Feature	Free	Academic Packages						Near Surface/Geotechnical Series			
	EMIGMA BASIC	Petros Suite	EMIGMA for Academics	FEM	Potential Fields	FEM &TEM	Complete PREMIUM	Complete Professional	Resistivity IP	FEM	Magnetics
BASIC tools											
Database backbone	x	x	x	x	x	x	x	x	x	x	x
Unlimited Survey Size	x				x	x	x				
Plotting	x	x	x	x	x	x	x	x	x	x	x
Data editing	x	x	x	x	x	x	x	x	x	x	x
Data merging	x	x	x	x	x	x	x	x	x	x	x
Trend removal	x	x	x	x	x	x	x	x	x	x	x
Co-ordinate grid translations	x	x	x	x	x	x	x	x	x	x	x
Decimation filters	x	x	x	x	x	x	x	x	x	x	x
Averaging filters	x	x	x	x	x	x	x	x	x	x	x
Interpolation filters	x	x	x	x	x	x	x	x	x	x	x
Spatial filters -1D/2D											
mean,median,Gaussian,spline	x	x	x	x	x	x	x	x	x	x	x
Gridding/gradient gridding											
Local - Natural Neighbor,Shepard, Delauney		x	x	x	x	x	x	x	x	x	x
Global - Minimum Curvature, Splines		x	x	x	x	x	x	x	x	x	x
rectangular grid cells		x	x	x	x	x	x	x	x	x	x
Contouring	x	x	x	x	x	x	x	x	x	x	x
Data surfaces	x	x	x	x	x	x	x	x	x	x	x
3D Visualizer	x	x	x	x	x	x	x	x	x	x	x
PseudoShow	x	x	x	x	x	x	x	x	x	x	x
Export functions	x	x	x	x	x	x	x	x	x	x	x
data,images											
Mapping tools	x	x	x	x	x	x	x	x	x	x	x
raster calibration, annotation, underlays											
SURVEY STYLES											
ground	x	x	x	x	x	x	x	x	x	x	x
airborne	x	x	x		x	x	x	x		x	x
borehole	x				x	x	x				
cross borehole						o	o				
POTENTIAL FIELD PROCESSING											
total field, components, derivatives											
derivative calculation		x	x		x	x	x	x			x
upward continuation		x	x		x	x	x	x			x
downward continuation		x	x		x	x	x	x			x
wavelength filters		x	x		x	x	x	x			x
Reduction-to-the-Pole		x	x		x	x	x	x			x
FFT, enhanced FFT, equivalent source											
magnetic Compensation							o				
gradient de-Rotation							o				
INVERSION											
imaging											
Apparent resistivity inversions		x	x	x		x	x	x		x	
Sengpiel Depths for Airborne FEM						x	x				
Airborne TEM CDI						x	x				
Ground TEM CDI		x	x			x	x	x			
layered 1D inversions[3]											
Smooth Overparametrized		x	x	x		x	x	x	x	x	
Marquardt		x	x	x		x	x	x	x	x	
Thickness constraints		x	x	x		x	x	x	x	x	
Resistivity bounds		x	x	x		x	x	x	x	x	
Entire surveys		x	x	x		x	x	x	x	x	
Section contouring and display		x	x	x		x	x	x	x	x	
3D volume display and slicing		x	x	x		x	x	x	x	x	
3D inversions[2]											
Linear Born inversion		x	x		x		x	x			x
Non-Linear Full Scattering		x	x		x		x	x			x
Gradient inversion		x	x		x		x	x			x
3D starting model		x	x		x		x	x			x
Inversion grid starting model		x	x		x		x	x			x
Airborne		x	x		x	x	x	x			x
Ground		x	x		x	x	x	x			x
Borehole											
Suite of Models											
plate suite		x	x	x		x	x	x	x	x	
layer suite		x	x	x	x	x	x	x	x	x	x
prism suite		x	x	x	x	x	x	x	x	x	x
optimizer tool		x	x	x	x	x	x	x	x	x	x
Quasi-3D for Potential Fields											
3D Extended Euler		x	x		x	x	x	x			x
Filtering		x	x		x	x	x	x			x
Clustering		x	x		x	x	x	x			x
Magnetization Vectors		x	x		x	x	x	x			x
MODELLING											
3D Prisms		x	x	x	x	x	x	x	x	x	x
2D Prisms		x	x	x	x	x	x	x	x	x	x
3D Thin-Sheets		x	x	x		x	x	x	x	x	
Polyhedra models		x	x	x	x	x	x	x	x	x	x
Multiple Prisms		x	x	x	x	x	x	x	x	x	x
Multiple Plates		x	x	x		x	x	x	x	x	
Linear (Weak) Algorithms		x	x	x	x	x	x	x	x	x	x
Non-Linear Algorithms		x	x	x	x	x	x	x	x	x	x
Interactions		x	x	x	x	x	x	x	x	x	x
Frequency-to-Time transforms		x	x	x		x	x	x	x	x	
system specific/bandwidth limited/calibrated											
XHOLE Tools											
Tomography	x						o				
3D Modelling	x						o				
grounded/ungrounded electric antennae											
magnetic dispole antennae											

Feature	Premium Series								
	Gravity	Magnetics	FEM	TEM	Potential Fields	Airborne FEM [1]	Airborne TEM+FEM [1]	Resistivity IP	Complete Premium
						[1] includes Magnetics			
BASIC tools									
Database backbone	x	x	x	x	x	x	x	x	x
Unlimited Survey Size	x	x	x	x	x	x	x	x	x
Plotting	x	x	x	x	x	x	x	x	x
Data editing	x	x	x	x	x	x	x	x	x
Data merging	x	x	x	x	x	x	x	x	x
Trend removal	x	x	x	x	x	x	x	x	x
Co-ordinate grid translations	x	x	x	x	x	x	x	x	x
Decimation filters	x	x	x	x	x	x	x	x	x
Averaging filters	x	x	x	x	x	x	x	x	x
Interpolation filters	x	x	x	x	x	x	x	x	x
Spatial filters -1D/2D									
mean,median,Gaussian,spline	x	x	x	x	x	x	x	x	x
Gridding/gradient gridding									
Local - Natural Neighbor,Shepard, Delauney	x	x	x	x	x	x	x	x	x
Global - Minimum Curvature, Splines	x	x	x	x	x	x	x	x	x
rectangular grid cells	x	x	x	x	x	x	x	x	x
Contouring	x	x	x	x	x	x	x	x	x
Data surfaces	x	x	x	x	x	x	x	x	x
3D Visualizer	x	x	x	x	x	x	x	x	x
PseudoShow	x	x	x	x	x	x	x	x	x
Export functions	x	x	x	x	x	x	x	x	x
data,images									
Mapping tools	x	x	x	x	x	x	x	x	x
raster calibration, annotation, underlays									
SURVEY STYLES									
ground	x	x	x	x	x	x	x	x	x
airborne	x	x			x	x	x		x
borehole	x	x	x	x	x			x	x
cross borehole			o					o	o
POTENTIAL FIELD PROCESSING									
total field, components, derivatives									
derivative calculation	x	x			x	x	x		x
upward continuation	x	x			x	x	x		x
downward continuation	x	x			x	x	x		x
wavelength filters	x	x			x	x	x		x
Reduction-to-the-Pole		x			x	x	x		x
FFT, enhanced FFT, equivalent source									
magnetic Compensation					o	o	o		o
gradient de-Rotation					o	o	o		o
INVERSION									
imaging									
Apparent resistivity inversions			x	x		x	x		x
Sengpiel Depths for Airborne FEM						x	x		x
Airborne TEM CDI							x		x
Ground TEM CDI				x			x		x
layered 1D inversions[3]									
Smooth Overparametrized			x	x		x	x	x	x
Marquardt			x	x		x	x	x	x
Thickness constraints			x	x		x	x	x	x
Resistivity bounds			x	x		x	x	x	x
Entire surveys			x	x		x	x	x	x
Section contouring and display			x	x		x	x	x	x
3D volume display and slicing			x	x		x	x	x	x
3D inversions[2]									
Linear Born inversion	x	x			x	x	x	x	x
Non-Linear Full Scattering	x	x			x	x	x	x	x
Gradient inversion	x	x			x	x	x	x	x
3D starting model	x	x			x	x	x	x	x
Inversion grid starting model	x	x			x	x	x	x	x
Airborne	x	x			x	x	x	x	x
Ground	x	x			x	x	x	x	x
Borehole									x
Suite of Models									
plate suite			x	x		x	x	x	x
layer suite	x	x	x	x	x	x	x	x	x
prism suite	x	x	x	x	x	x	x	x	x
optimizer tool	x	x	x	x	x	x	x	x	x
Quasi-3D for Potential Fields									
3D Extended Euler	x	x			x	x	x	x	x
Filtering	x	x			x	x	x	x	x
Clustering	x	x			x	x	x	x	x
Magnetization Vectors		x			x	x	x	x	x
MODELLING									
3D Prisms	x	x	x	x	x	x	x	x	x
2D Prisms	x	x	x	x	x	x	x	x	x
3D Thin-Sheets			x	x		x	x	x	x
Polyhedra models	x	x	x	x	x	x	x	x	x
Multiple Prisms	x	x	x	x	x	x	x	x	x
Multiple Plates			x	x		x	x	x	x
Linear (Weak) Algorithms	x	x	x	x	x	x	x	x	x
Non-Linear Algorithms	x	x	x	x	x	x	x	x	x
Interactions		x	x	x	x	x	x	x	x
Frequency-to-Time transforms			x	x		x	x	x	x
system specific/bandwidth limited/calibrated									
XHOLE Tools									
Tomography			o	o				o	o
3D Modelling			o	o				o	o
grounded/ungrounded electric antennae									
magnetic dispole antennae									

Notes: **1: includes magnetics** **2: for gravity,magnetics or resistivity** **3: for FDEM, TDEM or Resistivity**