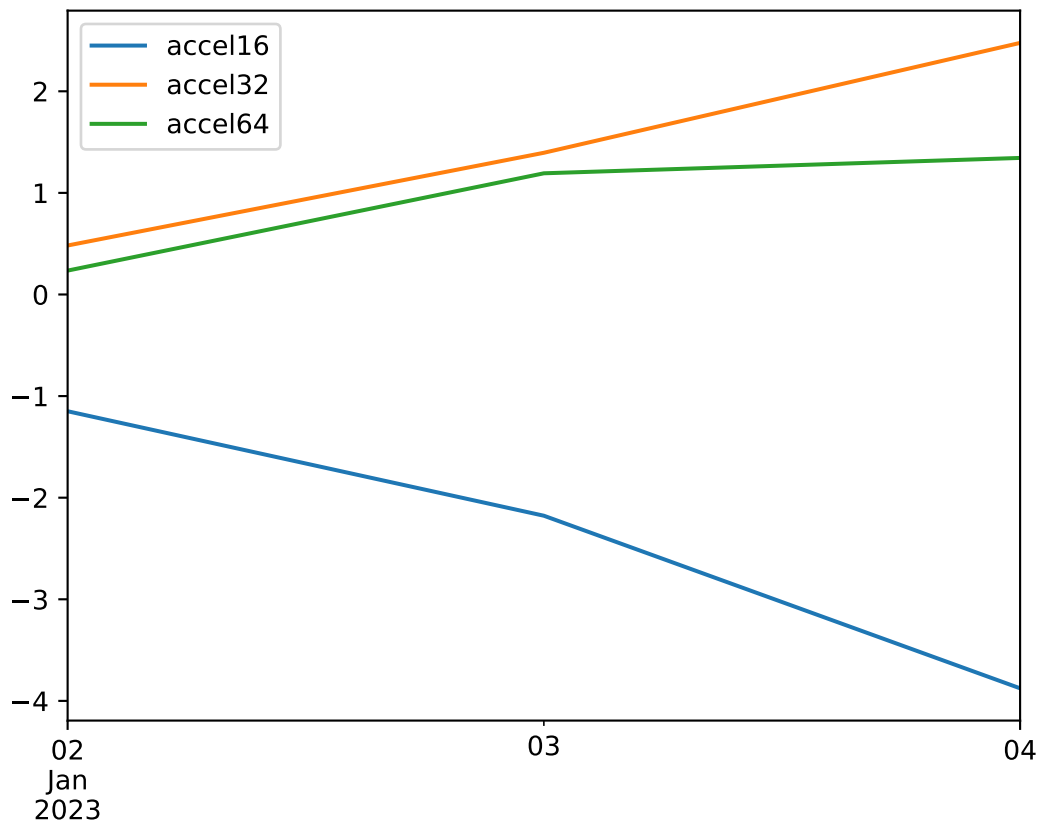
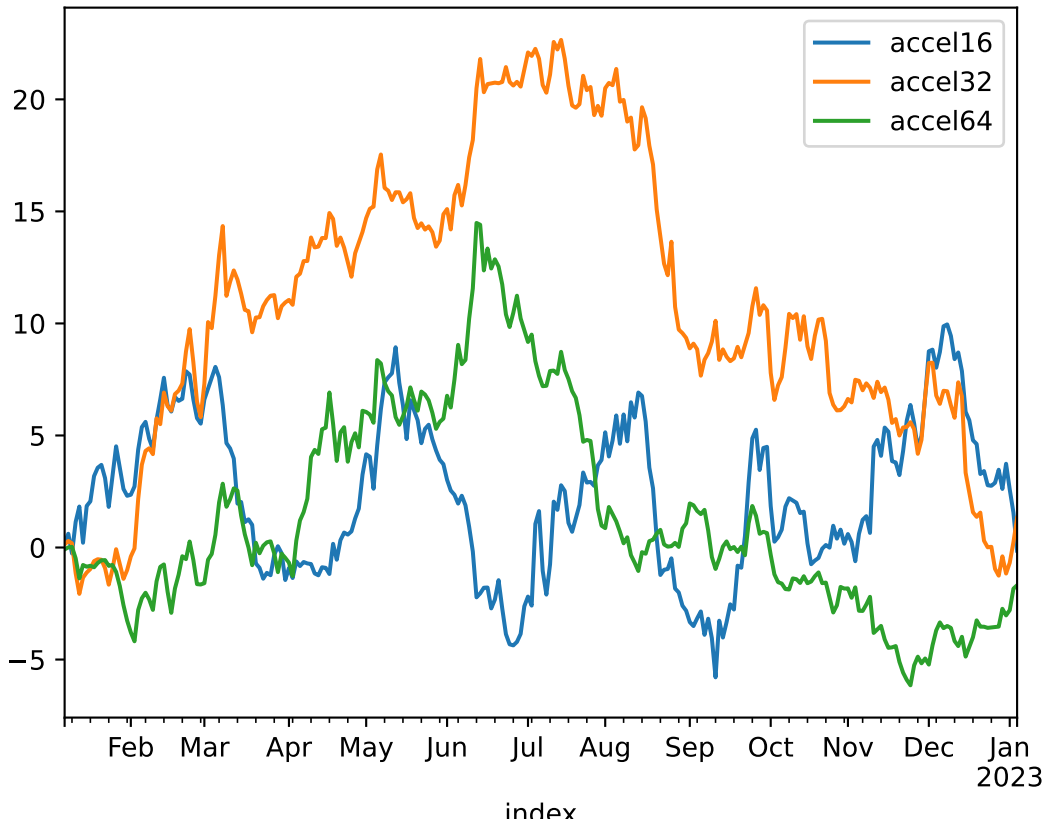


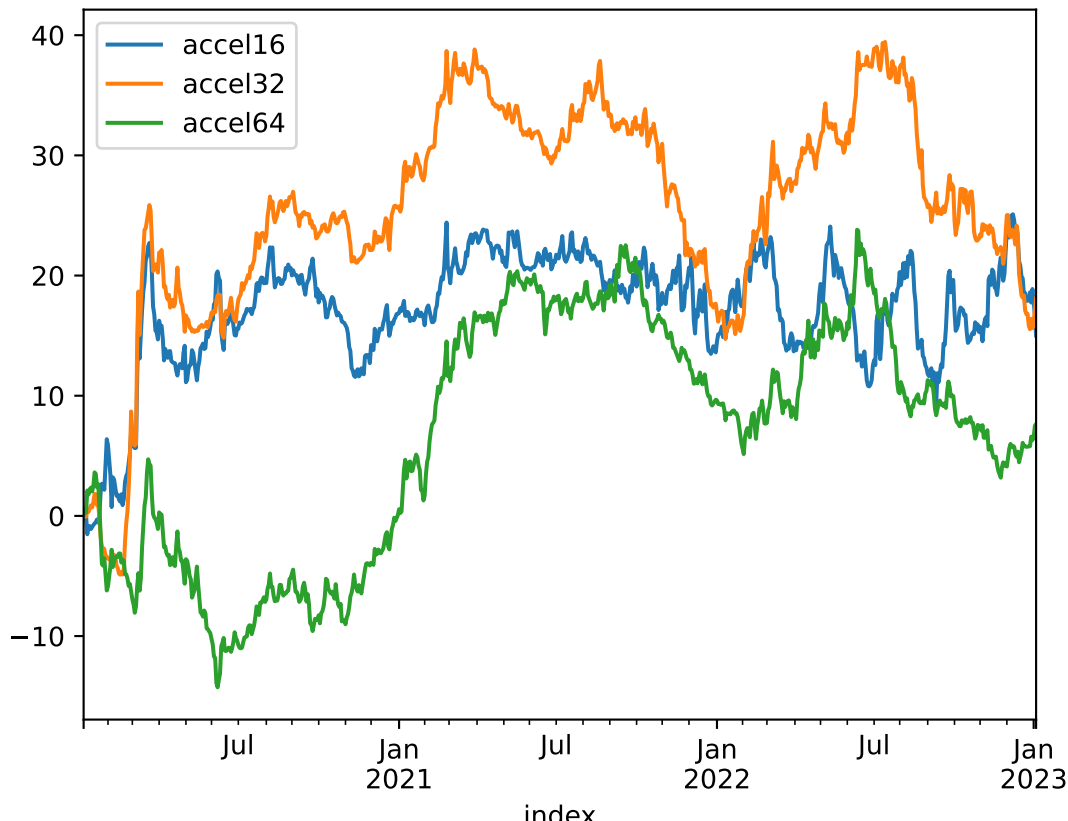
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -330.761, 'accel32': 211.301, 'accel64': 114.7}
ann. std {'accel16': 5.716, 'accel32': 4.944, 'accel64': 7.093}
ann. SR {'accel16': -57.87, 'accel32': 42.74, 'accel64': 16.17}



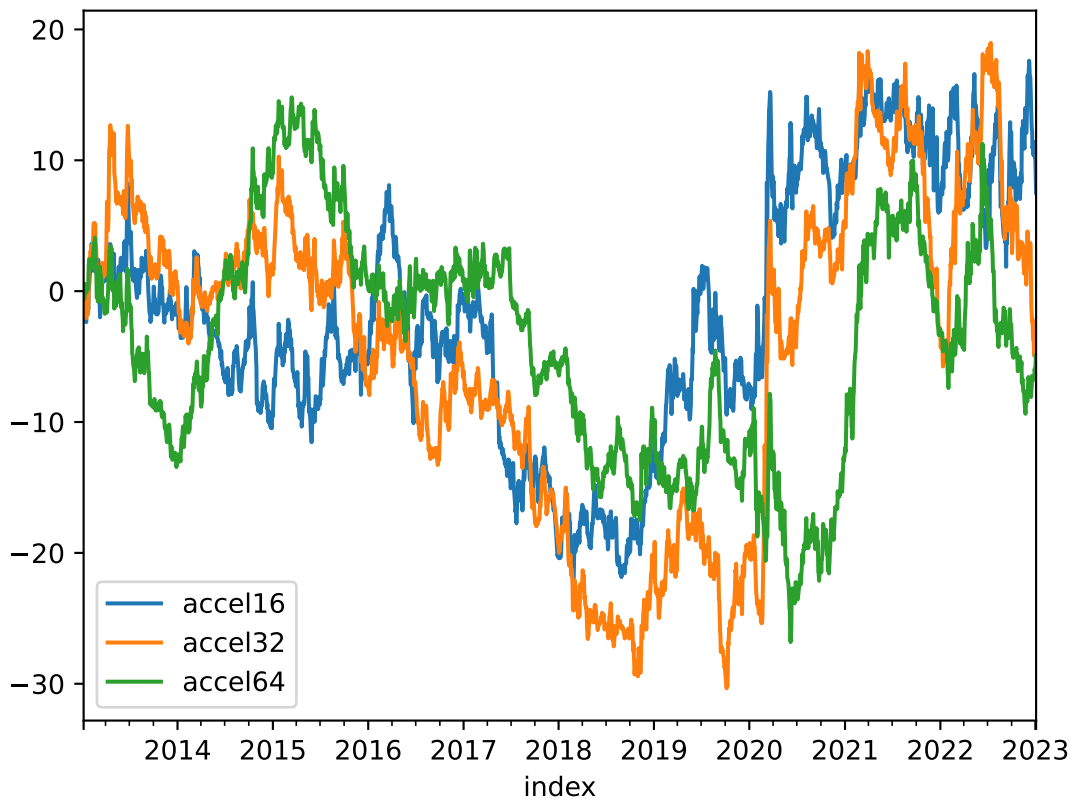
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -0.136, 'accel32': 1.294, 'accel64': -1.659}
ann. std {'accel16': 16.292, 'accel32': 14.684, 'accel64': 11.682}
ann. SR {'accel16': -0.01, 'accel32': 0.09, 'accel64': -0.14}



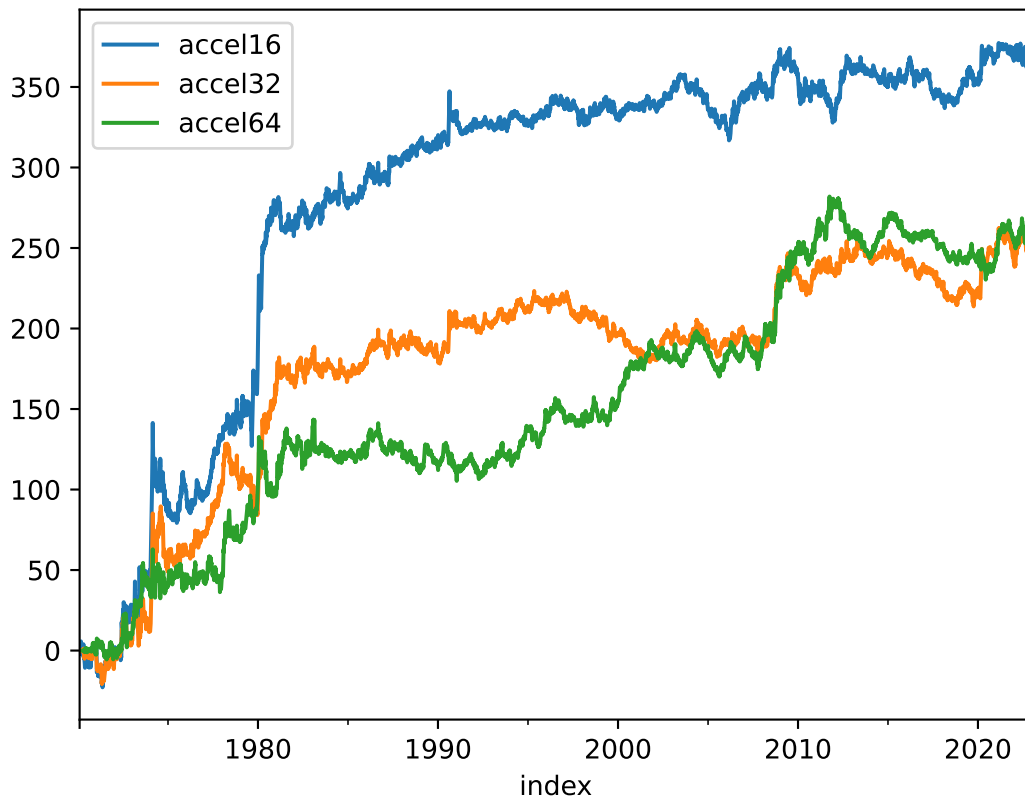
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': 4.905, 'accel32': 5.918, 'accel64': 2.499}
ann. std {'accel16': 14.999, 'accel32': 14.292, 'accel64': 11.71}
ann. SR {'accel16': 0.33, 'accel32': 0.41, 'accel64': 0.21}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 0.738, 'accel32': -0.233, 'accel64': -0.481}
ann. std {'accel16': 11.945, 'accel32': 11.218, 'accel64': 9.582}
ann. SR {'accel16': 0.06, 'accel32': -0.02, 'accel64': -0.05}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.821, 'accel32': 4.482, 'accel64': 4.677}
ann. std {'accel16': 15.731, 'accel32': 13.801, 'accel64': 13.327}
ann. SR {'accel16': 0.43, 'accel32': 0.32, 'accel64': 0.35}

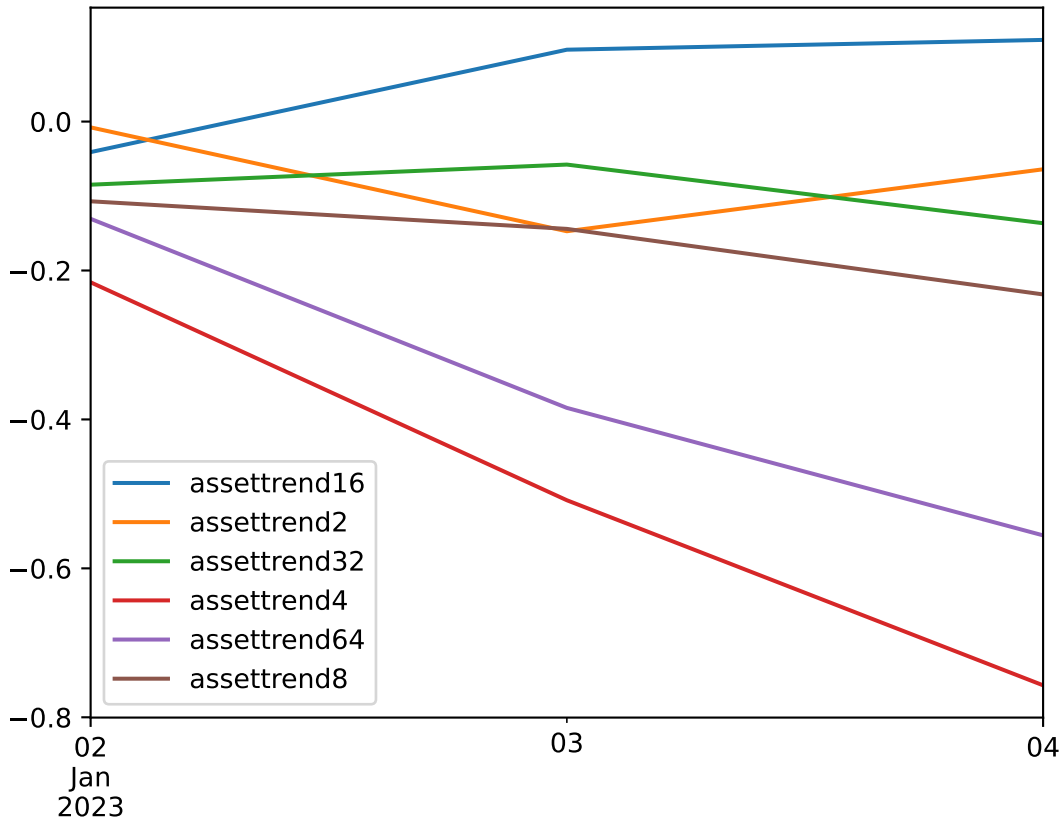


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': 9.358, 'assettrend2': -5.469, 'assettrend32': -11.648, 'assettrend4': -64.601, 'assettrend64': -47.419, 'assettrend8': -19.809}

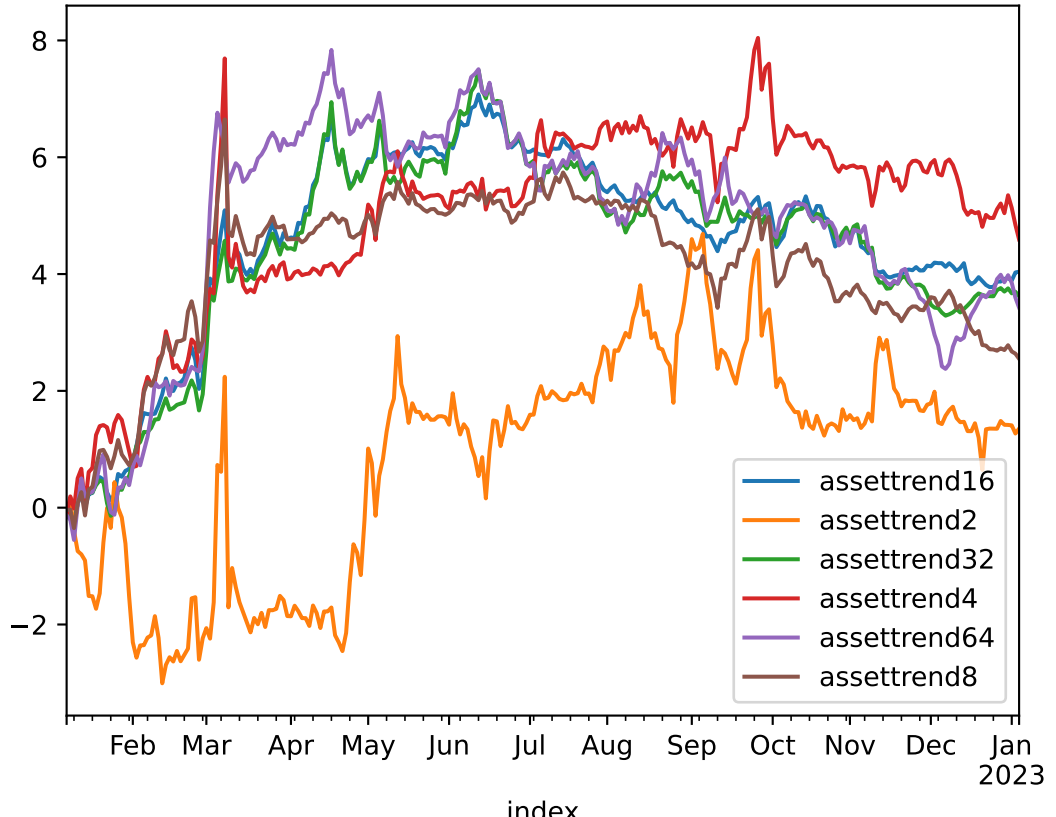
ann. std {'assettrend16': 1.465, 'assettrend2': 1.791, 'assettrend32': 1.006, 'assettrend4': 0.617, 'assettrend64': 1.005, 'assettrend8': 0.579}

ann. SR {'assettrend16': 6.39, 'assettrend2': -3.05, 'assettrend32': -11.58, 'assettrend4': -104.68, 'assettrend64': -47.19, 'assettrend8': -34.2}



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

ann. mean {'assettrend16': 3.978, 'assettrend2': 1.332, 'assettrend32': 3.563, 'assettrend4': 4.522, 'assettrend64': 3.373, 'assettrend8': 2.51}
ann. std {'assettrend16': 3.032, 'assettrend2': 7.652, 'assettrend32': 3.325, 'assettrend4': 5.756, 'assettrend64': 3.989, 'assettrend8': 3.758}
ann. SR {'assettrend16': 1.31, 'assettrend2': 0.17, 'assettrend32': 1.07, 'assettrend4': 0.79, 'assettrend64': 0.85, 'assettrend8': 0.67}

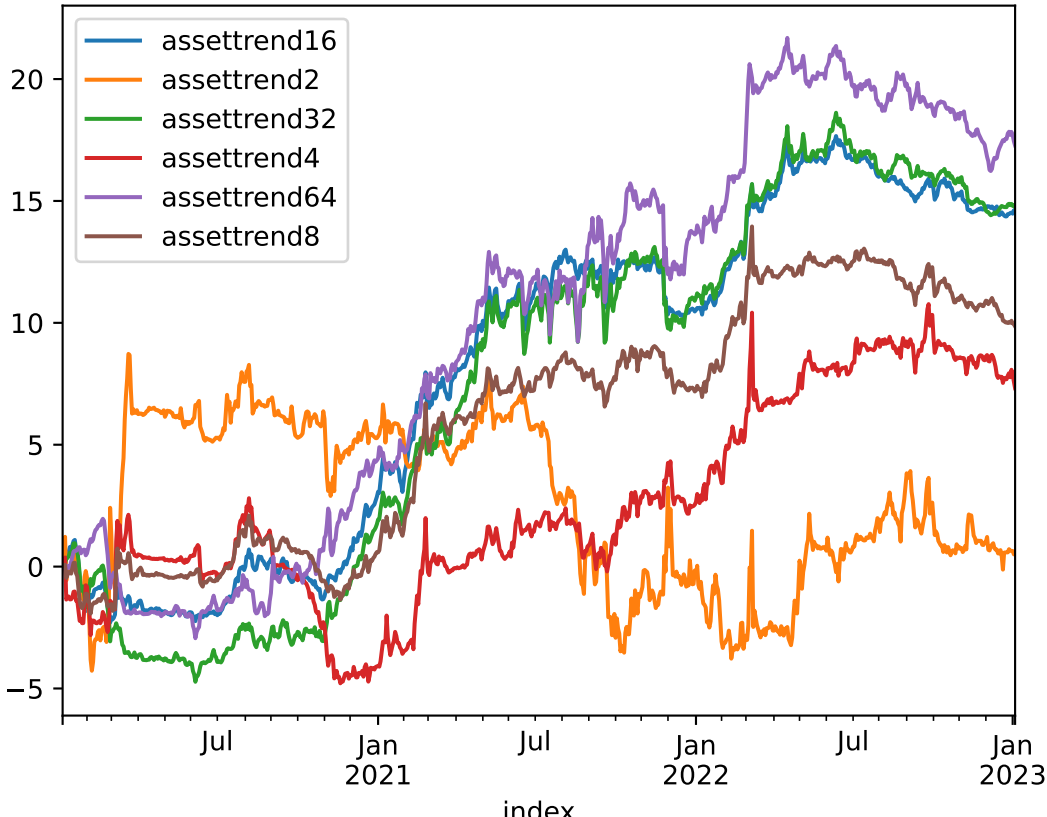


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 4.783, 'assettrend2': 0.191, 'assettrend32': 4.821, 'assettrend4': 2.392, 'assettrend64': 5.649, 'assettrend8': 3.222}

ann. std {'assettrend16': 3.602, 'assettrend2': 7.838, 'assettrend32': 4.419, 'assettrend4': 5.453, 'assettrend64': 5.127, 'assettrend8': 3.754}

ann. SR {'assettrend16': 1.33, 'assettrend2': 0.02, 'assettrend32': 1.09, 'assettrend4': 0.44, 'assettrend64': 1.1, 'assettrend8': 0.86}

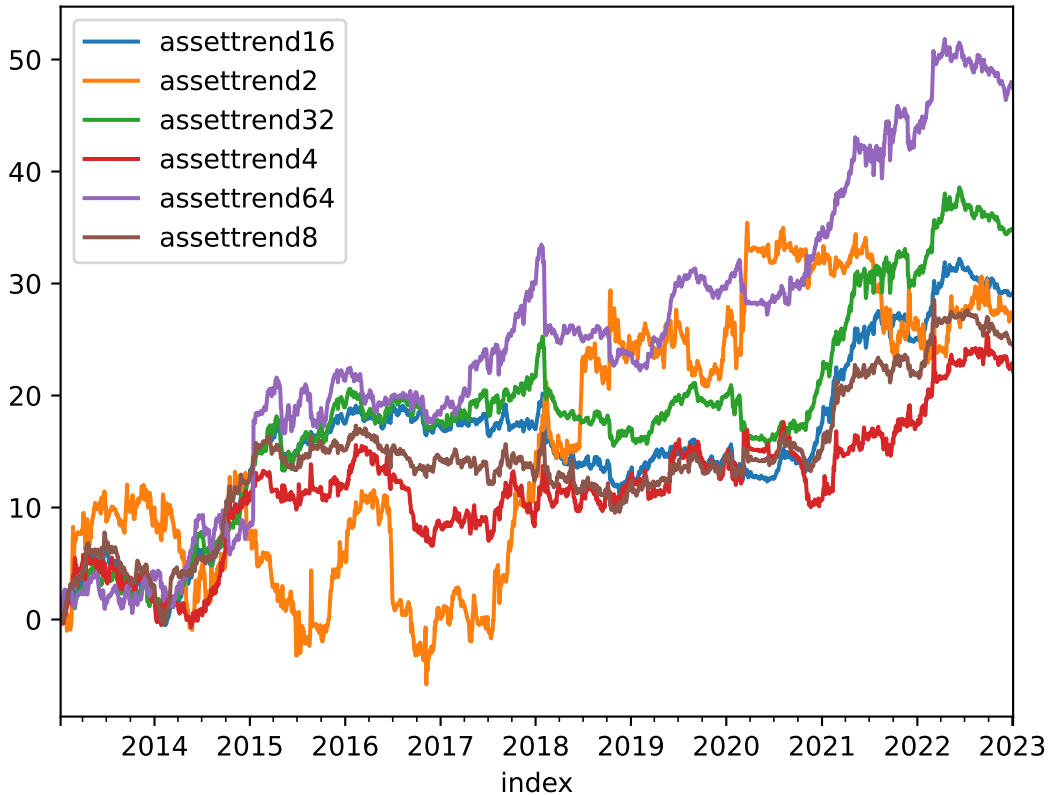


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.865, 'assettrend2': 2.678, 'assettrend32': 3.408, 'assettrend4': 2.173, 'assettrend64': 4.656, 'assettrend8': 2.401}

ann. std {'assettrend16': 3.272, 'assettrend2': 8.399, 'assettrend32': 3.748, 'assettrend4': 5.006, 'assettrend64': 5.308, 'assettrend8': 3.571}

ann. SR {'assettrend16': 0.88, 'assettrend2': 0.32, 'assettrend32': 0.91, 'assettrend4': 0.43, 'assettrend64': 0.88, 'assettrend8': 0.67}

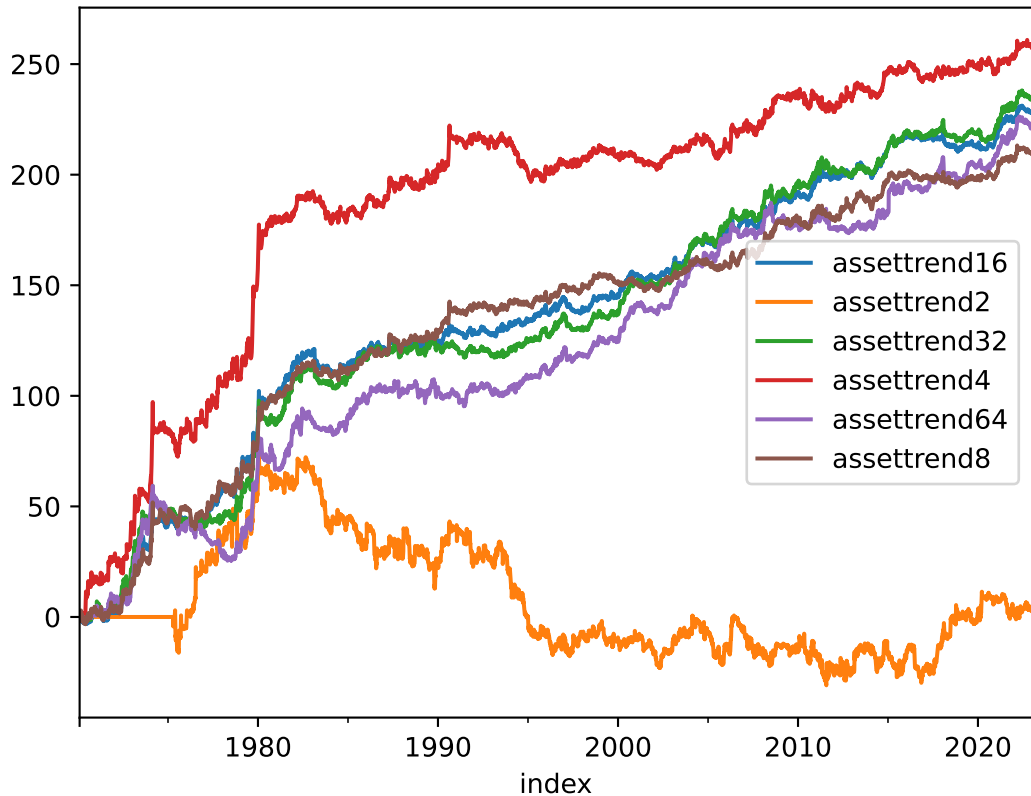


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.231, 'assettrend2': 0.061, 'assettrend32': 4.343, 'assettrend4': 4.774, 'assettrend64': 4.115, 'assettrend8': 3.877}

ann. std {'assettrend16': 4.661, 'assettrend2': 10.049, 'assettrend32': 4.895, 'assettrend4': 7.35, 'assettrend64': 5.47, 'assettrend8': 5.036}

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

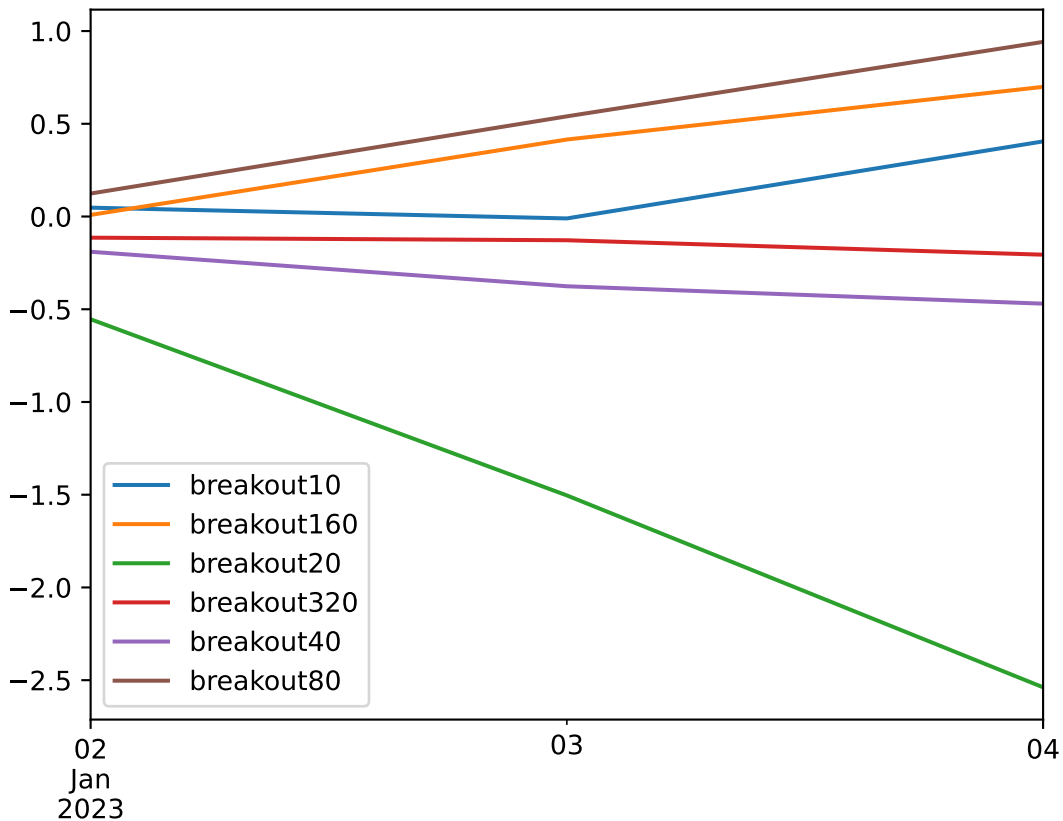


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 34.563, 'breakout160': 59.652, 'breakout20': -216.615, 'breakout320': -17.56, 'breakout40': -40.099, 'breakout80': 80.342}

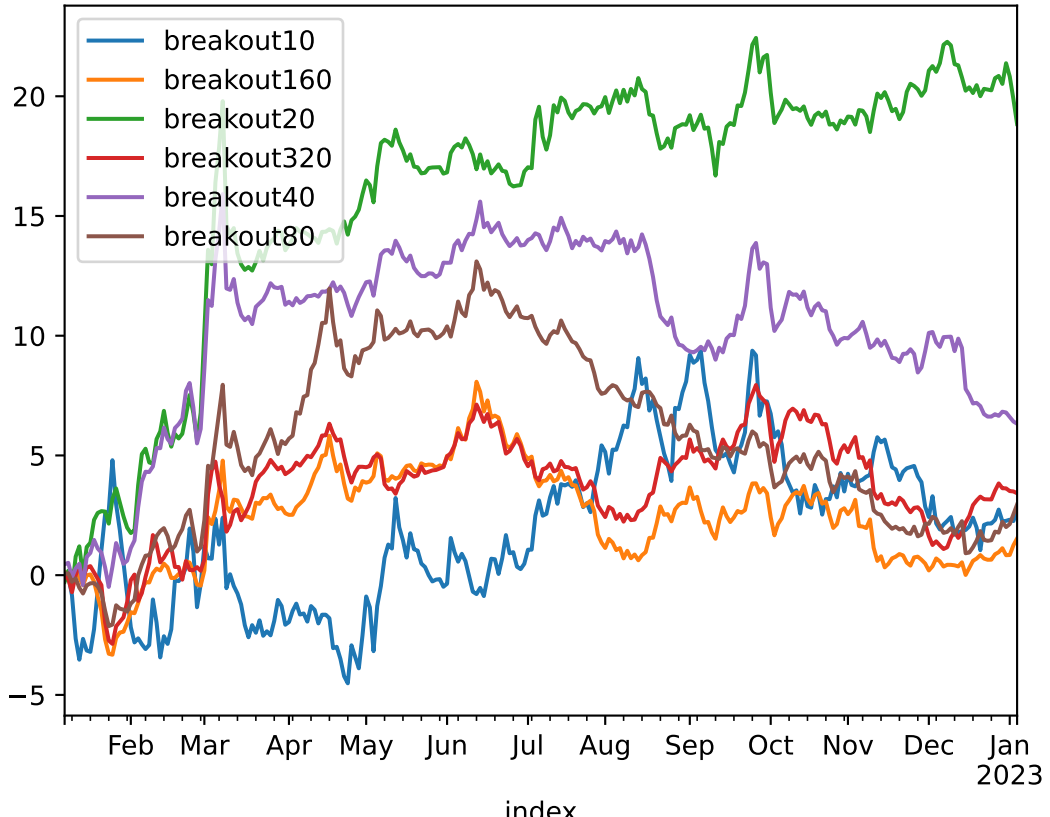
ann. std {'breakout10': 3.976, 'breakout160': 3.261, 'breakout20': 4.106, 'breakout320': 0.811, 'breakout40': 0.87, 'breakout80': 2.634}

ann. SR {'breakout10': 8.69, 'breakout160': 18.29, 'breakout20': -52.75, 'breakout320': -21.64, 'breakout40': -46.1, 'breakout80': 30.5}



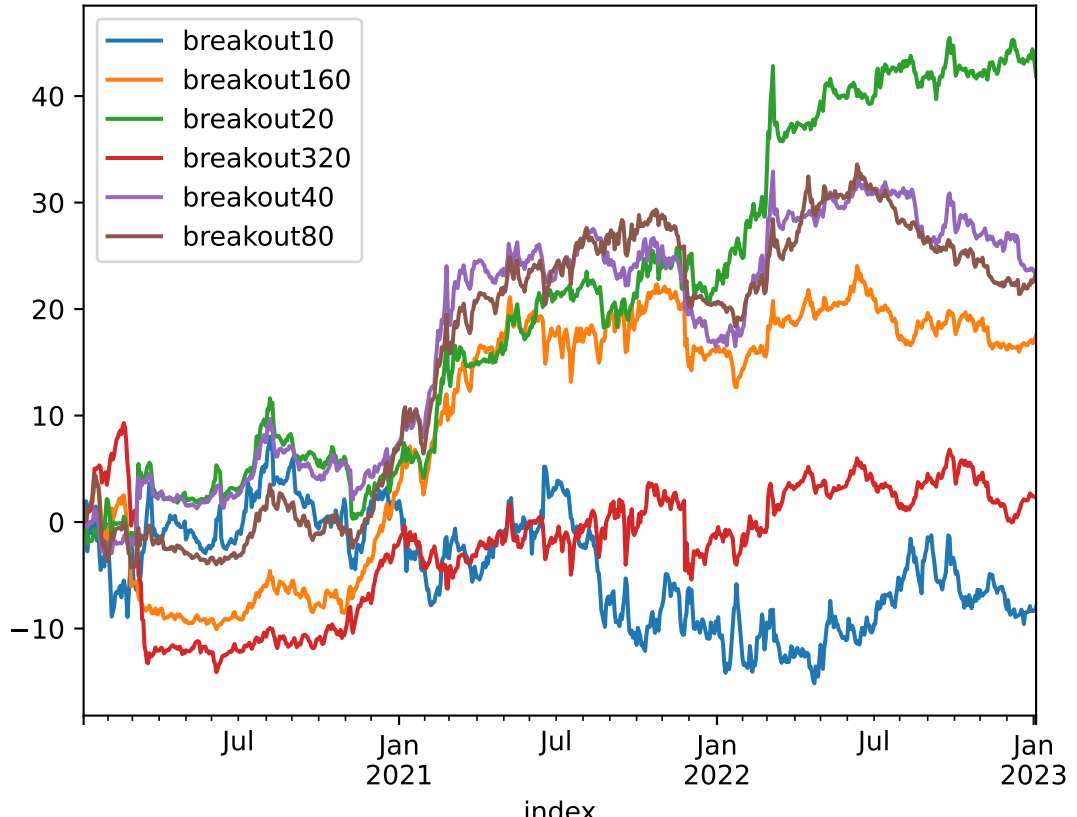
Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 2.633, 'breakout160': 1.509, 'breakout20': 18.552, 'breakout320': 3.367, 'breakout40': 6.226, 'breakout80': 2.905}
ann. std {'breakout10': 13.465, 'breakout160': 7.079, 'breakout20': 12.066, 'breakout320': 7.365, 'breakout40': 9.679, 'breakout80': 7.935}
ann. SR {'breakout10': 0.2, 'breakout160': 0.21, 'breakout20': 1.54, 'breakout320': 0.46, 'breakout40': 0.64, 'breakout80': 0.37}



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

ann. mean {'breakout10': -2.601, 'breakout160': 5.724, 'breakout20': 13.688, 'breakout320': 0.747, 'breakout40': 7.625, 'breakout80': 7.663}
ann. std {'breakout10': 14.793, 'breakout160': 9.733, 'breakout20': 11.555, 'breakout320': 10.709, 'breakout40': 9.96, 'breakout80': 9.549}
ann. SR {'breakout10': -0.18, 'breakout160': 0.59, 'breakout20': 1.18, 'breakout320': 0.07, 'breakout40': 0.77, 'breakout80': 0.8}

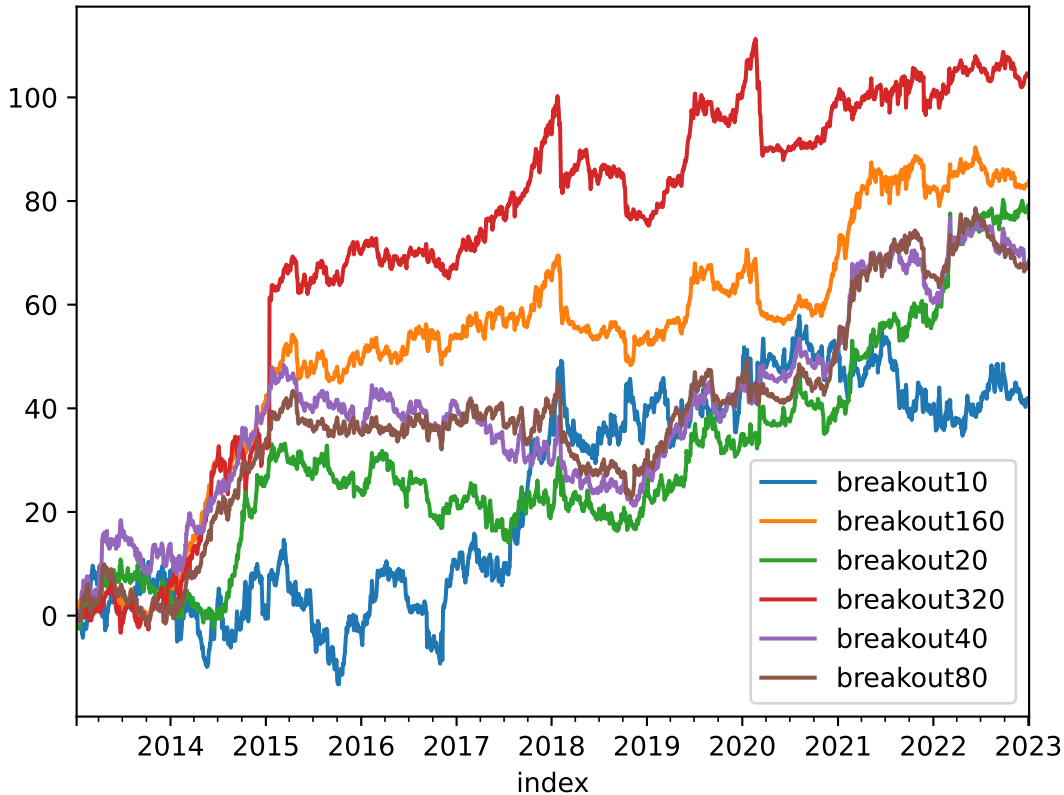


Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 4.113, 'breakout160': 8.232, 'breakout20': 7.525, 'breakout320': 10.235, 'breakout40': 6.591, 'breakout80': 6.719}

ann. std {'breakout10': 15.684, 'breakout160': 9.119, 'breakout20': 11.208, 'breakout320': 13.33, 'breakout40': 9.836, 'breakout80': 9.019}

ann. SR {'breakout10': 0.26, 'breakout160': 0.9, 'breakout20': 0.67, 'breakout320': 0.77, 'breakout40': 0.67, 'breakout80': 0.75}

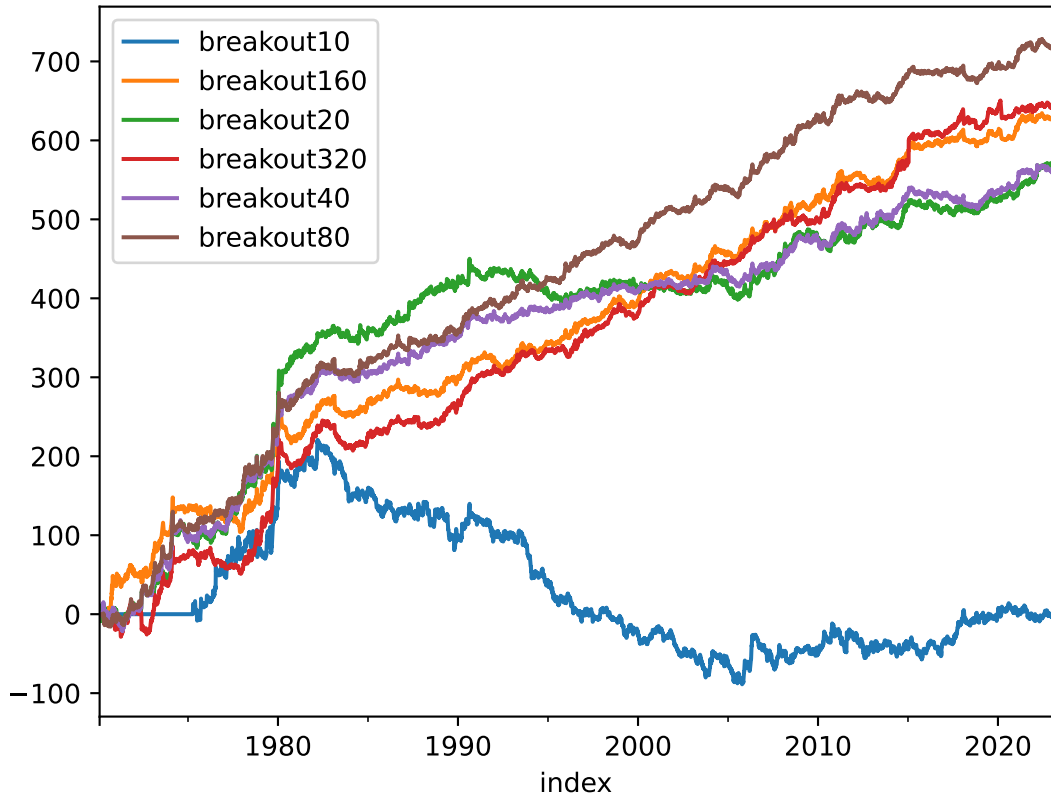


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.037, 'breakout160': 11.644, 'breakout20': 10.528, 'breakout320': 11.932, 'breakout40': 10.371, 'breakout80': 13.319}

ann. std {'breakout10': 20.835, 'breakout160': 12.497, 'breakout20': 16.104, 'breakout320': 13.05, 'breakout40': 13.235, 'breakout80': 12.757}

ann. SR {'breakout10': -0.0, 'breakout160': 0.93, 'breakout20': 0.65, 'breakout320': 0.91, 'breakout40': 0.78, 'breakout80': 1.04}

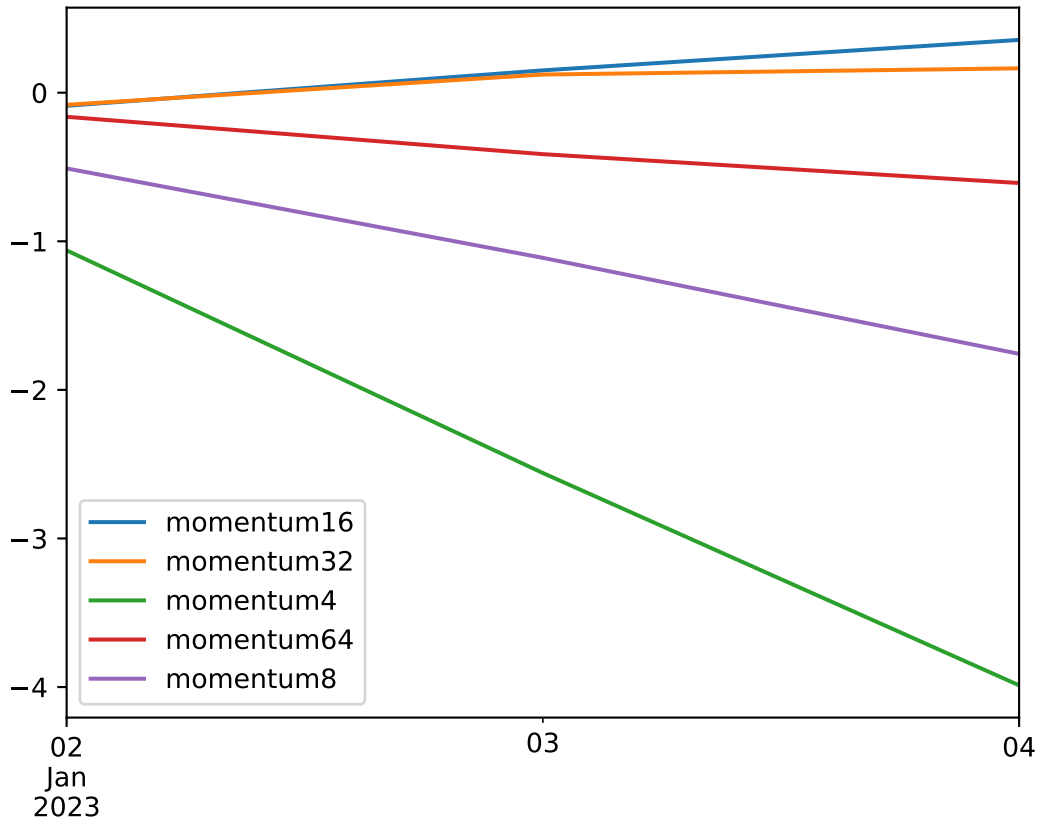


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 30.319, 'momentum32': 13.992, 'momentum4': -340.333, 'momentum64': -51.864, 'momentum8': -149.979}

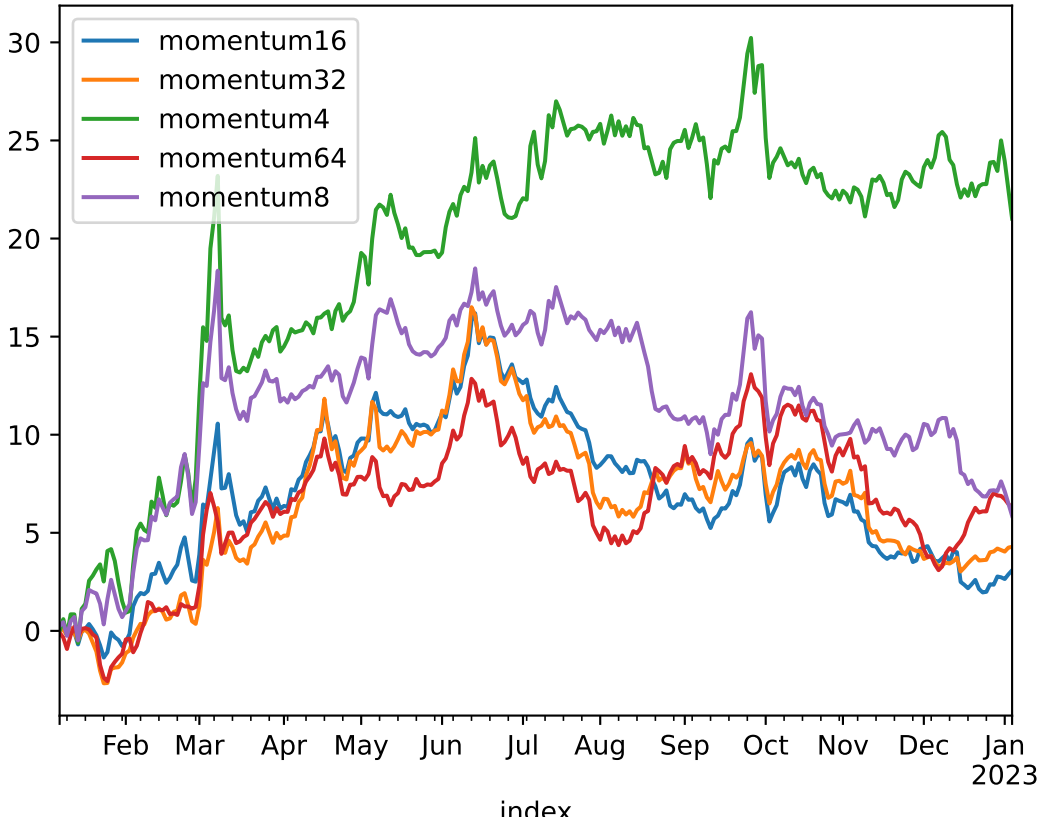
ann. std {'momentum16': 2.876, 'momentum32': 2.29, 'momentum4': 3.759, 'momentum64': 0.723, 'momentum8': 1.113}

ann. SR {'momentum16': 10.54, 'momentum32': 6.11, 'momentum4': -90.53, 'momentum64': -71.7, 'momentum8': -134.72}



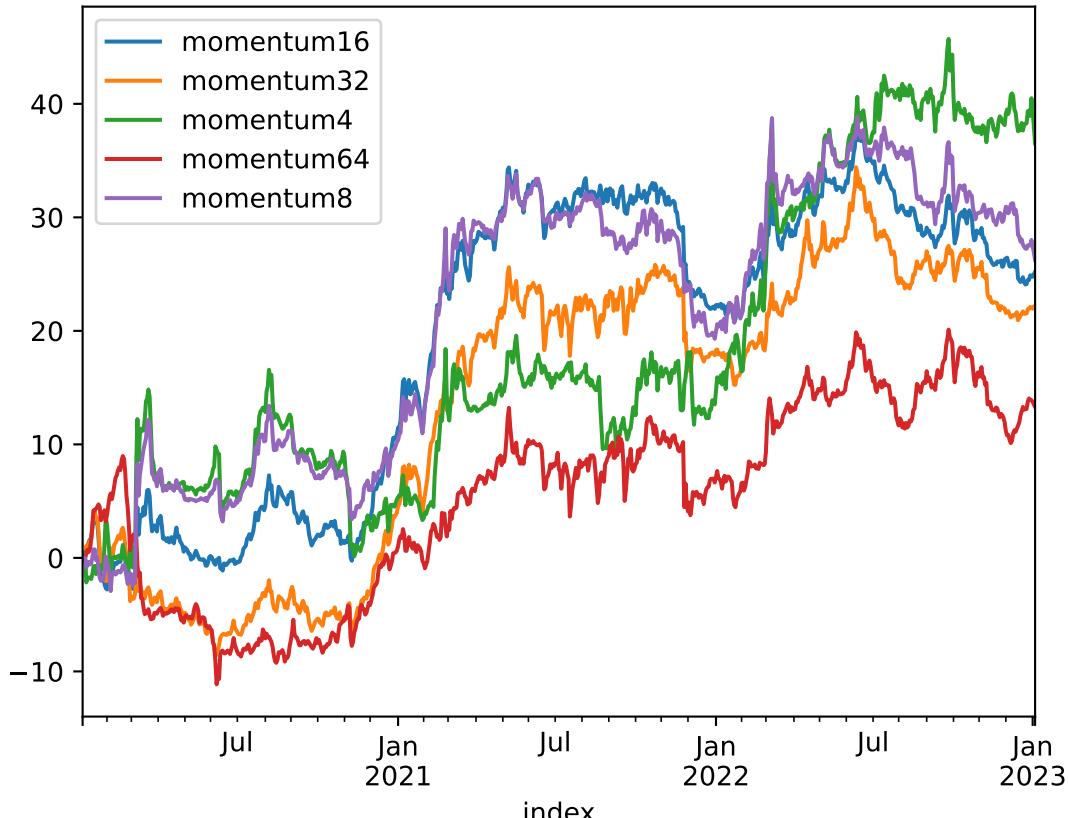
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': 3.04, 'momentum32': 4.221, 'momentum4': 20.692, 'momentum64': 6.176, 'momentum8': 5.774}
ann. std {'momentum16': 10.093, 'momentum32': 9.613, 'momentum4': 17.387, 'momentum64': 9.322, 'momentum8': 13.216}
ann. SR {'momentum16': 0.3, 'momentum32': 0.44, 'momentum4': 1.19, 'momentum64': 0.66, 'momentum8': 0.44}



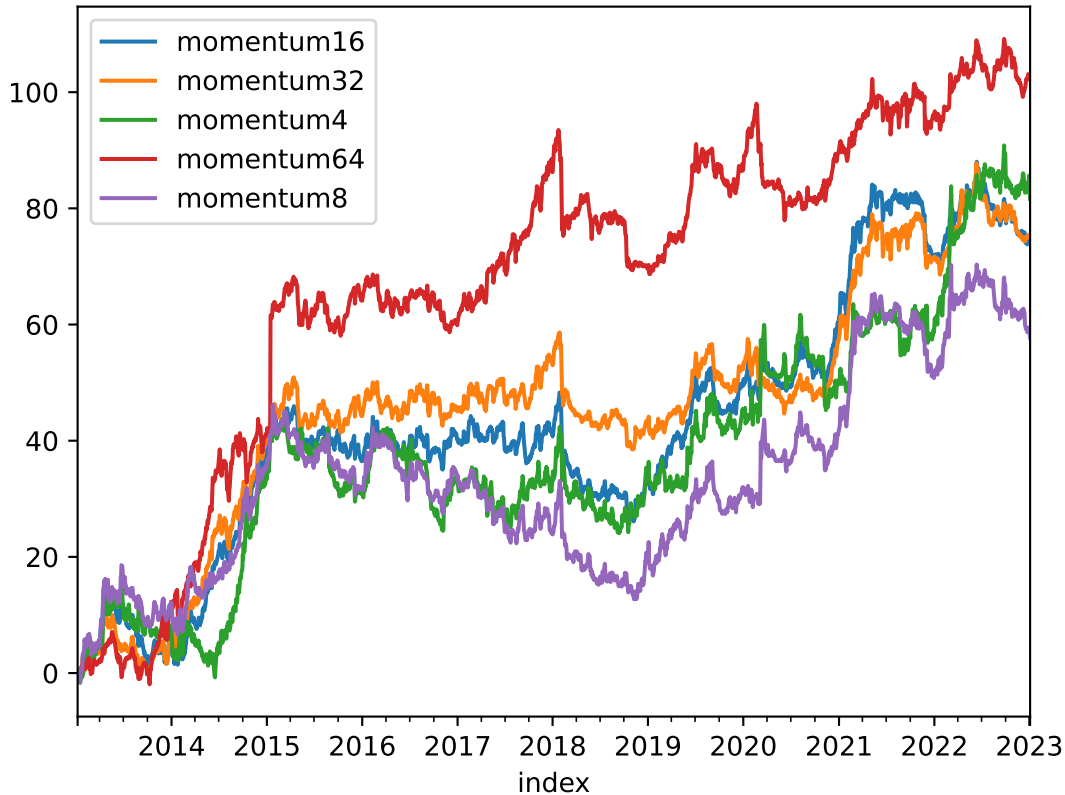
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 8.243, 'momentum32': 7.258, 'momentum4': 11.936, 'momentum64': 4.347, 'momentum8': 8.583}
ann. std {'momentum16': 10.995, 'momentum32': 10.843, 'momentum4': 16.168, 'momentum64': 10.905, 'momentum8': 12.781}
ann. SR {'momentum16': 0.75, 'momentum32': 0.67, 'momentum4': 0.74, 'momentum64': 0.4, 'momentum8': 0.67}



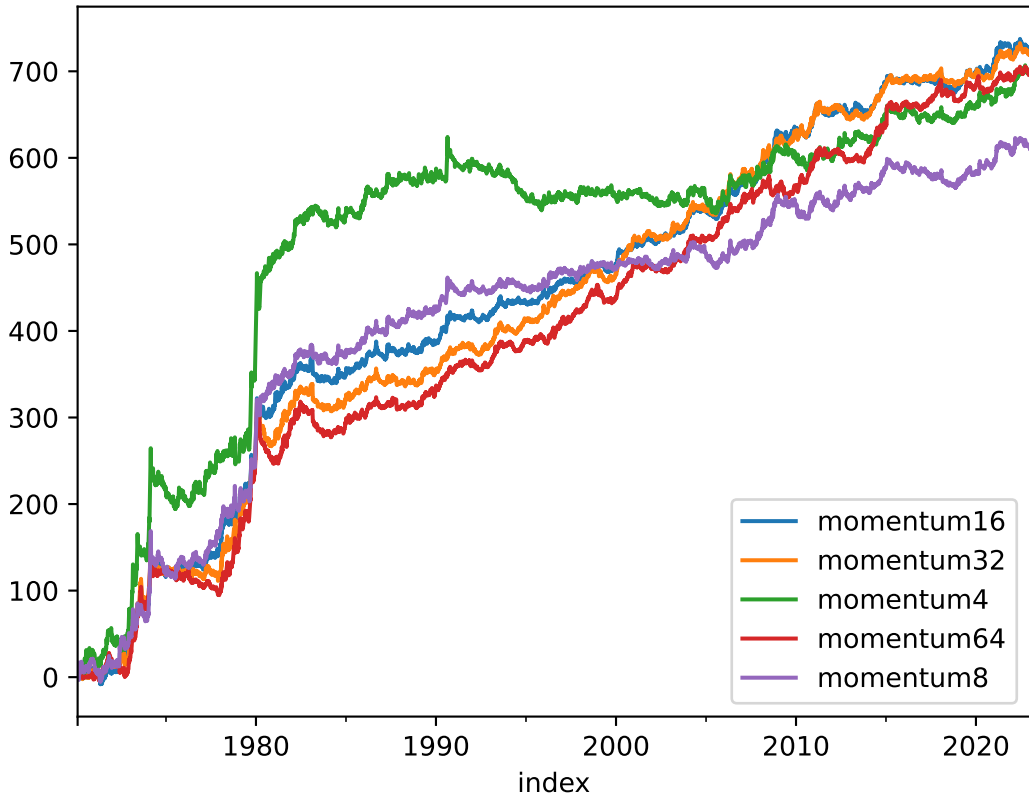
Total Trading Rule P&L for period '10Y'

ann. mean {'momentum16': 7.355, 'momentum32': 7.416, 'momentum4': 8.012, 'momentum64': 10.047, 'momentum8': 5.666}
ann. std {'momentum16': 9.948, 'momentum32': 9.488, 'momentum4': 13.714, 'momentum64': 12.001, 'momentum8': 11.323}
ann. SR {'momentum16': 0.74, 'momentum32': 0.78, 'momentum4': 0.58, 'momentum64': 0.84, 'momentum8': 0.5}



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

ann. mean {'momentum16': 13.43, 'momentum32': 13.356, 'momentum4': 12.937, 'momentum64': 12.957, 'momentum8': 11.318}
ann. std {'momentum16': 14.224, 'momentum32': 13.854, 'momentum4': 20.081, 'momentum64': 13.491, 'momentum8': 15.874}
ann. SR {'momentum16': 0.94, 'momentum32': 0.96, 'momentum4': 0.64, 'momentum64': 0.96, 'momentum8': 0.71}

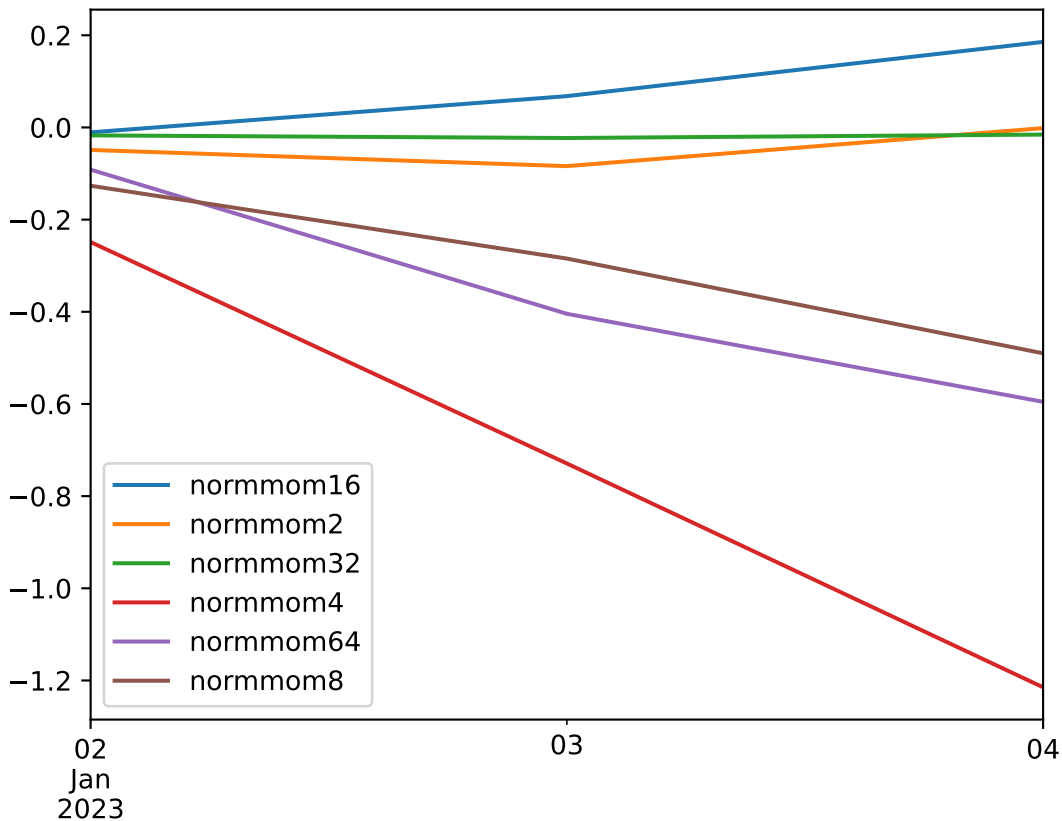


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 15.838, 'normmom2': -0.123, 'normmom32': -1.324, 'normmom4': -103.666, 'normmom64': -50.804, 'normmom8': -41.819}

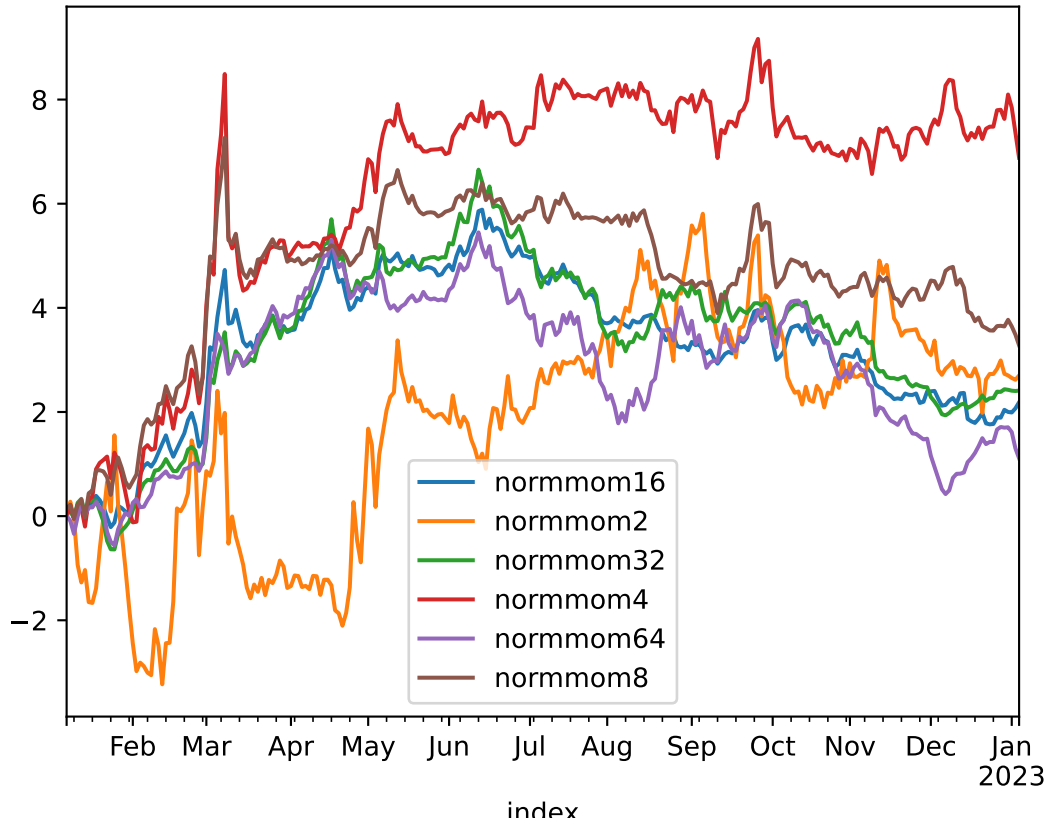
ann. std {'normmom16': 1.052, 'normmom2': 1.155, 'normmom32': 0.197, 'normmom4': 2.165, 'normmom64': 1.773, 'normmom8': 0.637}

ann. SR {'normmom16': 15.05, 'normmom2': -0.11, 'normmom32': -6.7, 'normmom4': -47.87, 'normmom64': -28.66, 'normmom8': -65.69}



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

ann. mean {'normmom16': 2.153, 'normmom2': 2.659, 'normmom32': 2.374, 'normmom4': 6.777, 'normmom64': 1.093, 'normmom8': 3.23}
ann. std {'normmom16': 3.137, 'normmom2': 8.02, 'normmom32': 3.139, 'normmom4': 5.999, 'normmom64': 3.429, 'normmom8': 4.245}
ann. SR {'normmom16': 0.69, 'normmom2': 0.33, 'normmom32': 0.76, 'normmom4': 1.13, 'normmom64': 0.32, 'normmom8': 0.76}

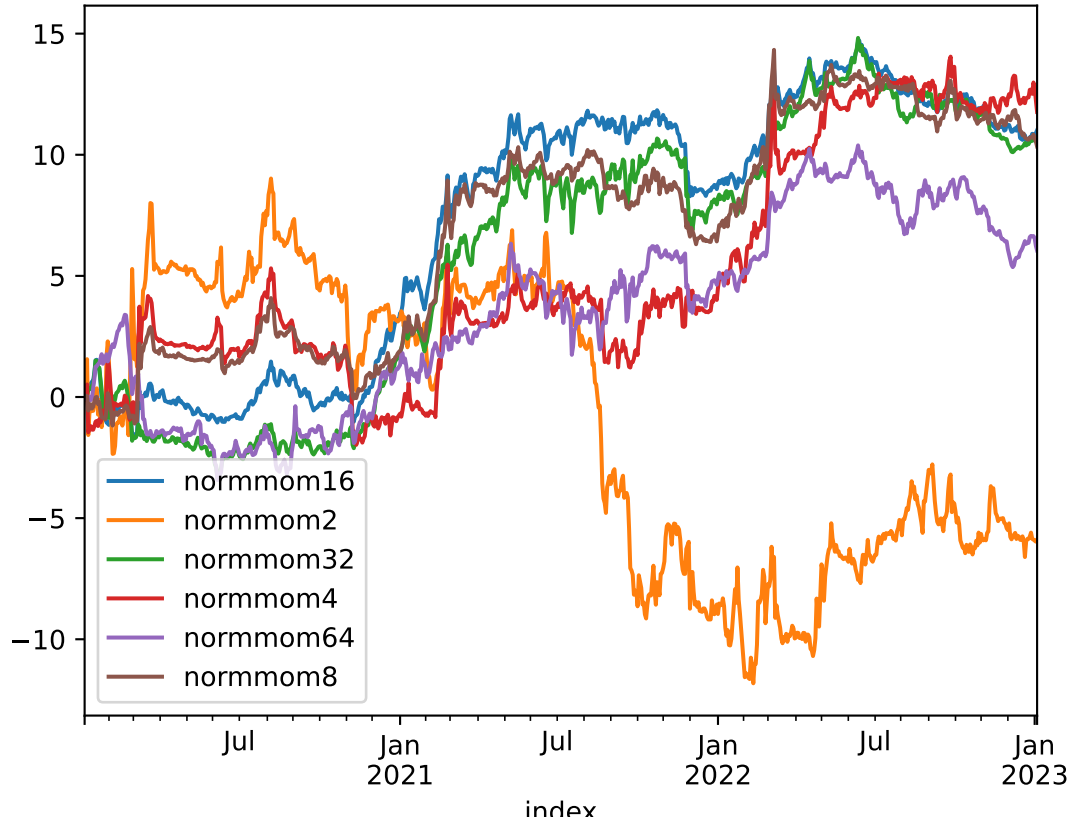


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.6, 'normmom2': -1.925, 'normmom32': 3.459, 'normmom4': 3.848, 'normmom64': 1.977, 'normmom8': 3.381}

ann. std {'normmom16': 3.7, 'normmom2': 8.712, 'normmom32': 4.04, 'normmom4': 5.952, 'normmom64': 4.308, 'normmom8': 4.254}

ann. SR {'normmom16': 0.97, 'normmom2': -0.22, 'normmom32': 0.86, 'normmom4': 0.65, 'normmom64': 0.46, 'normmom8': 0.79}

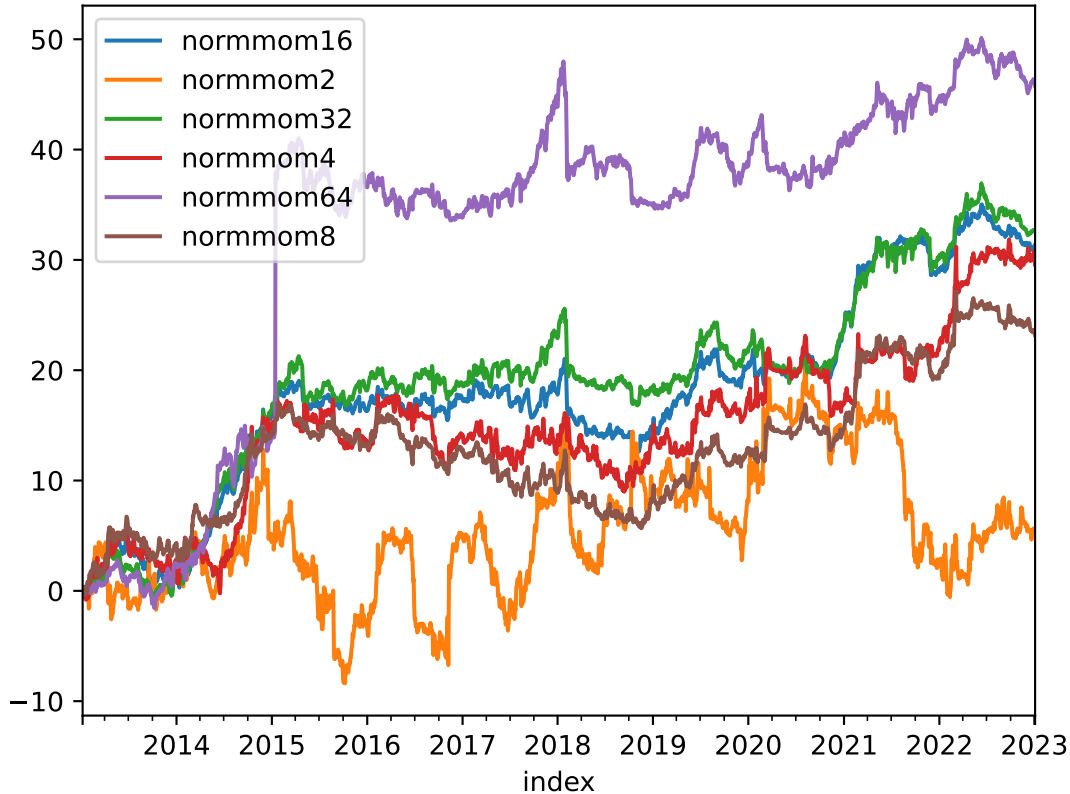


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 3.076, 'normmom2': 0.527, 'normmom32': 3.21, 'normmom4': 2.904, 'normmom64': 4.494, 'normmom8': 2.274}

ann. std {'normmom16': 3.577, 'normmom2': 9.053, 'normmom32': 3.726, 'normmom4': 5.497, 'normmom64': 8.561, 'normmom8': 4.047}

ann. SR {'normmom16': 0.86, 'normmom2': 0.06, 'normmom32': 0.86, 'normmom4': 0.53, 'normmom64': 0.52, 'normmom8': 0.56}

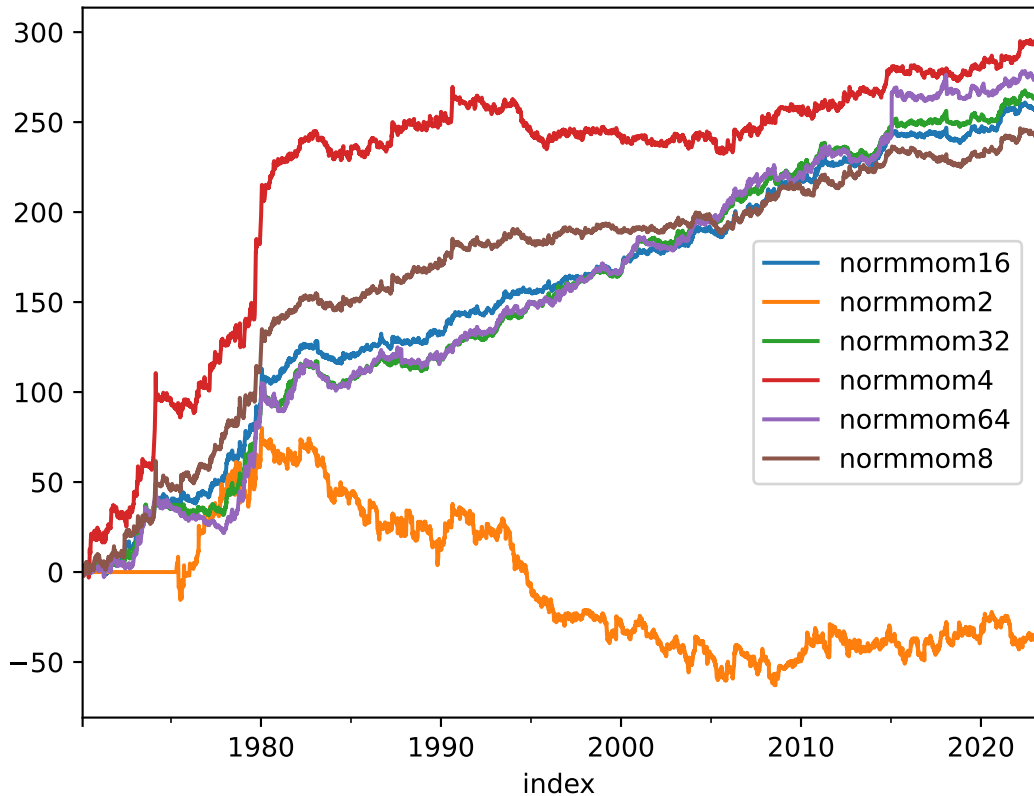


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.769, 'normmom2': -0.687, 'normmom32': 4.884, 'normmom4': 5.44, 'normmom64': 5.082, 'normmom8': 4.499}

ann. std {'normmom16': 4.923, 'normmom2': 11.2, 'normmom32': 4.992, 'normmom4': 8.324, 'normmom64': 6.311, 'normmom8': 5.933}

ann. SR {'normmom16': 0.97, 'normmom2': -0.06, 'normmom32': 0.98, 'normmom4': 0.65, 'normmom64': 0.81, 'normmom8': 0.76}

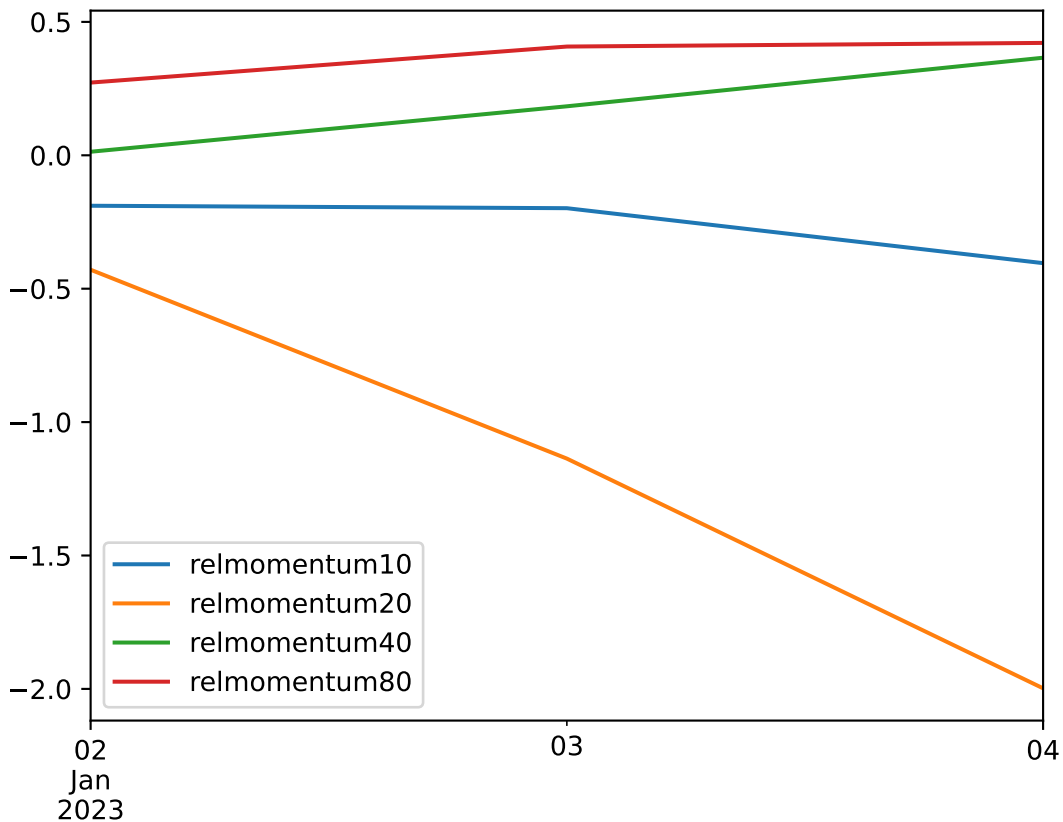


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -34.492, 'relmomentum20': -170.476, 'relmomentum40': 31.206, 'relmomentum80': 35.947}

ann. std {'relmomentum10': 1.745, 'relmomentum20': 3.505, 'relmomentum40': 1.508, 'relmomentum80': 2.072}

ann. SR {'relmomentum10': -19.77, 'relmomentum20': -48.64, 'relmomentum40': 20.69, 'relmomentum80': 17.35}

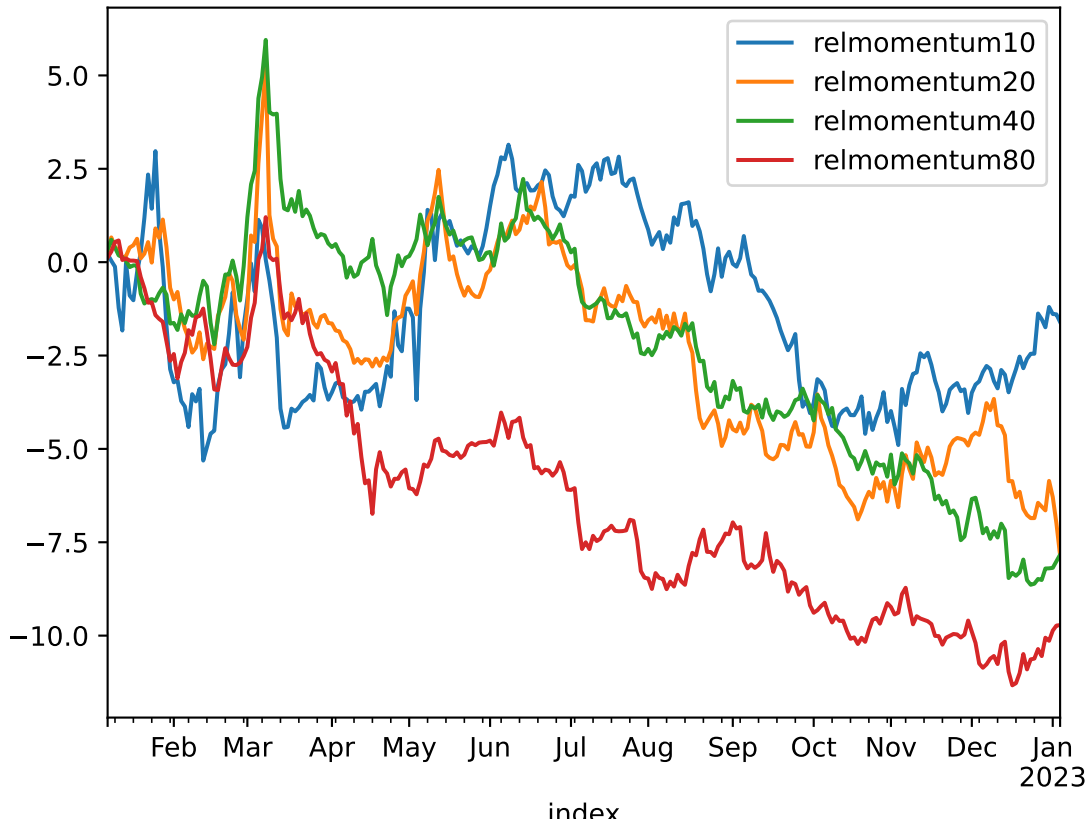


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -1.579, 'relmomentum20': -7.734, 'relmomentum40': -7.713, 'relmomentum80': -9.568}

ann. std {'relmomentum10': 9.948, 'relmomentum20': 8.5, 'relmomentum40': 6.678, 'relmomentum80': 5.701}

ann. SR {'relmomentum10': -0.16, 'relmomentum20': -0.91, 'relmomentum40': -1.15, 'relmomentum80': -1.68}

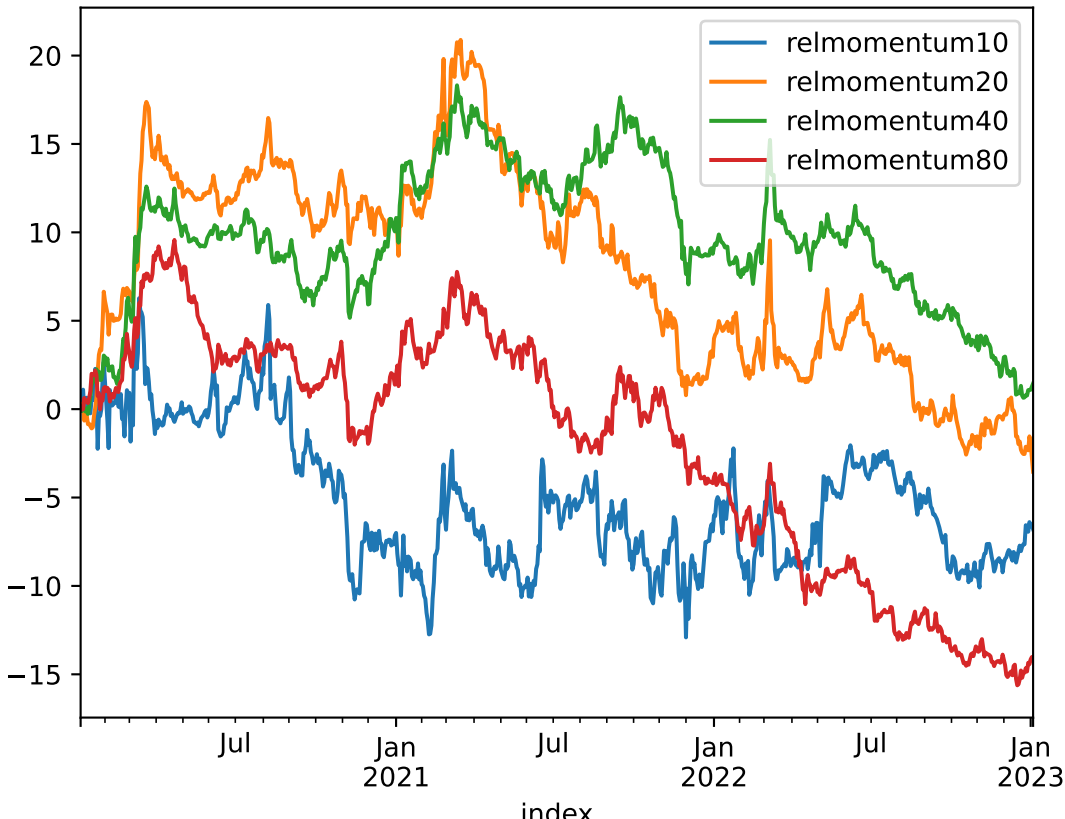


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -2.221, 'relmomentum20': -1.157, 'relmomentum40': 0.473, 'relmomentum80': -4.58}

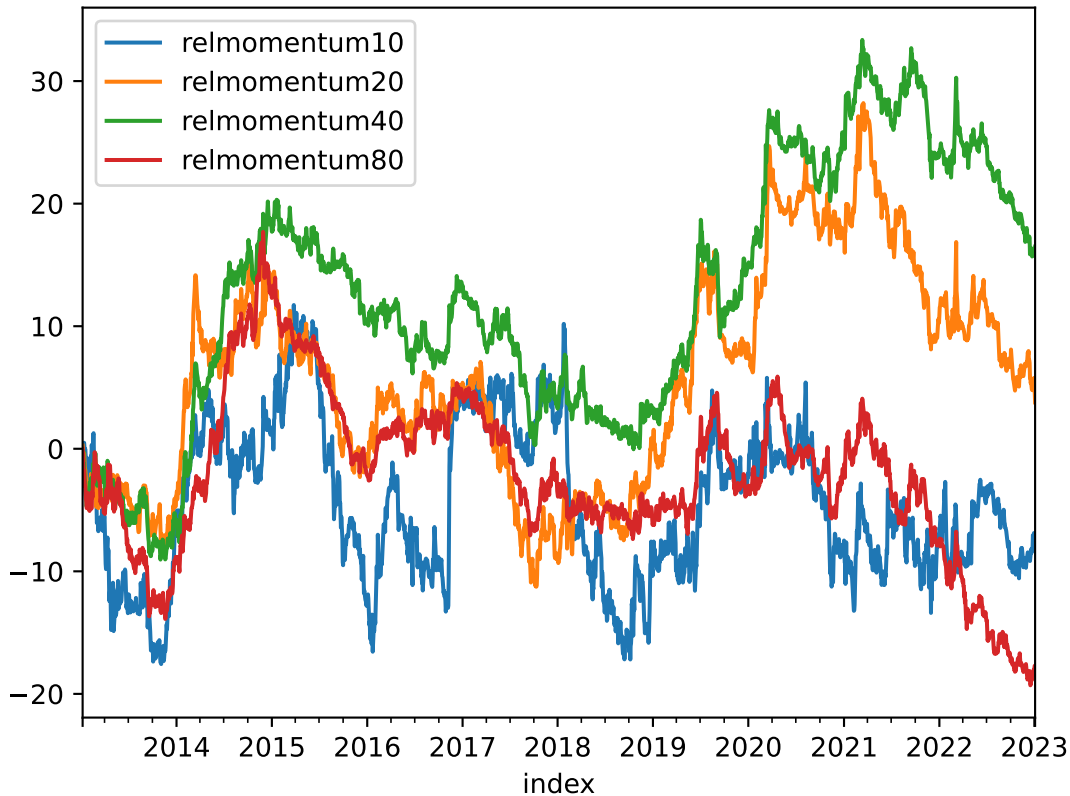
ann. std {'relmomentum10': 12.695, 'relmomentum20': 9.08, 'relmomentum40': 7.467, 'relmomentum80': 6.95}

ann. SR {'relmomentum10': -0.17, 'relmomentum20': -0.13, 'relmomentum40': 0.06, 'relmomentum80': -0.66}



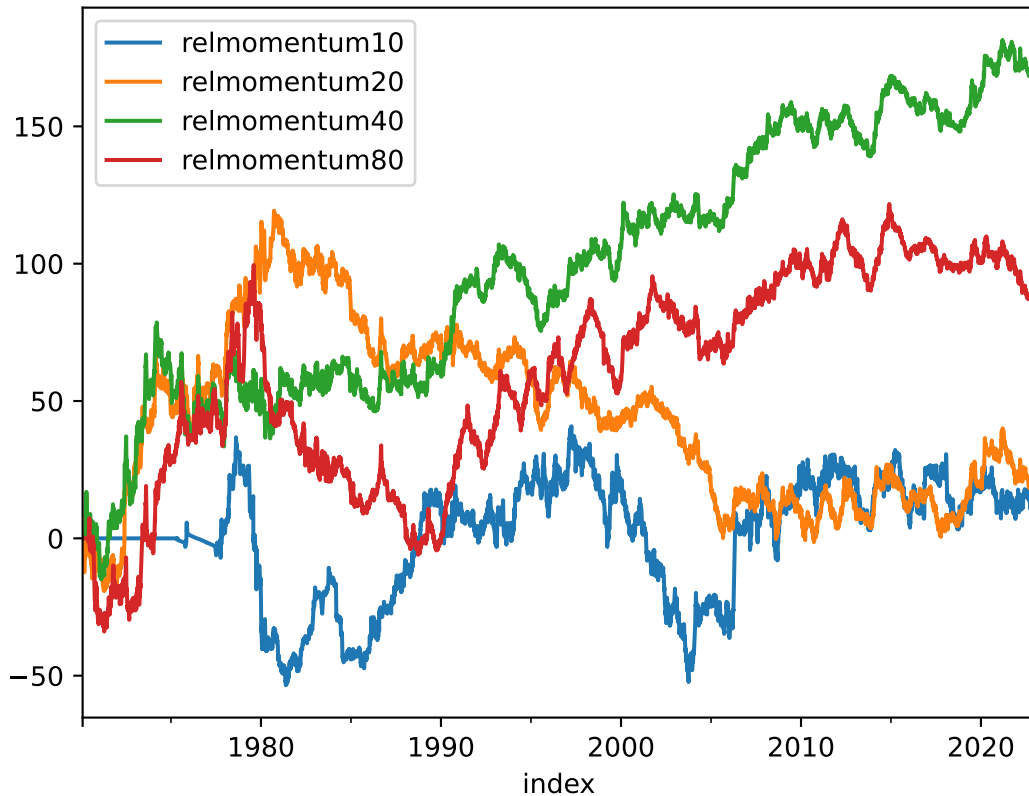
Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -0.714, 'relmomentum20': 0.371, 'relmomentum40': 1.619, 'relmomentum80': -1.736}
ann. std {'relmomentum10': 12.876, 'relmomentum20': 8.973, 'relmomentum40': 7.362, 'relmomentum80': 6.81}
ann. SR {'relmomentum10': -0.06, 'relmomentum20': 0.04, 'relmomentum40': 0.22, 'relmomentum80': -0.25}



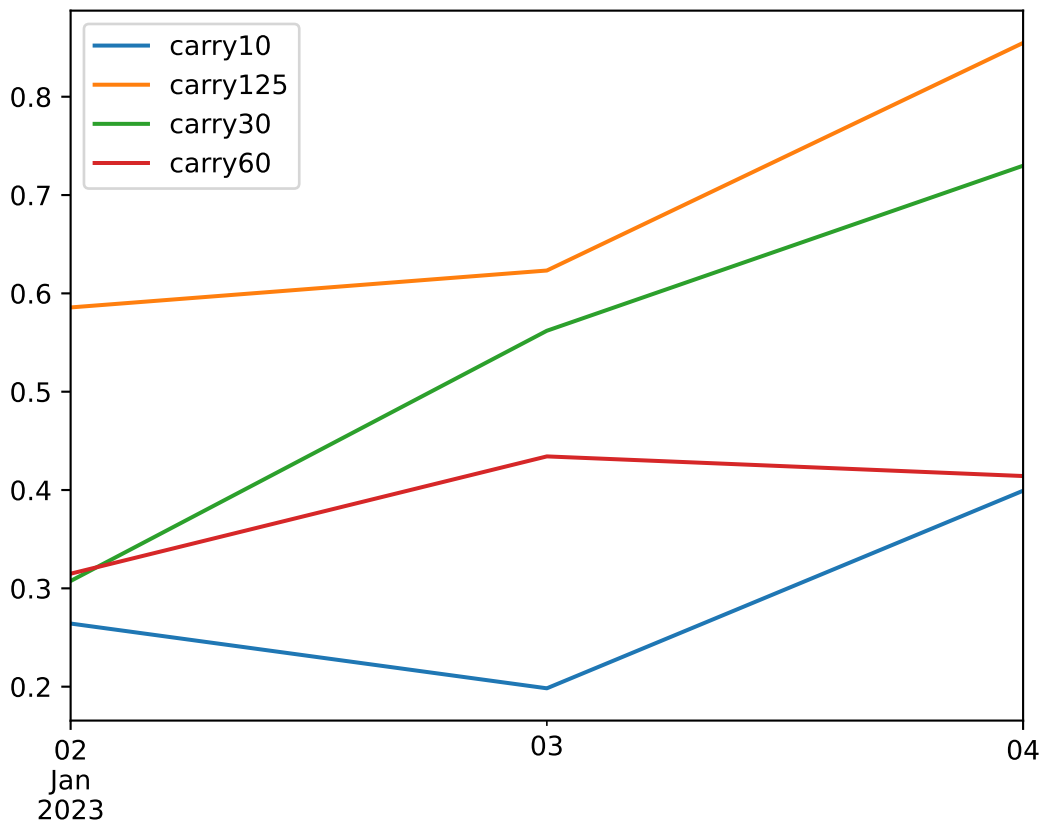
Total Trading Rule P&L for period '99Y'

ann. mean {'relmomentum10': 0.244, 'relmomentum20': 0.29, 'relmomentum40': 3.052, 'relmomentum80': 1.601}
ann. std {'relmomentum10': 13.323, 'relmomentum20': 11.526, 'relmomentum40': 10.794, 'relmomentum80': 11.062}
ann. SR {'relmomentum10': 0.02, 'relmomentum20': 0.03, 'relmomentum40': 0.28, 'relmomentum80': 0.14}



Total Trading Rule P&L for period 'YTD'

ann. mean	{'carry10': 34.073, 'carry125': 72.938, 'carry30': 62.279, 'carry60': 35.348}
ann. std	{'carry10': 2.803, 'carry125': 4.447, 'carry30': 1.128, 'carry60': 2.692}
ann. SR	{'carry10': 12.16, 'carry125': 16.4, 'carry30': 55.22, 'carry60': 13.13}

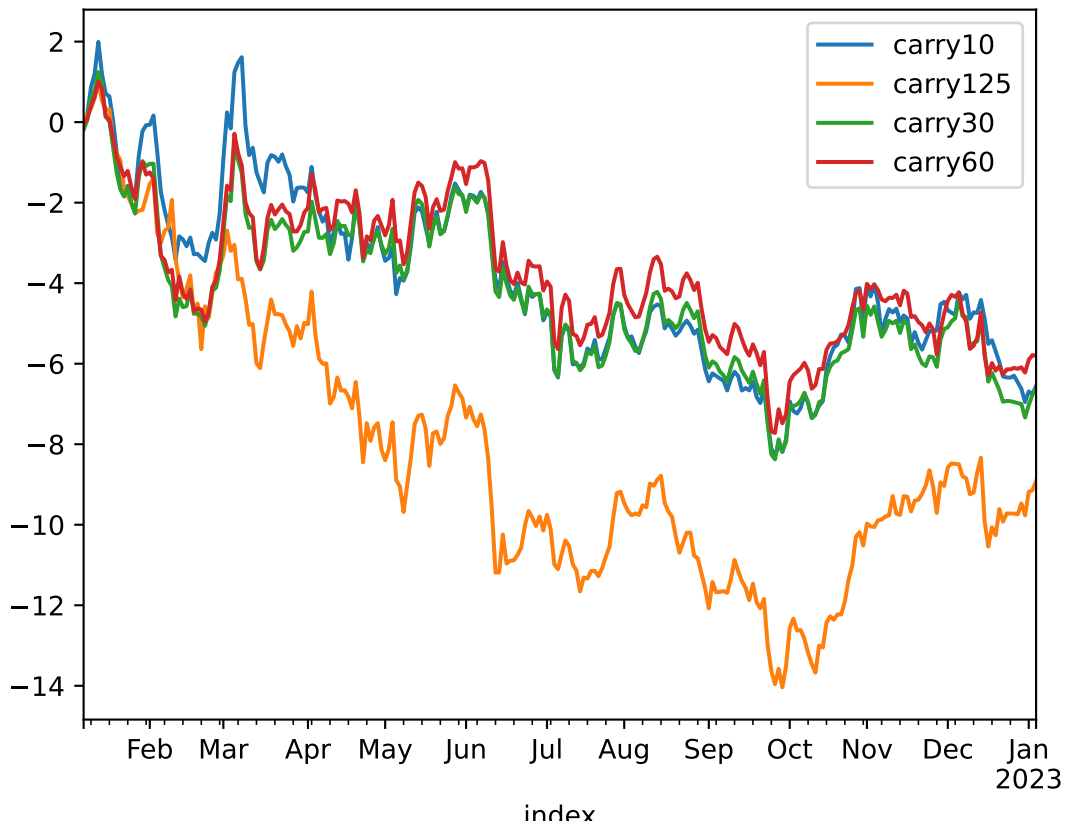


Total Trading Rule P&L for period '1Y'

ann. mean {'carry10': -6.453, 'carry125': -8.776, 'carry30': -6.504, 'carry60': -5.716}

ann. std {'carry10': 7.082, 'carry125': 7.648, 'carry30': 6.738, 'carry60': 6.763}

ann. SR {'carry10': -0.91, 'carry125': -1.15, 'carry30': -0.97, 'carry60': -0.85}

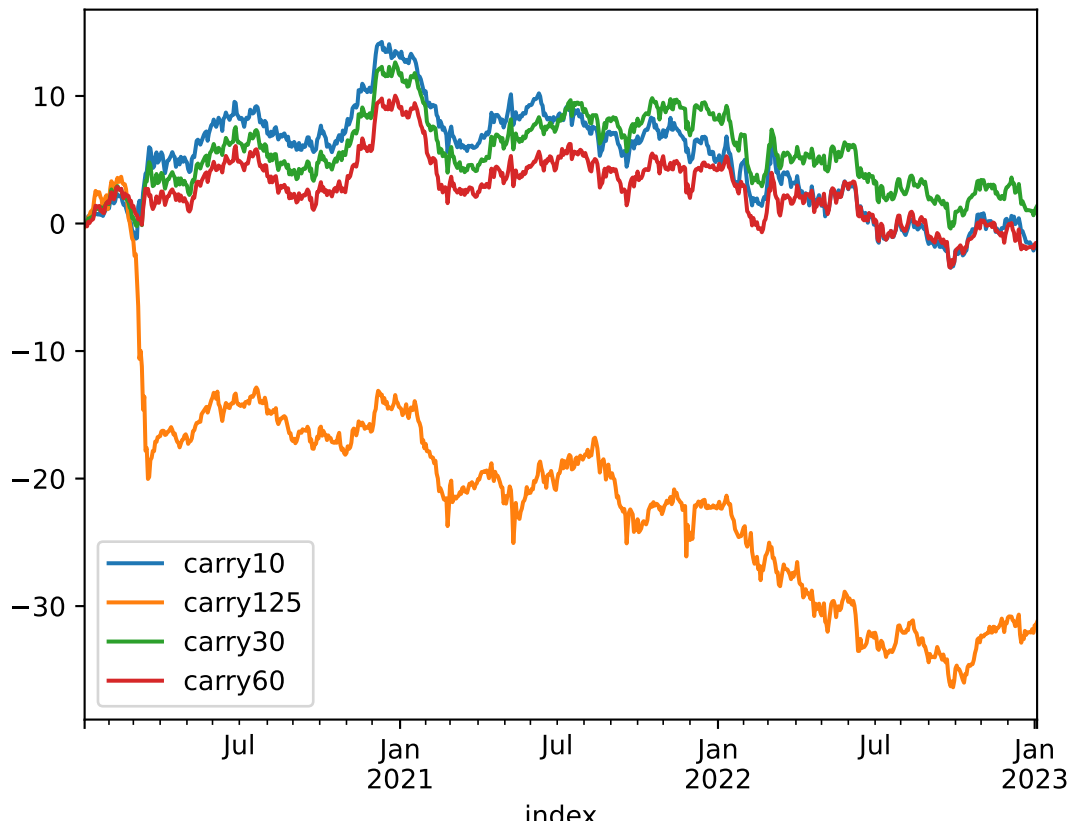


Total Trading Rule P&L for period '3Y'

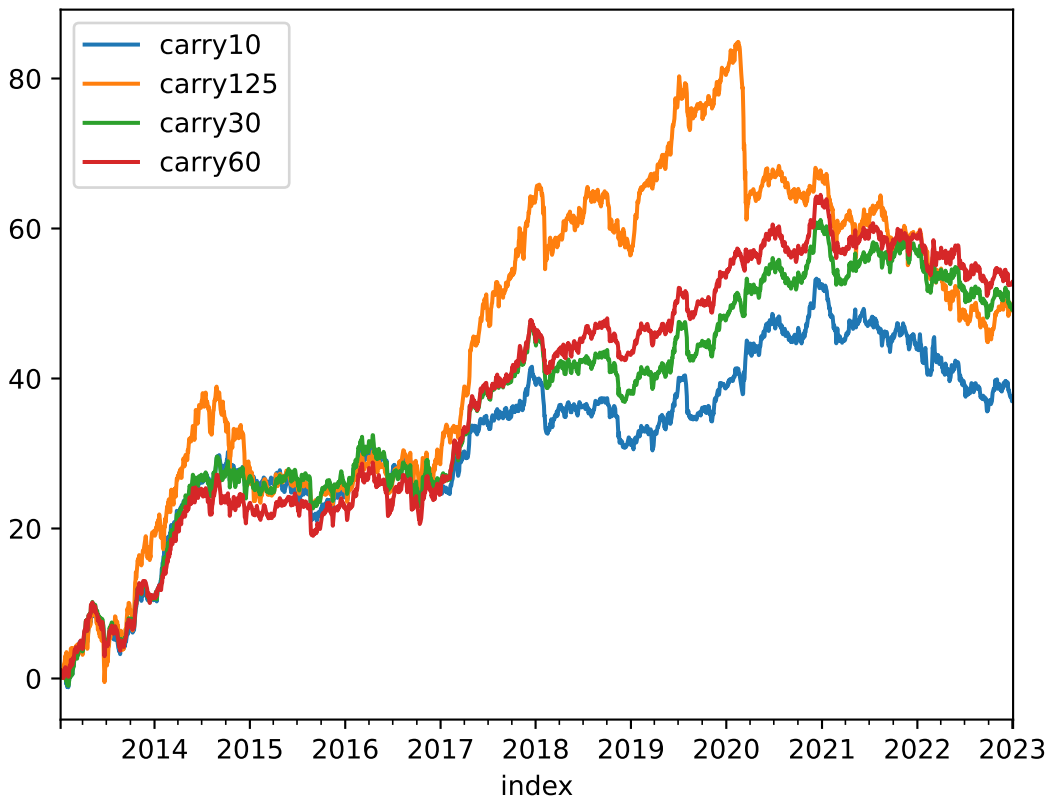
ann. mean {'carry10': -0.563, 'carry125': -10.215, 'carry30': 0.449, 'carry60': -0.503}

ann. std {'carry10': 6.826, 'carry125': 9.437, 'carry30': 6.623, 'carry60': 6.558}

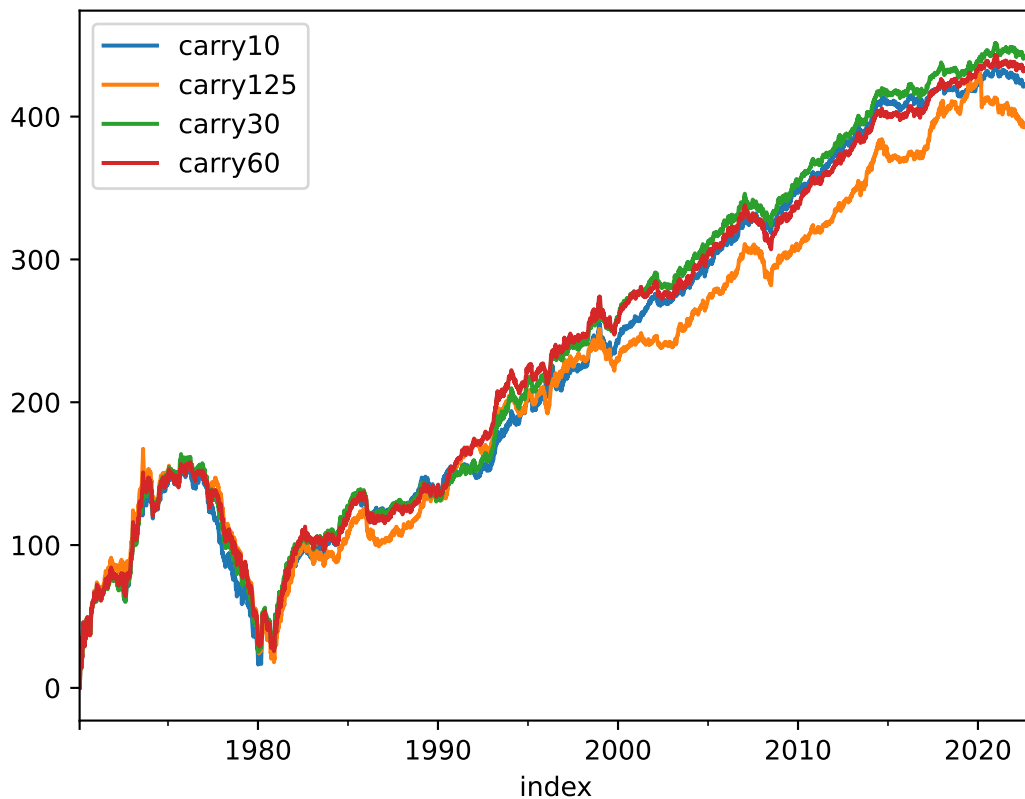
ann. SR {'carry10': -0.08, 'carry125': -1.08, 'carry30': 0.07, 'carry60': -0.08}



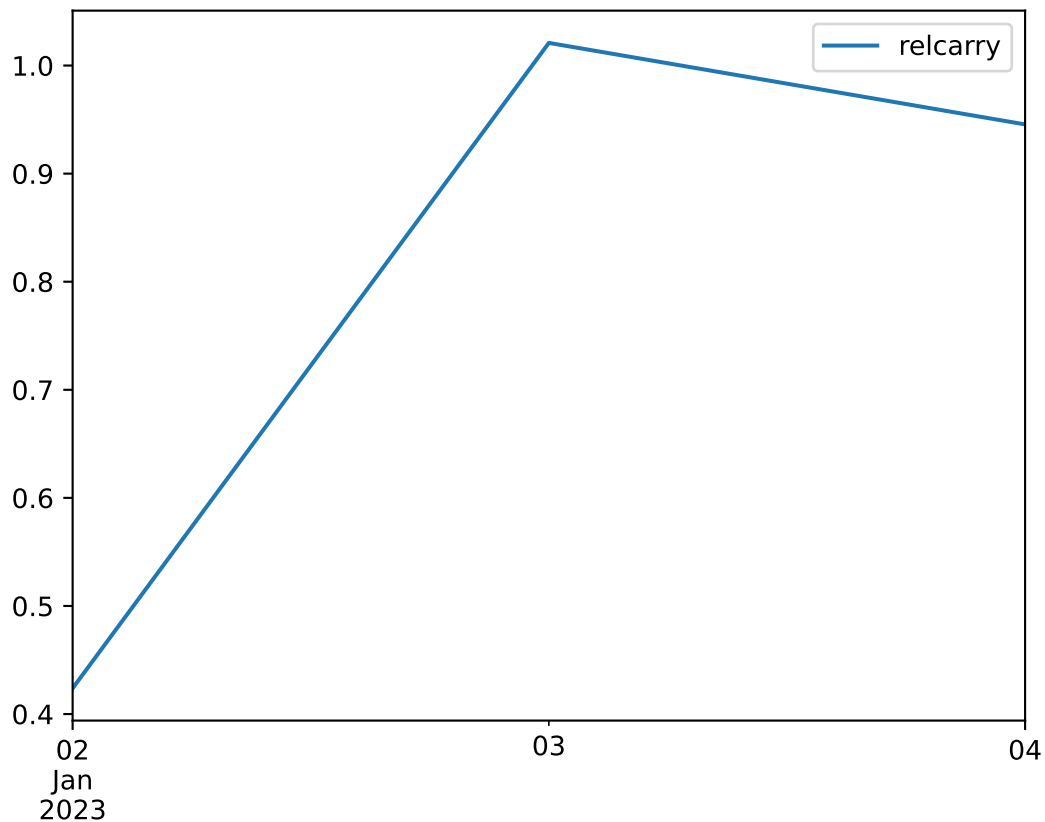
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.667, 'carry125': 4.905, 'carry30': 4.896, 'carry60': 5.196}
ann. std {'carry10': 6.452, 'carry125': 9.13, 'carry30': 6.549, 'carry60': 6.512}
ann. SR {'carry10': 0.57, 'carry125': 0.54, 'carry30': 0.75, 'carry60': 0.8}



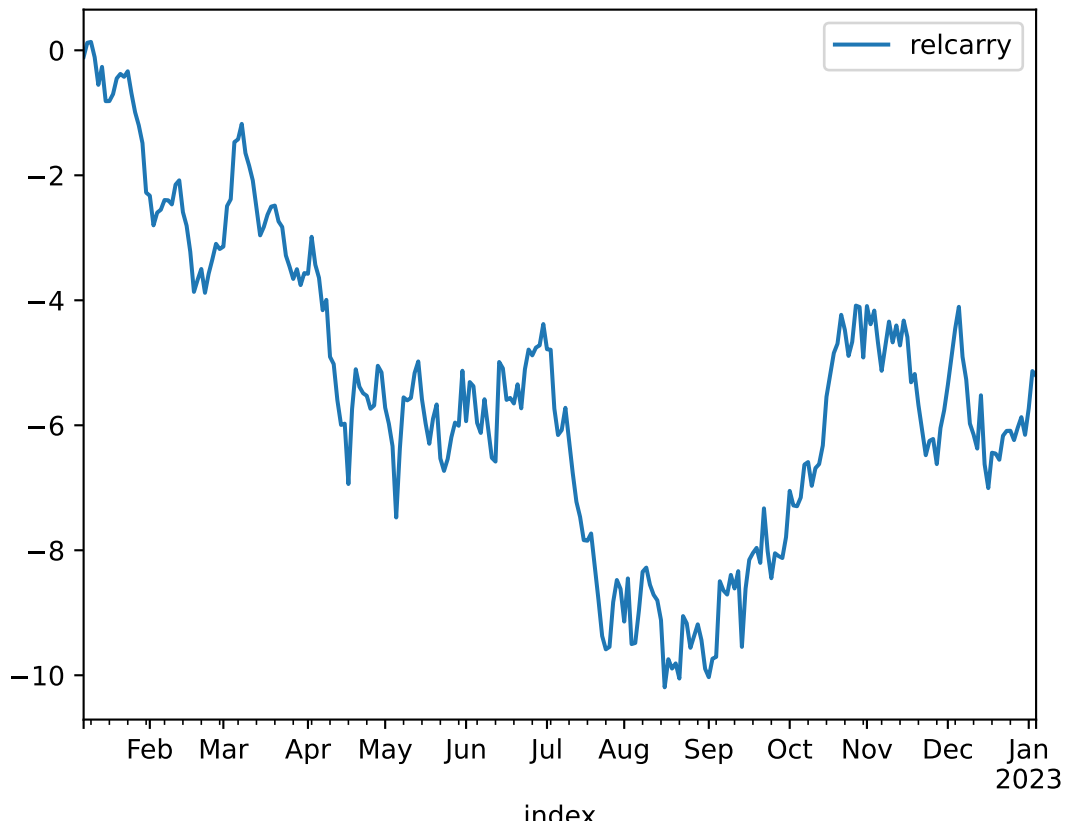
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.802, 'carry125': 7.329, 'carry30': 8.164, 'carry60': 8.001}
ann. std {'carry10': 11.858, 'carry125': 12.1, 'carry30': 11.87, 'carry60': 11.821}
ann. SR {'carry10': 0.66, 'carry125': 0.61, 'carry30': 0.69, 'carry60': 0.68}



Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 80.685}
ann. std {'relcarry': 5.587}
ann. SR {'relcarry': 14.44}



Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': -5.127}
ann. std {'relcarry': 7.196}
ann. SR {'relcarry': -0.71}

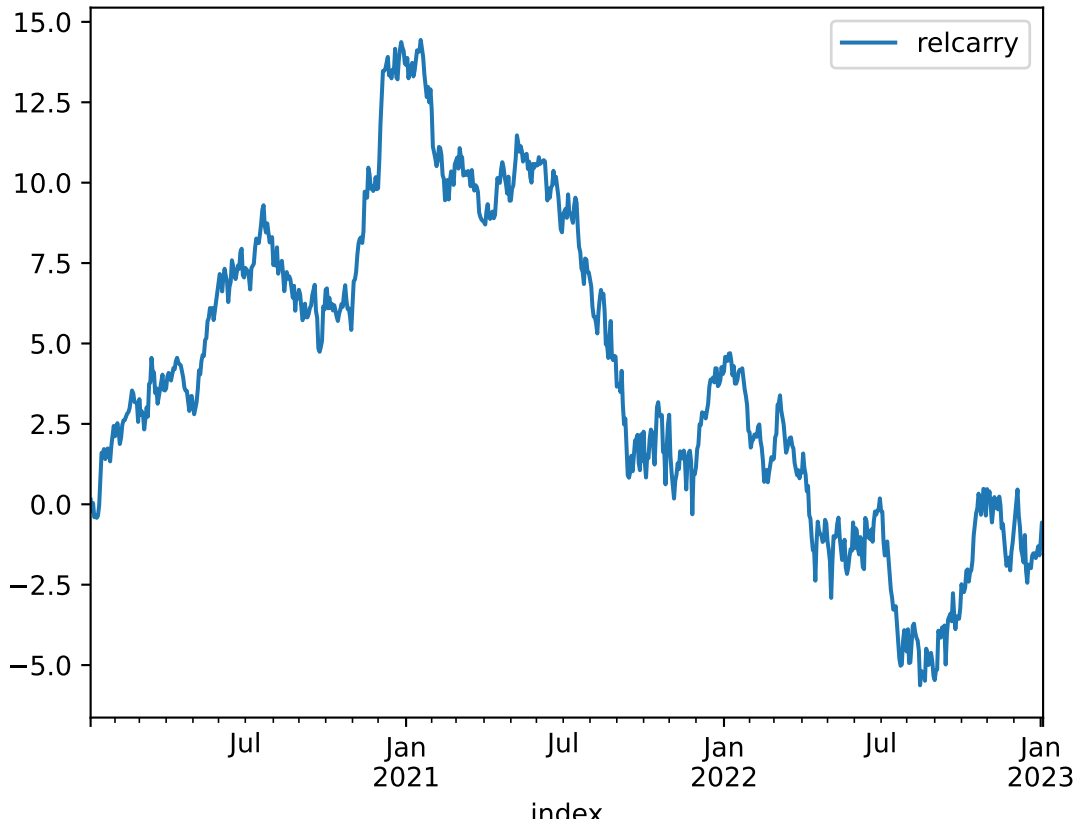


Total Trading Rule P&L for period '3Y'

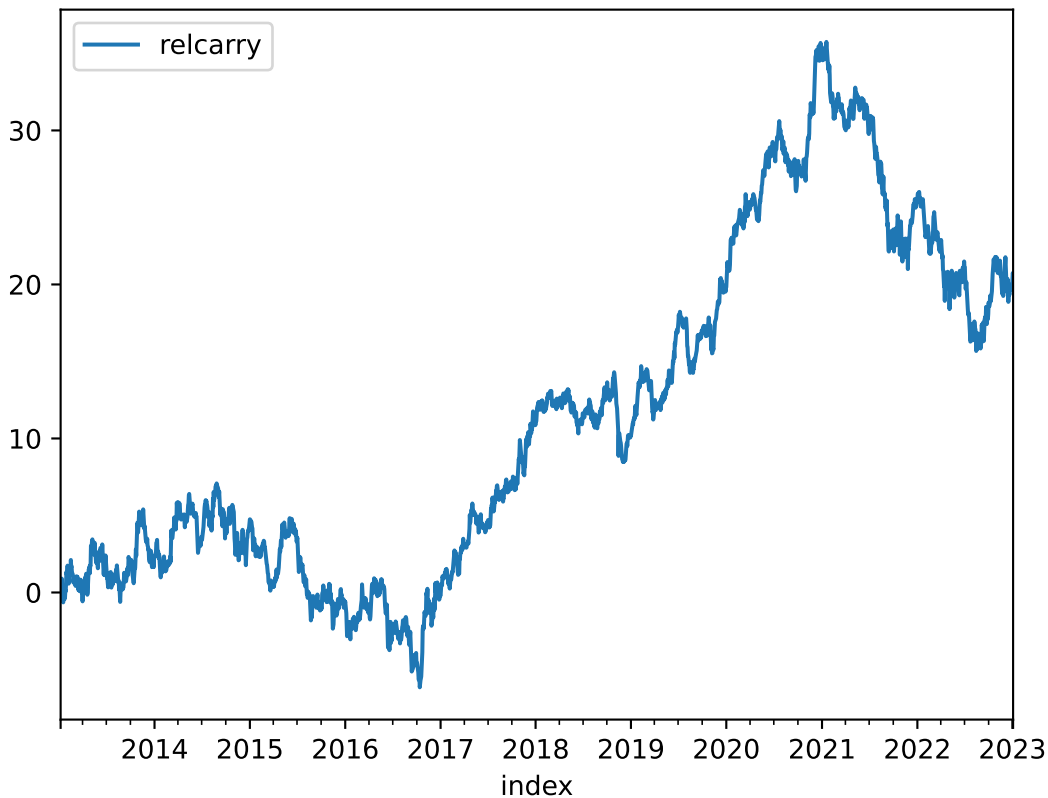
ann. mean {'relcarry': -0.21}

ann. std {'relcarry': 6.851}

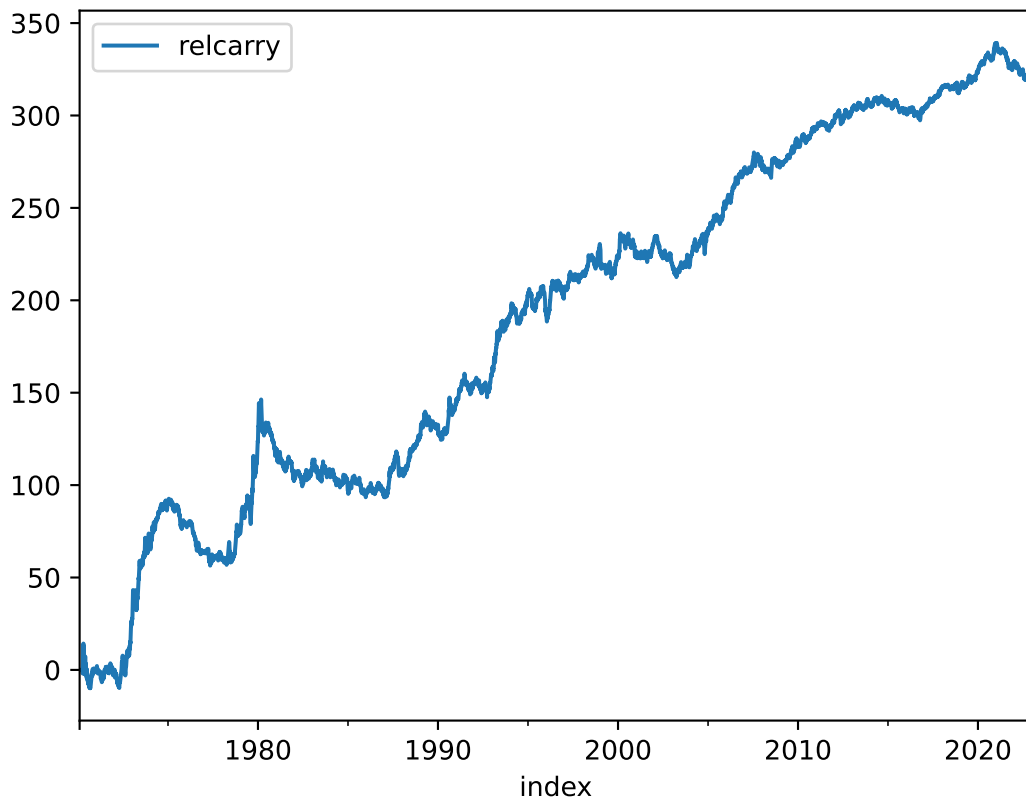
ann. SR {'relcarry': -0.03}



Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.029}
ann. std {'relcarry': 6.032}
ann. SR {'relcarry': 0.34}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 6.011}
ann. std {'relcarry': 9.558}
ann. SR {'relcarry': 0.63}

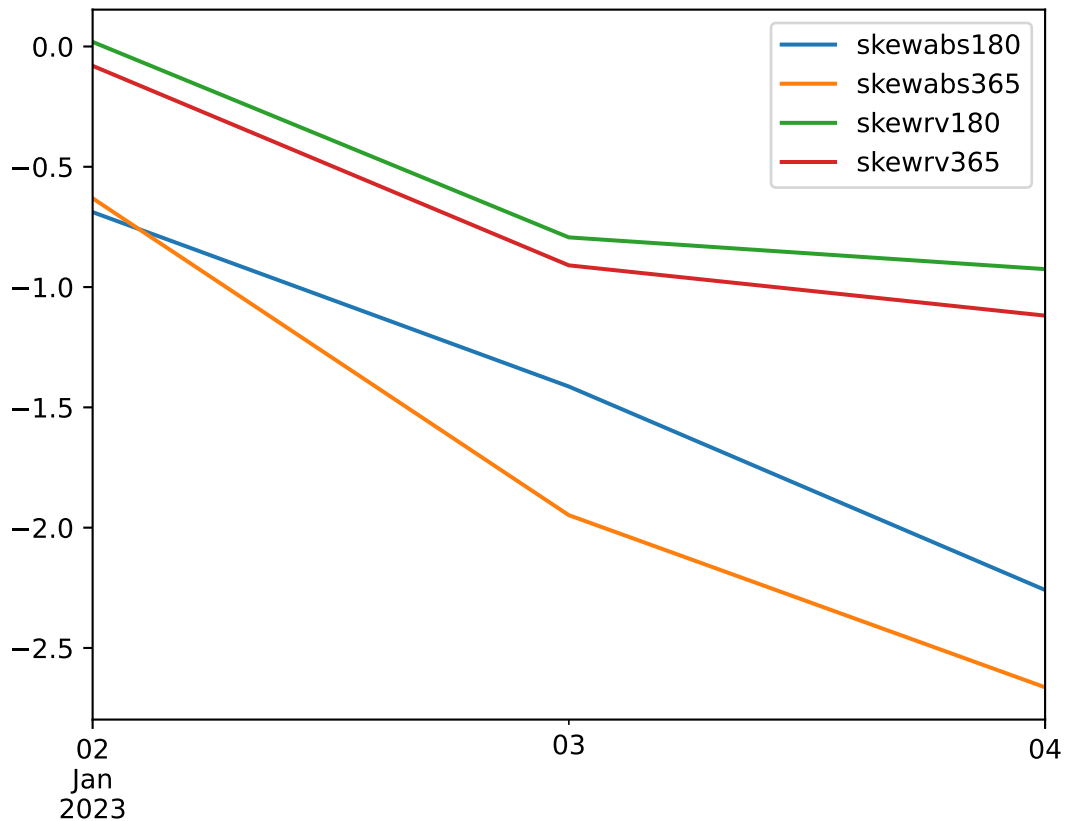


Total Trading Rule P&L for period 'YTD'

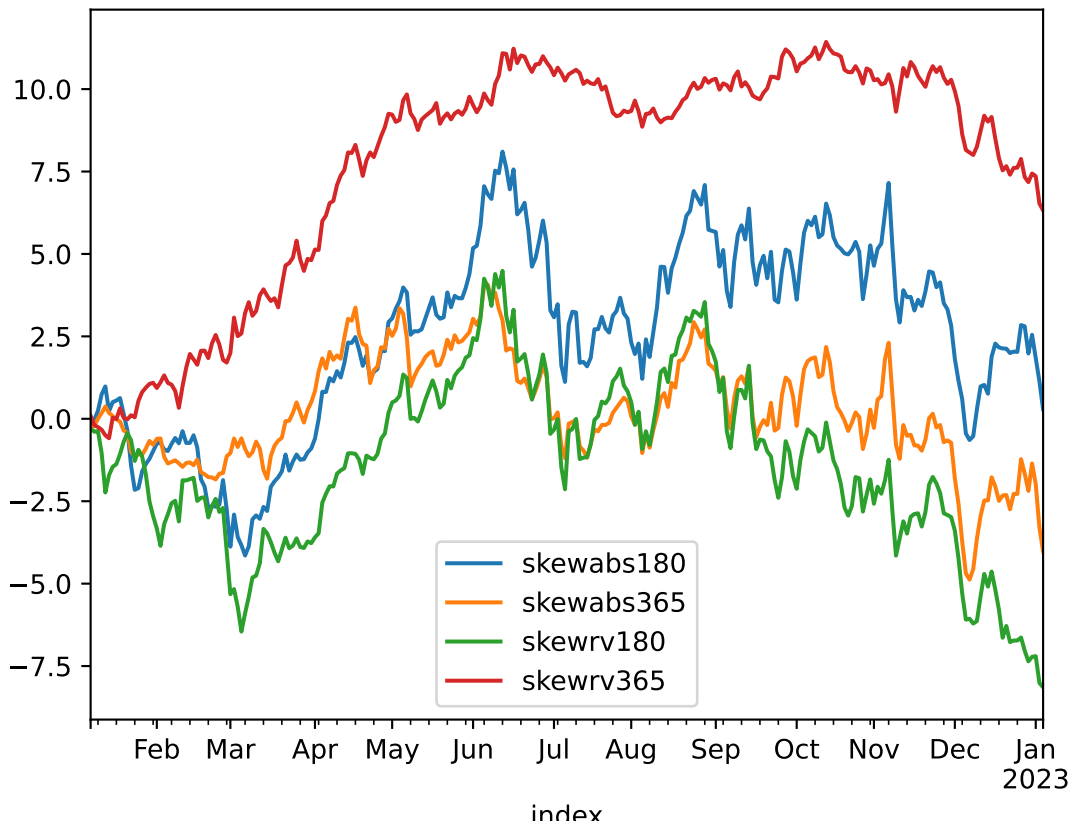
ann. mean {'skewabs180': -192.78, 'skewabs365': -227.291, 'skewrv180': -78.967, 'skewrv365': -95.457}

ann. std {'skewabs180': 1.317, 'skewabs365': 5.988, 'skewrv180': 7.087, 'skewrv365': 6.407}

ann. SR {'skewabs180': -146.34, 'skewabs365': -37.96, 'skewrv180': -11.14, 'skewrv365': -14.9}



Total Trading Rule P&L for period '1Y'
ann. mean {'skewabs180': 0.283, 'skewabs365': -3.957, 'skewrv180': -8.019, 'skewrv365': 6.224}
ann. std {'skewabs180': 9.984, 'skewabs365': 8.079, 'skewrv180': 9.293, 'skewrv365': 5.06}
ann. SR {'skewabs180': 0.03, 'skewabs365': -0.49, 'skewrv180': -0.86, 'skewrv365': 1.23}

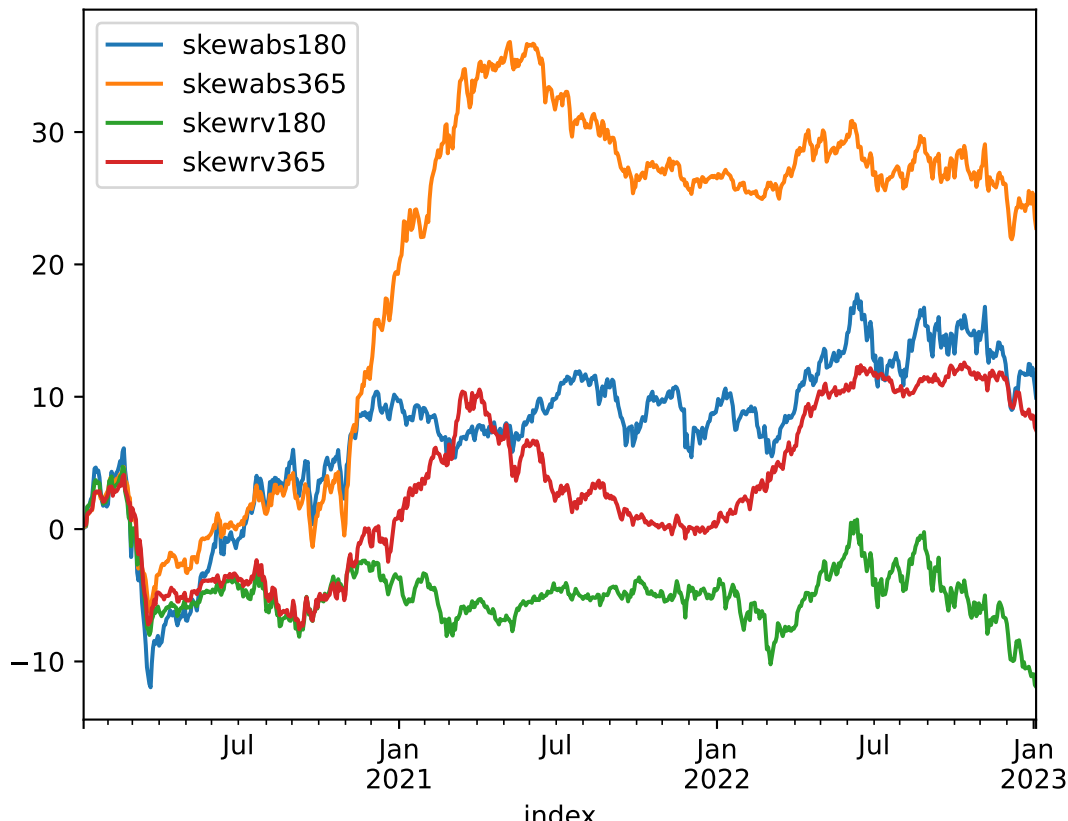


Total Trading Rule P&L for period '3Y'

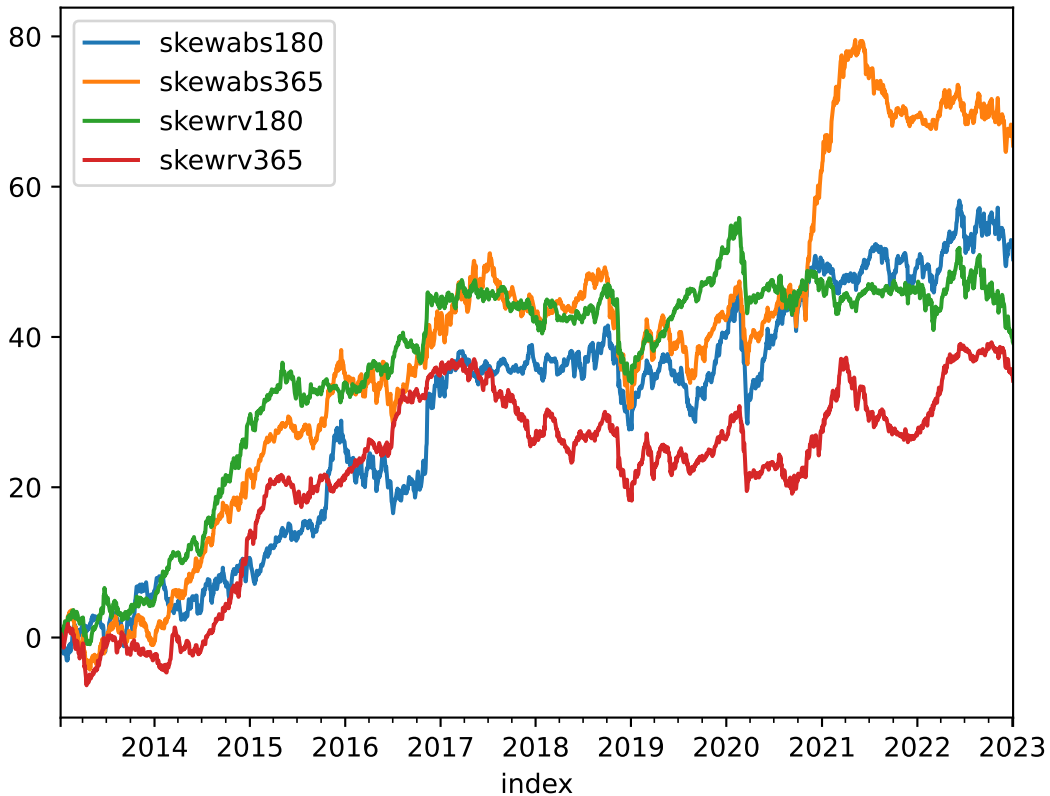
ann. mean {'skewabs180': 3.247, 'skewabs365': 7.44, 'skewrv180': -3.894, 'skewrv365': 2.445}

ann. std {'skewabs180': 9.659, 'skewabs365': 8.852, 'skewrv180': 7.824, 'skewrv365': 6.617}

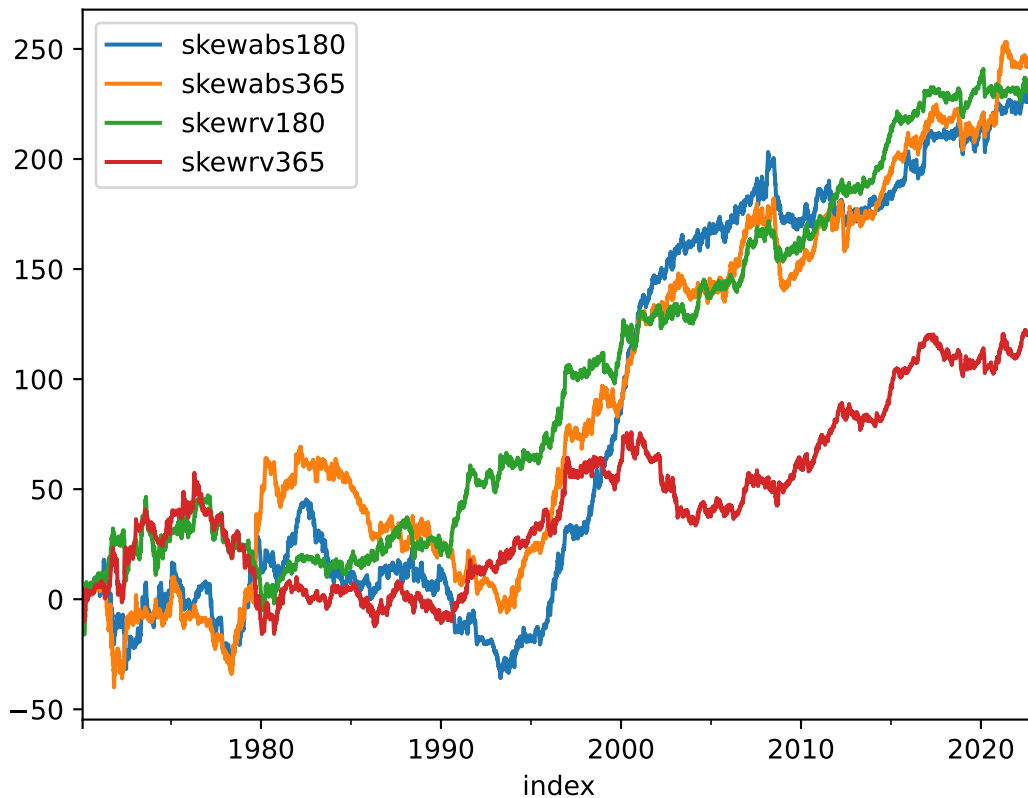
ann. SR {'skewabs180': 0.34, 'skewabs365': 0.84, 'skewrv180': -0.5, 'skewrv365': 0.37}



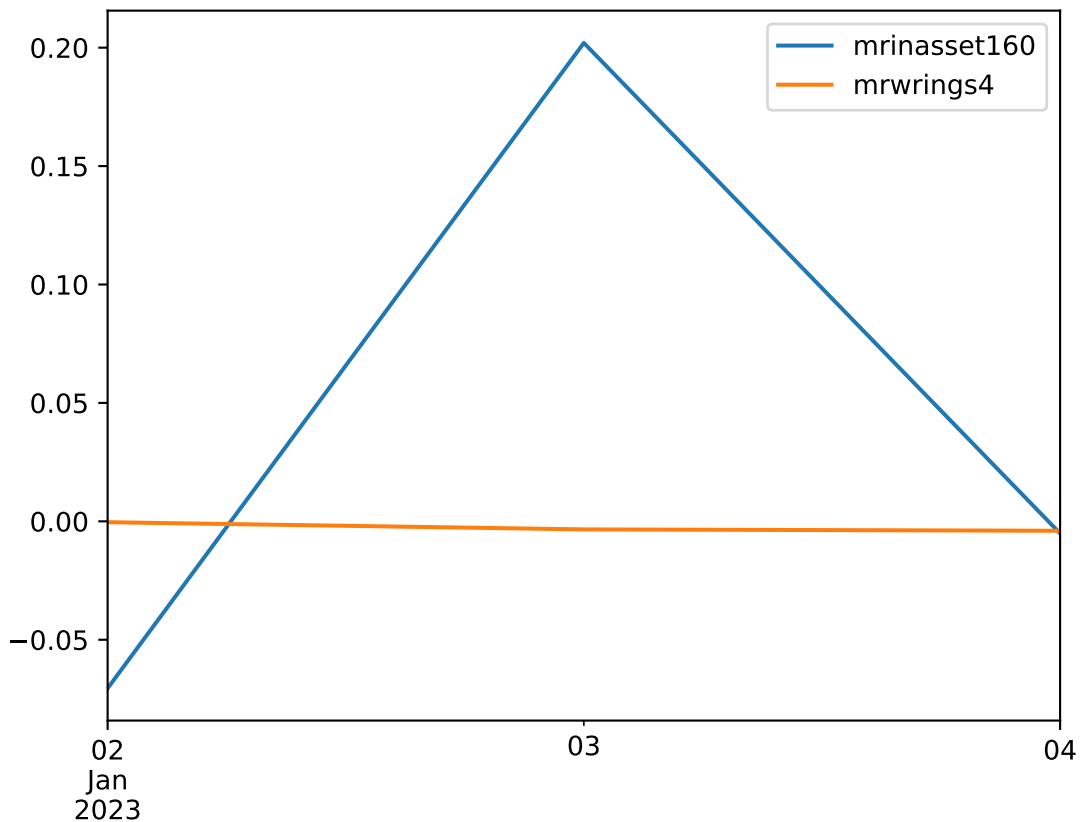
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.942, 'skewabs365': 6.427, 'skewrv180': 3.851, 'skewrv365': 3.355}
ann. std {'skewabs180': 8.063, 'skewabs365': 7.999, 'skewrv180': 6.589, 'skewrv365': 6.182}
ann. SR {'skewabs180': 0.61, 'skewabs365': 0.8, 'skewrv180': 0.58, 'skewrv365': 0.54}



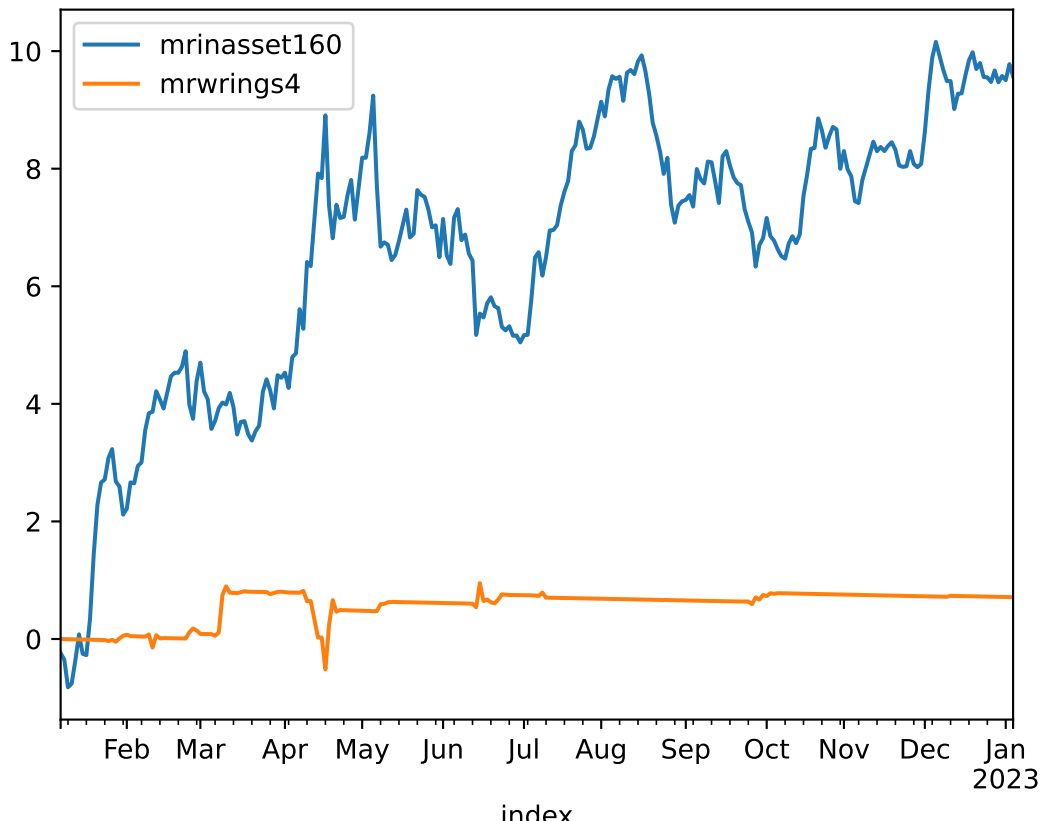
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.171, 'skewabs365': 4.434, 'skewrv180': 4.159, 'skewrv365': 2.177}
ann. std {'skewabs180': 10.792, 'skewabs365': 10.3, 'skewrv180': 9.308, 'skewrv365': 8.602}
ann. SR {'skewabs180': 0.39, 'skewabs365': 0.43, 'skewrv180': 0.45, 'skewrv365': 0.25}



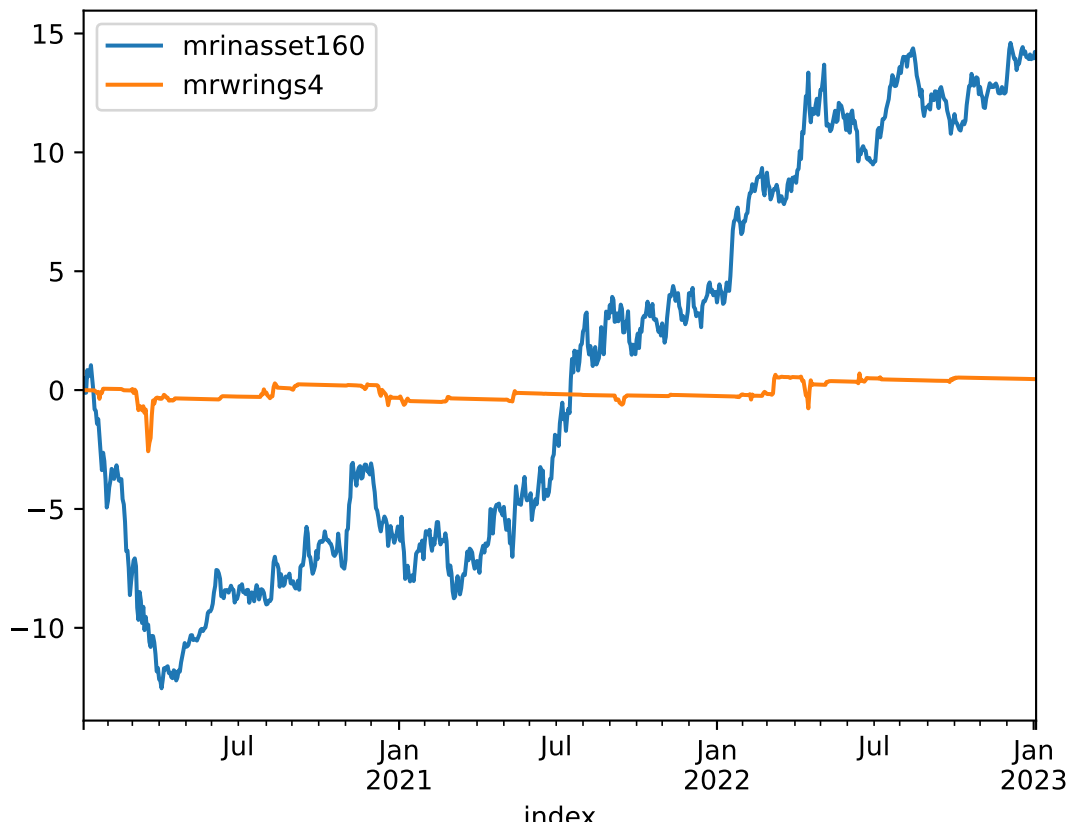
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': -0.434, 'mrwrings4': -0.339}
ann. std {'mrinasset160': 3.954, 'mrwrings4': 0.024}
ann. SR {'mrinasset160': -0.11, 'mrwrings4': -14.24}



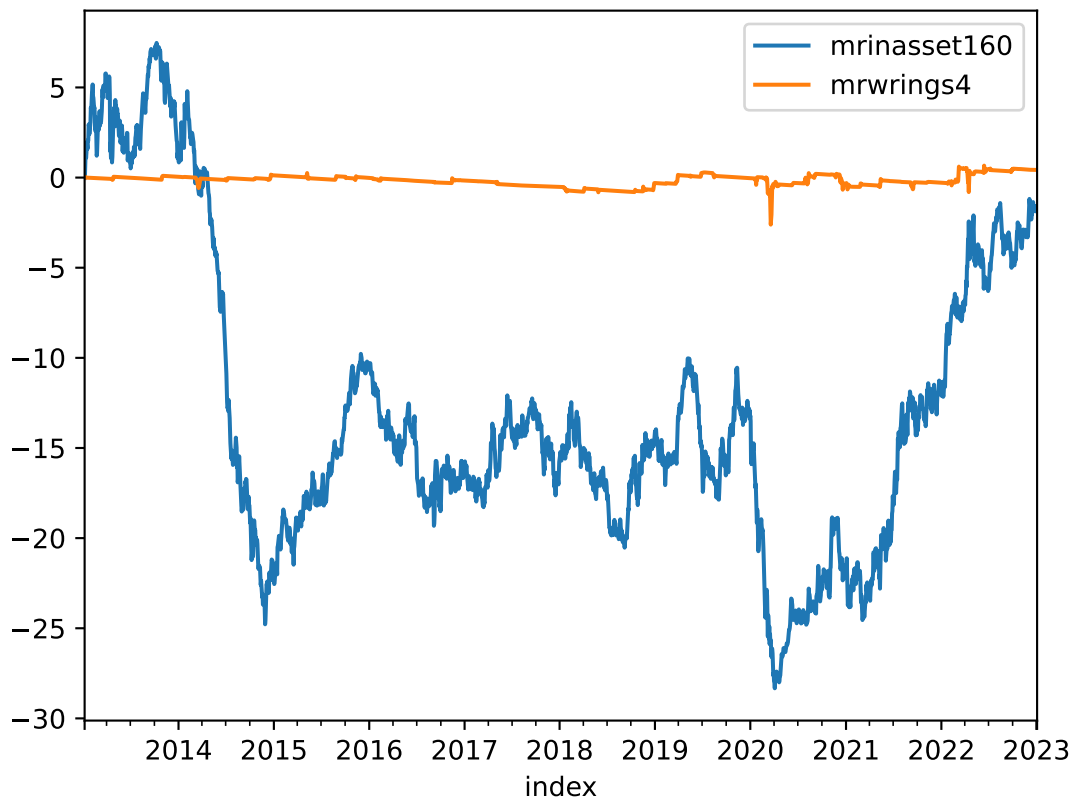
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 9.424, 'mrwrings4': 0.701}
ann. std {'mrinasset160': 6.169, 'mrwrings4': 1.481}
ann. SR {'mrinasset160': 1.53, 'mrwrings4': 0.47}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 4.583, 'mrwrings4': 0.15}
ann. std {'mrinasset160': 6.947, 'mrwrings4': 1.535}
ann. SR {'mrinasset160': 0.66, 'mrwrings4': 0.1}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.174, 'mrwrings4': 0.042}
ann. std {'mrinasset160': 6.612, 'mrwrings4': 0.897}
ann. SR {'mrinasset160': -0.03, 'mrwrings4': 0.05}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.343, 'mrwrings4': -1.169}
ann. std {'mrinasset160': 10.919, 'mrwrings4': 2.63}
ann. SR {'mrinasset160': -0.31, 'mrwrings4': -0.44}

