ECL_DATA.xls

Lists and summarizes sample Eclipse 100 and 300 input-data files

for input to the

Eclipse *

Reservoir Simulation Software **

vended by

Schlumberger (GeoQuest)

* Eclipse is Schlumberger (GeoQuest) software.
** This tutorial is based on Grid version 1999a_1.

Preface

Thank you for visiting www.EricLaine.com.

The primary purpose of this document is to serve as a memory aid for the author. Thus, the author is also the target audience. (In other words, the quality of the composition is 100% sufficient for me to understand what I wrote.)

The secondary purpose is to share this tutorial with the public. I appreciate the possibility that the general public may have some difficulty understanding the my personal abbreviations and my intuitive logic.

Introduction

This tutorial summarizes Schlumberger's (GeoQuest's) example input files for Eclipse.

Eclipse 100 and 300 have been consolidated as Eclipse since this list was compiled.

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Files Listing (1 of 2)

	A	B	C	D	E	F	G	H
1	name	Key1	grid	pg	software	description	spe csp	
2	aci.data	API	20x1x10	11	E100	API injection case		
3	apitra.data	API	14x1x10	8	E100	General API tracking test data set		
4	aquifer.data	cross section	10x1x3	4	E100	X-Z cross section with numerical aquifer		
5	big3d3p.data		20x20x10	8	E100	3,000 cell 3D3P, NO-Resolution option		
6	brillig.data	end-point scaling	20x15x8	118	E100	API tracking, Tracer tracking, end-point scaling vs depth, group control, reperforation, drilling que, local grid refinement, flux		
7	brillrst.data	end-point scaling	20x15x8	118	E100	API tracking, Tracer tracking, end-point scaling vs depth, group control, reperforation, drilling que, local grid refinement, flux		
8	c8.data	Odeh benchmark	400x40x3	5	E100	48,000 cell version of parallel benchmark, based on Odeh	1st proj	1
9	case1.data		30x34x5	5	E100	5,000 cel 3D3P		
10	chap.data	coning	10x1x15	9	E100	same as NOIO benchmakr example (ref chapold.data) 3-phase, radial coning, rate to bhp controll @ 250 days	2nd proj	2
11	chap4061.data	coning	40x1x61	9	E100	bigger version of chap.data chappelear and nolen	2nd proj	2
12	chapload.data	coning	10x1x15	2	E100	save/load type restart file. Uses chap.save and chap.x0009 restart file	2nd proj	2
13	chaprst.data	coning	10x1x15	3	E100	OLD version. USE rstchap instead	2nd proj	2
14	coalbed.data	flood, CO2	8x8x2	93	E100	CO2, carbon dioxide, injection		
15	diffuse.data	dual porosity	4x4x2	6	E100	small duffusion test case, dual porosity	6th ?	6
16	dpextra.data	dual porosity	4x4x4	6	E100	dual porosity case	6th ?	6
17	dual.data	dual porosity?	5x13x1	5	E100	Litvak 26.11.85	6th ?	6
18	endscale.data	scaling option	10x10x1	5	E100	3-phase run to test scaling option		
19	endscaln.data	end-point scaling	5x1x20	4	E100	test of enhanced end-point scaling test(sic) model		
20	enviro.data	tracer	100x3x1	6	E100	Environmental tracer option test dataset		
21	foam.data	flood, foam	10x10x3	8	E100	simple FOAM model example		
22	gasale.data	control	9x9x32	7	E100	sales gas control with pressure maintenance		
23	gascond.data	retrograde gas cond	9x9x2	5	E100	gas condensate, 3-phase, 3-D, above & below dew point, gwc at edges	3rd ?	3
24	gascusp.data	gas cusping	10x10x1	24	E100	gas cusping model		
25	gaslift.data	gas lift	9x9x2	8	E100	gas-lift optimization test, field depletion with target rate		
26	gasnet.data	control	9x9x32	9	E100	gas field operations with network - guide rate control		
27	gaswater.data	5-spot	20x20x4	4	E100	gas-water quarter five spot		
28	heat.data	injection	20x20x3	6	E100	simple cold-water injection		
29	hm.data		10x10x3	9	E100	history-matching test case		
30	horizw.data	horizontal well	8x9x7	7	E100	horizontal well with very high friction, 1.25-in diameter	7th ?	7
31	horzwell.data	horizontal well	20x9x9	7	E100	horizontal well, thin oil rim, ignore friction pressure drop in tubing. (GROSS refinement, gross refinement plus local grid COARSENING, and local grid REFINEMENT)	7th ?	7
32	hystr.data	hysterisis	5x5x1	4	E100	3-Phase hysterisis		
33	isolate.data	multiple reservoir	4x4x24	5	E100	multiple reservoir test case		
34	kasemi.data	dual porosity	8x8x2	4	E100	dual porosity test run #1. Quarter five spot. Matrix and fracture blocks.	6th ?	6
35	killough.data	heterogeneity	24x25x15	48	E100	SPE 9TH Comparative Solution Project,	9th proj	9
36	lgr.data	local grid refinement	4x4x4	7	E100	3-D, 3-Phs test for local grid refinement.		
37	lgreps.data	local grid refinement	10x10x1	7	E100	test local grid refinement end-point scaling		
38	littlef.data		4x2x2	9	E100	Little version of forties field model		
39	miscible.data	flood, miscible	7x7x3	10	E100	miscible flood	5th proj	5
40	multilev.data	controls	9x9x32	8	E100	multiple level controls: group, field, injection		
41	network.data	retrograde gas cond	9x9x32	9	E100	vapourised oil network facility test	3rd ?	3
42	noio.data	coning	10x1x15	7	E100	Chappelear & Nolen. One well. Completion in two cells.	2nd proj	2
43	nonet.data	gas lift	9x9x2	4	E100	gas lift optimization, no network		
44	odehimpes.data	Odeh benchmark	10x10x3	8	E100	Odeh's problem. IMPES solution	1st proj	1
45	odehimpli.data	Odeh benchmark	10x10x3	6	E100	Odeh's problem. Implicit solution	1st proj	1
46	oldchap.data	coning	10x1x15	8	E100	Chappelear & Nolen. One well. Completion in two cells.	2nd proj	2
47	output93.data	output	10x10x3	9	E100	Test for new output facilities (version 93a)		
48	paralgr.data	local grid refinement	4x4x4	7	E100	3D, 3P test for parallel local grid refinement		
49	parallel.data	shared memory	40x40x3	5	E100	Very simple test for the shared memory parallel option		
50	polymer.data	flood, polymer	10x10x1	5	E100	oil, water, polymer		

Files Listing (2 of 2)

	A	B	C	D	E	F	G	H
1	name	Key1	grid	pg	software	description	spe csp	
50	polymer.data	flood, polymer	10x10x1	5	E100	oil, water, polymer		
51	pseu.data	pseudo	2x2x2	1	E100	pseudized version of a 10x10x4 grid		
52	pseuinc.data	pseudo	2x2x2	7	E100	Kyte & Berry pseudos		
53	qfive.data	5-spot	5x5x1	3	E100	simple 5x5 quarter five spot		
54	radial.data		10x6x3	6	E100	new test dataset		
55	rcmaster1.data	controls	1x1x1	6	E100	multi-level group control in coupled reservoirs		
56	rcslave.data	controls	3x9x3	6	E100	multi-level group control in coupled reservoirs		
57	rcslave2.data	controls	3x9x3	6	E100	multi-level group control in coupled reservoirs		
58	rcslave3.data	controls	3x9x3	6	E100	multi-level group control in coupled reservoirs		
59	refgrid.data	local grid refinement	7x23x3	40	E100	7x7x3 plus local grid refinement = 7x23.3		
60	rstchap.data	coning	10x1x15	6	E100	testing Graf and restart runs. Change rates, economic limits. Cross section. USE this instead of chaprst.data	2nd proj	2
61	salt.data	tracer	15x1x10	9	E100	brine flood, aquifers, and tracers. Cross section		
62	solvent.data	flood, solvent	15x1x10	7	E100	simple 1D test case for solfent flood model with lean chase. Cross section		
63	spefrac.data	dual porosity	10x1x10	7	E100	dual porosity cross section. Pressure dependent capillary pressures	6th ?	6
64	sudation.data		30x1x8	5	E100	something about timesteps and convergence. Cross section		
65	surfact.data	flood, surfactant	10x10x3	5	E100	surfactant model test case		
66	thpres.data	capillary pressure	6x1x3	4	E100	2P cross section. Entry pressure (capillary pressure, woc, goc, gwc)		
67	tracer.data	tracer	15x1x9	7	E100	cross section, tracer tracking example So=1-Swc Fetkovich aquifer		
68	tracerds.data	tracer	15x15x1	4	E100	test tracer tracking with dispersion control in water-only reservoir		
69	tvd05.data	tracer	100x1x1	3	E100	1D tracer test case		
70	ve.data	vertical equilibrium	7x1x2	5	E100	vertical equilibrium test problem. Cross section		
71	ve2d.data	vertical equilibrium	5x1x4	5	E100	compressed vertical equilibrium base case. Cross section		
72	venewt.data	vertical equilibrium	5x1x1	4	E100			
73	wells87.data		9x9x32	8	E100	version 87 new keywords		
74	wlift.data	schedule	9x9x2	7	E100	automatic lift switching, down time, delayed workovers		
75	xsag.data	cross section	20x1x10	8	E100	cross section problem		
76	CASE01.DATA	gas cycling	9x9x4		E300		3	3
77	CASE02.DATA	restart			E300			
78	CASE03.DATA	coning			E300		2	2
79	CASE04.DATA	volatile oil + lean gas			E300		5	5
80	CASE05.DATA	dual porosity			E300	Kazemi, 1/4 of 5-spot, dula porosity		
81	CASE06.DATA	dual porosity			E300	Kazemi, 1/4 of 5-spot, dula porosity		
82	CASE07.DATA	10-meter slim tube			E300	10-meter slim tube		
83	CASE08.DATA	gas plant			E300			
84	CASE09.DATA	gas diffusion			E300			
85	CASE10.DATA	black +pvt gen tables			E300	black oil with pvt-generated tables		
86	CASE11.DATA	production controls			E300	group and field production controls		
87	CASE12.DATA	gas cycling			E300	3240 version of CASE01.DATA	3	3
88	CASE13.DATA	Odeh benchmark			E300	Odeh benchmark	1	1
89	CASE14.DATA	black +dual porosity	1x2x1 ?		E300	black oil, 2 cells, dual porosity	6	6
90	CASE15.DATA	carter-tracy +volatile			E300	Carter-Tracy aquifer with volatile oil		
91	CASE16.DATA	carter-tracy			E300	Carter-Tracy aquifer, numerical aquifer, volatile oil		
92	CASE17.DATA	K-values for phase eq			E300	K-values for phase equilibrium		
93	CASE18.DATA	gas, water, CO2 inj			E300	GASWAT (no oil) carbon dioxide injection		
94	CASE19.DATA	multiple EOS			E300	Three equations of start (3 regions)		
95	CASE20.DATA	multiple EOS (not?)			E300	Three (or one) equation of state		
96	CASE21.DATA	tracer + side aquifer			E300	Tracer flow with a side aquifer		
97	CASE22.DATA	steam inject 3D xyz			E300	1B, steam injection, 1/8th of inverted 9-spot, 2 components		
98	CASE23.DATA	steam inject 2D rz			E300	1A, steam injection, 2D radial-z		
99	CASE24.DATA	steam inject			E300	3A, steam injection		
100	CASE25.DATA	Kr = f(velocity)			E300	relative permeability depends on velocity		
101	CASE26.DATA	steam inject			E300	1A, steam injection		