

# 15-METER LANDSAT ANALYSES OF THE MISSISSIPPI RIVER – MAP SERIES FROM HEADWATERS TO THE GULF OF MEXICO

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## ABSTRACT

The purpose of the Mississippi River map series is to provide reference for ecological vulnerability throughout the entire Mississippi River Basin, which is a forthcoming product. The optional accompanying plotted map series consists of seven 32 inch x 40 inch poster have a nominal scale of 1 inch = 3 miles. The scale of these maps will vary with other plot sizes. Each map includes metadata, as follows:

- (1) Data type: Landsat ETM+ Panchromatic Band, 15 meter nominal spatial resolution
- (2) Imagery acquisition dates
- (3) Map projection: Universal Transverse Mercator, Zone 15
- (4) Imagery provided by: U.S. Environmental Protection Agency, a Multi-Resolution Land Characteristics (MRLC) Consortium member
- (5) Constructed by: U.S. Environmental Protection Agency (C.M. Edmonds, R.D. Lopez, D.T. Heggem) and U.S. Army Corps of Engineers (D.M. Williams and K.L. Short)
- (6) Map Version: 1.0
- (7) Map production date: August 5, 2003

The format of the map series is intended to allow for easy reference and includes basic reference information so that further ecological vulnerability analyses can be conducted using existing water quality data, existing hydrologic data, and land cover data. Reference data is overlaid on the map series, as follows:

- (a) River mile locations at 25-mile intervals (source: U.S. Army Corps of Engineers, St. Louis District)
- (b) Lock and dam location (source: U.S. Army Corps of Engineers, St. Louis District)
- (c) City location with state abbreviation
- (d) Major Mississippi River tributaries
- (e) Floodway locations (source: U.S. Army Corps of Engineers, St. Louis District).

We optimized the number and size of the presentations to allow for sufficient detail in the images and provide a hardcopy for reference as forthcoming additional ecological analyses are performed. The miniature scale posters included on this CD are for quick reference. Forthcoming ecological analyses include investigation of water quality or habitat vulnerability (after Lopez et. al, 2003). This map series is an important first step toward developing a system-wide approach to understanding the functioning of large rivers at a landscape scale. Note: Use the reference letters to connect segments of Landsat imagery.

## Reference Cited:

Lopez, R.D., D.T. Heggem, C.M. Edmonds, K.B. Jones, L.A. Bice, M. Hamilton, E. Evanston, C.L. Cross, and D.W. Ebert. 2003. *A Landscape Atlas of Ecological Vulnerability: Arkansas' White River Watershed and the Mississippi Alluvial Valley Ecoregion*. EPA/600/R-03/057. United States Environmental Protection Agency, Washington, D.C. 302pp.



## ***NOTICE***

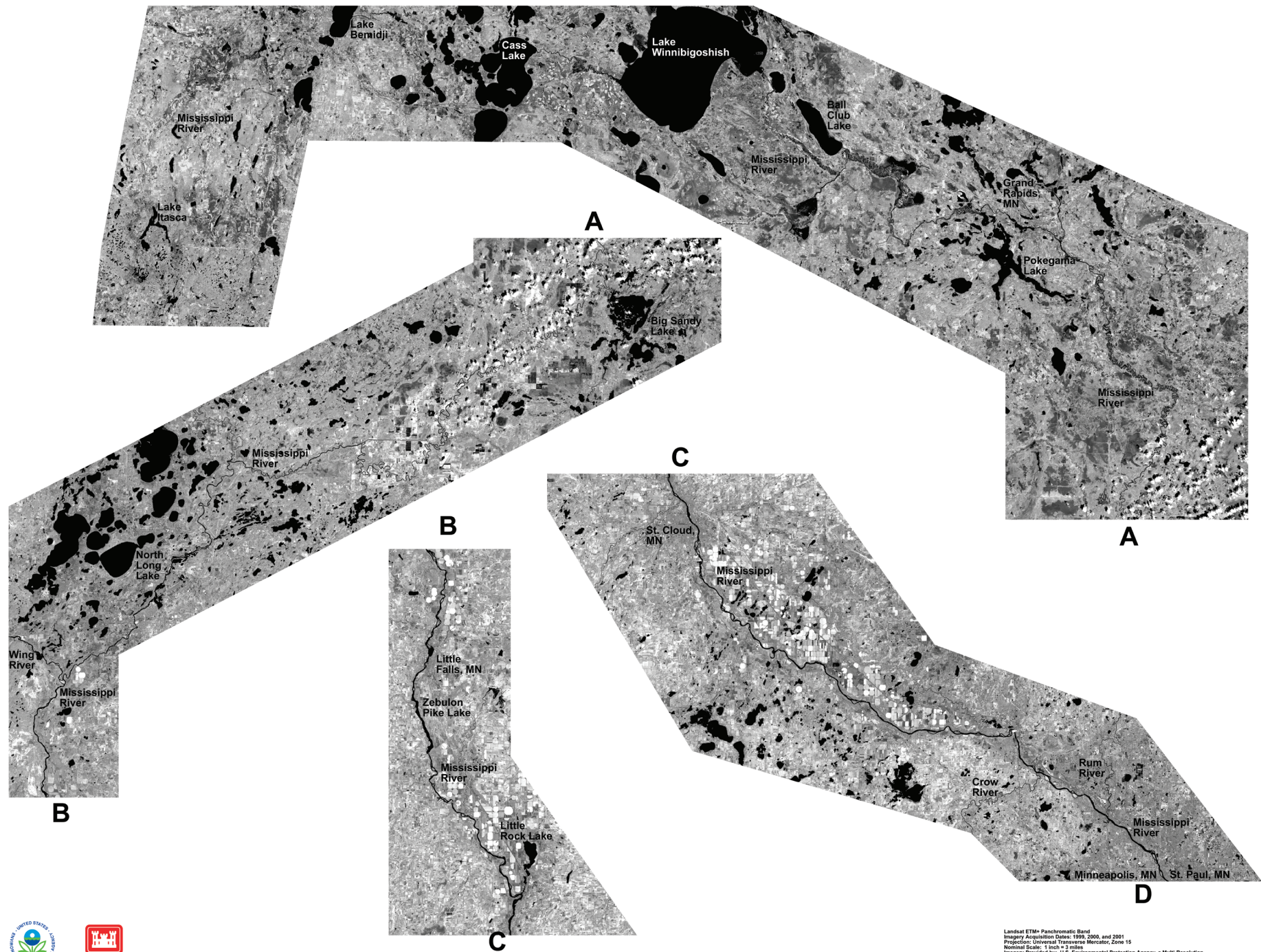
*This work has been funded by the United States Environmental Protection Agency under OMIS Task 5447. It has been subjected to Agency review and approved for publication.*



The White River (Arkansas), one of the many major tributaries to the Mississippi River

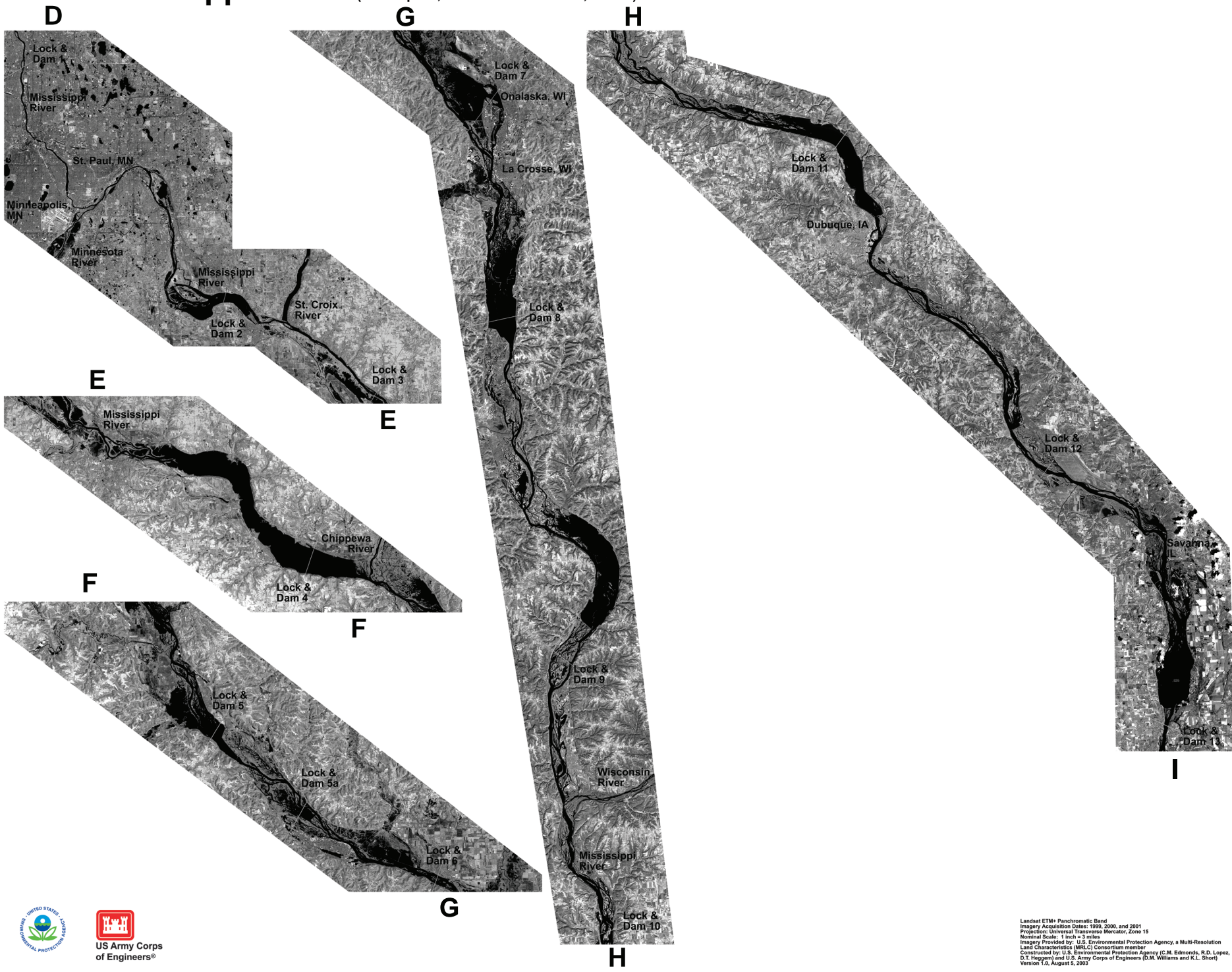


# The Mississippi River (Lake Itasca to Minneapolis, Minnesota)





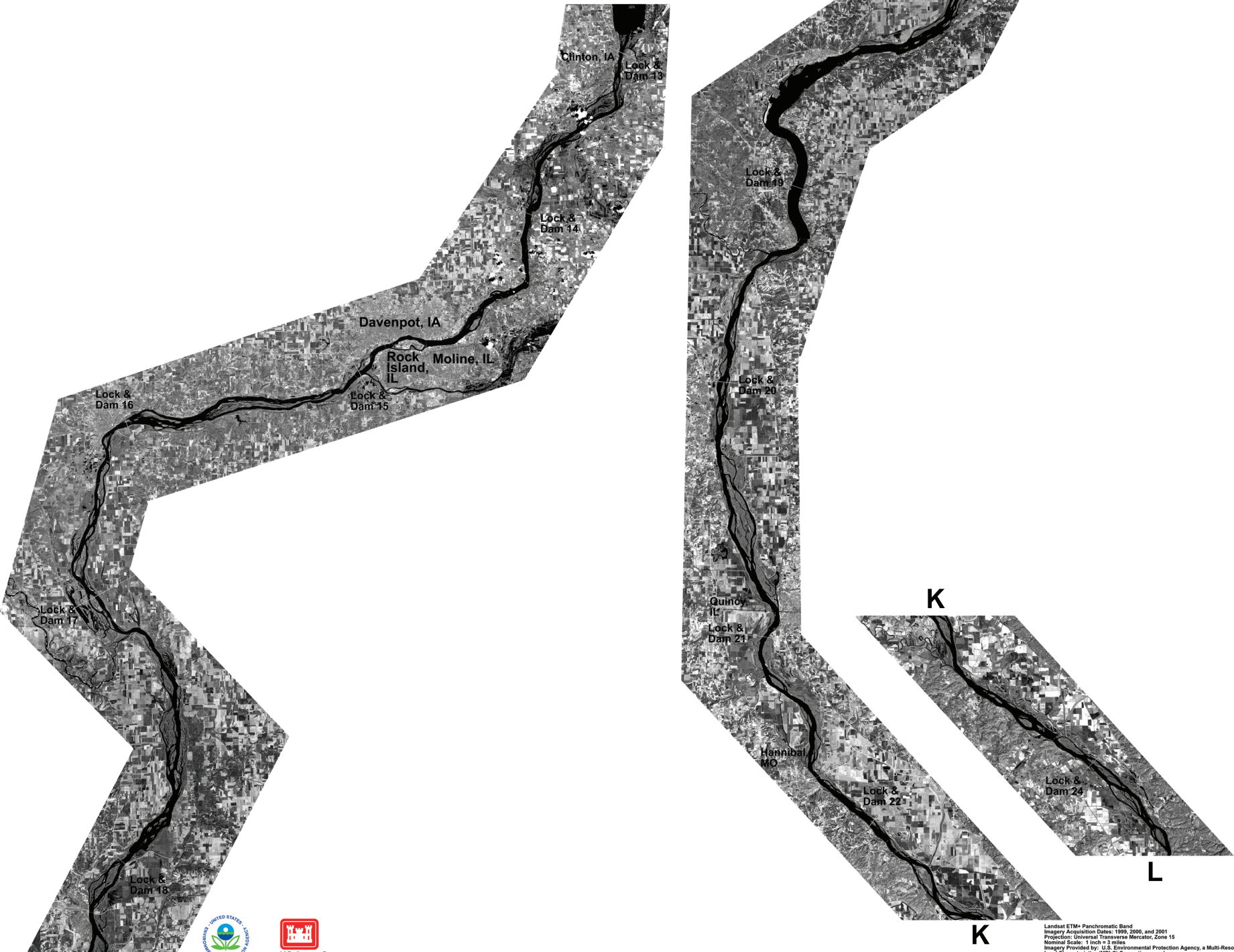
# The Mississippi River (Minneapolis, Minnesota to Savanna, Illinois)



Landsat ETM+ Panchromatic Band  
 Imagery Acquisition Dates: 1999, 2000, and 2001  
 Projection: Universal Transverse Mercator, Zone 15  
 Nominal Scale: 1 inch = 3 miles  
 Imagery Provided by: U.S. Environmental Protection Agency, a Multi-Resolution Land Characteristics (MRLC) Consortium member  
 Constructed by: U.S. Environmental Protection Agency (C.M. Edmonds, R.D. Lopez, D.T. Haggam) and U.S. Army Corps of Engineers (D.M. Williams and K.L. Short)  
 Version 1.0, August 5, 2003



# The Mississippi River (Clinton, Iowa to Lock & Dam 24)



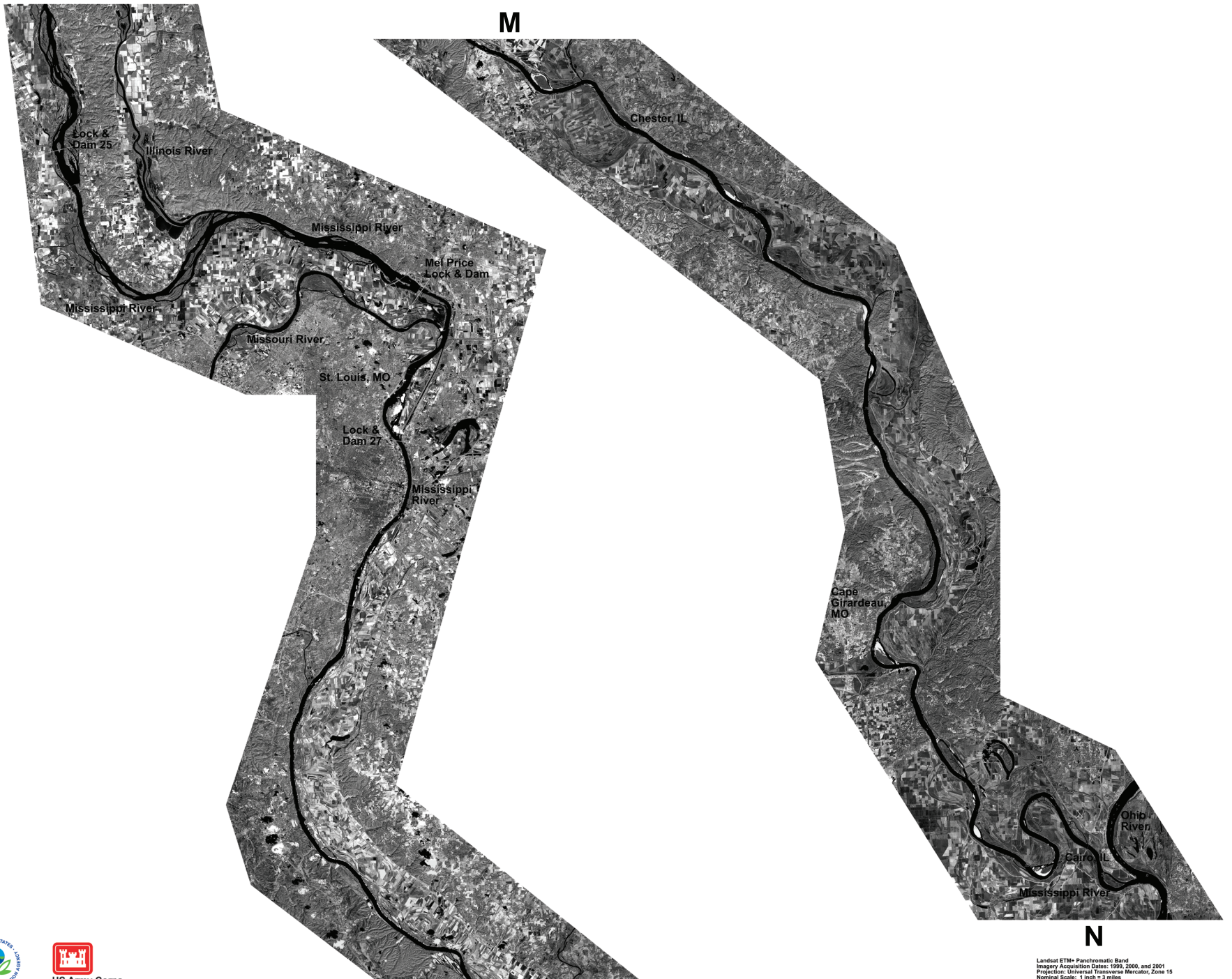
Landsat ETM+ Panchromatic Band  
 Imagery Acquisition Dates: 1999, 2000, and 2001  
 Projection: Universal Transverse Mercator, Zone 15  
 Nominal Scale: 1 inch = 3 miles  
 Imagery Provided by: U.S. Environmental Protection Agency, a Multi-Resolution Land Characteristics (MRLC) Consortium member  
 Constructed by: U.S. Environmental Protection Agency (C.M. Edmonds, R.D. Lopez, D.T. Haggan) and U.S. Army Corps of Engineers (D.M. Williams and K.L. Short)  
 Version 1.0, August 5, 2003



# The Mississippi River (Lock & Dam 25 to Cairo, Illinois)

L

M



N

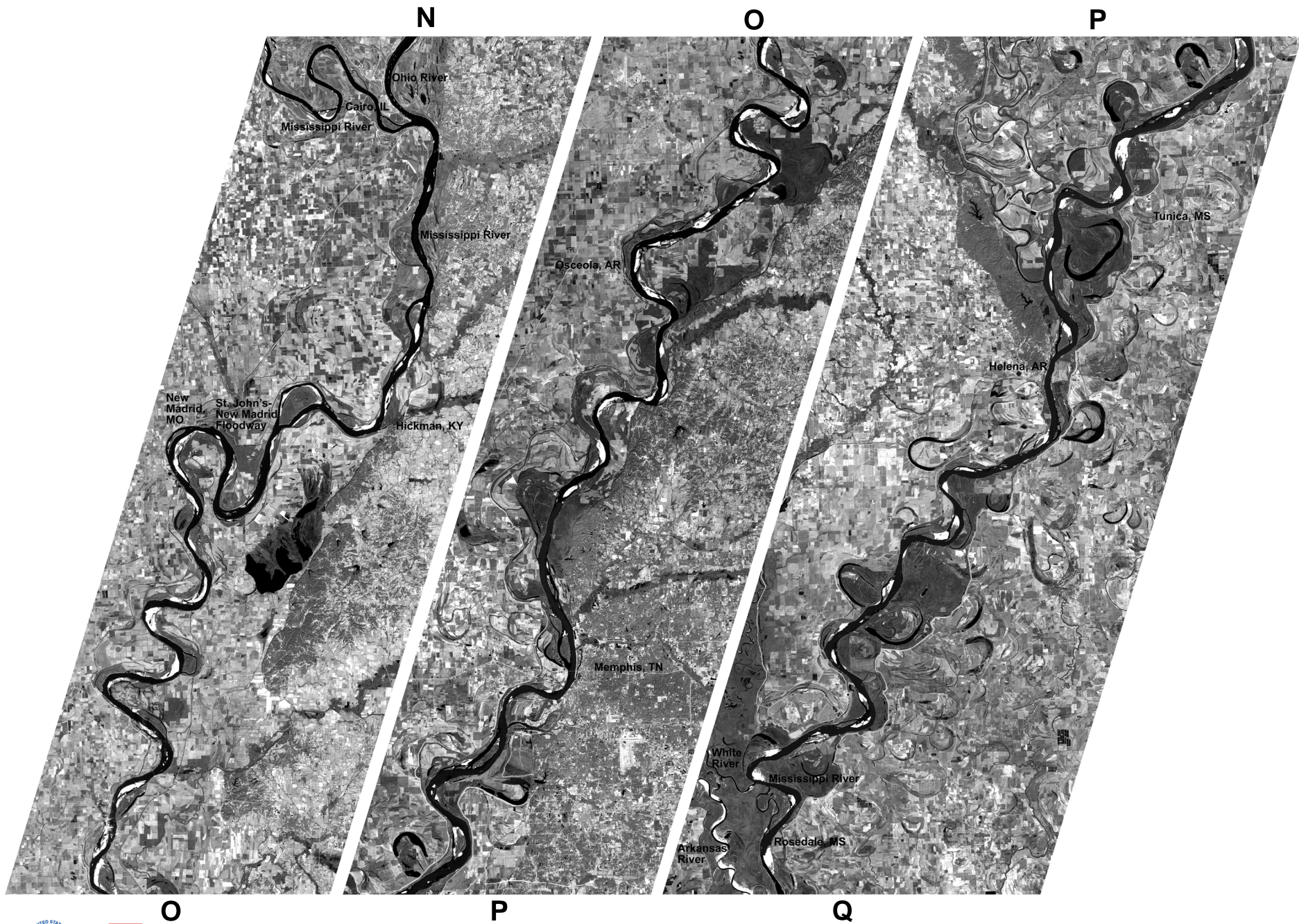
M



Landsat ETM+ Panchromatic Band  
Imagery Acquisition Dates: 1999, 2000, and 2001  
Projection: Universal Transverse Mercator, Zone 15  
Nominal Scale: 1 inch = 3 miles  
Imagery Provided by: U.S. Environmental Protection Agency, a Multi-Resolution Land Characteristics (MRLC) Consortium member  
Constructed by: U.S. Environmental Protection Agency (C.M. Edmonds, R.D. Lopez, D.T. Heggen) and U.S. Army Corps of Engineers (D.M. Williams and K.L. Short)  
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# The Mississippi River (Cairo, Illinois to Rosedale, Mississippi)



Landsat ETM+ Panchromatic Band  
Imagery Acquisition Dates: 1999 & 2000  
Projection: Universal Transverse Mercator, Zone 15  
Nominal Scale: 1 inch = 3 miles  
Imagery Provided by: U.S. Environmental Protection Agency, a Multi-Resolution  
Land Characteristics (MRLC) Consortium member  
Constructed by: U.S. Environmental Protection Agency (C.M. Edmonds, R.D. Lopez,  
D.T. Haggan) and U.S. Army Corps of Engineers (D.M. Williams and K.L. Short)  
Version 1.0, August 5, 2003



# The Mississippi River

(Rosedale, Mississippi to St. Francisville, Louisiana)

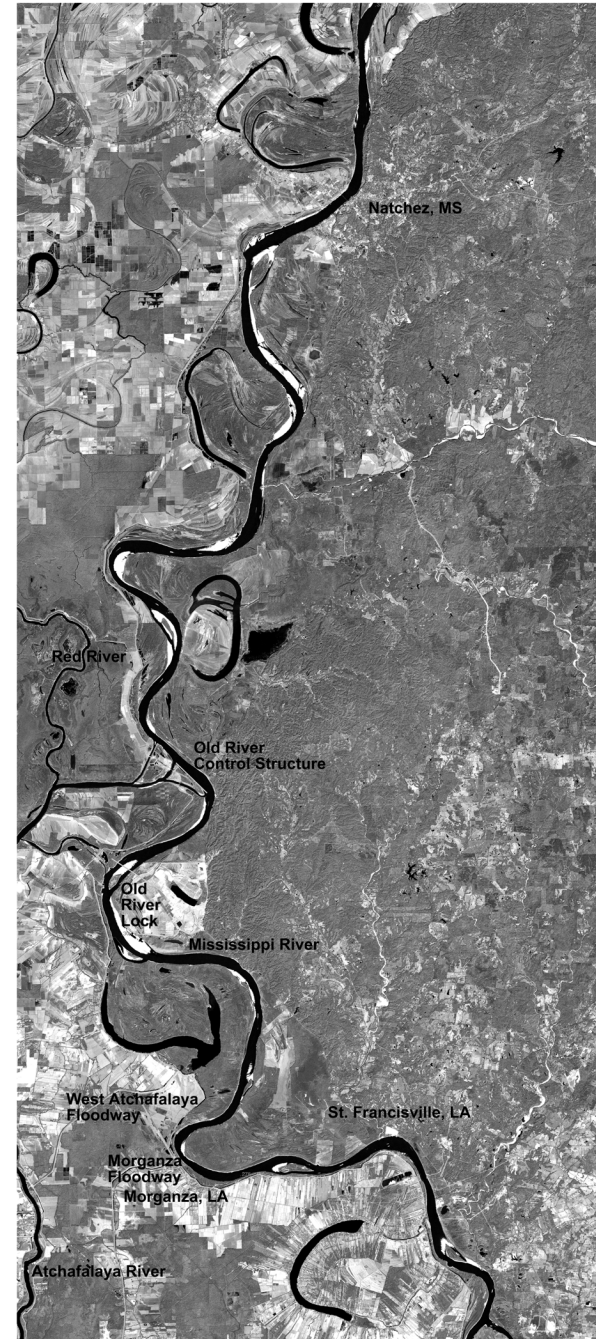
Q



R



S



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T

Landsat ETM+ Panchromatic Band  
Imagery Acquisition Dates: 1995 & 2000  
Projection: Universal Transverse Mercator, Zone 15  
Nominal Scale: 1 inch = 3 miles  
Imagery Provided by: U.S. Environmental Protection Agency, a Multi-Resolution  
Land Characteristics (MRLC) Consortium member  
Constructed by: U.S. Environmental Protection Agency (C.M. Edmonds, R.D. Lopez,  
D.J. Hoogen) and U.S. Army Corps of Engineers (D.M. Williams and K.L. Short)  
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# The Mississippi River (St. Francisville, Louisiana to The Gulf of Mexico)

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