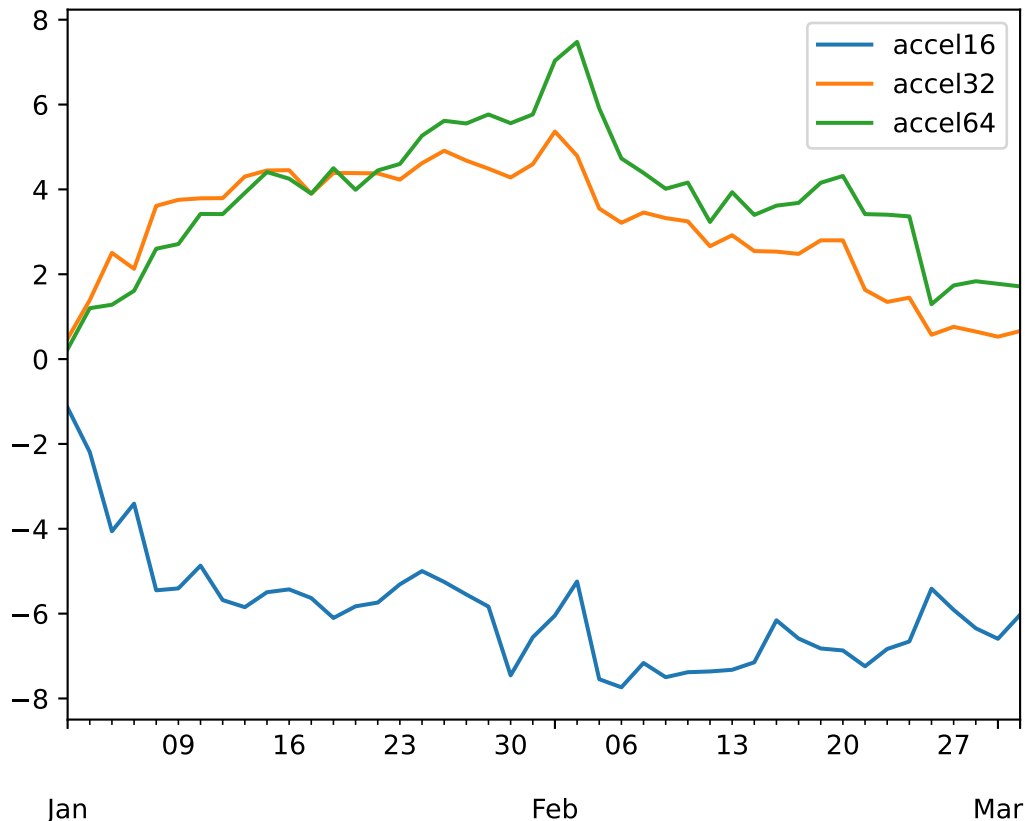
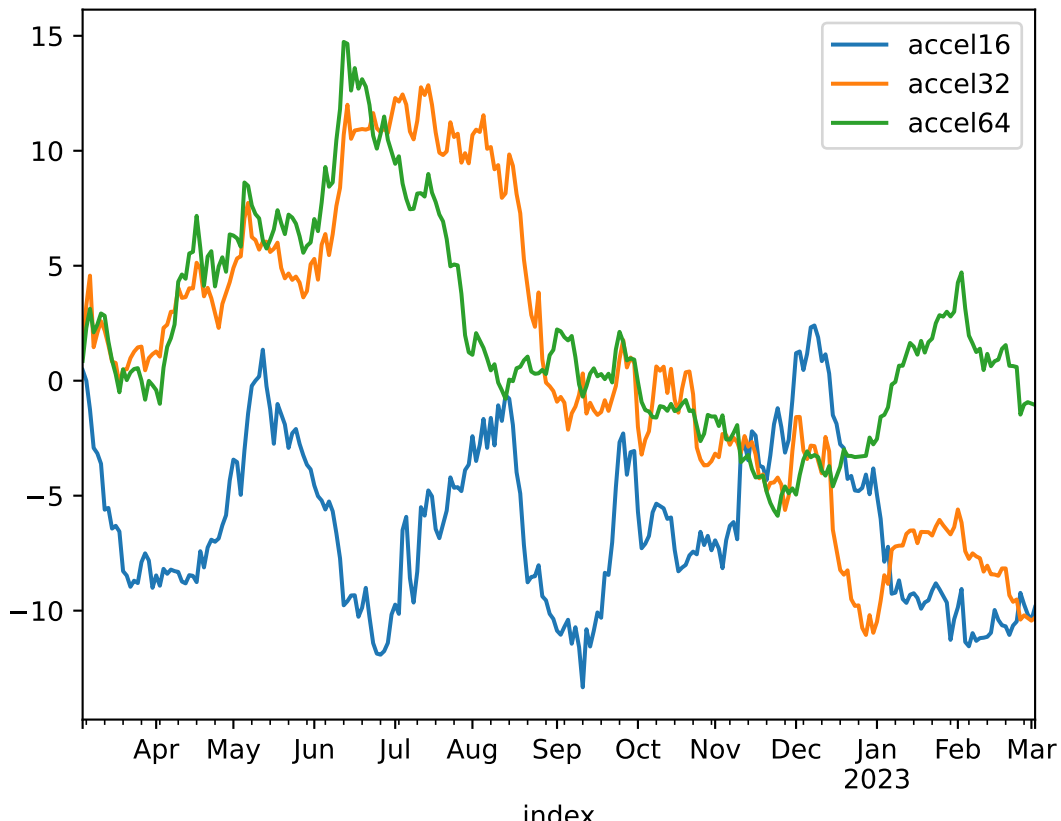


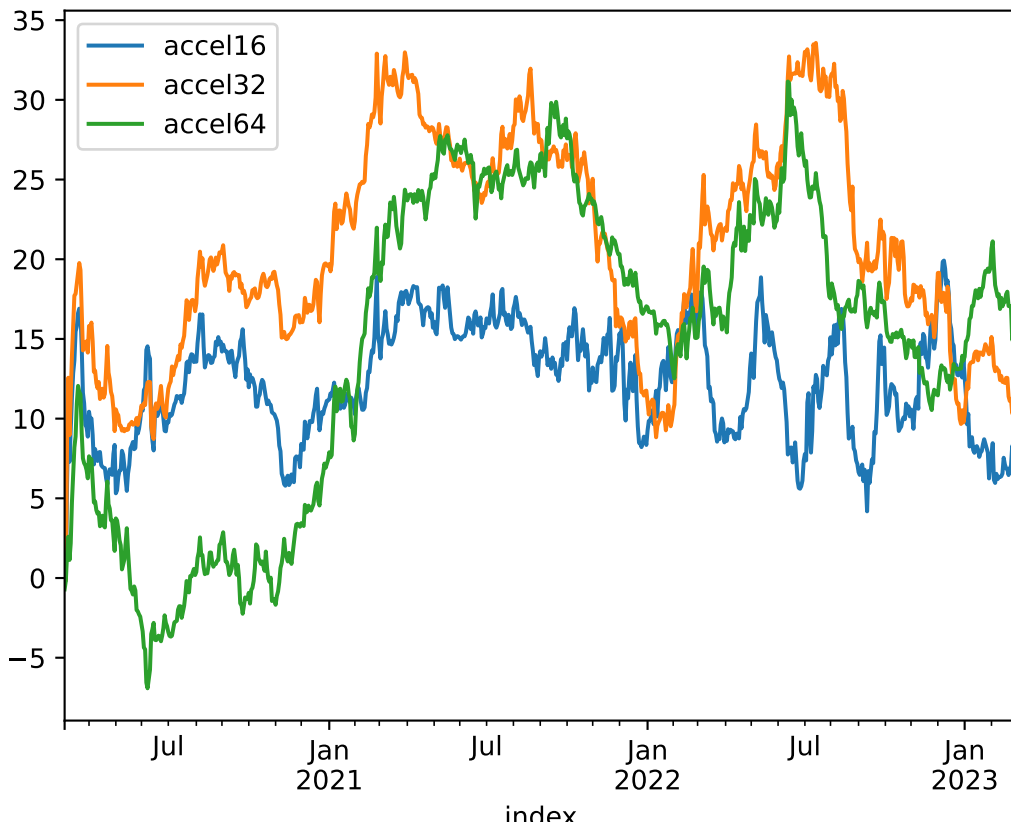
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -35.071, 'accel32': 3.843, 'accel64': 9.968}
ann. std {'accel16': 12.38, 'accel32': 8.305, 'accel64': 10.326}
ann. SR {'accel16': -2.83, 'accel32': 0.46, 'accel64': 0.97}



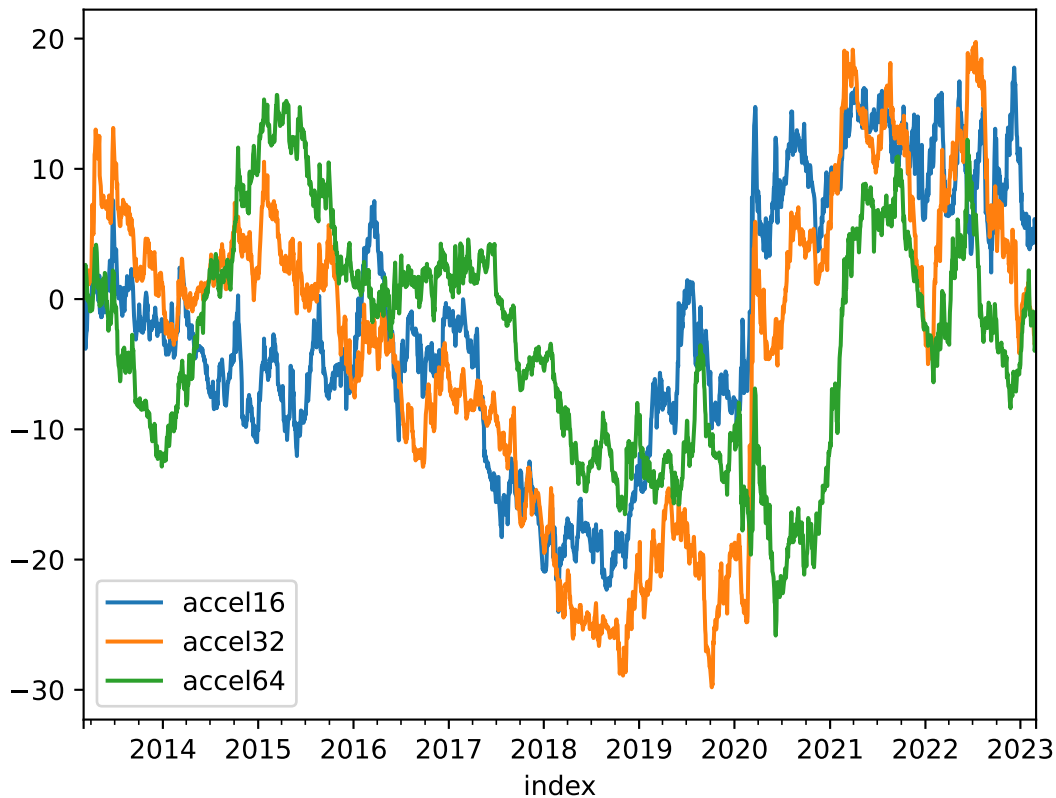
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -9.691, 'accel32': -10.144, 'accel64': -1.038}
ann. std {'accel16': 15.899, 'accel32': 13.624, 'accel64': 11.681}
ann. SR {'accel16': -0.61, 'accel32': -0.74, 'accel64': -0.09}



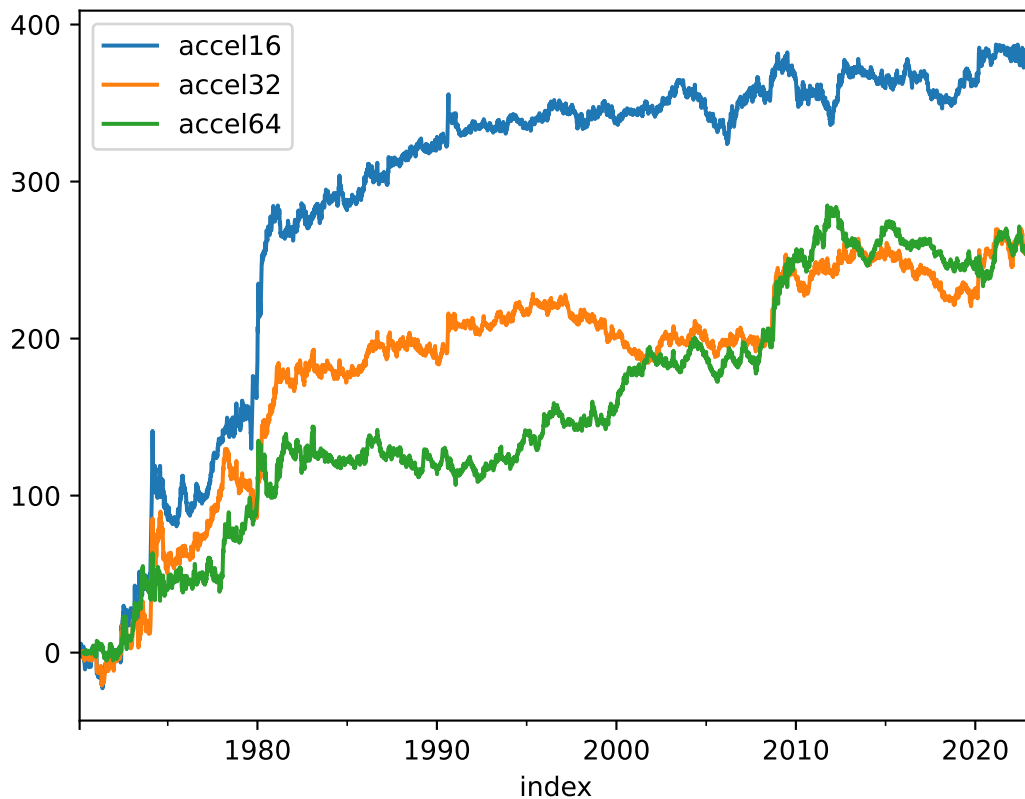
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': 2.512, 'accel32': 3.411, 'accel64': 5.028}
ann. std {'accel16': 14.758, 'accel32': 13.867, 'accel64': 11.443}
ann. SR {'accel16': 0.17, 'accel32': 0.25, 'accel64': 0.44}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 0.543, 'accel32': -0.334, 'accel64': -0.349}
ann. std {'accel16': 11.984, 'accel32': 11.163, 'accel64': 9.581}
ann. SR {'accel16': 0.05, 'accel32': -0.03, 'accel64': -0.04}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.952, 'accel32': 4.566, 'accel64': 4.726}
ann. std {'accel16': 15.66, 'accel32': 13.738, 'accel64': 13.253}
ann. SR {'accel16': 0.44, 'accel32': 0.33, 'accel64': 0.36}

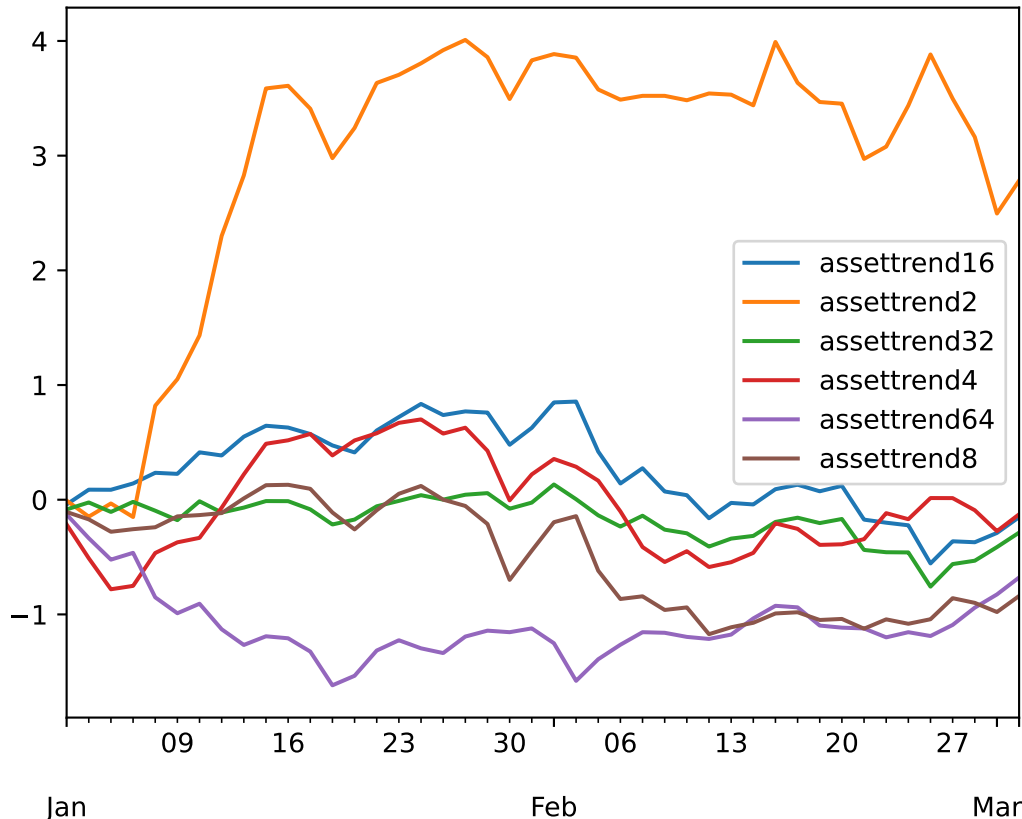


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': -0.887, 'assettrend2': 16.189, 'assettrend32': -1.668, 'assettrend4': -0.741, 'assettrend64': -3.945, 'assettrend8': -4.884}

ann. std {'assettrend16': 2.457, 'assettrend2': 5.615, 'assettrend32': 1.745, 'assettrend4': 2.88, 'assettrend64': 2.26, 'assettrend8': 2.477}

ann. SR {'assettrend16': -0.36, 'assettrend2': 2.88, 'assettrend32': -0.96, 'assettrend4': -0.26, 'assettrend64': -1.75, 'assettrend8': -1.97}

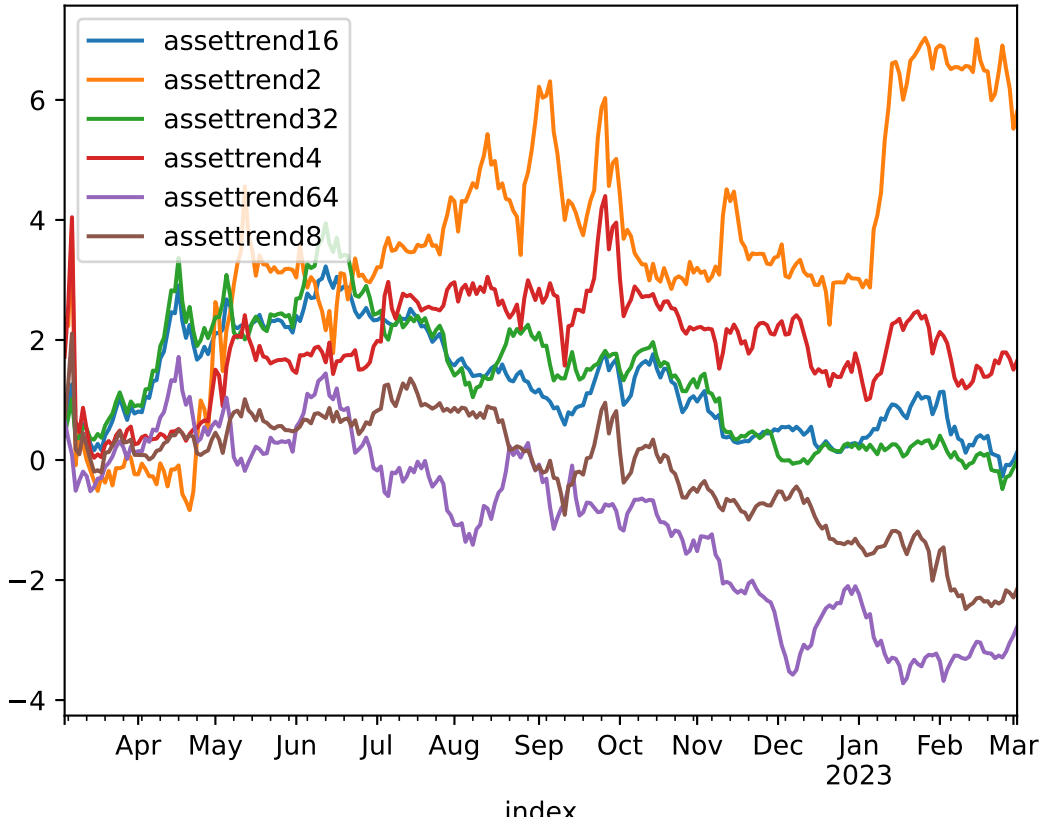


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': 0.128, 'assettrend2': 5.717, 'assettrend32': -0.013, 'assettrend4': 1.626, 'assettrend8': -2.118}

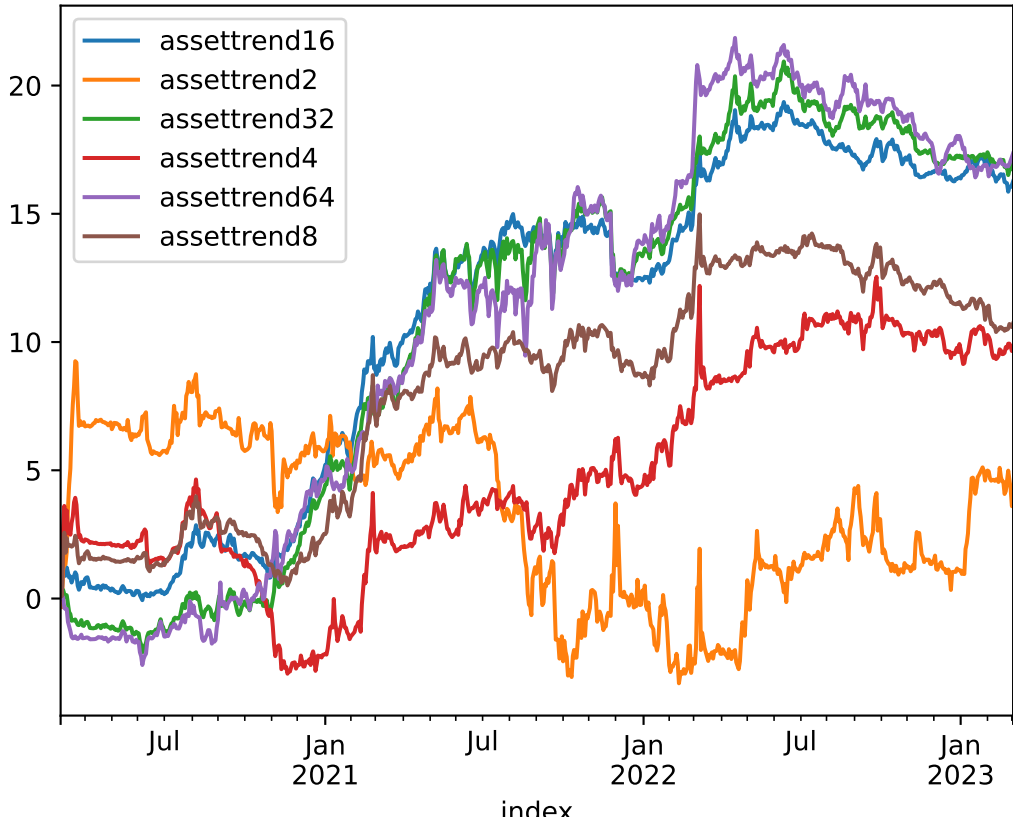
ann. std {'assettrend16': 2.714, 'assettrend2': 7.451, 'assettrend32': 2.914, 'assettrend4': 5.475, 'assettrend64': 3.106, 'assettrend8': 3.338}

ann. SR {'assettrend16': 0.05, 'assettrend2': 0.77, 'assettrend32': -0.0, 'assettrend4': 0.3, 'assettrend64': -0.88, 'assettrend8': -0.63}



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

ann. mean {'assettrend16': 5.324, 'assettrend2': 1.273, 'assettrend32': 5.559, 'assettrend4': 3.207, 'assettrend64': 5.683, 'assettrend8': 3.51}
ann. std {'assettrend16': 3.513, 'assettrend2': 7.233, 'assettrend32': 4.238, 'assettrend4': 5.249, 'assettrend64': 5.037, 'assettrend8': 3.732}
ann. SR {'assettrend16': 1.52, 'assettrend2': 0.18, 'assettrend32': 1.31, 'assettrend4': 0.61, 'assettrend64': 1.13, 'assettrend8': 0.94}

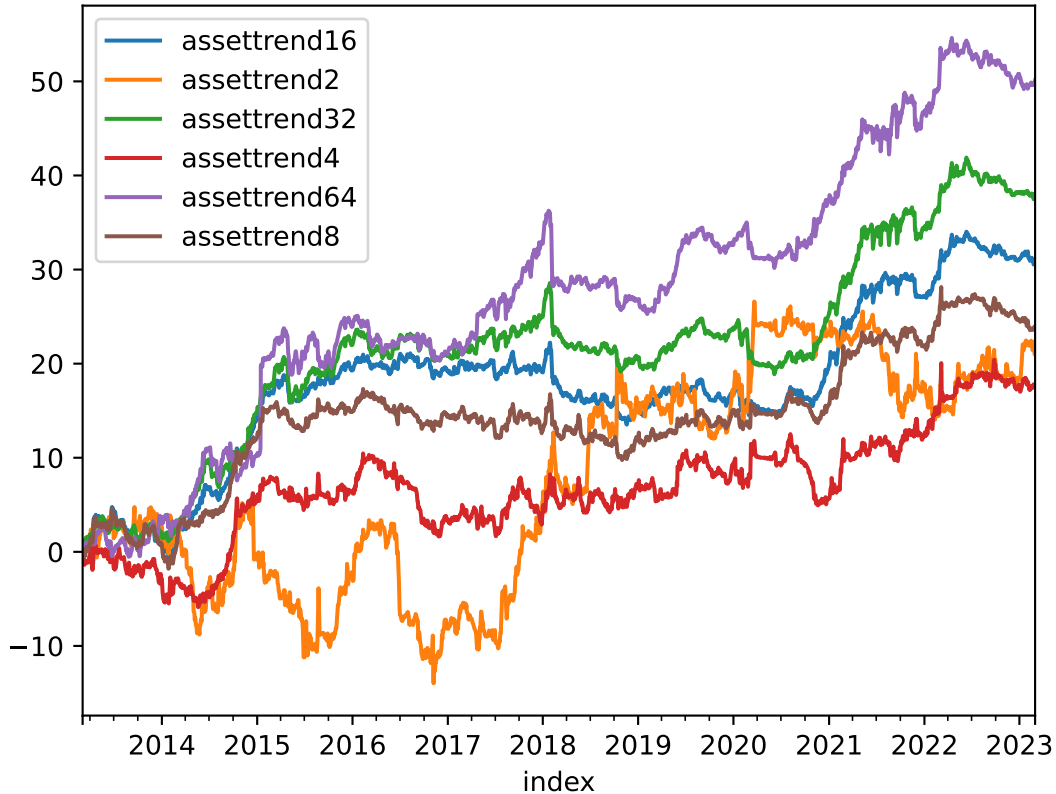


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 3.035, 'assettrend2': 2.084, 'assettrend32': 3.723, 'assettrend4': 1.733, 'assettrend64': 4.918, 'assettrend8': 2.344}

ann. std {'assettrend16': 3.243, 'assettrend2': 8.214, 'assettrend32': 3.701, 'assettrend4': 4.981, 'assettrend64': 5.282, 'assettrend8': 3.565}

ann. SR {'assettrend16': 0.94, 'assettrend2': 0.25, 'assettrend32': 1.01, 'assettrend4': 0.35, 'assettrend64': 0.93, 'assettrend8': 0.66}

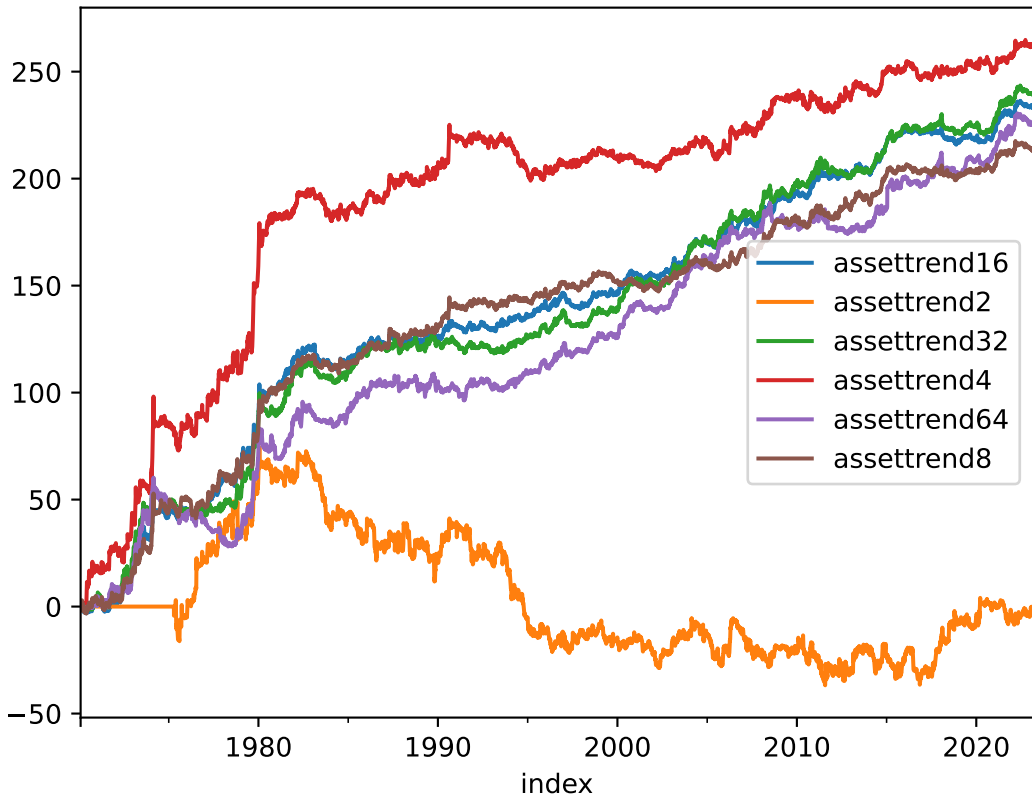


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.312, 'assettrend2': -0.024, 'assettrend32': 4.429, 'assettrend4': 4.845, 'assettrend8': 3.944}

ann. std {'assettrend16': 4.633, 'assettrend2': 10.017, 'assettrend32': 4.847, 'assettrend4': 7.337, 'assettrend64': 5.406, 'assettrend8': 5.015}

ann. SR {'assettrend16': 0.93, 'assettrend2': -0.0, 'assettrend32': 0.91, 'assettrend4': 0.66, 'assettrend64': 0.77, 'assettrend8': 0.79}

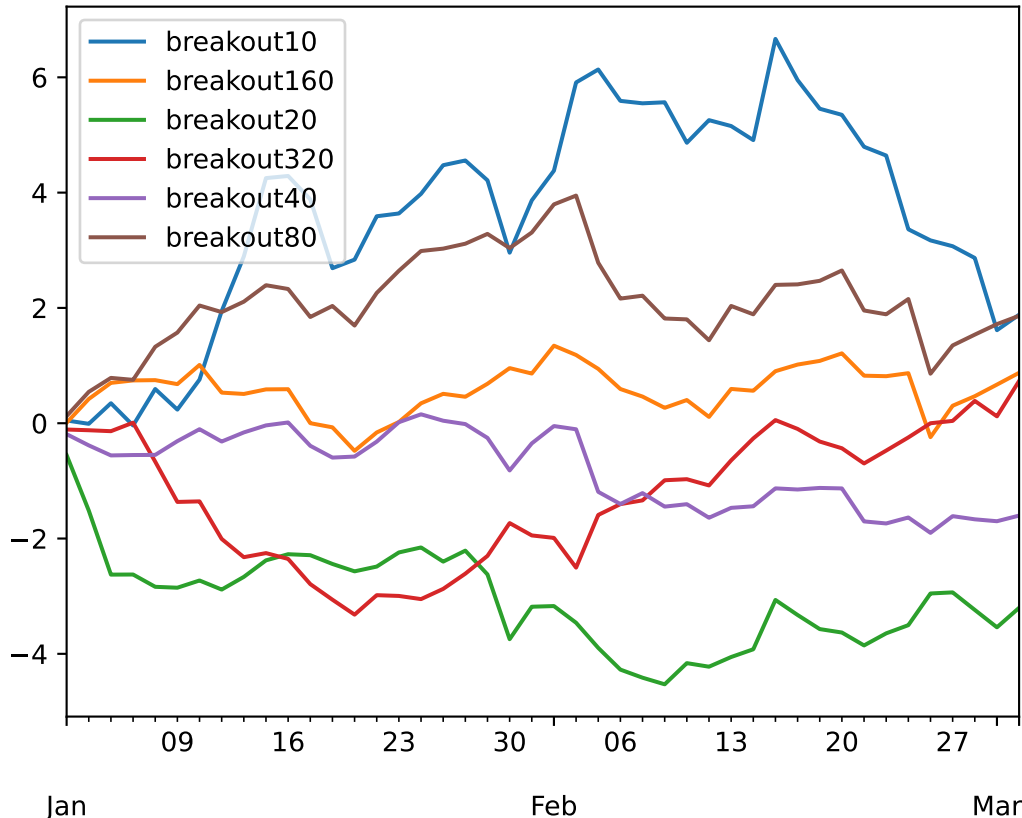


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 10.951, 'breakout160': 5.088, 'breakout20': -18.631, 'breakout320': 4.259, 'breakout40': -9.321, 'breakout80': 10.842}

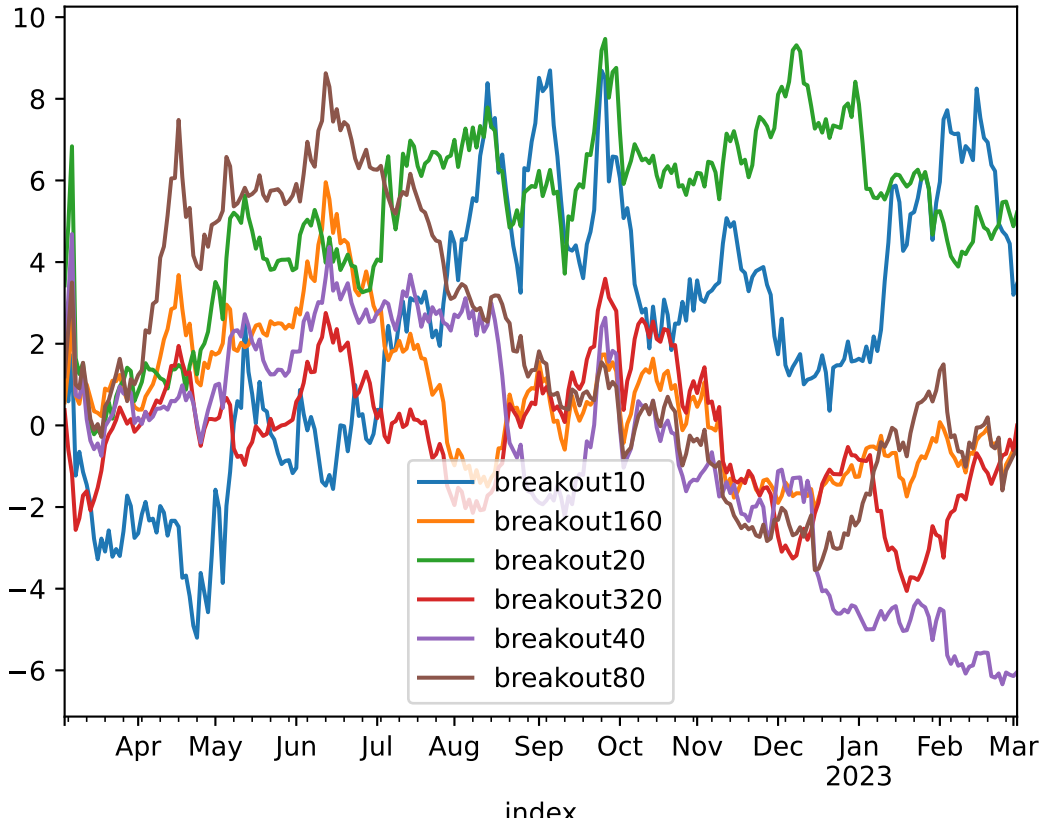
ann. std {'breakout10': 11.3, 'breakout160': 5.049, 'breakout20': 6.284, 'breakout320': 5.521, 'breakout40': 4.467, 'breakout80': 6.722}

ann. SR {'breakout10': 0.97, 'breakout160': 1.01, 'breakout20': -2.97, 'breakout320': 0.77, 'breakout40': -2.09, 'breakout80': 1.61}



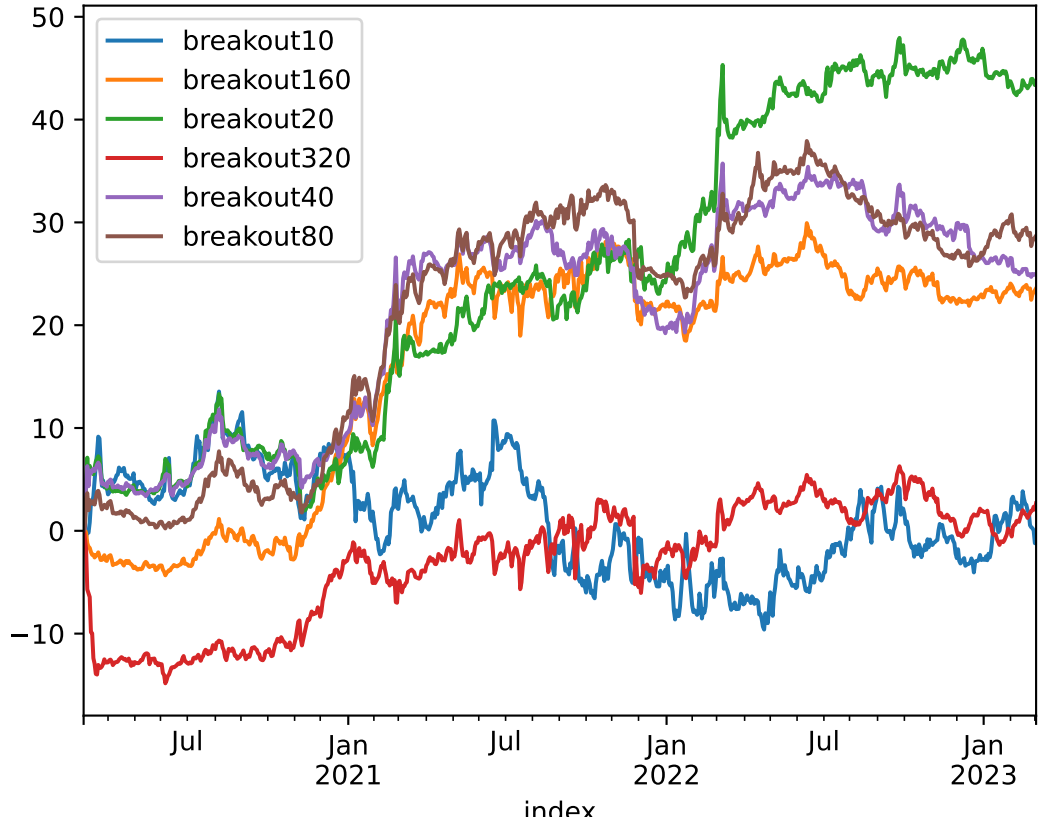
Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 3.414, 'breakout160': -0.383, 'breakout20': 5.136, 'breakout320': -0.004, 'breakout40': -5.949, 'breakout80': -0.58}
ann. std {'breakout10': 12.186, 'breakout160': 6.546, 'breakout20': 10.267, 'breakout320': 6.185, 'breakout40': 8.079, 'breakout80': 7.551}
ann. SR {'breakout10': 0.28, 'breakout160': -0.06, 'breakout20': 0.5, 'breakout320': -0.0, 'breakout40': -0.74, 'breakout80': -0.08}



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

ann. mean {'breakout10': -0.307, 'breakout160': 7.721, 'breakout20': 14.304, 'breakout320': 0.878, 'breakout40': 8.184, 'breakout80': 9.396}
 ann. std {'breakout10': 13.526, 'breakout160': 9.199, 'breakout20': 11.327, 'breakout320': 10.277, 'breakout40': 9.898, 'breakout80': 9.226}
 ann. SR {'breakout10': -0.02, 'breakout160': 0.84, 'breakout20': 1.26, 'breakout320': 0.09, 'breakout40': 0.83, 'breakout80': 1.02}

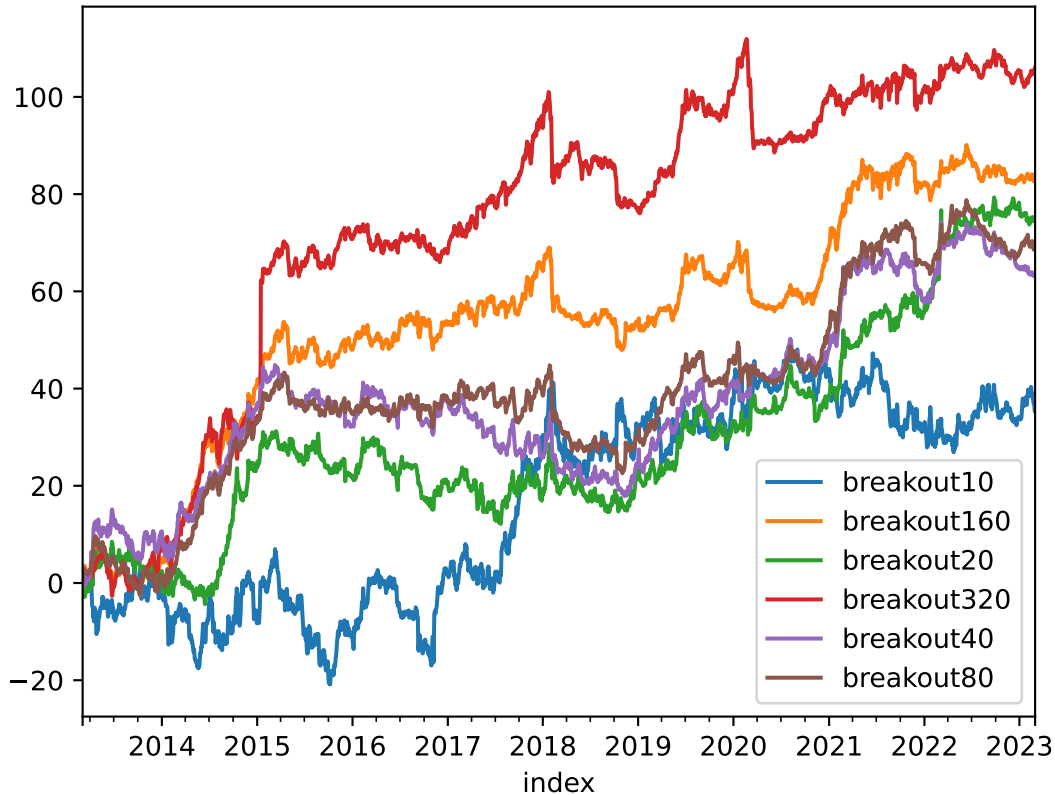


Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 3.49, 'breakout160': 8.219, 'breakout20': 7.366, 'breakout320': 10.408, 'breakout40': 6.227, 'breakout80': 6.826}

ann. std {'breakout10': 15.597, 'breakout160': 9.042, 'breakout20': 11.149, 'breakout320': 13.311, 'breakout40': 9.7, 'breakout80': 8.946}

ann. SR {'breakout10': 0.22, 'breakout160': 0.91, 'breakout20': 0.66, 'breakout320': 0.78, 'breakout40': 0.64, 'breakout80': 0.76}

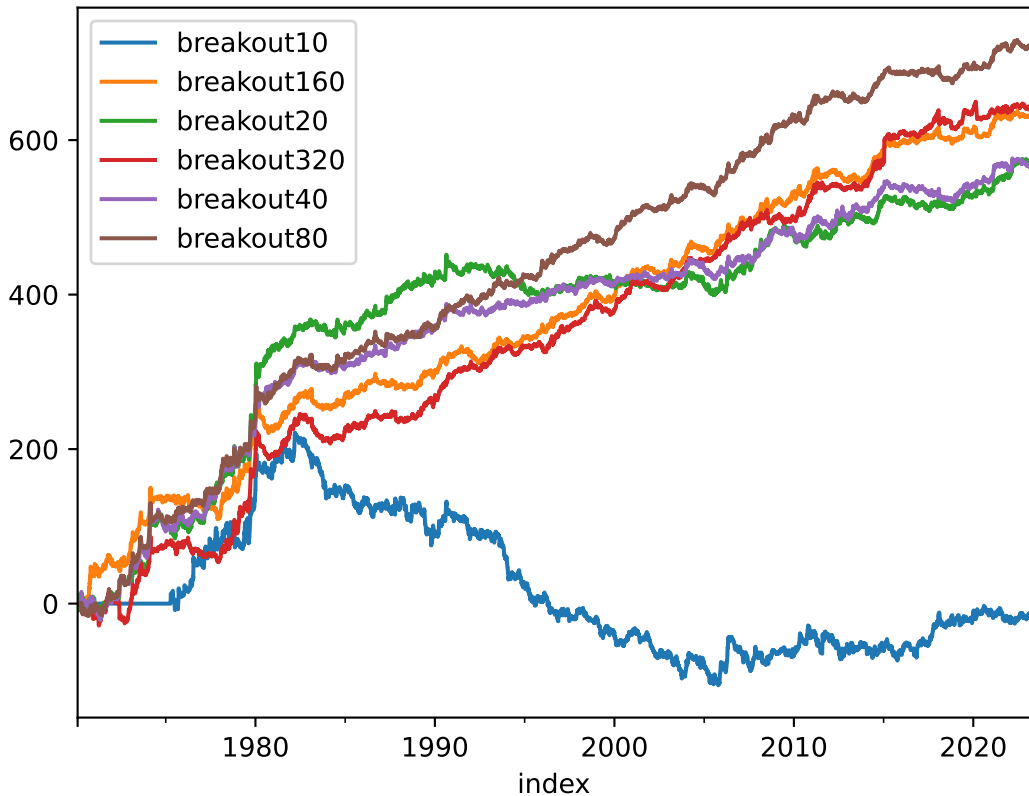


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.32, 'breakout160': 11.672, 'breakout20': 10.563, 'breakout320': 11.903, 'breakout40': 10.454, 'breakout80': 13.319}

ann. std {'breakout10': 20.754, 'breakout160': 12.436, 'breakout20': 15.982, 'breakout320': 13.0, 'breakout40': 13.181, 'breakout80': 12.684}

ann. SR {'breakout10': -0.02, 'breakout160': 0.94, 'breakout20': 0.66, 'breakout320': 0.92, 'breakout40': 0.79, 'breakout80': 1.05}

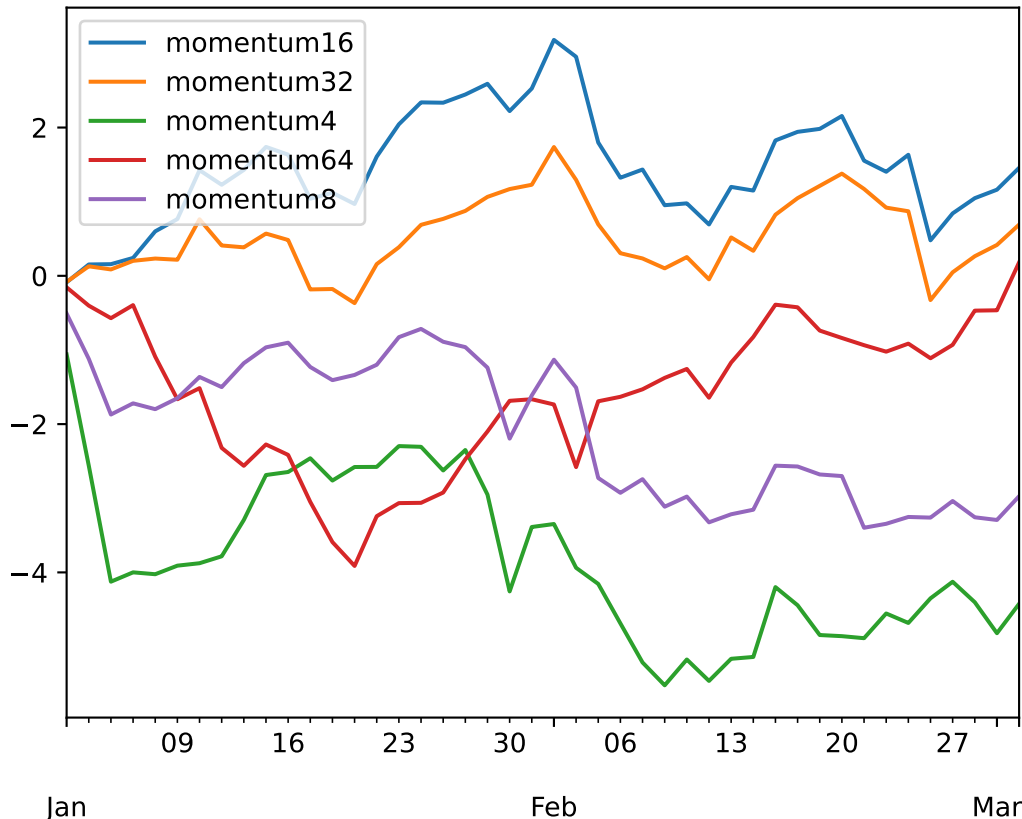


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 8.471, 'momentum32': 4.017, 'momentum4': -25.742, 'momentum64': 1.054, 'momentum8': -17.296}

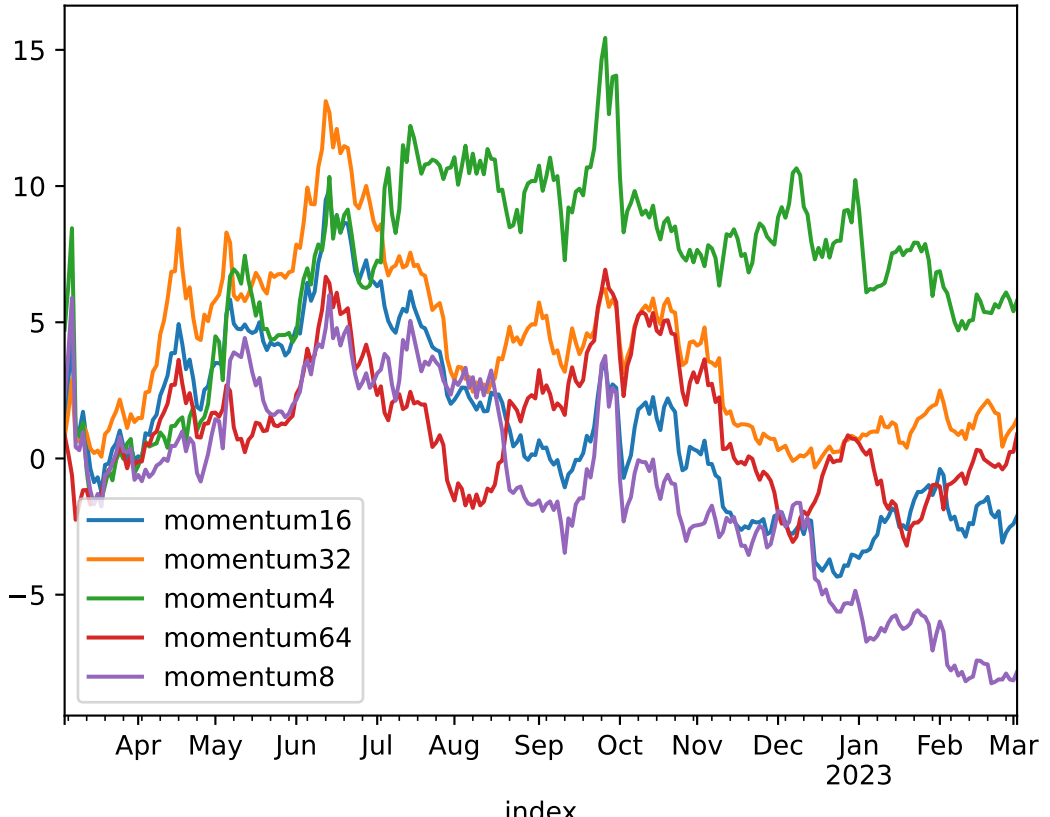
ann. std {'momentum16': 6.595, 'momentum32': 5.52, 'momentum4': 8.598, 'momentum64': 6.309, 'momentum8': 6.112}

ann. SR {'momentum16': 1.28, 'momentum32': 0.73, 'momentum4': -2.99, 'momentum64': 0.17, 'momentum8': -2.83}



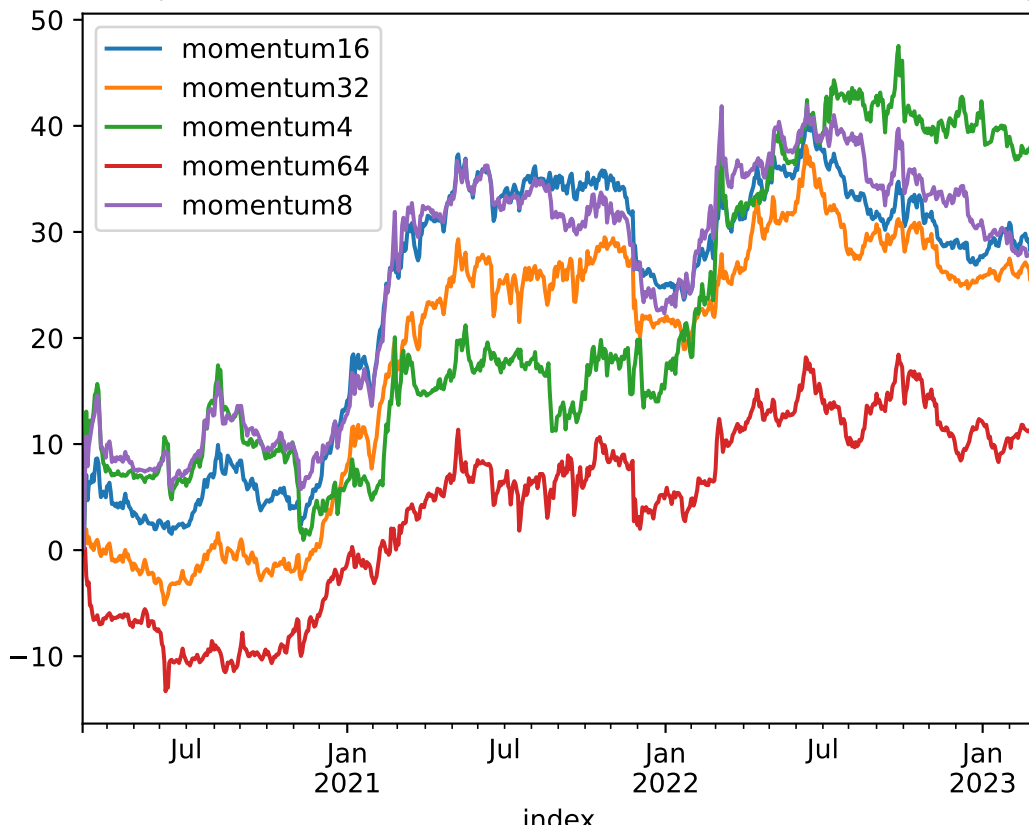
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -2.078, 'momentum32': 1.428, 'momentum4': 5.709, 'momentum64': 0.876, 'momentum8': -7.708}
ann. std {'momentum16': 9.467, 'momentum32': 9.201, 'momentum4': 15.544, 'momentum64': 8.714, 'momentum8': 11.616}
ann. SR {'momentum16': -0.22, 'momentum32': 0.16, 'momentum4': 0.37, 'momentum64': 0.1, 'momentum8': -0.66}



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

ann. mean {'momentum16': 9.54, 'momentum32': 8.658, 'momentum4': 12.406, 'momentum64': 4.058, 'momentum8': 9.211}
ann. std {'momentum16': 10.818, 'momentum32': 10.472, 'momentum4': 15.771, 'momentum64': 10.641, 'momentum8': 12.687}
ann. SR {'momentum16': 0.88, 'momentum32': 0.83, 'momentum4': 0.79, 'momentum64': 0.38, 'momentum8': 0.73}

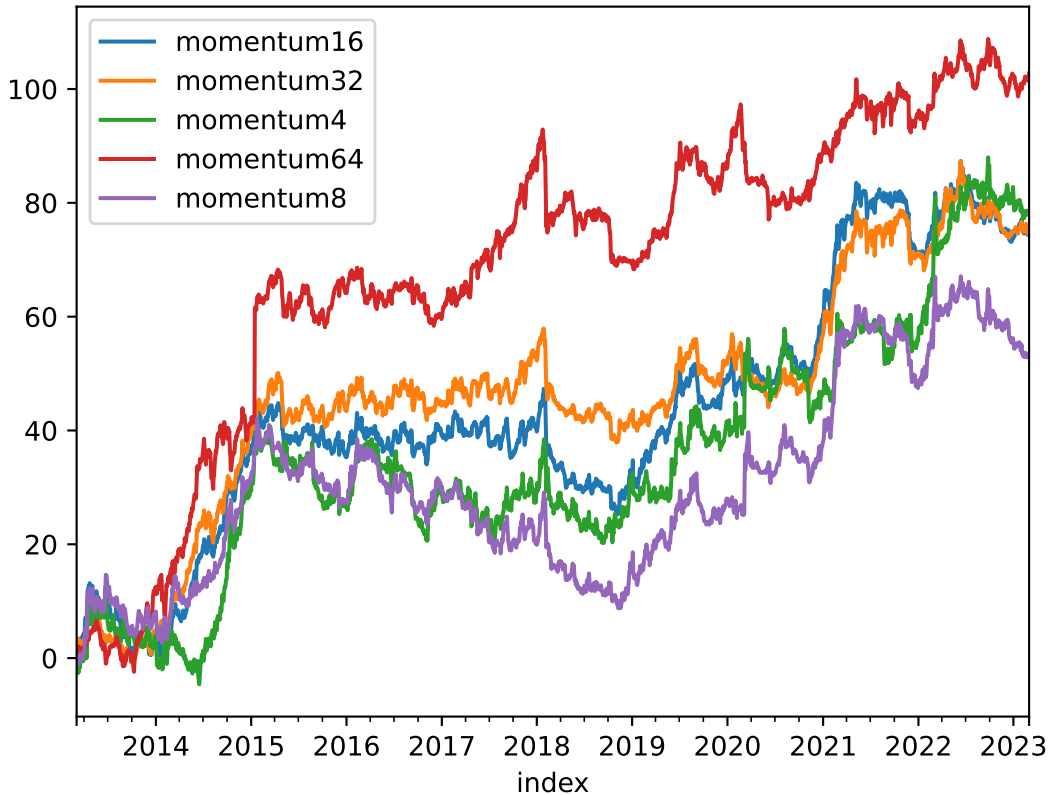


Total Trading Rule P&L for period '10Y'

ann. mean {'momentum16': 7.394, 'momentum32': 7.422, 'momentum4': 7.688, 'momentum64': 10.083, 'momentum8': 5.226}

ann. std {'momentum16': 9.866, 'momentum32': 9.408, 'momentum4': 13.679, 'momentum64': 11.96, 'momentum8': 11.252}

ann. SR {'momentum16': 0.75, 'momentum32': 0.79, 'momentum4': 0.56, 'momentum64': 0.84, 'momentum8': 0.46}

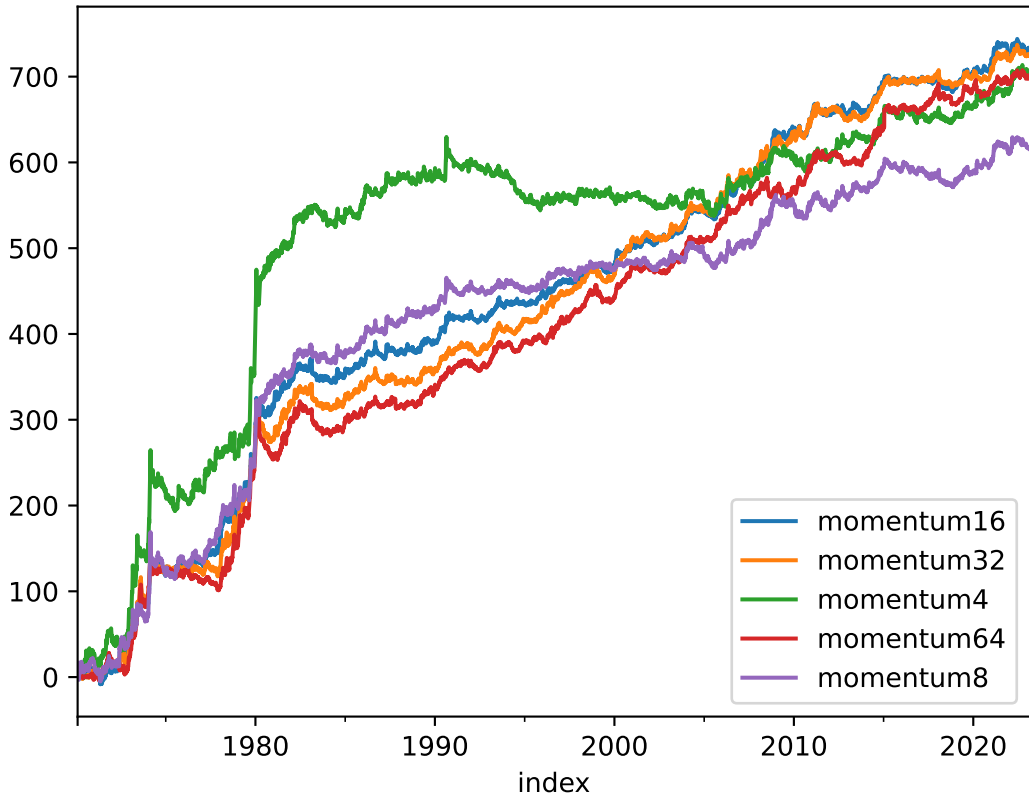


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.532, 'momentum32': 13.411, 'momentum4': 13.013, 'momentum64': 12.968, 'momentum8': 11.381}

ann. std {'momentum16': 14.132, 'momentum32': 13.742, 'momentum4': 19.999, 'momentum64': 13.356, 'momentum8': 15.79}

ann. SR {'momentum16': 0.96, 'momentum32': 0.98, 'momentum4': 0.65, 'momentum64': 0.97, 'momentum8': 0.72}

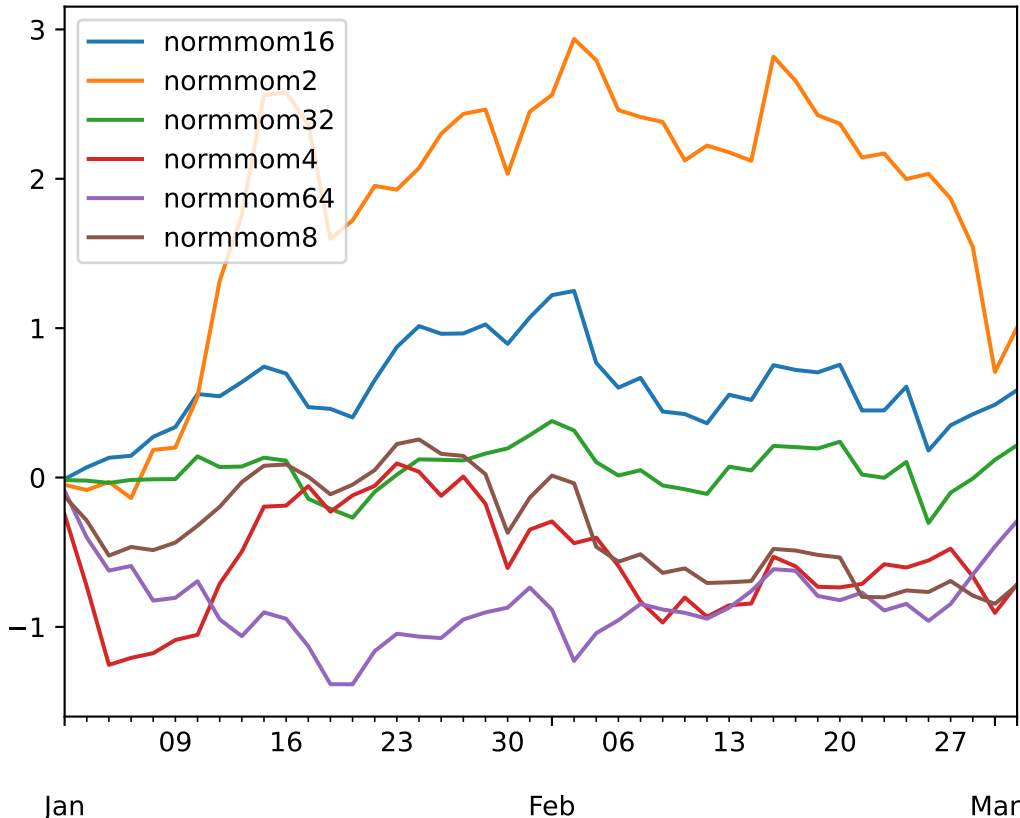


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 3.405, 'normmom2': 5.841, 'normmom32': 1.258, 'normmom4': -4.153, 'normmom64': -1.695, 'normmom8': -4.184}

ann. std {'normmom16': 2.584, 'normmom2': 5.319, 'normmom32': 1.913, 'normmom4': 3.187, 'normmom64': 2.362, 'normmom8': 2.258}

ann. SR {'normmom16': 1.32, 'normmom2': 1.1, 'normmom32': 0.66, 'normmom4': -1.3, 'normmom64': -0.72, 'normmom8': -1.85}

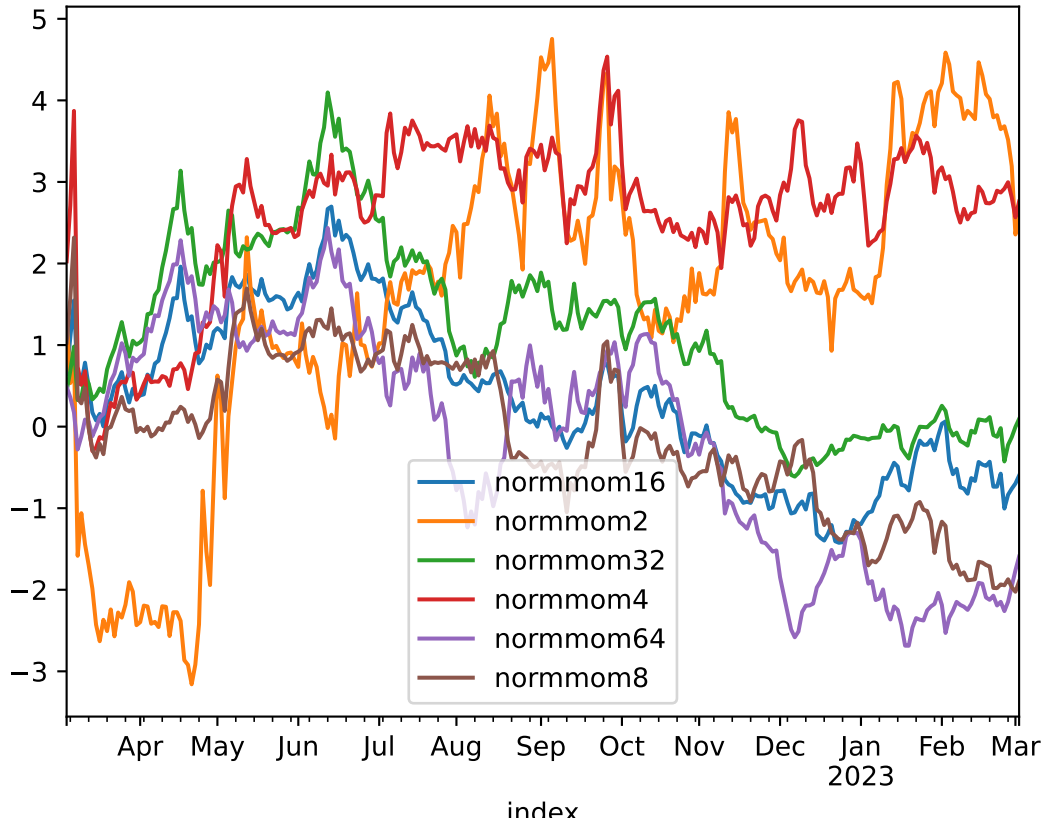


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': -0.591, 'normmom2': 2.612, 'normmom32': 0.092, 'normmom4': 2.717, 'normmom64': -1.569, 'normmom8': -1.869}

ann. std {'normmom16': 2.821, 'normmom2': 6.909, 'normmom32': 2.812, 'normmom4': 5.506, 'normmom64': 3.158, 'normmom8': 3.644}

ann. SR {'normmom16': -0.21, 'normmom2': 0.38, 'normmom32': 0.03, 'normmom4': 0.49, 'normmom64': -0.5, 'normmom8': -0.51}

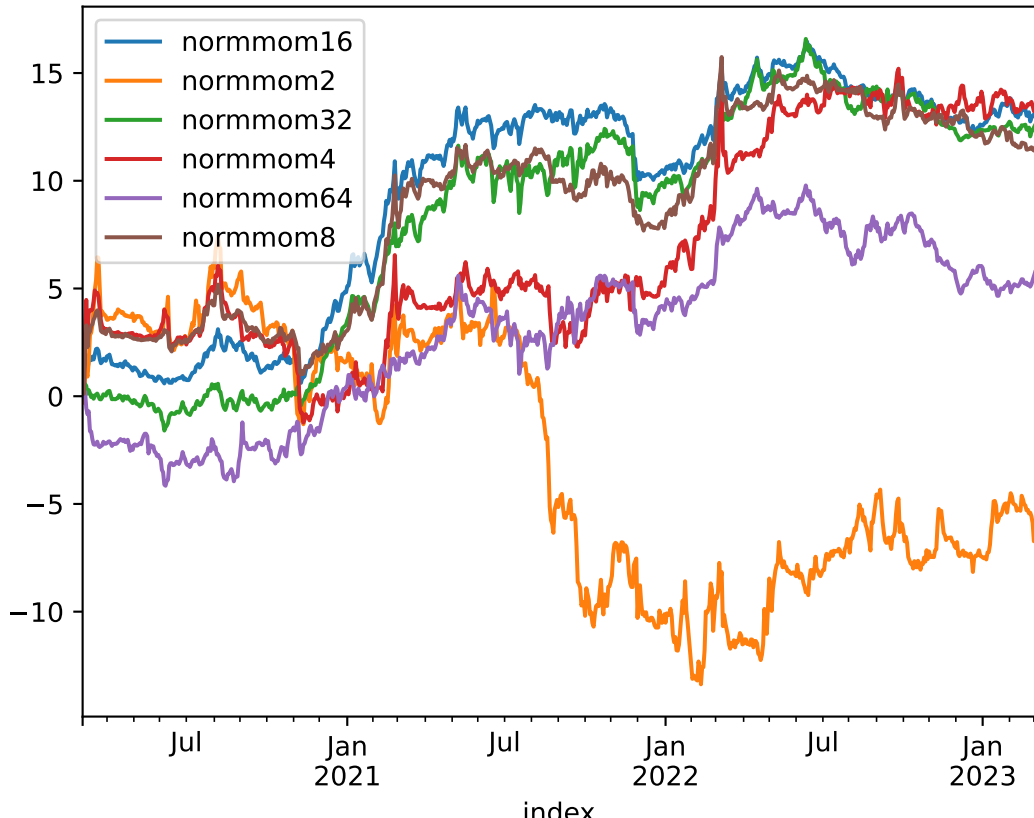


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 4.307, 'normmom2': -2.106, 'normmom32': 4.119, 'normmom4': 4.395, 'normmom64': 1.883, 'normmom8': 3.774}

ann. std {'normmom16': 3.62, 'normmom2': 7.701, 'normmom32': 3.896, 'normmom4': 5.671, 'normmom64': 4.163, 'normmom8': 4.201}

ann. SR {'normmom16': 1.19, 'normmom2': -0.27, 'normmom32': 1.06, 'normmom4': 0.77, 'normmom64': 0.45, 'normmom8': 0.9}

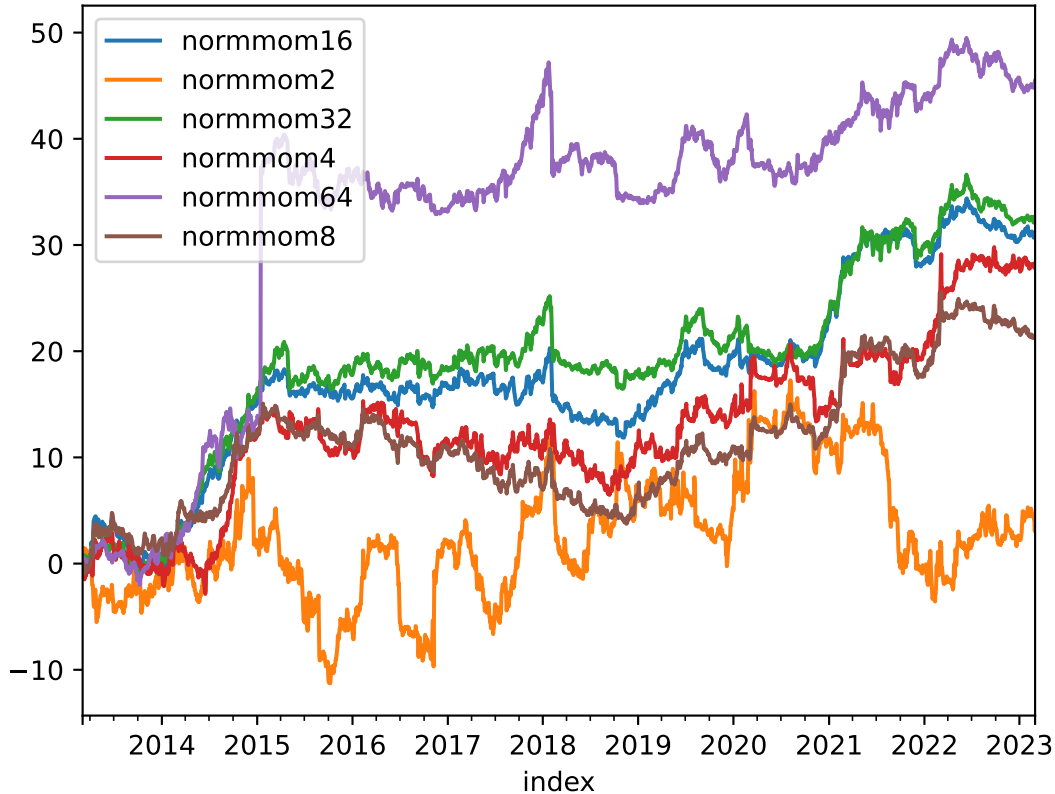


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 3.051, 'normmom2': 0.33, 'normmom32': 3.201, 'normmom4': 2.75, 'normmom64': 4.462, 'normmom8': 2.094}

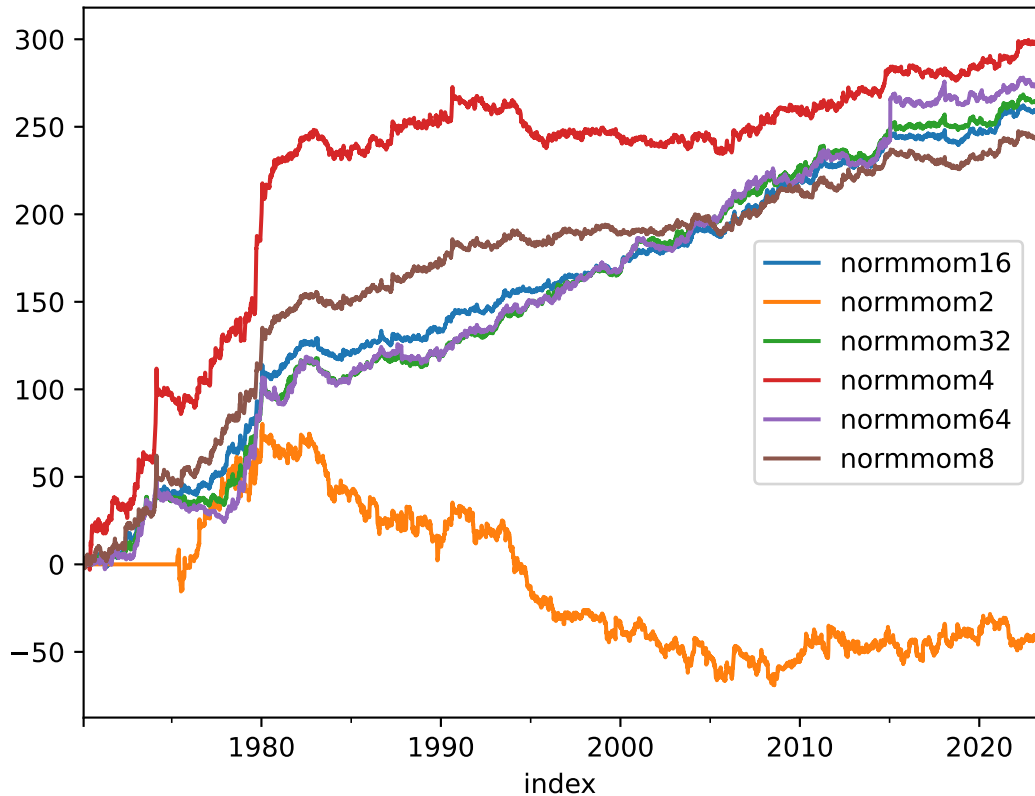
ann. std {'normmom16': 3.551, 'normmom2': 8.977, 'normmom32': 3.698, 'normmom4': 5.463, 'normmom64': 8.479, 'normmom8': 4.02}

ann. SR {'normmom16': 0.86, 'normmom2': 0.04, 'normmom32': 0.87, 'normmom4': 0.5, 'normmom64': 0.53, 'normmom8': 0.52}



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

ann. mean {'normmom16': 4.787, 'normmom2': -0.78, 'normmom32': 4.89, 'normmom4': 5.506, 'normmom64': 5.067, 'normmom8': 4.498}
ann. std {'normmom16': 4.889, 'normmom2': 11.169, 'normmom32': 4.947, 'normmom4': 8.289, 'normmom64': 6.235, 'normmom8': 5.902}
ann. SR {'normmom16': 0.98, 'normmom2': -0.07, 'normmom32': 0.99, 'normmom4': 0.66, 'normmom64': 0.81, 'normmom8': 0.76}

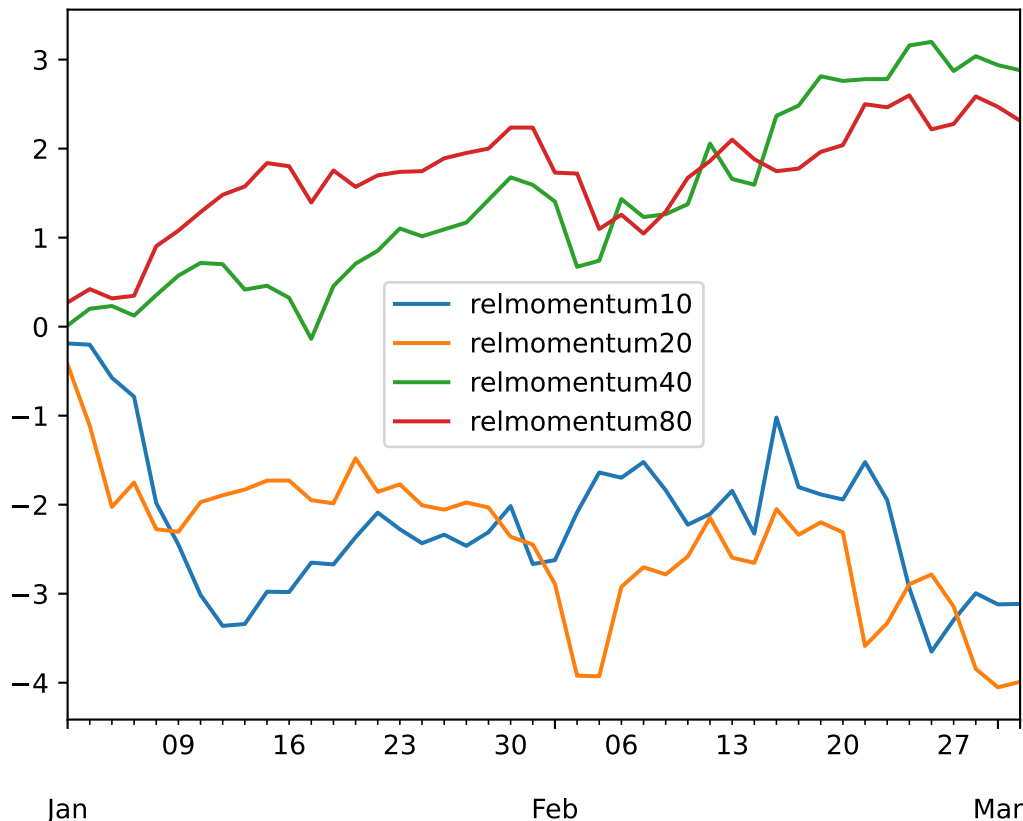


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -18.122, 'relmomentum20': -23.217, 'relmomentum40': 16.758, 'relmomentum80': 13.457}

ann. std {'relmomentum10': 7.157, 'relmomentum20': 6.92, 'relmomentum40': 4.695, 'relmomentum80': 3.9}

ann. SR {'relmomentum10': -2.53, 'relmomentum20': -3.36, 'relmomentum40': 3.57, 'relmomentum80': 3.45}

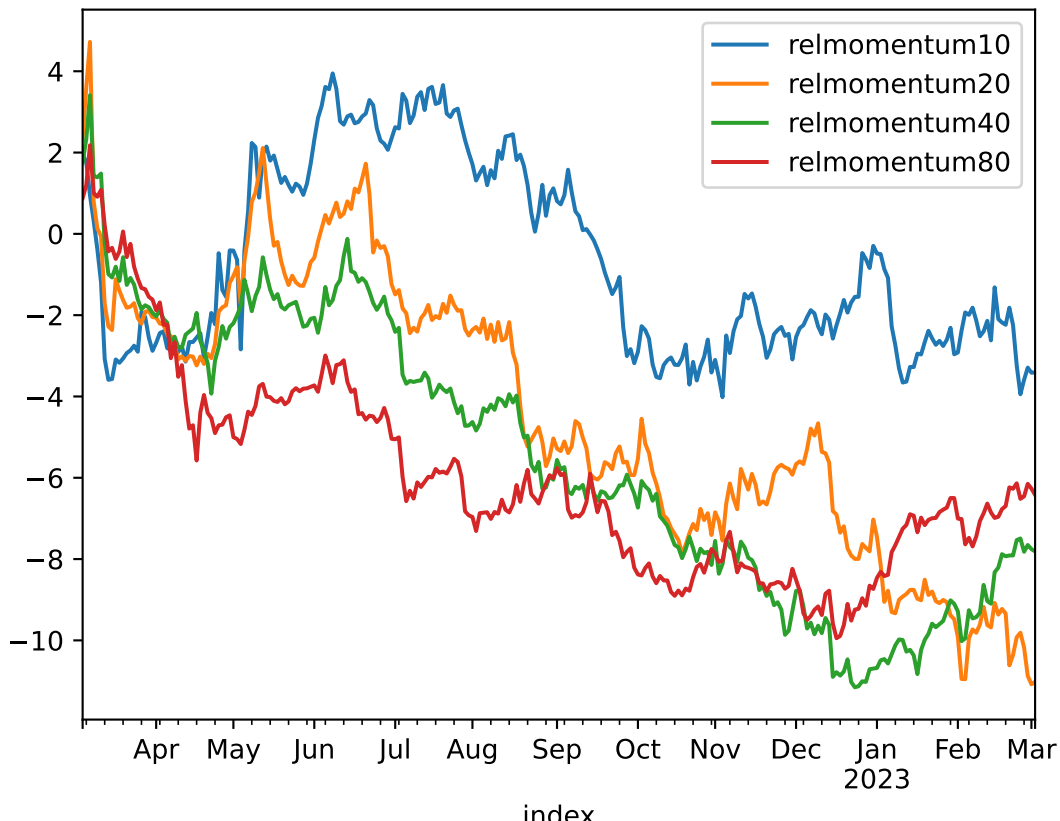


Total Trading Rule P&L for period '1Y'

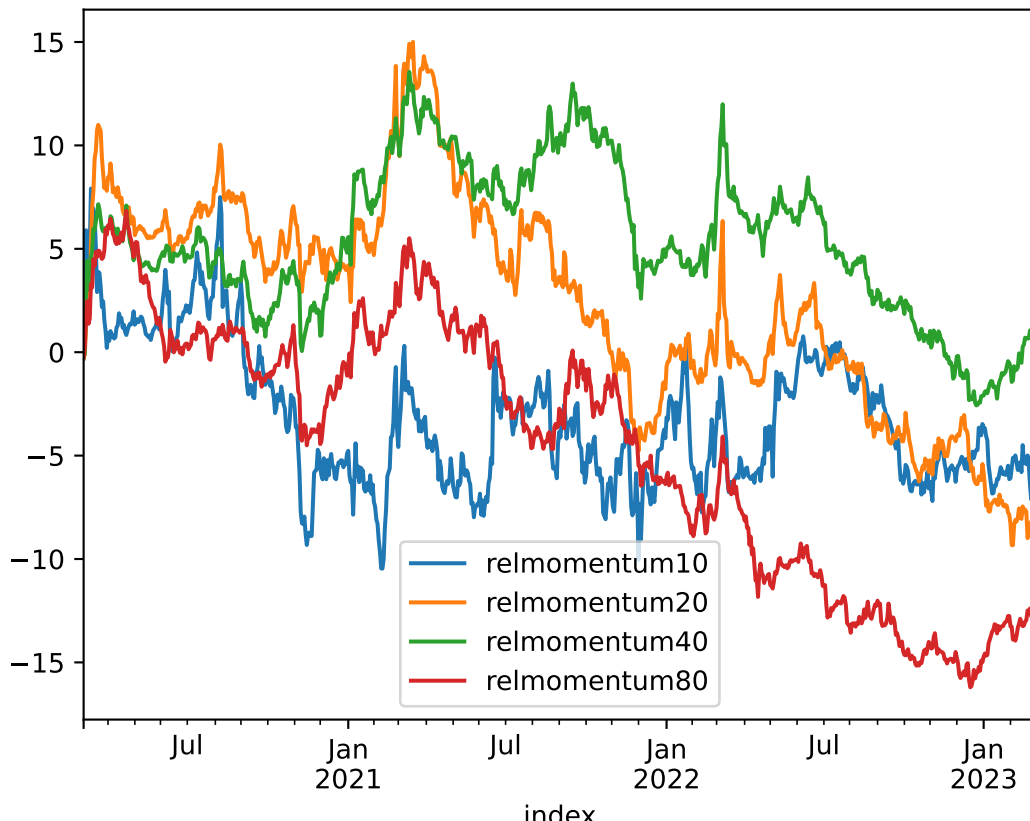
ann. mean {'relmomentum10': -3.357, 'relmomentum20': -10.849, 'relmomentum40': -7.691, 'relmomentum80': -6.323}

ann. std {'relmomentum10': 8.408, 'relmomentum20': 8.227, 'relmomentum40': 6.235, 'relmomentum80': 5.403}

ann. SR {'relmomentum10': -0.4, 'relmomentum20': -1.32, 'relmomentum40': -1.23, 'relmomentum80': -1.17}

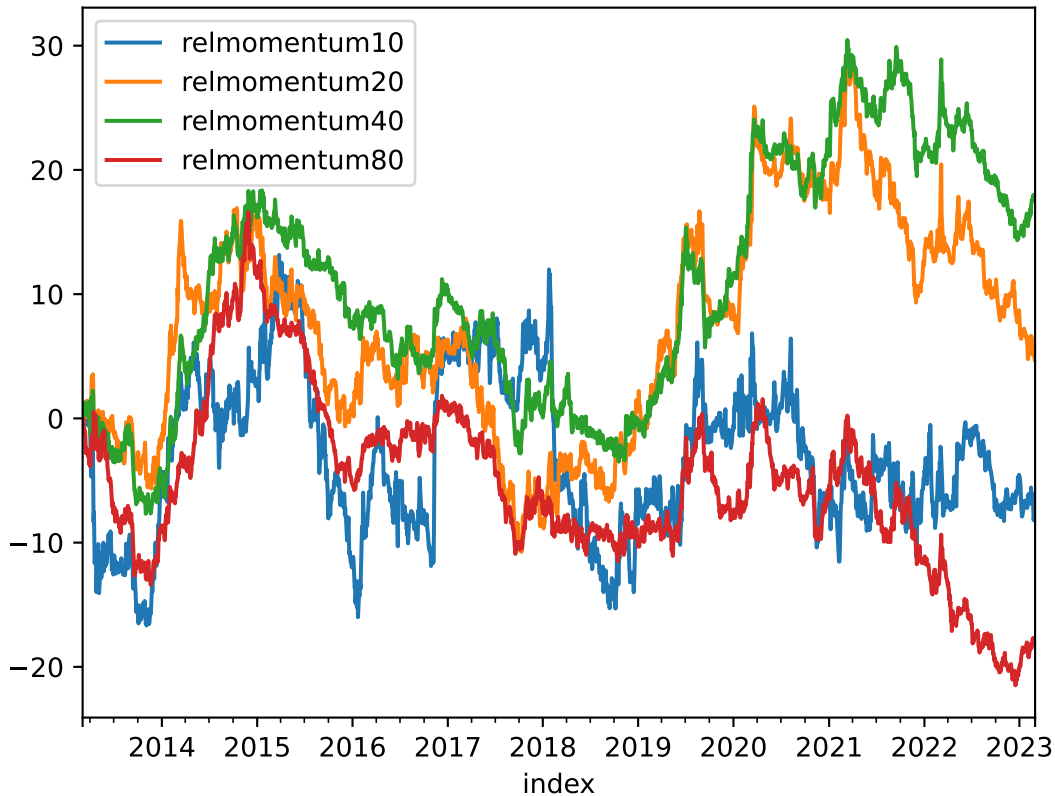


Total Trading Rule P&L for period '3Y'
ann. mean {'relmomentum10': -2.156, 'relmomentum20': -3.076, 'relmomentum40': 0.252, 'relmomentum80': -4.151}
ann. std {'relmomentum10': 12.001, 'relmomentum20': 8.909, 'relmomentum40': 7.323, 'relmomentum80': 6.766}
ann. SR {'relmomentum10': -0.18, 'relmomentum20': -0.35, 'relmomentum40': 0.03, 'relmomentum80': -0.61}



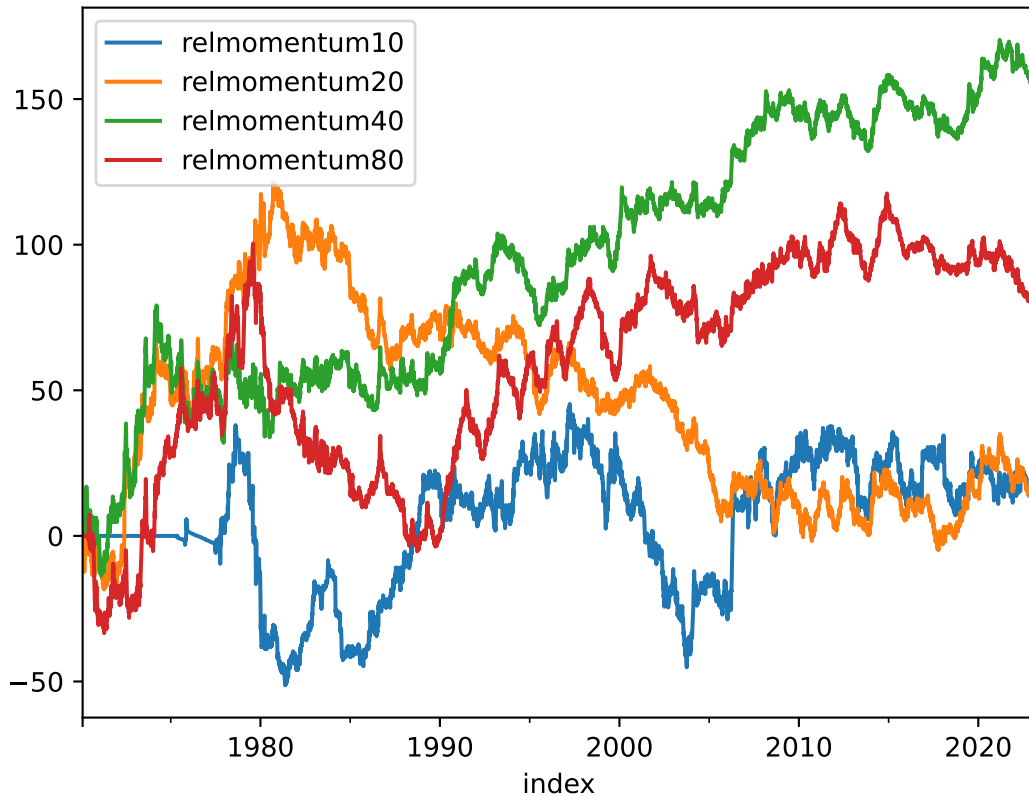
Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -0.751, 'relmomentum20': 0.462, 'relmomentum40': 1.735, 'relmomentum80': -1.762}
ann. std {'relmomentum10': 12.909, 'relmomentum20': 8.91, 'relmomentum40': 7.252, 'relmomentum80': 6.681}
ann. SR {'relmomentum10': -0.06, 'relmomentum20': 0.05, 'relmomentum40': 0.24, 'relmomentum80': -0.26}

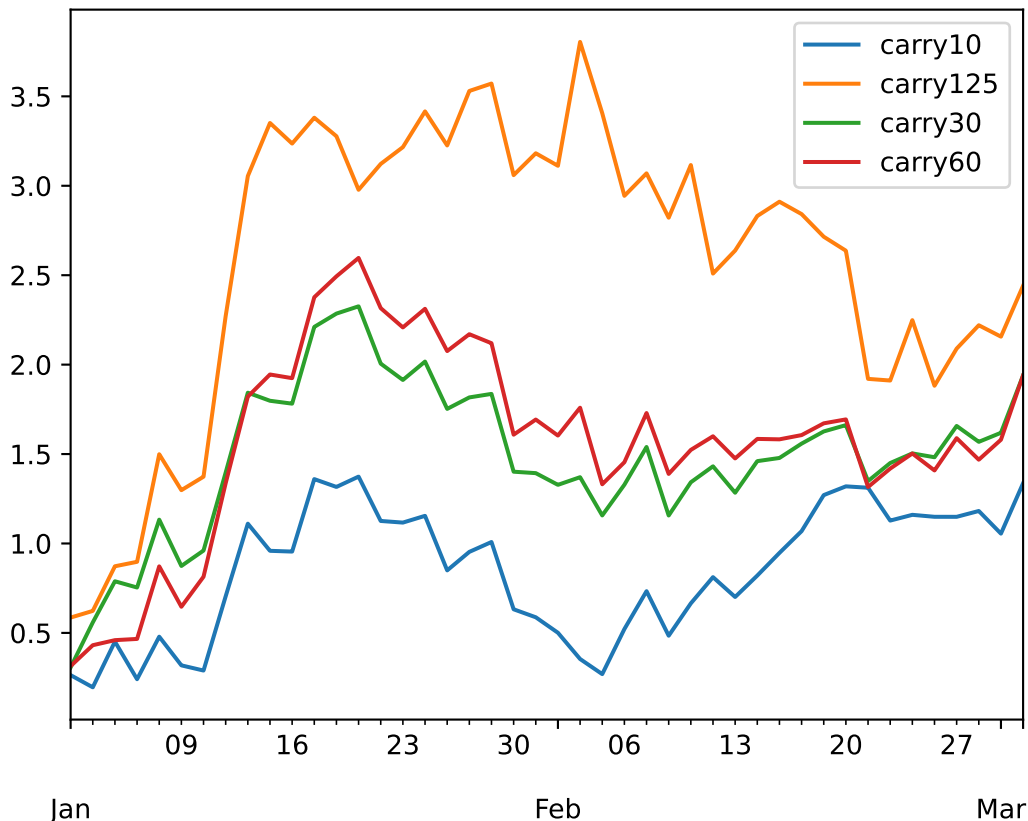


Total Trading Rule P&L for period '99Y'

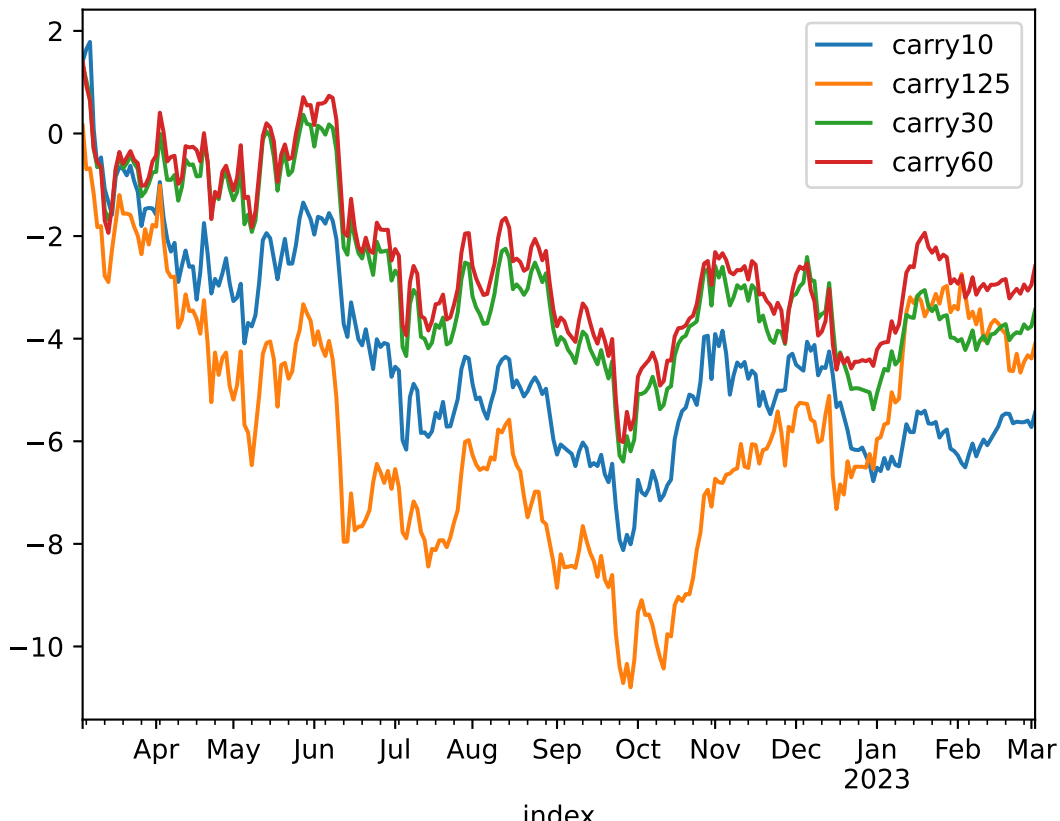
ann. mean {'relmomentum10': 0.275, 'relmomentum20': 0.196, 'relmomentum40': 2.912, 'relmomentum80': 1.535}
ann. std {'relmomentum10': 13.402, 'relmomentum20': 11.501, 'relmomentum40': 10.779, 'relmomentum80': 11.047}
ann. SR {'relmomentum10': 0.02, 'relmomentum20': 0.02, 'relmomentum40': 0.27, 'relmomentum80': 0.14}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 7.778, 'carry125': 14.203, 'carry30': 11.285, 'carry60': 11.287}
ann. std {'carry10': 3.05, 'carry125': 5.555, 'carry30': 3.407, 'carry60': 3.7}
ann. SR {'carry10': 2.55, 'carry125': 2.56, 'carry30': 3.31, 'carry60': 3.05}



Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -5.357, 'carry125': -4.039, 'carry30': -3.386, 'carry60': -2.552}
ann. std {'carry10': 6.27, 'carry125': 7.156, 'carry30': 6.098, 'carry60': 6.319}
ann. SR {'carry10': -0.85, 'carry125': -0.56, 'carry30': -0.56, 'carry60': -0.4}

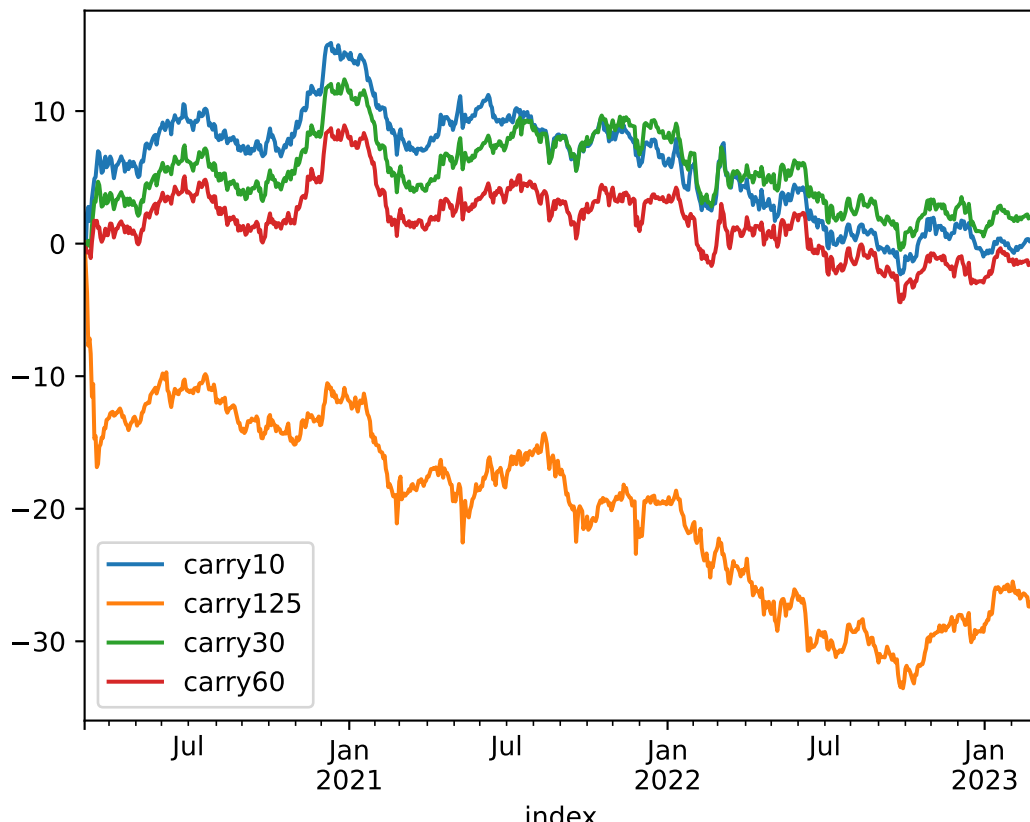


Total Trading Rule P&L for period '3Y'

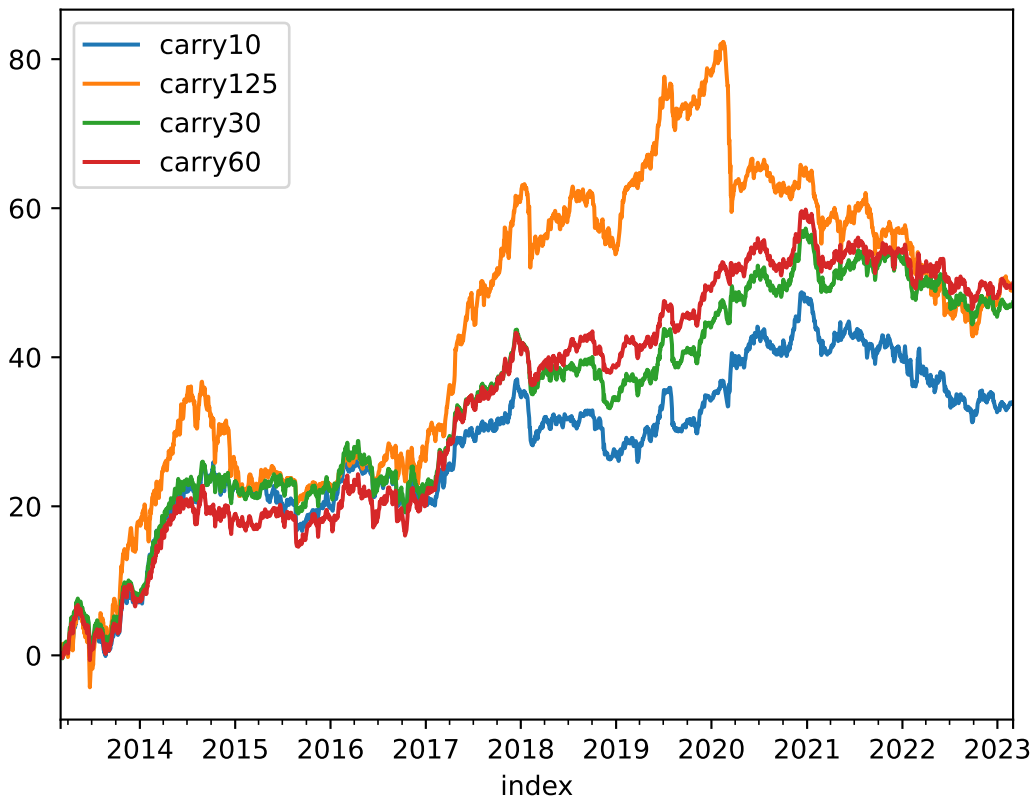
ann. mean {'carry10': 0.119, 'carry125': -8.79, 'carry30': 0.813, 'carry60': -0.328}

ann. std {'carry10': 6.764, 'carry125': 9.214, 'carry30': 6.557, 'carry60': 6.511}

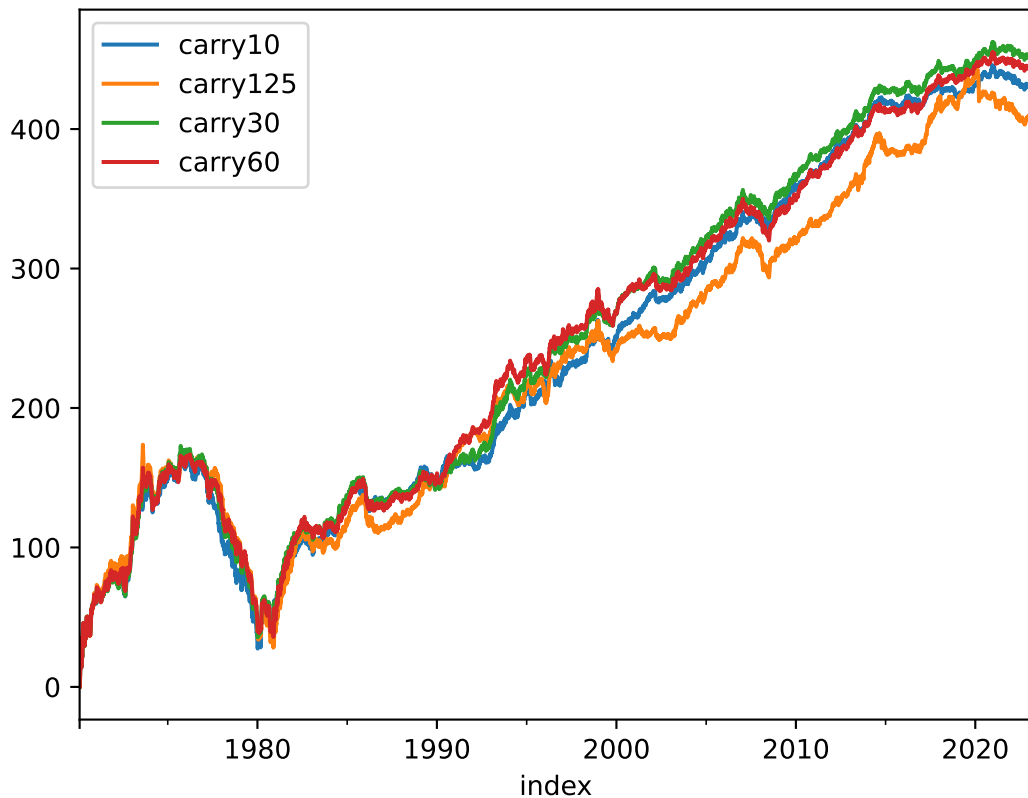
ann. SR {'carry10': 0.02, 'carry125': -0.95, 'carry30': 0.12, 'carry60': -0.05}



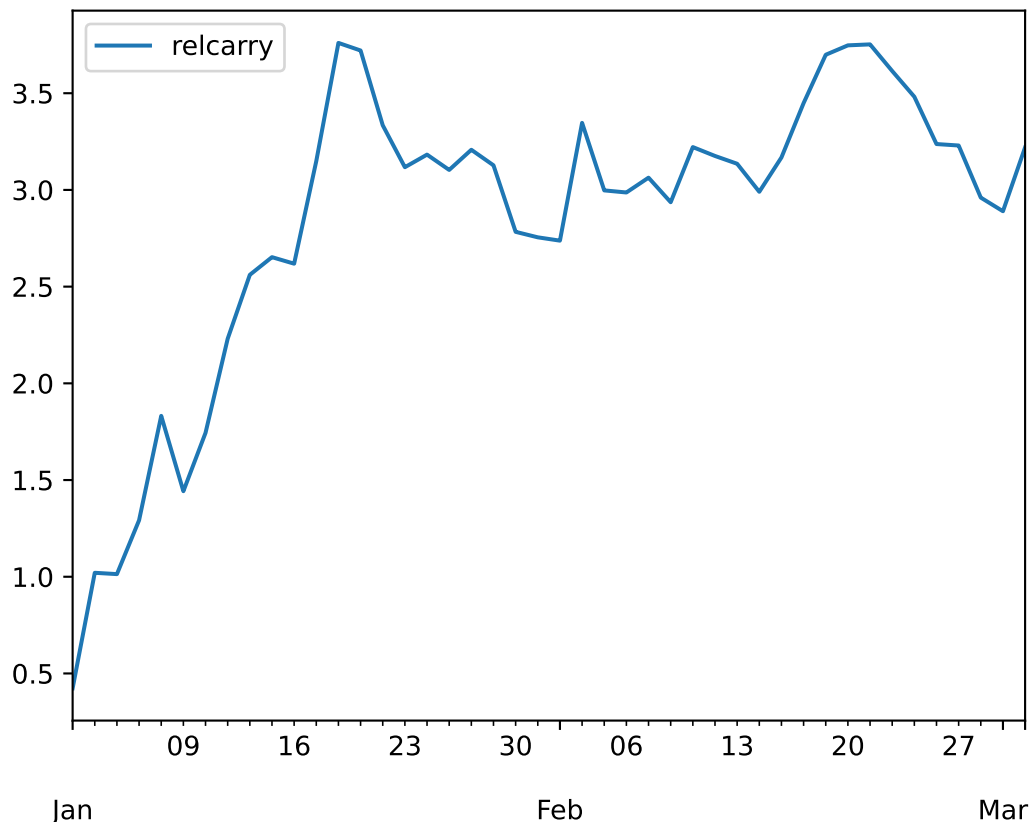
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.331, 'carry125': 4.857, 'carry30': 4.648, 'carry60': 4.896}
ann. std {'carry10': 6.375, 'carry125': 9.234, 'carry30': 6.487, 'carry60': 6.455}
ann. SR {'carry10': 0.52, 'carry125': 0.53, 'carry30': 0.72, 'carry60': 0.76}



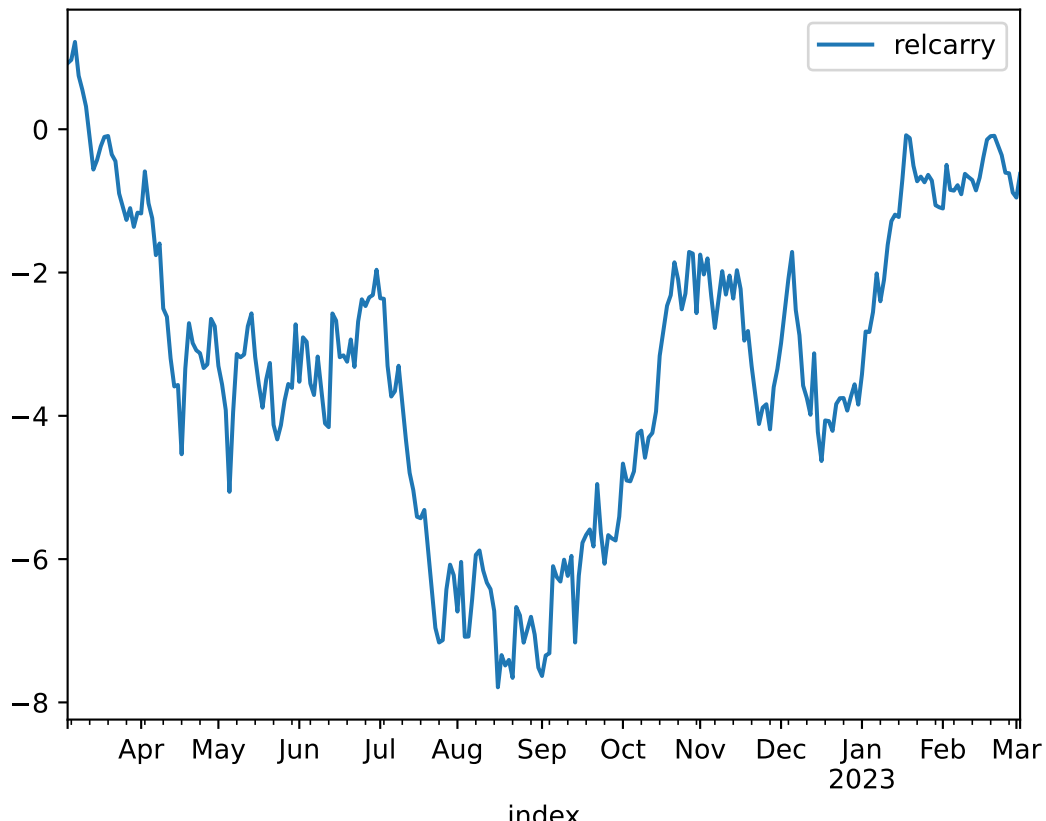
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.966, 'carry125': 7.578, 'carry30': 8.367, 'carry60': 8.23}
ann. std {'carry10': 11.894, 'carry125': 12.173, 'carry30': 11.914, 'carry60': 11.868}
ann. SR {'carry10': 0.67, 'carry125': 0.62, 'carry30': 0.7, 'carry60': 0.69}



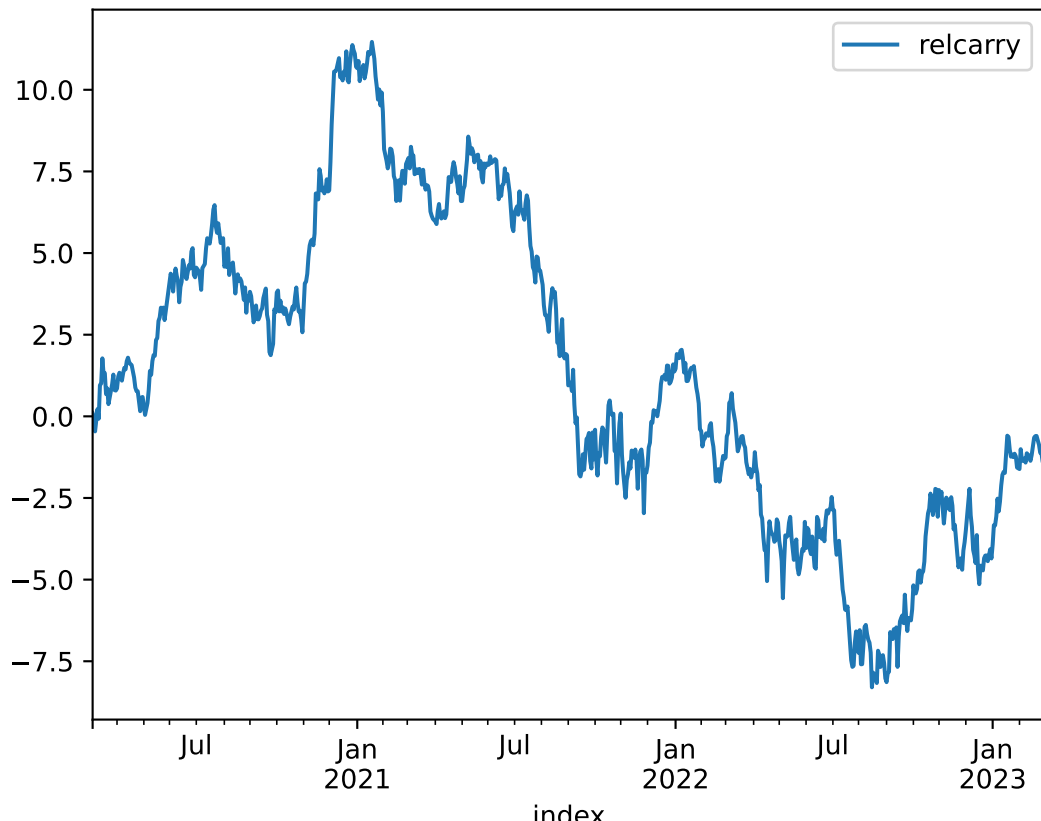
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': 18.734}
ann. std {'relcarry': 4.464}
ann. SR {'relcarry': 4.2}



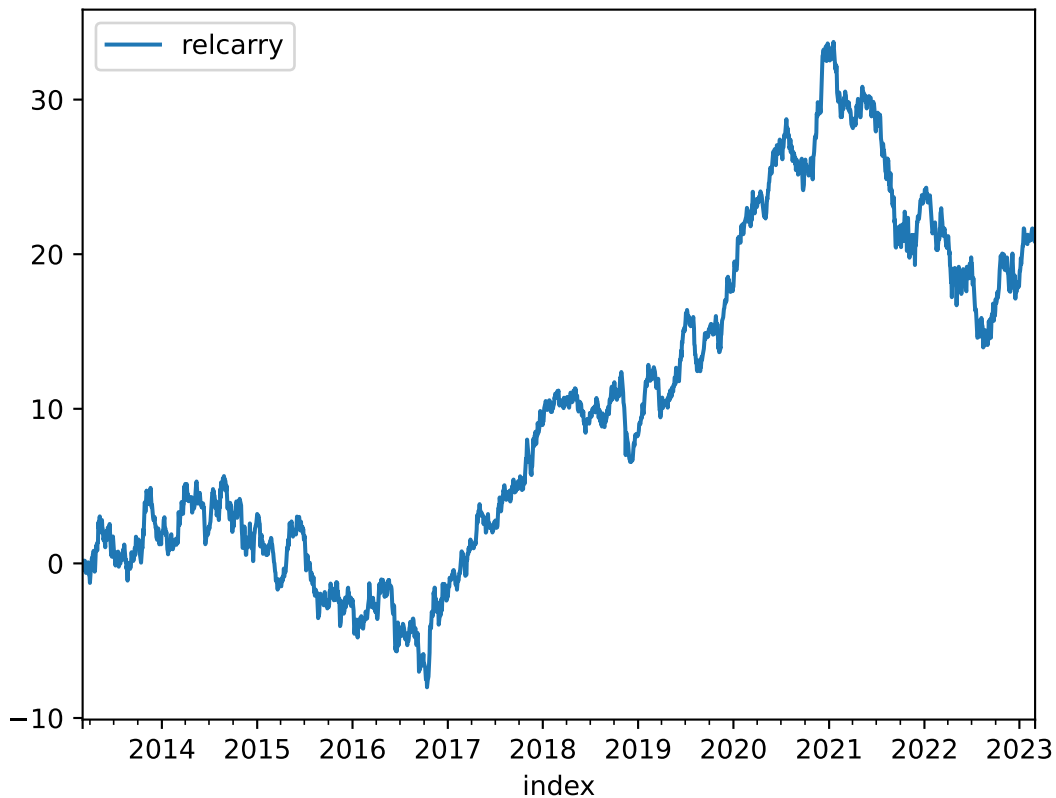
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': -0.614}
ann. std {'relcarry': 7.129}
ann. SR {'relcarry': -0.09}



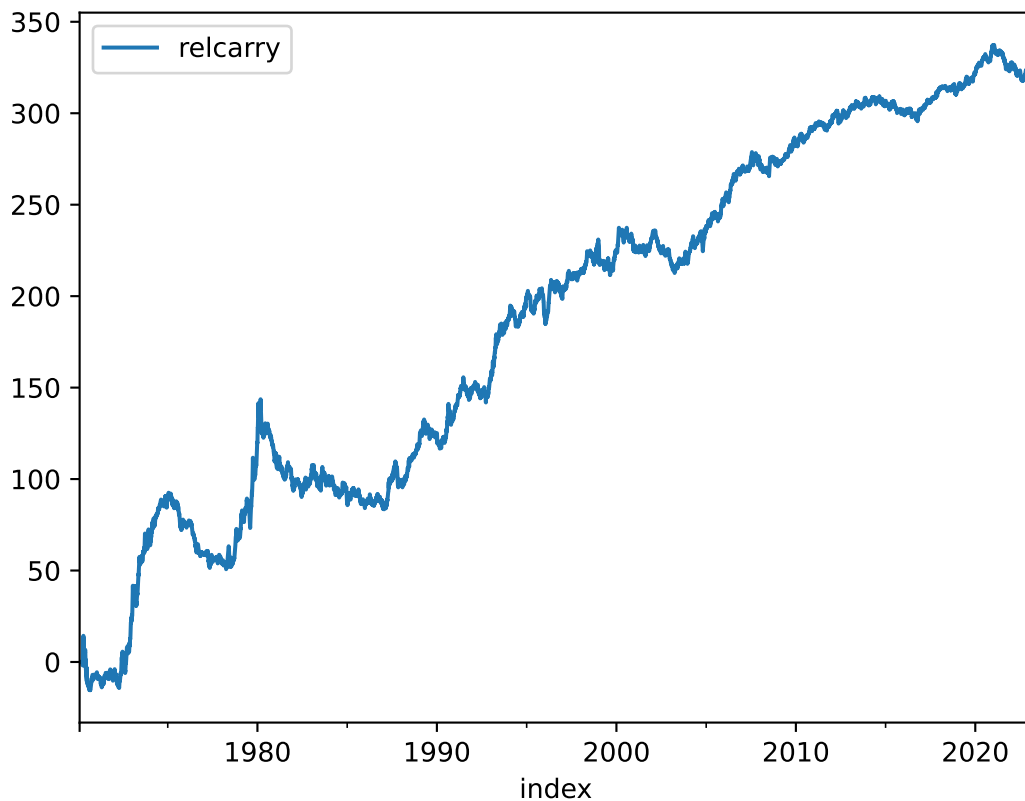
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -0.371}
ann. std {'relcarry': 6.777}
ann. SR {'relcarry': -0.05}



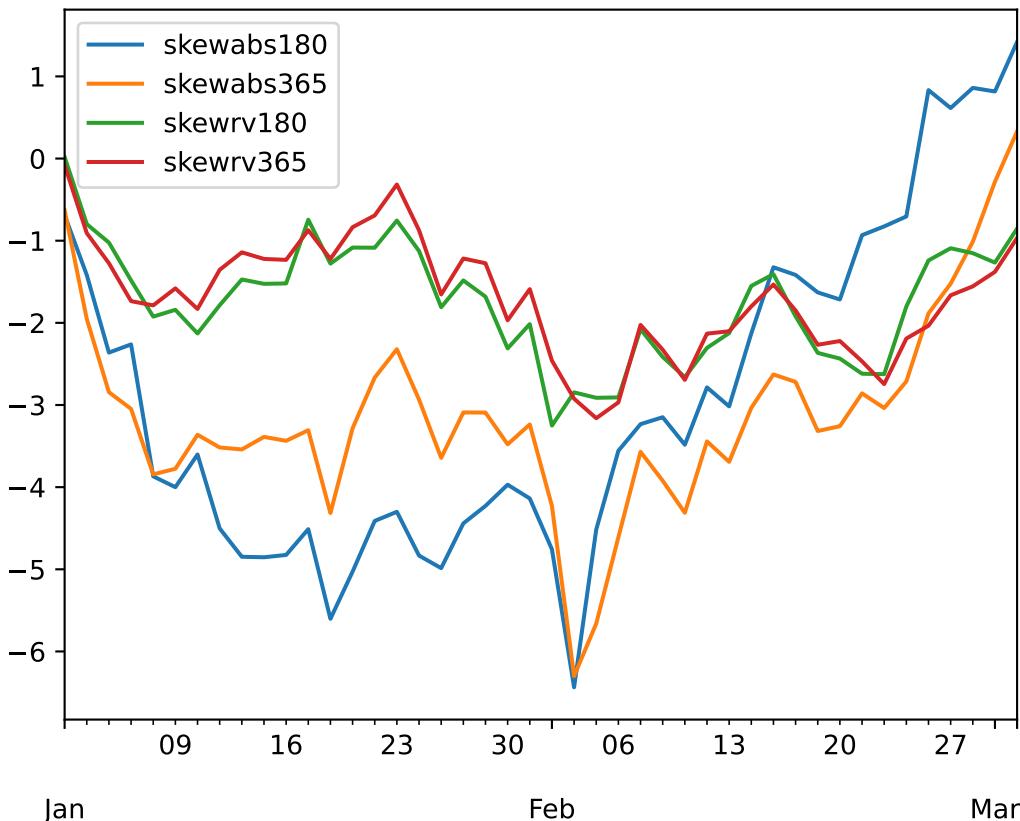
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.074}
ann. std {'relcarry': 5.988}
ann. SR {'relcarry': 0.35}



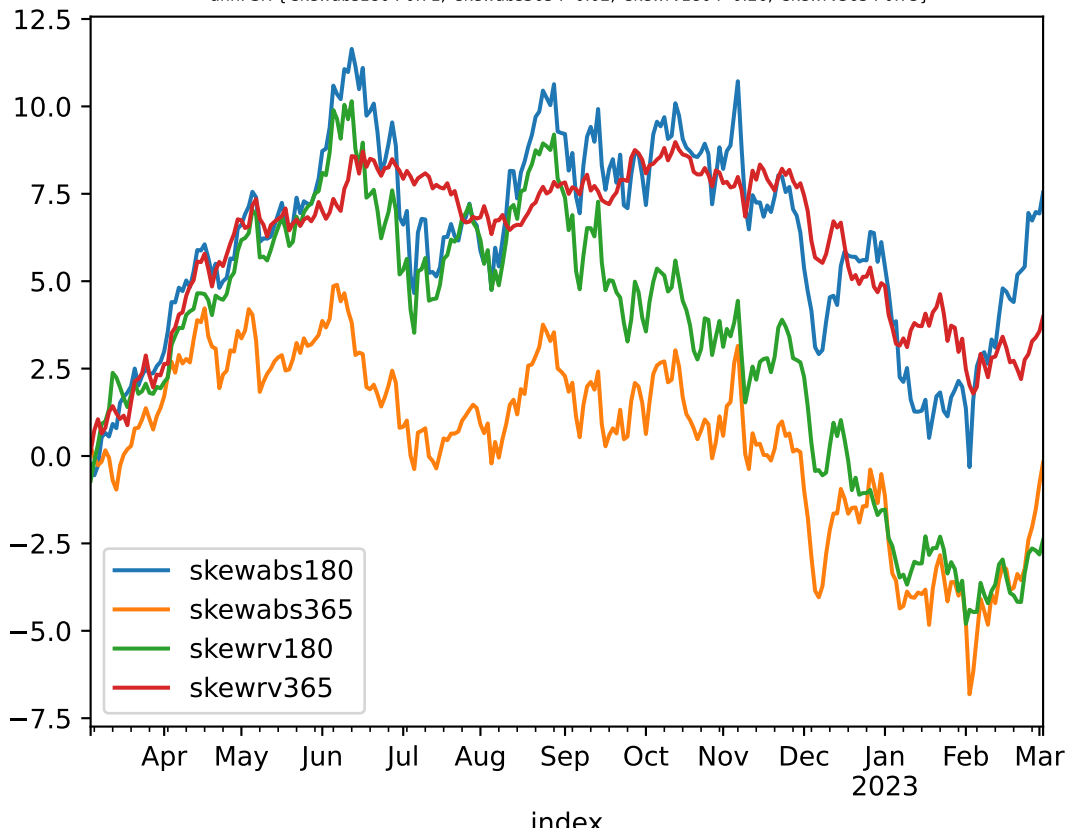
Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 6.004}
ann. std {'relcarry': 9.976}
ann. SR {'relcarry': 0.6}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': 8.261, 'skewabs365': 1.924, 'skewrv180': -4.958, 'skewrv365': -5.622}
ann. std {'skewabs180': 11.408, 'skewabs365': 10.924, 'skewrv180': 7.096, 'skewrv365': 6.669}
ann. SR {'skewabs180': 0.72, 'skewabs365': 0.18, 'skewrv180': -0.7, 'skewrv365': -0.84}



Total Trading Rule P&L for period '1Y'
ann. mean {'skewabs180': 7.423, 'skewabs365': -0.182, 'skewrv180': -2.367, 'skewrv365': 3.918}
ann. std {'skewabs180': 10.463, 'skewabs365': 8.971, 'skewrv180': 9.039, 'skewrv365': 5.245}
ann. SR {'skewabs180': 0.71, 'skewabs365': -0.02, 'skewrv180': -0.26, 'skewrv365': 0.75}

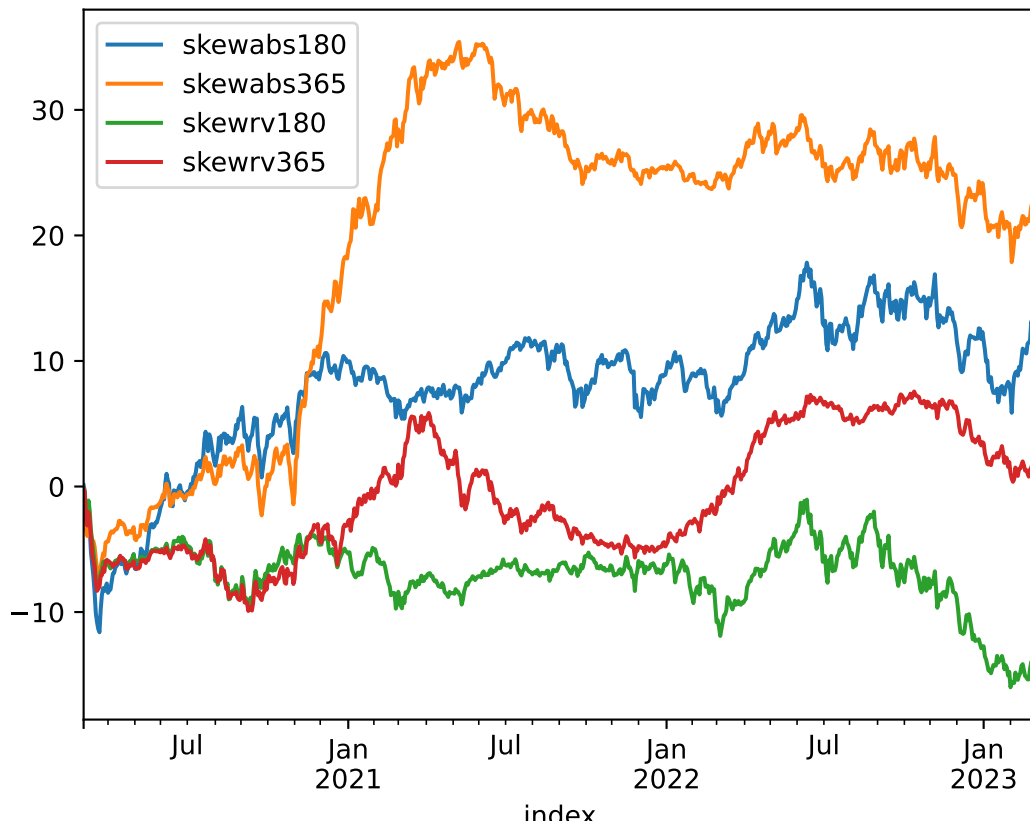


Total Trading Rule P&L for period '3Y'

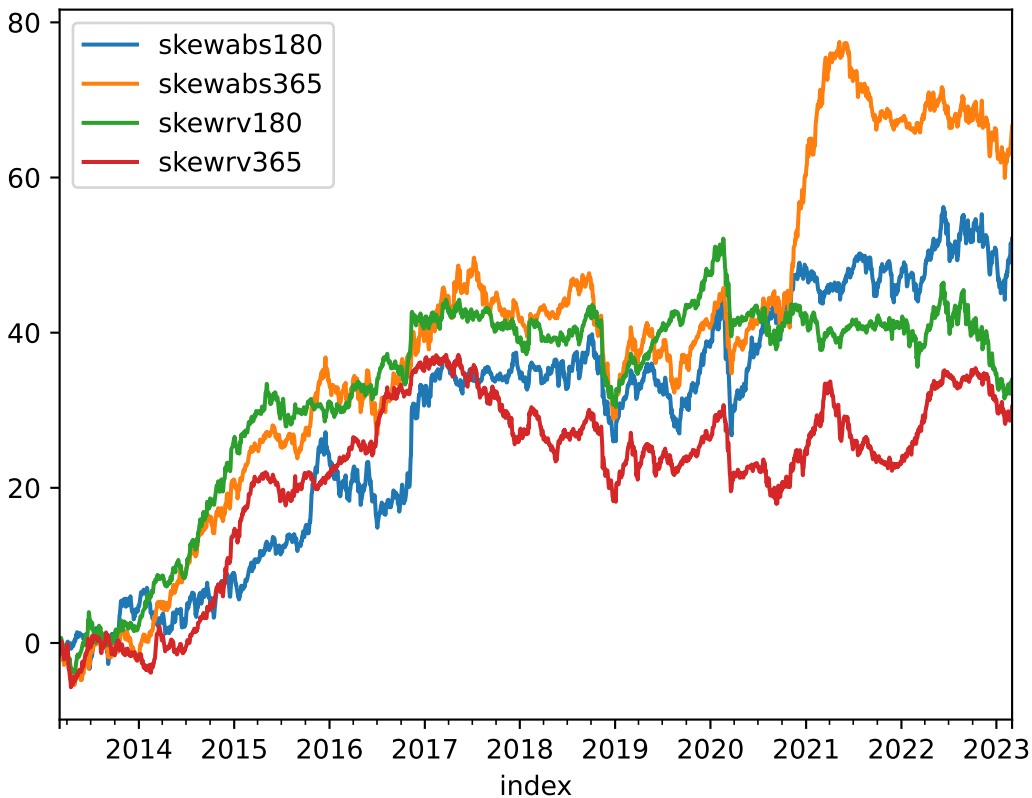
ann. mean {'skewabs180': 4.494, 'skewabs365': 8.023, 'skewrv180': -4.451, 'skewrv365': 0.841}

ann. std {'skewabs180': 9.462, 'skewabs365': 8.95, 'skewrv180': 7.545, 'skewrv365': 6.56}

ann. SR {'skewabs180': 0.47, 'skewabs365': 0.9, 'skewrv180': -0.59, 'skewrv365': 0.13}



Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 5.112, 'skewabs365': 6.532, 'skewrv180': 3.327, 'skewrv365': 2.986}
ann. std {'skewabs180': 8.083, 'skewabs365': 8.024, 'skewrv180': 6.559, 'skewrv365': 6.147}
ann. SR {'skewabs180': 0.63, 'skewabs365': 0.81, 'skewrv180': 0.51, 'skewrv365': 0.49}

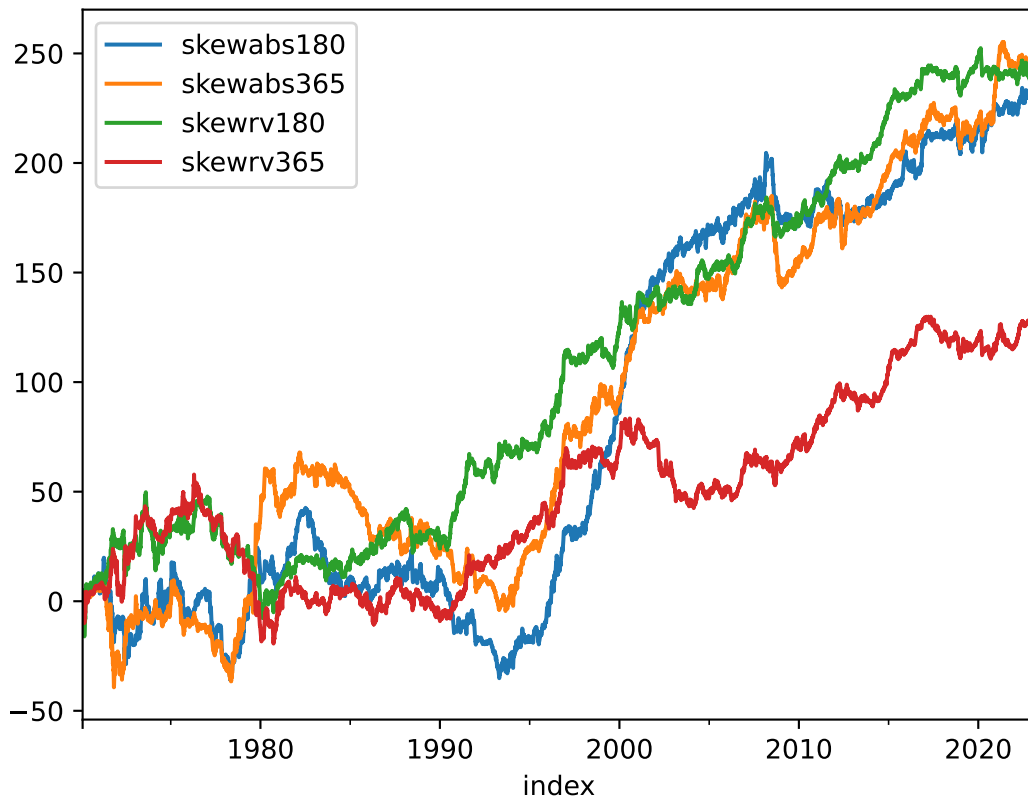


Total Trading Rule P&L for period '99Y'

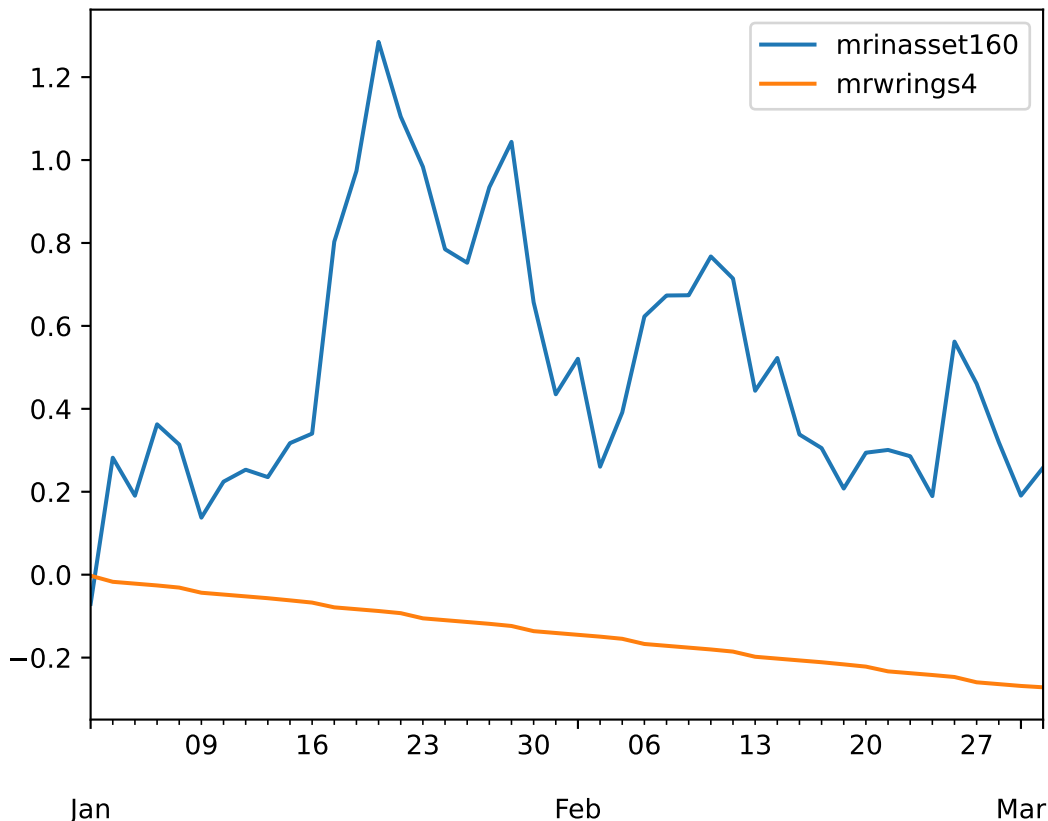
ann. mean {'skewabs180': 4.255, 'skewabs365': 4.517, 'skewrv180': 4.33, 'skewrv365': 2.277}

ann. std {'skewabs180': 10.779, 'skewabs365': 10.239, 'skewrv180': 9.45, 'skewrv365': 8.741}

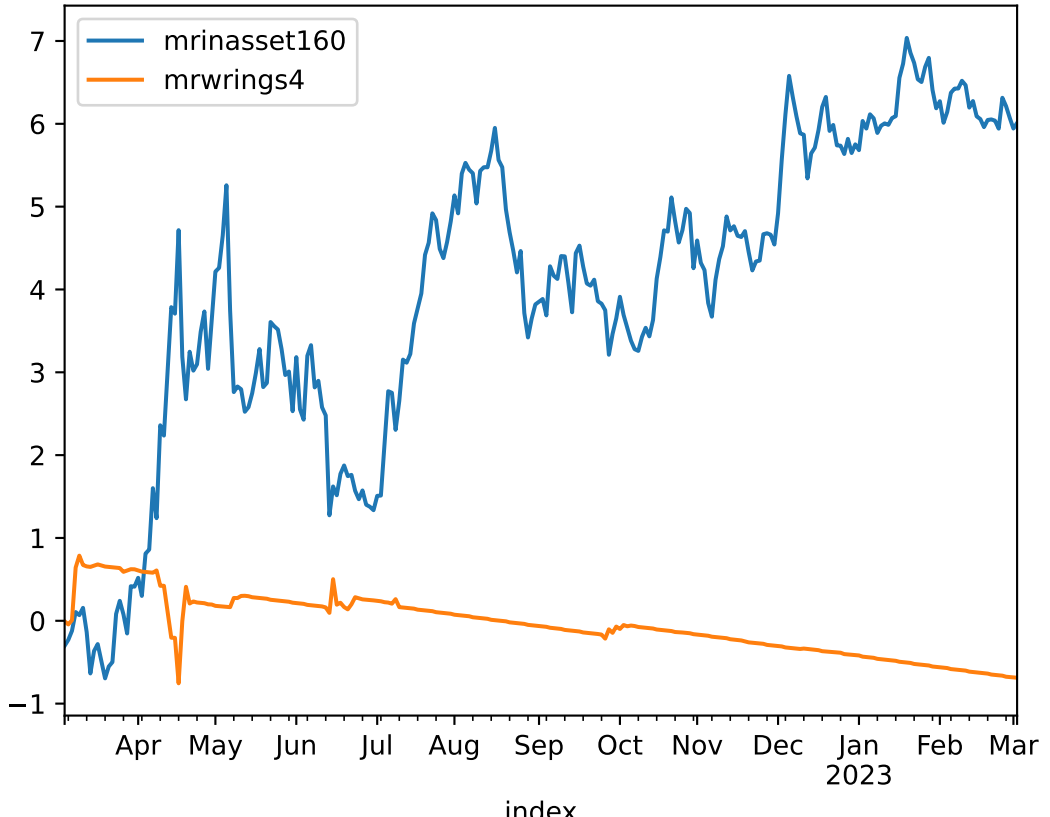
ann. SR {'skewabs180': 0.39, 'skewabs365': 0.44, 'skewrv180': 0.46, 'skewrv365': 0.26}



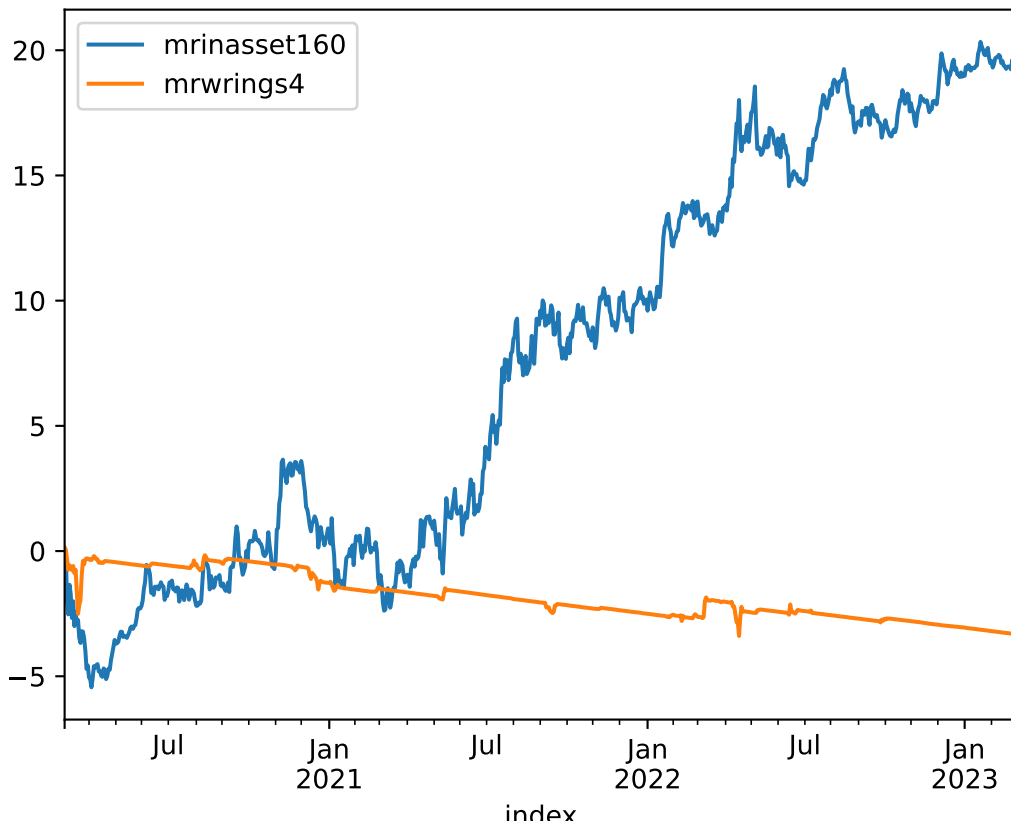
Total Trading Rule P&L for period 'YTD'
ann. mean {'mriasset160': 1.502, 'mrwrings4': -1.58}
ann. std {'mriasset160': 2.865, 'mrwrings4': 0.053}
ann. SR {'mriasset160': 0.52, 'mrwrings4': -29.77}



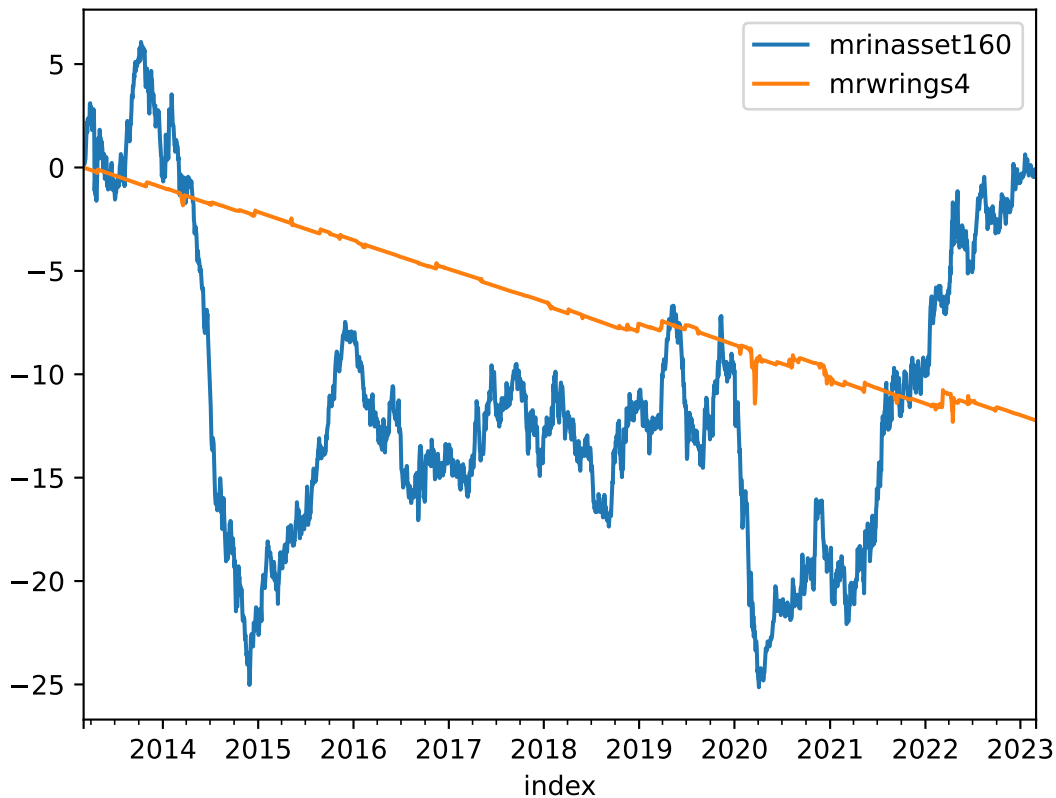
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 5.918, 'mrwrings4': -0.677}
ann. std {'mrinasset160': 5.56, 'mrwrings4': 1.439}
ann. SR {'mrinasset160': 1.06, 'mrwrings4': -0.47}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 6.32, 'mrwrings4': -1.088}
ann. std {'mrinasset160': 6.553, 'mrwrings4': 1.512}
ann. SR {'mrinasset160': 0.96, 'mrwrings4': -0.72}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.038, 'mrwrings4': -1.201}
ann. std {'mrinasset160': 6.496, 'mrwrings4': 0.898}
ann. SR {'mrinasset160': -0.01, 'mrwrings4': -1.34}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.133, 'mrwrings4': -2.317}
ann. std {'mrinasset160': 11.151, 'mrwrings4': 2.616}
ann. SR {'mrinasset160': -0.28, 'mrwrings4': -0.89}

