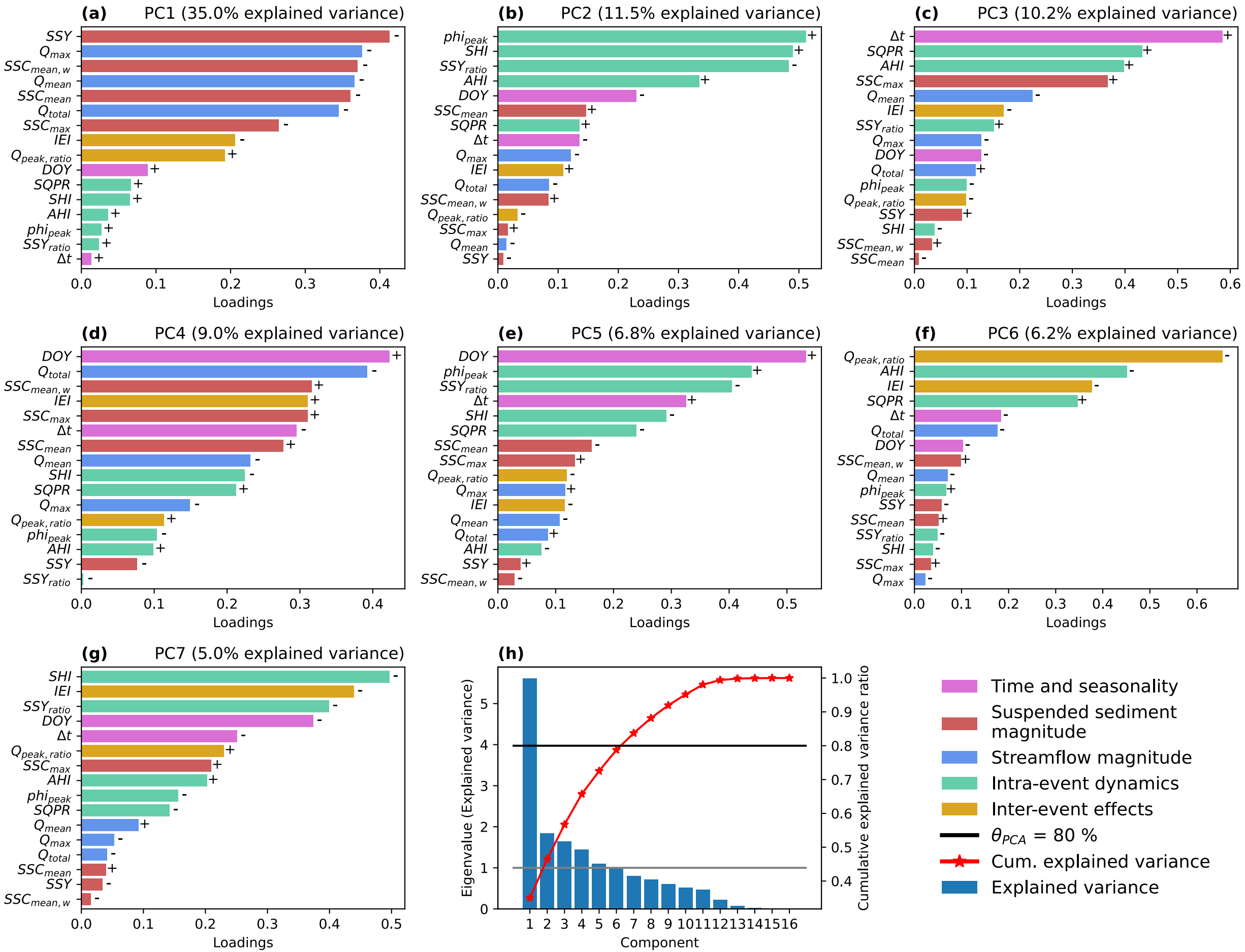
(a) PC1 (35.0% explained variance)
SSY
Q_max
SSC_mean, w
Q_mean
SSC_mean
Q_total
SSC_max
IEI
Q_peak, ratio
DOY
SQPR
SHI
AHI
phi_peak
SSY_ratio
Δt
Loadings
(b) PC2 (11.5% explained variance)
phi_peak
SHI
SSY_ratio
AHI
DOY
SSC_mean
SQPR
Δt
Q_max
IEI
Q_total
SSC_mean, w
Q_peak, ratio
SSC_max
Q_mean
SSY
Loadings
(c) PC3 (10.2% explained variance)
Δt
SQPR
AHI
SSC_max
Q_mean
IEI
SSY_ratio
Q_max
DOY
Q_total
phi_peak
Q_peak, ratio
SSY
SHI
SSC_mean, w
SSC_mean
Loadings
(d) PC4 (9.0% explained variance)
DOY
Q_total
SSC_mean, w
IEI
SSC_max
Δt
SSC_mean
Q_mean
SHI
SQPR
Q_max
Q_peak, ratio
phi_peak
AHI
SSY
SSY_ratio
Loadings
(e) PC5 (6.8% explained variance)
DOY
phi_peak
SSY_ratio
Δt
SHI
SQPR
SSC_mean
SSC_max
Q_peak, ratio
Q_max
IEI
Q_mean
Q_total
AHI
SSY
SSC_mean, w
Loadings
(f) PC6 (6.2% explained variance)
Q_peak, ratio
AHI
IEI
SQPR
Δt
Q_total
DOY
SSC_mean, w
Q_mean
phi_peak
SSY
SSC_mean
SSY_ratio
SHI
SSC_max
Q_max
Loadings
(g) PC7 (5.0% explained variance)
SHI
IEI
SSY_ratio
DOY
Δt
Q_peak, ratio
SSC_max
AHI
phi_peak
SQPR
Q_mean
Q_max
Q_total
SSC_mean
SSY
SSC_mean, w
Loadings
(h)
Eigenvalue (Explained variance)
Cumulative explained variance ratio
Component
Time and seasonality
Suspended sediment magnitude
Streamflow magnitude
Intra-event dynamics
Inter-event effects
θ_PCA = 80 %
Cum. explained variance
Explained variance