Unreinforced  
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Error: 0.217

Error: 0.214

Error: 0.211 (0.277\*a\_d^2\*(a\_d + fc)/rho + fc)^(0.227/(rho - 1.176)) - 0.143

Error: 0.214

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Error: 0.207 best\*\*\*\*\*\*\*

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Error 0.1776

Error: 0.1638

Error: 0.1879

error 0.1635

error 0.1699

error 0.1616

PC['vert']=PC['rho\_v']\*PC['fyv'];PC['horz']=PC['rho\_h']\*PC['fyh']

PC['vn']=PC['V']/(PC['h'] \* PC['b'])\*1000/PC['f\_c']

PC['f\_c']=PC['f\_c']/30.0

PC['s1']=PC['vert']/PC['f\_c'];PC['s2']=PC['horz']/PC['f\_c']

Error: 0.167

Error: 0.1608

Error: 0.1617

Error: 0.1577

Error: 0.16

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Error: 0.164

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Error: 0.1617

Error: 0.166

Error: 0.163

PC['vn']=PC['V']/(PC['h'] \* PC['b'])\*1000/PC['f\_c']

PC['f\_c']=PC['f\_c']/30.0

PC['ss']=PC['vert']\*2+PC['horz']

PC['s1']=PC['vert']/PC['f\_c'];PC['s2']=PC['horz']/PC['f\_c']

features=['ad','f\_c','rho','s1','s2']

X=PC[features];y=PC['vn']

Error: 0.168

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Error: 0.161

PC['vert']=PC['rho\_v']\*PC['fyv'];PC['horz']=PC['rho\_h']\*PC['fyh']

PC['vn']=PC['V']/(PC['h'] \* PC['b'])\*1000

PC['f\_c']=PC['f\_c']/30.0

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Error: 0.162

PC['vert']=PC['rho\_v']\*PC['fyv'];PC['horz']=PC['rho\_h']\*PC['fyh']

PC['vn']=PC['V']/(PC['h'] \* PC['b'])\*1000/PC['f\_c']

PC['f\_c']=PC['f\_c']/30.0

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PC['vn']=PC['V']/(PC['h'] \* PC['b'])/PC['f\_c']\*1000

features=['ad','f\_c','rho']

Error: 0.199

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Error: 0.189

PC['vn']=PC['V']/(PC['h'] \* PC['b'])/PC['f\_c']\*1000

features=['ad','f\_c','rho']

Error: 0.191

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Error: 0.216

PC['vn']=PC['V']/(PC['h'] \* PC['b'])/PC['f\_c']\*1000

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0.1879

error 0.1699

error 0.1616

PC['vert']=PC['rho\_v']\*PC['fyv'];PC['horz']=PC['rho\_h']\*PC['fyh']

PC['vn']=PC['V']/(PC['h'] \* PC['b'])\*1000/PC['f\_c']

PC['f\_c']=PC['f\_c']/30.0

PC['ss']=PC['vert']\*2+PC['horz']

PC['s1']=PC['vert']/PC['f\_c'];PC['s2']=PC['horz']/PC['f\_c']

(2\*rho/(f\_c\*(ad^2 - 0.039\*ad\*(ad\*s1 + s2) + 0.54)))^(2.549\*rho + 0.42) Error: 0.167

1.017^(1.592216\*ad\*f\_c\*s1 + s2)\*rho^0.286/(1.12^(ad\*(ad + 0.282)) + 0.803\*ad\*f\_c) Error: 0.1608

Error: 0.1617 0.758^ad/(ad\*f\_c\*(ad\*(-2.0\*s1 - 2.9\*s2 + 5.8) + (f\_c + 0.72)/rho))^0.32553884

Error: 0.15775887410155323 0.99275345^(f\_c\*s2)/(0.38260987^ad + ad\*f\_c\*((f\_c\*rho\*(s1 + s2 + 2.1271954))^(-0.44292453) + 0.40296805) + 2.1271954)

Error: 0.16006603259010496 (rho/(ad\*(f\_c\*(ad\*(0.11934049\*ad + f\_c)\*(ad - 0.21518488\*s1 - 0.21518488\*s2 + 1.0967479) + f\_c) + 1.0967479)))^0.32876948

Mean Squared Error: 0.1616960958265315 (ad\*(f\_c\*(ad\*(f\_c + 0.45751578)\*(ad - 0.10517342\*s1 - 0.10517342\*s2) + 1.3115842\*f\_c) + 0.93340546)/rho)^(-0.3329309)

Mean Squared Error: 0.16388543507052541 rho^0.27682614/(0.9327286^(s1 + s2 + 1.4772595) + f\_c^(rho + 0.64428164)\*(1.1987364\*ad + rho^(1.3292648\*ad)))

Error: 0.16377762670055404 ((ad + 0.47940058)\*(ad\*f\_c\*(f\_c + 0.19041009)\*(ad - 0.07335686\*s1 - 0.07335686\*s2) + f\_c)/rho)^(-0.34569216)

Error: 0.16049932396878444 (rho/(ad^2\*f\_c\*(f\_c + (f\_c + 0.91211253)\*(ad\*(-0.08672052\*f\_c\*s1 - 0.08672052\*s2) + ad)) + f\_c))^0.33197397

Error: 0.15871600688001788 (rho + 0.89259046687749\*(f\_c^2\*rho)^0.2651595)/(0.98223317^(2.3854148\*s1 + 2.3854148\*s2)\*ad^1.2831234\*f\_c + f\_c)

Error: 0.16362429709103654 rho^0.2895358/(0.92319286^(0.73782676\*s1 + 0.73782676\*s2) + ad\*(ad\*rho\*(ad - 1.2034018) + f\_c^0.73782676))

Error: 0.16535466639556712 rho^0.27921093/(0.9403078^(f\_c\*(ad + s1 + s2 - 1.8202094)) + 1.0231358^(ad^2)\*ad\*f\_c^0.8198478)

Error: 0.16165156721510698 rho^0.26750705/(0.98282707^s1 + 1.08937387736595\*ad\*(0.14292416\*ad + f\_c)/(ad\*f\_c + s1 + s2)^0.16783817)

Error: 0.16595943600361615 0.853327030249253\*0.686147330633142^ad/(0.6062143\*f\_c\*(0.85100704\*ad\*f\_c + 0.5187557)/rho - s2)^0.31689417

Error: 0.1630347232183897 (rho/(ad\*(ad + f\_c\*(ad^2\*f\_c\*(-0.25154865\*s1 - 0.25154865\*s2 + 2.6116545) + f\_c)) + f\_c))^0.31065893

PC['vn']=PC['V']/(PC['h'] \* PC['b'])\*1000/PC['f\_c']

PC['f\_c']=PC['f\_c']/30.0

PC['ss']=PC['vert']\*2+PC['horz']

PC['s1']=PC['vert']/PC['f\_c'];PC['s2']=PC['horz']/PC['f\_c']

features=['ad','f\_c','rho','s1','s2']

X=PC[features];y=PC['vn']

Mean Squared Error: 0.1652029357777135 rho^0.27729765/(0.88535154^(0.52552974\*f\_c\*(s1 + s2 - 0.8710819)) + ad\*(0.02775837\*ad^2 + f\_c)^0.855289030051107)

Mean Squared Error: 0.1678194565827842 (rho/(rho + (ad + rho)\*(-0.0385834636045742\*f\_c\*(s1 + s2) + f\_c)))^(1.56166569826139\*ad\*rho + 0.4223947)

Error: 0.16308654298846184 (rho/(ad\*f\_c\*(ad\*(ad + f\_c - 0.05864696\*(ad + f\_c)\*(s1 + s2)) + f\_c) + 0.374452))^0.34045708

Error: 0.16383618817499512 (rho/(ad\*(-0.028174559\*ad\*f\_c\*(s1 + s2) + f\_c)\*(ad^2 + f\_c + 0.6550527)))^0.3573858

Error: 0.16281573412596614 (rho/(ad\*(f\_c + 0.13434973)\*(f\_c + (ad + f\_c)\*(ad - 0.040739615\*(ad + f\_c)\*(s1 + s2))) + 0.3378967))^0.3378967

Error: 0.1625437927857339 (rho/(ad^2\*f\_c\*(-0.08473299\*ad^2\*(s1 - 1.2067732) + ad + f\_c - 0.08473299\*s2) + 0.7621819\*f\_c))^0.35065967

Error: 0.16305643353362 rho^0.27880418/(0.95001113^(s1 + s2) + ad\*f\_c^0.7133867 + 0.060425367\*ad^(ad - 0.41357868383692\*f\_c)\*f\_c)

Error: 0.1614701592894475 (0.5565549^ad/0.9784725^s2 + 0.0115033817969284\*ad\*s1 + 0.01415956)/((f\_c^2 + 0.39105052)/rho)^0.28757662

Error: 0.1660390671066667 ((f\_c + 0.62852806)\*(rho + (ad + rho)\*(ad^2\*f\_c + f\_c - 0.019894026\*s1 - 0.019894026\*s2) + 0.17679925)/rho)^(-0.33045933)

Error: 0.16446453478122425 rho/(rho\*(ad + f\_c\*(-0.07226578\*ad\*(ad\*(s2 - 1.9042596) + s1) + ad + 0.53136136808679)))^0.7187445

Error: 0.16175370977521084 (rho\*(rho\*(s1 + s2)/(f\_c + rho) + 0.4048103/(f\_c + 0.58628905))/(ad\*f\_c\*(ad^2 + 0.99750566)))^0.2991804

Error: 0.16109246878584574 rho/(rho + (rho\*(0.40383095\*f\_c + rho)\*(ad\*(ad - 0.057846162\*s1 - 0.057846162\*s2) + ad + 0.691948778))^0.6216529)

PC['vert']=PC['rho\_v']\*PC['fyv'];PC['horz']=PC['rho\_h']\*PC['fyh']

PC['vn']=PC['V']/(PC['h'] \* PC['b'])\*1000

PC['f\_c']=PC['f\_c']/30.0

Error: 0.1753173245064409 2.21020460306051\*ad^(-ad - 0.25669122)\*f\_c + 70.0707706568631\*rho + (2\*f\_c\*s1 + s2)^0.27441838

Error: 0.17034498322888864 (f\_c + (f\_c + rho\*s1 + 1.1594324)/(-0.11126381\*ad - 0.097698003344893))\*(-13.6070221346509\*rho\*(0.0037504428\*rho)^rho - 0.3209166)

Error: 0.17416789707797295 (4.452615\*f\_c + 4.452615\*rho\*(s1 + s2)^ad)/(ad + f\_c^0.31070423 - 0.17245609) + 0.49032852 + 104.164051714952\*rho/ad

Error: 0.1722432309358823 0.822093263192336\*f\_c + (ad^0.7716831 + rho\*(s1^(ad + 0.8274047) + 122.03838))/(ad + rho\*s1) + f\_c/ad^ad

Error: 0.17109391785501257 (ad\*(-0.046756454\*f\_c/rho + s1 + s2) + 36.6577609080391\*f\_c)^(-0.12475116\*ad + 2.97894218537522\*rho + 0.55392593) - 0.57063466

Error: 0.16987139884239083 (f\_c\*rho/(ad + rho))^(2\*ad\*rho + 0.49391347)\*(s1 + 35.4883986395978) + 0.7918104

Error: 0.1713409779763929 1.1019047^s1 + f\_c + f\_c/(ad^2)^ad + rho\*(4.21324496754221\*s2 + 94.4234694042693/ad)

Error: 0.1639172887659914 8.41699687948258\*rho^0.29944125\*(ad^(-ad - 0.29944125)\*f\_c^0.80441874 + f\_c^(0.13627683\*ad) + 0.023856888\*s1^ad)

Error: 0.16560989093761377 8.41699687948258\*rho^0.29944125\*(ad^(-ad - 0.29944125)\*f\_c^0.80441874 + f\_c^(0.13627683\*ad) + 0.023856888\*s1)

Error: 0.16315734928547385 rho^(ad\*rho + 0.32571977)\*((ad\*s1 + 0.21442744\*s2)^0.5936983 + (f\_c + 1.1443319)/(0.06721839\*ad + 0.046583244996426))

Error: 0.17643710702317672 ((3\*f\_c + rho\*(ad\*s1^2 + 170.99838))/(ad + f\_c\*rho + 0.294923467) + 0.69246405)^0.94631636

Error: 0.16018431739943537 f\_c\*(ad^2)^(-ad + 0.10718014\*s1) + f\_c + (s2 + s1^2/ad)^0.17401163 + 99.7907189043139\*rho/ad

Error: 0.1678191135415467 f\_c\*(ad^2)^(-ad + 0.10718014\*s1) + f\_c + (s1 + s2)^0.17417115 + 99.7907189043139\*rho/ad

Error: 0.17315474278066856 (ad/rho)^(rho\*s1) + (2\*f\_c + rho\*(s2 + 103.102554))/(ad + rho^ad)

Error: 0.1706631298613098 f\_c + (rho\*(s1\*(s1 + s2) + 174.96242/ad))^0.7477423 + 0.60961527 + f\_c/ad^(1.6522918\*ad)

Error: 0.17154865186044047 f\_c^0.4679759\*(7.79730135400138\*0.51670355^ad + 15.5946027080028\*rho^0.51670355 + 7.79730135400138\*rho\*s1 - 1.1373924)

Error: 0.17466125993088122 1.0346096^s2 + f\_c/ad^1.1511151 + 0.08131611\*ad\*s1 + f\_c + 103.900011900108\*rho/ad^ad

Error: 0.16176552969596572 24.2226959586025\*(0.0010068334\*s1 + 0.0010068334\*s2 + f\_c\*rho/ad)^0.46186283 + f\_c/ad^(1.46186283\*ad)

PC['vert']=PC['rho\_v']\*PC['fyv'];PC['horz']=PC['rho\_h']\*PC['fyh']

PC['vn']=PC['V']/(PC['h'] \* PC['b'])\*1000/PC['f\_c']

PC['f\_c']=PC['f\_c']/30.0

Error: 0.16140238592602435 0.78729343^ad\*(1.0171463^(s1 + s2/f\_c) - 0.030016629)/(ad\*f\_c\*(f\_c + 1.0422592)/rho)^0.32480577

Error: 0.16264270118107554 0.53018117^ad/((rho^(-0.19716683) - 0.38574344)\*(f\_c - 0.06985062 + (-0.19716683\*f\_c + s1 + s2)^(-0.115116335\*ad))) + rho

Error: 0.16380774995285158 rho^0.28308782/(0.930042^(s1 + s2) + (ad + 0.051854270848491\*f\_c)\*(ad\*rho + f\_c)^0.8036735)

Error: 0.16381330968040358 rho^0.2962329/(0.92803484^(s1 + s2 + 1.0945278) + f\_c^0.795943335\*(ad + 0.03725128\*f\_c))

Error: 0.15910181983286975 rho^0.25262484/(1.2184963^(ad - 0.30589262\*s2) + f\_c\*(ad + 0.091101356)) + 0.005941891\*s1 - 0.00254994029997766

Error: 0.16346946240352273 rho^0.300637/(0.98056674\*ad\*f\_c^0.8358583 + rho + (s1 + s2 + 0.7595448)^(-0.24987414))

Error: 0.1634392622735554 (f\_c\*(ad^2\*(ad\*f\_c + ad + 2.337942\*f\_c - 0.24452624219796\*s1 - 0.24452624219796\*s2) + 1.2787184)/rho)^(-0.311677)

Error: 0.1622262187073454 (f\_c\*(ad\*(ad - 0.30196404\*s1) + 2.9930253)\*(ad^2\*f\_c + 0.35158855)/rho)^(-0.314316273924933)

Error: 0.16143899011516186 (rho/(f\_c\*(ad^2\*(1.3579063\*ad\*(2\*rho - 0.13184755)\*(s1 + s2) + ad + 1.3579063\*f\_c) + 0.73683125)))^0.34706897

Error: 0.15673637202141089 (f\_c\*(ad^2 + 0.8212575)\*(1.7556022\*ad\*f\_c + 1.27464391701614/(s1 + s2))/rho)^(-0.32067218)

Error: 0.16407531537928421 0.322149029700879/(0.0442051097258268\*ad\*f\_c\*(ad\*(ad - 0.12663691\*s1 - 0.12663691\*s2) + f\_c)/rho + 1)^0.36318433

Error: 0.15698306682146948 0.814677076999706/(f\_c\*(ad\*(ad\*f\_c\*(0.610931768696345\*ad + 2\*ad/(s1 + s2)) + f\_c) + ad)/rho)^0.29569978

Error: 0.1610103750699458 rho^0.28605306/(0.9473162^(s1 + 1.169921\*s2) + f\_c^(-0.01560928\*ad\*f\_c\*s1 + 0.91673315)\*(ad + f\_c\*rho))

Error: 0.16407135199874961 (rho/(ad\*(ad\*f\_c\*(ad + 1.5487891) + ad\*(-0.099813424\*s1 - 0.099813424\*s2))\*(f\_c + rho + 0.3567469) + f\_c))^0.32241502

Error: 0.16285322253667847 0.788762^ad/(ad\*(f\_c^2 + f\_c - 0.09810462\*s1 - 0.09810462\*s2 + 0.19802734)/rho + s1 + s2)^0.326019661775464

Error: 0.16206827931876444 0.77186346^ad/(ad\*f\_c\*(ad + (-0.092942804\*ad\*(s1 + s2) + f\_c + 1.1686008)/rho))^0.32373604

Error: 0.16502304088612388 (rho/(f\_c\*(ad\*(1.9204354\*ad\*(1.4664217\*ad\*f\_c - 0.13330439\*s2) + f\_c) + ad + 0.548243)))^0.312

Error: 0.16336624020940238 rho^0.27215633/(1.1563936^(ad\*(-0.58049244\*f\_c\*s1 - 0.58049244\*s2)) + (ad\*(0.14016183\*ad + f\_c))^0.9534871)

Error: 0.16389370324056532 rho^0.28719333/(ad\*f\_c^0.84595084 + (f\_c\*rho + 0.8719396)^(-0.23115161674746\*f\_c + 0.5594068\*s1 + 0.5594068\*s2))

Error: 0.15702238688285605 (0.00910711711545228\*f\_c^(ad - 0.115062832066206\*s2)\*s1 + rho^0.15301284 + 0.00910711711545228\*s2 - 0.26657313)/(ad\*f\_c + 0.75761503)

Error: 0.15650643150700372 rho^0.3089876/(ad\*f\_c^0.87858176 + rho + 0.7256604) + 0.0058200816\*s1 - 0.00361916437281173 + 0.0058200816\*(0.6023688\*s2 - 0.74396384)/f\_c^ad

Error: 0.16278971628354402 rho^0.2751883/(0.9329289^(ad\*(s1 + s2)) + 0.095795184\*ad^2 + ad\*f\_c^0.9120516)

Error: 0.163424047574831 (rho/(ad^2\*f\_c\*(ad\*(f\_c - 0.1386729\*s1 - 0.1386729\*s2) + ad + f\_c) + f\_c))^0.326348610550759

Error: 0.1643459175257892 (rho/(-0.090670846\*ad\*s2 - 0.045335423\*s1 + (ad\*f\_c^2 + f\_c)\*(ad^2 + rho + 0.59992296)))^0.3390997

Error: 0.1589181876724612 rho^0.286067\*(-0.19004355\*ad + f\_c)^(rho\*(ad\*f\_c + ad))/(ad\*f\_c + (s1 + s2)^(-0.19004355))

Error: 0.16018978188915753 ((ad\*f\_c + 0.7059134)\*(1.230749\*ad^2\*(-0.10947949\*f\_c\*s1 + 2\*f\_c - 0.10947949\*s2) + f\_c)/rho)^(-0.30856508)

Error: 0.1674812680275955 (rho/(ad\*f\_c\*(ad\*(ad\*(-0.16797642\*ad\*s2 + 2\*f\_c) + ad) + f\_c) + f\_c))^0.3125012

Error: 0.1638284628271944 rho^0.2924111/(0.93370634^(s1 + s2) + ad\*(0.95442516^(ad\*f\_c)\*f\_c + ad^2\*rho))

Error: 0.15997524858423187 rho^0.291906/(ad\*(ad\*rho + f\_c^0.83636755) + f\_c\*rho^(ad + 0.24145067) + (s1 + s2 + 0.36065948)^(-0.25423622))

Error: 0.1609901537157504 (rho/((f\_c + rho)\*(ad\*(ad - 0.13782041)\*(f\_c + 0.38091865) + 0.38091865)))^(0.38091865 + rho/(f\_c\*(s1 + s2)))

Error: 0.16198719594020938 (rho/(ad\*f\_c\*(f\_c + (ad - 0.15887646)\*(ad - 0.1652256\*s1)\*(f\_c + 0.29684803) + 1.2546856)))^0.34223622

Error: 0.16856698847186183 1.0932852\*0.69564354^ad\*(((f\_c\*(ad + f\_c) + (ad + 0.591188)/rho)\*(f\_c + 1.41950162433571\*rho - 0.4170695))^(-0.10375514) - 0.43068522)

PC['vn']=PC['V']/(PC['h'] \* PC['b'])/PC['f\_c']\*1000

features=['ad','f\_c','rho']

Error: 0.19864297620000154 rho^(0.173944\*ad - 2\*rho)/f\_c^0.39691243

Error: 0.1979522708579545 (ad + 0.8003141)\*(f\_c^(-0.2557186) - 0.15669526)/(-0.15669526 + rho^(-0.29057407\*ad))

Error: 0.20846088670765364 ad^0.9230947\*(rho + (f\_c - 1.8743323 + 0.26398525/(ad\*rho))^(-0.54092884\*ad))

Error: 0.19007399891062574 4.8318086\*(ad\*rho/f\_c)^0.29541546/(ad\*rho + 2\*ad + 0.41571784) - 0.066898495

Error: 0.19317676931670838 1.0720665/(ad^2\*f\_c/rho + 2\*f\_c^2\*rho)^0.09701975 - 0.37116364

Error: 0.18558992588713247 -0.0053056508736324\*f\_c\*rho + 3.1674929\*(f\_c/rho)^(-0.0958634\*ad - 0.30919015)

Error: 0.18907483095316688 0.530715491091671/(0.603983200352238\*ad\*(0.0466189\*f\_c + 0.0238449967958163/rho) + 1)^1.2564816

PC['vn']=PC['V']/(PC['h'] \* PC['b'])/PC['f\_c']\*1000

features=['ad','f\_c','rho']

Error: 0.19087420987055978 1.08213274126713\*(rho/(ad\*f\_c\*(ad + 0.11002313\*f\_c\*rho) + 0.9828094))^0.112845406 - 0.31397173

Error: 0.1932658841624657 rho\*(0.069979146\*f\_c\*rho + 0.0291538496634413)^(1.2774279\*ad\*rho - 0.91230106)/(ad + 0.25745162)

Error: 0.1930164243583314 rho^0.2989391\*(rho + (0.23047012\*f\_c)^(-0.3851998\*ad))

Error: 0.19296412446222647 (0.628893044474373\*ad^2\*f\_c/rho + f\_c)^(-0.13141385) - 0.25022328

Error: 0.19438572036436172 (f\_c + 0.51270664\*(ad^2\*f\_c + 1.4304041)/rho)^(-0.11497319) - 0.30652204

Error: 0.1896446113929794 (rho/(ad^2\*f\_c\*(f\_c\*rho^2 + 0.30110124) + 1.0562274))^0.17028008 - 0.18603688

Error: 0.1933336506235278 1.53118164031949\*rho^0.39154142/(0.26068112\*f\_c)^(0.35791066\*ad)

Error: 0.19940005887078863 (f\_c^rho + 1.64967233655031\*rho^(0.42563167\*ad)\*(ad\*f\_c)^0.7221795)/f\_c

Error: 0.1948186067549963 (rho/(ad + rho))^0.4153753\*(0.9875785^(ad\*f\_c) + 0.129918526)

Error: 0.1924519492988548 (rho/(0.1575473\*ad\*f\_c\*(ad + rho) + 0.4018111))^0.24651968 - 0.096628524

Error: 0.1876939987901253 (rho/(f\_c\*(ad^2 + 0.14431654)\*(rho + 0.1293831) + rho - 0.17219193))^0.24431057 - 0.10239257

Error: 0.1942336090633044 (rho/(1.3817029\*ad^2\*f\_c\*(rho + 0.203979) + 1.01179334434388))^0.10507456 - 0.3622439

Error: 0.1931599581101996 (0.49164847\*ad^2\*f\_c/rho + f\_c\*(f\_c\*rho - 0.41487166))^(-0.095534645) - 0.37655526

Error: 0.18849807007612587 1.2437377/(ad\*(ad + f\_c + (rho + 0.5520484)/rho))^0.3030311 - 0.2

Error: 0.18849807007612587 1.2437377/(ad\*(ad + f\_c + (rho + 0.5520484)/rho))^0.3030311 - 0.2

Error: 0.20819154594733794 1/(f\_c^0.24948196\*(ad + 1.0457006)) + rho^(2.09661062876693\*rho + 0.39114395) - 0.236

Error: 0.19488083171653325 1.08371325392224\*(rho/(ad\*f\_c\*(ad + rho) + 1.9452975))^0.11408769 - 0.31064796

Error: 0.19389258055028 1.61490671340089\*rho^0.36078218/(1.0134267^f\_c\*ad^1.0430878 + 0.7417303) - 0.01396161

Error: 0.20063344416249443 rho^(f\_c\*rho^2 + 0.61939853) - 0.054114286 + 0.27967897/(0.25574926\*f\_c)^(0.41327348\*ad)

Error: 0.18634378687112682 2.9761903\*rho^0.48943815/(f\_c^(0.1896267\*ad + 1.1896267\*rho + 0.141572417582961) - 0.62322044)

d Error: 0.194364550243671 1.04970175300921/(ad^2\*f\_c/rho)^0.10799112 - 0.3216715

Error: 0.19109012279541931 1.19504279308134/(0.0764655587430395\*ad\*(ad\*f\_c + 1.1450098/rho) + 0.0764655587430395\*f\_c + 1)^0.86298347

Error: 0.1938168964795666 0.4439747775286\*(0.316213723\*f\_c^2)^(-0.12194894\*ad - 0.0011019728050434/rho)

Error: 0.19172579353785724 (rho/(ad\*(0.1356318\*ad + rho)\*(ad + f\_c) + 0.59598273))^0.21817505 - 0.13583188

Error: 0.2057366737120081 (ad\*(ad\*(f\_c - 10.8939441552654) + 2.3744411 + 0.31975225/rho))^(2\*rho - 0.55364245)

Error: 0.2089248930619706 (ad + rho)\*(rho + (0.61925203\*f\_c + 0.16367619625222/(ad\*rho))^(-0.61363554\*ad))

i = 7 1.034263773697072 Mean Squared Error: 0.18613850700028634 (0.19282725\*f\_c + 0.321691290834375 + 0.109140694/rho)^(-0.27730215\*ad - 0.46325356)

i = 8 1.0348870090010664 Mean Squared Error: 0.18670769181040459 (0.19282725\*f\_c + 15.1368255503561\*rho + 0.109140694/rho)^(-0.27730215\*ad - 0.46325356)

i = 9 1.0294765897534373 Mean Squared Error: 0.1869436387045423 (0.19282725\*f\_c + 15.1368255503561\*rho + 0.0900929270743425 + 0.109140694/rho)^(-0.27730215\*ad - 0.46325356)

i = 10 1.0304159304375355 Mean Squared Error: 0.1869008944147758 (0.19282725\*f\_c + 15.1368255503561\*rho + 0.074364696685125 + 0.109140694/rho)^(-0.27730215\*ad - 0.46325356)

Error: 0.19297641007566652 2.85965716\*rho^(0.18044226\*ad + 0.186151597460208)/f\_c^0.42750025

Error: 0.19297641007566652 2.85965716\*rho^(0.18044226\*ad + 0.186151597460208)/f\_c^0.42750025

Error: 0.19333824996740007 (0.45320743\*ad^2\*f\_c/rho + f\_c^2\*rho)^(-0.09945931) - 0.36531252

i = 7 1.0390375402706593 Mean Squared Error: 0.1953558364284361 (rho/(0.4922368\*ad^2\*f\_c + 1.0757453))^0.1329713 - 0.2556673

i = 8 1.016671109270561 Mean Squared Error: 0.1899269892604623 1.22157950271922\*(rho/(ad\*(f\_c\*rho + 0.5677589)))^0.28874776 - 0.217442918572093

i = 9 1.0320587528872536 Mean Squared Error: 0.18909276149419127 1.22157950271922\*(rho/(ad\*(f\_c\*rho + 0.548952113)))^0.28874776 - 0.217442918572093

i = 10 1.0214635232797438 Mean Squared Error: 0.18934711003410815 1.22157950271922\*(rho/(ad\*(rho\*(f\_c + 0.85505897) + 0.548952113)))^0.28874776 - 0.217442918572093

Error: 0.20934319725166464 (ad + rho/ad^2)\*(rho + (f\_c + 0.18732229/(ad\*rho))^(-0.55155647\*ad))

Error: 0.2160310878144535 ad/(ad + f\_c^(0.65312815\*ad)) + rho^0.74424666/(f\_c\*rho)^(2\*rho)

PC['vn']=PC['V']/(PC['h'] \* PC['b'])/PC['f\_c']\*1000

Error: 0.20070797107002217 (rho^0.38960296 + rho)/(ad + rho + (0.015781086\*ad\*(f\_c - 2.2872898))^ad)

Error: 0.19636636524824752 (0.5742973^(0.01162973/rho) + rho)/(f\_c^0.43130448\*(ad + rho^(0.8092\*ad)))

Error: 0.19223897050042682 (rho/(ad^2\*(f\_c - 2.3968972) + 0.37112538))^0.12764066 - 0.2437771

Error: 0.19122956492434243 2.137227\*ad\*ad^ad/(ad + f\_c + 0.5291064/rho)^(0.643436879485559\*ad)

Error: 0.19497584959947936 (rho/(0.014520158855293\*ad^2\*f\_c + 0.15698631))^(2\*rho + 0.50290704)

Error: 0.19756234367320782 (ad\*rho)^(0.0024345245017185\*ad\*f\_c + 0.3432943)/(ad^2 + 0.35572916)^0.5779847

Error: 0.2127465295835781 ad\*rho^(0.572632277197084\*ad + f\_c\*rho^2) + f\_c^(2.1425557\*rho - 0.883415)

Error: 0.19194158841122091 (0.6562589\*ad^2\*f\_c/rho + f\_c^2\*rho)^(-0.124345556) - 0.2675521

Error: 0.18776306856812375 (0.5701629\*f\_c\*(0.70095116 + 0.148729200574854/rho))^(-0.141047679626481\*ad - 0.23447408)

Error: 0.18476902274708082 1.6569768\*(rho/((f\_c + 3.0975882)\*(rho + 0.077995345)))^(0.14040595\*ad + 0.3186759)

Error: 0.1925827446687029 1.57228499183245\*rho^0.41191053/((ad + f\_c)\*(rho + 0.19171566))^(0.36565307\*ad)

0.19685713341227096 (ad\*(0.24499752\*ad\*f\_c + 1.8489356)/rho + f\_c)^(-0.15244147) - 0.23165385

Error: 0.1958600967521372 ad^0.7135758/(f\_c/(2\*ad^2\*rho))^(0.286120462322599\*ad)

Error: 0.19305335267182838 (ad^2\*f\_c/(2\*rho) + f\_c^2\*rho)^(-0.099295646) - 0.3615062

Error: 0.20987306005870093 (ad + rho)\*(rho + (f\_c - 0.95638204 + 0.17458238/(ad\*rho))^(-0.5569308\*ad))

Error: 0.19582672500111717 (rho/((1.2659795\*ad + rho)\*(ad\*(f\_c + rho) - 2.3229945)))^0.15442708 - 0.16232435

Error: 0.19642376026481426 ad/(0.46363407\*f\_c + 0.123826978104749/(ad\*rho))^(0.6608561\*ad) + rho

Error: 0.1892645531955782 1.2285595/(ad\*(f\_c + 3.8844066 + 0.53199595/rho))^0.281689346410538 - 0.227070192714015

Error: 0.19168766258122344 3.46187470277642\*f\_c^(-rho - 0.40350634)\*rho^(0.17861035\*ad + 0.240170746923085)

rror: 0.1947761839495437 (rho/(ad^2\*f\_c\*(rho + 0.36736637) + 1.2571145))^0.11828578 - 0.30858922

Error: 0.1936320306741344 (0.5841873\*ad^2\*f\_c/rho + f\_c)^(-0.10985942) - 0.318183109

Error: 0.1998009724347945 1/(1.0323564^(0.23121777/rho)\*f\_c^0.4112704\*(ad + (2\*rho)^ad))

error: 0.19580091224484414 (rho/(0.4229528\*ad^2\*f\_c + 0.47407138))^0.098244675 - 0.3729295

Error: 0.18657981225841042 0.391498031373246/(0.0119761836996297\*ad\*(f\_c + 0.5515856/rho) + 1)^1.6750098

Error: 0.18721516028203608 3.6617086\*(4.81972261339626\*f\_c + f\_c/rho)^(-0.1006359\*ad - 0.321684)

Error: 0.18692079732049918 (f\_c/rho)^(-0.101550356\*ad - 0.3227756)\*(3.766312995 - 9.84733130822308\*rho)

i = 9 1.0318270341728315 Mean Squared Error: 0.18654777321568314 3.6617086\*(4.81972261339626\*f\_c^2\*rho + f\_c/rho)^(-0.1006359\*ad - 0.321684)

i = 10 1.027596710386325 Mean Squared Error: 0.1868289006895285 3.6617086\*(5.44610203944276\*f\_c^2\*rho + f\_c/rho)^(-0.1006359\*ad - 0.321684)

Error: 0.1937109015497254 ((0.5950323\*ad^2\*f\_c + 0.69189397841997)/rho)^(-0.13733865) - 0.23558708

Error: 0.19348617179779476 1.08935294385919/(ad\*f\_c\*(ad/rho + f\_c\*rho))^0.08417625 - 0.4341287

Error: 0.1967641937100679 (f\_c\*(0.022034662106467\*ad^2/rho + 0.294146))^(-0.4929798)

Error: 0.21774736366501232 ad\*(rho + (f\_c + 0.12364918/rho)^(-0.560014567\*ad))

Error: 0.21198035282343888 ad\*(rho + (f\_c + 0.150312690077067/(ad\*rho))^(-0.55703396\*ad))

Error: 0.1883099806475295 (ad\*(0.40478942\*f\_c + 1.2673715 + 0.2179564/rho))^(-0.34784818) - 0.16780692

Error: 0.19597349726869615 (-0.020834757\*ad + (f\_c\*rho - 0.081733376)^0.3098322)/(0.13146035\*ad\*f\_c + 1.064169)

Error: 0.18885259410480465 rho\*(-0.16549622\*ad + (rho\*(f\_c + f\_c/ad))^(-0.3525606))/(0.07689967\*ad + rho)

Error: 0.1950711831707213 4.06006285688015\*(-1.57515318265158e-5 + rho/(ad\*f\_c\*(ad + 0.27347624)))^0.42941016

Error: 0.19303701043462423 (rho/(ad^2\*f\_c))^0.13182046 - 0.229351489862488

Error: 0.1934447756281957 (rho/(0.7987765\*ad^2\*f\_c + 0.4395037643618))^0.12280926 - 0.2638372

Error: 0.1886983951844325 (rho/(ad\*(rho\*(0.3548754\*f\_c + 1.3328335) + 0.1929951)))^0.37850448 - 0.14985959