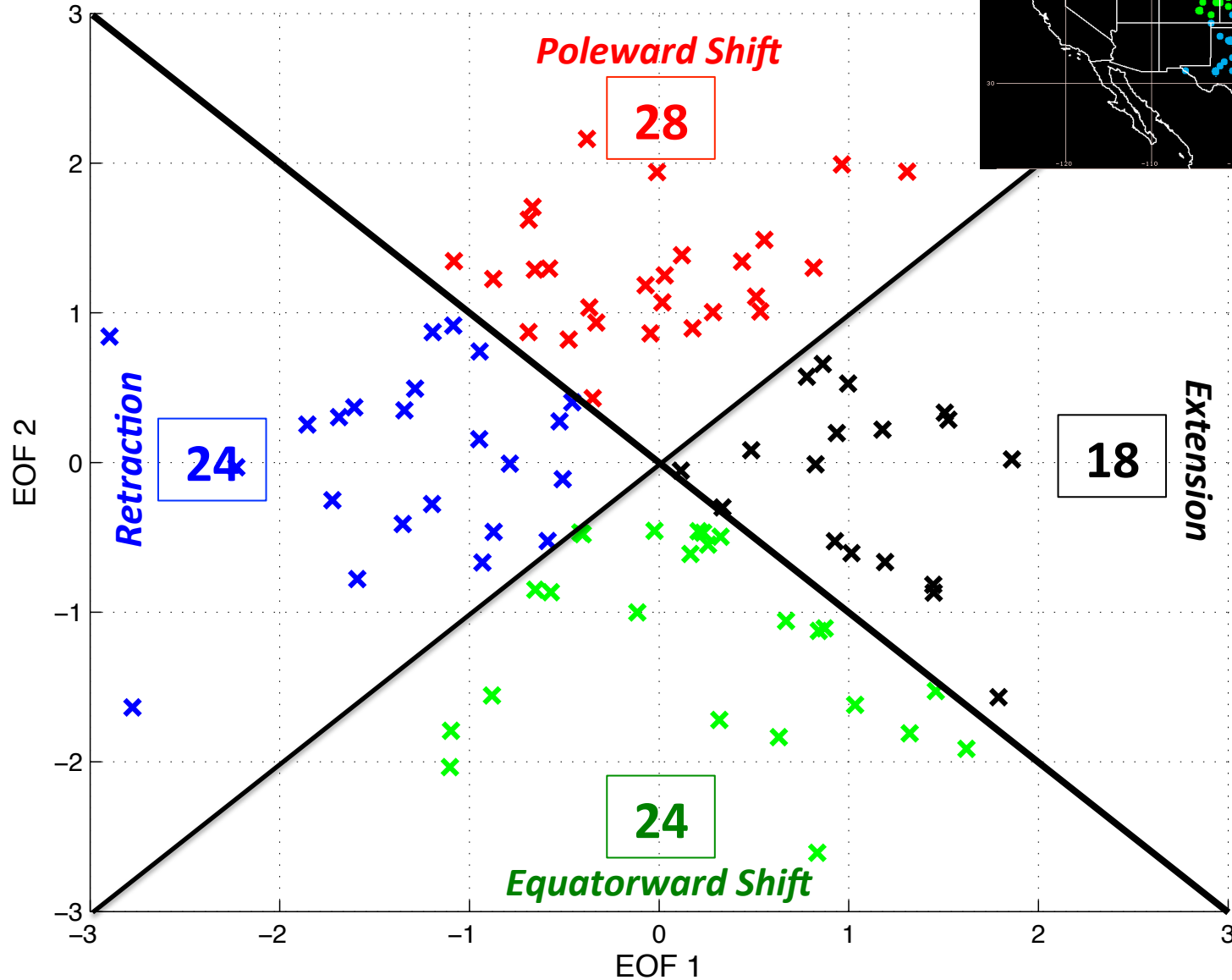
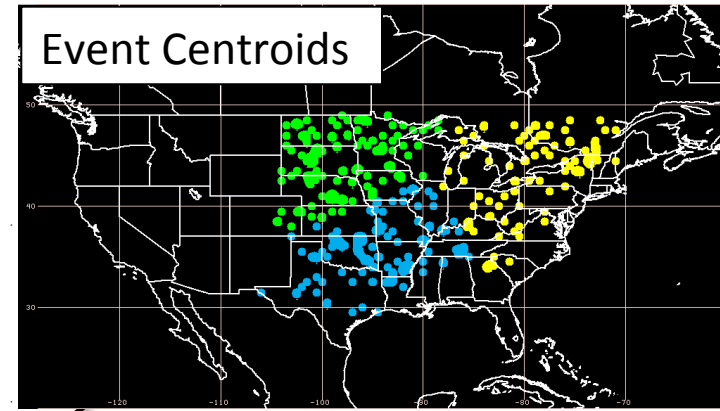


**Classification of EWEs
based on the
antecedent state of
the
N. Pacific Jet**

**EXTREME
WARM
EVENTS**

Eastern U.S. – N. Plains Cluster (1)

** X's below are colored by quadrant of the phase diagram **



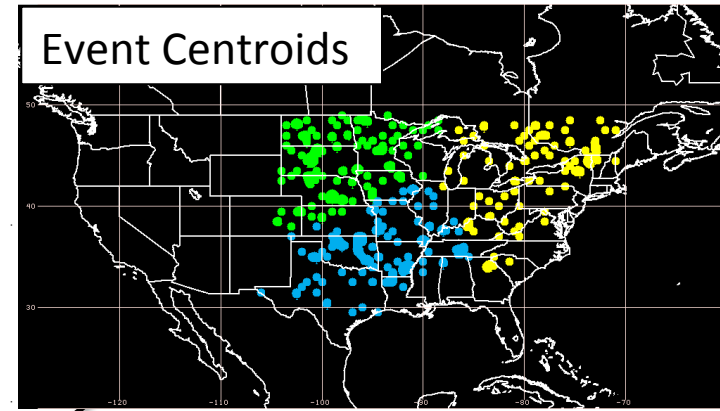
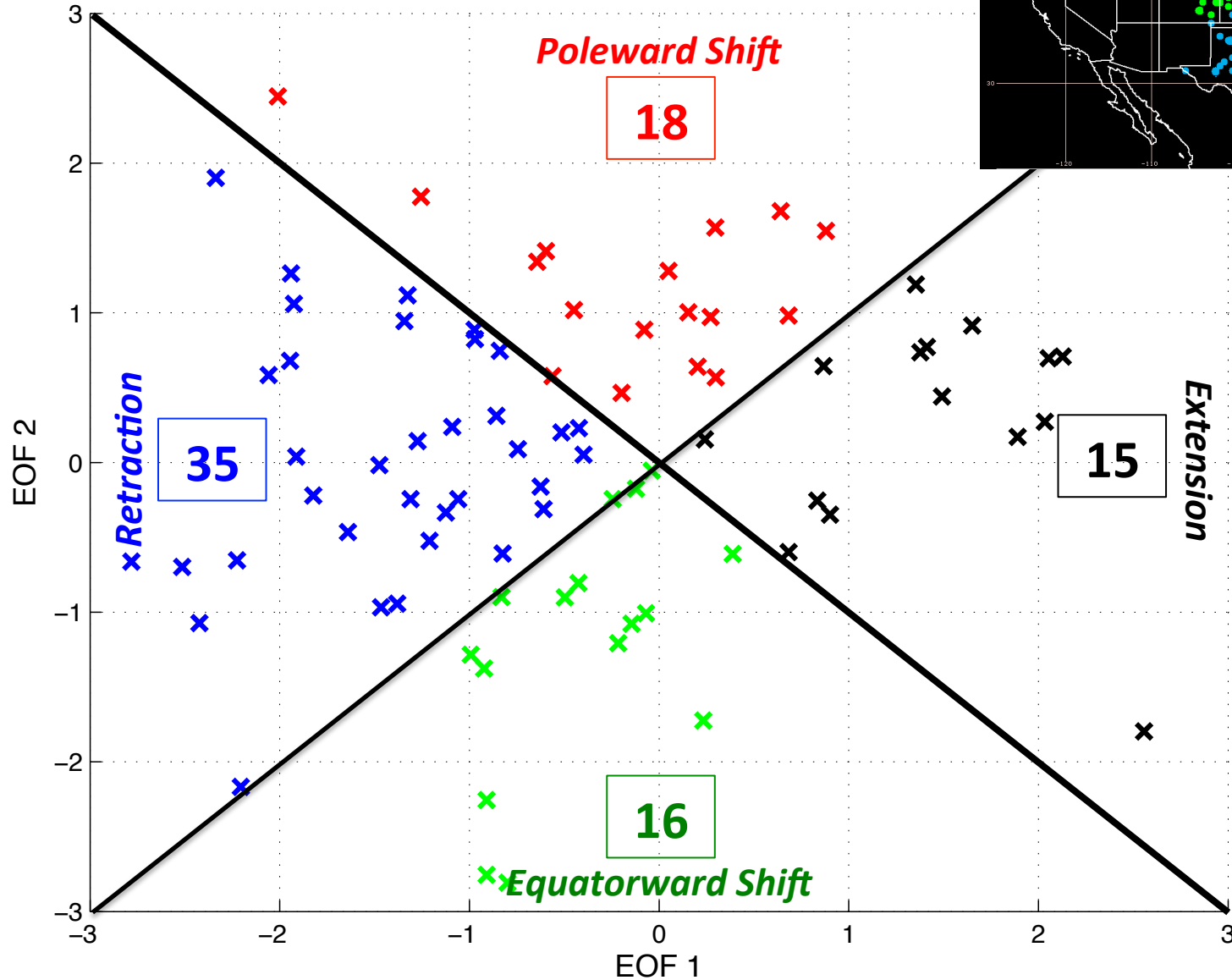
Events during Sept. – May projected onto phase diagram

Each point is an average of the PCs for 3–7 days prior to the event

94 events

Eastern U.S. – S. Plains Cluster (2)

** X's below are colored by quadrant of the phase diagram **



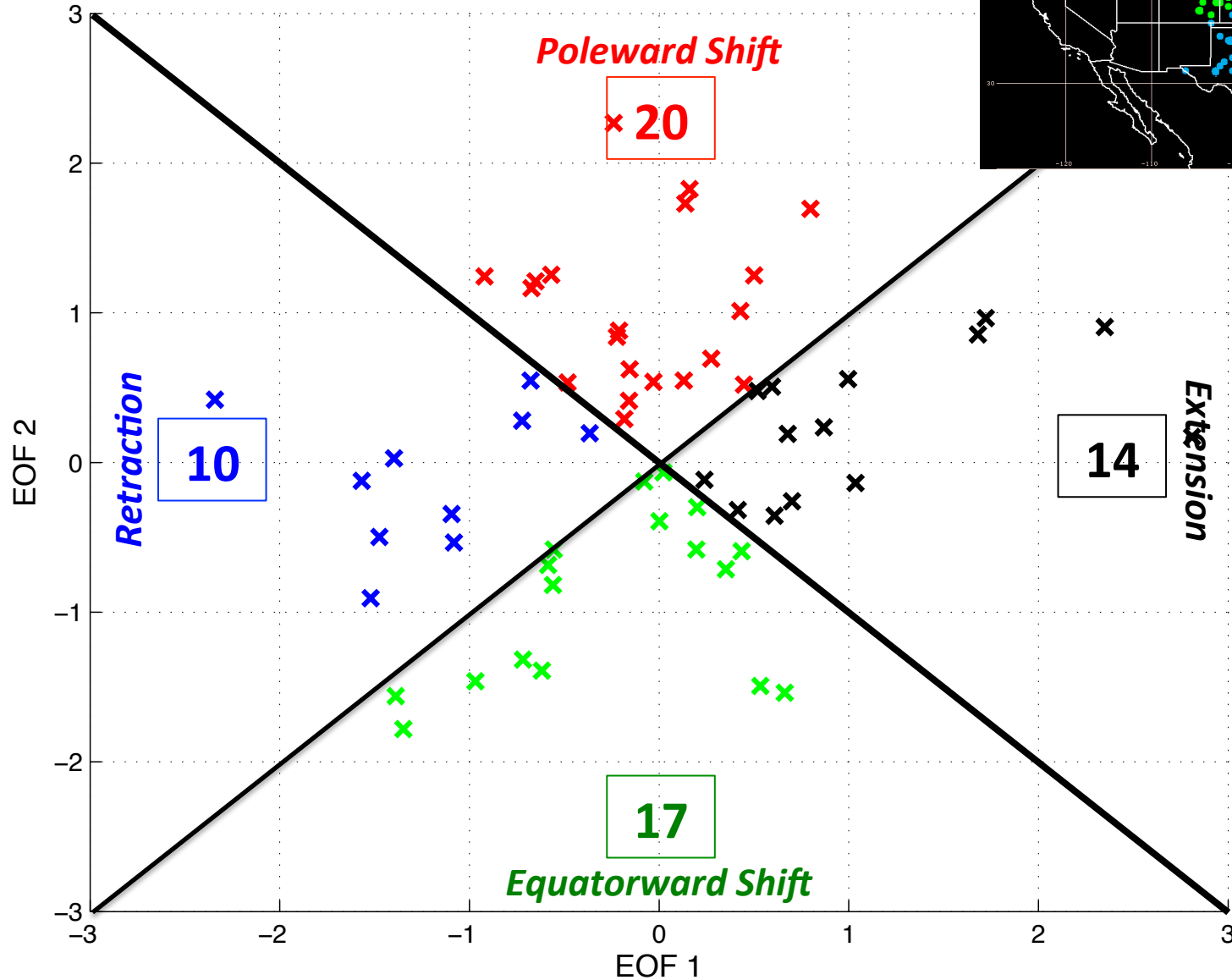
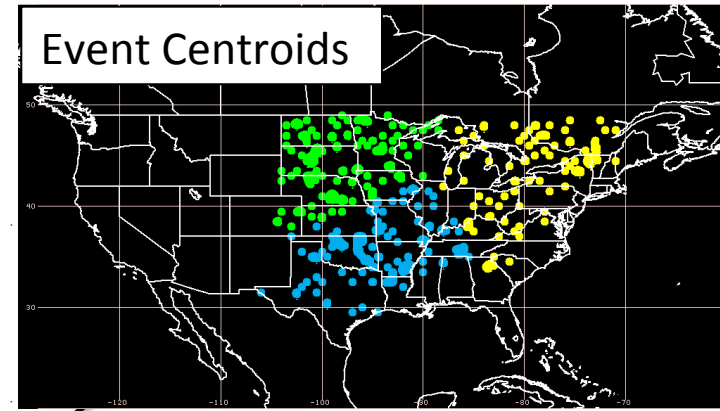
Events during
Sept. – May
projected onto
phase diagram

Each point is an
average of the
PCs for
3–7 days prior
to the event

84 events

Eastern U.S. – Northeast Cluster (3)

** X's below are colored by quadrant of the phase diagram **



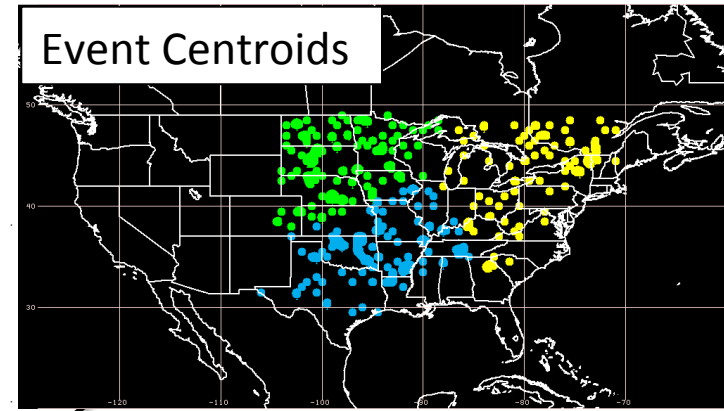
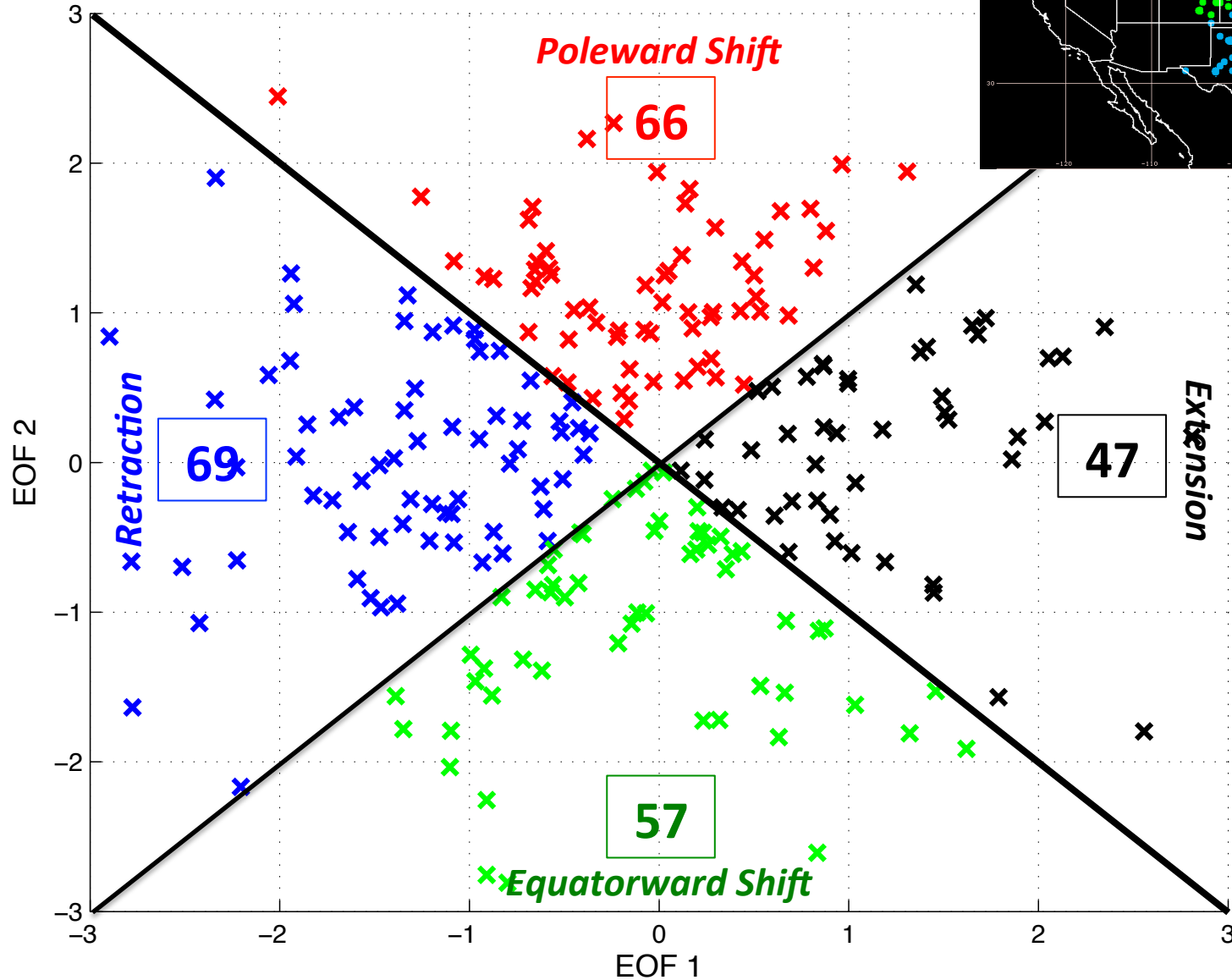
Events during Sept. – May projected onto phase diagram

Each point is an average of the PCs for 3–7 days prior to the event

61 events

Eastern U.S. – All Events

** X's below are colored by quadrant of the phase diagram **



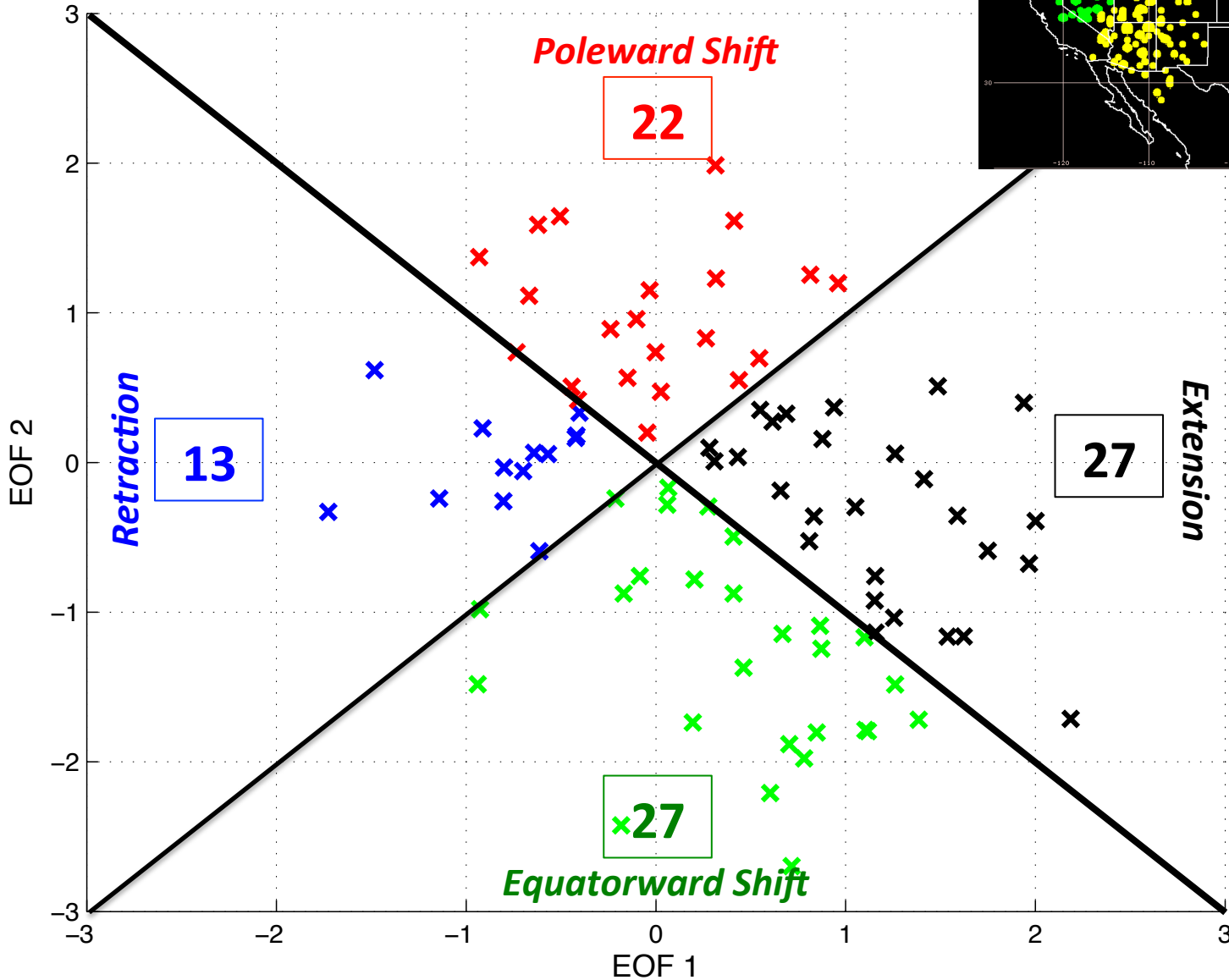
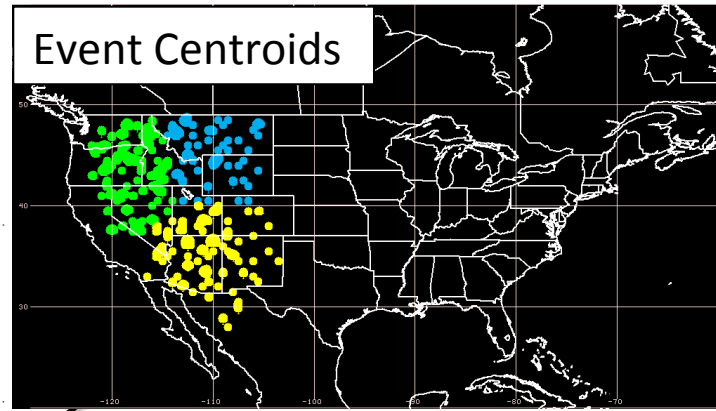
Events during
Sept. – May
projected onto
phase diagram

Each point is an
average of the
PCs for
3–7 days prior
to the event

239 events

Western U.S. – Pacific NW Cluster (1)

** X's below are colored by quadrant of the phase diagram **



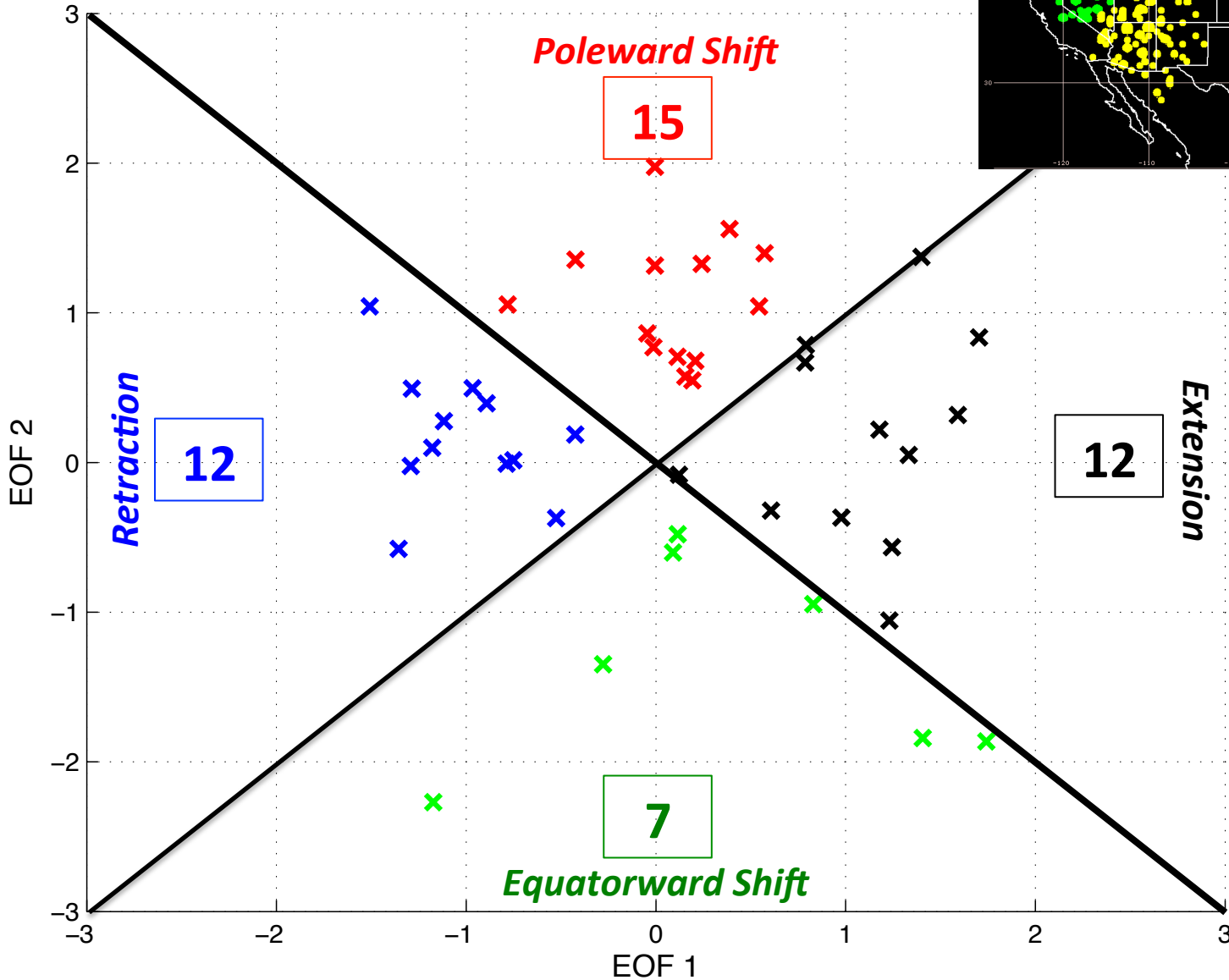
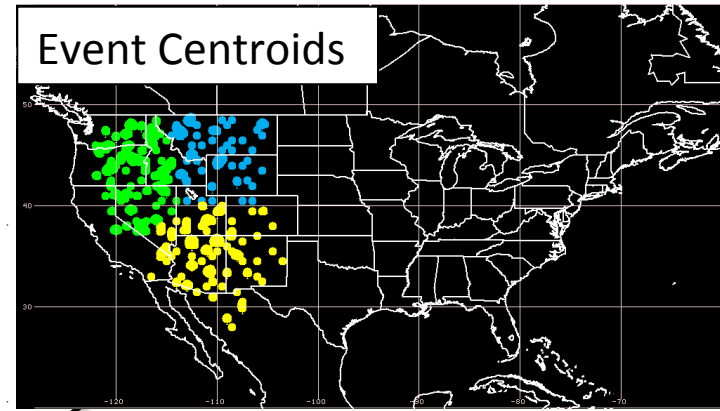
Events during
Sept. – May
projected onto
phase diagram

Each point is an
average of the
PCs for
3–7 days prior
to the event

89 events

Western U.S. – N. Rockies Cluster (2)

**** X's below are colored by quadrant of the phase diagram****



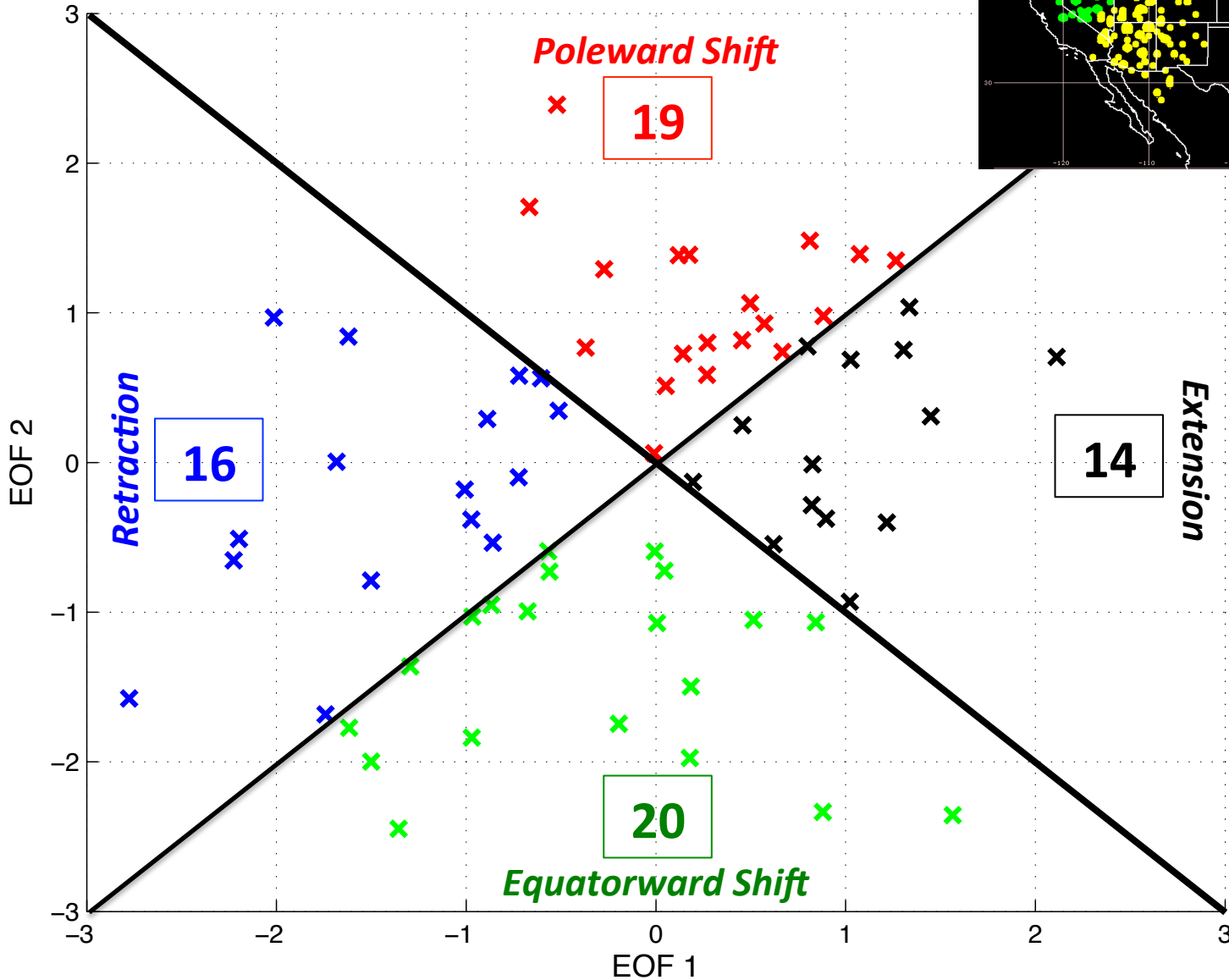
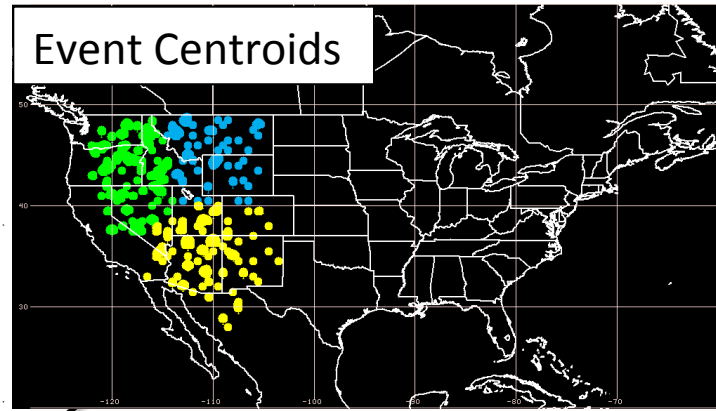
Events during
Sept. – May
projected onto
phase diagram

Each point is an
average of the
PCs for
3–7 days prior
to the event

46 events

Western U.S. – Southwest Cluster (3)

** X's below are colored by quadrant of the phase diagram **



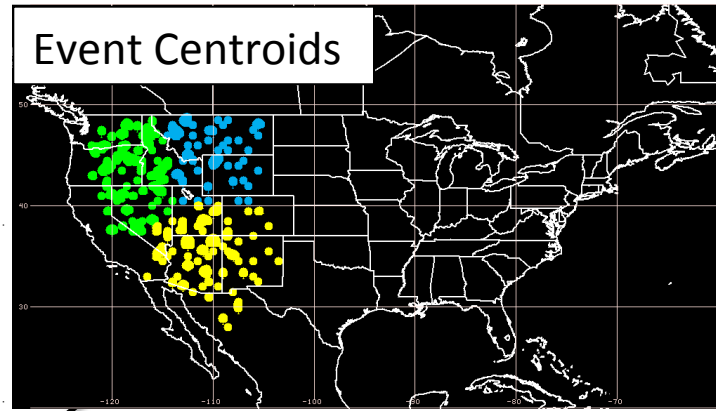
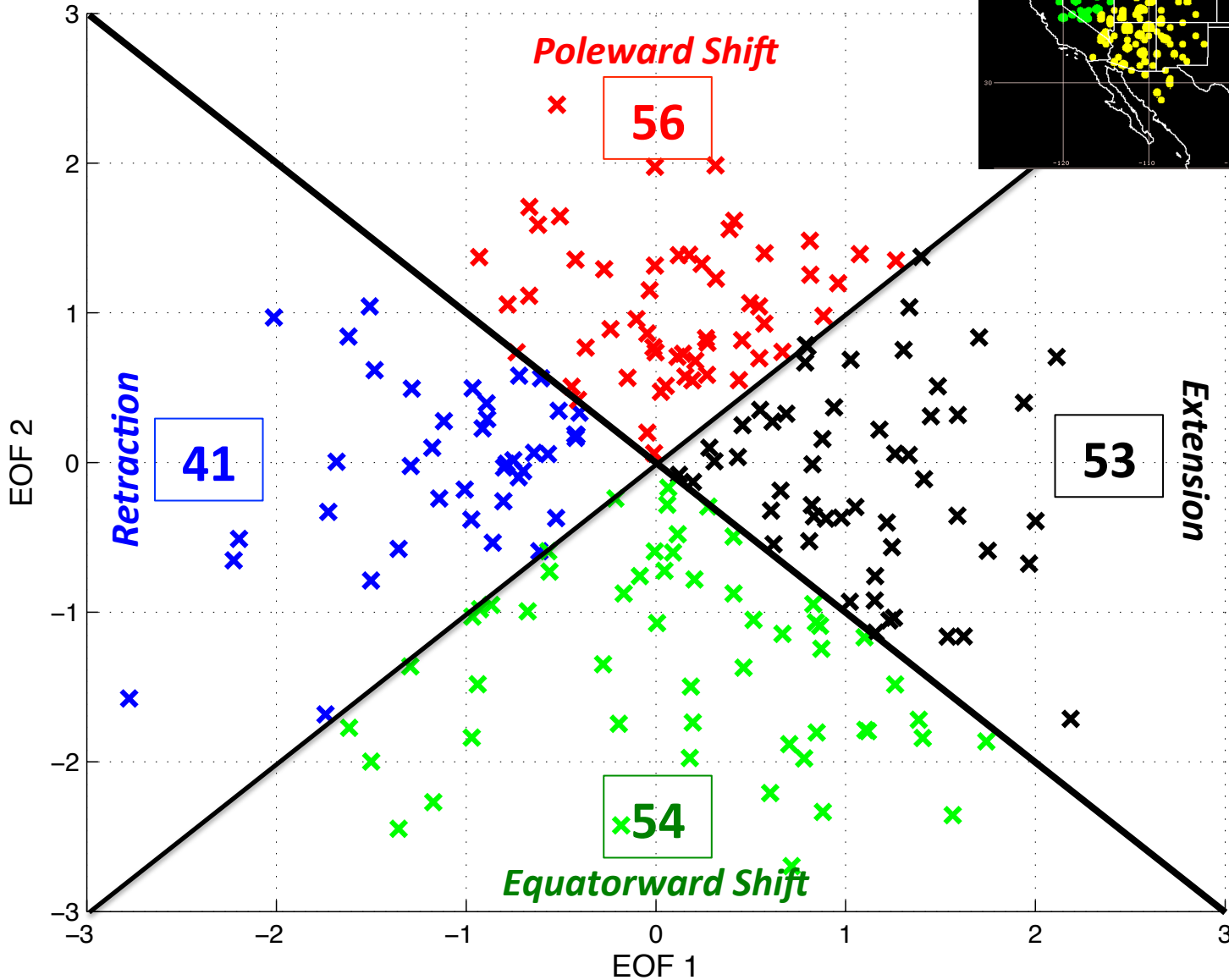
Events during
Sept. – May
projected onto
phase diagram

Each point is an
average of the
PCs for
3–7 days prior
to the event

69 events

Western U.S. – All Events

** X's below are colored by quadrant of the phase diagram**



Events during
Sept. – May
projected onto
phase diagram

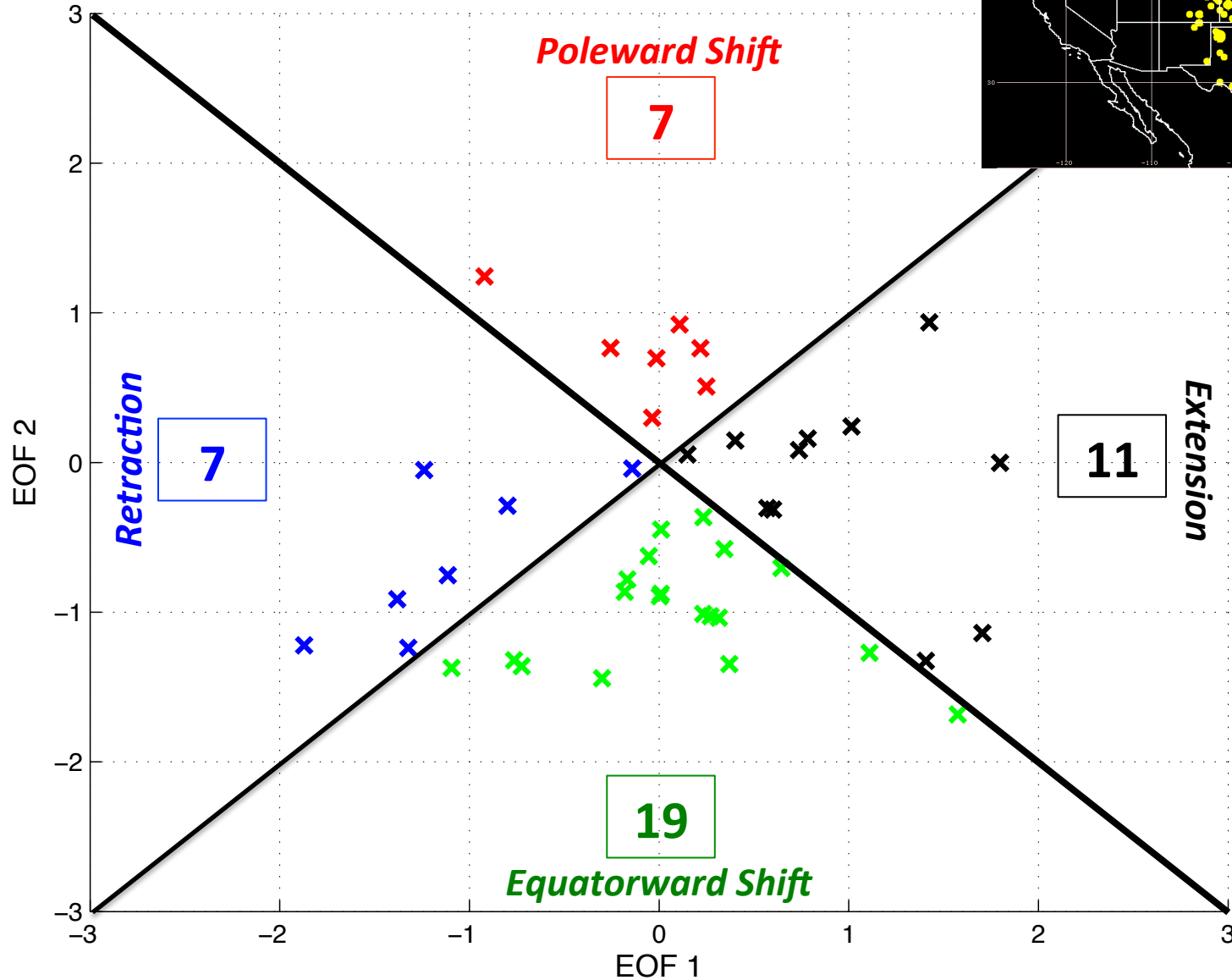
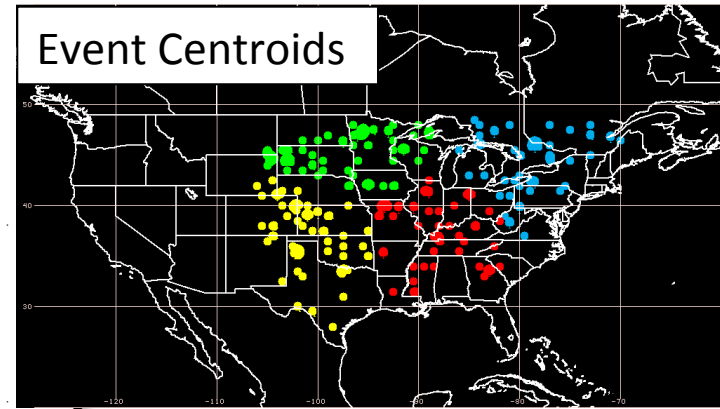
Each point is an
average of the
PCs for
3–7 days prior
to the event

69 events

**EXTREME
COLD
EVENTS**

Eastern U.S. – N. Plains Cluster (1)

** X's below are colored by quadrant of the phase diagram **



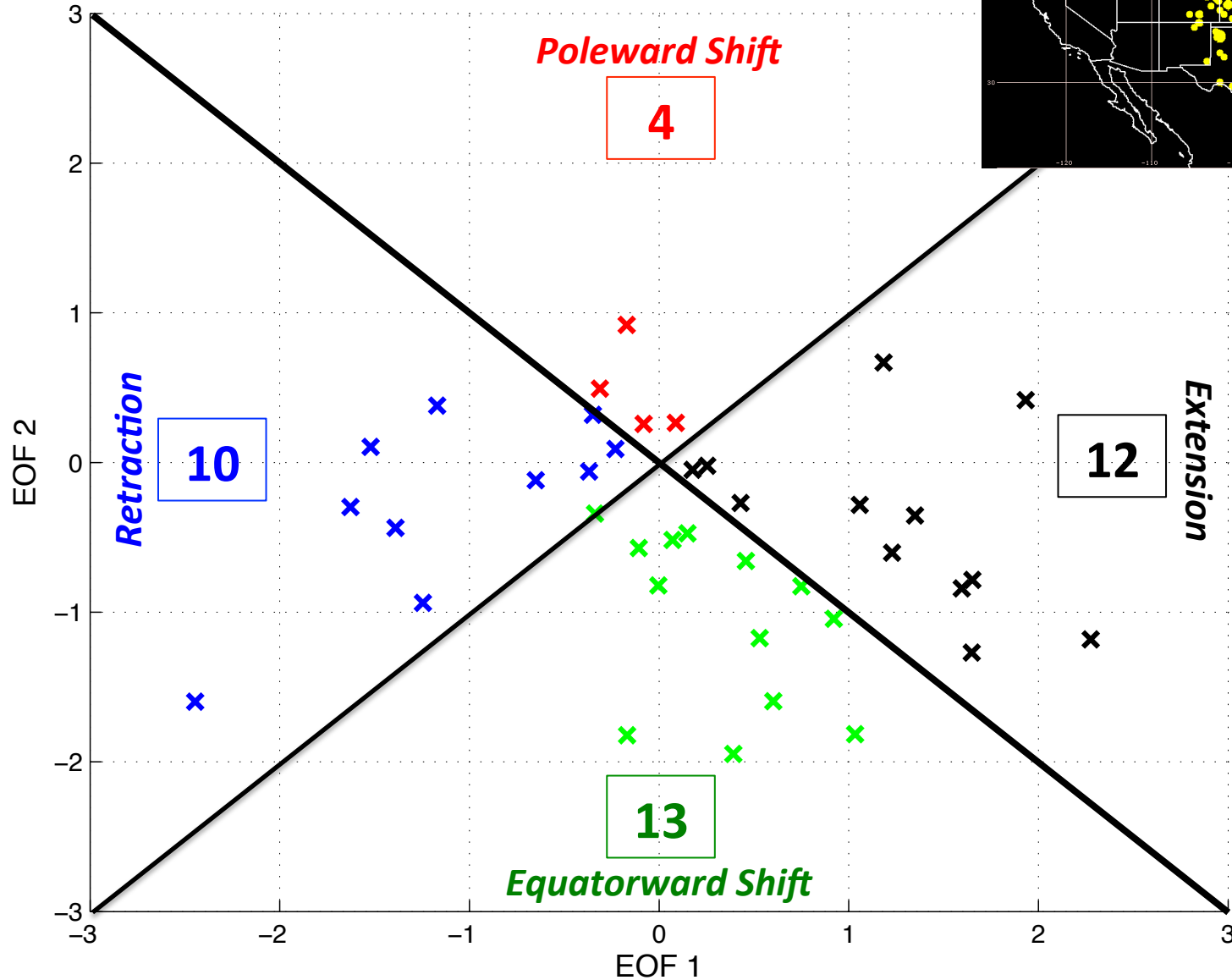
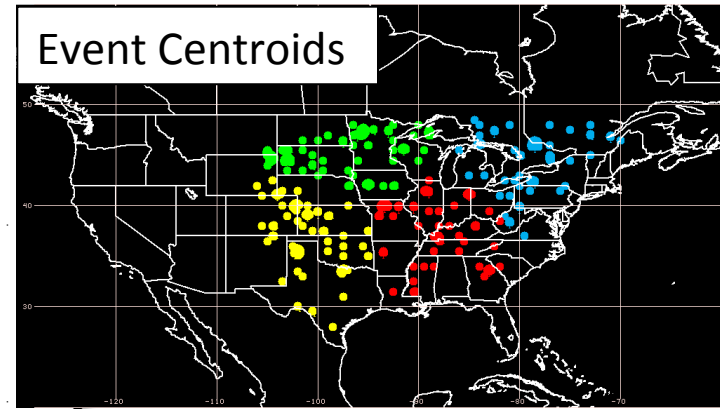
Events during Sept. – May projected onto phase diagram

Each point is an average of the PCs for 3–7 days prior to the event

44 events

Eastern U.S. – Northeast Cluster (2)

** X's below are colored by quadrant of the phase diagram **



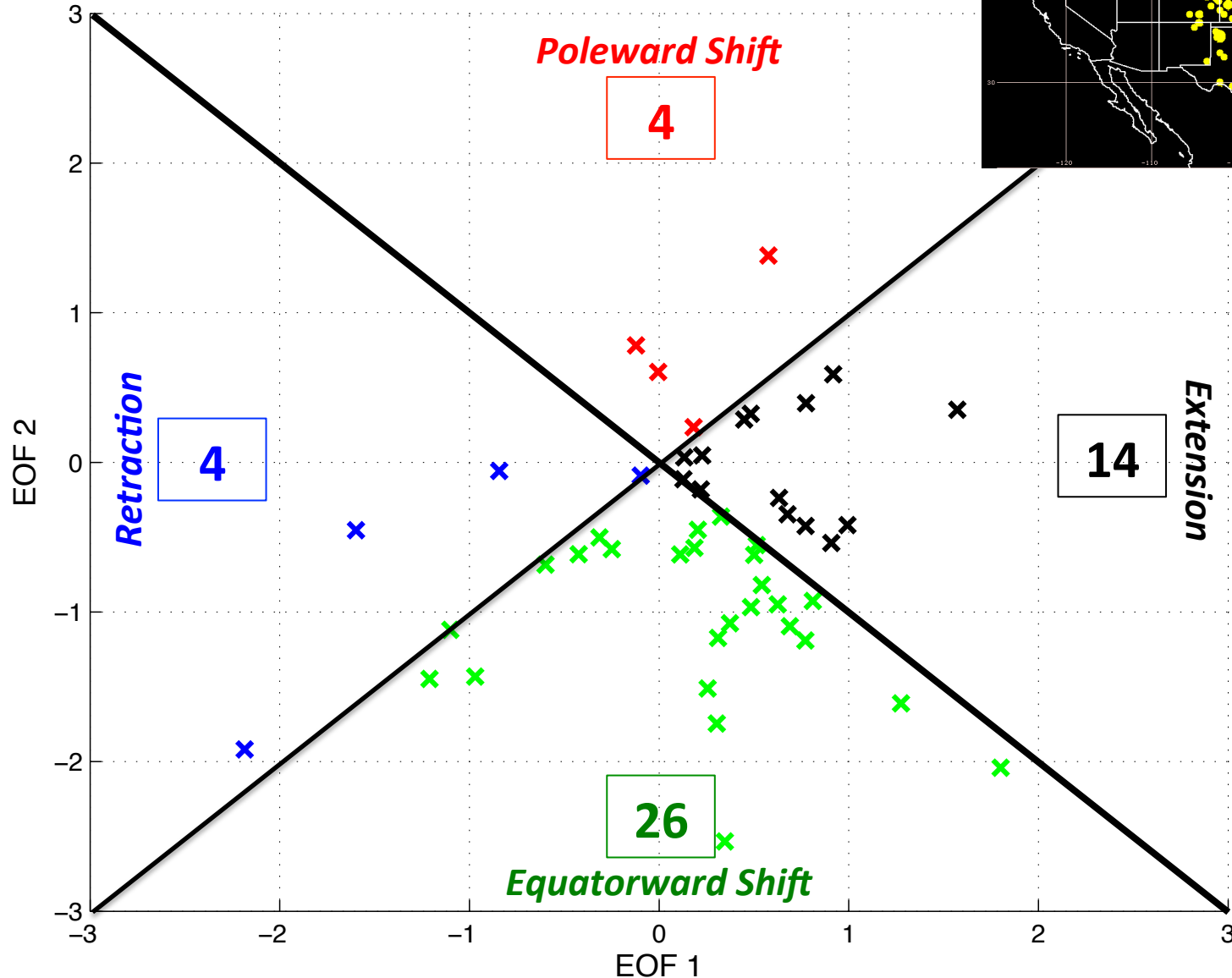
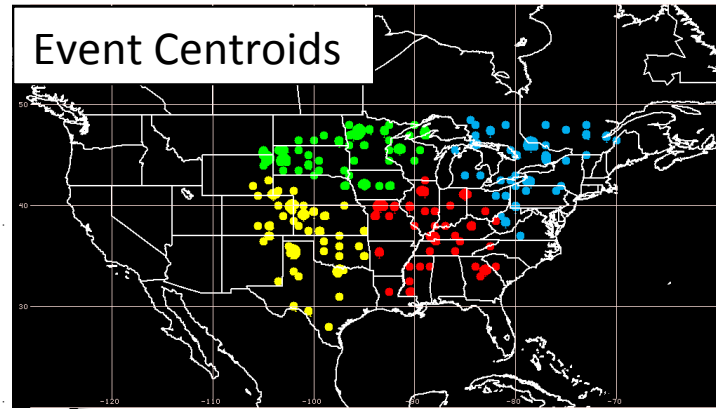
Events during Sept. – May projected onto phase diagram

Each point is an average of the PCs for 3–7 days prior to the event

39 events

Eastern U.S. – S. Plains Cluster (3)

** X's below are colored by quadrant of the phase diagram **



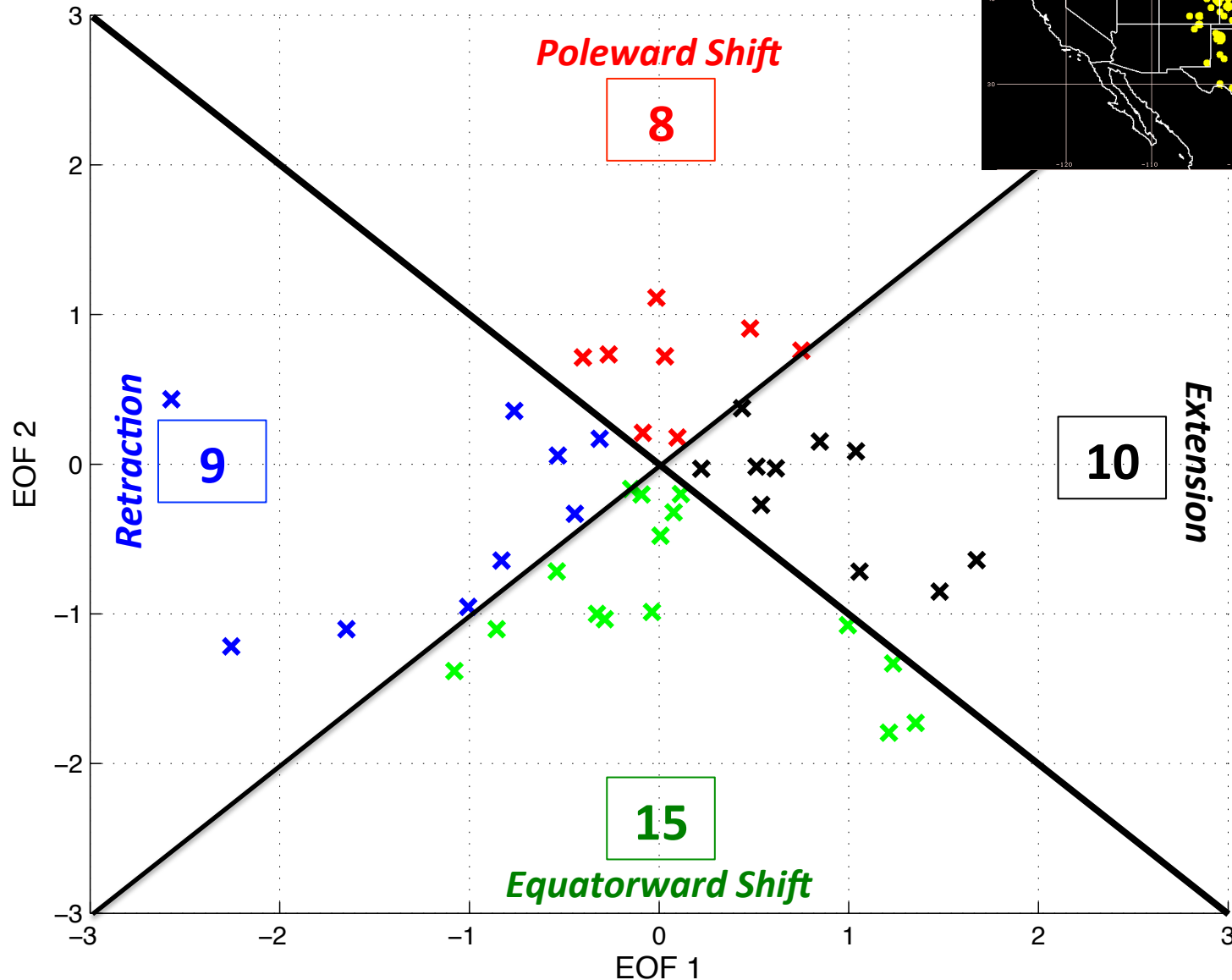
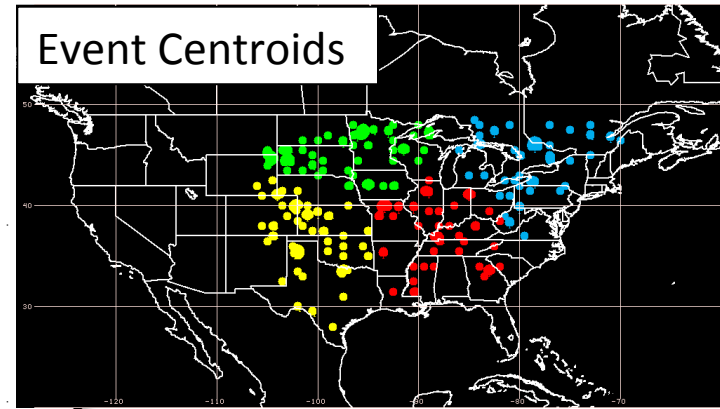
Events during
Sept. – May
projected onto
phase diagram

Each point is an
average of the
PCs for
3–7 days prior
to the event

48 events

Eastern U.S. – Southeast Cluster (4)

** X's below are colored by quadrant of the phase diagram **



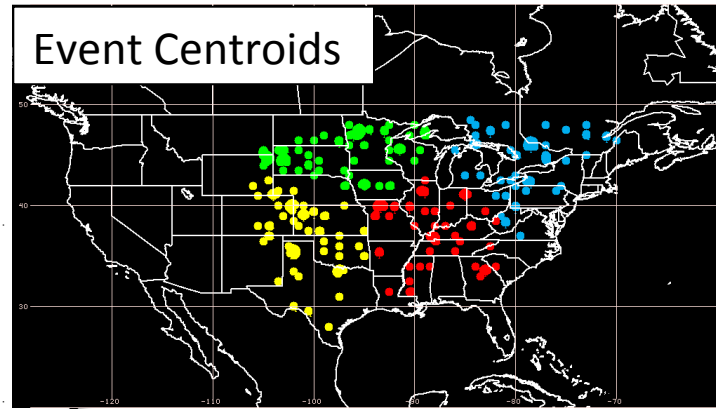
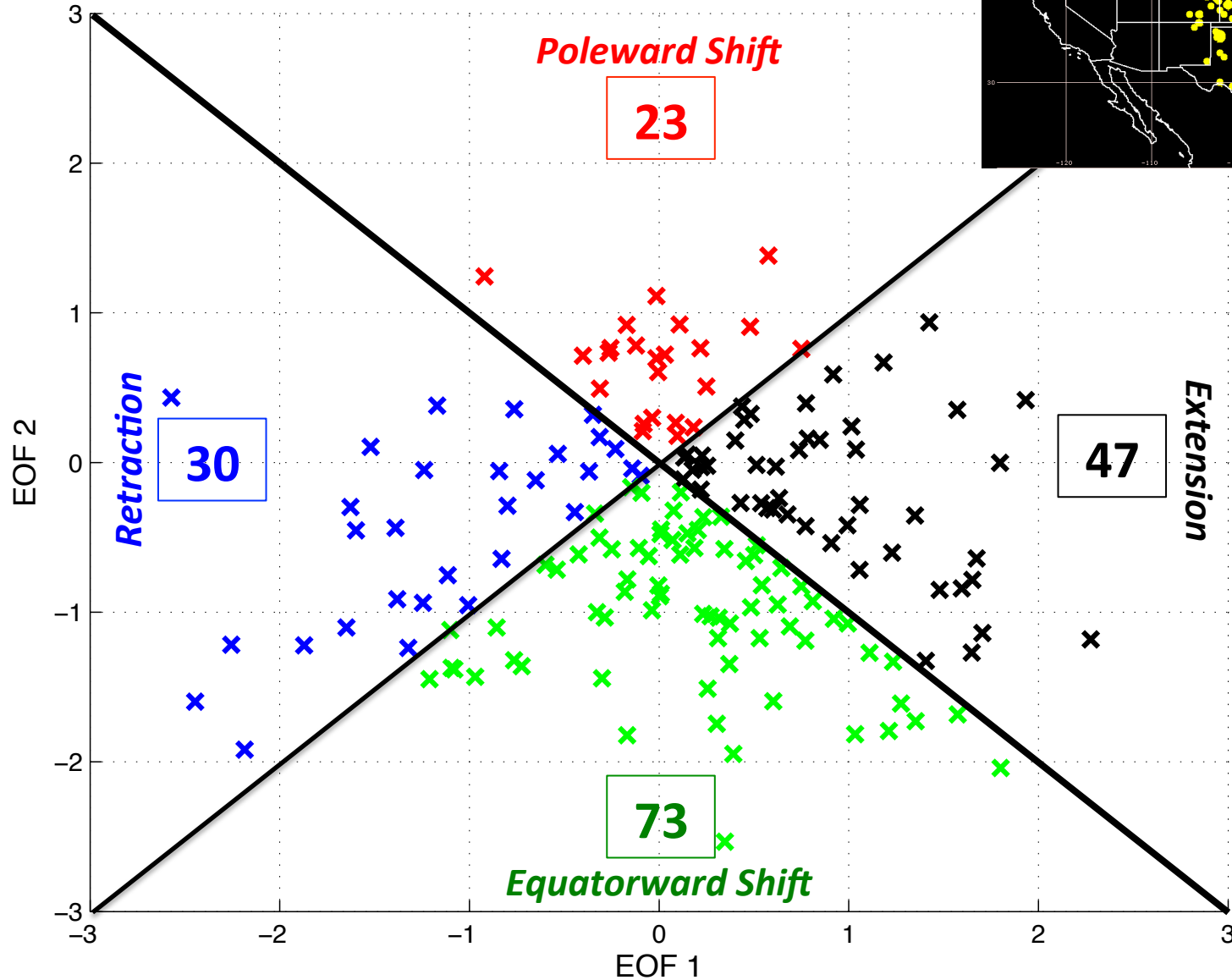
Events during
Sept. – May
projected onto
phase diagram

Each point is an
average of the
PCs for
3–7 days prior
to the event

42 events

Eastern U.S. – All Events

**** X's below are colored by quadrant of the phase diagram****



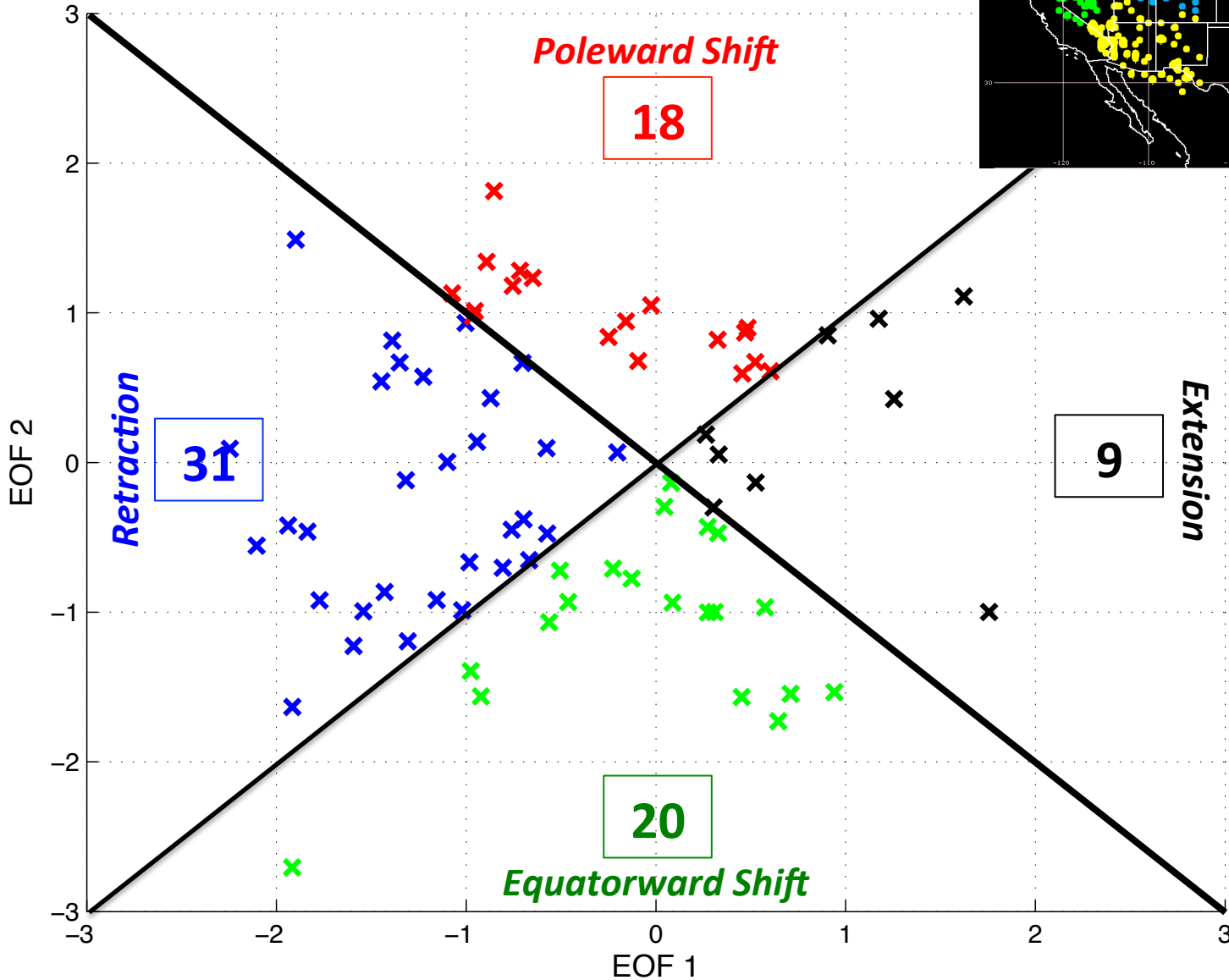
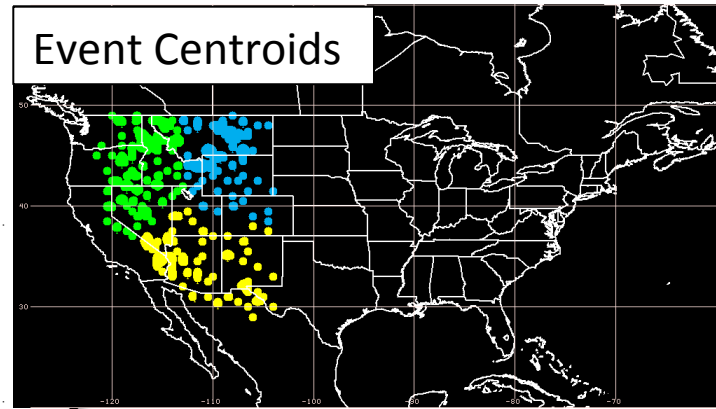
**Events during
Sept. – May
projected onto
phase diagram**

**Each point is an
average of the
PCs for
3–7 days prior
to the event**

173 events

Western U.S. – Pacific NW Cluster (1)

** X's below are colored by quadrant of the phase diagram **



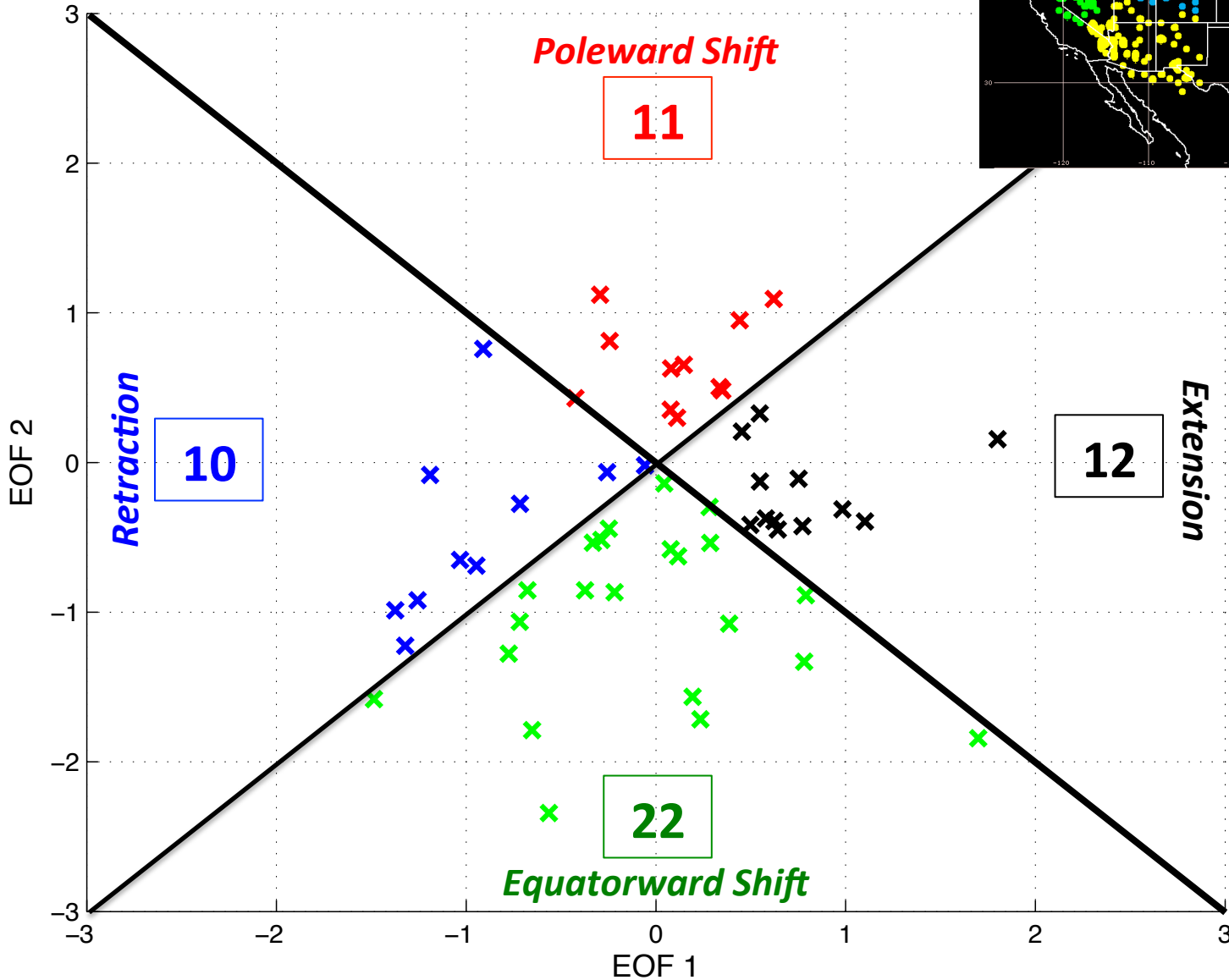
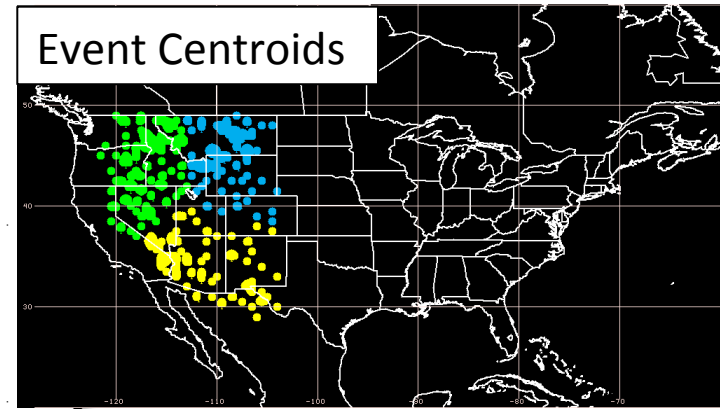
Events during Sept. – May projected onto phase diagram

Each point is an average of the PCs for 3–7 days prior to the event

78 events

Western U.S. – N. Rockies Cluster (2)

**** X's below are colored by quadrant of the phase diagram ****



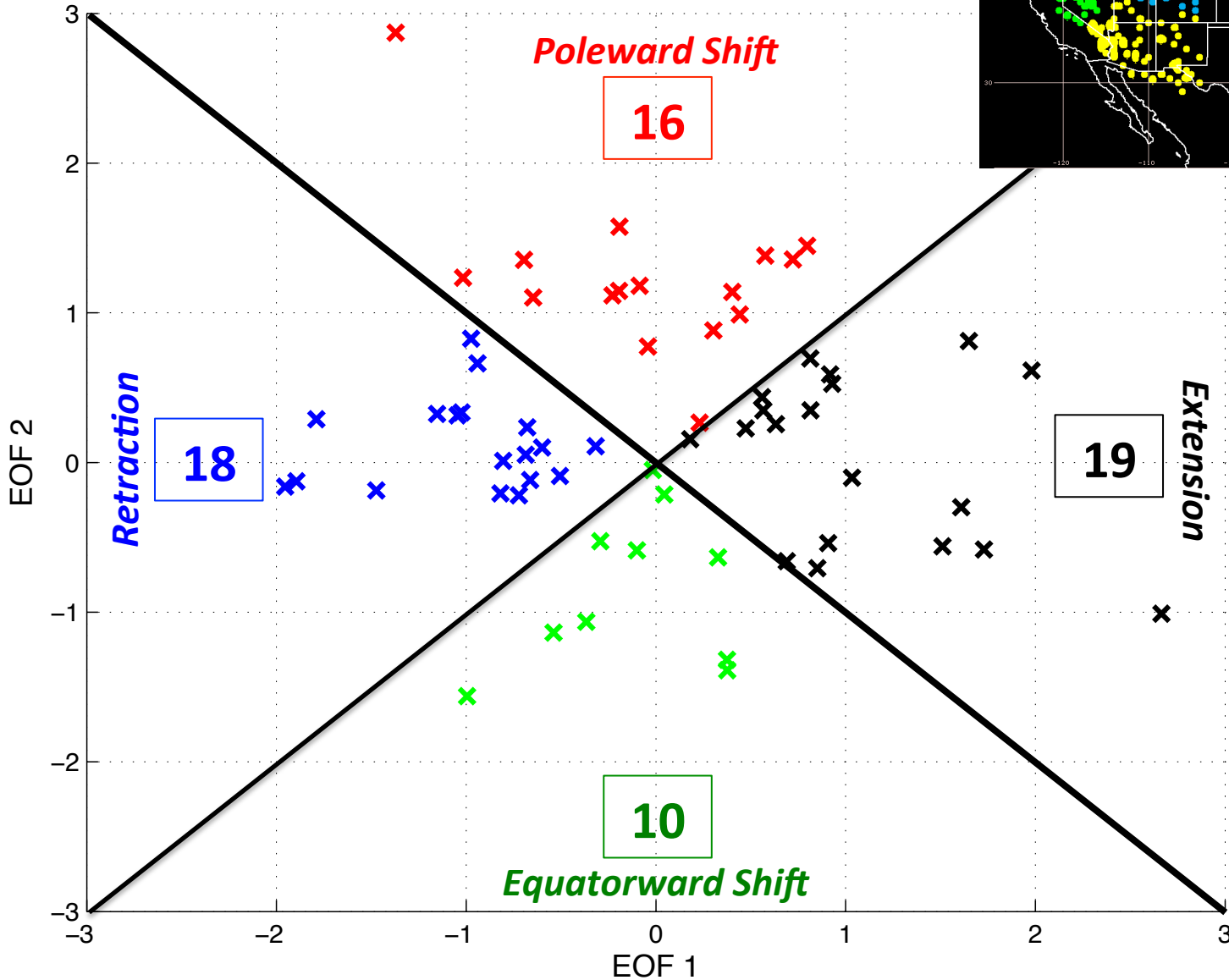
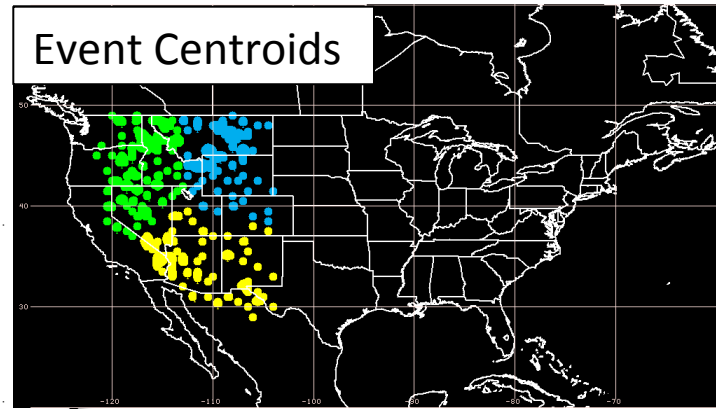
Events during
Sept. – May
projected onto
phase diagram

Each point is an
average of the
PCs for
3–7 days prior
to the event

55 events

Western U.S. – Southwest Cluster (3)

** X's below are colored by quadrant of the phase diagram **



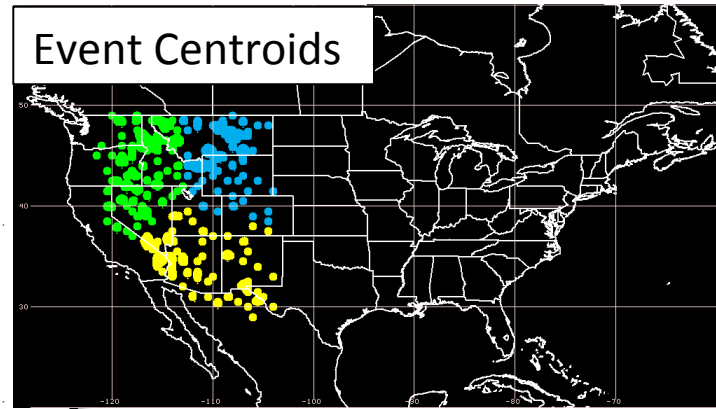
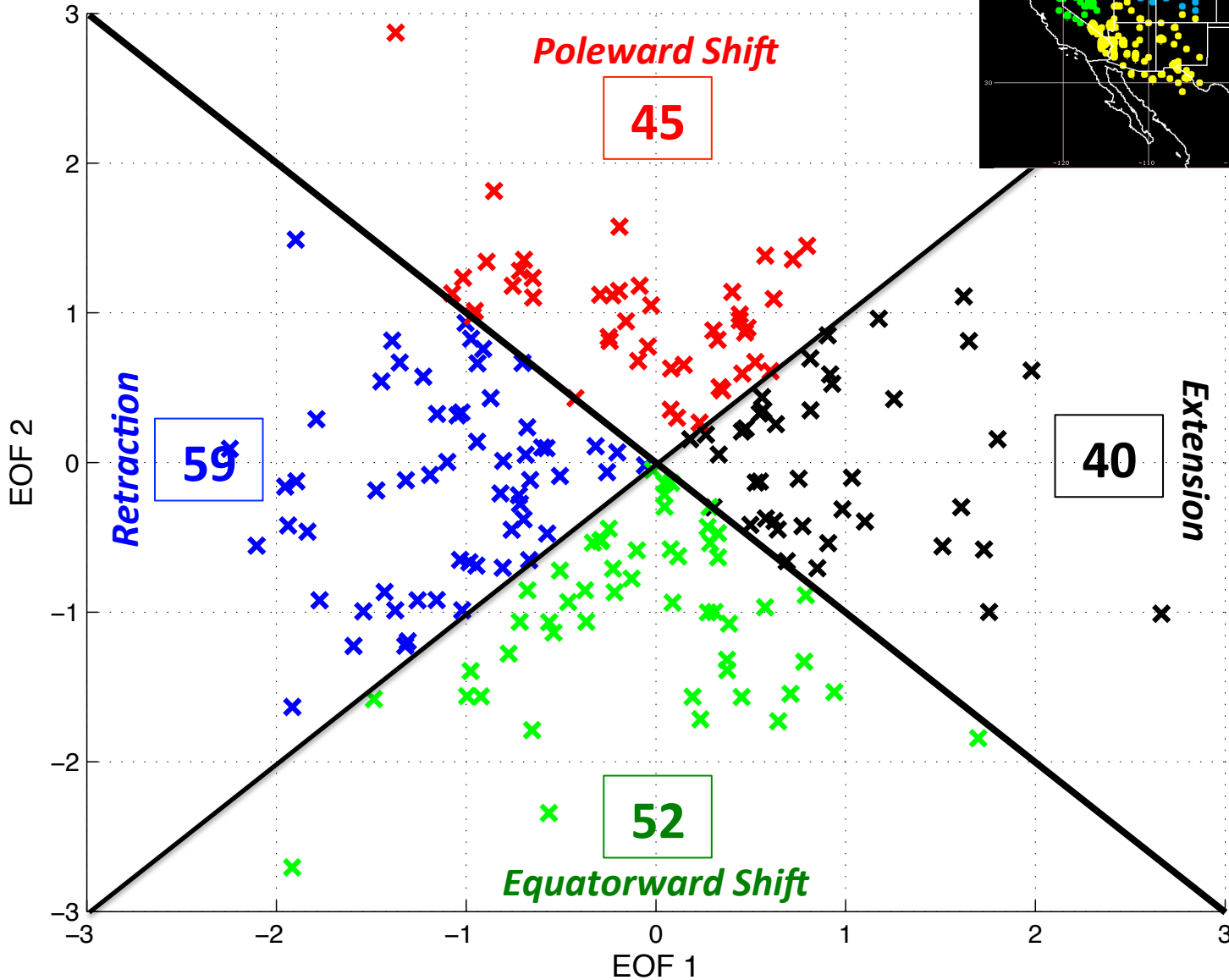
Events during
Sept. – May
projected onto
phase diagram

Each point is an
average of the
PCs for
3–7 days prior
to the event

63 events

Western U.S. – All Events

**** X's below are colored by quadrant of the phase diagram ****



**Events during
Sept. – May
projected onto
phase diagram**

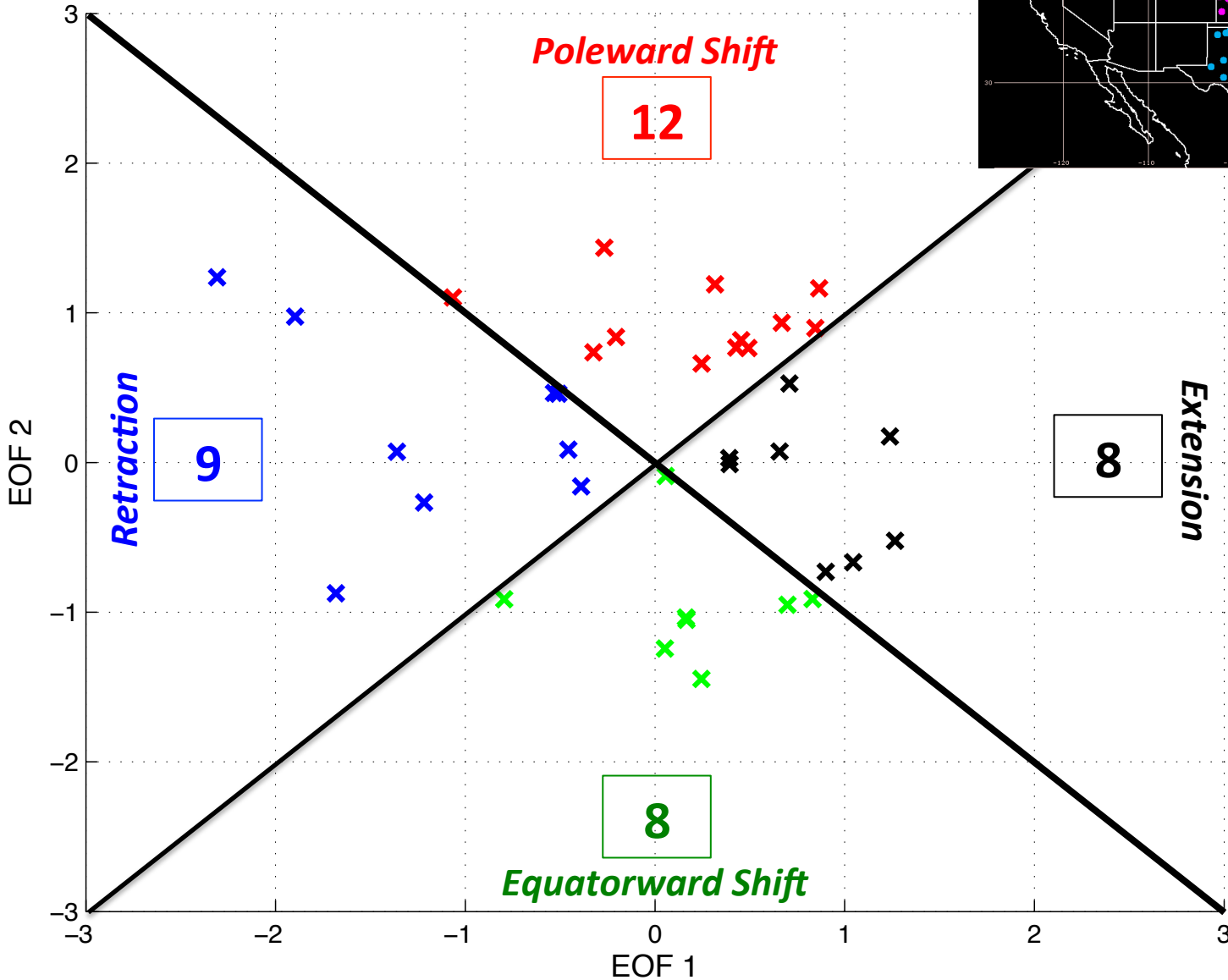
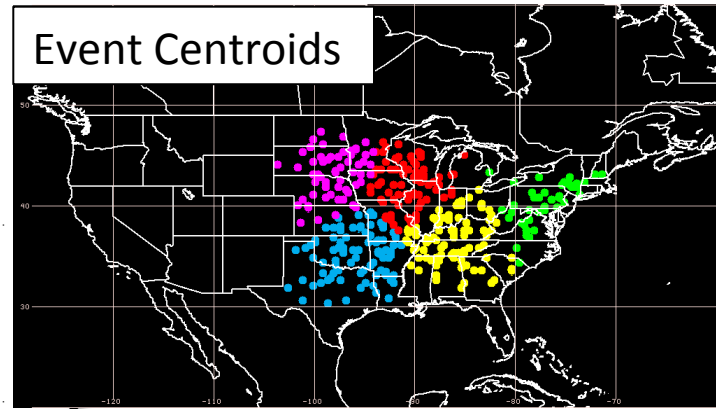
**Each point is an
average of the
PCs for
3–7 days prior
to the event**

196 events

**EXTREME
PRECIP.
EVENTS**

Eastern U.S. – Northeast Cluster (1)

** X's below are colored by quadrant of the phase diagram **



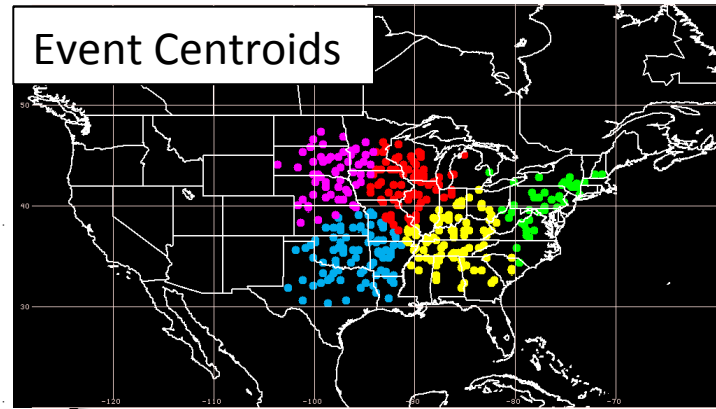
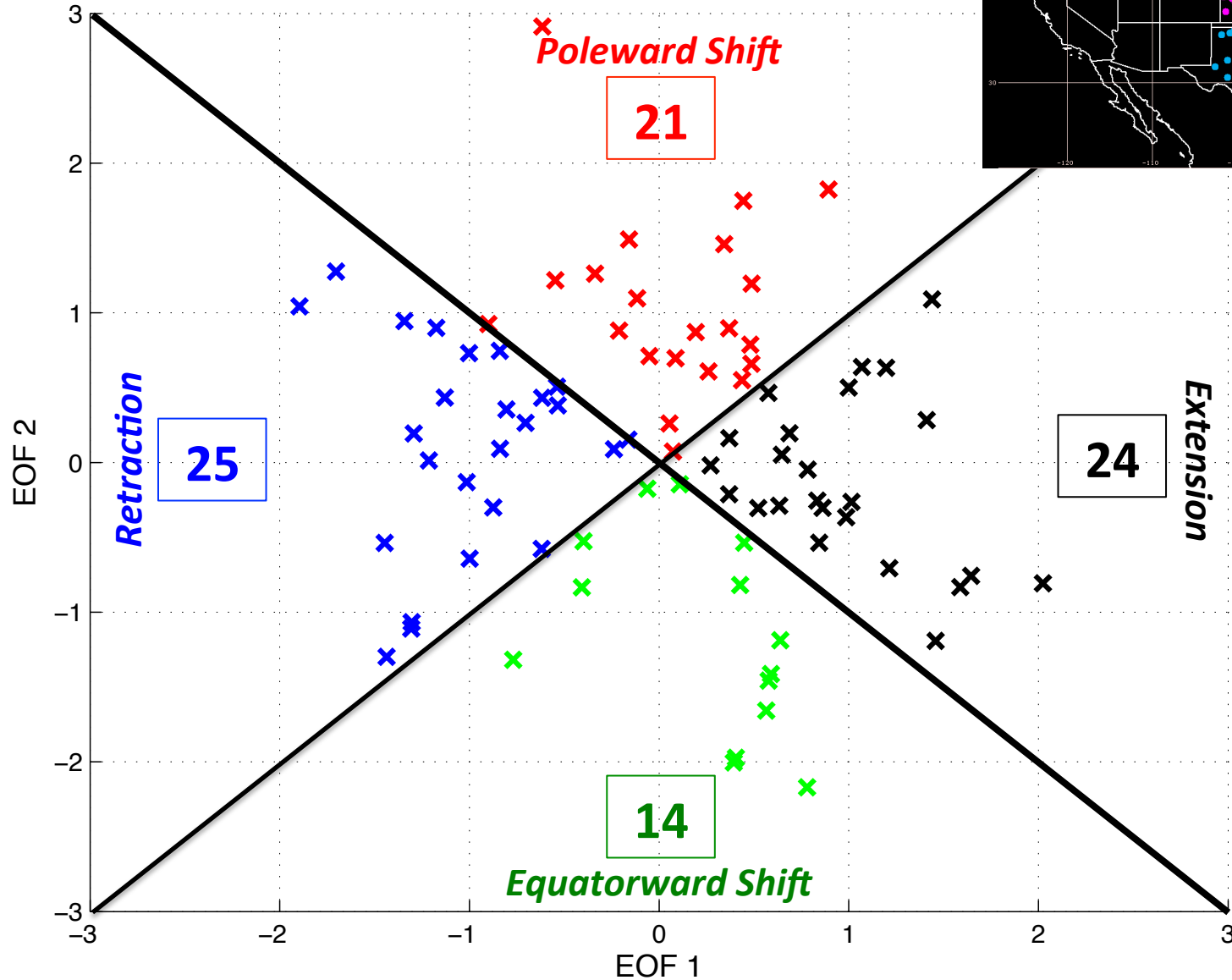
Events during
Sept. – May
projected onto
phase diagram

Each point is an
average of the
PCs for
3–7 days prior
to the event

37 events

Eastern U.S. – S. Plains Cluster (2)

** X's below are colored by quadrant of the phase diagram **



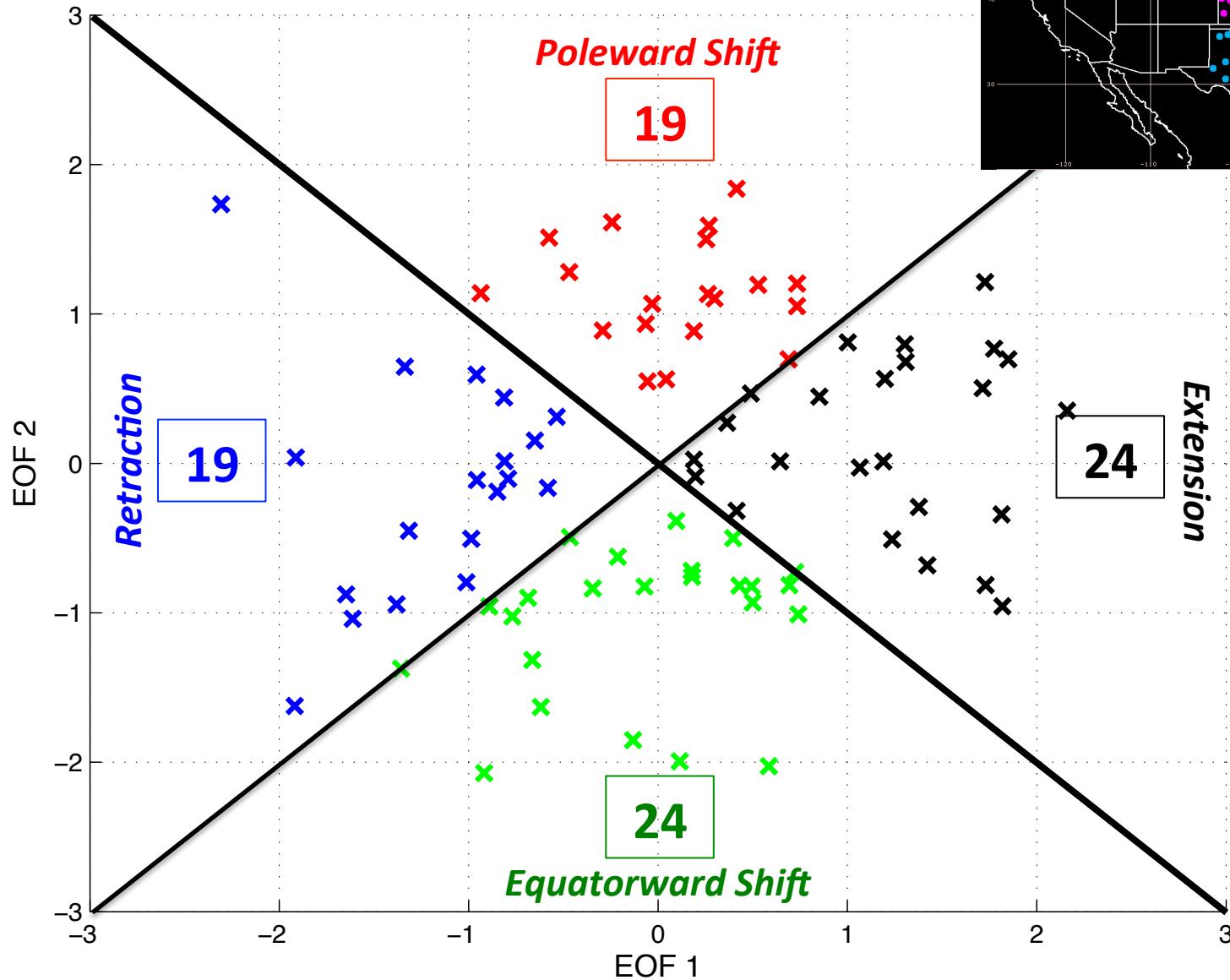
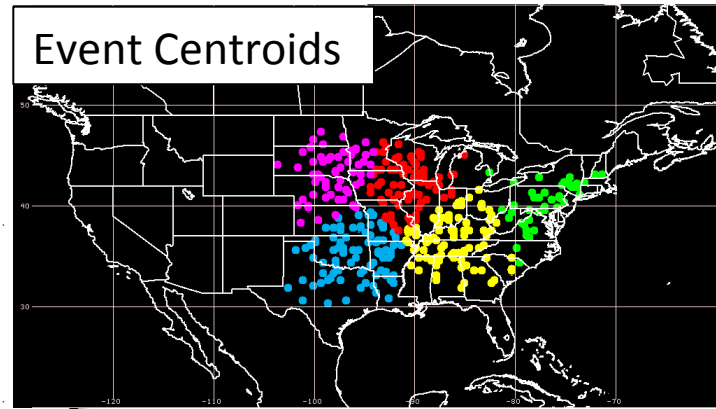
Events during
Sept. – May
projected onto
phase diagram

Each point is an
average of the
PCs for
3–7 days prior
to the event

84 events

Eastern U.S. – Midwest Cluster (3)

**** X's below are colored by quadrant of the phase diagram****



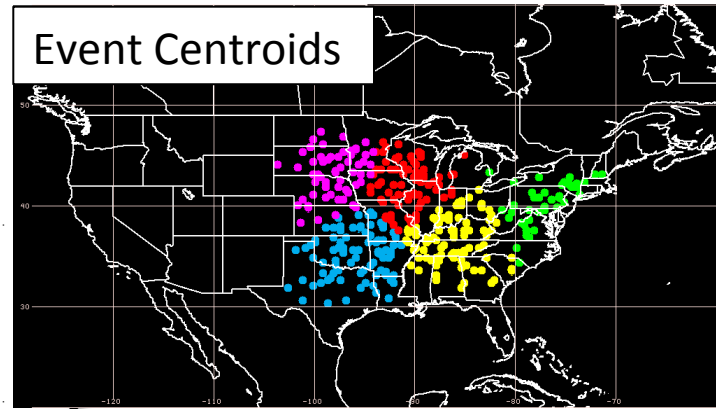
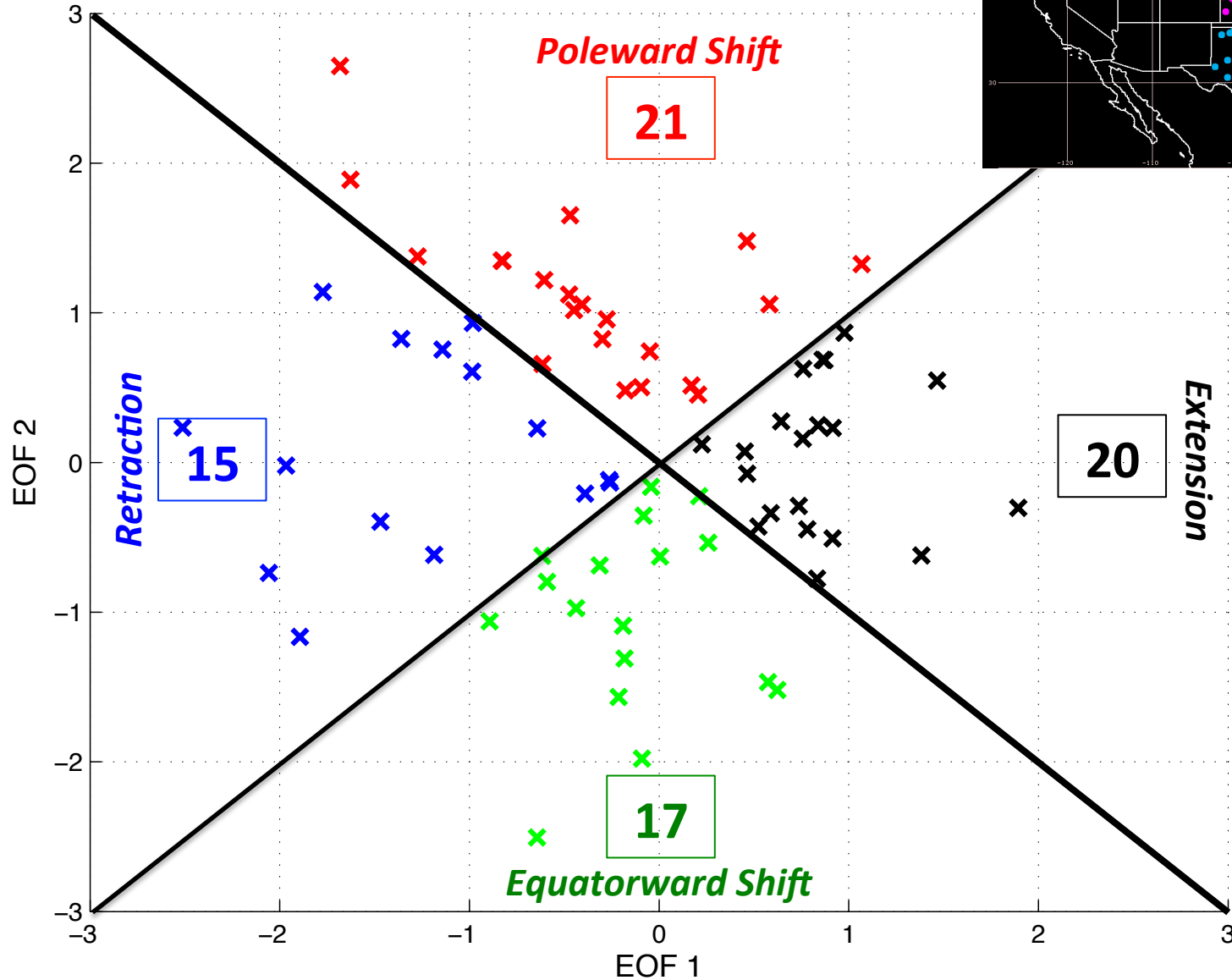
Events during
Sept. – May
projected onto
phase diagram

Each point is an
average of the
PCs for
3–7 days prior
to the event

86 events

Eastern U.S. – Southeast Cluster (4)

** X's below are colored by quadrant of the phase diagram **



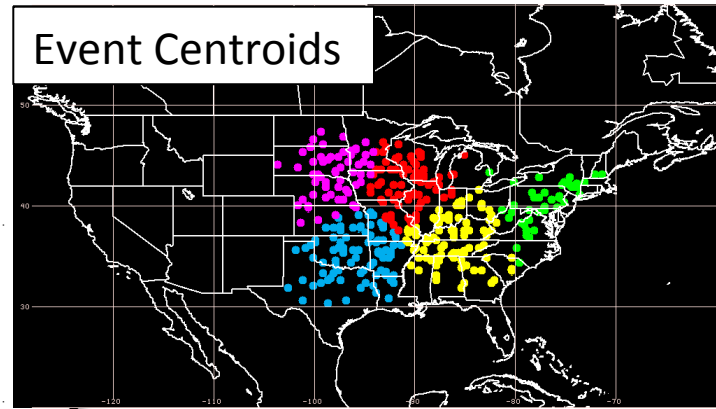
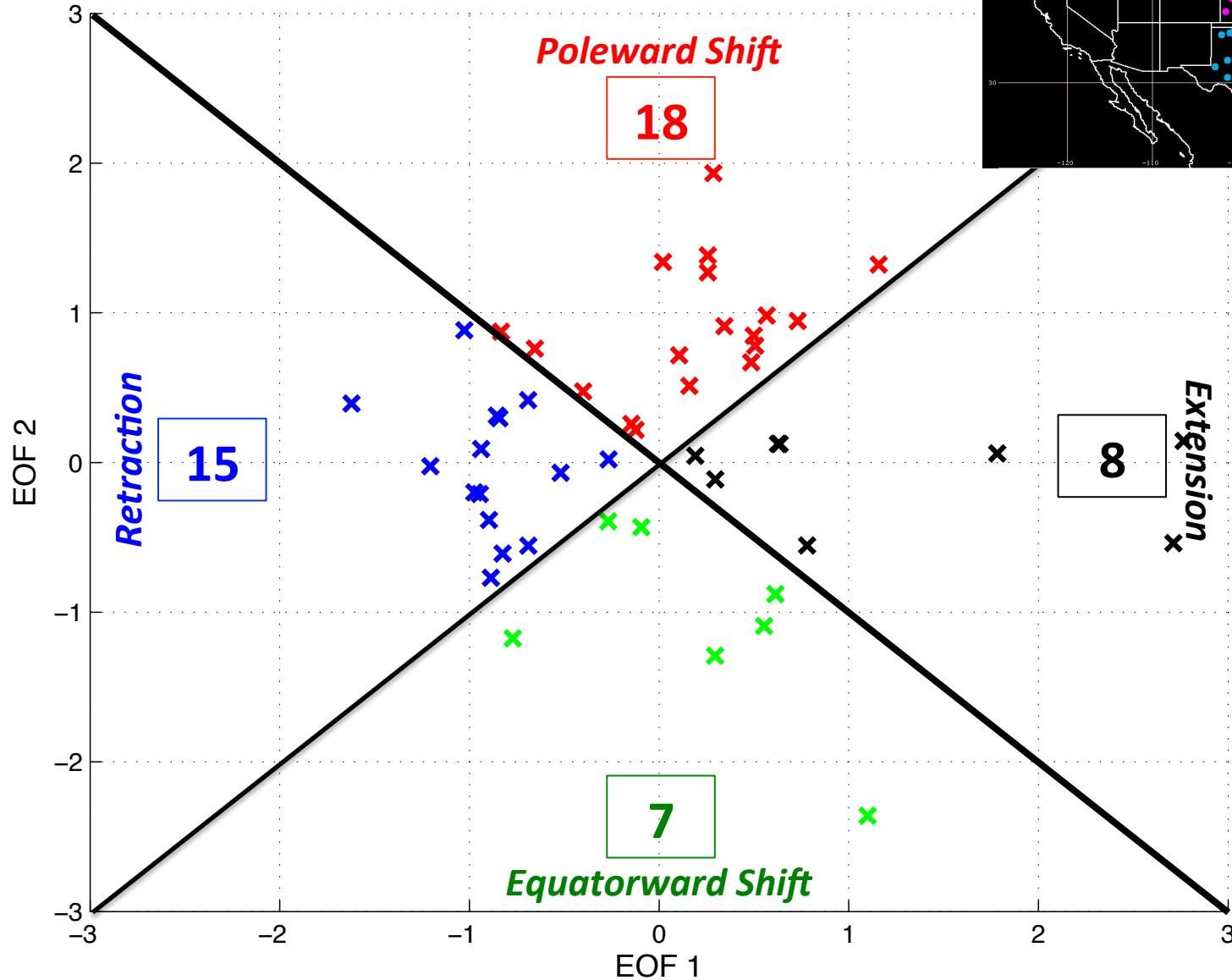
Events during
Sept. – May
projected onto
phase diagram

Each point is an
average of the
PCs for
3–7 days prior
to the event

73 events

Eastern U.S. – N. Plains Cluster (5)

** X's below are colored by quadrant of the phase diagram **



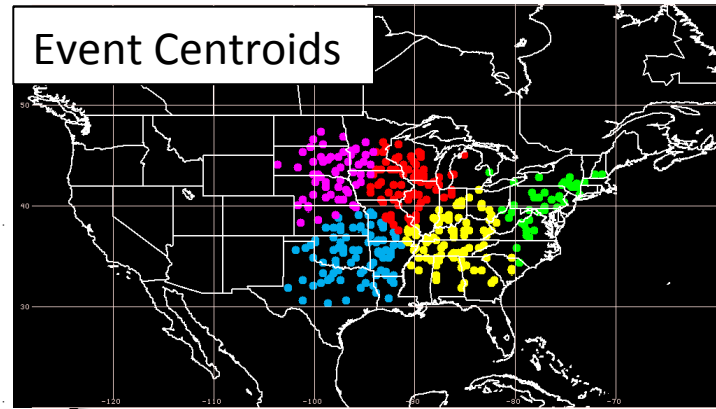
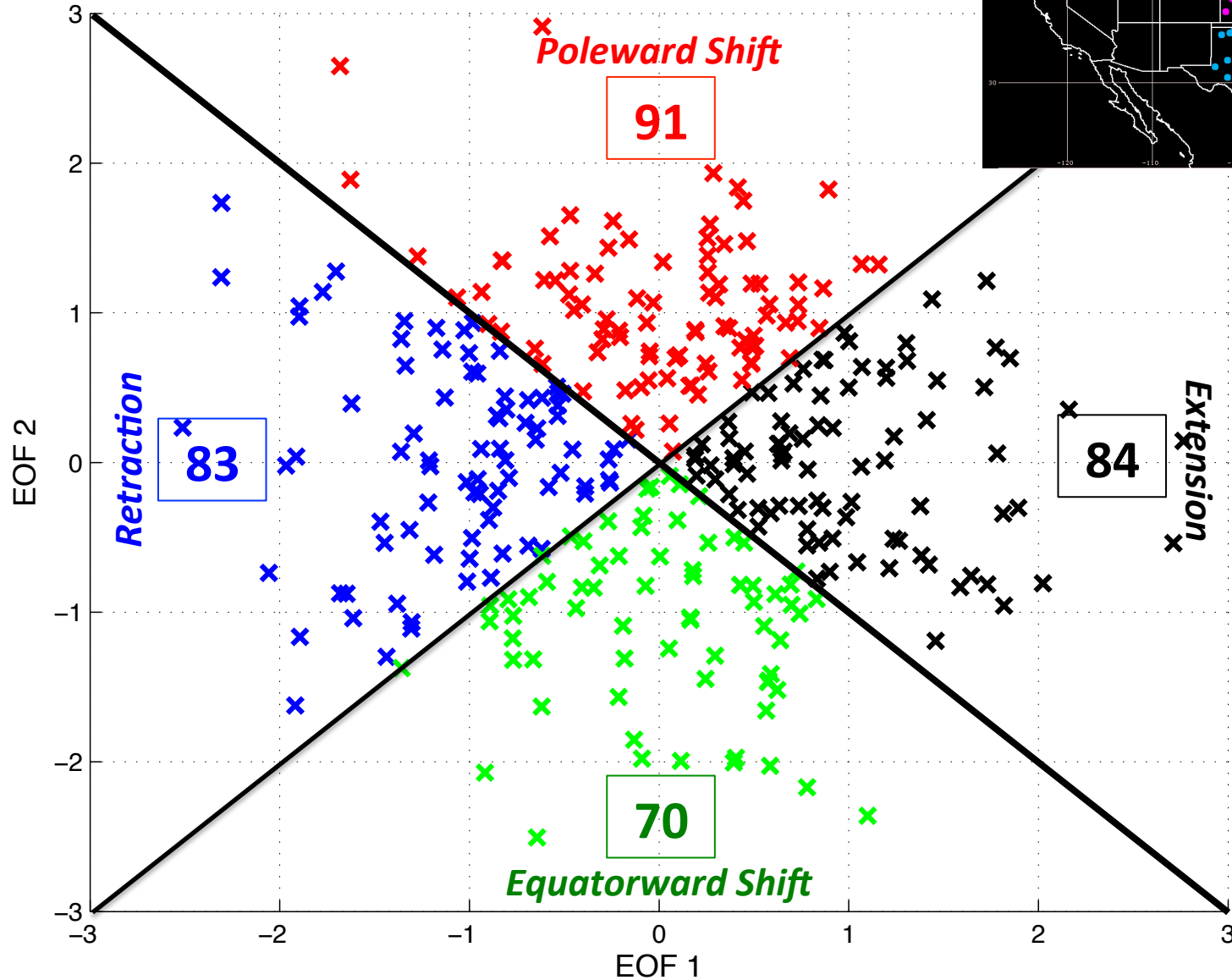
Events during
Sept. – May
projected onto
phase diagram

Each point is an
average of the
PCs for
3–7 days prior
to the event

48 events

Eastern U.S. – All Events

**** X's below are colored by quadrant of the phase diagram****



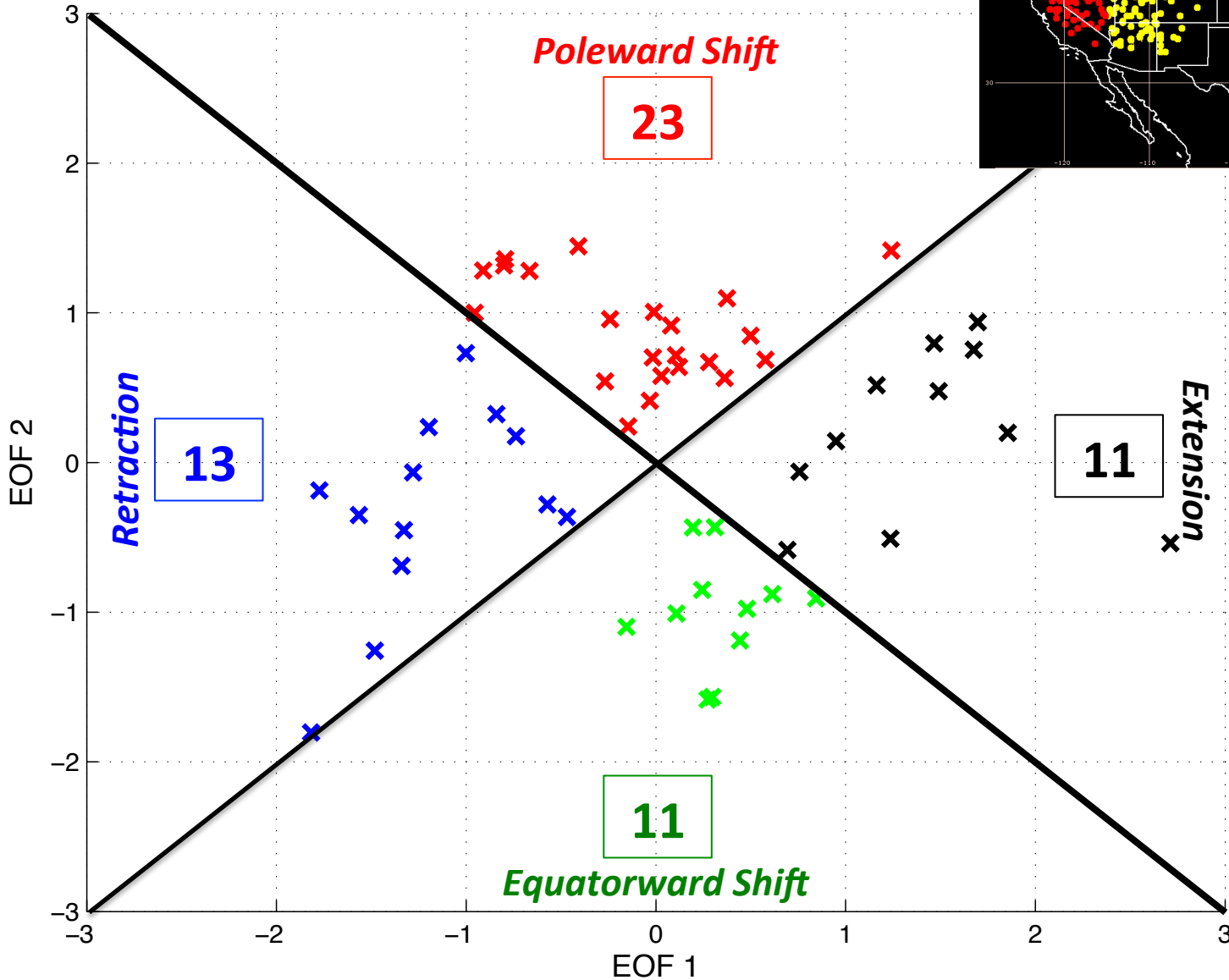
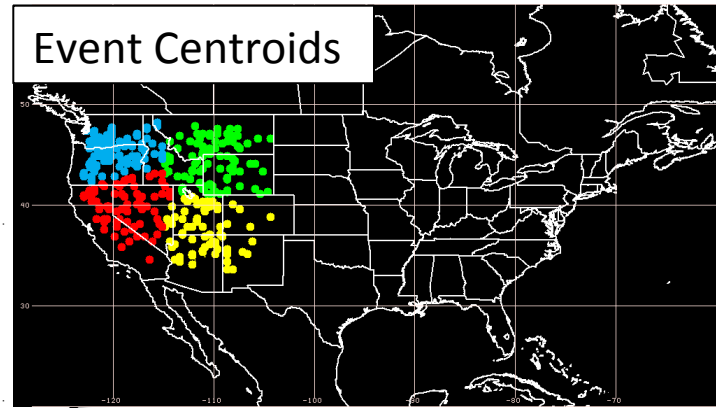
**Events during
Sept. – May
projected onto
phase diagram**

**Each point is an
average of the
PCs for
3–7 days prior
to the event**

328 events

Western U.S. – N. Rockies Cluster (1)

** X's below are colored by quadrant of the phase diagram **



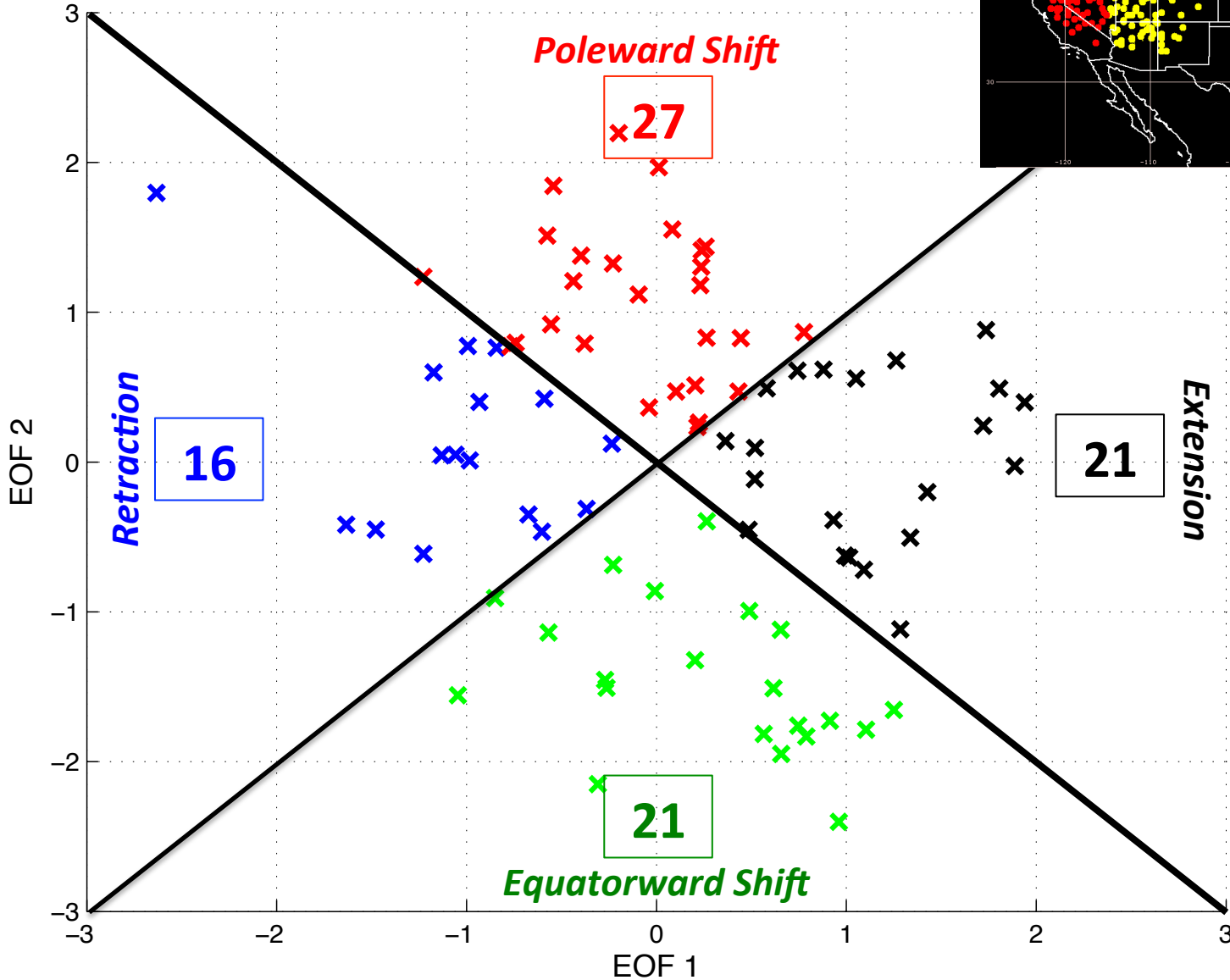
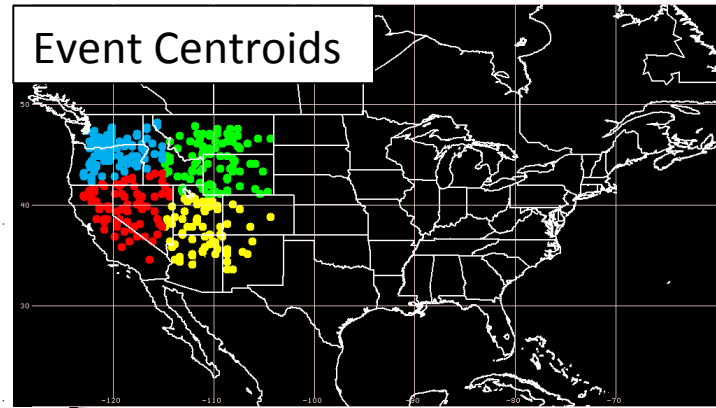
Events during
Sept. – May
projected onto
phase diagram

Each point is an
average of the
PCs for
3–7 days prior
to the event

58 events

Western U.S. – Pacific NW Cluster (2)

** X's below are colored by quadrant of the phase diagram **



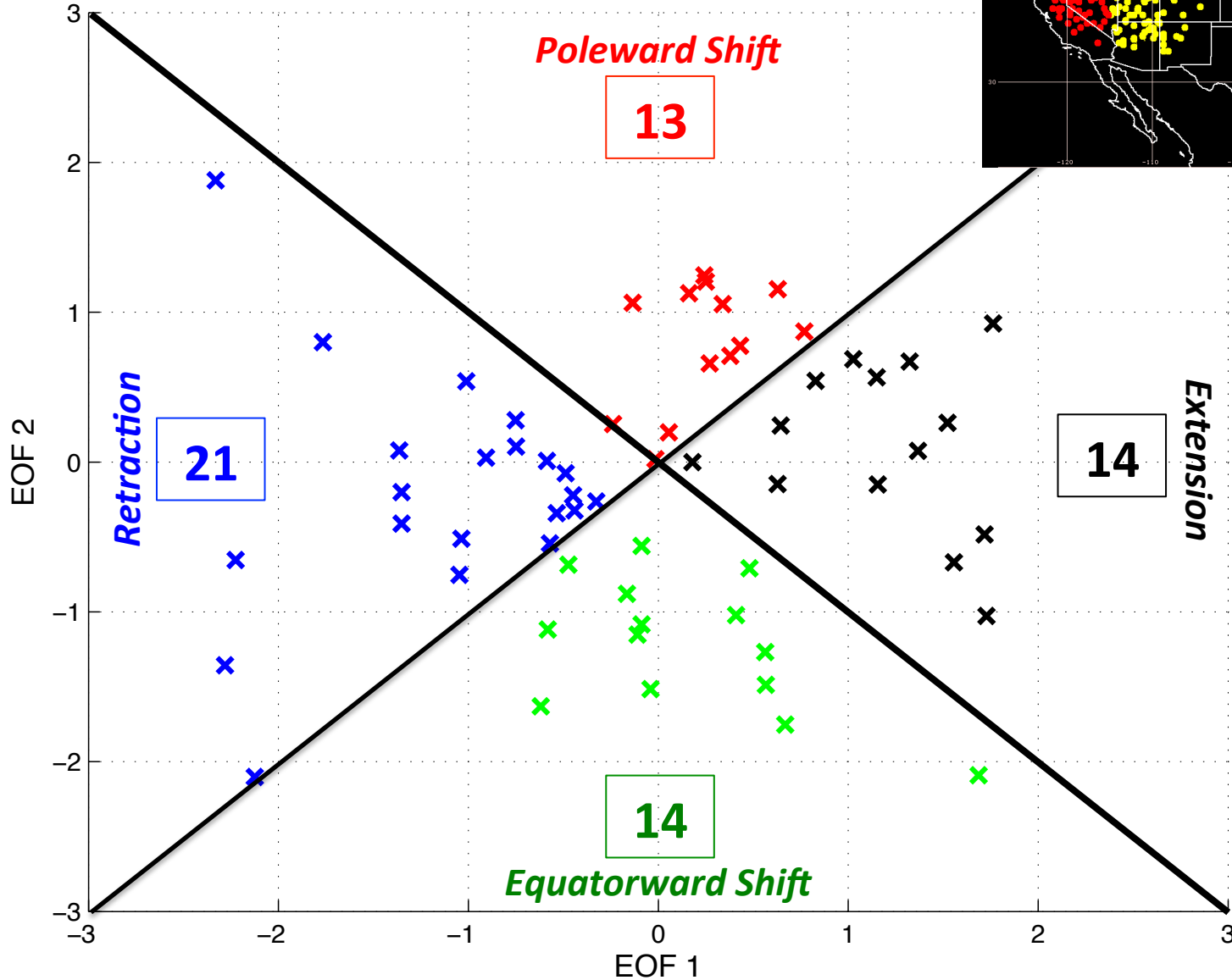
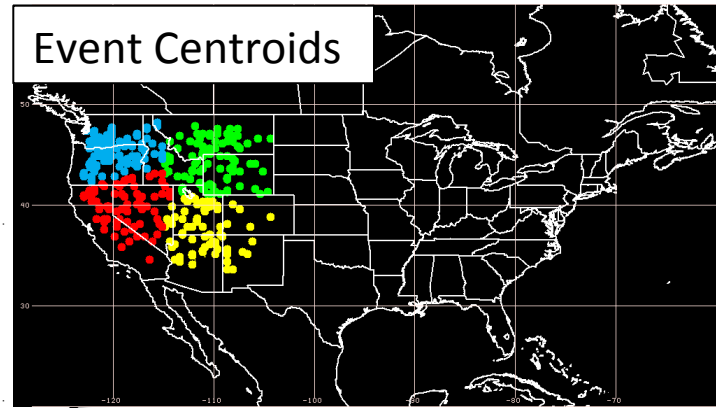
Events during
Sept. – May
projected onto
phase diagram

Each point is an
average of the
PCs for
3–7 days prior
to the event

85 events

Western U.S. – S. Rockies Cluster (3)

** X's below are colored by quadrant of the phase diagram **



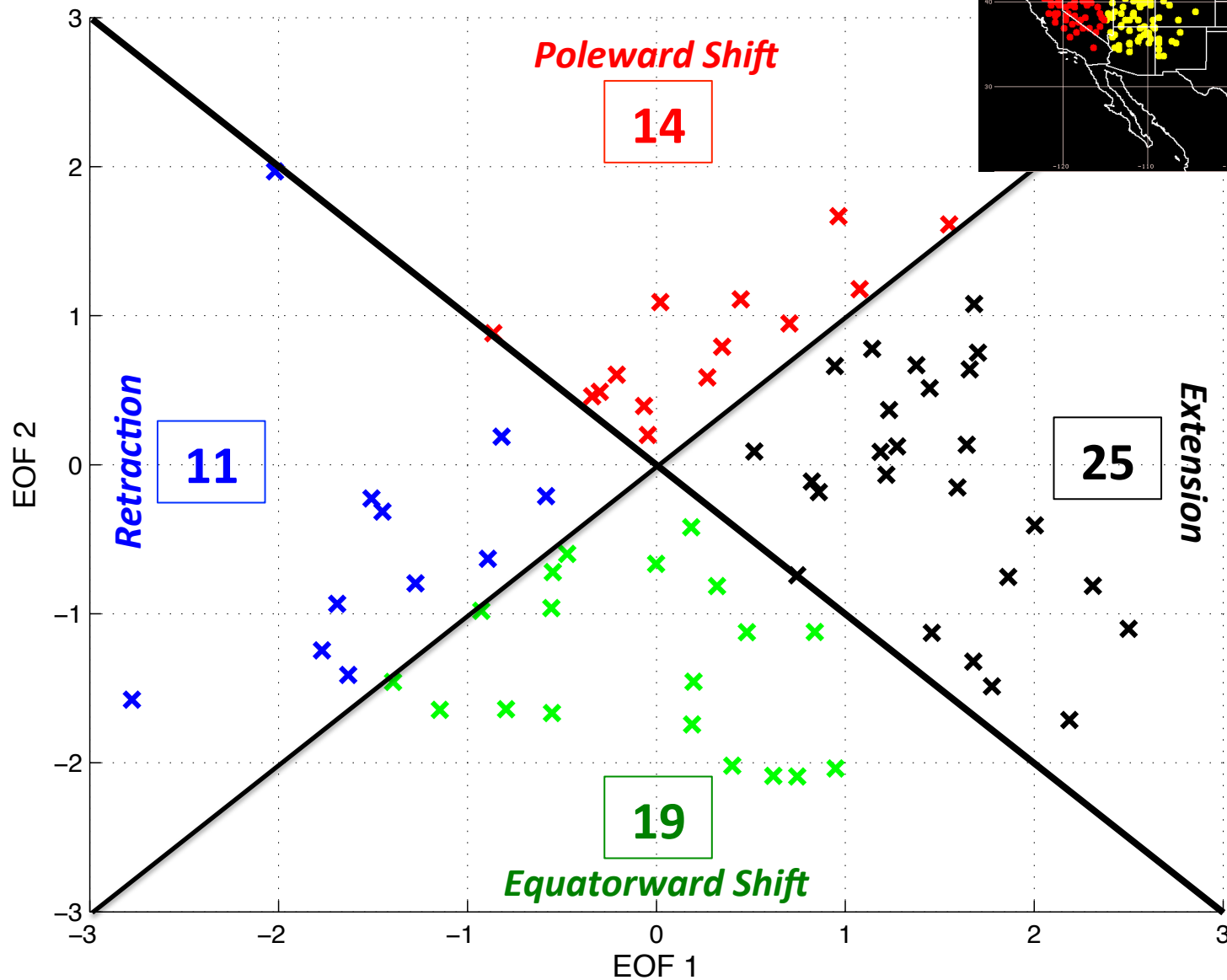
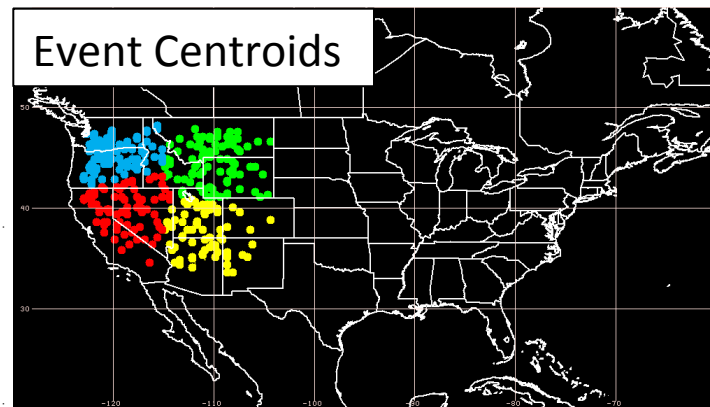
Events during
Sept. – May
projected onto
phase diagram

Each point is an
average of the
PCs for
3–7 days prior
to the event

62 events

Western U.S. – CA/NV Cluster (4)

**** X's below are colored by quadrant of the phase diagram****



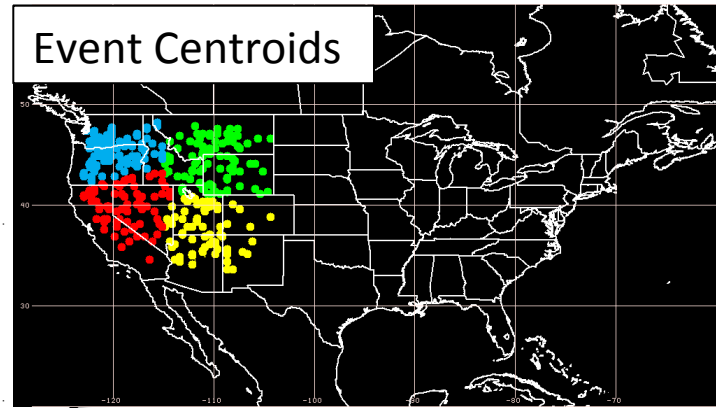
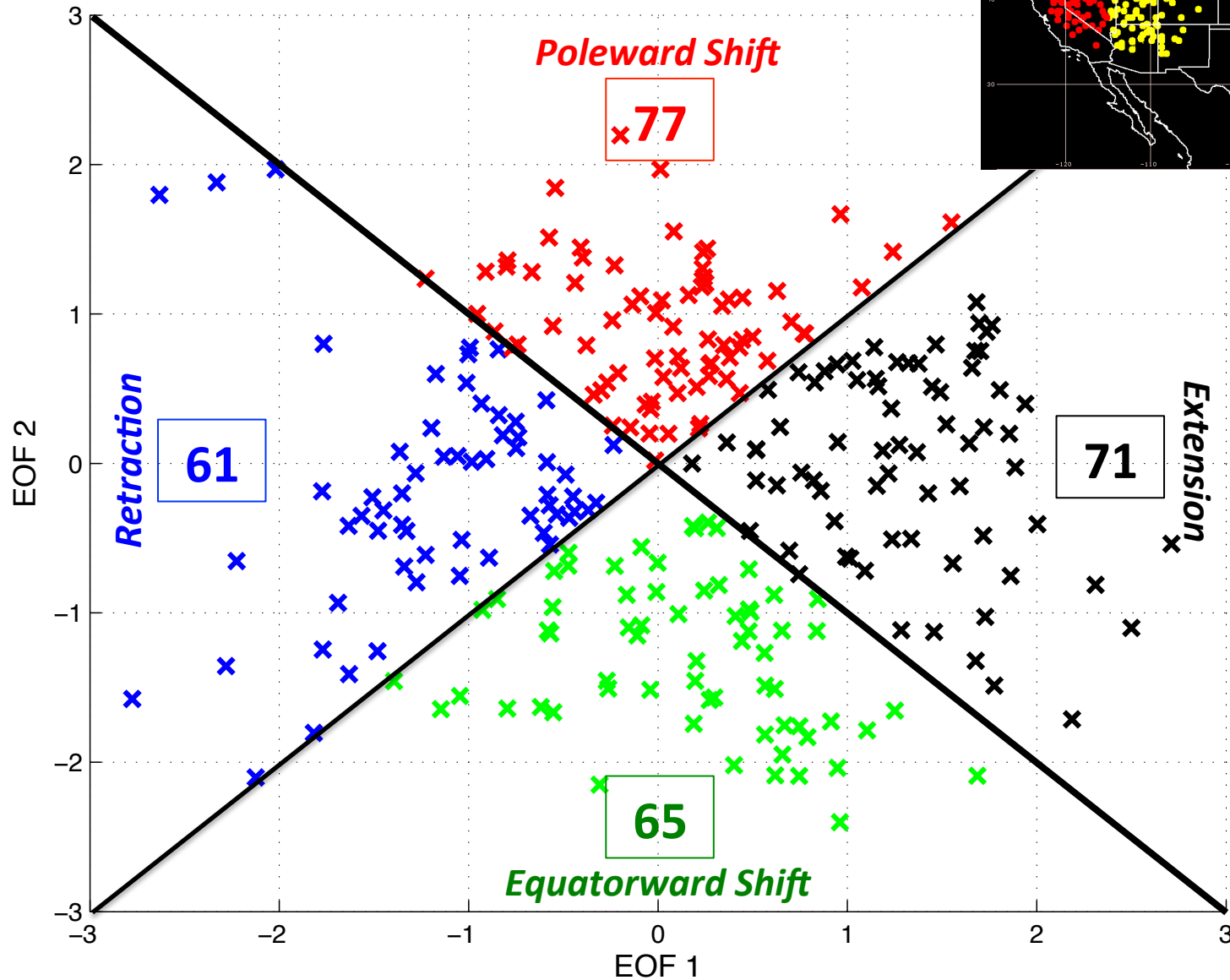
Events during
Sept. – May
projected onto
phase diagram

Each point is an
average of the
PCs for
3–7 days prior
to the event

69 events

Western U.S. – All Events

** X's below are colored by quadrant of the phase diagram**



Events during
Sept. – May
projected onto
phase diagram

Each point is an
average of the
PCs for
3–7 days prior
to the event

274 events