outline:

- introduction
- stokes theorem
  - relevance of free-surface
  - importance of integral
    - completeness
    - individuality of sources
    - time zero: Papanicolau freq. domain smoothing=time window
  - current goals
    - source location
    - statics correction
  - imaging
    - datum-correlate
    - complicated initial conditions
  - imprecision in rigorous theory effects on direct migration
    - multiple sources
    - insufficient sources
    - undersampled wavefields

- CASC
  - introduction
    - location
    - previous work
  - data
    - bandwidth
    - preprocessing
  - imaging
    - image modes
    - imaging vs. parameter inversion
    - v(x,z) migration
    - CIG's and velocity information
  - direct migration
  - discussion/implications

- Valhall
  - introduction
    - location
    - hardware description
    - timing/extent
      - 25 hours Feb. 15 2004
      - 12 hours Jan. 2005
  - time processing
    - correlation vs. deconvolution
    - stability
    - number of time windows to reveal signal
    - identification of signal
      - gathers
        - off-array location
        - identification
          - model possibilities
            - point source
            - reflection from a plane
            - 2 vs. 3 vs. 5/7 raypaths
          - location
            - inversion
            - precision
            - time stability
      - cmp sorted data
        - poorness
        - goodness
    - direct migration
      - active migration benchmark
      - parameter selection
      - time window processing
        - buildup
        - changes over time
        - depth stacked results
      - time-stacked processing
      - correlations w/ active migration

- Moss Beach experiment
    - introduction
        - location
        - hardware
        - data
        - active migration benchmark
    - time window stability
    - deconvolution
    - anomaly identification
    - analysis/identification of areas for improvement

- Discussion/implications
    - incomplete integrals
        - incorrecte kinematics
        - illumination holes
    - interpretation data volume
        - time processing
        - depth processing
    - potential goodness
        - time v. depth
    - addressing badness
        - nature imposed
        - equipment/technique remediable

- Multiple prediction as an imaging experiment
    - commutability of extrapolation and convolution
    - SRMP v. IS-SRMP
    - Sigsbee
    - Discussion/implications