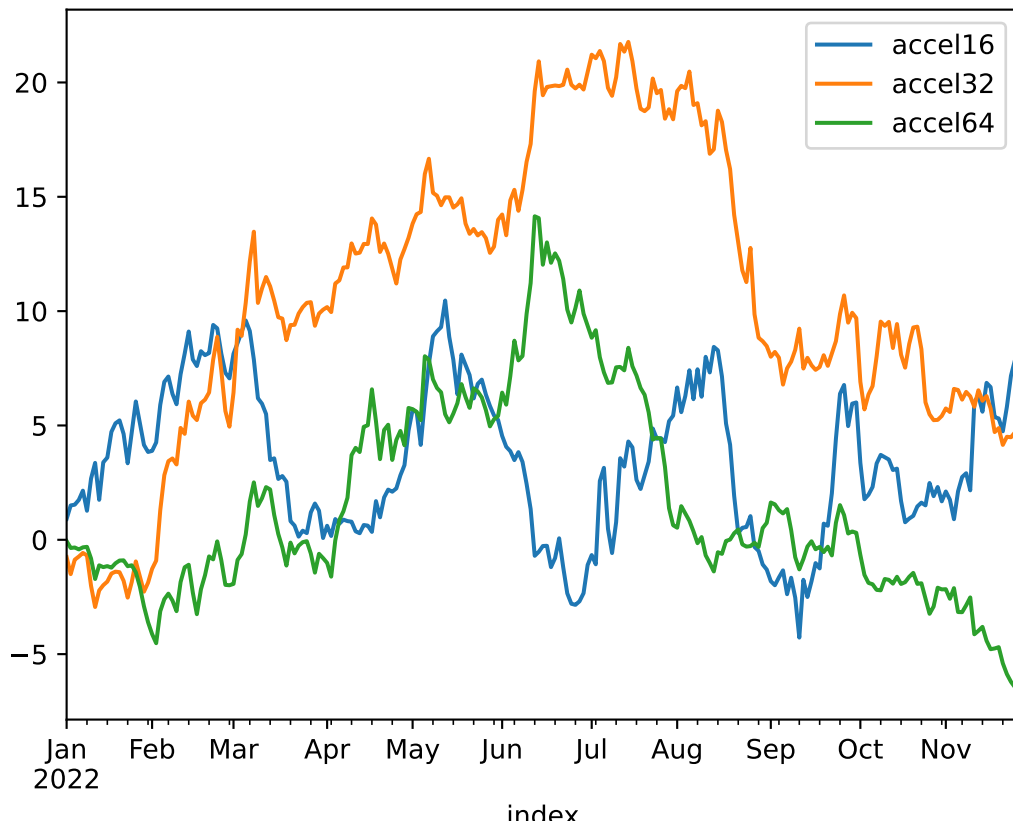
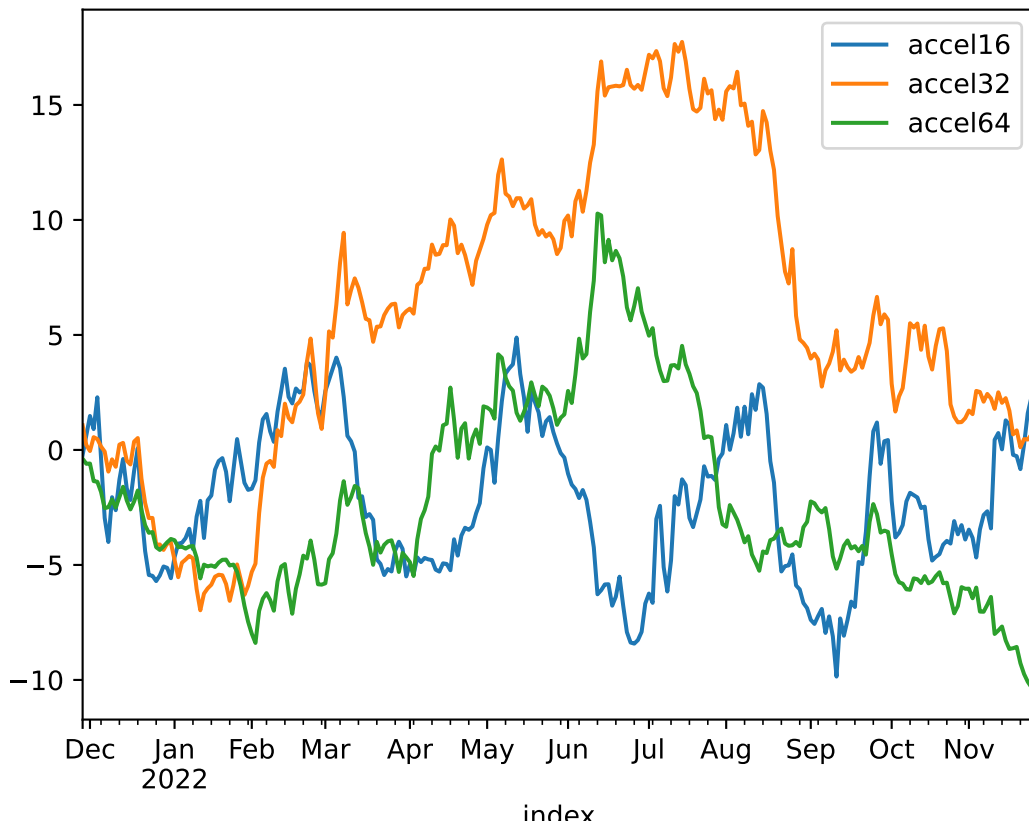


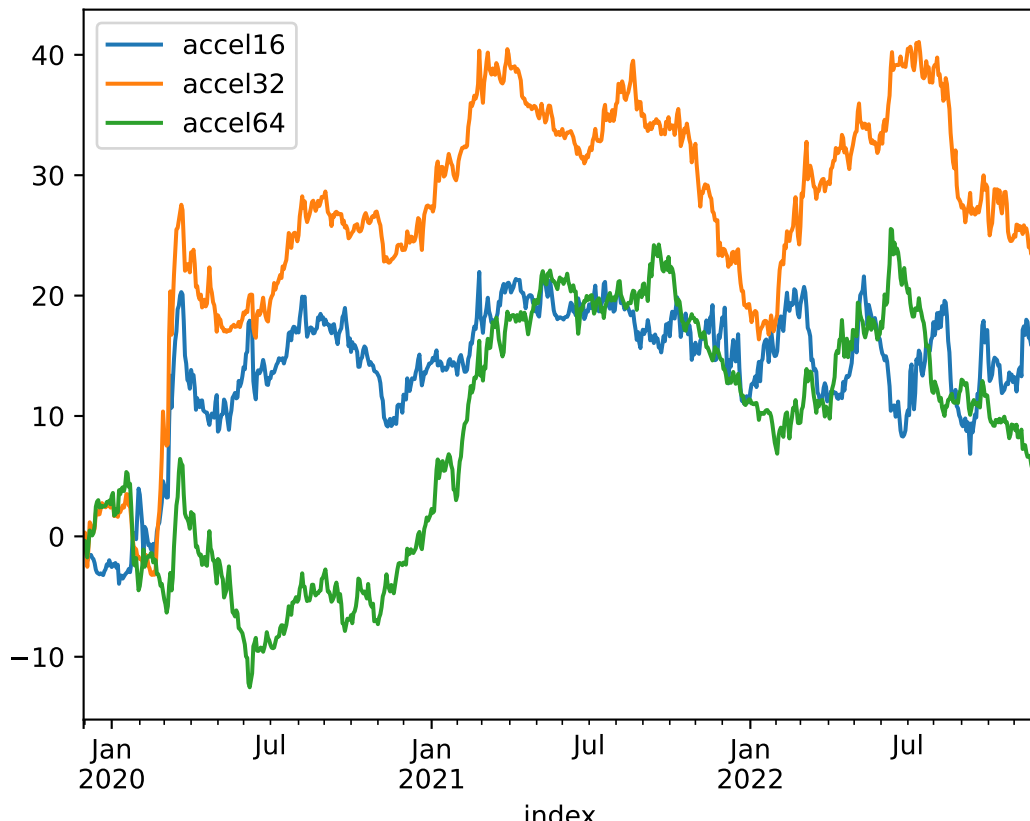
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': 7.748, 'accel32': 4.811, 'accel64': -6.124}
ann. std {'accel16': 16.27, 'accel32': 14.274, 'accel64': 12.022}
ann. SR {'accel16': 0.48, 'accel32': 0.34, 'accel64': -0.51}



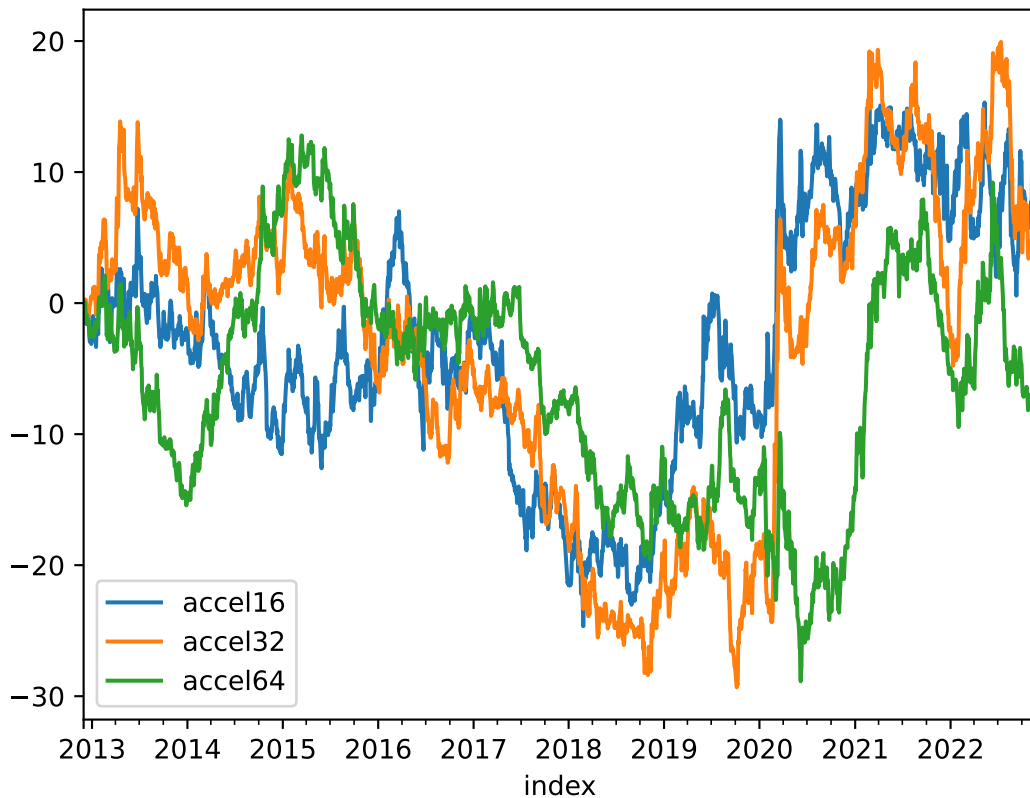
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': 1.512, 'accel32': 0.377, 'accel64': -9.345}
ann. std {'accel16': 16.759, 'accel32': 14.013, 'accel64': 11.623}
ann. SR {'accel16': 0.09, 'accel32': 0.03, 'accel64': -0.8}



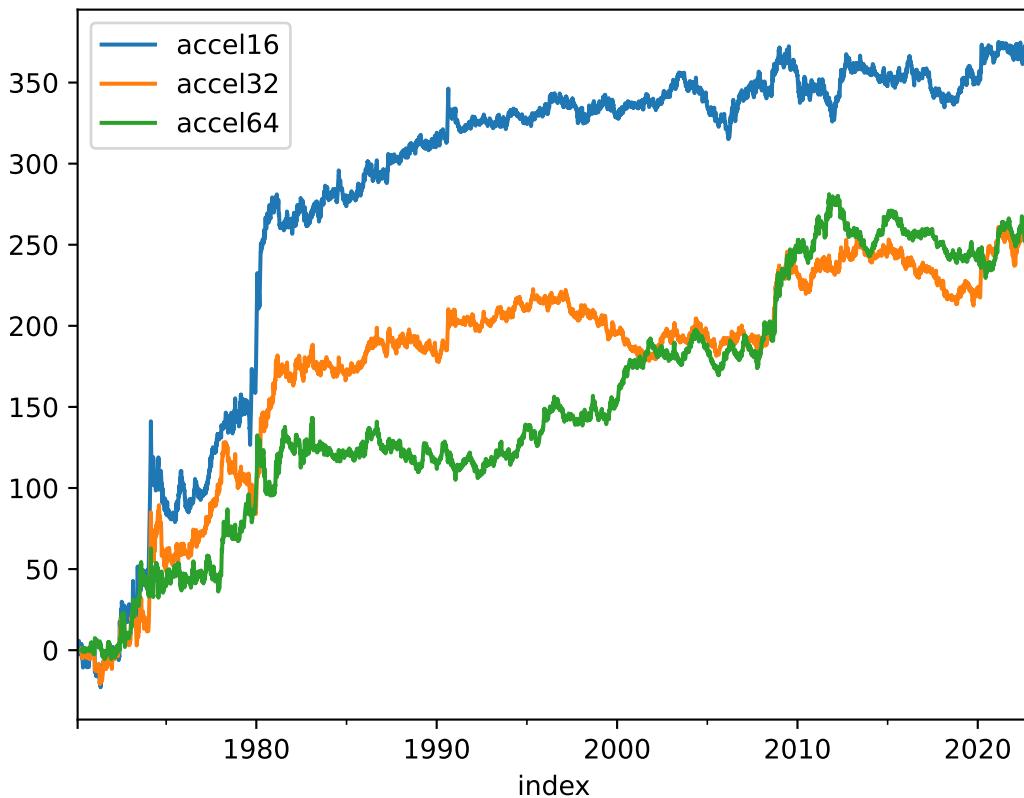
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': 5.98, 'accel32': 7.774, 'accel64': 1.891}
ann. std {'accel16': 14.752, 'accel32': 14.115, 'accel64': 11.806}
ann. SR {'accel16': 0.41, 'accel32': 0.55, 'accel64': 0.16}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 1.174, 'accel32': 0.253, 'accel64': -1.037}
ann. std {'accel16': 11.855, 'accel32': 11.088, 'accel64': 9.574}
ann. SR {'accel16': 0.1, 'accel32': 0.02, 'accel64': -0.11}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.899, 'accel32': 4.54, 'accel64': 4.604}
ann. std {'accel16': 15.73, 'accel32': 13.793, 'accel64': 13.336}
ann. SR {'accel16': 0.44, 'accel32': 0.33, 'accel64': 0.35}

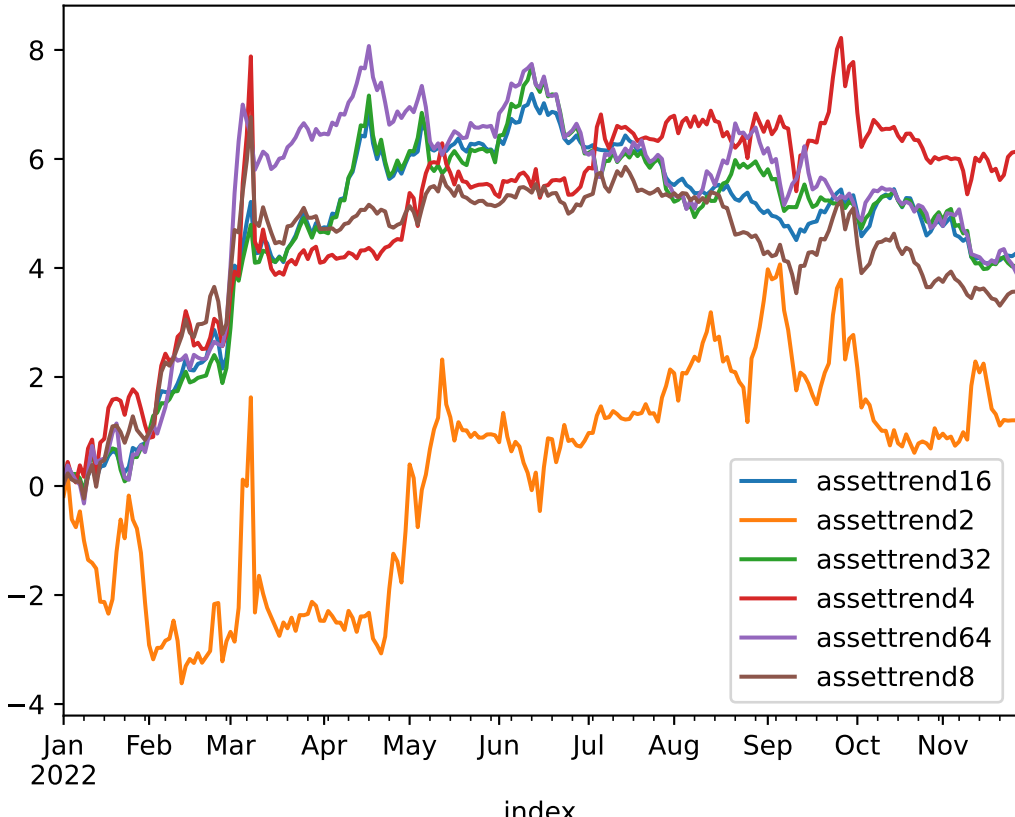


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': 4.649, 'assettrend2': 1.313, 'assettrend32': 4.406, 'assettrend4': 6.682, 'assettrend64': 4.269, 'assettrend8': 3.886}

ann. std {'assettrend16': 3.156, 'assettrend2': 8.013, 'assettrend32': 3.482, 'assettrend4': 5.99, 'assettrend64': 4.111, 'assettrend8': 3.919}

ann. SR {'assettrend16': 1.47, 'assettrend2': 0.16, 'assettrend32': 1.27, 'assettrend4': 1.12, 'assettrend64': 1.04, 'assettrend8': 0.99}

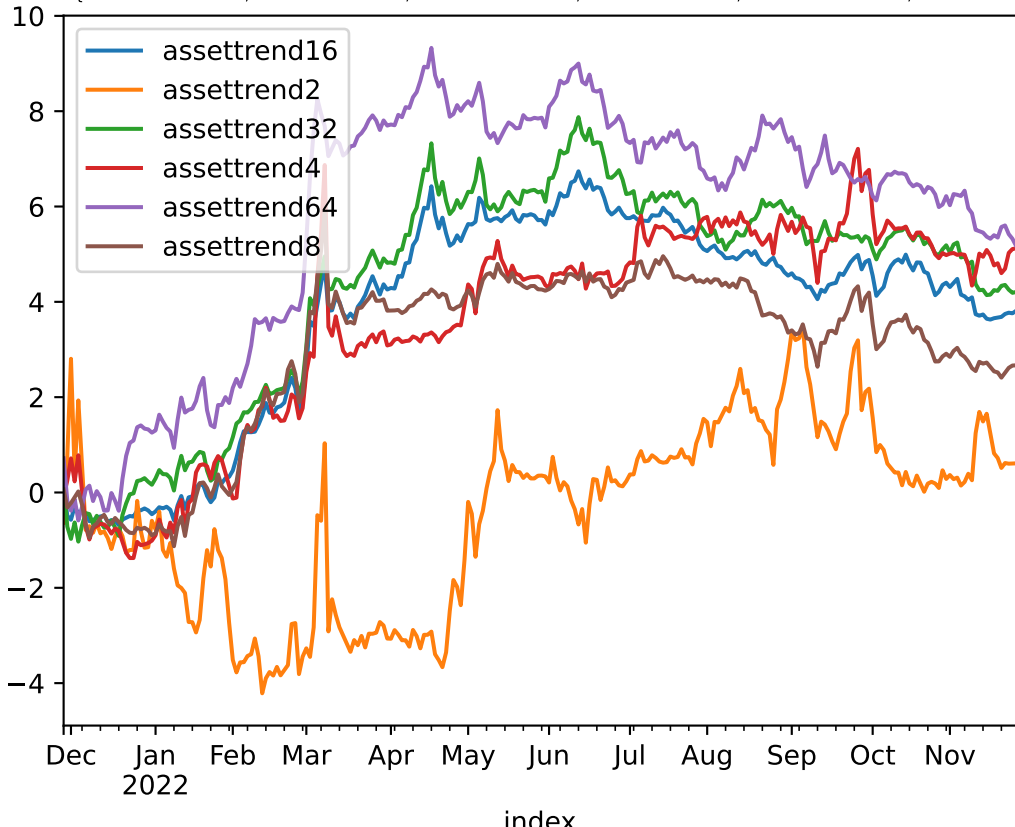


Total Trading Rule P&L for period '1Y'

ann. mean {'assettrend16': 3.753, 'assettrend2': 0.602, 'assettrend32': 4.142, 'assettrend4': 5.044, 'assettrend64': 5.095, 'assettrend8': 2.627}

ann. std {'assettrend16': 3.103, 'assettrend2': 8.86, 'assettrend32': 3.58, 'assettrend4': 5.904, 'assettrend64': 4.281, 'assettrend8': 3.817}

ann. SR {'assettrend16': 1.21, 'assettrend2': 0.07, 'assettrend32': 1.16, 'assettrend4': 0.85, 'assettrend64': 1.19, 'assettrend8': 0.69}

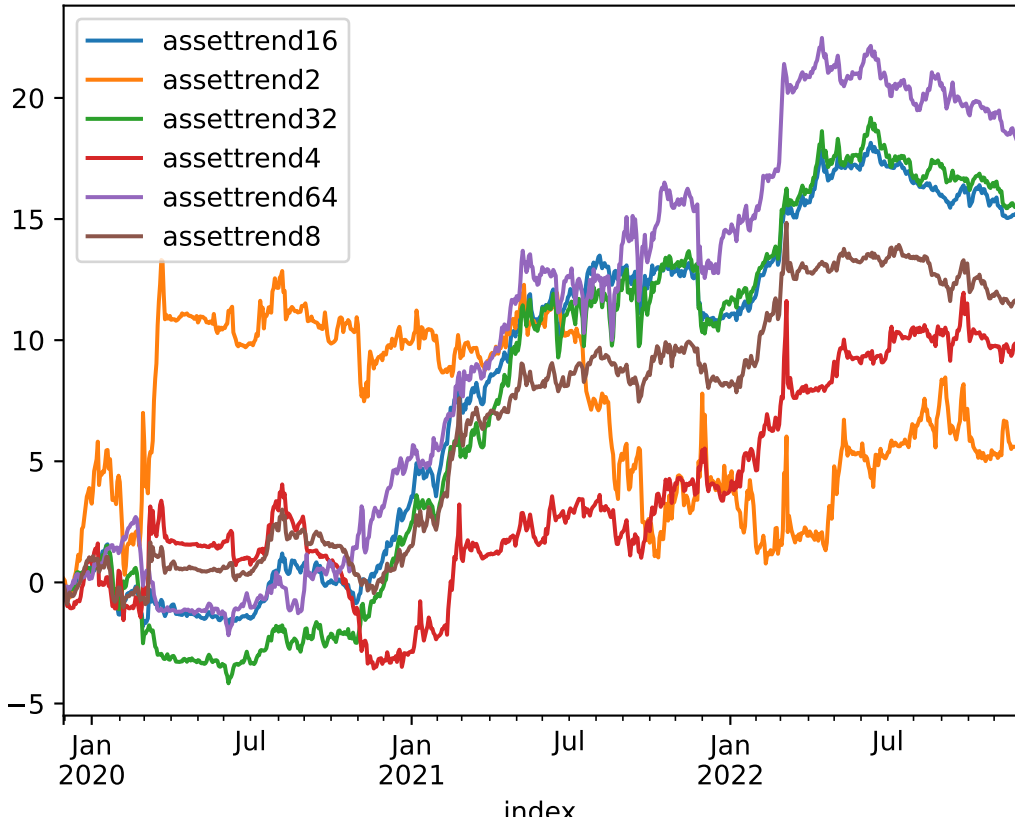


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 4.989, 'assettrend2': 1.836, 'assettrend32': 5.084, 'assettrend4': 3.236, 'assettrend64': 6.007, 'assettrend8': 3.816}

ann. std {'assettrend16': 3.631, 'assettrend2': 7.896, 'assettrend32': 4.439, 'assettrend4': 5.466, 'assettrend64': 5.138, 'assettrend8': 3.774}

ann. SR {'assettrend16': 1.37, 'assettrend2': 0.23, 'assettrend32': 1.15, 'assettrend4': 0.59, 'assettrend64': 1.17, 'assettrend8': 1.01}

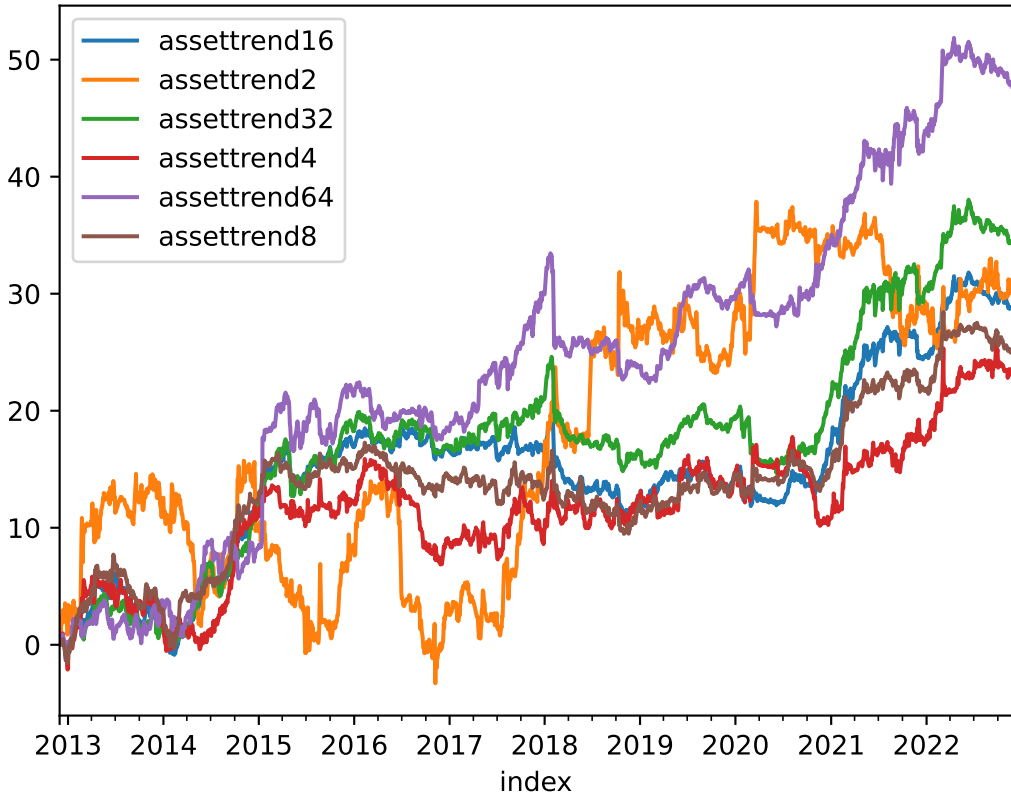


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.836, 'assettrend2': 2.961, 'assettrend32': 3.374, 'assettrend4': 2.316, 'assettrend64': 4.685, 'assettrend8': 2.477}

ann. std {'assettrend16': 3.283, 'assettrend2': 8.478, 'assettrend32': 3.76, 'assettrend4': 5.046, 'assettrend64': 5.307, 'assettrend8': 3.6}

ann. SR {'assettrend16': 0.86, 'assettrend2': 0.35, 'assettrend32': 0.9, 'assettrend4': 0.46, 'assettrend64': 0.88, 'assettrend8': 0.69}

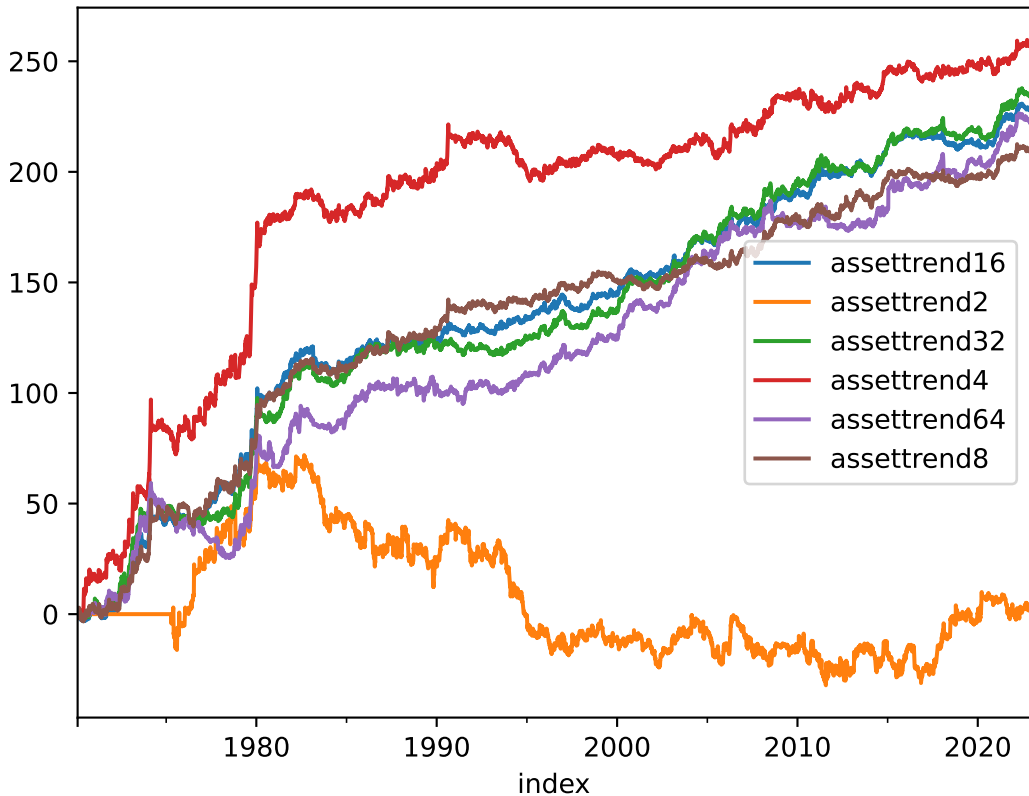


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.235, 'assettrend2': 0.042, 'assettrend32': 4.35, 'assettrend4': 4.786, 'assettrend64': 4.131, 'assettrend8': 3.889}

ann. std {'assettrend16': 4.665, 'assettrend2': 10.059, 'assettrend32': 4.9, 'assettrend4': 7.356, 'assettrend64': 5.474, 'assettrend8': 5.041}

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

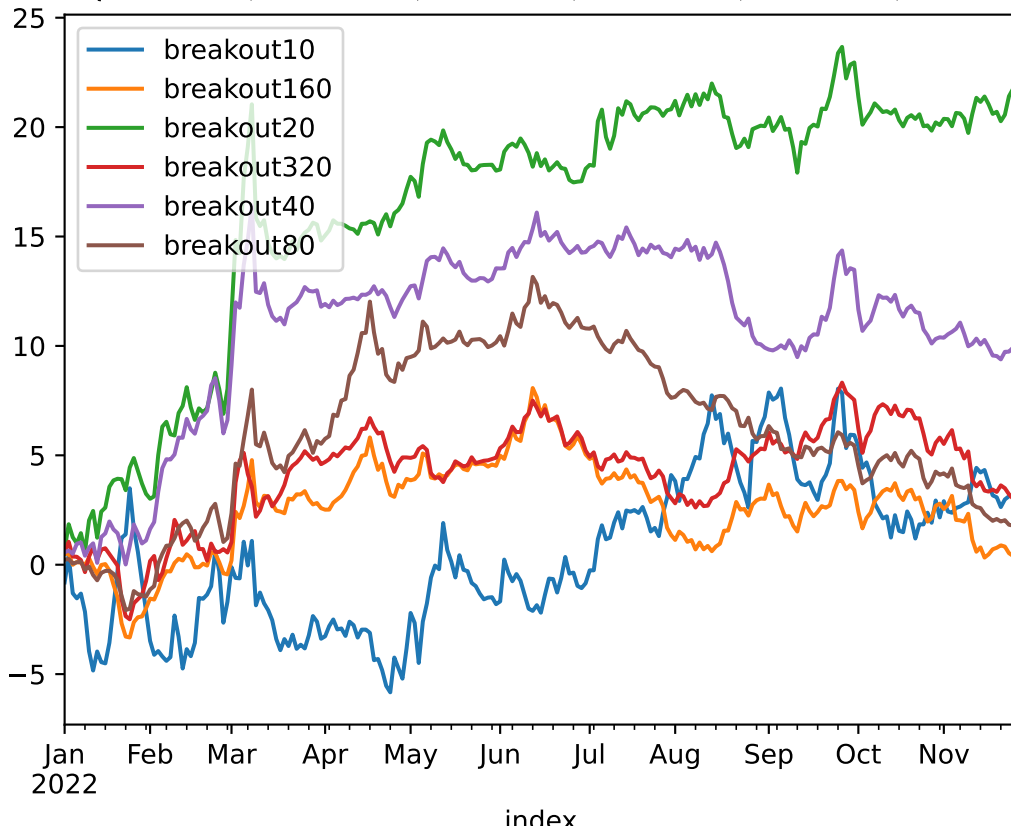


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 3.53, 'breakout160': 0.784, 'breakout20': 23.617, 'breakout320': 3.303, 'breakout40': 10.617, 'breakout80': 2.261}

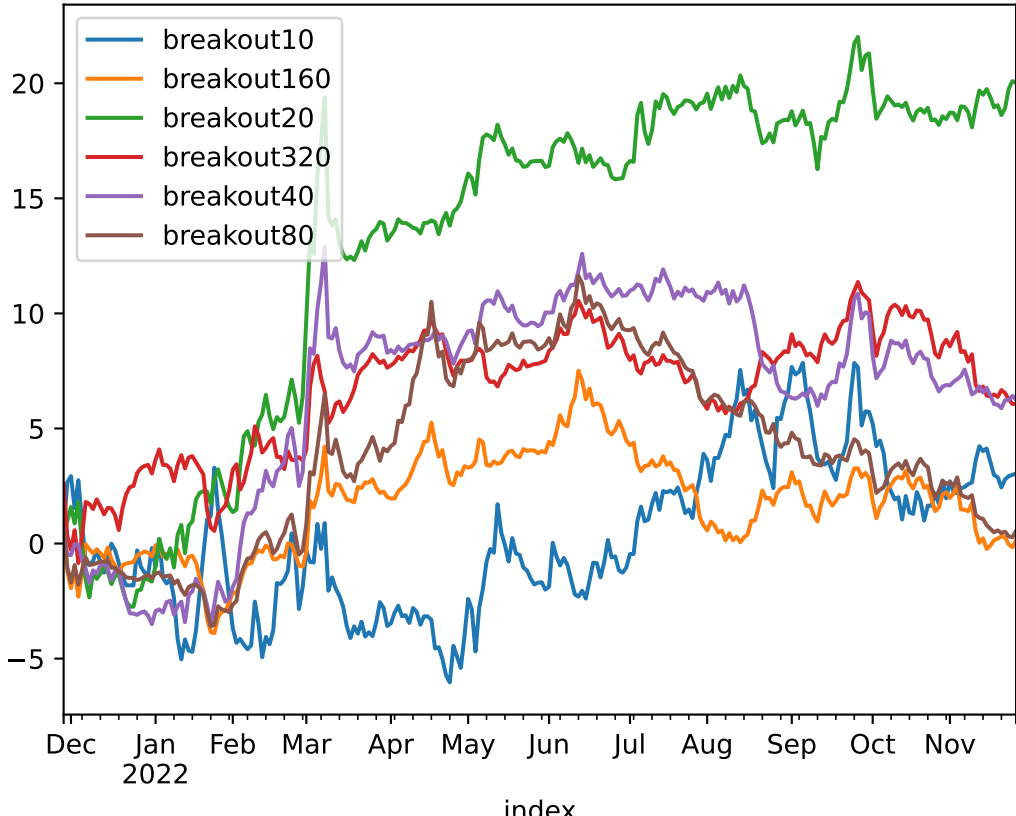
ann. std {'breakout10': 14.079, 'breakout160': 7.387, 'breakout20': 12.466, 'breakout320': 7.679, 'breakout40': 9.845, 'breakout80': 8.1}

ann. SR {'breakout10': 0.25, 'breakout160': 0.11, 'breakout20': 1.89, 'breakout320': 0.43, 'breakout40': 1.08, 'breakout80': 0.28}



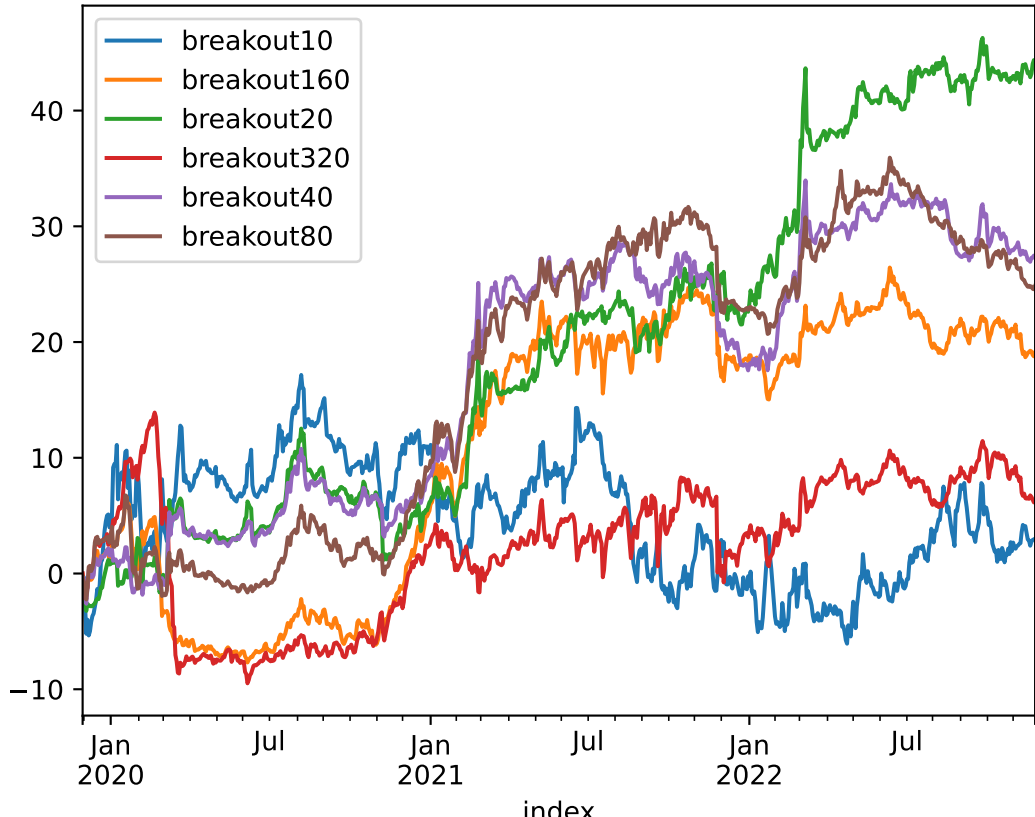
Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 2.995, 'breakout160': 0.153, 'breakout20': 19.72, 'breakout320': 5.983, 'breakout40': 6.146, 'breakout80': 0.547}
 ann. std {'breakout10': 14.15, 'breakout160': 7.713, 'breakout20': 12.358, 'breakout320': 8.632, 'breakout40': 9.636, 'breakout80': 8.087}
 ann. SR {'breakout10': 0.21, 'breakout160': 0.02, 'breakout20': 1.6, 'breakout320': 0.69, 'breakout40': 0.64, 'breakout80': 0.07}



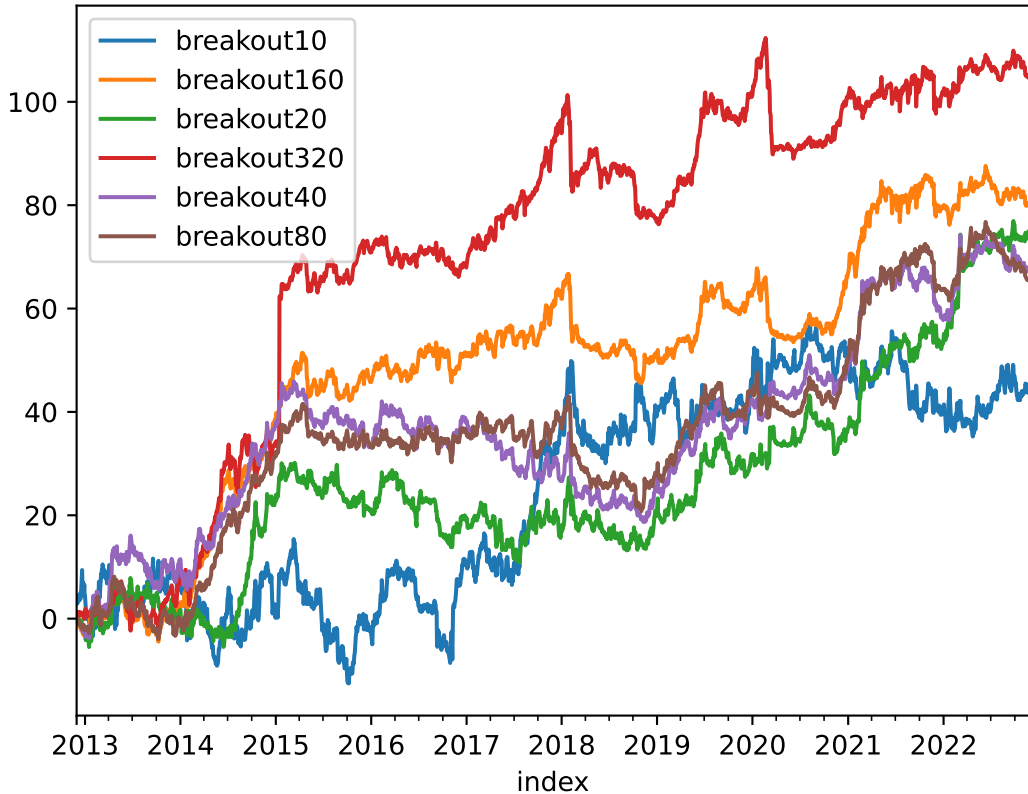
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': 0.987, 'breakout160': 6.255, 'breakout20': 14.518, 'breakout320': 2.018, 'breakout40': 8.947, 'breakout80': 8.145}
ann. std {'breakout10': 15.246, 'breakout160': 9.832, 'breakout20': 11.545, 'breakout320': 10.871, 'breakout40': 10.045, 'breakout80': 9.729}
ann. SR {'breakout10': 0.06, 'breakout160': 0.64, 'breakout20': 1.26, 'breakout320': 0.19, 'breakout40': 0.89, 'breakout80': 0.84}



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

ann. mean {'breakout10': 4.35, 'breakout160': 7.88, 'breakout20': 7.36, 'breakout320': 10.273, 'breakout40': 6.63, 'breakout80': 6.45}
ann. std {'breakout10': 15.796, 'breakout160': 9.147, 'breakout20': 11.211, 'breakout320': 13.348, 'breakout40': 9.834, 'breakout80': 9.018}
ann. SR {'breakout10': 0.28, 'breakout160': 0.86, 'breakout20': 0.66, 'breakout320': 0.77, 'breakout40': 0.67, 'breakout80': 0.72}

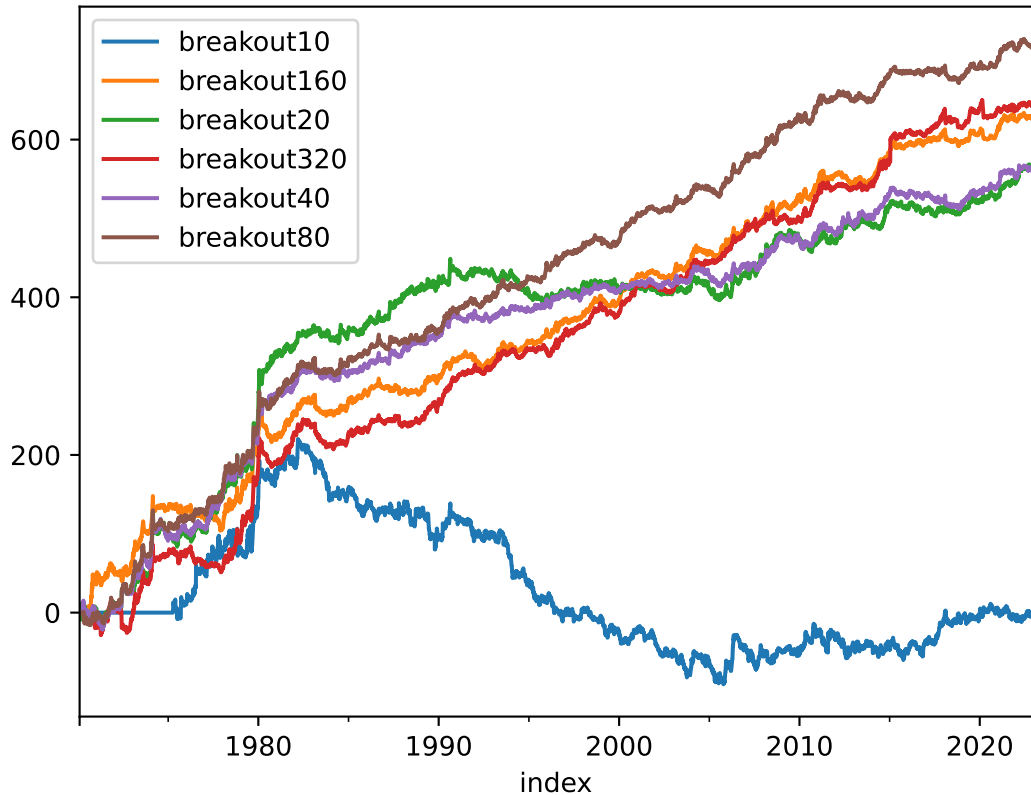


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.054, 'breakout160': 11.643, 'breakout20': 10.529, 'breakout320': 11.937, 'breakout40': 10.419, 'breakout80': 13.314}

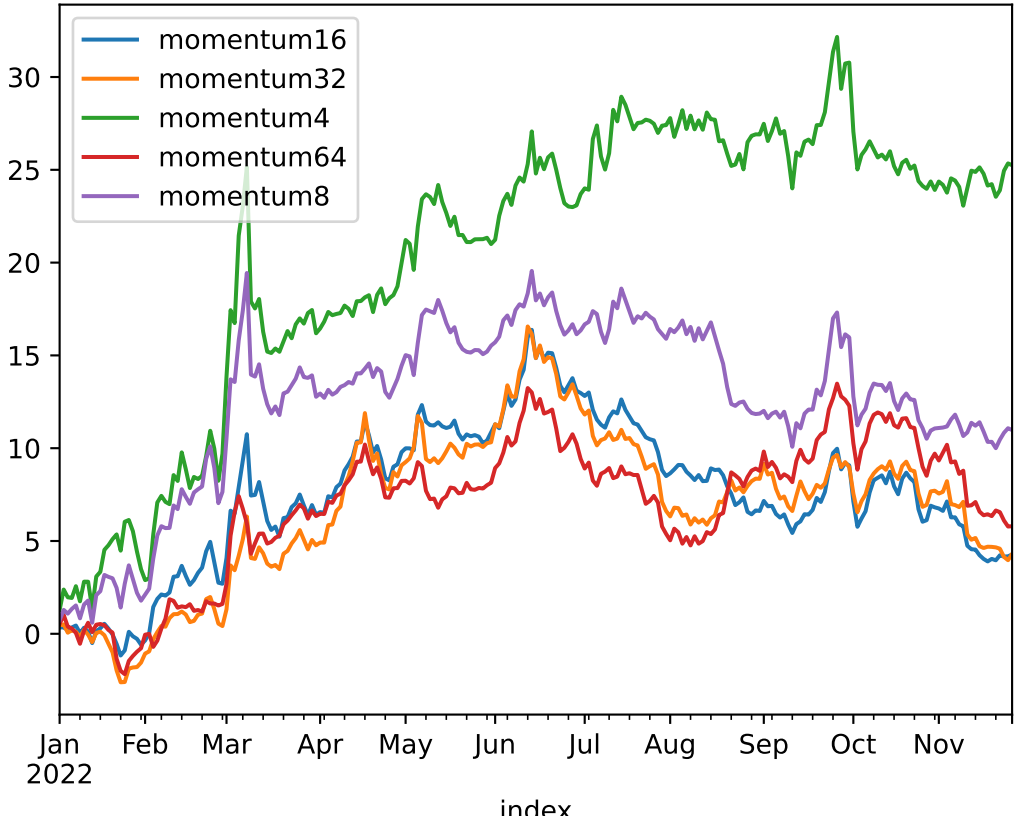
ann. std {'breakout10': 20.853, 'breakout160': 12.509, 'breakout20': 16.116, 'breakout320': 13.062, 'breakout40': 13.244, 'breakout80': 12.767}

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



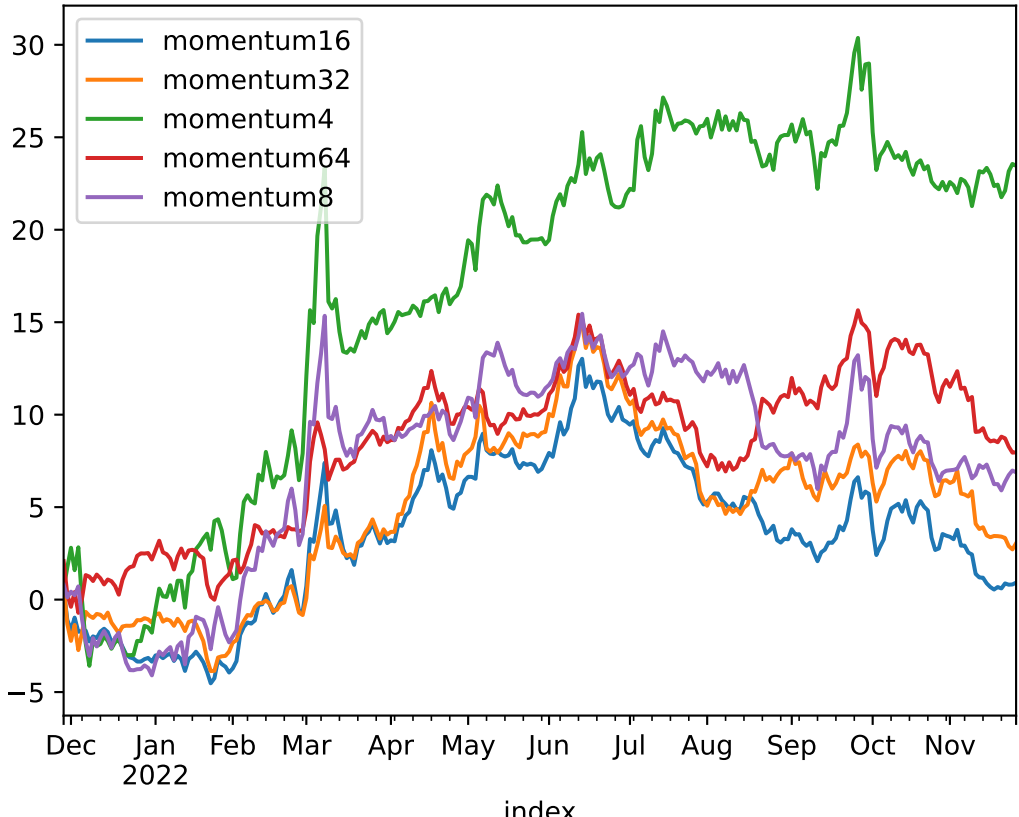
Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 4.654, 'momentum32': 4.683, 'momentum4': 27.502, 'momentum64': 6.313, 'momentum8': 11.96}
ann. std {'momentum16': 10.384, 'momentum32': 10.06, 'momentum4': 17.848, 'momentum64': 9.661, 'momentum8': 13.61}
ann. SR {'momentum16': 0.45, 'momentum32': 0.47, 'momentum4': 1.54, 'momentum64': 0.65, 'momentum8': 0.88}



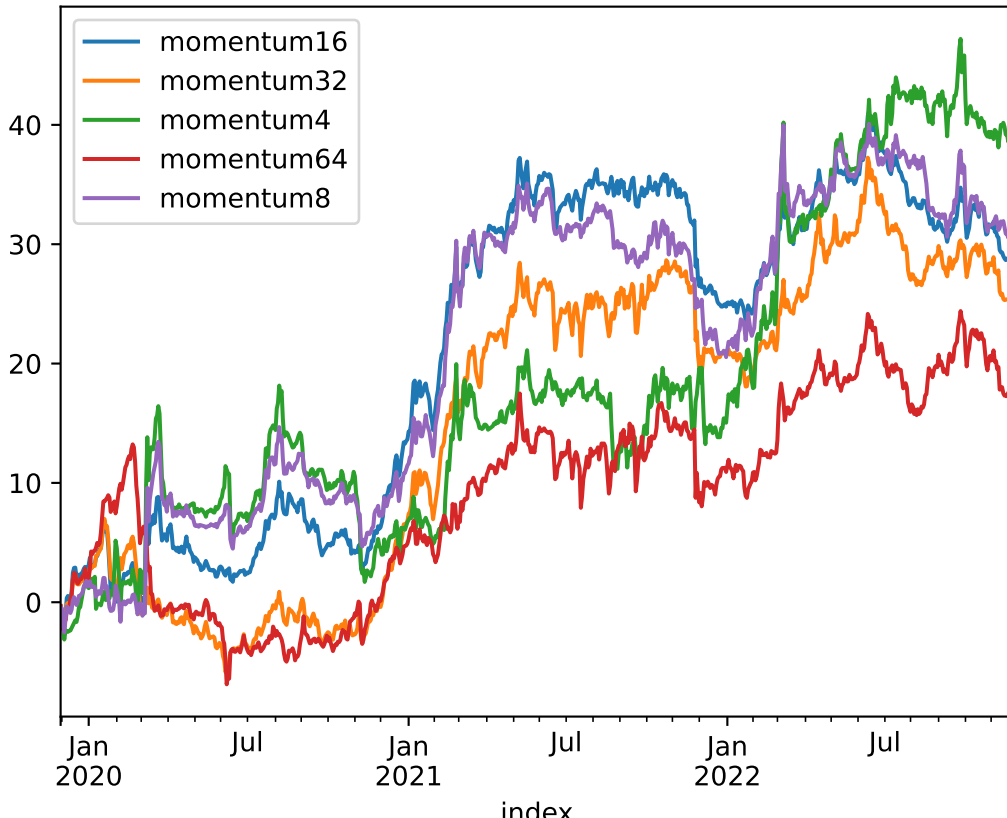
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': 0.903, 'momentum32': 3.001, 'momentum4': 23.096, 'momentum64': 7.84, 'momentum8': 6.777}
ann. std {'momentum16': 10.167, 'momentum32': 10.138, 'momentum4': 17.703, 'momentum64': 9.916, 'momentum8': 13.349}
ann. SR {'momentum16': 0.09, 'momentum32': 0.3, 'momentum4': 1.3, 'momentum64': 0.79, 'momentum8': 0.51}



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

ann. mean {'momentum16': 9.519, 'momentum32': 8.191, 'momentum4': 13.206, 'momentum64': 5.478, 'momentum8': 10.331}
ann. std {'momentum16': 11.098, 'momentum32': 10.946, 'momentum4': 16.077, 'momentum64': 11.063, 'momentum8': 12.788}
ann. SR {'momentum16': 0.86, 'momentum32': 0.75, 'momentum4': 0.82, 'momentum64': 0.5, 'momentum8': 0.81}

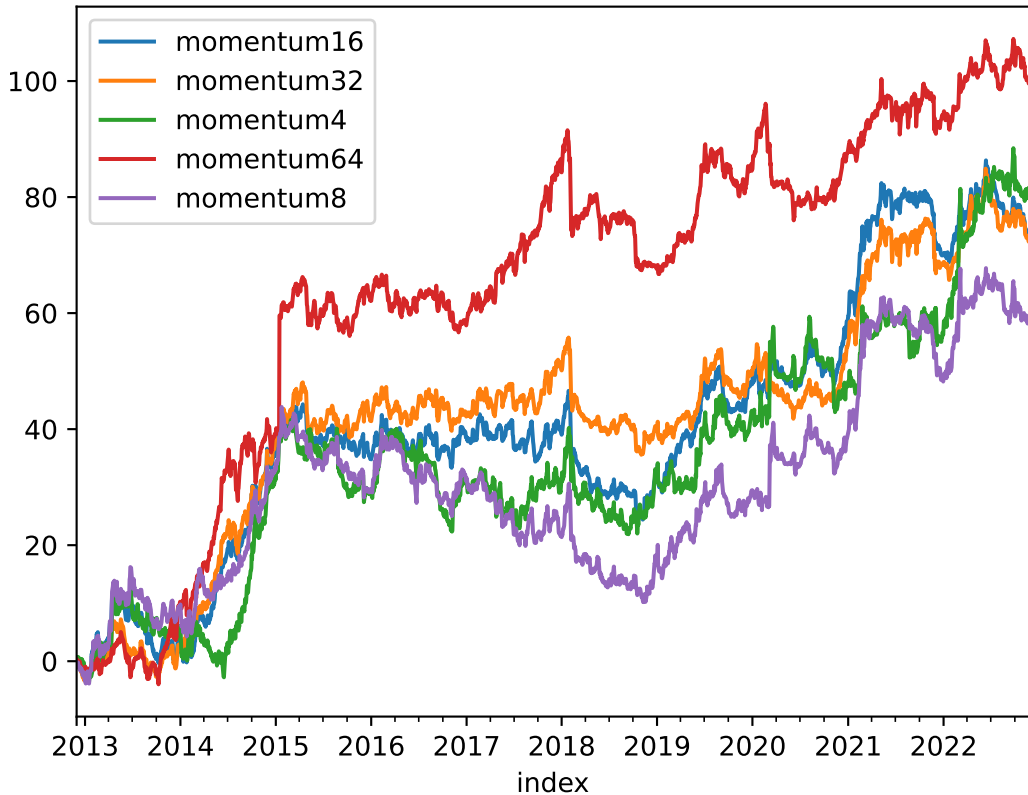


Total Trading Rule P&L for period '10Y'

ann. mean {'momentum16': 7.288, 'momentum32': 7.133, 'momentum4': 8.004, 'momentum64': 9.778, 'momentum8': 5.811}

ann. std {'momentum16': 9.951, 'momentum32': 9.51, 'momentum4': 13.676, 'momentum64': 12.01, 'momentum8': 11.316}

ann. SR {'momentum16': 0.73, 'momentum32': 0.75, 'momentum4': 0.59, 'momentum64': 0.81, 'momentum8': 0.51}

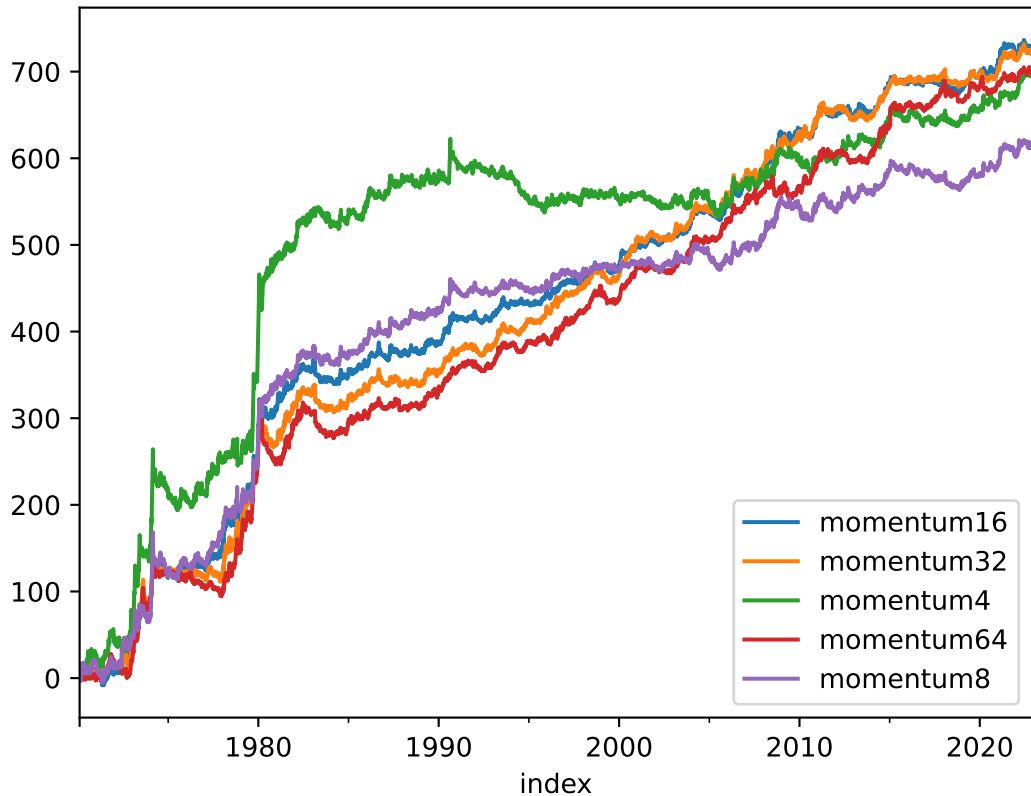


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.461, 'momentum32': 13.371, 'momentum4': 12.942, 'momentum64': 12.961, 'momentum8': 11.381}

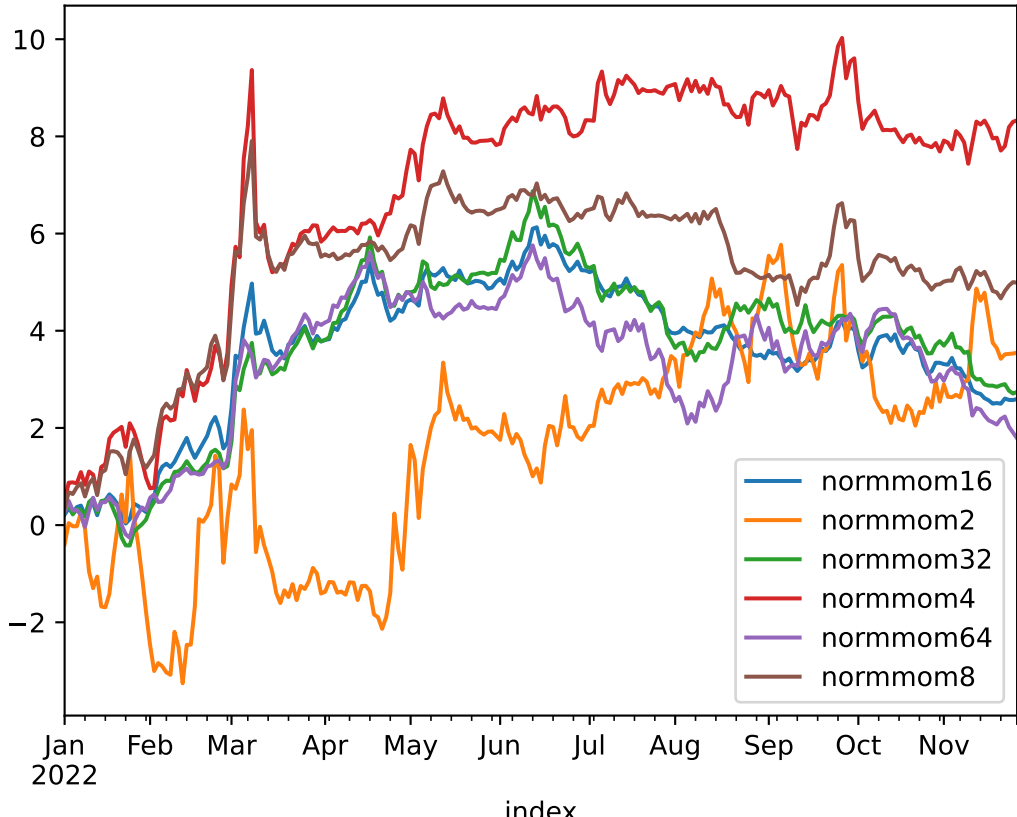
ann. std {'momentum16': 14.235, 'momentum32': 13.867, 'momentum4': 20.094, 'momentum64': 13.502, 'momentum8': 15.885}

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': 2.827, 'normmom2': 3.866, 'normmom32': 2.986, 'normmom4': 9.075, 'normmom64': 1.945, 'normmom8': 5.433}
ann. std {'normmom16': 3.22, 'normmom2': 8.352, 'normmom32': 3.298, 'normmom4': 6.164, 'normmom64': 3.535, 'normmom8': 4.397}
ann. SR {'normmom16': 0.88, 'normmom2': 0.46, 'normmom32': 0.91, 'normmom4': 1.47, 'normmom64': 0.55, 'normmom8': 1.24}

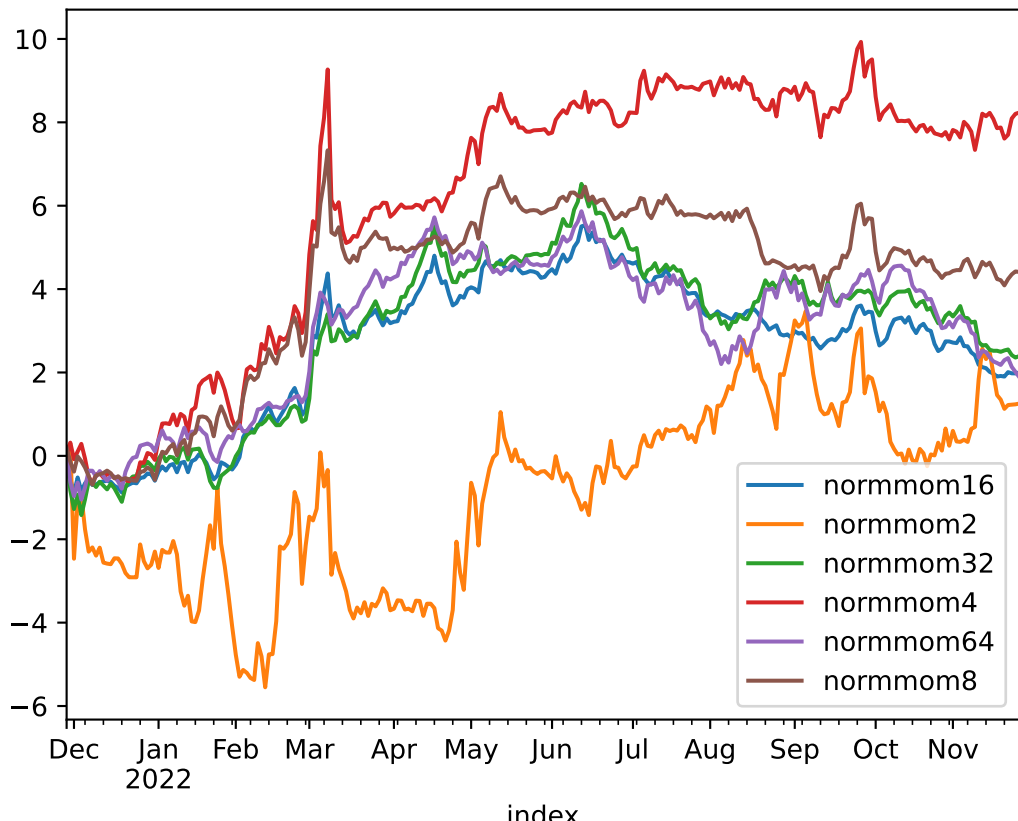


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': 1.968, 'normmom2': 1.234, 'normmom32': 2.355, 'normmom4': 8.106, 'normmom64': 1.867, 'normmom8': 4.343}

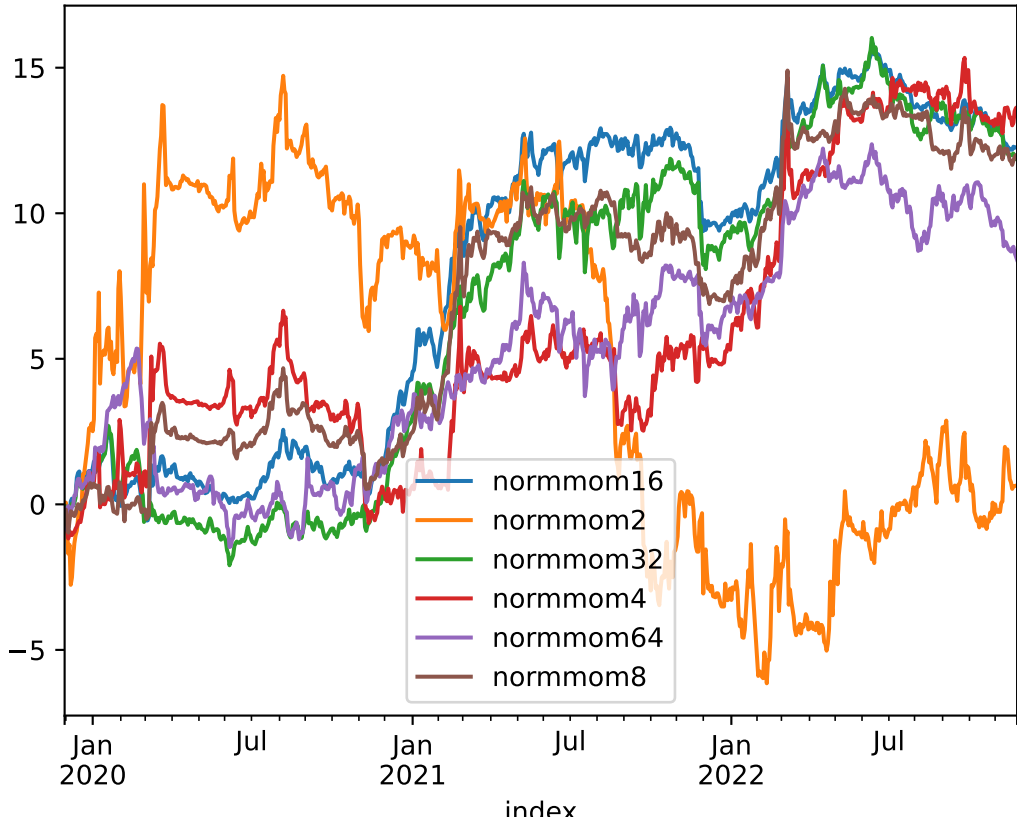
ann. std {'normmom16': 3.219, 'normmom2': 8.643, 'normmom32': 3.447, 'normmom4': 5.943, 'normmom64': 3.588, 'normmom8': 4.26}

ann. SR {'normmom16': 0.61, 'normmom2': 0.14, 'normmom32': 0.68, 'normmom4': 1.36, 'normmom64': 0.52, 'normmom8': 1.02}



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

ann. mean {'normmom16': 4.024, 'normmom2': 0.215, 'normmom32': 3.898, 'normmom4': 4.472, 'normmom64': 2.753, 'normmom8': 3.928}
ann. std {'normmom16': 3.744, 'normmom2': 8.967, 'normmom32': 4.067, 'normmom4': 5.94, 'normmom64': 4.384, 'normmom8': 4.266}
ann. SR {'normmom16': 1.08, 'normmom2': 0.02, 'normmom32': 0.96, 'normmom4': 0.75, 'normmom64': 0.63, 'normmom8': 0.92}

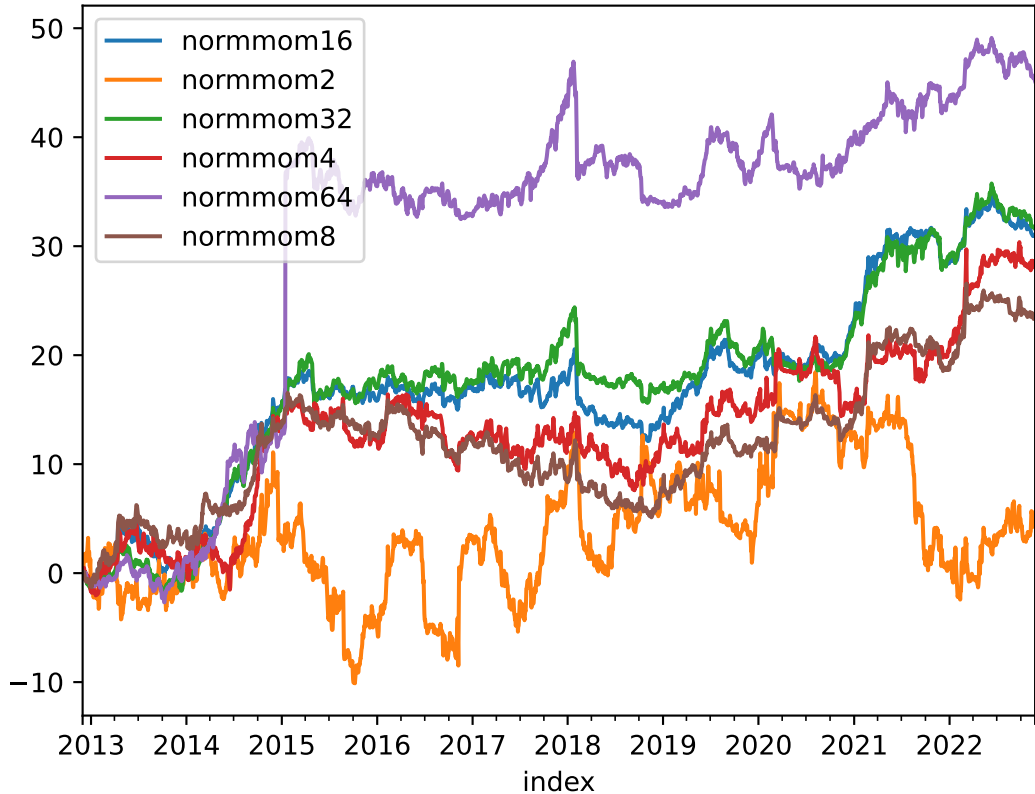


Total Trading Rule P&L for period '10Y'

ann. mean {'normmom16': 3.047, 'normmom2': 0.43, 'normmom32': 3.105, 'normmom4': 2.816, 'normmom64': 4.433, 'normmom8': 2.322}

ann. std {'normmom16': 3.58, 'normmom2': 9.11, 'normmom32': 3.735, 'normmom4': 5.496, 'normmom64': 8.563, 'normmom8': 4.056}

ann. SR {'normmom16': 0.85, 'normmom2': 0.05, 'normmom32': 0.83, 'normmom4': 0.51, 'normmom64': 0.52, 'normmom8': 0.57}

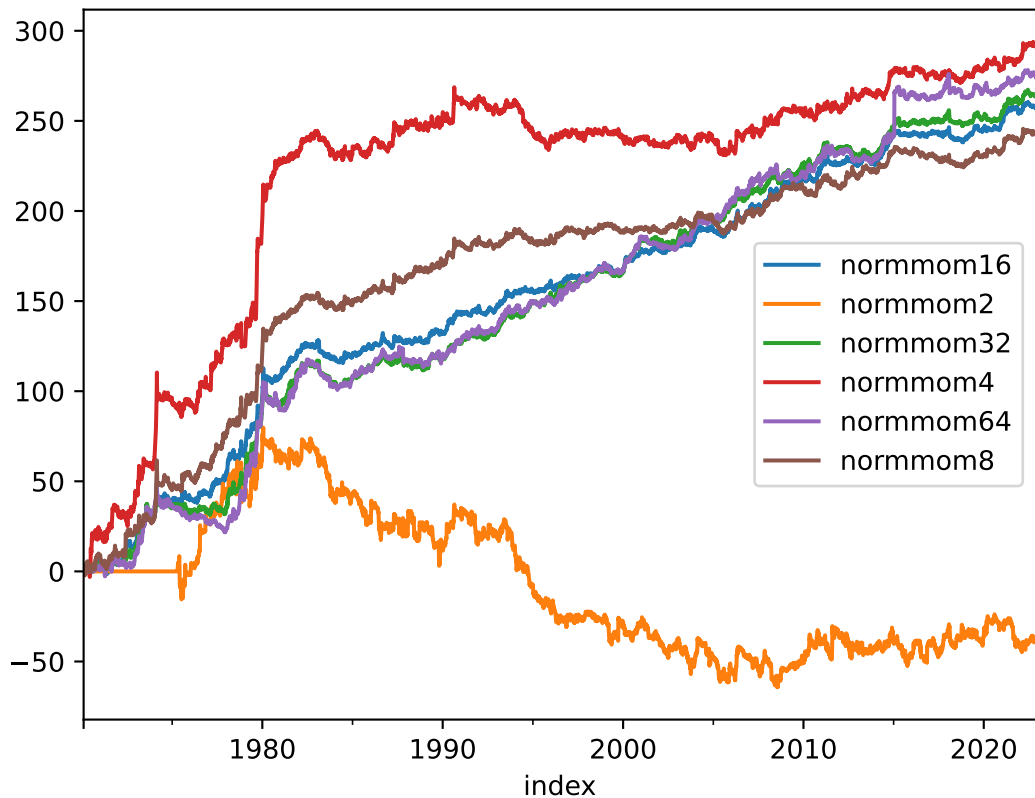


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.775, 'normmom2': -0.703, 'normmom32': 4.889, 'normmom4': 5.427, 'normmom64': 5.095, 'normmom8': 4.51}

ann. std {'normmom16': 4.927, 'normmom2': 11.21, 'normmom32': 4.996, 'normmom4': 8.33, 'normmom64': 6.316, 'normmom8': 5.937}

ann. SR {'normmom16': 0.97, 'normmom2': -0.06, 'normmom32': 0.98, 'normmom4': 0.65, 'normmom64': 0.81, 'normmom8': 0.76}

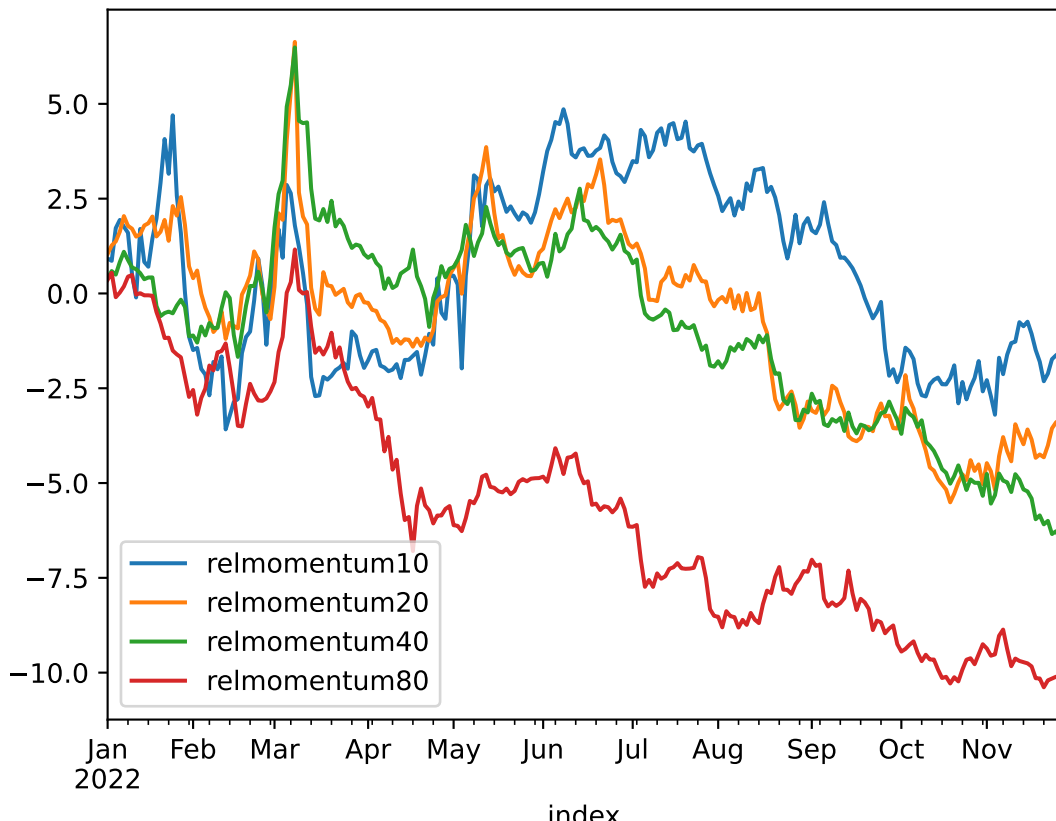


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -1.691, 'relmomentum20': -3.619, 'relmomentum40': -7.036, 'relmomentum80': -11.068}

ann. std {'relmomentum10': 10.359, 'relmomentum20': 8.695, 'relmomentum40': 6.726, 'relmomentum80': 5.785}

ann. SR {'relmomentum10': -0.16, 'relmomentum20': -0.42, 'relmomentum40': -1.05, 'relmomentum80': -1.91}

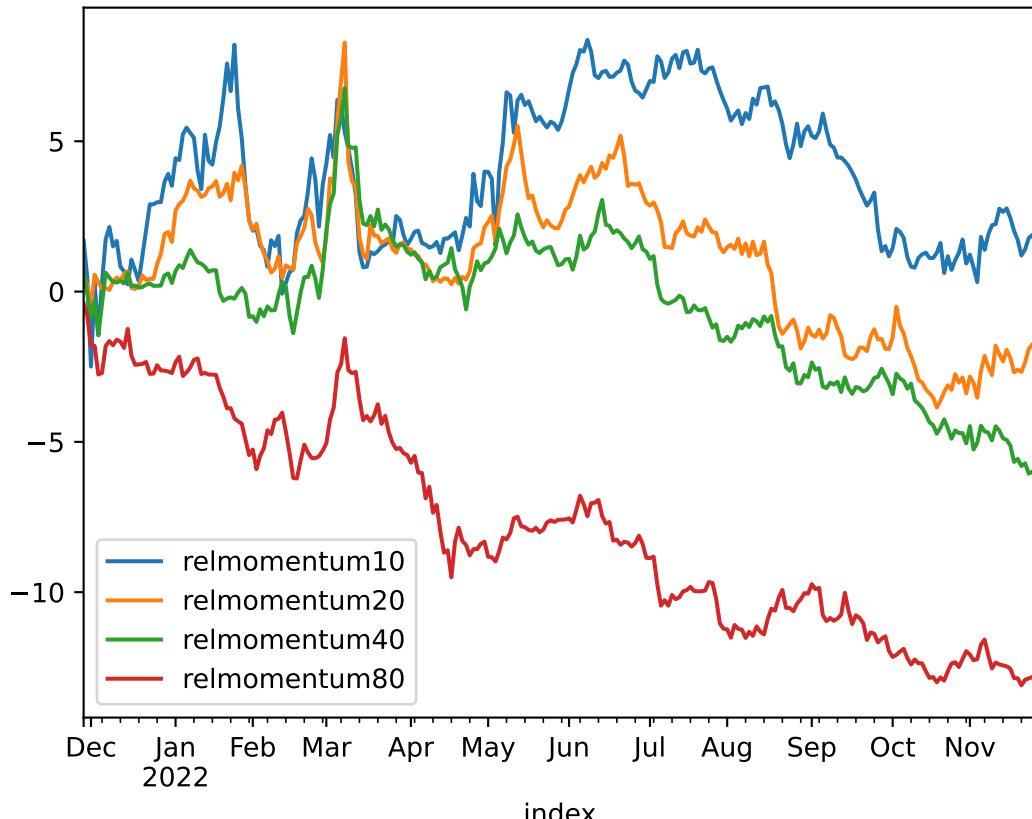


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': 1.932, 'relmomentum20': -1.648, 'relmomentum40': -6.077, 'relmomentum80': -12.674}

ann. std {'relmomentum10': 11.432, 'relmomentum20': 8.484, 'relmomentum40': 6.843, 'relmomentum80': 5.891}

ann. SR {'relmomentum10': 0.17, 'relmomentum20': -0.19, 'relmomentum40': -0.89, 'relmomentum80': -2.15}

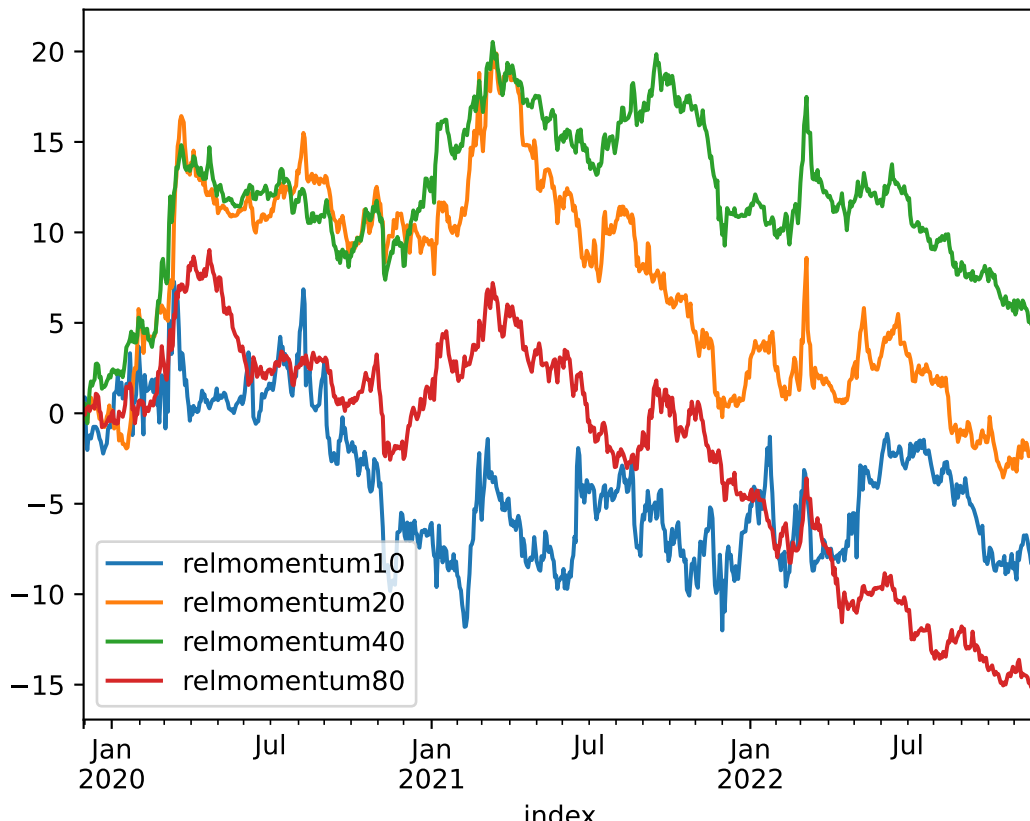


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -2.473, 'relmomentum20': -0.447, 'relmomentum40': 1.489, 'relmomentum80': -4.89}

ann. std {'relmomentum10': 12.801, 'relmomentum20': 9.071, 'relmomentum40': 7.496, 'relmomentum80': 6.965}

ann. SR {'relmomentum10': -0.19, 'relmomentum20': -0.05, 'relmomentum40': 0.2, 'relmomentum80': -0.7}

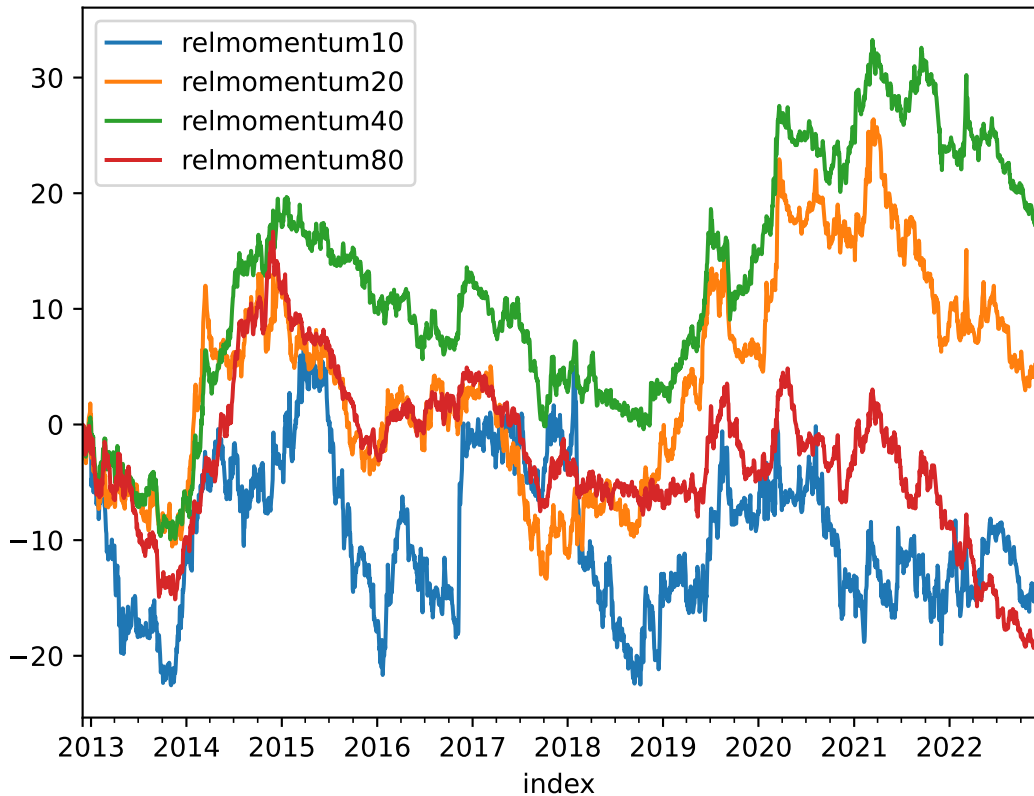


Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -1.428, 'relmomentum20': 0.505, 'relmomentum40': 1.696, 'relmomentum80': -1.875}

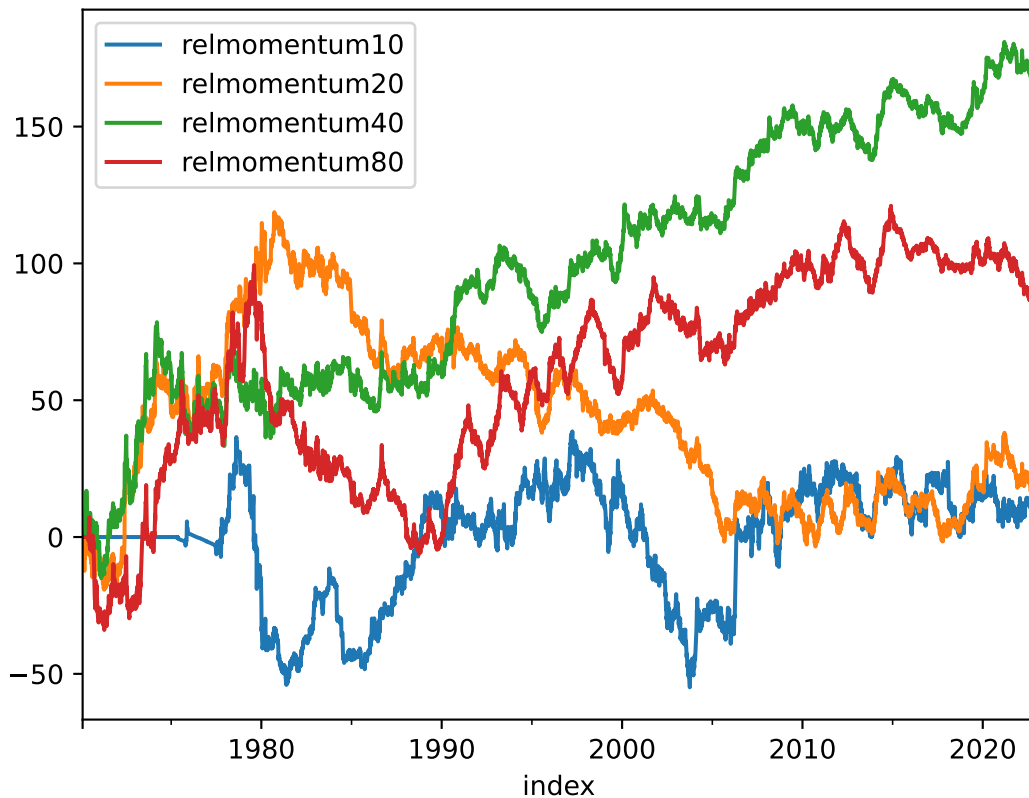
ann. std {'relmomentum10': 13.008, 'relmomentum20': 9.058, 'relmomentum40': 7.388, 'relmomentum80': 6.848}

ann. SR {'relmomentum10': -0.11, 'relmomentum20': 0.06, 'relmomentum40': 0.23, 'relmomentum80': -0.27}

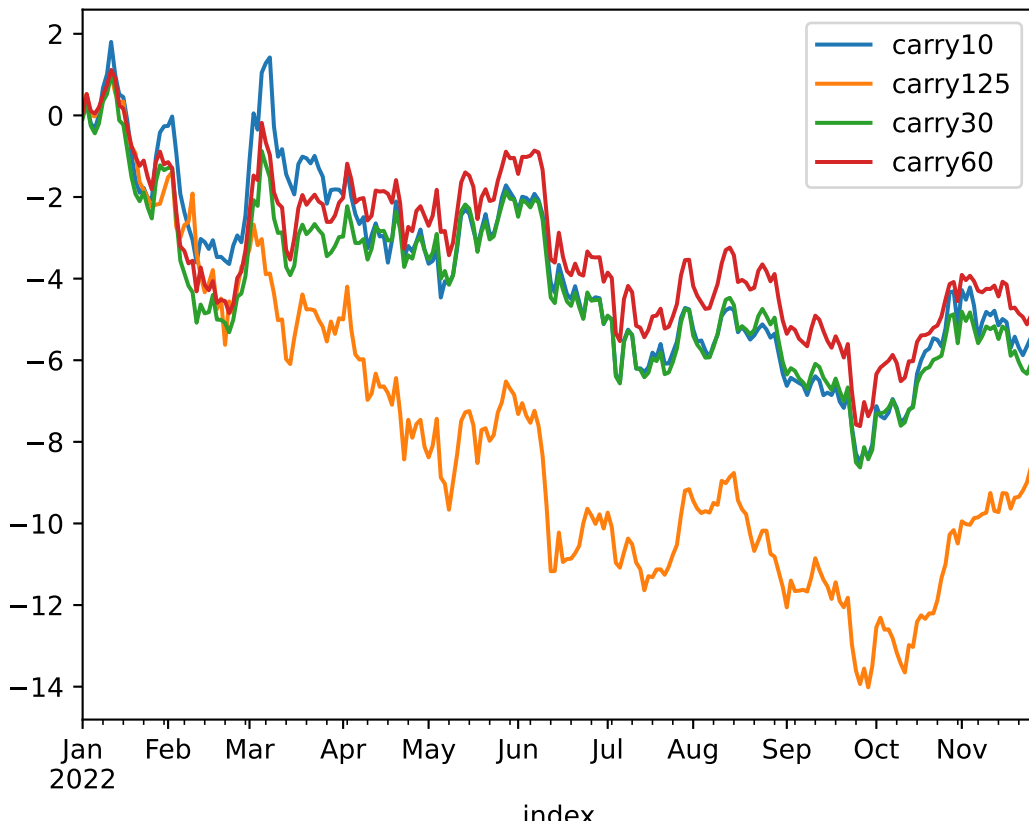


Total Trading Rule P&L for period '99Y'

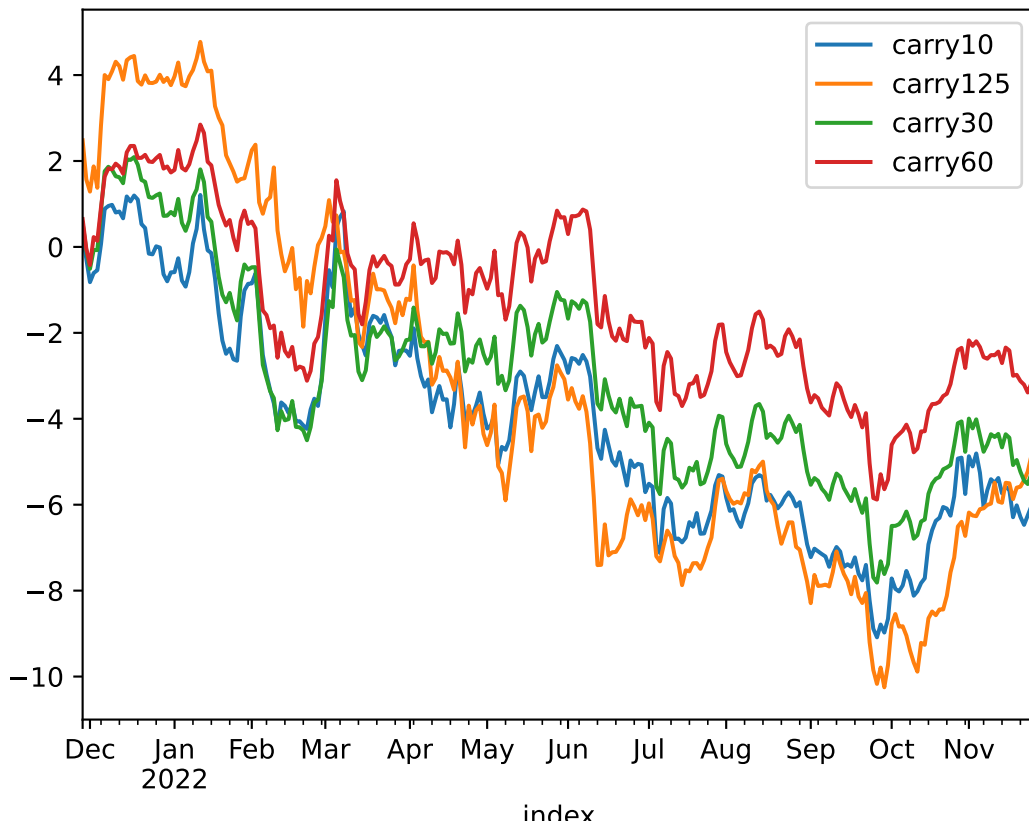
ann. mean {'relmomentum10': 0.148, 'relmomentum20': 0.313, 'relmomentum40': 3.065, 'relmomentum80': 1.585}
ann. std {'relmomentum10': 13.333, 'relmomentum20': 11.534, 'relmomentum40': 10.803, 'relmomentum80': 11.071}
ann. SR {'relmomentum10': 0.01, 'relmomentum20': 0.03, 'relmomentum40': 0.28, 'relmomentum80': 0.14}



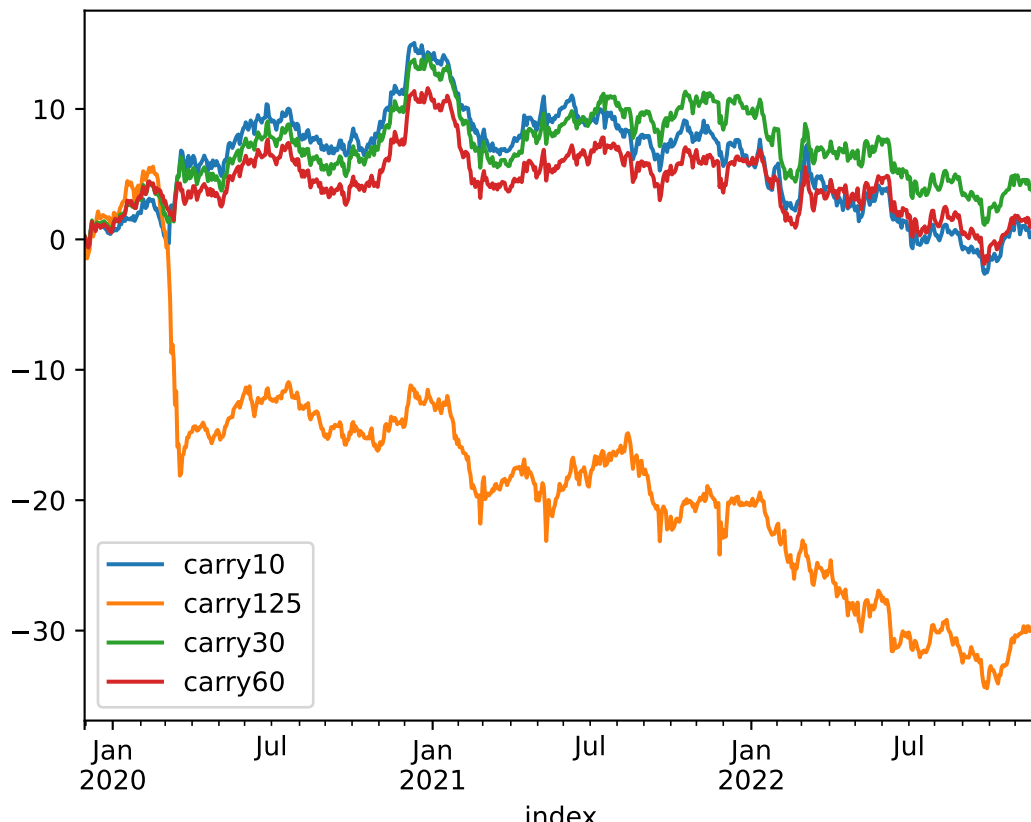
Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': -5.914, 'carry125': -9.455, 'carry30': -6.649, 'carry60': -5.496}
ann. std {'carry10': 7.3, 'carry125': 7.633, 'carry30': 6.838, 'carry60': 6.831}
ann. SR {'carry10': -0.81, 'carry125': -1.24, 'carry30': -0.97, 'carry60': -0.8}



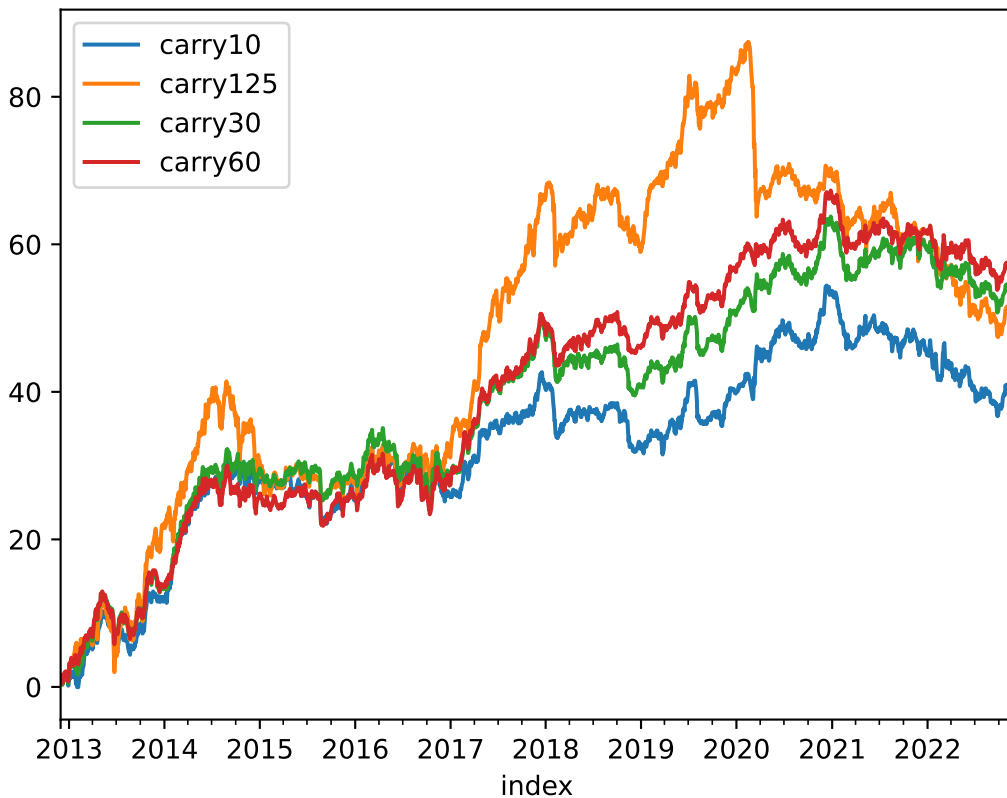
Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -5.928, 'carry125': -4.839, 'carry30': -5.208, 'carry60': -3.26}
ann. std {'carry10': 7.169, 'carry125': 8.05, 'carry30': 6.78, 'carry60': 6.737}
ann. SR {'carry10': -0.83, 'carry125': -0.6, 'carry30': -0.77, 'carry60': -0.48}



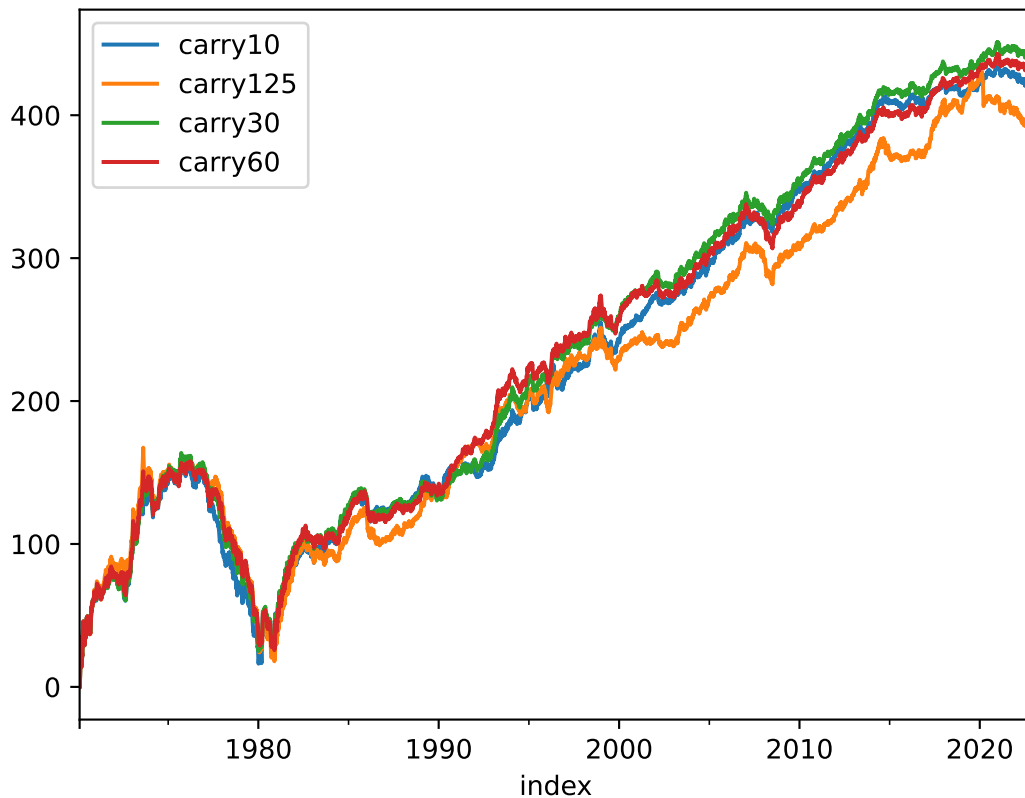
Total Trading Rule P&L for period '3Y'
ann. mean {'carry10': 0.138, 'carry125': -9.535, 'carry30': 1.191, 'carry60': 0.228}
ann. std {'carry10': 6.811, 'carry125': 9.447, 'carry30': 6.612, 'carry60': 6.545}
ann. SR {'carry10': 0.02, 'carry125': -1.01, 'carry30': 0.18, 'carry60': 0.03}



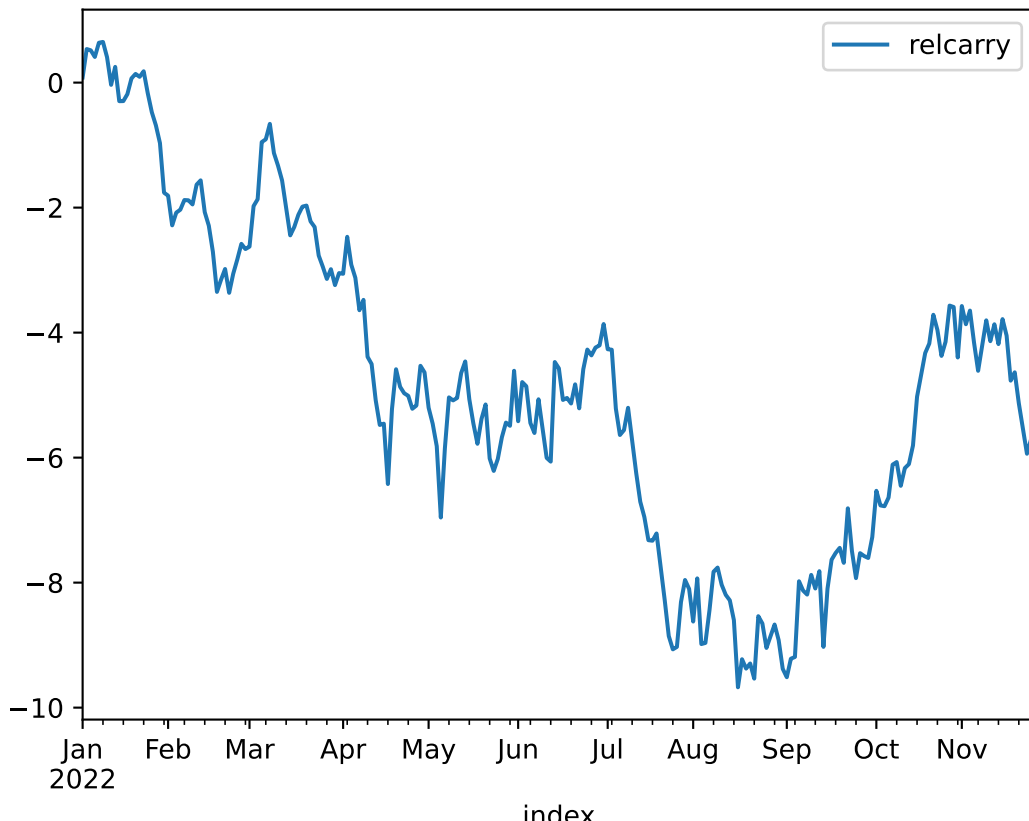
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.906, 'carry125': 5.182, 'carry30': 5.231, 'carry60': 5.537}
ann. std {'carry10': 6.466, 'carry125': 9.126, 'carry30': 6.578, 'carry60': 6.538}
ann. SR {'carry10': 0.6, 'carry125': 0.57, 'carry30': 0.8, 'carry60': 0.85}



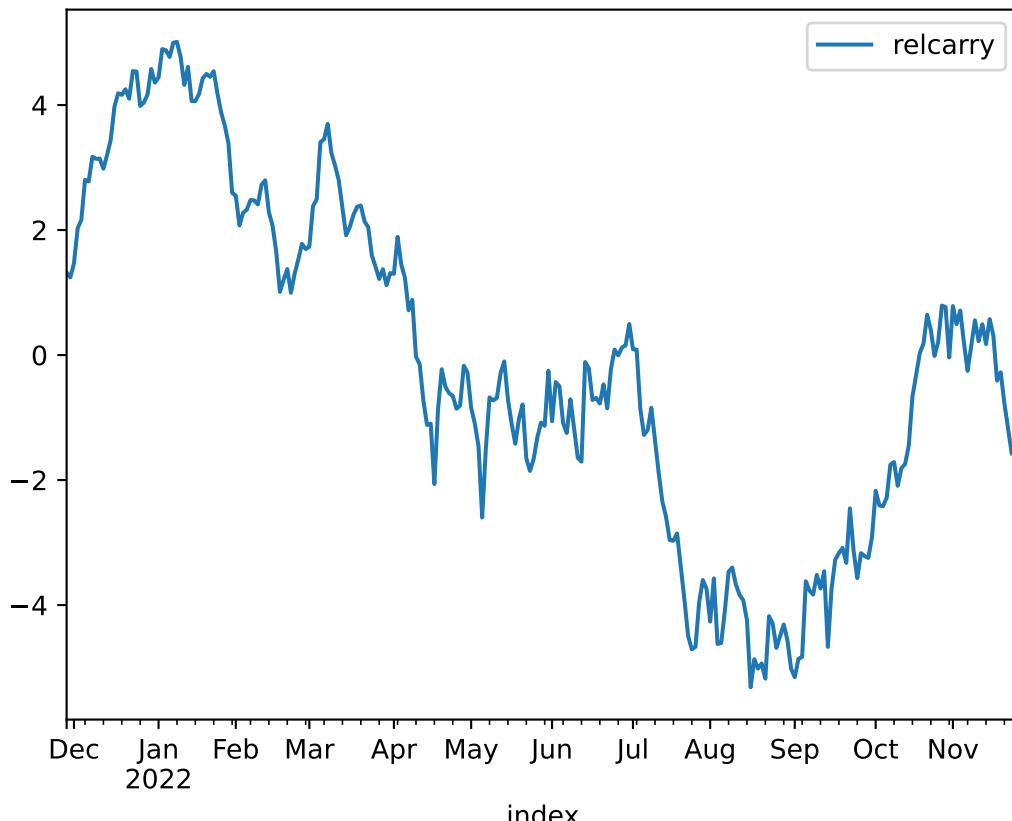
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.834, 'carry125': 7.346, 'carry30': 8.189, 'carry60': 8.024}
ann. std {'carry10': 11.868, 'carry125': 12.107, 'carry30': 11.879, 'carry60': 11.83}
ann. SR {'carry10': 0.66, 'carry125': 0.61, 'carry30': 0.69, 'carry60': 0.68}



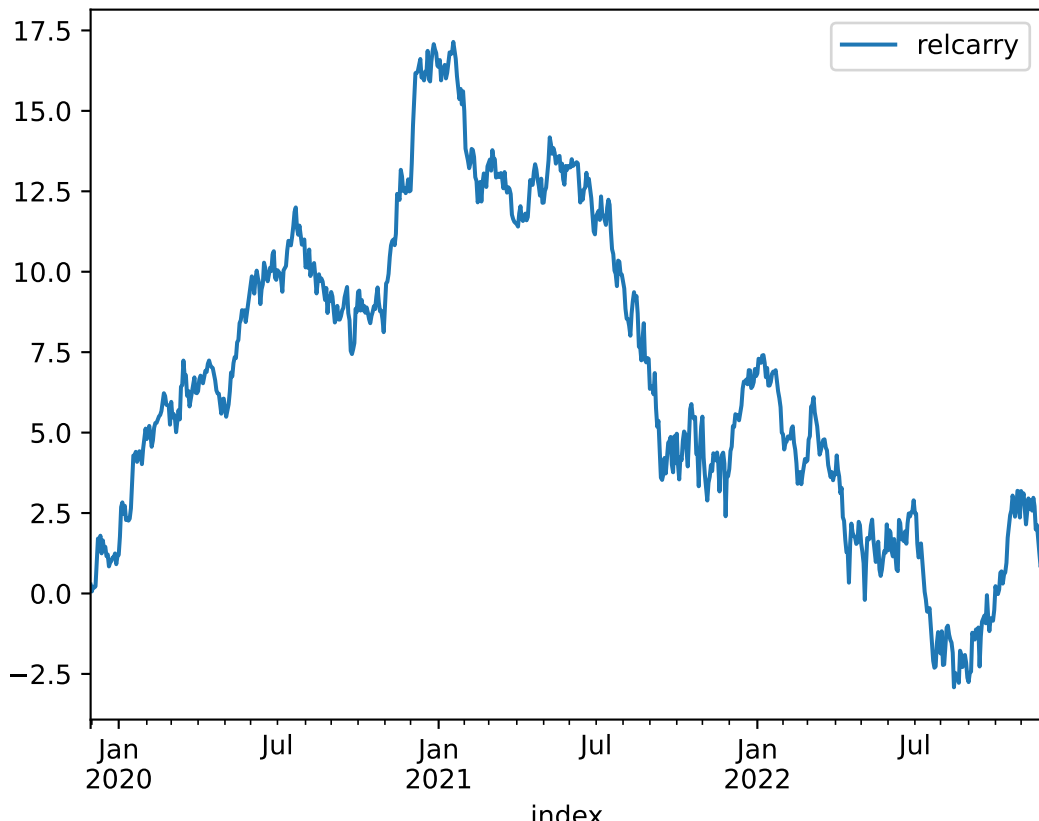
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': -6.167}
ann. std {'relcarry': 7.146}
ann. SR {'relcarry': -0.86}



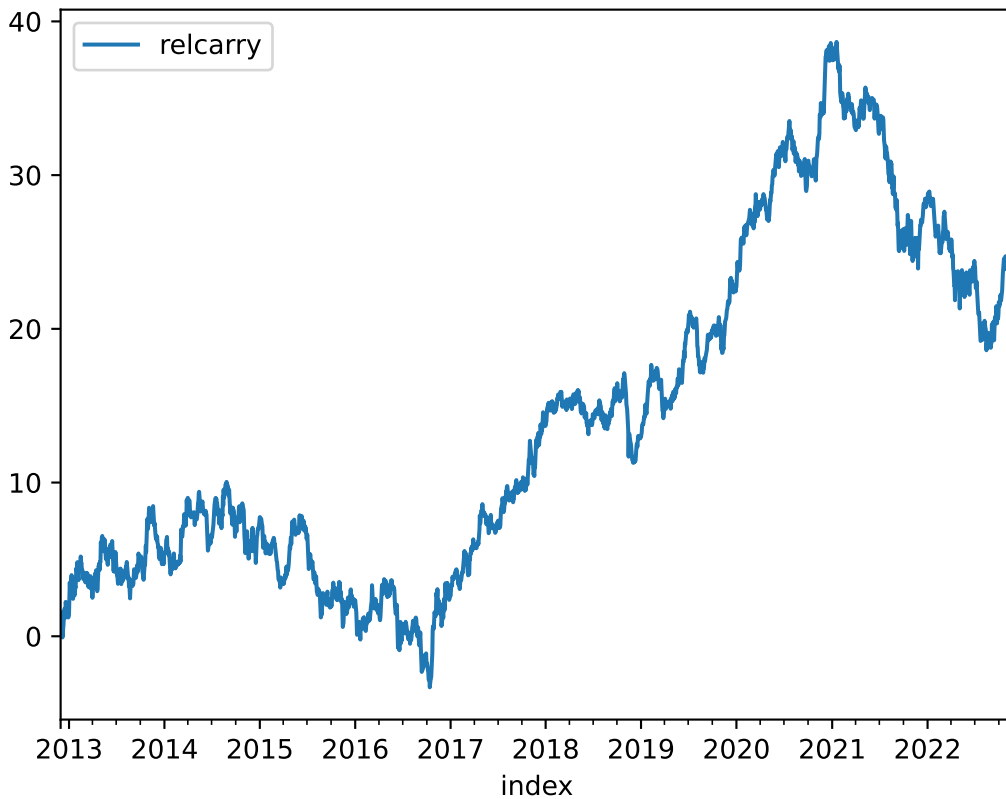
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': -1.282}
ann. std {'relcarry': 7.081}
ann. SR {'relcarry': -0.18}



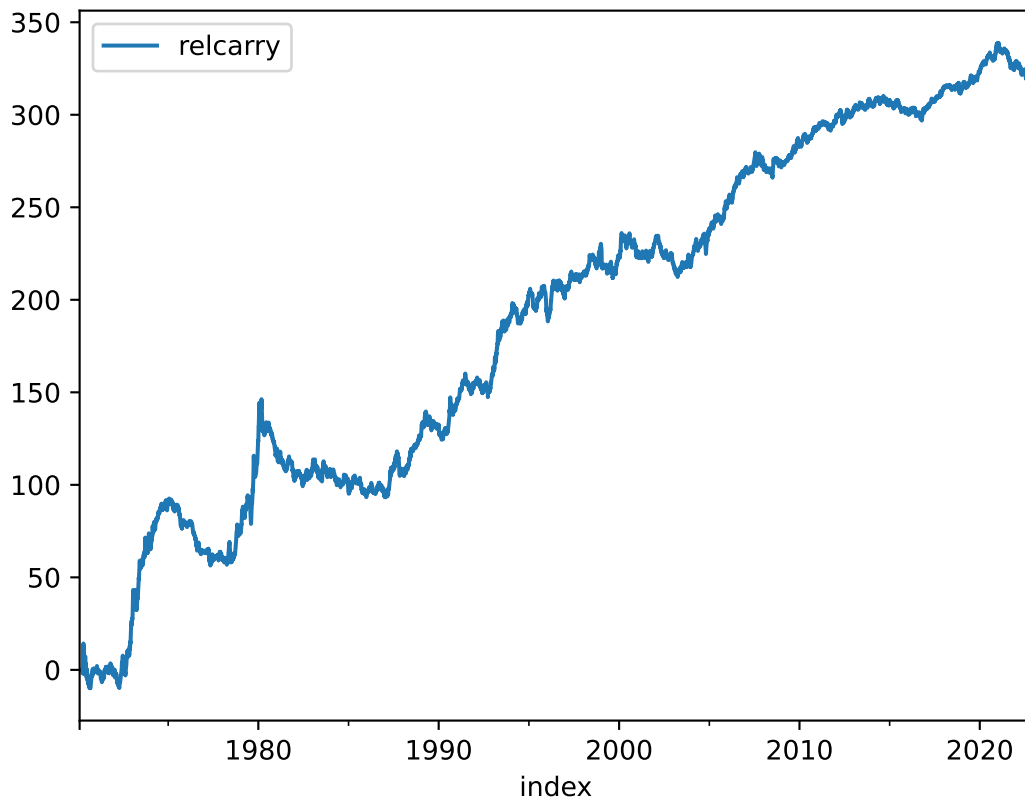
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': 0.36}
ann. std {'relcarry': 6.805}
ann. SR {'relcarry': 0.05}



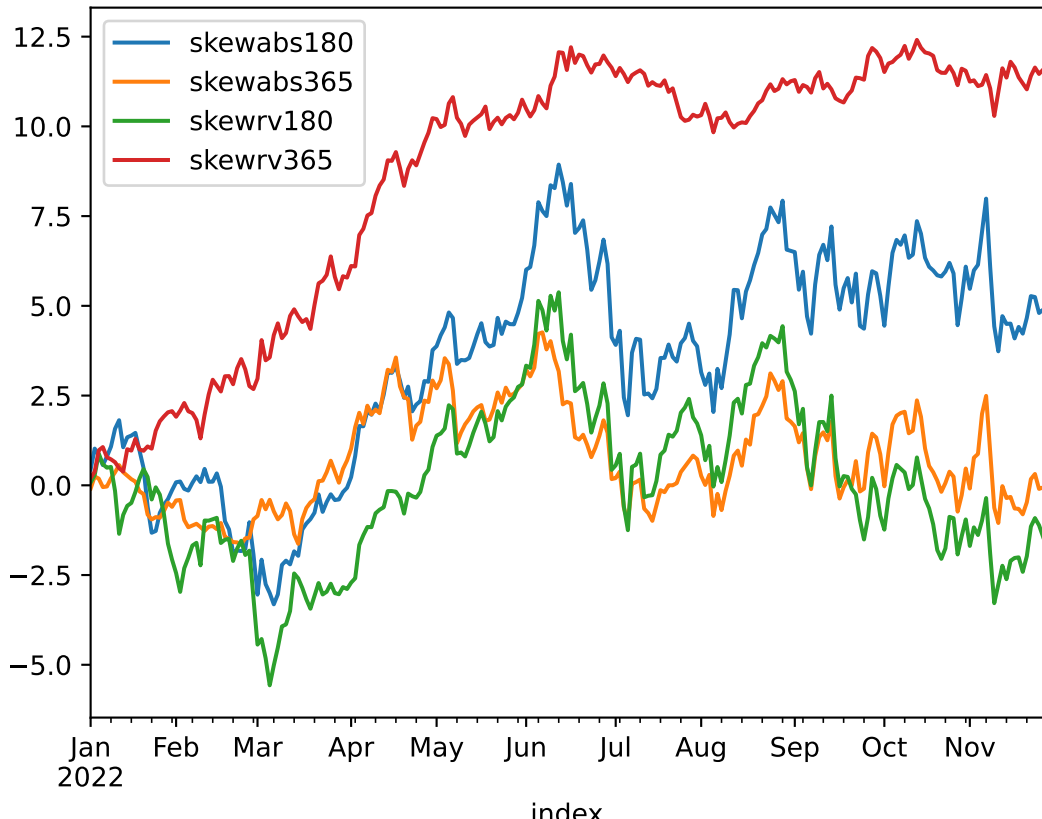
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.221}
ann. std {'relcarry': 6.053}
ann. SR {'relcarry': 0.37}



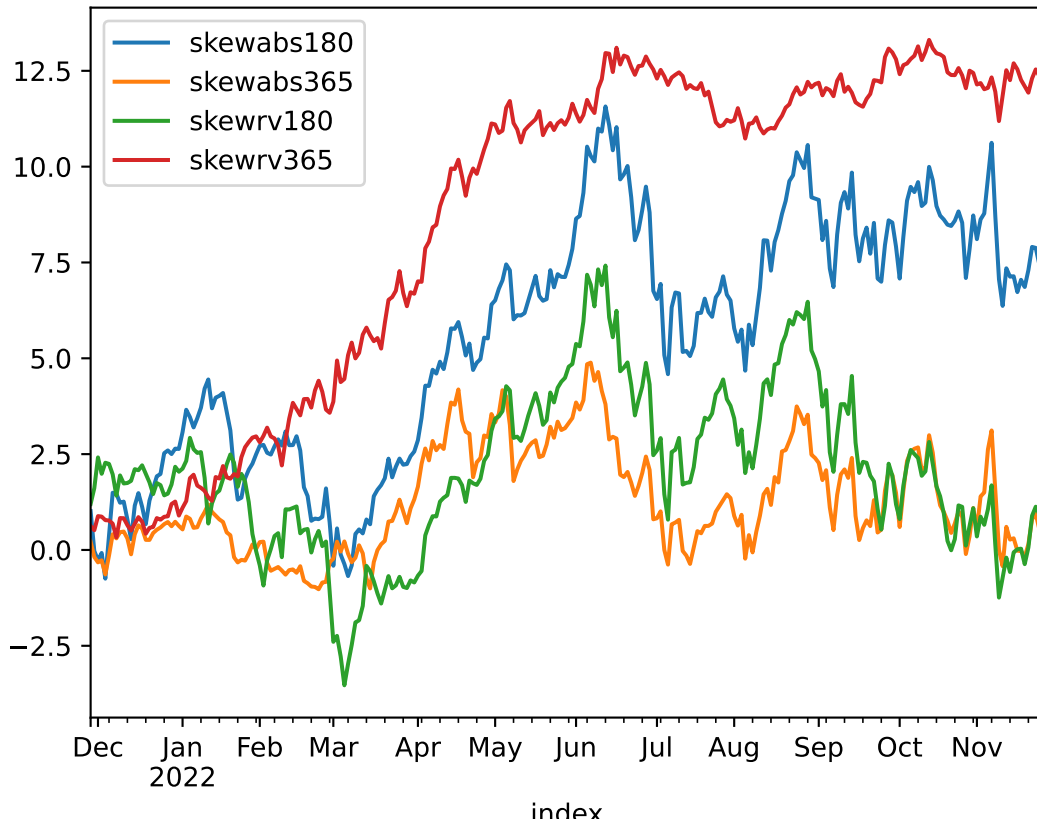
Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 5.997}
ann. std {'relcarry': 9.562}
ann. SR {'relcarry': 0.63}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': 5.328, 'skewabs365': -0.065, 'skewrv180': -1.565, 'skewrv365': 12.614}
ann. std {'skewabs180': 10.019, 'skewabs365': 7.701, 'skewrv180': 9.412, 'skewrv365': 4.868}
ann. SR {'skewabs180': 0.53, 'skewabs365': -0.01, 'skewrv180': -0.17, 'skewrv365': 2.59}



Total Trading Rule P&L for period '1Y'
ann. mean {'skewabs180': 7.41, 'skewabs365': 0.558, 'skewrv180': 0.595, 'skewrv365': 12.284}
ann. std {'skewabs180': 9.915, 'skewabs365': 7.432, 'skewrv180': 9.164, 'skewrv365': 4.78}
ann. SR {'skewabs180': 0.75, 'skewabs365': 0.08, 'skewrv180': 0.06, 'skewrv365': 2.57}

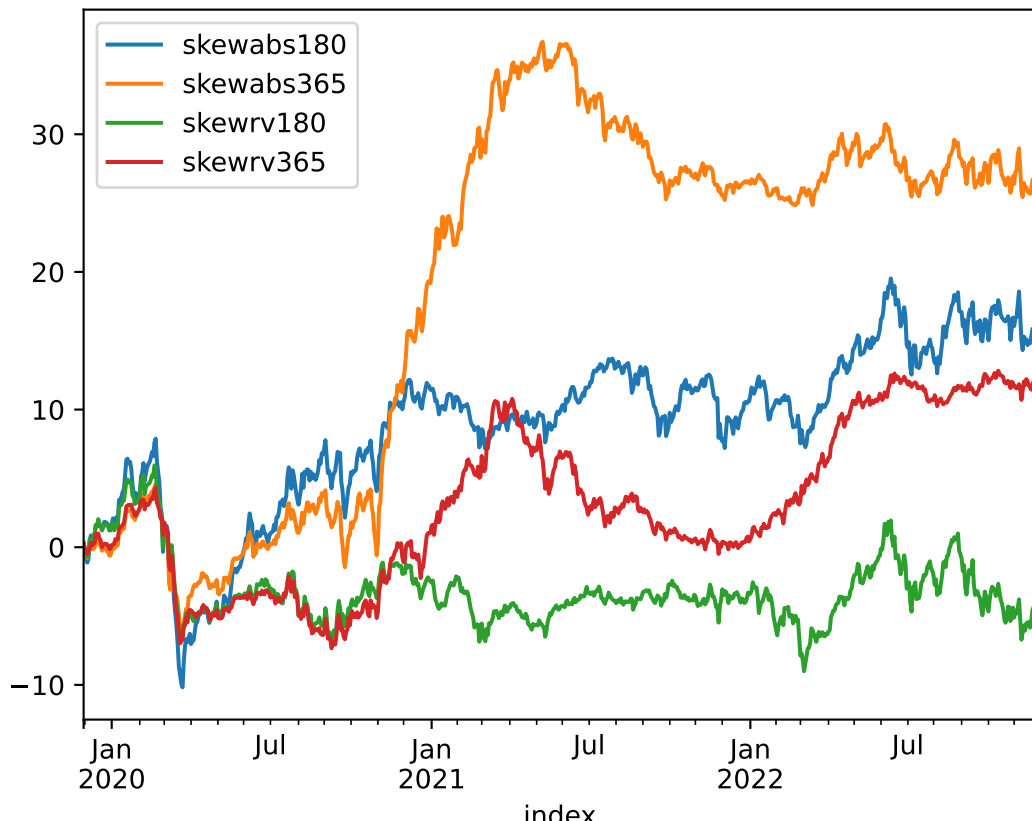


Total Trading Rule P&L for period '3Y'

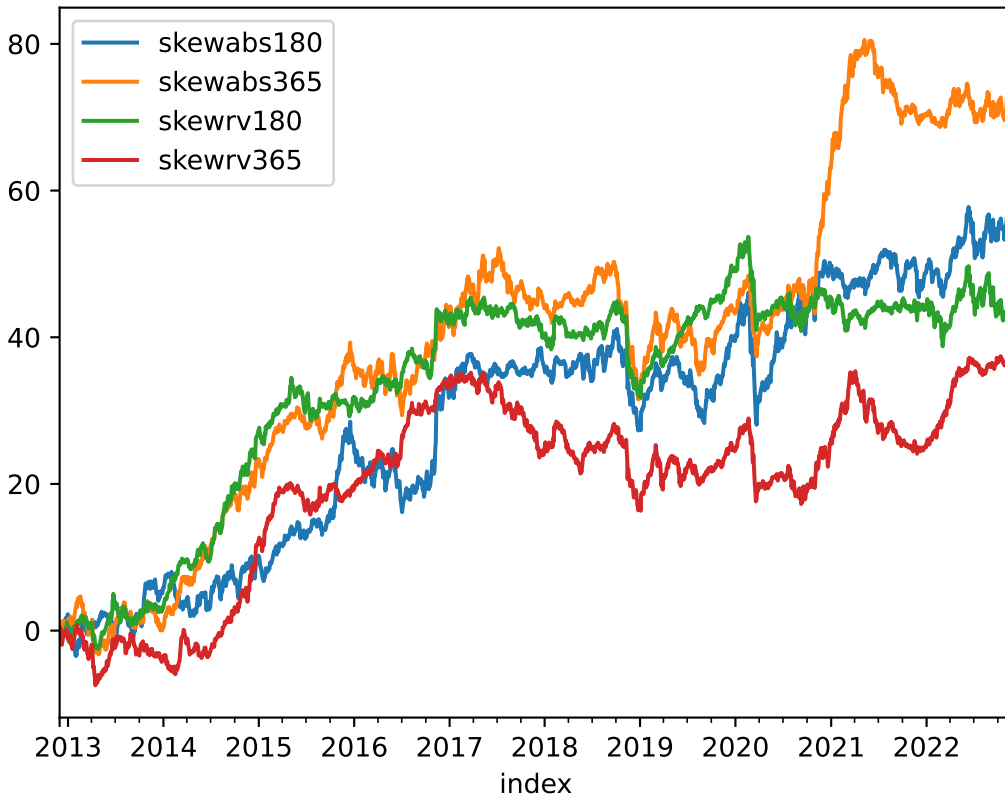
ann. mean {'skewabs180': 5.074, 'skewabs365': 8.662, 'skewrv180': -1.596, 'skewrv365': 3.931}

ann. std {'skewabs180': 9.589, 'skewabs365': 8.664, 'skewrv180': 7.759, 'skewrv365': 6.561}

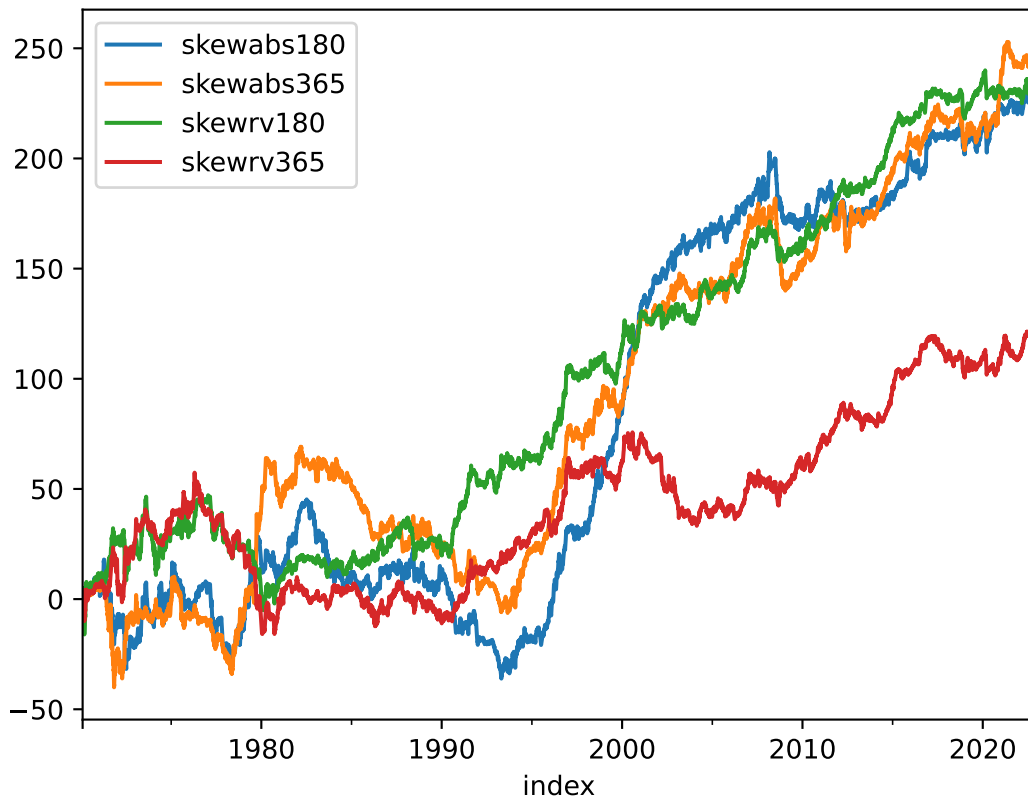
ann. SR {'skewabs180': 0.53, 'skewabs365': 1.0, 'skewrv180': -0.21, 'skewrv365': 0.6}



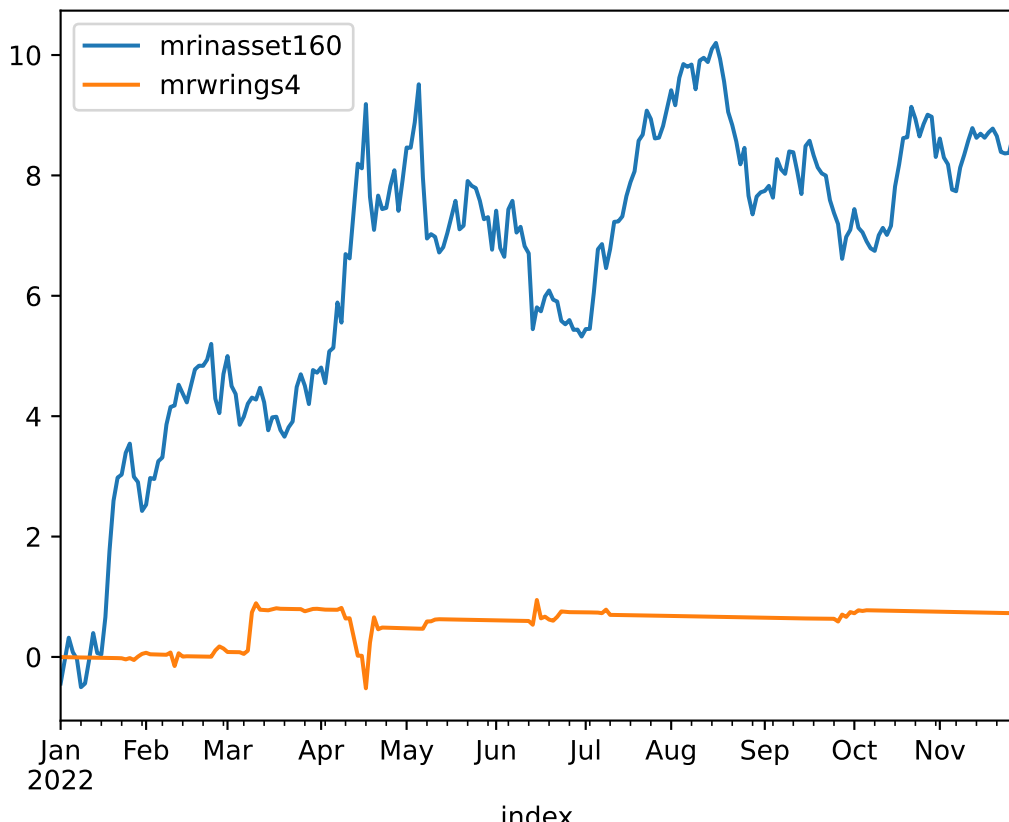
Total Trading Rule P&L for period '10Y'
ann. mean {'skewabs180': 5.275, 'skewabs365': 6.9, 'skewrv180': 4.211, 'skewrv365': 3.593}
ann. std {'skewabs180': 8.065, 'skewabs365': 7.982, 'skewrv180': 6.576, 'skewrv365': 6.189}
ann. SR {'skewabs180': 0.65, 'skewabs365': 0.86, 'skewrv180': 0.64, 'skewrv365': 0.58}



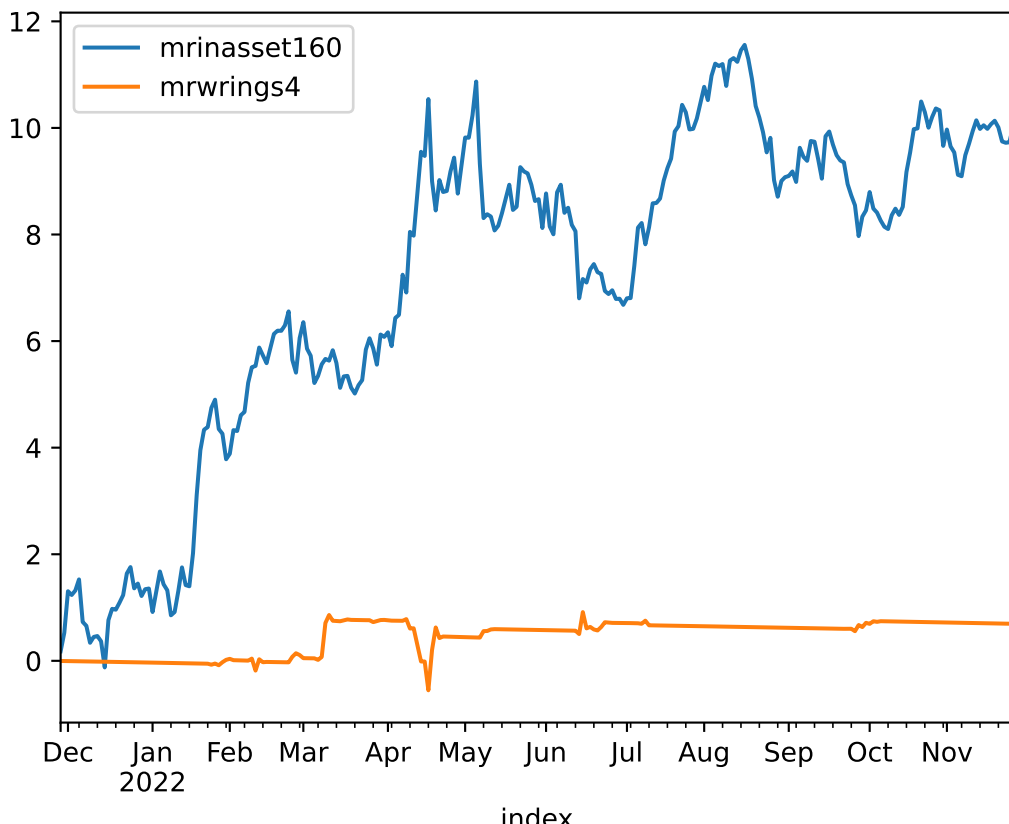
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.242, 'skewabs365': 4.508, 'skewrv180': 4.258, 'skewrv365': 2.245}
ann. std {'skewabs180': 10.795, 'skewabs365': 10.299, 'skewrv180': 9.309, 'skewrv365': 8.607}
ann. SR {'skewabs180': 0.39, 'skewabs365': 0.44, 'skewrv180': 0.46, 'skewrv365': 0.26}



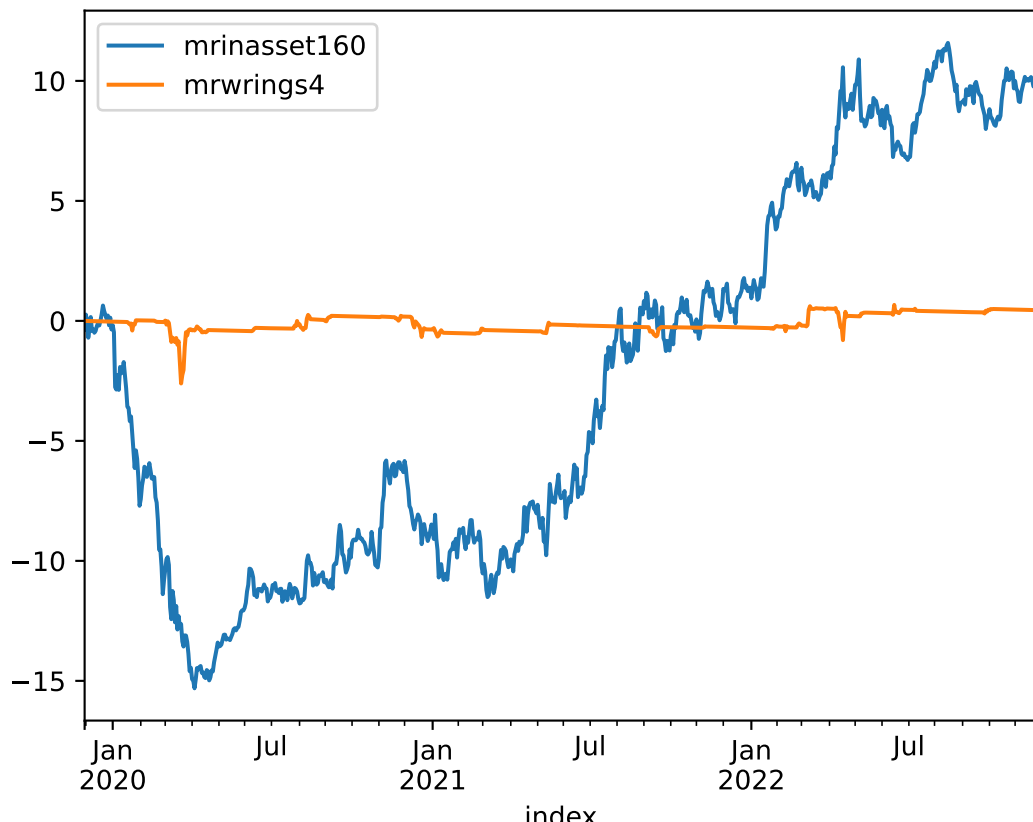
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 9.443, 'mrwrings4': 0.793}
ann. std {'mrinasset160': 6.343, 'mrwrings4': 1.558}
ann. SR {'mrinasset160': 1.49, 'mrwrings4': 0.51}



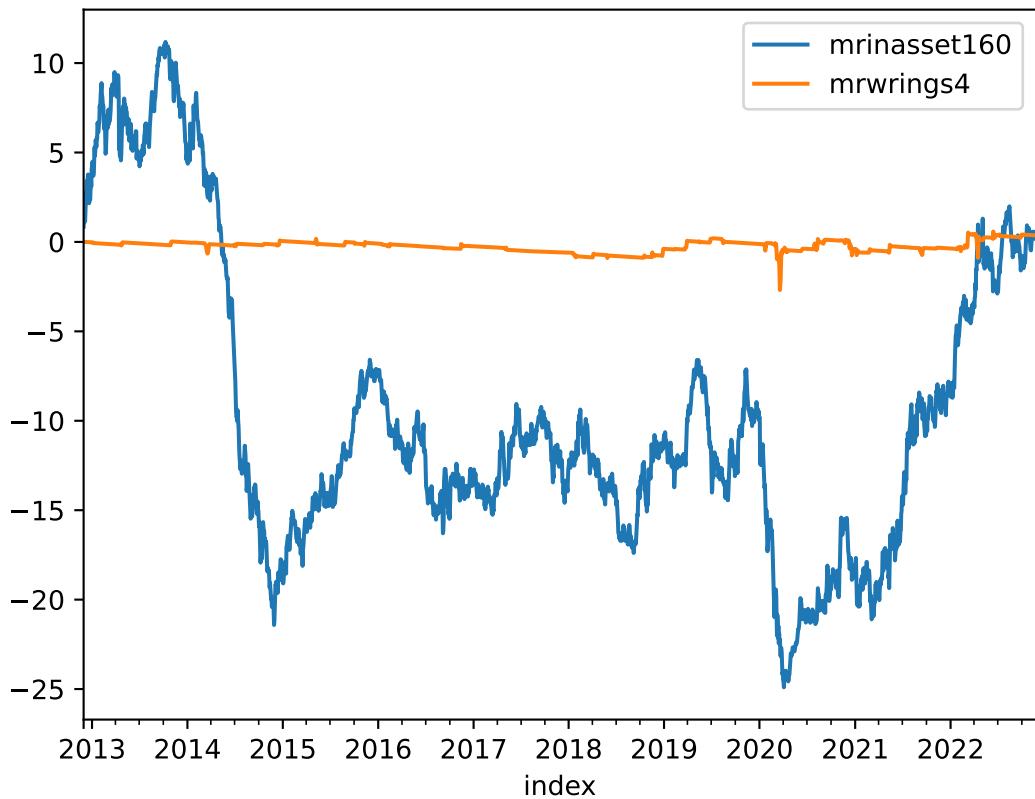
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 9.871, 'mrwrings4': 0.685}
ann. std {'mrinasset160': 6.273, 'mrwrings4': 1.481}
ann. SR {'mrinasset160': 1.57, 'mrwrings4': 0.46}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 3.294, 'mrwrings4': 0.147}
ann. std {'mrinasset160': 7.097, 'mrwrings4': 1.537}
ann. SR {'mrinasset160': 0.46, 'mrwrings4': 0.1}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': 0.045, 'mrwrings4': 0.036}
ann. std {'mrinasset160': 6.659, 'mrwrings4': 0.897}
ann. SR {'mrinasset160': 0.01, 'mrwrings4': 0.04}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.383, 'mrwrings4': -1.175}
ann. std {'mrinasset160': 10.929, 'mrwrings4': 2.633}
ann. SR {'mrinasset160': -0.31, 'mrwrings4': -0.45}

