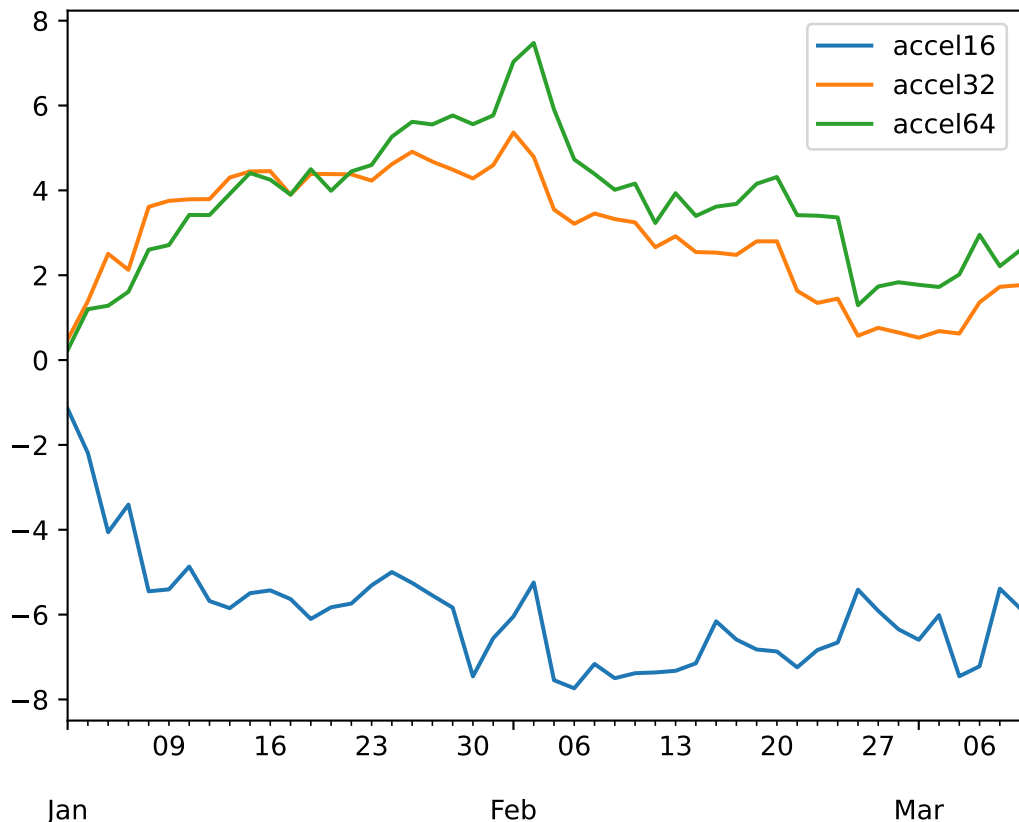
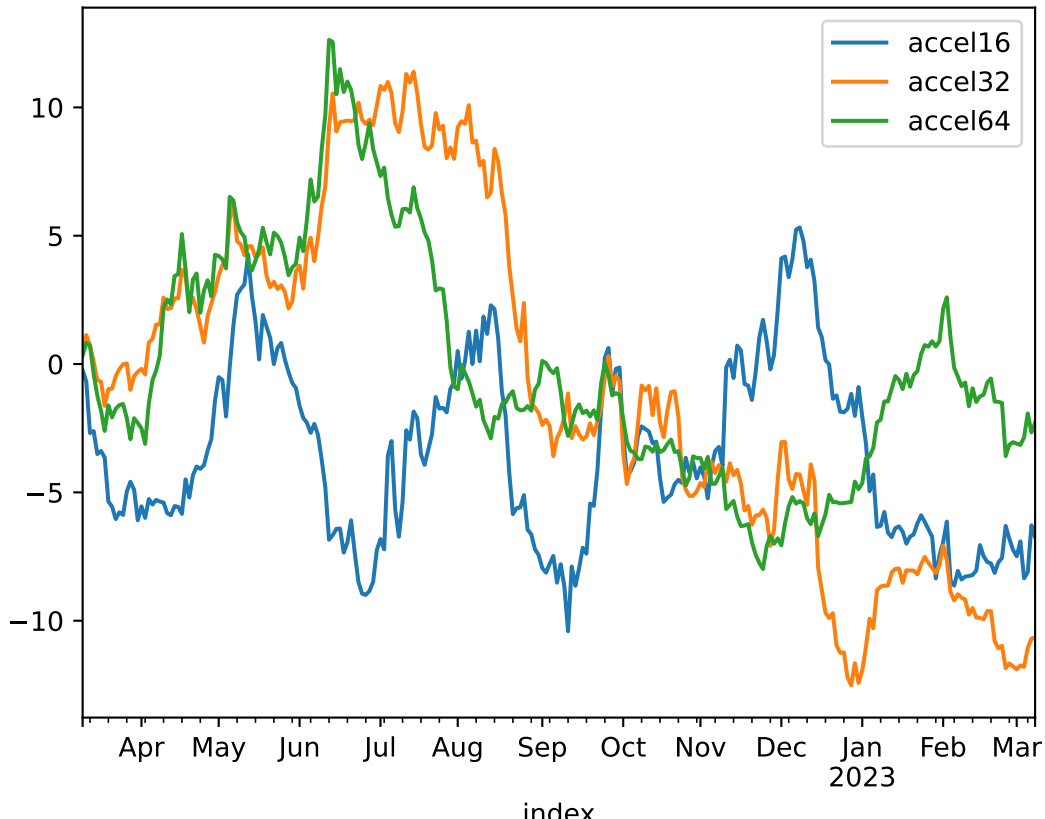


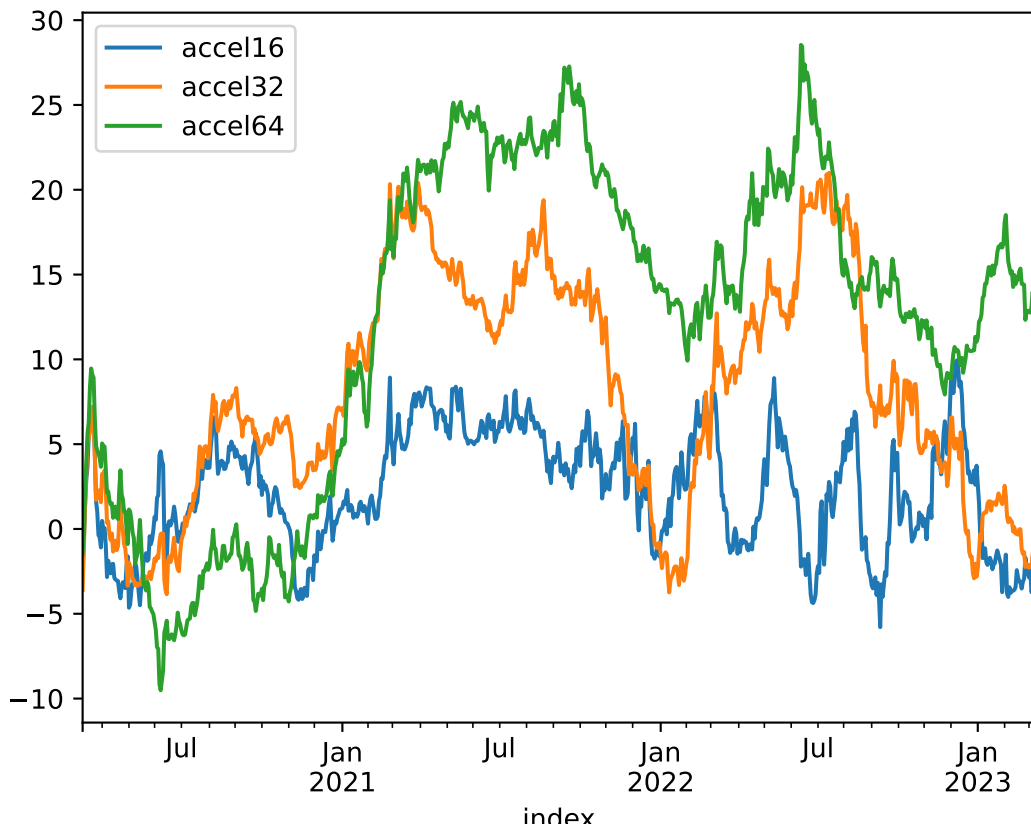
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -31.205, 'accel32': 9.414, 'accel64': 13.804}
ann. std {'accel16': 13.112, 'accel32': 8.157, 'accel64': 10.301}
ann. SR {'accel16': -2.38, 'accel32': 1.15, 'accel64': 1.34}



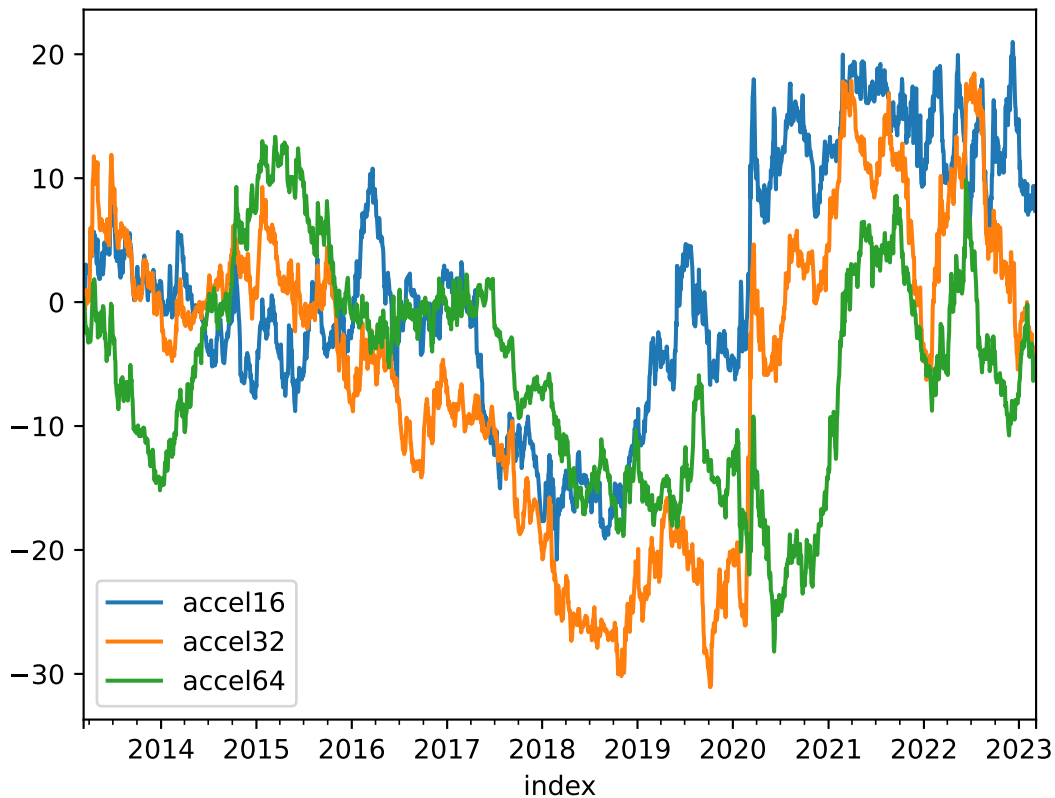
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -6.643, 'accel32': -10.494, 'accel64': -2.253}
ann. std {'accel16': 15.933, 'accel32': 13.026, 'accel64': 11.557}
ann. SR {'accel16': -0.42, 'accel32': -0.81, 'accel64': -0.19}



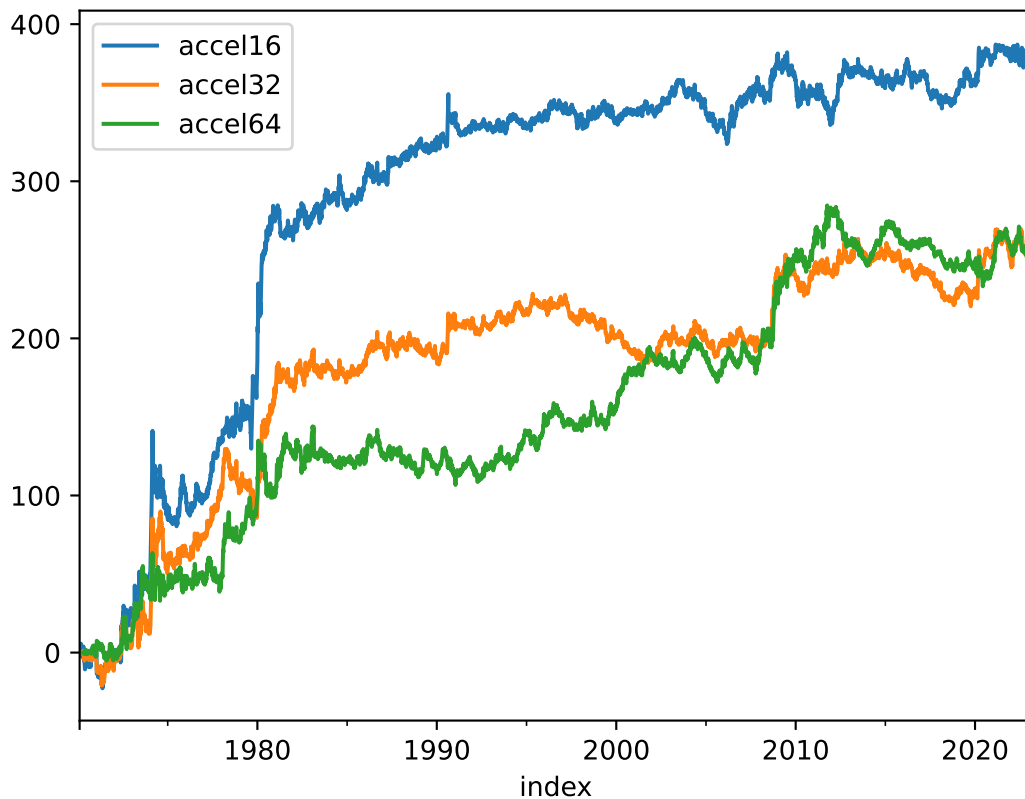
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -0.695, 'accel32': -0.344, 'accel64': 4.46}
ann. std {'accel16': 14.223, 'accel32': 12.717, 'accel64': 11.398}
ann. SR {'accel16': -0.05, 'accel32': -0.03, 'accel64': 0.39}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 0.876, 'accel32': -0.352, 'accel64': -0.497}
ann. std {'accel16': 11.992, 'accel32': 11.16, 'accel64': 9.579}
ann. SR {'accel16': 0.07, 'accel32': -0.03, 'accel64': -0.05}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.949, 'accel32': 4.582, 'accel64': 4.736}
ann. std {'accel16': 15.661, 'accel32': 13.736, 'accel64': 13.252}
ann. SR {'accel16': 0.44, 'accel32': 0.33, 'accel64': 0.36}

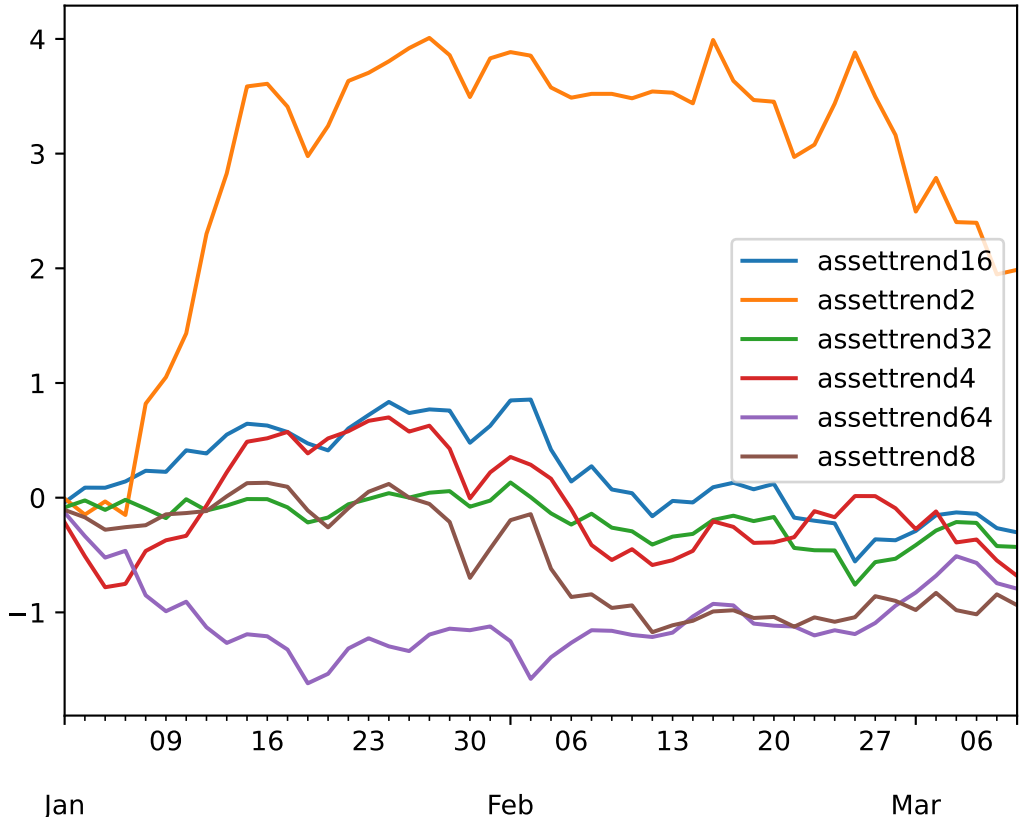


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': -1.613, 'assettrend2': 10.596, 'assettrend32': -2.29, 'assettrend4': -3.637, 'assettrend64': -4.232, 'assettrend8': -4.999}

ann. std {'assettrend16': 2.369, 'assettrend2': 5.595, 'assettrend32': 1.74, 'assettrend4': 2.87, 'assettrend64': 2.239, 'assettrend8': 2.442}

ann. SR {'assettrend16': -0.68, 'assettrend2': 1.89, 'assettrend32': -1.32, 'assettrend4': -1.27, 'assettrend64': -1.89, 'assettrend8': -2.05}

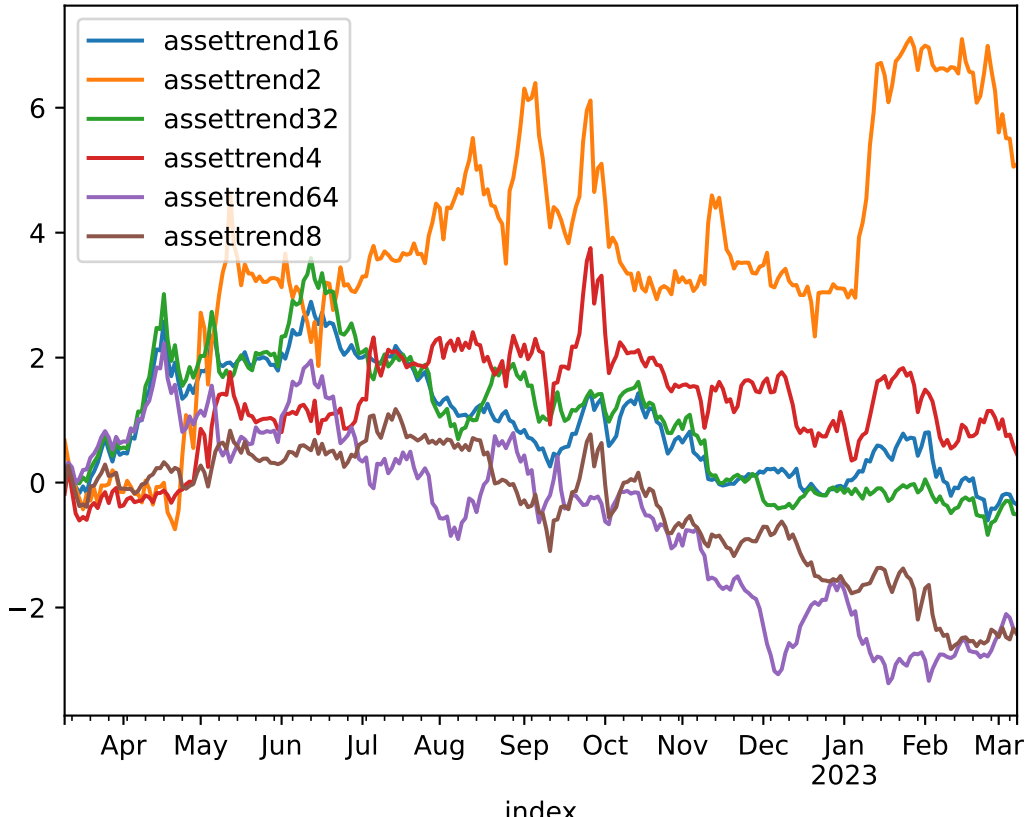


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': -0.348, 'assettrend2': 5.017, 'assettrend32': -0.502, 'assettrend4': 0.444, 'assettrend64': -2.351, 'assettrend8': -2.394}

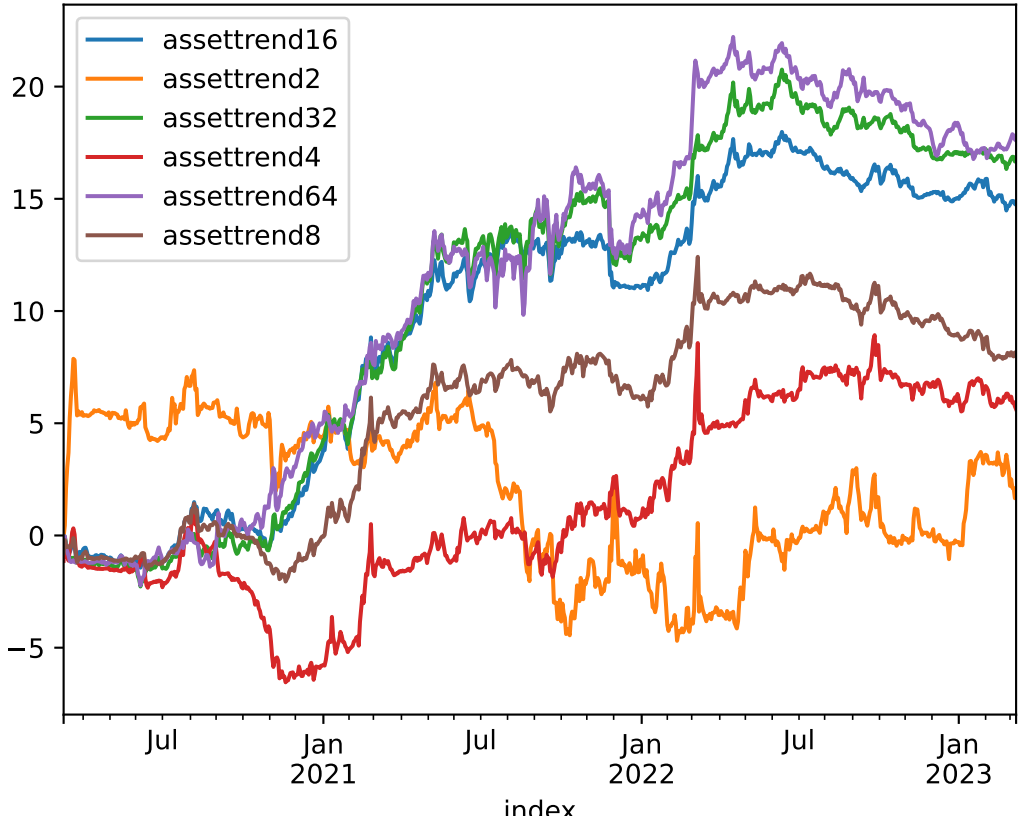
ann. std {'assettrend16': 2.448, 'assettrend2': 5.692, 'assettrend32': 2.782, 'assettrend4': 3.595, 'assettrend64': 2.961, 'assettrend8': 2.459}

ann. SR {'assettrend16': -0.14, 'assettrend2': 0.88, 'assettrend32': -0.18, 'assettrend4': 0.12, 'assettrend64': -0.79, 'assettrend8': -0.97}



Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 4.823, 'assettrend2': 0.557, 'assettrend32': 5.453, 'assettrend4': 1.841, 'assettrend64': 5.76, 'assettrend8': 2.638}
ann. std {'assettrend16': 3.464, 'assettrend2': 7.189, 'assettrend32': 4.238, 'assettrend4': 4.984, 'assettrend64': 5.032, 'assettrend8': 3.569}
ann. SR {'assettrend16': 1.39, 'assettrend2': 0.08, 'assettrend32': 1.29, 'assettrend4': 0.37, 'assettrend64': 1.14, 'assettrend8': 0.74}

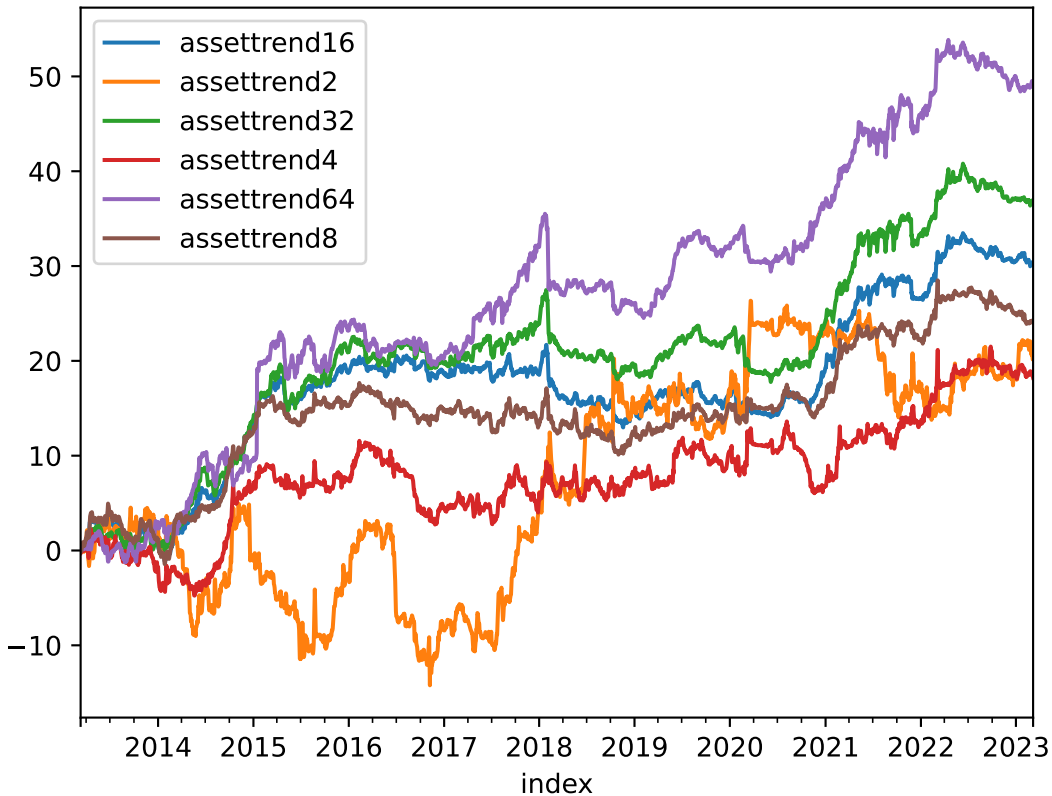


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.967, 'assettrend2': 1.98, 'assettrend32': 3.603, 'assettrend4': 1.787, 'assettrend64': 4.833, 'assettrend8': 2.369}

ann. std {'assettrend16': 3.241, 'assettrend2': 8.214, 'assettrend32': 3.699, 'assettrend4': 4.979, 'assettrend64': 5.283, 'assettrend8': 3.562}

ann. SR {'assettrend16': 0.92, 'assettrend2': 0.24, 'assettrend32': 0.97, 'assettrend4': 0.36, 'assettrend64': 0.91, 'assettrend8': 0.67}

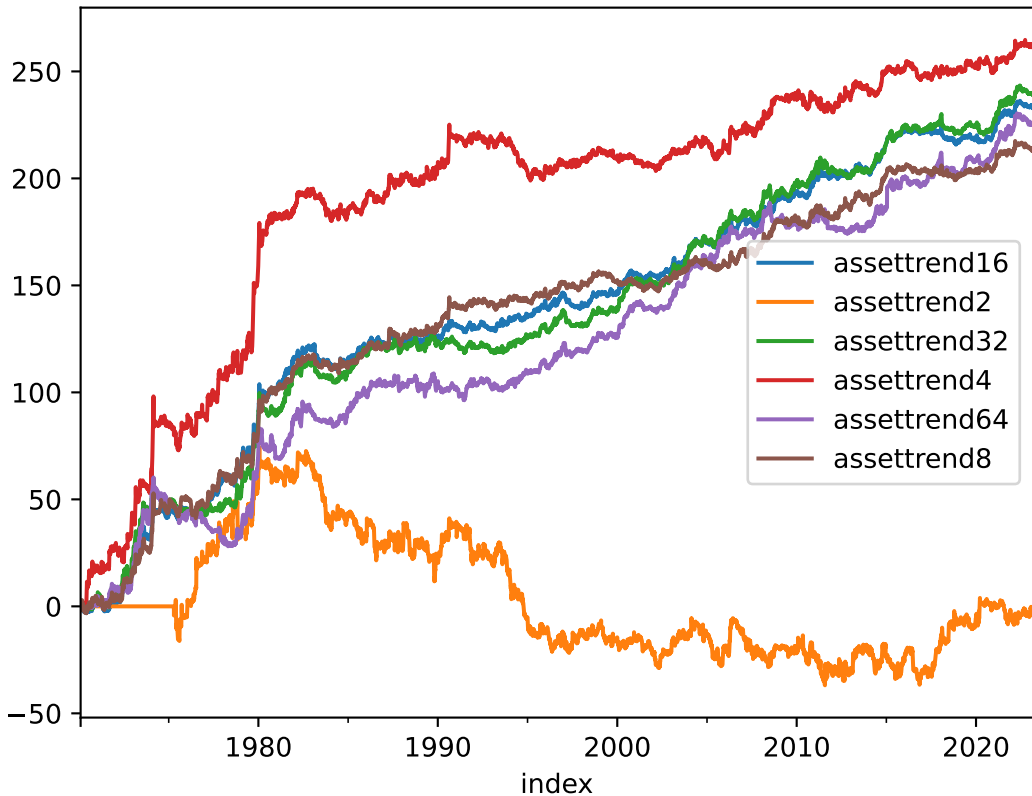


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.306, 'assettrend2': -0.041, 'assettrend32': 4.423, 'assettrend4': 4.831, 'assettrend8': 3.939}

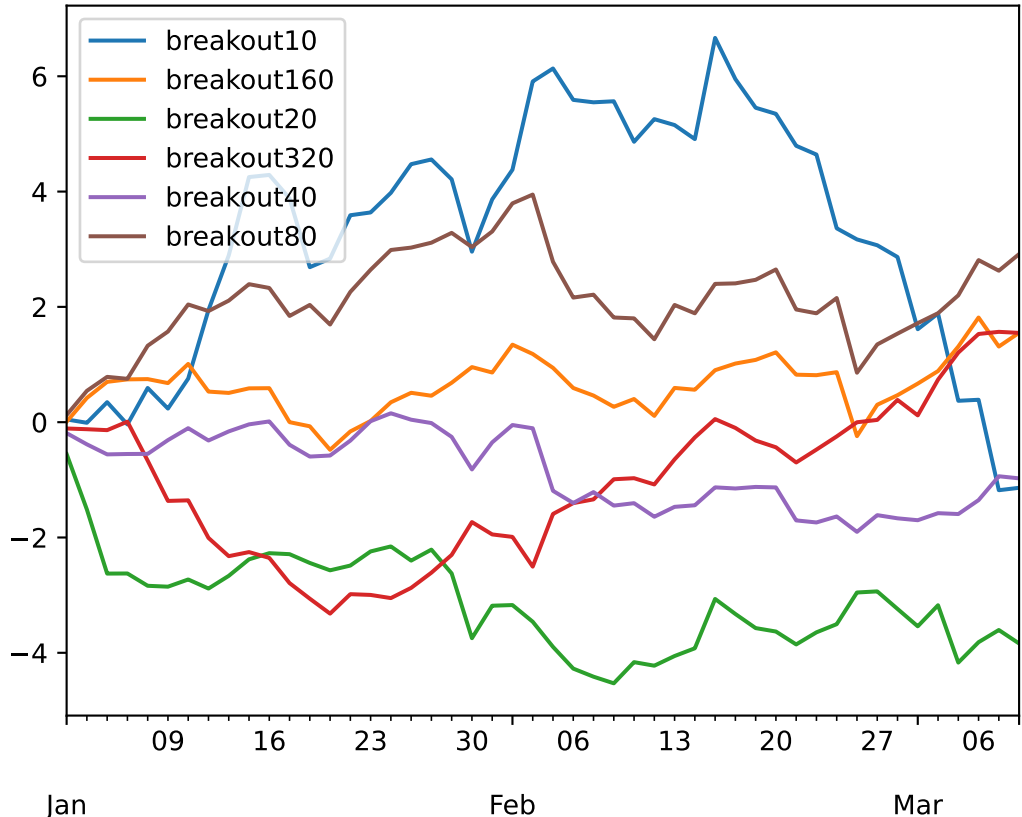
ann. std {'assettrend16': 4.632, 'assettrend2': 10.016, 'assettrend32': 4.847, 'assettrend4': 7.336, 'assettrend64': 5.406, 'assettrend8': 5.015}

ann. SR {'assettrend16': 0.93, 'assettrend2': -0.0, 'assettrend32': 0.91, 'assettrend4': 0.66, 'assettrend64': 0.77, 'assettrend8': 0.79}



Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': -6.07, 'breakout160': 8.269, 'breakout20': -20.472, 'breakout320': 8.26, 'breakout40': -5.196, 'breakout80': 15.548}
 ann. std {'breakout10': 11.959, 'breakout160': 5.218, 'breakout20': 6.515, 'breakout320': 5.431, 'breakout40': 4.445, 'breakout80': 6.637}
 ann. SR {'breakout10': -0.51, 'breakout160': 1.58, 'breakout20': -3.14, 'breakout320': 1.52, 'breakout40': -1.17, 'breakout80': 2.34}

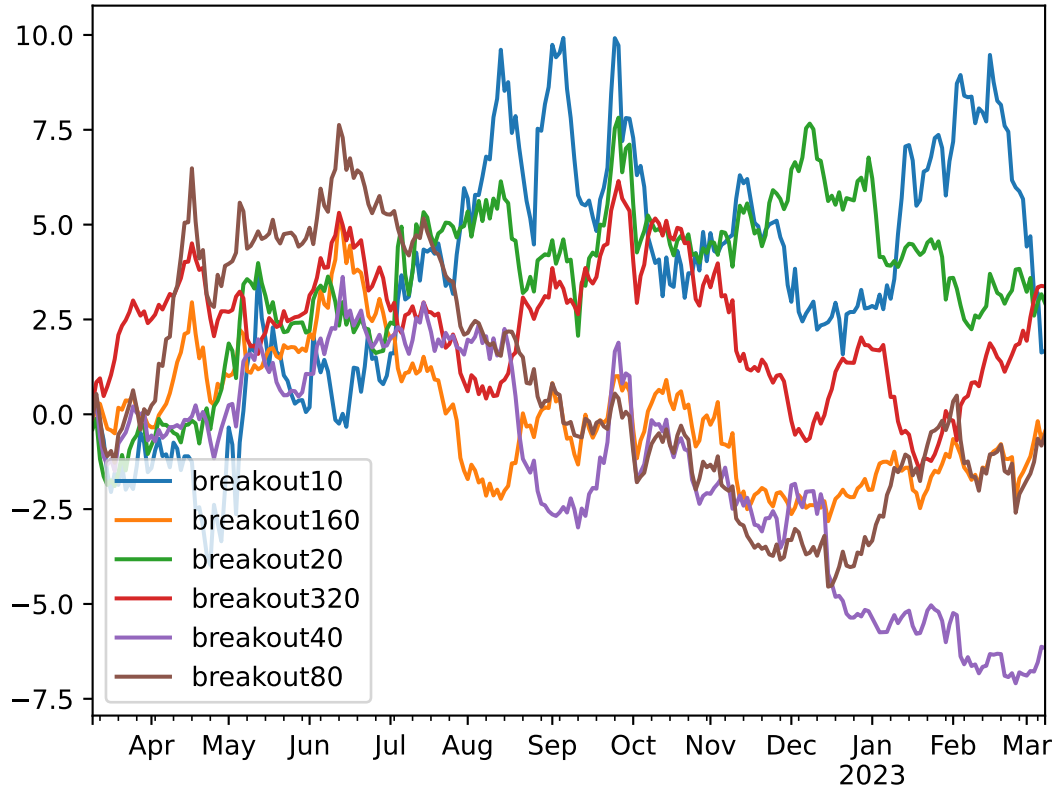


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 1.645, 'breakout160': -0.439, 'breakout20': 2.886, 'breakout320': 3.316, 'breakout40': -6.069, 'breakout80': -0.531}

ann. std {'breakout10': 11.81, 'breakout160': 6.107, 'breakout20': 7.91, 'breakout320': 5.937, 'breakout40': 6.526, 'breakout80': 6.882}

ann. SR {'breakout10': 0.14, 'breakout160': -0.07, 'breakout20': 0.36, 'breakout320': 0.56, 'breakout40': -0.93, 'breakout80': -0.08}



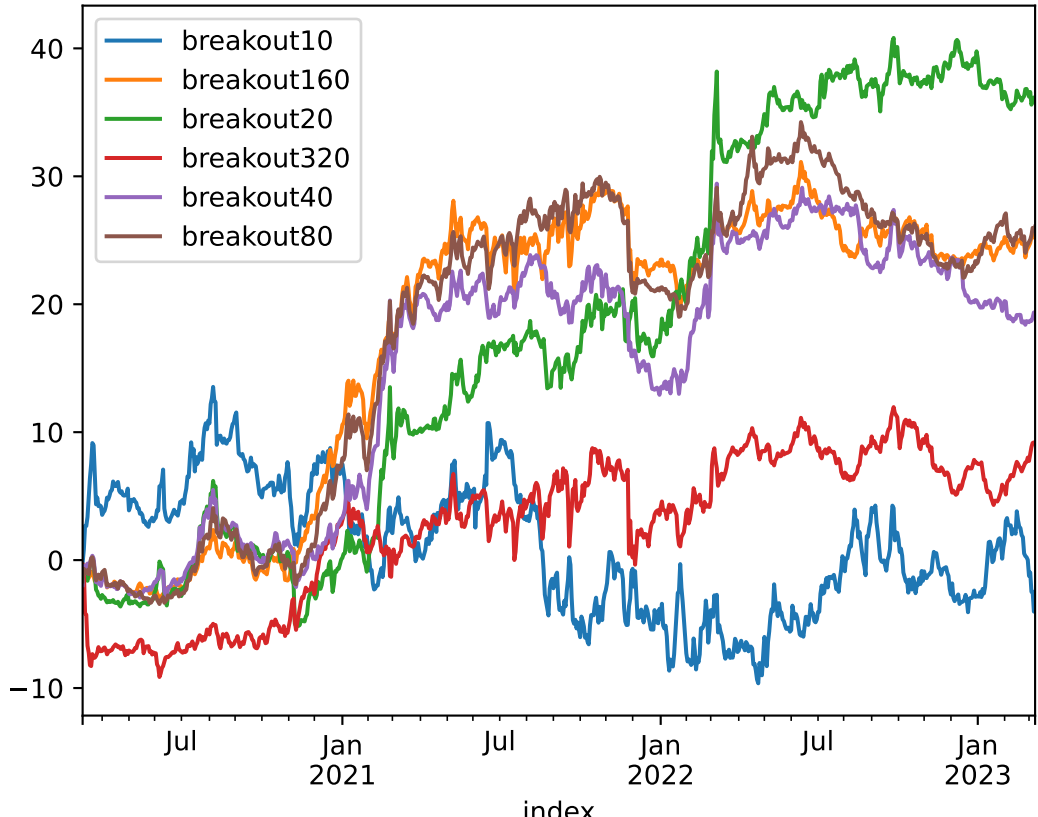
index

Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -1.305, 'breakout160': 8.332, 'breakout20': 11.762, 'breakout320': 3.005, 'breakout40': 6.325, 'breakout80': 8.535}

ann. std {'breakout10': 13.573, 'breakout160': 9.191, 'breakout20': 10.996, 'breakout320': 9.99, 'breakout40': 9.532, 'breakout80': 9.097}

ann. SR {'breakout10': -0.1, 'breakout160': 0.91, 'breakout20': 1.07, 'breakout320': 0.3, 'breakout40': 0.66, 'breakout80': 0.94}

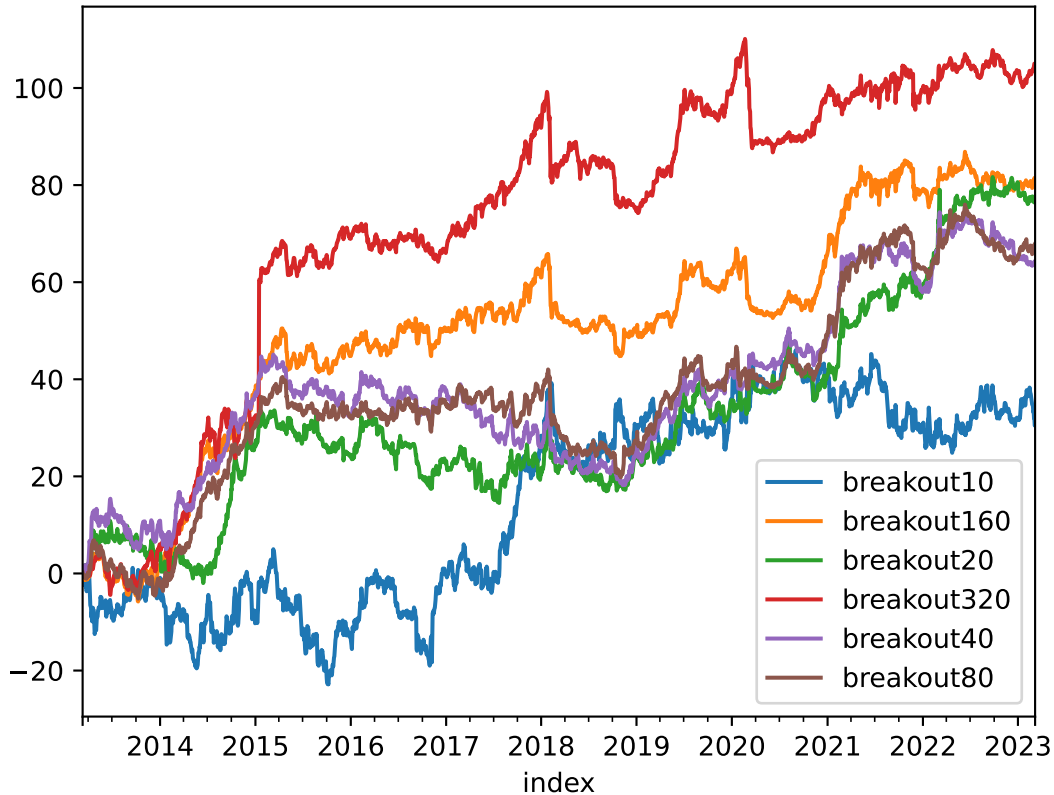


Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 2.993, 'breakout160': 7.97, 'breakout20': 7.536, 'breakout320': 10.311, 'breakout80': 6.657}

ann. std {'breakout10': 15.603, 'breakout160': 9.028, 'breakout20': 11.146, 'breakout320': 13.31, 'breakout40': 9.69, 'breakout80': 8.93}

ann. SR {'breakout10': 0.19, 'breakout160': 0.88, 'breakout20': 0.68, 'breakout320': 0.77, 'breakout40': 0.65, 'breakout80': 0.75}

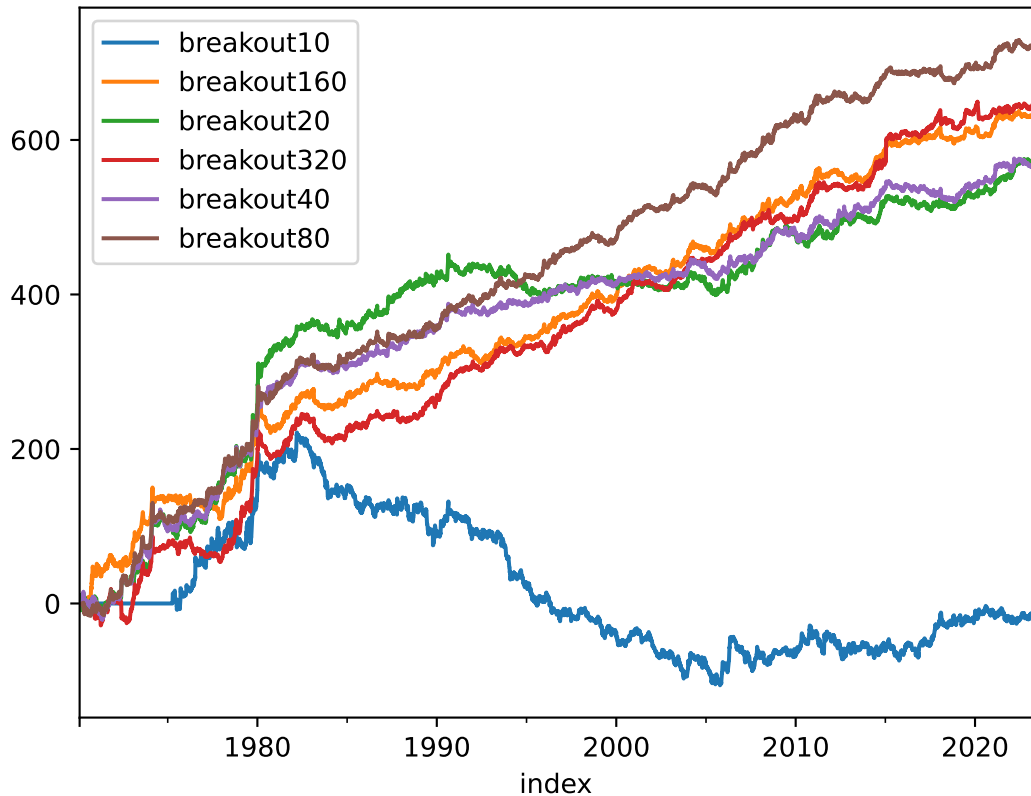


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.381, 'breakout160': 11.678, 'breakout20': 10.544, 'breakout320': 11.912, 'breakout40': 10.459, 'breakout80': 13.331}

ann. std {'breakout10': 20.753, 'breakout160': 12.435, 'breakout20': 15.981, 'breakout320': 12.998, 'breakout40': 13.179, 'breakout80': 12.682}

ann. SR {'breakout10': -0.02, 'breakout160': 0.94, 'breakout20': 0.66, 'breakout320': 0.92, 'breakout40': 0.79, 'breakout80': 1.05}

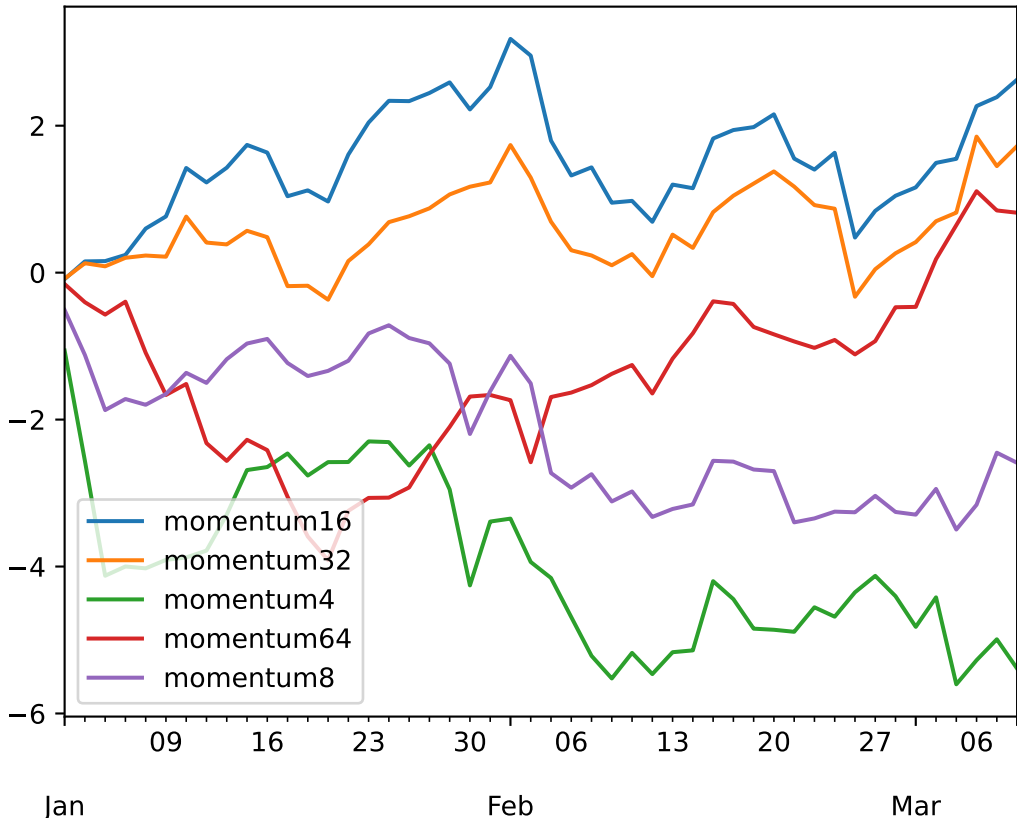


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 14.011, 'momentum32': 9.188, 'momentum4': -28.739, 'momentum64': 4.349, 'momentum8': -13.806}

ann. std {'momentum16': 6.529, 'momentum32': 5.901, 'momentum4': 8.735, 'momentum64': 6.251, 'momentum8': 6.304}

ann. SR {'momentum16': 2.15, 'momentum32': 1.56, 'momentum4': -3.29, 'momentum64': 0.7, 'momentum8': -2.19}

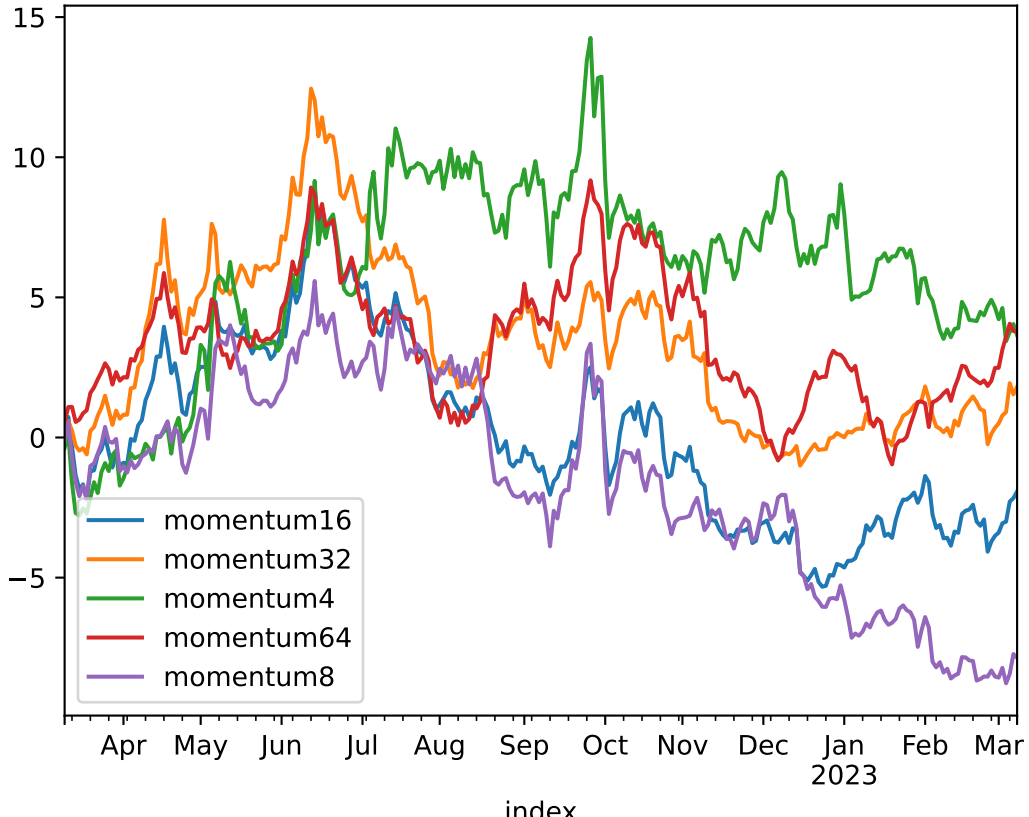


Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -1.896, 'momentum32': 1.781, 'momentum4': 3.595, 'momentum64': 3.71, 'momentum8': -7.742}

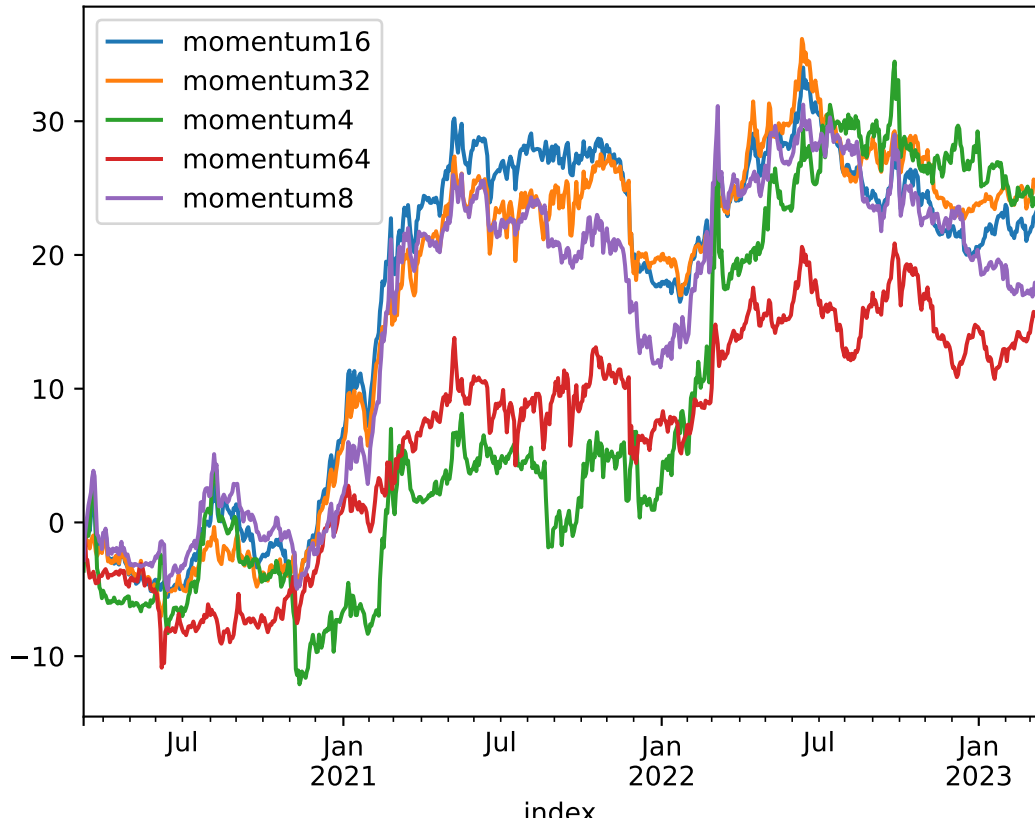
ann. std {'momentum16': 8.563, 'momentum32': 8.837, 'momentum4': 12.729, 'momentum64': 8.48, 'momentum8': 9.723}

ann. SR {'momentum16': -0.22, 'momentum32': 0.2, 'momentum4': 0.28, 'momentum64': 0.44, 'momentum8': -0.8}



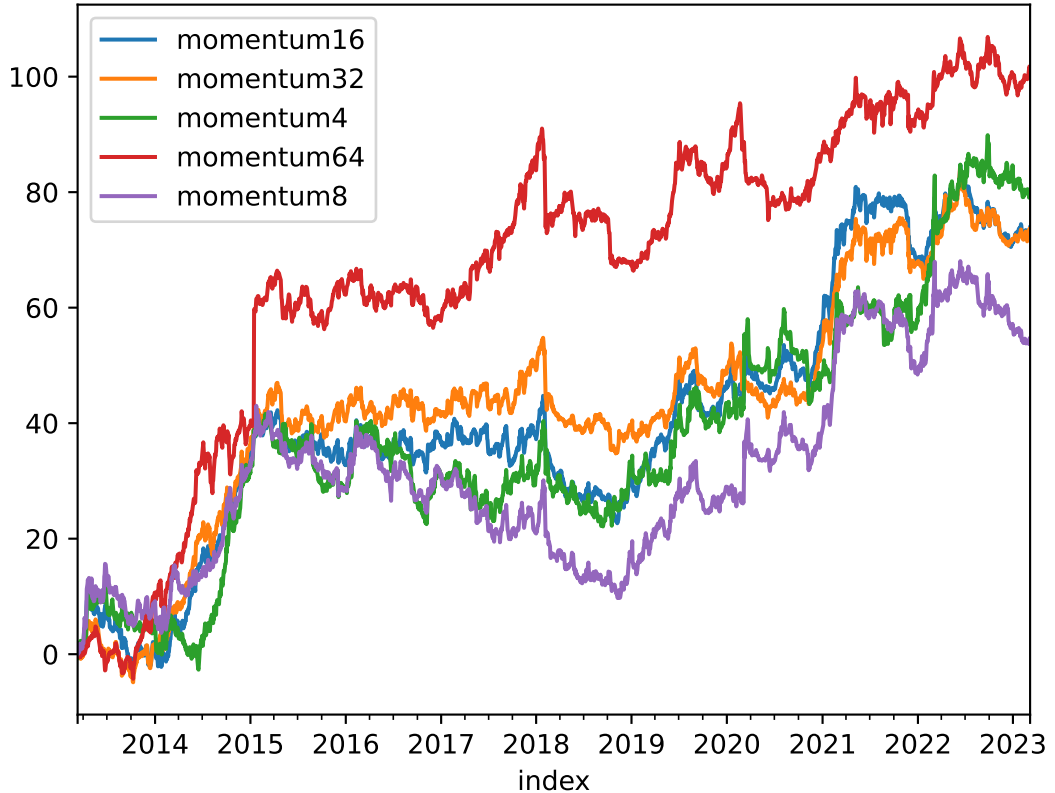
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 7.593, 'momentum32': 8.353, 'momentum4': 7.808, 'momentum64': 5.06, 'momentum8': 5.825}
ann. std {'momentum16': 10.404, 'momentum32': 10.451, 'momentum4': 14.777, 'momentum64': 10.528, 'momentum8': 11.852}
ann. SR {'momentum16': 0.73, 'momentum32': 0.8, 'momentum4': 0.53, 'momentum64': 0.48, 'momentum8': 0.49}



Total Trading Rule P&L for period '10Y'

ann. mean {'momentum16': 7.255, 'momentum32': 7.217, 'momentum4': 7.781, 'momentum64': 9.96, 'momentum8': 5.36}
ann. std {'momentum16': 9.856, 'momentum32': 9.398, 'momentum4': 13.681, 'momentum64': 11.959, 'momentum8': 11.25}
ann. SR {'momentum16': 0.74, 'momentum32': 0.77, 'momentum4': 0.57, 'momentum64': 0.83, 'momentum8': 0.48}

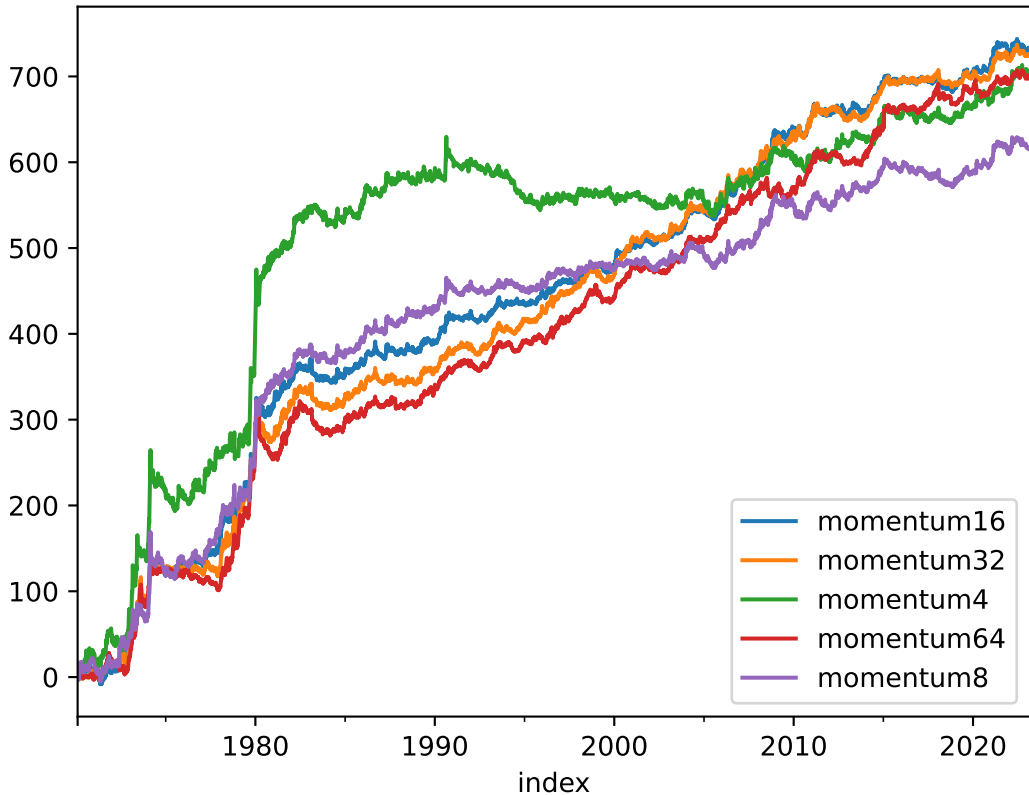


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.545, 'momentum32': 13.423, 'momentum4': 12.987, 'momentum64': 12.973, 'momentum8': 11.381}

ann. std {'momentum16': 14.131, 'momentum32': 13.741, 'momentum4': 19.997, 'momentum64': 13.354, 'momentum8': 15.788}

ann. SR {'momentum16': 0.96, 'momentum32': 0.98, 'momentum4': 0.65, 'momentum64': 0.97, 'momentum8': 0.72}

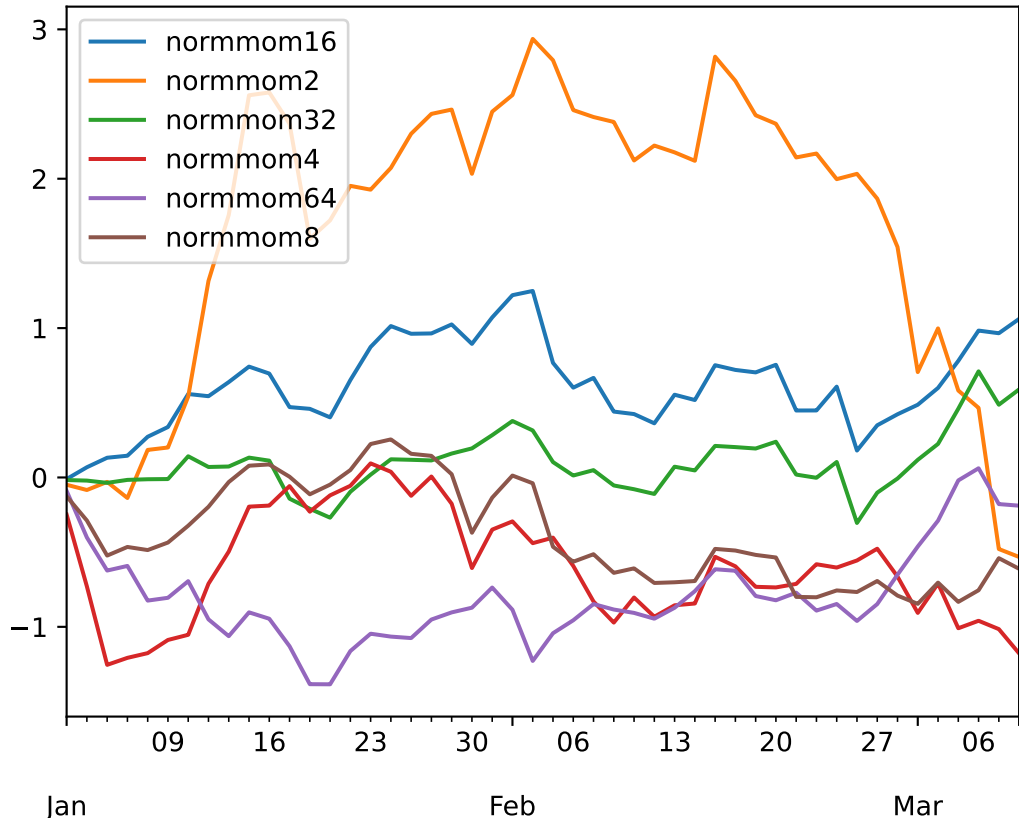


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 5.66, 'normmom2': -2.838, 'normmom32': 3.143, 'normmom4': -6.28, 'normmom64': -1.007, 'normmom8': -3.26}

ann. std {'normmom16': 2.548, 'normmom2': 5.645, 'normmom32': 2.073, 'normmom4': 3.142, 'normmom64': 2.421, 'normmom8': 2.261}

ann. SR {'normmom16': 2.22, 'normmom2': -0.5, 'normmom32': 1.52, 'normmom4': -2.0, 'normmom64': -0.42, 'normmom8': -1.44}

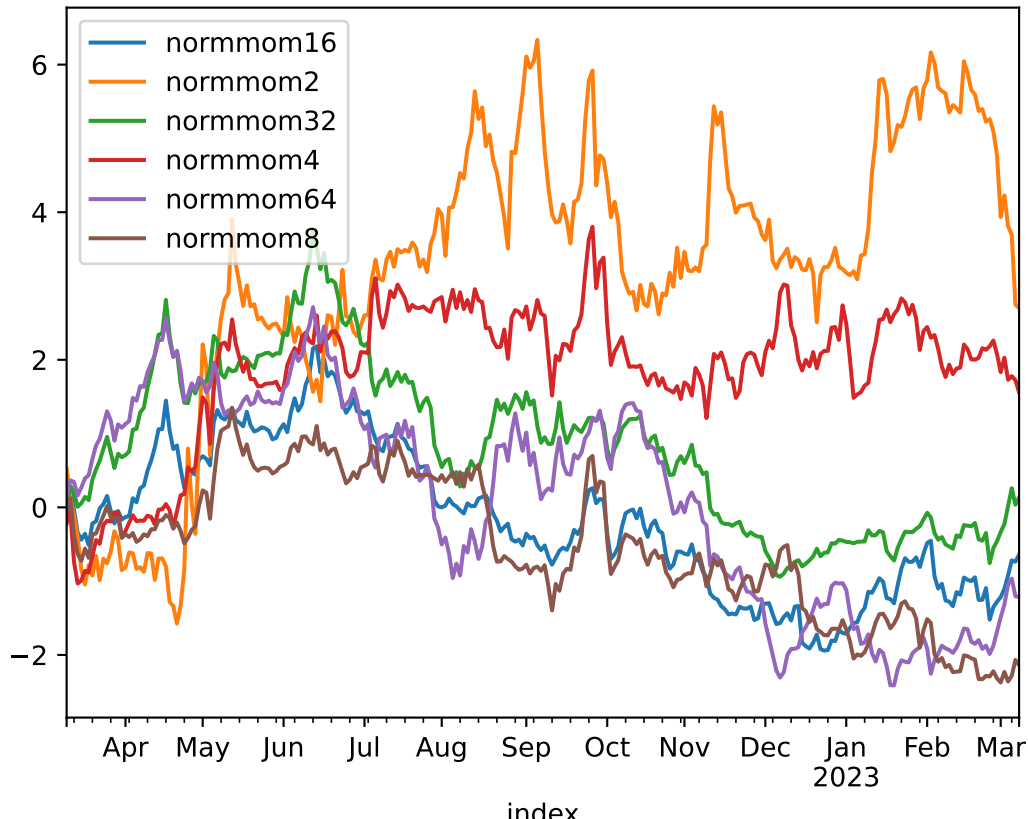


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -0.631, 'normmom2': 2.656, 'normmom32': 0.136, 'normmom4': 1.537, 'normmom64': -1.197, 'normmom8': -2.105}

ann. std {'normmom16': 2.485, 'normmom2': 6.32, 'normmom32': 2.706, 'normmom4': 3.856, 'normmom64': 3.103, 'normmom8': 2.761}

ann. SR {'normmom16': -0.25, 'normmom2': 0.42, 'normmom32': 0.05, 'normmom4': 0.4, 'normmom64': -0.39, 'normmom8': -0.76}

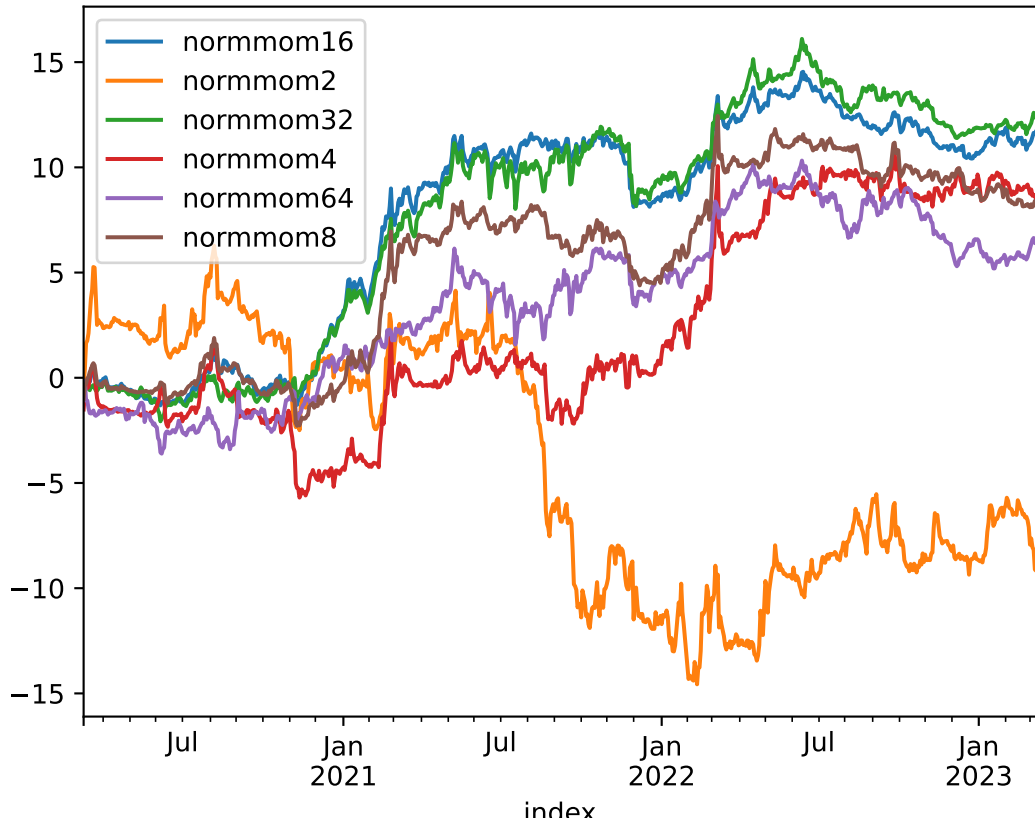


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.836, 'normmom2': -3.002, 'normmom32': 4.083, 'normmom4': 2.777, 'normmom64': 2.093, 'normmom8': 2.729}

ann. std {'normmom16': 3.531, 'normmom2': 7.679, 'normmom32': 3.895, 'normmom4': 5.363, 'normmom64': 4.142, 'normmom8': 3.98}

ann. SR {'normmom16': 1.09, 'normmom2': -0.39, 'normmom32': 1.05, 'normmom4': 0.52, 'normmom64': 0.51, 'normmom8': 0.69}

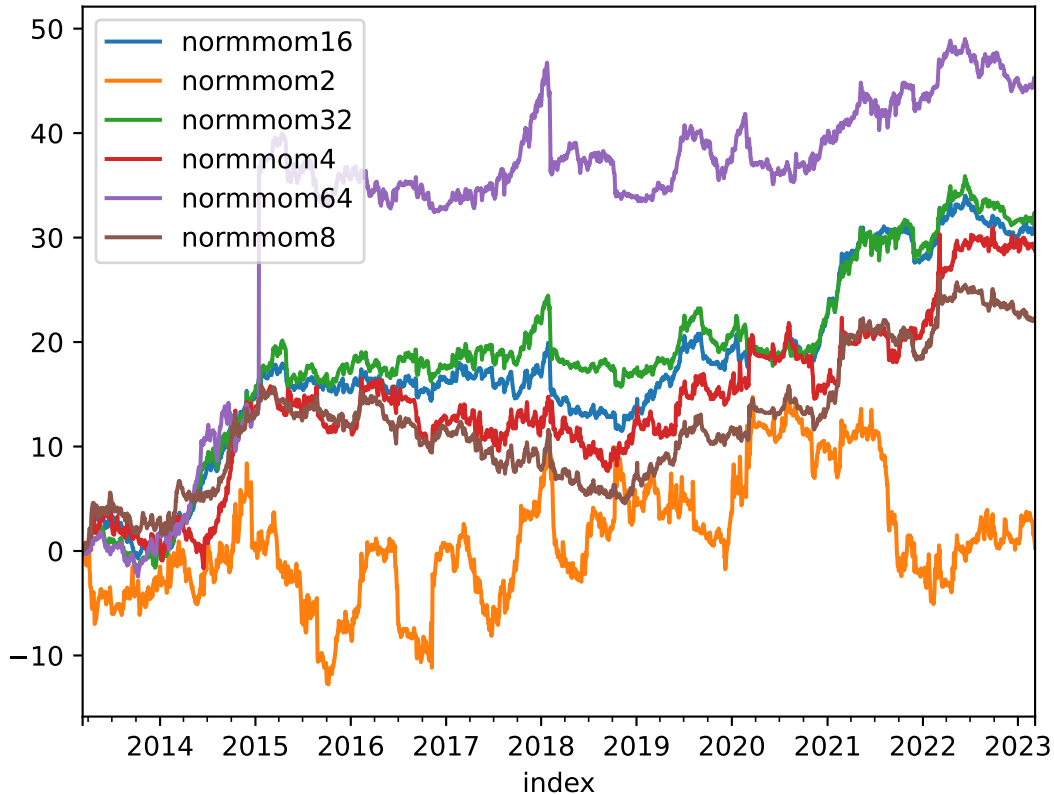


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 3.062, 'normmom2': 0.03, 'normmom32': 3.166, 'normmom4': 2.82, 'normmom64': 4.426, 'normmom8': 2.184}

ann. std {'normmom16': 3.548, 'normmom2': 8.975, 'normmom32': 3.697, 'normmom4': 5.459, 'normmom64': 8.48, 'normmom8': 4.016}

ann. SR {'normmom16': 0.86, 'normmom2': 0.0, 'normmom32': 0.86, 'normmom4': 0.52, 'normmom64': 0.52, 'normmom8': 0.54}

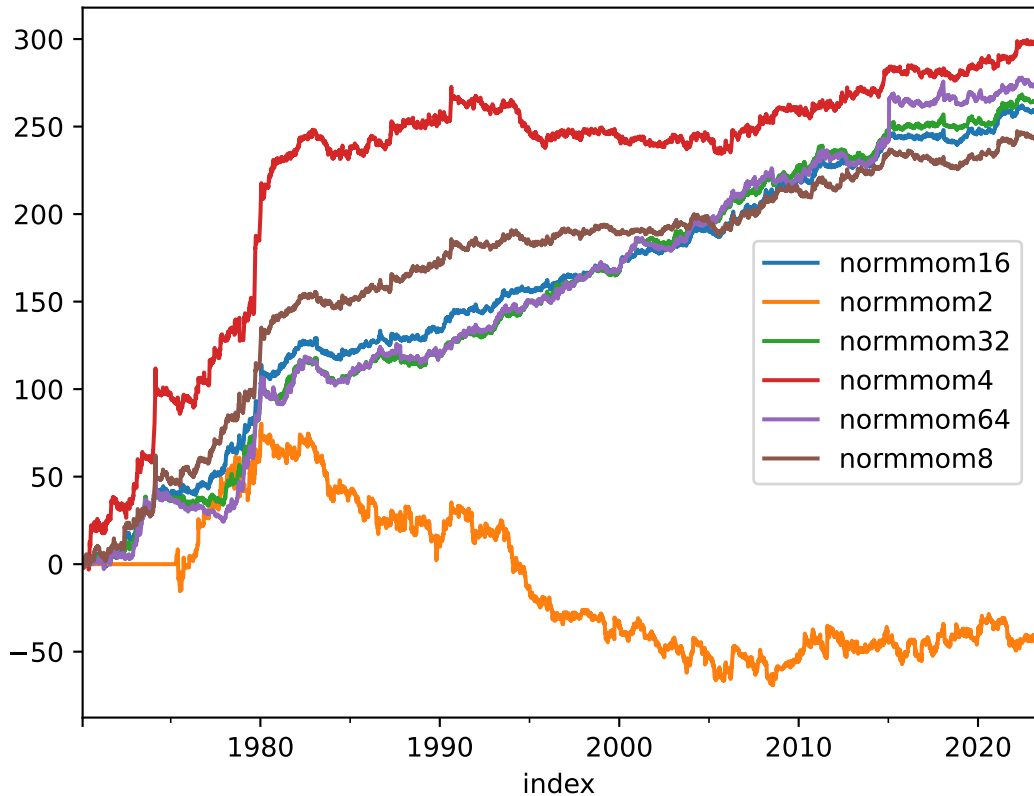


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.793, 'normmom2': -0.812, 'normmom32': 4.893, 'normmom4': 5.494, 'normmom64': 5.065, 'normmom8': 4.497}

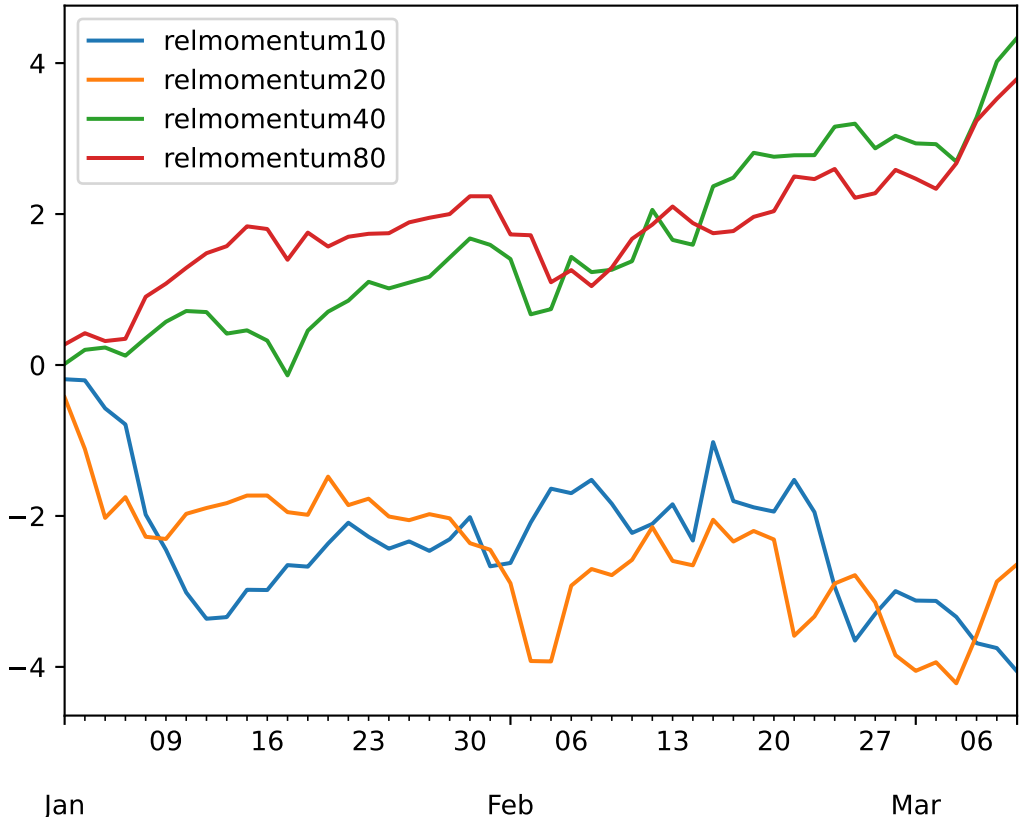
ann. std {'normmom16': 4.889, 'normmom2': 11.168, 'normmom32': 4.947, 'normmom4': 8.288, 'normmom64': 6.234, 'normmom8': 5.902}

ann. SR {'normmom16': 0.98, 'normmom2': -0.07, 'normmom32': 0.99, 'normmom4': 0.66, 'normmom64': 0.81, 'normmom8': 0.76}



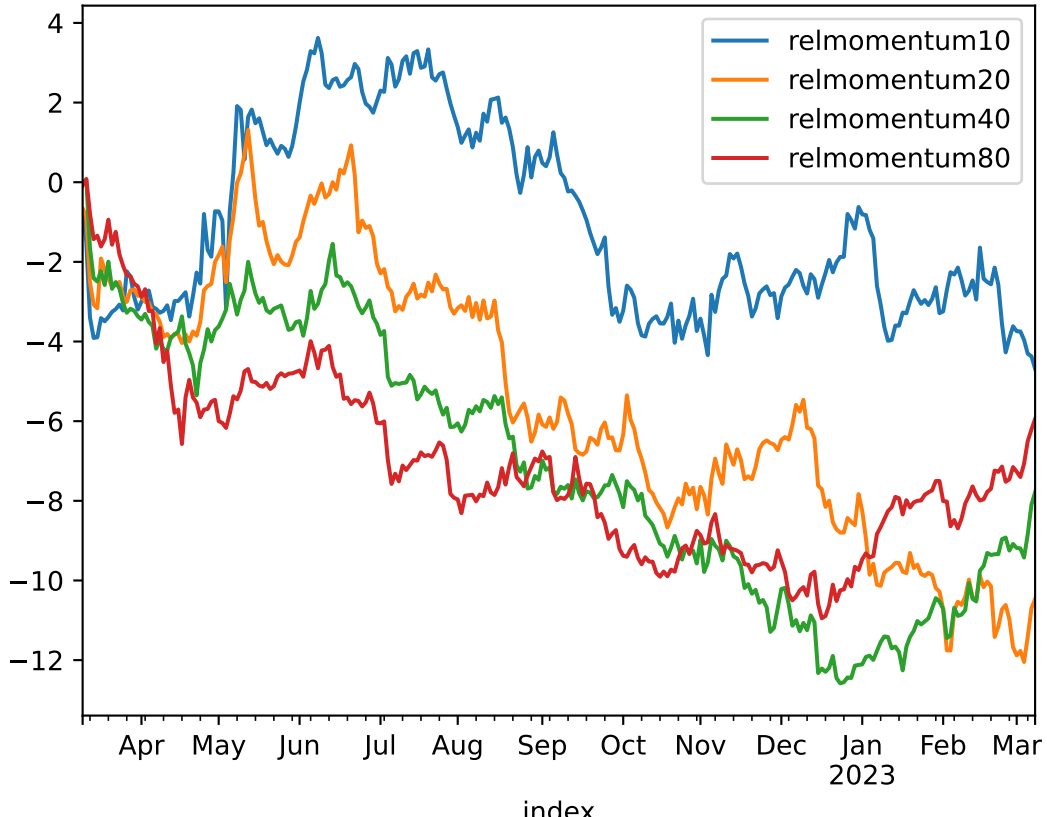
Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -21.658, 'relmomentum20': -14.083, 'relmomentum40': 23.114, 'relmomentum80': 20.221}
 ann. std {'relmomentum10': 6.903, 'relmomentum20': 7.121, 'relmomentum40': 4.972, 'relmomentum80': 4.013}
 ann. SR {'relmomentum10': -3.14, 'relmomentum20': -1.98, 'relmomentum40': 4.65, 'relmomentum80': 5.04}



Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -4.61, 'relmomentum20': -10.31, 'relmomentum40': -7.666, 'relmomentum80': -5.855}
ann. std {'relmomentum10': 8.125, 'relmomentum20': 6.732, 'relmomentum40': 5.61, 'relmomentum80': 5.158}
ann. SR {'relmomentum10': -0.57, 'relmomentum20': -1.53, 'relmomentum40': -1.37, 'relmomentum80': -1.14}

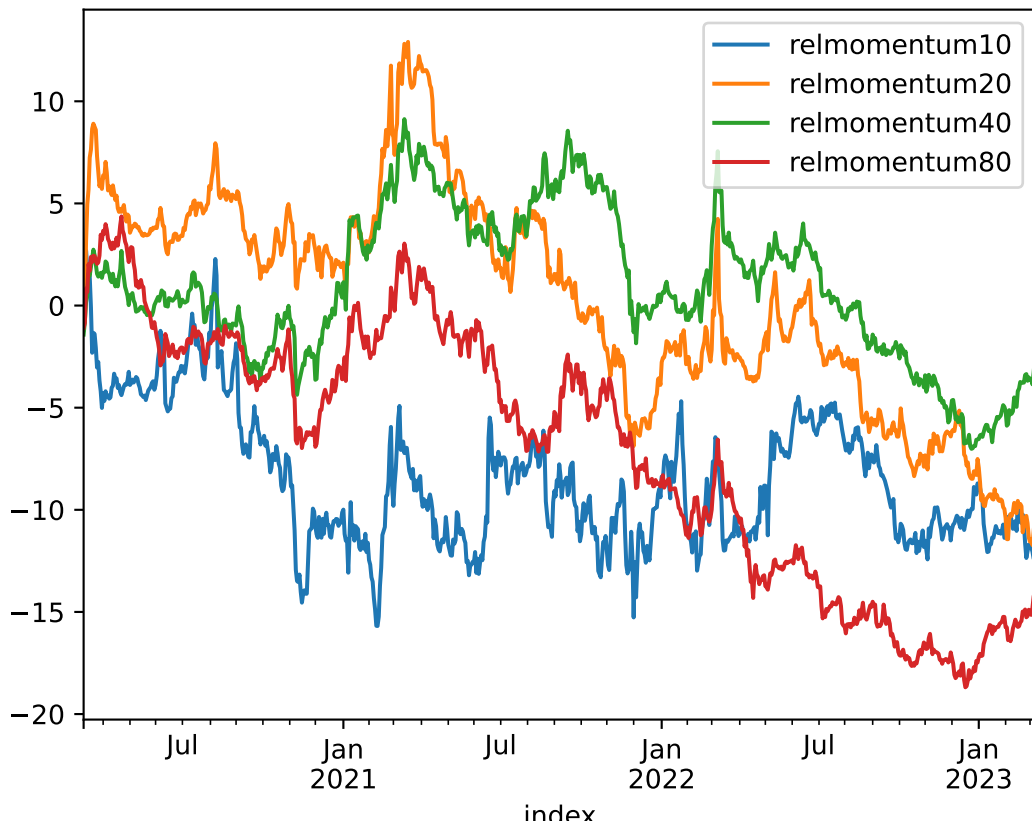


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -4.18, 'relmomentum20': -3.324, 'relmomentum40': -0.726, 'relmomentum80': -4.48}

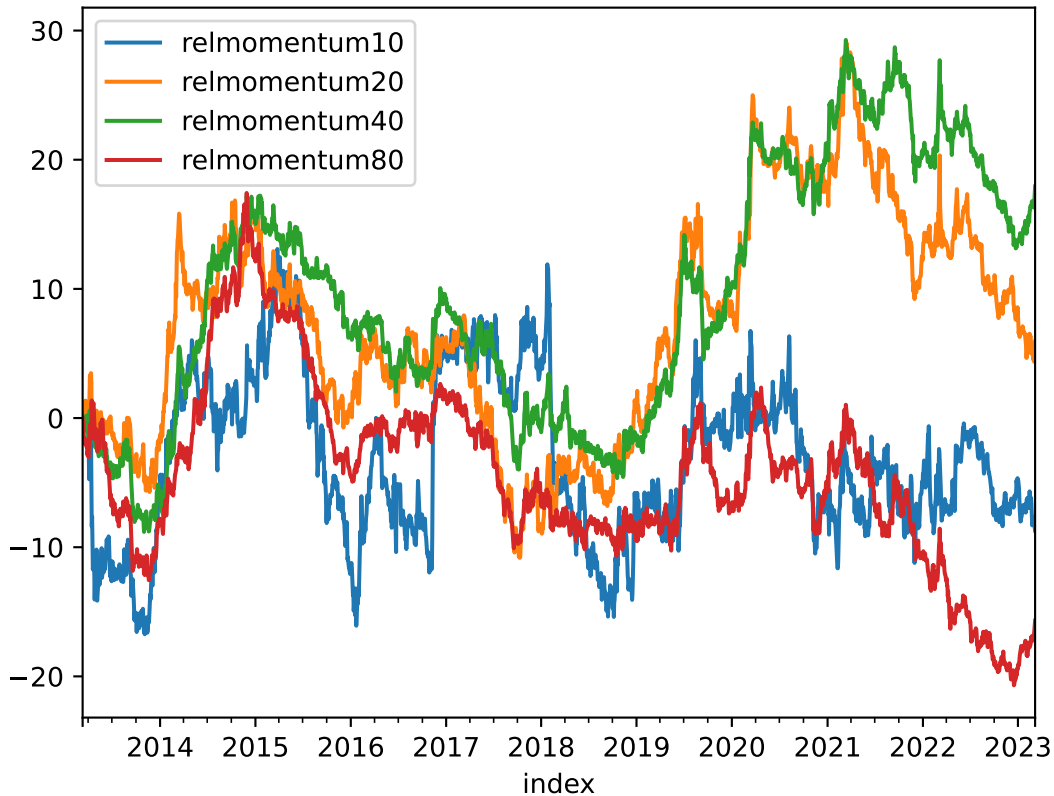
ann. std {'relmomentum10': 11.602, 'relmomentum20': 8.876, 'relmomentum40': 7.091, 'relmomentum80': 6.704}

ann. SR {'relmomentum10': -0.36, 'relmomentum20': -0.37, 'relmomentum40': -0.1, 'relmomentum80': -0.67}



Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -0.855, 'relmomentum20': 0.583, 'relmomentum40': 1.76, 'relmomentum80': -1.54}
ann. std {'relmomentum10': 12.908, 'relmomentum20': 8.909, 'relmomentum40': 7.249, 'relmomentum80': 6.675}
ann. SR {'relmomentum10': -0.07, 'relmomentum20': 0.07, 'relmomentum40': 0.24, 'relmomentum80': -0.23}

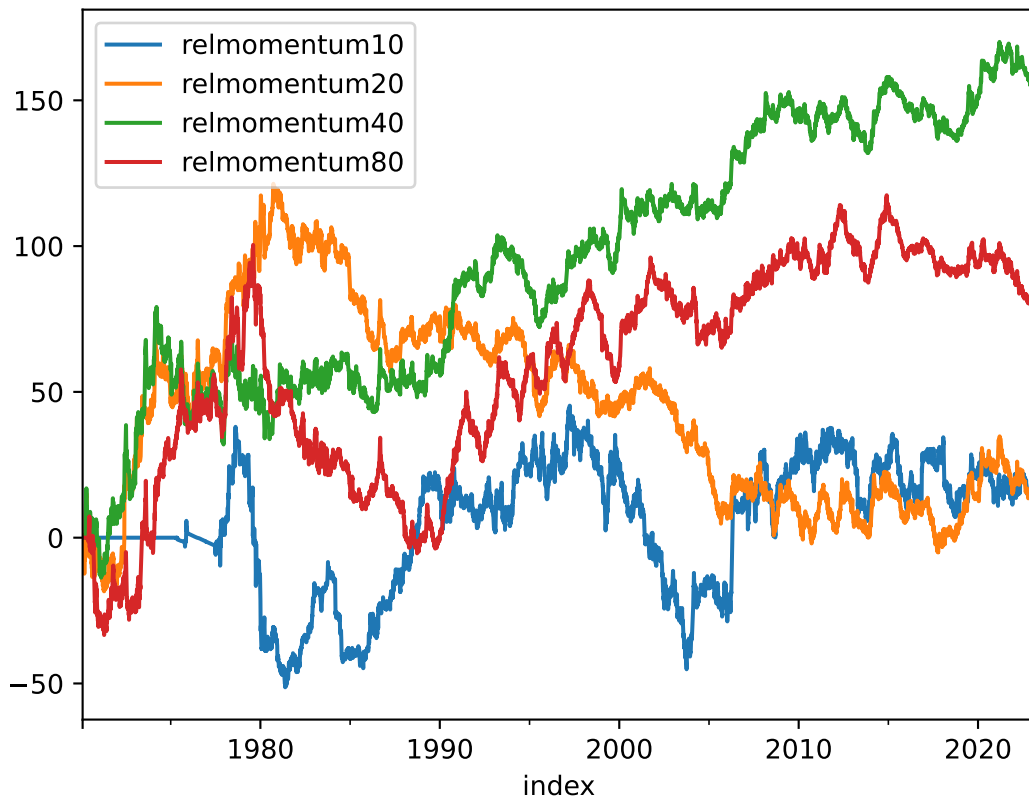


Total Trading Rule P&L for period '99Y'

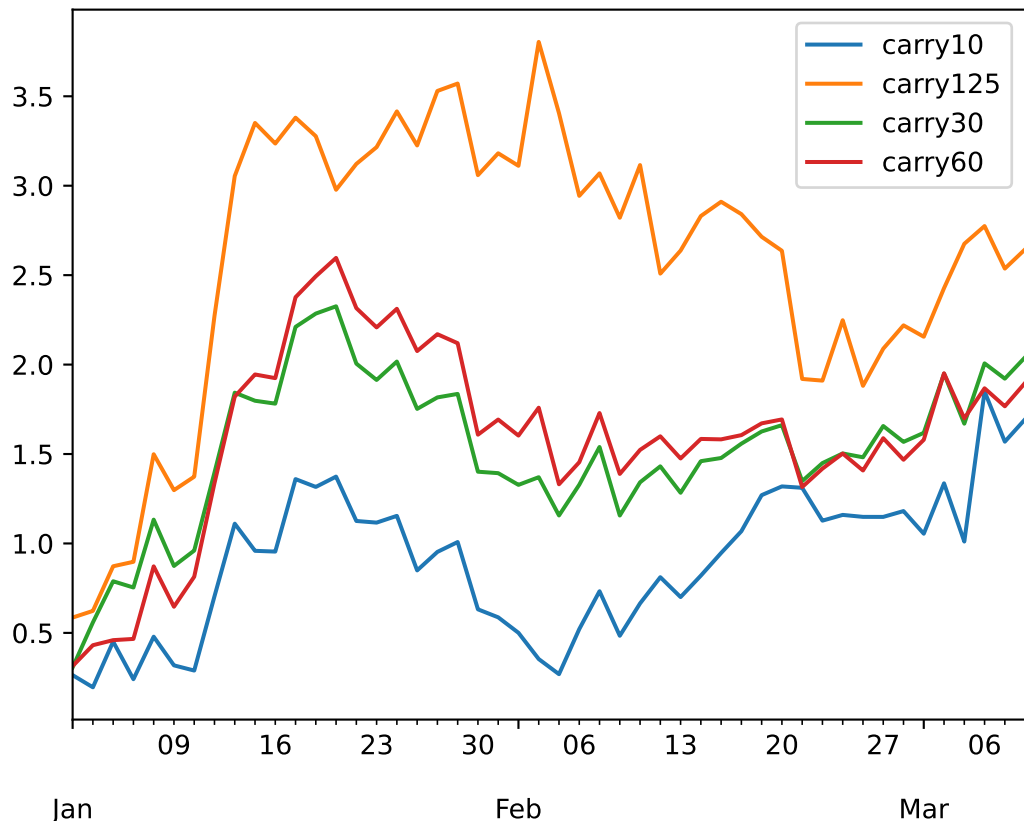
ann. mean {'relmomentum10': 0.255, 'relmomentum20': 0.216, 'relmomentum40': 2.933, 'relmomentum80': 1.559}

ann. std {'relmomentum10': 13.4, 'relmomentum20': 11.5, 'relmomentum40': 10.778, 'relmomentum80': 11.046}

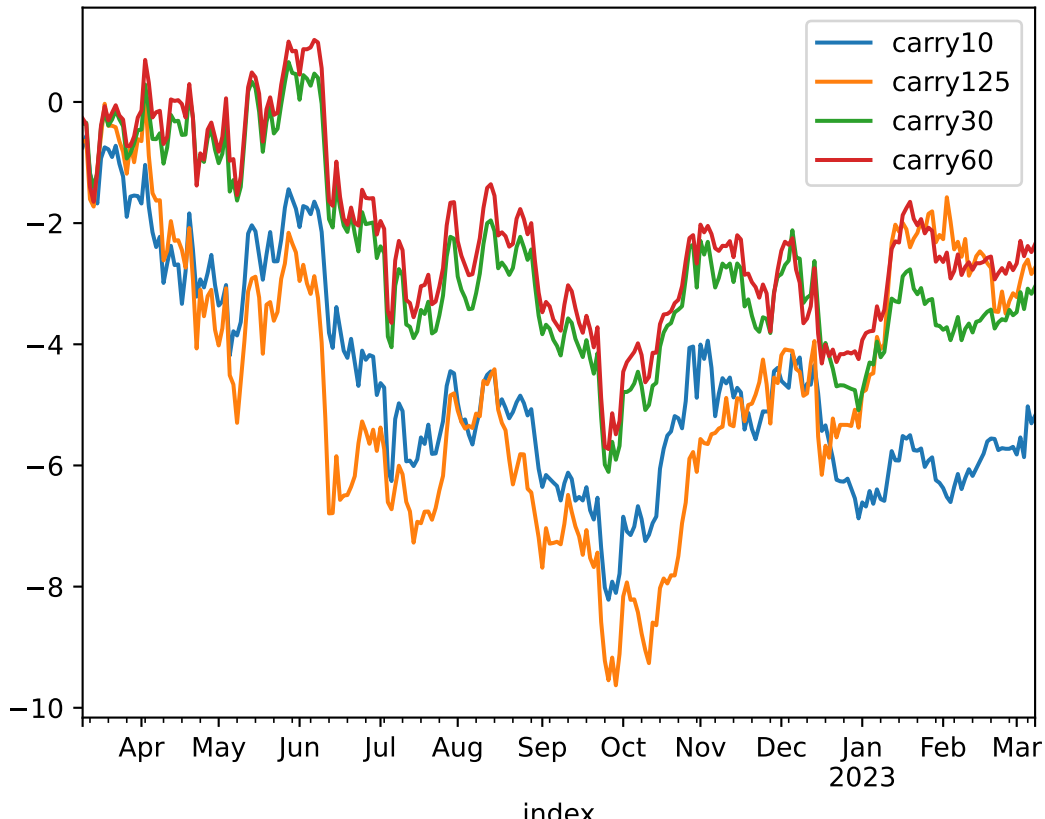
ann. SR {'relmomentum10': 0.02, 'relmomentum20': 0.02, 'relmomentum40': 0.27, 'relmomentum80': 0.14}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 9.036, 'carry125': 14.103, 'carry30': 10.884, 'carry60': 10.12}
ann. std {'carry10': 3.652, 'carry125': 5.376, 'carry30': 3.437, 'carry60': 3.644}
ann. SR {'carry10': 2.47, 'carry125': 2.62, 'carry30': 3.17, 'carry60': 2.78}

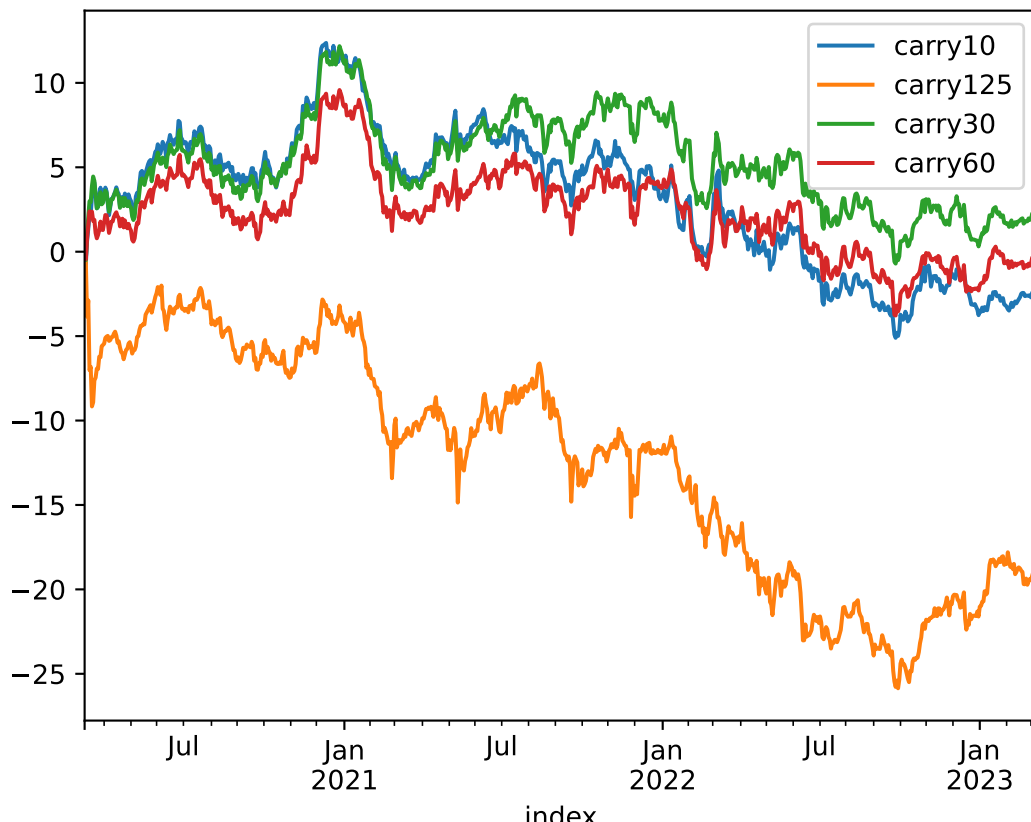


Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -5.1, 'carry125': -2.69, 'carry30': -3.001, 'carry60': -2.311}
ann. std {'carry10': 5.947, 'carry125': 7.098, 'carry30': 5.866, 'carry60': 6.078}
ann. SR {'carry10': -0.86, 'carry125': -0.38, 'carry30': -0.51, 'carry60': -0.38}

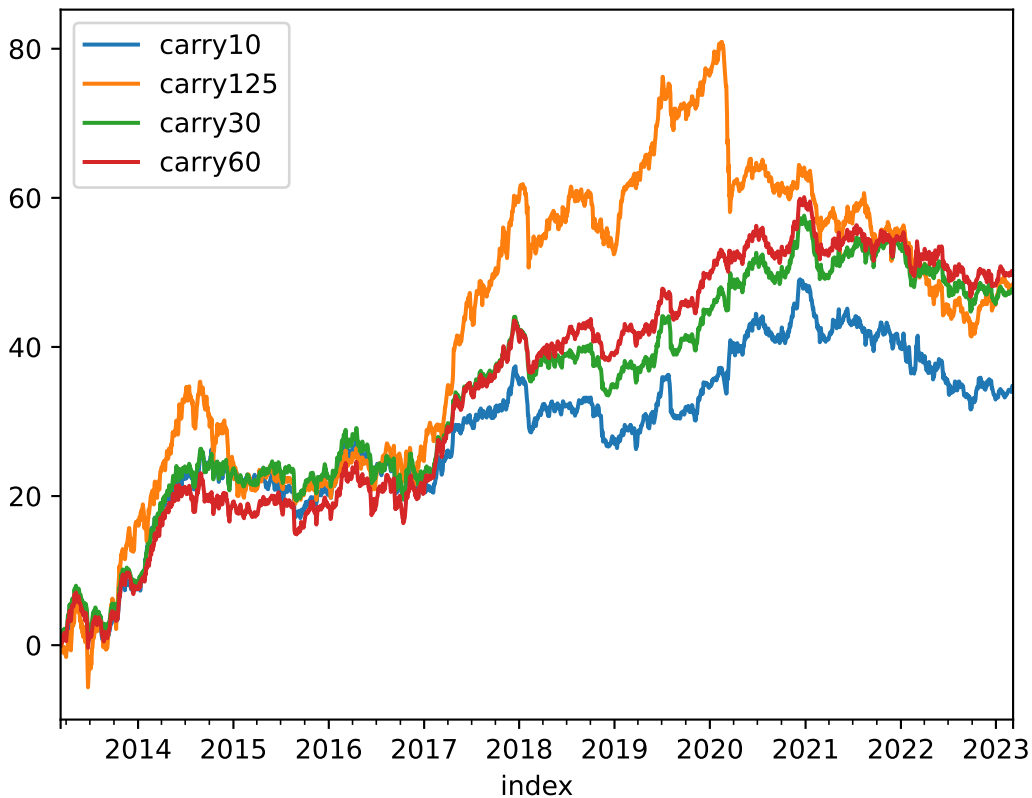


Total Trading Rule P&L for period '3Y'

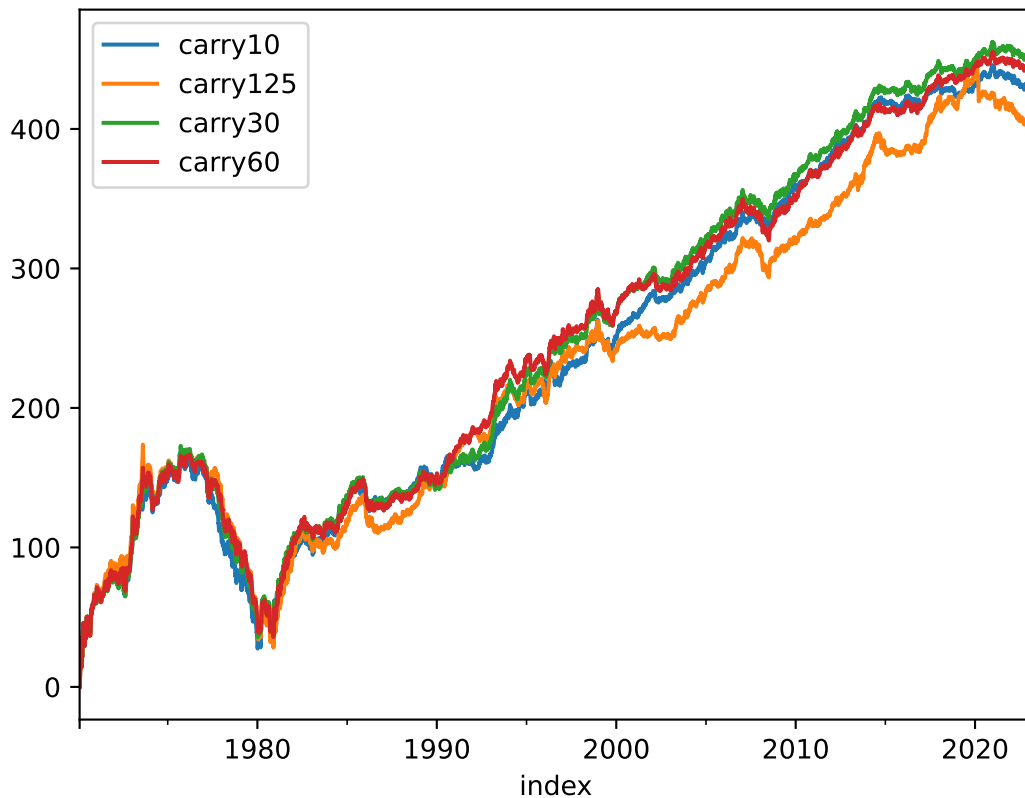
| | |
|-----------|---|
| ann. mean | {'carry10': -0.676, 'carry125': -6.208, 'carry30': 0.771, 'carry60': -0.13} |
| ann. std | {'carry10': 6.632, 'carry125': 8.803, 'carry30': 6.556, 'carry60': 6.509} |
| ann. SR | {'carry10': -0.1, 'carry125': -0.71, 'carry30': 0.12, 'carry60': -0.02} |



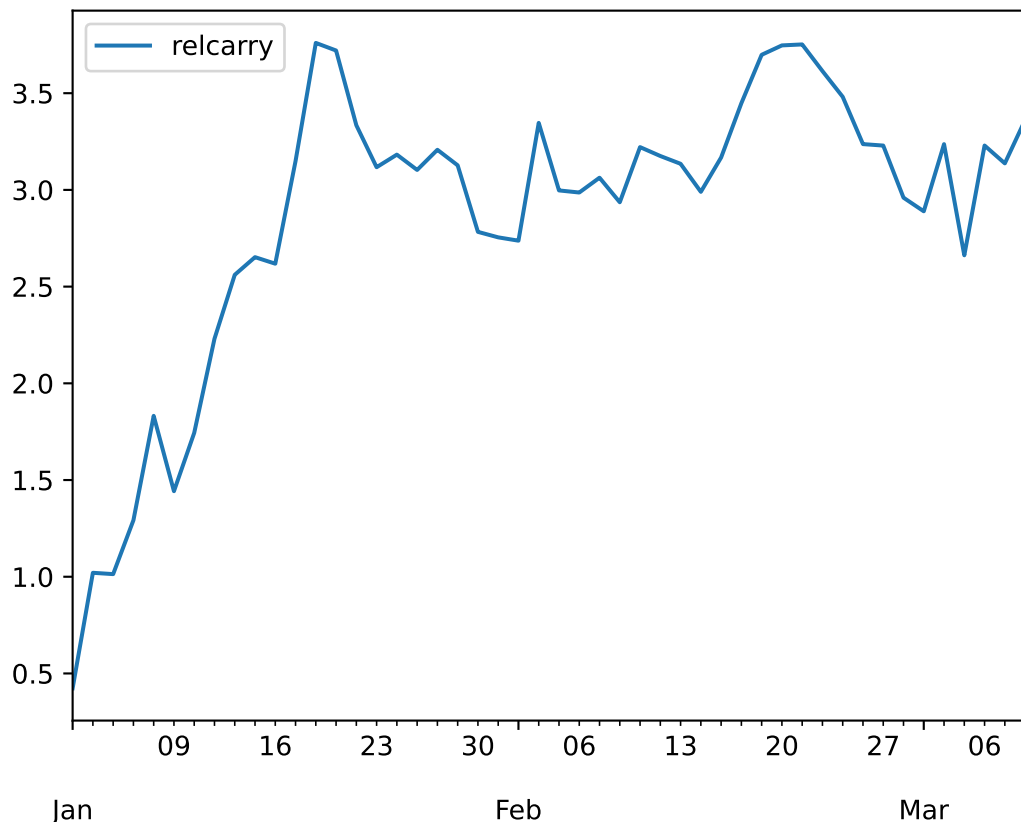
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.401, 'carry125': 4.741, 'carry30': 4.692, 'carry60': 4.92}
ann. std {'carry10': 6.38, 'carry125': 9.233, 'carry30': 6.488, 'carry60': 6.455}
ann. SR {'carry10': 0.53, 'carry125': 0.51, 'carry30': 0.72, 'carry60': 0.76}



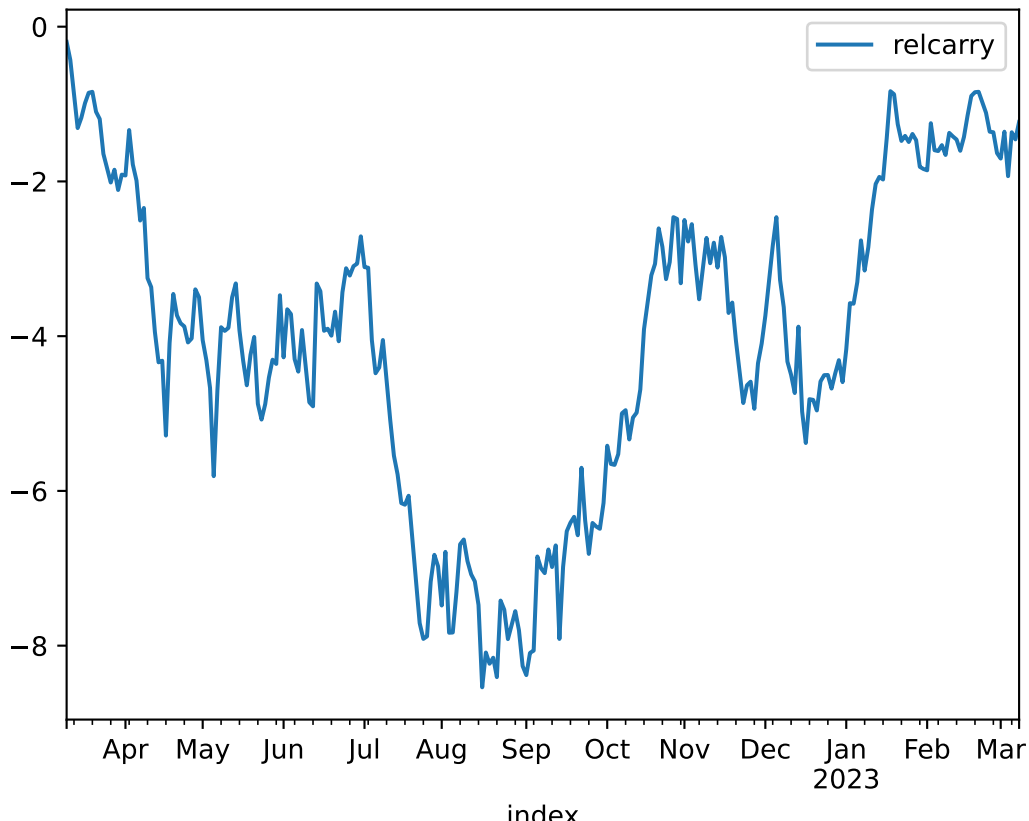
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.968, 'carry125': 7.578, 'carry30': 8.364, 'carry60': 8.226}
ann. std {'carry10': 11.893, 'carry125': 12.171, 'carry30': 11.912, 'carry60': 11.867}
ann. SR {'carry10': 0.67, 'carry125': 0.62, 'carry30': 0.7, 'carry60': 0.69}



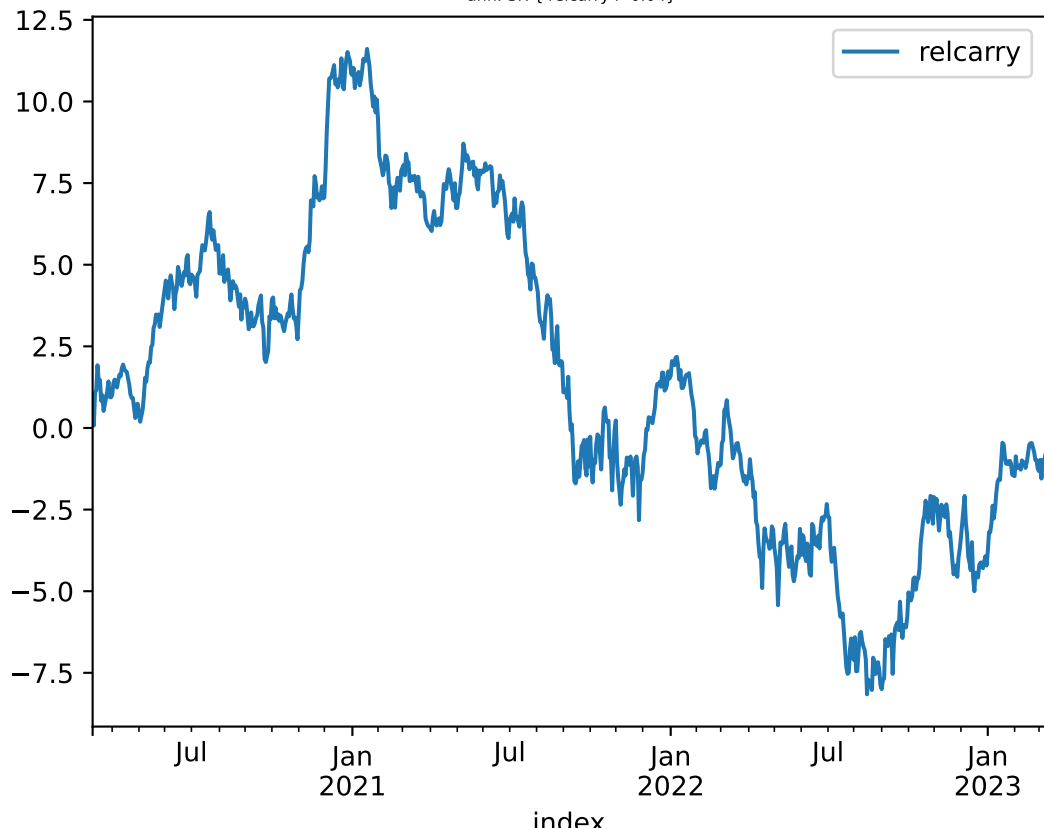
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 17.929}
ann. std {'relcarry': 4.708}
ann. SR {'relcarry': 3.81}



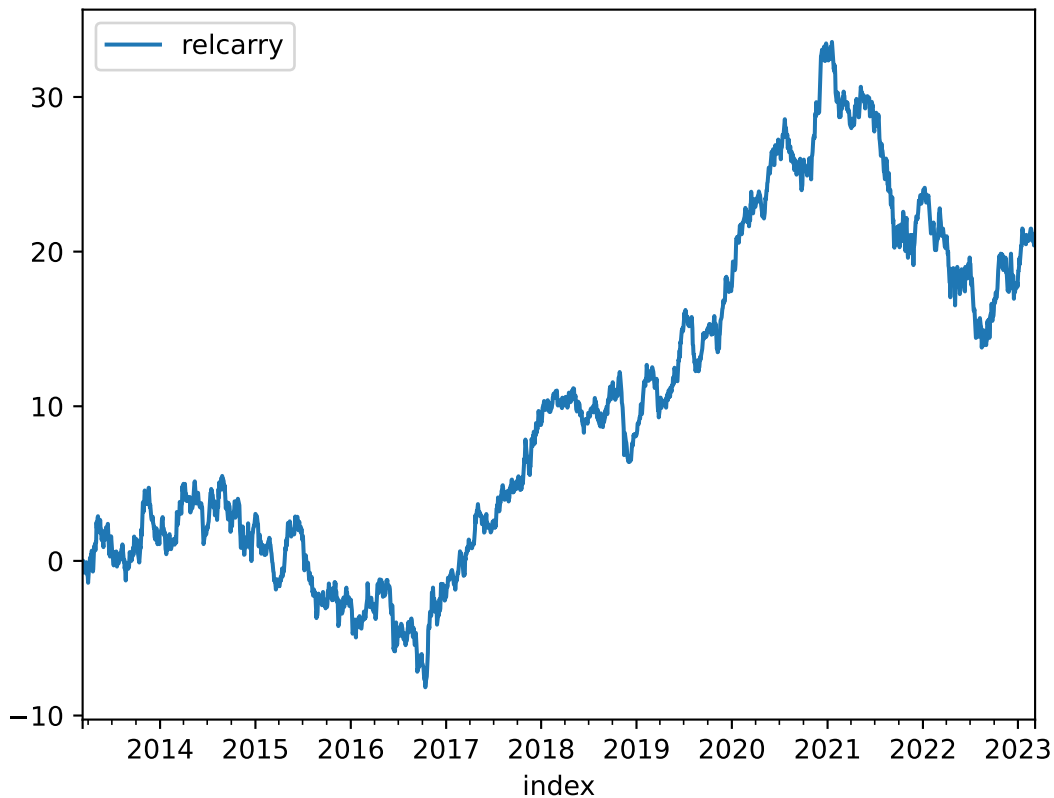
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': -1.213}
ann. std {'relcarry': 7.1}
ann. SR {'relcarry': -0.17}



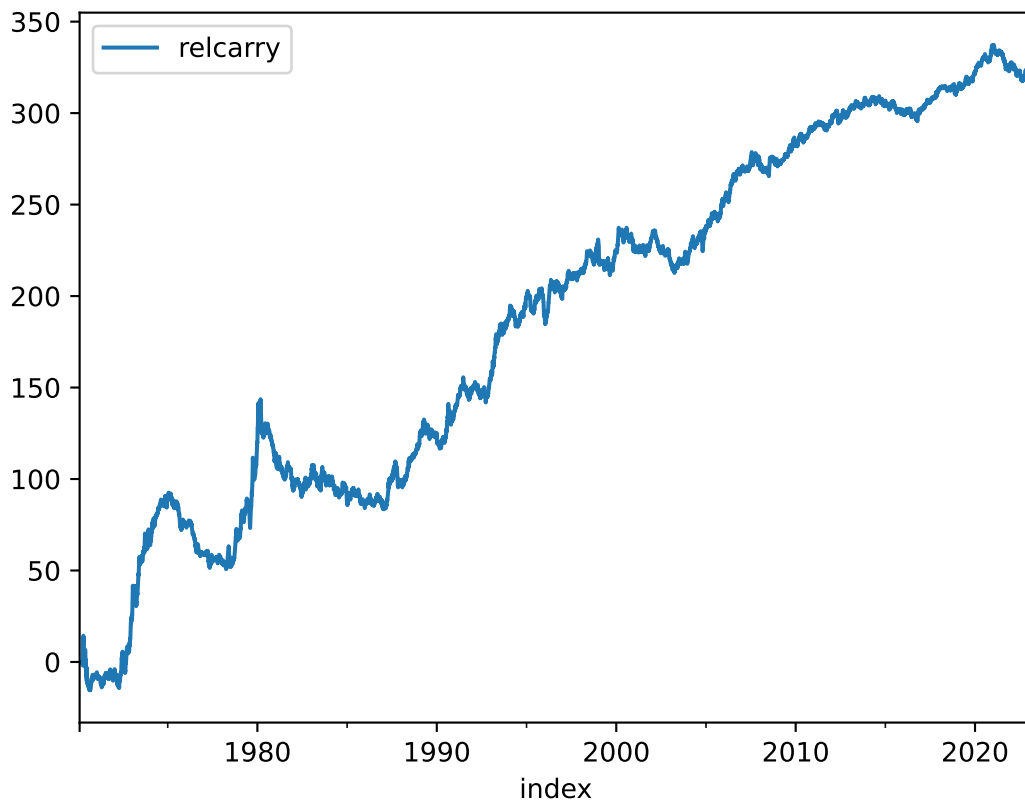
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -0.279}
ann. std {'relcarry': 6.786}
ann. SR {'relcarry': -0.04}



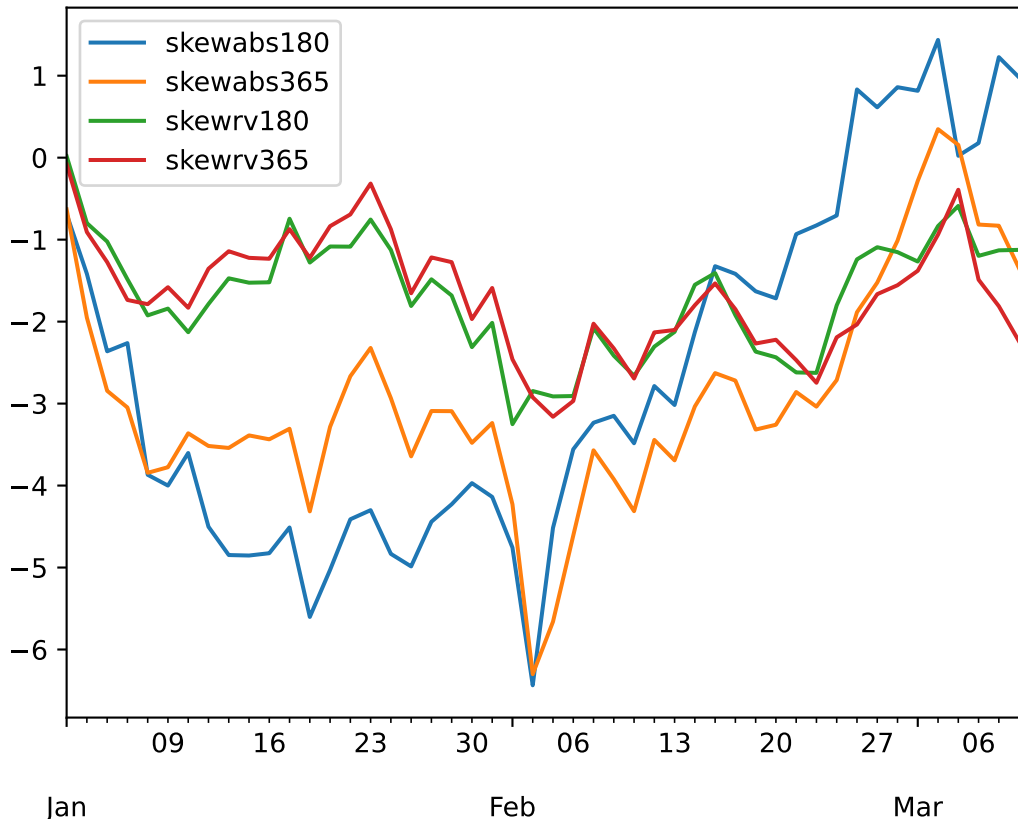
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.071}
ann. std {'relcarry': 5.992}
ann. SR {'relcarry': 0.35}



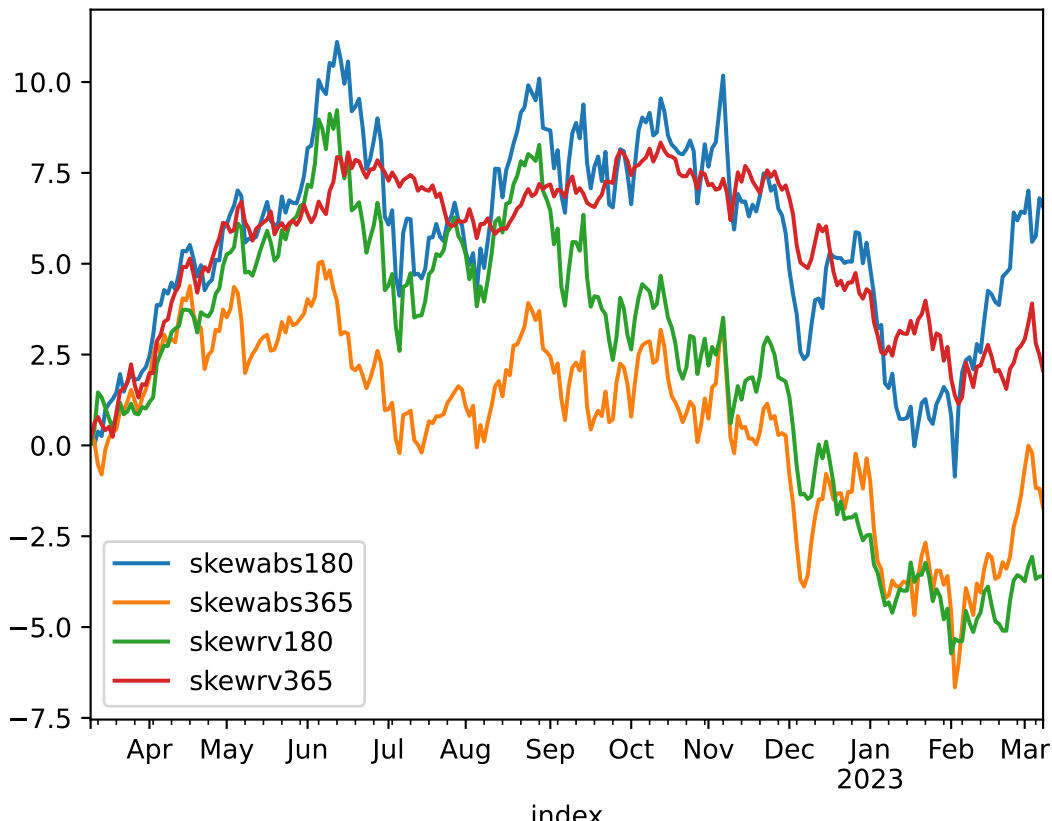
Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 6.003}
ann. std {'relcarry': 9.975}
ann. SR {'relcarry': 0.6}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': 5.219, 'skewabs365': -7.201, 'skewrv180': -5.998, 'skewrv365': -11.956}
ann. std {'skewabs180': 11.69, 'skewabs365': 10.767, 'skewrv180': 6.963, 'skewrv365': 7.08}
ann. SR {'skewabs180': 0.45, 'skewabs365': -0.67, 'skewrv180': -0.86, 'skewrv365': -1.69}



Total Trading Rule P&L for period '1Y'
ann. mean {'skewabs180': 6.455, 'skewabs365': -1.681, 'skewrv180': -3.546, 'skewrv365': 2.026}
ann. std {'skewabs180': 10.574, 'skewabs365': 9.028, 'skewrv180': 8.985, 'skewrv365': 5.357}
ann. SR {'skewabs180': 0.61, 'skewabs365': -0.19, 'skewrv180': -0.39, 'skewrv365': 0.38}

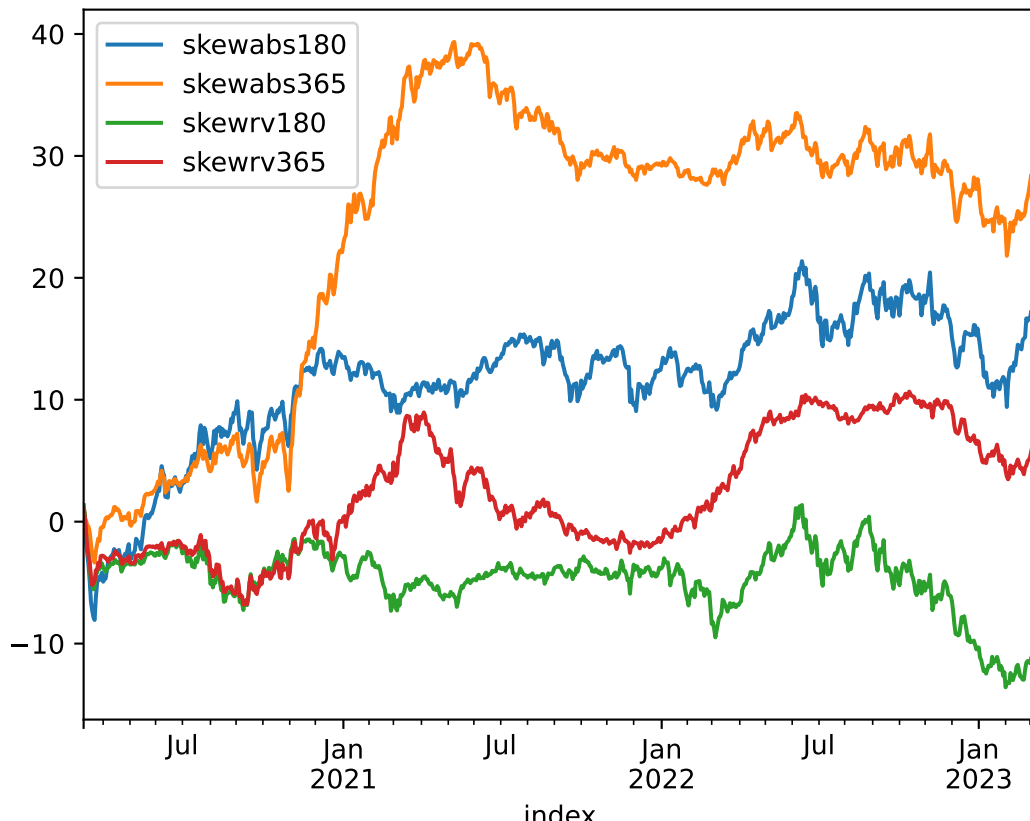


Total Trading Rule P&L for period '3Y'

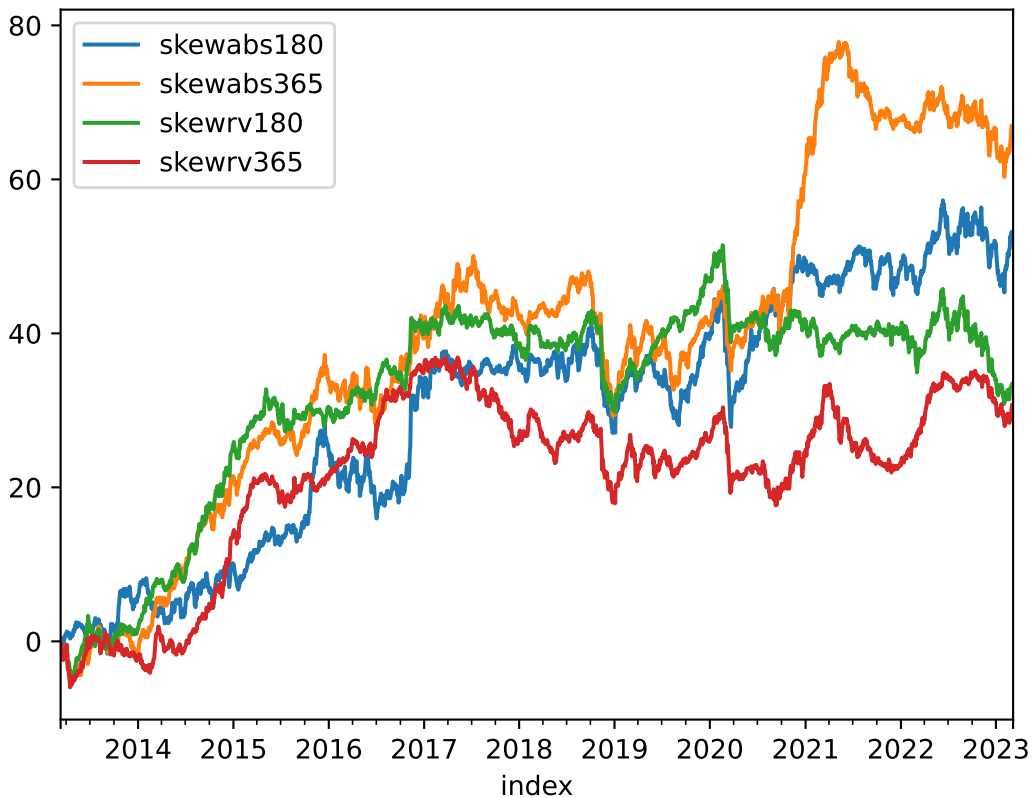
ann. mean {'skewabs180': 5.507, 'skewabs365': 8.76, 'skewrv180': -3.752, 'skewrv365': 1.438}

ann. std {'skewabs180': 9.39, 'skewabs365': 8.812, 'skewrv180': 7.455, 'skewrv365': 6.476}

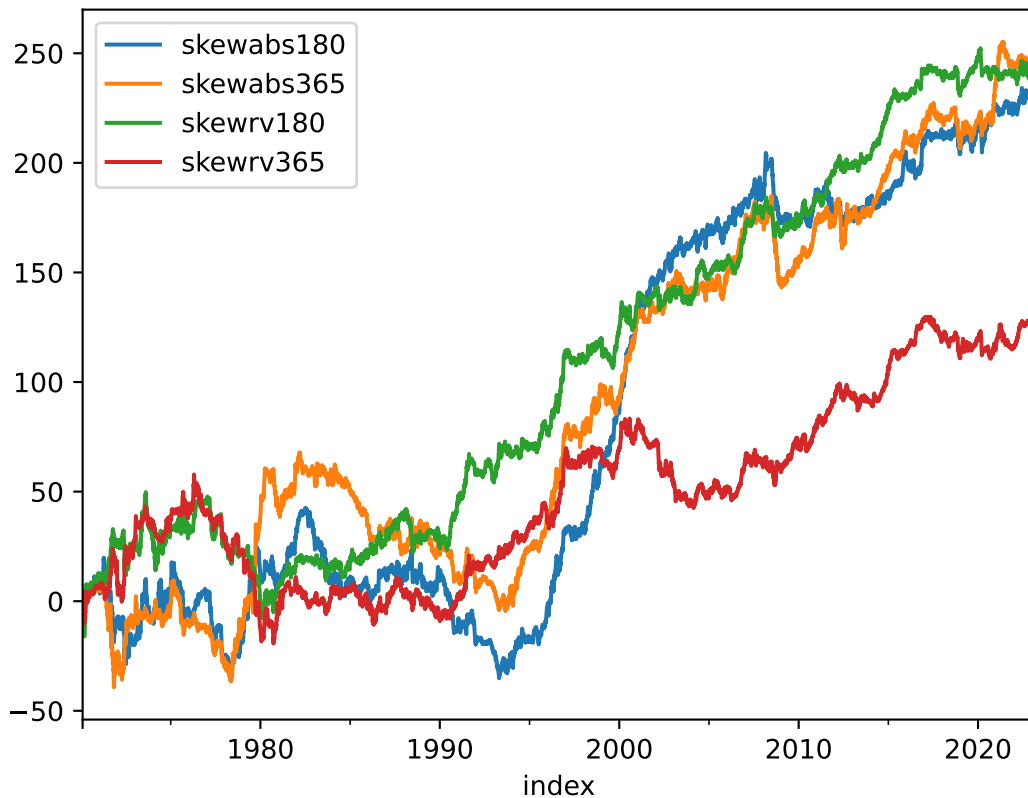
ann. SR {'skewabs180': 0.59, 'skewabs365': 0.99, 'skewrv180': -0.5, 'skewrv365': 0.22}



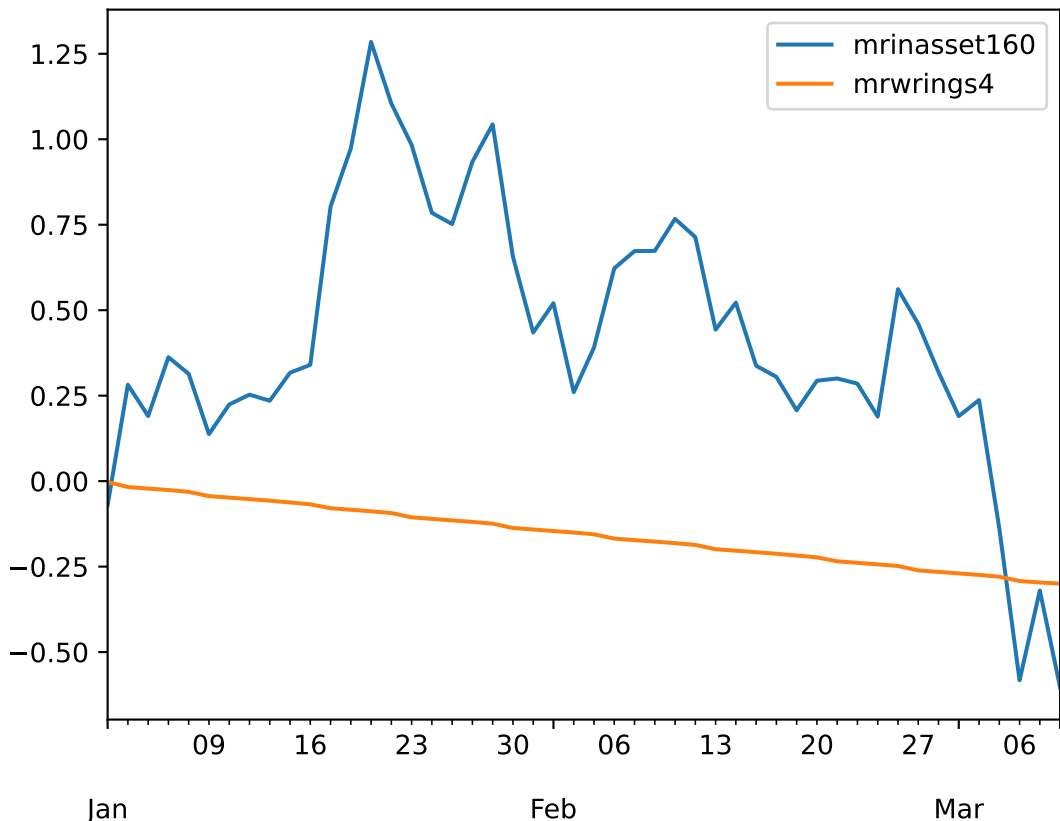
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 5.176, 'skewabs365': 6.406, 'skewrv180': 3.234, 'skewrv365': 2.835}
ann. std {'skewabs180': 8.098, 'skewabs365': 8.026, 'skewrv180': 6.558, 'skewrv365': 6.155}
ann. SR {'skewabs180': 0.64, 'skewabs365': 0.8, 'skewrv180': 0.49, 'skewrv365': 0.46}



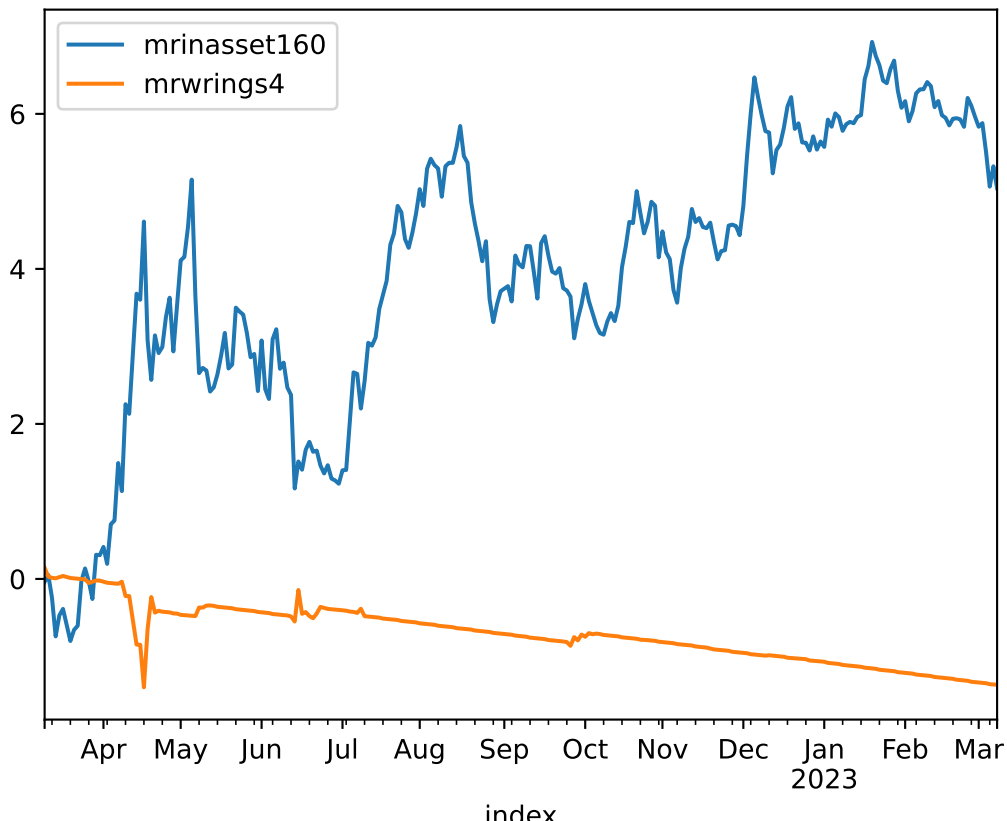
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.244, 'skewabs365': 4.483, 'skewrv180': 4.321, 'skewrv365': 2.251}
ann. std {'skewabs180': 10.78, 'skewabs365': 10.239, 'skewrv180': 9.449, 'skewrv365': 8.742}
ann. SR {'skewabs180': 0.39, 'skewabs365': 0.44, 'skewrv180': 0.46, 'skewrv365': 0.26}



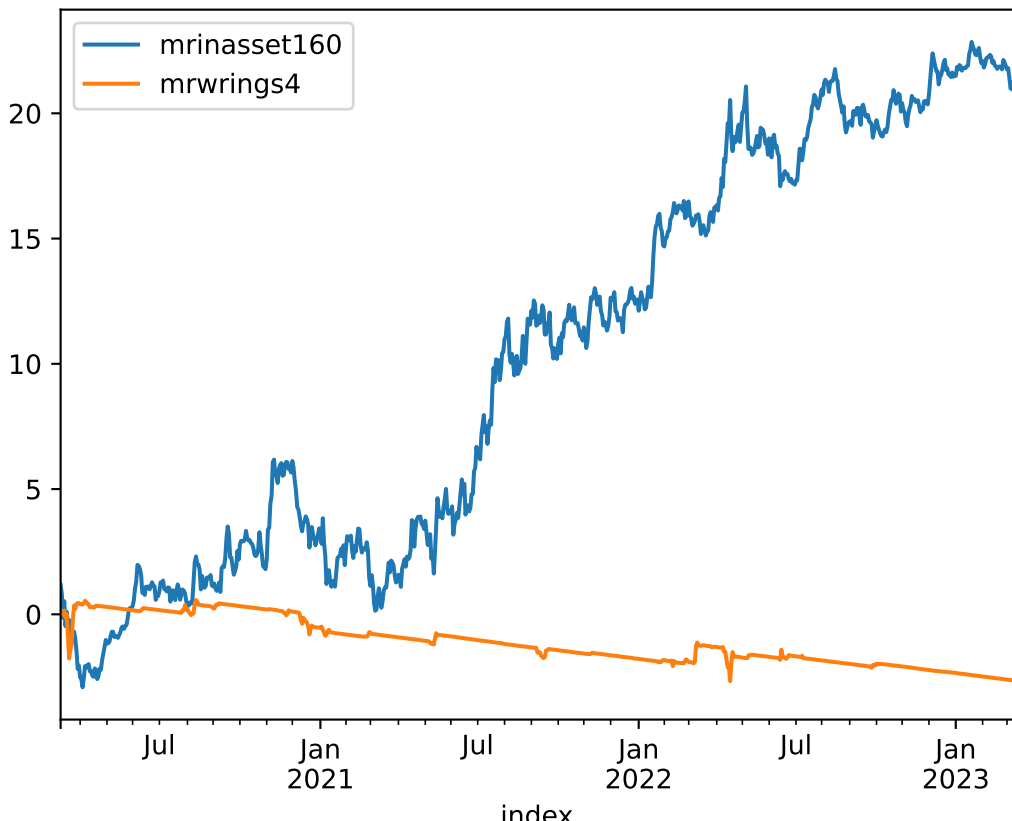
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': -3.216, 'mrwrings4': -1.599}
ann. std {'mrinasset160': 3.181, 'mrwrings4': 0.053}
ann. SR {'mrinasset160': -1.01, 'mrwrings4': -29.93}



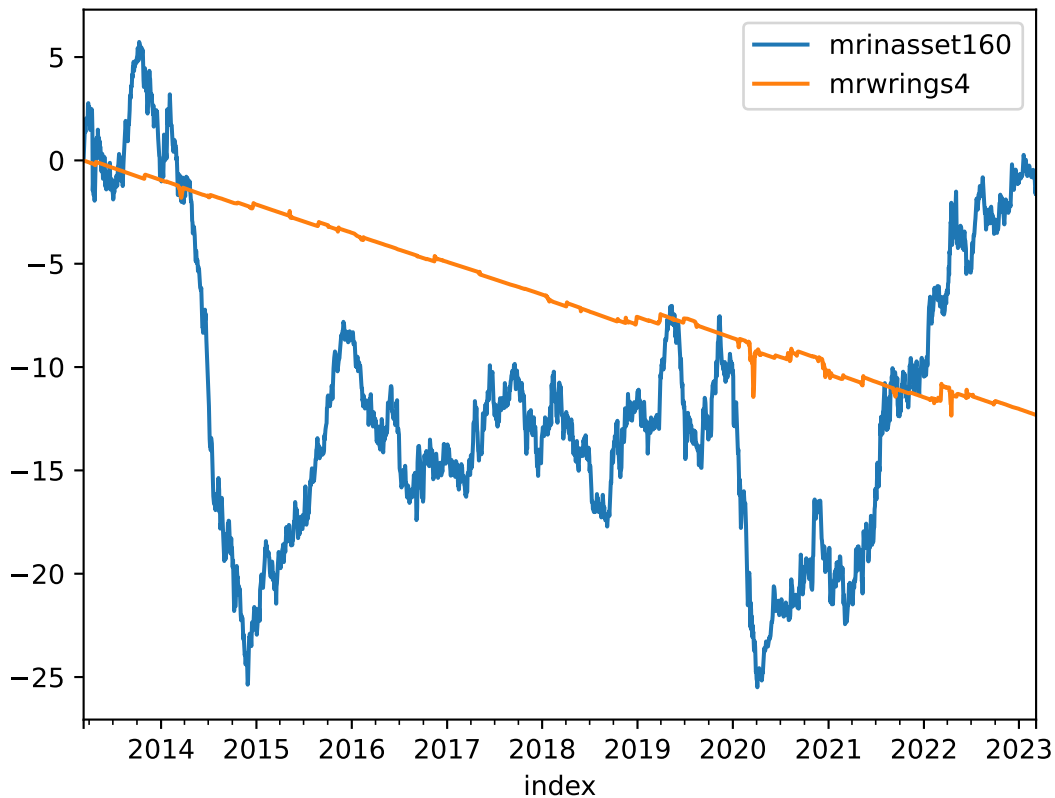
Total Trading Rule P&L for period '1Y'
ann. mean {'mriasset160': 4.963, 'mrwrings4': -1.345}
ann. std {'mriasset160': 5.592, 'mrwrings4': 1.289}
ann. SR {'mriasset160': 0.89, 'mrwrings4': -1.04}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 6.863, 'mrwrings4': -0.863}
ann. std {'mrinasset160': 6.474, 'mrwrings4': 1.475}
ann. SR {'mrinasset160': 1.06, 'mrwrings4': -0.59}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.159, 'mrwrings4': -1.209}
ann. std {'mrinasset160': 6.492, 'mrwrings4': 0.898}
ann. SR {'mrinasset160': -0.02, 'mrwrings4': -1.35}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.15, 'mrwrings4': -2.323}
ann. std {'mrinasset160': 11.149, 'mrwrings4': 2.616}
ann. SR {'mrinasset160': -0.28, 'mrwrings4': -0.89}

