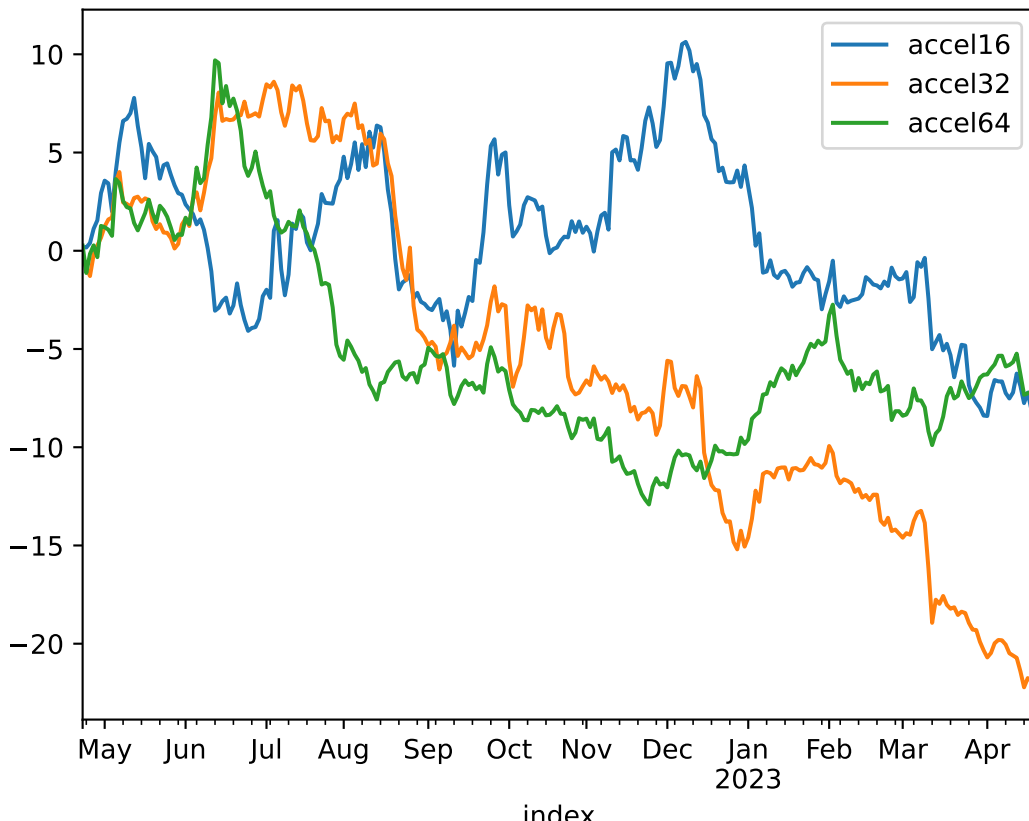


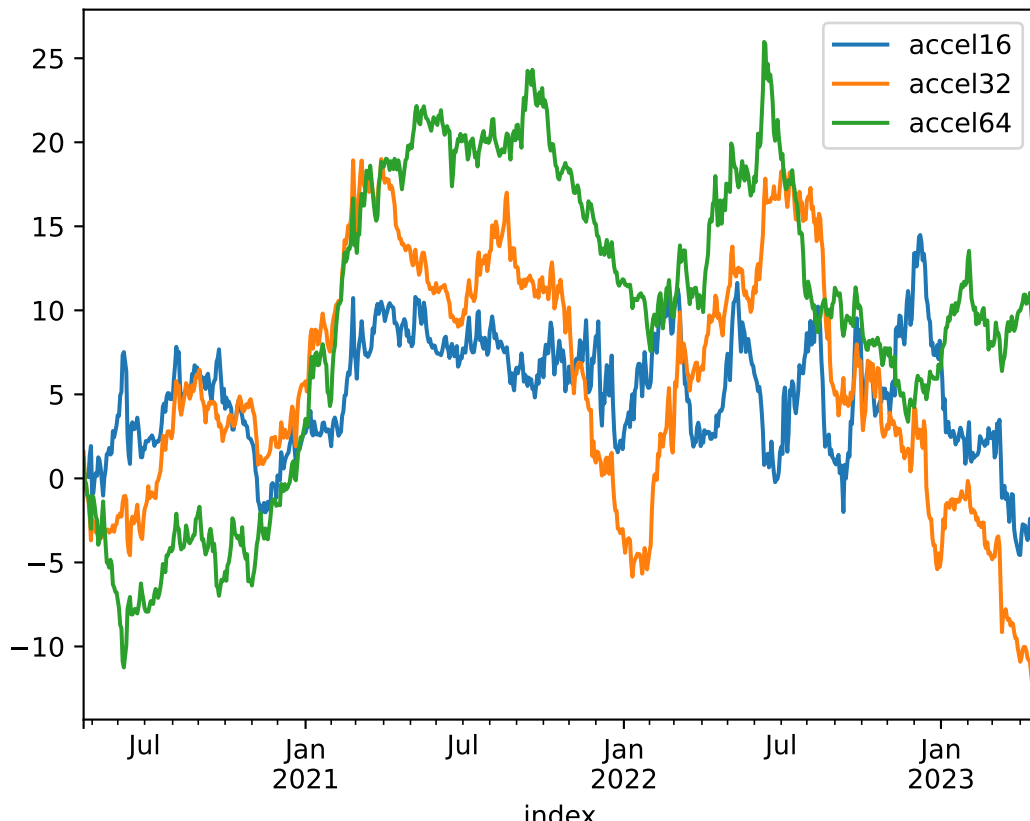
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -42.65, 'accel32': -19.78, 'accel64': 9.569}
ann. std {'accel16': 13.212, 'accel32': 10.184, 'accel64': 9.536}
ann. SR {'accel16': -3.23, 'accel32': -1.94, 'accel64': 1.0}



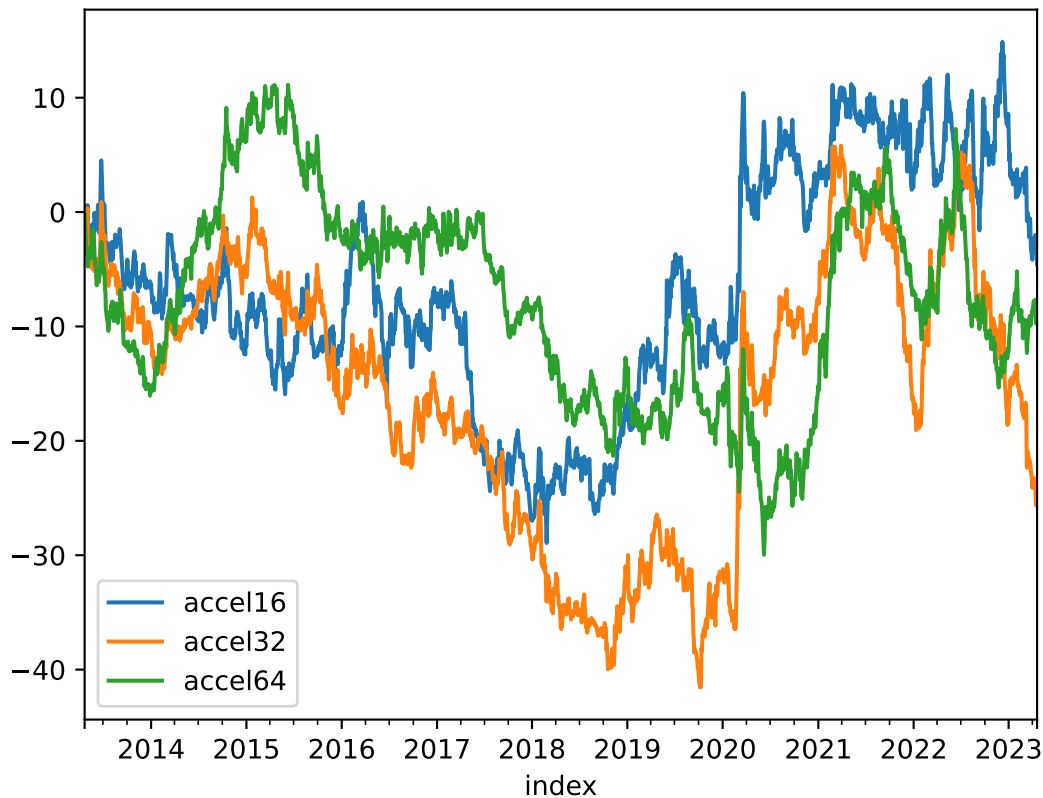
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -8.683, 'accel32': -20.837, 'accel64': -6.777}
ann. std {'accel16': 16.072, 'accel32': 13.048, 'accel64': 10.887}
ann. SR {'accel16': -0.54, 'accel32': -1.6, 'accel64': -0.62}



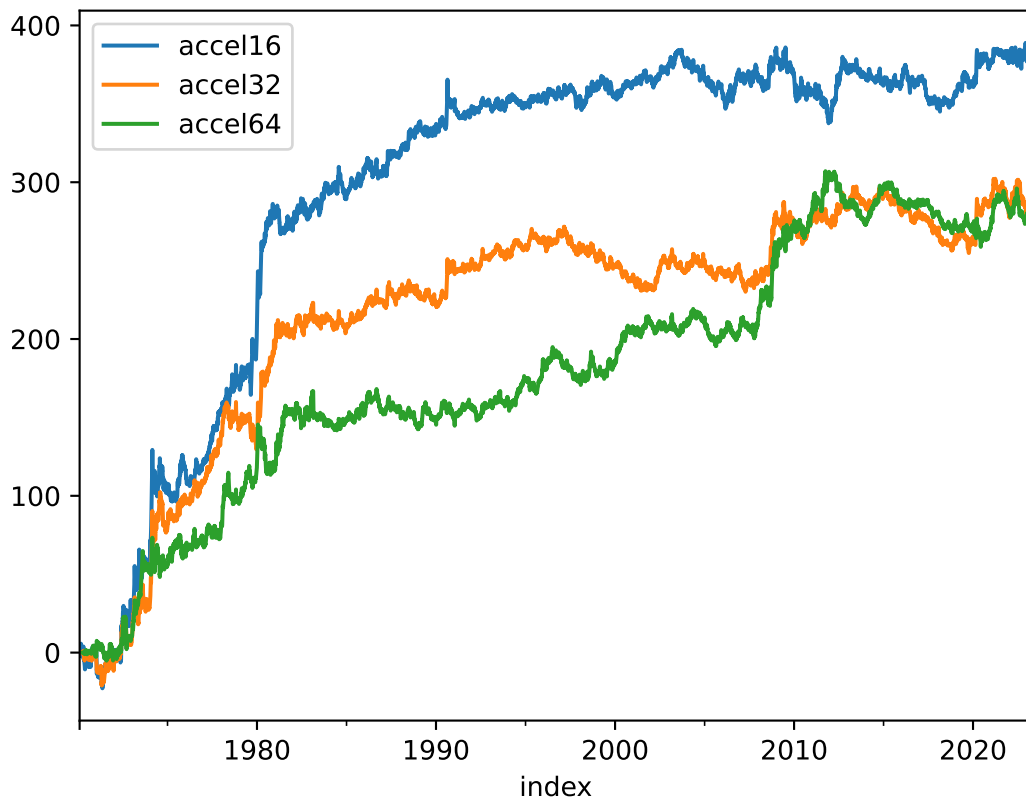
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': -1.626, 'accel32': -3.723, 'accel64': 3.076}
ann. std {'accel16': 13.655, 'accel32': 11.842, 'accel64': 10.663}
ann. SR {'accel16': -0.12, 'accel32': -0.31, 'accel64': 0.29}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': -0.449, 'accel32': -2.412, 'accel64': -0.913}
ann. std {'accel16': 11.711, 'accel32': 10.687, 'accel64': 9.339}
ann. SR {'accel16': -0.04, 'accel32': -0.23, 'accel64': -0.1}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.812, 'accel32': 5.012, 'accel64': 5.153}
ann. std {'accel16': 14.131, 'accel32': 12.455, 'accel64': 12.104}
ann. SR {'accel16': 0.48, 'accel32': 0.4, 'accel64': 0.43}

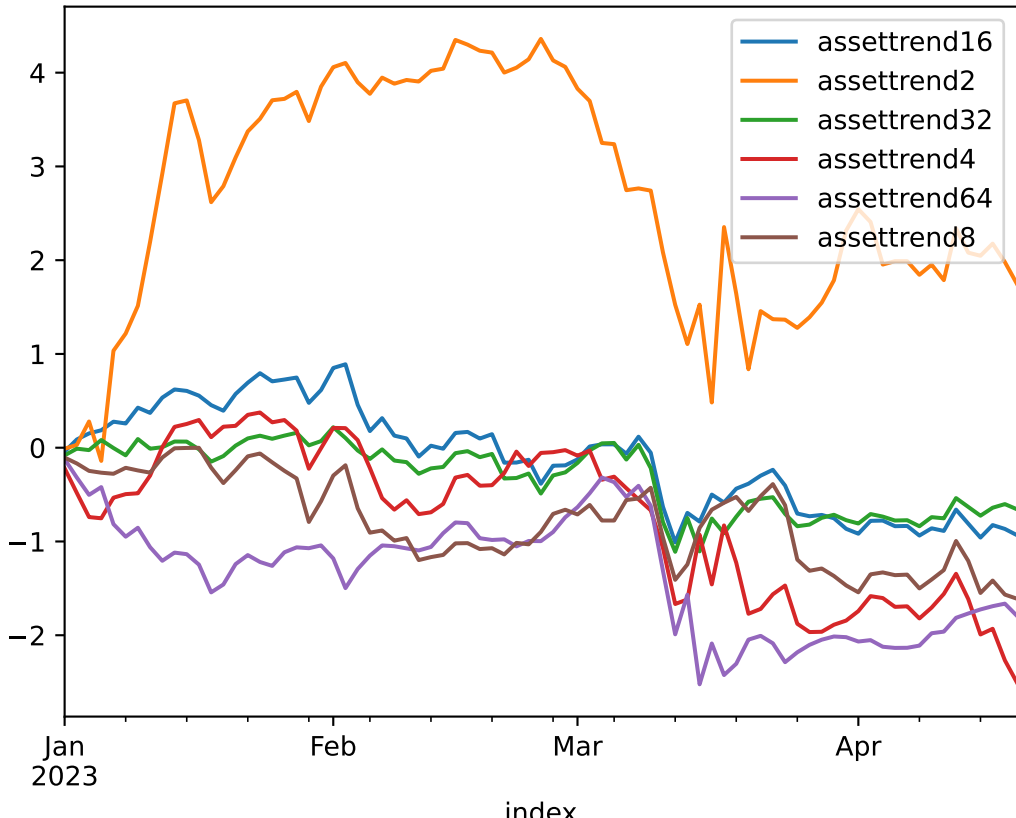


Total Trading Rule P&L for period 'YTD'

ann. mean {'assetrend16': -3.025, 'assetrend2': 5.652, 'assetrend32': -2.13, 'assetrend4': -8.126, 'assetrend64': -5.816, 'assetrend8': -5.221}

ann. std {'assetrend16': 2.575, 'assetrend2': 6.715, 'assetrend32': 2.321, 'assetrend4': 3.699, 'assetrend64': 3.393, 'assetrend8': 2.945}

ann. SR {'assetrend16': -1.17, 'assetrend2': 0.84, 'assetrend32': -0.92, 'assetrend4': -2.2, 'assetrend64': -1.71, 'assetrend8': -1.77}

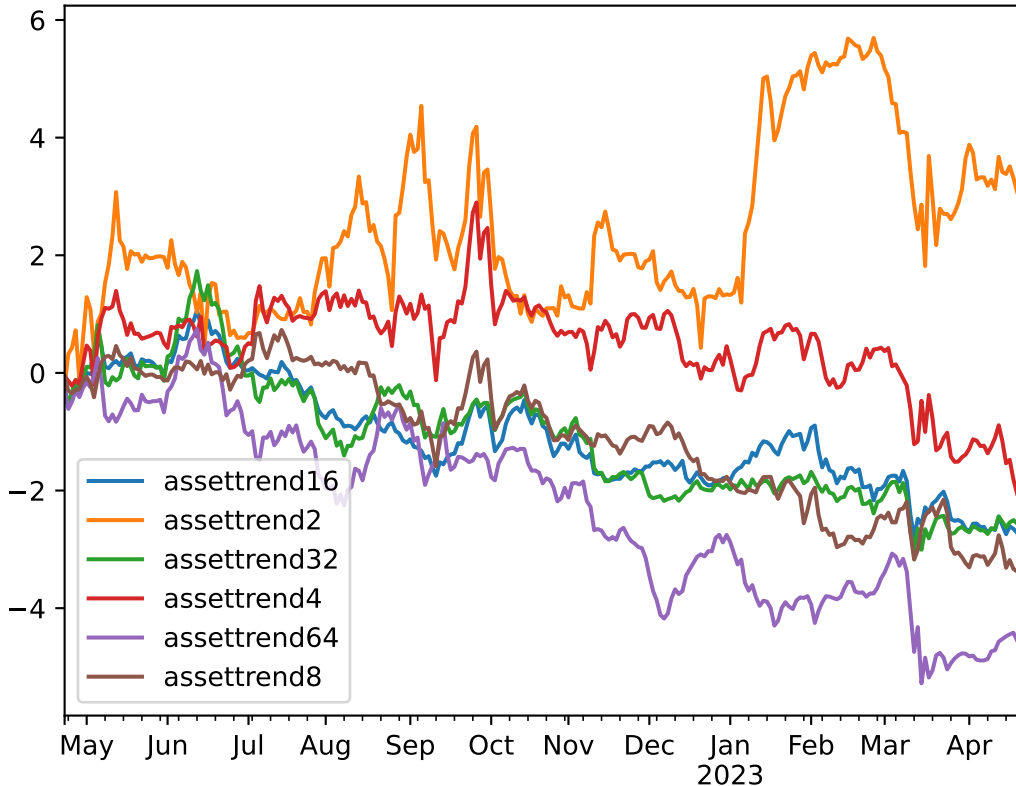


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': -2.675, 'assettrend2': 3.032, 'assettrend32': -2.52, 'assettrend4': -2.022, 'assettrend64': -4.479, 'assettrend8': -3.324}

ann. std {'assettrend16': 2.323, 'assettrend2': 6.428, 'assettrend32': 2.65, 'assettrend4': 3.989, 'assettrend64': 3.169, 'assettrend8': 2.666}

ann. SR {'assettrend16': -1.15, 'assettrend2': 0.47, 'assettrend32': -0.95, 'assettrend4': -0.51, 'assettrend64': -1.41, 'assettrend8': -1.25}



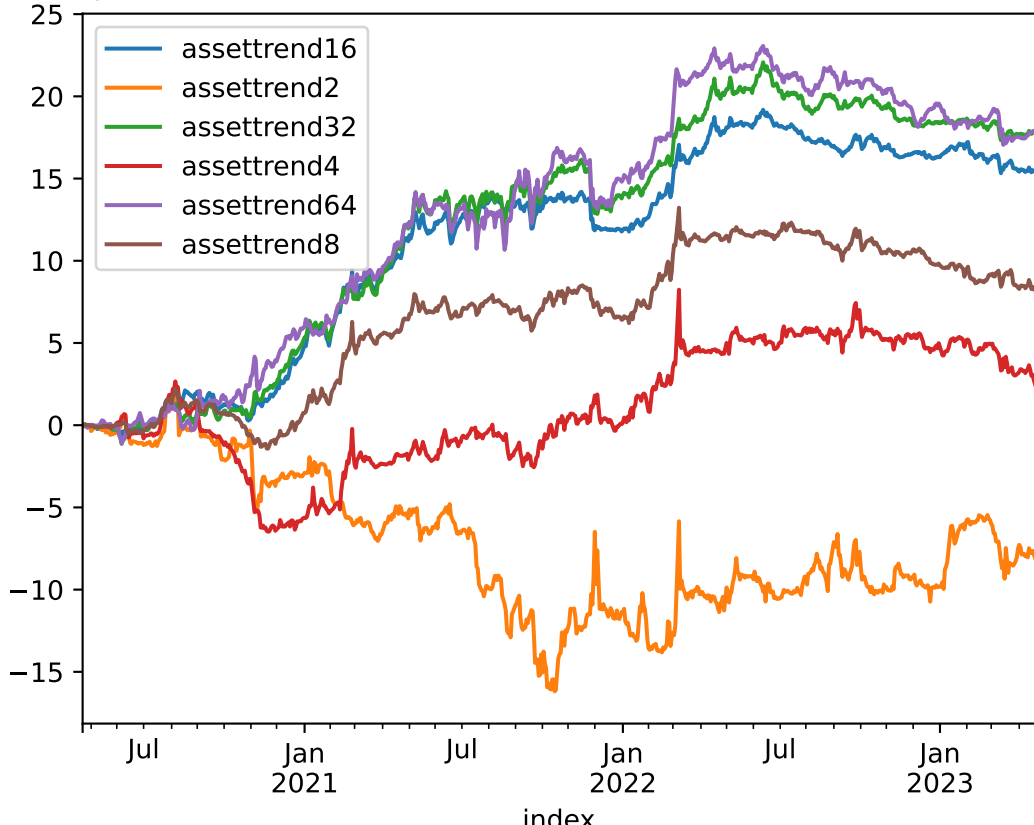
index

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

ann. mean {'assettrend16': 5.043, 'assettrend2': -2.644, 'assettrend32': 5.821, 'assettrend4': 0.813, 'assettrend64': 5.819, 'assettrend8': 2.69}

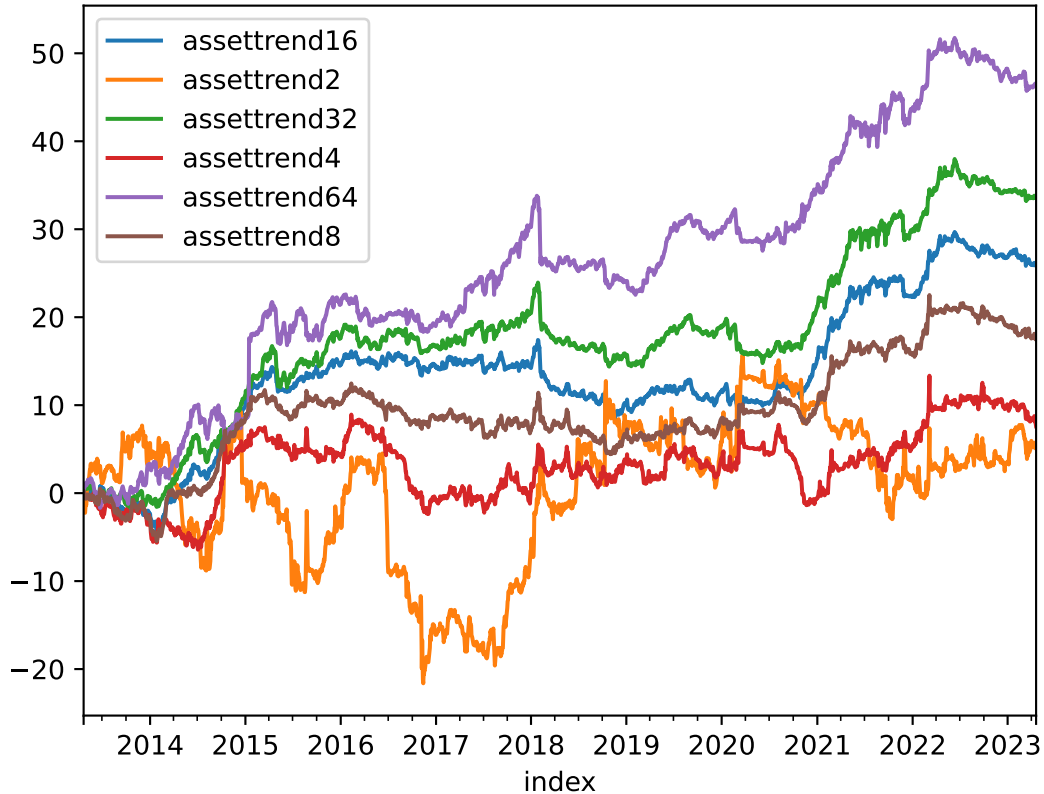
ann. std {'assettrend16': 3.404, 'assettrend2': 7.796, 'assettrend32': 4.119, 'assettrend4': 4.943, 'assettrend64': 4.993, 'assettrend8': 3.516}

ann. SR {'assettrend16': 1.48, 'assettrend2': -0.34, 'assettrend32': 1.41, 'assettrend4': 0.16, 'assettrend64': 1.17, 'assettrend8': 0.77}



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

ann. mean {'assettrend16': 2.542, 'assettrend2': 0.505, 'assettrend32': 3.306, 'assettrend4': 0.745, 'assettrend64': 4.558, 'assettrend8': 1.717}
ann. std {'assettrend16': 3.151, 'assettrend2': 9.787, 'assettrend32': 3.587, 'assettrend4': 4.968, 'assettrend64': 5.189, 'assettrend8': 3.453}
ann. SR {'assettrend16': 0.81, 'assettrend2': 0.05, 'assettrend32': 0.92, 'assettrend4': 0.15, 'assettrend64': 0.88, 'assettrend8': 0.5}

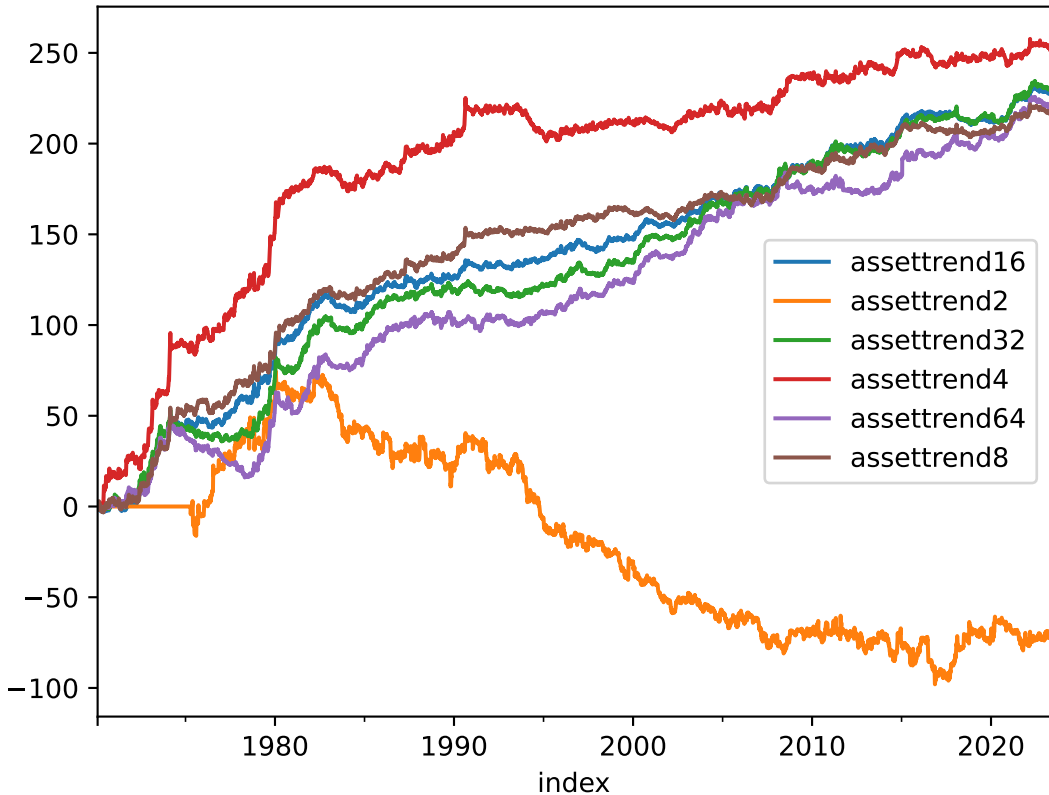


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.198, 'assettrend2': -1.313, 'assettrend32': 4.245, 'assettrend4': 4.646, 'assettrend8': 3.994}

ann. std {'assettrend16': 4.304, 'assettrend2': 10.26, 'assettrend32': 4.495, 'assettrend4': 6.547, 'assettrend64': 4.995, 'assettrend8': 4.634}

ann. SR {'assettrend16': 0.98, 'assettrend2': -0.13, 'assettrend32': 0.94, 'assettrend4': 0.71, 'assettrend64': 0.81, 'assettrend8': 0.86}

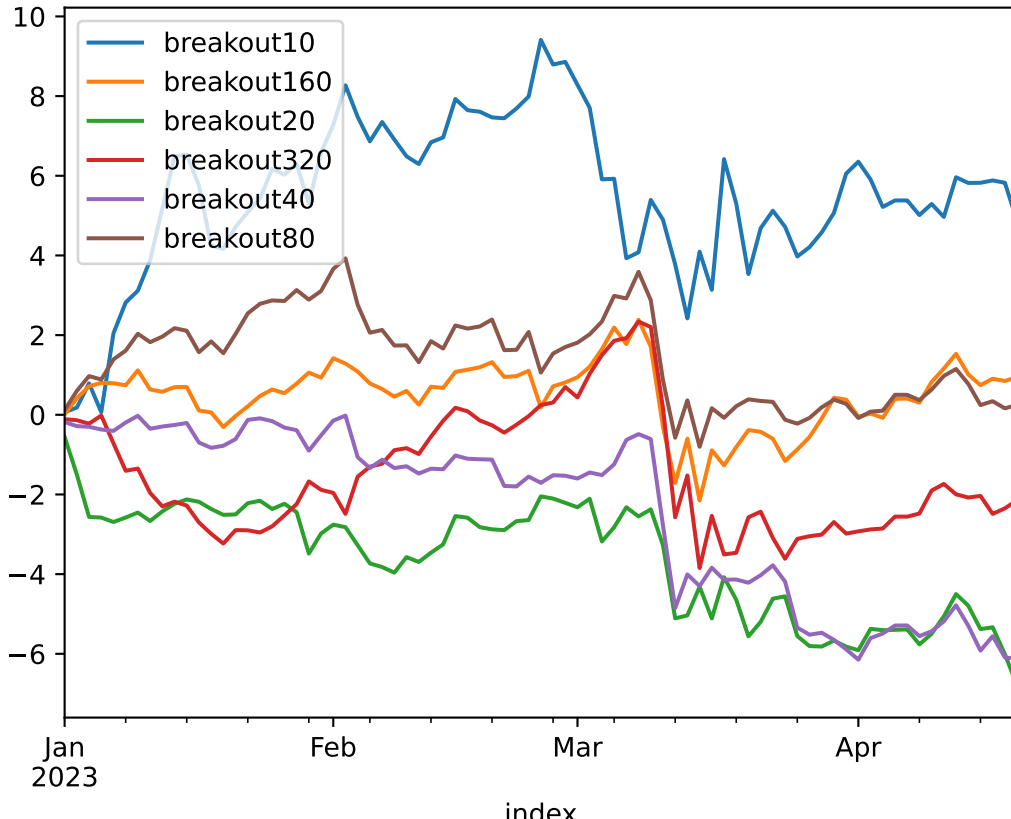


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 15.753, 'breakout160': 3.068, 'breakout20': -22.005, 'breakout320': -6.941, 'breakout40': -19.857, 'breakout80': 0.815}

ann. std {'breakout10': 14.204, 'breakout160': 8.006, 'breakout20': 7.818, 'breakout320': 9.803, 'breakout40': 7.481, 'breakout80': 8.081}

ann. SR {'breakout10': 1.11, 'breakout160': 0.38, 'breakout20': -2.81, 'breakout320': -0.71, 'breakout40': -2.65, 'breakout80': 0.1}

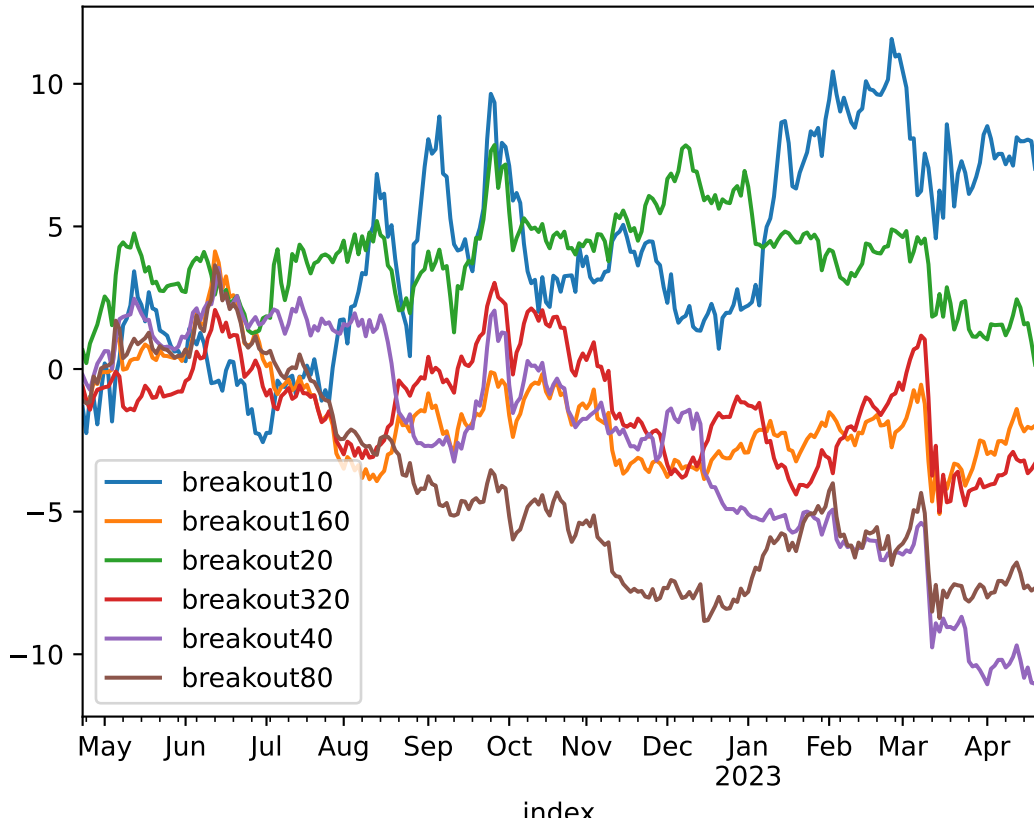


Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 6.917, 'breakout160': -1.954, 'breakout20': 0.153, 'breakout320': -3.259, 'breakout40': -10.865, 'breakout80': -7.561}

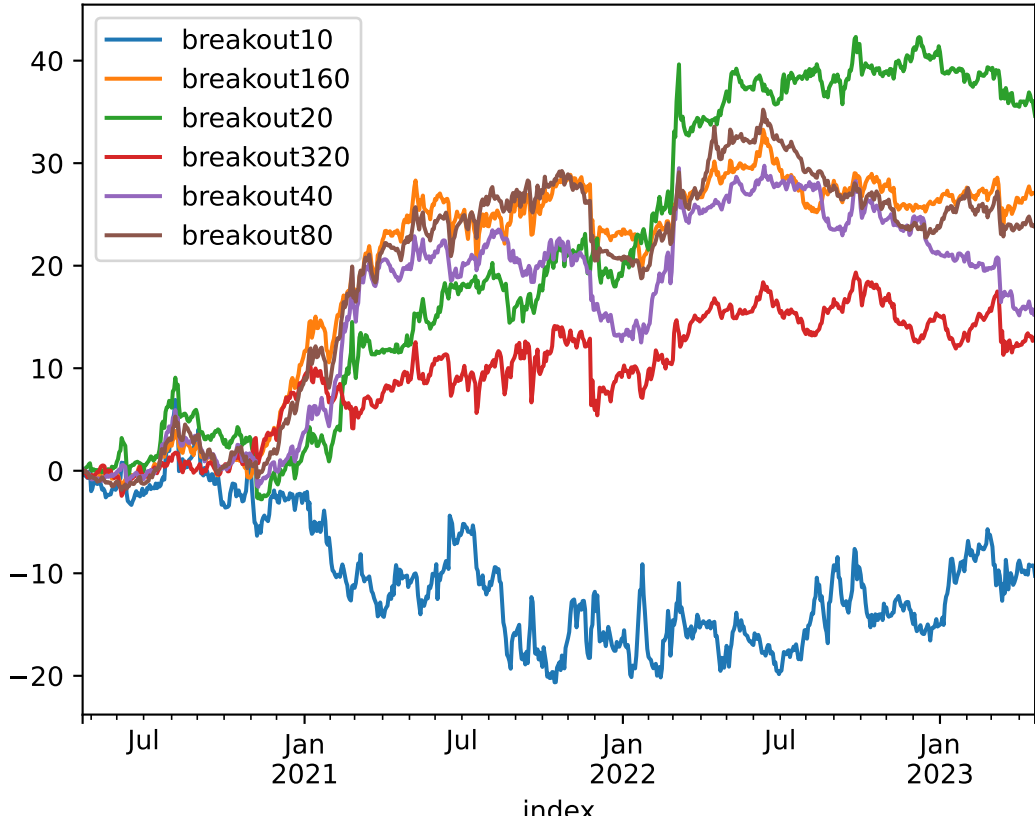
ann. std {'breakout10': 13.521, 'breakout160': 7.064, 'breakout20': 8.643, 'breakout320': 7.566, 'breakout40': 7.243, 'breakout80': 6.868}

ann. SR {'breakout10': 0.51, 'breakout160': -0.28, 'breakout20': 0.02, 'breakout320': -0.43, 'breakout40': -1.5, 'breakout80': -1.1}



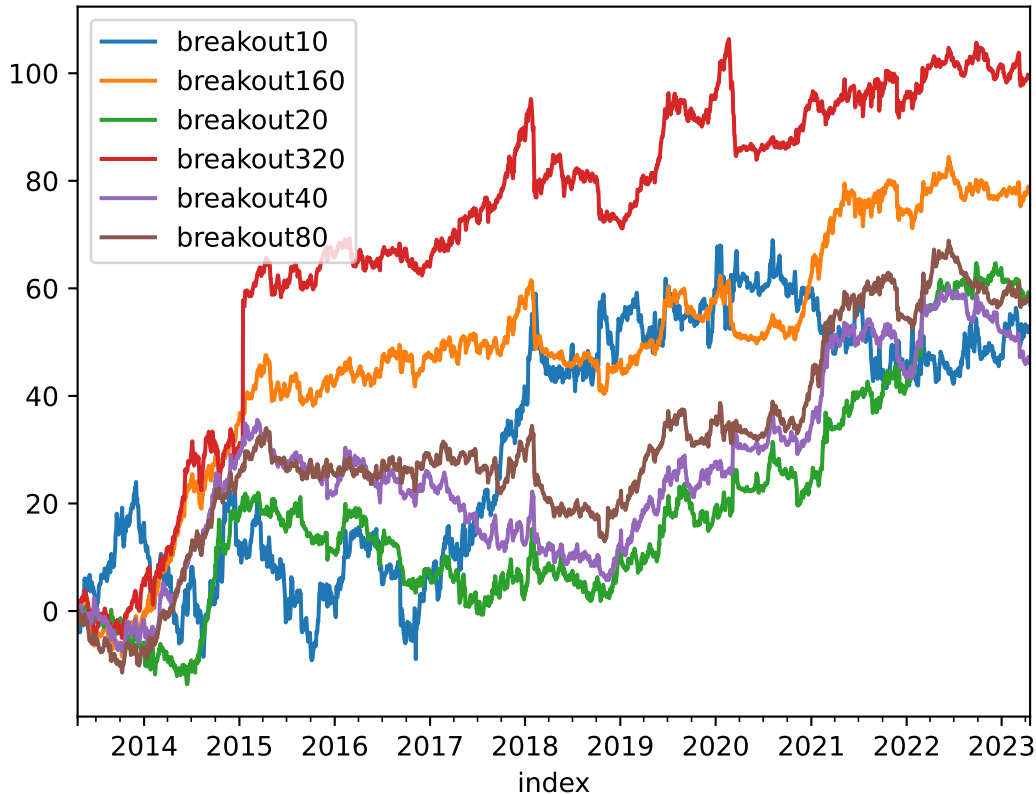
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -3.354, 'breakout160': 8.889, 'breakout20': 11.333, 'breakout320': 4.258, 'breakout40': 4.966, 'breakout80': 7.826}
 ann. std {'breakout10': 15.057, 'breakout160': 9.171, 'breakout20': 11.037, 'breakout320': 9.895, 'breakout40': 9.47, 'breakout80': 8.903}
 ann. SR {'breakout10': -0.22, 'breakout160': 0.97, 'breakout20': 1.03, 'breakout320': 0.43, 'breakout40': 0.52, 'breakout80': 0.88}



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

ann. mean {'breakout10': 5.085, 'breakout160': 7.687, 'breakout20': 5.594, 'breakout320': 9.749, 'breakout40': 4.506, 'breakout80': 5.649}
ann. std {'breakout10': 17.816, 'breakout160': 8.872, 'breakout20': 11.092, 'breakout320': 13.082, 'breakout40': 9.393, 'breakout80': 8.735}
ann. SR {'breakout10': 0.29, 'breakout160': 0.87, 'breakout20': 0.5, 'breakout320': 0.75, 'breakout40': 0.48, 'breakout80': 0.65}

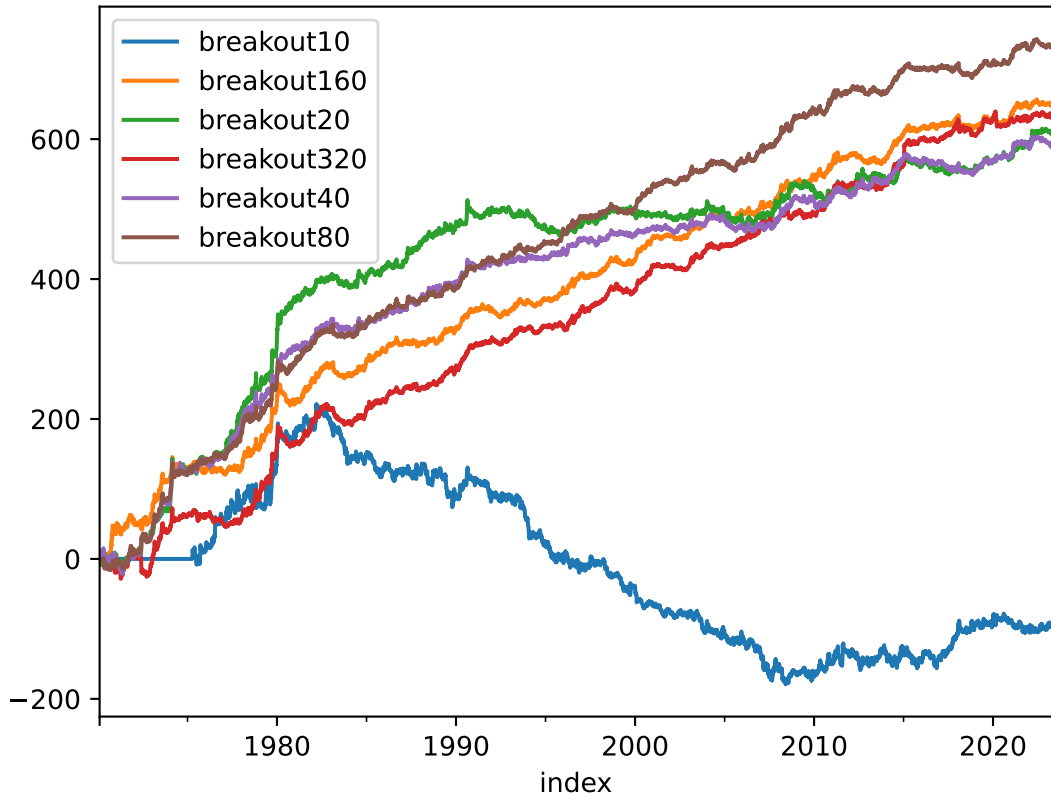


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -1.759, 'breakout160': 12.001, 'breakout20': 11.198, 'breakout320': 11.664, 'breakout40': 10.862, 'breakout80': 13.496}

ann. std {'breakout10': 21.321, 'breakout160': 11.53, 'breakout20': 14.891, 'breakout320': 12.116, 'breakout40': 12.113, 'breakout80': 11.718}

ann. SR {'breakout10': -0.08, 'breakout160': 1.04, 'breakout20': 0.75, 'breakout320': 0.96, 'breakout40': 0.9, 'breakout80': 1.15}

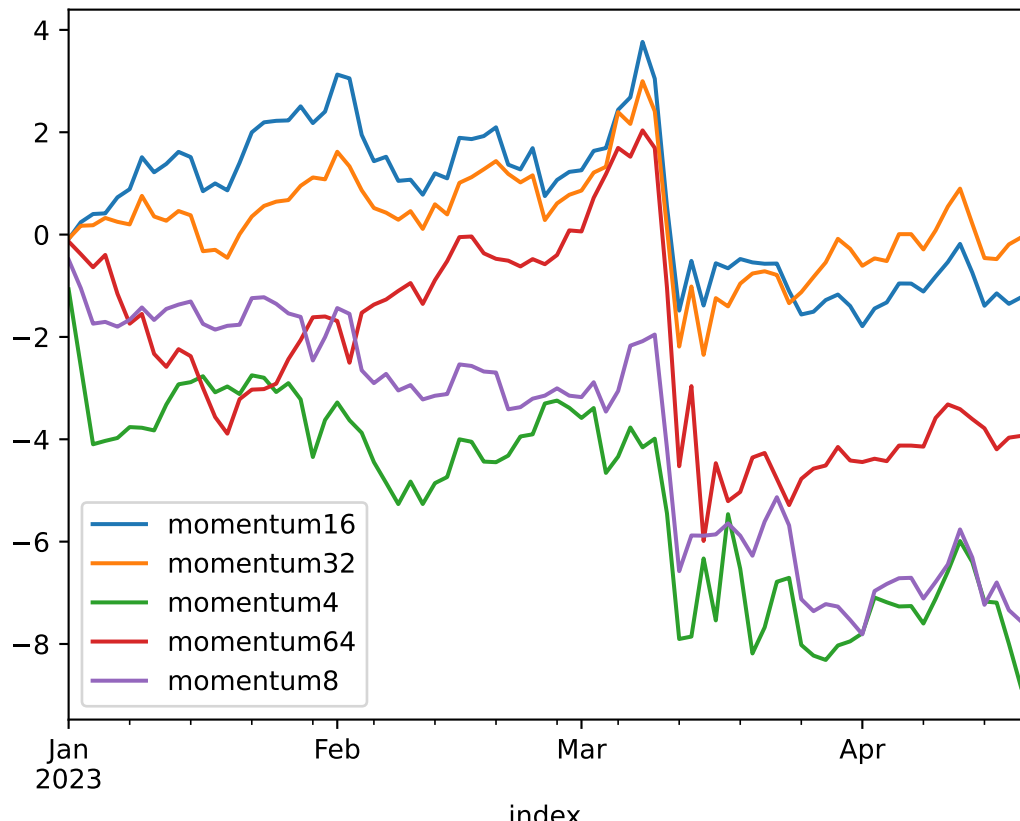


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': -3.974, 'momentum32': -0.182, 'momentum4': -28.667, 'momentum64': -12.747, 'momentum8': -24.49}

ann. std {'momentum16': 8.981, 'momentum32': 8.989, 'momentum4': 11.351, 'momentum64': 12.054, 'momentum8': 8.907}

ann. SR {'momentum16': -0.44, 'momentum32': -0.02, 'momentum4': -2.53, 'momentum64': -1.06, 'momentum8': -2.75}

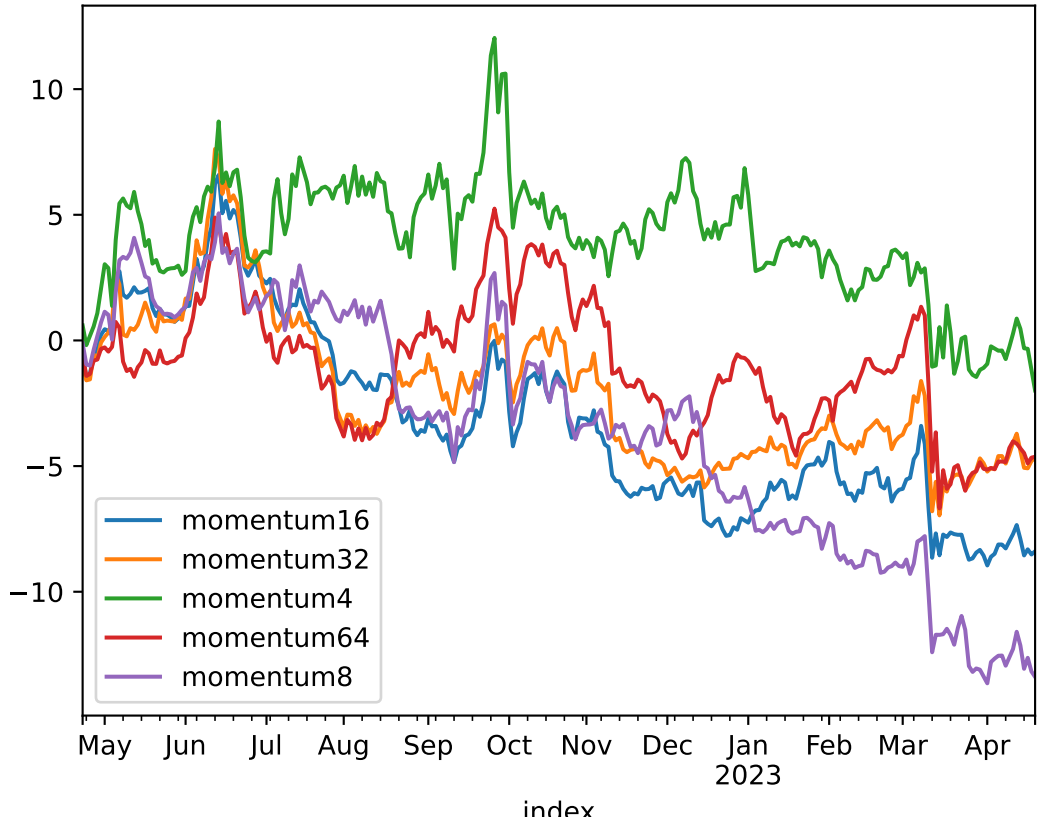


Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -8.261, 'momentum32': -4.594, 'momentum4': -1.958, 'momentum64': -4.558, 'momentum8': -13.183}

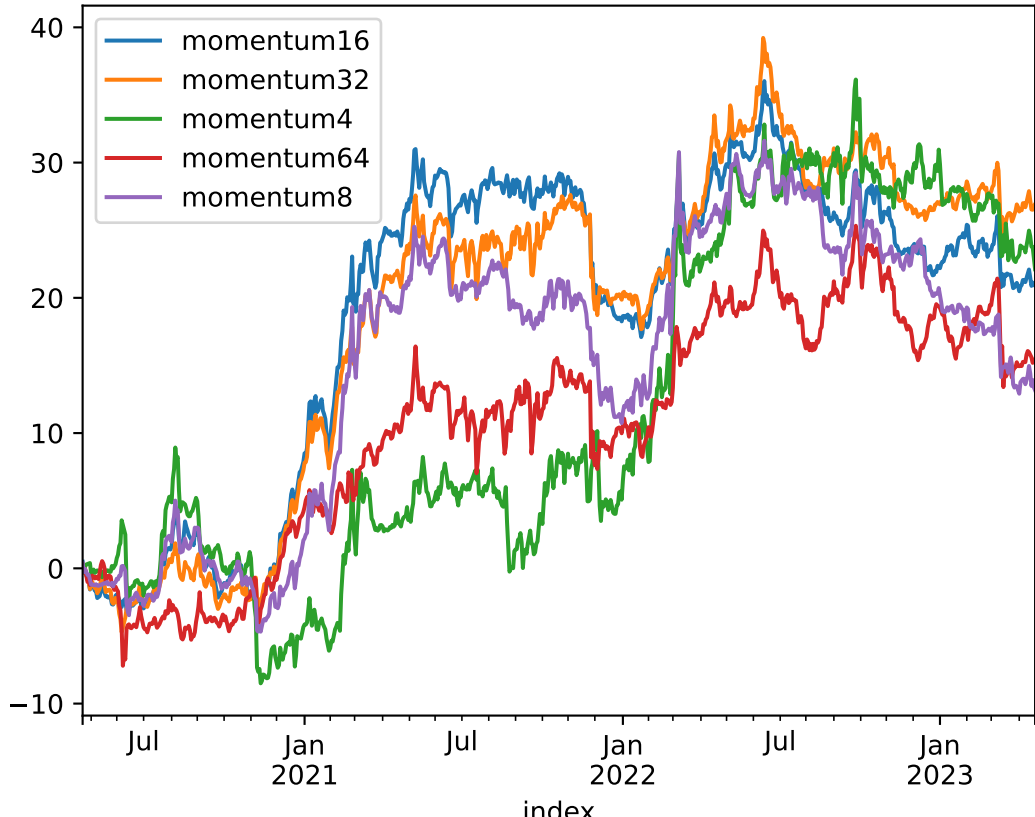
ann. std {'momentum16': 8.879, 'momentum32': 9.353, 'momentum4': 13.567, 'momentum64': 10.292, 'momentum8': 10.069}

ann. SR {'momentum16': -0.93, 'momentum32': -0.49, 'momentum4': -0.14, 'momentum64': -0.44, 'momentum8': -1.31}



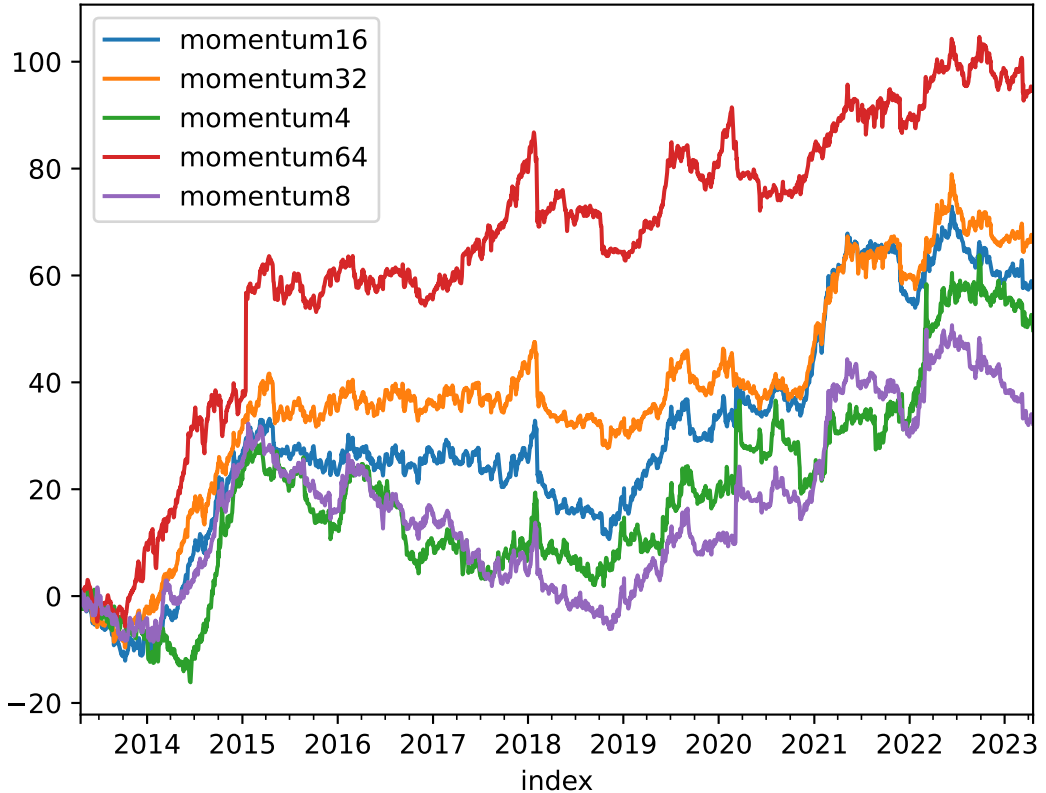
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 6.891, 'momentum32': 8.817, 'momentum4': 7.239, 'momentum64': 5.059, 'momentum8': 4.311}
ann. std {'momentum16': 10.14, 'momentum32': 10.395, 'momentum4': 14.628, 'momentum64': 10.824, 'momentum8': 11.416}
ann. SR {'momentum16': 0.68, 'momentum32': 0.85, 'momentum4': 0.49, 'momentum64': 0.47, 'momentum8': 0.38}



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

ann. mean {'momentum16': 5.681, 'momentum32': 6.542, 'momentum4': 4.884, 'momentum64': 9.299, 'momentum8': 3.164}
ann. std {'momentum16': 9.669, 'momentum32': 9.276, 'momentum4': 13.687, 'momentum64': 11.868, 'momentum8': 10.873}
ann. SR {'momentum16': 0.59, 'momentum32': 0.71, 'momentum4': 0.36, 'momentum64': 0.78, 'momentum8': 0.29}

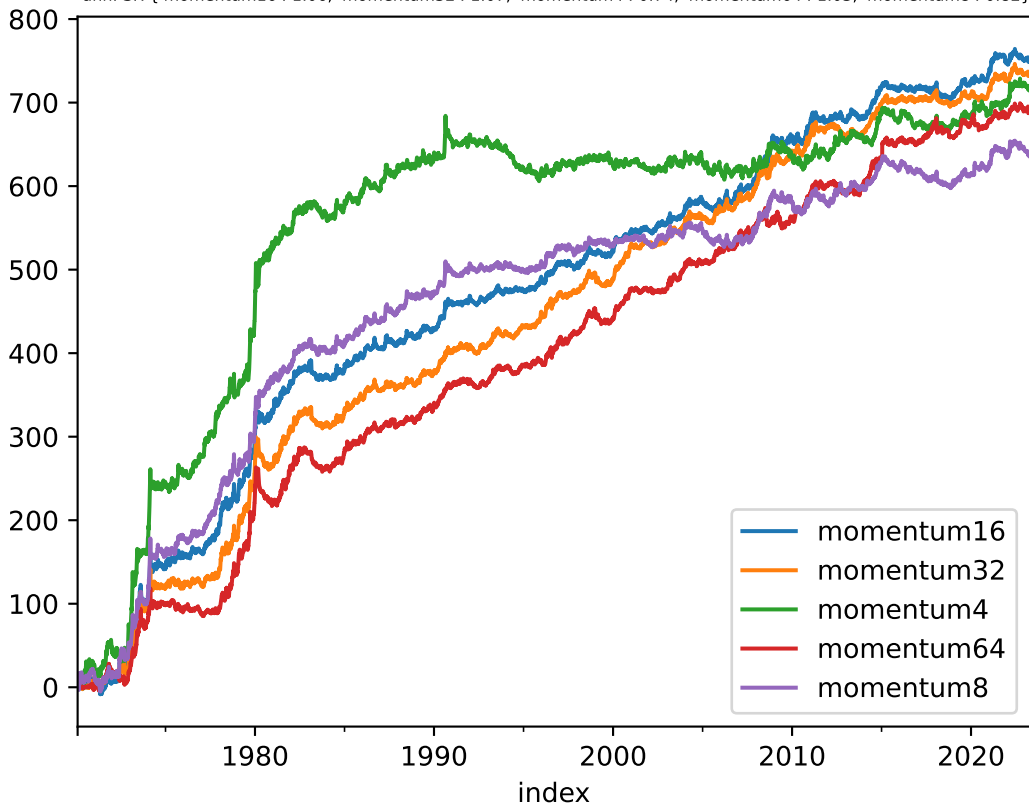


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.817, 'momentum32': 13.537, 'momentum4': 13.18, 'momentum64': 12.712, 'momentum8': 11.728}

ann. std {'momentum16': 13.048, 'momentum32': 12.611, 'momentum4': 17.894, 'momentum64': 12.332, 'momentum8': 14.332}

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

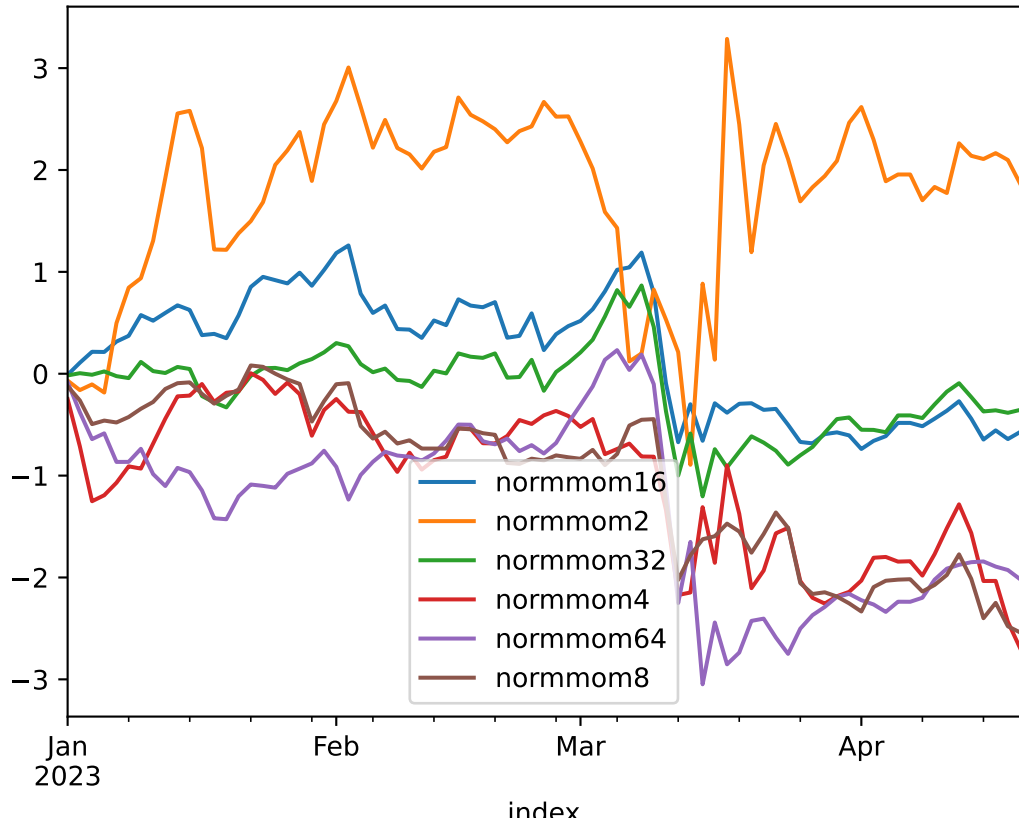


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': -1.854, 'normmom2': 6.048, 'normmom32': -1.15, 'normmom4': -8.726, 'normmom64': -6.536, 'normmom8': -8.228}

ann. std {'normmom16': 3.229, 'normmom2': 9.295, 'normmom32': 3.162, 'normmom4': 4.606, 'normmom64': 4.688, 'normmom8': 3.158}

ann. SR {'normmom16': -0.57, 'normmom2': 0.65, 'normmom32': -0.36, 'normmom4': -1.89, 'normmom64': -1.39, 'normmom8': -2.61}

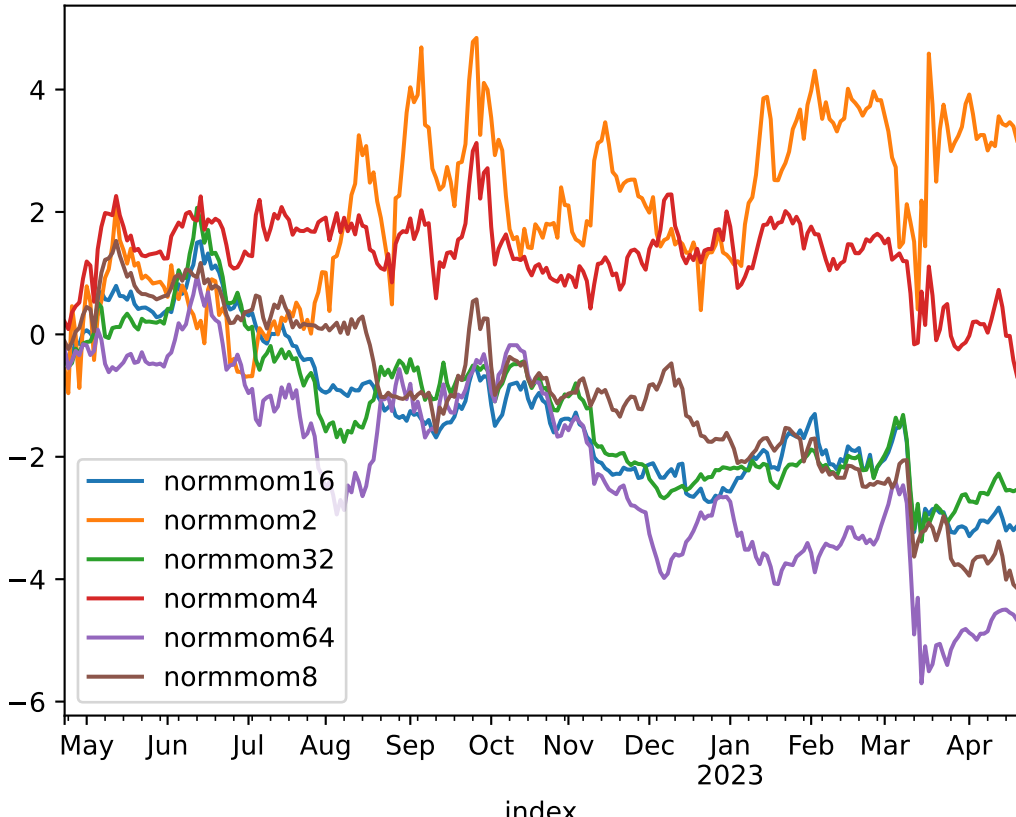


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -3.083, 'normmom2': 3.119, 'normmom32': -2.498, 'normmom4': -0.673, 'normmom64': -4.598, 'normmom8': -4.084}

ann. std {'normmom16': 2.64, 'normmom2': 7.814, 'normmom32': 2.937, 'normmom4': 4.391, 'normmom64': 3.835, 'normmom8': 2.997}

ann. SR {'normmom16': -1.17, 'normmom2': 0.4, 'normmom32': -0.85, 'normmom4': -0.15, 'normmom64': -1.2, 'normmom8': -1.36}

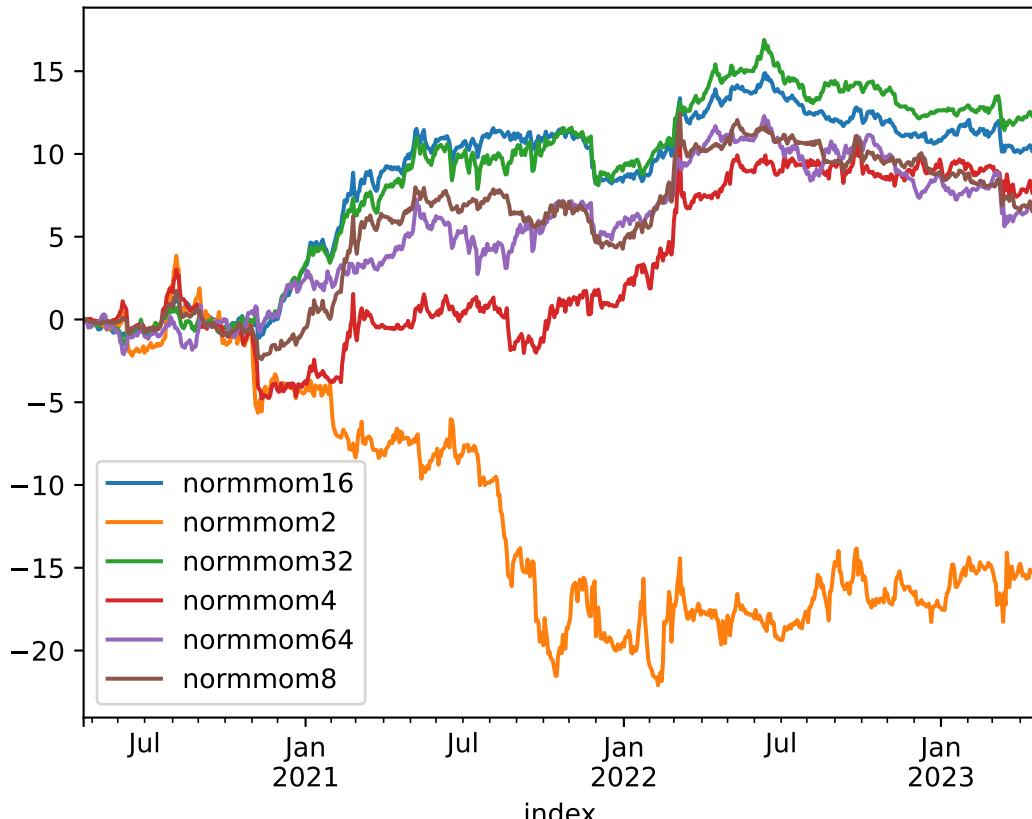


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.349, 'normmom2': -5.077, 'normmom32': 4.022, 'normmom4': 2.283, 'normmom64': 2.179, 'normmom8': 2.088}

ann. std {'normmom16': 3.509, 'normmom2': 8.615, 'normmom32': 3.878, 'normmom4': 5.368, 'normmom64': 4.275, 'normmom8': 3.927}

ann. SR {'normmom16': 0.95, 'normmom2': -0.59, 'normmom32': 1.04, 'normmom4': 0.43, 'normmom64': 0.51, 'normmom8': 0.53}

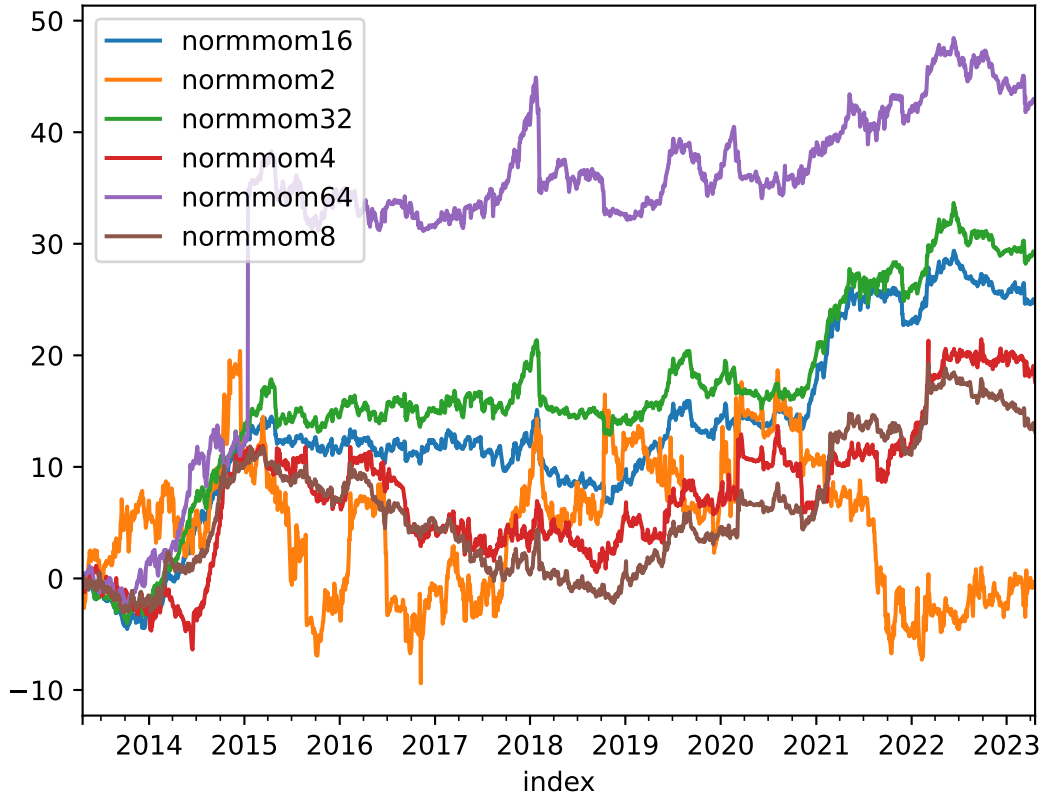


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 2.427, 'normmom2': -0.068, 'normmom32': 2.851, 'normmom4': 1.731, 'normmom64': 4.202, 'normmom8': 1.292}

ann. std {'normmom16': 3.468, 'normmom2': 10.325, 'normmom32': 3.623, 'normmom4': 5.447, 'normmom64': 8.27, 'normmom8': 3.885}

ann. SR {'normmom16': 0.7, 'normmom2': -0.01, 'normmom32': 0.79, 'normmom4': 0.32, 'normmom64': 0.51, 'normmom8': 0.33}

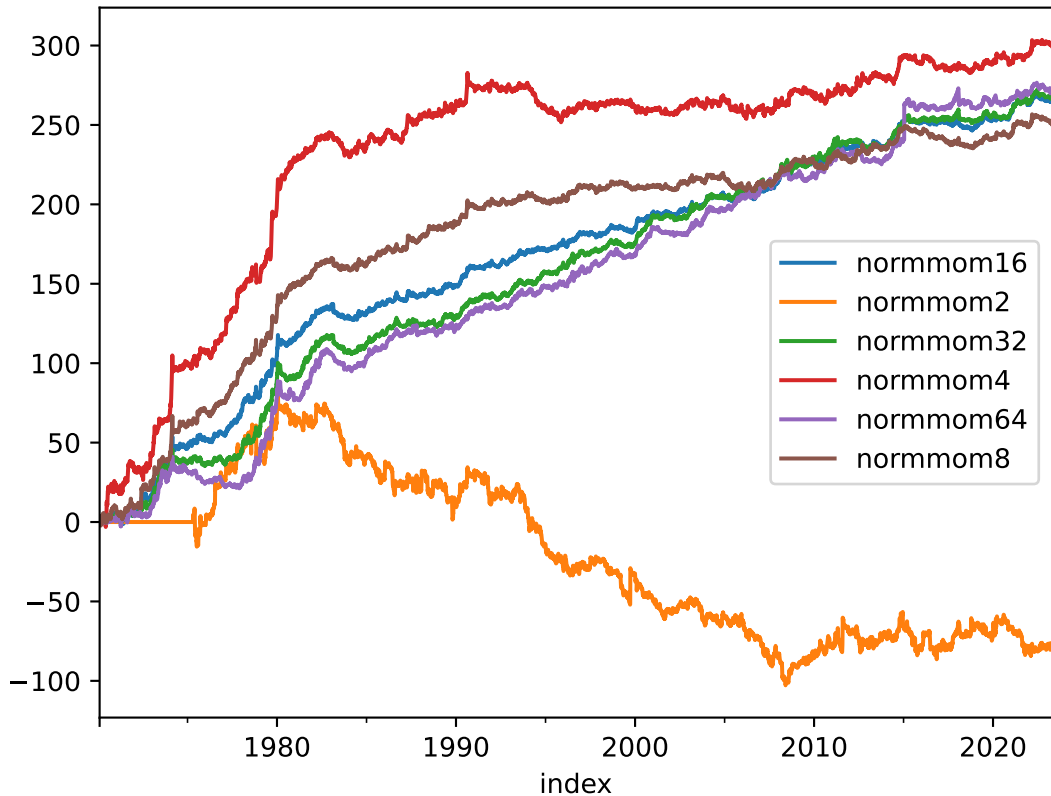


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.879, 'normmom2': -1.433, 'normmom32': 4.931, 'normmom4': 5.527, 'normmom64': 4.997, 'normmom8': 4.622}

ann. std {'normmom16': 4.533, 'normmom2': 11.612, 'normmom32': 4.61, 'normmom4': 7.385, 'normmom64': 5.87, 'normmom8': 5.366}

ann. SR {'normmom16': 1.08, 'normmom2': -0.12, 'normmom32': 1.07, 'normmom4': 0.75, 'normmom64': 0.85, 'normmom8': 0.86}

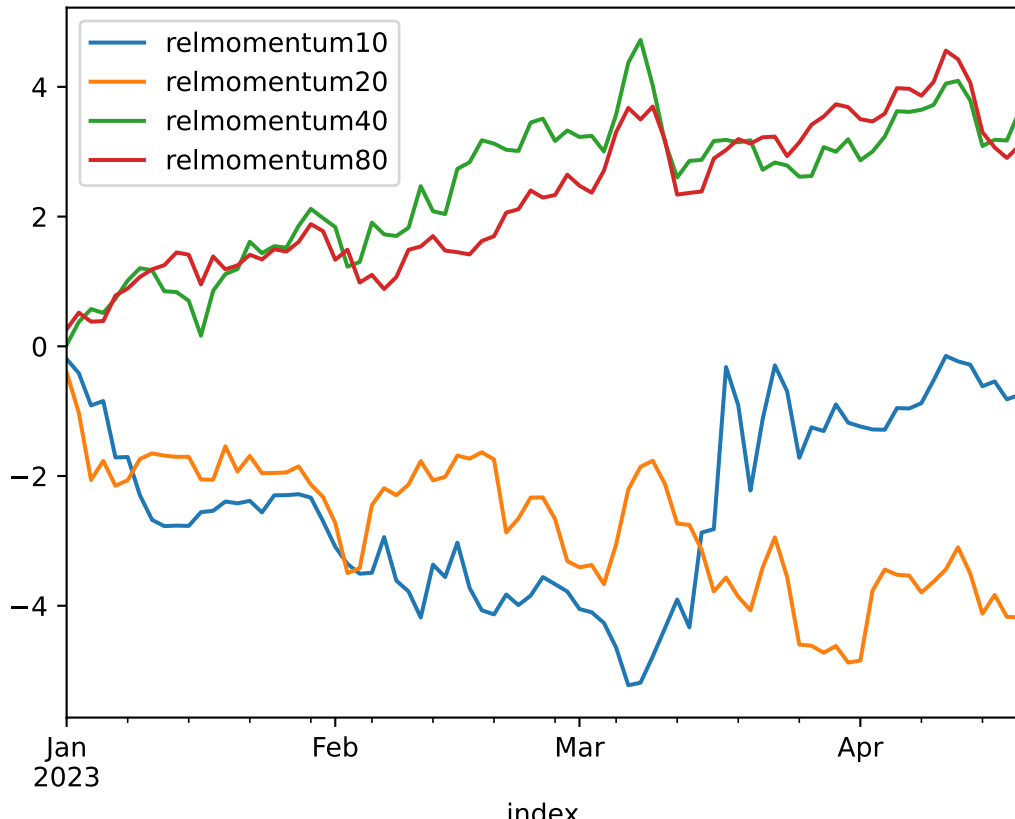


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -2.429, 'relmomentum20': -13.544, 'relmomentum40': 11.721, 'relmomentum80': 10.015}

ann. std {'relmomentum10': 8.278, 'relmomentum20': 6.704, 'relmomentum40': 5.279, 'relmomentum80': 4.336}

ann. SR {'relmomentum10': -0.29, 'relmomentum20': -2.02, 'relmomentum40': 2.22, 'relmomentum80': 2.31}

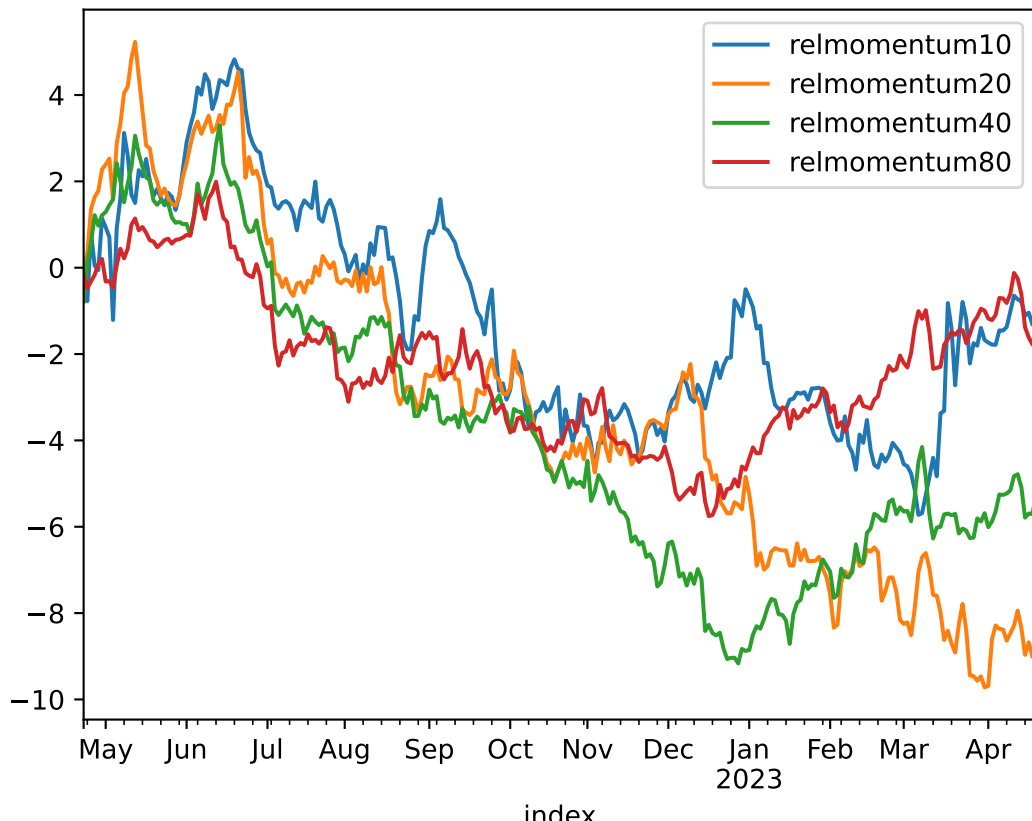


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -1.229, 'relmomentum20': -8.884, 'relmomentum40': -5.179, 'relmomentum80': -1.565}

ann. std {'relmomentum10': 8.27, 'relmomentum20': 6.722, 'relmomentum40': 5.449, 'relmomentum80': 4.525}

ann. SR {'relmomentum10': -0.15, 'relmomentum20': -1.32, 'relmomentum40': -0.95, 'relmomentum80': -0.35}

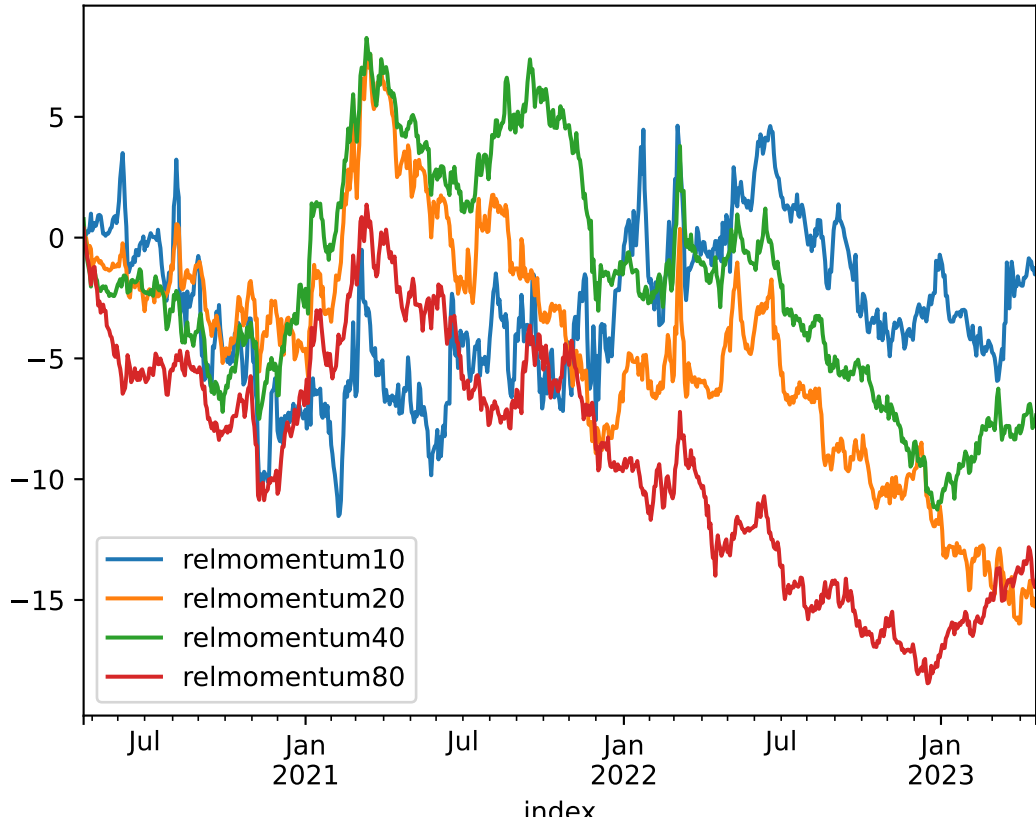


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -0.477, 'relmomentum20': -5.003, 'relmomentum40': -2.408, 'relmomentum80': -4.676}

ann. std {'relmomentum10': 11.914, 'relmomentum20': 8.341, 'relmomentum40': 6.969, 'relmomentum80': 6.351}

ann. SR {'relmomentum10': -0.04, 'relmomentum20': -0.6, 'relmomentum40': -0.35, 'relmomentum80': -0.74}

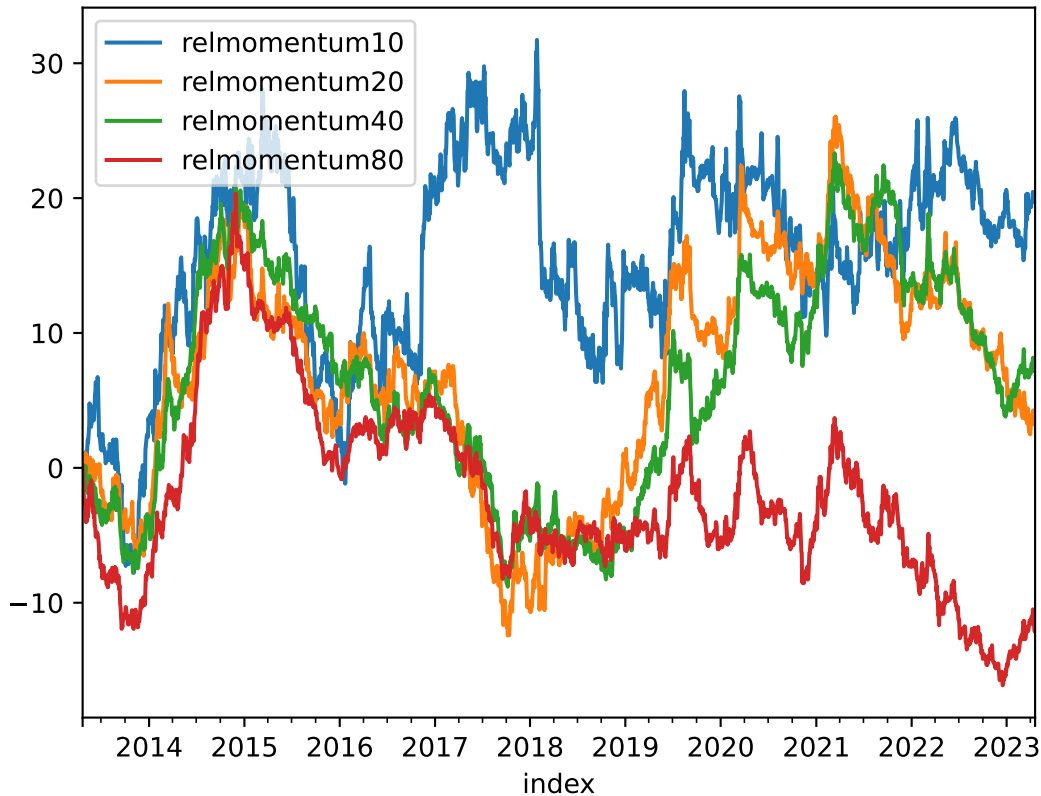


Total Trading Rule P&L for period '10Y'

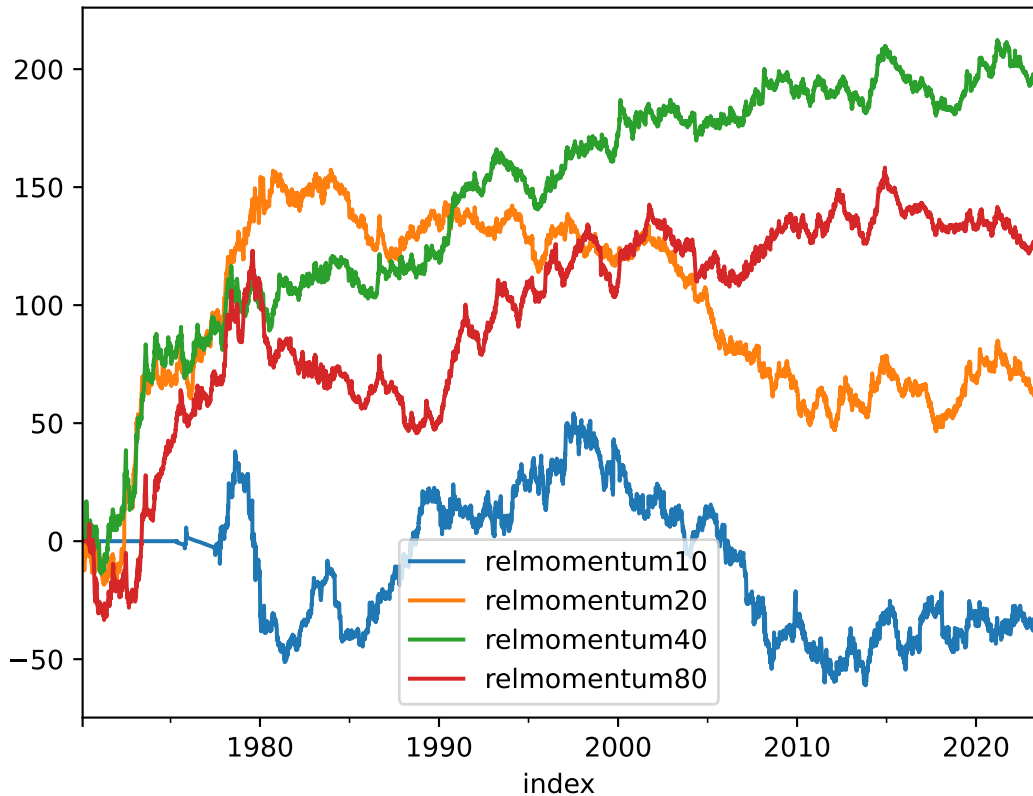
ann. mean {'relmomentum10': 1.949, 'relmomentum20': 0.312, 'relmomentum40': 0.755, 'relmomentum80': -1.173}

ann. std {'relmomentum10': 13.416, 'relmomentum20': 8.574, 'relmomentum40': 7.004, 'relmomentum80': 6.399}

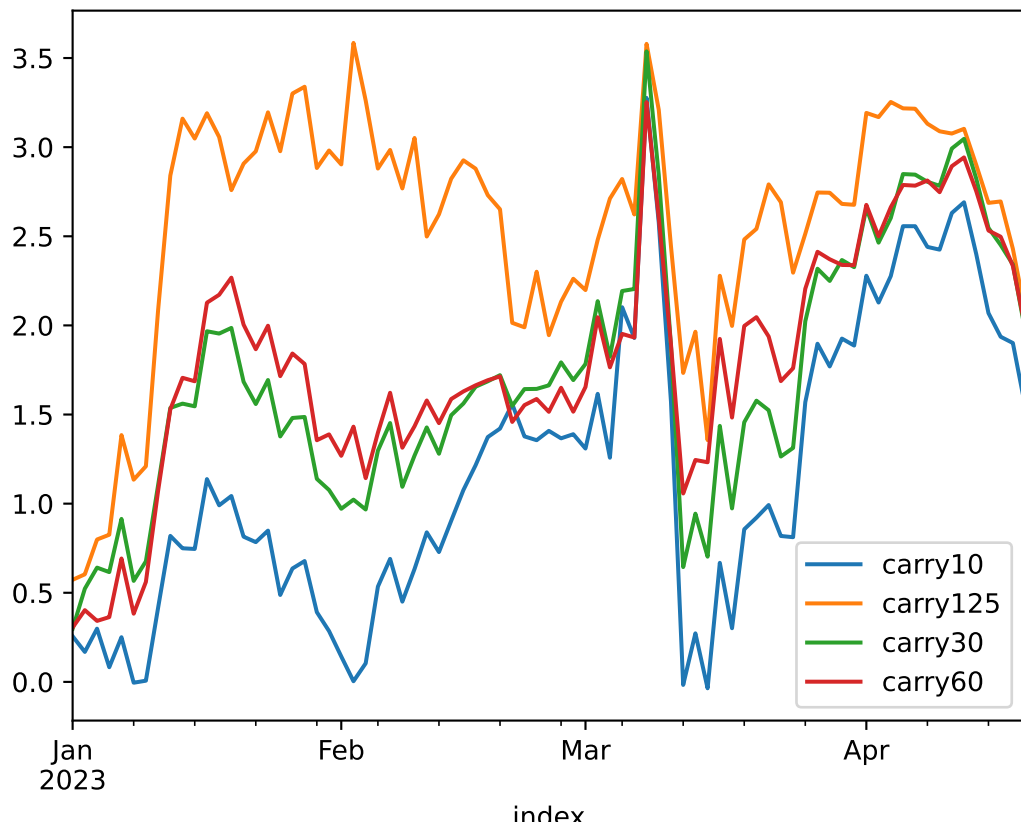
ann. SR {'relmomentum10': 0.15, 'relmomentum20': 0.04, 'relmomentum40': 0.11, 'relmomentum80': -0.18}



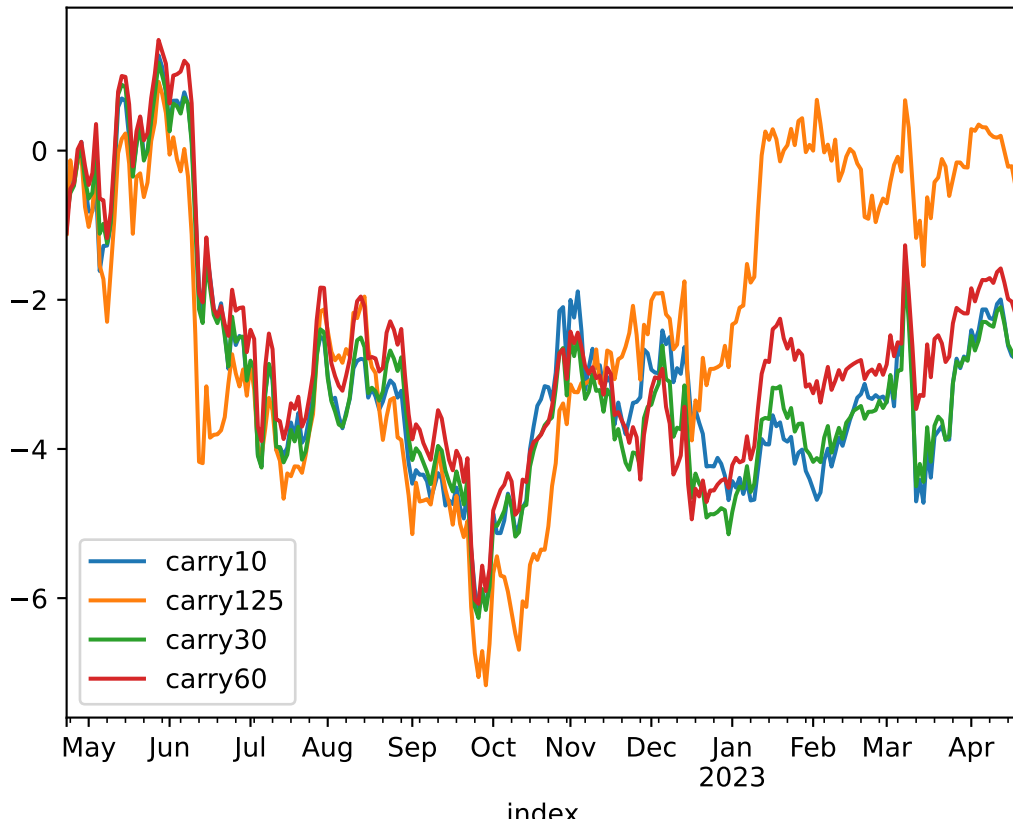
Total Trading Rule P&L for period '99Y'
ann. mean {'relmomentum10': -0.616, 'relmomentum20': 1.146, 'relmomentum40': 3.628, 'relmomentum80': 2.324}
ann. std {'relmomentum10': 13.391, 'relmomentum20': 10.469, 'relmomentum40': 9.639, 'relmomentum80': 9.784}
ann. SR {'relmomentum10': -0.05, 'relmomentum20': 0.11, 'relmomentum40': 0.38, 'relmomentum80': 0.24}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 5.016, 'carry125': 6.731, 'carry30': 6.389, 'carry60': 6.456}
ann. std {'carry10': 5.995, 'carry125': 5.579, 'carry30': 5.495, 'carry60': 4.901}
ann. SR {'carry10': 0.84, 'carry125': 1.21, 'carry30': 1.16, 'carry60': 1.32}



Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -3.09, 'carry125': -0.814, 'carry30': -3.124, 'carry60': -2.49}
ann. std {'carry10': 6.119, 'carry125': 6.865, 'carry30': 6.115, 'carry60': 6.12}
ann. SR {'carry10': -0.51, 'carry125': -0.12, 'carry30': -0.51, 'carry60': -0.41}

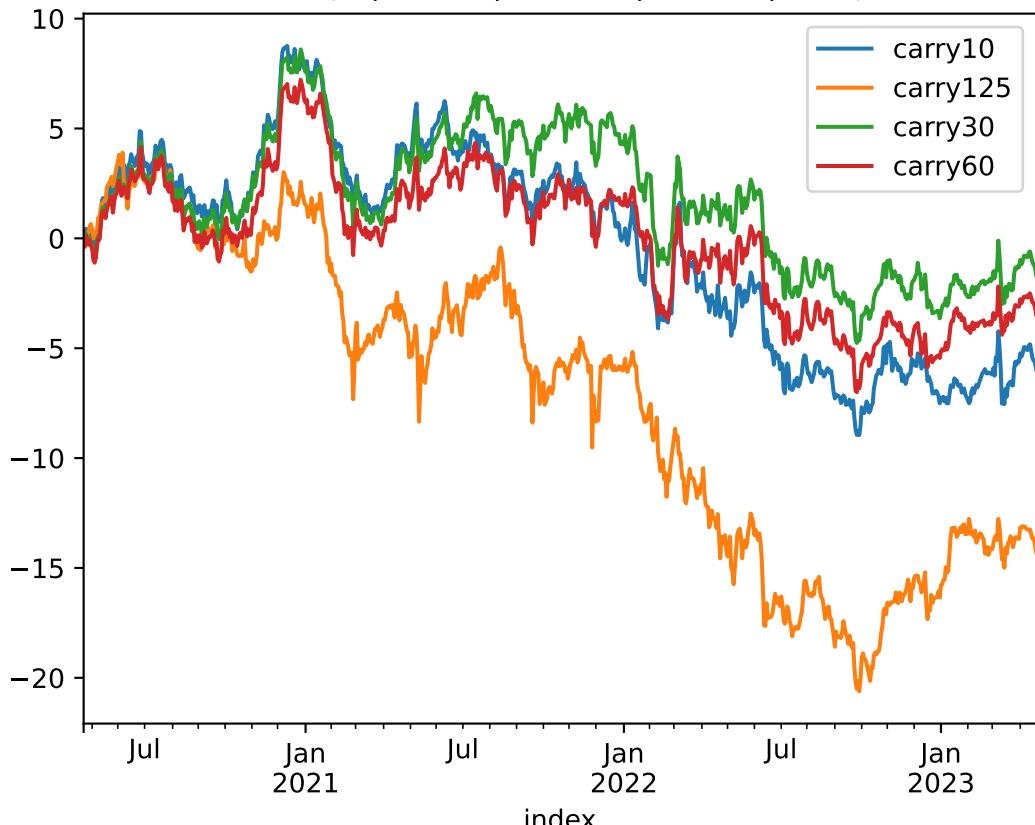


Total Trading Rule P&L for period '3Y'

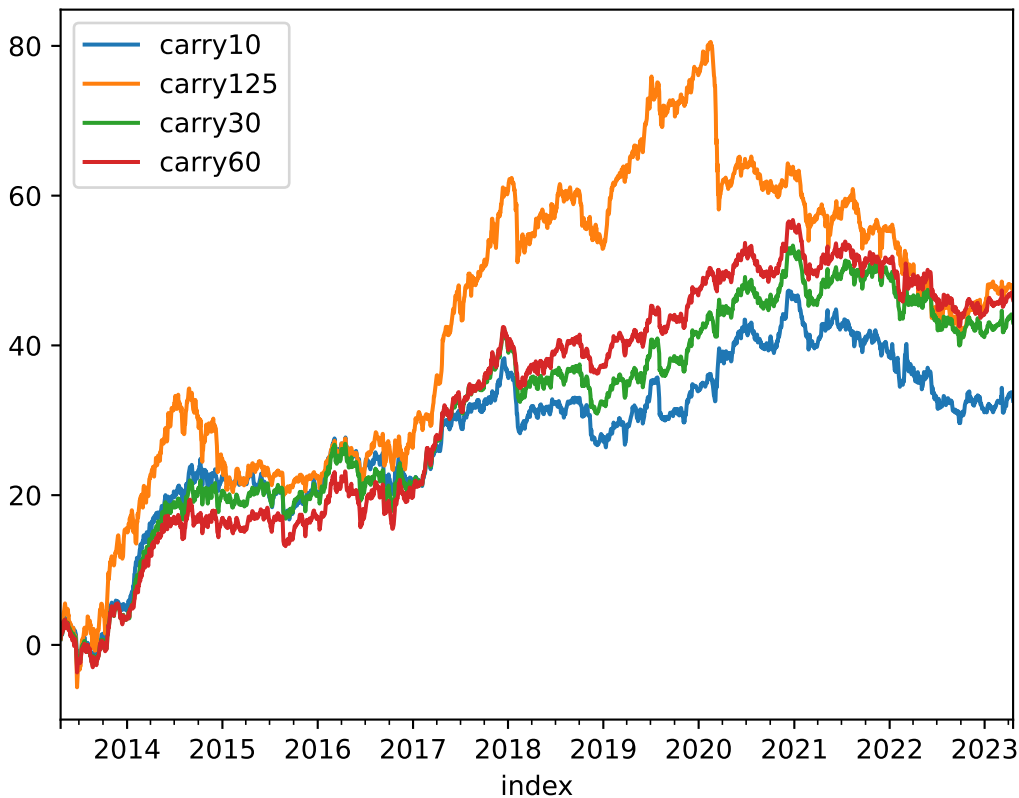
ann. mean {'carry10': -1.951, 'carry125': -4.672, 'carry30': -0.547, 'carry60': -1.131}

ann. std {'carry10': 6.559, 'carry125': 7.995, 'carry30': 6.487, 'carry60': 6.472}

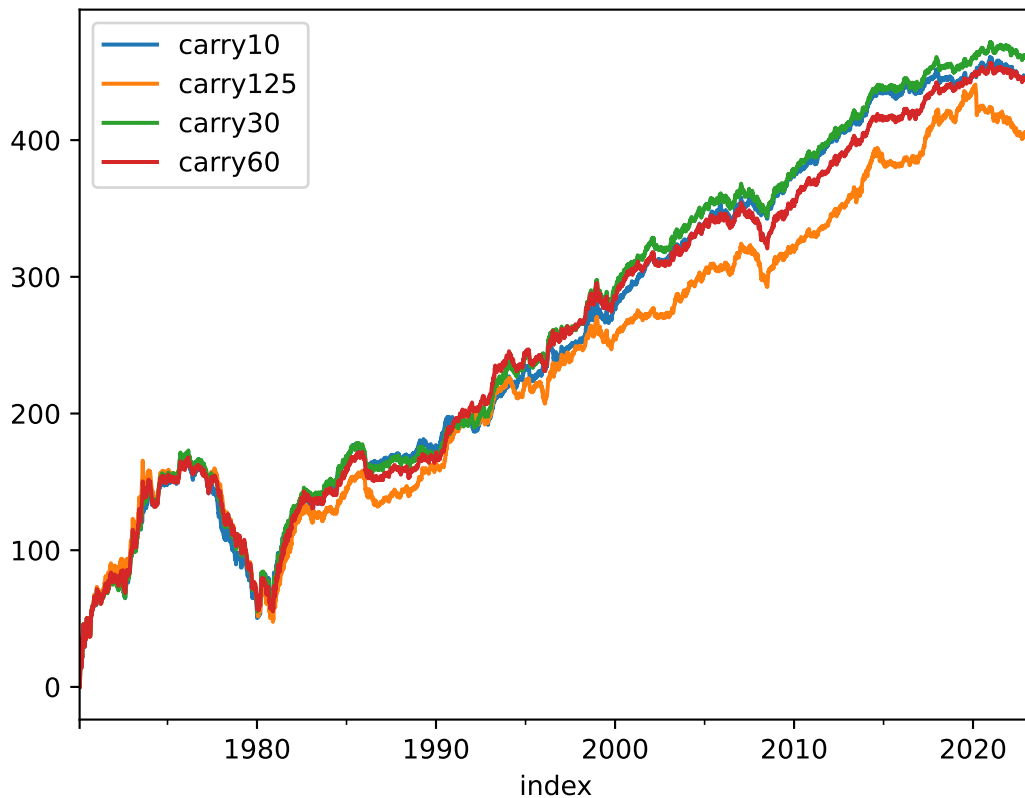
ann. SR {'carry10': -0.3, 'carry125': -0.58, 'carry30': -0.08, 'carry60': -0.17}



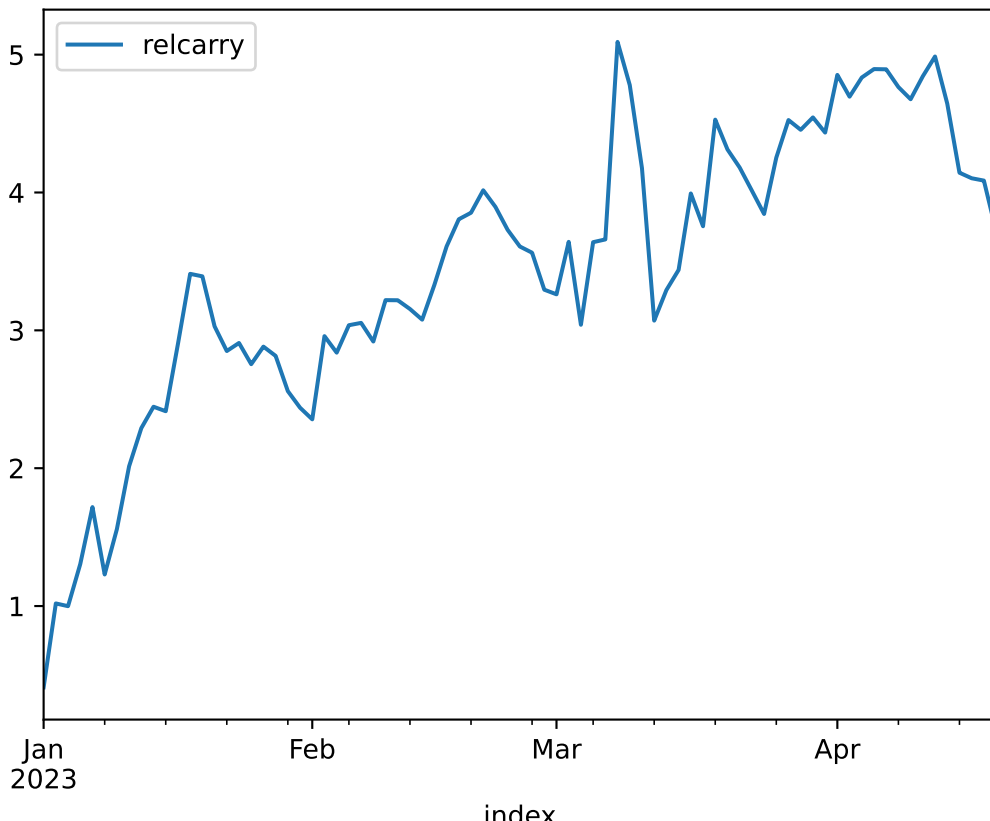
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.2, 'carry125': 4.615, 'carry30': 4.226, 'carry60': 4.522}
ann. std {'carry10': 6.369, 'carry125': 8.967, 'carry30': 6.461, 'carry60': 6.414}
ann. SR {'carry10': 0.5, 'carry125': 0.51, 'carry30': 0.65, 'carry60': 0.71}



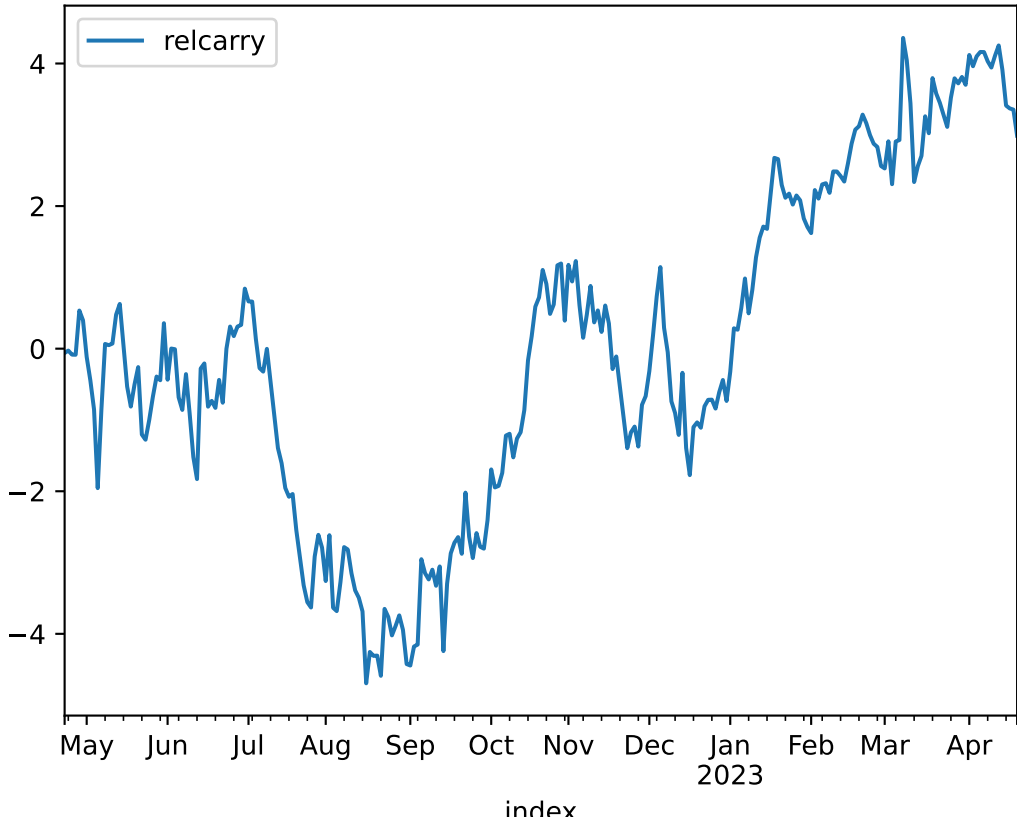
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 8.225, 'carry125': 7.507, 'carry30': 8.512, 'carry60': 8.223}
ann. std {'carry10': 11.202, 'carry125': 11.559, 'carry30': 11.259, 'carry60': 11.262}
ann. SR {'carry10': 0.73, 'carry125': 0.65, 'carry30': 0.76, 'carry60': 0.73}



Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 12.057}
ann. std {'relcarry': 5.666}
ann. SR {'relcarry': 2.13}



Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': 2.942}
ann. std {'relcarry': 6.938}
ann. SR {'relcarry': 0.42}

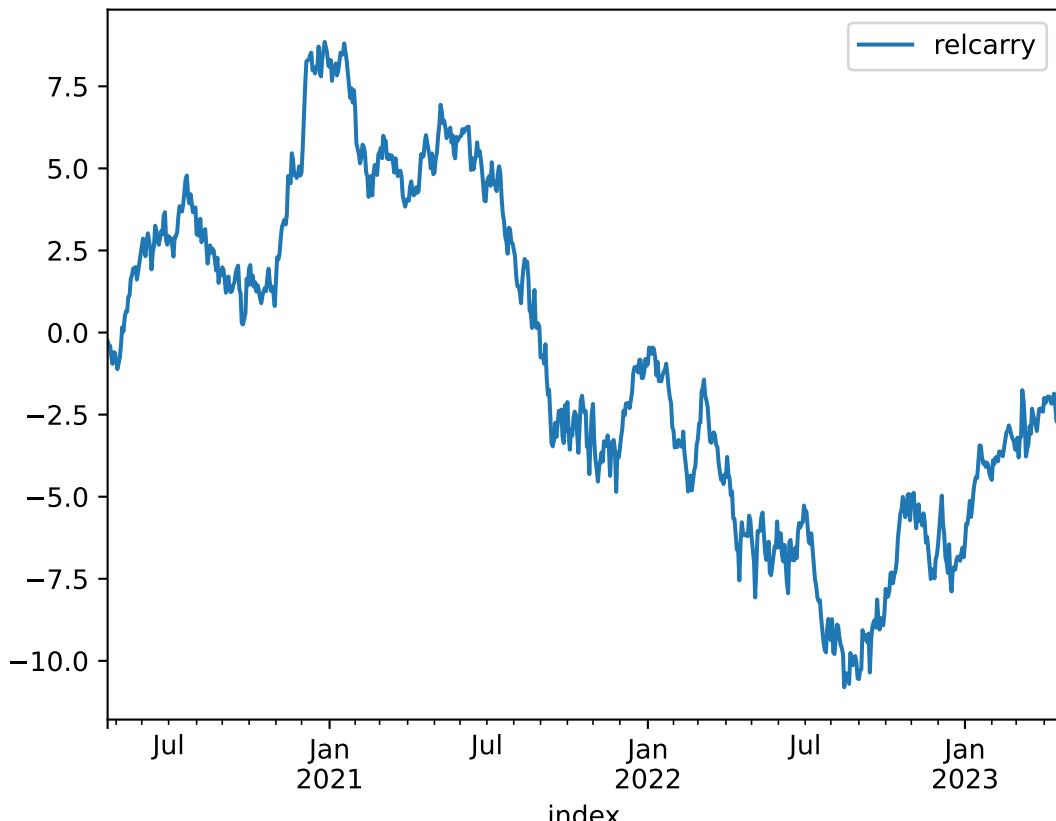


Total Trading Rule P&L for period '3Y'

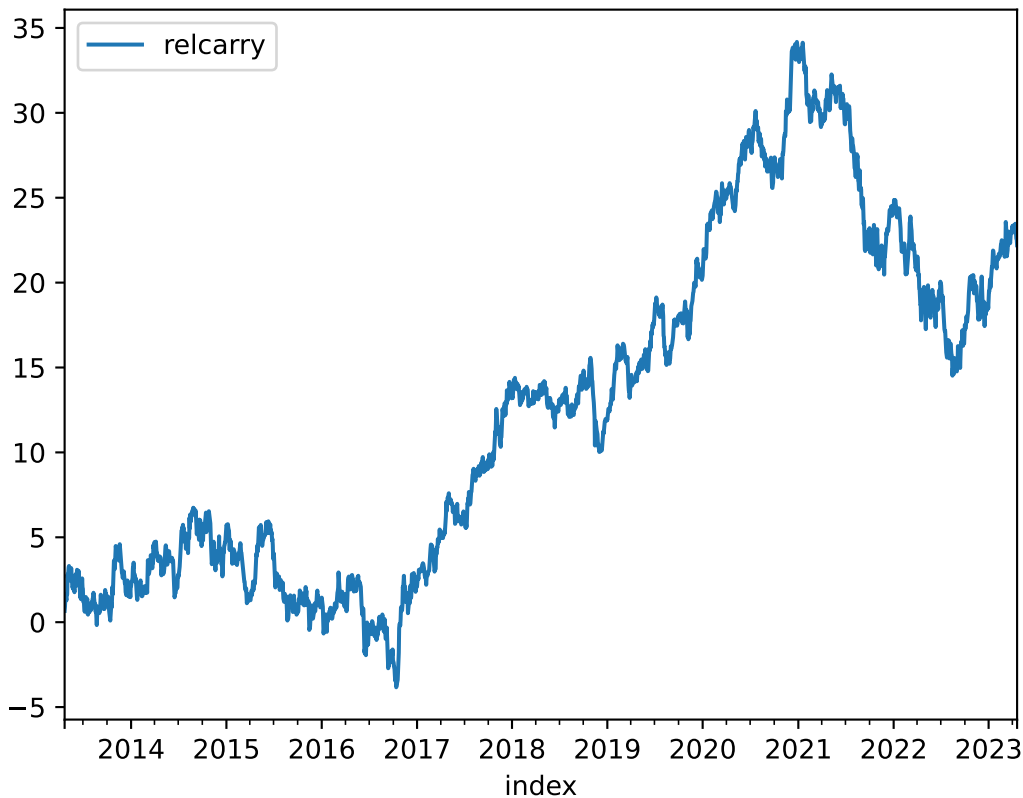
ann. mean {'relcarry': -1.023}

ann. std {'relcarry': 6.651}

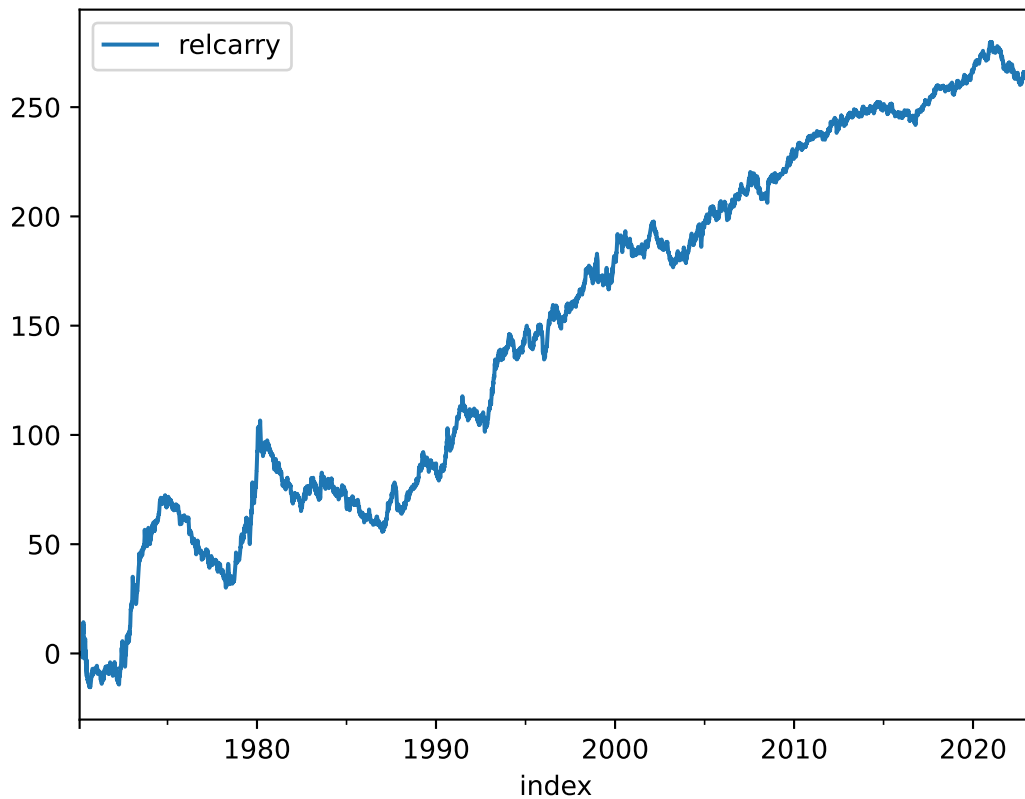
ann. SR {'relcarry': -0.15}



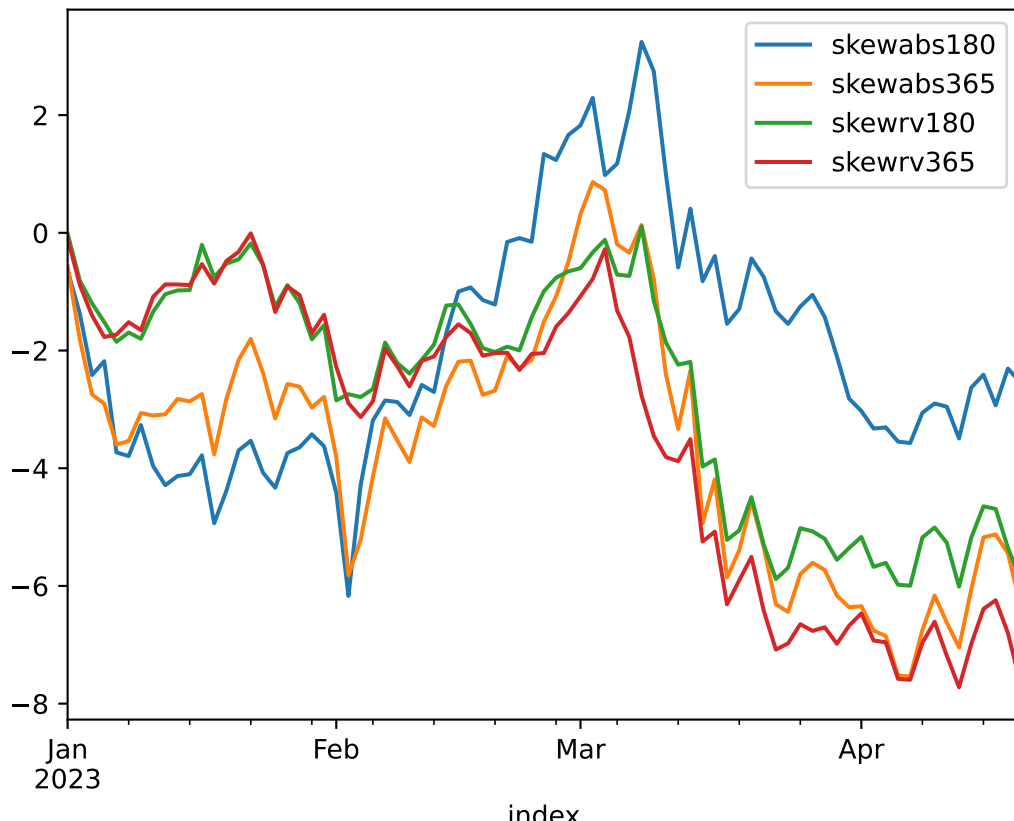
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.178}
ann. std {'relcarry': 5.825}
ann. SR {'relcarry': 0.37}



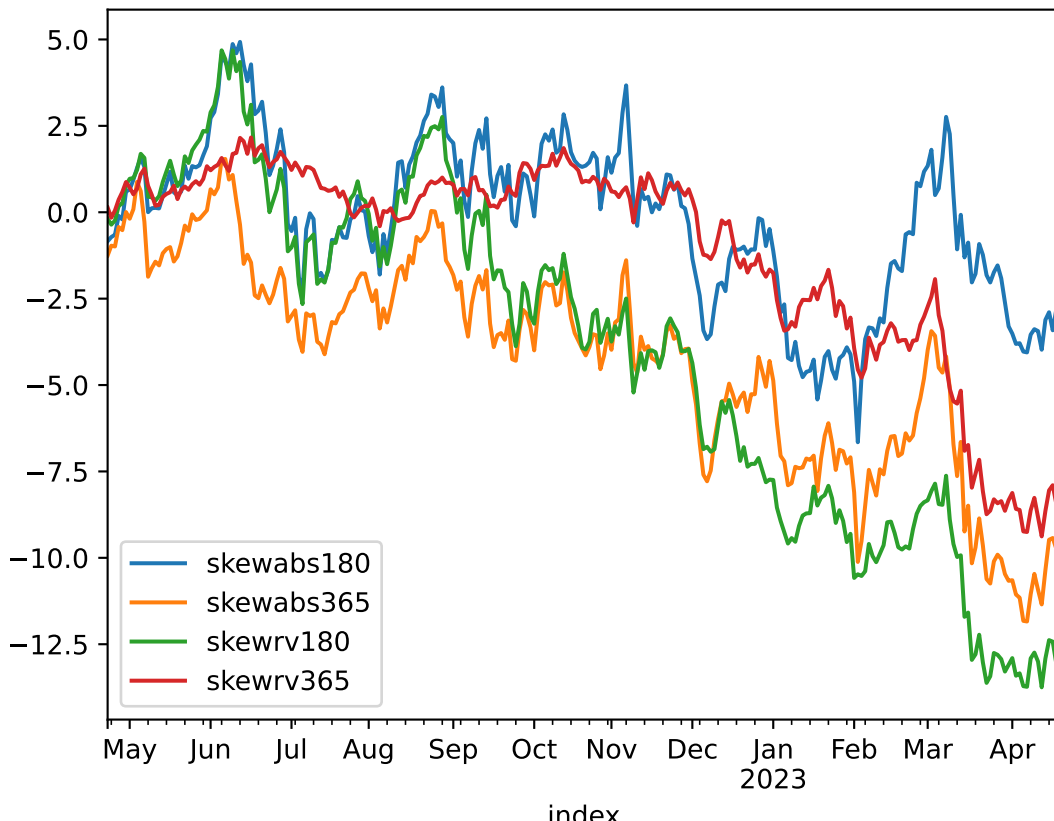
Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 4.94}
ann. std {'relcarry': 8.961}
ann. SR {'relcarry': 0.55}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': -8.224, 'skewabs365': -20.438, 'skewrv180': -19.054, 'skewrv365': -24.742}
ann. std {'skewabs180': 11.633, 'skewabs365': 11.882, 'skewrv180': 8.314, 'skewrv365': 8.063}
ann. SR {'skewabs180': -0.71, 'skewabs365': -1.72, 'skewrv180': -2.29, 'skewrv365': -3.07}



Total Trading Rule P&L for period '1Y'
ann. mean {'skewabs180': -2.976, 'skewabs365': -10.446, 'skewrv180': -13.405, 'skewrv365': -9.149}
ann. std {'skewabs180': 11.063, 'skewabs365': 9.978, 'skewrv180': 9.286, 'skewrv365': 5.716}
ann. SR {'skewabs180': -0.27, 'skewabs365': -1.05, 'skewrv180': -1.44, 'skewrv365': -1.6}

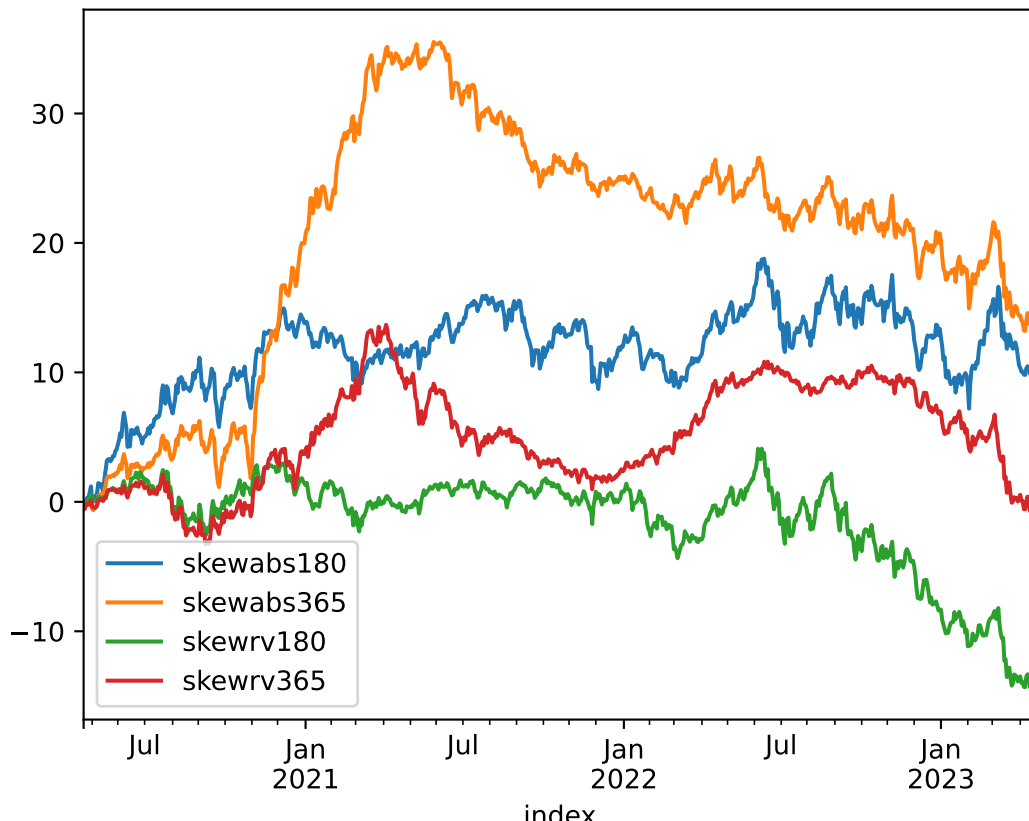


Total Trading Rule P&L for period '3Y'

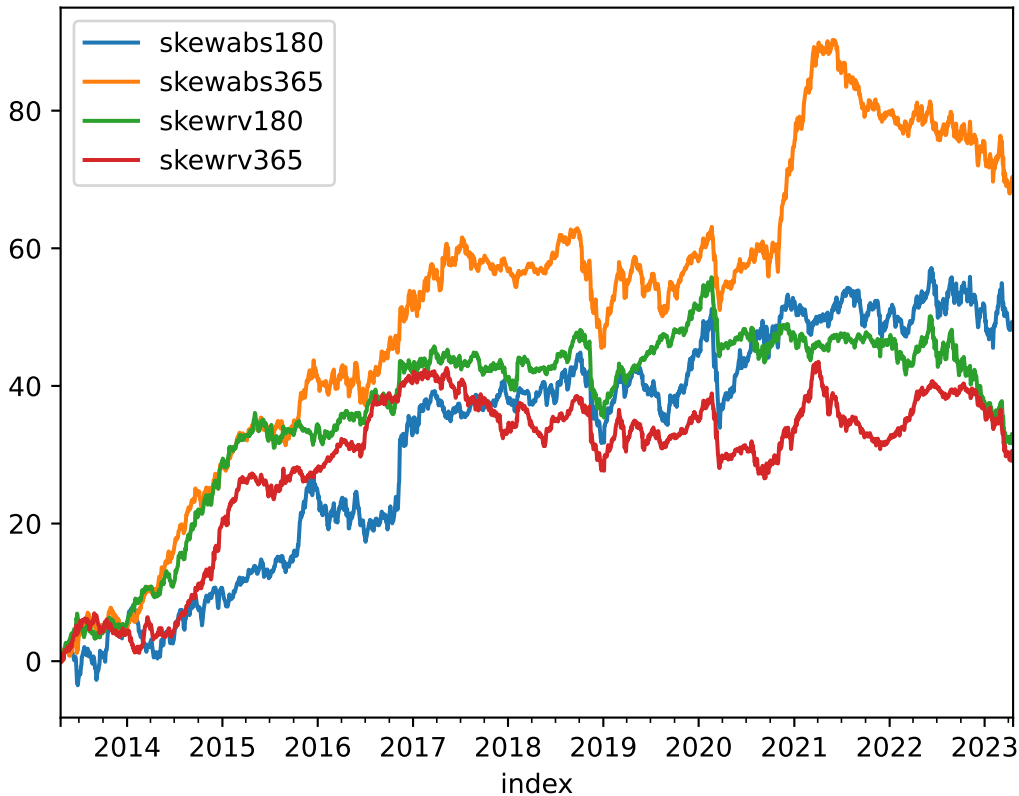
ann. mean {'skewabs180': 3.547, 'skewabs365': 4.727, 'skewrv180': -4.647, 'skewrv365': -0.204}

ann. std {'skewabs180': 9.129, 'skewabs365': 8.902, 'skewrv180': 7.242, 'skewrv365': 6.333}

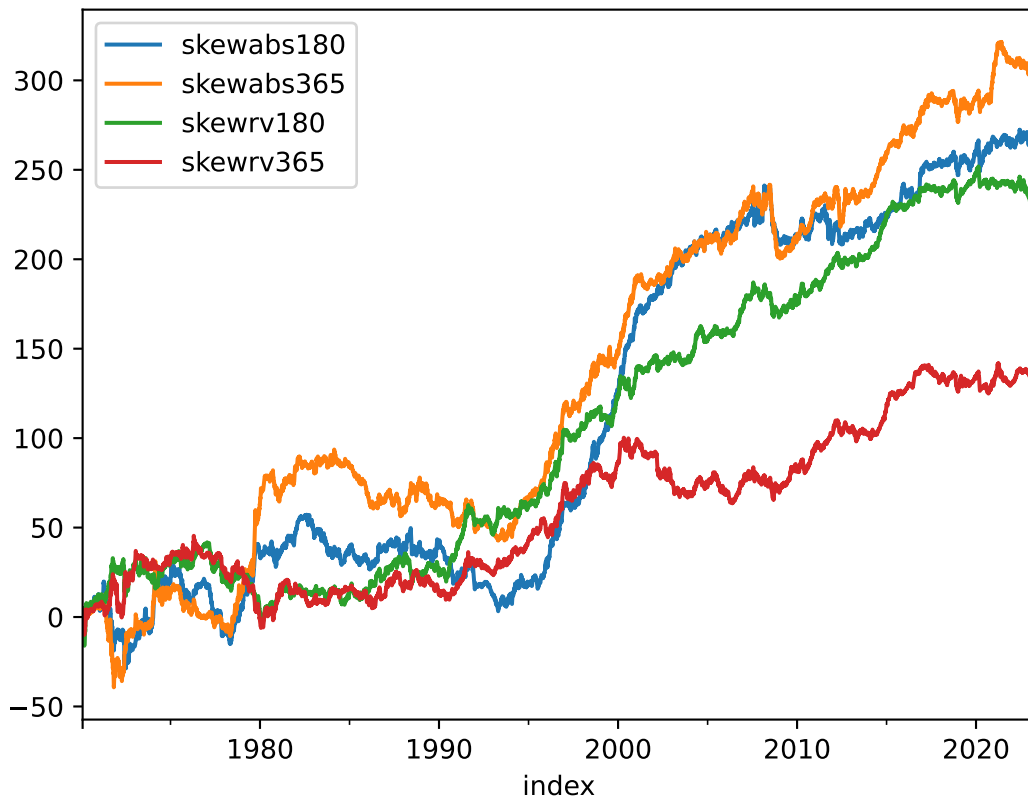
ann. SR {'skewabs180': 0.39, 'skewabs365': 0.53, 'skewrv180': -0.64, 'skewrv365': -0.03}



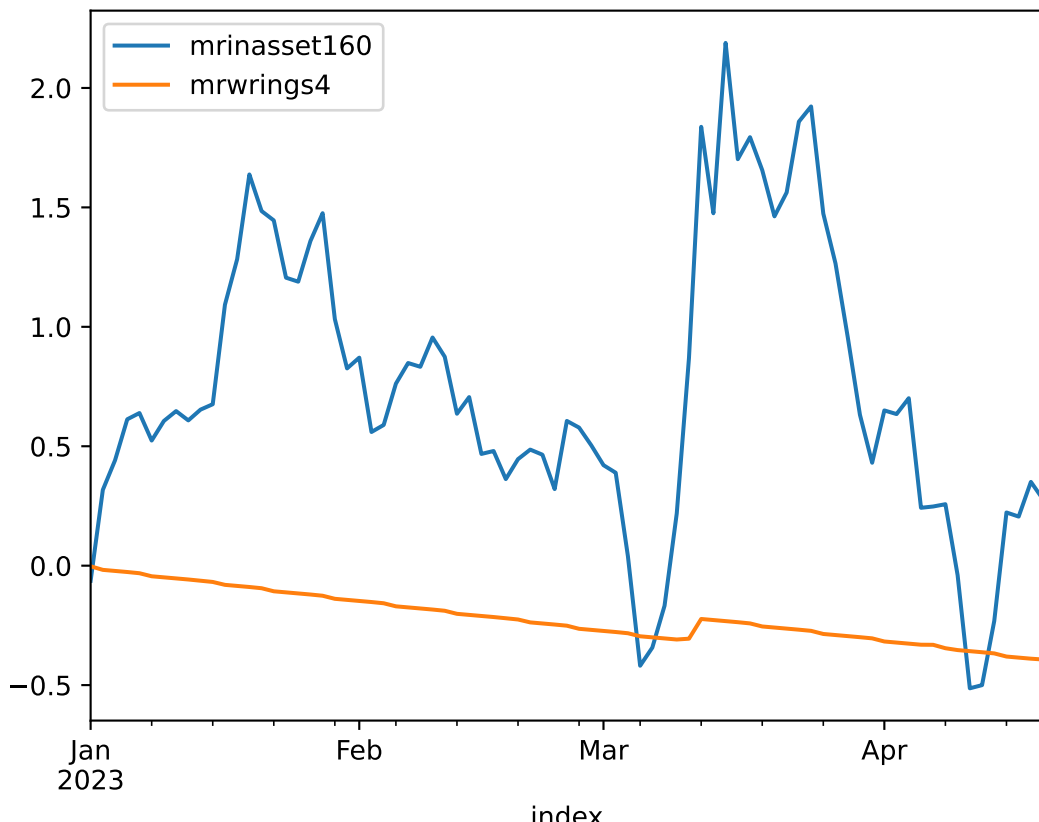
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.824, 'skewabs365': 6.789, 'skewrv180': 3.121, 'skewrv365': 2.867}
ann. std {'skewabs180': 8.008, 'skewabs365': 7.951, 'skewrv180': 6.39, 'skewrv365': 6.052}
ann. SR {'skewabs180': 0.6, 'skewabs365': 0.85, 'skewrv180': 0.49, 'skewrv365': 0.47}



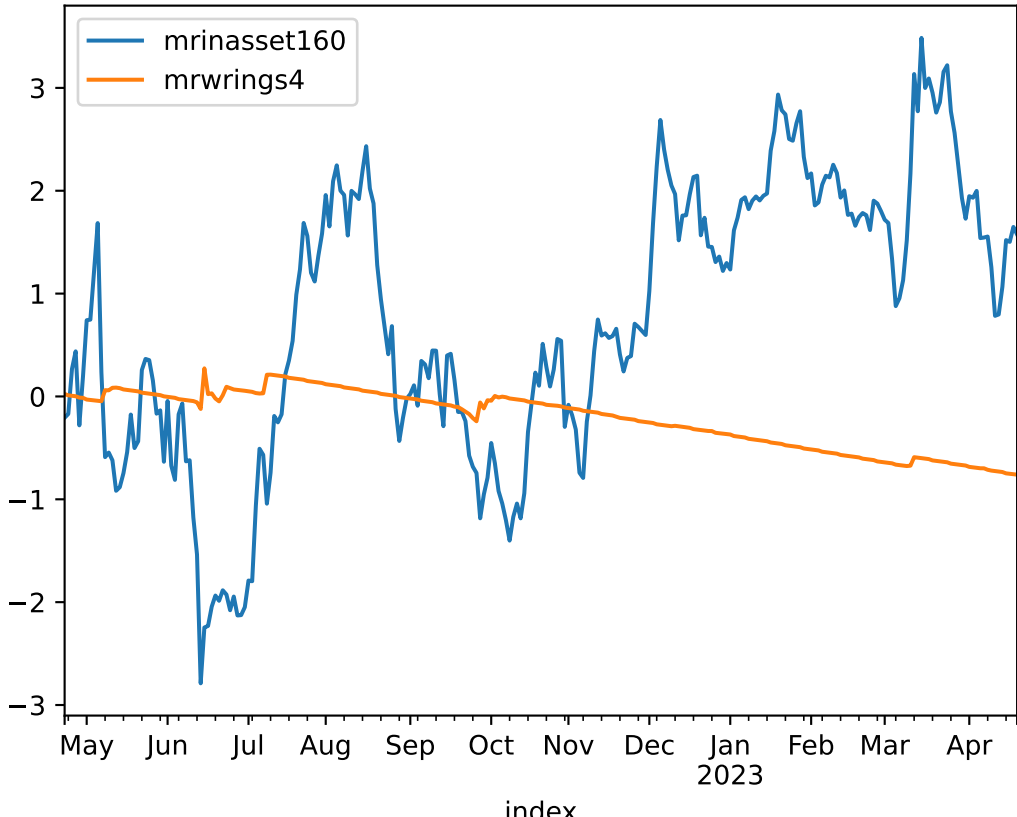
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.877, 'skewabs365': 5.539, 'skewrv180': 4.203, 'skewrv365': 2.353}
ann. std {'skewabs180': 10.101, 'skewabs365': 9.87, 'skewrv180': 8.752, 'skewrv365': 8.125}
ann. SR {'skewabs180': 0.48, 'skewabs365': 0.56, 'skewrv180': 0.48, 'skewrv365': 0.29}



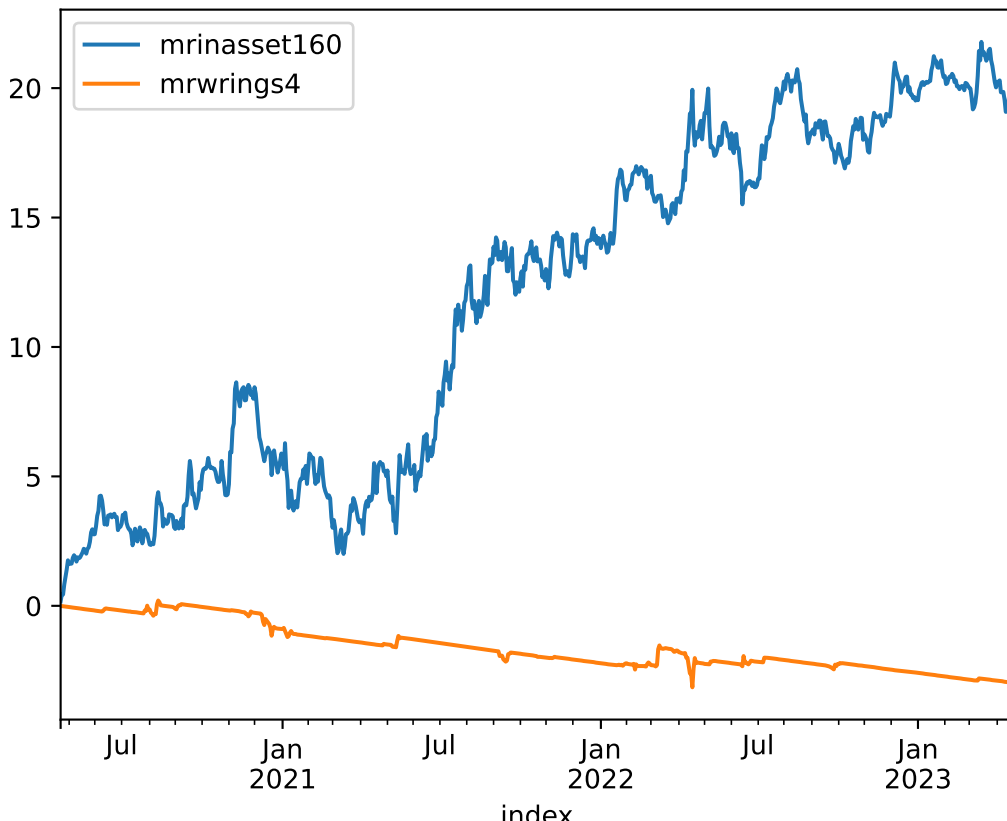
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 0.899, 'mrwrings4': -1.273}
ann. std {'mrinasset160': 4.297, 'mrwrings4': 0.17}
ann. SR {'mrinasset160': 0.21, 'mrwrings4': -7.5}



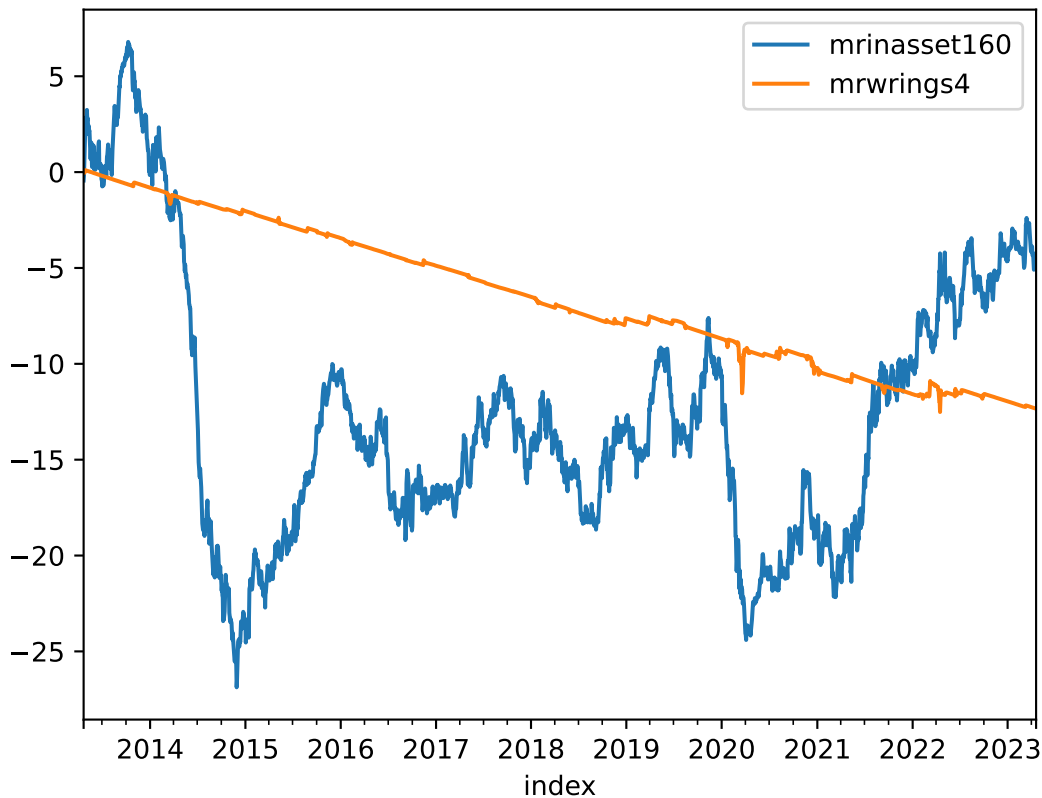
Total Trading Rule P&L for period '1Y'
ann. mean {'mriasset160': 1.551, 'mrwrings4': -0.749}
ann. std {'mriasset160': 5.214, 'mrwrings4': 0.586}
ann. SR {'mriasset160': 0.3, 'mrwrings4': -1.28}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 6.506, 'mrwrings4': -0.974}
ann. std {'mrinasset160': 6.263, 'mrwrings4': 1.017}
ann. SR {'mrinasset160': 1.04, 'mrwrings4': -0.96}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.422, 'mrwrings4': -1.211}
ann. std {'mrinasset160': 6.229, 'mrwrings4': 0.88}
ann. SR {'mrinasset160': -0.07, 'mrwrings4': -1.38}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.557, 'mrwrings4': -2.138}
ann. std {'mrinasset160': 9.869, 'mrwrings4': 2.088}
ann. SR {'mrinasset160': -0.36, 'mrwrings4': -1.02}

