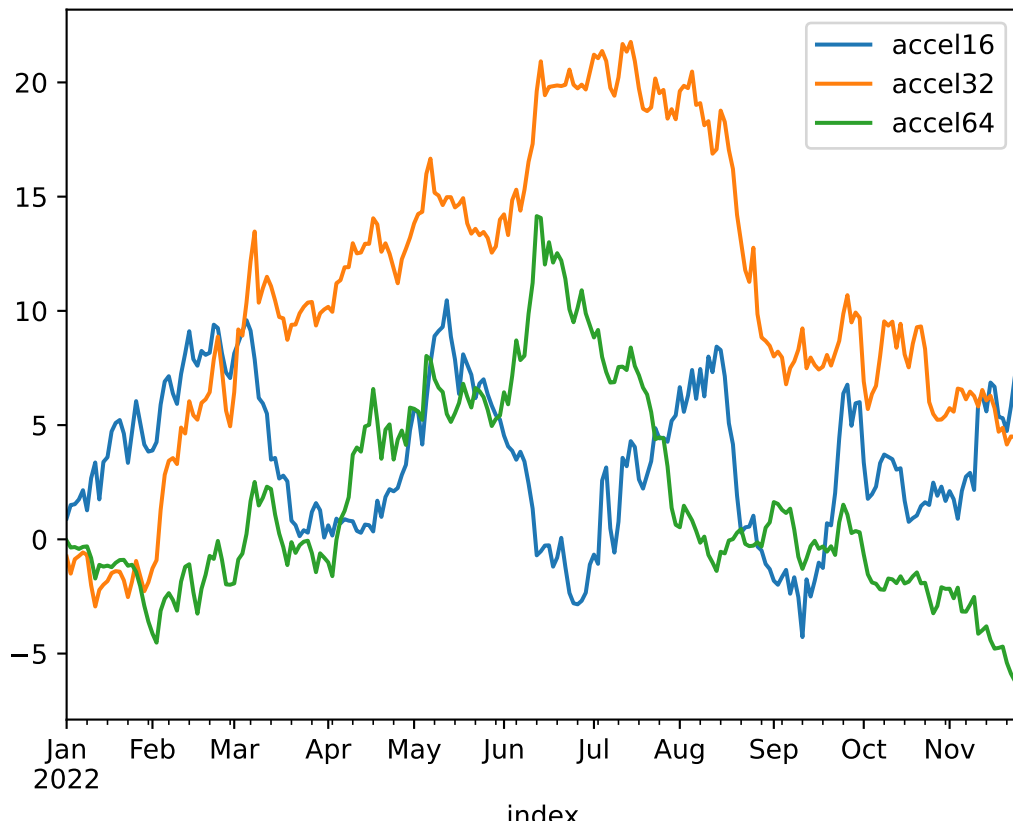
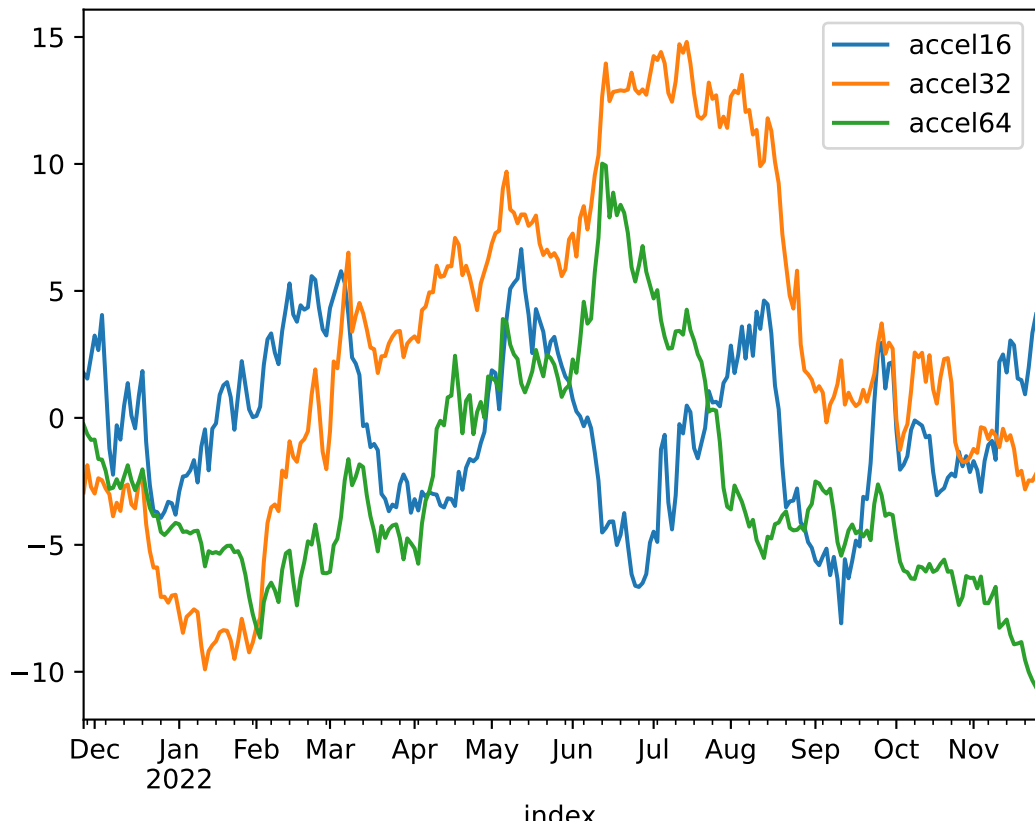


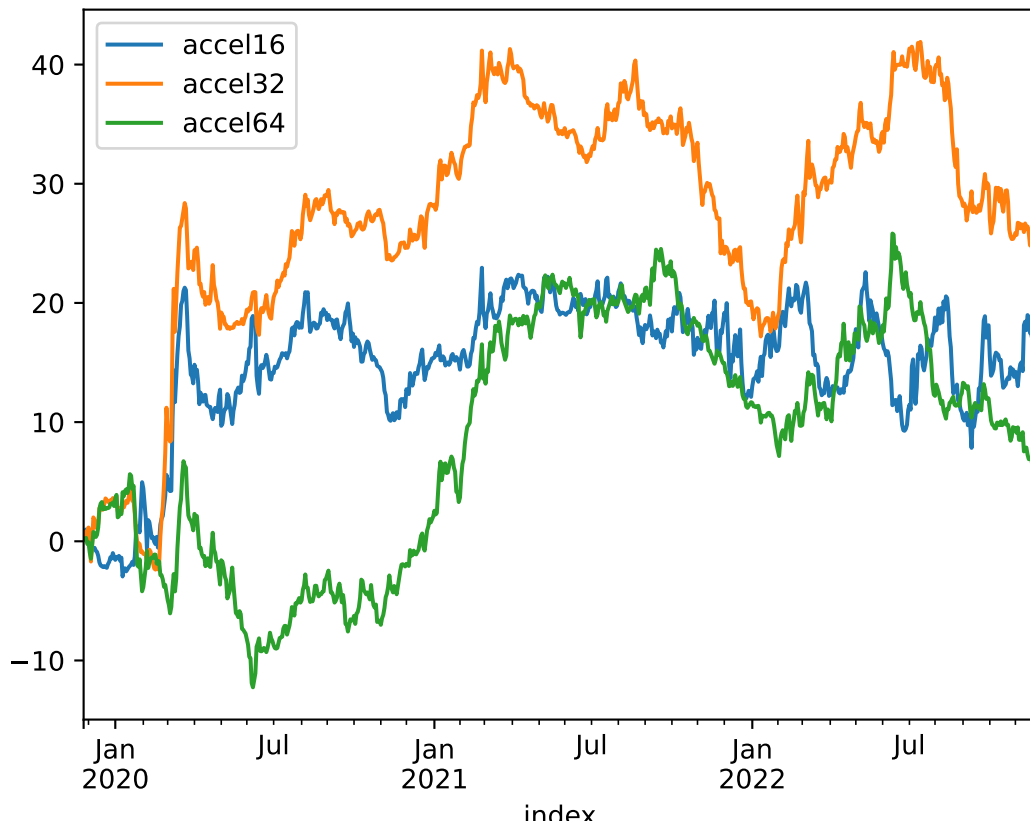
Total Trading Rule P&L for period 'YTD'
ann. mean {'accel16': 8.633, 'accel32': 5.212, 'accel64': -7.086}
ann. std {'accel16': 16.285, 'accel32': 14.302, 'accel64': 12.015}
ann. SR {'accel16': 0.53, 'accel32': 0.36, 'accel64': -0.59}



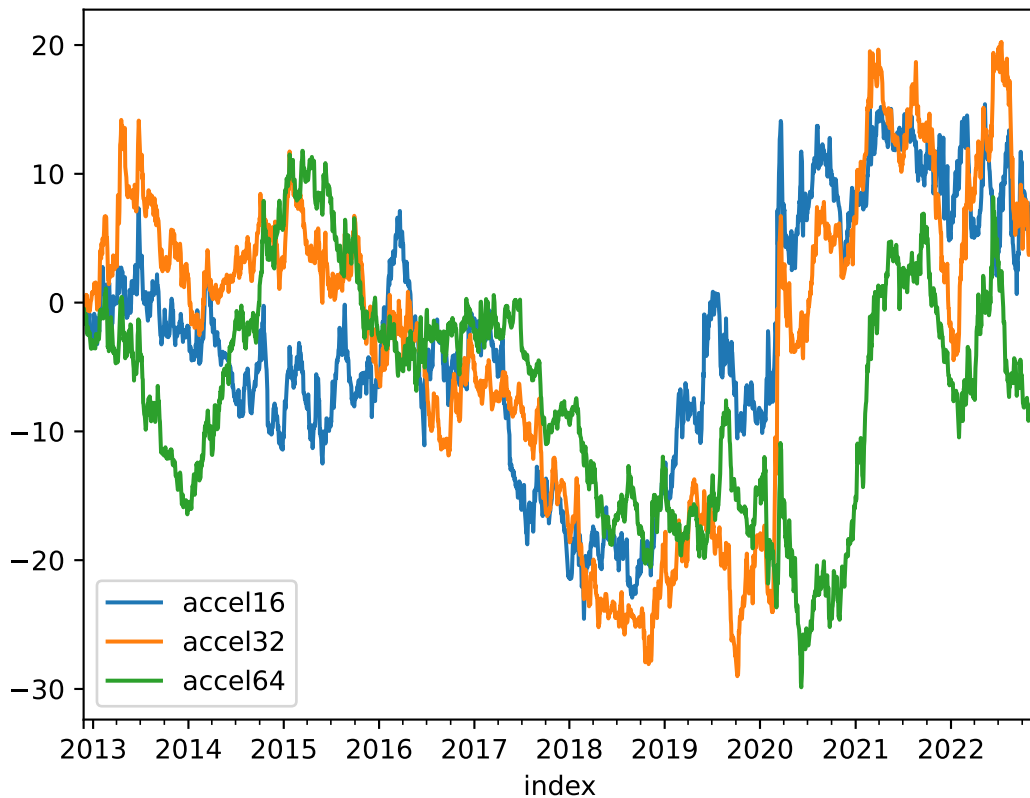
Total Trading Rule P&L for period '1Y'
ann. mean {'accel16': 4.014, 'accel32': -2.169, 'accel64': -10.448}
ann. std {'accel16': 16.833, 'accel32': 14.311, 'accel64': 11.594}
ann. SR {'accel16': 0.24, 'accel32': -0.15, 'accel64': -0.9}



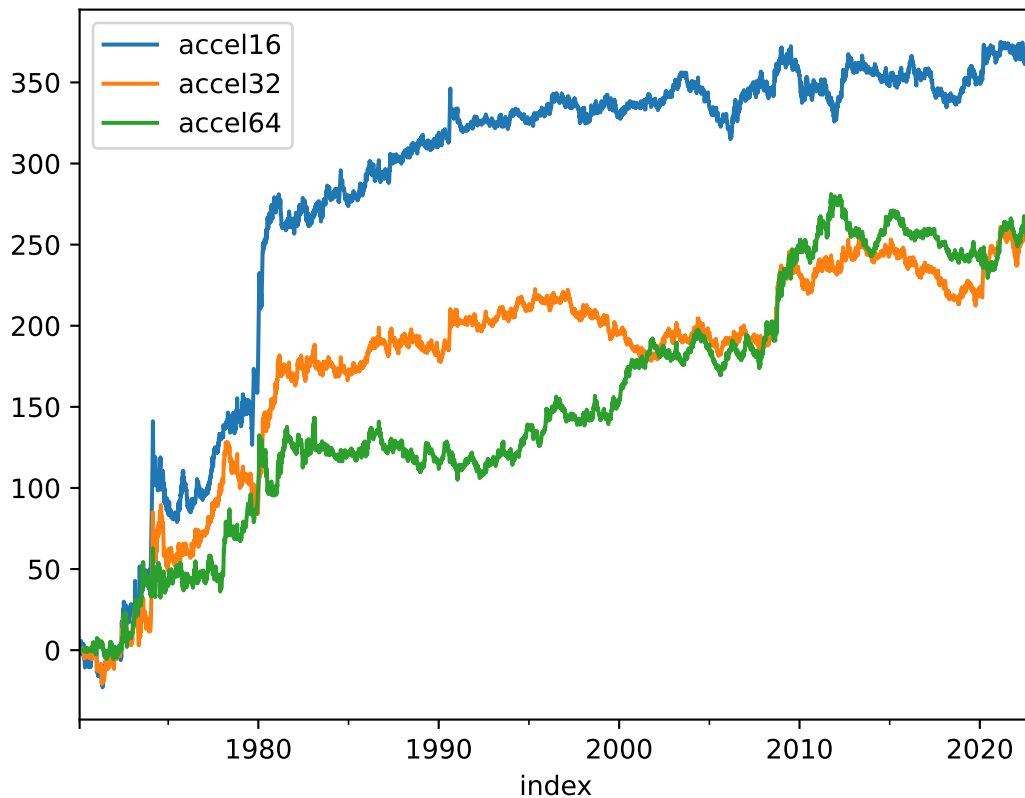
Total Trading Rule P&L for period '3Y'
ann. mean {'accel16': 6.542, 'accel32': 8.139, 'accel64': 1.699}
ann. std {'accel16': 14.731, 'accel32': 14.099, 'accel64': 11.782}
ann. SR {'accel16': 0.44, 'accel32': 0.58, 'accel64': 0.14}



Total Trading Rule P&L for period '10Y'
ann. mean {'accel16': 1.259, 'accel32': 0.317, 'accel64': -1.219}
ann. std {'accel16': 11.848, 'accel32': 11.085, 'accel64': 9.57}
ann. SR {'accel16': 0.11, 'accel32': 0.03, 'accel64': -0.13}



Total Trading Rule P&L for period '99Y'
ann. mean {'accel16': 6.912, 'accel32': 4.546, 'accel64': 4.588}
ann. std {'accel16': 15.731, 'accel32': 13.793, 'accel64': 13.336}
ann. SR {'accel16': 0.44, 'accel32': 0.33, 'accel64': 0.34}

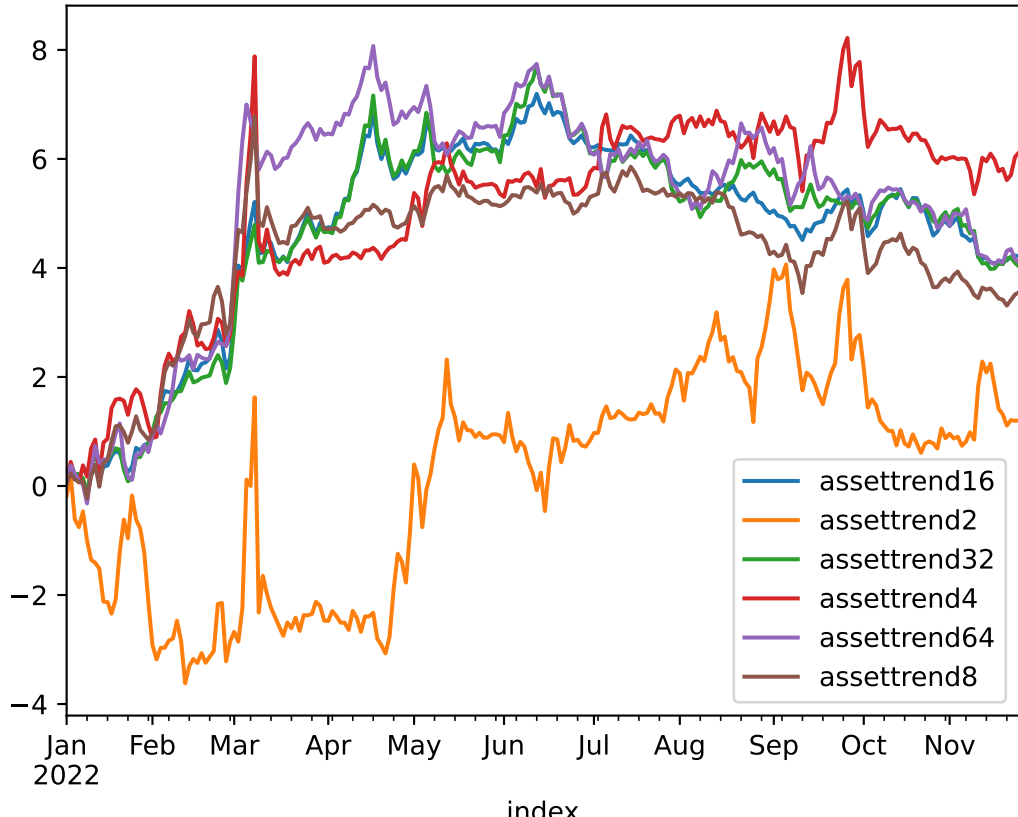


Total Trading Rule P&L for period 'YTD'

ann. mean {'assettrend16': 4.609, 'assettrend2': 1.316, 'assettrend32': 4.404, 'assettrend4': 6.698, 'assettrend64': 4.485, 'assettrend8': 3.887}

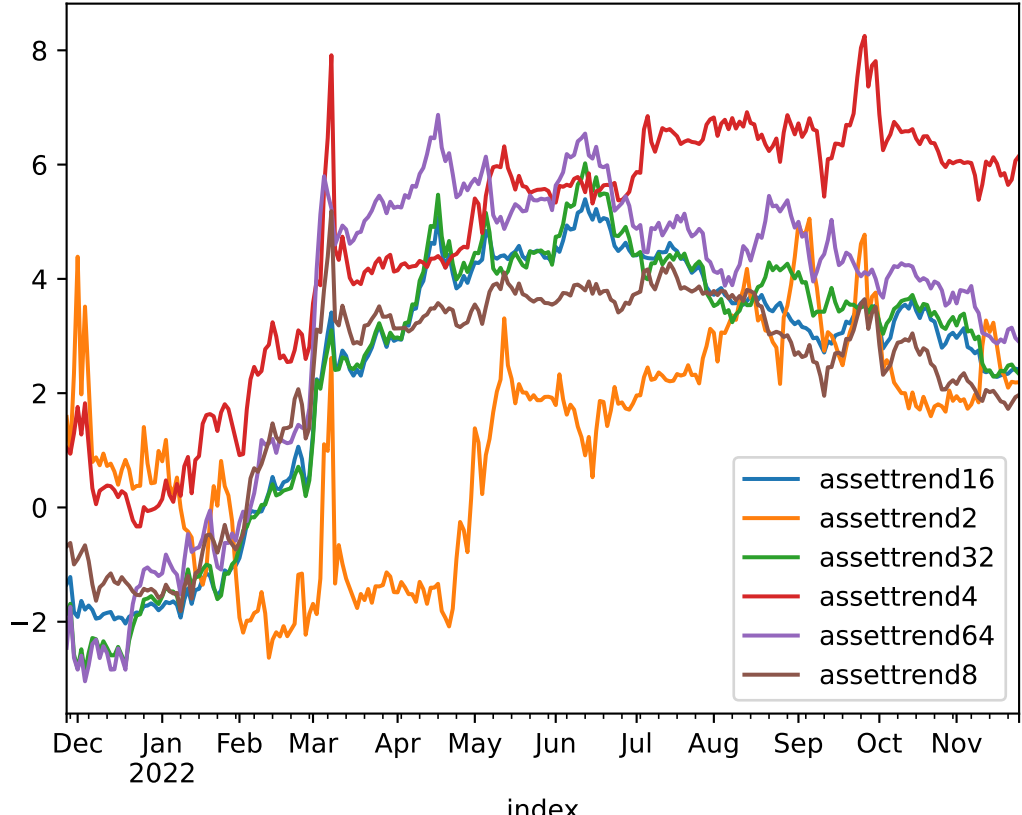
ann. std {'assettrend16': 3.163, 'assettrend2': 8.03, 'assettrend32': 3.489, 'assettrend4': 6.003, 'assettrend64': 4.115, 'assettrend8': 3.927}

ann. SR {'assettrend16': 1.46, 'assettrend2': 0.16, 'assettrend32': 1.26, 'assettrend4': 1.12, 'assettrend64': 1.09, 'assettrend8': 0.99}



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

ann. mean {'assettrend16': 2.376, 'assettrend2': 2.158, 'assettrend32': 2.299, 'assettrend4': 6.06, 'assettrend64': 2.854, 'assettrend8': 1.94}
ann. std {'assettrend16': 3.383, 'assettrend2': 8.998, 'assettrend32': 4.031, 'assettrend4': 5.991, 'assettrend64': 4.933, 'assettrend8': 3.879}
ann. SR {'assettrend16': 0.7, 'assettrend2': 0.24, 'assettrend32': 0.57, 'assettrend4': 1.01, 'assettrend64': 0.58, 'assettrend8': 0.5}

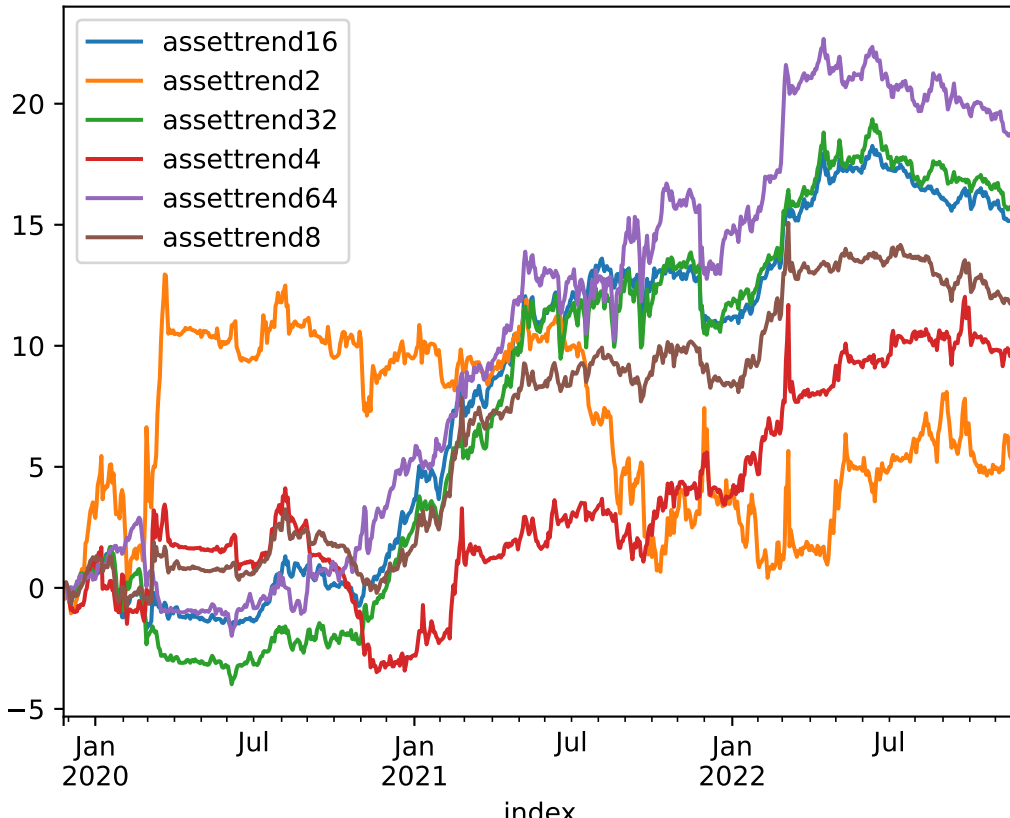


Total Trading Rule P&L for period '3Y'

ann. mean {'assettrend16': 4.995, 'assettrend2': 1.711, 'assettrend32': 5.124, 'assettrend4': 3.246, 'assettrend64': 6.115, 'assettrend8': 3.88}

ann. std {'assettrend16': 3.626, 'assettrend2': 7.889, 'assettrend32': 4.433, 'assettrend4': 5.46, 'assettrend64': 5.131, 'assettrend8': 3.771}

ann. SR {'assettrend16': 1.38, 'assettrend2': 0.22, 'assettrend32': 1.16, 'assettrend4': 0.59, 'assettrend64': 1.19, 'assettrend8': 1.03}

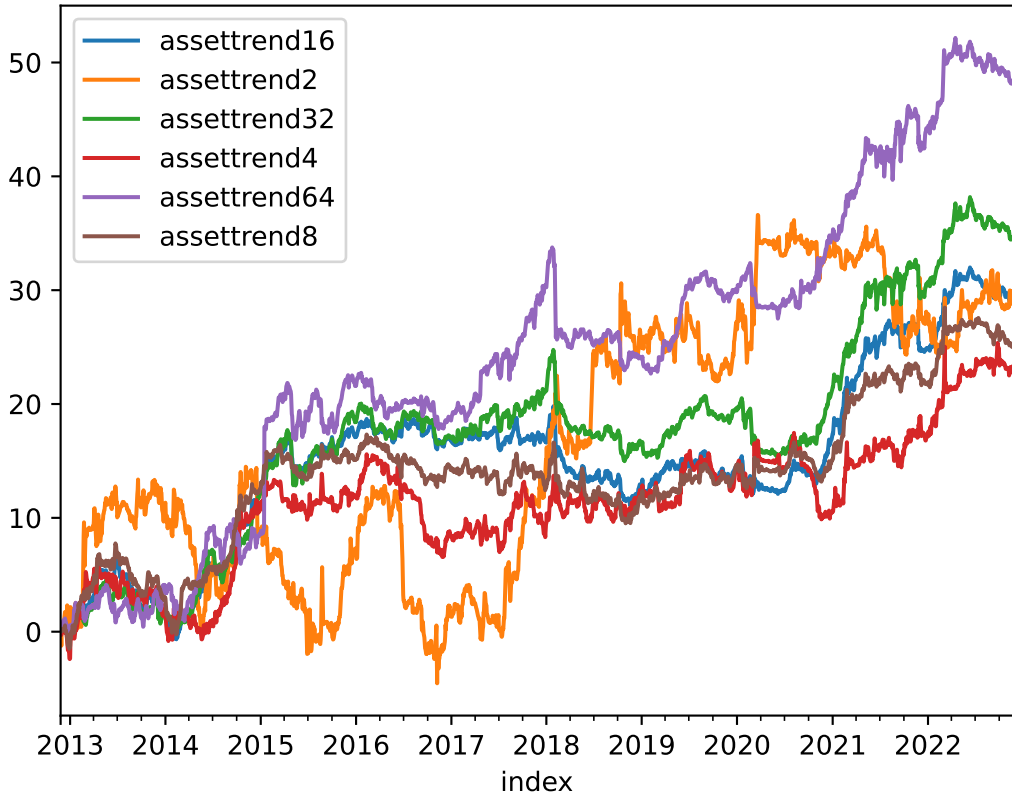


Total Trading Rule P&L for period '10Y'

ann. mean {'assettrend16': 2.847, 'assettrend2': 2.836, 'assettrend32': 3.384, 'assettrend4': 2.284, 'assettrend64': 4.728, 'assettrend8': 2.478}

ann. std {'assettrend16': 3.282, 'assettrend2': 8.481, 'assettrend32': 3.759, 'assettrend4': 5.045, 'assettrend64': 5.305, 'assettrend8': 3.599}

ann. SR {'assettrend16': 0.87, 'assettrend2': 0.33, 'assettrend32': 0.9, 'assettrend4': 0.45, 'assettrend64': 0.89, 'assettrend8': 0.69}

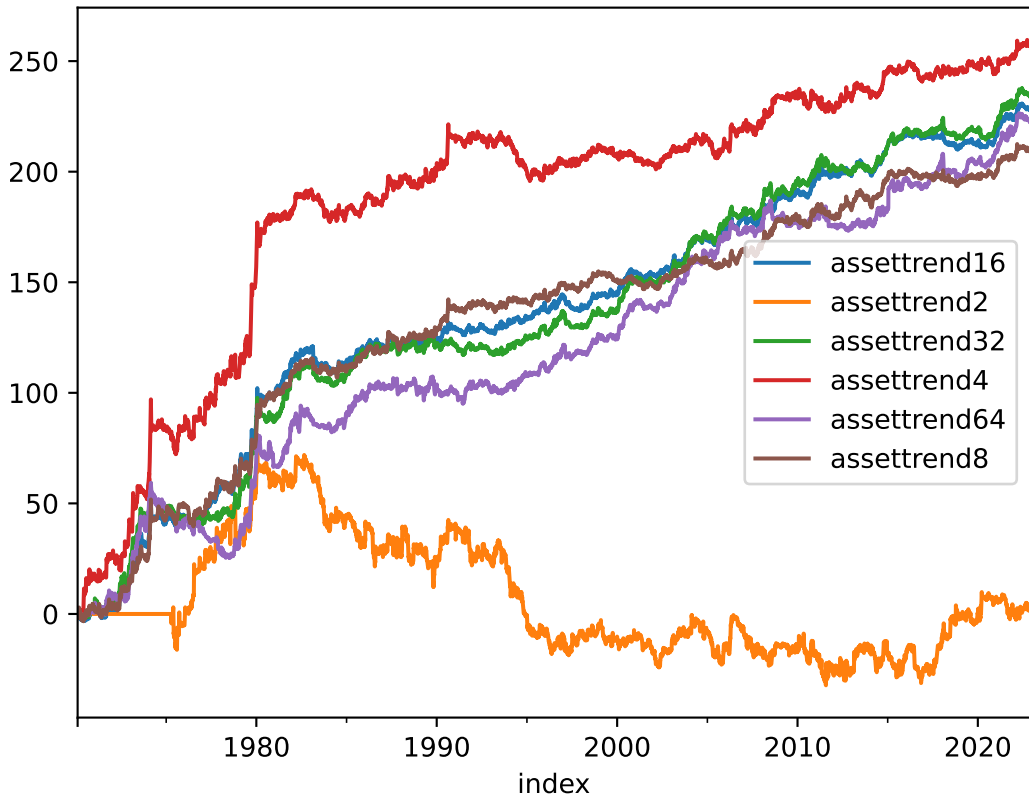


Total Trading Rule P&L for period '99Y'

ann. mean {'assettrend16': 4.234, 'assettrend2': 0.041, 'assettrend32': 4.35, 'assettrend4': 4.784, 'assettrend64': 4.135, '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': 0.76, 'assettrend8': 0.77}

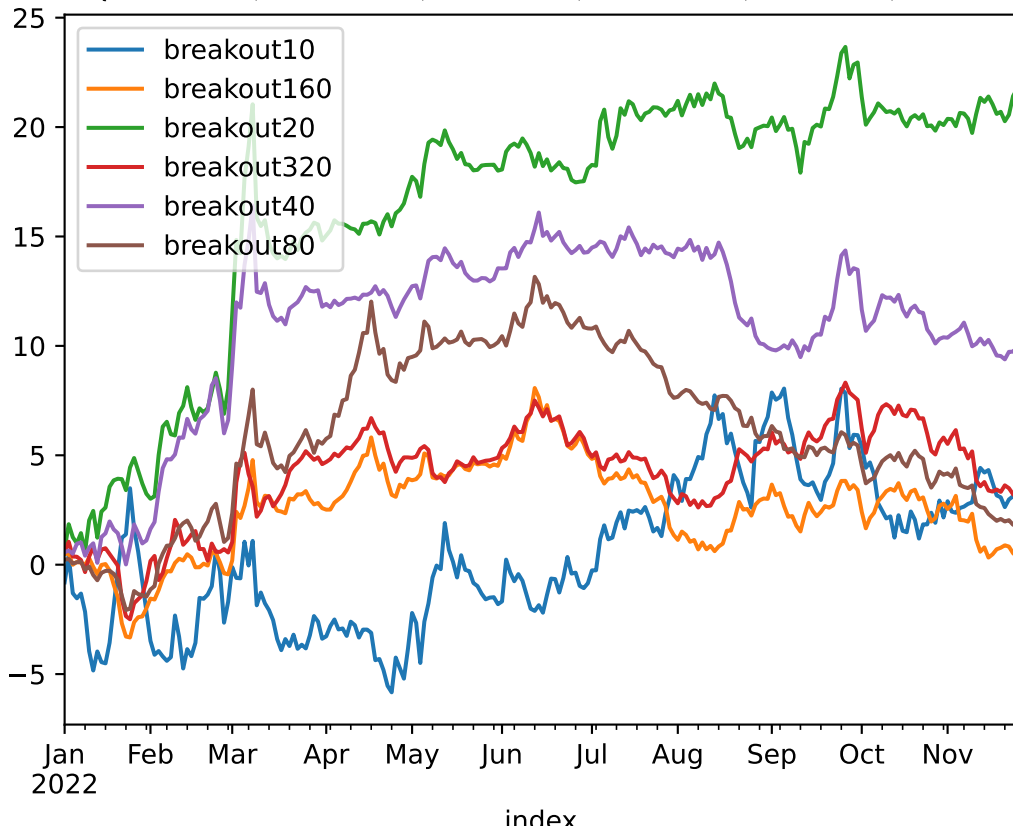


Total Trading Rule P&L for period 'YTD'

ann. mean {'breakout10': 3.475, 'breakout160': 0.401, 'breakout20': 23.796, 'breakout320': 3.334, 'breakout40': 10.868, 'breakout80': 1.939}

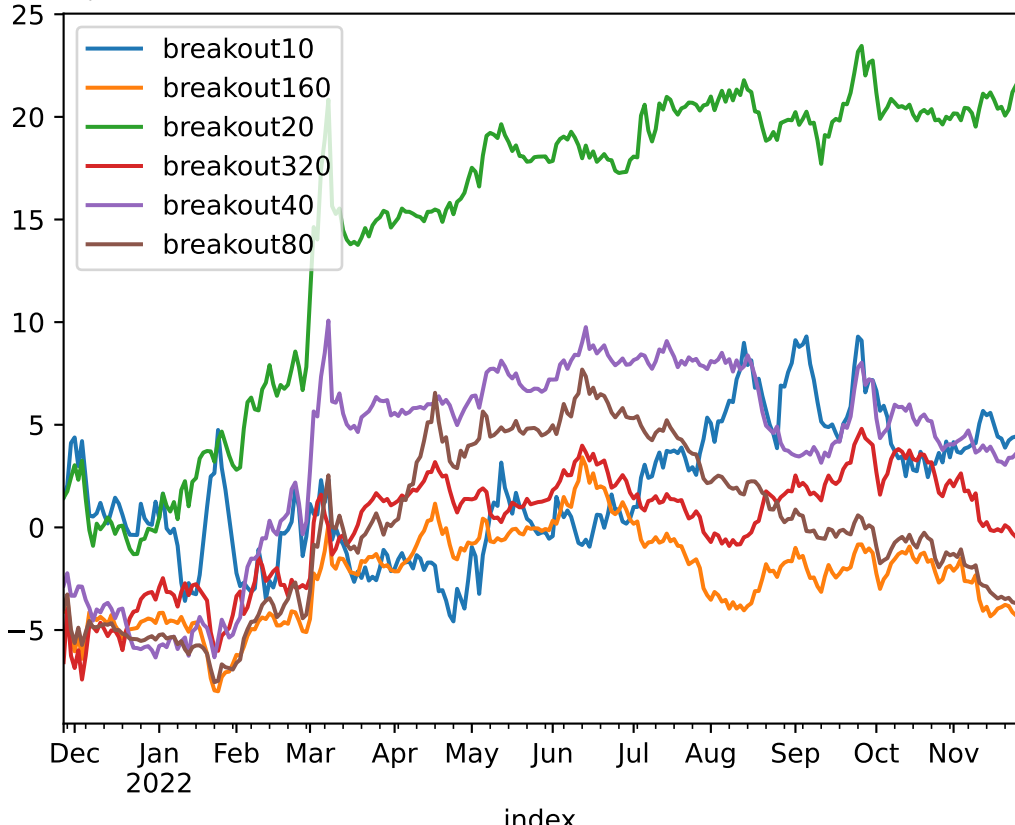
ann. std {'breakout10': 14.109, 'breakout160': 7.397, 'breakout20': 12.491, 'breakout320': 7.695, 'breakout40': 9.864, 'breakout80': 8.113}

ann. SR {'breakout10': 0.25, 'breakout160': 0.05, 'breakout20': 1.91, 'breakout320': 0.43, 'breakout40': 1.1, 'breakout80': 0.24}



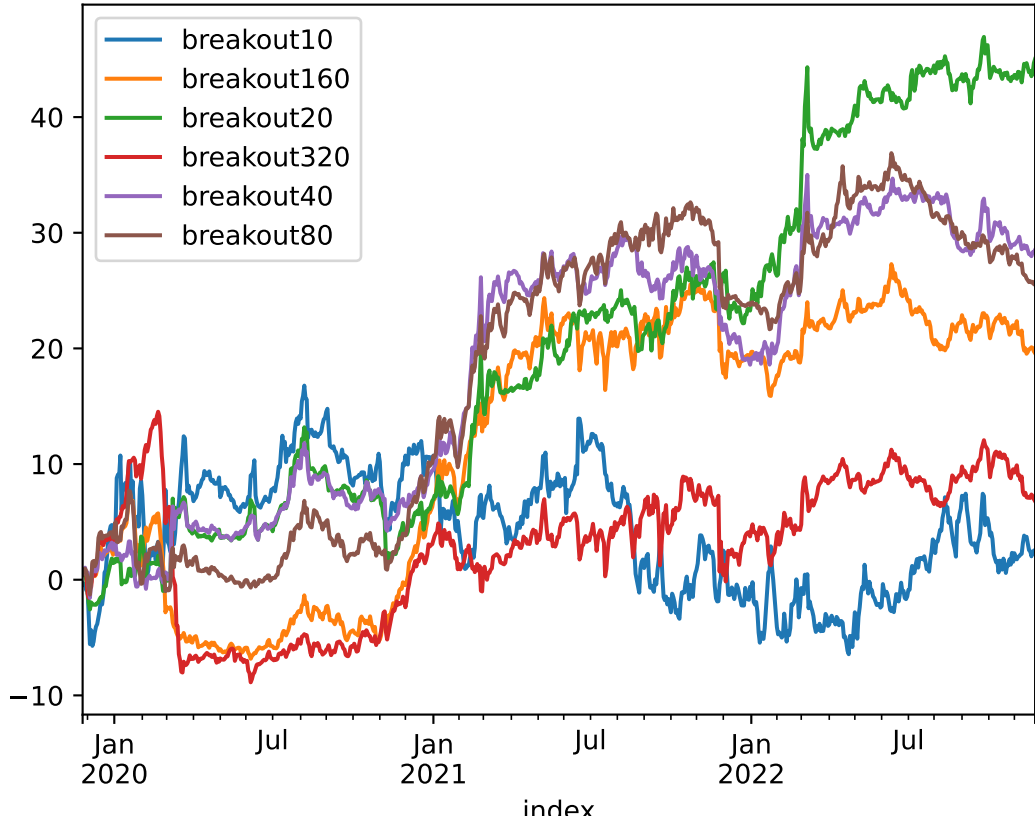
Total Trading Rule P&L for period '1Y'

ann. mean {'breakout10': 4.362, 'breakout160': -4.226, 'breakout20': 21.213, 'breakout320': -0.465, 'breakout40': 3.541, 'breakout80': -3.638}
 ann. std {'breakout10': 14.222, 'breakout160': 8.713, 'breakout20': 12.431, 'breakout320': 10.827, 'breakout40': 10.044, 'breakout80': 8.981}
 ann. SR {'breakout10': 0.31, 'breakout160': -0.49, 'breakout20': 1.71, 'breakout320': -0.04, 'breakout40': 0.35, 'breakout80': -0.41}



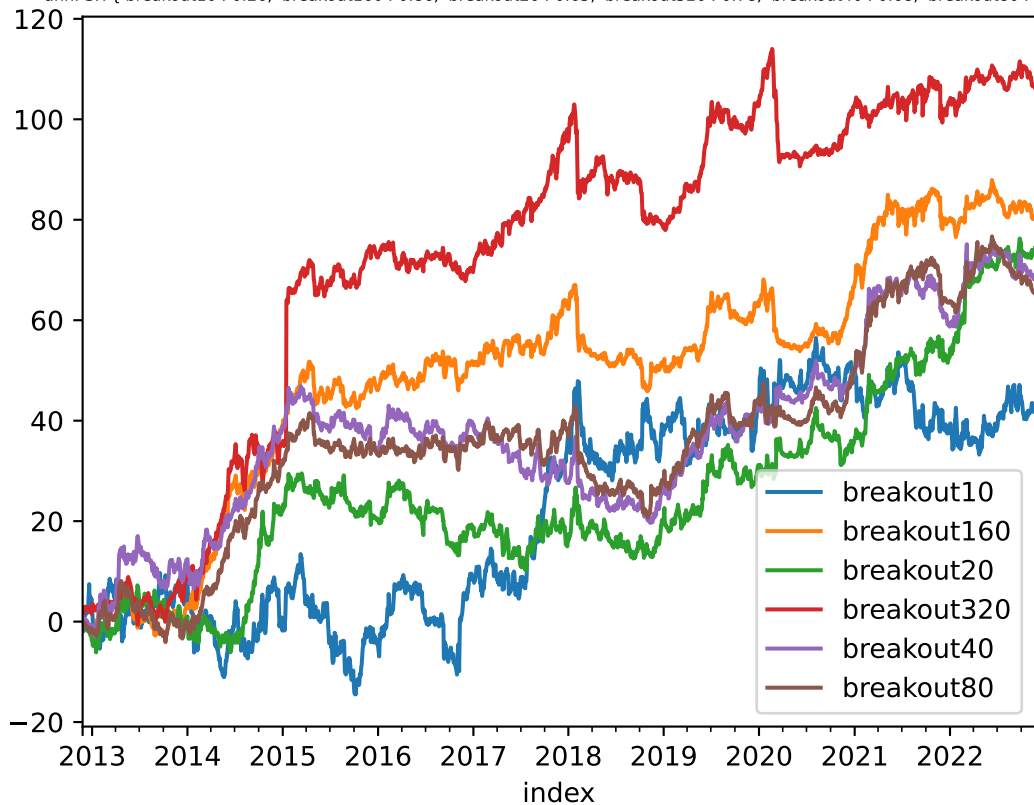
Total Trading Rule P&L for period '3Y'

ann. mean {'breakout10': 0.84, 'breakout160': 6.402, 'breakout20': 14.719, 'breakout320': 2.22, 'breakout40': 9.326, 'breakout80': 8.337}
ann. std {'breakout10': 15.227, 'breakout160': 9.823, 'breakout20': 11.533, 'breakout320': 10.866, 'breakout40': 10.037, 'breakout80': 9.721}
ann. SR {'breakout10': 0.06, 'breakout160': 0.65, 'breakout20': 1.28, 'breakout320': 0.2, 'breakout40': 0.93, 'breakout80': 0.86}



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

ann. mean {'breakout10': 4.146, 'breakout160': 7.871, 'breakout20': 7.297, 'breakout320': 10.428, 'breakout40': 6.736, 'breakout80': 6.409}
ann. std {'breakout10': 15.798, 'breakout160': 9.145, 'breakout20': 11.208, 'breakout320': 13.349, 'breakout40': 9.836, 'breakout80': 9.015}
ann. SR {'breakout10': 0.26, 'breakout160': 0.86, 'breakout20': 0.65, 'breakout320': 0.78, 'breakout40': 0.68, 'breakout80': 0.71}

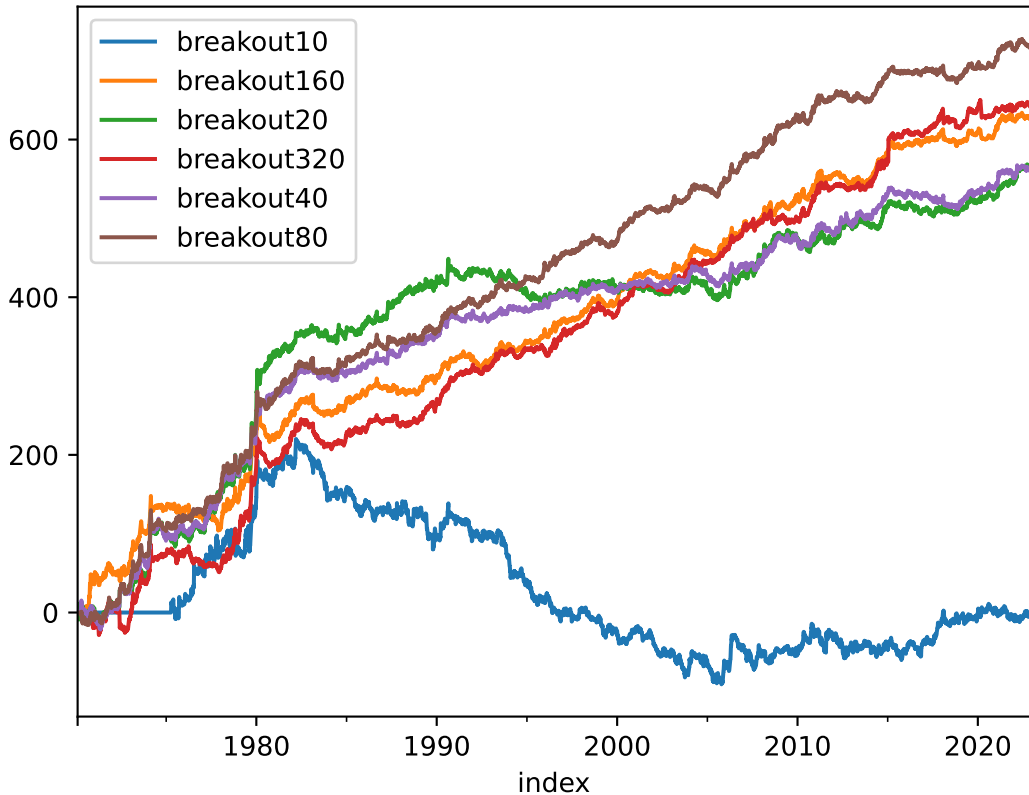


Total Trading Rule P&L for period '99Y'

ann. mean {'breakout10': -0.059, 'breakout160': 11.637, 'breakout20': 10.529, 'breakout320': 11.938, 'breakout40': 10.422, 'breakout80': 13.309}

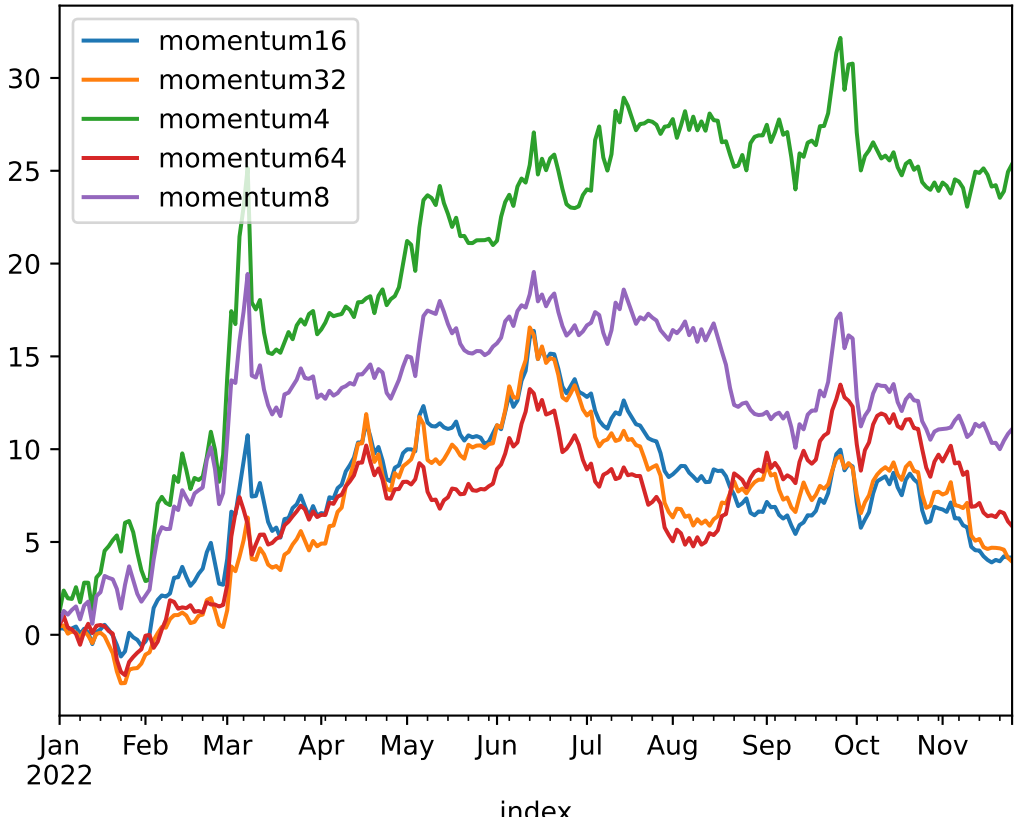
ann. std {'breakout10': 20.854, 'breakout160': 12.509, 'breakout20': 16.116, 'breakout320': 13.062, 'breakout40': 13.244, 'breakout80': 12.767}

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



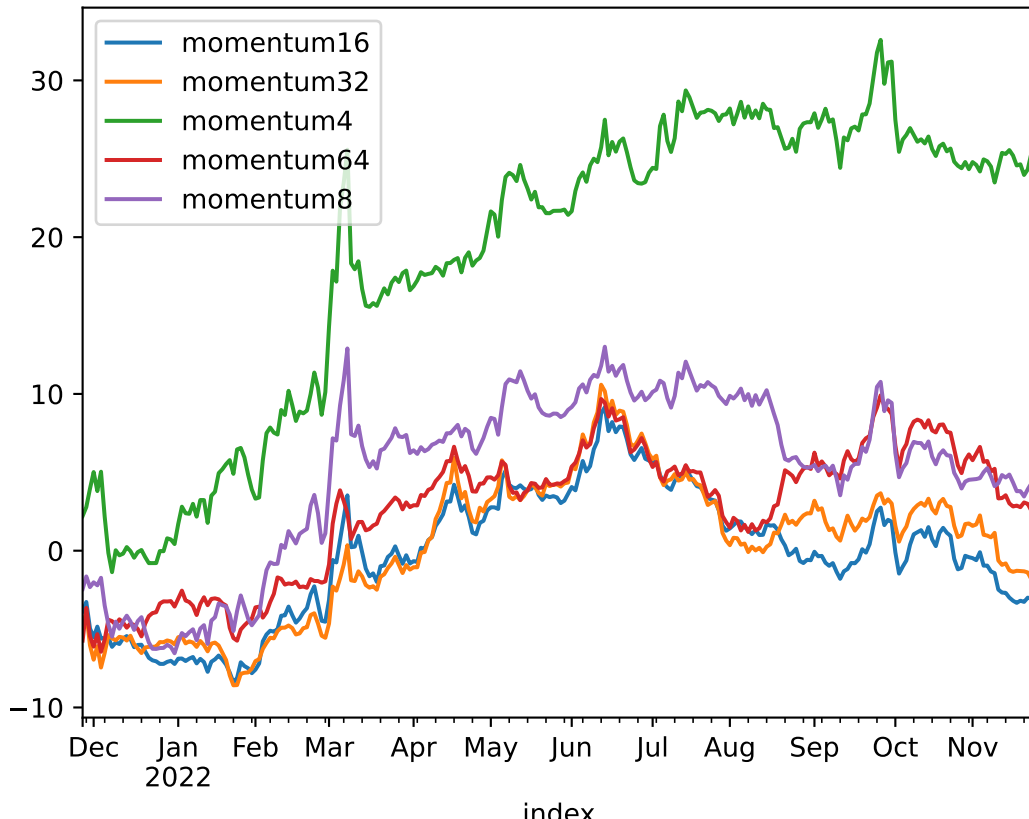
Total Trading Rule P&L for period 'YTD'

ann. mean {'momentum16': 4.557, 'momentum32': 4.308, 'momentum4': 27.745, 'momentum64': 6.403, 'momentum8': 12.123}
ann. std {'momentum16': 10.406, 'momentum32': 10.077, 'momentum4': 17.886, 'momentum64': 9.679, 'momentum8': 13.638}
ann. SR {'momentum16': 0.44, 'momentum32': 0.43, 'momentum4': 1.55, 'momentum64': 0.66, 'momentum8': 0.89}



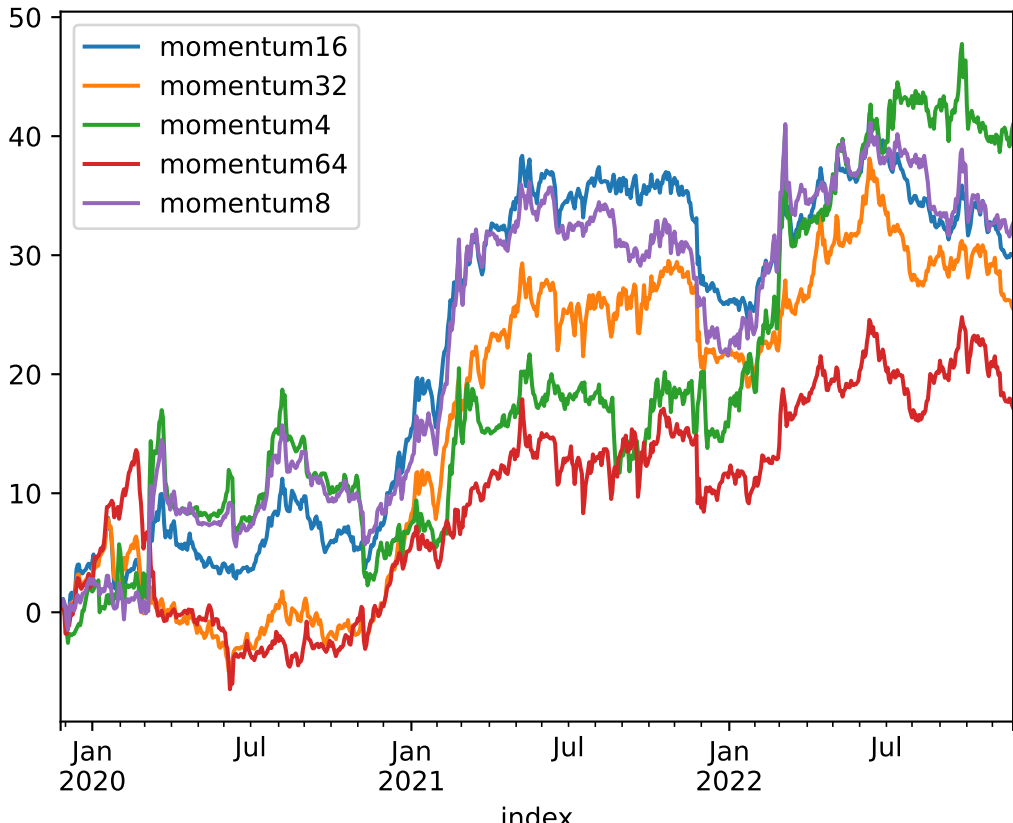
Total Trading Rule P&L for period '1Y'

ann. mean {'momentum16': -3.013, 'momentum32': -2.003, 'momentum4': 25.388, 'momentum64': 2.252, 'momentum8': 4.47}
ann. std {'momentum16': 10.869, 'momentum32': 11.169, 'momentum4': 17.827, 'momentum64': 11.445, 'momentum8': 13.572}
ann. SR {'momentum16': -0.28, 'momentum32': -0.18, 'momentum4': 1.42, 'momentum64': 0.2, 'momentum8': 0.33}



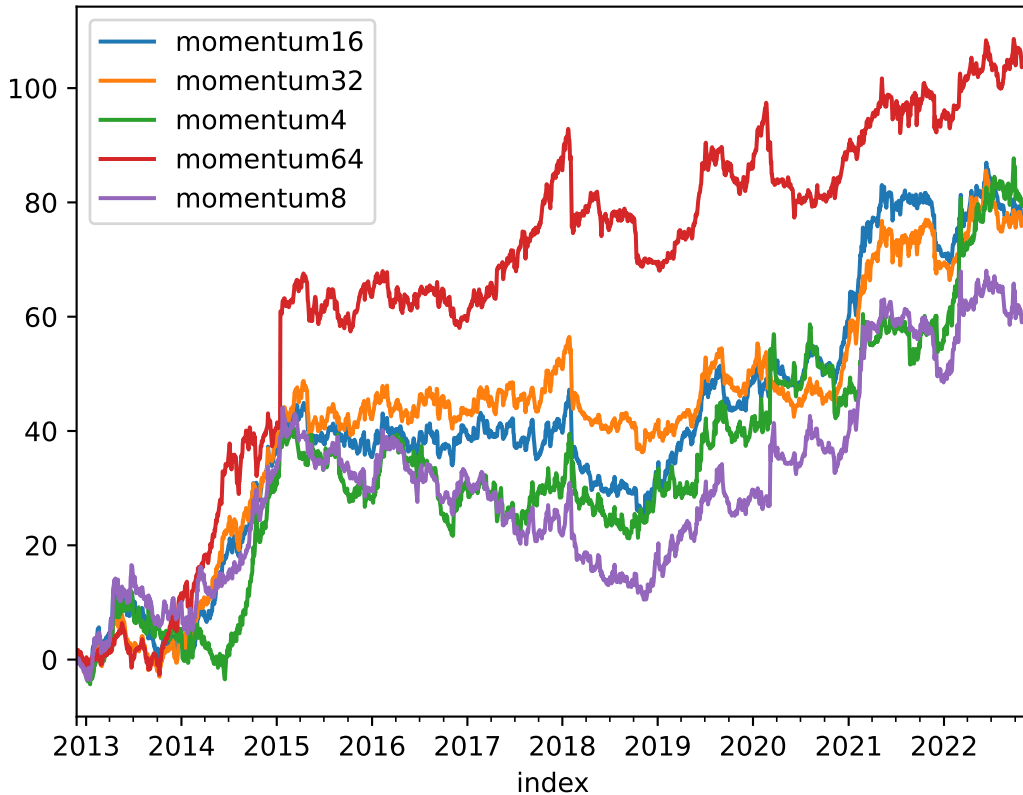
Total Trading Rule P&L for period '3Y'

ann. mean {'momentum16': 9.826, 'momentum32': 8.337, 'momentum4': 13.39, 'momentum64': 5.616, 'momentum8': 10.676}
ann. std {'momentum16': 11.09, 'momentum32': 10.935, 'momentum4': 16.058, 'momentum64': 11.055, 'momentum8': 12.776}
ann. SR {'momentum16': 0.89, 'momentum32': 0.76, 'momentum4': 0.83, 'momentum64': 0.51, 'momentum8': 0.84}



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

ann. mean {'momentum16': 7.335, 'momentum32': 7.159, 'momentum4': 7.94, 'momentum64': 9.908, 'momentum8': 5.846}
ann. std {'momentum16': 9.949, 'momentum32': 9.509, 'momentum4': 13.673, 'momentum64': 12.011, 'momentum8': 11.312}
ann. SR {'momentum16': 0.74, 'momentum32': 0.75, 'momentum4': 0.58, 'momentum64': 0.82, 'momentum8': 0.52}

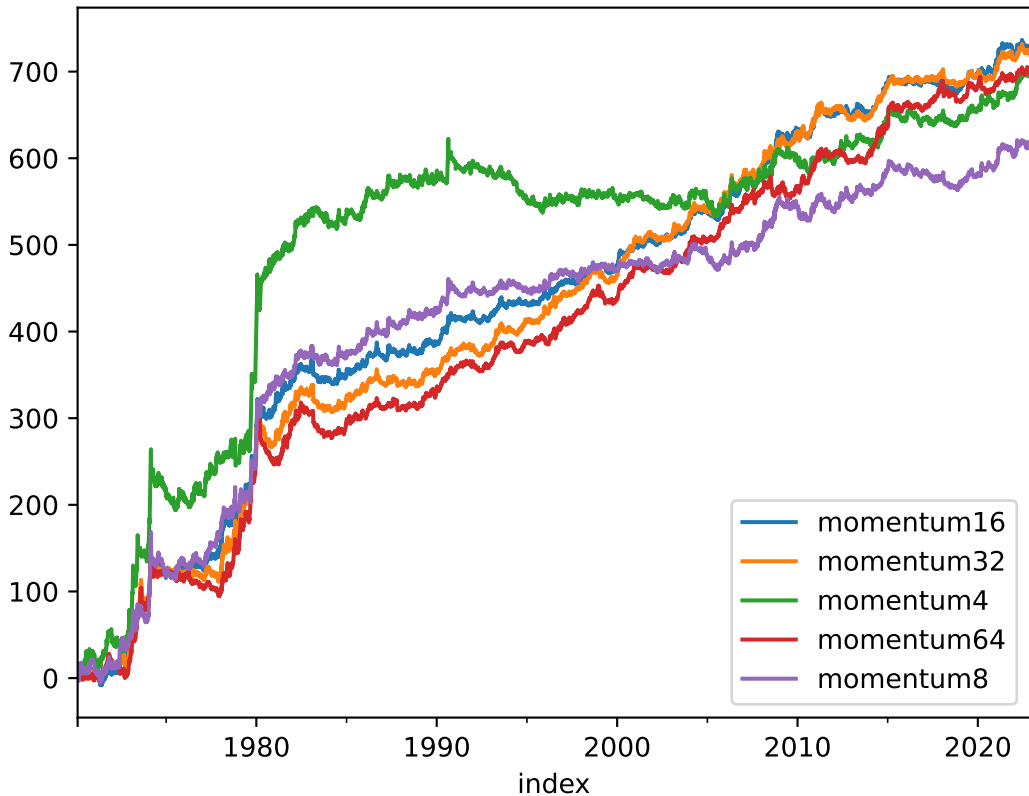


Total Trading Rule P&L for period '99Y'

ann. mean {'momentum16': 13.459, 'momentum32': 13.365, 'momentum4': 12.942, 'momentum64': 12.963, 'momentum8': 11.382}

ann. std {'momentum16': 14.236, 'momentum32': 13.867, 'momentum4': 20.094, 'momentum64': 13.502, 'momentum8': 15.886}

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

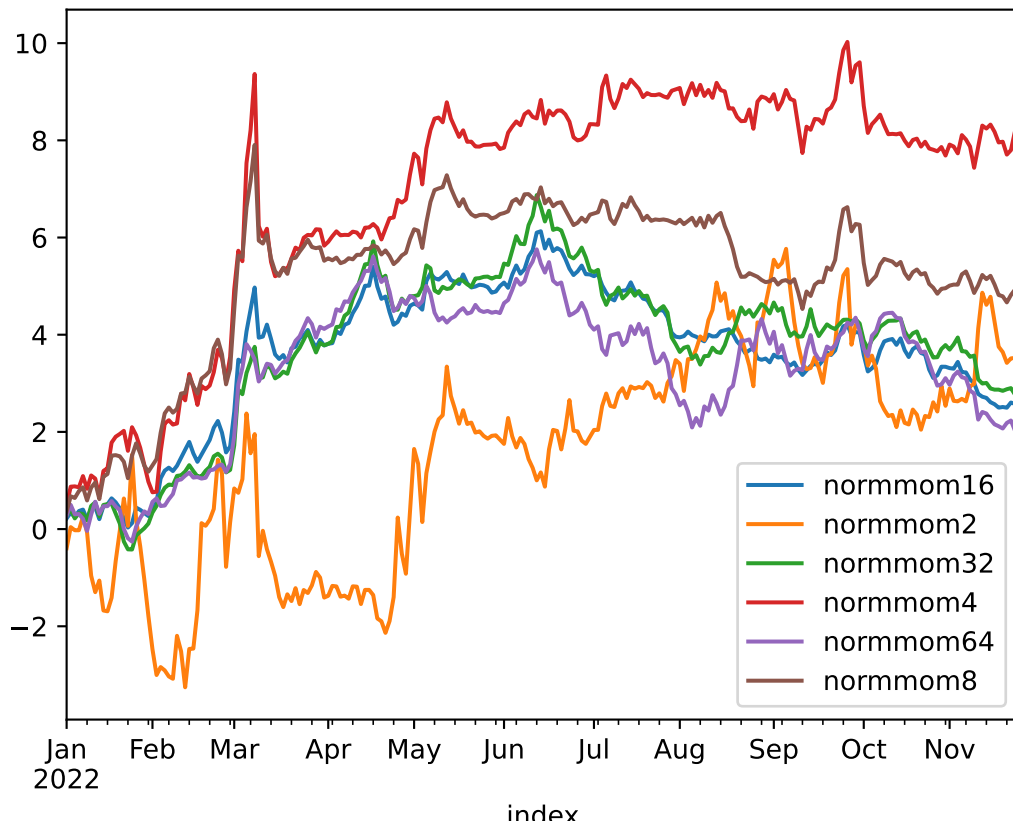


Total Trading Rule P&L for period 'YTD'

ann. mean {'normmom16': 2.806, 'normmom2': 3.861, 'normmom32': 2.945, 'normmom4': 9.086, 'normmom64': 2.114, 'normmom8': 5.469}

ann. std {'normmom16': 3.227, 'normmom2': 8.37, 'normmom32': 3.306, 'normmom4': 6.177, 'normmom64': 3.539, 'normmom8': 4.406}

ann. SR {'normmom16': 0.87, 'normmom2': 0.46, 'normmom32': 0.89, 'normmom4': 1.47, 'normmom64': 0.6, 'normmom8': 1.24}

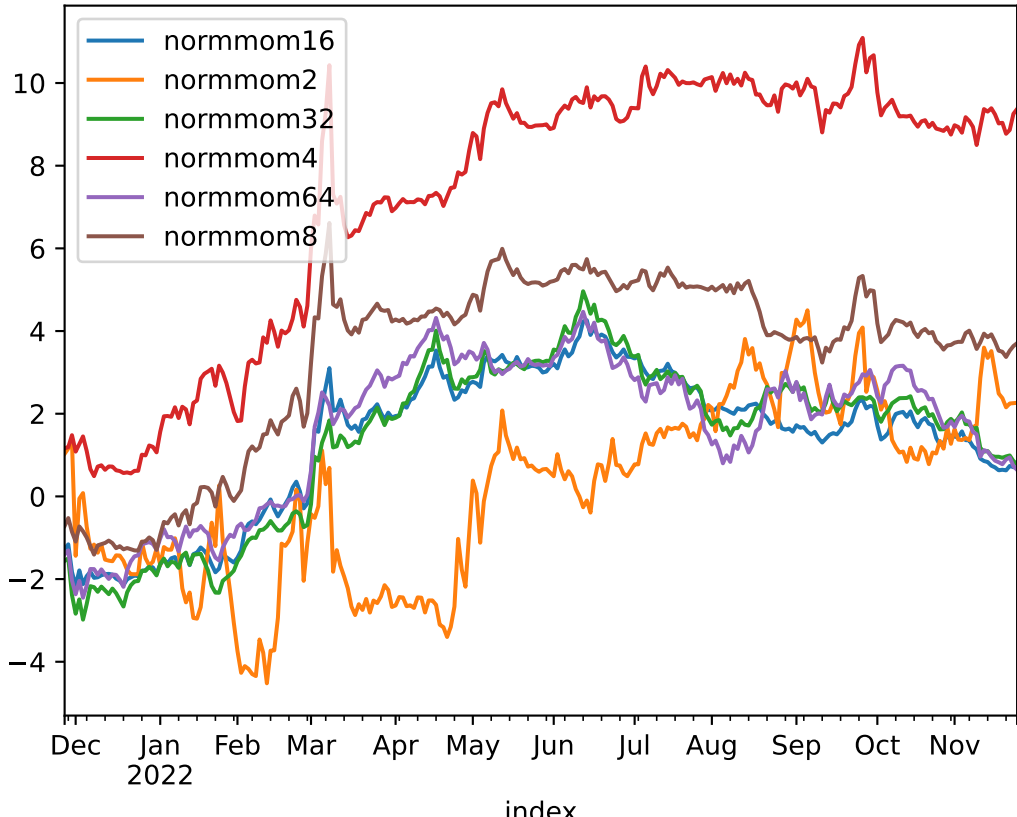


Total Trading Rule P&L for period '1Y'

ann. mean {'normmom16': 0.686, 'normmom2': 2.229, 'normmom32': 0.769, 'normmom4': 9.227, 'normmom64': 0.632, 'normmom8': 3.65}

ann. std {'normmom16': 3.461, 'normmom2': 8.703, 'normmom32': 3.783, 'normmom4': 6.049, 'normmom64': 3.848, 'normmom8': 4.321}

ann. SR {'normmom16': 0.2, 'normmom2': 0.26, 'normmom32': 0.2, 'normmom4': 1.53, 'normmom64': 0.16, 'normmom8': 0.84}

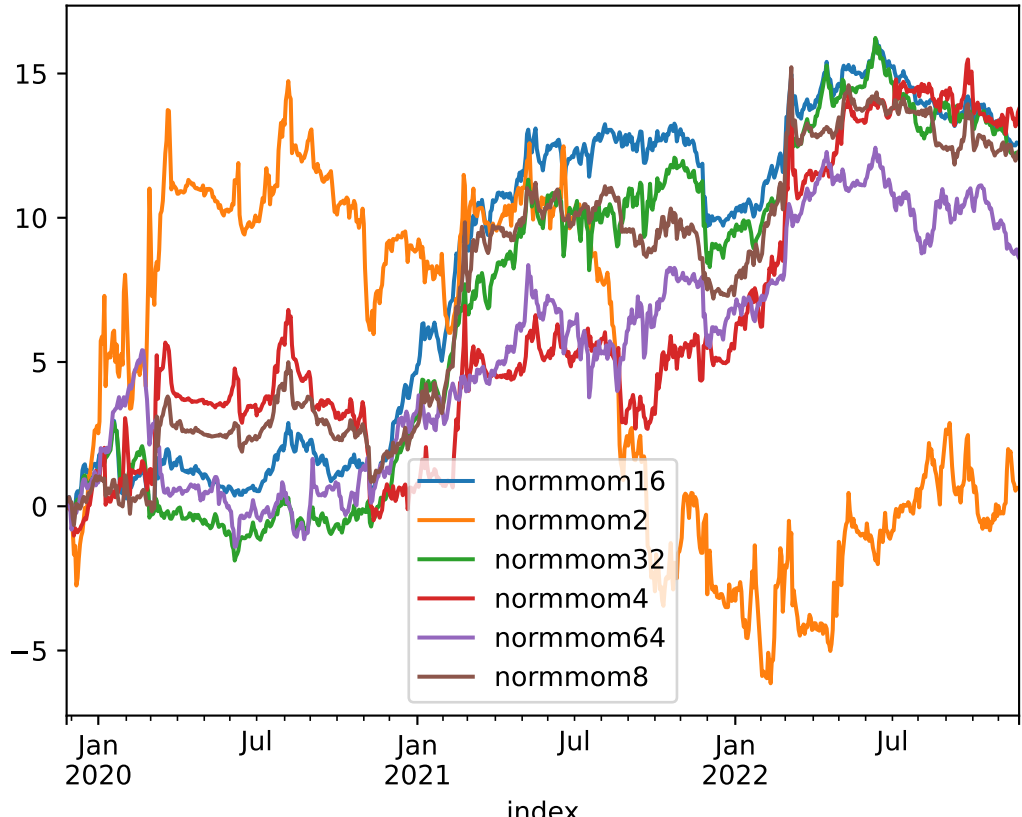


Total Trading Rule P&L for period '3Y'

ann. mean {'normmom16': 4.11, 'normmom2': 0.212, 'normmom32': 3.941, 'normmom4': 4.502, 'normmom64': 2.813, 'normmom8': 4.026}

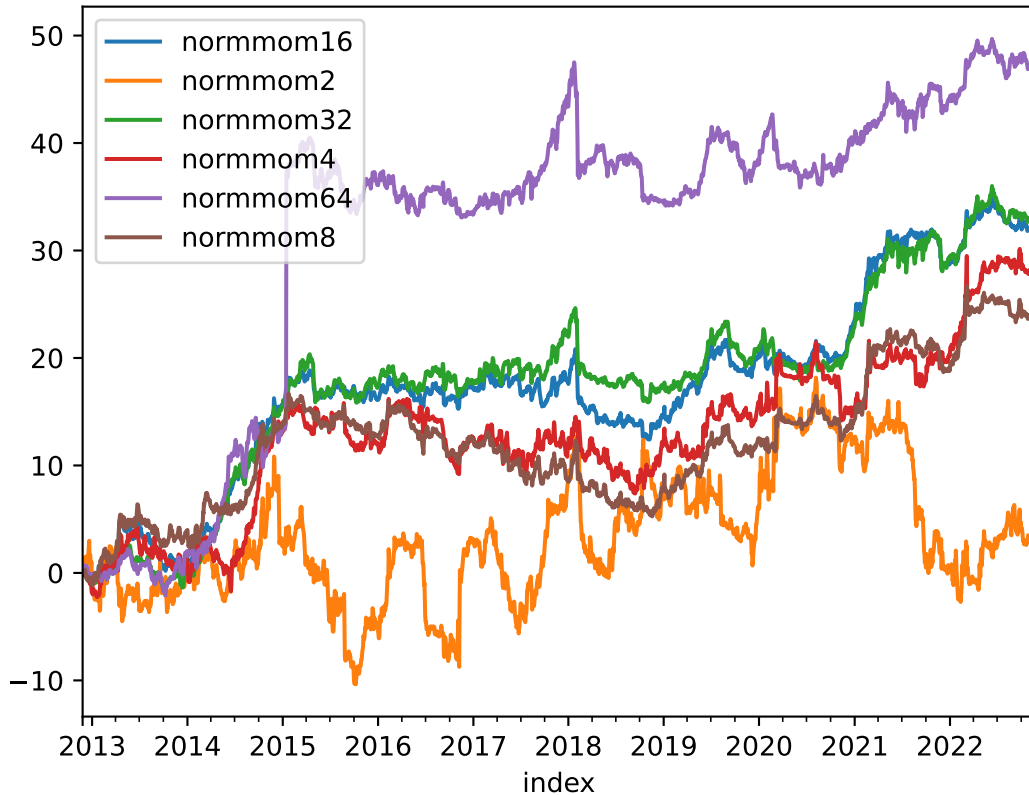
ann. std {'normmom16': 3.74, 'normmom2': 8.956, 'normmom32': 4.063, 'normmom4': 5.933, 'normmom64': 4.379, 'normmom8': 4.261}

ann. SR {'normmom16': 1.1, 'normmom2': 0.02, 'normmom32': 0.97, 'normmom4': 0.76, 'normmom64': 0.64, 'normmom8': 0.94}



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

ann. mean {'normmom16': 3.069, 'normmom2': 0.401, 'normmom32': 3.122, 'normmom4': 2.79, 'normmom64': 4.5, 'normmom8': 2.334}
ann. std {'normmom16': 3.58, 'normmom2': 9.107, 'normmom32': 3.734, 'normmom4': 5.494, 'normmom64': 8.561, 'normmom8': 4.054}
ann. SR {'normmom16': 0.86, 'normmom2': 0.04, 'normmom32': 0.84, 'normmom4': 0.51, 'normmom64': 0.53, 'normmom8': 0.58}

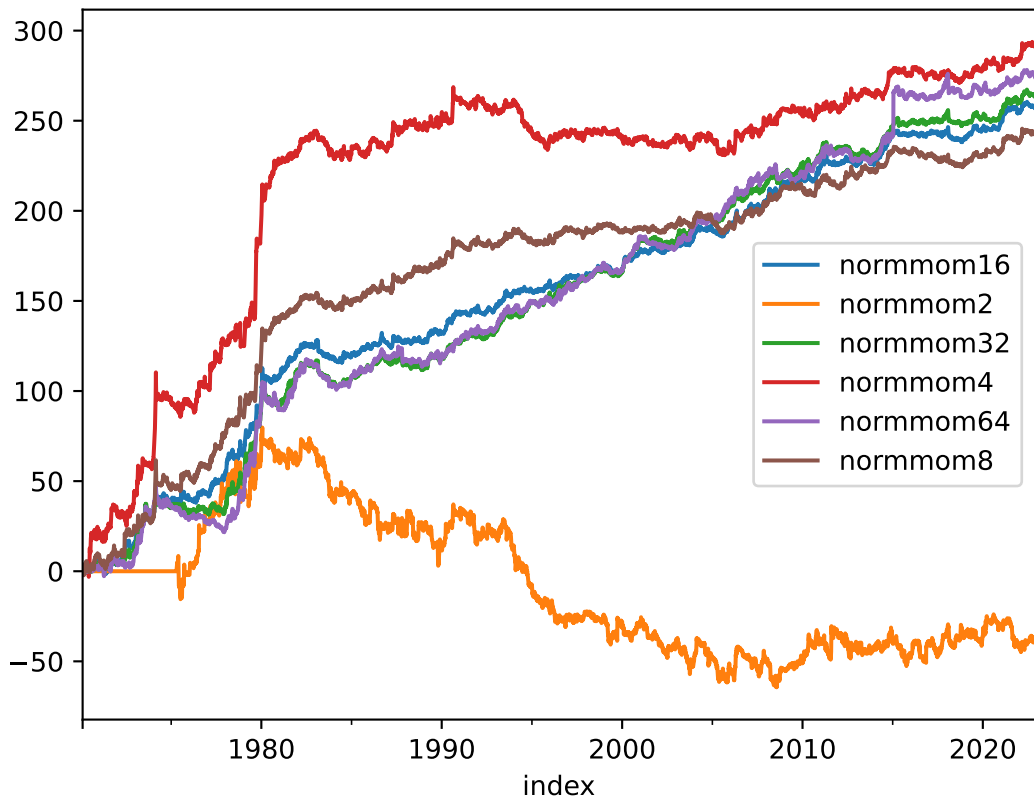


Total Trading Rule P&L for period '99Y'

ann. mean {'normmom16': 4.774, 'normmom2': -0.706, 'normmom32': 4.889, 'normmom4': 5.426, 'normmom64': 5.098, 'normmom8': 4.509}

ann. std {'normmom16': 4.928, 'normmom2': 11.21, 'normmom32': 4.997, 'normmom4': 8.33, 'normmom64': 6.316, 'normmom8': 5.938}

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

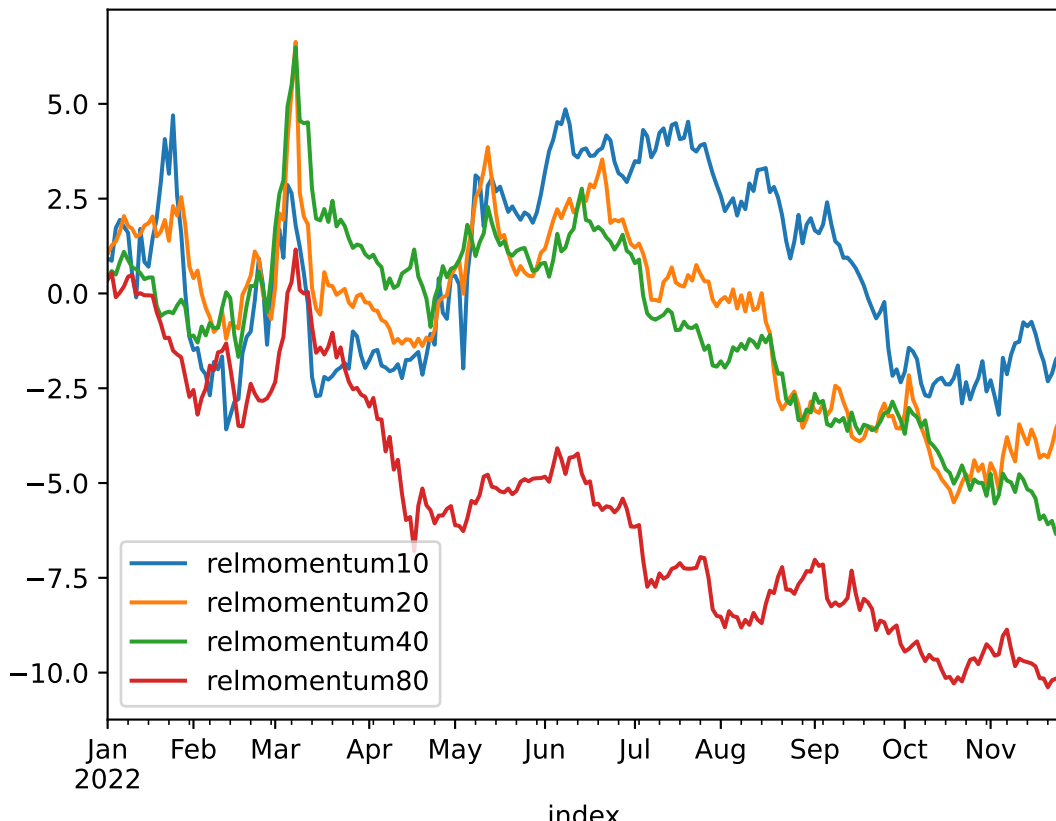


Total Trading Rule P&L for period 'YTD'

ann. mean {'relmomentum10': -1.754, 'relmomentum20': -3.625, 'relmomentum40': -6.86, 'relmomentum80': -11.122}

ann. std {'relmomentum10': 10.381, 'relmomentum20': 8.715, 'relmomentum40': 6.738, 'relmomentum80': 5.797}

ann. SR {'relmomentum10': -0.17, 'relmomentum20': -0.42, 'relmomentum40': -1.02, 'relmomentum80': -1.92}

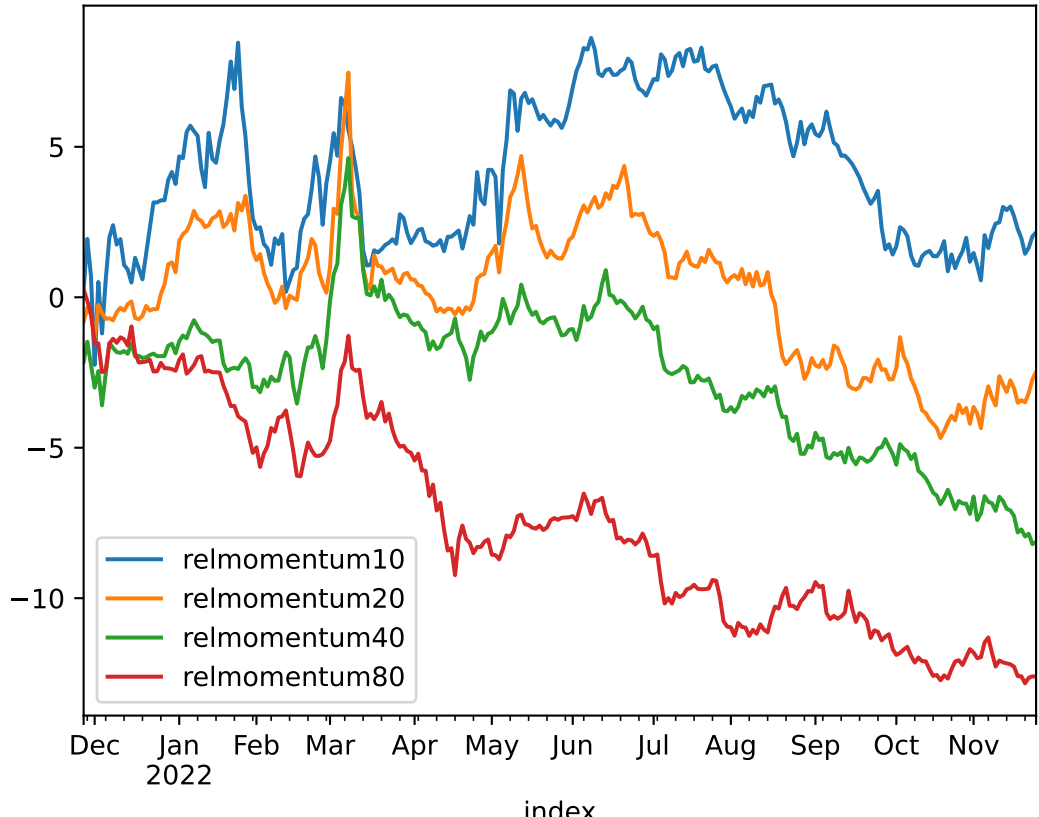


Total Trading Rule P&L for period '1Y'

ann. mean {'relmomentum10': 2.126, 'relmomentum20': -2.444, 'relmomentum40': -8.006, 'relmomentum80': -12.414}

ann. std {'relmomentum10': 11.434, 'relmomentum20': 8.524, 'relmomentum40': 7.158, 'relmomentum80': 5.899}

ann. SR {'relmomentum10': 0.19, 'relmomentum20': -0.29, 'relmomentum40': -1.12, 'relmomentum80': -2.1}

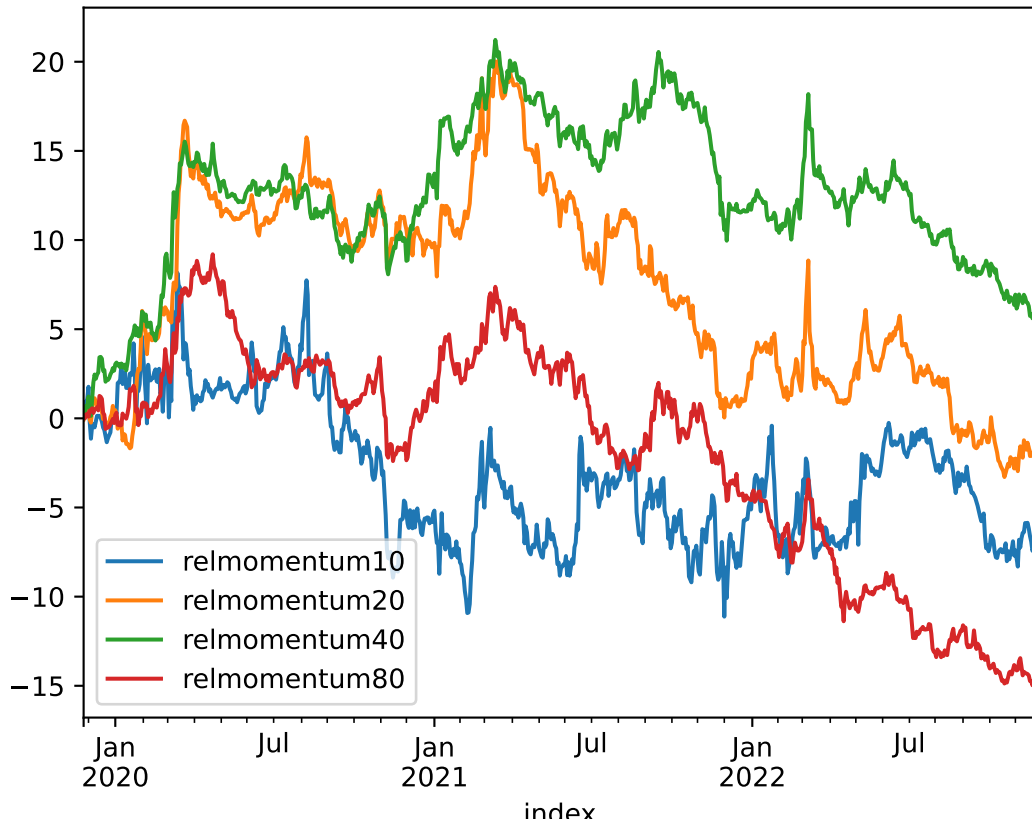


Total Trading Rule P&L for period '3Y'

ann. mean {'relmomentum10': -2.196, 'relmomentum20': -0.357, 'relmomentum40': 1.774, 'relmomentum80': -4.823}

ann. std {'relmomentum10': 12.79, 'relmomentum20': 9.061, 'relmomentum40': 7.492, 'relmomentum80': 6.958}

ann. SR {'relmomentum10': -0.17, 'relmomentum20': -0.04, 'relmomentum40': 0.24, 'relmomentum80': -0.69}

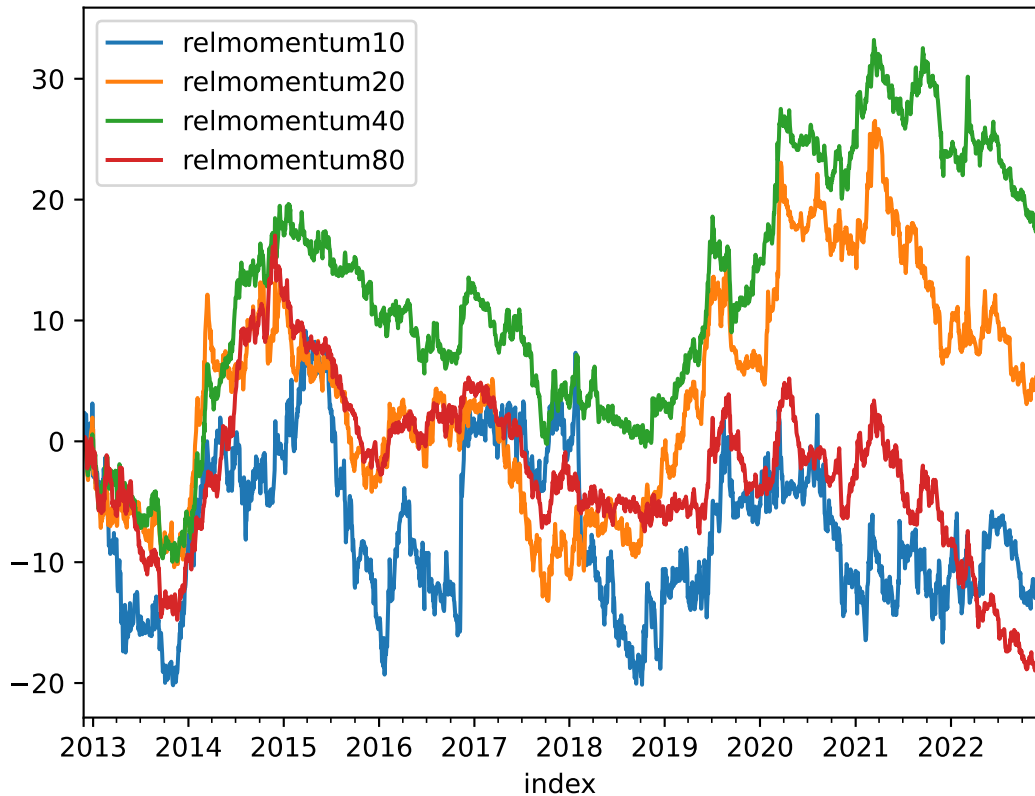


Total Trading Rule P&L for period '10Y'

ann. mean {'relmomentum10': -1.203, 'relmomentum20': 0.518, 'relmomentum40': 1.709, 'relmomentum80': -1.839}

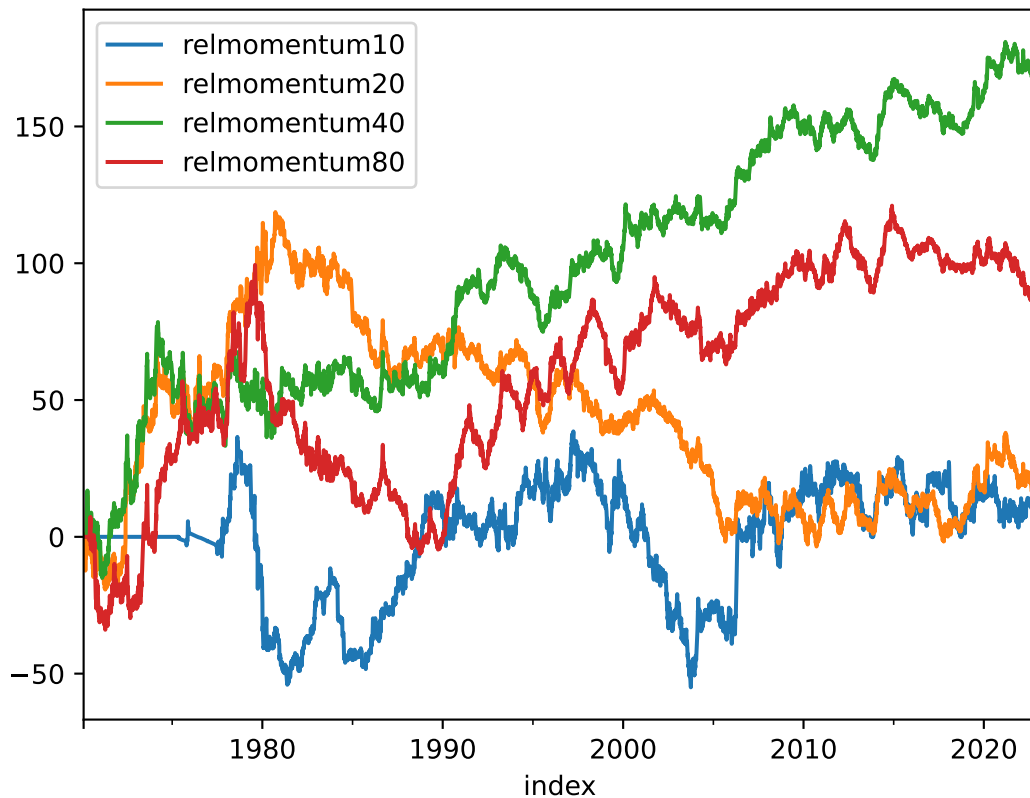
ann. std {'relmomentum10': 13.021, 'relmomentum20': 9.056, 'relmomentum40': 7.386, 'relmomentum80': 6.848}

ann. SR {'relmomentum10': -0.09, 'relmomentum20': 0.06, 'relmomentum40': 0.23, 'relmomentum80': -0.27}

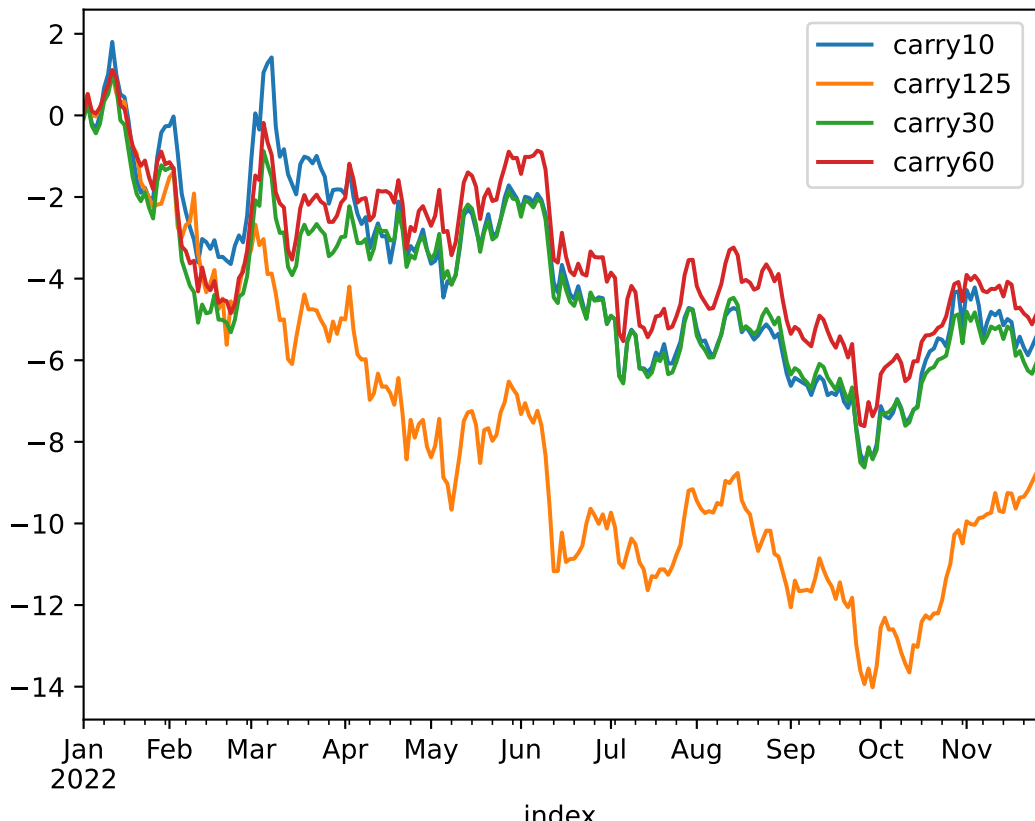


Total Trading Rule P&L for period '99Y'

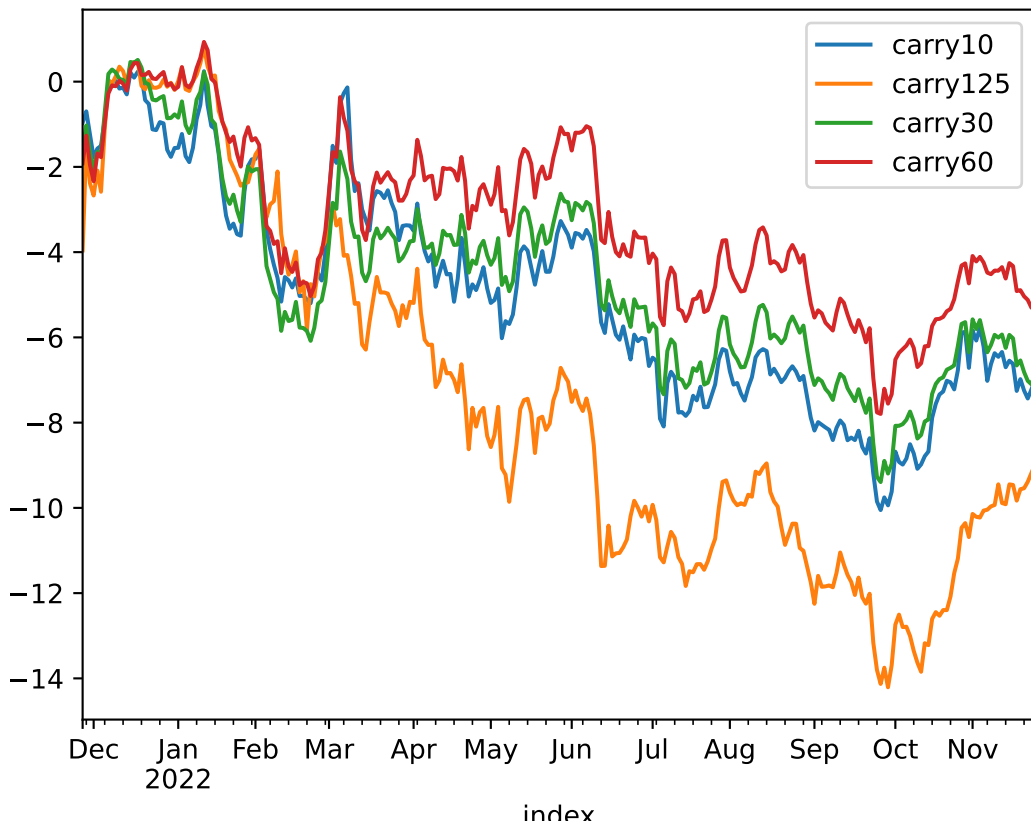
ann. mean {'relmomentum10': 0.145, 'relmomentum20': 0.312, 'relmomentum40': 3.068, 'relmomentum80': 1.584}
ann. std {'relmomentum10': 13.333, 'relmomentum20': 11.534, 'relmomentum40': 10.803, 'relmomentum80': 11.071}
ann. SR {'relmomentum10': 0.01, 'relmomentum20': 0.03, 'relmomentum40': 0.28, 'relmomentum80': 0.14}



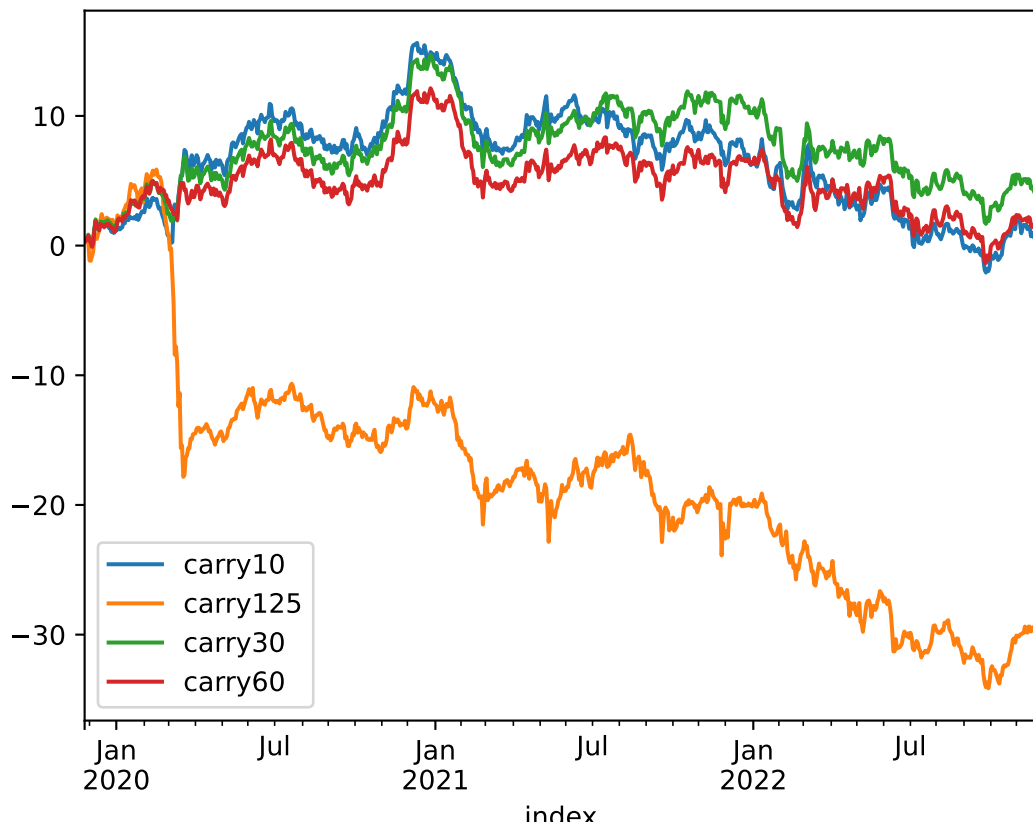
Total Trading Rule P&L for period 'YTD'
ann. mean {'carry10': -5.946, 'carry125': -9.606, 'carry30': -6.656, 'carry60': -5.35}
ann. std {'carry10': 7.316, 'carry125': 7.642, 'carry30': 6.853, 'carry60': 6.845}
ann. SR {'carry10': -0.81, 'carry125': -1.26, 'carry30': -0.97, 'carry60': -0.78}



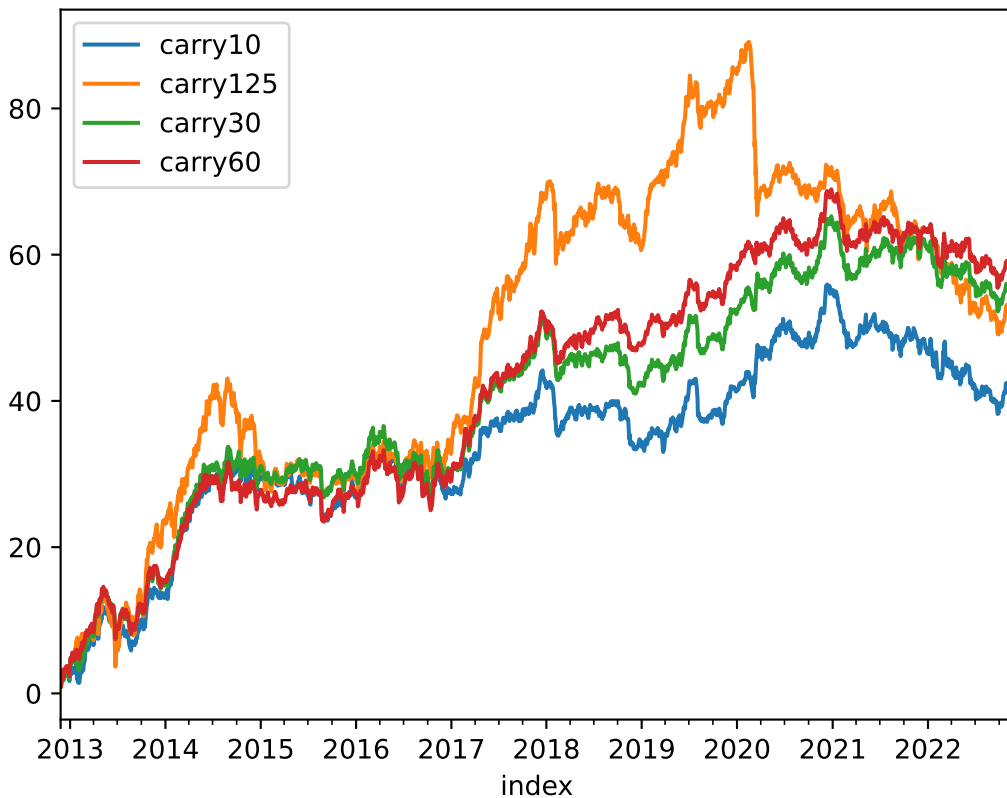
Total Trading Rule P&L for period '1Y'
ann. mean {'carry10': -6.884, 'carry125': -8.836, 'carry30': -6.746, 'carry60': -4.994}
ann. std {'carry10': 7.23, 'carry125': 8.944, 'carry30': 6.955, 'carry60': 6.995}
ann. SR {'carry10': -0.95, 'carry125': -0.99, 'carry30': -0.97, 'carry60': -0.71}



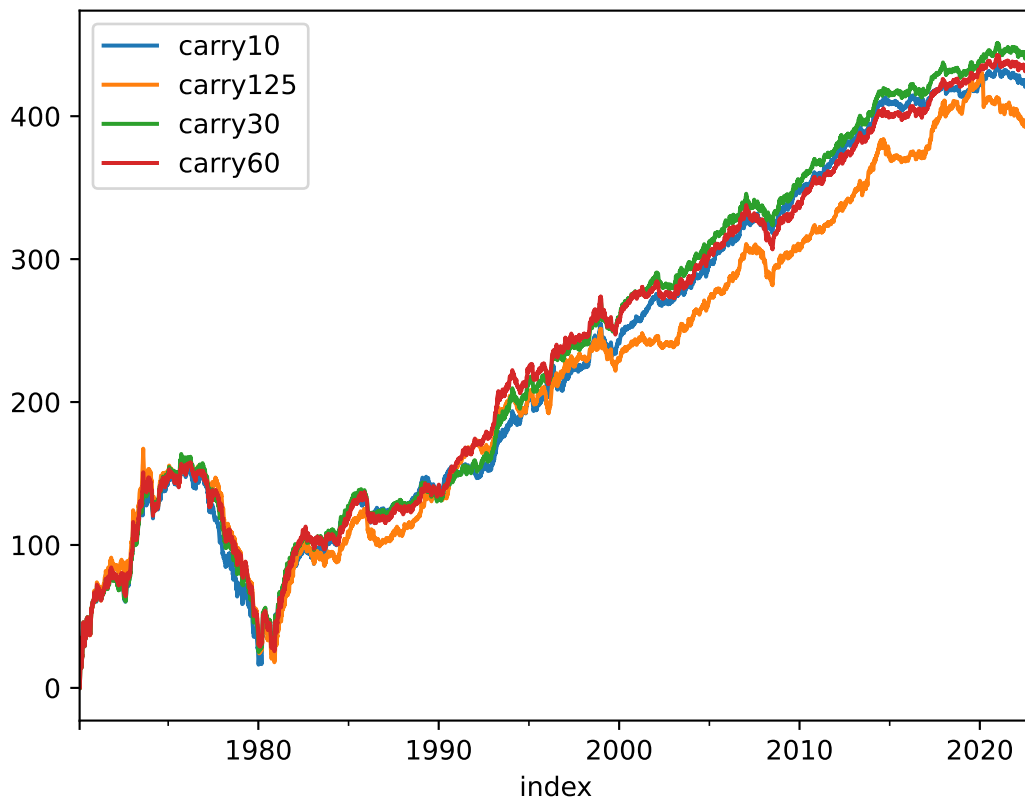
Total Trading Rule P&L for period '3Y'
ann. mean {'carry10': 0.32, 'carry125': -9.45, 'carry30': 1.379, 'carry60': 0.451}
ann. std {'carry10': 6.806, 'carry125': 9.439, 'carry30': 6.607, 'carry60': 6.54}
ann. SR {'carry10': 0.05, 'carry125': -1.0, 'carry30': 0.21, 'carry60': 0.07}



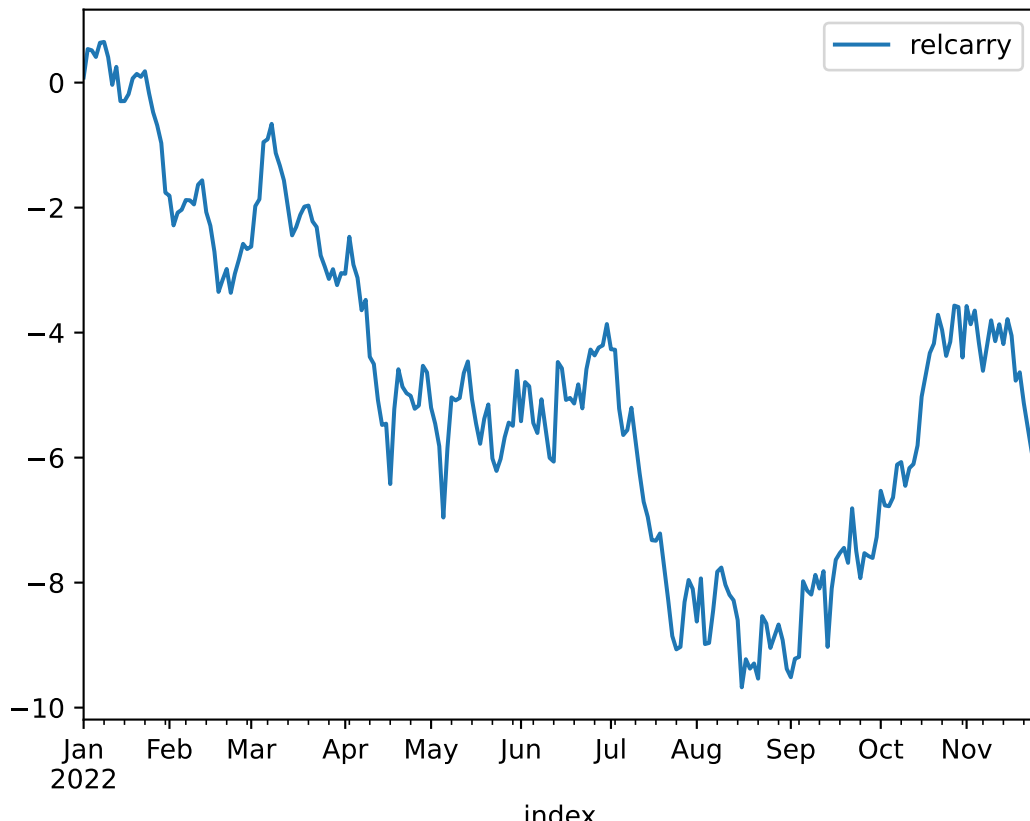
Total Trading Rule P&L for period '10Y'
ann. mean {'carry10': 4.05, 'carry125': 5.331, 'carry30': 5.374, 'carry60': 5.709}
ann. std {'carry10': 6.474, 'carry125': 9.13, 'carry30': 6.585, 'carry60': 6.547}
ann. SR {'carry10': 0.63, 'carry125': 0.58, 'carry30': 0.82, 'carry60': 0.87}



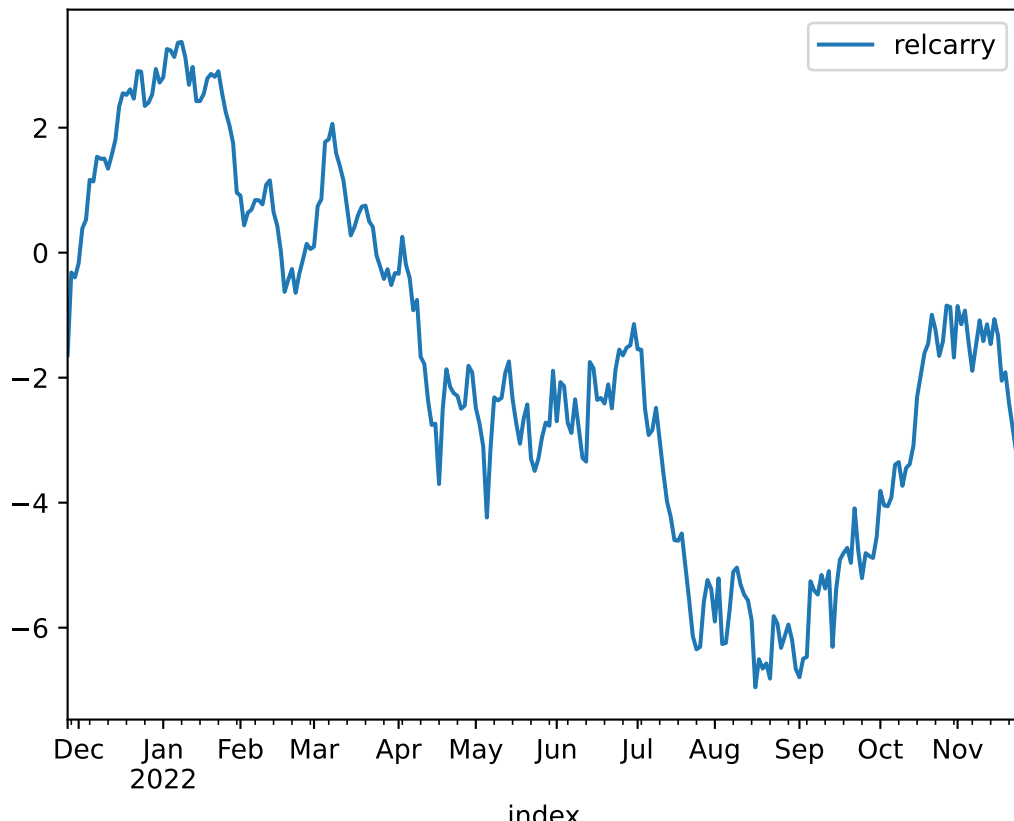
Total Trading Rule P&L for period '99Y'
ann. mean {'carry10': 7.835, 'carry125': 7.345, 'carry30': 8.19, 'carry60': 8.028}
ann. std {'carry10': 11.868, 'carry125': 12.107, 'carry30': 11.88, 'carry60': 11.83}
ann. SR {'carry10': 0.66, 'carry125': 0.61, 'carry30': 0.69, 'carry60': 0.68}



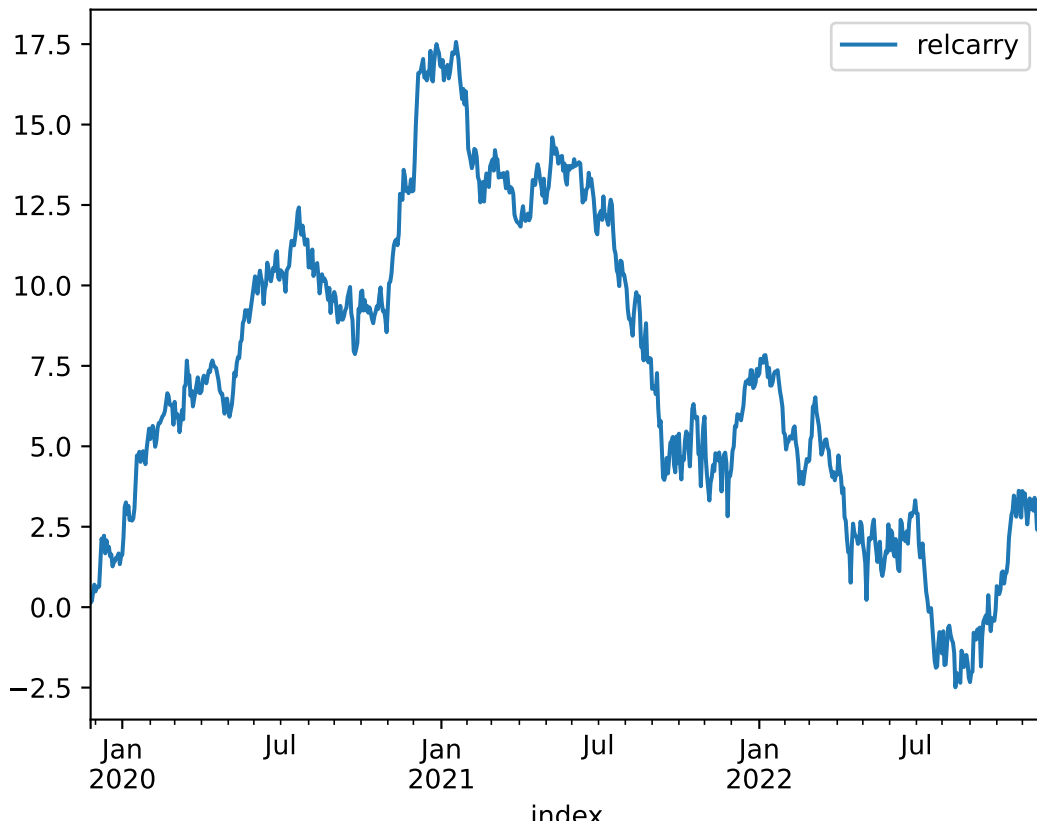
Total Trading Rule P&L for period 'YTD'
ann. mean {'relcarry': -6.195}
ann. std {'relcarry': 7.163}
ann. SR {'relcarry': -0.86}



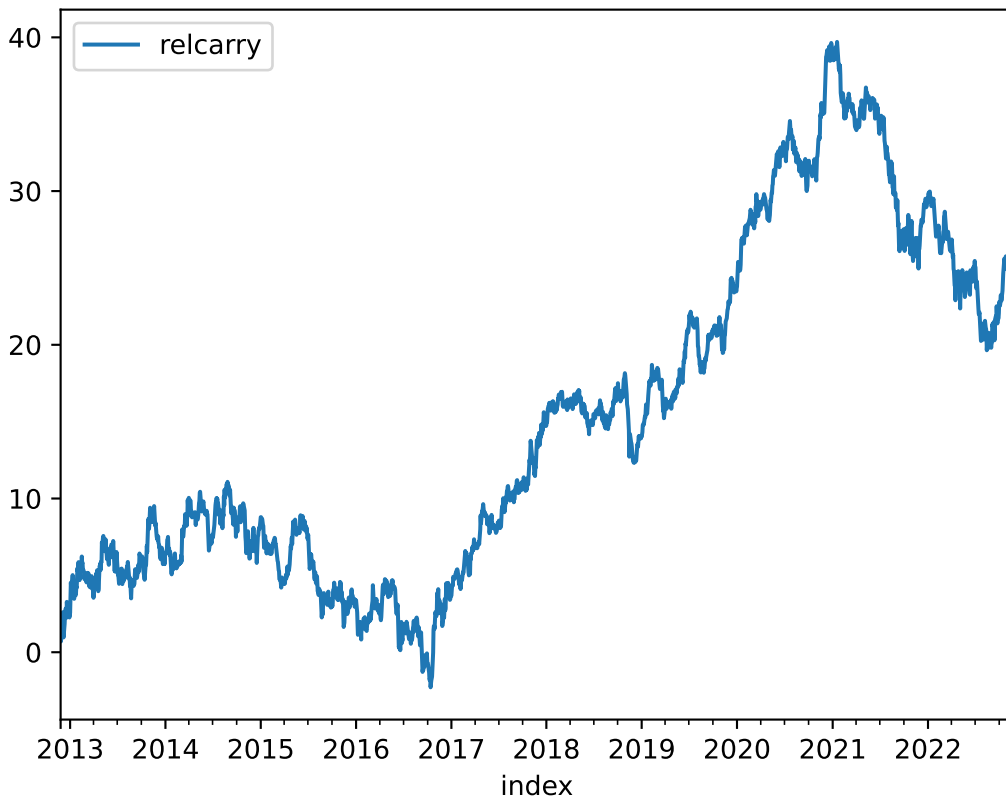
Total Trading Rule P&L for period '1Y'
ann. mean {'relcarry': -2.897}
ann. std {'relcarry': 7.265}
ann. SR {'relcarry': -0.4}



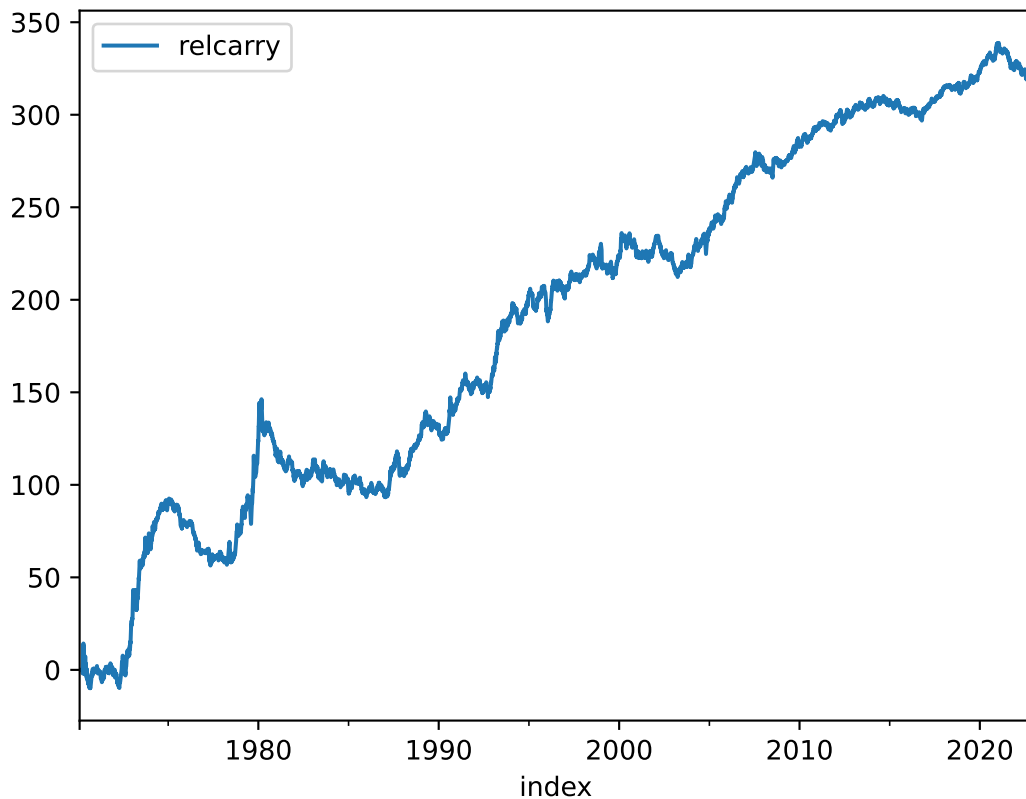
Total Trading Rule P&L for period '3Y'
ann. mean {'relcarry': 0.497}
ann. std {'relcarry': 6.799}
ann. SR {'relcarry': 0.07}



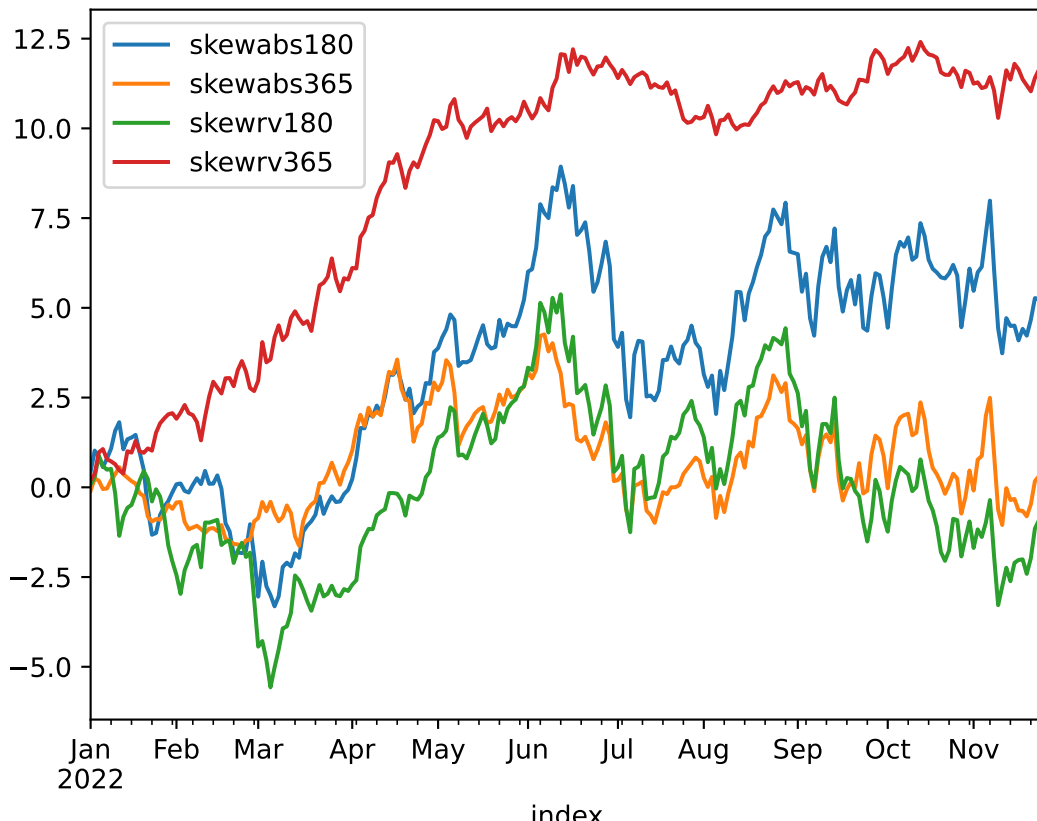
Total Trading Rule P&L for period '10Y'
ann. mean {'relcarry': 2.321}
ann. std {'relcarry': 6.057}
ann. SR {'relcarry': 0.38}



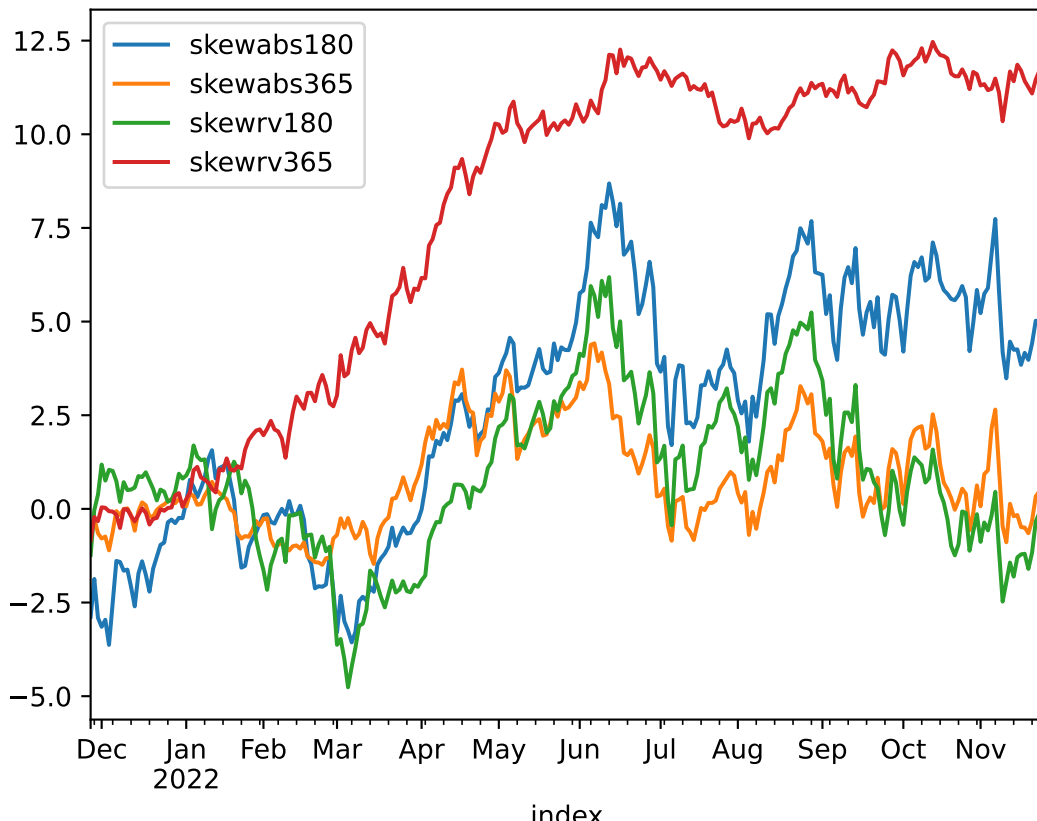
Total Trading Rule P&L for period '99Y'
ann. mean {'relcarry': 5.997}
ann. std {'relcarry': 9.562}
ann. SR {'relcarry': 0.63}



Total Trading Rule P&L for period 'YTD'
ann. mean {'skewabs180': 5.315, 'skewabs365': -0.02, 'skewrv180': -1.182, 'skewrv365': 12.607}
ann. std {'skewabs180': 10.038, 'skewabs365': 7.713, 'skewrv180': 9.426, 'skewrv365': 4.875}
ann. SR {'skewabs180': 0.53, 'skewabs365': -0.0, 'skewrv180': -0.13, 'skewrv365': 2.59}



Total Trading Rule P&L for period '1Y'
ann. mean {'skewabs180': 4.539, 'skewabs365': 0.138, 'skewrv180': -0.267, 'skewrv365': 11.402}
ann. std {'skewabs180': 10.324, 'skewabs365': 7.442, 'skewrv180': 9.239, 'skewrv365': 4.858}
ann. SR {'skewabs180': 0.44, 'skewabs365': 0.02, 'skewrv180': -0.03, 'skewrv365': 2.35}

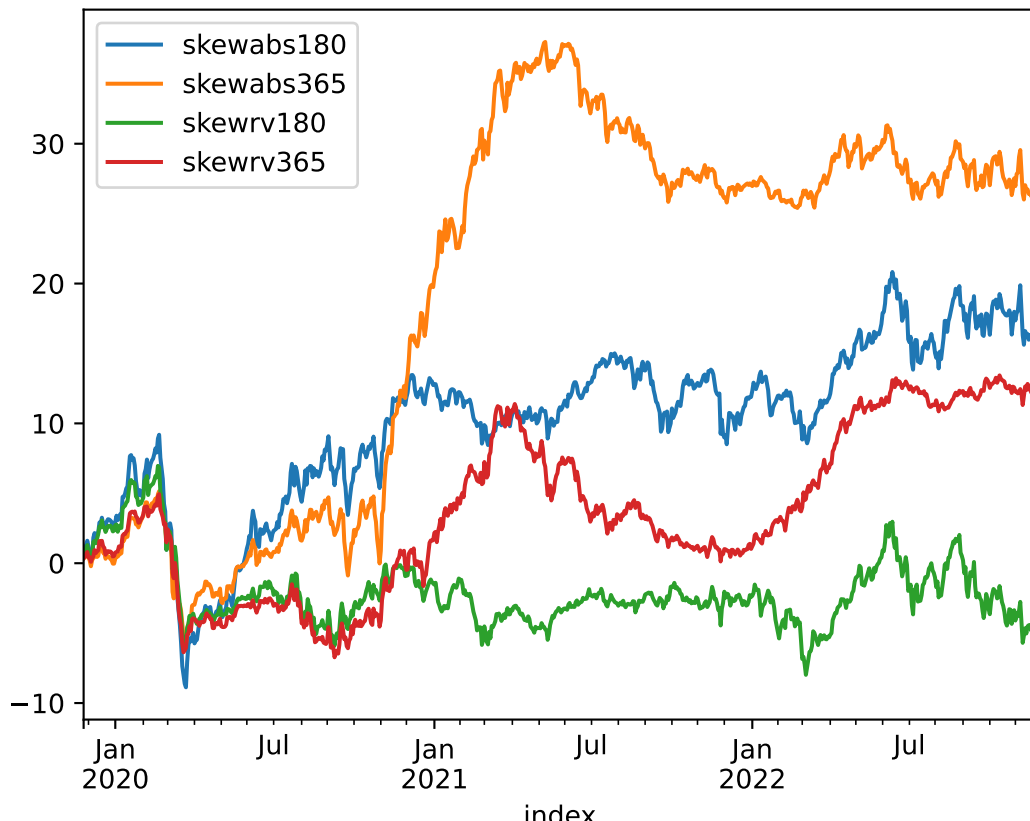


Total Trading Rule P&L for period '3Y'

ann. mean {'skewabs180': 5.476, 'skewabs365': 8.841, 'skewrv180': -1.141, 'skewrv365': 4.102}

ann. std {'skewabs180': 9.585, 'skewabs365': 8.654, 'skewrv180': 7.756, 'skewrv365': 6.555}

ann. SR {'skewabs180': 0.57, 'skewabs365': 1.02, 'skewrv180': -0.15, 'skewrv365': 0.63}

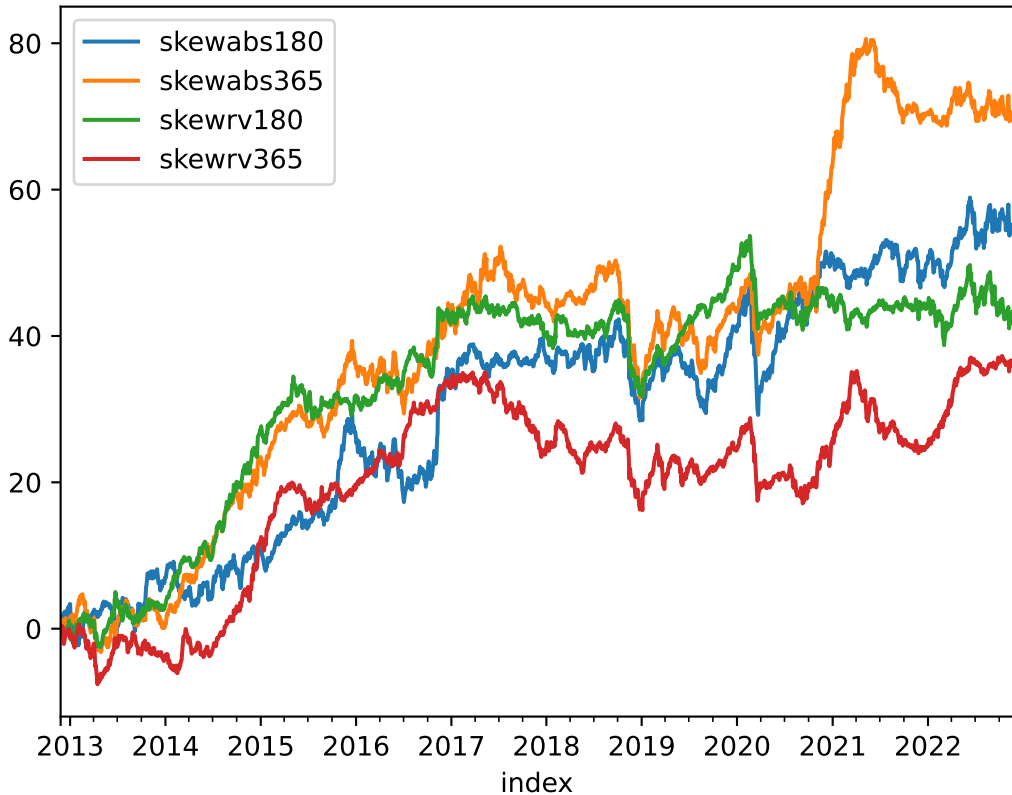


Total Trading Rule P&L for period '10Y'

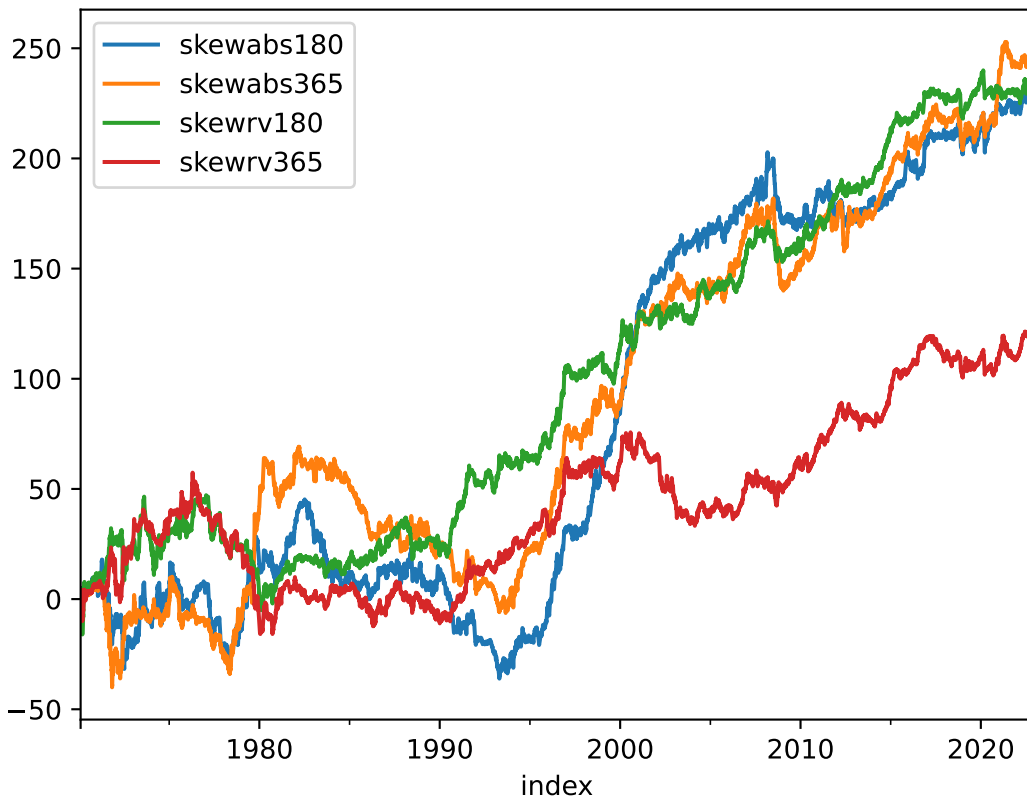
ann. mean {'skewabs180': 5.381, 'skewabs365': 6.903, 'skewrv180': 4.242, 'skewrv365': 3.57}

ann. std {'skewabs180': 8.068, 'skewabs365': 7.982, 'skewrv180': 6.572, 'skewrv365': 6.189}

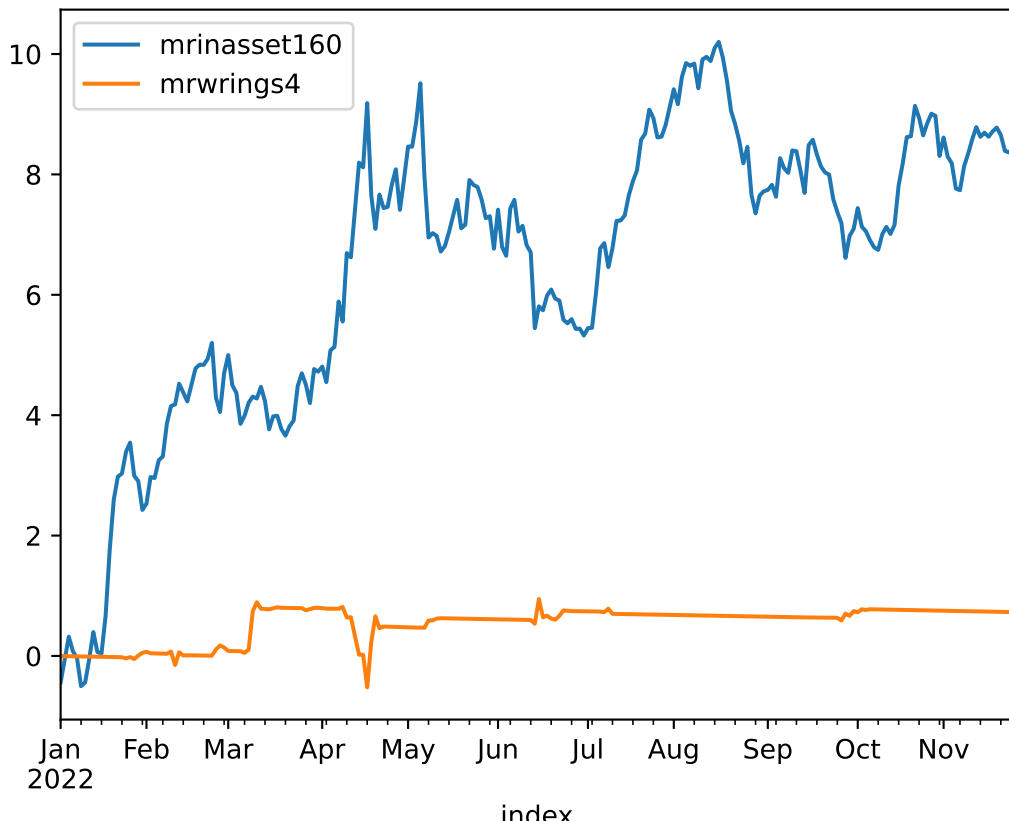
ann. SR {'skewabs180': 0.67, 'skewabs365': 0.86, 'skewrv180': 0.65, 'skewrv365': 0.58}



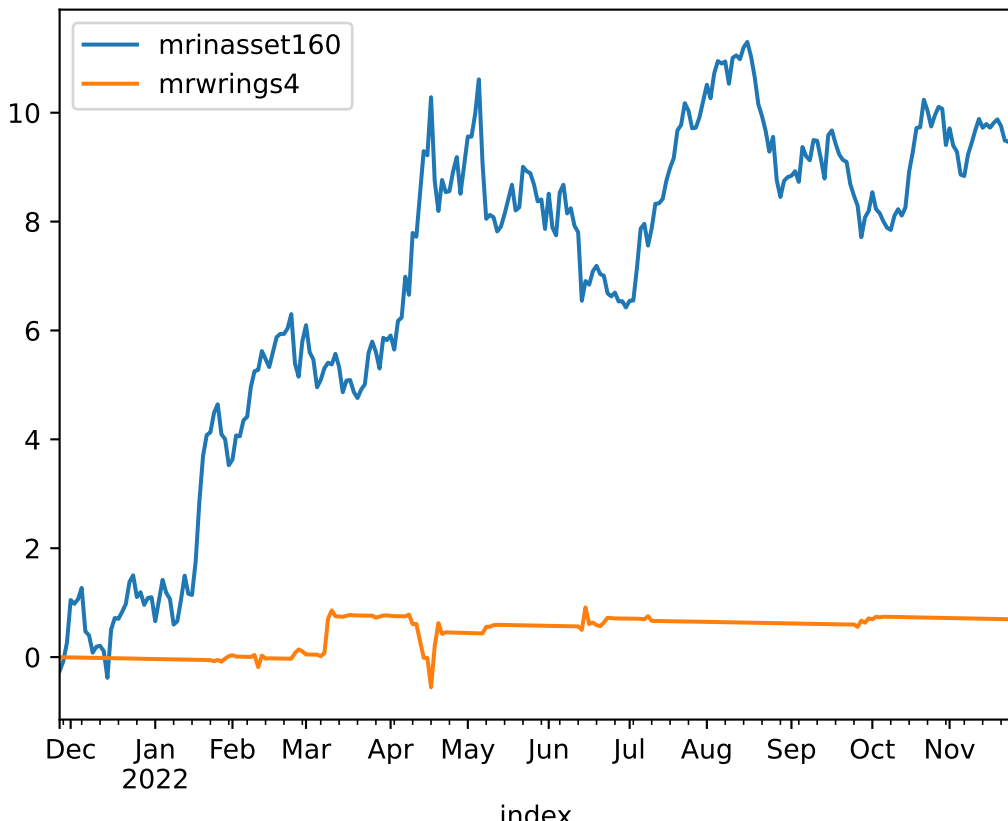
Total Trading Rule P&L for period '99Y'
ann. mean {'skewabs180': 4.241, 'skewabs365': 4.508, 'skewrv180': 4.265, 'skewrv365': 2.244}
ann. std {'skewabs180': 10.795, 'skewabs365': 10.299, 'skewrv180': 9.309, 'skewrv365': 8.607}
ann. SR {'skewabs180': 0.39, 'skewabs365': 0.44, 'skewrv180': 0.46, 'skewrv365': 0.26}



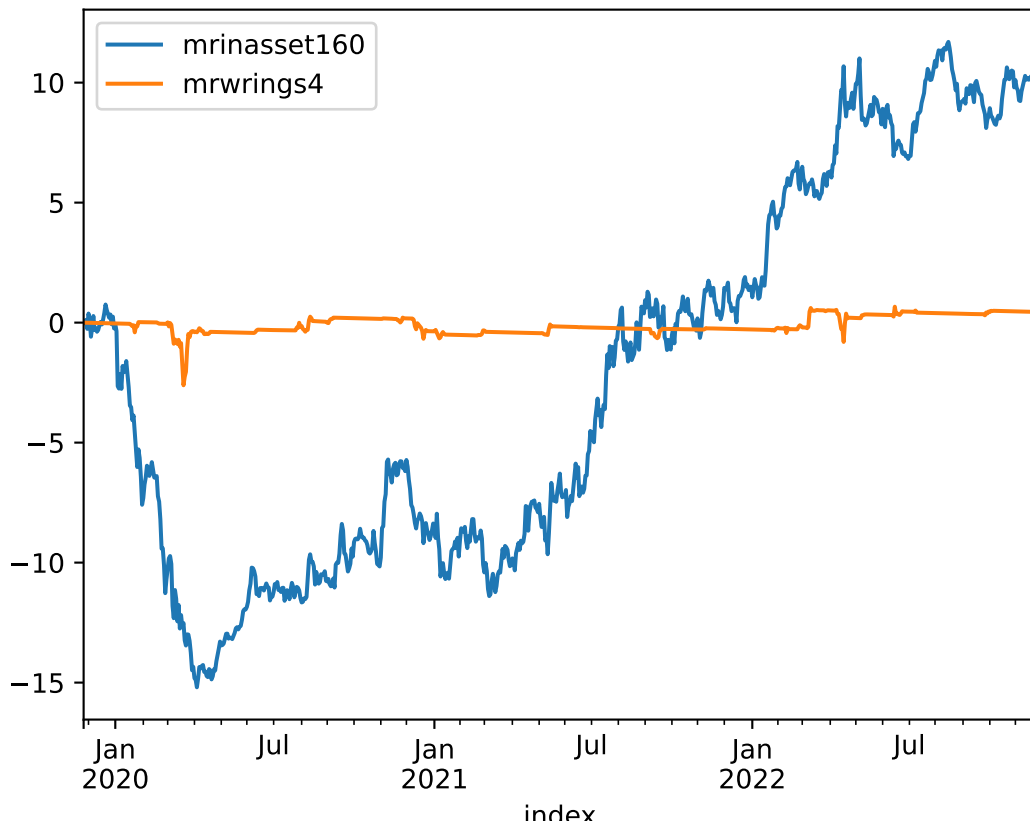
Total Trading Rule P&L for period 'YTD'
ann. mean {'mrinasset160': 9.238, 'mrwrings4': 0.798}
ann. std {'mrinasset160': 6.351, 'mrwrings4': 1.562}
ann. SR {'mrinasset160': 1.45, 'mrwrings4': 0.51}



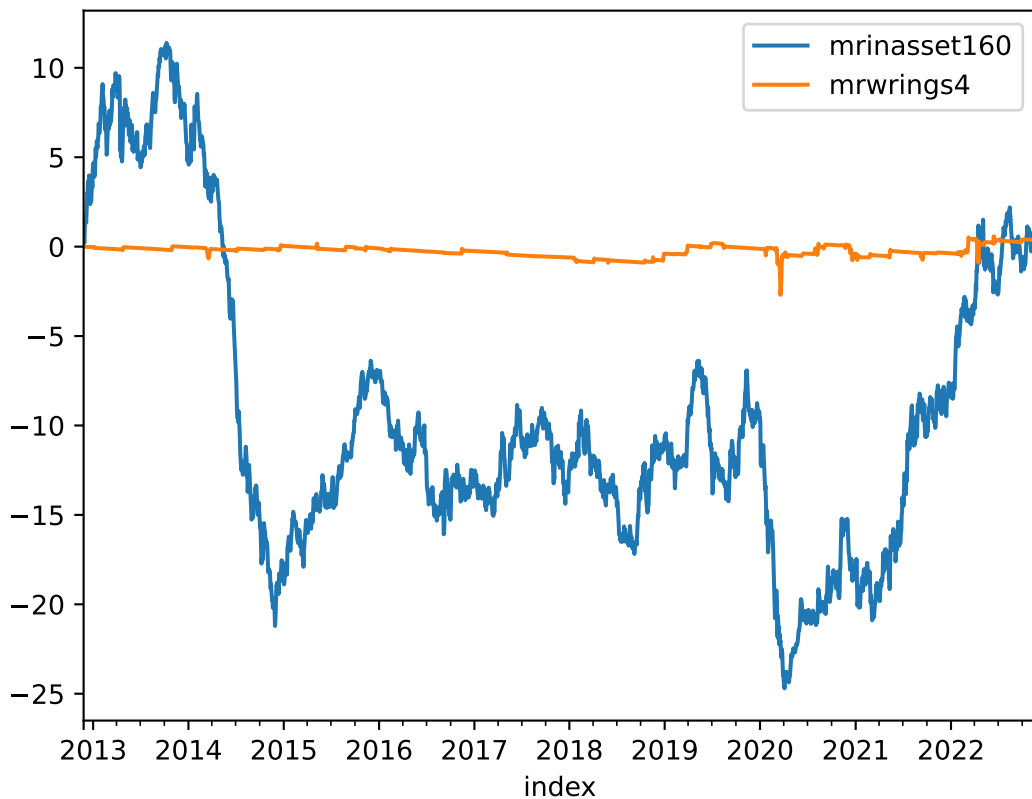
Total Trading Rule P&L for period '1Y'
ann. mean {'mriasset160': 9.396, 'mrwrings4': 0.685}
ann. std {'mriasset160': 6.275, 'mrwrings4': 1.481}
ann. SR {'mriasset160': 1.5, 'mrwrings4': 0.46}



Total Trading Rule P&L for period '3Y'
ann. mean {'mriasset160': 3.25, 'mrwrings4': 0.146}
ann. std {'mriasset160': 7.087, 'mrwrings4': 1.535}
ann. SR {'mriasset160': 0.46, 'mrwrings4': 0.09}



Total Trading Rule P&L for period '10Y'
ann. mean {'mrinasset160': 0.043, 'mrwrings4': 0.035}
ann. std {'mrinasset160': 6.658, 'mrwrings4': 0.897}
ann. SR {'mrinasset160': 0.01, 'mrwrings4': 0.04}



Total Trading Rule P&L for period '99Y'
ann. mean {'mrinasset160': -3.388, 'mrwrings4': -1.176}
ann. std {'mrinasset160': 10.929, 'mrwrings4': 2.633}
ann. SR {'mrinasset160': -0.31, 'mrwrings4': -0.45}

