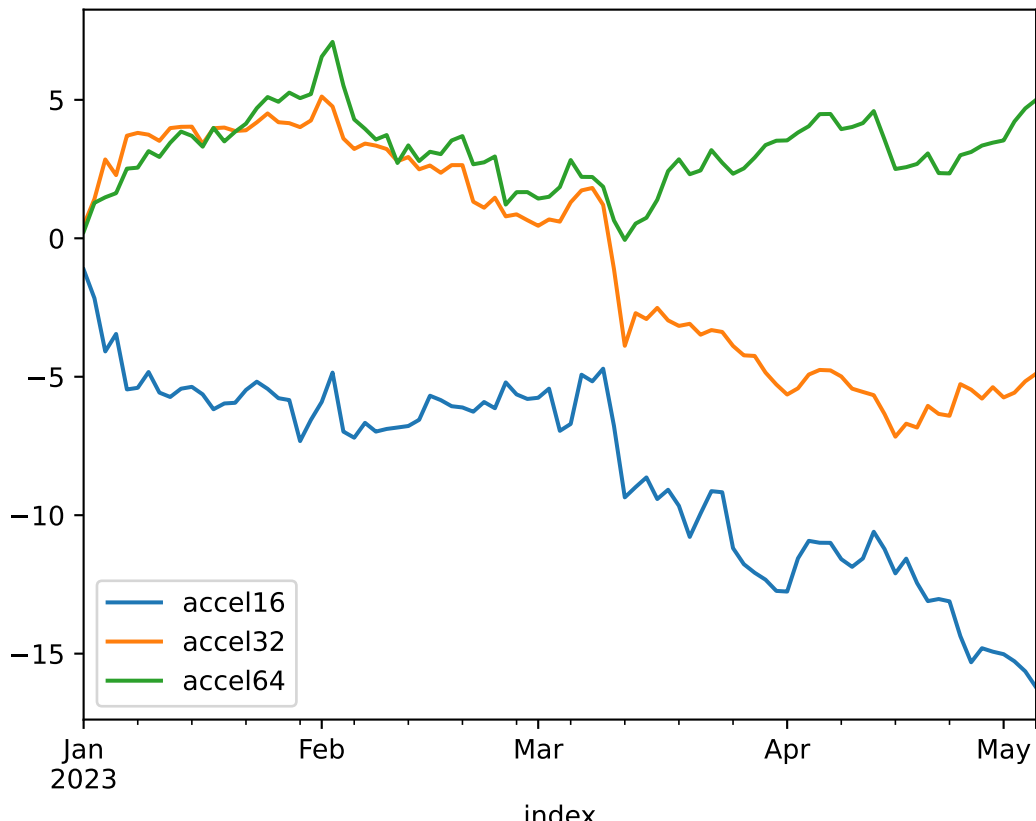
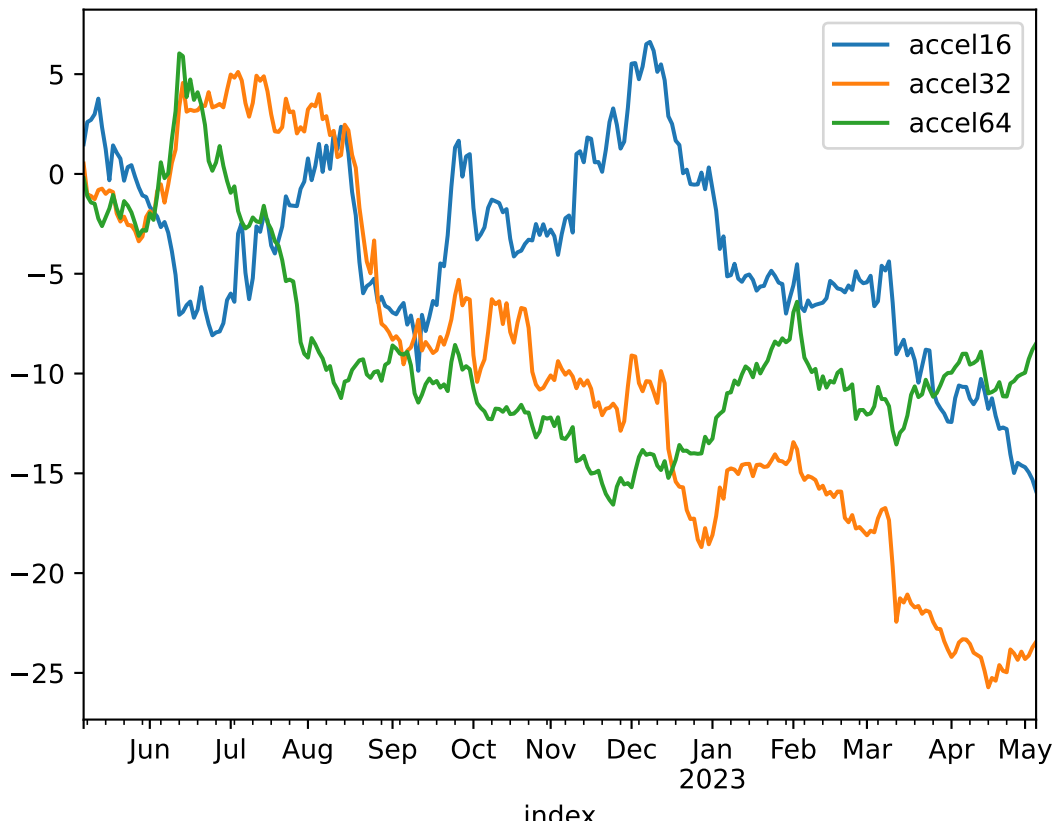


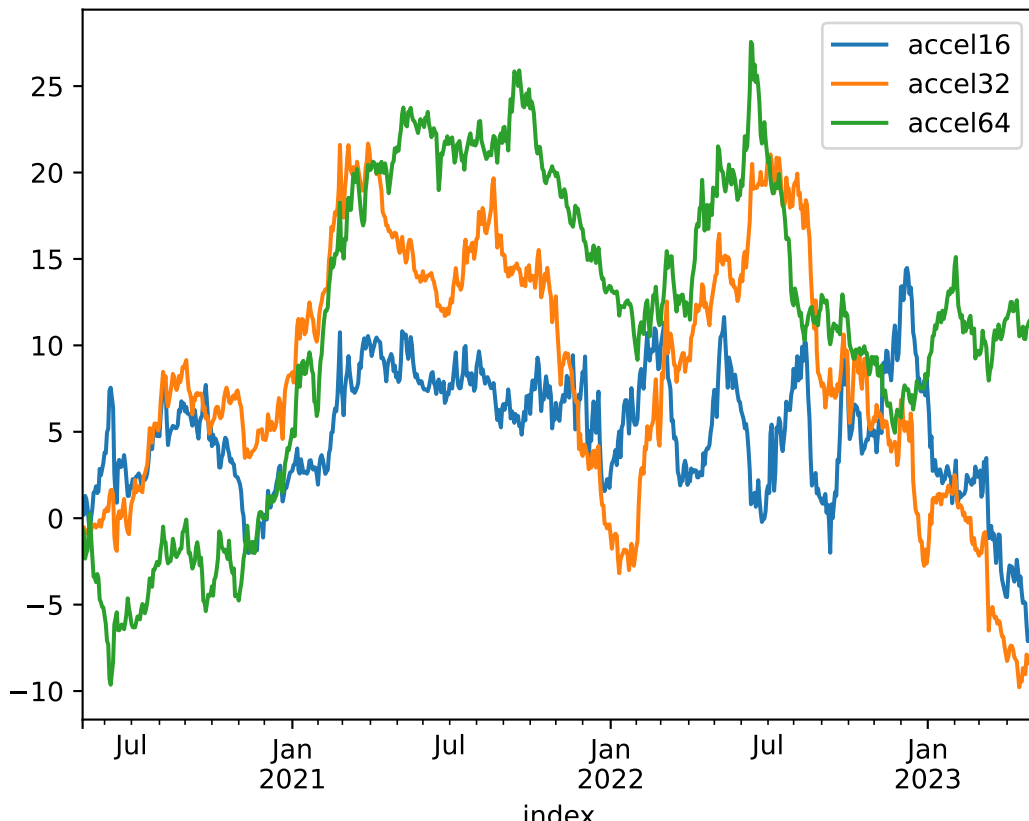
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -46.643, 'accel32': -14.064, 'accel64': 14.377}
ann. std {'accel16': 12.721, 'accel32': 9.947, 'accel64': 9.252}
ann. SR {'accel16': -3.67, 'accel32': -1.41, 'accel64': 1.55}



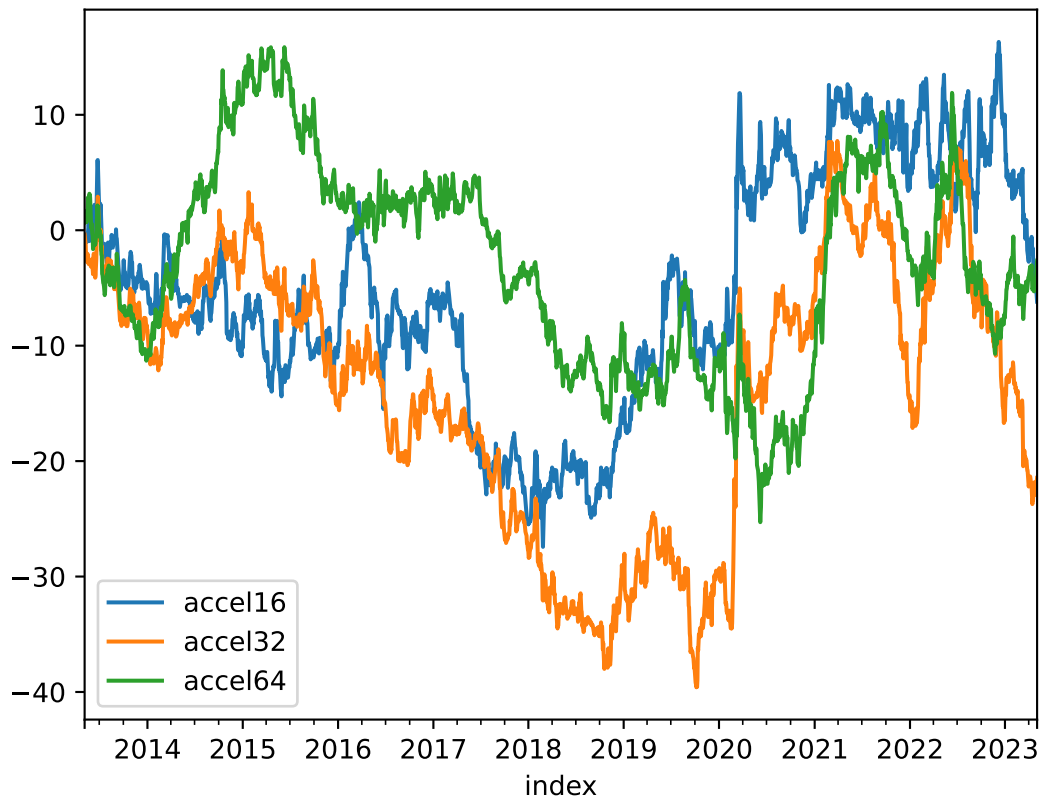
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -15.644, 'accel32': -23.086, 'accel64': -8.367}
ann. std {'accel16': 15.864, 'accel32': 12.896, 'accel64': 10.293}
ann. SR {'accel16': -0.99, 'accel32': -1.79, 'accel64': -0.81}



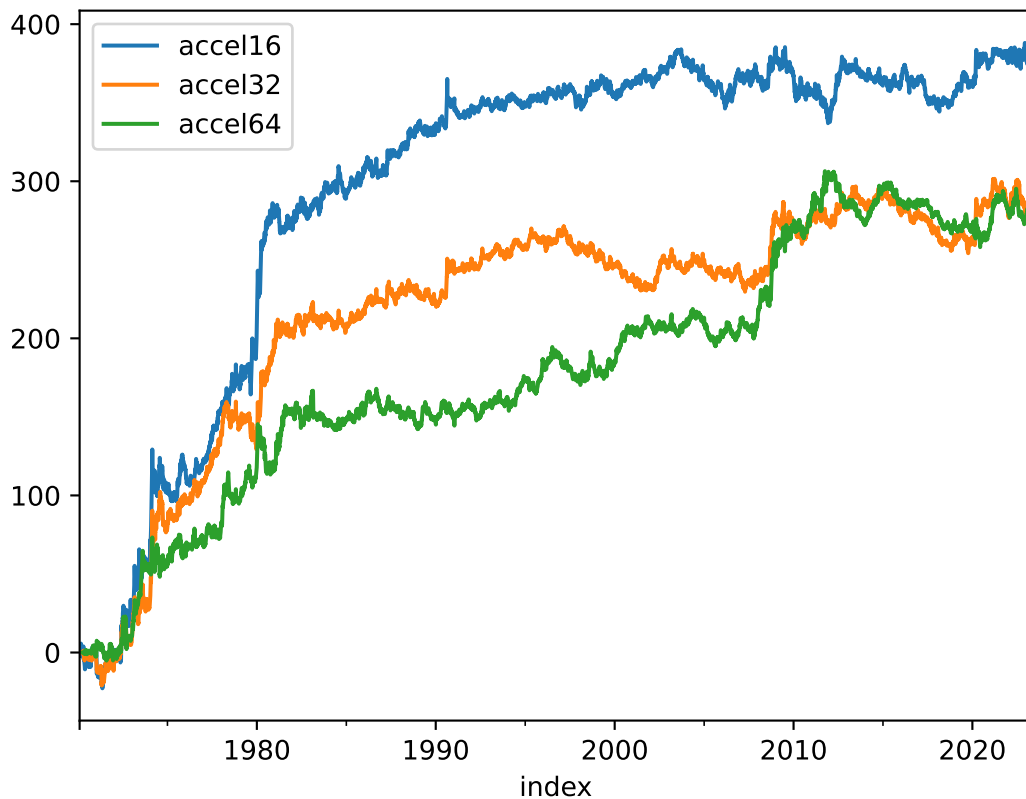
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -2.626, 'accel32': -2.458, 'accel64': 4.262}
ann. std {'accel16': 13.551, 'accel32': 11.73, 'accel64': 10.541}
ann. SR {'accel16': -0.19, 'accel32': -0.21, 'accel64': 0.4}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': -0.607, 'accel32': -2.105, 'accel64': -0.259}
ann. std {'accel16': 11.691, 'accel32': 10.664, 'accel64': 9.326}
ann. SR {'accel16': -0.05, 'accel32': -0.2, 'accel64': -0.03}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.736, 'accel32': 5.019, 'accel64': 5.172}
ann. std {'accel16': 14.128, 'accel32': 12.452, 'accel64': 12.101}
ann. SR {'accel16': 0.48, 'accel32': 0.4, 'accel64': 0.43}

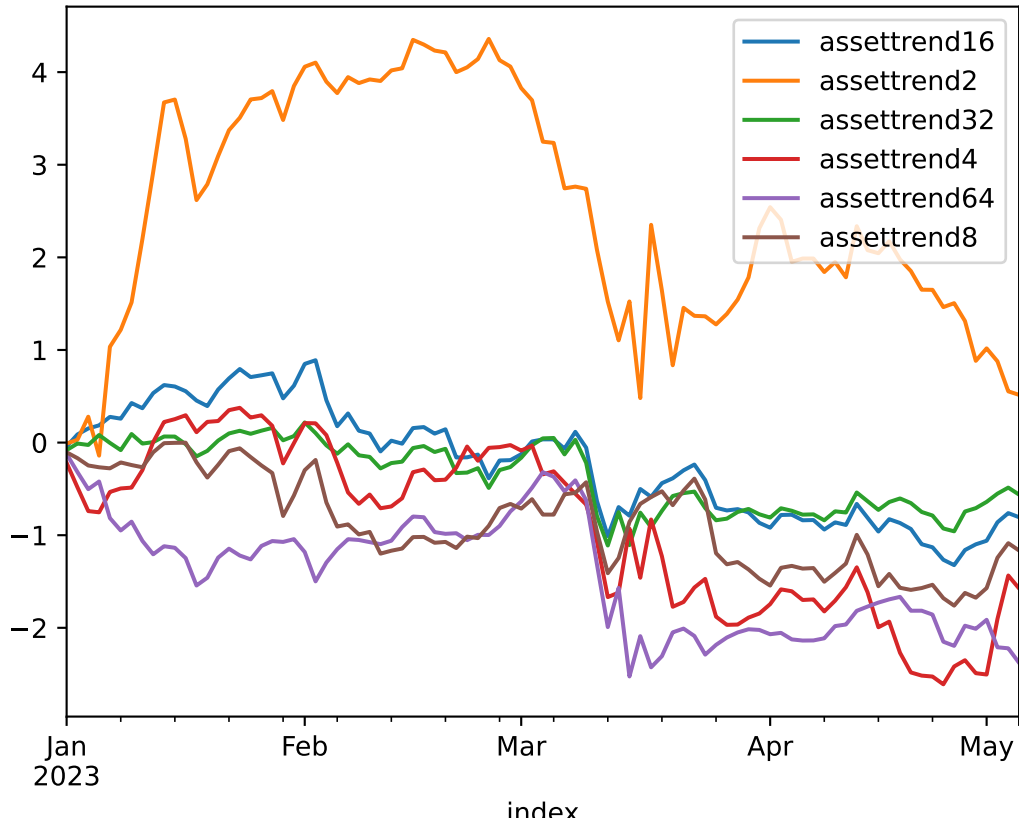


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': -2.318, 'assettrend2': 1.482, 'assettrend32': -1.616, 'assettrend4': -4.531, 'assettrend64': -6.841, 'assettrend8': -3.352}

ann. std {'assettrend16': 2.505, 'assettrend2': 6.422, 'assettrend32': 2.252, 'assettrend4': 3.767, 'assettrend64': 3.303, 'assettrend8': 2.884}

ann. SR {'assettrend16': -0.93, 'assettrend2': 0.23, 'assettrend32': -0.72, 'assettrend4': -1.2, 'assettrend64': -2.07, 'assettrend8': -1.16}

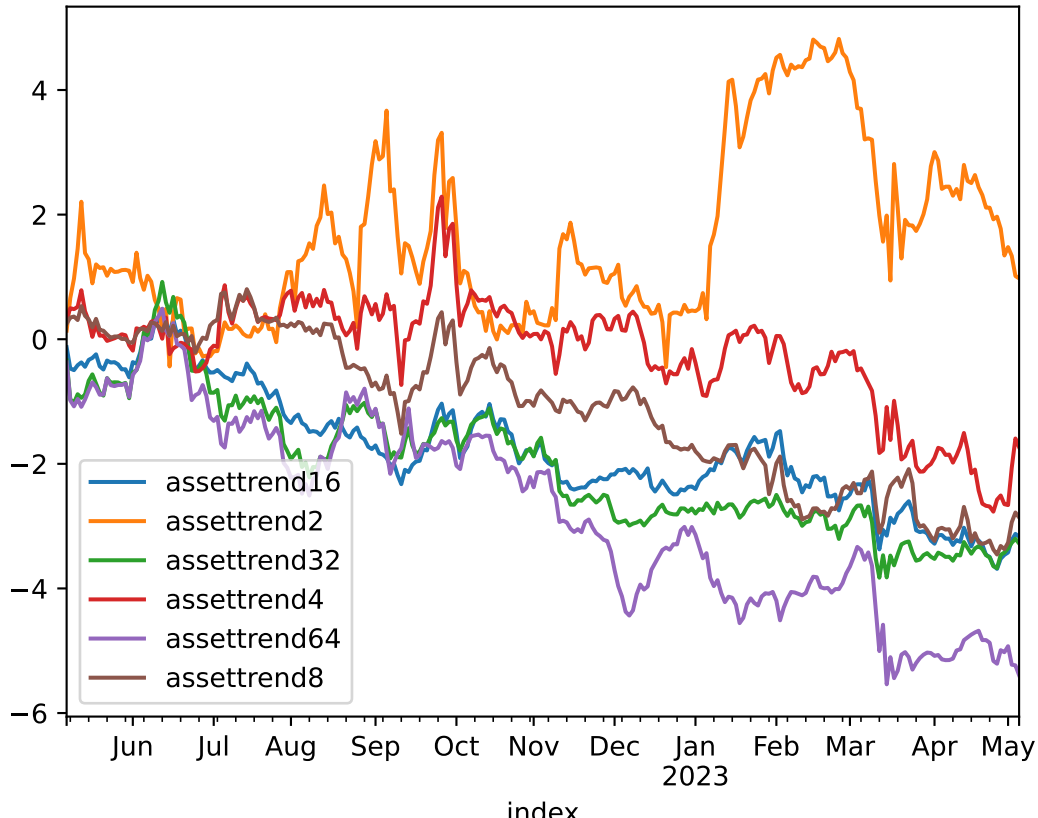


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': -3.12, 'assettrend2': 0.962, 'assettrend32': -3.228, 'assettrend4': -1.706, 'assettrend64': -5.309, 'assettrend8': -2.816}

ann. std {'assettrend16': 2.236, 'assettrend2': 6.234, 'assettrend32': 2.55, 'assettrend4': 3.915, 'assettrend64': 3.139, 'assettrend8': 2.653}

ann. SR {'assettrend16': -1.4, 'assettrend2': 0.15, 'assettrend32': -1.27, 'assettrend4': -0.44, 'assettrend64': -1.69, 'assettrend8': -1.06}

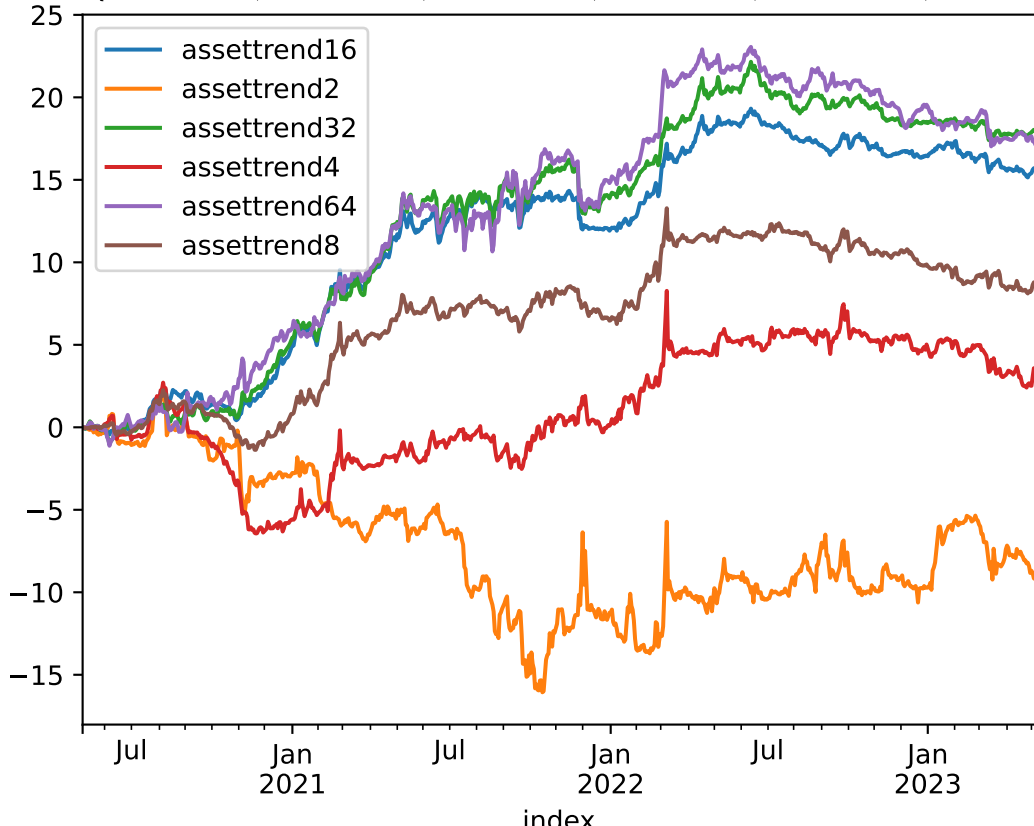


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 5.127, 'assettrend2': -3.01, 'assettrend32': 5.878, 'assettrend4': 1.127, 'assettrend64': 5.623, 'assettrend8': 2.851}

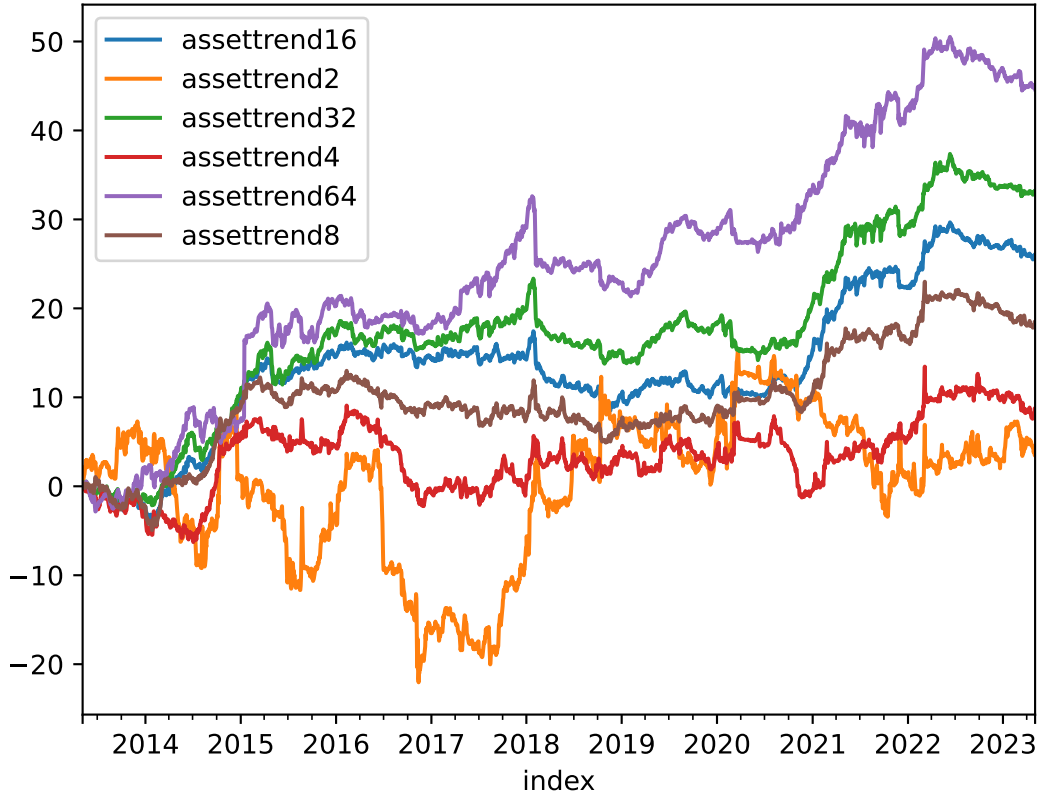
ann. std {'assettrend16': 3.408, 'assettrend2': 7.802, 'assettrend32': 4.121, 'assettrend4': 4.964, 'assettrend64': 5.001, 'assettrend8': 3.524}

ann. SR {'assettrend16': 1.5, 'assettrend2': -0.39, 'assettrend32': 1.43, 'assettrend4': 0.23, 'assettrend64': 1.12, 'assettrend8': 0.81}



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

ann. mean {'assettrend16': 2.553, 'assettrend2': 0.338, 'assettrend32': 3.254, 'assettrend4': 0.846, 'assettrend64': 4.38, 'assettrend8': 1.808}
ann. std {'assettrend16': 3.15, 'assettrend2': 9.768, 'assettrend32': 3.587, 'assettrend4': 4.972, 'assettrend64': 5.188, 'assettrend8': 3.451}
ann. SR {'assettrend16': 0.81, 'assettrend2': 0.03, 'assettrend32': 0.91, 'assettrend4': 0.17, 'assettrend64': 0.84, 'assettrend8': 0.52}

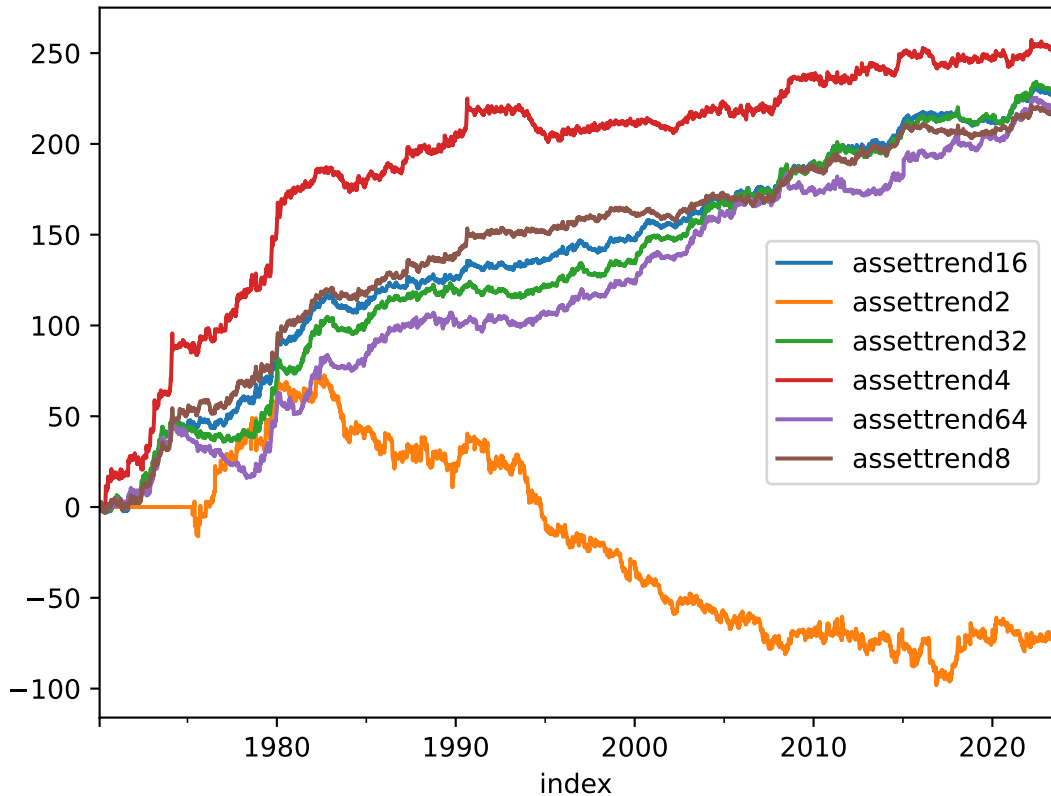


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.191, 'assettrend2': -1.34, 'assettrend32': 4.239, 'assettrend4': 4.652, 'assettrend64': 4.046, 'assettrend8': 3.993}

ann. std {'assettrend16': 4.303, 'assettrend2': 10.257, 'assettrend32': 4.494, '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}

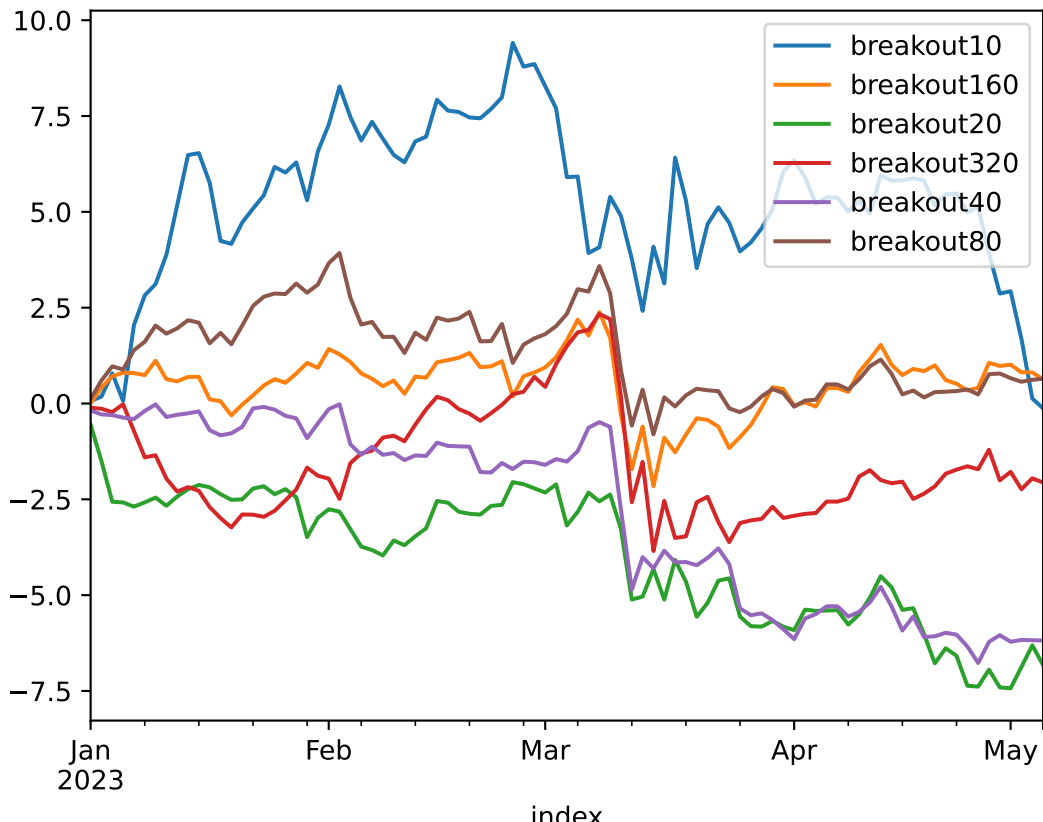


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': -0.37, 'breakout160': 1.817, 'breakout20': -19.624, 'breakout320': -5.932, 'breakout40': -17.784, 'breakout80': 1.859}

ann. std {'breakout10': 14.086, 'breakout160': 7.675, 'breakout20': 7.772, 'breakout320': 9.445, 'breakout40': 7.187, 'breakout80': 7.672}

ann. SR {'breakout10': -0.03, 'breakout160': 0.24, 'breakout20': -2.52, 'breakout320': -0.63, 'breakout40': -2.47, 'breakout80': 0.24}

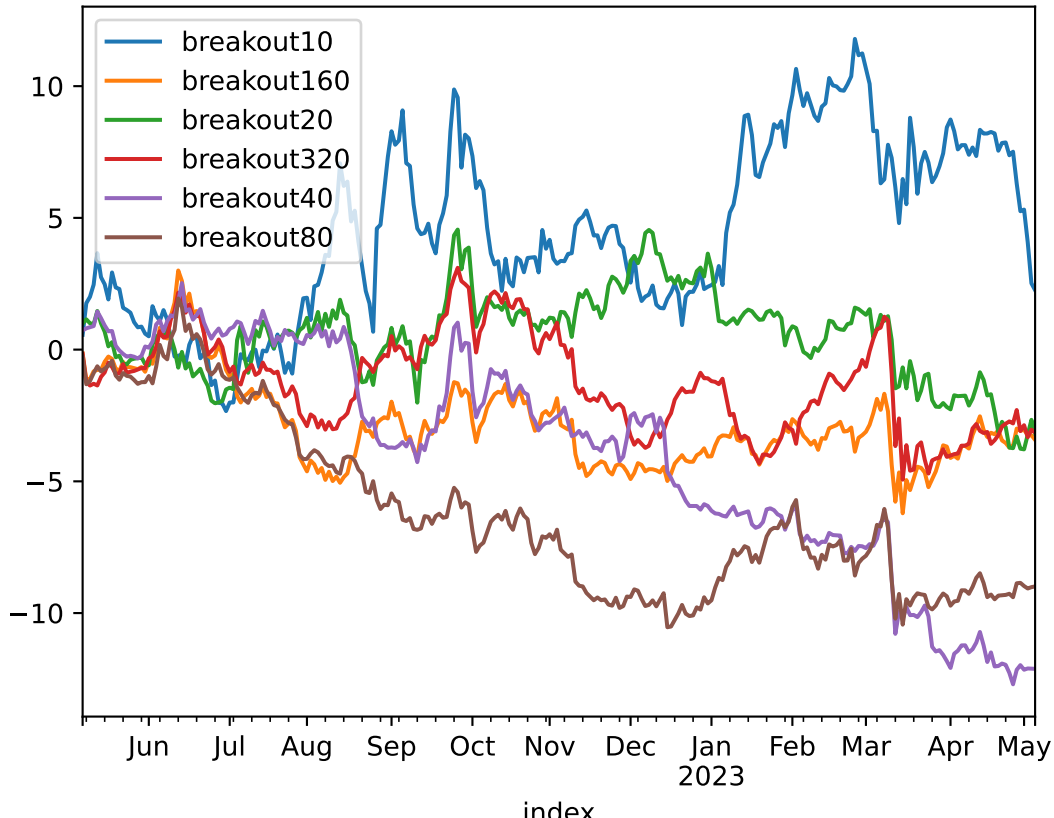


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 2.222, 'breakout160': -3.375, 'breakout20': -3.129, 'breakout320': -3.101, 'breakout40': -11.93, 'breakout80': -8.85}

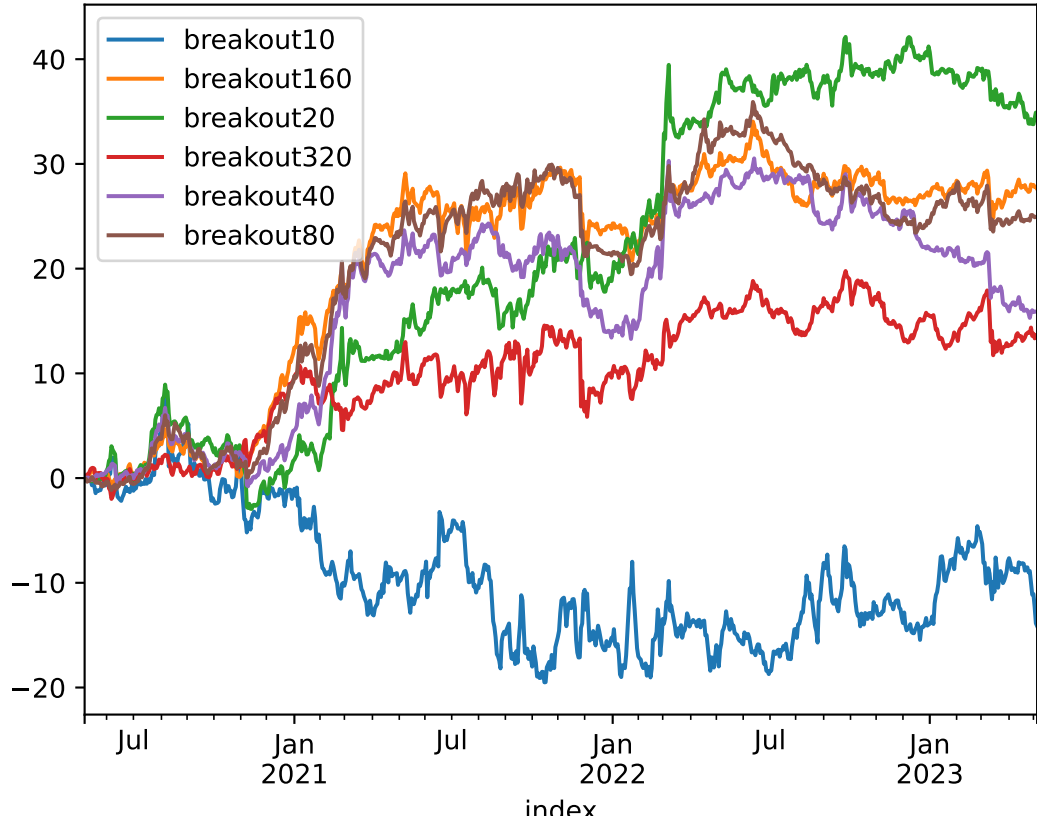
ann. std {'breakout10': 13.292, 'breakout160': 6.935, 'breakout20': 8.436, 'breakout320': 7.582, 'breakout40': 7.135, 'breakout80': 6.556}

ann. SR {'breakout10': 0.17, 'breakout160': -0.49, 'breakout20': -0.37, 'breakout320': -0.41, 'breakout40': -1.67, 'breakout80': -1.35}



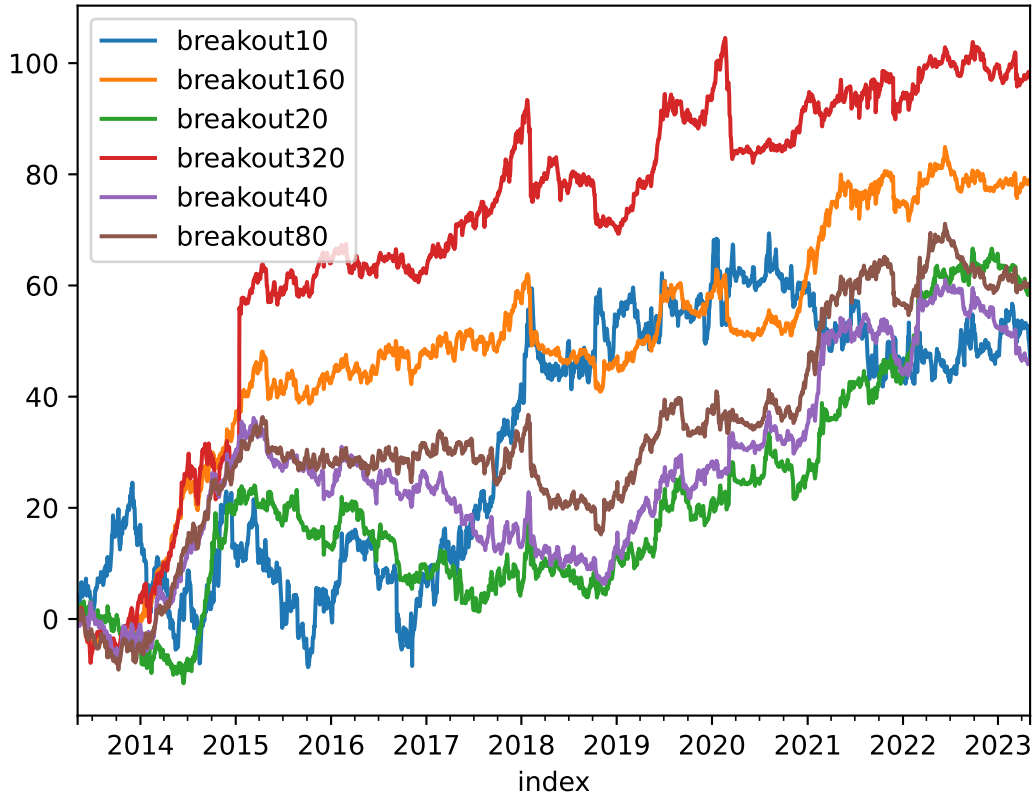
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -4.625, 'breakout160': 9.039, 'breakout20': 11.259, 'breakout320': 4.425, 'breakout40': 5.2, 'breakout80': 8.18}
 ann. std {'breakout10': 15.072, 'breakout160': 9.178, 'breakout20': 11.058, 'breakout320': 9.908, 'breakout40': 9.476, 'breakout80': 8.903}
 ann. SR {'breakout10': -0.31, 'breakout160': 0.98, 'breakout20': 1.02, 'breakout320': 0.45, 'breakout40': 0.55, 'breakout80': 0.92}



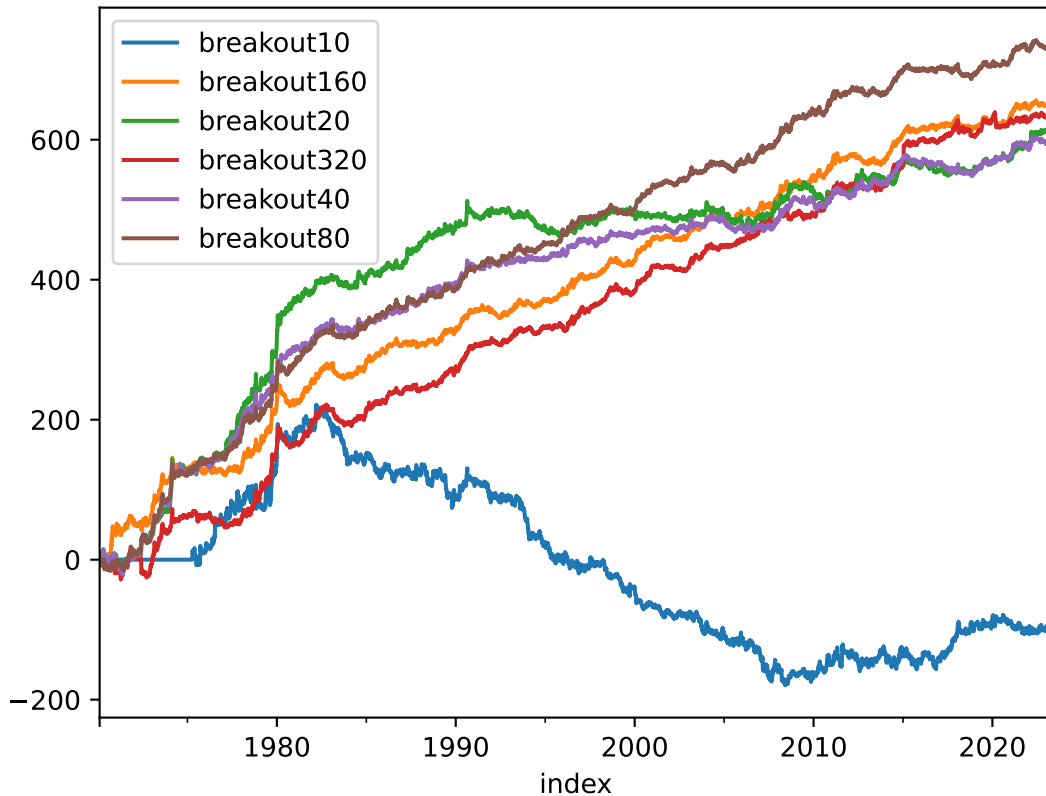
Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 4.632, 'breakout160': 7.702, 'breakout20': 5.781, 'breakout320': 9.573, 'breakout40': 4.553, 'breakout80': 5.906}
ann. std {'breakout10': 17.803, 'breakout160': 8.866, 'breakout20': 11.068, 'breakout320': 13.083, 'breakout40': 9.365, 'breakout80': 8.716}
ann. SR {'breakout10': 0.26, 'breakout160': 0.87, 'breakout20': 0.52, 'breakout320': 0.73, 'breakout40': 0.49, 'breakout80': 0.68}



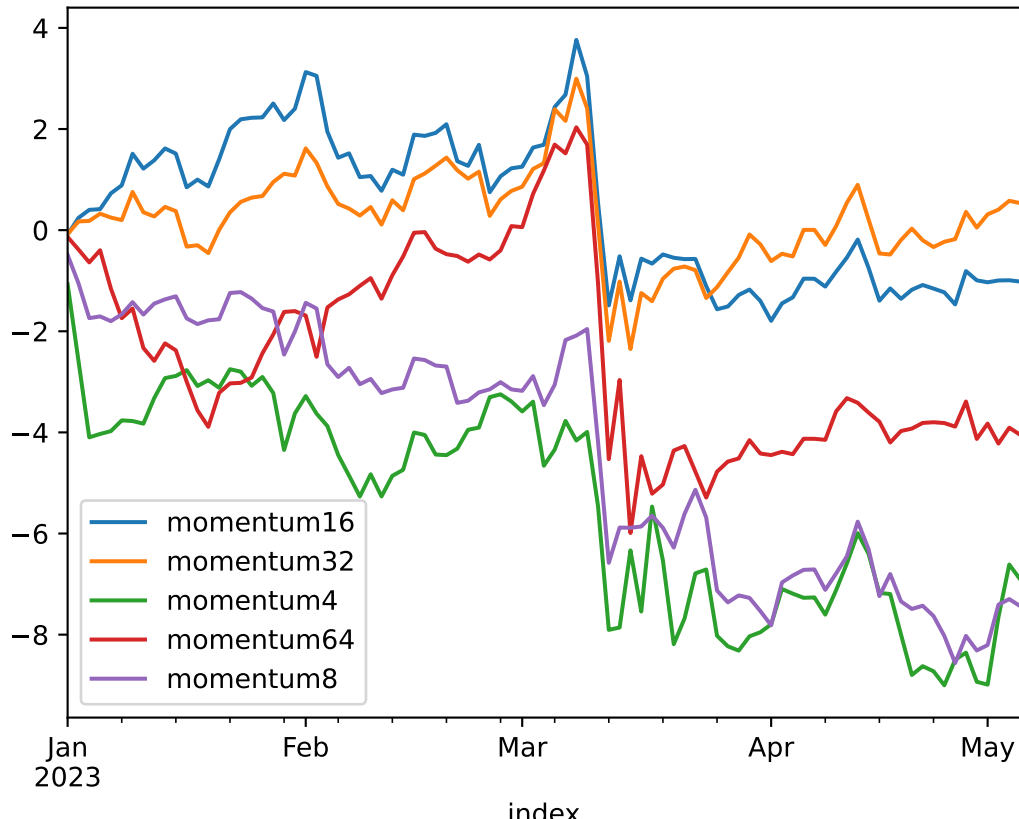
Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -1.86, 'breakout160': 11.979, 'breakout20': 11.175, 'breakout320': 11.651, 'breakout40': 10.842, 'breakout80': 13.482}
ann. std {'breakout10': 21.316, 'breakout160': 11.526, 'breakout20': 14.887, 'breakout320': 12.112, 'breakout40': 12.109, 'breakout80': 11.714}
ann. SR {'breakout10': -0.09, 'breakout160': 1.04, 'breakout20': 0.75, 'breakout320': 0.96, 'breakout40': 0.9, 'breakout80': 1.15}



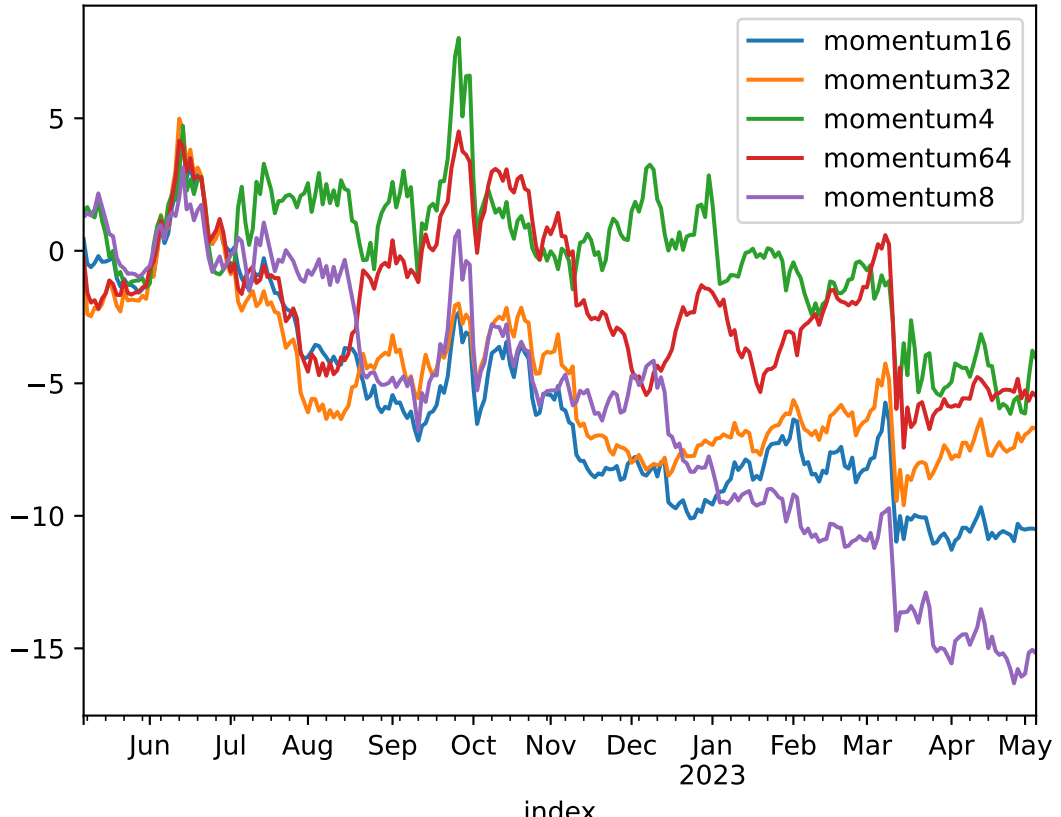
Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': -2.924, 'momentum32': 1.539, 'momentum4': -19.859, 'momentum64': -11.637, 'momentum8': -21.385}
 ann. std {'momentum16': 8.553, 'momentum32': 8.567, 'momentum4': 11.223, 'momentum64': 11.5, 'momentum8': 8.663}
 ann. SR {'momentum16': -0.34, 'momentum32': 0.18, 'momentum4': -1.77, 'momentum64': -1.01, 'momentum8': -2.47}



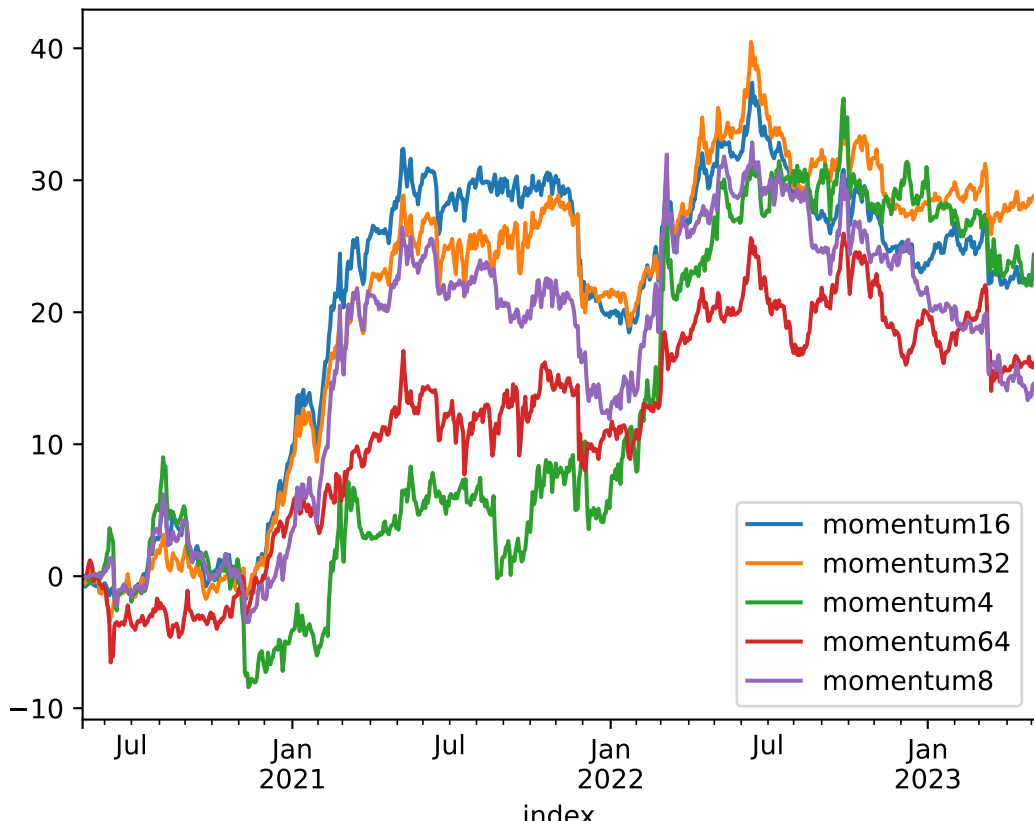
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -10.344, 'momentum32': -6.611, 'momentum4': -3.994, 'momentum64': -5.401, 'momentum8': -14.957}
ann. std {'momentum16': 8.53, 'momentum32': 9.024, 'momentum4': 13.232, 'momentum64': 10.223, 'momentum8': 9.815}
ann. SR {'momentum16': -1.21, 'momentum32': -0.73, 'momentum4': -0.3, 'momentum64': -0.53, 'momentum8': -1.52}



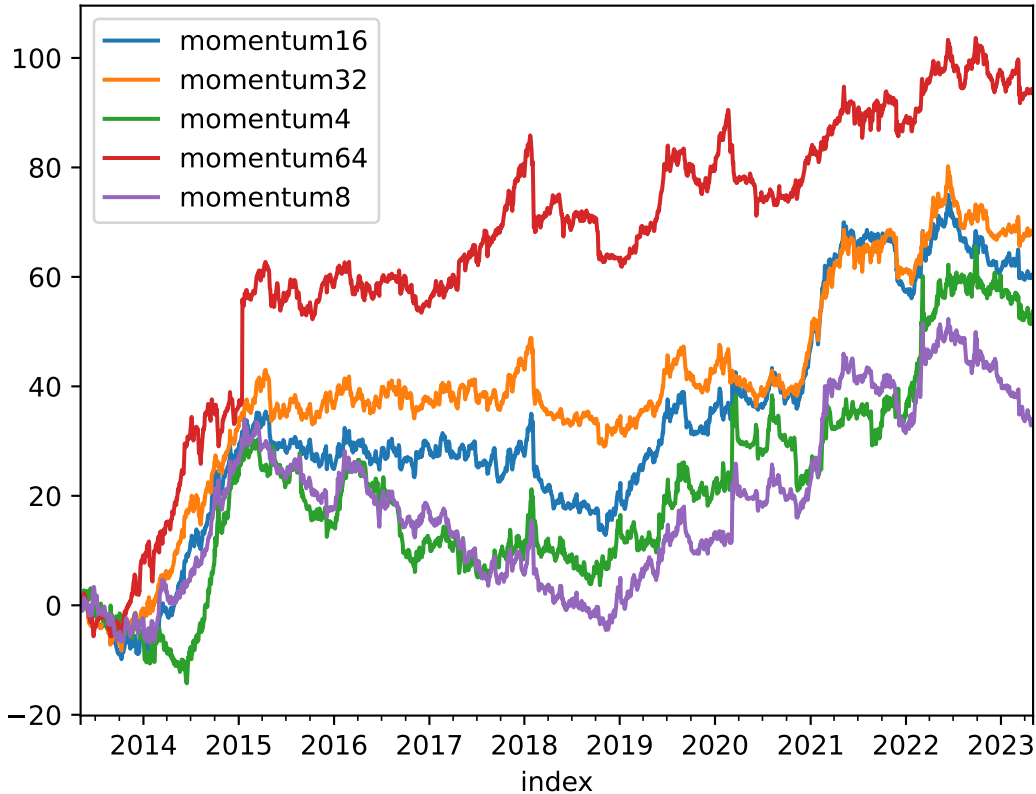
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 7.405, 'momentum32': 9.423, 'momentum4': 7.891, 'momentum64': 5.23, 'momentum8': 4.732}
ann. std {'momentum16': 10.121, 'momentum32': 10.378, 'momentum4': 14.659, 'momentum64': 10.826, 'momentum8': 11.423}
ann. SR {'momentum16': 0.73, 'momentum32': 0.91, 'momentum4': 0.54, 'momentum64': 0.48, 'momentum8': 0.41}



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

ann. mean {'momentum16': 5.91, 'momentum32': 6.724, 'momentum4': 5.246, 'momentum64': 9.191, 'momentum8': 3.335}
ann. std {'momentum16': 9.64, 'momentum32': 9.267, 'momentum4': 13.674, 'momentum64': 11.871, 'momentum8': 10.841}
ann. SR {'momentum16': 0.61, 'momentum32': 0.73, 'momentum4': 0.38, 'momentum64': 0.77, 'momentum8': 0.31}

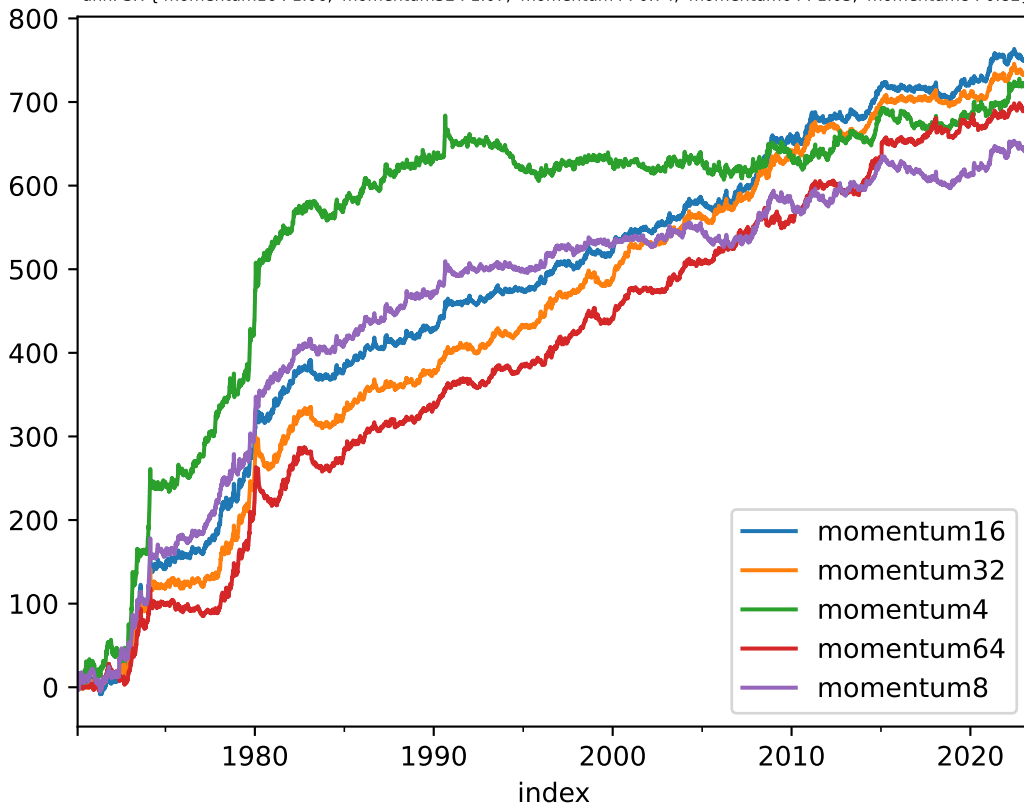


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.797, 'momentum32': 13.528, 'momentum4': 13.189, 'momentum64': 12.692, 'momentum8': 11.708}

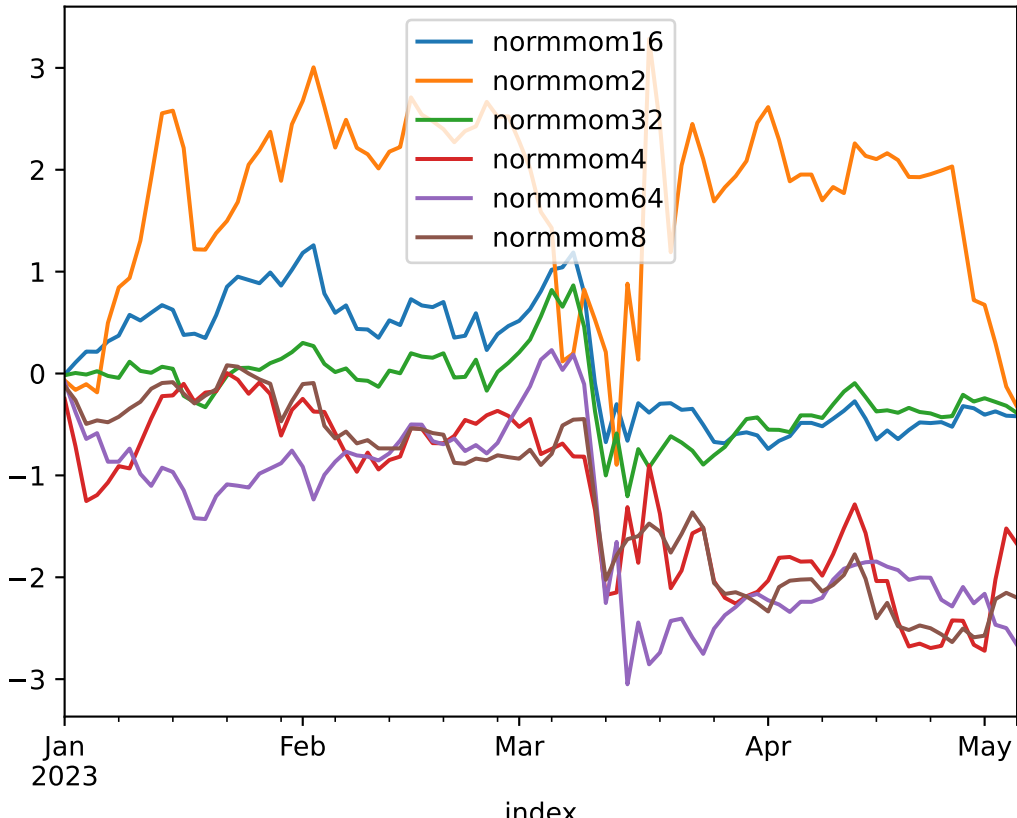
ann. std {'momentum16': 13.043, 'momentum32': 12.607, 'momentum4': 17.89, 'momentum64': 12.328, 'momentum8': 14.328}

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': -1.207, 'normmom2': -0.939, 'normmom32': -1.116, 'normmom4': -4.815, 'normmom64': -7.665, 'normmom8': -6.329}
 ann. std {'normmom16': 3.07, 'normmom2': 8.955, 'normmom32': 3.008, 'normmom4': 4.641, 'normmom64': 4.485, 'normmom8': 3.068}
 ann. SR {'normmom16': -0.39, 'normmom2': -0.1, 'normmom32': -0.37, 'normmom4': -1.04, 'normmom64': -1.71, 'normmom8': -2.06}

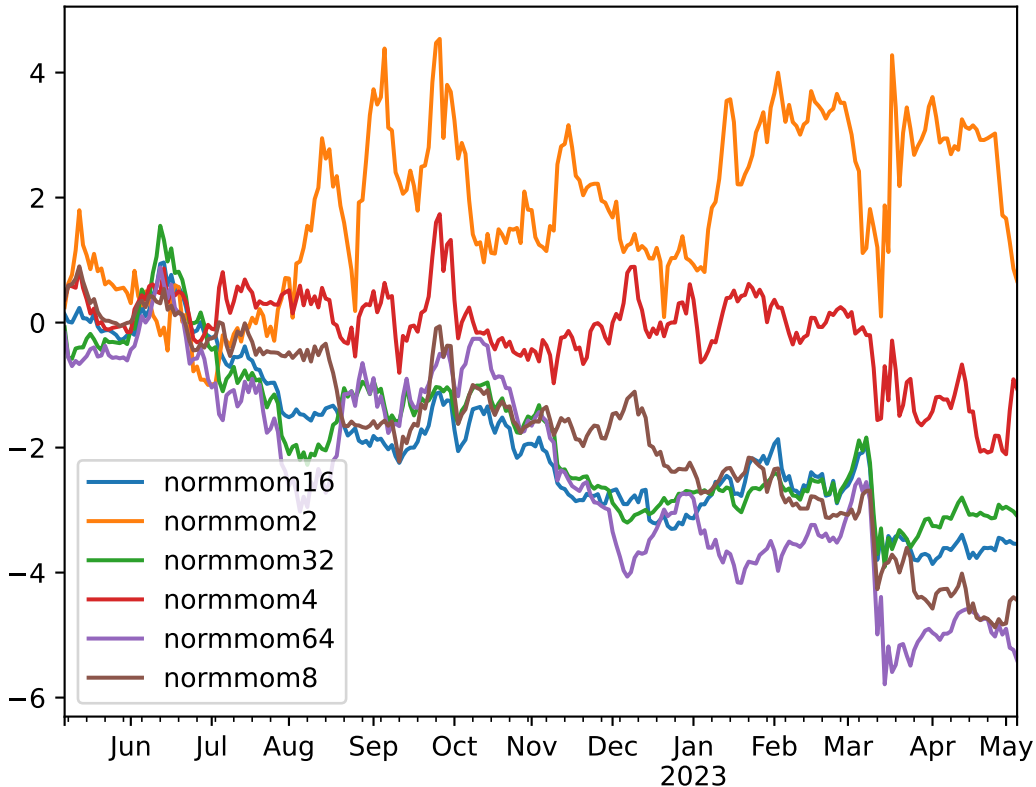


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -3.488, 'normmom2': 0.657, 'normmom32': -3.045, 'normmom4': -1.043, 'normmom64': -5.318, 'normmom8': -4.373}

ann. std {'normmom16': 2.532, 'normmom2': 7.479, 'normmom32': 2.857, 'normmom4': 4.324, 'normmom64': 3.813, 'normmom8': 2.922}

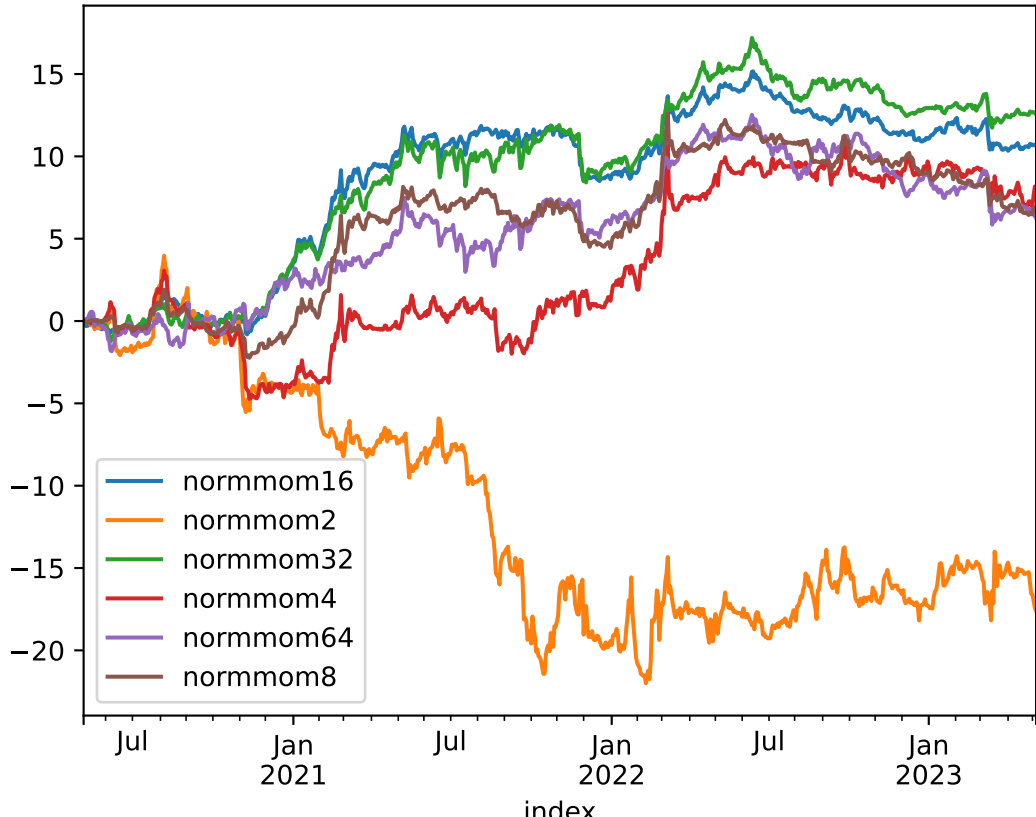
ann. SR {'normmom16': -1.38, 'normmom2': 0.09, 'normmom32': -1.07, 'normmom4': -0.24, 'normmom64': -1.39, 'normmom8': -1.5}



index

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

ann. mean {'normmom16': 3.49, 'normmom2': -5.765, 'normmom32': 4.11, 'normmom4': 2.625, 'normmom64': 2.043, 'normmom8': 2.25}
ann. std {'normmom16': 3.507, 'normmom2': 8.631, 'normmom32': 3.876, 'normmom4': 5.394, 'normmom64': 4.275, 'normmom8': 3.933}
ann. SR {'normmom16': 1.0, 'normmom2': -0.67, 'normmom32': 1.06, 'normmom4': 0.49, 'normmom64': 0.48, 'normmom8': 0.57}

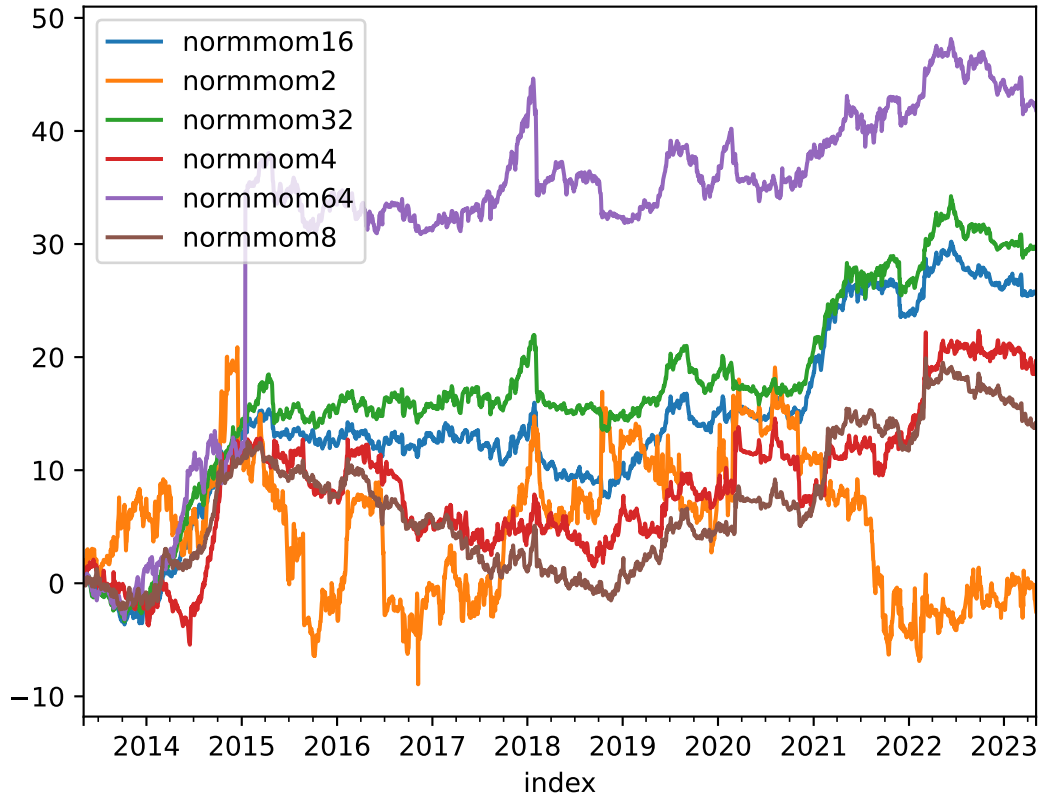


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.523, 'normmom2': -0.244, 'normmom32': 2.904, 'normmom4': 1.917, 'normmom64': 4.107, 'normmom8': 1.39}

ann. std {'normmom16': 3.459, 'normmom2': 10.313, 'normmom32': 3.62, 'normmom4': 5.447, 'normmom64': 8.27, 'normmom8': 3.875}

ann. SR {'normmom16': 0.73, 'normmom2': -0.02, 'normmom32': 0.8, 'normmom4': 0.35, 'normmom64': 0.5, 'normmom8': 0.36}

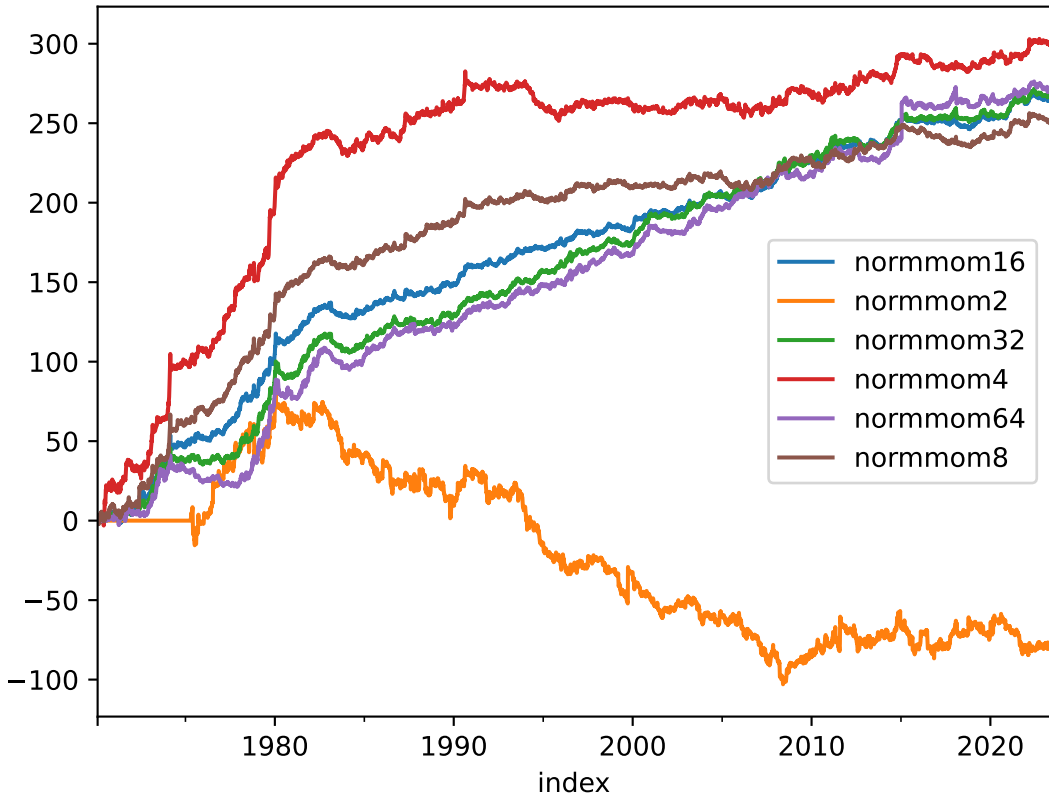


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.871, 'normmom2': -1.478, 'normmom32': 4.921, 'normmom4': 5.532, 'normmom64': 4.975, 'normmom8': 4.618}

ann. std {'normmom16': 4.531, 'normmom2': 11.608, 'normmom32': 4.608, 'normmom4': 7.383, 'normmom64': 5.869, 'normmom8': 5.364}

ann. SR {'normmom16': 1.08, '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': -4.995, 'relmomentum20': -13.1, 'relmomentum40': 15.361, 'relmomentum80': 12.085}

ann. std {'relmomentum10': 7.894, 'relmomentum20': 6.53, 'relmomentum40': 5.31, 'relmomentum80': 4.3}

ann. SR {'relmomentum10': -0.63, 'relmomentum20': -2.01, 'relmomentum40': 2.89, 'relmomentum80': 2.81}

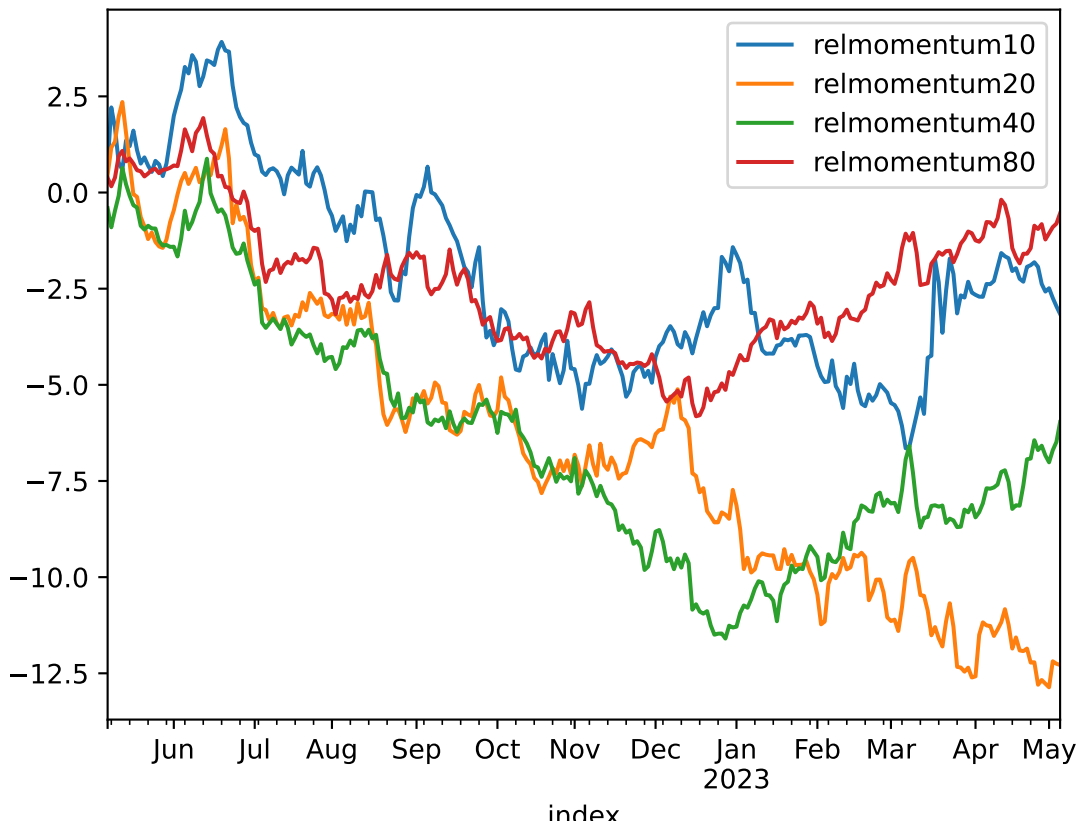


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -3.108, 'relmomentum20': -12.095, 'relmomentum40': -5.877, 'relmomentum80': -0.533}

ann. std {'relmomentum10': 7.428, 'relmomentum20': 6.46, 'relmomentum40': 5.302, 'relmomentum80': 4.514}

ann. SR {'relmomentum10': -0.42, 'relmomentum20': -1.87, 'relmomentum40': -1.11, 'relmomentum80': -0.12}

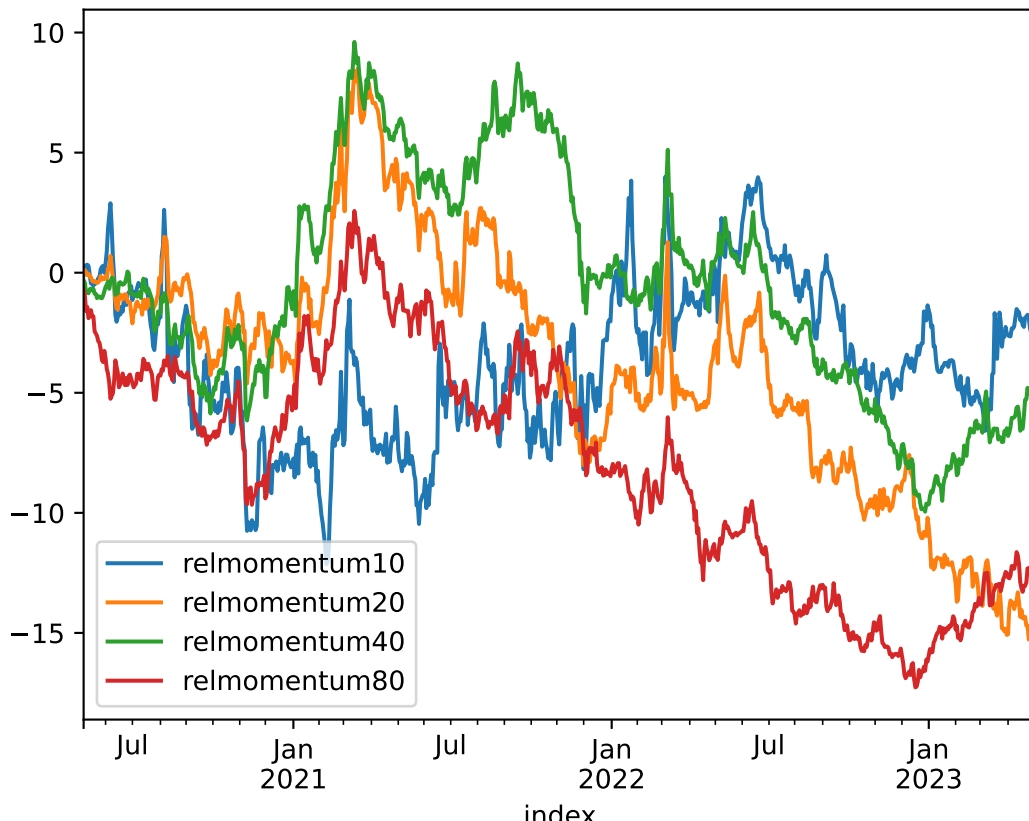


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -1.013, 'relmomentum20': -4.832, 'relmomentum40': -1.415, 'relmomentum80': -3.925}

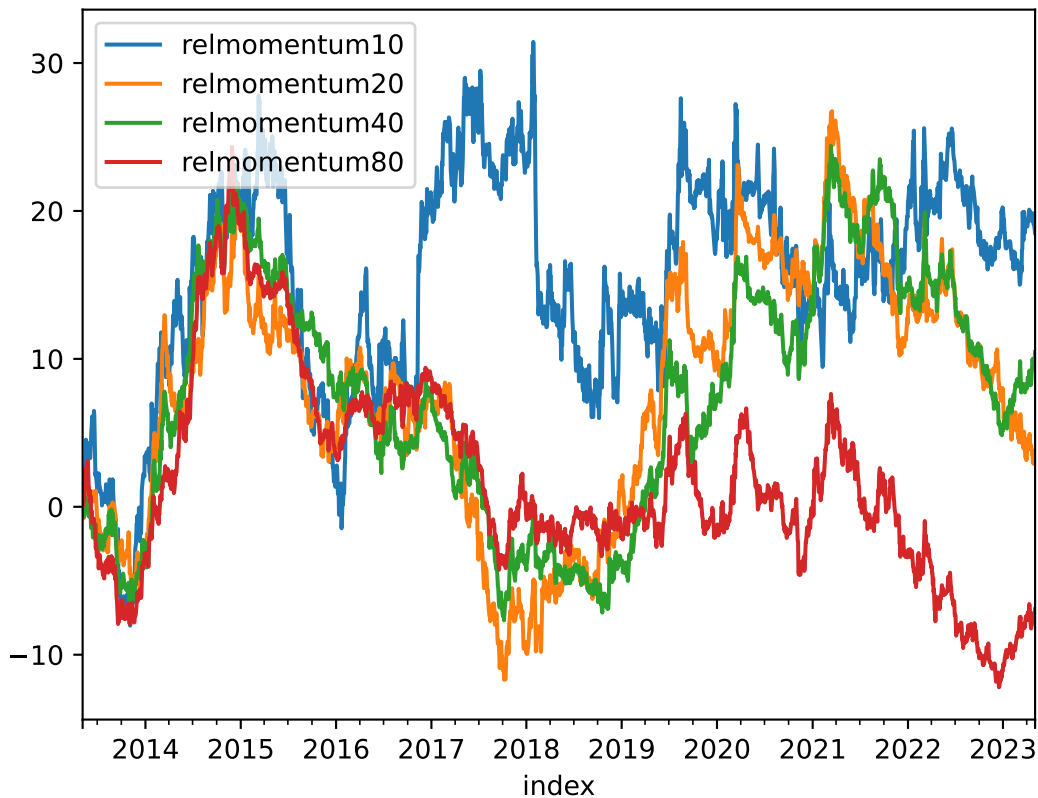
ann. std {'relmomentum10': 11.907, 'relmomentum20': 8.339, 'relmomentum40': 6.947, 'relmomentum80': 6.332}

ann. SR {'relmomentum10': -0.09, 'relmomentum20': -0.58, 'relmomentum40': -0.2, 'relmomentum80': -0.62}

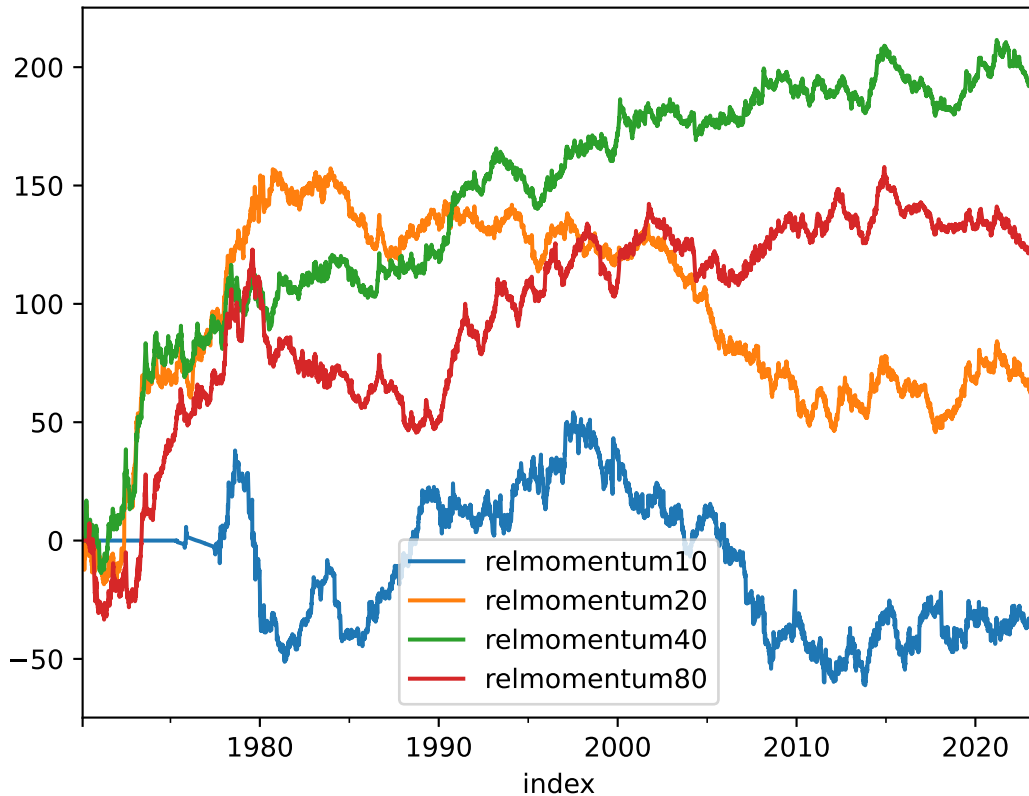


Total Trading Rule P&L for period '10Y'

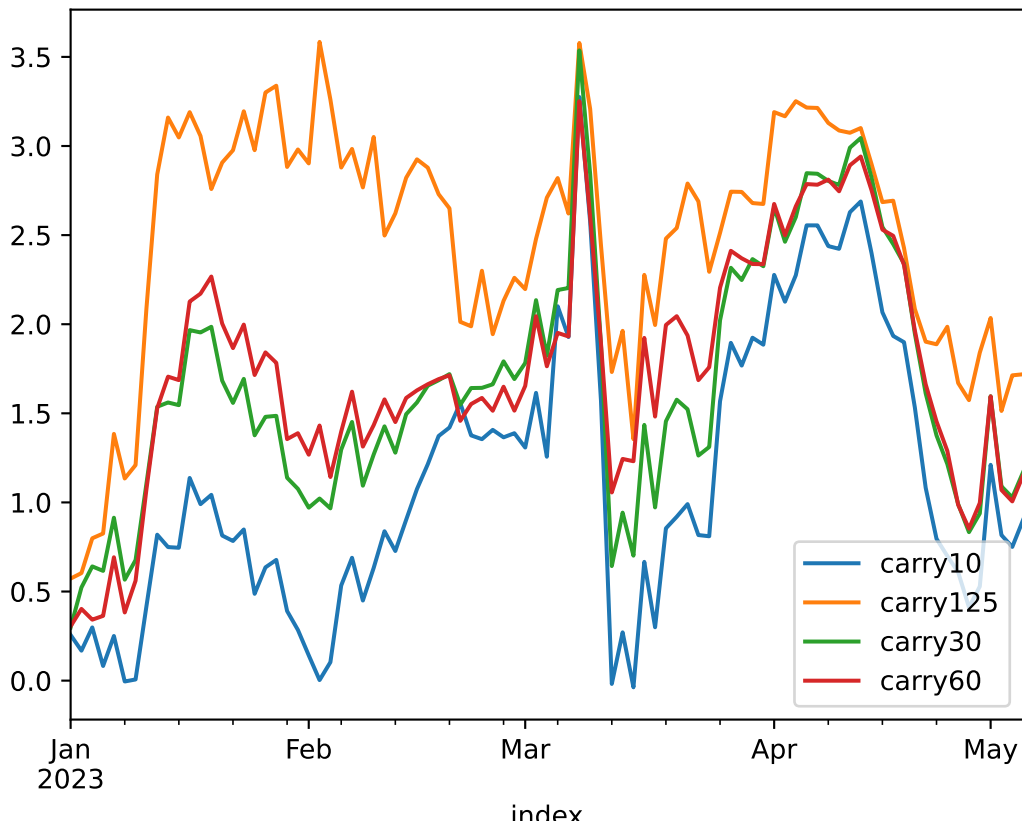
ann. mean {'relmomentum10': 1.816, 'relmomentum20': 0.341, 'relmomentum40': 1.027, 'relmomentum80': -0.68}
ann. std {'relmomentum10': 13.389, 'relmomentum20': 8.537, 'relmomentum40': 6.993, 'relmomentum80': 6.375}
ann. SR {'relmomentum10': 0.14, 'relmomentum20': 0.04, 'relmomentum40': 0.15, 'relmomentum80': -0.11}



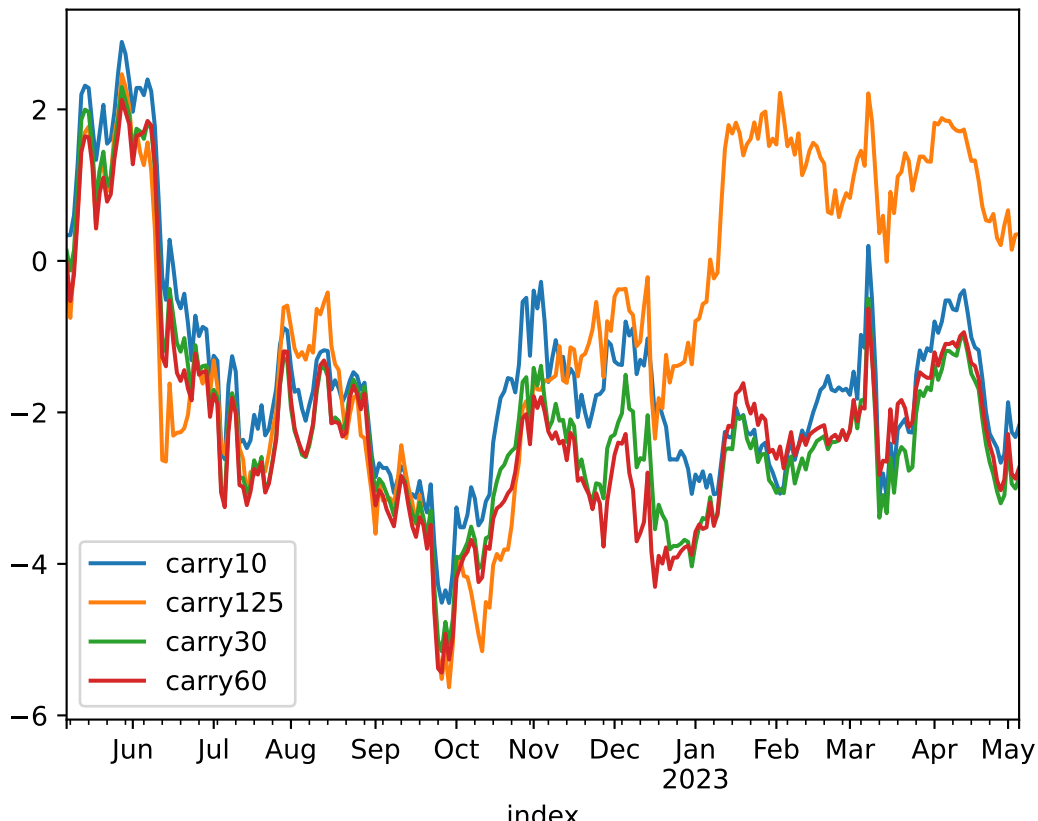
Total Trading Rule P&L for period '99Y'
ann. mean {'relmomentum10': -0.638, 'relmomentum20': 1.123, 'relmomentum40': 3.641, 'relmomentum80': 2.333}
ann. std {'relmomentum10': 13.387, 'relmomentum20': 10.467, 'relmomentum40': 9.637, 'relmomentum80': 9.781}
ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.11, 'relmomentum40': 0.38, 'relmomentum80': 0.24}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 2.594, 'carry125': 4.945, 'carry30': 3.365, 'carry60': 3.314}
ann. std {'carry10': 5.905, 'carry125': 5.413, 'carry30': 5.459, 'carry60': 4.921}
ann. SR {'carry10': 0.44, 'carry125': 0.91, 'carry30': 0.62, 'carry60': 0.67}



Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -2.141, 'carry125': 0.347, 'carry30': -2.82, 'carry60': -2.687}
ann. std {'carry10': 5.988, 'carry125': 6.502, 'carry30': 5.975, 'carry60': 5.92}
ann. SR {'carry10': -0.36, 'carry125': 0.05, 'carry30': -0.47, 'carry60': -0.45}

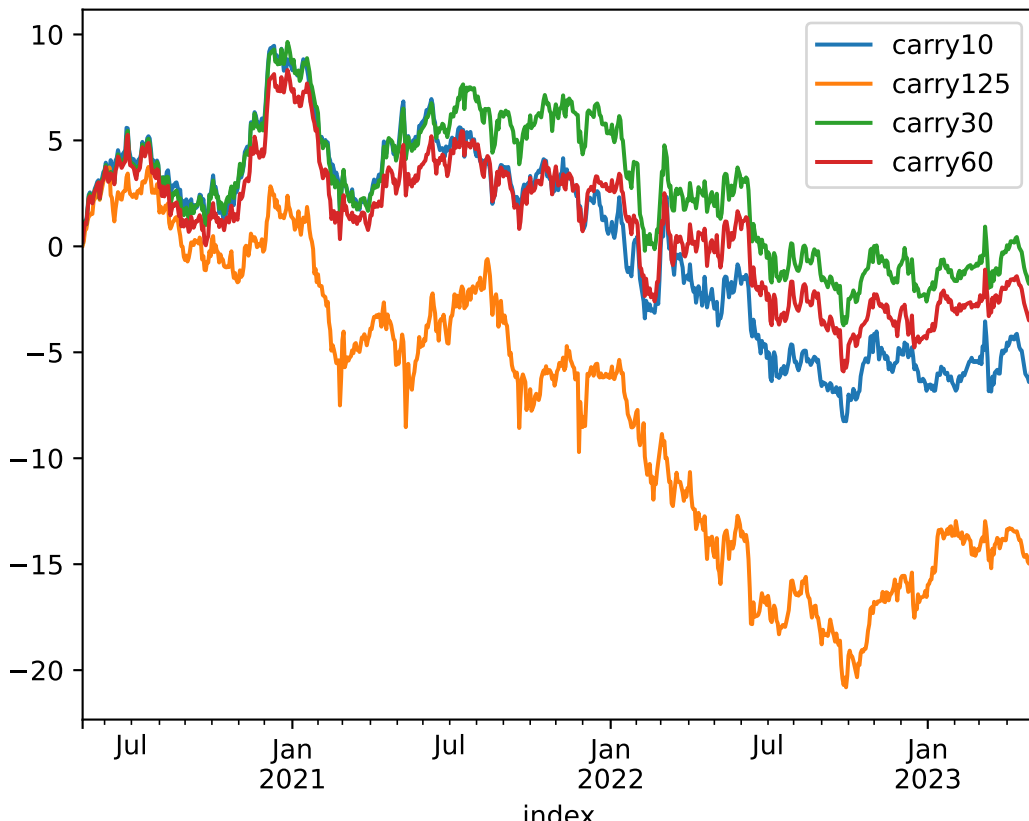


Total Trading Rule P&L for period '3Y'

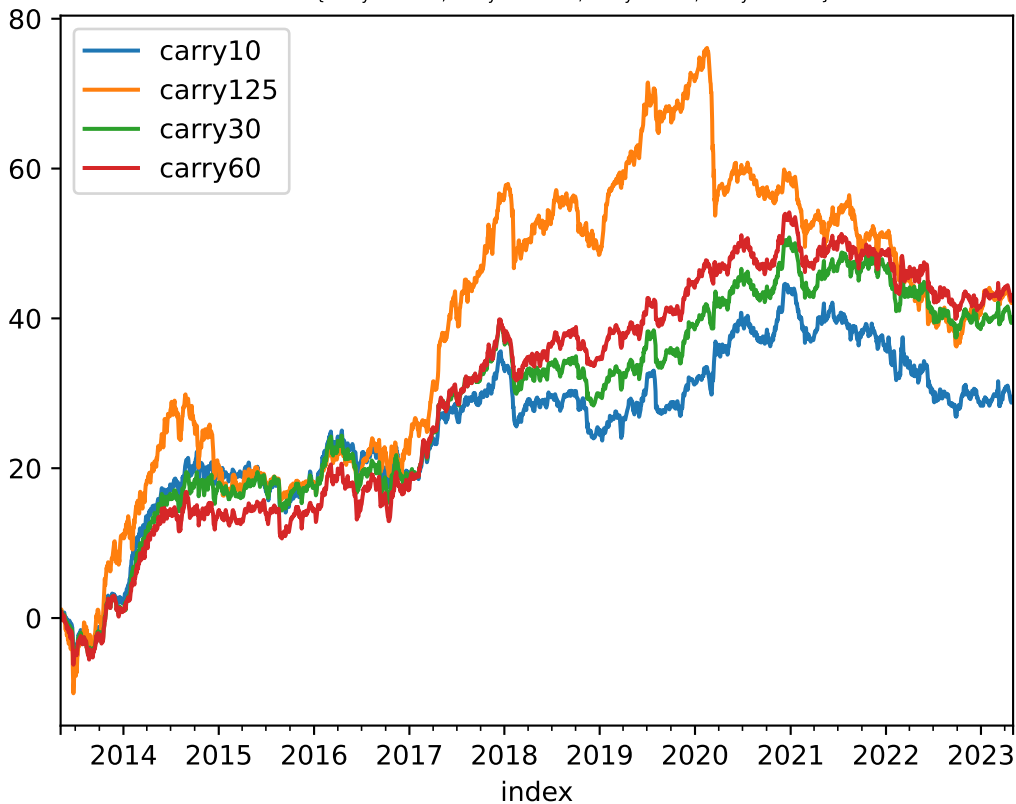
ann. mean {'carry10': -1.936, 'carry125': -4.854, 'carry30': -0.47, 'carry60': -1.047}

ann. std {'carry10': 6.556, 'carry125': 7.992, 'carry30': 6.485, 'carry60': 6.471}

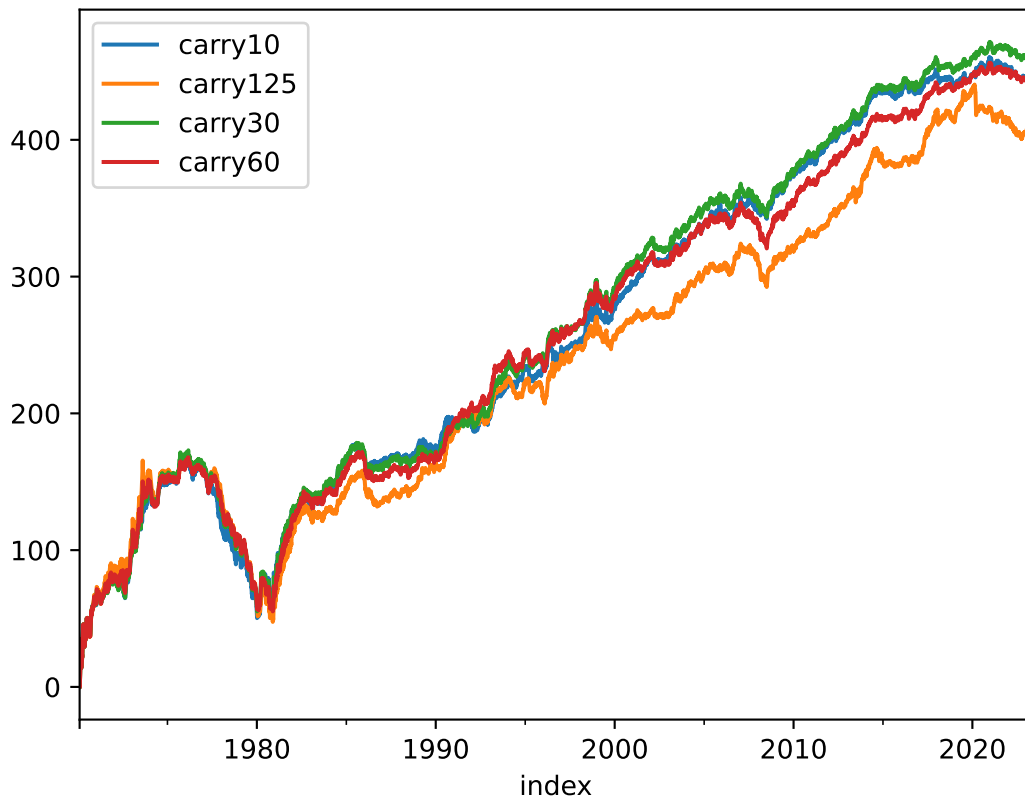
ann. SR {'carry10': -0.3, 'carry125': -0.61, 'carry30': -0.07, 'carry60': -0.16}



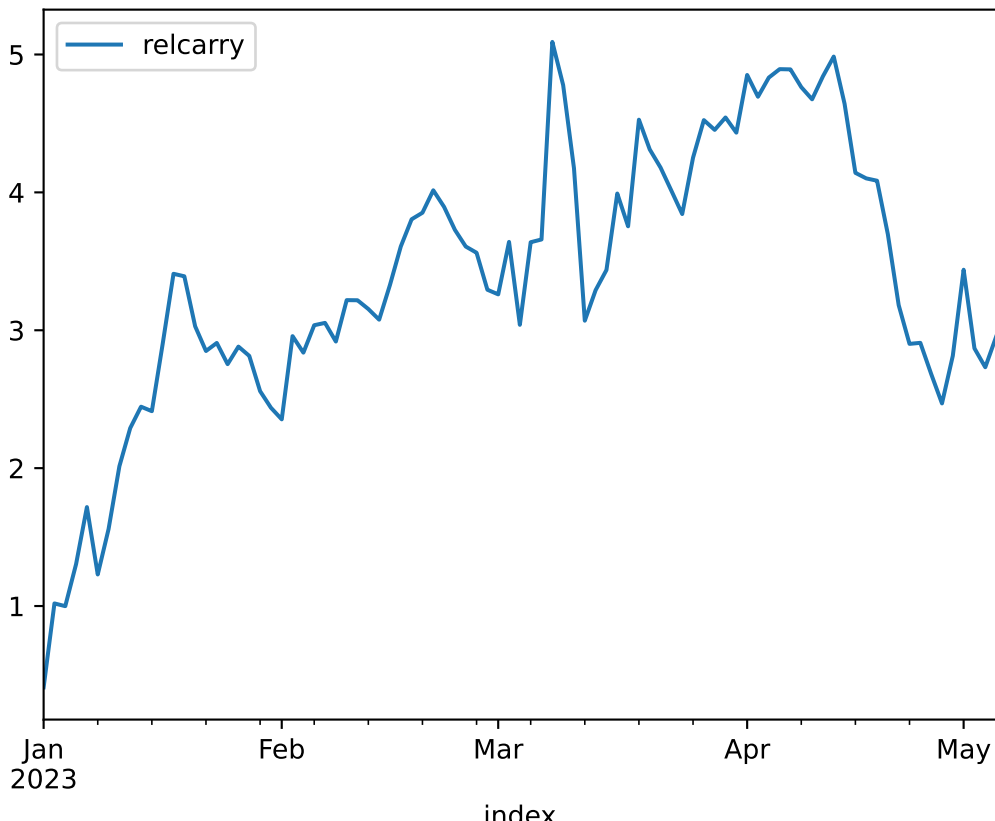
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 2.869, 'carry125': 4.143, 'carry30': 3.898, 'carry60': 4.184}
ann. std {'carry10': 6.365, 'carry125': 8.945, 'carry30': 6.451, 'carry60': 6.398}
ann. SR {'carry10': 0.45, 'carry125': 0.46, 'carry30': 0.6, 'carry60': 0.65}



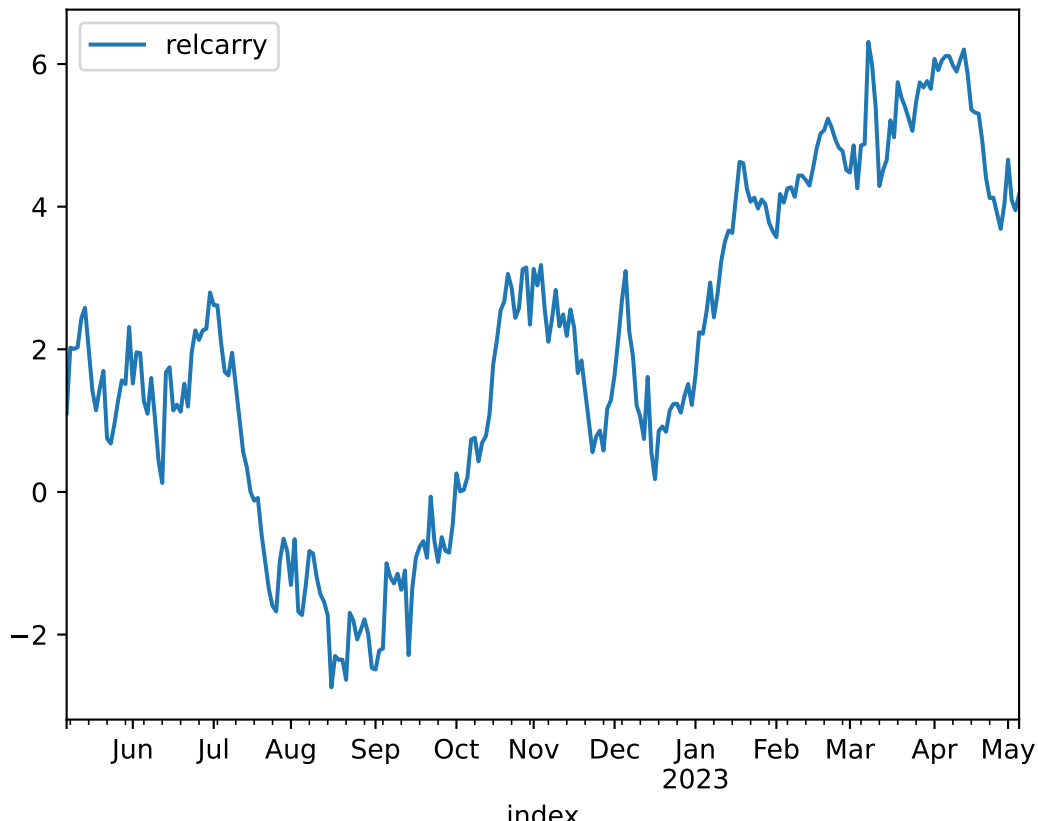
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 8.201, 'carry125': 7.491, 'carry30': 8.486, 'carry60': 8.197}
ann. std {'carry10': 11.199, 'carry125': 11.556, 'carry30': 11.256, 'carry60': 11.259}
ann. SR {'carry10': 0.73, 'carry125': 0.65, 'carry30': 0.75, 'carry60': 0.73}



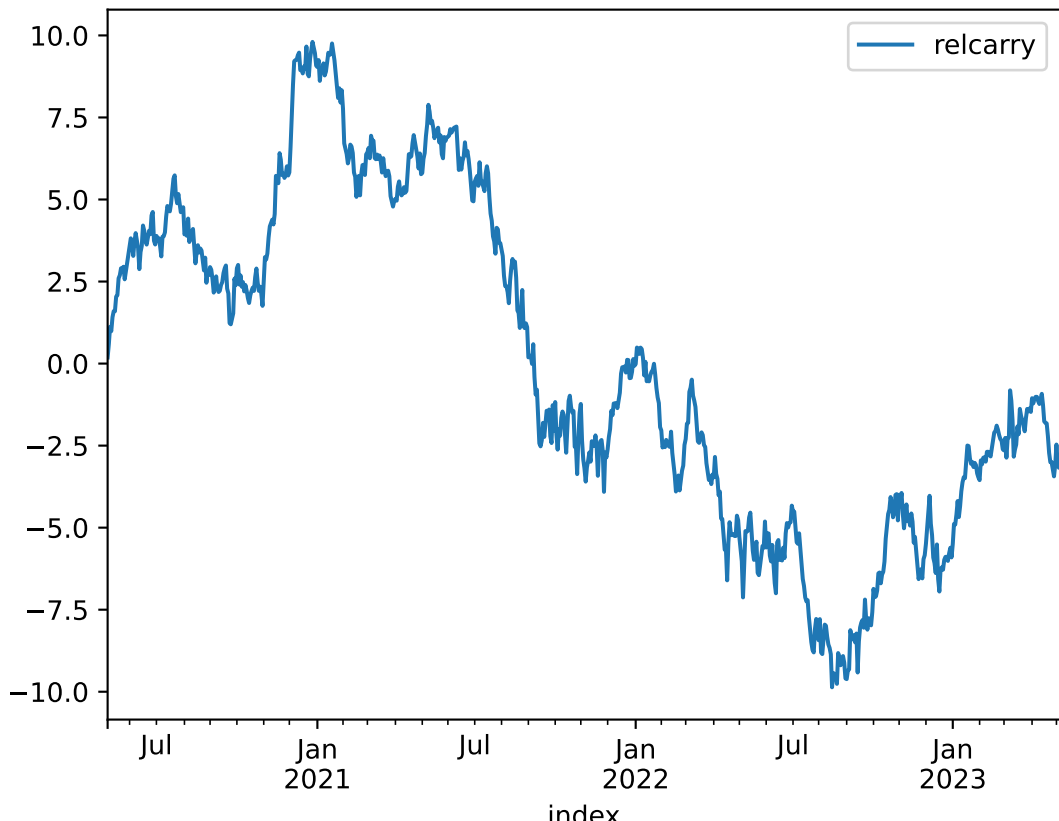
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 8.492}
ann. std {'relcarry': 5.712}
ann. SR {'relcarry': 1.49}



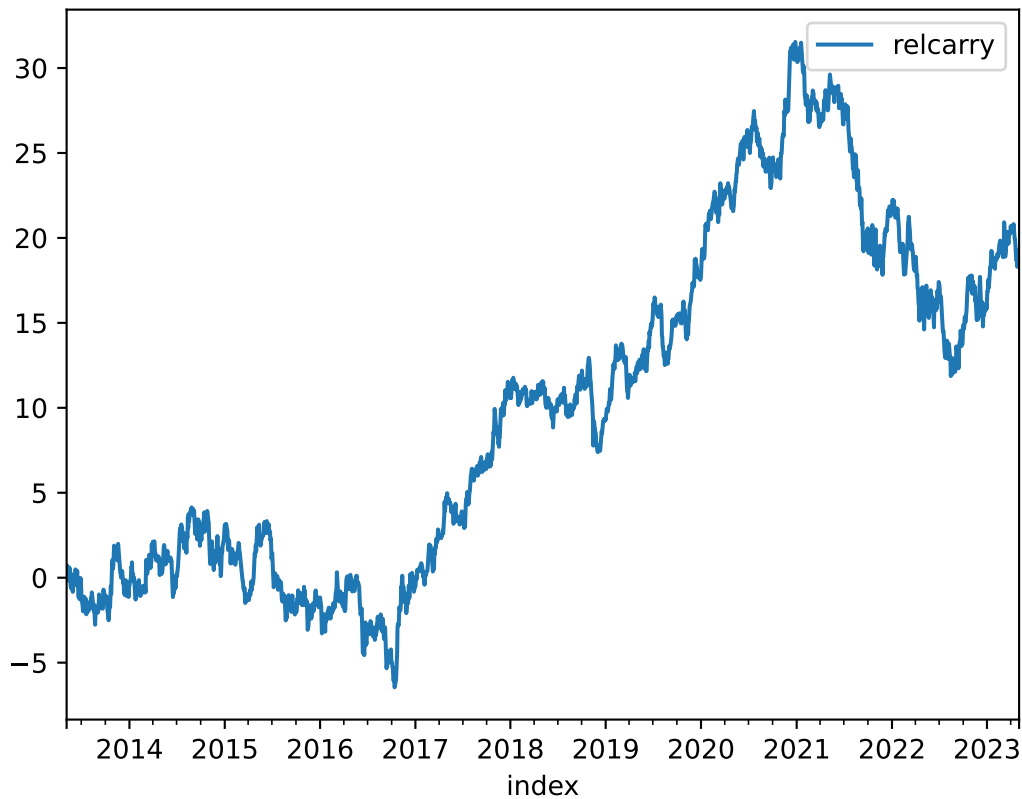
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': 4.107}
ann. std {'relcarry': 6.878}
ann. SR {'relcarry': 0.6}



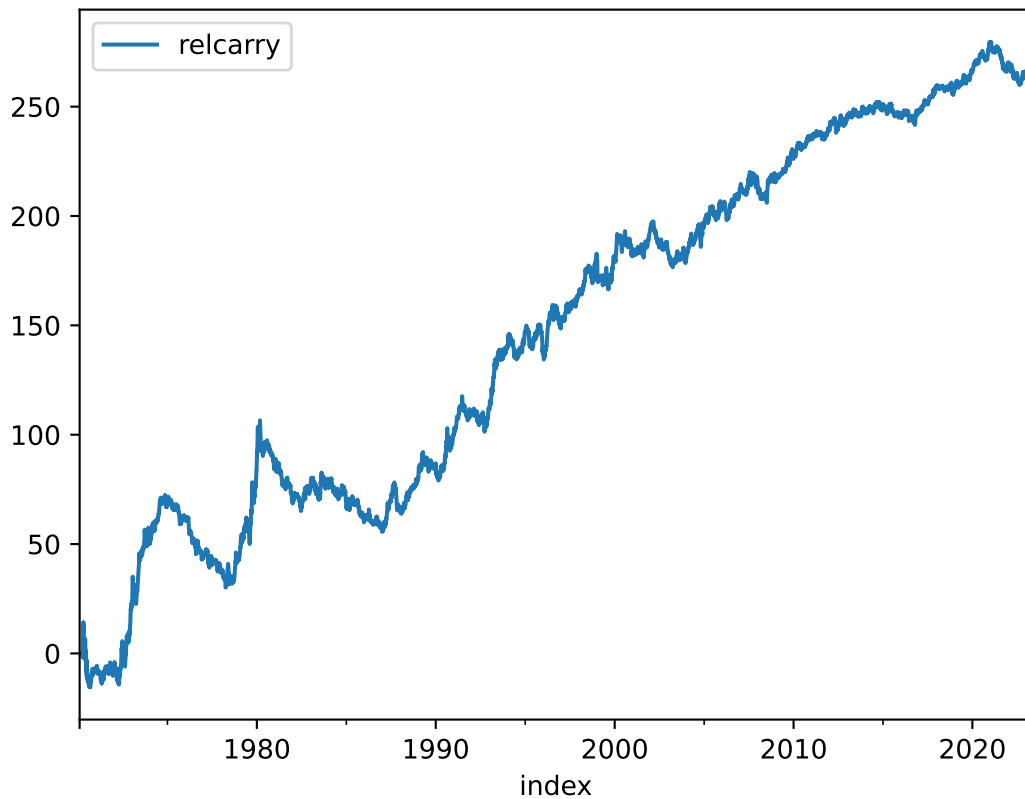
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -0.967}
ann. std {'relcarry': 6.672}
ann. SR {'relcarry': -0.14}



Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 1.843}
ann. std {'relcarry': 5.817}
ann. SR {'relcarry': 0.32}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 4.917}
ann. std {'relcarry': 8.959}
ann. SR {'relcarry': 0.55}

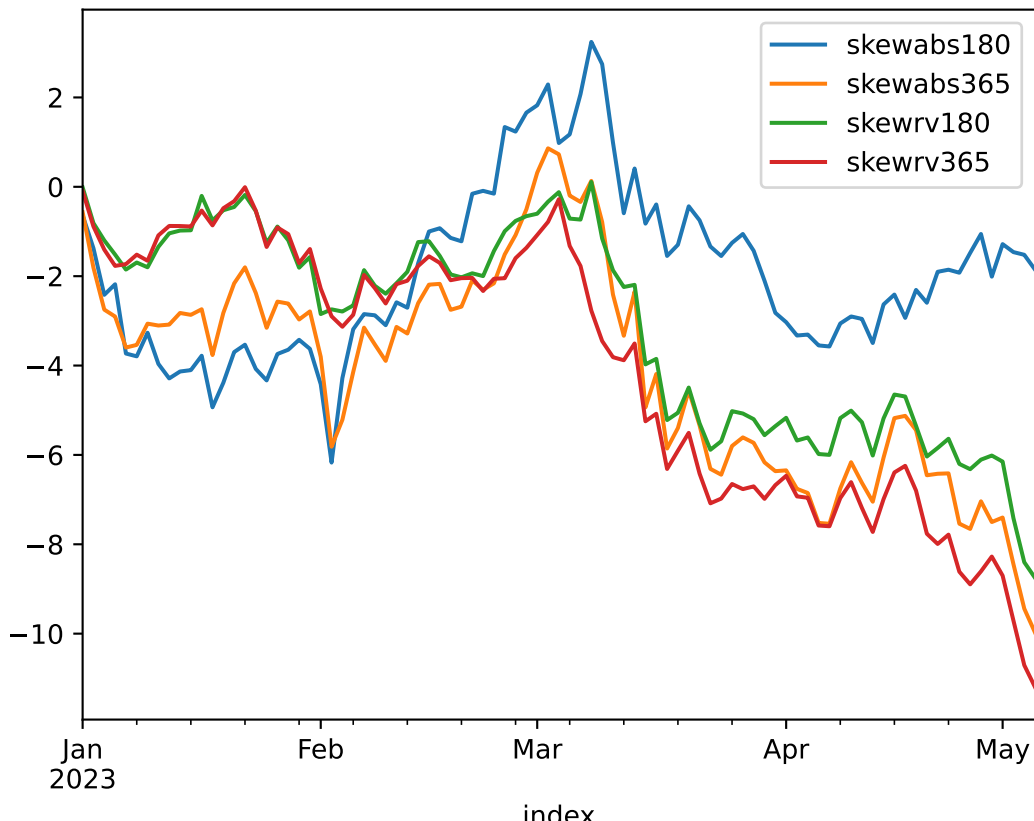


Total Trading Rule P&L for period 'YTD'

ann. mean {'skewabs180': -5.339, 'skewabs365': -28.707, 'skewrv180': -25.181, 'skewrv365': -32.218}

ann. std {'skewabs180': 11.282, 'skewabs365': 11.685, 'skewrv180': 8.357, 'skewrv365': 8.155}

ann. SR {'skewabs180': -0.47, 'skewabs365': -2.46, 'skewrv180': -3.01, 'skewrv365': -3.95}

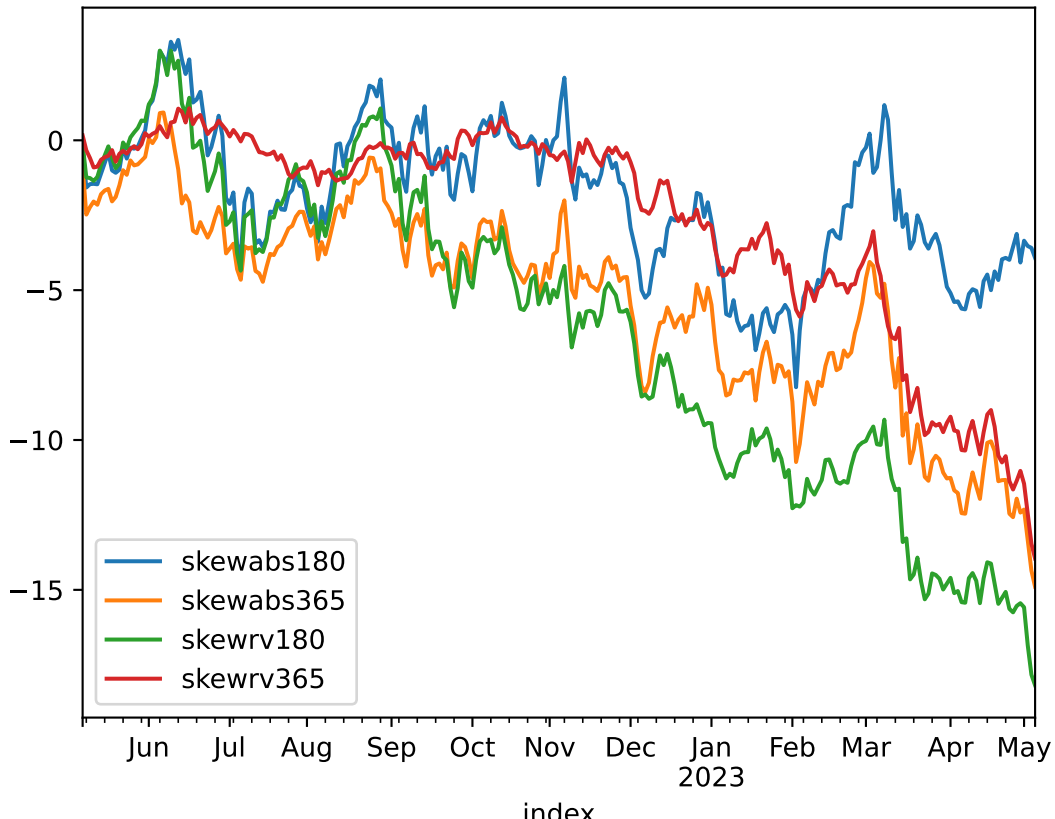


Total Trading Rule P&L for period '1Y'

ann. mean {'skewabs180': -3.863, 'skewabs365': -14.669, 'skewrv180': -17.905, 'skewrv365': -13.742}

ann. std {'skewabs180': 11.084, 'skewabs365': 10.03, 'skewrv180': 9.39, 'skewrv365': 5.941}

ann. SR {'skewabs180': -0.35, 'skewabs365': -1.46, 'skewrv180': -1.91, 'skewrv365': -2.31}

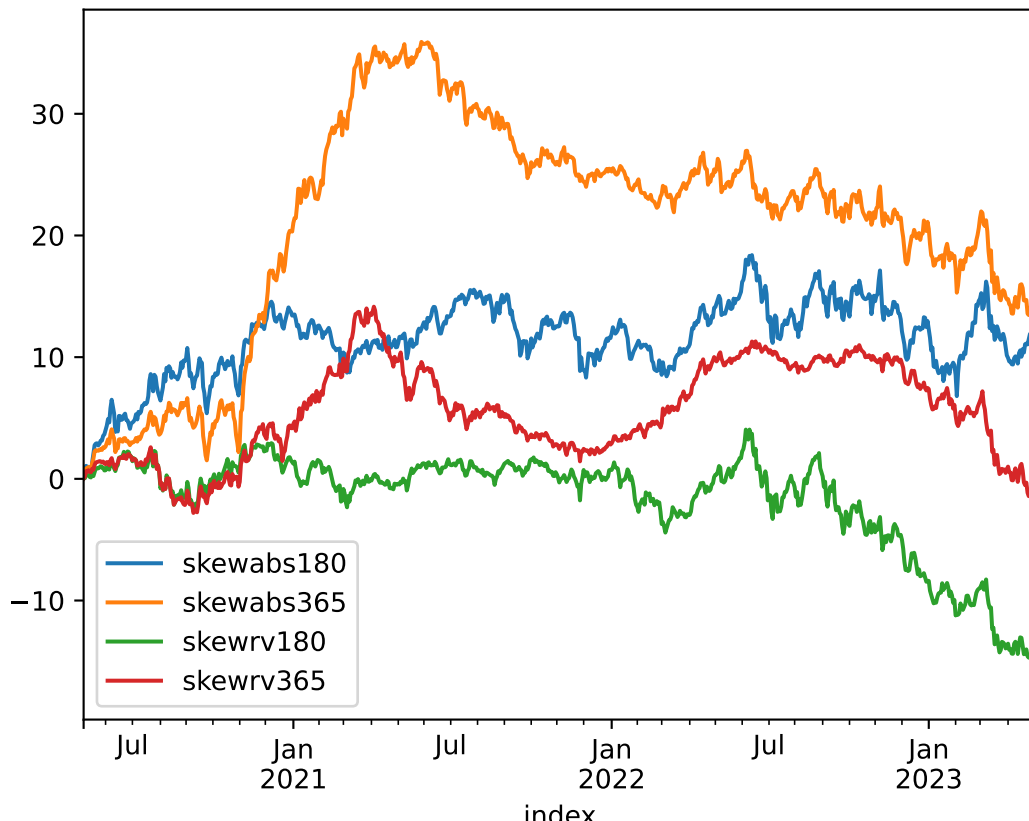


Total Trading Rule P&L for period '3Y'

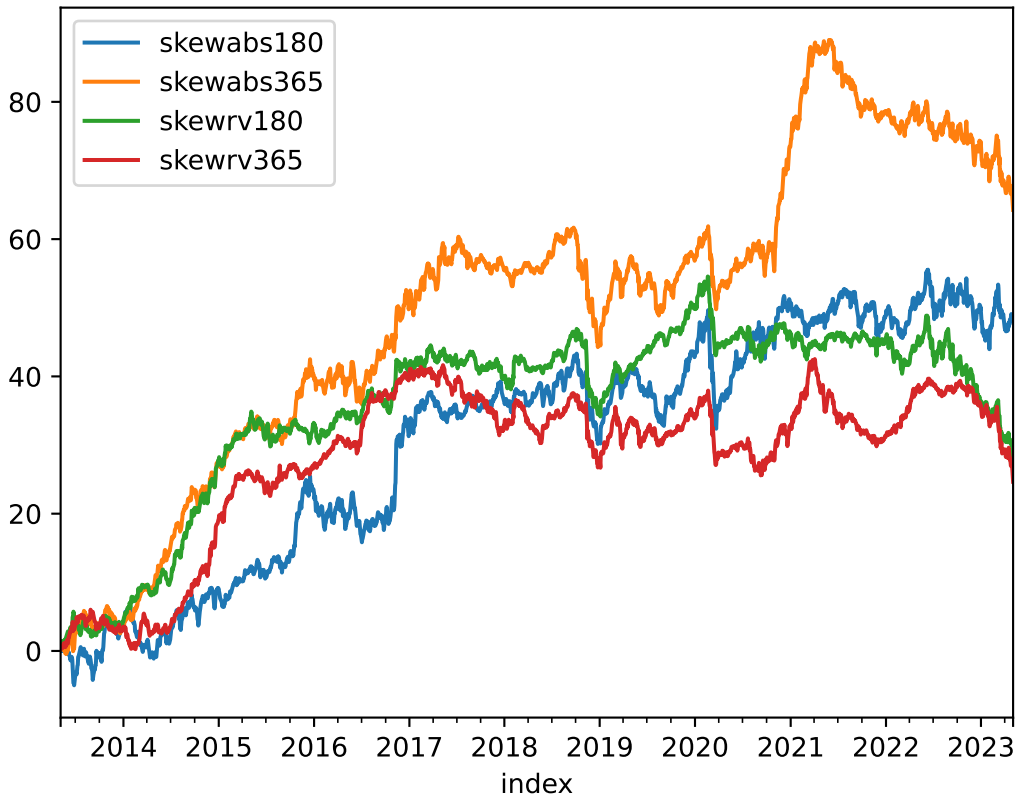
ann. mean {'skewabs180': 3.638, 'skewabs365': 3.646, 'skewrv180': -5.609, 'skewrv365': -1.221}

ann. std {'skewabs180': 9.139, 'skewabs365': 8.963, 'skewrv180': 7.297, 'skewrv365': 6.41}

ann. SR {'skewabs180': 0.4, 'skewabs365': 0.41, 'skewrv180': -0.77, 'skewrv365': -0.19}



Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.737, 'skewabs365': 6.305, 'skewrv180': 2.715, 'skewrv365': 2.419}
ann. std {'skewabs180': 8.019, 'skewabs365': 7.96, 'skewrv180': 6.408, 'skewrv365': 6.066}
ann. SR {'skewabs180': 0.59, 'skewabs365': 0.79, 'skewrv180': 0.42, 'skewrv365': 0.4}

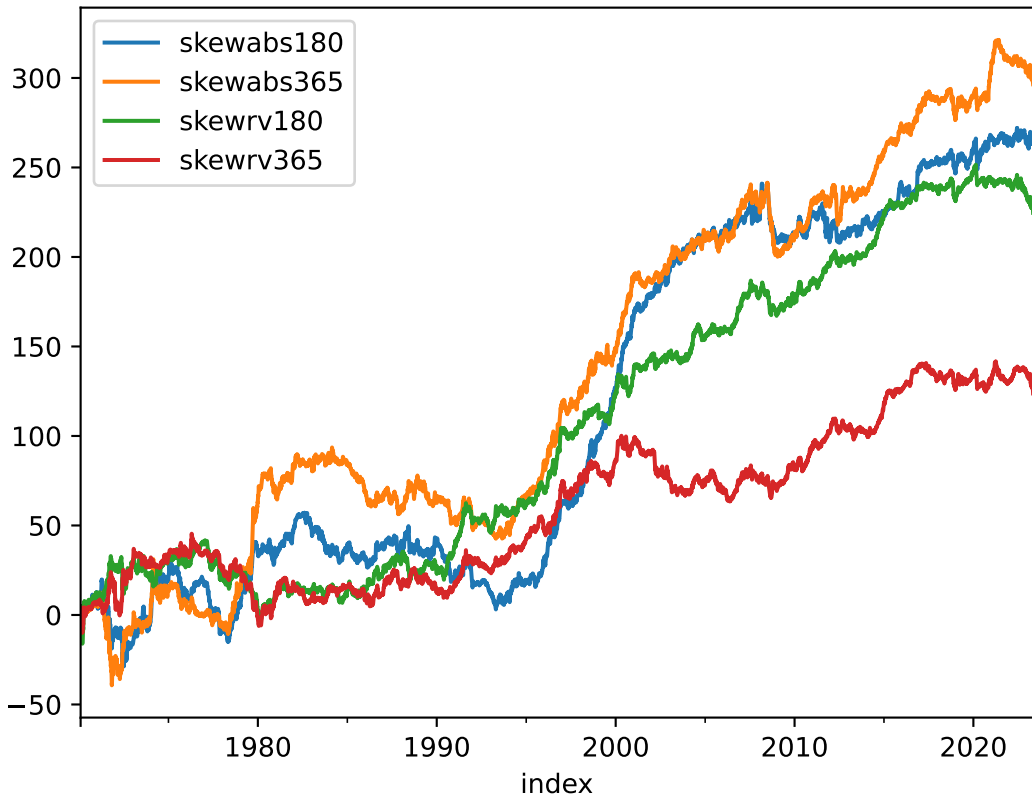


Total Trading Rule P&L for period '99Y'

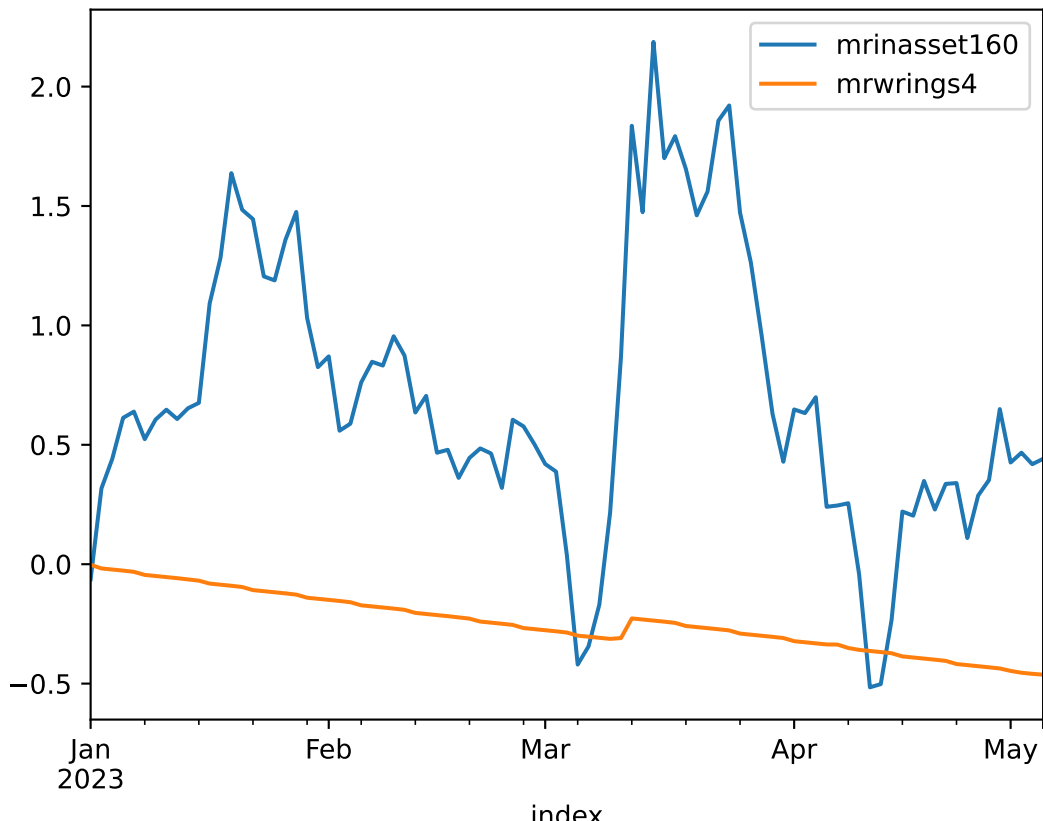
ann. mean {'skewabs180': 4.88, 'skewabs365': 5.463, 'skewrv180': 4.14, 'skewrv365': 2.281}

ann. std {'skewabs180': 10.1, 'skewabs365': 9.87, 'skewrv180': 8.752, 'skewrv365': 8.126}

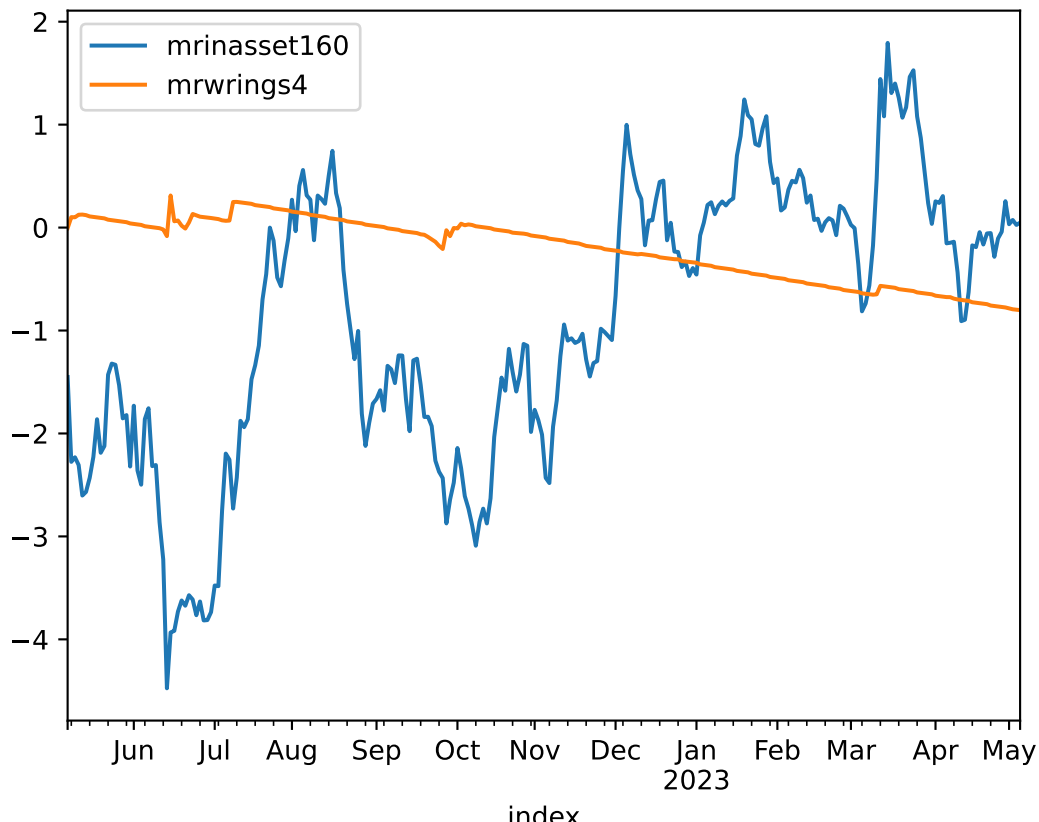
ann. SR {'skewabs180': 0.48, 'skewabs365': 0.55, 'skewrv180': 0.47, 'skewrv365': 0.28}



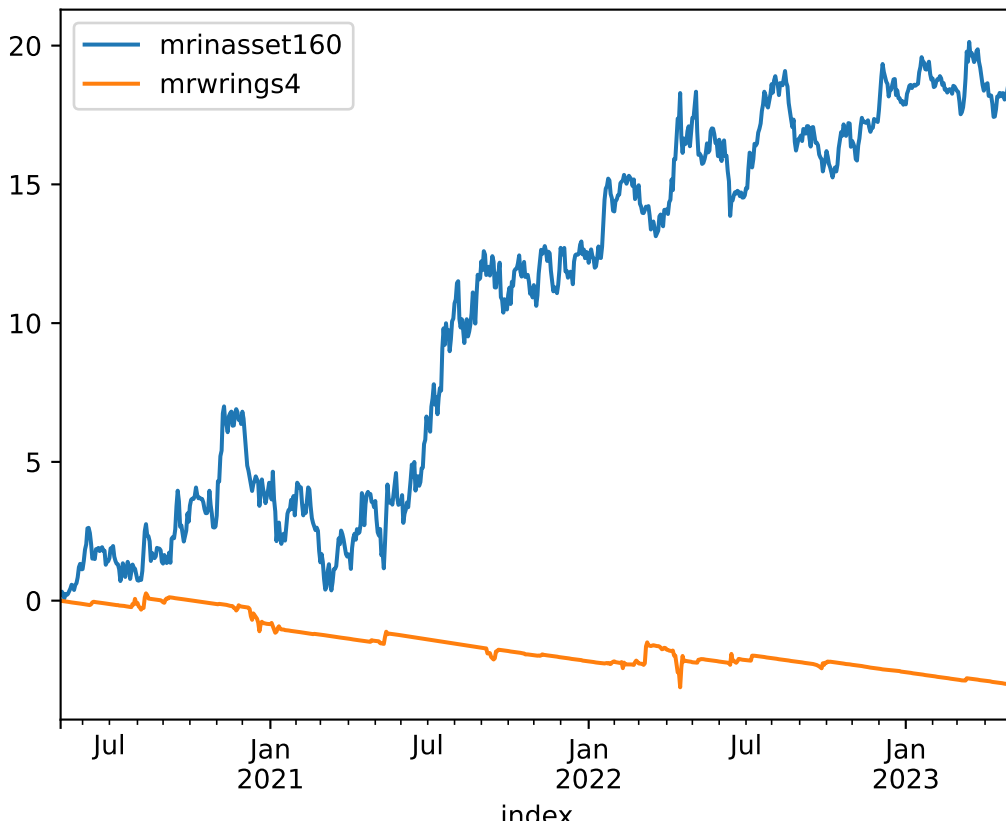
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 1.269, 'mrwrings4': -1.331}
ann. std {'mrinasset160': 4.135, 'mrwrings4': 0.161}
ann. SR {'mrinasset160': 0.31, 'mrwrings4': -8.28}



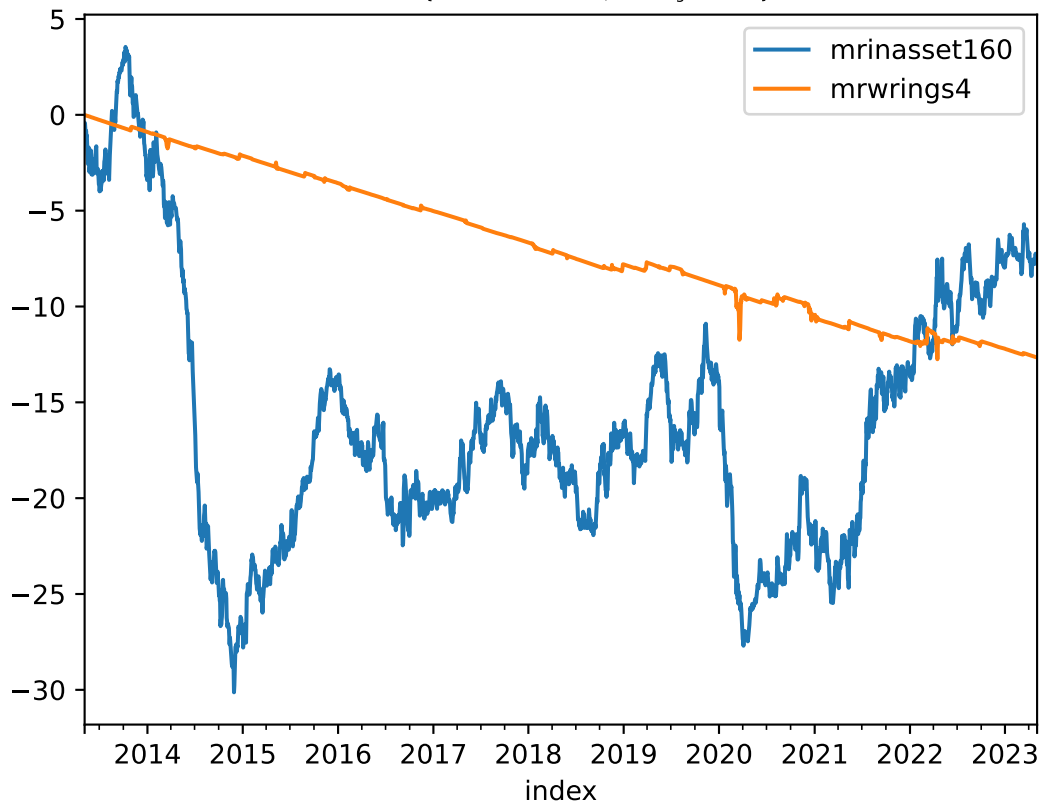
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 0.047, 'mrwrings4': -0.789}
ann. std {'mrinasset160': 5.072, 'mrwrings4': 0.585}
ann. SR {'mrinasset160': 0.01, 'mrwrings4': -1.35}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 6.019, 'mrwrings4': -0.993}
ann. std {'mrinasset160': 6.257, 'mrwrings4': 1.017}
ann. SR {'mrinasset160': 0.96, 'mrwrings4': -0.98}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.731, 'mrwrings4': -1.242}
ann. std {'mrinasset160': 6.196, 'mrwrings4': 0.879}
ann. SR {'mrinasset160': -0.12, 'mrwrings4': -1.41}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.558, 'mrwrings4': -2.157}
ann. std {'mrinasset160': 9.865, 'mrwrings4': 2.087}
ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.03}

