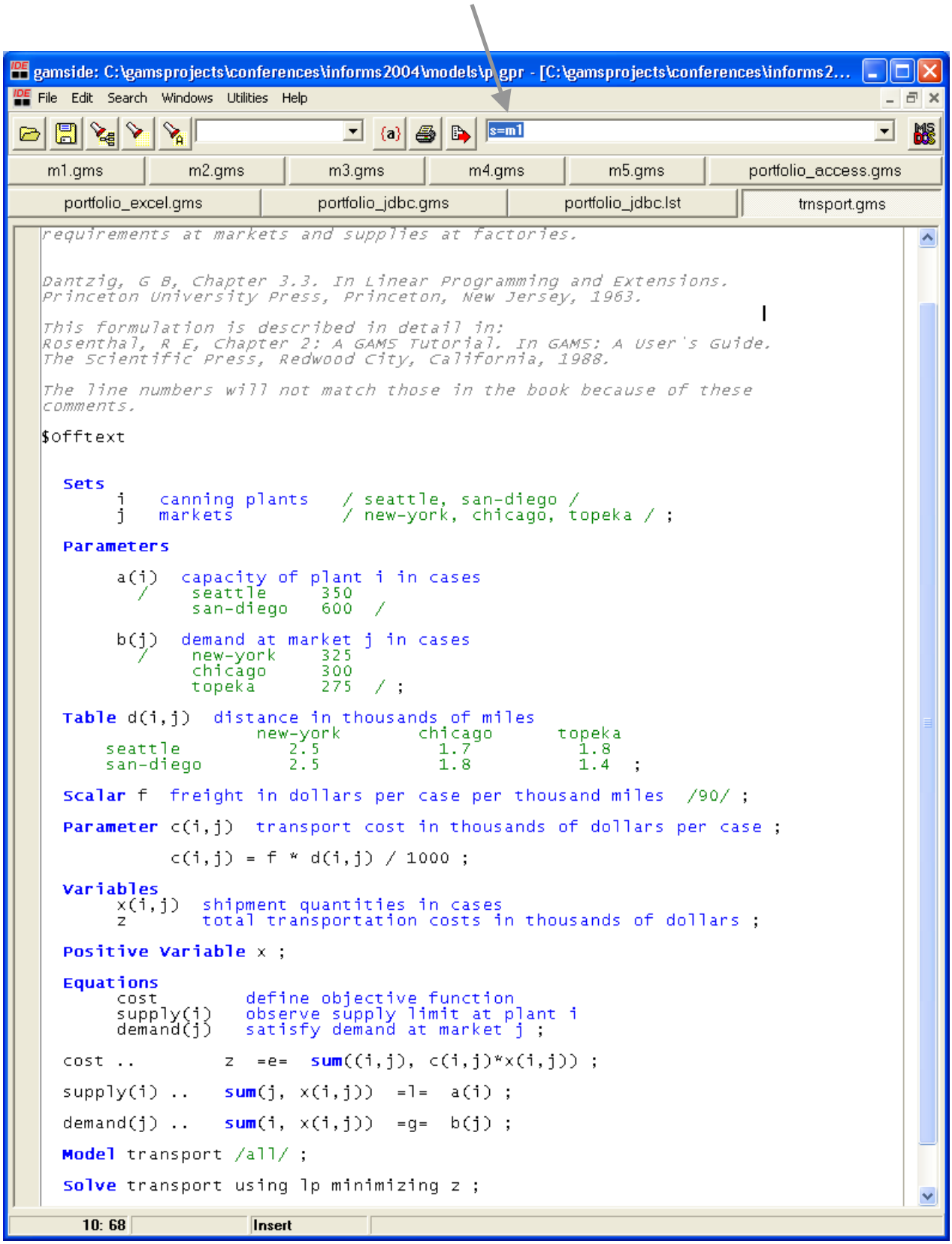
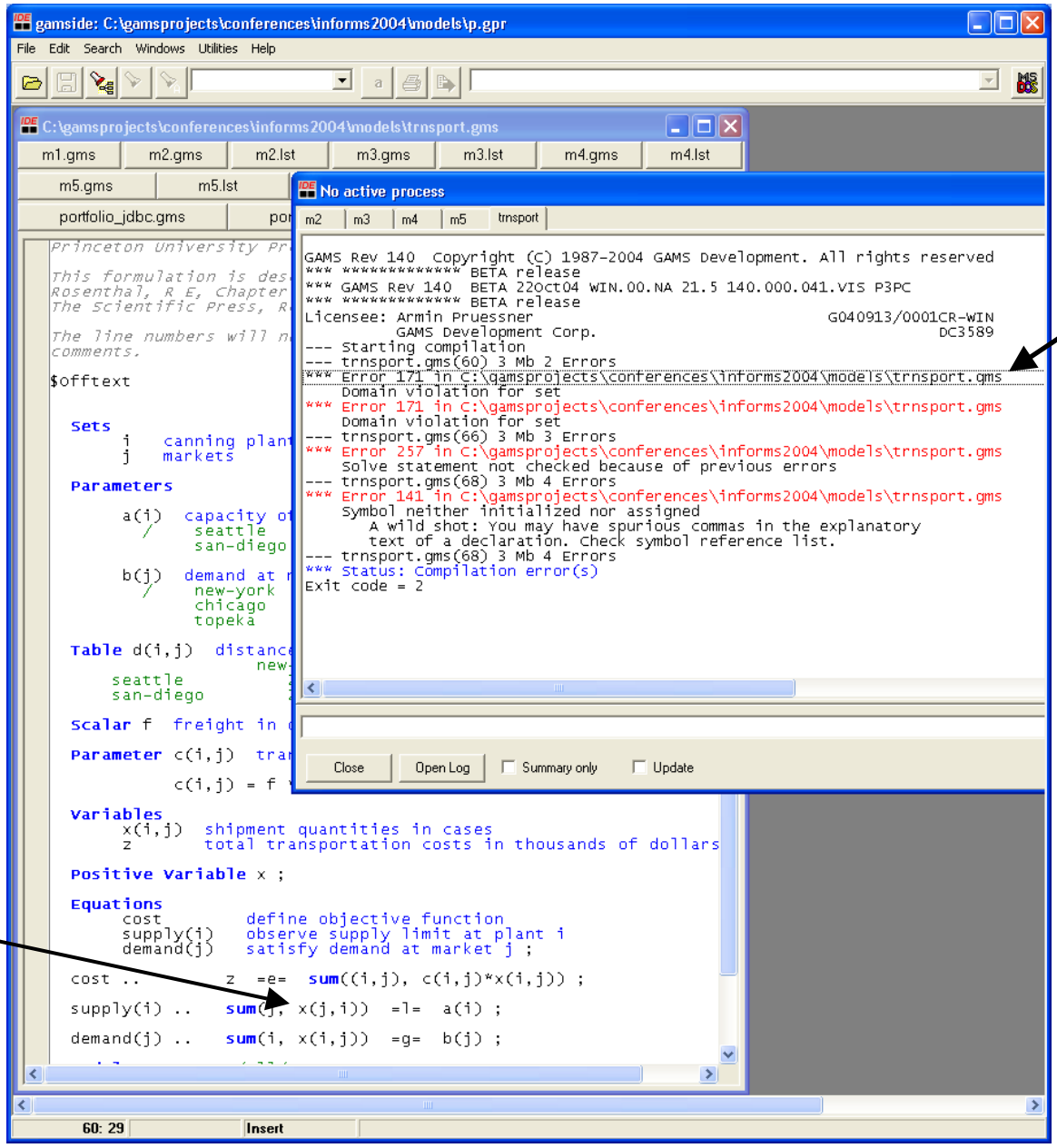
Transport.gms (LP case): solve with s=m1 (save model to file m1)



trnsport.gms: debugging – clicking on error takes you automatically to code where error occurred.

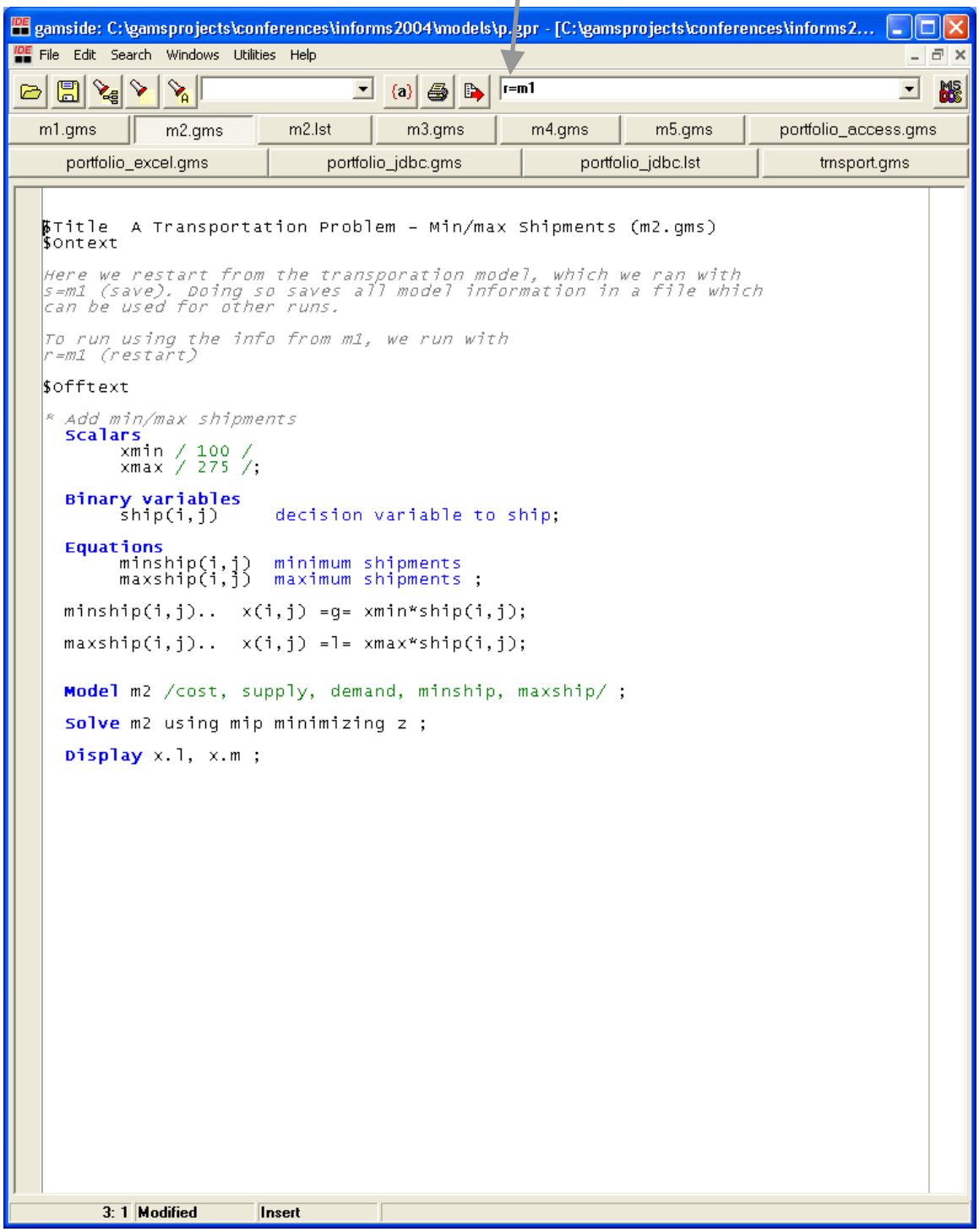


Clicking on error immediately takes you to code that has the error

Incorrect indices x(j,i) instead of x(i,j)

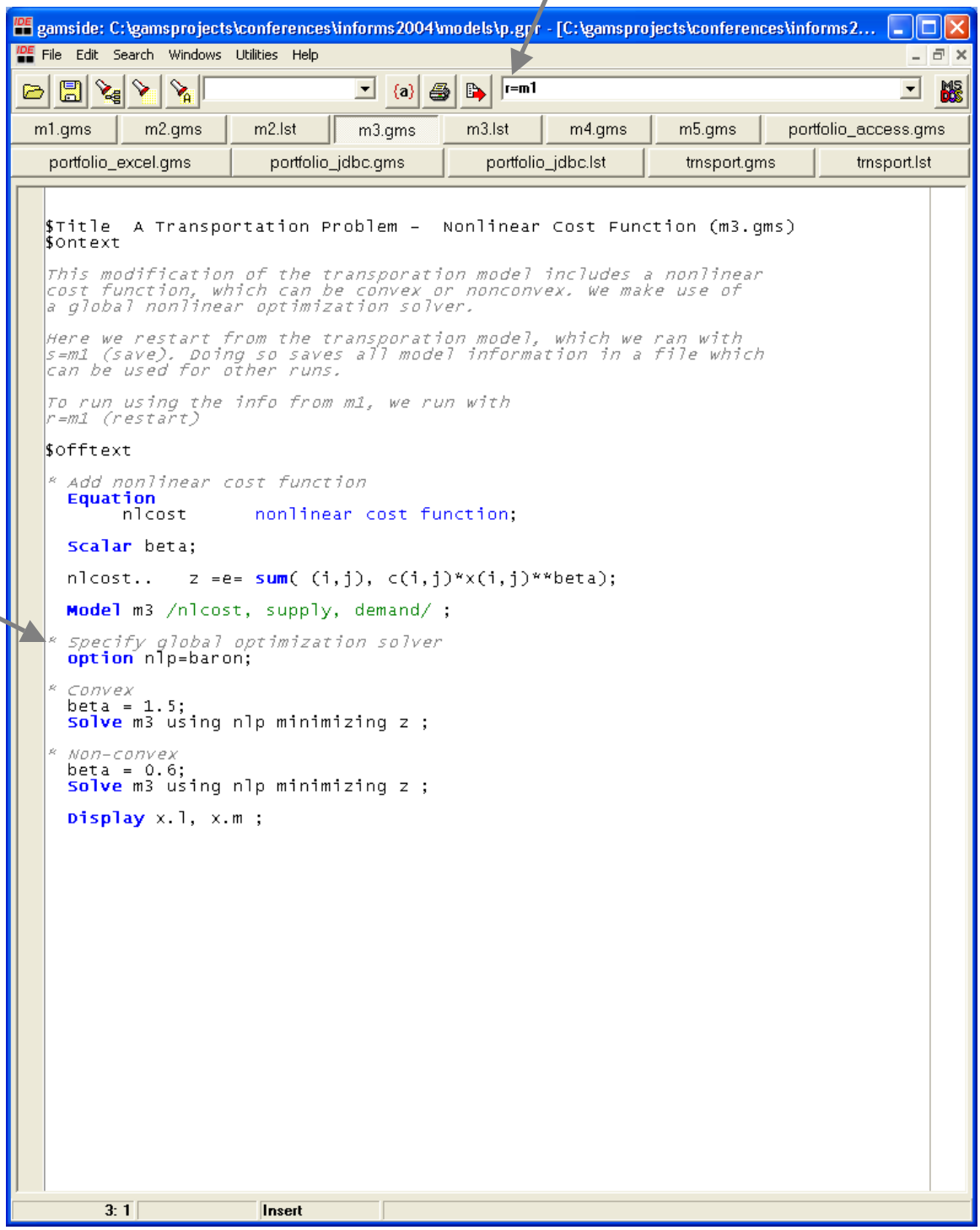
m2.gms: min/max shipments (MIP): solve with r=m1 (restart from file m1)

We use model info from restart file and only need to add changes to previous model.



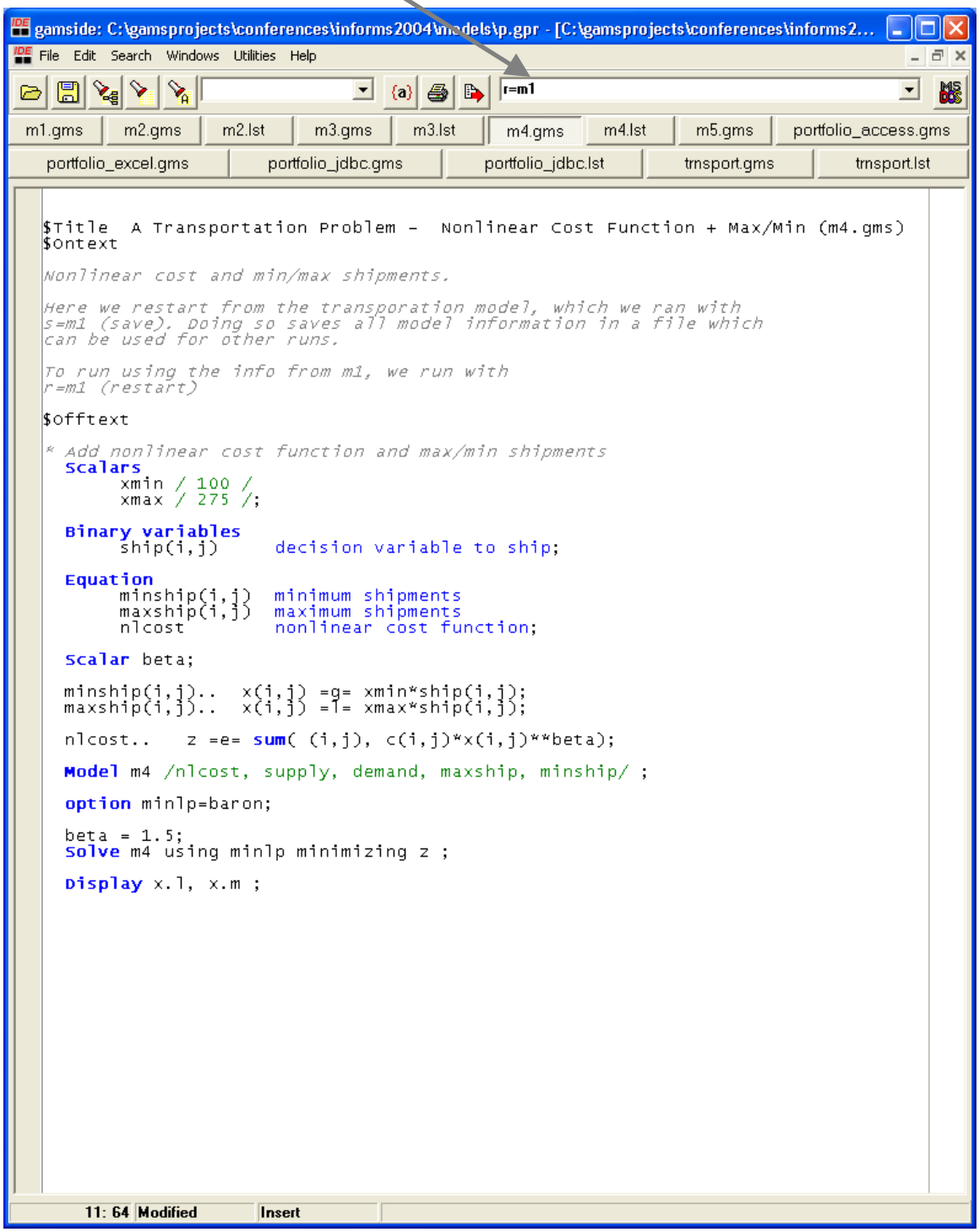
m3.gms: nonlinear cost function (NLP): solve with r=m1 (restart from file m1)

We use model info from restart file and only need to add changes to previous model.



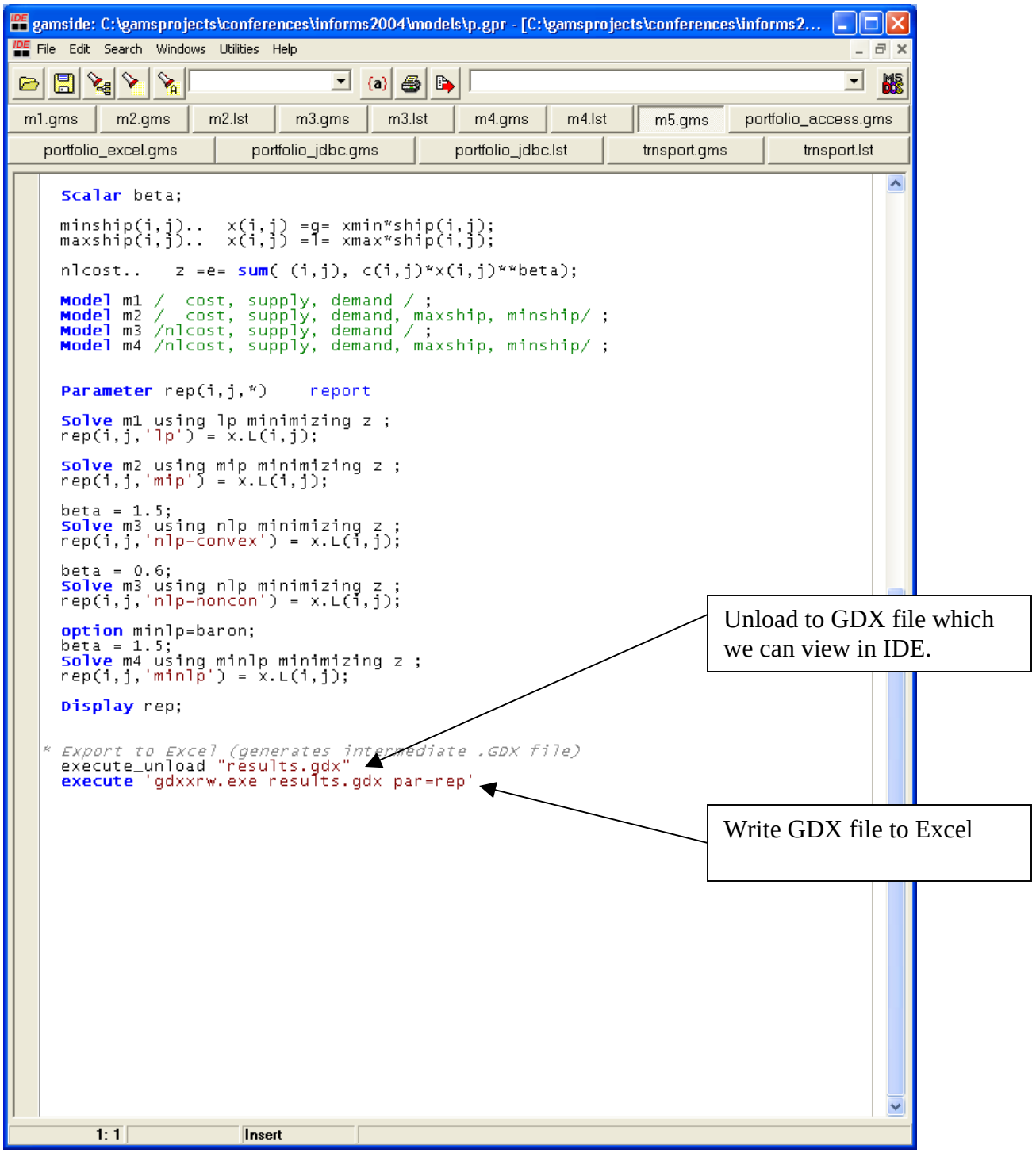
Specify global NLP solver

M4.gms: nonlinear cost function + min/max shipments (MINLP): solve with r=m1 (restart from file m1)

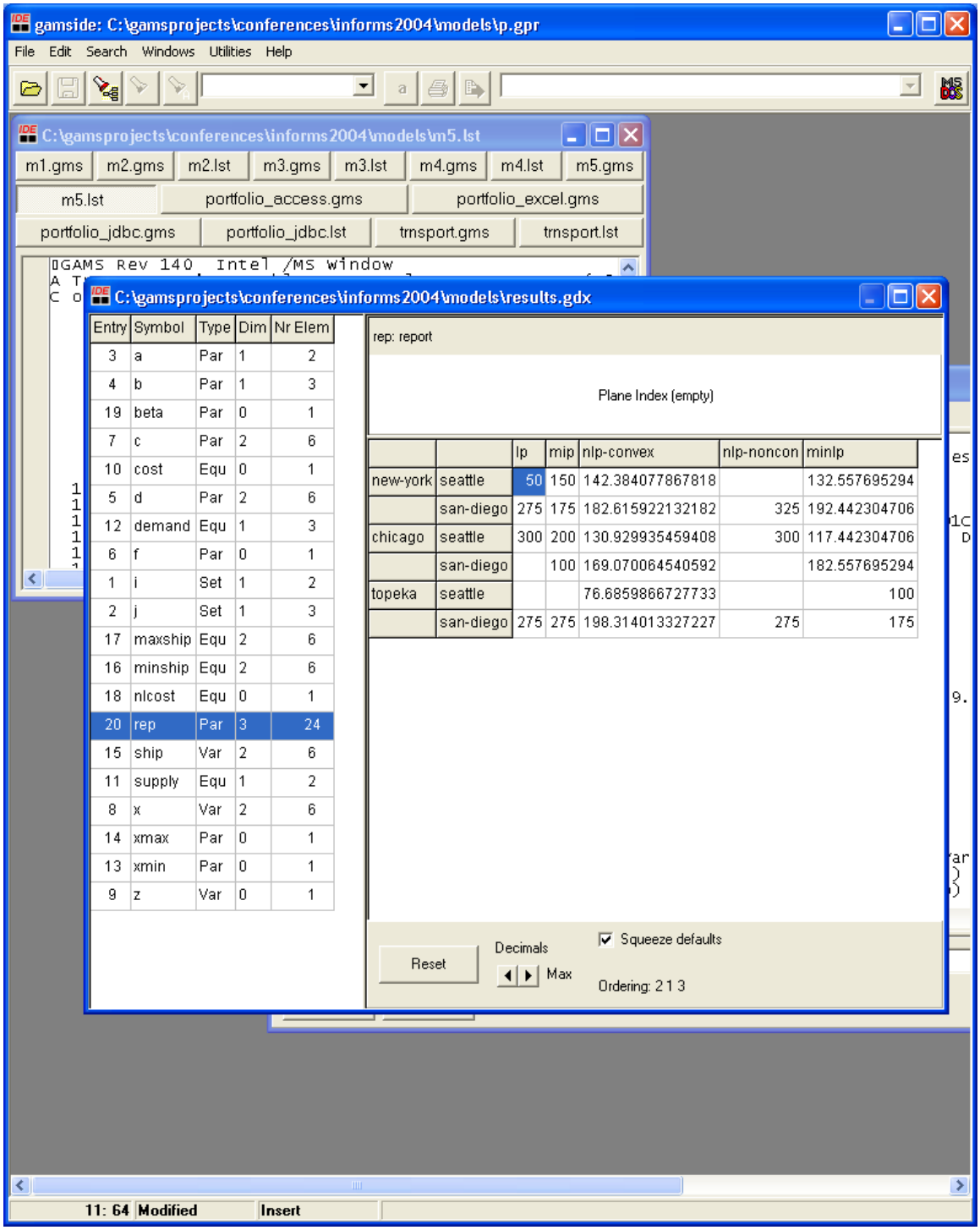


M5.gms: solve all 4 previous models and write solutions to Excel (created intermediate GDX file report.gdx which can be viewed in the IDE)

Note: that we only list part of the model. The initial part is the same as the trnsport.gms model.



M5.gms: GDX view of file results.gdx



Entry	Symbol	Type	Dim	Nr Elem
3	a	Par	1	2
4	b	Par	1	3
19	beta	Par	0	1
7	c	Par	2	6
10	cost	Equ	0	1
5	d	Par	2	6
12	demand	Equ	1	3
6	f	Par	0	1
1	i	Set	1	2
2	j	Set	1	3
17	maxship	Equ	2	6
16	minship	Equ	2	6
18	nlcost	Equ	0	1
20	rep	Par	3	24
15	ship	Var	2	6
11	supply	Equ	1	2
8	x	Var	2	6
14	xmax	Par	0	1
13	xmin	Par	0	1
9	z	Var	0	1

		lp	mip	nlp-convex	nlp-noncon	minlp
new-york	seattle	50	150	142.384077867818		132.557695294
	san-diego	275	175	182.615922132182	325	192.442304706
chicago	seattle	300	200	130.929935459408	300	117.442304706
	san-diego		100	169.070064540592		182.557695294
topeka	seattle			76.6859866727733		100
	san-diego	275	275	198.314013327227	275	175