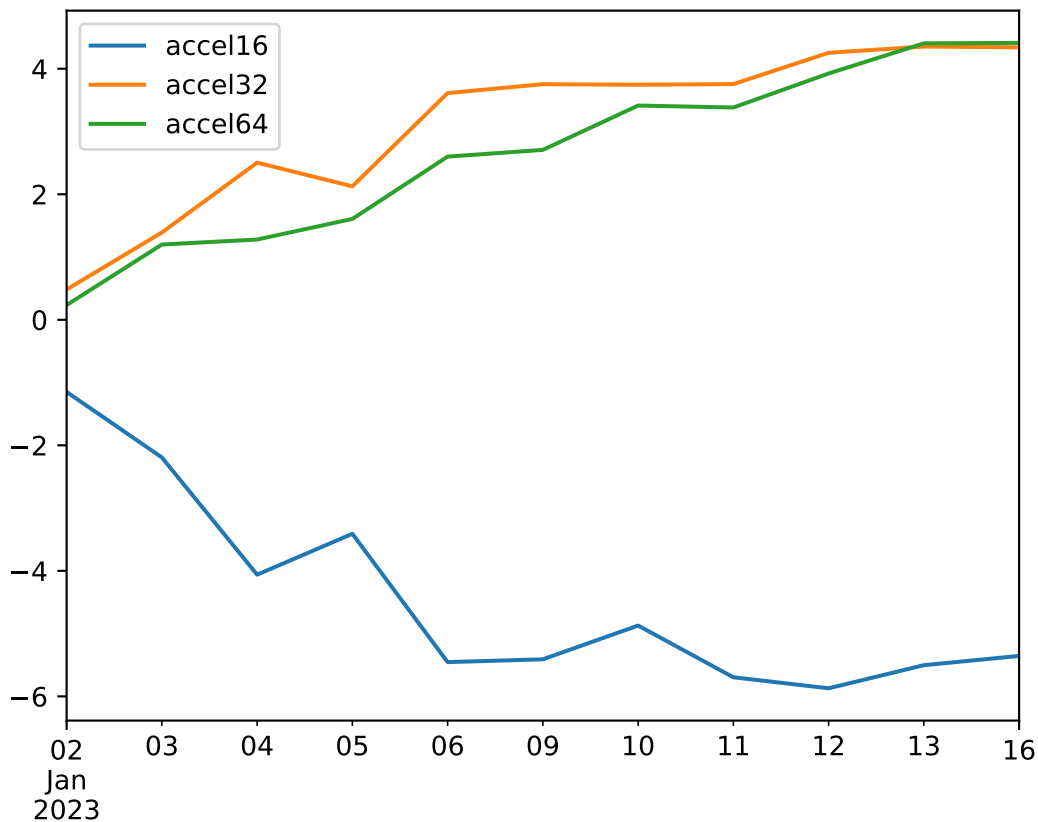
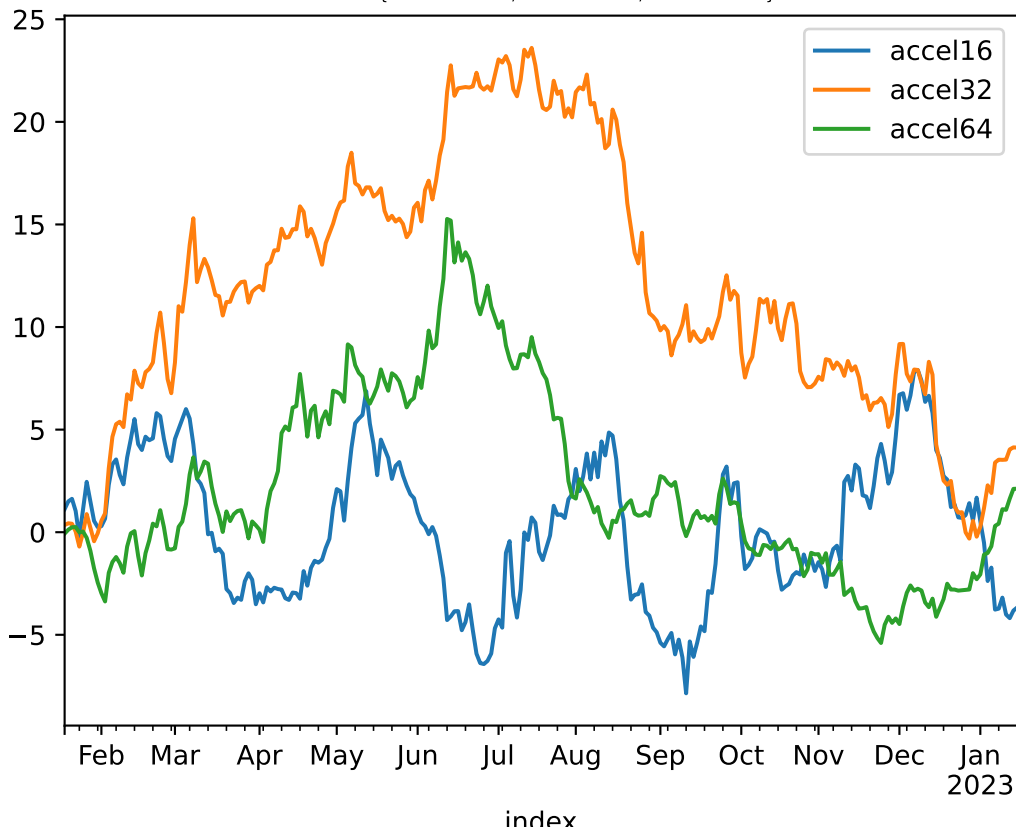


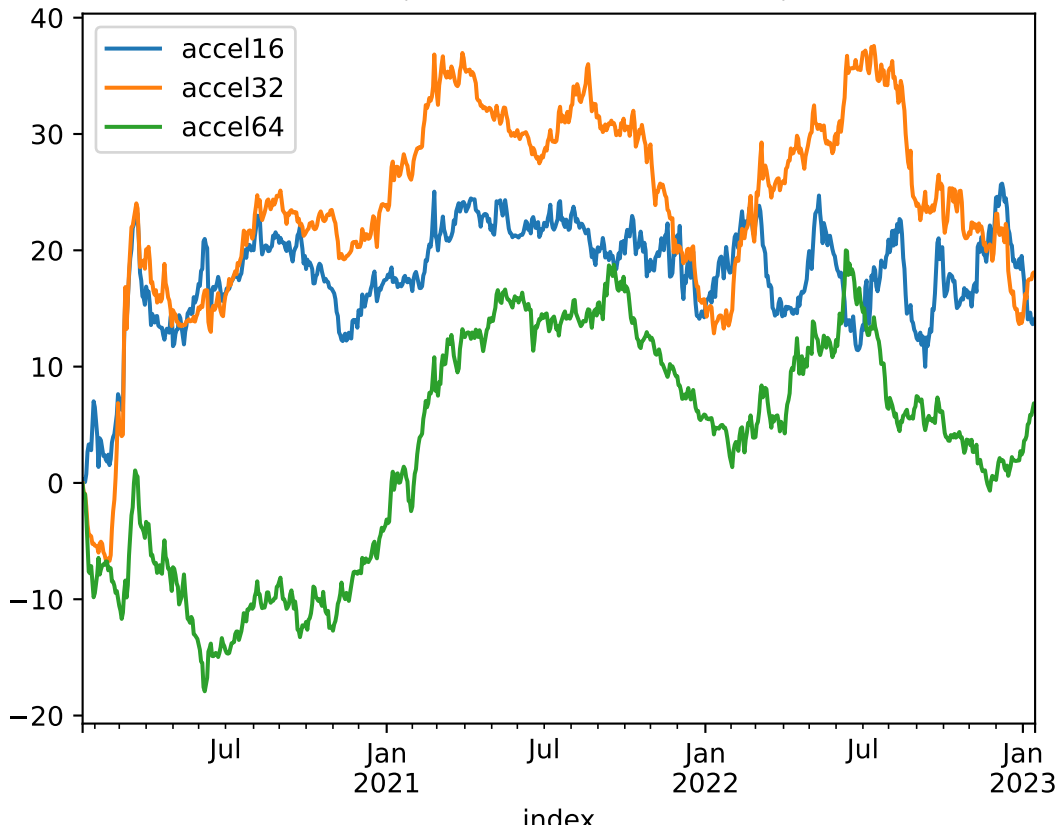
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': -124.639, 'accel32': 101.021, 'accel64': 102.669}
ann. std {'accel16': 15.228, 'accel32': 9.067, 'accel64': 5.879}
ann. SR {'accel16': -8.18, 'accel32': 11.14, 'accel64': 17.46}



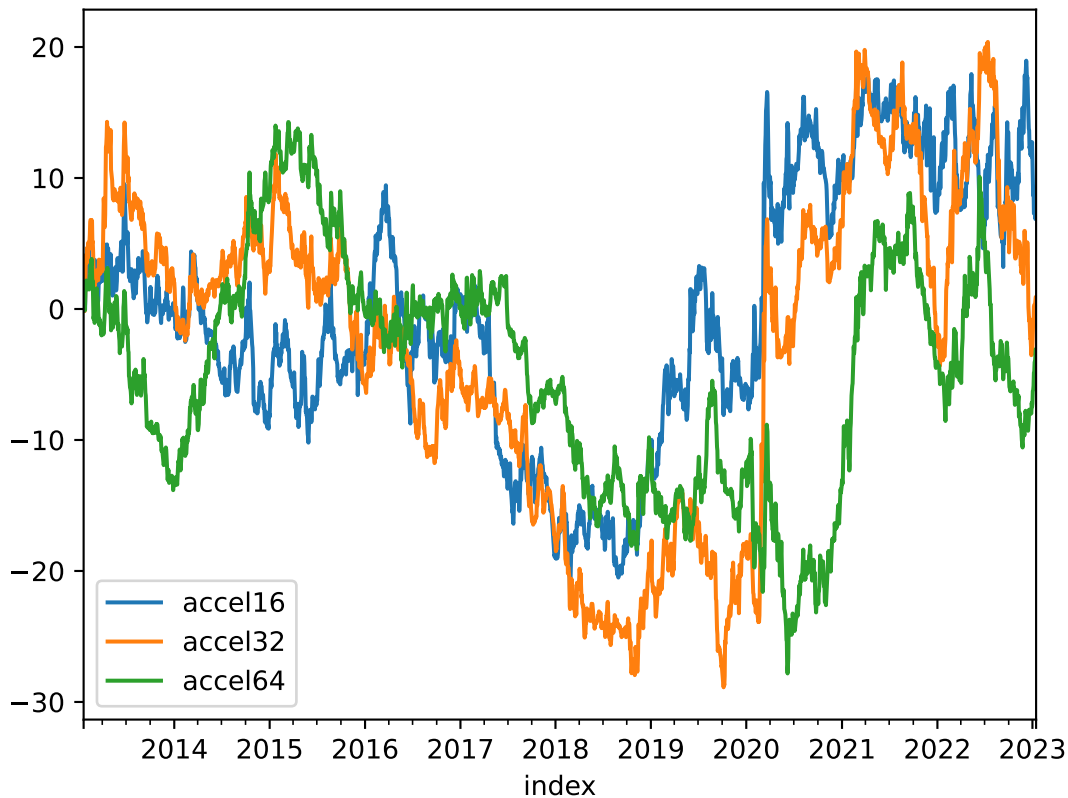
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': -3.616, 'accel32': 4.059, 'accel64': 2.087}
ann. std {'accel16': 16.218, 'accel32': 14.659, 'accel64': 11.709}
ann. SR {'accel16': -0.22, 'accel32': 0.28, 'accel64': 0.18}



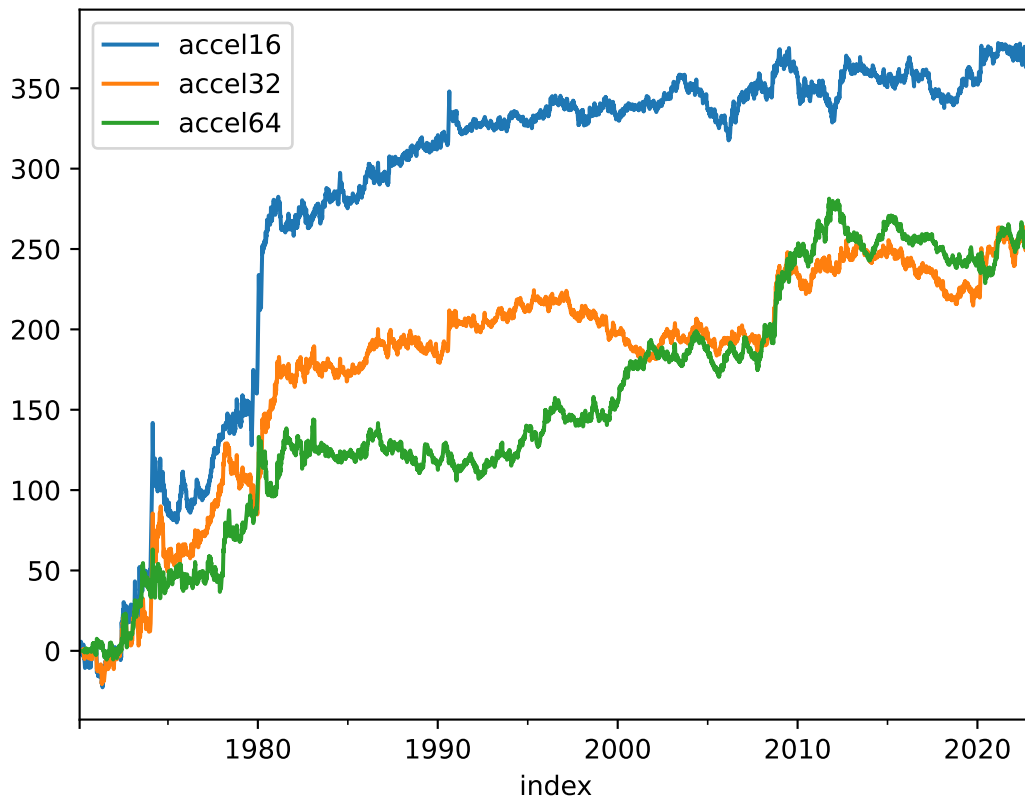
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': 4.642, 'accel32': 5.93, 'accel64': 2.246}
ann. std {'accel16': 15.052, 'accel32': 14.326, 'accel64': 11.677}
ann. SR {'accel16': 0.31, 'accel32': 0.41, 'accel64': 0.19}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 0.725, 'accel32': 0.089, 'accel64': -0.3}
ann. std {'accel16': 11.961, 'accel32': 11.224, 'accel64': 9.589}
ann. SR {'accel16': 0.06, 'accel32': 0.01, 'accel64': -0.03}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.806, 'accel32': 4.532, 'accel64': 4.699}
ann. std {'accel16': 15.73, 'accel32': 13.799, 'accel64': 13.324}
ann. SR {'accel16': 0.43, 'accel32': 0.33, 'accel64': 0.35}

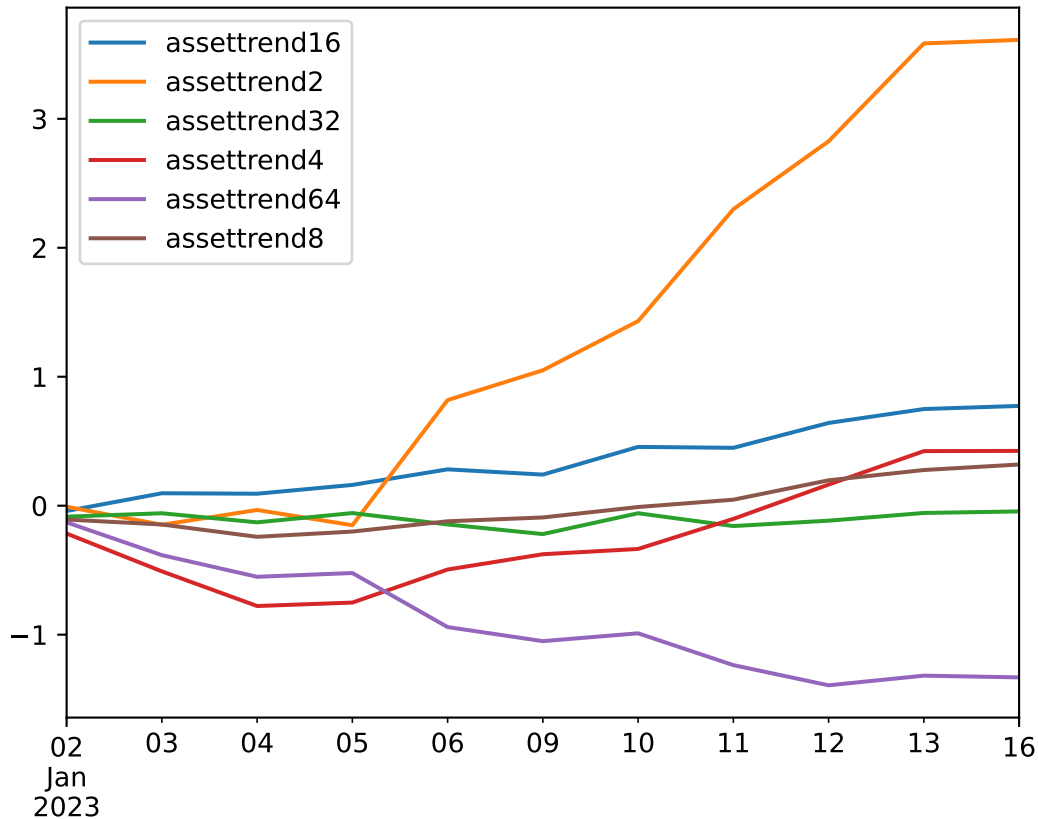


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': 18.007, 'assettrend2': 84.055, 'assettrend32': -1.033, 'assettrend4': 9.889, 'assettrend64': -30.979, 'assettrend8': 7.435}

ann. std {'assettrend16': 1.455, 'assettrend2': 6.416, 'assettrend32': 1.363, 'assettrend4': 3.442, 'assettrend64': 2.436, 'assettrend8': 1.263}

ann. SR {'assettrend16': 12.38, 'assettrend2': 13.1, 'assettrend32': -0.76, 'assettrend4': 2.87, 'assettrend64': -12.72, 'assettrend8': 5.89}

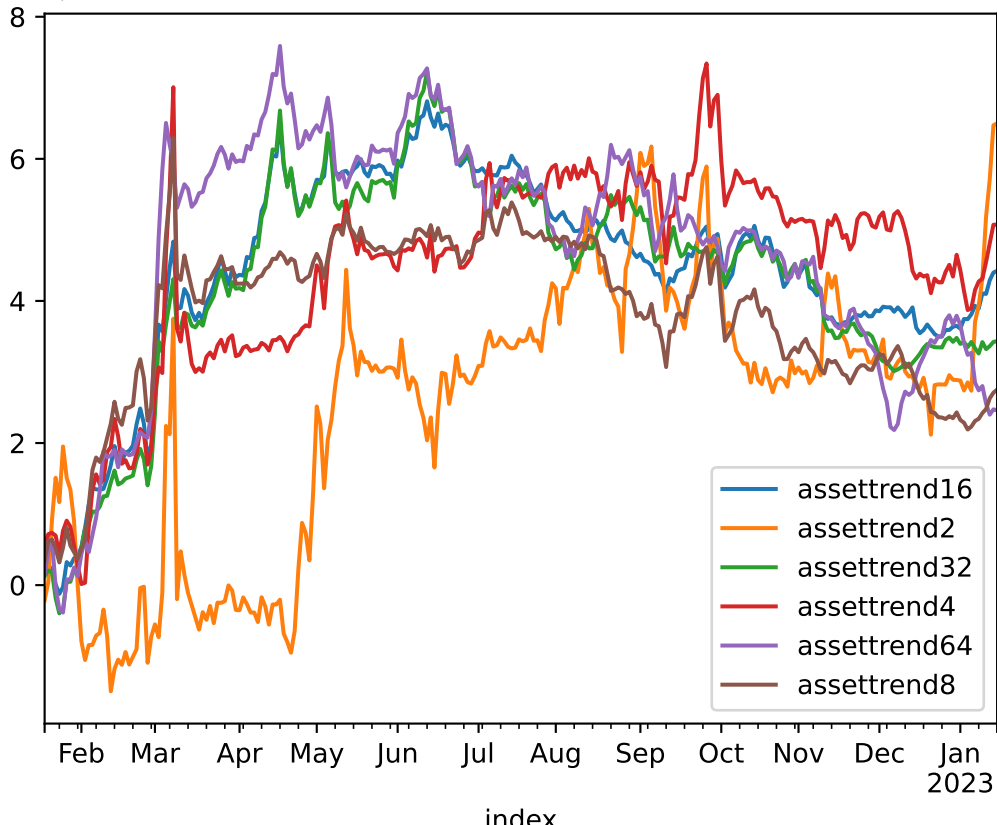


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': 4.356, 'assettrend2': 6.399, 'assettrend32': 3.382, 'assettrend4': 4.996, 'assettrend64': 2.423, 'assettrend8': 2.709}

ann. std {'assettrend16': 2.996, 'assettrend2': 7.762, 'assettrend32': 3.264, 'assettrend4': 5.675, 'assettrend64': 3.926, 'assettrend8': 3.675}

ann. SR {'assettrend16': 1.45, 'assettrend2': 0.82, 'assettrend32': 1.04, 'assettrend4': 0.88, 'assettrend64': 0.62, 'assettrend8': 0.74}

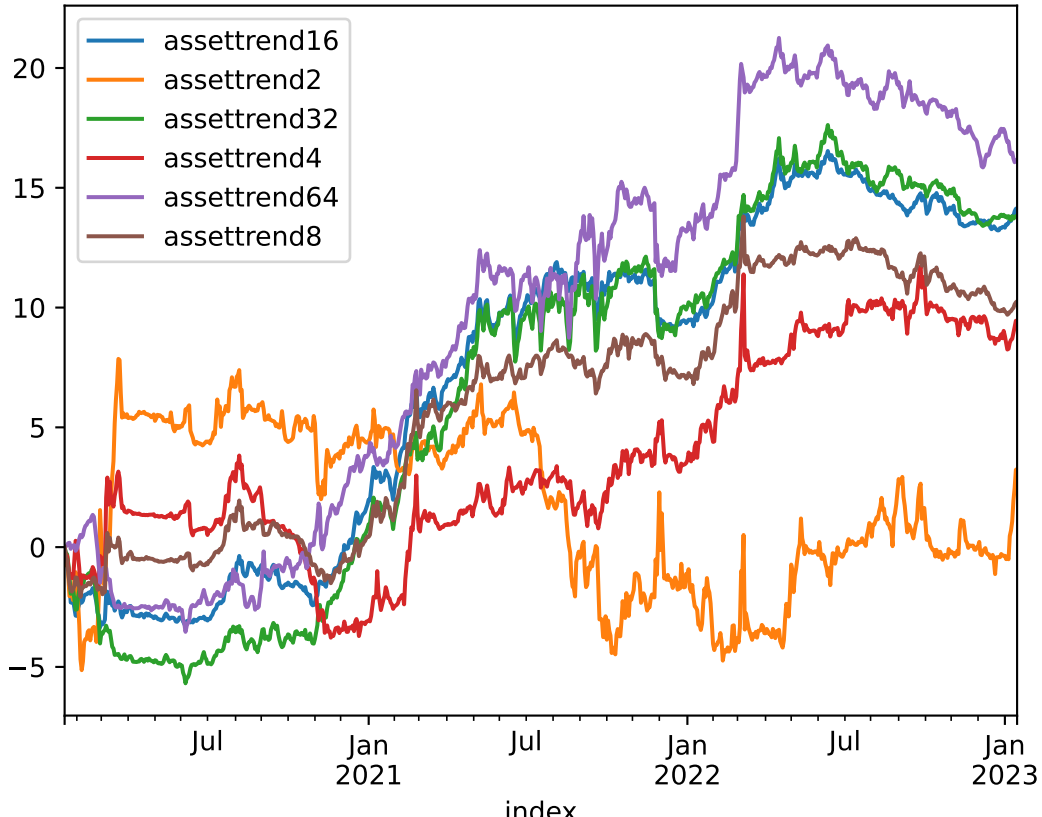


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 4.637, 'assettrend2': 1.068, 'assettrend32': 4.533, 'assettrend4': 3.098, 'assettrend64': 5.286, 'assettrend8': 3.363}

ann. std {'assettrend16': 3.604, 'assettrend2': 7.811, 'assettrend32': 4.421, 'assettrend4': 5.369, 'assettrend64': 5.139, 'assettrend8': 3.742}

ann. SR {'assettrend16': 1.29, 'assettrend2': 0.14, 'assettrend32': 1.03, 'assettrend4': 0.58, 'assettrend64': 1.03, 'assettrend8': 0.9}

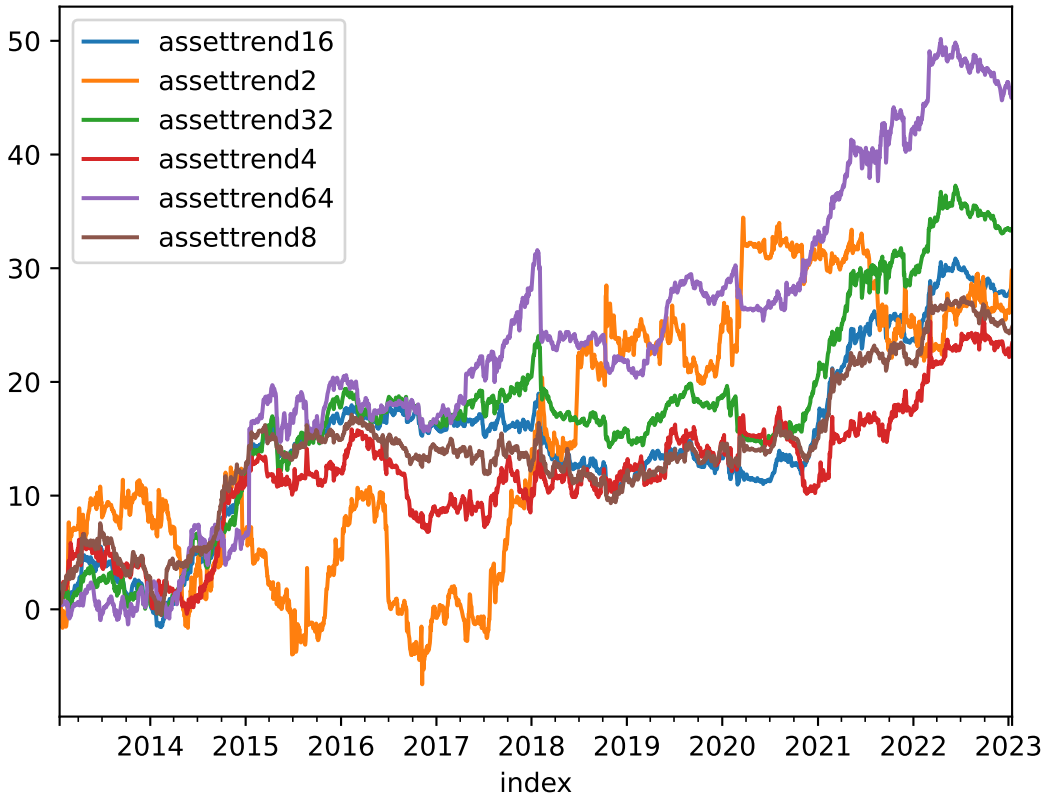


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.795, 'assettrend2': 2.932, 'assettrend32': 3.287, 'assettrend4': 2.296, 'assettrend64': 4.423, 'assettrend8': 2.438}

ann. std {'assettrend16': 3.269, 'assettrend2': 8.409, 'assettrend32': 3.746, 'assettrend4': 5.006, 'assettrend64': 5.304, 'assettrend8': 3.565}

ann. SR {'assettrend16': 0.86, 'assettrend2': 0.35, 'assettrend32': 0.88, 'assettrend4': 0.46, 'assettrend64': 0.83, 'assettrend8': 0.68}

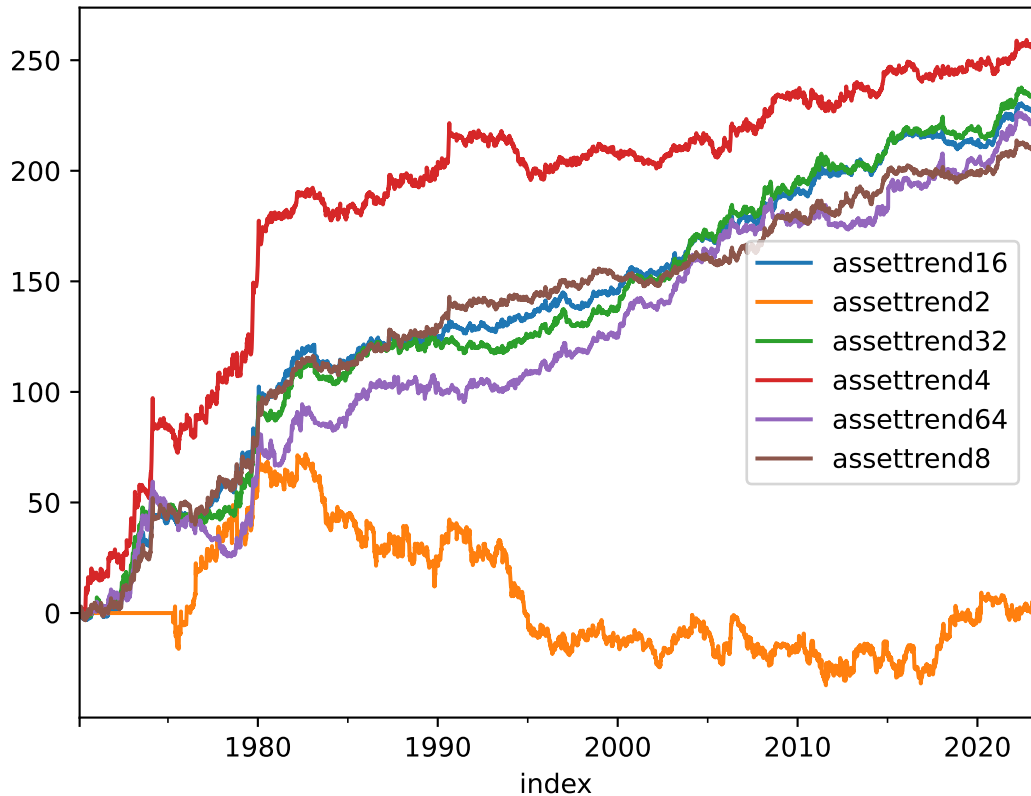


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.227, 'assettrend2': 0.086, 'assettrend32': 4.334, 'assettrend4': 4.761, 'assettrend64': 4.101, 'assettrend8': 3.895}

ann. std {'assettrend16': 4.66, 'assettrend2': 10.049, 'assettrend32': 4.894, 'assettrend4': 7.348, 'assettrend64': 5.469, 'assettrend8': 5.034}

ann. SR {'assettrend16': 0.91, 'assettrend2': 0.01, 'assettrend32': 0.89, 'assettrend4': 0.65, 'assettrend64': 0.75, 'assettrend8': 0.77}

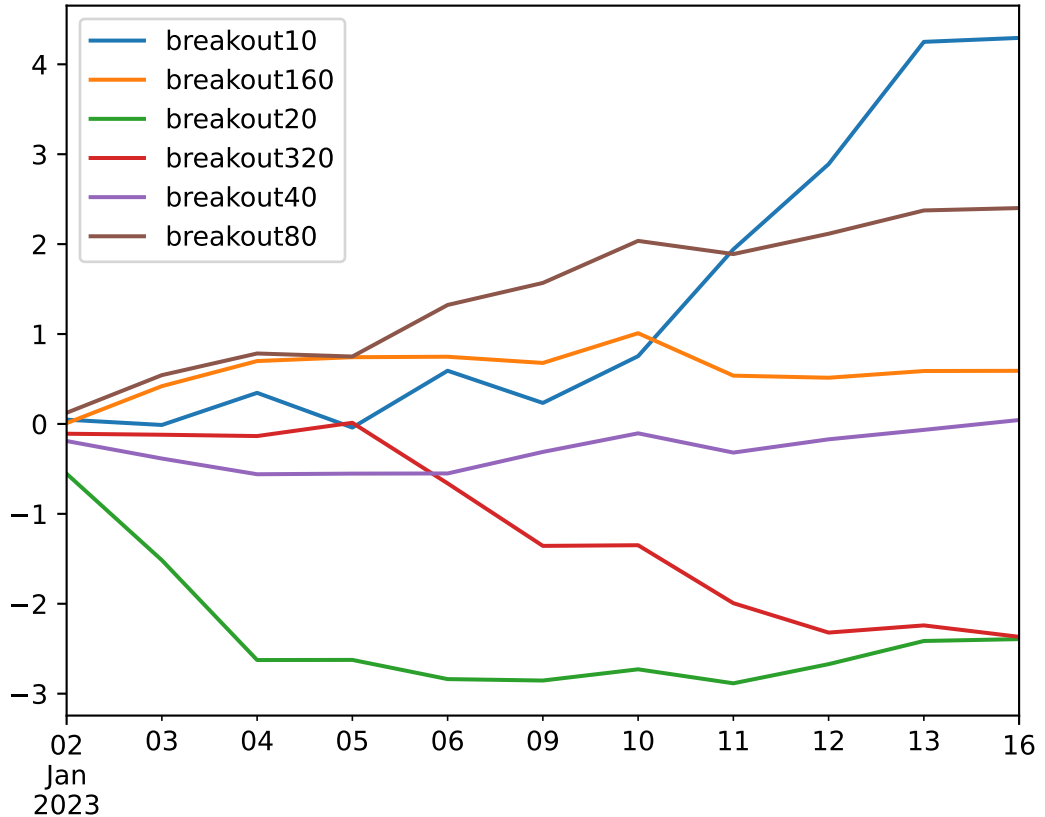


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 99.923, 'breakout160': 13.748, 'breakout20': -55.699, 'breakout320': -55.106, 'breakout40': 1.014, 'breakout80': 55.876}

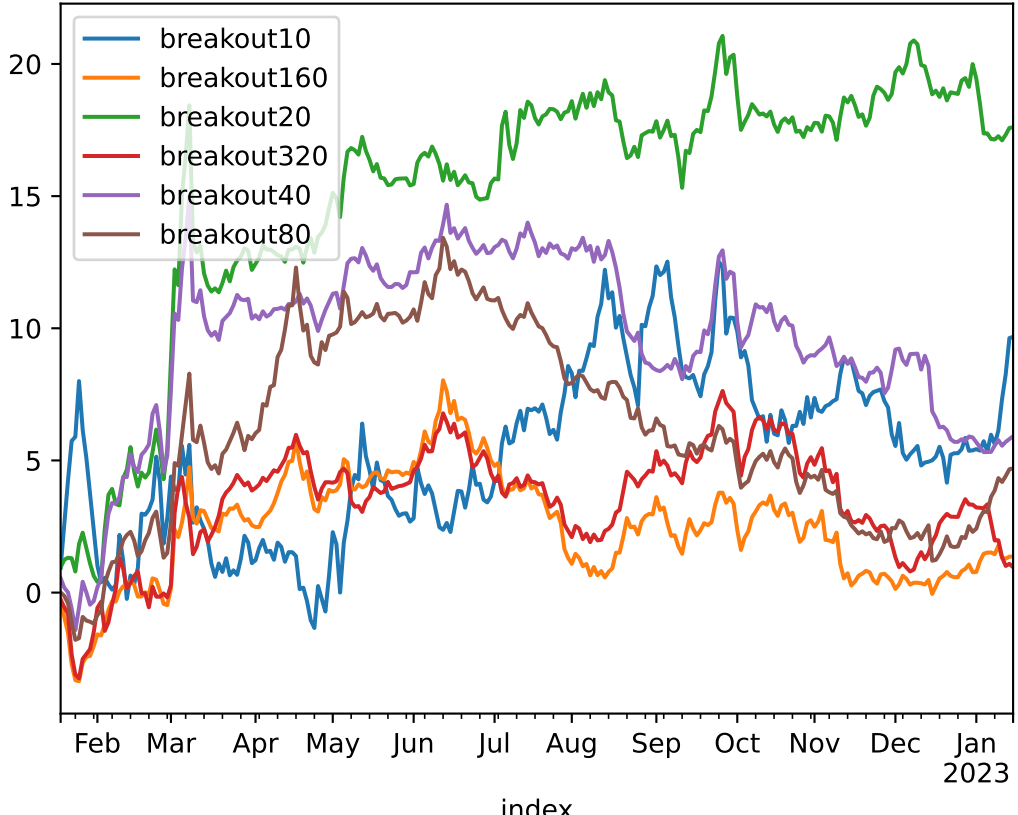
ann. std {'breakout10': 9.556, 'breakout160': 3.789, 'breakout20': 7.405, 'breakout320': 5.078, 'breakout40': 2.75, 'breakout80': 3.483}

ann. SR {'breakout10': 10.46, 'breakout160': 3.63, 'breakout20': -7.52, 'breakout320': -10.85, 'breakout40': 0.37, 'breakout80': 16.04}



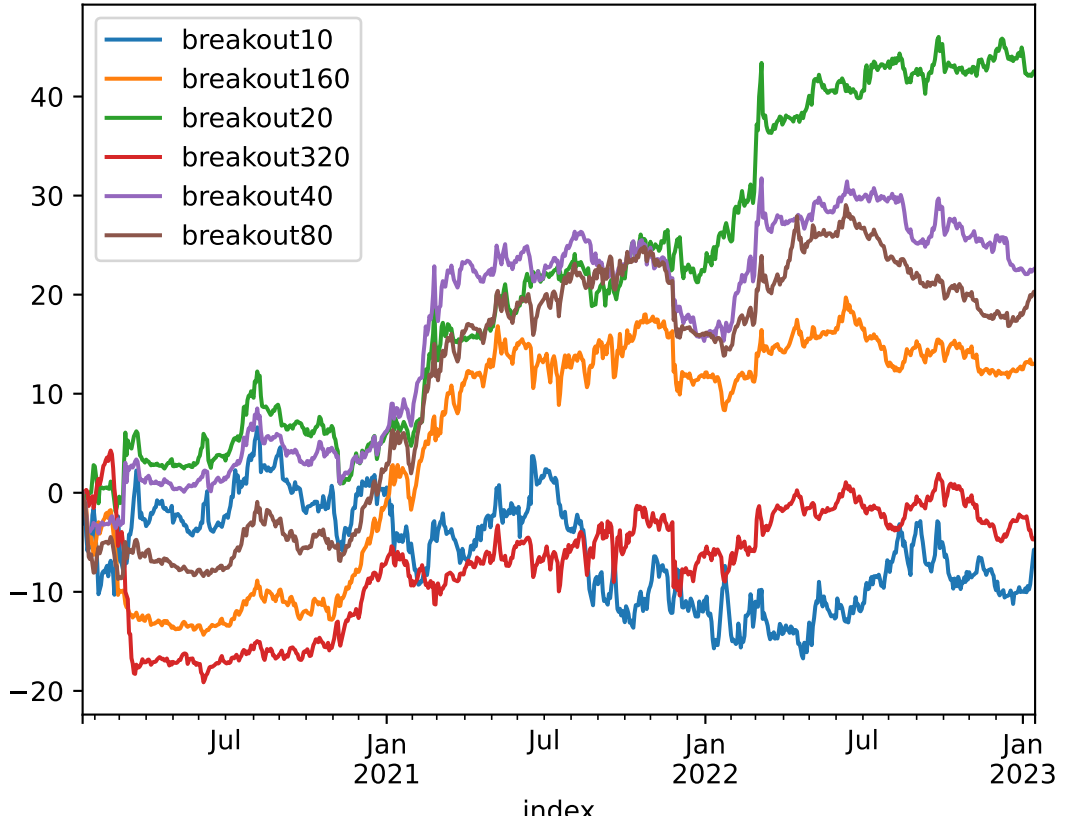
Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 9.527, 'breakout160': 1.341, 'breakout20': 17.332, 'breakout320': 0.946, 'breakout40': 5.826, 'breakout80': 4.624}
 ann. std {'breakout10': 13.425, 'breakout160': 7.064, 'breakout20': 11.834, 'breakout320': 7.362, 'breakout40': 9.538, 'breakout80': 7.942}
 ann. SR {'breakout10': 0.71, 'breakout160': 0.19, 'breakout20': 1.46, 'breakout320': 0.13, 'breakout40': 0.61, 'breakout80': 0.58}



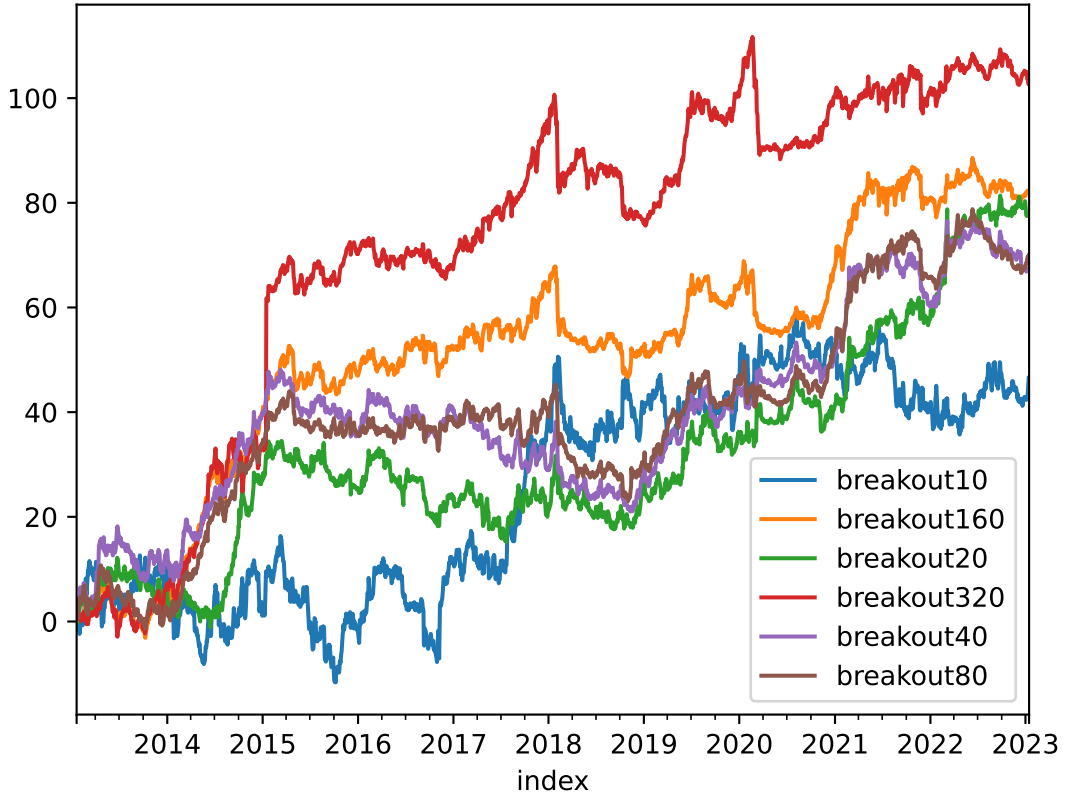
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': -1.871, 'breakout160': 4.277, 'breakout20': 13.951, 'breakout320': -1.56, 'breakout40': 7.433, 'breakout80': 6.66}
ann. std {'breakout10': 14.509, 'breakout160': 9.675, 'breakout20': 11.5, 'breakout320': 10.656, 'breakout40': 9.957, 'breakout80': 9.485}
ann. SR {'breakout10': -0.13, 'breakout160': 0.44, 'breakout20': 1.21, 'breakout320': -0.15, 'breakout40': 0.75, 'breakout80': 0.7}



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

ann. mean {'breakout10': 4.588, 'breakout160': 8.044, 'breakout20': 7.652, 'breakout320': 10.083, 'breakout40': 6.626, 'breakout80': 6.881}
ann. std {'breakout10': 15.688, 'breakout160': 9.118, 'breakout20': 11.187, 'breakout320': 13.336, 'breakout40': 9.807, 'breakout80': 9.019}
ann. SR {'breakout10': 0.29, 'breakout160': 0.88, 'breakout20': 0.68, 'breakout320': 0.76, 'breakout40': 0.68, 'breakout80': 0.76}

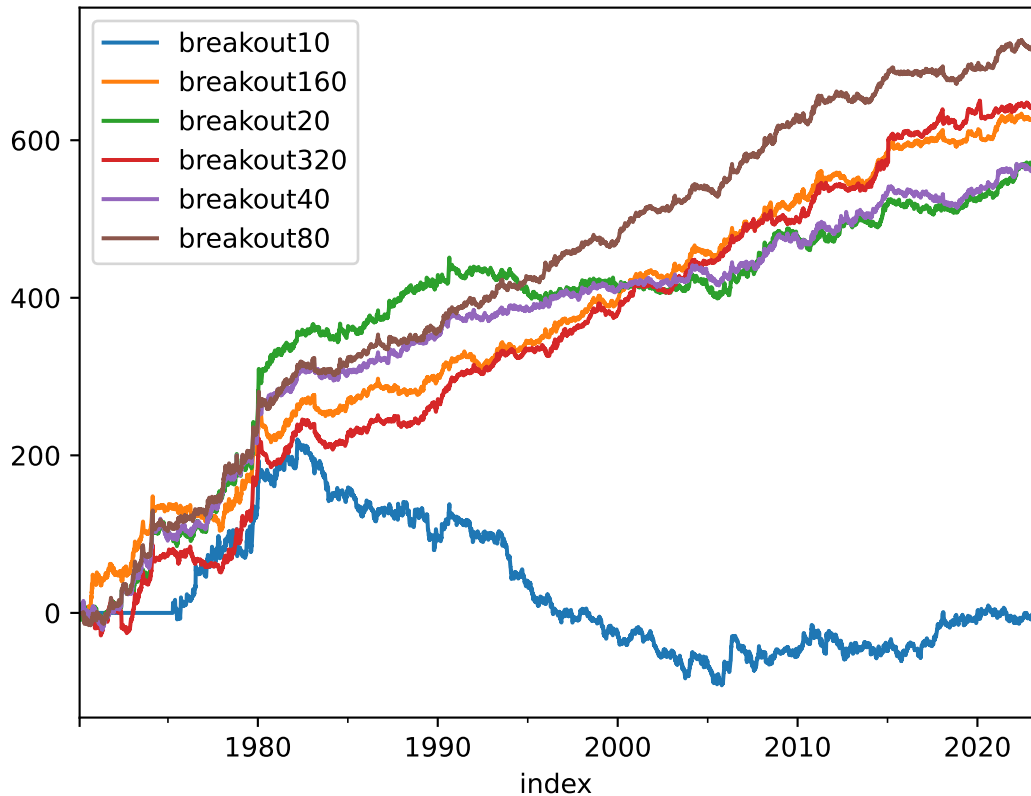


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.052, 'breakout160': 11.622, 'breakout20': 10.533, 'breakout320': 11.885, 'breakout40': 10.395, 'breakout80': 13.317}

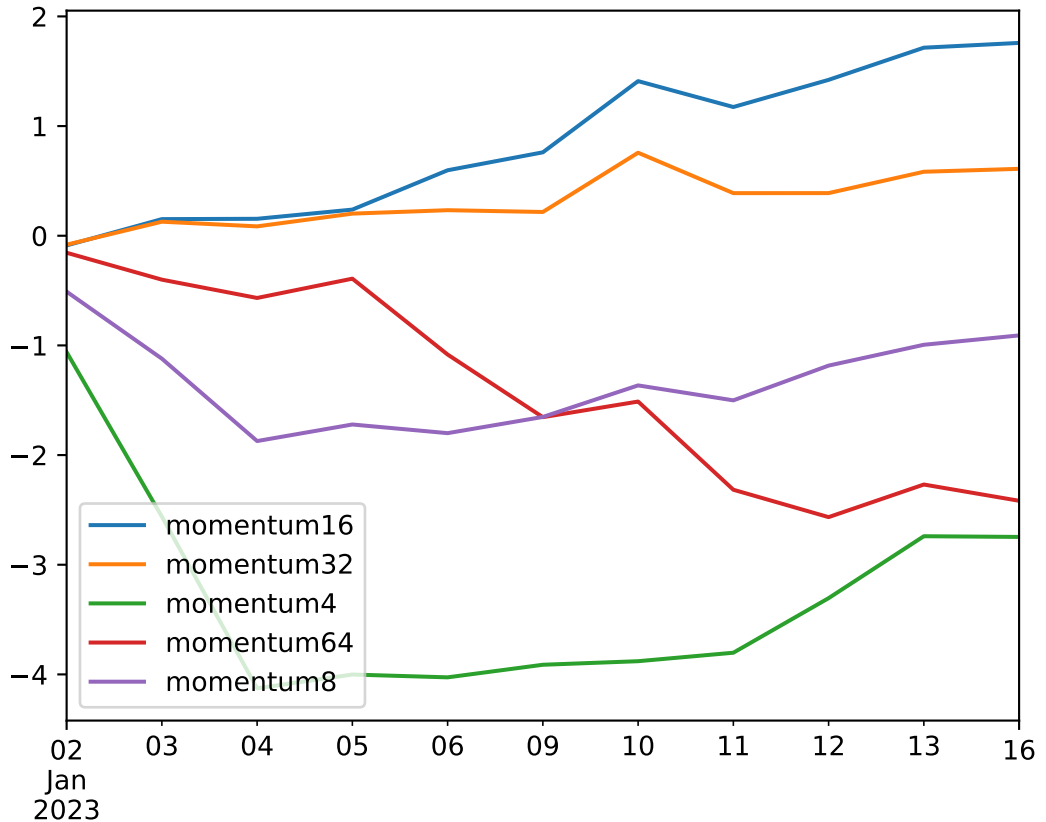
ann. std {'breakout10': 20.831, 'breakout160': 12.494, 'breakout20': 16.099, 'breakout320': 13.047, 'breakout40': 13.231, 'breakout80': 12.754}

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': 40.923, 'momentum32': 14.198, 'momentum4': -63.916, 'momentum64': -56.243, 'momentum8': -21.15}
 ann. std {'momentum16': 3.831, 'momentum32': 3.577, 'momentum4': 12.127, 'momentum64': 5.672, 'momentum8': 6.026}
 ann. SR {'momentum16': 10.68, 'momentum32': 3.97, 'momentum4': -5.27, 'momentum64': -9.92, 'momentum8': -3.51}

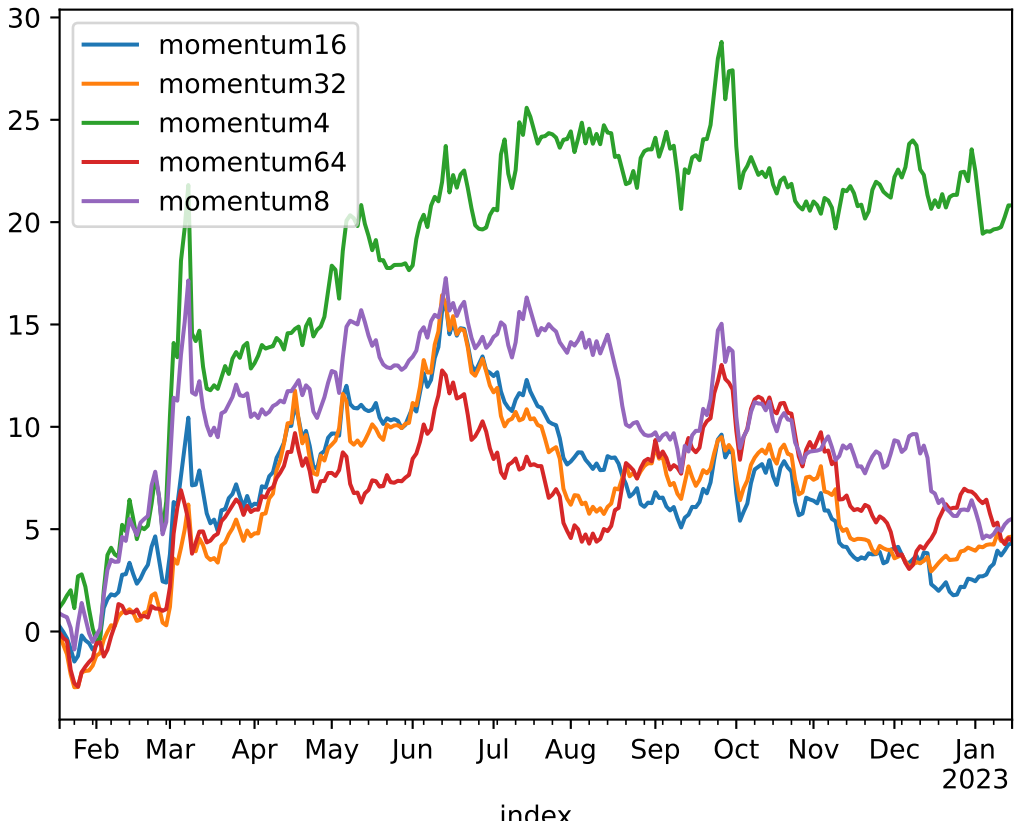


Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': 4.234, 'momentum32': 4.566, 'momentum4': 20.493, 'momentum64': 4.349, 'momentum8': 5.421}

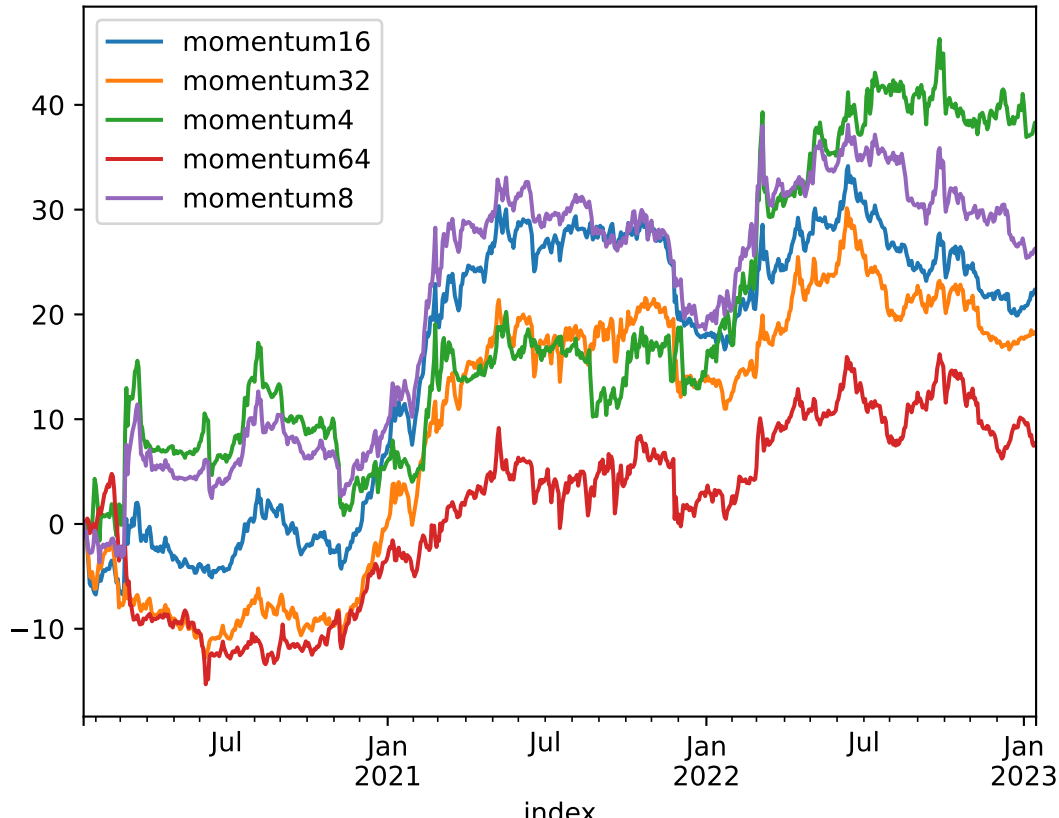
ann. std {'momentum16': 10.071, 'momentum32': 9.6, 'momentum4': 17.205, 'momentum64': 9.333, 'momentum8': 13.05}

ann. SR {'momentum16': 0.42, 'momentum32': 0.48, 'momentum4': 1.19, 'momentum64': 0.47, 'momentum8': 0.42}



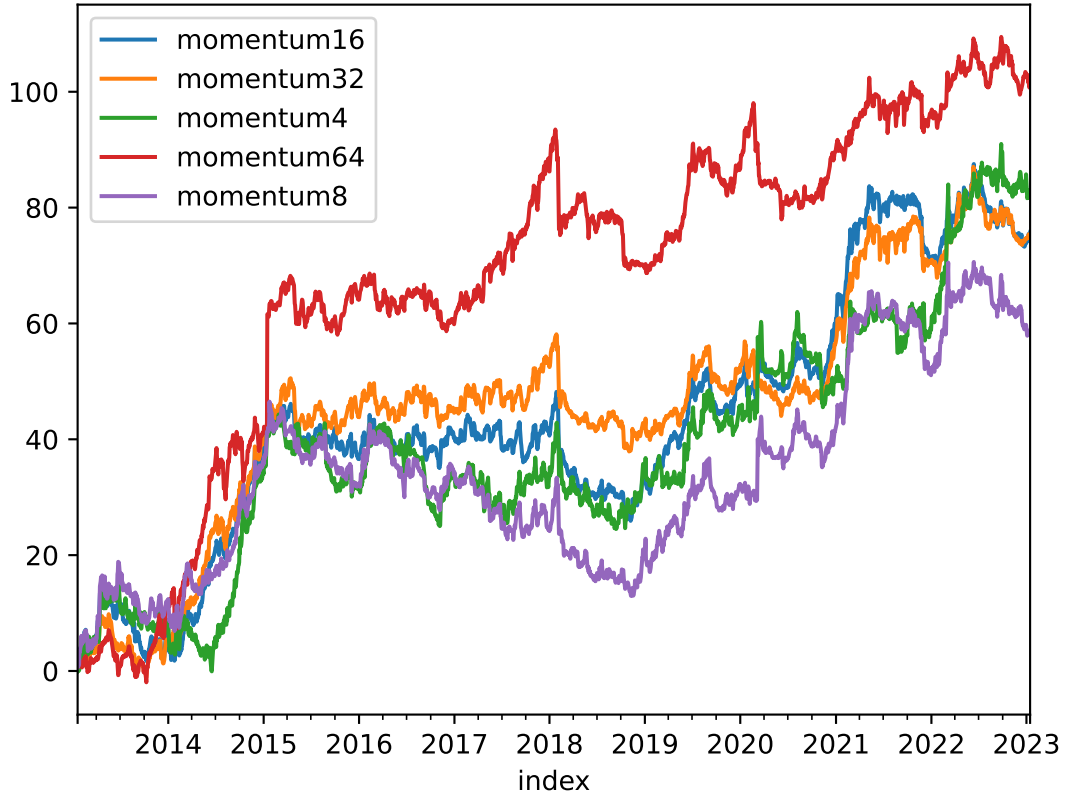
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 7.347, 'momentum32': 6.014, 'momentum4': 12.555, 'momentum64': 2.492, 'momentum8': 8.636}
ann. std {'momentum16': 10.974, 'momentum32': 10.804, 'momentum4': 16.112, 'momentum64': 10.877, 'momentum8': 12.781}
ann. SR {'momentum16': 0.67, 'momentum32': 0.56, 'momentum4': 0.78, 'momentum64': 0.23, 'momentum8': 0.68}



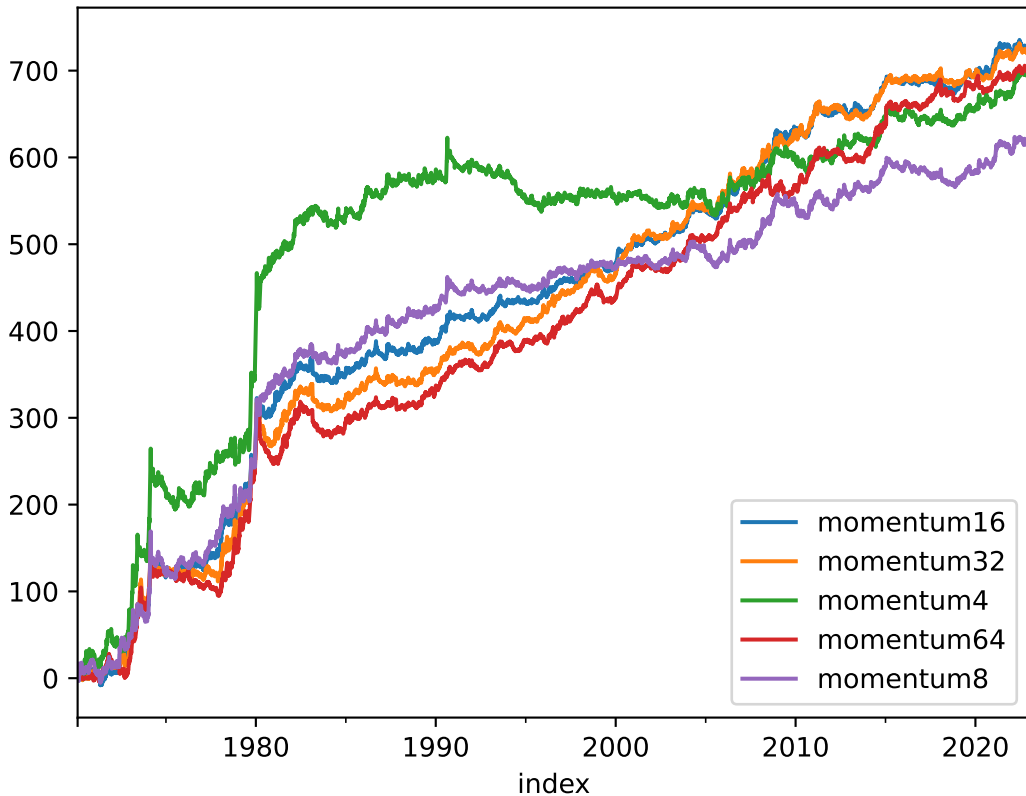
Total Trading Rule P&L for period '10Y'

ann. mean {'momentum16': 7.441, 'momentum32': 7.389, 'momentum4': 8.15, 'momentum64': 9.905, 'momentum8': 5.779}
ann. std {'momentum16': 9.946, 'momentum32': 9.49, 'momentum4': 13.7, 'momentum64': 12.008, 'momentum8': 11.308}
ann. SR {'momentum16': 0.75, 'momentum32': 0.78, 'momentum4': 0.59, 'momentum64': 0.82, 'momentum8': 0.51}



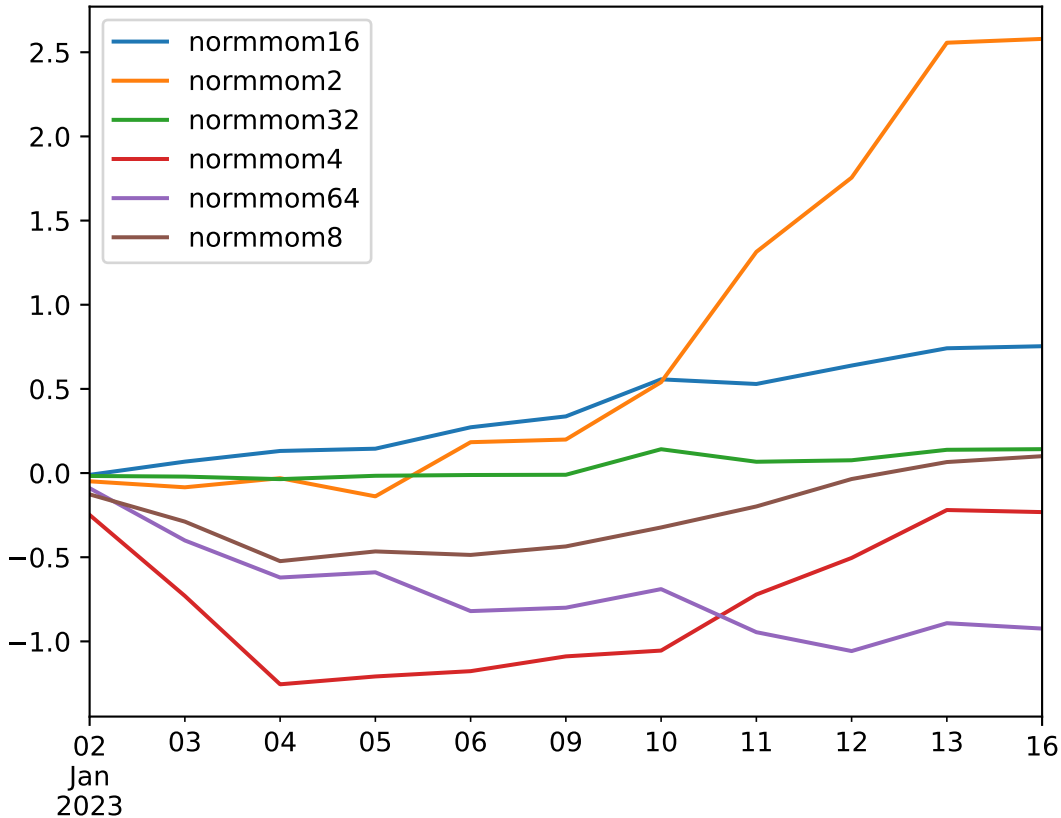
Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.41, 'momentum32': 13.339, 'momentum4': 12.881, 'momentum64': 12.917, 'momentum8': 11.341}
ann. std {'momentum16': 14.22, 'momentum32': 13.85, 'momentum4': 20.076, 'momentum64': 13.488, 'momentum8': 15.87}
ann. SR {'momentum16': 0.94, 'momentum32': 0.96, 'momentum4': 0.64, 'momentum64': 0.96, 'momentum8': 0.71}



Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 17.538, 'normmom2': 60.026, 'normmom32': 3.306, 'normmom4': -5.397, 'normmom64': -21.501, 'normmom8': 2.333}
ann. std {'normmom16': 1.144, 'normmom2': 5.234, 'normmom32': 0.901, 'normmom4': 4.569, 'normmom64': 2.522, 'normmom8': 2.08}
ann. SR {'normmom16': 15.34, 'normmom2': 11.47, 'normmom32': 3.67, 'normmom4': -1.18, 'normmom64': -8.52, 'normmom8': 1.12}

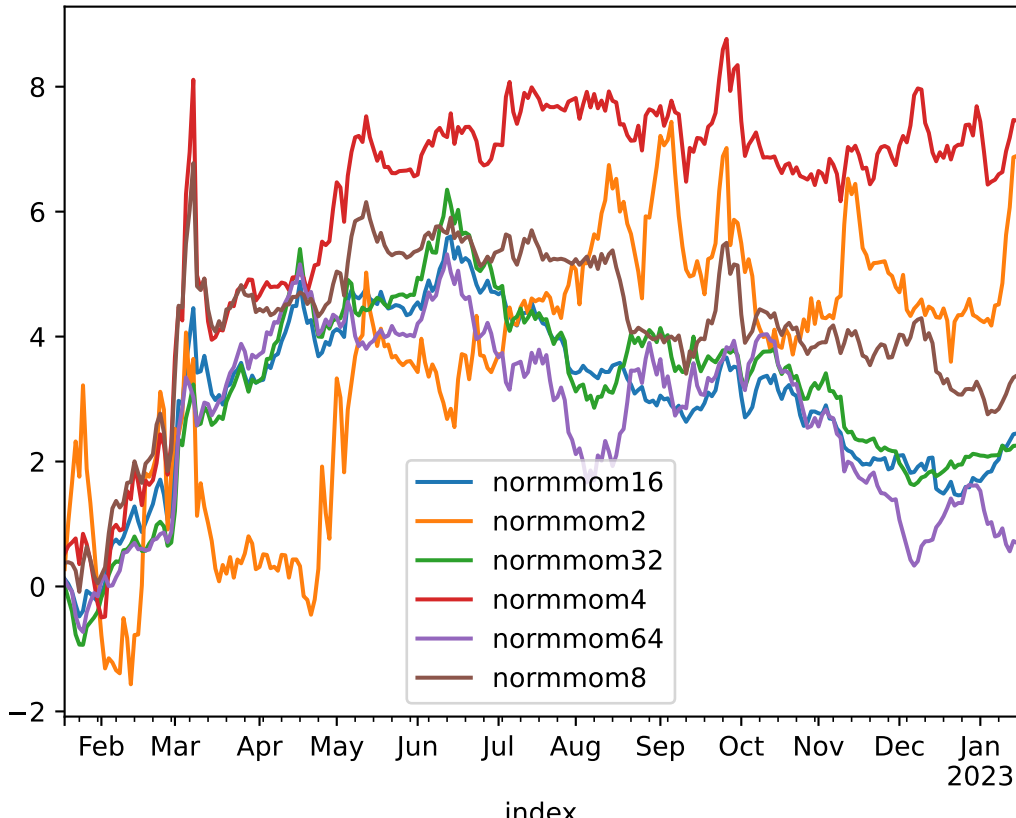


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': 2.413, 'normmom2': 6.788, 'normmom32': 2.22, 'normmom4': 7.341, 'normmom64': 0.685, 'normmom8': 3.327}

ann. std {'normmom16': 3.111, 'normmom2': 8.019, 'normmom32': 3.103, 'normmom4': 5.971, 'normmom64': 3.407, 'normmom8': 4.195}

ann. SR {'normmom16': 0.78, 'normmom2': 0.85, 'normmom32': 0.72, 'normmom4': 1.23, 'normmom64': 0.2, 'normmom8': 0.79}

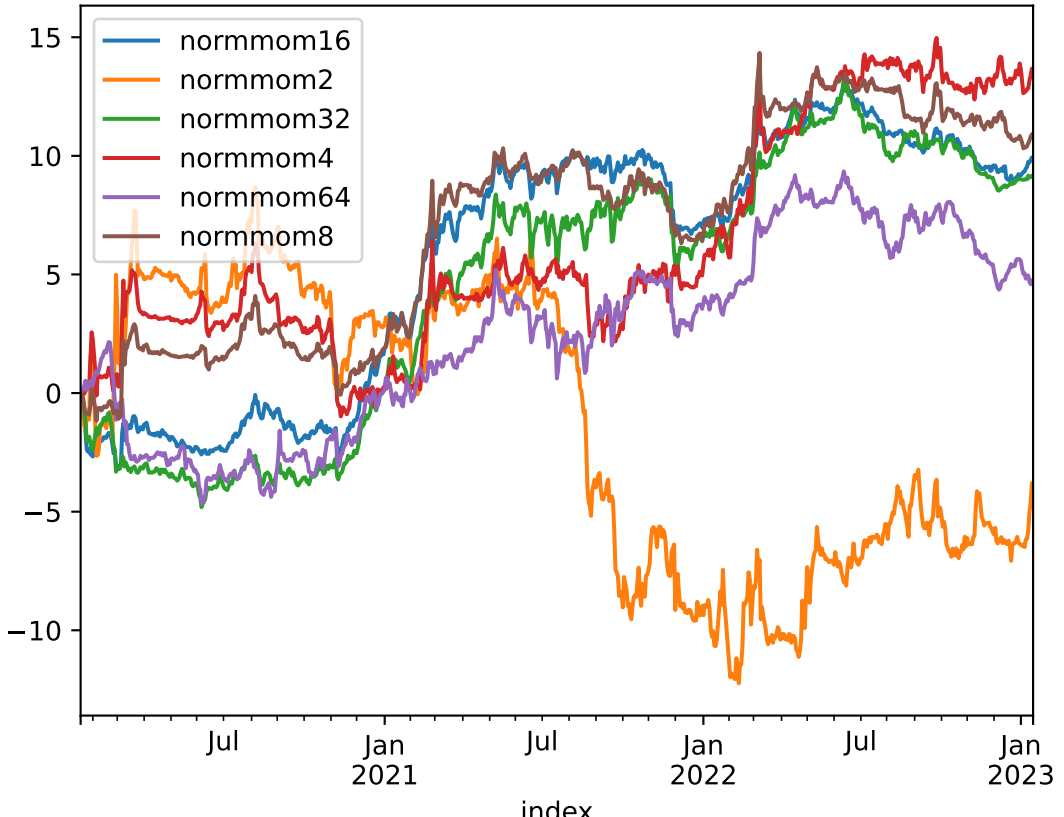


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.259, 'normmom2': -1.237, 'normmom32': 3.004, 'normmom4': 4.478, 'normmom64': 1.548, 'normmom8': 3.586}

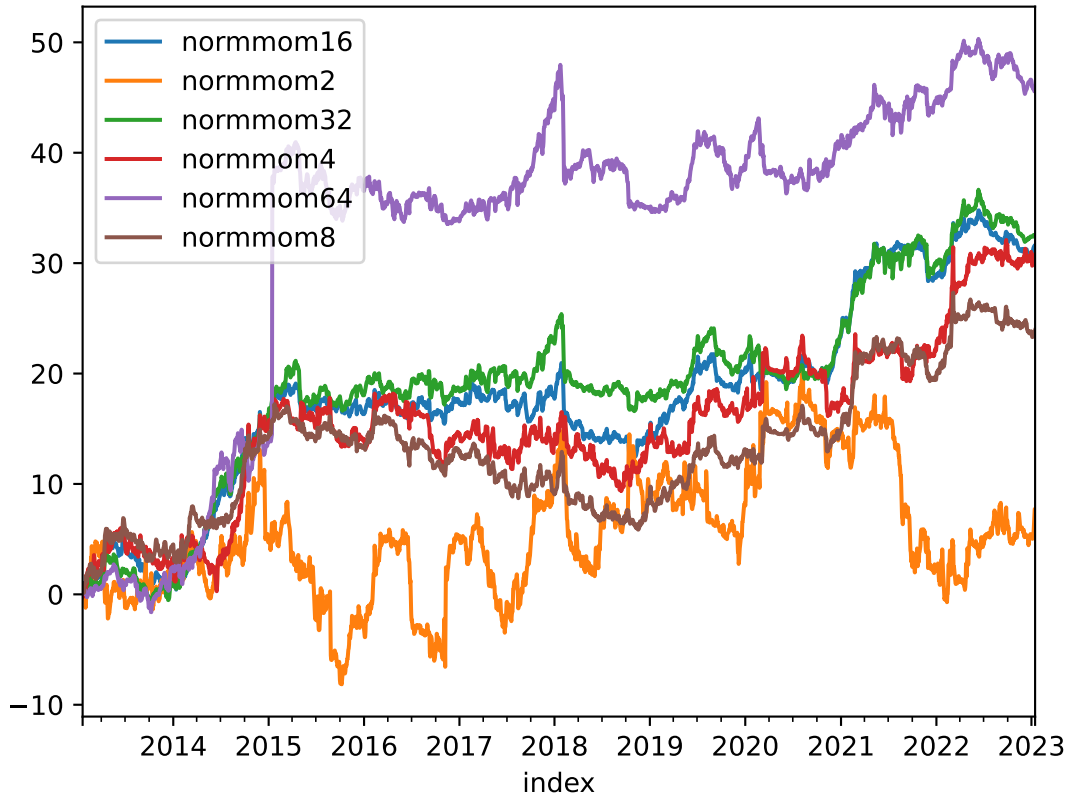
ann. std {'normmom16': 3.689, 'normmom2': 8.487, 'normmom32': 4.024, 'normmom4': 5.841, 'normmom64': 4.296, 'normmom8': 4.242}

ann. SR {'normmom16': 0.88, 'normmom2': -0.15, 'normmom32': 0.75, 'normmom4': 0.77, 'normmom64': 0.36, 'normmom8': 0.85}



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

ann. mean {'normmom16': 3.106, 'normmom2': 0.761, 'normmom32': 3.197, 'normmom4': 3.023, 'normmom64': 4.487, 'normmom8': 2.351}
ann. std {'normmom16': 3.575, 'normmom2': 9.056, 'normmom32': 3.726, 'normmom4': 5.499, 'normmom64': 8.562, 'normmom8': 4.042}
ann. SR {'normmom16': 0.87, 'normmom2': 0.08, 'normmom32': 0.86, 'normmom4': 0.55, 'normmom64': 0.52, 'normmom8': 0.58}

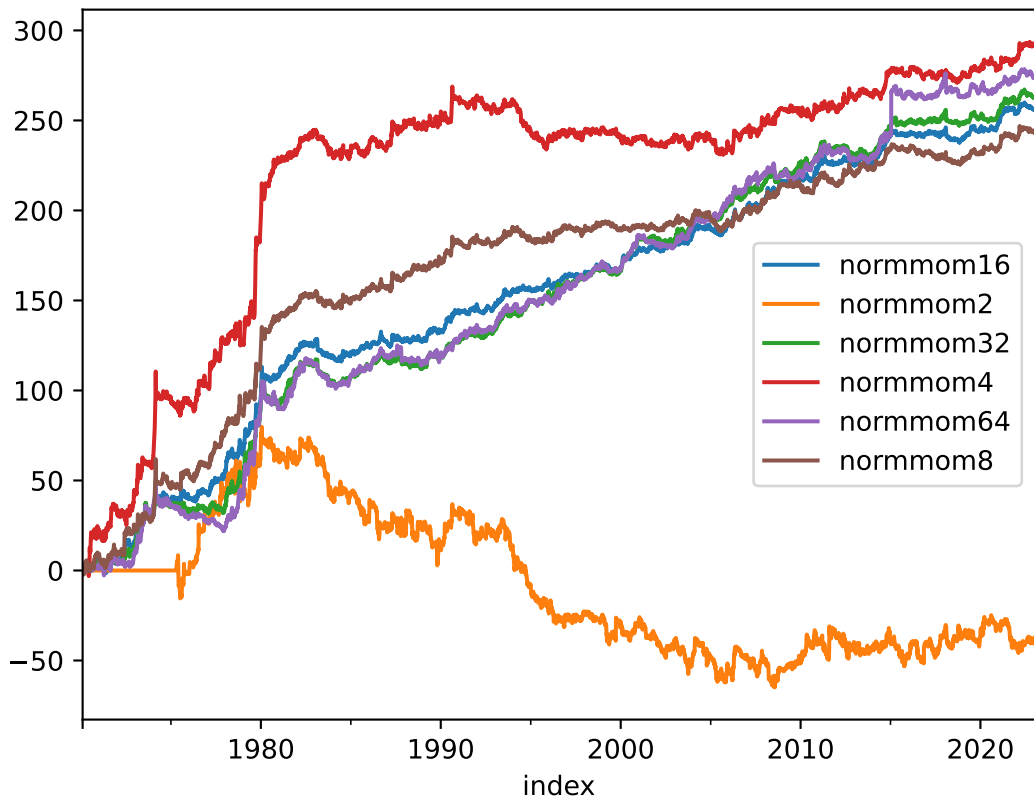


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.759, 'normmom2': -0.691, 'normmom32': 4.875, 'normmom4': 5.417, 'normmom64': 5.076, 'normmom8': 4.513}

ann. std {'normmom16': 4.922, 'normmom2': 11.198, 'normmom32': 4.99, 'normmom4': 8.322, 'normmom64': 6.309, 'normmom8': 5.931}

ann. SR {'normmom16': 0.97, 'normmom2': -0.06, 'normmom32': 0.98, 'normmom4': 0.65, 'normmom64': 0.8, 'normmom8': 0.76}

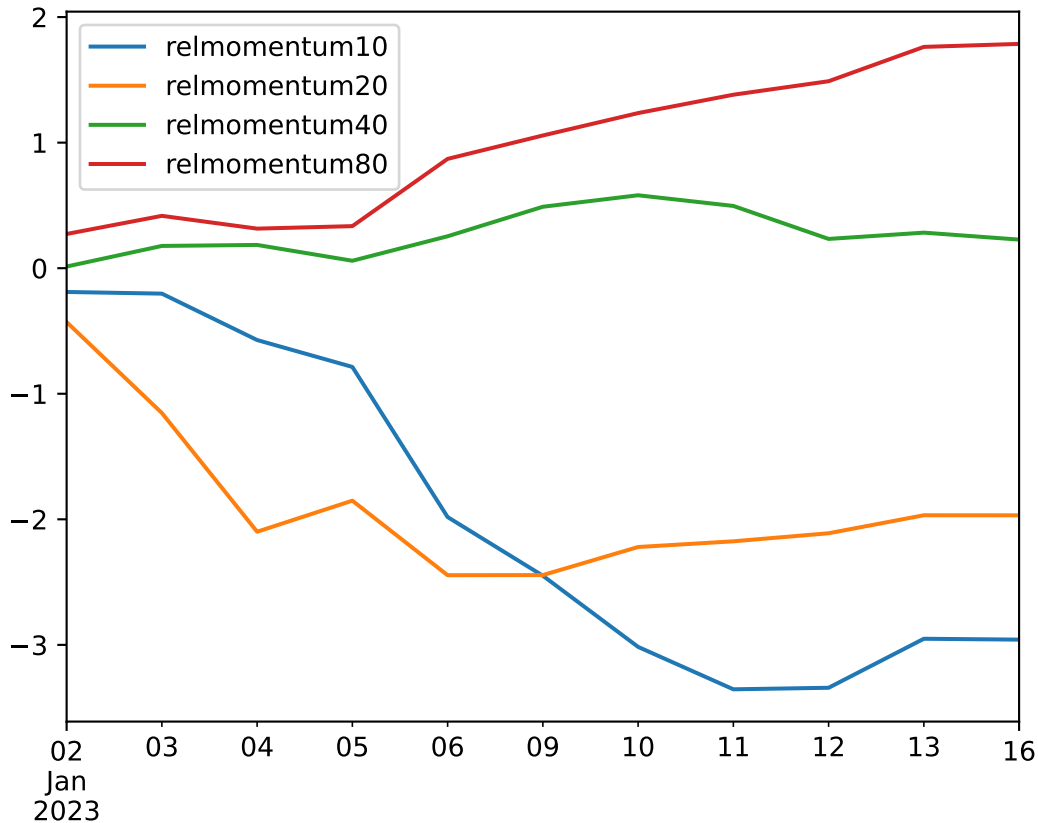


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -68.845, 'relmomentum20': -45.804, 'relmomentum40': 5.3, 'relmomentum80': 41.572}

ann. std {'relmomentum10': 6.517, 'relmomentum20': 6.676, 'relmomentum40': 2.383, 'relmomentum80': 2.666}

ann. SR {'relmomentum10': -10.56, 'relmomentum20': -6.86, 'relmomentum40': 2.22, 'relmomentum80': 15.6}

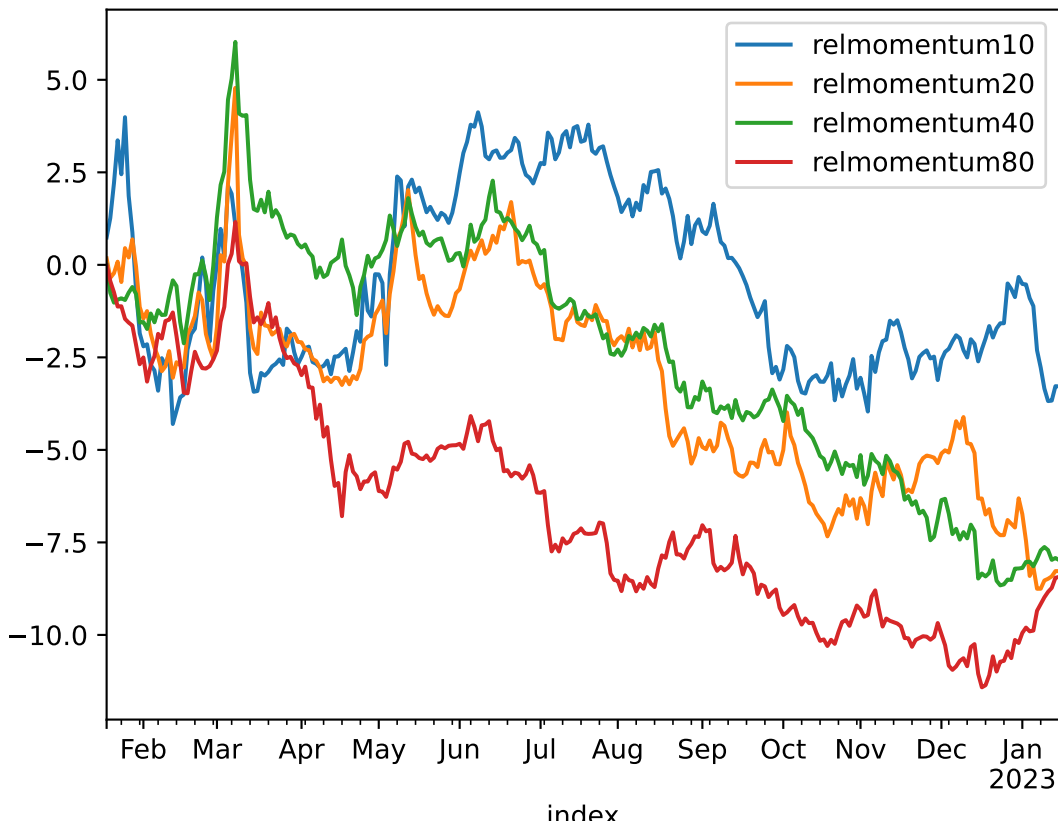


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': -3.235, 'relmomentum20': -8.149, 'relmomentum40': -7.854, 'relmomentum80': -8.302}

ann. std {'relmomentum10': 9.777, 'relmomentum20': 8.514, 'relmomentum40': 6.666, 'relmomentum80': 5.716}

ann. SR {'relmomentum10': -0.33, 'relmomentum20': -0.96, 'relmomentum40': -1.18, 'relmomentum80': -1.45}

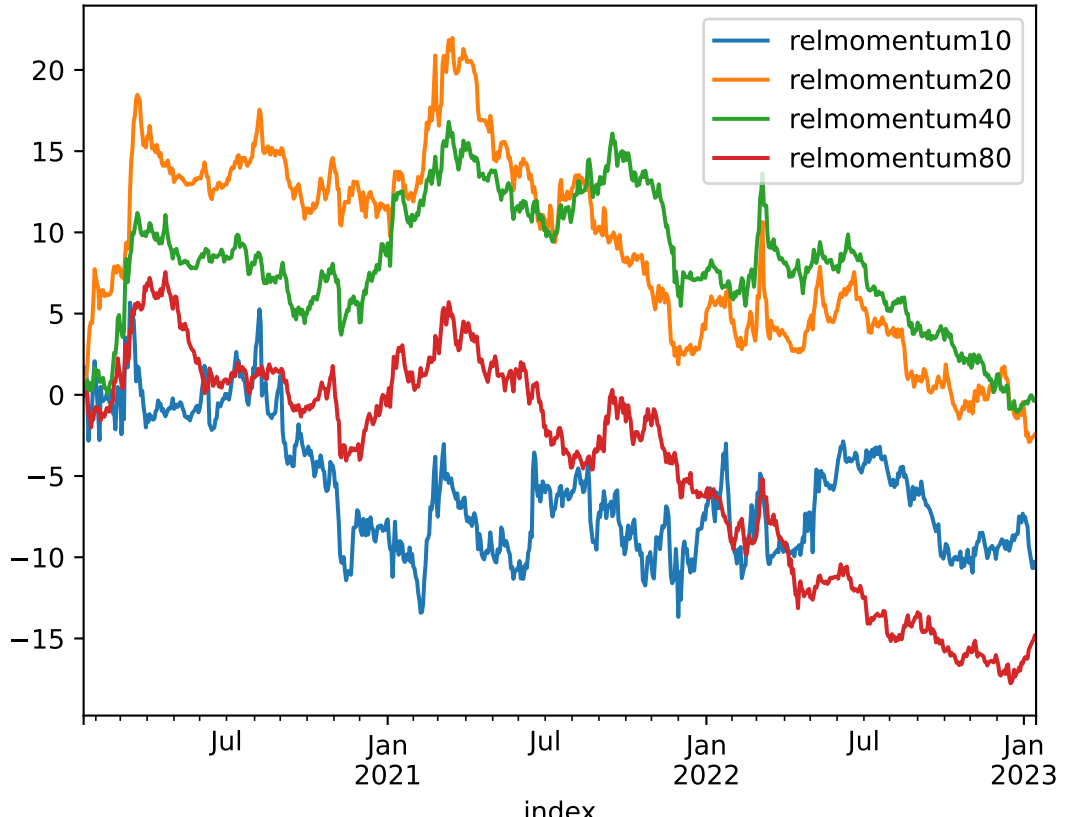


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -3.368, 'relmomentum20': -0.793, 'relmomentum40': -0.123, 'relmomentum80': -4.844}

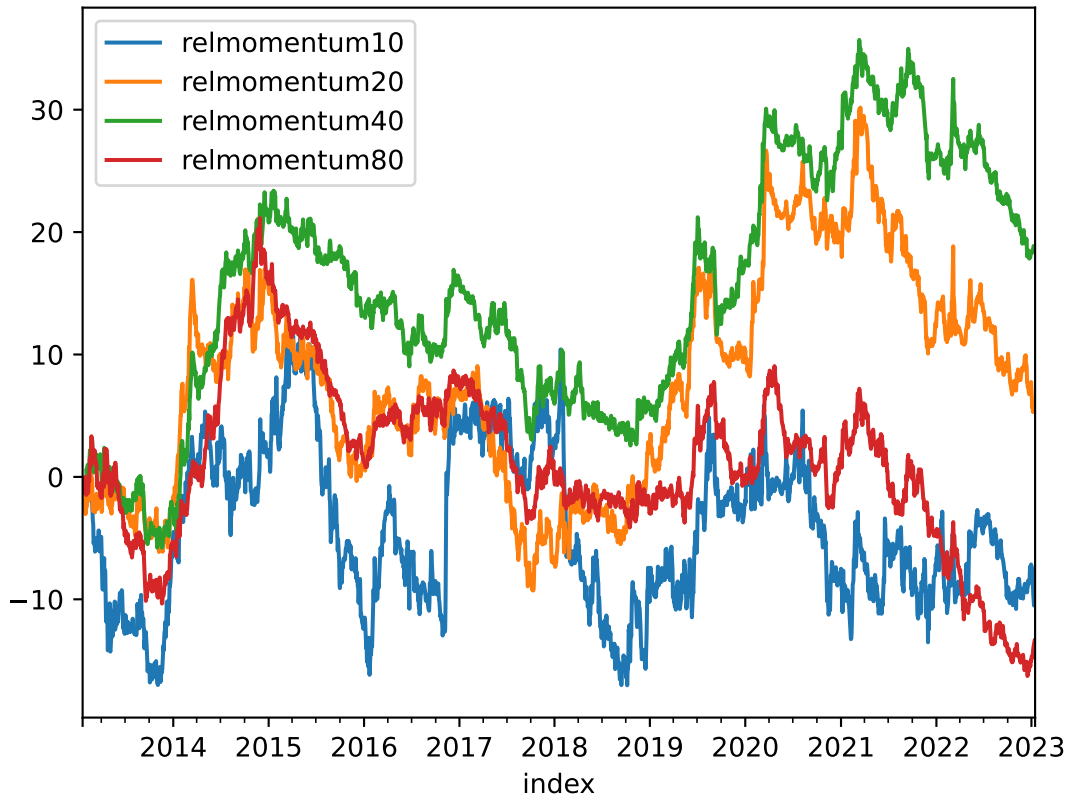
ann. std {'relmomentum10': 12.691, 'relmomentum20': 9.076, 'relmomentum40': 7.452, 'relmomentum80': 6.929}

ann. SR {'relmomentum10': -0.27, 'relmomentum20': -0.09, 'relmomentum40': -0.02, 'relmomentum80': -0.7}

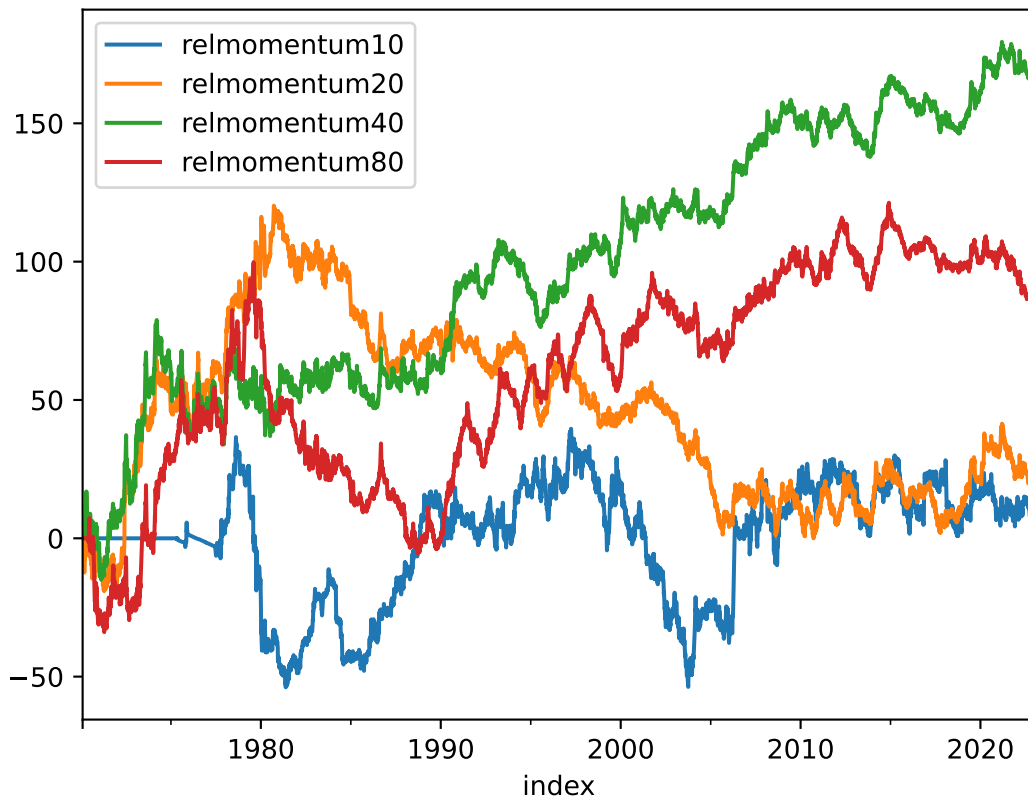


Total Trading Rule P&L for period '10Y'

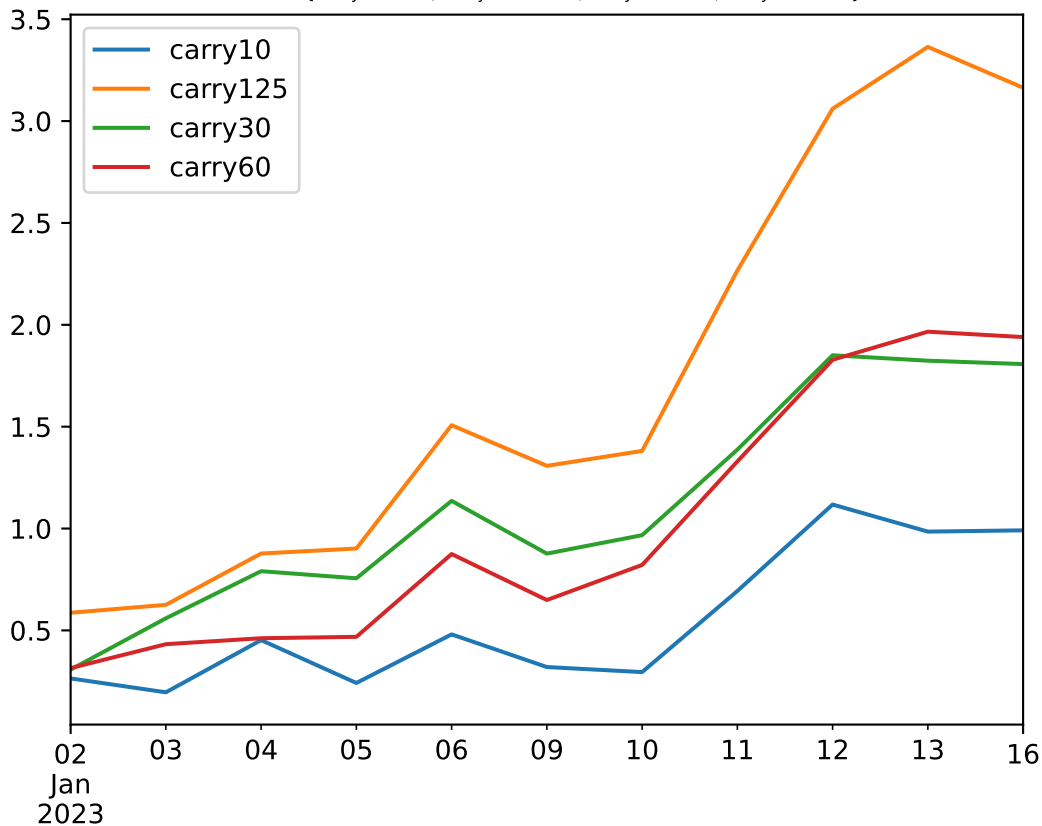
ann. mean {'relmomentum10': -0.993, 'relmomentum20': 0.568, 'relmomentum40': 1.818, 'relmomentum80': -1.304}
ann. std {'relmomentum10': 12.867, 'relmomentum20': 8.952, 'relmomentum40': 7.344, 'relmomentum80': 6.79}
ann. SR {'relmomentum10': -0.08, 'relmomentum20': 0.06, 'relmomentum40': 0.25, 'relmomentum80': -0.19}



Total Trading Rule P&L for period '99Y'
ann. mean {'relmomentum10': 0.143, 'relmomentum20': 0.316, 'relmomentum40': 3.006, 'relmomentum80': 1.61}
ann. std {'relmomentum10': 13.32, 'relmomentum20': 11.523, 'relmomentum40': 10.791, 'relmomentum80': 11.059}
ann. SR {'relmomentum10': 0.01, 'relmomentum20': 0.03, 'relmomentum40': 0.28, 'relmomentum80': 0.15}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': 23.068, 'carry125': 73.632, 'carry30': 42.059, 'carry60': 45.143}
ann. std {'carry10': 3.699, 'carry125': 6.11, 'carry30': 3.675, 'carry60': 3.734}
ann. SR {'carry10': 6.24, 'carry125': 12.05, 'carry30': 11.44, 'carry60': 12.09}

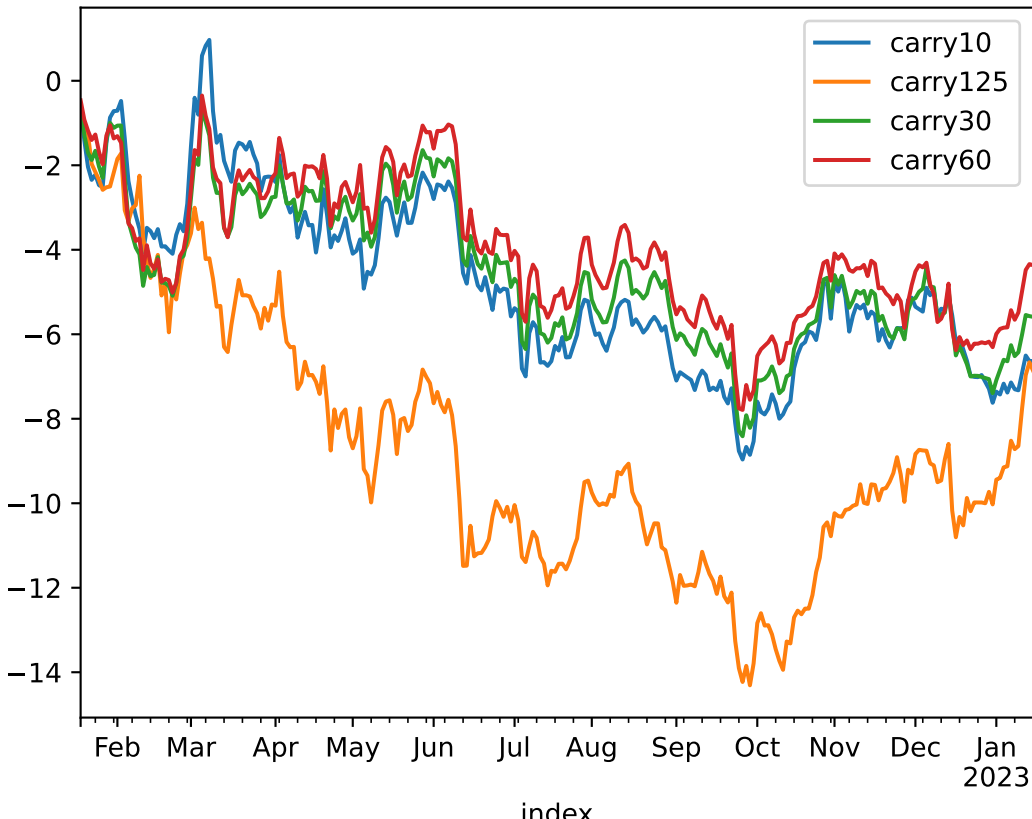


Total Trading Rule P&L for period '1Y'

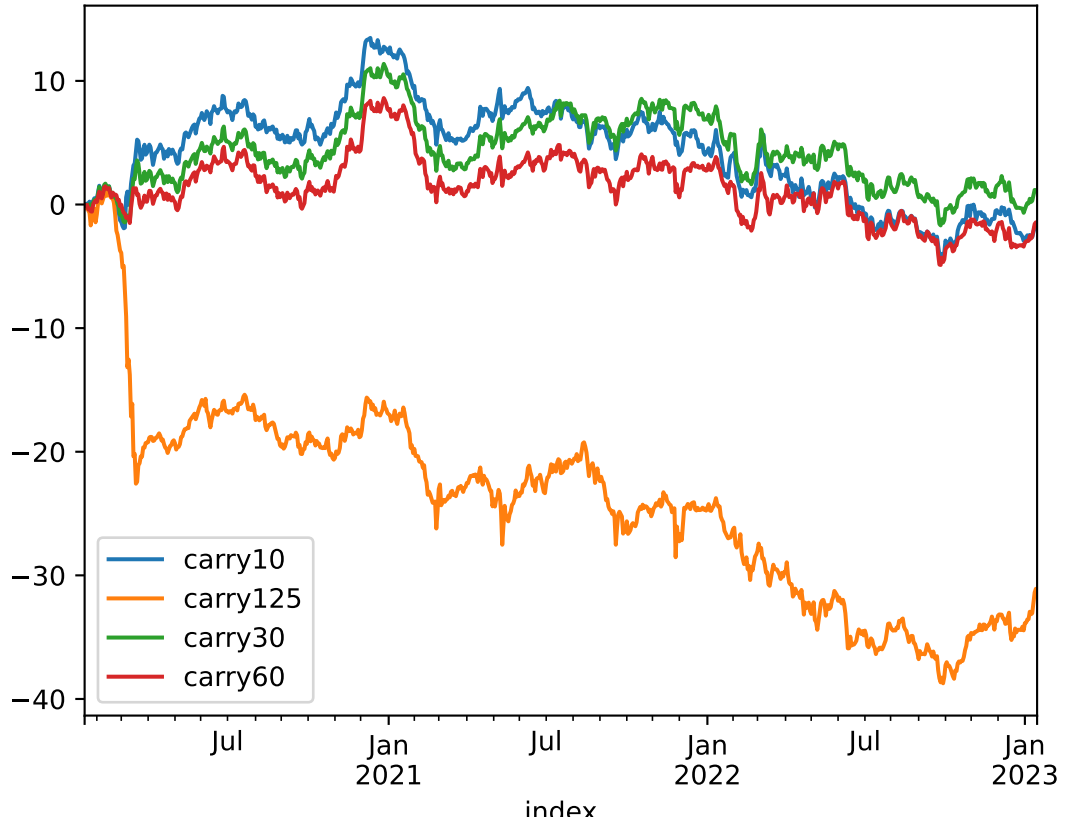
ann. mean {'carry10': -6.529, 'carry125': -6.758, 'carry30': -5.502, 'carry60': -4.299}

ann. std {'carry10': 6.962, 'carry125': 7.746, 'carry30': 6.685, 'carry60': 6.764}

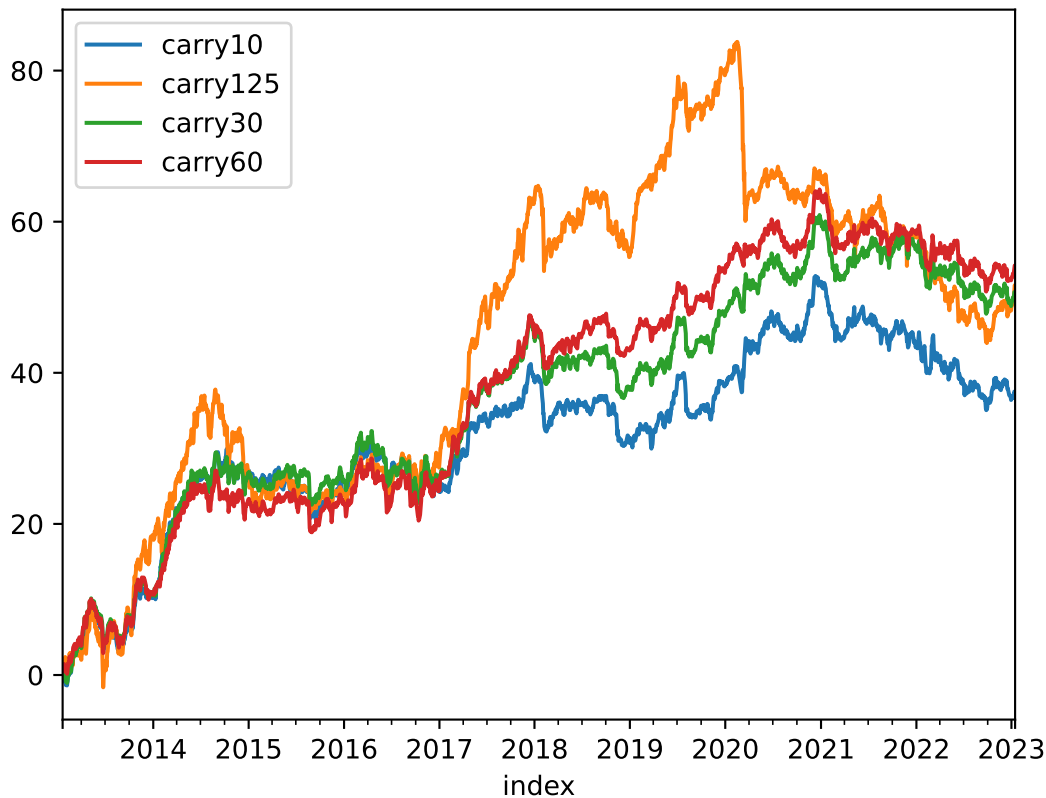
ann. SR {'carry10': -0.94, 'carry125': -0.87, 'carry30': -0.82, 'carry60': -0.64}



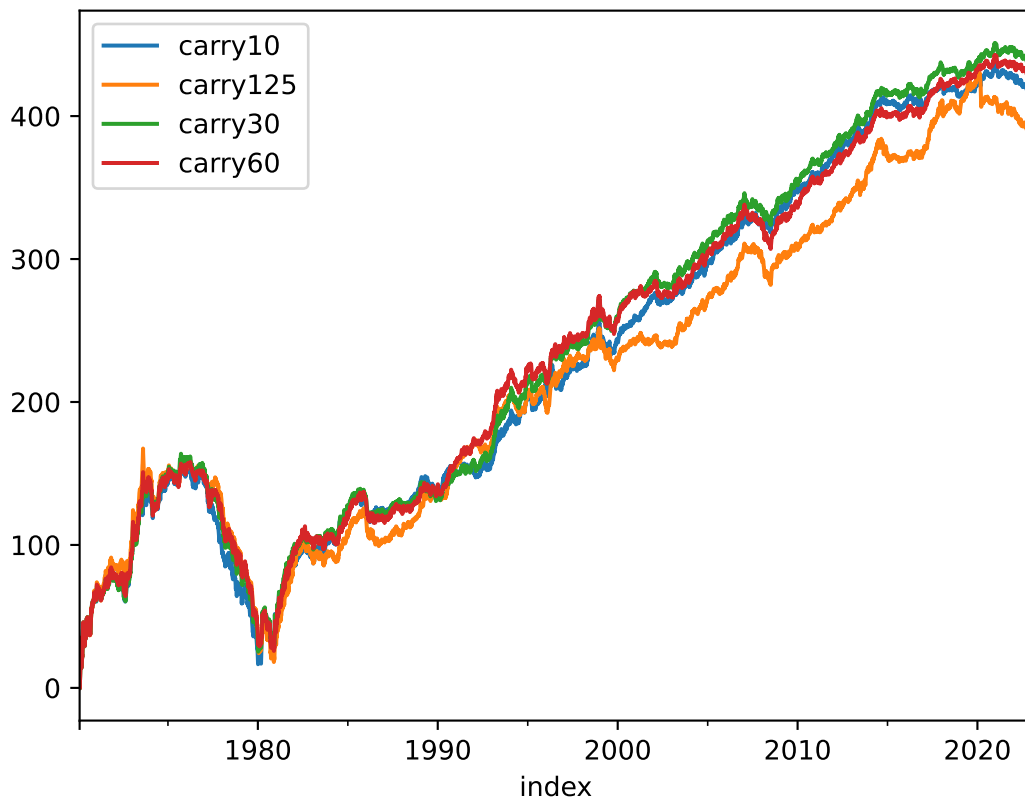
Total Trading Rule P&L for period '3Y'
ann. mean {'carry10': -0.639, 'carry125': -10.255, 'carry30': 0.372, 'carry60': -0.481}
ann. std {'carry10': 6.831, 'carry125': 9.458, 'carry30': 6.632, 'carry60': 6.566}
ann. SR {'carry10': -0.09, 'carry125': -1.08, 'carry30': 0.06, 'carry60': -0.07}



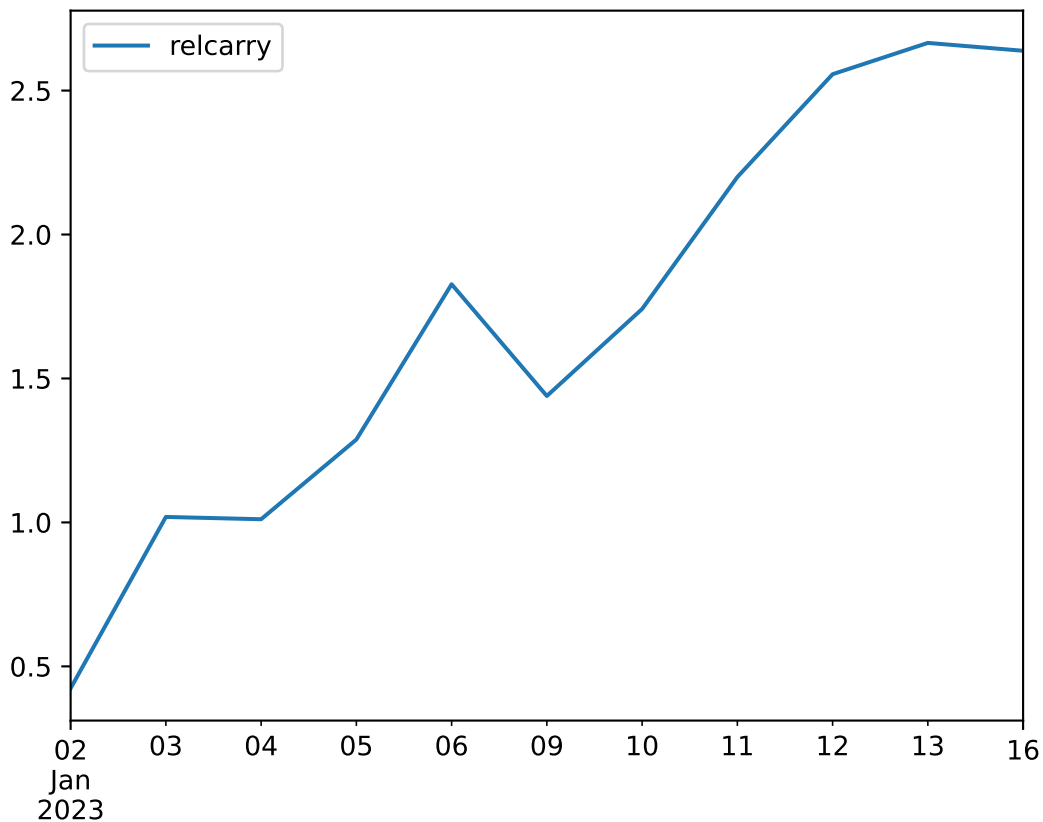
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.672, 'carry125': 5.047, 'carry30': 4.973, 'carry60': 5.321}
ann. std {'carry10': 6.449, 'carry125': 9.138, 'carry30': 6.548, 'carry60': 6.511}
ann. SR {'carry10': 0.57, 'carry125': 0.55, 'carry30': 0.76, 'carry60': 0.82}



Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.797, 'carry125': 7.371, 'carry30': 8.171, 'carry60': 8.018}
ann. std {'carry10': 11.855, 'carry125': 12.098, 'carry30': 11.867, 'carry60': 11.818}
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': 61.398}
ann. std {'relcarry': 4.695}
ann. SR {'relcarry': 13.08}

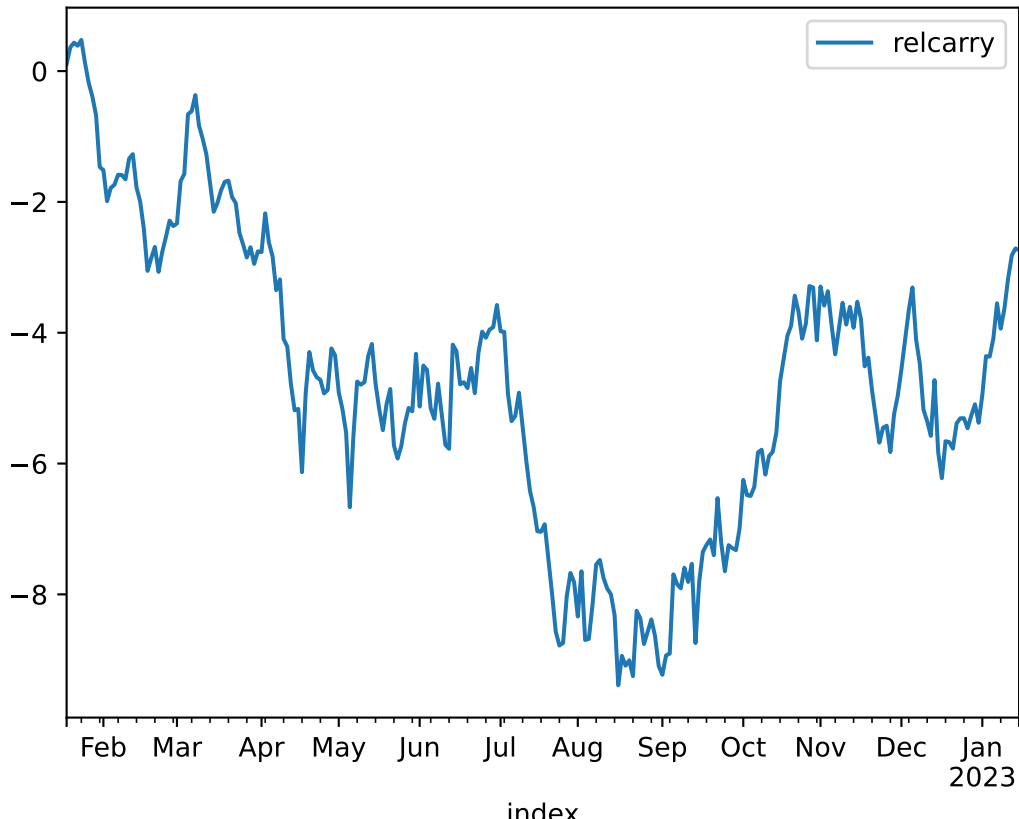


Total Trading Rule P&L for period '1Y'

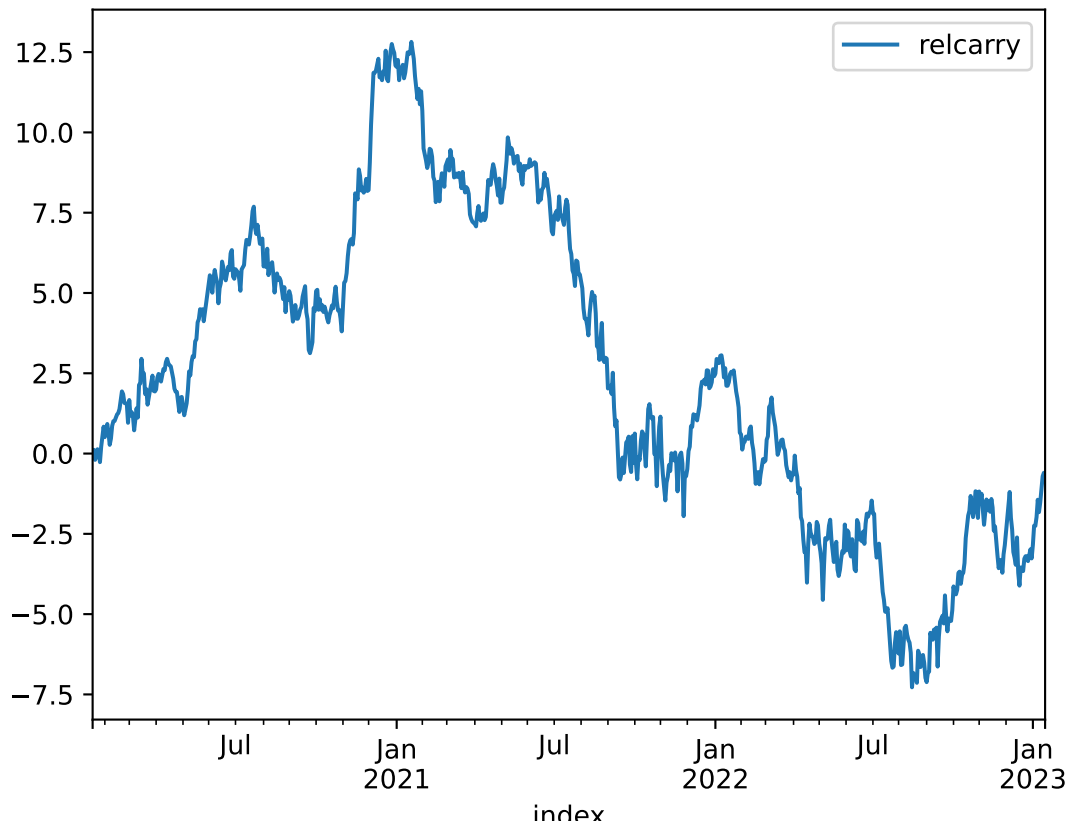
ann. mean {'relcarry': -2.696}

ann. std {'relcarry': 7.22}

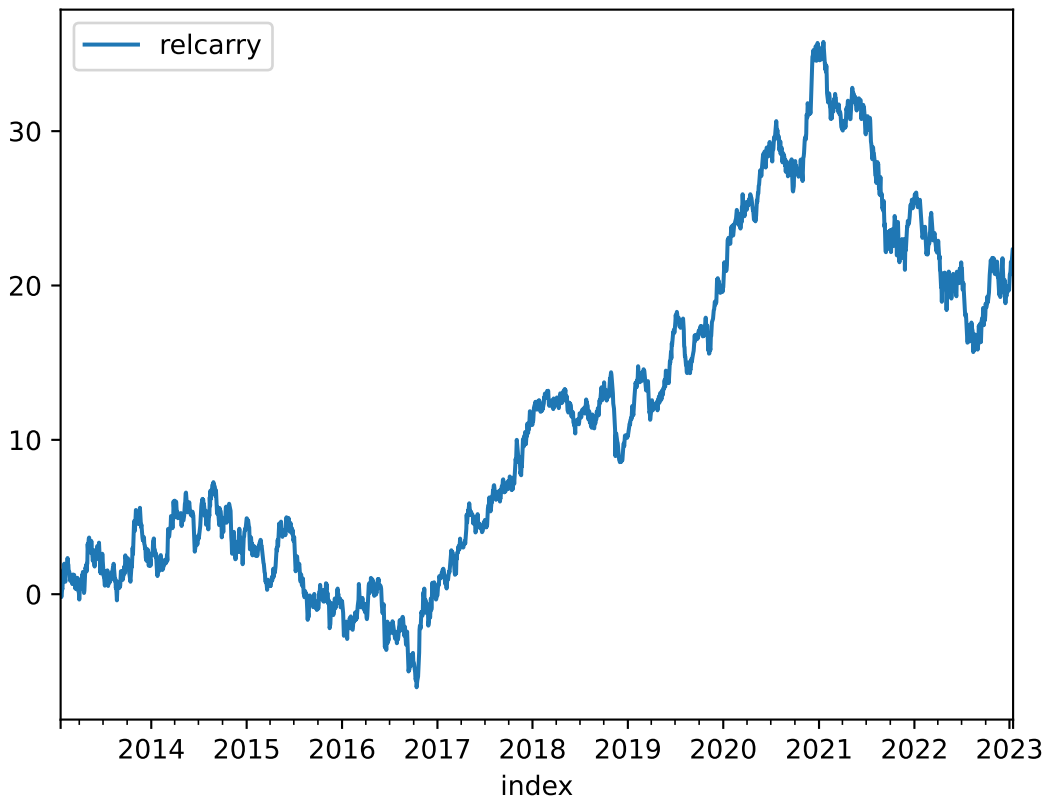
ann. SR {'relcarry': -0.37}



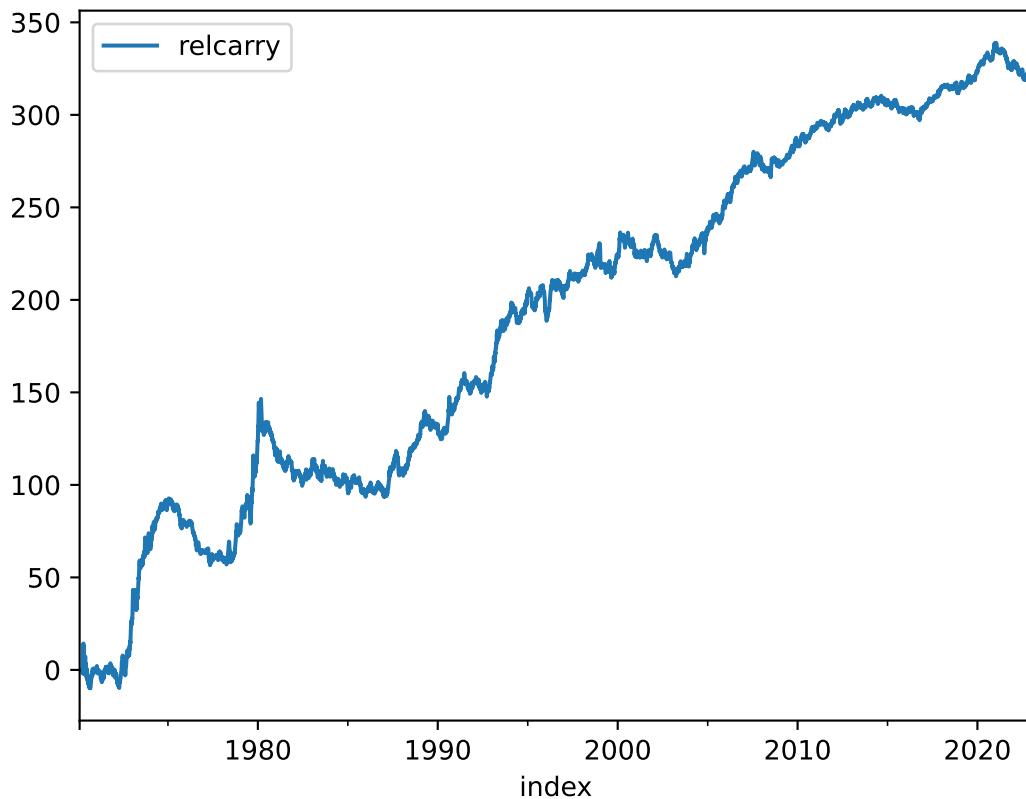
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': -0.205}
ann. std {'relcarry': 6.838}
ann. SR {'relcarry': -0.03}



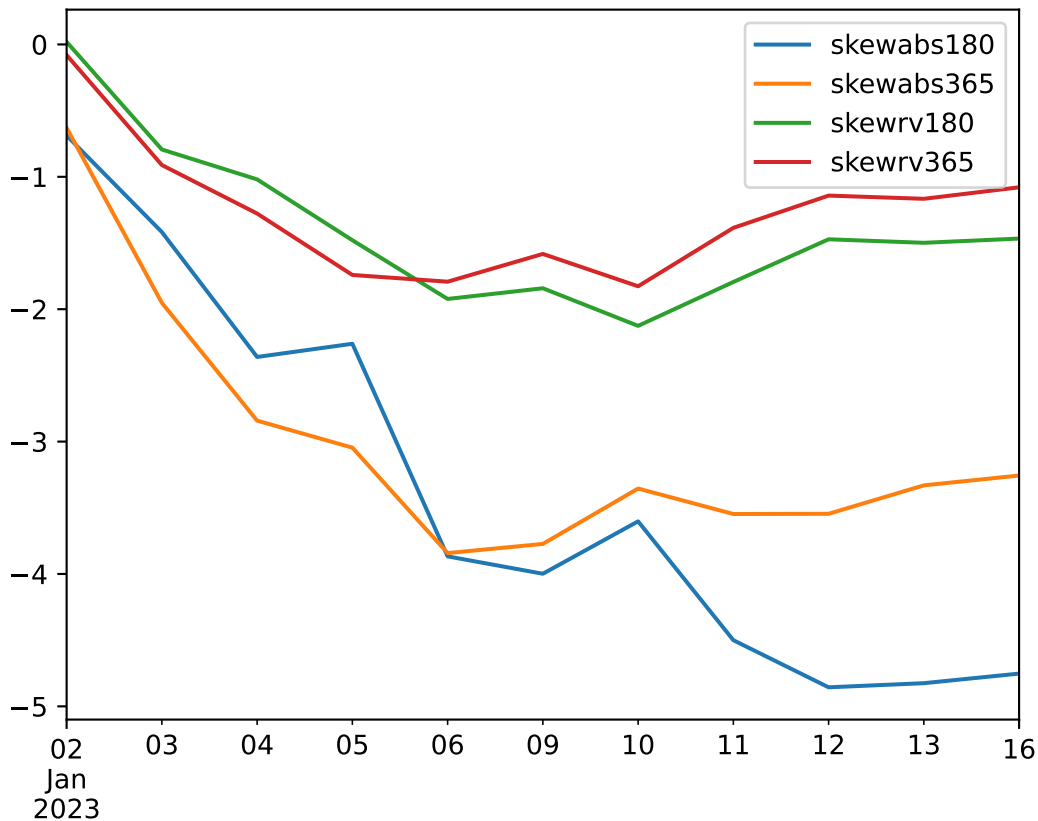
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.193}
ann. std {'relcarry': 6.027}
ann. SR {'relcarry': 0.36}



Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 6.031}
ann. std {'relcarry': 9.556}
ann. SR {'relcarry': 0.63}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': -110.605, 'skewabs365': -75.784, 'skewrv180': -34.13, 'skewrv365': -25.118}
ann. std {'skewabs180': 9.525, 'skewabs365': 8.639, 'skewrv180': 5.605, 'skewrv365': 5.788}
ann. SR {'skewabs180': -11.61, 'skewabs365': -8.77, 'skewrv180': -6.09, 'skewrv365': -4.34}

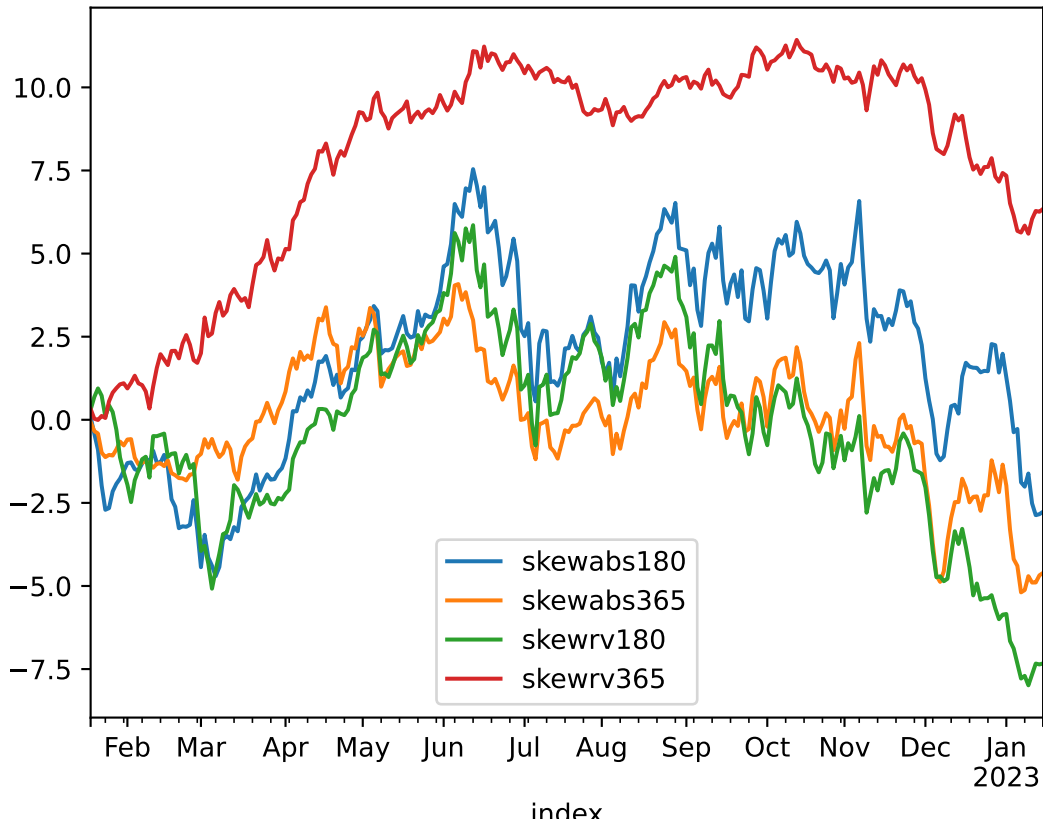


Total Trading Rule P&L for period '1Y'

ann. mean {'skewabs180': -2.724, 'skewabs365': -4.535, 'skewrv180': -7.216, 'skewrv365': 6.248}

ann. std {'skewabs180': 10.117, 'skewabs365': 8.139, 'skewrv180': 9.211, 'skewrv365': 5.076}

ann. SR {'skewabs180': -0.27, 'skewabs365': -0.56, 'skewrv180': -0.78, 'skewrv365': 1.23}

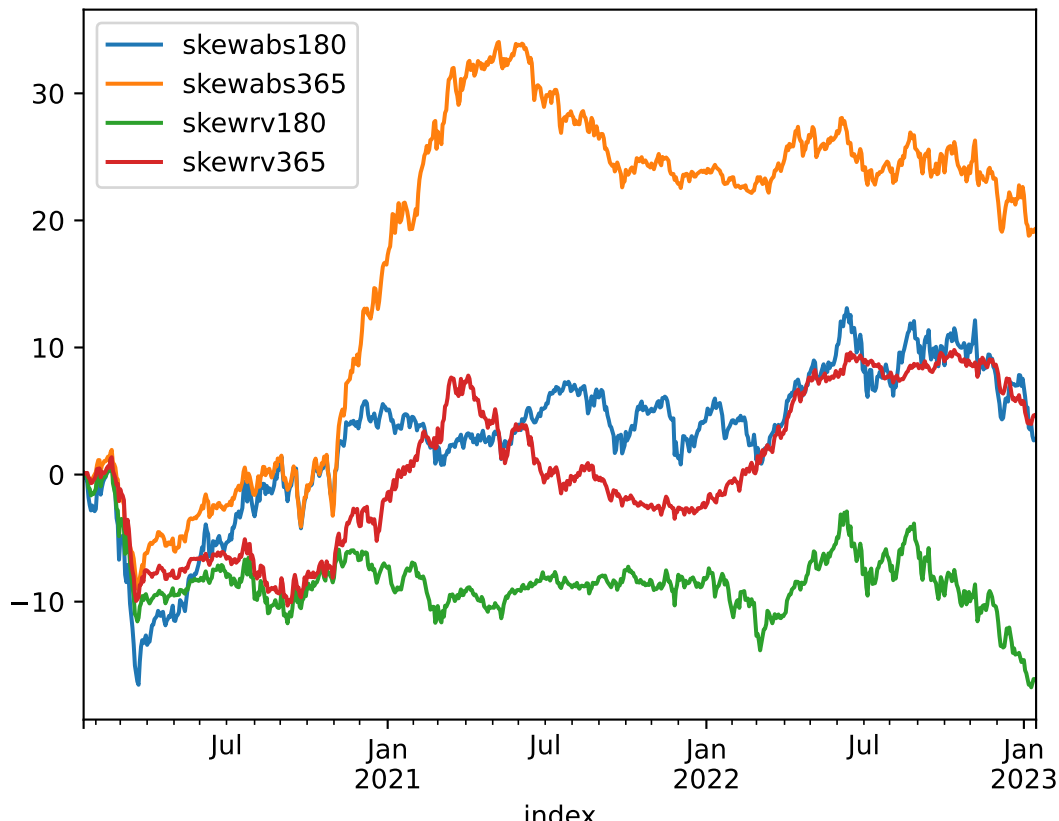


Total Trading Rule P&L for period '3Y'

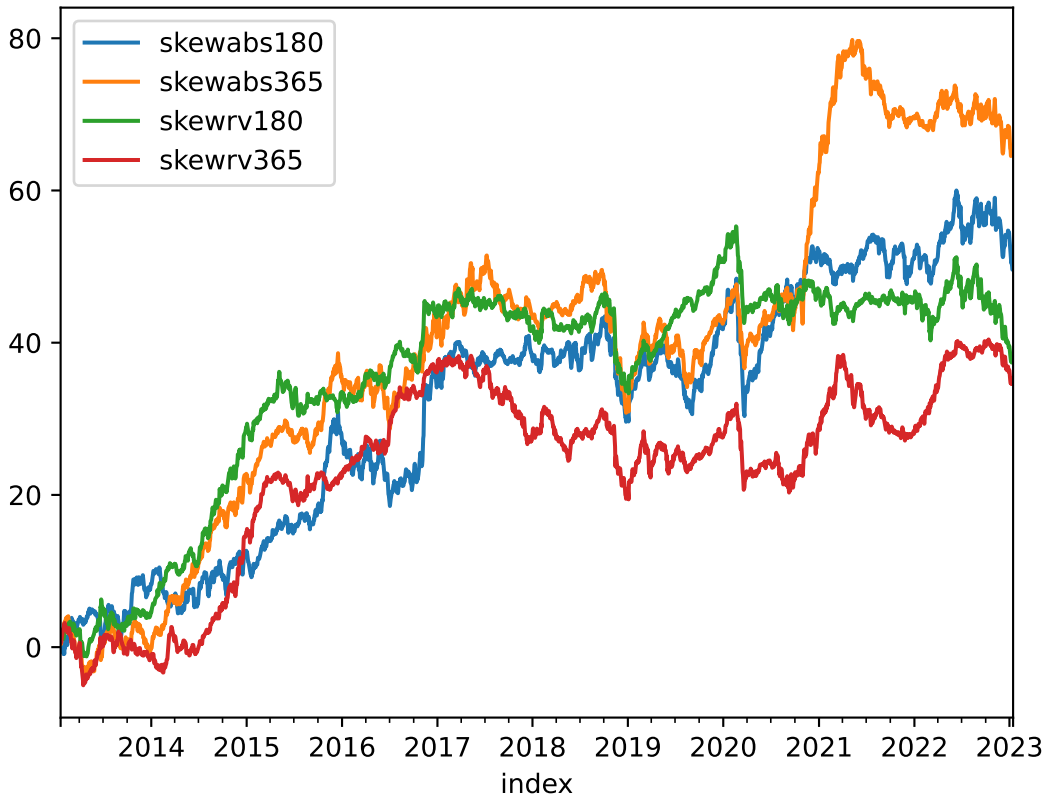
ann. mean {'skewabs180': 0.915, 'skewabs365': 6.352, 'skewrv180': -5.271, 'skewrv365': 1.549}

ann. std {'skewabs180': 9.655, 'skewabs365': 8.853, 'skewrv180': 7.779, 'skewrv365': 6.605}

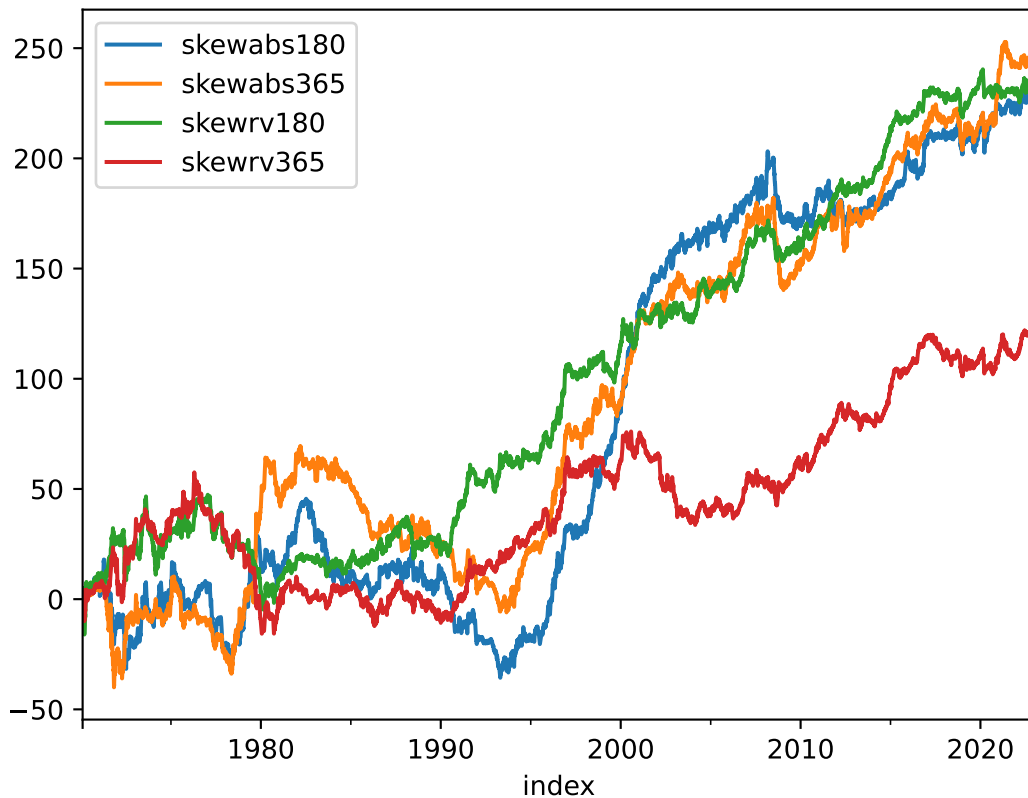
ann. SR {'skewabs180': 0.09, 'skewabs365': 0.72, 'skewrv180': -0.68, 'skewrv365': 0.23}



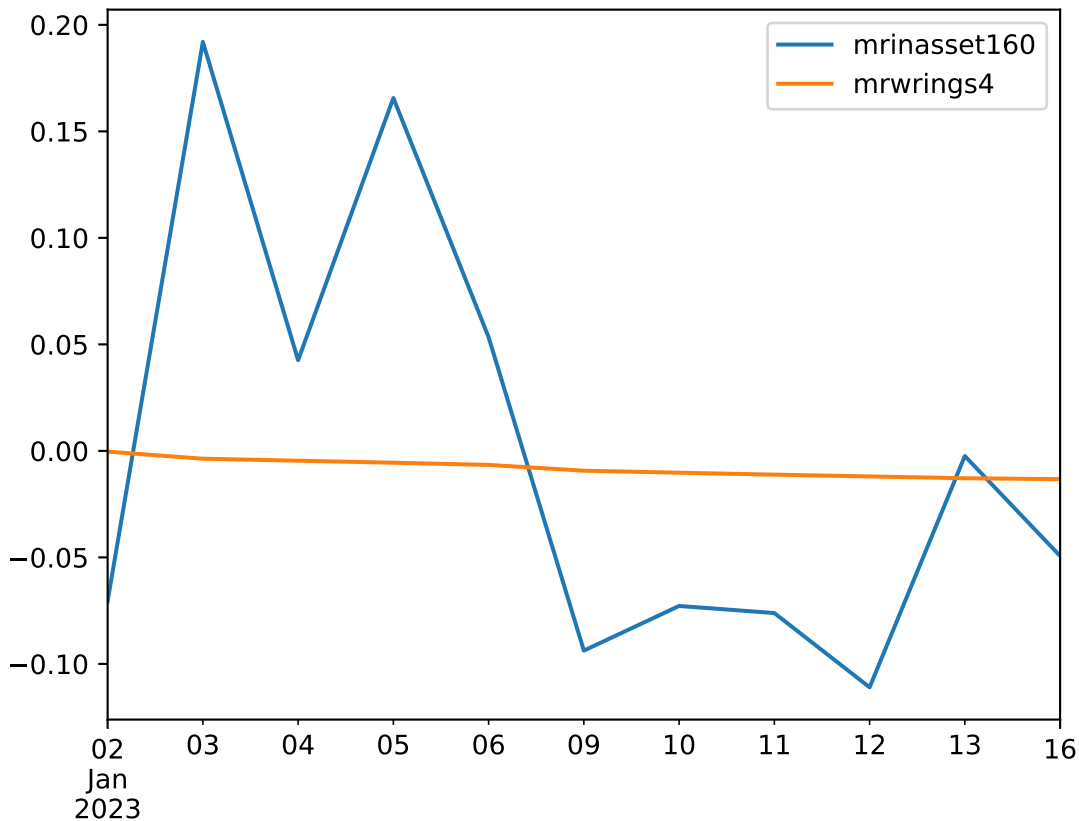
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 4.88, 'skewabs365': 6.394, 'skewrv180': 3.737, 'skewrv365': 3.471}
ann. std {'skewabs180': 8.056, 'skewabs365': 8.0, 'skewrv180': 6.585, 'skewrv365': 6.178}
ann. SR {'skewabs180': 0.61, 'skewabs365': 0.8, 'skewrv180': 0.57, 'skewrv365': 0.56}



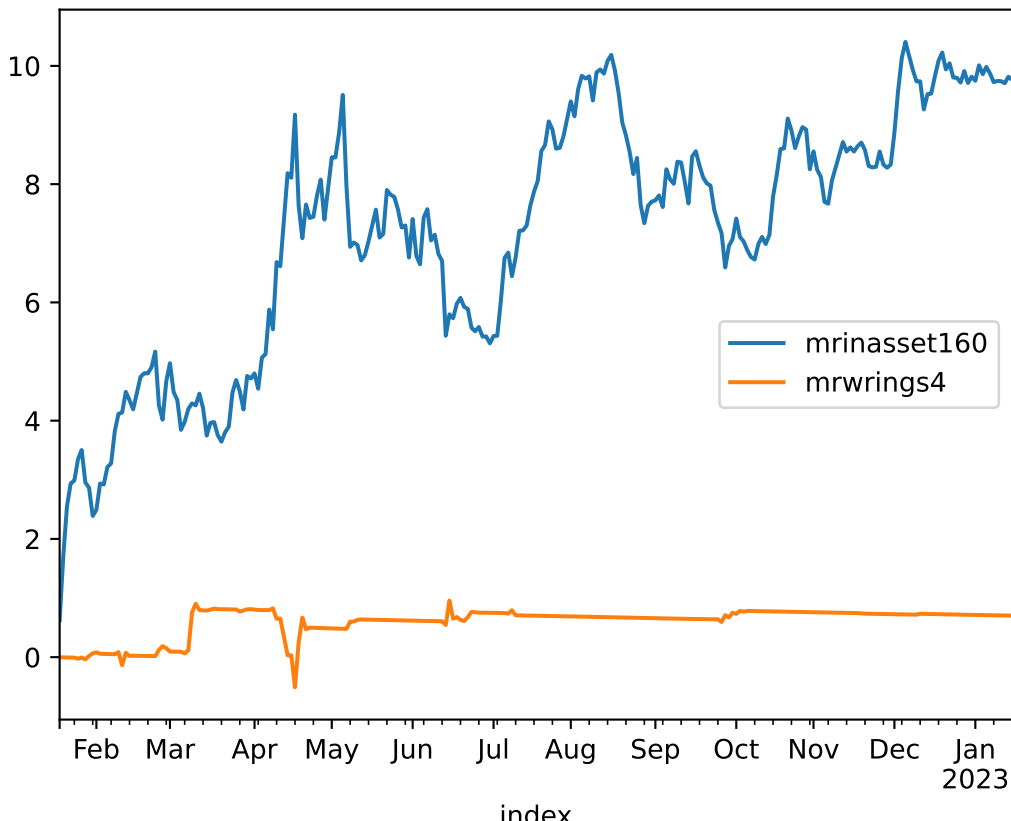
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.112, 'skewabs365': 4.413, 'skewrv180': 4.135, 'skewrv365': 2.169}
ann. std {'skewabs180': 10.792, 'skewabs365': 10.298, 'skewrv180': 9.306, 'skewrv365': 8.6}
ann. SR {'skewabs180': 0.38, 'skewabs365': 0.43, 'skewrv180': 0.44, 'skewrv365': 0.25}



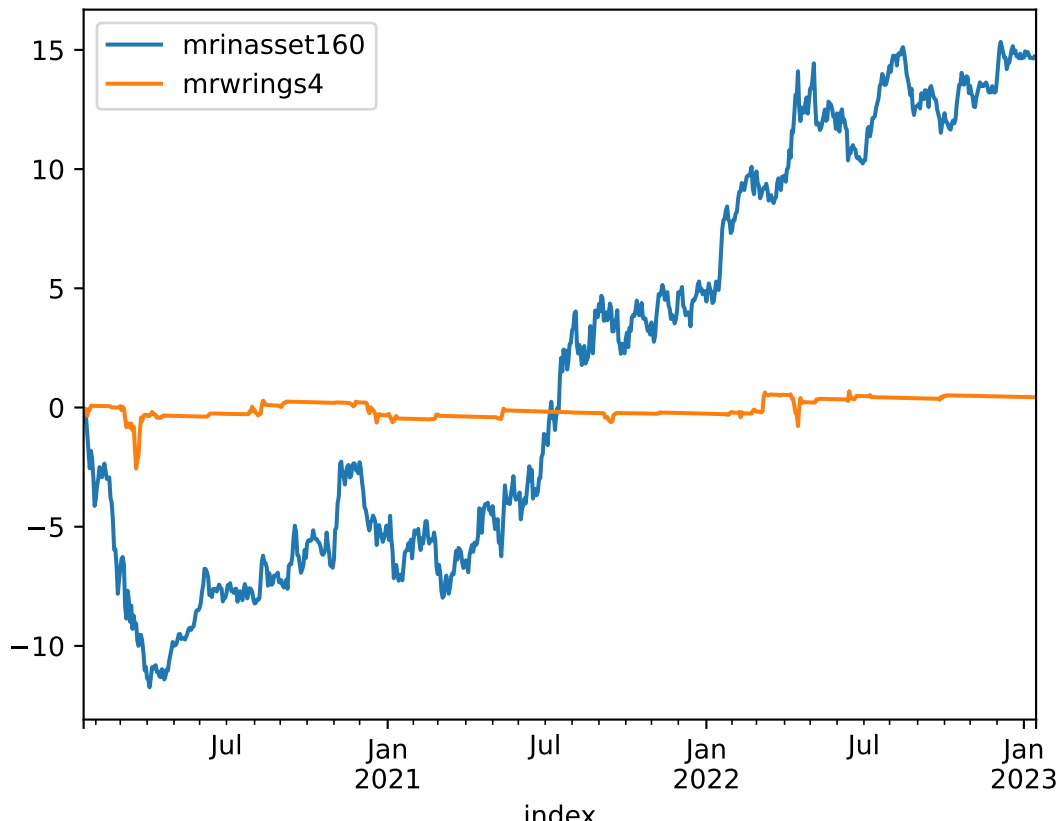
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': -1.148, 'mrwrings4': -0.309}
ann. std {'mrinasset160': 2.03, 'mrwrings4': 0.015}
ann. SR {'mrinasset160': -0.57, 'mrwrings4': -20.75}



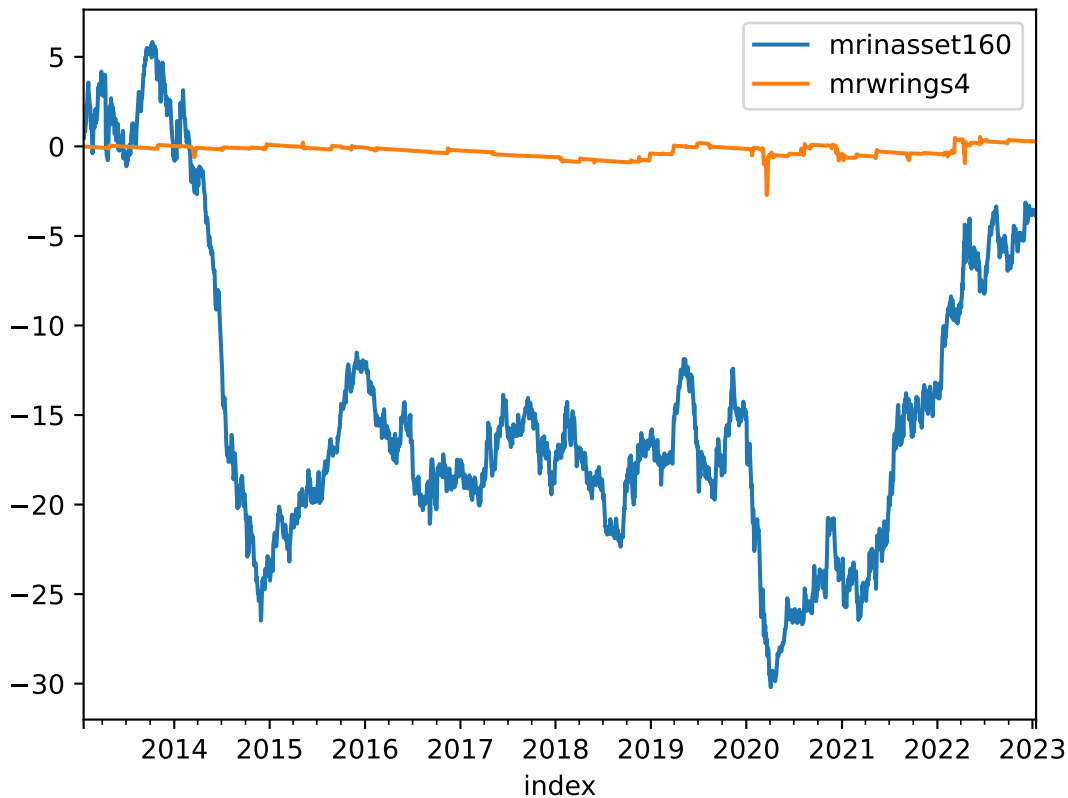
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 9.618, 'mrwrings4': 0.691}
ann. std {'mrinasset160': 6.109, 'mrwrings4': 1.481}
ann. SR {'mrinasset160': 1.57, 'mrwrings4': 0.47}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 4.818, 'mrwrings4': 0.141}
ann. std {'mrinasset160': 6.883, 'mrwrings4': 1.537}
ann. SR {'mrinasset160': 0.7, 'mrwrings4': 0.09}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': -0.37, 'mrwrings4': 0.027}
ann. std {'mrinasset160': 6.601, 'mrwrings4': 0.897}
ann. SR {'mrinasset160': -0.06, 'mrwrings4': 0.03}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.353, 'mrwrings4': -1.173}
ann. std {'mrinasset160': 10.916, 'mrwrings4': 2.63}
ann. SR {'mrinasset160': -0.31, 'mrwrings4': -0.45}

