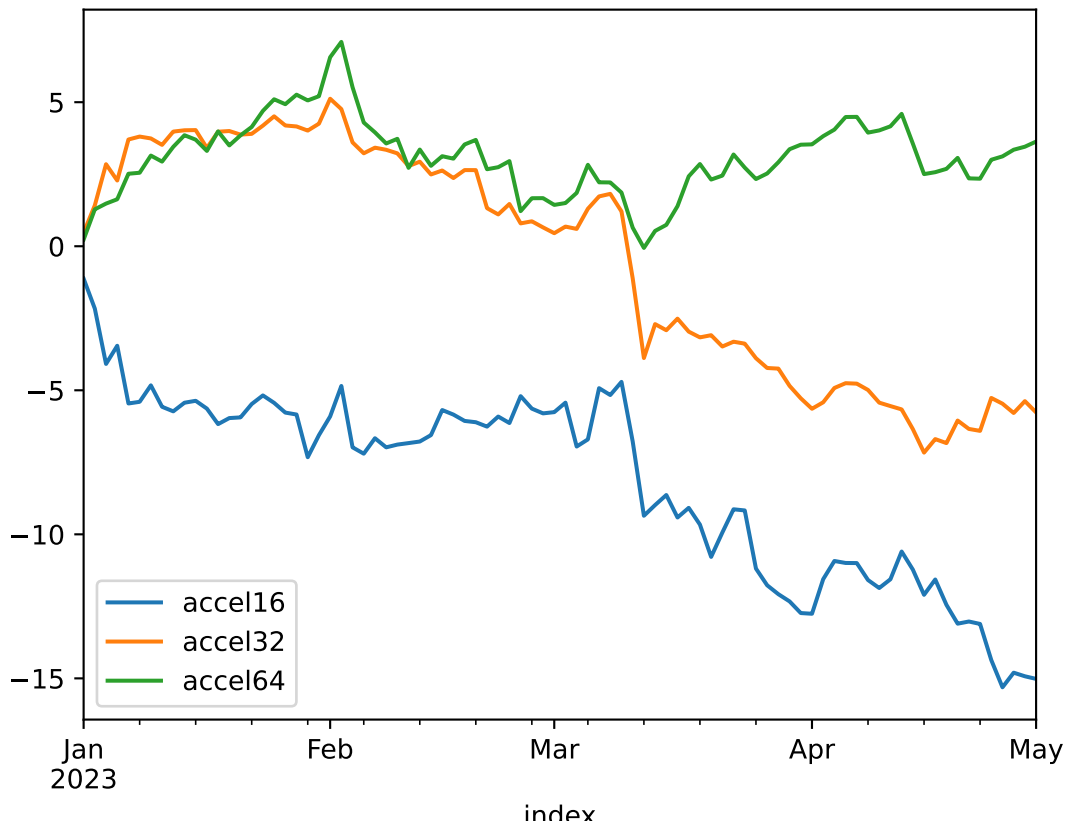
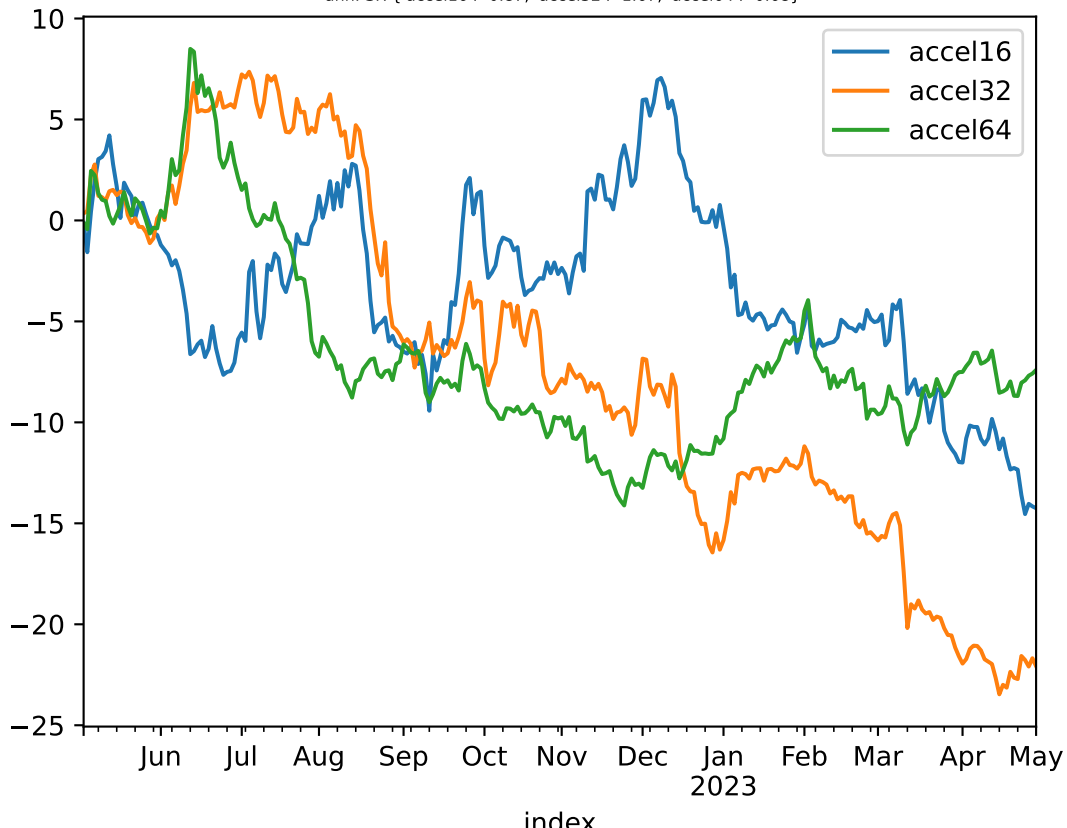


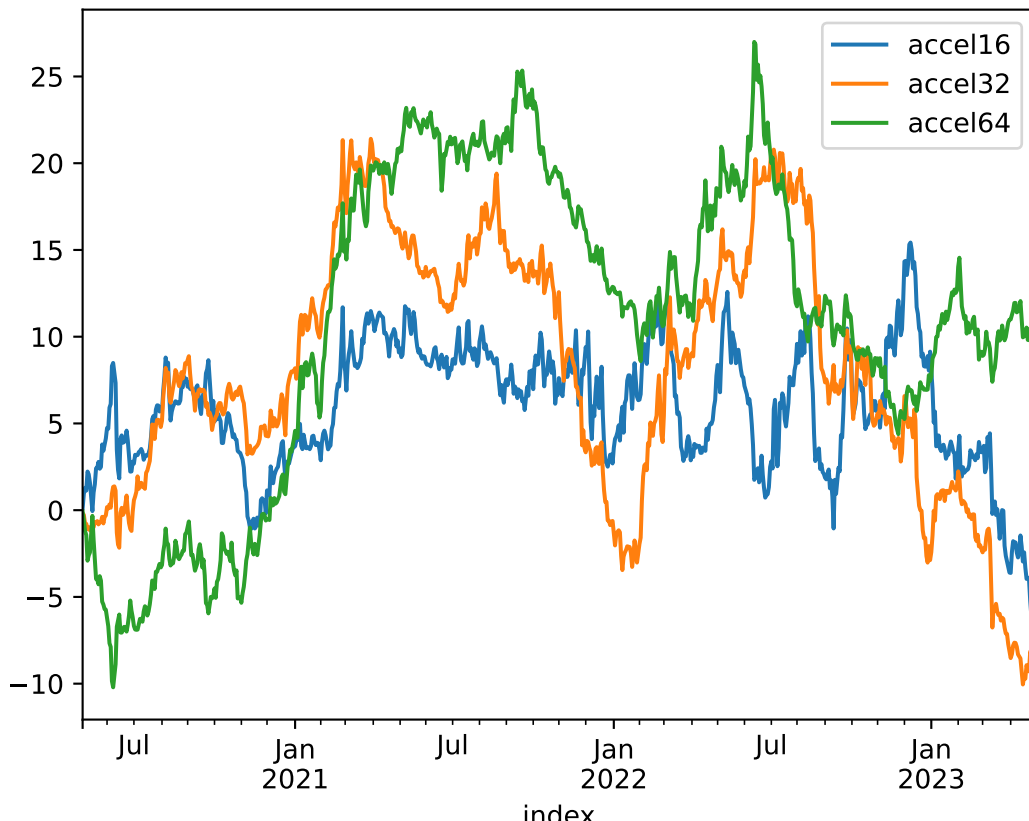
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -44.705, 'accel32': -17.168, 'accel64': 10.817}
ann. std {'accel16': 12.921, 'accel32': 10.065, 'accel64': 9.312}
ann. SR {'accel16': -3.46, 'accel32': -1.71, 'accel64': 1.16}



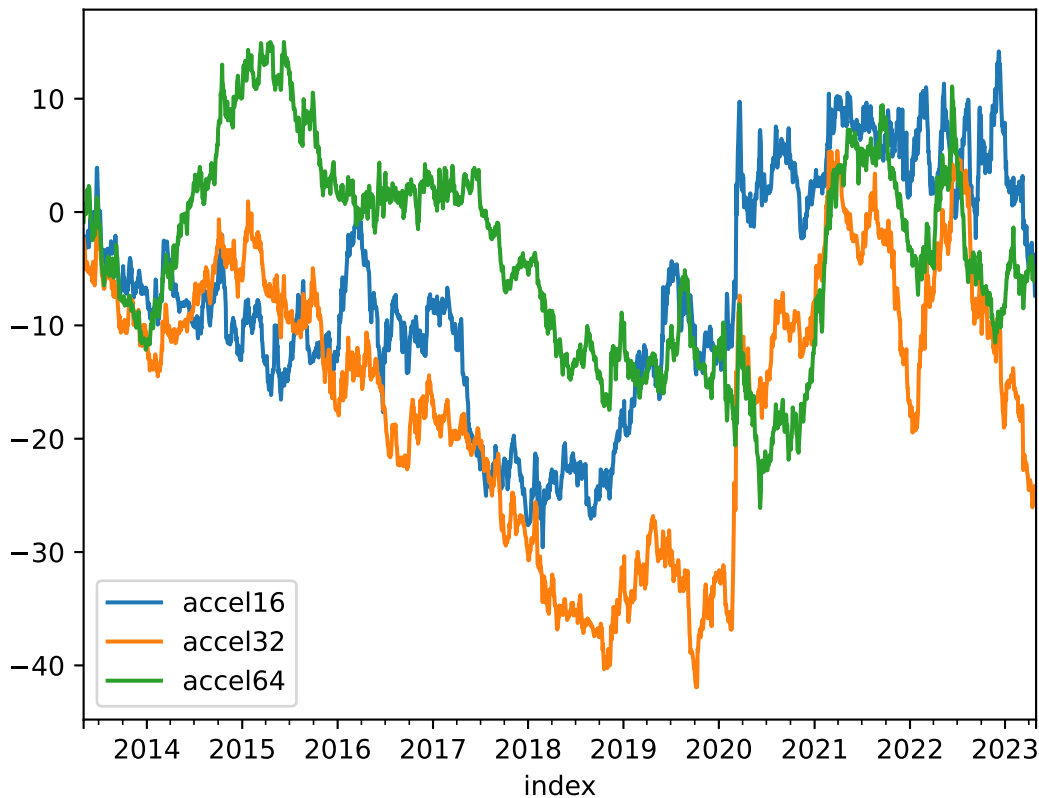
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -14.031, 'accel32': -21.732, 'accel64': -7.292}
ann. std {'accel16': 16.043, 'accel32': 13.024, 'accel64': 10.66}
ann. SR {'accel16': -0.87, 'accel32': -1.67, 'accel64': -0.68}



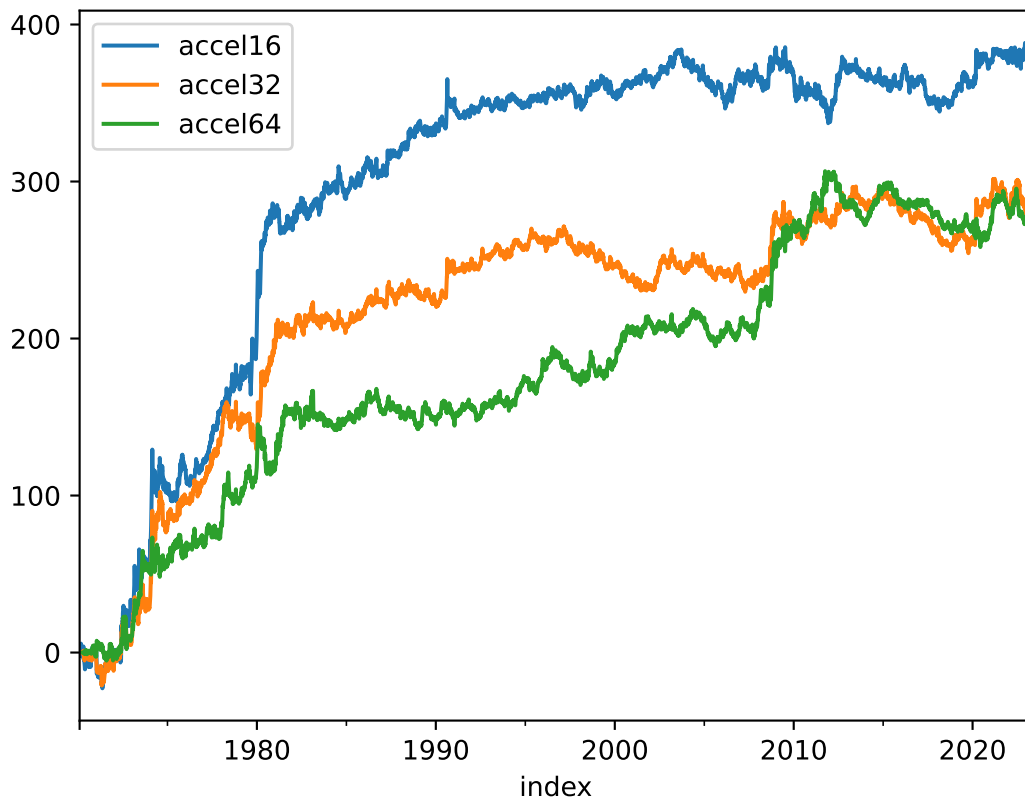
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -1.927, 'accel32': -2.835, 'accel64': 3.636}
ann. std {'accel16': 13.562, 'accel32': 11.734, 'accel64': 10.541}
ann. SR {'accel16': -0.14, 'accel32': -0.24, 'accel64': 0.34}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': -0.7, 'accel32': -2.421, 'accel64': -0.473}
ann. std {'accel16': 11.713, 'accel32': 10.692, 'accel64': 9.33}
ann. SR {'accel16': -0.06, 'accel32': -0.23, 'accel64': -0.05}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.764, 'accel32': 5.007, 'accel64': 5.152}
ann. std {'accel16': 14.129, 'accel32': 12.453, 'accel64': 12.102}
ann. SR {'accel16': 0.48, 'accel32': 0.4, 'accel64': 0.43}

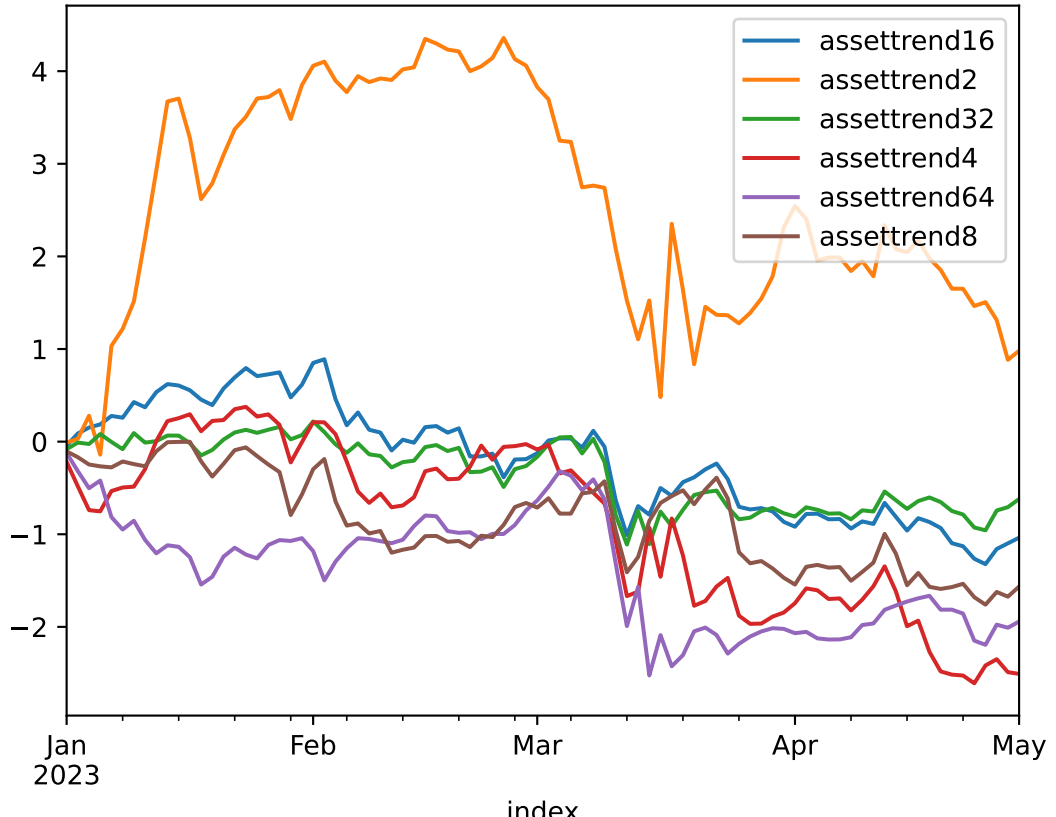


Total Trading Rule P&L for period 'YTD'

ann. mean {'assetrend16': -3.087, 'assetrend2': 2.921, 'assetrend32': -1.844, 'assetrend4': -7.464, 'assetrend64': -5.781, 'assetrend8': -4.657}

ann. std {'assetrend16': 2.516, 'assetrend2': 6.502, 'assetrend32': 2.281, 'assetrend4': 3.57, 'assetrend64': 3.317, 'assetrend8': 2.856}

ann. SR {'assetrend16': -1.23, 'assetrend2': 0.45, 'assetrend32': -0.81, 'assetrend4': -2.09, 'assetrend64': -1.74, 'assetrend8': -1.63}

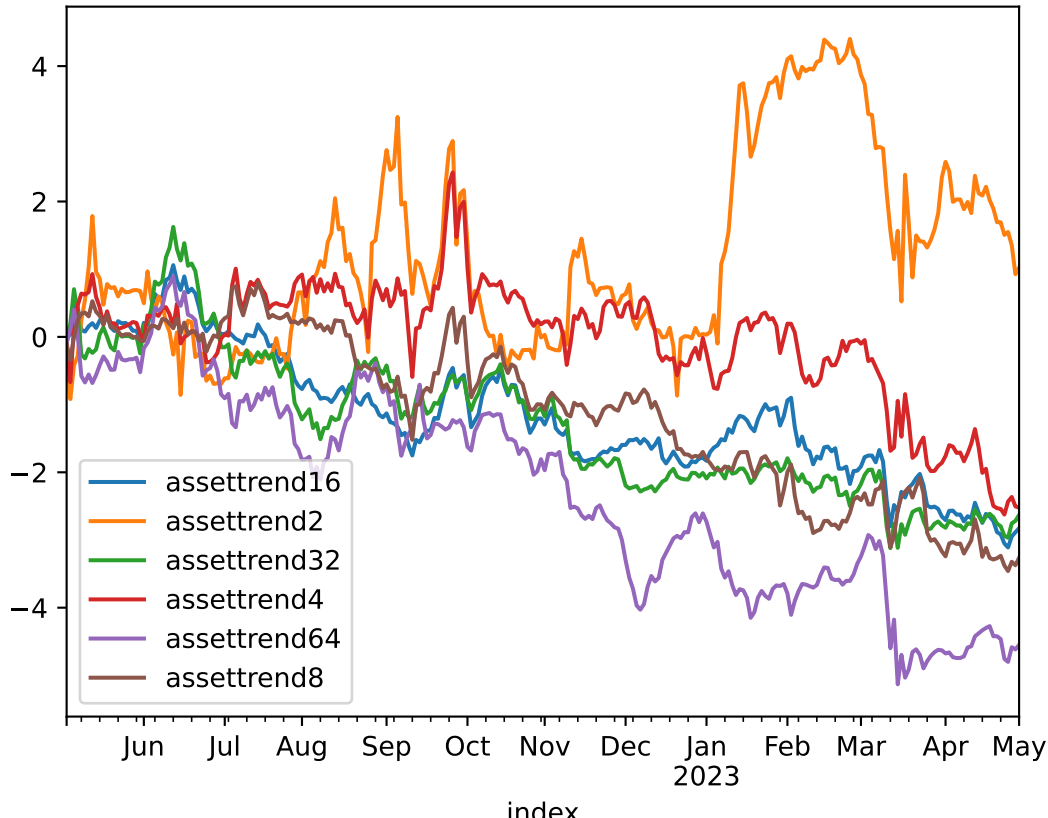


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': -2.781, 'assettrend2': 1.008, 'assettrend32': -2.589, 'assettrend4': -2.484, 'assettrend64': -4.479, 'assettrend8': -3.213}

ann. std {'assettrend16': 2.29, 'assettrend2': 6.286, 'assettrend32': 2.609, 'assettrend4': 3.964, 'assettrend64': 3.147, 'assettrend8': 2.66}

ann. SR {'assettrend16': -1.21, 'assettrend2': 0.16, 'assettrend32': -0.99, 'assettrend4': -0.63, 'assettrend64': -1.42, 'assettrend8': -1.21}

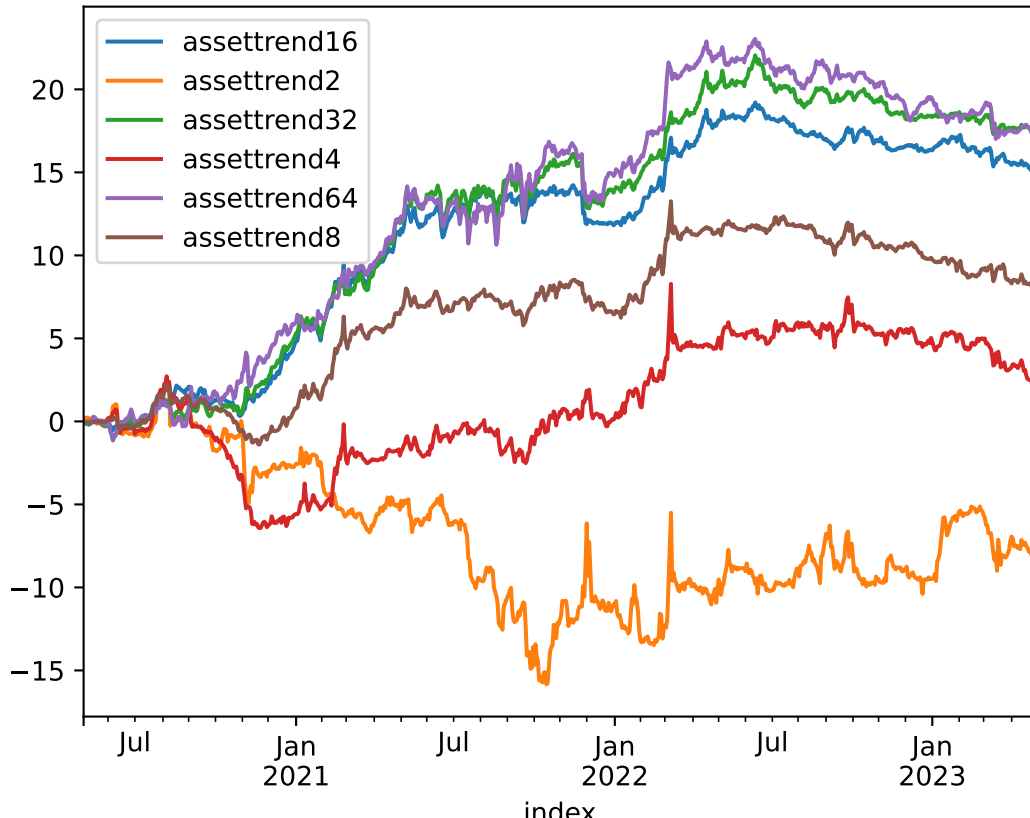


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 5.024, 'assettrend2': -2.786, 'assettrend32': 5.833, 'assettrend4': 0.827, 'assettrend64': 5.768, 'assettrend8': 2.718}

ann. std {'assettrend16': 3.409, 'assettrend2': 7.805, 'assettrend32': 4.124, 'assettrend4': 4.948, 'assettrend64': 5.0, 'assettrend8': 3.52}

ann. SR {'assettrend16': 1.47, 'assettrend2': -0.36, 'assettrend32': 1.41, 'assettrend4': 0.17, 'assettrend64': 1.15, 'assettrend8': 0.77}

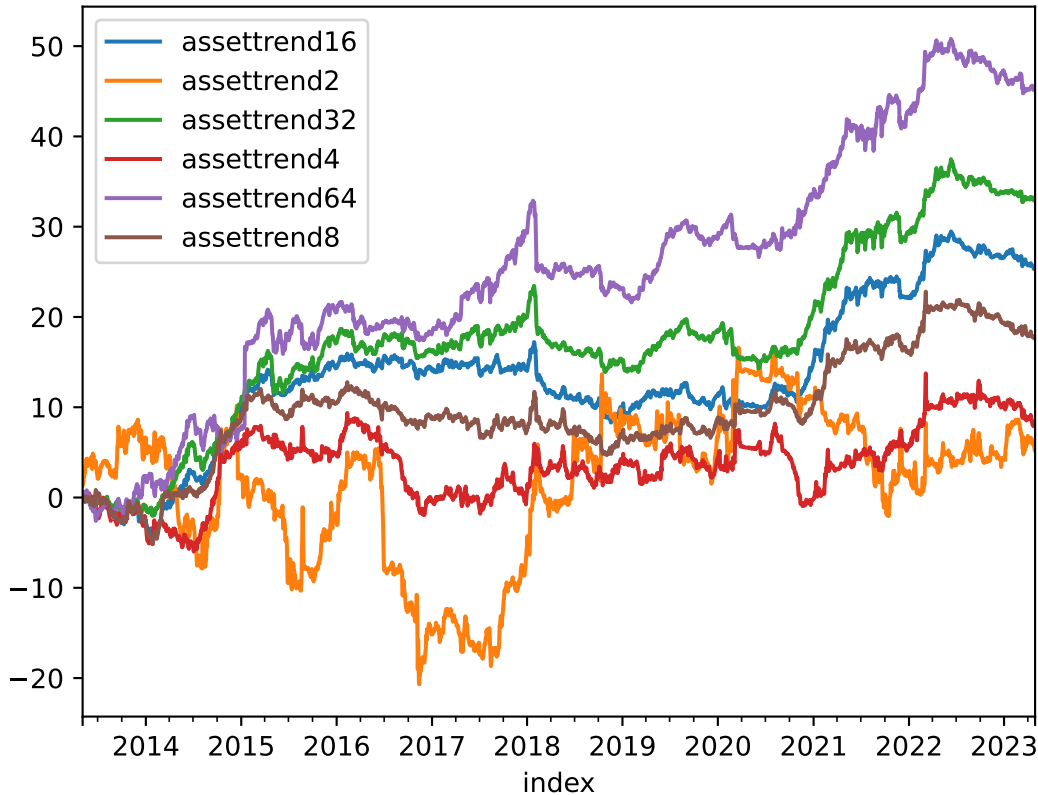


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.513, 'assettrend2': 0.518, 'assettrend32': 3.263, 'assettrend4': 0.785, 'assettrend64': 4.454, 'assettrend8': 1.751}

ann. std {'assettrend16': 3.152, 'assettrend2': 9.78, 'assettrend32': 3.588, 'assettrend4': 4.969, 'assettrend64': 5.189, 'assettrend8': 3.451}

ann. SR {'assettrend16': 0.8, 'assettrend2': 0.05, 'assettrend32': 0.91, 'assettrend4': 0.16, 'assettrend64': 0.86, 'assettrend8': 0.51}

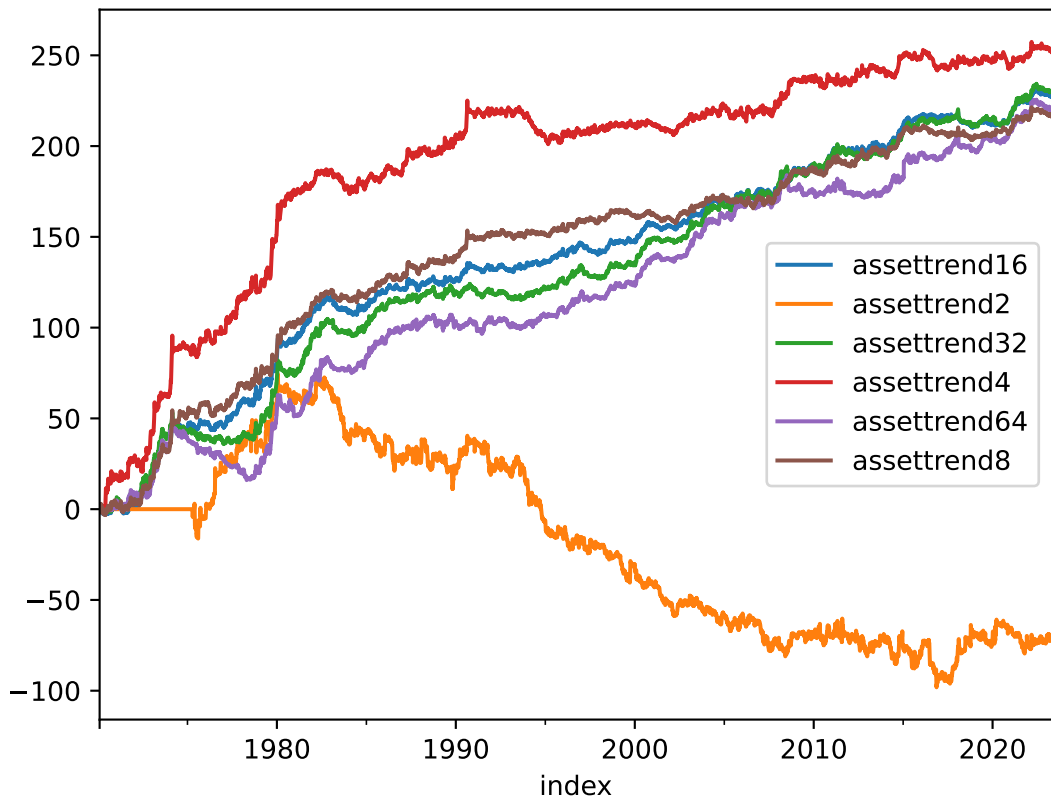


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.189, 'assettrend2': -1.33, 'assettrend32': 4.24, 'assettrend4': 4.638, 'assettrend64': 4.057, 'assettrend8': 3.988}

ann. std {'assettrend16': 4.303, 'assettrend2': 10.258, '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}

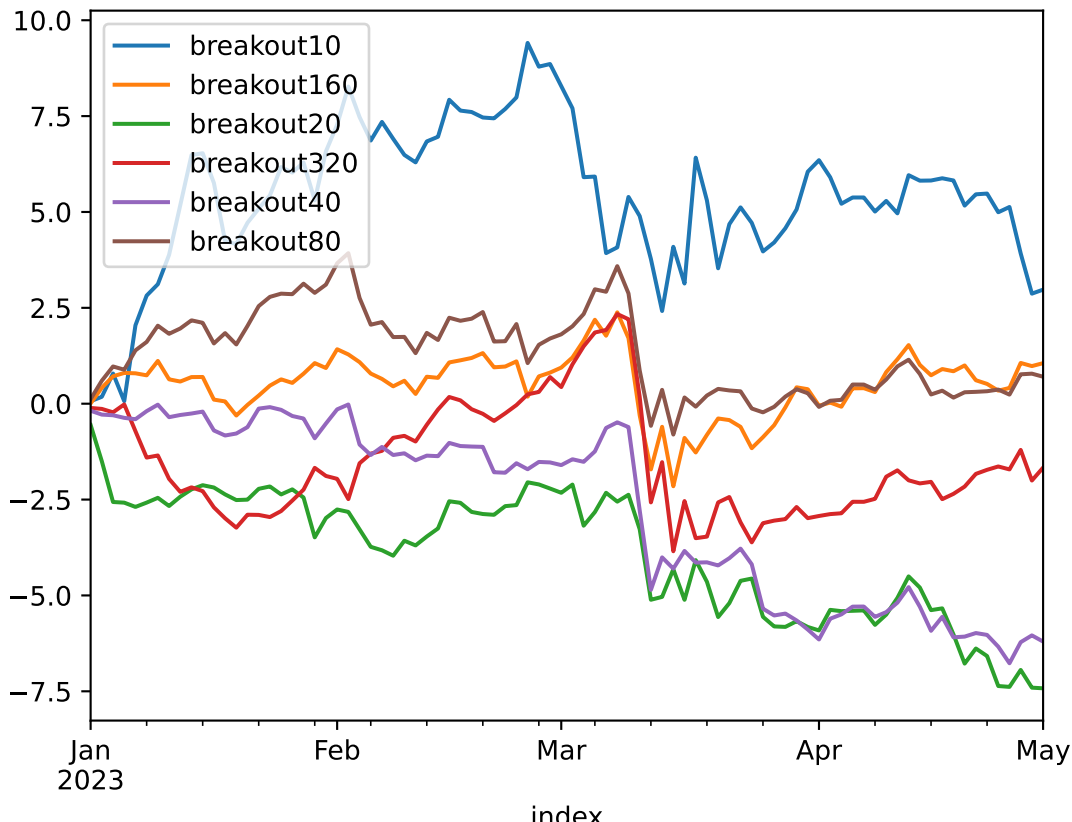


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 8.854, 'breakout160': 3.148, 'breakout20': -22.093, 'breakout320': -4.965, 'breakout40': -18.466, 'breakout80': 2.094}

ann. std {'breakout10': 13.893, 'breakout160': 7.794, 'breakout20': 7.714, 'breakout320': 9.575, 'breakout40': 7.308, 'breakout80': 7.802}

ann. SR {'breakout10': 0.64, 'breakout160': 0.4, 'breakout20': -2.86, 'breakout320': -0.52, 'breakout40': -2.53, 'breakout80': 0.27}

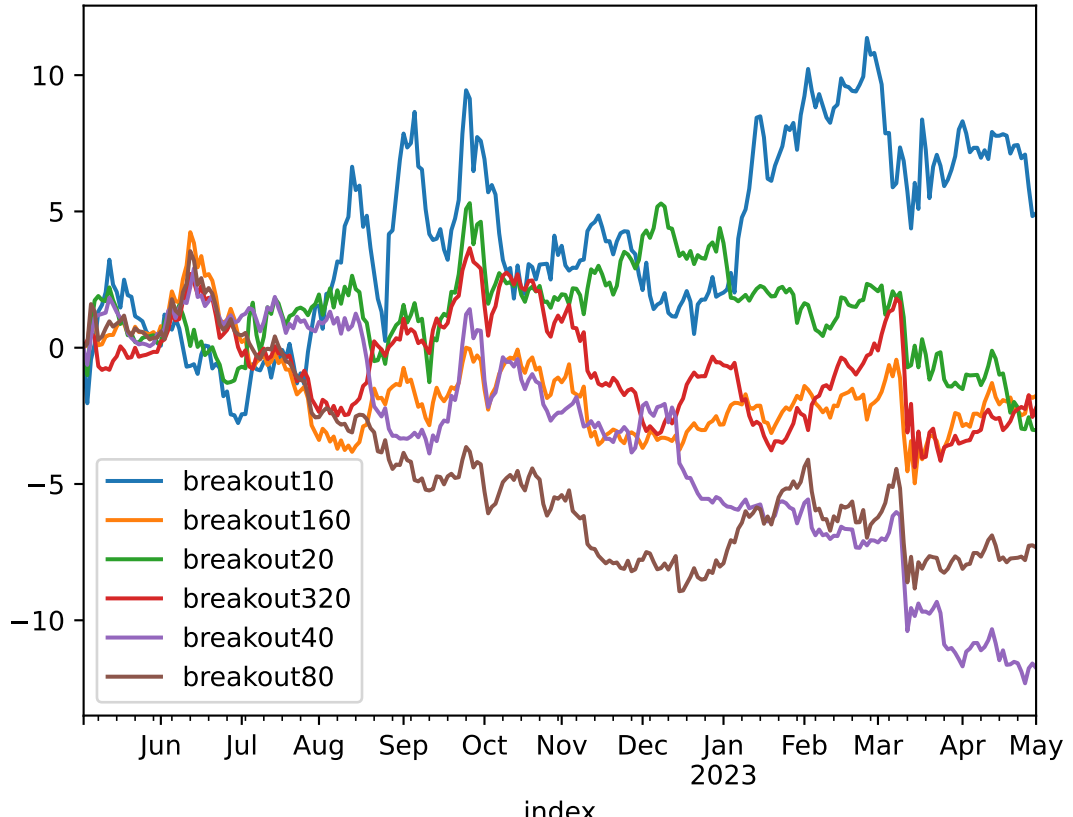


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 4.856, 'breakout160': -1.738, 'breakout20': -2.982, 'breakout320': -2.17, 'breakout40': -11.566, 'breakout80': -7.215}

ann. std {'breakout10': 13.341, 'breakout160': 7.025, 'breakout20': 8.605, 'breakout320': 7.577, 'breakout40': 7.235, 'breakout80': 6.722}

ann. SR {'breakout10': 0.36, 'breakout160': -0.25, 'breakout20': -0.35, 'breakout320': -0.29, 'breakout40': -1.6, 'breakout80': -1.07}

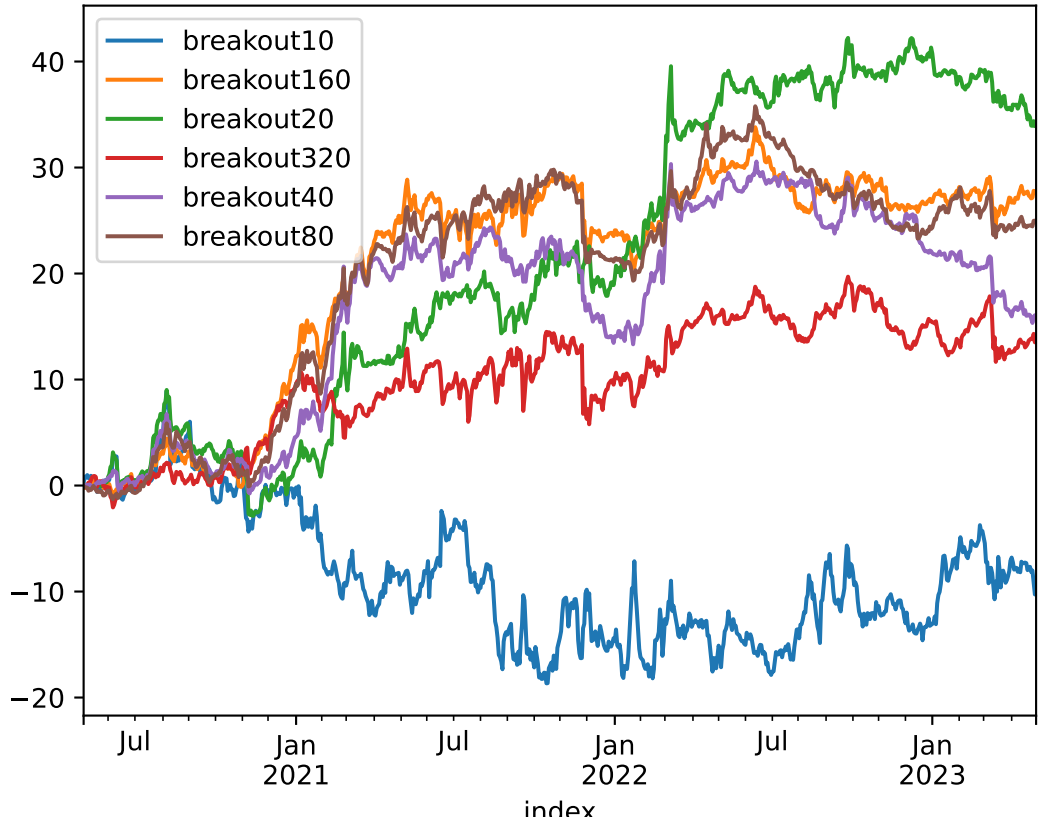


Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -3.334, 'breakout160': 9.112, 'breakout20': 11.111, 'breakout320': 4.538, 'breakout40': 5.213, 'breakout80': 8.165}

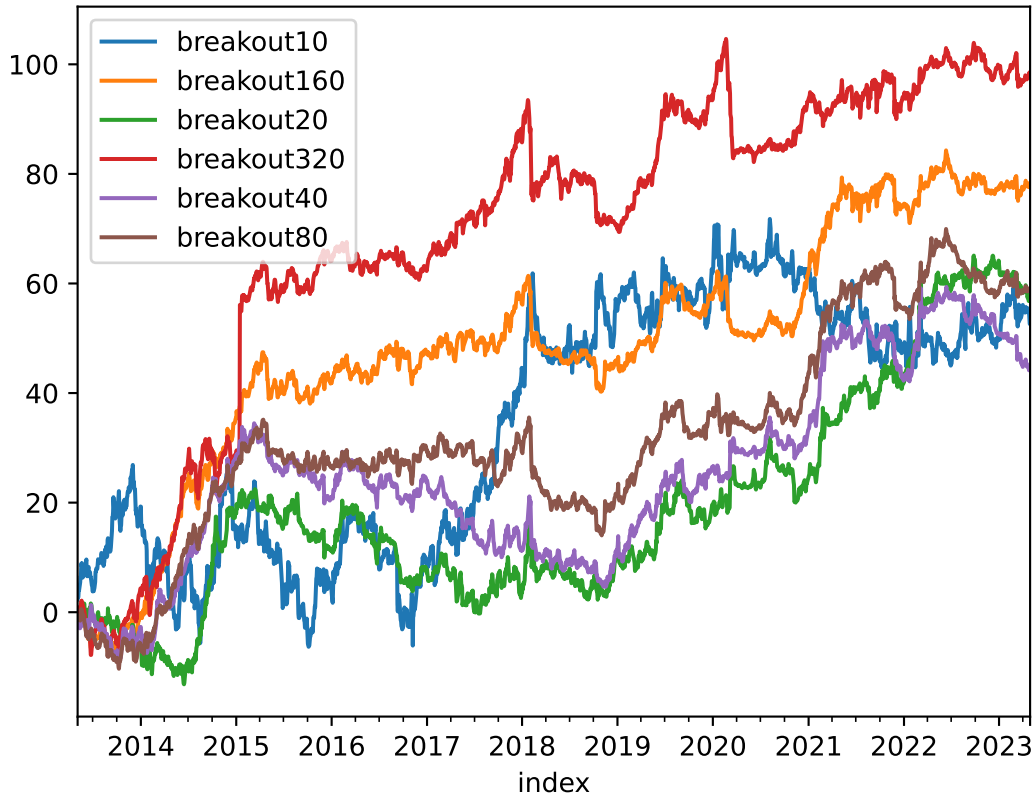
ann. std {'breakout10': 15.044, 'breakout160': 9.183, 'breakout20': 11.053, 'breakout320': 9.91, 'breakout40': 9.482, 'breakout80': 8.909}

ann. SR {'breakout10': -0.22, 'breakout160': 0.99, 'breakout20': 1.01, 'breakout320': 0.46, 'breakout40': 0.55, 'breakout80': 0.92}



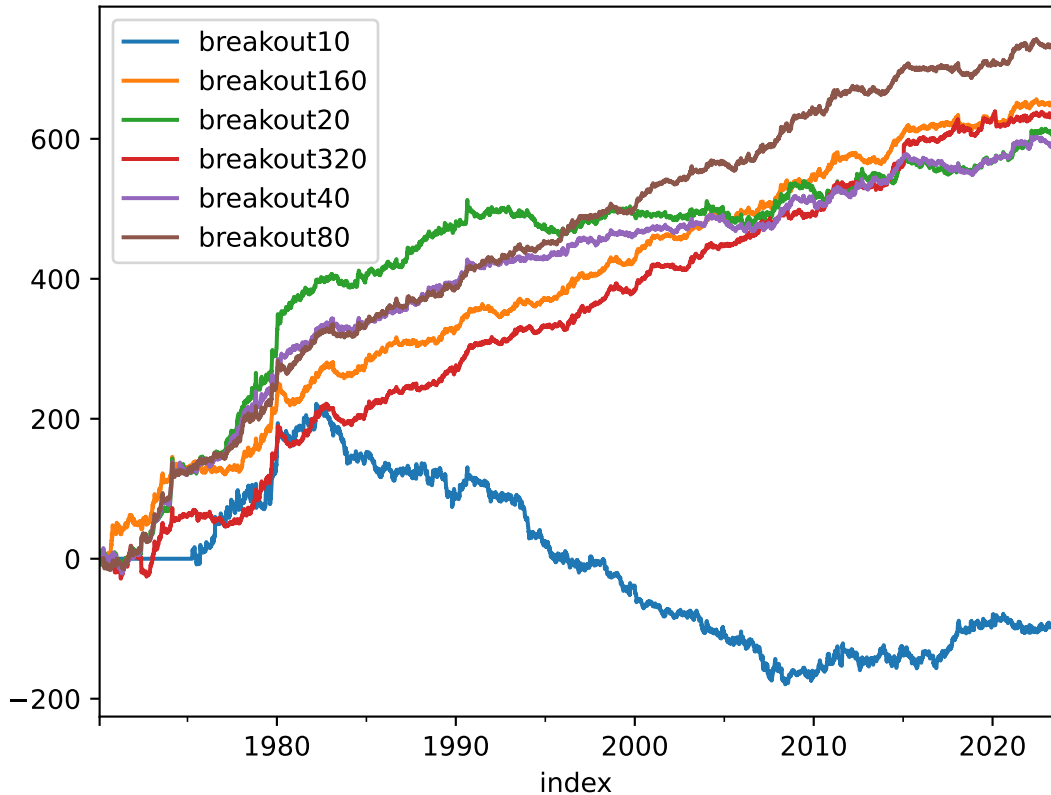
Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 5.176, 'breakout160': 7.688, 'breakout20': 5.574, 'breakout320': 9.63, 'breakout40': 4.39, 'breakout80': 5.801}
ann. std {'breakout10': 17.813, 'breakout160': 8.872, 'breakout20': 11.08, 'breakout320': 13.087, 'breakout40': 9.384, 'breakout80': 8.728}
ann. SR {'breakout10': 0.29, 'breakout160': 0.87, 'breakout20': 0.5, 'breakout320': 0.74, 'breakout40': 0.47, 'breakout80': 0.66}



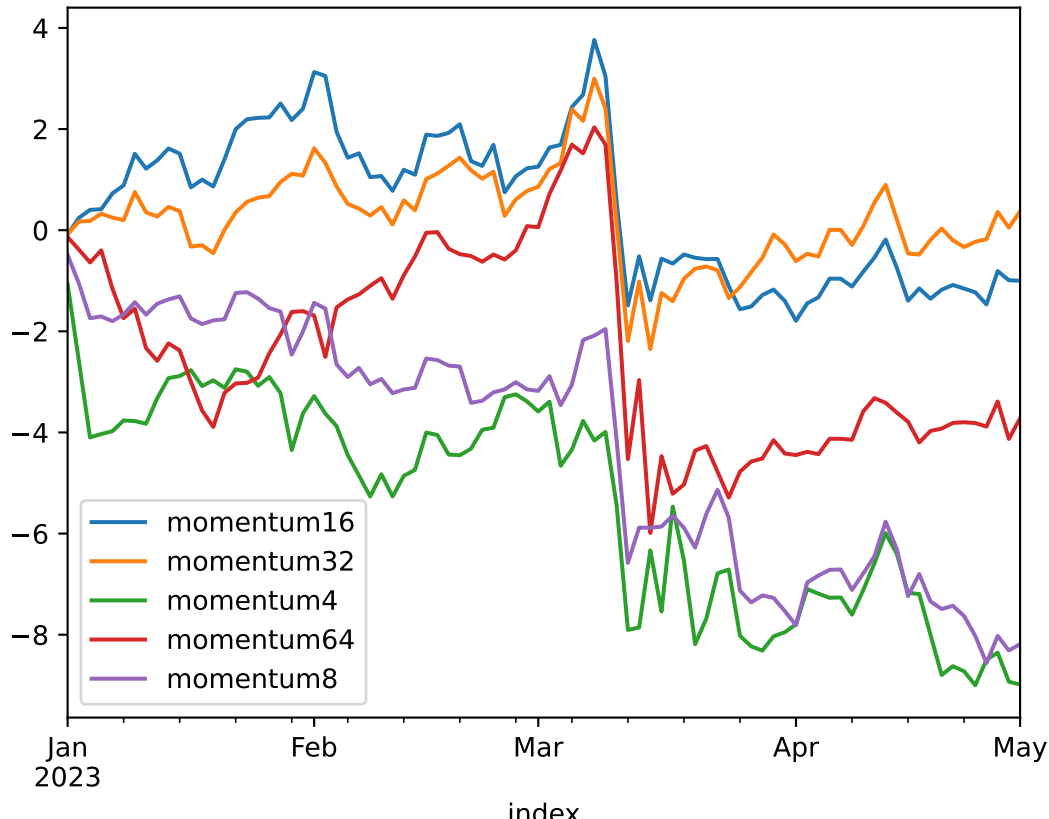
Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -1.8, 'breakout160': 11.991, 'breakout20': 11.17, 'breakout320': 11.663, 'breakout40': 10.846, 'breakout80': 13.489}
ann. std {'breakout10': 21.317, 'breakout160': 11.527, 'breakout20': 14.888, 'breakout320': 12.113, 'breakout40': 12.11, 'breakout80': 11.716}
ann. SR {'breakout10': -0.08, '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': -2.973, 'momentum32': 1.109, 'momentum4': -26.742, 'momentum64': -11.076, 'momentum8': -24.369}
 ann. std {'momentum16': 8.702, 'momentum32': 8.716, 'momentum4': 10.969, 'momentum64': 11.678, 'momentum8': 8.672}
 ann. SR {'momentum16': -0.34, 'momentum32': 0.13, 'momentum4': -2.44, 'momentum64': -0.95, 'momentum8': -2.81}

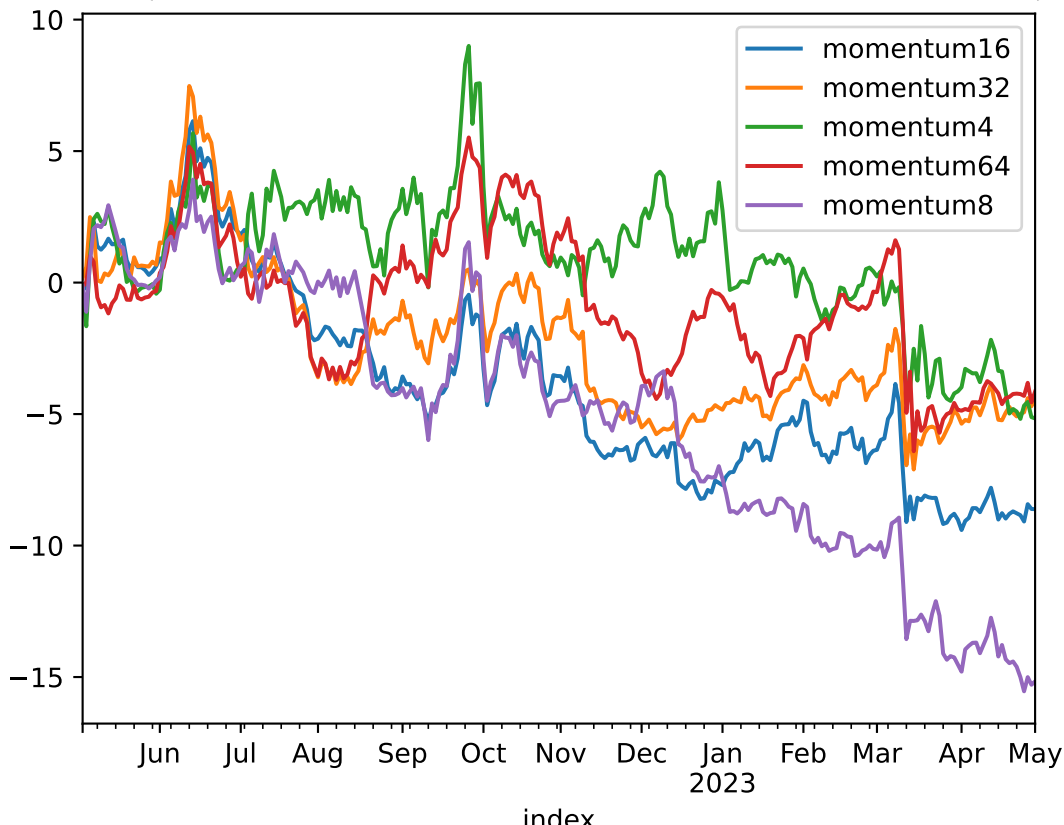


Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -8.483, 'momentum32': -4.316, 'momentum4': -5.088, 'momentum64': -4.081, 'momentum8': -14.934}

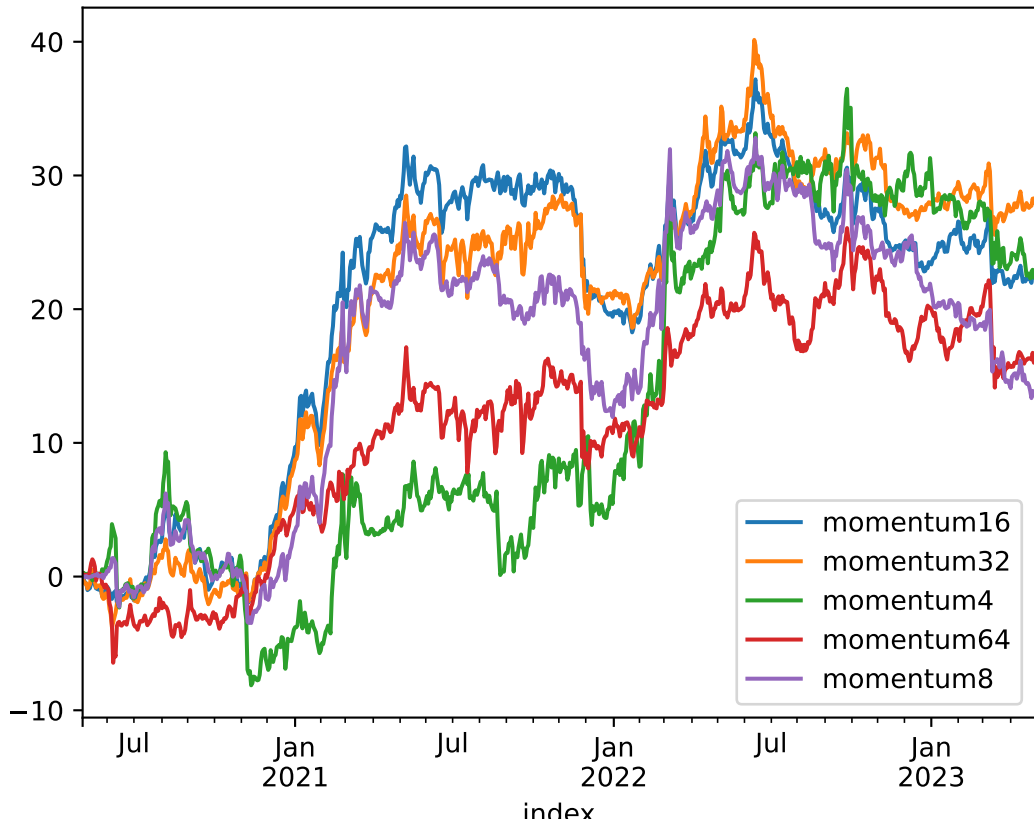
ann. std {'momentum16': 8.791, 'momentum32': 9.234, 'momentum4': 13.462, 'momentum64': 10.267, 'momentum8': 10.008}

ann. SR {'momentum16': -0.96, 'momentum32': -0.47, 'momentum4': -0.38, 'momentum64': -0.4, 'momentum8': -1.49}



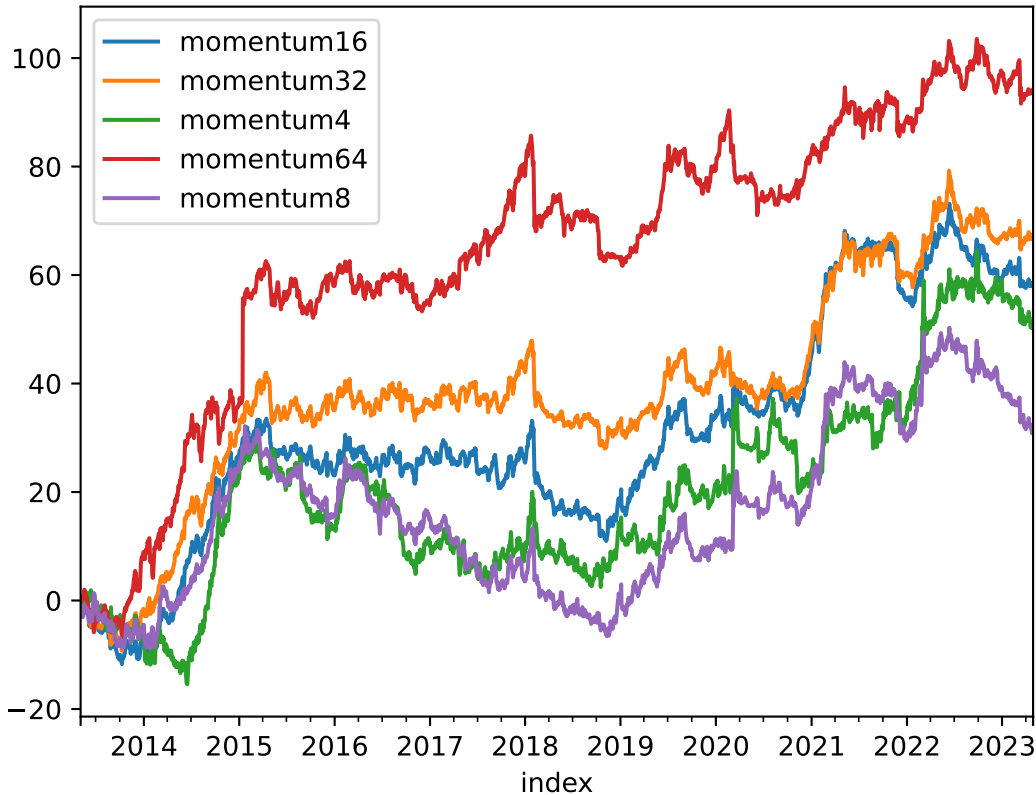
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 7.353, 'momentum32': 9.269, 'momentum4': 7.315, 'momentum64': 5.376, 'momentum8': 4.498}
ann. std {'momentum16': 10.128, 'momentum32': 10.386, 'momentum4': 14.637, 'momentum64': 10.831, 'momentum8': 11.421}
ann. SR {'momentum16': 0.73, 'momentum32': 0.89, 'momentum4': 0.5, 'momentum64': 0.5, 'momentum8': 0.39}



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

ann. mean {'momentum16': 5.734, 'momentum32': 6.619, 'momentum4': 4.932, 'momentum64': 9.218, 'momentum8': 3.065}
ann. std {'momentum16': 9.662, 'momentum32': 9.276, 'momentum4': 13.674, 'momentum64': 11.875, 'momentum8': 10.861}
ann. SR {'momentum16': 0.59, 'momentum32': 0.71, 'momentum4': 0.36, 'momentum64': 0.78, 'momentum8': 0.28}

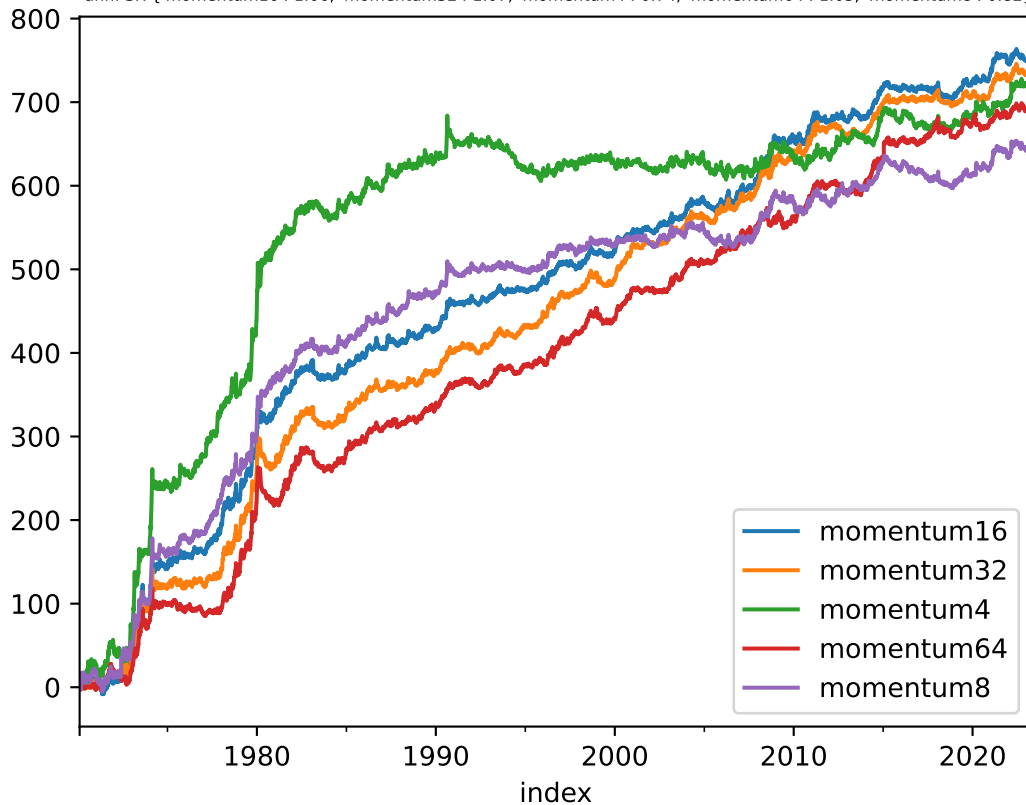


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.804, 'momentum32': 13.531, 'momentum4': 13.158, 'momentum64': 12.704, 'momentum8': 11.7}

ann. std {'momentum16': 13.045, 'momentum32': 12.608, 'momentum4': 17.89, 'momentum64': 12.33, 'momentum8': 14.329}

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

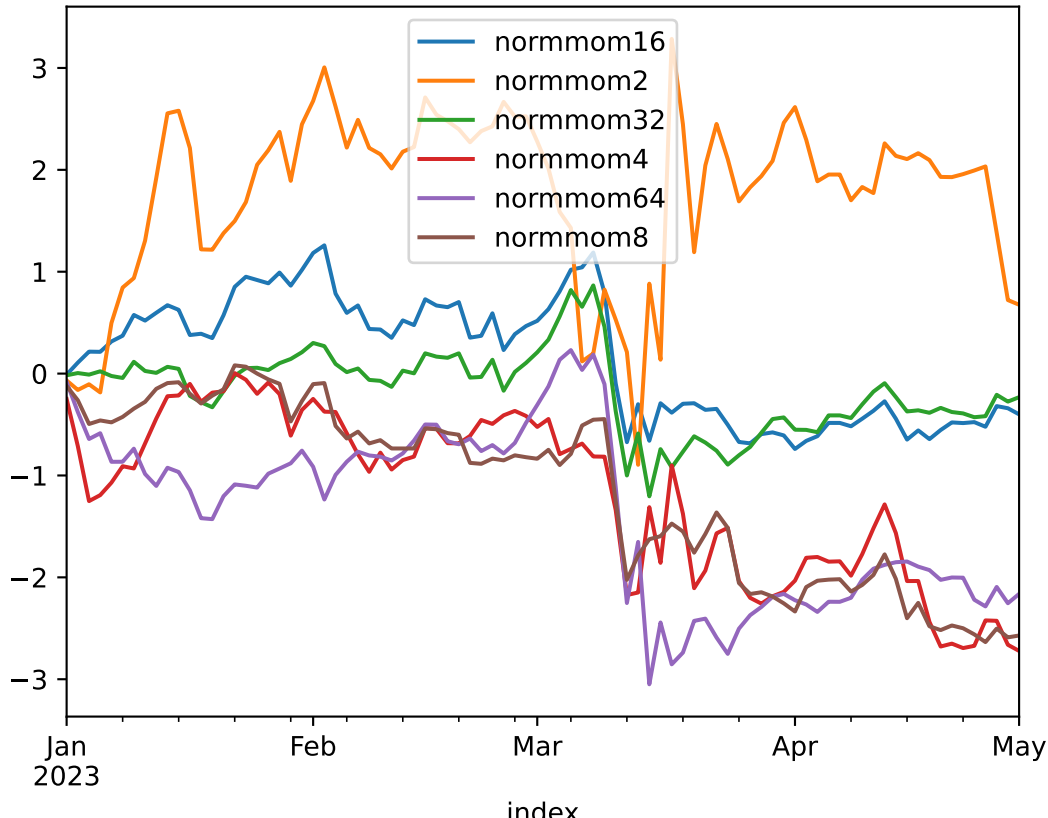


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': -1.191, 'normmom2': 2.012, 'normmom32': -0.69, 'normmom4': -8.103, 'normmom64': -6.438, 'normmom8': -7.653}

ann. std {'normmom16': 3.122, 'normmom2': 9.051, 'normmom32': 3.057, 'normmom4': 4.454, 'normmom64': 4.531, 'normmom8': 3.046}

ann. SR {'normmom16': -0.38, 'normmom2': 0.22, 'normmom32': -0.23, 'normmom4': -1.82, 'normmom64': -1.42, 'normmom8': -2.51}

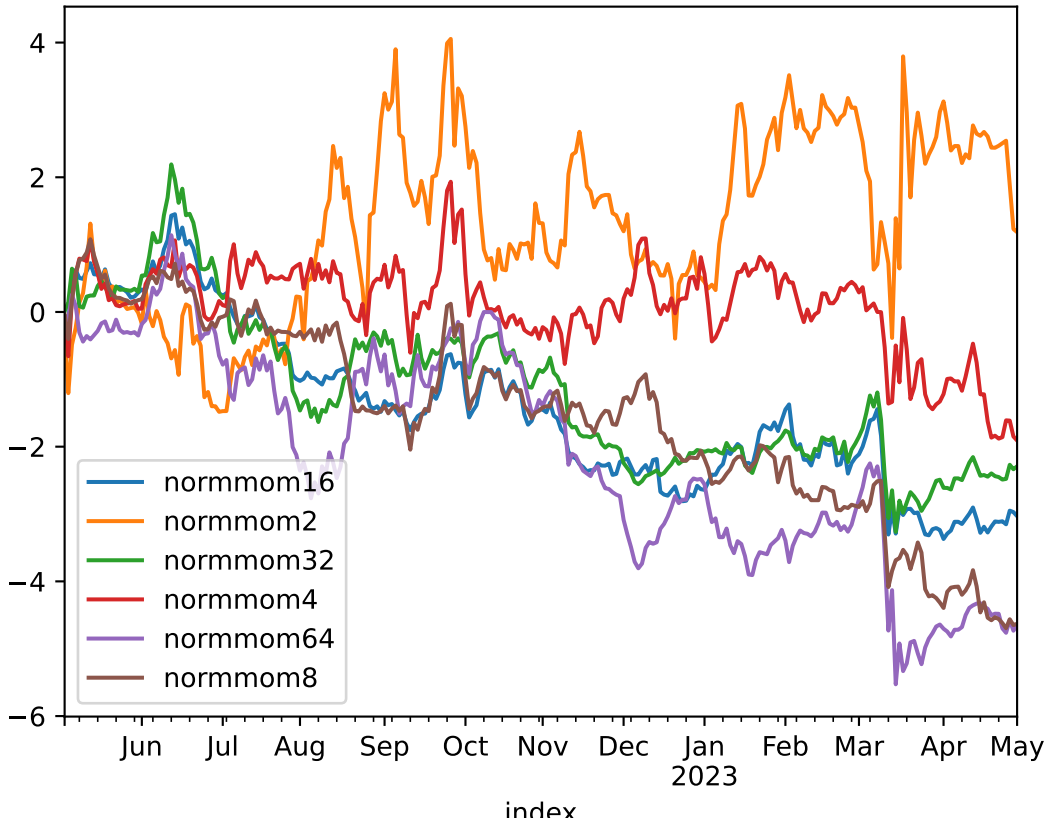


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -2.984, 'normmom2': 1.167, 'normmom32': -2.257, 'normmom4': -1.879, 'normmom64': -4.57, 'normmom8': -4.559}

ann. std {'normmom16': 2.614, 'normmom2': 7.552, 'normmom32': 2.905, 'normmom4': 4.36, 'normmom64': 3.821, 'normmom8': 2.977}

ann. SR {'normmom16': -1.14, 'normmom2': 0.15, 'normmom32': -0.78, 'normmom4': -0.43, 'normmom64': -1.2, 'normmom8': -1.53}

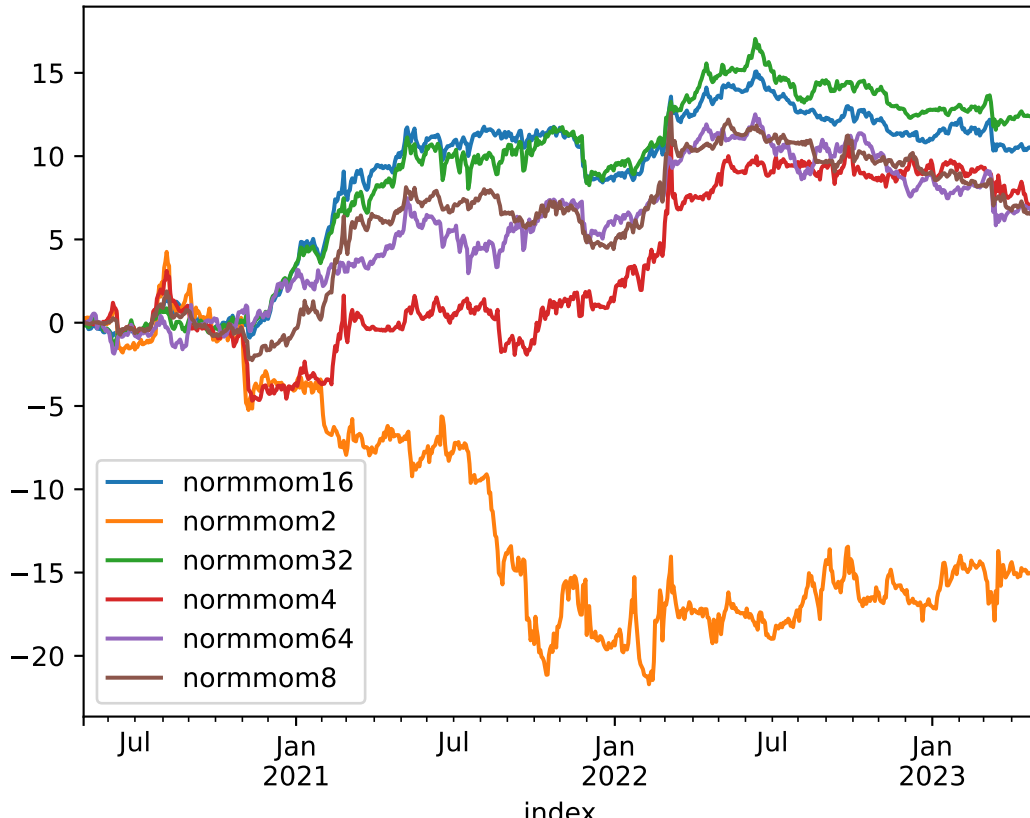


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.476, 'normmom2': -5.347, 'normmom32': 4.115, 'normmom4': 2.303, 'normmom64': 2.207, 'normmom8': 2.127}

ann. std {'normmom16': 3.509, 'normmom2': 8.631, 'normmom32': 3.879, 'normmom4': 5.375, 'normmom64': 4.273, 'normmom8': 3.93}

ann. SR {'normmom16': 0.99, 'normmom2': -0.62, 'normmom32': 1.06, 'normmom4': 0.43, 'normmom64': 0.52, 'normmom8': 0.54}

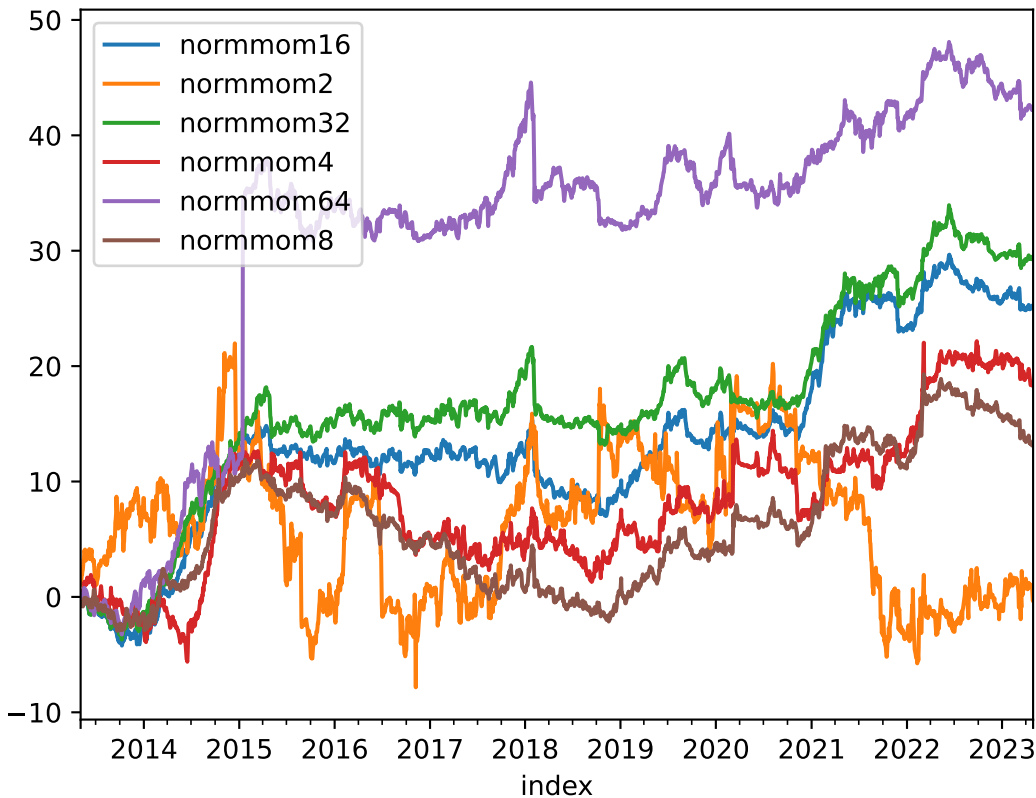


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.472, 'normmom2': -0.036, 'normmom32': 2.893, 'normmom4': 1.799, 'normmom64': 4.155, 'normmom8': 1.295}

ann. std {'normmom16': 3.465, 'normmom2': 10.321, 'normmom32': 3.622, 'normmom4': 5.442, 'normmom64': 8.273, 'normmom8': 3.879}

ann. SR {'normmom16': 0.71, 'normmom2': -0.0, 'normmom32': 0.8, 'normmom4': 0.33, 'normmom64': 0.5, 'normmom8': 0.33}

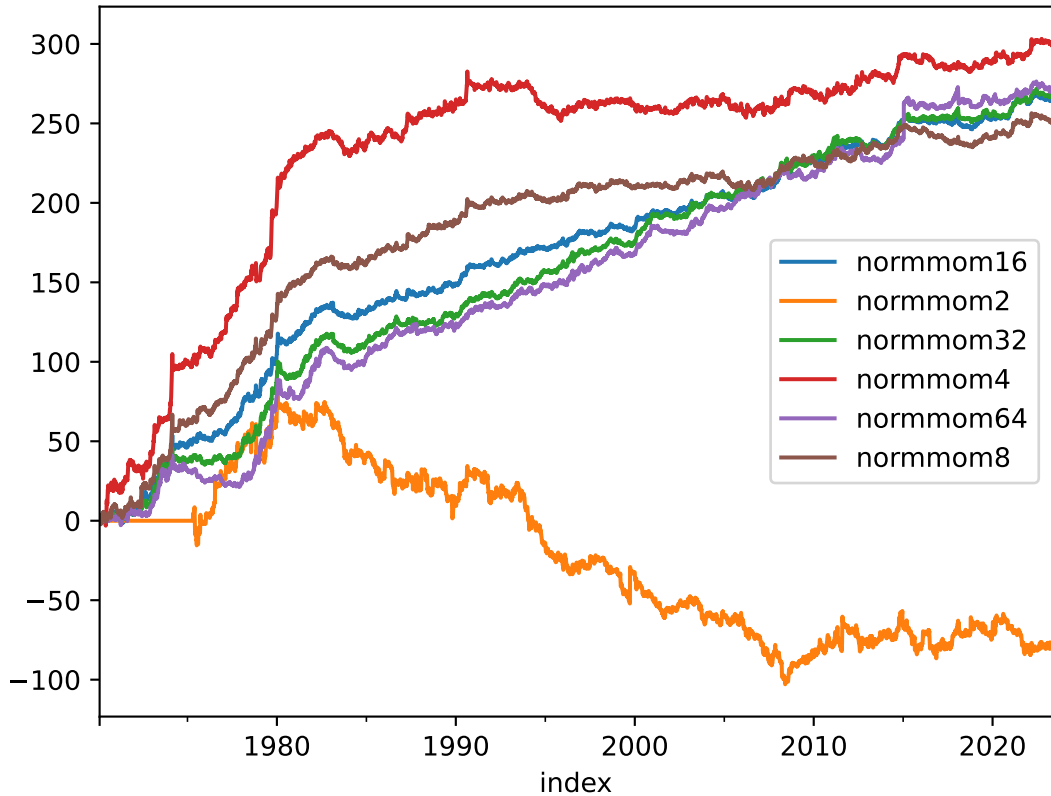


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.874, 'normmom2': -1.458, 'normmom32': 4.927, 'normmom4': 5.517, 'normmom64': 4.987, 'normmom8': 4.614}

ann. std {'normmom16': 4.532, 'normmom2': 11.609, 'normmom32': 4.609, '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': -3.124, 'relmomentum20': -15.302, 'relmomentum40': 12.712, 'relmomentum80': 11.116}

ann. std {'relmomentum10': 8.009, 'relmomentum20': 6.522, 'relmomentum40': 5.321, 'relmomentum80': 4.358}

ann. SR {'relmomentum10': -0.39, 'relmomentum20': -2.35, 'relmomentum40': 2.39, 'relmomentum80': 2.55}

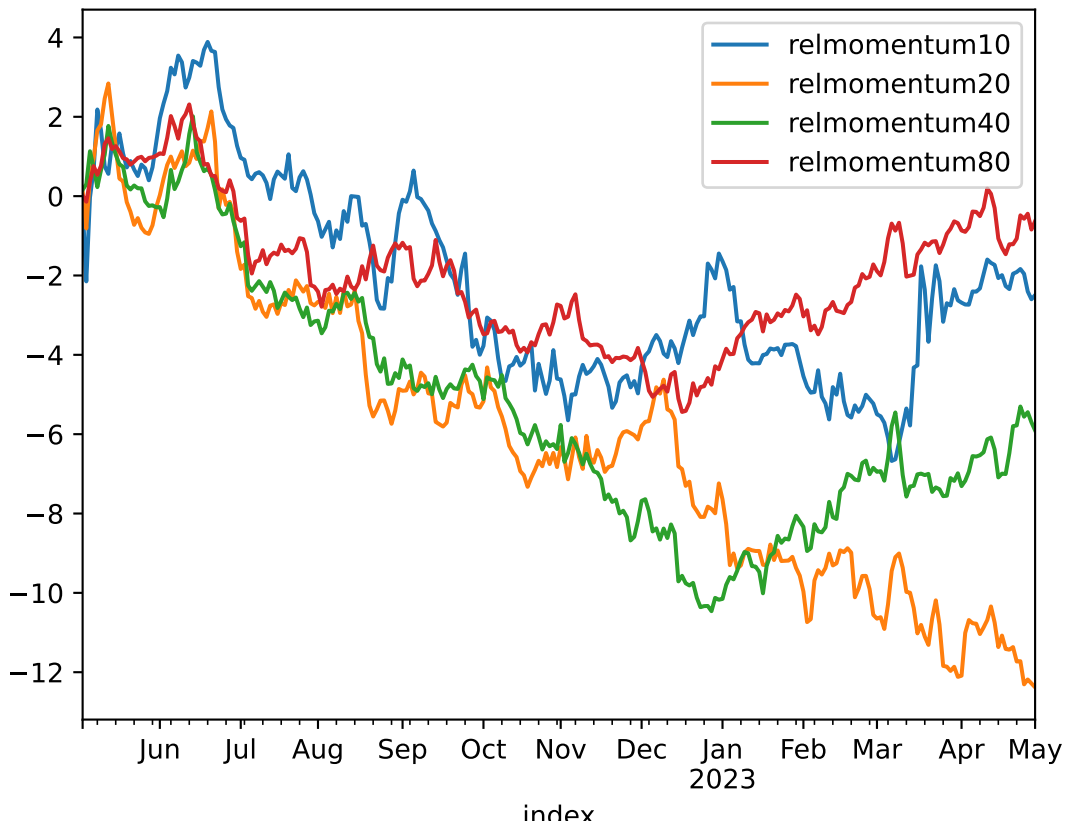


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -2.457, 'relmomentum20': -12.19, 'relmomentum40': -5.813, 'relmomentum80': -0.621}

ann. std {'relmomentum10': 7.948, 'relmomentum20': 6.622, 'relmomentum40': 5.334, 'relmomentum80': 4.536}

ann. SR {'relmomentum10': -0.31, 'relmomentum20': -1.84, 'relmomentum40': -1.09, 'relmomentum80': -0.14}

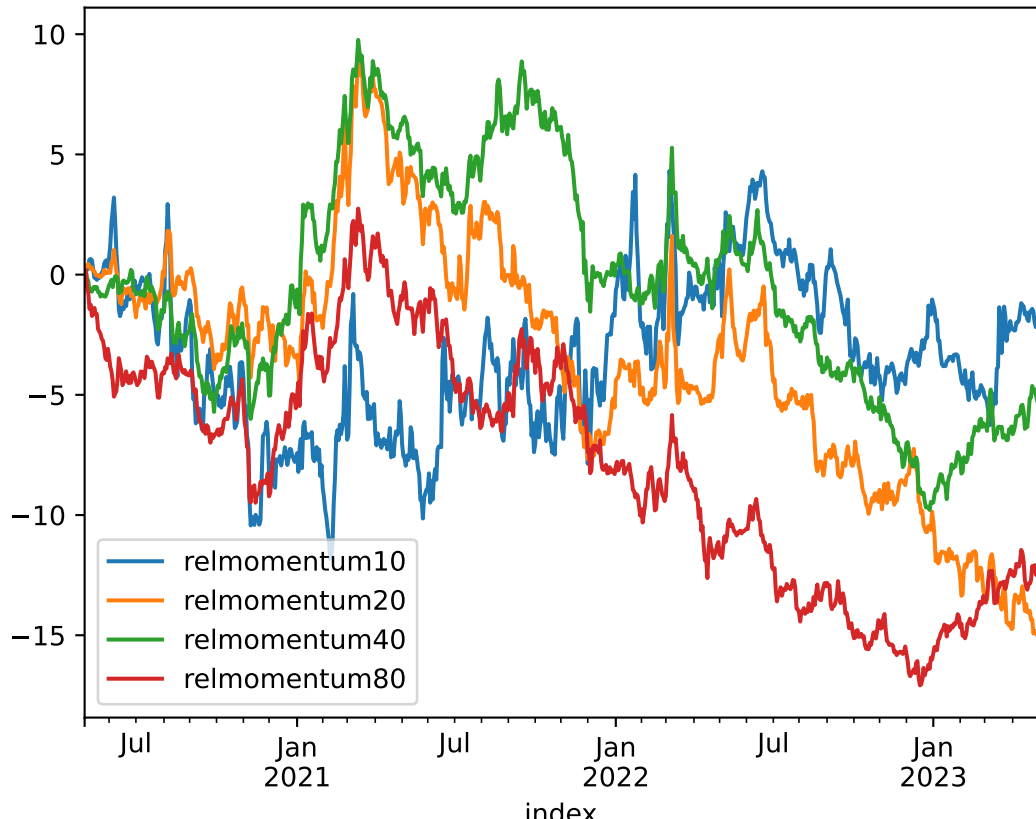


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -0.683, 'relmomentum20': -4.918, 'relmomentum40': -1.715, 'relmomentum80': -4.023}

ann. std {'relmomentum10': 11.914, 'relmomentum20': 8.336, 'relmomentum40': 6.942, 'relmomentum80': 6.334}

ann. SR {'relmomentum10': -0.06, 'relmomentum20': -0.59, 'relmomentum40': -0.25, 'relmomentum80': -0.64}

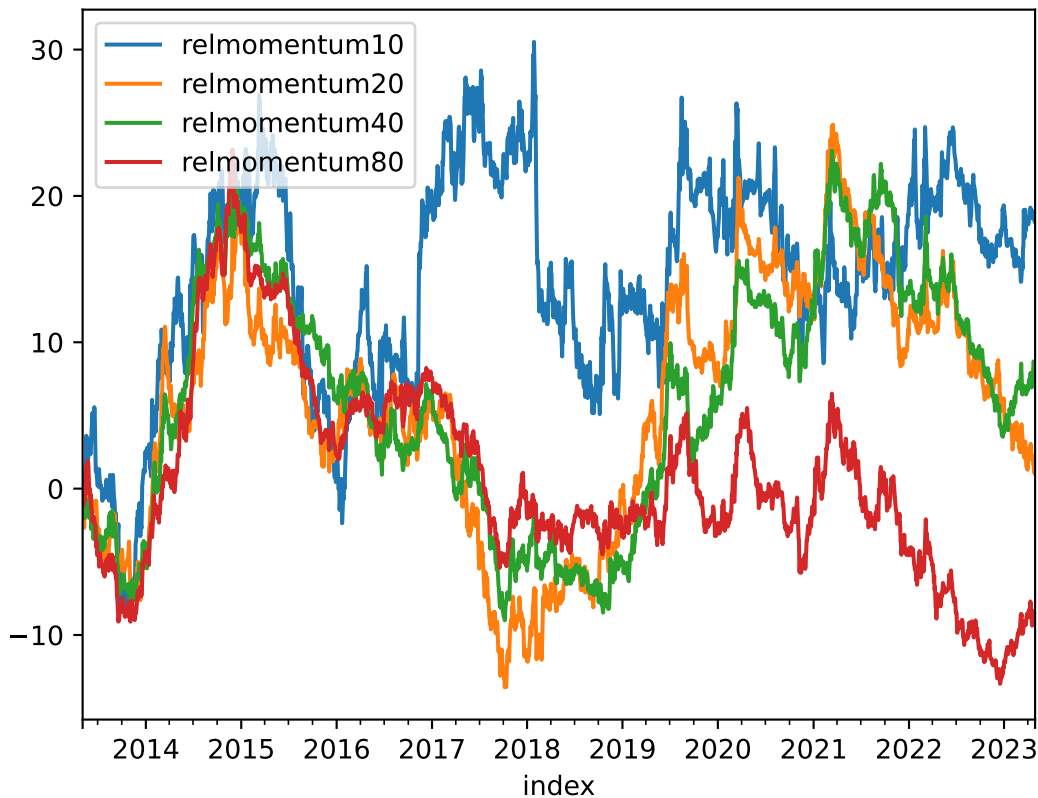


Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': 1.798, 'relmomentum20': 0.101, 'relmomentum40': 0.795, 'relmomentum80': -0.838}

ann. std {'relmomentum10': 13.396, 'relmomentum20': 8.559, 'relmomentum40': 7.005, 'relmomentum80': 6.387}

ann. SR {'relmomentum10': 0.13, 'relmomentum20': 0.01, 'relmomentum40': 0.11, 'relmomentum80': -0.13}

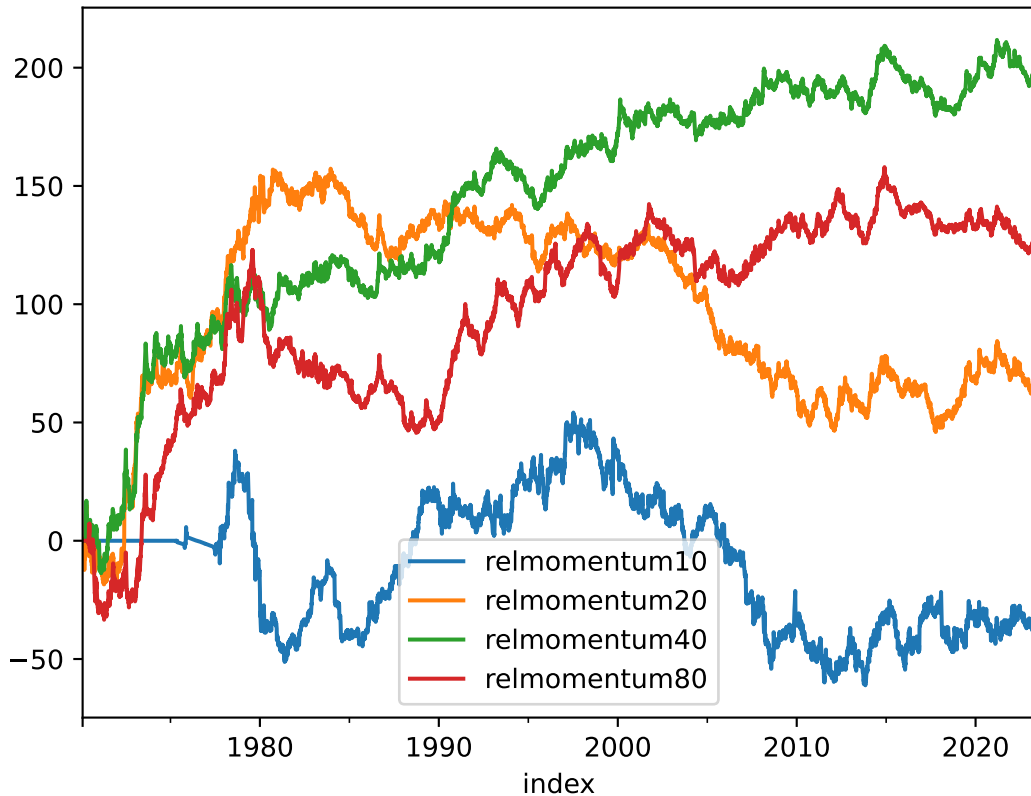


Total Trading Rule P&L for period '99Y'

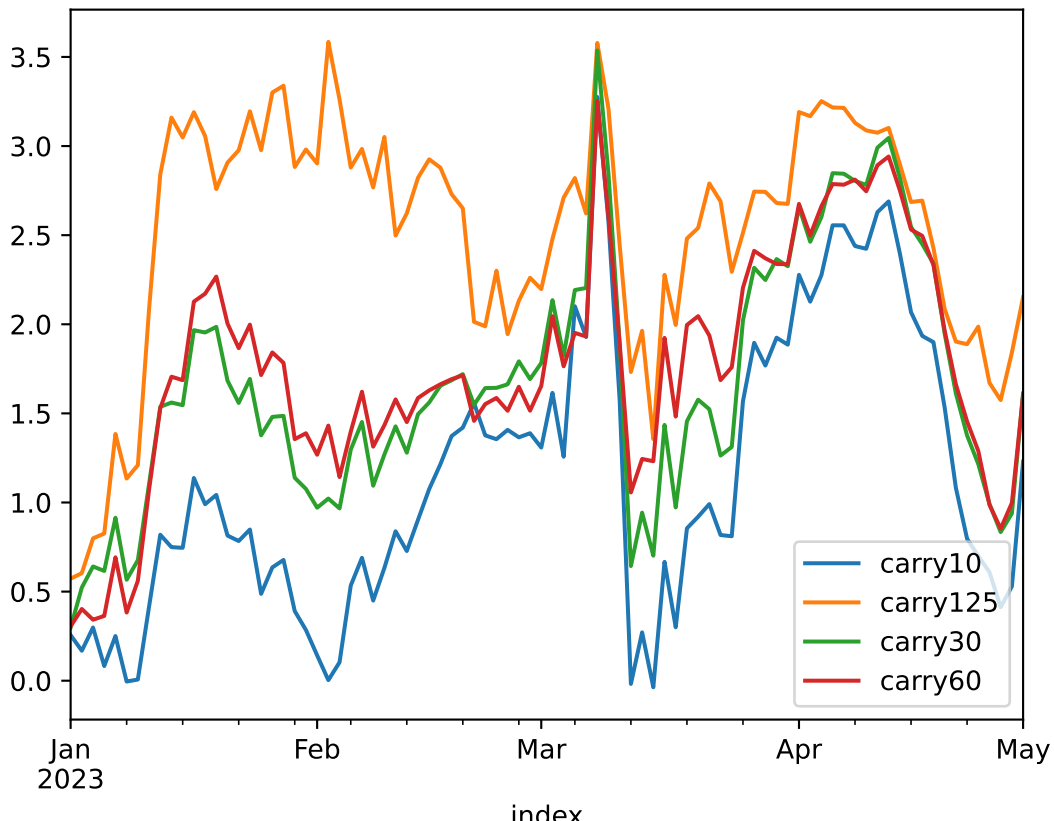
ann. mean {'relmomentum10': -0.624, 'relmomentum20': 1.117, 'relmomentum40': 3.626, 'relmomentum80': 2.327}

ann. std {'relmomentum10': 13.388, 'relmomentum20': 10.467, 'relmomentum40': 9.637, 'relmomentum80': 9.782}

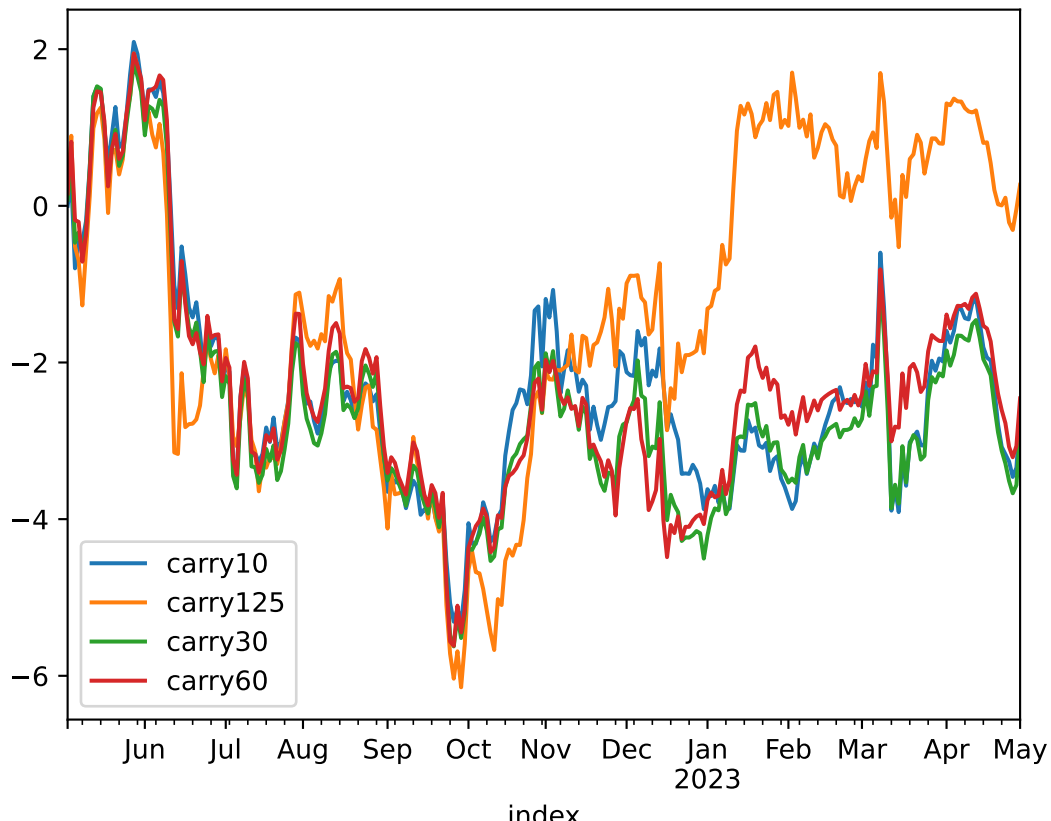
ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.11, 'relmomentum40': 0.38, 'relmomentum80': 0.24}



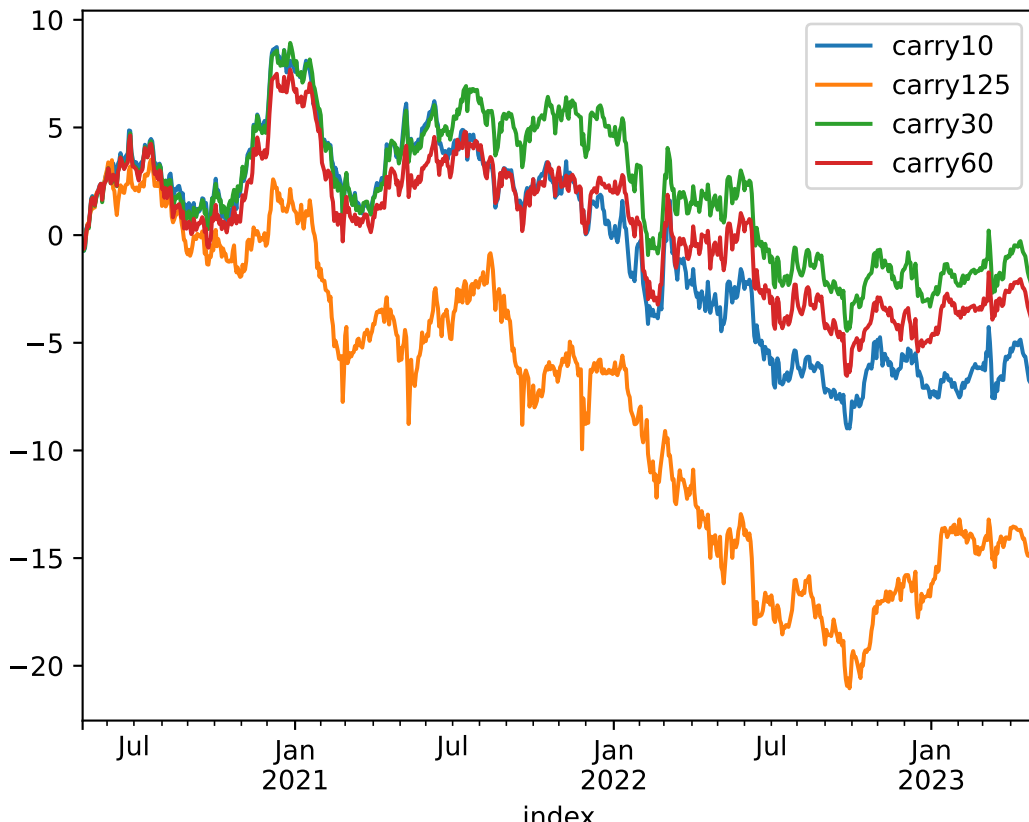
Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 3.659, 'carry125': 6.406, 'carry30': 4.799, 'carry60': 4.778}
ann. std {'carry10': 5.966, 'carry125': 5.432, 'carry30': 5.479, 'carry60': 4.914}
ann. SR {'carry10': 0.61, 'carry125': 1.18, 'carry30': 0.88, 'carry60': 0.97}



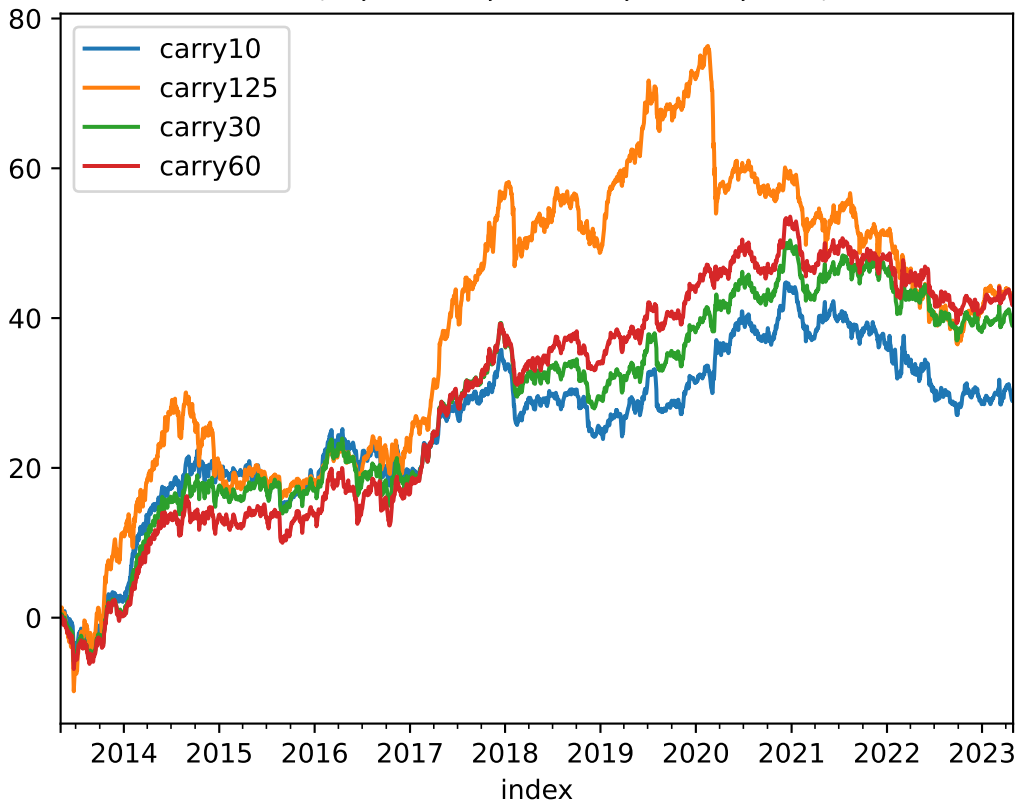
Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -2.603, 'carry125': 0.265, 'carry30': -2.847, 'carry60': -2.42}
ann. std {'carry10': 6.086, 'carry125': 6.67, 'carry30': 6.067, 'carry60': 6.017}
ann. SR {'carry10': -0.43, 'carry125': 0.04, 'carry30': -0.47, 'carry60': -0.4}



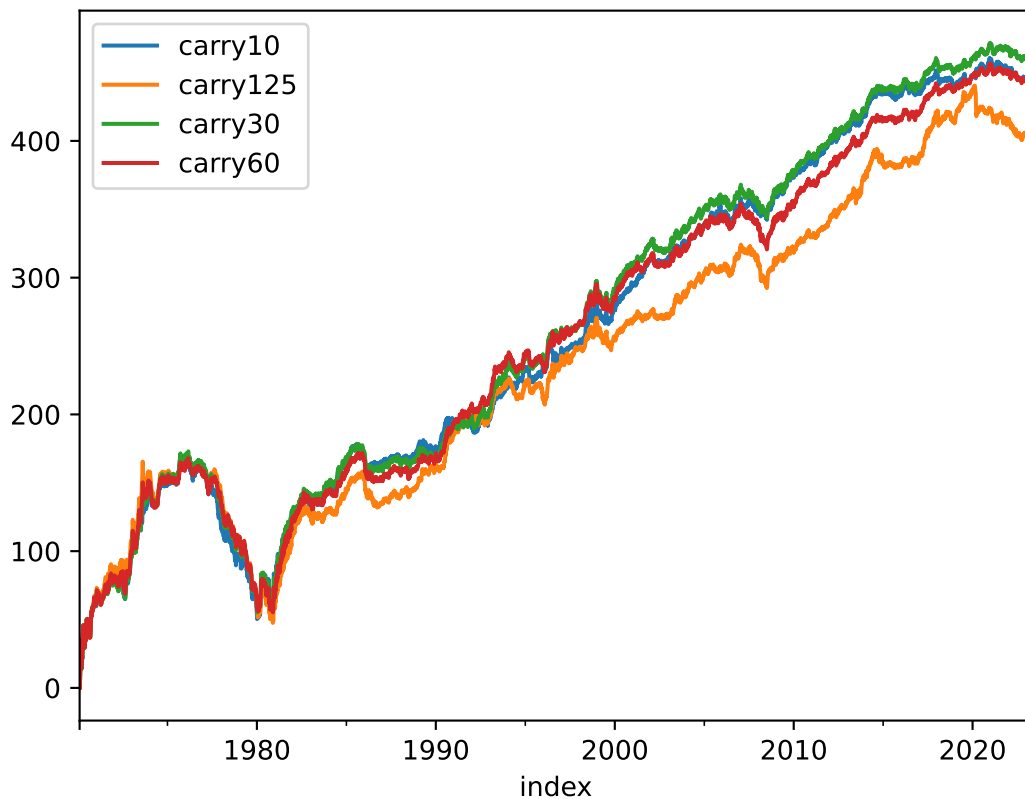
Total Trading Rule P&L for period '3Y'
ann. mean {'carry10': -2.069, 'carry125': -4.796, 'carry30': -0.561, 'carry60': -1.107}
ann. std {'carry10': 6.563, 'carry125': 7.996, 'carry30': 6.49, 'carry60': 6.474}
ann. SR {'carry10': -0.32, 'carry125': -0.6, 'carry30': -0.09, 'carry60': -0.17}



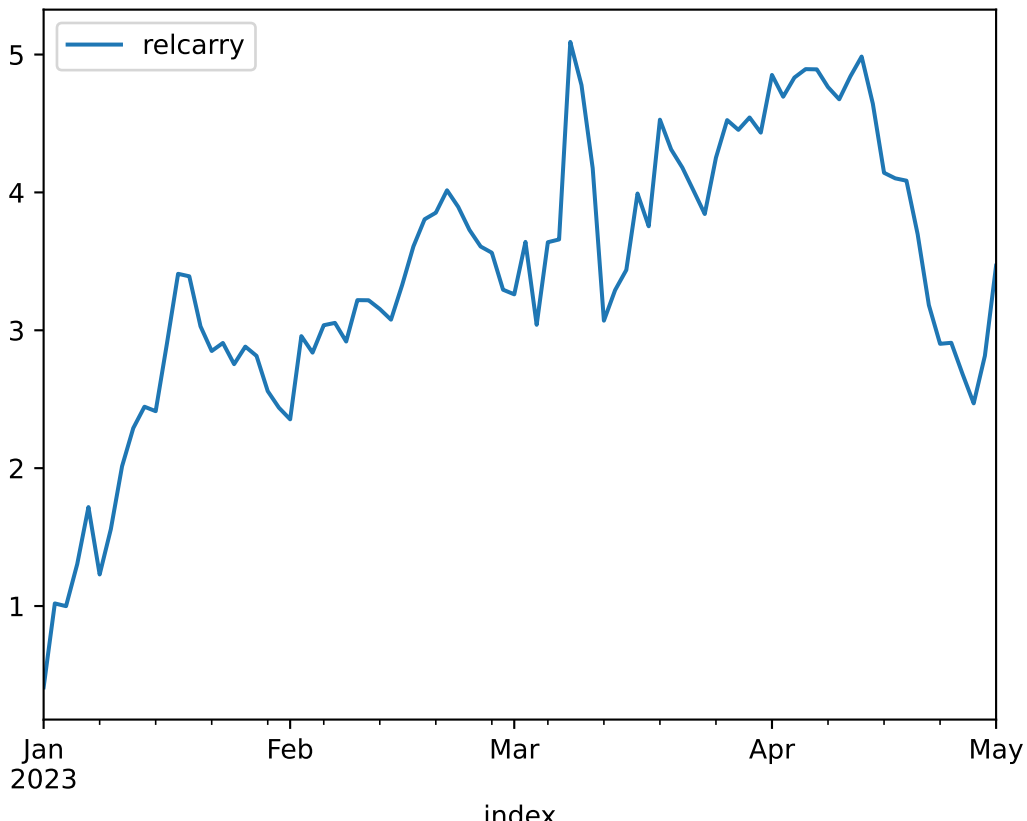
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 2.92, 'carry125': 4.213, 'carry30': 3.903, 'carry60': 4.172}
ann. std {'carry10': 6.366, 'carry125': 8.947, 'carry30': 6.453, 'carry60': 6.401}
ann. SR {'carry10': 0.46, 'carry125': 0.47, 'carry30': 0.6, 'carry60': 0.65}



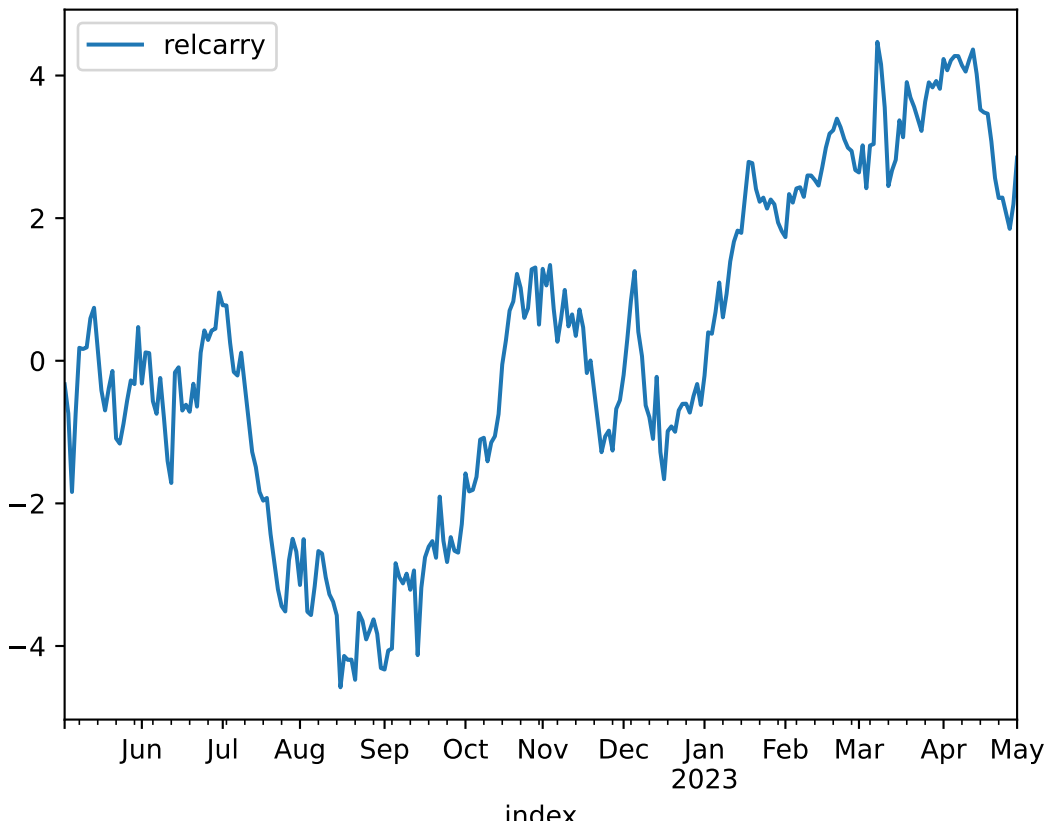
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 8.21, 'carry125': 7.501, 'carry30': 8.497, 'carry60': 8.208}
ann. std {'carry10': 11.2, 'carry125': 11.557, 'carry30': 11.257, 'carry60': 11.26}
ann. SR {'carry10': 0.73, 'carry125': 0.65, 'carry30': 0.75, 'carry60': 0.73}



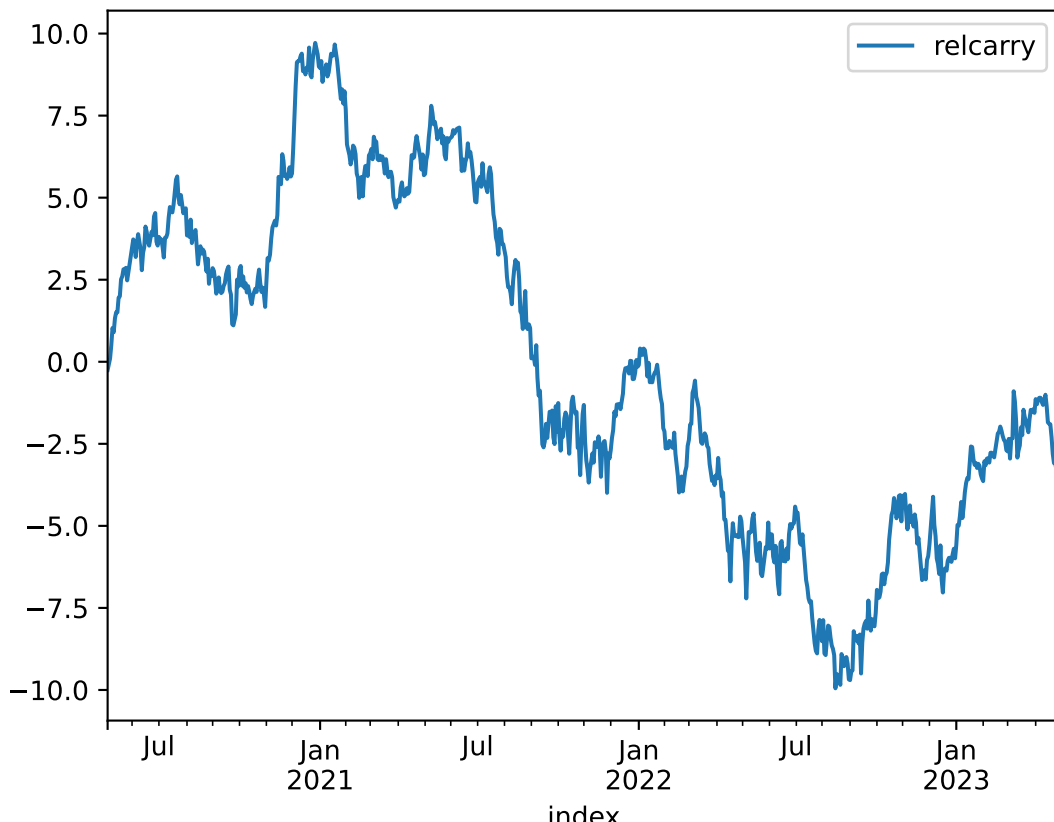
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 10.324}
ann. std {'relcarry': 5.708}
ann. SR {'relcarry': 1.81}



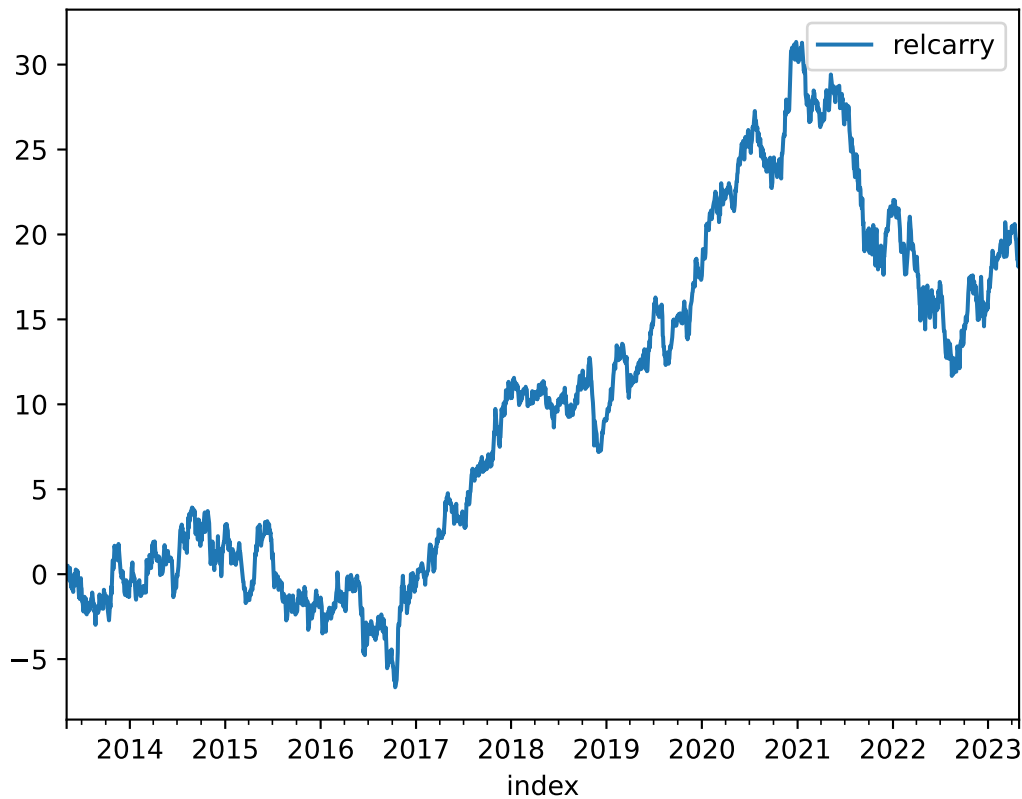
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': 2.804}
ann. std {'relcarry': 6.962}
ann. SR {'relcarry': 0.4}



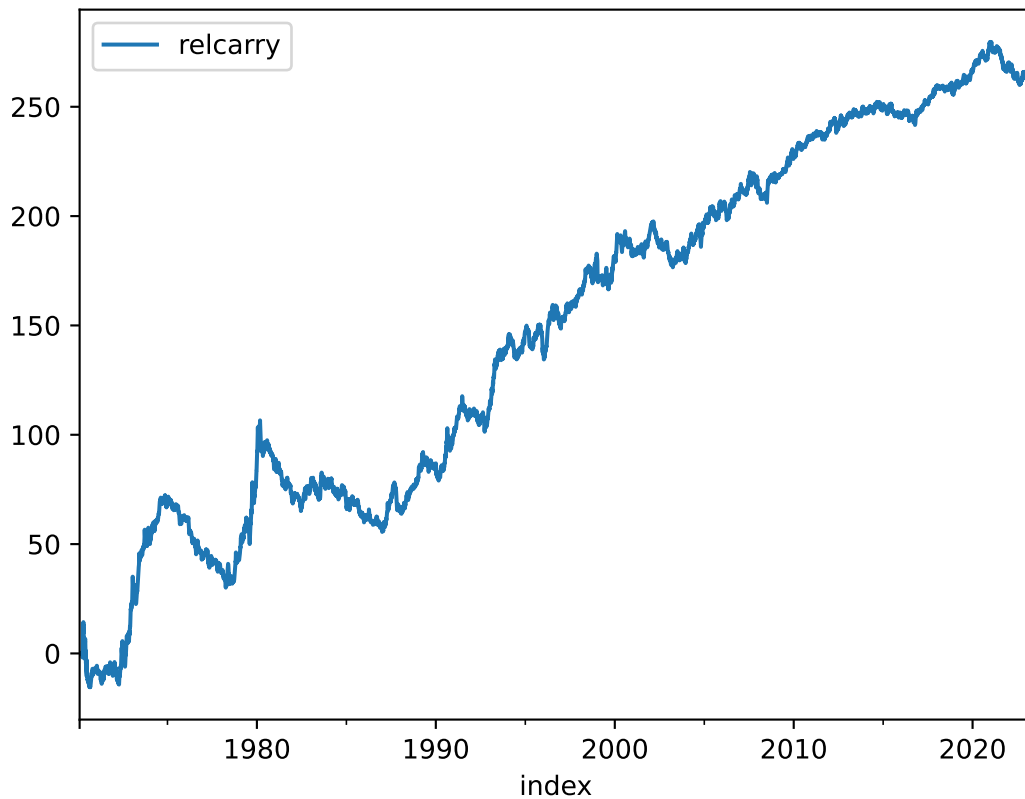
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -0.827}
ann. std {'relcarry': 6.669}
ann. SR {'relcarry': -0.12}



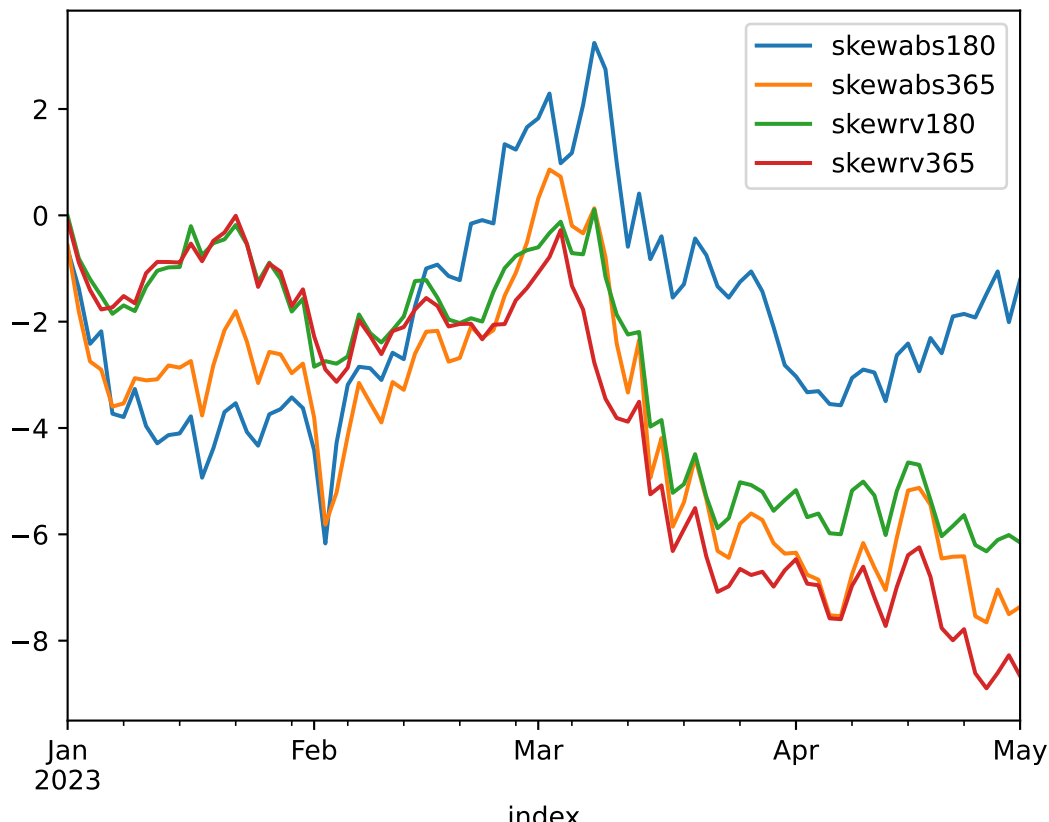
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 1.875}
ann. std {'relcarry': 5.816}
ann. SR {'relcarry': 0.32}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 4.929}
ann. std {'relcarry': 8.96}
ann. SR {'relcarry': 0.55}

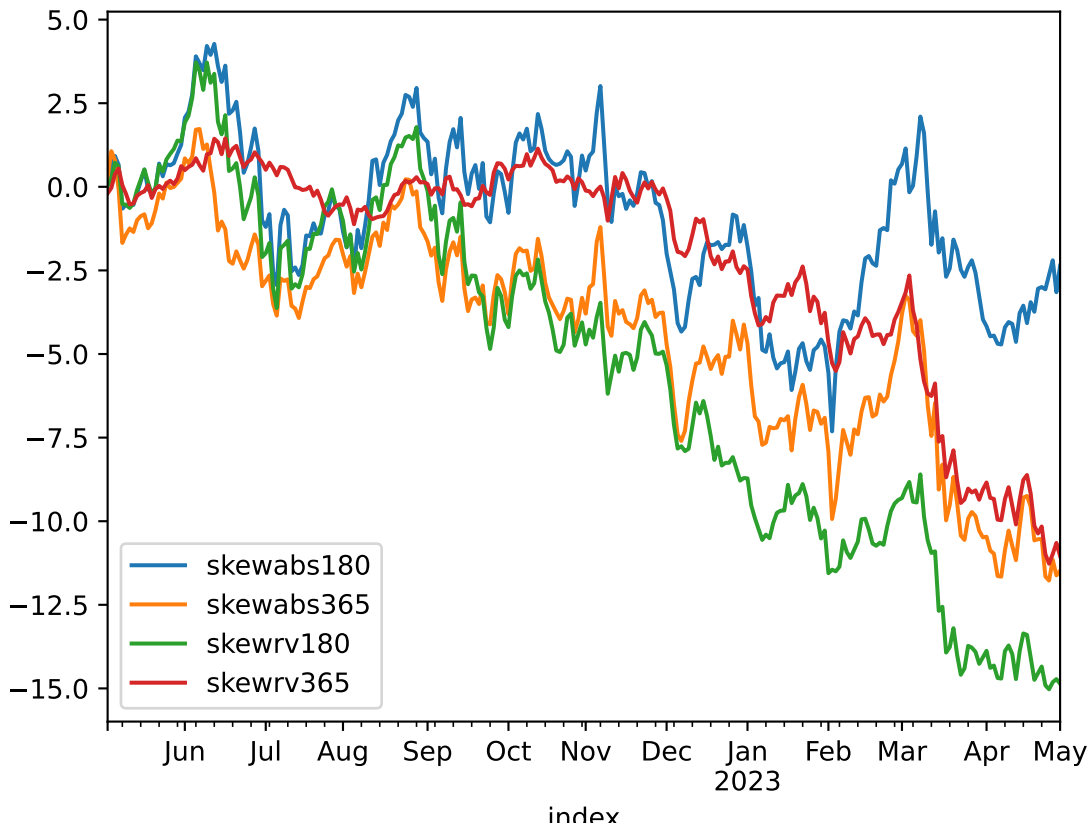


Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': -3.62, 'skewabs365': -21.916, 'skewrv180': -18.314, 'skewrv365': -25.791}
ann. std {'skewabs180': 11.476, 'skewabs365': 11.65, 'skewrv180': 8.09, 'skewrv365': 7.974}
ann. SR {'skewabs180': -0.32, 'skewabs365': -1.88, 'skewrv180': -2.26, 'skewrv365': -3.23}



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

ann. mean {'skewabs180': -2.323, 'skewabs365': -11.304, 'skewrv180': -14.631, 'skewrv365': -10.869}
ann. std {'skewabs180': 11.097, 'skewabs365': 9.969, 'skewrv180': 9.284, 'skewrv365': 5.793}
ann. SR {'skewabs180': -0.21, 'skewabs365': -1.13, 'skewrv180': -1.58, 'skewrv365': -1.88}

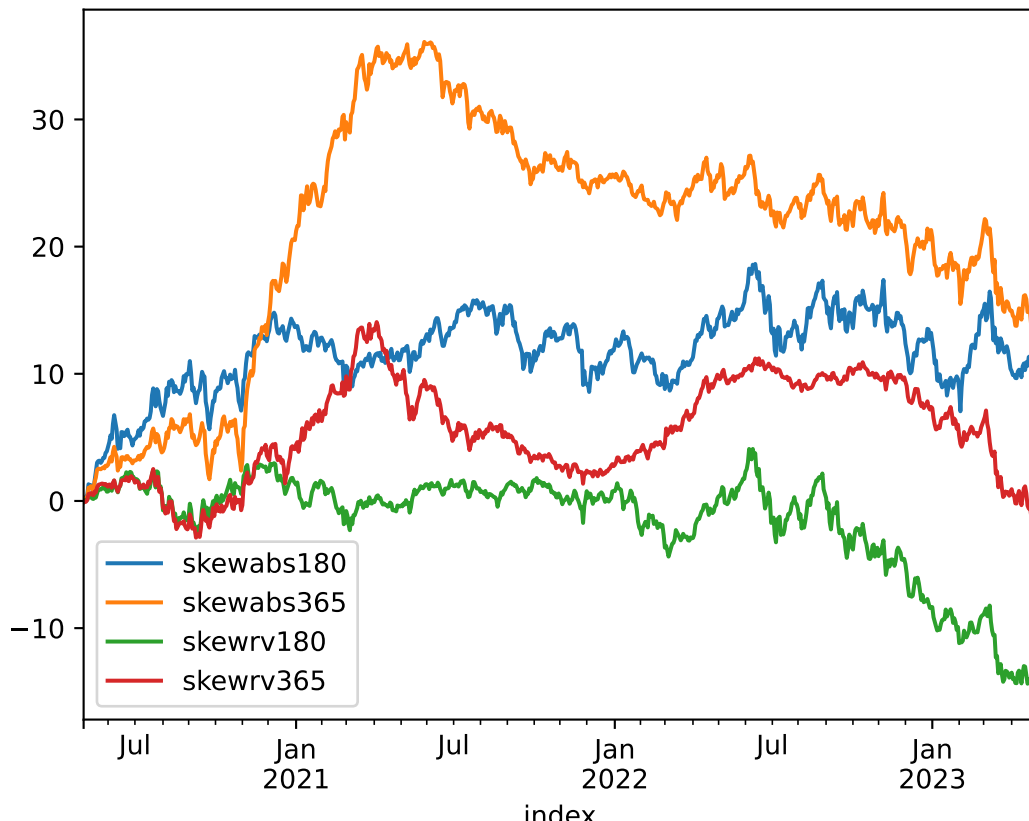


Total Trading Rule P&L for period '3Y'

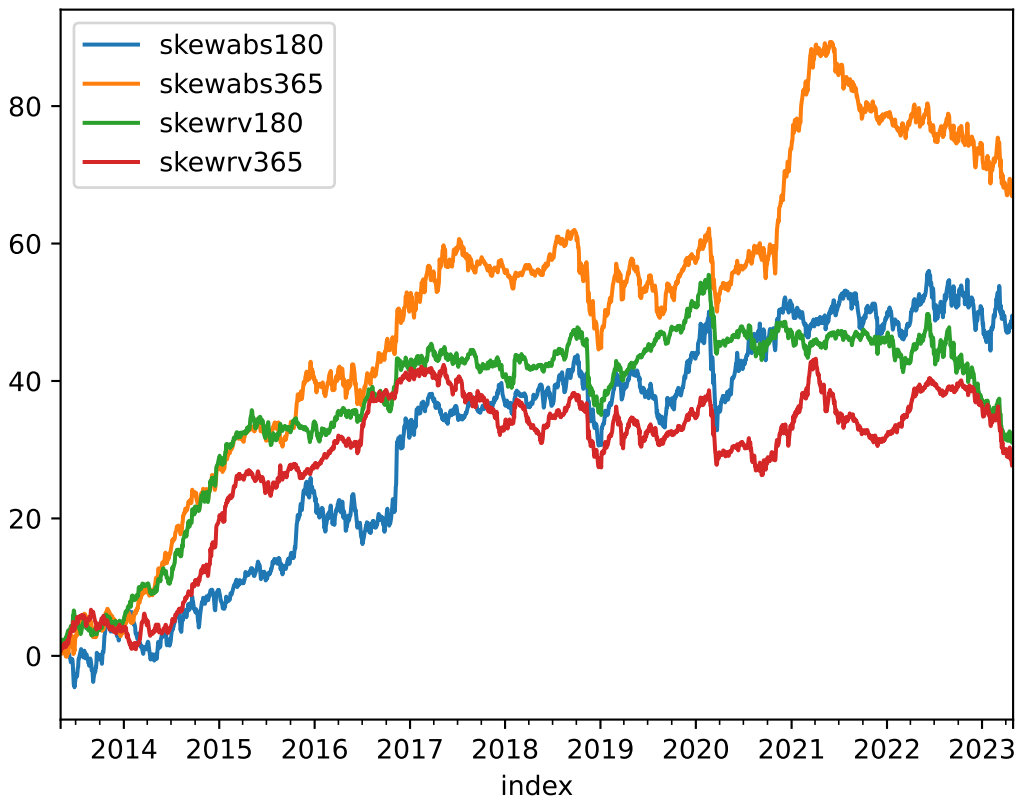
ann. mean {'skewabs180': 3.936, 'skewabs365': 4.571, 'skewrv180': -4.748, 'skewrv365': -0.417}

ann. std {'skewabs180': 9.146, 'skewabs365': 8.925, 'skewrv180': 7.243, 'skewrv365': 6.356}

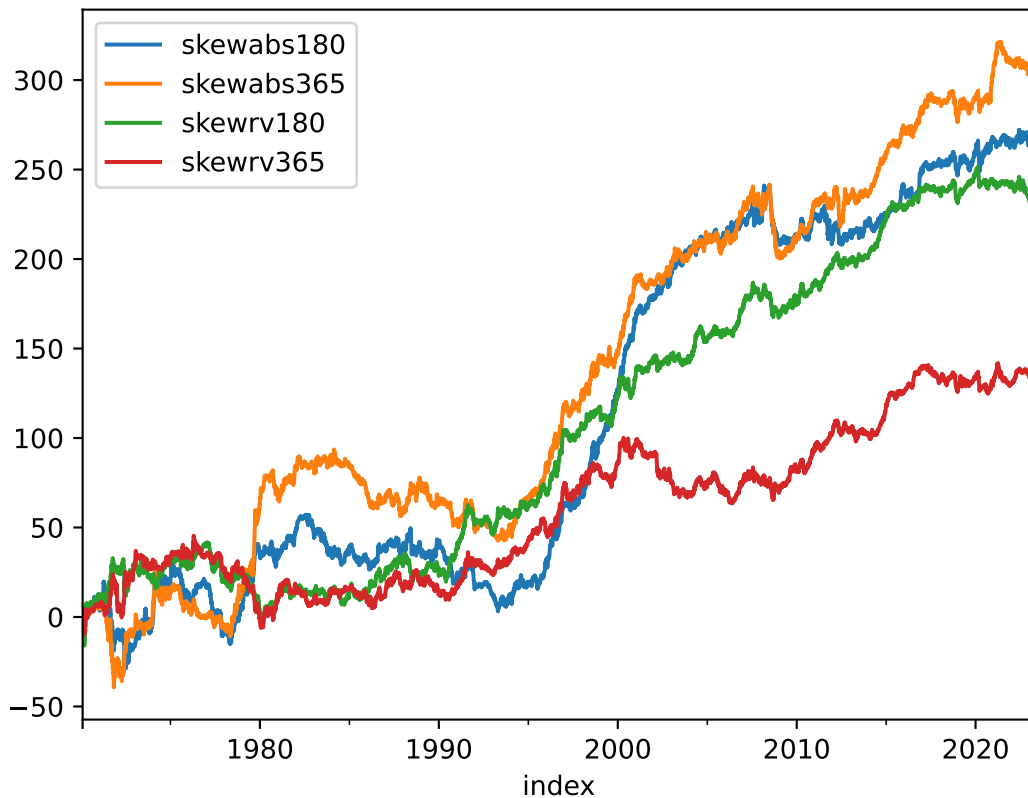
ann. SR {'skewabs180': 0.43, 'skewabs365': 0.51, 'skewrv180': -0.66, 'skewrv365': -0.07}



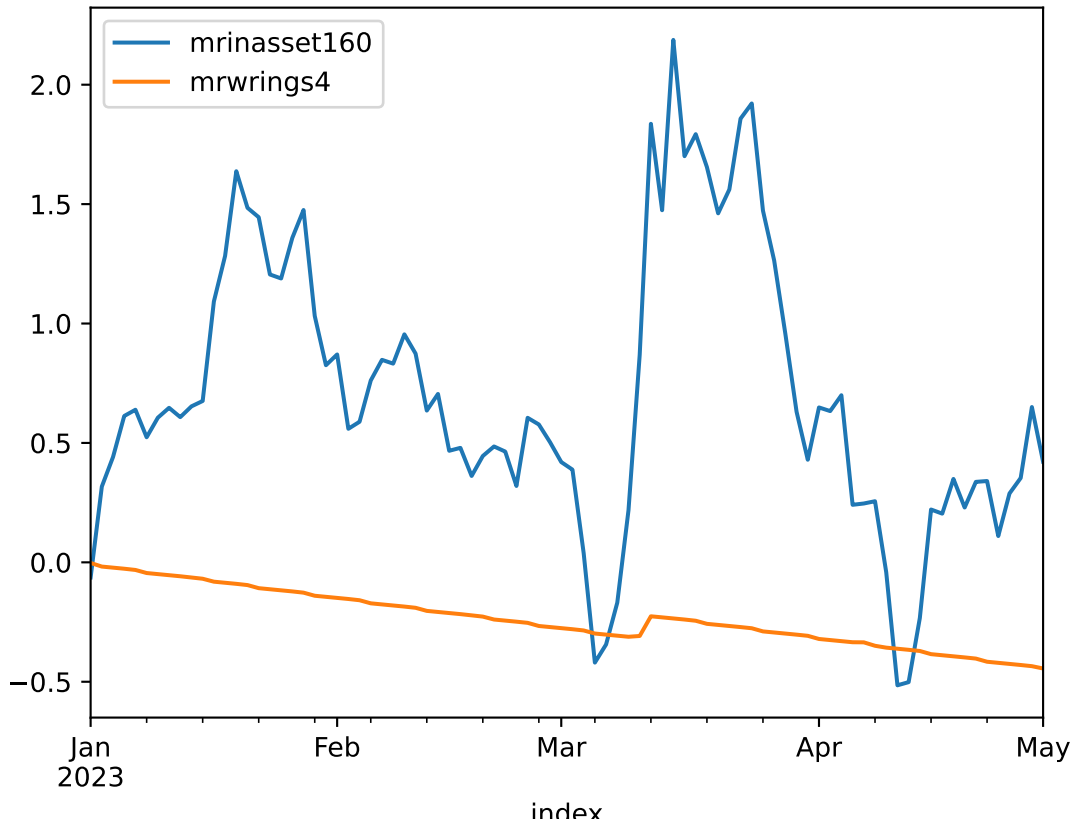
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.848, 'skewabs365': 6.598, 'skewrv180': 3.061, 'skewrv365': 2.741}
ann. std {'skewabs180': 8.023, 'skewabs365': 7.948, 'skewrv180': 6.395, 'skewrv365': 6.053}
ann. SR {'skewabs180': 0.6, 'skewabs365': 0.83, 'skewrv180': 0.48, 'skewrv365': 0.45}



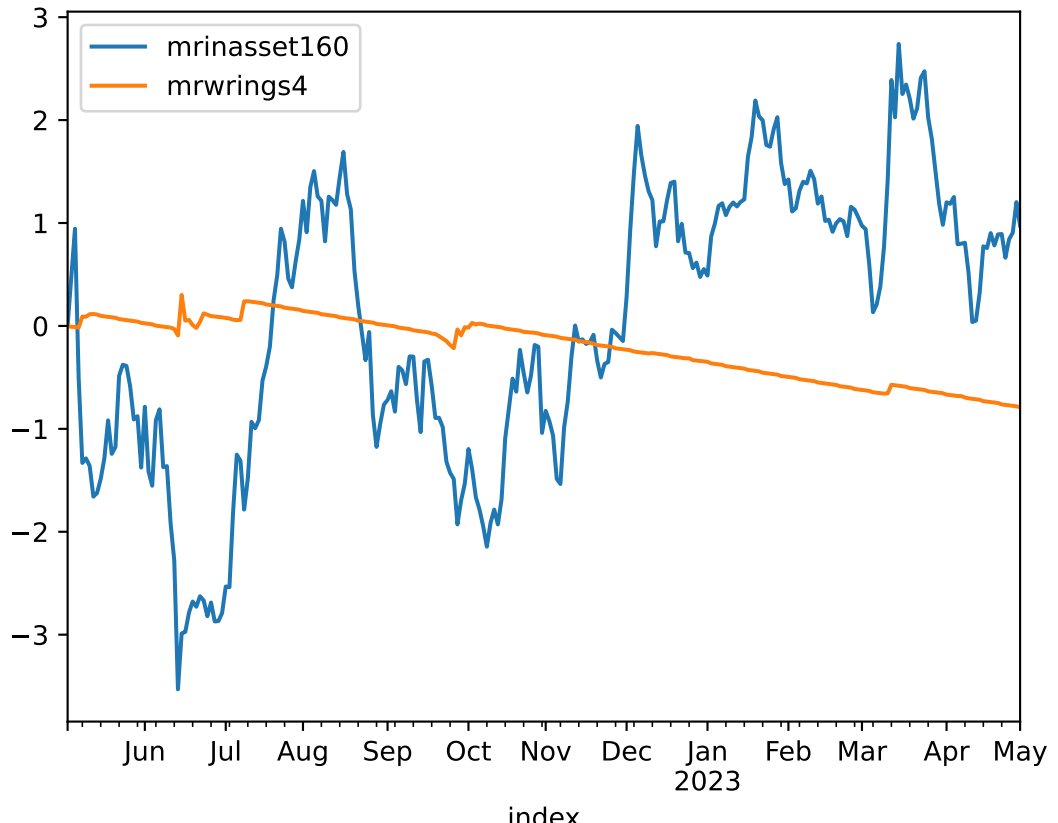
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.894, 'skewabs365': 5.514, 'skewrv180': 4.191, 'skewrv365': 2.329}
ann. std {'skewabs180': 10.101, 'skewabs365': 9.869, 'skewrv180': 8.75, 'skewrv365': 8.124}
ann. SR {'skewabs180': 0.48, 'skewabs365': 0.56, 'skewrv180': 0.48, 'skewrv365': 0.29}



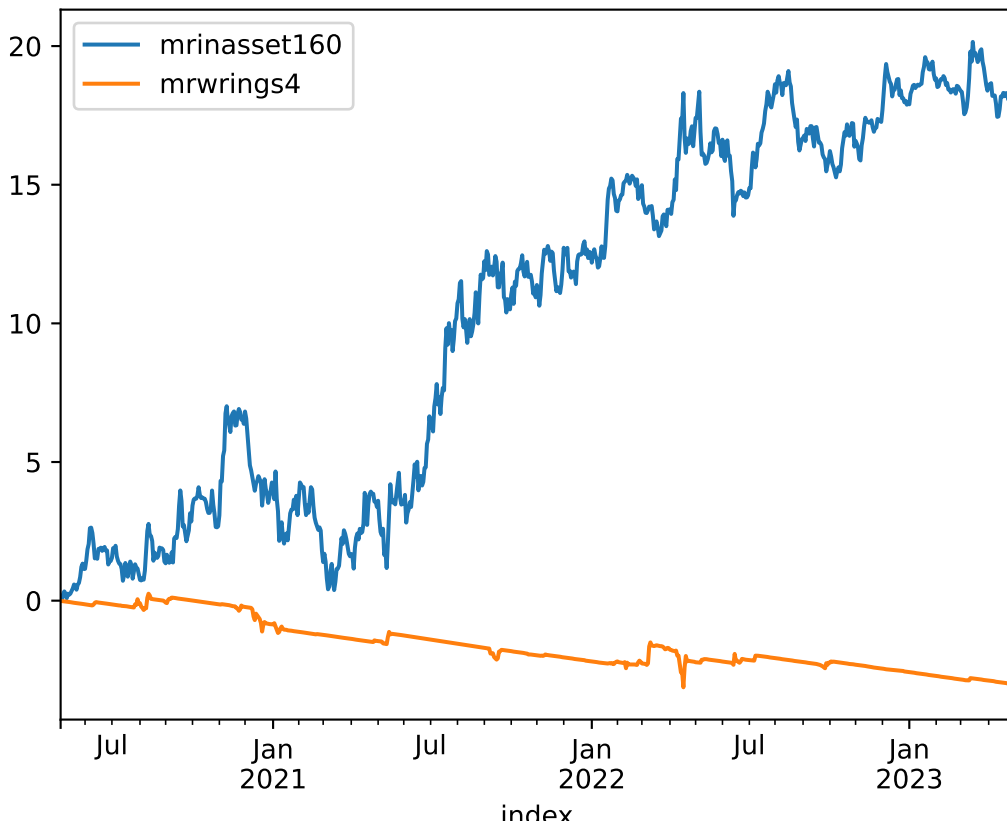
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 1.255, 'mrwrings4': -1.323}
ann. std {'mrinasset160': 4.206, 'mrwrings4': 0.163}
ann. SR {'mrinasset160': 0.3, 'mrwrings4': -8.1}



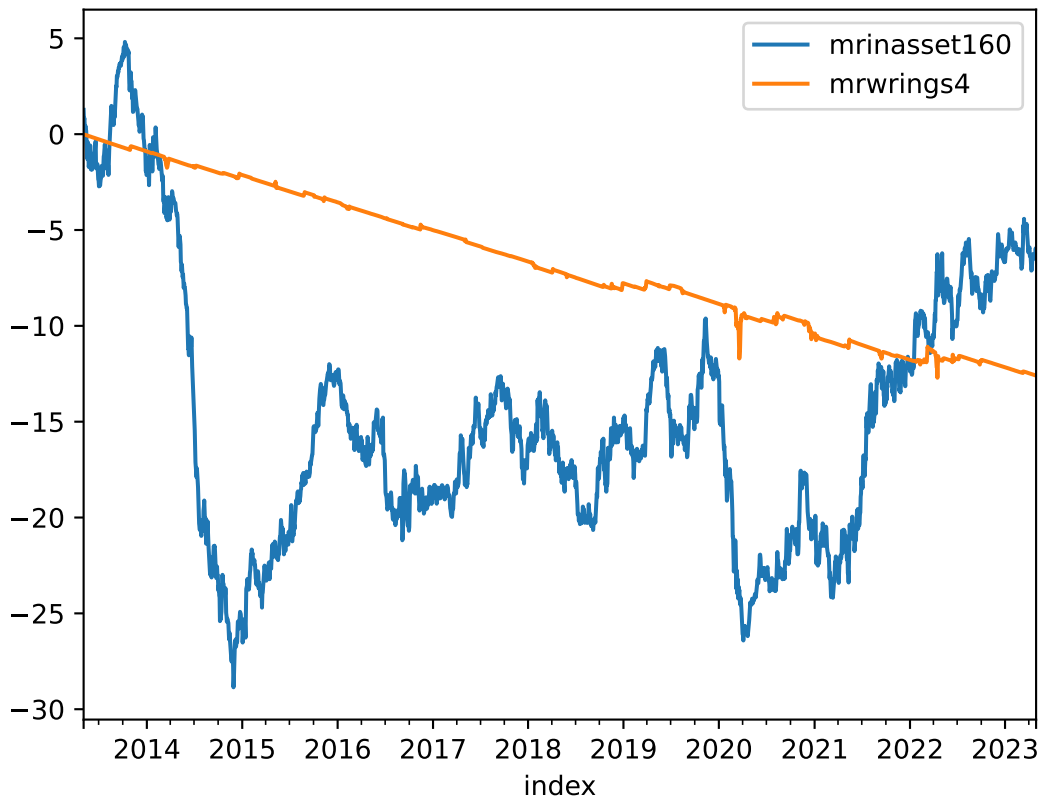
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 0.959, 'mrwrings4': -0.779}
ann. std {'mrinasset160': 5.114, 'mrwrings4': 0.585}
ann. SR {'mrinasset160': 0.19, 'mrwrings4': -1.33}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 6.026, 'mrwrings4': -0.987}
ann. std {'mrinasset160': 6.261, 'mrwrings4': 1.017}
ann. SR {'mrinasset160': 0.96, 'mrwrings4': -0.97}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.607, 'mrwrings4': -1.237}
ann. std {'mrinasset160': 6.211, 'mrwrings4': 0.879}
ann. SR {'mrinasset160': -0.1, 'mrwrings4': -1.41}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.557, 'mrwrings4': -2.152}
ann. std {'mrinasset160': 9.866, 'mrwrings4': 2.088}
ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.03}

