GLOSSARY

AASC: Absolute Abundance Sum-to-one Constraint, Chapters 10
AIC: An Information Criterion, Chapter 17
AMPC: Automatic Mixed Pixel Classification, Chapters 13-16
ANC: Abundance Nonnegativity Constraint, Chapters 3, 10
a%MPCV: *a*% Mixed-to-Pure Conversion (Converter), Chapters 9, 11, 12, 15
ASC: Abundance Sum-to-one Constraint, Chapters 3, 10
ASD: Automatic Subpixel Detection, Chapters 5-6
ATDCA: Automatic Target Detection and Classification Algorithm, Chapter 13
AVIRIS: Airborne Visible/Infrared Imaging Spectrometer, Chapter 1
BRLCMV: Background Removed Linearly Constrained Minimum Variance, Chapter 11
CBD: City Block Distance, Chapter 2
CCA: Convex Cone Analysis, Chapter 18
CEM: Constrained Energy Minimization, Chapters 4, 7, 11
CMD: Covariance-based Mahalanobis Distance, Chapter 14
CMFD: Covariance-based Matched Filter Distance, Chapter 14
CRXD: Causal RXD, Chapter 6
DTDCA: Desired Target Detection and Classification Algorithm, Chapter 13
EA: Evolutionary Algorithm, Chapter 16
ED: Euclidean Distance, Chapters 2, 9
FCLS: Fully Constrained Least-Squares method, Chapter 10
FIR: Finite Impulse Response
FNNLS: Fast NNLS method, Chapter 3
FNNLSb: A second version of FNNLS, Chapter 3
FV: Filter Vectors Approach developed by Bowels et al., Chapters 11, 12
γ: Confidence coefficient, Chapters 15-16
γMPCV: γMixed-to-Pure Conversion (Converter), Chapters 15-16
GCEM: Generalized Constrained Energy Minimization, Section 18.7.1
GML: Gaussian maximum likelihood, Chapter 3, 8
GOSP: Generalized Orthogonal Subspace Projection, Section 18.7.1
GSD: Ground Sampling Distance
HFC: Harsanyi-Farrand-Chang, Chapter 17
HMM: Hidden Markov Model, Chapter 2
HMMID: Hidden Markov Model-Based Information Divergence, Chapter 2
HYDICE: HYperspectral Digital Imagery Collection Experiment, Chapter 1
IAD: IntrA-Distance, Chapter 12
ICA: Independent Component Analysis, Chapter 15
ID: Intrinsic Dimensionality, Chapter 17
IED: IntEr-Distance, Chapter 12
JMD: Jeffries-Matusita Distance, Chapter 2
LBG: Linde-Buzo-Gray
LCDA: Linearly Constrained Discriminant Analysis, Chapter 12
LCMV: Linearly Constrained Minimum Variance, Chapters 4, 11
LCVF: Lunar Crater Volcanic Field, Chapter 1
LDA: Linear Discriminant Analysis, Chapter 9
LPD: Low Probability Detection/Detector, Chapter 6
LPTD: Low Probability Target Detector, Chapter 6
LSE: Least-Squares Error, Chapters 5, 10

LSMA: Linear Spectral Mixture Analysis, Chapters 3, 8
LSRMA: Linear Spectral Random Mixture Analysis, Chapter 15
MD: Mahalanobis Distance, Chapter 2
MFCLS: Modified Fully Constrained Least-Squares method, Chapter 10
MLC: Maximum Likelihood Classifier, Chapters 3, 8
MNF: Maximum Noise Fraction, Chapter 18
MPC: Mixed Pixel Classification, Chapters 8-16
MPCV: Mixed-to-Pure pixel ConVerter (Conversion), Chapter 9
MRI: Magnetic Resonance Imaging, Section 18.8
MRXD: Modified RX Detector, Chapter 6
MTCEM: Multiple-Target Constrained Energy Minimization, Chapter 11
MVDR: Minimum Variance Distortionless Response, Chapter 4
NAPC: Noise Adjusted Principal Component, Chapter 18
NCLS: Nonnegativity Constrained Least-Squares method, Chapters 3, 5, 10
NNLS: NonNegative Least-Squares method, Chapter 3
NNNLS: Normalized NonNegative Least-Squares method, Chapter 10
NNR: Nearest Neighbor Rule, Chapter 5
NRXD: Normalized RX Detector, Chapter 6
NSCLS: Normalized Sum-to-one Constrained Least-Squares, Chapter 10
NSP: Noise Subspace Projection, Chapter 17
NWHFC: Noise-Whitened Harsanyi-Farrand-Chang, Chapter 17
OBSP: OBlique Subspace Projection, Chapter 8
OPCI: Orthogonal Projection Correlation Index, Chapter 13
OPD: Orthogonal Projection Distance, Chapter 2
OSP: Orthogonal Subspace Projection, Chapter 3
PCA: Principal Components Analysis, Chapter 6
PCLS: Partially Constrained Least-Squares method(s), Chapter 3
PP: Projection Pursuit
PPC: Pure Pixel Classification, Chapter 9
PPEA: Projection Pursuit-based Evolutionary Algorithm, Chapter 16
RMD: Correlation-based Mahalanobis Distance, Chapter 14
RMFD: Correlation-based Matched Filter Distance, Chapter 14
ROC: Receiver Operating Characteristics
RSDE: Relative Spectral Discriminatory Entropy, Chapter 2
RSDPB: Relative Spectral Discriminatory ProBability, Chapter 2
RSDPW: Relative Spectral Discriminatory PoWer, Chapter 2
RXD: RX Detector, Chapters 6, 14
SAM: Spectral Angle Mapper, Chapter 2
SCEM: Sum Constrained Energy Minimization, Chapter 11
SCLS: Sum-to-one Constrained Least-Squares, Chapter 3
SD: Subpixel Detection, Chapters 3-7
SID: Spectral Information Divergence, Chapter 2
SIM: Spectral Information Measure, Chapter 2
SSP: Signature Subspace Projection, Chapter 8
TACMPC: Target Abundance-Constrained Mixed Pixel Classification, Chapter 10
TCIM: Target-Constrained Interference-Minimized, Chapter 11
TCIMF: Target-Constrained Interference-Minimized Filter, Chapters 4, 11
TD: Tchebyshev Distance, Chapter 2
TSCMPC: Target signature-Constrained Mixed Pixel Classification, Chapters 11, 12
TSP: Target Subspace Projection, Chapter 8
UCEM: Unsupervised Constrained Energy Minimization, Chapter 11
UFCLS: Unsupervised Fully Constrained Least-Squares, Chapter 10
UNCLS: Unsupervised Nonnegativity Constrained Least-Squares, Chapter 5
UOSP: Unsupervised Orthogonal Subspace Projection, Chapter 13
UTD: Uniform Target Detector, Chapters 6,14

UTGP: Unsupervised Target Generation Process, Chapter 13
UVQ: Unsupervised Vector Quantization, Chapter 5
VD: Virtual Dimensionality, Chapter 17
WTA: Winner-Take-All, Chapter 9
WTACEM: Winner-Take-All Constrained Energy Minimization, Chapter 11
WTAMPCV: Winner-Take-All Mixed-to-Pure Conversion (Converter), Chapter 9