

## BRAIN-SURGERY: SELF-TAUGHT

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Teaching and learning modern geophysical data-processing ideas is not straightforward. Not long ago it was satisfactory to proceed through my book *Fundamentals of Geophysical Data Processing* (FGDP) and then through a few SEP research papers. Since FGDP was published in 1976, however, there has been astonishing progress; furthermore, few SEP articles were intended for use in teaching. Taking advantage of my sabbatical leave and the deadline pressure of a March 1980 one-week class in Singapore, I reorganized and extensively revised the old materials. I expect to use the results both at Stanford and for one-week industry classes. They should also be suitable for anyone interested in self-teaching. On subsequent pages are the results of recent efforts, a carefully organized, referenced outline of materials in FGDP and SEP reports, followed by eleven new written lectures which fit in at various, random places in the outline. The eleven lectures are mainly a revision of earlier research papers, intended to get the meaning and the results stated before the mathematical details. I am always interested in including more field examples of textbook quality and would be delighted to receive them from anyone.

## 1980 LECTURE NOTES

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reference  
 14,1-3 = SEP-14,p.1-3  
 F = FGDP  
 [ ] = not written

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