
00:11:28 10 | 15 |  -0.0187 |  -0.0221
00:11:32 10 | 16 |  -0.0207 |  -0.0441
00:11:36 10 | 17 |   0.0074 |  -0.0023
00:11:39 10 | 18 |   0.0054 |   0.0012
00:11:43 10 | 19 |   0.0041 |   0.0050
00:11:47 10 | 20 |   0.0040 |  -0.0033
00:11:51 11 | 01 |  -0.0119 |  -0.0027
00:11:55 11 | 02 |   0.0309 |   0.0362
00:11:58 11 | 03 |   0.0428 |   0.0488
00:12:02 11 | 04 |   0.0250 |   0.0235
00:12:06 11 | 05 |   0.0270 |   0.0318
00:12:09 11 | 06 |   0.0335 |   0.0354
00:12:13 11 | 07 |   0.0004 |  -0.0036
00:12:17 11 | 08 |  -0.0034 |  -0.0096
00:12:20 11 | 09 |  -0.0067 |  -0.0123
00:12:24 11 | 10 |   0.0102 |   0.0104
00:12:27 11 | 11 |   0.0214 |   0.0292
00:12:31 11 | 12 |   0.0237 |   0.0220
00:12:35 11 | 13 |   0.0223 |   0.0176
00:12:38 11 | 14 |   0.0265 |   0.0132
00:12:42 11 | 15 |   0.0206 |   0.0175
00:12:45 11 | 16 |   0.0266 |   0.0145
00:12:49 11 | 17 |   0.0335 |   0.0355
00:12:53 11 | 18 |   0.0210 |   0.0107
00:12:56 11 | 19 |   0.0424 |   0.0297
00:12:60 11 | 20 |   0.0197 |   0.0153
00:13:04 12 | 01 |   0.0070 |   0.0164
00:13:08 12 | 02 |   0.0086 |   0.0021
00:13:11 12 | 03 |   0.0222 |   0.0245
```

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00:13:14 12 | 04 |   0.0098 | -0.0140
00:13:18 12 | 05 |   0.0057 | -0.0068
00:13:21 12 | 06 |   0.0075 | -0.0103
00:13:24 12 | 07 |   0.0223 |  0.0186
00:13:28 12 | 08 |   0.0317 |  0.0217
00:13:31 12 | 09 |   0.0053 | -0.0047
00:13:34 12 | 10 |   0.0149 | -0.0066
00:13:38 12 | 11 |   0.0145 |  0.0028
00:13:41 12 | 12 |   0.0054 | -0.0074
00:13:44 12 | 13 |   0.0070 | -0.0210
00:13:47 12 | 14 |   0.0056 | -0.0104
00:13:51 12 | 15 |   0.0042 | -0.0095
00:13:54 12 | 16 |   0.0135 |  0.0147
00:13:57 12 | 17 |   0.0012 | -0.0201
00:14:01 12 | 18 |   0.0097 |  0.0226
00:14:04 12 | 19 |  -0.0076 | -0.0315
00:14:08 12 | 20 |   0.0014 |  0.0070
(64, 32) tanh 0 64
00:00:10 01 | 01 |   0.0016 |  0.0012
00:00:17 01 | 02 |   0.0195 |  0.0222
00:00:25 01 | 03 |   0.0151 |  0.0153
00:00:33 01 | 04 |   0.0063 |  0.0289
00:00:41 01 | 05 |   0.0060 |  0.0056
00:00:49 01 | 06 |   0.0064 |  0.0246
00:00:57 01 | 07 |   0.0143 |  0.0093
00:01:05 01 | 08 |   0.0131 |  0.0169
00:01:13 01 | 09 |   0.0139 |  0.0225
00:01:21 01 | 10 |   0.0143 |  0.0039
00:01:29 01 | 11 |   0.0058 | -0.0056
00:01:38 01 | 12 |   0.0165 |  0.0102
00:01:47 01 | 13 |   0.0122 |  0.0136
00:01:55 01 | 14 |   0.0134 |  0.0250
00:02:04 01 | 15 |   0.0273 |  0.0357
00:02:13 01 | 16 |   0.0100 |  0.0103
00:02:21 01 | 17 |   0.0218 |  0.0276
00:02:29 01 | 18 |   0.0152 |  0.0095
00:02:37 01 | 19 |   0.0124 |  0.0087
00:02:45 01 | 20 |   0.0233 |  0.0118
00:02:55 02 | 01 |  -0.0212 | -0.0234
00:03:03 02 | 02 |   0.0220 |  0.0289
00:03:11 02 | 03 |   0.0218 |  0.0163
00:03:19 02 | 04 |  -0.0200 | -0.0061
00:03:27 02 | 05 |   0.0004 | -0.0040
00:03:35 02 | 06 |   0.0186 |  0.0151
00:03:43 02 | 07 |   0.0016 |  0.0028
00:03:50 02 | 08 |   0.0013 |  0.0209
00:03:58 02 | 09 |   0.0103 |  0.0183
00:04:06 02 | 10 |  -0.0213 | -0.0206
```

```
00:04:14 02 | 11 | -0.0017 | -0.0019
00:04:22 02 | 12 | -0.0012 | -0.0186
00:04:30 02 | 13 |  0.0088 |  0.0249
00:04:38 02 | 14 | -0.0045 | -0.0006
00:04:46 02 | 15 | -0.0019 |  0.0055
00:04:53 02 | 16 |  0.0006 | -0.0110
00:05:01 02 | 17 | -0.0068 | -0.0273
00:05:09 02 | 18 |  0.0003 |  0.0113
00:05:17 02 | 19 |  0.0125 |  0.0110
00:05:25 02 | 20 |  0.0152 |  0.0074
00:05:34 03 | 01 |  0.0105 |  0.0090
00:05:41 03 | 02 | -0.0078 | -0.0017
00:05:48 03 | 03 |  0.0369 |  0.0320
00:05:55 03 | 04 |  0.0122 | -0.0140
00:06:03 03 | 05 | -0.0170 | -0.0361
00:06:10 03 | 06 | -0.0162 | -0.0109
00:06:17 03 | 07 | -0.0179 | -0.0384
00:06:24 03 | 08 | -0.0128 | -0.0273
00:06:32 03 | 09 | -0.0322 | -0.0294
00:06:39 03 | 10 | -0.0228 | -0.0239
00:06:46 03 | 11 |  0.0021 |  0.0050
00:06:53 03 | 12 | -0.0006 |  0.0157
00:07:01 03 | 13 | -0.0081 | -0.0233
00:07:08 03 | 14 | -0.0309 | -0.0461
00:07:15 03 | 15 | -0.0189 | -0.0211
00:07:23 03 | 16 |  0.0082 | -0.0084
00:07:30 03 | 17 | -0.0219 | -0.0220
00:07:37 03 | 18 | -0.0239 | -0.0306
00:07:44 03 | 19 | -0.0012 |  0.0113
00:07:52 03 | 20 |  0.0020 |  0.0078
00:07:60 04 | 01 |  0.0167 |  0.0409
00:08:07 04 | 02 |  0.0143 |  0.0168
00:08:14 04 | 03 | -0.0161 | -0.0162
00:08:22 04 | 04 |  0.0268 |  0.0165
00:08:29 04 | 05 | -0.0443 | -0.0348
00:08:36 04 | 06 | -0.0420 | -0.0576
00:08:44 04 | 07 | -0.0334 | -0.0187
00:08:51 04 | 08 | -0.0006 | -0.0090
00:08:58 04 | 09 | -0.0453 | -0.0507
00:09:06 04 | 10 |  0.0099 | -0.0126
00:09:13 04 | 11 | -0.0242 | -0.0041
00:09:20 04 | 12 | -0.0070 | -0.0126
00:09:28 04 | 13 |  0.0136 | -0.0037
00:09:35 04 | 14 |  0.0345 |  0.0238
00:09:42 04 | 15 |  0.0229 |  0.0165
00:09:49 04 | 16 | -0.0497 | -0.0411
00:09:57 04 | 17 |  0.0001 | -0.0113
00:10:04 04 | 18 |  0.0110 |  0.0077
```

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00:10:11 04 | 19 |  -0.0425 |  -0.0279
00:10:19 04 | 20 |   0.0039 |   0.0218
00:10:27 05 | 01 |  -0.0174 |  -0.0010
00:10:34 05 | 02 |   0.0148 |   0.0222
00:10:41 05 | 03 |   0.0108 |   0.0154
00:10:49 05 | 04 |   0.0323 |   0.0340
00:10:56 05 | 05 |   0.0103 |  -0.0038
00:11:03 05 | 06 |  -0.0015 |  -0.0033
00:11:10 05 | 07 |   0.0168 |   0.0158
00:11:18 05 | 08 |   0.0239 |   0.0274
00:11:25 05 | 09 |   0.0132 |  -0.0091
00:11:32 05 | 10 |   0.0137 |   0.0124
00:11:40 05 | 11 |   0.0196 |   0.0192
00:11:47 05 | 12 |   0.0061 |  -0.0096
00:11:54 05 | 13 |  -0.0058 |  -0.0004
00:12:02 05 | 14 |  -0.0042 |   0.0126
00:12:09 05 | 15 |   0.0287 |   0.0240
00:12:16 05 | 16 |   0.0166 |   0.0119
00:12:24 05 | 17 |   0.0031 |   0.0016
00:12:31 05 | 18 |  -0.0047 |   0.0047
00:12:38 05 | 19 |   0.0122 |   0.0123
00:12:46 05 | 20 |   0.0178 |   0.0098
00:12:54 06 | 01 |   0.0234 |   0.0198
00:13:01 06 | 02 |  -0.0069 |  -0.0034
00:13:08 06 | 03 |   0.0339 |   0.0437
00:13:16 06 | 04 |   0.0345 |   0.0147
00:13:23 06 | 05 |   0.0192 |   0.0177
00:13:30 06 | 06 |   0.0283 |   0.0247
00:13:38 06 | 07 |   0.0152 |   0.0085
00:13:45 06 | 08 |  -0.0017 |  -0.0013
00:13:52 06 | 09 |   0.0248 |   0.0344
00:13:60 06 | 10 |   0.0380 |   0.0185
00:14:07 06 | 11 |   0.0239 |  -0.0020
00:14:15 06 | 12 |   0.0205 |  -0.0045
00:14:22 06 | 13 |   0.0334 |   0.0297
00:14:30 06 | 14 |   0.0373 |   0.0172
00:14:37 06 | 15 |   0.0447 |   0.0549
00:14:44 06 | 16 |   0.0126 |  -0.0000
00:14:52 06 | 17 |   0.0325 |   0.0281
00:14:59 06 | 18 |   0.0258 |   0.0103
00:15:07 06 | 19 |   0.0453 |   0.0691
00:15:14 06 | 20 |   0.0398 |   0.0487
00:15:22 07 | 01 |   0.0218 |   0.0335
00:15:29 07 | 02 |   0.0376 |   0.0496
00:15:37 07 | 03 |   0.0005 |   0.0194
00:15:44 07 | 04 |  -0.0230 |  -0.0202
00:15:51 07 | 05 |   0.0054 |  -0.0225
00:15:58 07 | 06 |   0.0213 |   0.0189
```

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00:16:06 07 | 07 |  -0.0081 |  -0.0031
00:16:13 07 | 08 |   0.0345 |   0.0605
00:16:20 07 | 09 |   0.0014 |   0.0095
00:16:28 07 | 10 |  -0.0074 |  -0.0022
00:16:35 07 | 11 |   0.0102 |   0.0215
00:16:42 07 | 12 |   0.0054 |   0.0341
00:16:50 07 | 13 |   0.0229 |   0.0540
00:16:57 07 | 14 |   0.0163 |   0.0621
00:17:04 07 | 15 |  -0.0198 |  -0.0048
00:17:12 07 | 16 |   0.0189 |   0.0077
00:17:19 07 | 17 |  -0.0005 |  -0.0056
00:17:26 07 | 18 |   0.0299 |   0.0715
00:17:34 07 | 19 |   0.0366 |   0.0574
00:17:41 07 | 20 |   0.0239 |   0.0205
00:17:49 08 | 01 |  -0.0010 |  -0.0107
00:17:56 08 | 02 |   0.0019 |  -0.0171
00:18:04 08 | 03 |   0.0109 |   0.0008
00:18:11 08 | 04 |   0.0159 |   0.0442
00:18:19 08 | 05 |  -0.0102 |   0.0067
00:18:26 08 | 06 |   0.0205 |   0.0224
00:18:33 08 | 07 |   0.0112 |   0.0203
00:18:41 08 | 08 |   0.0158 |   0.0242
00:18:48 08 | 09 |   0.0072 |   0.0030
00:18:55 08 | 10 |   0.0210 |   0.0099
00:19:02 08 | 11 |   0.0023 |  -0.0208
00:19:10 08 | 12 |   0.0112 |   0.0316
00:19:17 08 | 13 |   0.0046 |   0.0053
00:19:25 08 | 14 |   0.0075 |  -0.0063
00:19:32 08 | 15 |  -0.0018 |   0.0064
00:19:39 08 | 16 |   0.0060 |   0.0131
00:19:47 08 | 17 |   0.0179 |   0.0367
00:19:54 08 | 18 |   0.0024 |  -0.0092
00:20:01 08 | 19 |   0.0208 |   0.0401
00:20:09 08 | 20 |  -0.0006 |   0.0411
00:20:17 09 | 01 |  -0.0012 |  -0.0071
00:20:24 09 | 02 |   0.0038 |  -0.0036
00:20:31 09 | 03 |   0.0082 |   0.0027
00:20:39 09 | 04 |   0.0089 |   0.0183
00:20:46 09 | 05 |   0.0201 |   0.0215
00:20:53 09 | 06 |   0.0156 |   0.0180
00:21:01 09 | 07 |  -0.0043 |  -0.0049
00:21:08 09 | 08 |   0.0065 |   0.0062
00:21:15 09 | 09 |   0.0012 |   0.0041
00:21:23 09 | 10 |   0.0132 |   0.0014
00:21:30 09 | 11 |   0.0043 |  -0.0058
00:21:38 09 | 12 |  -0.0094 |  -0.0182
00:21:45 09 | 13 |  -0.0059 |  -0.0146
00:21:52 09 | 14 |  -0.0026 |  -0.0131
```

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00:21:60 09 | 15 |  0.0005 |  0.0004
00:22:07 09 | 16 |  0.0003 | -0.0028
00:22:15 09 | 17 | -0.0010 |  0.0043
00:22:22 09 | 18 | -0.0137 | -0.0131
00:22:29 09 | 19 |  0.0014 |  0.0089
00:22:37 09 | 20 |  0.0033 |  0.0015
00:22:45 10 | 01 | -0.0230 | -0.0269
00:22:52 10 | 02 | -0.0310 | -0.0773
00:22:59 10 | 03 | -0.0068 |  0.0027
00:23:07 10 | 04 | -0.0260 | -0.0485
00:23:14 10 | 05 |  0.0051 | -0.0052
00:23:21 10 | 06 | -0.0108 | -0.0292
00:23:28 10 | 07 | -0.0013 | -0.0012
00:23:36 10 | 08 | -0.0218 | -0.0377
00:23:43 10 | 09 | -0.0052 | -0.0046
00:23:50 10 | 10 | -0.0053 | -0.0111
00:23:57 10 | 11 | -0.0169 | -0.0131
00:24:05 10 | 12 | -0.0201 | -0.0271
00:24:12 10 | 13 |  0.0050 |  0.0089
00:24:19 10 | 14 | -0.0045 |  0.0041
00:24:26 10 | 15 |  0.0085 |  0.0154
00:24:34 10 | 16 | -0.0027 | -0.0020
00:24:41 10 | 17 | -0.0173 |  0.0048
00:24:48 10 | 18 | -0.0182 |  0.0004
00:24:55 10 | 19 | -0.0078 |  0.0018
00:25:03 10 | 20 | -0.0054 |  0.0090
00:25:11 11 | 01 |  0.0045 |  0.0087
00:25:18 11 | 02 |  0.0319 |  0.0106
00:25:26 11 | 03 |  0.0077 |  0.0156
00:25:33 11 | 04 | -0.0020 | -0.0110
00:25:40 11 | 05 |  0.0203 |  0.0222
00:25:47 11 | 06 |  0.0049 |  0.0032
00:25:55 11 | 07 |  0.0258 |  0.0155
00:26:02 11 | 08 |  0.0159 |  0.0122
00:26:10 11 | 09 |  0.0094 |  0.0003
00:26:17 11 | 10 |  0.0219 |  0.0125
00:26:24 11 | 11 |  0.0274 |  0.0277
00:26:32 11 | 12 |  0.0230 |  0.0202
00:26:39 11 | 13 |  0.0156 |  0.0208
00:26:46 11 | 14 |  0.0057 | -0.0018
00:26:54 11 | 15 |  0.0167 |  0.0158
00:27:01 11 | 16 |  0.0133 |  0.0009
00:27:08 11 | 17 |  0.0063 | -0.0000
00:27:16 11 | 18 |  0.0163 |  0.0135
00:27:23 11 | 19 |  0.0245 |  0.0228
00:27:30 11 | 20 |  0.0247 |  0.0313
00:27:38 12 | 01 | -0.0053 | -0.0099
00:27:46 12 | 02 |  0.0118 |  0.0199
```

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00:27:53 12 | 03 |   0.0059 | -0.0043
00:28:00 12 | 04 |   0.0079 |  0.0168
00:28:07 12 | 05 |   0.0209 |  0.0283
00:28:15 12 | 06 |   0.0080 |  0.0074
00:28:22 12 | 07 |   0.0066 |  0.0126
00:28:29 12 | 08 |   0.0067 |  0.0178
00:28:36 12 | 09 |   0.0203 |  0.0133
00:28:44 12 | 10 |   0.0172 |  0.0312
00:28:51 12 | 11 |   0.0104 |  0.0038
00:28:58 12 | 12 |   0.0076 |  0.0211
00:29:05 12 | 13 |   0.0148 |  0.0060
00:29:13 12 | 14 |   0.0221 |  0.0288
00:29:20 12 | 15 |   0.0045 |  0.0131
00:29:27 12 | 16 |   0.0124 |  0.0129
00:29:35 12 | 17 |   0.0072 |  0.0042
00:29:42 12 | 18 |  -0.0004 |  0.0110
00:29:49 12 | 19 |   0.0069 |  0.0069
00:29:56 12 | 20 |   0.0036 |  0.0030
(64, 32) tanh 0 256
00:00:04 01 | 01 |   0.0119 |  0.0158
00:00:07 01 | 02 |  -0.0106 | -0.0062
00:00:10 01 | 03 |   0.0185 |  0.0123
00:00:13 01 | 04 |   0.0142 |  0.0022
00:00:16 01 | 05 |   0.0144 |  0.0211
00:00:19 01 | 06 |   0.0092 |  0.0069
00:00:22 01 | 07 |  -0.0045 | -0.0064
00:00:25 01 | 08 |  -0.0021 | -0.0098
00:00:28 01 | 09 |   0.0004 |  0.0041
00:00:31 01 | 10 |   0.0092 |  0.0085
00:00:34 01 | 11 |  -0.0079 | -0.0249
00:00:37 01 | 12 |  -0.0018 |  0.0000
00:00:40 01 | 13 |   0.0016 | -0.0055
00:00:43 01 | 14 |   0.0045 |  0.0044
00:00:46 01 | 15 |   0.0105 |  0.0103
00:00:49 01 | 16 |   0.0116 |  0.0073
00:00:52 01 | 17 |   0.0033 | -0.0039
00:00:55 01 | 18 |   0.0088 |  0.0063
00:00:58 01 | 19 |   0.0087 |  0.0022
00:01:01 01 | 20 |   0.0061 | -0.0062
00:01:05 02 | 01 |  -0.0168 | -0.0221
00:01:08 02 | 02 |   0.0221 |  0.0133
00:01:11 02 | 03 |  -0.0003 |  0.0154
00:01:14 02 | 04 |   0.0037 | -0.0066
00:01:17 02 | 05 |   0.0092 |  0.0125
00:01:20 02 | 06 |   0.0072 |  0.0021
00:01:23 02 | 07 |  -0.0040 | -0.0091
00:01:26 02 | 08 |  -0.0116 | -0.0137
00:01:29 02 | 09 |  -0.0012 |  0.0190
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00:01:32 02 | 10 |  0.0075 |  0.0069
00:01:35 02 | 11 |  0.0236 |  0.0152
00:01:38 02 | 12 |  0.0002 | -0.0044
00:01:41 02 | 13 |  0.0191 |  0.0184
00:01:44 02 | 14 |  0.0022 |  0.0125
00:01:47 02 | 15 | -0.0040 | -0.0035
00:01:50 02 | 16 |  0.0126 |  0.0086
00:01:53 02 | 17 | -0.0111 | -0.0034
00:01:56 02 | 18 | -0.0092 | -0.0087
00:01:59 02 | 19 | -0.0122 | -0.0072
00:02:02 02 | 20 | -0.0120 | -0.0059
00:02:05 03 | 01 |  0.0192 |  0.0298
00:02:08 03 | 02 | -0.0244 | -0.0304
00:02:11 03 | 03 | -0.0051 | -0.0137
00:02:14 03 | 04 |  0.0074 |  0.0168
00:02:17 03 | 05 |  0.0226 |  0.0519
00:02:20 03 | 06 | -0.0140 | -0.0215
00:02:24 03 | 07 | -0.0051 | -0.0250
00:02:27 03 | 08 | -0.0150 | -0.0333
00:02:30 03 | 09 | -0.0158 | -0.0580
00:02:33 03 | 10 | -0.0101 | -0.0314
00:02:36 03 | 11 |  0.0057 | -0.0028
00:02:39 03 | 12 |  0.0044 |  0.0052
00:02:42 03 | 13 | -0.0116 | -0.0285
00:02:45 03 | 14 | -0.0050 | -0.0099
00:02:48 03 | 15 |  0.0037 |  0.0018
00:02:51 03 | 16 |  0.0033 |  0.0002
00:02:54 03 | 17 | -0.0015 | -0.0070
00:02:57 03 | 18 |  0.0005 | -0.0136
00:03:00 03 | 19 | -0.0110 | -0.0141
00:03:03 03 | 20 | -0.0025 |  0.0008
00:03:07 04 | 01 | -0.0312 | -0.0253
00:03:10 04 | 02 |  0.0017 |  0.0031
00:03:13 04 | 03 | -0.0412 | -0.0519
00:03:16 04 | 04 | -0.0114 | -0.0135
00:03:19 04 | 05 |  0.0243 |  0.0160
00:03:22 04 | 06 |  0.0225 |  0.0370
00:03:25 04 | 07 |  0.0050 |  0.0030
00:03:28 04 | 08 |  0.0299 |  0.0170
00:03:31 04 | 09 |  0.0260 |  0.0233
00:03:34 04 | 10 |  0.0008 |  0.0020
00:03:37 04 | 11 | -0.0074 | -0.0189
00:03:40 04 | 12 | -0.0108 | -0.0350
00:03:43 04 | 13 | -0.0066 | -0.0127
00:03:46 04 | 14 |  0.0174 |  0.0078
00:03:49 04 | 15 | -0.0110 | -0.0249
00:03:53 04 | 16 | -0.0058 | -0.0274
00:03:56 04 | 17 |  0.0009 |  0.0031
```

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00:03:59 04 | 18 |   0.0056 | -0.0080
00:04:02 04 | 19 |   0.0106 | -0.0052
00:04:05 04 | 20 |   0.0017 | -0.0070
00:04:08 05 | 01 | -0.0152 | -0.0107
00:04:11 05 | 02 |   0.0363 |   0.0252
00:04:15 05 | 03 |   0.0009 |   0.0075
00:04:18 05 | 04 |   0.0092 |   0.0076
00:04:21 05 | 05 |   0.0204 |   0.0167
00:04:24 05 | 06 | -0.0073 | -0.0004
00:04:27 05 | 07 |   0.0207 |   0.0195
00:04:30 05 | 08 |   0.0198 |   0.0193
00:04:33 05 | 09 |   0.0166 |   0.0242
00:04:36 05 | 10 | -0.0113 | -0.0143
00:04:39 05 | 11 |   0.0236 |   0.0184
00:04:42 05 | 12 |   0.0238 |   0.0297
00:04:45 05 | 13 |   0.0251 |   0.0246
00:04:48 05 | 14 |   0.0192 |   0.0180
00:04:51 05 | 15 | -0.0036 | -0.0066
00:04:54 05 | 16 |   0.0254 |   0.0286
00:04:57 05 | 17 |   0.0215 |   0.0158
00:04:60 05 | 18 | -0.0096 | -0.0180
00:05:03 05 | 19 | -0.0133 | -0.0181
00:05:06 05 | 20 | -0.0116 | -0.0140
00:05:10 06 | 01 |   0.0340 |   0.0215
00:05:13 06 | 02 |   0.0300 |   0.0277
00:05:16 06 | 03 |   0.0379 |   0.0344
00:05:19 06 | 04 |   0.0451 |   0.0509
00:05:22 06 | 05 |   0.0325 |   0.0187
00:05:25 06 | 06 |   0.0222 |   0.0288
00:05:28 06 | 07 |   0.0178 |   0.0166
00:05:31 06 | 08 |   0.0253 |   0.0196
00:05:34 06 | 09 |   0.0226 |   0.0106
00:05:37 06 | 10 |   0.0210 |   0.0270
00:05:40 06 | 11 |   0.0241 |   0.0263
00:05:43 06 | 12 |   0.0274 |   0.0282
00:05:46 06 | 13 |   0.0004 |   0.0030
00:05:49 06 | 14 | -0.0006 |   0.0013
00:05:52 06 | 15 |   0.0203 |   0.0078
00:05:55 06 | 16 |   0.0146 |   0.0289
00:05:58 06 | 17 |   0.0193 |   0.0204
00:06:01 06 | 18 | -0.0101 | -0.0112
00:06:04 06 | 19 | -0.0020 | -0.0081
00:06:07 06 | 20 | -0.0048 | -0.0071
00:06:11 07 | 01 |   0.0100 |   0.0229
00:06:14 07 | 02 |   0.0472 |   0.0406
00:06:17 07 | 03 |   0.0019 | -0.0083
00:06:20 07 | 04 |   0.0201 |   0.0087
00:06:23 07 | 05 |   0.0192 |   0.0267
```

```
00:06:26 07 | 06 |   0.0058 |   0.0389
00:06:29 07 | 07 |   0.0225 |   0.0269
00:06:32 07 | 08 |   0.0412 |   0.0666
00:06:35 07 | 09 |   0.0184 |   0.0296
00:06:39 07 | 10 |   0.0278 |   0.0377
00:06:42 07 | 11 |   0.0038 |   0.0140
00:06:45 07 | 12 |   0.0106 |   0.0385
00:06:48 07 | 13 |   0.0287 |   0.0484
00:06:51 07 | 14 |   0.0168 |   0.0280
00:06:54 07 | 15 |   0.0068 |   0.0155
00:06:57 07 | 16 |   0.0096 |   0.0431
00:06:60 07 | 17 |  -0.0035 |   0.0098
00:07:03 07 | 18 |   0.0036 |   0.0229
00:07:06 07 | 19 |  -0.0056 |   0.0080
00:07:09 07 | 20 |  -0.0125 |   0.0127
00:07:13 08 | 01 |   0.0085 |   0.0028
00:07:16 08 | 02 |  -0.0017 |  -0.0027
00:07:19 08 | 03 |   0.0114 |   0.0230
00:07:22 08 | 04 |   0.0213 |   0.0221
00:07:25 08 | 05 |   0.0176 |   0.0044
00:07:28 08 | 06 |   0.0038 |   0.0152
00:07:31 08 | 07 |   0.0099 |   0.0050
00:07:34 08 | 08 |   0.0201 |   0.0130
00:07:37 08 | 09 |   0.0032 |   0.0031
00:07:40 08 | 10 |   0.0008 |   0.0057
00:07:43 08 | 11 |  -0.0031 |   0.0122
00:07:46 08 | 12 |  -0.0138 |  -0.0031
00:07:49 08 | 13 |   0.0015 |   0.0132
00:07:52 08 | 14 |   0.0001 |   0.0048
00:07:55 08 | 15 |  -0.0033 |  -0.0038
00:07:58 08 | 16 |  -0.0026 |  -0.0038
00:08:01 08 | 17 |   0.0017 |  -0.0089
00:08:04 08 | 18 |   0.0071 |  -0.0173
00:08:07 08 | 19 |   0.0016 |  -0.0075
00:08:10 08 | 20 |  -0.0001 |  -0.0138
00:08:14 09 | 01 |   0.0218 |   0.0364
00:08:17 09 | 02 |  -0.0007 |   0.0120
00:08:20 09 | 03 |  -0.0238 |  -0.0339
00:08:23 09 | 04 |   0.0080 |   0.0175
00:08:26 09 | 05 |   0.0068 |   0.0192
00:08:29 09 | 06 |  -0.0011 |   0.0084
00:08:33 09 | 07 |   0.0163 |   0.0279
00:08:36 09 | 08 |  -0.0014 |  -0.0102
00:08:39 09 | 09 |   0.0101 |   0.0185
00:08:42 09 | 10 |  -0.0021 |   0.0140
00:08:45 09 | 11 |   0.0019 |   0.0125
00:08:48 09 | 12 |  -0.0119 |  -0.0192
00:08:51 09 | 13 |  -0.0090 |  -0.0073
```

```
00:08:54 09 | 14 |  0.0056 |  0.0006
00:08:57 09 | 15 | -0.0093 | -0.0147
00:08:60 09 | 16 |  0.0165 |  0.0144
00:09:03 09 | 17 |  0.0166 |  0.0083
00:09:06 09 | 18 |  0.0043 | -0.0010
00:09:09 09 | 19 |  0.0010 | -0.0061
00:09:12 09 | 20 |  0.0081 | -0.0019
00:09:16 10 | 01 | -0.0368 | -0.0577
00:09:19 10 | 02 |  0.0046 | -0.0120
00:09:22 10 | 03 | -0.0019 |  0.0081
00:09:25 10 | 04 | -0.0015 | -0.0174
00:09:28 10 | 05 | -0.0214 | -0.0242
00:09:31 10 | 06 |  0.0091 |  0.0272
00:09:34 10 | 07 | -0.0185 | -0.0177
00:09:37 10 | 08 | -0.0085 | -0.0208
00:09:40 10 | 09 | -0.0105 | -0.0062
00:09:43 10 | 10 | -0.0035 | -0.0041
00:09:46 10 | 11 | -0.0252 | -0.0339
00:09:49 10 | 12 | -0.0005 |  0.0056
00:09:52 10 | 13 | -0.0246 | -0.0335
00:09:55 10 | 14 | -0.0176 | -0.0363
00:09:58 10 | 15 | -0.0278 | -0.0337
00:10:01 10 | 16 | -0.0043 | -0.0085
00:10:05 10 | 17 | -0.0096 | -0.0213
00:10:08 10 | 18 | -0.0086 | -0.0124
00:10:11 10 | 19 | -0.0184 | -0.0253
00:10:14 10 | 20 | -0.0213 | -0.0219
00:10:18 11 | 01 |  0.0311 |  0.0324
00:10:21 11 | 02 |  0.0180 |  0.0134
00:10:24 11 | 03 |  0.0044 |  0.0050
00:10:27 11 | 04 |  0.0303 |  0.0300
00:10:30 11 | 05 |  0.0173 |  0.0146
00:10:33 11 | 06 |  0.0035 |  0.0118
00:10:36 11 | 07 |  0.0015 | -0.0037
00:10:39 11 | 08 |  0.0126 |  0.0057
00:10:42 11 | 09 |  0.0014 | -0.0060
00:10:45 11 | 10 |  0.0221 |  0.0084
00:10:48 11 | 11 |  0.0046 |  0.0034
00:10:51 11 | 12 |  0.0236 |  0.0190
00:10:54 11 | 13 |  0.0168 |  0.0039
00:10:57 11 | 14 |  0.0035 | -0.0020
00:11:00 11 | 15 |  0.0162 |  0.0074
00:11:03 11 | 16 |  0.0065 | -0.0211
00:11:06 11 | 17 |  0.0136 |  0.0096
00:11:09 11 | 18 |  0.0165 |  0.0089
00:11:12 11 | 19 |  0.0101 |  0.0045
00:11:15 11 | 20 |  0.0097 |  0.0067
00:11:19 12 | 01 |  0.0181 |  0.0203
```

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00:11:22 12 | 02 |   0.0067 |   0.0113
00:11:25 12 | 03 |   0.0174 |   0.0137
00:11:28 12 | 04 |   0.0110 |  -0.0144
00:11:32 12 | 05 |   0.0046 |  -0.0095
00:11:35 12 | 06 |   0.0118 |   0.0124
00:11:38 12 | 07 |   0.0270 |   0.0213
00:11:41 12 | 08 |   0.0294 |   0.0247
00:11:44 12 | 09 |   0.0143 |   0.0176
00:11:47 12 | 10 |   0.0326 |   0.0413
00:11:50 12 | 11 |   0.0292 |   0.0312
00:11:53 12 | 12 |   0.0186 |   0.0252
00:11:56 12 | 13 |   0.0180 |   0.0182
00:11:59 12 | 14 |   0.0214 |   0.0108
00:12:02 12 | 15 |   0.0223 |   0.0127
00:12:05 12 | 16 |   0.0257 |   0.0376
00:12:09 12 | 17 |   0.0194 |   0.0314
00:12:12 12 | 18 |   0.0132 |   0.0019
00:12:15 12 | 19 |   0.0196 |   0.0299
00:12:18 12 | 20 |   0.0232 |   0.0353
(16, 8) tanh 0 64
00:00:07 01 | 01 |  -0.0133 |  -0.0139
00:00:14 01 | 02 |   0.0281 |   0.0298
00:00:21 01 | 03 |   0.0138 |   0.0085
00:00:27 01 | 04 |  -0.0009 |   0.0087
00:00:34 01 | 05 |   0.0083 |  -0.0031
00:00:40 01 | 06 |   0.0166 |   0.0172
00:00:47 01 | 07 |  -0.0018 |  -0.0063
00:00:53 01 | 08 |   0.0059 |   0.0050
00:00:60 01 | 09 |   0.0070 |  -0.0058
00:01:06 01 | 10 |   0.0099 |   0.0071
00:01:13 01 | 11 |   0.0077 |   0.0007
00:01:19 01 | 12 |   0.0005 |  -0.0000
00:01:26 01 | 13 |   0.0070 |   0.0110
00:01:32 01 | 14 |   0.0137 |   0.0102
00:01:39 01 | 15 |   0.0037 |  -0.0017
00:01:45 01 | 16 |   0.0127 |   0.0160
00:01:52 01 | 17 |   0.0103 |  -0.0064
00:01:59 01 | 18 |   0.0116 |  -0.0049
00:02:05 01 | 19 |   0.0228 |   0.0224
00:02:12 01 | 20 |   0.0170 |   0.0218
00:02:19 02 | 01 |   0.0167 |  -0.0072
00:02:26 02 | 02 |   0.0098 |   0.0123
00:02:32 02 | 03 |   0.0128 |   0.0215
00:02:39 02 | 04 |  -0.0102 |   0.0020
00:02:45 02 | 05 |  -0.0026 |   0.0139
00:02:52 02 | 06 |  -0.0134 |  -0.0038
00:02:58 02 | 07 |  -0.0036 |  -0.0059
00:03:05 02 | 08 |   0.0018 |   0.0046
```

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00:03:11 02 | 09 |  -0.0082 | -0.0021
00:03:18 02 | 10 |   0.0008 | -0.0023
00:03:24 02 | 11 |   0.0019 |  0.0050
00:03:31 02 | 12 |   0.0142 |  0.0166
00:03:37 02 | 13 |   0.0112 |  0.0127
00:03:44 02 | 14 |   0.0036 |  0.0065
00:03:50 02 | 15 |  -0.0042 | -0.0141
00:03:57 02 | 16 |  -0.0030 | -0.0086
00:04:04 02 | 17 |   0.0030 |  0.0044
00:04:10 02 | 18 |   0.0067 |  0.0109
00:04:17 02 | 19 |   0.0014 | -0.0050
00:04:23 02 | 20 |  -0.0077 | -0.0044
00:04:31 03 | 01 |   0.0184 |  0.0258
00:04:37 03 | 02 |   0.0155 |  0.0057
00:04:44 03 | 03 |   0.0048 | -0.0055
00:04:51 03 | 04 |   0.0213 |  0.0223
00:04:57 03 | 05 |  -0.0186 | -0.0287
00:05:04 03 | 06 |  -0.0076 | -0.0048
00:05:11 03 | 07 |   0.0200 |  0.0238
00:05:17 03 | 08 |   0.0254 |  0.0204
00:05:24 03 | 09 |  -0.0196 | -0.0386
00:05:31 03 | 10 |   0.0224 |  0.0118
00:05:37 03 | 11 |   0.0249 |  0.0149
00:05:44 03 | 12 |  -0.0255 | -0.0276
00:05:51 03 | 13 |  -0.0178 | -0.0257
00:05:57 03 | 14 |   0.0173 |  0.0176
00:06:04 03 | 15 |   0.0147 |  0.0185
00:06:10 03 | 16 |   0.0184 |  0.0201
00:06:17 03 | 17 |   0.0104 |  0.0180
00:06:24 03 | 18 |  -0.0127 | -0.0182
00:06:30 03 | 19 |   0.0089 |  0.0131
00:06:37 03 | 20 |  -0.0153 | -0.0380
00:06:44 04 | 01 |   0.0204 |  0.0049
00:06:51 04 | 02 |  -0.0323 | -0.0415
00:06:57 04 | 03 |  -0.0322 | -0.0409
00:07:04 04 | 04 |  -0.0393 | -0.0486
00:07:11 04 | 05 |   0.0218 |  0.0300
00:07:17 04 | 06 |  -0.0335 | -0.0327
00:07:24 04 | 07 |  -0.0372 | -0.0524
00:07:30 04 | 08 |  -0.0322 | -0.0484
00:07:37 04 | 09 |  -0.0344 | -0.0402
00:07:44 04 | 10 |  -0.0296 | -0.0410
00:07:50 04 | 11 |   0.0239 |  0.0129
00:07:57 04 | 12 |   0.0042 | -0.0089
00:08:03 04 | 13 |   0.0151 |  0.0047
00:08:10 04 | 14 |  -0.0382 | -0.0496
00:08:16 04 | 15 |  -0.0338 | -0.0401
00:08:23 04 | 16 |  -0.0267 | -0.0302
```

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00:08:30 04 | 17 | -0.0297 | -0.0162
00:08:36 04 | 18 | -0.0281 | -0.0182
00:08:43 04 | 19 | -0.0012 | -0.0029
00:08:49 04 | 20 | -0.0269 | -0.0201
00:08:57 05 | 01 |  0.0131 |  0.0133
00:09:03 05 | 02 |  0.0188 |  0.0172
00:09:10 05 | 03 |  0.0265 |  0.0266
00:09:17 05 | 04 | -0.0112 | -0.0154
00:09:23 05 | 05 | -0.0026 | -0.0123
00:09:30 05 | 06 |  0.0157 |  0.0292
00:09:36 05 | 07 | -0.0098 | -0.0026
00:09:43 05 | 08 |  0.0175 |  0.0265
00:09:49 05 | 09 |  0.0059 |  0.0031
00:09:56 05 | 10 |  0.0193 |  0.0282
00:10:03 05 | 11 |  0.0232 |  0.0281
00:10:09 05 | 12 |  0.0024 |  0.0085
00:10:16 05 | 13 |  0.0189 |  0.0152
00:10:23 05 | 14 |  0.0236 |  0.0274
00:10:29 05 | 15 | -0.0061 | -0.0104
00:10:36 05 | 16 | -0.0088 | -0.0079
00:10:42 05 | 17 | -0.0076 |  0.0097
00:10:49 05 | 18 | -0.0012 |  0.0022
00:10:56 05 | 19 |  0.0101 |  0.0040
00:11:02 05 | 20 |  0.0076 | -0.0004
00:11:10 06 | 01 |  0.0245 |  0.0106
00:11:16 06 | 02 | -0.0343 | -0.0415
00:11:23 06 | 03 |  0.0226 |  0.0192
00:11:30 06 | 04 |  0.0208 |  0.0253
00:11:36 06 | 05 |  0.0341 |  0.0231
00:11:43 06 | 06 |  0.0272 |  0.0239
00:11:49 06 | 07 |  0.0224 |  0.0235
00:11:56 06 | 08 |  0.0293 |  0.0134
00:12:03 06 | 09 |  0.0121 |  0.0124
00:12:09 06 | 10 |  0.0069 | -0.0010
00:12:16 06 | 11 |  0.0252 |  0.0391
00:12:22 06 | 12 |  0.0255 |  0.0346
00:12:29 06 | 13 |  0.0243 |  0.0262
00:12:36 06 | 14 |  0.0170 | -0.0026
00:12:42 06 | 15 |  0.0216 |  0.0086
00:12:49 06 | 16 |  0.0179 |  0.0251
00:12:55 06 | 17 |  0.0053 |  0.0267
00:13:02 06 | 18 |  0.0043 |  0.0086
00:13:09 06 | 19 |  0.0111 |  0.0154
00:13:15 06 | 20 |  0.0025 |  0.0190
00:13:22 07 | 01 |  0.0006 |  0.0167
00:13:29 07 | 02 | -0.0074 |  0.0081
00:13:35 07 | 03 |  0.0304 |  0.0676
00:13:42 07 | 04 |  0.0170 |  0.0710
```

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00:13:49 07 | 05 | -0.0057 |  0.0148
00:13:55 07 | 06 | -0.0031 |  0.0068
00:14:02 07 | 07 |  0.0138 |  0.0361
00:14:08 07 | 08 |  0.0025 |  0.0206
00:14:15 07 | 09 |  0.0040 |  0.0166
00:14:21 07 | 10 | -0.0104 |  0.0225
00:14:28 07 | 11 | -0.0130 | -0.0023
00:14:34 07 | 12 |  0.0015 |  0.0036
00:14:41 07 | 13 |  0.0248 |  0.0403
00:14:47 07 | 14 |  0.0184 |  0.0272
00:14:54 07 | 15 |  0.0119 |  0.0181
00:15:00 07 | 16 |  0.0245 |  0.0408
00:15:07 07 | 17 |  0.0056 |  0.0280
00:15:13 07 | 18 | -0.0040 |  0.0114
00:15:20 07 | 19 |  0.0129 |  0.0297
00:15:26 07 | 20 |  0.0279 |  0.0467
00:15:34 08 | 01 |  0.0072 |  0.0072
00:15:40 08 | 02 |  0.0047 |  0.0001
00:15:47 08 | 03 |  0.0107 |  0.0223
00:15:53 08 | 04 |  0.0140 |  0.0114
00:15:60 08 | 05 |  0.0214 |  0.0005
00:16:06 08 | 06 |  0.0323 |  0.0397
00:16:13 08 | 07 |  0.0209 |  0.0224
00:16:19 08 | 08 |  0.0130 | -0.0021
00:16:26 08 | 09 | -0.0047 | -0.0255
00:16:32 08 | 10 |  0.0077 |  0.0067
00:16:39 08 | 11 | -0.0078 | -0.0225
00:16:45 08 | 12 | -0.0026 | -0.0003
00:16:52 08 | 13 |  0.0035 |  0.0058
00:16:58 08 | 14 | -0.0108 | -0.0048
00:17:05 08 | 15 | -0.0099 | -0.0024
00:17:12 08 | 16 |  0.0012 |  0.0035
00:17:18 08 | 17 | -0.0019 | -0.0059
00:17:25 08 | 18 | -0.0057 | -0.0217
00:17:31 08 | 19 |  0.0029 |  0.0078
00:17:38 08 | 20 | -0.0074 | -0.0104
00:17:45 09 | 01 |  0.0155 |  0.0164
00:17:52 09 | 02 | -0.0073 | -0.0104
00:17:58 09 | 03 |  0.0132 |  0.0116
00:18:05 09 | 04 | -0.0090 | -0.0044
00:18:11 09 | 05 |  0.0176 |  0.0366
00:18:18 09 | 06 |  0.0127 |  0.0057
00:18:25 09 | 07 | -0.0036 | -0.0134
00:18:31 09 | 08 | -0.0001 | -0.0009
00:18:38 09 | 09 | -0.0028 | -0.0108
00:18:45 09 | 10 |  0.0182 |  0.0138
00:18:51 09 | 11 |  0.0116 |  0.0146
00:18:58 09 | 12 |  0.0172 |  0.0180
```

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00:19:05 09 | 13 |  0.0106 |  0.0116
00:19:11 09 | 14 |  0.0212 |  0.0152
00:19:18 09 | 15 |  0.0145 |  0.0194
00:19:24 09 | 16 |  0.0038 |  0.0138
00:19:31 09 | 17 |  0.0137 |  0.0182
00:19:38 09 | 18 |  0.0084 |  0.0121
00:19:44 09 | 19 |  0.0160 |  0.0181
00:19:51 09 | 20 |  0.0010 |  0.0097
00:19:58 10 | 01 |  0.0292 |  0.0446
00:20:05 10 | 02 |  0.0219 |  0.0272
00:20:11 10 | 03 | -0.0148 | -0.0086
00:20:18 10 | 04 | -0.0015 |  0.0174
00:20:24 10 | 05 | -0.0053 |  0.0038
00:20:31 10 | 06 |  0.0067 |  0.0218
00:20:37 10 | 07 |  0.0083 | -0.0061
00:20:44 10 | 08 |  0.0118 | -0.0005
00:20:50 10 | 09 |  0.0156 |  0.0198
00:20:57 10 | 10 |  0.0146 |  0.0078
00:21:03 10 | 11 | -0.0044 | -0.0144
00:21:10 10 | 12 |  0.0014 | -0.0162
00:21:16 10 | 13 |  0.0153 | -0.0020
00:21:23 10 | 14 |  0.0024 | -0.0013
00:21:29 10 | 15 |  0.0028 | -0.0104
00:21:36 10 | 16 | -0.0037 |  0.0018
00:21:42 10 | 17 | -0.0059 | -0.0052
00:21:49 10 | 18 | -0.0072 |  0.0009
00:21:55 10 | 19 |  0.0102 |  0.0104
00:22:02 10 | 20 |  0.0021 |  0.0031
00:22:09 11 | 01 |  0.0129 |  0.0291
00:22:15 11 | 02 |  0.0126 |  0.0157
00:22:22 11 | 03 |  0.0198 |  0.0243
00:22:28 11 | 04 |  0.0246 |  0.0331
00:22:35 11 | 05 |  0.0070 |  0.0026
00:22:41 11 | 06 |  0.0156 |  0.0056
00:22:48 11 | 07 |  0.0284 |  0.0271
00:22:54 11 | 08 |  0.0121 |  0.0065
00:23:01 11 | 09 |  0.0203 |  0.0206
00:23:07 11 | 10 |  0.0229 |  0.0188
00:23:14 11 | 11 |  0.0206 |  0.0215
00:23:20 11 | 12 |  0.0214 |  0.0179
00:23:27 11 | 13 |  0.0444 |  0.0357
00:23:34 11 | 14 |  0.0400 |  0.0359
00:23:40 11 | 15 |  0.0311 |  0.0340
00:23:46 11 | 16 |  0.0231 |  0.0177
00:23:53 11 | 17 |  0.0172 |  0.0066
00:23:60 11 | 18 |  0.0271 |  0.0326
00:24:06 11 | 19 |  0.0179 |  0.0153
00:24:13 11 | 20 |  0.0263 |  0.0338
```

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00:24:20 12 | 01 |   0.0060 |   0.0141
00:24:26 12 | 02 |   0.0218 |   0.0202
00:24:33 12 | 03 |   0.0108 |   0.0218
00:24:40 12 | 04 |   0.0170 |   0.0101
00:24:46 12 | 05 |   0.0143 |   0.0209
00:24:53 12 | 06 |   0.0326 |   0.0298
00:24:59 12 | 07 |   0.0239 |   0.0307
00:25:06 12 | 08 |  -0.0107 |  -0.0204
00:25:12 12 | 09 |   0.0073 |   0.0064
00:25:19 12 | 10 |   0.0265 |   0.0395
00:25:25 12 | 11 |   0.0258 |   0.0312
00:25:32 12 | 12 |   0.0112 |   0.0127
00:25:39 12 | 13 |   0.0280 |   0.0264
00:25:45 12 | 14 |   0.0167 |   0.0152
00:25:52 12 | 15 |   0.0113 |   0.0130
00:25:59 12 | 16 |  -0.0026 |  -0.0127
00:26:05 12 | 17 |   0.0053 |   0.0009
00:26:12 12 | 18 |   0.0004 |  -0.0046
00:26:19 12 | 19 |   0.0070 |  -0.0059
00:26:25 12 | 20 |   0.0109 |   0.0175
(16, 8) tanh 0 256
00:00:03 01 | 01 |   0.0064 |   0.0080
00:00:06 01 | 02 |   0.0007 |   0.0067
00:00:08 01 | 03 |   0.0070 |   0.0031
00:00:10 01 | 04 |   0.0209 |   0.0285
00:00:13 01 | 05 |   0.0043 |  -0.0004
00:00:15 01 | 06 |   0.0192 |   0.0133
00:00:17 01 | 07 |   0.0201 |   0.0178
00:00:20 01 | 08 |   0.0124 |   0.0125
00:00:22 01 | 09 |   0.0124 |   0.0236
00:00:24 01 | 10 |   0.0087 |  -0.0054
00:00:27 01 | 11 |   0.0084 |  -0.0070
00:00:29 01 | 12 |   0.0110 |  -0.0120
00:00:31 01 | 13 |   0.0072 |  -0.0236
00:00:34 01 | 14 |   0.0081 |  -0.0032
00:00:36 01 | 15 |   0.0108 |   0.0049
00:00:38 01 | 16 |   0.0067 |  -0.0021
00:00:41 01 | 17 |   0.0088 |   0.0060
00:00:43 01 | 18 |   0.0141 |   0.0100
00:00:45 01 | 19 |   0.0024 |   0.0048
00:00:48 01 | 20 |   0.0054 |   0.0062
00:00:51 02 | 01 |   0.0156 |   0.0013
00:00:53 02 | 02 |   0.0113 |   0.0143
00:00:56 02 | 03 |   0.0172 |   0.0038
00:00:58 02 | 04 |   0.0069 |   0.0233
00:01:00 02 | 05 |  -0.0103 |  -0.0061
00:01:02 02 | 06 |   0.0109 |   0.0249
00:01:05 02 | 07 |   0.0048 |   0.0012
```

```
00:01:07 02 | 08 |   0.0006 |   0.0025
00:01:09 02 | 09 |   0.0013 |   0.0108
00:01:12 02 | 10 |   0.0098 |   0.0330
00:01:14 02 | 11 |   0.0003 |  -0.0034
00:01:16 02 | 12 |   0.0076 |   0.0024
00:01:19 02 | 13 |   0.0092 |   0.0225
00:01:21 02 | 14 |   0.0001 |  -0.0061
00:01:23 02 | 15 |   0.0091 |   0.0009
00:01:26 02 | 16 |  -0.0008 |   0.0170
00:01:28 02 | 17 |   0.0008 |   0.0023
00:01:30 02 | 18 |   0.0023 |   0.0180
00:01:33 02 | 19 |  -0.0010 |  -0.0057
00:01:35 02 | 20 |  -0.0067 |   0.0001
00:01:38 03 | 01 |  -0.0130 |  -0.0096
00:01:40 03 | 02 |  -0.0107 |   0.0020
00:01:43 03 | 03 |   0.0235 |   0.0221
00:01:45 03 | 04 |  -0.0311 |  -0.0463
00:01:47 03 | 05 |  -0.0258 |  -0.0215
00:01:50 03 | 06 |   0.0175 |   0.0293
00:01:52 03 | 07 |   0.0092 |   0.0023
00:01:54 03 | 08 |   0.0306 |   0.0348
00:01:57 03 | 09 |  -0.0115 |  -0.0122
00:01:59 03 | 10 |   0.0033 |  -0.0003
00:02:01 03 | 11 |  -0.0009 |  -0.0148
00:02:04 03 | 12 |   0.0175 |   0.0160
00:02:06 03 | 13 |  -0.0136 |  -0.0150
00:02:08 03 | 14 |  -0.0036 |  -0.0223
00:02:11 03 | 15 |   0.0075 |   0.0007
00:02:13 03 | 16 |   0.0108 |   0.0064
00:02:15 03 | 17 |  -0.0059 |  -0.0084
00:02:17 03 | 18 |  -0.0091 |  -0.0246
00:02:20 03 | 19 |  -0.0158 |  -0.0175
00:02:22 03 | 20 |  -0.0210 |  -0.0366
00:02:26 04 | 01 |  -0.0075 |   0.0003
00:02:28 04 | 02 |  -0.0261 |   0.0059
00:02:30 04 | 03 |   0.0271 |   0.0116
00:02:33 04 | 04 |   0.0215 |   0.0134
00:02:35 04 | 05 |   0.0181 |   0.0043
00:02:38 04 | 06 |   0.0313 |   0.0130
00:02:40 04 | 07 |  -0.0301 |  -0.0318
00:02:42 04 | 08 |   0.0221 |   0.0165
00:02:45 04 | 09 |   0.0316 |   0.0265
00:02:47 04 | 10 |  -0.0116 |  -0.0114
00:02:49 04 | 11 |   0.0216 |   0.0111
00:02:52 04 | 12 |   0.0149 |   0.0011
00:02:54 04 | 13 |   0.0171 |   0.0157
00:02:57 04 | 14 |  -0.0214 |  -0.0261
00:02:59 04 | 15 |   0.0302 |   0.0198
```

```
00:03:01 04 | 16 | -0.0275 | -0.0332
00:03:04 04 | 17 | -0.0196 | -0.0156
00:03:06 04 | 18 |  0.0271 |  0.0138
00:03:09 04 | 19 |  0.0222 |  0.0103
00:03:11 04 | 20 |  0.0272 |  0.0143
00:03:14 05 | 01 |  0.0000 |  0.0106
00:03:17 05 | 02 | -0.0195 | -0.0052
00:03:19 05 | 03 |  0.0192 |  0.0061
00:03:21 05 | 04 |  0.0066 | -0.0031
00:03:24 05 | 05 |  0.0109 |  0.0081
00:03:26 05 | 06 |  0.0109 |  0.0001
00:03:28 05 | 07 |  0.0140 |  0.0172
00:03:31 05 | 08 |  0.0279 |  0.0084
00:03:33 05 | 09 |  0.0201 |  0.0190
00:03:35 05 | 10 | -0.0038 | -0.0026
00:03:38 05 | 11 |  0.0064 |  0.0201
00:03:40 05 | 12 |  0.0098 |  0.0040
00:03:42 05 | 13 |  0.0030 | -0.0096
00:03:45 05 | 14 |  0.0093 |  0.0050
00:03:47 05 | 15 |  0.0129 |  0.0079
00:03:50 05 | 16 |  0.0009 |  0.0091
00:03:52 05 | 17 |  0.0059 |  0.0181
00:03:54 05 | 18 |  0.0104 |  0.0171
00:03:57 05 | 19 |  0.0192 |  0.0304
00:03:59 05 | 20 |  0.0123 |  0.0201
00:04:02 06 | 01 | -0.0063 | -0.0080
00:04:05 06 | 02 |  0.0074 | -0.0044
00:04:07 06 | 03 |  0.0157 |  0.0257
00:04:09 06 | 04 |  0.0232 |  0.0171
00:04:12 06 | 05 | -0.0154 | -0.0303
00:04:14 06 | 06 | -0.0050 | -0.0084
00:04:16 06 | 07 |  0.0023 | -0.0055
00:04:19 06 | 08 |  0.0150 |  0.0138
00:04:21 06 | 09 |  0.0408 |  0.0304
00:04:24 06 | 10 |  0.0144 |  0.0031
00:04:26 06 | 11 |  0.0332 |  0.0219
00:04:28 06 | 12 | -0.0100 | -0.0052
00:04:31 06 | 13 |  0.0112 |  0.0024
00:04:33 06 | 14 |  0.0296 |  0.0141
00:04:35 06 | 15 |  0.0065 | -0.0003
00:04:38 06 | 16 |  0.0290 |  0.0250
00:04:40 06 | 17 | -0.0056 | -0.0198
00:04:42 06 | 18 |  0.0016 |  0.0002
00:04:45 06 | 19 |  0.0093 | -0.0123
00:04:47 06 | 20 |  0.0307 |  0.0215
00:04:51 07 | 01 |  0.0254 |  0.0198
00:04:53 07 | 02 | -0.0186 | -0.0181
00:04:55 07 | 03 | -0.0327 | -0.0391
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00:04:58 07 | 04 |  -0.0048 |  -0.0083
00:05:00 07 | 05 |   0.0093 |   0.0070
00:05:02 07 | 06 |   0.0037 |   0.0039
00:05:05 07 | 07 |   0.0139 |   0.0261
00:05:07 07 | 08 |  -0.0135 |   0.0153
00:05:09 07 | 09 |   0.0189 |   0.0215
00:05:12 07 | 10 |  -0.0088 |   0.0213
00:05:14 07 | 11 |  -0.0057 |   0.0177
00:05:17 07 | 12 |  -0.0064 |   0.0064
00:05:19 07 | 13 |   0.0109 |   0.0428
00:05:21 07 | 14 |   0.0206 |   0.0107
00:05:24 07 | 15 |  -0.0023 |   0.0296
00:05:26 07 | 16 |  -0.0023 |   0.0358
00:05:28 07 | 17 |   0.0380 |   0.0201
00:05:31 07 | 18 |   0.0344 |   0.0242
00:05:33 07 | 19 |   0.0299 |   0.0233
00:05:35 07 | 20 |   0.0285 |   0.0273
00:05:39 08 | 01 |   0.0038 |   0.0056
00:05:41 08 | 02 |   0.0050 |  -0.0014
00:05:43 08 | 03 |   0.0176 |   0.0015
00:05:46 08 | 04 |   0.0124 |   0.0056
00:05:48 08 | 05 |   0.0067 |  -0.0005
00:05:50 08 | 06 |   0.0074 |   0.0269
00:05:53 08 | 07 |   0.0307 |   0.0287
00:05:55 08 | 08 |   0.0087 |   0.0295
00:05:58 08 | 09 |   0.0126 |  -0.0091
00:05:60 08 | 10 |   0.0112 |   0.0176
00:06:02 08 | 11 |   0.0212 |   0.0125
00:06:05 08 | 12 |   0.0116 |   0.0353
00:06:07 08 | 13 |   0.0129 |   0.0124
00:06:10 08 | 14 |   0.0161 |   0.0175
00:06:12 08 | 15 |   0.0105 |   0.0218
00:06:14 08 | 16 |   0.0238 |   0.0248
00:06:17 08 | 17 |   0.0144 |   0.0201
00:06:19 08 | 18 |   0.0289 |   0.0179
00:06:21 08 | 19 |   0.0292 |   0.0313
00:06:24 08 | 20 |   0.0202 |   0.0282
00:06:27 09 | 01 |   0.0020 |  -0.0015
00:06:29 09 | 02 |  -0.0057 |  -0.0046
00:06:32 09 | 03 |   0.0151 |   0.0197
00:06:34 09 | 04 |   0.0033 |   0.0069
00:06:36 09 | 05 |   0.0052 |  -0.0033
00:06:39 09 | 06 |   0.0165 |   0.0318
00:06:41 09 | 07 |   0.0048 |   0.0049
00:06:44 09 | 08 |   0.0049 |  -0.0030
00:06:46 09 | 09 |  -0.0003 |  -0.0164
00:06:48 09 | 10 |  -0.0125 |  -0.0318
00:06:51 09 | 11 |   0.0064 |   0.0025
```

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00:06:53 09 | 12 | -0.0061 | -0.0088
00:06:55 09 | 13 | -0.0051 | -0.0210
00:06:58 09 | 14 | -0.0016 | -0.0111
00:07:00 09 | 15 | -0.0041 | -0.0028
00:07:03 09 | 16 | -0.0082 | -0.0082
00:07:05 09 | 17 | -0.0074 | -0.0103
00:07:07 09 | 18 | -0.0035 |  0.0054
00:07:10 09 | 19 | -0.0044 | -0.0093
00:07:12 09 | 20 | -0.0046 |  0.0029
00:07:15 10 | 01 | -0.0350 | -0.0414
00:07:18 10 | 02 | -0.0377 | -0.0338
00:07:20 10 | 03 | -0.0200 | -0.0220
00:07:23 10 | 04 | -0.0556 | -0.0542
00:07:25 10 | 05 | -0.0257 | -0.0165
00:07:27 10 | 06 | -0.0345 | -0.0365
00:07:30 10 | 07 |  0.0117 | -0.0025
00:07:32 10 | 08 |  0.0102 | -0.0200
00:07:34 10 | 09 | -0.0075 | -0.0033
00:07:37 10 | 10 |  0.0102 | -0.0020
00:07:39 10 | 11 | -0.0108 | -0.0137
00:07:42 10 | 12 |  0.0140 |  0.0144
00:07:44 10 | 13 | -0.0066 | -0.0134
00:07:46 10 | 14 | -0.0107 | -0.0181
00:07:49 10 | 15 |  0.0136 |  0.0082
00:07:51 10 | 16 | -0.0032 | -0.0074
00:07:53 10 | 17 | -0.0022 | -0.0011
00:07:56 10 | 18 | -0.0004 | -0.0097
00:07:58 10 | 19 | -0.0169 | -0.0185
00:08:00 10 | 20 | -0.0053 | -0.0139
00:08:04 11 | 01 |  0.0010 |  0.0114
00:08:06 11 | 02 | -0.0202 | -0.0204
00:08:08 11 | 03 |  0.0158 |  0.0066
00:08:11 11 | 04 | -0.0004 | -0.0030
00:08:13 11 | 05 |  0.0213 |  0.0183
00:08:15 11 | 06 |  0.0186 |  0.0015
00:08:18 11 | 07 |  0.0222 |  0.0199
00:08:20 11 | 08 |  0.0121 |  0.0034
00:08:22 11 | 09 |  0.0265 |  0.0304
00:08:25 11 | 10 |  0.0244 |  0.0308
00:08:27 11 | 11 |  0.0144 |  0.0202
00:08:29 11 | 12 |  0.0177 | -0.0032
00:08:32 11 | 13 |  0.0187 |  0.0220
00:08:34 11 | 14 |  0.0095 |  0.0005
00:08:36 11 | 15 |  0.0066 | -0.0052
00:08:39 11 | 16 |  0.0080 |  0.0040
00:08:41 11 | 17 |  0.0104 |  0.0093
00:08:44 11 | 18 |  0.0013 | -0.0101
00:08:46 11 | 19 |  0.0036 |  0.0032
```

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00:08:48 11 | 20 |   0.0051 |   0.0027
00:08:52 12 | 01 |   0.0062 |   0.0134
00:08:54 12 | 02 |   0.0155 |   0.0081
00:08:56 12 | 03 |   0.0164 |   0.0088
00:08:59 12 | 04 |   0.0247 |   0.0300
00:09:01 12 | 05 |   0.0003 |   0.0207
00:09:03 12 | 06 |   0.0169 |   0.0099
00:09:06 12 | 07 |   0.0235 |   0.0096
00:09:08 12 | 08 |   0.0300 |   0.0314
00:09:10 12 | 09 |   0.0067 |  -0.0033
00:09:13 12 | 10 |   0.0382 |   0.0360
00:09:15 12 | 11 |   0.0215 |   0.0248
00:09:17 12 | 12 |   0.0156 |   0.0152
00:09:20 12 | 13 |  -0.0022 |  -0.0163
00:09:22 12 | 14 |   0.0155 |   0.0057
00:09:24 12 | 15 |   0.0151 |   0.0256
00:09:27 12 | 16 |   0.0113 |   0.0130
00:09:29 12 | 17 |   0.0065 |   0.0189
00:09:32 12 | 18 |   0.0278 |   0.0363
00:09:34 12 | 19 |   0.0287 |   0.0131
00:09:36 12 | 20 |   0.0248 |   0.0428
(32, 32) tanh 0.2 64
00:00:08 01 | 01 |   0.0088 |   0.0242
00:00:15 01 | 02 |  -0.0146 |  -0.0192
00:00:22 01 | 03 |   0.0100 |   0.0075
00:00:28 01 | 04 |   0.0134 |   0.0190
00:00:35 01 | 05 |   0.0135 |   0.0255
00:00:42 01 | 06 |   0.0154 |   0.0211
00:00:49 01 | 07 |   0.0165 |   0.0280
00:00:56 01 | 08 |   0.0193 |   0.0450
00:01:03 01 | 09 |   0.0085 |   0.0289
00:01:10 01 | 10 |   0.0114 |   0.0130
00:01:17 01 | 11 |   0.0112 |   0.0080
00:01:24 01 | 12 |   0.0101 |   0.0060
00:01:31 01 | 13 |   0.0307 |   0.0144
00:01:38 01 | 14 |   0.0157 |   0.0204
00:01:45 01 | 15 |   0.0134 |   0.0266
00:01:52 01 | 16 |   0.0180 |   0.0198
00:01:59 01 | 17 |   0.0218 |   0.0253
00:02:06 01 | 18 |   0.0158 |   0.0119
00:02:13 01 | 19 |   0.0323 |   0.0350
00:02:20 01 | 20 |   0.0214 |   0.0197
00:02:28 02 | 01 |  -0.0145 |  -0.0116
00:02:35 02 | 02 |   0.0102 |   0.0195
00:02:42 02 | 03 |   0.0056 |   0.0158
00:02:49 02 | 04 |   0.0072 |   0.0049
00:02:56 02 | 05 |  -0.0274 |  -0.0170
00:03:03 02 | 06 |  -0.0121 |   0.0052
```

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00:03:10 02 | 07 | -0.0011 |  0.0040
00:03:17 02 | 08 | -0.0269 | -0.0107
00:03:23 02 | 09 | -0.0040 |  0.0065
00:03:30 02 | 10 |  0.0181 |  0.0270
00:03:37 02 | 11 | -0.0186 | -0.0263
00:03:44 02 | 12 | -0.0211 | -0.0073
00:03:51 02 | 13 | -0.0074 | -0.0042
00:03:58 02 | 14 | -0.0103 | -0.0136
00:04:05 02 | 15 |  0.0163 |  0.0072
00:04:12 02 | 16 |  0.0144 |  0.0074
00:04:19 02 | 17 |  0.0191 |  0.0565
00:04:26 02 | 18 | -0.0043 |  0.0082
00:04:33 02 | 19 |  0.0090 |  0.0066
00:04:40 02 | 20 | -0.0108 | -0.0070
00:04:48 03 | 01 |  0.0058 |  0.0249
00:04:55 03 | 02 |  0.0106 | -0.0177
00:05:02 03 | 03 |  0.0118 |  0.0032
00:05:09 03 | 04 | -0.0146 | -0.0013
00:05:16 03 | 05 |  0.0166 |  0.0323
00:05:23 03 | 06 |  0.0017 | -0.0008
00:05:30 03 | 07 | -0.0045 | -0.0144
00:05:37 03 | 08 |  0.0068 |  0.0054
00:05:44 03 | 09 | -0.0065 |  0.0031
00:05:51 03 | 10 |  0.0134 |  0.0048
00:05:58 03 | 11 |  0.0159 |  0.0162
00:06:05 03 | 12 | -0.0020 | -0.0018
00:06:12 03 | 13 | -0.0047 | -0.0279
00:06:19 03 | 14 |  0.0021 | -0.0125
00:06:26 03 | 15 | -0.0217 | -0.0356
00:06:32 03 | 16 | -0.0145 | -0.0100
00:06:39 03 | 17 | -0.0254 | -0.0440
00:06:46 03 | 18 | -0.0277 | -0.0219
00:06:53 03 | 19 | -0.0131 | -0.0039
00:07:00 03 | 20 | -0.0182 | -0.0380
00:07:08 04 | 01 |  0.0278 |  0.0342
00:07:15 04 | 02 |  0.0246 |  0.0217
00:07:22 04 | 03 | -0.0141 | -0.0144
00:07:29 04 | 04 |  0.0276 |  0.0345
00:07:36 04 | 05 |  0.0068 |  0.0139
00:07:43 04 | 06 |  0.0084 |  0.0133
00:07:50 04 | 07 | -0.0345 | -0.0403
00:07:57 04 | 08 |  0.0038 |  0.0117
00:08:04 04 | 09 | -0.0319 | -0.0319
00:08:11 04 | 10 | -0.0313 | -0.0176
00:08:18 04 | 11 | -0.0166 |  0.0134
00:08:25 04 | 12 | -0.0480 | -0.0520
00:08:32 04 | 13 | -0.0316 | -0.0414
00:08:39 04 | 14 |  0.0053 | -0.0085
```

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00:08:46 04 | 15 | -0.0065 |  0.0080
00:08:54 04 | 16 |  0.0107 |  0.0329
00:09:01 04 | 17 |  0.0286 |  0.0256
00:09:08 04 | 18 |  0.0004 | -0.0124
00:09:15 04 | 19 | -0.0218 | -0.0384
00:09:22 04 | 20 | -0.0015 | -0.0091
00:09:30 05 | 01 |  0.0048 | -0.0097
00:09:37 05 | 02 |  0.0002 |  0.0089
00:09:44 05 | 03 |  0.0090 |  0.0123
00:09:50 05 | 04 | -0.0114 | -0.0148
00:09:57 05 | 05 | -0.0119 | -0.0114
00:10:04 05 | 06 | -0.0120 | -0.0096
00:10:11 05 | 07 | -0.0147 | -0.0158
00:10:18 05 | 08 | -0.0052 | -0.0102
00:10:25 05 | 09 | -0.0080 | -0.0148
00:10:32 05 | 10 |  0.0023 | -0.0125
00:10:39 05 | 11 | -0.0013 | -0.0260
00:10:46 05 | 12 |  0.0141 |  0.0189
00:10:53 05 | 13 | -0.0199 | -0.0171
00:11:00 05 | 14 | -0.0047 | -0.0211
00:11:07 05 | 15 | -0.0069 | -0.0166
00:11:14 05 | 16 | -0.0118 | -0.0228
00:11:21 05 | 17 | -0.0180 | -0.0375
00:11:28 05 | 18 |  0.0035 |  0.0077
00:11:35 05 | 19 | -0.0052 | -0.0296
00:11:42 05 | 20 | -0.0087 | -0.0016
00:11:50 06 | 01 |  0.0141 | -0.0033
00:11:57 06 | 02 |  0.0207 | -0.0085
00:12:04 06 | 03 |  0.0391 |  0.0403
00:12:11 06 | 04 |  0.0351 |  0.0527
00:12:18 06 | 05 |  0.0283 |  0.0246
00:12:25 06 | 06 |  0.0519 |  0.0457
00:12:32 06 | 07 |  0.0181 |  0.0073
00:12:39 06 | 08 |  0.0306 |  0.0128
00:12:46 06 | 09 |  0.0242 |  0.0160
00:12:53 06 | 10 |  0.0232 |  0.0098
00:13:00 06 | 11 |  0.0421 |  0.0356
00:13:07 06 | 12 |  0.0321 |  0.0241
00:13:14 06 | 13 |  0.0326 |  0.0648
00:13:21 06 | 14 |  0.0052 | -0.0148
00:13:28 06 | 15 |  0.0338 |  0.0423
00:13:35 06 | 16 |  0.0339 |  0.0495
00:13:42 06 | 17 |  0.0381 |  0.0391
00:13:49 06 | 18 |  0.0333 |  0.0510
00:13:56 06 | 19 |  0.0448 |  0.0470
00:14:03 06 | 20 |  0.0310 |  0.0433
00:14:11 07 | 01 |  0.0193 |  0.0215
00:14:18 07 | 02 |  0.0130 |  0.0052
```

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00:14:25 07 | 03 |   0.0205 |   0.0348
00:14:32 07 | 04 |   0.0257 |   0.0196
00:14:39 07 | 05 |   0.0223 |   0.0414
00:14:46 07 | 06 |   0.0153 |   0.0368
00:14:53 07 | 07 |   0.0171 |   0.0026
00:14:60 07 | 08 |   0.0074 |   0.0163
00:15:07 07 | 09 |   0.0228 |   0.0166
00:15:14 07 | 10 |   0.0352 |   0.0240
00:15:21 07 | 11 |   0.0274 |   0.0228
00:15:28 07 | 12 |   0.0152 |   0.0066
00:15:35 07 | 13 |   0.0438 |   0.0468
00:15:42 07 | 14 |   0.0268 |   0.0178
00:15:49 07 | 15 |  -0.0110 |  -0.0142
00:15:56 07 | 16 |   0.0446 |   0.0447
00:16:03 07 | 17 |  -0.0025 |   0.0017
00:16:10 07 | 18 |   0.0019 |   0.0247
00:16:17 07 | 19 |  -0.0082 |  -0.0017
00:16:24 07 | 20 |   0.0154 |   0.0303
00:16:32 08 | 01 |   0.0267 |   0.0087
00:16:39 08 | 02 |  -0.0112 |  -0.0057
00:16:46 08 | 03 |   0.0343 |   0.0418
00:16:53 08 | 04 |   0.0255 |   0.0083
00:16:60 08 | 05 |   0.0126 |   0.0169
00:17:07 08 | 06 |   0.0078 |   0.0322
00:17:14 08 | 07 |   0.0026 |   0.0118
00:17:21 08 | 08 |   0.0280 |   0.0524
00:17:27 08 | 09 |   0.0060 |  -0.0035
00:17:34 08 | 10 |   0.0025 |   0.0099
00:17:41 08 | 11 |  -0.0032 |   0.0119
00:17:48 08 | 12 |   0.0089 |   0.0171
00:17:55 08 | 13 |   0.0377 |   0.0420
00:18:02 08 | 14 |   0.0006 |   0.0229
00:18:09 08 | 15 |   0.0292 |   0.0302
00:18:16 08 | 16 |   0.0011 |  -0.0103
00:18:23 08 | 17 |   0.0062 |   0.0110
00:18:30 08 | 18 |  -0.0044 |  -0.0113
00:18:37 08 | 19 |   0.0077 |   0.0012
00:18:44 08 | 20 |   0.0143 |   0.0161
00:18:52 09 | 01 |  -0.0254 |  -0.0141
00:18:59 09 | 02 |   0.0062 |   0.0145
00:19:06 09 | 03 |   0.0051 |   0.0235
00:19:13 09 | 04 |   0.0028 |   0.0125
00:19:20 09 | 05 |   0.0091 |   0.0151
00:19:27 09 | 06 |   0.0148 |   0.0125
00:19:33 09 | 07 |   0.0255 |   0.0317
00:19:40 09 | 08 |  -0.0047 |  -0.0008
00:19:47 09 | 09 |   0.0158 |   0.0067
00:19:54 09 | 10 |   0.0157 |   0.0342
```

```
00:20:01 09 | 11 |   0.0063 |   0.0010
00:20:08 09 | 12 |   0.0092 |   0.0165
00:20:15 09 | 13 |   0.0171 |   0.0169
00:20:22 09 | 14 |   0.0112 |   0.0060
00:20:29 09 | 15 |   0.0049 |  -0.0103
00:20:36 09 | 16 |   0.0044 |  -0.0051
00:20:43 09 | 17 |   0.0148 |   0.0039
00:20:50 09 | 18 |   0.0146 |   0.0152
00:20:57 09 | 19 |   0.0094 |   0.0053
00:21:04 09 | 20 |   0.0207 |   0.0066
00:21:12 10 | 01 |  -0.0199 |  -0.0142
00:21:19 10 | 02 |  -0.0225 |  -0.0097
00:21:26 10 | 03 |   0.0106 |   0.0048
00:21:33 10 | 04 |  -0.0083 |  -0.0121
00:21:40 10 | 05 |  -0.0160 |  -0.0317
00:21:47 10 | 06 |  -0.0020 |   0.0063
00:21:54 10 | 07 |  -0.0100 |  -0.0162
00:22:01 10 | 08 |  -0.0039 |  -0.0070
00:22:08 10 | 09 |  -0.0334 |  -0.0381
00:22:14 10 | 10 |  -0.0301 |  -0.0319
00:22:21 10 | 11 |   0.0081 |   0.0177
00:22:28 10 | 12 |  -0.0172 |  -0.0105
00:22:35 10 | 13 |  -0.0149 |  -0.0115
00:22:42 10 | 14 |  -0.0102 |  -0.0162
00:22:49 10 | 15 |  -0.0156 |  -0.0143
00:22:56 10 | 16 |  -0.0025 |  -0.0177
00:23:03 10 | 17 |  -0.0040 |  -0.0046
00:23:10 10 | 18 |  -0.0185 |  -0.0150
00:23:17 10 | 19 |  -0.0104 |  -0.0235
00:23:24 10 | 20 |  -0.0049 |  -0.0053
00:23:32 11 | 01 |   0.0300 |   0.0177
00:23:39 11 | 02 |   0.0067 |   0.0100
00:23:46 11 | 03 |   0.0153 |   0.0197
00:23:53 11 | 04 |   0.0194 |   0.0257
00:23:60 11 | 05 |   0.0185 |   0.0188
00:24:07 11 | 06 |   0.0271 |   0.0172
00:24:14 11 | 07 |   0.0288 |   0.0274
00:24:21 11 | 08 |   0.0323 |   0.0241
00:24:28 11 | 09 |   0.0036 |  -0.0044
00:24:35 11 | 10 |   0.0221 |   0.0290
00:24:42 11 | 11 |   0.0189 |   0.0317
00:24:49 11 | 12 |   0.0080 |   0.0185
00:24:56 11 | 13 |   0.0041 |   0.0081
00:25:03 11 | 14 |   0.0100 |   0.0156
00:25:10 11 | 15 |   0.0256 |   0.0290
00:25:17 11 | 16 |   0.0101 |   0.0224
00:25:23 11 | 17 |   0.0160 |   0.0144
00:25:30 11 | 18 |   0.0053 |   0.0120
```

```
00:25:37 11 | 19 |   0.0054 |   0.0141
00:25:44 11 | 20 |   0.0105 |   0.0102
00:25:52 12 | 01 |   0.0078 |   0.0050
00:25:59 12 | 02 |   0.0046 |   0.0138
00:26:06 12 | 03 |   0.0034 |   0.0170
00:26:13 12 | 04 |  -0.0004 |   0.0087
00:26:20 12 | 05 |   0.0127 |   0.0197
00:26:27 12 | 06 |   0.0037 |   0.0018
00:26:34 12 | 07 |   0.0105 |   0.0001
00:26:41 12 | 08 |   0.0077 |   0.0021
00:26:48 12 | 09 |   0.0142 |   0.0036
00:26:55 12 | 10 |   0.0168 |   0.0253
00:27:02 12 | 11 |   0.0063 |  -0.0036
00:27:09 12 | 12 |   0.0111 |   0.0193
00:27:16 12 | 13 |   0.0147 |   0.0120
00:27:23 12 | 14 |   0.0230 |   0.0113
00:27:30 12 | 15 |   0.0062 |   0.0037
00:27:37 12 | 16 |   0.0047 |   0.0106
00:27:44 12 | 17 |  -0.0039 |   0.0073
00:27:51 12 | 18 |   0.0101 |   0.0082
00:27:58 12 | 19 |   0.0101 |   0.0256
00:28:05 12 | 20 |   0.0106 |   0.0261
(32, 32) tanh 0.2 256
00:00:04 01 | 01 |  -0.0017 |   0.0022
00:00:07 01 | 02 |  -0.0034 |   0.0039
00:00:09 01 | 03 |   0.0047 |   0.0032
00:00:12 01 | 04 |   0.0180 |   0.0126
00:00:15 01 | 05 |  -0.0012 |  -0.0038
00:00:18 01 | 06 |   0.0070 |  -0.0024
00:00:20 01 | 07 |   0.0036 |  -0.0077
00:00:23 01 | 08 |  -0.0102 |  -0.0054
00:00:26 01 | 09 |   0.0125 |   0.0067
00:00:29 01 | 10 |   0.0075 |   0.0032
00:00:31 01 | 11 |   0.0136 |   0.0128
00:00:34 01 | 12 |  -0.0060 |  -0.0087
00:00:37 01 | 13 |  -0.0008 |   0.0070
00:00:40 01 | 14 |   0.0046 |   0.0001
00:00:42 01 | 15 |   0.0025 |   0.0041
00:00:45 01 | 16 |  -0.0087 |  -0.0096
00:00:48 01 | 17 |   0.0034 |   0.0151
00:00:51 01 | 18 |   0.0146 |   0.0182
00:00:53 01 | 19 |   0.0132 |   0.0178
00:00:56 01 | 20 |   0.0164 |   0.0190
00:00:60 02 | 01 |   0.0178 |   0.0358
00:01:03 02 | 02 |   0.0068 |   0.0054
00:01:05 02 | 03 |  -0.0031 |   0.0072
00:01:08 02 | 04 |  -0.0083 |  -0.0158
00:01:11 02 | 05 |  -0.0020 |  -0.0144
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00:01:14 02 | 06 | -0.0016 | -0.0006
00:01:17 02 | 07 | -0.0058 | -0.0107
00:01:19 02 | 08 |  0.0150 |  0.0321
00:01:22 02 | 09 | -0.0102 |  0.0093
00:01:25 02 | 10 | -0.0102 | -0.0188
00:01:28 02 | 11 | -0.0073 |  0.0022
00:01:30 02 | 12 | -0.0077 | -0.0068
00:01:33 02 | 13 | -0.0090 | -0.0042
00:01:36 02 | 14 | -0.0084 |  0.0044
00:01:39 02 | 15 |  0.0101 |  0.0151
00:01:42 02 | 16 | -0.0153 | -0.0120
00:01:44 02 | 17 |  0.0204 |  0.0235
00:01:47 02 | 18 |  0.0041 |  0.0152
00:01:50 02 | 19 |  0.0057 |  0.0062
00:01:53 02 | 20 | -0.0053 | -0.0102
00:01:56 03 | 01 | -0.0188 | -0.0227
00:01:59 03 | 02 | -0.0146 | -0.0140
00:02:02 03 | 03 | -0.0095 | -0.0036
00:02:05 03 | 04 | -0.0041 | -0.0009
00:02:07 03 | 05 |  0.0111 |  0.0053
00:02:10 03 | 06 |  0.0292 |  0.0218
00:02:13 03 | 07 |  0.0202 |  0.0024
00:02:16 03 | 08 |  0.0164 |  0.0225
00:02:19 03 | 09 |  0.0042 |  0.0006
00:02:22 03 | 10 |  0.0070 |  0.0035
00:02:25 03 | 11 | -0.0107 | -0.0246
00:02:27 03 | 12 |  0.0050 | -0.0102
00:02:30 03 | 13 |  0.0086 |  0.0129
00:02:33 03 | 14 |  0.0168 |  0.0351
00:02:36 03 | 15 | -0.0211 | -0.0349
00:02:39 03 | 16 | -0.0028 | -0.0014
00:02:41 03 | 17 | -0.0271 | -0.0445
00:02:44 03 | 18 | -0.0181 | -0.0467
00:02:47 03 | 19 |  0.0042 |  0.0099
00:02:50 03 | 20 |  0.0004 |  0.0008
00:02:53 04 | 01 |  0.0134 | -0.0064
00:02:56 04 | 02 | -0.0220 | -0.0127
00:02:59 04 | 03 |  0.0072 |  0.0138
00:03:02 04 | 04 | -0.0156 | -0.0090
00:03:05 04 | 05 |  0.0263 |  0.0254
00:03:07 04 | 06 | -0.0001 |  0.0013
00:03:10 04 | 07 |  0.0200 |  0.0147
00:03:13 04 | 08 |  0.0138 | -0.0251
00:03:16 04 | 09 |  0.0063 | -0.0042
00:03:18 04 | 10 | -0.0355 | -0.0518
00:03:21 04 | 11 |  0.0258 |  0.0119
00:03:24 04 | 12 | -0.0502 | -0.0444
00:03:27 04 | 13 | -0.0055 | -0.0030
```

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00:03:30 04 | 14 | -0.0164 | -0.0140
00:03:32 04 | 15 | -0.0328 | -0.0275
00:03:35 04 | 16 | -0.0061 |  0.0080
00:03:38 04 | 17 | -0.0072 | -0.0004
00:03:41 04 | 18 | -0.0094 |  0.0031
00:03:43 04 | 19 | -0.0041 | -0.0045
00:03:46 04 | 20 |  0.0062 |  0.0027
00:03:50 05 | 01 |  0.0200 |  0.0197
00:03:53 05 | 02 | -0.0013 | -0.0090
00:03:55 05 | 03 | -0.0191 | -0.0098
00:03:58 05 | 04 |  0.0041 | -0.0113
00:04:01 05 | 05 | -0.0110 | -0.0107
00:04:04 05 | 06 |  0.0151 |  0.0144
00:04:06 05 | 07 | -0.0009 |  0.0069
00:04:09 05 | 08 |  0.0079 |  0.0008
00:04:12 05 | 09 |  0.0285 |  0.0348
00:04:15 05 | 10 |  0.0126 | -0.0030
00:04:18 05 | 11 |  0.0230 |  0.0090
00:04:20 05 | 12 |  0.0128 |  0.0095
00:04:23 05 | 13 |  0.0080 |  0.0059
00:04:26 05 | 14 |  0.0072 |  0.0032
00:04:29 05 | 15 |  0.0085 |  0.0105
00:04:32 05 | 16 |  0.0124 |  0.0203
00:04:34 05 | 17 |  0.0106 |  0.0046
00:04:37 05 | 18 |  0.0018 |  0.0092
00:04:40 05 | 19 |  0.0041 |  0.0069
00:04:43 05 | 20 |  0.0010 | -0.0084
00:04:47 06 | 01 |  0.0032 |  0.0063
00:04:49 06 | 02 |  0.0283 |  0.0247
00:04:52 06 | 03 |  0.0080 |  0.0003
00:04:55 06 | 04 |  0.0052 |  0.0272
00:04:58 06 | 05 |  0.0260 |  0.0344
00:05:01 06 | 06 |  0.0073 | -0.0127
00:05:03 06 | 07 |  0.0348 |  0.0079
00:05:06 06 | 08 |  0.0013 |  0.0107
00:05:09 06 | 09 |  0.0258 |  0.0255
00:05:12 06 | 10 |  0.0326 |  0.0293
00:05:15 06 | 11 |  0.0359 |  0.0487
00:05:17 06 | 12 |  0.0352 |  0.0361
00:05:20 06 | 13 |  0.0316 |  0.0245
00:05:23 06 | 14 |  0.0320 |  0.0514
00:05:26 06 | 15 |  0.0118 |  0.0109
00:05:29 06 | 16 |  0.0365 |  0.0373
00:05:31 06 | 17 |  0.0278 |  0.0356
00:05:34 06 | 18 |  0.0378 |  0.0355
00:05:37 06 | 19 |  0.0319 |  0.0363
00:05:40 06 | 20 |  0.0306 |  0.0530
00:05:44 07 | 01 | -0.0003 |  0.0184
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00:05:46 07 | 02 |   0.0263 |   0.0245
00:05:49 07 | 03 |   0.0280 |   0.0333
00:05:52 07 | 04 |   0.0197 |   0.0200
00:05:55 07 | 05 |  -0.0178 |  -0.0088
00:05:57 07 | 06 |   0.0192 |   0.0229
00:06:00 07 | 07 |   0.0220 |   0.0304
00:06:03 07 | 08 |   0.0310 |   0.0504
00:06:06 07 | 09 |   0.0124 |   0.0398
00:06:09 07 | 10 |   0.0212 |   0.0086
00:06:11 07 | 11 |   0.0261 |   0.0273
00:06:14 07 | 12 |   0.0415 |   0.0353
00:06:17 07 | 13 |   0.0272 |   0.0335
00:06:20 07 | 14 |   0.0068 |   0.0346
00:06:22 07 | 15 |   0.0126 |   0.0042
00:06:25 07 | 16 |   0.0275 |   0.0362
00:06:28 07 | 17 |   0.0195 |   0.0198
00:06:31 07 | 18 |   0.0347 |   0.0454
00:06:33 07 | 19 |   0.0235 |   0.0403
00:06:36 07 | 20 |   0.0295 |   0.0215
00:06:40 08 | 01 |   0.0023 |   0.0280
00:06:43 08 | 02 |  -0.0003 |   0.0173
00:06:45 08 | 03 |   0.0024 |   0.0094
00:06:48 08 | 04 |   0.0150 |   0.0092
00:06:51 08 | 05 |   0.0016 |   0.0251
00:06:54 08 | 06 |   0.0035 |  -0.0007
00:06:57 08 | 07 |   0.0153 |   0.0044
00:06:59 08 | 08 |   0.0091 |   0.0218
00:07:02 08 | 09 |   0.0092 |   0.0010
00:07:05 08 | 10 |   0.0045 |   0.0233
00:07:08 08 | 11 |   0.0033 |   0.0040
00:07:10 08 | 12 |   0.0247 |   0.0210
00:07:13 08 | 13 |   0.0084 |  -0.0071
00:07:16 08 | 14 |   0.0103 |   0.0114
00:07:19 08 | 15 |   0.0149 |   0.0131
00:07:21 08 | 16 |   0.0102 |   0.0236
00:07:24 08 | 17 |   0.0201 |   0.0323
00:07:27 08 | 18 |   0.0046 |   0.0046
00:07:30 08 | 19 |   0.0129 |  -0.0069
00:07:33 08 | 20 |   0.0137 |   0.0039
00:07:36 09 | 01 |  -0.0186 |  -0.0329
00:07:39 09 | 02 |  -0.0142 |   0.0079
00:07:42 09 | 03 |   0.0092 |   0.0028
00:07:45 09 | 04 |  -0.0004 |  -0.0071
00:07:48 09 | 05 |   0.0249 |   0.0343
00:07:51 09 | 06 |   0.0243 |   0.0206
00:07:53 09 | 07 |   0.0114 |   0.0072
00:07:56 09 | 08 |  -0.0004 |  -0.0076
00:07:59 09 | 09 |   0.0157 |   0.0183
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00:08:02 09 | 10 |  -0.0008 |  -0.0067
00:08:04 09 | 11 |   0.0148 |   0.0100
00:08:07 09 | 12 |  -0.0031 |  -0.0131
00:08:10 09 | 13 |   0.0101 |   0.0034
00:08:13 09 | 14 |   0.0195 |   0.0238
00:08:15 09 | 15 |   0.0002 |  -0.0092
00:08:18 09 | 16 |   0.0204 |   0.0252
00:08:21 09 | 17 |   0.0140 |   0.0142
00:08:24 09 | 18 |   0.0226 |   0.0181
00:08:27 09 | 19 |   0.0139 |   0.0020
00:08:29 09 | 20 |   0.0107 |   0.0005
00:08:33 10 | 01 |  -0.0022 |   0.0031
00:08:36 10 | 02 |   0.0003 |  -0.0112
00:08:39 10 | 03 |   0.0178 |   0.0088
00:08:41 10 | 04 |  -0.0053 |  -0.0073
00:08:44 10 | 05 |  -0.0366 |  -0.0680
00:08:47 10 | 06 |  -0.0323 |  -0.0331
00:08:50 10 | 07 |  -0.0006 |   0.0072
00:08:53 10 | 08 |  -0.0233 |  -0.0257
00:08:55 10 | 09 |   0.0201 |   0.0261
00:08:58 10 | 10 |  -0.0256 |  -0.0167
00:09:01 10 | 11 |  -0.0232 |  -0.0338
00:09:04 10 | 12 |   0.0156 |   0.0139
00:09:07 10 | 13 |  -0.0182 |  -0.0100
00:09:09 10 | 14 |  -0.0428 |  -0.0388
00:09:12 10 | 15 |  -0.0364 |  -0.0420
00:09:15 10 | 16 |  -0.0272 |  -0.0214
00:09:18 10 | 17 |  -0.0207 |  -0.0057
00:09:21 10 | 18 |  -0.0455 |  -0.0651
00:09:23 10 | 19 |  -0.0122 |  -0.0127
00:09:26 10 | 20 |   0.0038 |   0.0046
00:09:30 11 | 01 |   0.0101 |   0.0161
00:09:33 11 | 02 |  -0.0027 |   0.0000
00:09:35 11 | 03 |   0.0221 |   0.0291
00:09:38 11 | 04 |   0.0277 |   0.0288
00:09:41 11 | 05 |   0.0109 |   0.0100
00:09:44 11 | 06 |   0.0092 |   0.0212
00:09:46 11 | 07 |   0.0114 |   0.0074
00:09:49 11 | 08 |   0.0163 |   0.0204
00:09:52 11 | 09 |   0.0198 |   0.0185
00:09:55 11 | 10 |  -0.0028 |  -0.0002
00:09:57 11 | 11 |   0.0319 |   0.0247
00:10:00 11 | 12 |   0.0320 |   0.0232
00:10:03 11 | 13 |   0.0246 |   0.0139
00:10:06 11 | 14 |   0.0230 |   0.0296
00:10:09 11 | 15 |   0.0310 |   0.0222
00:10:11 11 | 16 |   0.0321 |   0.0277
00:10:14 11 | 17 |   0.0253 |   0.0146
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00:10:17 11 | 18 |   0.0126 |   0.0056
00:10:20 11 | 19 |   0.0035 |  -0.0064
00:10:23 11 | 20 |  -0.0016 |  -0.0071
00:10:26 12 | 01 |  -0.0040 |  -0.0234
00:10:29 12 | 02 |   0.0082 |   0.0265
00:10:32 12 | 03 |   0.0048 |   0.0124
00:10:34 12 | 04 |   0.0222 |   0.0273
00:10:37 12 | 05 |   0.0371 |   0.0195
00:10:40 12 | 06 |   0.0332 |   0.0144
00:10:43 12 | 07 |   0.0209 |   0.0026
00:10:46 12 | 08 |   0.0187 |   0.0164
00:10:49 12 | 09 |   0.0209 |   0.0073
00:10:51 12 | 10 |   0.0091 |  -0.0004
00:10:54 12 | 11 |   0.0054 |  -0.0105
00:10:57 12 | 12 |  -0.0052 |  -0.0070
00:10:60 12 | 13 |   0.0029 |   0.0085
00:11:02 12 | 14 |  -0.0067 |  -0.0129
00:11:05 12 | 15 |   0.0144 |   0.0382
00:11:08 12 | 16 |   0.0024 |  -0.0046
00:11:11 12 | 17 |   0.0058 |   0.0220
00:11:14 12 | 18 |  -0.0059 |  -0.0118
00:11:17 12 | 19 |   0.0023 |  -0.0171
00:11:19 12 | 20 |   0.0053 |   0.0131
(32, 16) tanh 0.2 64
00:00:08 01 | 01 |  -0.0083 |   0.0022
00:00:14 01 | 02 |  -0.0200 |  -0.0344
00:00:21 01 | 03 |   0.0081 |   0.0054
00:00:28 01 | 04 |  -0.0092 |  -0.0048
00:00:34 01 | 05 |   0.0278 |   0.0230
00:00:41 01 | 06 |   0.0194 |   0.0217
00:00:48 01 | 07 |   0.0123 |   0.0169
00:00:54 01 | 08 |   0.0224 |   0.0204
00:01:01 01 | 09 |   0.0114 |   0.0101
00:01:08 01 | 10 |   0.0153 |   0.0186
00:01:14 01 | 11 |   0.0197 |   0.0155
00:01:21 01 | 12 |   0.0220 |   0.0228
00:01:27 01 | 13 |   0.0115 |   0.0064
00:01:34 01 | 14 |   0.0020 |  -0.0000
00:01:41 01 | 15 |   0.0099 |   0.0066
00:01:47 01 | 16 |   0.0062 |   0.0154
00:01:54 01 | 17 |   0.0075 |   0.0038
00:02:01 01 | 18 |   0.0050 |  -0.0114
00:02:07 01 | 19 |   0.0024 |  -0.0110
00:02:14 01 | 20 |  -0.0020 |  -0.0040
00:02:21 02 | 01 |  -0.0101 |  -0.0180
00:02:28 02 | 02 |  -0.0101 |  -0.0295
00:02:35 02 | 03 |   0.0019 |   0.0121
00:02:41 02 | 04 |   0.0125 |   0.0339
```

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00:02:48 02 | 05 | -0.0013 | -0.0042
00:02:55 02 | 06 |  0.0055 |  0.0004
00:03:01 02 | 07 |  0.0034 |  0.0191
00:03:08 02 | 08 |  0.0162 |  0.0210
00:03:14 02 | 09 |  0.0096 |  0.0050
00:03:21 02 | 10 |  0.0048 |  0.0064
00:03:28 02 | 11 |  0.0075 |  0.0054
00:03:34 02 | 12 |  0.0134 |  0.0187
00:03:41 02 | 13 |  0.0190 |  0.0317
00:03:47 02 | 14 |  0.0076 |  0.0129
00:03:54 02 | 15 | -0.0111 | -0.0117
00:04:01 02 | 16 |  0.0212 |  0.0239
00:04:07 02 | 17 |  0.0068 |  0.0111
00:04:14 02 | 18 |  0.0018 | -0.0037
00:04:21 02 | 19 |  0.0064 |  0.0041
00:04:27 02 | 20 | -0.0004 |  0.0011
00:04:35 03 | 01 | -0.0124 | -0.0238
00:04:41 03 | 02 |  0.0049 |  0.0084
00:04:48 03 | 03 |  0.0089 |  0.0277
00:04:55 03 | 04 |  0.0002 |  0.0192
00:05:01 03 | 05 | -0.0094 | -0.0187
00:05:08 03 | 06 | -0.0334 | -0.0169
00:05:15 03 | 07 | -0.0075 | -0.0045
00:05:21 03 | 08 | -0.0241 | -0.0252
00:05:28 03 | 09 | -0.0041 | -0.0031
00:05:35 03 | 10 | -0.0140 | -0.0373
00:05:41 03 | 11 | -0.0174 | -0.0340
00:05:48 03 | 12 | -0.0161 | -0.0247
00:05:55 03 | 13 |  0.0043 |  0.0128
00:06:01 03 | 14 |  0.0014 |  0.0187
00:06:08 03 | 15 | -0.0146 | -0.0276
00:06:15 03 | 16 | -0.0239 | -0.0349
00:06:21 03 | 17 | -0.0111 | -0.0258
00:06:28 03 | 18 |  0.0149 |  0.0200
00:06:35 03 | 19 | -0.0054 | -0.0154
00:06:41 03 | 20 |  0.0046 | -0.0046
00:06:49 04 | 01 | -0.0143 | -0.0124
00:06:56 04 | 02 |  0.0364 |  0.0324
00:07:03 04 | 03 | -0.0080 | -0.0135
00:07:09 04 | 04 | -0.0016 | -0.0096
00:07:16 04 | 05 | -0.0298 | -0.0426
00:07:23 04 | 06 |  0.0030 | -0.0029
00:07:30 04 | 07 | -0.0145 | -0.0079
00:07:36 04 | 08 | -0.0107 | -0.0048
00:07:43 04 | 09 |  0.0042 | -0.0171
00:07:50 04 | 10 | -0.0240 | -0.0470
00:07:57 04 | 11 |  0.0058 | -0.0138
00:08:03 04 | 12 |  0.0134 | -0.0145
```

```
00:08:10 04 | 13 |   0.0087 | -0.0101
00:08:17 04 | 14 |   0.0077 |  0.0117
00:08:23 04 | 15 | -0.0015 |  0.0001
00:08:30 04 | 16 | -0.0186 | -0.0236
00:08:37 04 | 17 | -0.0026 | -0.0001
00:08:43 04 | 18 |   0.0024 |  0.0066
00:08:50 04 | 19 |   0.0114 |  0.0032
00:08:57 04 | 20 | -0.0197 | -0.0252
00:09:04 05 | 01 | -0.0098 |  0.0072
00:09:11 05 | 02 | -0.0040 |  0.0010
00:09:18 05 | 03 |   0.0217 |  0.0270
00:09:24 05 | 04 |   0.0075 |  0.0141
00:09:31 05 | 05 |   0.0222 |  0.0148
00:09:38 05 | 06 |   0.0161 |  0.0113
00:09:45 05 | 07 |   0.0065 |  0.0092
00:09:51 05 | 08 | -0.0083 | -0.0069
00:09:58 05 | 09 |   0.0233 |  0.0212
00:10:05 05 | 10 | -0.0091 | -0.0292
00:10:11 05 | 11 | -0.0000 | -0.0055
00:10:18 05 | 12 | -0.0113 | -0.0053
00:10:25 05 | 13 |   0.0046 |  0.0157
00:10:31 05 | 14 | -0.0011 |  0.0087
00:10:38 05 | 15 |   0.0102 |  0.0195
00:10:45 05 | 16 | -0.0038 |  0.0188
00:10:52 05 | 17 |   0.0076 | -0.0007
00:10:58 05 | 18 |   0.0039 |  0.0021
00:11:05 05 | 19 |   0.0134 |  0.0119
00:11:12 05 | 20 |   0.0066 | -0.0040
00:11:19 06 | 01 |   0.0210 |  0.0132
00:11:26 06 | 02 | -0.0009 |  0.0146
00:11:32 06 | 03 |   0.0311 |  0.0152
00:11:39 06 | 04 |   0.0344 |  0.0321
00:11:46 06 | 05 |   0.0298 |  0.0307
00:11:53 06 | 06 |   0.0413 |  0.0377
00:11:59 06 | 07 |   0.0380 |  0.0194
00:12:06 06 | 08 |   0.0210 |  0.0159
00:12:13 06 | 09 |   0.0181 |  0.0321
00:12:19 06 | 10 |   0.0455 |  0.0483
00:12:26 06 | 11 |   0.0312 |  0.0269
00:12:33 06 | 12 |   0.0313 |  0.0244
00:12:40 06 | 13 |   0.0312 |  0.0226
00:12:47 06 | 14 |   0.0417 |  0.0113
00:12:54 06 | 15 |   0.0191 |  0.0007
00:13:01 06 | 16 |   0.0345 |  0.0033
00:13:09 06 | 17 |   0.0311 |  0.0277
00:13:15 06 | 18 |   0.0347 |  0.0224
00:13:22 06 | 19 |   0.0444 |  0.0567
00:13:29 06 | 20 |   0.0154 |  0.0196
```

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00:13:36 07 | 01 | -0.0175 | -0.0210
00:13:43 07 | 02 |  0.0326 |  0.0434
00:13:49 07 | 03 |  0.0040 |  0.0113
00:13:56 07 | 04 |  0.0228 |  0.0281
00:14:03 07 | 05 |  0.0359 |  0.0508
00:14:10 07 | 06 |  0.0337 |  0.0356
00:14:16 07 | 07 |  0.0367 |  0.0608
00:14:23 07 | 08 |  0.0240 |  0.0615
00:14:30 07 | 09 |  0.0376 |  0.0479
00:14:37 07 | 10 | -0.0057 |  0.0212
00:14:43 07 | 11 |  0.0309 |  0.0498
00:14:50 07 | 12 |  0.0181 |  0.0287
00:14:57 07 | 13 |  0.0142 |  0.0012
00:15:04 07 | 14 |  0.0161 |  0.0369
00:15:11 07 | 15 | -0.0070 |  0.0144
00:15:17 07 | 16 |  0.0218 |  0.0298
00:15:24 07 | 17 |  0.0102 |  0.0395
00:15:31 07 | 18 |  0.0220 |  0.0409
00:15:38 07 | 19 | -0.0172 |  0.0050
00:15:44 07 | 20 |  0.0189 |  0.0264
00:15:52 08 | 01 |  0.0162 |  0.0263
00:15:59 08 | 02 |  0.0126 |  0.0092
00:16:05 08 | 03 |  0.0103 |  0.0089
00:16:12 08 | 04 |  0.0221 |  0.0245
00:16:19 08 | 05 |  0.0108 |  0.0258
00:16:25 08 | 06 | -0.0102 | -0.0110
00:16:32 08 | 07 |  0.0301 |  0.0323
00:16:39 08 | 08 |  0.0043 |  0.0123
00:16:45 08 | 09 |  0.0161 |  0.0196
00:16:52 08 | 10 | -0.0054 |  0.0136
00:16:59 08 | 11 | -0.0058 |  0.0291
00:17:05 08 | 12 |  0.0111 |  0.0097
00:17:12 08 | 13 | -0.0004 |  0.0199
00:17:19 08 | 14 |  0.0058 |  0.0156
00:17:25 08 | 15 |  0.0110 |  0.0369
00:17:32 08 | 16 |  0.0154 |  0.0187
00:17:39 08 | 17 |  0.0047 |  0.0292
00:17:45 08 | 18 |  0.0099 |  0.0113
00:17:52 08 | 19 |  0.0027 |  0.0067
00:17:59 08 | 20 |  0.0138 | -0.0028
00:18:06 09 | 01 |  0.0037 |  0.0056
00:18:13 09 | 02 |  0.0134 |  0.0063
00:18:20 09 | 03 |  0.0345 |  0.0255
00:18:27 09 | 04 |  0.0171 |  0.0088
00:18:33 09 | 05 |  0.0068 |  0.0087
00:18:40 09 | 06 | -0.0096 | -0.0181
00:18:47 09 | 07 |  0.0093 |  0.0013
00:18:53 09 | 08 |  0.0217 |  0.0145
```

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00:19:00 09 | 09 |   0.0103 | -0.0041
00:19:07 09 | 10 |   0.0129 |  0.0128
00:19:14 09 | 11 |   0.0177 |  0.0098
00:19:20 09 | 12 |   0.0026 | -0.0224
00:19:27 09 | 13 |   0.0122 |  0.0009
00:19:34 09 | 14 |   0.0127 |  0.0230
00:19:41 09 | 15 |   0.0155 |  0.0038
00:19:47 09 | 16 |   0.0094 |  0.0091
00:19:54 09 | 17 |   0.0187 |  0.0210
00:20:01 09 | 18 |   0.0146 |  0.0047
00:20:07 09 | 19 |   0.0104 | -0.0017
00:20:14 09 | 20 |   0.0001 | -0.0201
00:20:21 10 | 01 |  -0.0277 | -0.0189
00:20:28 10 | 02 |  -0.0198 | -0.0123
00:20:35 10 | 03 |   0.0437 |  0.0443
00:20:42 10 | 04 |   0.0295 |  0.0365
00:20:48 10 | 05 |   0.0231 |  0.0212
00:20:55 10 | 06 |  -0.0124 |  0.0008
00:21:01 10 | 07 |  -0.0362 | -0.0167
00:21:08 10 | 08 |  -0.0020 |  0.0049
00:21:15 10 | 09 |  -0.0087 | -0.0077
00:21:22 10 | 10 |   0.0112 |  0.0184
00:21:28 10 | 11 |   0.0071 |  0.0131
00:21:35 10 | 12 |  -0.0001 | -0.0173
00:21:42 10 | 13 |   0.0069 |  0.0136
00:21:48 10 | 14 |  -0.0092 | -0.0155
00:21:55 10 | 15 |  -0.0264 | -0.0352
00:22:02 10 | 16 |  -0.0025 | -0.0008
00:22:08 10 | 17 |   0.0257 |  0.0395
00:22:15 10 | 18 |   0.0139 |  0.0039
00:22:22 10 | 19 |   0.0042 |  0.0062
00:22:28 10 | 20 |   0.0023 | -0.0038
00:22:36 11 | 01 |  -0.0003 | -0.0002
00:22:43 11 | 02 |   0.0229 |  0.0195
00:22:50 11 | 03 |   0.0268 |  0.0285
00:22:56 11 | 04 |   0.0067 |  0.0051
00:23:03 11 | 05 |   0.0262 |  0.0254
00:23:10 11 | 06 |   0.0109 | -0.0021
00:23:16 11 | 07 |   0.0140 |  0.0263
00:23:23 11 | 08 |   0.0086 |  0.0020
00:23:30 11 | 09 |   0.0279 |  0.0322
00:23:37 11 | 10 |   0.0180 |  0.0119
00:23:43 11 | 11 |   0.0140 |  0.0121
00:23:50 11 | 12 |   0.0168 |  0.0270
00:23:57 11 | 13 |   0.0094 |  0.0159
00:24:04 11 | 14 |   0.0091 |  0.0046
00:24:10 11 | 15 |   0.0082 | -0.0014
00:24:17 11 | 16 |   0.0117 | -0.0047
```

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00:24:24 11 | 17 |   0.0147 |   0.0129
00:24:30 11 | 18 |   0.0189 |   0.0123
00:24:37 11 | 19 |  -0.0104 |  -0.0136
00:24:44 11 | 20 |  -0.0021 |   0.0015
00:24:51 12 | 01 |   0.0106 |   0.0406
00:24:58 12 | 02 |   0.0290 |   0.0146
00:25:05 12 | 03 |   0.0227 |   0.0061
00:25:11 12 | 04 |   0.0177 |   0.0243
00:25:18 12 | 05 |   0.0077 |  -0.0108
00:25:25 12 | 06 |   0.0143 |  -0.0011
00:25:31 12 | 07 |   0.0094 |  -0.0100
00:25:38 12 | 08 |   0.0214 |   0.0384
00:25:45 12 | 09 |   0.0023 |   0.0129
00:25:51 12 | 10 |  -0.0032 |  -0.0000
00:25:58 12 | 11 |  -0.0057 |  -0.0001
00:26:05 12 | 12 |  -0.0180 |  -0.0403
00:26:11 12 | 13 |  -0.0156 |  -0.0297
00:26:18 12 | 14 |  -0.0067 |   0.0135
00:26:25 12 | 15 |  -0.0210 |  -0.0119
00:26:31 12 | 16 |  -0.0092 |  -0.0009
00:26:38 12 | 17 |  -0.0192 |  -0.0172
00:26:45 12 | 18 |  -0.0071 |  -0.0043
00:26:51 12 | 19 |  -0.0135 |  -0.0009
00:26:58 12 | 20 |  -0.0176 |  -0.0085
(32, 16) tanh 0.2 256
00:00:04 01 | 01 |   0.0048 |   0.0108
00:00:06 01 | 02 |   0.0214 |   0.0171
00:00:09 01 | 03 |   0.0062 |  -0.0020
00:00:11 01 | 04 |   0.0132 |   0.0179
00:00:14 01 | 05 |  -0.0023 |  -0.0012
00:00:16 01 | 06 |   0.0196 |   0.0211
00:00:19 01 | 07 |   0.0193 |   0.0416
00:00:21 01 | 08 |   0.0144 |   0.0202
00:00:24 01 | 09 |   0.0138 |   0.0133
00:00:26 01 | 10 |   0.0079 |   0.0104
00:00:29 01 | 11 |   0.0238 |   0.0277
00:00:31 01 | 12 |   0.0164 |   0.0288
00:00:34 01 | 13 |   0.0139 |   0.0148
00:00:36 01 | 14 |  -0.0080 |   0.0001
00:00:39 01 | 15 |   0.0029 |   0.0062
00:00:41 01 | 16 |   0.0128 |   0.0286
00:00:44 01 | 17 |   0.0058 |   0.0107
00:00:46 01 | 18 |   0.0031 |   0.0054
00:00:49 01 | 19 |   0.0045 |   0.0055
00:00:51 01 | 20 |   0.0070 |   0.0203
00:00:54 02 | 01 |   0.0011 |  -0.0059
00:00:57 02 | 02 |  -0.0068 |  -0.0061
00:00:59 02 | 03 |  -0.0133 |  -0.0107
```

```
00:01:02 02 | 04 | -0.0225 | -0.0130
00:01:04 02 | 05 |  0.0027 |  0.0195
00:01:07 02 | 06 |  0.0013 | -0.0006
00:01:09 02 | 07 |  0.0131 |  0.0120
00:01:12 02 | 08 | -0.0157 | -0.0194
00:01:14 02 | 09 |  0.0079 |  0.0089
00:01:17 02 | 10 | -0.0056 | -0.0018
00:01:20 02 | 11 | -0.0101 | -0.0117
00:01:22 02 | 12 |  0.0001 | -0.0007
00:01:25 02 | 13 |  0.0015 | -0.0145
00:01:27 02 | 14 | -0.0050 |  0.0128
00:01:30 02 | 15 |  0.0036 | -0.0139
00:01:32 02 | 16 |  0.0099 |  0.0080
00:01:35 02 | 17 |  0.0094 | -0.0029
00:01:37 02 | 18 | -0.0011 | -0.0128
00:01:40 02 | 19 |  0.0115 |  0.0147
00:01:42 02 | 20 | -0.0067 | -0.0162
00:01:46 03 | 01 | -0.0237 | -0.0184
00:01:48 03 | 02 | -0.0174 | -0.0111
00:01:51 03 | 03 | -0.0143 | -0.0217
00:01:53 03 | 04 | -0.0084 | -0.0207
00:01:56 03 | 05 |  0.0197 |  0.0258
00:01:58 03 | 06 | -0.0126 | -0.0022
00:02:01 03 | 07 | -0.0140 | -0.0251
00:02:03 03 | 08 | -0.0188 | -0.0408
00:02:06 03 | 09 |  0.0017 | -0.0189
00:02:08 03 | 10 |  0.0156 |  0.0038
00:02:11 03 | 11 |  0.0093 | -0.0039
00:02:13 03 | 12 | -0.0006 | -0.0158
00:02:16 03 | 13 | -0.0067 | -0.0148
00:02:18 03 | 14 | -0.0032 | -0.0116
00:02:21 03 | 15 |  0.0043 |  0.0156
00:02:23 03 | 16 | -0.0052 | -0.0090
00:02:26 03 | 17 |  0.0153 |  0.0139
00:02:28 03 | 18 |  0.0007 | -0.0051
00:02:31 03 | 19 |  0.0173 |  0.0033
00:02:33 03 | 20 |  0.0120 | -0.0080
00:02:37 04 | 01 |  0.0081 |  0.0213
00:02:39 04 | 02 |  0.0026 | -0.0070
00:02:42 04 | 03 |  0.0079 |  0.0085
00:02:44 04 | 04 | -0.0045 | -0.0009
00:02:47 04 | 05 |  0.0247 |  0.0284
00:02:49 04 | 06 |  0.0471 |  0.0355
00:02:52 04 | 07 |  0.0151 |  0.0278
00:02:54 04 | 08 |  0.0080 |  0.0039
00:02:57 04 | 09 |  0.0221 | -0.0048
00:02:59 04 | 10 |  0.0047 | -0.0091
00:03:02 04 | 11 |  0.0265 |  0.0024
```

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00:03:04 04 | 12 |   0.0125 |   0.0012
00:03:07 04 | 13 |  -0.0102 |   0.0007
00:03:09 04 | 14 |   0.0001 |   0.0028
00:03:12 04 | 15 |  -0.0096 |  -0.0186
00:03:15 04 | 16 |   0.0192 |   0.0127
00:03:17 04 | 17 |   0.0195 |   0.0184
00:03:20 04 | 18 |  -0.0043 |  -0.0217
00:03:22 04 | 19 |   0.0088 |  -0.0144
00:03:25 04 | 20 |   0.0063 |  -0.0050
00:03:28 05 | 01 |   0.0001 |   0.0053
00:03:31 05 | 02 |  -0.0227 |  -0.0162
00:03:33 05 | 03 |  -0.0019 |  -0.0056
00:03:36 05 | 04 |   0.0199 |   0.0254
00:03:38 05 | 05 |   0.0097 |   0.0012
00:03:41 05 | 06 |   0.0118 |   0.0026
00:03:43 05 | 07 |   0.0104 |   0.0097
00:03:46 05 | 08 |  -0.0083 |  -0.0120
00:03:48 05 | 09 |   0.0090 |   0.0140
00:03:51 05 | 10 |  -0.0172 |  -0.0177
00:03:53 05 | 11 |  -0.0137 |  -0.0092
00:03:56 05 | 12 |  -0.0143 |  -0.0109
00:03:58 05 | 13 |  -0.0110 |  -0.0102
00:04:01 05 | 14 |  -0.0036 |   0.0053
00:04:03 05 | 15 |   0.0005 |   0.0096
00:04:06 05 | 16 |   0.0056 |  -0.0086
00:04:08 05 | 17 |  -0.0069 |  -0.0168
00:04:11 05 | 18 |   0.0038 |   0.0023
00:04:13 05 | 19 |   0.0026 |  -0.0143
00:04:16 05 | 20 |  -0.0050 |  -0.0202
00:04:20 06 | 01 |   0.0226 |   0.0223
00:04:22 06 | 02 |  -0.0019 |   0.0042
00:04:25 06 | 03 |  -0.0127 |  -0.0056
00:04:27 06 | 04 |   0.0233 |   0.0244
00:04:30 06 | 05 |   0.0224 |   0.0095
00:04:32 06 | 06 |   0.0157 |   0.0323
00:04:35 06 | 07 |   0.0196 |   0.0134
00:04:37 06 | 08 |   0.0356 |   0.0096
00:04:40 06 | 09 |  -0.0019 |  -0.0004
00:04:42 06 | 10 |   0.0051 |   0.0231
00:04:45 06 | 11 |   0.0016 |  -0.0150
00:04:47 06 | 12 |   0.0024 |  -0.0102
00:04:50 06 | 13 |   0.0423 |   0.0416
00:04:53 06 | 14 |   0.0221 |   0.0180
00:04:55 06 | 15 |   0.0144 |   0.0061
00:04:58 06 | 16 |  -0.0021 |  -0.0063
00:05:00 06 | 17 |  -0.0024 |  -0.0072
00:05:03 06 | 18 |   0.0084 |  -0.0078
00:05:05 06 | 19 |   0.0066 |   0.0285
```

```
00:05:08 06 | 20 |   0.0076 |   0.0182
00:05:11 07 | 01 |   0.0123 |   0.0204
00:05:14 07 | 02 |   0.0119 |   0.0517
00:05:16 07 | 03 |   0.0350 |   0.0562
00:05:19 07 | 04 |   0.0225 |   0.0460
00:05:21 07 | 05 |   0.0142 |   0.0368
00:05:24 07 | 06 |   0.0376 |   0.0449
00:05:26 07 | 07 |   0.0114 |   0.0155
00:05:29 07 | 08 |   0.0222 |   0.0197
00:05:31 07 | 09 |   0.0373 |   0.0540
00:05:34 07 | 10 |   0.0255 |   0.0461
00:05:36 07 | 11 |   0.0373 |   0.0620
00:05:39 07 | 12 |   0.0234 |   0.0207
00:05:41 07 | 13 |   0.0231 |   0.0298
00:05:44 07 | 14 |   0.0207 |   0.0280
00:05:46 07 | 15 |   0.0205 |   0.0331
00:05:49 07 | 16 |   0.0372 |   0.0466
00:05:51 07 | 17 |   0.0120 |   0.0335
00:05:54 07 | 18 |   0.0154 |   0.0438
00:05:56 07 | 19 |   0.0020 |   0.0229
00:05:59 07 | 20 |   0.0325 |   0.0380
00:06:02 08 | 01 |   0.0144 |   0.0190
00:06:05 08 | 02 |  -0.0075 |   0.0072
00:06:07 08 | 03 |   0.0127 |  -0.0042
00:06:10 08 | 04 |   0.0062 |   0.0132
00:06:12 08 | 05 |   0.0336 |   0.0337
00:06:15 08 | 06 |   0.0015 |  -0.0008
00:06:17 08 | 07 |   0.0114 |   0.0049
00:06:20 08 | 08 |   0.0104 |   0.0086
00:06:22 08 | 09 |   0.0228 |   0.0005
00:06:25 08 | 10 |   0.0137 |  -0.0031
00:06:27 08 | 11 |   0.0315 |   0.0220
00:06:30 08 | 12 |   0.0280 |   0.0209
00:06:32 08 | 13 |   0.0187 |   0.0011
00:06:35 08 | 14 |   0.0174 |   0.0094
00:06:37 08 | 15 |   0.0251 |   0.0283
00:06:40 08 | 16 |   0.0189 |   0.0194
00:06:42 08 | 17 |   0.0219 |   0.0310
00:06:45 08 | 18 |   0.0315 |   0.0319
00:06:48 08 | 19 |   0.0227 |   0.0098
00:06:50 08 | 20 |   0.0293 |   0.0223
00:06:53 09 | 01 |  -0.0186 |  -0.0165
00:06:56 09 | 02 |  -0.0044 |  -0.0210
00:06:58 09 | 03 |  -0.0137 |  -0.0095
00:07:01 09 | 04 |   0.0100 |   0.0175
00:07:03 09 | 05 |   0.0060 |   0.0228
00:07:06 09 | 06 |   0.0112 |   0.0008
00:07:09 09 | 07 |  -0.0041 |  -0.0021
```

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00:07:11 09 | 08 |  0.0040 |  0.0165
00:07:14 09 | 09 |  0.0301 |  0.0229
00:07:16 09 | 10 |  0.0307 |  0.0277
00:07:19 09 | 11 |  0.0098 |  0.0122
00:07:21 09 | 12 |  0.0284 |  0.0115
00:07:24 09 | 13 |  0.0249 |  0.0350
00:07:26 09 | 14 |  0.0104 |  0.0153
00:07:29 09 | 15 |  0.0054 |  0.0001
00:07:31 09 | 16 |  0.0140 |  0.0113
00:07:34 09 | 17 |  0.0159 |  0.0245
00:07:37 09 | 18 |  0.0267 |  0.0226
00:07:39 09 | 19 |  0.0178 |  0.0204
00:07:42 09 | 20 |  0.0137 |  0.0254
00:07:45 10 | 01 |  0.0179 |  0.0125
00:07:48 10 | 02 |  0.0295 |  0.0070
00:07:50 10 | 03 | -0.0049 | -0.0239
00:07:53 10 | 04 |  0.0057 |  0.0094
00:07:55 10 | 05 |  0.0356 |  0.0335
00:07:58 10 | 06 | -0.0097 | -0.0063
00:08:00 10 | 07 | -0.0026 | -0.0081
00:08:03 10 | 08 | -0.0005 | -0.0207
00:08:05 10 | 09 | -0.0342 | -0.0319
00:08:08 10 | 10 |  0.0405 |  0.0425
00:08:10 10 | 11 | -0.0239 | -0.0160
00:08:13 10 | 12 | -0.0194 | -0.0292
00:08:15 10 | 13 | -0.0078 | -0.0119
00:08:18 10 | 14 | -0.0346 | -0.0316
00:08:21 10 | 15 | -0.0469 | -0.0385
00:08:23 10 | 16 | -0.0410 | -0.0233
00:08:26 10 | 17 | -0.0053 | -0.0095
00:08:28 10 | 18 | -0.0277 | -0.0221
00:08:31 10 | 19 | -0.0049 | -0.0003
00:08:33 10 | 20 | -0.0310 | -0.0203
00:08:36 11 | 01 |  0.0165 |  0.0154
00:08:39 11 | 02 |  0.0275 |  0.0225
00:08:41 11 | 03 |  0.0460 |  0.0543
00:08:44 11 | 04 |  0.0232 |  0.0301
00:08:46 11 | 05 |  0.0356 |  0.0293
00:08:49 11 | 06 |  0.0336 |  0.0323
00:08:51 11 | 07 |  0.0304 |  0.0201
00:08:54 11 | 08 | -0.0016 | -0.0003
00:08:56 11 | 09 |  0.0303 |  0.0259
00:08:59 11 | 10 |  0.0193 | -0.0061
00:09:01 11 | 11 |  0.0273 |  0.0216
00:09:04 11 | 12 | -0.0031 | -0.0098
00:09:06 11 | 13 |  0.0049 |  0.0017
00:09:09 11 | 14 | -0.0083 | -0.0133
00:09:11 11 | 15 | -0.0099 | -0.0213
```

```
00:09:14 11 | 16 |  0.0006 | -0.0011
00:09:16 11 | 17 | -0.0022 | -0.0056
00:09:19 11 | 18 | -0.0001 | -0.0089
00:09:21 11 | 19 | -0.0086 | -0.0120
00:09:24 11 | 20 |  0.0092 |  0.0063
00:09:27 12 | 01 |  0.0025 | -0.0104
00:09:30 12 | 02 |  0.0041 |  0.0057
00:09:32 12 | 03 |  0.0171 |  0.0068
00:09:35 12 | 04 |  0.0038 | -0.0133
00:09:37 12 | 05 |  0.0055 |  0.0034
00:09:40 12 | 06 |  0.0014 | -0.0007
00:09:42 12 | 07 |  0.0104 |  0.0216
00:09:45 12 | 08 |  0.0149 |  0.0168
00:09:48 12 | 09 |  0.0102 |  0.0140
00:09:50 12 | 10 |  0.0282 |  0.0405
00:09:53 12 | 11 |  0.0213 |  0.0407
00:09:55 12 | 12 |  0.0029 |  0.0013
00:09:58 12 | 13 |  0.0188 |  0.0061
00:10:00 12 | 14 |  0.0167 |  0.0145
00:10:03 12 | 15 |  0.0078 |  0.0151
00:10:05 12 | 16 |  0.0017 | -0.0114
00:10:08 12 | 17 |  0.0098 |  0.0099
00:10:10 12 | 18 |  0.0053 |  0.0065
00:10:13 12 | 19 |  0.0195 |  0.0075
00:10:15 12 | 20 |  0.0061 | -0.0073
(16, 8) tanh 0.2 64
00:00:07 01 | 01 |  0.0075 | -0.0055
00:00:14 01 | 02 |  0.0144 |  0.0130
00:00:20 01 | 03 |  0.0084 |  0.0153
00:00:27 01 | 04 |  0.0121 |  0.0119
00:00:33 01 | 05 |  0.0137 |  0.0131
00:00:39 01 | 06 |  0.0183 |  0.0133
00:00:46 01 | 07 |  0.0262 |  0.0443
00:00:52 01 | 08 |  0.0291 |  0.0367
00:00:59 01 | 09 |  0.0168 |  0.0064
00:01:05 01 | 10 |  0.0084 |  0.0174
00:01:12 01 | 11 |  0.0185 |  0.0365
00:01:18 01 | 12 |  0.0185 |  0.0300
00:01:25 01 | 13 |  0.0079 |  0.0023
00:01:31 01 | 14 |  0.0064 | -0.0020
00:01:38 01 | 15 |  0.0146 |  0.0292
00:01:44 01 | 16 |  0.0022 | -0.0160
00:01:50 01 | 17 |  0.0105 |  0.0037
00:01:55 01 | 18 | -0.0040 | -0.0180
00:02:01 01 | 19 |  0.0039 |  0.0071
00:02:06 01 | 20 |  0.0151 |  0.0202
00:02:13 02 | 01 |  0.0052 | -0.0240
00:02:18 02 | 02 |  0.0135 |  0.0197
```

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00:02:24 02 | 03 |   0.0008 |   0.0004
00:02:30 02 | 04 |   0.0098 |   0.0210
00:02:35 02 | 05 |   0.0005 |   0.0101
00:02:41 02 | 06 |   0.0174 |   0.0231
00:02:46 02 | 07 |   0.0064 |   0.0023
00:02:52 02 | 08 |  -0.0012 |   0.0102
00:02:58 02 | 09 |   0.0099 |   0.0029
00:03:03 02 | 10 |   0.0045 |  -0.0087
00:03:09 02 | 11 |   0.0014 |   0.0074
00:03:14 02 | 12 |   0.0077 |   0.0166
00:03:20 02 | 13 |   0.0082 |   0.0116
00:03:26 02 | 14 |   0.0043 |   0.0123
00:03:31 02 | 15 |  -0.0081 |  -0.0062
00:03:37 02 | 16 |  -0.0009 |  -0.0051
00:03:42 02 | 17 |   0.0050 |   0.0076
00:03:48 02 | 18 |  -0.0105 |  -0.0121
00:03:54 02 | 19 |   0.0005 |  -0.0066
00:03:59 02 | 20 |  -0.0038 |   0.0041
00:04:05 03 | 01 |  -0.0332 |  -0.0385
00:04:11 03 | 02 |  -0.0022 |  -0.0078
00:04:16 03 | 03 |   0.0257 |   0.0148
00:04:22 03 | 04 |   0.0001 |   0.0197
00:04:28 03 | 05 |  -0.0216 |  -0.0222
00:04:33 03 | 06 |  -0.0101 |  -0.0002
00:04:39 03 | 07 |  -0.0058 |   0.0128
00:04:44 03 | 08 |  -0.0039 |  -0.0069
00:04:50 03 | 09 |  -0.0115 |  -0.0057
00:04:55 03 | 10 |   0.0047 |  -0.0007
00:05:01 03 | 11 |  -0.0016 |  -0.0172
00:05:06 03 | 12 |   0.0151 |   0.0122
00:05:12 03 | 13 |   0.0134 |   0.0175
00:05:17 03 | 14 |   0.0089 |   0.0045
00:05:23 03 | 15 |   0.0037 |  -0.0014
00:05:28 03 | 16 |   0.0048 |  -0.0074
00:05:34 03 | 17 |  -0.0002 |   0.0017
00:05:40 03 | 18 |  -0.0010 |  -0.0007
00:05:45 03 | 19 |  -0.0220 |  -0.0221
00:05:51 03 | 20 |  -0.0117 |  -0.0252
00:05:57 04 | 01 |  -0.0114 |  -0.0124
00:06:02 04 | 02 |  -0.0133 |  -0.0090
00:06:08 04 | 03 |   0.0300 |   0.0037
00:06:13 04 | 04 |  -0.0054 |  -0.0108
00:06:19 04 | 05 |  -0.0241 |  -0.0277
00:06:25 04 | 06 |   0.0250 |   0.0199
00:06:30 04 | 07 |   0.0117 |  -0.0010
00:06:36 04 | 08 |   0.0176 |   0.0253
00:06:41 04 | 09 |   0.0225 |   0.0156
00:06:47 04 | 10 |   0.0246 |   0.0180
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00:06:52 04 | 11 |   0.0190 |   0.0002
00:06:58 04 | 12 |   0.0385 |   0.0323
00:07:03 04 | 13 |   0.0140 |   0.0160
00:07:09 04 | 14 |   0.0322 |   0.0162
00:07:14 04 | 15 |   0.0381 |   0.0255
00:07:20 04 | 16 |   0.0317 |   0.0258
00:07:26 04 | 17 |   0.0013 |  -0.0184
00:07:31 04 | 18 |   0.0202 |   0.0090
00:07:37 04 | 19 |   0.0258 |   0.0212
00:07:43 04 | 20 |   0.0165 |   0.0063
00:07:49 05 | 01 |   0.0090 |   0.0047
00:07:55 05 | 02 |  -0.0116 |  -0.0160
00:08:00 05 | 03 |   0.0105 |   0.0197
00:08:06 05 | 04 |  -0.0248 |  -0.0242
00:08:11 05 | 05 |   0.0113 |   0.0087
00:08:17 05 | 06 |   0.0355 |   0.0329
00:08:22 05 | 07 |  -0.0045 |   0.0063
00:08:28 05 | 08 |   0.0075 |   0.0195
00:08:34 05 | 09 |   0.0031 |   0.0127
00:08:39 05 | 10 |   0.0240 |   0.0359
00:08:45 05 | 11 |   0.0038 |   0.0194
00:08:50 05 | 12 |   0.0020 |   0.0053
00:08:56 05 | 13 |   0.0012 |   0.0177
00:09:01 05 | 14 |   0.0055 |   0.0154
00:09:07 05 | 15 |   0.0028 |  -0.0002
00:09:13 05 | 16 |   0.0054 |   0.0077
00:09:18 05 | 17 |   0.0096 |   0.0269
00:09:24 05 | 18 |   0.0001 |   0.0103
00:09:29 05 | 19 |   0.0051 |   0.0043
00:09:35 05 | 20 |  -0.0009 |   0.0120
00:09:41 06 | 01 |   0.0364 |   0.0436
00:09:47 06 | 02 |   0.0043 |   0.0121
00:09:52 06 | 03 |   0.0199 |  -0.0036
00:09:58 06 | 04 |   0.0429 |   0.0303
00:10:04 06 | 05 |   0.0236 |   0.0258
00:10:09 06 | 06 |   0.0211 |   0.0111
00:10:15 06 | 07 |  -0.0138 |  -0.0199
00:10:20 06 | 08 |   0.0236 |   0.0481
00:10:26 06 | 09 |   0.0173 |   0.0245
00:10:32 06 | 10 |   0.0293 |   0.0246
00:10:37 06 | 11 |   0.0129 |  -0.0088
00:10:43 06 | 12 |   0.0281 |   0.0288
00:10:48 06 | 13 |   0.0240 |   0.0241
00:10:54 06 | 14 |   0.0108 |   0.0160
00:10:60 06 | 15 |   0.0184 |   0.0167
00:11:05 06 | 16 |   0.0368 |   0.0455
00:11:11 06 | 17 |   0.0115 |   0.0209
00:11:16 06 | 18 |   0.0291 |   0.0363
```

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00:11:22 06 | 19 |  0.0195 |  0.0217
00:11:28 06 | 20 |  0.0365 |  0.0350
00:11:34 07 | 01 |  0.0004 |  0.0004
00:11:39 07 | 02 |  0.0220 |  0.0306
00:11:45 07 | 03 |  0.0154 |  0.0286
00:11:51 07 | 04 |  0.0098 |  0.0152
00:11:56 07 | 05 | -0.0040 | -0.0007
00:12:02 07 | 06 |  0.0065 |  0.0207
00:12:07 07 | 07 |  0.0289 |  0.0507
00:12:13 07 | 08 |  0.0174 |  0.0544
00:12:19 07 | 09 |  0.0124 |  0.0262
00:12:24 07 | 10 |  0.0250 |  0.0447
00:12:30 07 | 11 |  0.0230 |  0.0487
00:12:35 07 | 12 |  0.0357 |  0.0445
00:12:41 07 | 13 |  0.0230 |  0.0256
00:12:47 07 | 14 |  0.0246 |  0.0335
00:12:52 07 | 15 |  0.0325 |  0.0236
00:12:58 07 | 16 |  0.0168 |  0.0113
00:13:04 07 | 17 |  0.0170 |  0.0395
00:13:09 07 | 18 |  0.0248 |  0.0332
00:13:15 07 | 19 |  0.0227 |  0.0326
00:13:20 07 | 20 |  0.0125 |  0.0243
00:13:27 08 | 01 | -0.0124 | -0.0292
00:13:32 08 | 02 |  0.0047 |  0.0050
00:13:38 08 | 03 |  0.0122 |  0.0025
00:13:43 08 | 04 |  0.0288 |  0.0217
00:13:49 08 | 05 |  0.0315 |  0.0148
00:13:54 08 | 06 |  0.0195 |  0.0282
00:13:60 08 | 07 |  0.0216 |  0.0246
00:14:05 08 | 08 |  0.0245 |  0.0188
00:14:11 08 | 09 |  0.0292 |  0.0337
00:14:17 08 | 10 |  0.0202 |  0.0149
00:14:22 08 | 11 |  0.0131 |  0.0078
00:14:28 08 | 12 |  0.0107 | -0.0070
00:14:34 08 | 13 |  0.0138 |  0.0087
00:14:39 08 | 14 |  0.0131 |  0.0040
00:14:45 08 | 15 |  0.0078 |  0.0078
00:14:51 08 | 16 |  0.0156 |  0.0116
00:14:56 08 | 17 |  0.0136 |  0.0171
00:15:02 08 | 18 |  0.0229 |  0.0238
00:15:07 08 | 19 |  0.0106 |  0.0260
00:15:13 08 | 20 |  0.0140 |  0.0199
00:15:19 09 | 01 |  0.0025 | -0.0001
00:15:25 09 | 02 |  0.0125 | -0.0085
00:15:31 09 | 03 |  0.0119 |  0.0274
00:15:36 09 | 04 | -0.0000 |  0.0048
00:15:42 09 | 05 |  0.0198 |  0.0090
00:15:47 09 | 06 |  0.0159 |  0.0032
```

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00:15:53 09 | 07 |  0.0101 | -0.0030
00:15:59 09 | 08 |  0.0229 |  0.0125
00:16:04 09 | 09 |  0.0158 |  0.0171
00:16:10 09 | 10 |  0.0228 |  0.0258
00:16:16 09 | 11 |  0.0211 |  0.0211
00:16:21 09 | 12 |  0.0178 |  0.0257
00:16:27 09 | 13 |  0.0106 | -0.0065
00:16:33 09 | 14 |  0.0124 | -0.0001
00:16:38 09 | 15 |  0.0246 |  0.0161
00:16:44 09 | 16 |  0.0242 | -0.0064
00:16:49 09 | 17 |  0.0158 |  0.0157
00:16:55 09 | 18 |  0.0191 |  0.0169
00:17:01 09 | 19 |  0.0172 | -0.0009
00:17:06 09 | 20 |  0.0095 | -0.0110
00:17:13 10 | 01 | -0.0309 | -0.0441
00:17:18 10 | 02 | -0.0062 |  0.0136
00:17:24 10 | 03 | -0.0082 |  0.0037
00:17:29 10 | 04 |  0.0360 |  0.0319
00:17:35 10 | 05 |  0.0199 |  0.0198
00:17:41 10 | 06 |  0.0305 |  0.0368
00:17:46 10 | 07 |  0.0376 |  0.0314
00:17:52 10 | 08 |  0.0235 |  0.0201
00:17:57 10 | 09 |  0.0034 |  0.0024
00:18:03 10 | 10 | -0.0162 | -0.0018
00:18:09 10 | 11 | -0.0086 | -0.0039
00:18:14 10 | 12 | -0.0084 |  0.0026
00:18:20 10 | 13 | -0.0040 |  0.0004
00:18:26 10 | 14 | -0.0158 | -0.0140
00:18:31 10 | 15 |  0.0335 |  0.0436
00:18:37 10 | 16 | -0.0070 |  0.0066
00:18:42 10 | 17 | -0.0133 | -0.0049
00:18:48 10 | 18 | -0.0098 |  0.0026
00:18:54 10 | 19 | -0.0080 | -0.0062
00:18:59 10 | 20 | -0.0103 | -0.0028
00:19:06 11 | 01 |  0.0348 |  0.0311
00:19:11 11 | 02 |  0.0331 |  0.0476
00:19:17 11 | 03 |  0.0212 |  0.0107
00:19:22 11 | 04 |  0.0002 | -0.0165
00:19:28 11 | 05 |  0.0208 |  0.0137
00:19:34 11 | 06 |  0.0170 |  0.0208
00:19:39 11 | 07 |  0.0251 |  0.0264
00:19:45 11 | 08 |  0.0131 |  0.0270
00:19:50 11 | 09 |  0.0380 |  0.0318
00:19:56 11 | 10 |  0.0038 |  0.0008
00:20:01 11 | 11 |  0.0210 |  0.0109
00:20:07 11 | 12 |  0.0117 |  0.0030
00:20:13 11 | 13 |  0.0123 |  0.0058
00:20:18 11 | 14 |  0.0050 |  0.0051
```

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00:20:24 11 | 15 |   0.0102 |   0.0019
00:20:29 11 | 16 |   0.0172 |   0.0128
00:20:35 11 | 17 |   0.0047 |   0.0101
00:20:41 11 | 18 |   0.0307 |   0.0286
00:20:46 11 | 19 |   0.0061 |   0.0109
00:20:52 11 | 20 |   0.0177 |   0.0303
00:20:58 12 | 01 |   0.0147 |   0.0114
00:21:04 12 | 02 |   0.0089 |   0.0069
00:21:09 12 | 03 | -0.0055 | -0.0151
00:21:15 12 | 04 | -0.0077 | -0.0245
00:21:21 12 | 05 | -0.0053 |   0.0038
00:21:26 12 | 06 | -0.0158 | -0.0171
00:21:32 12 | 07 | -0.0100 | -0.0095
00:21:38 12 | 08 | -0.0192 | -0.0155
00:21:43 12 | 09 | -0.0272 | -0.0365
00:21:49 12 | 10 | -0.0222 | -0.0352
00:21:55 12 | 11 | -0.0262 | -0.0266
00:22:00 12 | 12 | -0.0312 | -0.0372
00:22:06 12 | 13 | -0.0262 | -0.0490
00:22:12 12 | 14 | -0.0253 | -0.0341
00:22:17 12 | 15 | -0.0241 | -0.0266
00:22:23 12 | 16 | -0.0295 | -0.0210
00:22:29 12 | 17 | -0.0314 | -0.0351
00:22:34 12 | 18 | -0.0261 | -0.0154
00:22:40 12 | 19 | -0.0248 | -0.0373
00:22:46 12 | 20 | -0.0242 | -0.0254
(16, 8) tanh 0.2 256
00:00:03 01 | 01 | -0.0038 | -0.0136
00:00:05 01 | 02 |   0.0066 | -0.0154
00:00:07 01 | 03 |   0.0202 |   0.0182
00:00:09 01 | 04 |   0.0166 |   0.0065
00:00:11 01 | 05 |   0.0121 |   0.0040
00:00:13 01 | 06 |   0.0215 |   0.0195
00:00:15 01 | 07 |   0.0144 |   0.0137
00:00:17 01 | 08 |   0.0221 |   0.0366
00:00:19 01 | 09 |   0.0277 |   0.0350
00:00:21 01 | 10 |   0.0181 |   0.0103
00:00:23 01 | 11 |   0.0223 |   0.0228
00:00:25 01 | 12 |   0.0196 |   0.0119
00:00:27 01 | 13 |   0.0106 |   0.0143
00:00:29 01 | 14 | -0.0006 | -0.0234
00:00:31 01 | 15 |   0.0044 | -0.0009
00:00:33 01 | 16 |   0.0029 |   0.0108
00:00:35 01 | 17 |   0.0029 |   0.0011
00:00:37 01 | 18 |   0.0016 |   0.0159
00:00:39 01 | 19 |   0.0097 |   0.0076
00:00:41 01 | 20 |   0.0032 |   0.0050
00:00:44 02 | 01 |   0.0057 |   0.0121
```

```
00:00:46 02 | 02 | -0.0026 |  0.0178
00:00:48 02 | 03 |  0.0098 |  0.0019
00:00:50 02 | 04 |  0.0095 |  0.0184
00:00:52 02 | 05 |  0.0171 |  0.0277
00:00:54 02 | 06 |  0.0106 |  0.0216
00:00:56 02 | 07 |  0.0171 |  0.0277
00:00:58 02 | 08 |  0.0005 |  0.0056
00:00:60 02 | 09 |  0.0043 |  0.0154
00:01:02 02 | 10 | -0.0104 | -0.0164
00:01:04 02 | 11 | -0.0198 | -0.0228
00:01:06 02 | 12 | -0.0037 | -0.0298
00:01:08 02 | 13 | -0.0076 | -0.0115
00:01:10 02 | 14 |  0.0001 |  0.0012
00:01:12 02 | 15 | -0.0141 | -0.0062
00:01:14 02 | 16 | -0.0036 | -0.0122
00:01:16 02 | 17 | -0.0100 | -0.0172
00:01:18 02 | 18 | -0.0096 | -0.0252
00:01:20 02 | 19 | -0.0057 | -0.0004
00:01:22 02 | 20 | -0.0124 | -0.0217
00:01:24 03 | 01 | -0.0054 | -0.0066
00:01:26 03 | 02 |  0.0198 |  0.0429
00:01:28 03 | 03 |  0.0009 |  0.0040
00:01:30 03 | 04 | -0.0037 | -0.0097
00:01:32 03 | 05 | -0.0060 |  0.0005
00:01:34 03 | 06 | -0.0008 | -0.0183
00:01:36 03 | 07 |  0.0314 |  0.0464
00:01:38 03 | 08 |  0.0156 |  0.0230
00:01:40 03 | 09 |  0.0354 |  0.0477
00:01:42 03 | 10 |  0.0214 |  0.0024
00:01:44 03 | 11 | -0.0083 | -0.0136
00:01:46 03 | 12 |  0.0129 |  0.0209
00:01:48 03 | 13 | -0.0079 | -0.0156
00:01:50 03 | 14 |  0.0020 |  0.0162
00:01:52 03 | 15 | -0.0022 | -0.0073
00:01:54 03 | 16 |  0.0106 |  0.0309
00:01:56 03 | 17 | -0.0064 |  0.0016
00:01:58 03 | 18 | -0.0073 | -0.0036
00:02:00 03 | 19 | -0.0129 |  0.0057
00:02:02 03 | 20 | -0.0086 | -0.0202
00:02:05 04 | 01 |  0.0024 |  0.0131
00:02:07 04 | 02 |  0.0337 |  0.0280
00:02:09 04 | 03 | -0.0038 |  0.0018
00:02:11 04 | 04 | -0.0269 | -0.0326
00:02:14 04 | 05 |  0.0038 | -0.0314
00:02:16 04 | 06 | -0.0041 | -0.0058
00:02:18 04 | 07 | -0.0171 | -0.0358
00:02:20 04 | 08 | -0.0235 | -0.0469
00:02:22 04 | 09 | -0.0001 | -0.0230
```

```
00:02:24 04 | 10 |   0.0151 |   0.0094
00:02:26 04 | 11 | -0.0035 | -0.0068
00:02:28 04 | 12 |   0.0210 |   0.0017
00:02:30 04 | 13 | -0.0115 | -0.0307
00:02:32 04 | 14 |   0.0060 | -0.0009
00:02:34 04 | 15 |   0.0085 |   0.0067
00:02:36 04 | 16 |   0.0211 |   0.0244
00:02:38 04 | 17 |   0.0083 | -0.0116
00:02:40 04 | 18 | -0.0006 |   0.0086
00:02:42 04 | 19 |   0.0164 |   0.0058
00:02:44 04 | 20 |   0.0277 |   0.0296
00:02:47 05 | 01 | -0.0264 | -0.0251
00:02:49 05 | 02 | -0.0003 | -0.0025
00:02:51 05 | 03 | -0.0067 | -0.0376
00:02:53 05 | 04 |   0.0109 |   0.0028
00:02:55 05 | 05 |   0.0174 |   0.0210
00:02:57 05 | 06 |   0.0025 | -0.0032
00:02:59 05 | 07 | -0.0070 |   0.0057
00:03:01 05 | 08 |   0.0160 |   0.0047
00:03:03 05 | 09 |   0.0206 |   0.0109
00:03:05 05 | 10 |   0.0269 |   0.0248
00:03:07 05 | 11 |   0.0293 |   0.0377
00:03:09 05 | 12 |   0.0164 |   0.0224
00:03:11 05 | 13 |   0.0207 |   0.0260
00:03:13 05 | 14 |   0.0119 |   0.0181
00:03:15 05 | 15 |   0.0156 |   0.0286
00:03:17 05 | 16 |   0.0158 |   0.0246
00:03:19 05 | 17 |   0.0130 |   0.0266
00:03:21 05 | 18 |   0.0034 | -0.0002
00:03:23 05 | 19 | -0.0026 |   0.0071
00:03:25 05 | 20 | -0.0034 |   0.0004
00:03:28 06 | 01 |   0.0208 |   0.0125
00:03:30 06 | 02 | -0.0182 | -0.0363
00:03:32 06 | 03 |   0.0270 |   0.0207
00:03:34 06 | 04 |   0.0255 |   0.0368
00:03:36 06 | 05 |   0.0359 |   0.0223
00:03:38 06 | 06 |   0.0286 |   0.0301
00:03:40 06 | 07 |   0.0410 |   0.0436
00:03:42 06 | 08 |   0.0406 |   0.0380
00:03:44 06 | 09 |   0.0309 |   0.0089
00:03:46 06 | 10 |   0.0367 |   0.0382
00:03:48 06 | 11 |   0.0299 |   0.0190
00:03:50 06 | 12 |   0.0161 | -0.0059
00:03:52 06 | 13 |   0.0355 |   0.0072
00:03:54 06 | 14 |   0.0290 |   0.0199
00:03:56 06 | 15 |   0.0138 |   0.0060
00:03:58 06 | 16 |   0.0215 |   0.0010
00:04:00 06 | 17 |   0.0305 |   0.0080
```

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00:04:02 06 | 18 |   0.0037 |   0.0049
00:04:04 06 | 19 |   0.0299 |   0.0346
00:04:06 06 | 20 |   0.0264 |   0.0286
00:04:09 07 | 01 |   0.0111 |   0.0033
00:04:11 07 | 02 |  -0.0137 |  -0.0202
00:04:13 07 | 03 |   0.0241 |   0.0286
00:04:15 07 | 04 |  -0.0020 |   0.0040
00:04:17 07 | 05 |   0.0009 |   0.0010
00:04:19 07 | 06 |   0.0198 |   0.0545
00:04:21 07 | 07 |  -0.0043 |   0.0114
00:04:23 07 | 08 |  -0.0205 |   0.0080
00:04:25 07 | 09 |   0.0220 |   0.0207
00:04:27 07 | 10 |   0.0117 |   0.0093
00:04:29 07 | 11 |   0.0164 |   0.0126
00:04:31 07 | 12 |   0.0238 |   0.0428
00:04:33 07 | 13 |   0.0234 |   0.0581
00:04:35 07 | 14 |   0.0277 |   0.0388
00:04:37 07 | 15 |   0.0279 |   0.0372
00:04:39 07 | 16 |   0.0221 |   0.0324
00:04:41 07 | 17 |   0.0304 |   0.0448
00:04:43 07 | 18 |   0.0429 |   0.0589
00:04:45 07 | 19 |   0.0332 |   0.0276
00:04:47 07 | 20 |   0.0366 |   0.0129
00:04:50 08 | 01 |   0.0112 |   0.0127
00:04:52 08 | 02 |  -0.0101 |   0.0020
00:04:54 08 | 03 |  -0.0079 |   0.0115
00:04:56 08 | 04 |   0.0125 |   0.0114
00:04:58 08 | 05 |   0.0039 |  -0.0004
00:05:00 08 | 06 |   0.0150 |   0.0152
00:05:02 08 | 07 |   0.0142 |   0.0246
00:05:04 08 | 08 |   0.0255 |   0.0163
00:05:06 08 | 09 |   0.0224 |   0.0020
00:05:08 08 | 10 |   0.0202 |   0.0282
00:05:10 08 | 11 |   0.0124 |   0.0093
00:05:12 08 | 12 |   0.0154 |   0.0063
00:05:14 08 | 13 |   0.0212 |   0.0148
00:05:16 08 | 14 |   0.0160 |   0.0202
00:05:19 08 | 15 |   0.0127 |   0.0129
00:05:21 08 | 16 |   0.0216 |  -0.0054
00:05:23 08 | 17 |   0.0206 |   0.0099
00:05:25 08 | 18 |   0.0166 |   0.0034
00:05:27 08 | 19 |   0.0303 |   0.0099
00:05:29 08 | 20 |   0.0289 |   0.0262
00:05:31 09 | 01 |   0.0166 |  -0.0002
00:05:33 09 | 02 |  -0.0161 |  -0.0257
00:05:35 09 | 03 |  -0.0355 |  -0.0169
00:05:37 09 | 04 |   0.0069 |  -0.0126
00:05:39 09 | 05 |   0.0229 |   0.0140
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00:05:41 09 | 06 |   0.0248 |   0.0210
00:05:43 09 | 07 |   0.0150 |   0.0048
00:05:46 09 | 08 |   0.0156 |   0.0007
00:05:48 09 | 09 |   0.0055 |   0.0139
00:05:50 09 | 10 |   0.0177 |   0.0279
00:05:52 09 | 11 |   0.0143 |   0.0044
00:05:54 09 | 12 |   0.0182 |   0.0301
00:05:56 09 | 13 |   0.0069 |  -0.0088
00:05:58 09 | 14 |   0.0276 |   0.0206
00:05:60 09 | 15 |   0.0120 |   0.0133
00:06:02 09 | 16 |   0.0237 |   0.0424
00:06:04 09 | 17 |   0.0186 |  -0.0037
00:06:06 09 | 18 |   0.0244 |   0.0208
00:06:08 09 | 19 |   0.0113 |   0.0029
00:06:10 09 | 20 |   0.0100 |   0.0054
00:06:13 10 | 01 |   0.0076 |   0.0083
00:06:15 10 | 02 |  -0.0031 |  -0.0029
00:06:17 10 | 03 |  -0.0082 |  -0.0072
00:06:19 10 | 04 |   0.0004 |  -0.0024
00:06:21 10 | 05 |  -0.0193 |  -0.0121
00:06:23 10 | 06 |  -0.0002 |  -0.0082
00:06:25 10 | 07 |  -0.0232 |  -0.0053
00:06:27 10 | 08 |  -0.0278 |  -0.0121
00:06:29 10 | 09 |  -0.0304 |  -0.0270
00:06:31 10 | 10 |  -0.0019 |  -0.0116
00:06:33 10 | 11 |  -0.0254 |   0.0106
00:06:35 10 | 12 |   0.0205 |   0.0221
00:06:37 10 | 13 |  -0.0209 |  -0.0110
00:06:39 10 | 14 |  -0.0072 |   0.0095
00:06:41 10 | 15 |  -0.0038 |   0.0060
00:06:43 10 | 16 |   0.0199 |   0.0333
00:06:45 10 | 17 |   0.0053 |   0.0150
00:06:47 10 | 18 |  -0.0300 |  -0.0293
00:06:49 10 | 19 |  -0.0053 |   0.0019
00:06:51 10 | 20 |   0.0002 |   0.0043
00:06:53 11 | 01 |   0.0122 |   0.0059
00:06:56 11 | 02 |   0.0121 |   0.0146
00:06:58 11 | 03 |   0.0000 |  -0.0078
00:06:60 11 | 04 |   0.0223 |   0.0206
00:07:02 11 | 05 |   0.0159 |   0.0220
00:07:04 11 | 06 |  -0.0117 |   0.0057
00:07:06 11 | 07 |   0.0003 |  -0.0026
00:07:08 11 | 08 |   0.0270 |   0.0138
00:07:10 11 | 09 |   0.0344 |   0.0427
00:07:12 11 | 10 |   0.0097 |  -0.0021
00:07:14 11 | 11 |   0.0172 |   0.0030
00:07:16 11 | 12 |   0.0109 |   0.0101
00:07:18 11 | 13 |   0.0191 |   0.0196
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00:07:20 11 | 14 |   0.0021 | -0.0112
00:07:22 11 | 15 |  -0.0072 | -0.0235
00:07:24 11 | 16 |   0.0093 | -0.0112
00:07:26 11 | 17 |   0.0152 |  0.0143
00:07:28 11 | 18 |  -0.0005 | -0.0221
00:07:30 11 | 19 |   0.0117 |  0.0087
00:07:32 11 | 20 |   0.0195 |  0.0053
00:07:35 12 | 01 |   0.0070 |  0.0189
00:07:37 12 | 02 |   0.0190 |  0.0133
00:07:39 12 | 03 |   0.0154 |  0.0060
00:07:41 12 | 04 |   0.0240 |  0.0221
00:07:43 12 | 05 |   0.0021 |  0.0061
00:07:45 12 | 06 |   0.0035 |  0.0052
00:07:47 12 | 07 |   0.0010 | -0.0213
00:07:49 12 | 08 |   0.0035 |  0.0187
00:07:51 12 | 09 |  -0.0009 |  0.0013
00:07:53 12 | 10 |   0.0011 |  0.0206
00:07:55 12 | 11 |   0.0072 |  0.0054
00:07:57 12 | 12 |   0.0061 |  0.0126
00:07:59 12 | 13 |  -0.0043 | -0.0075
00:08:01 12 | 14 |   0.0154 |  0.0139
00:08:03 12 | 15 |   0.0112 | -0.0010
00:08:05 12 | 16 |   0.0089 |  0.0110
00:08:08 12 | 17 |   0.0173 |  0.0272
00:08:10 12 | 18 |   0.0271 |  0.0185
00:08:12 12 | 19 |   0.0244 |  0.0297
00:08:14 12 | 20 |   0.0241 |  0.0211
(16, 8) tanh 0.1 64
00:00:06 01 | 01 |   0.0032 | -0.0136
00:00:12 01 | 02 |  -0.0071 |  0.0016
00:00:18 01 | 03 |   0.0028 |  0.0148
00:00:23 01 | 04 |  -0.0044 |  0.0060
00:00:29 01 | 05 |   0.0082 |  0.0061
00:00:34 01 | 06 |   0.0022 | -0.0044
00:00:40 01 | 07 |   0.0149 |  0.0147
00:00:46 01 | 08 |   0.0145 |  0.0143
00:00:51 01 | 09 |   0.0079 | -0.0023
00:00:57 01 | 10 |   0.0086 |  0.0041
00:01:02 01 | 11 |  -0.0040 | -0.0078
00:01:08 01 | 12 |   0.0008 | -0.0204
00:01:14 01 | 13 |   0.0030 | -0.0012
00:01:19 01 | 14 |   0.0078 |  0.0085
00:01:25 01 | 15 |   0.0106 |  0.0050
00:01:30 01 | 16 |   0.0102 | -0.0025
00:01:36 01 | 17 |   0.0002 | -0.0017
00:01:42 01 | 18 |  -0.0006 | -0.0040
00:01:47 01 | 19 |   0.0035 | -0.0053
00:01:53 01 | 20 |   0.0009 |  0.0196
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00:01:59 02 | 01 |   0.0125 |   0.0146
00:02:05 02 | 02 |   0.0120 |   0.0095
00:02:10 02 | 03 |   0.0132 |   0.0003
00:02:16 02 | 04 |  -0.0006 |  -0.0015
00:02:21 02 | 05 |   0.0091 |   0.0024
00:02:27 02 | 06 |   0.0100 |   0.0194
00:02:32 02 | 07 |  -0.0091 |  -0.0118
00:02:38 02 | 08 |  -0.0111 |   0.0009
00:02:44 02 | 09 |  -0.0050 |   0.0025
00:02:49 02 | 10 |   0.0101 |   0.0073
00:02:55 02 | 11 |  -0.0011 |   0.0053
00:03:00 02 | 12 |   0.0022 |  -0.0049
00:03:06 02 | 13 |  -0.0012 |   0.0097
00:03:11 02 | 14 |  -0.0041 |   0.0044
00:03:17 02 | 15 |  -0.0039 |   0.0010
00:03:22 02 | 16 |   0.0209 |   0.0289
00:03:28 02 | 17 |  -0.0067 |  -0.0012
00:03:34 02 | 18 |  -0.0075 |  -0.0118
00:03:39 02 | 19 |  -0.0066 |   0.0120
00:03:45 02 | 20 |   0.0095 |  -0.0054
00:03:51 03 | 01 |  -0.0032 |  -0.0016
00:03:57 03 | 02 |  -0.0159 |  -0.0205
00:04:02 03 | 03 |  -0.0109 |  -0.0190
00:04:08 03 | 04 |   0.0306 |   0.0398
00:04:13 03 | 05 |   0.0221 |   0.0227
00:04:19 03 | 06 |   0.0116 |   0.0265
00:04:24 03 | 07 |  -0.0061 |  -0.0127
00:04:30 03 | 08 |  -0.0063 |  -0.0054
00:04:35 03 | 09 |   0.0118 |  -0.0025
00:04:41 03 | 10 |  -0.0051 |  -0.0205
00:04:47 03 | 11 |  -0.0088 |  -0.0188
00:04:53 03 | 12 |  -0.0111 |  -0.0212
00:04:58 03 | 13 |  -0.0140 |  -0.0379
00:05:04 03 | 14 |  -0.0213 |  -0.0248
00:05:10 03 | 15 |   0.0009 |   0.0031
00:05:15 03 | 16 |   0.0018 |   0.0113
00:05:21 03 | 17 |  -0.0005 |  -0.0065
00:05:26 03 | 18 |  -0.0057 |  -0.0147
00:05:32 03 | 19 |  -0.0161 |  -0.0156
00:05:38 03 | 20 |  -0.0236 |  -0.0268
00:05:44 04 | 01 |  -0.0131 |  -0.0232
00:05:50 04 | 02 |   0.0060 |   0.0012
00:05:55 04 | 03 |   0.0138 |   0.0164
00:06:01 04 | 04 |   0.0015 |  -0.0174
00:06:07 04 | 05 |   0.0195 |   0.0275
00:06:12 04 | 06 |  -0.0030 |  -0.0106
00:06:18 04 | 07 |   0.0002 |  -0.0168
00:06:23 04 | 08 |   0.0016 |  -0.0124
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00:06:29 04 | 09 |  -0.0074 |  -0.0010
00:06:35 04 | 10 |  -0.0398 |  -0.0490
00:06:40 04 | 11 |   0.0144 |   0.0124
00:06:46 04 | 12 |   0.0030 |  -0.0088
00:06:52 04 | 13 |  -0.0148 |  -0.0225
00:06:57 04 | 14 |   0.0222 |   0.0097
00:07:03 04 | 15 |   0.0048 |  -0.0032
00:07:08 04 | 16 |   0.0129 |   0.0350
00:07:14 04 | 17 |   0.0009 |  -0.0001
00:07:20 04 | 18 |   0.0289 |   0.0382
00:07:25 04 | 19 |   0.0211 |   0.0289
00:07:31 04 | 20 |   0.0057 |   0.0142
00:07:37 05 | 01 |   0.0034 |   0.0021
00:07:43 05 | 02 |  -0.0027 |   0.0058
00:07:48 05 | 03 |  -0.0076 |  -0.0079
00:07:54 05 | 04 |  -0.0011 |  -0.0130
00:07:59 05 | 05 |   0.0179 |   0.0105
00:08:05 05 | 06 |   0.0137 |   0.0154
00:08:11 05 | 07 |   0.0035 |  -0.0015
00:08:16 05 | 08 |   0.0036 |  -0.0065
00:08:22 05 | 09 |  -0.0056 |  -0.0097
00:08:27 05 | 10 |   0.0132 |   0.0264
00:08:33 05 | 11 |   0.0270 |   0.0211
00:08:38 05 | 12 |   0.0304 |   0.0325
00:08:44 05 | 13 |   0.0170 |   0.0115
00:08:50 05 | 14 |   0.0106 |   0.0182
00:08:55 05 | 15 |   0.0162 |   0.0267
00:09:01 05 | 16 |   0.0074 |   0.0144
00:09:07 05 | 17 |   0.0058 |   0.0124
00:09:12 05 | 18 |   0.0197 |   0.0172
00:09:18 05 | 19 |   0.0138 |   0.0237
00:09:23 05 | 20 |   0.0156 |   0.0164
00:09:30 06 | 01 |  -0.0031 |  -0.0131
00:09:35 06 | 02 |   0.0317 |   0.0514
00:09:41 06 | 03 |   0.0036 |   0.0070
00:09:46 06 | 04 |   0.0485 |   0.0413
00:09:52 06 | 05 |   0.0302 |   0.0286
00:09:57 06 | 06 |   0.0287 |   0.0168
00:10:03 06 | 07 |   0.0320 |   0.0421
00:10:09 06 | 08 |   0.0330 |   0.0236
00:10:14 06 | 09 |   0.0255 |   0.0077
00:10:20 06 | 10 |   0.0223 |   0.0054
00:10:25 06 | 11 |   0.0319 |   0.0376
00:10:31 06 | 12 |   0.0197 |   0.0028
00:10:37 06 | 13 |   0.0129 |   0.0049
00:10:42 06 | 14 |   0.0238 |   0.0020
00:10:48 06 | 15 |   0.0177 |   0.0222
00:10:53 06 | 16 |   0.0188 |  -0.0014
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00:10:59 06 | 17 |   0.0169 |   0.0090
00:11:04 06 | 18 |   0.0114 |   0.0161
00:11:10 06 | 19 |   0.0181 |  -0.0006
00:11:16 06 | 20 |   0.0170 |  -0.0024
00:11:22 07 | 01 |   0.0116 |   0.0228
00:11:27 07 | 02 |   0.0161 |   0.0321
00:11:33 07 | 03 |   0.0169 |   0.0234
00:11:39 07 | 04 |  -0.0042 |  -0.0057
00:11:44 07 | 05 |   0.0045 |   0.0354
00:11:50 07 | 06 |   0.0136 |   0.0129
00:11:55 07 | 07 |   0.0175 |   0.0437
00:12:01 07 | 08 |   0.0133 |   0.0330
00:12:06 07 | 09 |  -0.0044 |   0.0196
00:12:12 07 | 10 |   0.0197 |   0.0447
00:12:18 07 | 11 |   0.0061 |   0.0238
00:12:24 07 | 12 |   0.0223 |   0.0404
00:12:29 07 | 13 |   0.0129 |   0.0269
00:12:35 07 | 14 |   0.0204 |   0.0120
00:12:40 07 | 15 |  -0.0055 |   0.0066
00:12:46 07 | 16 |   0.0004 |   0.0068
00:12:52 07 | 17 |   0.0205 |   0.0197
00:12:57 07 | 18 |  -0.0008 |   0.0086
00:13:03 07 | 19 |   0.0260 |   0.0440
00:13:09 07 | 20 |   0.0121 |   0.0216
00:13:15 08 | 01 |   0.0259 |   0.0216
00:13:21 08 | 02 |   0.0239 |   0.0210
00:13:26 08 | 03 |   0.0215 |   0.0073
00:13:32 08 | 04 |   0.0044 |   0.0117
00:13:37 08 | 05 |   0.0101 |   0.0031
00:13:43 08 | 06 |   0.0071 |  -0.0037
00:13:49 08 | 07 |   0.0116 |   0.0143
00:13:54 08 | 08 |   0.0163 |   0.0025
00:13:60 08 | 09 |   0.0073 |   0.0178
00:14:05 08 | 10 |   0.0029 |   0.0190
00:14:11 08 | 11 |   0.0111 |   0.0252
00:14:17 08 | 12 |   0.0142 |   0.0114
00:14:22 08 | 13 |   0.0131 |   0.0487
00:14:28 08 | 14 |   0.0075 |   0.0291
00:14:33 08 | 15 |   0.0087 |   0.0290
00:14:39 08 | 16 |   0.0090 |   0.0214
00:14:45 08 | 17 |   0.0068 |   0.0239
00:14:50 08 | 18 |   0.0027 |   0.0216
00:14:56 08 | 19 |   0.0087 |   0.0044
00:15:02 08 | 20 |   0.0015 |   0.0093
00:15:08 09 | 01 |   0.0015 |  -0.0069
00:15:13 09 | 02 |   0.0098 |   0.0125
00:15:19 09 | 03 |   0.0130 |   0.0072
00:15:25 09 | 04 |   0.0118 |   0.0148
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00:15:30 09 | 05 |   0.0117 |   0.0113
00:15:36 09 | 06 |   0.0124 |   0.0015
00:15:41 09 | 07 |   0.0030 |   0.0016
00:15:47 09 | 08 |  -0.0012 |   0.0031
00:15:52 09 | 09 |  -0.0086 |  -0.0095
00:15:58 09 | 10 |  -0.0040 |  -0.0043
00:16:03 09 | 11 |  -0.0072 |  -0.0011
00:16:09 09 | 12 |  -0.0095 |  -0.0090
00:16:14 09 | 13 |  -0.0240 |  -0.0124
00:16:20 09 | 14 |  -0.0399 |  -0.0582
00:16:26 09 | 15 |  -0.0287 |  -0.0287
00:16:31 09 | 16 |  -0.0255 |  -0.0305
00:16:37 09 | 17 |  -0.0265 |  -0.0140
00:16:42 09 | 18 |  -0.0145 |  -0.0237
00:16:48 09 | 19 |  -0.0234 |  -0.0277
00:16:53 09 | 20 |  -0.0197 |  -0.0325
00:16:60 10 | 01 |   0.0444 |   0.0346
00:17:05 10 | 02 |  -0.0182 |  -0.0076
00:17:11 10 | 03 |   0.0233 |   0.0183
00:17:16 10 | 04 |   0.0159 |   0.0028
00:17:22 10 | 05 |   0.0151 |  -0.0038
00:17:28 10 | 06 |   0.0186 |   0.0110
00:17:33 10 | 07 |   0.0099 |  -0.0041
00:17:39 10 | 08 |  -0.0076 |   0.0010
00:17:44 10 | 09 |  -0.0007 |   0.0049
00:17:50 10 | 10 |  -0.0048 |   0.0089
00:17:55 10 | 11 |   0.0015 |  -0.0039
00:18:01 10 | 12 |  -0.0179 |  -0.0095
00:18:07 10 | 13 |  -0.0273 |  -0.0293
00:18:13 10 | 14 |  -0.0090 |  -0.0212
00:18:18 10 | 15 |   0.0089 |   0.0233
00:18:24 10 | 16 |  -0.0274 |  -0.0335
00:18:29 10 | 17 |  -0.0203 |  -0.0145
00:18:35 10 | 18 |  -0.0214 |  -0.0230
00:18:40 10 | 19 |  -0.0278 |  -0.0163
00:18:46 10 | 20 |  -0.0208 |  -0.0082
00:18:52 11 | 01 |  -0.0060 |   0.0053
00:18:58 11 | 02 |   0.0365 |   0.0362
00:19:04 11 | 03 |   0.0362 |   0.0313
00:19:09 11 | 04 |   0.0324 |   0.0277
00:19:15 11 | 05 |   0.0156 |   0.0253
00:19:21 11 | 06 |   0.0070 |   0.0117
00:19:27 11 | 07 |   0.0189 |   0.0225
00:19:32 11 | 08 |   0.0293 |   0.0342
00:19:38 11 | 09 |   0.0066 |   0.0115
00:19:44 11 | 10 |   0.0228 |   0.0146
00:19:50 11 | 11 |  -0.0092 |  -0.0090
00:19:55 11 | 12 |   0.0060 |  -0.0126
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00:20:01 11 | 13 |   0.0023 |   0.0045
00:20:07 11 | 14 |   0.0335 |   0.0225
00:20:12 11 | 15 |  -0.0005 |  -0.0051
00:20:18 11 | 16 |   0.0209 |   0.0096
00:20:24 11 | 17 |   0.0341 |   0.0222
00:20:29 11 | 18 |   0.0125 |   0.0110
00:20:35 11 | 19 |   0.0170 |   0.0230
00:20:41 11 | 20 |   0.0087 |   0.0100
00:20:47 12 | 01 |   0.0195 |   0.0341
00:20:52 12 | 02 |   0.0139 |   0.0212
00:20:58 12 | 03 |   0.0158 |   0.0139
00:21:04 12 | 04 |   0.0133 |   0.0211
00:21:09 12 | 05 |   0.0123 |   0.0038
00:21:15 12 | 06 |   0.0045 |  -0.0110
00:21:20 12 | 07 |  -0.0040 |  -0.0165
00:21:26 12 | 08 |   0.0199 |   0.0031
00:21:32 12 | 09 |   0.0025 |  -0.0069
00:21:37 12 | 10 |  -0.0133 |  -0.0084
00:21:43 12 | 11 |  -0.0114 |  -0.0160
00:21:49 12 | 12 |  -0.0039 |   0.0104
00:21:54 12 | 13 |   0.0052 |   0.0231
00:21:60 12 | 14 |   0.0066 |   0.0189
00:22:06 12 | 15 |   0.0109 |   0.0083
00:22:11 12 | 16 |   0.0003 |   0.0095
00:22:17 12 | 17 |   0.0023 |   0.0239
00:22:22 12 | 18 |   0.0011 |  -0.0082
00:22:28 12 | 19 |   0.0034 |  -0.0082
00:22:34 12 | 20 |  -0.0001 |  -0.0043
(16, 8) tanh 0.1 256
00:00:03 01 | 01 |   0.0031 |   0.0024
00:00:05 01 | 02 |  -0.0037 |  -0.0037
00:00:07 01 | 03 |   0.0123 |   0.0006
00:00:09 01 | 04 |   0.0205 |   0.0166
00:00:11 01 | 05 |   0.0138 |   0.0292
00:00:13 01 | 06 |   0.0007 |   0.0009
00:00:15 01 | 07 |  -0.0039 |   0.0056
00:00:17 01 | 08 |   0.0016 |   0.0006
00:00:19 01 | 09 |   0.0074 |   0.0129
00:00:21 01 | 10 |   0.0095 |   0.0346
00:00:23 01 | 11 |   0.0112 |   0.0137
00:00:25 01 | 12 |   0.0036 |  -0.0036
00:00:27 01 | 13 |   0.0025 |   0.0076
00:00:29 01 | 14 |   0.0222 |   0.0017
00:00:31 01 | 15 |   0.0121 |   0.0058
00:00:33 01 | 16 |   0.0089 |   0.0299
00:00:35 01 | 17 |   0.0127 |   0.0156
00:00:37 01 | 18 |   0.0021 |  -0.0037
00:00:39 01 | 19 |  -0.0004 |  -0.0005
```

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00:00:41 01 | 20 |   0.0112 |   0.0244
00:00:44 02 | 01 |  -0.0119 |  -0.0102
00:00:46 02 | 02 |  -0.0105 |  -0.0019
00:00:48 02 | 03 |  -0.0189 |  -0.0144
00:00:50 02 | 04 |   0.0159 |   0.0008
00:00:52 02 | 05 |   0.0105 |   0.0153
00:00:54 02 | 06 |   0.0046 |   0.0096
00:00:56 02 | 07 |   0.0086 |   0.0129
00:00:58 02 | 08 |  -0.0025 |   0.0115
00:00:60 02 | 09 |  -0.0127 |  -0.0028
00:01:02 02 | 10 |   0.0081 |   0.0182
00:01:04 02 | 11 |  -0.0007 |  -0.0086
00:01:06 02 | 12 |   0.0072 |   0.0155
00:01:08 02 | 13 |   0.0168 |   0.0253
00:01:10 02 | 14 |   0.0187 |   0.0261
00:01:12 02 | 15 |   0.0103 |   0.0195
00:01:14 02 | 16 |   0.0247 |   0.0397
00:01:16 02 | 17 |   0.0191 |   0.0338
00:01:18 02 | 18 |   0.0148 |   0.0196
00:01:20 02 | 19 |   0.0036 |   0.0073
00:01:22 02 | 20 |  -0.0016 |   0.0073
00:01:25 03 | 01 |  -0.0120 |  -0.0099
00:01:27 03 | 02 |  -0.0087 |  -0.0198
00:01:29 03 | 03 |  -0.0041 |  -0.0151
00:01:31 03 | 04 |   0.0166 |   0.0201
00:01:33 03 | 05 |   0.0100 |   0.0130
00:01:35 03 | 06 |   0.0290 |   0.0297
00:01:37 03 | 07 |   0.0081 |   0.0098
00:01:39 03 | 08 |  -0.0084 |   0.0011
00:01:41 03 | 09 |  -0.0068 |   0.0129
00:01:43 03 | 10 |  -0.0249 |  -0.0426
00:01:45 03 | 11 |  -0.0122 |  -0.0468
00:01:47 03 | 12 |  -0.0063 |  -0.0057
00:01:49 03 | 13 |  -0.0138 |  -0.0242
00:01:51 03 | 14 |  -0.0066 |  -0.0134
00:01:53 03 | 15 |  -0.0062 |  -0.0070
00:01:55 03 | 16 |  -0.0132 |  -0.0313
00:01:57 03 | 17 |  -0.0053 |  -0.0080
00:01:59 03 | 18 |  -0.0023 |  -0.0277
00:02:01 03 | 19 |  -0.0174 |  -0.0317
00:02:03 03 | 20 |  -0.0159 |  -0.0414
00:02:06 04 | 01 |   0.0191 |   0.0192
00:02:08 04 | 02 |   0.0079 |   0.0052
00:02:10 04 | 03 |  -0.0146 |  -0.0080
00:02:12 04 | 04 |   0.0256 |   0.0106
00:02:14 04 | 05 |   0.0260 |   0.0146
00:02:16 04 | 06 |  -0.0054 |  -0.0139
00:02:18 04 | 07 |   0.0385 |   0.0247
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00:02:20 04 | 08 | -0.0141 | -0.0254
00:02:22 04 | 09 |  0.0192 |  0.0020
00:02:24 04 | 10 | -0.0022 |  0.0000
00:02:26 04 | 11 |  0.0058 |  0.0040
00:02:28 04 | 12 |  0.0145 |  0.0077
00:02:30 04 | 13 |  0.0128 |  0.0116
00:02:32 04 | 14 |  0.0034 | -0.0283
00:02:34 04 | 15 |  0.0158 | -0.0029
00:02:36 04 | 16 |  0.0022 |  0.0013
00:02:38 04 | 17 |  0.0018 |  0.0031
00:02:40 04 | 18 |  0.0007 | -0.0004
00:02:42 04 | 19 | -0.0058 | -0.0183
00:02:45 04 | 20 | -0.0287 | -0.0443
00:02:47 05 | 01 |  0.0206 |  0.0236
00:02:49 05 | 02 |  0.0006 | -0.0052
00:02:51 05 | 03 |  0.0082 |  0.0062
00:02:53 05 | 04 |  0.0009 | -0.0119
00:02:55 05 | 05 |  0.0032 |  0.0044
00:02:57 05 | 06 |  0.0198 |  0.0082
00:02:59 05 | 07 |  0.0079 |  0.0022
00:03:01 05 | 08 |  0.0243 |  0.0042
00:03:03 05 | 09 |  0.0141 | -0.0016
00:03:05 05 | 10 |  0.0189 |  0.0182
00:03:07 05 | 11 | -0.0014 | -0.0147
00:03:09 05 | 12 | -0.0008 |  0.0071
00:03:11 05 | 13 | -0.0090 | -0.0005
00:03:13 05 | 14 |  0.0034 |  0.0009
00:03:16 05 | 15 |  0.0024 | -0.0114
00:03:18 05 | 16 |  0.0123 |  0.0273
00:03:20 05 | 17 |  0.0150 |  0.0251
00:03:22 05 | 18 |  0.0129 |  0.0137
00:03:24 05 | 19 |  0.0103 |  0.0112
00:03:26 05 | 20 |  0.0077 |  0.0151
00:03:28 06 | 01 | -0.0106 | -0.0143
00:03:30 06 | 02 |  0.0053 |  0.0152
00:03:32 06 | 03 |  0.0191 |  0.0091
00:03:34 06 | 04 |  0.0294 |  0.0292
00:03:36 06 | 05 |  0.0299 |  0.0315
00:03:38 06 | 06 |  0.0402 |  0.0535
00:03:40 06 | 07 |  0.0426 |  0.0541
00:03:42 06 | 08 |  0.0438 |  0.0575
00:03:44 06 | 09 |  0.0338 |  0.0382
00:03:46 06 | 10 |  0.0326 |  0.0363
00:03:48 06 | 11 |  0.0257 |  0.0227
00:03:51 06 | 12 |  0.0330 |  0.0444
00:03:53 06 | 13 |  0.0252 |  0.0217
00:03:55 06 | 14 |  0.0220 |  0.0298
00:03:57 06 | 15 |  0.0254 |  0.0249
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00:03:59 06 | 16 |   0.0266 |   0.0247
00:04:01 06 | 17 |   0.0278 |   0.0242
00:04:03 06 | 18 |   0.0274 |   0.0206
00:04:05 06 | 19 |   0.0204 |   0.0158
00:04:07 06 | 20 |   0.0247 |   0.0250
00:04:09 07 | 01 |   0.0108 |   0.0223
00:04:11 07 | 02 |   0.0013 |  -0.0024
00:04:13 07 | 03 |   0.0251 |   0.0363
00:04:15 07 | 04 |   0.0367 |   0.0528
00:04:18 07 | 05 |   0.0039 |   0.0284
00:04:20 07 | 06 |   0.0286 |   0.0278
00:04:22 07 | 07 |   0.0295 |   0.0227
00:04:24 07 | 08 |   0.0306 |   0.0313
00:04:26 07 | 09 |   0.0172 |   0.0388
00:04:28 07 | 10 |   0.0150 |   0.0274
00:04:30 07 | 11 |   0.0069 |   0.0462
00:04:32 07 | 12 |   0.0094 |   0.0353
00:04:34 07 | 13 |   0.0359 |   0.0672
00:04:36 07 | 14 |   0.0173 |   0.0473
00:04:38 07 | 15 |   0.0210 |   0.0402
00:04:40 07 | 16 |   0.0354 |   0.0645
00:04:42 07 | 17 |   0.0277 |   0.0294
00:04:44 07 | 18 |   0.0197 |   0.0419
00:04:46 07 | 19 |   0.0194 |   0.0284
00:04:48 07 | 20 |   0.0146 |   0.0301
00:04:51 08 | 01 |   0.0062 |   0.0118
00:04:53 08 | 02 |  -0.0049 |   0.0105
00:04:55 08 | 03 |   0.0152 |   0.0140
00:04:57 08 | 04 |  -0.0082 |   0.0250
00:04:59 08 | 05 |  -0.0111 |  -0.0086
00:05:01 08 | 06 |   0.0034 |   0.0069
00:05:03 08 | 07 |   0.0037 |   0.0096
00:05:05 08 | 08 |   0.0059 |  -0.0020
00:05:07 08 | 09 |  -0.0020 |  -0.0055
00:05:09 08 | 10 |   0.0165 |   0.0102
00:05:12 08 | 11 |   0.0304 |   0.0296
00:05:14 08 | 12 |   0.0285 |   0.0305
00:05:16 08 | 13 |   0.0125 |  -0.0071
00:05:18 08 | 14 |   0.0208 |  -0.0003
00:05:20 08 | 15 |   0.0093 |  -0.0093
00:05:22 08 | 16 |   0.0269 |   0.0314
00:05:24 08 | 17 |   0.0161 |   0.0137
00:05:26 08 | 18 |   0.0169 |   0.0345
00:05:28 08 | 19 |   0.0147 |   0.0201
00:05:30 08 | 20 |   0.0243 |   0.0465
00:05:33 09 | 01 |   0.0012 |  -0.0093
00:05:35 09 | 02 |  -0.0106 |  -0.0259
00:05:37 09 | 03 |   0.0196 |   0.0321
```

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00:05:39 09 | 04 |  0.0321 |  0.0375
00:05:41 09 | 05 |  0.0082 |  0.0130
00:05:43 09 | 06 |  0.0046 |  0.0088
00:05:45 09 | 07 |  0.0023 |  0.0209
00:05:47 09 | 08 | -0.0057 |  0.0074
00:05:49 09 | 09 |  0.0109 |  0.0101
00:05:51 09 | 10 | -0.0197 | -0.0072
00:05:53 09 | 11 | -0.0017 | -0.0053
00:05:55 09 | 12 | -0.0054 | -0.0191
00:05:57 09 | 13 |  0.0060 |  0.0081
00:05:59 09 | 14 | -0.0005 | -0.0086
00:06:01 09 | 15 |  0.0061 |  0.0034
00:06:03 09 | 16 |  0.0017 |  0.0038
00:06:05 09 | 17 | -0.0083 | -0.0266
00:06:07 09 | 18 | -0.0077 | -0.0237
00:06:09 09 | 19 | -0.0134 | -0.0201
00:06:11 09 | 20 | -0.0028 | -0.0194
00:06:14 10 | 01 | -0.0205 | -0.0241
00:06:16 10 | 02 | -0.0373 | -0.0765
00:06:18 10 | 03 | -0.0329 | -0.0363
00:06:20 10 | 04 | -0.0038 | -0.0294
00:06:22 10 | 05 | -0.0315 | -0.0258
00:06:24 10 | 06 | -0.0270 | -0.0355
00:06:26 10 | 07 | -0.0214 | -0.0278
00:06:28 10 | 08 | -0.0049 | -0.0156
00:06:30 10 | 09 | -0.0094 | -0.0068
00:06:32 10 | 10 |  0.0067 |  0.0114
00:06:34 10 | 11 | -0.0192 | -0.0080
00:06:36 10 | 12 | -0.0114 | -0.0001
00:06:38 10 | 13 |  0.0047 | -0.0188
00:06:40 10 | 14 |  0.0247 |  0.0190
00:06:42 10 | 15 |  0.0206 |  0.0171
00:06:44 10 | 16 |  0.0015 | -0.0107
00:06:46 10 | 17 | -0.0130 | -0.0095
00:06:48 10 | 18 |  0.0294 |  0.0186
00:06:50 10 | 19 |  0.0139 |  0.0069
00:06:52 10 | 20 |  0.0133 |  0.0238
00:06:55 11 | 01 |  0.0294 |  0.0317
00:06:57 11 | 02 |  0.0249 |  0.0241
00:06:59 11 | 03 |  0.0405 |  0.0454
00:07:02 11 | 04 |  0.0260 |  0.0030
00:07:04 11 | 05 |  0.0011 |  0.0093
00:07:06 11 | 06 | -0.0019 | -0.0010
00:07:08 11 | 07 |  0.0275 |  0.0164
00:07:10 11 | 08 | -0.0011 | -0.0087
00:07:12 11 | 09 |  0.0133 |  0.0028
00:07:14 11 | 10 |  0.0190 |  0.0106
00:07:16 11 | 11 |  0.0223 |  0.0272
```

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00:07:18 11 | 12 |  0.0320 |  0.0258
00:07:20 11 | 13 |  0.0265 |  0.0212
00:07:22 11 | 14 |  0.0120 |  0.0056
00:07:24 11 | 15 |  0.0312 |  0.0266
00:07:26 11 | 16 |  0.0260 |  0.0326
00:07:28 11 | 17 |  0.0006 |  0.0029
00:07:30 11 | 18 |  0.0217 |  0.0247
00:07:32 11 | 19 |  0.0173 |  0.0183
00:07:34 11 | 20 |  0.0113 |  0.0123
00:07:37 12 | 01 | -0.0056 |  0.0018
00:07:39 12 | 02 |  0.0091 |  0.0210
00:07:41 12 | 03 |  0.0227 |  0.0087
00:07:43 12 | 04 |  0.0125 |  0.0122
00:07:45 12 | 05 |  0.0283 |  0.0336
00:07:47 12 | 06 |  0.0063 | -0.0029
00:07:49 12 | 07 |  0.0309 |  0.0422
00:07:51 12 | 08 |  0.0286 |  0.0299
00:07:53 12 | 09 |  0.0111 |  0.0240
00:07:55 12 | 10 |  0.0043 |  0.0225
00:07:57 12 | 11 |  0.0039 |  0.0019
00:07:59 12 | 12 |  0.0099 |  0.0460
00:08:01 12 | 13 |  0.0112 |  0.0326
00:08:03 12 | 14 |  0.0171 |  0.0326
00:08:05 12 | 15 |  0.0144 |  0.0133
00:08:07 12 | 16 |  0.0117 |  0.0269
00:08:09 12 | 17 |  0.0113 | -0.0025
00:08:12 12 | 18 |  0.0134 |  0.0119
00:08:14 12 | 19 |  0.0094 |  0.0130
00:08:16 12 | 20 |  0.0132 |  0.0146
(64, 32) tanh 0.2 64
00:00:07 01 | 01 |  0.0029 |  0.0107
00:00:13 01 | 02 |  0.0136 |  0.0103
00:00:19 01 | 03 |  0.0067 |  0.0056
00:00:25 01 | 04 |  0.0168 |  0.0097
00:00:31 01 | 05 |  0.0005 | -0.0013
00:00:38 01 | 06 |  0.0129 |  0.0159
00:00:44 01 | 07 |  0.0033 |  0.0098
00:00:50 01 | 08 |  0.0223 |  0.0235
00:00:56 01 | 09 |  0.0125 |  0.0293
00:01:02 01 | 10 |  0.0314 |  0.0452
00:01:08 01 | 11 |  0.0071 |  0.0082
00:01:14 01 | 12 |  0.0070 | -0.0052
00:01:20 01 | 13 |  0.0350 |  0.0402
00:01:27 01 | 14 |  0.0050 |  0.0118
00:01:33 01 | 15 |  0.0122 |  0.0183
00:01:39 01 | 16 |  0.0073 |  0.0049
00:01:45 01 | 17 |  0.0093 |  0.0046
00:01:51 01 | 18 |  0.0104 |  0.0190
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00:01:57 01 | 19 |   0.0175 |   0.0255
00:02:04 01 | 20 |   0.0022 |  -0.0064
00:02:10 02 | 01 |   0.0260 |   0.0258
00:02:17 02 | 02 |   0.0147 |   0.0103
00:02:23 02 | 03 |   0.0003 |  -0.0104
00:02:29 02 | 04 |   0.0163 |   0.0314
00:02:35 02 | 05 |   0.0051 |   0.0122
00:02:41 02 | 06 |   0.0031 |  -0.0107
00:02:47 02 | 07 |   0.0138 |   0.0022
00:02:53 02 | 08 |   0.0307 |   0.0542
00:02:59 02 | 09 |   0.0039 |   0.0044
00:03:05 02 | 10 |   0.0197 |  -0.0027
00:03:11 02 | 11 |   0.0028 |  -0.0036
00:03:18 02 | 12 |   0.0124 |   0.0138
00:03:24 02 | 13 |  -0.0080 |  -0.0058
00:03:30 02 | 14 |  -0.0041 |  -0.0105
00:03:36 02 | 15 |  -0.0210 |  -0.0220
00:03:42 02 | 16 |   0.0002 |  -0.0108
00:03:48 02 | 17 |  -0.0028 |  -0.0072
00:03:55 02 | 18 |  -0.0099 |   0.0037
00:04:01 02 | 19 |  -0.0068 |  -0.0036
00:04:07 02 | 20 |   0.0039 |   0.0039
00:04:14 03 | 01 |   0.0070 |  -0.0092
00:04:20 03 | 02 |  -0.0141 |  -0.0131
00:04:27 03 | 03 |   0.0134 |   0.0029
00:04:33 03 | 04 |  -0.0045 |  -0.0313
00:04:39 03 | 05 |  -0.0039 |  -0.0095
00:04:45 03 | 06 |  -0.0278 |  -0.0373
00:04:52 03 | 07 |   0.0095 |   0.0148
00:04:58 03 | 08 |   0.0255 |   0.0342
00:05:04 03 | 09 |   0.0147 |   0.0118
00:05:11 03 | 10 |  -0.0078 |  -0.0222
00:05:17 03 | 11 |   0.0171 |   0.0234
00:05:23 03 | 12 |   0.0071 |  -0.0006
00:05:29 03 | 13 |   0.0205 |   0.0139
00:05:35 03 | 14 |  -0.0134 |  -0.0245
00:05:42 03 | 15 |  -0.0248 |  -0.0278
00:05:48 03 | 16 |   0.0178 |   0.0151
00:05:54 03 | 17 |  -0.0136 |  -0.0342
00:06:00 03 | 18 |   0.0018 |  -0.0042
00:06:07 03 | 19 |  -0.0011 |  -0.0046
00:06:13 03 | 20 |   0.0083 |   0.0195
00:06:20 04 | 01 |  -0.0580 |  -0.0572
00:06:26 04 | 02 |   0.0218 |   0.0151
00:06:32 04 | 03 |  -0.0280 |  -0.0138
00:06:39 04 | 04 |   0.0141 |   0.0030
00:06:45 04 | 05 |  -0.0139 |   0.0000
00:06:51 04 | 06 |  -0.0069 |  -0.0163
```

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00:06:57 04 | 07 |   0.0079 |   0.0025
00:07:04 04 | 08 |   0.0174 |  -0.0221
00:07:10 04 | 09 |   0.0343 |   0.0217
00:07:16 04 | 10 |   0.0171 |   0.0087
00:07:22 04 | 11 |   0.0368 |   0.0218
00:07:29 04 | 12 |   0.0321 |   0.0238
00:07:35 04 | 13 |   0.0197 |   0.0234
00:07:41 04 | 14 |  -0.0017 |   0.0099
00:07:47 04 | 15 |   0.0333 |   0.0440
00:07:53 04 | 16 |   0.0051 |   0.0008
00:07:60 04 | 17 |   0.0265 |   0.0329
00:08:06 04 | 18 |   0.0389 |   0.0234
00:08:12 04 | 19 |   0.0083 |  -0.0059
00:08:18 04 | 20 |   0.0302 |   0.0238
00:08:25 05 | 01 |   0.0327 |   0.0259
00:08:31 05 | 02 |   0.0121 |  -0.0020
00:08:37 05 | 03 |   0.0104 |   0.0108
00:08:43 05 | 04 |   0.0220 |   0.0357
00:08:50 05 | 05 |   0.0134 |  -0.0035
00:08:56 05 | 06 |   0.0133 |   0.0167
00:09:02 05 | 07 |   0.0137 |  -0.0036
00:09:08 05 | 08 |  -0.0162 |  -0.0069
00:09:14 05 | 09 |   0.0104 |   0.0112
00:09:20 05 | 10 |  -0.0096 |  -0.0058
00:09:27 05 | 11 |  -0.0215 |  -0.0358
00:09:33 05 | 12 |  -0.0053 |  -0.0155
00:09:39 05 | 13 |  -0.0085 |   0.0083
00:09:45 05 | 14 |   0.0045 |   0.0155
00:09:51 05 | 15 |   0.0082 |   0.0098
00:09:57 05 | 16 |   0.0100 |   0.0019
00:10:04 05 | 17 |   0.0010 |  -0.0105
00:10:10 05 | 18 |  -0.0073 |   0.0076
00:10:16 05 | 19 |   0.0263 |   0.0205
00:10:22 05 | 20 |   0.0065 |   0.0237
00:10:29 06 | 01 |  -0.0048 |  -0.0151
00:10:35 06 | 02 |   0.0151 |   0.0145
00:10:41 06 | 03 |  -0.0120 |  -0.0250
00:10:47 06 | 04 |   0.0156 |   0.0127
00:10:54 06 | 05 |   0.0098 |  -0.0048
00:10:60 06 | 06 |   0.0062 |  -0.0053
00:11:06 06 | 07 |   0.0229 |   0.0037
00:11:12 06 | 08 |   0.0324 |   0.0283
00:11:18 06 | 09 |   0.0164 |   0.0104
00:11:24 06 | 10 |   0.0168 |  -0.0200
00:11:31 06 | 11 |   0.0394 |   0.0328
00:11:37 06 | 12 |   0.0107 |  -0.0021
00:11:43 06 | 13 |   0.0226 |   0.0234
00:11:49 06 | 14 |   0.0301 |   0.0045
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00:11:55 06 | 15 |   0.0253 |   0.0102
00:12:01 06 | 16 |   0.0328 |   0.0164
00:12:08 06 | 17 |   0.0118 |   0.0123
00:12:14 06 | 18 |   0.0221 |   0.0090
00:12:20 06 | 19 |   0.0031 |  -0.0036
00:12:26 06 | 20 |   0.0241 |   0.0054
00:12:33 07 | 01 |   0.0401 |   0.0650
00:12:39 07 | 02 |  -0.0518 |  -0.0586
00:12:45 07 | 03 |  -0.0066 |   0.0041
00:12:51 07 | 04 |   0.0141 |   0.0384
00:12:58 07 | 05 |   0.0276 |   0.0436
00:13:04 07 | 06 |   0.0262 |   0.0453
00:13:10 07 | 07 |   0.0110 |   0.0348
00:13:16 07 | 08 |   0.0253 |   0.0333
00:13:22 07 | 09 |   0.0372 |   0.0242
00:13:29 07 | 10 |  -0.0081 |   0.0028
00:13:35 07 | 11 |   0.0194 |  -0.0070
00:13:41 07 | 12 |   0.0157 |   0.0090
00:13:47 07 | 13 |   0.0296 |   0.0337
00:13:54 07 | 14 |  -0.0225 |  -0.0108
00:13:60 07 | 15 |   0.0342 |   0.0351
00:14:06 07 | 16 |   0.0272 |   0.0181
00:14:12 07 | 17 |   0.0176 |   0.0165
00:14:18 07 | 18 |   0.0028 |   0.0252
00:14:25 07 | 19 |   0.0331 |   0.0508
00:14:31 07 | 20 |   0.0299 |   0.0332
00:14:38 08 | 01 |   0.0157 |   0.0119
00:14:44 08 | 02 |   0.0177 |   0.0111
00:14:50 08 | 03 |  -0.0022 |  -0.0134
00:14:56 08 | 04 |  -0.0011 |   0.0191
00:15:03 08 | 05 |   0.0374 |   0.0343
00:15:09 08 | 06 |   0.0149 |   0.0402
00:15:15 08 | 07 |   0.0180 |   0.0183
00:15:21 08 | 08 |  -0.0070 |   0.0087
00:15:27 08 | 09 |   0.0190 |   0.0202
00:15:34 08 | 10 |   0.0130 |   0.0200
00:15:40 08 | 11 |   0.0043 |  -0.0160
00:15:46 08 | 12 |   0.0051 |   0.0051
00:15:52 08 | 13 |  -0.0046 |   0.0098
00:15:58 08 | 14 |   0.0066 |   0.0055
00:16:05 08 | 15 |   0.0145 |   0.0020
00:16:11 08 | 16 |   0.0153 |   0.0138
00:16:17 08 | 17 |   0.0120 |   0.0001
00:16:23 08 | 18 |  -0.0154 |  -0.0259
00:16:29 08 | 19 |   0.0270 |   0.0148
00:16:36 08 | 20 |  -0.0088 |  -0.0180
00:16:43 09 | 01 |   0.0221 |   0.0209
00:16:49 09 | 02 |   0.0103 |   0.0066
```

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00:16:55 09 | 03 |   0.0004 | -0.0083
00:17:01 09 | 04 |   0.0129 |  0.0199
00:17:07 09 | 05 |  -0.0149 | -0.0151
00:17:13 09 | 06 |   0.0148 |  0.0145
00:17:19 09 | 07 |   0.0152 |  0.0203
00:17:26 09 | 08 |   0.0082 |  0.0043
00:17:32 09 | 09 |  -0.0062 | -0.0072
00:17:38 09 | 10 |   0.0187 |  0.0115
00:17:44 09 | 11 |  -0.0006 |  0.0025
00:17:50 09 | 12 |   0.0143 |  0.0092
00:17:57 09 | 13 |  -0.0013 | -0.0047
00:18:03 09 | 14 |   0.0006 |  0.0069
00:18:09 09 | 15 |   0.0155 |  0.0132
00:18:15 09 | 16 |   0.0158 |  0.0181
00:18:21 09 | 17 |   0.0029 | -0.0016
00:18:28 09 | 18 |  -0.0007 | -0.0240
00:18:34 09 | 19 |  -0.0046 | -0.0158
00:18:40 09 | 20 |   0.0084 |  0.0004
00:18:47 10 | 01 |  -0.0120 | -0.0170
00:18:53 10 | 02 |  -0.0247 | -0.0025
00:18:59 10 | 03 |   0.0100 |  0.0121
00:19:05 10 | 04 |   0.0060 |  0.0052
00:19:12 10 | 05 |  -0.0367 | -0.0358
00:19:18 10 | 06 |   0.0242 |  0.0232
00:19:24 10 | 07 |  -0.0143 | -0.0311
00:19:30 10 | 08 |   0.0051 | -0.0076
00:19:37 10 | 09 |  -0.0184 | -0.0152
00:19:43 10 | 10 |  -0.0135 | -0.0157
00:19:49 10 | 11 |   0.0080 |  0.0147
00:19:55 10 | 12 |   0.0067 | -0.0078
00:20:02 10 | 13 |   0.0305 |  0.0483
00:20:08 10 | 14 |  -0.0404 | -0.0383
00:20:14 10 | 15 |  -0.0136 | -0.0115
00:20:20 10 | 16 |  -0.0131 | -0.0179
00:20:27 10 | 17 |  -0.0067 | -0.0068
00:20:33 10 | 18 |  -0.0120 | -0.0003
00:20:39 10 | 19 |  -0.0408 | -0.0218
00:20:45 10 | 20 |  -0.0381 | -0.0366
00:20:52 11 | 01 |   0.0232 |  0.0148
00:20:58 11 | 02 |  -0.0141 | -0.0072
00:21:04 11 | 03 |   0.0187 |  0.0201
00:21:10 11 | 04 |  -0.0096 | -0.0218
00:21:16 11 | 05 |   0.0093 |  0.0028
00:21:22 11 | 06 |   0.0252 |  0.0275
00:21:29 11 | 07 |  -0.0022 | -0.0131
00:21:35 11 | 08 |   0.0158 |  0.0189
00:21:41 11 | 09 |  -0.0110 | -0.0156
00:21:47 11 | 10 |  -0.0078 | -0.0106
```

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00:21:54 11 | 11 | -0.0143 | -0.0219
00:21:60 11 | 12 | -0.0082 | -0.0062
00:22:06 11 | 13 | -0.0111 | -0.0119
00:22:12 11 | 14 | -0.0024 | -0.0050
00:22:19 11 | 15 |  0.0019 | -0.0036
00:22:25 11 | 16 | -0.0003 |  0.0039
00:22:31 11 | 17 | -0.0095 | -0.0125
00:22:37 11 | 18 | -0.0219 | -0.0264
00:22:43 11 | 19 |  0.0048 |  0.0008
00:22:50 11 | 20 | -0.0093 | -0.0033
00:22:57 12 | 01 |  0.0132 |  0.0336
00:23:03 12 | 02 |  0.0068 |  0.0283
00:23:09 12 | 03 | -0.0061 | -0.0102
00:23:15 12 | 04 |  0.0100 | -0.0004
00:23:22 12 | 05 |  0.0136 |  0.0351
00:23:28 12 | 06 |  0.0175 |  0.0206
00:23:34 12 | 07 |  0.0169 |  0.0006
00:23:40 12 | 08 |  0.0046 | -0.0078
00:23:47 12 | 09 | -0.0009 | -0.0282
00:23:53 12 | 10 |  0.0110 |  0.0046
00:23:59 12 | 11 |  0.0094 |  0.0199
00:24:06 12 | 12 |  0.0016 |  0.0047
00:24:12 12 | 13 |  0.0057 |  0.0050
00:24:18 12 | 14 |  0.0153 |  0.0147
00:24:24 12 | 15 |  0.0135 |  0.0051
00:24:31 12 | 16 |  0.0103 |  0.0057
00:24:37 12 | 17 |  0.0062 |  0.0198
00:24:43 12 | 18 |  0.0112 |  0.0268
00:24:49 12 | 19 |  0.0072 |  0.0094
00:24:56 12 | 20 |  0.0101 |  0.0158
(64, 32) tanh 0.2 256
00:00:03 01 | 01 | -0.0109 | -0.0093
00:00:06 01 | 02 | -0.0113 | -0.0081
00:00:09 01 | 03 |  0.0190 |  0.0211
00:00:11 01 | 04 |  0.0296 |  0.0248
00:00:14 01 | 05 |  0.0119 |  0.0190
00:00:16 01 | 06 |  0.0138 |  0.0203
00:00:19 01 | 07 | -0.0001 | -0.0211
00:00:22 01 | 08 |  0.0158 |  0.0223
00:00:24 01 | 09 |  0.0024 | -0.0011
00:00:27 01 | 10 |  0.0176 |  0.0086
00:00:29 01 | 11 |  0.0148 |  0.0231
00:00:32 01 | 12 |  0.0225 |  0.0198
00:00:35 01 | 13 |  0.0194 |  0.0195
00:00:37 01 | 14 |  0.0209 |  0.0197
00:00:40 01 | 15 |  0.0210 |  0.0199
00:00:43 01 | 16 |  0.0167 |  0.0190
00:00:45 01 | 17 |  0.0070 | -0.0039
```

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00:00:48 01 | 18 |   0.0106 |   0.0131
00:00:50 01 | 19 |   0.0120 |   0.0050
00:00:53 01 | 20 |   0.0092 |   0.0116
00:00:56 02 | 01 |  -0.0182 |  -0.0104
00:00:59 02 | 02 |  -0.0039 |   0.0033
00:01:01 02 | 03 |   0.0216 |   0.0308
00:01:04 02 | 04 |  -0.0225 |  -0.0139
00:01:07 02 | 05 |   0.0024 |   0.0090
00:01:09 02 | 06 |   0.0091 |  -0.0019
00:01:12 02 | 07 |   0.0293 |   0.0502
00:01:15 02 | 08 |  -0.0146 |  -0.0163
00:01:17 02 | 09 |  -0.0056 |   0.0025
00:01:20 02 | 10 |  -0.0067 |  -0.0037
00:01:22 02 | 11 |  -0.0132 |  -0.0200
00:01:25 02 | 12 |   0.0172 |   0.0278
00:01:28 02 | 13 |  -0.0003 |   0.0034
00:01:30 02 | 14 |   0.0159 |   0.0266
00:01:33 02 | 15 |   0.0016 |   0.0068
00:01:35 02 | 16 |   0.0122 |   0.0147
00:01:38 02 | 17 |   0.0195 |   0.0238
00:01:41 02 | 18 |  -0.0023 |  -0.0190
00:01:43 02 | 19 |   0.0097 |  -0.0104
00:01:46 02 | 20 |   0.0148 |   0.0027
00:01:49 03 | 01 |  -0.0087 |  -0.0088
00:01:52 03 | 02 |  -0.0088 |   0.0013
00:01:55 03 | 03 |   0.0193 |   0.0127
00:01:57 03 | 04 |   0.0066 |   0.0106
00:01:60 03 | 05 |   0.0120 |   0.0053
00:02:02 03 | 06 |   0.0189 |   0.0378
00:02:05 03 | 07 |  -0.0175 |  -0.0275
00:02:08 03 | 08 |  -0.0112 |  -0.0277
00:02:11 03 | 09 |   0.0059 |  -0.0063
00:02:13 03 | 10 |  -0.0149 |  -0.0353
00:02:16 03 | 11 |   0.0188 |   0.0255
00:02:19 03 | 12 |   0.0144 |  -0.0106
00:02:21 03 | 13 |   0.0055 |  -0.0145
00:02:24 03 | 14 |   0.0037 |  -0.0028
00:02:27 03 | 15 |   0.0025 |  -0.0155
00:02:29 03 | 16 |   0.0134 |   0.0253
00:02:32 03 | 17 |  -0.0229 |  -0.0491
00:02:35 03 | 18 |   0.0112 |  -0.0028
00:02:37 03 | 19 |  -0.0017 |  -0.0268
00:02:40 03 | 20 |  -0.0055 |  -0.0233
00:02:43 04 | 01 |  -0.0146 |  -0.0087
00:02:46 04 | 02 |  -0.0178 |  -0.0234
00:02:49 04 | 03 |   0.0214 |   0.0252
00:02:51 04 | 04 |  -0.0223 |  -0.0162
00:02:54 04 | 05 |  -0.0302 |  -0.0292
```

```
00:02:56 04 | 06 | -0.0172 | -0.0104
00:02:59 04 | 07 | -0.0096 | -0.0058
00:03:02 04 | 08 |  0.0093 |  0.0126
00:03:04 04 | 09 |  0.0015 |  0.0025
00:03:07 04 | 10 | -0.0186 | -0.0163
00:03:10 04 | 11 | -0.0104 | -0.0179
00:03:12 04 | 12 | -0.0076 | -0.0061
00:03:15 04 | 13 | -0.0156 | -0.0127
00:03:18 04 | 14 | -0.0061 | -0.0201
00:03:20 04 | 15 | -0.0103 | -0.0208
00:03:23 04 | 16 |  0.0101 |  0.0005
00:03:26 04 | 17 |  0.0056 |  0.0088
00:03:29 04 | 18 | -0.0226 | -0.0445
00:03:31 04 | 19 |  0.0033 | -0.0042
00:03:34 04 | 20 |  0.0063 |  0.0067
00:03:37 05 | 01 | -0.0090 | -0.0077
00:03:40 05 | 02 |  0.0057 |  0.0027
00:03:43 05 | 03 |  0.0076 |  0.0022
00:03:45 05 | 04 |  0.0070 | -0.0052
00:03:48 05 | 05 |  0.0000 | -0.0222
00:03:50 05 | 06 |  0.0178 |  0.0456
00:03:53 05 | 07 |  0.0118 |  0.0105
00:03:56 05 | 08 |  0.0226 |  0.0178
00:03:58 05 | 09 |  0.0165 |  0.0099
00:04:01 05 | 10 |  0.0109 |  0.0145
00:04:04 05 | 11 |  0.0055 | -0.0042
00:04:06 05 | 12 | -0.0041 |  0.0029
00:04:09 05 | 13 | -0.0052 | -0.0086
00:04:12 05 | 14 | -0.0039 |  0.0115
00:04:14 05 | 15 | -0.0114 | -0.0116
00:04:17 05 | 16 | -0.0103 | -0.0166
00:04:20 05 | 17 | -0.0067 | -0.0114
00:04:22 05 | 18 | -0.0078 | -0.0061
00:04:25 05 | 19 | -0.0036 |  0.0072
00:04:28 05 | 20 | -0.0247 | -0.0128
00:04:31 06 | 01 |  0.0010 |  0.0053
00:04:34 06 | 02 |  0.0451 |  0.0605
00:04:36 06 | 03 |  0.0064 |  0.0028
00:04:39 06 | 04 |  0.0400 |  0.0210
00:04:41 06 | 05 |  0.0366 |  0.0391
00:04:44 06 | 06 |  0.0264 |  0.0268
00:04:47 06 | 07 |  0.0366 |  0.0228
00:04:49 06 | 08 |  0.0281 |  0.0156
00:04:52 06 | 09 |  0.0244 |  0.0247
00:04:55 06 | 10 |  0.0278 |  0.0240
00:04:57 06 | 11 |  0.0266 |  0.0063
00:05:00 06 | 12 |  0.0329 |  0.0116
00:05:03 06 | 13 |  0.0523 |  0.0230
```

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00:05:05 06 | 14 |   0.0503 |   0.0399
00:05:08 06 | 15 |   0.0304 |   0.0436
00:05:11 06 | 16 |   0.0461 |   0.0235
00:05:13 06 | 17 |   0.0384 |   0.0196
00:05:16 06 | 18 |   0.0441 |   0.0333
00:05:19 06 | 19 |   0.0398 |   0.0254
00:05:21 06 | 20 |   0.0440 |   0.0213
00:05:25 07 | 01 |   0.0121 |   0.0231
00:05:27 07 | 02 |   0.0262 |   0.0137
00:05:30 07 | 03 |   0.0096 |   0.0277
00:05:32 07 | 04 |   0.0369 |   0.0335
00:05:35 07 | 05 |   0.0246 |   0.0208
00:05:38 07 | 06 |   0.0217 |   0.0262
00:05:40 07 | 07 |   0.0159 |   0.0258
00:05:43 07 | 08 |   0.0141 |   0.0216
00:05:46 07 | 09 |   0.0306 |   0.0308
00:05:48 07 | 10 |   0.0296 |   0.0285
00:05:51 07 | 11 |   0.0373 |   0.0336
00:05:53 07 | 12 |   0.0342 |   0.0400
00:05:56 07 | 13 |   0.0315 |   0.0268
00:05:59 07 | 14 |   0.0206 |   0.0309
00:06:02 07 | 15 |   0.0343 |   0.0295
00:06:04 07 | 16 |   0.0243 |   0.0243
00:06:07 07 | 17 |   0.0132 |   0.0234
00:06:10 07 | 18 |   0.0107 |   0.0140
00:06:12 07 | 19 |   0.0178 |   0.0321
00:06:15 07 | 20 |   0.0156 |   0.0190
00:06:18 08 | 01 |   0.0162 |   0.0257
00:06:21 08 | 02 |   0.0037 |   0.0218
00:06:24 08 | 03 |  -0.0117 |  -0.0066
00:06:26 08 | 04 |  -0.0020 |   0.0083
00:06:29 08 | 05 |   0.0097 |   0.0179
00:06:31 08 | 06 |   0.0286 |   0.0324
00:06:34 08 | 07 |   0.0109 |   0.0345
00:06:37 08 | 08 |   0.0264 |   0.0188
00:06:39 08 | 09 |   0.0207 |   0.0268
00:06:42 08 | 10 |   0.0168 |   0.0186
00:06:45 08 | 11 |   0.0224 |   0.0213
00:06:47 08 | 12 |   0.0116 |   0.0182
00:06:50 08 | 13 |   0.0175 |  -0.0053
00:06:52 08 | 14 |   0.0268 |   0.0325
00:06:55 08 | 15 |   0.0228 |   0.0248
00:06:58 08 | 16 |   0.0185 |   0.0254
00:07:00 08 | 17 |   0.0322 |   0.0358
00:07:03 08 | 18 |   0.0271 |  -0.0039
00:07:06 08 | 19 |   0.0115 |   0.0026
00:07:08 08 | 20 |   0.0271 |   0.0139
00:07:12 09 | 01 |   0.0038 |  -0.0098
```

```
00:07:14 09 | 02 |   0.0056 | -0.0058
00:07:17 09 | 03 |   0.0107 | -0.0015
00:07:20 09 | 04 | -0.0047 | -0.0196
00:07:22 09 | 05 | -0.0107 | -0.0124
00:07:25 09 | 06 | -0.0099 | -0.0066
00:07:27 09 | 07 | -0.0099 | -0.0142
00:07:30 09 | 08 | -0.0120 | -0.0225
00:07:33 09 | 09 | -0.0114 | -0.0292
00:07:35 09 | 10 |   0.0043 |   0.0143
00:07:38 09 | 11 |   0.0049 |   0.0152
00:07:40 09 | 12 | -0.0050 | -0.0018
00:07:43 09 | 13 | -0.0062 | -0.0181
00:07:46 09 | 14 | -0.0187 | -0.0308
00:07:48 09 | 15 | -0.0143 | -0.0207
00:07:51 09 | 16 | -0.0065 | -0.0037
00:07:53 09 | 17 | -0.0019 |   0.0072
00:07:56 09 | 18 | -0.0032 | -0.0092
00:07:59 09 | 19 | -0.0098 | -0.0018
00:08:01 09 | 20 | -0.0003 | -0.0046
00:08:05 10 | 01 | -0.0279 | -0.0386
00:08:07 10 | 02 |   0.0064 | -0.0155
00:08:10 10 | 03 |   0.0394 |   0.0448
00:08:13 10 | 04 |   0.0105 |   0.0100
00:08:15 10 | 05 |   0.0076 |   0.0021
00:08:18 10 | 06 | -0.0282 | -0.0353
00:08:21 10 | 07 |   0.0355 |   0.0315
00:08:23 10 | 08 | -0.0130 | -0.0012
00:08:26 10 | 09 | -0.0242 | -0.0202
00:08:28 10 | 10 |   0.0015 | -0.0026
00:08:31 10 | 11 | -0.0196 | -0.0049
00:08:34 10 | 12 | -0.0345 | -0.0545
00:08:36 10 | 13 | -0.0227 | -0.0250
00:08:39 10 | 14 | -0.0192 | -0.0175
00:08:42 10 | 15 | -0.0117 | -0.0190
00:08:44 10 | 16 | -0.0049 |   0.0017
00:08:47 10 | 17 | -0.0406 | -0.0358
00:08:49 10 | 18 | -0.0085 | -0.0217
00:08:52 10 | 19 | -0.0362 | -0.0324
00:08:55 10 | 20 | -0.0291 | -0.0335
00:08:59 11 | 01 |   0.0249 |   0.0177
00:09:01 11 | 02 | -0.0095 | -0.0070
00:09:04 11 | 03 |   0.0450 |   0.0484
00:09:07 11 | 04 |   0.0357 |   0.0284
00:09:09 11 | 05 | -0.0037 |   0.0010
00:09:12 11 | 06 |   0.0474 |   0.0204
00:09:14 11 | 07 |   0.0095 | -0.0013
00:09:17 11 | 08 |   0.0036 |   0.0080
00:09:20 11 | 09 |   0.0102 |   0.0100
```

```
00:09:22 11 | 10 |   0.0216 |   0.0080
00:09:25 11 | 11 |   0.0134 |   0.0166
00:09:28 11 | 12 |   0.0392 |   0.0352
00:09:30 11 | 13 |   0.0054 |   0.0051
00:09:33 11 | 14 |   0.0235 |   0.0183
00:09:35 11 | 15 |   0.0282 |   0.0281
00:09:38 11 | 16 |   0.0222 |   0.0301
00:09:41 11 | 17 |   0.0070 |   0.0146
00:09:43 11 | 18 |   0.0138 |   0.0111
00:09:47 11 | 19 |   0.0236 |   0.0282
00:09:49 11 | 20 |   0.0165 |   0.0122
00:09:53 12 | 01 |   0.0279 |   0.0220
00:09:55 12 | 02 |   0.0269 |   0.0272
00:09:58 12 | 03 |   0.0285 |   0.0193
00:10:01 12 | 04 |   0.0196 |   0.0353
00:10:03 12 | 05 |   0.0249 |   0.0203
00:10:06 12 | 06 |   0.0047 |   0.0166
00:10:09 12 | 07 |   0.0178 |   0.0274
00:10:11 12 | 08 |   0.0085 |   0.0025
00:10:14 12 | 09 |   0.0068 |  -0.0233
00:10:17 12 | 10 |   0.0061 |   0.0069
00:10:19 12 | 11 |   0.0019 |   0.0202
00:10:22 12 | 12 |   0.0083 |  -0.0045
00:10:24 12 | 13 |   0.0105 |  -0.0001
00:10:27 12 | 14 |   0.0114 |   0.0063
00:10:30 12 | 15 |   0.0057 |   0.0129
00:10:32 12 | 16 |   0.0083 |   0.0173
00:10:35 12 | 17 |   0.0134 |   0.0143
00:10:38 12 | 18 |   0.0100 |   0.0099
00:10:40 12 | 19 |   0.0087 |   0.0248
00:10:43 12 | 20 |   0.0120 |   0.0108
(32, 16) tanh 0.1 64
00:00:07 01 | 01 |   0.0205 |   0.0150
00:00:12 01 | 02 |   0.0038 |   0.0095
00:00:18 01 | 03 |   0.0003 |   0.0011
00:00:24 01 | 04 |   0.0135 |   0.0185
00:00:29 01 | 05 |   0.0098 |   0.0127
00:00:35 01 | 06 |   0.0085 |   0.0213
00:00:41 01 | 07 |   0.0097 |   0.0201
00:00:47 01 | 08 |   0.0158 |   0.0230
00:00:52 01 | 09 |   0.0041 |   0.0009
00:00:58 01 | 10 |   0.0087 |   0.0159
00:01:04 01 | 11 |   0.0073 |   0.0162
00:01:10 01 | 12 |   0.0156 |   0.0210
00:01:15 01 | 13 |   0.0112 |   0.0101
00:01:21 01 | 14 |   0.0151 |   0.0340
00:01:27 01 | 15 |   0.0214 |   0.0225
00:01:33 01 | 16 |   0.0149 |   0.0193
```

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00:01:38 01 | 17 |   0.0221 |   0.0246
00:01:44 01 | 18 |   0.0171 |   0.0137
00:01:50 01 | 19 |   0.0261 |   0.0276
00:01:56 01 | 20 |   0.0155 |   0.0017
00:02:02 02 | 01 |   0.0028 |   0.0072
00:02:08 02 | 02 |  -0.0037 |   0.0029
00:02:14 02 | 03 |   0.0106 |   0.0314
00:02:19 02 | 04 |   0.0065 |  -0.0017
00:02:25 02 | 05 |  -0.0122 |  -0.0035
00:02:31 02 | 06 |   0.0065 |   0.0188
00:02:37 02 | 07 |   0.0098 |   0.0113
00:02:42 02 | 08 |   0.0097 |   0.0090
00:02:48 02 | 09 |   0.0233 |   0.0277
00:02:54 02 | 10 |   0.0123 |   0.0162
00:02:59 02 | 11 |   0.0181 |   0.0237
00:03:05 02 | 12 |   0.0087 |   0.0332
00:03:11 02 | 13 |   0.0003 |   0.0100
00:03:17 02 | 14 |   0.0012 |   0.0222
00:03:23 02 | 15 |  -0.0071 |  -0.0051
00:03:28 02 | 16 |  -0.0120 |  -0.0026
00:03:34 02 | 17 |   0.0034 |   0.0249
00:03:40 02 | 18 |  -0.0135 |  -0.0006
00:03:46 02 | 19 |  -0.0080 |  -0.0007
00:03:51 02 | 20 |  -0.0051 |   0.0017
00:03:58 03 | 01 |   0.0038 |   0.0017
00:04:04 03 | 02 |  -0.0093 |  -0.0132
00:04:09 03 | 03 |  -0.0111 |  -0.0368
00:04:15 03 | 04 |  -0.0009 |  -0.0191
00:04:21 03 | 05 |  -0.0091 |  -0.0202
00:04:26 03 | 06 |  -0.0025 |  -0.0119
00:04:32 03 | 07 |  -0.0244 |  -0.0359
00:04:38 03 | 08 |   0.0009 |  -0.0038
00:04:44 03 | 09 |  -0.0143 |  -0.0366
00:04:49 03 | 10 |  -0.0059 |  -0.0219
00:04:55 03 | 11 |  -0.0113 |  -0.0299
00:05:01 03 | 12 |   0.0027 |   0.0096
00:05:07 03 | 13 |  -0.0161 |  -0.0104
00:05:12 03 | 14 |  -0.0111 |   0.0001
00:05:18 03 | 15 |  -0.0169 |  -0.0158
00:05:24 03 | 16 |  -0.0092 |  -0.0134
00:05:30 03 | 17 |  -0.0067 |  -0.0134
00:05:35 03 | 18 |   0.0097 |   0.0088
00:05:41 03 | 19 |  -0.0027 |   0.0021
00:05:47 03 | 20 |  -0.0122 |  -0.0115
00:05:54 04 | 01 |  -0.0063 |  -0.0045
00:05:59 04 | 02 |  -0.0404 |  -0.0436
00:06:05 04 | 03 |  -0.0155 |  -0.0307
00:06:11 04 | 04 |   0.0349 |   0.0219
```

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00:06:17 04 | 05 |   0.0125 |   0.0047
00:06:23 04 | 06 |  -0.0095 |  -0.0088
00:06:29 04 | 07 |  -0.0488 |  -0.0466
00:06:35 04 | 08 |  -0.0377 |  -0.0525
00:06:40 04 | 09 |  -0.0217 |  -0.0186
00:06:46 04 | 10 |  -0.0360 |  -0.0401
00:06:52 04 | 11 |  -0.0503 |  -0.0445
00:06:58 04 | 12 |  -0.0284 |  -0.0183
00:07:04 04 | 13 |  -0.0266 |  -0.0343
00:07:09 04 | 14 |  -0.0130 |  -0.0012
00:07:15 04 | 15 |  -0.0310 |  -0.0185
00:07:21 04 | 16 |  -0.0323 |  -0.0299
00:07:27 04 | 17 |  -0.0348 |  -0.0305
00:07:33 04 | 18 |  -0.0110 |  -0.0266
00:07:38 04 | 19 |  -0.0199 |  -0.0169
00:07:44 04 | 20 |   0.0041 |  -0.0033
00:07:51 05 | 01 |   0.0136 |   0.0221
00:07:56 05 | 02 |   0.0105 |   0.0084
00:08:02 05 | 03 |   0.0079 |  -0.0019
00:08:08 05 | 04 |   0.0126 |  -0.0104
00:08:14 05 | 05 |   0.0142 |   0.0009
00:08:20 05 | 06 |  -0.0062 |  -0.0031
00:08:25 05 | 07 |   0.0094 |   0.0081
00:08:31 05 | 08 |  -0.0073 |  -0.0217
00:08:37 05 | 09 |   0.0115 |   0.0019
00:08:43 05 | 10 |   0.0060 |  -0.0011
00:08:48 05 | 11 |   0.0024 |  -0.0029
00:08:54 05 | 12 |   0.0000 |  -0.0201
00:08:60 05 | 13 |  -0.0028 |  -0.0212
00:09:06 05 | 14 |   0.0046 |  -0.0097
00:09:11 05 | 15 |   0.0128 |  -0.0012
00:09:17 05 | 16 |   0.0040 |   0.0056
00:09:23 05 | 17 |   0.0062 |   0.0029
00:09:29 05 | 18 |   0.0183 |   0.0097
00:09:34 05 | 19 |   0.0013 |  -0.0036
00:09:40 05 | 20 |   0.0226 |   0.0149
00:09:47 06 | 01 |  -0.0058 |  -0.0168
00:09:52 06 | 02 |   0.0263 |   0.0228
00:09:58 06 | 03 |   0.0292 |   0.0116
00:10:04 06 | 04 |   0.0142 |   0.0244
00:10:10 06 | 05 |   0.0099 |   0.0229
00:10:16 06 | 06 |   0.0055 |   0.0122
00:10:21 06 | 07 |   0.0286 |   0.0195
00:10:27 06 | 08 |   0.0114 |   0.0060
00:10:33 06 | 09 |   0.0029 |  -0.0139
00:10:39 06 | 10 |   0.0104 |  -0.0137
00:10:44 06 | 11 |  -0.0082 |  -0.0030
00:10:50 06 | 12 |   0.0060 |   0.0124
```

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00:10:56 06 | 13 |   0.0088 | -0.0091
00:11:02 06 | 14 |   0.0083 |  0.0034
00:11:07 06 | 15 |  -0.0029 | -0.0140
00:11:13 06 | 16 |  -0.0018 | -0.0192
00:11:19 06 | 17 |   0.0084 |  0.0058
00:11:25 06 | 18 |   0.0185 |  0.0103
00:11:31 06 | 19 |   0.0020 |  0.0056
00:11:36 06 | 20 |  -0.0079 | -0.0094
00:11:43 07 | 01 |   0.0309 |  0.0187
00:11:49 07 | 02 |  -0.0079 |  0.0091
00:11:54 07 | 03 |   0.0151 |  0.0175
00:11:60 07 | 04 |   0.0382 |  0.0305
00:12:06 07 | 05 |  -0.0030 | -0.0087
00:12:11 07 | 06 |   0.0274 |  0.0399
00:12:17 07 | 07 |   0.0113 |  0.0322
00:12:23 07 | 08 |   0.0092 |  0.0121
00:12:29 07 | 09 |   0.0155 |  0.0118
00:12:34 07 | 10 |   0.0211 |  0.0120
00:12:40 07 | 11 |   0.0180 |  0.0216
00:12:46 07 | 12 |  -0.0032 |  0.0261
00:12:52 07 | 13 |   0.0013 |  0.0016
00:12:57 07 | 14 |  -0.0214 | -0.0009
00:13:03 07 | 15 |  -0.0130 | -0.0114
00:13:09 07 | 16 |  -0.0054 | -0.0103
00:13:15 07 | 17 |  -0.0060 | -0.0092
00:13:20 07 | 18 |  -0.0146 | -0.0118
00:13:26 07 | 19 |  -0.0097 |  0.0045
00:13:32 07 | 20 |  -0.0171 | -0.0171
00:13:38 08 | 01 |  -0.0027 |  0.0151
00:13:44 08 | 02 |   0.0218 |  0.0255
00:13:50 08 | 03 |   0.0325 |  0.0279
00:13:56 08 | 04 |   0.0246 |  0.0154
00:14:02 08 | 05 |   0.0282 |  0.0265
00:14:07 08 | 06 |   0.0186 |  0.0338
00:14:13 08 | 07 |   0.0129 |  0.0004
00:14:19 08 | 08 |   0.0241 |  0.0356
00:14:25 08 | 09 |   0.0231 |  0.0475
00:14:31 08 | 10 |   0.0183 |  0.0291
00:14:37 08 | 11 |   0.0243 |  0.0438
00:14:42 08 | 12 |   0.0246 |  0.0498
00:14:48 08 | 13 |   0.0168 |  0.0222
00:14:54 08 | 14 |   0.0174 |  0.0224
00:14:60 08 | 15 |   0.0156 |  0.0309
00:15:06 08 | 16 |   0.0105 |  0.0057
00:15:11 08 | 17 |   0.0038 |  0.0205
00:15:17 08 | 18 |  -0.0015 |  0.0167
00:15:23 08 | 19 |   0.0095 |  0.0160
00:15:29 08 | 20 |   0.0008 |  0.0068
```

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00:15:35 09 | 01 |   0.0093 |   0.0070
00:15:41 09 | 02 |   0.0017 |   0.0025
00:15:47 09 | 03 |  -0.0162 |  -0.0234
00:15:53 09 | 04 |   0.0182 |   0.0150
00:15:59 09 | 05 |   0.0036 |  -0.0064
00:16:04 09 | 06 |   0.0140 |  -0.0002
00:16:10 09 | 07 |   0.0041 |  -0.0102
00:16:16 09 | 08 |   0.0073 |  -0.0002
00:16:22 09 | 09 |   0.0130 |   0.0044
00:16:27 09 | 10 |   0.0175 |   0.0019
00:16:33 09 | 11 |   0.0052 |  -0.0031
00:16:39 09 | 12 |   0.0078 |  -0.0011
00:16:45 09 | 13 |   0.0116 |  -0.0042
00:16:51 09 | 14 |   0.0203 |   0.0081
00:16:56 09 | 15 |   0.0289 |   0.0275
00:17:02 09 | 16 |   0.0111 |  -0.0086
00:17:08 09 | 17 |   0.0265 |   0.0130
00:17:14 09 | 18 |   0.0119 |   0.0050
00:17:20 09 | 19 |   0.0214 |   0.0069
00:17:25 09 | 20 |   0.0170 |   0.0083
00:17:32 10 | 01 |  -0.0302 |  -0.0195
00:17:38 10 | 02 |   0.0541 |   0.0740
00:17:43 10 | 03 |   0.0107 |   0.0233
00:17:49 10 | 04 |  -0.0119 |  -0.0012
00:17:55 10 | 05 |  -0.0128 |  -0.0040
00:18:01 10 | 06 |  -0.0203 |  -0.0069
00:18:07 10 | 07 |  -0.0300 |  -0.0136
00:18:13 10 | 08 |  -0.0009 |  -0.0056
00:18:18 10 | 09 |  -0.0223 |  -0.0165
00:18:24 10 | 10 |  -0.0347 |  -0.0203
00:18:30 10 | 11 |  -0.0256 |  -0.0178
00:18:36 10 | 12 |  -0.0319 |  -0.0371
00:18:41 10 | 13 |  -0.0474 |  -0.0301
00:18:47 10 | 14 |   0.0019 |   0.0143
00:18:53 10 | 15 |  -0.0056 |  -0.0199
00:18:59 10 | 16 |  -0.0355 |  -0.0608
00:19:05 10 | 17 |  -0.0112 |   0.0039
00:19:10 10 | 18 |  -0.0418 |  -0.0442
00:19:16 10 | 19 |  -0.0227 |  -0.0123
00:19:22 10 | 20 |  -0.0134 |  -0.0154
00:19:28 11 | 01 |   0.0345 |   0.0298
00:19:34 11 | 02 |  -0.0076 |  -0.0066
00:19:40 11 | 03 |  -0.0031 |  -0.0049
00:19:46 11 | 04 |   0.0088 |   0.0027
00:19:52 11 | 05 |   0.0202 |   0.0198
00:19:57 11 | 06 |   0.0044 |   0.0110
00:20:03 11 | 07 |   0.0170 |   0.0162
00:20:09 11 | 08 |   0.0145 |   0.0149
```

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00:20:15 11 | 09 |  0.0063 | -0.0019
00:20:20 11 | 10 | -0.0097 | -0.0042
00:20:26 11 | 11 |  0.0005 |  0.0109
00:20:32 11 | 12 |  0.0200 |  0.0202
00:20:38 11 | 13 |  0.0197 |  0.0194
00:20:43 11 | 14 |  0.0200 |  0.0127
00:20:49 11 | 15 |  0.0229 |  0.0202
00:20:55 11 | 16 |  0.0116 |  0.0230
00:21:01 11 | 17 |  0.0101 |  0.0095
00:21:07 11 | 18 |  0.0187 |  0.0144
00:21:12 11 | 19 |  0.0031 | -0.0071
00:21:18 11 | 20 | -0.0011 | -0.0047
00:21:25 12 | 01 |  0.0288 |  0.0355
00:21:30 12 | 02 |  0.0238 |  0.0157
00:21:36 12 | 03 |  0.0220 |  0.0163
00:21:42 12 | 04 |  0.0141 |  0.0109
00:21:48 12 | 05 | -0.0000 |  0.0219
00:21:53 12 | 06 | -0.0051 | -0.0055
00:21:59 12 | 07 |  0.0069 |  0.0039
00:22:05 12 | 08 |  0.0089 |  0.0063
00:22:11 12 | 09 |  0.0239 |  0.0207
00:22:17 12 | 10 |  0.0109 |  0.0025
00:22:23 12 | 11 |  0.0176 |  0.0234
00:22:28 12 | 12 |  0.0107 |  0.0240
00:22:34 12 | 13 |  0.0178 |  0.0233
00:22:40 12 | 14 | -0.0008 |  0.0099
00:22:46 12 | 15 |  0.0037 |  0.0242
00:22:52 12 | 16 |  0.0072 |  0.0390
00:22:58 12 | 17 | -0.0017 | -0.0010
00:23:03 12 | 18 |  0.0025 |  0.0229
00:23:09 12 | 19 |  0.0009 |  0.0027
00:23:15 12 | 20 |  0.0006 |  0.0051
(32, 16) tanh 0.1 256
00:00:03 01 | 01 |  0.0012 |  0.0105
00:00:05 01 | 02 |  0.0090 |  0.0127
00:00:07 01 | 03 |  0.0176 |  0.0166
00:00:10 01 | 04 |  0.0111 |  0.0223
00:00:12 01 | 05 |  0.0069 |  0.0120
00:00:14 01 | 06 |  0.0046 |  0.0026
00:00:16 01 | 07 |  0.0229 |  0.0235
00:00:18 01 | 08 | -0.0028 |  0.0060
00:00:20 01 | 09 |  0.0252 |  0.0270
00:00:23 01 | 10 |  0.0115 |  0.0251
00:00:25 01 | 11 |  0.0232 |  0.0208
00:00:27 01 | 12 |  0.0122 |  0.0080
00:00:29 01 | 13 |  0.0077 |  0.0035
00:00:31 01 | 14 |  0.0093 |  0.0082
00:00:34 01 | 15 |  0.0138 |  0.0153
```

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00:00:36 01 | 16 |   0.0103 |   0.0279
00:00:38 01 | 17 |   0.0055 |   0.0097
00:00:40 01 | 18 |   0.0119 |   0.0109
00:00:42 01 | 19 |   0.0138 |   0.0221
00:00:44 01 | 20 |   0.0063 |  -0.0047
00:00:47 02 | 01 |   0.0047 |   0.0042
00:00:50 02 | 02 |  -0.0048 |  -0.0023
00:00:52 02 | 03 |   0.0242 |   0.0477
00:00:54 02 | 04 |   0.0139 |   0.0136
00:00:56 02 | 05 |  -0.0151 |  -0.0049
00:00:58 02 | 06 |   0.0001 |  -0.0168
00:01:00 02 | 07 |   0.0097 |   0.0169
00:01:02 02 | 08 |   0.0126 |   0.0232
00:01:04 02 | 09 |   0.0135 |   0.0180
00:01:07 02 | 10 |   0.0099 |   0.0255
00:01:09 02 | 11 |   0.0260 |   0.0267
00:01:11 02 | 12 |   0.0165 |   0.0243
00:01:13 02 | 13 |   0.0142 |   0.0066
00:01:15 02 | 14 |   0.0186 |   0.0304
00:01:17 02 | 15 |   0.0091 |   0.0103
00:01:19 02 | 16 |   0.0183 |   0.0200
00:01:22 02 | 17 |   0.0039 |   0.0168
00:01:24 02 | 18 |   0.0100 |   0.0135
00:01:26 02 | 19 |   0.0149 |   0.0259
00:01:28 02 | 20 |   0.0123 |   0.0059
00:01:31 03 | 01 |  -0.0009 |  -0.0155
00:01:33 03 | 02 |   0.0096 |   0.0236
00:01:35 03 | 03 |  -0.0206 |  -0.0254
00:01:37 03 | 04 |  -0.0290 |  -0.0394
00:01:40 03 | 05 |   0.0267 |   0.0202
00:01:42 03 | 06 |  -0.0042 |  -0.0257
00:01:44 03 | 07 |   0.0025 |   0.0044
00:01:46 03 | 08 |  -0.0046 |  -0.0043
00:01:48 03 | 09 |  -0.0049 |  -0.0214
00:01:50 03 | 10 |  -0.0046 |  -0.0123
00:01:52 03 | 11 |   0.0079 |  -0.0196
00:01:55 03 | 12 |   0.0061 |   0.0029
00:01:57 03 | 13 |   0.0153 |   0.0100
00:01:59 03 | 14 |   0.0047 |  -0.0088
00:02:01 03 | 15 |  -0.0188 |  -0.0285
00:02:03 03 | 16 |  -0.0053 |  -0.0004
00:02:06 03 | 17 |   0.0003 |  -0.0193
00:02:08 03 | 18 |  -0.0173 |  -0.0278
00:02:10 03 | 19 |  -0.0099 |  -0.0082
00:02:12 03 | 20 |   0.0037 |   0.0128
00:02:15 04 | 01 |  -0.0174 |  -0.0249
00:02:17 04 | 02 |   0.0197 |   0.0223
00:02:19 04 | 03 |  -0.0285 |  -0.0353
```

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00:02:21 04 | 04 | -0.0195 | -0.0041
00:02:24 04 | 05 |  0.0099 | -0.0156
00:02:26 04 | 06 | -0.0230 | -0.0210
00:02:28 04 | 07 | -0.0102 | -0.0127
00:02:30 04 | 08 | -0.0027 | -0.0022
00:02:32 04 | 09 |  0.0260 |  0.0099
00:02:34 04 | 10 |  0.0270 |  0.0464
00:02:37 04 | 11 | -0.0120 | -0.0065
00:02:39 04 | 12 |  0.0308 |  0.0223
00:02:41 04 | 13 | -0.0023 | -0.0119
00:02:43 04 | 14 |  0.0040 | -0.0059
00:02:45 04 | 15 | -0.0285 | -0.0424
00:02:47 04 | 16 | -0.0103 | -0.0331
00:02:50 04 | 17 |  0.0018 | -0.0058
00:02:52 04 | 18 | -0.0111 | -0.0264
00:02:54 04 | 19 | -0.0058 | -0.0154
00:02:56 04 | 20 | -0.0179 | -0.0187
00:02:59 05 | 01 |  0.0163 |  0.0059
00:03:02 05 | 02 |  0.0016 |  0.0156
00:03:04 05 | 03 |  0.0152 |  0.0162
00:03:06 05 | 04 |  0.0168 |  0.0243
00:03:08 05 | 05 |  0.0113 |  0.0028
00:03:10 05 | 06 |  0.0065 |  0.0148
00:03:13 05 | 07 |  0.0071 | -0.0013
00:03:15 05 | 08 |  0.0222 |  0.0302
00:03:17 05 | 09 |  0.0183 |  0.0190
00:03:19 05 | 10 |  0.0178 |  0.0143
00:03:21 05 | 11 |  0.0112 | -0.0175
00:03:23 05 | 12 |  0.0066 |  0.0034
00:03:26 05 | 13 |  0.0272 |  0.0219
00:03:28 05 | 14 |  0.0239 |  0.0159
00:03:30 05 | 15 |  0.0223 |  0.0100
00:03:32 05 | 16 |  0.0143 |  0.0050
00:03:34 05 | 17 | -0.0018 |  0.0078
00:03:37 05 | 18 |  0.0047 |  0.0129
00:03:39 05 | 19 |  0.0093 |  0.0256
00:03:41 05 | 20 |  0.0076 |  0.0188
00:03:44 06 | 01 | -0.0010 |  0.0072
00:03:46 06 | 02 |  0.0046 | -0.0003
00:03:48 06 | 03 |  0.0186 |  0.0252
00:03:50 06 | 04 |  0.0300 |  0.0478
00:03:53 06 | 05 |  0.0289 |  0.0021
00:03:55 06 | 06 |  0.0256 |  0.0217
00:03:57 06 | 07 |  0.0314 |  0.0299
00:03:59 06 | 08 |  0.0235 |  0.0294
00:04:01 06 | 09 |  0.0264 |  0.0015
00:04:03 06 | 10 |  0.0063 | -0.0003
00:04:06 06 | 11 |  0.0240 |  0.0132
```

```
00:04:08 06 | 12 |   0.0104 |   0.0038
00:04:10 06 | 13 |   0.0102 |   0.0127
00:04:12 06 | 14 |   0.0190 |   0.0269
00:04:14 06 | 15 |   0.0241 |   0.0263
00:04:16 06 | 16 |   0.0291 |   0.0448
00:04:19 06 | 17 |   0.0261 |   0.0353
00:04:21 06 | 18 |   0.0224 |   0.0351
00:04:23 06 | 19 |   0.0148 |   0.0096
00:04:25 06 | 20 |   0.0327 |   0.0454
00:04:28 07 | 01 |   0.0453 |   0.0468
00:04:30 07 | 02 |   0.0044 |   0.0039
00:04:32 07 | 03 |  -0.0029 |   0.0289
00:04:35 07 | 04 |   0.0053 |  -0.0091
00:04:37 07 | 05 |   0.0131 |   0.0135
00:04:39 07 | 06 |   0.0074 |   0.0621
00:04:41 07 | 07 |   0.0208 |   0.0499
00:04:43 07 | 08 |   0.0260 |   0.0616
00:04:45 07 | 09 |   0.0350 |   0.0525
00:04:48 07 | 10 |   0.0149 |   0.0368
00:04:50 07 | 11 |   0.0435 |   0.0393
00:04:52 07 | 12 |   0.0426 |   0.0539
00:04:54 07 | 13 |   0.0160 |   0.0248
00:04:56 07 | 14 |   0.0086 |   0.0115
00:04:58 07 | 15 |   0.0140 |   0.0161
00:05:00 07 | 16 |   0.0158 |   0.0446
00:05:03 07 | 17 |   0.0156 |   0.0111
00:05:05 07 | 18 |   0.0025 |   0.0178
00:05:07 07 | 19 |   0.0176 |   0.0269
00:05:09 07 | 20 |   0.0142 |   0.0129
00:05:12 08 | 01 |   0.0177 |   0.0145
00:05:14 08 | 02 |   0.0145 |   0.0234
00:05:16 08 | 03 |   0.0036 |  -0.0166
00:05:19 08 | 04 |   0.0277 |   0.0189
00:05:21 08 | 05 |   0.0022 |   0.0006
00:05:23 08 | 06 |   0.0264 |   0.0298
00:05:25 08 | 07 |   0.0247 |   0.0118
00:05:27 08 | 08 |   0.0304 |   0.0165
00:05:29 08 | 09 |   0.0323 |   0.0260
00:05:32 08 | 10 |   0.0148 |   0.0135
00:05:34 08 | 11 |   0.0076 |   0.0154
00:05:36 08 | 12 |   0.0274 |   0.0259
00:05:38 08 | 13 |   0.0108 |   0.0200
00:05:40 08 | 14 |   0.0151 |   0.0283
00:05:43 08 | 15 |   0.0115 |   0.0121
00:05:45 08 | 16 |   0.0241 |   0.0323
00:05:47 08 | 17 |   0.0098 |   0.0151
00:05:49 08 | 18 |   0.0206 |   0.0323
00:05:51 08 | 19 |   0.0278 |   0.0276
```

```
00:05:53 08 | 20 |   0.0225 |   0.0242
00:05:57 09 | 01 |   0.0041 |   0.0032
00:05:59 09 | 02 |   0.0019 |  -0.0052
00:06:01 09 | 03 |  -0.0010 |   0.0003
00:06:03 09 | 04 |   0.0026 |   0.0120
00:06:06 09 | 05 |   0.0245 |   0.0237
00:06:08 09 | 06 |   0.0190 |   0.0190
00:06:10 09 | 07 |   0.0031 |  -0.0208
00:06:12 09 | 08 |   0.0088 |   0.0163
00:06:14 09 | 09 |   0.0065 |  -0.0075
00:06:17 09 | 10 |  -0.0073 |  -0.0171
00:06:19 09 | 11 |   0.0068 |   0.0187
00:06:21 09 | 12 |  -0.0063 |   0.0080
00:06:23 09 | 13 |   0.0006 |   0.0201
00:06:26 09 | 14 |   0.0011 |  -0.0092
00:06:28 09 | 15 |  -0.0008 |  -0.0065
00:06:30 09 | 16 |   0.0066 |   0.0118
00:06:32 09 | 17 |  -0.0141 |  -0.0108
00:06:34 09 | 18 |   0.0046 |   0.0220
00:06:37 09 | 19 |  -0.0062 |  -0.0117
00:06:39 09 | 20 |   0.0008 |   0.0099
00:06:42 10 | 01 |   0.0336 |   0.0497
00:06:44 10 | 02 |   0.0164 |   0.0119
00:06:46 10 | 03 |  -0.0313 |  -0.0351
00:06:48 10 | 04 |  -0.0147 |  -0.0142
00:06:51 10 | 05 |   0.0290 |   0.0334
00:06:53 10 | 06 |  -0.0023 |  -0.0099
00:06:55 10 | 07 |   0.0053 |   0.0109
00:06:57 10 | 08 |  -0.0195 |  -0.0258
00:06:59 10 | 09 |   0.0040 |   0.0039
00:07:02 10 | 10 |  -0.0011 |  -0.0228
00:07:04 10 | 11 |   0.0224 |   0.0182
00:07:06 10 | 12 |   0.0213 |   0.0267
00:07:08 10 | 13 |   0.0161 |   0.0149
00:07:10 10 | 14 |  -0.0036 |  -0.0004
00:07:13 10 | 15 |   0.0040 |  -0.0021
00:07:15 10 | 16 |   0.0039 |   0.0060
00:07:17 10 | 17 |   0.0126 |  -0.0142
00:07:19 10 | 18 |  -0.0033 |   0.0018
00:07:21 10 | 19 |   0.0276 |   0.0281
00:07:24 10 | 20 |   0.0084 |   0.0168
00:07:27 11 | 01 |   0.0121 |   0.0077
00:07:29 11 | 02 |   0.0090 |   0.0159
00:07:31 11 | 03 |   0.0078 |   0.0118
00:07:33 11 | 04 |  -0.0076 |  -0.0137
00:07:35 11 | 05 |   0.0046 |  -0.0016
00:07:37 11 | 06 |  -0.0147 |  -0.0028
00:07:40 11 | 07 |   0.0278 |   0.0315
```

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00:07:42 11 | 08 |   0.0096 |   0.0062
00:07:44 11 | 09 |   0.0069 |   0.0002
00:07:46 11 | 10 |   0.0041 |  -0.0108
00:07:48 11 | 11 |   0.0369 |   0.0352
00:07:50 11 | 12 |   0.0140 |   0.0151
00:07:53 11 | 13 |  -0.0048 |  -0.0082
00:07:55 11 | 14 |   0.0174 |   0.0169
00:07:57 11 | 15 |   0.0176 |   0.0203
00:07:59 11 | 16 |   0.0222 |   0.0303
00:08:01 11 | 17 |   0.0153 |   0.0143
00:08:04 11 | 18 |   0.0179 |   0.0136
00:08:06 11 | 19 |   0.0085 |   0.0092
00:08:08 11 | 20 |   0.0193 |   0.0070
00:08:11 12 | 01 |   0.0012 |  -0.0148
00:08:13 12 | 02 |   0.0143 |   0.0368
00:08:15 12 | 03 |   0.0093 |   0.0008
00:08:17 12 | 04 |   0.0067 |   0.0105
00:08:19 12 | 05 |  -0.0073 |  -0.0103
00:08:22 12 | 06 |   0.0001 |   0.0142
00:08:24 12 | 07 |   0.0021 |  -0.0061
00:08:26 12 | 08 |  -0.0073 |  -0.0177
00:08:28 12 | 09 |  -0.0054 |  -0.0166
00:08:30 12 | 10 |  -0.0017 |  -0.0072
00:08:33 12 | 11 |   0.0102 |   0.0089
00:08:35 12 | 12 |   0.0016 |  -0.0159
00:08:37 12 | 13 |   0.0061 |   0.0030
00:08:39 12 | 14 |   0.0079 |   0.0004
00:08:41 12 | 15 |   0.0135 |   0.0123
00:08:43 12 | 16 |   0.0189 |   0.0209
00:08:46 12 | 17 |   0.0216 |   0.0284
00:08:48 12 | 18 |   0.0159 |   0.0299
00:08:50 12 | 19 |   0.0141 |   0.0266
00:08:52 12 | 20 |   0.0042 |  -0.0117
(32, 32) tanh 0.1 64
00:00:07 01 | 01 |  -0.0023 |  -0.0012
00:00:13 01 | 02 |  -0.0057 |  -0.0149
00:00:18 01 | 03 |   0.0155 |   0.0076
00:00:24 01 | 04 |   0.0243 |   0.0195
00:00:30 01 | 05 |   0.0133 |   0.0193
00:00:37 01 | 06 |   0.0110 |   0.0185
00:00:43 01 | 07 |   0.0101 |   0.0296
00:00:49 01 | 08 |   0.0076 |   0.0153
00:00:55 01 | 09 |  -0.0088 |   0.0103
00:01:00 01 | 10 |   0.0099 |   0.0236
00:01:06 01 | 11 |   0.0014 |  -0.0063
00:01:12 01 | 12 |   0.0098 |   0.0029
00:01:18 01 | 13 |   0.0050 |   0.0111
00:01:24 01 | 14 |  -0.0032 |   0.0056
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00:01:30 01 | 15 |   0.0013 | -0.0013
00:01:36 01 | 16 |   0.0111 |  0.0024
00:01:42 01 | 17 |   0.0046 |  0.0101
00:01:48 01 | 18 |   0.0096 |  0.0077
00:01:54 01 | 19 |   0.0144 |  0.0315
00:02:00 01 | 20 |   0.0050 |  0.0044
00:02:07 02 | 01 |   0.0188 |  0.0066
00:02:13 02 | 02 |   0.0070 |  0.0205
00:02:19 02 | 03 |   0.0095 |  0.0081
00:02:25 02 | 04 |   0.0153 |  0.0057
00:02:31 02 | 05 |  -0.0065 | -0.0134
00:02:37 02 | 06 |  -0.0235 | -0.0256
00:02:43 02 | 07 |  -0.0105 |  0.0094
00:02:49 02 | 08 |  -0.0055 | -0.0106
00:02:55 02 | 09 |   0.0005 | -0.0157
00:03:01 02 | 10 |   0.0067 | -0.0019
00:03:07 02 | 11 |  -0.0004 | -0.0095
00:03:13 02 | 12 |   0.0040 | -0.0143
00:03:19 02 | 13 |  -0.0198 | -0.0217
00:03:25 02 | 14 |   0.0192 |  0.0186
00:03:31 02 | 15 |  -0.0134 | -0.0013
00:03:37 02 | 16 |  -0.0096 |  0.0081
00:03:43 02 | 17 |   0.0275 |  0.0228
00:03:49 02 | 18 |   0.0138 |  0.0437
00:03:55 02 | 19 |  -0.0090 | -0.0064
00:04:01 02 | 20 |   0.0053 |  0.0131
00:04:07 03 | 01 |  -0.0275 | -0.0442
00:04:13 03 | 02 |  -0.0094 |  0.0081
00:04:19 03 | 03 |  -0.0041 | -0.0056
00:04:25 03 | 04 |  -0.0213 | -0.0211
00:04:31 03 | 05 |   0.0045 |  0.0076
00:04:37 03 | 06 |   0.0123 |  0.0196
00:04:43 03 | 07 |   0.0149 |  0.0064
00:04:49 03 | 08 |  -0.0200 | -0.0300
00:04:55 03 | 09 |  -0.0215 | -0.0320
00:05:01 03 | 10 |  -0.0084 | -0.0209
00:05:07 03 | 11 |   0.0056 |  0.0258
00:05:13 03 | 12 |   0.0041 |  0.0351
00:05:19 03 | 13 |   0.0030 | -0.0125
00:05:25 03 | 14 |   0.0008 | -0.0143
00:05:31 03 | 15 |  -0.0197 | -0.0248
00:05:37 03 | 16 |  -0.0111 | -0.0193
00:05:43 03 | 17 |  -0.0103 | -0.0153
00:05:49 03 | 18 |   0.0307 |  0.0382
00:05:55 03 | 19 |  -0.0270 | -0.0380
00:06:01 03 | 20 |   0.0050 | -0.0013
00:06:07 04 | 01 |   0.0065 |  0.0059
00:06:13 04 | 02 |  -0.0153 | -0.0143
```

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00:06:19 04 | 03 |   0.0194 | -0.0020
00:06:25 04 | 04 | -0.0126 |  0.0041
00:06:31 04 | 05 | -0.0176 | -0.0138
00:06:37 04 | 06 | -0.0403 | -0.0665
00:06:43 04 | 07 | -0.0069 | -0.0052
00:06:49 04 | 08 | -0.0453 | -0.0431
00:06:55 04 | 09 |  0.0329 |  0.0556
00:07:01 04 | 10 |  0.0233 |  0.0078
00:07:07 04 | 11 |  0.0440 |  0.0626
00:07:13 04 | 12 |  0.0185 |  0.0278
00:07:20 04 | 13 |  0.0297 |  0.0323
00:07:26 04 | 14 |  0.0076 | -0.0068
00:07:32 04 | 15 | -0.0016 | -0.0016
00:07:38 04 | 16 | -0.0359 | -0.0432
00:07:44 04 | 17 | -0.0356 | -0.0161
00:07:50 04 | 18 |  0.0198 | -0.0115
00:07:56 04 | 19 |  0.0231 |  0.0329
00:08:02 04 | 20 |  0.0045 | -0.0041
00:08:08 05 | 01 |  0.0074 | -0.0017
00:08:14 05 | 02 |  0.0061 |  0.0064
00:08:20 05 | 03 |  0.0256 |  0.0269
00:08:26 05 | 04 |  0.0248 |  0.0290
00:08:32 05 | 05 |  0.0138 |  0.0240
00:08:38 05 | 06 |  0.0161 |  0.0134
00:08:44 05 | 07 |  0.0371 |  0.0085
00:08:50 05 | 08 |  0.0219 |  0.0030
00:08:56 05 | 09 |  0.0173 |  0.0270
00:09:02 05 | 10 | -0.0112 | -0.0298
00:09:08 05 | 11 | -0.0083 | -0.0021
00:09:14 05 | 12 |  0.0164 |  0.0268
00:09:20 05 | 13 |  0.0004 |  0.0020
00:09:26 05 | 14 |  0.0112 | -0.0023
00:09:32 05 | 15 | -0.0002 | -0.0085
00:09:38 05 | 16 |  0.0104 |  0.0085
00:09:44 05 | 17 |  0.0157 | -0.0072
00:09:50 05 | 18 |  0.0287 |  0.0315
00:09:56 05 | 19 |  0.0067 | -0.0125
00:10:02 05 | 20 | -0.0144 | -0.0270
00:10:09 06 | 01 |  0.0034 |  0.0127
00:10:15 06 | 02 |  0.0032 |  0.0071
00:10:21 06 | 03 |  0.0125 |  0.0284
00:10:27 06 | 04 |  0.0032 |  0.0051
00:10:33 06 | 05 |  0.0302 | -0.0030
00:10:39 06 | 06 |  0.0286 |  0.0150
00:10:45 06 | 07 |  0.0230 |  0.0275
00:10:51 06 | 08 |  0.0198 |  0.0006
00:10:57 06 | 09 | -0.0108 | -0.0206
00:11:04 06 | 10 |  0.0381 |  0.0151
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00:11:10 06 | 11 |  0.0064 | -0.0021
00:11:16 06 | 12 |  0.0129 | -0.0087
00:11:22 06 | 13 |  0.0047 | -0.0059
00:11:28 06 | 14 |  0.0207 |  0.0213
00:11:34 06 | 15 |  0.0287 |  0.0332
00:11:40 06 | 16 |  0.0126 |  0.0045
00:11:46 06 | 17 |  0.0343 |  0.0306
00:11:52 06 | 18 |  0.0244 |  0.0002
00:11:58 06 | 19 |  0.0236 | -0.0031
00:12:04 06 | 20 | -0.0096 | -0.0282
00:12:10 07 | 01 |  0.0109 |  0.0148
00:12:16 07 | 02 | -0.0013 |  0.0129
00:12:22 07 | 03 |  0.0344 |  0.0282
00:12:28 07 | 04 |  0.0037 |  0.0279
00:12:34 07 | 05 |  0.0112 |  0.0149
00:12:40 07 | 06 |  0.0267 |  0.0502
00:12:46 07 | 07 |  0.0177 |  0.0178
00:12:52 07 | 08 |  0.0077 |  0.0085
00:12:58 07 | 09 |  0.0157 |  0.0303
00:13:04 07 | 10 |  0.0032 |  0.0102
00:13:10 07 | 11 |  0.0158 |  0.0208
00:13:16 07 | 12 |  0.0310 |  0.0535
00:13:22 07 | 13 |  0.0209 |  0.0457
00:13:28 07 | 14 |  0.0056 |  0.0251
00:13:34 07 | 15 | -0.0051 |  0.0036
00:13:40 07 | 16 |  0.0046 |  0.0113
00:13:46 07 | 17 | -0.0041 | -0.0185
00:13:52 07 | 18 |  0.0140 |  0.0142
00:13:58 07 | 19 |  0.0341 |  0.0543
00:14:04 07 | 20 |  0.0161 |  0.0189
00:14:11 08 | 01 |  0.0041 | -0.0169
00:14:17 08 | 02 | -0.0227 | -0.0077
00:14:23 08 | 03 |  0.0057 | -0.0096
00:14:29 08 | 04 |  0.0265 |  0.0359
00:14:35 08 | 05 |  0.0457 |  0.0530
00:14:41 08 | 06 |  0.0248 |  0.0293
00:14:47 08 | 07 |  0.0361 |  0.0286
00:14:53 08 | 08 |  0.0286 |  0.0334
00:14:59 08 | 09 |  0.0253 |  0.0349
00:15:05 08 | 10 |  0.0157 |  0.0140
00:15:11 08 | 11 |  0.0280 |  0.0252
00:15:17 08 | 12 |  0.0097 |  0.0176
00:15:23 08 | 13 |  0.0245 |  0.0097
00:15:29 08 | 14 |  0.0124 |  0.0398
00:15:35 08 | 15 |  0.0126 |  0.0172
00:15:41 08 | 16 |  0.0097 |  0.0092
00:15:47 08 | 17 |  0.0053 |  0.0207
00:15:53 08 | 18 |  0.0085 |  0.0021
```

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00:15:59 08 | 19 |   0.0136 |   0.0109
00:16:05 08 | 20 |   0.0153 |   0.0037
00:16:11 09 | 01 |   0.0066 |  -0.0088
00:16:17 09 | 02 |   0.0095 |   0.0022
00:16:23 09 | 03 |   0.0001 |   0.0168
00:16:29 09 | 04 |   0.0152 |   0.0031
00:16:35 09 | 05 |   0.0190 |   0.0140
00:16:41 09 | 06 |   0.0095 |  -0.0009
00:16:47 09 | 07 |   0.0211 |   0.0219
00:16:53 09 | 08 |   0.0101 |   0.0102
00:16:59 09 | 09 |   0.0155 |   0.0111
00:17:05 09 | 10 |   0.0125 |   0.0194
00:17:11 09 | 11 |   0.0038 |  -0.0066
00:17:17 09 | 12 |   0.0184 |   0.0117
00:17:23 09 | 13 |   0.0218 |   0.0252
00:17:29 09 | 14 |   0.0064 |   0.0058
00:17:35 09 | 15 |   0.0084 |   0.0235
00:17:40 09 | 16 |  -0.0027 |   0.0016
00:17:46 09 | 17 |   0.0055 |   0.0030
00:17:52 09 | 18 |   0.0055 |   0.0041
00:17:58 09 | 19 |   0.0077 |   0.0200
00:18:04 09 | 20 |   0.0085 |   0.0226
00:18:12 10 | 01 |   0.0048 |   0.0025
00:18:18 10 | 02 |   0.0447 |   0.0664
00:18:24 10 | 03 |  -0.0163 |   0.0010
00:18:30 10 | 04 |  -0.0052 |   0.0218
00:18:36 10 | 05 |   0.0302 |   0.0314
00:18:42 10 | 06 |  -0.0105 |   0.0087
00:18:48 10 | 07 |   0.0307 |   0.0231
00:18:54 10 | 08 |  -0.0004 |   0.0028
00:18:60 10 | 09 |   0.0303 |   0.0422
00:19:06 10 | 10 |  -0.0104 |   0.0017
00:19:12 10 | 11 |  -0.0030 |   0.0172
00:19:18 10 | 12 |   0.0187 |   0.0315
00:19:24 10 | 13 |   0.0095 |   0.0202
00:19:30 10 | 14 |  -0.0138 |  -0.0139
00:19:36 10 | 15 |  -0.0282 |  -0.0168
00:19:42 10 | 16 |  -0.0104 |   0.0012
00:19:48 10 | 17 |  -0.0159 |  -0.0035
00:19:54 10 | 18 |  -0.0286 |  -0.0296
00:19:60 10 | 19 |  -0.0299 |  -0.0159
00:20:06 10 | 20 |  -0.0217 |  -0.0263
00:20:13 11 | 01 |   0.0237 |   0.0097
00:20:19 11 | 02 |   0.0106 |  -0.0017
00:20:25 11 | 03 |  -0.0066 |  -0.0182
00:20:31 11 | 04 |   0.0252 |   0.0202
00:20:37 11 | 05 |   0.0336 |   0.0187
00:20:43 11 | 06 |   0.0170 |   0.0134
```

```
00:20:49 11 | 07 |   0.0162 |   0.0115
00:20:55 11 | 08 |   0.0260 |   0.0218
00:21:01 11 | 09 |   0.0230 |   0.0212
00:21:07 11 | 10 |   0.0258 |   0.0180
00:21:13 11 | 11 |   0.0254 |   0.0226
00:21:19 11 | 12 |   0.0390 |   0.0469
00:21:25 11 | 13 |   0.0137 |   0.0049
00:21:31 11 | 14 |   0.0198 |   0.0216
00:21:37 11 | 15 |   0.0156 |   0.0176
00:21:43 11 | 16 |   0.0281 |   0.0241
00:21:49 11 | 17 |   0.0169 |   0.0087
00:21:55 11 | 18 |   0.0100 |   0.0046
00:22:01 11 | 19 |   0.0173 |   0.0070
00:22:07 11 | 20 |   0.0123 |   0.0028
00:22:14 12 | 01 |   0.0145 |   0.0261
00:22:20 12 | 02 |   0.0200 |   0.0221
00:22:26 12 | 03 |   0.0111 |   0.0115
00:22:32 12 | 04 |   0.0035 |  -0.0107
00:22:38 12 | 05 |  -0.0036 |   0.0008
00:22:43 12 | 06 |   0.0001 |  -0.0036
00:22:49 12 | 07 |   0.0059 |  -0.0065
00:22:55 12 | 08 |   0.0056 |  -0.0051
00:23:01 12 | 09 |   0.0019 |  -0.0139
00:23:07 12 | 10 |   0.0067 |  -0.0000
00:23:13 12 | 11 |  -0.0109 |  -0.0062
00:23:19 12 | 12 |  -0.0032 |  -0.0083
00:23:25 12 | 13 |   0.0004 |   0.0029
00:23:31 12 | 14 |  -0.0121 |  -0.0012
00:23:37 12 | 15 |  -0.0030 |  -0.0005
00:23:43 12 | 16 |  -0.0135 |  -0.0065
00:23:49 12 | 17 |  -0.0103 |  -0.0023
00:23:55 12 | 18 |  -0.0107 |   0.0110
00:24:01 12 | 19 |  -0.0075 |   0.0058
00:24:07 12 | 20 |  -0.0018 |  -0.0006
(32, 32) tanh 0.1 256
00:00:03 01 | 01 |   0.0003 |   0.0034
00:00:06 01 | 02 |   0.0049 |  -0.0008
00:00:08 01 | 03 |  -0.0058 |  -0.0254
00:00:10 01 | 04 |   0.0062 |   0.0141
00:00:13 01 | 05 |   0.0118 |   0.0281
00:00:15 01 | 06 |   0.0026 |  -0.0115
00:00:18 01 | 07 |   0.0040 |   0.0041
00:00:20 01 | 08 |   0.0035 |   0.0177
00:00:22 01 | 09 |   0.0127 |   0.0072
00:00:25 01 | 10 |   0.0268 |   0.0345
00:00:27 01 | 11 |   0.0144 |  -0.0018
00:00:29 01 | 12 |   0.0157 |   0.0295
00:00:32 01 | 13 |   0.0155 |   0.0229
```

```
00:00:34 01 | 14 |   0.0202 |   0.0160
00:00:37 01 | 15 |   0.0161 |   0.0144
00:00:39 01 | 16 |   0.0225 |   0.0246
00:00:41 01 | 17 |   0.0189 |   0.0000
00:00:44 01 | 18 |   0.0280 |   0.0164
00:00:46 01 | 19 |   0.0305 |   0.0245
00:00:49 01 | 20 |   0.0179 |   0.0100
00:00:52 02 | 01 |   0.0054 |   0.0043
00:00:54 02 | 02 |  -0.0134 |  -0.0167
00:00:56 02 | 03 |   0.0193 |   0.0319
00:00:59 02 | 04 |  -0.0077 |  -0.0056
00:01:01 02 | 05 |   0.0077 |   0.0204
00:01:03 02 | 06 |   0.0069 |   0.0329
00:01:06 02 | 07 |   0.0011 |   0.0019
00:01:08 02 | 08 |  -0.0022 |   0.0123
00:01:11 02 | 09 |  -0.0059 |  -0.0013
00:01:13 02 | 10 |   0.0117 |   0.0129
00:01:15 02 | 11 |   0.0054 |   0.0026
00:01:18 02 | 12 |   0.0022 |  -0.0028
00:01:20 02 | 13 |   0.0078 |   0.0111
00:01:22 02 | 14 |  -0.0080 |  -0.0180
00:01:25 02 | 15 |  -0.0070 |   0.0084
00:01:28 02 | 16 |  -0.0090 |  -0.0041
00:01:30 02 | 17 |   0.0034 |   0.0033
00:01:32 02 | 18 |   0.0028 |   0.0152
00:01:35 02 | 19 |   0.0148 |   0.0032
00:01:37 02 | 20 |   0.0126 |   0.0056
00:01:40 03 | 01 |   0.0086 |   0.0015
00:01:43 03 | 02 |   0.0135 |   0.0062
00:01:45 03 | 03 |   0.0181 |   0.0191
00:01:48 03 | 04 |   0.0026 |   0.0189
00:01:50 03 | 05 |   0.0012 |  -0.0084
00:01:52 03 | 06 |   0.0022 |   0.0114
00:01:55 03 | 07 |   0.0108 |   0.0331
00:01:57 03 | 08 |  -0.0113 |  -0.0443
00:01:60 03 | 09 |   0.0042 |  -0.0108
00:02:02 03 | 10 |   0.0128 |  -0.0038
00:02:05 03 | 11 |  -0.0192 |  -0.0224
00:02:07 03 | 12 |   0.0082 |   0.0073
00:02:09 03 | 13 |  -0.0028 |   0.0097
00:02:12 03 | 14 |   0.0092 |   0.0088
00:02:14 03 | 15 |  -0.0075 |  -0.0056
00:02:17 03 | 16 |  -0.0052 |  -0.0145
00:02:19 03 | 17 |  -0.0067 |  -0.0112
00:02:22 03 | 18 |  -0.0051 |  -0.0067
00:02:24 03 | 19 |   0.0103 |   0.0030
00:02:26 03 | 20 |  -0.0070 |  -0.0219
00:02:30 04 | 01 |   0.0368 |   0.0134
```

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00:02:32 04 | 02 |   0.0018 |   0.0150
00:02:34 04 | 03 |   0.0325 |   0.0353
00:02:37 04 | 04 |  -0.0162 |  -0.0105
00:02:39 04 | 05 |  -0.0339 |  -0.0436
00:02:42 04 | 06 |   0.0057 |  -0.0152
00:02:44 04 | 07 |  -0.0050 |  -0.0042
00:02:46 04 | 08 |   0.0121 |  -0.0013
00:02:49 04 | 09 |   0.0333 |   0.0224
00:02:51 04 | 10 |   0.0125 |  -0.0001
00:02:54 04 | 11 |   0.0074 |   0.0163
00:02:56 04 | 12 |   0.0362 |   0.0110
00:02:59 04 | 13 |   0.0168 |   0.0125
00:03:01 04 | 14 |   0.0167 |   0.0117
00:03:03 04 | 15 |  -0.0016 |  -0.0081
00:03:06 04 | 16 |   0.0207 |   0.0064
00:03:08 04 | 17 |   0.0311 |   0.0186
00:03:11 04 | 18 |   0.0191 |   0.0193
00:03:13 04 | 19 |   0.0276 |   0.0134
00:03:16 04 | 20 |   0.0196 |   0.0105
00:03:19 05 | 01 |   0.0087 |   0.0136
00:03:21 05 | 02 |   0.0154 |   0.0023
00:03:24 05 | 03 |  -0.0068 |  -0.0102
00:03:26 05 | 04 |  -0.0057 |  -0.0096
00:03:28 05 | 05 |   0.0217 |   0.0020
00:03:31 05 | 06 |   0.0140 |   0.0141
00:03:33 05 | 07 |   0.0139 |   0.0264
00:03:36 05 | 08 |   0.0231 |   0.0337
00:03:38 05 | 09 |  -0.0134 |  -0.0025
00:03:41 05 | 10 |  -0.0017 |   0.0061
00:03:43 05 | 11 |  -0.0133 |  -0.0072
00:03:45 05 | 12 |  -0.0059 |  -0.0047
00:03:48 05 | 13 |  -0.0049 |   0.0024
00:03:50 05 | 14 |  -0.0059 |   0.0104
00:03:53 05 | 15 |  -0.0088 |  -0.0259
00:03:55 05 | 16 |  -0.0037 |   0.0072
00:03:57 05 | 17 |  -0.0113 |  -0.0055
00:03:60 05 | 18 |  -0.0117 |  -0.0081
00:04:02 05 | 19 |  -0.0184 |  -0.0137
00:04:05 05 | 20 |  -0.0210 |  -0.0096
00:04:08 06 | 01 |  -0.0064 |   0.0149
00:04:10 06 | 02 |   0.0063 |   0.0118
00:04:13 06 | 03 |   0.0493 |   0.0270
00:04:15 06 | 04 |   0.0471 |   0.0395
00:04:17 06 | 05 |  -0.0000 |   0.0073
00:04:20 06 | 06 |   0.0285 |   0.0199
00:04:22 06 | 07 |   0.0347 |   0.0229
00:04:25 06 | 08 |   0.0153 |   0.0094
00:04:27 06 | 09 |   0.0265 |   0.0354
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00:04:29 06 | 10 |   0.0210 |   0.0284
00:04:32 06 | 11 |   0.0480 |   0.0124
00:04:34 06 | 12 |   0.0144 |   0.0130
00:04:36 06 | 13 |   0.0056 |   0.0043
00:04:39 06 | 14 |   0.0130 |   0.0045
00:04:41 06 | 15 |   0.0131 |   0.0186
00:04:44 06 | 16 |   0.0101 |   0.0161
00:04:46 06 | 17 |   0.0257 |   0.0225
00:04:48 06 | 18 |   0.0334 |   0.0420
00:04:51 06 | 19 |   0.0234 |   0.0018
00:04:53 06 | 20 |   0.0231 |   0.0190
00:04:57 07 | 01 |   0.0157 |   0.0243
00:04:59 07 | 02 |   0.0171 |   0.0507
00:05:02 07 | 03 |  -0.0002 |  -0.0030
00:05:04 07 | 04 |  -0.0075 |   0.0034
00:05:06 07 | 05 |   0.0412 |   0.0496
00:05:09 07 | 06 |   0.0175 |   0.0192
00:05:11 07 | 07 |   0.0167 |   0.0231
00:05:14 07 | 08 |   0.0101 |   0.0360
00:05:16 07 | 09 |   0.0010 |   0.0055
00:05:18 07 | 10 |  -0.0077 |   0.0155
00:05:21 07 | 11 |  -0.0012 |   0.0086
00:05:23 07 | 12 |  -0.0090 |  -0.0004
00:05:26 07 | 13 |   0.0113 |   0.0288
00:05:28 07 | 14 |  -0.0007 |   0.0133
00:05:31 07 | 15 |  -0.0090 |   0.0050
00:05:33 07 | 16 |   0.0278 |   0.0337
00:05:35 07 | 17 |   0.0295 |   0.0296
00:05:38 07 | 18 |   0.0318 |   0.0406
00:05:40 07 | 19 |   0.0287 |   0.0203
00:05:43 07 | 20 |   0.0321 |   0.0428
00:05:46 08 | 01 |  -0.0016 |   0.0195
00:05:48 08 | 02 |   0.0005 |   0.0103
00:05:51 08 | 03 |   0.0147 |   0.0008
00:05:53 08 | 04 |   0.0277 |   0.0250
00:05:56 08 | 05 |  -0.0053 |   0.0316
00:05:58 08 | 06 |   0.0258 |   0.0165
00:06:00 08 | 07 |   0.0121 |  -0.0137
00:06:03 08 | 08 |   0.0225 |   0.0317
00:06:05 08 | 09 |   0.0297 |   0.0417
00:06:08 08 | 10 |   0.0193 |  -0.0122
00:06:10 08 | 11 |   0.0333 |   0.0290
00:06:13 08 | 12 |   0.0175 |   0.0187
00:06:15 08 | 13 |   0.0177 |   0.0271
00:06:17 08 | 14 |   0.0185 |   0.0329
00:06:20 08 | 15 |   0.0178 |   0.0112
00:06:22 08 | 16 |   0.0141 |  -0.0077
00:06:25 08 | 17 |   0.0246 |   0.0125
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00:06:27 08 | 18 |   0.0213 |   0.0194
00:06:30 08 | 19 |   0.0218 |   0.0199
00:06:32 08 | 20 |   0.0256 |   0.0245
00:06:35 09 | 01 |   0.0149 |   0.0108
00:06:38 09 | 02 |   0.0344 |   0.0409
00:06:40 09 | 03 |   0.0021 |   0.0027
00:06:42 09 | 04 |   0.0099 |   0.0026
00:06:45 09 | 05 |  -0.0020 |  -0.0075
00:06:47 09 | 06 |   0.0104 |  -0.0006
00:06:50 09 | 07 |   0.0136 |  -0.0048
00:06:52 09 | 08 |   0.0070 |  -0.0047
00:06:54 09 | 09 |   0.0186 |   0.0102
00:06:57 09 | 10 |   0.0066 |  -0.0017
00:06:59 09 | 11 |   0.0280 |   0.0411
00:07:02 09 | 12 |   0.0097 |  -0.0056
00:07:04 09 | 13 |   0.0164 |   0.0057
00:07:06 09 | 14 |   0.0055 |   0.0098
00:07:09 09 | 15 |   0.0074 |  -0.0093
00:07:11 09 | 16 |   0.0121 |  -0.0018
00:07:14 09 | 17 |   0.0166 |   0.0033
00:07:16 09 | 18 |   0.0197 |   0.0081
00:07:18 09 | 19 |   0.0005 |  -0.0059
00:07:21 09 | 20 |   0.0110 |  -0.0019
00:07:24 10 | 01 |  -0.0232 |  -0.0017
00:07:26 10 | 02 |   0.0464 |   0.0377
00:07:29 10 | 03 |  -0.0011 |   0.0062
00:07:31 10 | 04 |   0.0155 |   0.0147
00:07:34 10 | 05 |  -0.0305 |  -0.0334
00:07:36 10 | 06 |   0.0054 |   0.0151
00:07:39 10 | 07 |   0.0021 |   0.0158
00:07:41 10 | 08 |  -0.0139 |  -0.0097
00:07:43 10 | 09 |  -0.0155 |  -0.0311
00:07:46 10 | 10 |  -0.0079 |  -0.0119
00:07:48 10 | 11 |  -0.0260 |  -0.0226
00:07:51 10 | 12 |  -0.0312 |  -0.0071
00:07:53 10 | 13 |  -0.0173 |  -0.0062
00:07:56 10 | 14 |  -0.0055 |  -0.0015
00:07:58 10 | 15 |  -0.0385 |  -0.0177
00:08:00 10 | 16 |  -0.0161 |   0.0120
00:08:03 10 | 17 |  -0.0231 |  -0.0123
00:08:05 10 | 18 |  -0.0217 |  -0.0173
00:08:08 10 | 19 |  -0.0233 |  -0.0345
00:08:10 10 | 20 |  -0.0040 |   0.0064
00:08:13 11 | 01 |   0.0191 |   0.0120
00:08:16 11 | 02 |   0.0255 |   0.0242
00:08:18 11 | 03 |   0.0281 |   0.0281
00:08:20 11 | 04 |   0.0297 |   0.0344
00:08:23 11 | 05 |   0.0268 |   0.0172
```

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00:08:25 11 | 06 |  0.0316 |  0.0258
00:08:28 11 | 07 |  0.0025 |  0.0017
00:08:30 11 | 08 |  0.0316 |  0.0301
00:08:33 11 | 09 |  0.0302 |  0.0306
00:08:35 11 | 10 | -0.0018 | -0.0172
00:08:37 11 | 11 | -0.0046 | -0.0146
00:08:40 11 | 12 | -0.0149 | -0.0199
00:08:42 11 | 13 |  0.0042 |  0.0050
00:08:45 11 | 14 | -0.0096 | -0.0132
00:08:47 11 | 15 |  0.0200 |  0.0194
00:08:49 11 | 16 |  0.0054 |  0.0114
00:08:52 11 | 17 |  0.0014 |  0.0115
00:08:54 11 | 18 |  0.0075 |  0.0132
00:08:57 11 | 19 |  0.0037 | -0.0040
00:08:59 11 | 20 |  0.0127 |  0.0095
00:09:03 12 | 01 |  0.0222 |  0.0286
00:09:05 12 | 02 |  0.0065 | -0.0045
00:09:07 12 | 03 |  0.0191 |  0.0314
00:09:10 12 | 04 |  0.0193 |  0.0227
00:09:12 12 | 05 |  0.0162 |  0.0211
00:09:15 12 | 06 |  0.0170 |  0.0055
00:09:17 12 | 07 |  0.0123 |  0.0165
00:09:20 12 | 08 |  0.0178 |  0.0343
00:09:22 12 | 09 |  0.0246 |  0.0391
00:09:24 12 | 10 |  0.0116 |  0.0176
00:09:27 12 | 11 |  0.0269 |  0.0245
00:09:29 12 | 12 |  0.0141 |  0.0138
00:09:32 12 | 13 |  0.0118 |  0.0325
00:09:34 12 | 14 |  0.0110 |  0.0268
00:09:37 12 | 15 |  0.0243 |  0.0411
00:09:39 12 | 16 |  0.0222 |  0.0115
00:09:41 12 | 17 |  0.0182 |  0.0250
00:09:44 12 | 18 |  0.0245 |  0.0329
00:09:46 12 | 19 |  0.0226 |  0.0094
00:09:49 12 | 20 |  0.0229 |  0.0293
(32, 16) tanh 0 64
00:00:07 01 | 01 | -0.0044 |  0.0151
00:00:12 01 | 02 |  0.0249 |  0.0296
00:00:18 01 | 03 |  0.0034 | -0.0118
00:00:24 01 | 04 |  0.0185 |  0.0101
00:00:30 01 | 05 |  0.0258 |  0.0158
00:00:35 01 | 06 |  0.0088 | -0.0166
00:00:41 01 | 07 |  0.0200 |  0.0148
00:00:47 01 | 08 |  0.0142 |  0.0167
00:00:52 01 | 09 |  0.0209 |  0.0254
00:00:58 01 | 10 |  0.0022 |  0.0118
00:01:04 01 | 11 |  0.0039 |  0.0055
00:01:10 01 | 12 |  0.0133 | -0.0061
```

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00:01:15 01 | 13 | -0.0162 | -0.0198
00:01:21 01 | 14 |  0.0089 |  0.0156
00:01:27 01 | 15 |  0.0011 |  0.0023
00:01:32 01 | 16 | -0.0001 |  0.0032
00:01:38 01 | 17 | -0.0080 | -0.0169
00:01:44 01 | 18 |  0.0025 |  0.0015
00:01:50 01 | 19 | -0.0069 | -0.0026
00:01:55 01 | 20 | -0.0045 | -0.0129
00:02:02 02 | 01 | -0.0046 | -0.0187
00:02:08 02 | 02 |  0.0101 |  0.0240
00:02:13 02 | 03 |  0.0131 |  0.0124
00:02:19 02 | 04 |  0.0125 |  0.0293
00:02:25 02 | 05 |  0.0095 |  0.0154
00:02:30 02 | 06 | -0.0173 | -0.0170
00:02:36 02 | 07 |  0.0114 |  0.0094
00:02:42 02 | 08 |  0.0086 |  0.0214
00:02:48 02 | 09 |  0.0191 |  0.0273
00:02:53 02 | 10 |  0.0046 |  0.0250
00:02:59 02 | 11 |  0.0177 |  0.0206
00:03:05 02 | 12 |  0.0019 |  0.0044
00:03:11 02 | 13 |  0.0125 |  0.0229
00:03:16 02 | 14 |  0.0078 |  0.0392
00:03:22 02 | 15 |  0.0247 |  0.0332
00:03:28 02 | 16 |  0.0130 |  0.0244
00:03:34 02 | 17 |  0.0097 | -0.0049
00:03:39 02 | 18 |  0.0012 | -0.0011
00:03:45 02 | 19 |  0.0171 |  0.0008
00:03:51 02 | 20 | -0.0110 |  0.0004
00:03:57 03 | 01 |  0.0382 |  0.0364
00:04:03 03 | 02 | -0.0109 | -0.0179
00:04:09 03 | 03 |  0.0061 |  0.0082
00:04:14 03 | 04 | -0.0066 | -0.0114
00:04:20 03 | 05 | -0.0193 | -0.0451
00:04:26 03 | 06 |  0.0002 | -0.0208
00:04:32 03 | 07 |  0.0057 | -0.0143
00:04:37 03 | 08 | -0.0104 | -0.0261
00:04:43 03 | 09 | -0.0000 |  0.0007
00:04:49 03 | 10 | -0.0163 | -0.0149
00:04:55 03 | 11 | -0.0060 | -0.0334
00:05:00 03 | 12 | -0.0094 | -0.0299
00:05:06 03 | 13 |  0.0001 |  0.0045
00:05:12 03 | 14 | -0.0060 | -0.0183
00:05:17 03 | 15 | -0.0009 | -0.0077
00:05:23 03 | 16 | -0.0042 | -0.0073
00:05:29 03 | 17 | -0.0171 | -0.0195
00:05:34 03 | 18 | -0.0038 | -0.0122
00:05:40 03 | 19 | -0.0086 | -0.0069
00:05:46 03 | 20 |  0.0000 |  0.0012
```

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00:05:52 04 | 01 |   0.0029 |   0.0088
00:05:58 04 | 02 |   0.0043 |   0.0113
00:06:04 04 | 03 |  -0.0252 |  -0.0217
00:06:09 04 | 04 |   0.0070 |  -0.0061
00:06:15 04 | 05 |   0.0107 |   0.0248
00:06:21 04 | 06 |   0.0204 |   0.0019
00:06:27 04 | 07 |   0.0023 |  -0.0193
00:06:32 04 | 08 |  -0.0217 |  -0.0418
00:06:38 04 | 09 |  -0.0098 |  -0.0075
00:06:44 04 | 10 |   0.0100 |   0.0007
00:06:50 04 | 11 |  -0.0029 |  -0.0117
00:06:56 04 | 12 |   0.0014 |  -0.0000
00:07:02 04 | 13 |  -0.0009 |  -0.0196
00:07:07 04 | 14 |  -0.0108 |  -0.0058
00:07:13 04 | 15 |  -0.0174 |  -0.0199
00:07:19 04 | 16 |  -0.0220 |  -0.0339
00:07:25 04 | 17 |   0.0031 |   0.0031
00:07:30 04 | 18 |  -0.0216 |  -0.0219
00:07:36 04 | 19 |  -0.0033 |   0.0078
00:07:42 04 | 20 |  -0.0033 |   0.0071
00:07:48 05 | 01 |   0.0108 |   0.0168
00:07:54 05 | 02 |   0.0139 |   0.0052
00:07:60 05 | 03 |   0.0217 |   0.0330
00:08:06 05 | 04 |   0.0164 |   0.0138
00:08:11 05 | 05 |   0.0065 |  -0.0062
00:08:17 05 | 06 |   0.0171 |   0.0027
00:08:23 05 | 07 |  -0.0043 |  -0.0031
00:08:29 05 | 08 |  -0.0135 |  -0.0227
00:08:35 05 | 09 |  -0.0001 |  -0.0086
00:08:40 05 | 10 |   0.0045 |   0.0117
00:08:46 05 | 11 |   0.0061 |   0.0083
00:08:52 05 | 12 |   0.0295 |   0.0309
00:08:58 05 | 13 |   0.0185 |   0.0213
00:09:03 05 | 14 |   0.0266 |   0.0275
00:09:09 05 | 15 |   0.0107 |   0.0016
00:09:15 05 | 16 |   0.0013 |  -0.0099
00:09:21 05 | 17 |   0.0149 |  -0.0042
00:09:26 05 | 18 |   0.0100 |   0.0007
00:09:32 05 | 19 |   0.0237 |  -0.0019
00:09:38 05 | 20 |  -0.0012 |  -0.0057
00:09:44 06 | 01 |   0.0048 |   0.0099
00:09:50 06 | 02 |   0.0427 |   0.0391
00:09:56 06 | 03 |   0.0093 |   0.0258
00:10:01 06 | 04 |   0.0093 |   0.0120
00:10:07 06 | 05 |   0.0333 |   0.0102
00:10:13 06 | 06 |   0.0081 |  -0.0149
00:10:19 06 | 07 |   0.0376 |   0.0321
00:10:24 06 | 08 |   0.0281 |   0.0263
```

```
00:10:30 06 | 09 |  0.0121 |  0.0063
00:10:36 06 | 10 |  0.0507 |  0.0492
00:10:42 06 | 11 |  0.0311 |  0.0279
00:10:47 06 | 12 |  0.0286 |  0.0128
00:10:53 06 | 13 |  0.0339 |  0.0236
00:10:59 06 | 14 |  0.0400 |  0.0249
00:11:04 06 | 15 |  0.0193 |  0.0183
00:11:10 06 | 16 |  0.0286 |  0.0387
00:11:16 06 | 17 |  0.0283 |  0.0366
00:11:22 06 | 18 |  0.0291 |  0.0131
00:11:27 06 | 19 |  0.0328 |  0.0483
00:11:33 06 | 20 |  0.0206 |  0.0204
00:11:40 07 | 01 |  0.0201 |  0.0033
00:11:45 07 | 02 | -0.0032 |  0.0265
00:11:51 07 | 03 |  0.0107 |  0.0423
00:11:57 07 | 04 |  0.0320 |  0.0677
00:12:03 07 | 05 | -0.0040 |  0.0166
00:12:08 07 | 06 |  0.0258 |  0.0451
00:12:14 07 | 07 |  0.0055 |  0.0457
00:12:20 07 | 08 | -0.0054 |  0.0308
00:12:26 07 | 09 |  0.0158 |  0.0360
00:12:32 07 | 10 | -0.0034 |  0.0220
00:12:37 07 | 11 |  0.0045 |  0.0321
00:12:43 07 | 12 |  0.0248 |  0.0182
00:12:49 07 | 13 | -0.0050 |  0.0074
00:12:55 07 | 14 |  0.0003 |  0.0196
00:13:00 07 | 15 |  0.0103 |  0.0303
00:13:06 07 | 16 |  0.0162 |  0.0380
00:13:12 07 | 17 | -0.0175 |  0.0185
00:13:18 07 | 18 |  0.0148 |  0.0222
00:13:24 07 | 19 |  0.0131 |  0.0303
00:13:29 07 | 20 |  0.0109 |  0.0248
00:13:36 08 | 01 |  0.0225 |  0.0016
00:13:41 08 | 02 | -0.0060 | -0.0142
00:13:47 08 | 03 |  0.0222 |  0.0168
00:13:53 08 | 04 |  0.0022 | -0.0061
00:13:59 08 | 05 |  0.0079 |  0.0123
00:14:04 08 | 06 |  0.0093 |  0.0074
00:14:10 08 | 07 |  0.0114 |  0.0064
00:14:16 08 | 08 |  0.0094 |  0.0128
00:14:22 08 | 09 |  0.0141 |  0.0034
00:14:27 08 | 10 |  0.0183 |  0.0286
00:14:33 08 | 11 |  0.0158 |  0.0214
00:14:39 08 | 12 |  0.0219 |  0.0272
00:14:45 08 | 13 |  0.0258 |  0.0248
00:14:50 08 | 14 |  0.0209 |  0.0075
00:14:56 08 | 15 |  0.0204 |  0.0165
00:15:02 08 | 16 |  0.0347 |  0.0344
```

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00:15:07 08 | 17 |   0.0226 |   0.0362
00:15:13 08 | 18 |   0.0200 |   0.0188
00:15:19 08 | 19 |   0.0248 |   0.0260
00:15:25 08 | 20 |   0.0179 |   0.0268
00:15:32 09 | 01 |   0.0093 |  -0.0041
00:15:37 09 | 02 |  -0.0073 |  -0.0028
00:15:43 09 | 03 |   0.0074 |   0.0123
00:15:49 09 | 04 |  -0.0019 |  -0.0091
00:15:55 09 | 05 |   0.0060 |   0.0018
00:16:01 09 | 06 |  -0.0087 |  -0.0201
00:16:07 09 | 07 |  -0.0040 |  -0.0162
00:16:13 09 | 08 |  -0.0073 |  -0.0098
00:16:18 09 | 09 |  -0.0068 |   0.0097
00:16:24 09 | 10 |  -0.0071 |  -0.0108
00:16:30 09 | 11 |   0.0052 |   0.0107
00:16:36 09 | 12 |  -0.0196 |  -0.0205
00:16:42 09 | 13 |  -0.0127 |  -0.0190
00:16:48 09 | 14 |  -0.0163 |  -0.0315
00:16:53 09 | 15 |  -0.0152 |  -0.0362
00:16:59 09 | 16 |  -0.0179 |  -0.0276
00:17:05 09 | 17 |  -0.0049 |  -0.0118
00:17:11 09 | 18 |  -0.0261 |  -0.0267
00:17:17 09 | 19 |  -0.0290 |  -0.0206
00:17:22 09 | 20 |  -0.0117 |   0.0055
00:17:29 10 | 01 |   0.0152 |   0.0200
00:17:35 10 | 02 |  -0.0338 |  -0.0560
00:17:41 10 | 03 |  -0.0160 |  -0.0190
00:17:46 10 | 04 |   0.0150 |   0.0211
00:17:52 10 | 05 |  -0.0059 |  -0.0104
00:17:58 10 | 06 |   0.0206 |   0.0048
00:18:04 10 | 07 |   0.0176 |   0.0052
00:18:09 10 | 08 |   0.0166 |   0.0066
00:18:15 10 | 09 |   0.0171 |   0.0254
00:18:21 10 | 10 |  -0.0013 |  -0.0047
00:18:27 10 | 11 |  -0.0024 |  -0.0012
00:18:32 10 | 12 |  -0.0161 |  -0.0349
00:18:38 10 | 13 |  -0.0148 |  -0.0054
00:18:44 10 | 14 |  -0.0099 |  -0.0026
00:18:50 10 | 15 |  -0.0033 |  -0.0035
00:18:55 10 | 16 |  -0.0299 |  -0.0435
00:19:01 10 | 17 |  -0.0216 |  -0.0328
00:19:07 10 | 18 |  -0.0387 |  -0.0560
00:19:13 10 | 19 |  -0.0142 |  -0.0274
00:19:19 10 | 20 |  -0.0309 |  -0.0314
00:19:25 11 | 01 |  -0.0161 |  -0.0164
00:19:31 11 | 02 |  -0.0012 |  -0.0084
00:19:37 11 | 03 |   0.0255 |   0.0136
00:19:43 11 | 04 |   0.0336 |   0.0213
```

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00:19:49 11 | 05 |  0.0136 |  0.0139
00:19:54 11 | 06 |  0.0303 |  0.0383
00:20:00 11 | 07 |  0.0173 |  0.0115
00:20:06 11 | 08 |  0.0141 |  0.0058
00:20:12 11 | 09 |  0.0056 |  0.0093
00:20:17 11 | 10 | -0.0048 | -0.0105
00:20:23 11 | 11 |  0.0129 |  0.0010
00:20:29 11 | 12 |  0.0010 |  0.0046
00:20:35 11 | 13 |  0.0117 |  0.0137
00:20:40 11 | 14 |  0.0142 |  0.0280
00:20:46 11 | 15 |  0.0232 |  0.0336
00:20:52 11 | 16 |  0.0203 |  0.0120
00:20:58 11 | 17 |  0.0323 |  0.0214
00:21:04 11 | 18 |  0.0302 |  0.0243
00:21:09 11 | 19 |  0.0154 |  0.0121
00:21:15 11 | 20 |  0.0310 |  0.0282
00:21:22 12 | 01 |  0.0204 |  0.0097
00:21:27 12 | 02 |  0.0046 |  0.0069
00:21:33 12 | 03 |  0.0005 |  0.0108
00:21:39 12 | 04 |  0.0047 |  0.0013
00:21:45 12 | 05 |  0.0239 |  0.0241
00:21:51 12 | 06 |  0.0135 |  0.0255
00:21:56 12 | 07 |  0.0128 |  0.0050
00:22:02 12 | 08 |  0.0054 |  0.0115
00:22:08 12 | 09 |  0.0141 |  0.0205
00:22:14 12 | 10 | -0.0025 |  0.0258
00:22:20 12 | 11 |  0.0037 |  0.0153
00:22:25 12 | 12 | -0.0046 |  0.0077
00:22:31 12 | 13 |  0.0015 |  0.0086
00:22:37 12 | 14 |  0.0075 |  0.0135
00:22:43 12 | 15 |  0.0143 |  0.0192
00:22:48 12 | 16 |  0.0092 |  0.0177
00:22:54 12 | 17 | -0.0008 |  0.0087
00:22:60 12 | 18 |  0.0095 |  0.0280
00:23:06 12 | 19 |  0.0047 |  0.0059
00:23:11 12 | 20 |  0.0076 |  0.0134
(32, 16) tanh 0 256
00:00:03 01 | 01 |  0.0065 |  0.0054
00:00:05 01 | 02 |  0.0003 |  0.0026
00:00:07 01 | 03 |  0.0065 |  0.0048
00:00:10 01 | 04 |  0.0097 |  0.0050
00:00:12 01 | 05 |  0.0062 |  0.0029
00:00:14 01 | 06 |  0.0210 |  0.0187
00:00:16 01 | 07 |  0.0112 |  0.0070
00:00:18 01 | 08 |  0.0069 | -0.0174
00:00:20 01 | 09 |  0.0105 |  0.0010
00:00:22 01 | 10 |  0.0076 | -0.0178
00:00:25 01 | 11 |  0.0108 |  0.0048
```

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00:00:27 01 | 12 |   0.0188 |   0.0072
00:00:29 01 | 13 |   0.0123 |   0.0056
00:00:31 01 | 14 |   0.0193 |   0.0226
00:00:34 01 | 15 |   0.0091 |  -0.0033
00:00:36 01 | 16 |   0.0103 |   0.0042
00:00:38 01 | 17 |   0.0113 |  -0.0129
00:00:40 01 | 18 |   0.0028 |  -0.0040
00:00:42 01 | 19 |   0.0069 |  -0.0005
00:00:45 01 | 20 |   0.0128 |   0.0028
00:00:48 02 | 01 |   0.0083 |  -0.0045
00:00:50 02 | 02 |   0.0112 |   0.0159
00:00:52 02 | 03 |  -0.0257 |  -0.0194
00:00:55 02 | 04 |   0.0168 |   0.0007
00:00:57 02 | 05 |  -0.0247 |  -0.0209
00:00:59 02 | 06 |   0.0221 |   0.0214
00:01:01 02 | 07 |  -0.0008 |   0.0083
00:01:03 02 | 08 |   0.0115 |   0.0138
00:01:06 02 | 09 |   0.0141 |   0.0011
00:01:08 02 | 10 |  -0.0174 |  -0.0168
00:01:10 02 | 11 |  -0.0012 |  -0.0039
00:01:12 02 | 12 |   0.0111 |   0.0119
00:01:14 02 | 13 |   0.0129 |   0.0040
00:01:16 02 | 14 |   0.0246 |   0.0210
00:01:19 02 | 15 |   0.0022 |   0.0078
00:01:21 02 | 16 |   0.0115 |   0.0080
00:01:23 02 | 17 |   0.0054 |   0.0030
00:01:25 02 | 18 |   0.0091 |   0.0268
00:01:27 02 | 19 |   0.0048 |   0.0063
00:01:29 02 | 20 |   0.0164 |   0.0343
00:01:32 03 | 01 |  -0.0129 |  -0.0402
00:01:35 03 | 02 |   0.0282 |   0.0190
00:01:37 03 | 03 |  -0.0310 |  -0.0329
00:01:39 03 | 04 |  -0.0125 |  -0.0104
00:01:41 03 | 05 |  -0.0131 |  -0.0277
00:01:43 03 | 06 |   0.0013 |   0.0070
00:01:45 03 | 07 |   0.0031 |  -0.0105
00:01:48 03 | 08 |  -0.0074 |  -0.0317
00:01:50 03 | 09 |  -0.0132 |  -0.0282
00:01:52 03 | 10 |   0.0214 |   0.0028
00:01:54 03 | 11 |   0.0100 |  -0.0143
00:01:56 03 | 12 |   0.0071 |  -0.0010
00:01:58 03 | 13 |   0.0095 |  -0.0003
00:02:01 03 | 14 |   0.0232 |  -0.0008
00:02:03 03 | 15 |   0.0173 |   0.0076
00:02:05 03 | 16 |   0.0104 |   0.0079
00:02:07 03 | 17 |   0.0158 |   0.0099
00:02:09 03 | 18 |   0.0079 |  -0.0137
00:02:11 03 | 19 |   0.0188 |   0.0224
```

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00:02:14 03 | 20 |   0.0058 | -0.0059
00:02:17 04 | 01 | -0.0353 | -0.0357
00:02:19 04 | 02 | -0.0133 | -0.0431
00:02:21 04 | 03 | -0.0319 | -0.0311
00:02:23 04 | 04 |   0.0240 |  0.0281
00:02:25 04 | 05 | -0.0021 | -0.0103
00:02:28 04 | 06 |   0.0317 |  0.0100
00:02:30 04 | 07 |   0.0156 |  0.0127
00:02:32 04 | 08 |   0.0158 |  0.0134
00:02:34 04 | 09 |   0.0172 |  0.0064
00:02:36 04 | 10 |   0.0259 |  0.0211
00:02:38 04 | 11 |   0.0279 |  0.0222
00:02:41 04 | 12 | -0.0033 | -0.0127
00:02:43 04 | 13 |   0.0185 |  0.0101
00:02:45 04 | 14 |   0.0040 | -0.0213
00:02:47 04 | 15 |   0.0218 |  0.0255
00:02:49 04 | 16 |   0.0051 |  0.0002
00:02:52 04 | 17 | -0.0166 | -0.0166
00:02:54 04 | 18 | -0.0135 | -0.0000
00:02:56 04 | 19 | -0.0329 | -0.0113
00:02:58 04 | 20 |   0.0039 |  0.0197
00:03:01 05 | 01 |   0.0174 |  0.0100
00:03:03 05 | 02 | -0.0193 | -0.0045
00:03:05 05 | 03 | -0.0200 | -0.0242
00:03:08 05 | 04 | -0.0103 | -0.0178
00:03:10 05 | 05 |   0.0106 | -0.0077
00:03:12 05 | 06 |   0.0139 | -0.0004
00:03:14 05 | 07 |   0.0004 | -0.0003
00:03:17 05 | 08 |   0.0038 |  0.0054
00:03:19 05 | 09 |   0.0238 |  0.0283
00:03:21 05 | 10 |   0.0047 | -0.0066
00:03:23 05 | 11 |   0.0058 |  0.0136
00:03:25 05 | 12 |   0.0086 |  0.0045
00:03:27 05 | 13 | -0.0021 | -0.0103
00:03:29 05 | 14 |   0.0178 |  0.0116
00:03:32 05 | 15 |   0.0181 |  0.0060
00:03:34 05 | 16 |   0.0264 |  0.0176
00:03:36 05 | 17 |   0.0191 |  0.0152
00:03:38 05 | 18 |   0.0227 |  0.0240
00:03:40 05 | 19 |   0.0153 |  0.0065
00:03:42 05 | 20 |   0.0119 |  0.0123
00:03:45 06 | 01 |   0.0005 | -0.0013
00:03:48 06 | 02 | -0.0105 | -0.0045
00:03:50 06 | 03 |   0.0110 | -0.0014
00:03:52 06 | 04 |   0.0220 |  0.0271
00:03:54 06 | 05 |   0.0346 |  0.0244
00:03:56 06 | 06 |   0.0192 |  0.0194
00:03:59 06 | 07 |   0.0249 |  0.0390
```

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00:04:01 06 | 08 |   0.0370 |   0.0326
00:04:03 06 | 09 |   0.0303 |   0.0135
00:04:06 06 | 10 |   0.0199 |   0.0095
00:04:08 06 | 11 |  -0.0061 |  -0.0105
00:04:10 06 | 12 |   0.0311 |   0.0291
00:04:12 06 | 13 |   0.0334 |   0.0244
00:04:14 06 | 14 |  -0.0113 |  -0.0108
00:04:17 06 | 15 |   0.0053 |   0.0115
00:04:19 06 | 16 |   0.0248 |   0.0220
00:04:21 06 | 17 |   0.0167 |   0.0035
00:04:23 06 | 18 |   0.0412 |   0.0229
00:04:26 06 | 19 |  -0.0025 |  -0.0114
00:04:28 06 | 20 |  -0.0116 |  -0.0185
00:04:31 07 | 01 |   0.0061 |   0.0110
00:04:33 07 | 02 |   0.0174 |   0.0162
00:04:35 07 | 03 |   0.0039 |   0.0135
00:04:37 07 | 04 |   0.0129 |   0.0089
00:04:40 07 | 05 |   0.0111 |   0.0309
00:04:42 07 | 06 |   0.0131 |   0.0317
00:04:44 07 | 07 |   0.0475 |   0.0360
00:04:46 07 | 08 |   0.0473 |   0.0397
00:04:48 07 | 09 |   0.0210 |   0.0627
00:04:50 07 | 10 |   0.0103 |   0.0081
00:04:53 07 | 11 |   0.0017 |   0.0130
00:04:55 07 | 12 |  -0.0155 |  -0.0254
00:04:57 07 | 13 |   0.0087 |   0.0336
00:04:59 07 | 14 |   0.0107 |   0.0253
00:05:01 07 | 15 |   0.0174 |   0.0456
00:05:04 07 | 16 |   0.0226 |   0.0169
00:05:06 07 | 17 |   0.0075 |   0.0182
00:05:08 07 | 18 |   0.0153 |   0.0233
00:05:10 07 | 19 |   0.0231 |   0.0205
00:05:13 07 | 20 |   0.0081 |   0.0174
00:05:16 08 | 01 |  -0.0138 |  -0.0005
00:05:18 08 | 02 |  -0.0068 |   0.0015
00:05:20 08 | 03 |   0.0206 |   0.0195
00:05:22 08 | 04 |   0.0356 |   0.0332
00:05:25 08 | 05 |   0.0471 |   0.0431
00:05:27 08 | 06 |   0.0267 |   0.0205
00:05:29 08 | 07 |   0.0109 |   0.0417
00:05:31 08 | 08 |   0.0263 |   0.0466
00:05:33 08 | 09 |   0.0314 |   0.0102
00:05:36 08 | 10 |   0.0240 |   0.0020
00:05:38 08 | 11 |   0.0137 |   0.0488
00:05:40 08 | 12 |   0.0151 |   0.0087
00:05:42 08 | 13 |   0.0062 |  -0.0116
00:05:44 08 | 14 |   0.0128 |   0.0079
00:05:47 08 | 15 |   0.0176 |   0.0200
```

```
00:05:49 08 | 16 |   0.0143 |   0.0152
00:05:51 08 | 17 |   0.0016 |   0.0051
00:05:53 08 | 18 |   0.0022 |  -0.0037
00:05:55 08 | 19 |   0.0061 |   0.0090
00:05:58 08 | 20 |   0.0135 |   0.0118
00:06:01 09 | 01 |   0.0040 |   0.0041
00:06:03 09 | 02 |   0.0036 |   0.0074
00:06:05 09 | 03 |   0.0206 |   0.0236
00:06:07 09 | 04 |   0.0062 |  -0.0020
00:06:09 09 | 05 |  -0.0054 |  -0.0076
00:06:11 09 | 06 |   0.0081 |   0.0127
00:06:14 09 | 07 |  -0.0037 |  -0.0050
00:06:16 09 | 08 |   0.0047 |   0.0024
00:06:18 09 | 09 |   0.0074 |   0.0107
00:06:20 09 | 10 |   0.0219 |   0.0196
00:06:22 09 | 11 |   0.0228 |   0.0261
00:06:25 09 | 12 |   0.0153 |  -0.0051
00:06:27 09 | 13 |  -0.0087 |   0.0007
00:06:29 09 | 14 |   0.0081 |   0.0020
00:06:31 09 | 15 |   0.0161 |   0.0231
00:06:33 09 | 16 |   0.0092 |   0.0074
00:06:35 09 | 17 |   0.0062 |   0.0079
00:06:38 09 | 18 |   0.0041 |   0.0043
00:06:40 09 | 19 |   0.0067 |   0.0004
00:06:42 09 | 20 |   0.0137 |   0.0100
00:06:45 10 | 01 |  -0.0334 |  -0.0243
00:06:47 10 | 02 |   0.0194 |   0.0276
00:06:49 10 | 03 |   0.0095 |   0.0006
00:06:51 10 | 04 |  -0.0041 |  -0.0241
00:06:54 10 | 05 |   0.0248 |   0.0152
00:06:56 10 | 06 |  -0.0055 |   0.0047
00:06:58 10 | 07 |   0.0137 |   0.0194
00:07:00 10 | 08 |   0.0003 |  -0.0086
00:07:02 10 | 09 |  -0.0008 |   0.0190
00:07:04 10 | 10 |   0.0037 |   0.0173
00:07:07 10 | 11 |   0.0239 |   0.0259
00:07:09 10 | 12 |   0.0338 |   0.0270
00:07:11 10 | 13 |   0.0236 |   0.0243
00:07:13 10 | 14 |   0.0287 |   0.0207
00:07:15 10 | 15 |   0.0051 |   0.0063
00:07:17 10 | 16 |   0.0161 |   0.0083
00:07:20 10 | 17 |  -0.0071 |  -0.0157
00:07:22 10 | 18 |   0.0166 |   0.0257
00:07:24 10 | 19 |  -0.0027 |  -0.0091
00:07:26 10 | 20 |   0.0104 |  -0.0006
00:07:30 11 | 01 |  -0.0070 |  -0.0096
00:07:32 11 | 02 |   0.0168 |   0.0177
00:07:34 11 | 03 |  -0.0016 |  -0.0087
```

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00:07:36 11 | 04 |   0.0159 |   0.0196
00:07:38 11 | 05 |   0.0324 |   0.0391
00:07:41 11 | 06 |   0.0134 |   0.0140
00:07:43 11 | 07 |   0.0115 |   0.0131
00:07:45 11 | 08 |   0.0371 |   0.0356
00:07:47 11 | 09 |   0.0251 |   0.0271
00:07:49 11 | 10 |   0.0226 |   0.0161
00:07:52 11 | 11 |   0.0245 |   0.0104
00:07:54 11 | 12 |   0.0283 |   0.0286
00:07:56 11 | 13 |   0.0386 |   0.0297
00:07:58 11 | 14 |   0.0484 |   0.0496
00:08:00 11 | 15 |   0.0353 |   0.0310
00:08:02 11 | 16 |   0.0235 |   0.0221
00:08:05 11 | 17 |   0.0421 |   0.0405
00:08:07 11 | 18 |   0.0284 |   0.0288
00:08:09 11 | 19 |   0.0507 |   0.0487
00:08:11 11 | 20 |   0.0288 |   0.0258
00:08:14 12 | 01 |  -0.0012 |   0.0064
00:08:16 12 | 02 |  -0.0007 |   0.0053
00:08:19 12 | 03 |   0.0228 |   0.0323
00:08:21 12 | 04 |   0.0159 |   0.0157
00:08:23 12 | 05 |   0.0036 |   0.0006
00:08:25 12 | 06 |   0.0128 |   0.0156
00:08:27 12 | 07 |   0.0196 |   0.0248
00:08:30 12 | 08 |   0.0219 |   0.0271
00:08:32 12 | 09 |   0.0160 |   0.0170
00:08:34 12 | 10 |   0.0151 |   0.0096
00:08:36 12 | 11 |   0.0157 |   0.0084
00:08:38 12 | 12 |   0.0110 |  -0.0009
00:08:41 12 | 13 |   0.0103 |  -0.0064
00:08:43 12 | 14 |   0.0007 |  -0.0168
00:08:45 12 | 15 |   0.0160 |   0.0065
00:08:47 12 | 16 |   0.0100 |   0.0009
00:08:49 12 | 17 |  -0.0023 |  -0.0056
00:08:51 12 | 18 |   0.0094 |   0.0013
00:08:54 12 | 19 |  -0.0001 |  -0.0059
00:08:56 12 | 20 |   0.0073 |   0.0062
(32, 32) tanh 0 64
00:00:07 01 | 01 |  -0.0023 |  -0.0138
00:00:13 01 | 02 |   0.0003 |   0.0059
00:00:19 01 | 03 |   0.0092 |   0.0141
00:00:25 01 | 04 |   0.0023 |  -0.0016
00:00:31 01 | 05 |   0.0136 |   0.0106
00:00:37 01 | 06 |   0.0112 |   0.0023
00:00:42 01 | 07 |   0.0175 |   0.0081
00:00:48 01 | 08 |   0.0103 |   0.0028
00:00:54 01 | 09 |   0.0051 |   0.0002
00:01:00 01 | 10 |   0.0112 |   0.0032
```

```
00:01:06 01 | 11 |   0.0089 |   0.0045
00:01:12 01 | 12 |   0.0049 |  -0.0071
00:01:18 01 | 13 |  -0.0040 |   0.0177
00:01:24 01 | 14 |   0.0246 |   0.0147
00:01:30 01 | 15 |   0.0037 |  -0.0047
00:01:36 01 | 16 |   0.0153 |   0.0265
00:01:42 01 | 17 |   0.0114 |   0.0101
00:01:48 01 | 18 |   0.0204 |   0.0189
00:01:54 01 | 19 |   0.0230 |   0.0304
00:01:60 01 | 20 |   0.0144 |   0.0101
00:02:06 02 | 01 |   0.0090 |  -0.0207
00:02:12 02 | 02 |   0.0222 |   0.0238
00:02:18 02 | 03 |  -0.0004 |  -0.0096
00:02:24 02 | 04 |  -0.0029 |  -0.0077
00:02:30 02 | 05 |   0.0041 |   0.0154
00:02:36 02 | 06 |  -0.0062 |  -0.0167
00:02:42 02 | 07 |  -0.0194 |  -0.0181
00:02:48 02 | 08 |  -0.0152 |  -0.0089
00:02:54 02 | 09 |  -0.0065 |  -0.0180
00:02:59 02 | 10 |   0.0106 |   0.0397
00:03:05 02 | 11 |   0.0212 |   0.0222
00:03:11 02 | 12 |   0.0081 |   0.0153
00:03:17 02 | 13 |   0.0193 |   0.0122
00:03:23 02 | 14 |   0.0144 |   0.0036
00:03:29 02 | 15 |  -0.0005 |  -0.0105
00:03:35 02 | 16 |   0.0034 |   0.0142
00:03:41 02 | 17 |  -0.0177 |  -0.0150
00:03:47 02 | 18 |   0.0096 |   0.0172
00:03:53 02 | 19 |  -0.0067 |  -0.0009
00:03:59 02 | 20 |  -0.0010 |   0.0121
00:04:05 03 | 01 |  -0.0117 |  -0.0070
00:04:11 03 | 02 |  -0.0014 |  -0.0172
00:04:17 03 | 03 |   0.0023 |  -0.0045
00:04:23 03 | 04 |  -0.0042 |   0.0214
00:04:29 03 | 05 |   0.0256 |   0.0374
00:04:35 03 | 06 |  -0.0171 |  -0.0270
00:04:41 03 | 07 |  -0.0006 |  -0.0237
00:04:47 03 | 08 |  -0.0018 |  -0.0004
00:04:53 03 | 09 |   0.0044 |  -0.0164
00:04:59 03 | 10 |  -0.0268 |  -0.0442
00:05:05 03 | 11 |   0.0264 |   0.0292
00:05:11 03 | 12 |   0.0107 |   0.0194
00:05:17 03 | 13 |  -0.0029 |   0.0219
00:05:23 03 | 14 |  -0.0082 |  -0.0186
00:05:29 03 | 15 |   0.0067 |   0.0179
00:05:36 03 | 16 |   0.0184 |  -0.0000
00:05:42 03 | 17 |   0.0090 |   0.0127
00:05:48 03 | 18 |   0.0133 |   0.0115
```

```
00:05:54 03 | 19 |  0.0308 |  0.0463
00:05:60 03 | 20 |  0.0172 |  0.0071
00:06:07 04 | 01 | -0.0334 | -0.0139
00:06:13 04 | 02 |  0.0143 |  0.0024
00:06:19 04 | 03 | -0.0033 | -0.0007
00:06:25 04 | 04 | -0.0308 | -0.0307
00:06:31 04 | 05 |  0.0098 | -0.0051
00:06:37 04 | 06 |  0.0105 | -0.0033
00:06:43 04 | 07 | -0.0046 | -0.0139
00:06:49 04 | 08 |  0.0265 |  0.0293
00:06:55 04 | 09 |  0.0072 | -0.0029
00:07:01 04 | 10 |  0.0326 |  0.0220
00:07:07 04 | 11 | -0.0312 | -0.0368
00:07:13 04 | 12 |  0.0038 | -0.0021
00:07:19 04 | 13 | -0.0017 | -0.0176
00:07:25 04 | 14 | -0.0067 | -0.0240
00:07:31 04 | 15 | -0.0177 | -0.0362
00:07:37 04 | 16 |  0.0184 |  0.0065
00:07:44 04 | 17 |  0.0059 | -0.0213
00:07:50 04 | 18 |  0.0050 |  0.0007
00:07:56 04 | 19 |  0.0346 |  0.0196
00:08:02 04 | 20 |  0.0283 |  0.0252
00:08:08 05 | 01 |  0.0101 |  0.0151
00:08:14 05 | 02 | -0.0053 | -0.0140
00:08:20 05 | 03 | -0.0341 | -0.0268
00:08:26 05 | 04 |  0.0240 |  0.0079
00:08:32 05 | 05 |  0.0195 |  0.0048
00:08:38 05 | 06 |  0.0057 |  0.0265
00:08:44 05 | 07 |  0.0095 |  0.0210
00:08:50 05 | 08 |  0.0484 |  0.0378
00:08:56 05 | 09 | -0.0103 | -0.0173
00:09:03 05 | 10 |  0.0167 |  0.0147
00:09:08 05 | 11 |  0.0147 |  0.0249
00:09:15 05 | 12 |  0.0148 |  0.0194
00:09:21 05 | 13 |  0.0242 |  0.0316
00:09:27 05 | 14 |  0.0017 | -0.0042
00:09:33 05 | 15 |  0.0352 |  0.0422
00:09:39 05 | 16 | -0.0132 | -0.0078
00:09:45 05 | 17 |  0.0008 |  0.0088
00:09:51 05 | 18 |  0.0413 |  0.0349
00:09:57 05 | 19 |  0.0243 |  0.0231
00:10:03 05 | 20 |  0.0101 |  0.0161
00:10:09 06 | 01 | -0.0287 | -0.0255
00:10:15 06 | 02 |  0.0028 | -0.0073
00:10:21 06 | 03 |  0.0332 |  0.0269
00:10:27 06 | 04 |  0.0000 |  0.0168
00:10:33 06 | 05 | -0.0033 |  0.0047
00:10:39 06 | 06 |  0.0321 |  0.0372
```

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00:10:45 06 | 07 |   0.0111 |   0.0248
00:10:51 06 | 08 |   0.0341 |   0.0374
00:10:57 06 | 09 |   0.0257 |   0.0215
00:11:03 06 | 10 |   0.0272 |   0.0311
00:11:09 06 | 11 |   0.0233 |   0.0338
00:11:15 06 | 12 |   0.0075 |  -0.0114
00:11:21 06 | 13 |   0.0293 |   0.0241
00:11:27 06 | 14 |   0.0217 |   0.0227
00:11:33 06 | 15 |   0.0091 |   0.0078
00:11:39 06 | 16 |   0.0204 |   0.0136
00:11:45 06 | 17 |   0.0354 |   0.0506
00:11:51 06 | 18 |   0.0209 |   0.0091
00:11:57 06 | 19 |   0.0094 |  -0.0023
00:12:03 06 | 20 |   0.0259 |   0.0349
00:12:09 07 | 01 |   0.0267 |   0.0267
00:12:15 07 | 02 |   0.0052 |   0.0103
00:12:21 07 | 03 |   0.0154 |   0.0333
00:12:27 07 | 04 |   0.0394 |   0.0771
00:12:33 07 | 05 |   0.0259 |   0.0508
00:12:39 07 | 06 |   0.0304 |   0.0593
00:12:45 07 | 07 |   0.0092 |   0.0626
00:12:51 07 | 08 |   0.0325 |   0.0567
00:12:57 07 | 09 |   0.0312 |   0.0792
00:13:03 07 | 10 |  -0.0013 |   0.0154
00:13:08 07 | 11 |   0.0174 |   0.0516
00:13:14 07 | 12 |  -0.0171 |   0.0243
00:13:20 07 | 13 |   0.0163 |   0.0488
00:13:26 07 | 14 |  -0.0032 |   0.0023
00:13:32 07 | 15 |   0.0226 |   0.0522
00:13:38 07 | 16 |   0.0066 |   0.0002
00:13:44 07 | 17 |   0.0339 |   0.0258
00:13:50 07 | 18 |   0.0150 |   0.0196
00:13:56 07 | 19 |   0.0279 |   0.0409
00:14:02 07 | 20 |   0.0182 |   0.0284
00:14:09 08 | 01 |  -0.0033 |   0.0028
00:14:15 08 | 02 |  -0.0073 |  -0.0224
00:14:21 08 | 03 |  -0.0156 |  -0.0213
00:14:26 08 | 04 |  -0.0098 |   0.0110
00:14:32 08 | 05 |   0.0191 |   0.0182
00:14:38 08 | 06 |  -0.0017 |  -0.0283
00:14:44 08 | 07 |   0.0045 |   0.0276
00:14:51 08 | 08 |   0.0012 |   0.0108
00:14:58 08 | 09 |   0.0134 |   0.0178
00:15:04 08 | 10 |   0.0189 |   0.0240
00:15:11 08 | 11 |   0.0256 |   0.0178
00:15:18 08 | 12 |  -0.0183 |  -0.0060
00:15:24 08 | 13 |   0.0013 |   0.0225
00:15:31 08 | 14 |   0.0032 |   0.0148
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00:15:37 08 | 15 |   0.0009 |   0.0057
00:15:43 08 | 16 |  -0.0031 |   0.0153
00:15:49 08 | 17 |   0.0191 |   0.0375
00:15:55 08 | 18 |  -0.0004 |   0.0237
00:16:02 08 | 19 |  -0.0027 |   0.0071
00:16:08 08 | 20 |   0.0320 |   0.0260
00:16:14 09 | 01 |  -0.0228 |  -0.0363
00:16:21 09 | 02 |   0.0112 |  -0.0152
00:16:27 09 | 03 |   0.0044 |  -0.0023
00:16:33 09 | 04 |   0.0040 |  -0.0014
00:16:39 09 | 05 |   0.0009 |  -0.0028
00:16:45 09 | 06 |  -0.0109 |  -0.0222
00:16:51 09 | 07 |  -0.0211 |  -0.0202
00:16:57 09 | 08 |  -0.0207 |  -0.0156
00:17:03 09 | 09 |  -0.0115 |  -0.0026
00:17:09 09 | 10 |  -0.0005 |   0.0005
00:17:15 09 | 11 |  -0.0114 |  -0.0139
00:17:21 09 | 12 |   0.0102 |   0.0341
00:17:27 09 | 13 |   0.0129 |   0.0208
00:17:33 09 | 14 |  -0.0083 |   0.0167
00:17:39 09 | 15 |   0.0040 |  -0.0080
00:17:45 09 | 16 |  -0.0006 |   0.0208
00:17:51 09 | 17 |  -0.0055 |   0.0244
00:17:57 09 | 18 |   0.0033 |   0.0237
00:18:03 09 | 19 |  -0.0093 |   0.0019
00:18:09 09 | 20 |  -0.0052 |   0.0115
00:18:15 10 | 01 |  -0.0161 |  -0.0264
00:18:21 10 | 02 |  -0.0229 |  -0.0385
00:18:27 10 | 03 |   0.0154 |   0.0293
00:18:33 10 | 04 |  -0.0052 |   0.0021
00:18:39 10 | 05 |  -0.0033 |   0.0110
00:18:45 10 | 06 |  -0.0073 |  -0.0013
00:18:51 10 | 07 |  -0.0112 |  -0.0133
00:18:57 10 | 08 |   0.0233 |   0.0019
00:19:03 10 | 09 |   0.0229 |   0.0234
00:19:09 10 | 10 |  -0.0091 |   0.0021
00:19:15 10 | 11 |  -0.0097 |  -0.0113
00:19:21 10 | 12 |   0.0119 |   0.0273
00:19:27 10 | 13 |  -0.0044 |  -0.0134
00:19:33 10 | 14 |  -0.0011 |  -0.0183
00:19:39 10 | 15 |  -0.0018 |   0.0125
00:19:45 10 | 16 |  -0.0096 |  -0.0047
00:19:52 10 | 17 |   0.0057 |  -0.0134
00:19:58 10 | 18 |  -0.0098 |   0.0005
00:20:04 10 | 19 |   0.0040 |   0.0055
00:20:10 10 | 20 |  -0.0169 |  -0.0193
00:20:17 11 | 01 |  -0.0014 |   0.0030
00:20:23 11 | 02 |   0.0296 |   0.0353
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00:20:29 11 | 03 | -0.0034 | -0.0041
00:20:35 11 | 04 |  0.0125 |  0.0126
00:20:41 11 | 05 |  0.0308 |  0.0263
00:20:47 11 | 06 |  0.0152 |  0.0151
00:20:53 11 | 07 |  0.0362 |  0.0390
00:20:59 11 | 08 |  0.0169 |  0.0162
00:21:05 11 | 09 |  0.0243 |  0.0143
00:21:11 11 | 10 |  0.0327 |  0.0355
00:21:17 11 | 11 |  0.0274 |  0.0330
00:21:23 11 | 12 |  0.0392 |  0.0305
00:21:29 11 | 13 |  0.0360 |  0.0247
00:21:35 11 | 14 |  0.0411 |  0.0376
00:21:41 11 | 15 |  0.0421 |  0.0466
00:21:47 11 | 16 |  0.0258 |  0.0184
00:21:53 11 | 17 |  0.0193 |  0.0200
00:21:59 11 | 18 |  0.0202 |  0.0088
00:22:05 11 | 19 |  0.0132 |  0.0149
00:22:11 11 | 20 |  0.0334 |  0.0155
00:22:18 12 | 01 |  0.0105 |  0.0194
00:22:24 12 | 02 |  0.0152 | -0.0047
00:22:30 12 | 03 | -0.0019 |  0.0172
00:22:35 12 | 04 |  0.0073 | -0.0032
00:22:41 12 | 05 |  0.0061 | -0.0114
00:22:47 12 | 06 |  0.0030 |  0.0067
00:22:53 12 | 07 |  0.0139 | -0.0075
00:22:59 12 | 08 |  0.0088 |  0.0095
00:23:05 12 | 09 |  0.0046 | -0.0136
00:23:11 12 | 10 | -0.0078 | -0.0210
00:23:17 12 | 11 |  0.0039 | -0.0171
00:23:23 12 | 12 | -0.0083 | -0.0181
00:23:29 12 | 13 | -0.0067 | -0.0116
00:23:35 12 | 14 | -0.0111 | -0.0215
00:23:41 12 | 15 | -0.0053 | -0.0199
00:23:47 12 | 16 | -0.0099 | -0.0211
00:23:53 12 | 17 | -0.0072 | -0.0216
00:23:59 12 | 18 | -0.0134 | -0.0233
00:24:05 12 | 19 | -0.0006 | -0.0063
00:24:11 12 | 20 |  0.0001 | -0.0167
(32, 32) tanh 0 256
00:00:03 01 | 01 | -0.0102 | -0.0139
00:00:06 01 | 02 |  0.0186 |  0.0107
00:00:08 01 | 03 |  0.0283 |  0.0531
00:00:11 01 | 04 | -0.0022 |  0.0015
00:00:13 01 | 05 |  0.0160 |  0.0201
00:00:16 01 | 06 |  0.0140 |  0.0215
00:00:18 01 | 07 |  0.0137 |  0.0305
00:00:21 01 | 08 |  0.0111 |  0.0028
00:00:23 01 | 09 |  0.0115 |  0.0106
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00:00:25 01 | 10 |   0.0101 |   0.0103
00:00:28 01 | 11 |   0.0075 |   0.0044
00:00:30 01 | 12 |   0.0021 |   0.0034
00:00:32 01 | 13 |   0.0124 |  -0.0015
00:00:35 01 | 14 |   0.0171 |   0.0115
00:00:37 01 | 15 |   0.0168 |   0.0117
00:00:40 01 | 16 |   0.0094 |   0.0082
00:00:42 01 | 17 |   0.0104 |   0.0048
00:00:45 01 | 18 |   0.0094 |   0.0011
00:00:47 01 | 19 |   0.0051 |   0.0091
00:00:49 01 | 20 |  -0.0021 |   0.0068
00:00:52 02 | 01 |   0.0242 |   0.0238
00:00:55 02 | 02 |   0.0233 |   0.0281
00:00:57 02 | 03 |   0.0170 |   0.0232
00:00:60 02 | 04 |   0.0042 |   0.0118
00:01:02 02 | 05 |   0.0261 |   0.0176
00:01:04 02 | 06 |  -0.0113 |   0.0045
00:01:07 02 | 07 |   0.0018 |  -0.0062
00:01:09 02 | 08 |   0.0060 |   0.0100
00:01:12 02 | 09 |   0.0041 |   0.0021
00:01:14 02 | 10 |   0.0097 |   0.0186
00:01:16 02 | 11 |   0.0096 |   0.0071
00:01:19 02 | 12 |   0.0037 |  -0.0055
00:01:21 02 | 13 |   0.0117 |   0.0188
00:01:23 02 | 14 |   0.0085 |   0.0198
00:01:26 02 | 15 |   0.0084 |   0.0141
00:01:28 02 | 16 |   0.0053 |   0.0162
00:01:31 02 | 17 |   0.0142 |   0.0135
00:01:33 02 | 18 |   0.0012 |   0.0007
00:01:35 02 | 19 |   0.0050 |   0.0011
00:01:38 02 | 20 |  -0.0077 |   0.0030
00:01:41 03 | 01 |  -0.0163 |  -0.0229
00:01:43 03 | 02 |   0.0056 |   0.0071
00:01:46 03 | 03 |   0.0020 |   0.0158
00:01:48 03 | 04 |   0.0257 |   0.0393
00:01:51 03 | 05 |  -0.0174 |  -0.0249
00:01:53 03 | 06 |  -0.0079 |  -0.0122
00:01:55 03 | 07 |  -0.0291 |  -0.0372
00:01:58 03 | 08 |  -0.0032 |  -0.0036
00:02:00 03 | 09 |  -0.0051 |  -0.0146
00:02:03 03 | 10 |  -0.0077 |  -0.0082
00:02:05 03 | 11 |  -0.0247 |  -0.0497
00:02:07 03 | 12 |  -0.0205 |  -0.0311
00:02:10 03 | 13 |  -0.0217 |  -0.0436
00:02:12 03 | 14 |  -0.0013 |  -0.0245
00:02:15 03 | 15 |   0.0100 |  -0.0085
00:02:17 03 | 16 |   0.0068 |  -0.0006
00:02:19 03 | 17 |   0.0026 |  -0.0116
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00:02:22 03 | 18 |  -0.0054 |   0.0003
00:02:24 03 | 19 |   0.0070 |  -0.0115
00:02:26 03 | 20 |  -0.0016 |  -0.0110
00:02:30 04 | 01 |  -0.0152 |  -0.0056
00:02:32 04 | 02 |   0.0226 |   0.0162
00:02:34 04 | 03 |  -0.0118 |   0.0097
00:02:37 04 | 04 |  -0.0289 |  -0.0417
00:02:39 04 | 05 |   0.0123 |   0.0110
00:02:42 04 | 06 |  -0.0007 |  -0.0228
00:02:44 04 | 07 |   0.0082 |  -0.0054
00:02:46 04 | 08 |   0.0075 |  -0.0093
00:02:49 04 | 09 |  -0.0024 |  -0.0160
00:02:51 04 | 10 |  -0.0117 |  -0.0331
00:02:54 04 | 11 |  -0.0083 |  -0.0162
00:02:56 04 | 12 |   0.0078 |  -0.0241
00:02:58 04 | 13 |  -0.0134 |  -0.0170
00:03:01 04 | 14 |  -0.0174 |  -0.0020
00:03:03 04 | 15 |  -0.0028 |  -0.0058
00:03:06 04 | 16 |   0.0142 |   0.0137
00:03:08 04 | 17 |   0.0063 |  -0.0190
00:03:10 04 | 18 |  -0.0089 |  -0.0052
00:03:13 04 | 19 |  -0.0117 |  -0.0049
00:03:15 04 | 20 |   0.0195 |   0.0099
00:03:18 05 | 01 |  -0.0176 |  -0.0065
00:03:21 05 | 02 |   0.0275 |   0.0401
00:03:23 05 | 03 |   0.0006 |   0.0167
00:03:25 05 | 04 |  -0.0015 |  -0.0029
00:03:28 05 | 05 |   0.0016 |  -0.0228
00:03:30 05 | 06 |   0.0126 |  -0.0137
00:03:32 05 | 07 |   0.0193 |   0.0197
00:03:35 05 | 08 |   0.0239 |   0.0171
00:03:37 05 | 09 |   0.0206 |   0.0192
00:03:40 05 | 10 |   0.0087 |  -0.0165
00:03:42 05 | 11 |   0.0211 |   0.0196
00:03:44 05 | 12 |  -0.0015 |   0.0116
00:03:47 05 | 13 |  -0.0034 |  -0.0097
00:03:49 05 | 14 |   0.0110 |   0.0073
00:03:52 05 | 15 |   0.0117 |  -0.0078
00:03:54 05 | 16 |   0.0168 |   0.0228
00:03:56 05 | 17 |  -0.0152 |  -0.0069
00:03:59 05 | 18 |   0.0064 |   0.0018
00:04:01 05 | 19 |  -0.0079 |  -0.0011
00:04:04 05 | 20 |   0.0037 |   0.0180
00:04:07 06 | 01 |  -0.0003 |  -0.0042
00:04:10 06 | 02 |   0.0100 |  -0.0070
00:04:12 06 | 03 |   0.0292 |   0.0109
00:04:15 06 | 04 |   0.0108 |   0.0161
00:04:17 06 | 05 |   0.0381 |   0.0267
```

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00:04:20 06 | 06 |   0.0299 |   0.0195
00:04:22 06 | 07 |   0.0379 |   0.0434
00:04:24 06 | 08 |   0.0212 |   0.0126
00:04:27 06 | 09 |   0.0451 |   0.0352
00:04:29 06 | 10 |   0.0268 |   0.0333
00:04:32 06 | 11 |   0.0325 |   0.0332
00:04:34 06 | 12 |   0.0277 |   0.0122
00:04:37 06 | 13 |   0.0435 |   0.0184
00:04:39 06 | 14 |   0.0433 |   0.0273
00:04:41 06 | 15 |   0.0246 |   0.0100
00:04:44 06 | 16 |   0.0142 |   0.0042
00:04:46 06 | 17 |   0.0293 |   0.0066
00:04:49 06 | 18 |   0.0160 |   0.0155
00:04:51 06 | 19 |   0.0180 |   0.0052
00:04:53 06 | 20 |   0.0210 |   0.0180
00:04:57 07 | 01 |  -0.0167 |  -0.0028
00:04:59 07 | 02 |   0.0523 |   0.0424
00:05:01 07 | 03 |  -0.0098 |   0.0001
00:05:04 07 | 04 |   0.0187 |   0.0319
00:05:06 07 | 05 |  -0.0038 |   0.0125
00:05:09 07 | 06 |   0.0106 |   0.0128
00:05:11 07 | 07 |   0.0336 |   0.0516
00:05:13 07 | 08 |   0.0143 |   0.0186
00:05:16 07 | 09 |  -0.0031 |   0.0203
00:05:18 07 | 10 |  -0.0070 |   0.0104
00:05:21 07 | 11 |   0.0150 |   0.0250
00:05:23 07 | 12 |   0.0194 |   0.0053
00:05:25 07 | 13 |   0.0061 |  -0.0206
00:05:28 07 | 14 |  -0.0053 |  -0.0192
00:05:30 07 | 15 |   0.0034 |   0.0109
00:05:33 07 | 16 |   0.0092 |   0.0219
00:05:35 07 | 17 |   0.0028 |   0.0122
00:05:37 07 | 18 |  -0.0051 |  -0.0277
00:05:40 07 | 19 |  -0.0061 |  -0.0051
00:05:42 07 | 20 |  -0.0221 |  -0.0308
00:05:45 08 | 01 |   0.0115 |   0.0182
00:05:48 08 | 02 |   0.0118 |  -0.0033
00:05:50 08 | 03 |   0.0132 |   0.0171
00:05:52 08 | 04 |  -0.0075 |  -0.0119
00:05:55 08 | 05 |   0.0139 |   0.0069
00:05:57 08 | 06 |   0.0004 |   0.0049
00:05:59 08 | 07 |   0.0189 |   0.0241
00:06:02 08 | 08 |   0.0214 |   0.0077
00:06:04 08 | 09 |  -0.0008 |   0.0107
00:06:07 08 | 10 |  -0.0049 |  -0.0017
00:06:09 08 | 11 |   0.0048 |   0.0217
00:06:11 08 | 12 |   0.0109 |  -0.0014
00:06:14 08 | 13 |   0.0059 |   0.0211
```

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00:06:16 08 | 14 | -0.0021 | -0.0148
00:06:19 08 | 15 |  0.0073 |  0.0110
00:06:21 08 | 16 |  0.0120 | -0.0035
00:06:23 08 | 17 |  0.0046 |  0.0083
00:06:26 08 | 18 |  0.0219 |  0.0105
00:06:28 08 | 19 |  0.0136 |  0.0310
00:06:31 08 | 20 |  0.0222 |  0.0354
00:06:34 09 | 01 | -0.0044 |  0.0053
00:06:36 09 | 02 |  0.0130 |  0.0052
00:06:39 09 | 03 |  0.0140 |  0.0044
00:06:41 09 | 04 | -0.0022 | -0.0083
00:06:44 09 | 05 |  0.0111 |  0.0155
00:06:46 09 | 06 |  0.0012 |  0.0028
00:06:48 09 | 07 |  0.0059 |  0.0080
00:06:51 09 | 08 | -0.0109 | -0.0172
00:06:53 09 | 09 | -0.0013 | -0.0090
00:06:56 09 | 10 |  0.0156 |  0.0249
00:06:58 09 | 11 |  0.0130 |  0.0193
00:07:00 09 | 12 |  0.0097 |  0.0064
00:07:03 09 | 13 |  0.0088 |  0.0252
00:07:05 09 | 14 |  0.0079 |  0.0114
00:07:07 09 | 15 |  0.0046 | -0.0046
00:07:10 09 | 16 |  0.0086 |  0.0115
00:07:12 09 | 17 |  0.0076 | -0.0130
00:07:15 09 | 18 | -0.0022 | -0.0224
00:07:17 09 | 19 |  0.0056 |  0.0077
00:07:20 09 | 20 |  0.0065 | -0.0040
00:07:23 10 | 01 | -0.0391 | -0.0545
00:07:25 10 | 02 |  0.0447 |  0.0487
00:07:28 10 | 03 |  0.0178 |  0.0177
00:07:30 10 | 04 |  0.0007 |  0.0198
00:07:32 10 | 05 | -0.0058 |  0.0076
00:07:35 10 | 06 | -0.0236 | -0.0132
00:07:37 10 | 07 | -0.0146 |  0.0126
00:07:40 10 | 08 | -0.0108 | -0.0214
00:07:42 10 | 09 | -0.0089 | -0.0087
00:07:45 10 | 10 | -0.0055 | -0.0125
00:07:47 10 | 11 | -0.0253 | -0.0222
00:07:49 10 | 12 | -0.0264 | -0.0329
00:07:52 10 | 13 | -0.0177 | -0.0297
00:07:54 10 | 14 | -0.0157 | -0.0101
00:07:56 10 | 15 | -0.0039 | -0.0110
00:07:59 10 | 16 |  0.0019 | -0.0047
00:08:01 10 | 17 |  0.0028 |  0.0060
00:08:04 10 | 18 |  0.0062 | -0.0258
00:08:06 10 | 19 | -0.0166 | -0.0021
00:08:08 10 | 20 | -0.0038 | -0.0053
00:08:12 11 | 01 |  0.0153 |  0.0116
```

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00:08:14 11 | 02 |   0.0248 |   0.0413
00:08:17 11 | 03 |   0.0279 |   0.0308
00:08:19 11 | 04 |   0.0166 |   0.0121
00:08:22 11 | 05 |   0.0241 |   0.0256
00:08:24 11 | 06 |   0.0203 |   0.0262
00:08:26 11 | 07 |   0.0092 |   0.0114
00:08:29 11 | 08 |   0.0189 |   0.0245
00:08:31 11 | 09 |   0.0152 |   0.0048
00:08:34 11 | 10 |   0.0200 |   0.0208
00:08:36 11 | 11 |   0.0215 |   0.0200
00:08:38 11 | 12 |   0.0259 |   0.0247
00:08:41 11 | 13 |   0.0263 |   0.0329
00:08:43 11 | 14 |   0.0368 |   0.0379
00:08:46 11 | 15 |   0.0297 |   0.0327
00:08:48 11 | 16 |   0.0361 |   0.0294
00:08:51 11 | 17 |   0.0270 |   0.0237
00:08:53 11 | 18 |   0.0299 |   0.0347
00:08:55 11 | 19 |   0.0281 |   0.0325
00:08:58 11 | 20 |   0.0354 |   0.0332
00:09:01 12 | 01 |   0.0088 | -0.0081
00:09:04 12 | 02 |   0.0188 |   0.0099
00:09:06 12 | 03 |   0.0018 | -0.0031
00:09:08 12 | 04 | -0.0013 | -0.0201
00:09:11 12 | 05 |   0.0034 | -0.0094
00:09:13 12 | 06 |   0.0084 | -0.0028
00:09:15 12 | 07 |   0.0128 |   0.0050
00:09:18 12 | 08 |   0.0039 | -0.0042
00:09:20 12 | 09 |   0.0287 |   0.0243
00:09:23 12 | 10 |   0.0148 |   0.0192
00:09:25 12 | 11 |   0.0071 |   0.0016
00:09:27 12 | 12 |   0.0144 |   0.0122
00:09:30 12 | 13 |   0.0127 |   0.0070
00:09:32 12 | 14 |   0.0063 |   0.0105
00:09:35 12 | 15 |   0.0123 |   0.0046
00:09:37 12 | 16 |   0.0040 | -0.0115
00:09:39 12 | 17 |   0.0109 | -0.0022
00:09:42 12 | 18 |   0.0189 |   0.0066
00:09:44 12 | 19 |   0.0207 |   0.0036
00:09:46 12 | 20 |   0.0159 |   0.0007
```

1.4.3 Evaluate predictive performance

```
[23]: params = ['dense_layers', 'dropout', 'batch_size']
```

```
[24]: ic = pd.read_hdf(results_path / 'scores.h5', 'ic_by_day').drop('activation',␣
      ↪axis=1)
      ic.info()
```

```
<class 'pandas.core.frame.DataFrame'>
DatetimeIndex: 18144 entries, 2017-08-30 to 2015-03-02
Data columns (total 24 columns):
 #   Column        Non-Null Count  Dtype
---  ------        --------------  -----
 0   0             18144 non-null  float64
 1   1             18144 non-null  float64
 2   2             18144 non-null  float64
 3   3             18144 non-null  float64
 4   4             18144 non-null  float64
 5   5             18144 non-null  float64
 6   6             18144 non-null  float64
 7   7             18144 non-null  float64
 8   8             18144 non-null  float64
 9   9             18144 non-null  float64
 10  10            18144 non-null  float64
 11  11            18144 non-null  float64
 12  12            18144 non-null  float64
 13  13            18144 non-null  float64
 14  14            18144 non-null  float64
 15  15            18144 non-null  float64
 16  16            18144 non-null  float64
 17  17            18144 non-null  float64
 18  18            18144 non-null  float64
 19  19            18144 non-null  float64
 20  dense_layers  18144 non-null  object
 21  dropout       18144 non-null  float64
 22  batch_size    18144 non-null  int64
 23  fold          18144 non-null  int64
dtypes: float64(21), int64(2), object(1)
memory usage: 3.5+ MB
```

[25]: `ic.groupby(params).size()`

[25]:
```
dense_layers  dropout  batch_size
(16, 8)       0.0      64             756
                       256            756
              0.1      64             756
                       256            756
              0.2      64             756
                       256            756
(32, 16)      0.0      64             756
                       256            756
              0.1      64             756
                       256            756
              0.2      64             756
                       256            756
```

```
         (32, 32)       0.0       64              756
                                   256             756
                        0.1       64              756
                                   256             756
                        0.2       64              756
                                   256             756
         (64, 32)       0.0       64              756
                                   256             756
                        0.1       64              756
                                   256             756
                        0.2       64              756
                                   256             756
         dtype: int64
```

[26]:
```python
ic_long = pd.melt(ic, id_vars=params + ['fold'], var_name='epoch',␣
 ↪value_name='ic')
ic_long.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 362880 entries, 0 to 362879
Data columns (total 6 columns):
 #   Column        Non-Null Count   Dtype
---  ------        --------------   -----
 0   dense_layers  362880 non-null  object
 1   dropout       362880 non-null  float64
 2   batch_size    362880 non-null  int64
 3   fold          362880 non-null  int64
 4   epoch         362880 non-null  object
 5   ic            362880 non-null  float64
dtypes: float64(2), int64(2), object(2)
memory usage: 16.6+ MB
```

[27]:
```python
ic_long = ic_long.groupby(params+ ['epoch', 'fold']).ic.mean().to_frame('ic').
 ↪reset_index()
```

[28]:
```python
g = sns.relplot(x='epoch', y='ic', col='dense_layers', row='dropout',
                data=ic_long[ic_long.dropout>0], kind='line')
g.map(plt.axhline, y=0, ls='--', c='k', lw=1)
g.savefig(results_path / 'ic_lineplot', dpi=300);
```
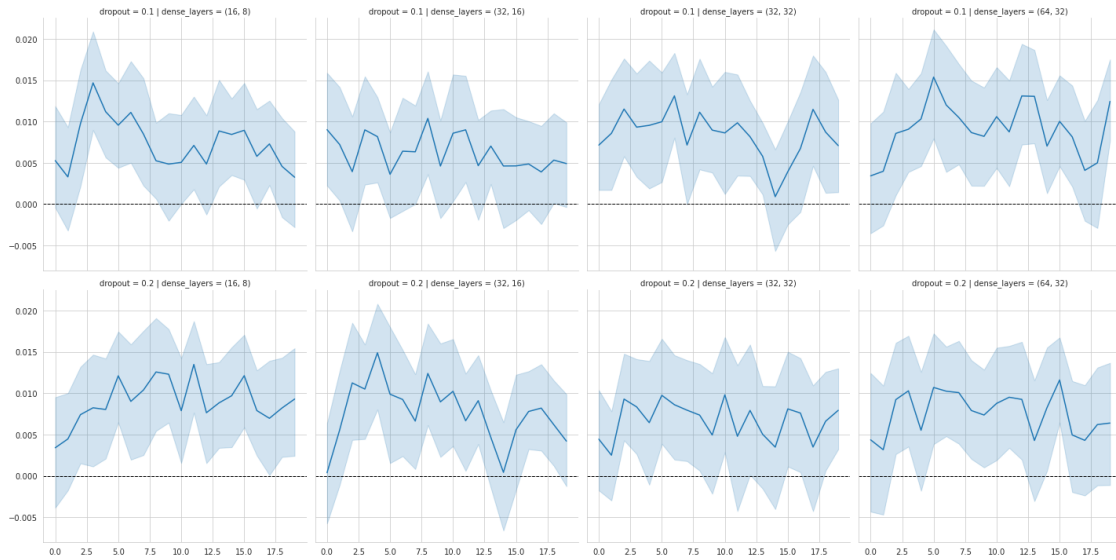
```
[29]: def run_ols(ic):
          ic.dense_layers = ic.dense_layers.str.replace(', ', '-').str.replace('(',␣
      ↪'').str.replace(')', '')
          data = pd.melt(ic, id_vars=params, var_name='epoch', value_name='ic')
          data.epoch = data.epoch.astype(int).astype(str).apply(lambda x: f'{int(x):␣
      ↪02.0f}')
          model_data = pd.get_dummies(data.sort_values(params + ['epoch']),␣
      ↪columns=['epoch'] + params, drop_first=True).sort_index(1)
          model_data.columns = [s.split('_')[-1] for s in model_data.columns]
          model = sm.OLS(endog=model_data.ic, exog=sm.add_constant(model_data.
      ↪drop('ic', axis=1)))
          return model.fit()
```

```
[30]: model = run_ols(ic.drop('fold', axis=1))
```

```
[31]: print(model.summary())
```

```
                            OLS Regression Results
==============================================================================
Dep. Variable:                     ic   R-squared:                       0.000
Model:                            OLS   Adj. R-squared:                  0.000
Method:                 Least Squares   F-statistic:                     2.444
Date:                Thu, 25 Feb 2021   Prob (F-statistic):           7.39e-05
Time:                        17:06:57   Log-Likelihood:              2.3604e+05
No. Observations:              362880   AIC:                         -4.720e+05
Df Residuals:                  362854   BIC:                         -4.718e+05
Df Model:                          25
Covariance Type:            nonrobust
==============================================================================
```

```
                        coef     std err          t       P>|t|      [0.025      0.975]
            ----------------------------------------------------------------------------
            const        0.0027     0.001       2.529      0.011       0.001       0.005
            256          0.0014     0.000       3.368      0.001       0.001       0.002
            32-16       -0.0002     0.001      -0.321      0.748      -0.001       0.001
            32-32       -0.0002     0.001      -0.265      0.791      -0.001       0.001
            64-32      -9.26e-05    0.001      -0.156      0.876      -0.001       0.001
            0.1          0.0005     0.001       1.032      0.302      -0.000       0.002
            0.2          0.0005     0.001       0.932      0.351      -0.001       0.001
            01           0.0017     0.001       1.307      0.191      -0.001       0.004
            02           0.0044     0.001       3.299      0.001       0.002       0.007
            03           0.0052     0.001       3.944      0.000       0.003       0.008
            04           0.0053     0.001       3.996      0.000       0.003       0.008
            05           0.0058     0.001       4.353      0.000       0.003       0.008
            06           0.0057     0.001       4.296      0.000       0.003       0.008
            07           0.0054     0.001       4.038      0.000       0.003       0.008
            08           0.0053     0.001       3.997      0.000       0.003       0.008
            09           0.0040     0.001       3.054      0.002       0.001       0.007
            10           0.0050     0.001       3.781      0.000       0.002       0.008
            11           0.0044     0.001       3.346      0.001       0.002       0.007
            12           0.0046     0.001       3.489      0.000       0.002       0.007
            13           0.0039     0.001       2.920      0.004       0.001       0.006
            14           0.0027     0.001       2.037      0.042       0.000       0.005
            15           0.0042     0.001       3.196      0.001       0.002       0.007
            16           0.0027     0.001       2.042      0.041       0.000       0.005
            17           0.0025     0.001       1.911      0.056    -6.55e-05      0.005
            18           0.0031     0.001       2.311      0.021       0.000       0.006
            19           0.0034     0.001       2.528      0.011       0.001       0.006
            ==============================================================================
            Omnibus:                      5763.272   Durbin-Watson:                 1.994
            Prob(Omnibus):                   0.000   Jarque-Bera (JB):          11327.461
            Skew:                            0.038   Prob(JB):                       0.00
            Kurtosis:                        3.862   Cond. No.                       27.2
            ==============================================================================

            Notes:
            [1] Standard Errors assume that the covariance matrix of the errors is correctly
            specified.
```

```python
[32]: fig, ax = plt.subplots(figsize=(14, 4))

      ci = model.conf_int()
      errors = ci[1].sub(ci[0]).div(2)

      coefs = (model.params.to_frame('coef').assign(error=errors)
               .reset_index().rename(columns={'index': 'variable'}))
```

```python
coefs = coefs[~coefs['variable'].str.startswith('date') & (coefs.variable !=
 ↪'const')]

coefs.plot(x='variable', y='coef', kind='bar',
           ax=ax, color='none', capsize=3,
           yerr='error', legend=False, rot=0, title='Impact of Architecture and
 ↪Training Parameters on Out-of-Sample Performance')
ax.set_ylabel('IC')
ax.set_xlabel('')
ax.scatter(x=pd.np.arange(len(coefs)), marker='_', s=120, y=coefs['coef'],
 ↪color='black')
ax.axhline(y=0, linestyle='--', color='black', linewidth=1)
ax.xaxis.set_ticks_position('none')

ax.annotate('Batch Size', xy=(.02, -0.1), xytext=(.02, -0.2),
            xycoords='axes fraction',
            textcoords='axes fraction',
            fontsize=11, ha='center', va='bottom',
            bbox=dict(boxstyle='square', fc='white', ec='black'),
            arrowprops=dict(arrowstyle='-[, widthB=1.3, lengthB=0.8', lw=1.0,
 ↪color='black'))

ax.annotate('Layers', xy=(.1, -0.1), xytext=(.1, -0.2),
            xycoords='axes fraction',
            textcoords='axes fraction',
            fontsize=11, ha='center', va='bottom',
            bbox=dict(boxstyle='square', fc='white', ec='black'),
            arrowprops=dict(arrowstyle='-[, widthB=4.8, lengthB=0.8', lw=1.0,
 ↪color='black'))

ax.annotate('Dropout', xy=(.2, -0.1), xytext=(.2, -0.2),
            xycoords='axes fraction',
            textcoords='axes fraction',
            fontsize=11, ha='center', va='bottom',
            bbox=dict(boxstyle='square', fc='white', ec='black'),
            arrowprops=dict(arrowstyle='-[, widthB=2.8, lengthB=0.8', lw=1.0,
 ↪color='black'))

ax.annotate('Epochs', xy=(.62, -0.1), xytext=(.62, -0.2),
            xycoords='axes fraction',
            textcoords='axes fraction',
            fontsize=11, ha='center', va='bottom',
            bbox=dict(boxstyle='square', fc='white', ec='black'),
            arrowprops=dict(arrowstyle='-[, widthB=30.5, lengthB=1.0', lw=1.0,
 ↪color='black'))
```
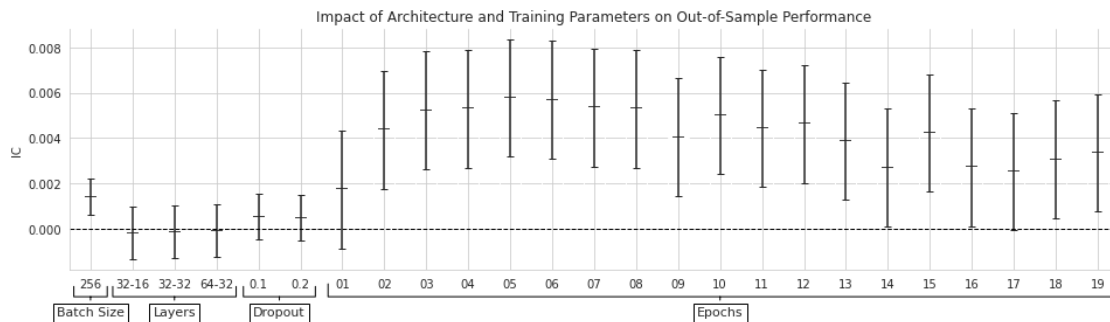
```
sns.despine()
fig.tight_layout()
fig.savefig(results_path / 'ols_coef', dpi=300)
```


Impact of Architecture and Training Parameters on Out-of-Sample Performance

1.5 Make Predictions

```
[33]: def get_best_params(n=5):
          """Get the best parameters across all folds by daily median IC"""
          params = ['dense_layers', 'activation', 'dropout', 'batch_size']
          ic = pd.read_hdf(results_path / 'scores.h5', 'ic_by_day').drop('fold',␣
      ↪axis=1)
          dates = sorted(ic.index.unique())
          train_period = 24 * 21
          train_dates = dates[:train_period]
          ic = ic.loc[train_dates]
          return (ic.groupby(params)
                  .median()
                  .stack()
                  .to_frame('ic')
                  .reset_index()
                  .rename(columns={'level_4': 'epoch'})
                  .nlargest(n=n, columns='ic')
                  .drop('ic', axis=1)
                  .to_dict('records'))
```

```
[40]: def generate_predictions(dense_layers, activation, dropout, batch_size, epoch):
          data = pd.read_hdf('../12_gradient_boosting_machines/data.h5',␣
      ↪'model_data').dropna().sort_index()
          outcomes = data.filter(like='fwd').columns.tolist()
          X_cv = data.loc[idx[:, :'2017'], :].drop(outcomes, axis=1)
          input_dim = X_cv.shape[1]
          y_cv = data.loc[idx[:, :'2017'], 'r01_fwd']

          scaler = StandardScaler()
```

```
    predictions = []

    do = '0' if str(dropout) == '0.0' else str(dropout)
    checkpoint_dir = checkpoint_path / str(dense_layers) / activation / str(do)␣
→/ str(batch_size)

    for fold, (train_idx, test_idx) in enumerate(cv.split(X_cv)):
        x_train, y_train, x_val, y_val = get_train_valid_data(X_cv, y_cv,␣
→train_idx, test_idx)
        x_val = scaler.fit(x_train).transform(x_val)
        model = make_model(make_tuple(dense_layers), activation, dropout)
        status = model.load_weights((checkpoint_dir / f'ckpt_{fold}_{epoch}').
→as_posix())
        status.expect_partial()
        predictions.append(pd.Series(model.predict(x_val).squeeze(),␣
→index=y_val.index))
    return pd.concat(predictions)
```

```
[41]: best_params = get_best_params()
predictions = []
for i, params in enumerate(best_params):
    predictions.append(generate_predictions(**params).to_frame(i))

predictions = pd.concat(predictions, axis=1)
print(predictions.info())
predictions.to_hdf(results_path / 'test_preds.h5', 'predictions')
```

```
---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
<ipython-input-41-293e5b606df7> in <module>
      2 predictions = []
      3 for i, params in enumerate(best_params):
----> 4     predictions.append(generate_predictions(**params).to_frame(i))
      5
      6 predictions = pd.concat(predictions, axis=1)

<ipython-input-40-1270e8a7c157> in generate_predictions(dense_layers,␣
→activation, dropout, batch_size, epoch)
     16             x_val = scaler.fit(x_train).transform(x_val)
     17             model = make_model(make_tuple(dense_layers), activation, dropout)
---> 18             status = model.load_weights((checkpoint_dir /␣
→f'ckpt_{fold}_{epoch}').as_posix())
     19             status.expect_partial()
     20             predictions.append(pd.Series(model.predict(x_val).squeeze(),␣
→index=y_val.index))
```

```
/opt/conda/envs/ml4t-dl/lib/python3.8/site-packages/tensorflow/python/keras/
 ↪engine/training.py in load_weights(self, filepath, by_name, skip_mismatch,␣
 ↪options)
   2180         save_format = 'h5'
   2181       if save_format == 'tf':
-> 2182         status = self._trackable_saver.restore(filepath, options)
   2183         if by_name:
   2184           raise NotImplementedError(


/opt/conda/envs/ml4t-dl/lib/python3.8/site-packages/tensorflow/python/training/
 ↪tracking/util.py in restore(self, save_path, options)
   1317         graph_view=self._graph_view,
   1318         options=options)
-> 1319     base.CheckpointPosition(

   1320         checkpoint=checkpoint, proto_id=0).restore(self._graph_view.root)
   1321     load_status = CheckpointLoadStatus(


/opt/conda/envs/ml4t-dl/lib/python3.8/site-packages/tensorflow/python/training/
 ↪tracking/base.py in restore(self, trackable)
    207       # This object's correspondence with a checkpointed object is␣
 ↪new, so
    208       # process deferred restorations for it and its dependencies.
--> 209       restore_ops = trackable._restore_from_checkpoint_position(self)  ␣
 ↪# pylint: disable=protected-access
    210       if restore_ops:
    211         self._checkpoint.new_restore_ops(restore_ops)


/opt/conda/envs/ml4t-dl/lib/python3.8/site-packages/tensorflow/python/training/
 ↪tracking/base.py in _restore_from_checkpoint_position(self,␣
 ↪checkpoint_position)
    911       python_saveables.extend(new_python_saveables)
    912     restore_ops.extend(
--> 913         current_position.checkpoint.restore_saveables(

    914             tensor_saveables, python_saveables))
    915     return restore_ops


/opt/conda/envs/ml4t-dl/lib/python3.8/site-packages/tensorflow/python/training/
 ↪tracking/util.py in restore_saveables(self, tensor_saveables, python_saveables)
    294             ("Saveable keys changed when validating. Got back %s, was "
    295              "expecting %s") % (tensor_saveables.keys(),␣
 ↪validated_names))
--> 296       new_restore_ops = functional_saver.MultiDeviceSaver(

    297           validated_saveables).restore(self.save_path_tensor, self.
 ↪options)
    298       if not context.executing_eagerly():
```

```
/opt/conda/envs/ml4t-dl/lib/python3.8/site-packages/tensorflow/python/training/
 ↪saving/functional_saver.py in restore(self, file_prefix, options)
    338          restore_ops = tf_function_restore()
    339       else:
--> 340          restore_ops = restore_fn()
    341
    342       for callback in self._after_restore_callbacks:

/opt/conda/envs/ml4t-dl/lib/python3.8/site-packages/tensorflow/python/training/
 ↪saving/functional_saver.py in restore_fn()
    314         for device, saver in sorted(self._single_device_savers.items()):
    315           with ops.device(device):
--> 316             restore_ops.update(saver.restore(file_prefix, options))
    317
    318       return restore_ops

/opt/conda/envs/ml4t-dl/lib/python3.8/site-packages/tensorflow/python/training/
 ↪saving/functional_saver.py in restore(self, file_prefix, options)
    108      for saveable, restored_tensors in zip(self._saveable_objects,
    109                                              structured_restored_tensors):
--> 110        restore_ops[saveable.name] = saveable.restore(
    111            restored_tensors, restored_shapes=None)
    112      return restore_ops

/opt/conda/envs/ml4t-dl/lib/python3.8/site-packages/tensorflow/python/training/
 ↪saving/saveable_object_util.py in restore(self, restored_tensors,␣
 ↪restored_shapes)
    124      with ops.device(self._var_device):
    125        restored_tensor = array_ops.identity(restored_tensor)
--> 126        return resource_variable_ops.shape_safe_assign_variable_handle(
    127            self.handle_op, self._var_shape, restored_tensor)
    128

/opt/conda/envs/ml4t-dl/lib/python3.8/site-packages/tensorflow/python/ops/
 ↪resource_variable_ops.py in shape_safe_assign_variable_handle(handle, shape,␣
 ↪value, name)
    309    with _handle_graph(handle):
    310      value_tensor = ops.convert_to_tensor(value)
--> 311    shape.assert_is_compatible_with(value_tensor.shape)
    312    return gen_resource_variable_ops.assign_variable_op(handle,
    313                                                        value_tensor,

/opt/conda/envs/ml4t-dl/lib/python3.8/site-packages/tensorflow/python/framework
 ↪tensor_shape.py in assert_is_compatible_with(self, other)
   1132        """
   1133        if not self.is_compatible_with(other):
```

```
-> 1134            raise ValueError("Shapes %s and %s are incompatible" % (self,␣
  ↪other))
   1135
   1136  def most_specific_compatible_shape(self, other):

ValueError: Shapes (31, 32) and (30, 32) are incompatible
```

1.5.1 How to further improve the results

The relatively simple architecture yields some promising results. To further improve performance, you can - First and foremost, add new features and more data to the model - Expand the set of architectures to explore, including more or wider layers - Inspect the training progress and train for more epochs if the validation error continued to improve at 50 epochs

Finally, you can use more sophisticated architectures, including Recurrent Neural Networks (RNN) and Convolutional Neural Networks that are well suited to sequential data, whereas vanilla feed-forward NNs are not designed to capture the ordered nature of the features.