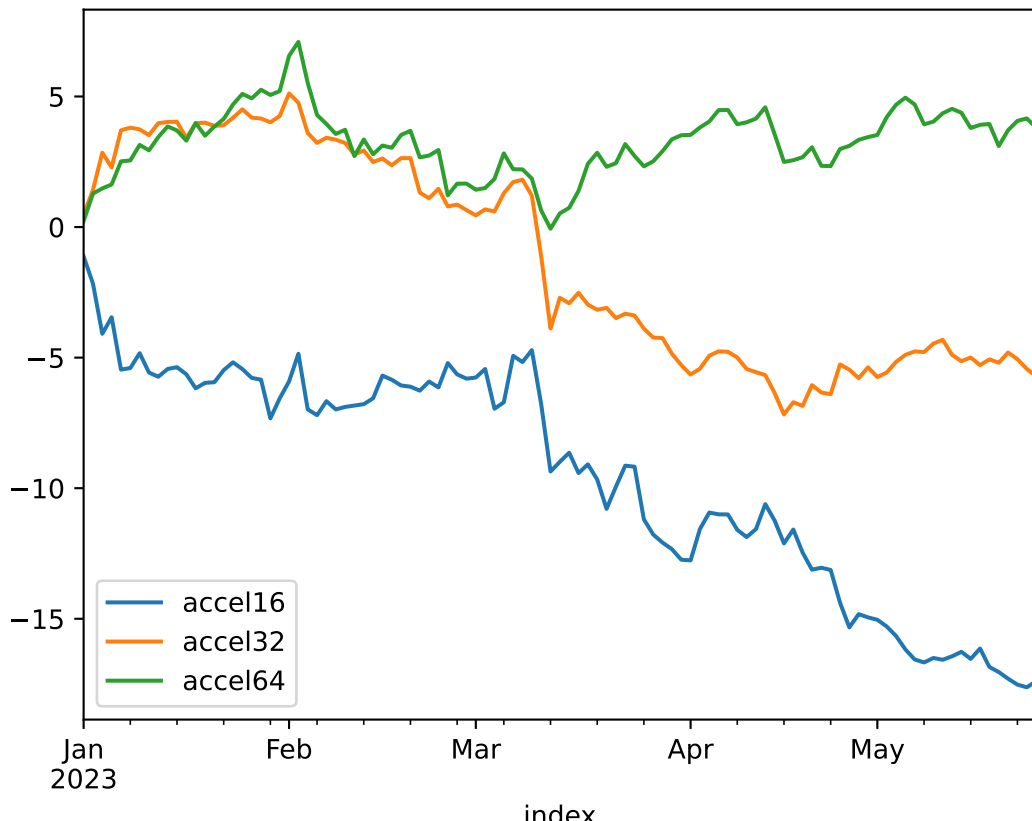
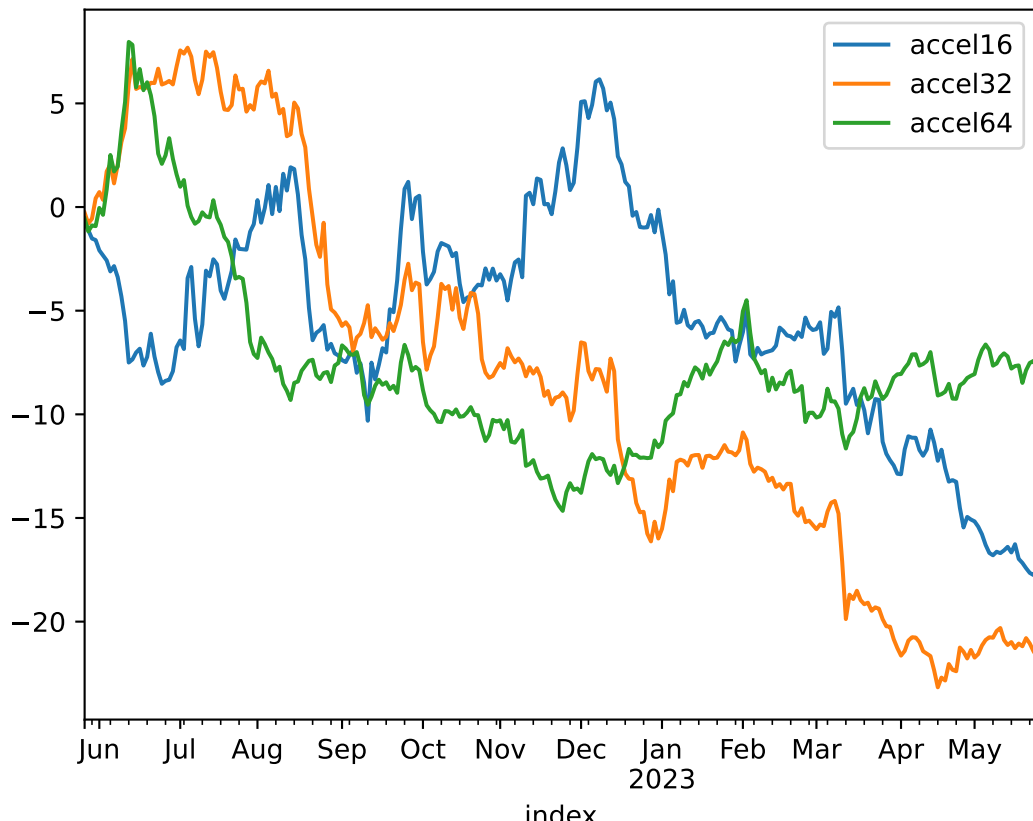


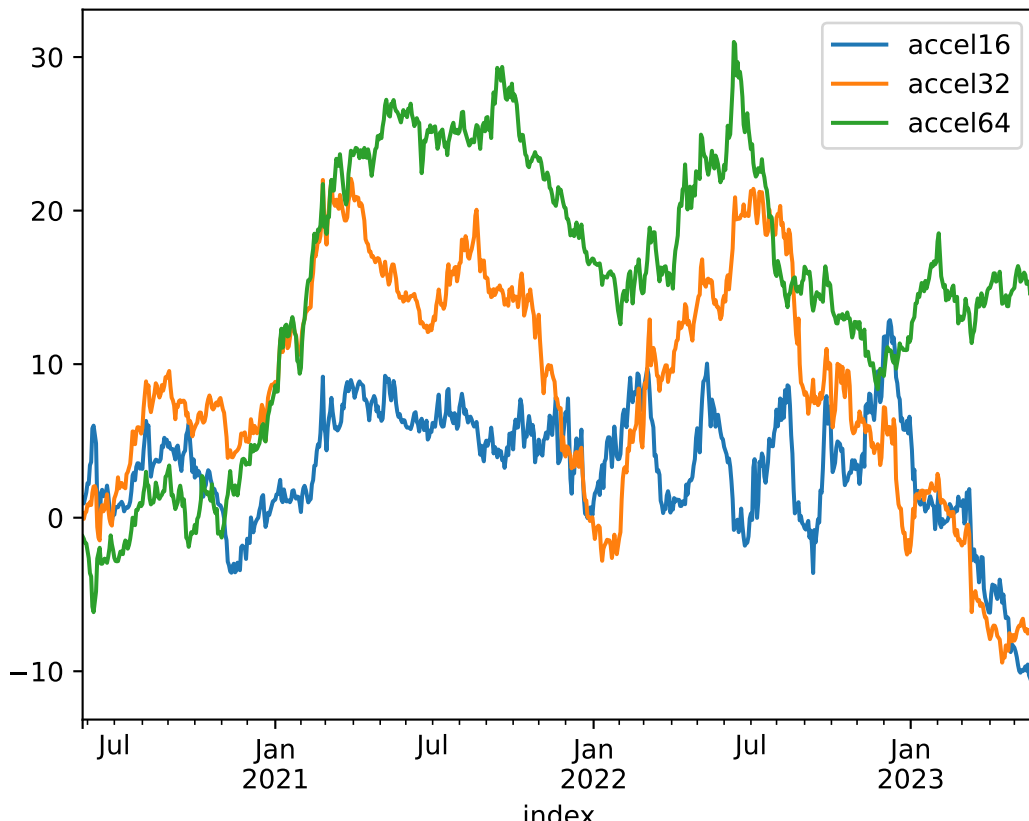
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -43.237, 'accel32': -14.202, 'accel64': 9.469}
ann. std {'accel16': 11.937, 'accel32': 9.391, 'accel64': 8.97}
ann. SR {'accel16': -3.62, 'accel32': -1.51, 'accel64': 1.06}



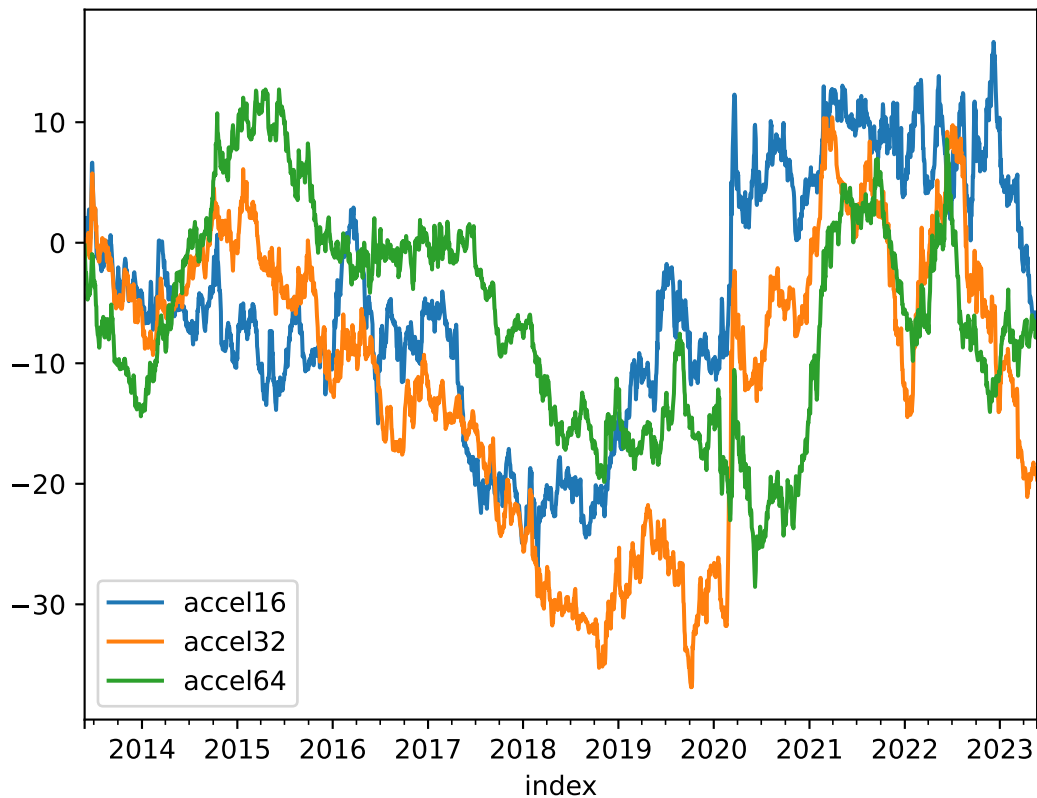
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -17.253, 'accel32': -21.372, 'accel64': -7.656}
ann. std {'accel16': 15.425, 'accel32': 12.777, 'accel64': 10.219}
ann. SR {'accel16': -1.12, 'accel32': -1.67, 'accel64': -0.75}



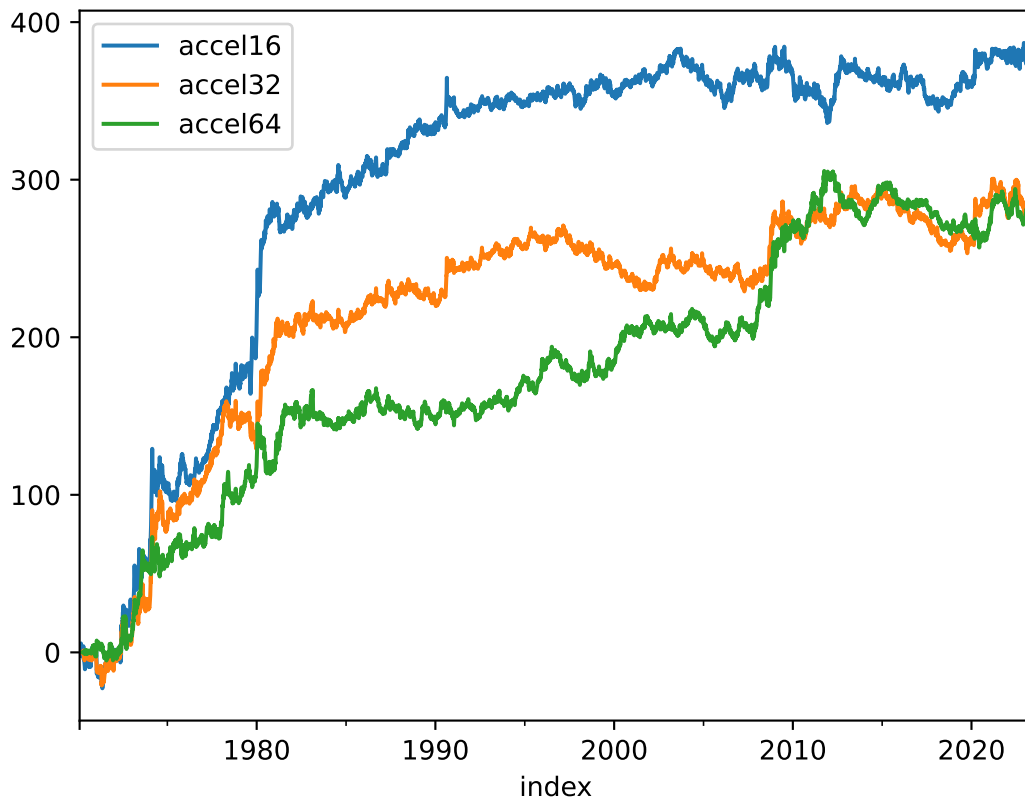
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -3.541, 'accel32': -2.611, 'accel64': 4.991}
ann. std {'accel16': 13.498, 'accel32': 11.738, 'accel64': 10.426}
ann. SR {'accel16': -0.26, 'accel32': -0.22, 'accel64': 0.48}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': -0.689, 'accel32': -1.927, 'accel64': -0.703}
ann. std {'accel16': 11.685, 'accel32': 10.659, 'accel64': 9.316}
ann. SR {'accel16': -0.06, 'accel32': -0.18, 'accel64': -0.08}

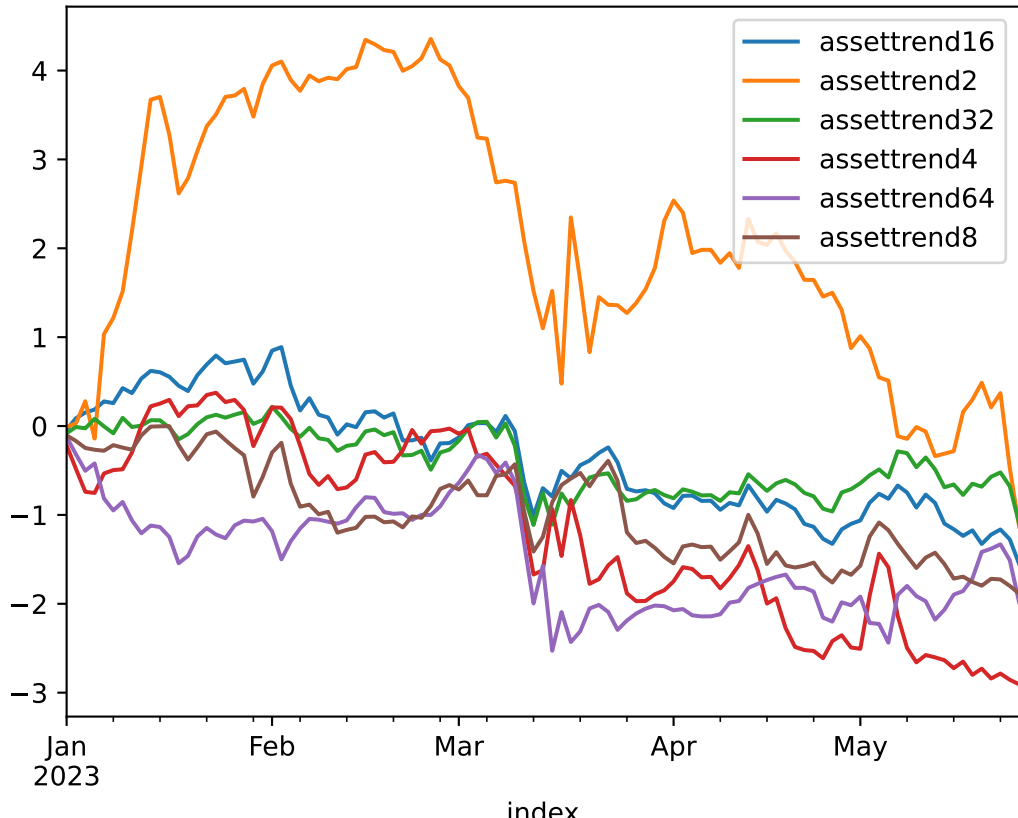


Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.684, 'accel32': 4.981, 'accel64': 5.124}
ann. std {'accel16': 14.122, 'accel32': 12.446, 'accel64': 12.097}
ann. SR {'accel16': 0.47, 'accel32': 0.4, 'accel64': 0.42}



Total Trading Rule P&L for period 'YTD'

ann. mean {'assetrend16': -3.854, 'assetrend2': -2.812, 'assetrend32': -2.716, 'assetrend4': -7.223, 'assetrend64': -4.926, 'assetrend8': -4.686}
 ann. std {'assetrend16': 2.466, 'assetrend2': 6.368, 'assetrend32': 2.33, 'assetrend4': 3.666, 'assetrend64': 3.386, 'assetrend8': 2.737}
 ann. SR {'assetrend16': -1.56, 'assetrend2': -0.44, 'assetrend32': -1.17, 'assetrend4': -1.97, 'assetrend64': -1.46, 'assetrend8': -1.71}

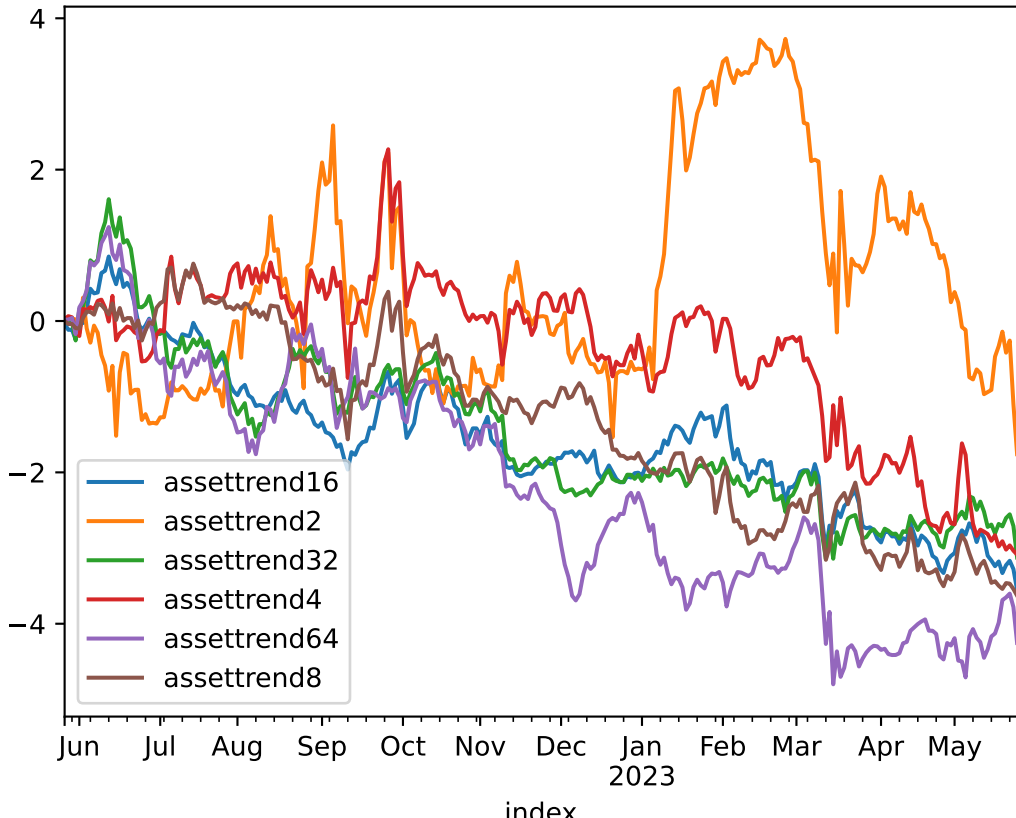


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': -3.5, 'assettrend2': -1.733, 'assettrend32': -3.077, 'assettrend4': -3.038, 'assettrend64': -4.188, 'assettrend8': -3.573}

ann. std {'assettrend16': 2.245, 'assettrend2': 6.22, 'assettrend32': 2.492, 'assettrend4': 3.917, 'assettrend64': 3.159, 'assettrend8': 2.634}

ann. SR {'assettrend16': -1.56, 'assettrend2': -0.28, 'assettrend32': -1.23, 'assettrend4': -0.78, 'assettrend64': -1.33, 'assettrend8': -1.36}

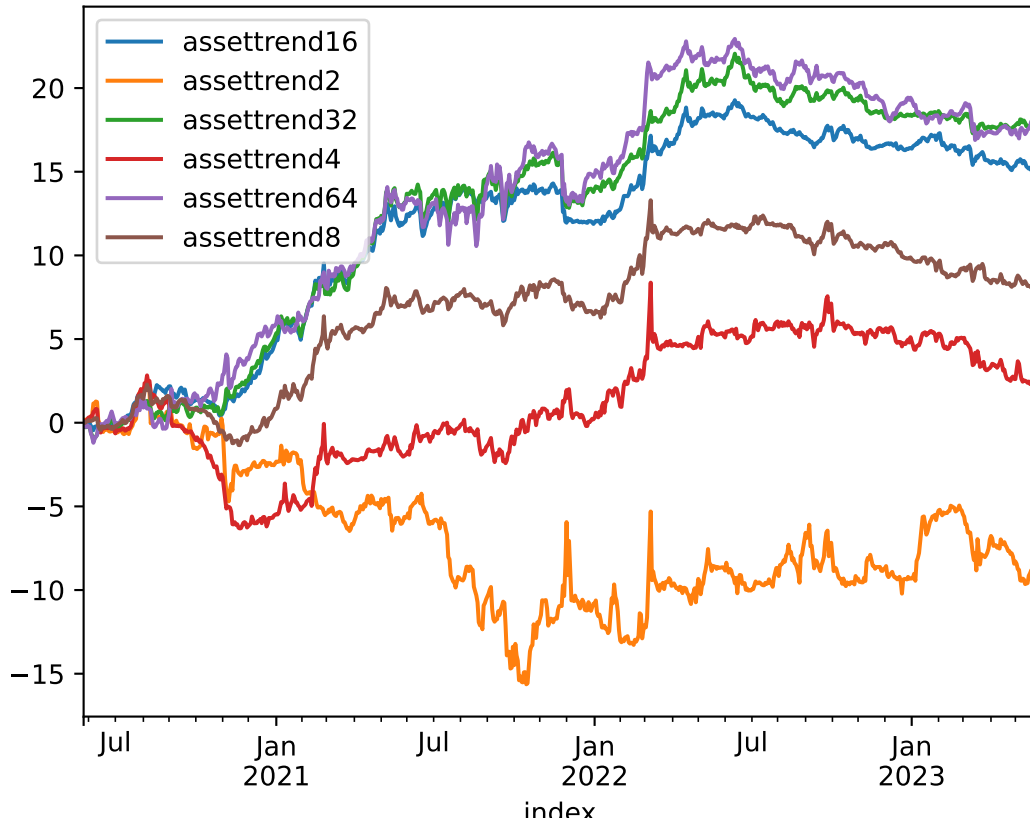


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 4.867, 'assettrend2': -3.416, 'assettrend32': 5.67, 'assettrend4': 0.722, 'assettrend64': 5.71, 'assettrend8': 2.618}

ann. std {'assettrend16': 3.42, 'assettrend2': 7.84, 'assettrend32': 4.134, 'assettrend4': 4.981, 'assettrend64': 5.022, 'assettrend8': 3.531}

ann. SR {'assettrend16': 1.42, 'assettrend2': -0.44, 'assettrend32': 1.37, 'assettrend4': 0.14, 'assettrend64': 1.14, 'assettrend8': 0.74}

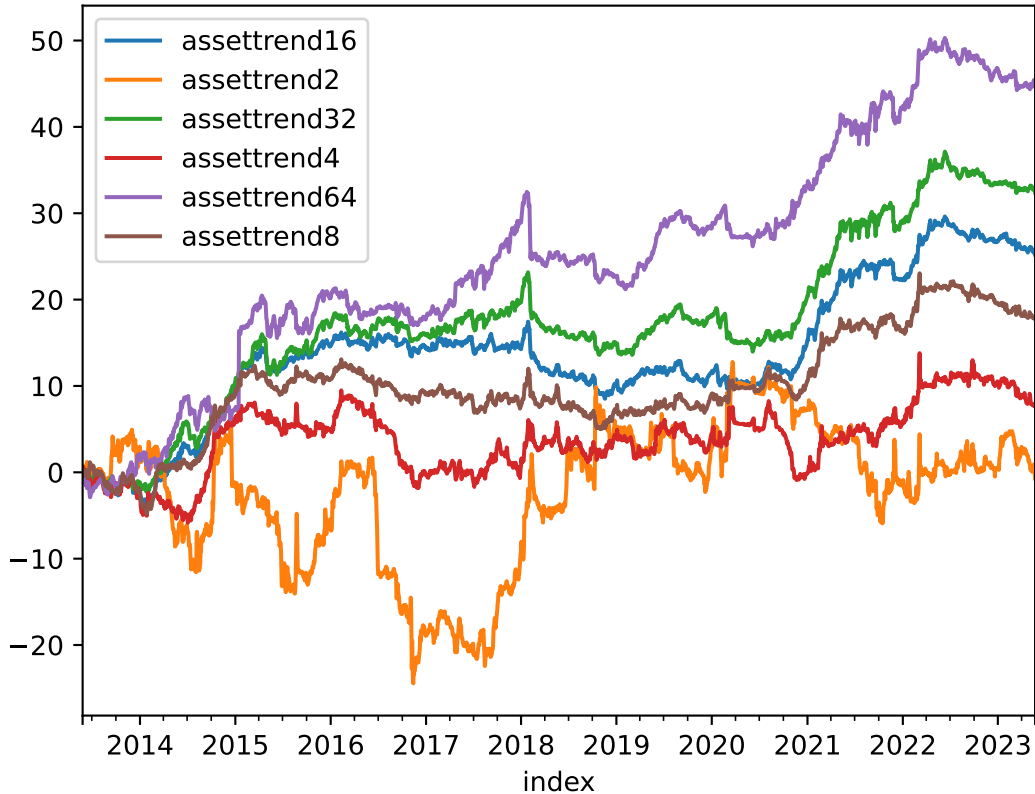


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.476, 'assettrend2': -0.07, 'assettrend32': 3.181, 'assettrend4': 0.749, 'assettrend64': 4.398, 'assettrend8': 1.742}

ann. std {'assettrend16': 3.149, 'assettrend2': 9.77, 'assettrend32': 3.588, 'assettrend4': 4.973, 'assettrend64': 5.194, 'assettrend8': 3.447}

ann. SR {'assettrend16': 0.79, 'assettrend2': -0.01, 'assettrend32': 0.89, 'assettrend4': 0.15, 'assettrend64': 0.85, 'assettrend8': 0.51}

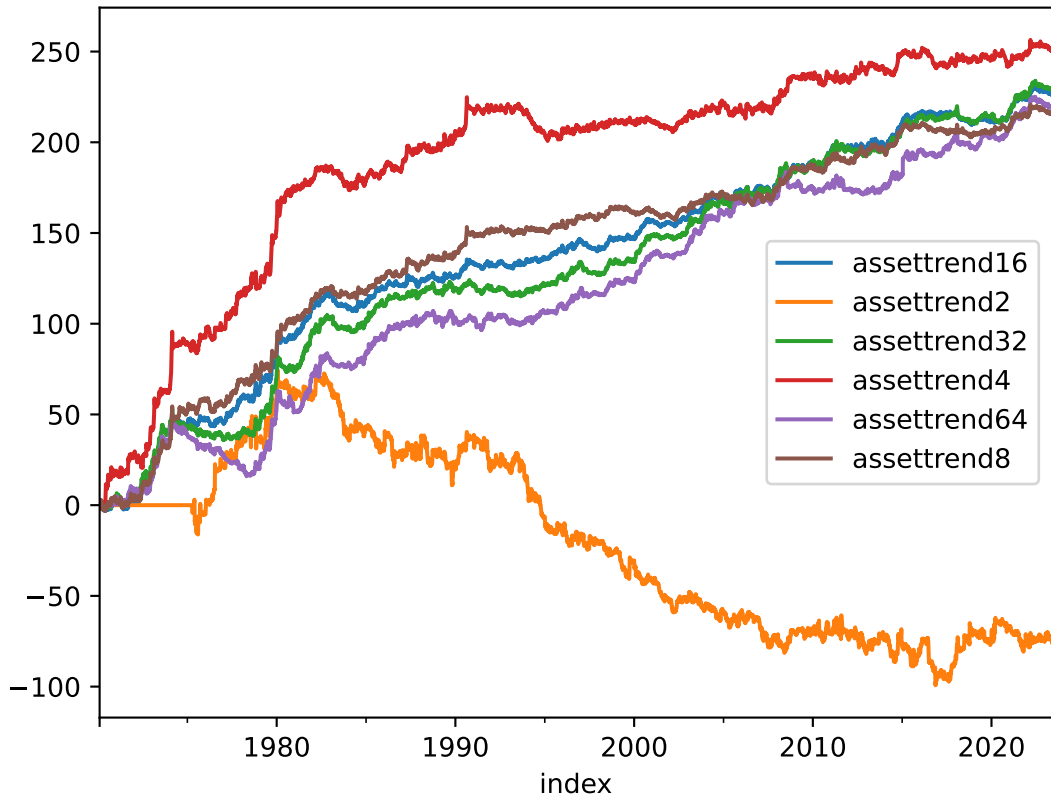


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.164, 'assettrend2': -1.391, 'assettrend32': 4.219, 'assettrend4': 4.607, 'assettrend64': 4.041, 'assettrend8': 3.966}

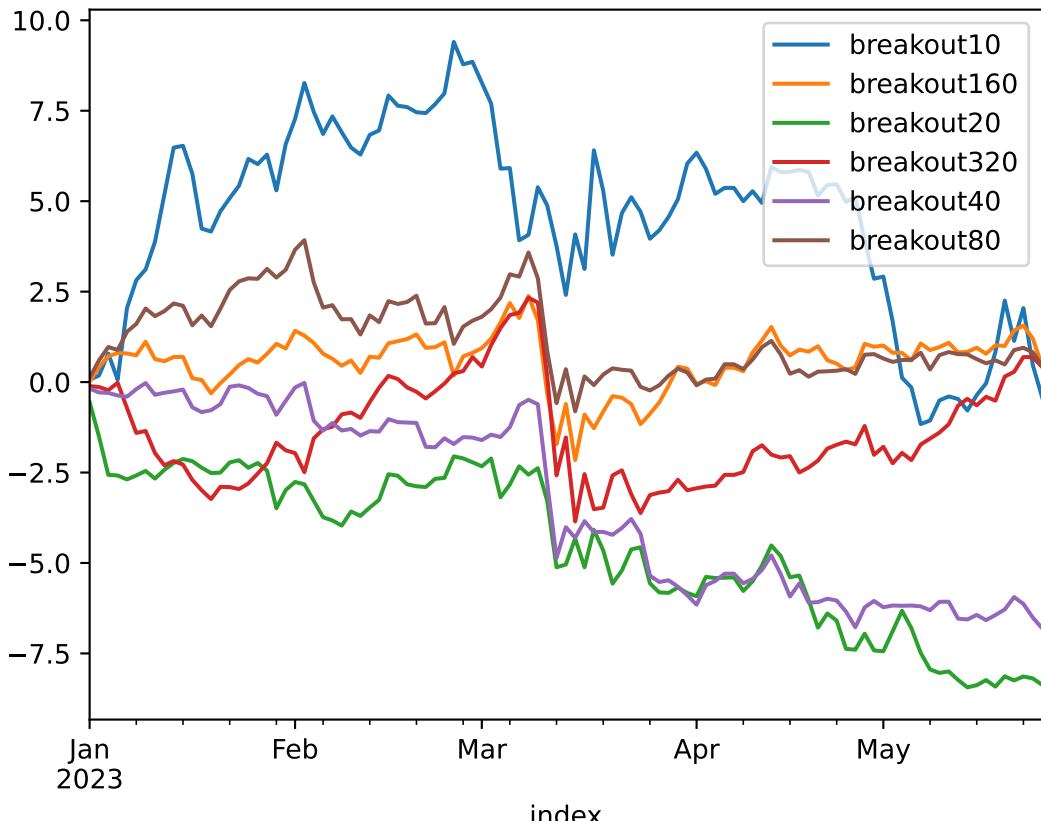
ann. std {'assettrend16': 4.301, 'assettrend2': 10.255, 'assettrend32': 4.492, 'assettrend4': 6.543, 'assettrend64': 4.993, 'assettrend8': 4.63}

ann. SR {'assettrend16': 0.97, 'assettrend2': -0.14, 'assettrend32': 0.94, 'assettrend4': 0.7, 'assettrend64': 0.81, 'assettrend8': 0.86}



Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': -1.035, 'breakout160': 1.121, 'breakout20': -20.799, 'breakout320': 1.038, 'breakout40': -16.91, 'breakout80': 1.15}
ann. std {'breakout10': 13.997, 'breakout160': 7.364, 'breakout20': 7.356, 'breakout320': 8.98, 'breakout40': 6.811, 'breakout80': 7.264}
ann. SR {'breakout10': -0.07, 'breakout160': 0.15, 'breakout20': -2.83, 'breakout320': 0.12, 'breakout40': -2.48, 'breakout80': 0.16}

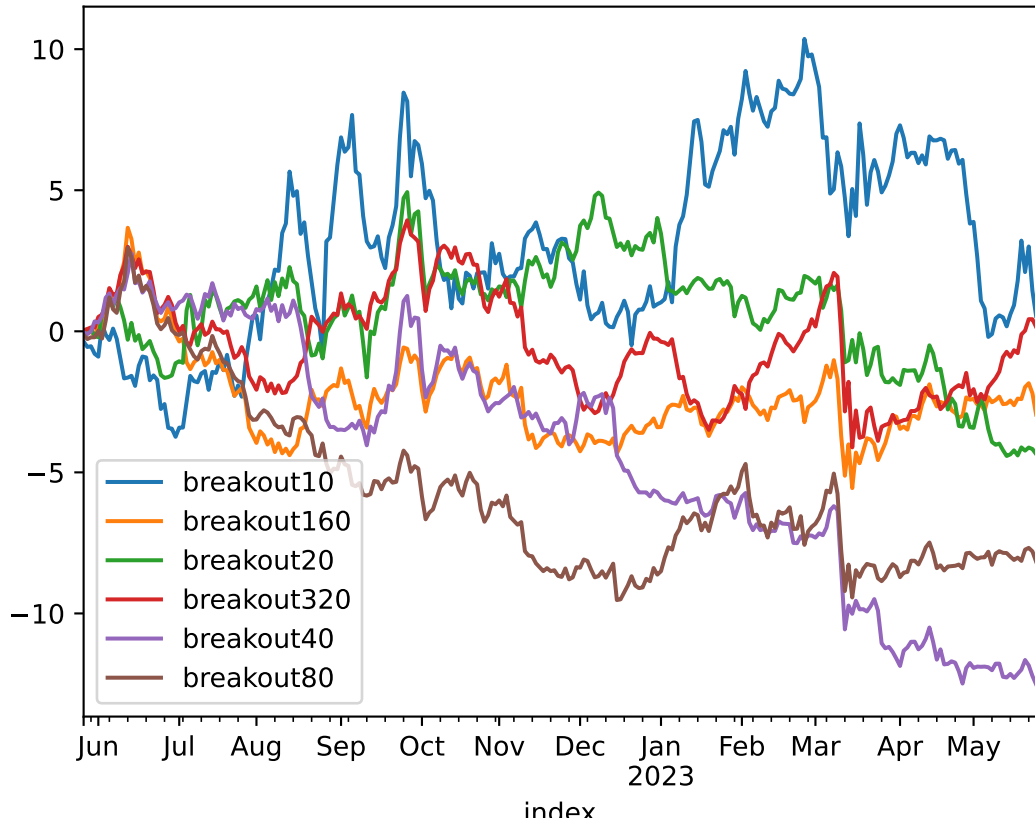


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 0.537, 'breakout160': -2.905, 'breakout20': -4.284, 'breakout320': 0.154, 'breakout40': -12.319, 'breakout80': -8.036}

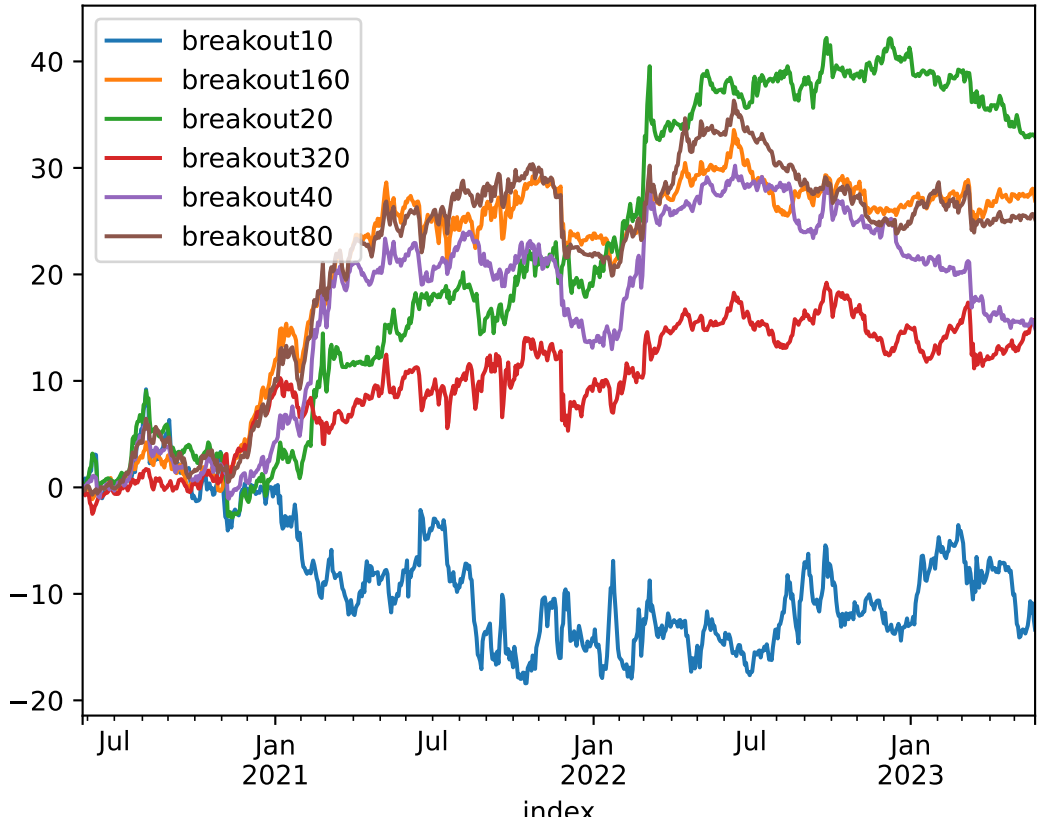
ann. std {'breakout10': 13.413, 'breakout160': 6.921, 'breakout20': 8.349, 'breakout320': 7.562, 'breakout40': 7.087, 'breakout80': 6.48}

ann. SR {'breakout10': 0.04, 'breakout160': -0.42, 'breakout20': -0.51, 'breakout320': 0.02, 'breakout40': -1.74, 'breakout80': -1.24}



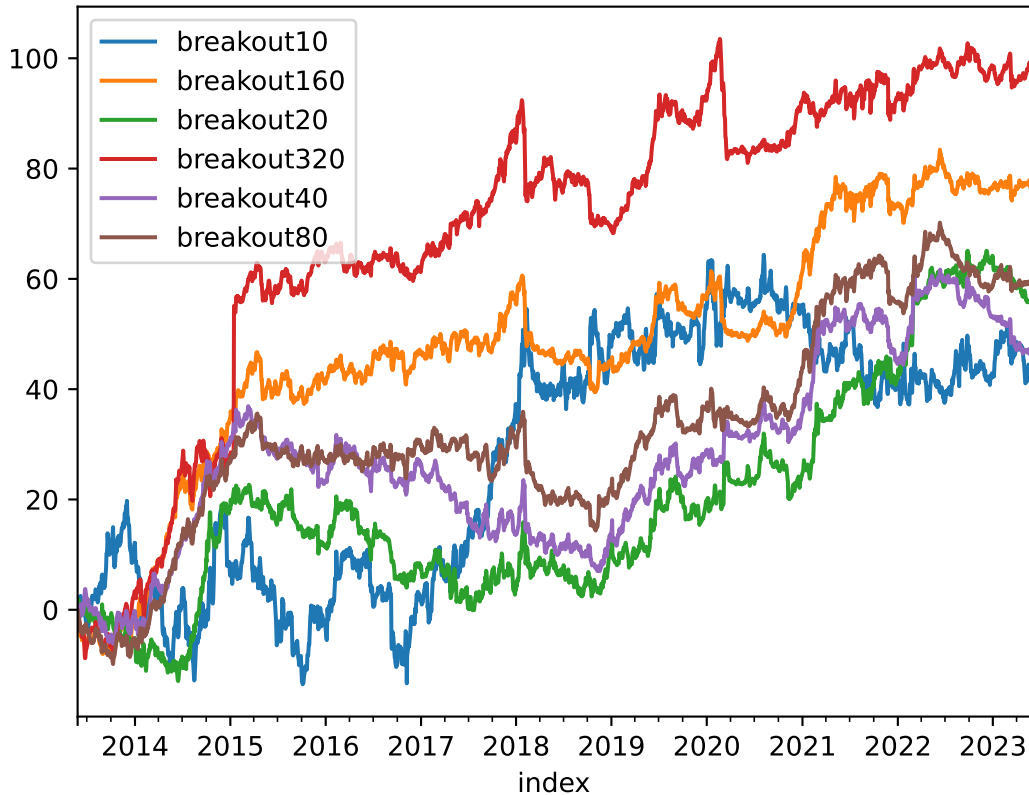
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -4.372, 'breakout160': 8.82, 'breakout20': 10.778, 'breakout320': 5.055, 'breakout40': 4.891, 'breakout80': 8.249}
 ann. std {'breakout10': 15.168, 'breakout160': 9.197, 'breakout20': 11.072, 'breakout320': 9.909, 'breakout40': 9.487, 'breakout80': 8.912}
 ann. SR {'breakout10': -0.29, 'breakout160': 0.96, 'breakout20': 0.97, 'breakout320': 0.51, 'breakout40': 0.52, 'breakout80': 0.93}



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

ann. mean {'breakout10': 4.104, 'breakout160': 7.539, 'breakout20': 5.48, 'breakout320': 9.713, 'breakout40': 4.556, 'breakout80': 5.799}
ann. std {'breakout10': 17.791, 'breakout160': 8.855, 'breakout20': 11.053, 'breakout320': 13.081, 'breakout40': 9.353, 'breakout80': 8.705}
ann. SR {'breakout10': 0.23, 'breakout160': 0.85, 'breakout20': 0.5, 'breakout320': 0.74, 'breakout40': 0.49, 'breakout80': 0.67}

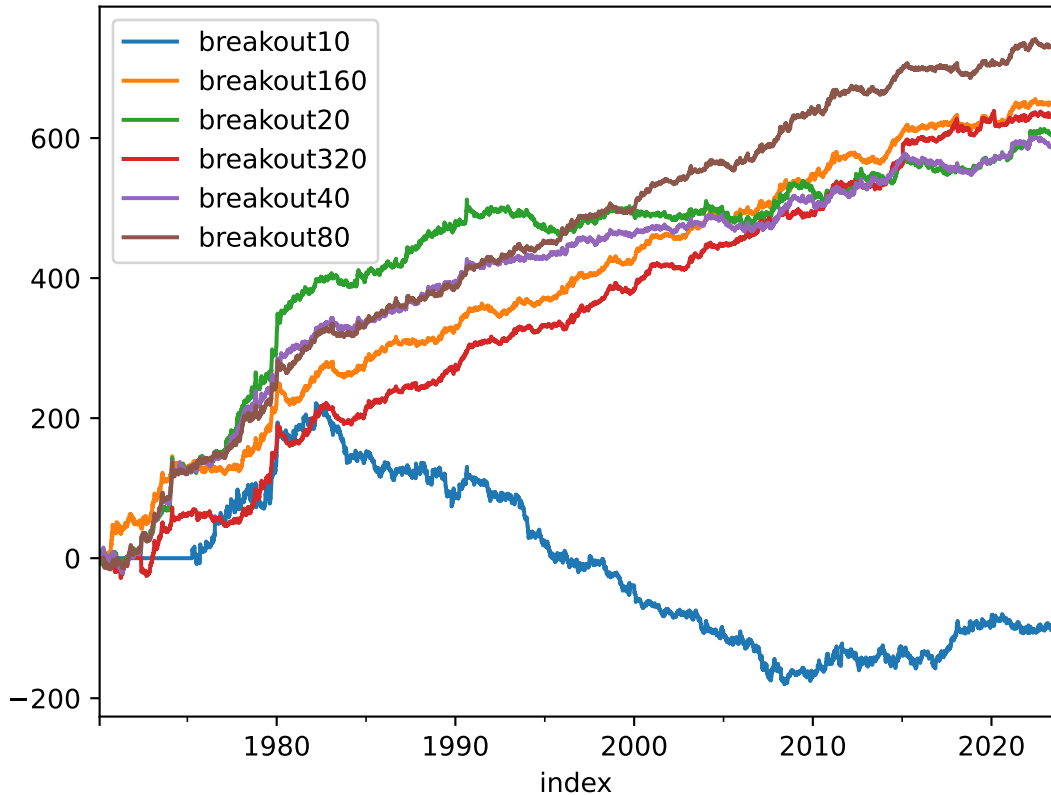


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -1.884, 'breakout160': 11.952, 'breakout20': 11.114, 'breakout320': 11.674, 'breakout40': 10.803, 'breakout80': 13.447}

ann. std {'breakout10': 21.31, 'breakout160': 11.521, 'breakout20': 14.88, 'breakout320': 12.107, 'breakout40': 12.103, 'breakout80': 11.709}

ann. SR {'breakout10': -0.09, 'breakout160': 1.04, 'breakout20': 0.75, 'breakout320': 0.96, 'breakout40': 0.89, 'breakout80': 1.15}

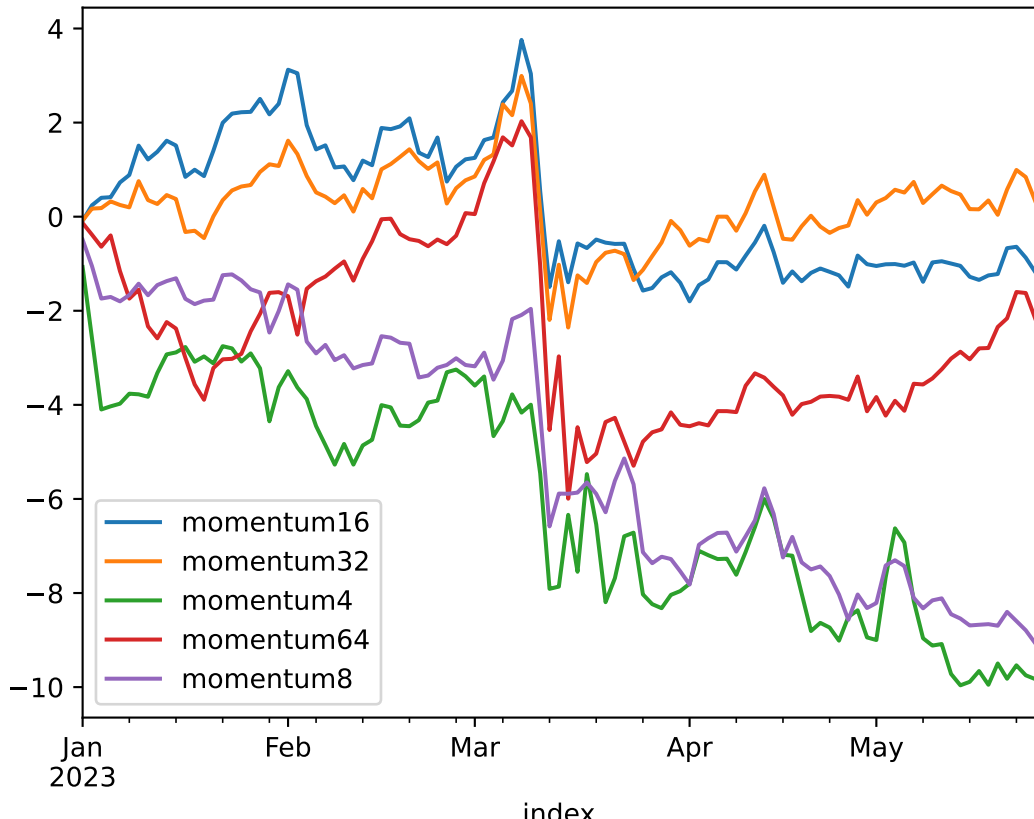


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': -2.916, 'momentum32': 0.84, 'momentum4': -24.428, 'momentum64': -5.368, 'momentum8': -22.525}

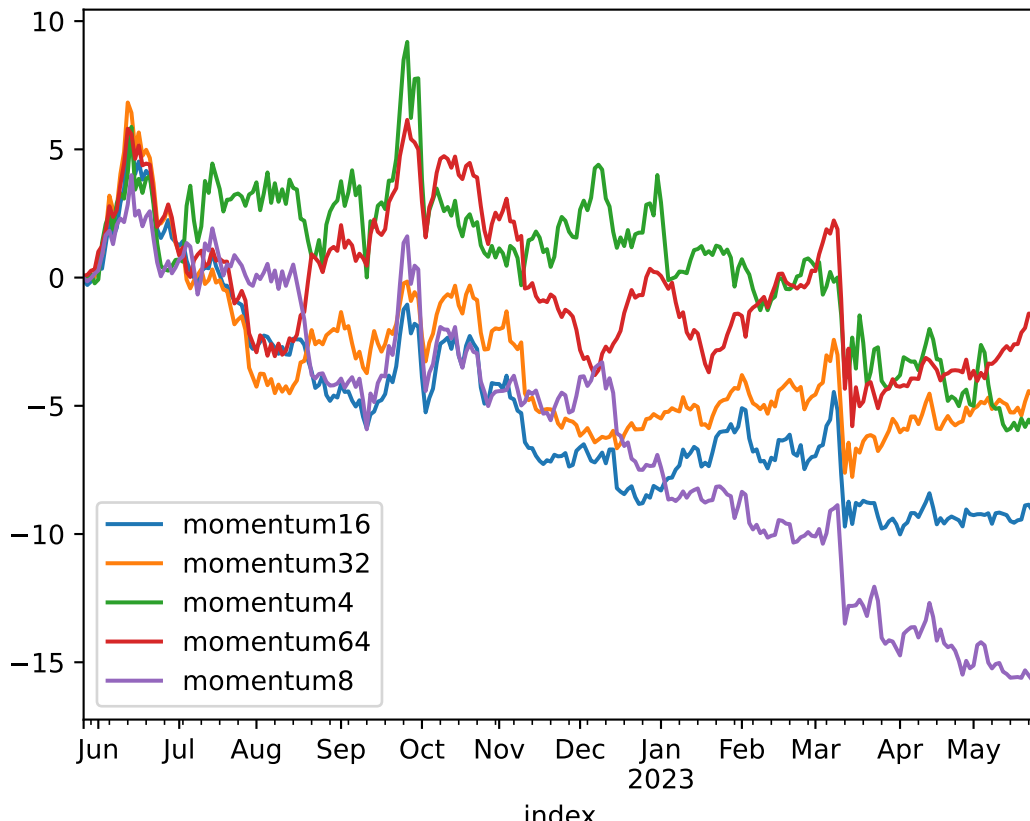
ann. std {'momentum16': 8.081, 'momentum32': 8.162, 'momentum4': 10.762, 'momentum64': 10.861, 'momentum8': 8.16}

ann. SR {'momentum16': -0.36, 'momentum32': 0.1, 'momentum4': -2.27, 'momentum64': -0.49, 'momentum8': -2.76}



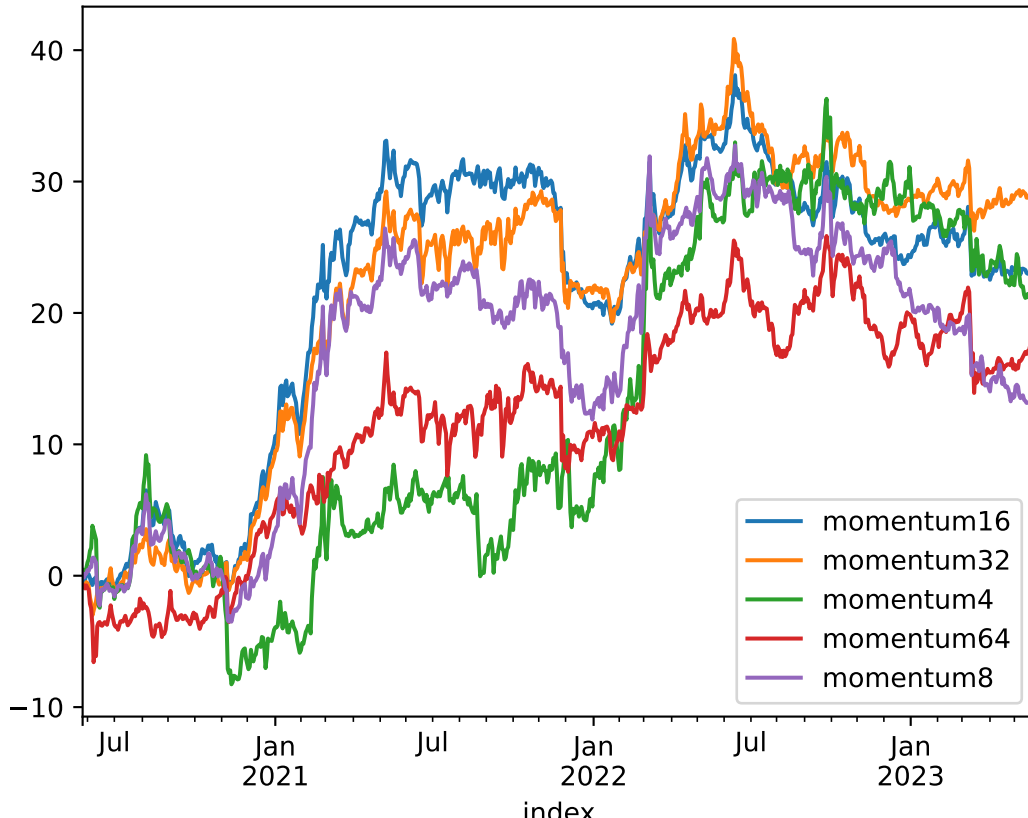
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -9.244, 'momentum32': -5.001, 'momentum4': -5.74, 'momentum64': -1.931, 'momentum8': -15.731}
ann. std {'momentum16': 8.464, 'momentum32': 8.774, 'momentum4': 13.147, 'momentum64': 10.138, 'momentum8': 9.67}
ann. SR {'momentum16': -1.09, 'momentum32': -0.57, 'momentum4': -0.44, 'momentum64': -0.19, 'momentum8': -1.63}



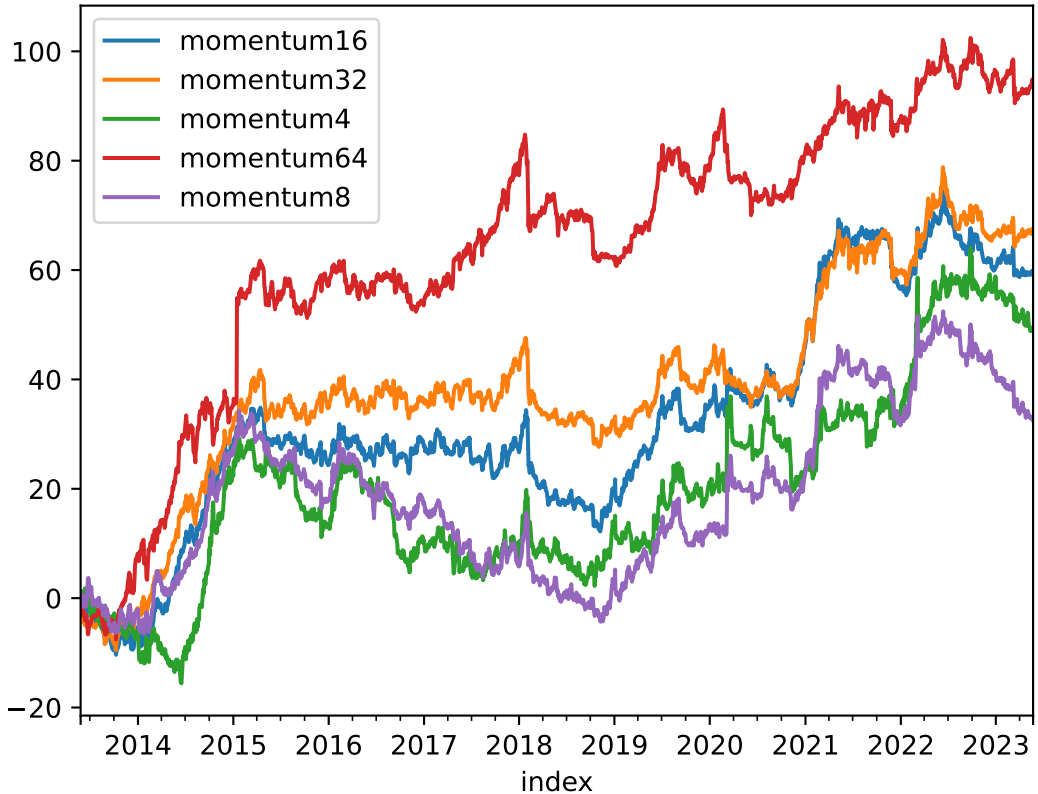
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 7.579, 'momentum32': 9.477, 'momentum4': 6.966, 'momentum64': 5.81, 'momentum8': 4.183}
ann. std {'momentum16': 10.121, 'momentum32': 10.375, 'momentum4': 14.693, 'momentum64': 10.815, 'momentum8': 11.436}
ann. SR {'momentum16': 0.75, 'momentum32': 0.91, 'momentum4': 0.47, 'momentum64': 0.54, 'momentum8': 0.37}



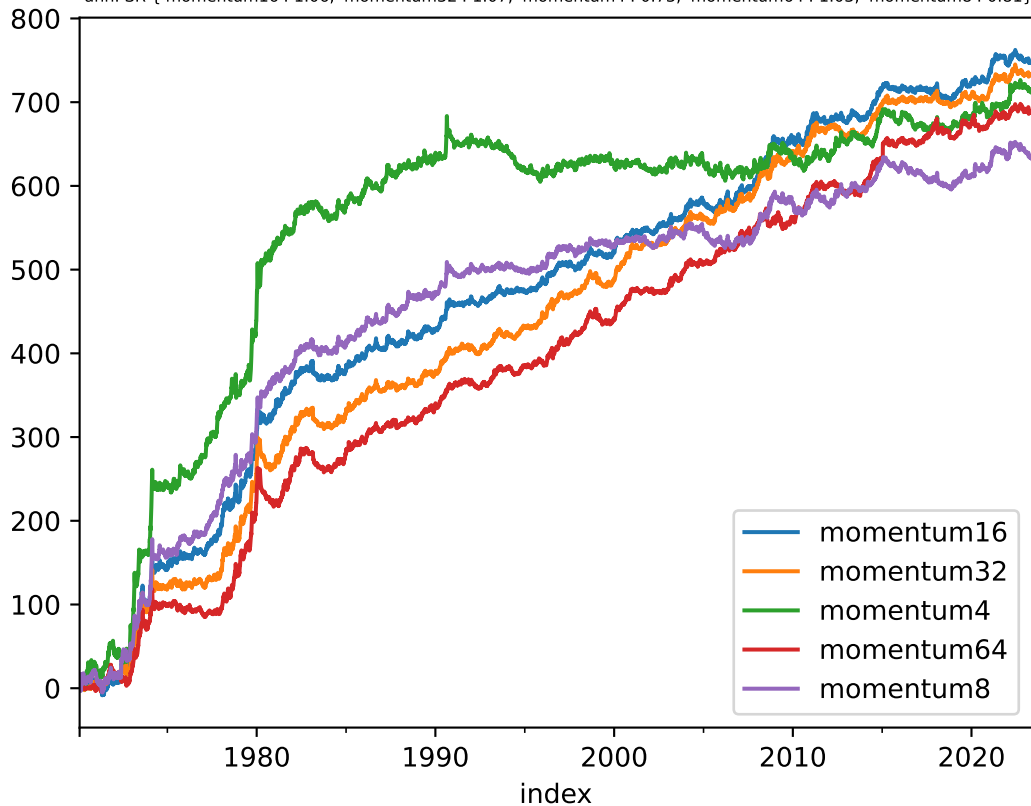
Total Trading Rule P&L for period '10Y'

ann. mean {'momentum16': 5.824, 'momentum32': 6.569, 'momentum4': 4.811, 'momentum64': 9.261, 'momentum8': 3.189}
ann. std {'momentum16': 9.627, 'momentum32': 9.255, 'momentum4': 13.668, 'momentum64': 11.869, 'momentum8': 10.828}
ann. SR {'momentum16': 0.6, 'momentum32': 0.71, 'momentum4': 0.35, 'momentum64': 0.78, 'momentum8': 0.29}



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

ann. mean {'momentum16': 13.76, 'momentum32': 13.496, 'momentum4': 13.097, 'momentum64': 12.7, 'momentum8': 11.645}
ann. std {'momentum16': 13.037, 'momentum32': 12.602, 'momentum4': 17.883, 'momentum64': 12.323, 'momentum8': 14.322}
ann. SR {'momentum16': 1.06, 'momentum32': 1.07, 'momentum4': 0.73, 'momentum64': 1.03, 'momentum8': 0.81}

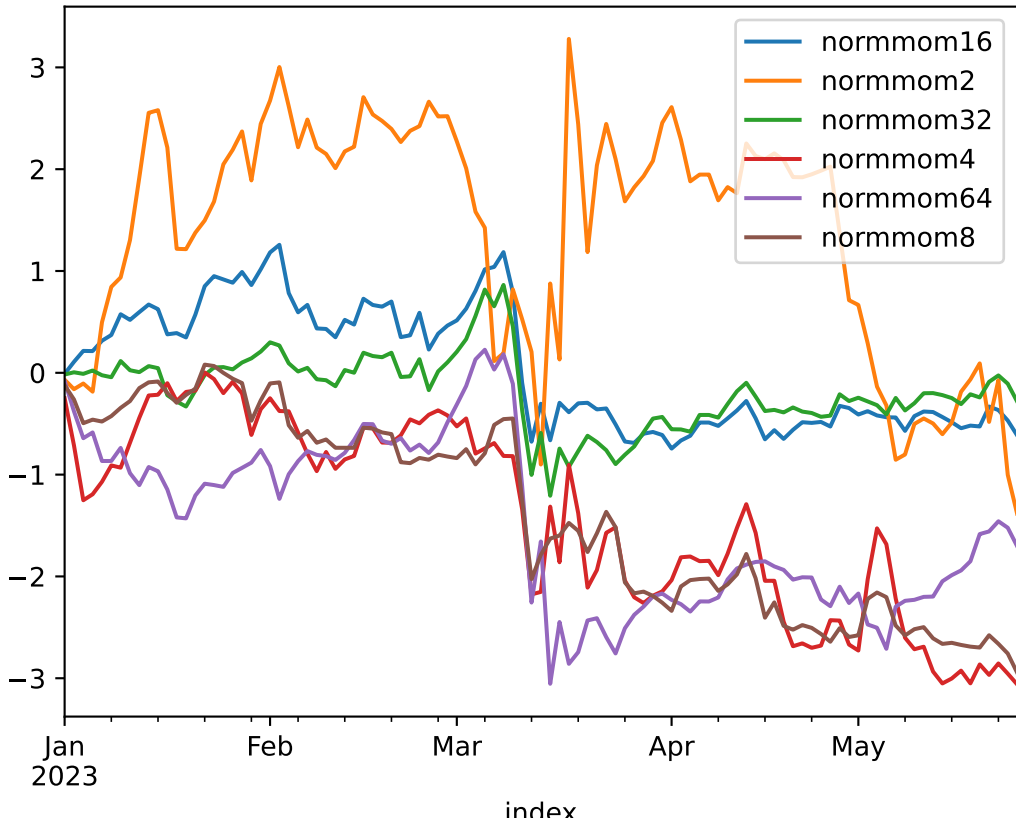


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': -1.525, 'normmom2': -3.437, 'normmom32': -0.699, 'normmom4': -7.605, 'normmom64': -4.231, 'normmom8': -7.317}

ann. std {'normmom16': 2.903, 'normmom2': 8.618, 'normmom32': 2.855, 'normmom4': 4.472, 'normmom64': 4.284, 'normmom8': 2.912}

ann. SR {'normmom16': -0.53, 'normmom2': -0.4, 'normmom32': -0.24, 'normmom4': -1.7, 'normmom64': -0.99, 'normmom8': -2.51}

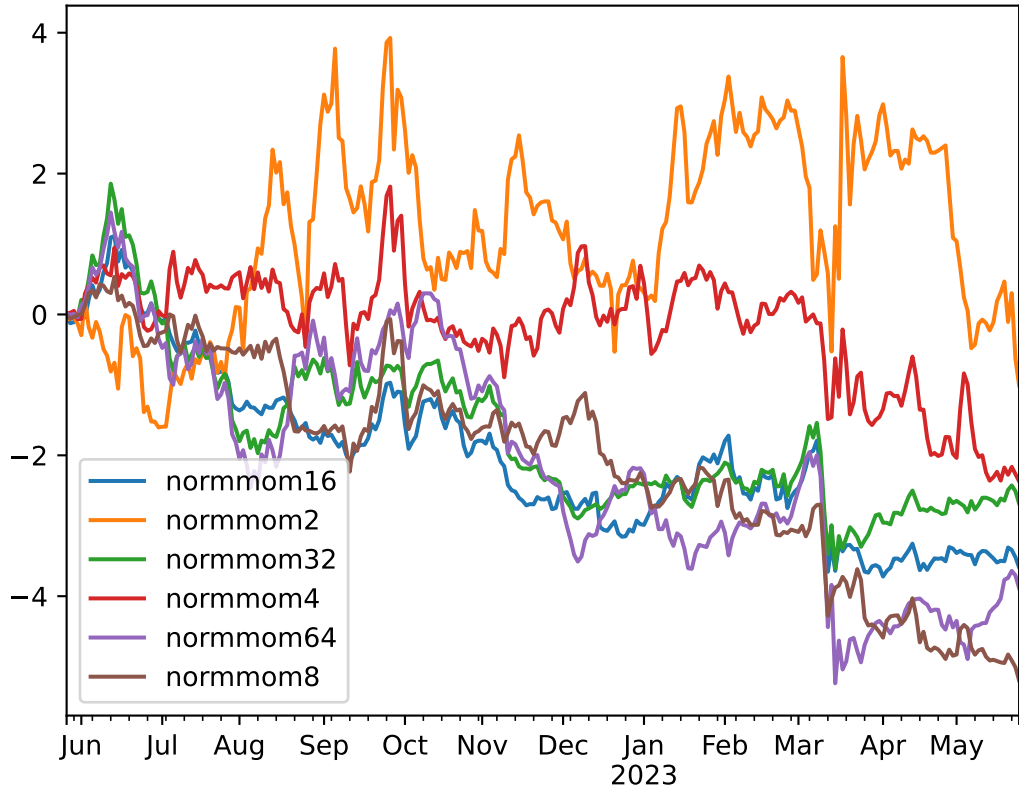


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -3.536, 'normmom2': -0.992, 'normmom32': -2.642, 'normmom4': -2.332, 'normmom64': -3.825, 'normmom8': -5.115}

ann. std {'normmom16': 2.525, 'normmom2': 7.522, 'normmom32': 2.823, 'normmom4': 4.33, 'normmom64': 3.826, 'normmom8': 2.877}

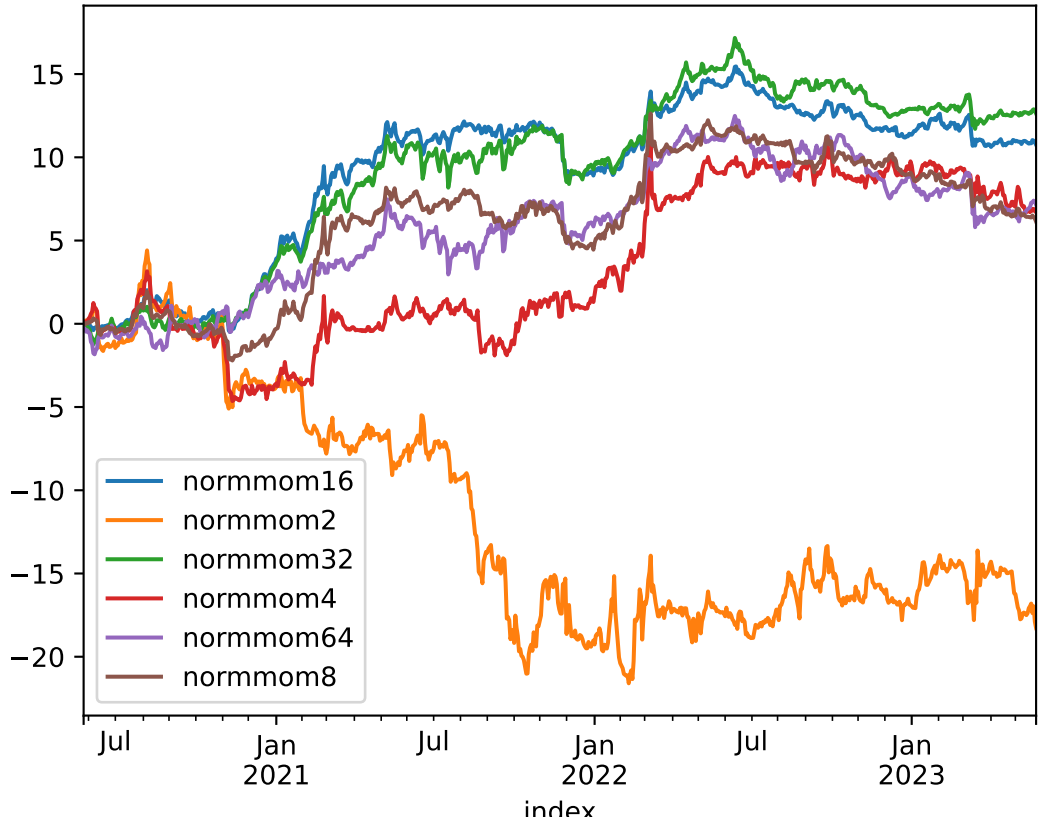
ann. SR {'normmom16': -1.4, 'normmom2': -0.13, 'normmom32': -0.94, 'normmom4': -0.54, 'normmom64': -1.0, 'normmom8': -1.78}



index

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

ann. mean {'normmom16': 3.52, 'normmom2': -5.985, 'normmom32': 4.135, 'normmom4': 2.192, 'normmom64': 2.342, 'normmom8': 2.009}
ann. std {'normmom16': 3.508, 'normmom2': 8.666, 'normmom32': 3.875, 'normmom4': 5.413, 'normmom64': 4.257, 'normmom8': 3.94}
ann. SR {'normmom16': 1.0, 'normmom2': -0.69, 'normmom32': 1.07, 'normmom4': 0.41, 'normmom64': 0.55, 'normmom8': 0.51}

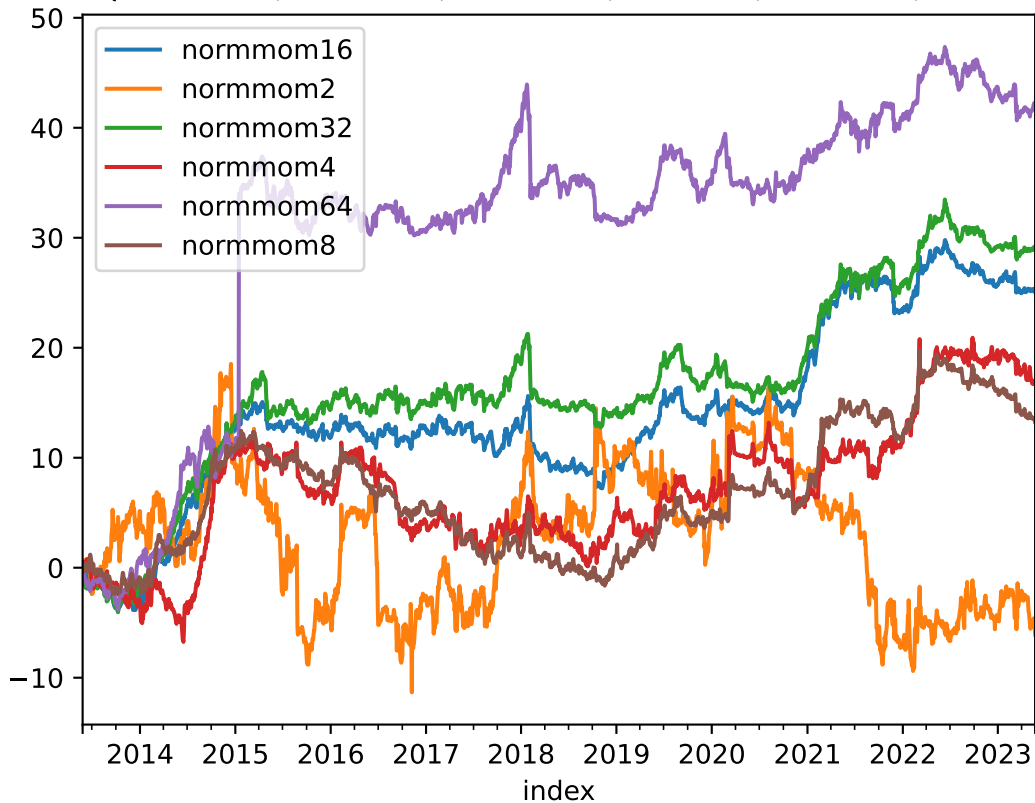


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.463, 'normmom2': -0.596, 'normmom32': 2.841, 'normmom4': 1.642, 'normmom64': 4.125, 'normmom8': 1.303}

ann. std {'normmom16': 3.456, 'normmom2': 10.313, 'normmom32': 3.615, 'normmom4': 5.445, 'normmom64': 8.272, 'normmom8': 3.871}

ann. SR {'normmom16': 0.71, 'normmom2': -0.06, 'normmom32': 0.79, 'normmom4': 0.3, 'normmom64': 0.5, 'normmom8': 0.34}

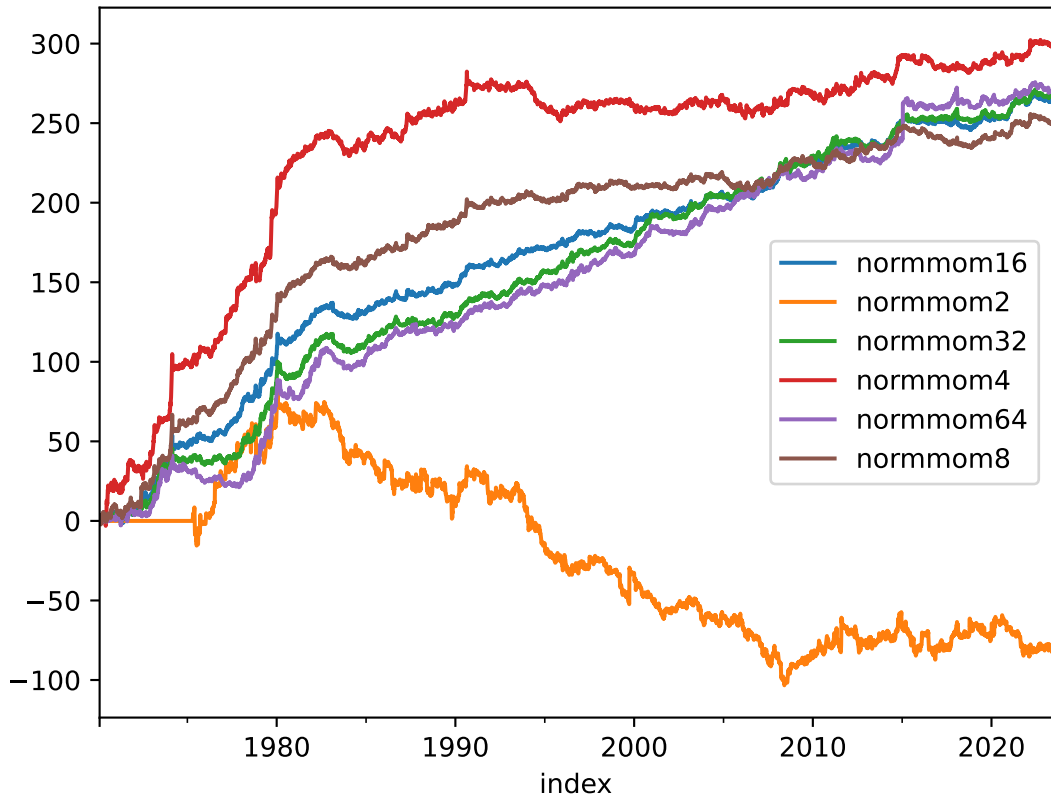


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.852, 'normmom2': -1.509, 'normmom32': 4.91, 'normmom4': 5.488, 'normmom64': 4.978, 'normmom8': 4.589}

ann. std {'normmom16': 4.529, 'normmom2': 11.604, 'normmom32': 4.606, 'normmom4': 7.38, 'normmom64': 5.866, 'normmom8': 5.362}

ann. SR {'normmom16': 1.07, 'normmom2': -0.13, 'normmom32': 1.07, 'normmom4': 0.74, 'normmom64': 0.85, 'normmom8': 0.86}

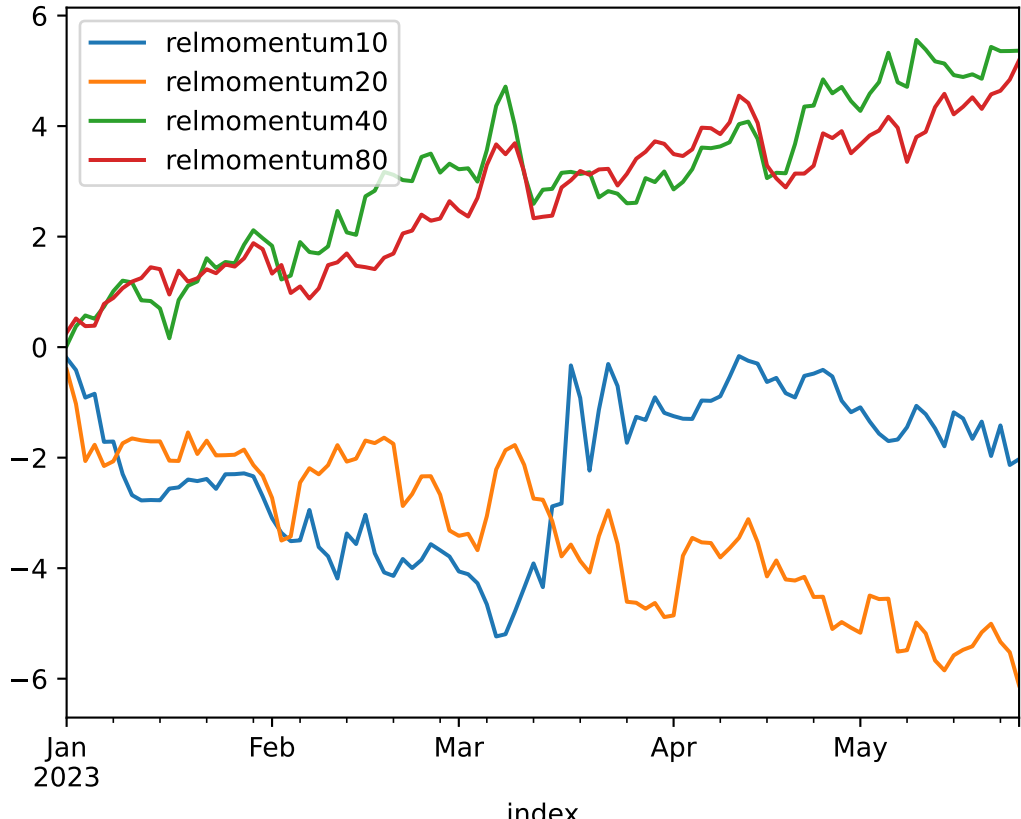


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -5.039, 'relmomentum20': -15.21, 'relmomentum40': 13.334, 'relmomentum80': 12.902}

ann. std {'relmomentum10': 7.701, 'relmomentum20': 6.473, 'relmomentum40': 5.312, 'relmomentum80': 4.38}

ann. SR {'relmomentum10': -0.65, 'relmomentum20': -2.35, 'relmomentum40': 2.51, 'relmomentum80': 2.95}

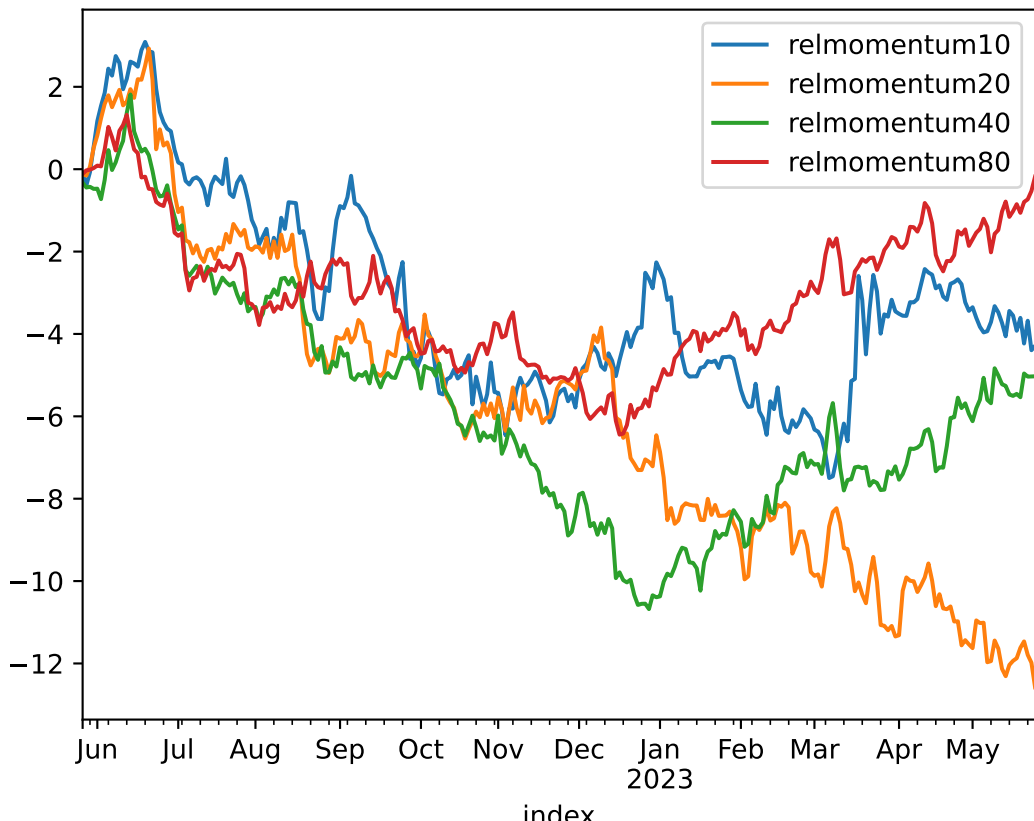


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -4.224, 'relmomentum20': -12.385, 'relmomentum40': -4.951, 'relmomentum80': -0.177}

ann. std {'relmomentum10': 7.222, 'relmomentum20': 6.334, 'relmomentum40': 5.274, 'relmomentum80': 4.581}

ann. SR {'relmomentum10': -0.58, 'relmomentum20': -1.96, 'relmomentum40': -0.94, 'relmomentum80': -0.04}

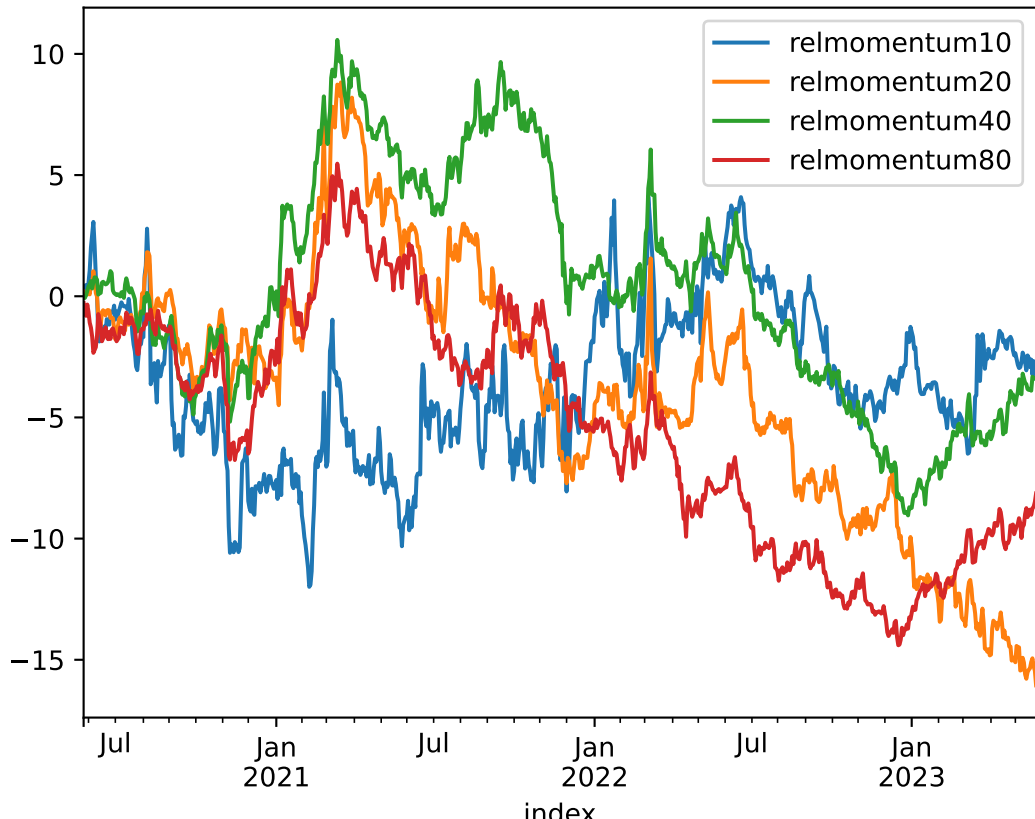


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -1.077, 'relmomentum20': -5.255, 'relmomentum40': -1.11, 'relmomentum80': -2.663}

ann. std {'relmomentum10': 11.932, 'relmomentum20': 8.379, 'relmomentum40': 6.973, 'relmomentum80': 6.322}

ann. SR {'relmomentum10': -0.09, 'relmomentum20': -0.63, 'relmomentum40': -0.16, 'relmomentum80': -0.42}

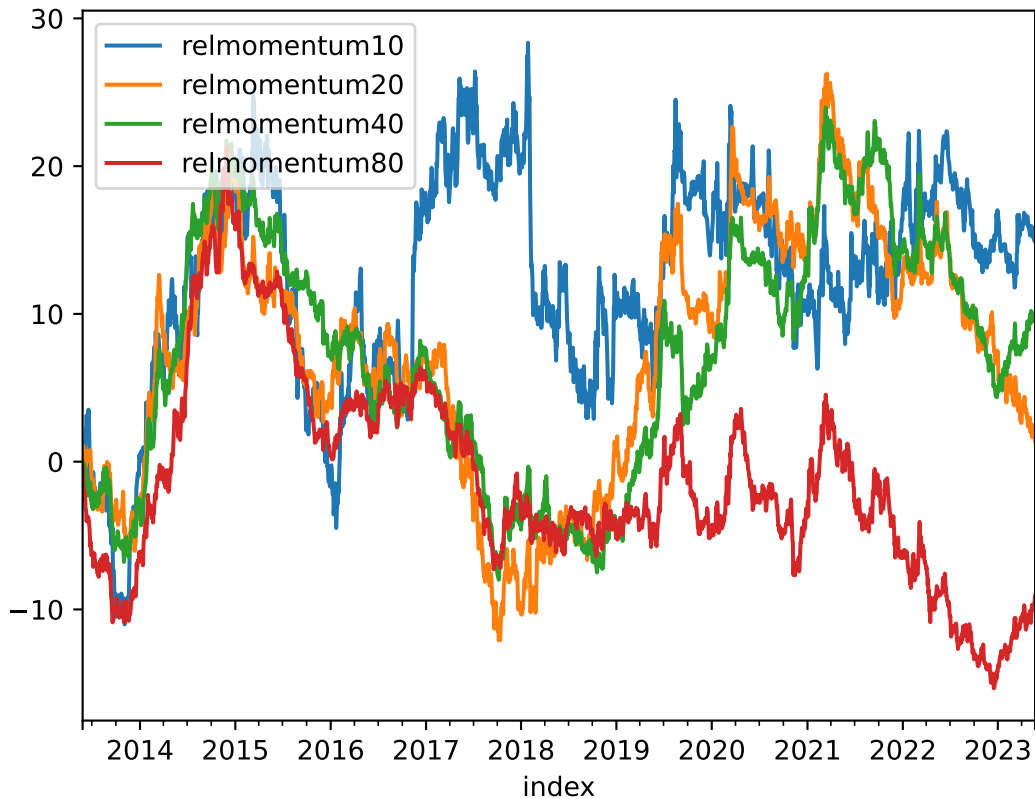


Total Trading Rule P&L for period '10Y'

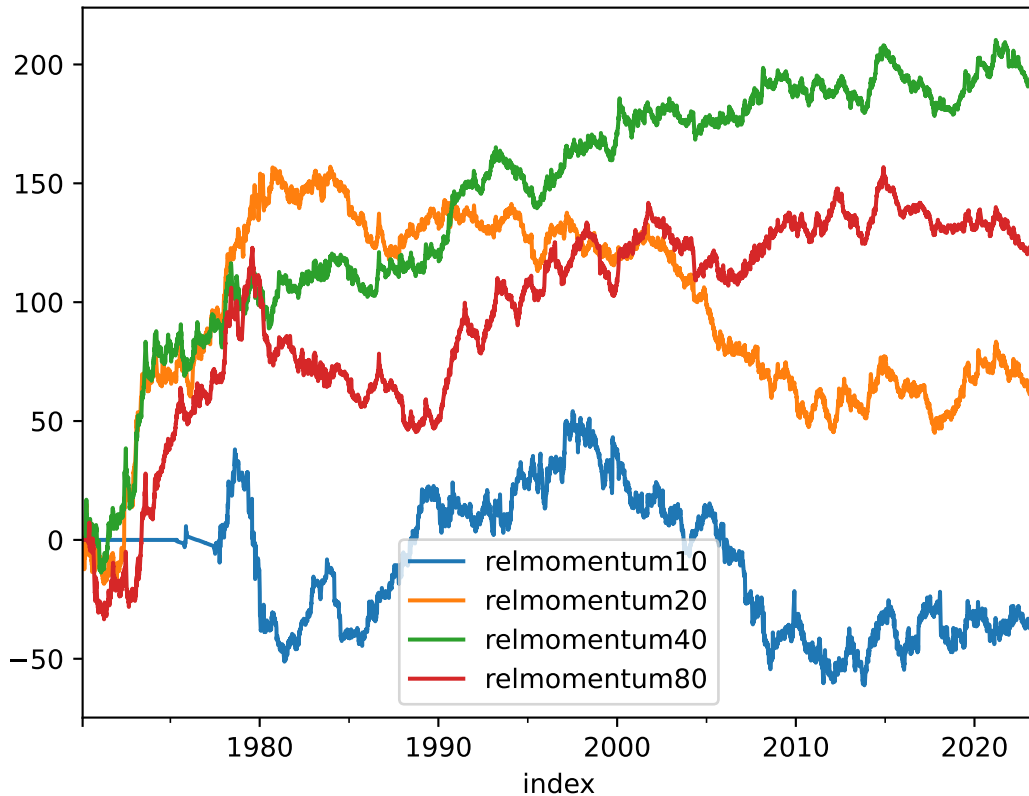
ann. mean {'relmomentum10': 1.471, 'relmomentum20': 0.136, 'relmomentum40': 0.983, 'relmomentum80': -0.891}

ann. std {'relmomentum10': 13.371, 'relmomentum20': 8.534, 'relmomentum40': 6.992, 'relmomentum80': 6.351}

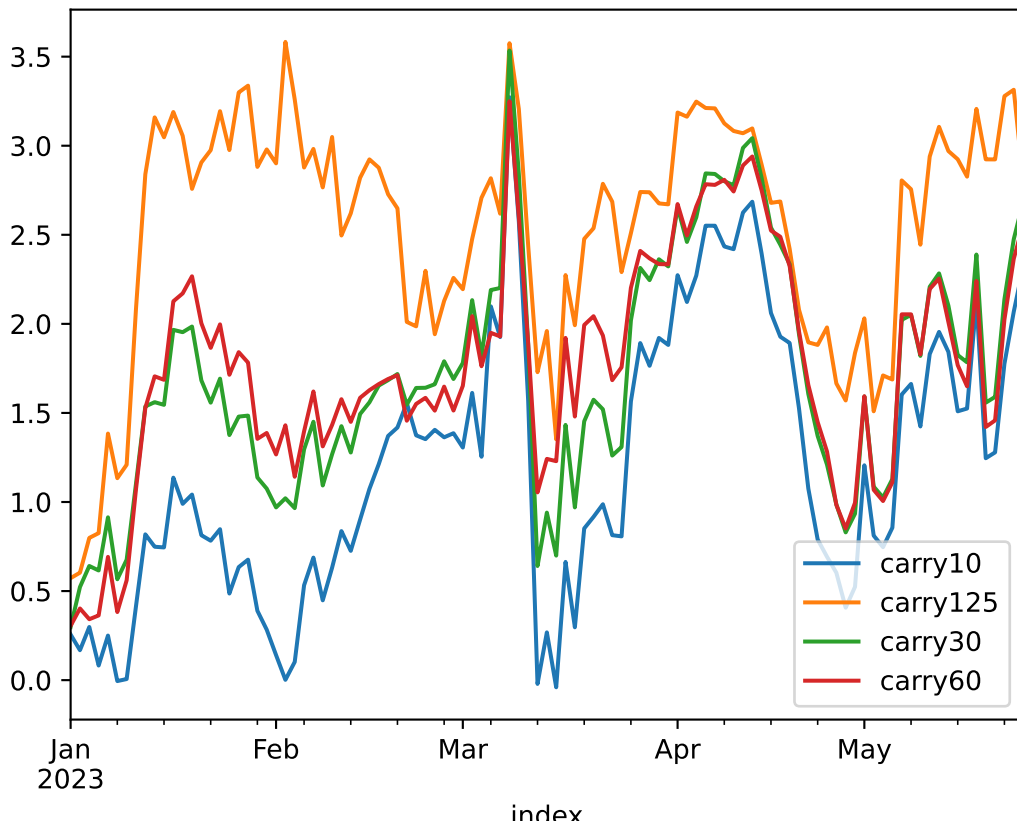
ann. SR {'relmomentum10': 0.11, 'relmomentum20': 0.02, 'relmomentum40': 0.14, 'relmomentum80': -0.14}



Total Trading Rule P&L for period '99Y'
ann. mean {'relmomentum10': -0.647, 'relmomentum20': 1.077, 'relmomentum40': 3.615, 'relmomentum80': 2.327}
ann. std {'relmomentum10': 13.381, 'relmomentum20': 10.464, 'relmomentum40': 9.634, 'relmomentum80': 9.777}
ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.1, 'relmomentum40': 0.38, 'relmomentum80': 0.24}

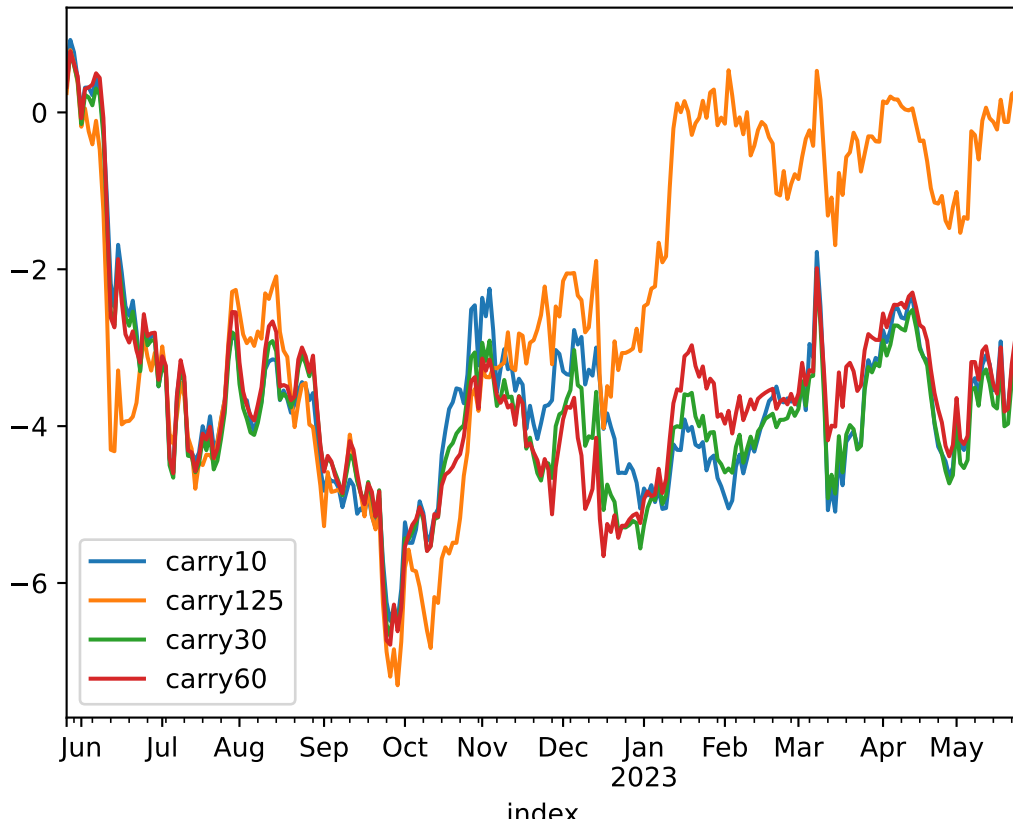


Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 5.766, 'carry125': 6.967, 'carry30': 6.675, 'carry60': 6.359}
ann. std {'carry10': 6.013, 'carry125': 5.555, 'carry30': 5.671, 'carry60': 5.247}
ann. SR {'carry10': 0.96, 'carry125': 1.25, 'carry30': 1.18, 'carry60': 1.21}



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

ann. mean	{'carry10': -2.689, 'carry125': -0.238, 'carry30': -2.83, 'carry60': -2.636}
ann. std	{'carry10': 5.974, 'carry125': 6.352, 'carry30': 5.939, 'carry60': 5.881}
ann. SR	{'carry10': -0.45, 'carry125': -0.04, 'carry30': -0.48, 'carry60': -0.45}

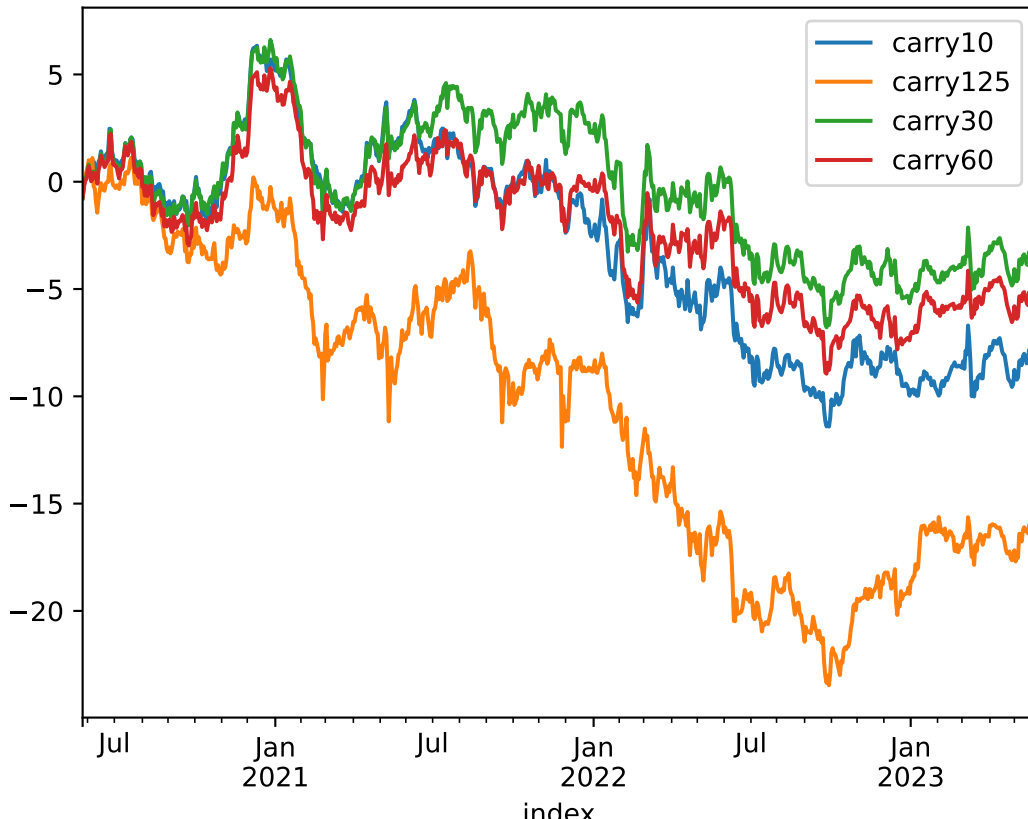


Total Trading Rule P&L for period '3Y'

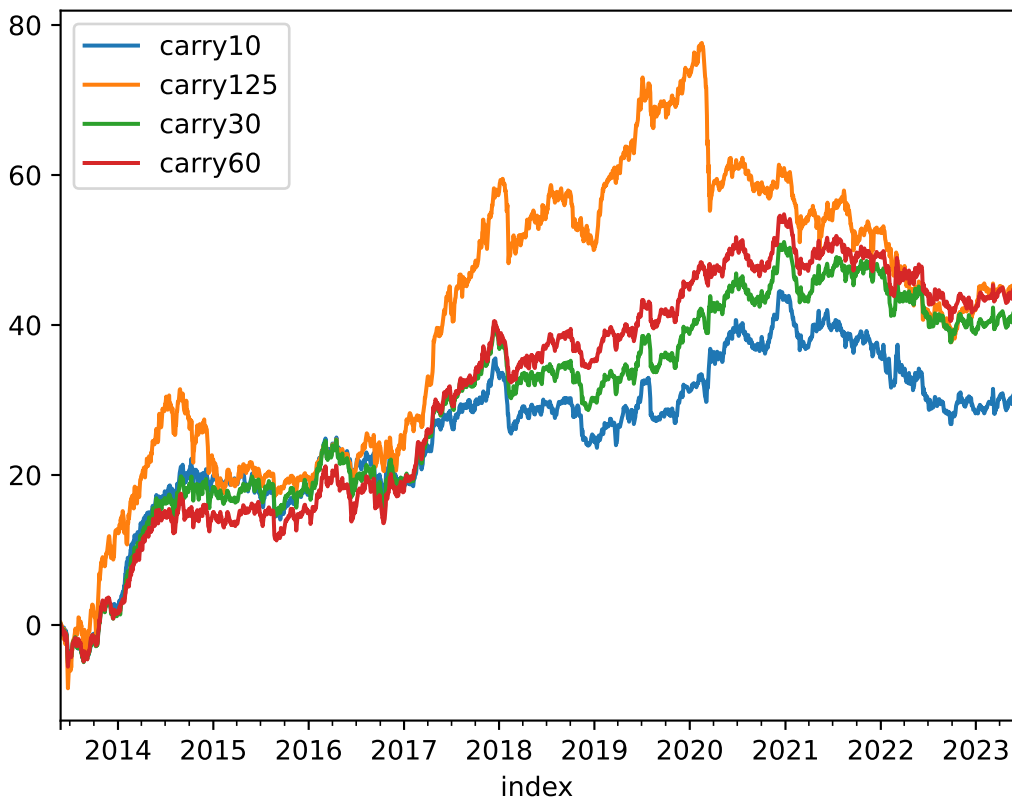
ann. mean {'carry10': -2.505, 'carry125': -5.37, 'carry30': -0.975, 'carry60': -1.583}

ann. std {'carry10': 6.567, 'carry125': 8.018, 'carry30': 6.505, 'carry60': 6.5}

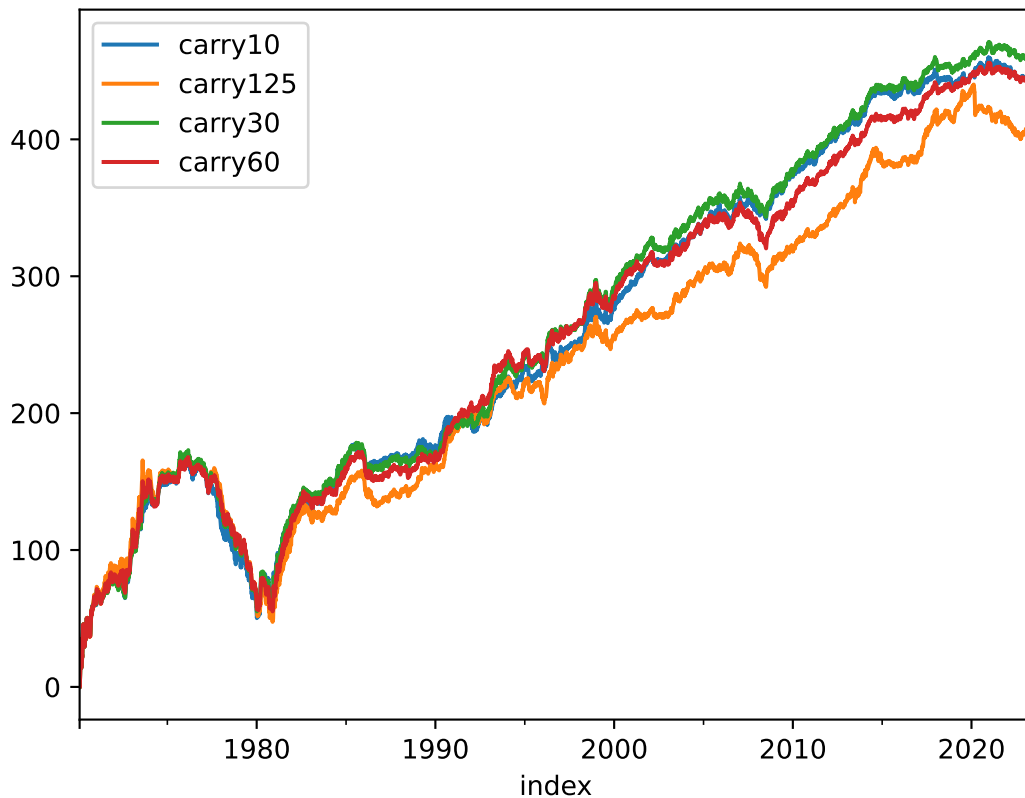
ann. SR {'carry10': -0.38, 'carry125': -0.67, 'carry30': -0.15, 'carry60': -0.24}



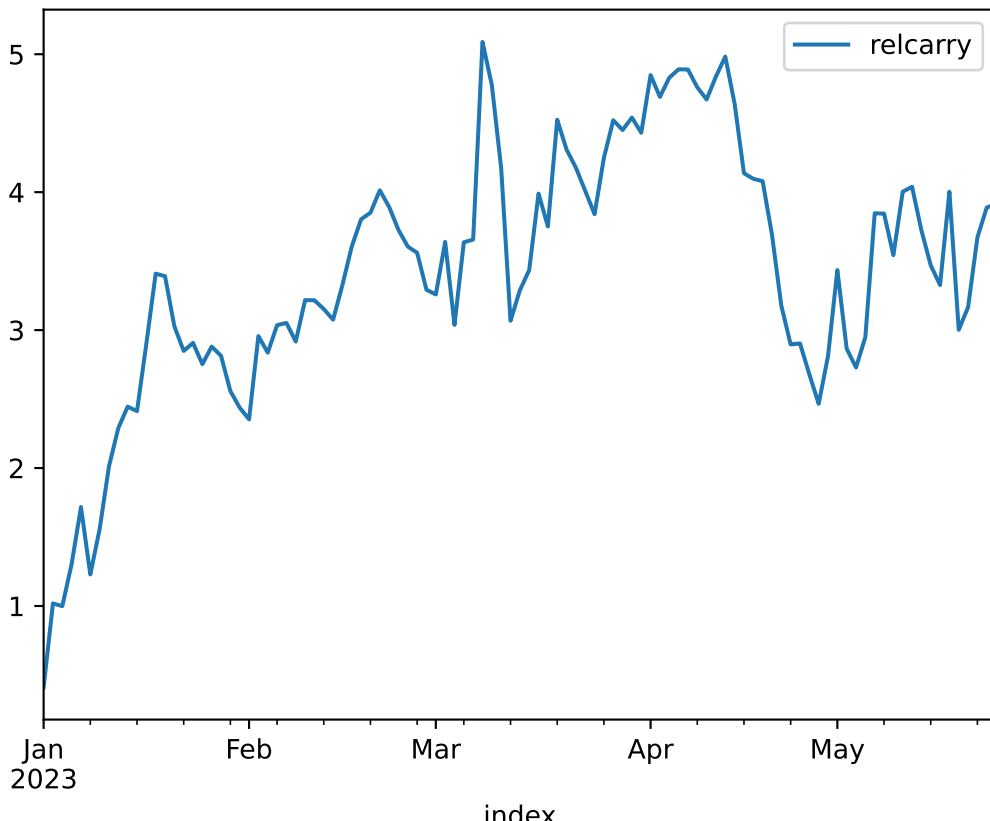
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 2.997, 'carry125': 4.395, 'carry30': 4.072, 'carry60': 4.381}
ann. std {'carry10': 6.376, 'carry125': 8.94, 'carry30': 6.462, 'carry60': 6.405}
ann. SR {'carry10': 0.47, 'carry125': 0.49, 'carry30': 0.63, 'carry60': 0.68}



Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 8.208, 'carry125': 7.496, 'carry30': 8.497, 'carry60': 8.208}
ann. std {'carry10': 11.195, 'carry125': 11.552, 'carry30': 11.252, 'carry60': 11.255}
ann. SR {'carry10': 0.73, 'carry125': 0.65, 'carry30': 0.76, 'carry60': 0.73}



Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 9.724}
ann. std {'relcarry': 5.981}
ann. SR {'relcarry': 1.63}

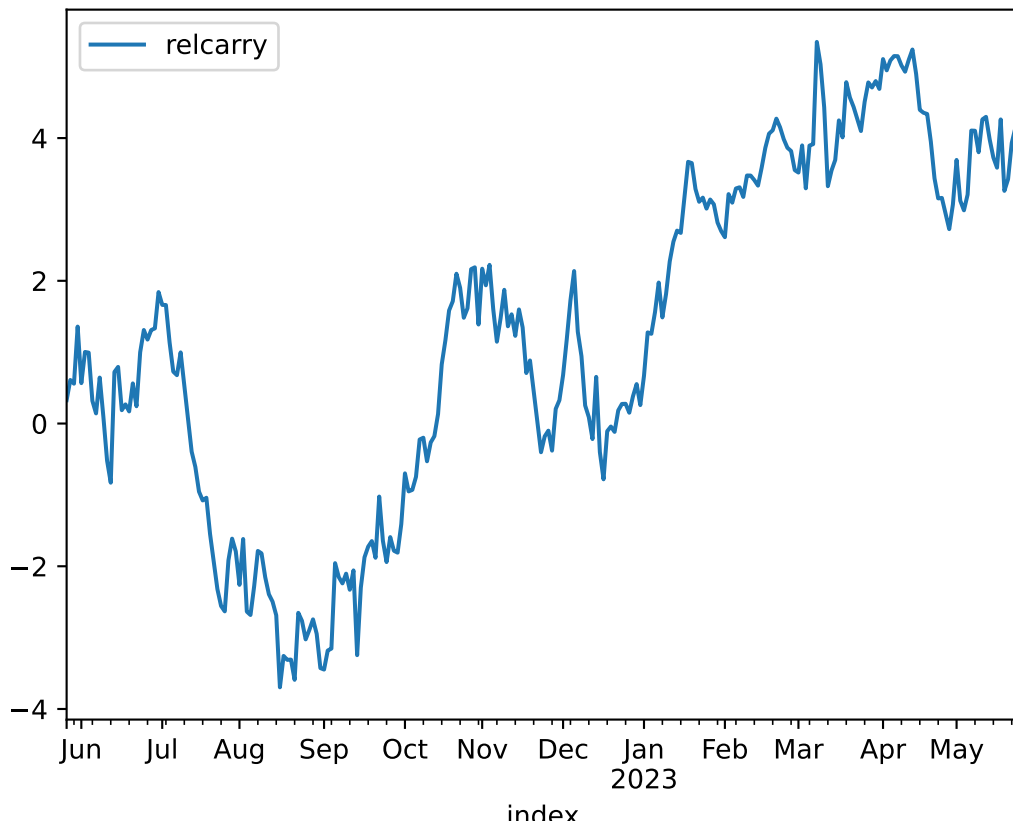


Total Trading Rule P&L for period '1Y'

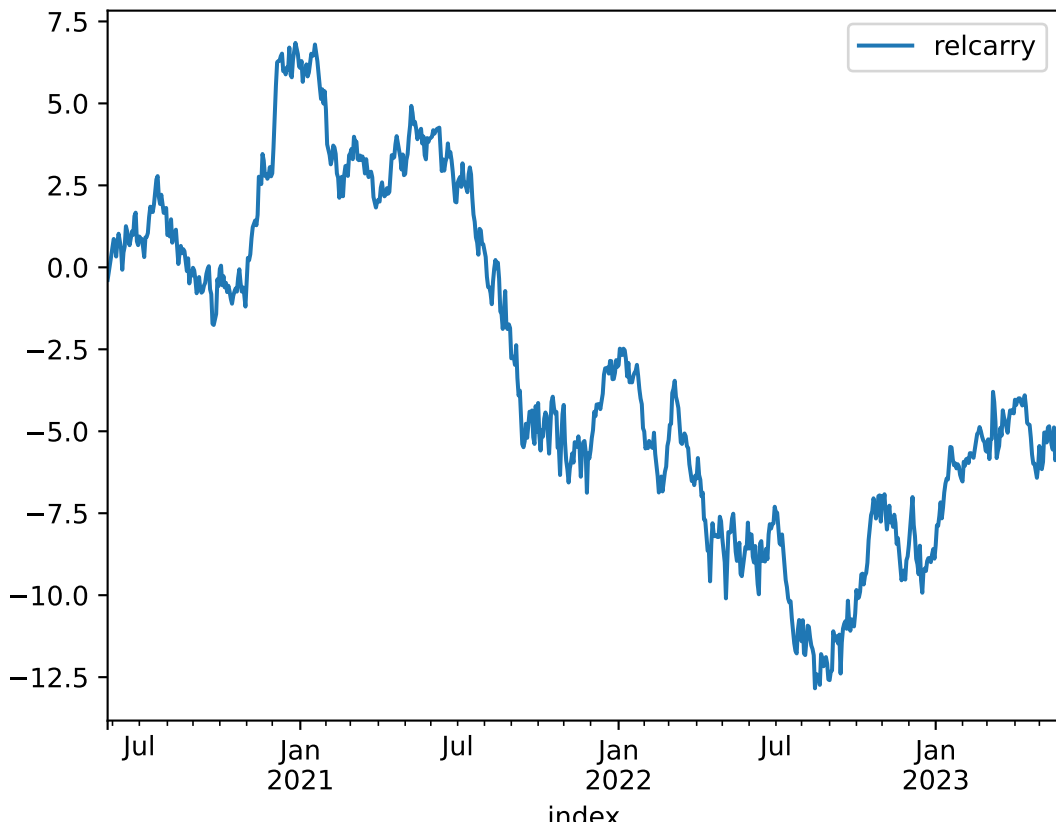
ann. mean {'relcarry': 4.107}

ann. std {'relcarry': 6.803}

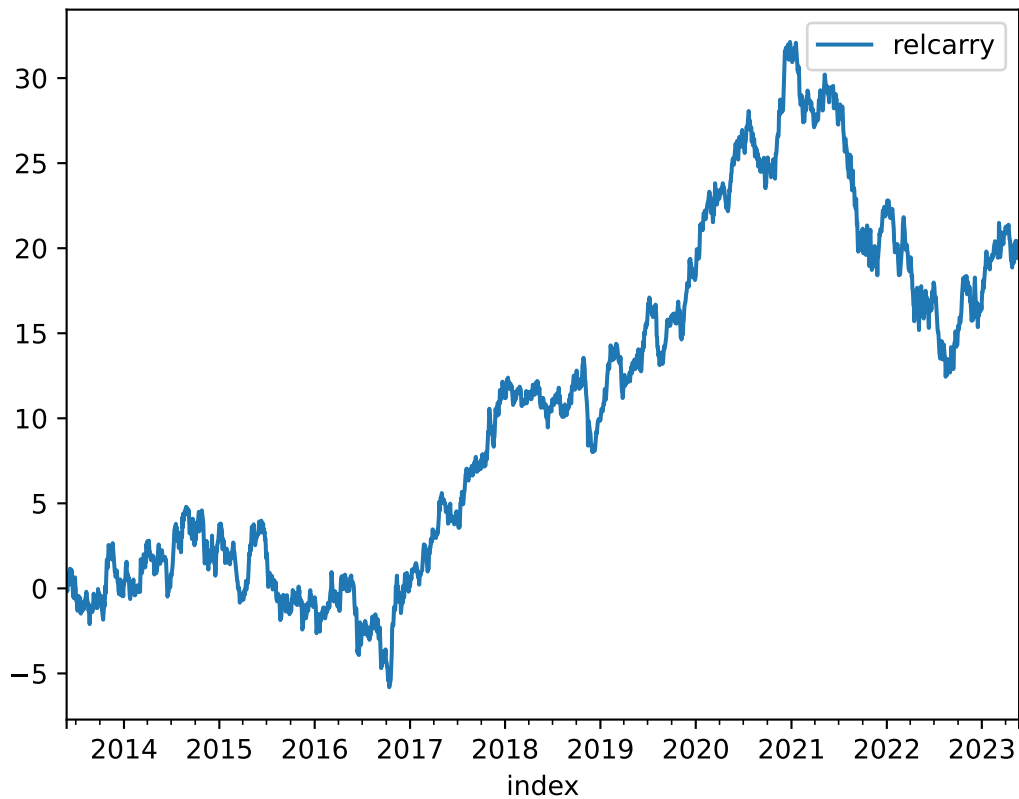
ann. SR {'relcarry': 0.6}



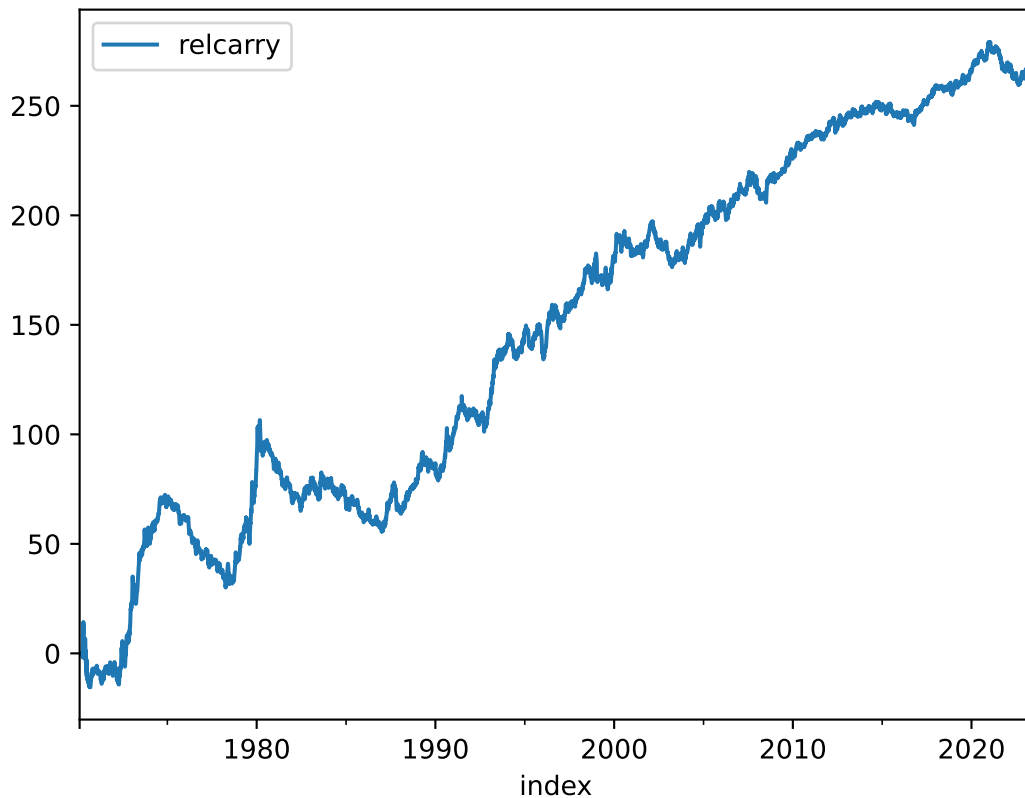
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -1.628}
ann. std {'relcarry': 6.716}
ann. SR {'relcarry': -0.24}



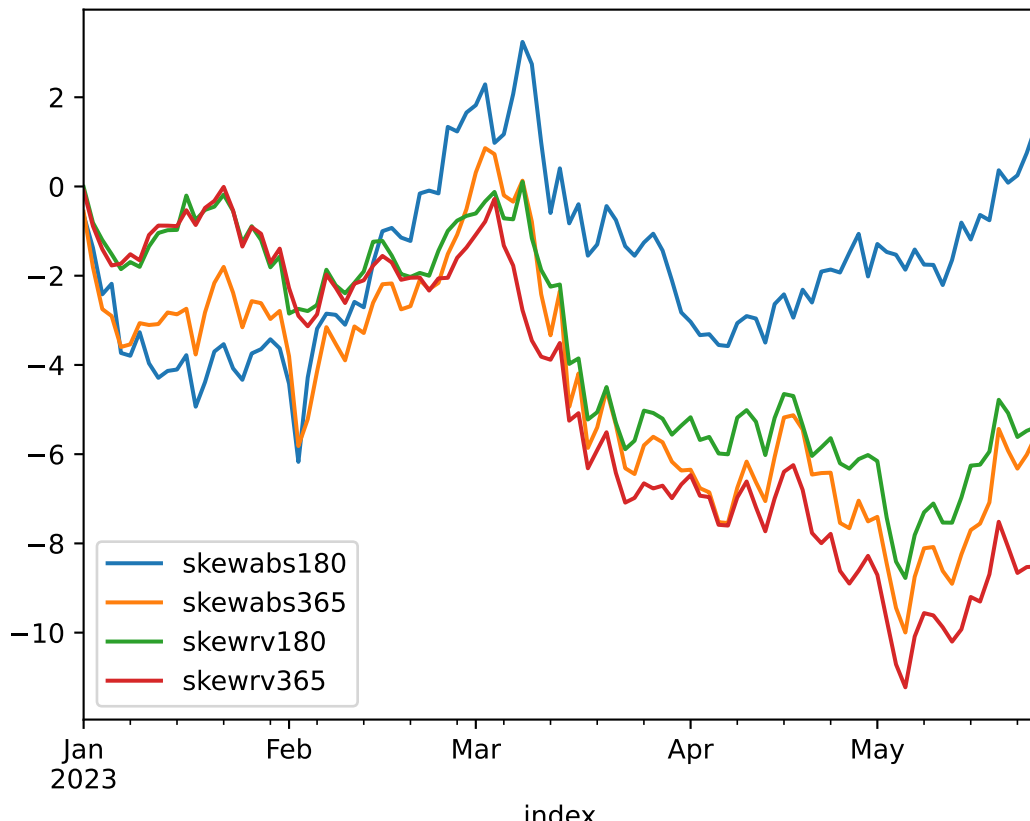
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 1.994}
ann. std {'relcarry': 5.829}
ann. SR {'relcarry': 0.34}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 4.922}
ann. std {'relcarry': 8.958}
ann. SR {'relcarry': 0.55}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': 3.389, 'skewabs365': -13.85, 'skewrv180': -13.403, 'skewrv365': -21.167}
ann. std {'skewabs180': 10.948, 'skewabs365': 11.695, 'skewrv180': 8.484, 'skewrv365': 8.441}
ann. SR {'skewabs180': 0.31, 'skewabs365': -1.18, 'skewrv180': -1.58, 'skewrv365': -2.51}

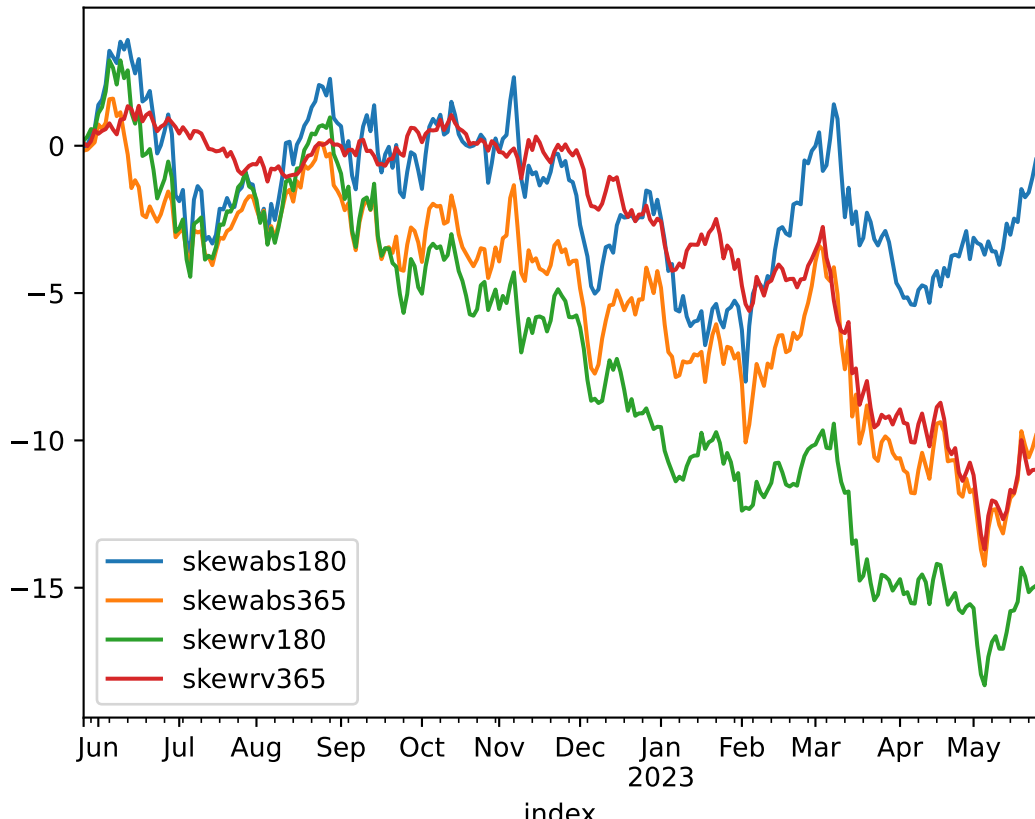


Total Trading Rule P&L for period '1Y'

ann. mean {'skewabs180': -0.462, 'skewabs365': -9.675, 'skewrv180': -14.699, 'skewrv365': -10.822}

ann. std {'skewabs180': 11.113, 'skewabs365': 10.167, 'skewrv180': 9.489, 'skewrv365': 6.289}

ann. SR {'skewabs180': -0.04, 'skewabs365': -0.95, 'skewrv180': -1.55, 'skewrv365': -1.72}

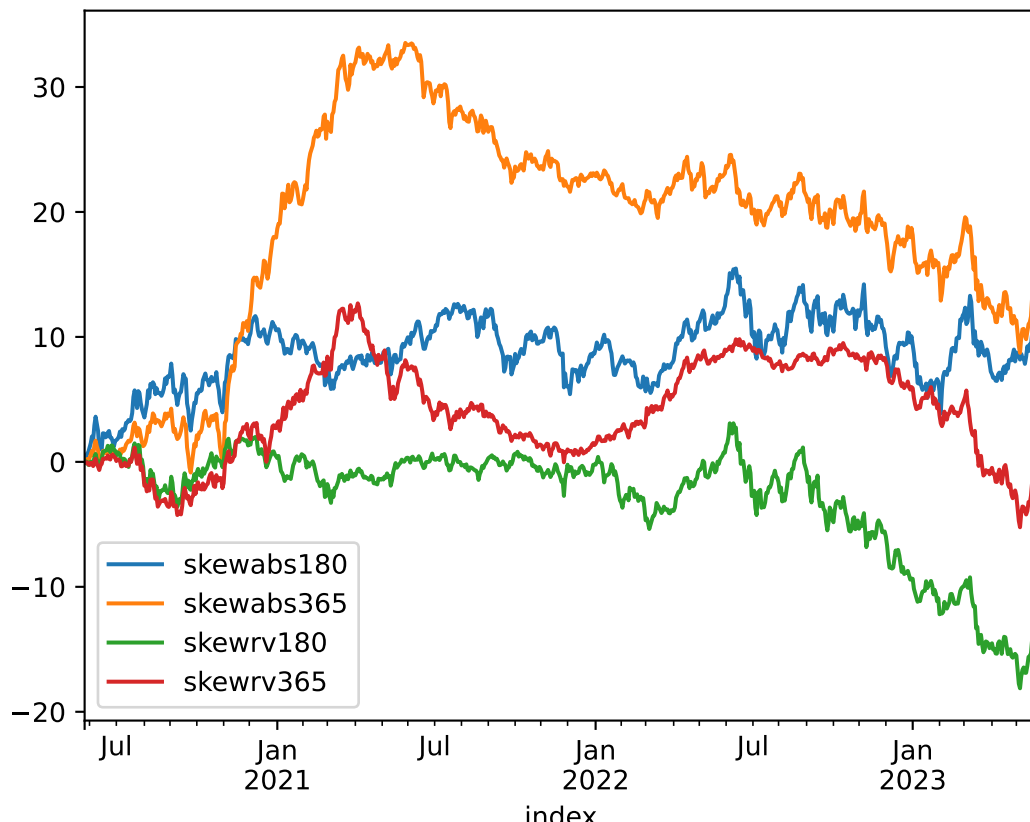


Total Trading Rule P&L for period '3Y'

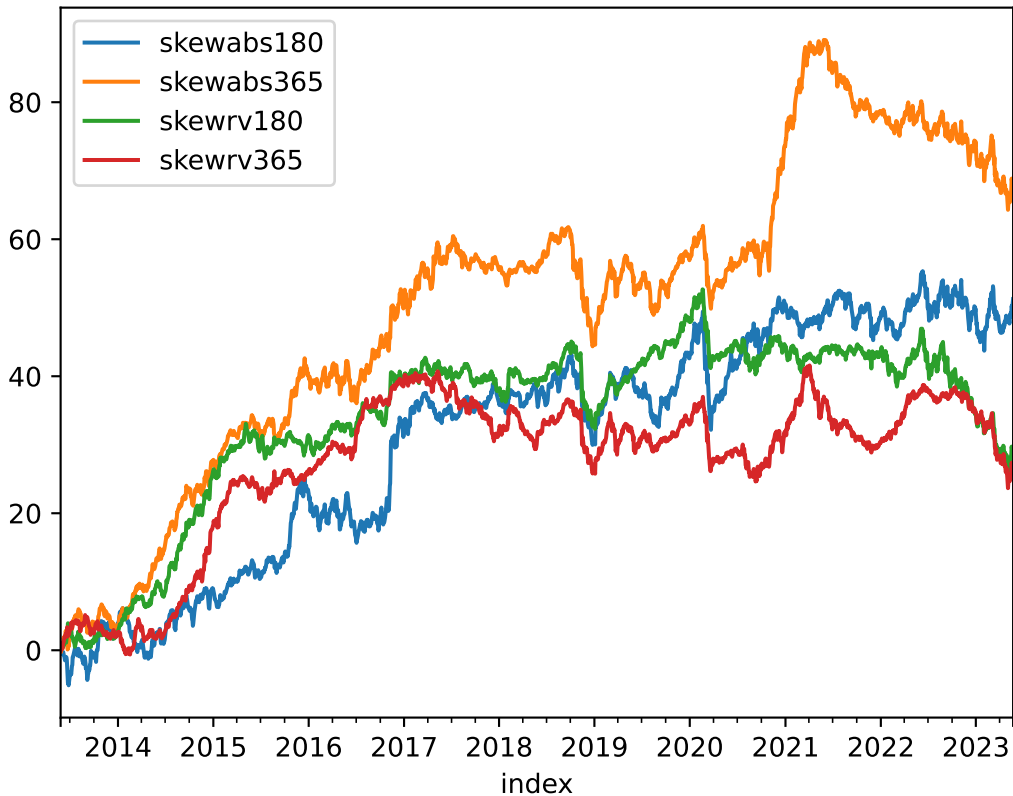
ann. mean {'skewabs180': 3.737, 'skewabs365': 4.304, 'skewrv180': -4.825, 'skewrv365': -0.827}

ann. std {'skewabs180': 9.16, 'skewabs365': 9.055, 'skewrv180': 7.382, 'skewrv365': 6.518}

ann. SR {'skewabs180': 0.41, 'skewabs365': 0.48, 'skewrv180': -0.65, 'skewrv365': -0.13}



Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 5.032, 'skewabs365': 6.745, 'skewrv180': 2.858, 'skewrv365': 2.588}
ann. std {'skewabs180': 8.037, 'skewabs365': 7.987, 'skewrv180': 6.433, 'skewrv365': 6.096}
ann. SR {'skewabs180': 0.63, 'skewabs365': 0.84, 'skewrv180': 0.44, 'skewrv365': 0.42}

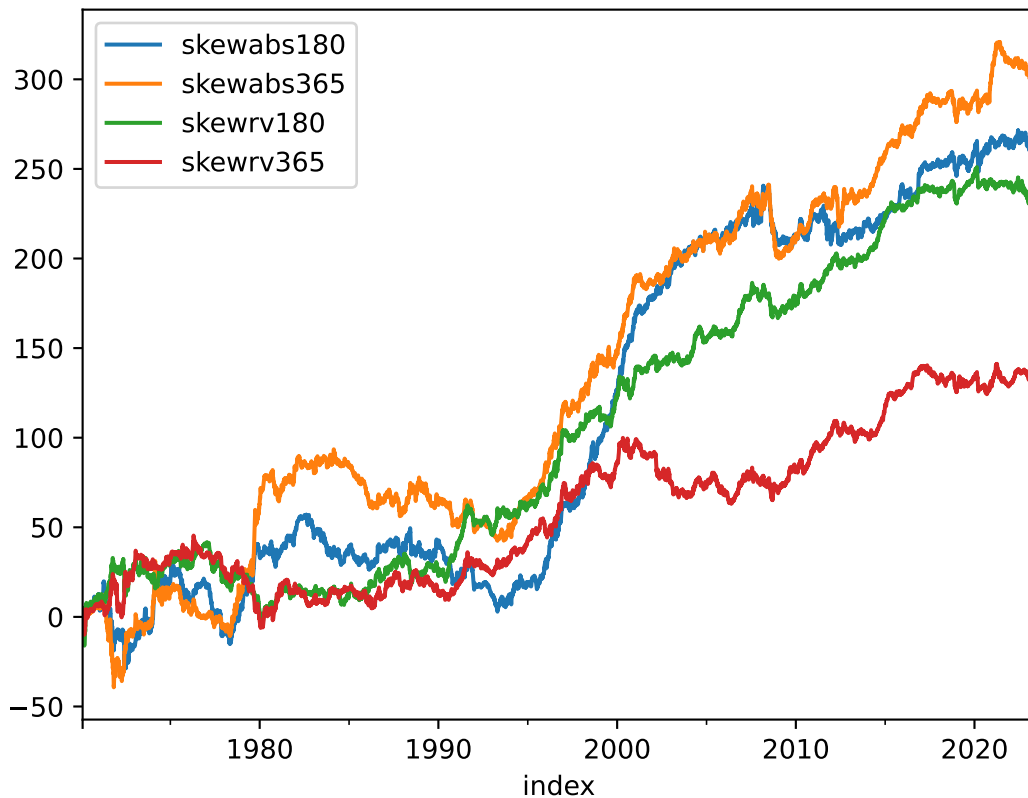


Total Trading Rule P&L for period '99Y'

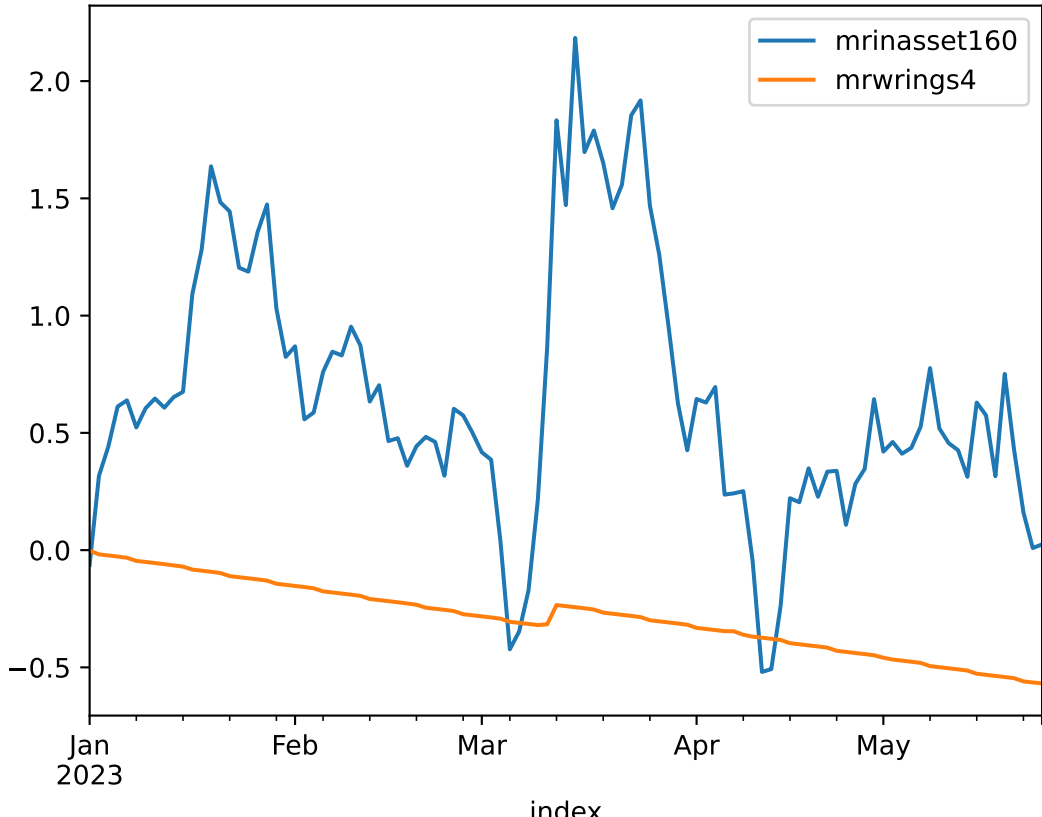
ann. mean {'skewabs180': 4.924, 'skewabs365': 5.532, 'skewrv180': 4.187, 'skewrv365': 2.32}

ann. std {'skewabs180': 10.098, 'skewabs365': 9.871, 'skewrv180': 8.752, 'skewrv365': 8.128}

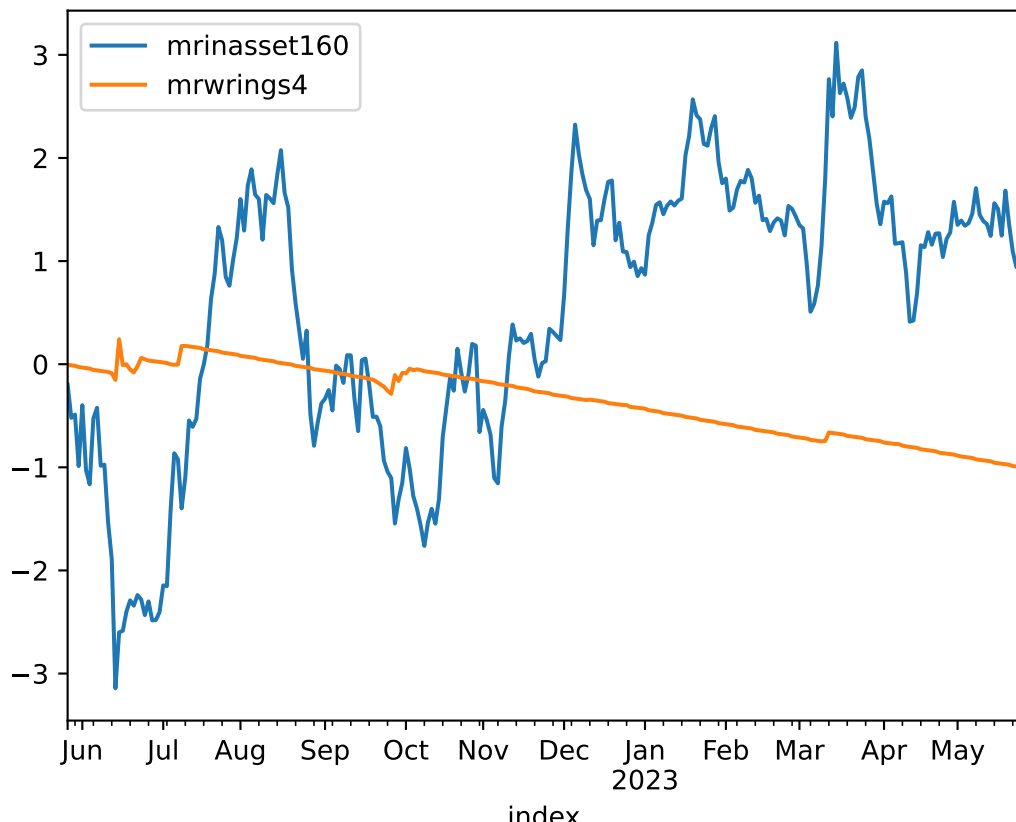
ann. SR {'skewabs180': 0.49, 'skewabs365': 0.56, 'skewrv180': 0.48, 'skewrv365': 0.29}



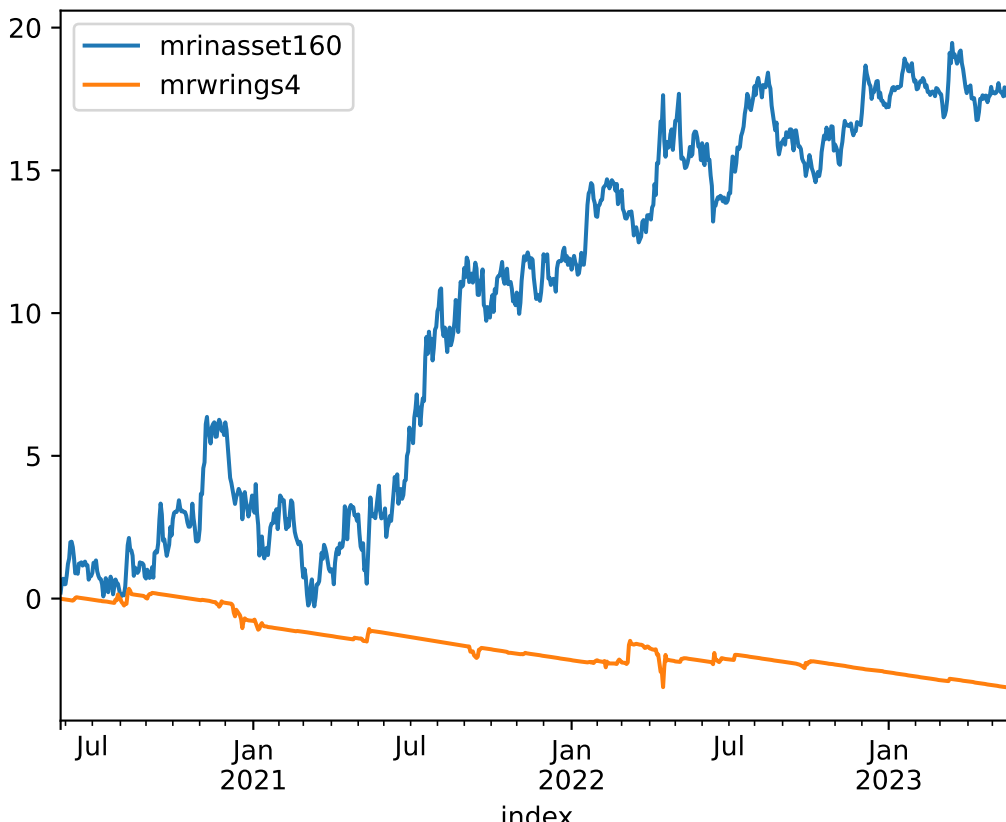
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 0.061, 'mrwrings4': -1.412}
ann. std {'mrinasset160': 4.069, 'mrwrings4': 0.151}
ann. SR {'mrinasset160': 0.02, 'mrwrings4': -9.34}



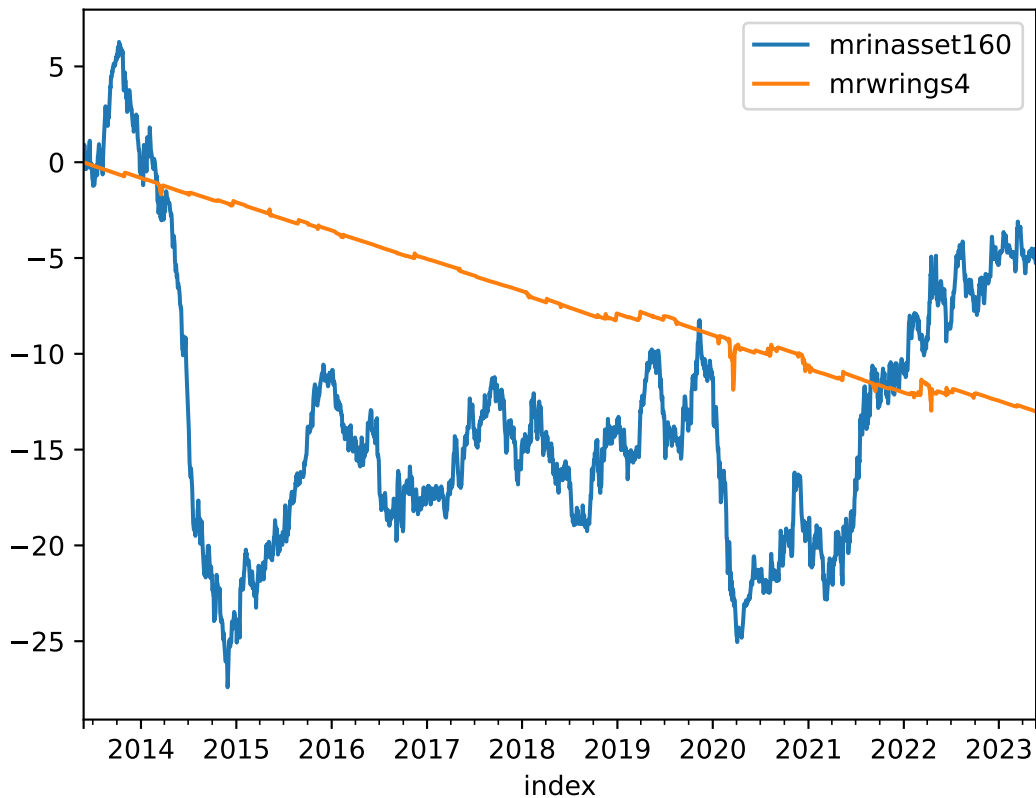
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 0.941, 'mrwrings4': -0.981}
ann. std {'mrinasset160': 4.774, 'mrwrings4': 0.574}
ann. SR {'mrinasset160': 0.2, 'mrwrings4': -1.71}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 5.665, 'mrwrings4': -1.029}
ann. std {'mrinasset160': 6.271, 'mrwrings4': 1.017}
ann. SR {'mrinasset160': 0.9, 'mrwrings4': -1.01}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.516, 'mrwrings4': -1.277}
ann. std {'mrinasset160': 6.181, 'mrwrings4': 0.879}
ann. SR {'mrinasset160': -0.08, 'mrwrings4': -1.45}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.574, 'mrwrings4': -2.186}
ann. std {'mrinasset160': 9.862, 'mrwrings4': 2.086}
ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.05}

