P_DIV_FRAC update

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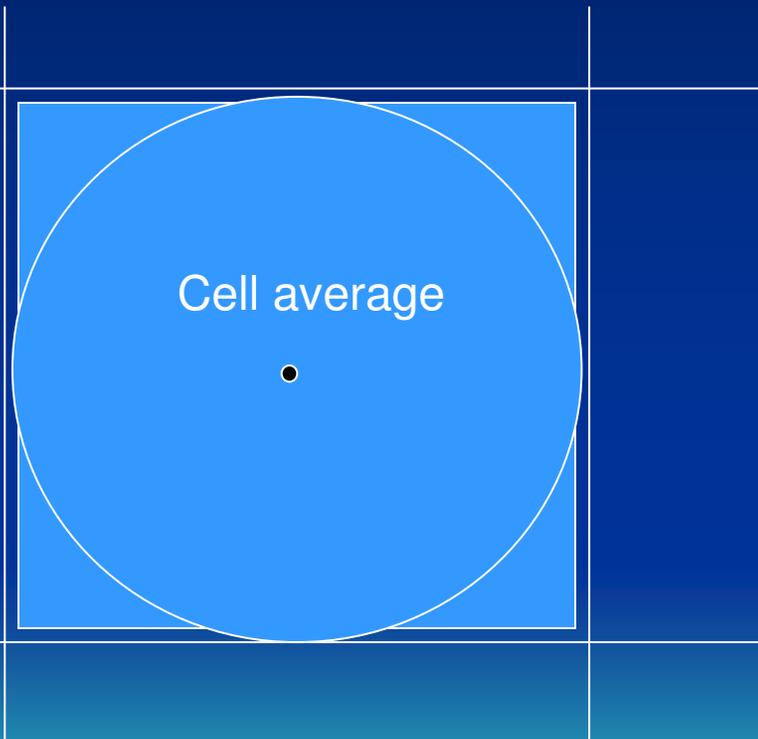IDWR

Outline

- What P_DIV_FRAC.exe does
- Suggested improvements
  – pdate
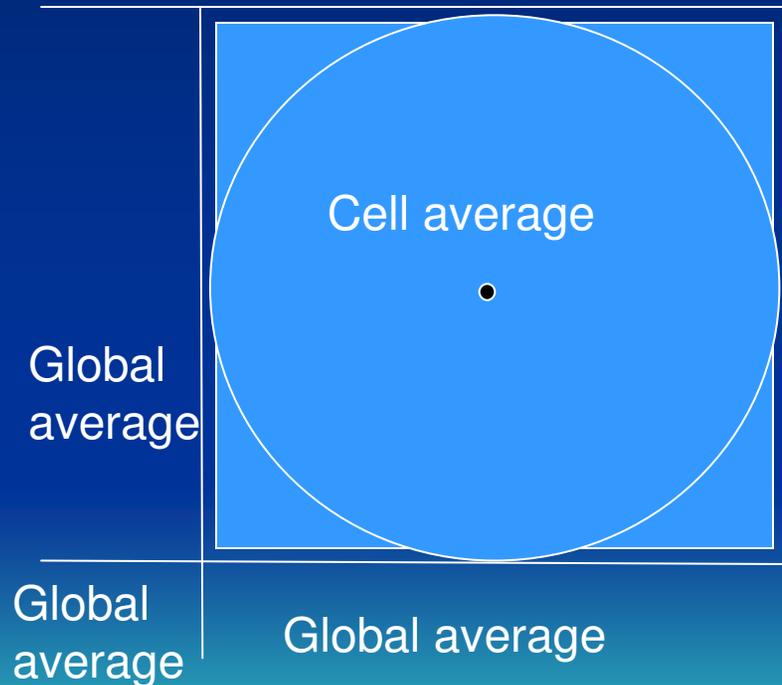- Comparison

P_DIV_FRAC.EXE

Cell average

- Computes junior fraction for each model cell in which there is at least one ground water irrigation water right

P_DIV_FRAC.EXE

Cell average

Global average

Global average

Global average

- Assigns global average junior fraction for model cells with no irrigation wells

P_DIV_FRAC.EXE
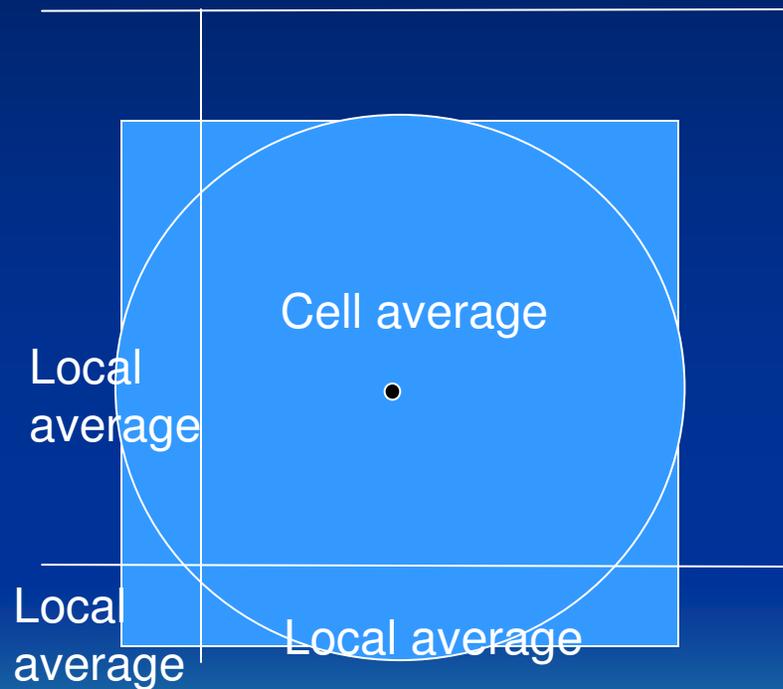
Cell average

Global average

Global average

Global average

- Assigns global average junior fraction for model cells with no irrigation wells

Suggested Improvement

- Use local average where available
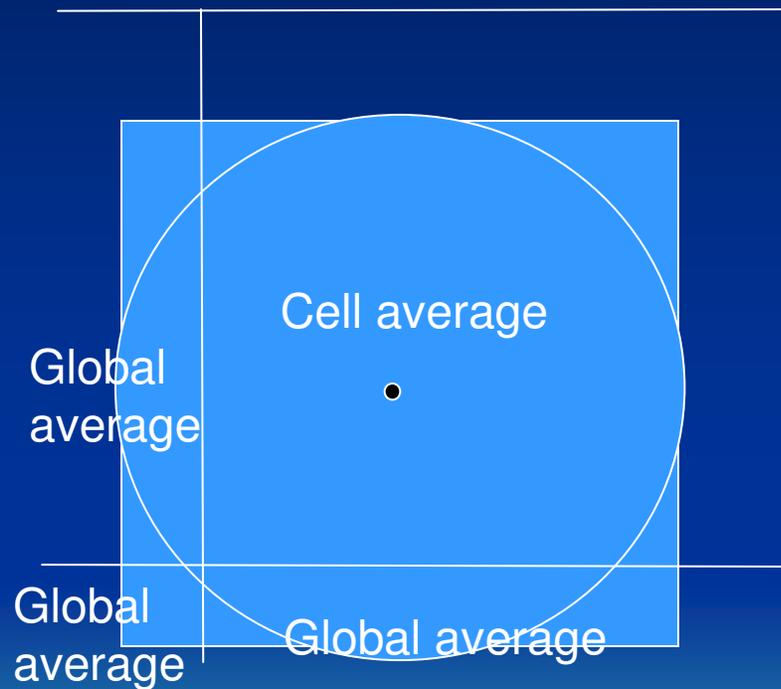
Cell average

Local average

Local average

Local average

Suggested Improvement
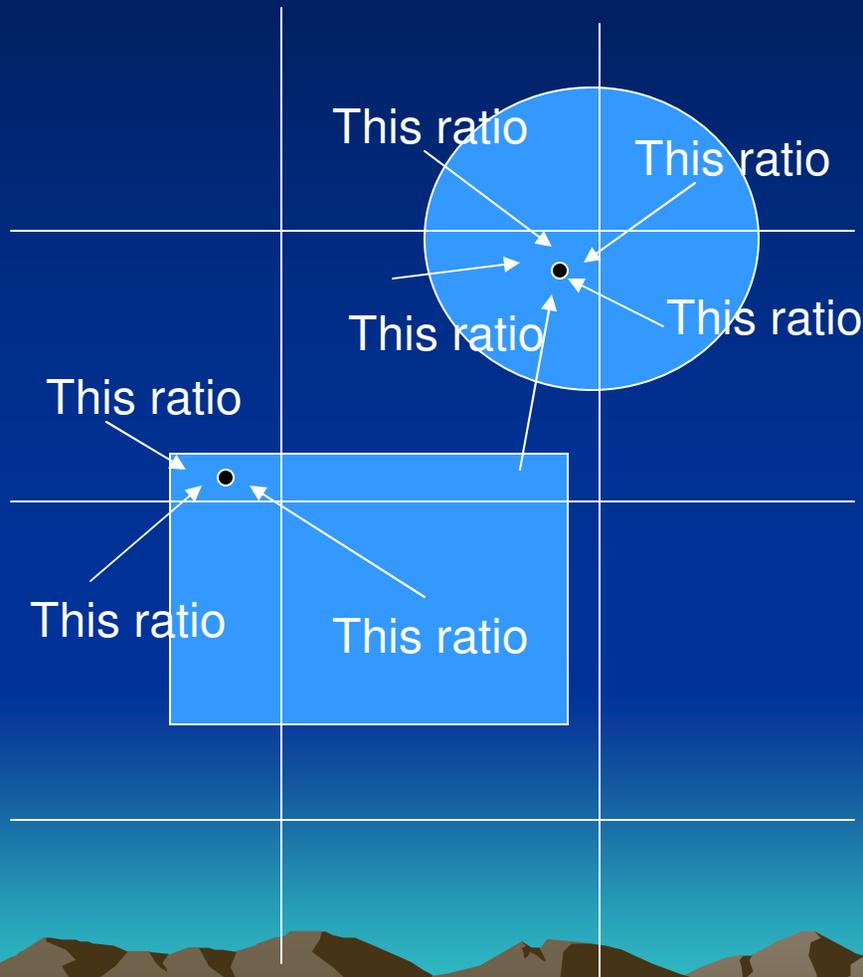
- Use local average where available
- Does not always work flawlessly
- Likely better than global average

PDATE

- ## Written in PERL
  - – Download for FREE at http://www.perl.com/
- perl pdate.pl 'POD file' 'P date (MM-DD-YYYY)' 'est flag (a or g)'
  - – a = use adjacent cells, where available, to compute average for cells without PODs
  - – g = use global average to compute average for cells without PODs
- ## Output is dbf file

Comparison

irr_area		Depleation		ft/ac/yr
121155052	m^2	7,955,701	ft^3/d	2.228215
29,938	ac	66,708	ac-ft/y	
reach	cf/d gain	cfs gain	ac-ft/y	
A-R	83525.72	1.0	700	
H-S	94580.66	1.1	793	
S-B	684503.9	7.9	5,740	
B-N	2335757	27.0	19,585	
N-M	803547.6	9.3	6,738	
DWB-BUL	1905698	22.1	15,979	
BUL-KSP	838732.5	9.7	7,033	
KSP	558090.4	6.5	4,680	
KSP-MLD	68692.78	0.8	576	
MLD	560693.7	6.5	4,701	
MLD-BAN	21879.08	0.3	183	
sum	7,955,701	92	66,708	
Percent above Milner			50.30%	
Percent below Milner			49.70%	
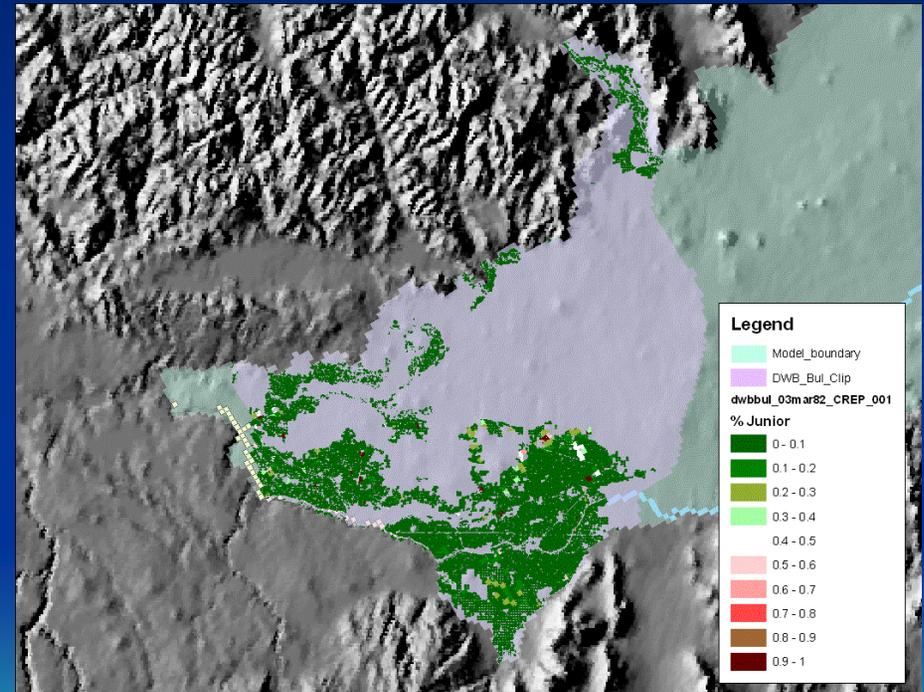
with perl pdate r global average for cells without a well round to 3 decimal places		with perl pdate g global average for cells without a well no rounding		with perl pdate a surrounding cells used to compute jr/sr frac no rounding	
irr_area		**irr_area**		**irr_area**	
121155052		121277554	m^2	121245709	m^2
29,938		29,968	ac	29,960	ac
100.00%		100.10%	% diff	100.07%	% diff

Legend
Model_boundary
DWB_Bul_Clip
dwbbul_03mar82_CREP_001
% Junior
0 - 0.1
0.1 - 0.2
0.2 - 0.3
0.3 - 0.4
0.4 - 0.5
0.5 - 0.6
0.6 - 0.7
0.7 - 0.8
0.8 - 0.9
0.9 - 1