

# H33A-06

AGU & CGU

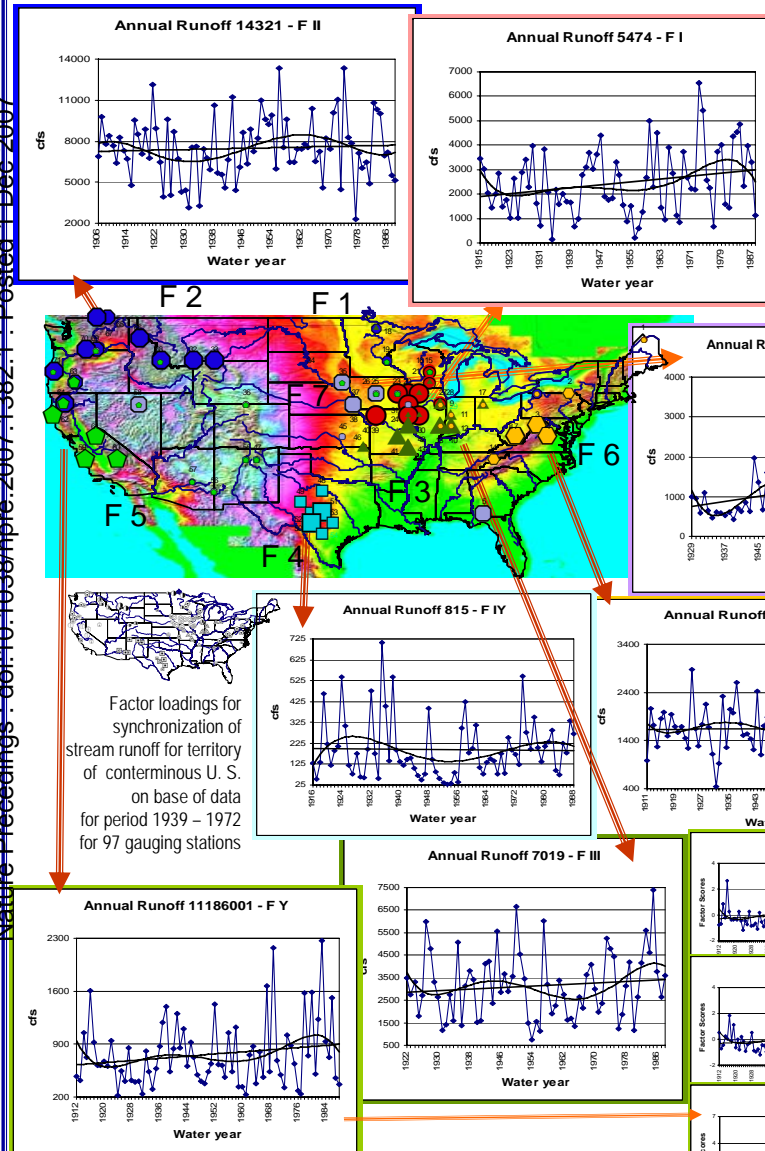
Montreal-2004

# The spatial temporal regime of stream flow of the conterminous U.S. in connection with indices of global atmospheric circulation

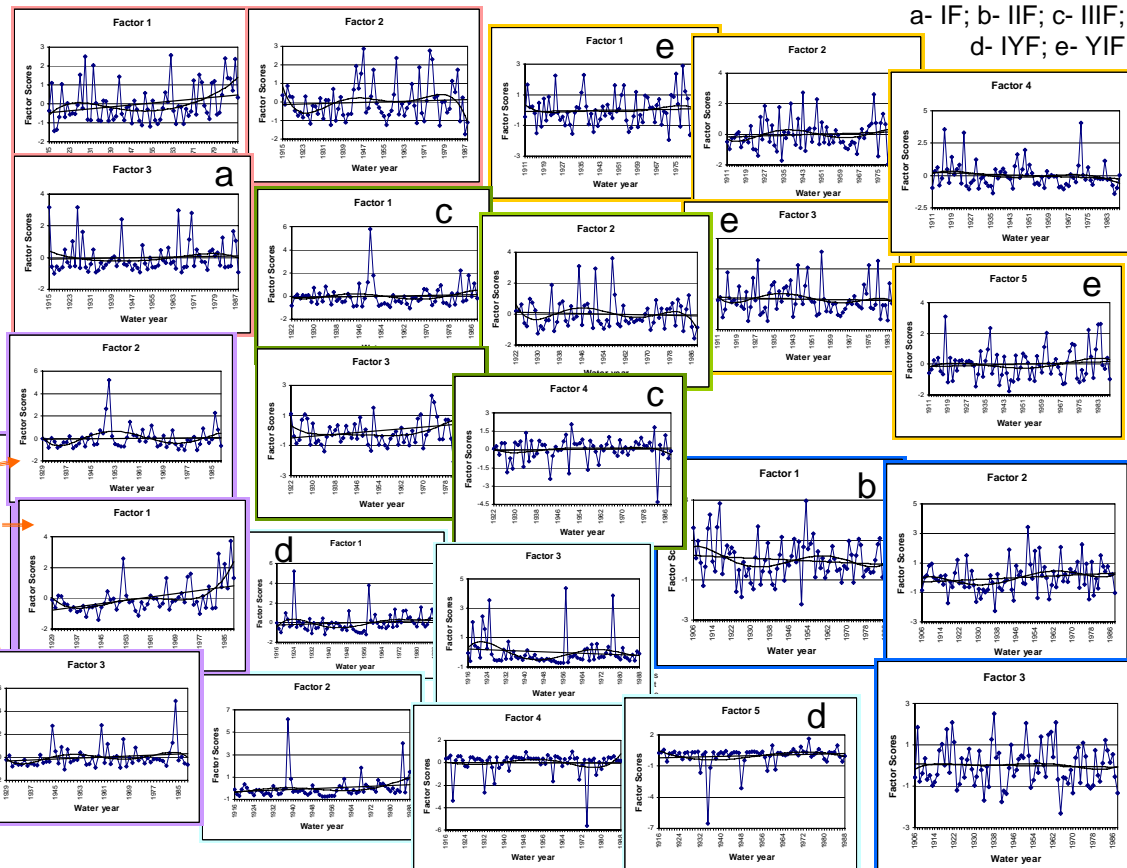
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## Seven Domains of Fluctuation for Conterminous U. S.



Factor loadings for 71 gauging stations for 60 (1929-88) years observation and annual discharge for typical watersheds



Graphs of Seasonal Runoff for Typical Watersheds: a- IF; b- IIF; c- IIIF; d- IYF; e- YIF

Table for Student and Fisher Criteria for Trend of Annual Runoff for Seven Typical Watersheds

Table with columns for Annual Runoff, Mean, t-value, df, p, Valid No, Standard Deviation, F-ratio, and p-level.

Table for Seven Typical Watersheds

Table with columns for Season, Annual, Oct, Nov, Dec, Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Expl. Var.

## Seasonal Runoff Structure

- #1 The spatial temporal distribution of stream runoff is multi dimensional process following the topography on continental level
#2 The inter annual distribution of stream runoff follows the multi year distribution and creates seasonal structures on regional level
#3 Stream runoff as multi dimensional and multilevel process is in interconnection with process of atmospheric circulation

## Table of Regression and Correlation Analysis

Large table with columns for Dep/Indep, Beta, St. Err. of Beta, B, St. Err. of B, t (f), p-level, and various regression statistics.

Hydrological Data for Conterminous US and Central US from source: U.S. Geological Survey Hydro-Climatic Data Network (HCDN): Streamflow Data Set, 1874 - 1988 By J.R. Slack, Alan M. Lumb, and Jurate Macinas Landwehr. USGS Water-Resources Investigations Report 93-4076

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