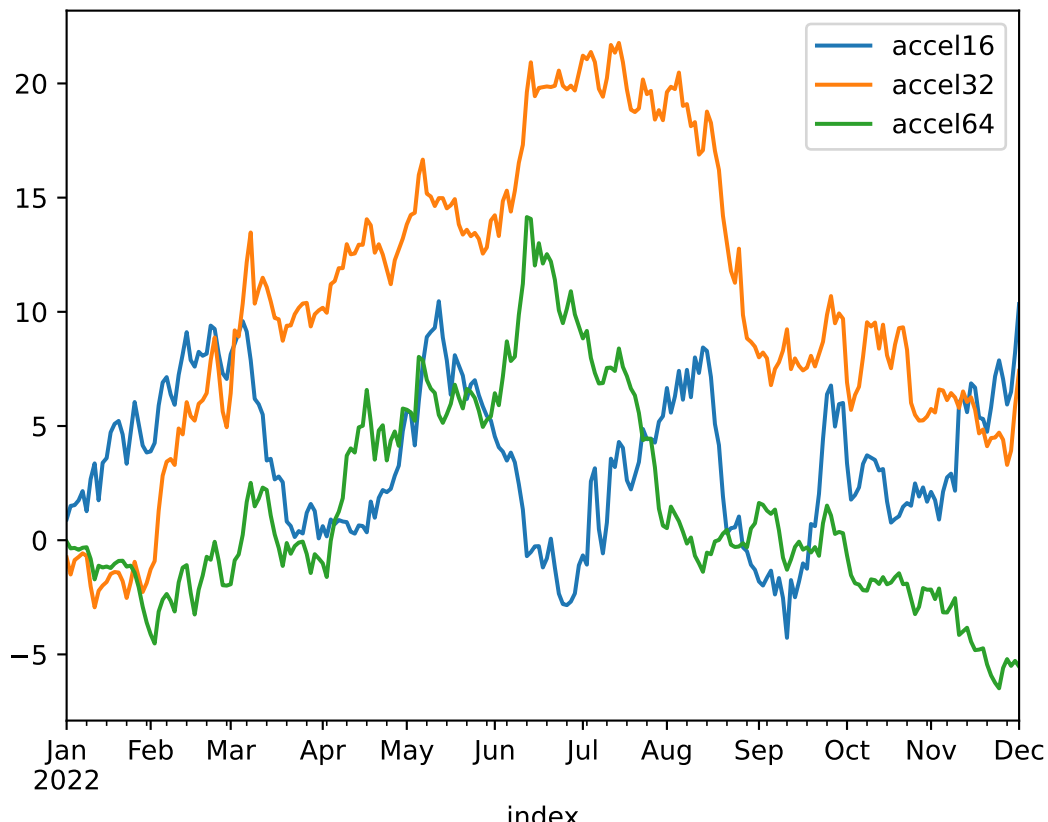
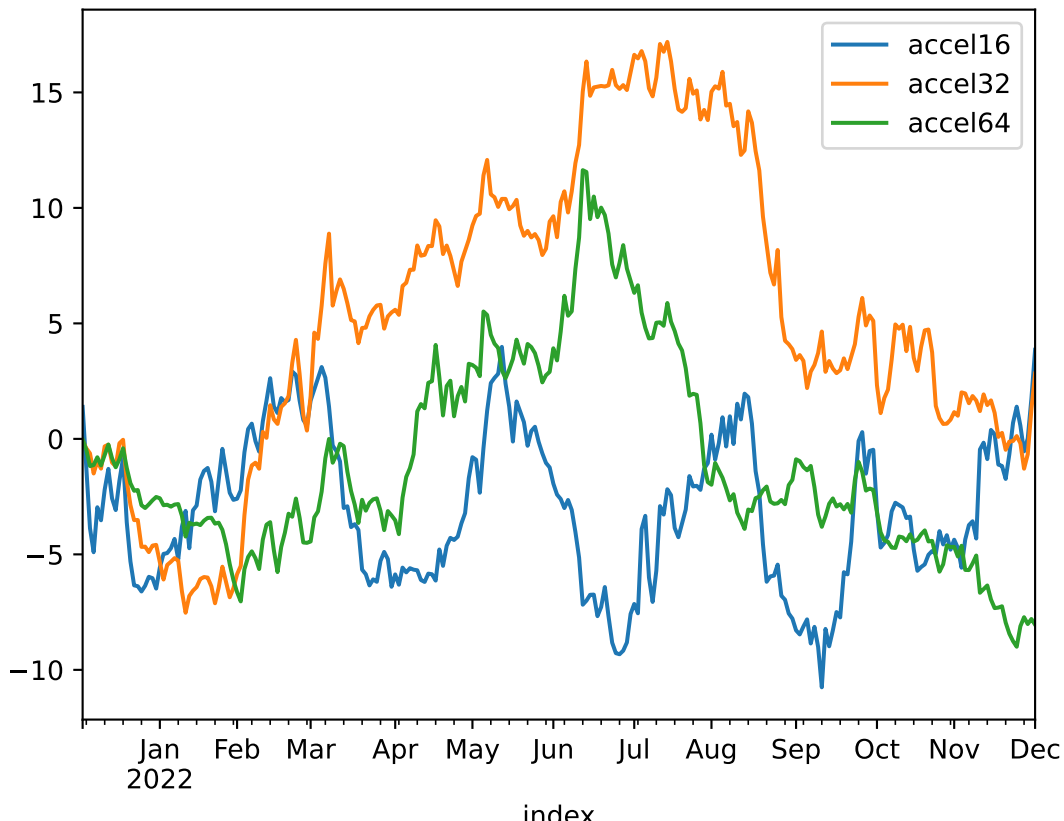


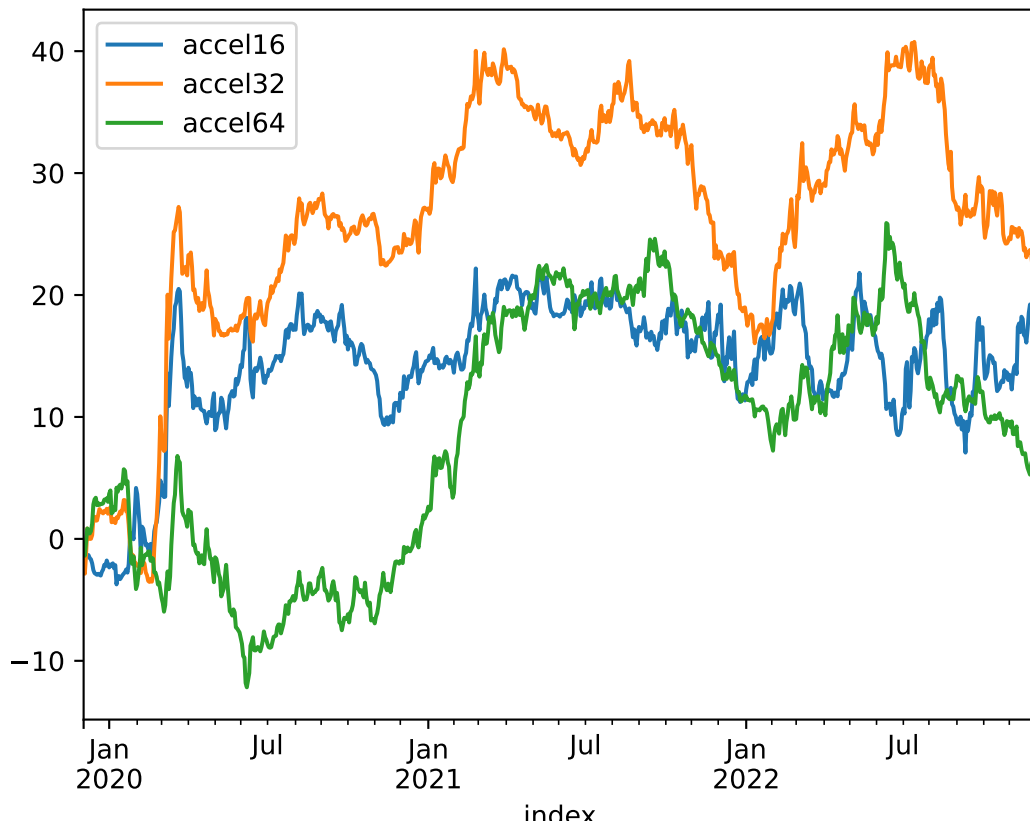
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': 11.074, 'accel32': 7.944, 'accel64': -5.926}
ann. std {'accel16': 16.426, 'accel32': 14.441, 'accel64': 11.94}
ann. SR {'accel16': 0.67, 'accel32': 0.55, 'accel64': -0.5}



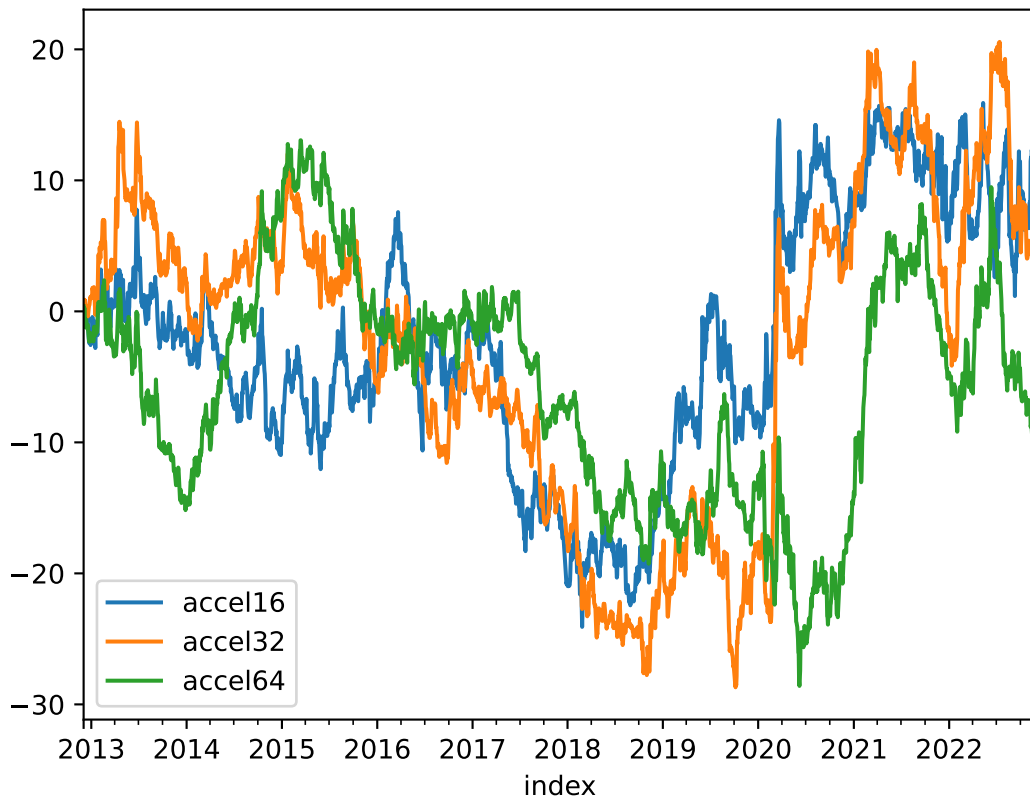
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': 3.798, 'accel32': 2.784, 'accel64': -7.922}
ann. std {'accel16': 16.971, 'accel32': 14.205, 'accel64': 11.613}
ann. SR {'accel16': 0.22, 'accel32': 0.2, 'accel64': -0.68}



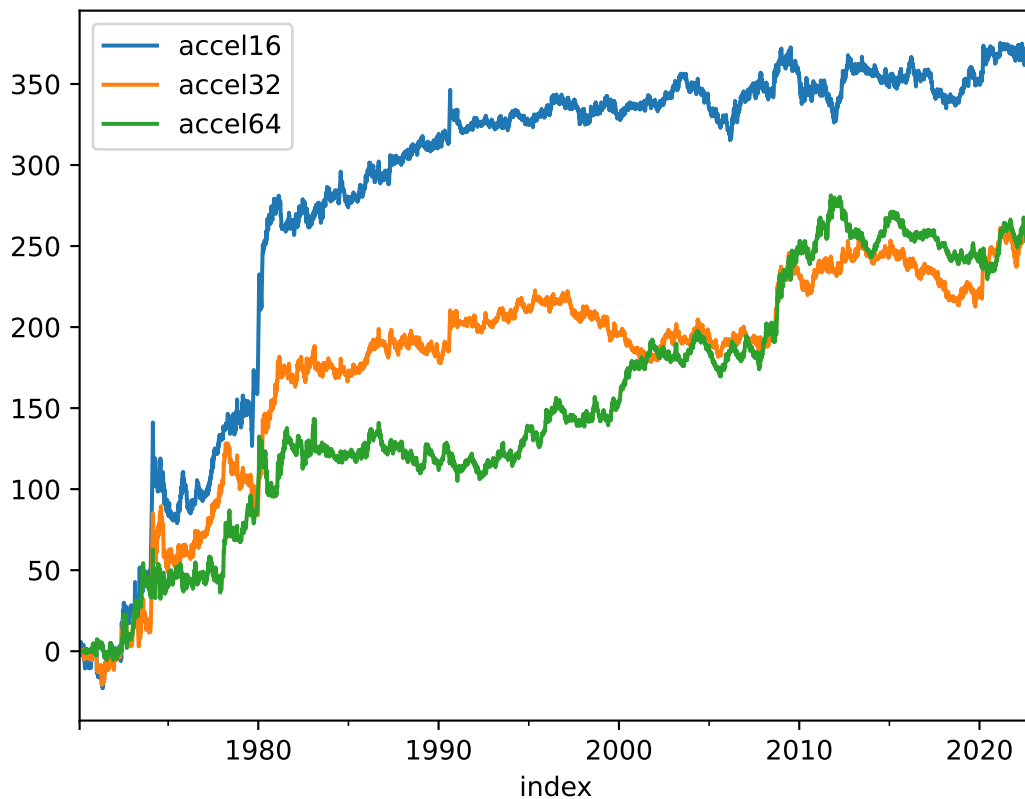
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': 7.091, 'accel32': 8.631, 'accel64': 2.034}
ann. std {'accel16': 14.83, 'accel32': 14.176, 'accel64': 11.793}
ann. SR {'accel16': 0.48, 'accel32': 0.61, 'accel64': 0.17}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 1.548, 'accel32': 0.609, 'accel64': -1.0}
ann. std {'accel16': 11.887, 'accel32': 11.116, 'accel64': 9.572}
ann. SR {'accel16': 0.13, 'accel32': 0.05, 'accel64': -0.1}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.963, 'accel32': 4.597, 'accel64': 4.606}
ann. std {'accel16': 15.733, 'accel32': 13.796, 'accel64': 13.335}
ann. SR {'accel16': 0.44, 'accel32': 0.33, 'accel64': 0.35}

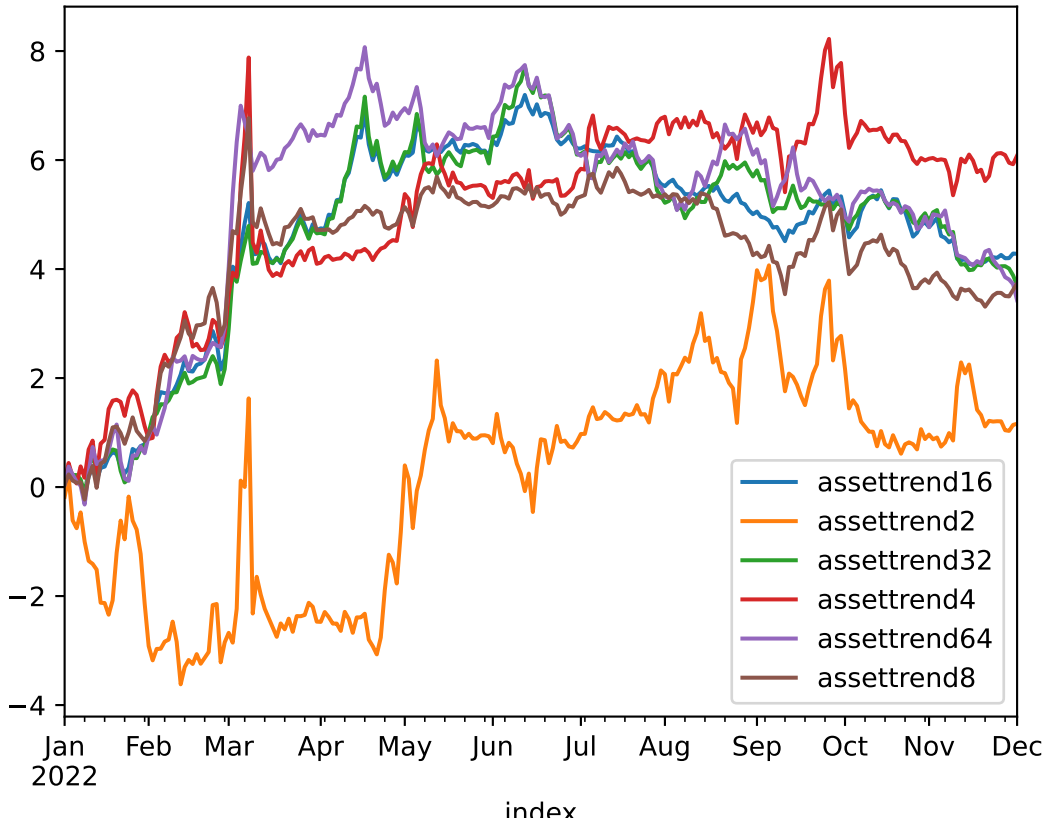


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': 4.584, 'assettrend2': 1.244, 'assettrend32': 3.966, 'assettrend4': 6.515, 'assettrend64': 3.672, 'assettrend8': 4.002}

ann. std {'assettrend16': 3.132, 'assettrend2': 7.948, 'assettrend32': 3.462, 'assettrend4': 5.944, 'assettrend64': 4.091, 'assettrend8': 3.89}

ann. SR {'assettrend16': 1.46, 'assettrend2': 0.16, 'assettrend32': 1.15, 'assettrend4': 1.1, 'assettrend64': 0.9, 'assettrend8': 1.03}

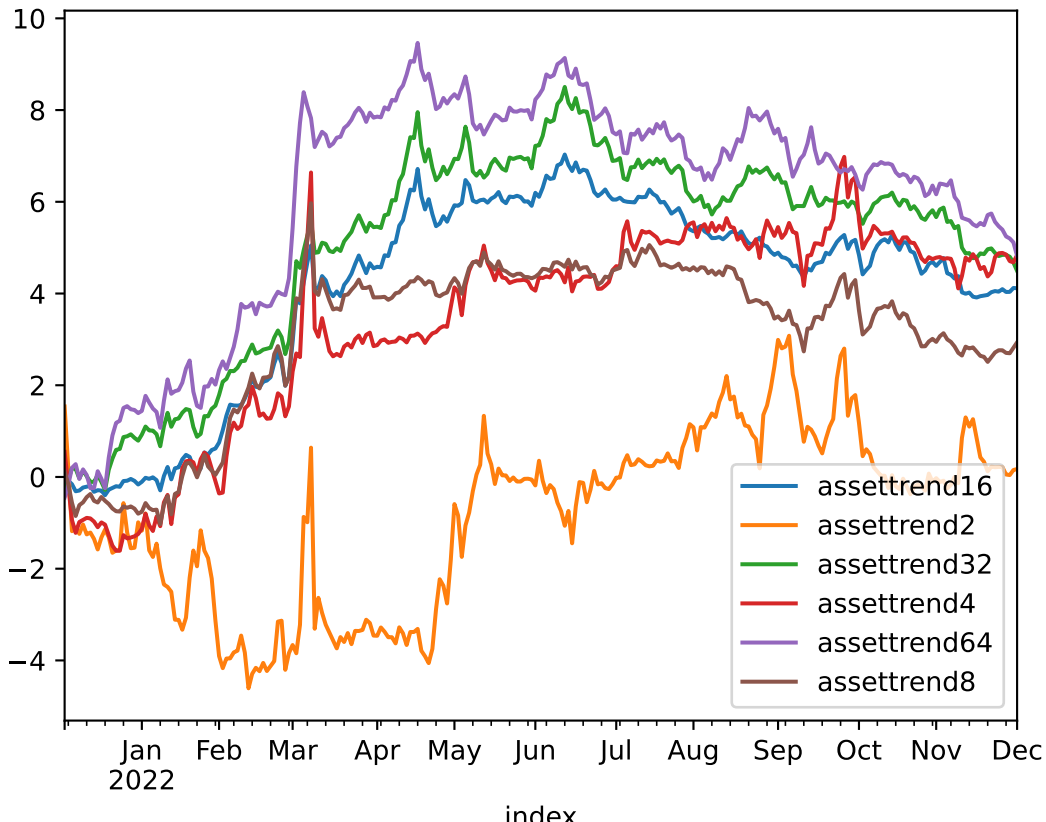


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': 4.052, 'assettrend2': 0.17, 'assettrend32': 4.425, 'assettrend4': 4.764, 'assettrend64': 4.746, 'assettrend8': 2.89}

ann. std {'assettrend16': 3.026, 'assettrend2': 8.145, 'assettrend32': 3.446, 'assettrend4': 5.86, 'assettrend64': 4.128, 'assettrend8': 3.799}

ann. SR {'assettrend16': 1.34, 'assettrend2': 0.02, 'assettrend32': 1.28, 'assettrend4': 0.81, 'assettrend64': 1.15, 'assettrend8': 0.76}

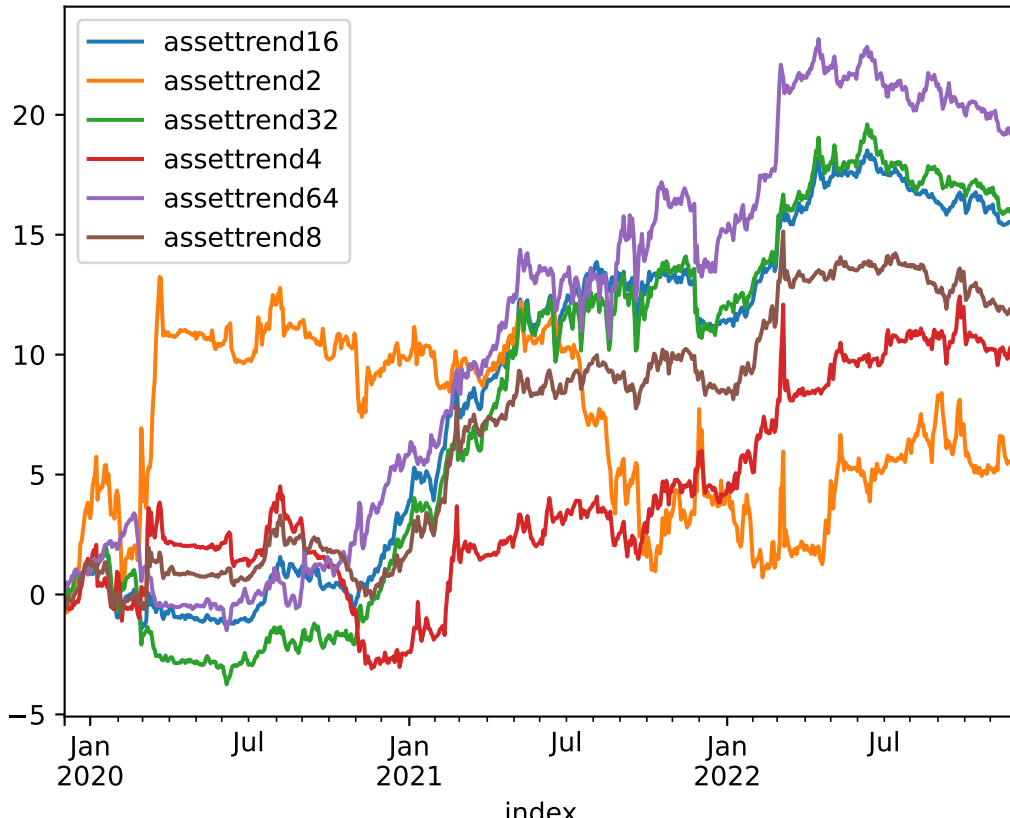


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 5.101, 'assettrend2': 1.796, 'assettrend32': 5.097, 'assettrend4': 3.364, 'assettrend64': 6.055, 'assettrend8': 3.958}

ann. std {'assettrend16': 3.623, 'assettrend2': 7.886, 'assettrend32': 4.431, 'assettrend4': 5.457, 'assettrend64': 5.126, 'assettrend8': 3.768}

ann. SR {'assettrend16': 1.41, 'assettrend2': 0.23, 'assettrend32': 1.15, 'assettrend4': 0.62, 'assettrend64': 1.18, 'assettrend8': 1.05}

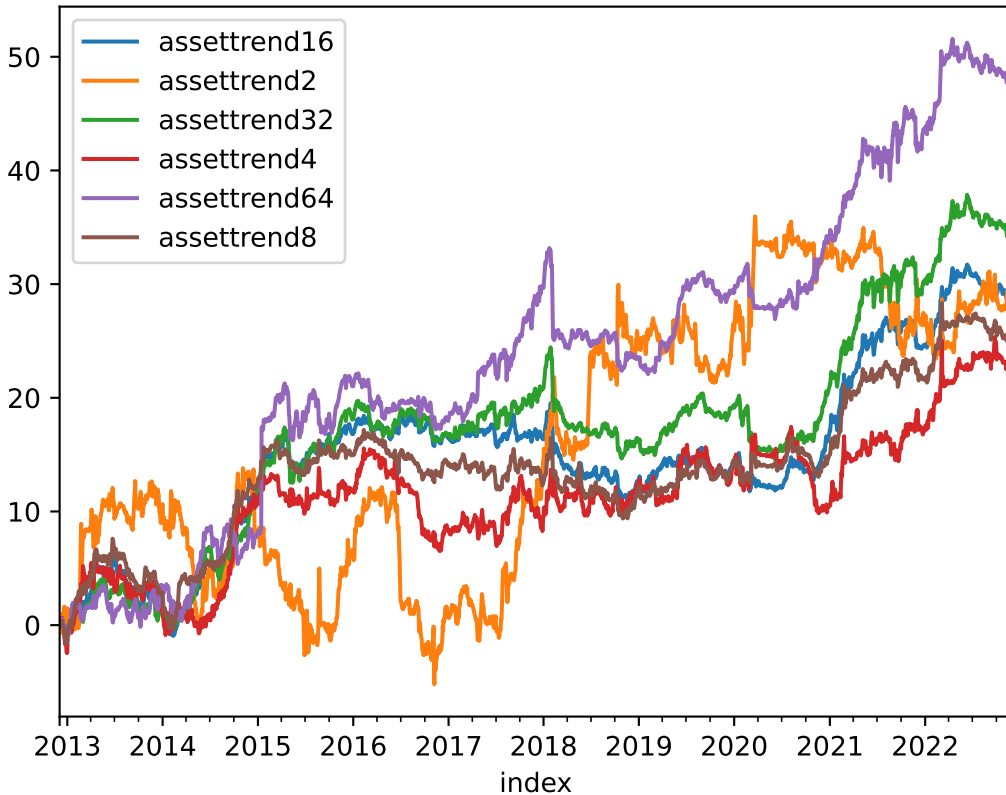


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.827, 'assettrend2': 2.768, 'assettrend32': 3.322, 'assettrend4': 2.279, 'assettrend64': 4.605, 'assettrend8': 2.483}

ann. std {'assettrend16': 3.282, 'assettrend2': 8.456, 'assettrend32': 3.759, 'assettrend4': 5.044, 'assettrend64': 5.306, 'assettrend8': 3.599}

ann. SR {'assettrend16': 0.86, 'assettrend2': 0.33, 'assettrend32': 0.88, 'assettrend4': 0.45, 'assettrend64': 0.87, 'assettrend8': 0.69}

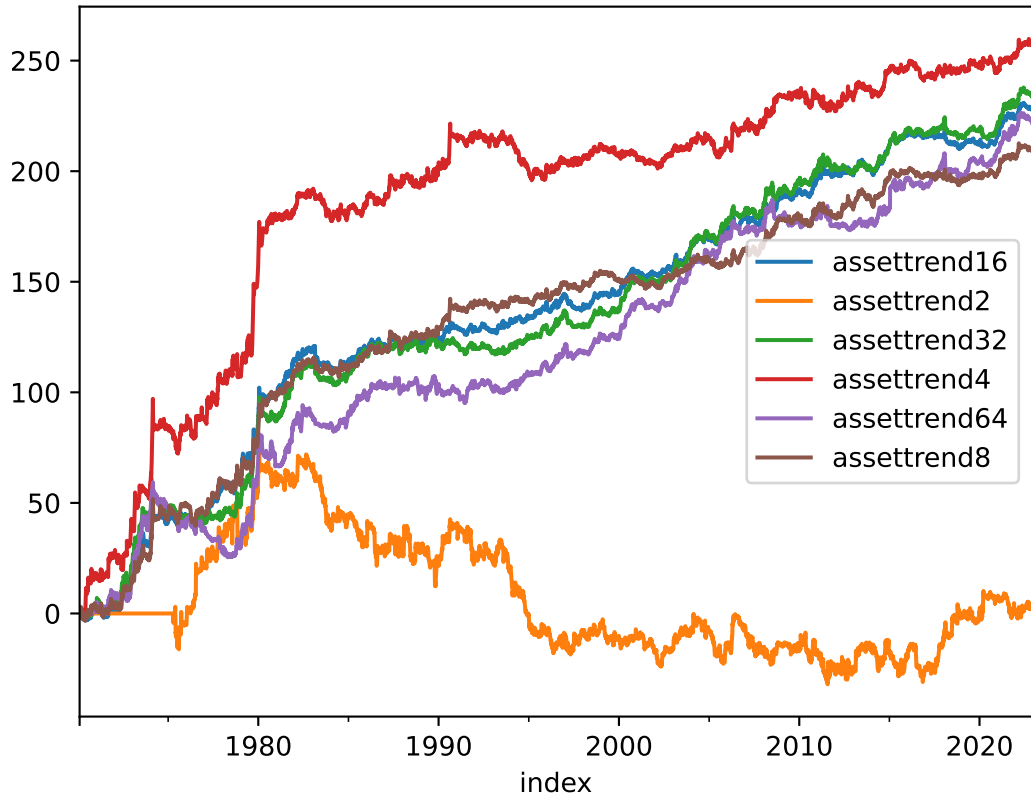


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.235, 'assettrend2': 0.045, 'assettrend32': 4.343, 'assettrend4': 4.786, 'assettrend64': 4.121, 'assettrend8': 3.893}

ann. std {'assettrend16': 4.665, 'assettrend2': 10.057, 'assettrend32': 4.899, 'assettrend4': 7.355, 'assettrend64': 5.473, 'assettrend8': 5.041}

ann. SR {'assettrend16': 0.91, 'assettrend2': 0.0, 'assettrend32': 0.89, 'assettrend4': 0.65, 'assettrend64': 0.75, 'assettrend8': 0.77}

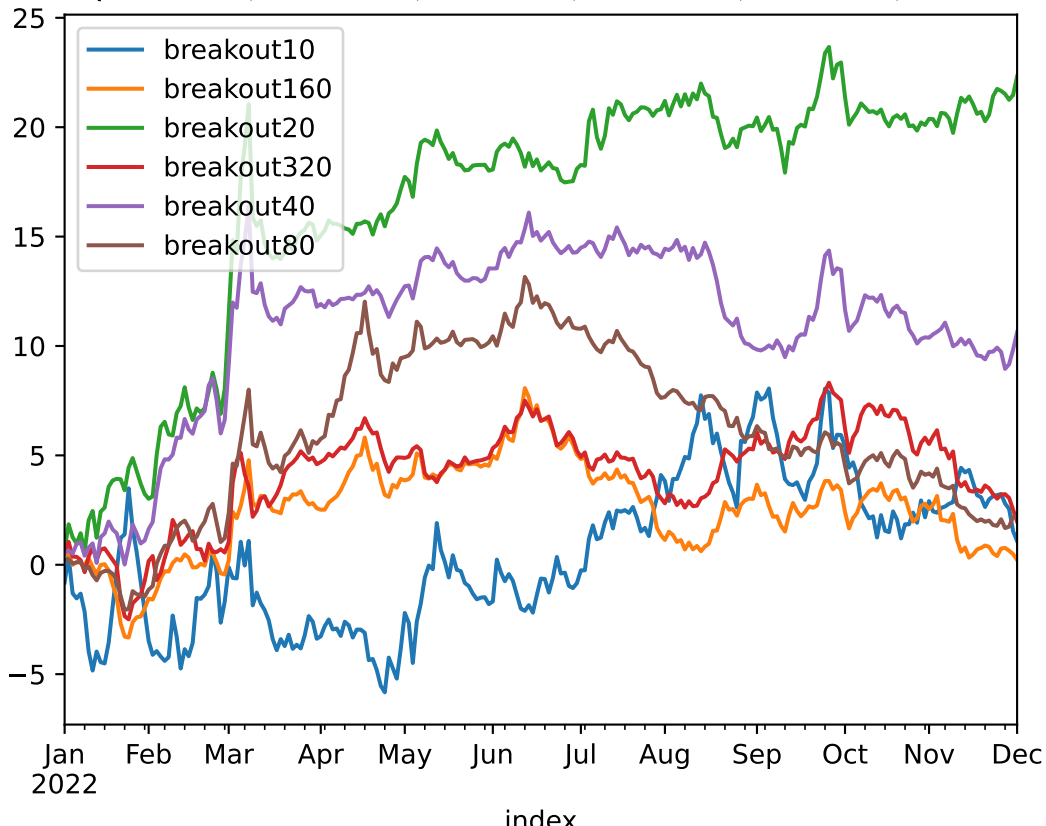


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 1.162, 'breakout160': 0.233, 'breakout20': 23.907, 'breakout320': 2.113, 'breakout40': 11.383, 'breakout80': 2.362}

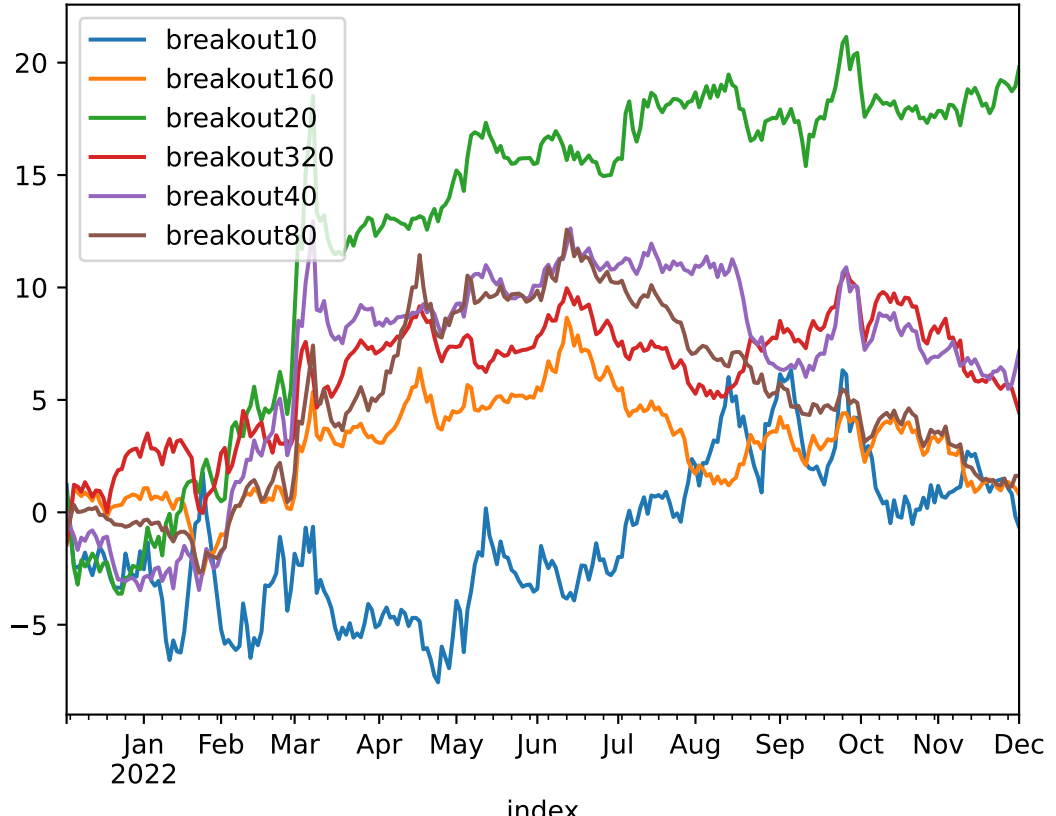
ann. std {'breakout10': 14.019, 'breakout160': 7.335, 'breakout20': 12.394, 'breakout320': 7.662, 'breakout40': 9.853, 'breakout80': 8.058}

ann. SR {'breakout10': 0.08, 'breakout160': 0.03, 'breakout20': 1.93, 'breakout320': 0.28, 'breakout40': 1.16, 'breakout80': 0.29}



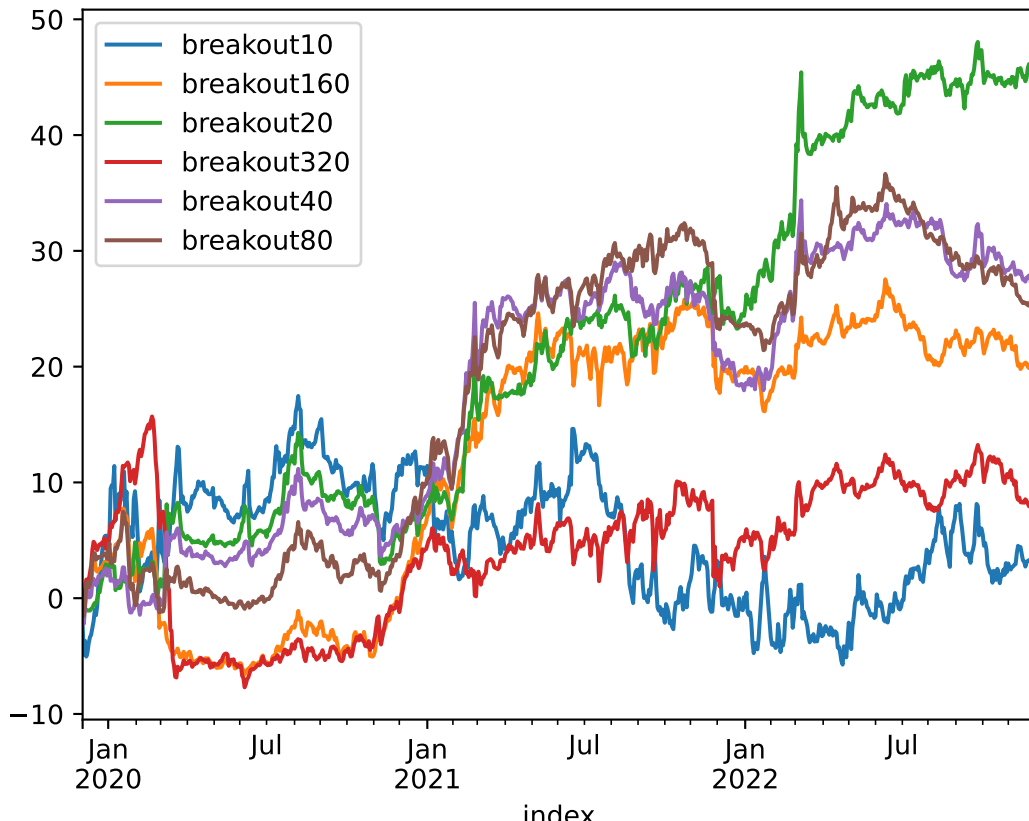
Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': -0.637, 'breakout160': 0.784, 'breakout20': 19.49, 'breakout320': 4.37, 'breakout40': 7.049, 'breakout80': 1.597}
 ann. std {'breakout10': 13.971, 'breakout160': 7.382, 'breakout20': 12.337, 'breakout320': 7.895, 'breakout40': 9.632, 'breakout80': 7.837}
 ann. SR {'breakout10': -0.05, 'breakout160': 0.11, 'breakout20': 1.58, 'breakout320': 0.55, 'breakout40': 0.73, 'breakout80': 0.2}



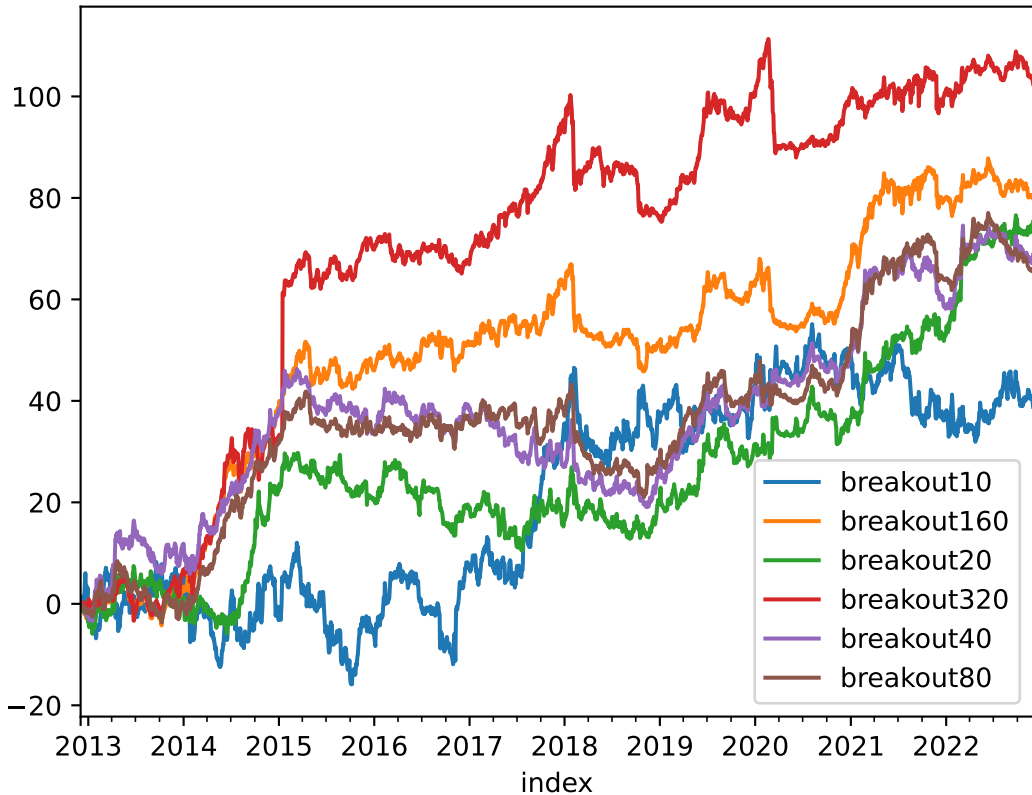
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': 0.384, 'breakout160': 6.437, 'breakout20': 15.268, 'breakout320': 2.251, 'breakout40': 9.345, 'breakout80': 8.401}
ann. std {'breakout10': 15.239, 'breakout160': 9.804, 'breakout20': 11.516, 'breakout320': 10.817, 'breakout40': 10.055, 'breakout80': 9.718}
ann. SR {'breakout10': 0.03, 'breakout160': 0.66, 'breakout20': 1.33, 'breakout320': 0.21, 'breakout40': 0.93, 'breakout80': 0.86}



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

ann. mean {'breakout10': 3.811, 'breakout160': 7.845, 'breakout20': 7.382, 'breakout320': 10.06, 'breakout80': 6.486}
ann. std {'breakout10': 15.768, 'breakout160': 9.144, 'breakout20': 11.21, 'breakout320': 13.344, 'breakout40': 9.837, 'breakout80': 9.017}
ann. SR {'breakout10': 0.24, 'breakout160': 0.86, 'breakout20': 0.66, 'breakout320': 0.75, 'breakout40': 0.69, 'breakout80': 0.72}

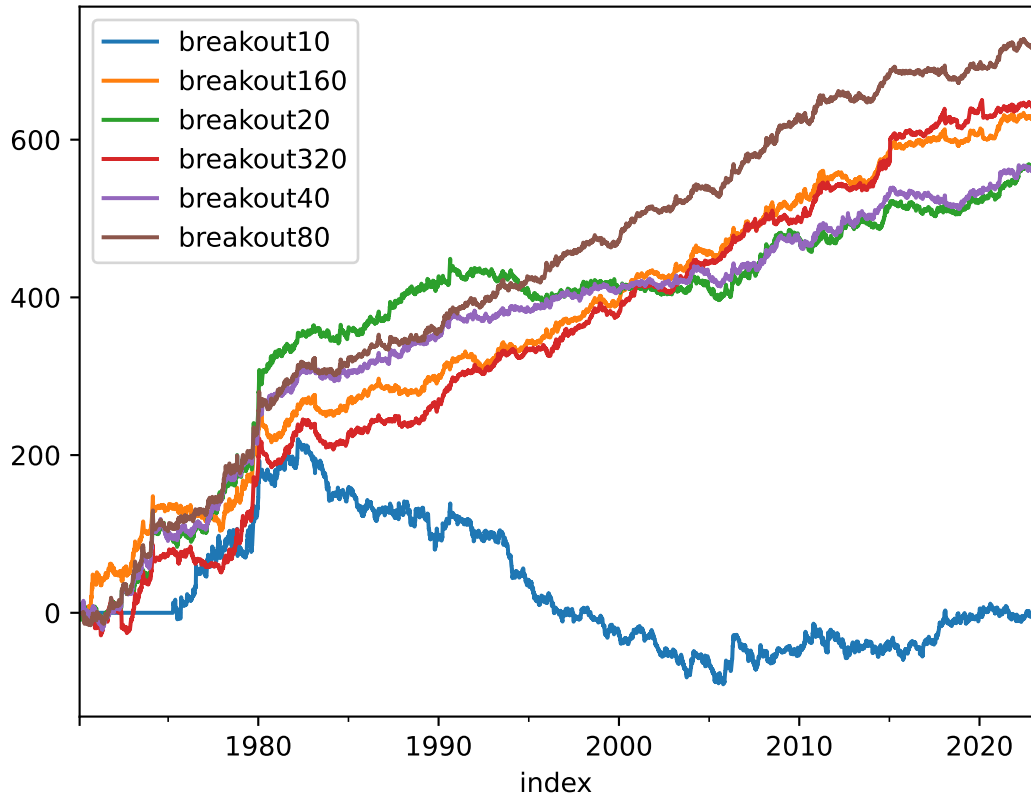


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.087, 'breakout160': 11.631, 'breakout20': 10.543, 'breakout320': 11.914, 'breakout40': 10.436, 'breakout80': 13.314}

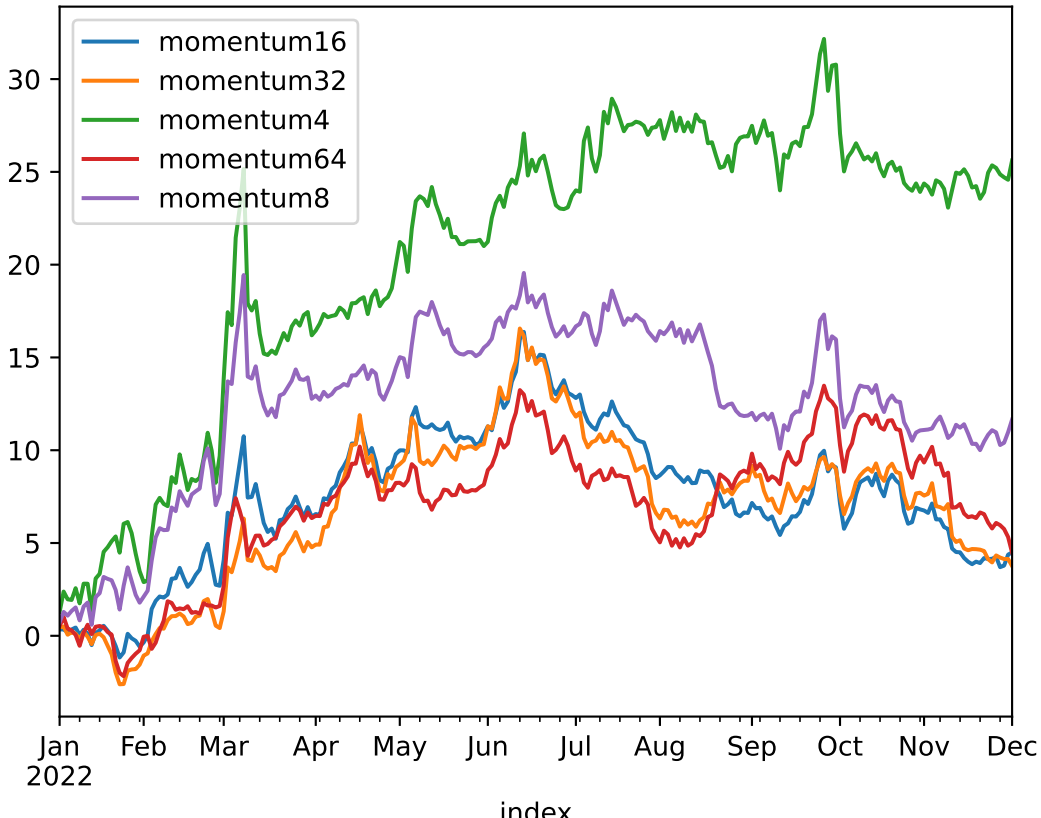
ann. std {'breakout10': 20.851, 'breakout160': 12.507, 'breakout20': 16.114, 'breakout320': 13.06, 'breakout40': 13.243, 'breakout80': 12.765}

ann. SR {'breakout10': -0.0, 'breakout160': 0.93, 'breakout20': 0.65, 'breakout320': 0.91, 'breakout40': 0.79, 'breakout80': 1.04}



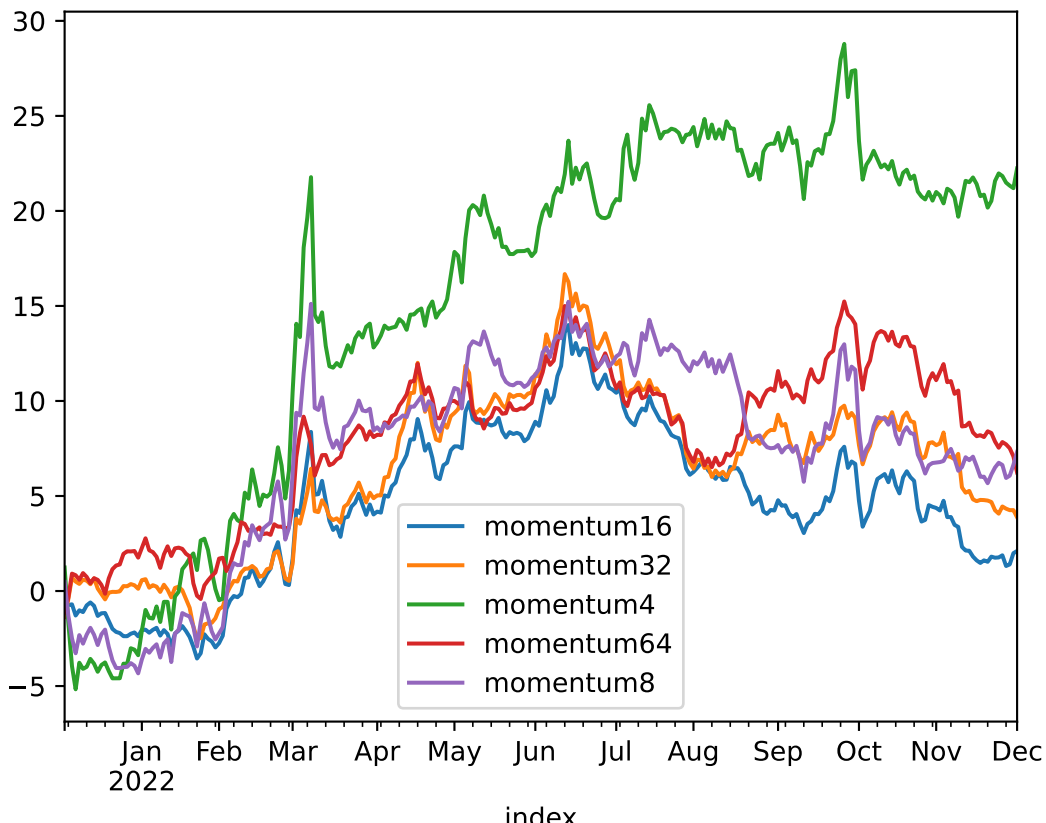
Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 4.809, 'momentum32': 4.029, 'momentum4': 27.435, 'momentum64': 4.8, 'momentum8': 12.481}
ann. std {'momentum16': 10.333, 'momentum32': 9.987, 'momentum4': 17.735, 'momentum64': 9.641, 'momentum8': 13.543}
ann. SR {'momentum16': 0.47, 'momentum32': 0.4, 'momentum4': 1.55, 'momentum64': 0.5, 'momentum8': 0.92}



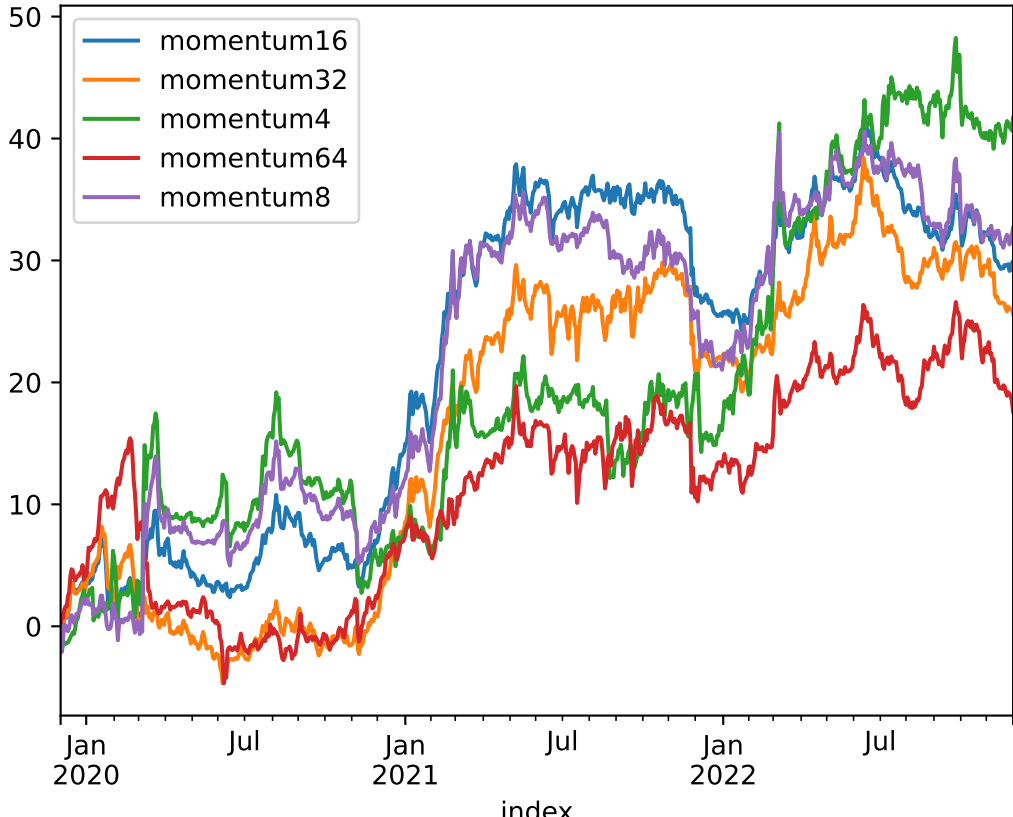
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': 2.074, 'momentum32': 3.818, 'momentum4': 21.893, 'momentum64': 6.141, 'momentum8': 7.208}
ann. std {'momentum16': 10.007, 'momentum32': 9.827, 'momentum4': 17.624, 'momentum64': 9.531, 'momentum8': 13.349}
ann. SR {'momentum16': 0.21, 'momentum32': 0.39, 'momentum4': 1.24, 'momentum64': 0.64, 'momentum8': 0.54}



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

ann. mean {'momentum16': 9.785, 'momentum32': 8.382, 'momentum4': 13.633, 'momentum64': 5.755, 'momentum8': 10.687}
ann. std {'momentum16': 11.09, 'momentum32': 10.922, 'momentum4': 16.062, 'momentum64': 11.009, 'momentum8': 12.783}
ann. SR {'momentum16': 0.88, 'momentum32': 0.77, 'momentum4': 0.85, 'momentum64': 0.52, 'momentum8': 0.84}

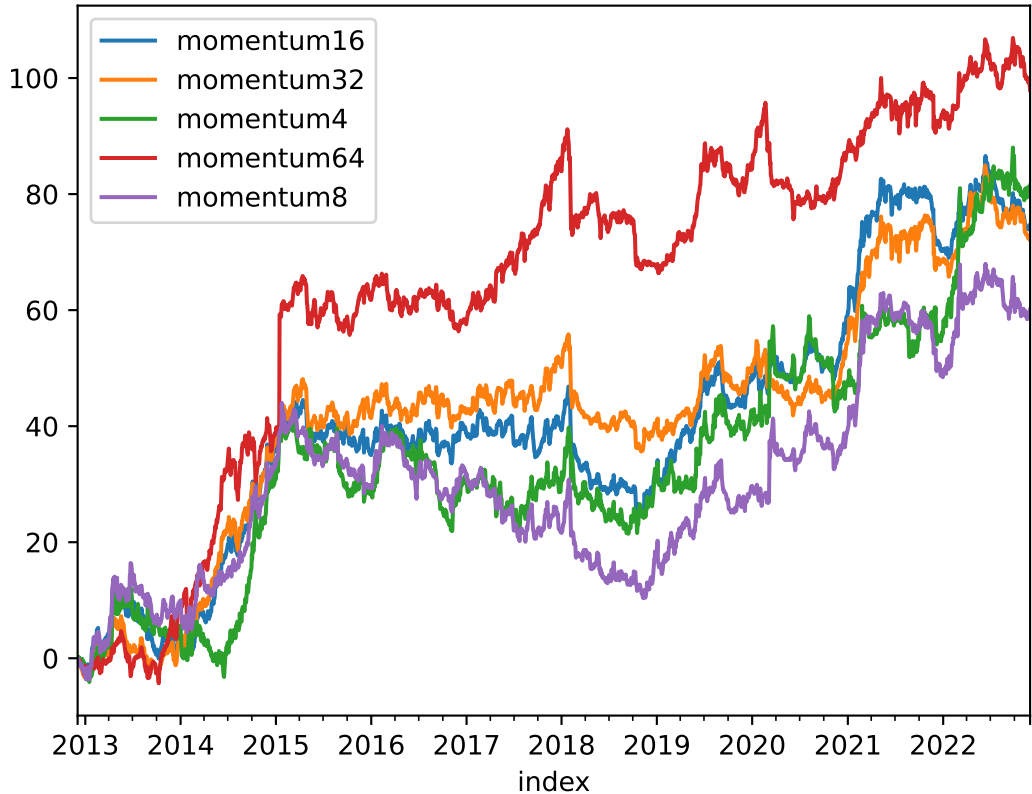


Total Trading Rule P&L for period '10Y'

ann. mean {'momentum16': 7.327, 'momentum32': 7.079, 'momentum4': 7.994, 'momentum64': 9.608, 'momentum8': 5.895}

ann. std {'momentum16': 9.95, 'momentum32': 9.508, 'momentum4': 13.675, 'momentum64': 12.01, 'momentum8': 11.317}

ann. SR {'momentum16': 0.74, 'momentum32': 0.74, 'momentum4': 0.58, 'momentum64': 0.8, 'momentum8': 0.52}

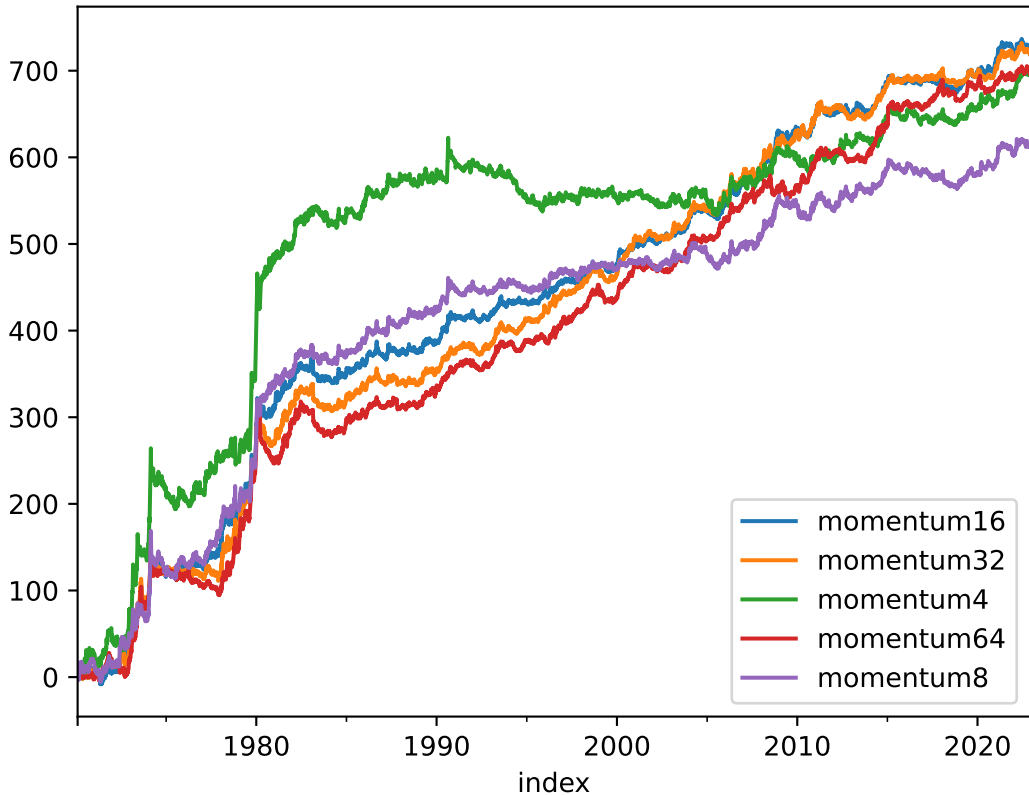


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.462, 'momentum32': 13.358, 'momentum4': 12.952, 'momentum64': 12.934, 'momentum8': 11.394}

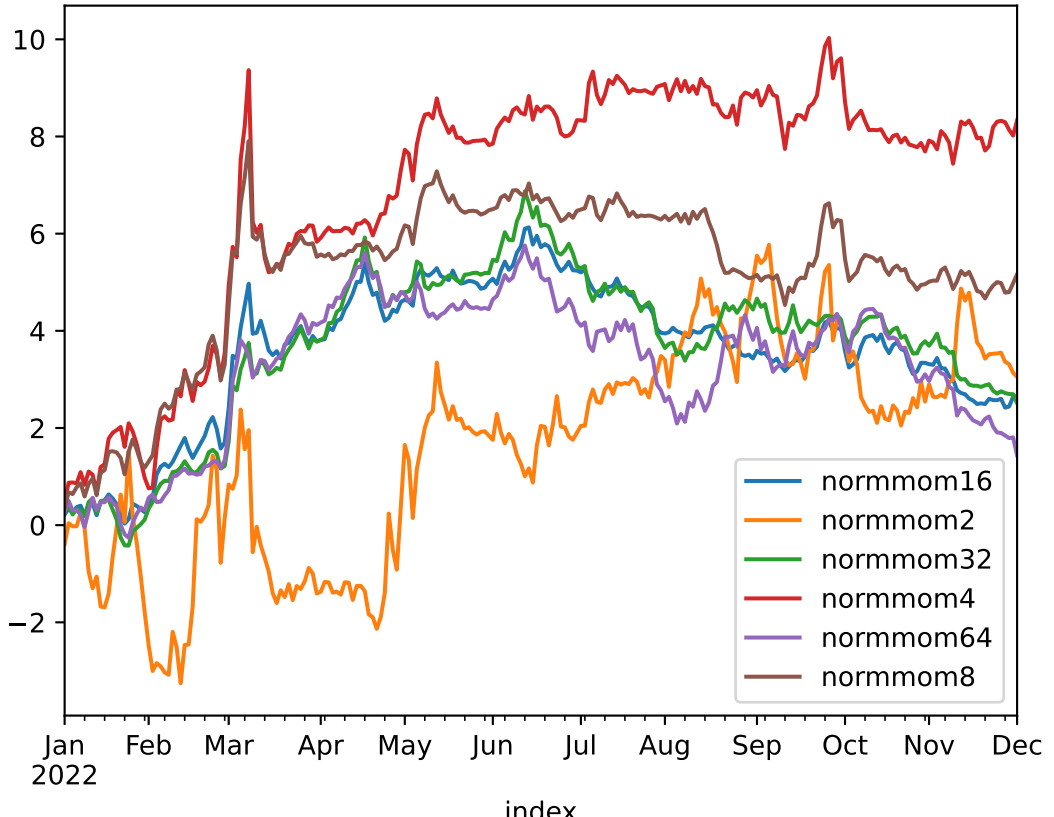
ann. std {'momentum16': 14.234, 'momentum32': 13.865, 'momentum4': 20.091, 'momentum64': 13.501, 'momentum8': 15.884}

ann. SR {'momentum16': 0.95, 'momentum32': 0.96, 'momentum4': 0.64, 'momentum64': 0.96, 'momentum8': 0.72}



Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 2.849, 'normmom2': 3.269, 'normmom32': 2.69, 'normmom4': 8.927, 'normmom64': 1.54, 'normmom8': 5.531}
ann. std {'normmom16': 3.205, 'normmom2': 8.287, 'normmom32': 3.278, 'normmom4': 6.125, 'normmom64': 3.525, 'normmom8': 4.372}
ann. SR {'normmom16': 0.89, 'normmom2': 0.39, 'normmom32': 0.82, 'normmom4': 1.46, 'normmom64': 0.44, 'normmom8': 1.26}

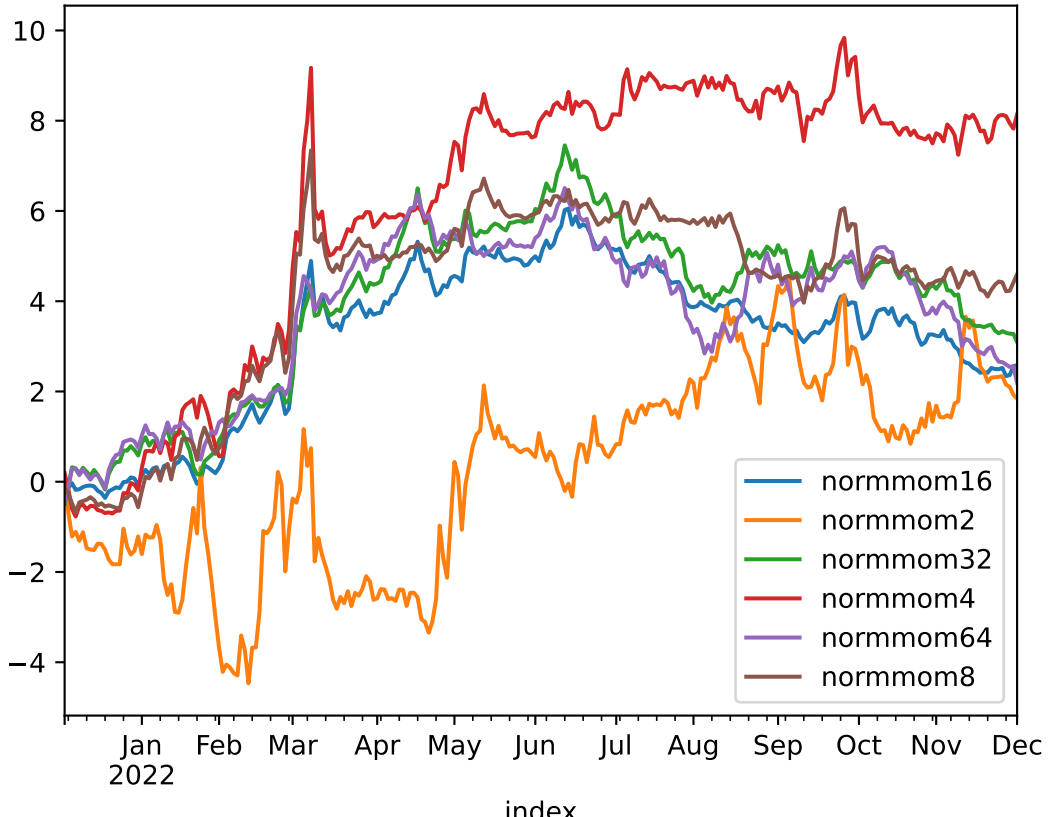


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': 2.542, 'normmom2': 1.812, 'normmom32': 3.045, 'normmom4': 8.014, 'normmom64': 2.156, 'normmom8': 4.528}

ann. std {'normmom16': 3.118, 'normmom2': 8.081, 'normmom32': 3.286, 'normmom4': 5.933, 'normmom64': 3.5, 'normmom8': 4.233}

ann. SR {'normmom16': 0.82, 'normmom2': 0.22, 'normmom32': 0.93, 'normmom4': 1.35, 'normmom64': 0.62, 'normmom8': 1.07}

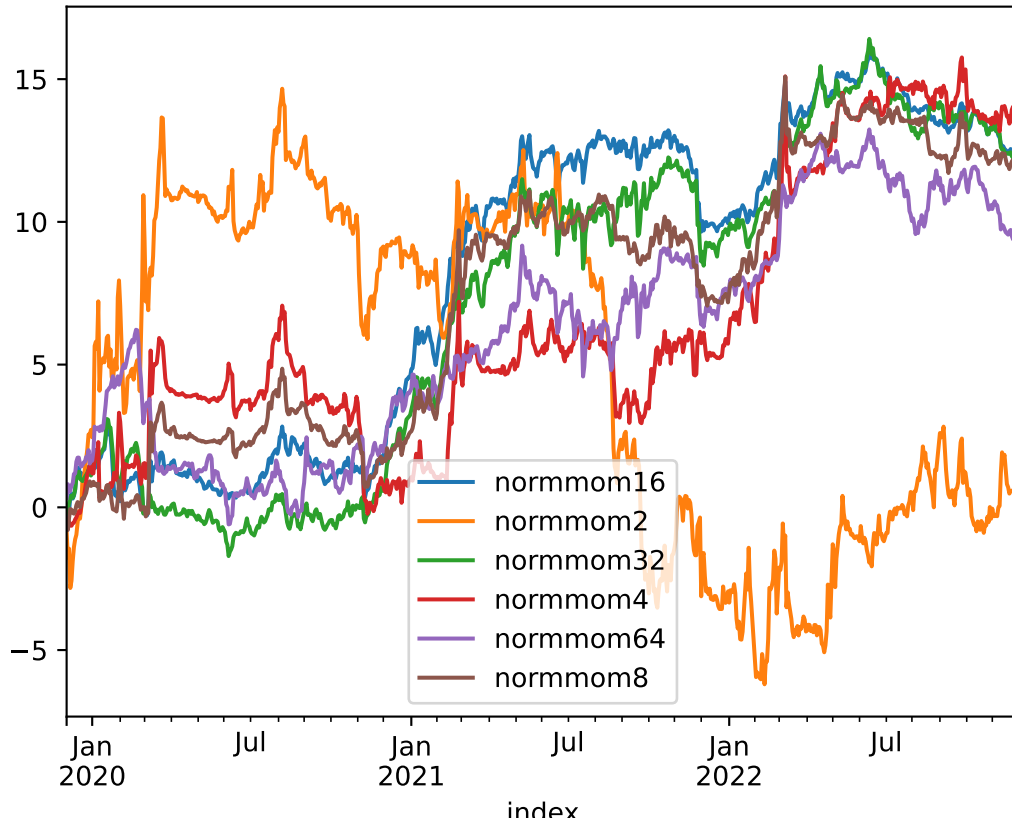


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 4.123, 'normmom2': 0.035, 'normmom32': 3.939, 'normmom4': 4.599, 'normmom64': 2.916, 'normmom8': 4.036}

ann. std {'normmom16': 3.74, 'normmom2': 8.956, 'normmom32': 4.059, 'normmom4': 5.934, 'normmom64': 4.362, 'normmom8': 4.263}

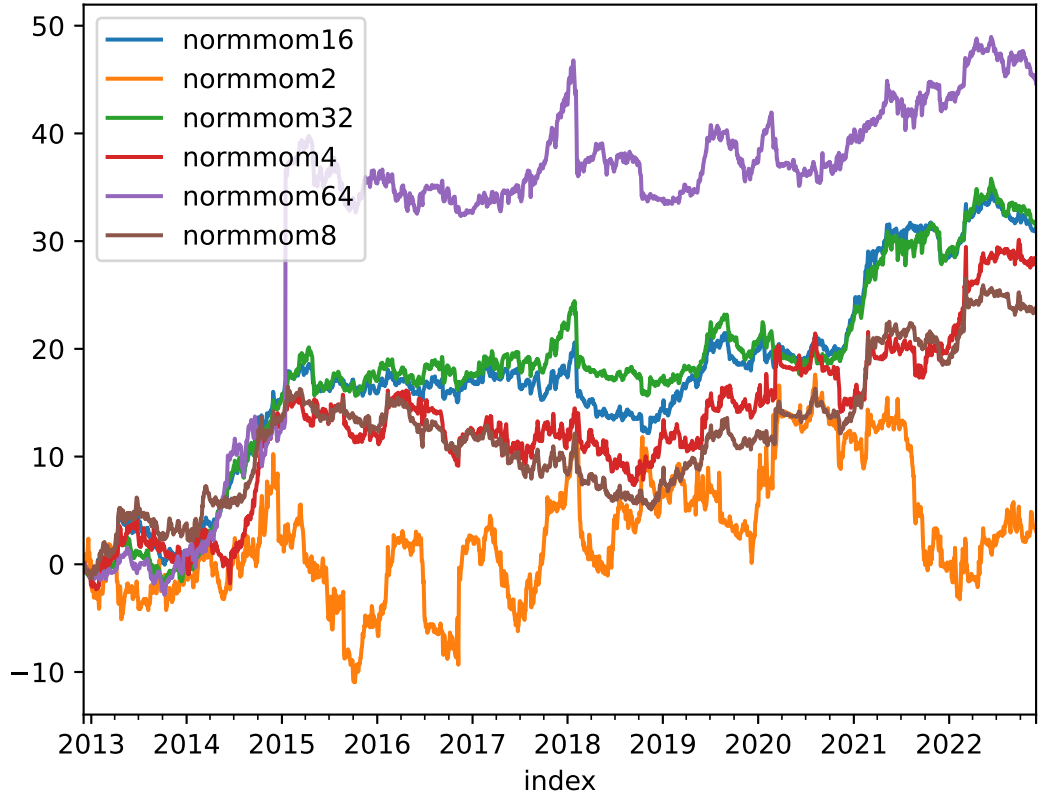
ann. SR {'normmom16': 1.1, 'normmom2': 0.0, 'normmom32': 0.97, 'normmom4': 0.77, 'normmom64': 0.67, 'normmom8': 0.95}



index

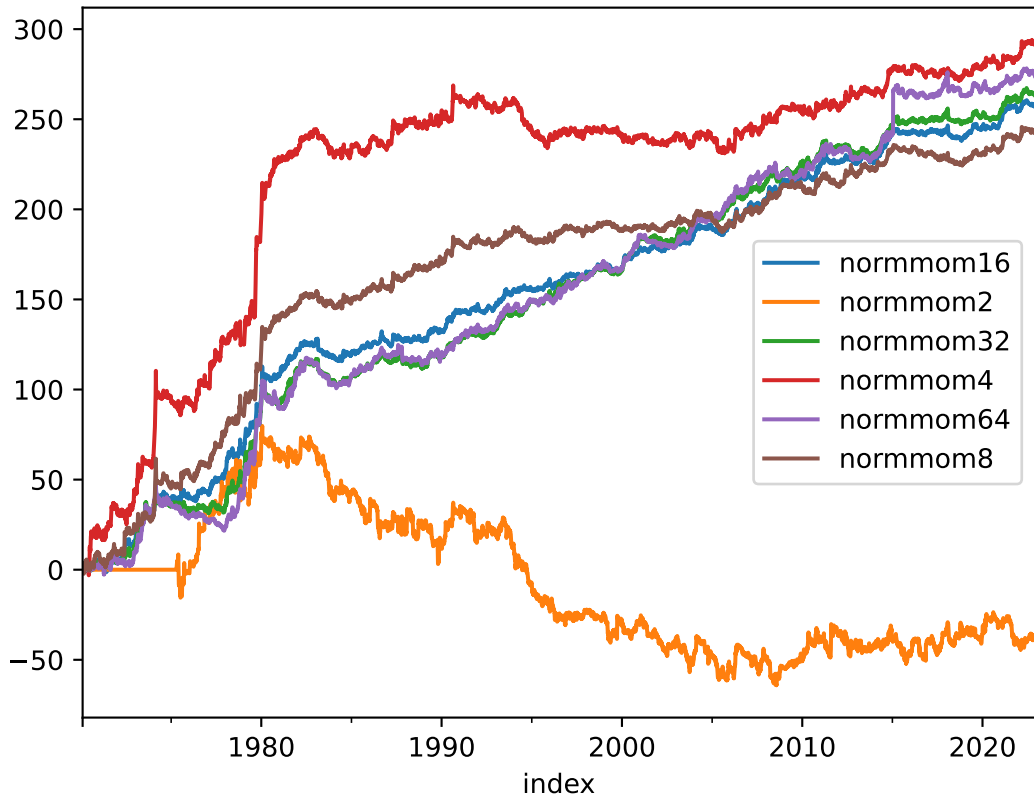
Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 3.055, 'normmom2': 0.3, 'normmom32': 3.085, 'normmom4': 2.79, 'normmom64': 4.38, 'normmom8': 2.334}
ann. std {'normmom16': 3.579, 'normmom2': 9.105, 'normmom32': 3.734, 'normmom4': 5.495, 'normmom64': 8.561, 'normmom8': 4.055}
ann. SR {'normmom16': 0.85, 'normmom2': 0.03, 'normmom32': 0.83, 'normmom4': 0.51, 'normmom64': 0.51, 'normmom8': 0.58}



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

ann. mean {'normmom16': 4.775, 'normmom2': -0.708, 'normmom32': 4.884, 'normmom4': 5.43, 'normmom64': 5.088, 'normmom8': 4.514}
ann. std {'normmom16': 4.927, 'normmom2': 11.208, 'normmom32': 4.996, 'normmom4': 8.329, 'normmom64': 6.315, 'normmom8': 5.937}
ann. SR {'normmom16': 0.97, 'normmom2': -0.06, 'normmom32': 0.98, 'normmom4': 0.65, 'normmom64': 0.81, 'normmom8': 0.76}

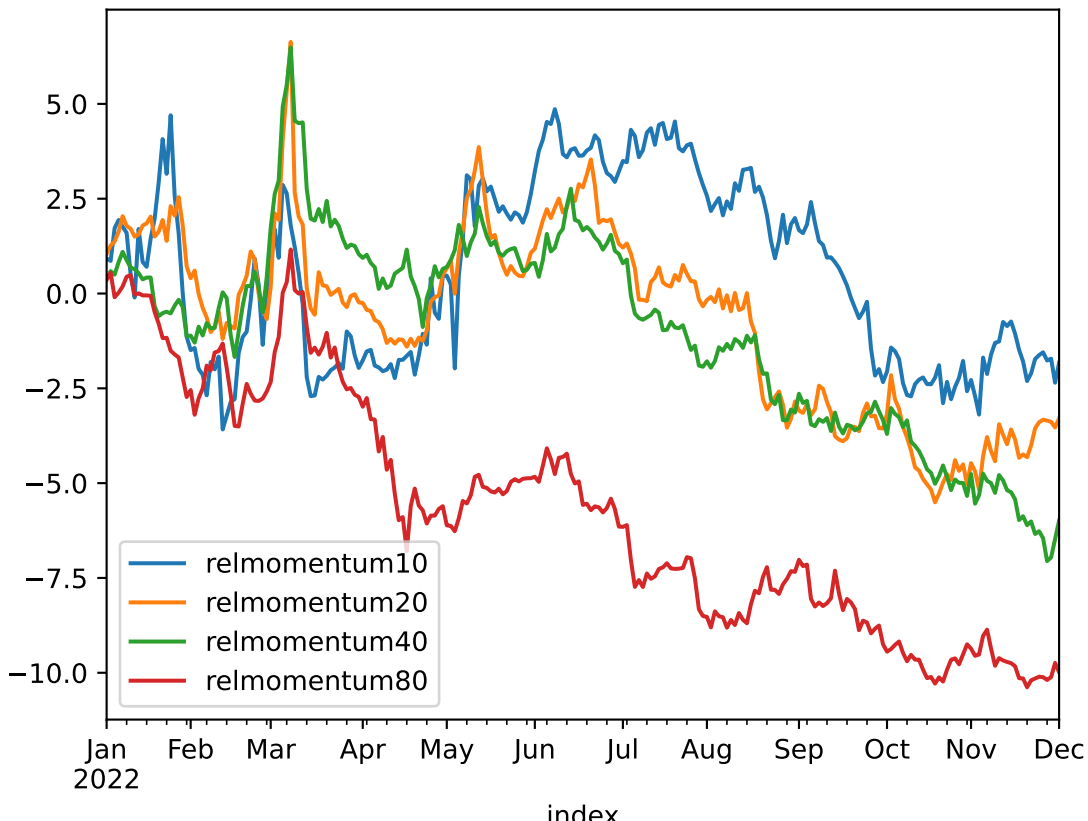


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -1.956, 'relmomentum20': -3.523, 'relmomentum40': -6.412, 'relmomentum80': -10.697}

ann. std {'relmomentum10': 10.309, 'relmomentum20': 8.626, 'relmomentum40': 6.738, 'relmomentum80': 5.757}

ann. SR {'relmomentum10': -0.19, 'relmomentum20': -0.41, 'relmomentum40': -0.95, 'relmomentum80': -1.86}

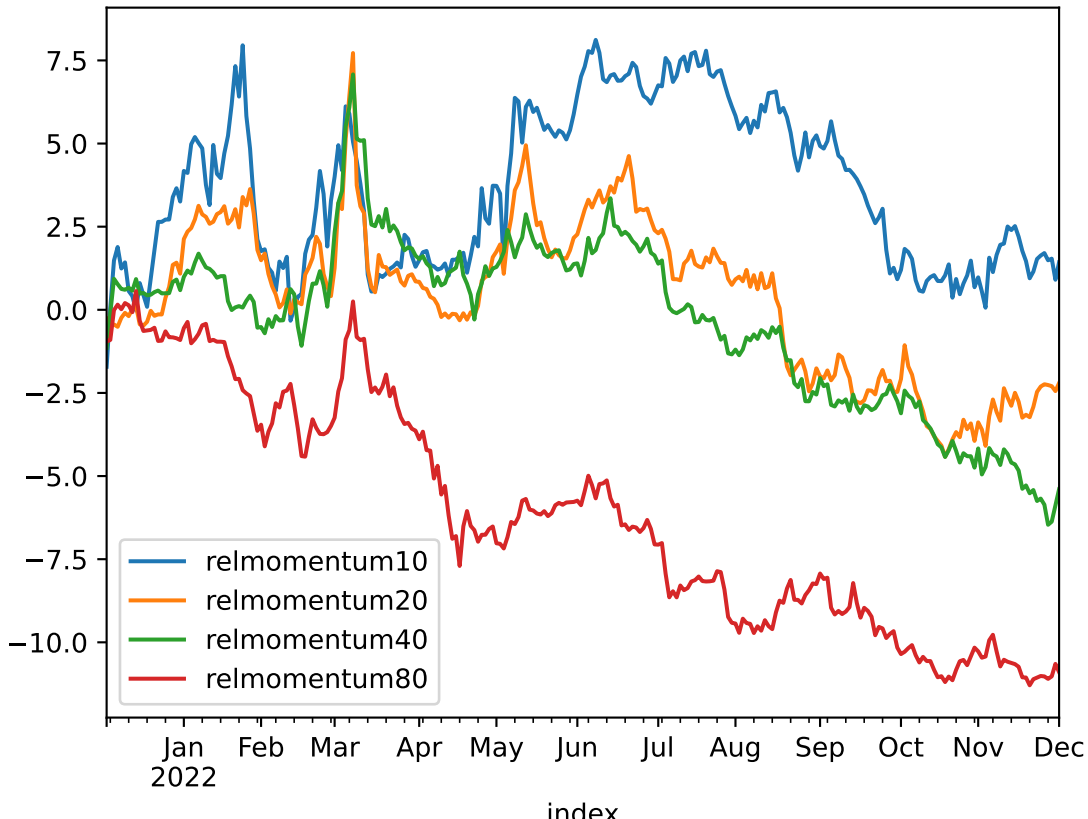


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': 1.408, 'relmomentum20': -2.169, 'relmomentum40': -5.313, 'relmomentum80': -10.728}

ann. std {'relmomentum10': 10.535, 'relmomentum20': 8.368, 'relmomentum40': 6.767, 'relmomentum80': 5.814}

ann. SR {'relmomentum10': 0.13, 'relmomentum20': -0.26, 'relmomentum40': -0.79, 'relmomentum80': -1.85}

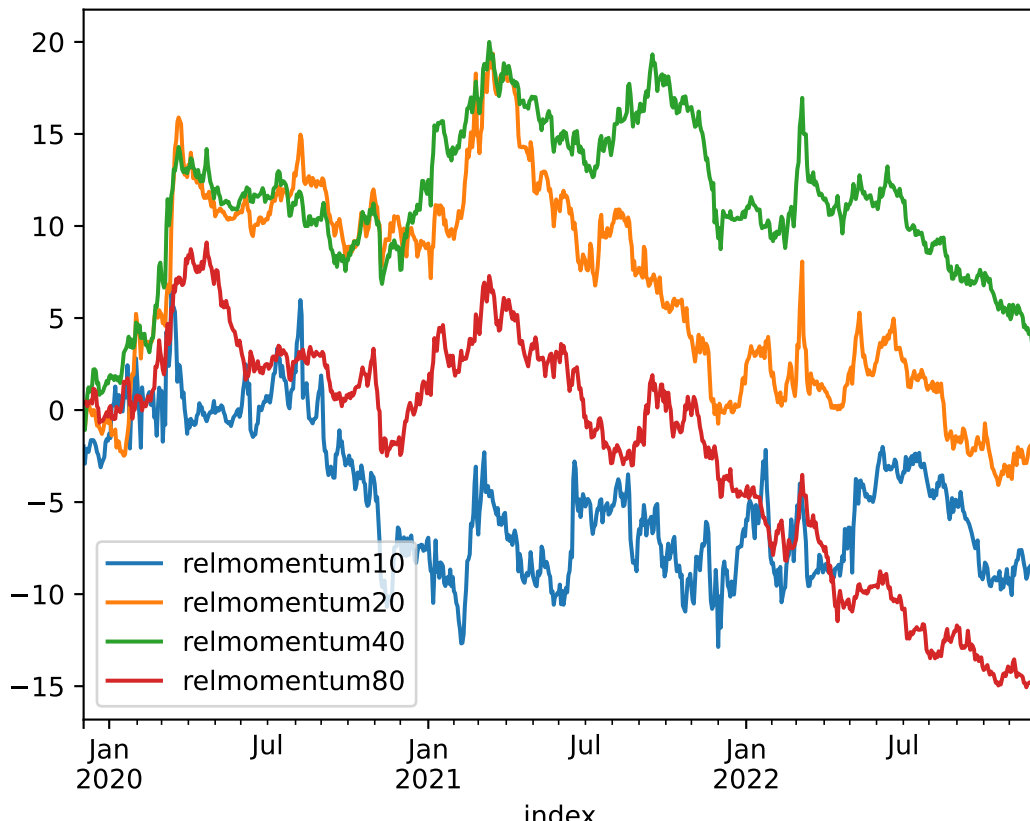


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -2.84, 'relmomentum20': -0.607, 'relmomentum40': 1.467, 'relmomentum80': -4.794}

ann. std {'relmomentum10': 12.787, 'relmomentum20': 9.053, 'relmomentum40': 7.497, 'relmomentum80': 6.96}

ann. SR {'relmomentum10': -0.22, 'relmomentum20': -0.07, 'relmomentum40': 0.2, 'relmomentum80': -0.69}

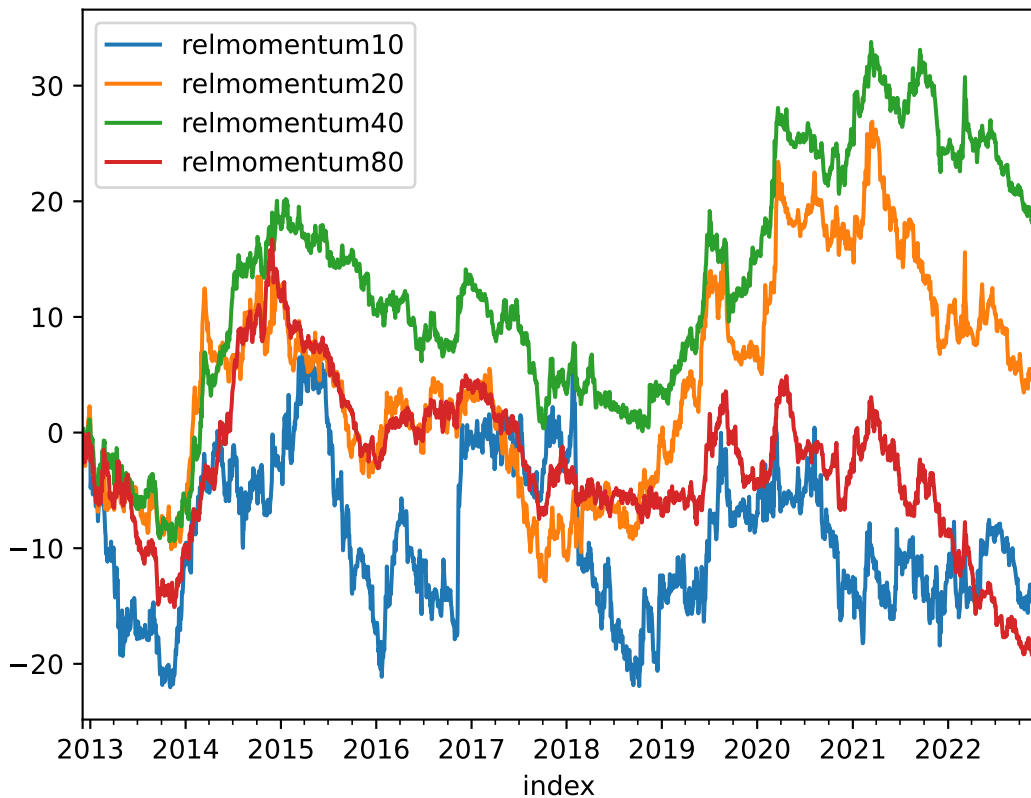


Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -1.396, 'relmomentum20': 0.557, 'relmomentum40': 1.793, 'relmomentum80': -1.853}

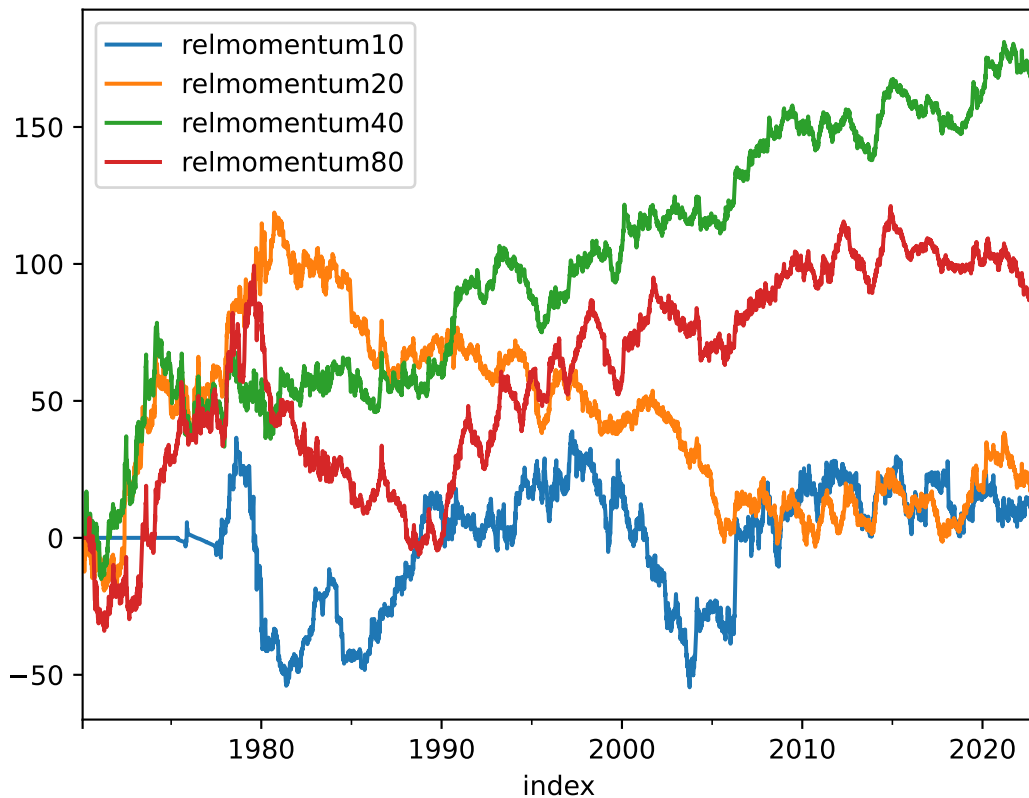
ann. std {'relmomentum10': 13.0, 'relmomentum20': 9.053, 'relmomentum40': 7.388, 'relmomentum80': 6.846}

ann. SR {'relmomentum10': -0.11, 'relmomentum20': 0.06, 'relmomentum40': 0.24, 'relmomentum80': -0.27}



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

ann. mean {'relmomentum10': 0.152, 'relmomentum20': 0.318, 'relmomentum40': 3.075, 'relmomentum80': 1.589}
ann. std {'relmomentum10': 13.331, 'relmomentum20': 11.532, 'relmomentum40': 10.802, 'relmomentum80': 11.069}
ann. SR {'relmomentum10': 0.01, 'relmomentum20': 0.03, 'relmomentum40': 0.28, 'relmomentum80': 0.14}

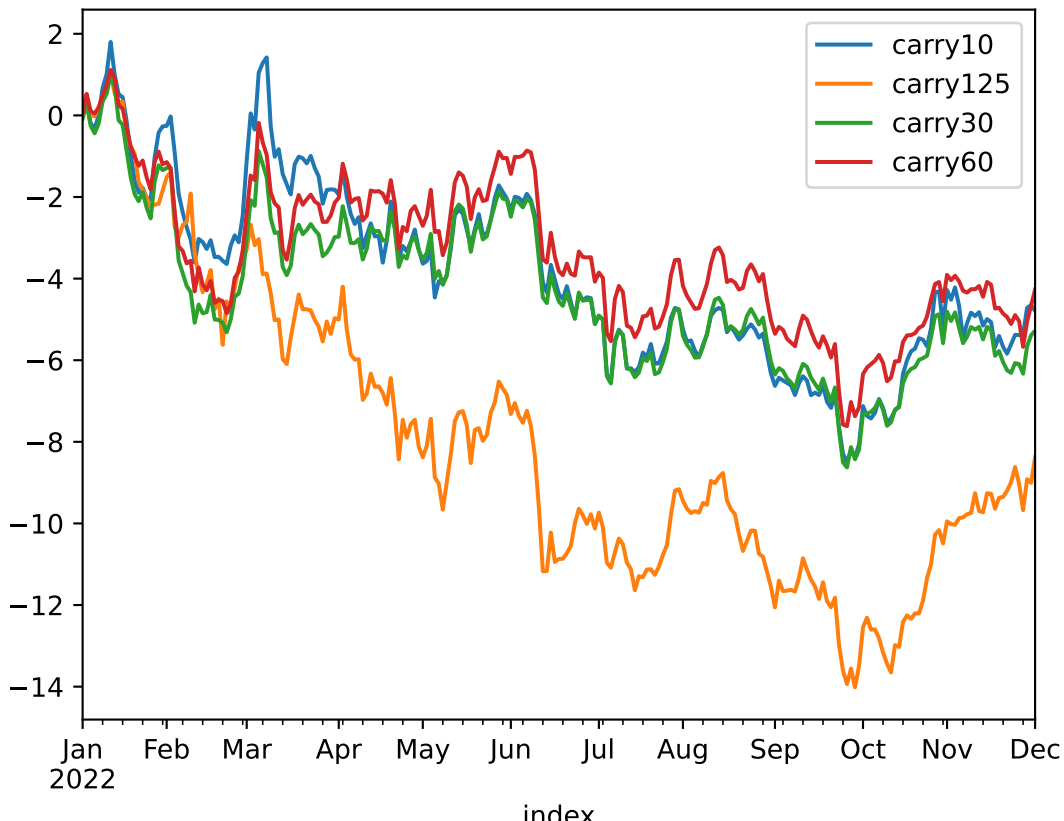


Total Trading Rule P&L for period 'YTD'

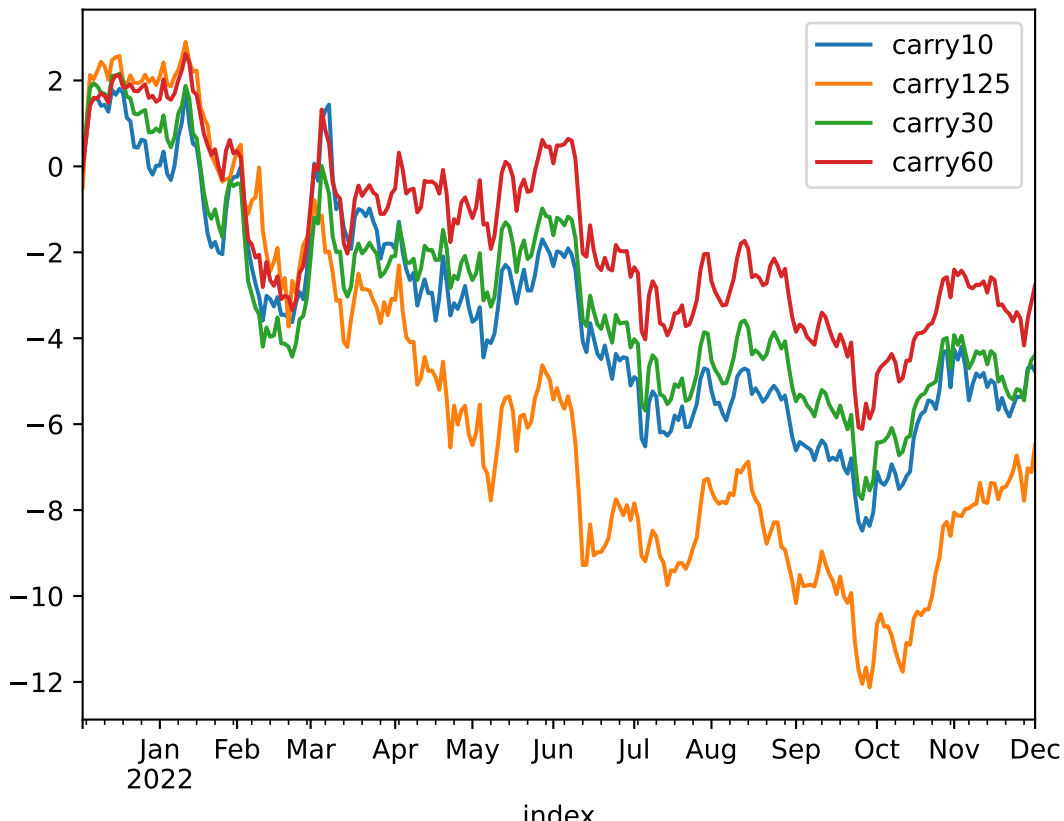
ann. mean {'carry10': -5.136, 'carry125': -8.968, 'carry30': -5.653, 'carry60': -4.569}

ann. std {'carry10': 7.27, 'carry125': 7.682, 'carry30': 6.829, 'carry60': 6.862}

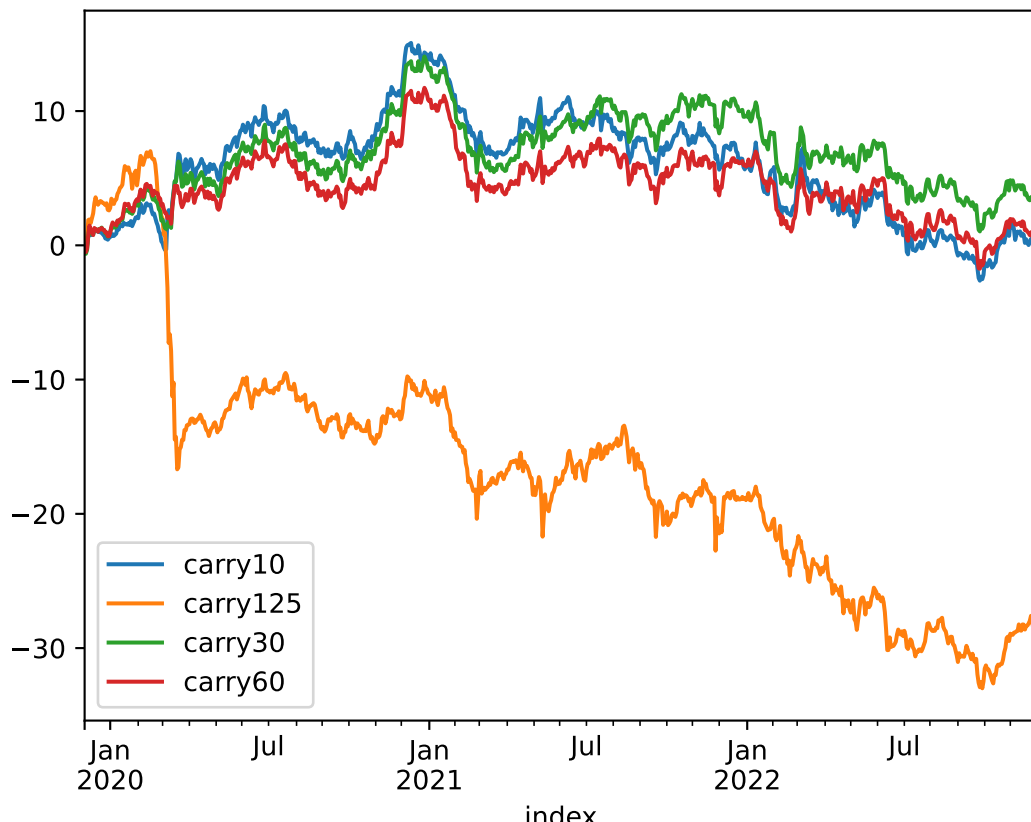
ann. SR {'carry10': -0.71, 'carry125': -1.17, 'carry30': -0.83, 'carry60': -0.67}



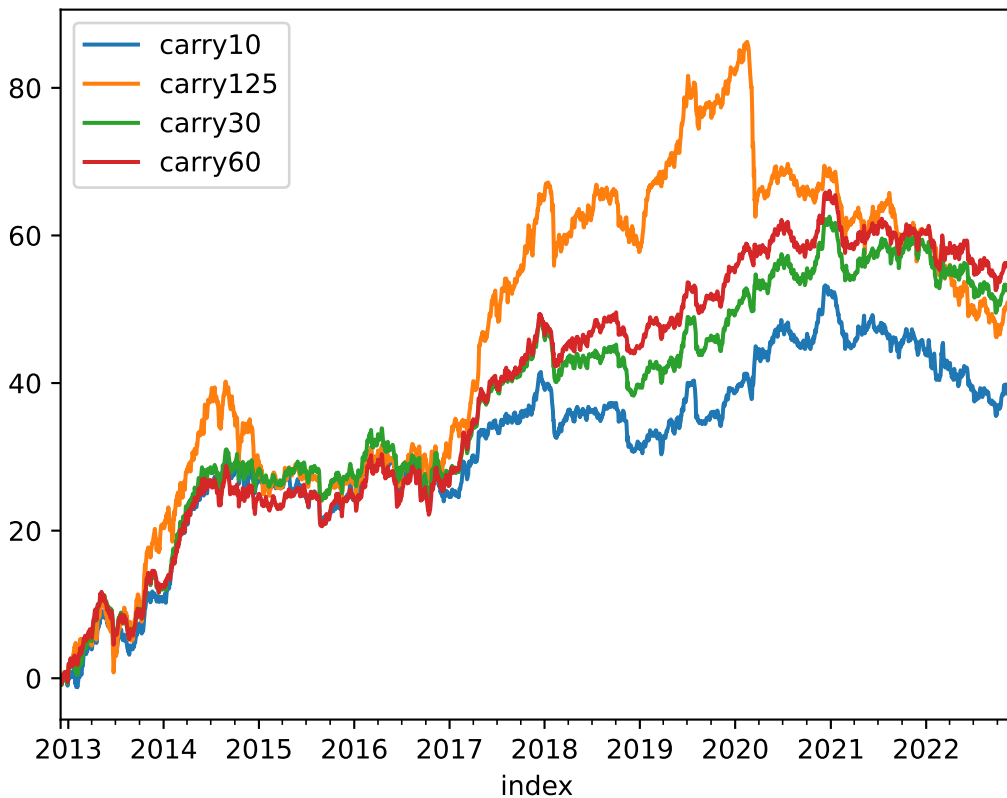
Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -4.706, 'carry125': -6.382, 'carry30': -4.326, 'carry60': -2.719}
ann. std {'carry10': 7.151, 'carry125': 7.679, 'carry30': 6.745, 'carry60': 6.709}
ann. SR {'carry10': -0.66, 'carry125': -0.83, 'carry30': -0.64, 'carry60': -0.41}



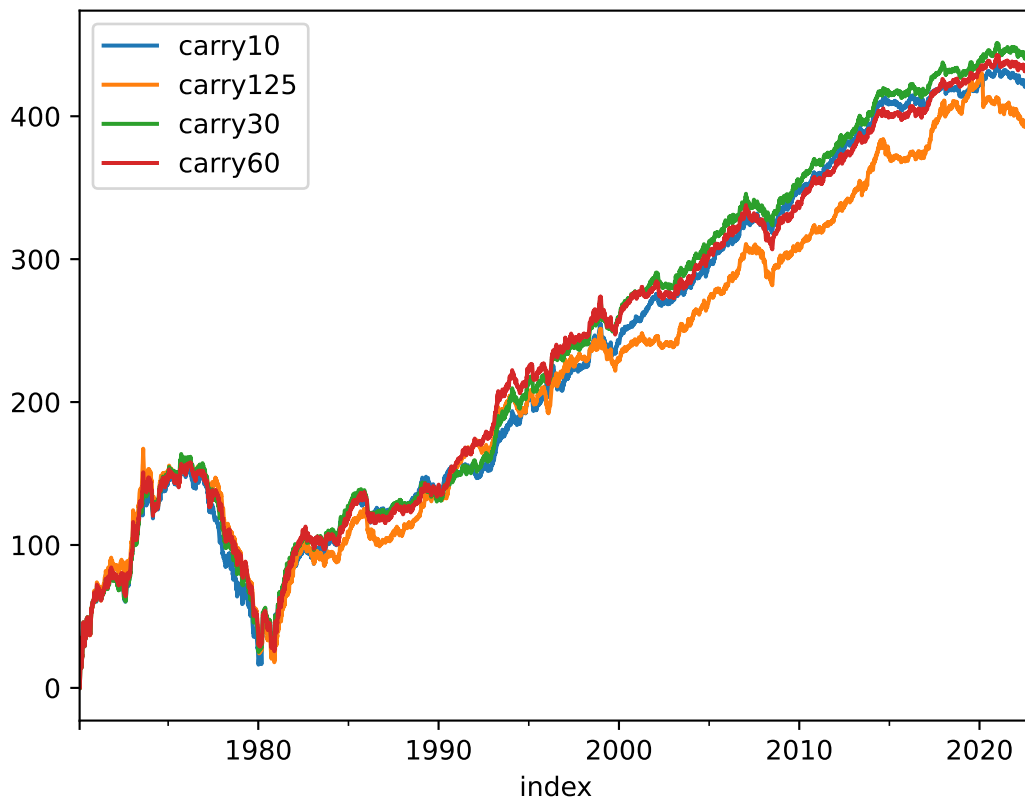
Total Trading Rule P&L for period '3Y'
ann. mean {'carry10': 0.349, 'carry125': -8.942, 'carry30': 1.434, 'carry60': 0.525}
ann. std {'carry10': 6.81, 'carry125': 9.427, 'carry30': 6.614, 'carry60': 6.56}
ann. SR {'carry10': 0.05, 'carry125': -0.95, 'carry30': 0.22, 'carry60': 0.08}



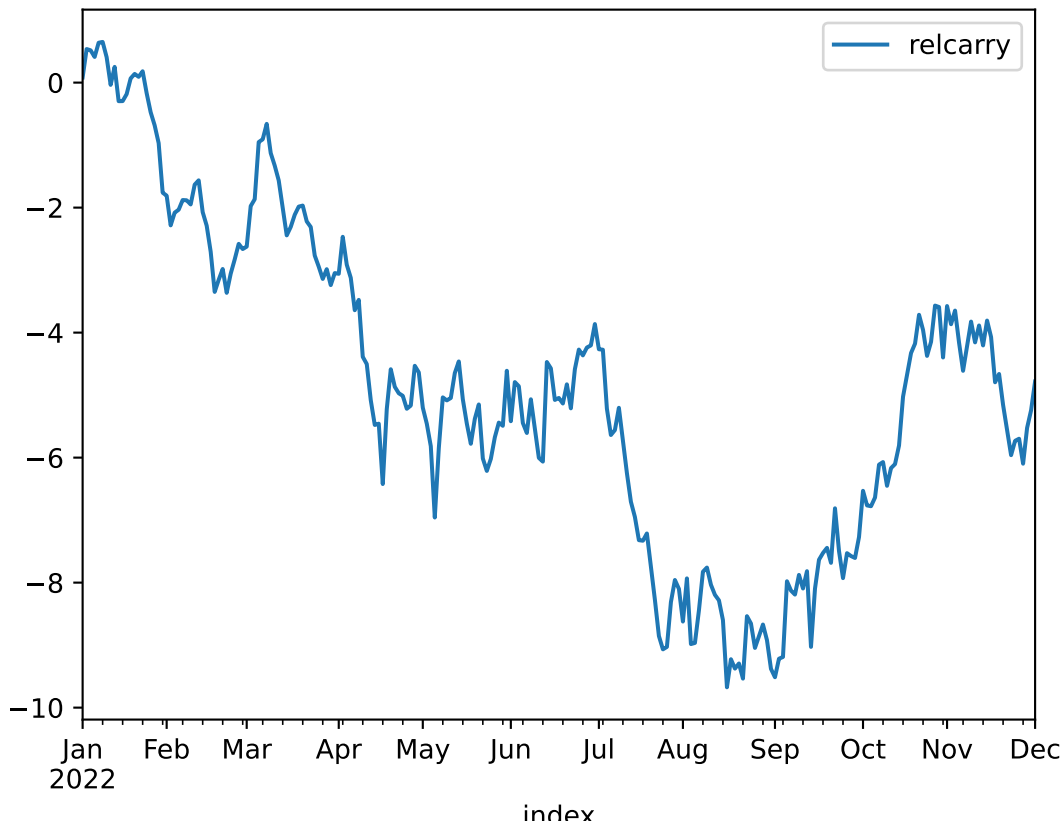
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.85, 'carry125': 5.089, 'carry30': 5.188, 'carry60': 5.488}
ann. std {'carry10': 6.461, 'carry125': 9.127, 'carry30': 6.574, 'carry60': 6.538}
ann. SR {'carry10': 0.6, 'carry125': 0.56, 'carry30': 0.79, 'carry60': 0.84}



Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.845, 'carry125': 7.35, 'carry30': 8.203, 'carry60': 8.037}
ann. std {'carry10': 11.867, 'carry125': 12.107, 'carry30': 11.878, 'carry60': 11.829}
ann. SR {'carry10': 0.66, 'carry125': 0.61, 'carry30': 0.69, 'carry60': 0.68}



Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': -5.122}
ann. std {'relcarry': 7.147}
ann. SR {'relcarry': -0.72}

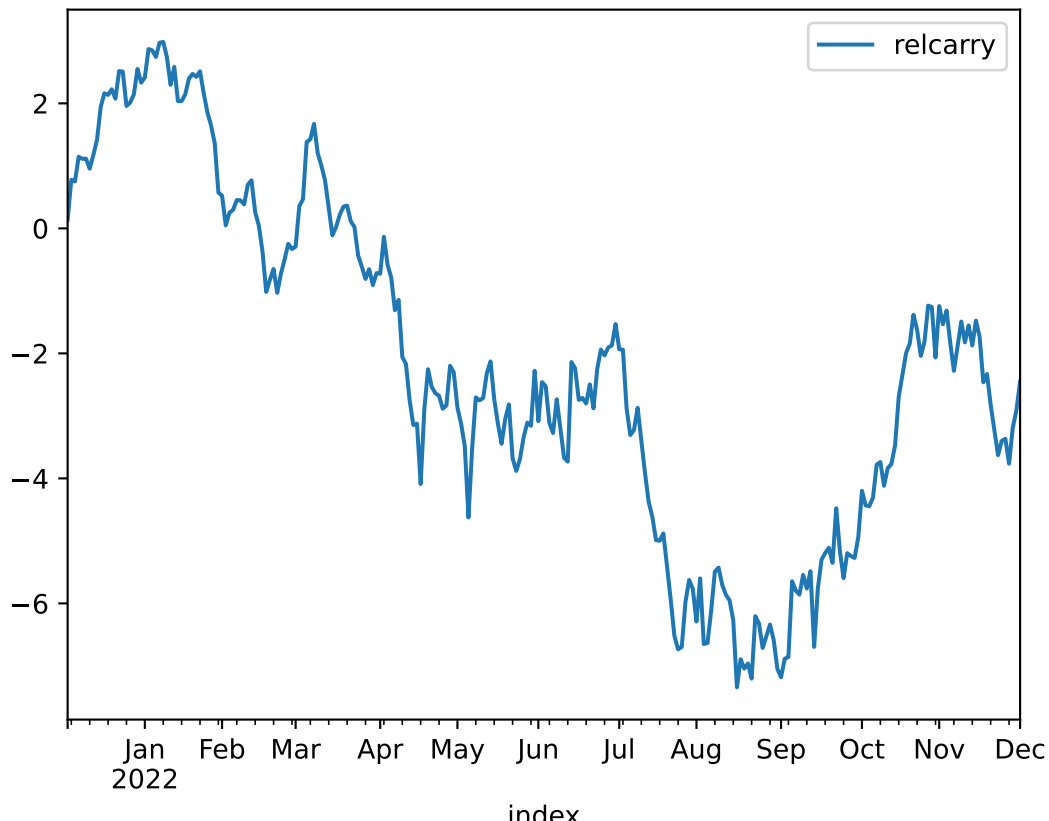


Total Trading Rule P&L for period '1Y'

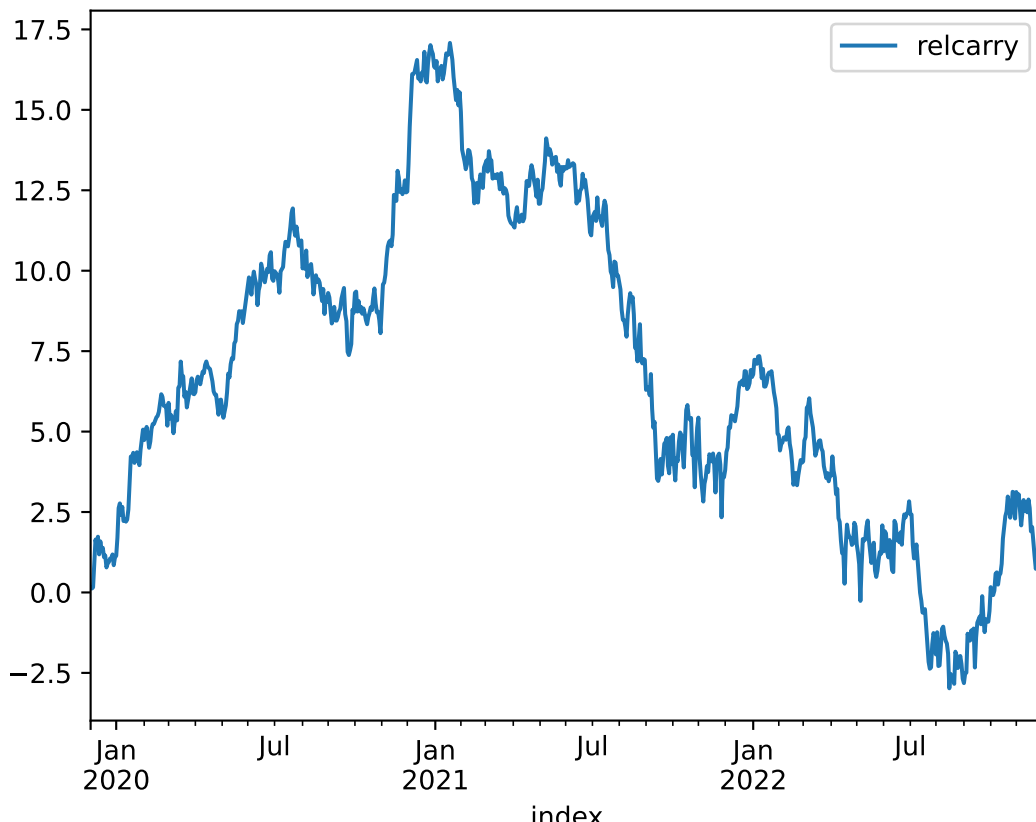
ann. mean {'relcarry': -2.412}

ann. std {'relcarry': 6.985}

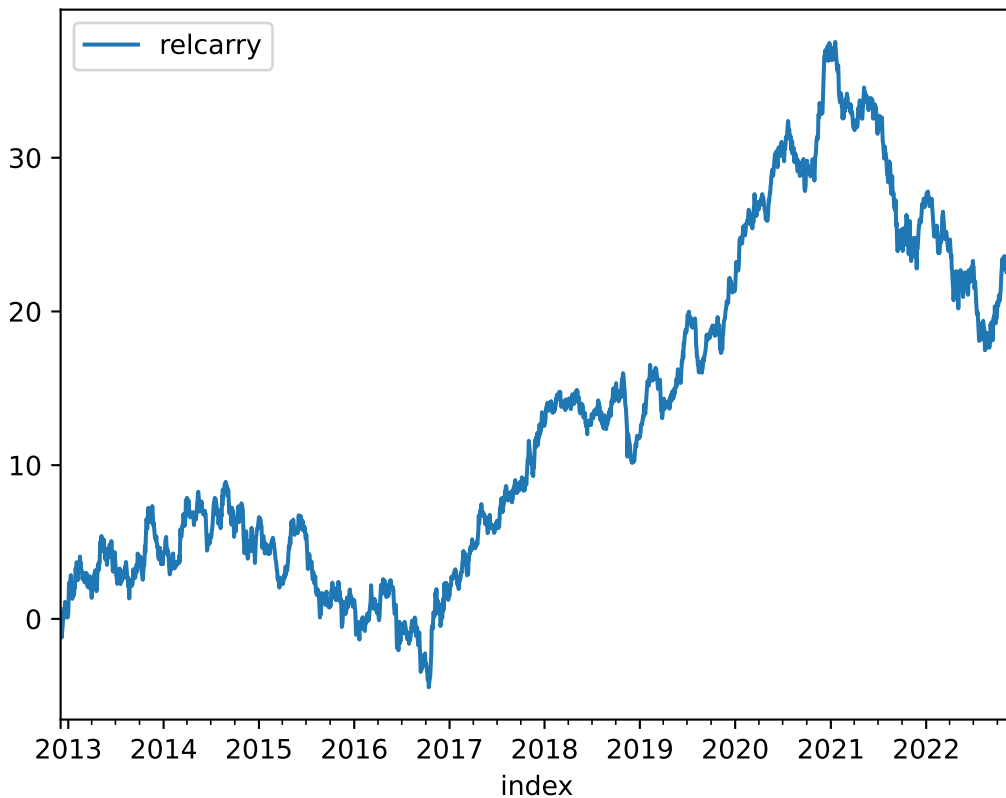
ann. SR {'relcarry': -0.35}



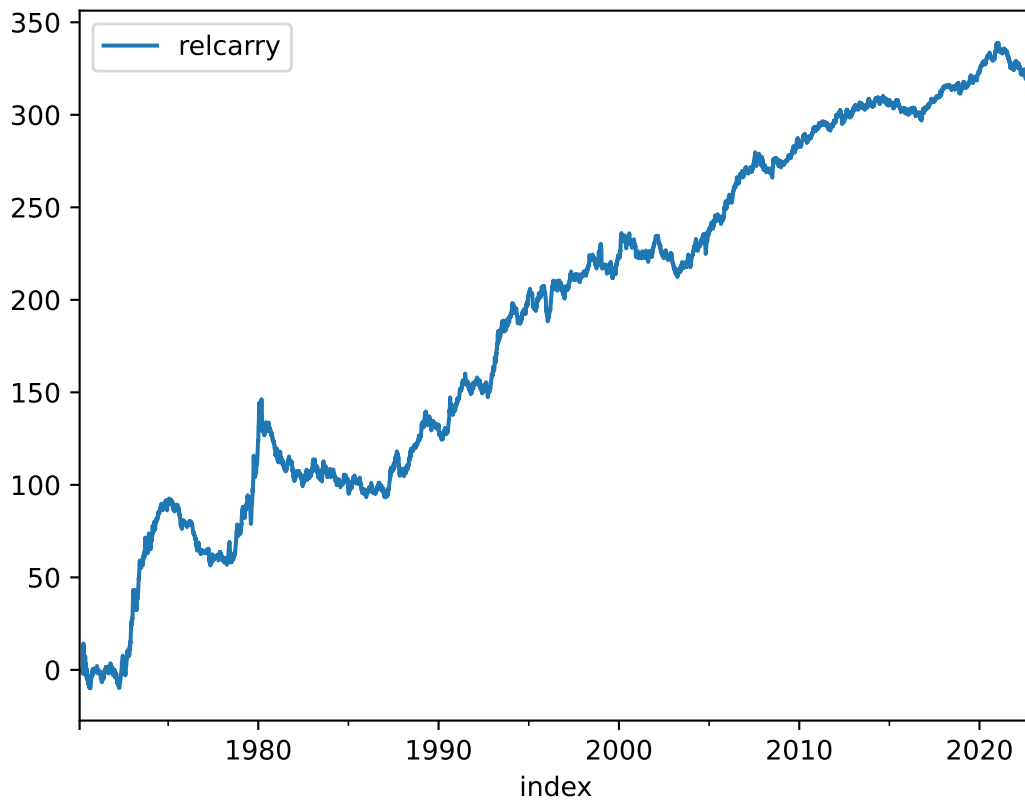
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': 0.626}
ann. std {'relcarry': 6.812}
ann. SR {'relcarry': 0.09}



Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.195}
ann. std {'relcarry': 6.052}
ann. SR {'relcarry': 0.36}



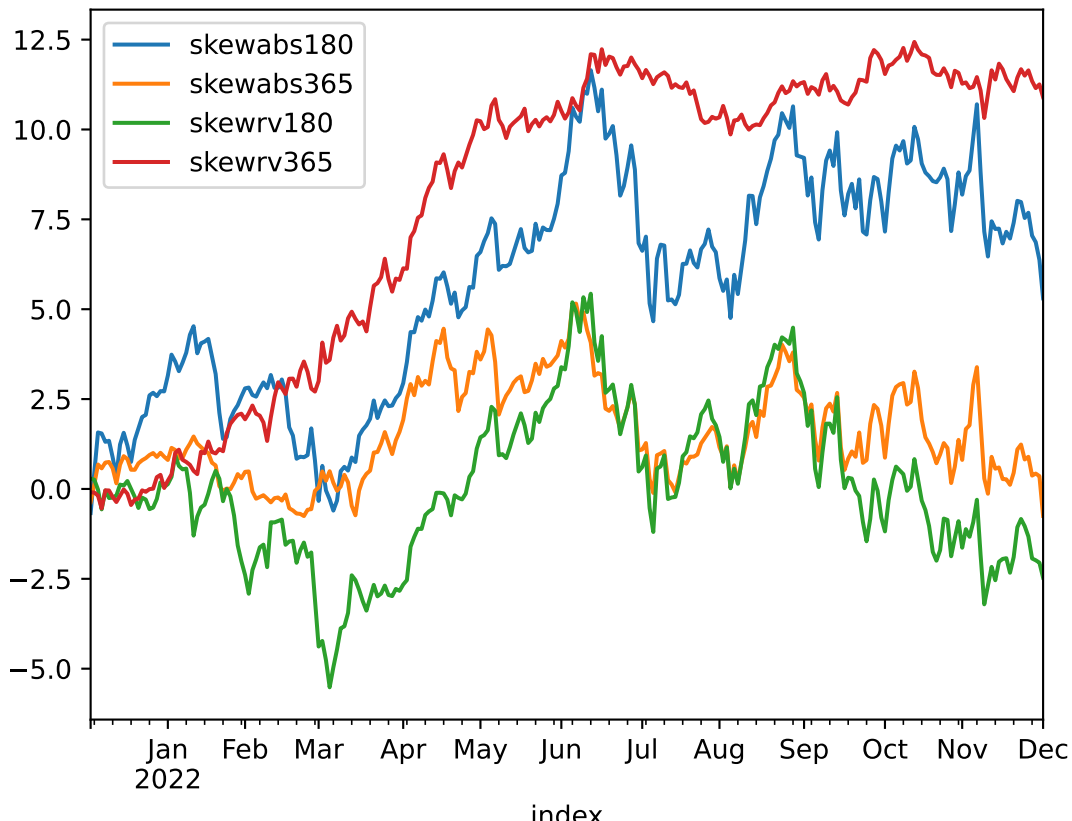
Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 6.012}
ann. std {'relcarry': 9.561}
ann. SR {'relcarry': 0.63}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': 2.774, 'skewabs365': -1.763, 'skewrv180': -2.702, 'skewrv365': 11.644}
ann. std {'skewabs180': 10.033, 'skewabs365': 7.736, 'skewrv180': 9.359, 'skewrv365': 4.865}
ann. SR {'skewabs180': 0.28, 'skewabs365': -0.23, 'skewrv180': -0.29, 'skewrv365': 2.39}



Total Trading Rule P&L for period '1Y'
ann. mean {'skewabs180': 5.222, 'skewabs365': -0.737, 'skewrv180': -2.43, 'skewrv365': 10.73}
ann. std {'skewabs180': 9.899, 'skewabs365': 7.512, 'skewrv180': 9.056, 'skewrv365': 4.767}
ann. SR {'skewabs180': 0.53, 'skewabs365': -0.1, 'skewrv180': -0.27, 'skewrv365': 2.25}

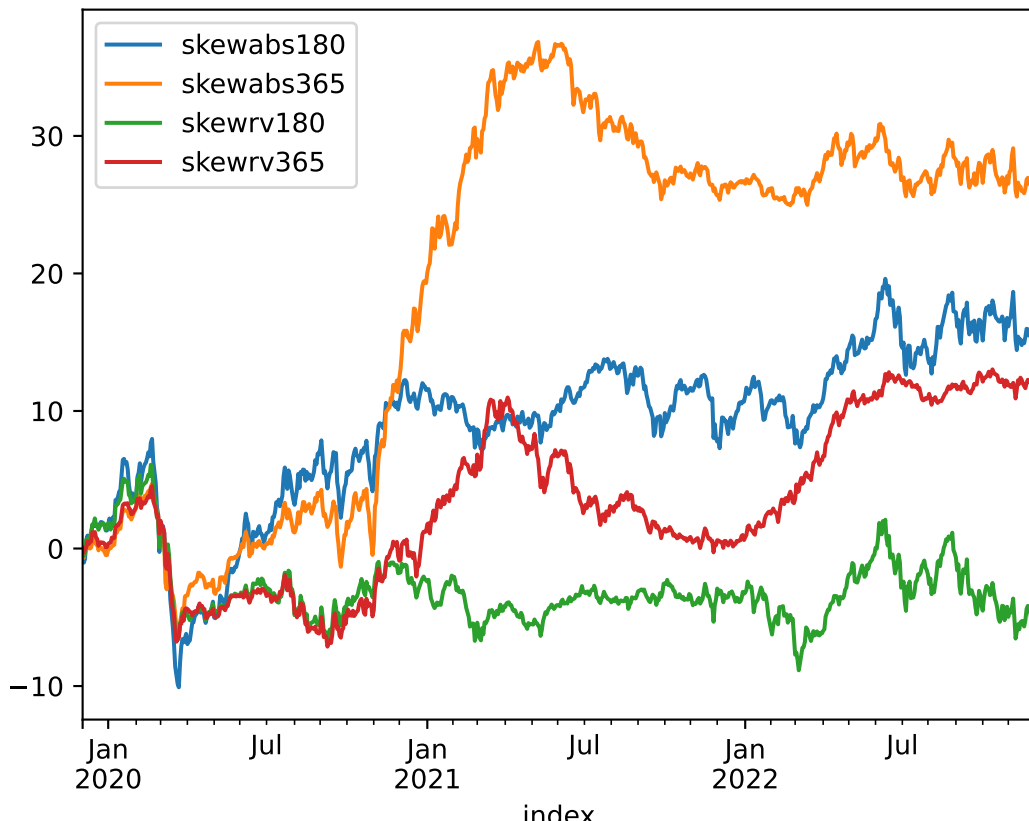


Total Trading Rule P&L for period '3Y'

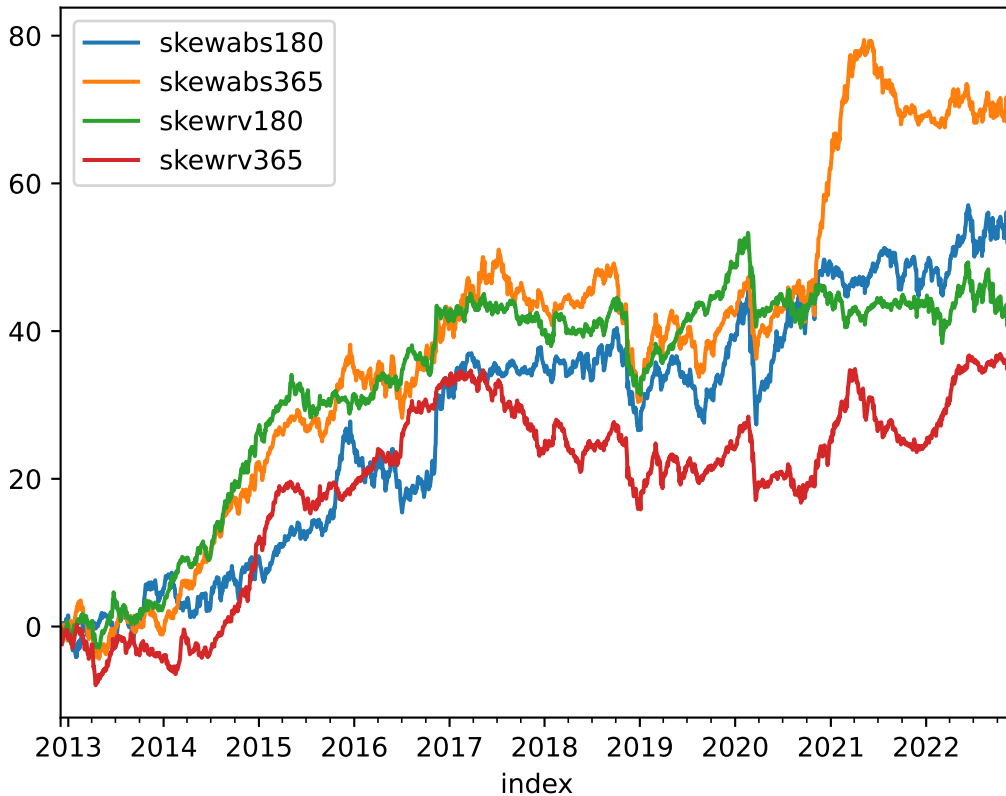
ann. mean {'skewabs180': 4.337, 'skewabs365': 8.162, 'skewrv180': -1.898, 'skewrv365': 3.756}

ann. std {'skewabs180': 9.603, 'skewabs365': 8.682, 'skewrv180': 7.753, 'skewrv365': 6.555}

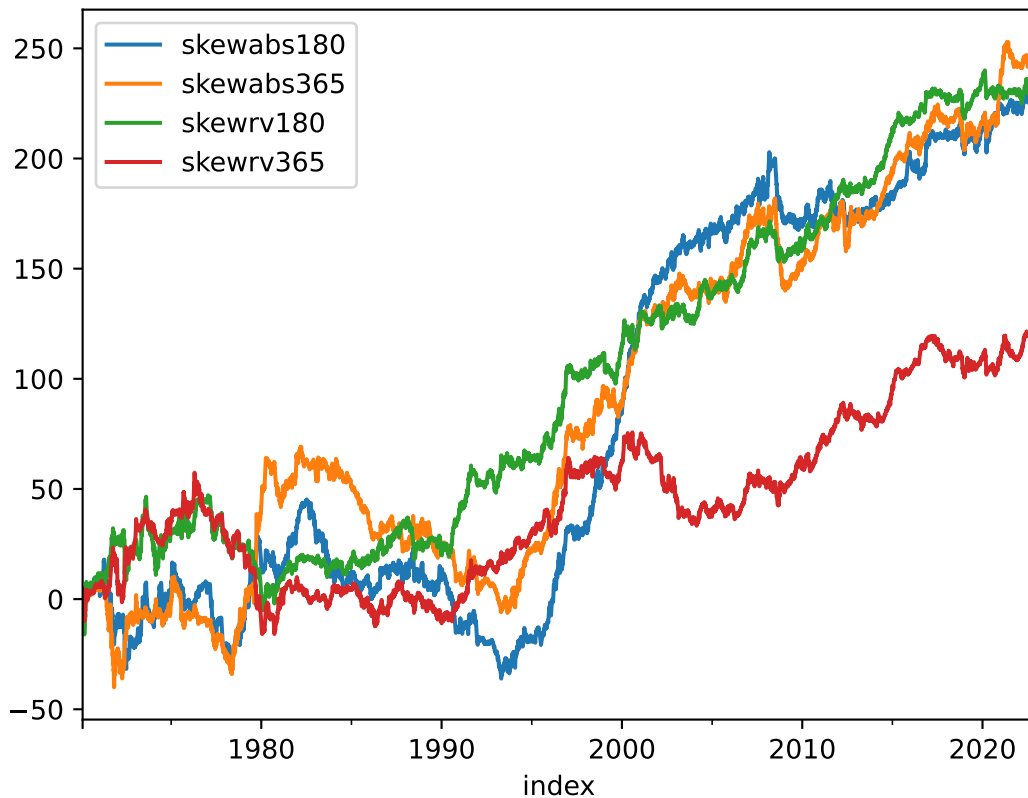
ann. SR {'skewabs180': 0.45, 'skewabs365': 0.94, 'skewrv180': -0.24, 'skewrv365': 0.57}



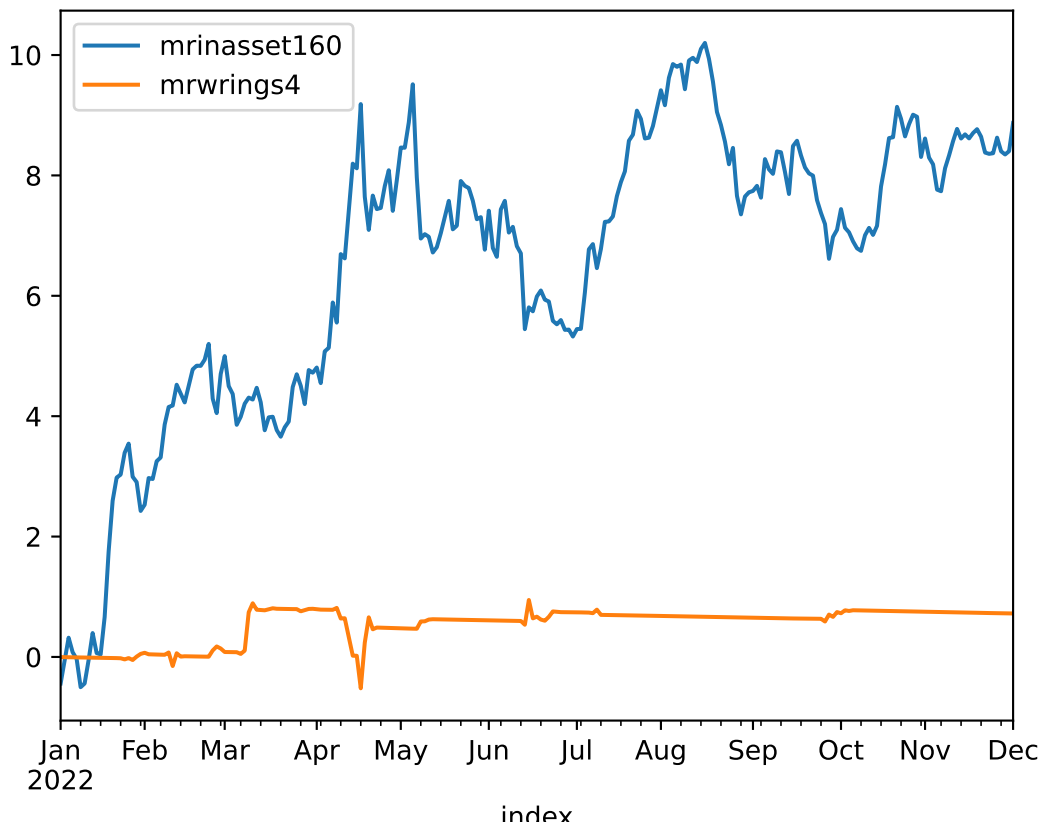
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.976, 'skewabs365': 6.629, 'skewrv180': 4.064, 'skewrv365': 3.472}
ann. std {'skewabs180': 8.07, 'skewabs365': 7.985, 'skewrv180': 6.574, 'skewrv365': 6.187}
ann. SR {'skewabs180': 0.62, 'skewabs365': 0.83, 'skewrv180': 0.62, 'skewrv365': 0.56}



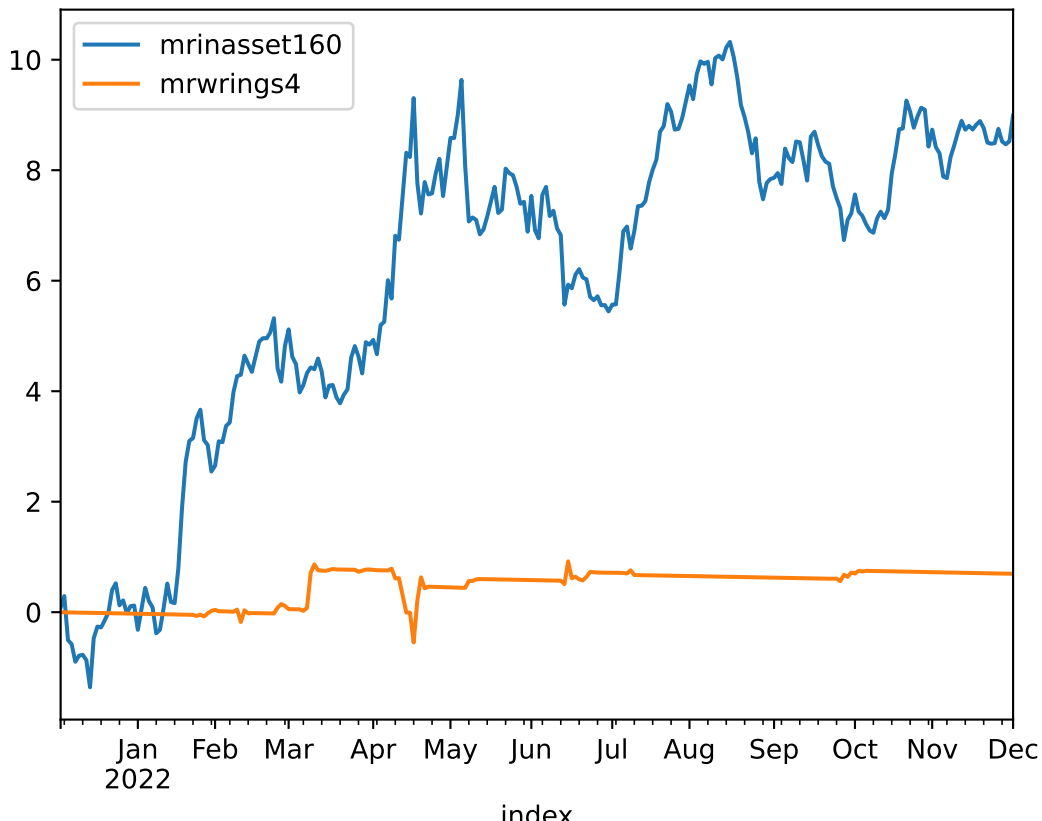
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.199, 'skewabs365': 4.477, 'skewrv180': 4.237, 'skewrv365': 2.231}
ann. std {'skewabs180': 10.795, 'skewabs365': 10.299, 'skewrv180': 9.308, 'skewrv365': 8.606}
ann. SR {'skewabs180': 0.39, 'skewabs365': 0.43, 'skewrv180': 0.46, 'skewrv365': 0.26}



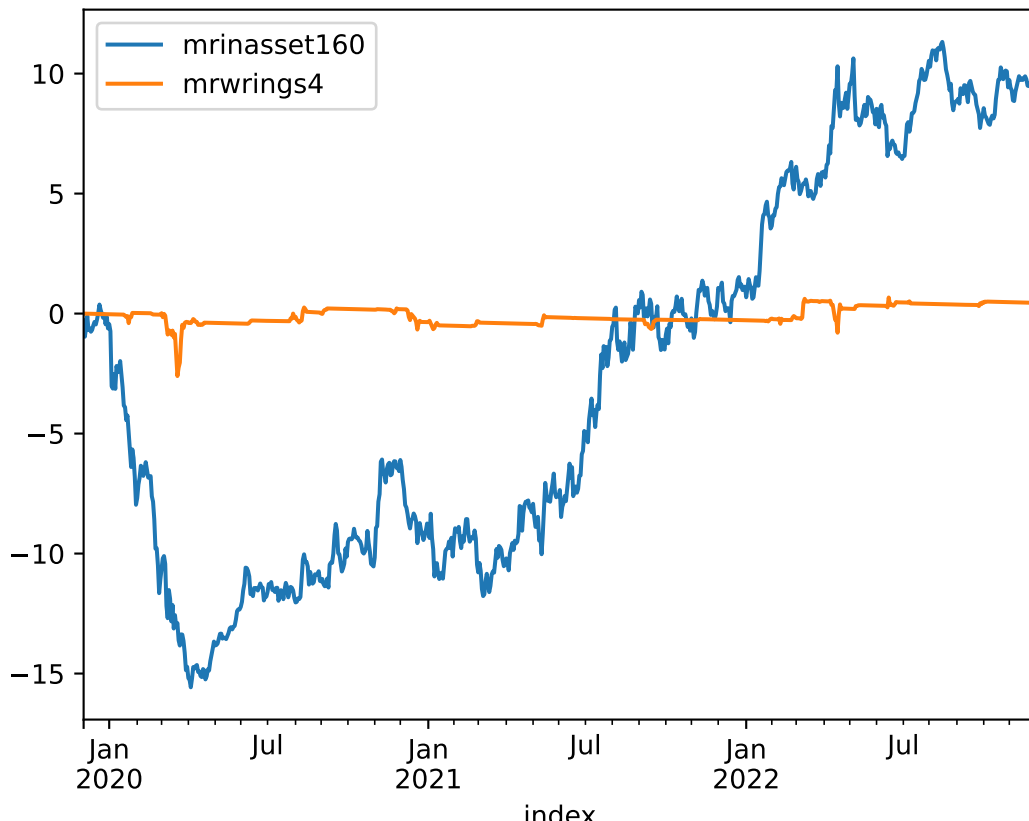
Total Trading Rule P&L for period 'YTD'
ann. mean {'mriasset160': 9.502, 'mrwrings4': 0.774}
ann. std {'mriasset160': 6.309, 'mrwrings4': 1.545}
ann. SR {'mriasset160': 1.51, 'mrwrings4': 0.5}



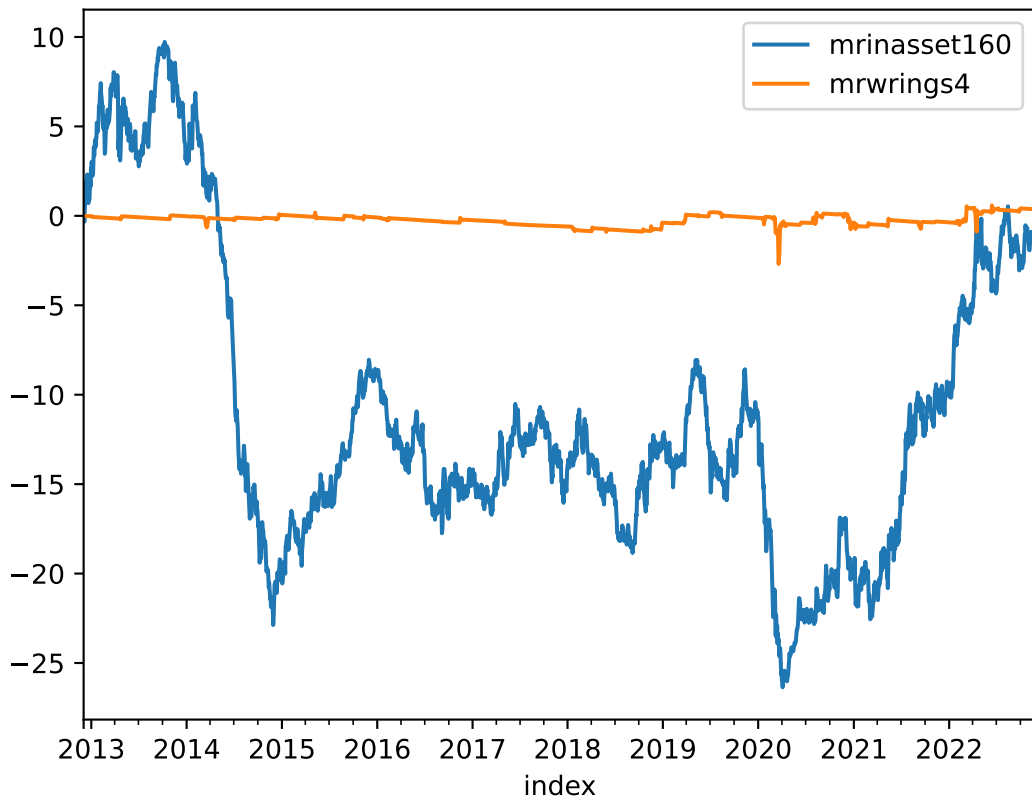
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 8.853, 'mrwrings4': 0.685}
ann. std {'mrinasset160': 6.238, 'mrwrings4': 1.481}
ann. SR {'mrinasset160': 1.42, 'mrwrings4': 0.46}



Total Trading Rule P&L for period '3Y'
ann. mean {'mriasset160': 3.266, 'mrwrings4': 0.146}
ann. std {'mriasset160': 7.081, 'mrwrings4': 1.535}
ann. SR {'mriasset160': 0.46, 'mrwrings4': 0.09}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.078, 'mrwrings4': 0.035}
ann. std {'mrinasset160': 6.65, 'mrwrings4': 0.897}
ann. SR {'mrinasset160': -0.01, 'mrwrings4': 0.04}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.379, 'mrwrings4': -1.175}
ann. std {'mrinasset160': 10.927, 'mrwrings4': 2.633}
ann. SR {'mrinasset160': -0.31, 'mrwrings4': -0.45}

