1. SATELLITE ALTIMETRY SYSTEMS
- GEOS-3 satellite mission
- SEASAT satellite mission
- GEOSAT satellite mission
- ERS-1 & 2 satellite missions
- TOPEX/POSEIDON mission
- other planned future missions

2. ALTIMETER DATA ANALYSIS
- geophysical data records
- tidal models and corrections
- ionospheric & tropospheric corrections
- measurement time tagging
- electromagnetic bias corrections
- profile data editing

3. ORBIT MODELING & ANALYSIS
- basic satellite orbit theory
- Lagrange series approximations
- satellite orbit specifications
- GEOSAT orbit information
- TOPEX orbit information
- future satellite orbit monitoring

4. ALTIMETRY DATA PROCESSING
- outlier detection & editing
- analysis of systematic biases
- analysis of measurement gaps
- autoregressive data modeling
- trend modeling & analysis
- special purpose data processing

5. REGULARIZATION & GRIDDING
- regularization strategies
- optimal prediction strategies
- triangulations & tesselations
- gridding methodologies
- crossover adjustment & analysis
- information content analysis

6. SEA SURFACE MODELING
- overview of ocean characteristics
- sea surface modeling strategies
- observational information
- geographical analysis
- time dependence analysis
- oceanographic considerations

7. OCEAN GEOID MODELING
- geodetic geoid definition
- oceanographic geoid definition
- overview of ocean currents
- geostrophic equilibrium
- seasonal & other effects
- sea surface topography

8. COASTAL GEOID MODELING
- observational information
- coastal geoid modeling difficulties
- optimal estimation methodologies
- examples of coastal geoid models
- comparative analysis of undulations
- possible future improvements

9. INVERSIONS FOR GRAVITY
- gravity anomalies & disturbances
- Stokes' & Hotine's formulations
- Molodensky's formulations
- kernel series refinements
- Fourier and other transform methods
- least-squares collocation methods

10. INVERSIONS FOR DENSITIES
- gravity & other information
- isostatic & other considerations
- inverse problem formulations
- forward modeling for simple bodies
- Euler deconvolution method
- geophysical result analysis

11. GLOBAL CHANGE APPLICATIONS
- ocean currents & surface changes
- global climate variations
- mean sea level monitoring
- large lake surface monitoring
- polar icecap volume monitoring
- environmental analyses

12. OTHER APPLICATIONS
- marine geoid determination
- marine gravity field studies
- oceanographic investigations
- geodynamical monitoring
- natural resource exploration
- auxiliary system applications