"DEEP INDEXING"
PRELIMINARY PRODUCT DESCRIPTION

Premise: Figures and tables represent the distilled essence of research communicated in academic articles. Although the analysis contained in the surrounding text is important, it is clear that researchers are eager to view the actual data collected, observed, or modeled to determine the article's relevance to their own work. The summary of data displayed in figures and tables is a highly valuable surrogate for the typically unavailable raw data sets..

The primary objective of a literature search is to locate information relevant to researchers' interests. Neither traditional article-level indexing nor fulltext-level indexing where all text within a document is searchable can locate those publications which contain specific data of interest. By indexing the variables defined in tables and figures, researchers can find data with pinpoint accuracy.

Product: We have created a web based service in which each variable presented in a research article can be searched individually and linked not only to the full text of the article, but to other studies examining the same variable. By revealing data links in studies across disciplines, new avenues of research can be illuminated.

How we created this new service: All tables and figures contained within an article are indexed. The number of records in a Tables & Figures Index is an order of magnitude greater than those contained in a typical abstracts database. Accordingly, the cost to create such a database is a significant investment for CSA. The investment provides

- Each record being assigned one or more general categories reflecting the 'type' of data display (e.g. Photomicrograph, Histogram, Line Graph, Map of Study Site, and so on).
- Indexing – The primary terms enabling accurate searching

   a. Subject Indexing – Key variables presented in the figure or table

   b. Geographic Indexing –A applicable geographic terms

   c. Taxonomic Indexing – The Latin names of organisms will be included when appropriate, most often consisting of the genus and species names, but will include broader categories when available (e.g. family, class, etc.).

   d. Statistical Indexing – Any standard statistical term relevant to a particular data display (e.g. Analysis of Covariance, ANCOVA, Simple Linear Regression, etc.)

   e. Other Relevant Data – an indication of whether the table or figure contains either an empirical or theoretical predictive model
- Each record is linked back to the source journal article

Benefits of Searching *T&FI*:

- Targeted searches can be constructed by employing T&FI-oriented searches allowing the researcher to save time and match retrieval to specific data contained in the article.
- Researchers can ensure that the study actually focused on a specific variable, rather than simply referring to it indirectly (i.e. from another publication).
- Categories of objects can be easily browsed allowing easy creation of visuals for conference presentations, teaching or seminars.
- T&F indexing does not simply answer research questions; rather, it provides a unique tool with which researchers can pose questions for future research.