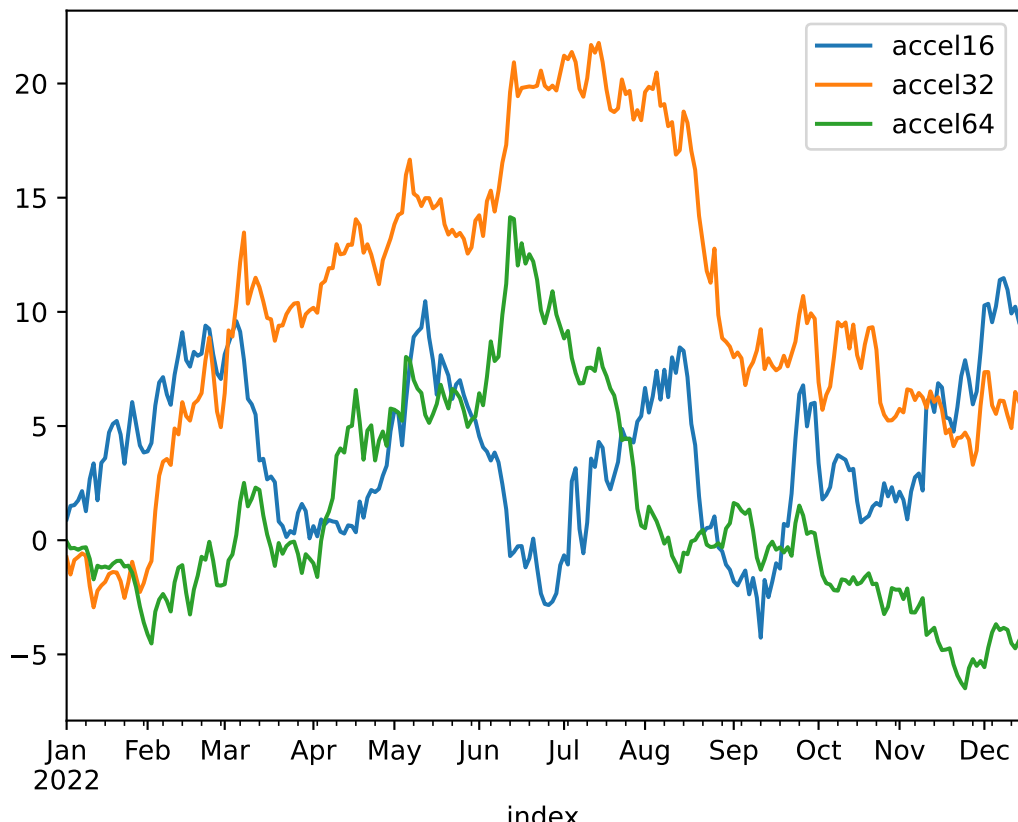
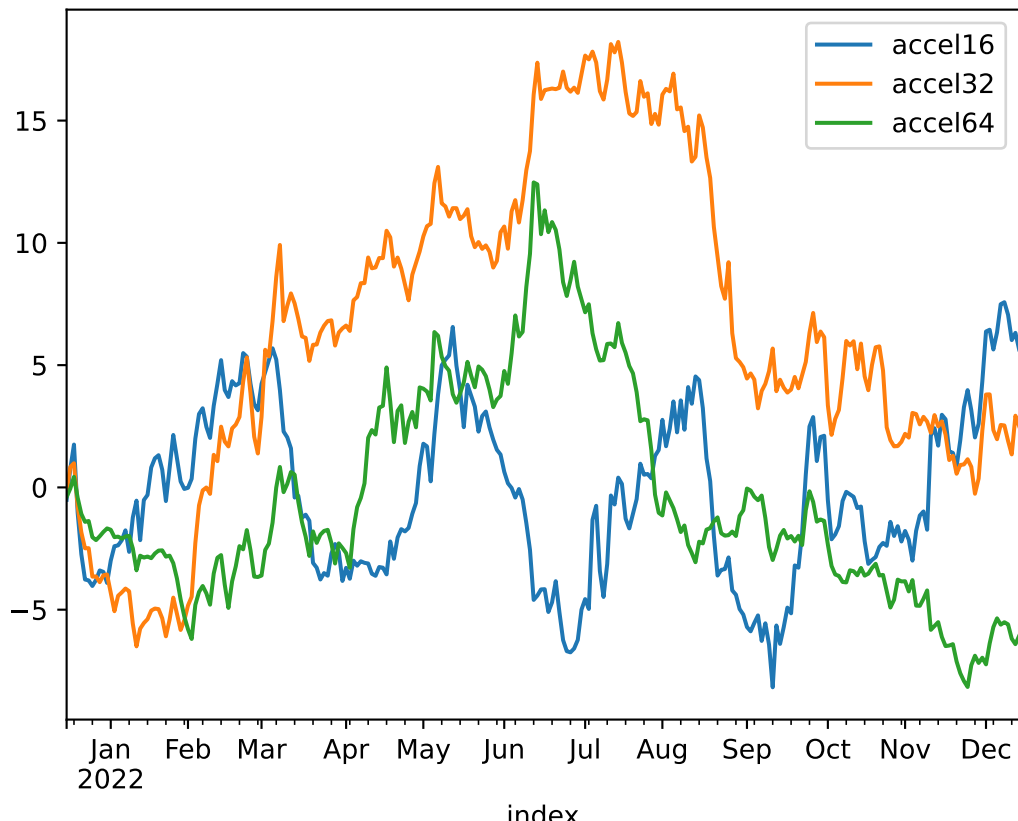


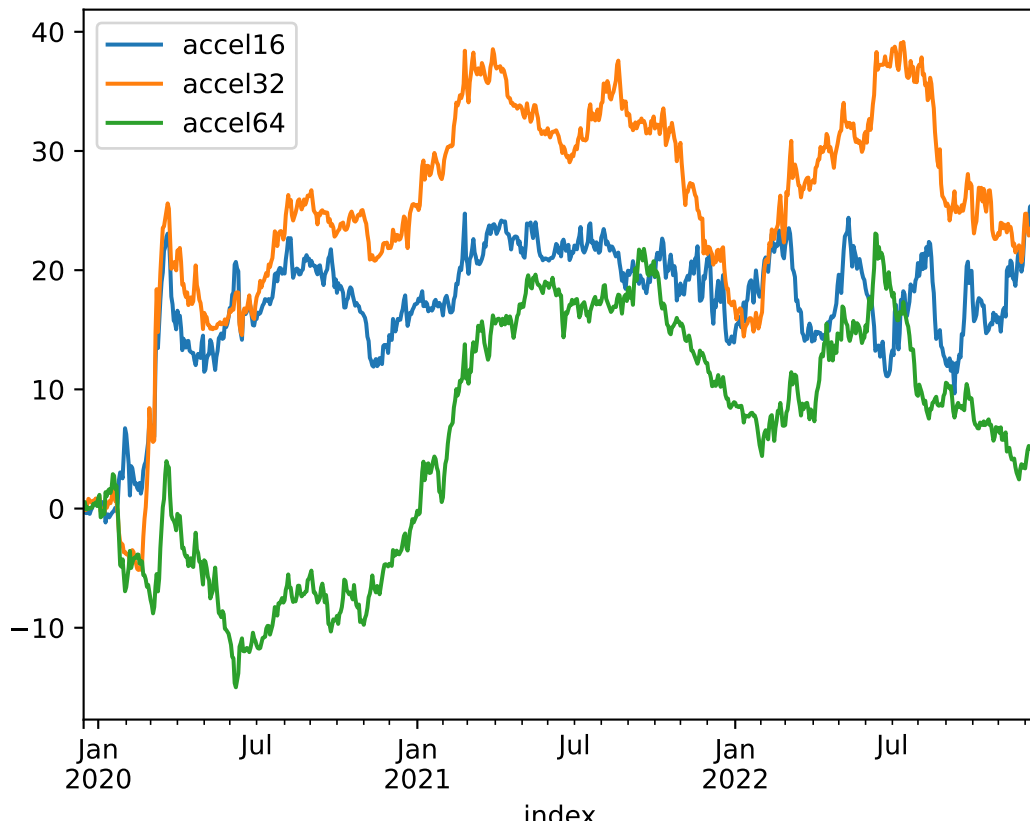
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': 9.86, 'accel32': 6.266, 'accel64': -4.543}
ann. std {'accel16': 16.257, 'accel32': 14.39, 'accel64': 11.807}
ann. SR {'accel16': 0.61, 'accel32': 0.44, 'accel64': -0.38}



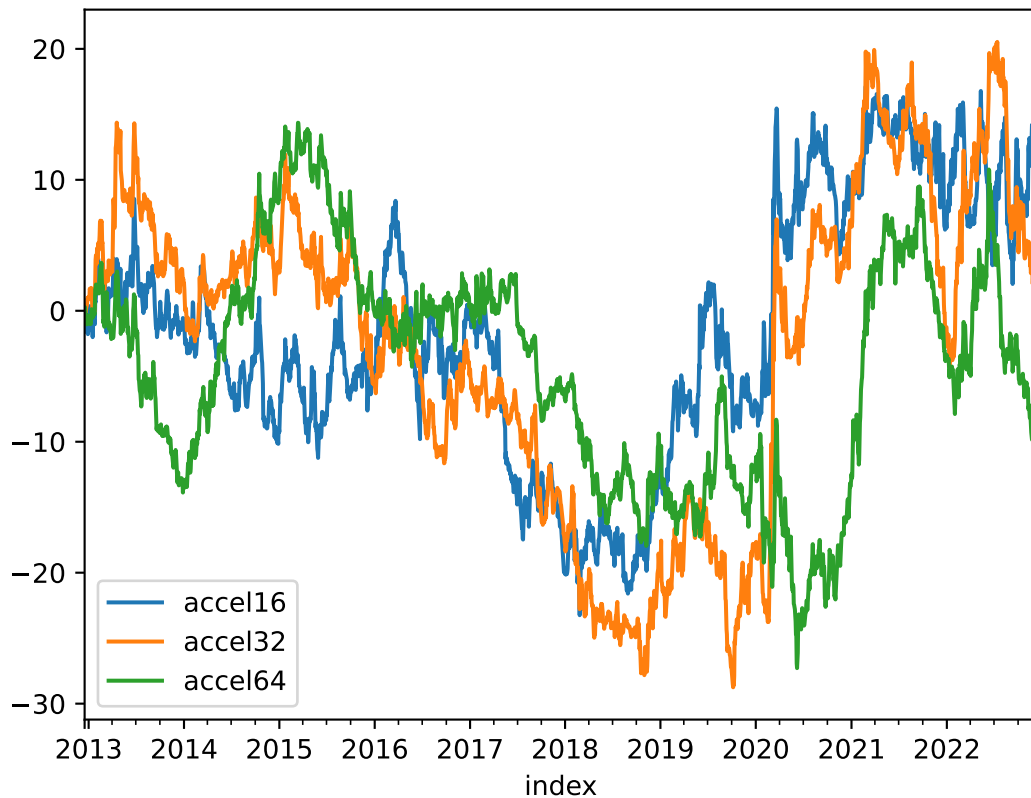
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': 5.559, 'accel32': 2.47, 'accel64': -5.983}
ann. std {'accel16': 16.345, 'accel32': 14.308, 'accel64': 11.626}
ann. SR {'accel16': 0.34, 'accel32': 0.17, 'accel64': -0.51}



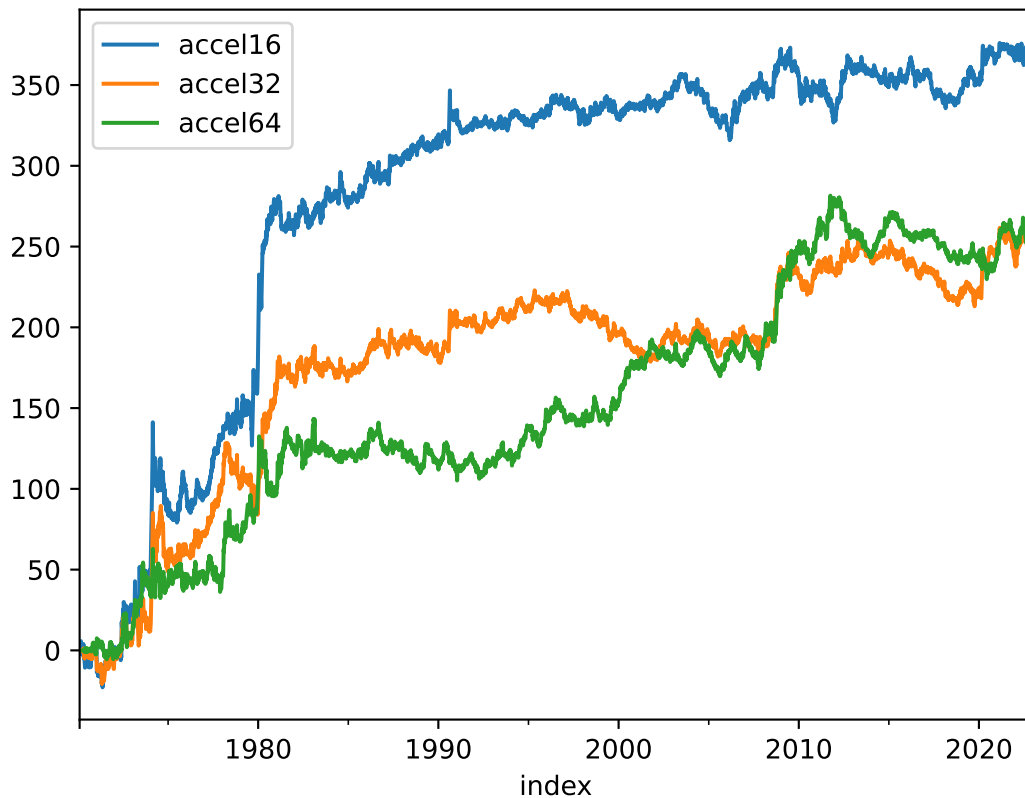
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': 7.677, 'accel32': 7.665, 'accel64': 1.481}
ann. std {'accel16': 14.847, 'accel32': 14.09, 'accel64': 11.729}
ann. SR {'accel16': 0.52, 'accel32': 0.54, 'accel64': 0.13}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 1.558, 'accel32': 0.473, 'accel64': -0.762}
ann. std {'accel16': 11.902, 'accel32': 11.137, 'accel64': 9.57}
ann. SR {'accel16': 0.13, 'accel32': 0.04, 'accel64': -0.08}

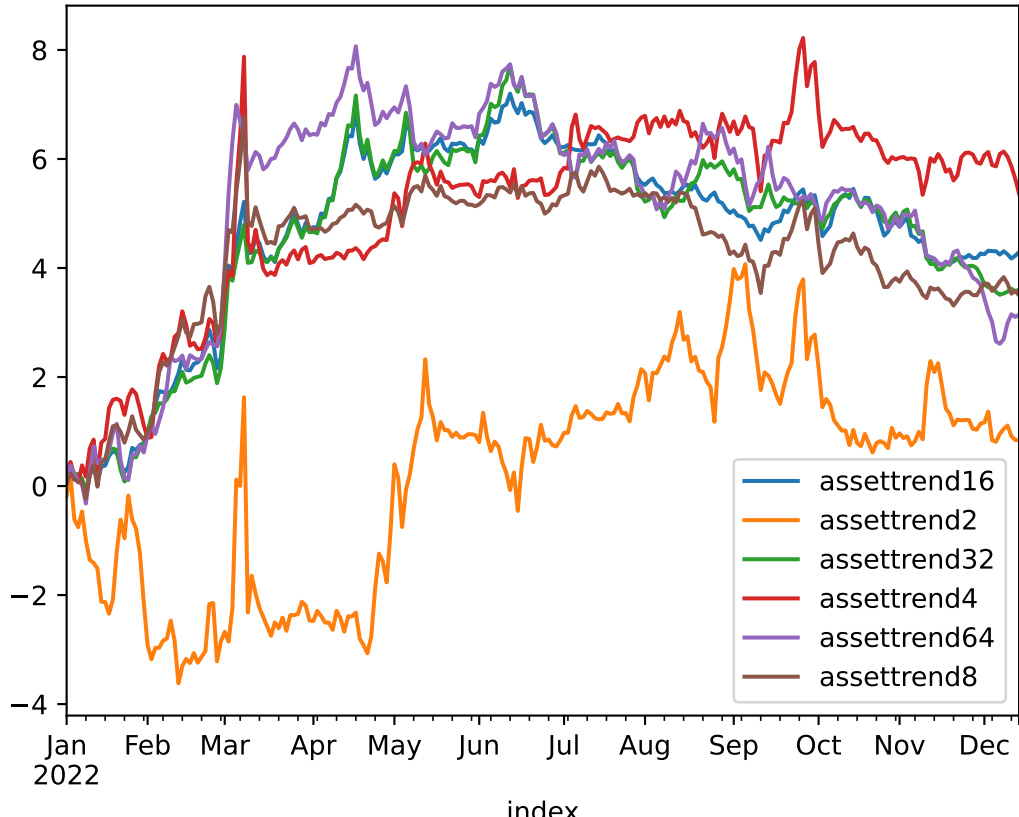


Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.956, 'accel32': 4.577, 'accel64': 4.629}
ann. std {'accel16': 15.731, 'accel32': 13.795, 'accel64': 13.332}
ann. SR {'accel16': 0.44, 'accel32': 0.33, 'accel64': 0.35}



Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': 4.432, 'assettrend2': 0.868, 'assettrend32': 3.724, 'assettrend4': 5.533, 'assettrend64': 3.243, 'assettrend8': 3.608}
ann. std {'assettrend16': 3.082, 'assettrend2': 7.828, 'assettrend32': 3.404, 'assettrend4': 5.862, 'assettrend64': 4.06, 'assettrend8': 3.832}
ann. SR {'assettrend16': 1.44, 'assettrend2': 0.11, 'assettrend32': 1.09, 'assettrend4': 0.94, 'assettrend64': 0.8, 'assettrend8': 0.94}

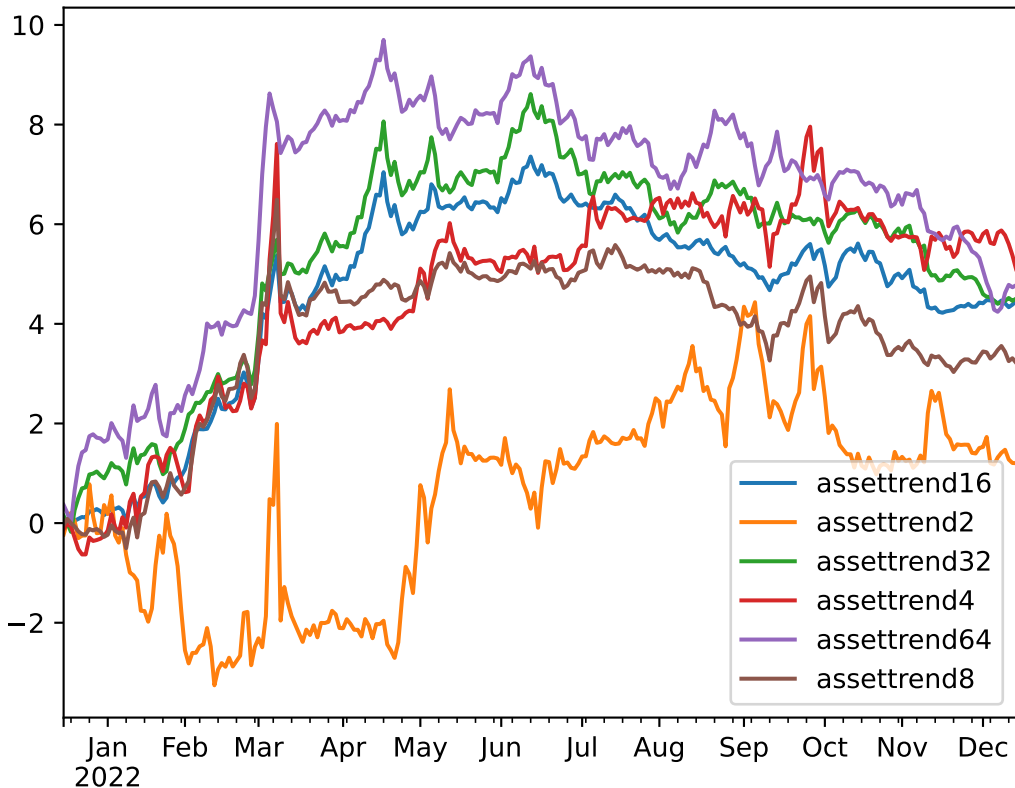


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': 4.385, 'assettrend2': 1.184, 'assettrend32': 4.437, 'assettrend4': 5.019, 'assettrend64': 4.701, 'assettrend8': 3.169}

ann. std {'assettrend16': 3.018, 'assettrend2': 7.785, 'assettrend32': 3.386, 'assettrend4': 5.749, 'assettrend64': 4.088, 'assettrend8': 3.752}

ann. SR {'assettrend16': 1.45, 'assettrend2': 0.15, 'assettrend32': 1.31, 'assettrend4': 0.87, 'assettrend64': 1.15, 'assettrend8': 0.84}



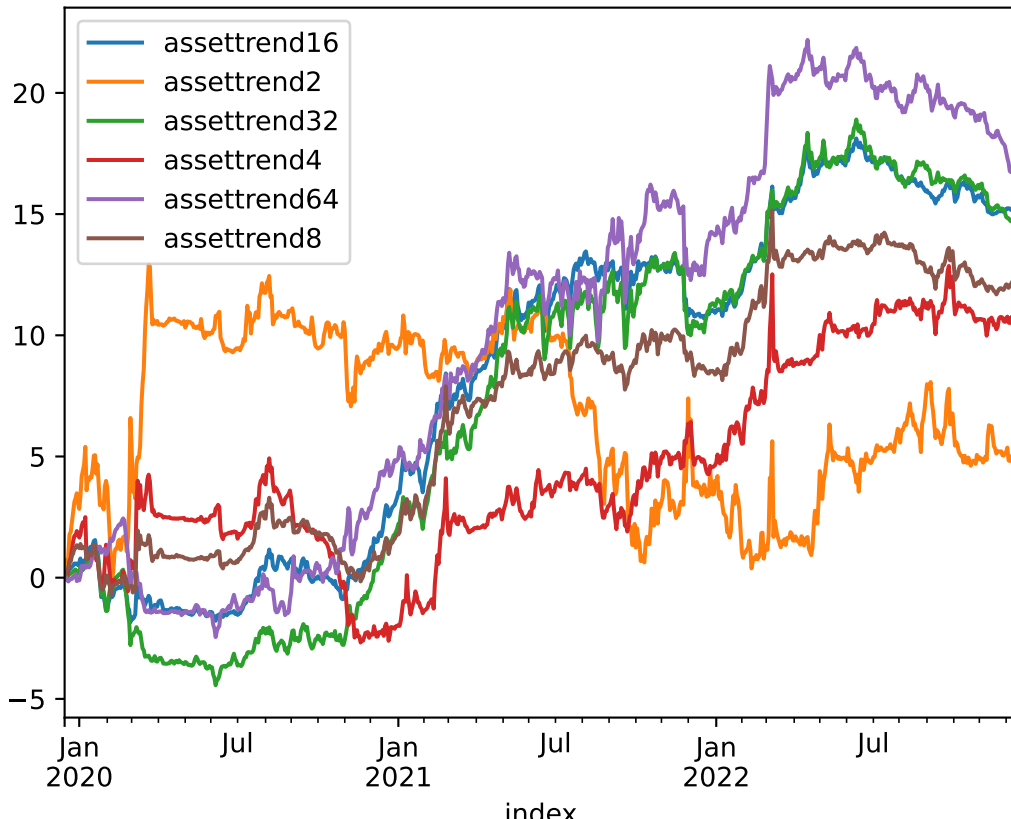
index

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

ann. mean {'assetrend16': 4.975, 'assetrend2': 1.583, 'assetrend32': 4.838, 'assetrend4': 3.27, 'assetrend64': 5.643, 'assetrend8': 3.882}

ann. std {'assetrend16': 3.604, 'assetrend2': 7.883, 'assetrend32': 4.422, 'assetrend4': 5.457, 'assetrend64': 5.127, 'assetrend8': 3.758}

ann. SR {'assetrend16': 1.38, 'assetrend2': 0.2, 'assetrend32': 1.09, 'assetrend4': 0.6, 'assetrend64': 1.1, 'assetrend8': 1.03}

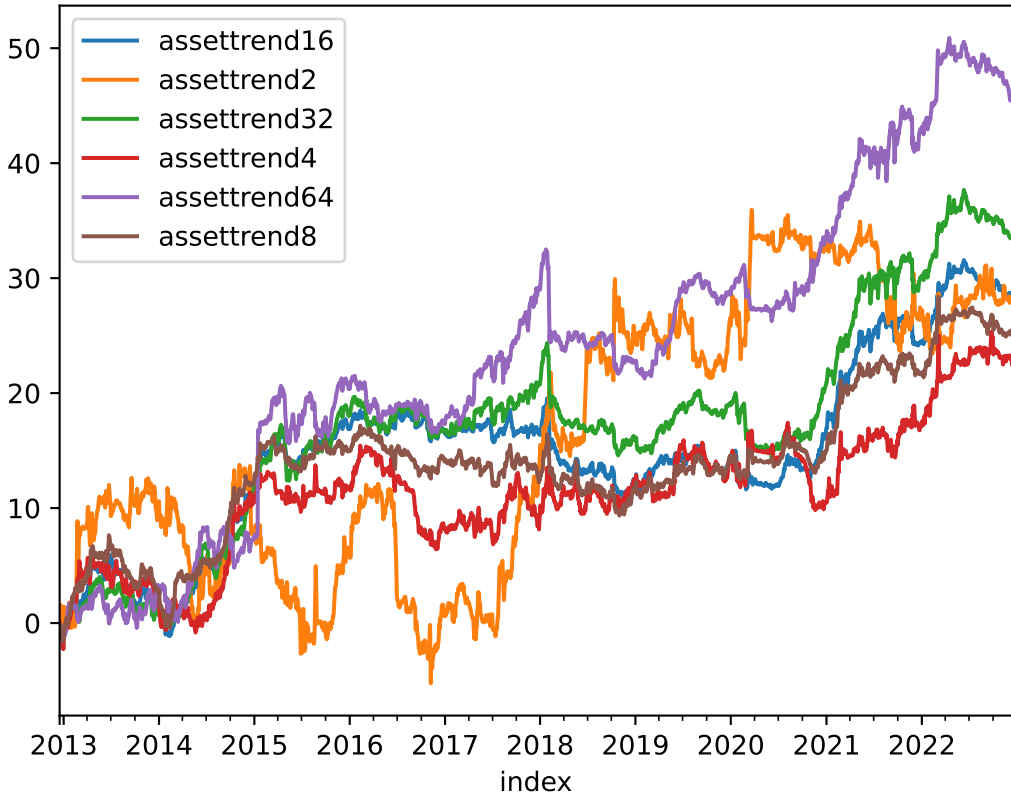


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.814, 'assettrend2': 2.737, 'assettrend32': 3.295, 'assettrend4': 2.208, 'assettrend64': 4.512, 'assettrend8': 2.463}

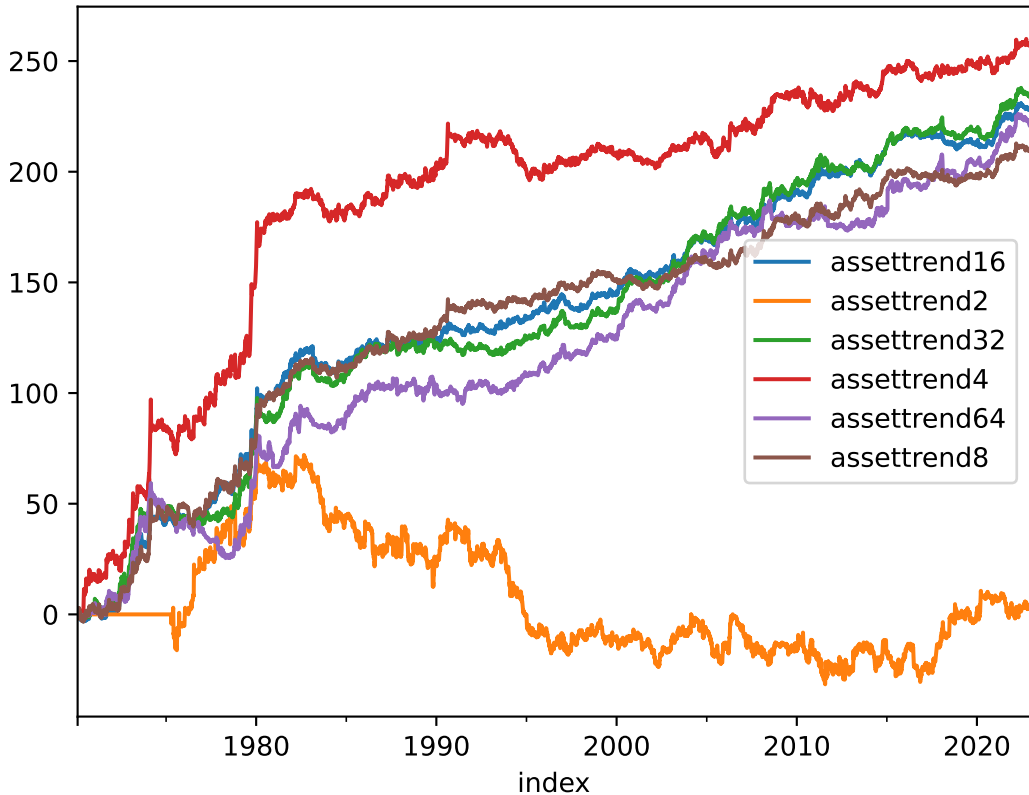
ann. std {'assettrend16': 3.281, 'assettrend2': 8.447, 'assettrend32': 3.76, 'assettrend4': 5.039, 'assettrend64': 5.313, 'assettrend8': 3.59}

ann. SR {'assettrend16': 0.86, 'assettrend2': 0.32, 'assettrend32': 0.88, 'assettrend4': 0.44, 'assettrend64': 0.85, 'assettrend8': 0.69}



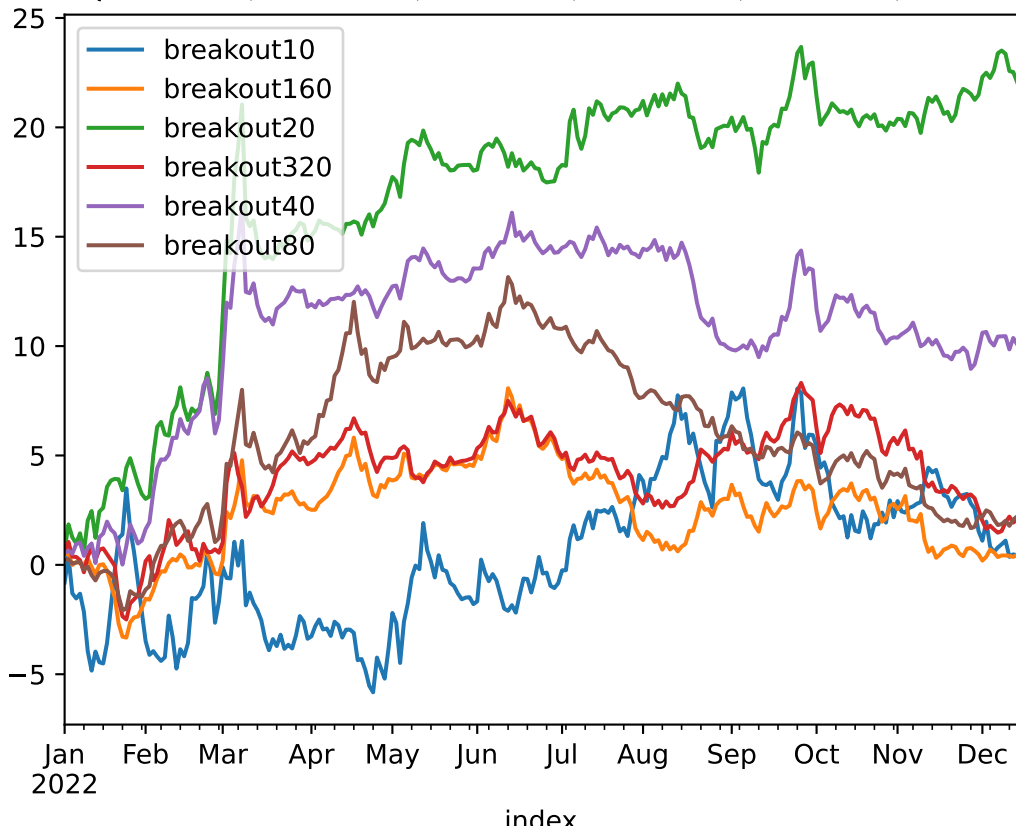
Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.233, 'assettrend2': 0.048, 'assettrend32': 4.34, 'assettrend4': 4.773, 'assettrend64': 4.107, 'assettrend8': 3.889}
ann. std {'assettrend16': 4.663, 'assettrend2': 10.054, 'assettrend32': 4.898, 'assettrend4': 7.353, 'assettrend64': 5.473, 'assettrend8': 5.038}
ann. SR {'assettrend16': 0.91, 'assettrend2': 0.0, 'assettrend32': 0.89, 'assettrend4': 0.65, 'assettrend64': 0.75, 'assettrend8': 0.77}



Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 0.445, 'breakout160': 0.469, 'breakout20': 22.786, 'breakout320': 2.132, 'breakout40': 10.412, 'breakout80': 2.284}
 ann. std {'breakout10': 13.865, 'breakout160': 7.217, 'breakout20': 12.242, 'breakout320': 7.555, 'breakout40': 9.733, 'breakout80': 7.939}
 ann. SR {'breakout10': 0.03, 'breakout160': 0.07, 'breakout20': 1.86, 'breakout320': 0.28, 'breakout40': 1.07, 'breakout80': 0.29}

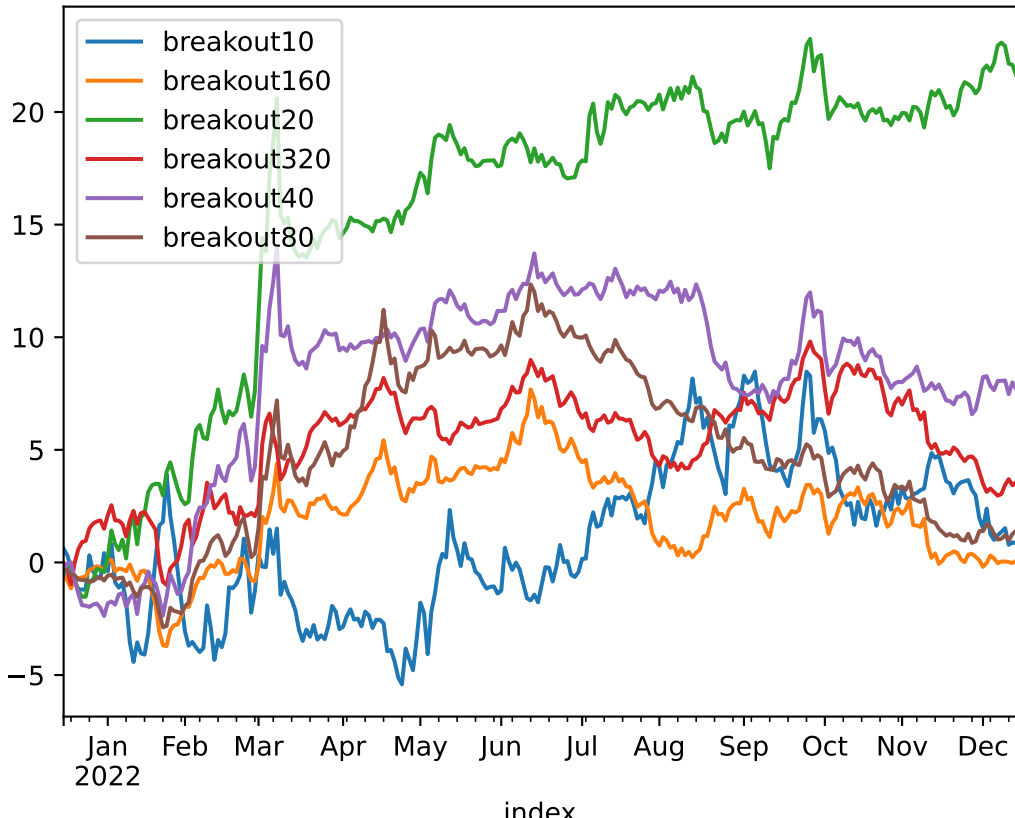


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 0.833, 'breakout160': 0.064, 'breakout20': 21.31, 'breakout320': 3.504, 'breakout40': 7.591, 'breakout80': 1.384}

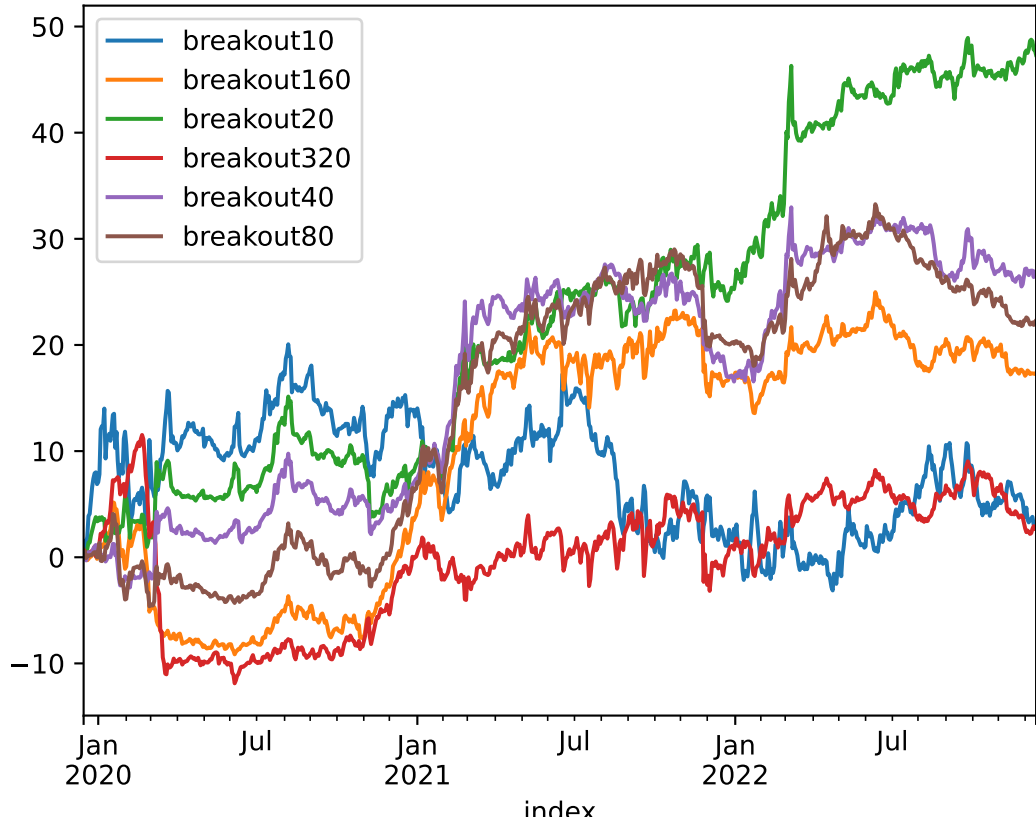
ann. std {'breakout10': 13.737, 'breakout160': 7.1, 'breakout20': 12.04, 'breakout320': 7.534, 'breakout40': 9.609, 'breakout80': 7.769}

ann. SR {'breakout10': 0.06, 'breakout160': 0.01, 'breakout20': 1.77, 'breakout320': 0.47, 'breakout40': 0.79, 'breakout80': 0.18}



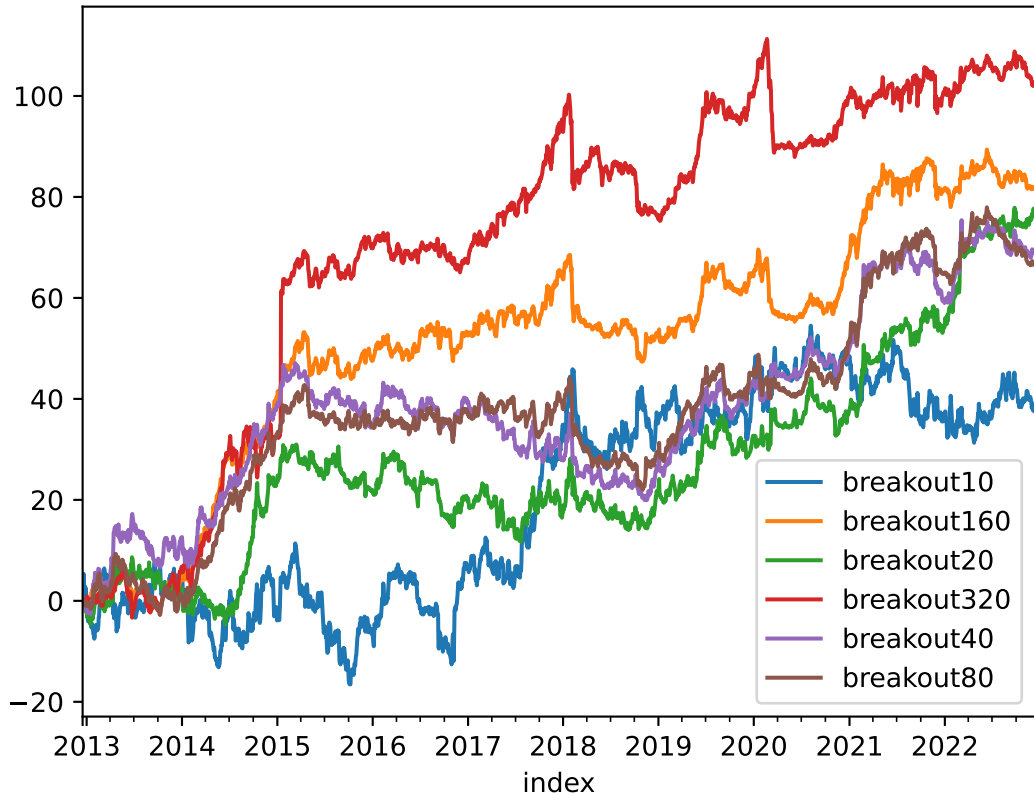
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': 1.023, 'breakout160': 5.674, 'breakout20': 15.473, 'breakout320': 0.913, 'breakout40': 8.71, 'breakout80': 7.296}
ann. std {'breakout10': 15.088, 'breakout160': 9.747, 'breakout20': 11.516, 'breakout320': 10.751, 'breakout40': 9.937, 'breakout80': 9.578}
ann. SR {'breakout10': 0.07, 'breakout160': 0.58, 'breakout20': 1.34, 'breakout320': 0.08, 'breakout40': 0.88, 'breakout80': 0.76}



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

ann. mean {'breakout10': 3.688, 'breakout160': 8.026, 'breakout20': 7.485, 'breakout320': 10.068, 'breakout80': 6.578}
ann. std {'breakout10': 15.765, 'breakout160': 9.139, 'breakout20': 11.209, 'breakout320': 13.345, 'breakout40': 9.84, 'breakout80': 9.015}
ann. SR {'breakout10': 0.23, 'breakout160': 0.88, 'breakout20': 0.67, 'breakout320': 0.75, 'breakout40': 0.69, 'breakout80': 0.73}

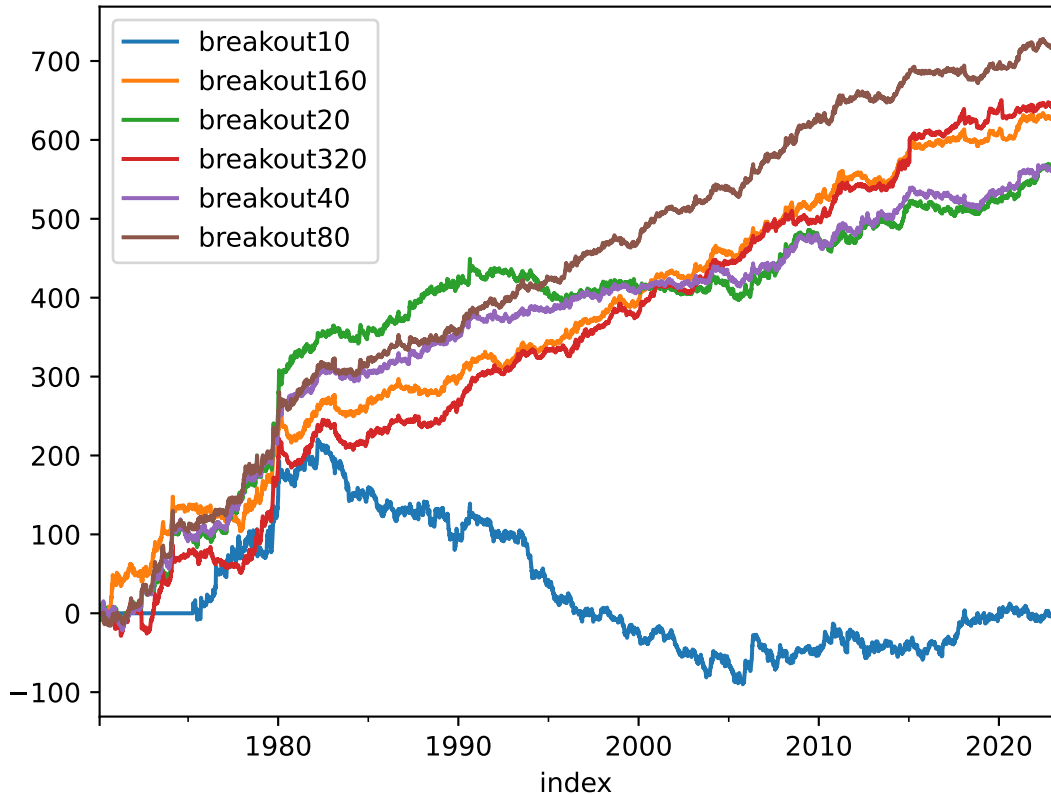


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.084, 'breakout160': 11.631, 'breakout20': 10.546, 'breakout320': 11.909, 'breakout40': 10.427, 'breakout80': 13.31}

ann. std {'breakout10': 20.845, 'breakout160': 12.503, 'breakout20': 16.11, 'breakout320': 13.056, 'breakout40': 13.24, 'breakout80': 12.762}

ann. SR {'breakout10': -0.0, 'breakout160': 0.93, 'breakout20': 0.65, 'breakout320': 0.91, 'breakout40': 0.79, 'breakout80': 1.04}

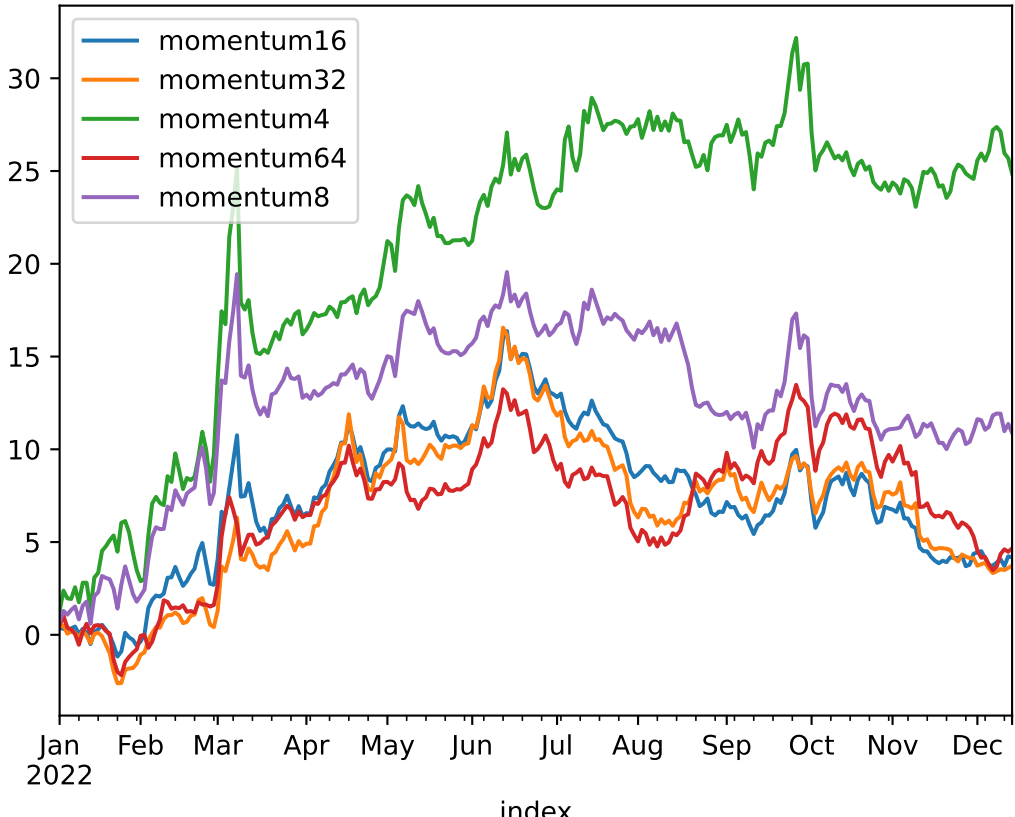


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 4.309, 'momentum32': 3.843, 'momentum4': 25.667, 'momentum64': 4.806, 'momentum8': 11.244}

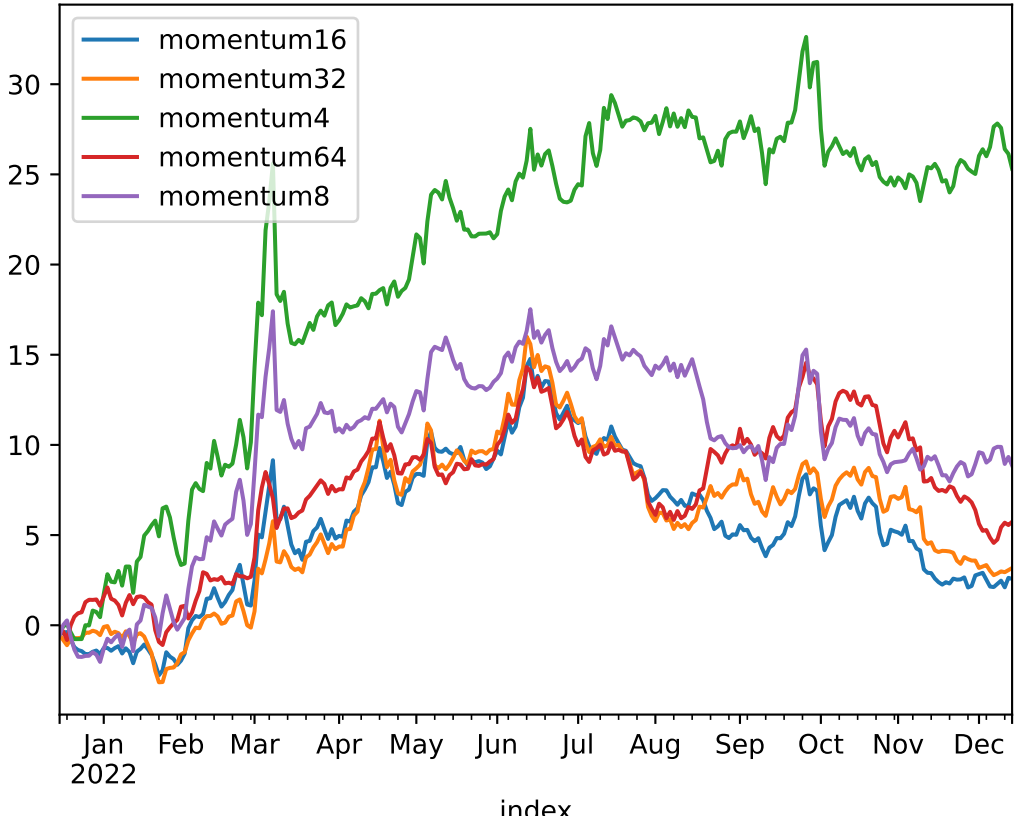
ann. std {'momentum16': 10.183, 'momentum32': 9.816, 'momentum4': 17.535, 'momentum64': 9.514, 'momentum8': 13.373}

ann. SR {'momentum16': 0.42, 'momentum32': 0.39, 'momentum4': 1.46, 'momentum64': 0.51, 'momentum8': 0.84}



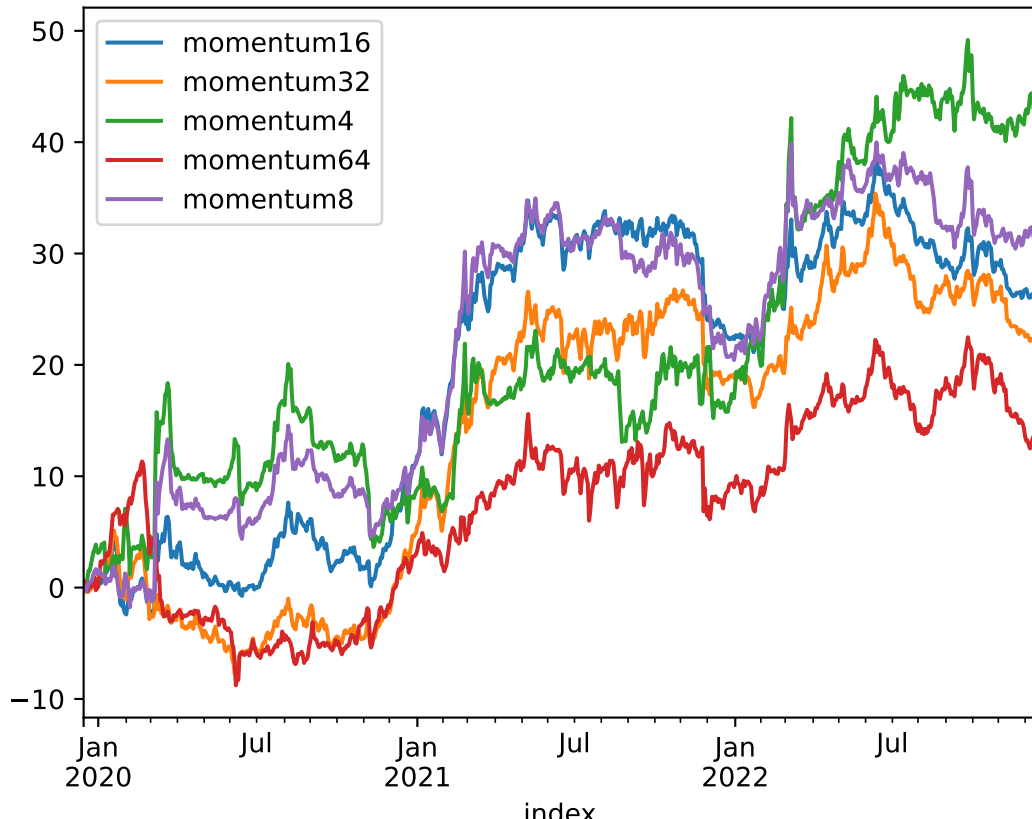
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': 2.531, 'momentum32': 3.125, 'momentum4': 24.923, 'momentum64': 5.647, 'momentum8': 8.724}
ann. std {'momentum16': 9.985, 'momentum32': 9.624, 'momentum4': 17.184, 'momentum64': 9.378, 'momentum8': 13.156}
ann. SR {'momentum16': 0.25, 'momentum32': 0.32, 'momentum4': 1.45, 'momentum64': 0.6, 'momentum8': 0.66}



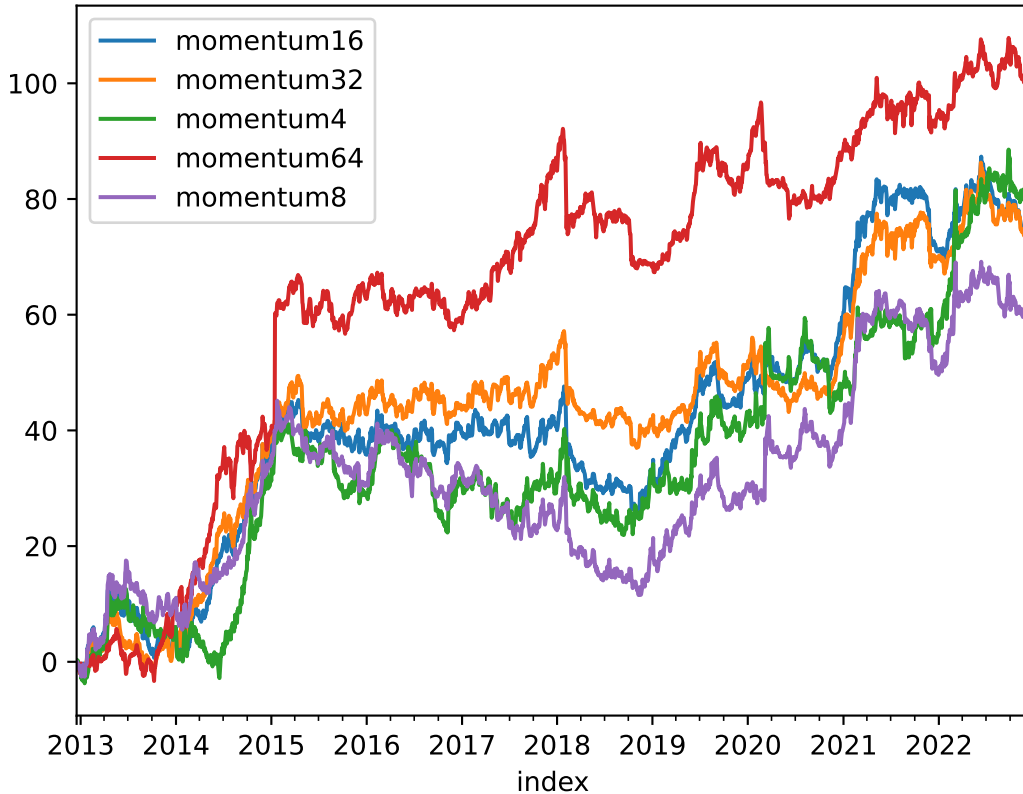
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 8.657, 'momentum32': 7.372, 'momentum4': 13.69, 'momentum64': 4.468, 'momentum8': 10.241}
ann. std {'momentum16': 10.987, 'momentum32': 10.858, 'momentum4': 16.073, 'momentum64': 10.962, 'momentum8': 12.736}
ann. SR {'momentum16': 0.79, 'momentum32': 0.68, 'momentum4': 0.85, 'momentum64': 0.41, 'momentum8': 0.8}



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

ann. mean {'momentum16': 7.374, 'momentum32': 7.209, 'momentum4': 7.974, 'momentum64': 9.721, 'momentum8': 5.937}
ann. std {'momentum16': 9.952, 'momentum32': 9.505, 'momentum4': 13.687, 'momentum64': 12.012, 'momentum8': 11.322}
ann. SR {'momentum16': 0.74, 'momentum32': 0.76, 'momentum4': 0.58, 'momentum64': 0.81, 'momentum8': 0.52}

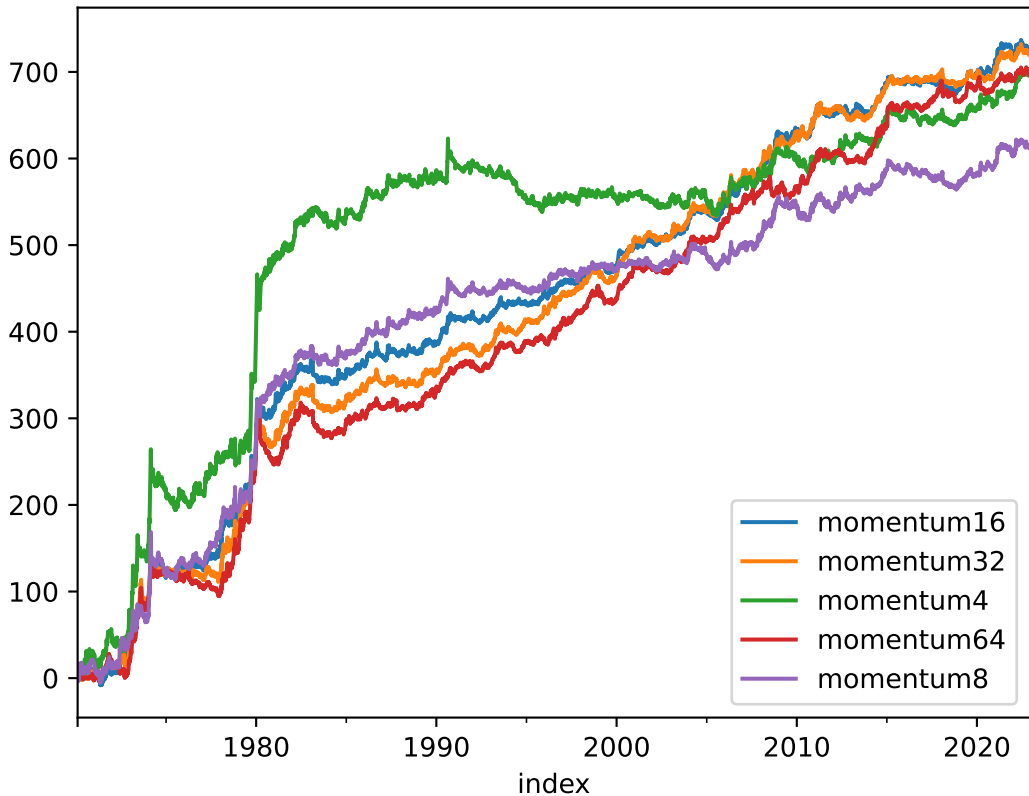


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.453, 'momentum32': 13.352, 'momentum4': 12.948, 'momentum64': 12.929, 'momentum8': 11.384}

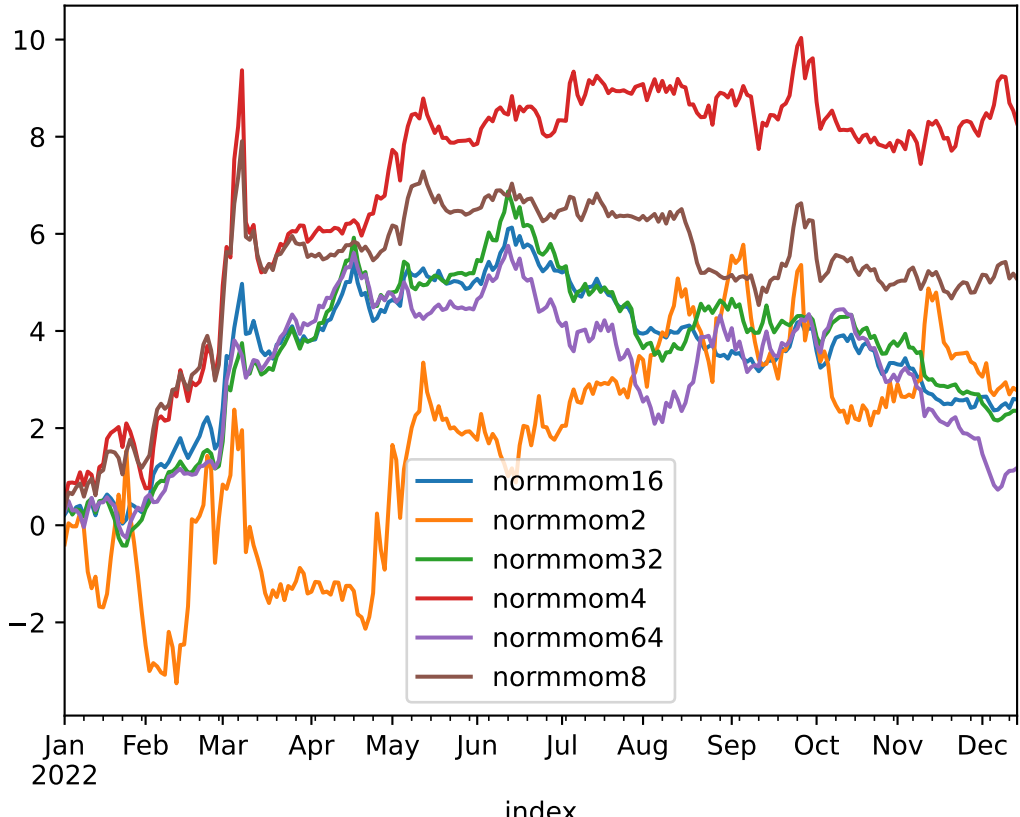
ann. std {'momentum16': 14.23, 'momentum32': 13.861, 'momentum4': 20.087, 'momentum64': 13.497, 'momentum8': 15.88}

ann. SR {'momentum16': 0.95, 'momentum32': 0.96, 'momentum4': 0.64, 'momentum64': 0.96, 'momentum8': 0.72}



Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 2.671, 'normmom2': 2.865, 'normmom32': 2.431, 'normmom4': 8.542, 'normmom64': 1.218, 'normmom8': 5.231}
ann. std {'normmom16': 3.162, 'normmom2': 8.168, 'normmom32': 3.226, 'normmom4': 6.076, 'normmom64': 3.49, 'normmom8': 4.321}
ann. SR {'normmom16': 0.84, 'normmom2': 0.35, 'normmom32': 0.75, 'normmom4': 1.41, 'normmom64': 0.35, 'normmom8': 1.21}

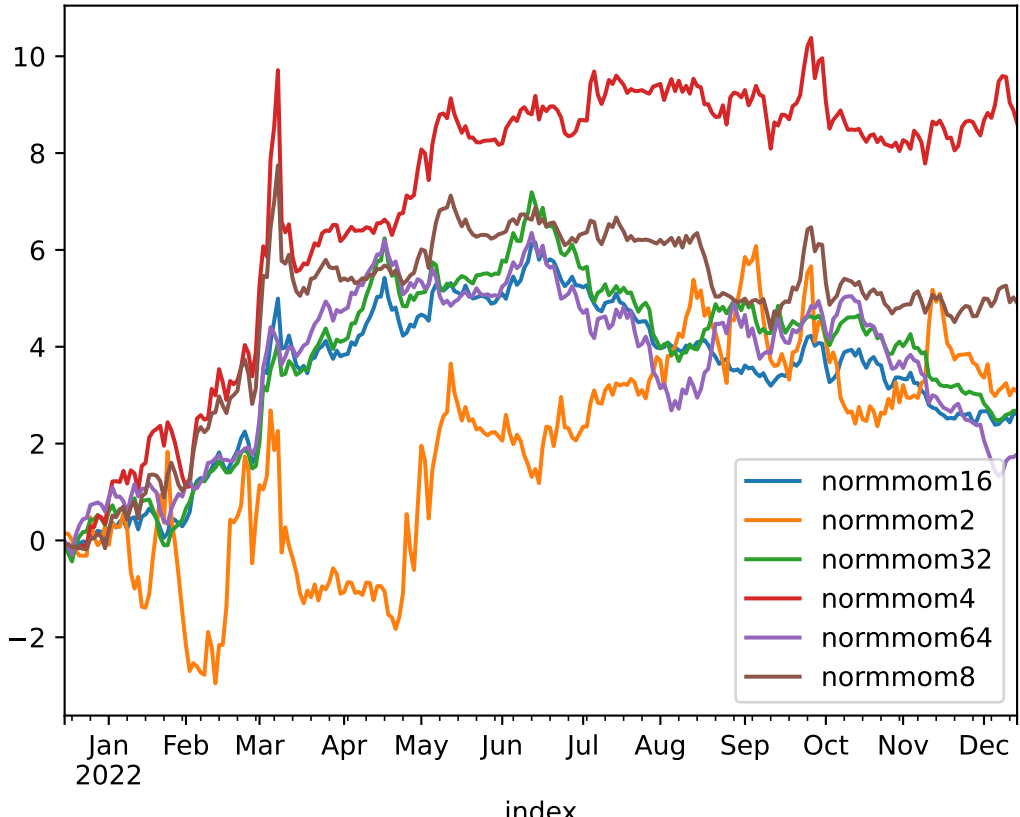


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': 2.572, 'normmom2': 3.031, 'normmom32': 2.633, 'normmom4': 8.488, 'normmom64': 1.749, 'normmom8': 4.832}

ann. std {'normmom16': 3.104, 'normmom2': 8.039, 'normmom32': 3.199, 'normmom4': 5.953, 'normmom64': 3.459, 'normmom8': 4.237}

ann. SR {'normmom16': 0.83, 'normmom2': 0.38, 'normmom32': 0.82, 'normmom4': 1.43, 'normmom64': 0.51, 'normmom8': 1.14}

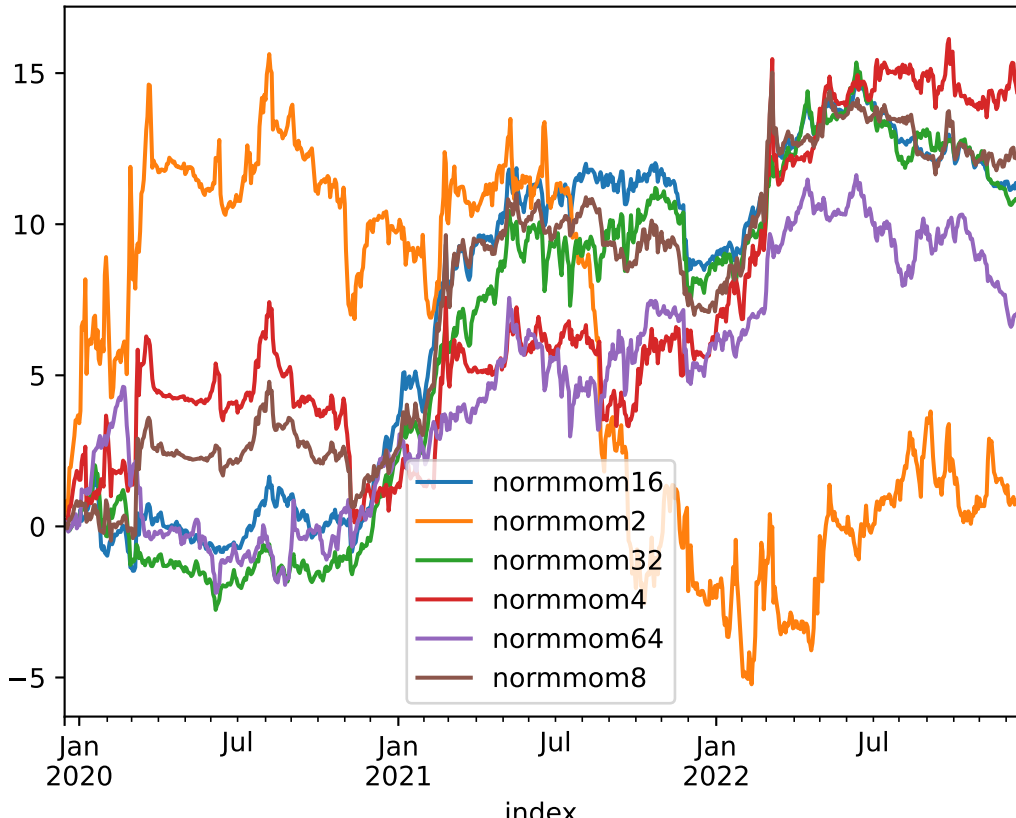


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.712, 'normmom2': 0.263, 'normmom32': 3.542, 'normmom4': 4.699, 'normmom64': 2.305, 'normmom8': 3.983}

ann. std {'normmom16': 3.702, 'normmom2': 8.884, 'normmom32': 4.048, 'normmom4': 5.943, 'normmom64': 4.343, 'normmom8': 4.245}

ann. SR {'normmom16': 1.0, 'normmom2': 0.03, 'normmom32': 0.88, 'normmom4': 0.79, 'normmom64': 0.53, 'normmom8': 0.94}

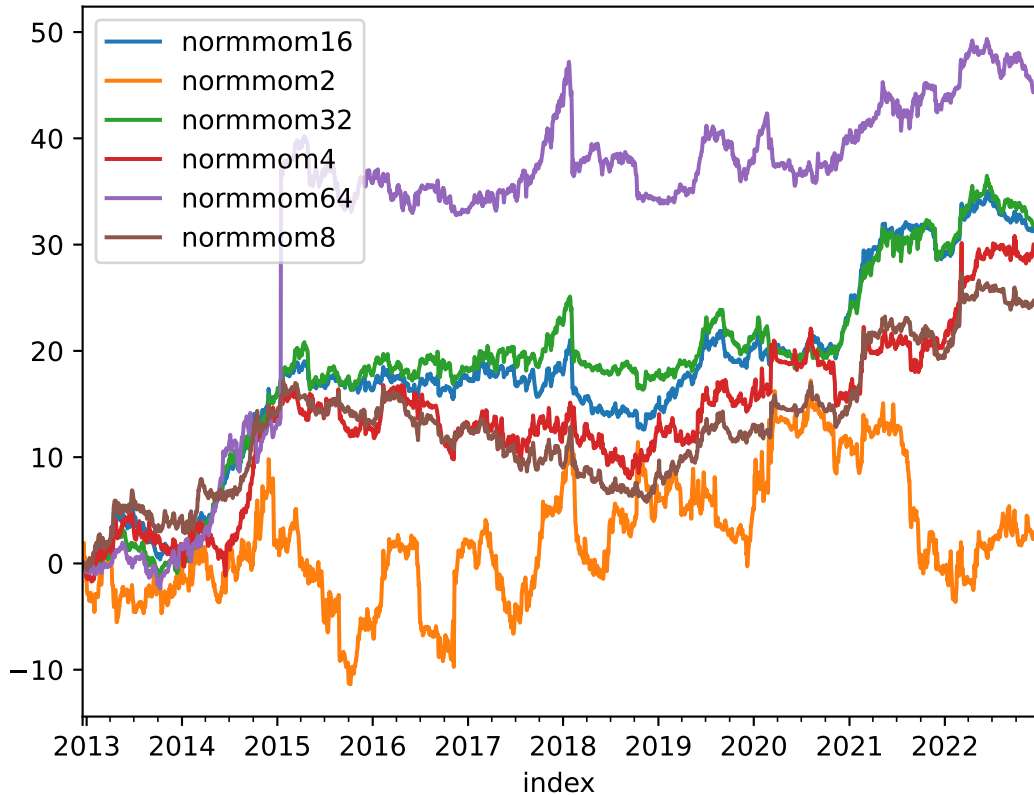


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 3.09, 'normmom2': 0.236, 'normmom32': 3.137, 'normmom4': 2.852, 'normmom64': 4.396, 'normmom8': 2.396}

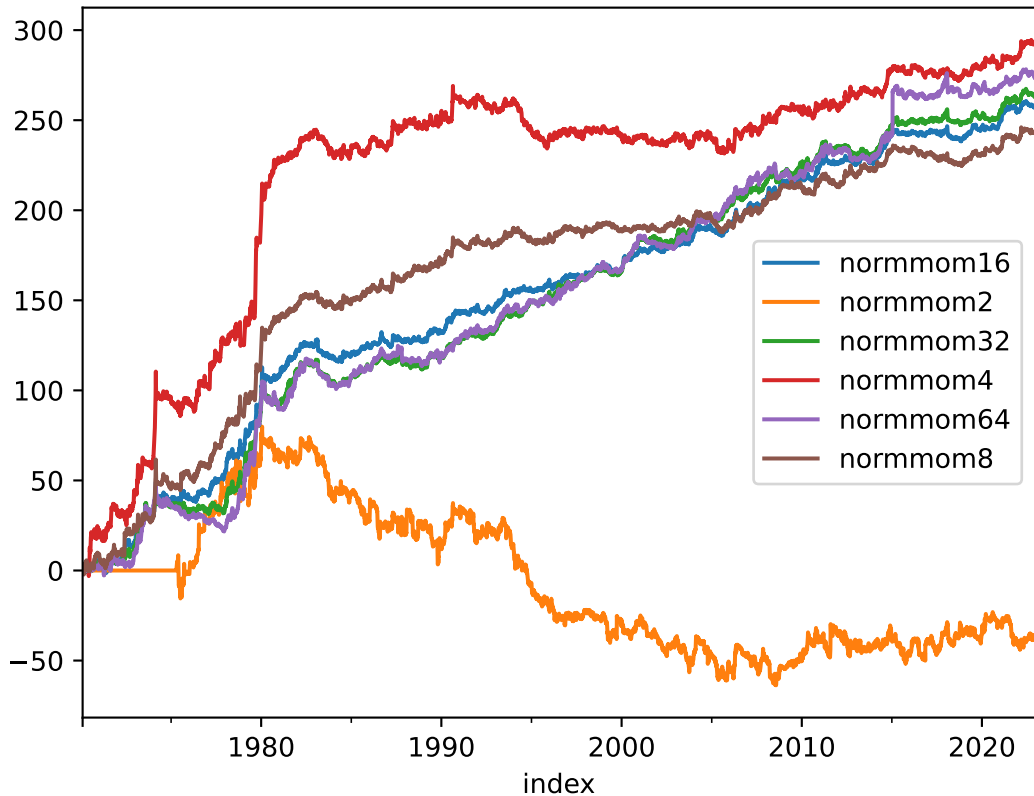
ann. std {'normmom16': 3.579, 'normmom2': 9.098, 'normmom32': 3.732, 'normmom4': 5.498, 'normmom64': 8.563, 'normmom8': 4.055}

ann. SR {'normmom16': 0.86, 'normmom2': 0.03, 'normmom32': 0.84, 'normmom4': 0.52, 'normmom64': 0.51, 'normmom8': 0.59}



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

ann. mean {'normmom16': 4.773, 'normmom2': -0.704, 'normmom32': 4.88, 'normmom4': 5.435, 'normmom64': 5.08, 'normmom8': 4.514}
ann. std {'normmom16': 4.925, 'normmom2': 11.205, 'normmom32': 4.994, 'normmom4': 8.327, 'normmom64': 6.314, 'normmom8': 5.935}
ann. SR {'normmom16': 0.97, 'normmom2': -0.06, 'normmom32': 0.98, 'normmom4': 0.65, 'normmom64': 0.8, 'normmom8': 0.76}

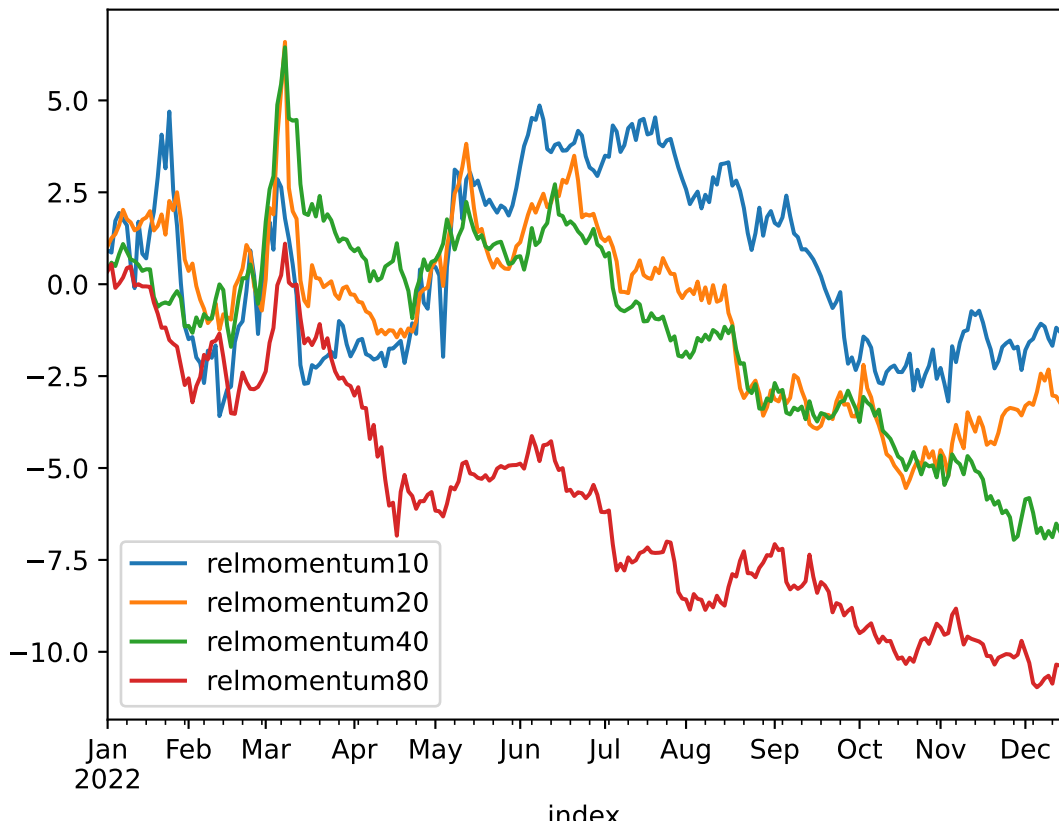


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -1.342, 'relmomentum20': -3.329, 'relmomentum40': -6.943, 'relmomentum80': -10.711}

ann. std {'relmomentum10': 10.151, 'relmomentum20': 8.53, 'relmomentum40': 6.684, 'relmomentum80': 5.721}

ann. SR {'relmomentum10': -0.13, 'relmomentum20': -0.39, 'relmomentum40': -1.04, 'relmomentum80': -1.87}

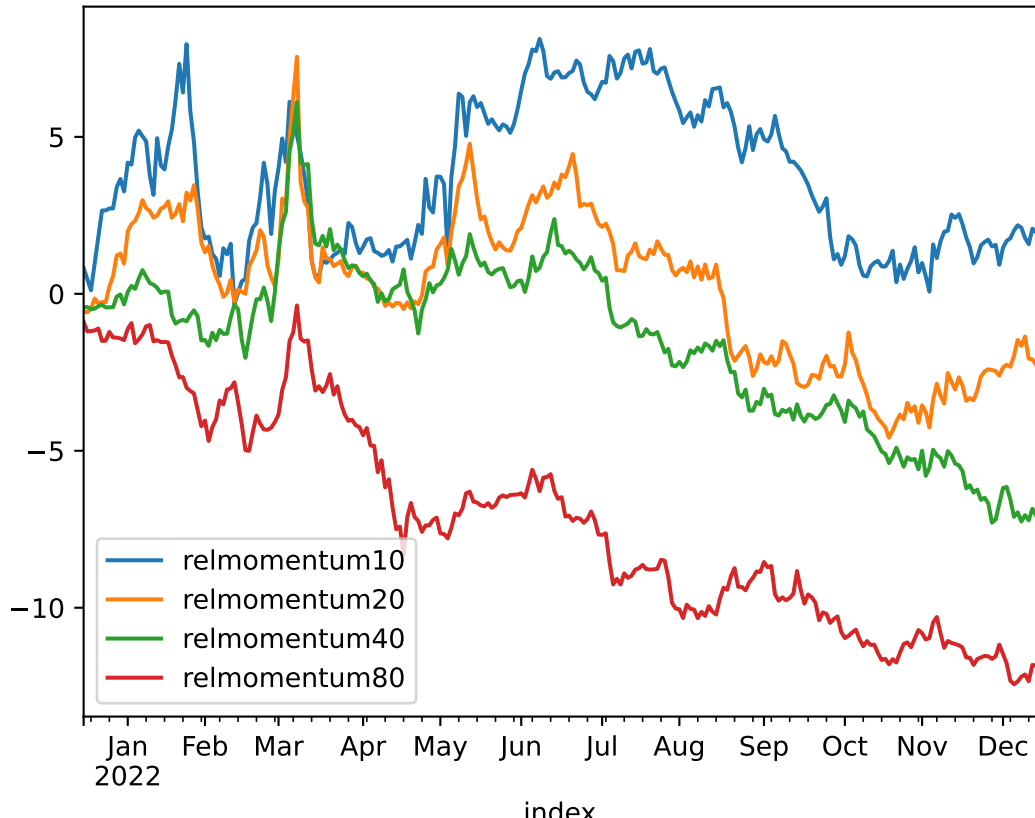


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': 1.93, 'relmomentum20': -2.229, 'relmomentum40': -6.953, 'relmomentum80': -11.668}

ann. std {'relmomentum10': 10.099, 'relmomentum20': 8.411, 'relmomentum40': 6.559, 'relmomentum80': 5.68}

ann. SR {'relmomentum10': 0.19, 'relmomentum20': -0.27, 'relmomentum40': -1.06, 'relmomentum80': -2.05}

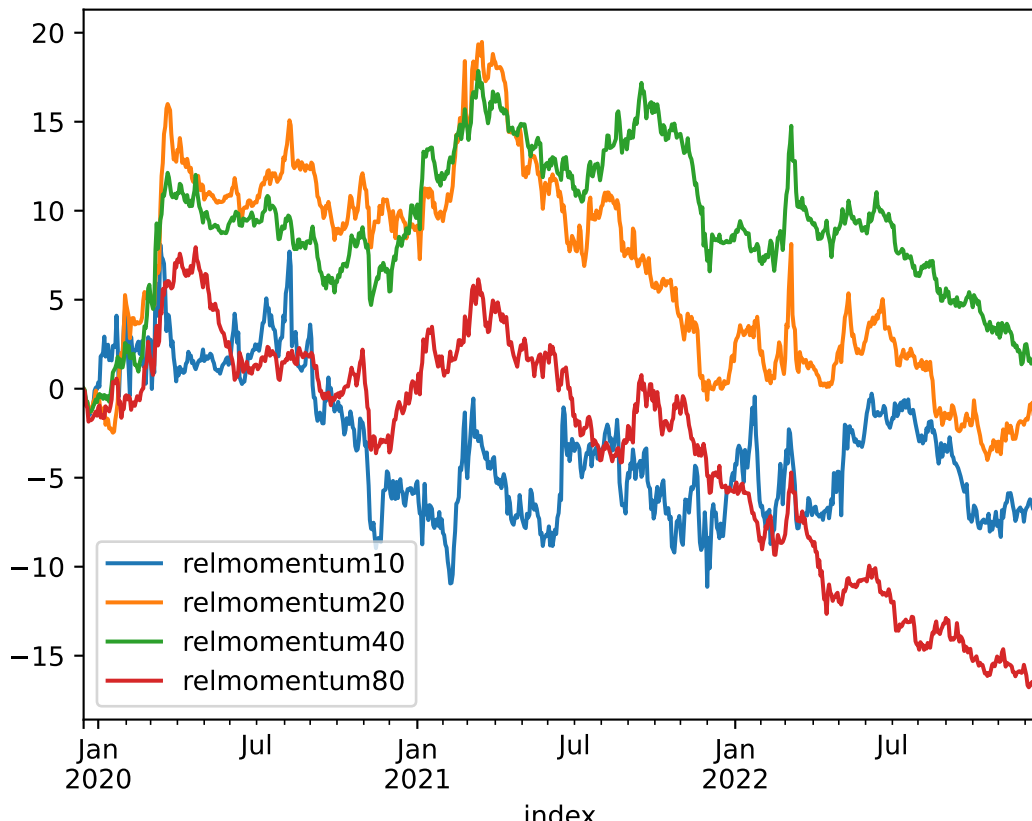


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -2.105, 'relmomentum20': -0.551, 'relmomentum40': 0.523, 'relmomentum80': -5.292}

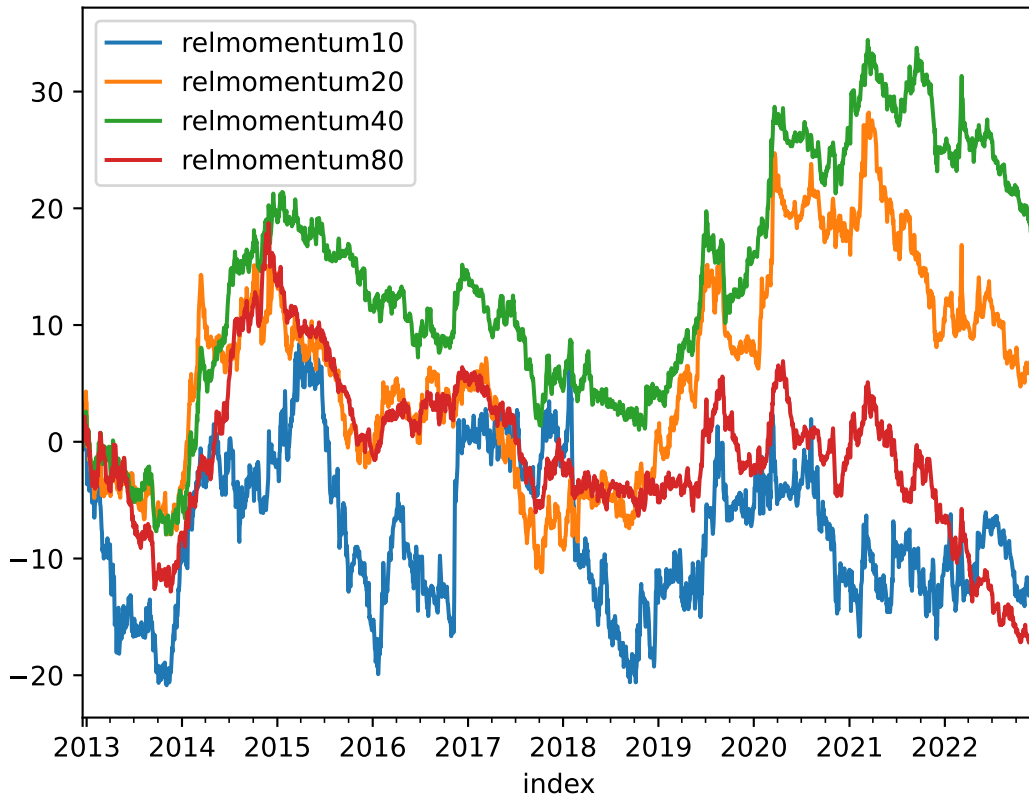
ann. std {'relmomentum10': 12.722, 'relmomentum20': 9.039, 'relmomentum40': 7.444, 'relmomentum80': 6.955}

ann. SR {'relmomentum10': -0.17, 'relmomentum20': -0.06, 'relmomentum40': 0.07, 'relmomentum80': -0.76}



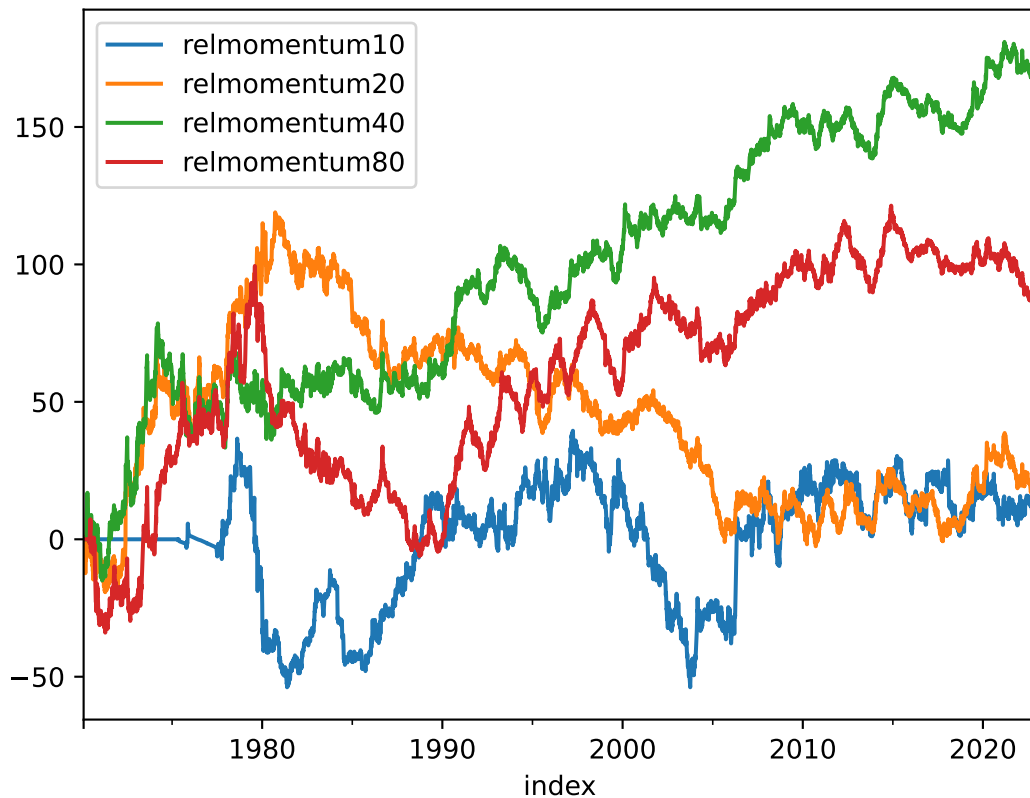
Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -1.197, 'relmomentum20': 0.692, 'relmomentum40': 1.784, 'relmomentum80': -1.691}
ann. std {'relmomentum10': 12.985, 'relmomentum20': 9.04, 'relmomentum40': 7.372, 'relmomentum80': 6.837}
ann. SR {'relmomentum10': -0.09, 'relmomentum20': 0.08, 'relmomentum40': 0.24, 'relmomentum80': -0.25}

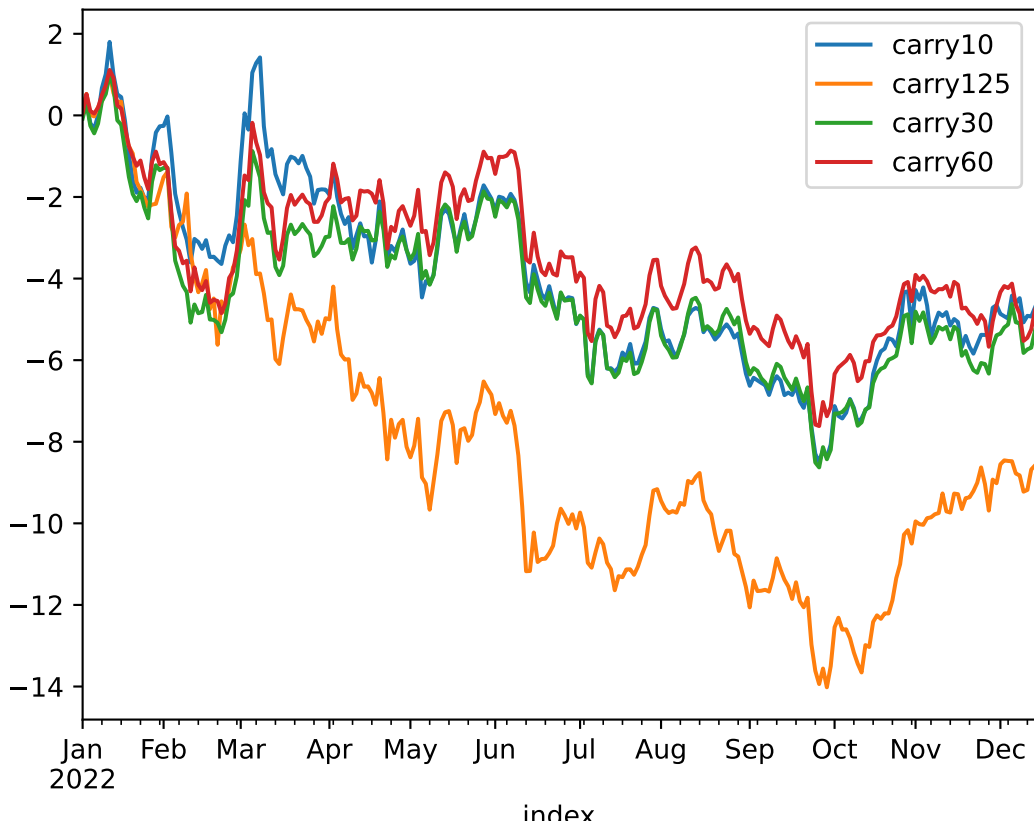


Total Trading Rule P&L for period '99Y'

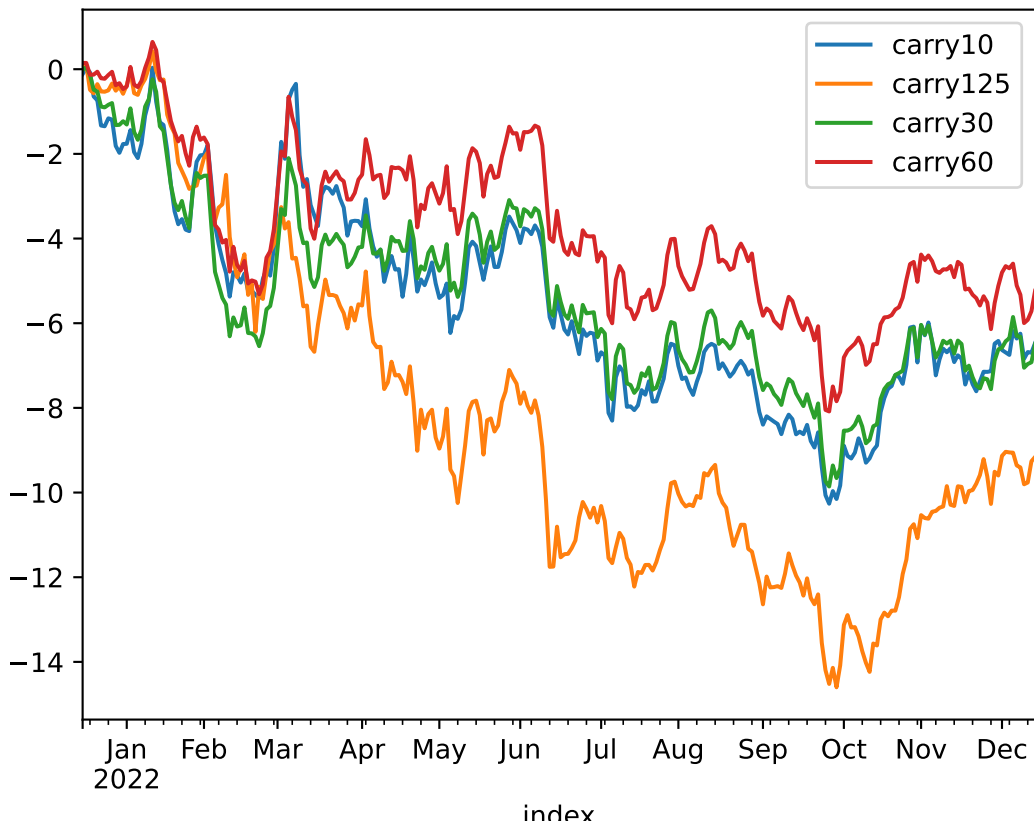
ann. mean {'relmomentum10': 0.181, 'relmomentum20': 0.325, 'relmomentum40': 3.057, 'relmomentum80': 1.585}
ann. std {'relmomentum10': 13.328, 'relmomentum20': 11.529, 'relmomentum40': 10.798, 'relmomentum80': 11.067}
ann. SR {'relmomentum10': 0.01, 'relmomentum20': 0.03, 'relmomentum40': 0.28, 'relmomentum80': 0.14}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': -4.854, 'carry125': -8.855, 'carry30': -5.434, 'carry60': -4.92}
ann. std {'carry10': 7.197, 'carry125': 7.563, 'carry30': 6.796, 'carry60': 6.814}
ann. SR {'carry10': -0.67, 'carry125': -1.17, 'carry30': -0.8, 'carry60': -0.72}



Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -6.37, 'carry125': -9.018, 'carry30': -6.392, 'carry60': -5.155}
ann. std {'carry10': 7.109, 'carry125': 7.419, 'carry30': 6.676, 'carry60': 6.673}
ann. SR {'carry10': -0.9, 'carry125': -1.22, 'carry30': -0.96, 'carry60': -0.77}

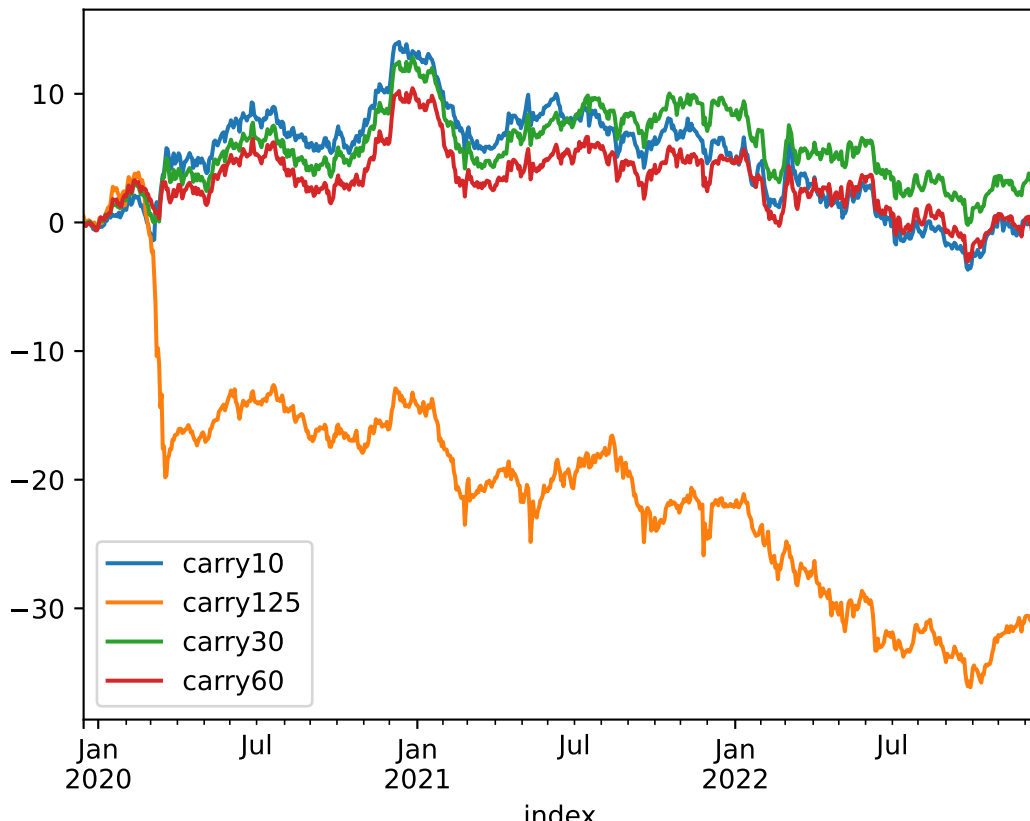


Total Trading Rule P&L for period '3Y'

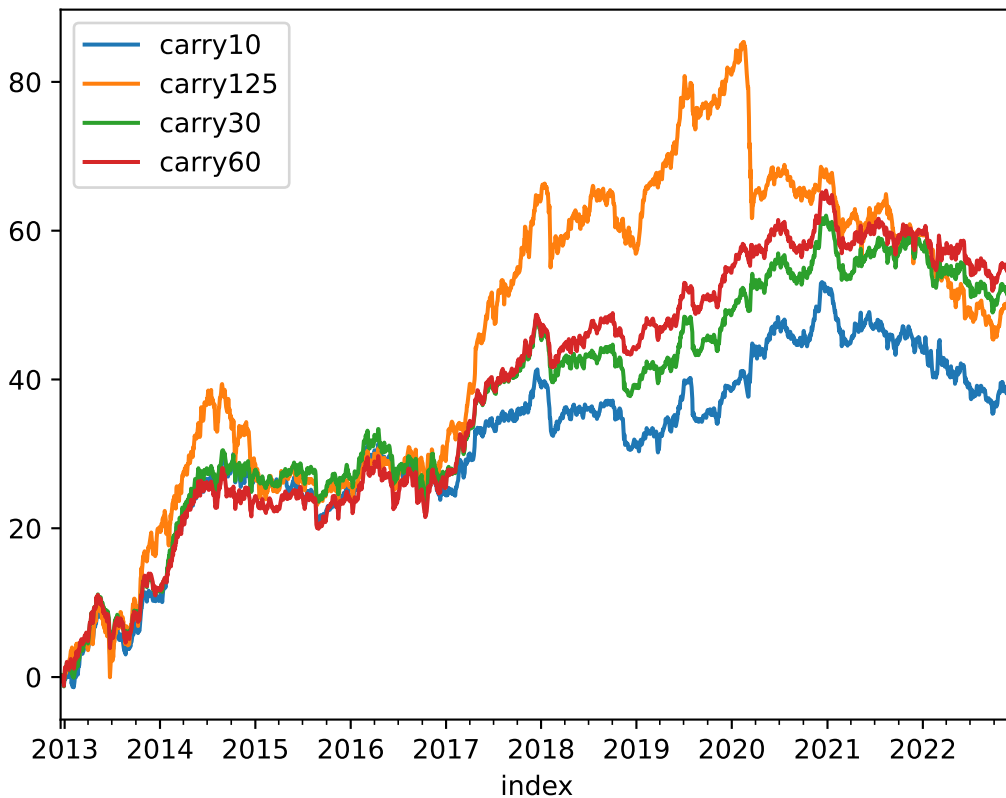
ann. mean {'carry10': 0.038, 'carry125': -10.036, 'carry30': 1.036, 'carry60': -0.062}

ann. std {'carry10': 6.802, 'carry125': 9.383, 'carry30': 6.586, 'carry60': 6.526}

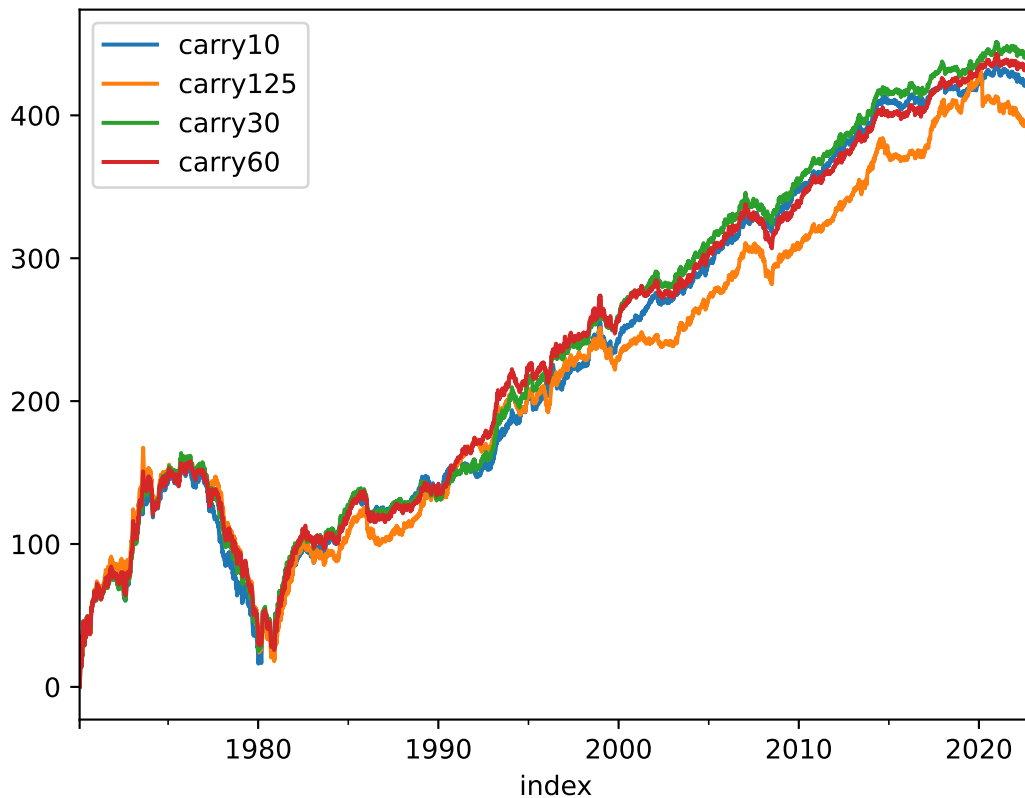
ann. SR {'carry10': 0.01, 'carry125': -1.07, 'carry30': 0.16, 'carry60': -0.01}



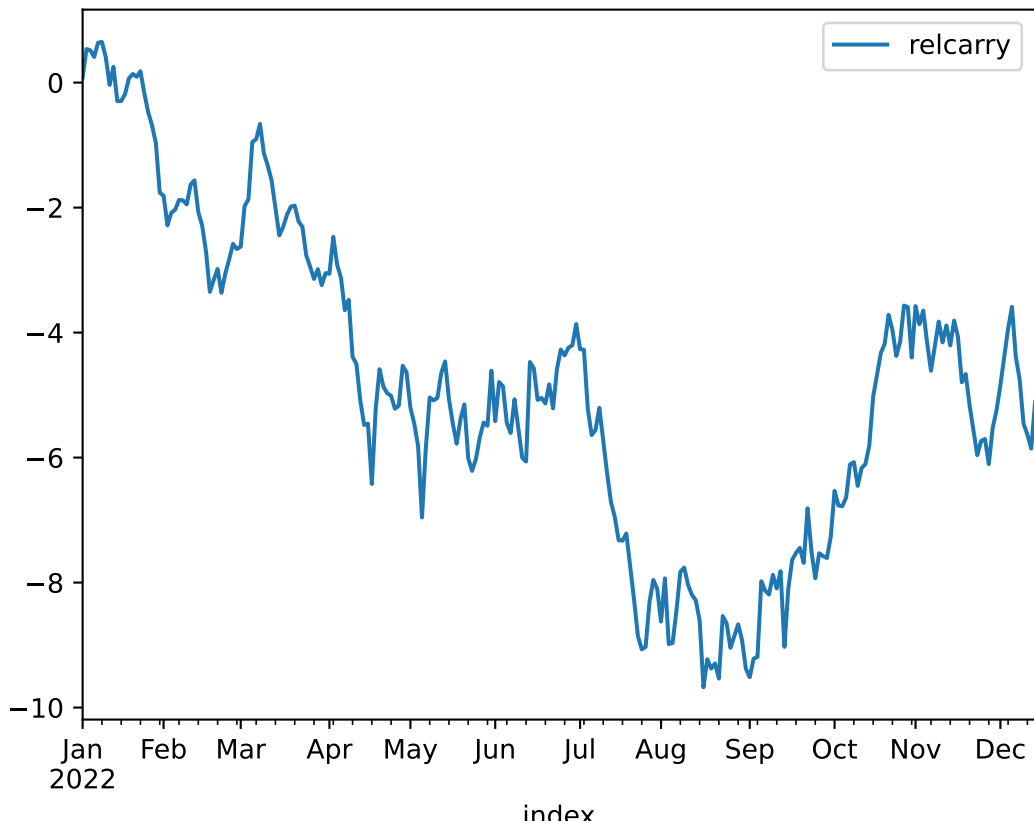
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.846, 'carry125': 4.986, 'carry30': 5.14, 'carry60': 5.376}
ann. std {'carry10': 6.46, 'carry125': 9.128, 'carry30': 6.572, 'carry60': 6.538}
ann. SR {'carry10': 0.6, 'carry125': 0.55, 'carry30': 0.78, 'carry60': 0.82}



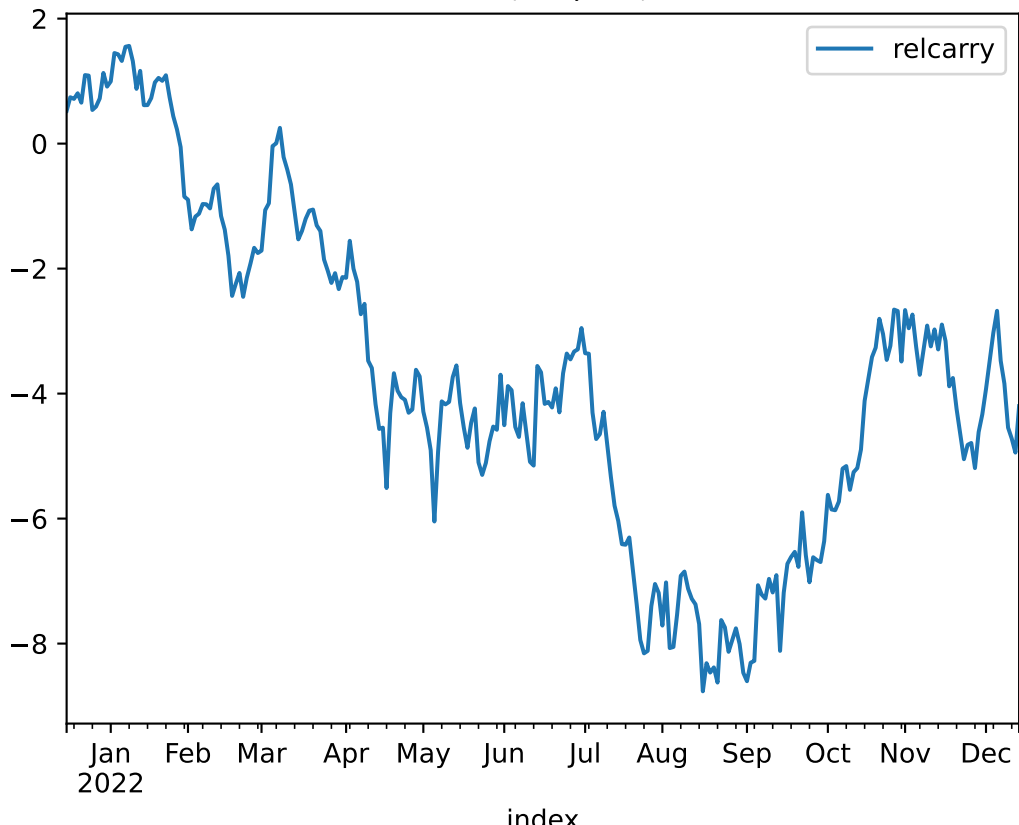
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.843, 'carry125': 7.341, 'carry30': 8.199, 'carry60': 8.024}
ann. std {'carry10': 11.863, 'carry125': 12.103, 'carry30': 11.875, 'carry60': 11.826}
ann. SR {'carry10': 0.66, 'carry125': 0.61, 'carry30': 0.69, 'carry60': 0.68}



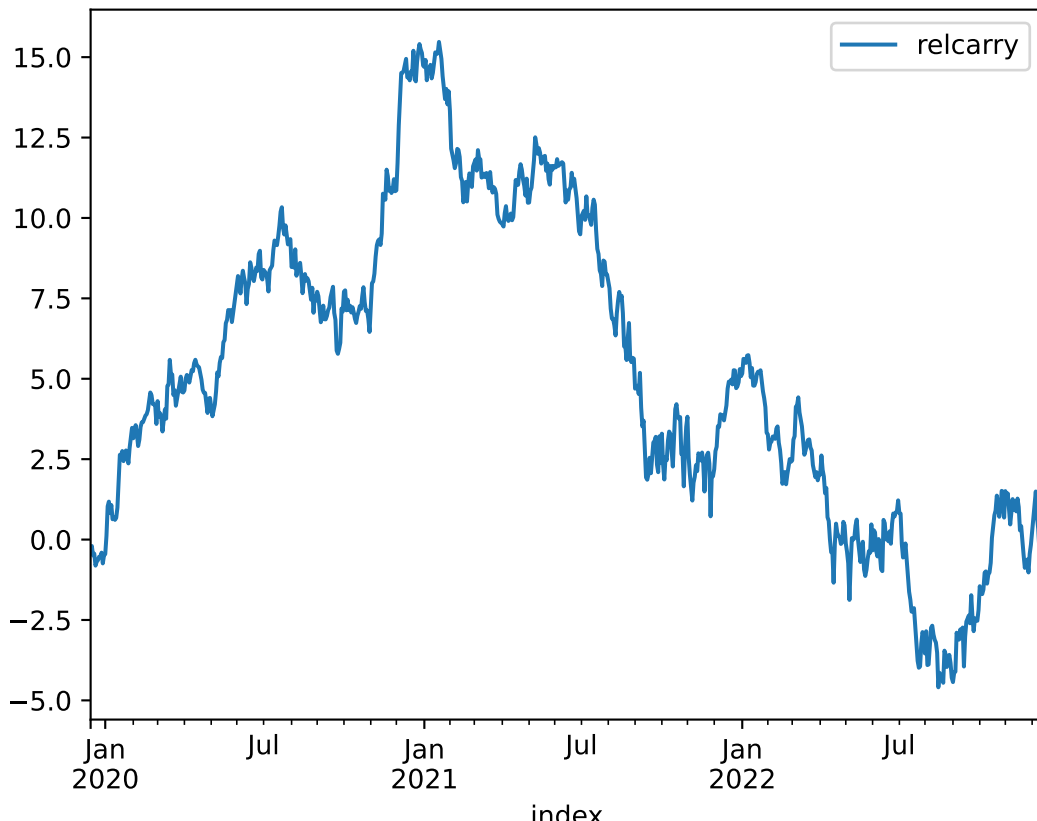
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': -5.279}
ann. std {'relcarry': 7.189}
ann. SR {'relcarry': -0.73}



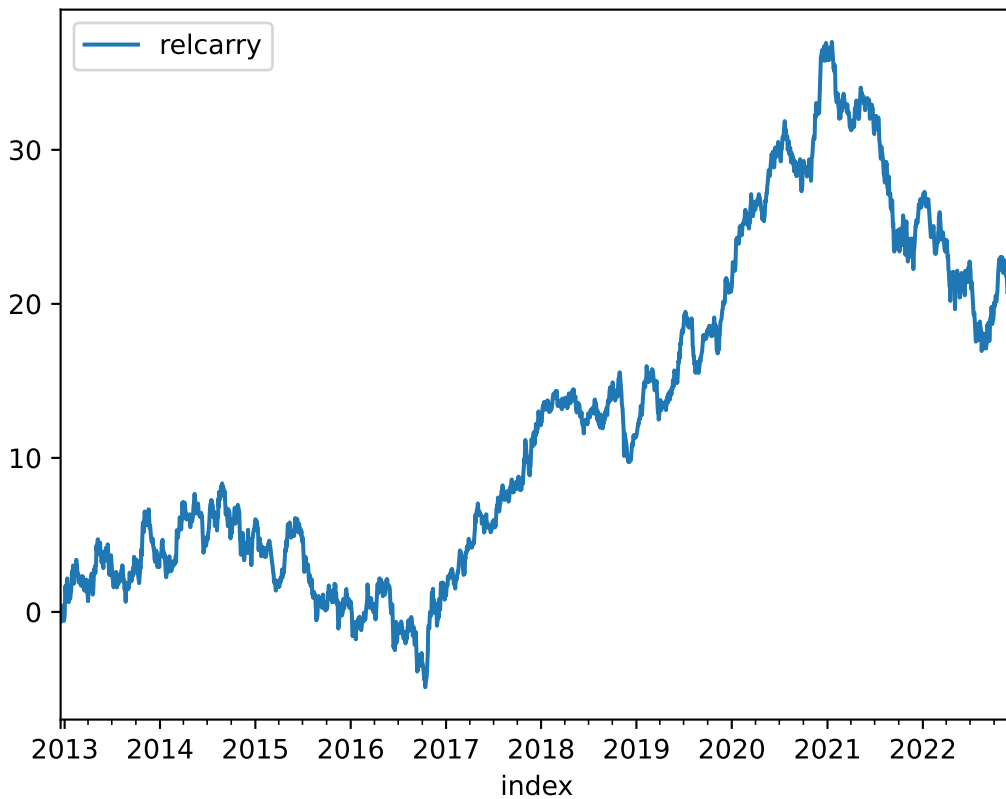
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': -4.137}
ann. std {'relcarry': 7.1}
ann. SR {'relcarry': -0.58}



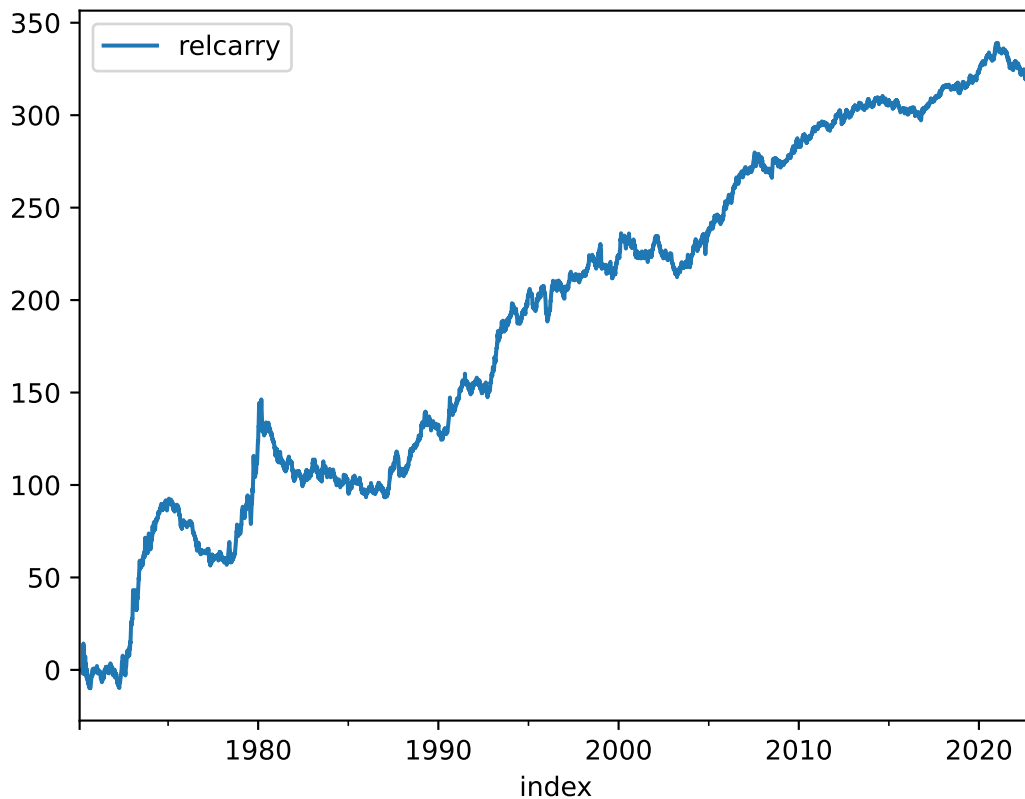
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -0.01}
ann. std {'relcarry': 6.827}
ann. SR {'relcarry': -0.0}



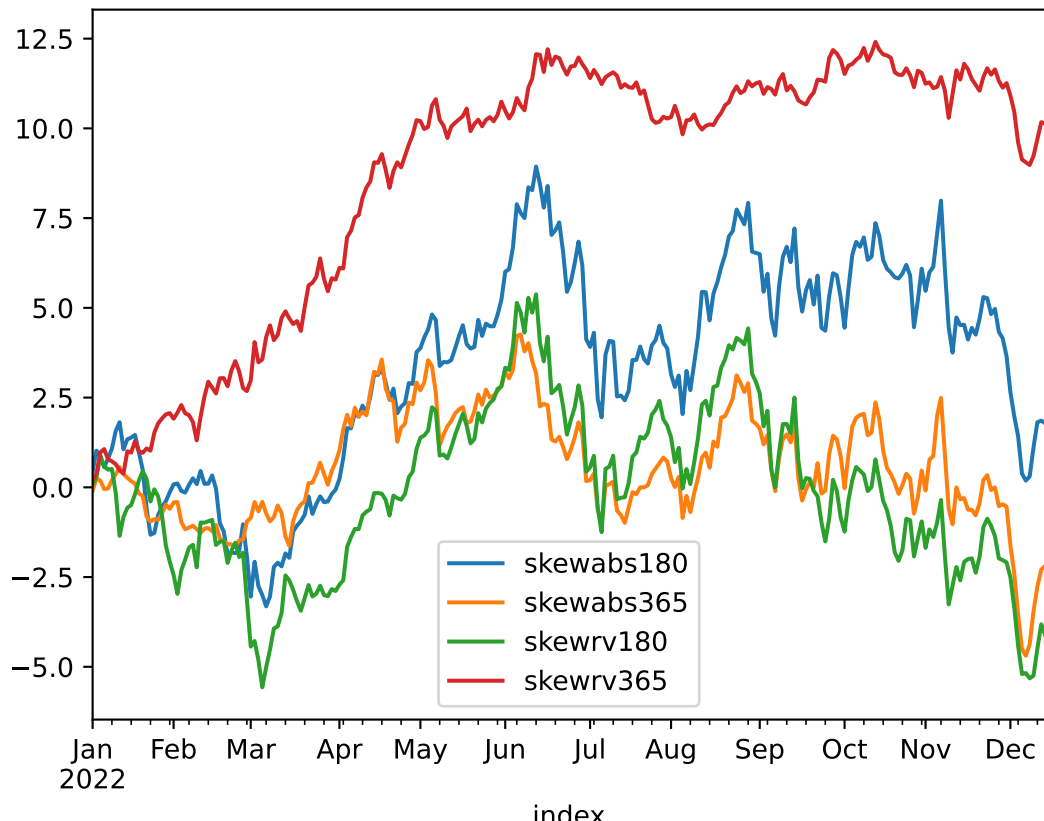
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.111}
ann. std {'relcarry': 6.051}
ann. SR {'relcarry': 0.35}



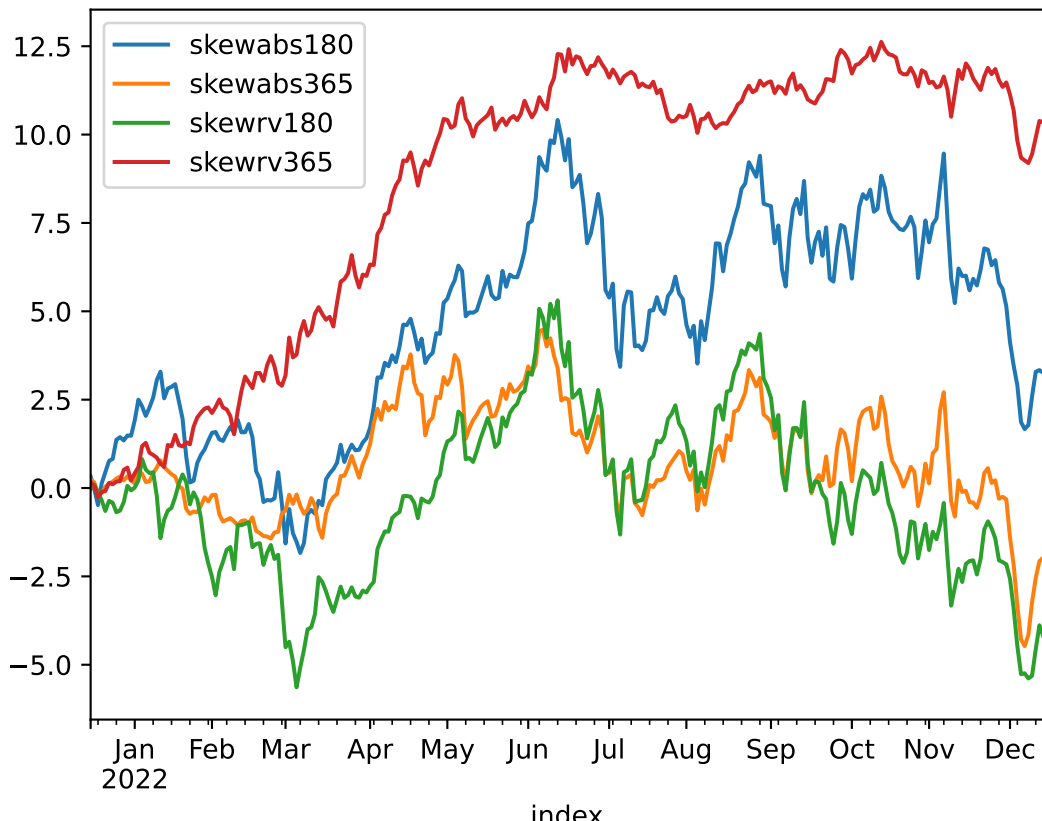
Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 6.006}
ann. std {'relcarry': 9.56}
ann. SR {'relcarry': 0.63}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': 1.843, 'skewabs365': -2.262, 'skewrv180': -4.241, 'skewrv365': 10.459}
ann. std {'skewabs180': 10.001, 'skewabs365': 7.893, 'skewrv180': 9.385, 'skewrv365': 4.964}
ann. SR {'skewabs180': 0.18, 'skewabs365': -0.29, 'skewrv180': -0.45, 'skewrv365': 2.11}



Total Trading Rule P&L for period '1Y'
ann. mean {'skewabs180': 3.213, 'skewabs365': -1.94, 'skewrv180': -4.112, 'skewrv365': 10.186}
ann. std {'skewabs180': 9.833, 'skewabs365': 7.724, 'skewrv180': 9.201, 'skewrv365': 4.896}
ann. SR {'skewabs180': 0.33, 'skewabs365': -0.25, 'skewrv180': -0.45, 'skewrv365': 2.08}

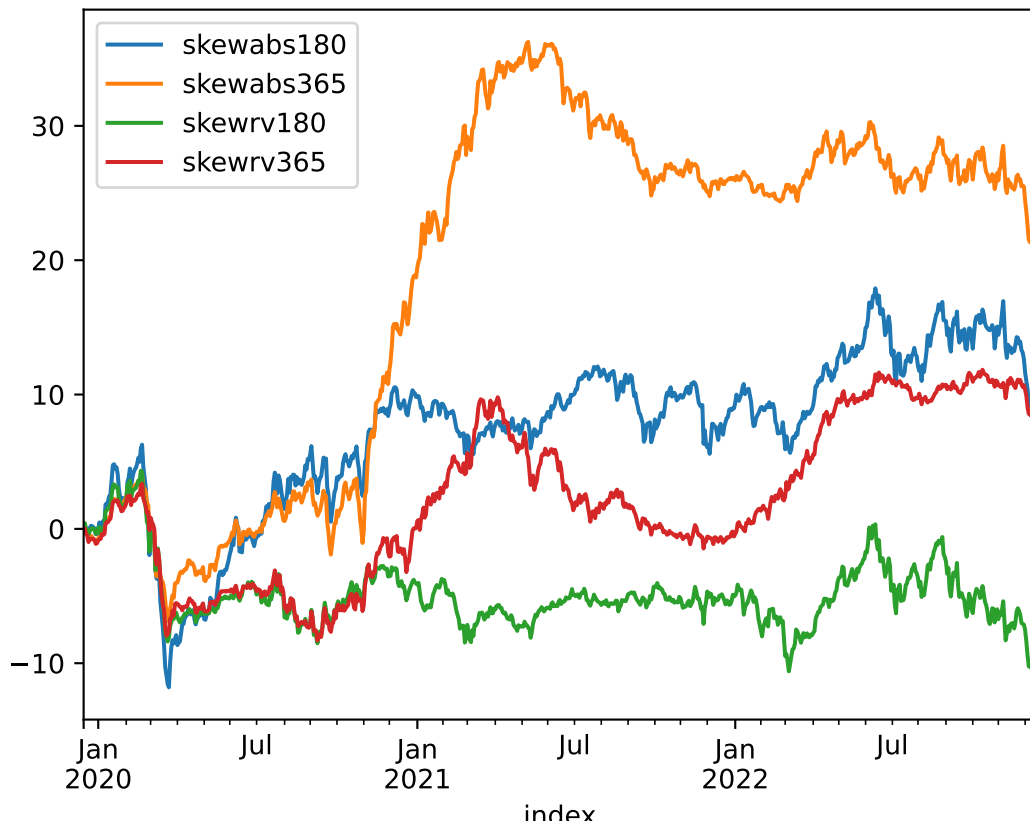


Total Trading Rule P&L for period '3Y'

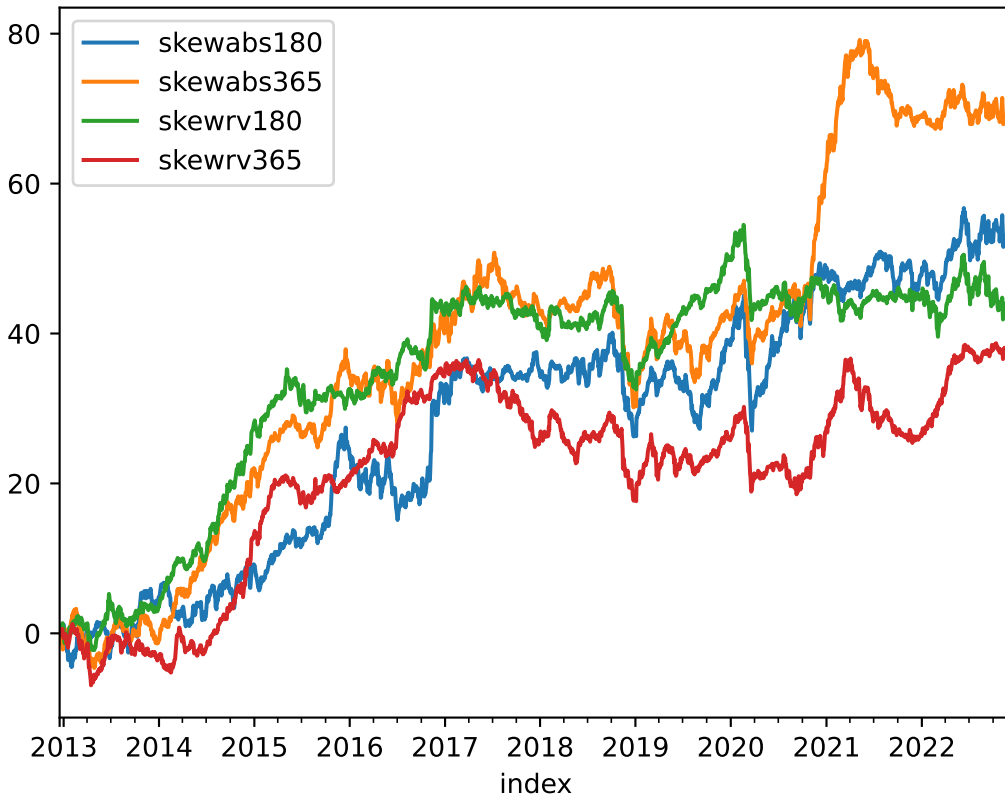
ann. mean {'skewabs180': 3.517, 'skewabs365': 7.793, 'skewrv180': -2.99, 'skewrv365': 3.128}

ann. std {'skewabs180': 9.595, 'skewabs365': 8.748, 'skewrv180': 7.788, 'skewrv365': 6.575}

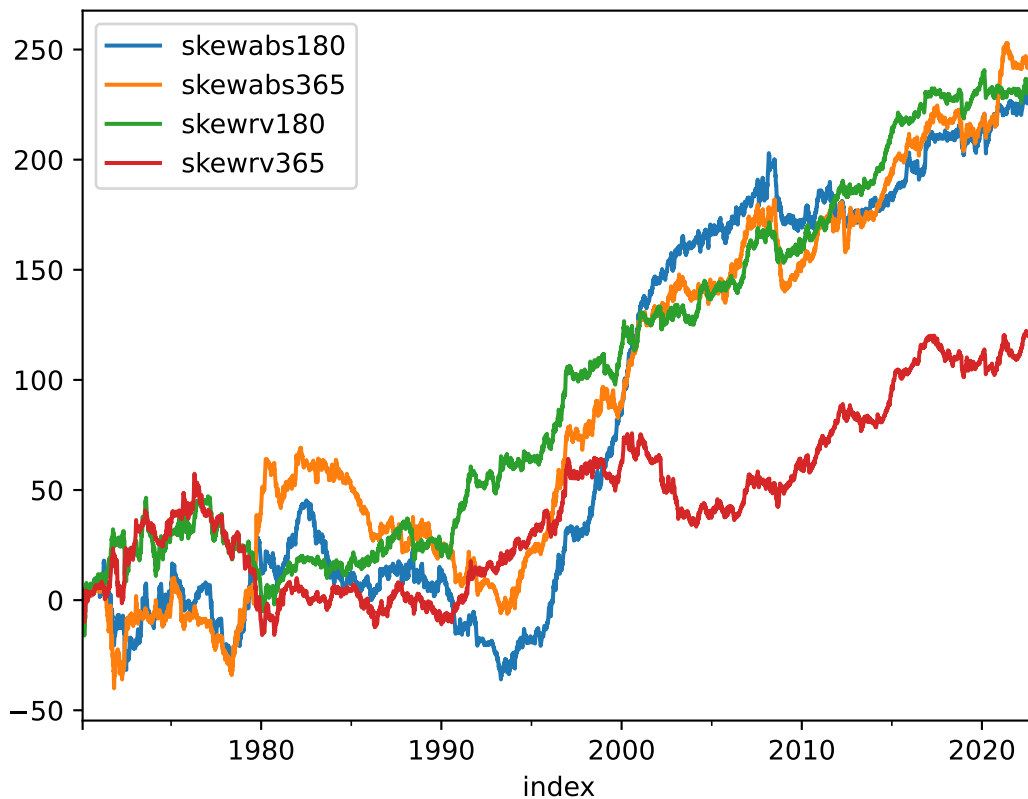
ann. SR {'skewabs180': 0.37, 'skewabs365': 0.89, 'skewrv180': -0.38, 'skewrv365': 0.48}



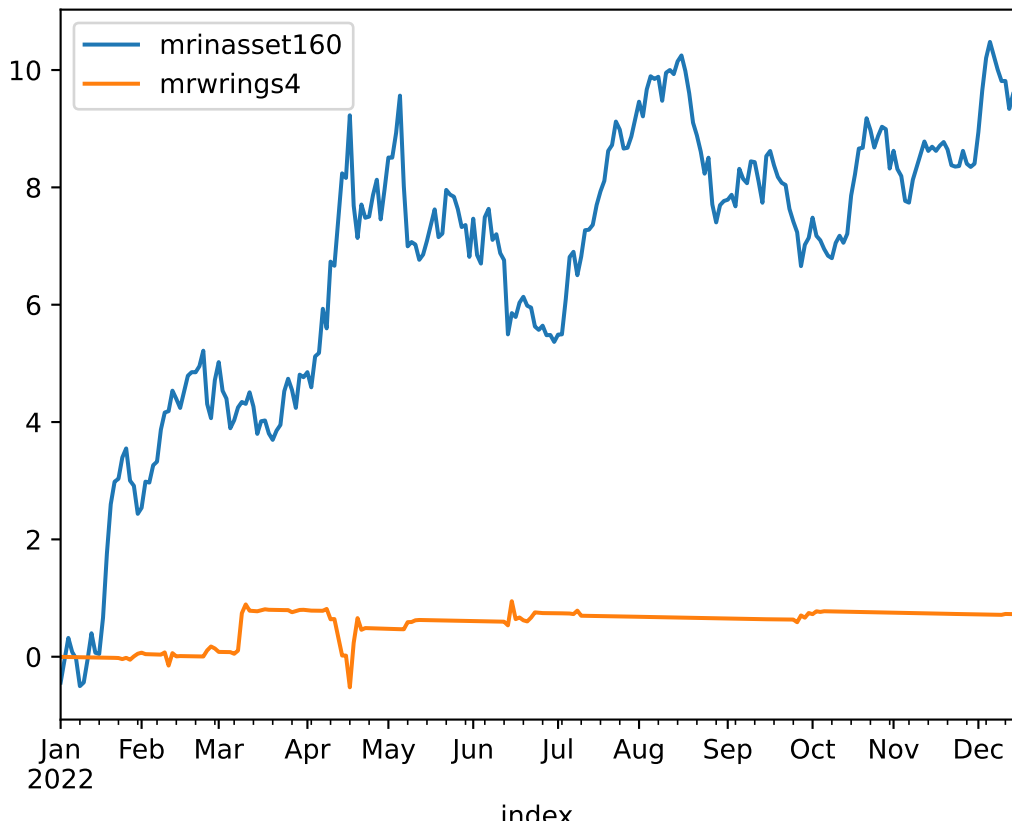
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.868, 'skewabs365': 6.553, 'skewrv180': 4.027, 'skewrv365': 3.576}
ann. std {'skewabs180': 8.071, 'skewabs365': 8.0, 'skewrv180': 6.593, 'skewrv365': 6.173}
ann. SR {'skewabs180': 0.6, 'skewabs365': 0.82, 'skewrv180': 0.61, 'skewrv365': 0.58}



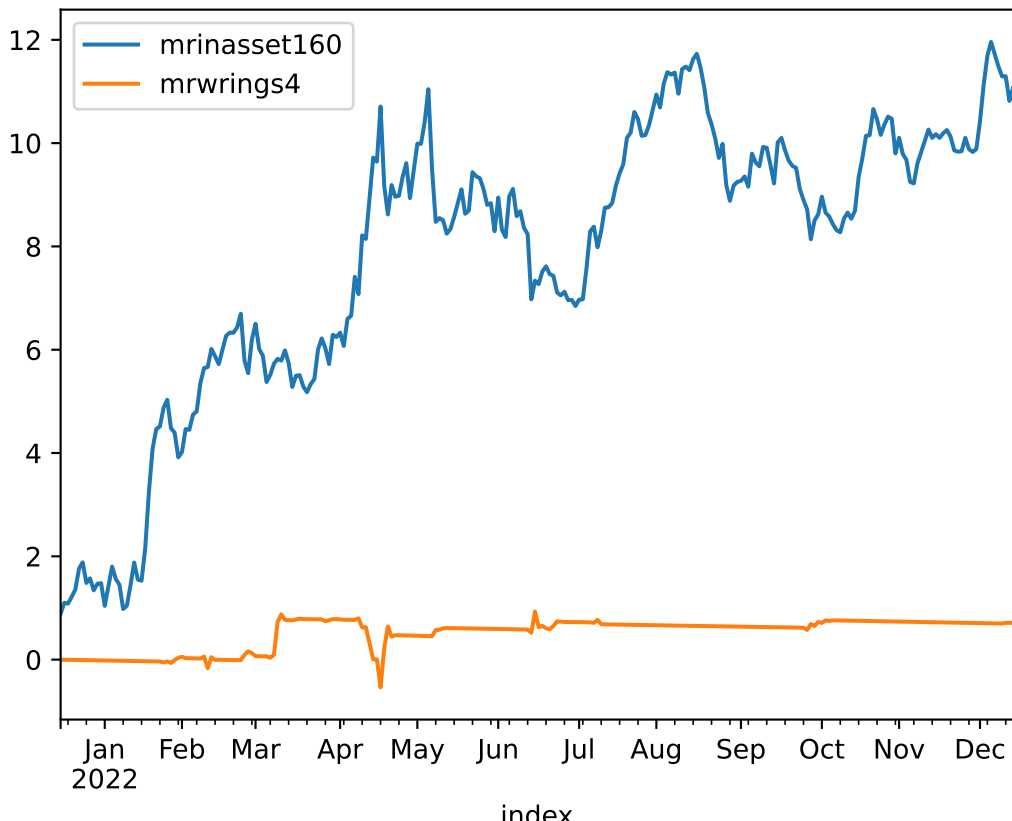
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.183, 'skewabs365': 4.466, 'skewrv180': 4.217, 'skewrv365': 2.229}
ann. std {'skewabs180': 10.794, 'skewabs365': 10.3, 'skewrv180': 9.31, 'skewrv365': 8.604}
ann. SR {'skewabs180': 0.39, 'skewabs365': 0.43, 'skewrv180': 0.45, 'skewrv365': 0.26}



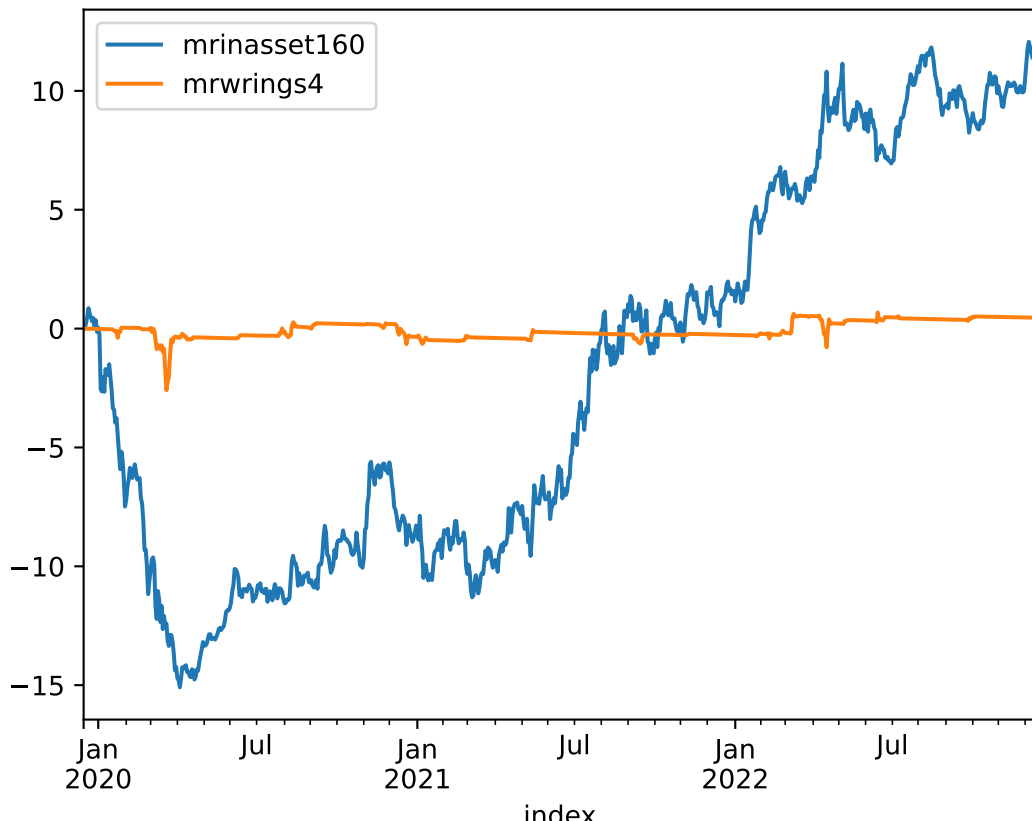
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 9.899, 'mrwrings4': 0.75}
ann. std {'mrinasset160': 6.31, 'mrwrings4': 1.517}
ann. SR {'mrinasset160': 1.57, 'mrwrings4': 0.49}



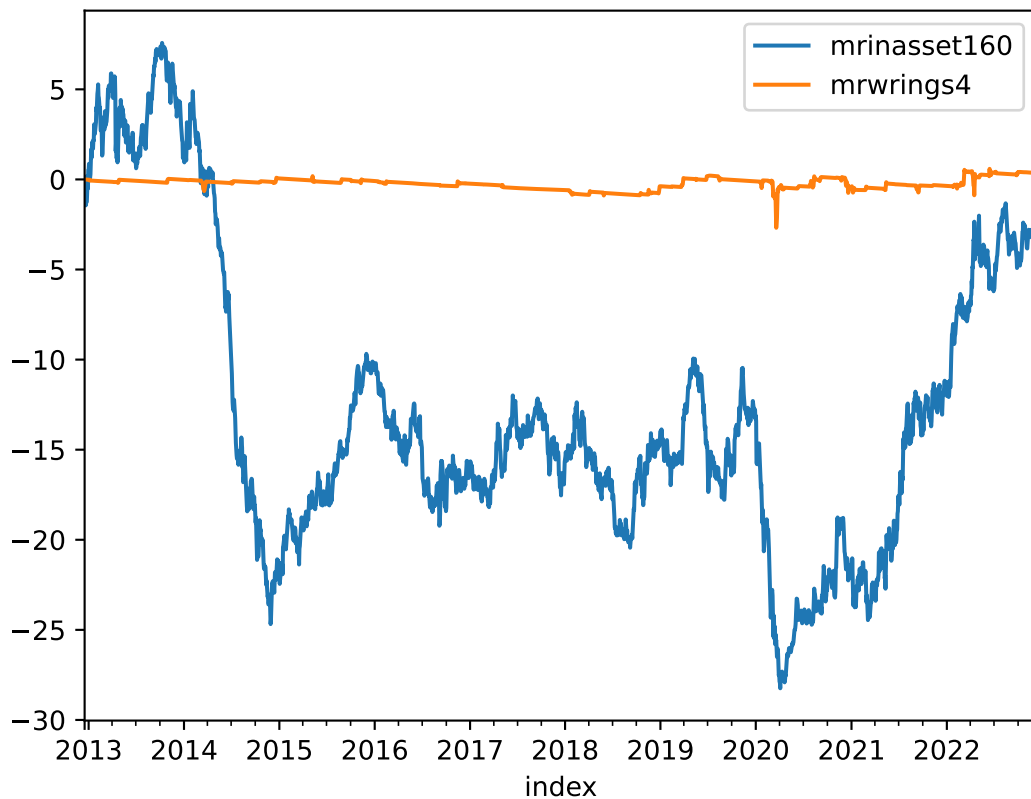
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 10.899, 'mrwrings4': 0.7}
ann. std {'mrinasset160': 6.256, 'mrwrings4': 1.481}
ann. SR {'mrinasset160': 1.74, 'mrwrings4': 0.47}



Total Trading Rule P&L for period '3Y'
ann. mean {'mriasset160': 3.652, 'mrwrings4': 0.15}
ann. std {'mriasset160': 7.083, 'mrwrings4': 1.535}
ann. SR {'mriasset160': 0.52, 'mrwrings4': 0.1}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.195, 'mrwrings4': 0.036}
ann. std {'mrinasset160': 6.641, 'mrwrings4': 0.897}
ann. SR {'mrinasset160': -0.03, 'mrwrings4': 0.04}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.357, 'mrwrings4': -1.173}
ann. std {'mrinasset160': 10.924, 'mrwrings4': 2.632}
ann. SR {'mrinasset160': -0.31, 'mrwrings4': -0.45}

