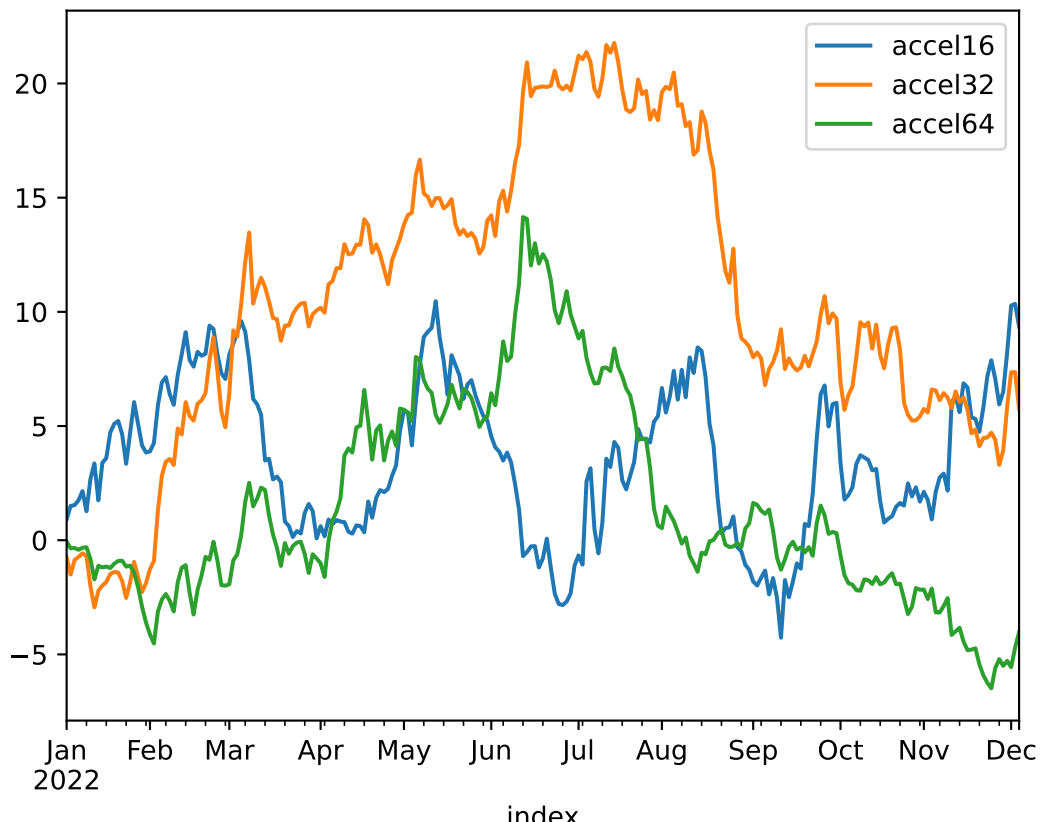
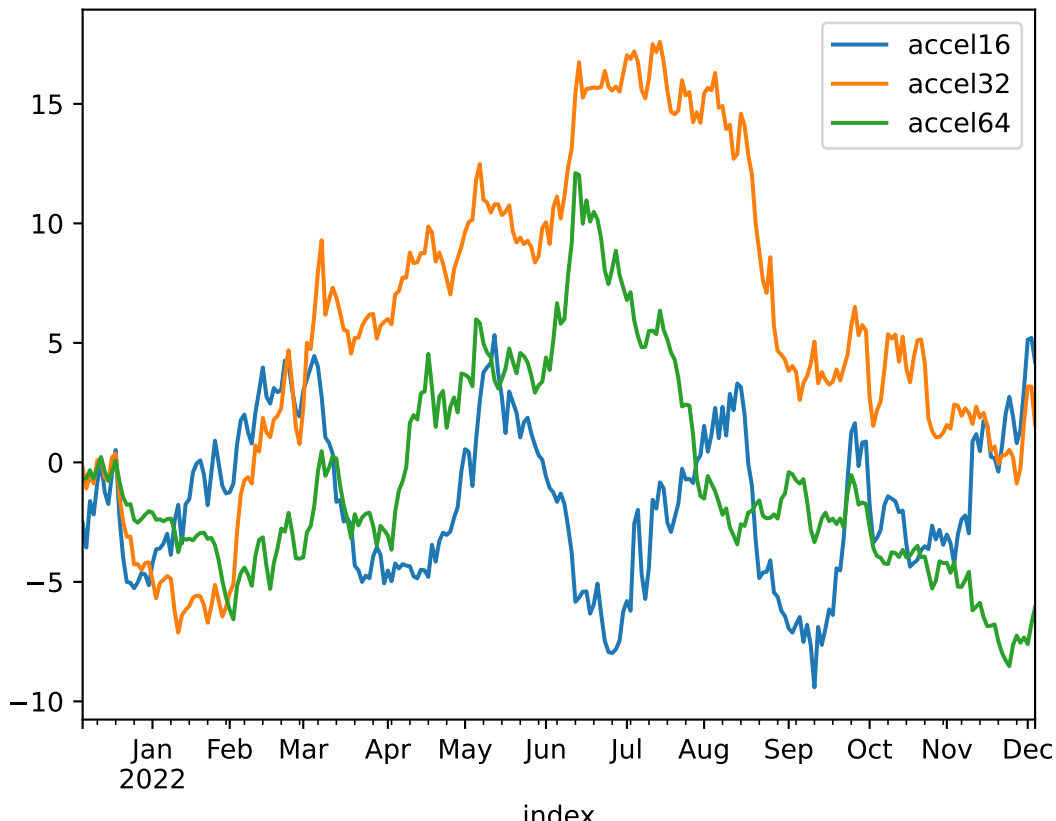


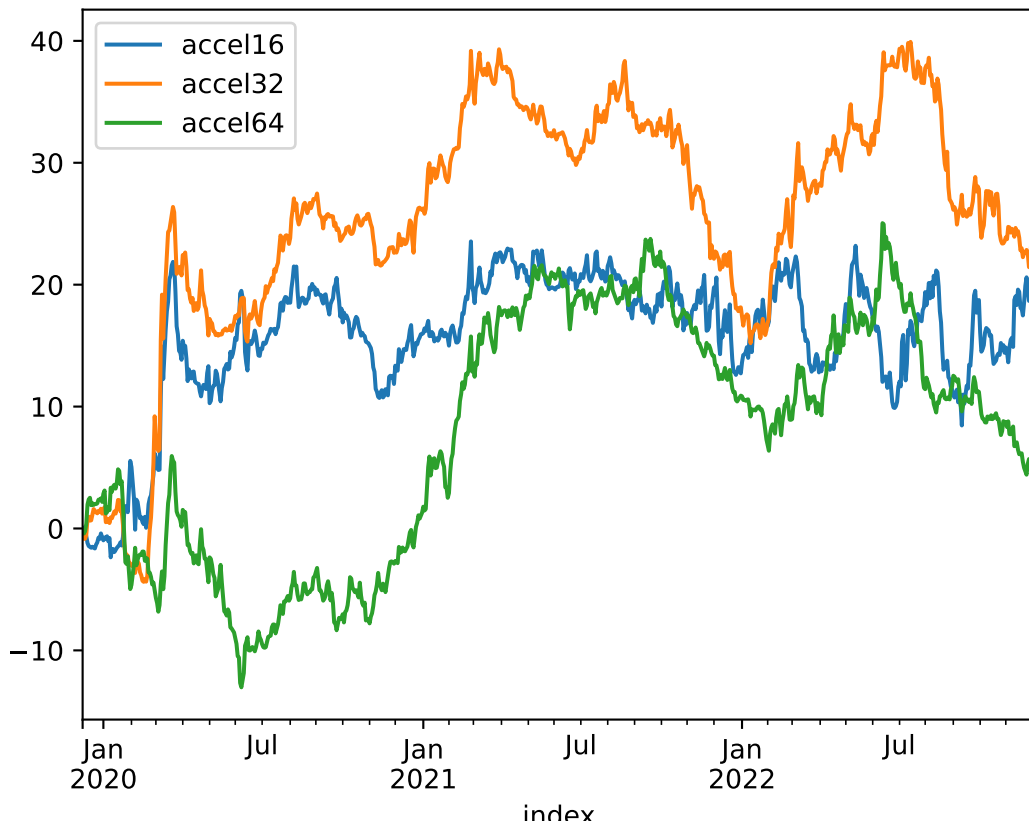
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': 9.931, 'accel32': 6.112, 'accel64': -4.277}
ann. std {'accel16': 16.384, 'accel32': 14.473, 'accel64': 11.947}
ann. SR {'accel16': 0.61, 'accel32': 0.42, 'accel64': -0.36}



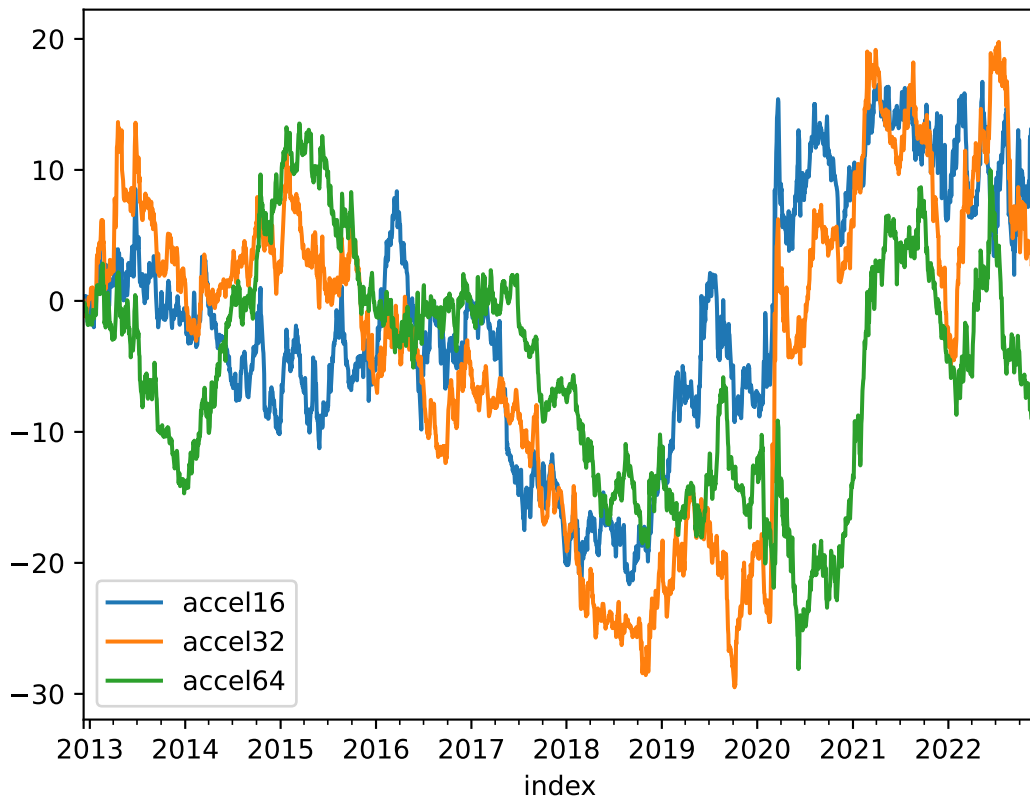
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': 4.144, 'accel32': 1.547, 'accel64': -5.978}
ann. std {'accel16': 16.718, 'accel32': 14.284, 'accel64': 11.66}
ann. SR {'accel16': 0.25, 'accel32': 0.11, 'accel64': -0.51}



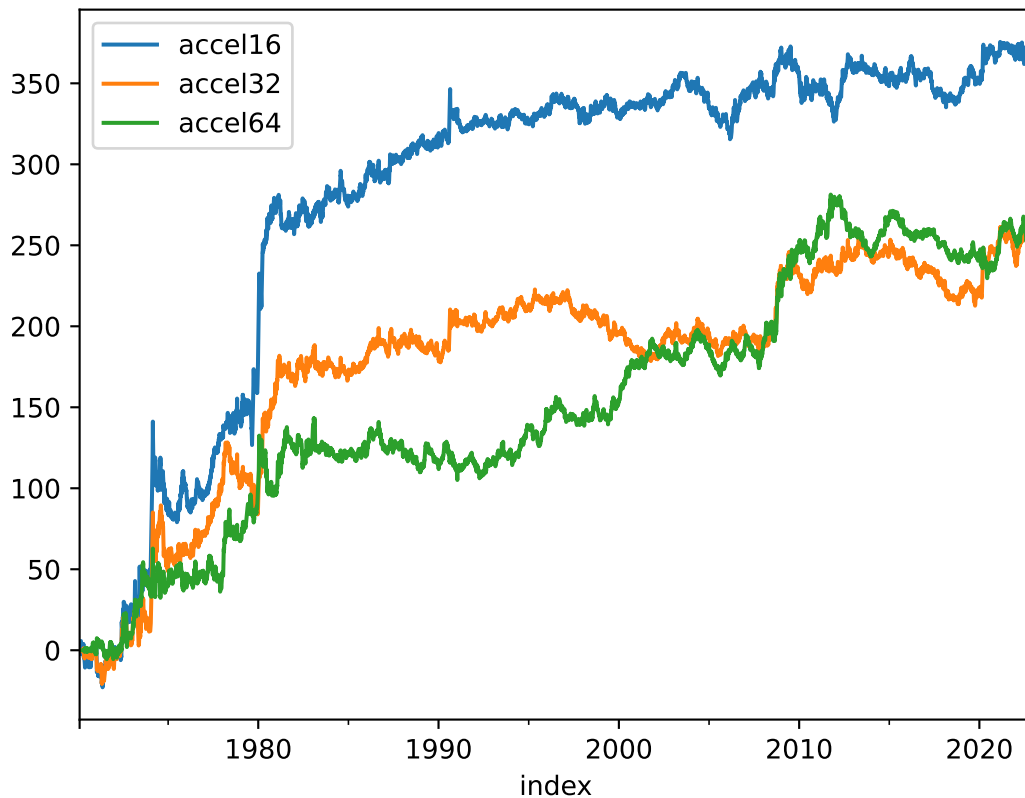
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': 7.235, 'accel32': 7.832, 'accel64': 2.253}
ann. std {'accel16': 14.835, 'accel32': 14.094, 'accel64': 11.775}
ann. SR {'accel16': 0.49, 'accel32': 0.56, 'accel64': 0.19}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 1.533, 'accel32': 0.368, 'accel64': -0.806}
ann. std {'accel16': 11.894, 'accel32': 11.127, 'accel64': 9.573}
ann. SR {'accel16': 0.13, 'accel32': 0.03, 'accel64': -0.08}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.947, 'accel32': 4.568, 'accel64': 4.635}
ann. std {'accel16': 15.733, 'accel32': 13.797, 'accel64': 13.335}
ann. SR {'accel16': 0.44, 'accel32': 0.33, 'accel64': 0.35}

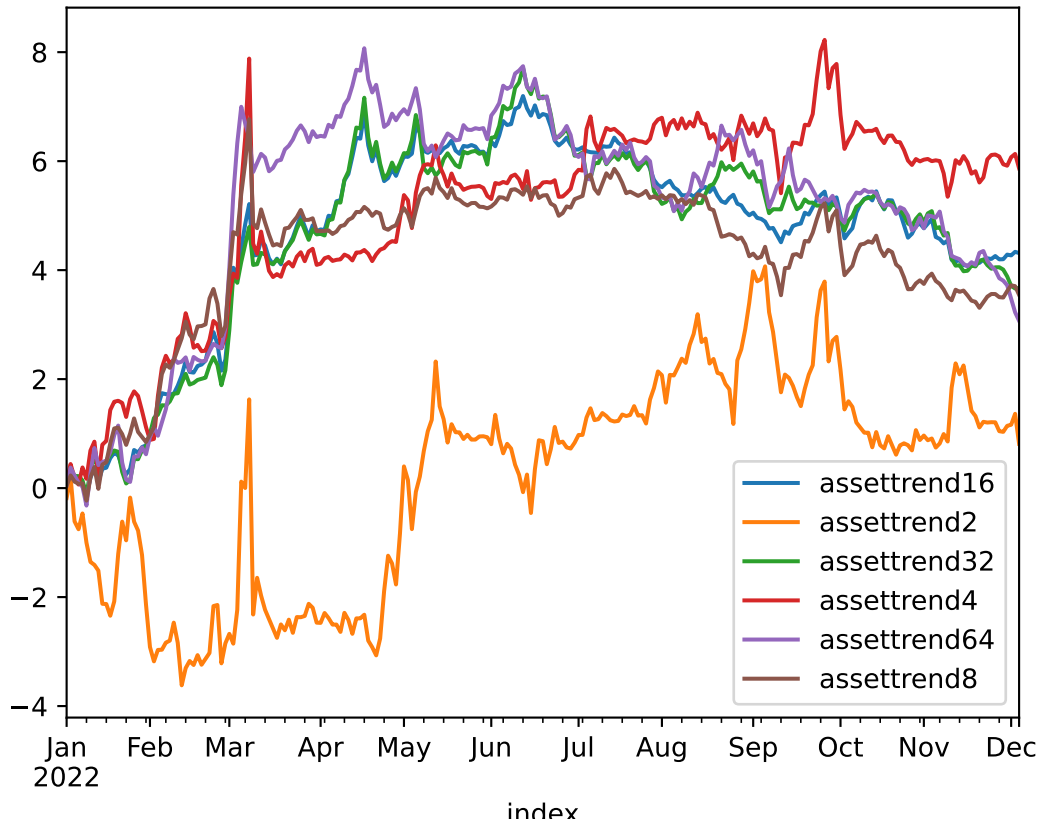


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': 4.581, 'assettrend2': 0.863, 'assettrend32': 3.903, 'assettrend4': 6.234, 'assettrend64': 3.261, 'assettrend8': 3.766}

ann. std {'assettrend16': 3.119, 'assettrend2': 7.938, 'assettrend32': 3.448, 'assettrend4': 5.927, 'assettrend64': 4.083, 'assettrend8': 3.877}

ann. SR {'assettrend16': 1.47, 'assettrend2': 0.11, 'assettrend32': 1.13, 'assettrend4': 1.05, 'assettrend64': 0.8, 'assettrend8': 0.97}

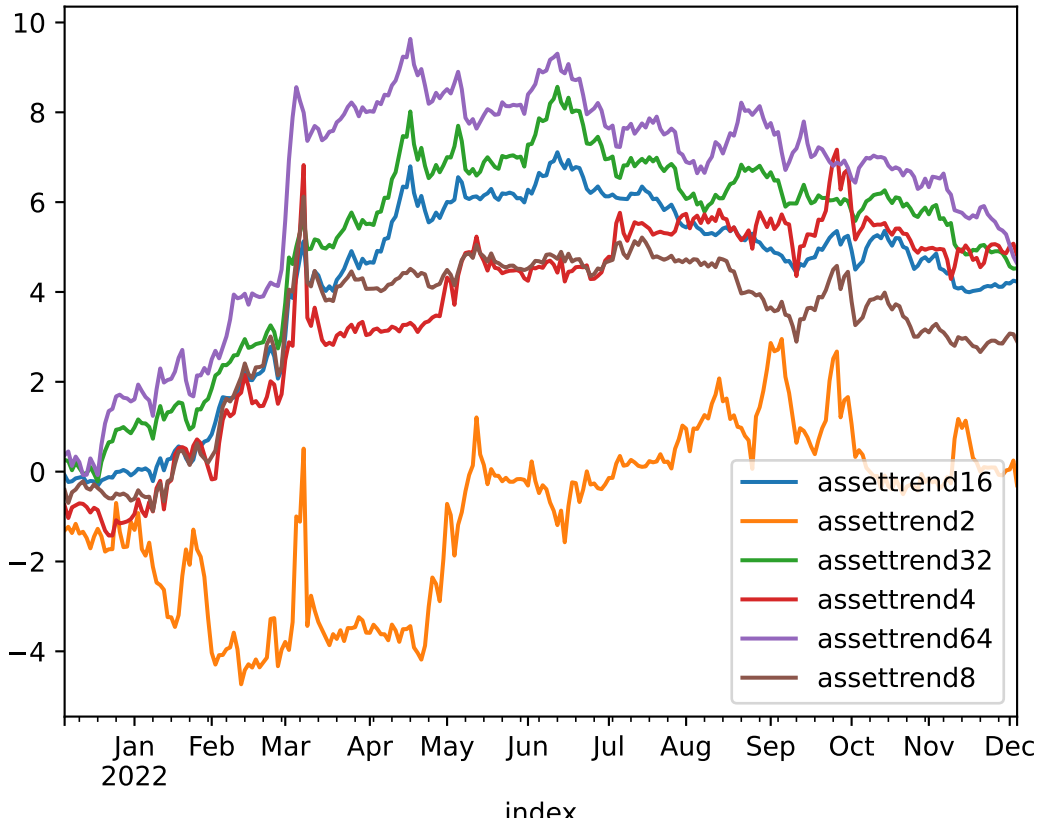


Total Trading Rule P&L for period '1Y'

ann. mean {'assetrend16': 4.164, 'assetrend2': -0.298, 'assetrend32': 4.459, 'assetrend4': 4.738, 'assetrend64': 4.561, 'assetrend8': 2.855}

ann. std {'assetrend16': 3.022, 'assetrend2': 7.898, 'assetrend32': 3.406, 'assetrend4': 5.795, 'assetrend64': 4.103, 'assetrend8': 3.79}

ann. SR {'assetrend16': 1.38, 'assetrend2': -0.04, 'assetrend32': 1.31, 'assetrend4': 0.82, 'assetrend64': 1.11, 'assetrend8': 0.75}

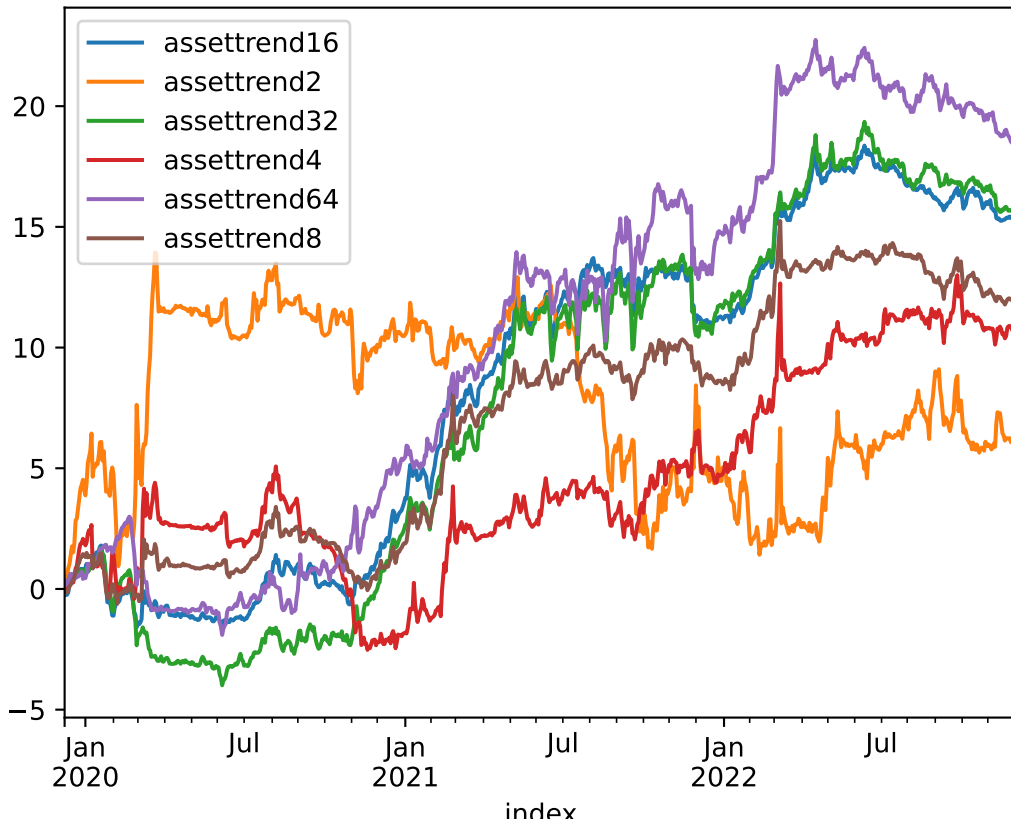


Total Trading Rule P&L for period '3Y'

ann. mean {'assetrend16': 5.075, 'assetrend2': 1.916, 'assetrend32': 5.019, 'assetrend4': 3.489, 'assetrend64': 5.816, 'assetrend8': 3.94}

ann. std {'assetrend16': 3.615, 'assetrend2': 7.897, 'assetrend32': 4.432, 'assetrend4': 5.46, 'assetrend64': 5.13, 'assetrend8': 3.761}

ann. SR {'assetrend16': 1.4, 'assetrend2': 0.24, 'assetrend32': 1.13, 'assetrend4': 0.64, 'assetrend64': 1.13, 'assetrend8': 1.05}

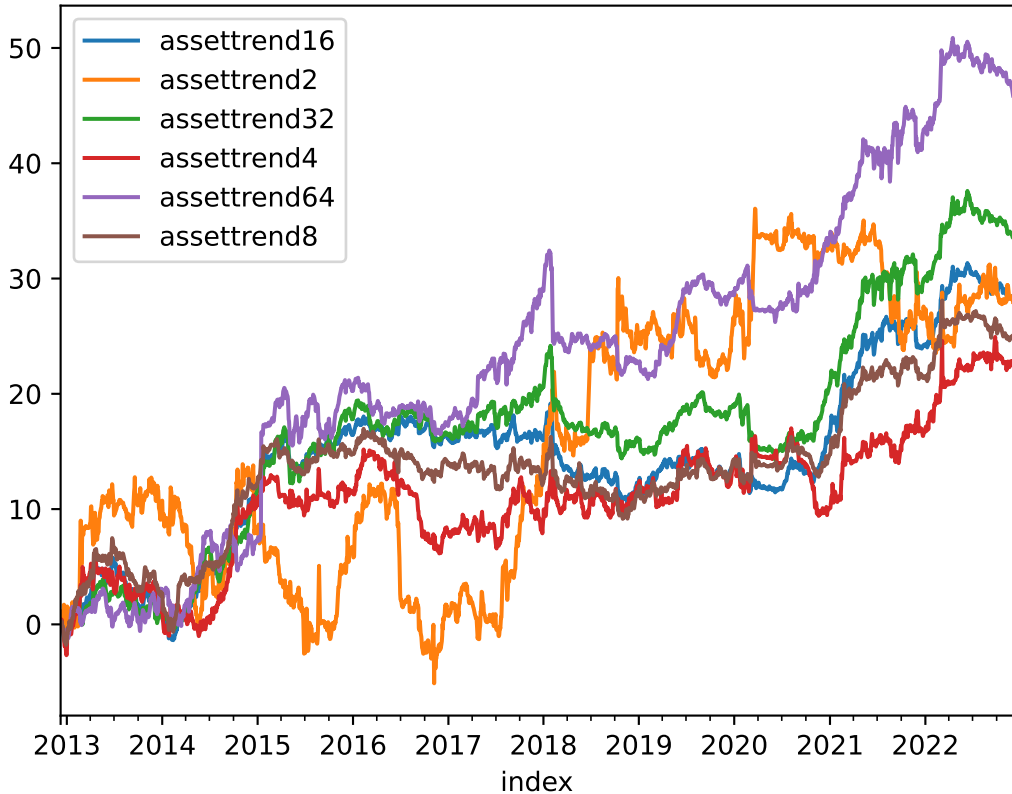


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.795, 'assettrend2': 2.746, 'assettrend32': 3.296, 'assettrend4': 2.217, 'assettrend64': 4.504, 'assettrend8': 2.442}

ann. std {'assettrend16': 3.281, 'assettrend2': 8.457, 'assettrend32': 3.761, 'assettrend4': 5.041, 'assettrend64': 5.311, 'assettrend8': 3.593}

ann. SR {'assettrend16': 0.85, 'assettrend2': 0.32, 'assettrend32': 0.88, 'assettrend4': 0.44, 'assettrend64': 0.85, 'assettrend8': 0.68}

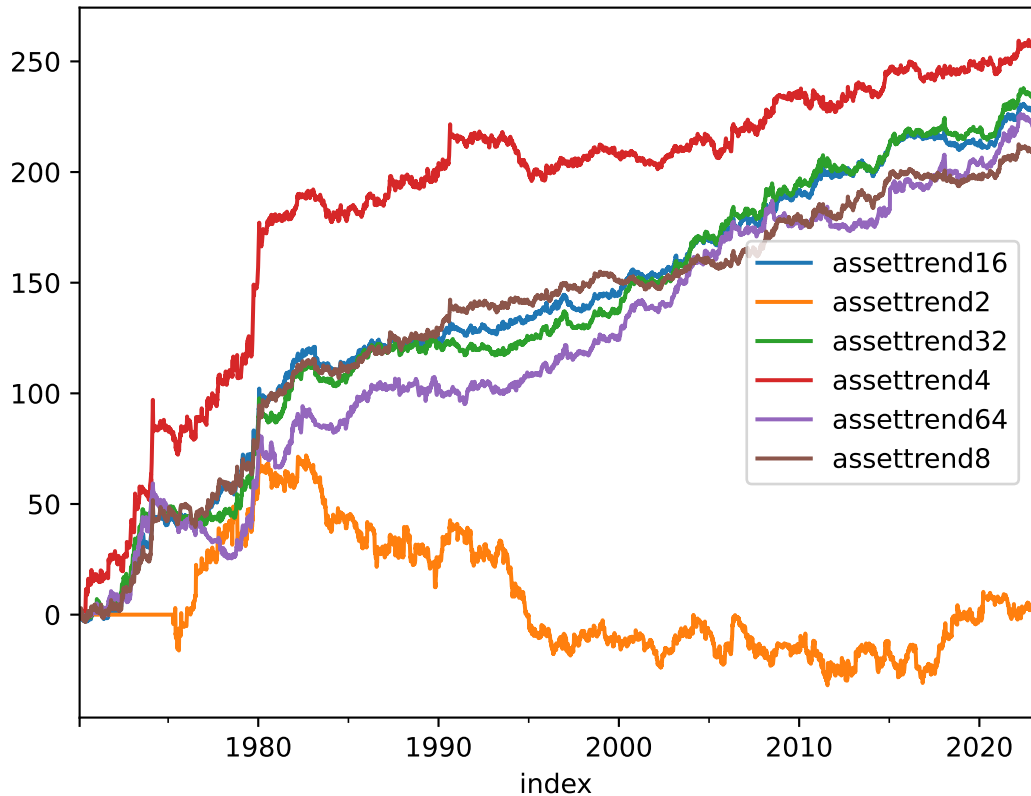


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.233, 'assettrend2': 0.041, 'assettrend32': 4.343, 'assettrend4': 4.779, 'assettrend64': 4.109, 'assettrend8': 3.887}

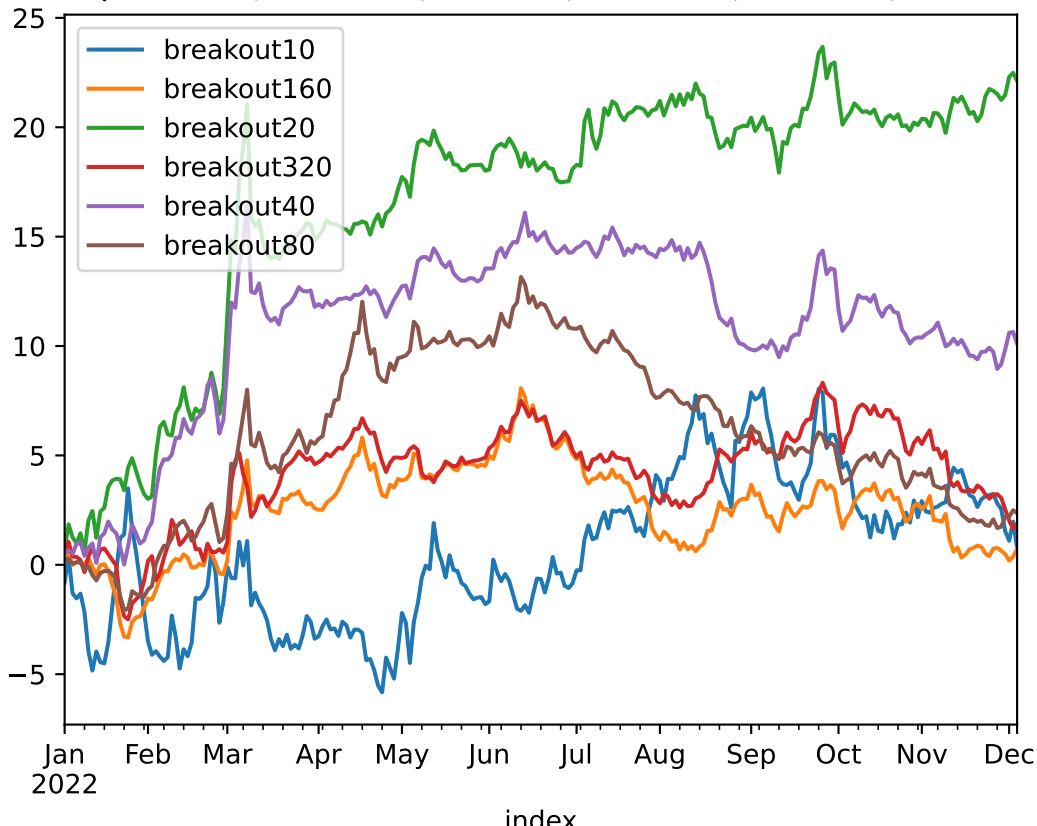
ann. std {'assettrend16': 4.664, 'assettrend2': 10.057, 'assettrend32': 4.899, 'assettrend4': 7.354, 'assettrend64': 5.474, 'assettrend8': 5.039}

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



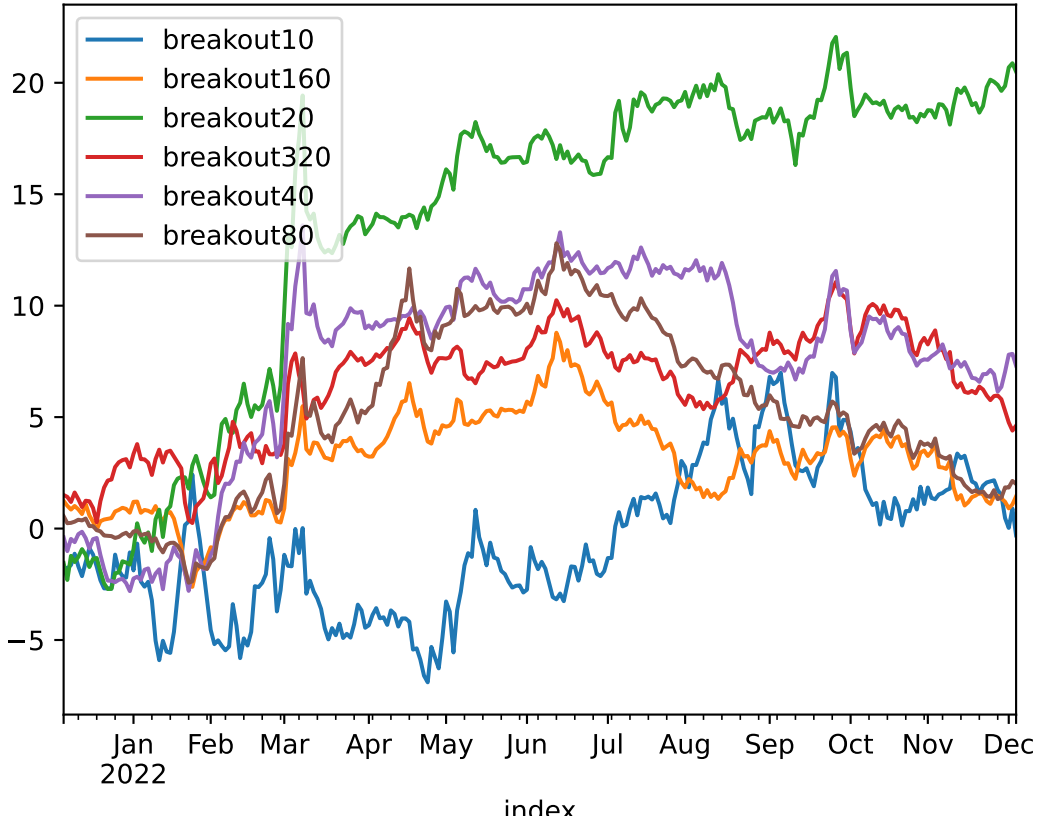
Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 0.813, 'breakout160': 0.779, 'breakout20': 23.492, 'breakout320': 1.99, 'breakout40': 10.742, 'breakout80': 2.506}
 ann. std {'breakout10': 14.045, 'breakout160': 7.317, 'breakout20': 12.352, 'breakout320': 7.639, 'breakout40': 9.829, 'breakout80': 8.031}
 ann. SR {'breakout10': 0.06, 'breakout160': 0.11, 'breakout20': 1.9, 'breakout320': 0.26, 'breakout40': 1.09, 'breakout80': 0.31}



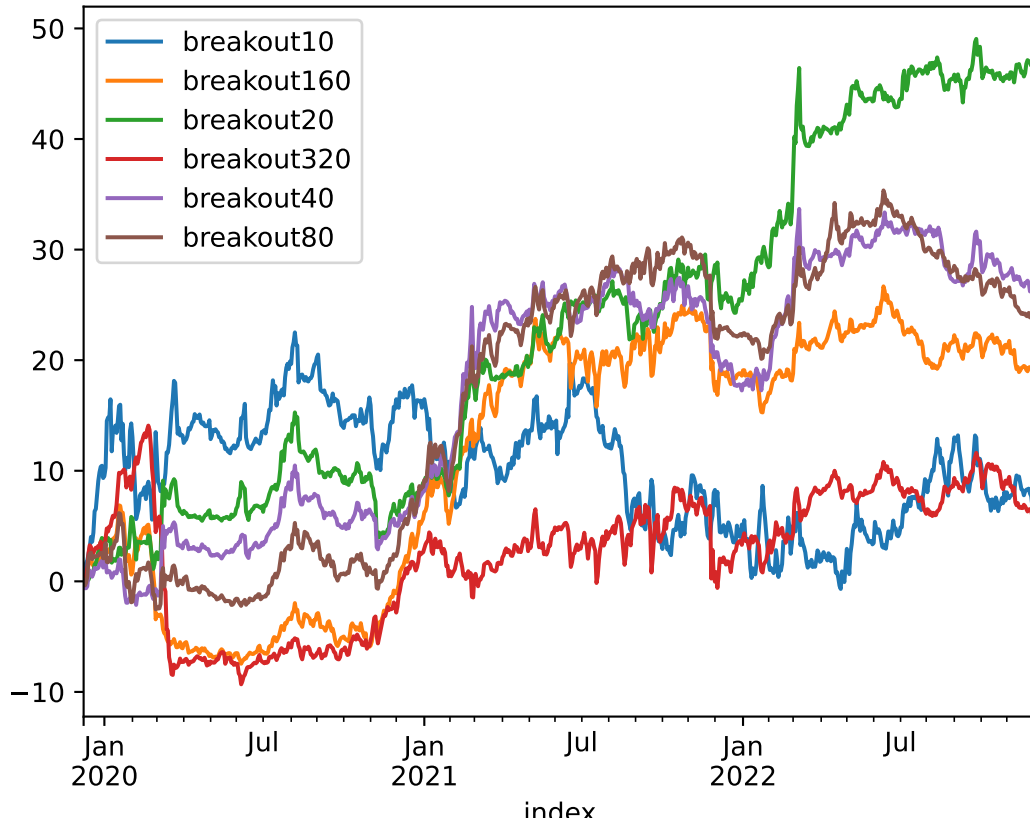
Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': -0.3, 'breakout160': 1.422, 'breakout20': 20.186, 'breakout320': 4.545, 'breakout40': 7.194, 'breakout80': 1.971}
 ann. std {'breakout10': 13.871, 'breakout160': 7.229, 'breakout20': 12.168, 'breakout320': 7.69, 'breakout40': 9.623, 'breakout80': 7.774}
 ann. SR {'breakout10': -0.02, 'breakout160': 0.2, 'breakout20': 1.66, 'breakout320': 0.59, 'breakout40': 0.75, 'breakout80': 0.25}



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

ann. mean {'breakout10': 1.936, 'breakout160': 6.337, 'breakout20': 15.568, 'breakout320': 1.695, 'breakout40': 8.973, 'breakout80': 8.048}
ann. std {'breakout10': 15.116, 'breakout160': 9.793, 'breakout20': 11.509, 'breakout320': 10.799, 'breakout40': 9.962, 'breakout80': 9.639}
ann. SR {'breakout10': 0.13, 'breakout160': 0.65, 'breakout20': 1.35, 'breakout320': 0.16, 'breakout40': 0.9, 'breakout80': 0.83}

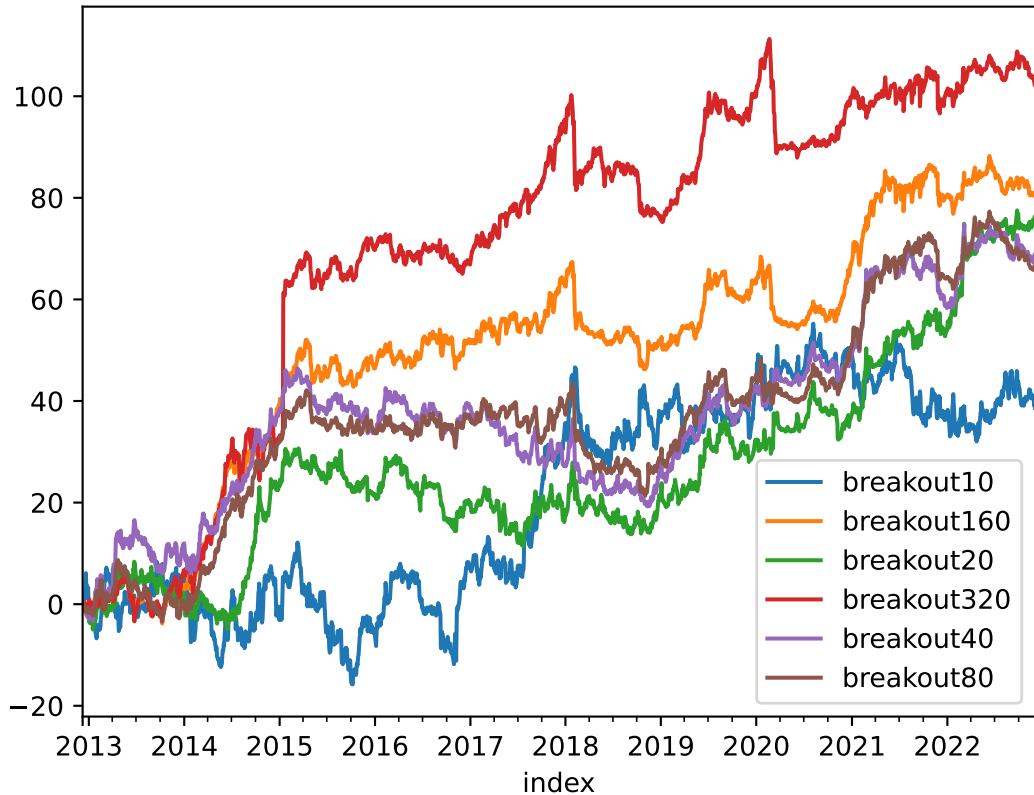


Total Trading Rule P&L for period '10Y'

ann. mean {'breakout10': 3.793, 'breakout160': 7.945, 'breakout20': 7.46, 'breakout320': 10.053, 'breakout40': 6.718, 'breakout80': 6.531}

ann. std {'breakout10': 15.773, 'breakout160': 9.144, 'breakout20': 11.21, 'breakout320': 13.348, 'breakout40': 9.84, 'breakout80': 9.017}

ann. SR {'breakout10': 0.24, 'breakout160': 0.87, 'breakout20': 0.67, 'breakout320': 0.75, 'breakout40': 0.68, 'breakout80': 0.72}

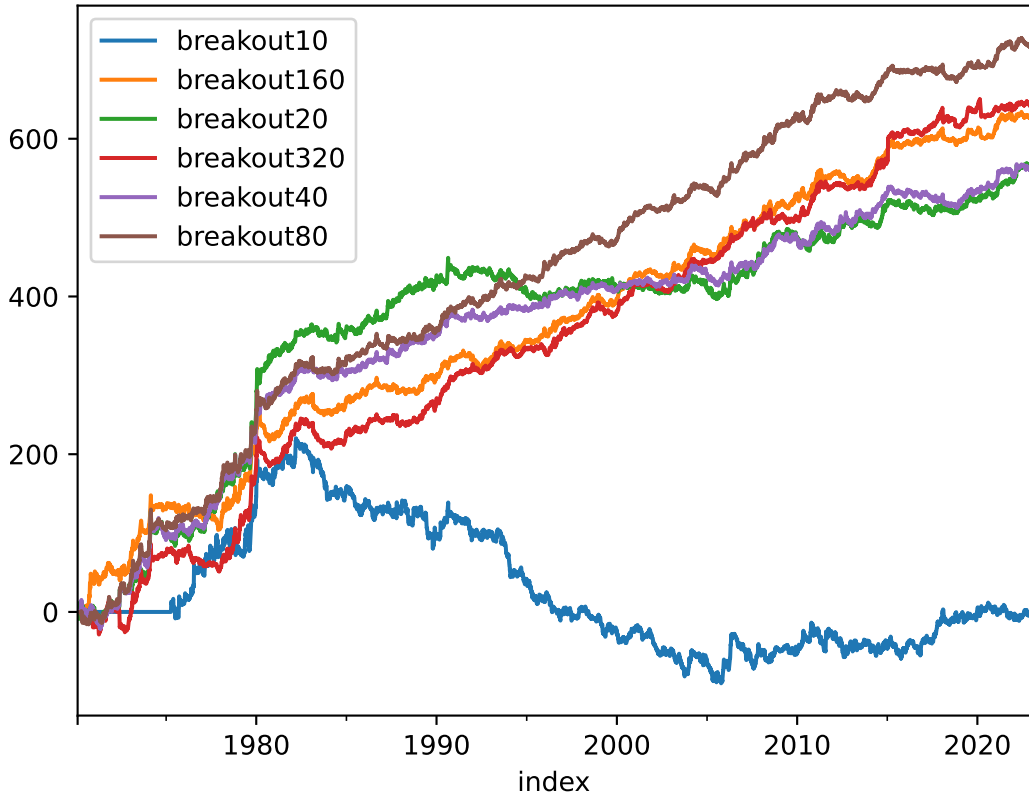


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.088, 'breakout160': 11.64, 'breakout20': 10.542, 'breakout320': 11.911, 'breakout40': 10.427, 'breakout80': 13.317}

ann. std {'breakout10': 20.85, 'breakout160': 12.506, 'breakout20': 16.113, 'breakout320': 13.059, 'breakout40': 13.242, 'breakout80': 12.765}

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

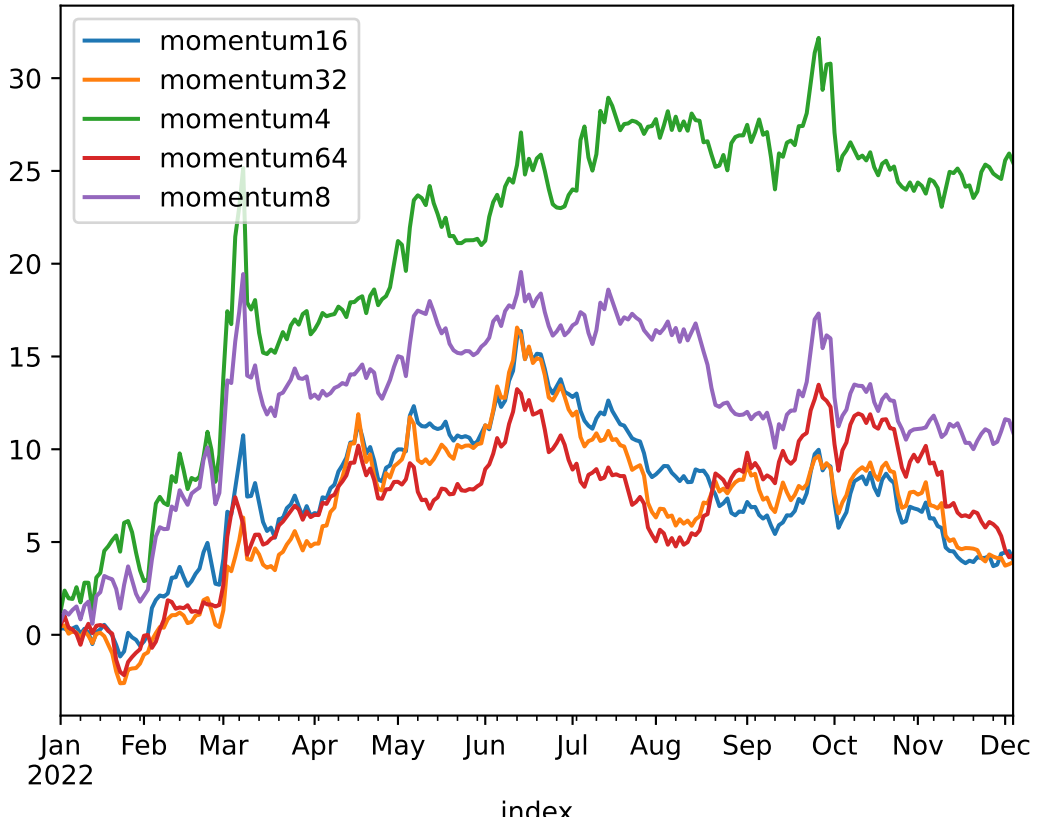


Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 4.297, 'momentum32': 4.161, 'momentum4': 27.036, 'momentum64': 4.557, 'momentum8': 11.594}

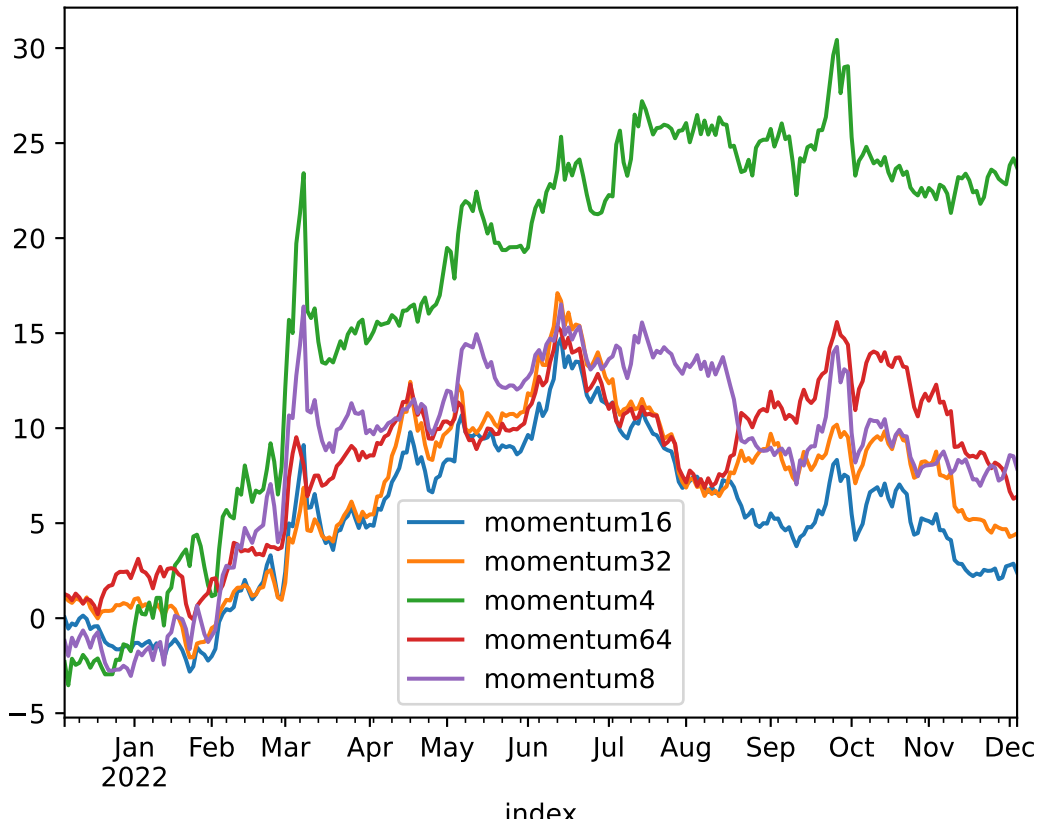
ann. std {'momentum16': 10.302, 'momentum32': 9.947, 'momentum4': 17.672, 'momentum64': 9.603, 'momentum8': 13.505}

ann. SR {'momentum16': 0.42, 'momentum32': 0.42, 'momentum4': 1.53, 'momentum64': 0.47, 'momentum8': 0.86}



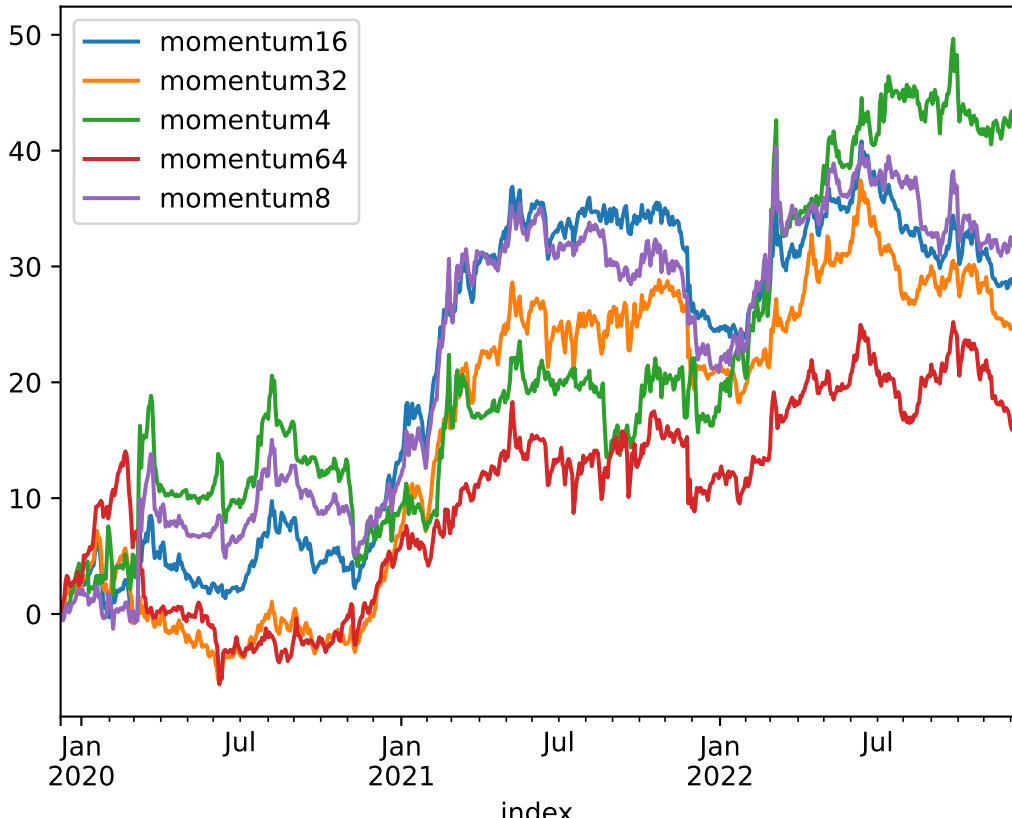
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': 2.363, 'momentum32': 4.395, 'momentum4': 23.348, 'momentum64': 6.298, 'momentum8': 7.753}
ann. std {'momentum16': 9.988, 'momentum32': 9.69, 'momentum4': 17.349, 'momentum64': 9.435, 'momentum8': 13.238}
ann. SR {'momentum16': 0.24, 'momentum32': 0.45, 'momentum4': 1.35, 'momentum64': 0.67, 'momentum8': 0.59}



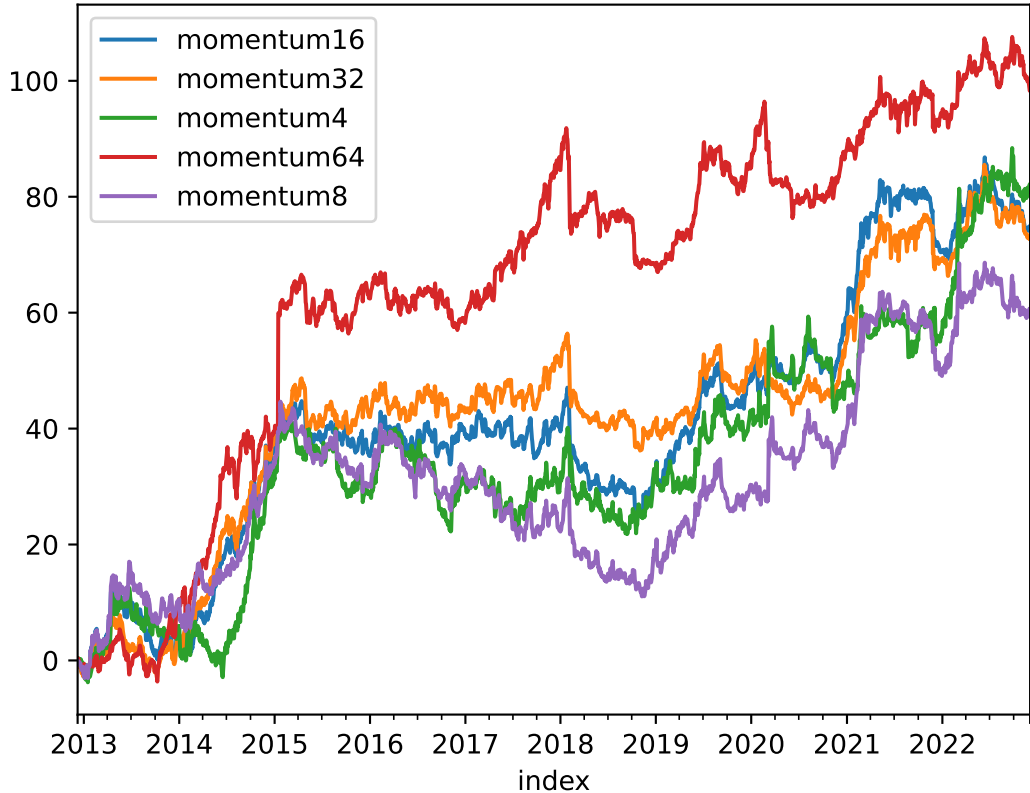
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 9.331, 'momentum32': 8.125, 'momentum4': 14.071, 'momentum64': 5.249, 'momentum8': 10.432}
ann. std {'momentum16': 11.039, 'momentum32': 10.906, 'momentum4': 16.056, 'momentum64': 11.001, 'momentum8': 12.742}
ann. SR {'momentum16': 0.85, 'momentum32': 0.74, 'momentum4': 0.88, 'momentum64': 0.48, 'momentum8': 0.82}



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

ann. mean {'momentum16': 7.313, 'momentum32': 7.156, 'momentum4': 8.021, 'momentum64': 9.661, 'momentum8': 5.891}
ann. std {'momentum16': 9.953, 'momentum32': 9.508, 'momentum4': 13.68, 'momentum64': 12.013, 'momentum8': 11.321}
ann. SR {'momentum16': 0.73, 'momentum32': 0.75, 'momentum4': 0.59, 'momentum64': 0.8, 'momentum8': 0.52}

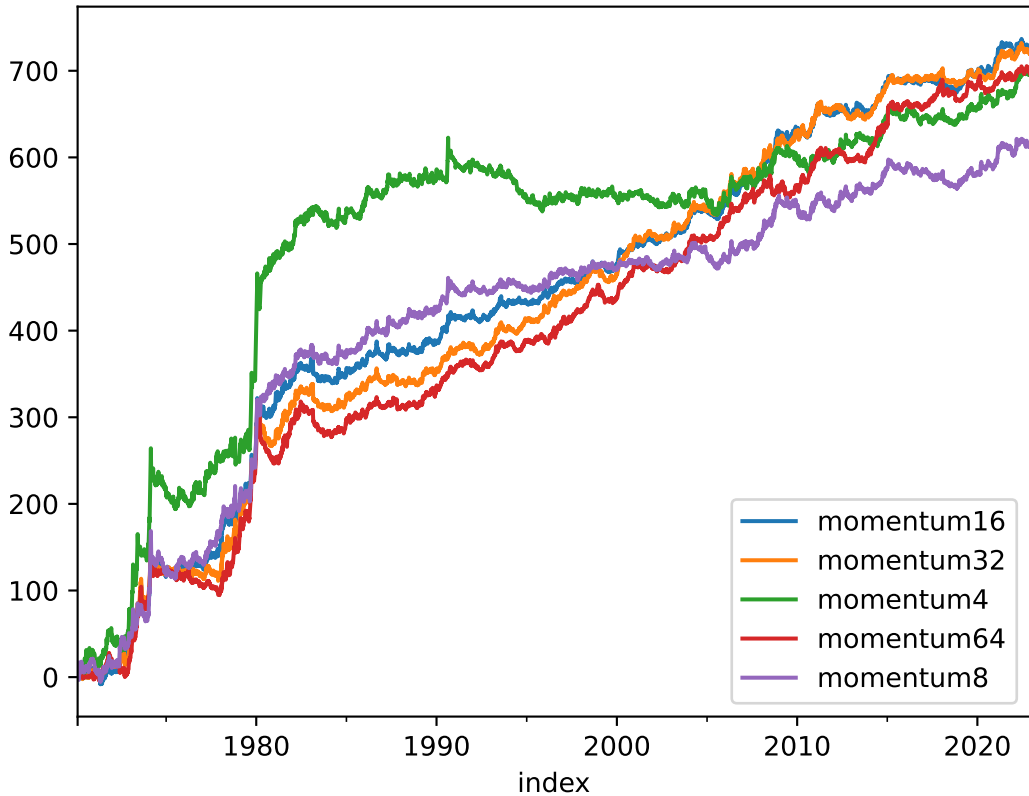


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.454, 'momentum32': 13.36, 'momentum4': 12.952, 'momentum64': 12.929, 'momentum8': 11.382}

ann. std {'momentum16': 14.233, 'momentum32': 13.864, 'momentum4': 20.09, 'momentum64': 13.5, 'momentum8': 15.883}

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

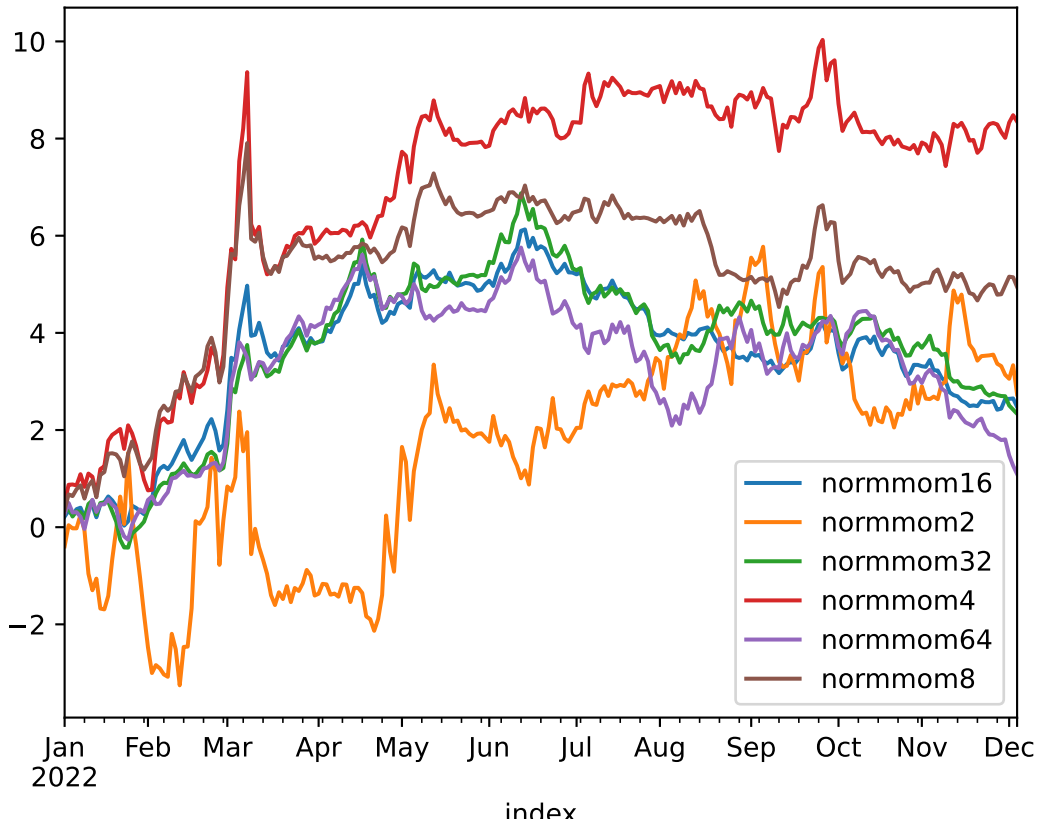


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 2.632, 'normmom2': 2.906, 'normmom32': 2.48, 'normmom4': 8.869, 'normmom64': 1.163, 'normmom8': 5.255}

ann. std {'normmom16': 3.197, 'normmom2': 8.281, 'normmom32': 3.267, 'normmom4': 6.103, 'normmom64': 3.518, 'normmom8': 4.36}

ann. SR {'normmom16': 0.82, 'normmom2': 0.35, 'normmom32': 0.76, 'normmom4': 1.45, 'normmom64': 0.33, 'normmom8': 1.21}

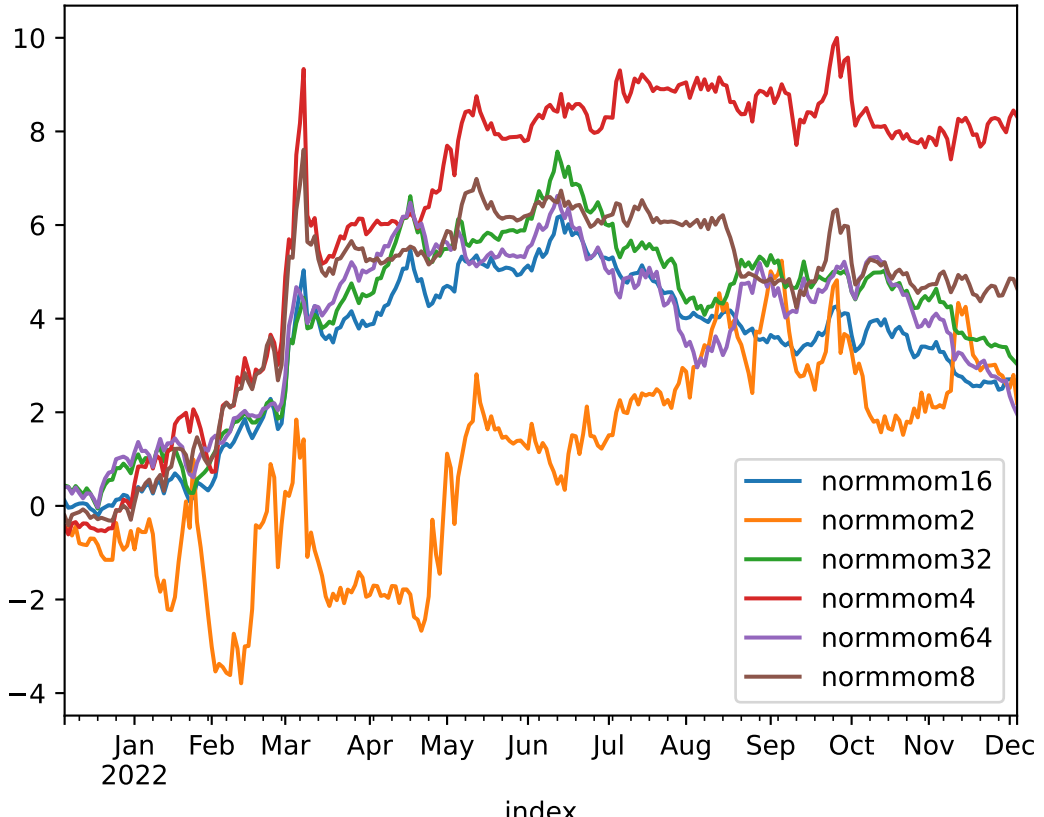


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': 2.501, 'normmom2': 2.166, 'normmom32': 2.983, 'normmom4': 8.189, 'normmom64': 1.932, 'normmom8': 4.578}

ann. std {'normmom16': 3.1, 'normmom2': 8.066, 'normmom32': 3.231, 'normmom4': 5.922, 'normmom64': 3.471, 'normmom8': 4.232}

ann. SR {'normmom16': 0.81, 'normmom2': 0.27, 'normmom32': 0.92, 'normmom4': 1.38, 'normmom64': 0.56, 'normmom8': 1.08}

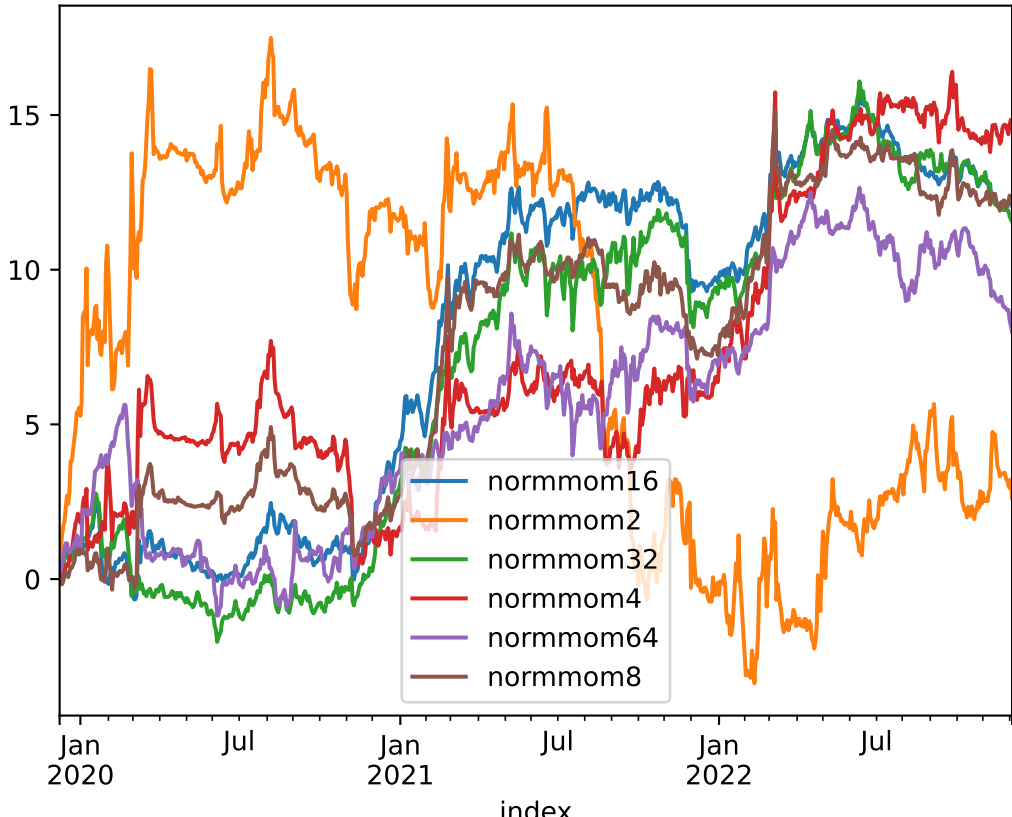


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 3.953, 'normmom2': 0.859, 'normmom32': 3.785, 'normmom4': 4.824, 'normmom64': 2.619, 'normmom8': 3.994}

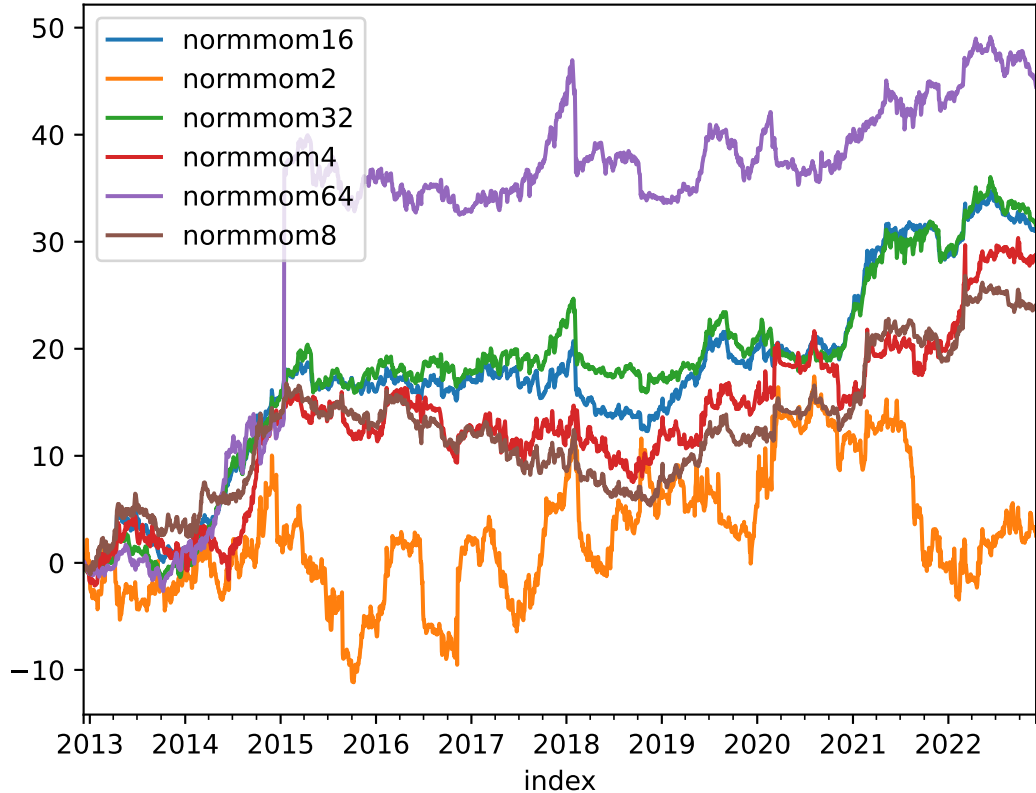
ann. std {'normmom16': 3.721, 'normmom2': 8.91, 'normmom32': 4.06, 'normmom4': 5.931, 'normmom64': 4.355, 'normmom8': 4.245}

ann. SR {'normmom16': 1.06, 'normmom2': 0.1, 'normmom32': 0.93, 'normmom4': 0.81, 'normmom64': 0.6, 'normmom8': 0.94}



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

ann. mean {'normmom16': 3.052, 'normmom2': 0.25, 'normmom32': 3.094, 'normmom4': 2.816, 'normmom64': 4.367, 'normmom8': 2.342}
ann. std {'normmom16': 3.58, 'normmom2': 9.103, 'normmom32': 3.734, 'normmom4': 5.496, 'normmom64': 8.564, 'normmom8': 4.055}
ann. SR {'normmom16': 0.85, 'normmom2': 0.03, 'normmom32': 0.83, 'normmom4': 0.51, 'normmom64': 0.51, 'normmom8': 0.58}

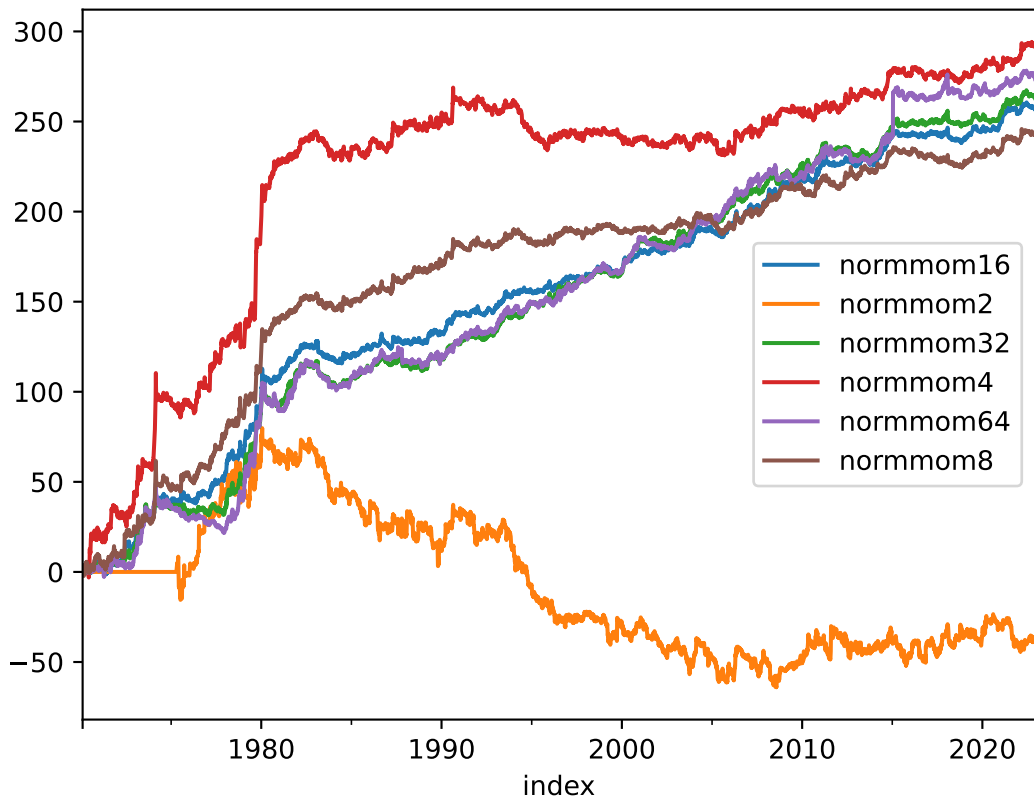


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.772, 'normmom2': -0.712, 'normmom32': 4.881, 'normmom4': 5.432, 'normmom64': 5.081, 'normmom8': 4.511}

ann. std {'normmom16': 4.927, 'normmom2': 11.208, 'normmom32': 4.996, 'normmom4': 8.328, 'normmom64': 6.315, 'normmom8': 5.936}

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

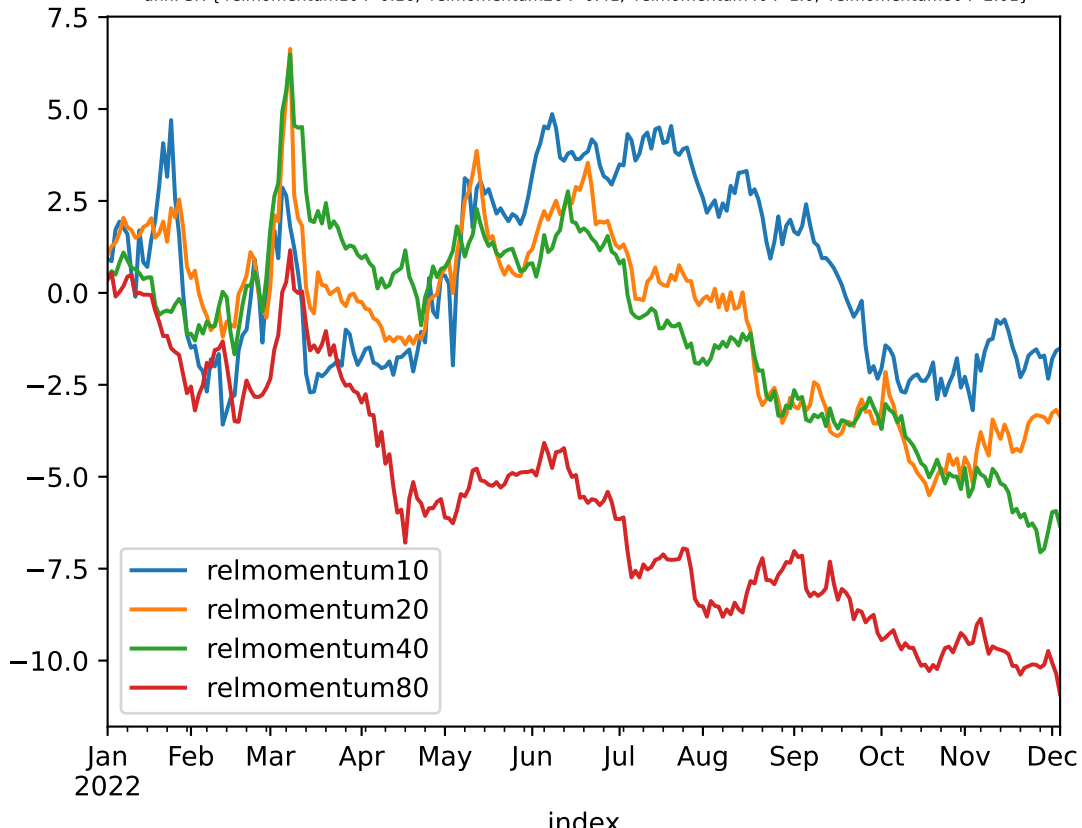


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -1.604, 'relmomentum20': -3.561, 'relmomentum40': -6.738, 'relmomentum80': -11.597}

ann. std {'relmomentum10': 10.272, 'relmomentum20': 8.593, 'relmomentum40': 6.724, 'relmomentum80': 5.767}

ann. SR {'relmomentum10': -0.16, 'relmomentum20': -0.41, 'relmomentum40': -1.0, 'relmomentum80': -2.01}

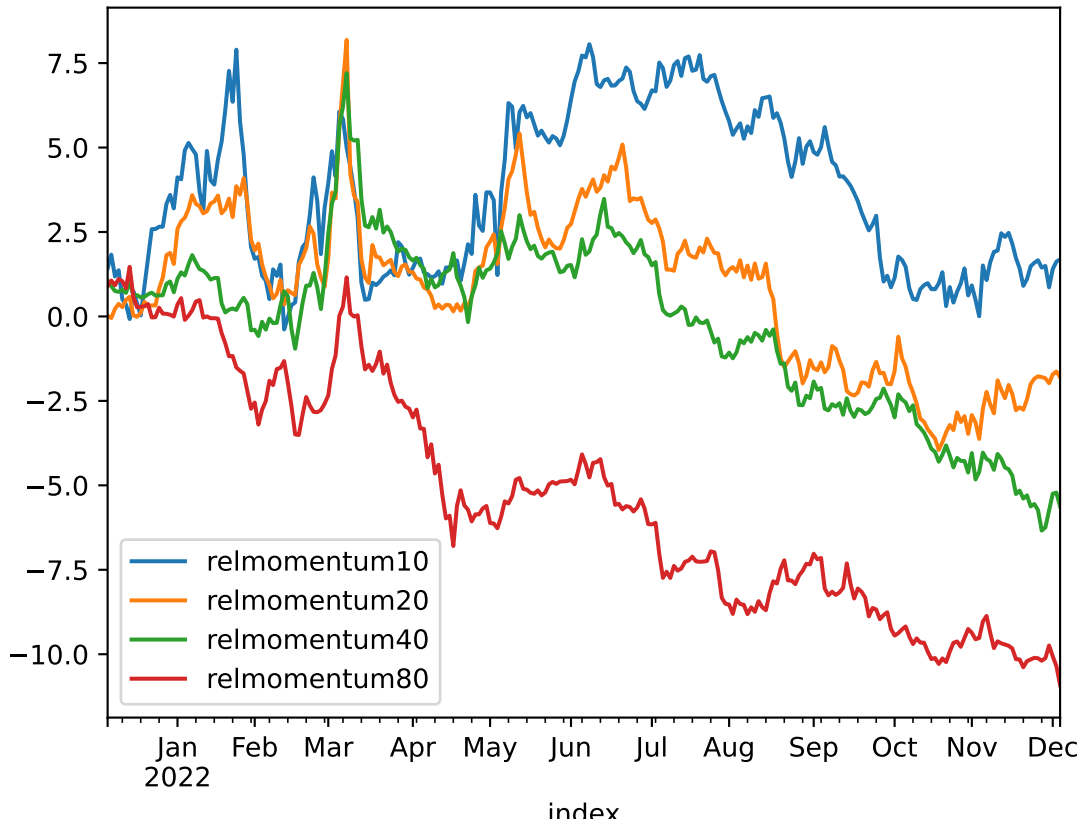


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': 1.661, 'relmomentum20': -1.773, 'relmomentum40': -5.541, 'relmomentum80': -10.752}

ann. std {'relmomentum10': 10.251, 'relmomentum20': 8.364, 'relmomentum40': 6.608, 'relmomentum80': 5.774}

ann. SR {'relmomentum10': 0.16, 'relmomentum20': -0.21, 'relmomentum40': -0.84, 'relmomentum80': -1.86}

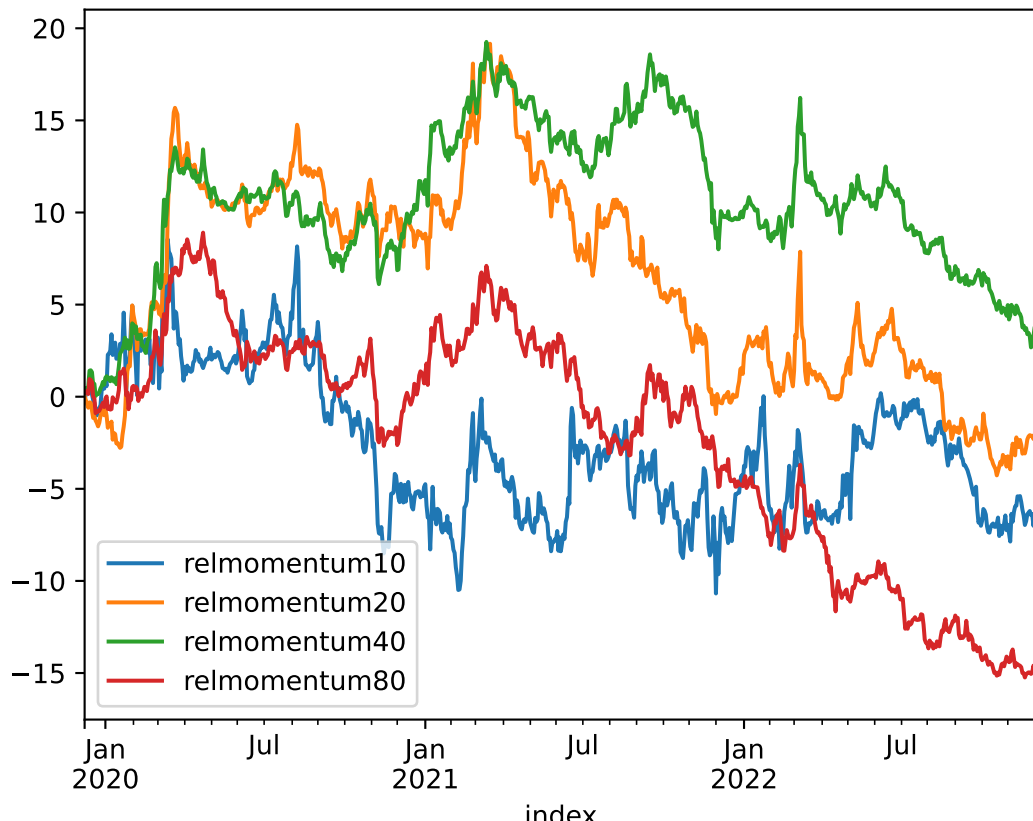


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -2.026, 'relmomentum20': -0.694, 'relmomentum40': 1.112, 'relmomentum80': -5.171}

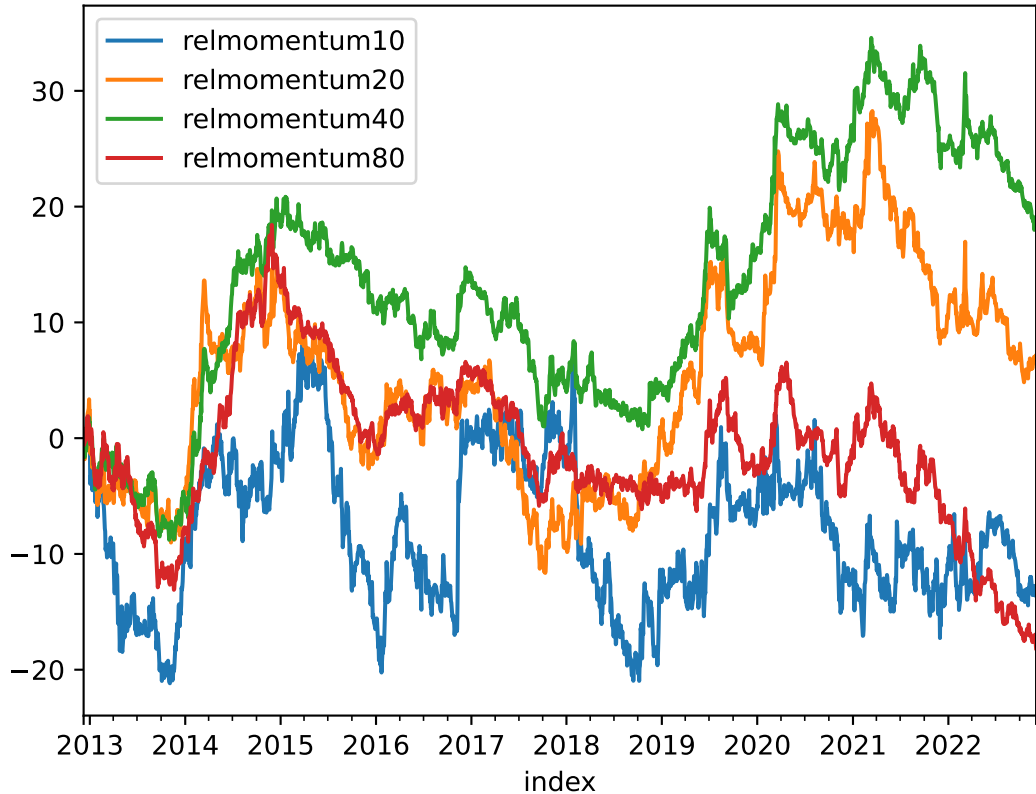
ann. std {'relmomentum10': 12.735, 'relmomentum20': 9.036, 'relmomentum40': 7.459, 'relmomentum80': 6.973}

ann. SR {'relmomentum10': -0.16, 'relmomentum20': -0.08, 'relmomentum40': 0.15, 'relmomentum80': -0.74}



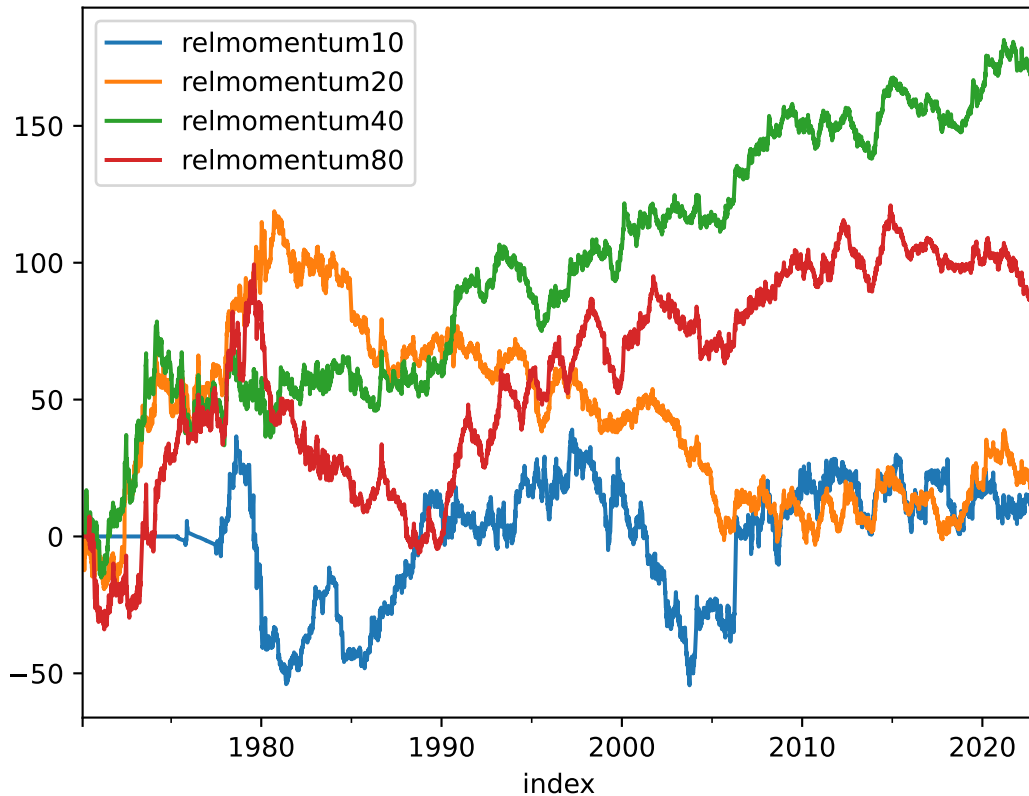
Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -1.254, 'relmomentum20': 0.685, 'relmomentum40': 1.837, 'relmomentum80': -1.782}
ann. std {'relmomentum10': 12.999, 'relmomentum20': 9.045, 'relmomentum40': 7.386, 'relmomentum80': 6.838}
ann. SR {'relmomentum10': -0.1, 'relmomentum20': 0.08, 'relmomentum40': 0.25, 'relmomentum80': -0.26}

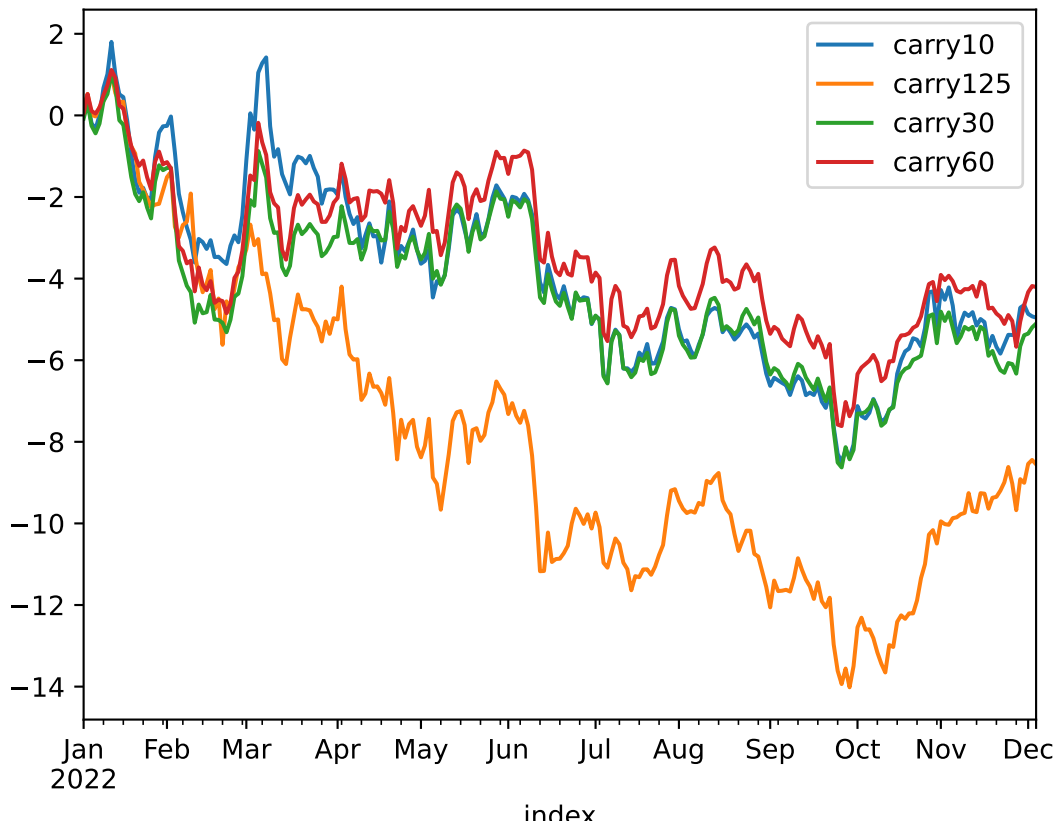


Total Trading Rule P&L for period '99Y'

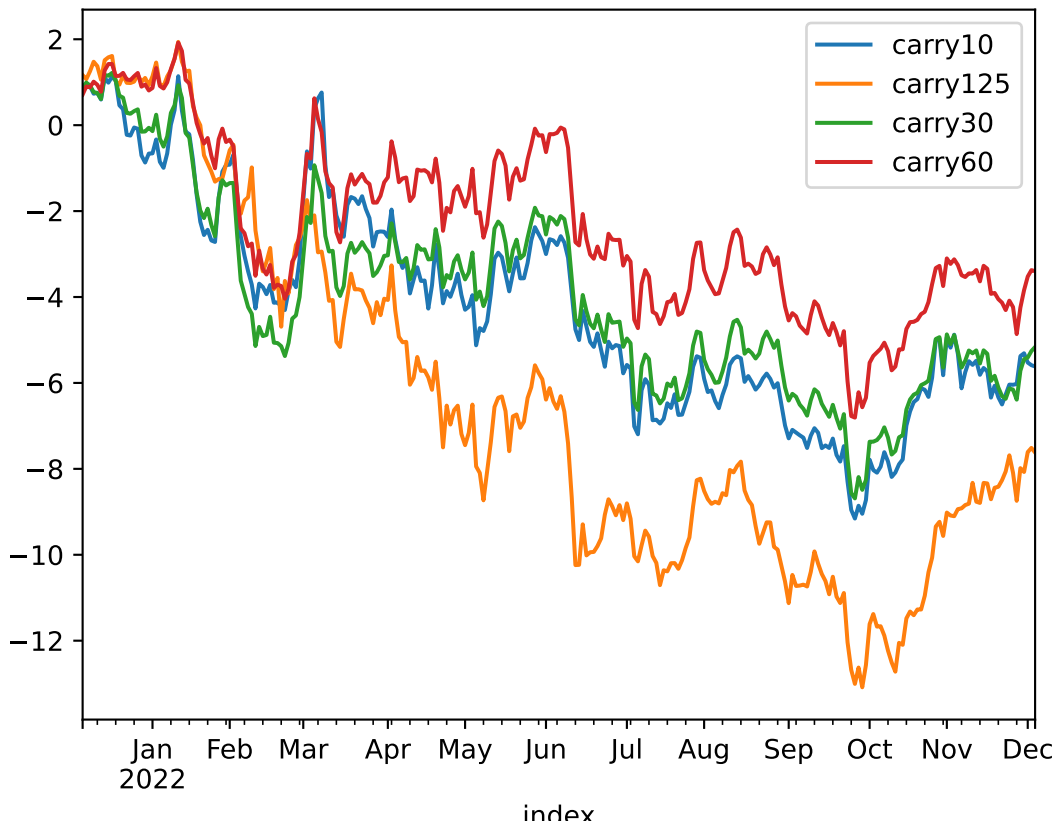
ann. mean {'relmomentum10': 0.168, 'relmomentum20': 0.326, 'relmomentum40': 3.074, 'relmomentum80': 1.567}
ann. std {'relmomentum10': 13.331, 'relmomentum20': 11.531, 'relmomentum40': 10.802, 'relmomentum80': 11.069}
ann. SR {'relmomentum10': 0.01, 'relmomentum20': 0.03, 'relmomentum40': 0.28, 'relmomentum80': 0.14}



Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': -5.265, 'carry125': -9.084, 'carry30': -5.422, 'carry60': -4.468}
ann. std {'carry10': 7.242, 'carry125': 7.638, 'carry30': 6.803, 'carry60': 6.832}
ann. SR {'carry10': -0.73, 'carry125': -1.19, 'carry30': -0.8, 'carry60': -0.65}

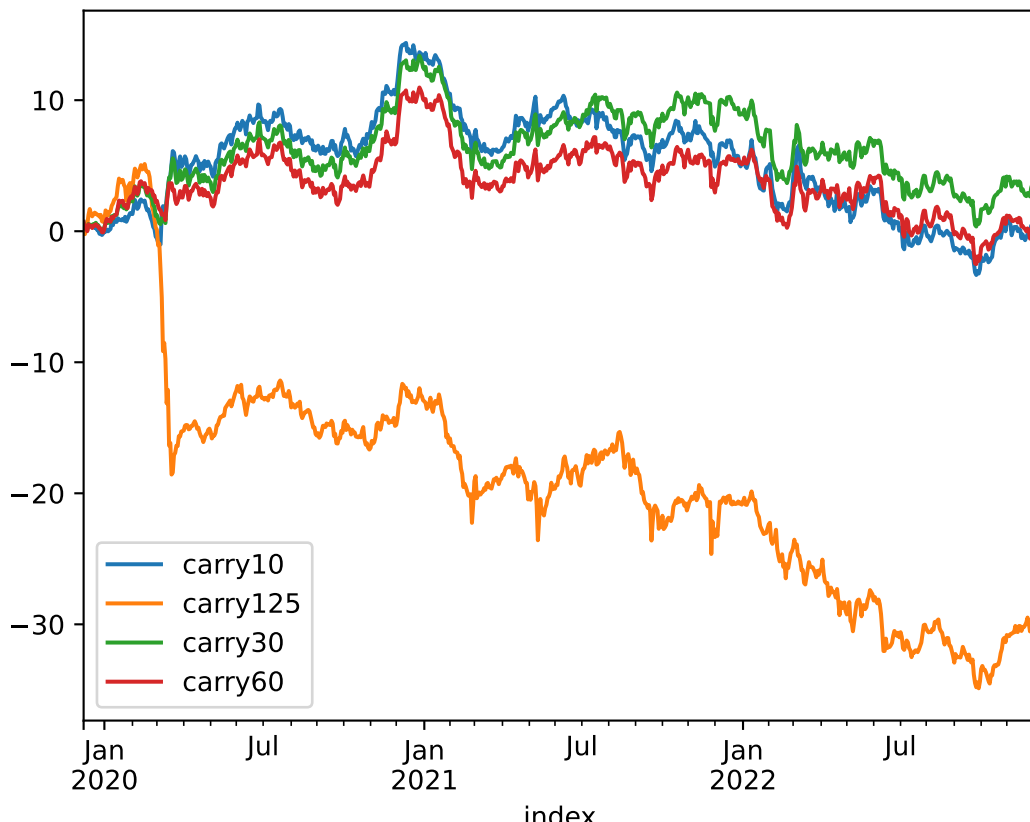


Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -5.531, 'carry125': -7.503, 'carry30': -5.085, 'carry60': -3.347}
ann. std {'carry10': 7.125, 'carry125': 7.51, 'carry30': 6.679, 'carry60': 6.661}
ann. SR {'carry10': -0.78, 'carry125': -1.0, 'carry30': -0.76, 'carry60': -0.5}

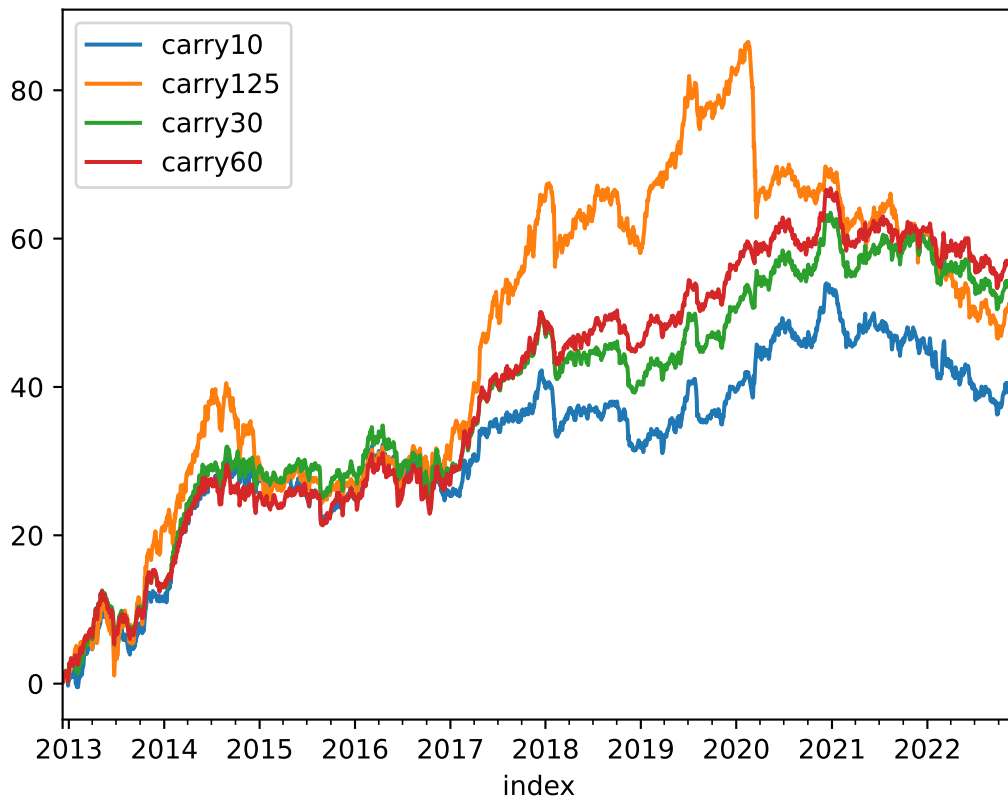


Total Trading Rule P&L for period '3Y'

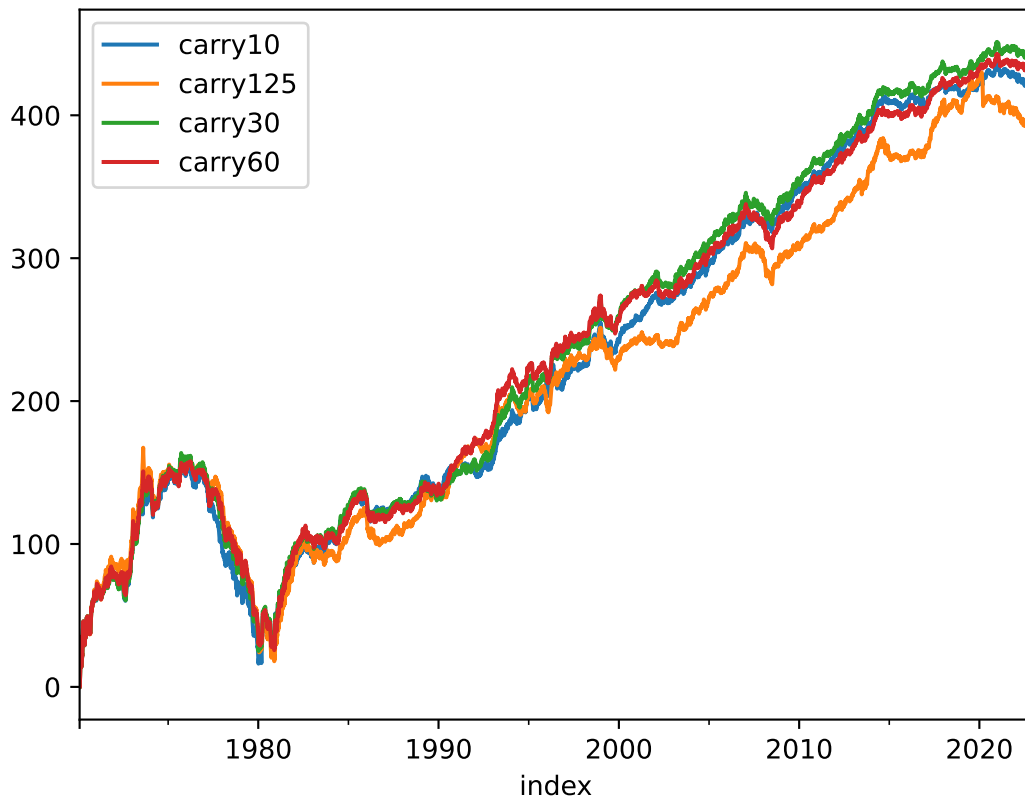
| | |
|-----------|--|
| ann. mean | {'carry10': 0.065, 'carry125': -9.643, 'carry30': 1.272, 'carry60': 0.295} |
| ann. std | {'carry10': 6.801, 'carry125': 9.403, 'carry30': 6.59, 'carry60': 6.537} |
| ann. SR | {'carry10': 0.01, 'carry125': -1.03, 'carry30': 0.19, 'carry60': 0.05} |



Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 3.909, 'carry125': 5.104, 'carry30': 5.302, 'carry60': 5.571}
ann. std {'carry10': 6.458, 'carry125': 9.129, 'carry30': 6.568, 'carry60': 6.535}
ann. SR {'carry10': 0.61, 'carry125': 0.56, 'carry30': 0.81, 'carry60': 0.85}



Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.841, 'carry125': 7.346, 'carry30': 8.205, 'carry60': 8.037}
ann. std {'carry10': 11.866, 'carry125': 12.106, 'carry30': 11.877, 'carry60': 11.828}
ann. SR {'carry10': 0.66, 'carry125': 0.61, 'carry30': 0.69, 'carry60': 0.68}

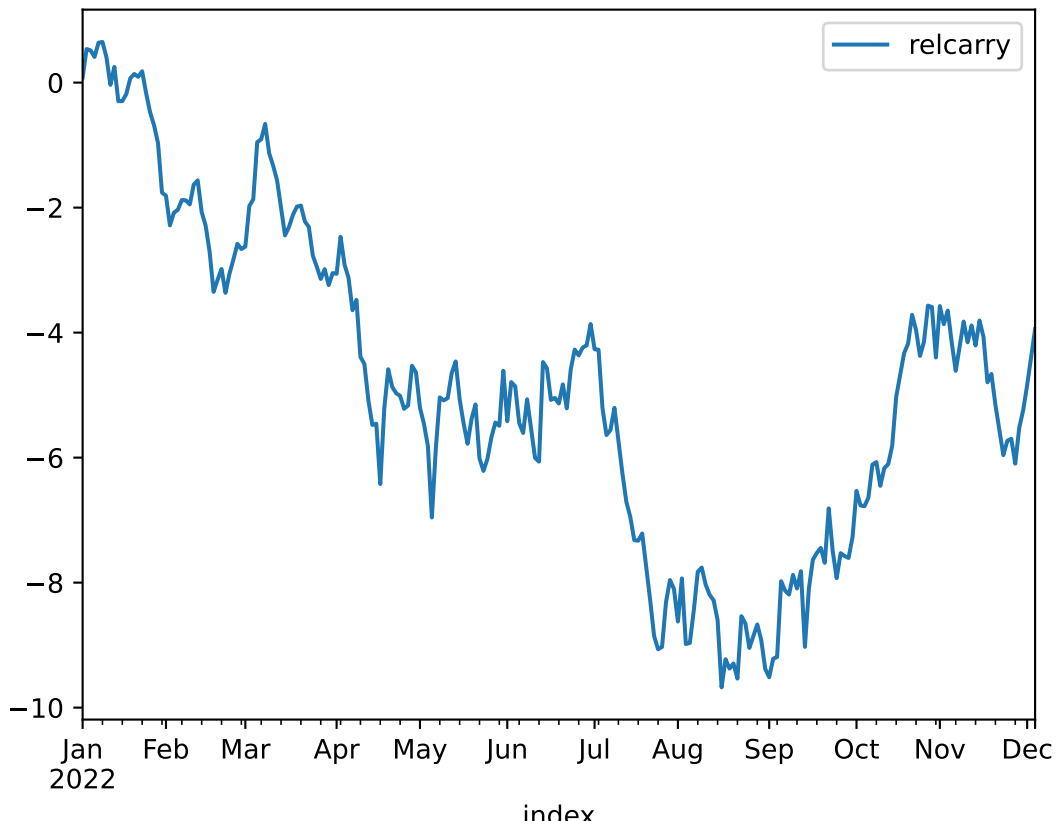


Total Trading Rule P&L for period 'YTD'

ann. mean {'relcarry': -4.191}

ann. std {'relcarry': 7.145}

ann. SR {'relcarry': -0.59}

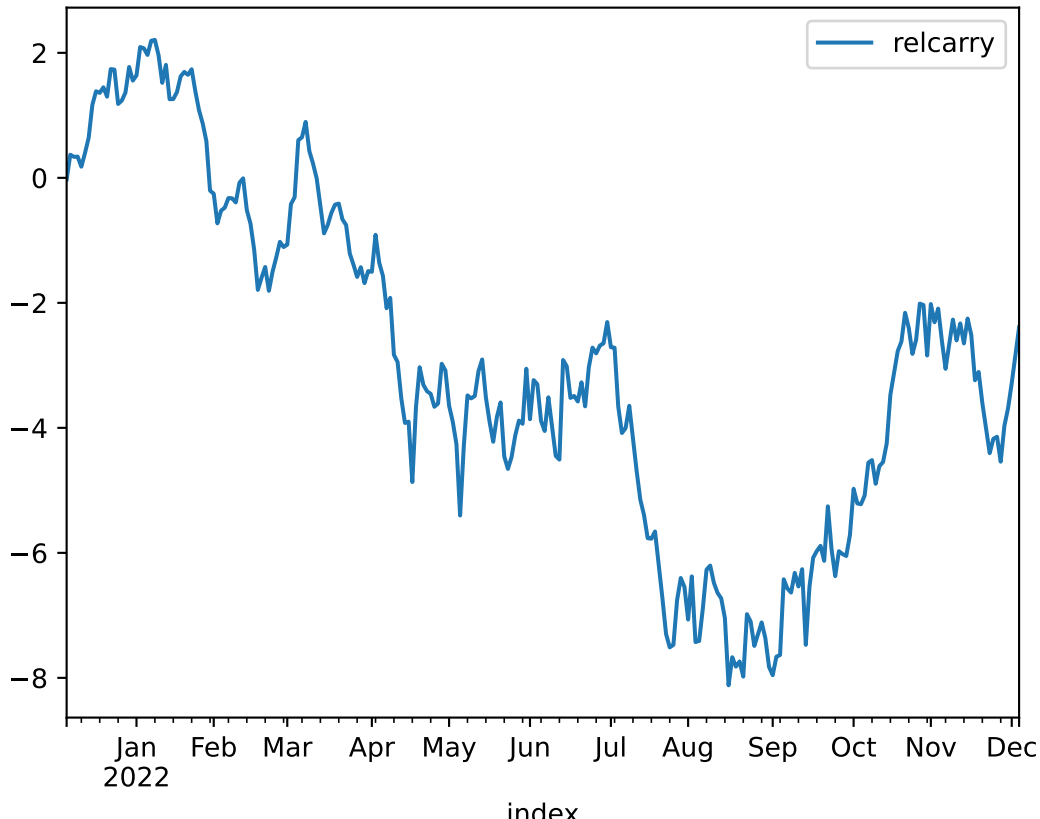


Total Trading Rule P&L for period '1Y'

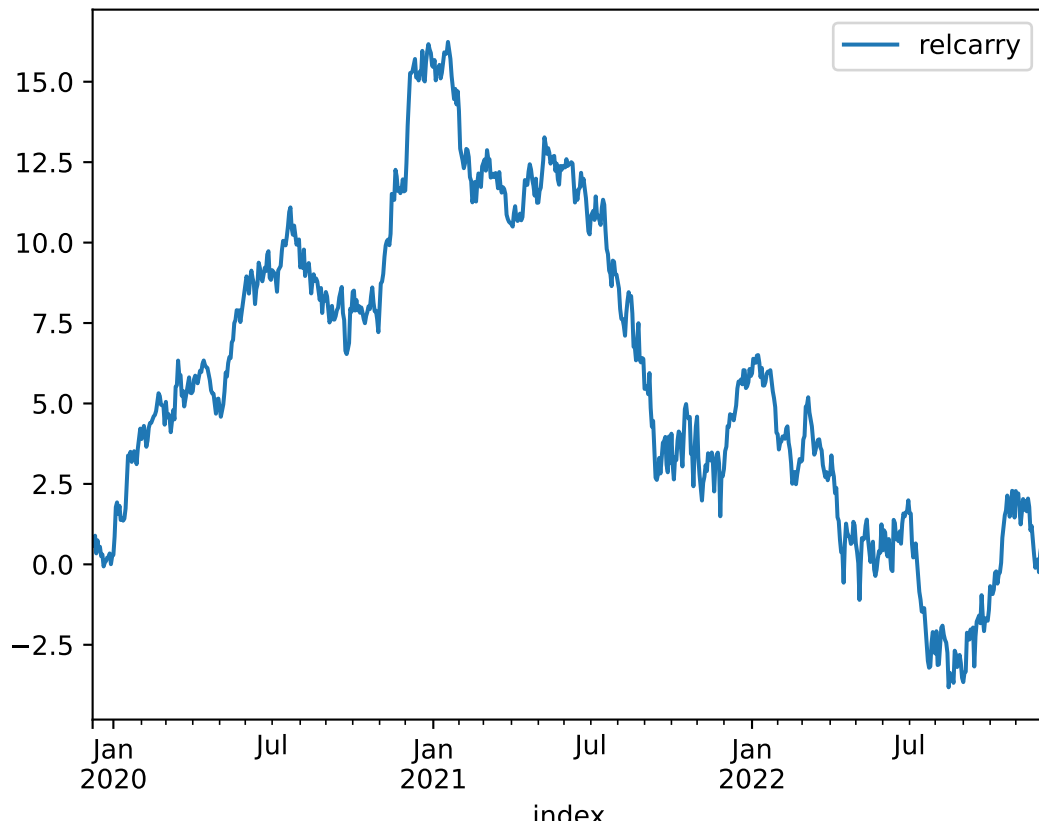
ann. mean {'relcarry': -2.353}

ann. std {'relcarry': 6.98}

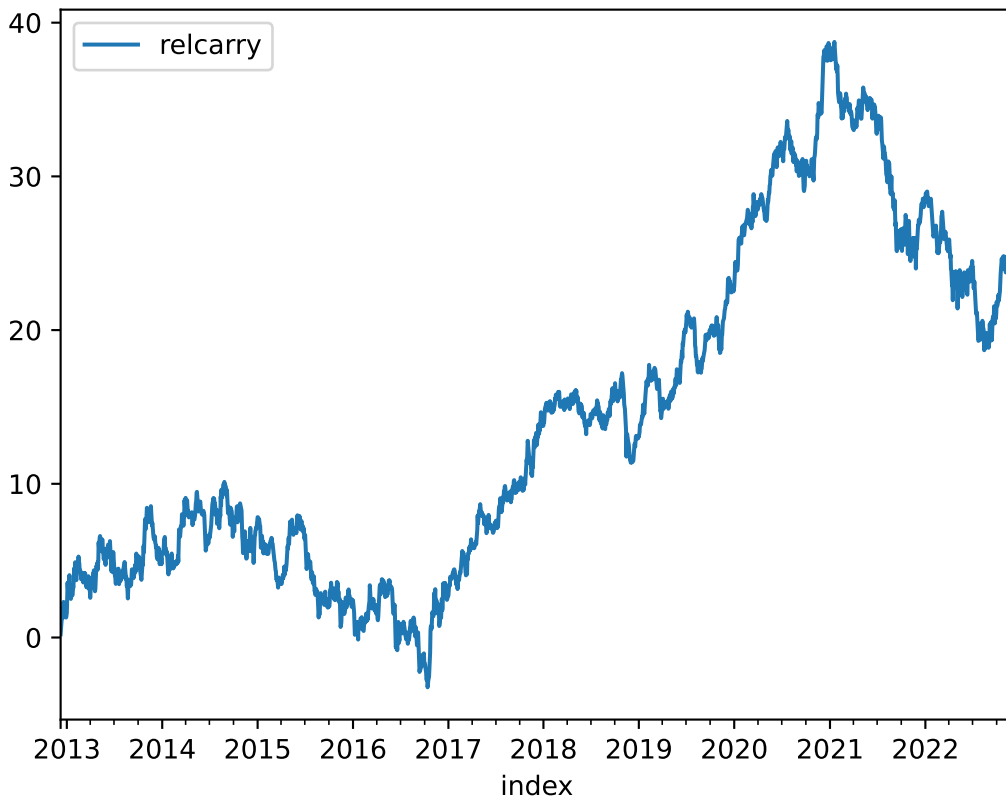
ann. SR {'relcarry': -0.34}



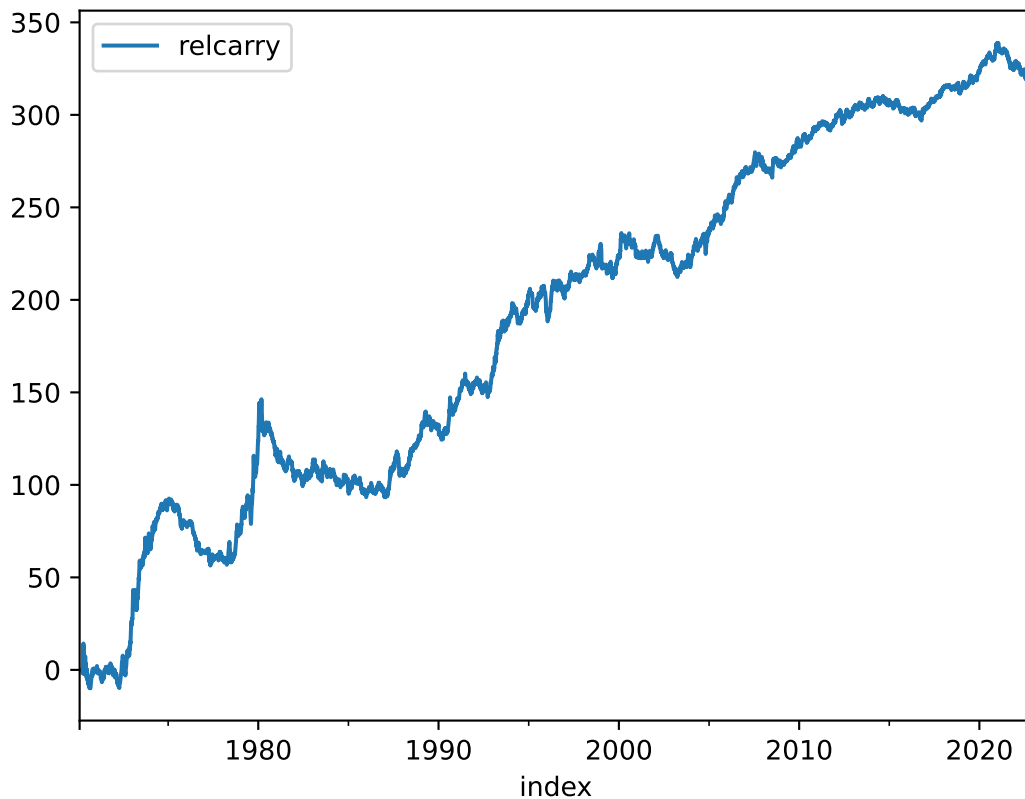
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': 0.625}
ann. std {'relcarry': 6.817}
ann. SR {'relcarry': 0.09}



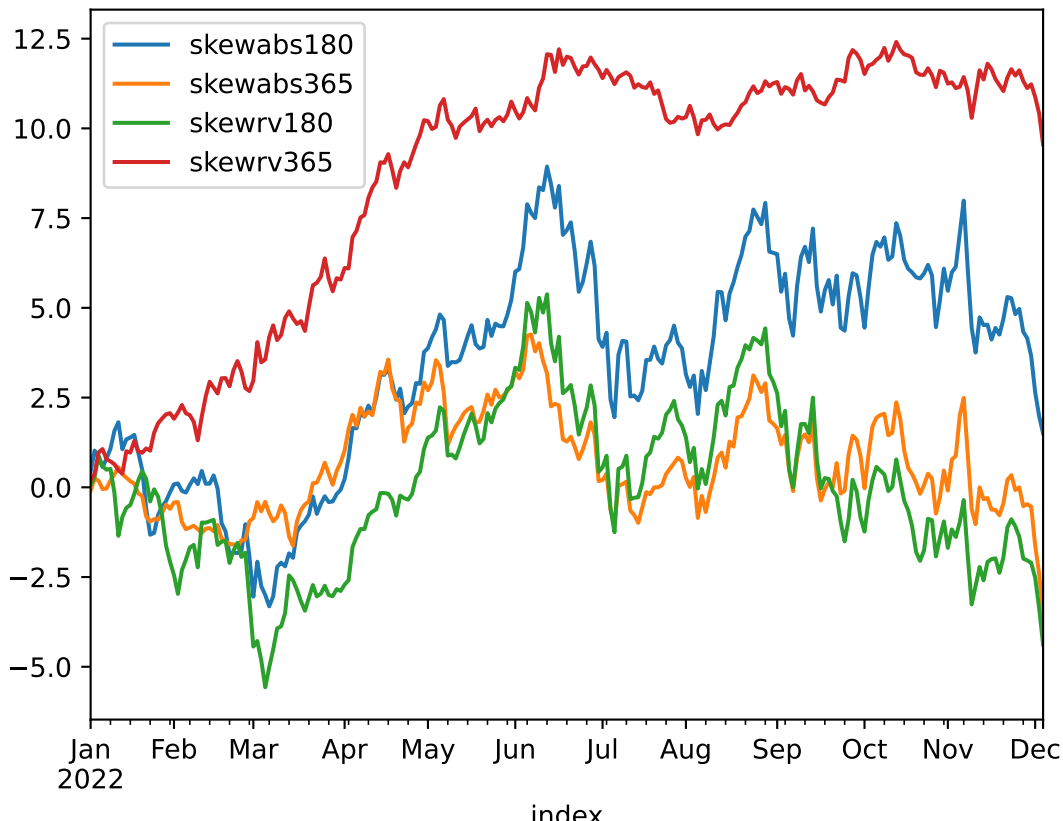
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.398}
ann. std {'relcarry': 6.044}
ann. SR {'relcarry': 0.4}



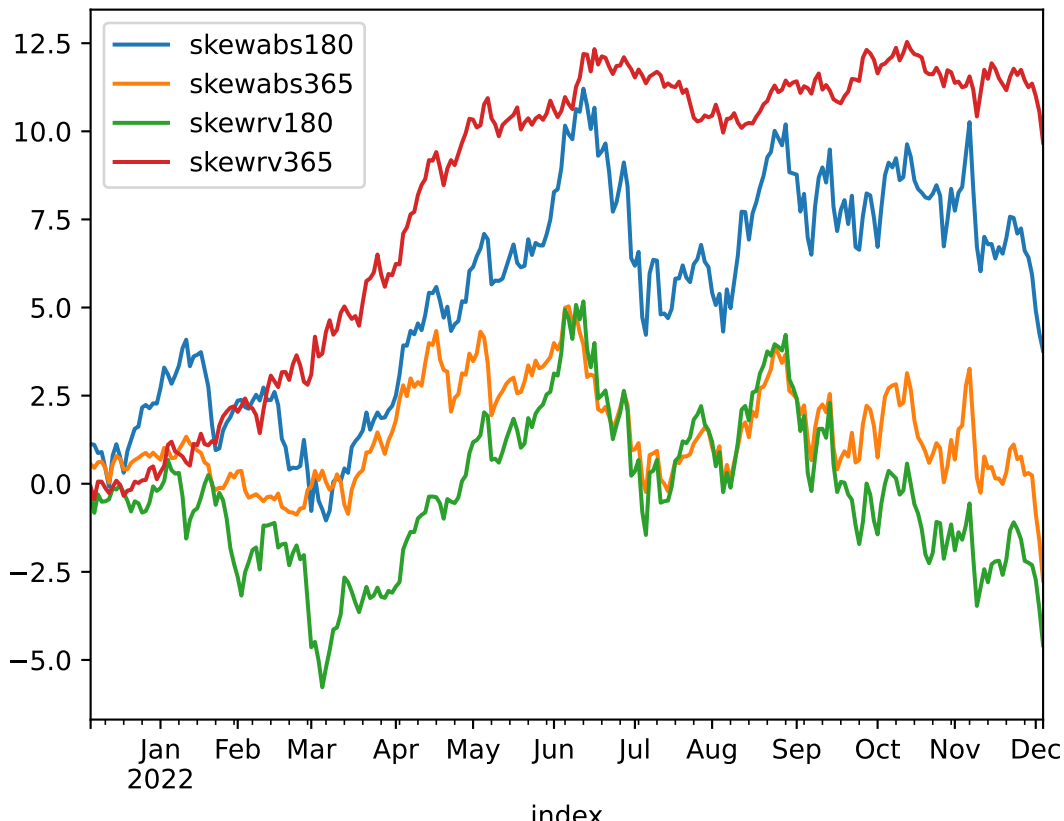
Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 6.027}
ann. std {'relcarry': 9.561}
ann. SR {'relcarry': 0.63}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': 1.596, 'skewabs365': -3.742, 'skewrv180': -4.65, 'skewrv365': 10.148}
ann. std {'skewabs180': 10.021, 'skewabs365': 7.826, 'skewrv180': 9.415, 'skewrv365': 4.961}
ann. SR {'skewabs180': 0.16, 'skewabs365': -0.48, 'skewrv180': -0.49, 'skewrv365': 2.05}



Total Trading Rule P&L for period '1Y'
ann. mean {'skewabs180': 3.718, 'skewabs365': -2.707, 'skewrv180': -4.511, 'skewrv365': 9.532}
ann. std {'skewabs180': 9.844, 'skewabs365': 7.604, 'skewrv180': 9.142, 'skewrv365': 4.874}
ann. SR {'skewabs180': 0.38, 'skewabs365': -0.36, 'skewrv180': -0.49, 'skewrv365': 1.96}

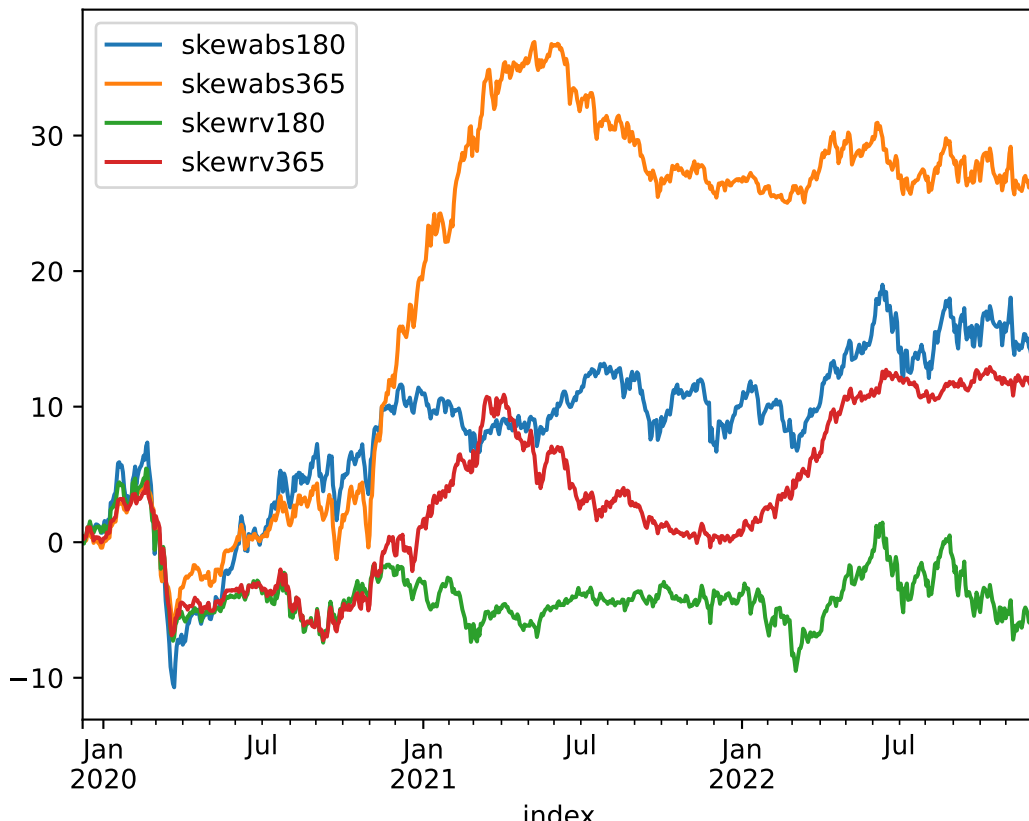


Total Trading Rule P&L for period '3Y'

ann. mean {'skewabs180': 3.79, 'skewabs365': 7.592, 'skewrv180': -2.722, 'skewrv365': 3.302}

ann. std {'skewabs180': 9.581, 'skewabs365': 8.721, 'skewrv180': 7.771, 'skewrv365': 6.584}

ann. SR {'skewabs180': 0.4, 'skewabs365': 0.87, 'skewrv180': -0.35, 'skewrv365': 0.5}

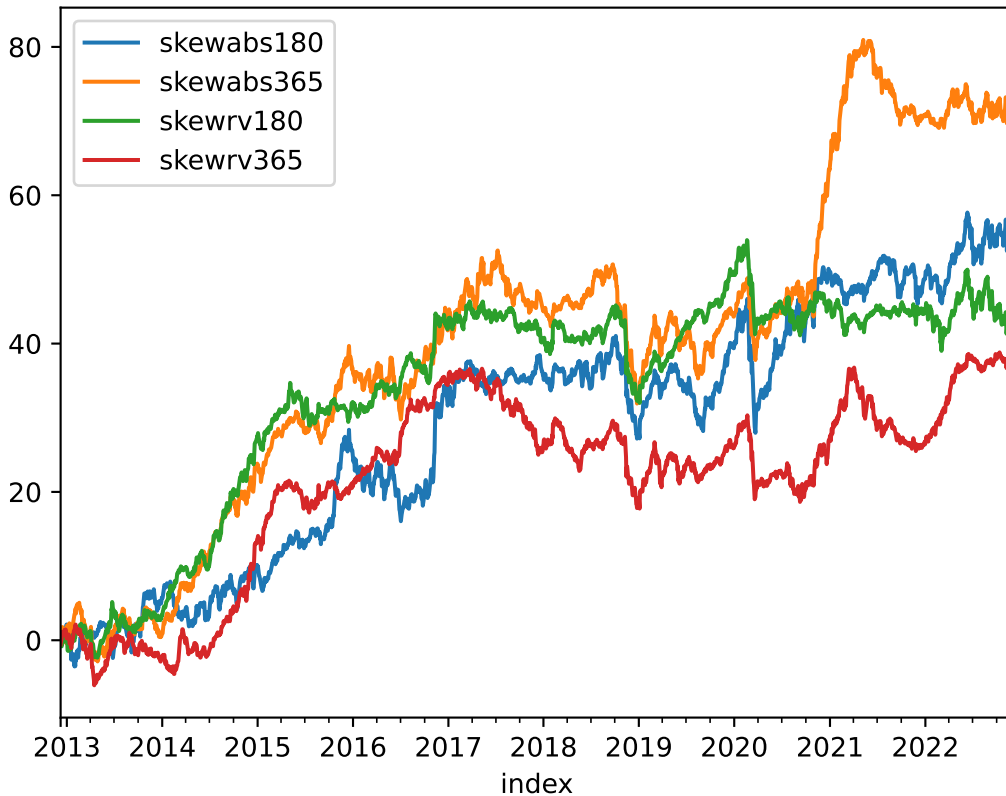


Total Trading Rule P&L for period '10Y'

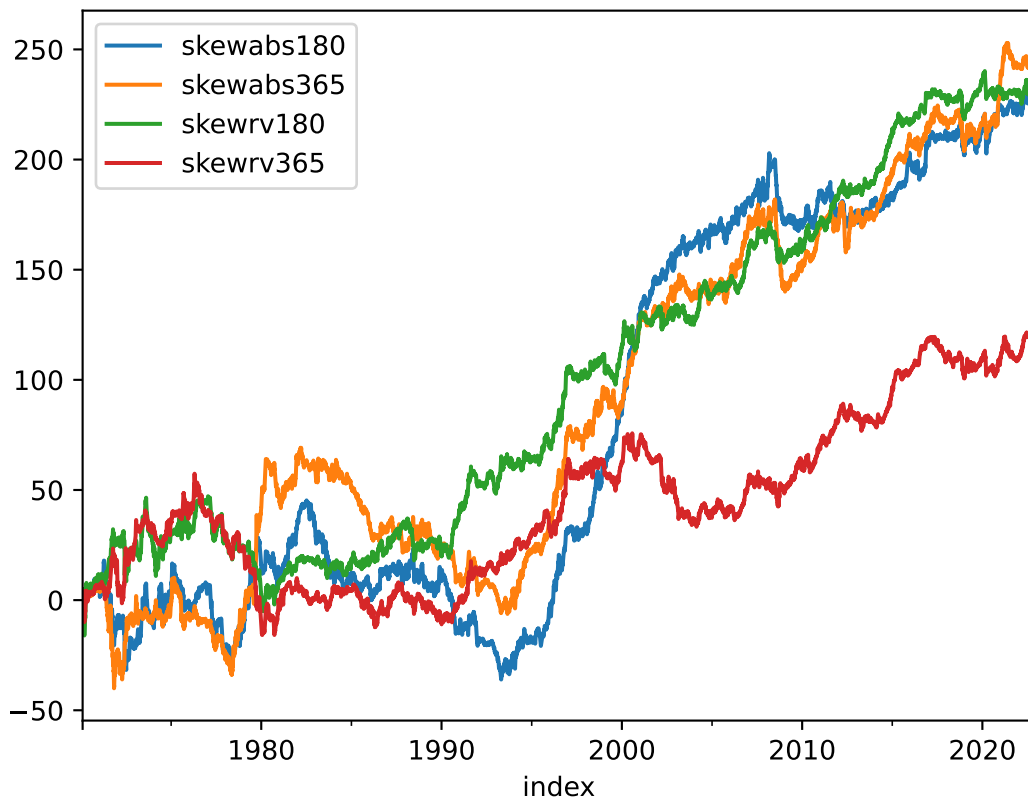
ann. mean {'skewabs180': 4.933, 'skewabs365': 6.599, 'skewrv180': 3.949, 'skewrv365': 3.531}

ann. std {'skewabs180': 8.069, 'skewabs365': 7.993, 'skewrv180': 6.589, 'skewrv365': 6.184}

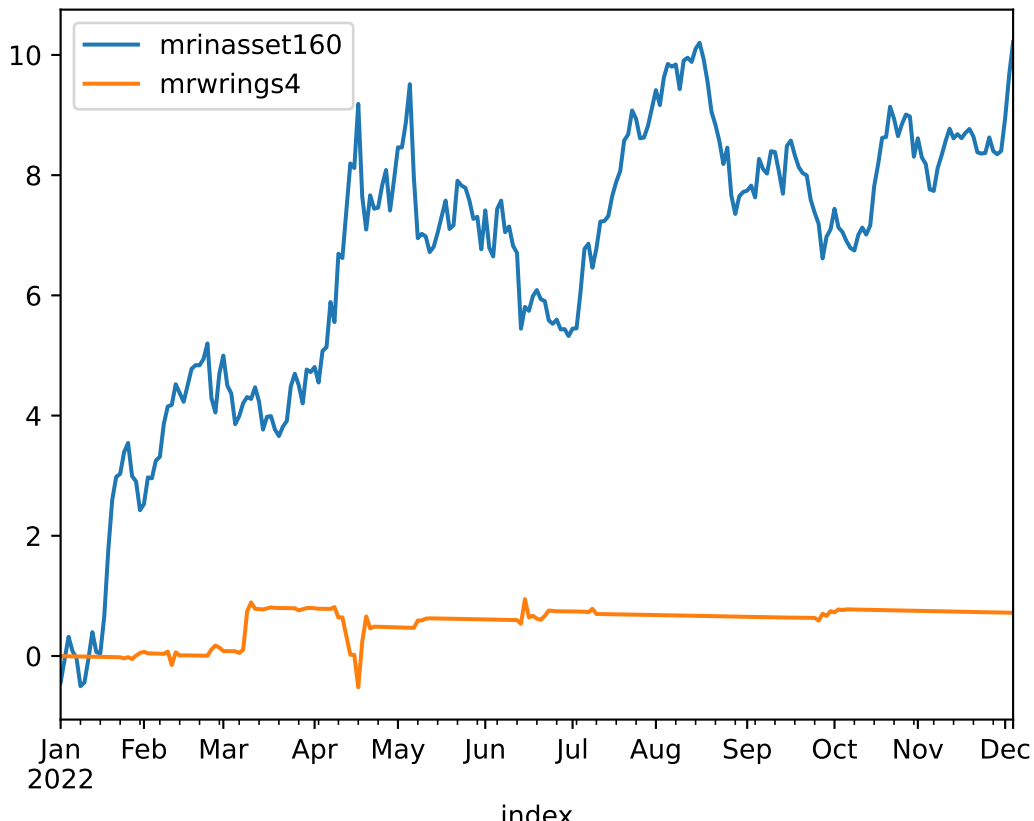
ann. SR {'skewabs180': 0.61, 'skewabs365': 0.83, 'skewrv180': 0.6, 'skewrv365': 0.57}



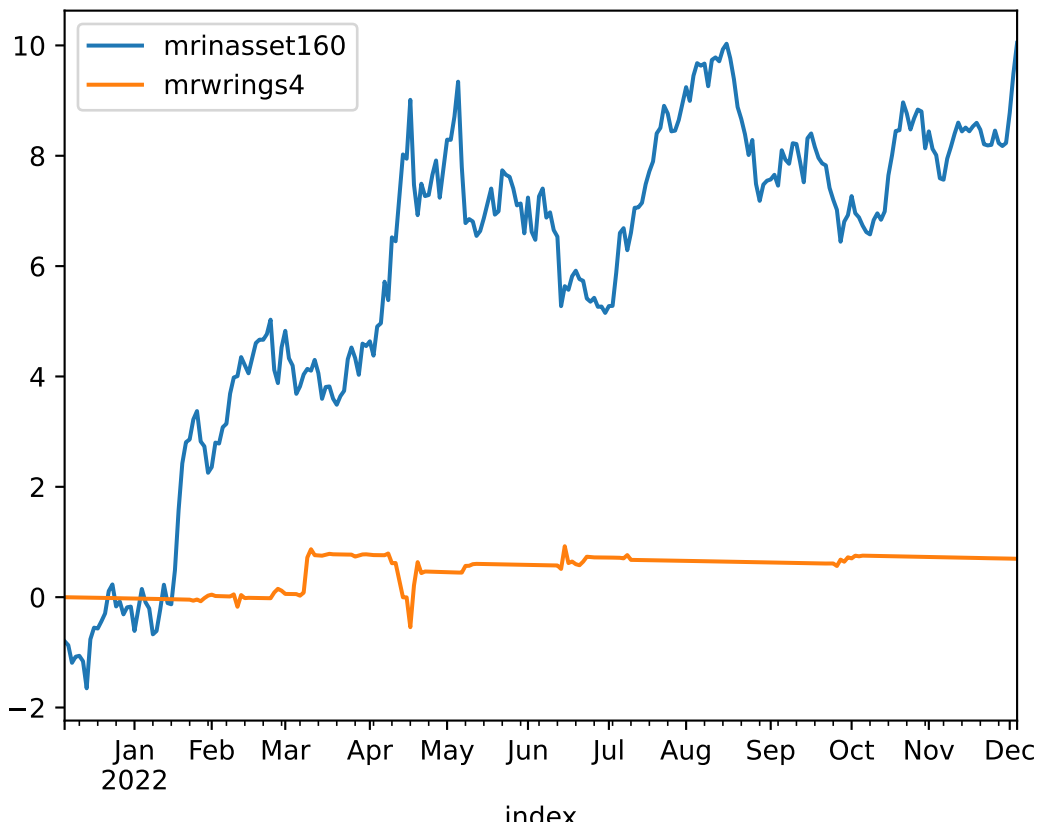
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.179, 'skewabs365': 4.442, 'skewrv180': 4.205, 'skewrv365': 2.207}
ann. std {'skewabs180': 10.794, 'skewabs365': 10.3, 'skewrv180': 9.31, 'skewrv365': 8.606}
ann. SR {'skewabs180': 0.39, 'skewabs365': 0.43, 'skewrv180': 0.45, 'skewrv365': 0.26}



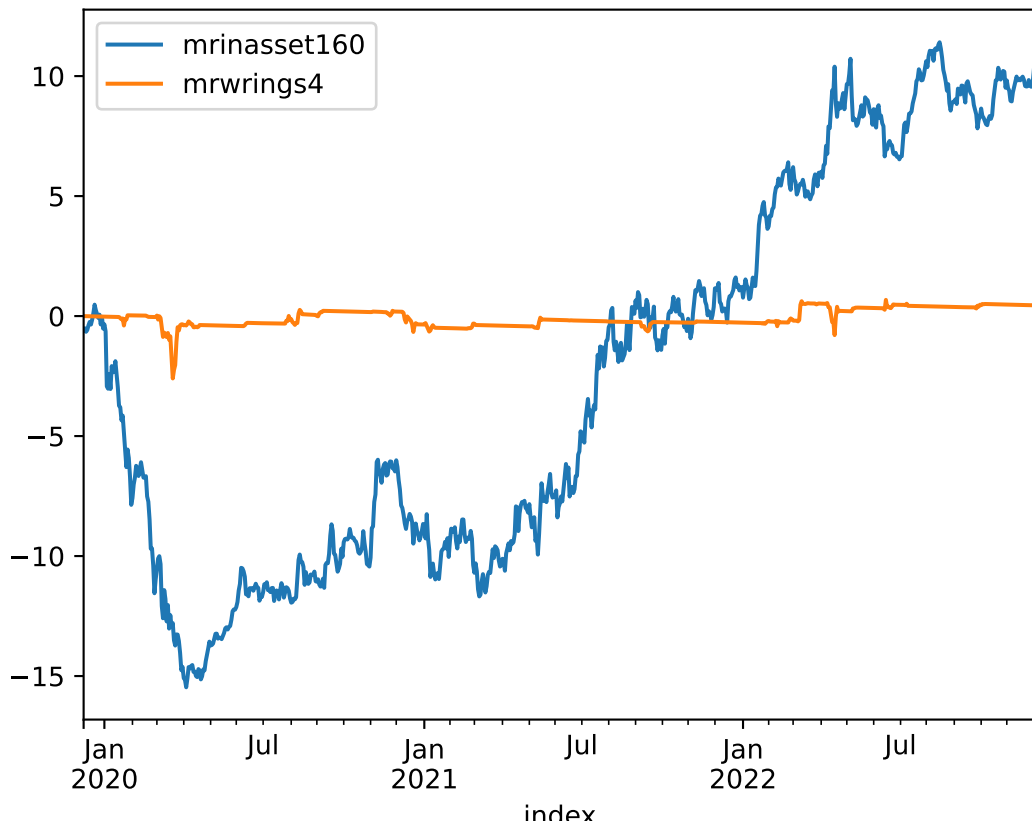
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 10.853, 'mrwrings4': 0.764}
ann. std {'mrinasset160': 6.35, 'mrwrings4': 1.539}
ann. SR {'mrinasset160': 1.71, 'mrwrings4': 0.5}



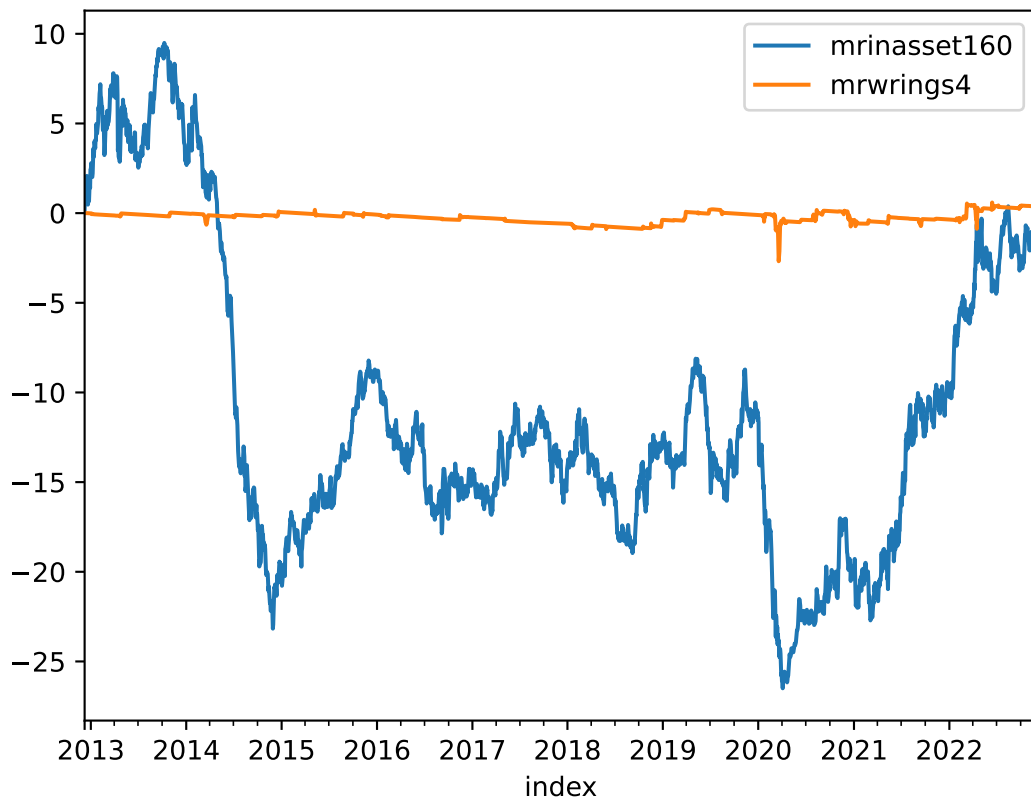
Total Trading Rule P&L for period '1Y'
ann. mean {'mrinasset160': 9.891, 'mrwrings4': 0.685}
ann. std {'mrinasset160': 6.299, 'mrwrings4': 1.481}
ann. SR {'mrinasset160': 1.57, 'mrwrings4': 0.46}



Total Trading Rule P&L for period '3Y'
ann. mean {'mrinasset160': 3.745, 'mrwrings4': 0.146}
ann. std {'mrinasset160': 7.088, 'mrwrings4': 1.537}
ann. SR {'mrinasset160': 0.53, 'mrwrings4': 0.1}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': 0.039, 'mrwrings4': 0.036}
ann. std {'mrinasset160': 6.657, 'mrwrings4': 0.897}
ann. SR {'mrinasset160': 0.01, 'mrwrings4': 0.04}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.351, 'mrwrings4': -1.174}
ann. std {'mrinasset160': 10.928, 'mrwrings4': 2.632}
ann. SR {'mrinasset160': -0.31, 'mrwrings4': -0.45}

