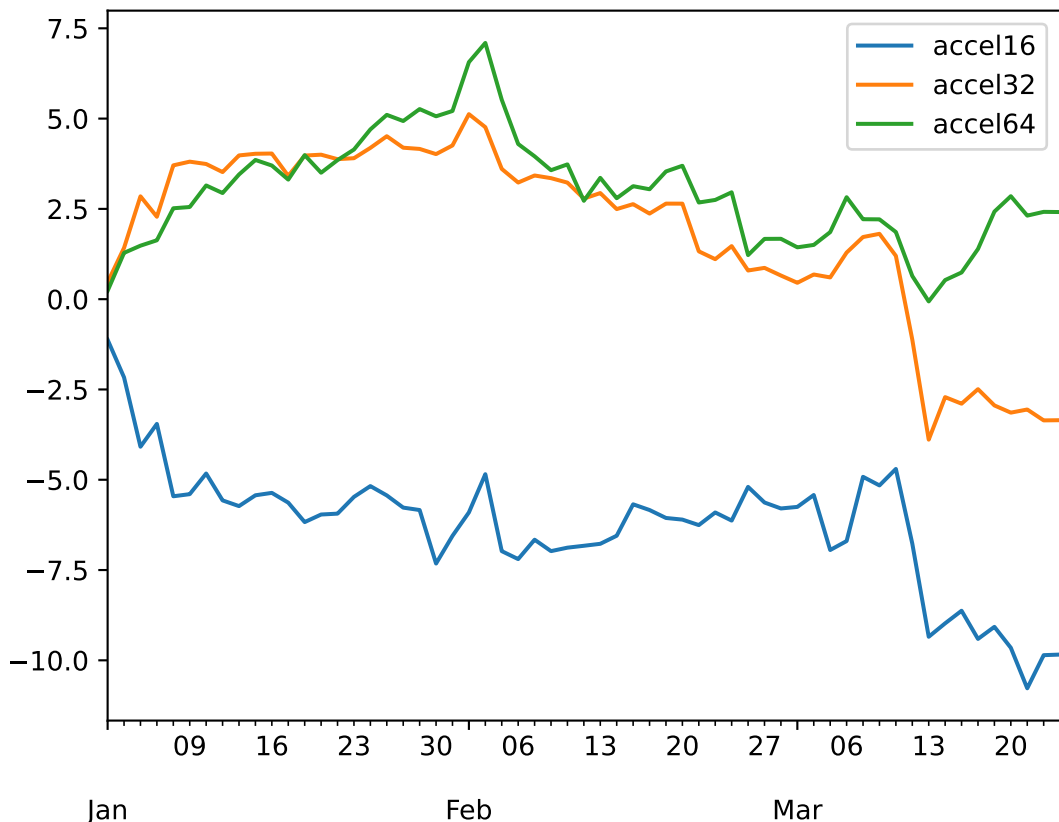
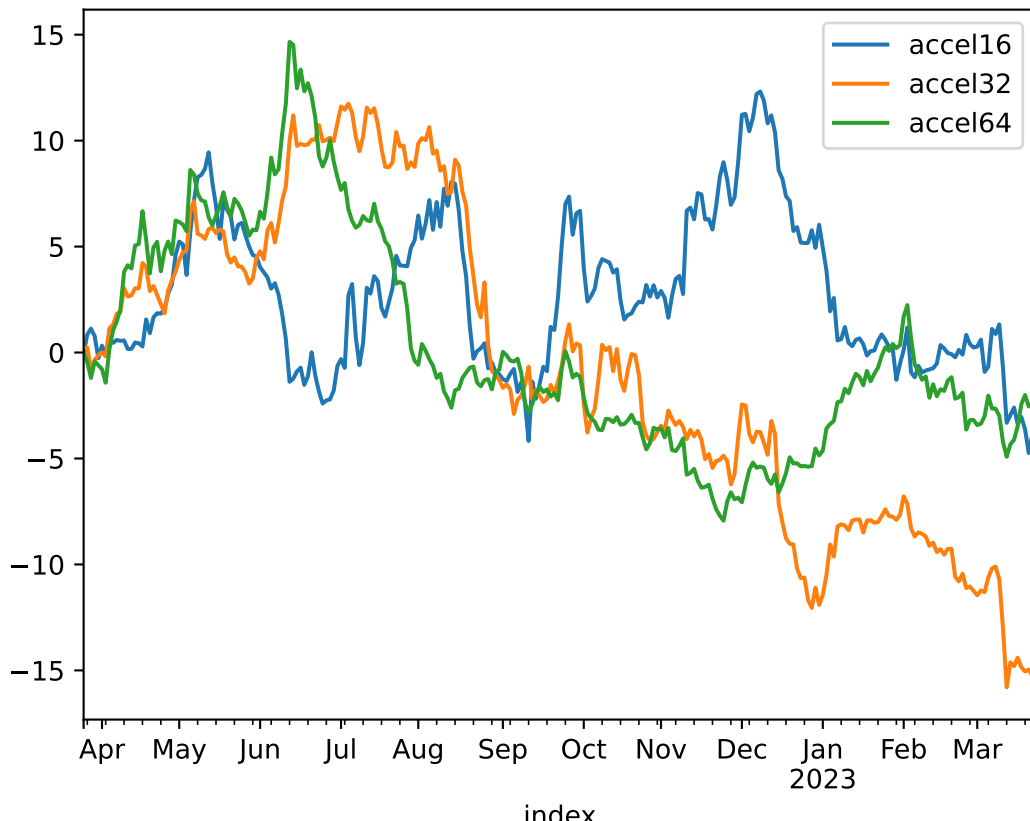


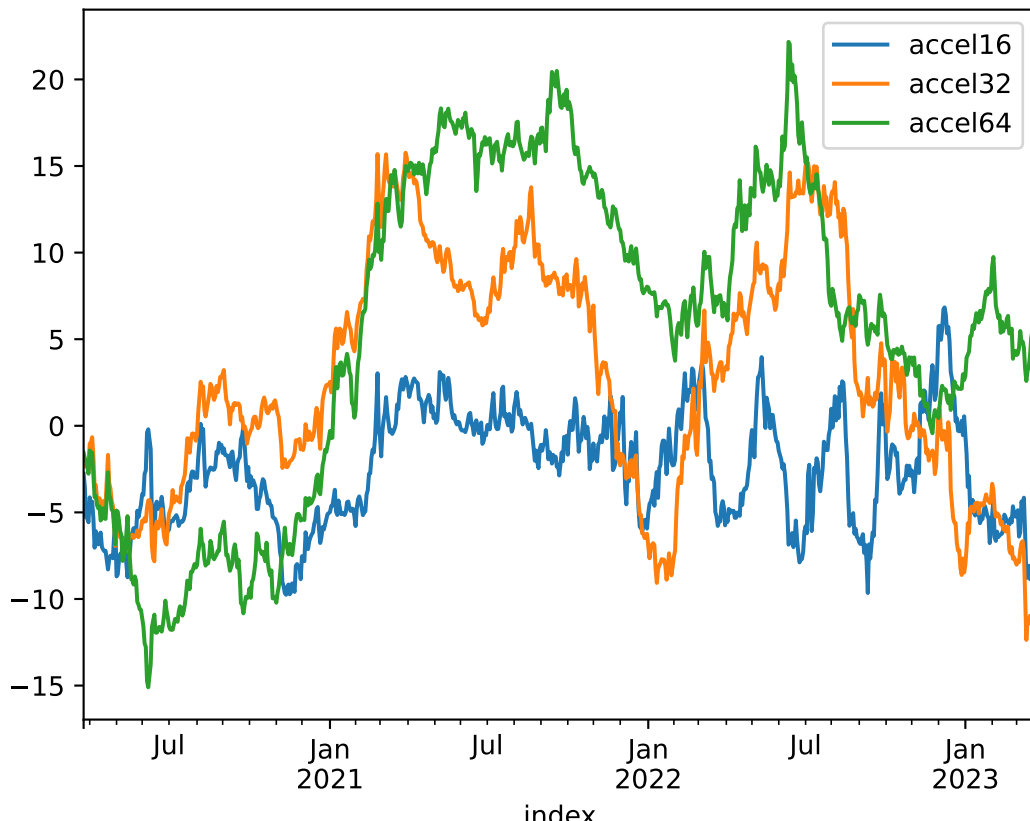
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -42.698, 'accel32': -14.539, 'accel64': 10.468}
ann. std {'accel16': 13.689, 'accel32': 11.16, 'accel64': 10.135}
ann. SR {'accel16': -3.12, 'accel32': -1.3, 'accel64': 1.03}



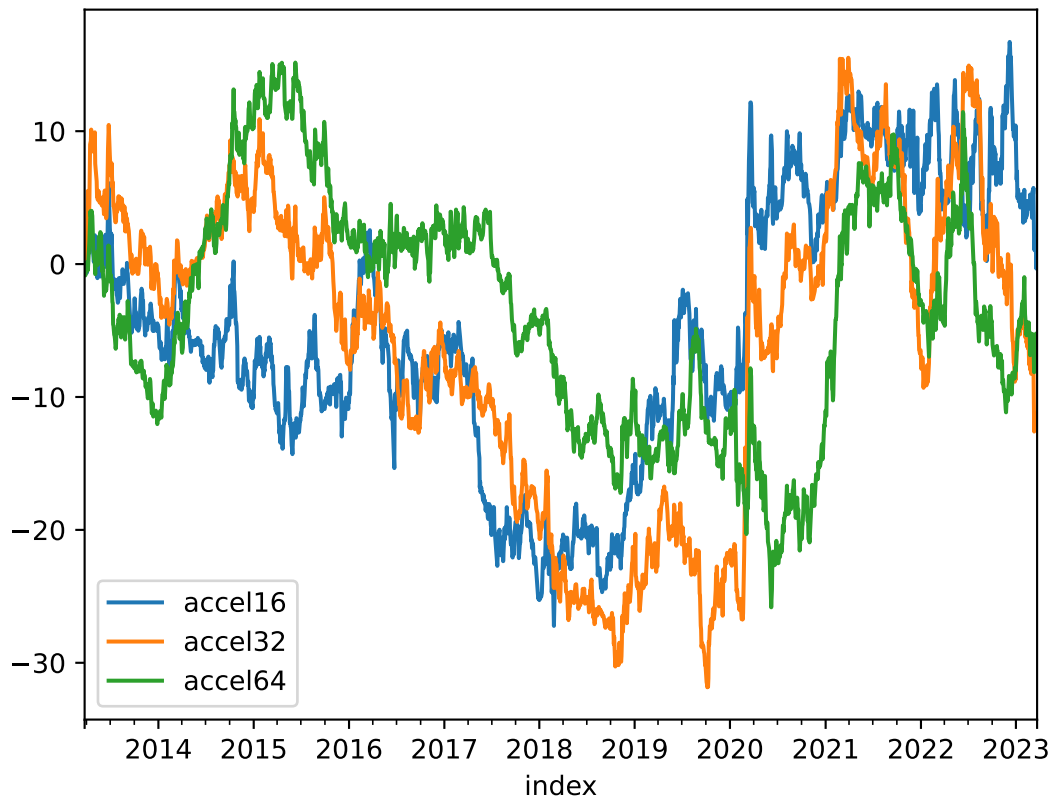
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -3.751, 'accel32': -15.025, 'accel64': -2.407}
ann. std {'accel16': 15.921, 'accel32': 13.243, 'accel64': 11.51}
ann. SR {'accel16': -0.24, 'accel32': -1.13, 'accel64': -0.21}



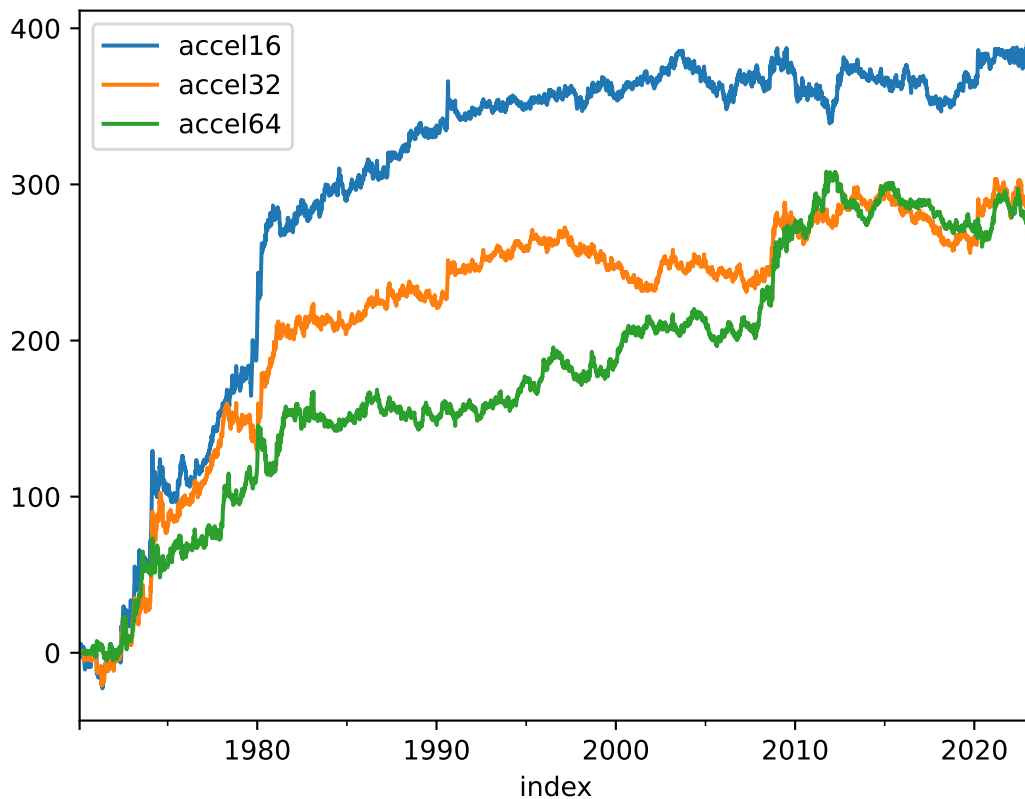
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -3.042, 'accel32': -3.871, 'accel64': 1.657}
ann. std {'accel16': 13.758, 'accel32': 12.022, 'accel64': 10.778}
ann. SR {'accel16': -0.22, 'accel32': -0.32, 'accel64': 0.15}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 0.058, 'accel32': -1.184, 'accel64': -0.556}
ann. std {'accel16': 11.7, 'accel32': 10.779, 'accel64': 9.342}
ann. SR {'accel16': 0.0, 'accel32': -0.11, 'accel64': -0.06}

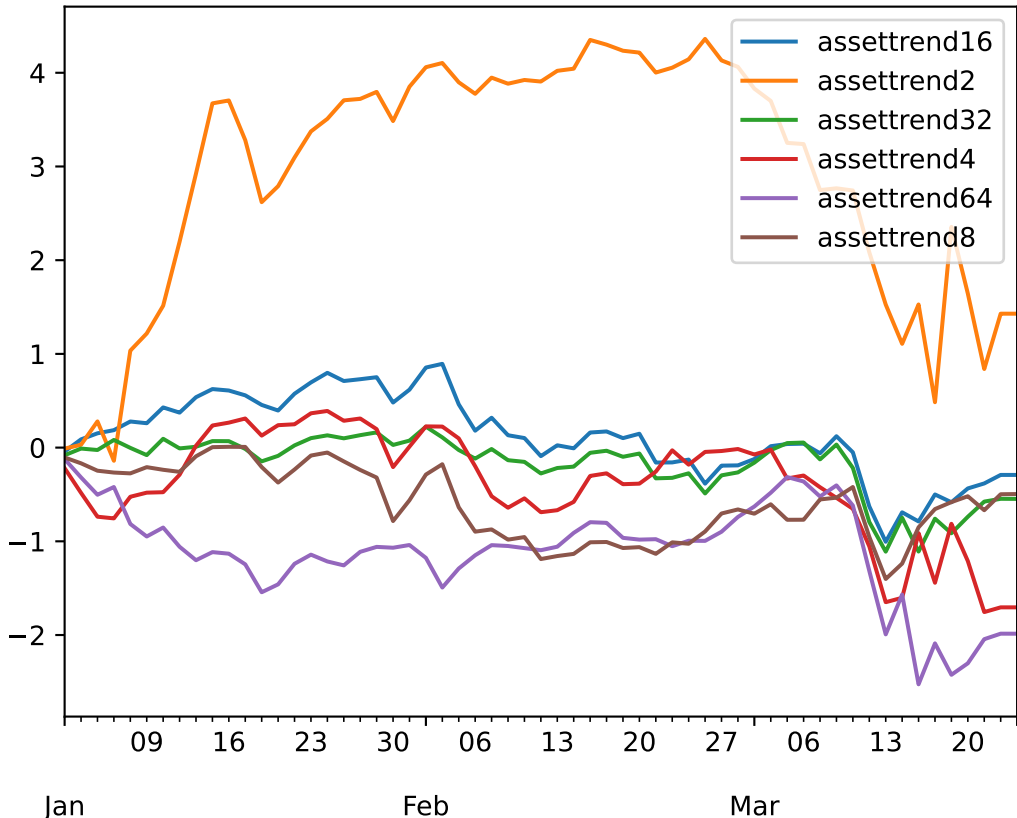


Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.916, 'accel32': 5.094, 'accel64': 5.175}
ann. std {'accel16': 14.134, 'accel32': 12.461, 'accel64': 12.11}
ann. SR {'accel16': 0.49, 'accel32': 0.41, 'accel64': 0.43}



Total Trading Rule P&L for period 'YTD'

ann. mean {'assetrend16': -1.265, 'assetrend2': 6.201, 'assetrend32': -2.374, 'assetrend4': -7.397, 'assetrend64': -8.617, 'assetrend8': -2.15}
 ann. std {'assetrend16': 2.771, 'assetrend2': 7.426, 'assetrend32': 2.565, 'assetrend4': 3.901, 'assetrend64': 3.851, 'assetrend8': 2.864}
 ann. SR {'assetrend16': -0.46, 'assetrend2': 0.84, 'assetrend32': -0.93, 'assetrend4': -1.9, 'assetrend64': -2.24, 'assetrend8': -0.75}

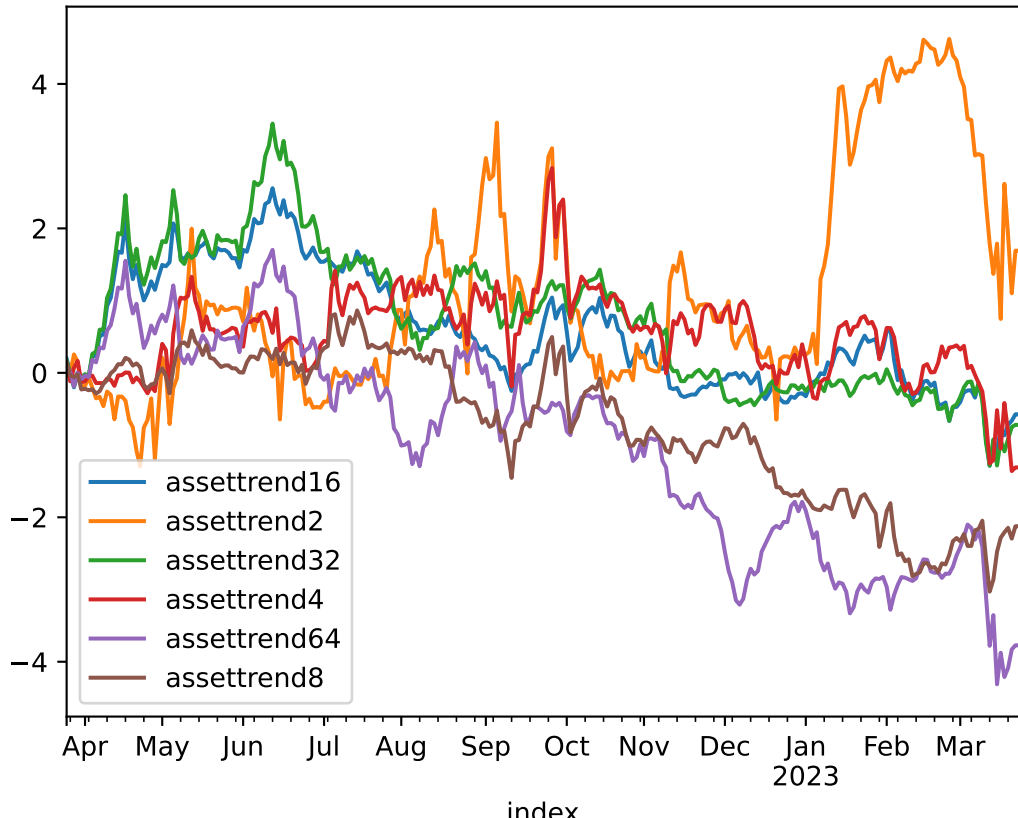


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': -0.565, 'assettrend2': 1.665, 'assettrend32': -0.71, 'assettrend4': -1.289, 'assettrend64': -3.714, 'assettrend8': -2.09}

ann. std {'assettrend16': 2.537, 'assettrend2': 6.39, 'assettrend32': 2.931, 'assettrend4': 3.931, 'assettrend64': 3.288, 'assettrend8': 2.547}

ann. SR {'assettrend16': -0.22, 'assettrend2': 0.26, 'assettrend32': -0.24, 'assettrend4': -0.33, 'assettrend64': -1.13, 'assettrend8': -0.82}

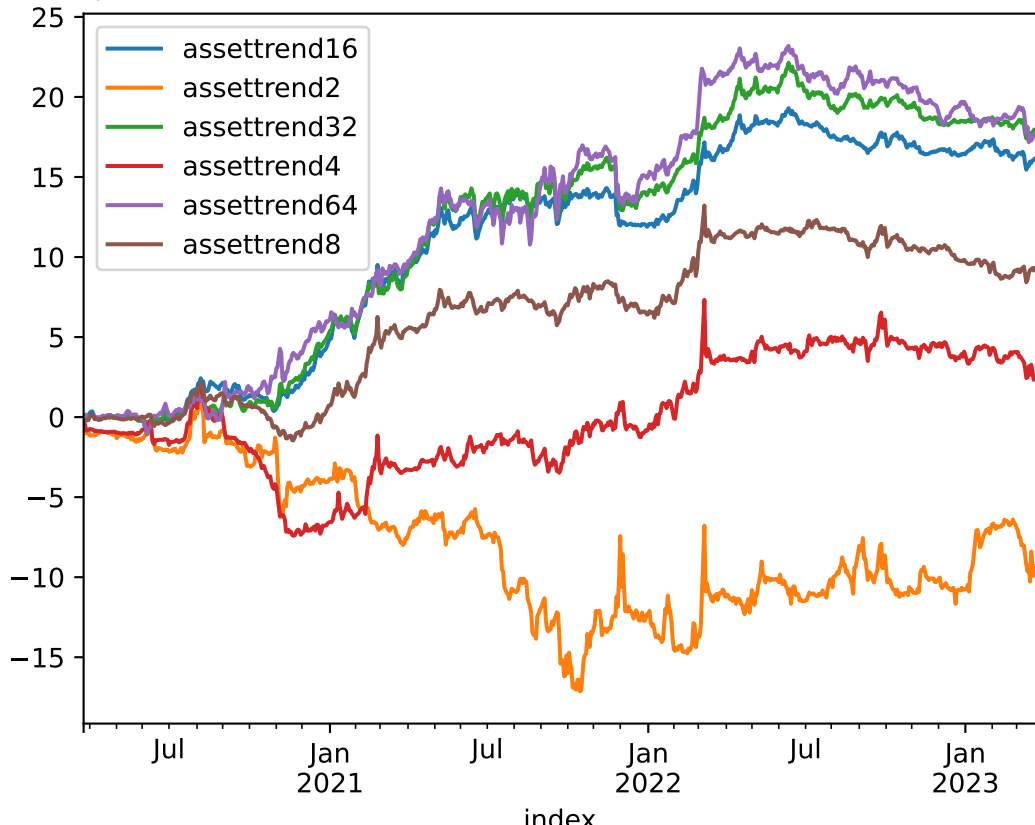


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 5.293, 'assettrend2': -3.053, 'assettrend32': 5.881, 'assettrend4': 0.78, 'assettrend64': 5.799, 'assettrend8': 3.055}

ann. std {'assettrend16': 3.4, 'assettrend2': 7.795, 'assettrend32': 4.118, 'assettrend4': 4.93, 'assettrend64': 4.99, 'assettrend8': 3.487}

ann. SR {'assettrend16': 1.56, 'assettrend2': -0.39, 'assettrend32': 1.43, 'assettrend4': 0.16, 'assettrend64': 1.16, 'assettrend8': 0.88}

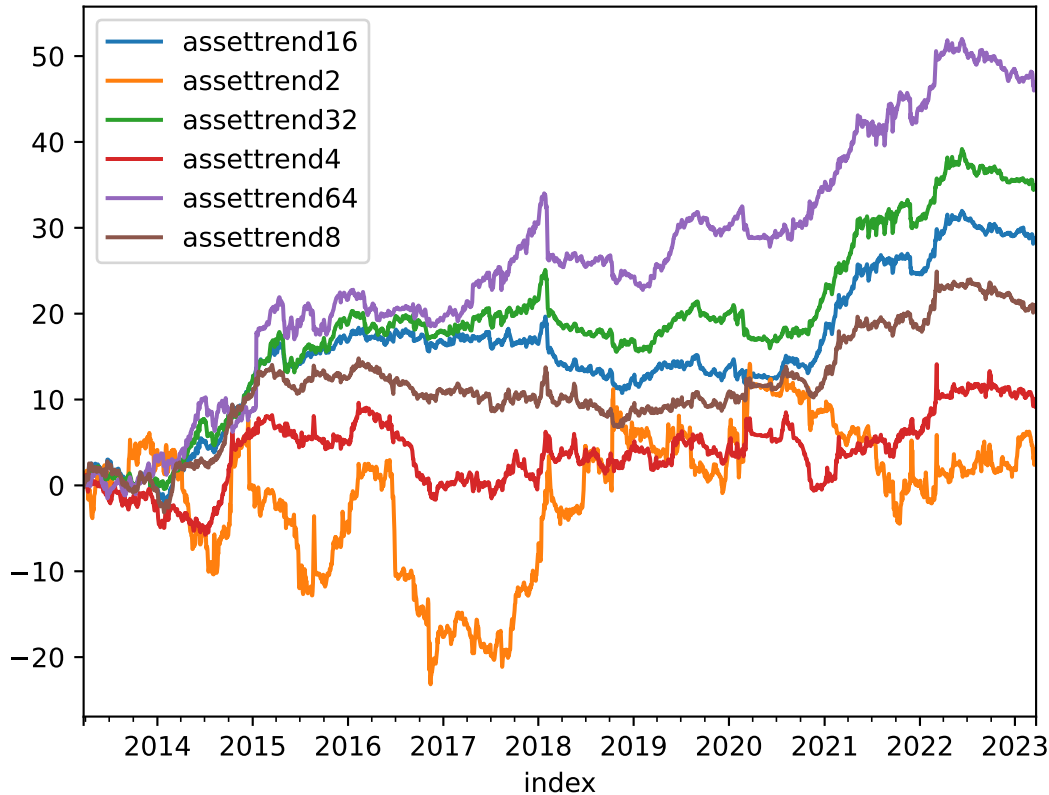


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.831, 'assettrend2': 0.327, 'assettrend32': 3.435, 'assettrend4': 0.9, 'assettrend64': 4.565, 'assettrend8': 2.063}

ann. std {'assettrend16': 3.165, 'assettrend2': 9.811, 'assettrend32': 3.598, 'assettrend4': 4.993, 'assettrend64': 5.198, 'assettrend8': 3.47}

ann. SR {'assettrend16': 0.89, 'assettrend2': 0.03, 'assettrend32': 0.95, 'assettrend4': 0.18, 'assettrend64': 0.88, 'assettrend8': 0.59}

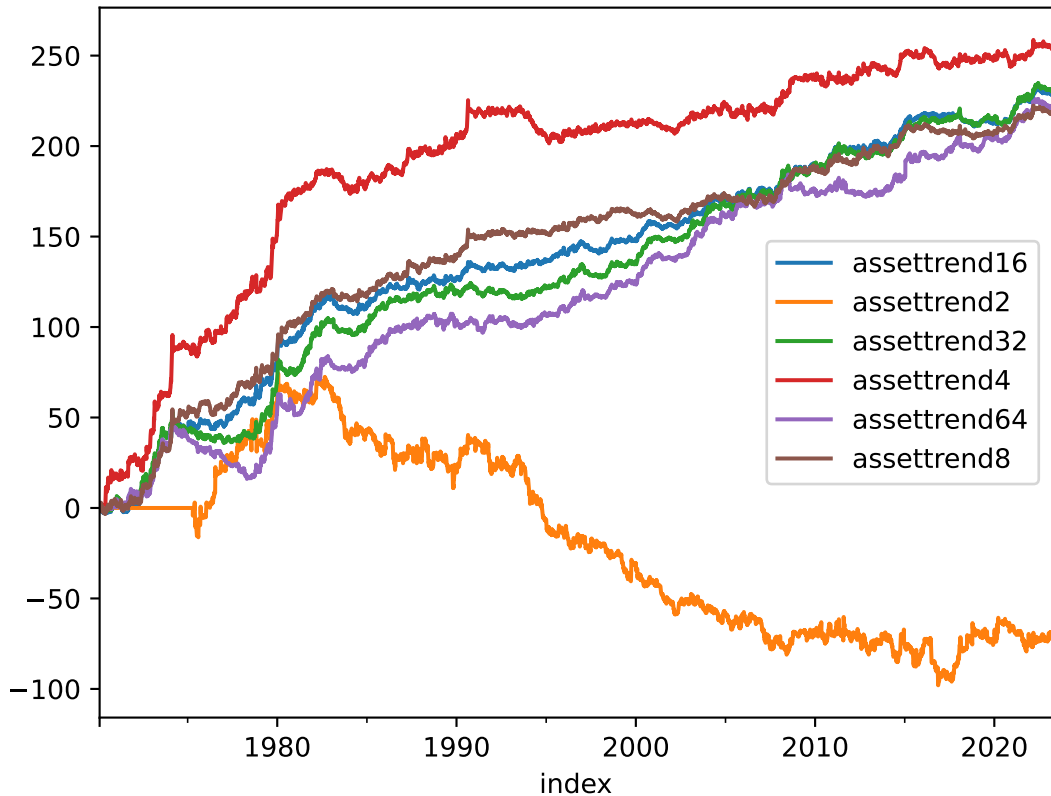


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.226, 'assettrend2': -1.32, 'assettrend32': 4.26, 'assettrend4': 4.686, 'assettrend64': 4.074, 'assettrend8': 4.035}

ann. std {'assettrend16': 4.306, 'assettrend2': 10.266, 'assettrend32': 4.498, 'assettrend4': 6.551, 'assettrend64': 4.999, 'assettrend8': 4.635}

ann. SR {'assettrend16': 0.98, 'assettrend2': -0.13, 'assettrend32': 0.95, 'assettrend4': 0.72, 'assettrend64': 0.81, 'assettrend8': 0.87}

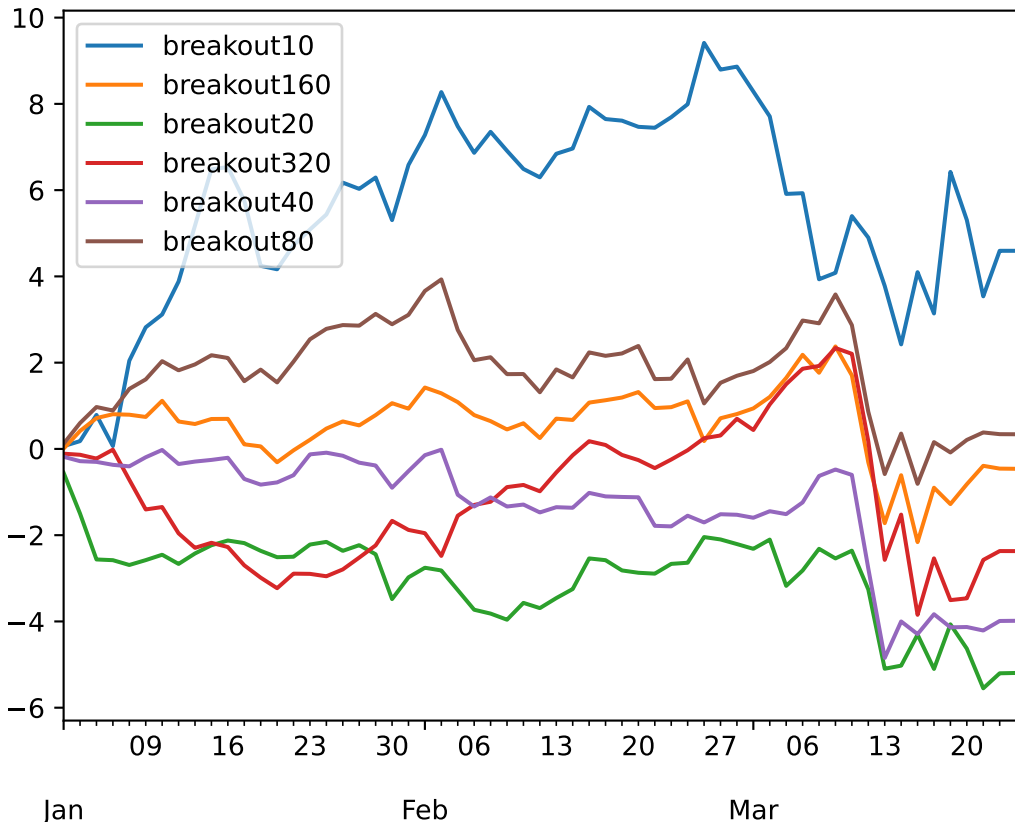


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 19.931, 'breakout160': -2.001, 'breakout20': -22.539, 'breakout320': -10.28, 'breakout40': -17.291, 'breakout80': 1.474}

ann. std {'breakout10': 15.698, 'breakout160': 8.712, 'breakout20': 8.074, 'breakout320': 10.978, 'breakout40': 7.798, 'breakout80': 9.046}

ann. SR {'breakout10': 1.27, 'breakout160': -0.23, 'breakout20': -2.79, 'breakout320': -0.94, 'breakout40': -2.22, 'breakout80': 0.16}

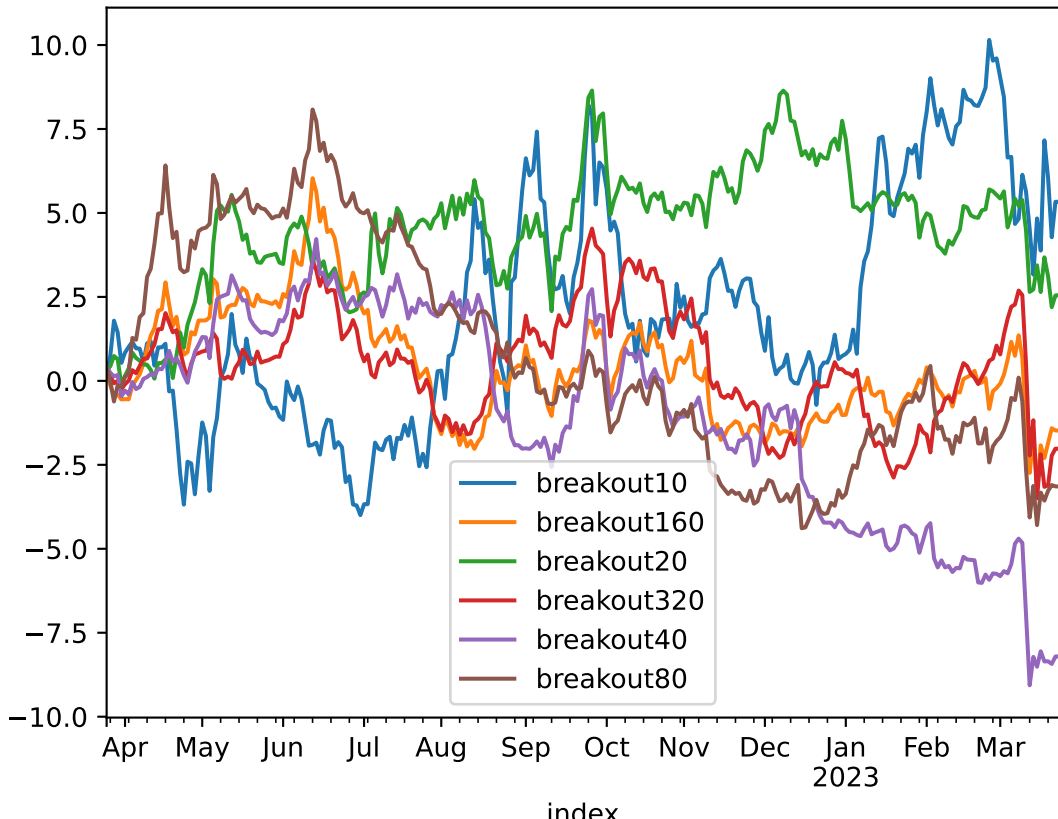


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 5.251, 'breakout160': -1.458, 'breakout20': 2.512, 'breakout320': -1.988, 'breakout40': -8.078, 'breakout80': -3.096}

ann. std {'breakout10': 13.584, 'breakout160': 7.099, 'breakout20': 8.551, 'breakout320': 7.518, 'breakout40': 7.104, 'breakout80': 7.457}

ann. SR {'breakout10': 0.39, 'breakout160': -0.21, 'breakout20': 0.29, 'breakout320': -0.26, 'breakout40': -1.14, 'breakout80': -0.42}

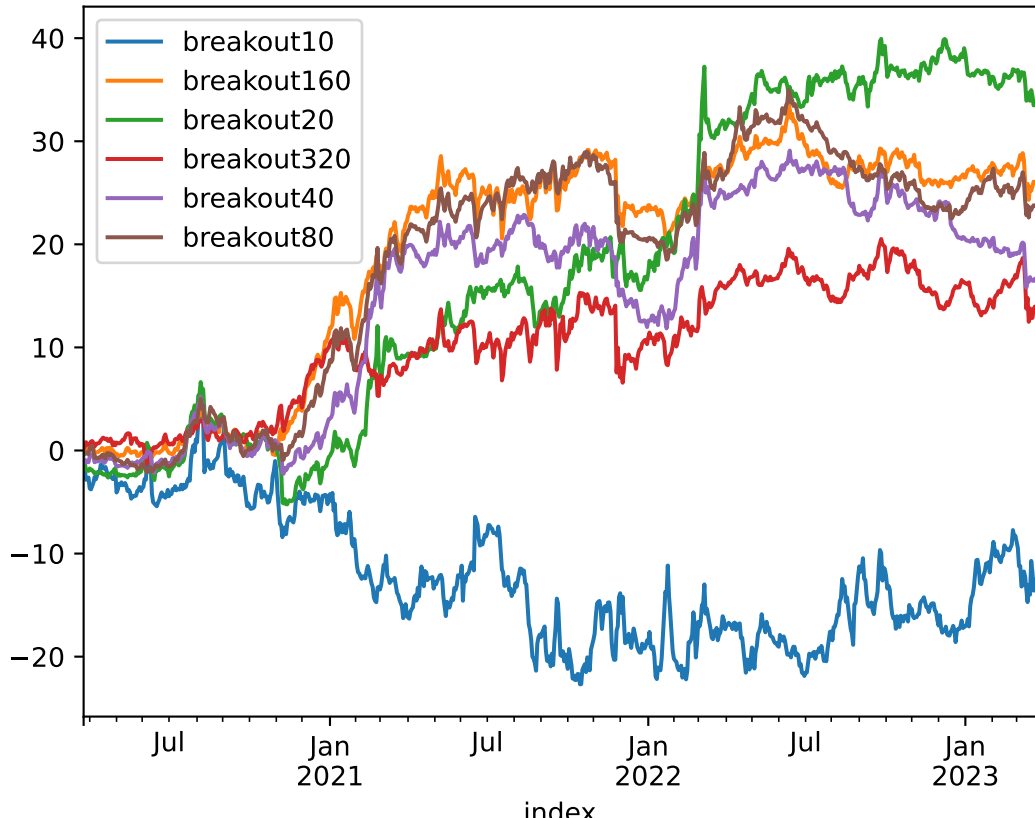


Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -4.106, 'breakout160': 8.516, 'breakout20': 11.076, 'breakout320': 4.571, 'breakout40': 5.457, 'breakout80': 7.775}

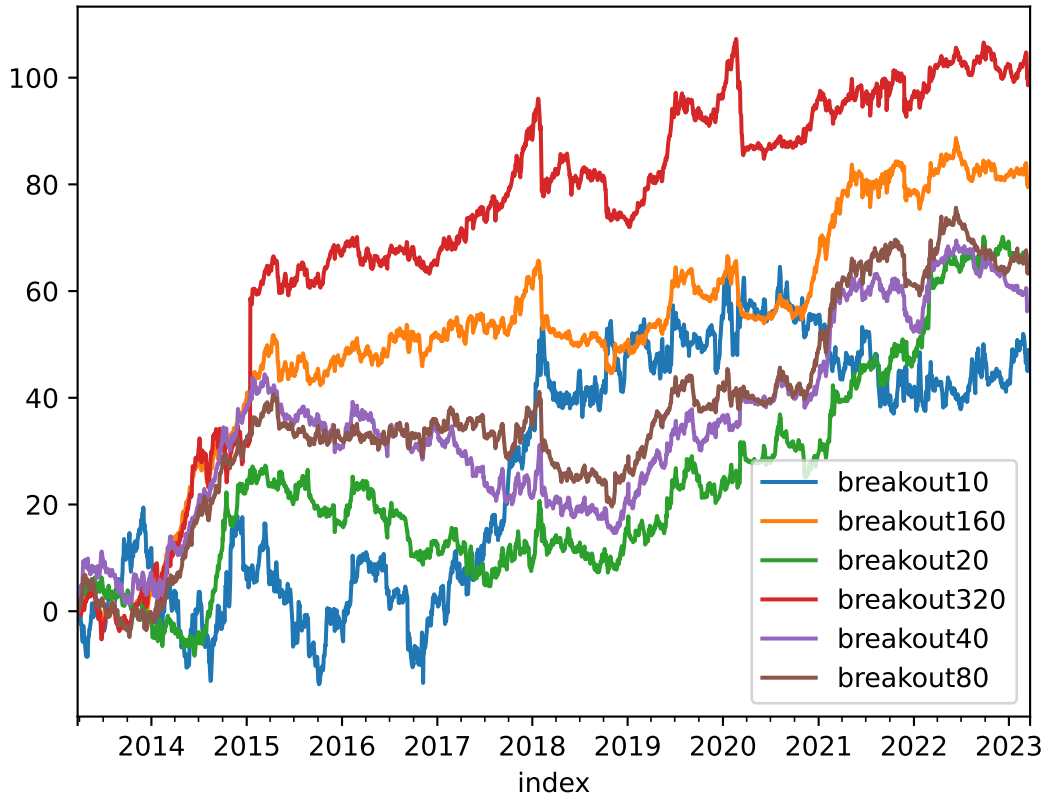
ann. std {'breakout10': 15.1, 'breakout160': 9.153, 'breakout20': 11.005, 'breakout320': 9.873, 'breakout40': 9.441, 'breakout80': 8.91}

ann. SR {'breakout10': -0.27, 'breakout160': 0.93, 'breakout20': 1.01, 'breakout320': 0.46, 'breakout40': 0.58, 'breakout80': 0.87}



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

ann. mean {'breakout10': 4.629, 'breakout160': 7.965, 'breakout20': 6.29, 'breakout320': 9.816, 'breakout40': 5.599, 'breakout80': 6.32}
ann. std {'breakout10': 17.91, 'breakout160': 8.883, 'breakout20': 11.135, 'breakout320': 13.091, 'breakout40': 9.476, 'breakout80': 8.768}
ann. SR {'breakout10': 0.26, 'breakout160': 0.9, 'breakout20': 0.56, 'breakout320': 0.75, 'breakout40': 0.59, 'breakout80': 0.72}

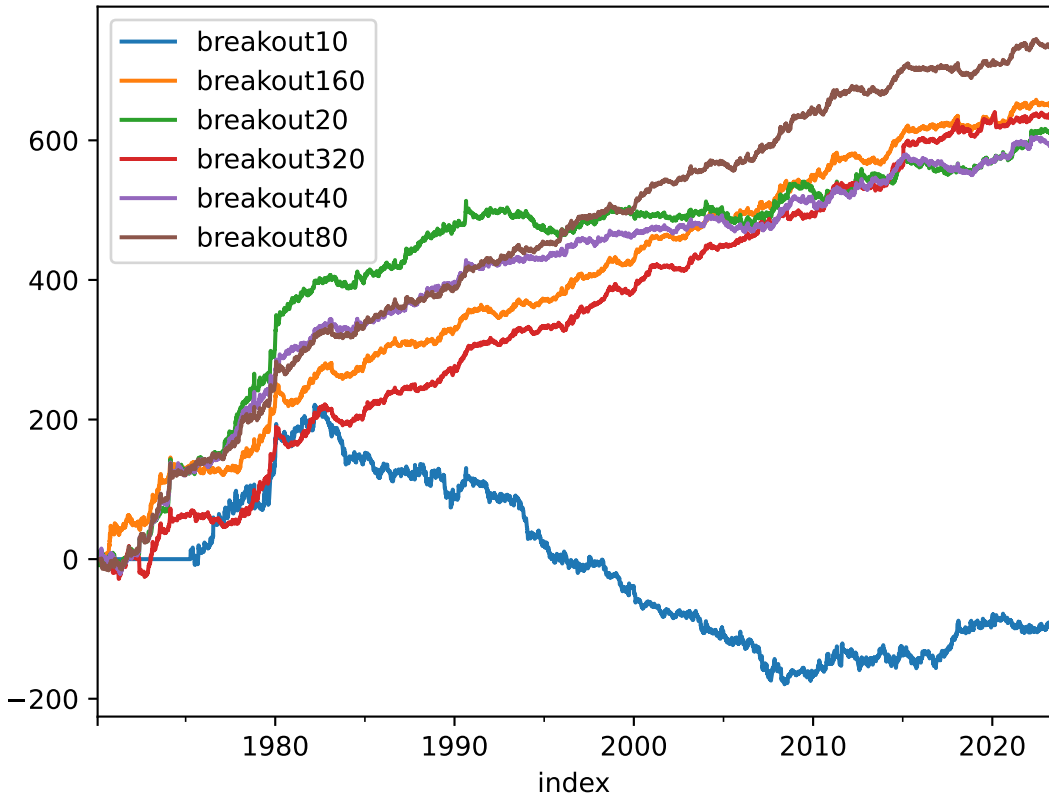


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -1.763, 'breakout160': 12.016, 'breakout20': 11.271, 'breakout320': 11.693, 'breakout40': 10.942, 'breakout80': 13.556}

ann. std {'breakout10': 21.334, 'breakout160': 11.536, 'breakout20': 14.9, 'breakout320': 12.123, 'breakout40': 12.119, 'breakout80': 11.725}

ann. SR {'breakout10': -0.08, 'breakout160': 1.04, 'breakout20': 0.76, 'breakout320': 0.96, 'breakout40': 0.9, 'breakout80': 1.16}

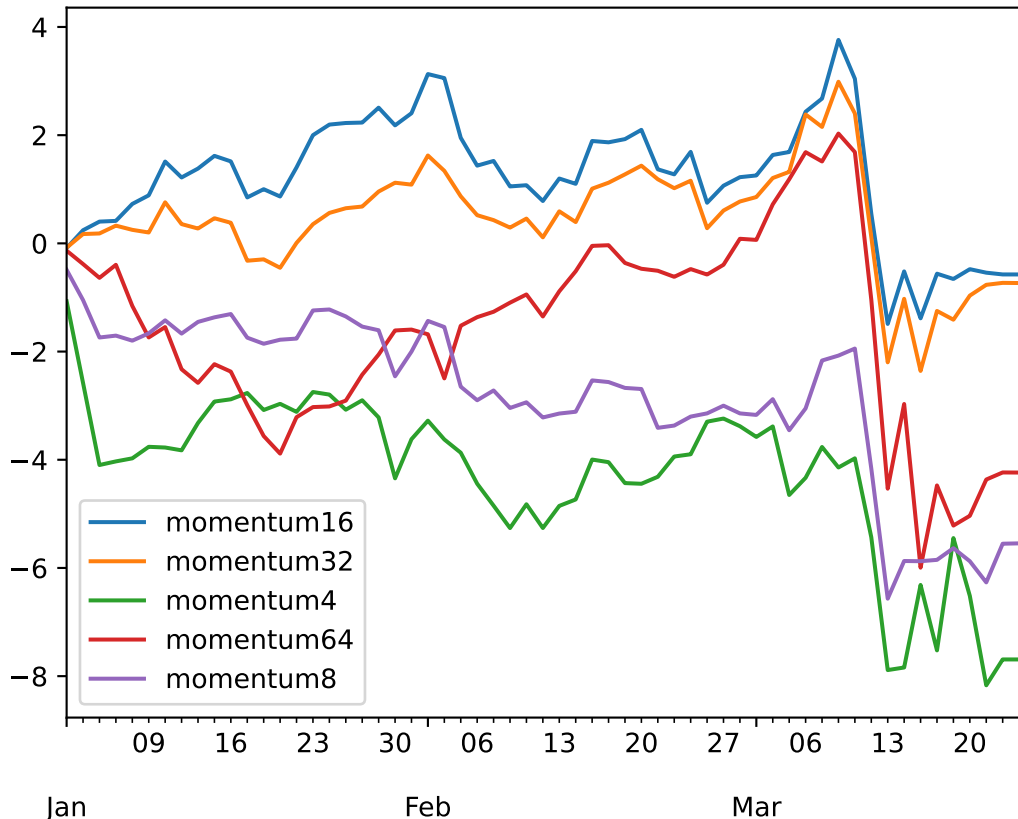


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': -2.493, 'momentum32': -3.182, 'momentum4': -33.372, 'momentum64': -18.383, 'momentum8': -24.062}

ann. std {'momentum16': 9.938, 'momentum32': 9.816, 'momentum4': 12.049, 'momentum64': 13.671, 'momentum8': 8.991}

ann. SR {'momentum16': -0.25, 'momentum32': -0.32, 'momentum4': -2.77, 'momentum64': -1.34, 'momentum8': -2.68}

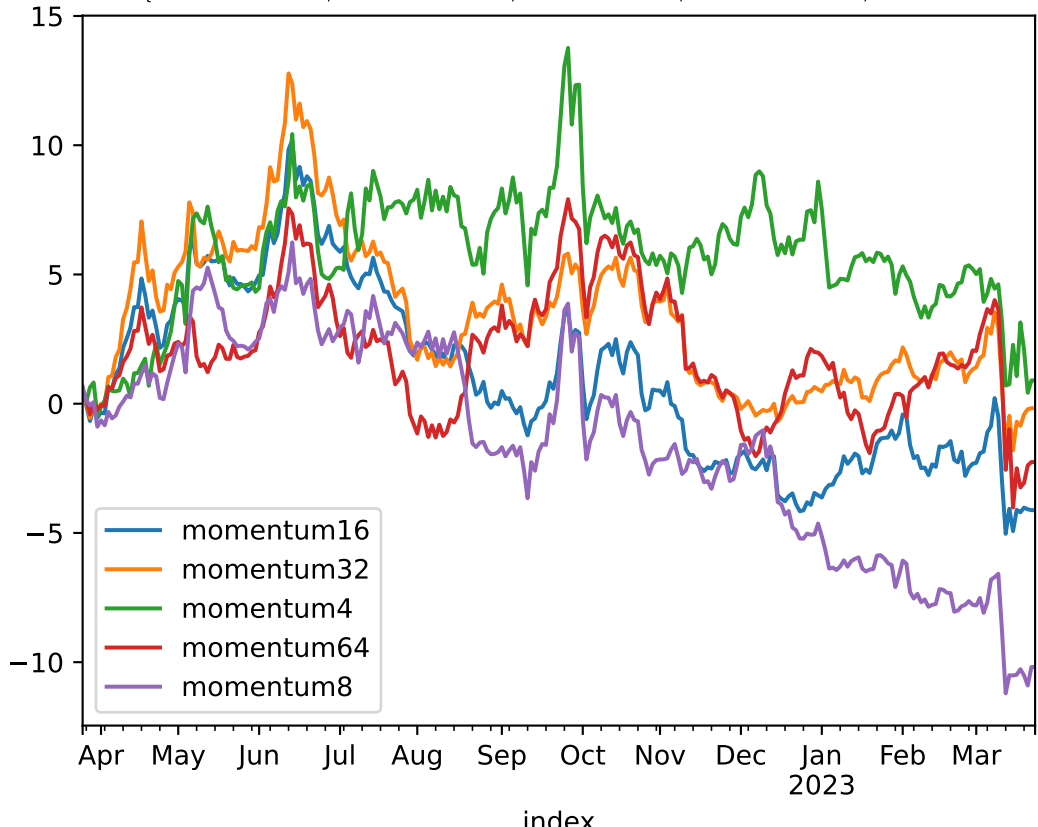


Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -4.056, 'momentum32': -0.176, 'momentum4': 0.888, 'momentum64': -2.224, 'momentum8': -10.025}

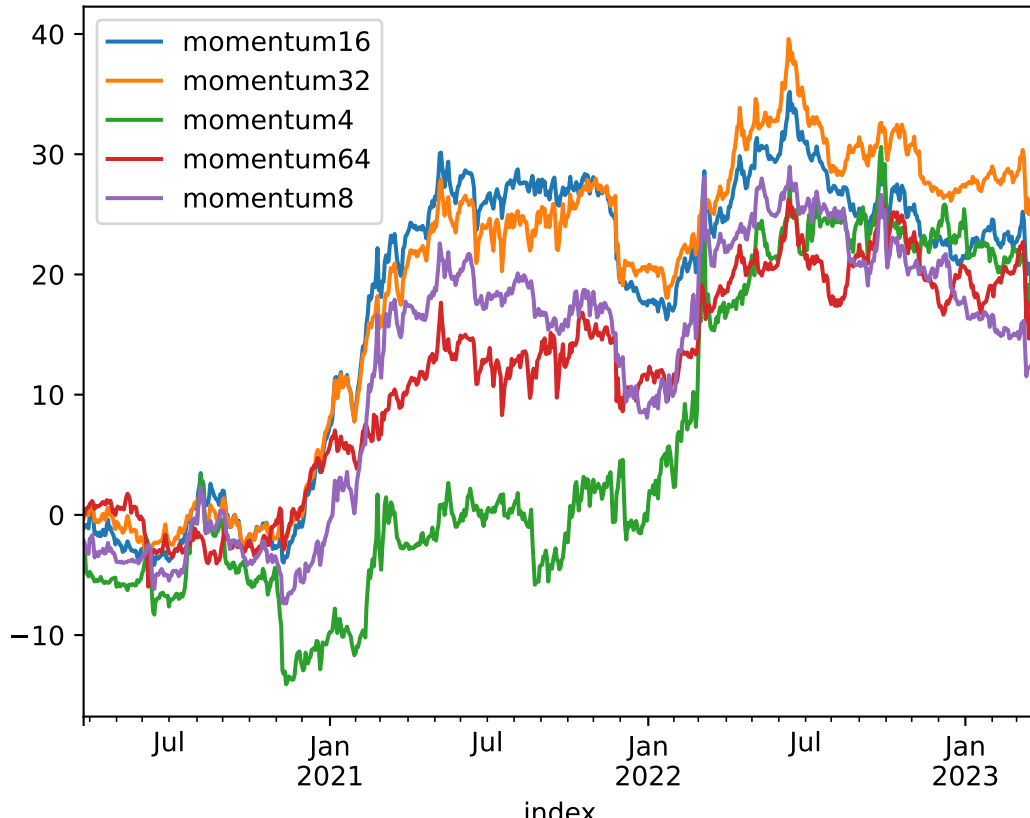
ann. std {'momentum16': 9.145, 'momentum32': 9.799, 'momentum4': 13.569, 'momentum64': 10.41, 'momentum8': 9.958}

ann. SR {'momentum16': -0.44, 'momentum32': -0.02, 'momentum4': 0.07, 'momentum64': -0.21, 'momentum8': -1.01}



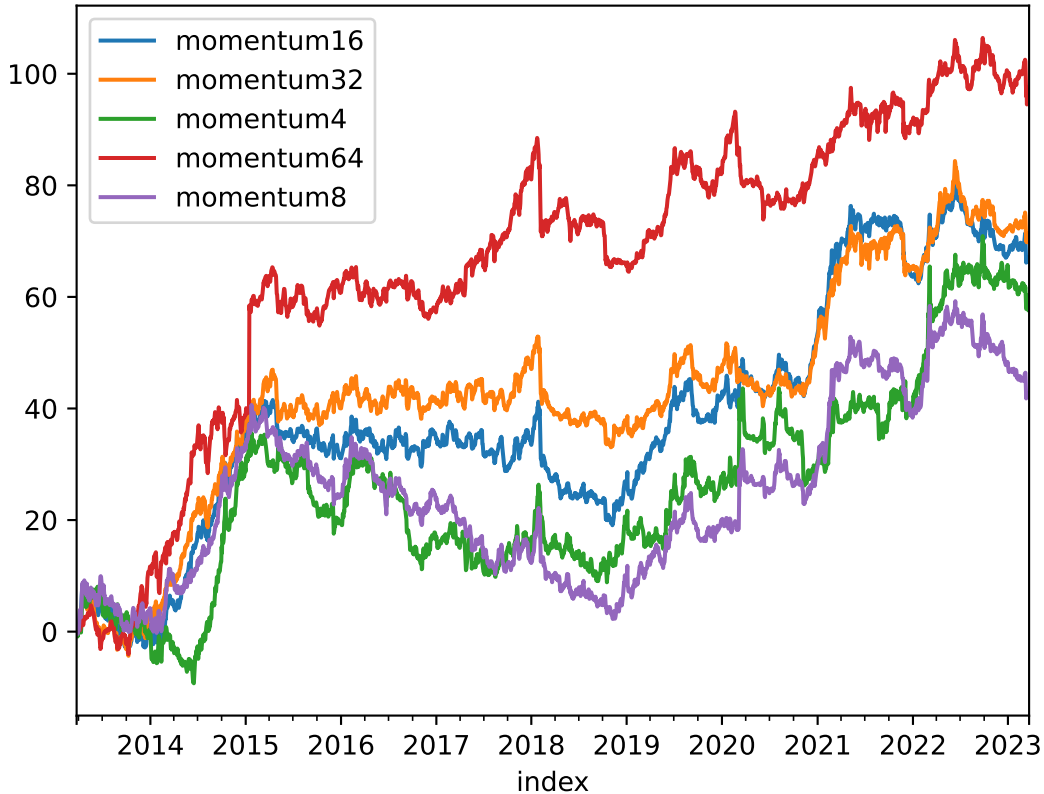
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 6.836, 'momentum32': 8.719, 'momentum4': 5.808, 'momentum64': 5.376, 'momentum8': 4.107}
ann. std {'momentum16': 10.199, 'momentum32': 10.402, 'momentum4': 14.665, 'momentum64': 10.808, 'momentum8': 11.471}
ann. SR {'momentum16': 0.67, 'momentum32': 0.84, 'momentum4': 0.4, 'momentum64': 0.5, 'momentum8': 0.36}



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

ann. mean {'momentum16': 6.58, 'momentum32': 7.007, 'momentum4': 5.695, 'momentum64': 9.445, 'momentum8': 4.201}
ann. std {'momentum16': 9.719, 'momentum32': 9.287, 'momentum4': 13.744, 'momentum64': 11.87, 'momentum8': 10.934}
ann. SR {'momentum16': 0.68, 'momentum32': 0.75, 'momentum4': 0.41, 'momentum64': 0.8, 'momentum8': 0.38}

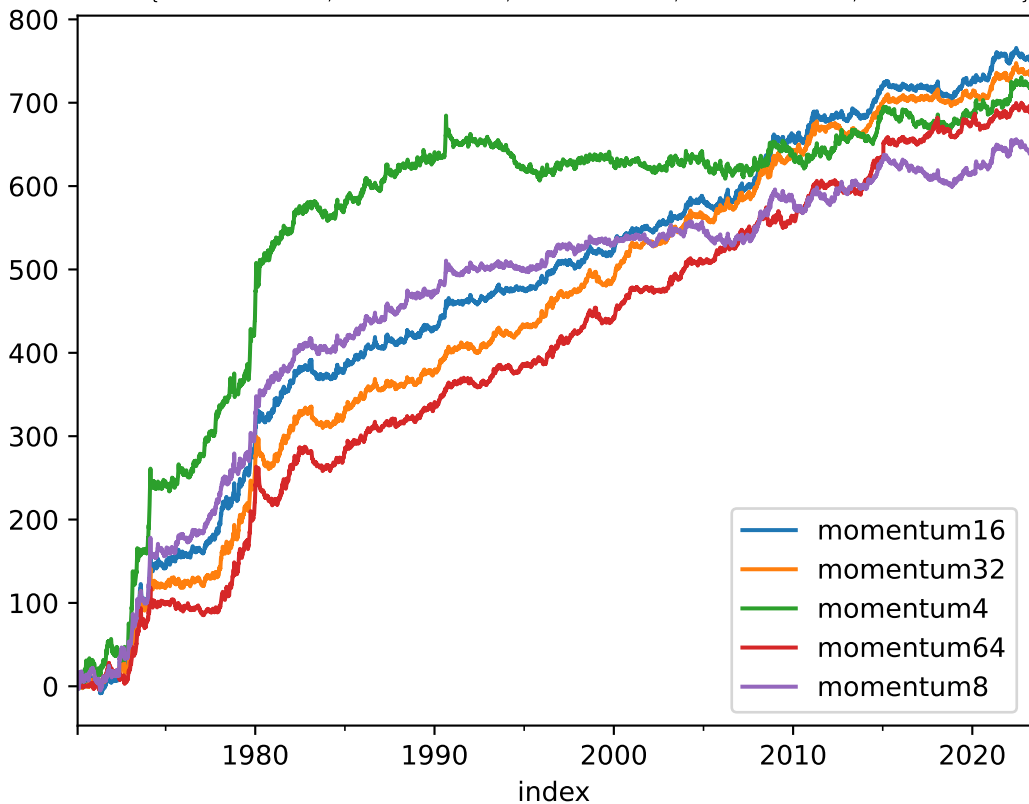


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.877, 'momentum32': 13.566, 'momentum4': 13.252, 'momentum64': 12.74, 'momentum8': 11.815}

ann. std {'momentum16': 13.055, 'momentum32': 12.618, 'momentum4': 17.904, 'momentum64': 12.339, 'momentum8': 14.339}

ann. SR {'momentum16': 1.06, 'momentum32': 1.08, 'momentum4': 0.74, 'momentum64': 1.03, 'momentum8': 0.82}

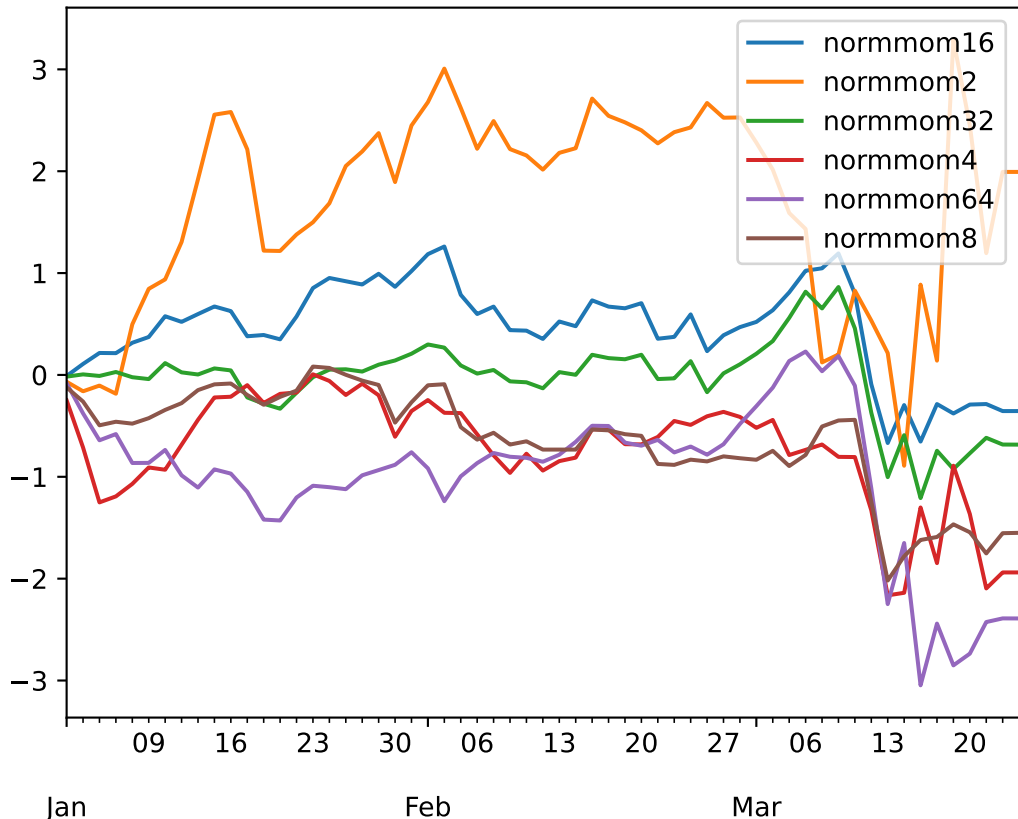


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': -1.539, 'normmom2': 8.648, 'normmom32': -2.969, 'normmom4': -8.413, 'normmom64': -10.374, 'normmom8': -6.726}

ann. std {'normmom16': 3.615, 'normmom2': 10.475, 'normmom32': 3.543, 'normmom4': 4.819, 'normmom64': 5.319, 'normmom8': 3.174}

ann. SR {'normmom16': -0.43, 'normmom2': 0.83, 'normmom32': -0.84, 'normmom4': -1.75, 'normmom64': -1.95, 'normmom8': -2.12}

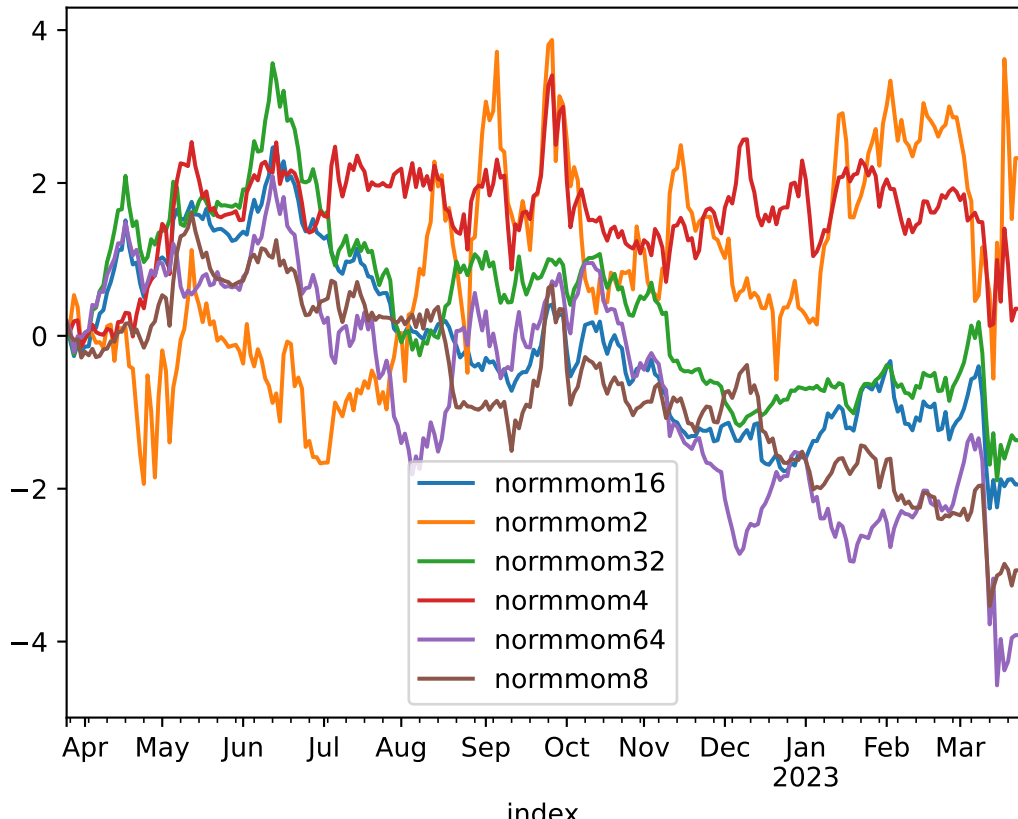


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -1.915, 'normmom2': 2.289, 'normmom32': -1.346, 'normmom4': 0.35, 'normmom64': -3.856, 'normmom8': -3.019}

ann. std {'normmom16': 2.738, 'normmom2': 7.821, 'normmom32': 3.072, 'normmom4': 4.305, 'normmom64': 3.887, 'normmom8': 2.903}

ann. SR {'normmom16': -0.7, 'normmom2': 0.29, 'normmom32': -0.44, 'normmom4': 0.08, 'normmom64': -0.99, 'normmom8': -1.04}

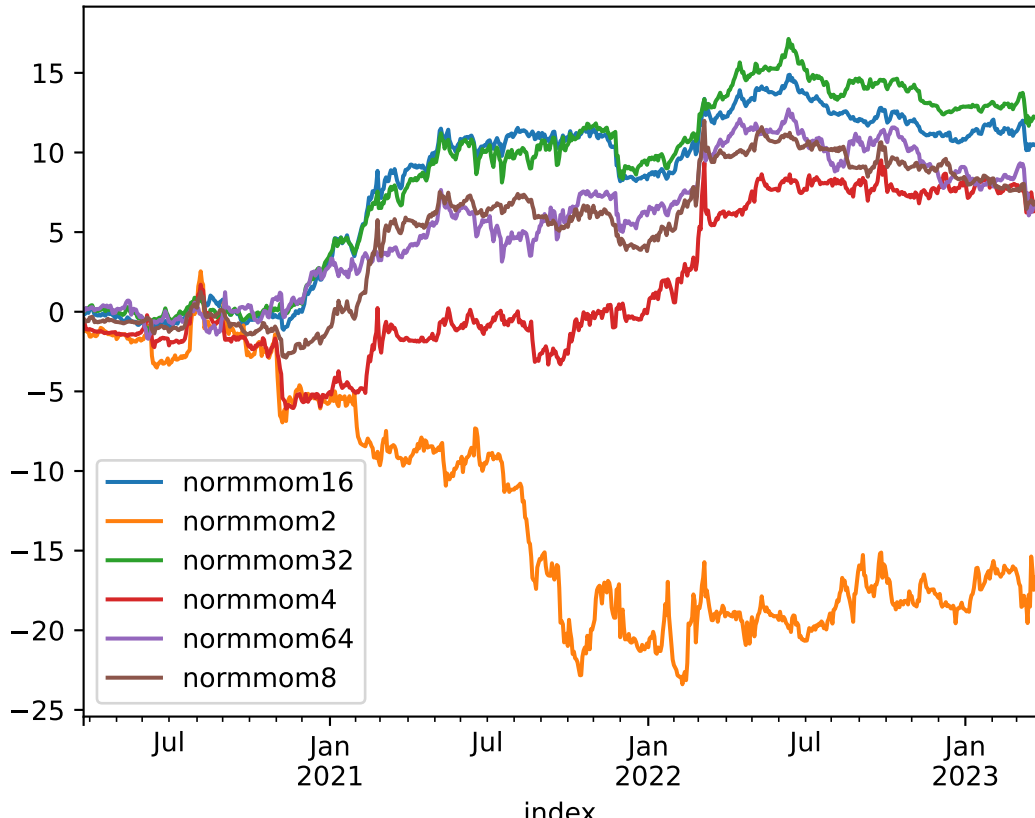


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.423, 'normmom2': -5.455, 'normmom32': 3.993, 'normmom4': 2.113, 'normmom64': 2.194, 'normmom8': 2.265}

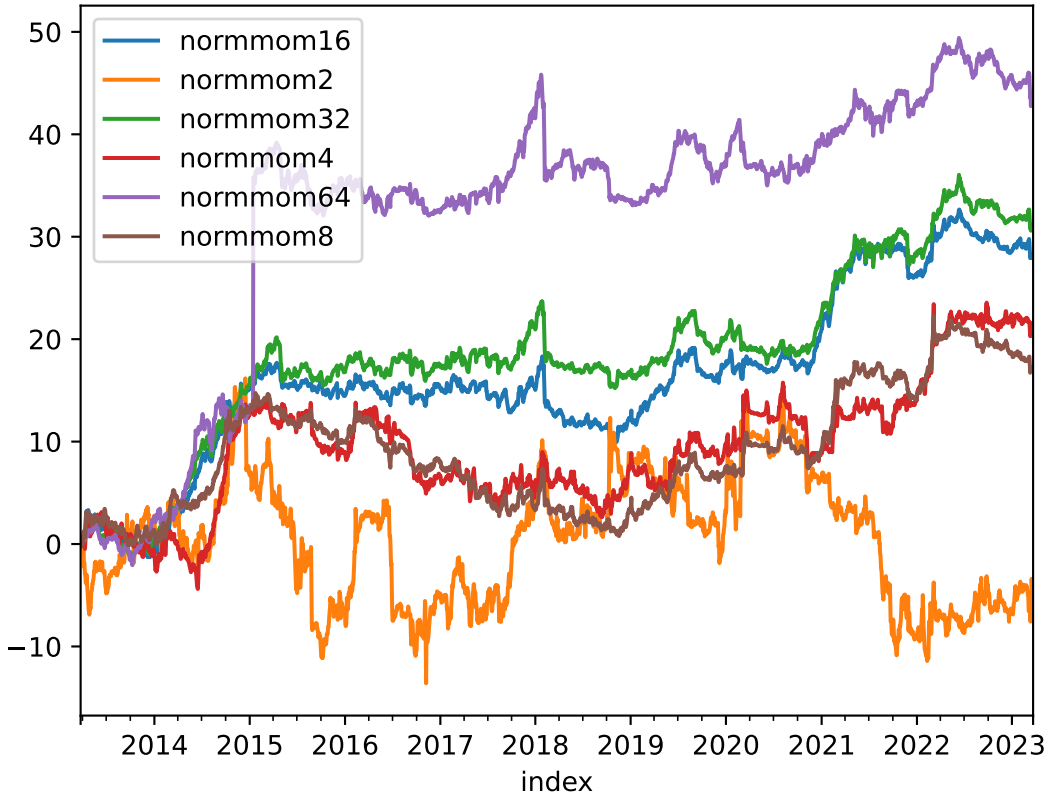
ann. std {'normmom16': 3.512, 'normmom2': 8.619, 'normmom32': 3.878, 'normmom4': 5.344, 'normmom64': 4.269, 'normmom8': 3.909}

ann. SR {'normmom16': 0.97, 'normmom2': -0.63, 'normmom32': 1.03, 'normmom4': 0.4, 'normmom64': 0.51, 'normmom8': 0.58}



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

ann. mean {'normmom16': 2.77, 'normmom2': -0.46, 'normmom32': 3.053, 'normmom4': 2.013, 'normmom64': 4.259, 'normmom8': 1.686}
ann. std {'normmom16': 3.493, 'normmom2': 10.367, 'normmom32': 3.632, 'normmom4': 5.468, 'normmom64': 8.27, 'normmom8': 3.912}
ann. SR {'normmom16': 0.79, 'normmom2': -0.04, 'normmom32': 0.84, 'normmom4': 0.37, 'normmom64': 0.51, 'normmom8': 0.43}

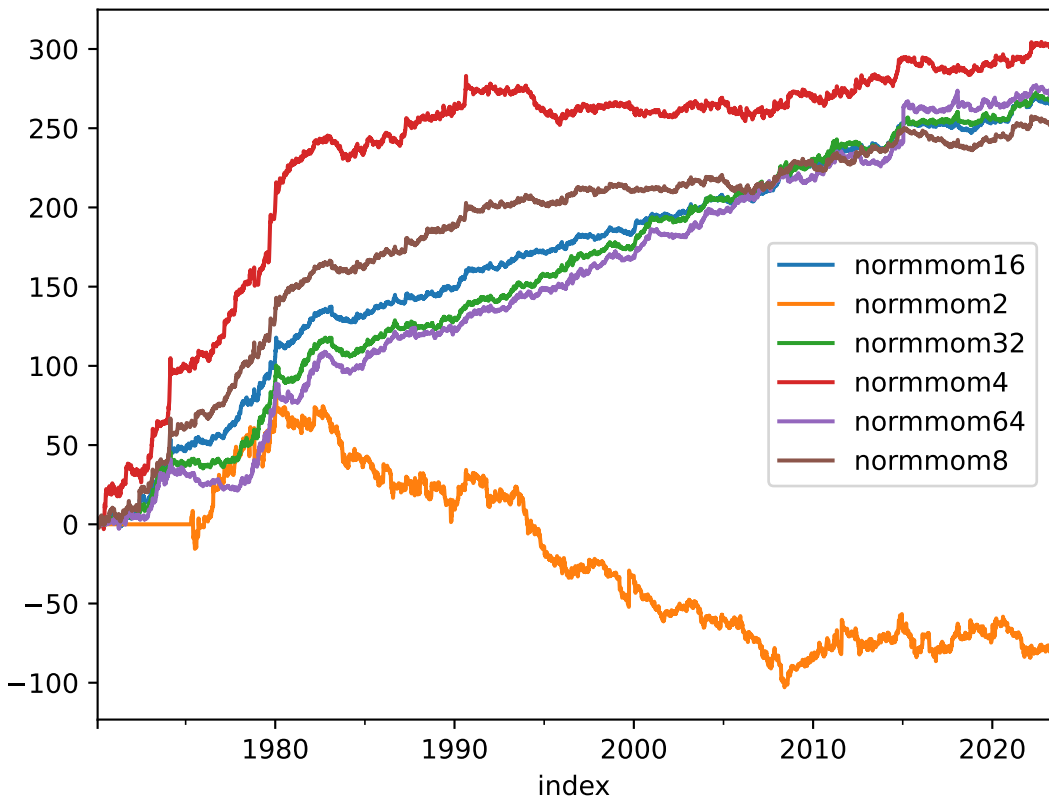


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.903, 'normmom2': -1.431, 'normmom32': 4.945, 'normmom4': 5.566, 'normmom64': 5.01, 'normmom8': 4.662}

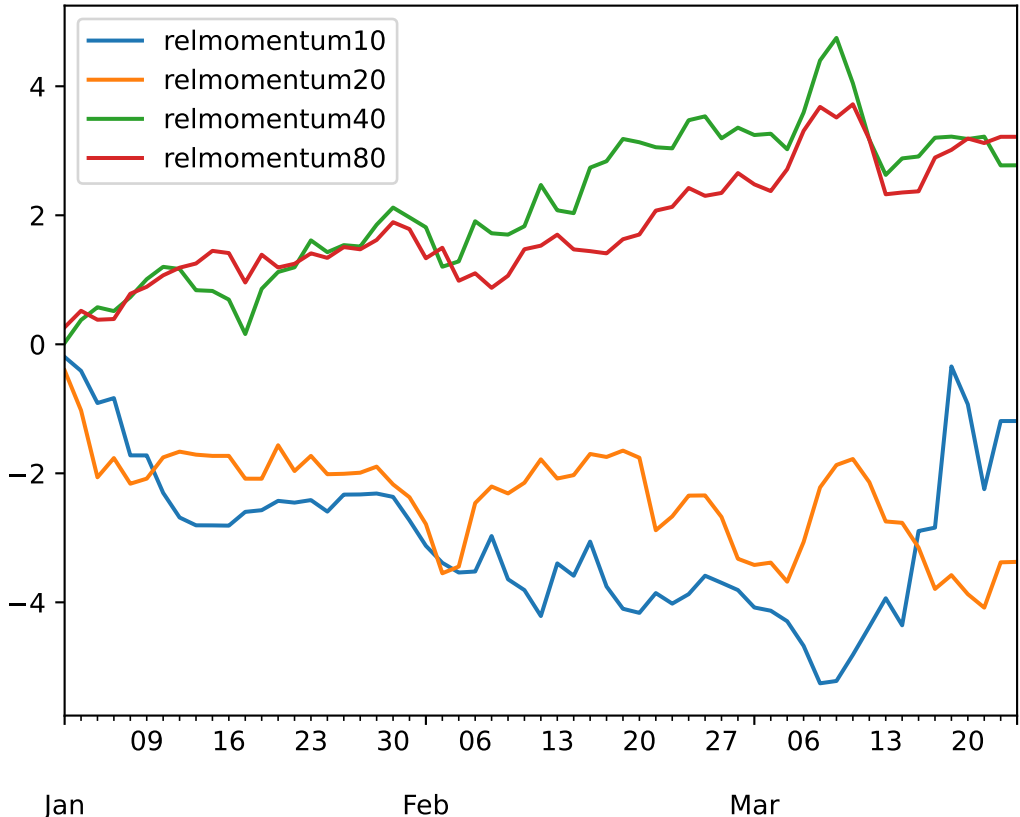
ann. std {'normmom16': 4.535, 'normmom2': 11.619, 'normmom32': 4.613, 'normmom4': 7.389, 'normmom64': 5.874, 'normmom8': 5.368}

ann. SR {'normmom16': 1.08, 'normmom2': -0.12, 'normmom32': 1.07, 'normmom4': 0.75, 'normmom64': 0.85, 'normmom8': 0.87}



Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -5.162, 'relmomentum20': -14.635, 'relmomentum40': 12.04, 'relmomentum80': 13.958}
 ann. std {'relmomentum10': 8.869, 'relmomentum20': 6.579, 'relmomentum40': 5.584, 'relmomentum80': 4.28}
 ann. SR {'relmomentum10': -0.58, 'relmomentum20': -2.22, 'relmomentum40': 2.16, 'relmomentum80': 3.26}

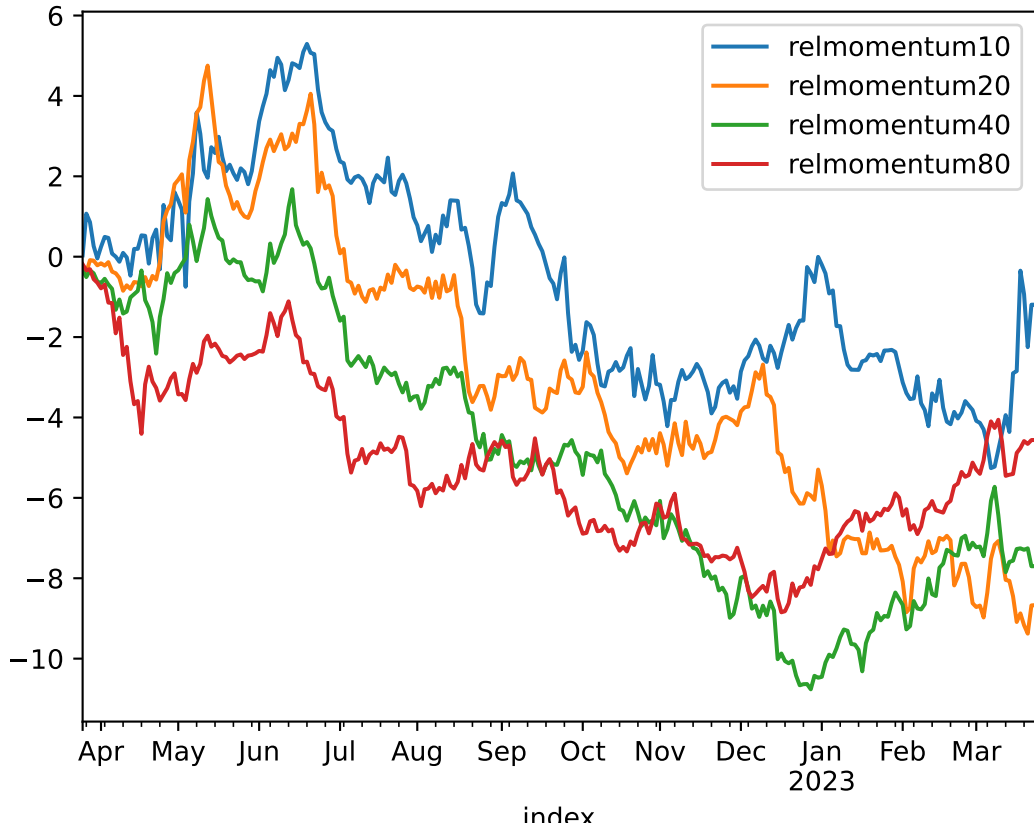


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -1.176, 'relmomentum20': -8.535, 'relmomentum40': -7.582, 'relmomentum80': -4.491}

ann. std {'relmomentum10': 8.301, 'relmomentum20': 6.477, 'relmomentum40': 5.471, 'relmomentum80': 4.932}

ann. SR {'relmomentum10': -0.14, 'relmomentum20': -1.32, 'relmomentum40': -1.39, 'relmomentum80': -0.91}

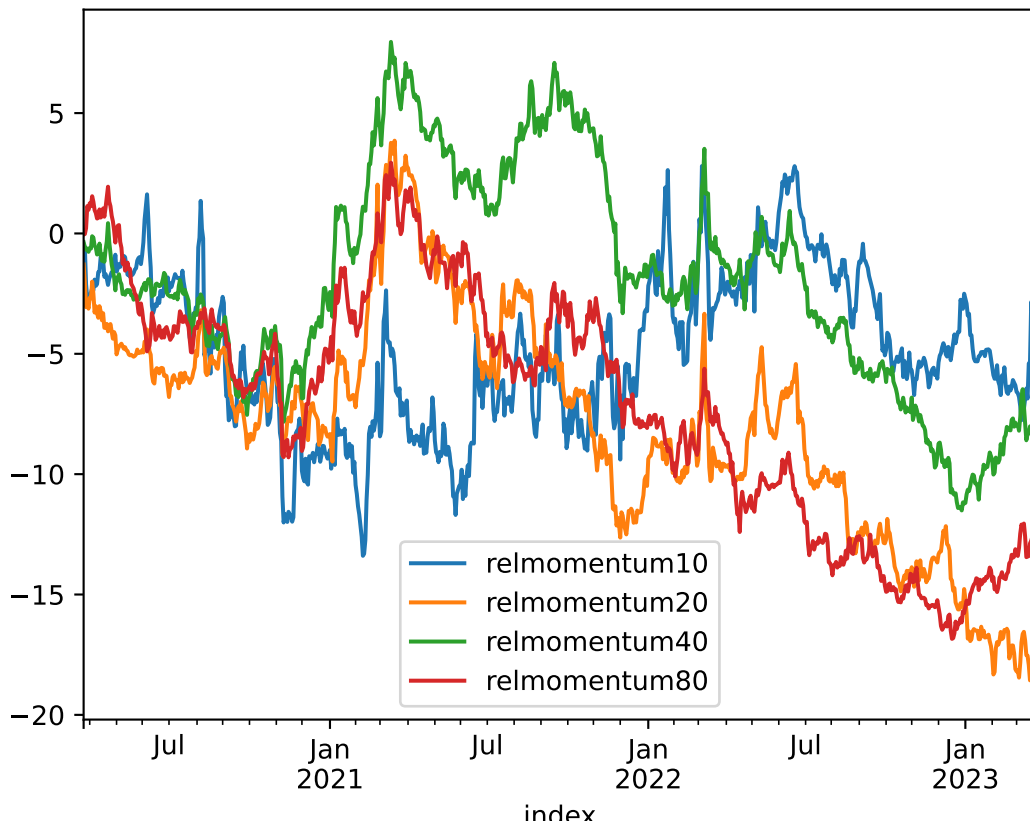


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -1.209, 'relmomentum20': -5.94, 'relmomentum40': -2.764, 'relmomentum80': -4.11}

ann. std {'relmomentum10': 11.933, 'relmomentum20': 8.379, 'relmomentum40': 6.974, 'relmomentum80': 6.37}

ann. SR {'relmomentum10': -0.1, 'relmomentum20': -0.71, 'relmomentum40': -0.4, 'relmomentum80': -0.65}

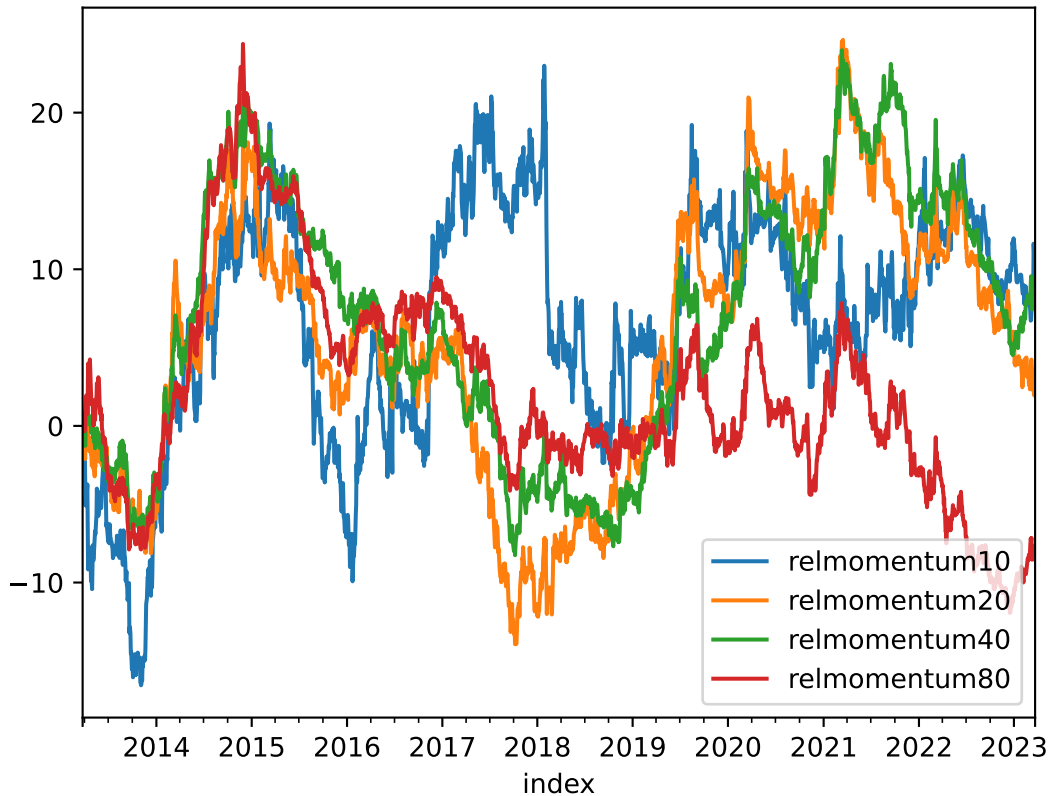


Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': 1.058, 'relmomentum20': 0.259, 'relmomentum40': 0.744, 'relmomentum80': -0.751}

ann. std {'relmomentum10': 13.522, 'relmomentum20': 8.655, 'relmomentum40': 7.082, 'relmomentum80': 6.457}

ann. SR {'relmomentum10': 0.08, 'relmomentum20': 0.03, 'relmomentum40': 0.11, 'relmomentum80': -0.12}

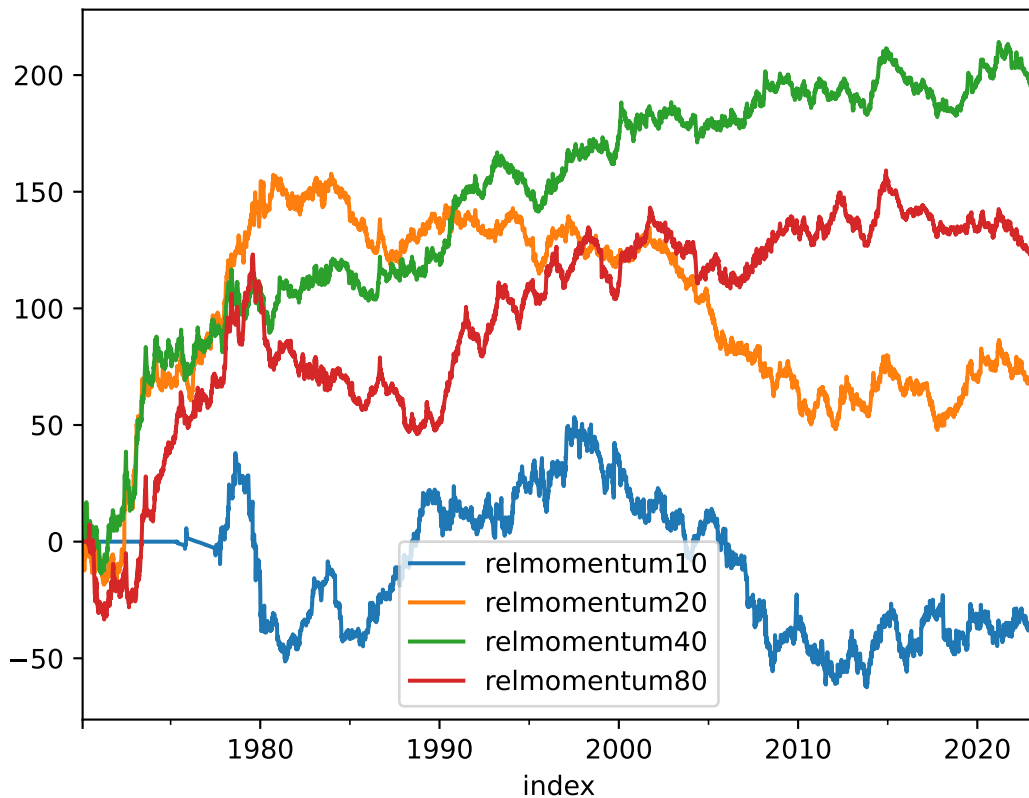


Total Trading Rule P&L for period '99Y'

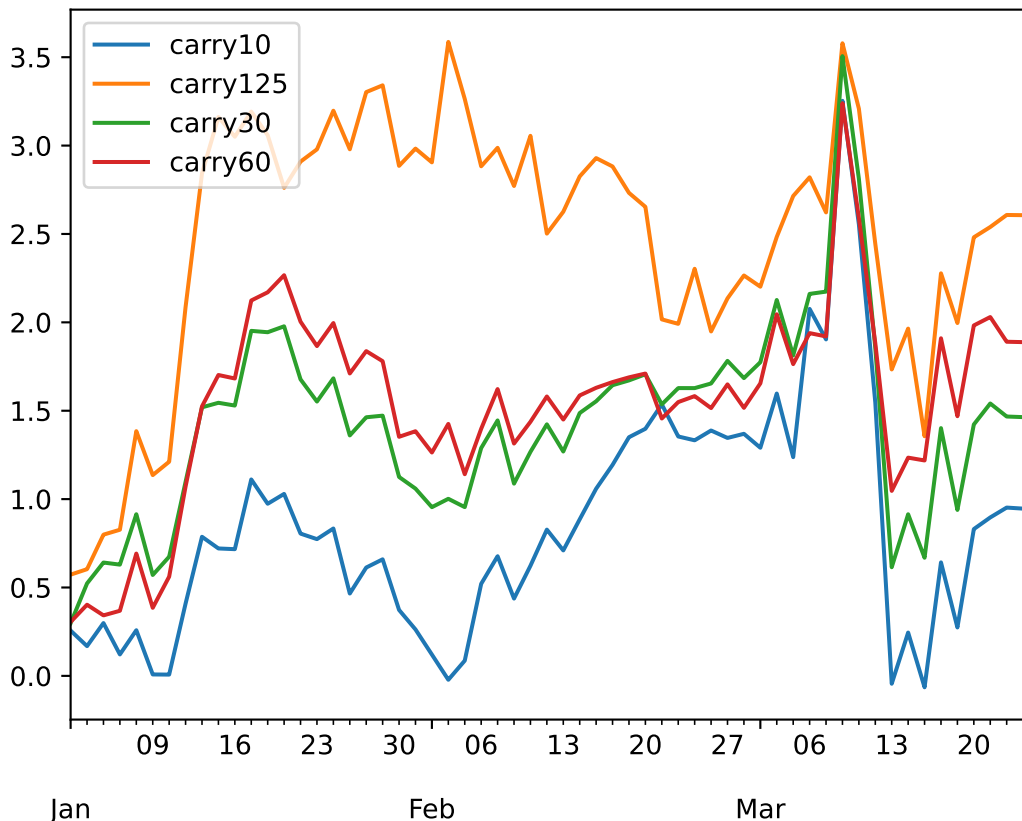
ann. mean {'relmomentum10': -0.648, 'relmomentum20': 1.19, 'relmomentum40': 3.653, 'relmomentum80': 2.347}

ann. std {'relmomentum10': 13.4, 'relmomentum20': 10.473, 'relmomentum40': 9.645, 'relmomentum80': 9.79}

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': 4.105, 'carry125': 11.309, 'carry30': 6.352, 'carry60': 8.193}
ann. std {'carry10': 6.48, 'carry125': 6.133, 'carry30': 5.917, 'carry60': 5.369}
ann. SR {'carry10': 0.63, 'carry125': 1.84, 'carry30': 1.07, 'carry60': 1.53}

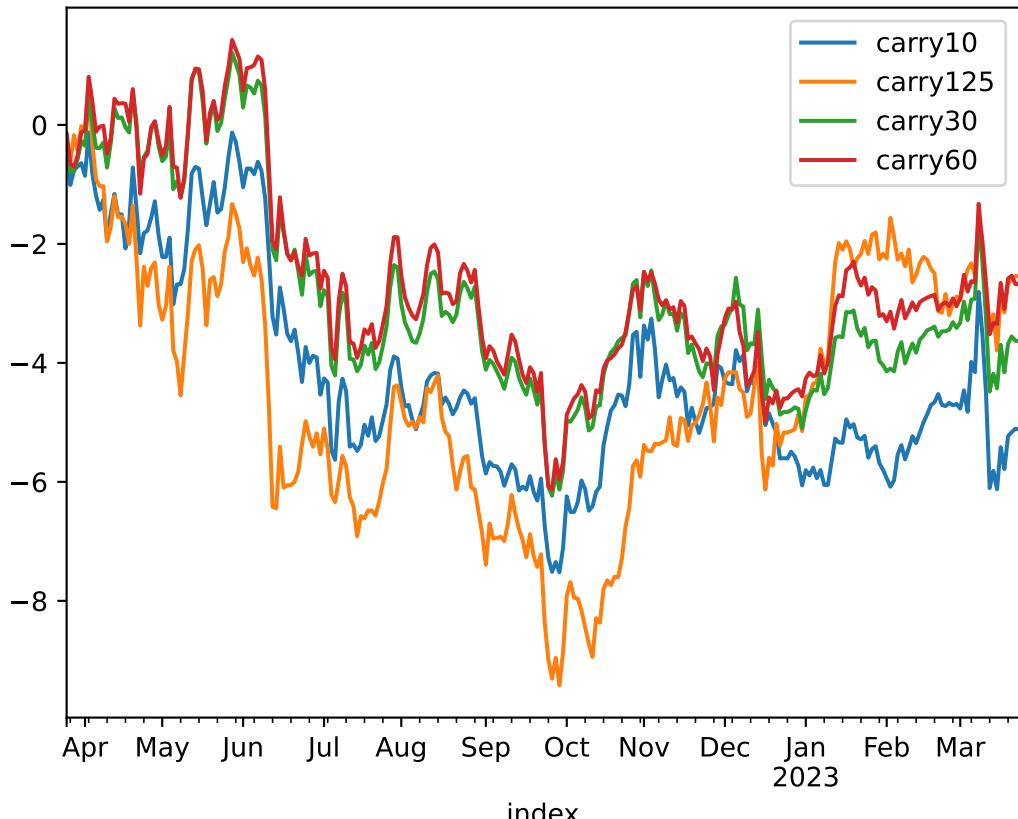


Total Trading Rule P&L for period '1Y'

ann. mean {'carry10': -5.035, 'carry125': -2.502, 'carry30': -3.577, 'carry60': -2.636}

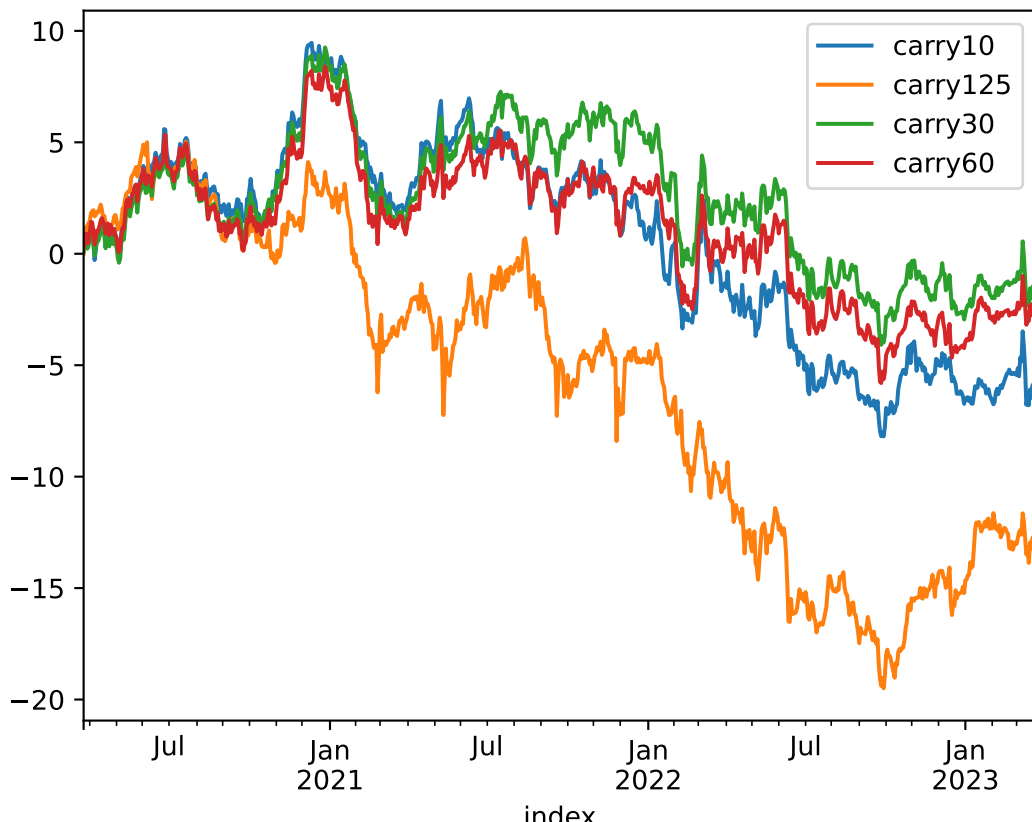
ann. std {'carry10': 6.379, 'carry125': 7.189, 'carry30': 6.266, 'carry60': 6.324}

ann. SR {'carry10': -0.79, 'carry125': -0.35, 'carry30': -0.57, 'carry60': -0.42}

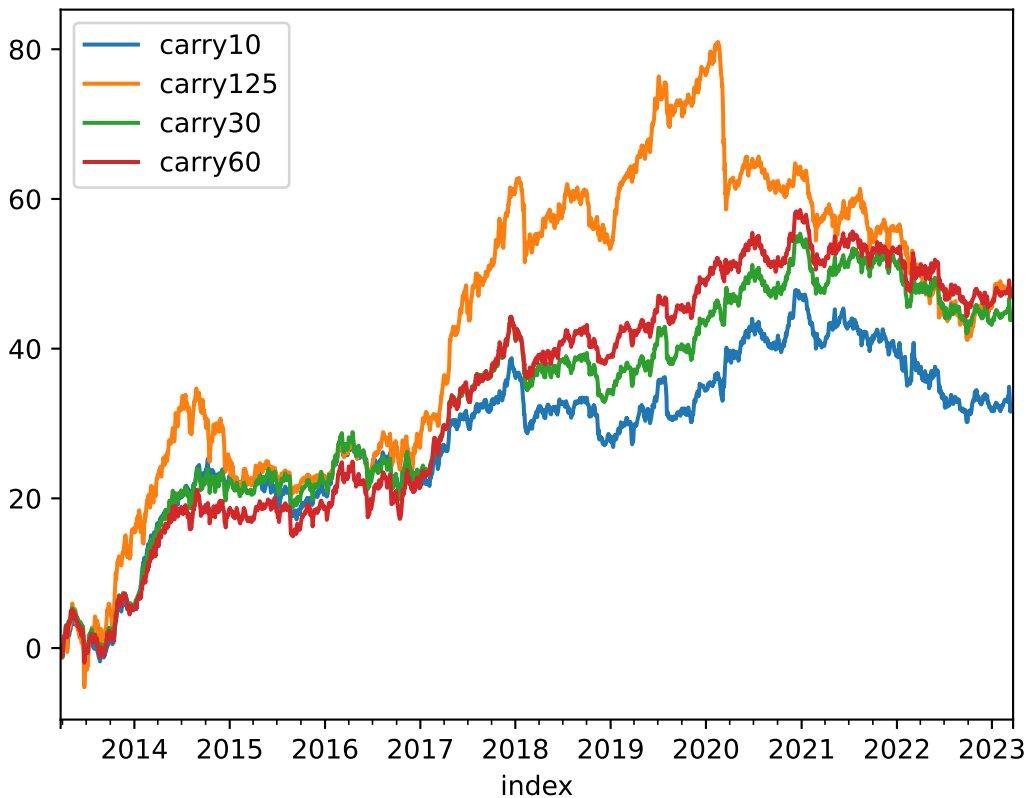


Total Trading Rule P&L for period '3Y'

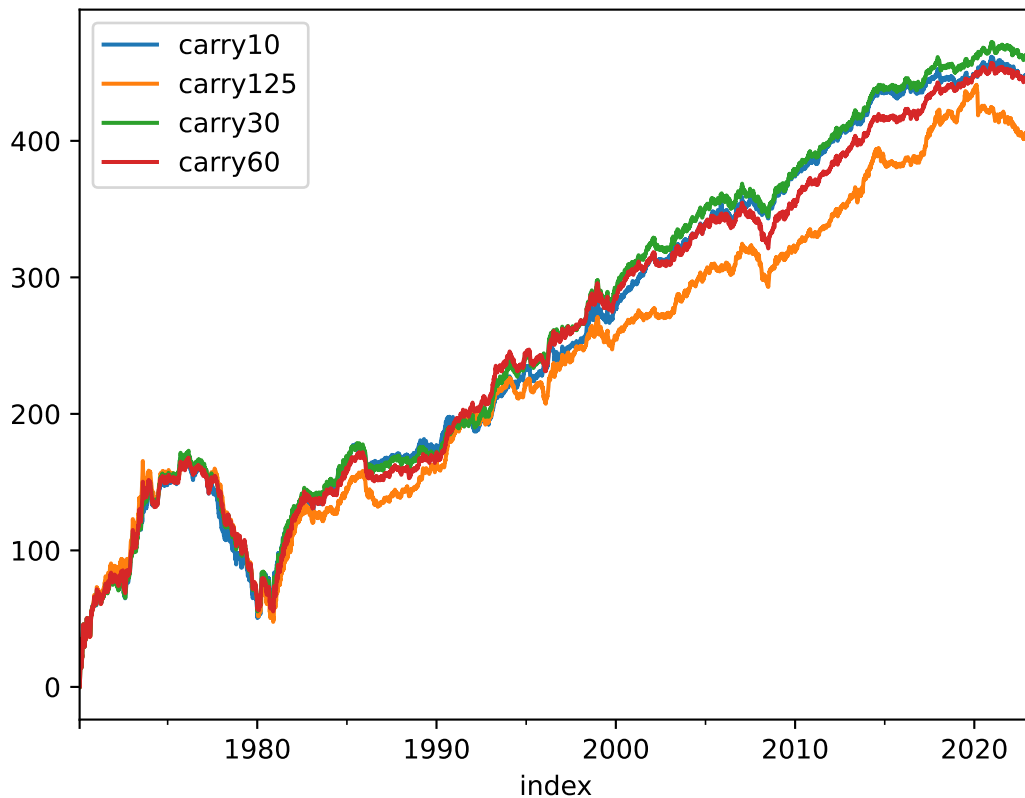
ann. mean	{'carry10': -1.895, 'carry125': -4.131, 'carry30': -0.486, 'carry60': -0.768}
ann. std	{'carry10': 6.617, 'carry125': 8.01, 'carry30': 6.522, 'carry60': 6.505}
ann. SR	{'carry10': -0.29, 'carry125': -0.52, 'carry30': -0.07, 'carry60': -0.12}



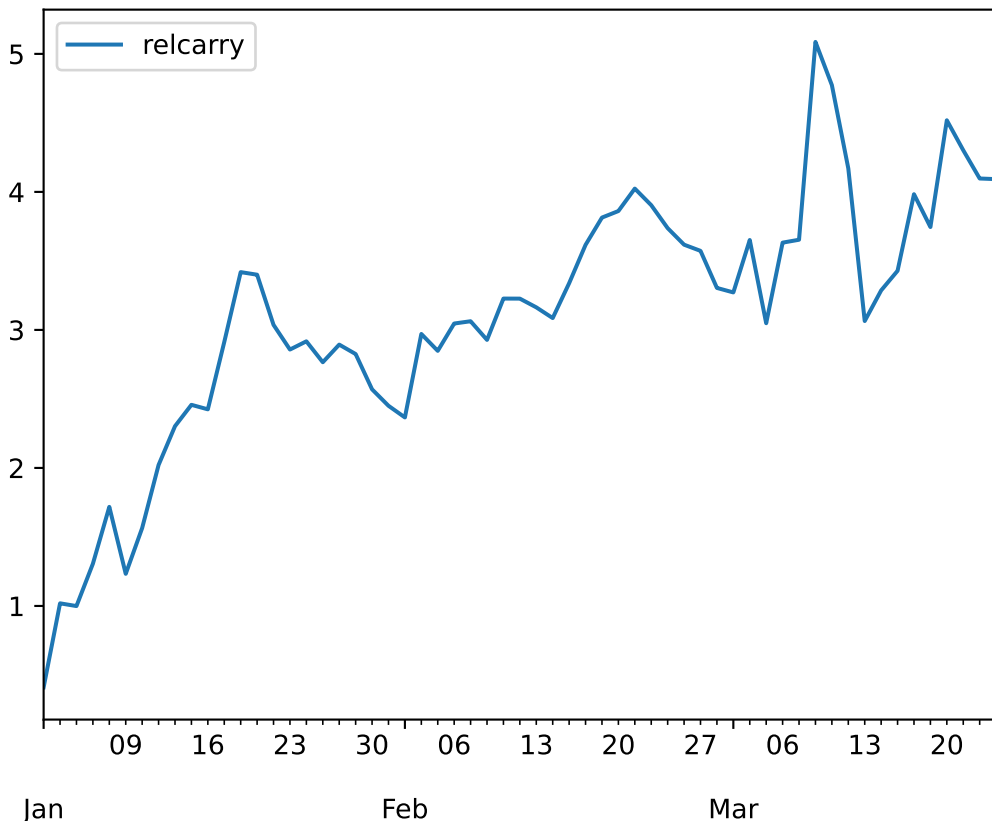
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.2, 'carry125': 4.714, 'carry30': 4.38, 'carry60': 4.689}
ann. std {'carry10': 6.391, 'carry125': 9.0, 'carry30': 6.49, 'carry60': 6.442}
ann. SR {'carry10': 0.5, 'carry125': 0.52, 'carry30': 0.67, 'carry60': 0.73}



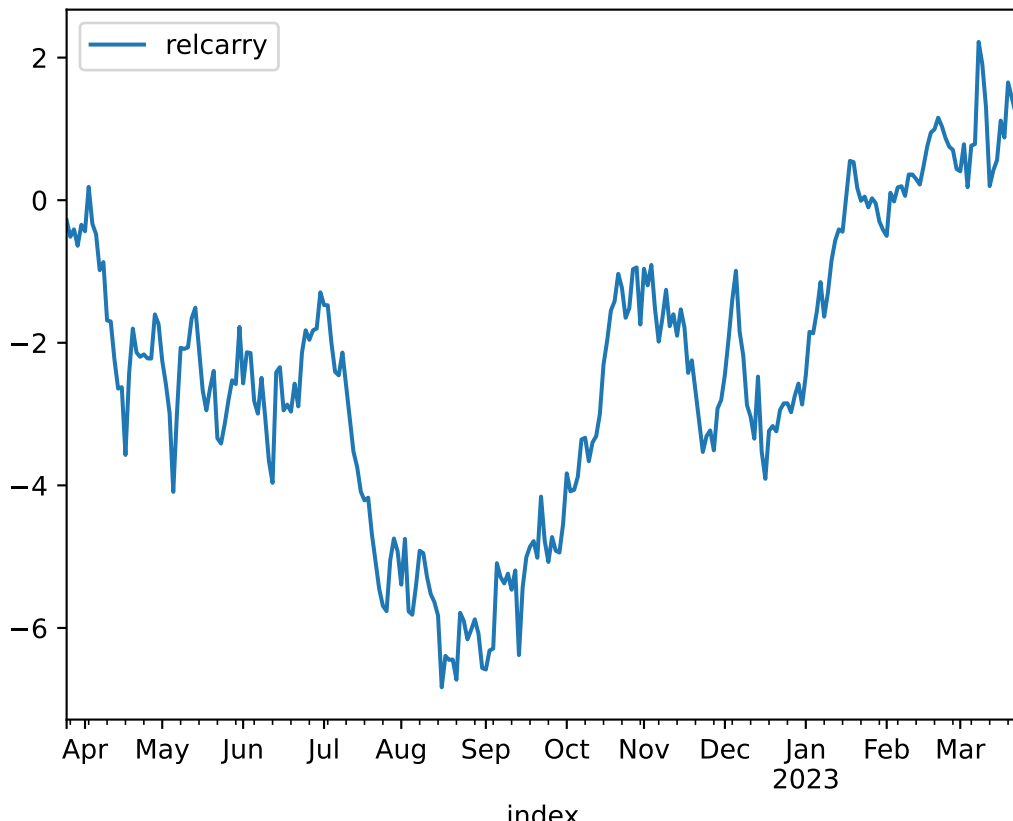
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 8.243, 'carry125': 7.537, 'carry30': 8.527, 'carry60': 8.243}
ann. std {'carry10': 11.207, 'carry125': 11.565, 'carry30': 11.264, 'carry60': 11.267}
ann. SR {'carry10': 0.74, 'carry125': 0.65, 'carry30': 0.76, 'carry60': 0.73}



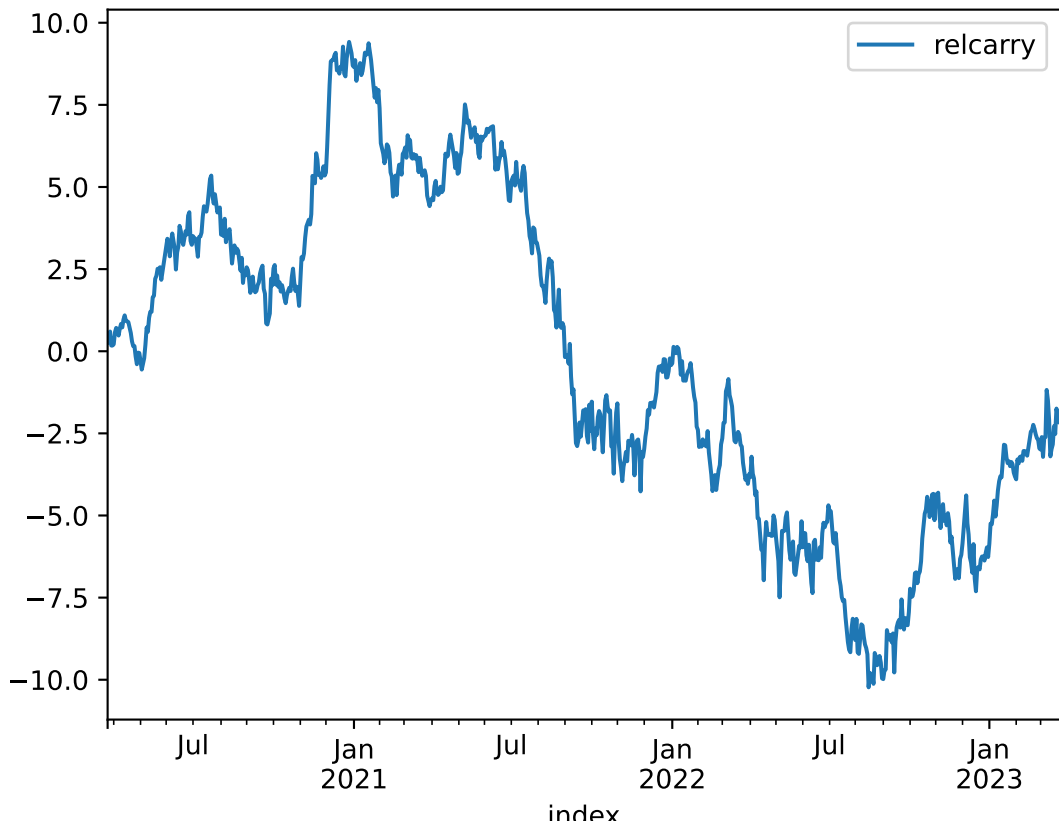
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 17.757}
ann. std {'relcarry': 6.147}
ann. SR {'relcarry': 2.89}



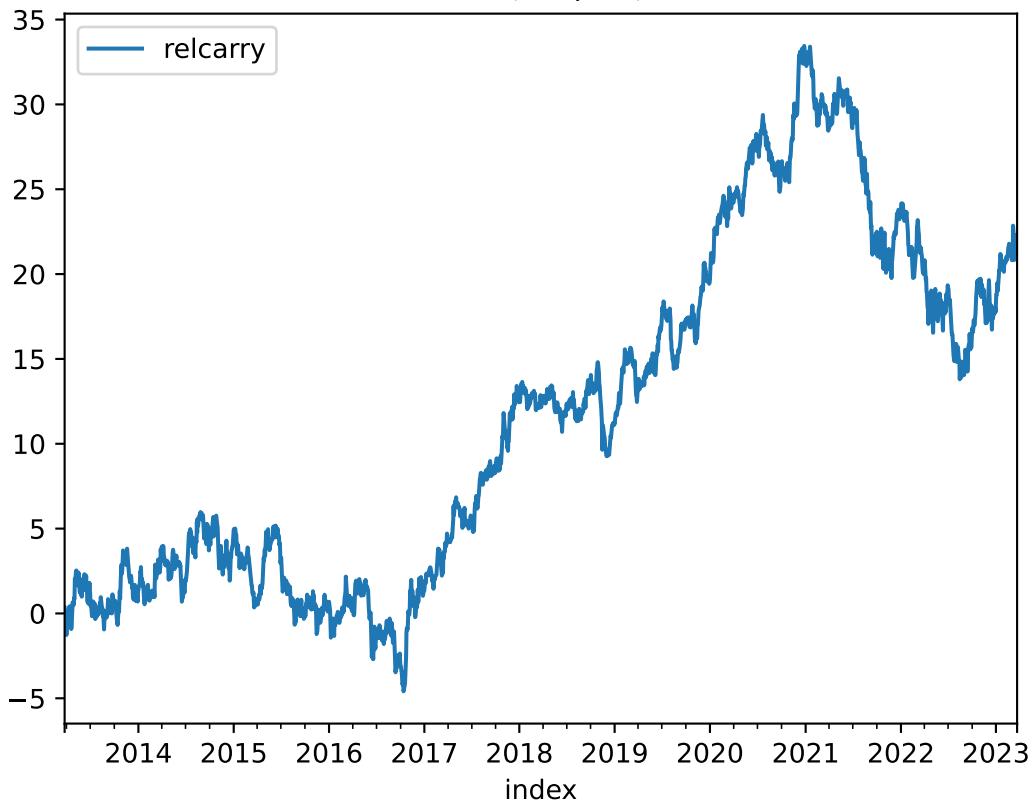
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': 1.207}
ann. std {'relcarry': 7.217}
ann. SR {'relcarry': 0.17}



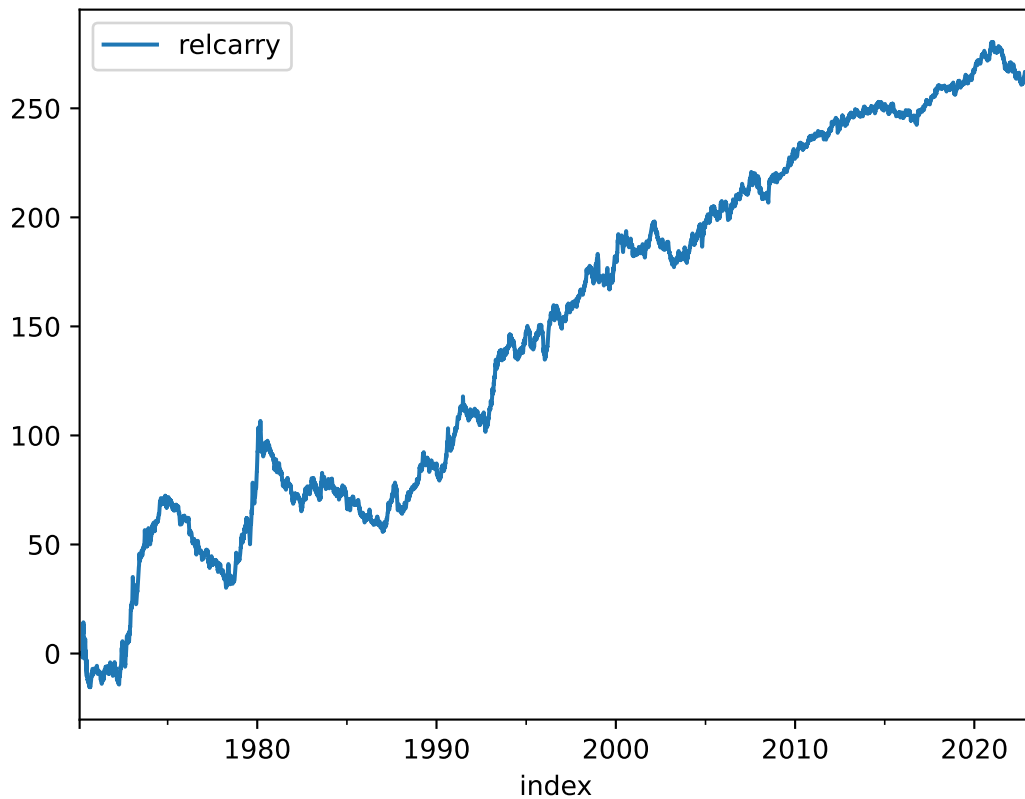
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -0.711}
ann. std {'relcarry': 6.64}
ann. SR {'relcarry': -0.11}



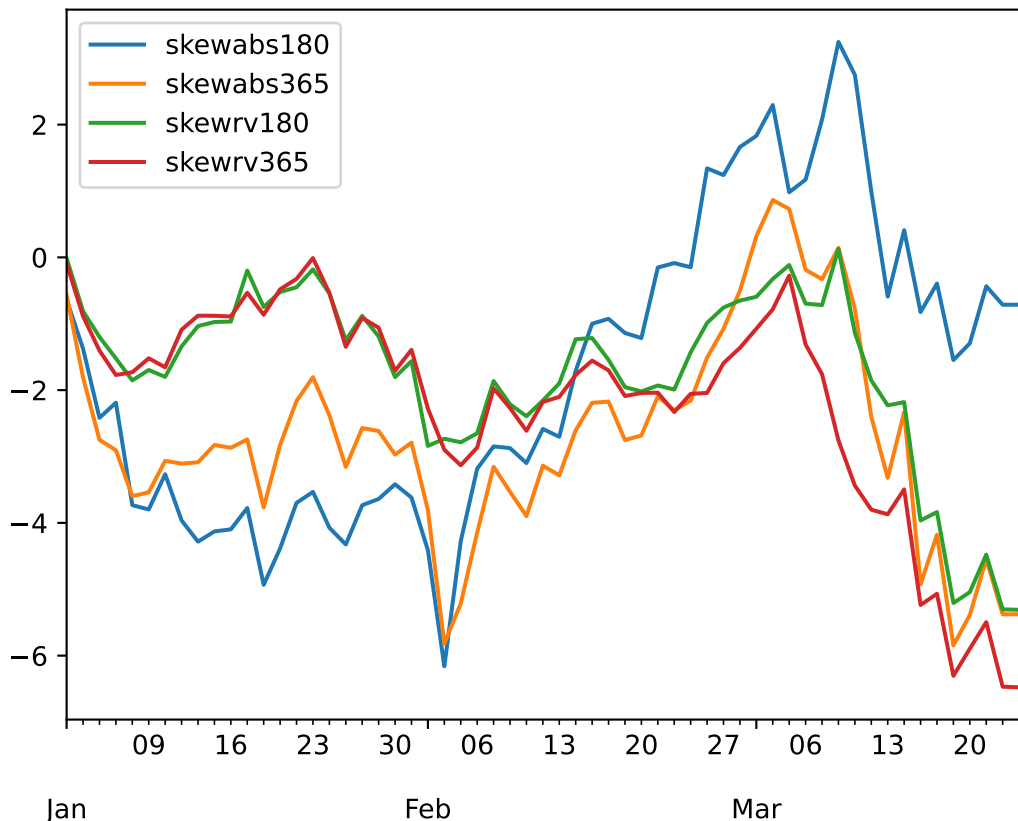
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.145}
ann. std {'relcarry': 5.842}
ann. SR {'relcarry': 0.37}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 4.965}
ann. std {'relcarry': 8.963}
ann. SR {'relcarry': 0.55}

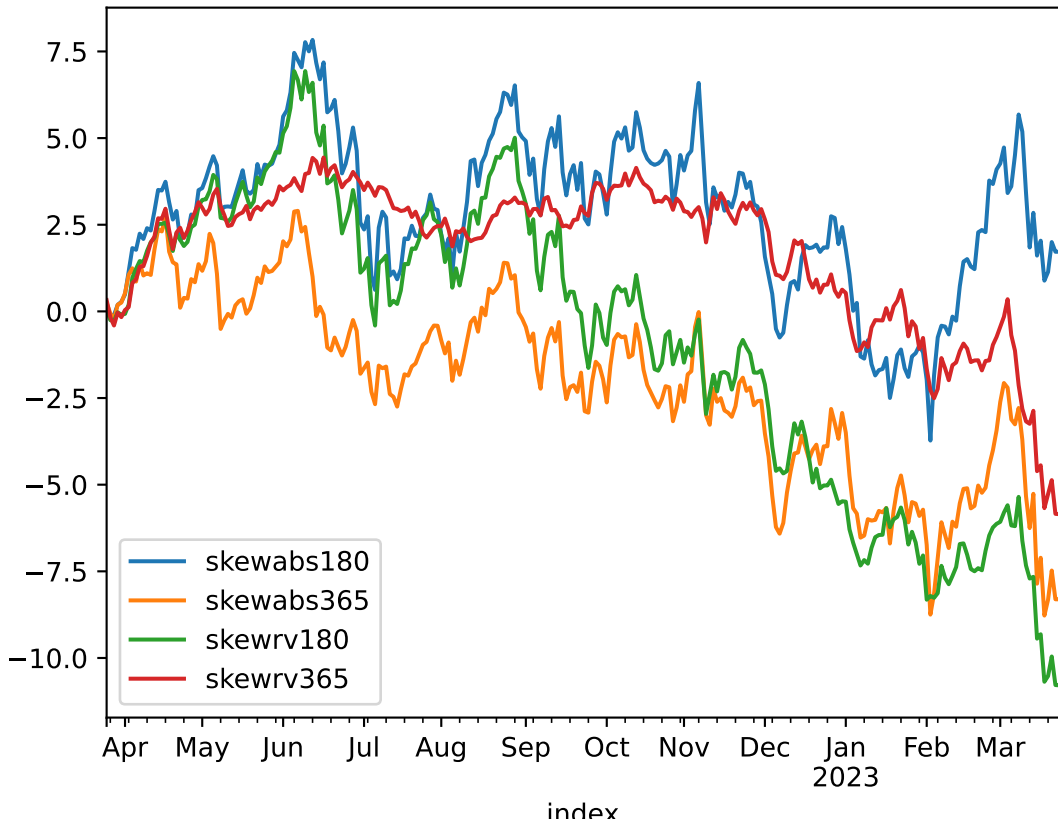


Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': -3.093, 'skewabs365': -23.331, 'skewrv180': -23.04, 'skewrv365': -28.104}
ann. std {'skewabs180': 12.838, 'skewabs365': 12.752, 'skewrv180': 8.556, 'skewrv365': 8.263}
ann. SR {'skewabs180': -0.24, 'skewabs365': -1.83, 'skewrv180': -2.69, 'skewrv365': -3.4}



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

ann. mean	{'skewabs180': 1.695, 'skewabs365': -8.179, 'skewrv180': -10.622, 'skewrv365': -5.76}
ann. std	{'skewabs180': 11.014, 'skewabs365': 9.852, 'skewrv180': 9.164, 'skewrv365': 5.594}
ann. SR	{'skewabs180': 0.15, 'skewabs365': -0.83, 'skewrv180': -1.16, 'skewrv365': -1.03}

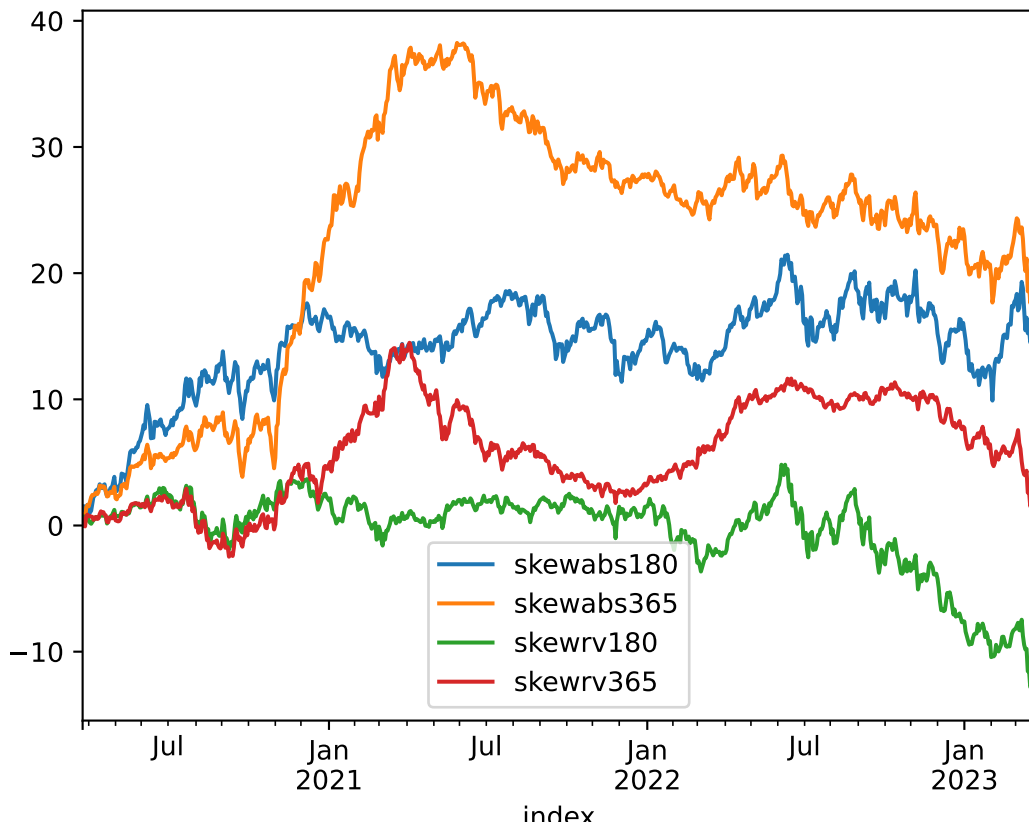


Total Trading Rule P&L for period '3Y'

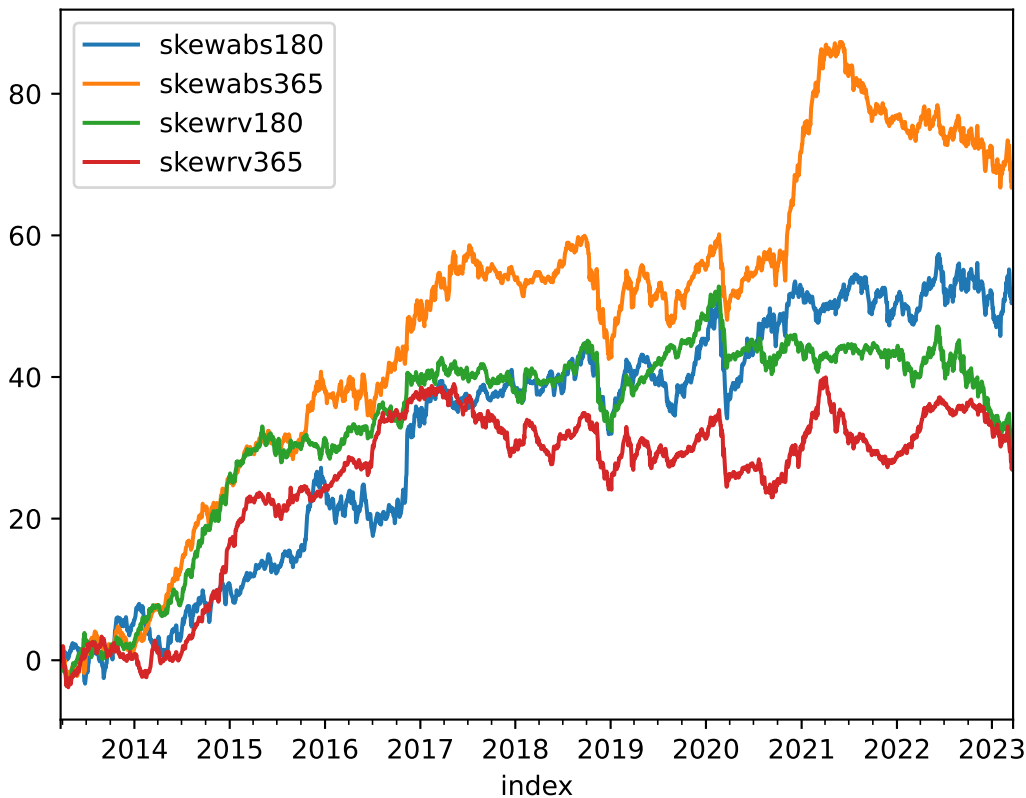
ann. mean {'skewabs180': 5.025, 'skewabs365': 5.929, 'skewrv180': -4.224, 'skewrv365': 0.445}

ann. std {'skewabs180': 9.12, 'skewabs365': 8.832, 'skewrv180': 7.167, 'skewrv365': 6.262}

ann. SR {'skewabs180': 0.55, 'skewabs365': 0.67, 'skewrv180': -0.59, 'skewrv365': 0.07}

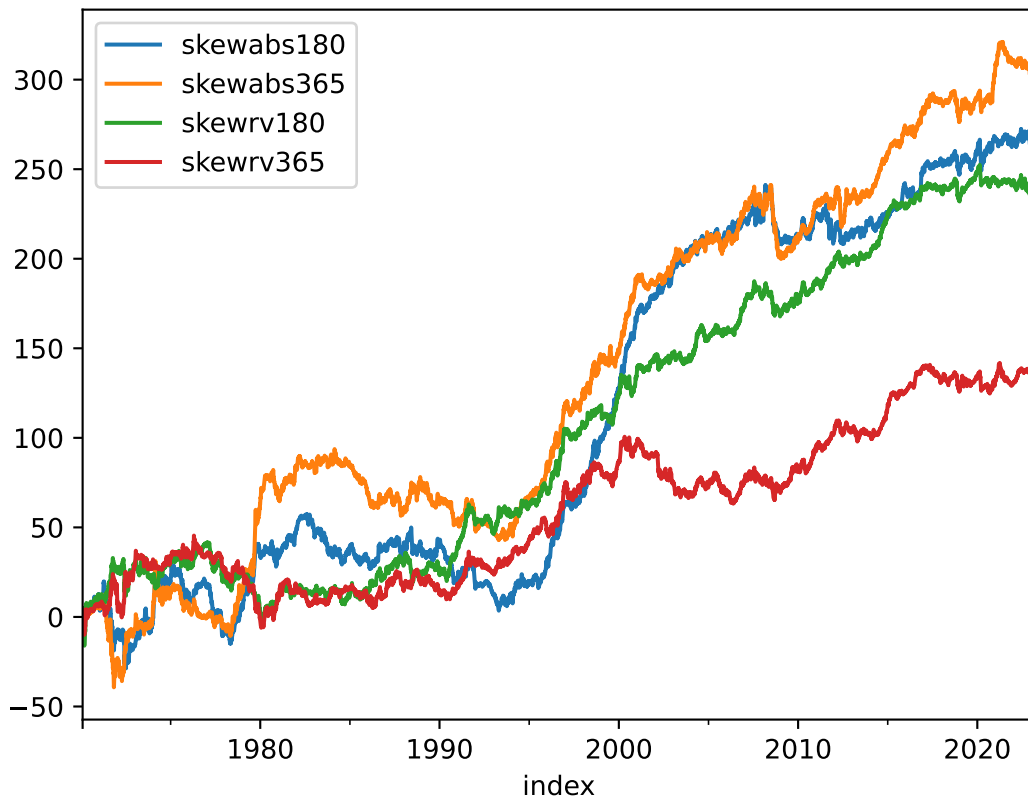


Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 5.028, 'skewabs365': 6.592, 'skewrv180': 2.885, 'skewrv365': 2.632}
ann. std {'skewabs180': 7.993, 'skewabs365': 7.963, 'skewrv180': 6.394, 'skewrv365': 6.084}
ann. SR {'skewabs180': 0.63, 'skewabs365': 0.83, 'skewrv180': 0.45, 'skewrv365': 0.43}

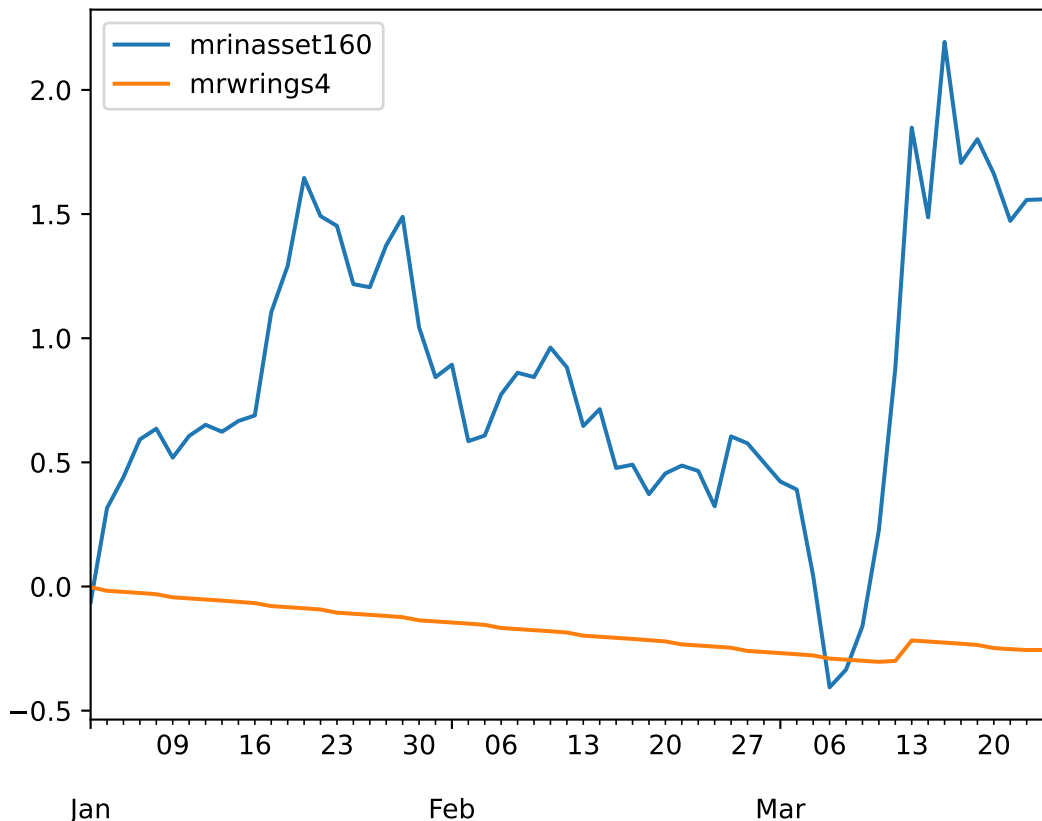


Total Trading Rule P&L for period '99Y'

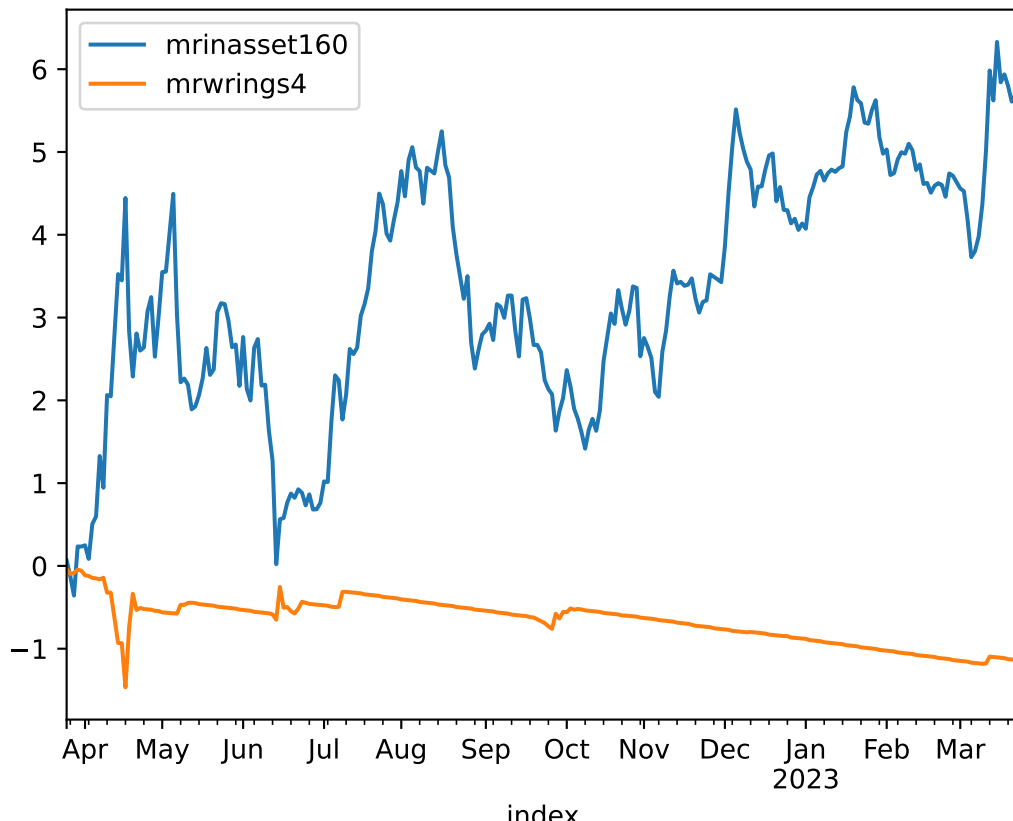
ann. mean	{'skewabs180': 4.918, 'skewabs365': 5.557, 'skewrv180': 4.229, 'skewrv365': 2.374}
ann. std	{'skewabs180': 10.103, 'skewabs365': 9.869, 'skewrv180': 8.753, 'skewrv365': 8.123}
ann. SR	{'skewabs180': 0.49, 'skewabs365': 0.56, 'skewrv180': 0.48, 'skewrv365': 0.29}



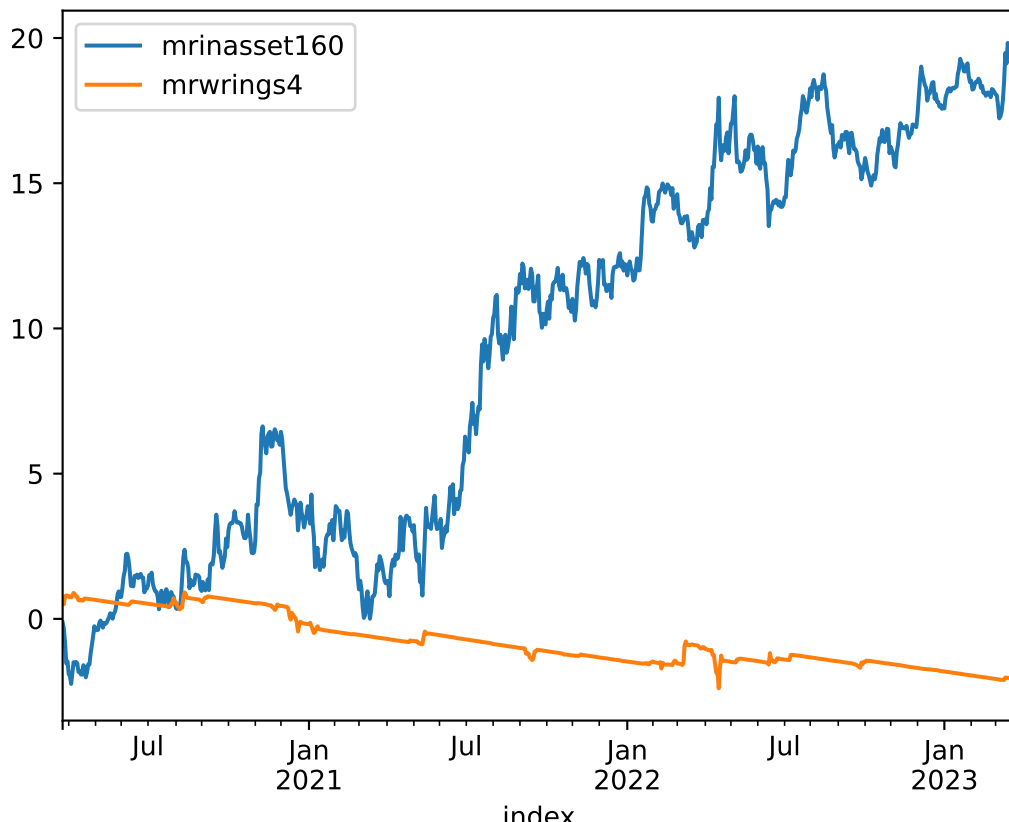
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 6.766, 'mrwrings4': -1.11}
ann. std {'mrinasset160': 4.246, 'mrwrings4': 0.193}
ann. SR {'mrinasset160': 1.59, 'mrwrings4': -5.76}



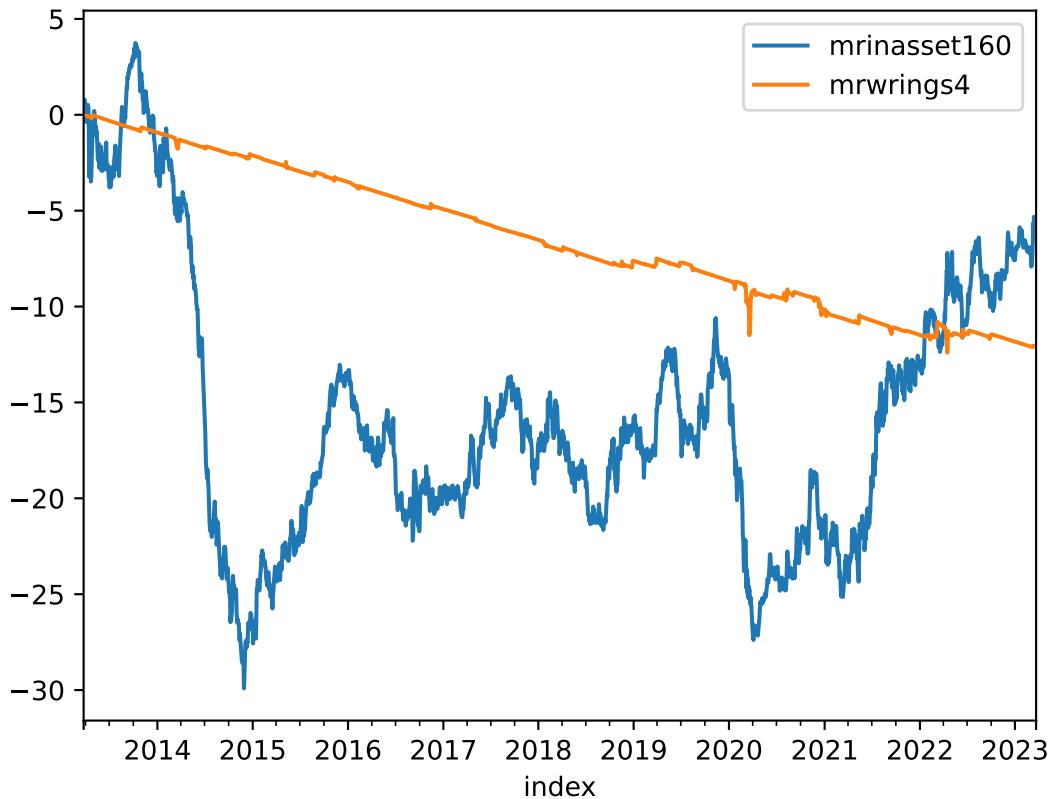
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 5.608, 'mrwrings4': -1.117}
ann. std {'mrinasset160': 5.771, 'mrwrings4': 1.252}
ann. SR {'mrinasset160': 0.97, 'mrwrings4': -0.89}



Total Trading Rule P&L for period '3Y'
ann. mean {'mriasset160': 6.285, 'mrwrings4': -0.674}
ann. std {'mriasset160': 6.269, 'mrwrings4': 1.093}
ann. SR {'mriasset160': 1.0, 'mrwrings4': -0.62}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.584, 'mrwrings4': -1.185}
ann. std {'mrinasset160': 6.313, 'mrwrings4': 0.88}
ann. SR {'mrinasset160': -0.09, 'mrwrings4': -1.35}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.534, 'mrwrings4': -2.103}
ann. std {'mrinasset160': 9.874, 'mrwrings4': 2.09}
ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.01}

