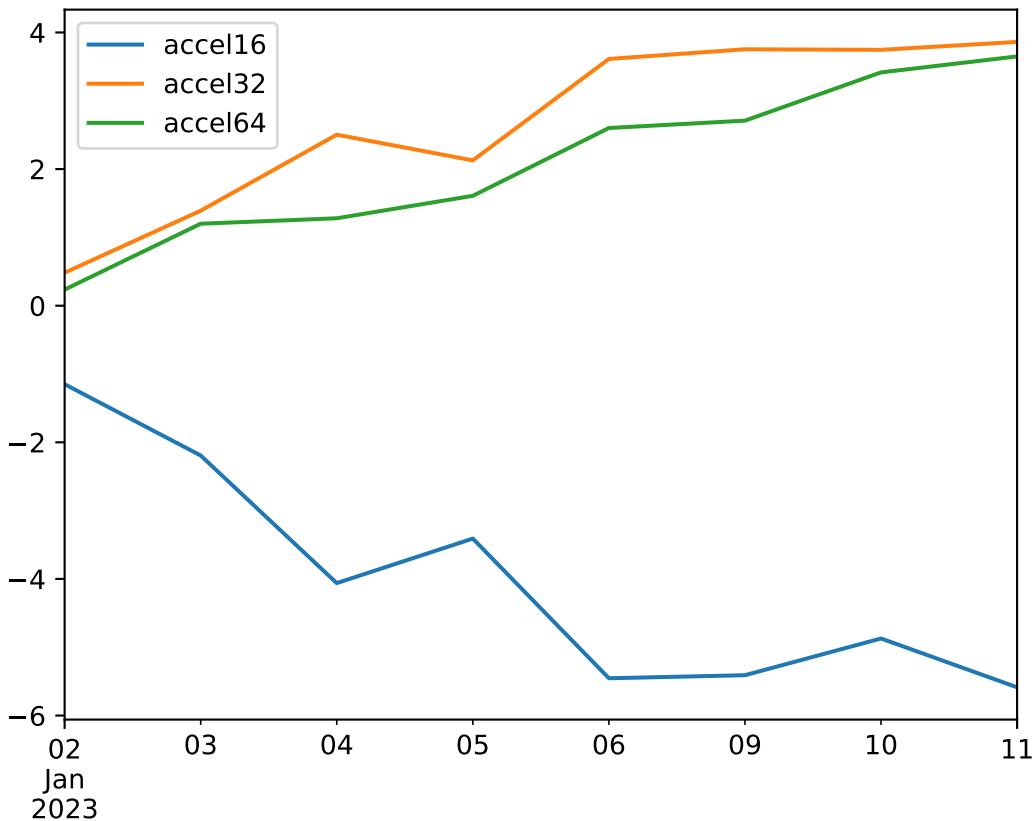
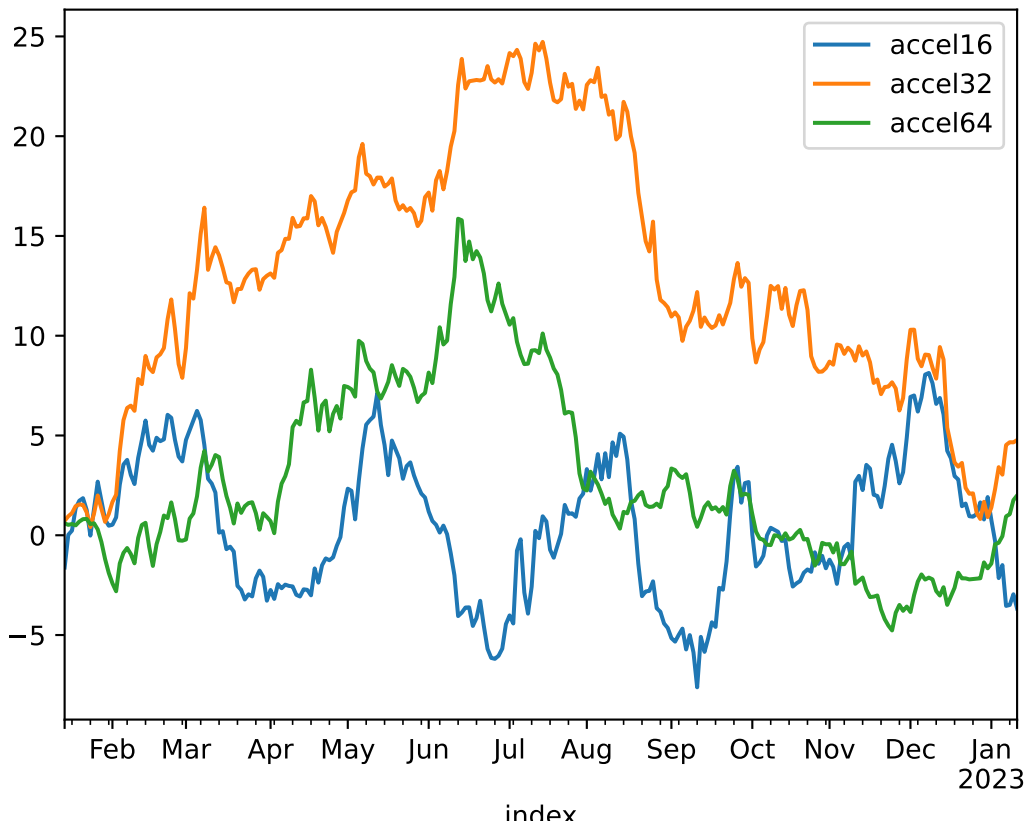


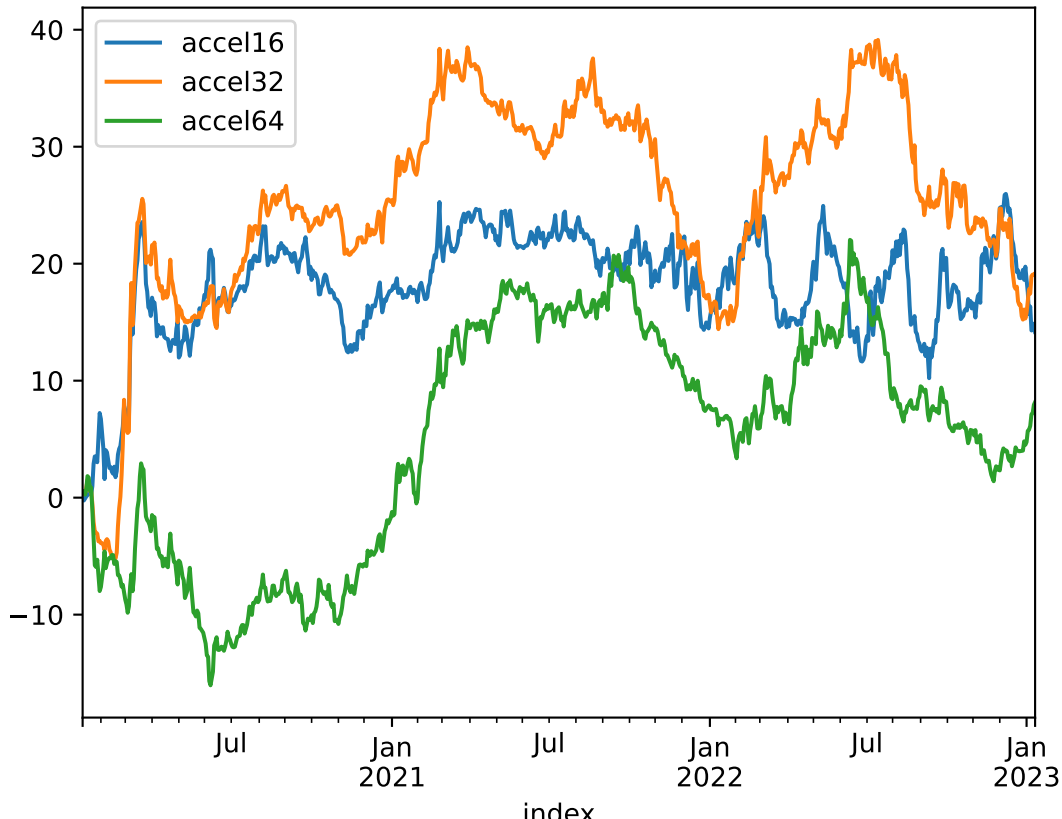
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -178.77, 'accel32': 123.574, 'accel64': 116.769}
ann. std {'accel16': 16.46, 'accel32': 10.147, 'accel64': 6.008}
ann. SR {'accel16': -10.86, 'accel32': 12.18, 'accel64': 19.44}



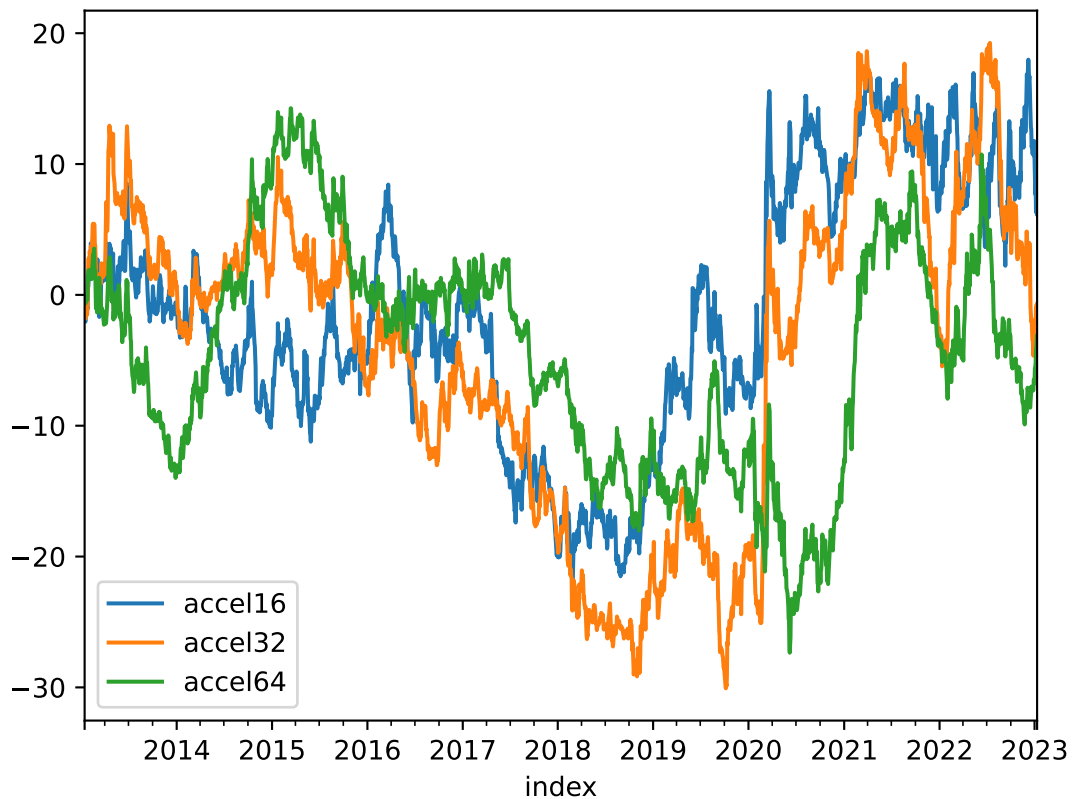
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -3.615, 'accel32': 4.698, 'accel64': 1.963}
ann. std {'accel16': 16.369, 'accel32': 14.671, 'accel64': 11.706}
ann. SR {'accel16': -0.22, 'accel32': 0.32, 'accel64': 0.17}



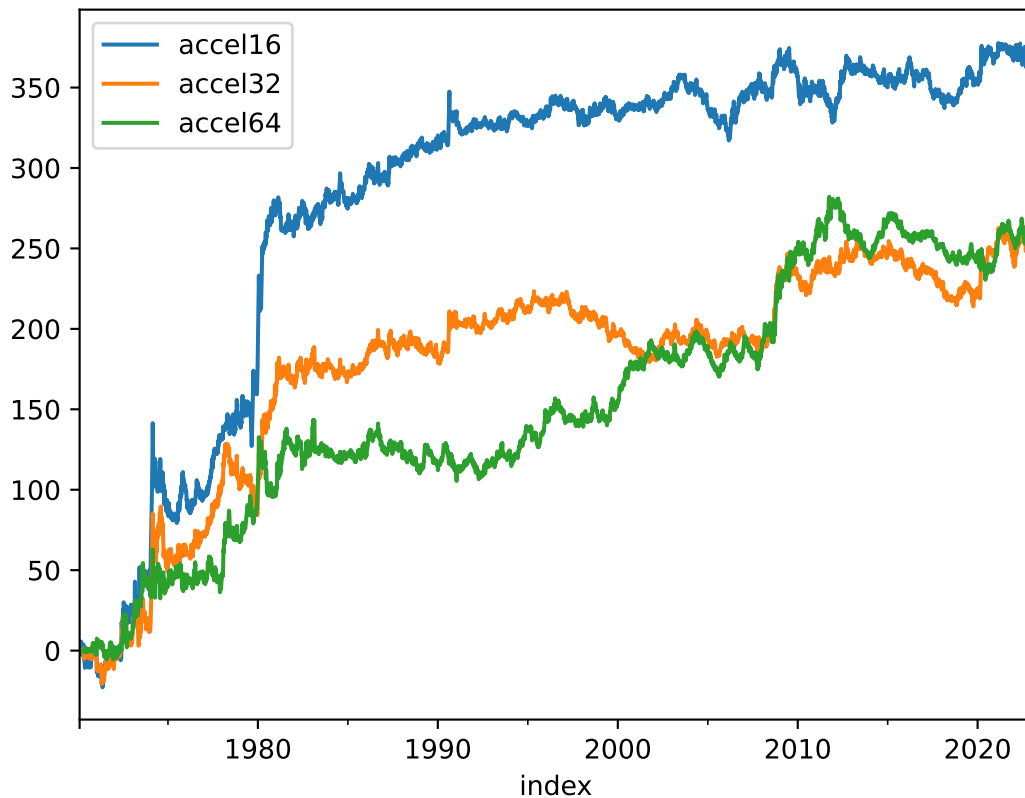
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': 4.63, 'accel32': 6.27, 'accel64': 2.67}
ann. std {'accel16': 15.031, 'accel32': 14.314, 'accel64': 11.68}
ann. SR {'accel16': 0.31, 'accel32': 0.44, 'accel64': 0.23}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 0.606, 'accel32': -0.068, 'accel64': -0.308}
ann. std {'accel16': 11.967, 'accel32': 11.227, 'accel64': 9.586}
ann. SR {'accel16': 0.05, 'accel32': -0.01, 'accel64': -0.03}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.794, 'accel32': 4.51, 'accel64': 4.721}
ann. std {'accel16': 15.732, 'accel32': 13.8, 'accel64': 13.326}
ann. SR {'accel16': 0.43, 'accel32': 0.33, 'accel64': 0.35}

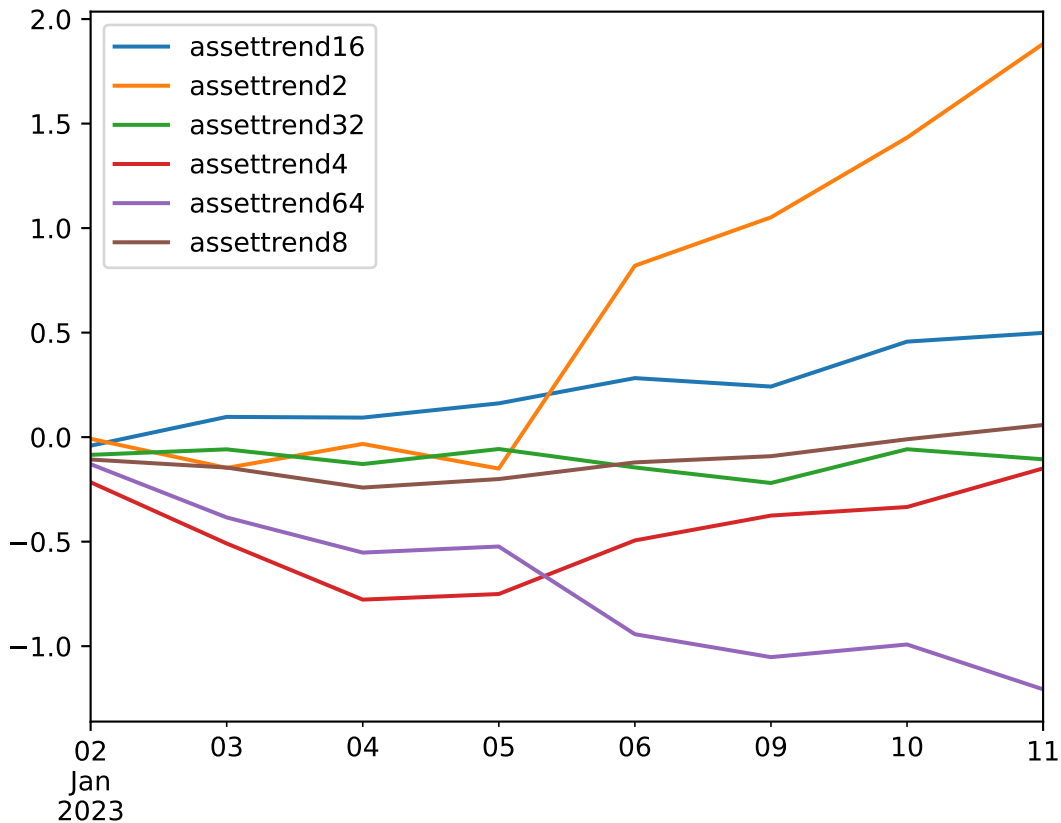


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': 15.96, 'assettrend2': 60.198, 'assettrend32': -3.394, 'assettrend4': -4.785, 'assettrend64': -38.604, 'assettrend8': 1.855}

ann. std {'assettrend16': 1.461, 'assettrend2': 5.883, 'assettrend32': 1.46, 'assettrend4': 3.411, 'assettrend64': 2.468, 'assettrend8': 1.236}

ann. SR {'assettrend16': 10.92, 'assettrend2': 10.23, 'assettrend32': -2.32, 'assettrend4': -1.4, 'assettrend64': -15.64, 'assettrend8': 1.5}

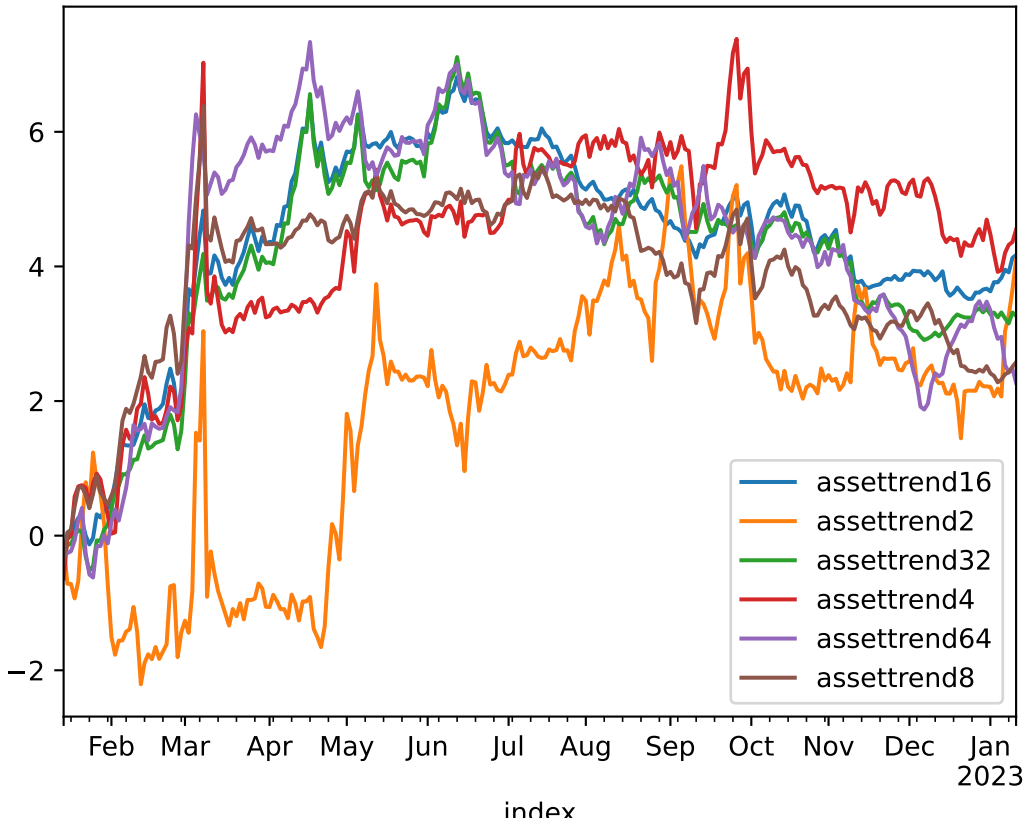


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': 4.105, 'assettrend2': 4.036, 'assettrend32': 3.217, 'assettrend4': 4.477, 'assettrend64': 2.236, 'assettrend8': 2.537}

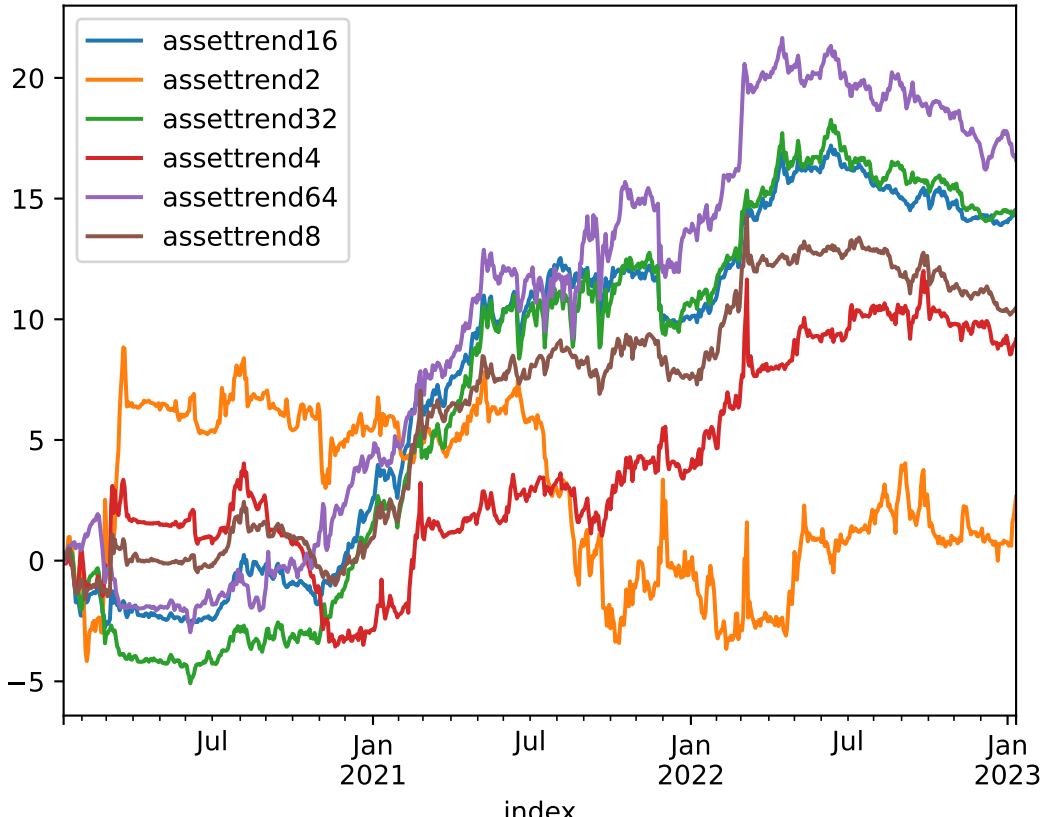
ann. std {'assettrend16': 3.012, 'assettrend2': 7.703, 'assettrend32': 3.281, 'assettrend4': 5.728, 'assettrend64': 3.934, 'assettrend8': 3.719}

ann. SR {'assettrend16': 1.36, 'assettrend2': 0.52, 'assettrend32': 0.98, 'assettrend4': 0.78, 'assettrend64': 0.57, 'assettrend8': 0.68}



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

ann. mean {'assettrend16': 4.758, 'assettrend2': 0.866, 'assettrend32': 4.715, 'assettrend4': 2.998, 'assettrend64': 5.425, 'assettrend8': 3.43}
ann. std {'assettrend16': 3.602, 'assettrend2': 7.781, 'assettrend32': 4.419, 'assettrend4': 5.359, 'assettrend64': 5.135, 'assettrend8': 3.74}
ann. SR {'assettrend16': 1.32, 'assettrend2': 0.11, 'assettrend32': 1.07, 'assettrend4': 0.56, 'assettrend64': 1.06, 'assettrend8': 0.92}

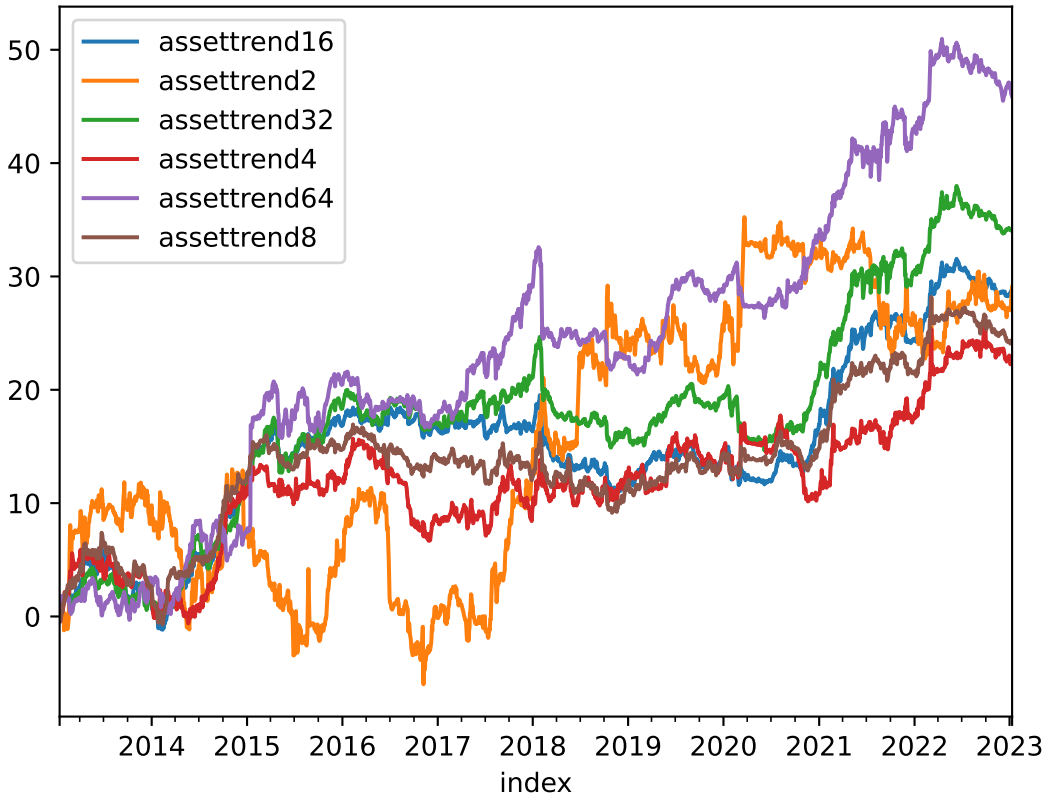


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.838, 'assettrend2': 2.852, 'assettrend32': 3.352, 'assettrend4': 2.246, 'assettrend64': 4.505, 'assettrend8': 2.393}

ann. std {'assettrend16': 3.269, 'assettrend2': 8.401, 'assettrend32': 3.746, 'assettrend4': 5.006, 'assettrend64': 5.309, 'assettrend8': 3.566}

ann. SR {'assettrend16': 0.87, 'assettrend2': 0.34, 'assettrend32': 0.89, 'assettrend4': 0.45, 'assettrend64': 0.85, 'assettrend8': 0.67}

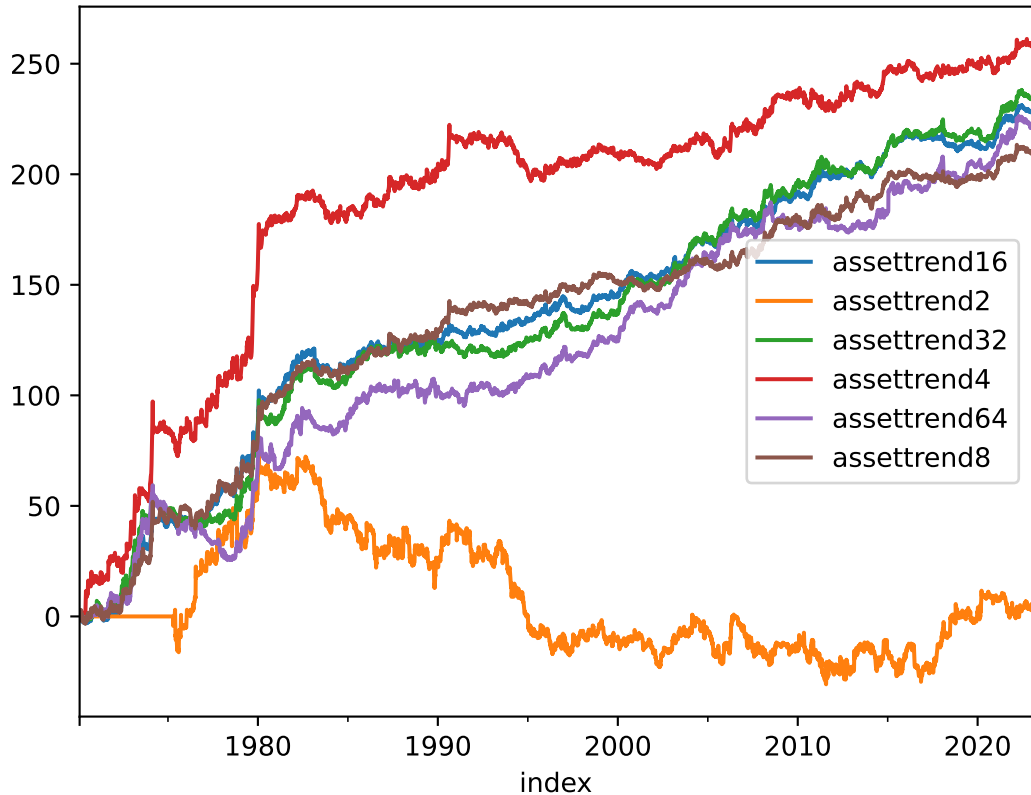


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.238, 'assettrend2': 0.101, 'assettrend32': 4.343, 'assettrend4': 4.789, 'assettrend8': 3.883}

ann. std {'assettrend16': 4.66, 'assettrend2': 10.049, 'assettrend32': 4.895, 'assettrend4': 7.348, 'assettrend64': 5.47, 'assettrend8': 5.035}

ann. SR {'assettrend16': 0.91, 'assettrend2': 0.01, 'assettrend32': 0.89, 'assettrend4': 0.65, 'assettrend64': 0.75, 'assettrend8': 0.77}

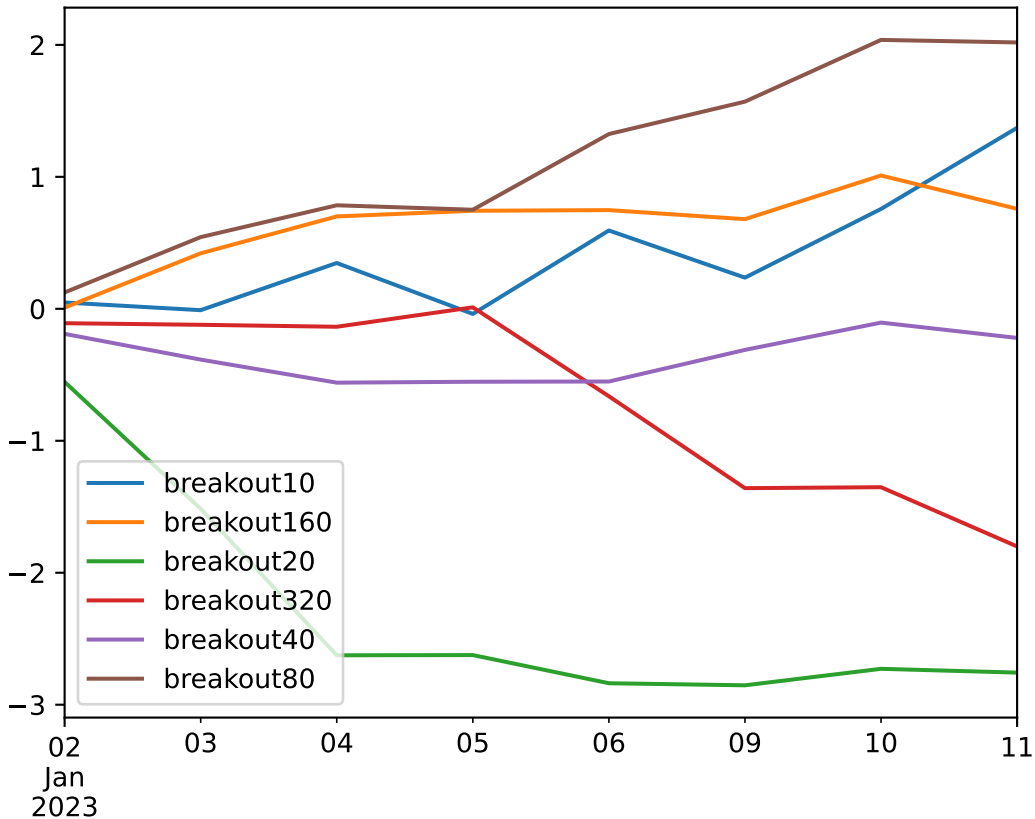


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 43.893, 'breakout160': 24.242, 'breakout20': -88.215, 'breakout320': -57.62, 'breakout40': -7.06, 'breakout80': 64.591}

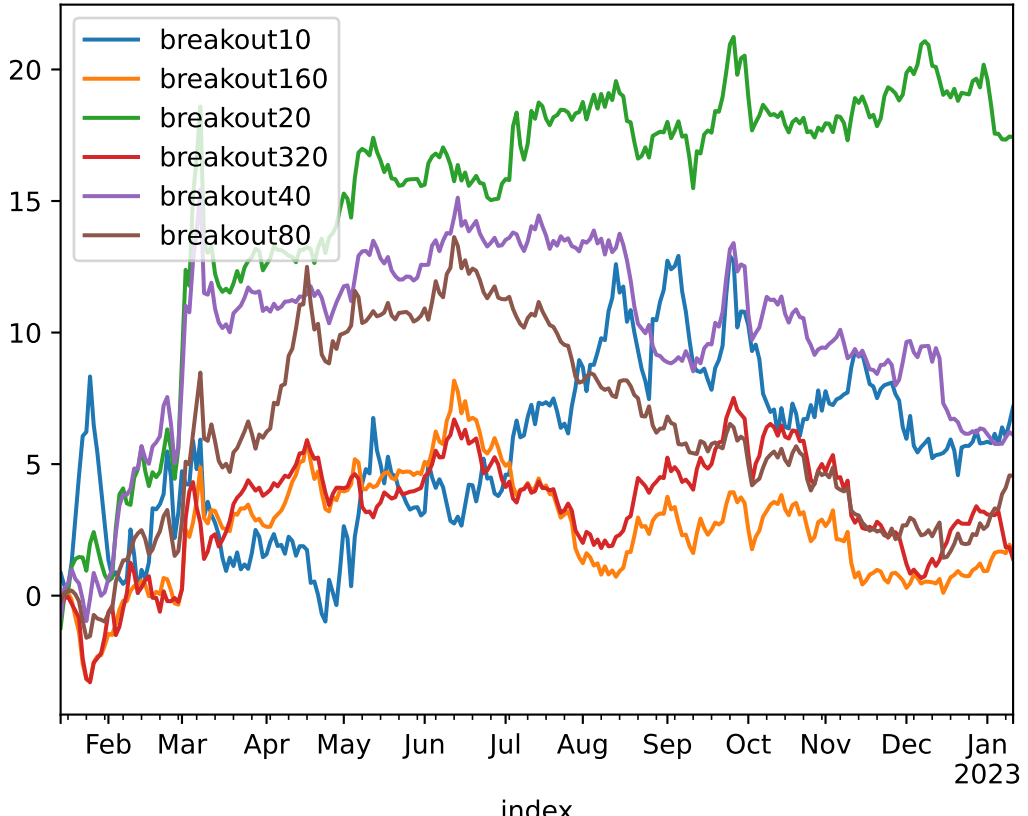
ann. std {'breakout10': 6.691, 'breakout160': 3.608, 'breakout20': 7.592, 'breakout320': 5.304, 'breakout40': 2.786, 'breakout80': 3.577}

ann. SR {'breakout10': 6.56, 'breakout160': 6.72, 'breakout20': -11.62, 'breakout320': -10.86, 'breakout40': -2.53, 'breakout80': 18.06}



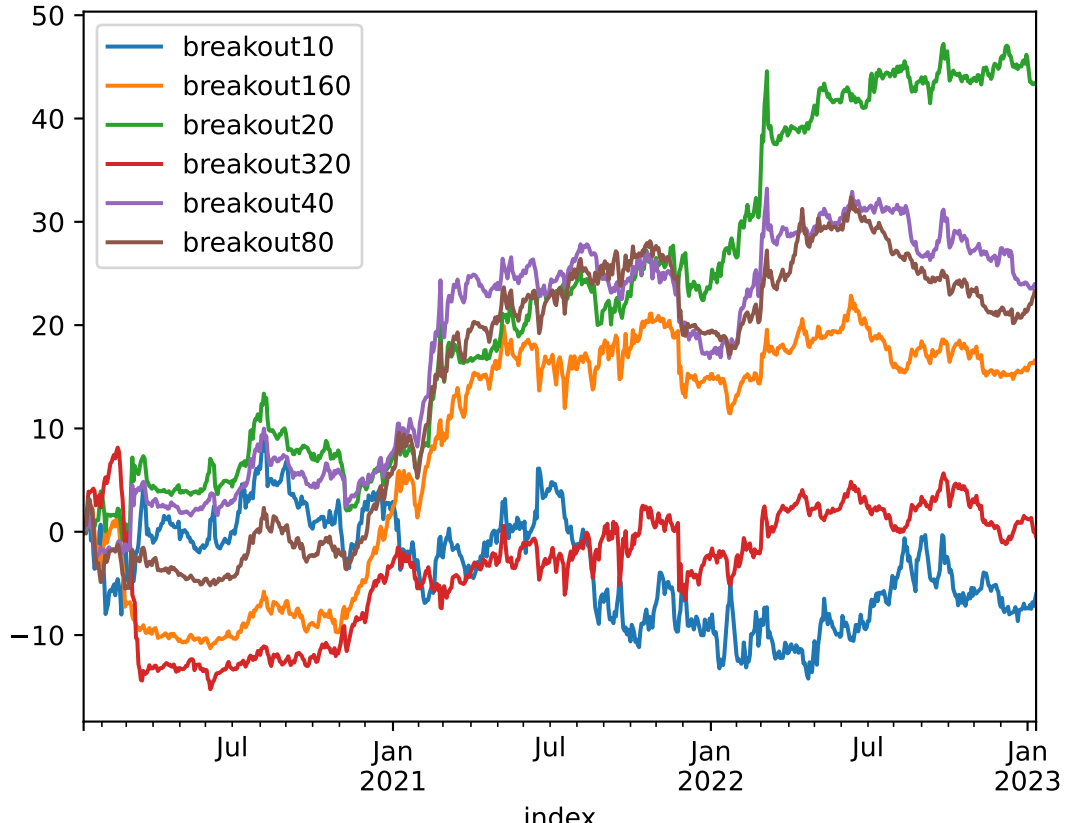
Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 7.066, 'breakout160': 1.662, 'breakout20': 17.157, 'breakout320': 1.371, 'breakout40': 6.01, 'breakout80': 4.481}
 ann. std {'breakout10': 13.328, 'breakout160': 7.072, 'breakout20': 11.952, 'breakout320': 7.377, 'breakout40': 9.648, 'breakout80': 7.945}
 ann. SR {'breakout10': 0.53, 'breakout160': 0.24, 'breakout20': 1.44, 'breakout320': 0.19, 'breakout40': 0.62, 'breakout80': 0.56}



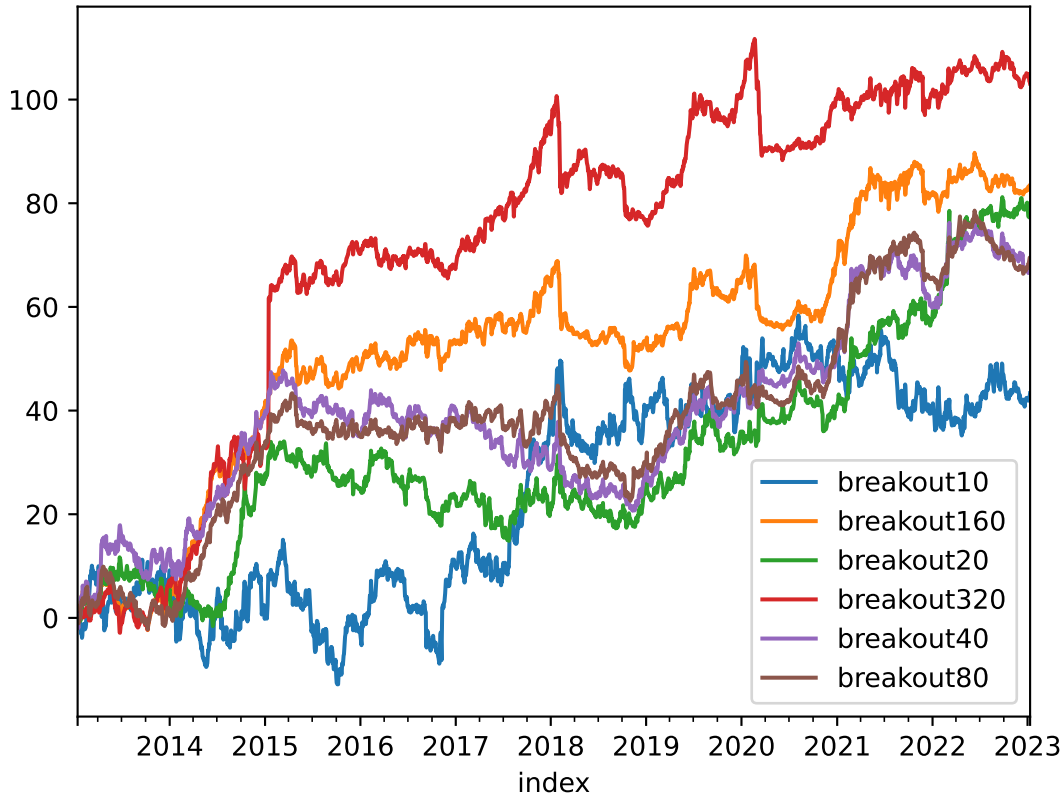
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -1.979, 'breakout160': 5.351, 'breakout20': 14.192, 'breakout320': -0.154, 'breakout40': 7.808, 'breakout80': 7.619}
ann. std {'breakout10': 14.488, 'breakout160': 9.718, 'breakout20': 11.492, 'breakout320': 10.715, 'breakout40': 9.957, 'breakout80': 9.53}
ann. SR {'breakout10': -0.14, 'breakout160': 0.55, 'breakout20': 1.23, 'breakout320': -0.01, 'breakout40': 0.78, 'breakout80': 0.8}



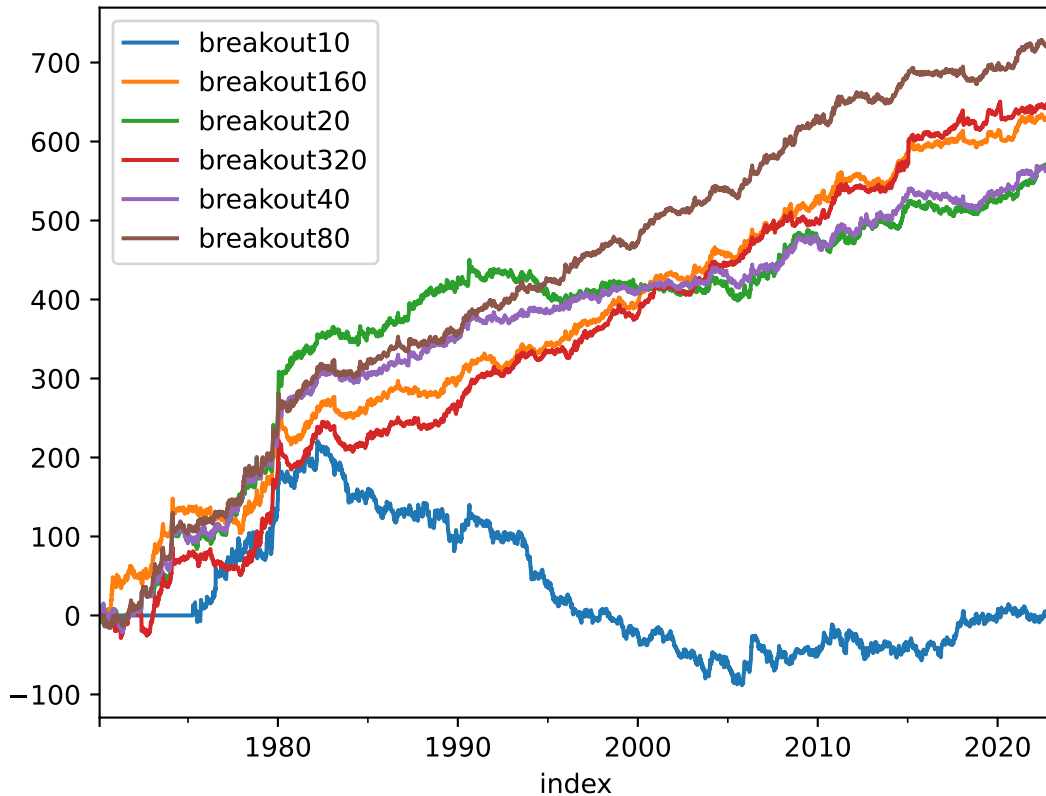
Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 4.255, 'breakout160': 8.171, 'breakout20': 7.594, 'breakout320': 10.119, 'breakout40': 6.566, 'breakout80': 6.823}
ann. std {'breakout10': 15.685, 'breakout160': 9.116, 'breakout20': 11.197, 'breakout320': 13.332, 'breakout40': 9.827, 'breakout80': 9.019}
ann. SR {'breakout10': 0.27, 'breakout160': 0.9, 'breakout20': 0.68, 'breakout320': 0.76, 'breakout40': 0.67, 'breakout80': 0.76}



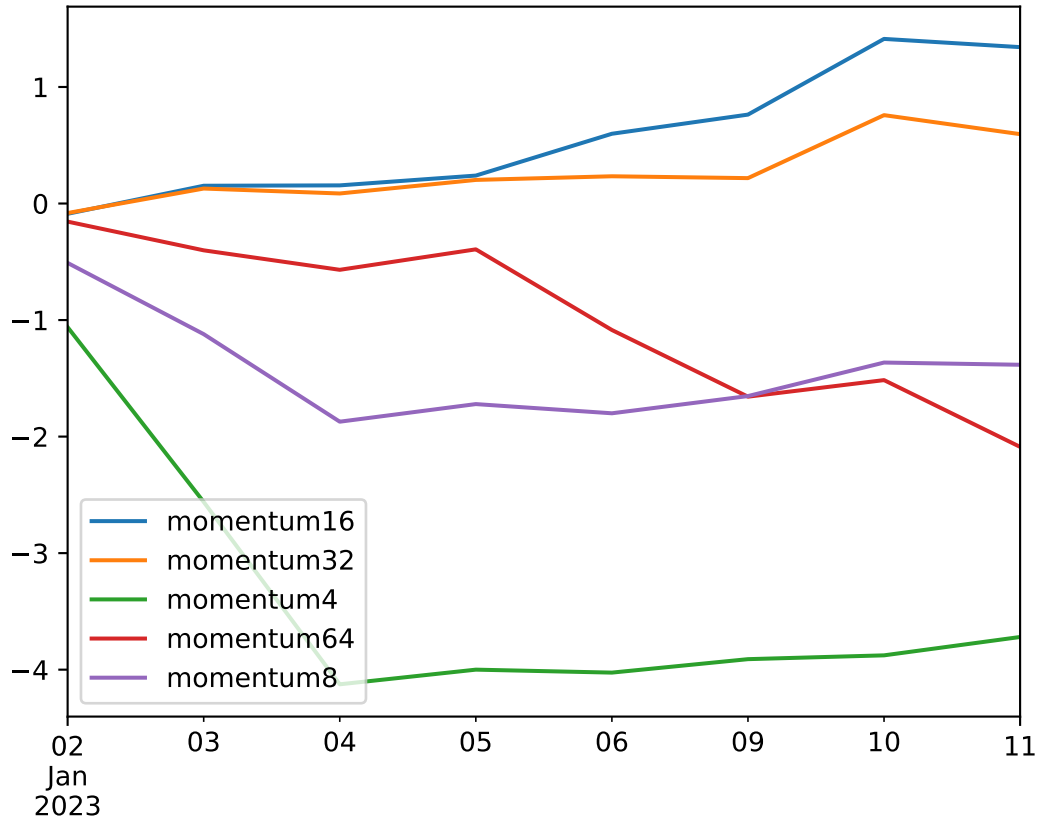
Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.01, 'breakout160': 11.643, 'breakout20': 10.529, 'breakout320': 11.899, 'breakout40': 10.376, 'breakout80': 13.337}
 ann. std {'breakout10': 20.832, 'breakout160': 12.495, 'breakout20': 16.101, 'breakout320': 13.048, 'breakout40': 13.233, 'breakout80': 12.755}
 ann. SR {'breakout10': -0.0, 'breakout160': 0.93, 'breakout20': 0.65, 'breakout320': 0.91, 'breakout40': 0.78, 'breakout80': 1.05}



Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 42.943, 'momentum32': 19.05, 'momentum4': -119.029, 'momentum64': -66.82, 'momentum8': -44.277}
 ann. std {'momentum16': 3.967, 'momentum32': 3.535, 'momentum4': 12.32, 'momentum64': 5.249, 'momentum8': 6.321}
 ann. SR {'momentum16': 10.82, 'momentum32': 5.39, 'momentum4': -9.66, 'momentum64': -12.73, 'momentum8': -7.01}

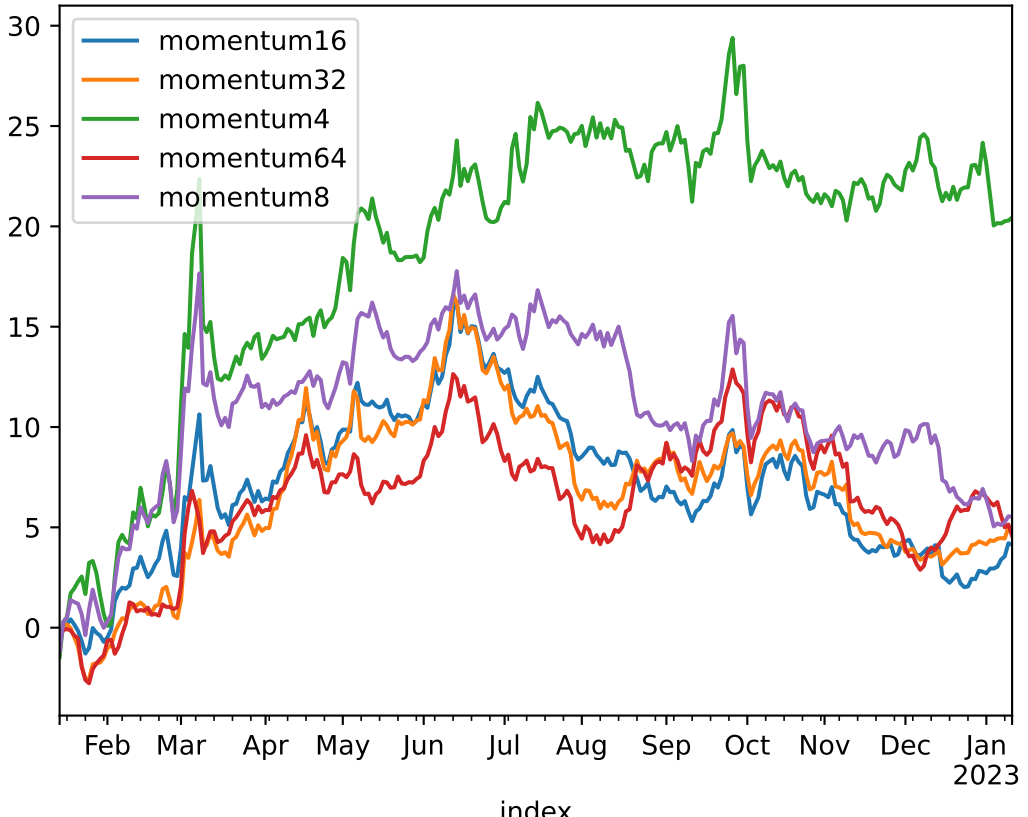


Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': 4.073, 'momentum32': 4.751, 'momentum4': 20.132, 'momentum64': 4.498, 'momentum8': 5.448}

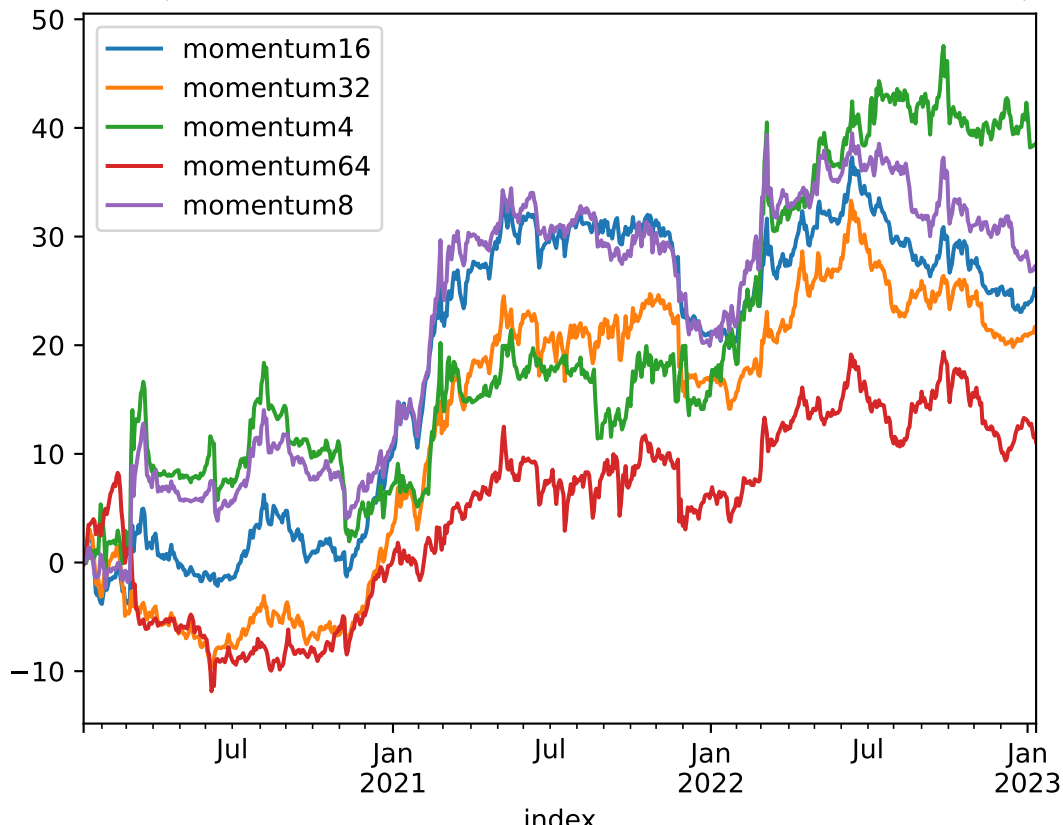
ann. std {'momentum16': 10.103, 'momentum32': 9.613, 'momentum4': 17.34, 'momentum64': 9.329, 'momentum8': 13.183}

ann. SR {'momentum16': 0.4, 'momentum32': 0.49, 'momentum4': 1.16, 'momentum64': 0.48, 'momentum8': 0.41}



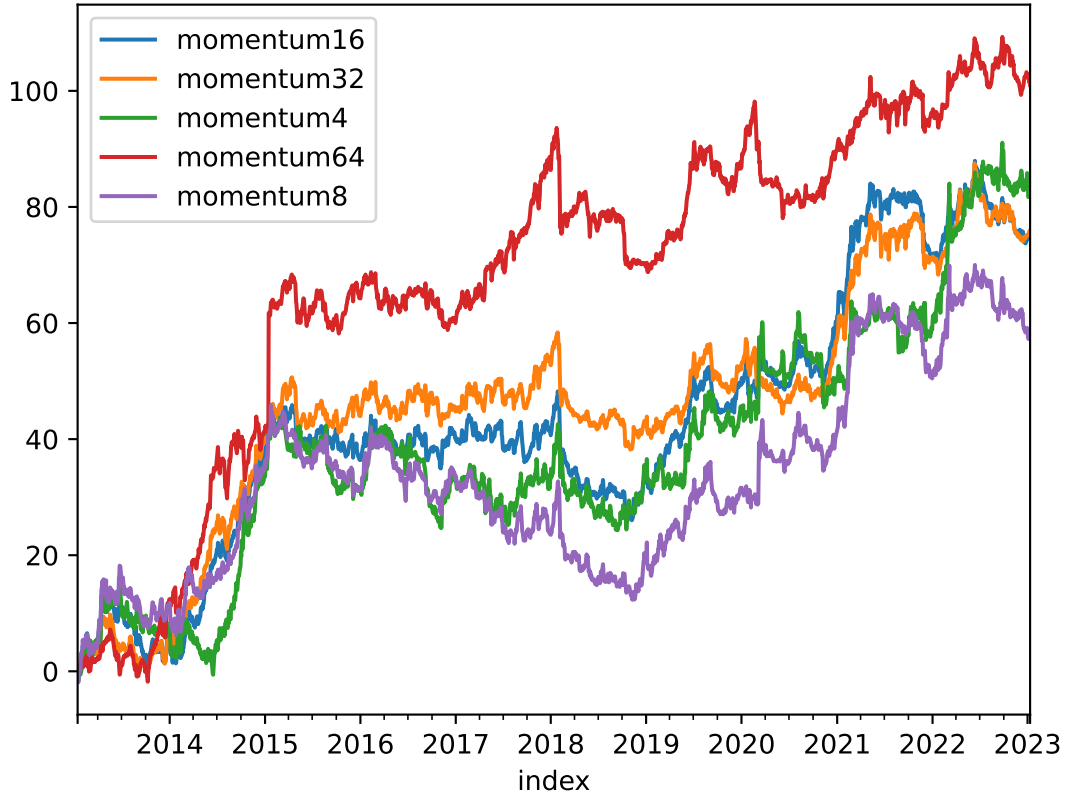
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 8.226, 'momentum32': 7.037, 'momentum4': 12.621, 'momentum64': 3.624, 'momentum8': 8.912}
ann. std {'momentum16': 10.997, 'momentum32': 10.837, 'momentum4': 16.093, 'momentum64': 10.918, 'momentum8': 12.774}
ann. SR {'momentum16': 0.75, 'momentum32': 0.65, 'momentum4': 0.78, 'momentum64': 0.33, 'momentum8': 0.7}



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

ann. mean {'momentum16': 7.444, 'momentum32': 7.433, 'momentum4': 8.061, 'momentum64': 9.913, 'momentum8': 5.671}
ann. std {'momentum16': 9.947, 'momentum32': 9.487, 'momentum4': 13.703, 'momentum64': 12.004, 'momentum8': 11.317}
ann. SR {'momentum16': 0.75, 'momentum32': 0.78, 'momentum4': 0.59, 'momentum64': 0.83, 'momentum8': 0.5}

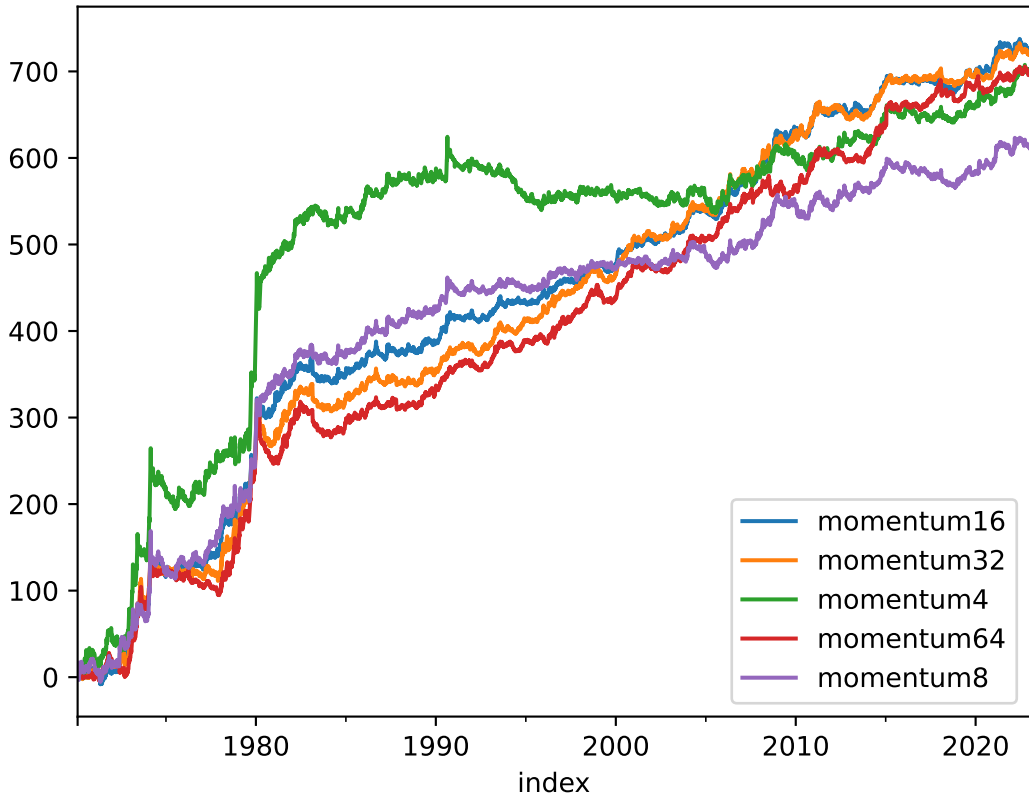


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.446, 'momentum32': 13.361, 'momentum4': 12.949, 'momentum64': 12.926, 'momentum8': 11.327}

ann. std {'momentum16': 14.222, 'momentum32': 13.852, 'momentum4': 20.078, 'momentum64': 13.489, 'momentum8': 15.871}

ann. SR {'momentum16': 0.95, 'momentum32': 0.96, 'momentum4': 0.64, 'momentum64': 0.96, 'momentum8': 0.71}

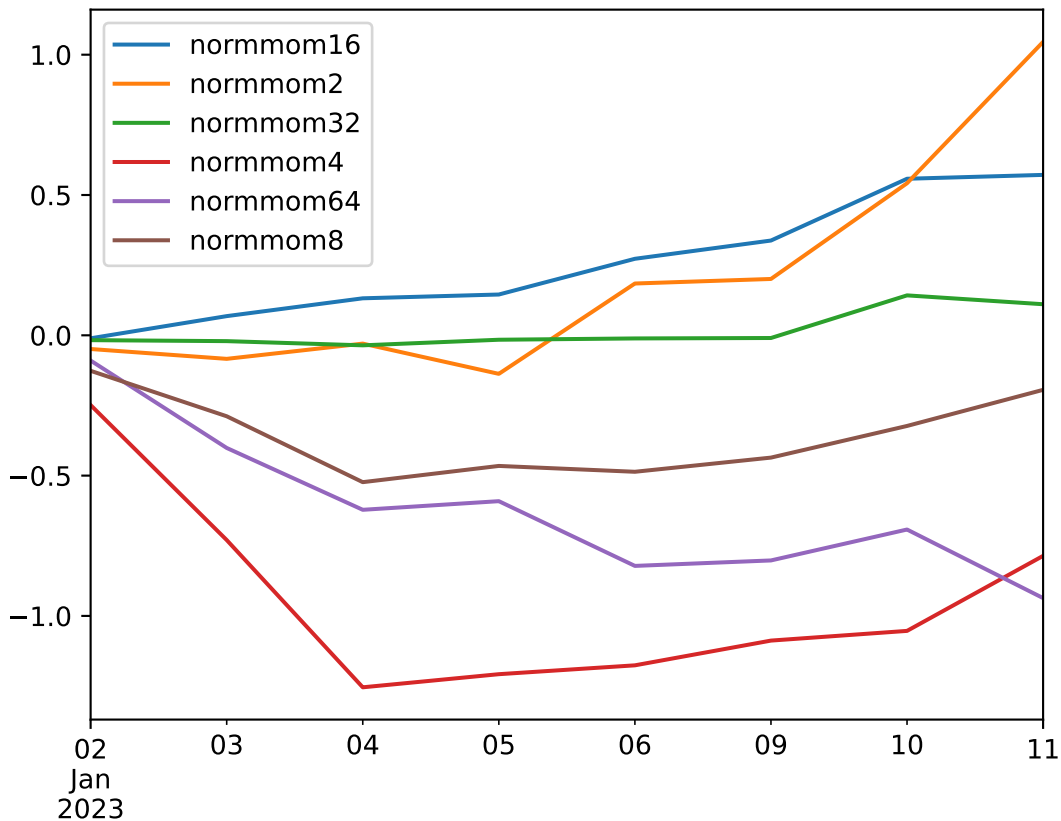


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 18.293, 'normmom2': 33.459, 'normmom32': 3.544, 'normmom4': -25.152, 'normmom64': -29.965, 'normmom8': -6.219}

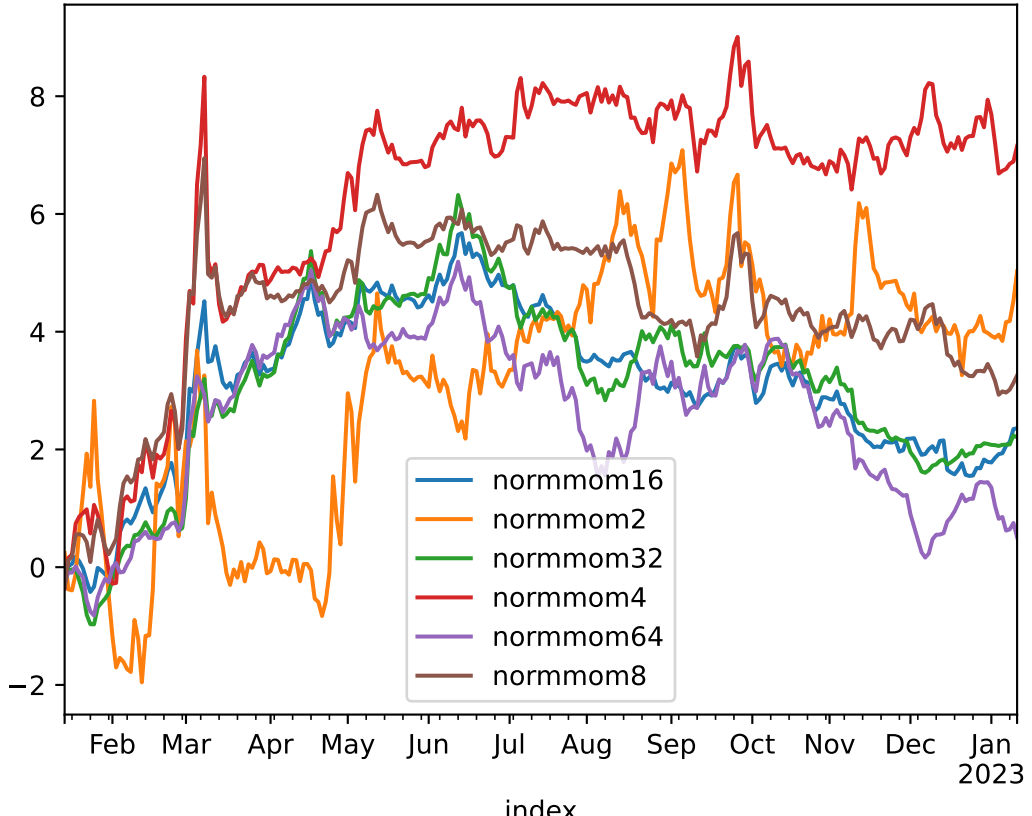
ann. std {'normmom16': 1.191, 'normmom2': 3.606, 'normmom32': 0.927, 'normmom4': 4.585, 'normmom64': 2.496, 'normmom8': 2.166}

ann. SR {'normmom16': 15.35, 'normmom2': 9.28, 'normmom32': 3.82, 'normmom4': -5.49, 'normmom64': -12.0, 'normmom8': -2.87}



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

ann. mean {'normmom16': 2.324, 'normmom2': 4.948, 'normmom32': 2.171, 'normmom4': 7.045, 'normmom64': 0.5, 'normmom8': 3.208}
ann. std {'normmom16': 3.129, 'normmom2': 7.978, 'normmom32': 3.125, 'normmom4': 5.992, 'normmom64': 3.413, 'normmom8': 4.23}
ann. SR {'normmom16': 0.74, 'normmom2': 0.62, 'normmom32': 0.69, 'normmom4': 1.18, 'normmom64': 0.15, 'normmom8': 0.76}

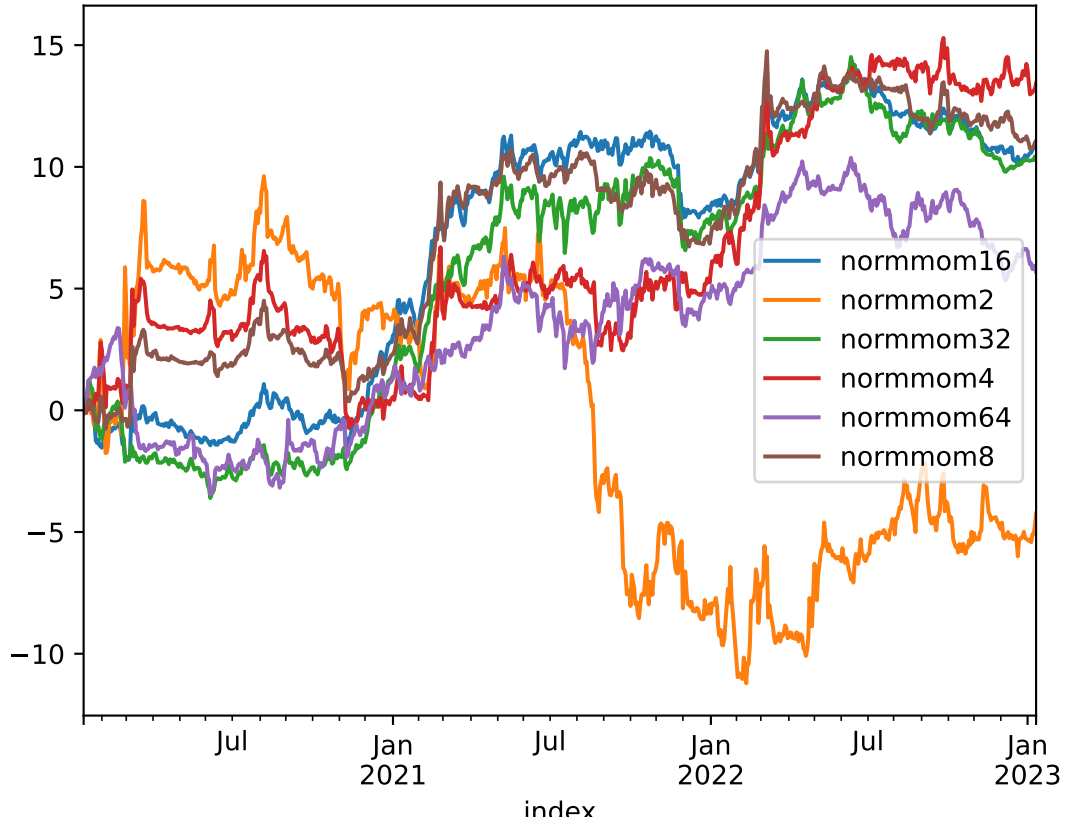


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.6, 'normmom2': -1.384, 'normmom32': 3.399, 'normmom4': 4.396, 'normmom64': 1.86, 'normmom8': 3.617}

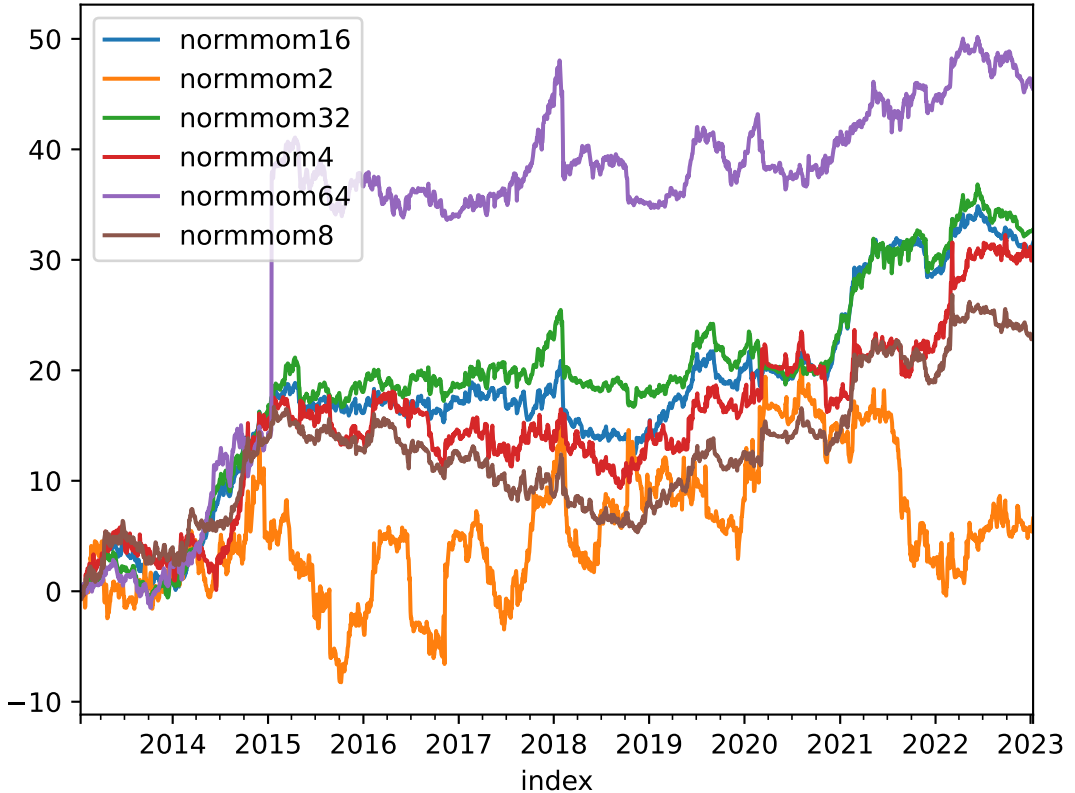
ann. std {'normmom16': 3.7, 'normmom2': 8.462, 'normmom32': 4.039, 'normmom4': 5.831, 'normmom64': 4.311, 'normmom8': 4.24}

ann. SR {'normmom16': 0.97, 'normmom2': -0.16, 'normmom32': 0.84, 'normmom4': 0.75, 'normmom64': 0.43, 'normmom8': 0.85}



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

ann. mean {'normmom16': 3.097, 'normmom2': 0.646, 'normmom32': 3.211, 'normmom4': 2.984, 'normmom64': 4.466, 'normmom8': 2.271}
ann. std {'normmom16': 3.576, 'normmom2': 9.051, 'normmom32': 3.726, 'normmom4': 5.497, 'normmom64': 8.561, 'normmom8': 4.043}
ann. SR {'normmom16': 0.87, 'normmom2': 0.07, 'normmom32': 0.86, 'normmom4': 0.54, 'normmom64': 0.52, 'normmom8': 0.56}

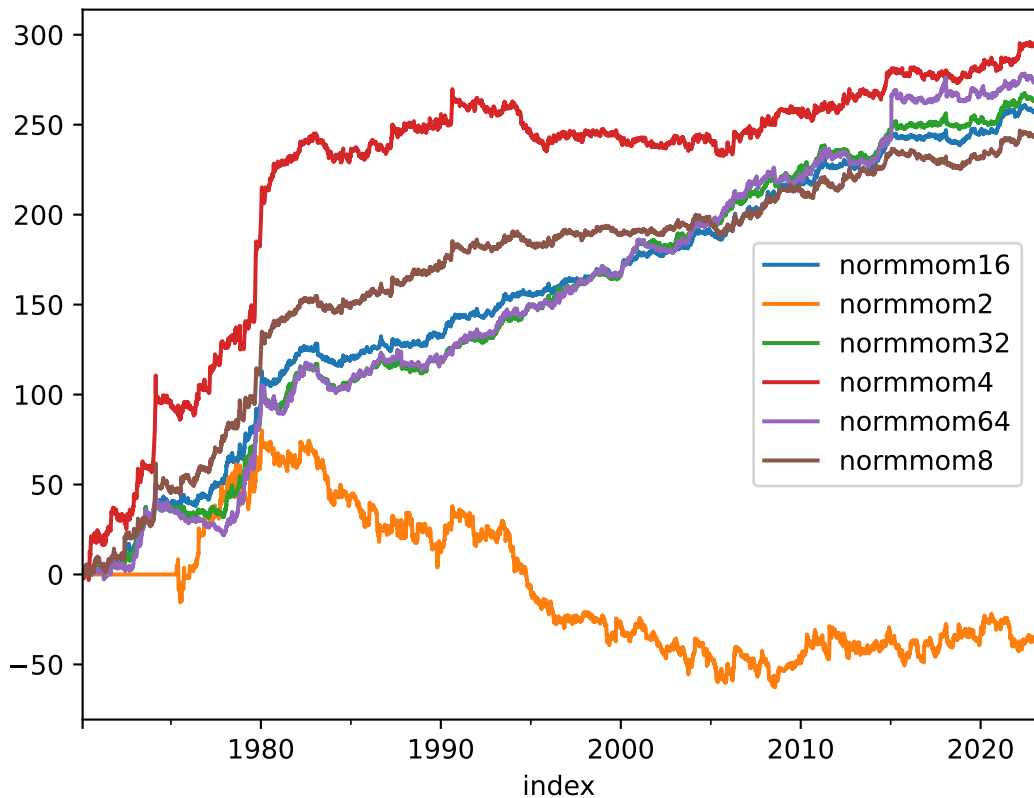


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.776, 'normmom2': -0.662, 'normmom32': 4.886, 'normmom4': 5.452, 'normmom64': 5.075, 'normmom8': 4.505}

ann. std {'normmom16': 4.923, 'normmom2': 11.198, 'normmom32': 4.991, 'normmom4': 8.322, 'normmom64': 6.31, 'normmom8': 5.932}

ann. SR {'normmom16': 0.97, 'normmom2': -0.06, 'normmom32': 0.98, 'normmom4': 0.66, 'normmom64': 0.8, 'normmom8': 0.76}

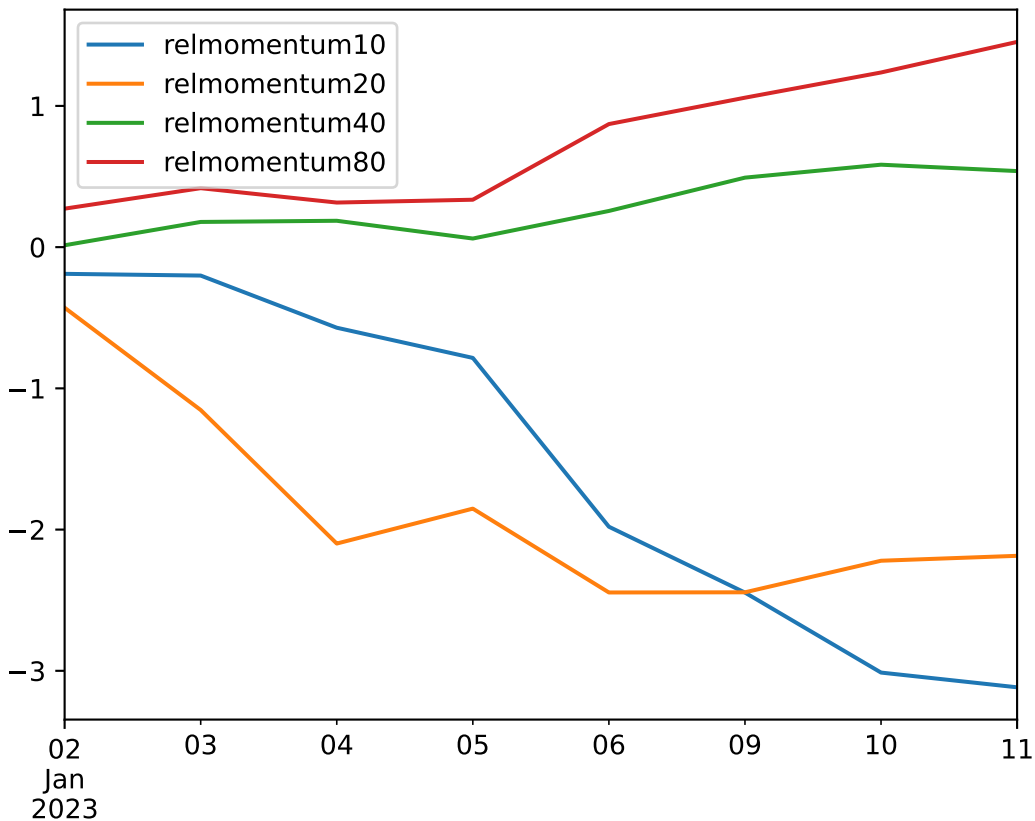


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -99.737, 'relmomentum20': -69.943, 'relmomentum40': 17.236, 'relmomentum80': 46.504}

ann. std {'relmomentum10': 5.992, 'relmomentum20': 7.334, 'relmomentum40': 2.018, 'relmomentum80': 2.979}

ann. SR {'relmomentum10': -16.65, 'relmomentum20': -9.54, 'relmomentum40': 8.54, 'relmomentum80': 15.61}

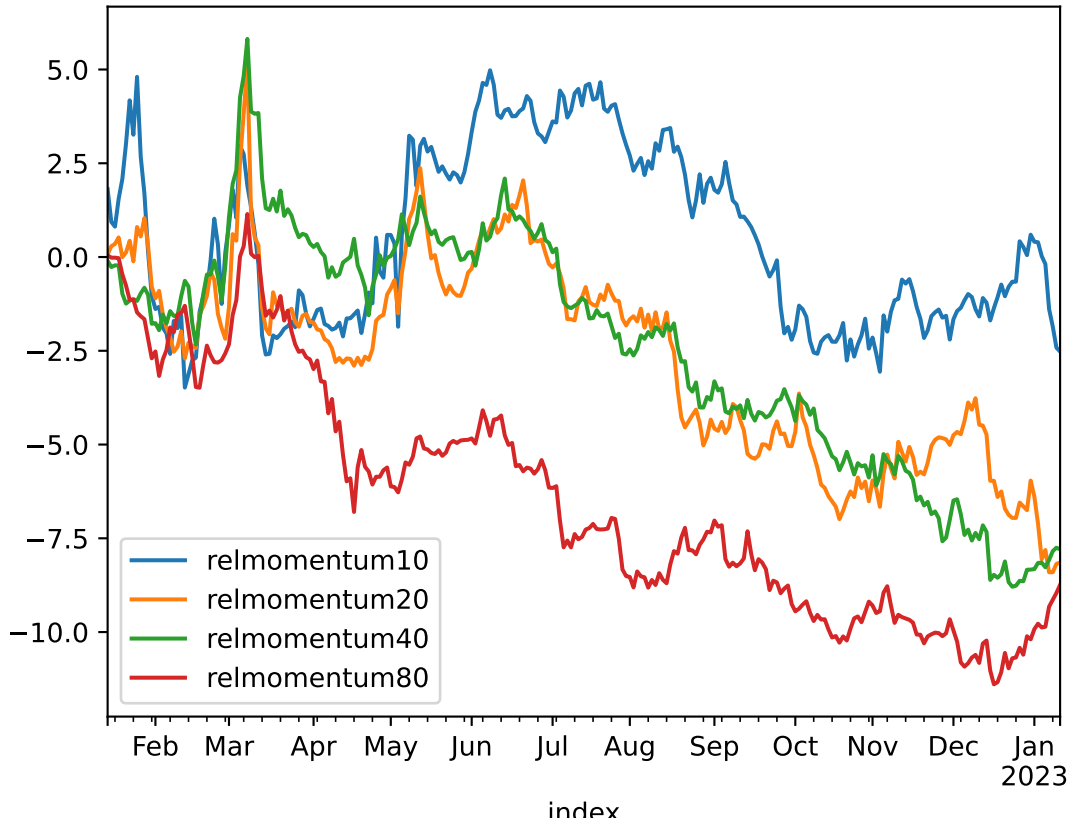


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -2.482, 'relmomentum20': -8.021, 'relmomentum40': -7.676, 'relmomentum80': -8.606}

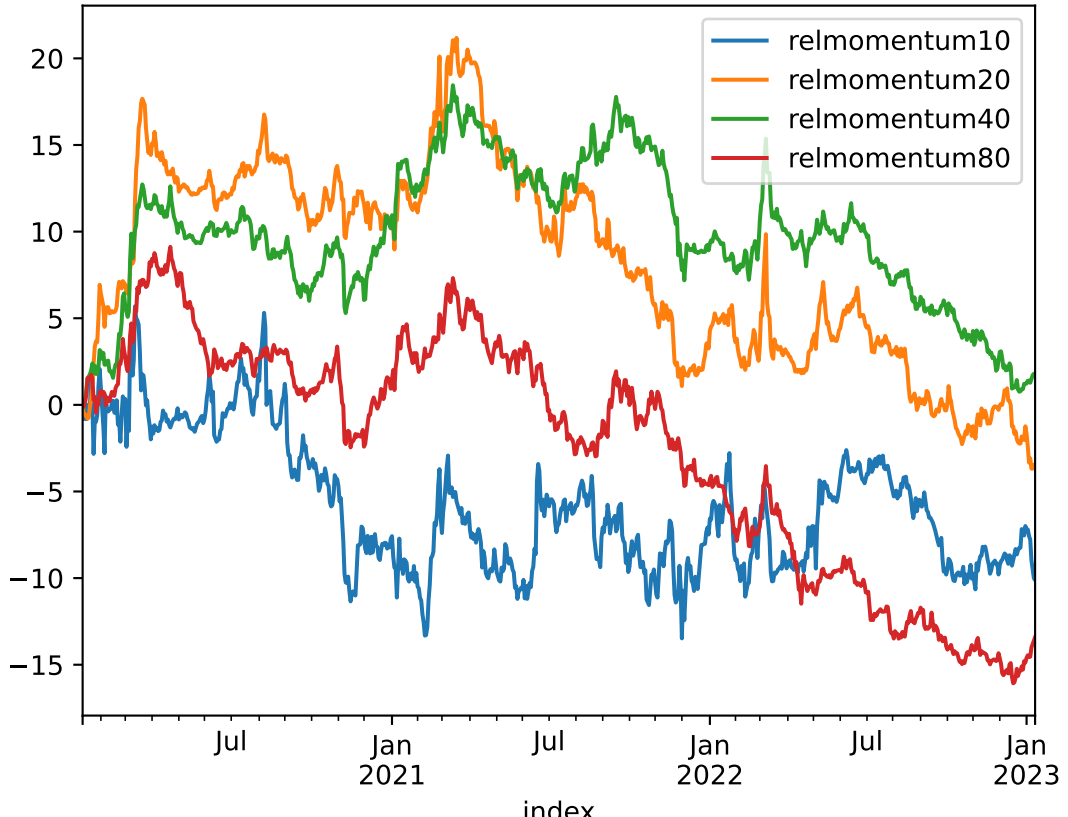
ann. std {'relmomentum10': 9.968, 'relmomentum20': 8.516, 'relmomentum40': 6.663, 'relmomentum80': 5.709}

ann. SR {'relmomentum10': -0.25, 'relmomentum20': -0.94, 'relmomentum40': -1.15, 'relmomentum80': -1.51}



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

ann. mean {'relmomentum10': -3.306, 'relmomentum20': -1.119, 'relmomentum40': 0.573, 'relmomentum80': -4.388}
ann. std {'relmomentum10': 12.69, 'relmomentum20': 9.069, 'relmomentum40': 7.465, 'relmomentum80': 6.949}
ann. SR {'relmomentum10': -0.26, 'relmomentum20': -0.12, 'relmomentum40': 0.08, 'relmomentum80': -0.63}

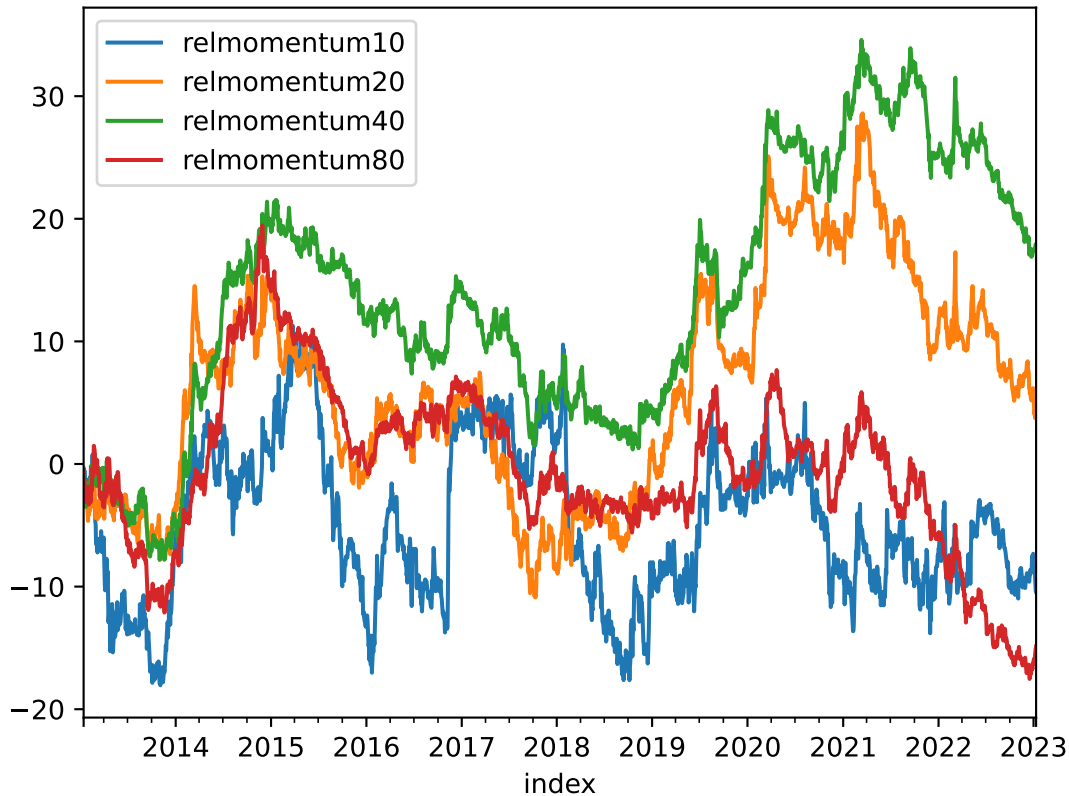


Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -1.024, 'relmomentum20': 0.393, 'relmomentum40': 1.756, 'relmomentum80': -1.46}

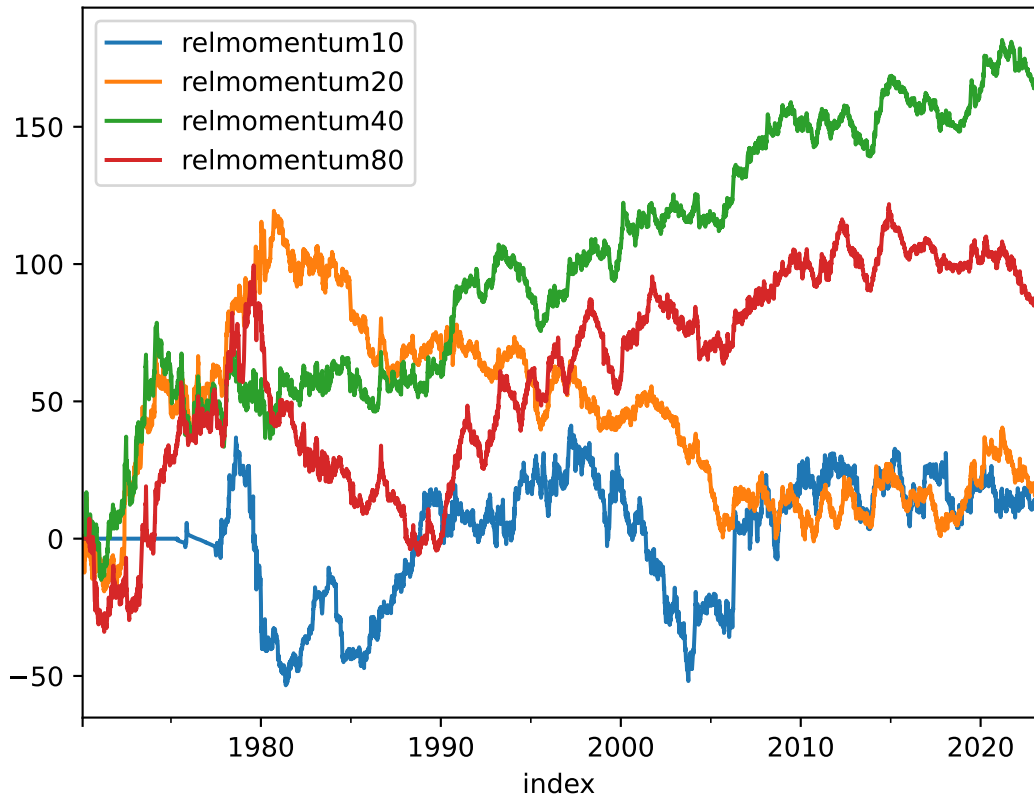
ann. std {'relmomentum10': 12.87, 'relmomentum20': 8.956, 'relmomentum40': 7.353, 'relmomentum80': 6.796}

ann. SR {'relmomentum10': -0.08, 'relmomentum20': 0.04, 'relmomentum40': 0.24, 'relmomentum80': -0.21}

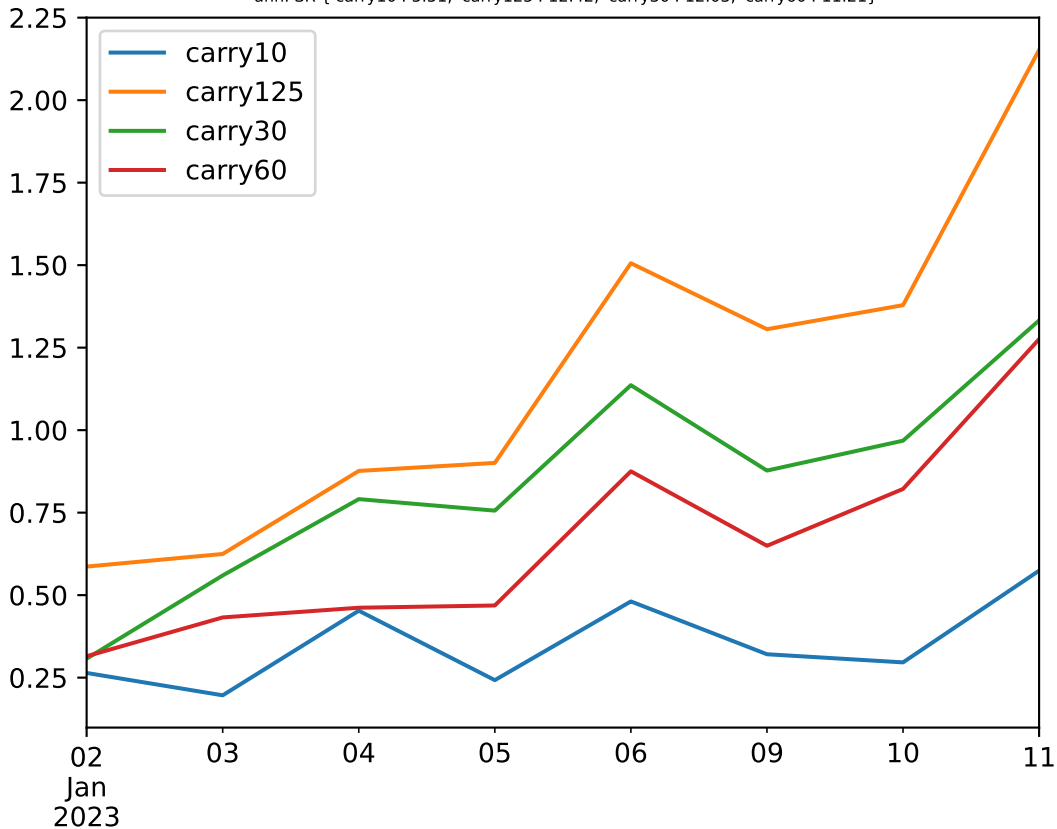


Total Trading Rule P&L for period '99Y'

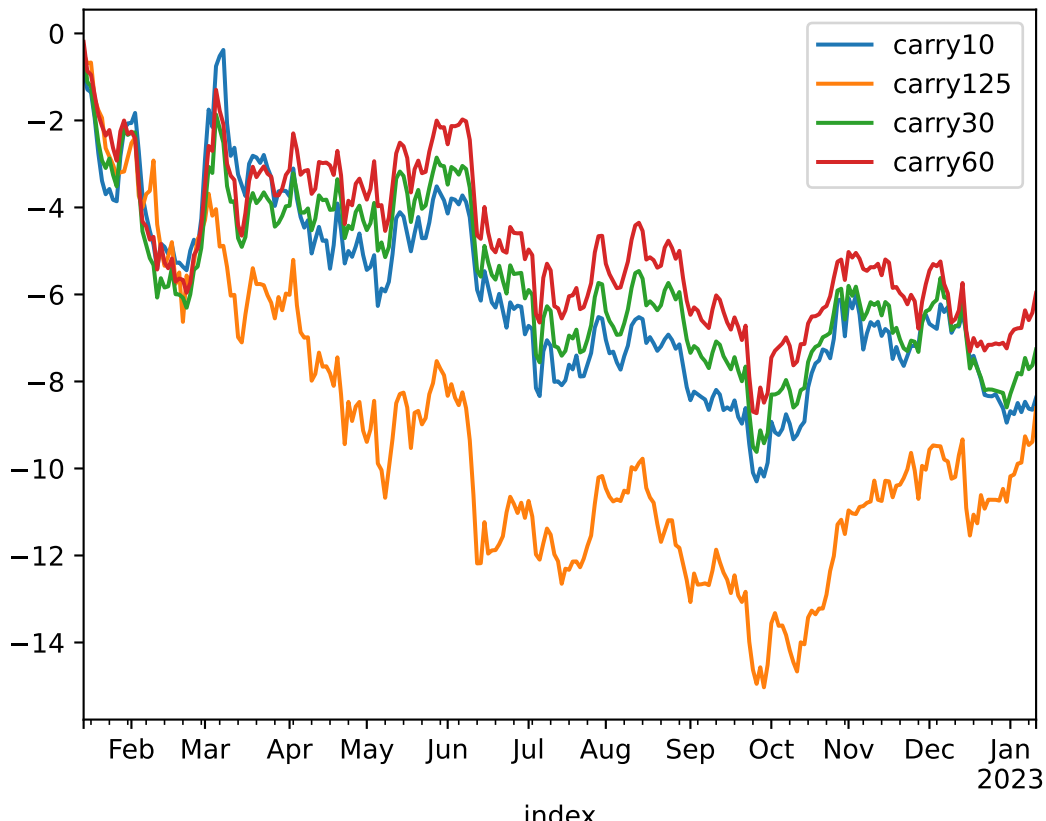
ann. mean {'relmomentum10': 0.205, 'relmomentum20': 0.294, 'relmomentum40': 3.057, 'relmomentum80': 1.622}
ann. std {'relmomentum10': 13.322, 'relmomentum20': 11.524, 'relmomentum40': 10.792, 'relmomentum80': 11.06}
ann. SR {'relmomentum10': 0.02, 'relmomentum20': 0.03, 'relmomentum40': 0.28, 'relmomentum80': 0.15}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 18.373, 'carry125': 68.872, 'carry30': 42.643, 'carry60': 40.824}
ann. std {'carry10': 3.332, 'carry125': 5.544, 'carry30': 3.544, 'carry60': 3.641}
ann. SR {'carry10': 5.51, 'carry125': 12.42, 'carry30': 12.03, 'carry60': 11.21}



Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -8.244, 'carry125': -8.481, 'carry30': -7.151, 'carry60': -5.872}
ann. std {'carry10': 6.998, 'carry125': 7.696, 'carry30': 6.716, 'carry60': 6.772}
ann. SR {'carry10': -1.18, 'carry125': -1.1, 'carry30': -1.06, 'carry60': -0.87}

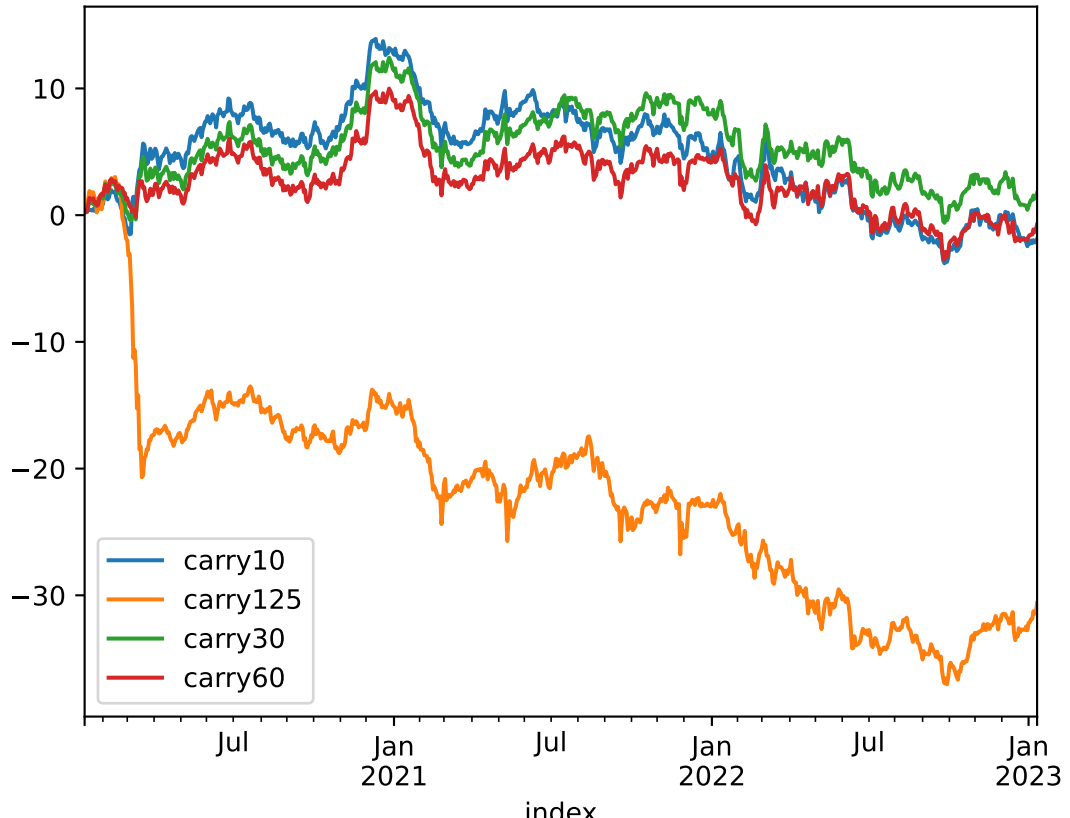


Total Trading Rule P&L for period '3Y'

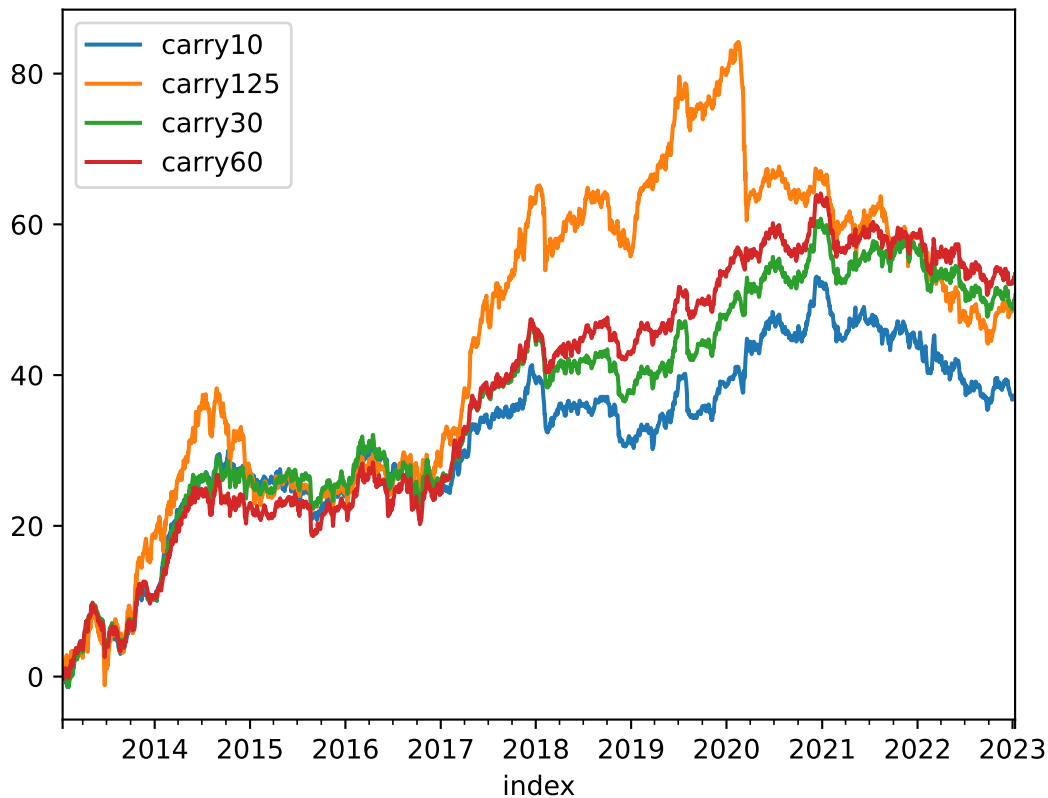
ann. mean {'carry10': -0.615, 'carry125': -10.007, 'carry30': 0.573, 'carry60': -0.237}

ann. std {'carry10': 6.822, 'carry125': 9.45, 'carry30': 6.626, 'carry60': 6.565}

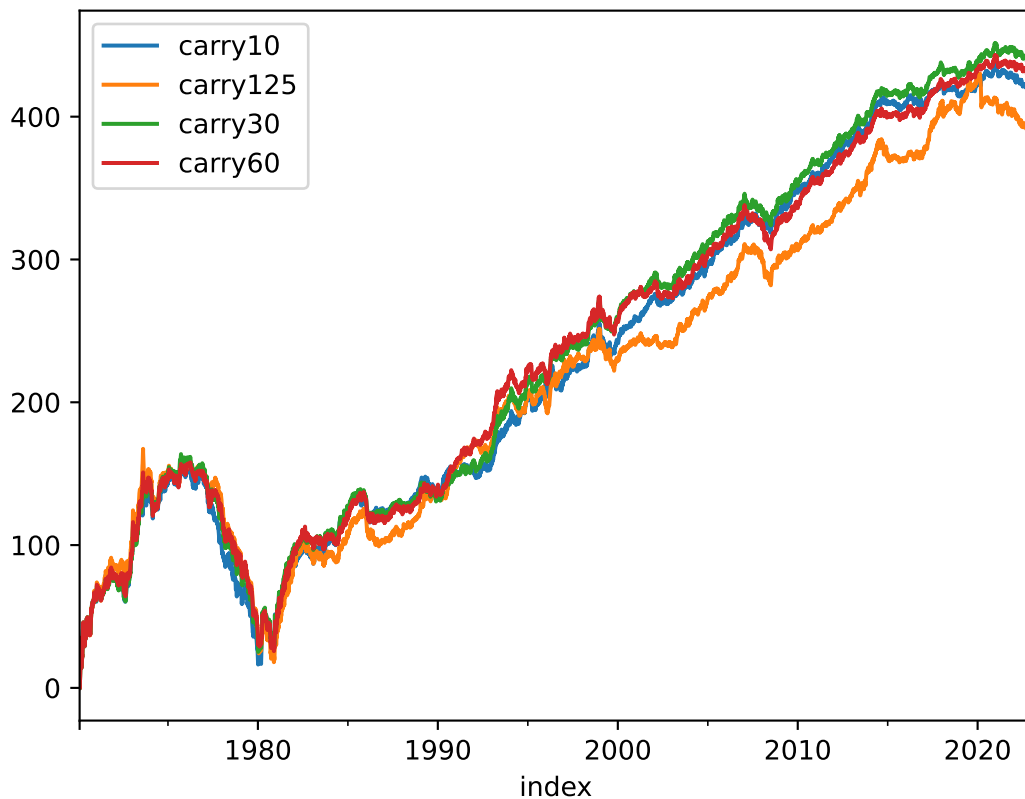
ann. SR {'carry10': -0.09, 'carry125': -1.06, 'carry30': 0.09, 'carry60': -0.04}



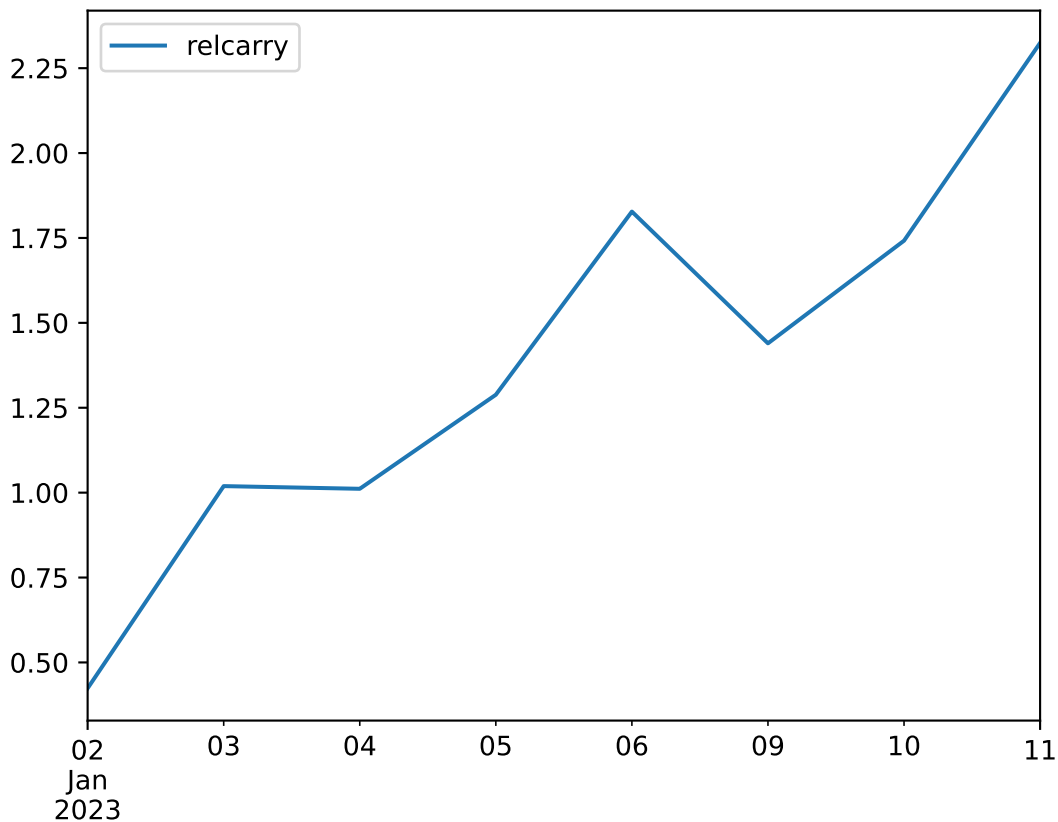
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.661, 'carry125': 4.965, 'carry30': 4.917, 'carry60': 5.241}
ann. std {'carry10': 6.449, 'carry125': 9.132, 'carry30': 6.547, 'carry60': 6.509}
ann. SR {'carry10': 0.57, 'carry125': 0.54, 'carry30': 0.75, 'carry60': 0.81}



Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.803, 'carry125': 7.351, 'carry30': 8.173, 'carry60': 8.014}
ann. std {'carry10': 11.856, 'carry125': 12.098, 'carry30': 11.868, 'carry60': 11.819}
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': 74.381}
ann. std {'relcarry': 5.435}
ann. SR {'relcarry': 13.69}

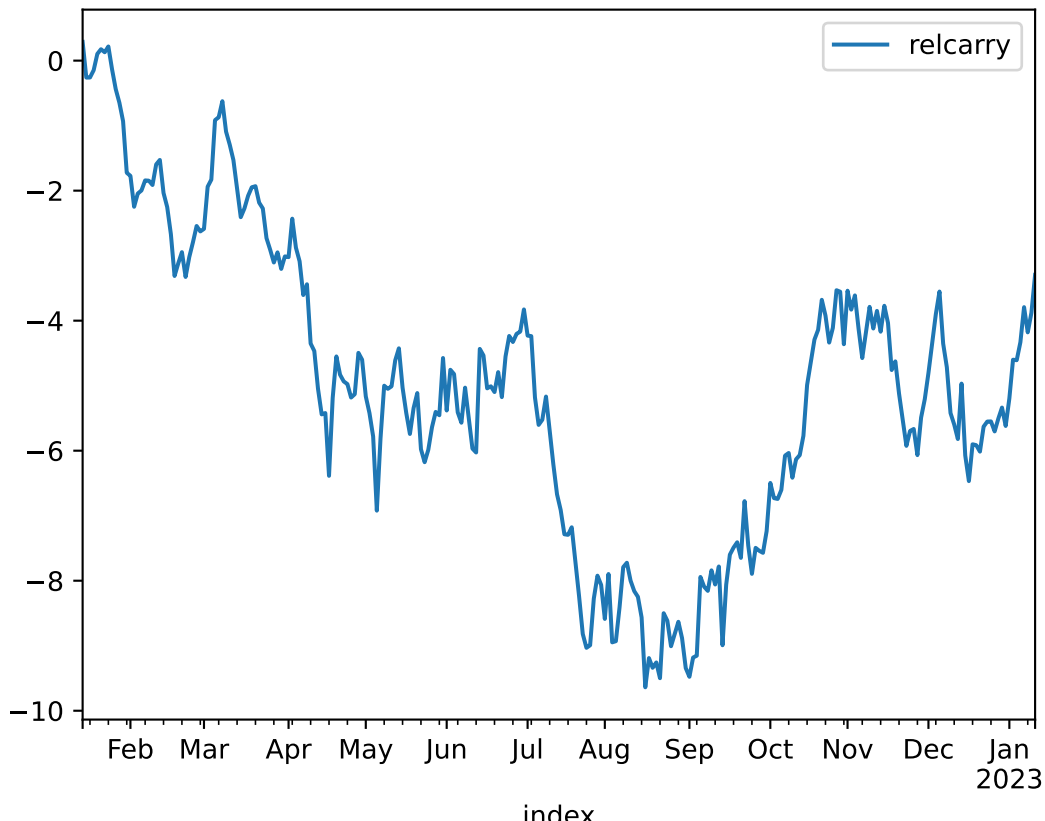


Total Trading Rule P&L for period '1Y'

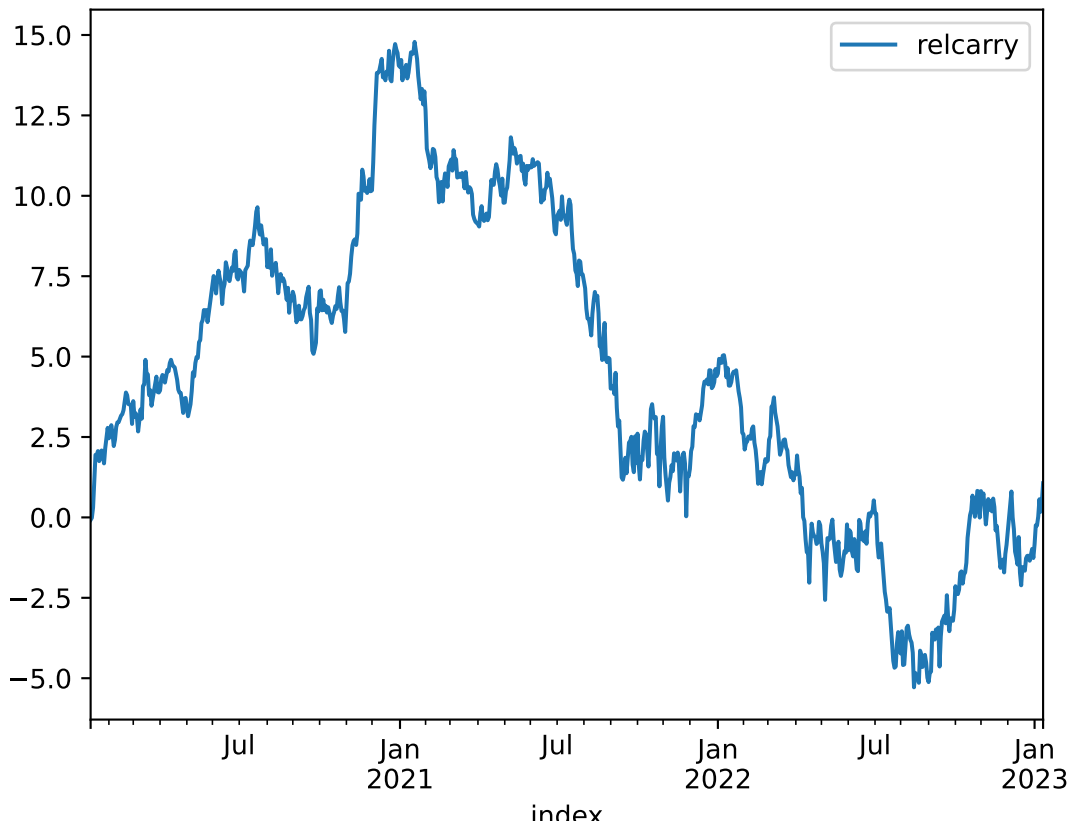
ann. mean {'relcarry': -3.245}

ann. std {'relcarry': 7.244}

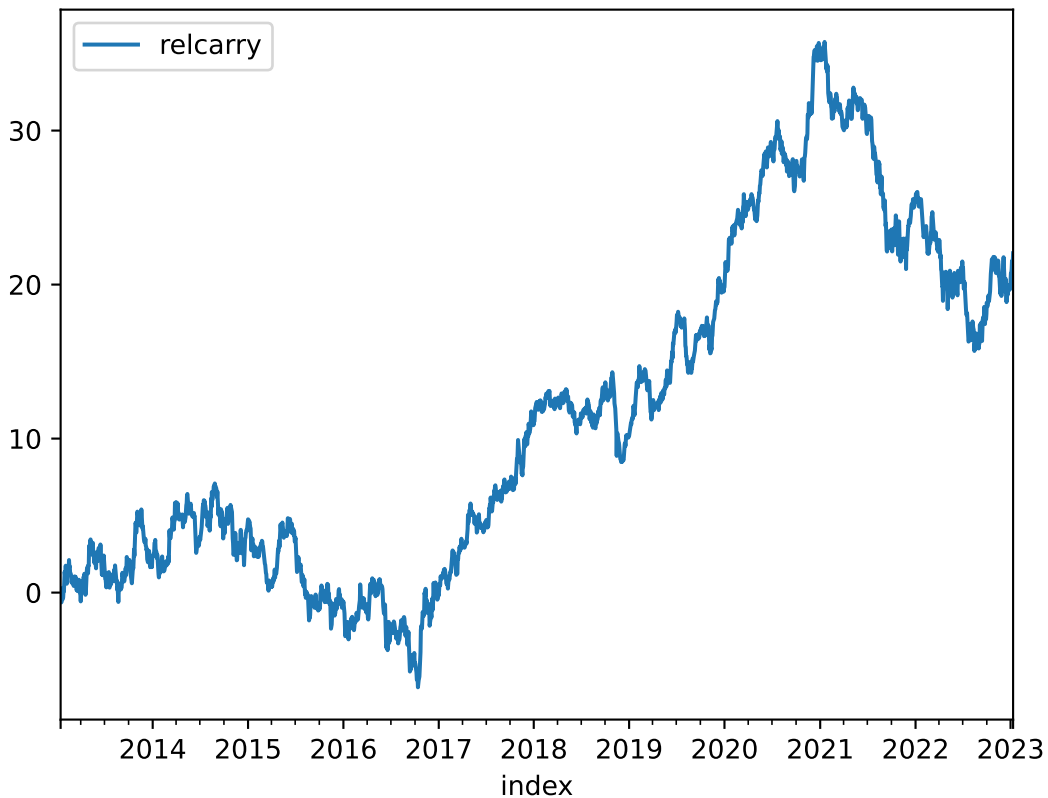
ann. SR {'relcarry': -0.45}



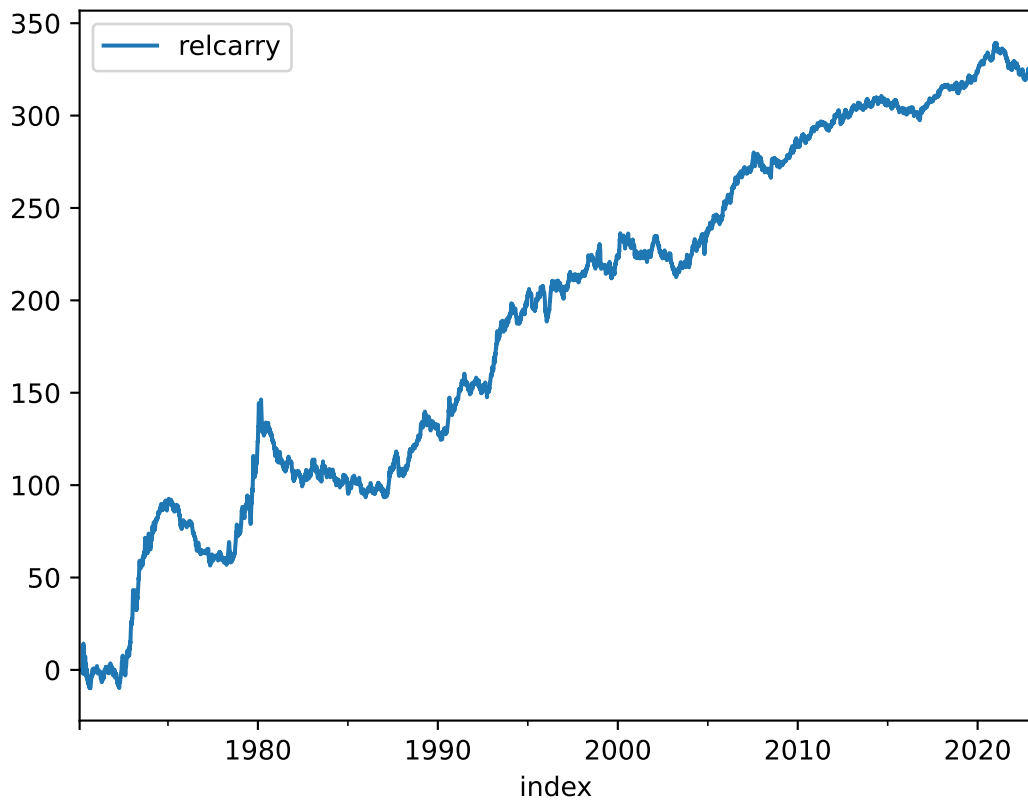
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': 0.347}
ann. std {'relcarry': 6.864}
ann. SR {'relcarry': 0.05}



Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.163}
ann. std {'relcarry': 6.031}
ann. SR {'relcarry': 0.36}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 6.035}
ann. std {'relcarry': 9.557}
ann. SR {'relcarry': 0.63}

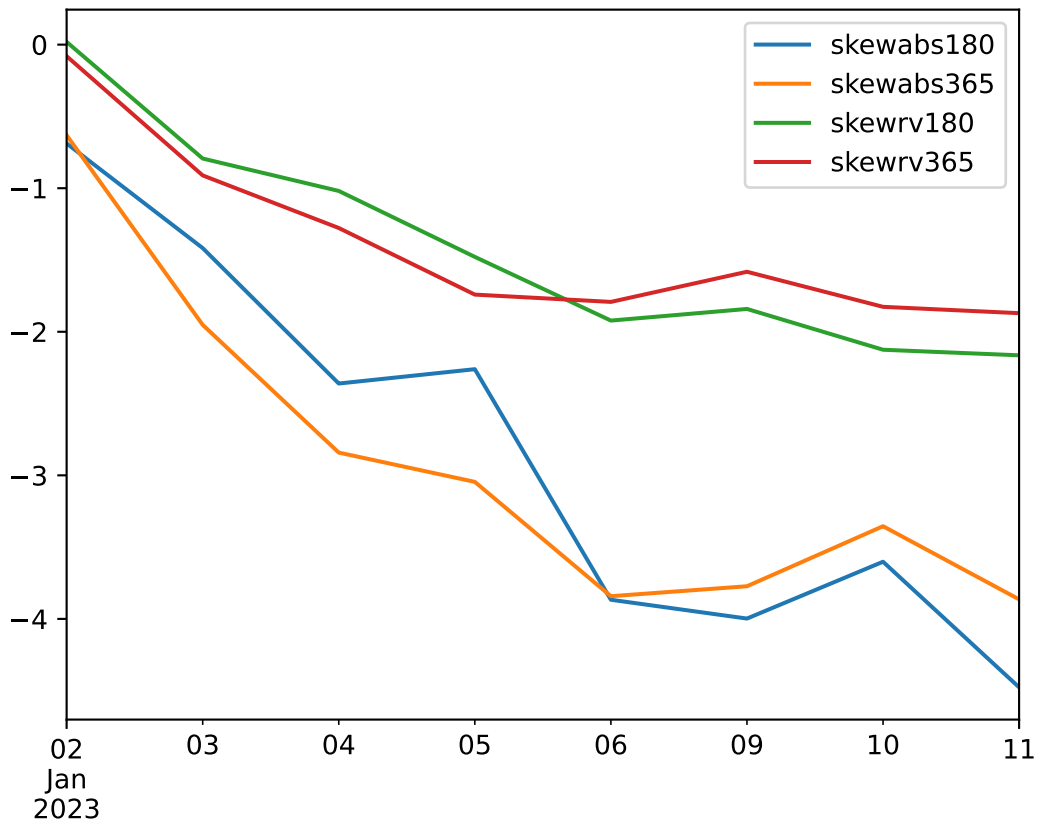


Total Trading Rule P&L for period 'YTD'

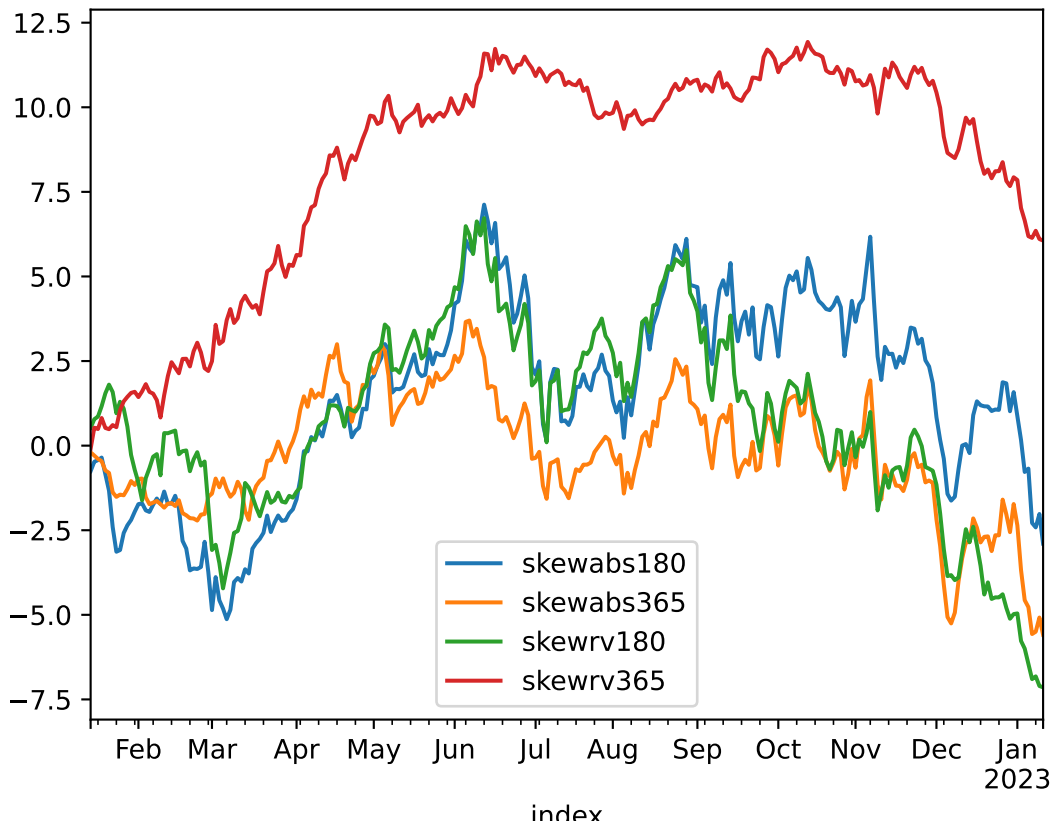
ann. mean {'skewabs180': -143.248, 'skewabs365': -123.642, 'skewrv180': -69.248, 'skewrv365': -59.855}

ann. std {'skewabs180': 10.33, 'skewabs365': 8.936, 'skewrv180': 4.772, 'skewrv365': 5.119}

ann. SR {'skewabs180': -13.87, 'skewabs365': -13.84, 'skewrv180': -14.51, 'skewrv365': -11.69}



Total Trading Rule P&L for period '1Y'
ann. mean {'skewabs180': -2.85, 'skewabs365': -5.503, 'skewrv180': -7.032, 'skewrv365': 5.968}
ann. std {'skewabs180': 10.14, 'skewabs365': 8.151, 'skewrv180': 9.219, 'skewrv365': 5.09}
ann. SR {'skewabs180': -0.28, 'skewabs365': -0.68, 'skewrv180': -0.76, 'skewrv365': 1.17}

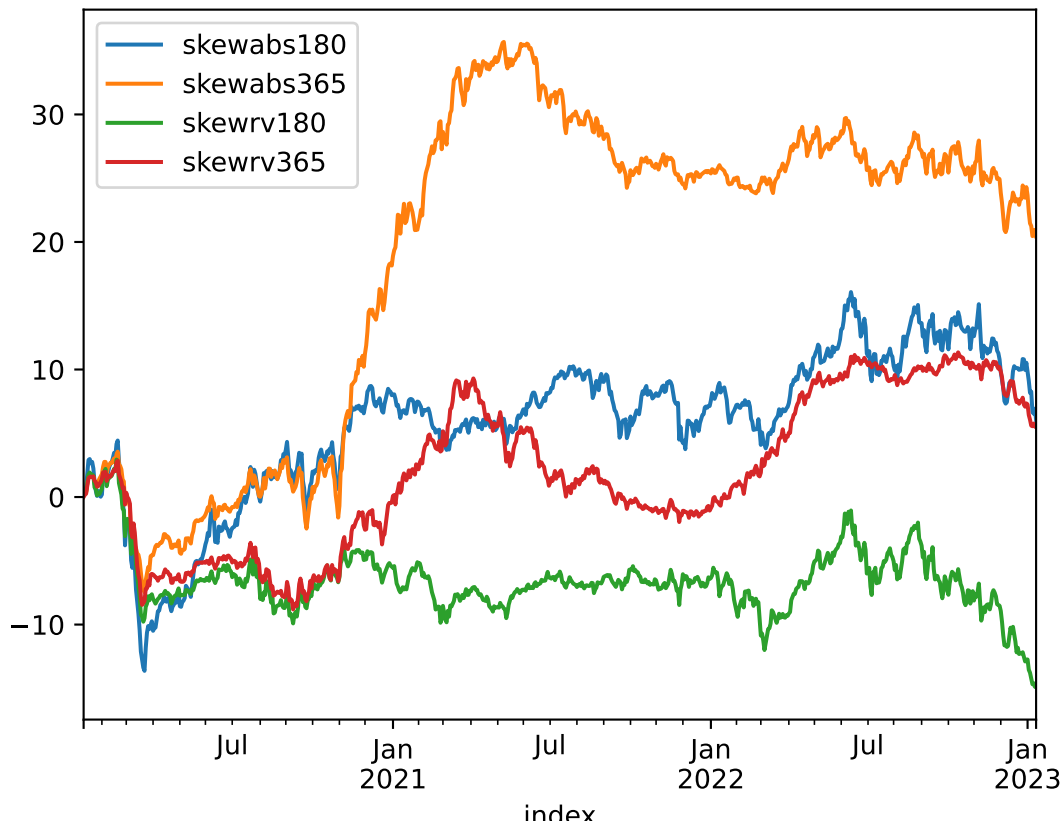


Total Trading Rule P&L for period '3Y'

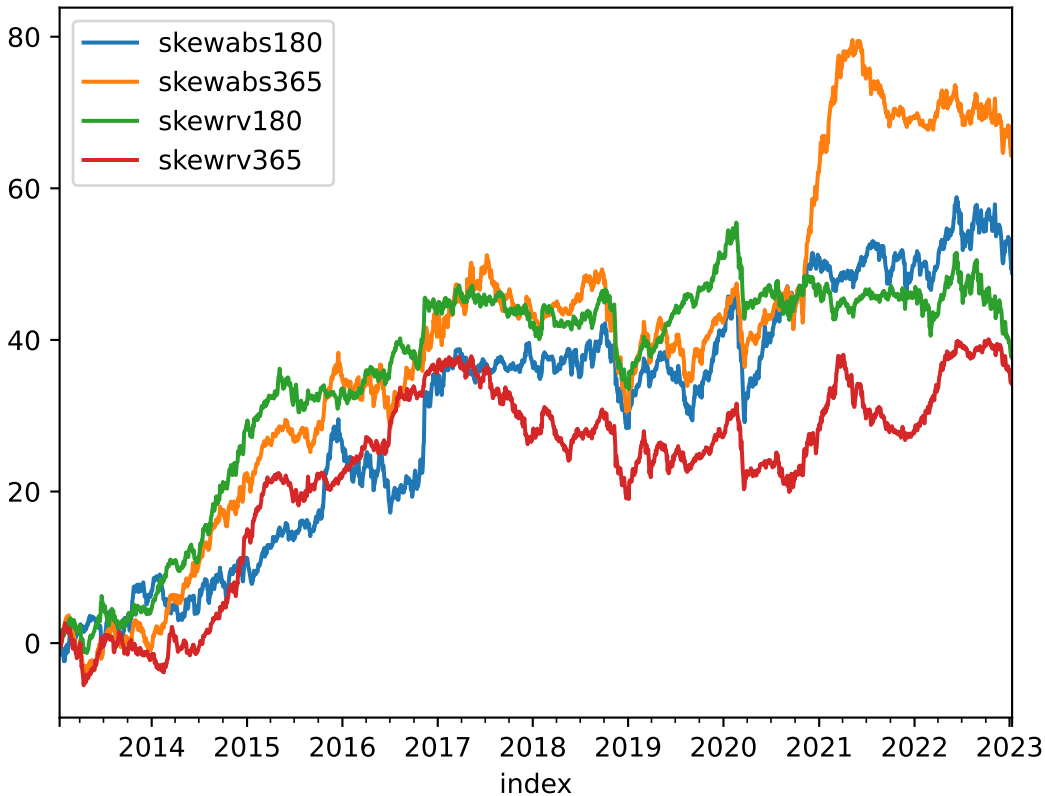
ann. mean {'skewabs180': 1.98, 'skewabs365': 6.682, 'skewrv180': -4.878, 'skewrv365': 1.79}

ann. std {'skewabs180': 9.683, 'skewabs365': 8.861, 'skewrv180': 7.787, 'skewrv365': 6.61}

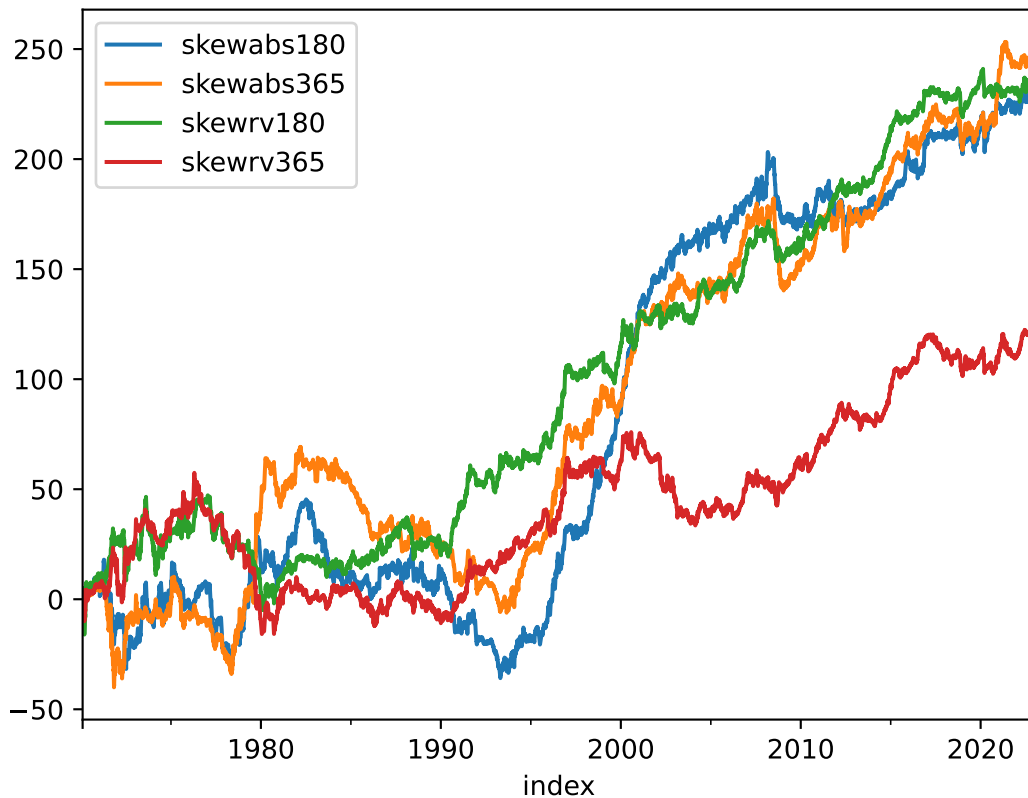
ann. SR {'skewabs180': 0.2, 'skewabs365': 0.75, 'skewrv180': -0.63, 'skewrv365': 0.27}



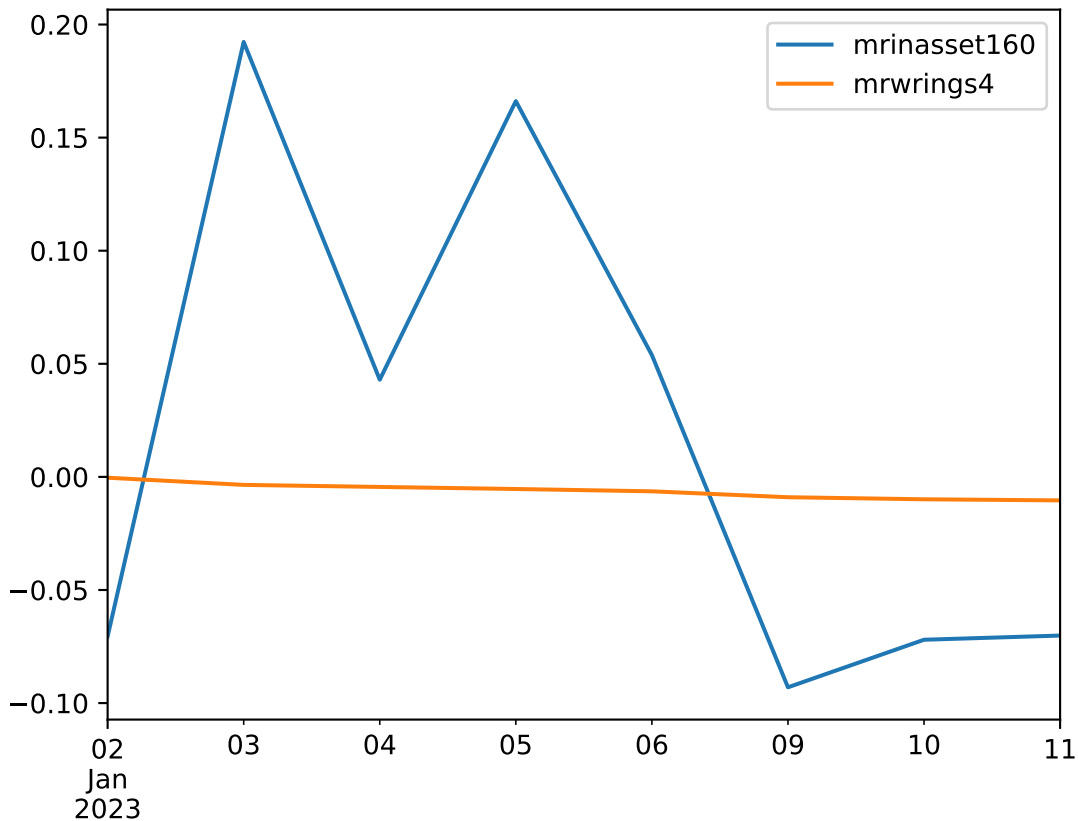
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.792, 'skewabs365': 6.315, 'skewrv180': 3.694, 'skewrv365': 3.359}
ann. std {'skewabs180': 8.067, 'skewabs365': 8.001, 'skewrv180': 6.59, 'skewrv365': 6.179}
ann. SR {'skewabs180': 0.59, 'skewabs365': 0.79, 'skewrv180': 0.56, 'skewrv365': 0.54}



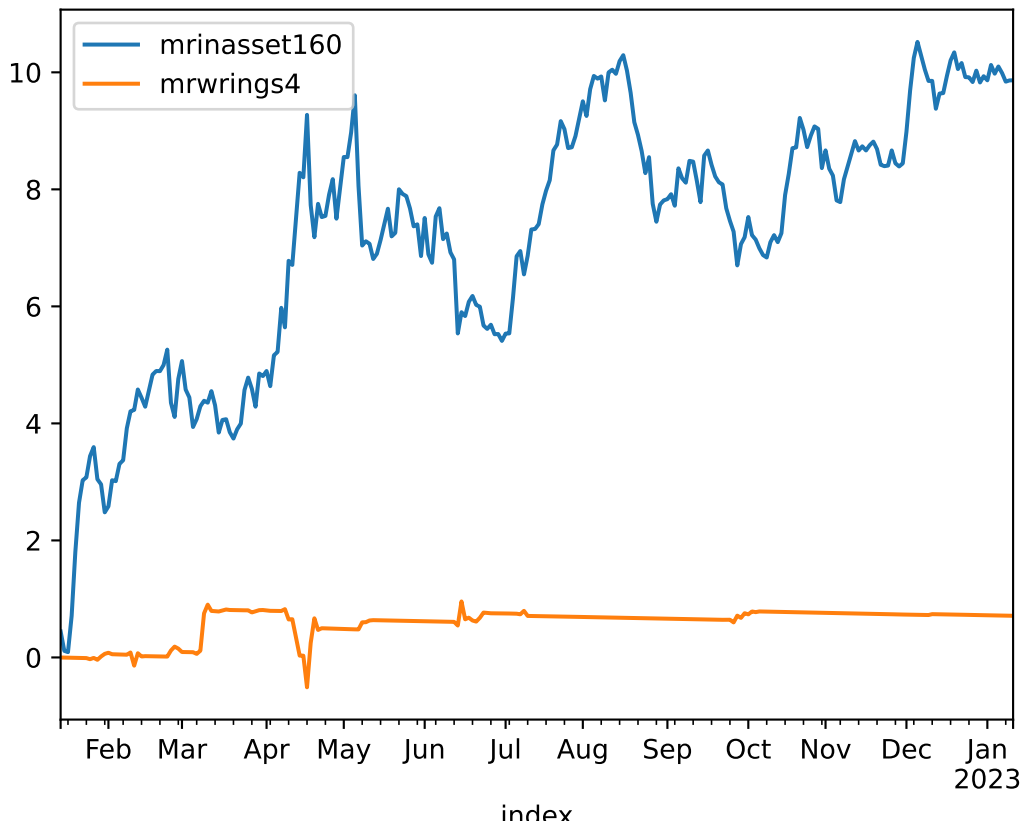
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.13, 'skewabs365': 4.411, 'skewrv180': 4.136, 'skewrv365': 2.164}
ann. std {'skewabs180': 10.793, 'skewabs365': 10.299, 'skewrv180': 9.306, 'skewrv365': 8.601}
ann. SR {'skewabs180': 0.38, 'skewabs365': 0.43, 'skewrv180': 0.44, 'skewrv365': 0.25}



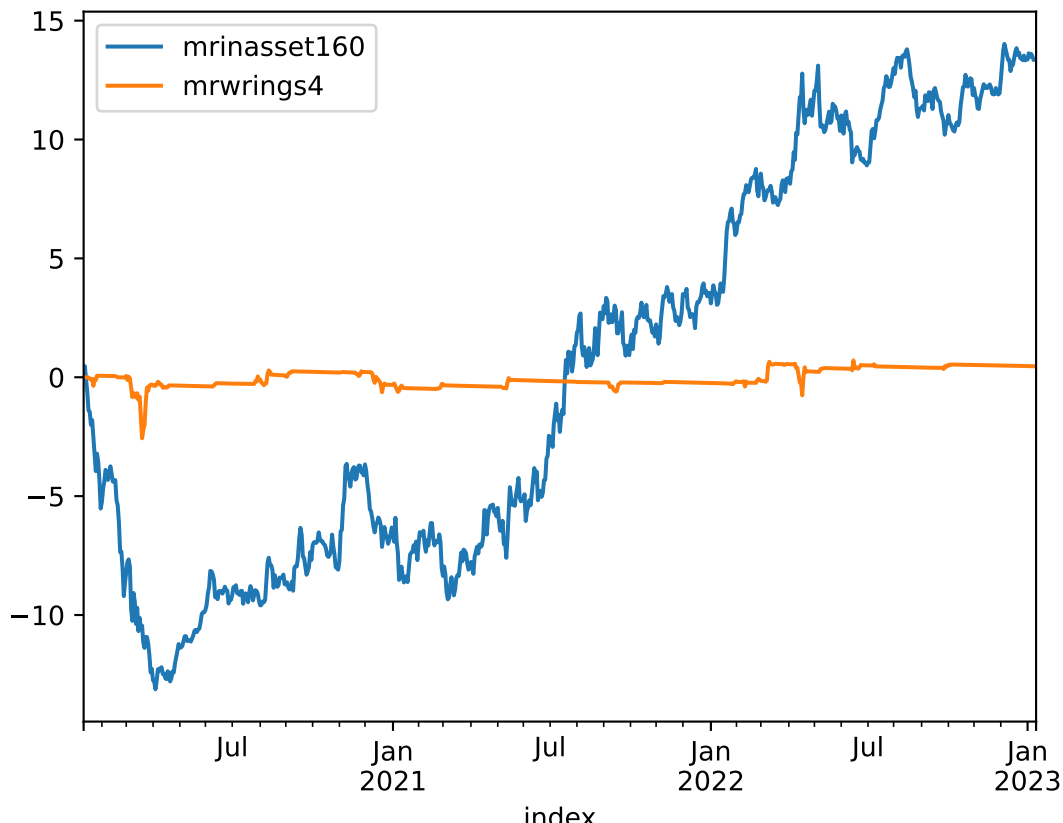
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': -2.245, 'mrwrings4': -0.332}
ann. std {'mrinasset160': 2.307, 'mrwrings4': 0.016}
ann. SR {'mrinasset160': -0.97, 'mrwrings4': -20.34}



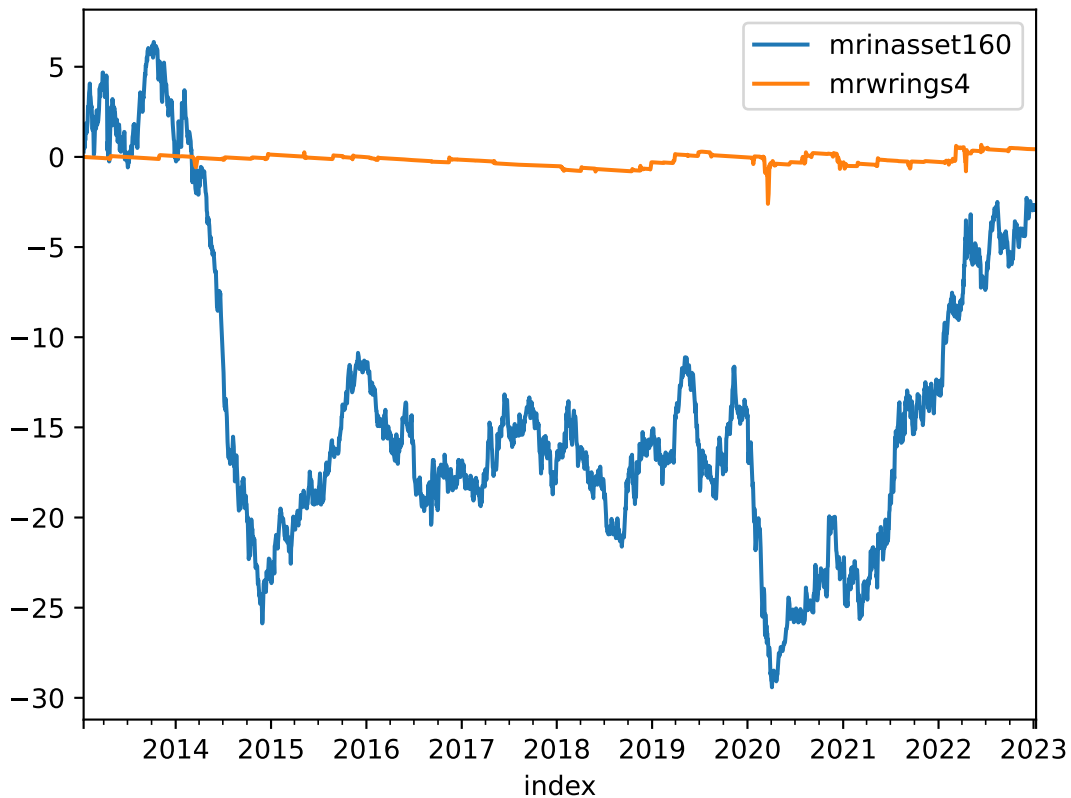
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 9.712, 'mrwrings4': 0.701}
ann. std {'mrinasset160': 6.133, 'mrwrings4': 1.481}
ann. SR {'mrinasset160': 1.58, 'mrwrings4': 0.47}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 4.37, 'mrwrings4': 0.151}
ann. std {'mrinasset160': 6.907, 'mrwrings4': 1.535}
ann. SR {'mrinasset160': 0.63, 'mrwrings4': 0.1}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.287, 'mrwrings4': 0.042}
ann. std {'mrinasset160': 6.603, 'mrwrings4': 0.897}
ann. SR {'mrinasset160': -0.04, 'mrwrings4': 0.05}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.342, 'mrwrings4': -1.168}
ann. std {'mrinasset160': 10.917, 'mrwrings4': 2.63}
ann. SR {'mrinasset160': -0.31, 'mrwrings4': -0.44}

