Application: gvSIG desktop - gvSIG feature requests #2035
Use square roots method + Flannery's compensation to calculate the size of symbols in graduated and proportional symbols legend

10/15/2013 12:35 PM - Manuel Madrid

Status:	New	**% Done:**	0%
Priority:	Low	**Spent time:**	0.00 hour
Assignee:			
Category:	Symbology		
Target version:			
gvSIG version:	2.1.0	**Add-on resolve version:**	
Keywords:		**Add-on resolve build:**	
Has patch:	No	**Proyecto:**	
Add-on name:	Unknown	**Hito:**	
Add-on version:			

Description

Latests researches in the field of symbolization conclude that the most appropriate method for graduated/proportional symbols is the square roots method extended with the Flannery's compensation.

In order to understand this, here is an example:
Suppose that you want to visualize the population by differentiate the size of point circle symbols. In a first step you have to define a formula by which you will compute the radius of the circle for each population. Obviously, the first approach is to suppose that the value of population is analog to the size of the circle, which means using formulas that
P=a*(π*r^2), where P is the Population, a is a constant value (depends on your scale) and (π*r^2) which corresponds to the area of the circle (the size of your symbol)
Eventually, your radius is calculated with the formula below:
r=b*P^(0.5), where b is a constant value (This is the root square method that we refer in the text)
Flannery, after experimentation, concluded that it is preferable to correspond the radius with a differentiated value of the depicted phenomenon. Specifically, the formula, according to Flannery's suggestion, is r=b*P^(0.57).
With this way, Flannery found that map readers are able to perceive better the differences among symbols.

In case the current method used in gvSIG is not this, it would be a good idea to implement it.

Suggestion originally made by Vassilis Krassanakis.