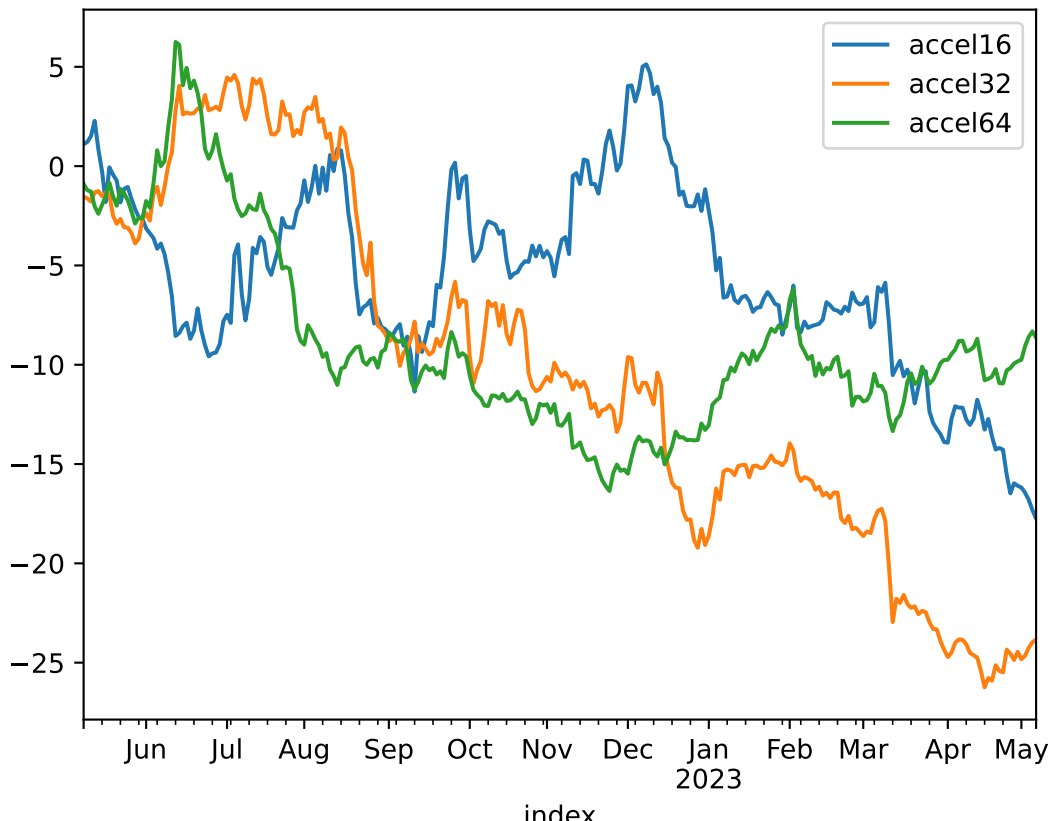


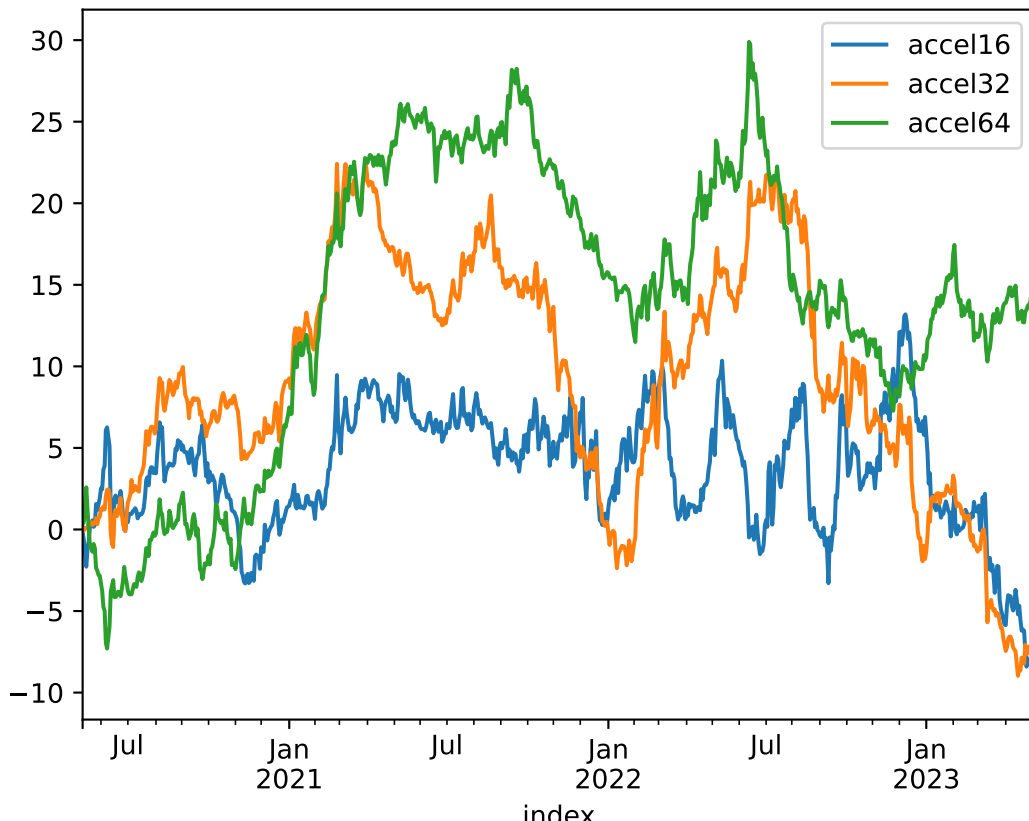
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -47.147, 'accel32': -13.527, 'accel64': 13.211}
ann. std {'accel16': 12.651, 'accel32': 9.896, 'accel64': 9.218}
ann. SR {'accel16': -3.73, 'accel32': -1.37, 'accel64': 1.43}



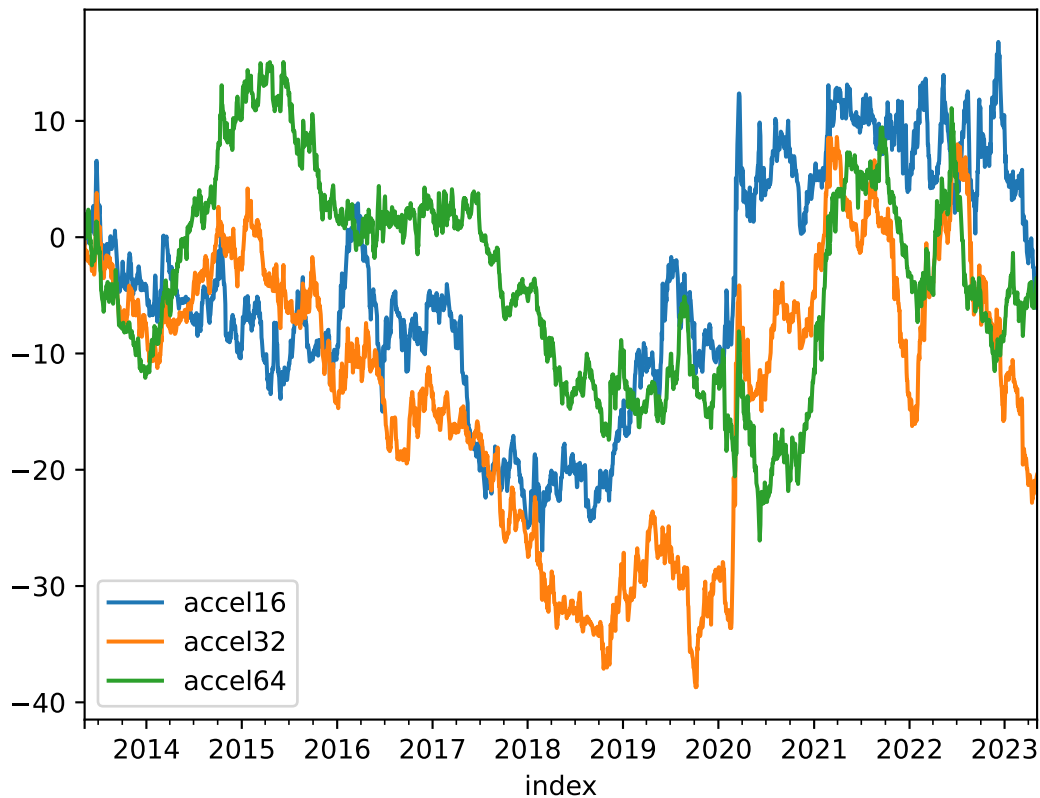
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -17.466, 'accel32': -23.465, 'accel64': -8.505}
ann. std {'accel16': 15.791, 'accel32': 12.884, 'accel64': 10.295}
ann. SR {'accel16': -1.11, 'accel32': -1.82, 'accel64': -0.83}



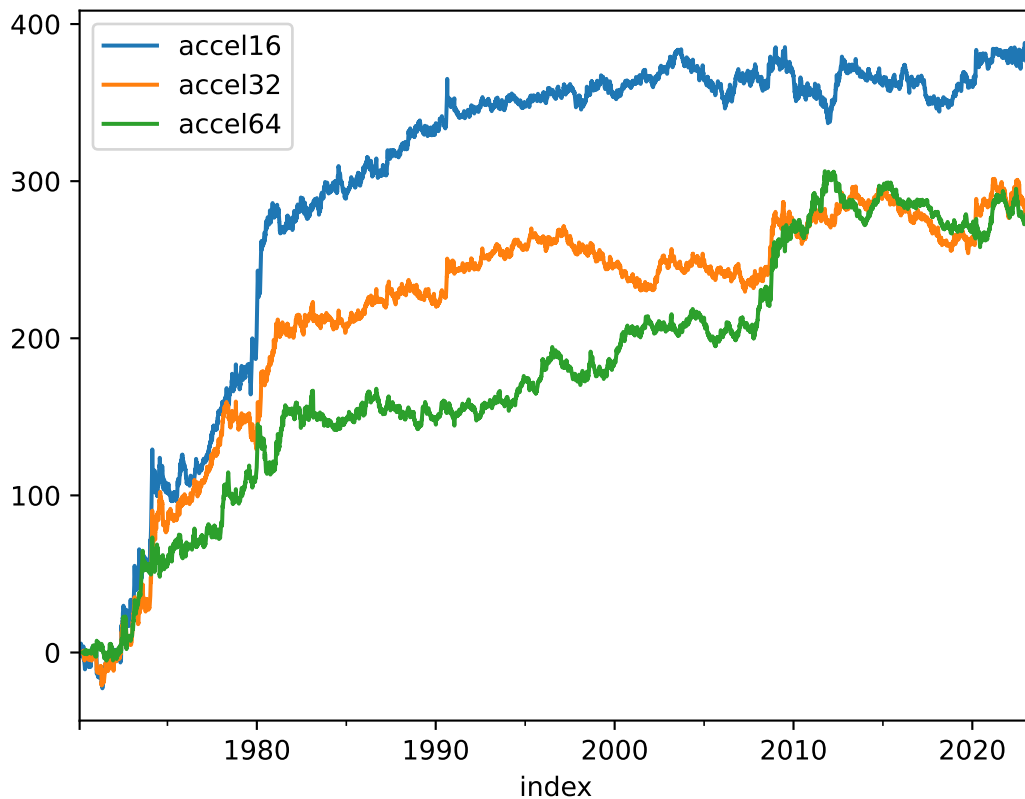
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -3.176, 'accel32': -2.154, 'accel64': 4.923}
ann. std {'accel16': 13.553, 'accel32': 11.741, 'accel64': 10.514}
ann. SR {'accel16': -0.23, 'accel32': -0.18, 'accel64': 0.47}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': -0.596, 'accel32': -2.007, 'accel64': -0.373}
ann. std {'accel16': 11.695, 'accel32': 10.666, 'accel64': 9.326}
ann. SR {'accel16': -0.05, 'accel32': -0.19, 'accel64': -0.04}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.728, 'accel32': 5.02, 'accel64': 5.164}
ann. std {'accel16': 14.128, 'accel32': 12.451, 'accel64': 12.101}
ann. SR {'accel16': 0.48, 'accel32': 0.4, 'accel64': 0.43}

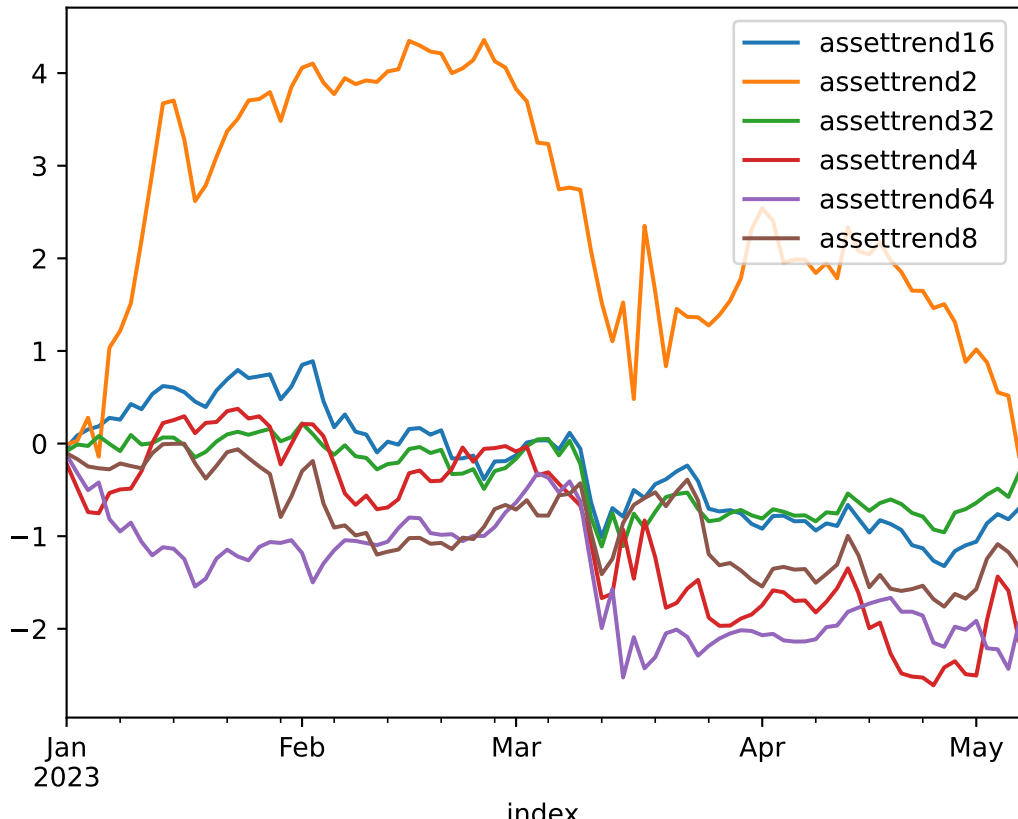


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': -1.989, 'assettrend2': -0.384, 'assettrend32': -0.903, 'assettrend4': -6.048, 'assettrend64': -5.516, 'assettrend8': -3.773}

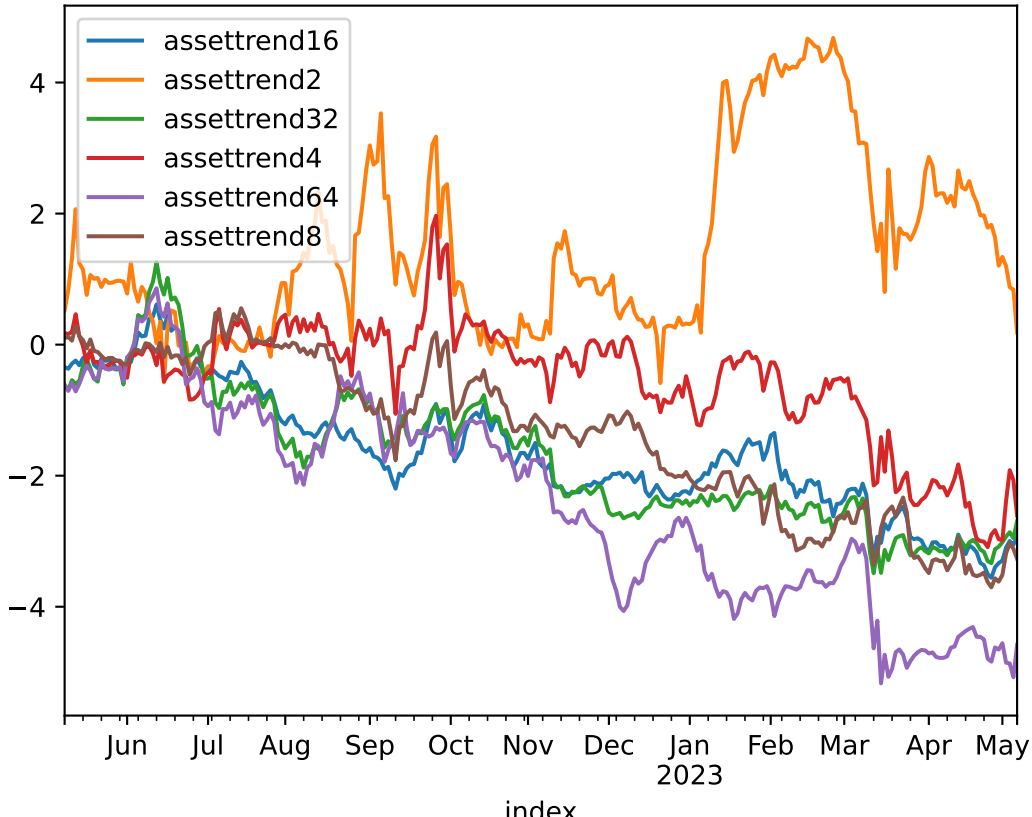
ann. std {'assettrend16': 2.501, 'assettrend2': 6.482, 'assettrend32': 2.285, 'assettrend4': 3.848, 'assettrend64': 3.407, 'assettrend8': 2.878}

ann. SR {'assettrend16': -0.8, 'assettrend2': -0.06, 'assettrend32': -0.4, 'assettrend4': -1.57, 'assettrend64': -1.62, 'assettrend8': -1.31}



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

ann. mean {'assettrend16': -2.89, 'assettrend2': 0.184, 'assettrend32': -2.653, 'assettrend4': -2.567, 'assettrend64': -4.512, 'assettrend8': -3.219}
ann. std {'assettrend16': 2.237, 'assettrend2': 6.266, 'assettrend32': 2.544, 'assettrend4': 3.937, 'assettrend64': 3.164, 'assettrend8': 2.645}
ann. SR {'assettrend16': -1.29, 'assettrend2': 0.03, 'assettrend32': -1.04, 'assettrend4': -0.65, 'assettrend64': -1.43, 'assettrend8': -1.22}

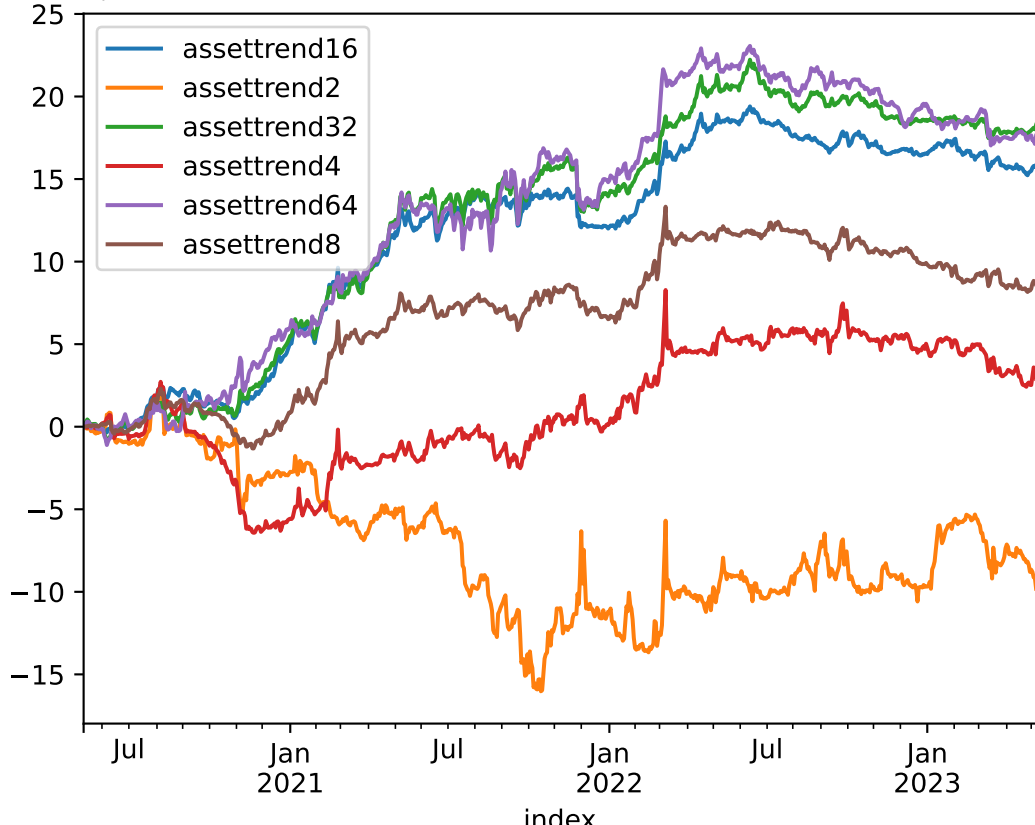


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 5.203, 'assettrend2': -3.22, 'assettrend32': 5.998, 'assettrend4': 0.952, 'assettrend64': 5.783, 'assettrend8': 2.821}

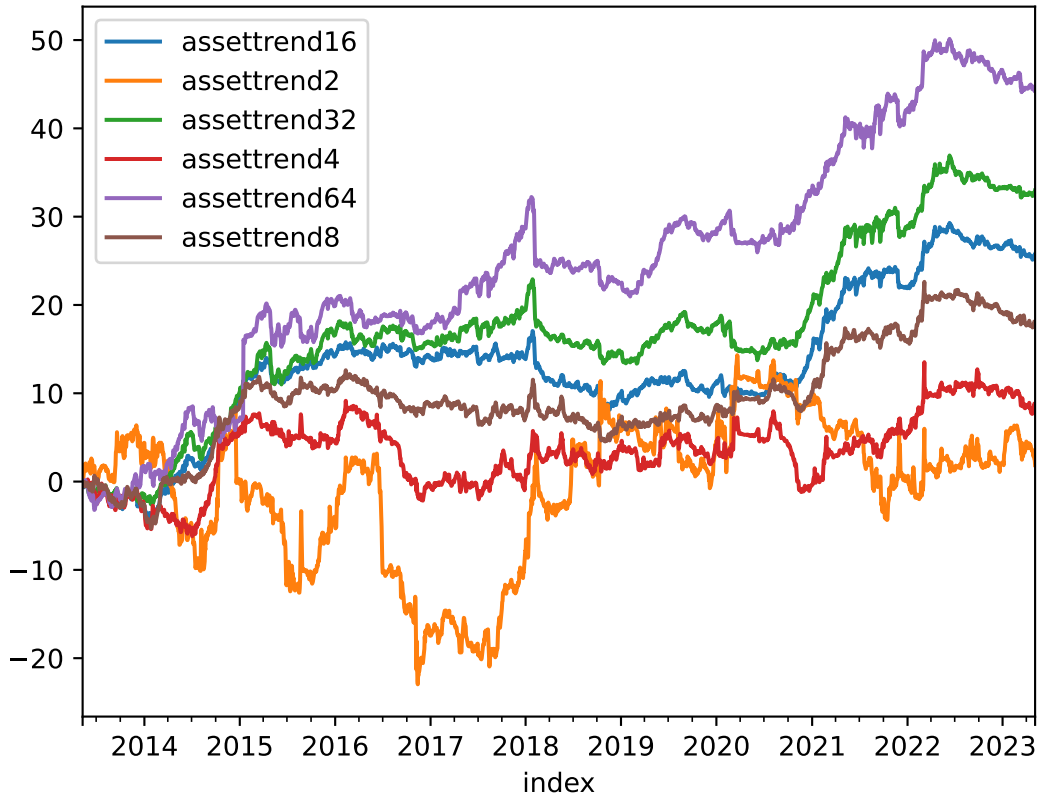
ann. std {'assettrend16': 3.413, 'assettrend2': 7.82, 'assettrend32': 4.128, 'assettrend4': 4.98, 'assettrend64': 5.016, 'assettrend8': 3.529}

ann. SR {'assettrend16': 1.52, 'assettrend2': -0.41, 'assettrend32': 1.45, 'assettrend4': 0.19, 'assettrend64': 1.15, 'assettrend8': 0.8}



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

ann. mean {'assettrend16': 2.528, 'assettrend2': 0.183, 'assettrend32': 3.238, 'assettrend4': 0.8, 'assettrend64': 4.388, 'assettrend8': 1.756}
ann. std {'assettrend16': 3.151, 'assettrend2': 9.772, 'assettrend32': 3.588, 'assettrend4': 4.977, 'assettrend64': 5.192, 'assettrend8': 3.451}
ann. SR {'assettrend16': 0.8, 'assettrend2': 0.02, 'assettrend32': 0.9, 'assettrend4': 0.16, 'assettrend64': 0.85, 'assettrend8': 0.51}

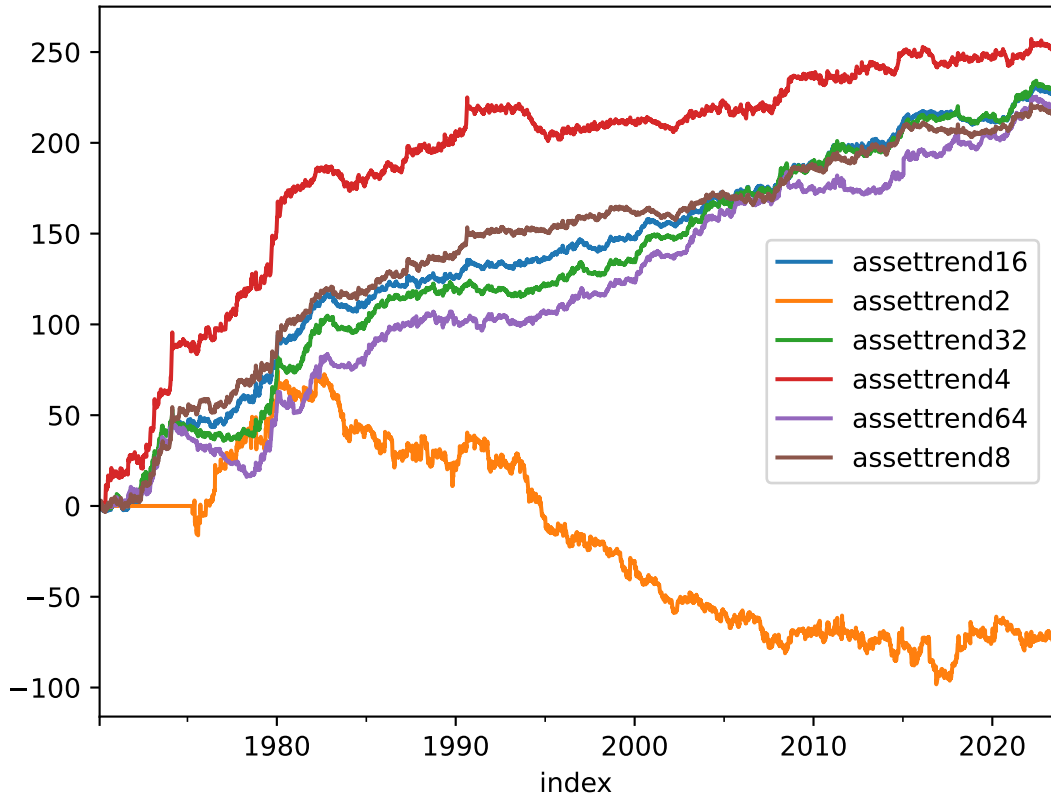


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.192, 'assettrend2': -1.352, 'assettrend32': 4.243, 'assettrend4': 4.641, 'assettrend64': 4.054, 'assettrend8': 3.99}

ann. std {'assettrend16': 4.303, 'assettrend2': 10.257, 'assettrend32': 4.493, 'assettrend4': 6.546, 'assettrend64': 4.994, 'assettrend8': 4.632}

ann. SR {'assettrend16': 0.97, 'assettrend2': -0.13, 'assettrend32': 0.94, 'assettrend4': 0.71, 'assettrend64': 0.81, 'assettrend8': 0.86}

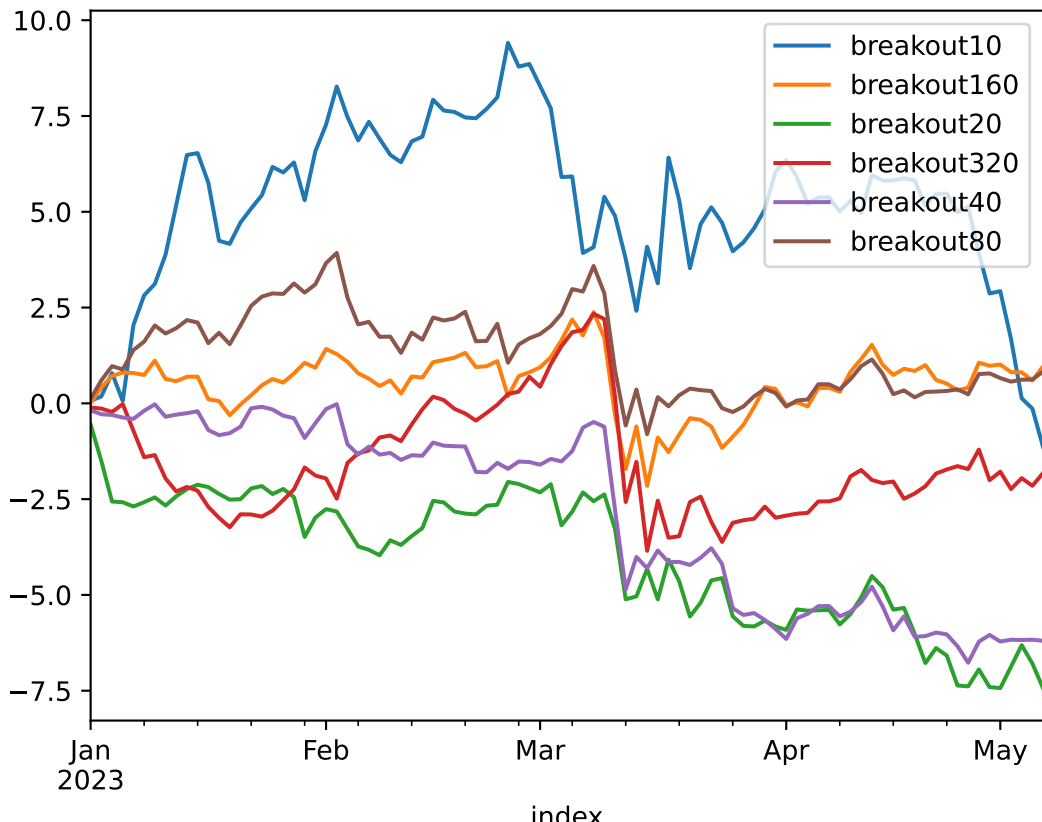


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': -3.249, 'breakout160': 2.749, 'breakout20': -21.155, 'breakout320': -5.171, 'breakout40': -17.626, 'breakout80': 2.365}

ann. std {'breakout10': 14.109, 'breakout160': 7.658, 'breakout20': 7.783, 'breakout320': 9.414, 'breakout40': 7.147, 'breakout80': 7.636}

ann. SR {'breakout10': -0.23, 'breakout160': 0.36, 'breakout20': -2.72, 'breakout320': -0.55, 'breakout40': -2.47, 'breakout80': 0.31}

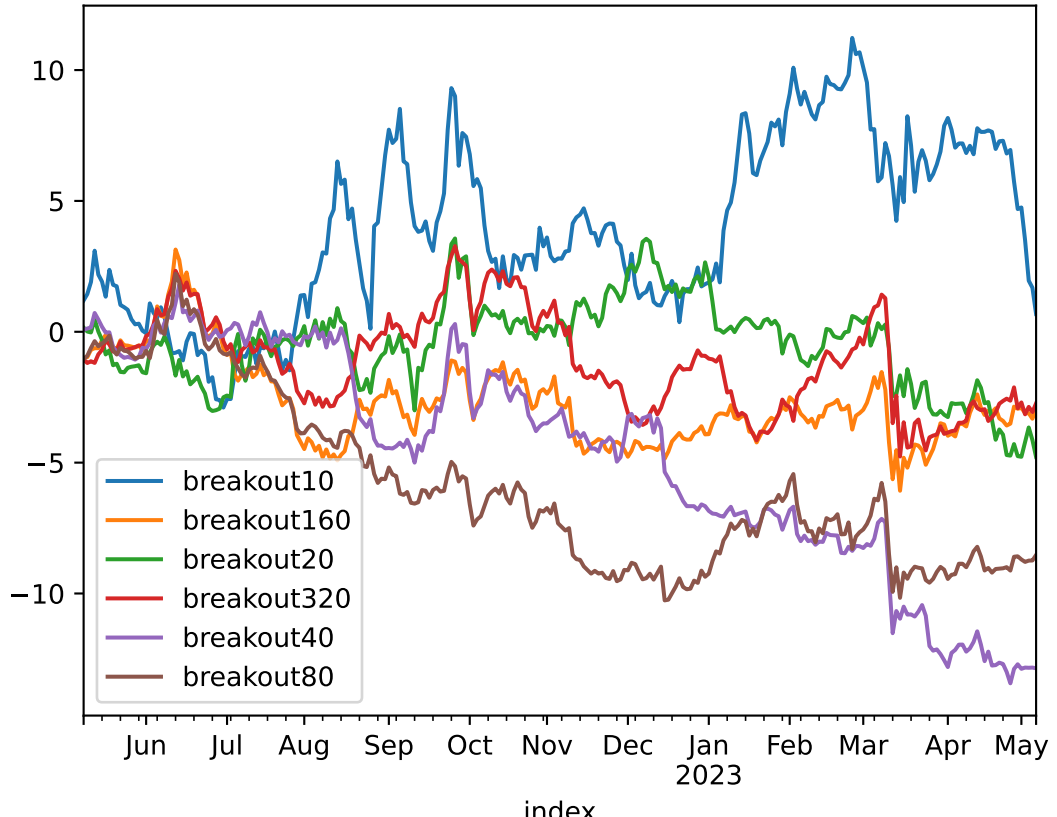


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 0.669, 'breakout160': -2.909, 'breakout20': -4.71, 'breakout320': -2.693, 'breakout40': -12.661, 'breakout80': -8.398}

ann. std {'breakout10': 13.318, 'breakout160': 6.945, 'breakout20': 8.398, 'breakout320': 7.59, 'breakout40': 7.094, 'breakout80': 6.556}

ann. SR {'breakout10': 0.05, 'breakout160': -0.42, 'breakout20': -0.56, 'breakout320': -0.35, 'breakout40': -1.78, 'breakout80': -1.28}

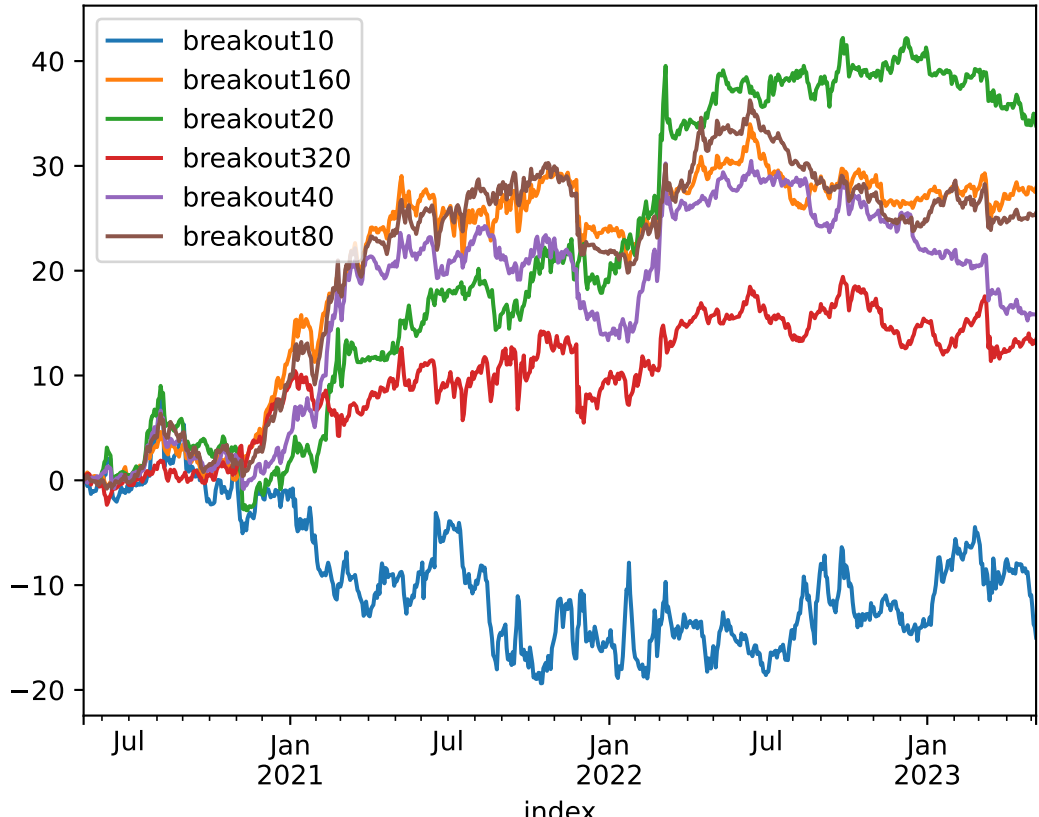


Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -4.926, 'breakout160': 9.151, 'breakout20': 11.114, 'breakout320': 4.401, 'breakout40': 5.192, 'breakout80': 8.374}

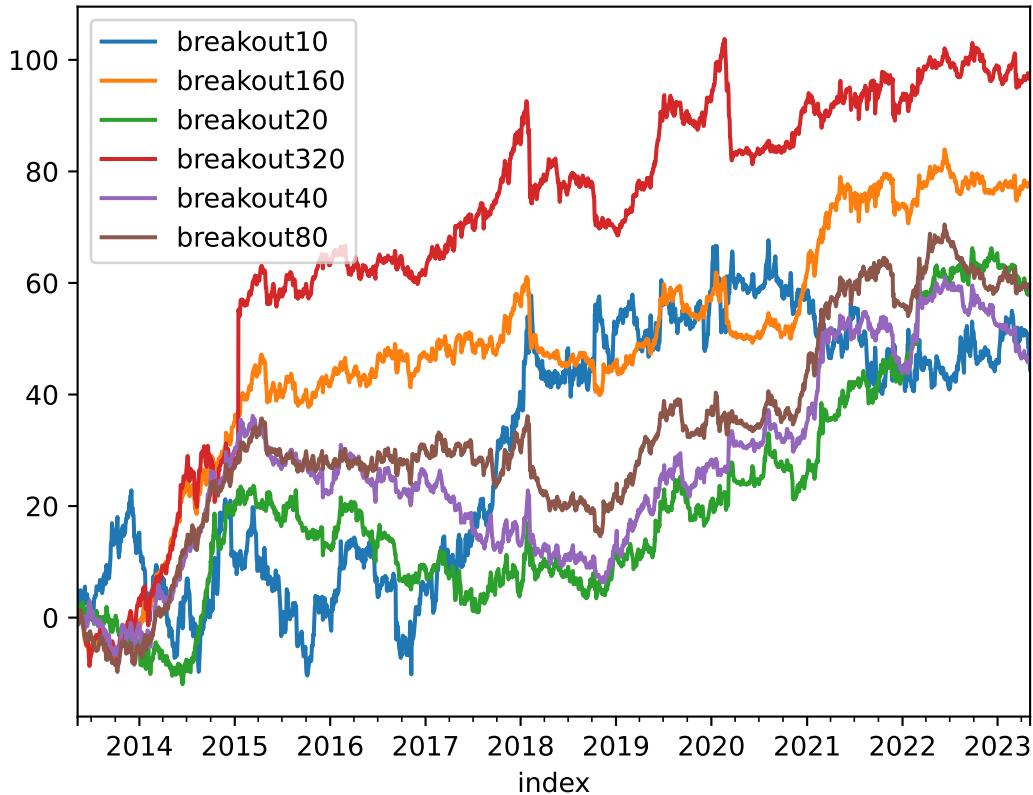
ann. std {'breakout10': 15.101, 'breakout160': 9.191, 'breakout20': 11.078, 'breakout320': 9.922, 'breakout40': 9.488, 'breakout80': 8.913}

ann. SR {'breakout10': -0.33, 'breakout160': 1.0, 'breakout20': 1.0, 'breakout320': 0.44, 'breakout40': 0.55, 'breakout80': 0.94}



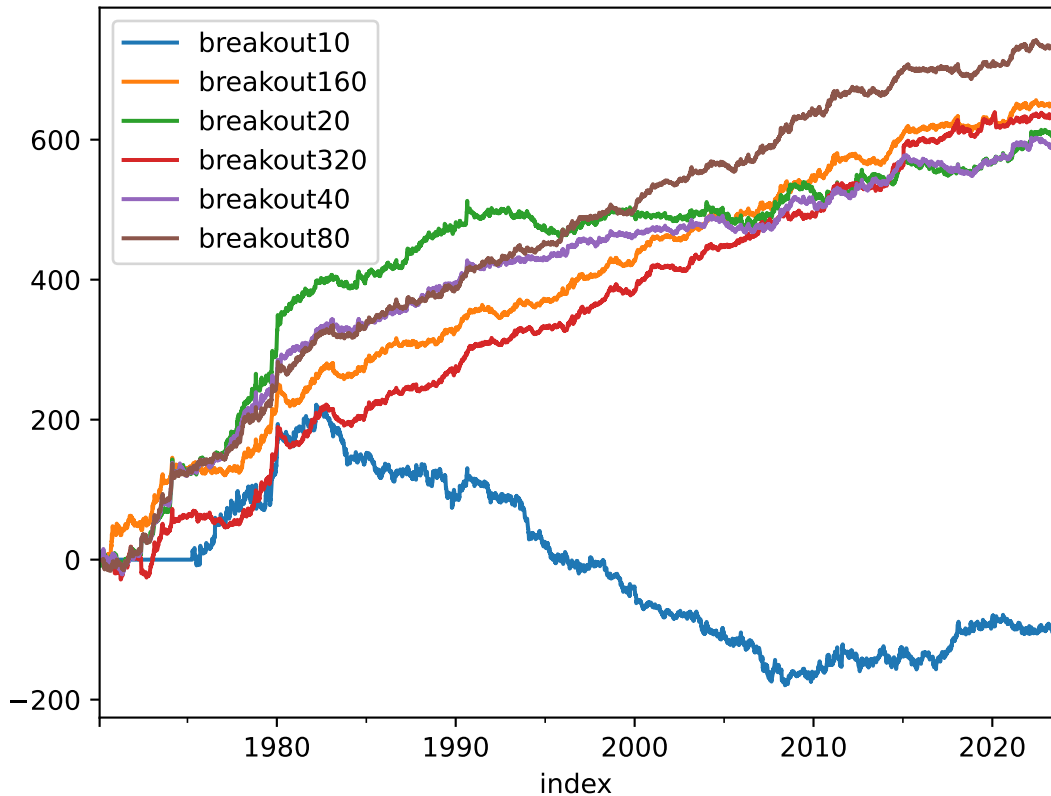
Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 4.366, 'breakout160': 7.646, 'breakout20': 5.686, 'breakout320': 9.527, 'breakout40': 4.555, 'breakout80': 5.868}
ann. std {'breakout10': 17.807, 'breakout160': 8.865, 'breakout20': 11.072, 'breakout320': 13.086, 'breakout40': 9.367, 'breakout80': 8.716}
ann. SR {'breakout10': 0.25, 'breakout160': 0.86, 'breakout20': 0.51, 'breakout320': 0.73, 'breakout40': 0.49, 'breakout80': 0.67}



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

ann. mean {'breakout10': -1.879, 'breakout160': 11.984, 'breakout20': 11.161, 'breakout320': 11.654, 'breakout40': 10.84, 'breakout80': 13.484}
 ann. std {'breakout10': 21.316, 'breakout160': 11.526, 'breakout20': 14.887, 'breakout320': 12.112, 'breakout40': 12.108, 'breakout80': 11.714}
 ann. SR {'breakout10': -0.09, 'breakout160': 1.04, 'breakout20': 0.75, 'breakout320': 0.96, 'breakout40': 0.9, 'breakout80': 1.15}

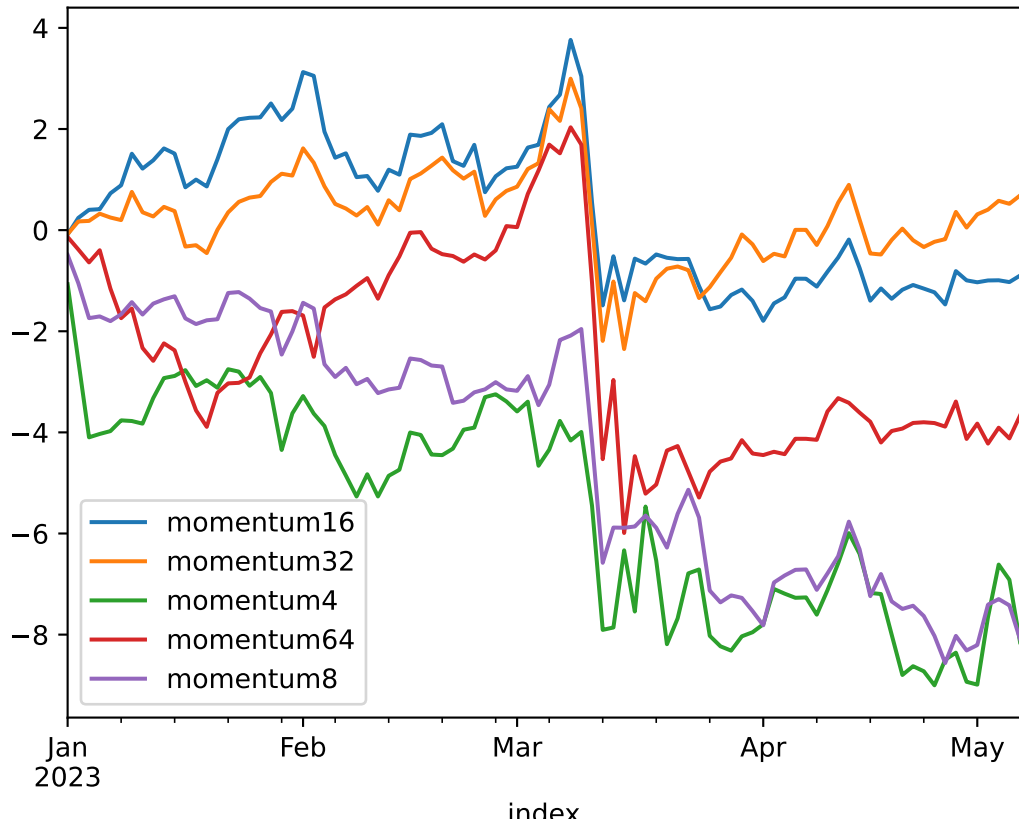


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': -2.555, 'momentum32': 1.952, 'momentum4': -23.179, 'momentum64': -23.179, 'momentum8': -23.018}

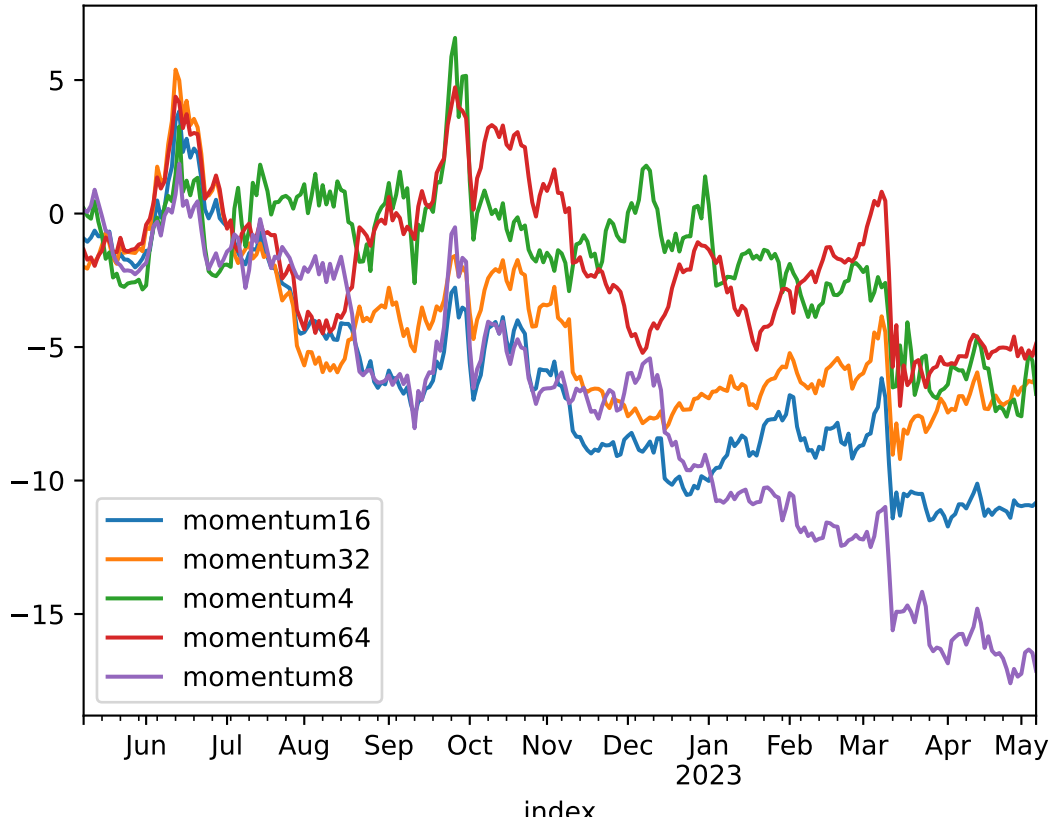
ann. std {'momentum16': 8.509, 'momentum32': 8.523, 'momentum4': 11.33, 'momentum64': 11.469, 'momentum8': 8.671}

ann. SR {'momentum16': -0.3, 'momentum32': 0.23, 'momentum4': -2.05, 'momentum64': -0.91, 'momentum8': -2.65}



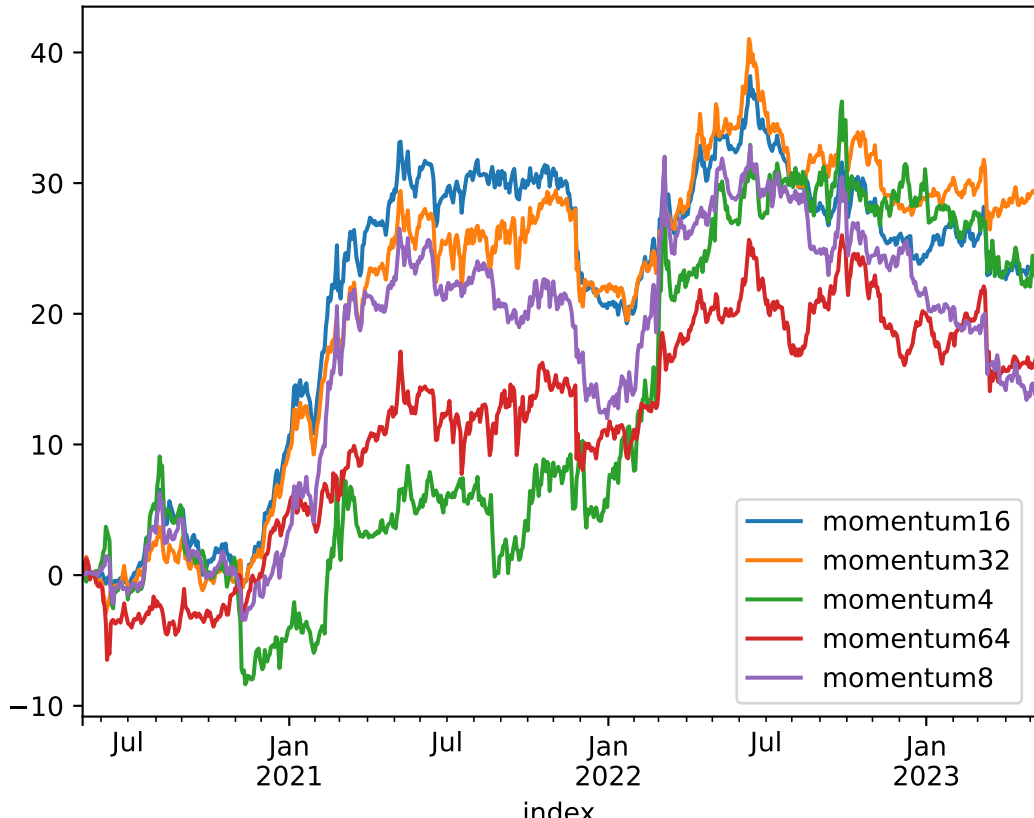
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -10.661, 'momentum32': -6.063, 'momentum4': -6.651, 'momentum64': -4.806, 'momentum8': -16.861}
ann. std {'momentum16': 8.519, 'momentum32': 9.018, 'momentum4': 13.206, 'momentum64': 10.233, 'momentum8': 9.743}
ann. SR {'momentum16': -1.25, 'momentum32': -0.67, 'momentum4': -0.5, 'momentum64': -0.47, 'momentum8': -1.73}



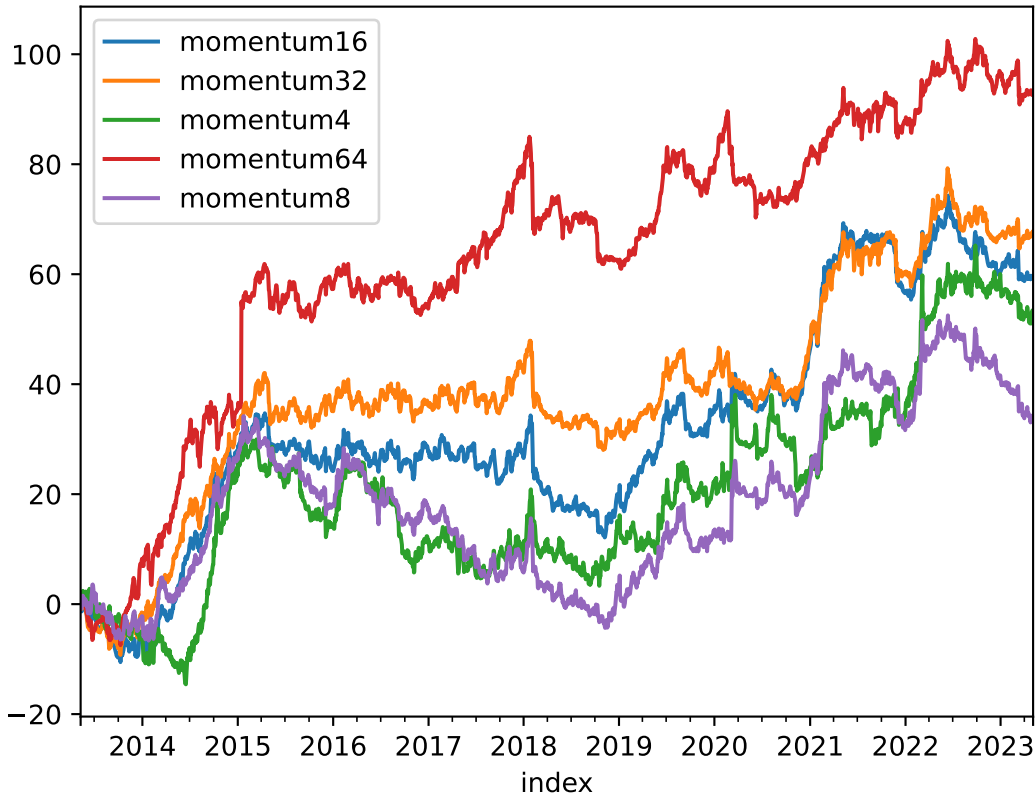
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 7.724, 'momentum32': 9.678, 'momentum4': 7.522, 'momentum64': 5.384, 'momentum8': 4.553}
ann. std {'momentum16': 10.128, 'momentum32': 10.388, 'momentum4': 14.695, 'momentum64': 10.843, 'momentum8': 11.444}
ann. SR {'momentum16': 0.76, 'momentum32': 0.93, 'momentum4': 0.51, 'momentum64': 0.5, 'momentum8': 0.4}



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

ann. mean {'momentum16': 5.856, 'momentum32': 6.65, 'momentum4': 5.095, 'momentum64': 9.15, 'momentum8': 3.291}
ann. std {'momentum16': 9.641, 'momentum32': 9.266, 'momentum4': 13.683, 'momentum64': 11.874, 'momentum8': 10.846}
ann. SR {'momentum16': 0.61, 'momentum32': 0.72, 'momentum4': 0.37, 'momentum64': 0.77, 'momentum8': 0.3}

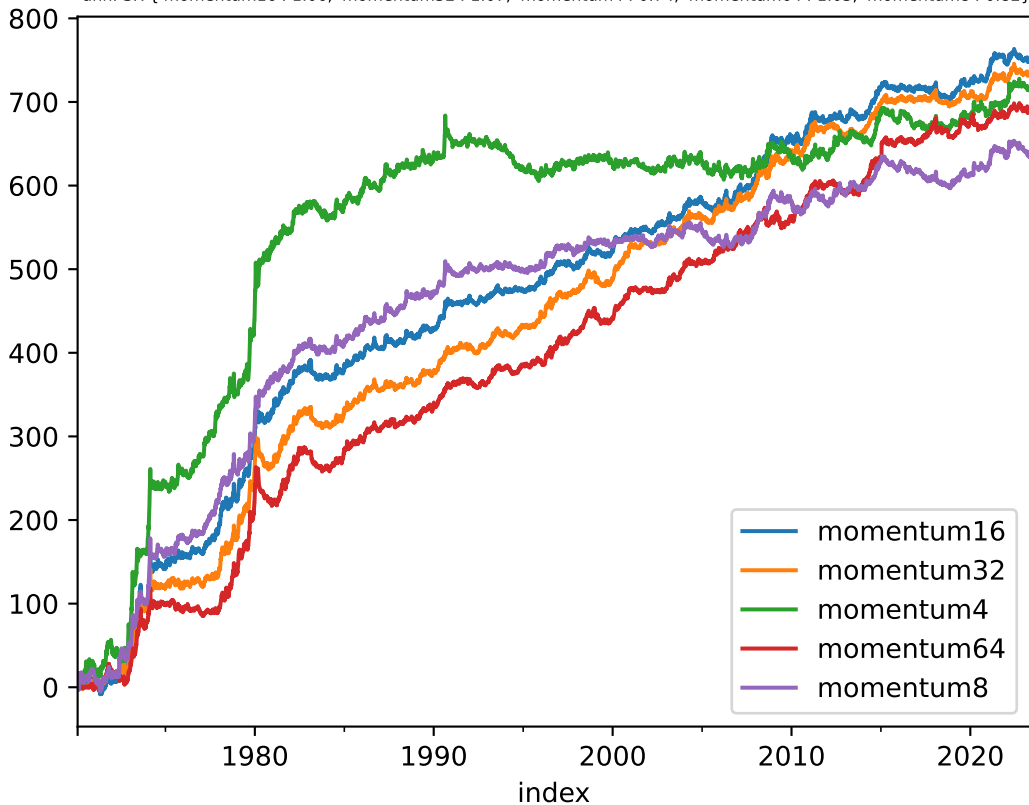


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.797, 'momentum32': 13.529, 'momentum4': 13.163, 'momentum64': 12.698, 'momentum8': 11.693}

ann. std {'momentum16': 13.043, 'momentum32': 12.607, 'momentum4': 17.89, 'momentum64': 12.328, 'momentum8': 14.328}

ann. SR {'momentum16': 1.06, 'momentum32': 1.07, 'momentum4': 0.74, 'momentum64': 1.03, 'momentum8': 0.82}

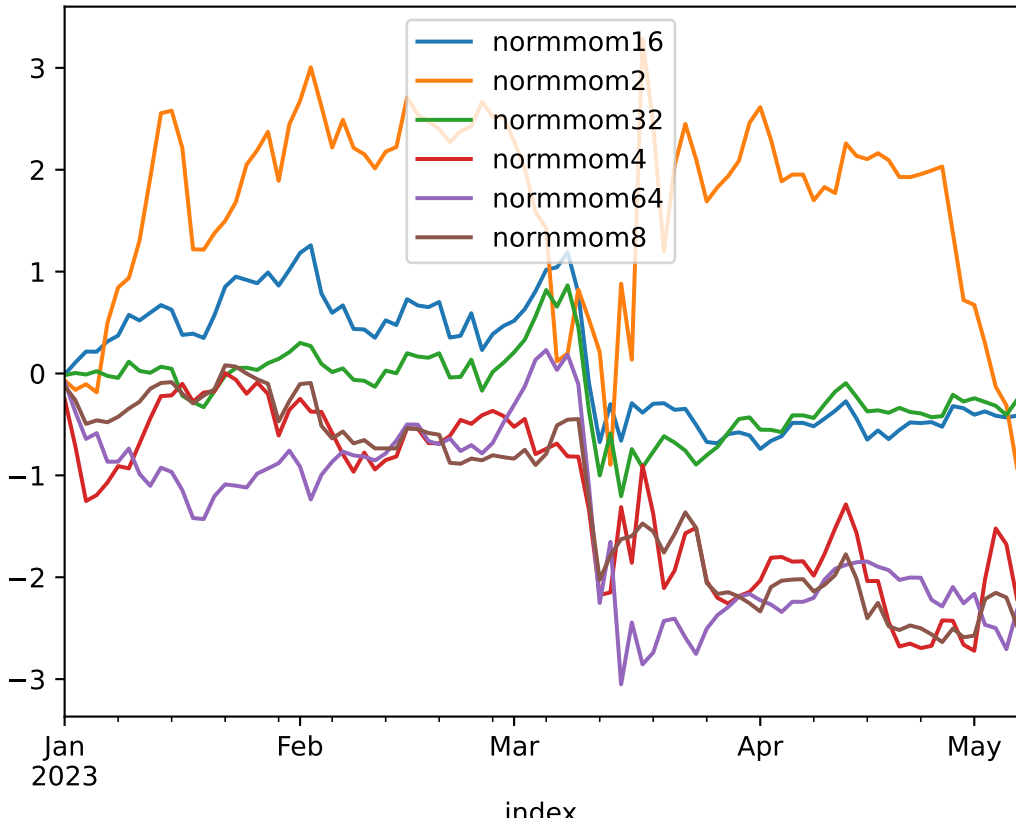


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': -1.179, 'normmom2': -2.634, 'normmom32': -0.736, 'normmom4': -6.295, 'normmom64': -6.606, 'normmom8': -7.044}

ann. std {'normmom16': 3.053, 'normmom2': 8.963, 'normmom32': 3.003, 'normmom4': 4.697, 'normmom64': 4.518, 'normmom8': 3.081}

ann. SR {'normmom16': -0.39, 'normmom2': -0.29, 'normmom32': -0.25, 'normmom4': -1.34, 'normmom64': -1.46, 'normmom8': -2.29}

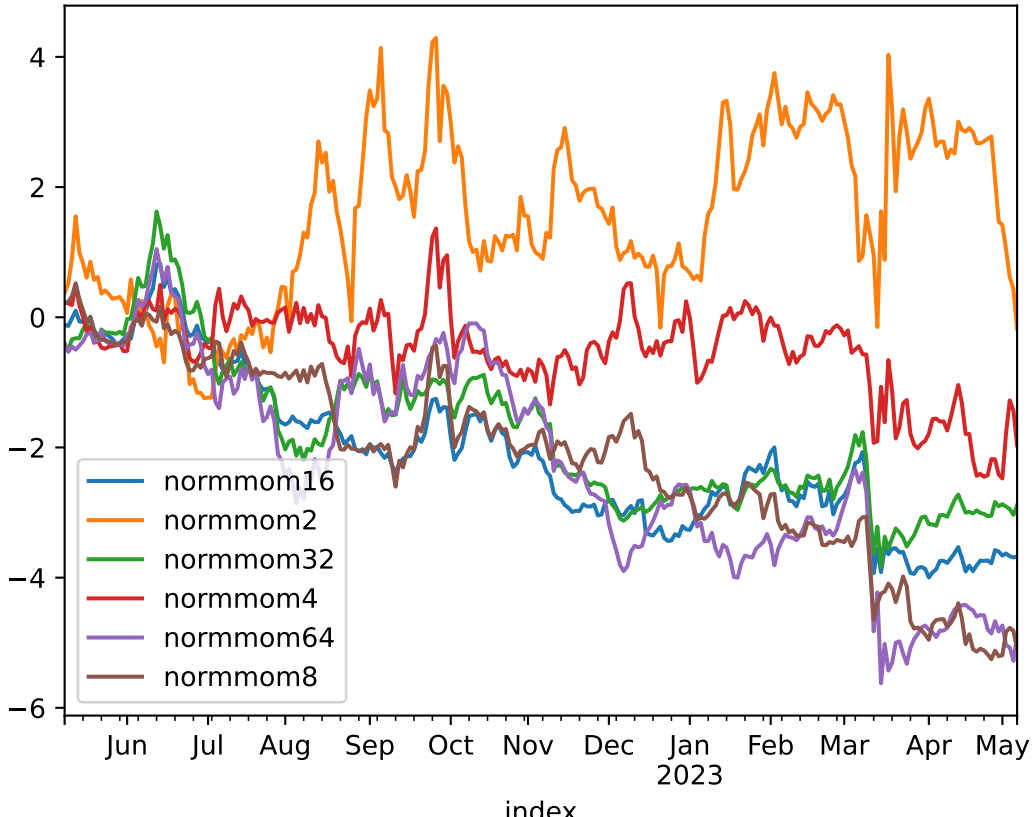


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -3.615, 'normmom2': -0.177, 'normmom32': -2.843, 'normmom4': -1.938, 'normmom64': -4.819, 'normmom8': -5.016}

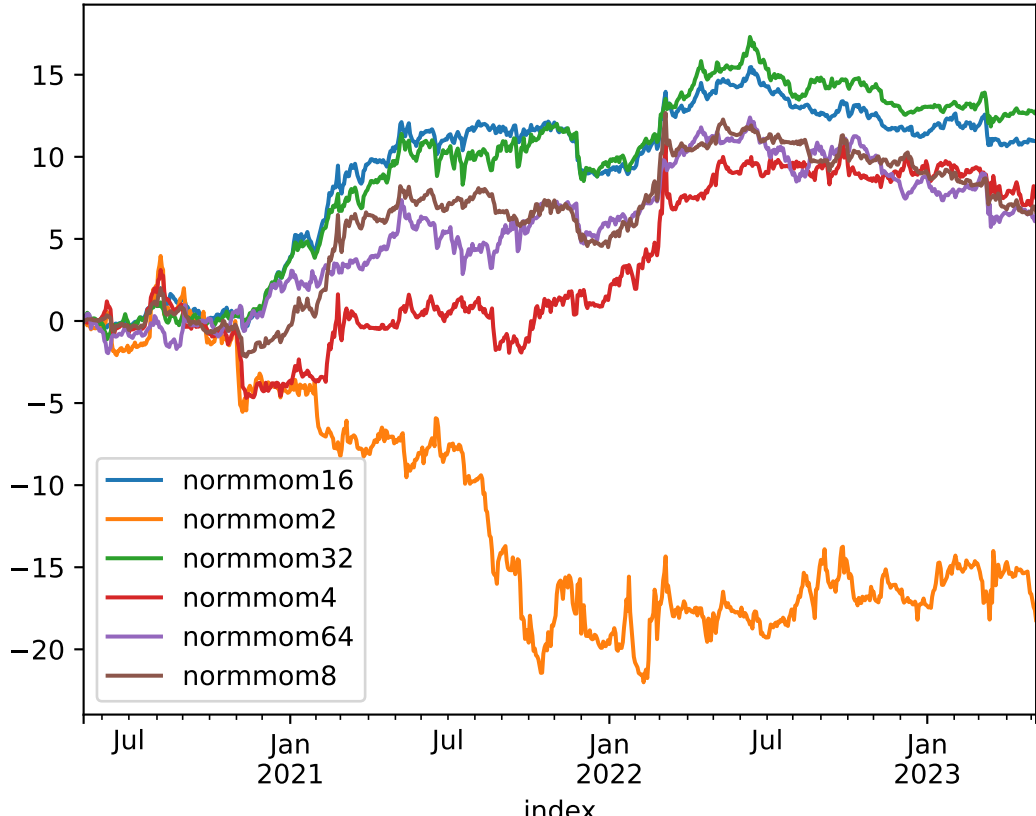
ann. std {'normmom16': 2.528, 'normmom2': 7.5, 'normmom32': 2.861, 'normmom4': 4.341, 'normmom64': 3.833, 'normmom8': 2.907}

ann. SR {'normmom16': -1.43, 'normmom2': -0.02, 'normmom32': -0.99, 'normmom4': -0.45, 'normmom64': -1.26, 'normmom8': -1.73}



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

ann. mean {'normmom16': 3.601, 'normmom2': -5.98, 'normmom32': 4.198, 'normmom4': 2.47, 'normmom64': 2.118, 'normmom8': 2.185}
ann. std {'normmom16': 3.509, 'normmom2': 8.648, 'normmom32': 3.882, 'normmom4': 5.41, 'normmom64': 4.286, 'normmom8': 3.941}
ann. SR {'normmom16': 1.03, 'normmom2': -0.69, 'normmom32': 1.08, 'normmom4': 0.46, 'normmom64': 0.49, 'normmom8': 0.55}

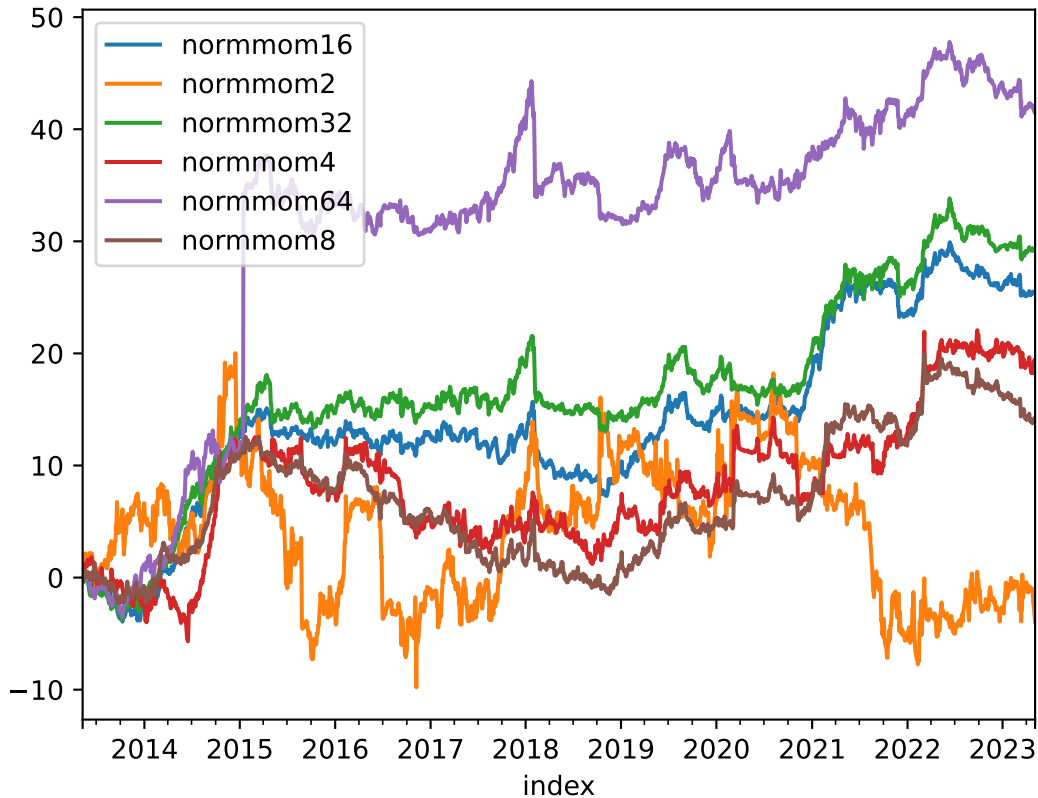


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.496, 'normmom2': -0.388, 'normmom32': 2.879, 'normmom4': 1.84, 'normmom64': 4.109, 'normmom8': 1.367}

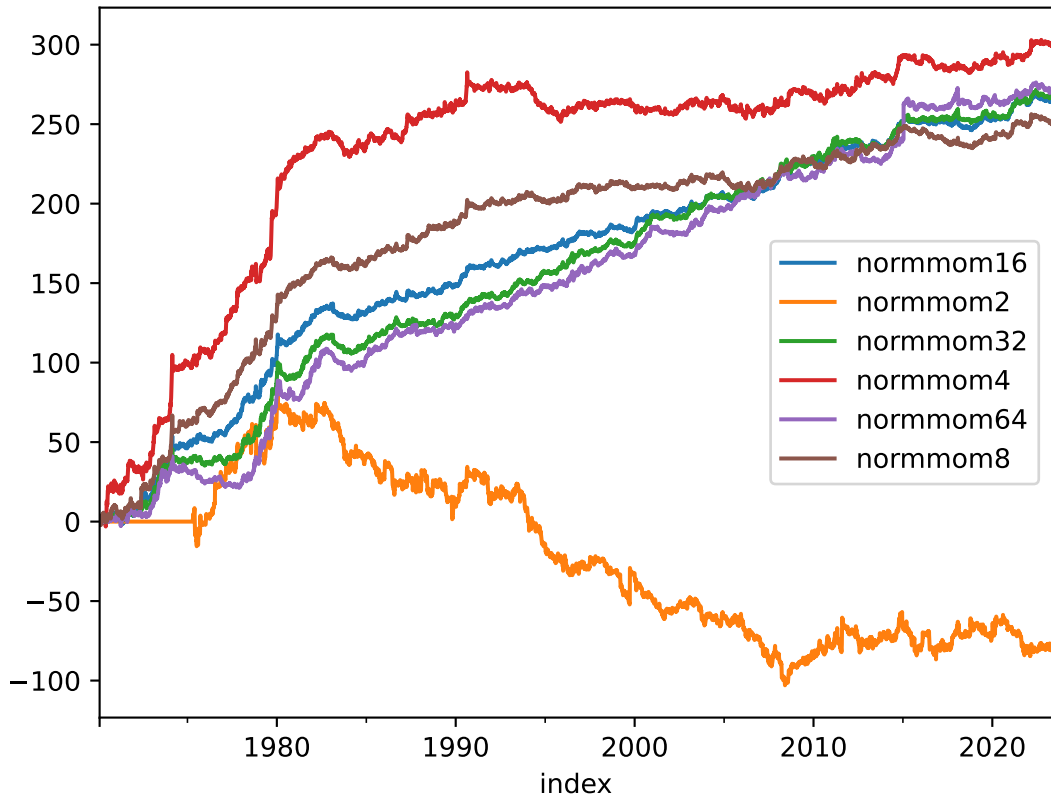
ann. std {'normmom16': 3.459, 'normmom2': 10.317, 'normmom32': 3.62, 'normmom4': 5.451, 'normmom64': 8.274, 'normmom8': 3.877}

ann. SR {'normmom16': 0.72, 'normmom2': -0.04, 'normmom32': 0.8, 'normmom4': 0.34, 'normmom64': 0.5, 'normmom8': 0.35}



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

ann. mean {'normmom16': 4.87, 'normmom2': -1.49, 'normmom32': 4.923, 'normmom4': 5.521, 'normmom64': 4.981, 'normmom8': 4.612}
ann. std {'normmom16': 4.531, 'normmom2': 11.608, 'normmom32': 4.608, 'normmom4': 7.383, 'normmom64': 5.869, 'normmom8': 5.364}
ann. SR {'normmom16': 1.07, 'normmom2': -0.13, 'normmom32': 1.07, 'normmom4': 0.75, 'normmom64': 0.85, 'normmom8': 0.86}



Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -4.811, 'relmomentum20': -15.645, 'relmomentum40': 14.229, 'relmomentum80': 11.56}

ann. std {'relmomentum10': 7.846, 'relmomentum20': 6.683, 'relmomentum40': 5.33, 'relmomentum80': 4.282}

ann. SR {'relmomentum10': -0.61, 'relmomentum20': -2.34, 'relmomentum40': 2.67, 'relmomentum80': 2.7}

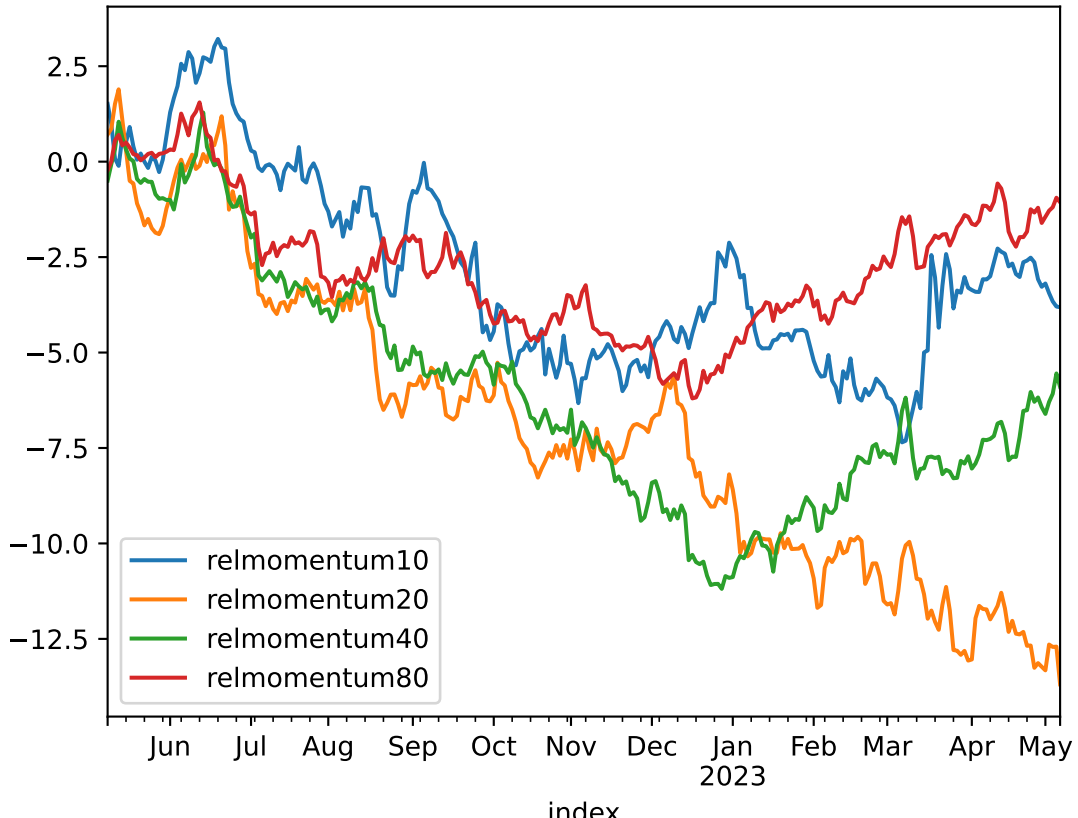


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -3.755, 'relmomentum20': -13.479, 'relmomentum40': -5.81, 'relmomentum80': -1.047}

ann. std {'relmomentum10': 7.393, 'relmomentum20': 6.507, 'relmomentum40': 5.3, 'relmomentum80': 4.498}

ann. SR {'relmomentum10': -0.51, 'relmomentum20': -2.07, 'relmomentum40': -1.1, 'relmomentum80': -0.23}

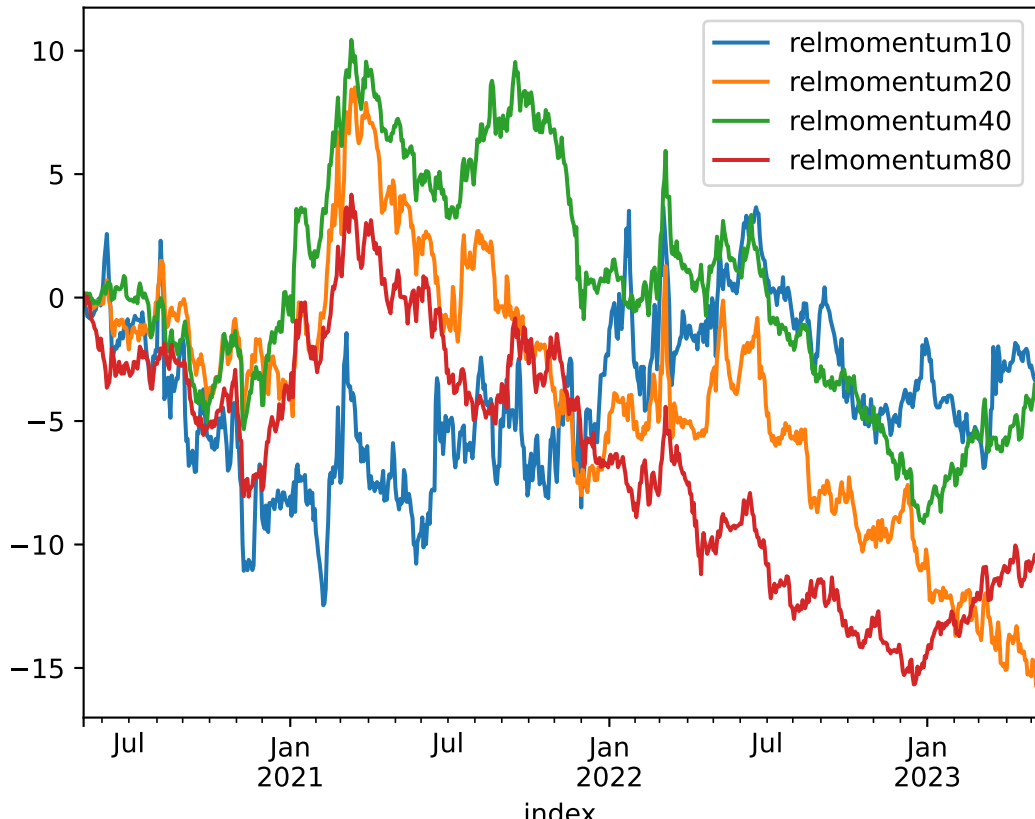


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -1.106, 'relmomentum20': -5.154, 'relmomentum40': -1.26, 'relmomentum80': -3.456}

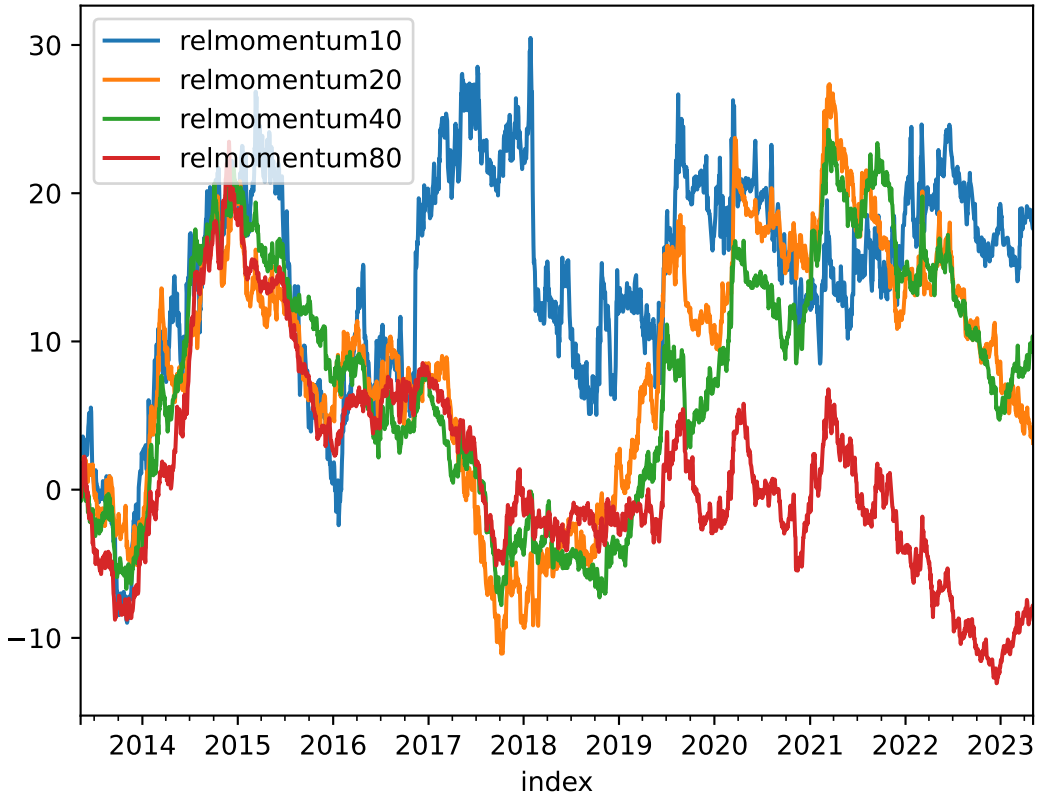
ann. std {'relmomentum10': 11.921, 'relmomentum20': 8.367, 'relmomentum40': 6.952, 'relmomentum80': 6.316}

ann. SR {'relmomentum10': -0.09, 'relmomentum20': -0.62, 'relmomentum40': -0.18, 'relmomentum80': -0.55}

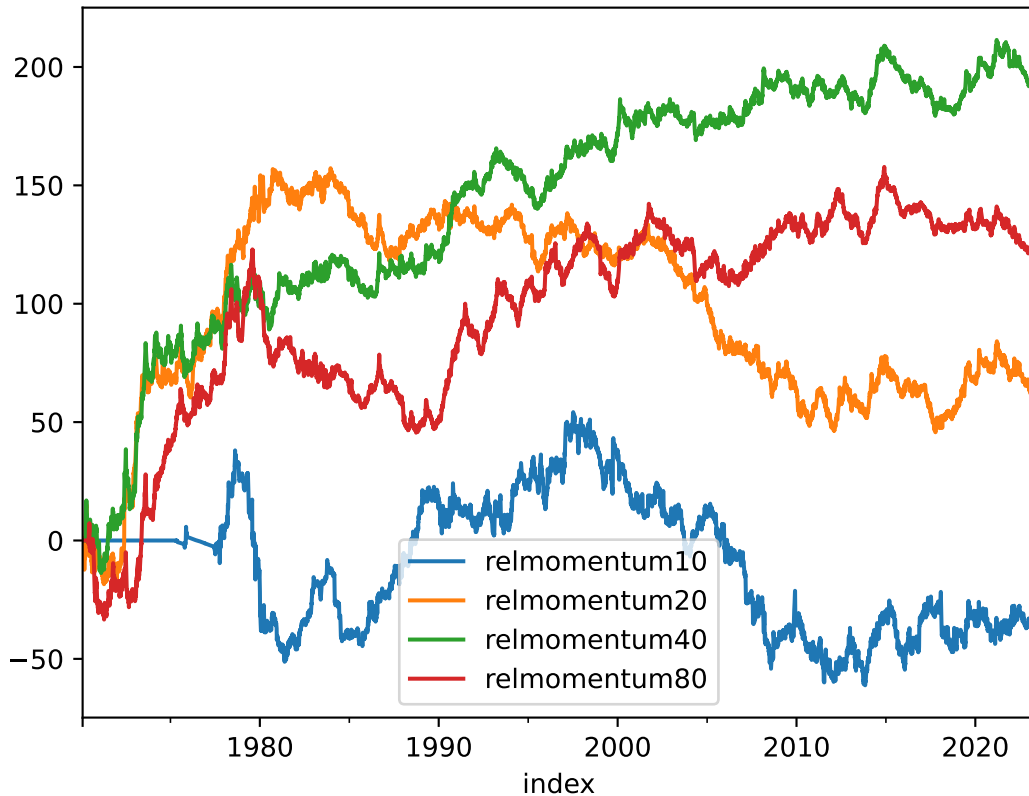


Total Trading Rule P&L for period '10Y'

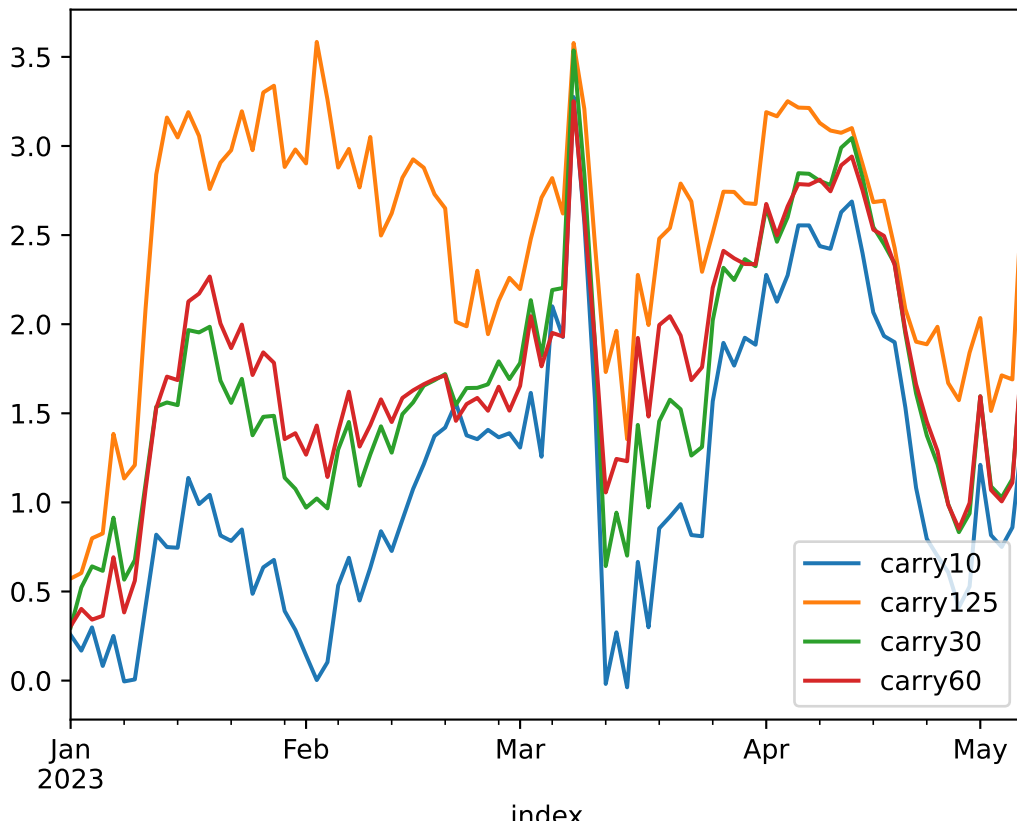
ann. mean {'relmomentum10': 1.728, 'relmomentum20': 0.309, 'relmomentum40': 0.982, 'relmomentum80': -0.778}
ann. std {'relmomentum10': 13.392, 'relmomentum20': 8.544, 'relmomentum40': 6.993, 'relmomentum80': 6.364}
ann. SR {'relmomentum10': 0.13, 'relmomentum20': 0.04, 'relmomentum40': 0.14, 'relmomentum80': -0.12}



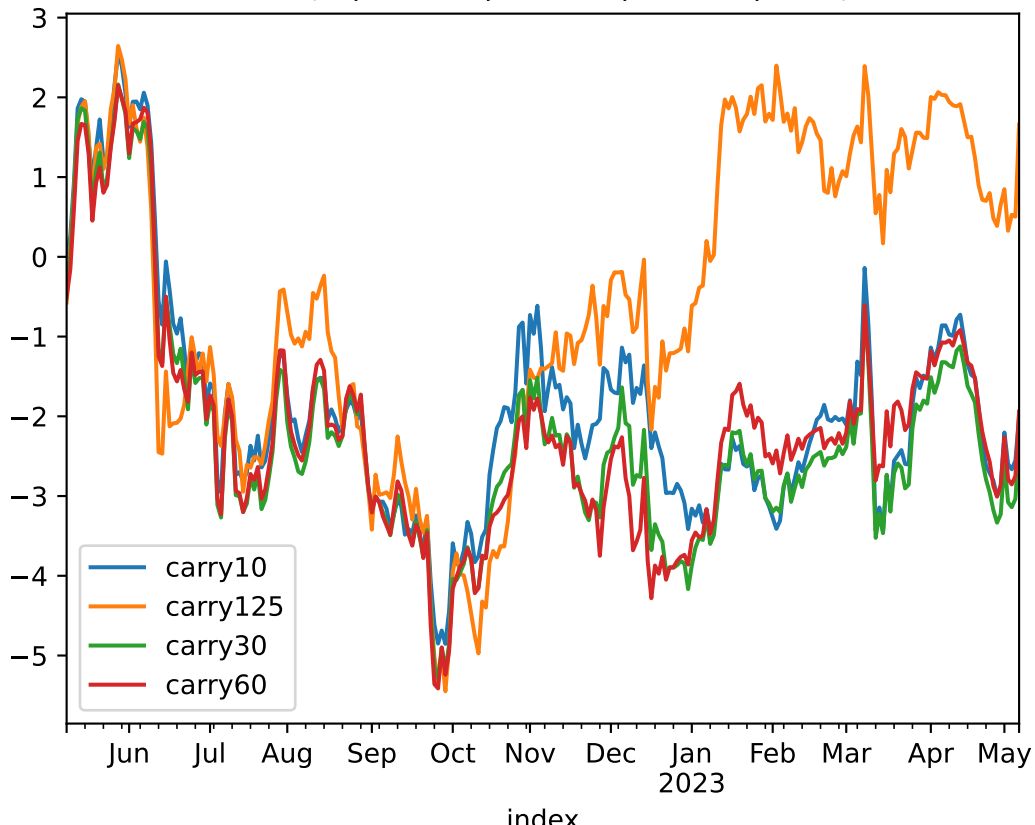
Total Trading Rule P&L for period '99Y'
ann. mean {'relmomentum10': -0.637, 'relmomentum20': 1.104, 'relmomentum40': 3.633, 'relmomentum80': 2.329}
ann. std {'relmomentum10': 13.386, 'relmomentum20': 10.467, 'relmomentum40': 9.637, 'relmomentum80': 9.781}
ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.11, 'relmomentum40': 0.38, 'relmomentum80': 0.24}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 4.038, 'carry125': 8.089, 'carry30': 5.299, 'carry60': 5.457}
ann. std {'carry10': 5.942, 'carry125': 5.713, 'carry30': 5.56, 'carry60': 5.071}
ann. SR {'carry10': 0.68, 'carry125': 1.42, 'carry30': 0.95, 'carry60': 1.08}



Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -1.964, 'carry125': 1.632, 'carry30': -2.269, 'carry60': -1.911}
ann. std {'carry10': 6.004, 'carry125': 6.599, 'carry30': 6.018, 'carry60': 5.974}
ann. SR {'carry10': -0.33, 'carry125': 0.25, 'carry30': -0.38, 'carry60': -0.32}

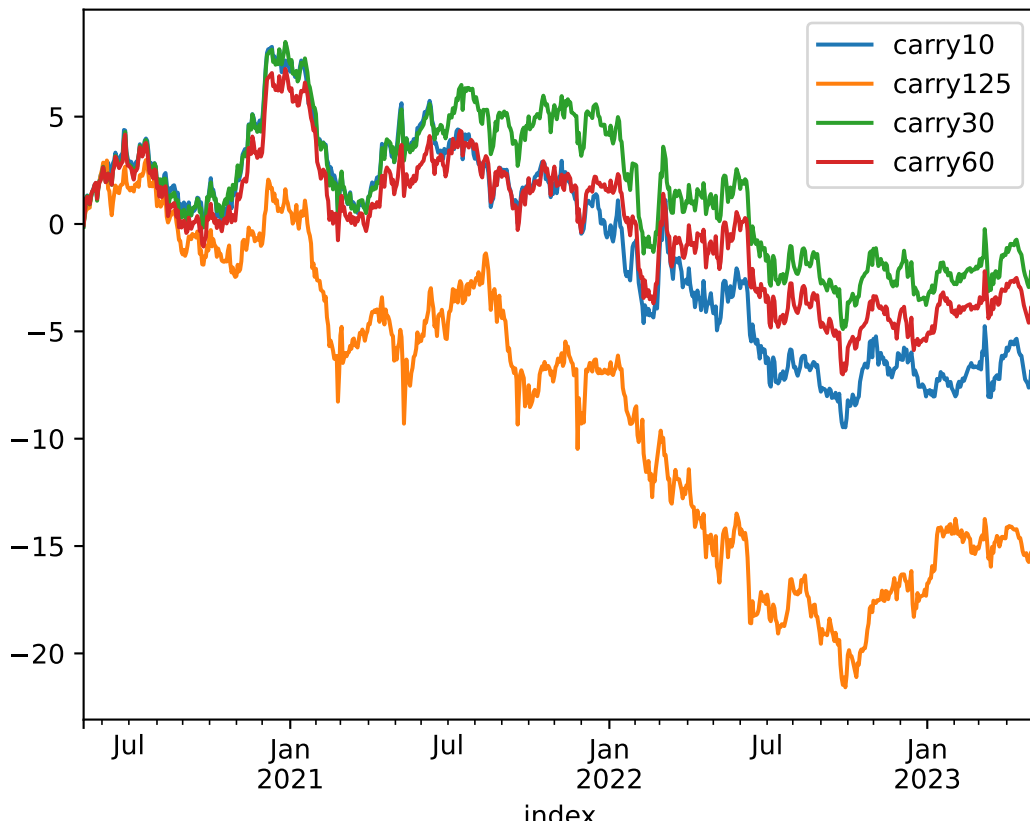


Total Trading Rule P&L for period '3Y'

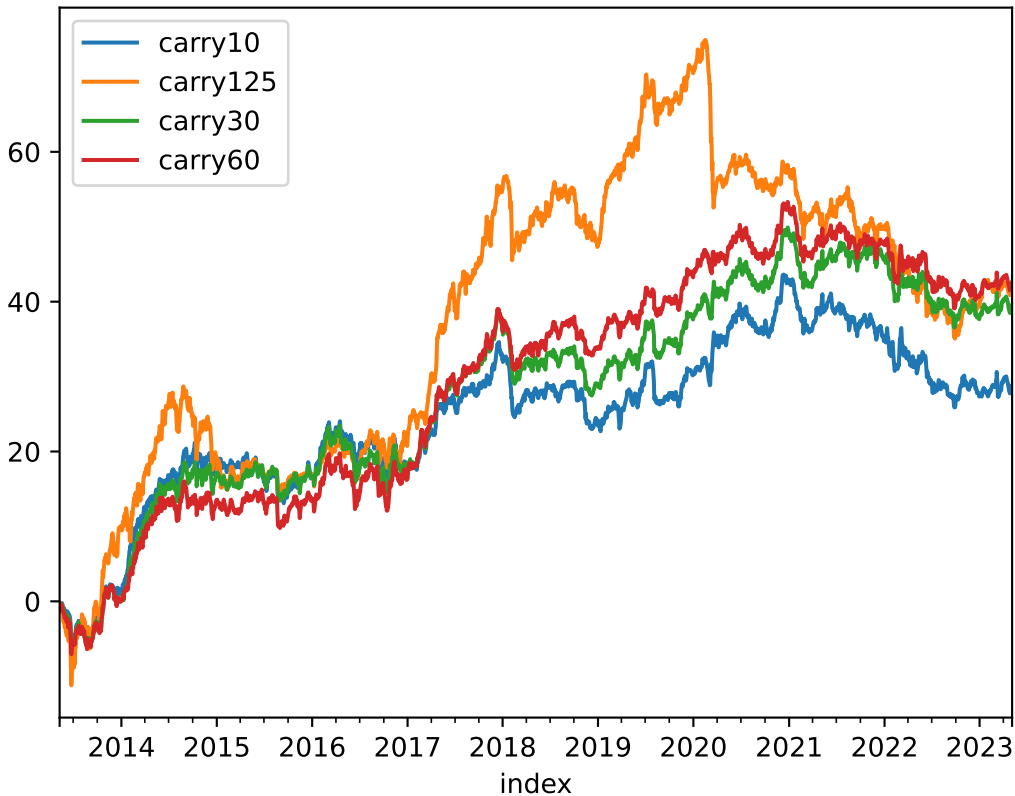
ann. mean {'carry10': -2.171, 'carry125': -4.75, 'carry30': -0.627, 'carry60': -1.159}

ann. std {'carry10': 6.551, 'carry125': 8.023, 'carry30': 6.49, 'carry60': 6.484}

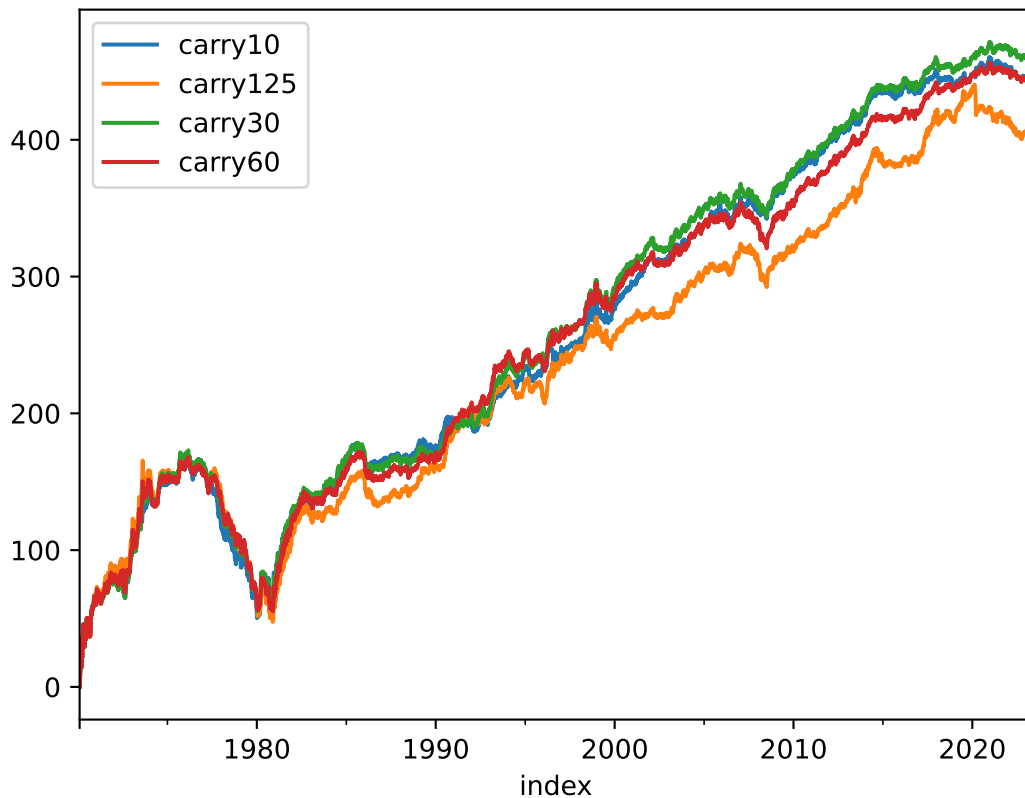
ann. SR {'carry10': -0.33, 'carry125': -0.59, 'carry30': -0.1, 'carry60': -0.18}



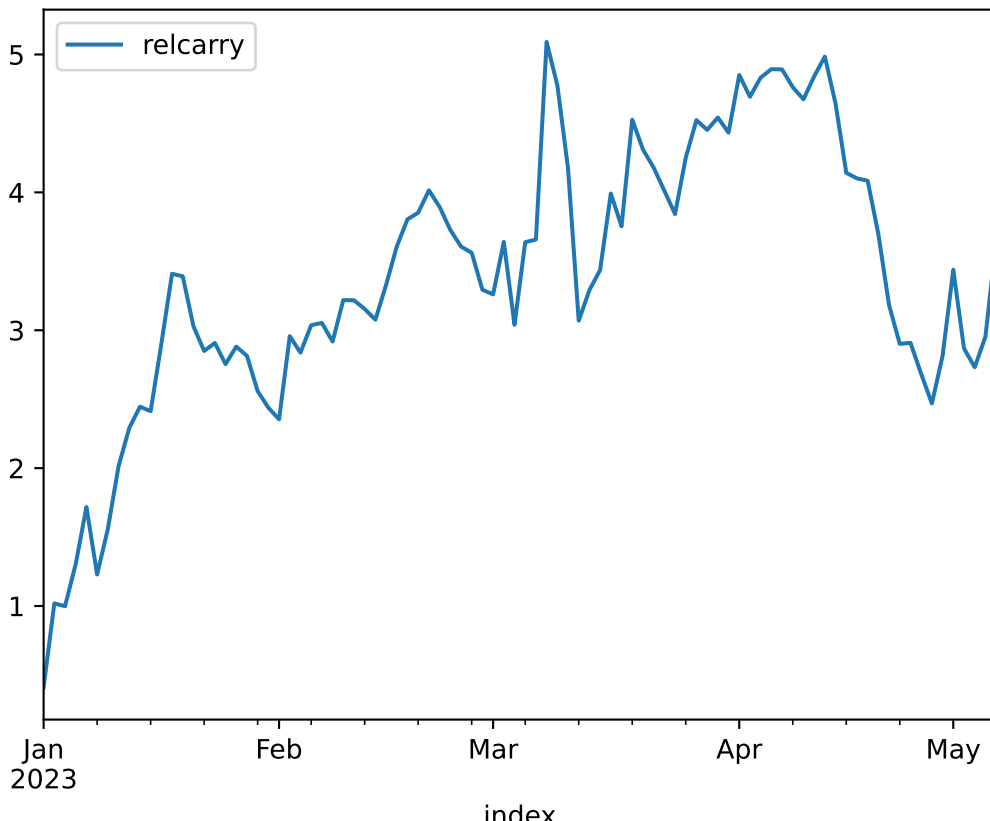
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 2.824, 'carry125': 4.142, 'carry30': 3.88, 'carry60': 4.18}
ann. std {'carry10': 6.366, 'carry125': 8.953, 'carry30': 6.454, 'carry60': 6.402}
ann. SR {'carry10': 0.44, 'carry125': 0.46, 'carry30': 0.6, 'carry60': 0.65}



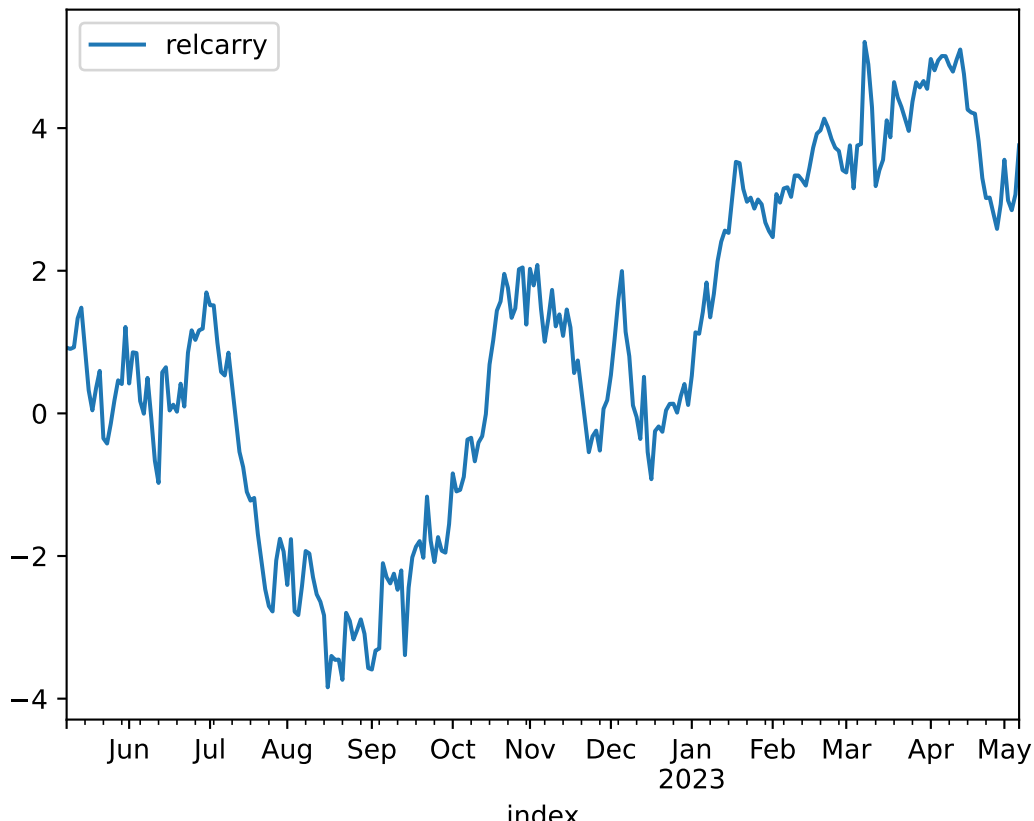
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 8.209, 'carry125': 7.51, 'carry30': 8.497, 'carry60': 8.21}
ann. std {'carry10': 11.199, 'carry125': 11.556, 'carry30': 11.256, 'carry60': 11.259}
ann. SR {'carry10': 0.73, 'carry125': 0.65, 'carry30': 0.75, 'carry60': 0.73}



Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 10.355}
ann. std {'relcarry': 5.787}
ann. SR {'relcarry': 1.79}



Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': 3.7}
ann. std {'relcarry': 6.826}
ann. SR {'relcarry': 0.54}

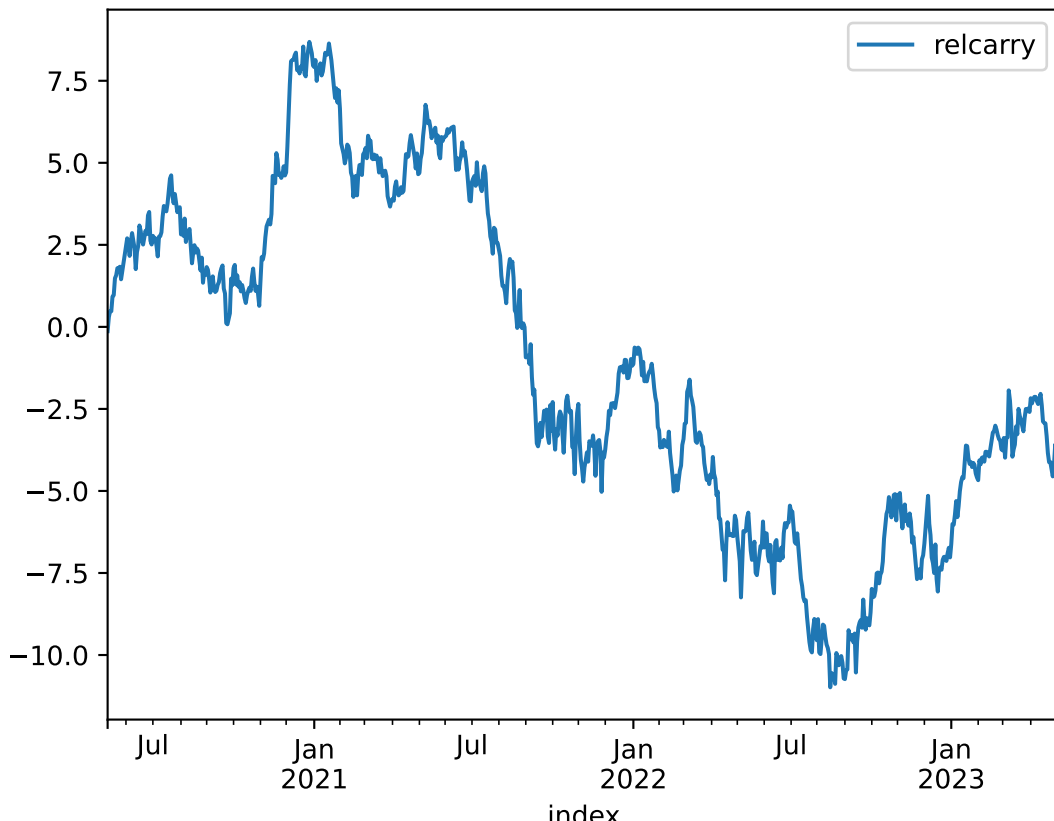


Total Trading Rule P&L for period '3Y'

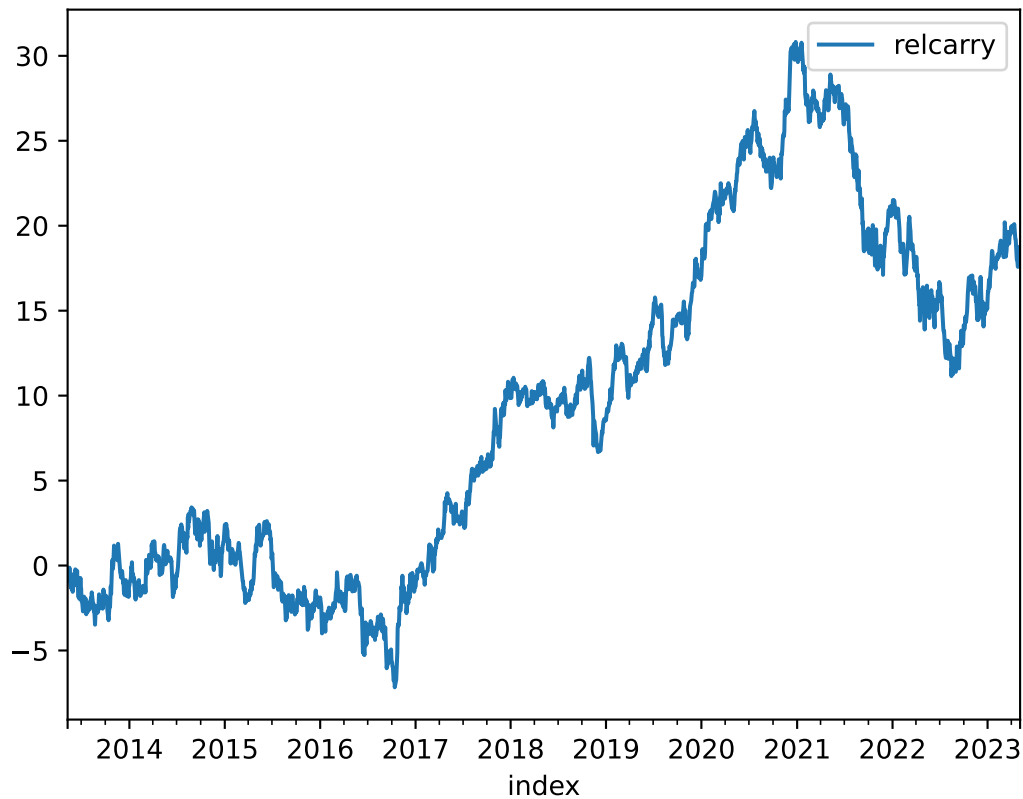
ann. mean {'relcarry': -1.111}

ann. std {'relcarry': 6.68}

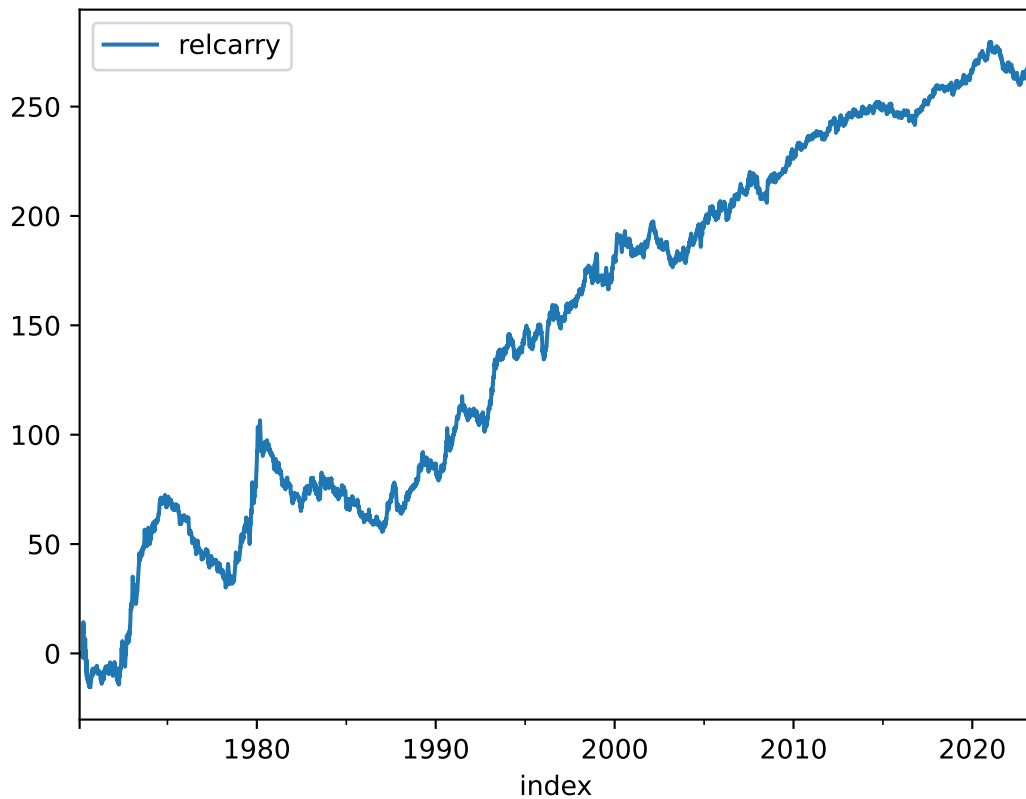
ann. SR {'relcarry': -0.17}



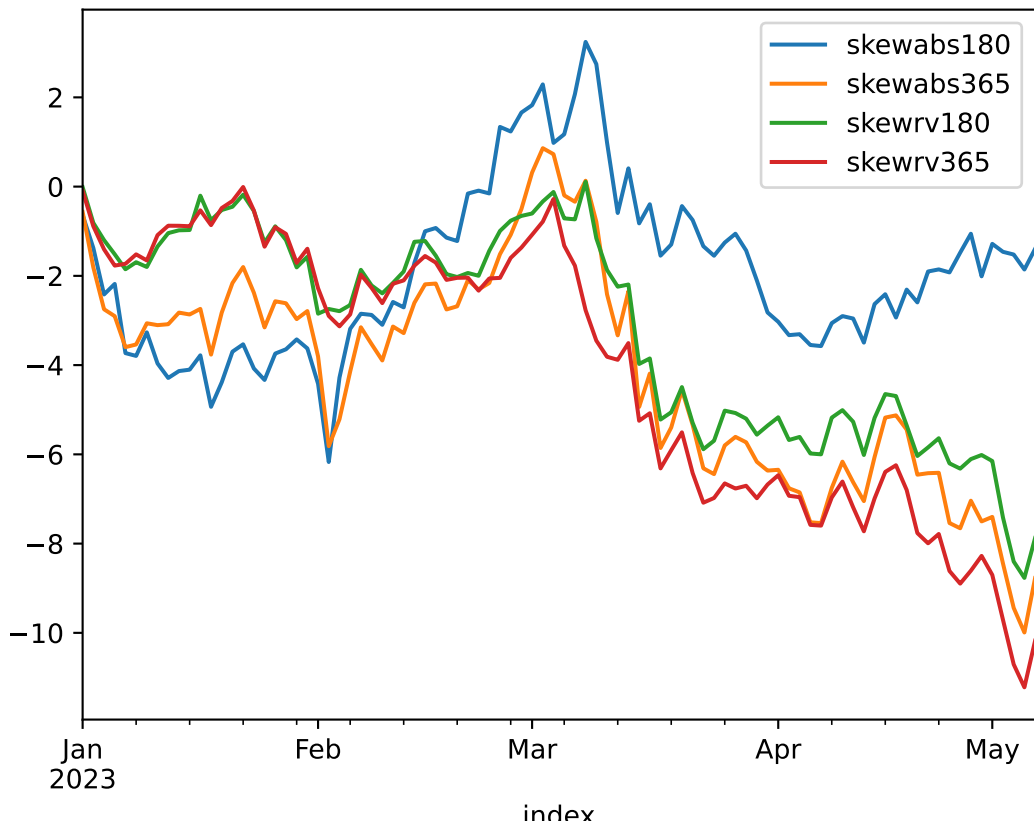
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 1.841}
ann. std {'relcarry': 5.821}
ann. SR {'relcarry': 0.32}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 4.929}
ann. std {'relcarry': 8.959}
ann. SR {'relcarry': 0.55}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': -3.966, 'skewabs365': -24.954, 'skewrv180': -22.4, 'skewrv365': -28.947}
ann. std {'skewabs180': 11.248, 'skewabs365': 11.835, 'skewrv180': 8.478, 'skewrv365': 8.348}
ann. SR {'skewabs180': -0.35, 'skewabs365': -2.11, 'skewrv180': -2.64, 'skewrv365': -3.47}

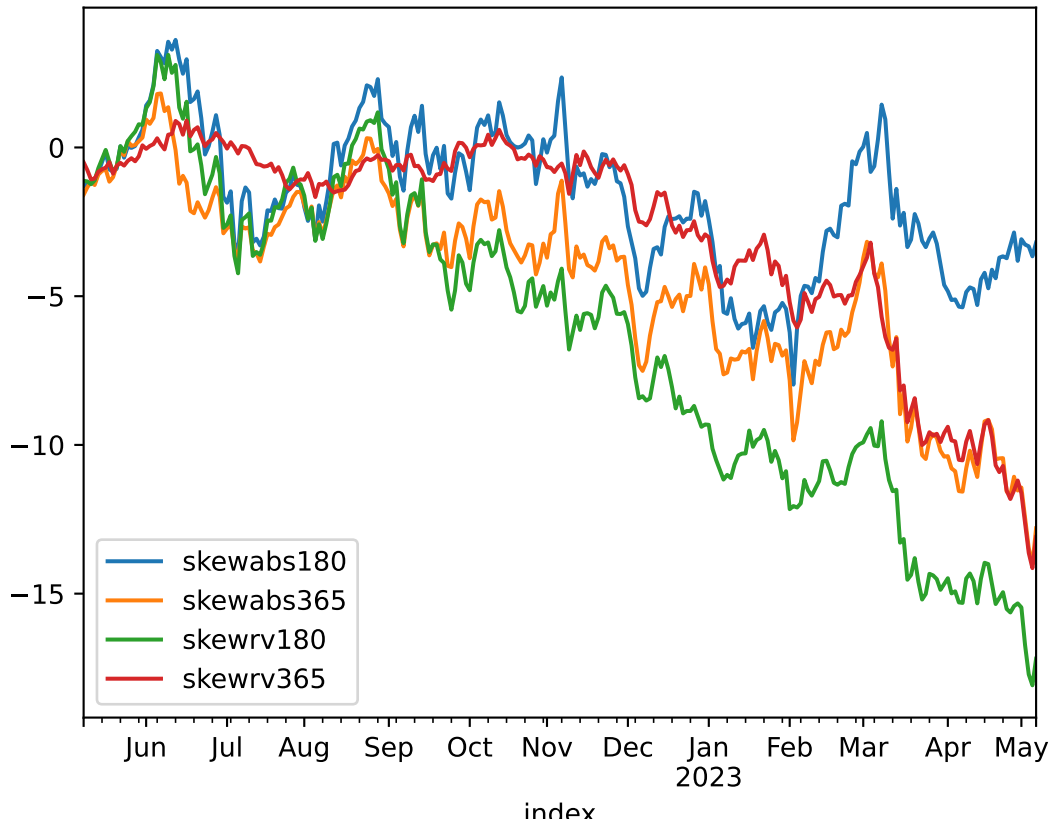


Total Trading Rule P&L for period '1Y'

ann. mean {'skewabs180': -3.147, 'skewabs365': -12.607, 'skewrv180': -16.923, 'skewrv365': -12.897}

ann. std {'skewabs180': 11.092, 'skewabs365': 10.076, 'skewrv180': 9.438, 'skewrv365': 6.038}

ann. SR {'skewabs180': -0.28, 'skewabs365': -1.25, 'skewrv180': -1.79, 'skewrv365': -2.14}

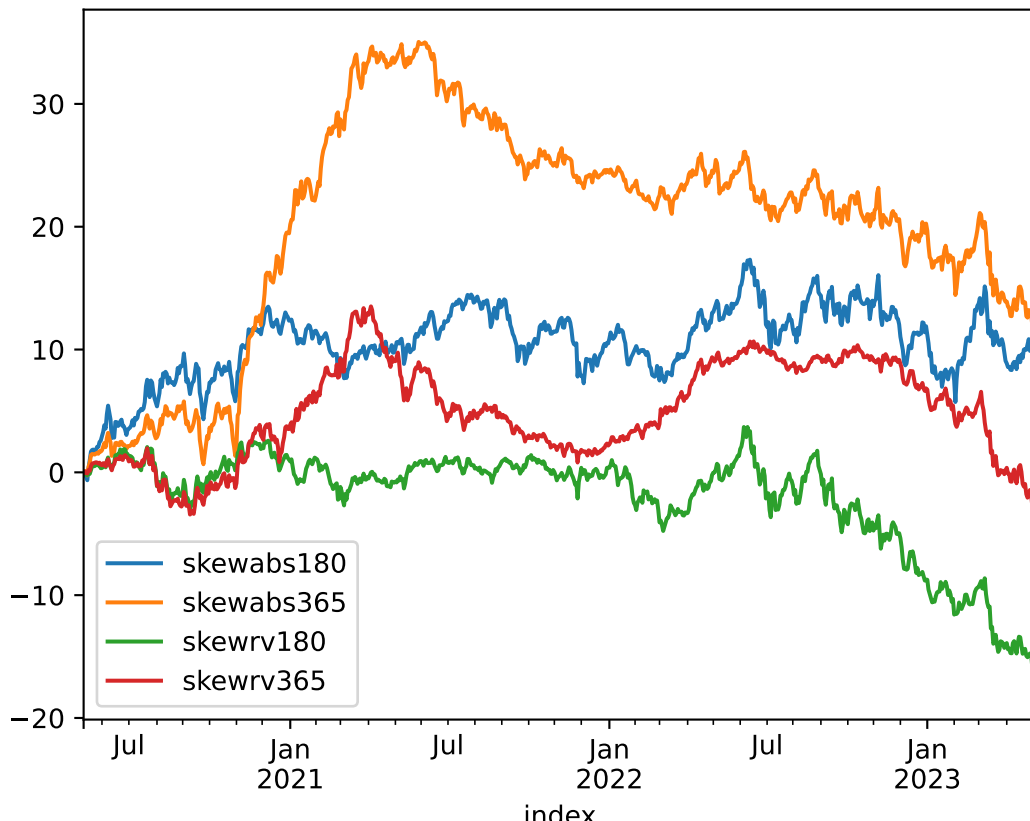


Total Trading Rule P&L for period '3Y'

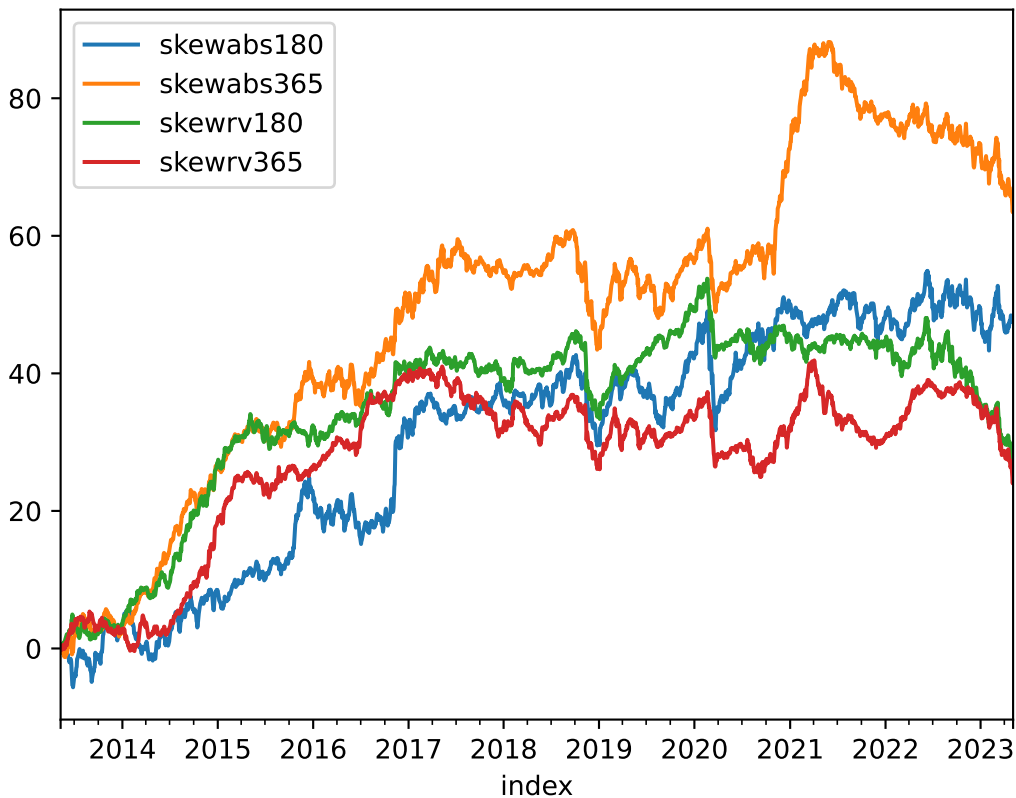
ann. mean {'skewabs180': 3.448, 'skewabs365': 3.769, 'skewrv180': -5.451, 'skewrv365': -1.096}

ann. std {'skewabs180': 9.142, 'skewabs365': 8.992, 'skewrv180': 7.323, 'skewrv365': 6.44}

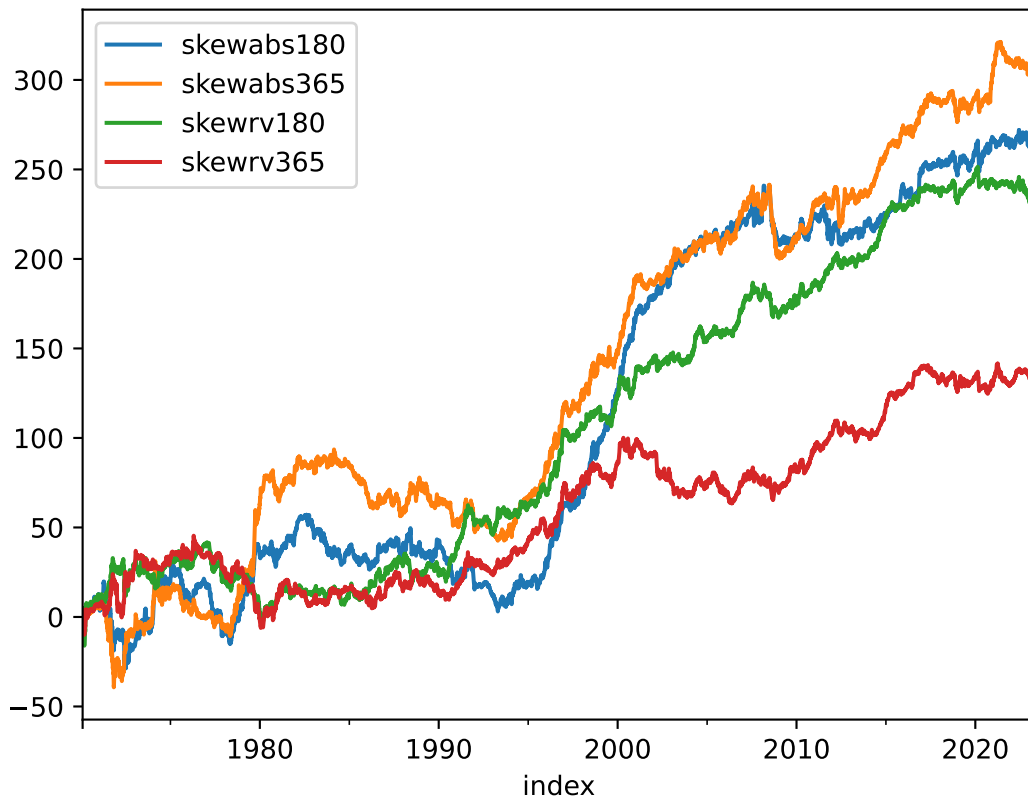
ann. SR {'skewabs180': 0.38, 'skewabs365': 0.42, 'skewrv180': -0.74, 'skewrv365': -0.17}



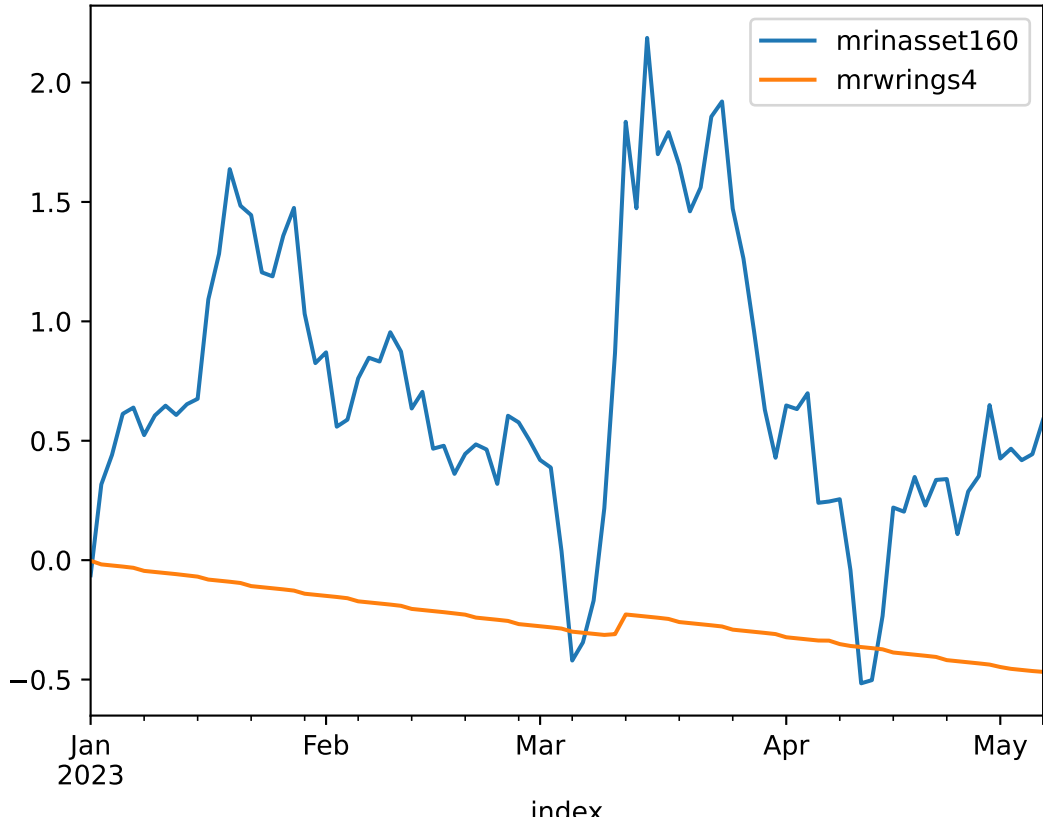
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.723, 'skewabs365': 6.346, 'skewrv180': 2.726, 'skewrv365': 2.458}
ann. std {'skewabs180': 8.019, 'skewabs365': 7.97, 'skewrv180': 6.415, 'skewrv365': 6.075}
ann. SR {'skewabs180': 0.59, 'skewabs365': 0.8, 'skewrv180': 0.42, 'skewrv365': 0.4}



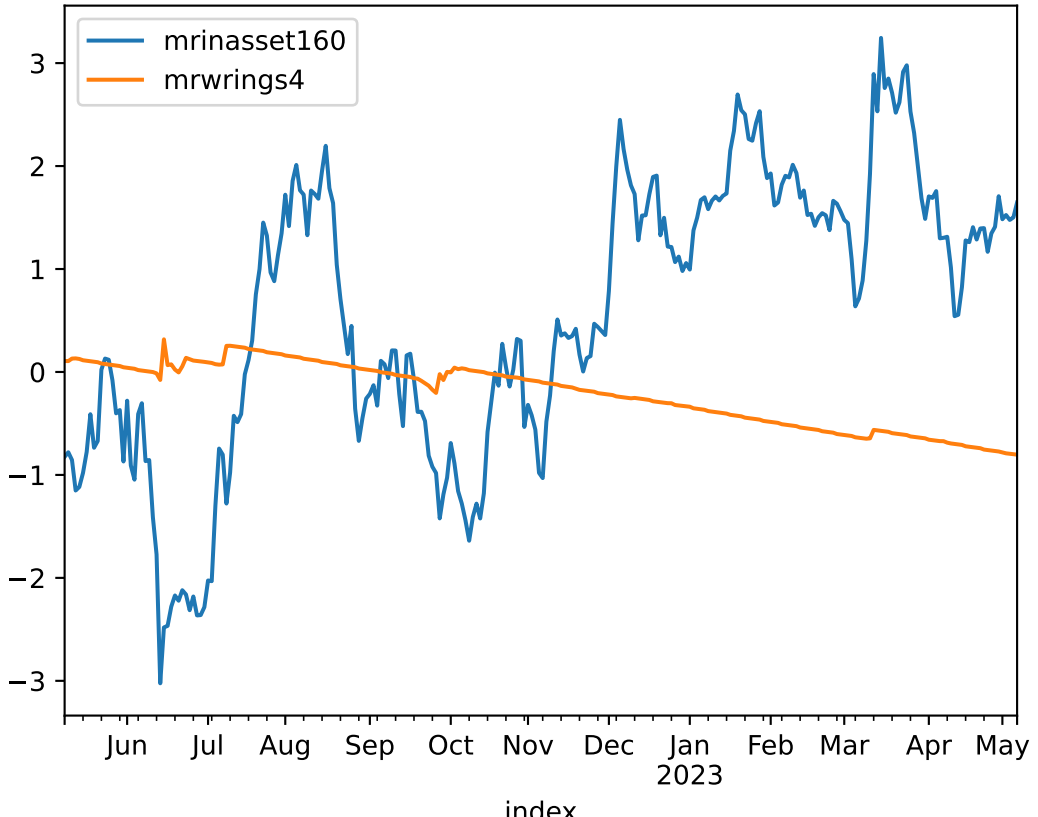
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.887, 'skewabs365': 5.485, 'skewrv180': 4.155, 'skewrv365': 2.299}
ann. std {'skewabs180': 10.1, 'skewabs365': 9.871, 'skewrv180': 8.753, 'skewrv365': 8.127}
ann. SR {'skewabs180': 0.48, 'skewabs365': 0.56, 'skewrv180': 0.47, 'skewrv365': 0.28}



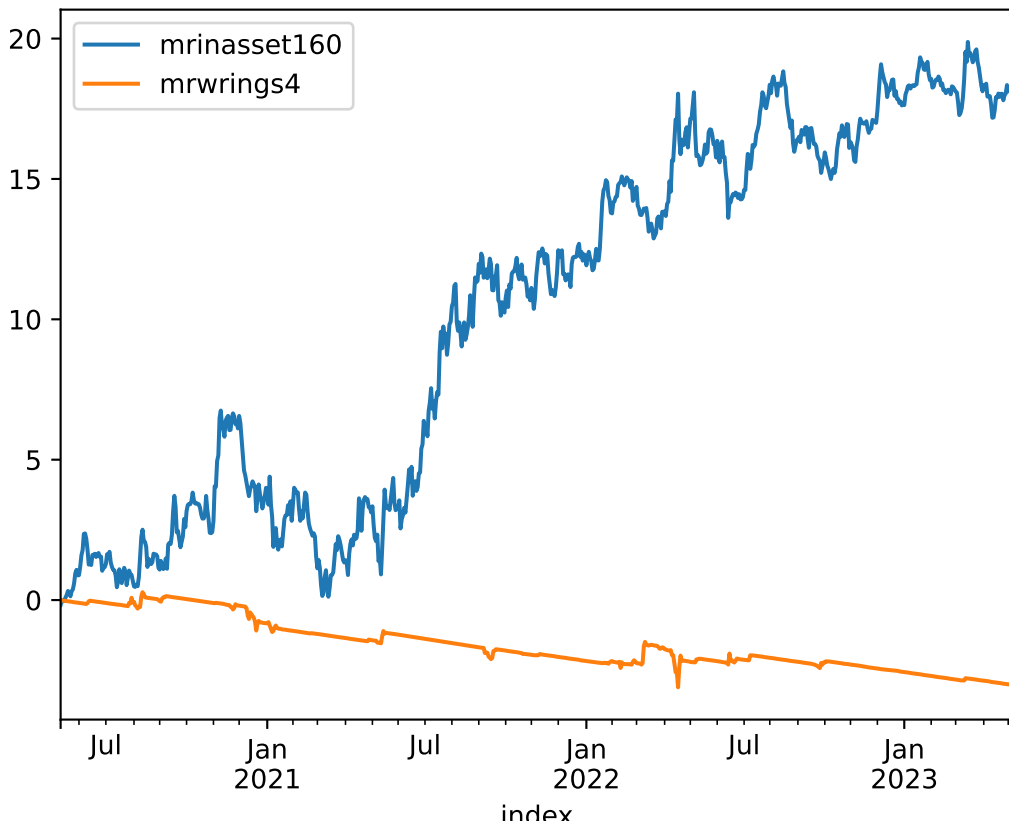
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 1.673, 'mrwrings4': -1.331}
ann. std {'mrinasset160': 4.118, 'mrwrings4': 0.16}
ann. SR {'mrinasset160': 0.41, 'mrwrings4': -8.33}



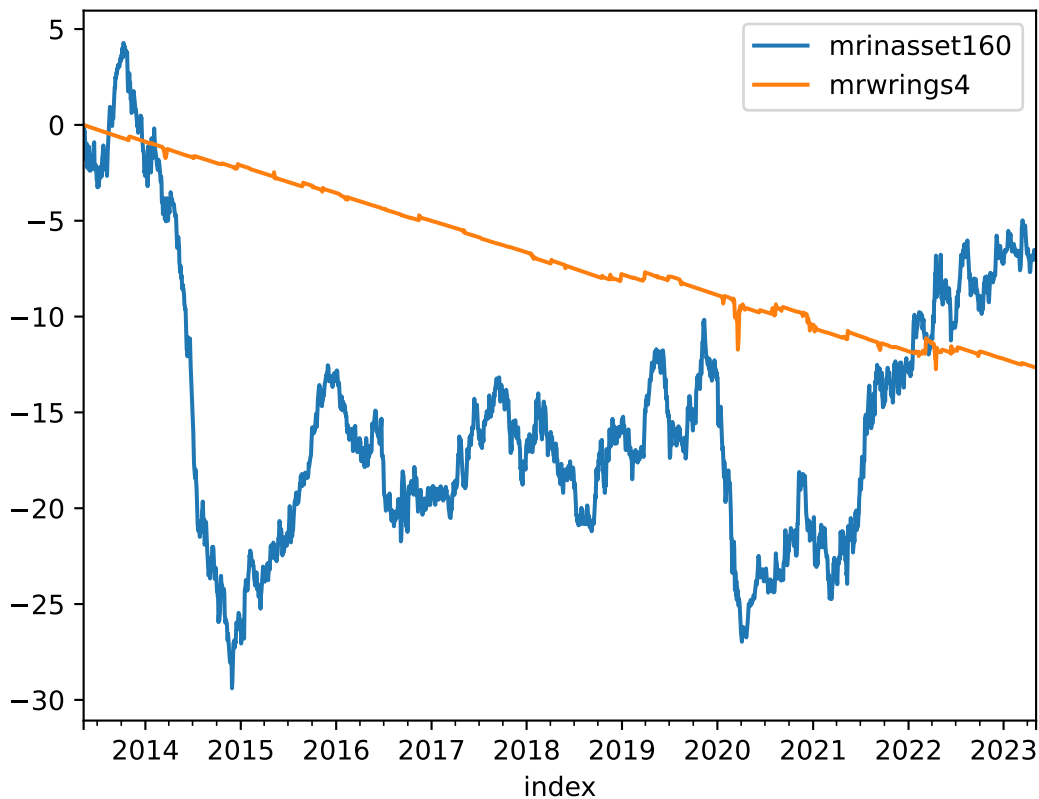
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 1.621, 'mrwrings4': -0.791}
ann. std {'mrinasset160': 4.863, 'mrwrings4': 0.585}
ann. SR {'mrinasset160': 0.33, 'mrwrings4': -1.35}



Total Trading Rule P&L for period '3Y'
ann. mean {'mriasset160': 6.0, 'mrwrings4': -0.992}
ann. std {'mriasset160': 6.264, 'mrwrings4': 1.018}
ann. SR {'mriasset160': 0.96, 'mrwrings4': -0.97}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.646, 'mrwrings4': -1.244}
ann. std {'mrinasset160': 6.195, 'mrwrings4': 0.879}
ann. SR {'mrinasset160': -0.1, 'mrwrings4': -1.41}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.556, 'mrwrings4': -2.159}
ann. std {'mrinasset160': 9.865, 'mrwrings4': 2.087}
ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.03}

