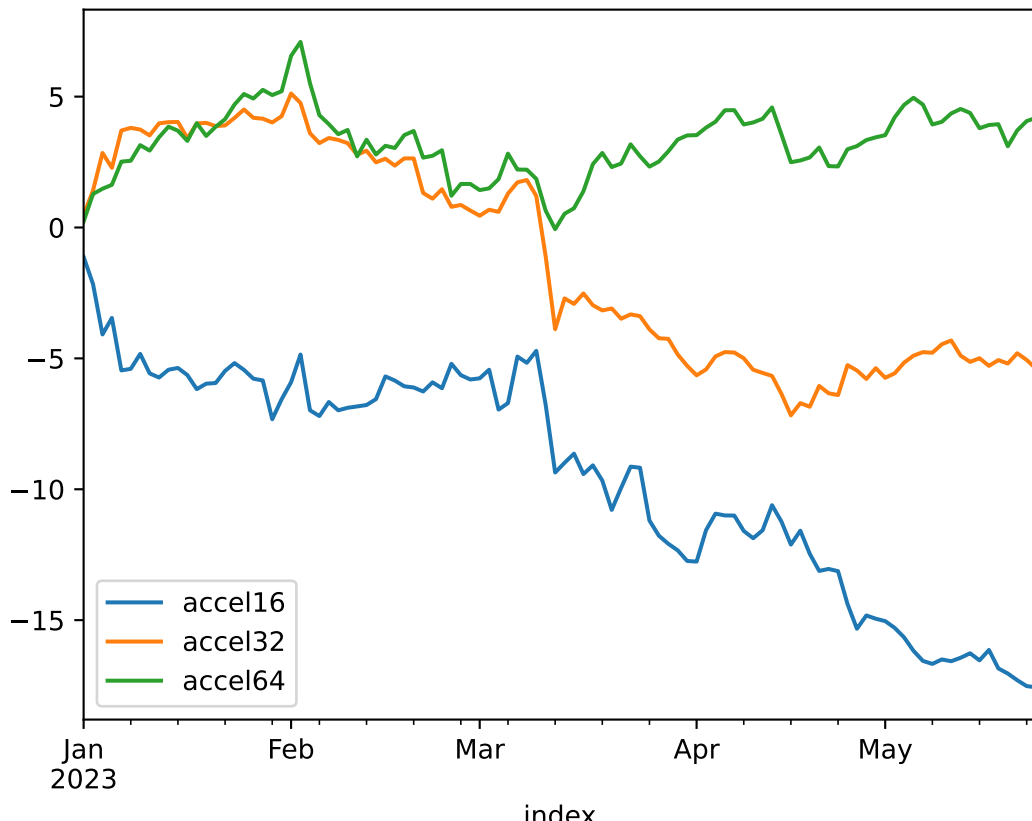
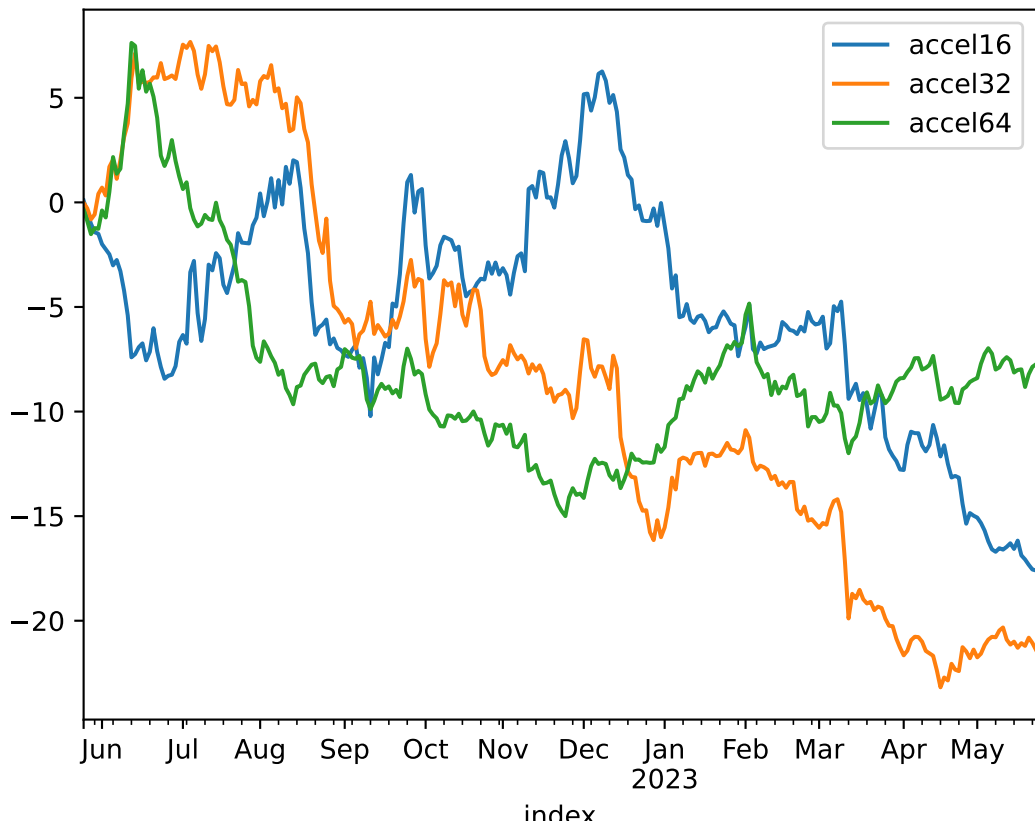


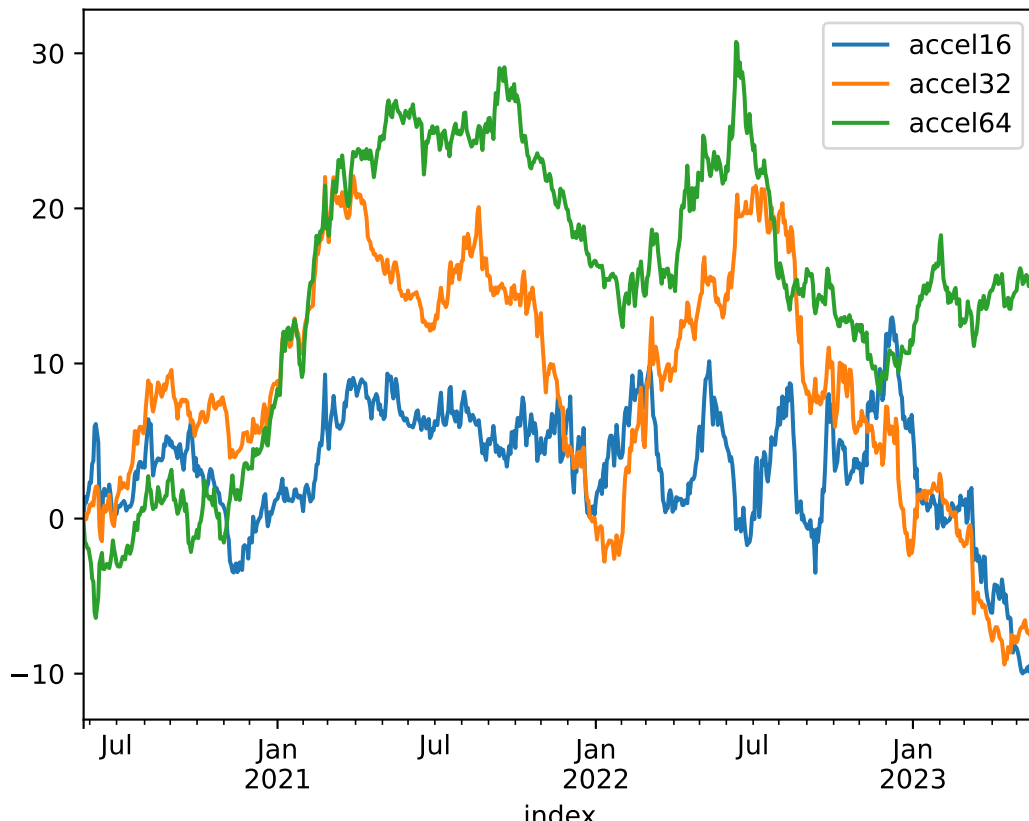
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -44.087, 'accel32': -13.547, 'accel64': 10.516}
ann. std {'accel16': 11.98, 'accel32': 9.427, 'accel64': 8.993}
ann. SR {'accel16': -3.68, 'accel32': -1.44, 'accel64': 1.17}



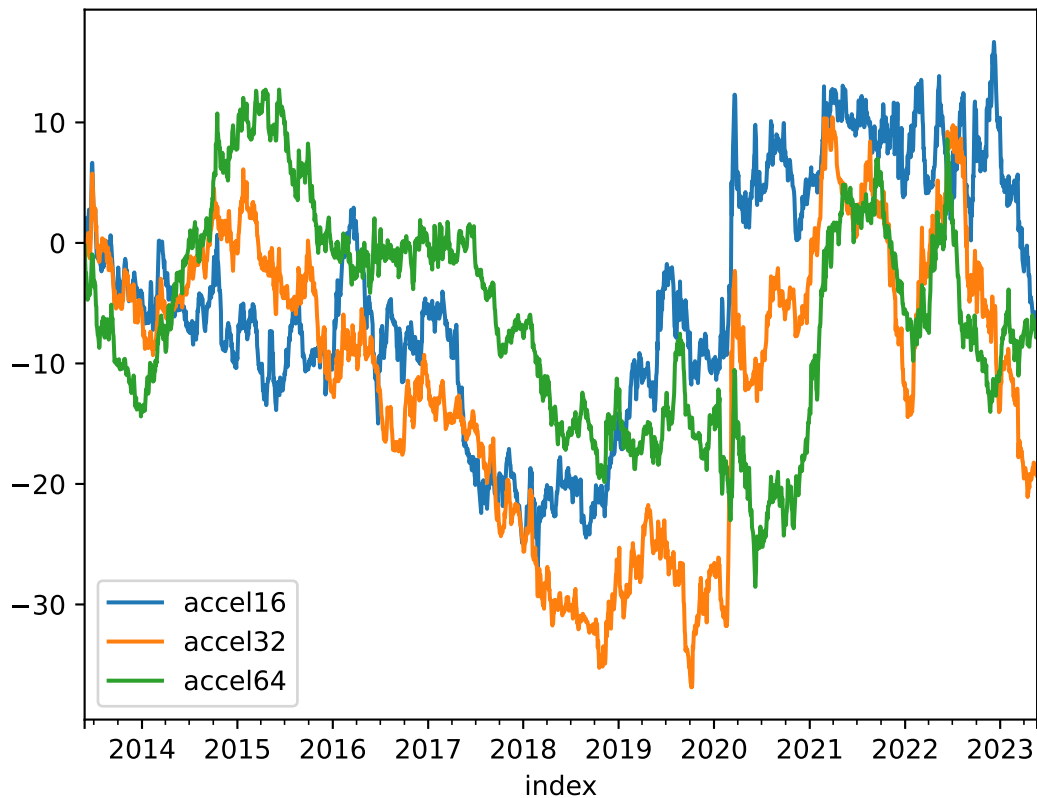
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -17.327, 'accel32': -21.075, 'accel64': -7.618}
ann. std {'accel16': 15.423, 'accel32': 12.775, 'accel64': 10.22}
ann. SR {'accel16': -1.12, 'accel32': -1.65, 'accel64': -0.75}



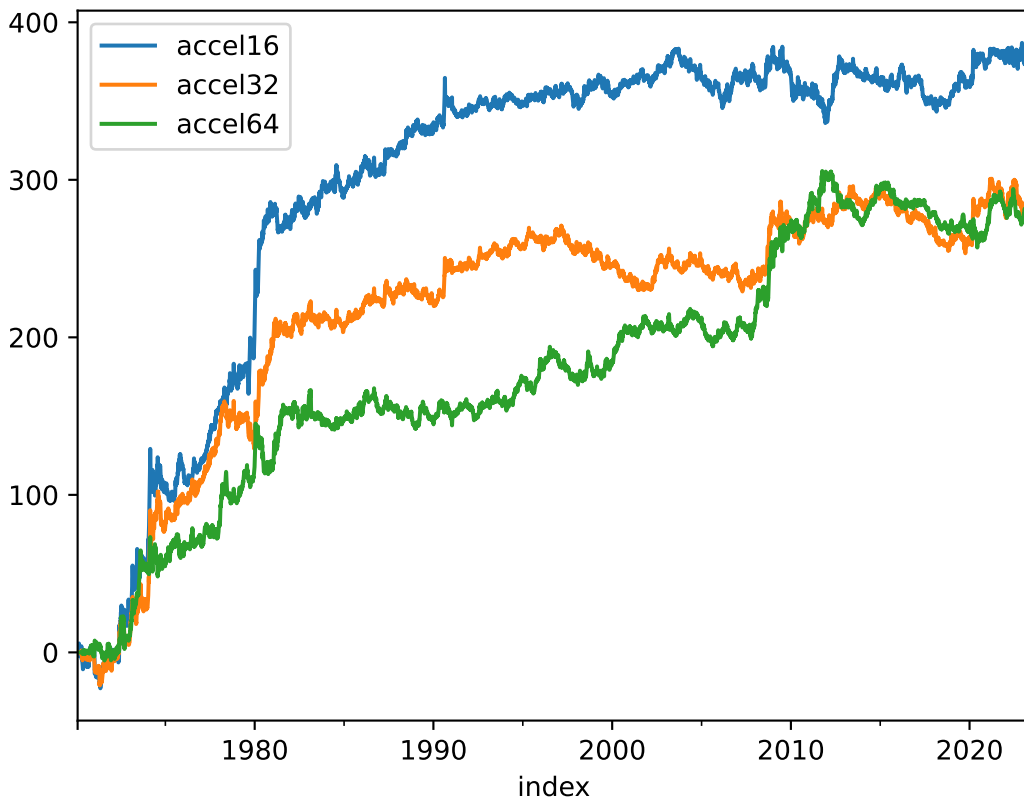
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -3.562, 'accel32': -2.498, 'accel64': 5.033}
ann. std {'accel16': 13.497, 'accel32': 11.737, 'accel64': 10.425}
ann. SR {'accel16': -0.26, 'accel32': -0.21, 'accel64': 0.48}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': -0.704, 'accel32': -1.895, 'accel64': -0.664}
ann. std {'accel16': 11.687, 'accel32': 10.661, 'accel64': 9.317}
ann. SR {'accel16': -0.06, 'accel32': -0.18, 'accel64': -0.07}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.684, 'accel32': 4.988, 'accel64': 5.133}
ann. std {'accel16': 14.122, 'accel32': 12.447, 'accel64': 12.097}
ann. SR {'accel16': 0.47, 'accel32': 0.4, 'accel64': 0.42}

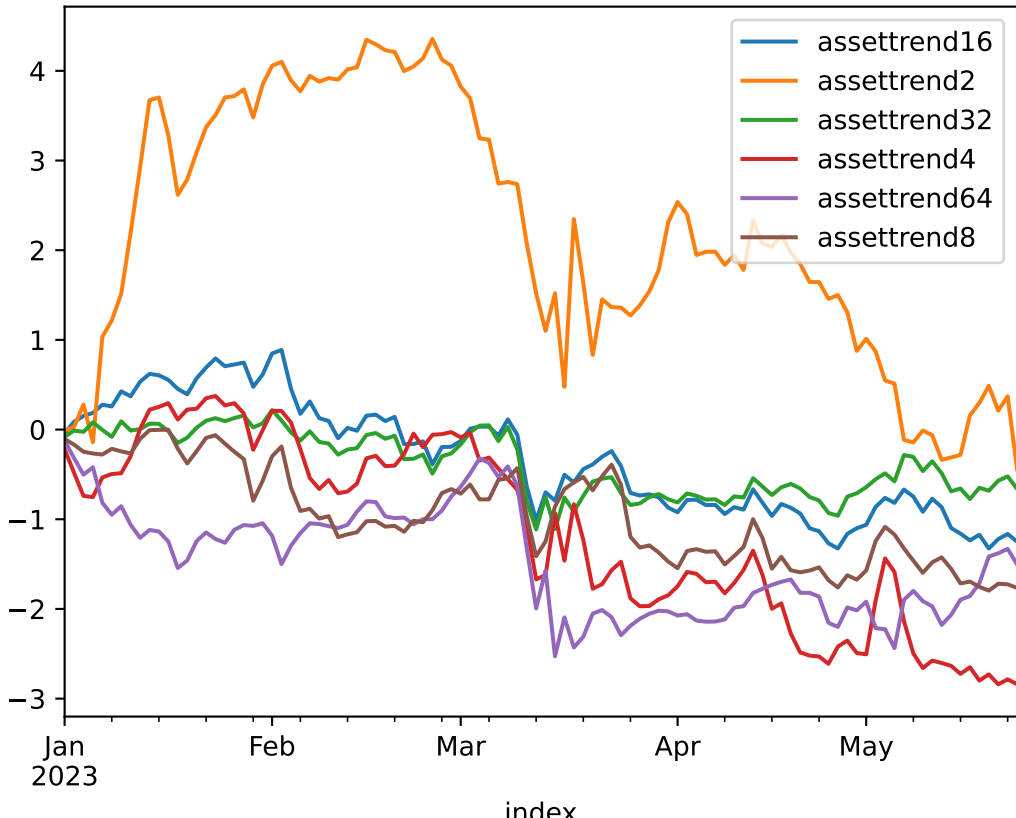


Total Trading Rule P&L for period 'YTD'

ann. mean {'assetrend16': -3.139, 'assetrend2': -1.11, 'assetrend32': -1.662, 'assetrend4': -7.126, 'assetrend64': -3.774, 'assetrend8': -4.431}

ann. std {'assetrend16': 2.44, 'assetrend2': 6.305, 'assetrend32': 2.248, 'assetrend4': 3.683, 'assetrend64': 3.323, 'assetrend8': 2.747}

ann. SR {'assetrend16': -1.29, 'assetrend2': -0.18, 'assetrend32': -0.74, 'assetrend4': -1.93, 'assetrend64': -1.14, 'assetrend8': -1.61}

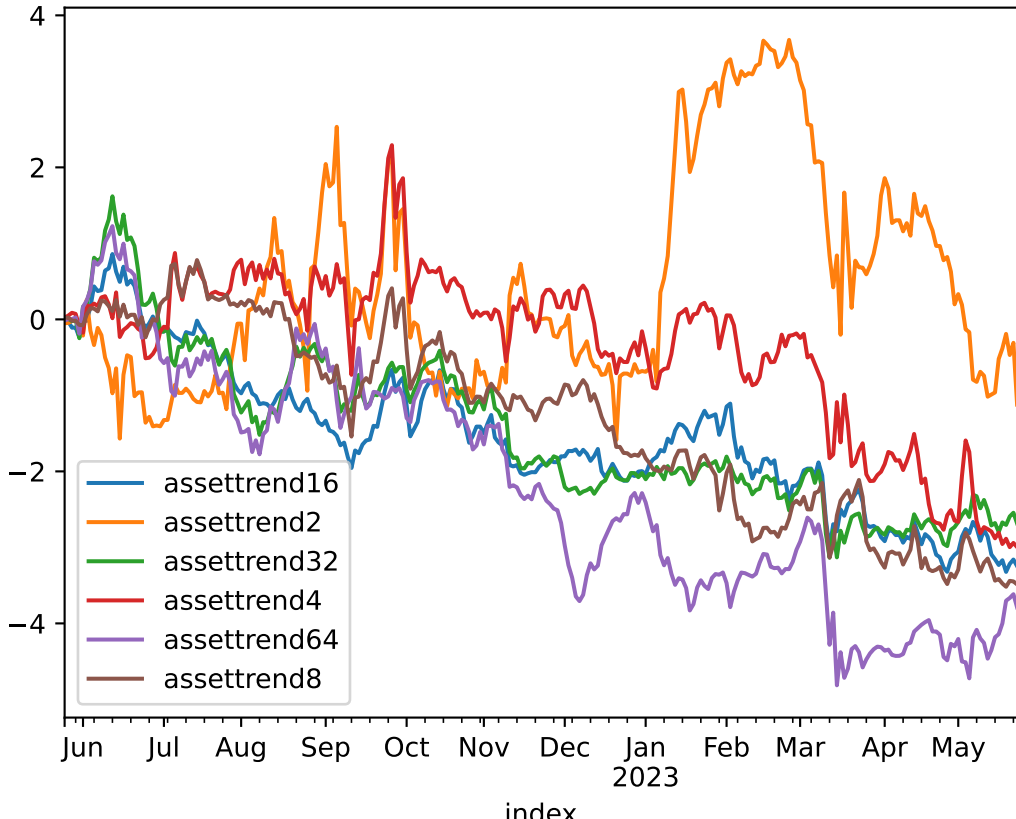


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': -3.197, 'assettrend2': -1.104, 'assettrend32': -2.643, 'assettrend4': -2.95, 'assettrend64': -3.731, 'assettrend8': -3.433}

ann. std {'assettrend16': 2.229, 'assettrend2': 6.182, 'assettrend32': 2.459, 'assettrend4': 3.917, 'assettrend64': 3.126, 'assettrend8': 2.633}

ann. SR {'assettrend16': -1.43, 'assettrend2': -0.18, 'assettrend32': -1.08, 'assettrend4': -0.75, 'assettrend64': -1.19, 'assettrend8': -1.3}

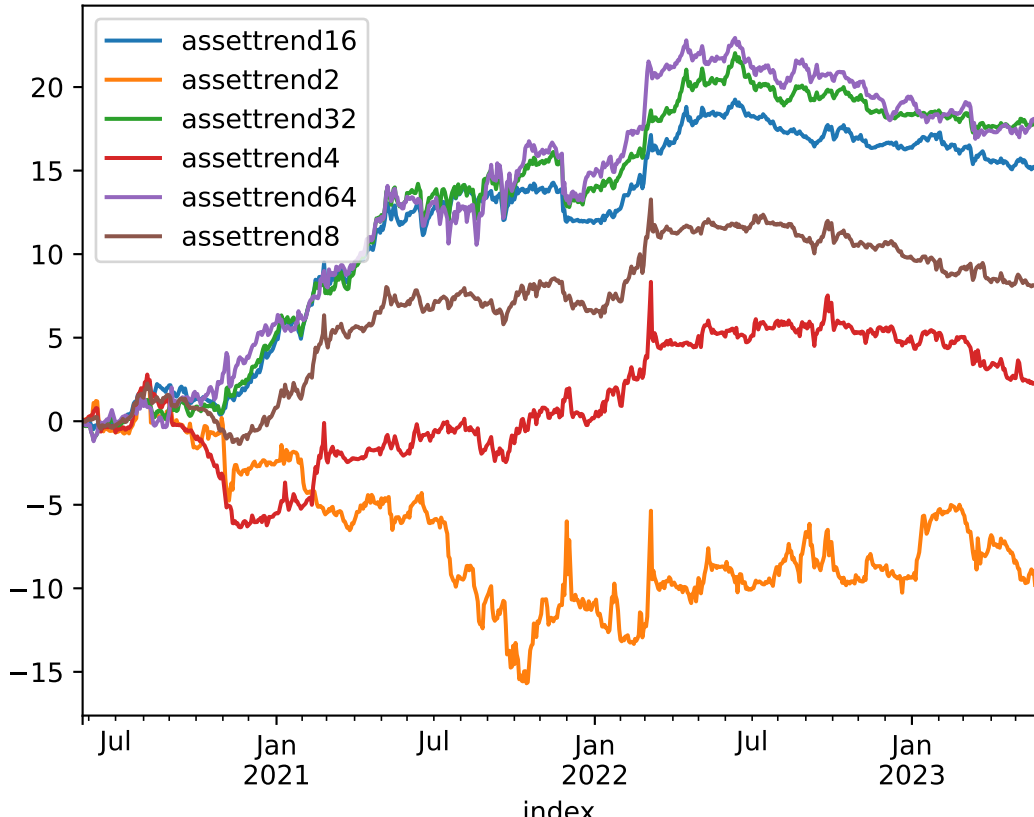


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 4.959, 'assettrend2': -3.207, 'assettrend32': 5.804, 'assettrend4': 0.733, 'assettrend64': 5.868, 'assettrend8': 2.651}

ann. std {'assettrend16': 3.416, 'assettrend2': 7.83, 'assettrend32': 4.127, 'assettrend4': 4.981, 'assettrend64': 5.014, 'assettrend8': 3.53}

ann. SR {'assettrend16': 1.45, 'assettrend2': -0.41, 'assettrend32': 1.41, 'assettrend4': 0.15, 'assettrend64': 1.17, 'assettrend8': 0.75}

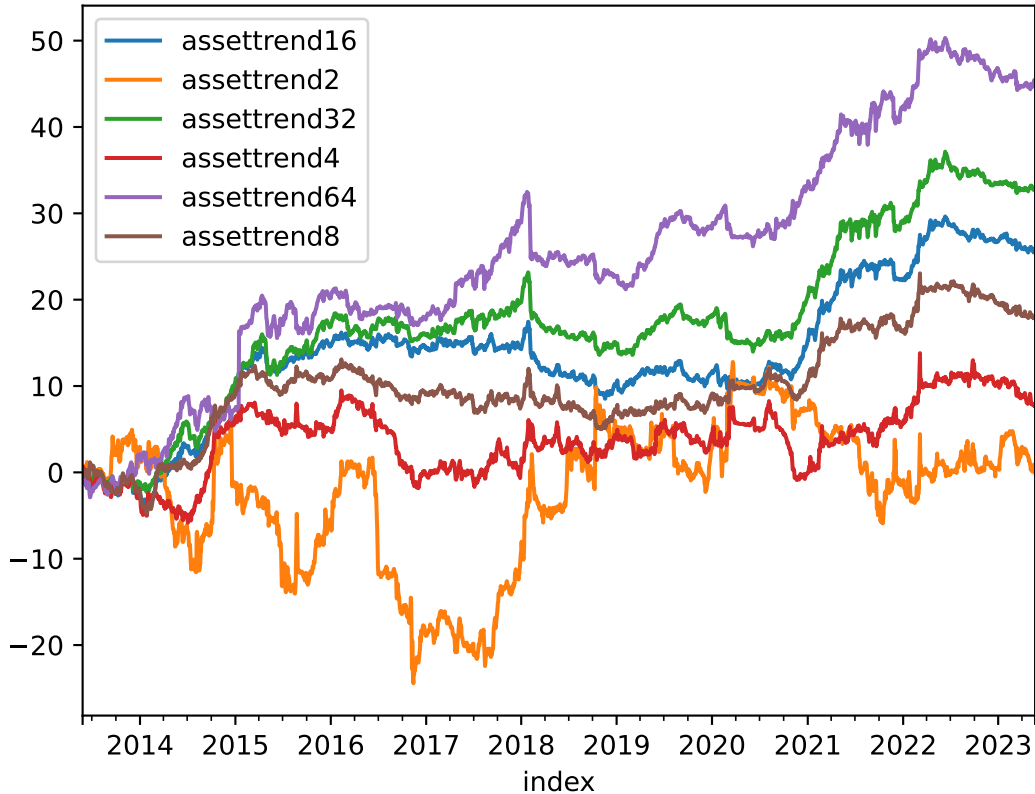


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.507, 'assettrend2': -0.001, 'assettrend32': 3.225, 'assettrend4': 0.757, 'assettrend64': 4.448, 'assettrend8': 1.755}

ann. std {'assettrend16': 3.148, 'assettrend2': 9.77, 'assettrend32': 3.586, 'assettrend4': 4.974, 'assettrend64': 5.193, 'assettrend8': 3.447}

ann. SR {'assettrend16': 0.8, 'assettrend2': -0.0, 'assettrend32': 0.9, 'assettrend4': 0.15, 'assettrend64': 0.86, 'assettrend8': 0.51}

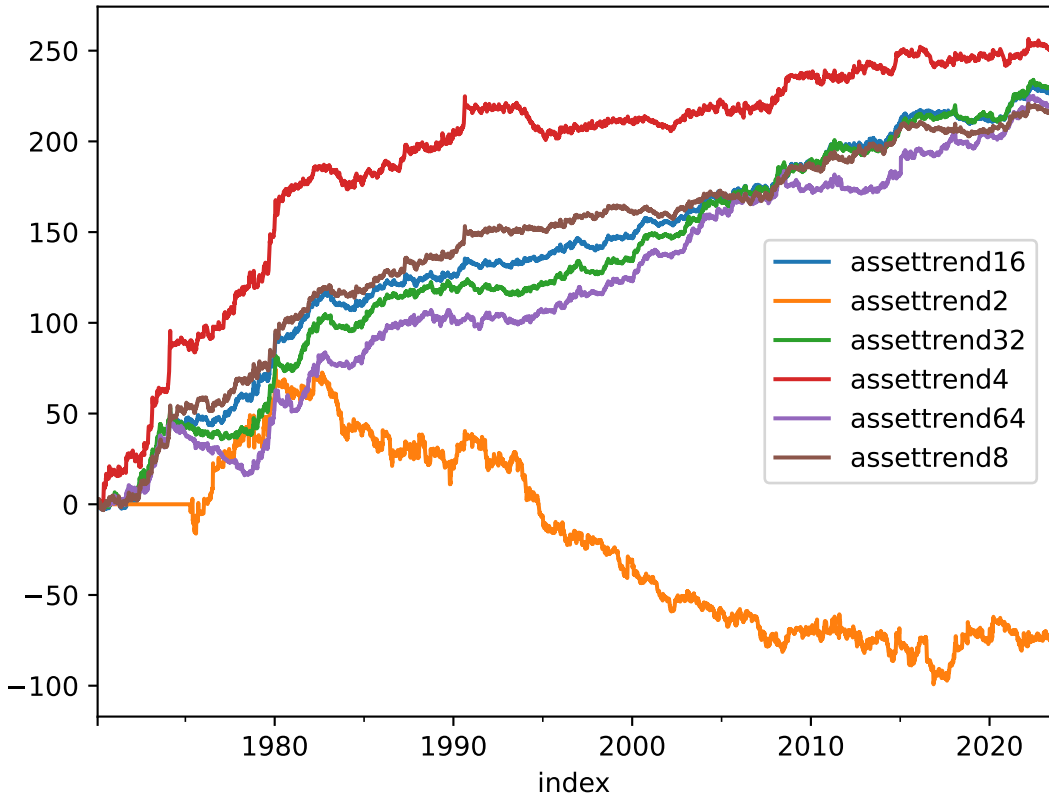


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.171, 'assettrend2': -1.377, 'assettrend32': 4.227, 'assettrend4': 4.609, 'assettrend64': 4.051, 'assettrend8': 3.97}

ann. std {'assettrend16': 4.301, 'assettrend2': 10.255, 'assettrend32': 4.492, 'assettrend4': 6.544, 'assettrend64': 4.993, 'assettrend8': 4.63}

ann. SR {'assettrend16': 0.97, 'assettrend2': -0.13, 'assettrend32': 0.94, 'assettrend4': 0.7, 'assettrend64': 0.81, 'assettrend8': 0.86}

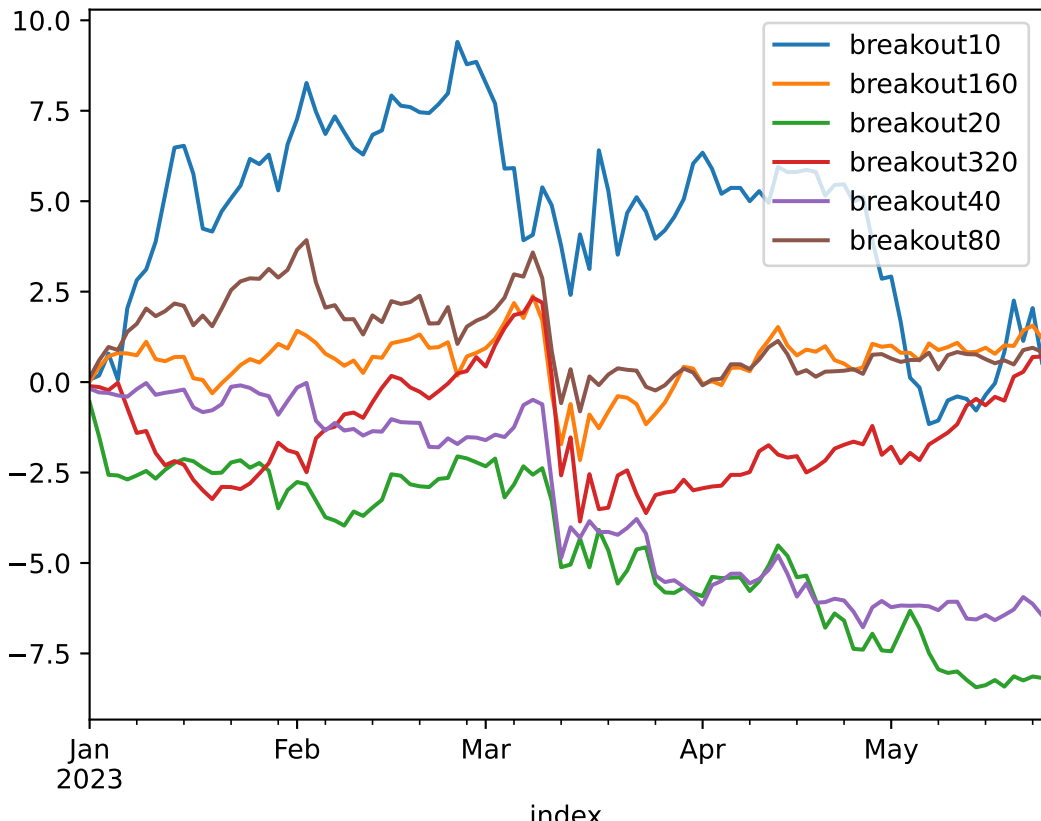


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 1.346, 'breakout160': 3.04, 'breakout20': -20.522, 'breakout320': 1.774, 'breakout40': -16.19, 'breakout80': 2.092}

ann. std {'breakout10': 13.977, 'breakout160': 7.299, 'breakout20': 7.39, 'breakout320': 9.014, 'breakout40': 6.829, 'breakout80': 7.275}

ann. SR {'breakout10': 0.1, 'breakout160': 0.42, 'breakout20': -2.78, 'breakout320': 0.2, 'breakout40': -2.37, 'breakout80': 0.29}

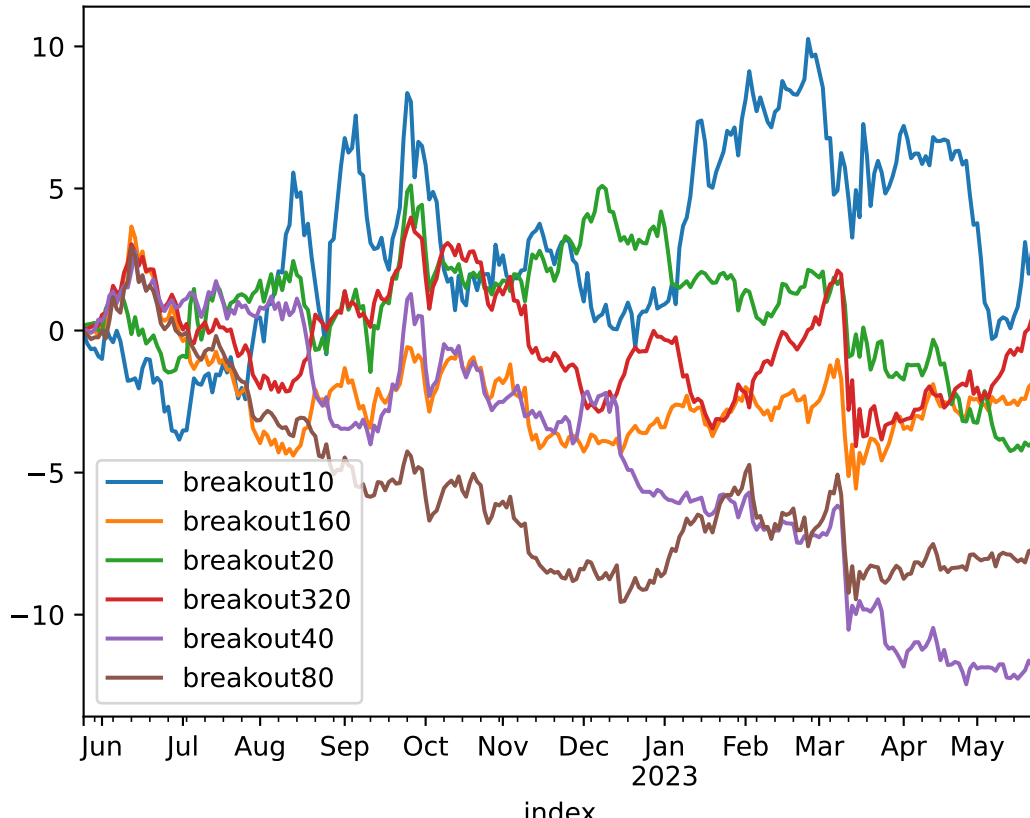


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 1.376, 'breakout160': -2.164, 'breakout20': -3.923, 'breakout320': 0.481, 'breakout40': -11.939, 'breakout80': -7.697}

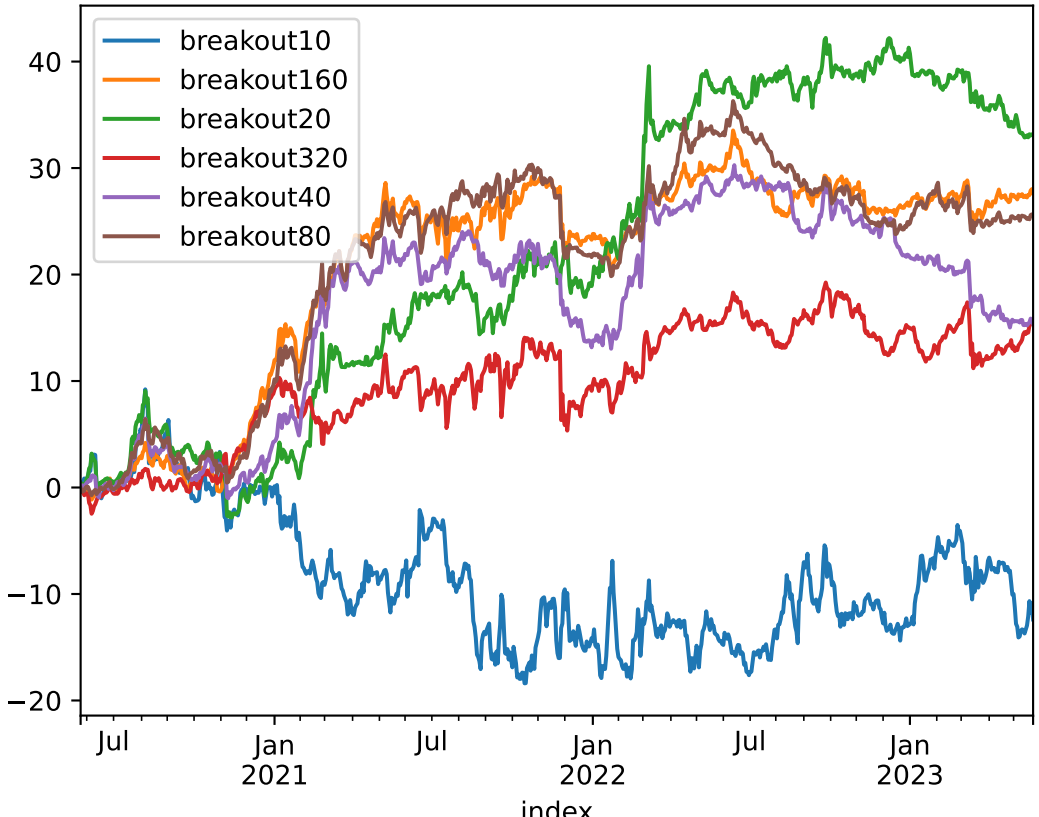
ann. std {'breakout10': 13.377, 'breakout160': 6.881, 'breakout20': 8.349, 'breakout320': 7.557, 'breakout40': 7.081, 'breakout80': 6.471}

ann. SR {'breakout10': 0.1, 'breakout160': -0.31, 'breakout20': -0.47, 'breakout320': 0.06, 'breakout40': -1.69, 'breakout80': -1.19}



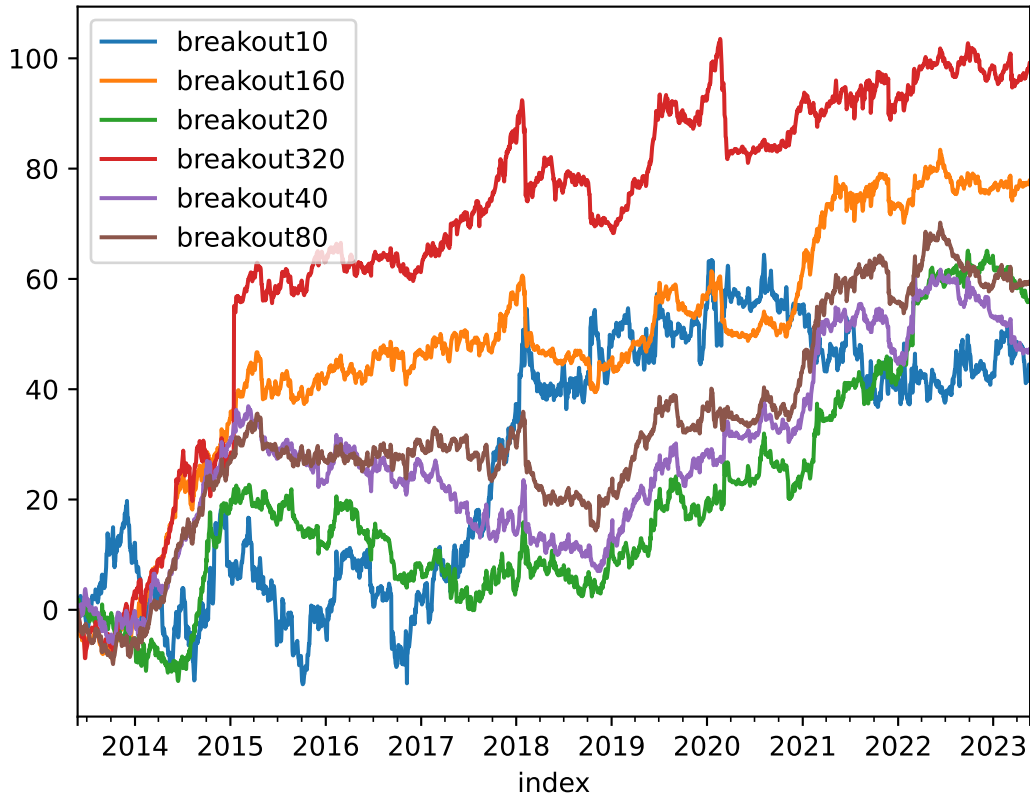
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -4.055, 'breakout160': 9.059, 'breakout20': 10.845, 'breakout320': 5.16, 'breakout40': 5.026, 'breakout80': 8.359}
 ann. std {'breakout10': 15.158, 'breakout160': 9.186, 'breakout20': 11.071, 'breakout320': 9.908, 'breakout40': 9.485, 'breakout80': 8.909}
 ann. SR {'breakout10': -0.27, 'breakout160': 0.99, 'breakout20': 0.98, 'breakout320': 0.52, 'breakout40': 0.53, 'breakout80': 0.94}



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

ann. mean {'breakout10': 4.202, 'breakout160': 7.617, 'breakout20': 5.503, 'breakout320': 9.746, 'breakout40': 4.593, 'breakout80': 5.839}
ann. std {'breakout10': 17.792, 'breakout160': 8.853, 'breakout20': 11.055, 'breakout320': 13.084, 'breakout40': 9.354, 'breakout80': 8.706}
ann. SR {'breakout10': 0.24, 'breakout160': 0.86, 'breakout20': 0.5, 'breakout320': 0.74, 'breakout40': 0.49, 'breakout80': 0.67}

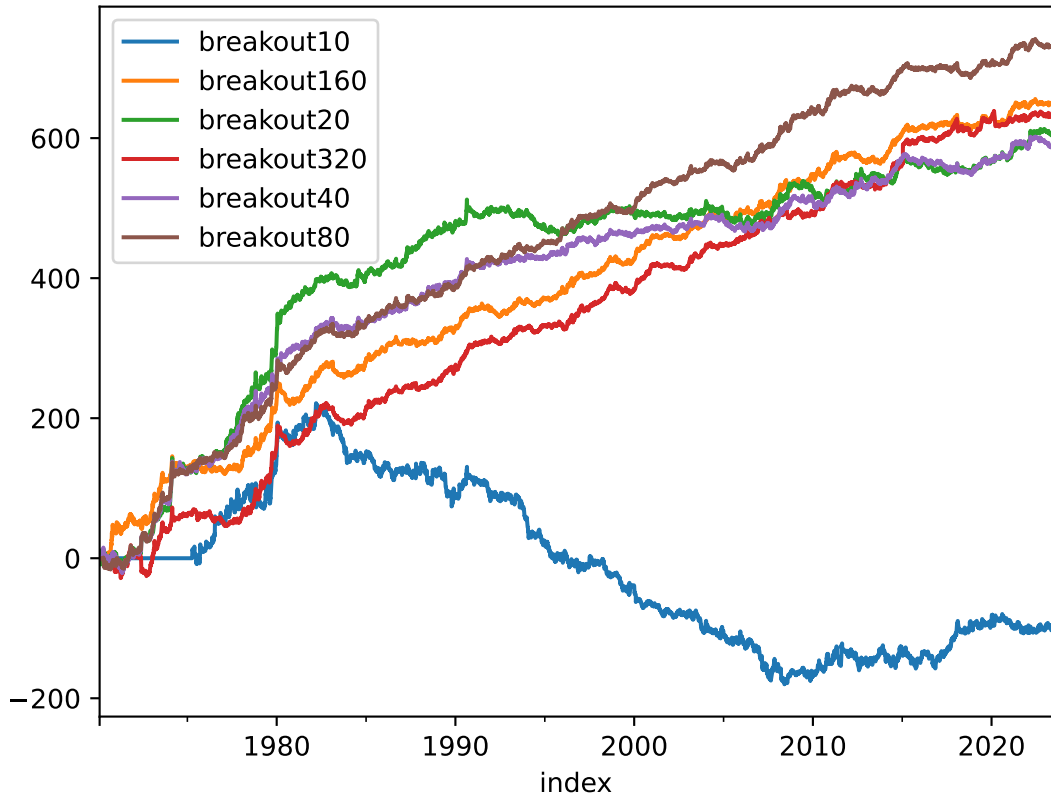


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -1.865, 'breakout160': 11.967, 'breakout20': 11.12, 'breakout320': 11.681, 'breakout40': 10.811, 'breakout80': 13.456}

ann. std {'breakout10': 21.31, 'breakout160': 11.521, 'breakout20': 14.881, 'breakout320': 12.107, 'breakout40': 12.104, 'breakout80': 11.709}

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

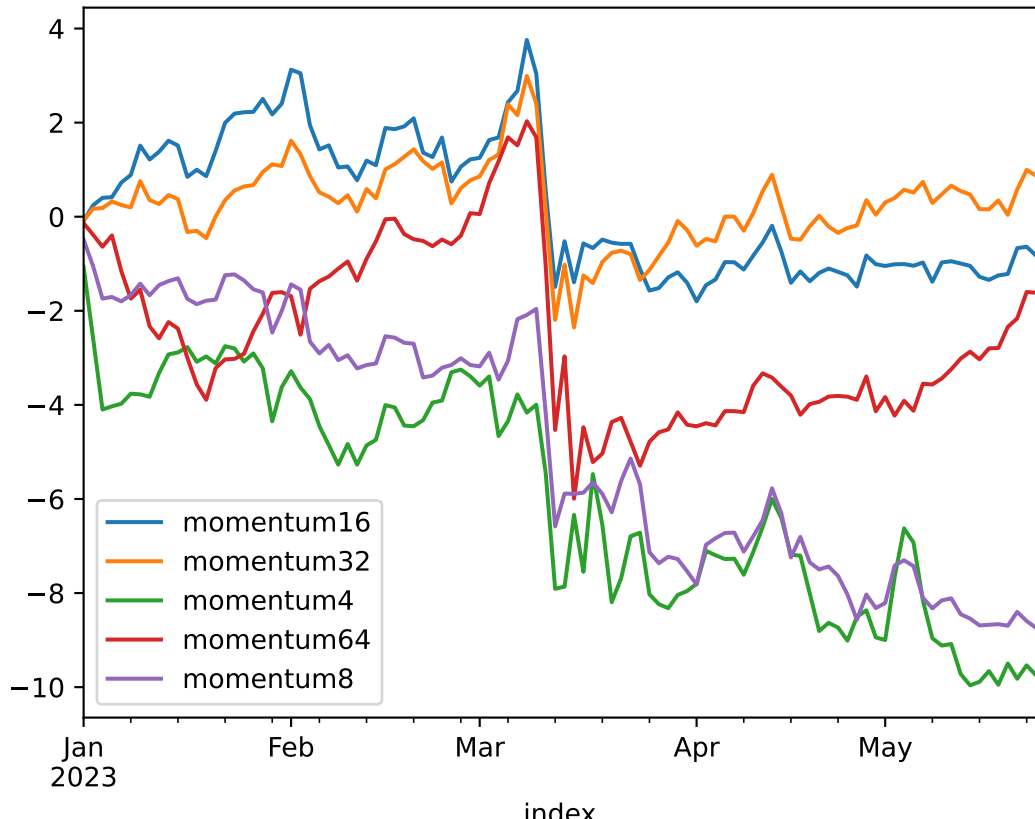


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': -2.077, 'momentum32': 2.189, 'momentum4': -24.47, 'momentum64': -4.055, 'momentum8': -21.937}

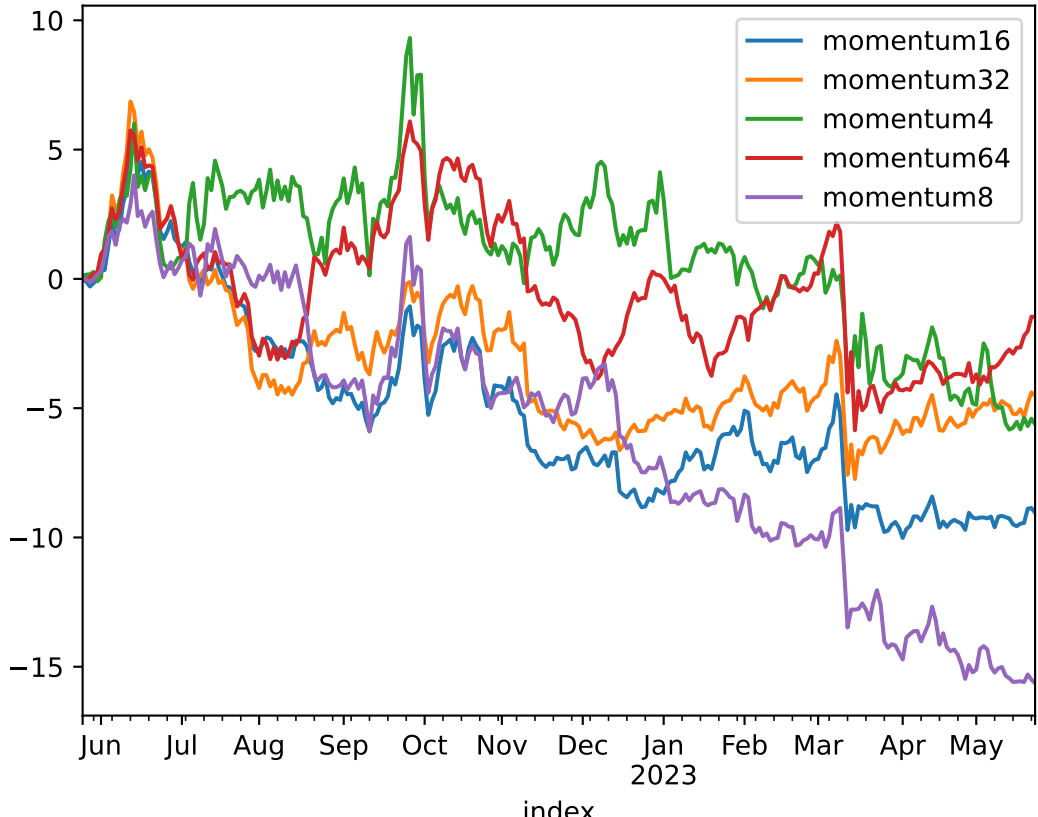
ann. std {'momentum16': 8.105, 'momentum32': 8.161, 'momentum4': 10.816, 'momentum64': 10.884, 'momentum8': 8.193}

ann. SR {'momentum16': -0.26, 'momentum32': 0.27, 'momentum4': -2.26, 'momentum64': -0.37, 'momentum8': -2.68}



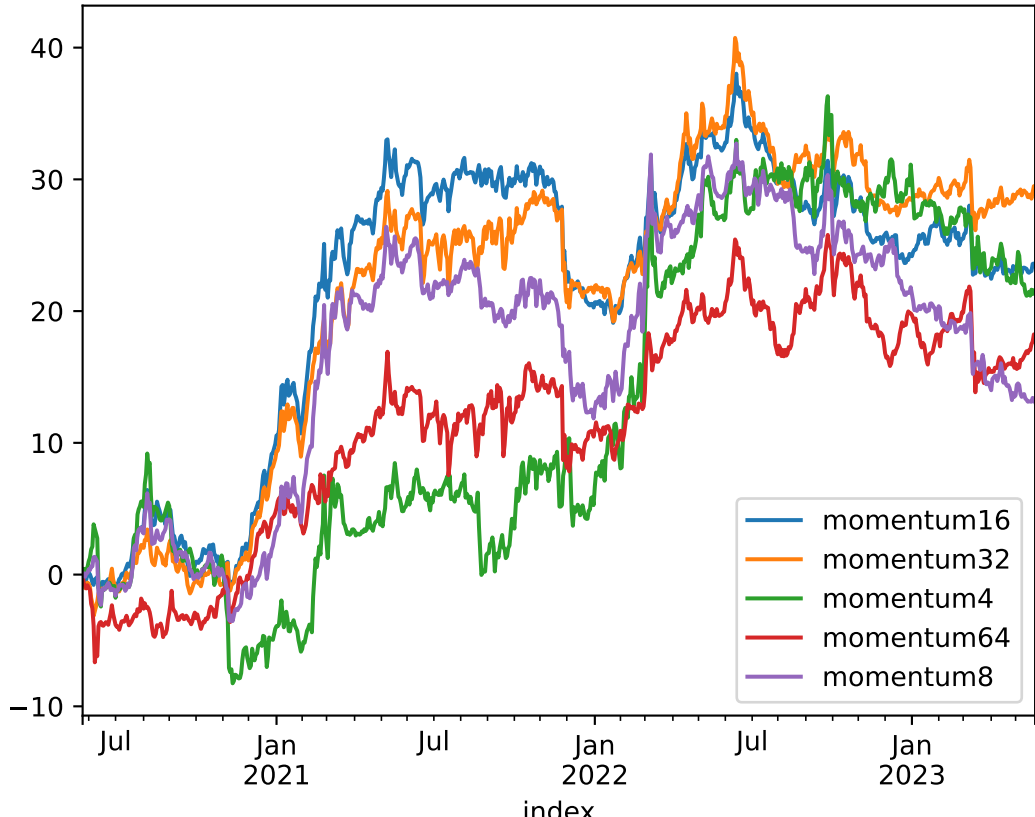
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -8.909, 'momentum32': -4.442, 'momentum4': -5.535, 'momentum64': -1.454, 'momentum8': -15.4}
ann. std {'momentum16': 8.459, 'momentum32': 8.76, 'momentum4': 13.148, 'momentum64': 10.125, 'momentum8': 9.668}
ann. SR {'momentum16': -1.05, 'momentum32': -0.51, 'momentum4': -0.42, 'momentum64': -0.14, 'momentum8': -1.59}



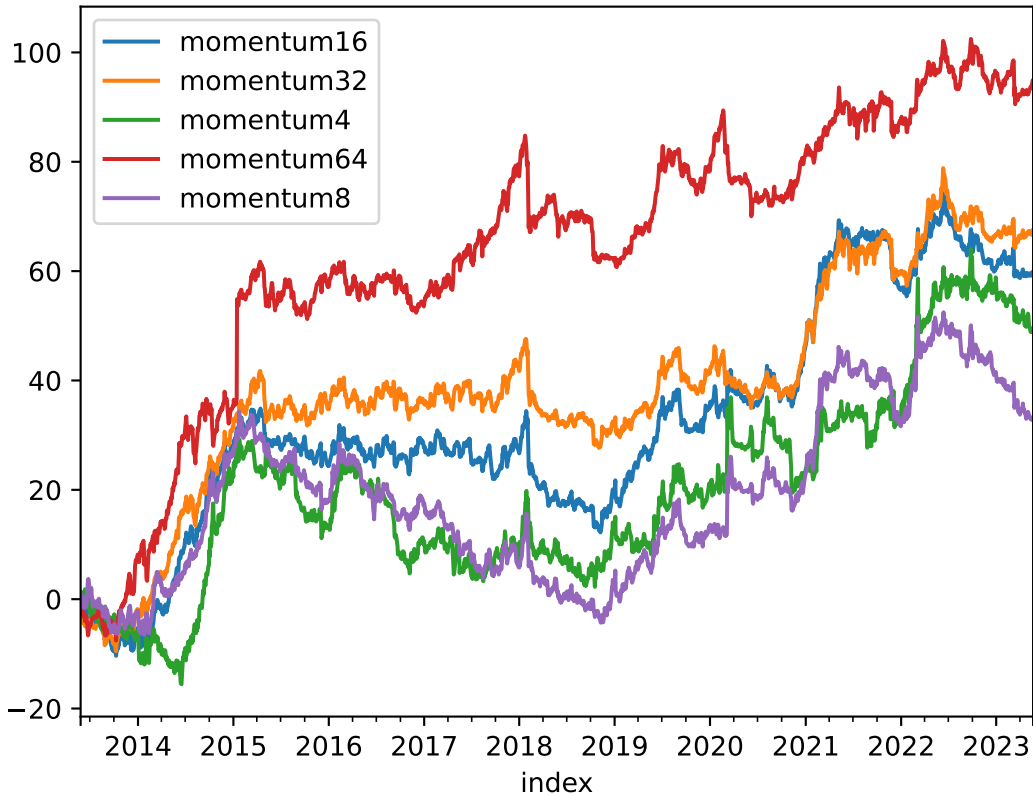
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 7.668, 'momentum32': 9.614, 'momentum4': 6.997, 'momentum64': 5.964, 'momentum8': 4.28}
ann. std {'momentum16': 10.12, 'momentum32': 10.37, 'momentum4': 14.692, 'momentum64': 10.81, 'momentum8': 11.435}
ann. SR {'momentum16': 0.76, 'momentum32': 0.93, 'momentum4': 0.48, 'momentum64': 0.55, 'momentum8': 0.37}



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

ann. mean {'momentum16': 5.862, 'momentum32': 6.625, 'momentum4': 4.823, 'momentum64': 9.32, 'momentum8': 3.223}
ann. std {'momentum16': 9.628, 'momentum32': 9.255, 'momentum4': 13.671, 'momentum64': 11.87, 'momentum8': 10.829}
ann. SR {'momentum16': 0.61, 'momentum32': 0.72, 'momentum4': 0.35, 'momentum64': 0.79, 'momentum8': 0.3}

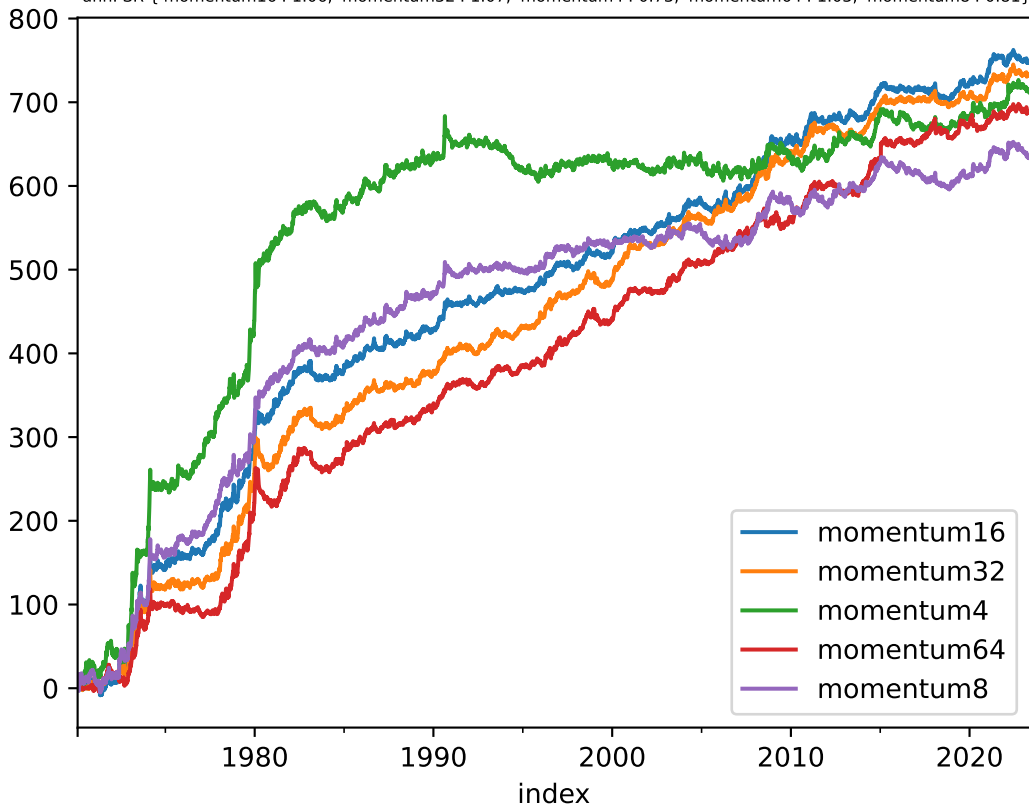


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.769, 'momentum32': 13.508, 'momentum4': 13.101, 'momentum64': 12.712, 'momentum8': 11.654}

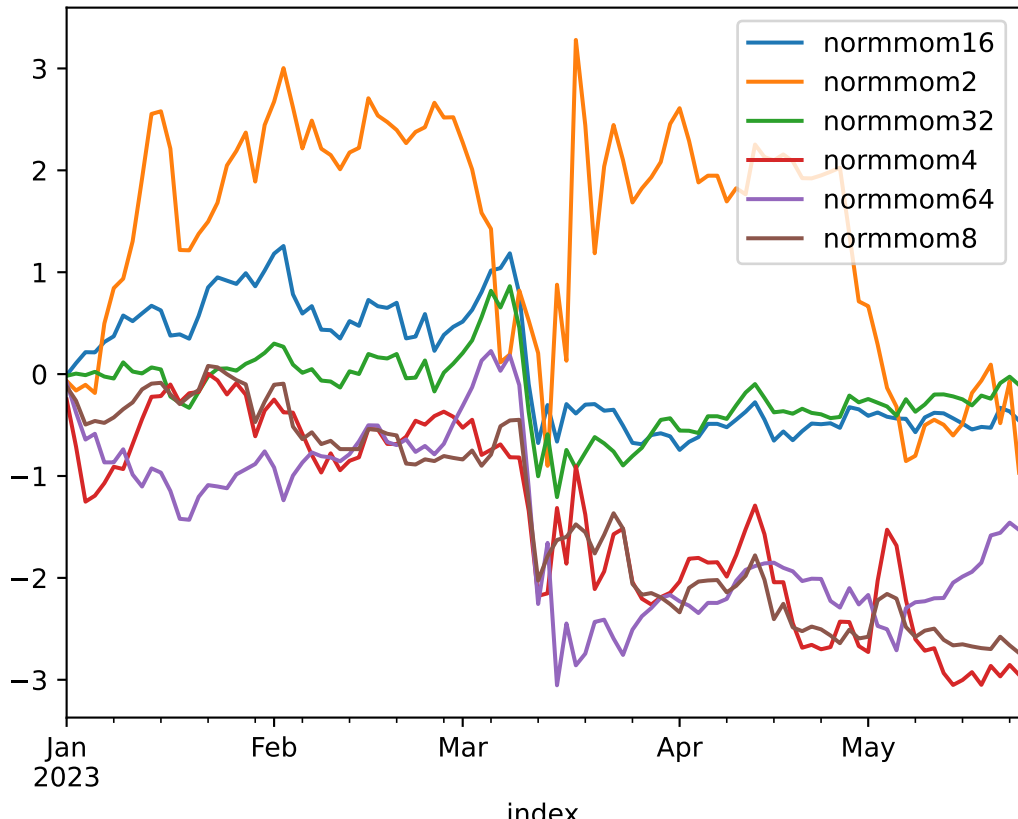
ann. std {'momentum16': 13.038, 'momentum32': 12.602, 'momentum4': 17.883, 'momentum64': 12.323, 'momentum8': 14.322}

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': -1.148, 'normmom2': -2.429, 'normmom32': -0.268, 'normmom4': -7.408, 'normmom64': -3.837, 'normmom8': -6.87}
 ann. std {'normmom16': 2.908, 'normmom2': 8.632, 'normmom32': 2.856, 'normmom4': 4.492, 'normmom64': 4.297, 'normmom8': 2.915}
 ann. SR {'normmom16': -0.39, 'normmom2': -0.28, 'normmom32': -0.09, 'normmom4': -1.65, 'normmom64': -0.89, 'normmom8': -2.36}

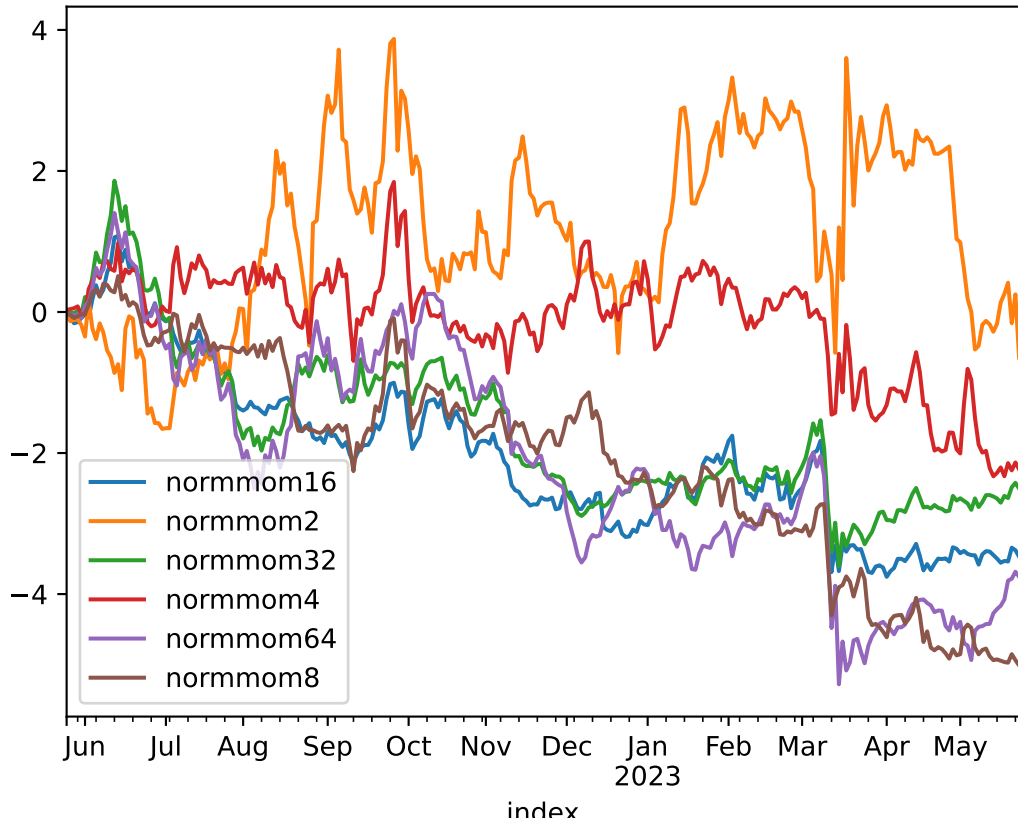


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -3.415, 'normmom2': -0.636, 'normmom32': -2.465, 'normmom4': -2.196, 'normmom64': -3.696, 'normmom8': -4.935}

ann. std {'normmom16': 2.521, 'normmom2': 7.509, 'normmom32': 2.818, 'normmom4': 4.329, 'normmom64': 3.822, 'normmom8': 2.871}

ann. SR {'normmom16': -1.35, 'normmom2': -0.08, 'normmom32': -0.87, 'normmom4': -0.51, 'normmom64': -0.97, 'normmom8': -1.72}

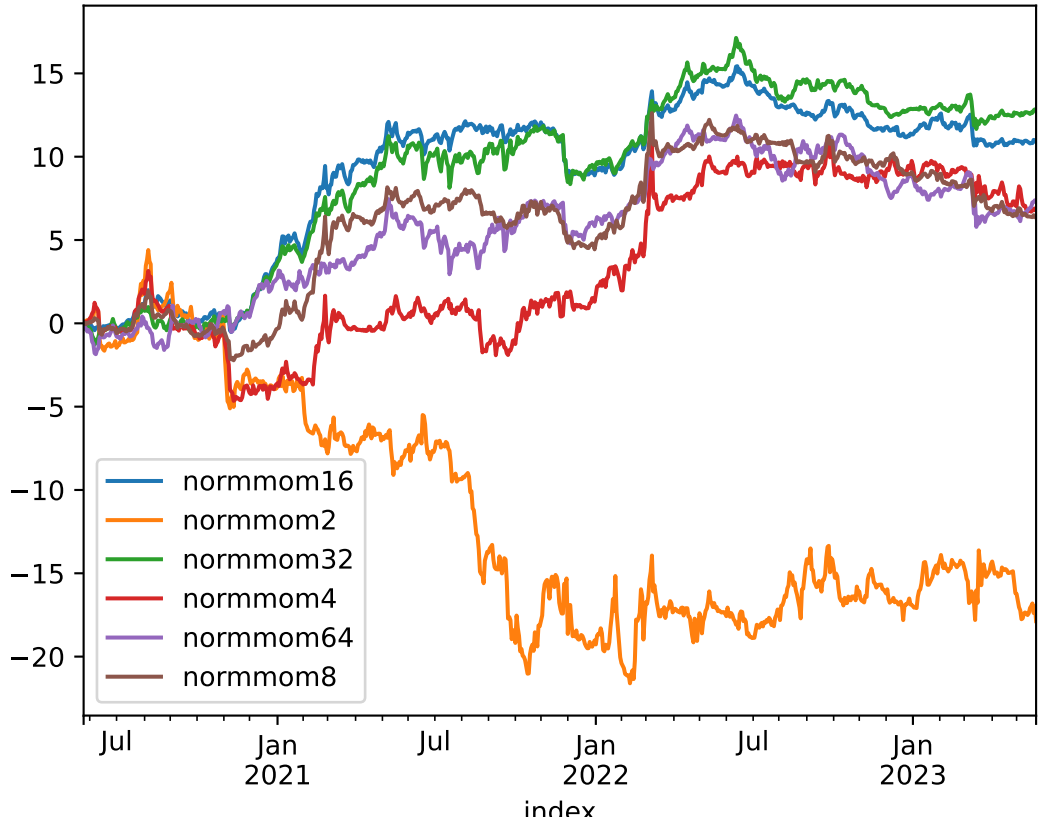


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.563, 'normmom2': -5.85, 'normmom32': 4.178, 'normmom4': 2.225, 'normmom64': 2.394, 'normmom8': 2.073}

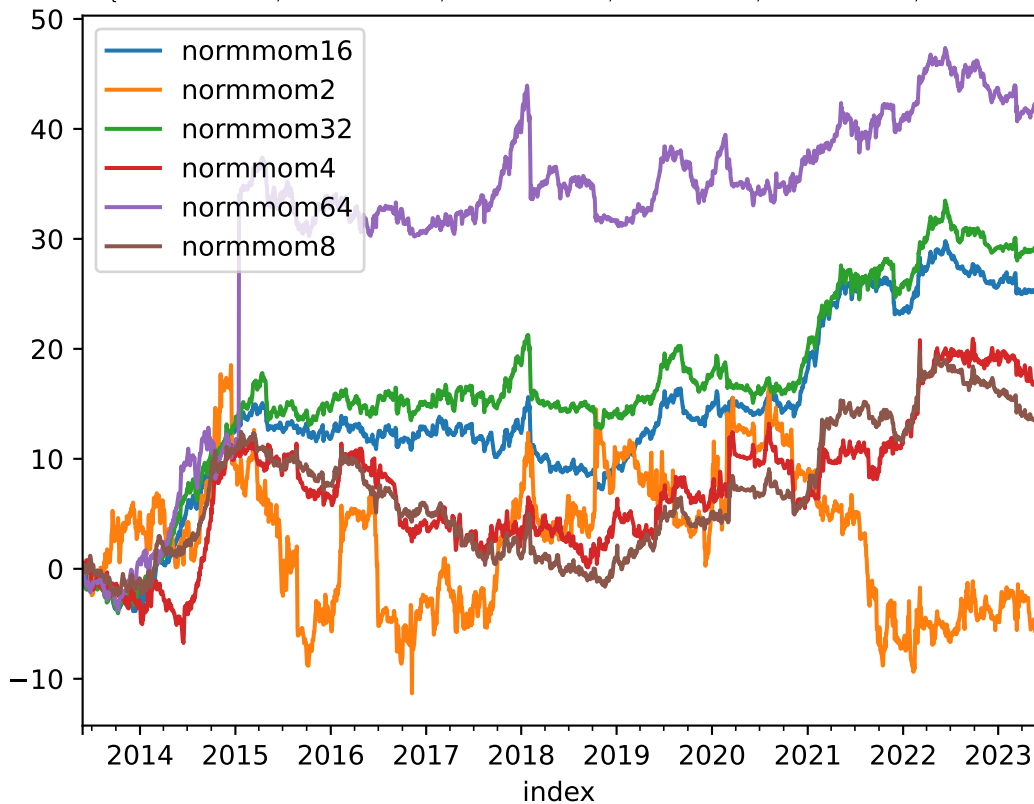
ann. std {'normmom16': 3.507, 'normmom2': 8.663, 'normmom32': 3.874, 'normmom4': 5.412, 'normmom64': 4.255, 'normmom8': 3.938}

ann. SR {'normmom16': 1.02, 'normmom2': -0.68, 'normmom32': 1.08, 'normmom4': 0.41, 'normmom64': 0.56, 'normmom8': 0.53}



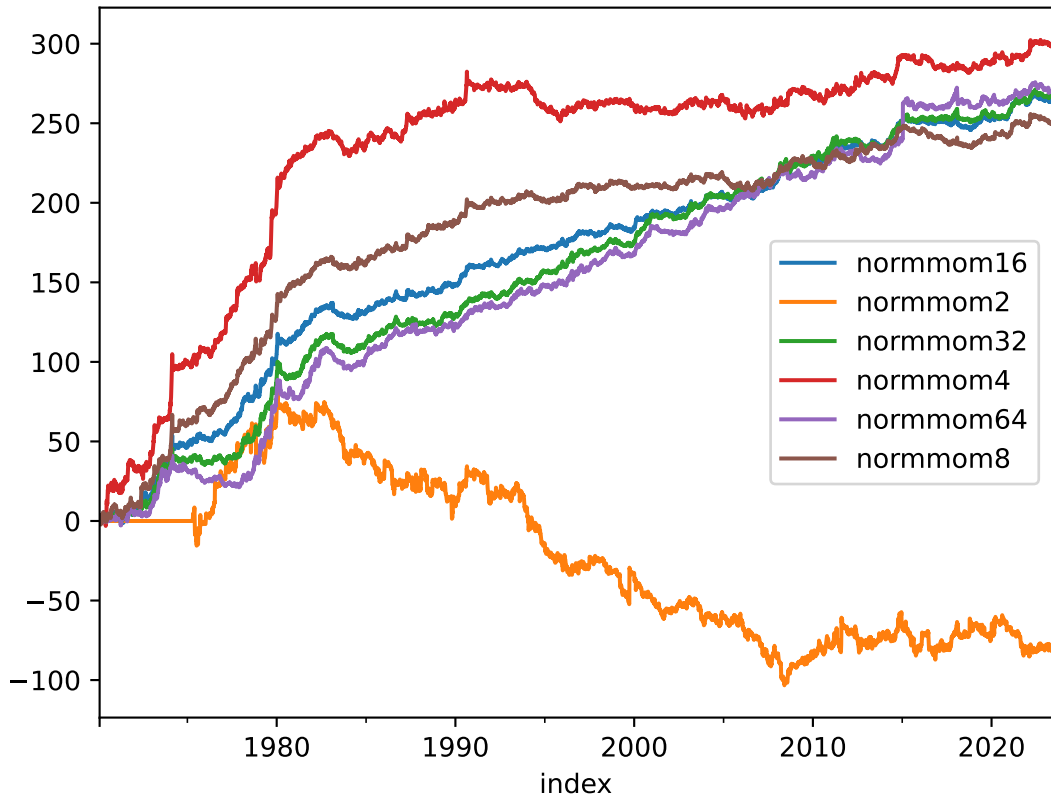
Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.48, 'normmom2': -0.554, 'normmom32': 2.86, 'normmom4': 1.654, 'normmom64': 4.145, 'normmom8': 1.324}
ann. std {'normmom16': 3.456, 'normmom2': 10.314, 'normmom32': 3.615, 'normmom4': 5.446, 'normmom64': 8.274, 'normmom8': 3.872}
ann. SR {'normmom16': 0.72, 'normmom2': -0.05, 'normmom32': 0.79, 'normmom4': 0.3, 'normmom64': 0.5, 'normmom8': 0.34}



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

ann. mean {'normmom16': 4.856, 'normmom2': -1.5, 'normmom32': 4.914, 'normmom4': 5.492, 'normmom64': 4.983, 'normmom8': 4.594}
ann. std {'normmom16': 4.529, 'normmom2': 11.604, 'normmom32': 4.606, 'normmom4': 7.381, '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}

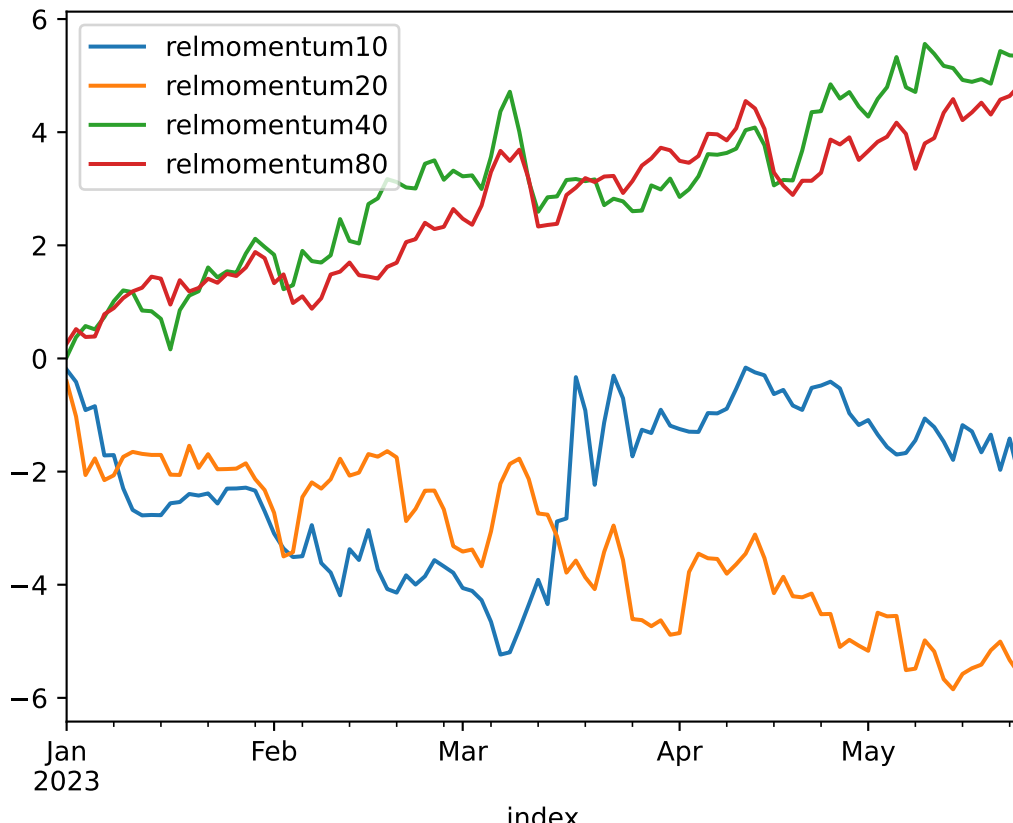


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -5.253, 'relmomentum20': -13.995, 'relmomentum40': 13.423, 'relmomentum80': 12.096}

ann. std {'relmomentum10': 7.728, 'relmomentum20': 6.451, 'relmomentum40': 5.338, 'relmomentum80': 4.374}

ann. SR {'relmomentum10': -0.68, 'relmomentum20': -2.17, 'relmomentum40': 2.51, 'relmomentum80': 2.77}

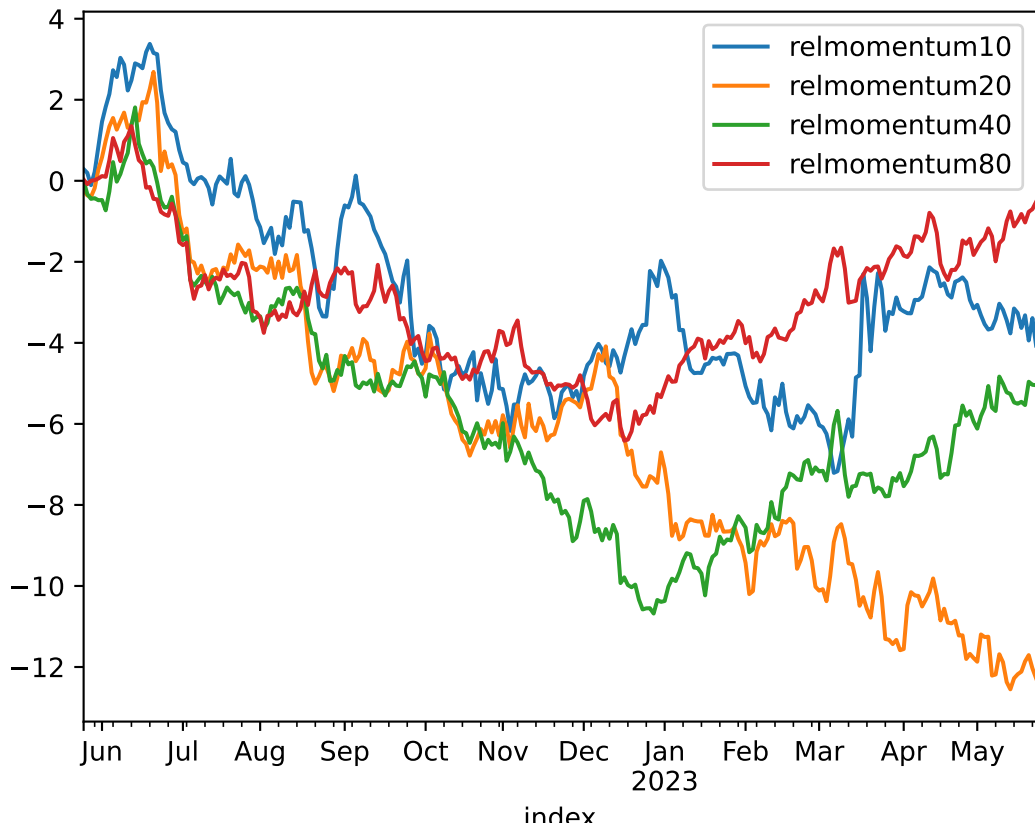


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -4.003, 'relmomentum20': -12.089, 'relmomentum40': -4.967, 'relmomentum80': -0.513}

ann. std {'relmomentum10': 7.224, 'relmomentum20': 6.315, 'relmomentum40': 5.274, 'relmomentum80': 4.567}

ann. SR {'relmomentum10': -0.55, 'relmomentum20': -1.91, 'relmomentum40': -0.94, 'relmomentum80': -0.11}

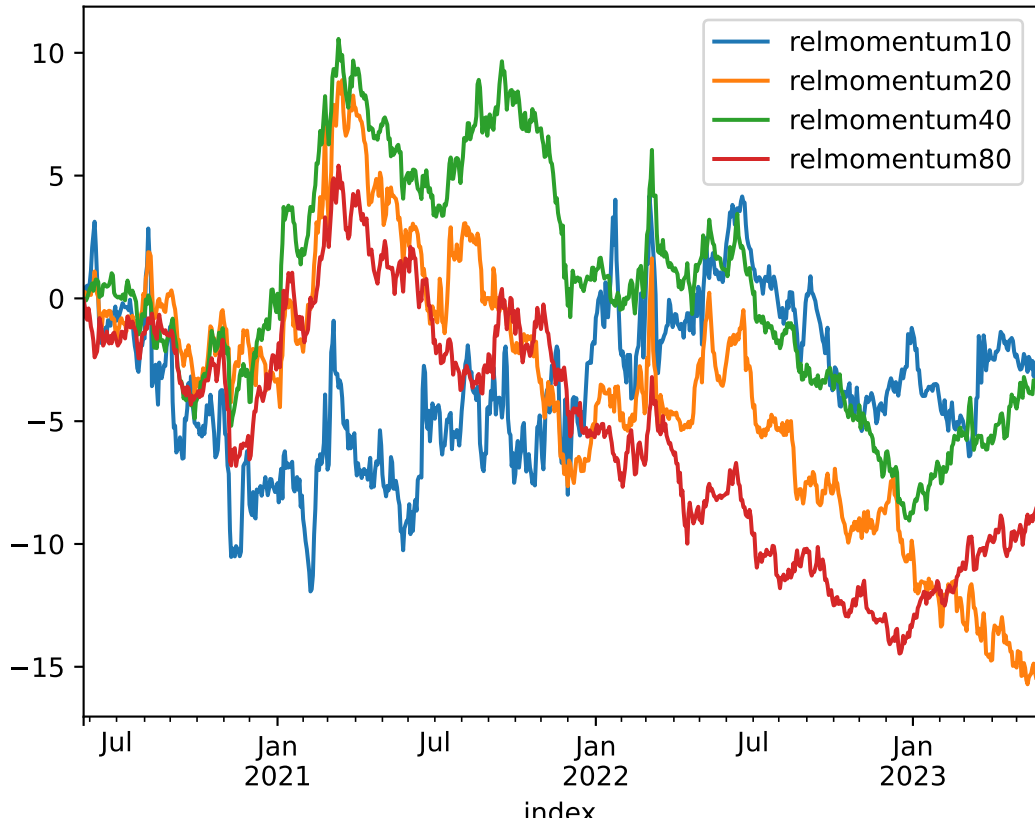


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -1.078, 'relmomentum20': -5.055, 'relmomentum40': -1.117, 'relmomentum80': -2.805}

ann. std {'relmomentum10': 11.931, 'relmomentum20': 8.373, 'relmomentum40': 6.973, 'relmomentum80': 6.319}

ann. SR {'relmomentum10': -0.09, 'relmomentum20': -0.6, 'relmomentum40': -0.16, 'relmomentum80': -0.44}

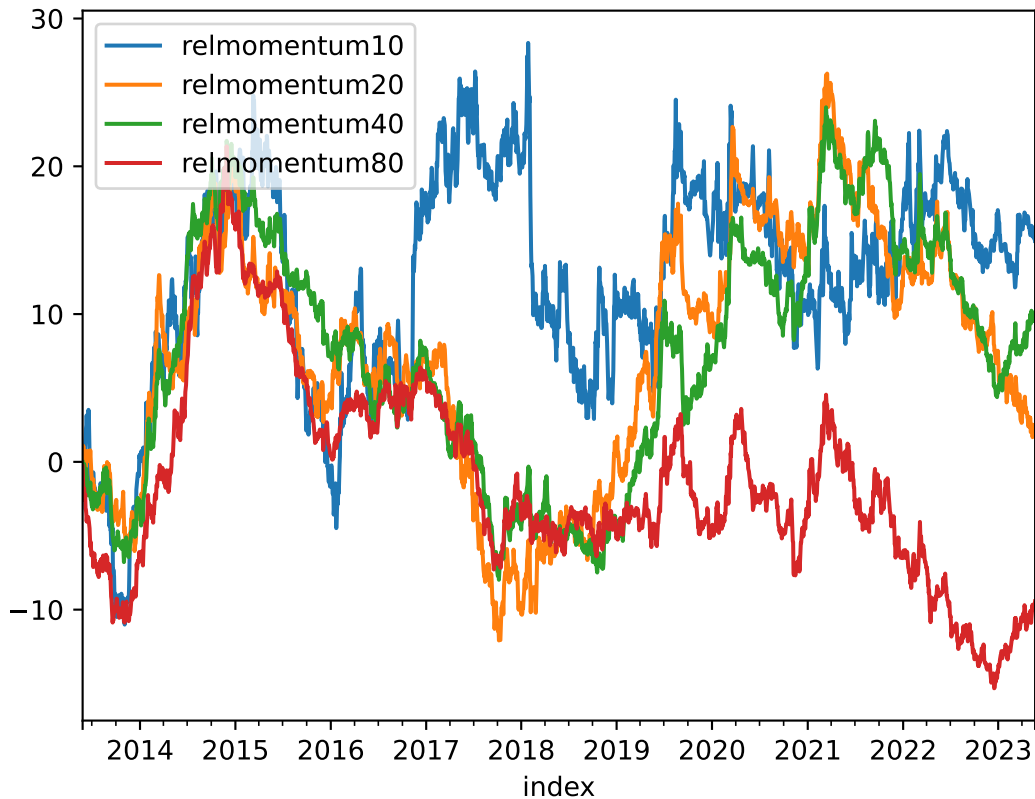


Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': 1.468, 'relmomentum20': 0.191, 'relmomentum40': 0.983, 'relmomentum80': -0.926}

ann. std {'relmomentum10': 13.373, 'relmomentum20': 8.534, 'relmomentum40': 6.993, 'relmomentum80': 6.351}

ann. SR {'relmomentum10': 0.11, 'relmomentum20': 0.02, 'relmomentum40': 0.14, 'relmomentum80': -0.15}

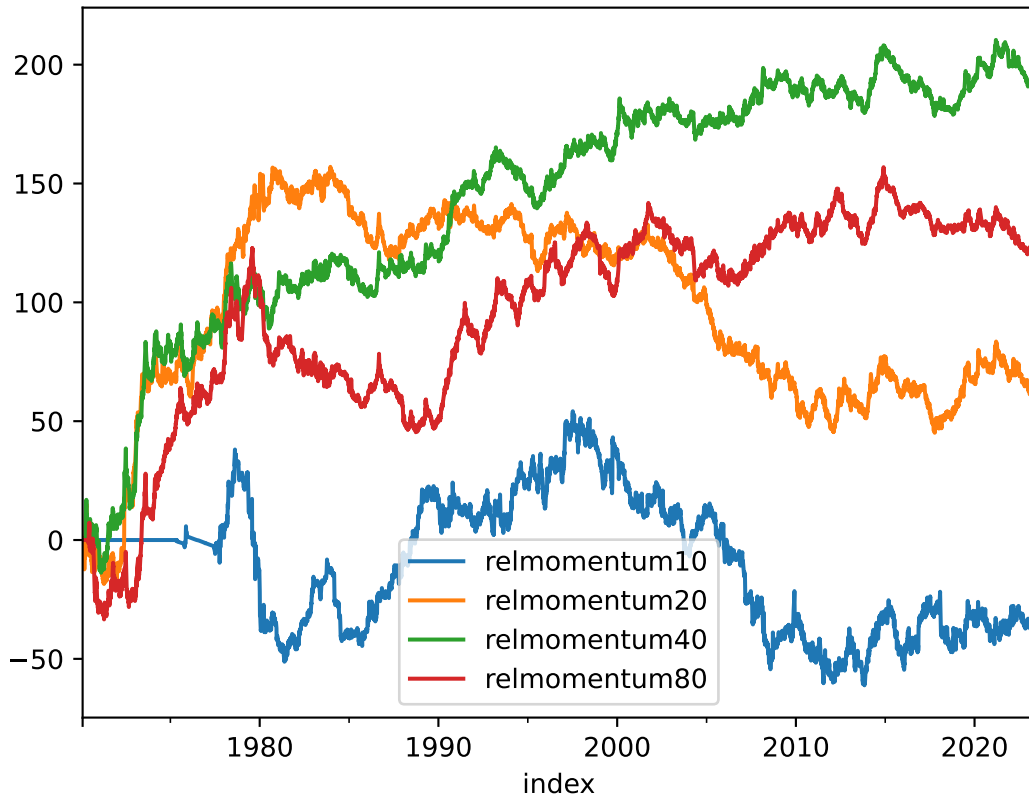


Total Trading Rule P&L for period '99Y'

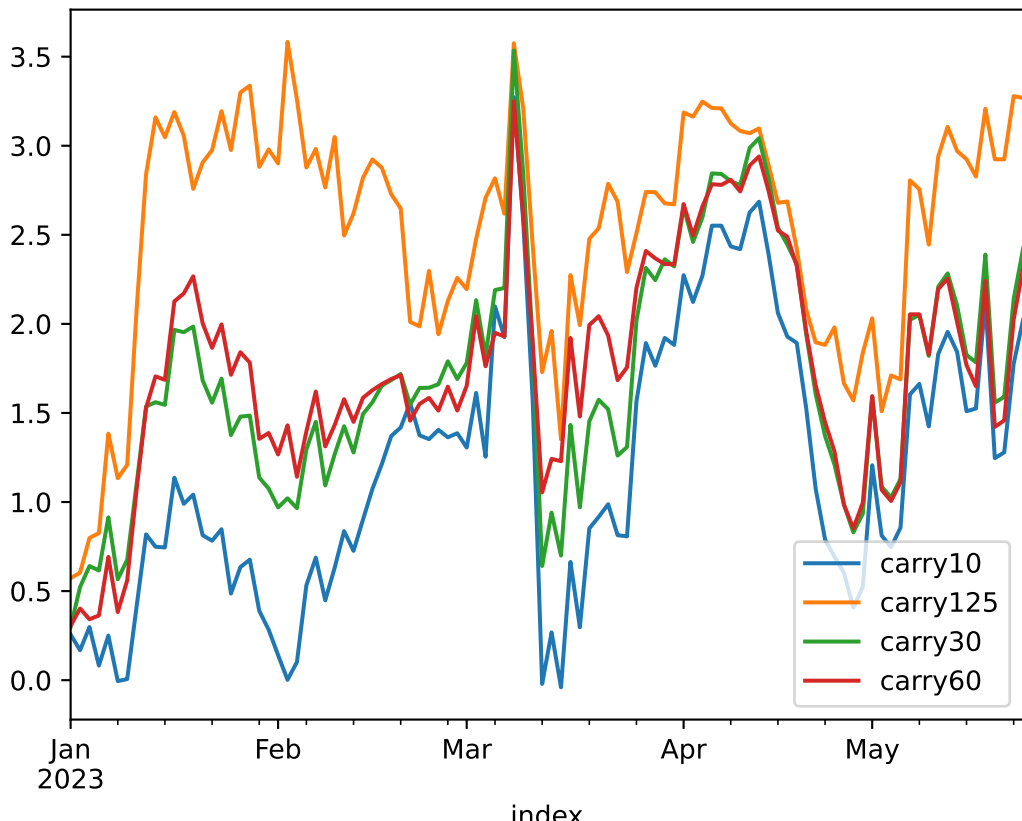
ann. mean {'relmomentum10': -0.648, 'relmomentum20': 1.089, 'relmomentum40': 3.616, 'relmomentum80': 2.321}

ann. std {'relmomentum10': 13.381, 'relmomentum20': 10.464, 'relmomentum40': 9.634, 'relmomentum80': 9.778}

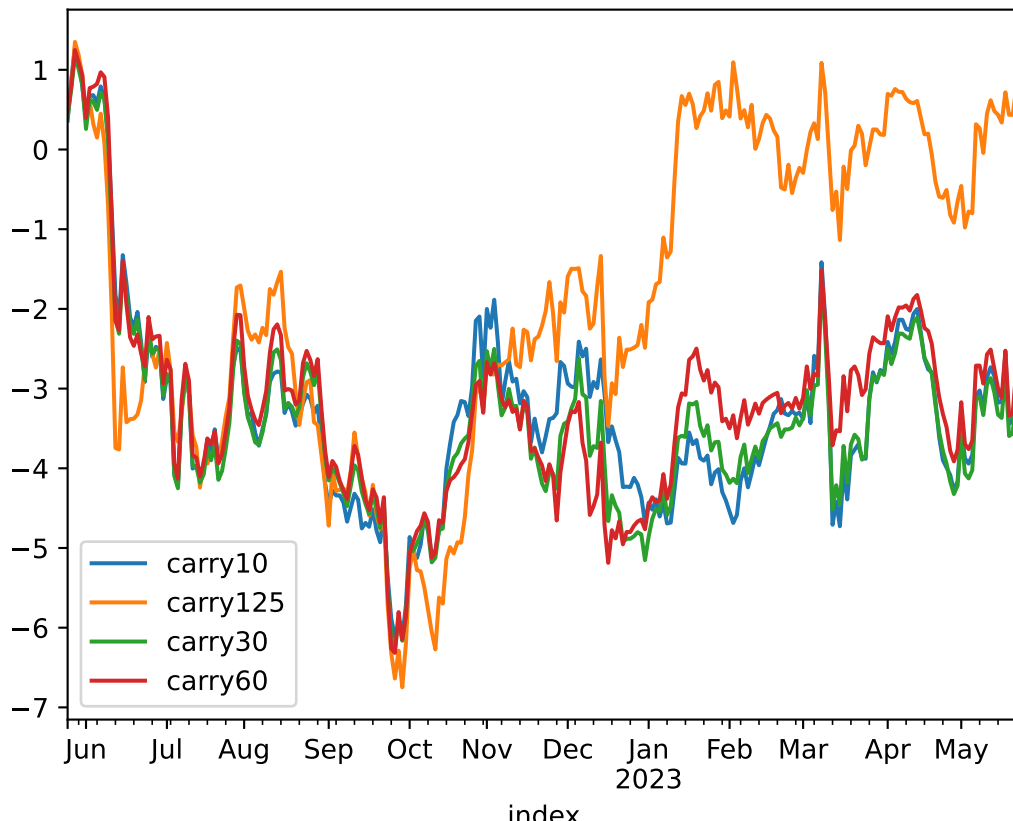
ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.1, 'relmomentum40': 0.38, 'relmomentum80': 0.24}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 5.077, 'carry125': 8.202, 'carry30': 6.08, 'carry60': 5.809}
ann. std {'carry10': 6.027, 'carry125': 5.516, 'carry30': 5.685, 'carry60': 5.259}
ann. SR {'carry10': 0.84, 'carry125': 1.49, 'carry30': 1.07, 'carry60': 1.1}



Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -2.623, 'carry125': 0.767, 'carry30': -2.688, 'carry60': -2.413}
ann. std {'carry10': 5.978, 'carry125': 6.355, 'carry30': 5.947, 'carry60': 5.894}
ann. SR {'carry10': -0.44, 'carry125': 0.12, 'carry30': -0.45, 'carry60': -0.41}

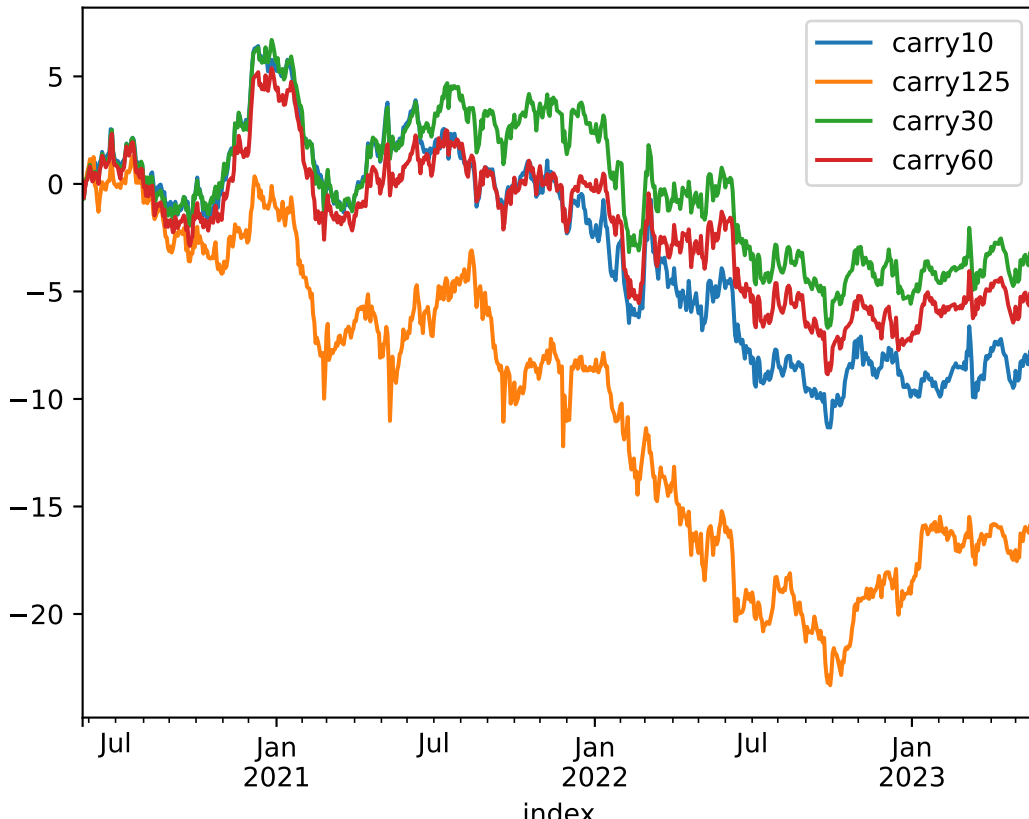


Total Trading Rule P&L for period '3Y'

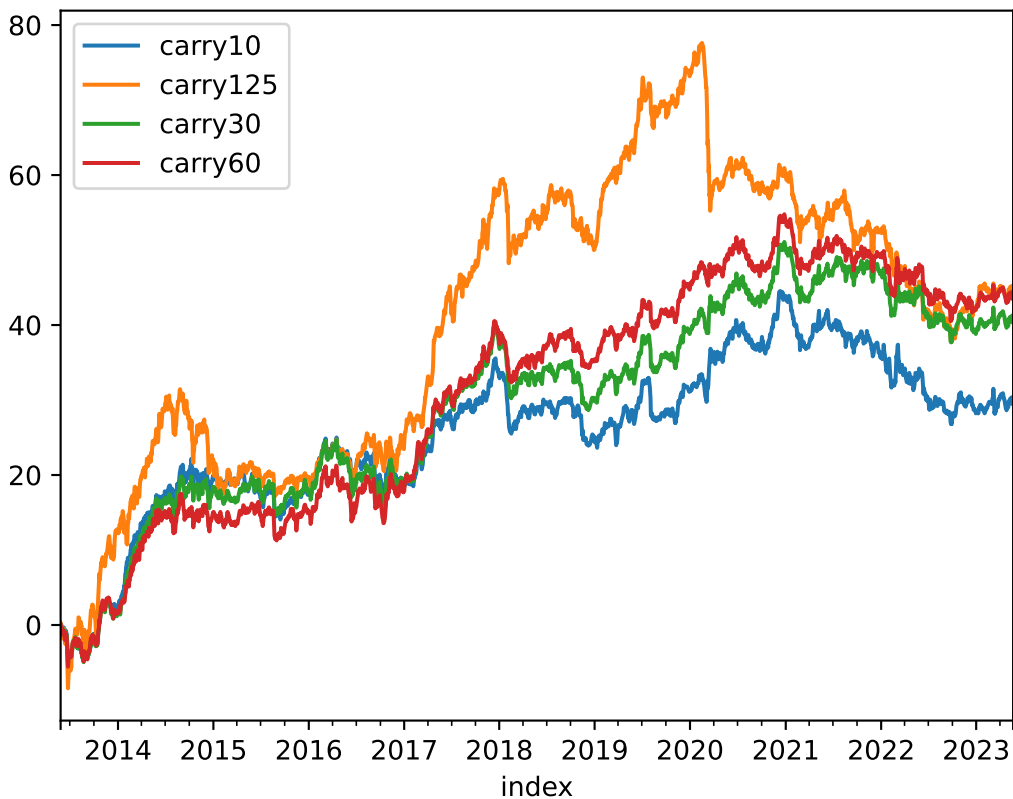
ann. mean {'carry10': -2.577, 'carry125': -5.168, 'carry30': -1.032, 'carry60': -1.633}

ann. std {'carry10': 6.564, 'carry125': 8.013, 'carry30': 6.503, 'carry60': 6.499}

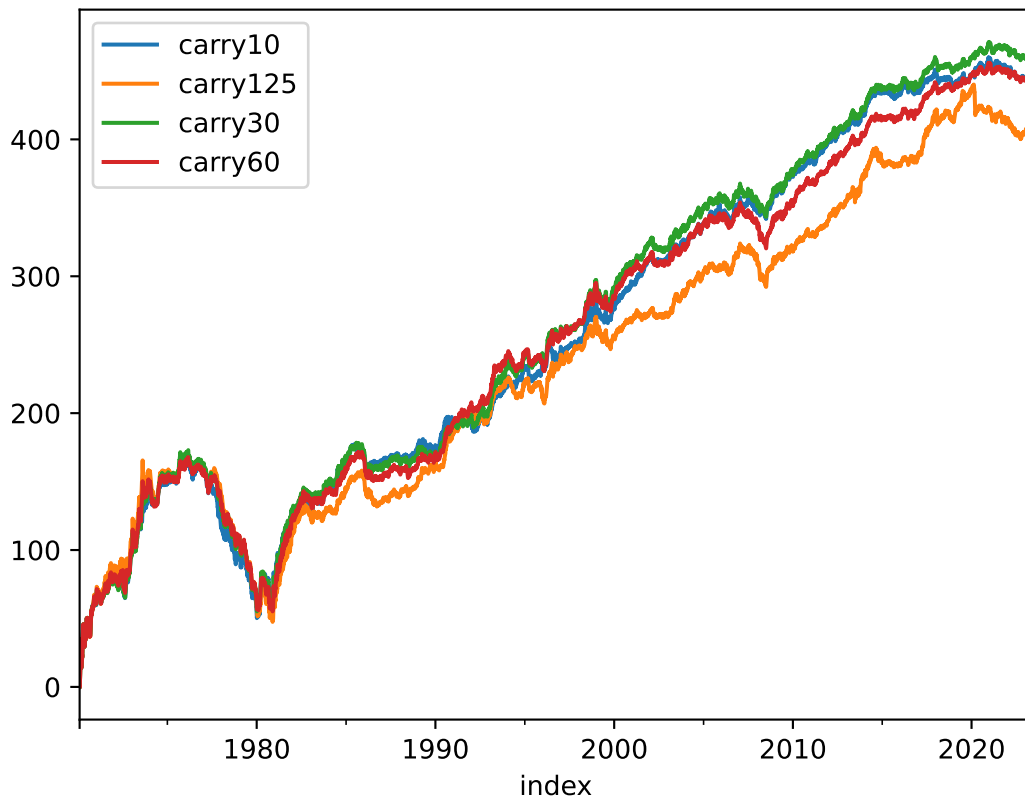
ann. SR {'carry10': -0.39, 'carry125': -0.64, 'carry30': -0.16, 'carry60': -0.25}



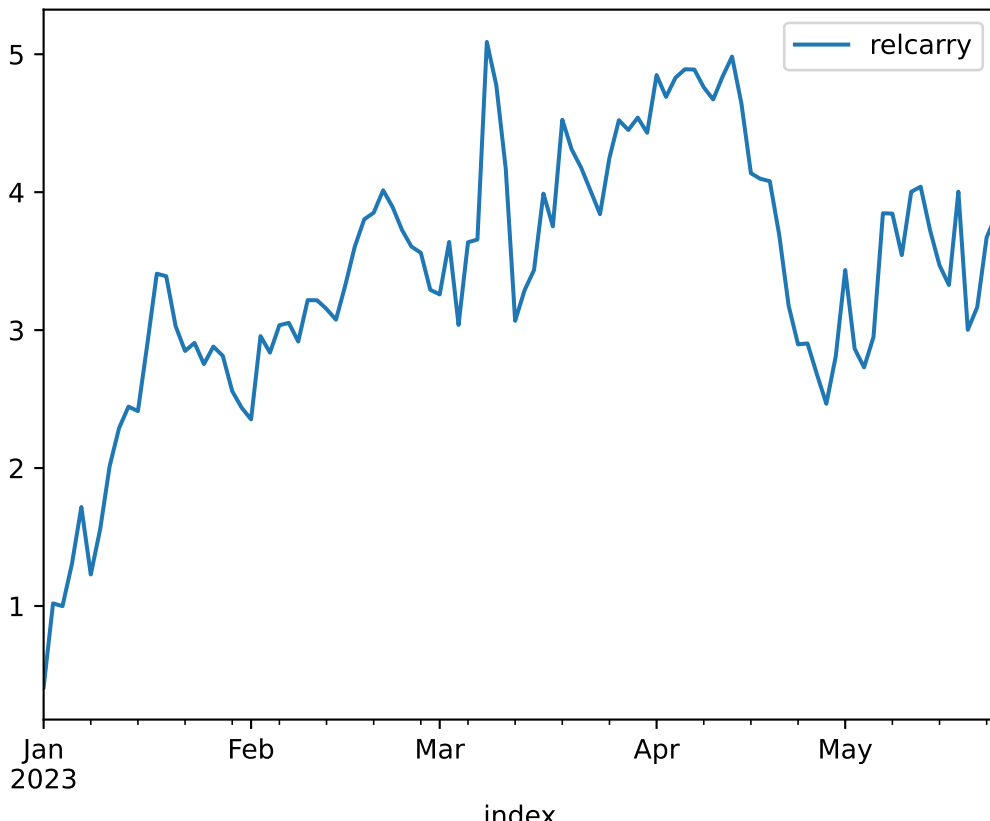
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 2.97, 'carry125': 4.443, 'carry30': 4.049, 'carry60': 4.36}
ann. std {'carry10': 6.377, 'carry125': 8.94, 'carry30': 6.462, 'carry60': 6.406}
ann. SR {'carry10': 0.47, 'carry125': 0.5, 'carry30': 0.63, 'carry60': 0.68}



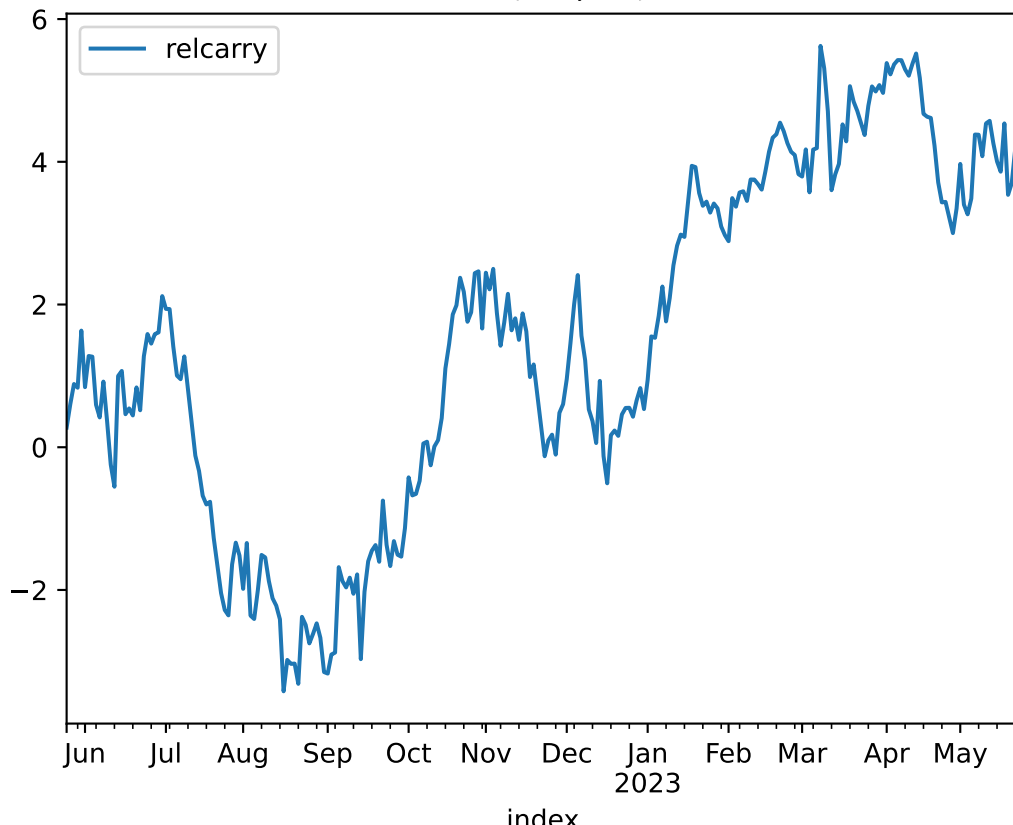
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 8.204, 'carry125': 7.505, 'carry30': 8.493, 'carry60': 8.204}
ann. std {'carry10': 11.196, 'carry125': 11.552, 'carry30': 11.253, 'carry60': 11.256}
ann. SR {'carry10': 0.73, 'carry125': 0.65, 'carry30': 0.75, 'carry60': 0.73}



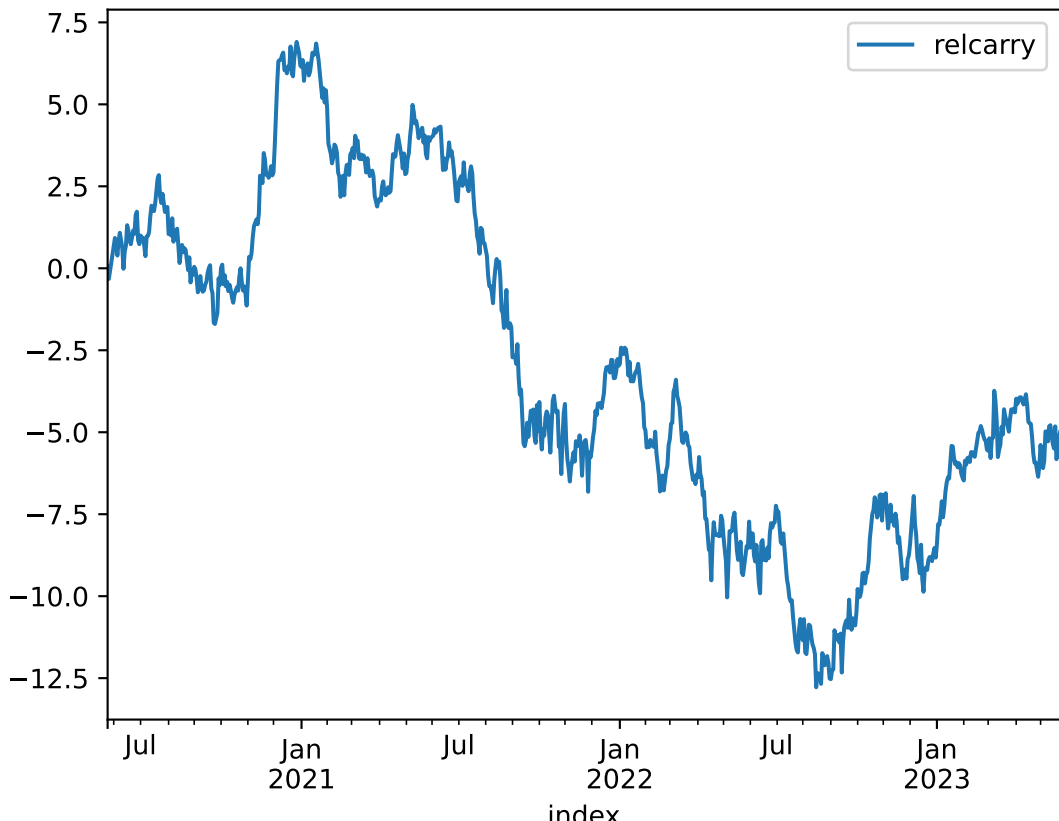
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 9.622}
ann. std {'relcarry': 6.007}
ann. SR {'relcarry': 1.6}



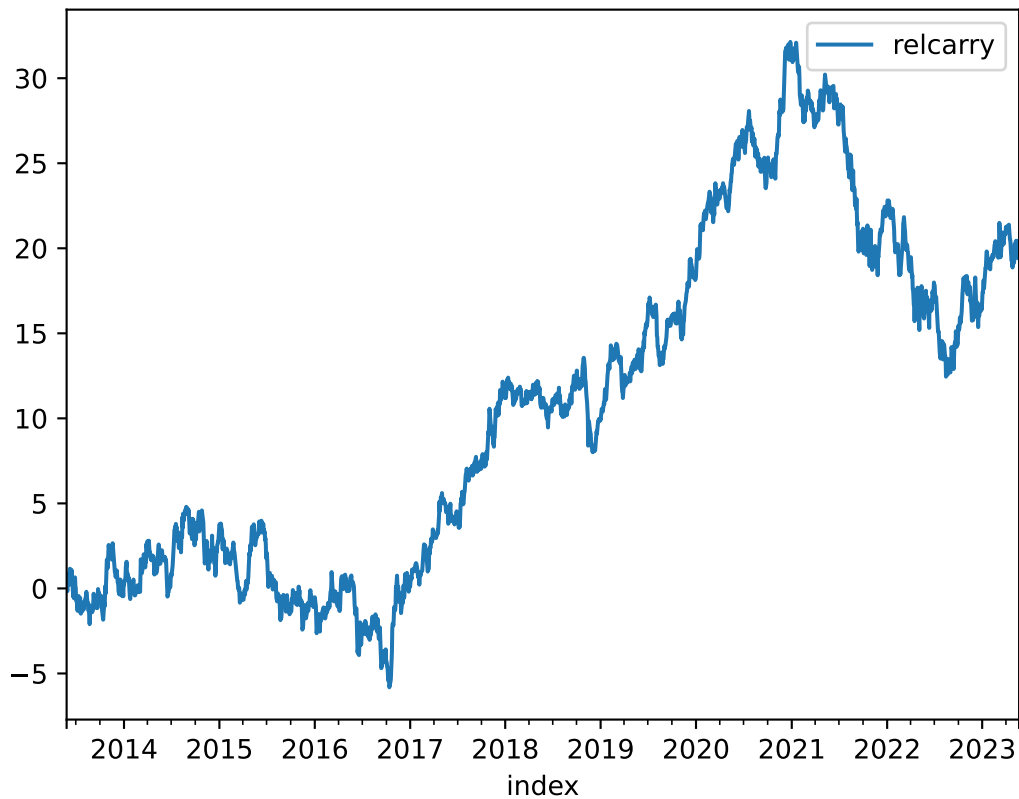
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': 4.301}
ann. std {'relcarry': 6.806}
ann. SR {'relcarry': 0.63}



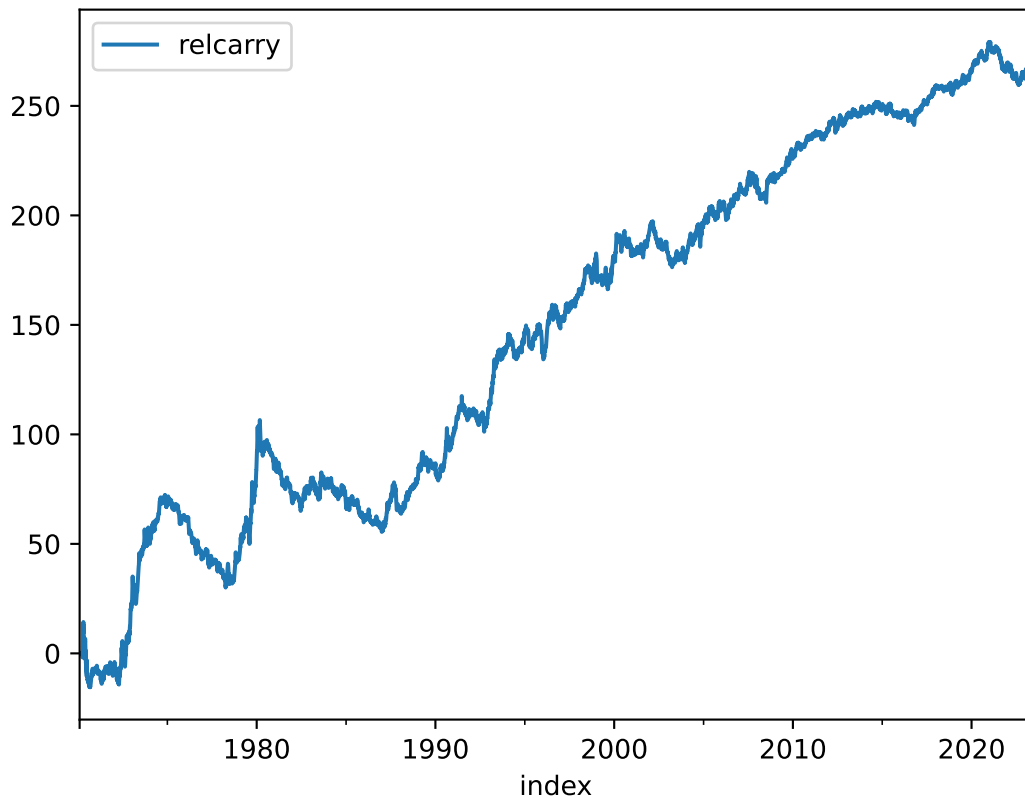
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -1.634}
ann. std {'relcarry': 6.716}
ann. SR {'relcarry': -0.24}



Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 1.987}
ann. std {'relcarry': 5.83}
ann. SR {'relcarry': 0.34}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 4.921}
ann. std {'relcarry': 8.958}
ann. SR {'relcarry': 0.55}

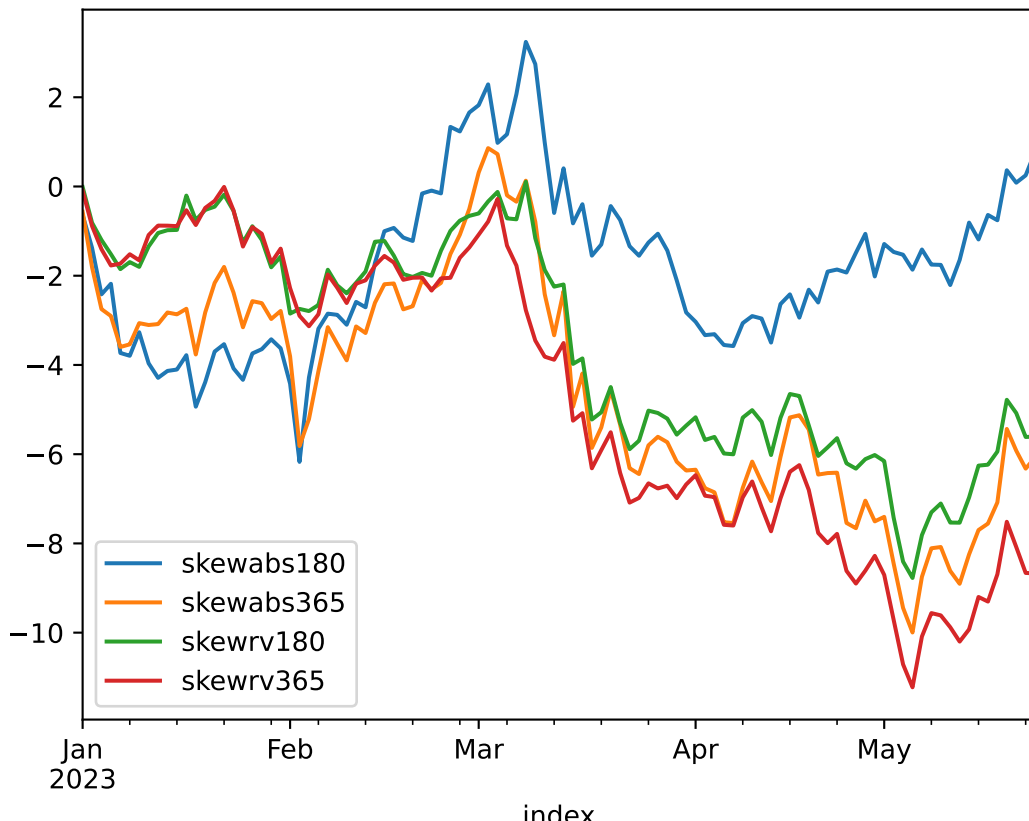


Total Trading Rule P&L for period 'YTD'

ann. mean {'skewabs180': 1.955, 'skewabs365': -15.246, 'skewrv180': -14.068, 'skewrv365': -21.761}

ann. std {'skewabs180': 10.963, 'skewabs365': 11.721, 'skewrv180': 8.518, 'skewrv365': 8.475}

ann. SR {'skewabs180': 0.18, 'skewabs365': -1.3, 'skewrv180': -1.65, 'skewrv365': -2.57}

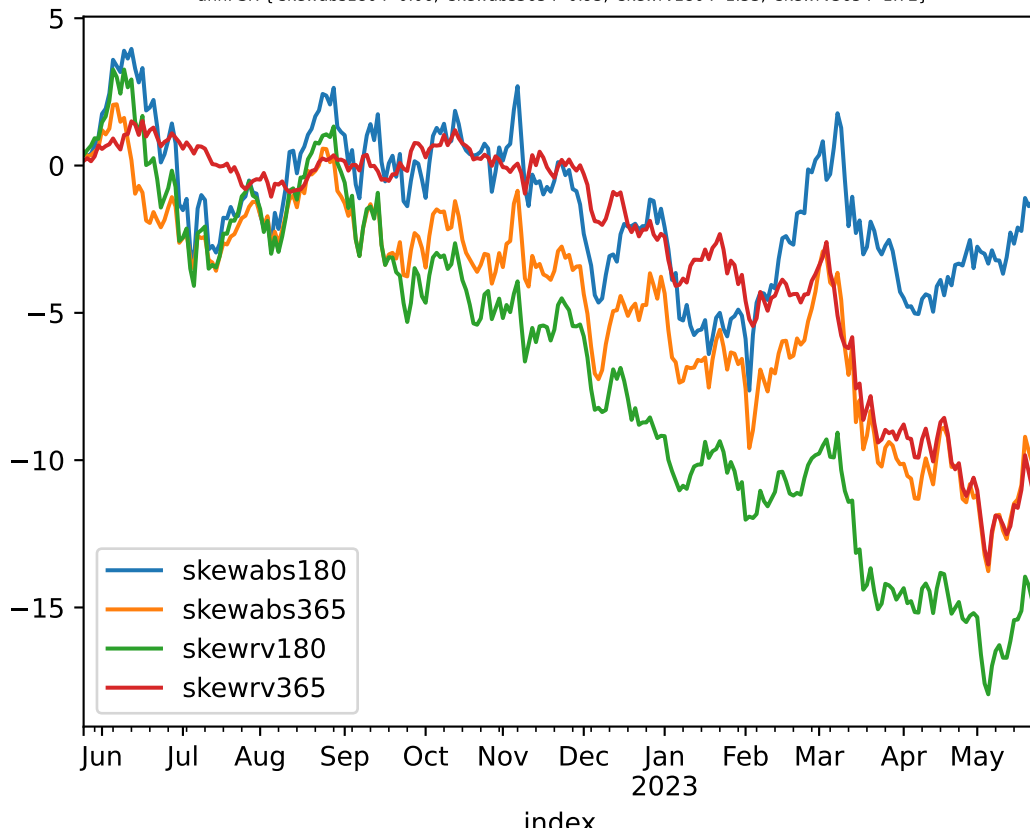


Total Trading Rule P&L for period '1Y'

ann. mean {'skewabs180': -0.676, 'skewabs365': -9.695, 'skewrv180': -14.551, 'skewrv365': -10.819}

ann. std {'skewabs180': 11.103, 'skewabs365': 10.167, 'skewrv180': 9.496, 'skewrv365': 6.29}

ann. SR {'skewabs180': -0.06, 'skewabs365': -0.95, 'skewrv180': -1.53, 'skewrv365': -1.72}

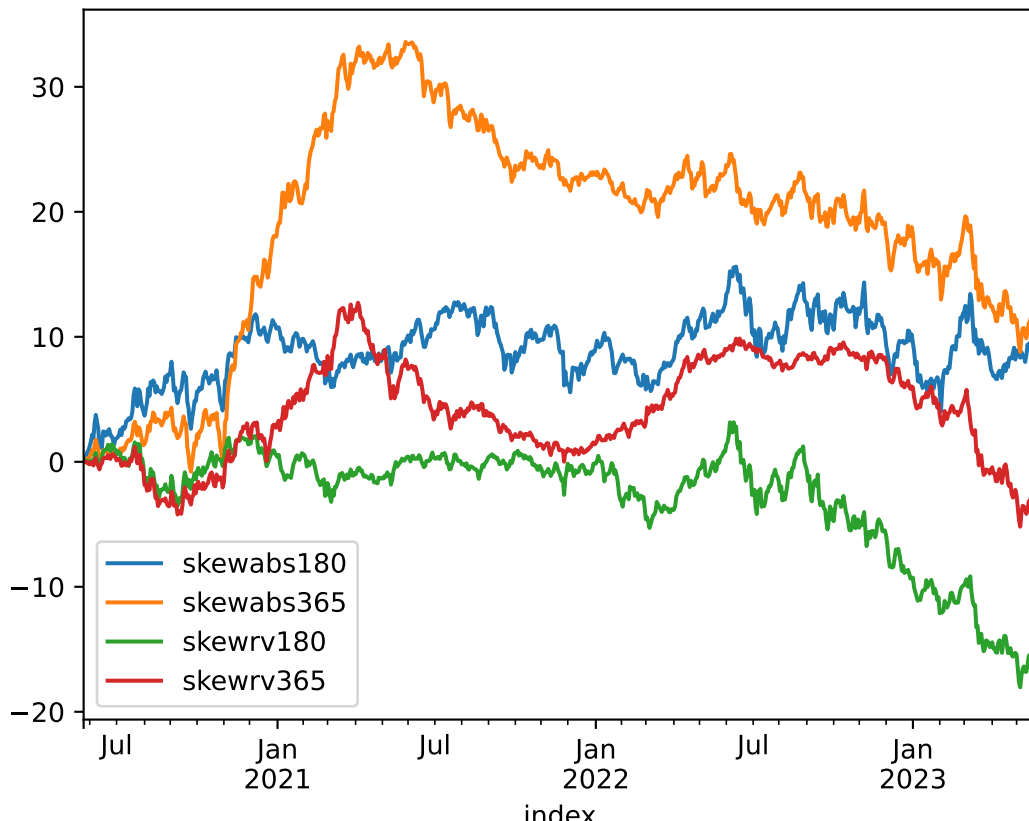


Total Trading Rule P&L for period '3Y'

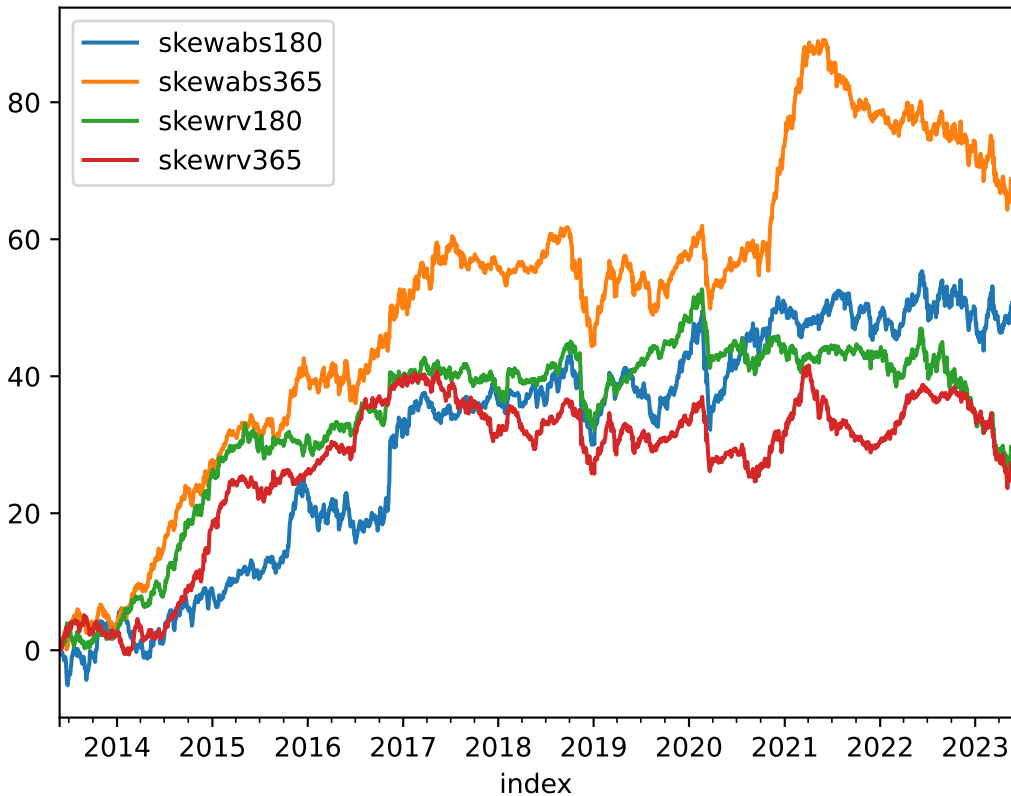
ann. mean {'skewabs180': 3.591, 'skewabs365': 4.162, 'skewrv180': -4.869, 'skewrv365': -0.863}

ann. std {'skewabs180': 9.154, 'skewabs365': 9.051, 'skewrv180': 7.381, 'skewrv365': 6.518}

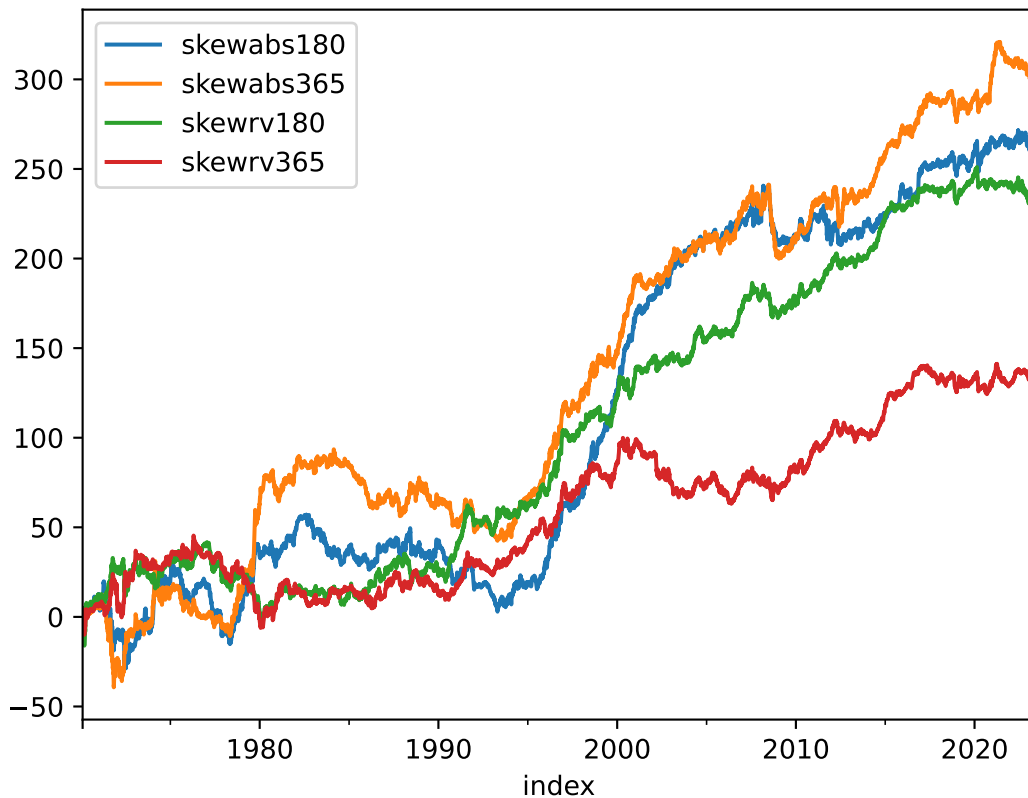
ann. SR {'skewabs180': 0.39, 'skewabs365': 0.46, 'skewrv180': -0.66, 'skewrv365': -0.13}



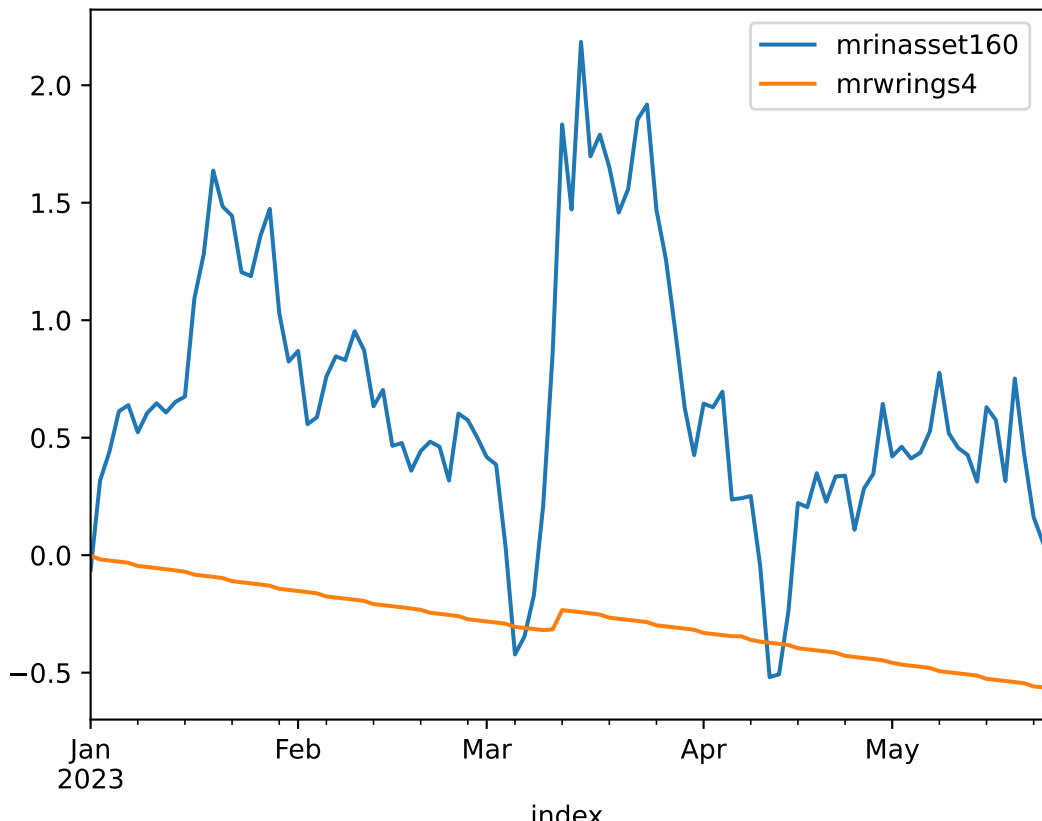
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.977, 'skewabs365': 6.699, 'skewrv180': 2.839, 'skewrv365': 2.575}
ann. std {'skewabs180': 8.036, 'skewabs365': 7.987, 'skewrv180': 6.434, 'skewrv365': 6.097}
ann. SR {'skewabs180': 0.62, 'skewabs365': 0.84, 'skewrv180': 0.44, 'skewrv365': 0.42}



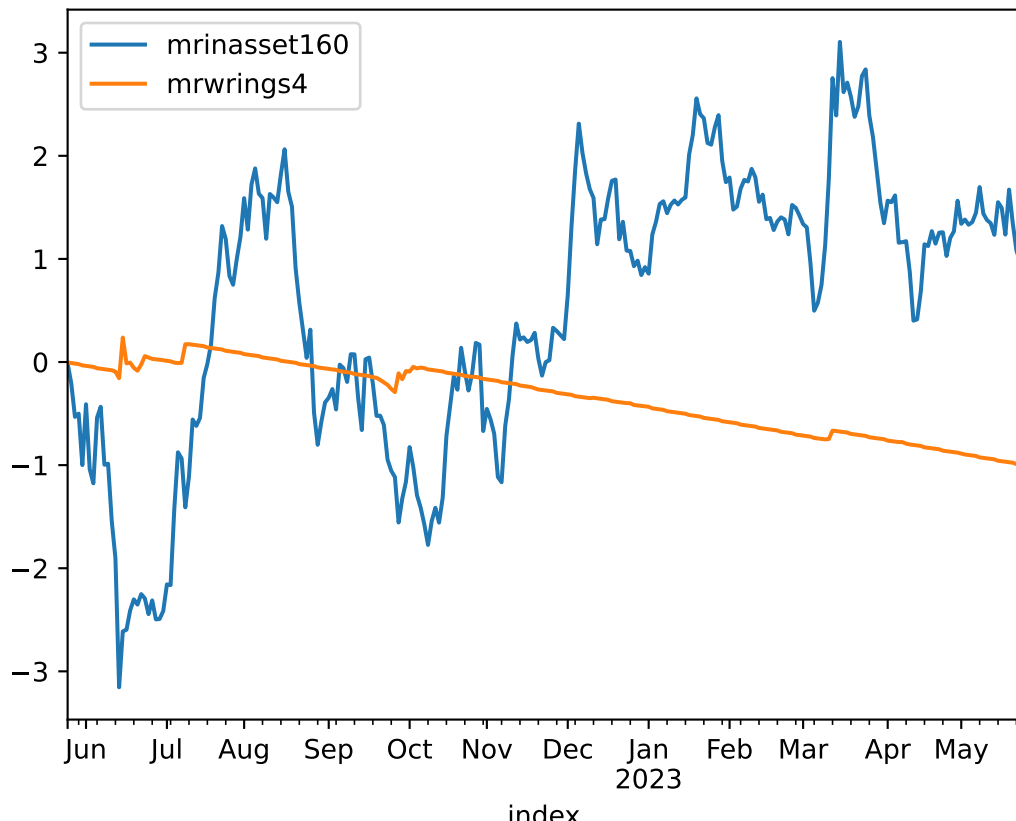
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.914, 'skewabs365': 5.523, 'skewrv180': 4.184, 'skewrv365': 2.318}
ann. std {'skewabs180': 10.098, 'skewabs365': 9.872, 'skewrv180': 8.752, 'skewrv365': 8.128}
ann. SR {'skewabs180': 0.49, 'skewabs365': 0.56, 'skewrv180': 0.48, 'skewrv365': 0.29}



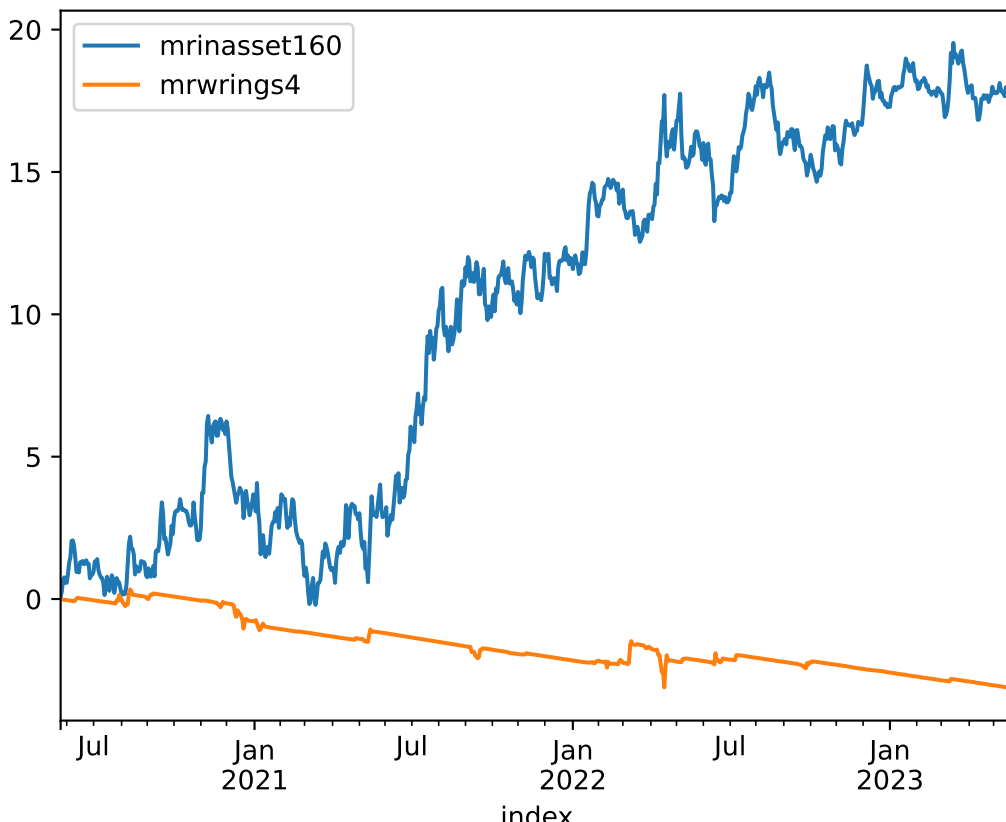
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 0.132, 'mrwrings4': -1.411}
ann. std {'mrinasset160': 4.086, 'mrwrings4': 0.152}
ann. SR {'mrinasset160': 0.03, 'mrwrings4': -9.29}



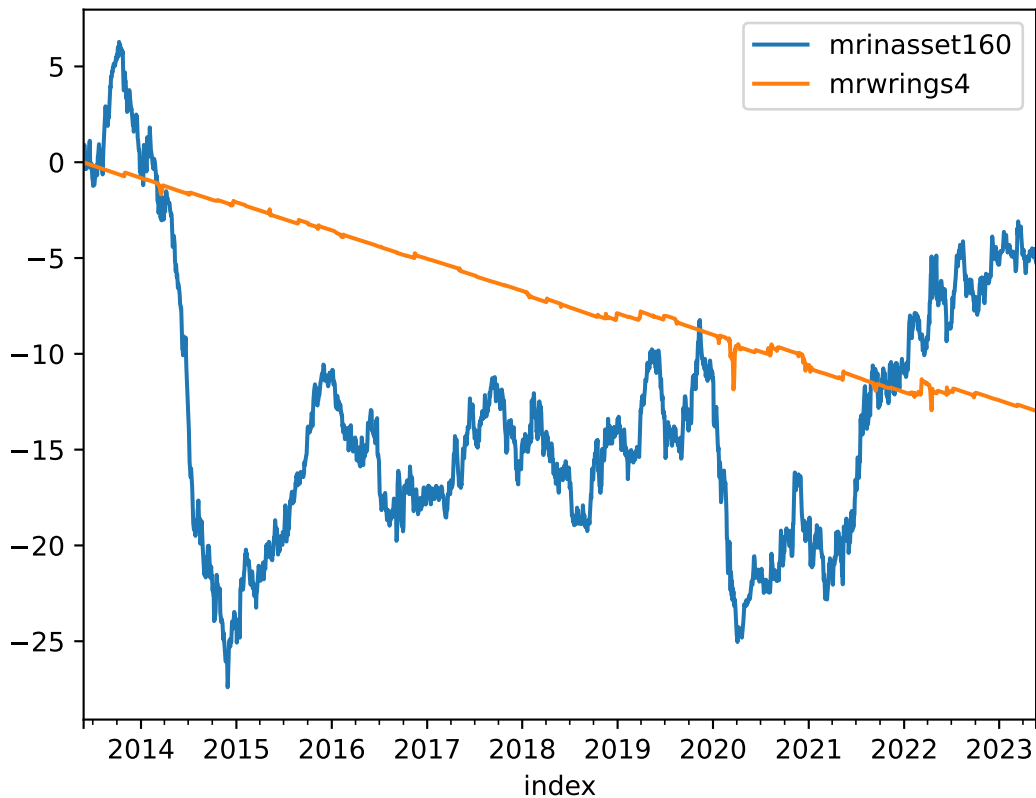
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 0.958, 'mrwrings4': -0.978}
ann. std {'mrinasset160': 4.773, 'mrwrings4': 0.574}
ann. SR {'mrinasset160': 0.2, 'mrwrings4': -1.7}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 5.696, 'mrwrings4': -1.027}
ann. std {'mrinasset160': 6.271, 'mrwrings4': 1.017}
ann. SR {'mrinasset160': 0.91, 'mrwrings4': -1.01}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.512, 'mrwrings4': -1.275}
ann. std {'mrinasset160': 6.182, 'mrwrings4': 0.879}
ann. SR {'mrinasset160': -0.08, 'mrwrings4': -1.45}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.573, 'mrwrings4': -2.184}
ann. std {'mrinasset160': 9.862, 'mrwrings4': 2.086}
ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.05}

