



Supplemental Information for the
Technical Support Document (TSD)
Revised Recommendations for Visibility Progress Tracking
Metrics for the Regional Haze Program

U.S. Environmental Protection Agency
Office of Air Quality Planning and Standards
Air Quality Assessment Division
Research Triangle Park, NC 27711
July 2016

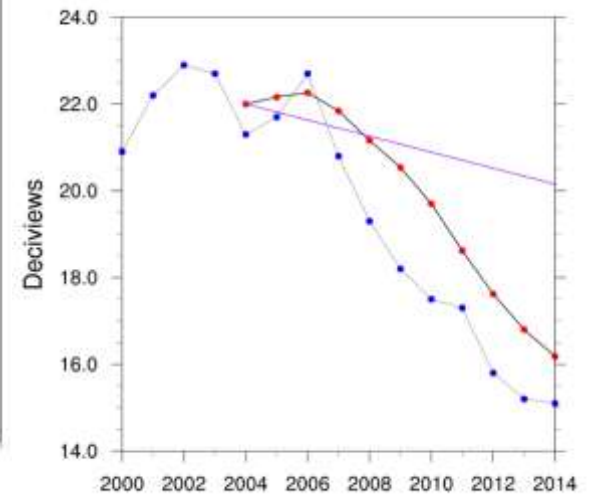
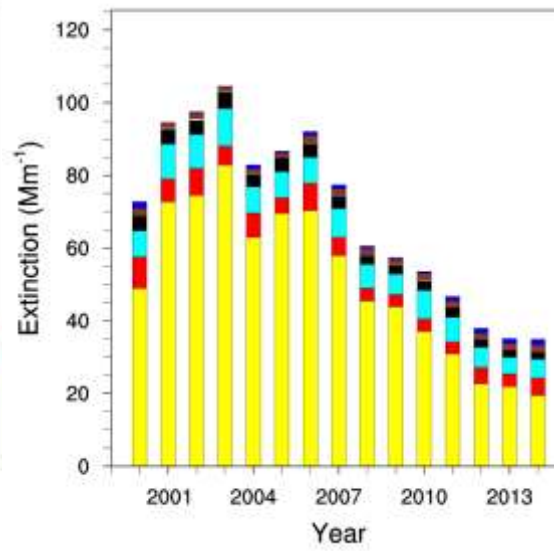
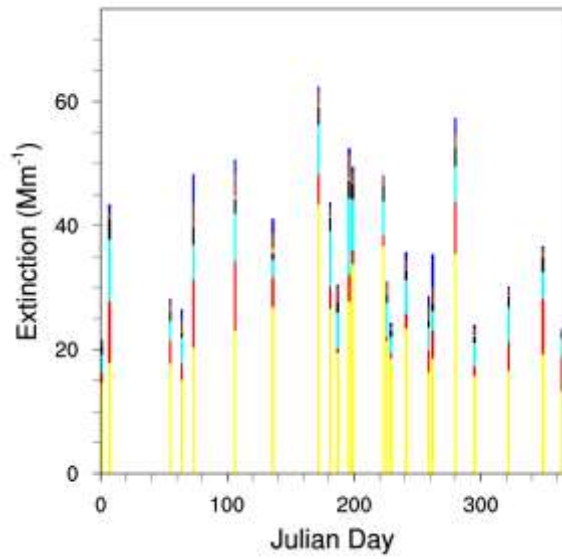
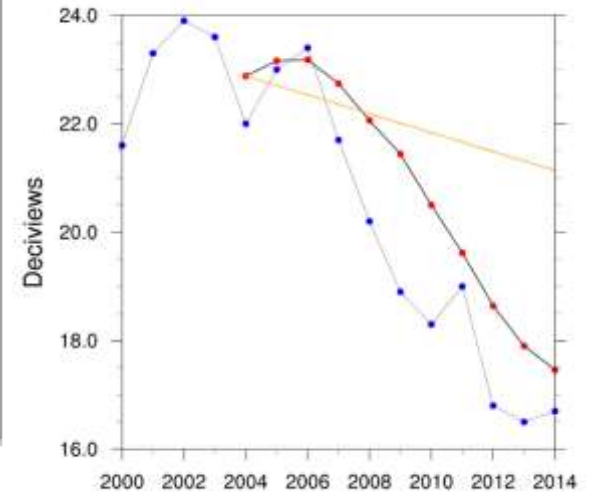
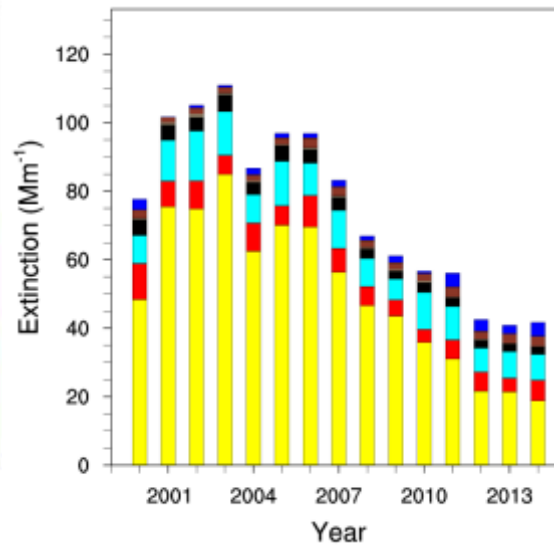
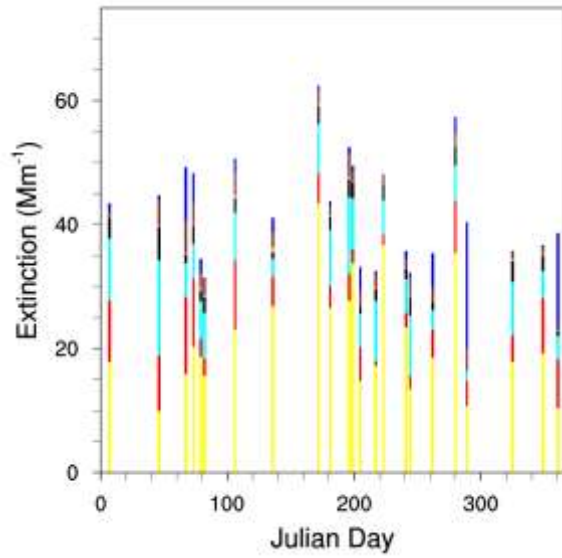
Table of Contents

Appendix G: Extinction and glidepath graphs for all sites	1
Appendix H: Seasonal anthropogenic extinction budgets for each site	111
Appendix I: Trends in clearest days and estimated natural conditions by site, 5-year average extinction budgets	141
Appendix J: Seasonality in clearest days and estimated natural conditions by site, 5-year average extinction budgets (2010-2014)	168

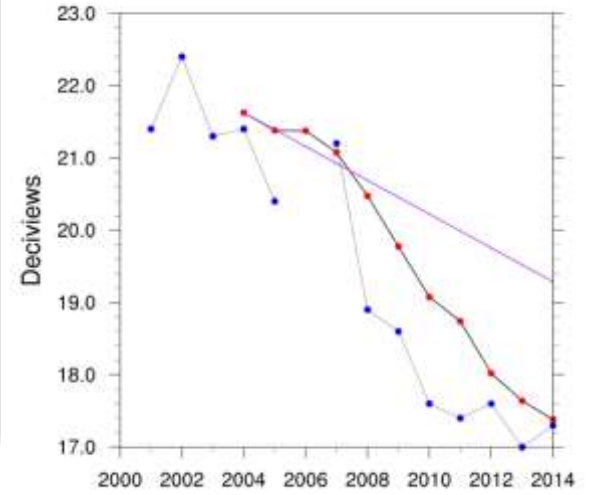
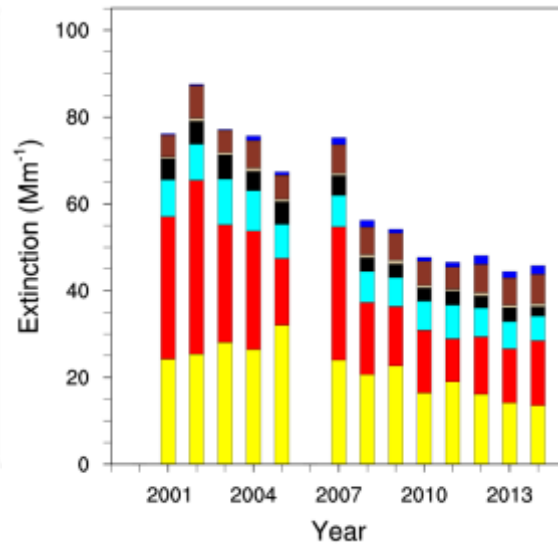
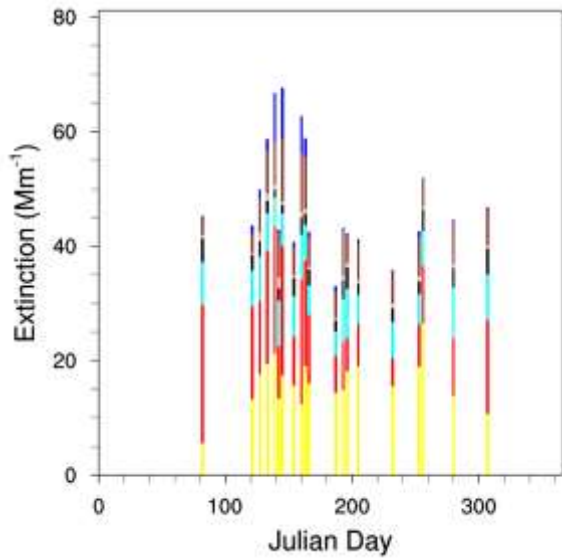
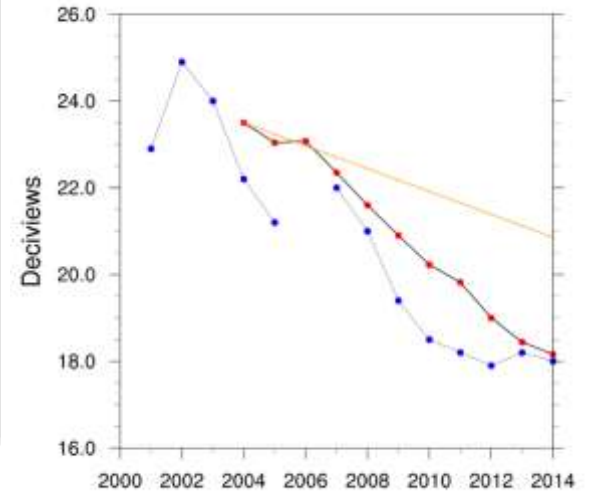
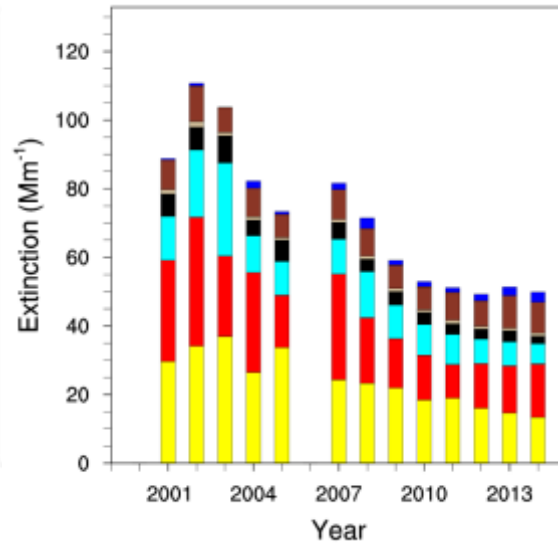
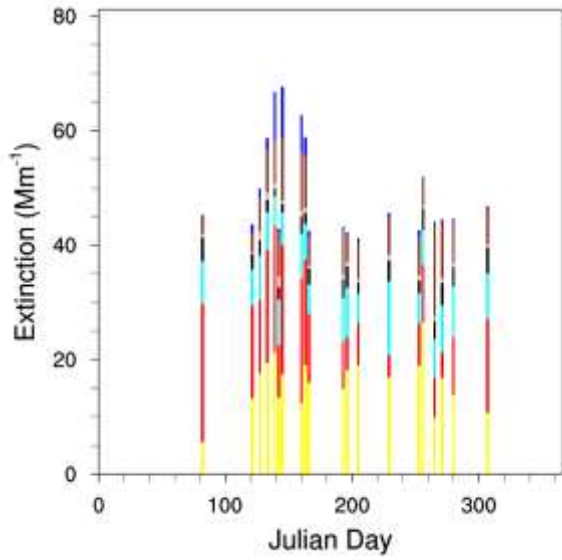
Appendix G: Extinction and glidepath graphs for all sites

For each of the following sites, the top row represents graphs for the first implementation period's approach and the bottom row represents graphs for the updated approach. The left column gives the total extinction budget for days classified as the 20% haziest (top) and 20% most impaired (bottom) in 2012 similar to Figure 6. The middle column gives the time series from 2000-2014 of the annual average total extinction budget for days classified as the 20% haziest (top) and 20% most impaired (bottom) similar to the bottom row of Figure 15.

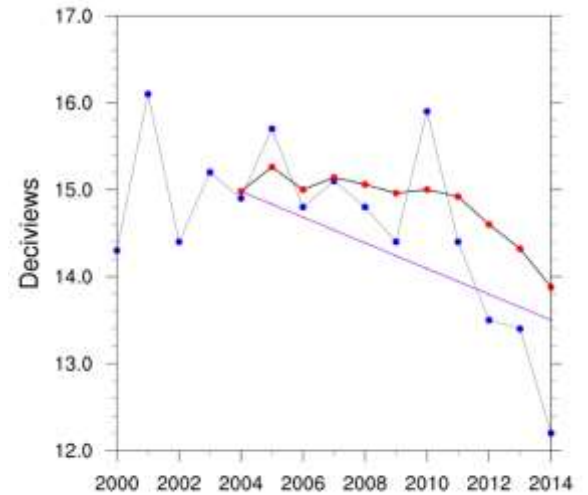
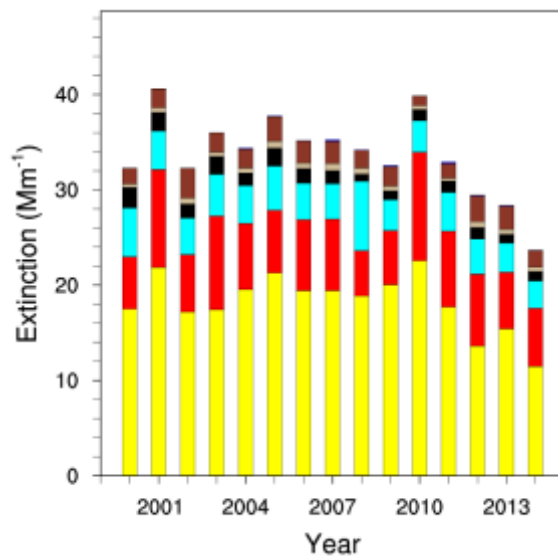
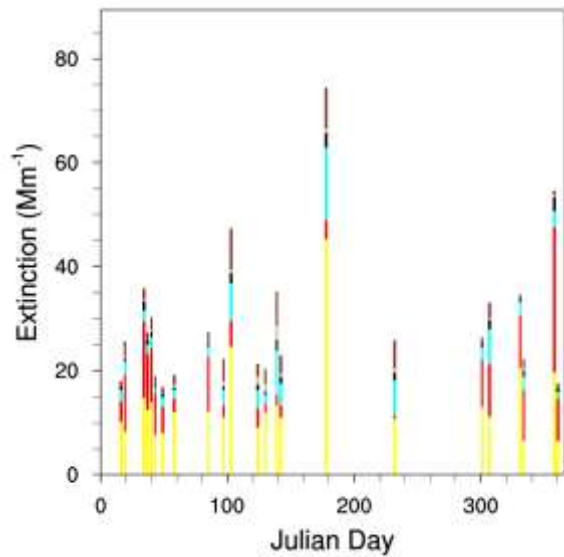
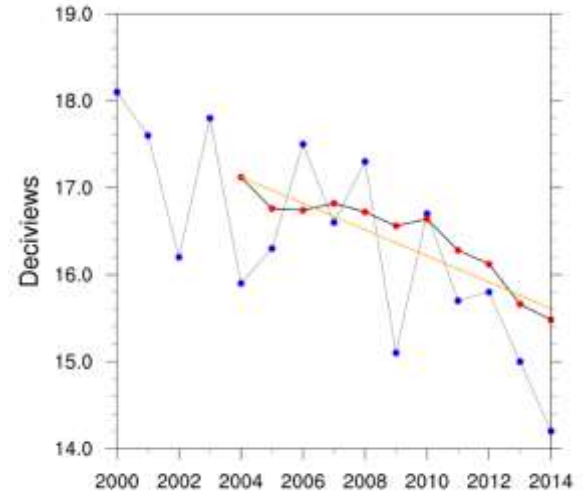
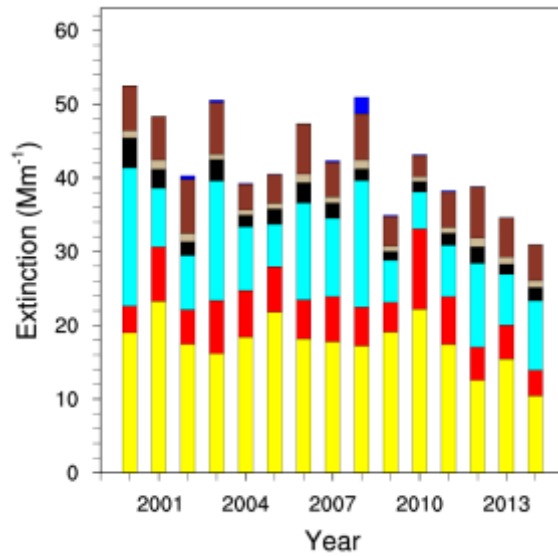
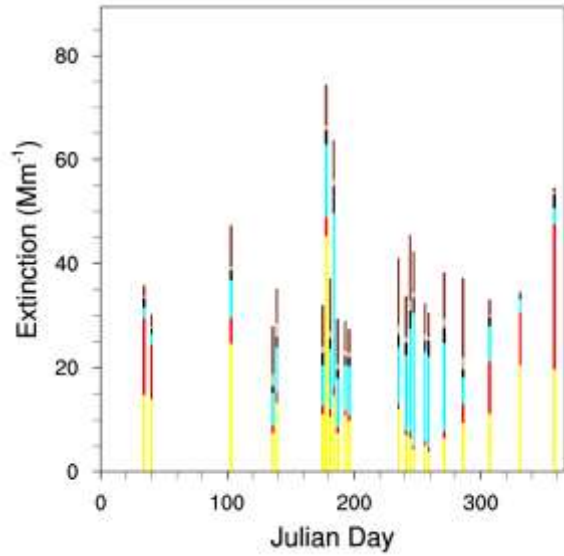
Acadia National Park, ME



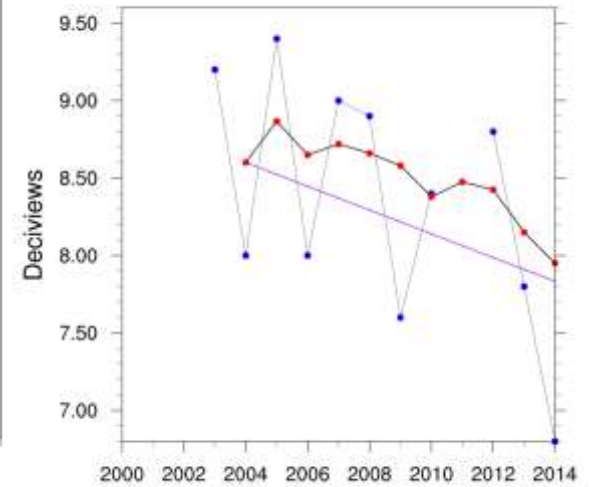
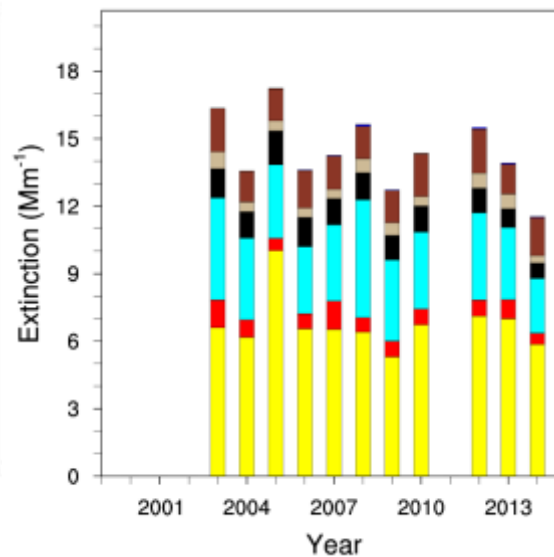
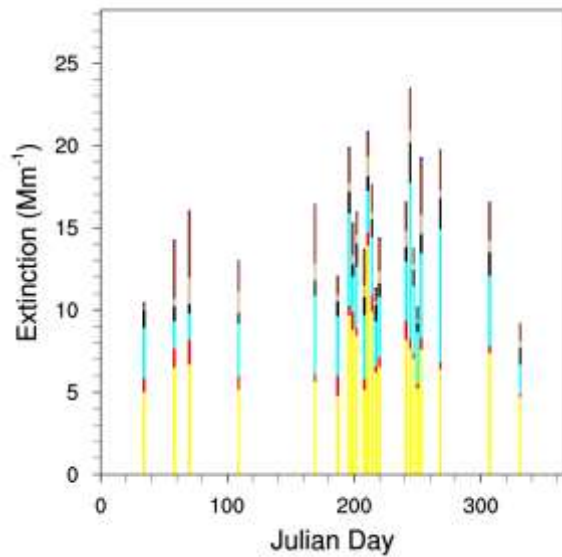
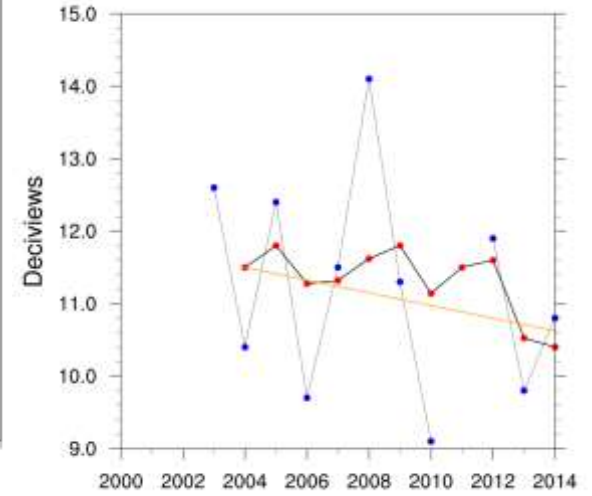
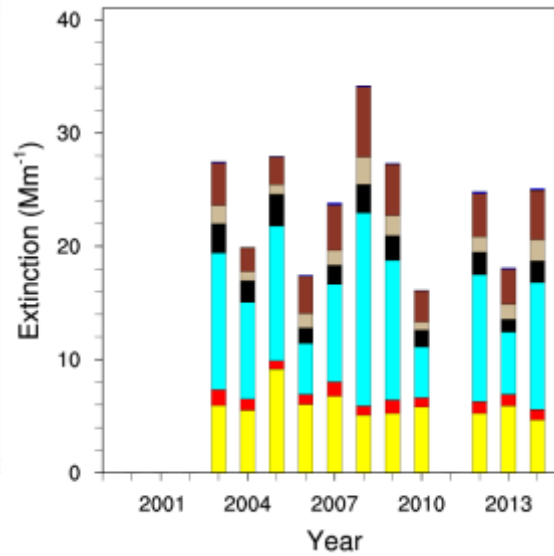
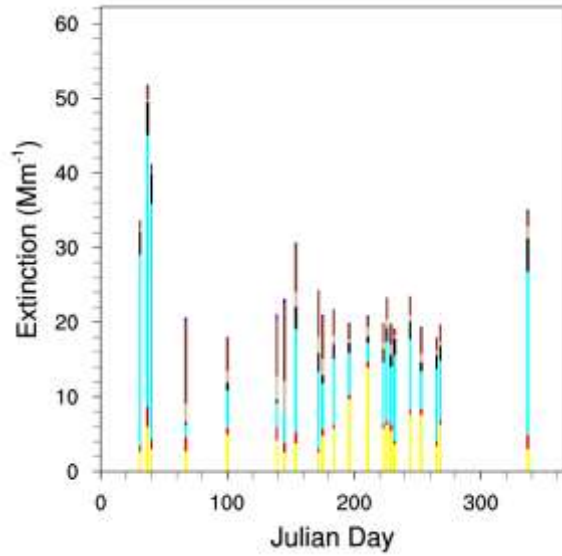
Agua Tibia, CA



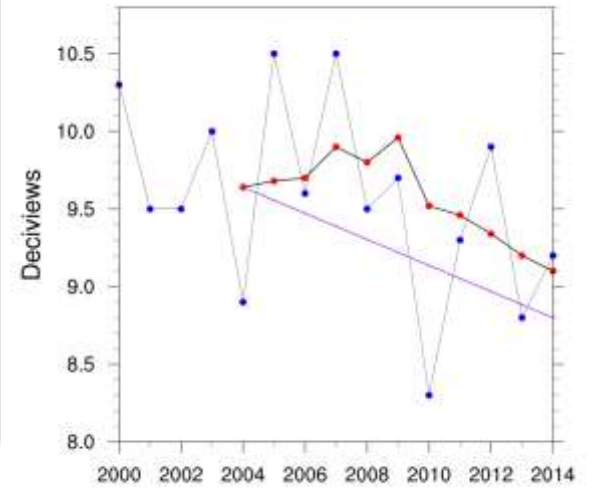
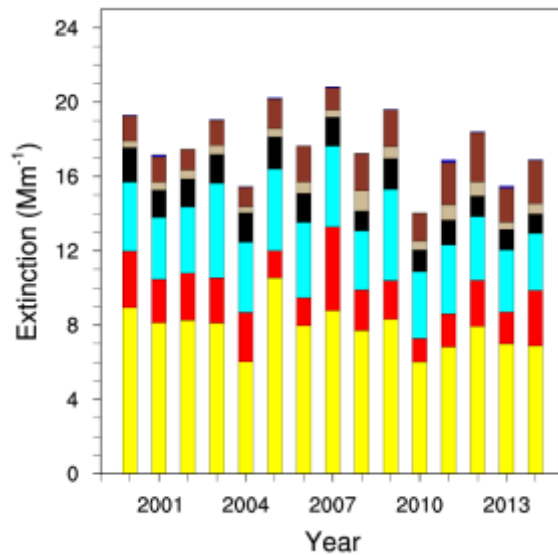
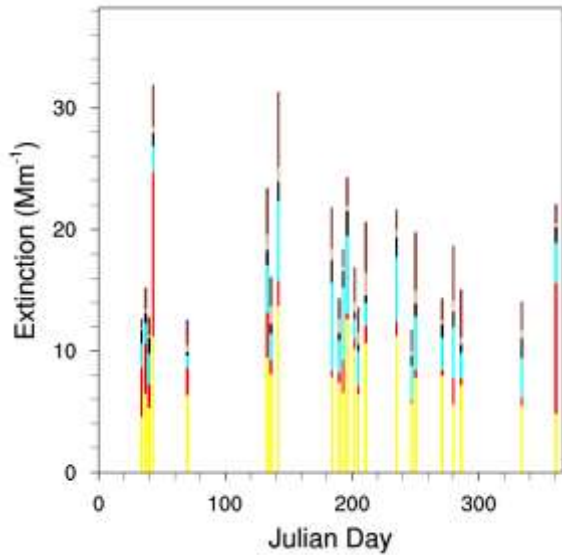
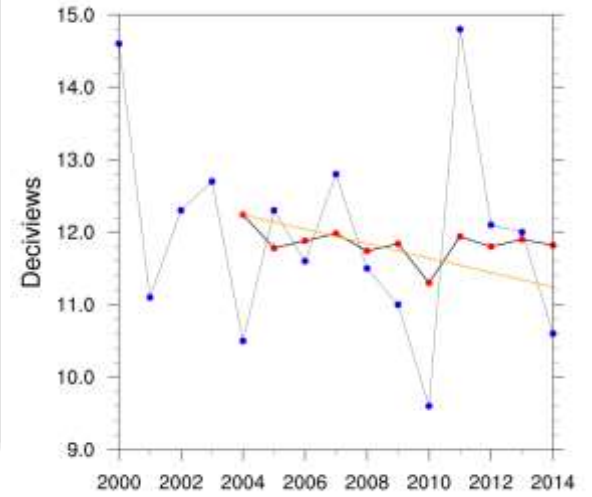
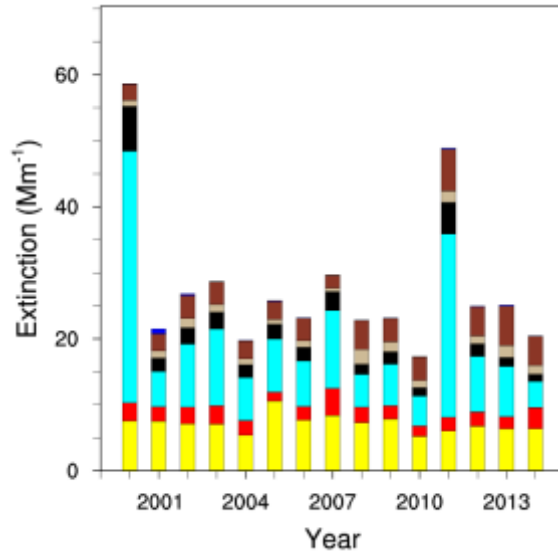
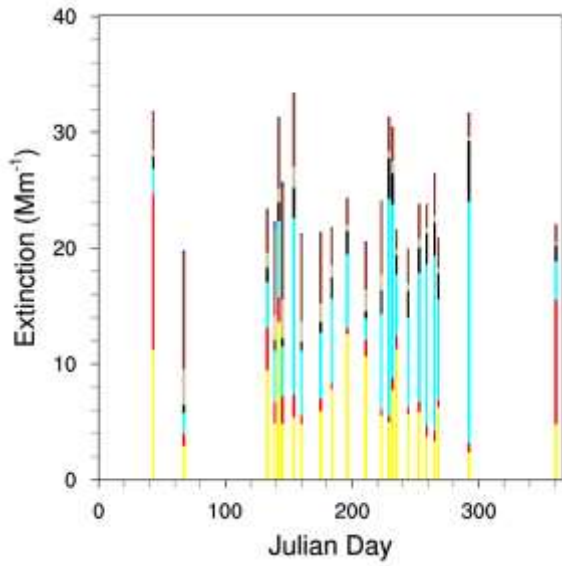
Badlands National Park, SD



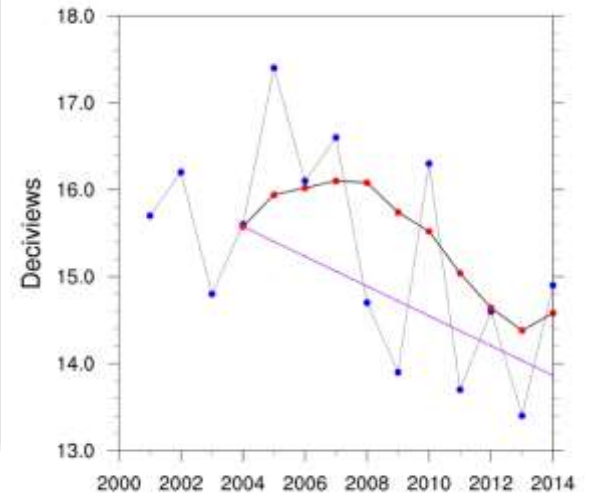
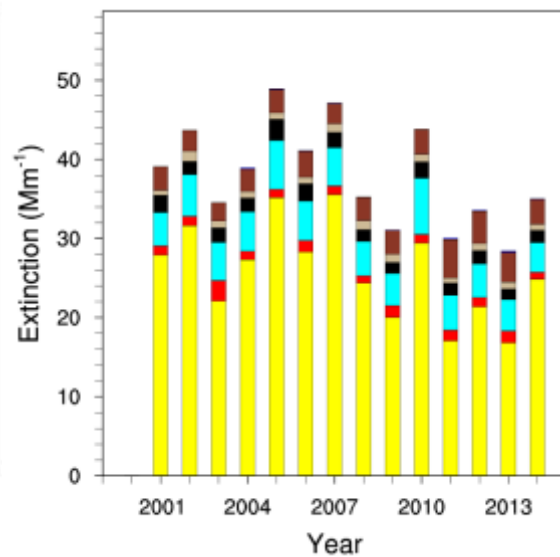
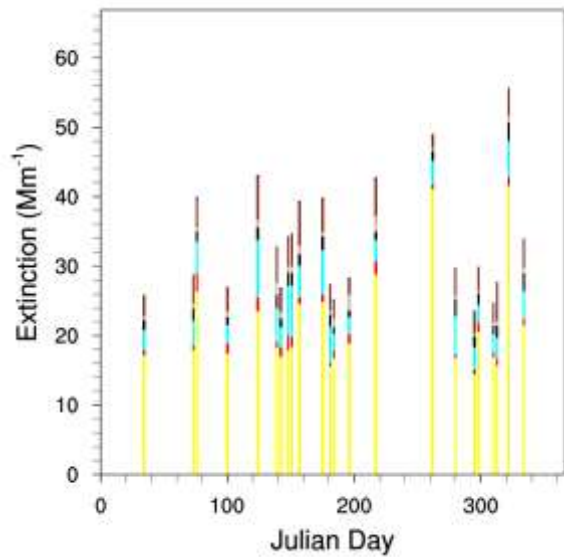
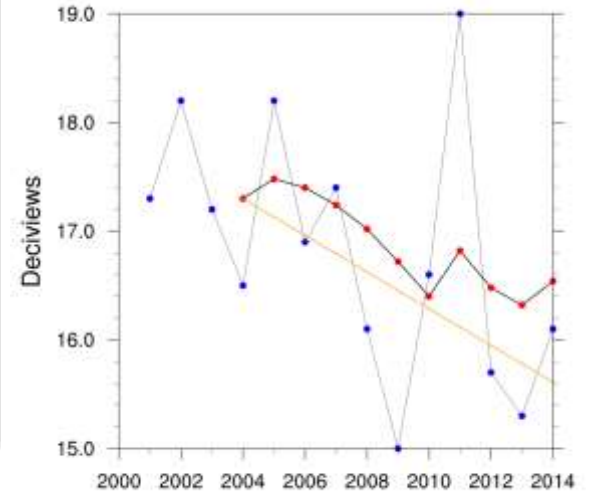
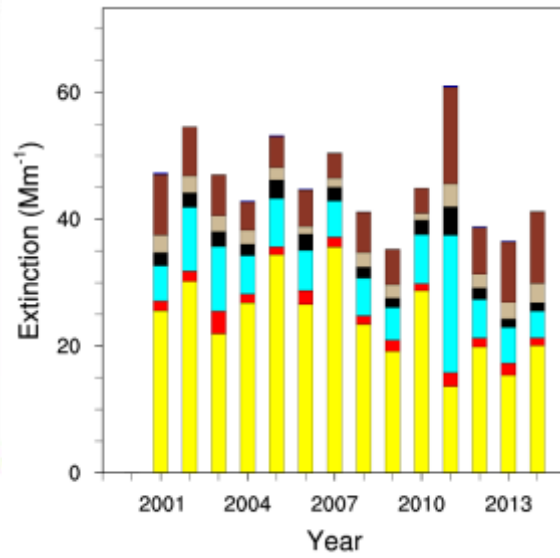
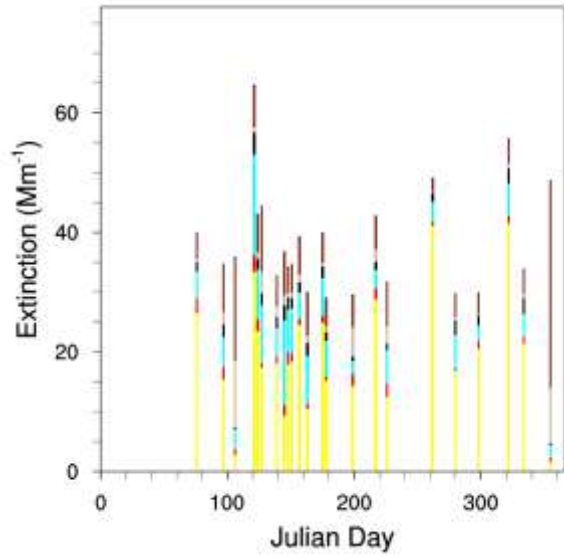
Mount Baldy, AZ



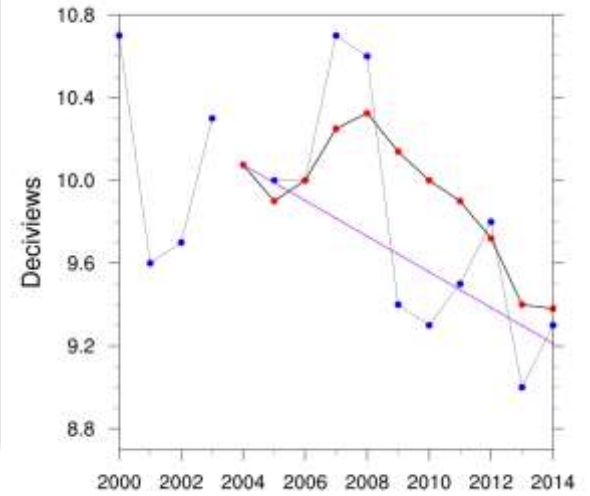
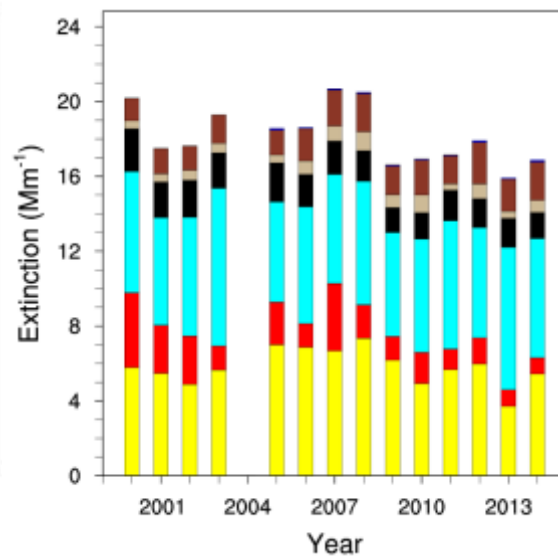
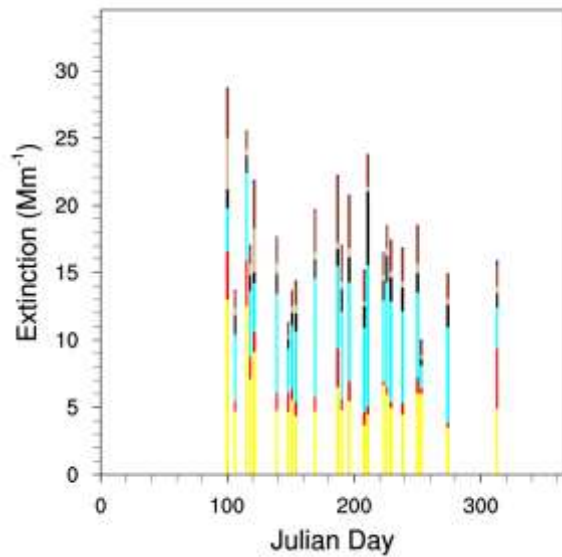
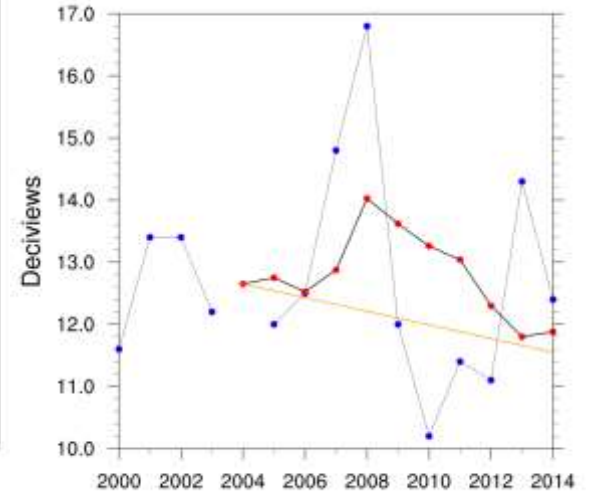
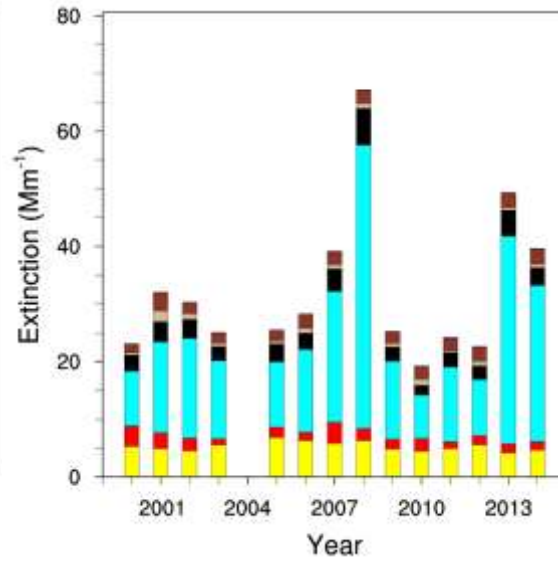
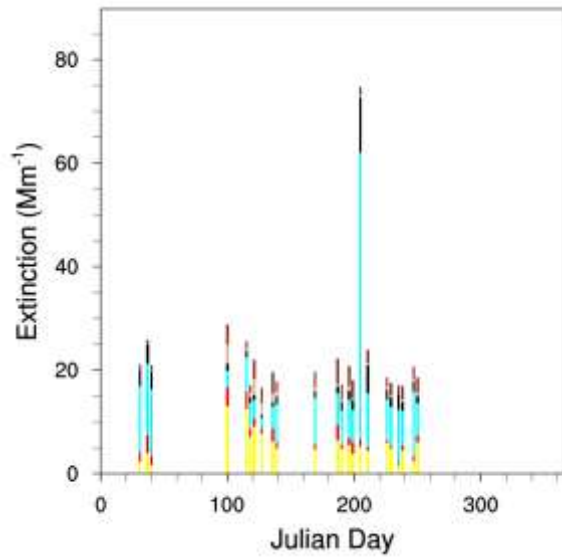
Bandelier National Monument, NM



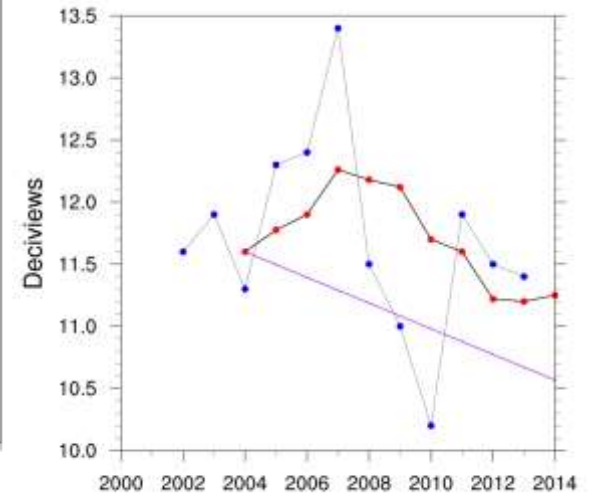
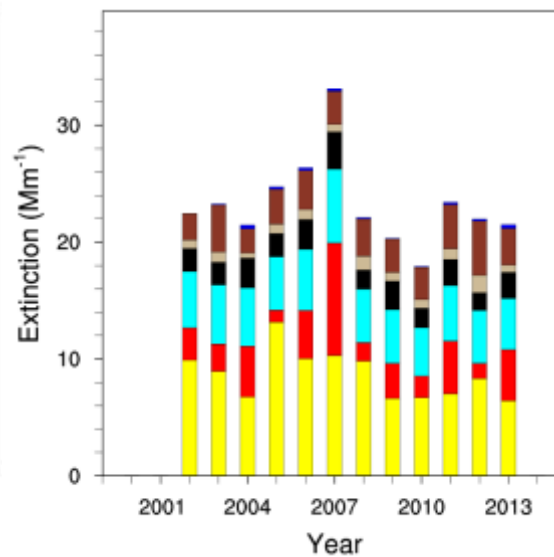
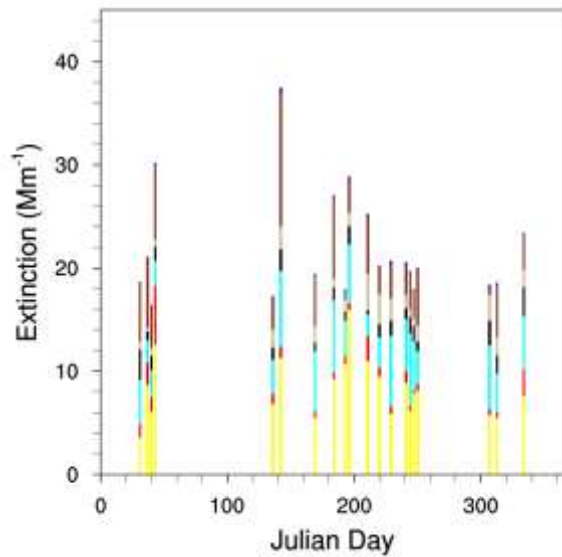
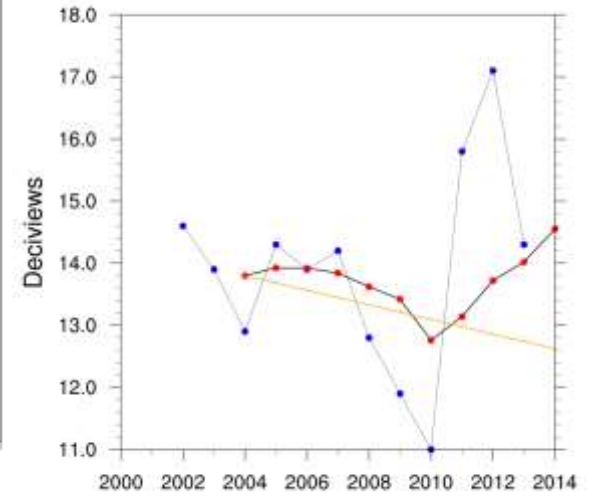
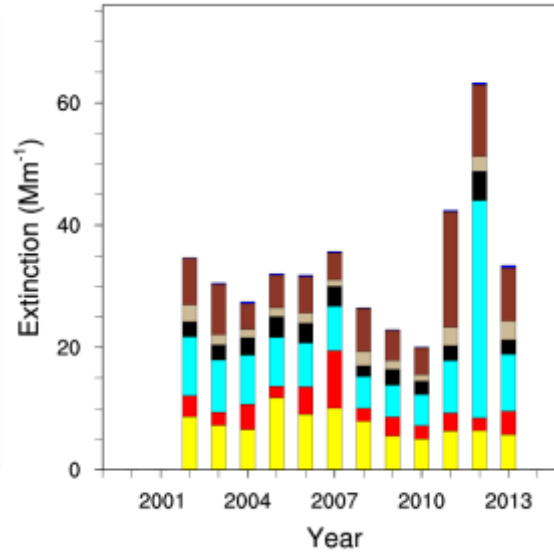
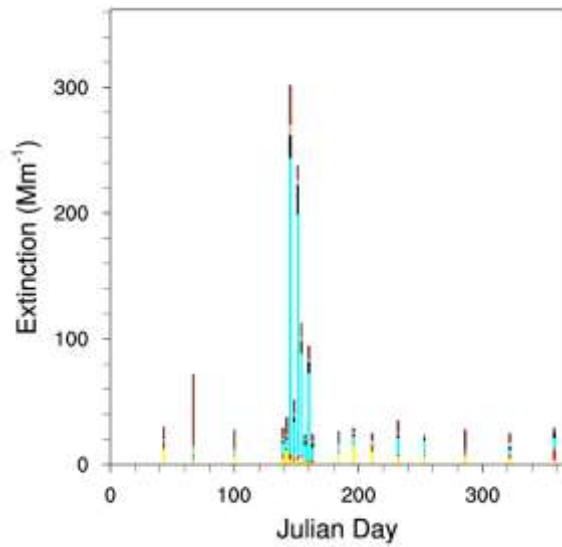
Big Bend National Park, TX



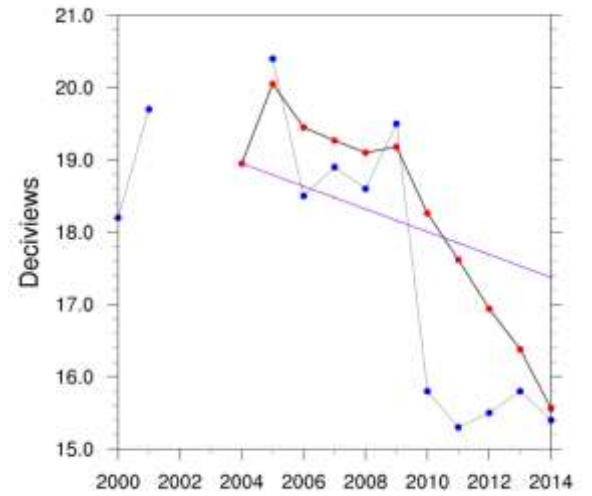
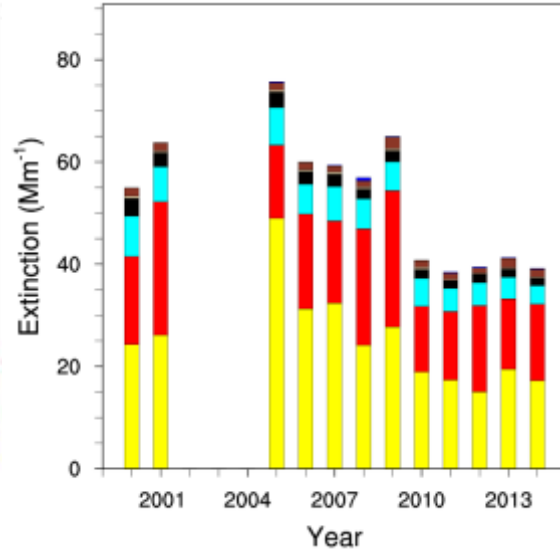
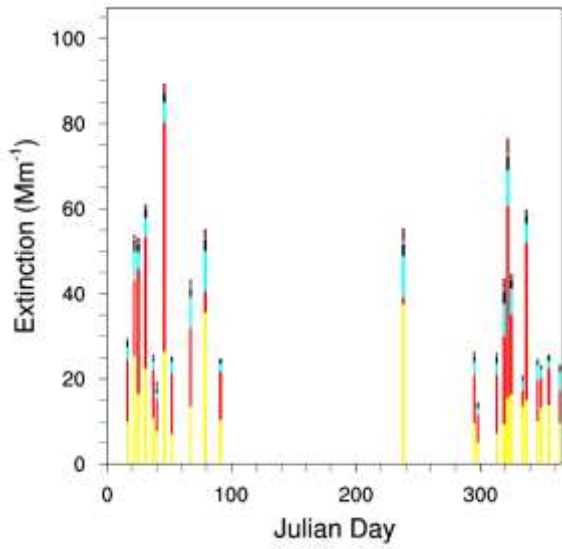
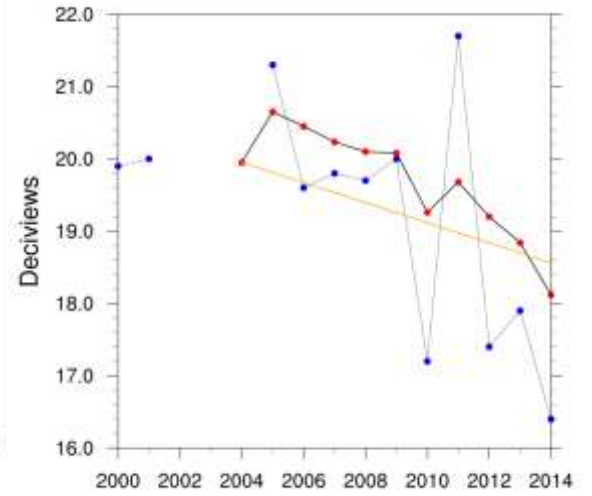
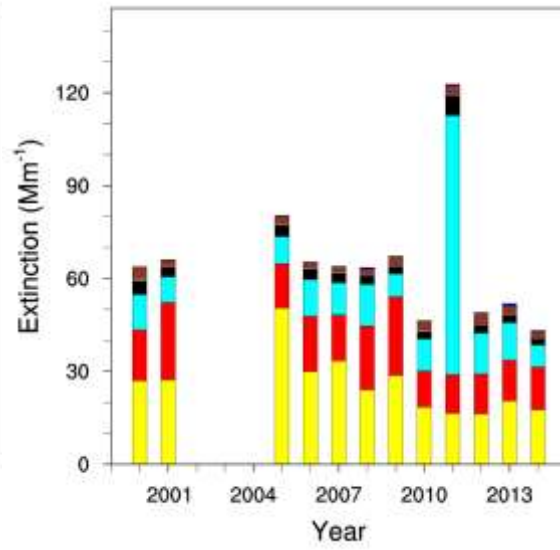
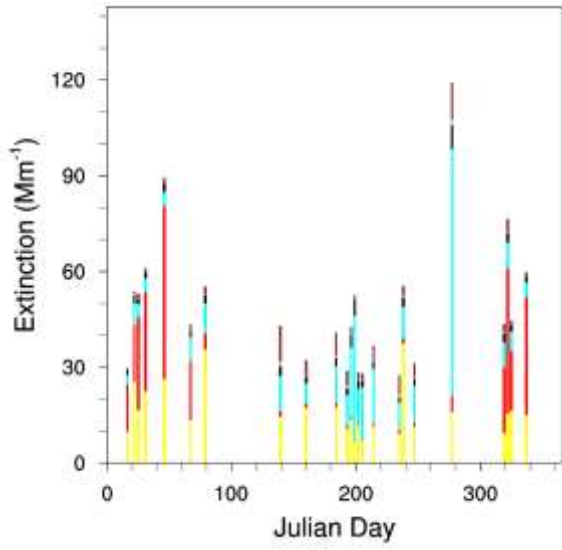
Bliss State Park, CA



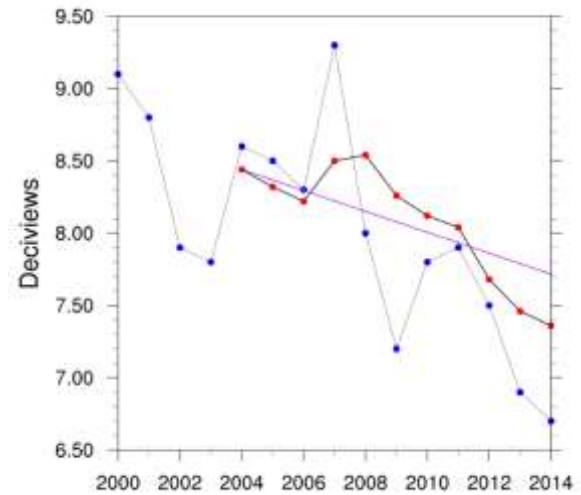
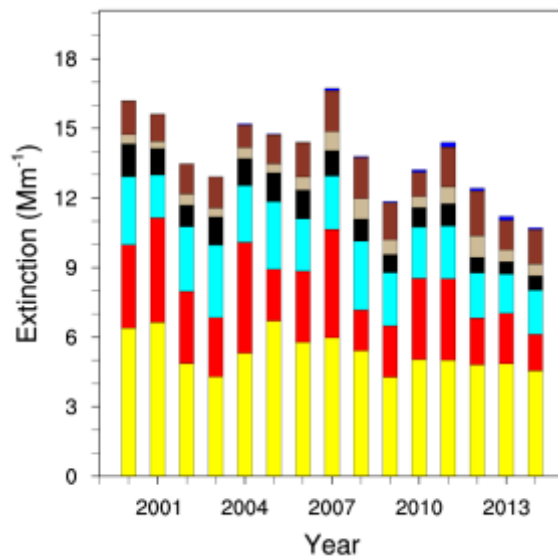
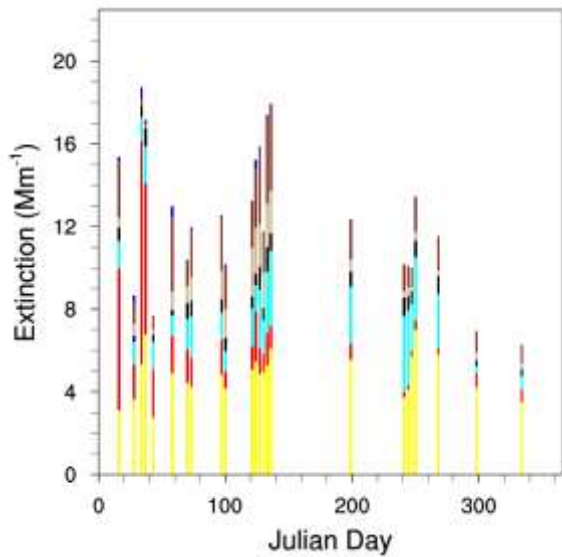
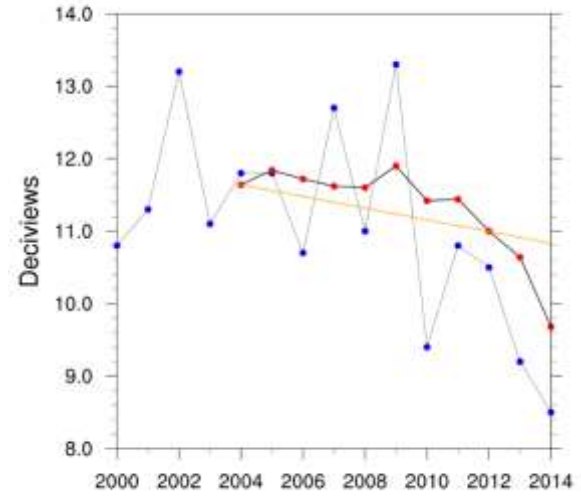
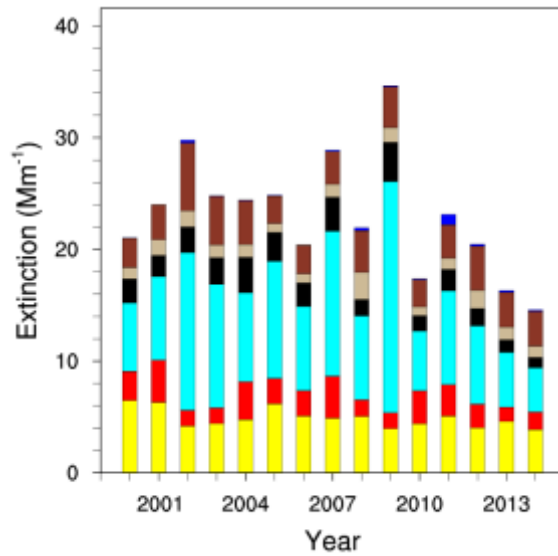
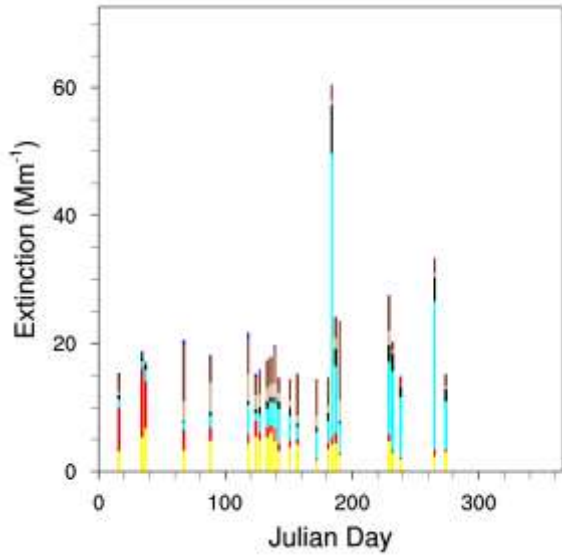
Bosque del Apache, NM



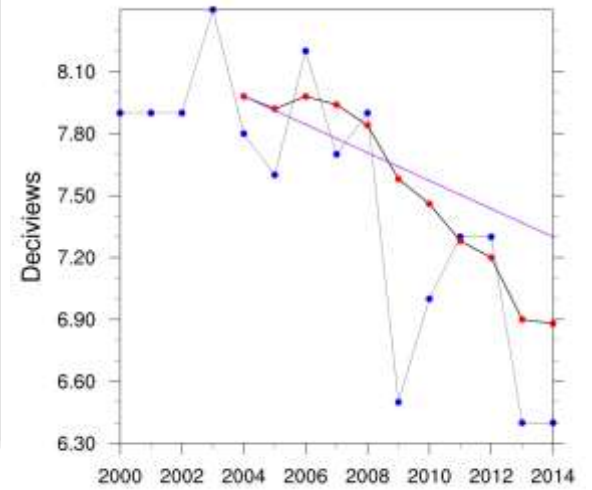
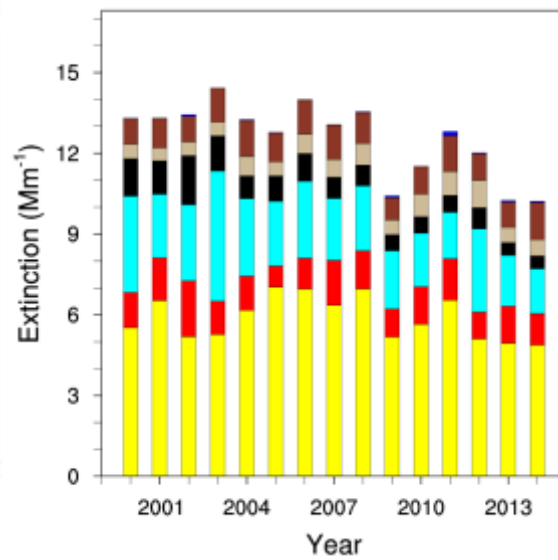
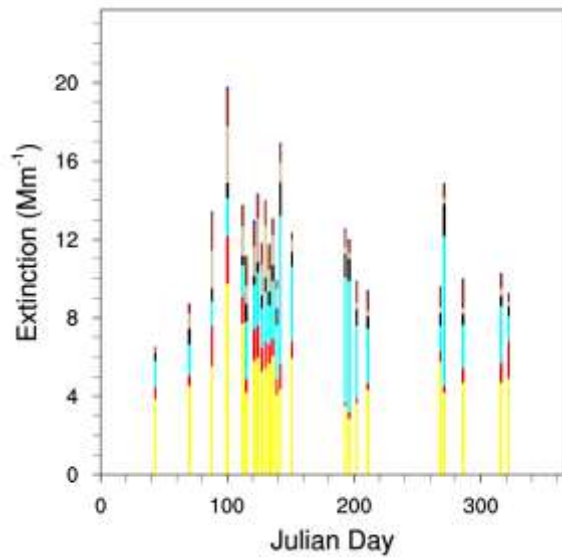
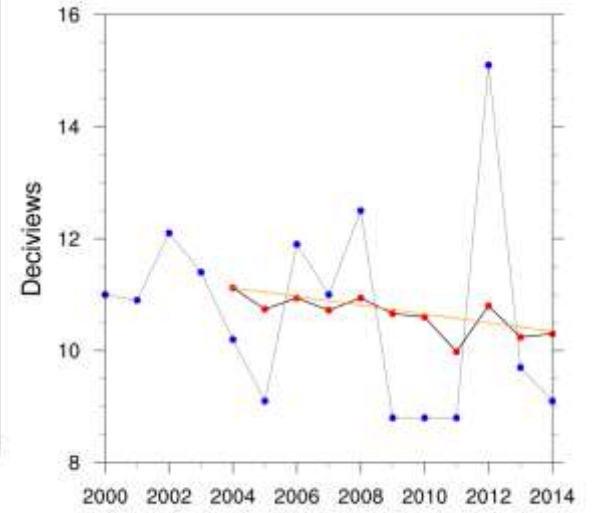
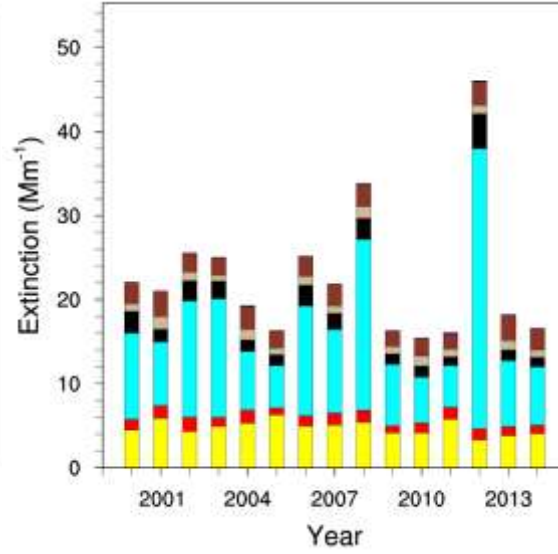
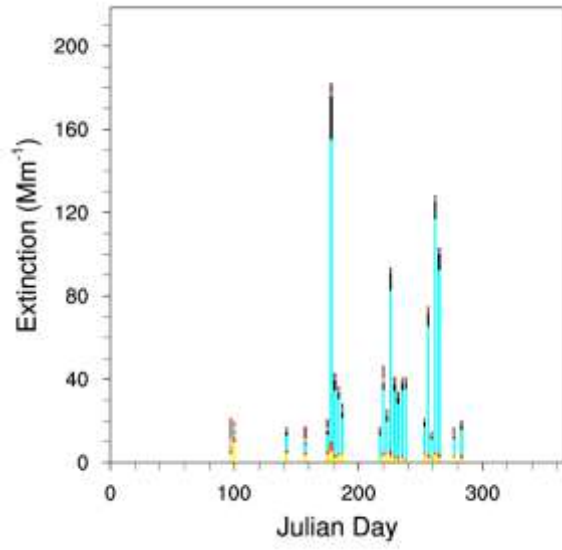
Boundary Waters Canoe Area, MN



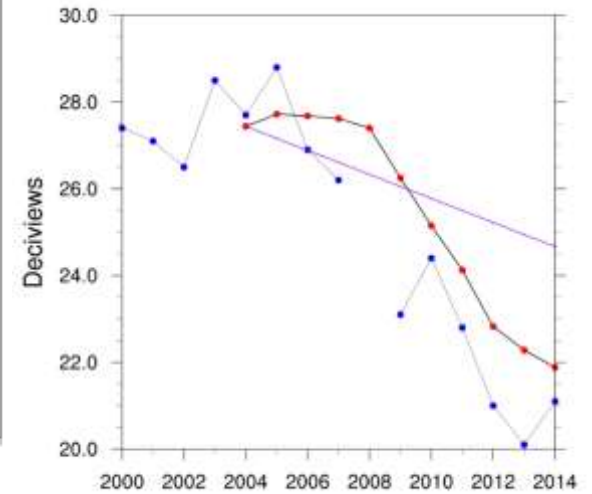
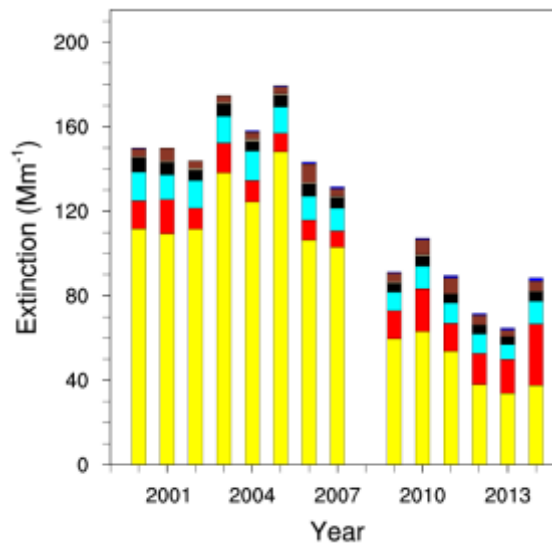
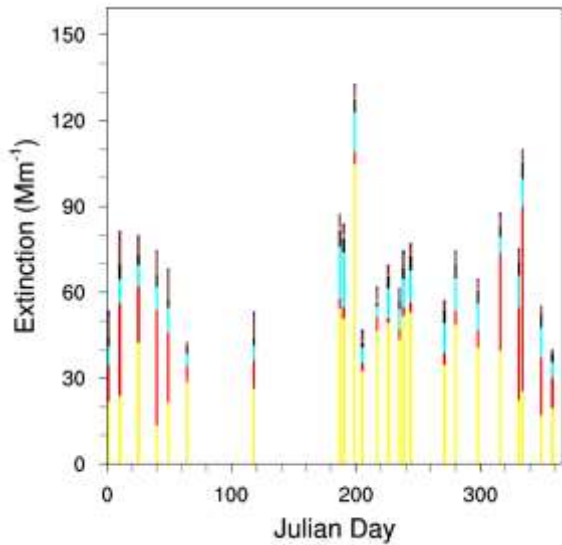
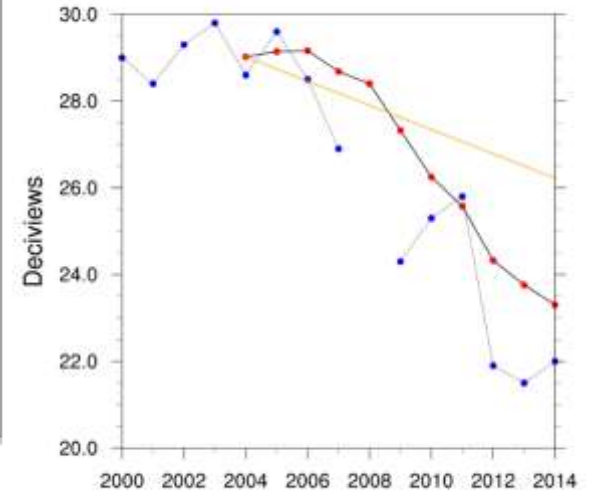
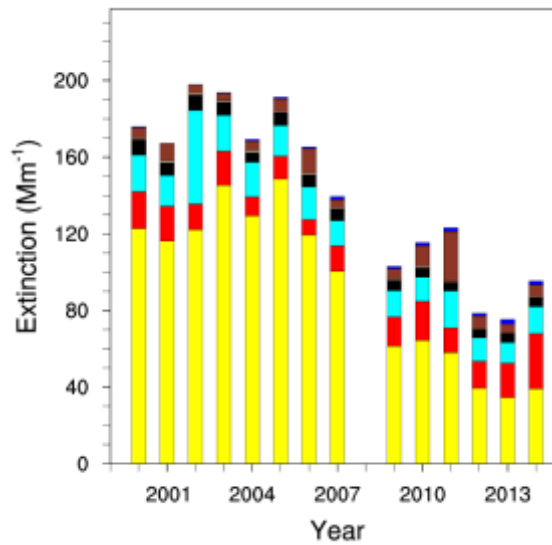
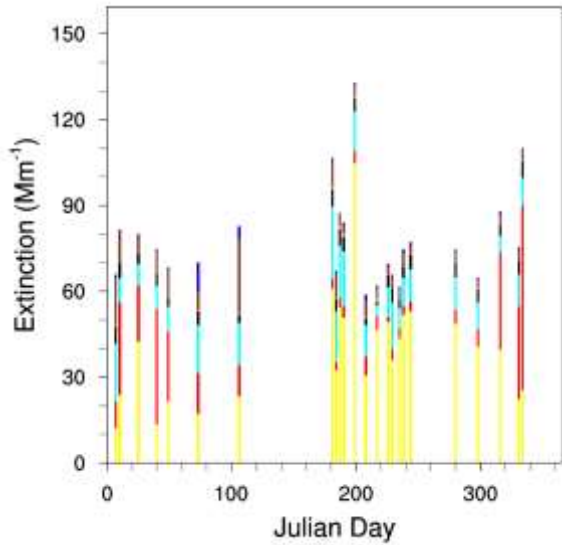
Bryce Canyon National Park, UT



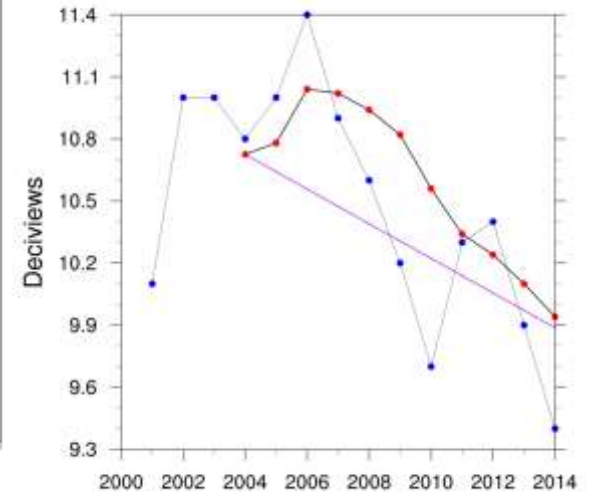
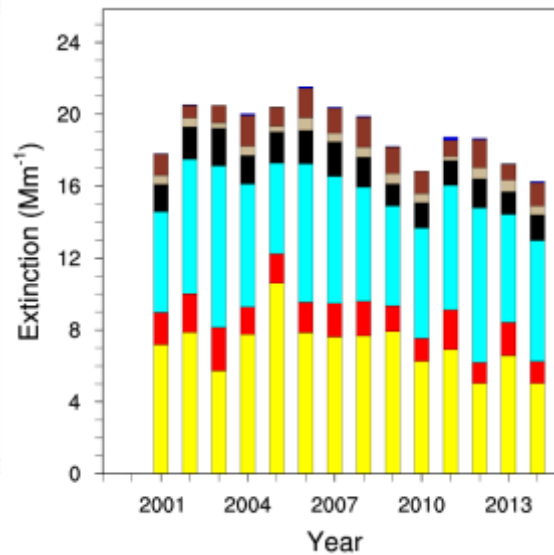
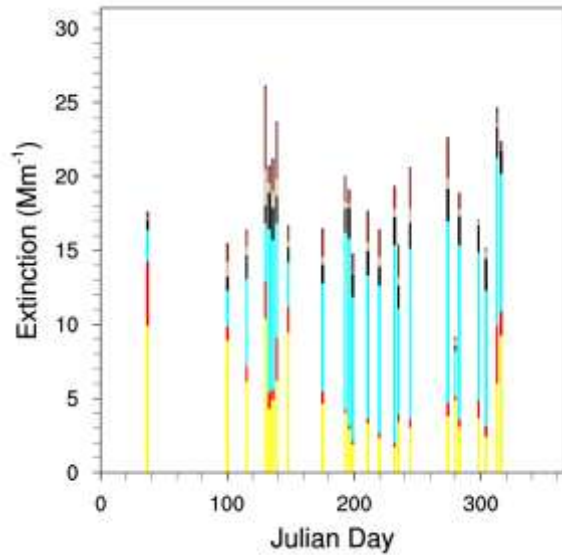
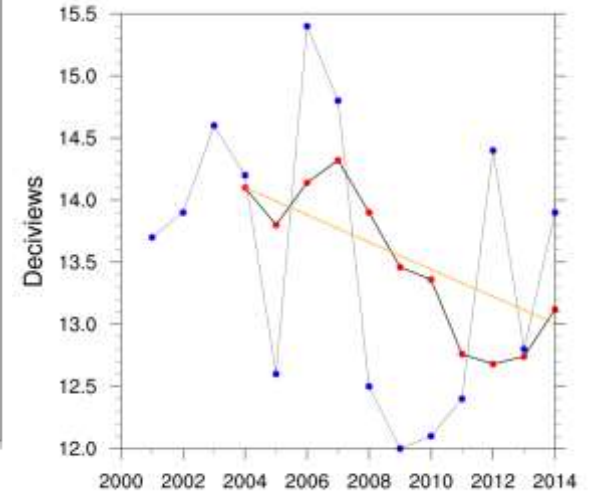
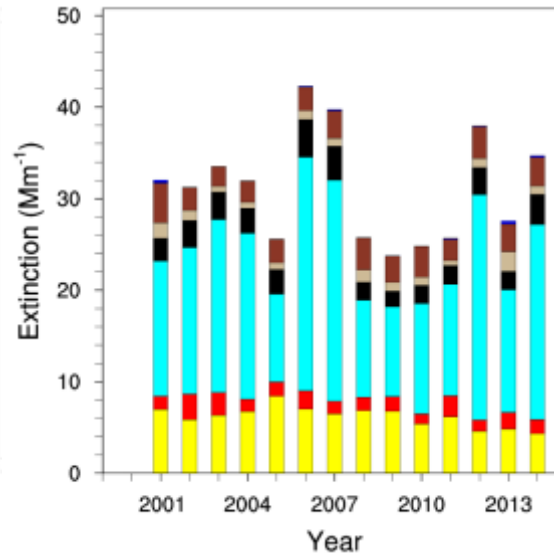
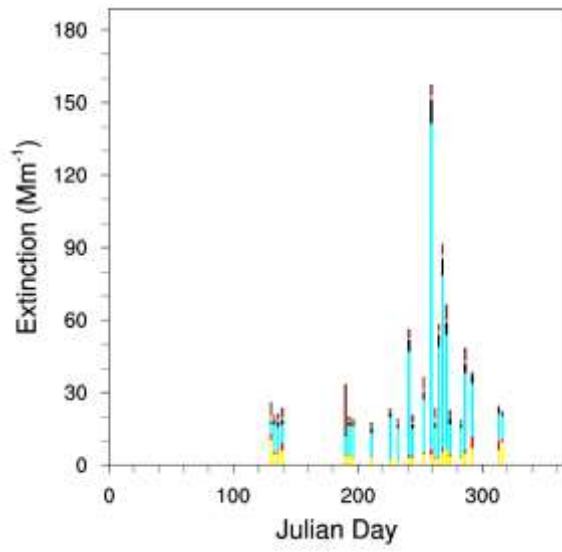
Bridger Wilderness, WY



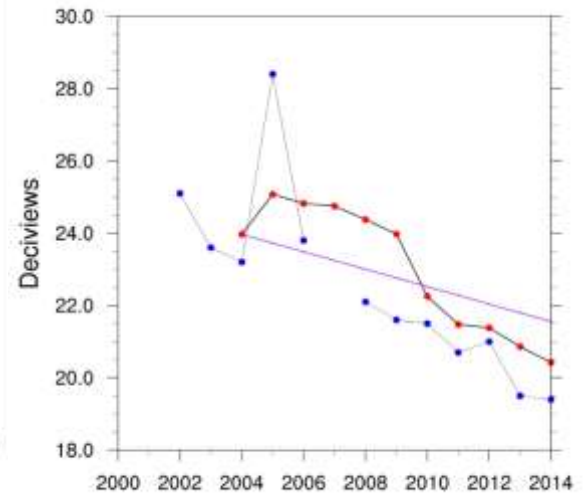
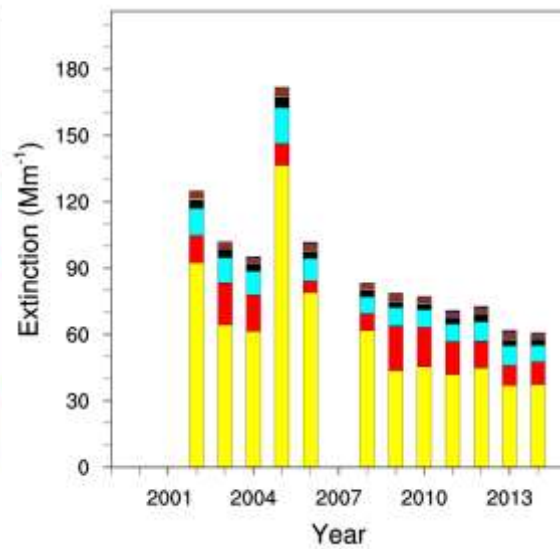
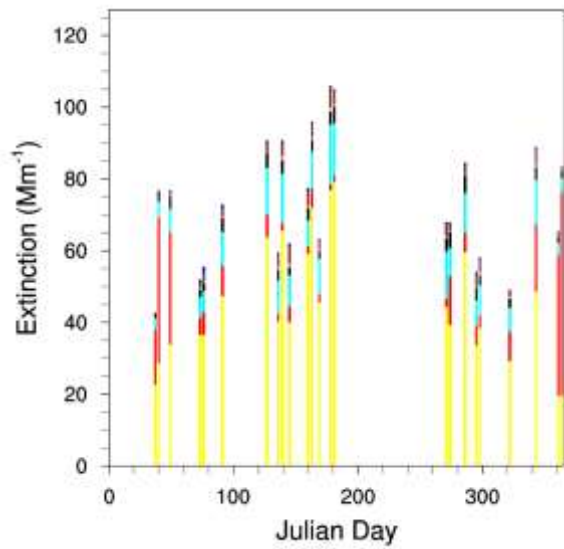
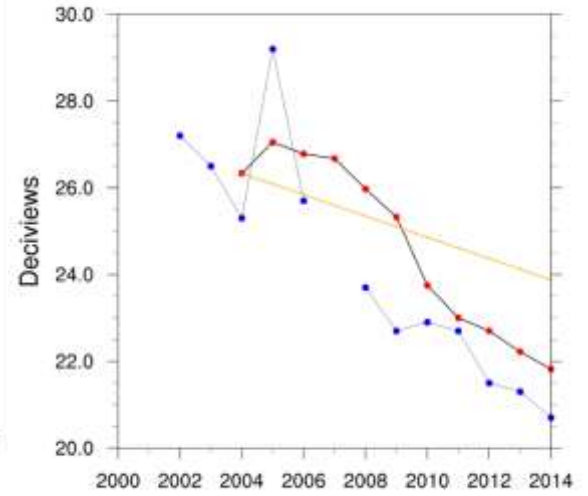
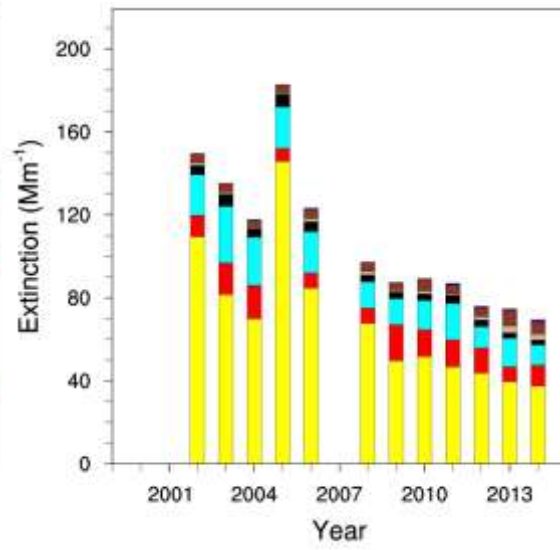
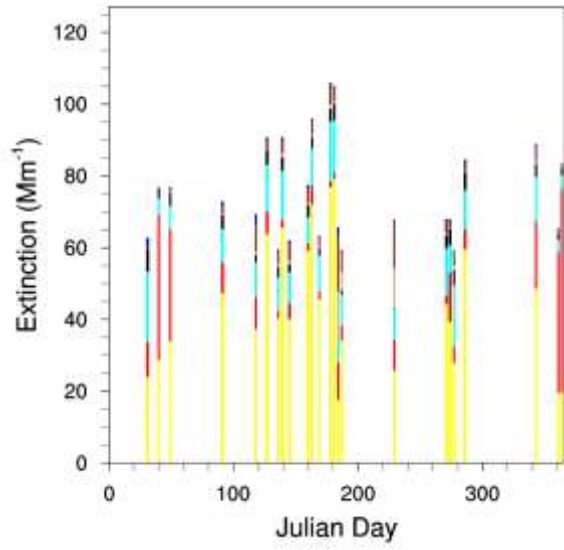
Brigantine National Wildlife Refuge, NJ



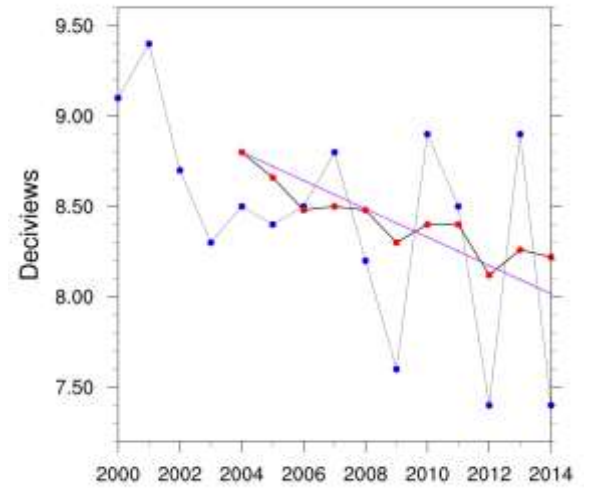
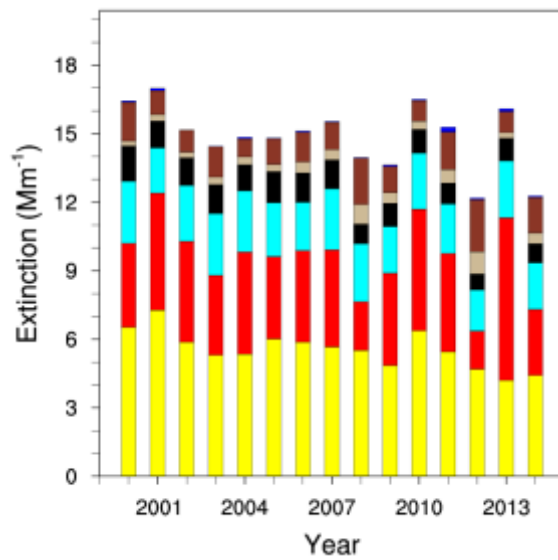
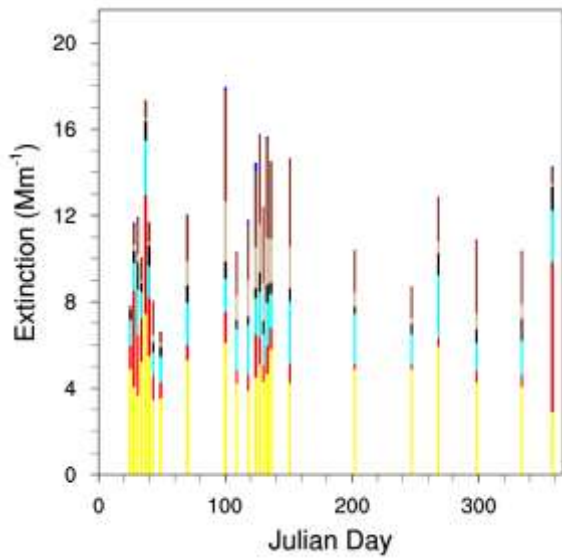
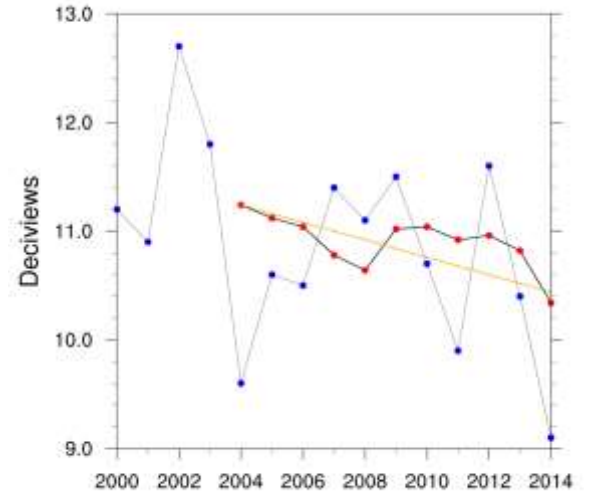
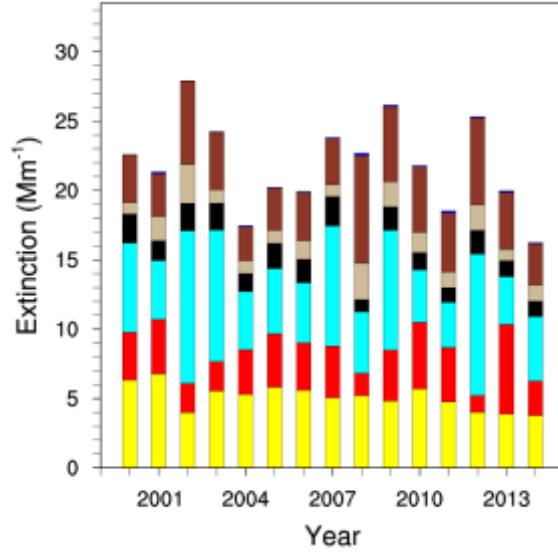
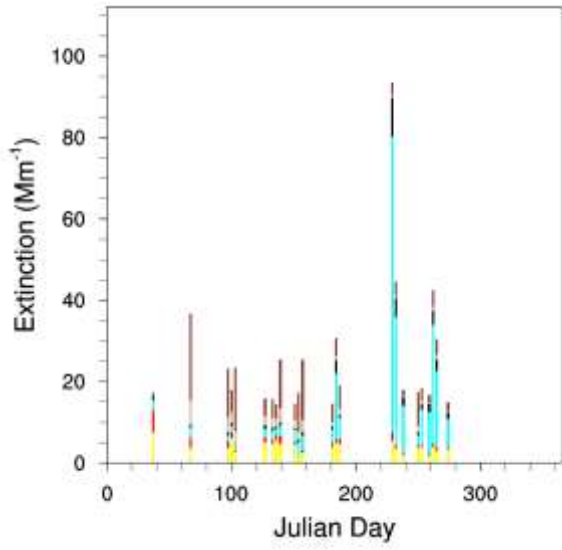
Cabinet Mountains, MT



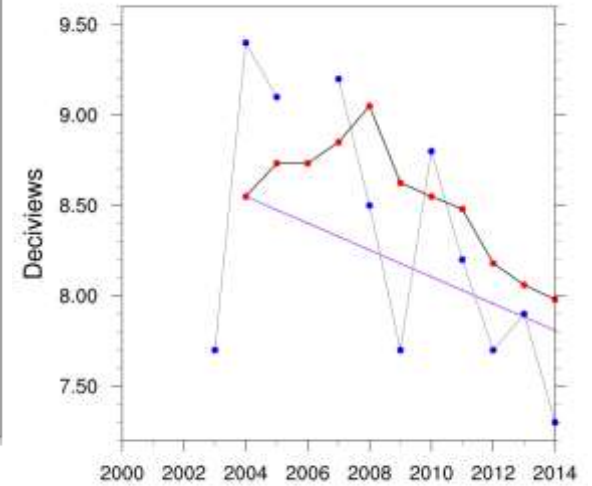
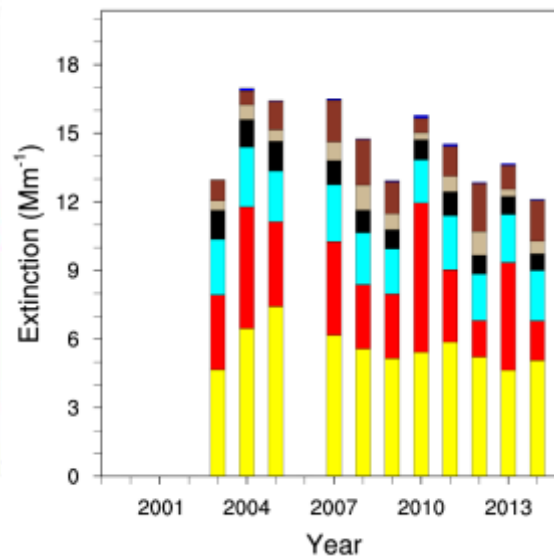
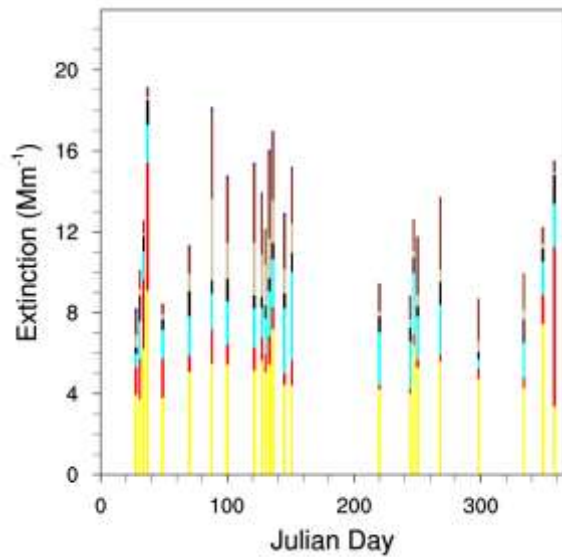
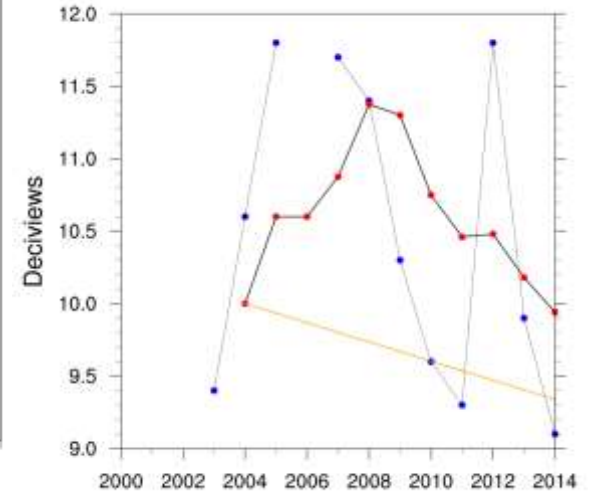
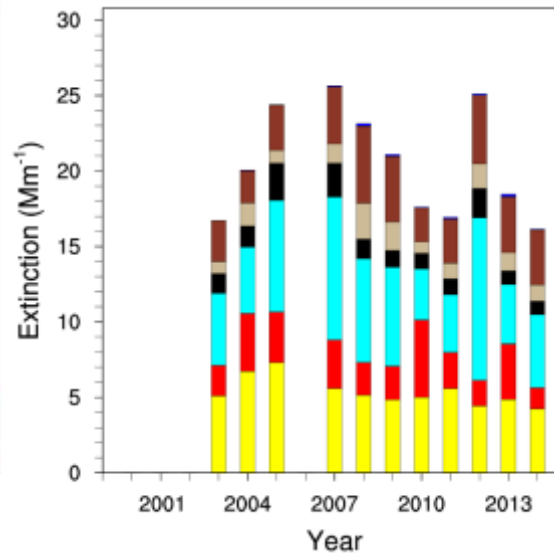
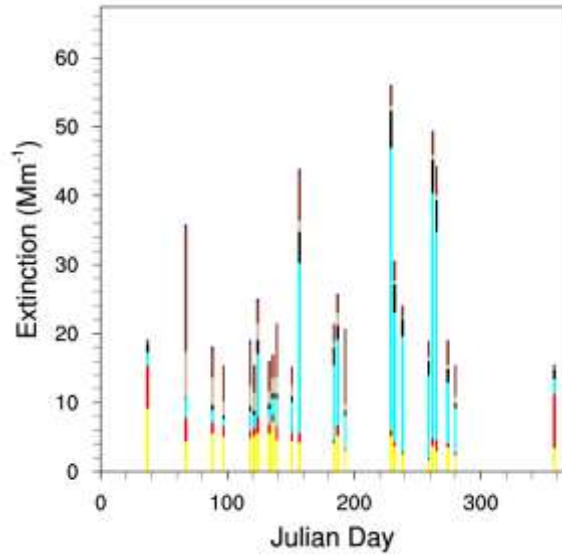
Caney Creek, AR



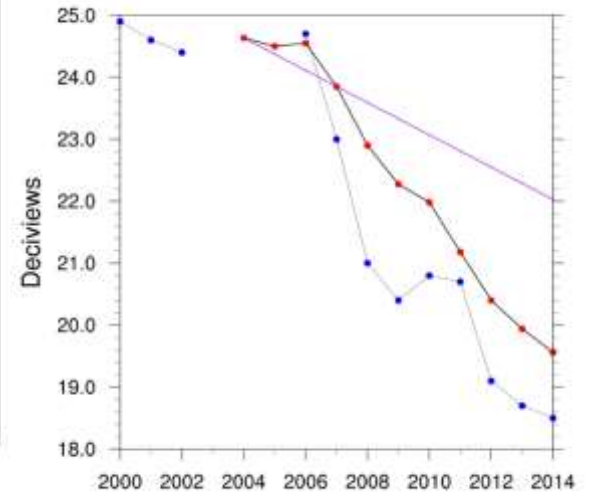
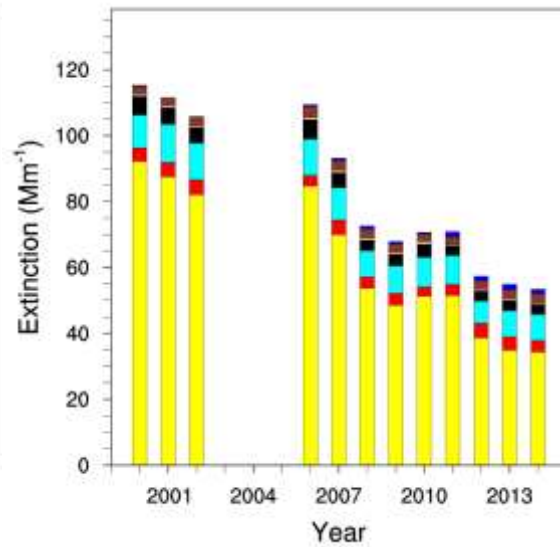
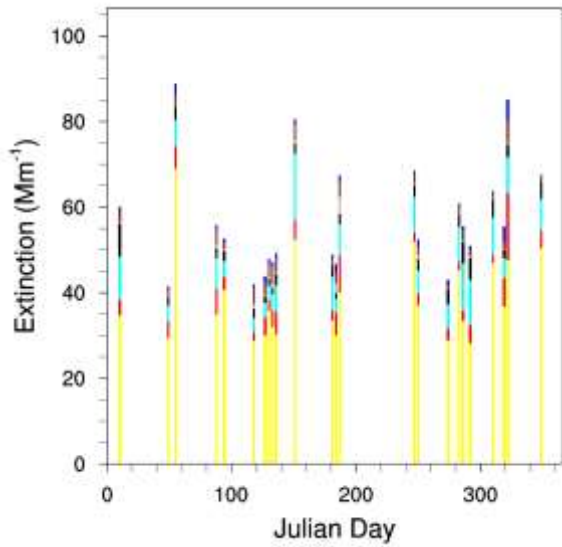
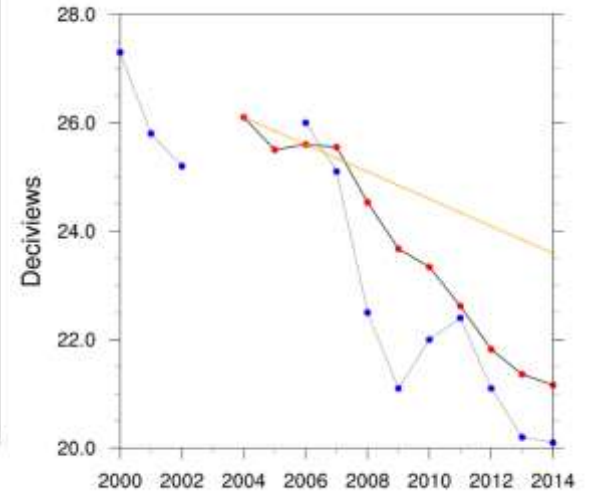
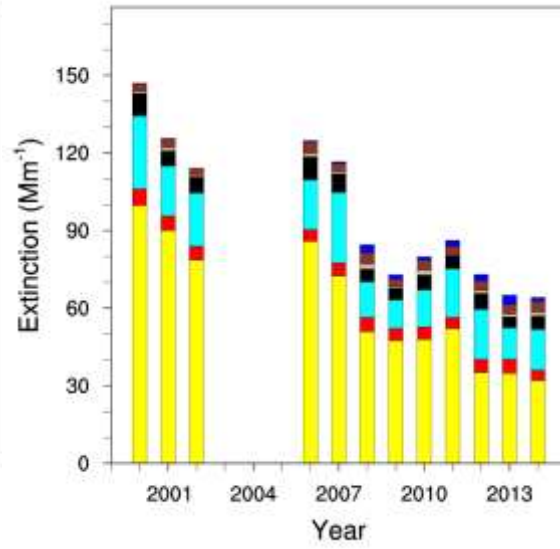
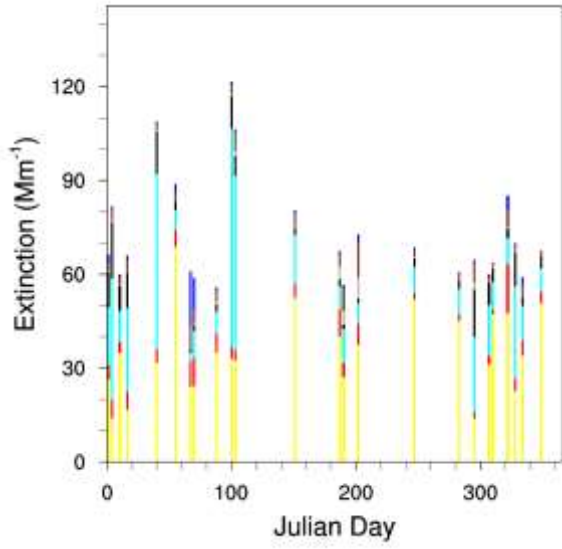
Canyonlands National Park, UT



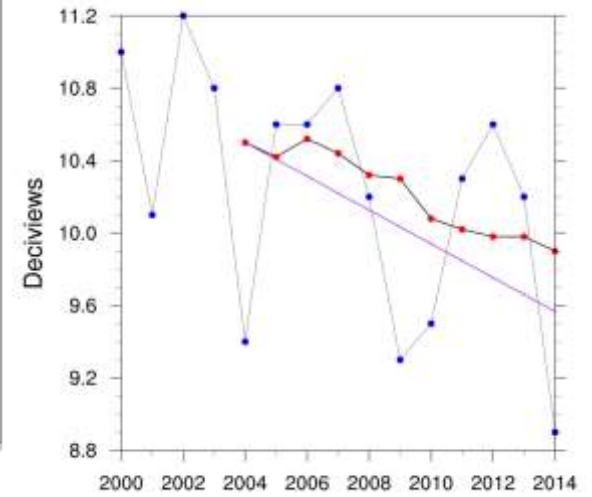
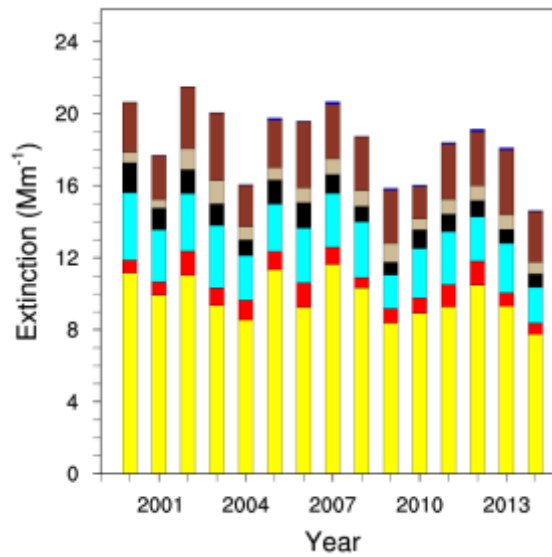
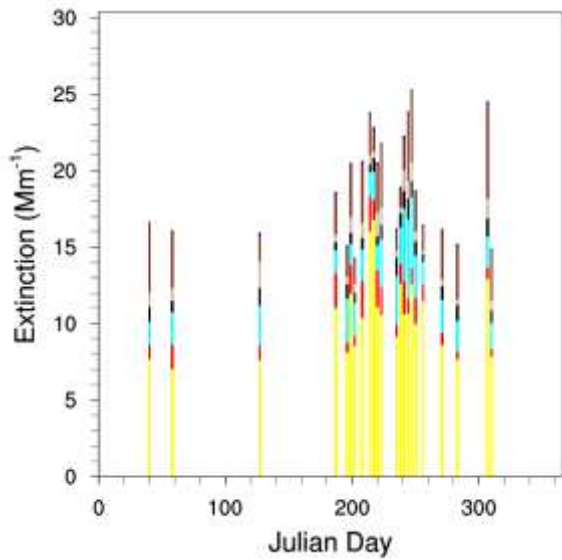
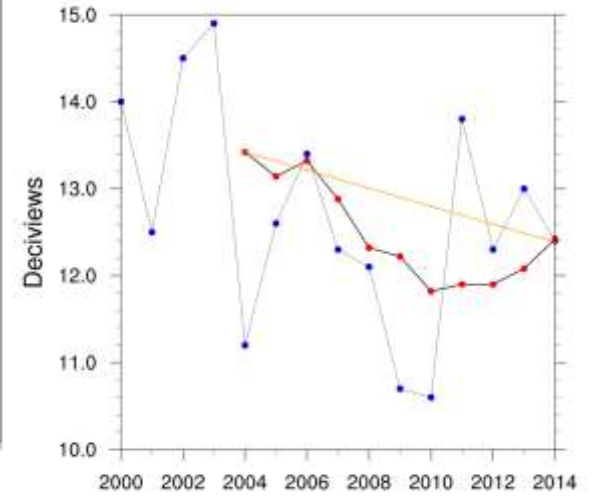
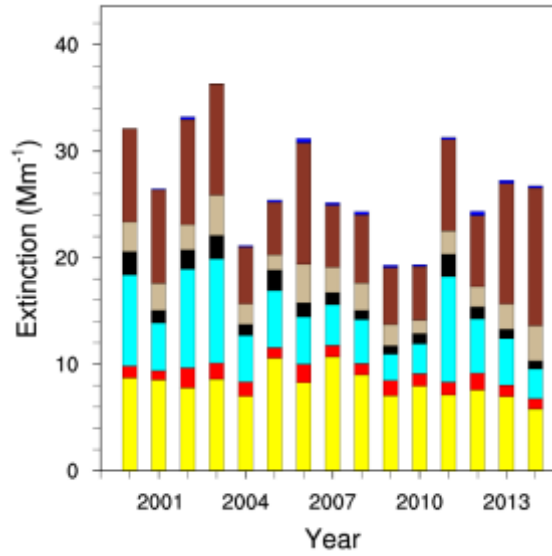
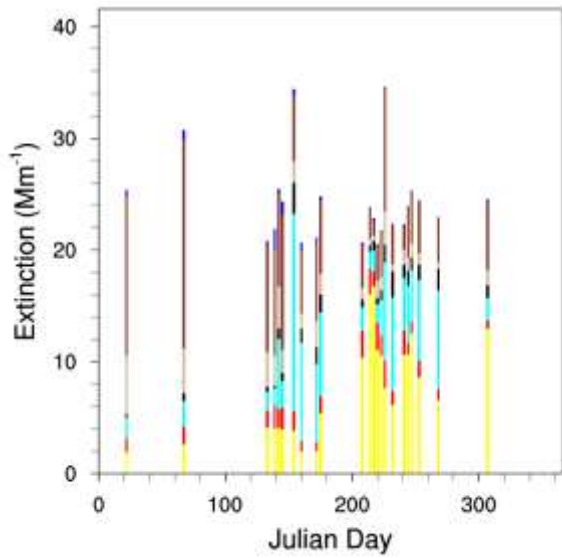
Capitol Reef National Park, UT



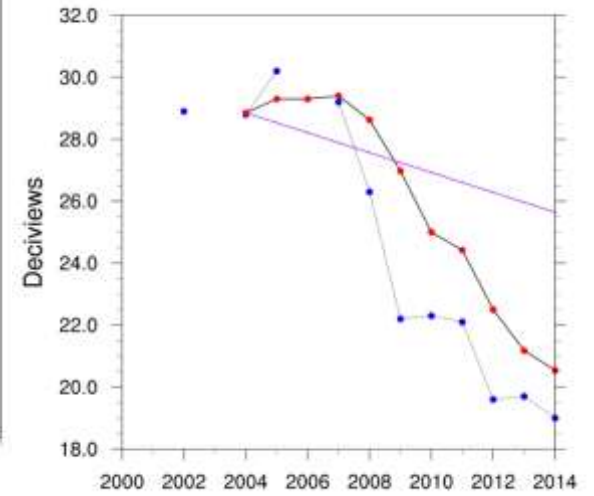
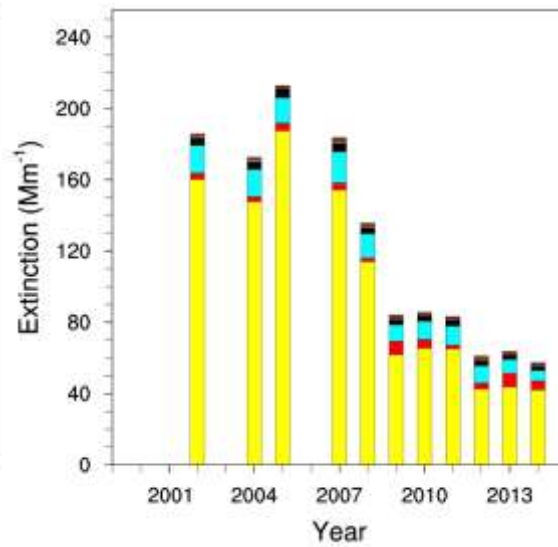
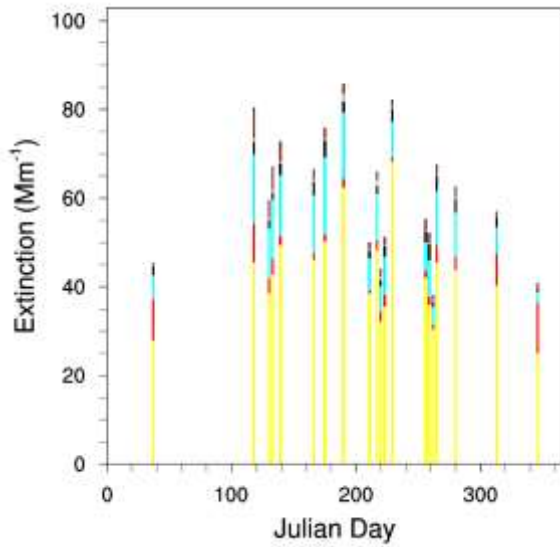
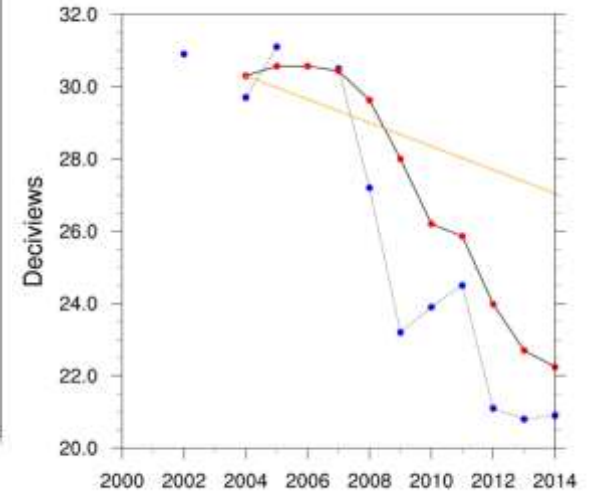
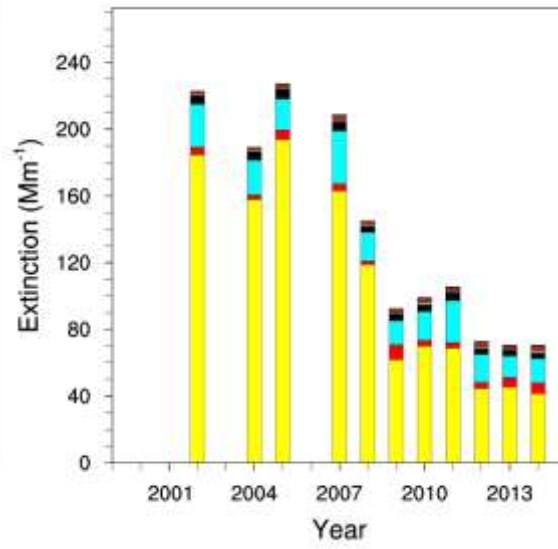
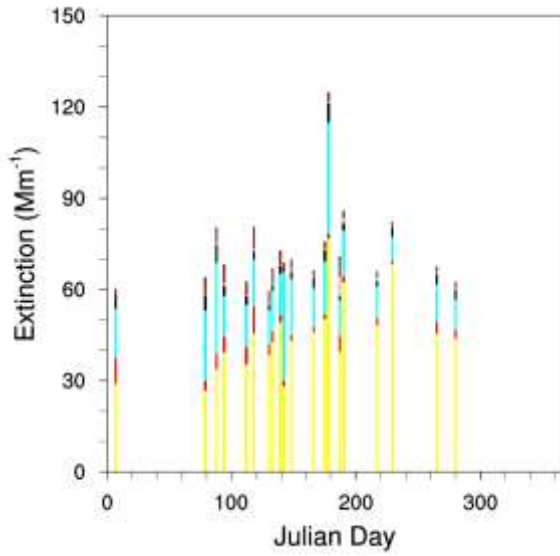
Chassahowitzka National Wildlife Refuge, FL



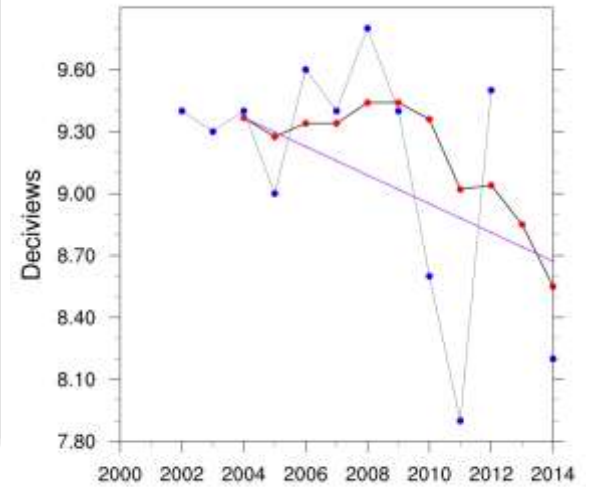
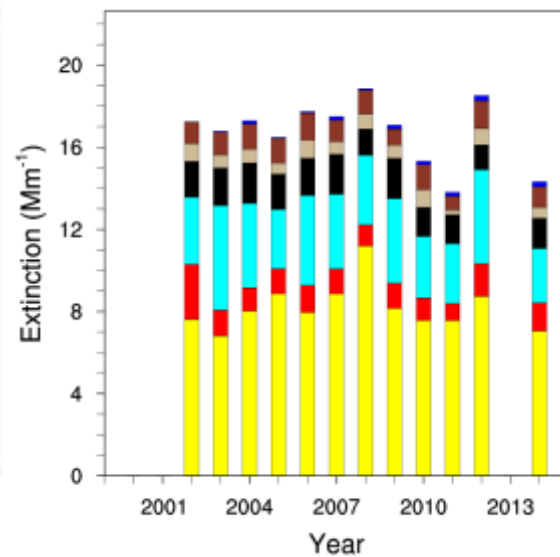
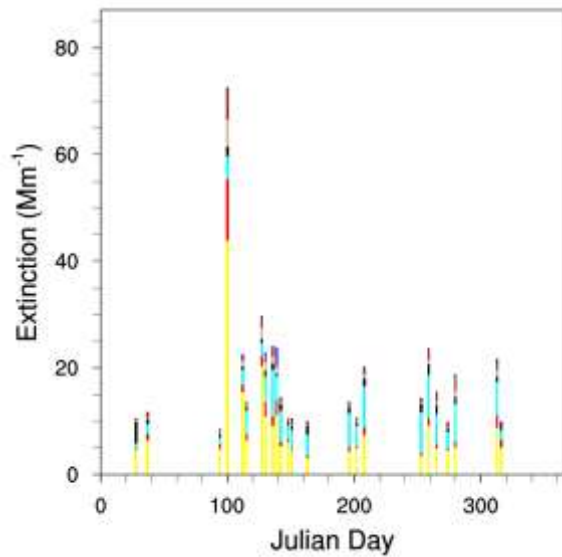
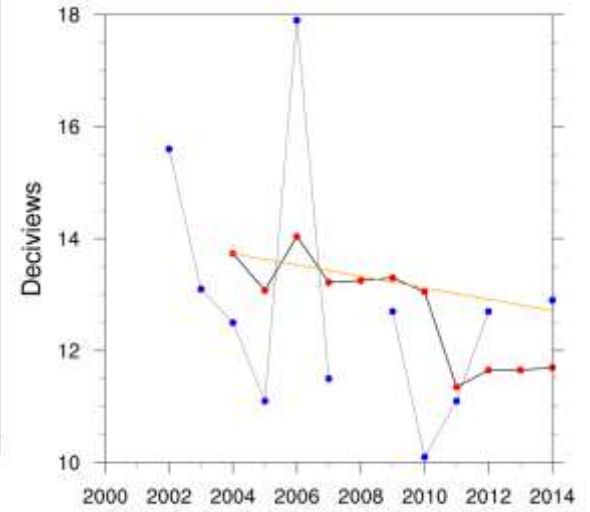
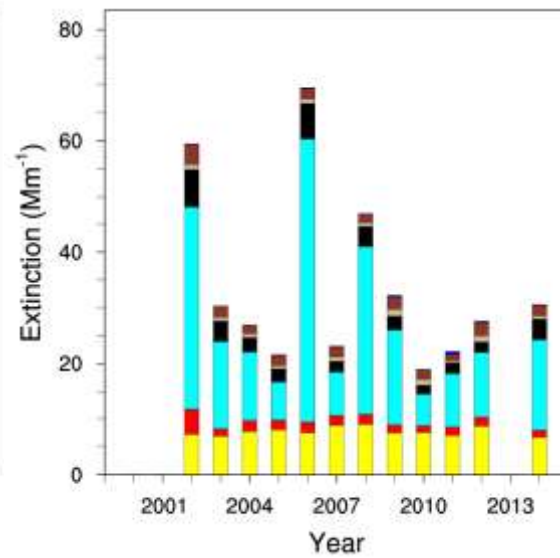
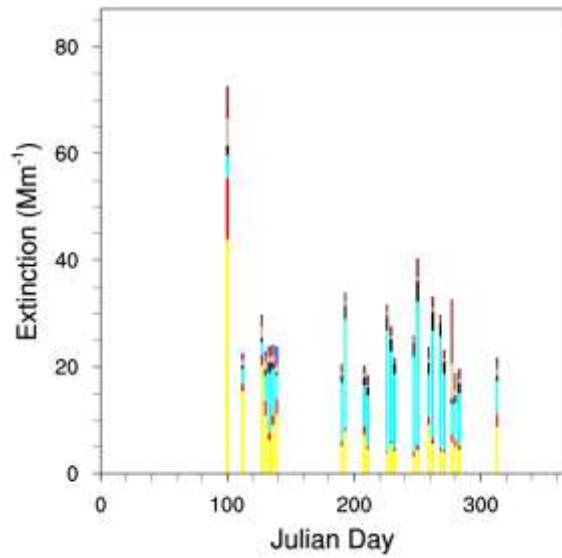
Chiricahua National Monument, AZ



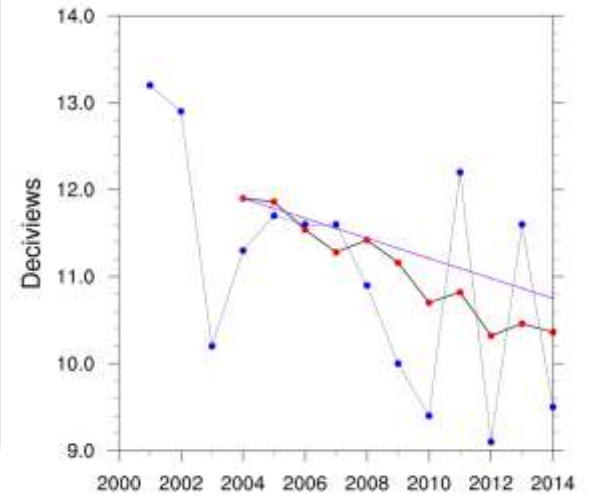
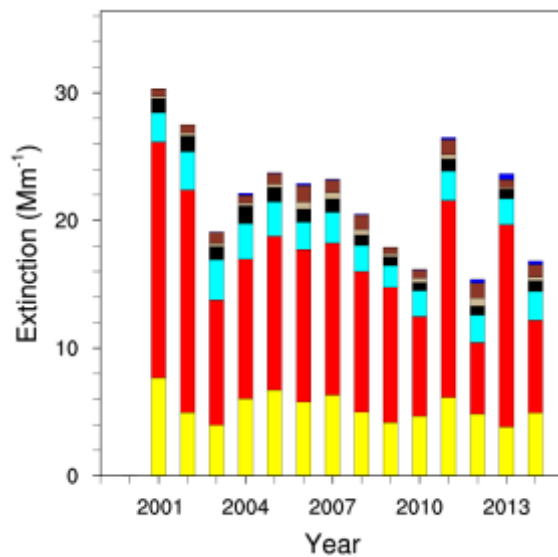
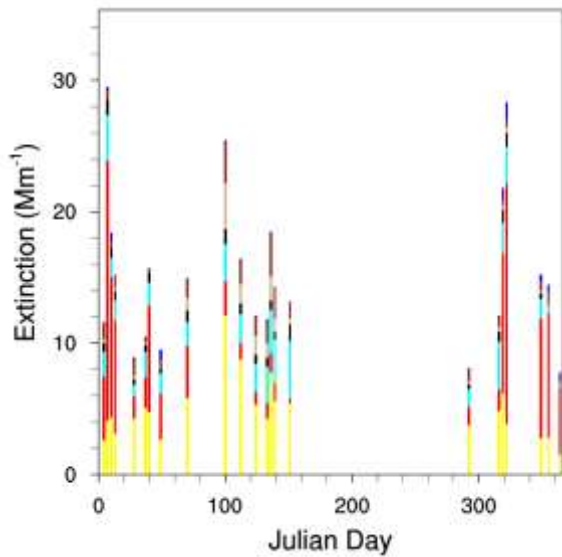
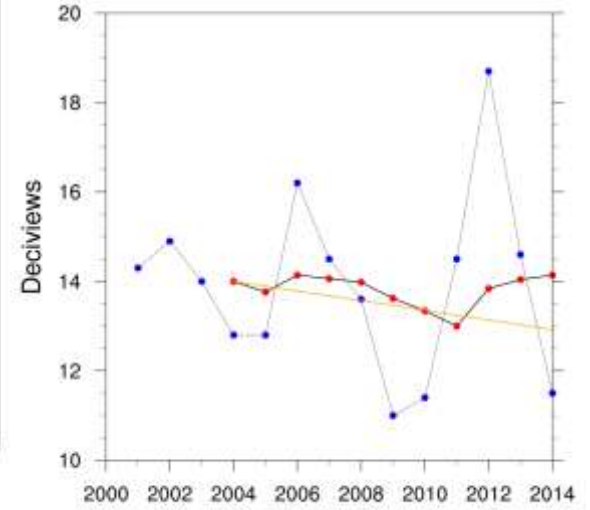
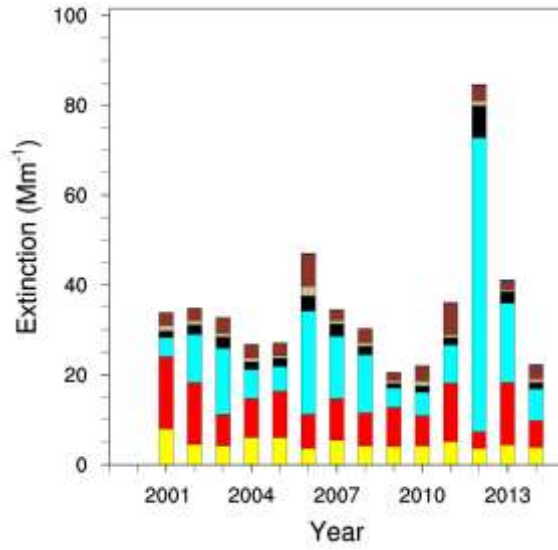
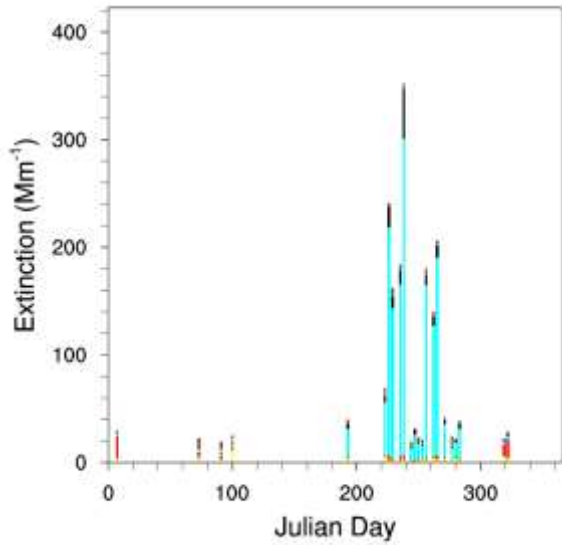
Cohutta, GA



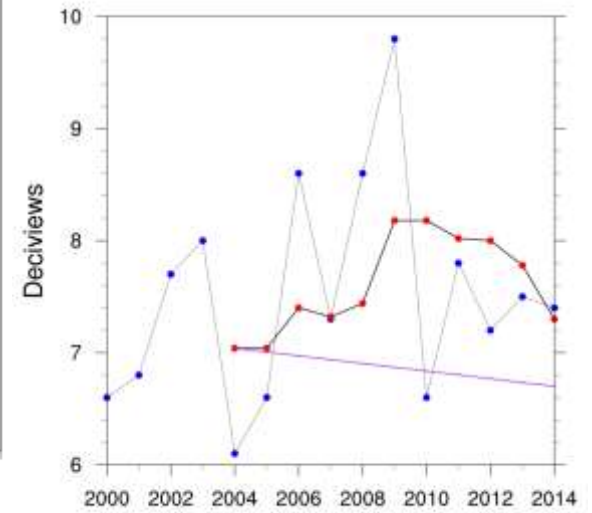
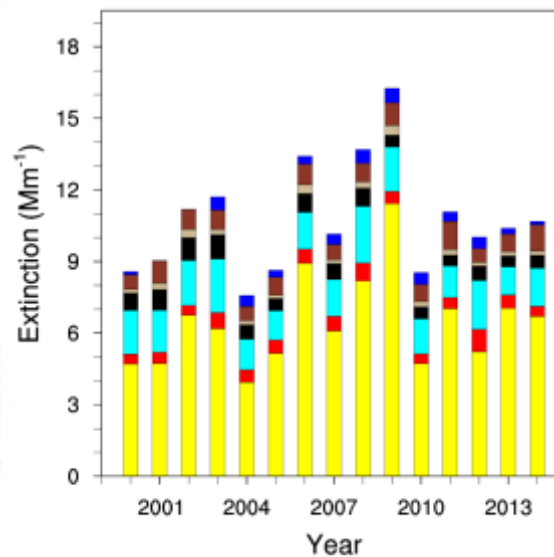
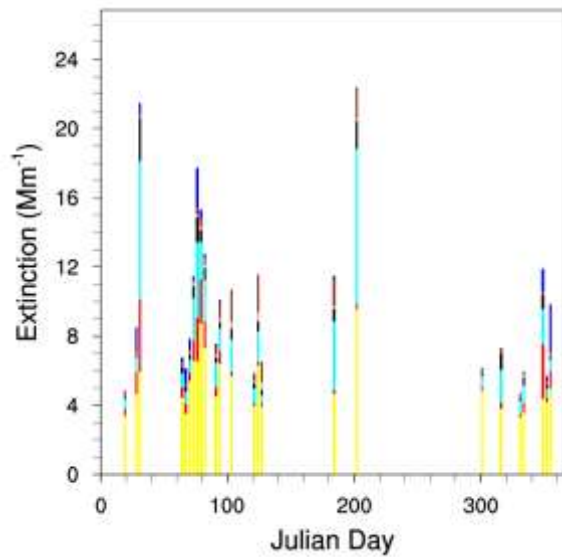
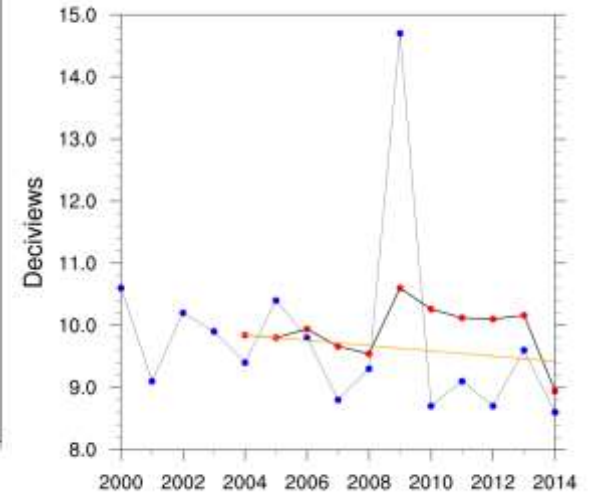
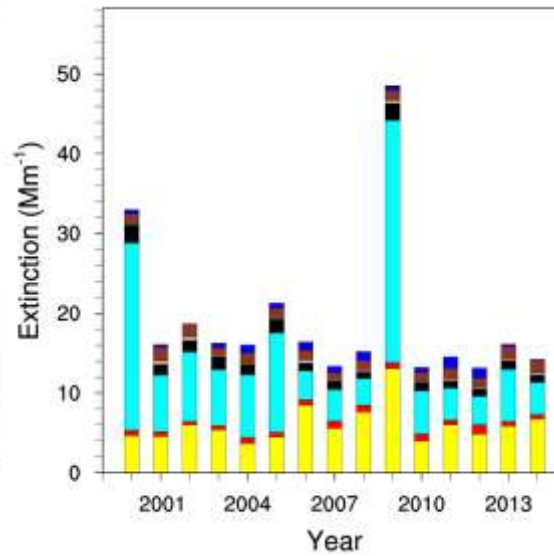
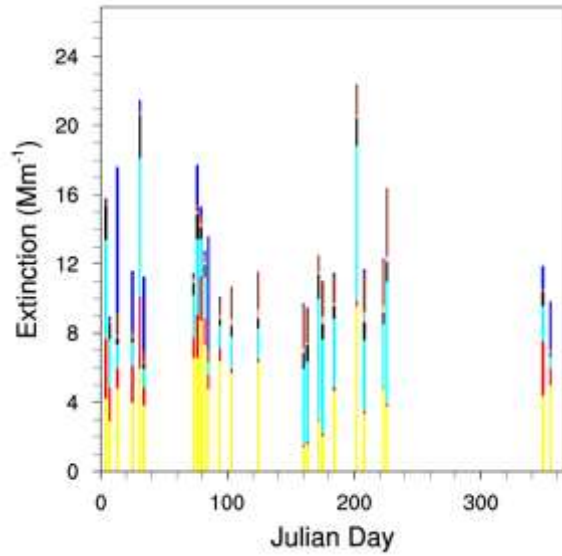
Crater Lake National Park



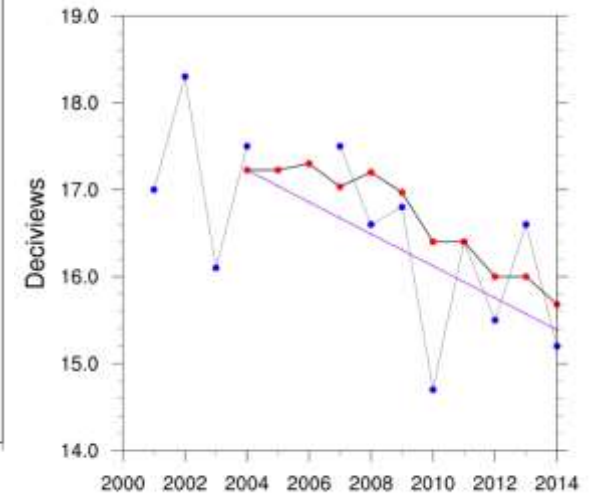
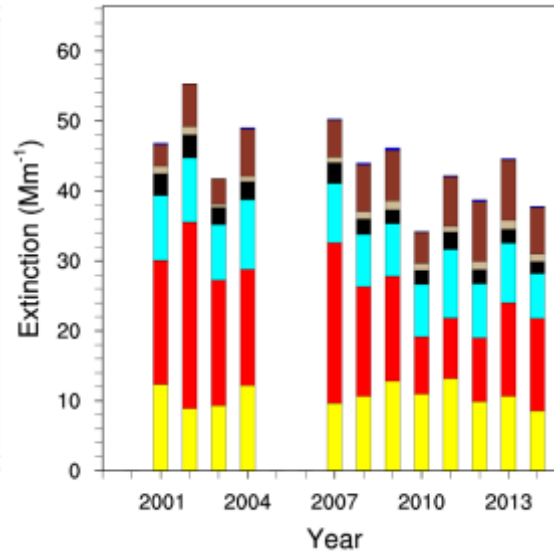
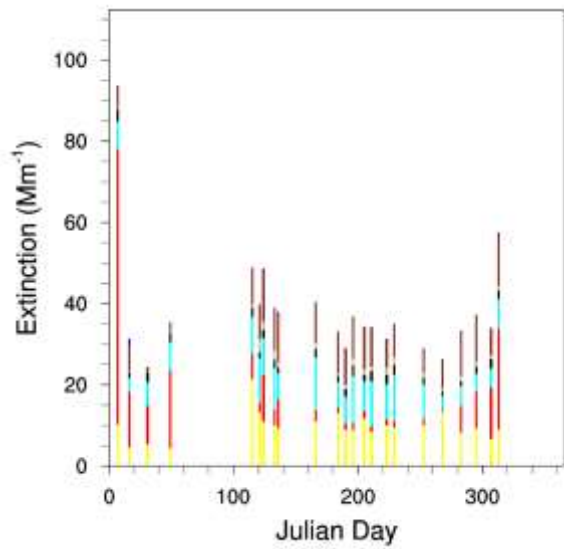
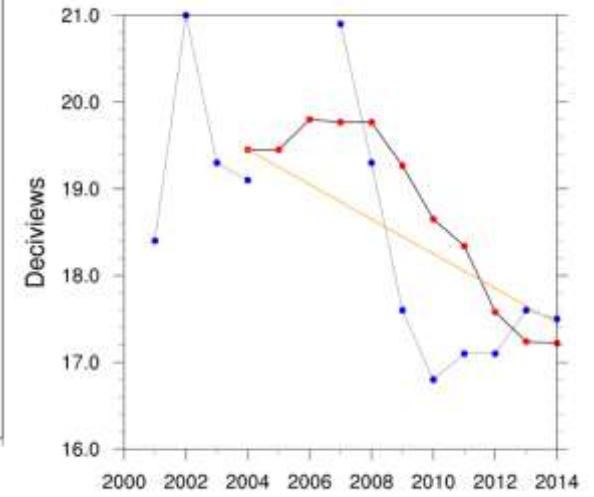
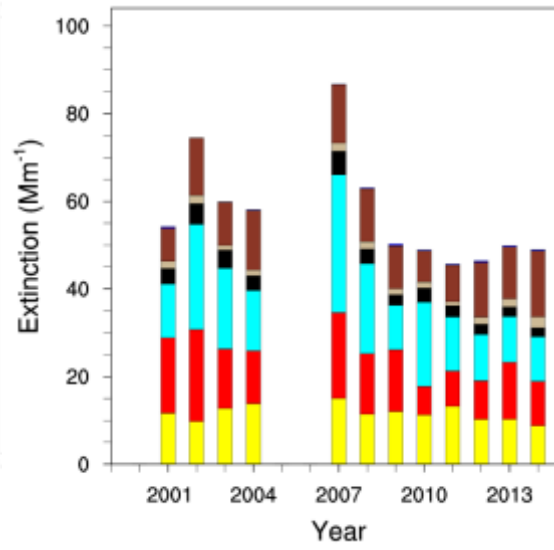
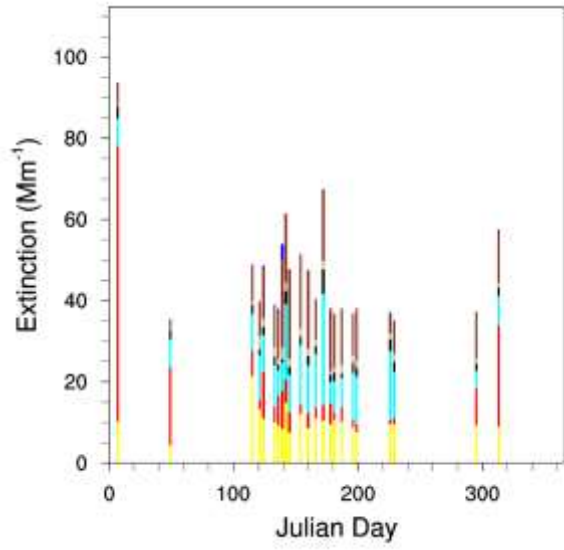
Craters of the Moon National Monument, ID



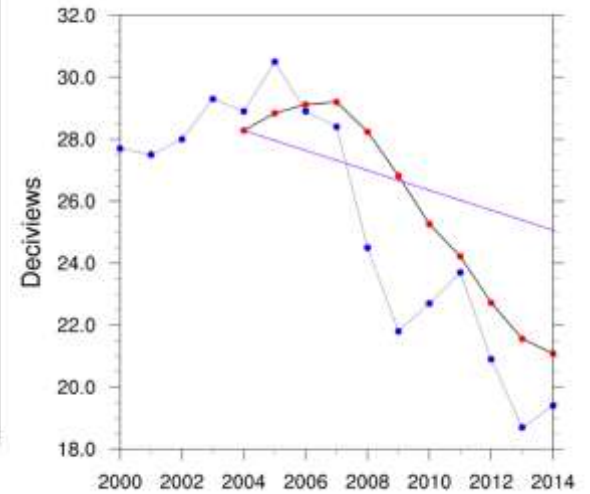
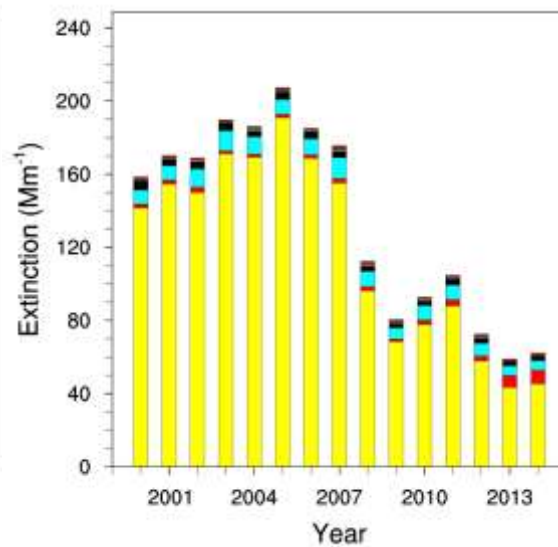
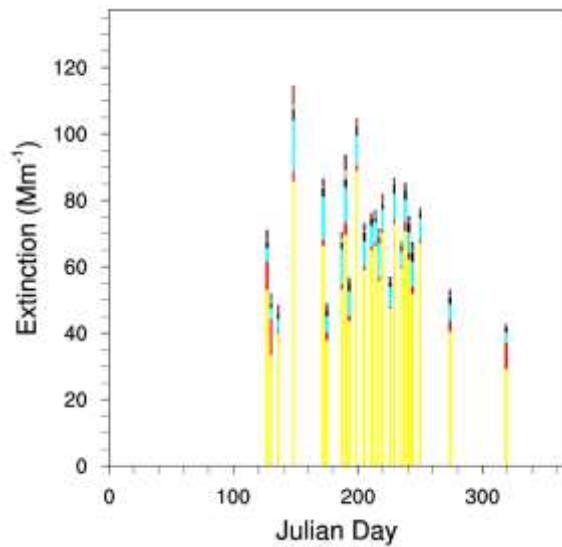
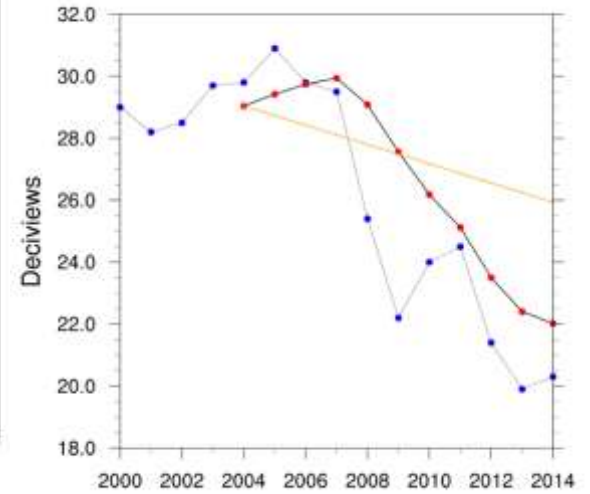
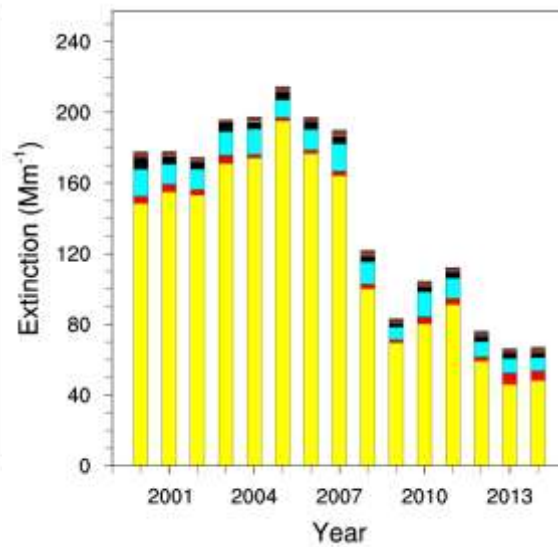
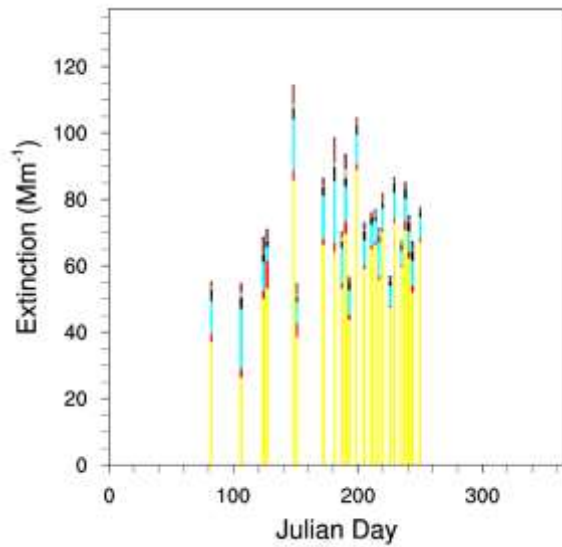
Denali National Park, AK



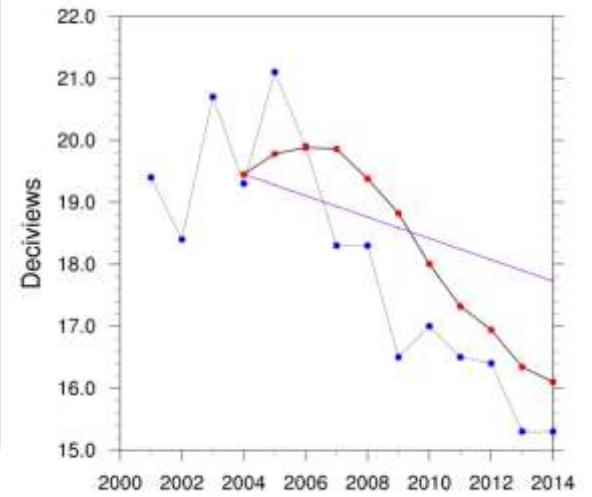
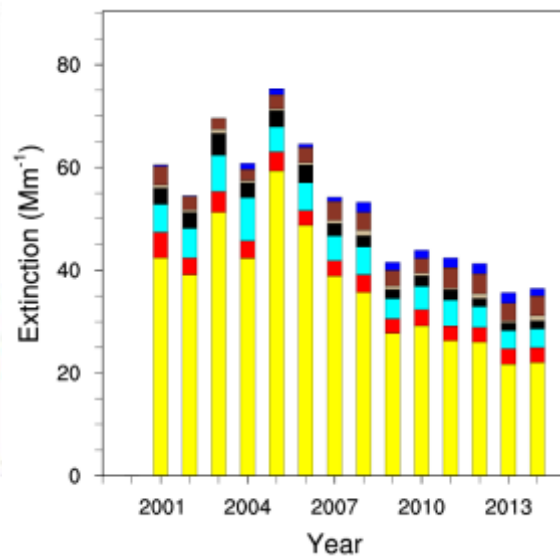
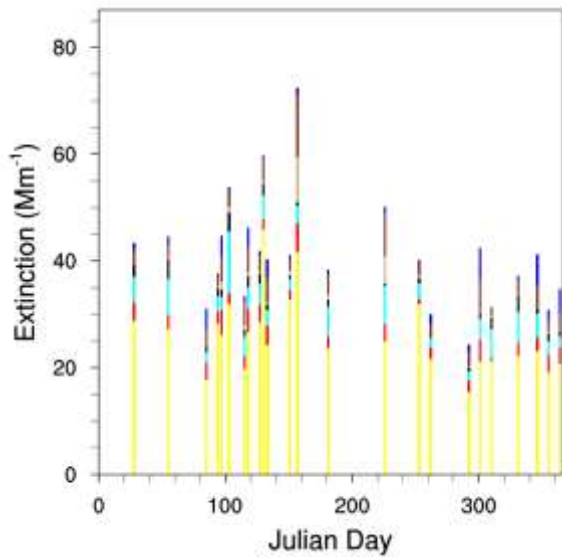
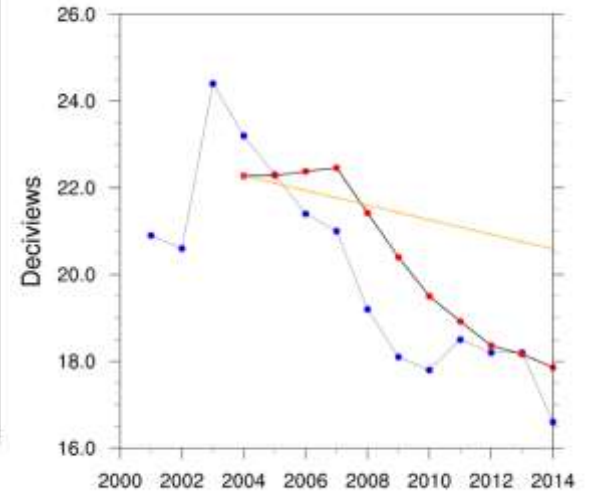
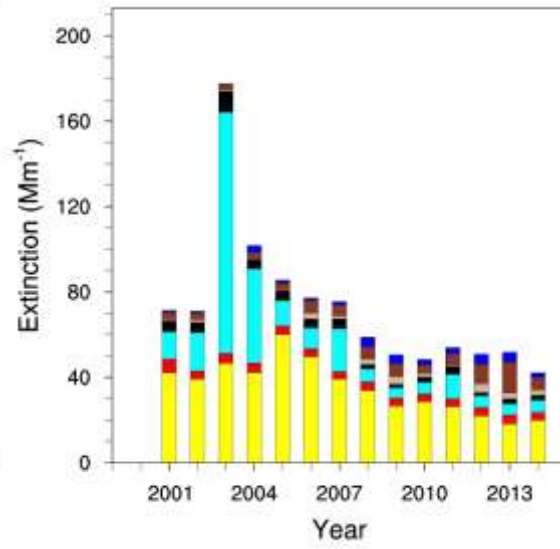
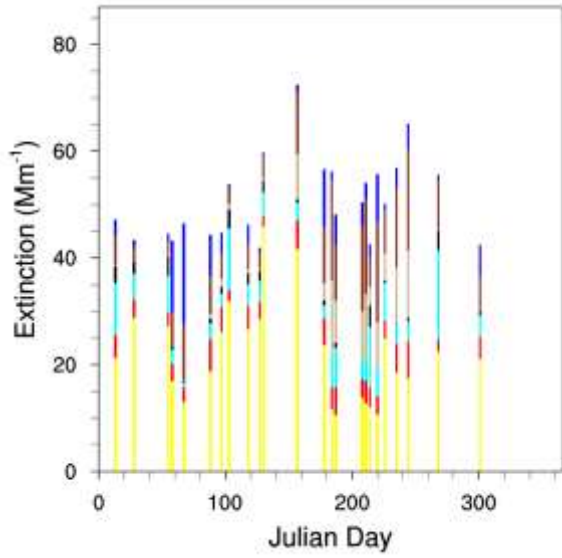
Dome Lands Wilderness, CA



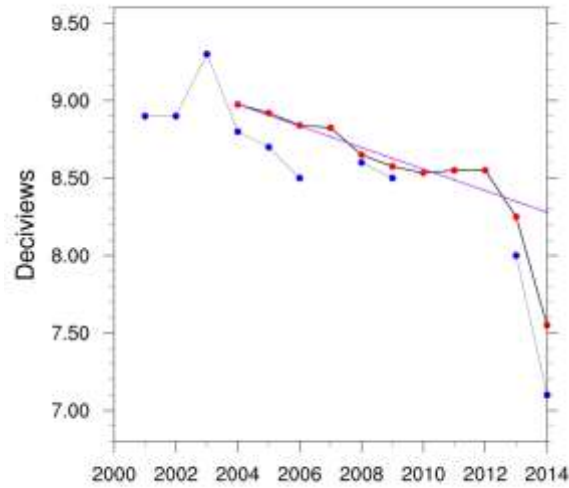
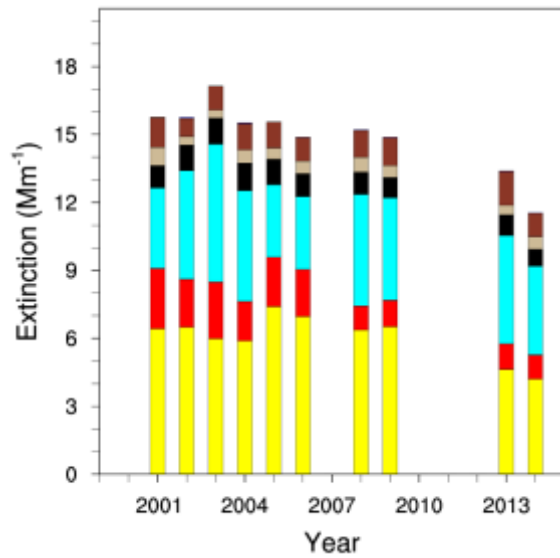
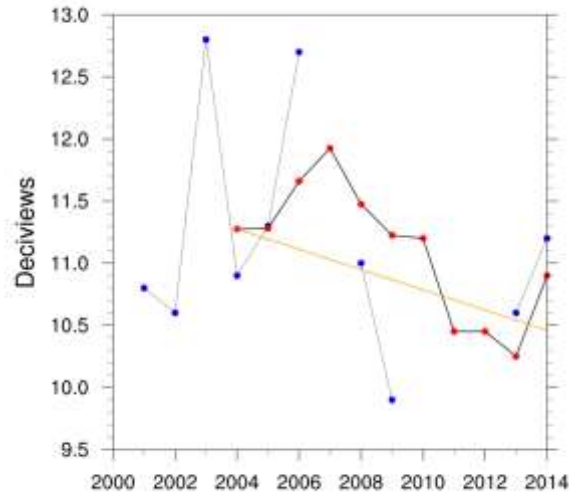
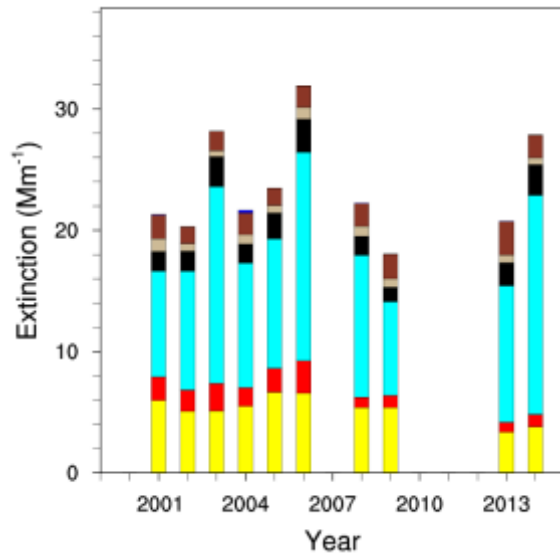
Dolly Sods Wilderness, WV



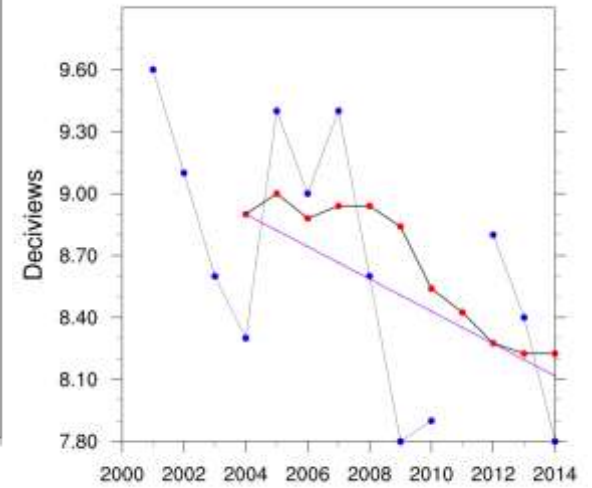
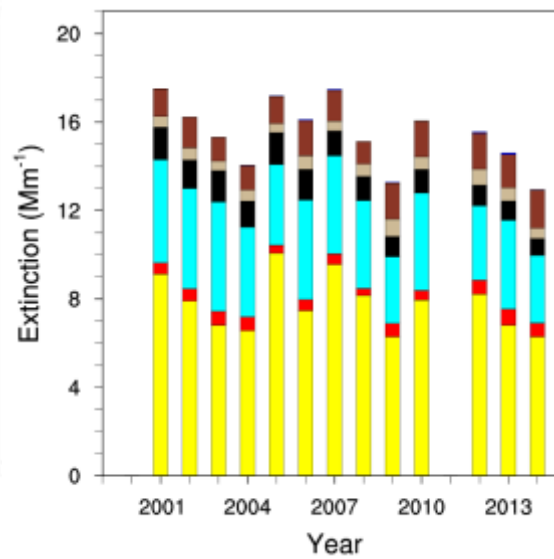
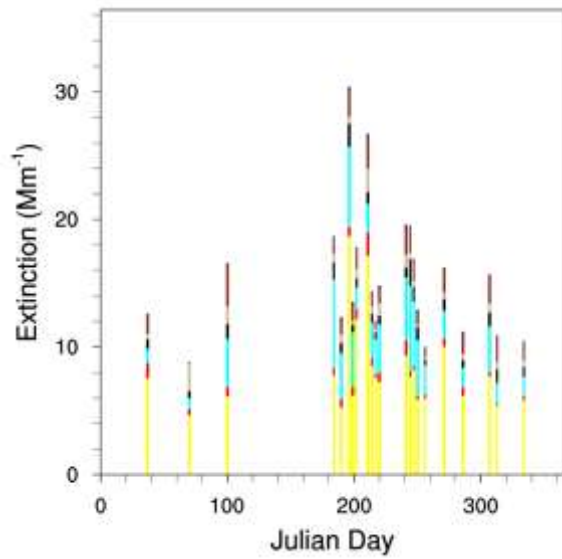
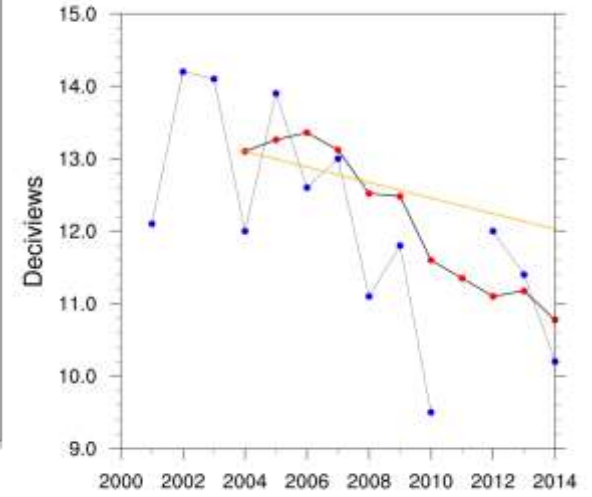
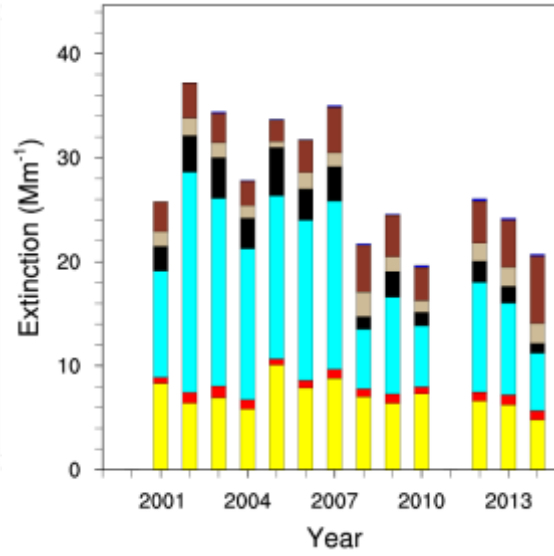
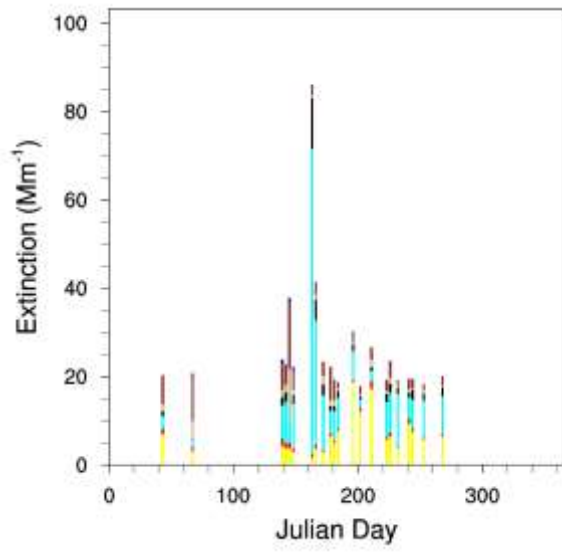
Everglades National Park, FL



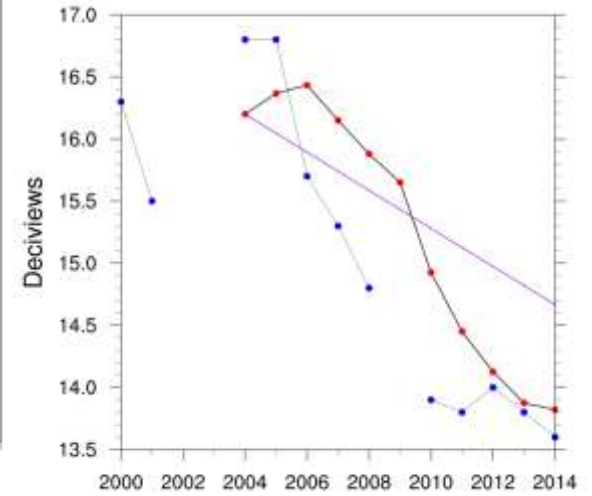
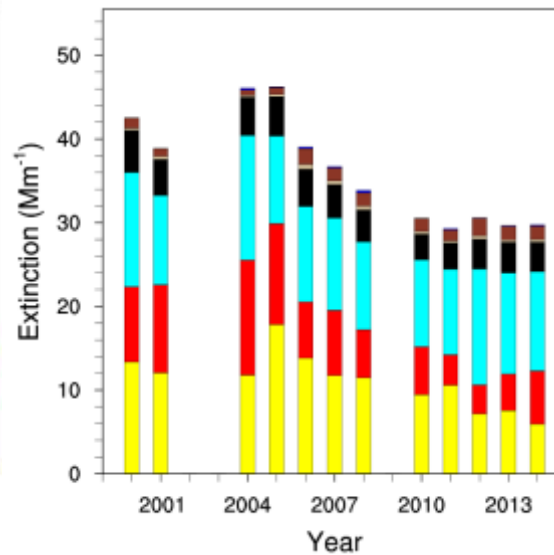
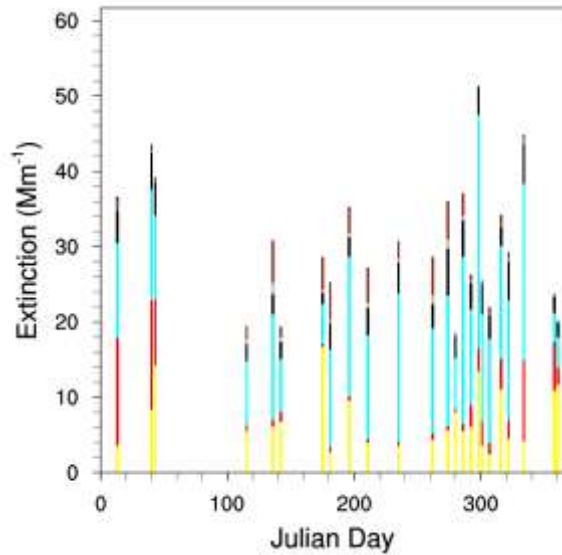
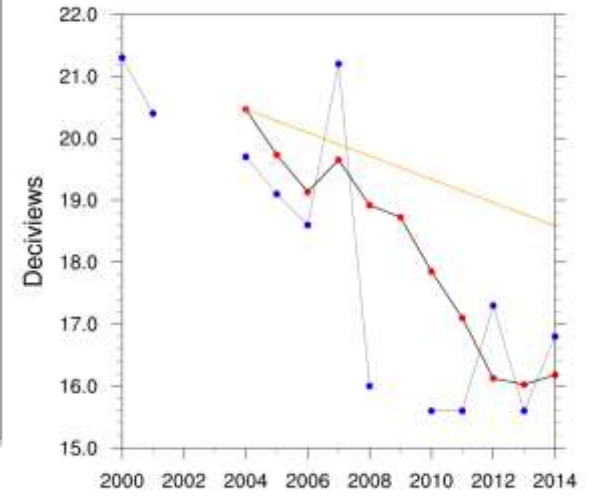
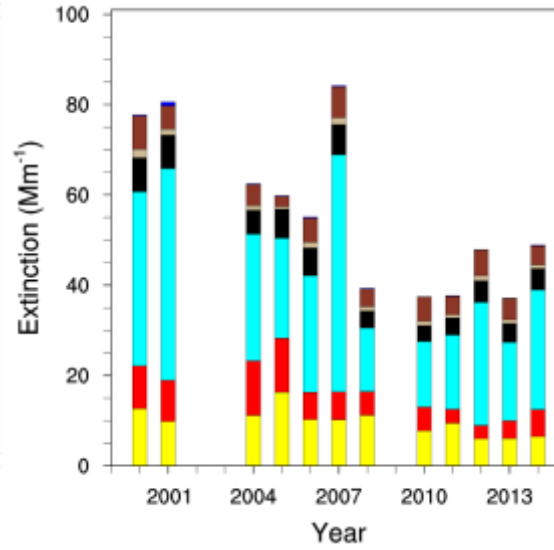
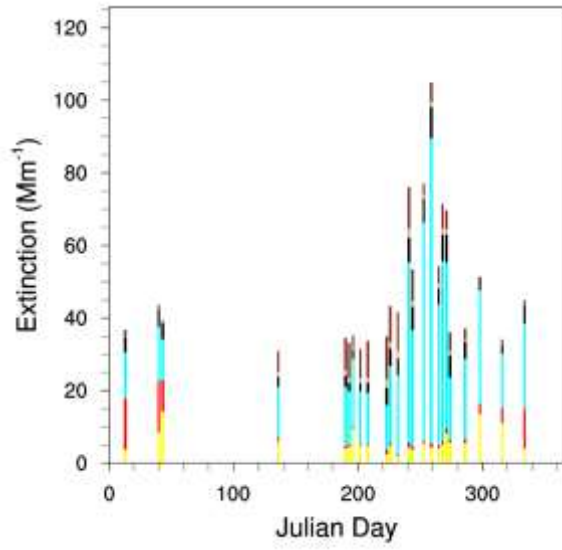
Gates of the Mountains, MT



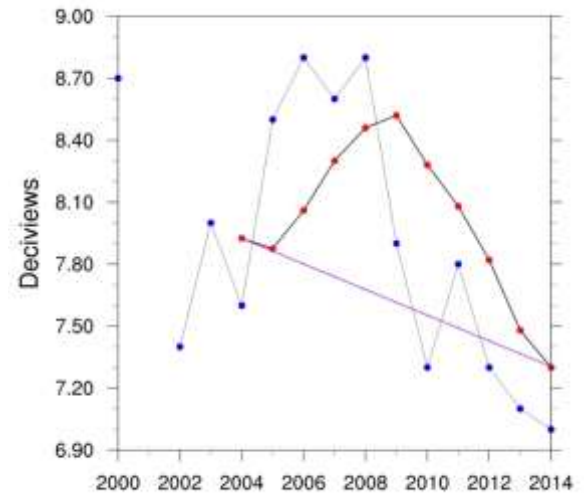
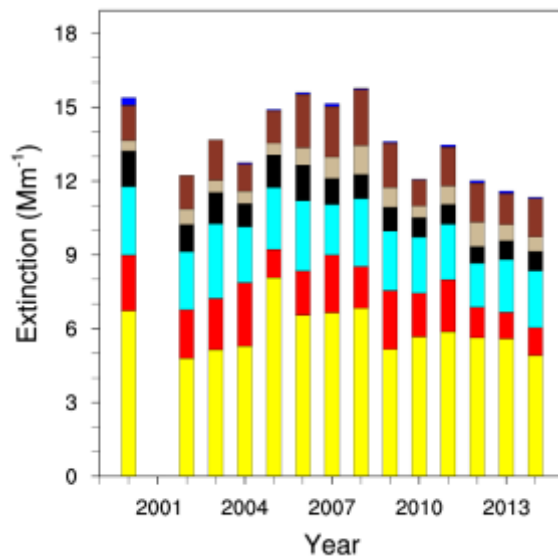
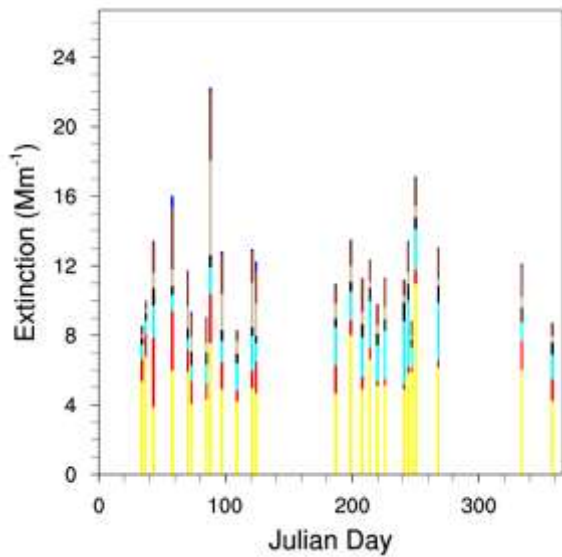
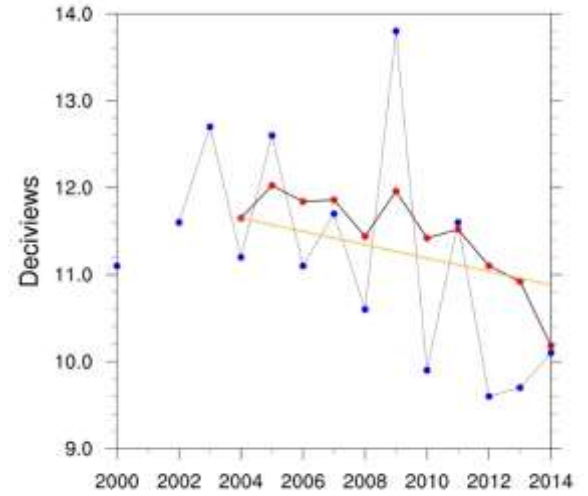
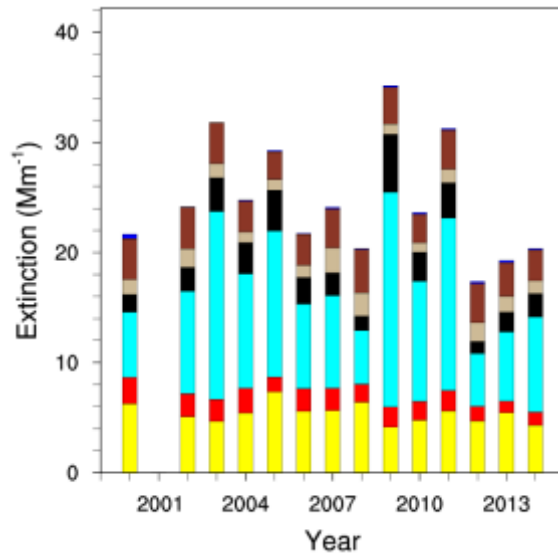
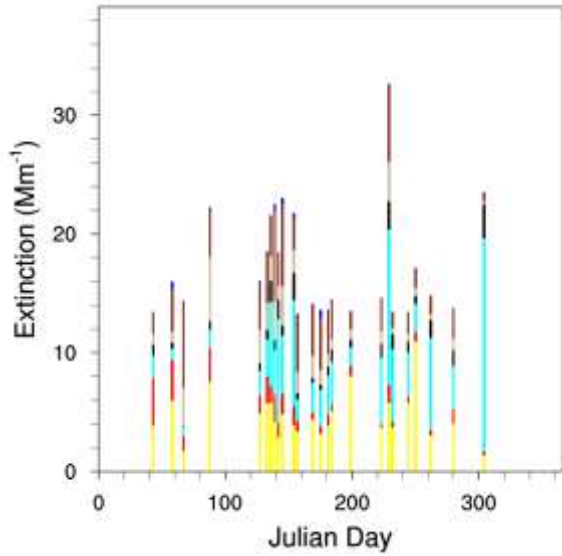
Gila Wilderness, NM



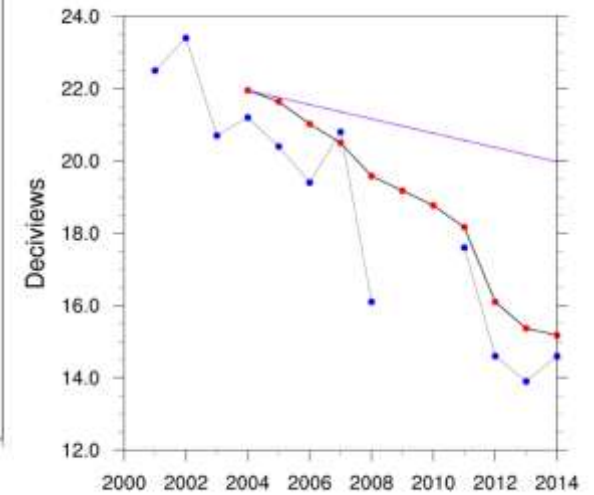
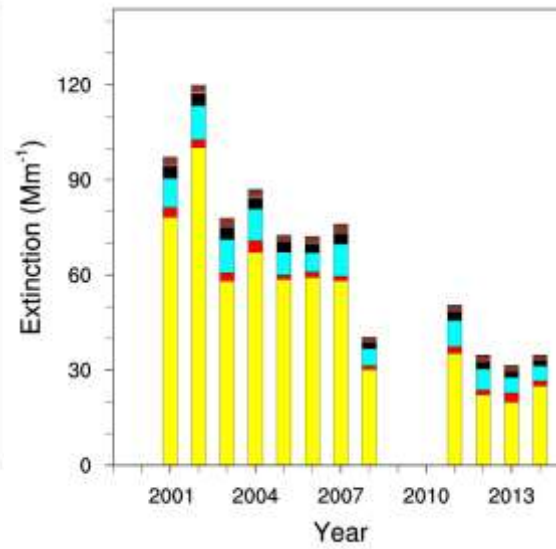
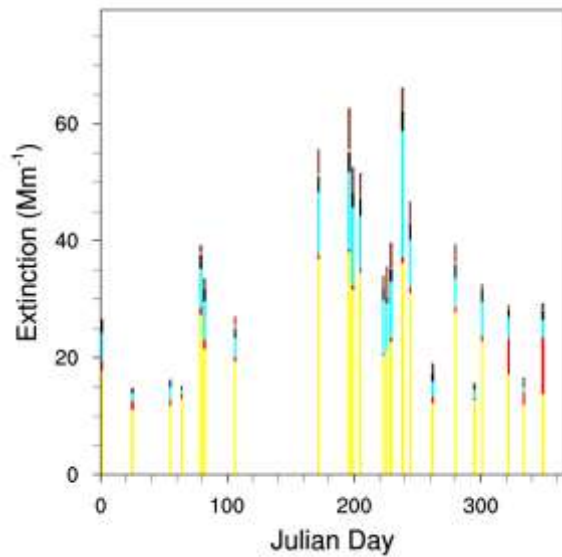
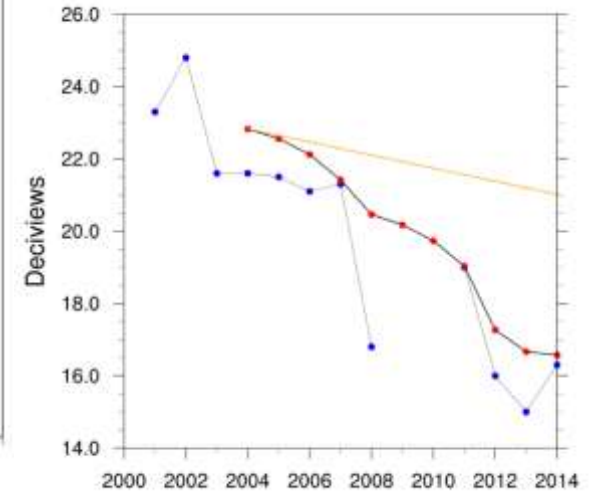
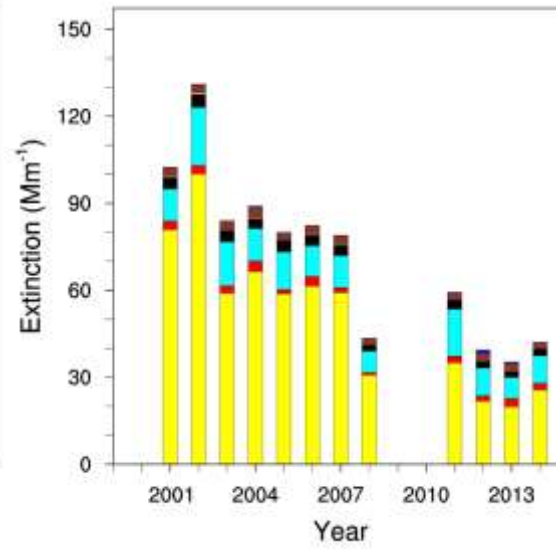
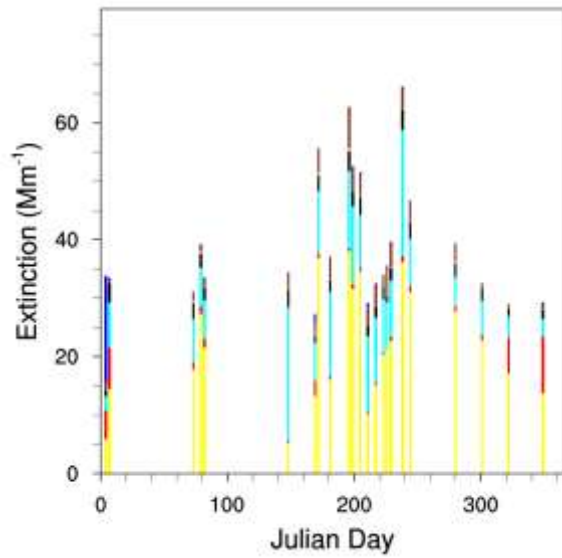
Glacier National Park, MT



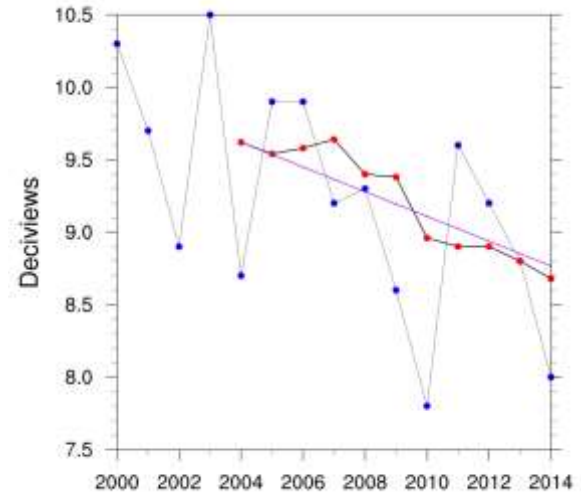
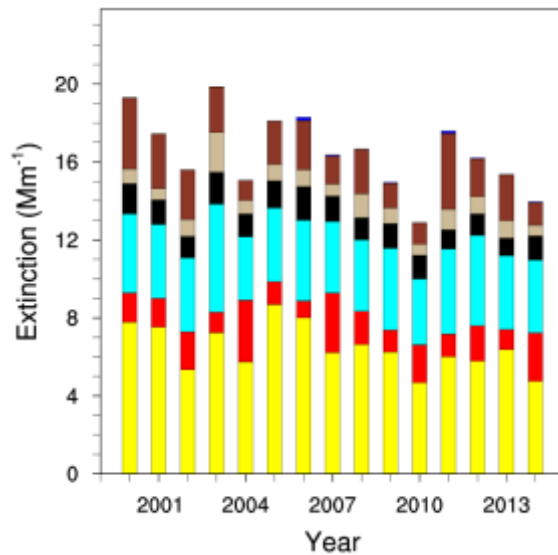
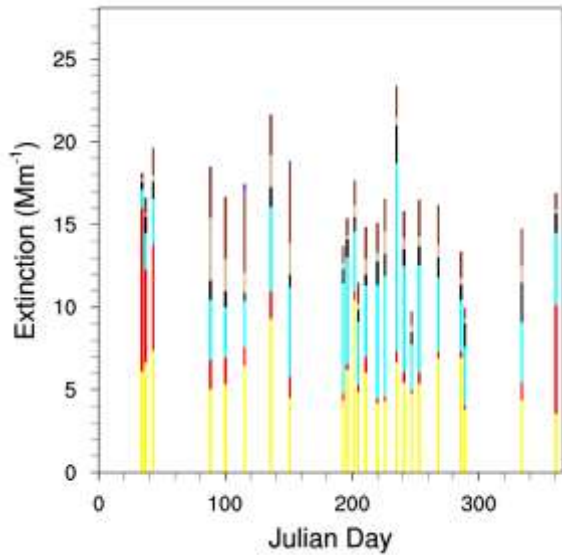
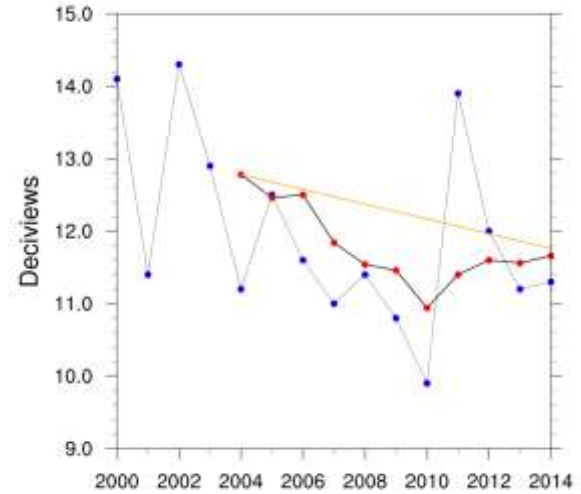
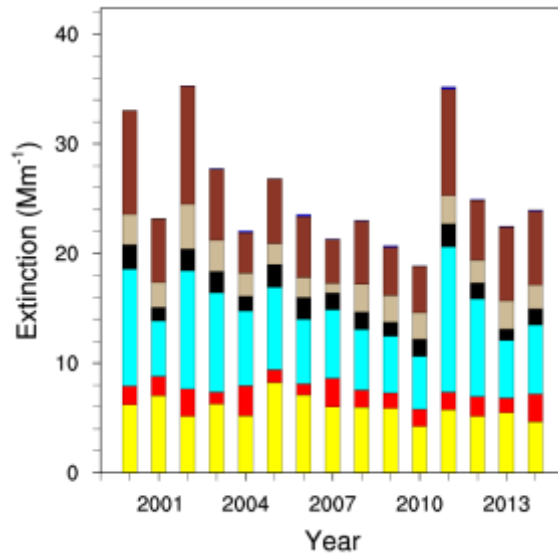
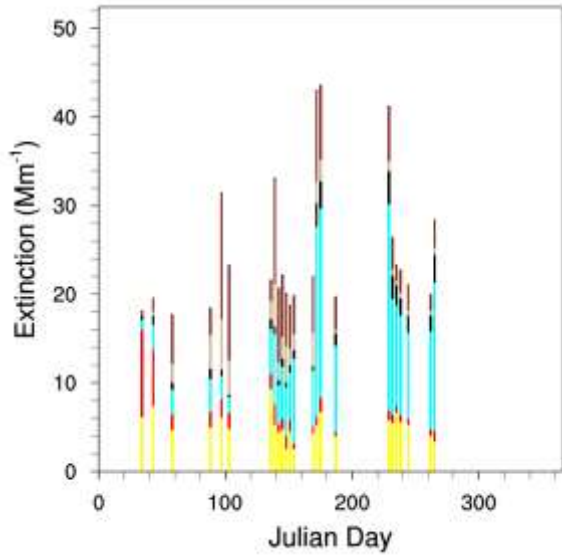
Grand Canyon National Park, AZ



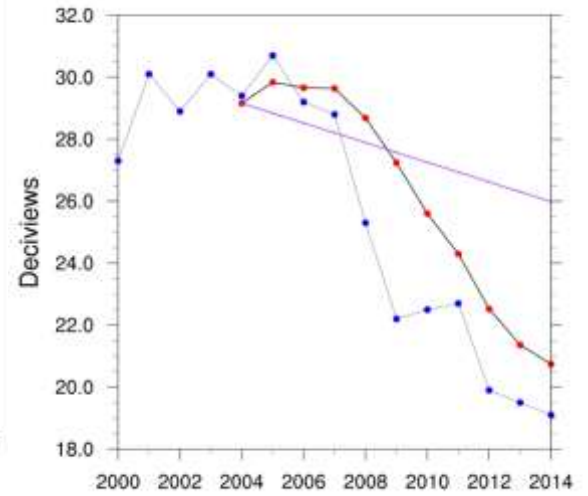
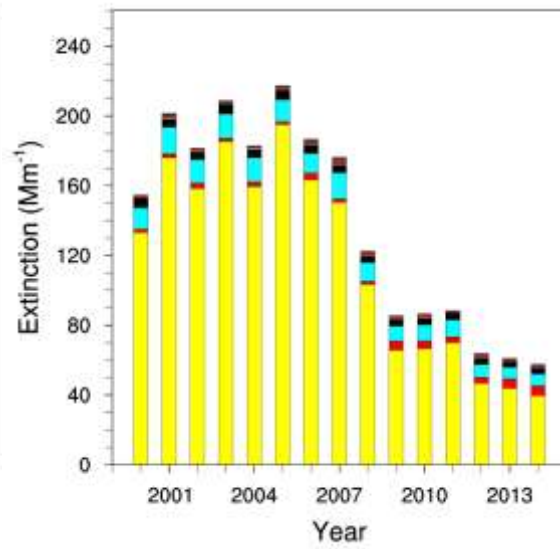
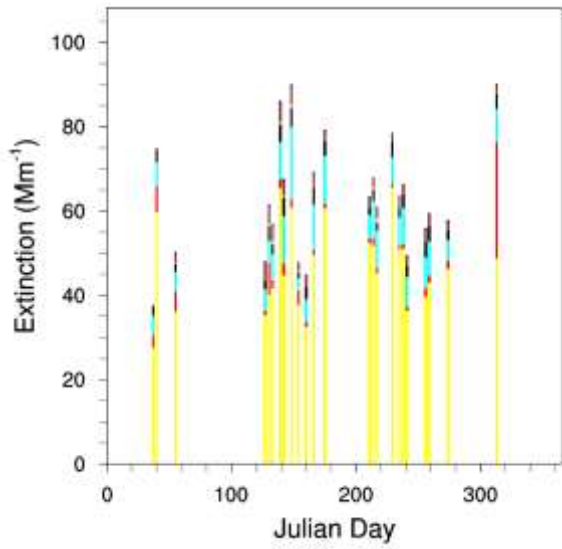
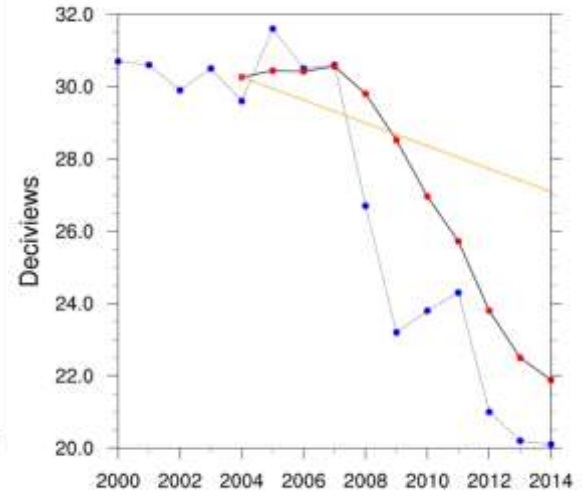
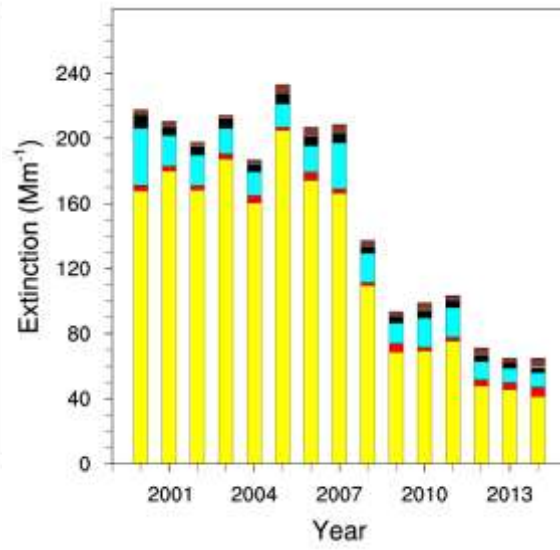
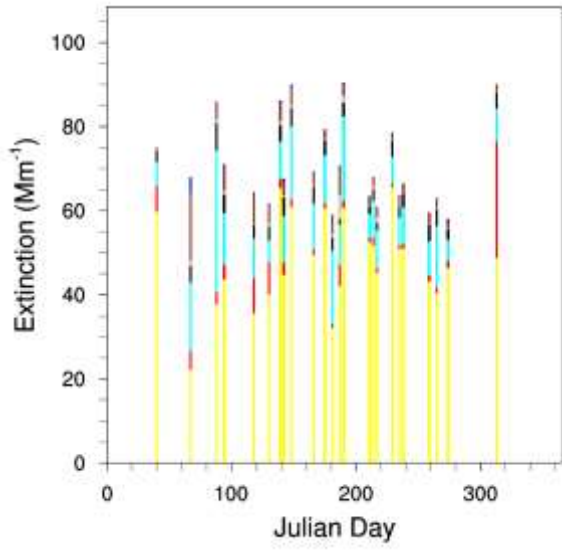
Great Gulf Wilderness, NH



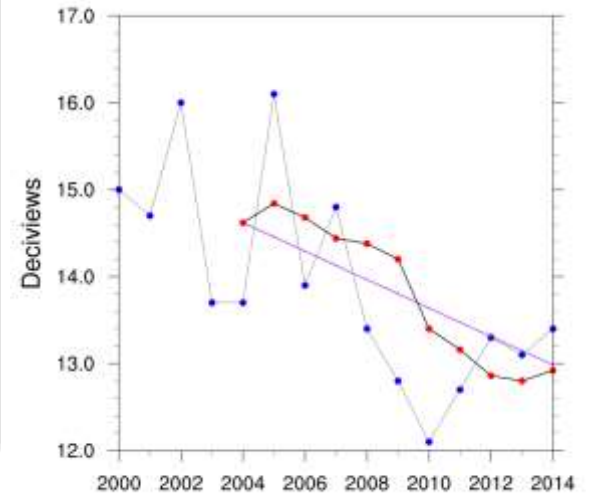
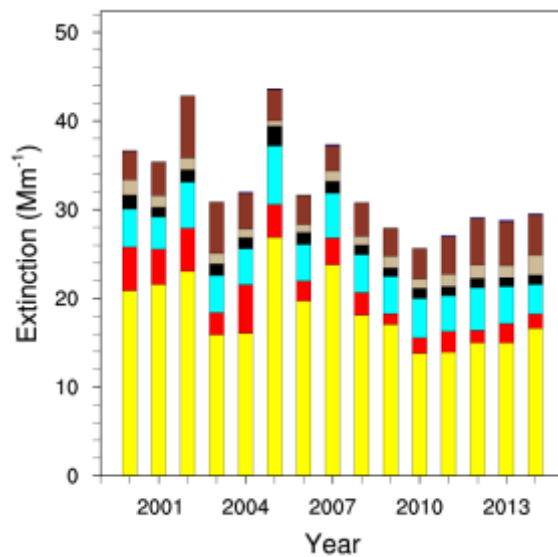
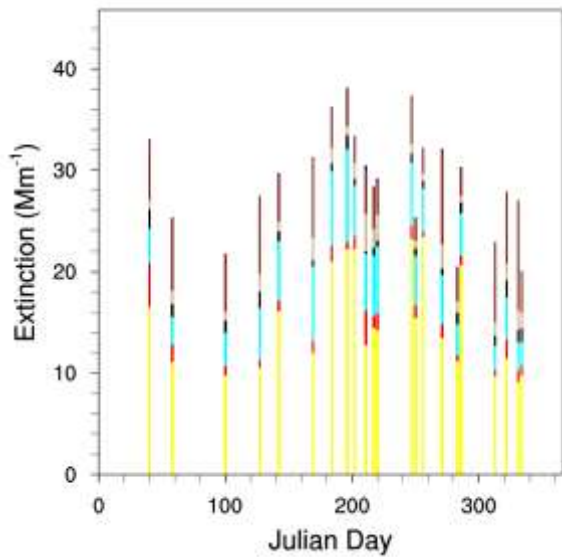
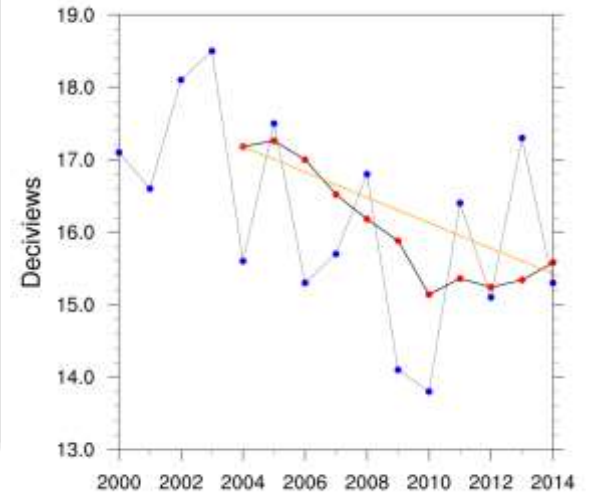
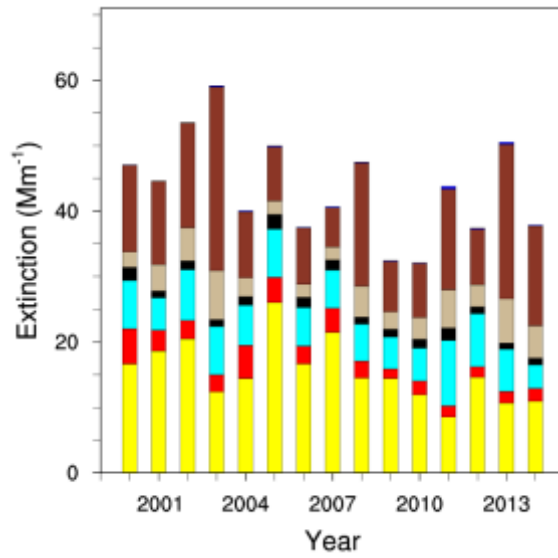
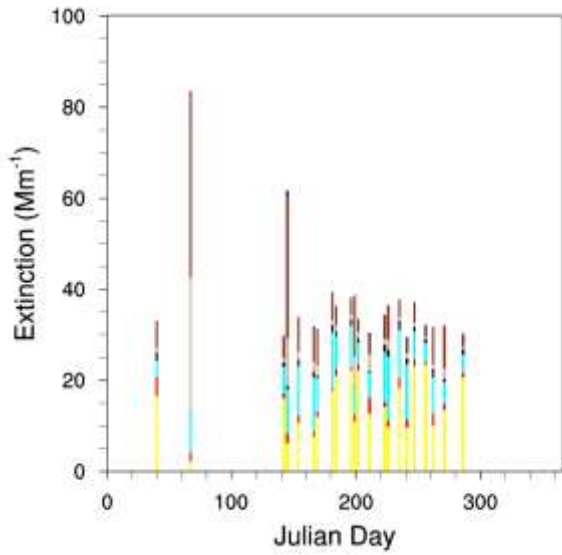
Great Sand Dunes National Monument, CO



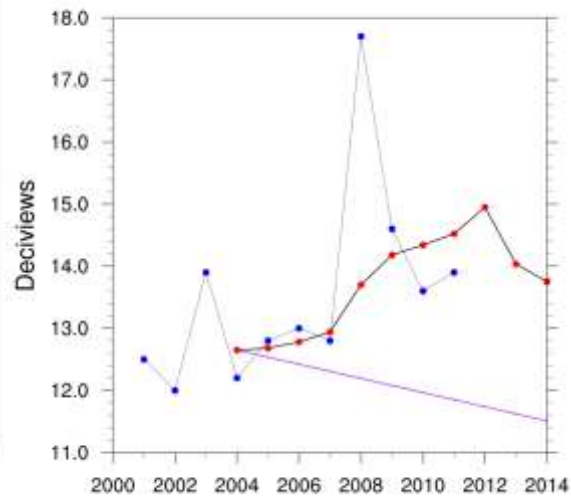
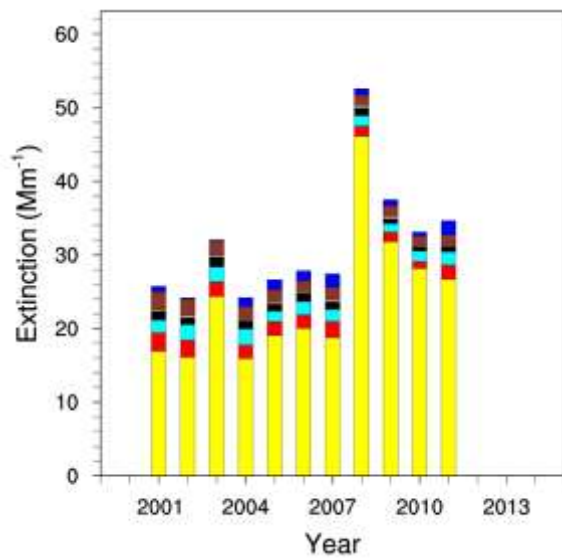
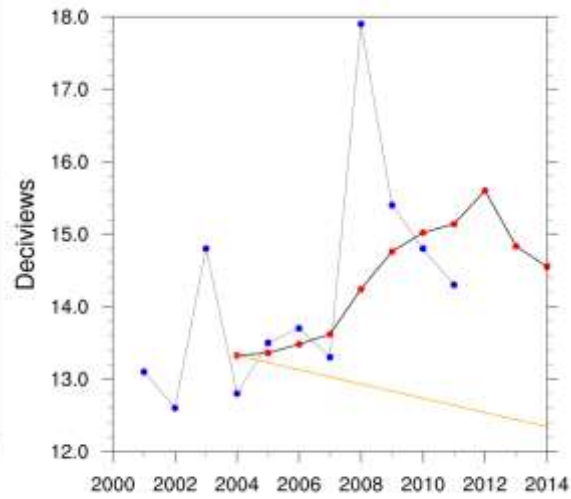
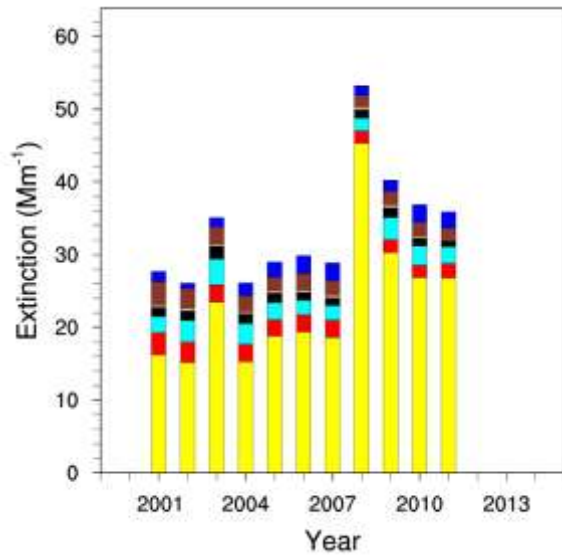
Great Smoky Mountains National Park, TN



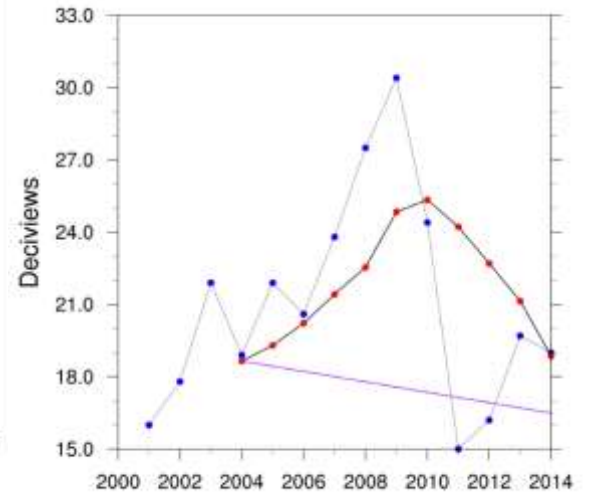
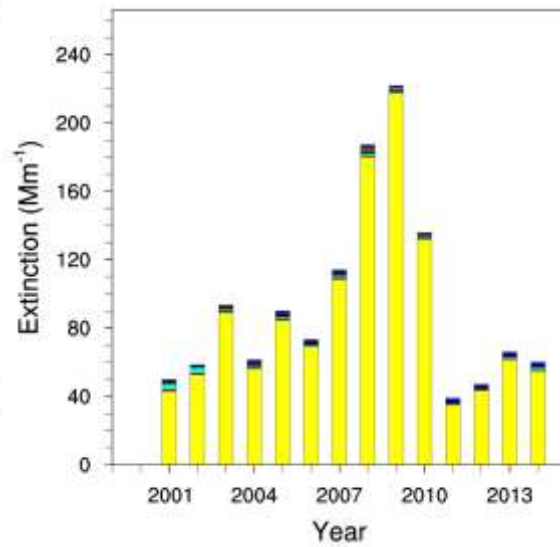
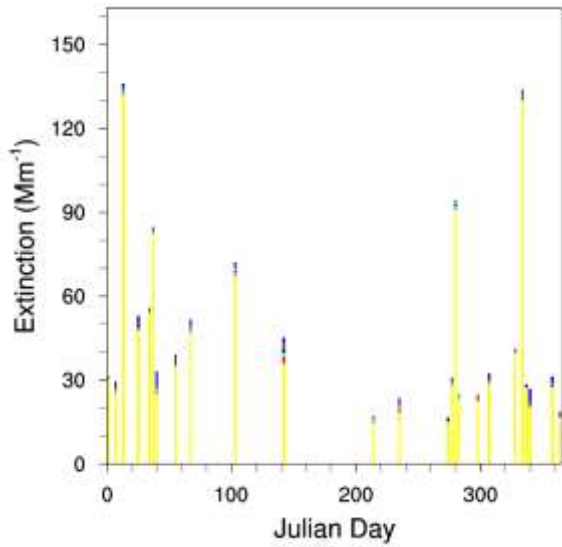
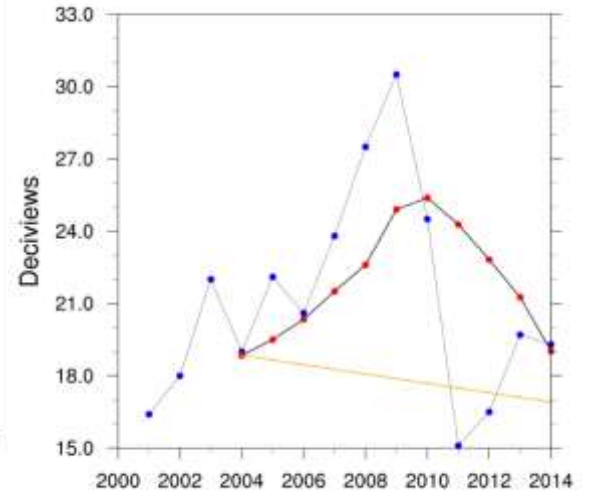
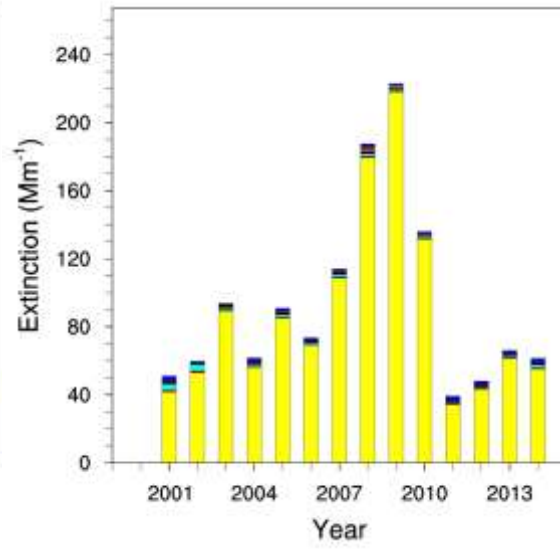
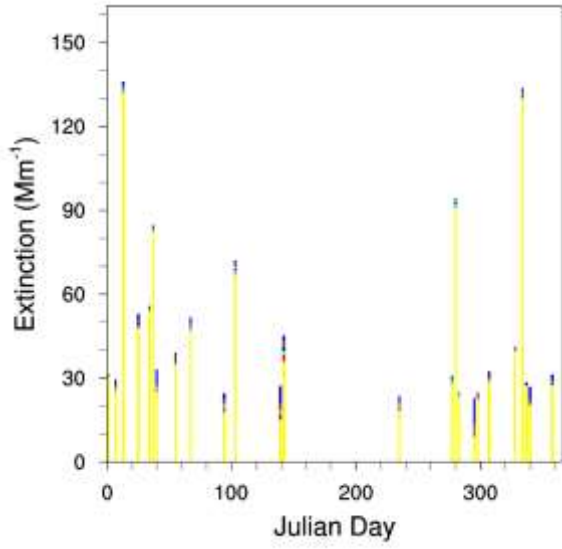
Guadalupe Mountains National Park, TX



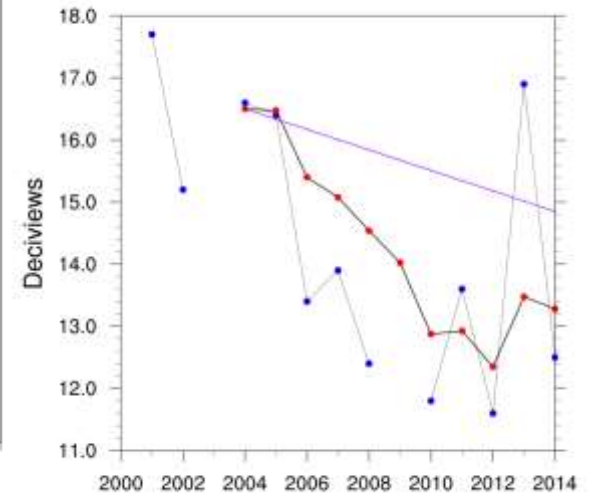
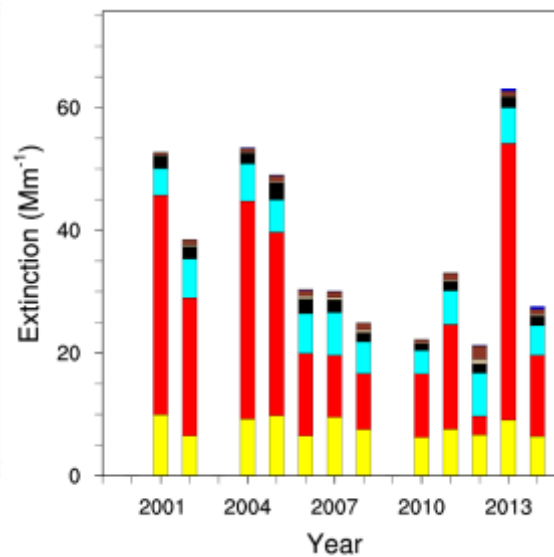
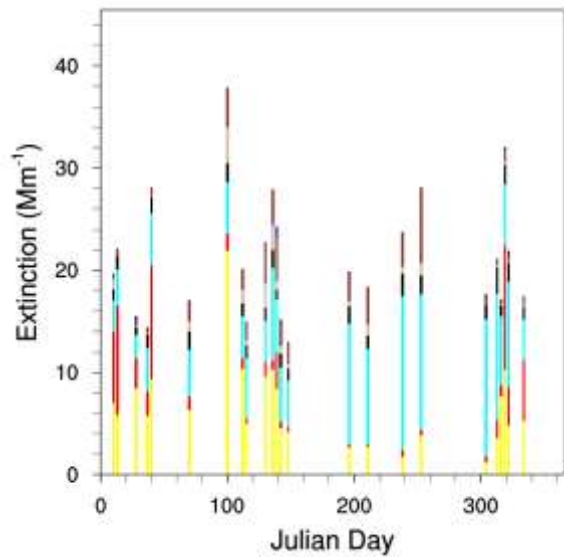
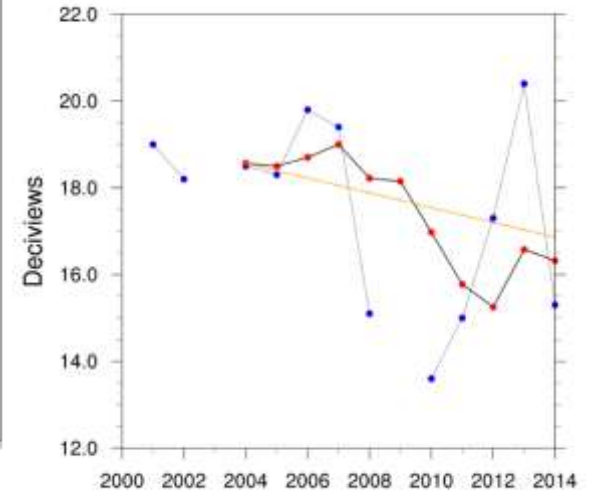
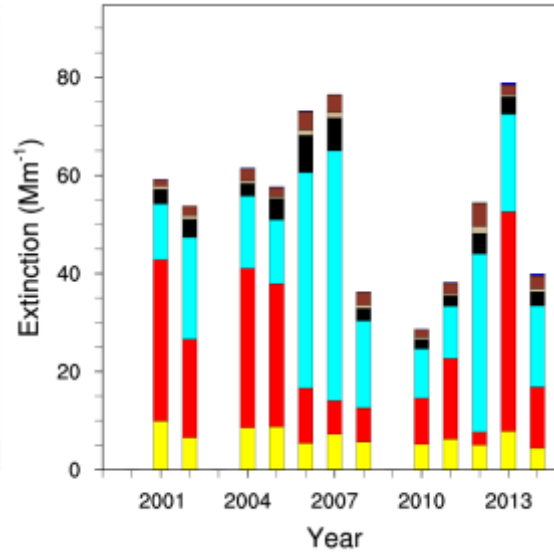
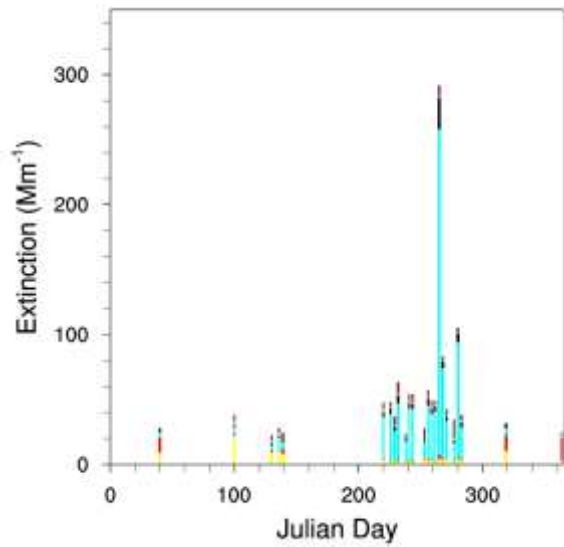
Haleakala National Park, HI



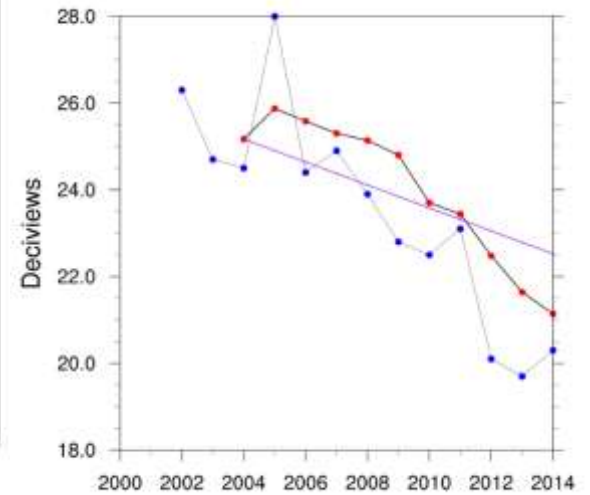
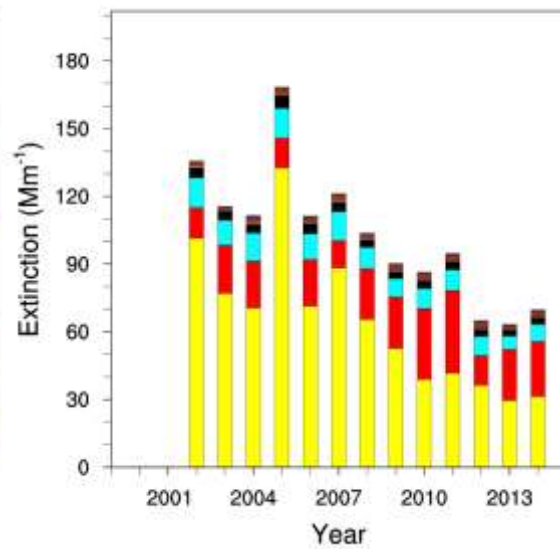
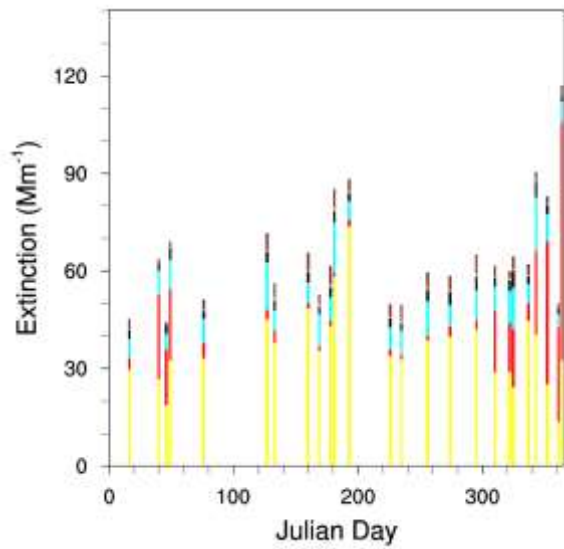
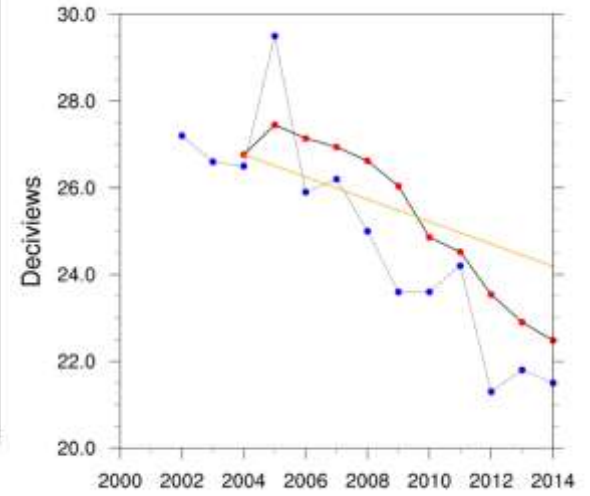
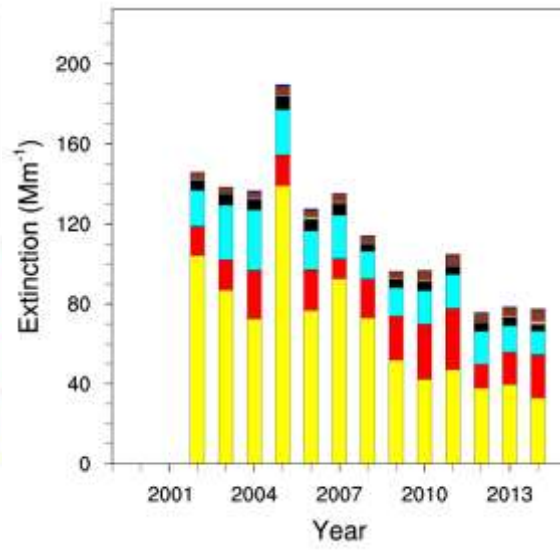
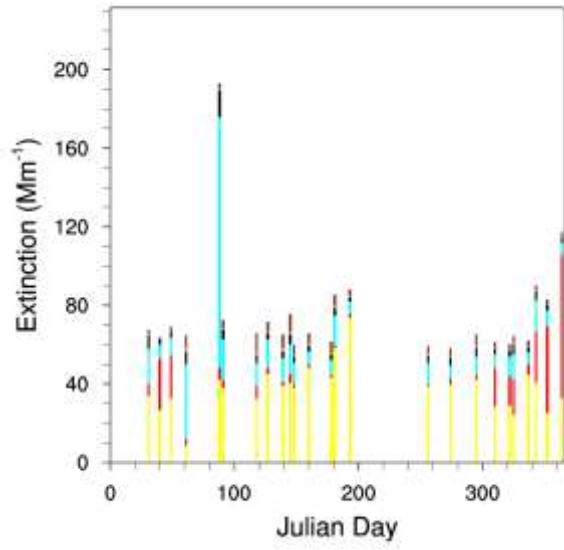
Hawaii Volcanoes National Park, HI



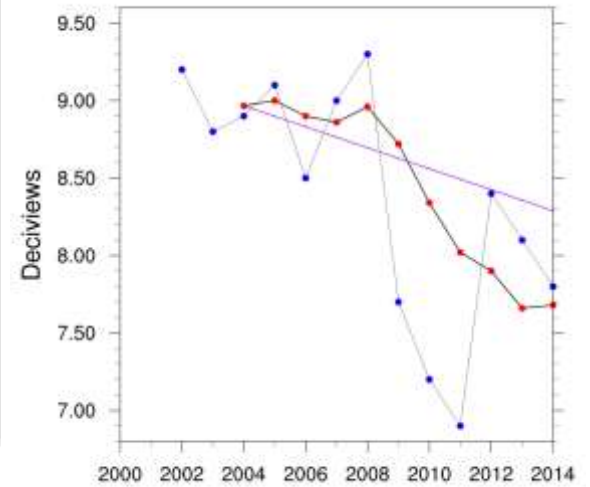
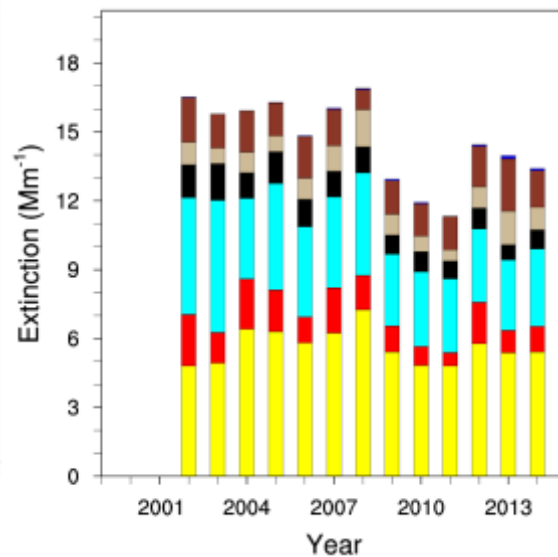
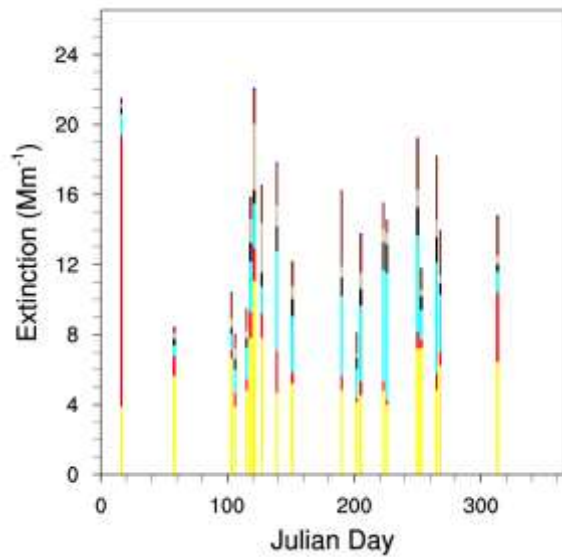
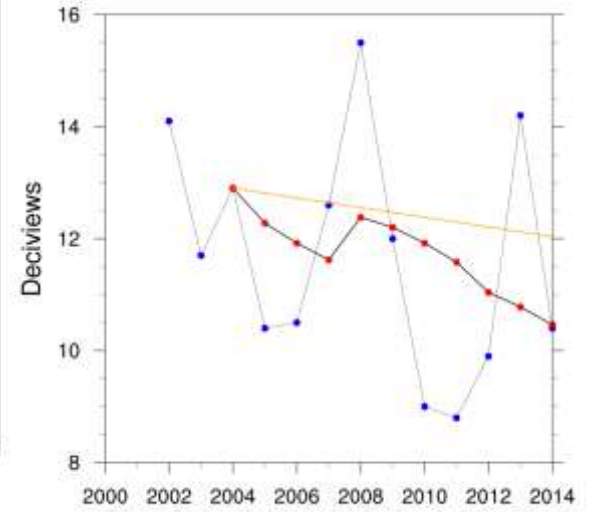
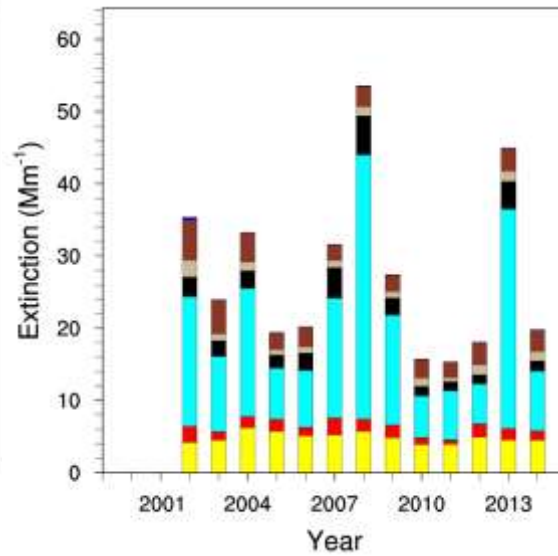
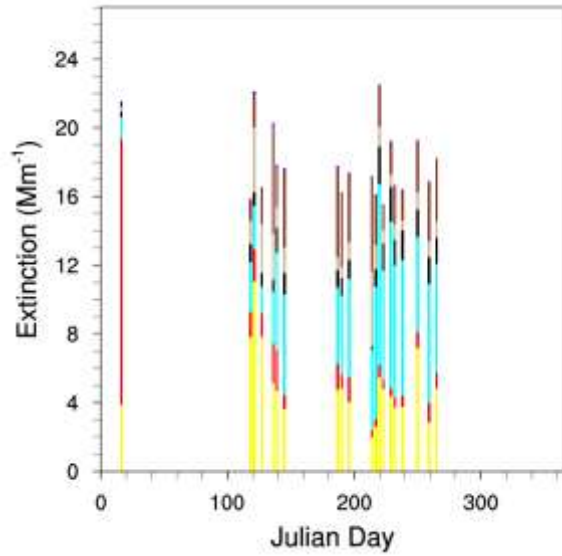
Hells Canyon, OR



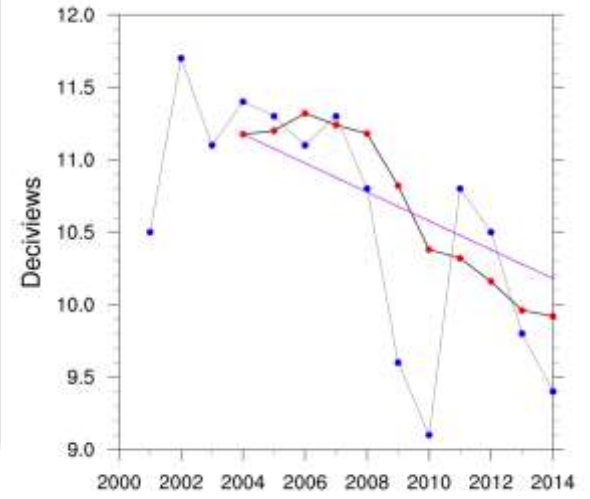
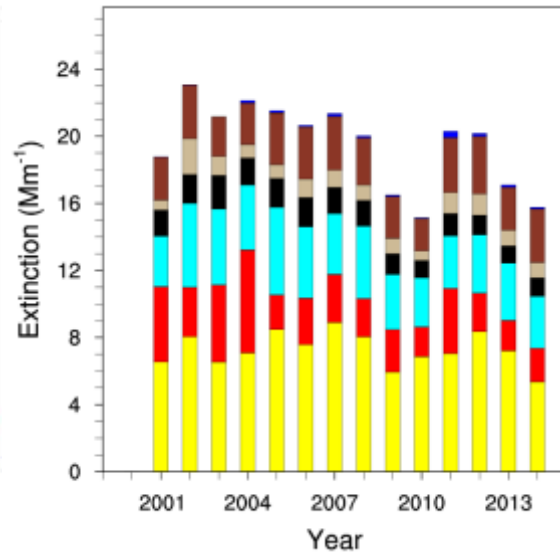
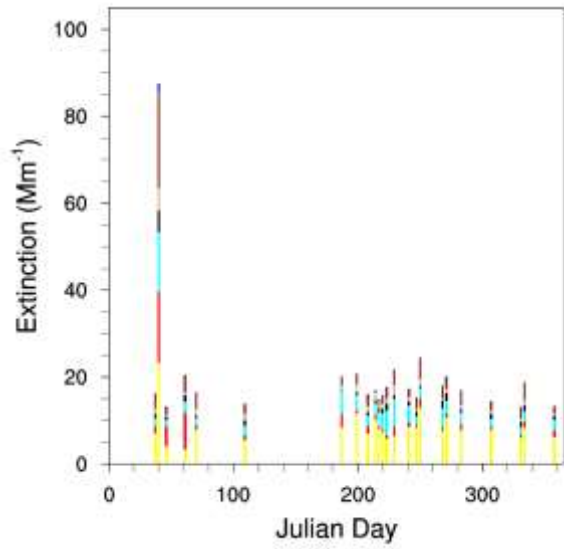
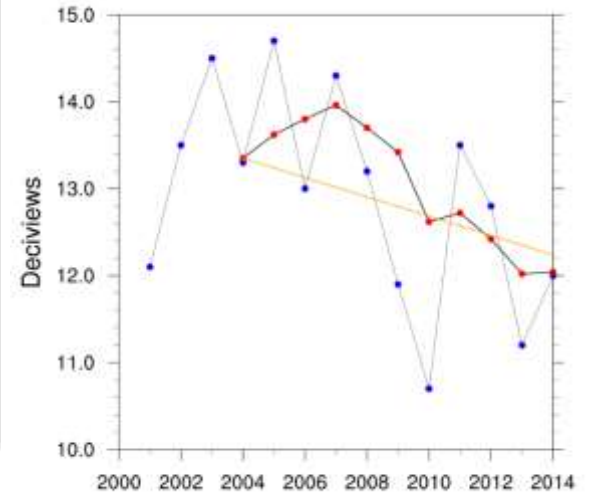
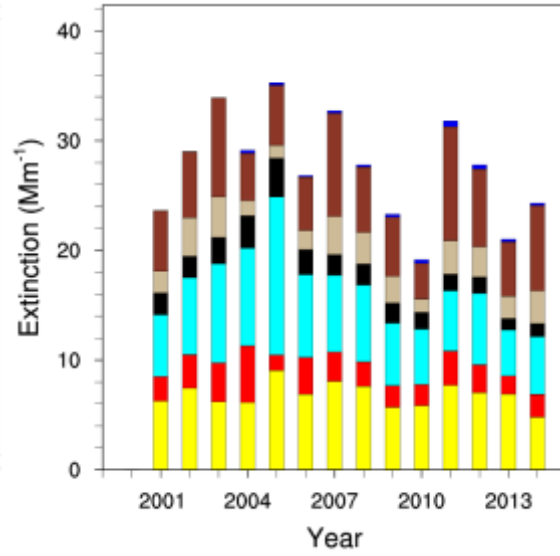
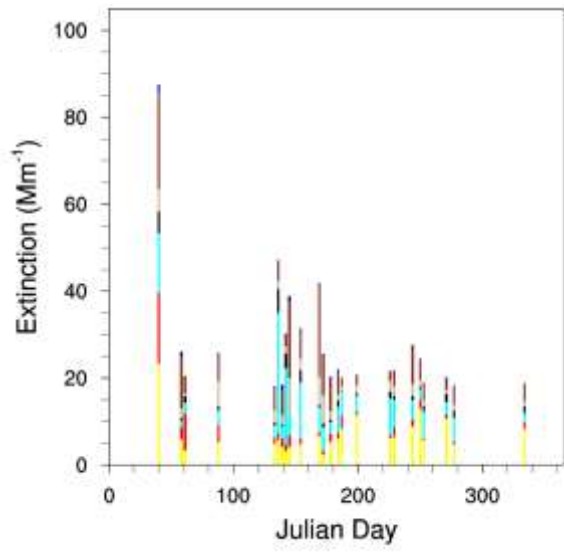
Hercules-Glades, MO



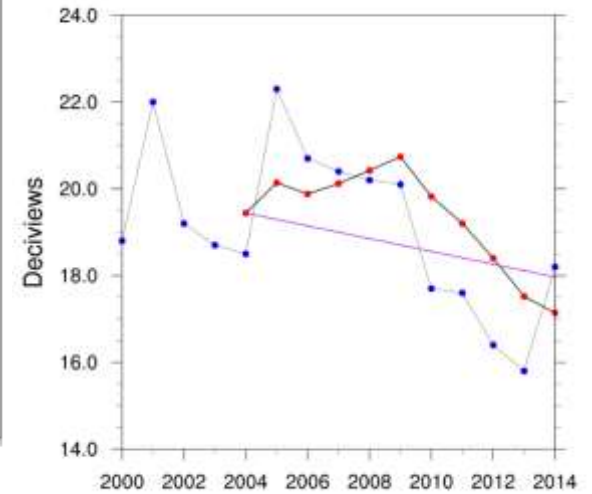
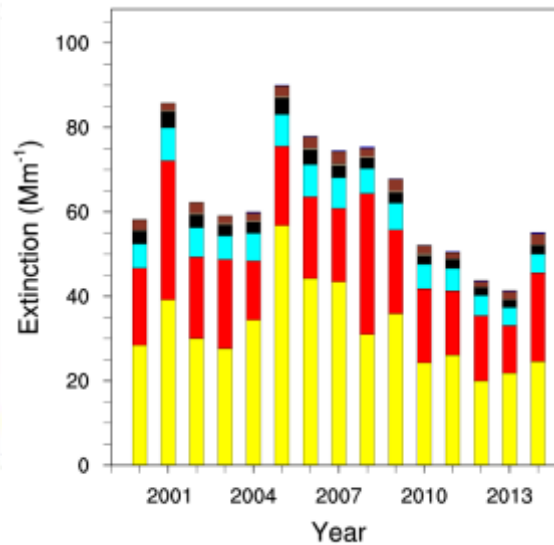
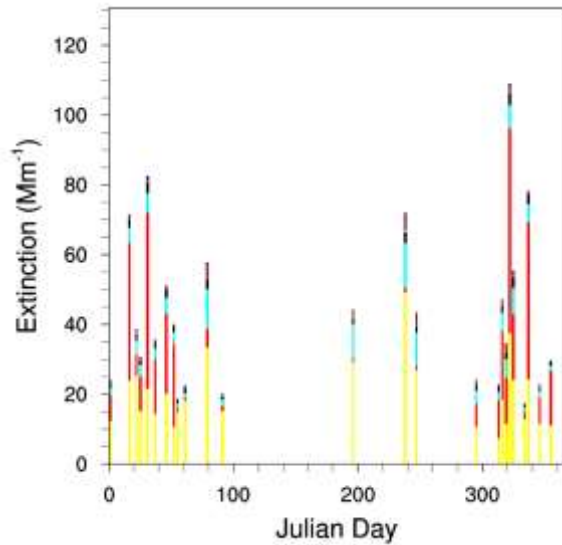
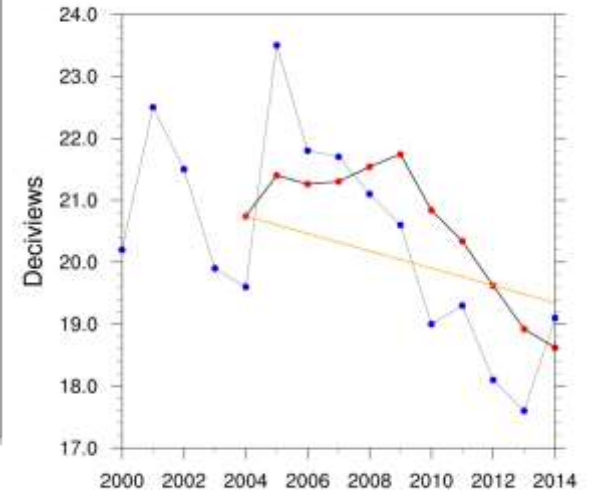
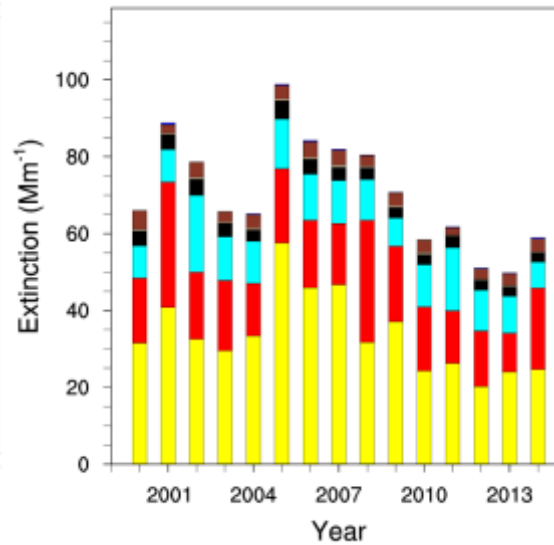
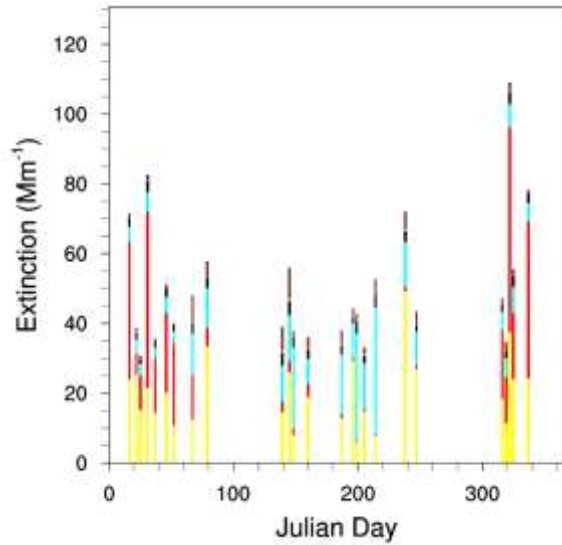
Hoover, CA



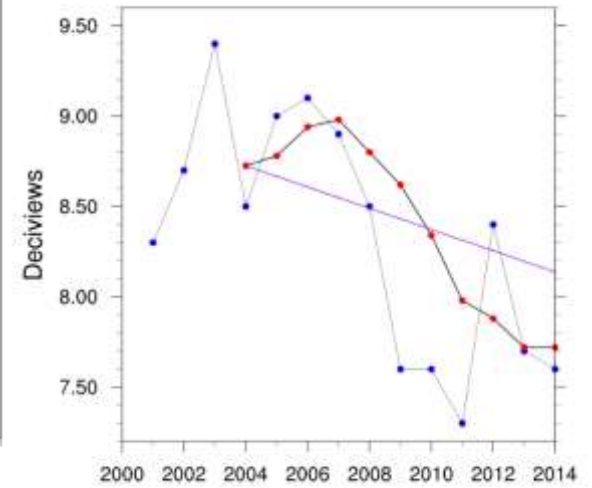
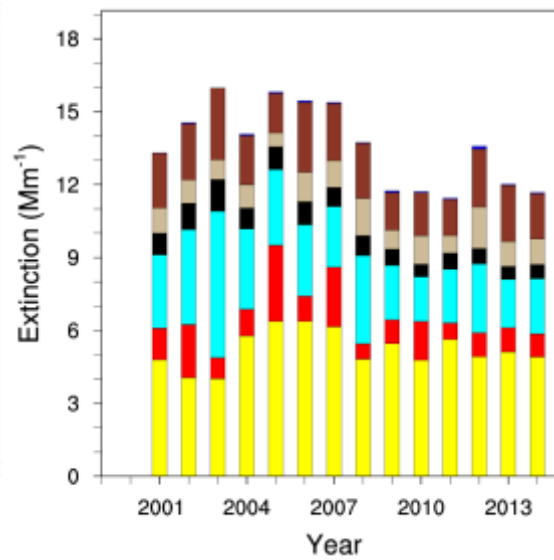
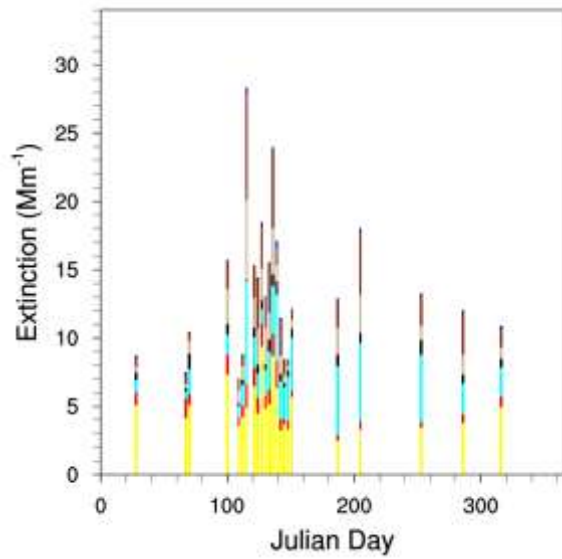
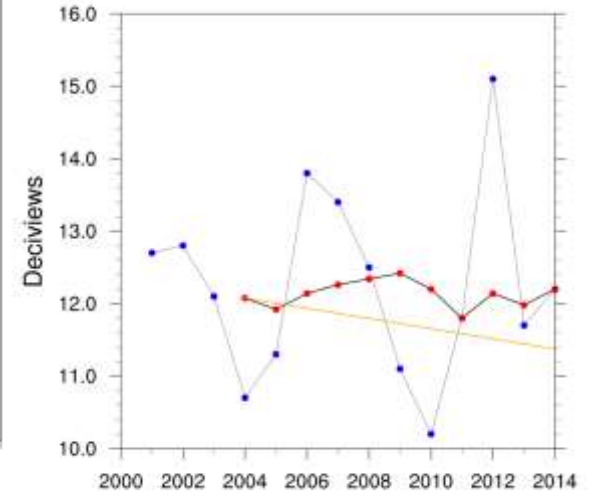
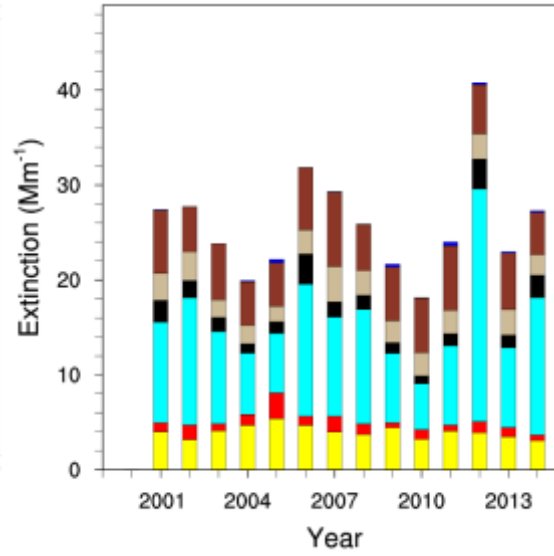
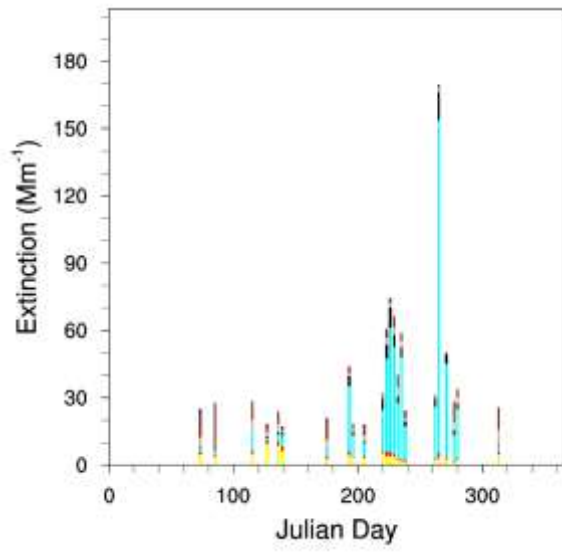
Ike's Backbone, AZ



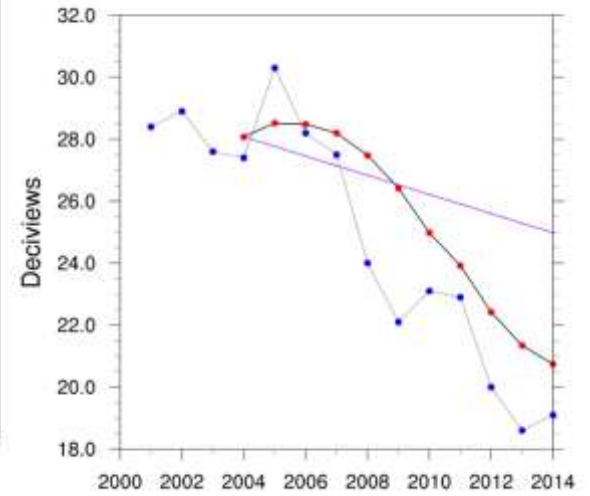
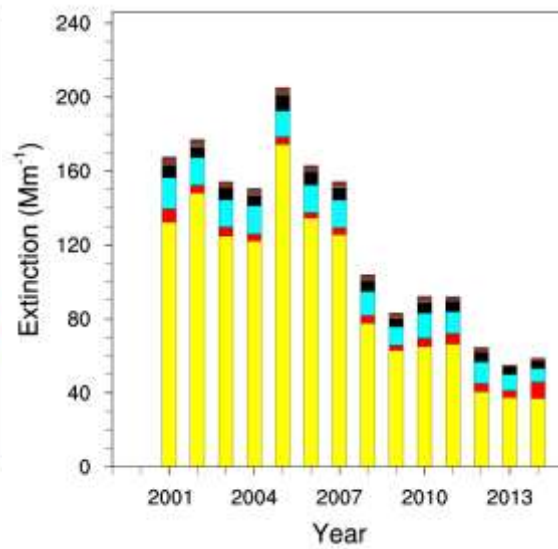
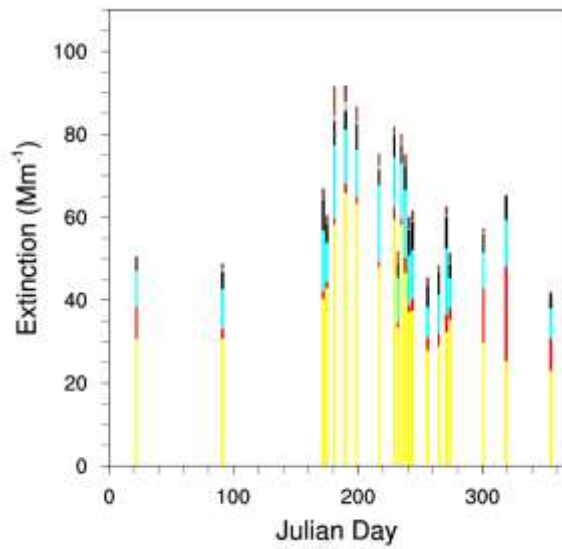
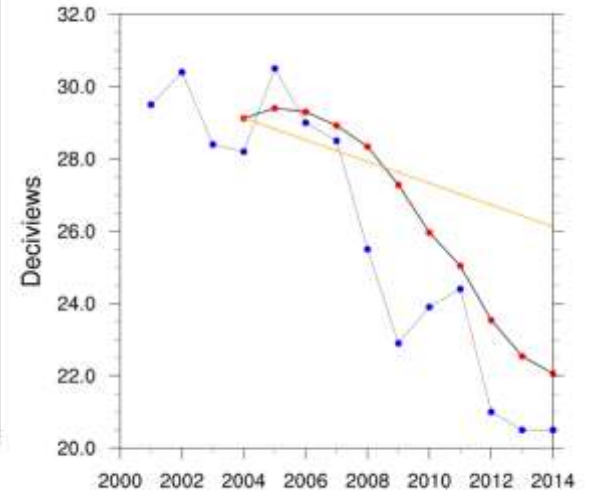
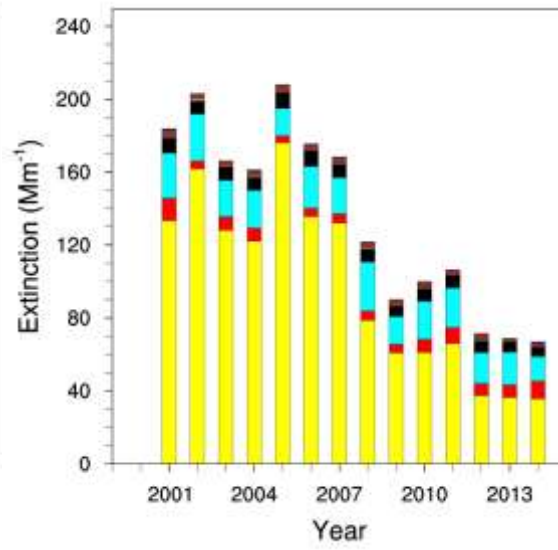
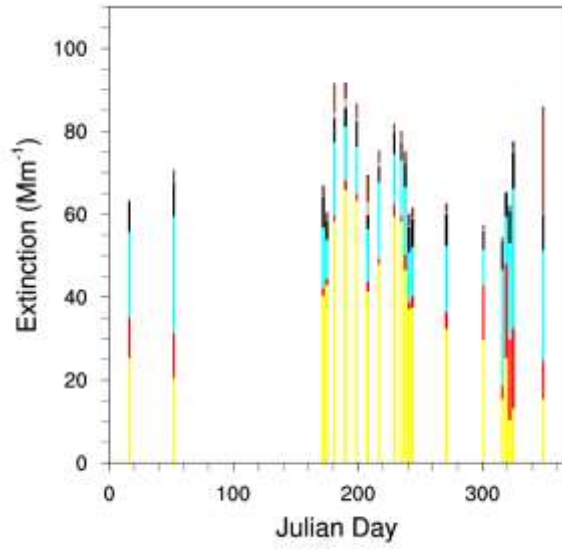
Isle Royale National Park, MI



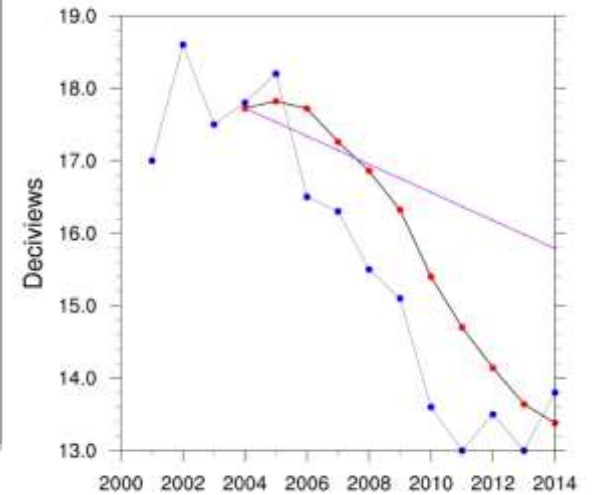
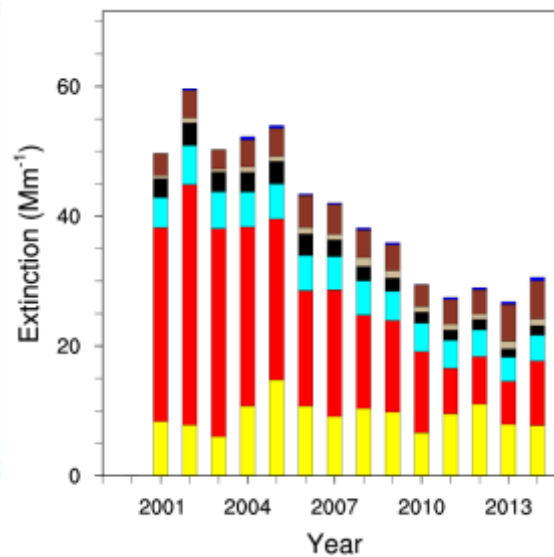
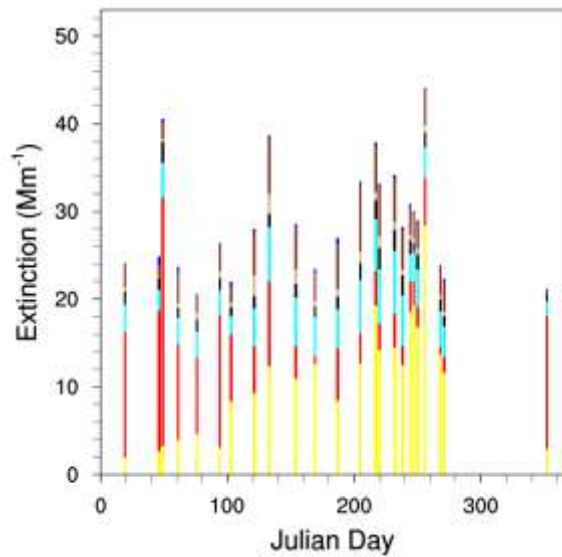
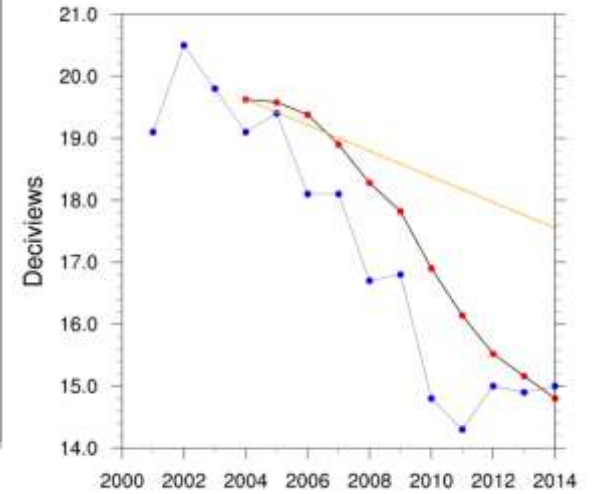
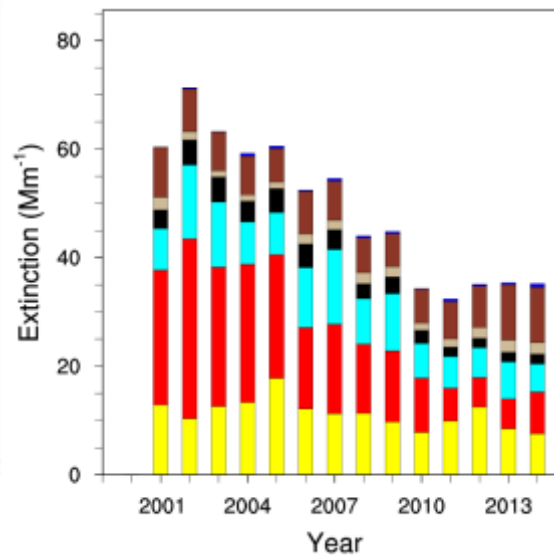
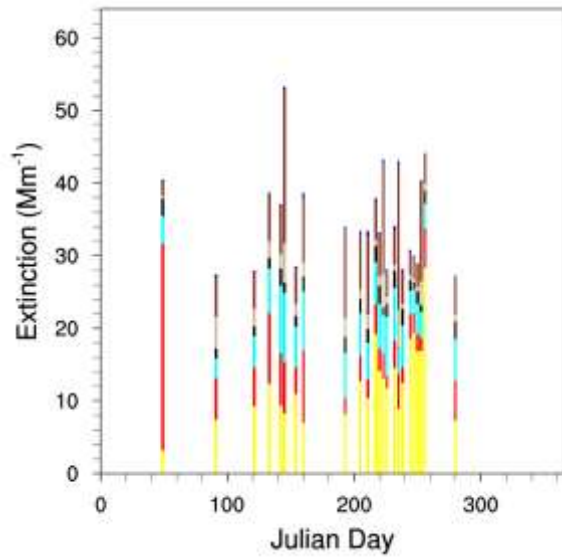
Jarbridge Wilderness, NV



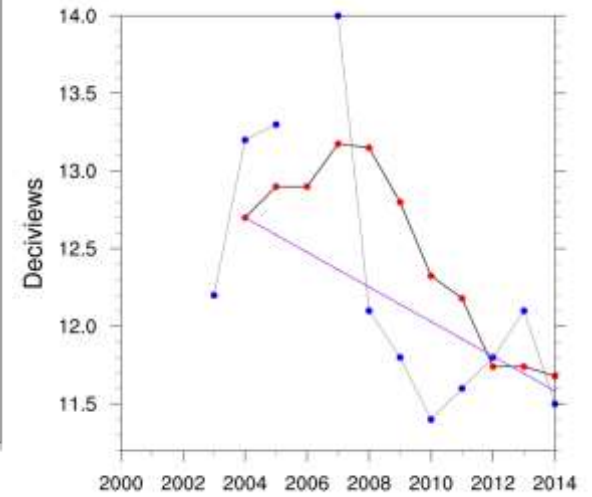
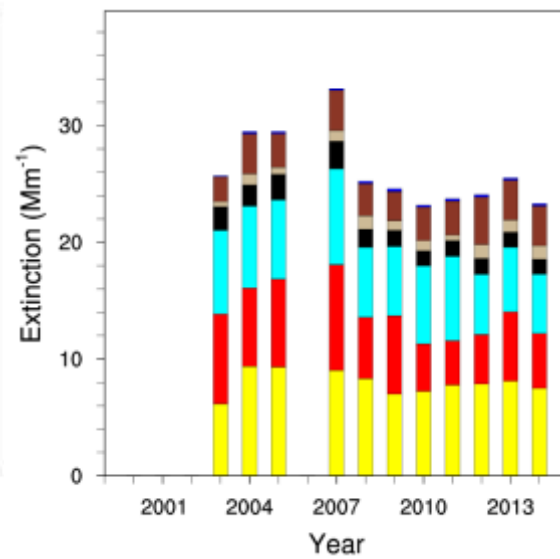
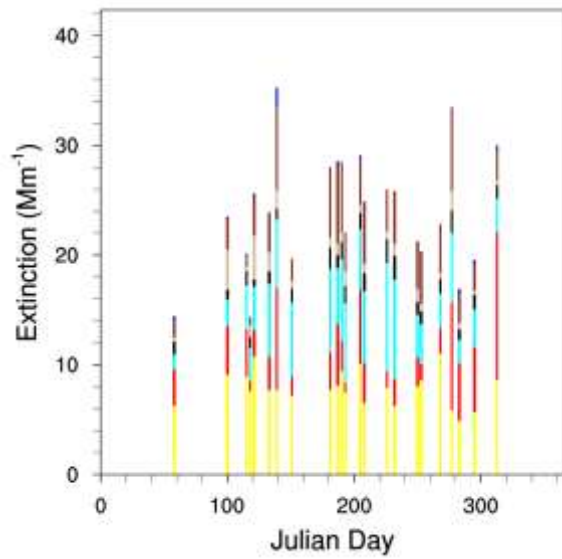
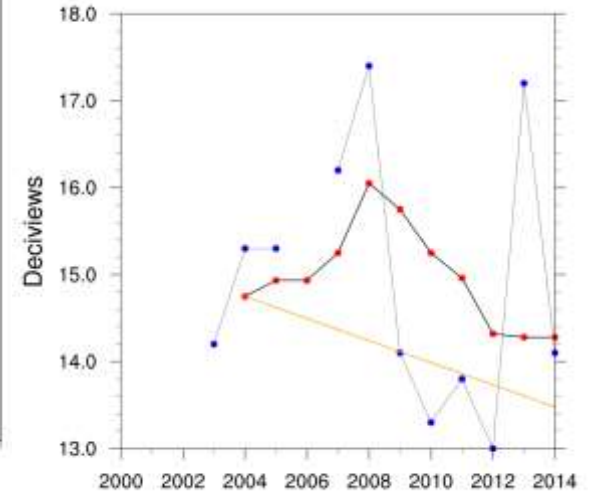
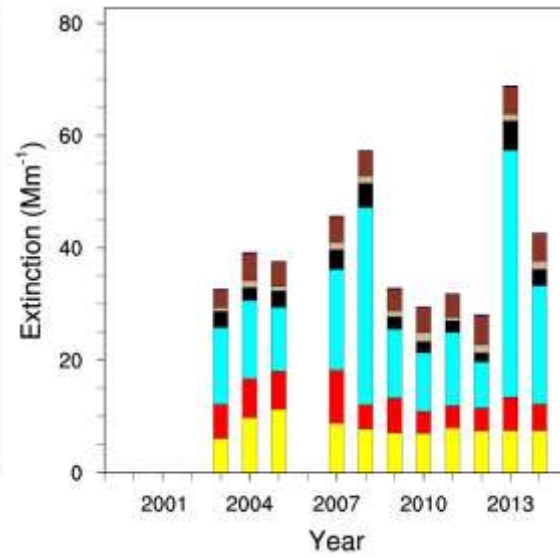
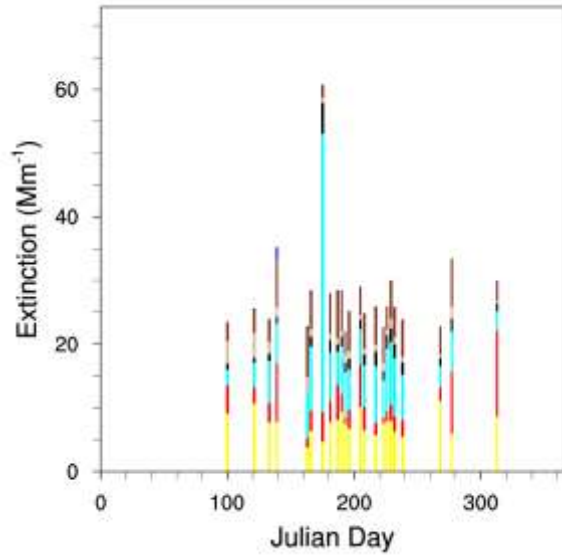
James River Face Wilderness, VA



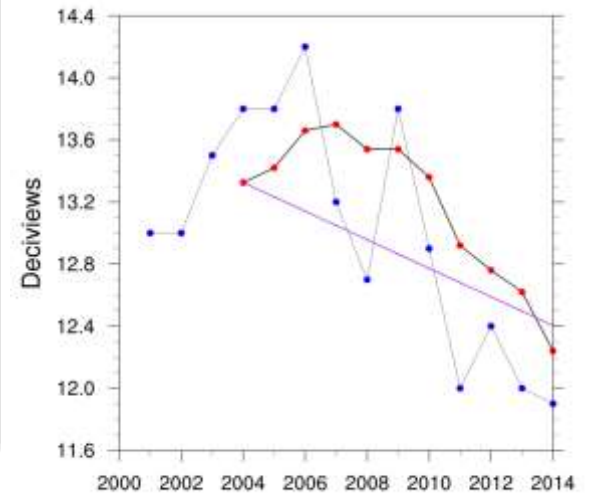
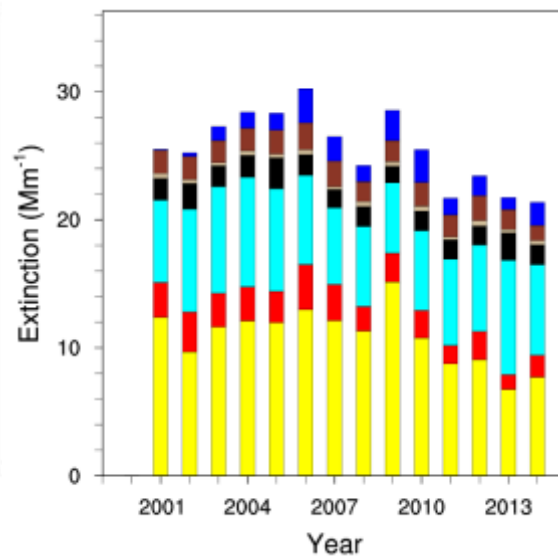
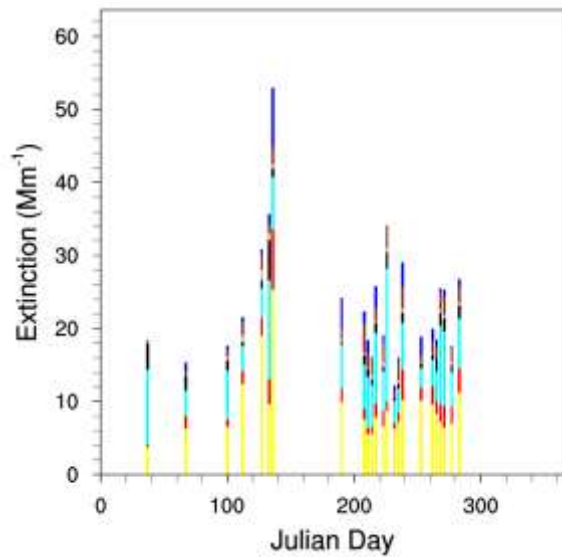
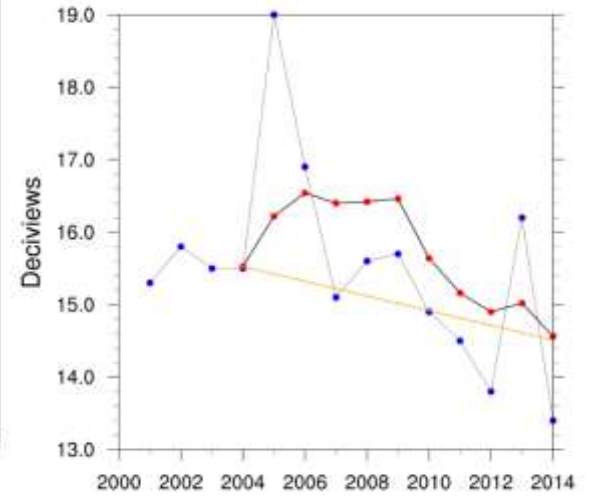
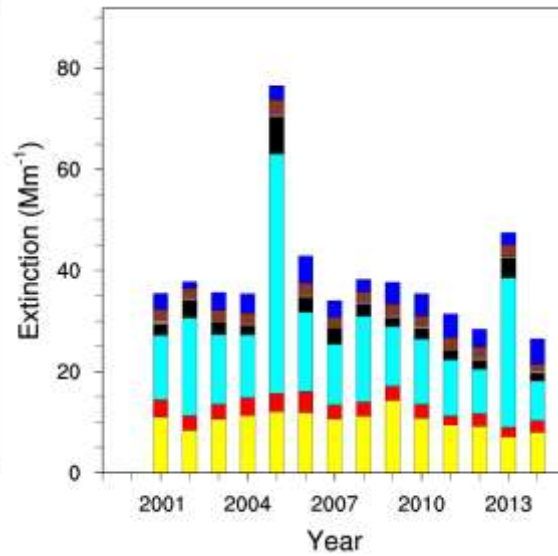
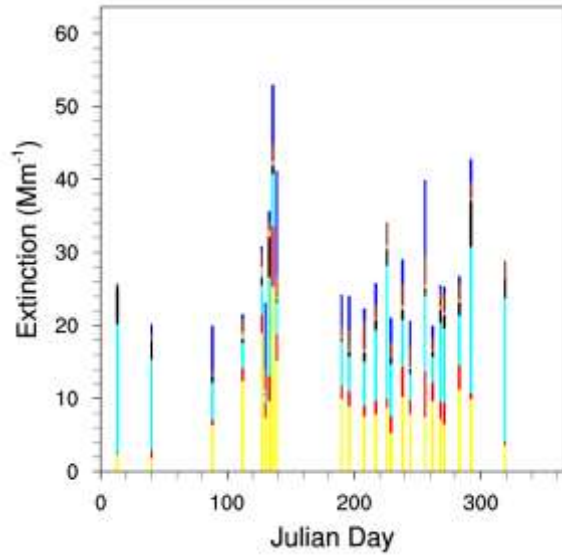
Joshua Tree National Park, CA



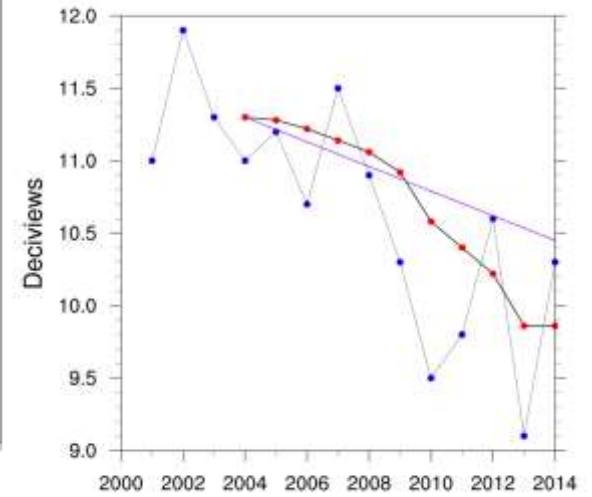
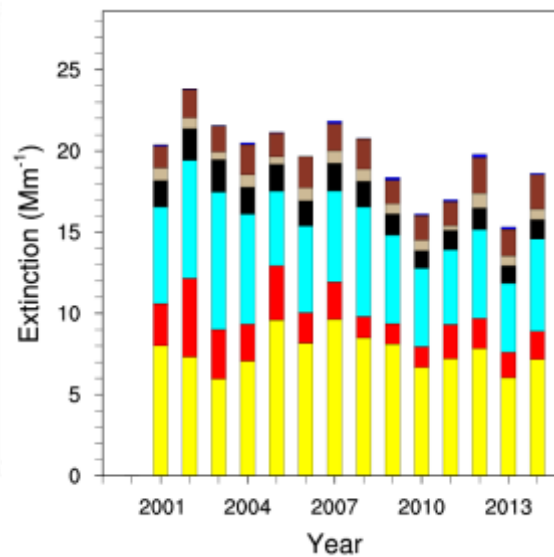
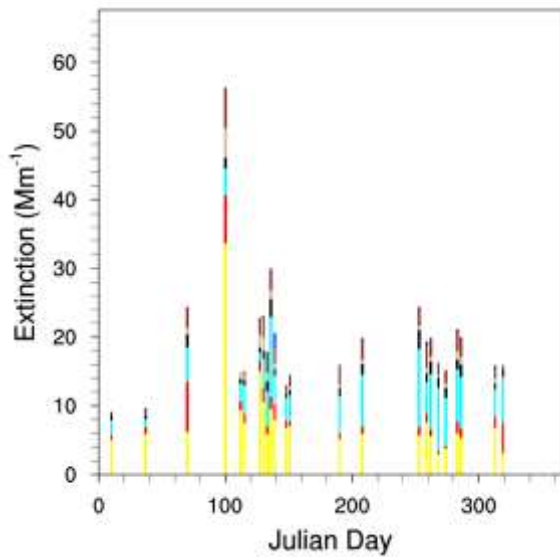
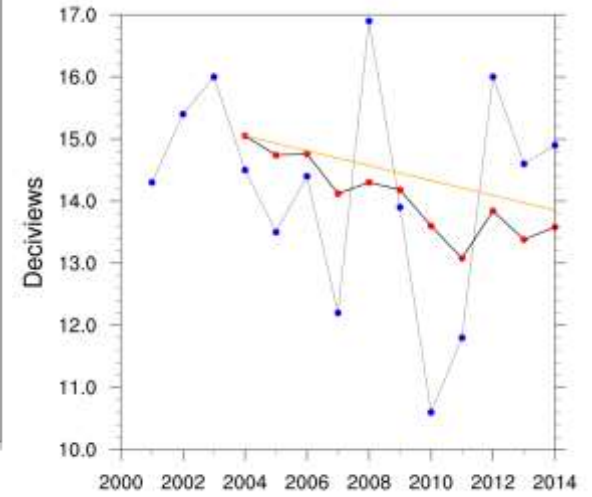
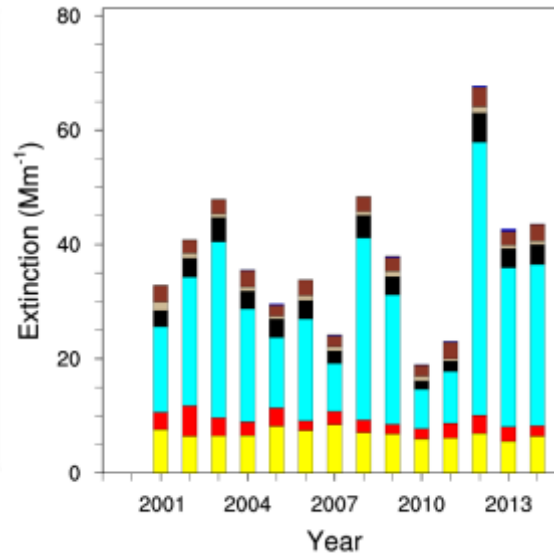
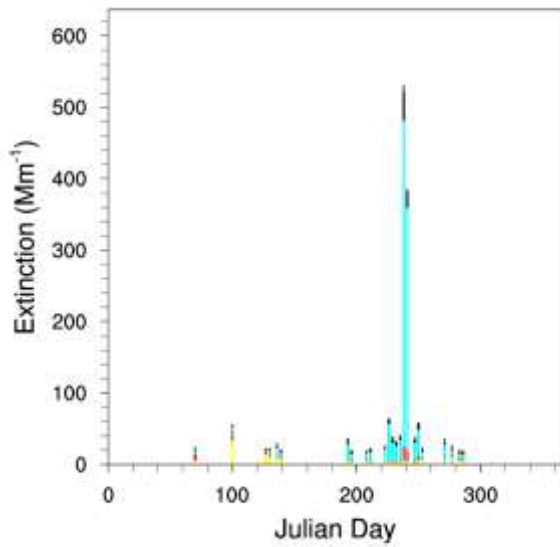
Kaiser, CA



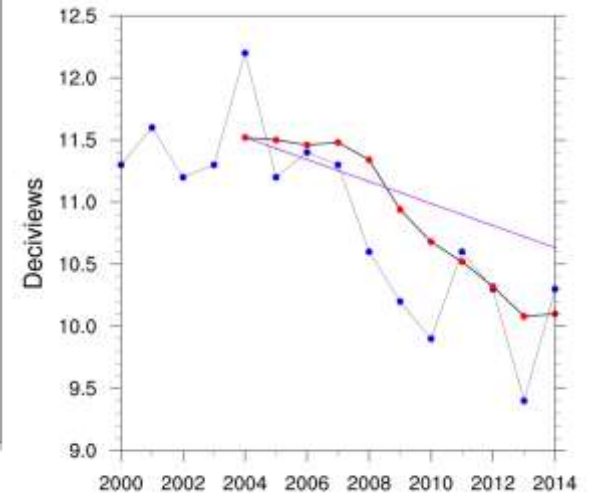
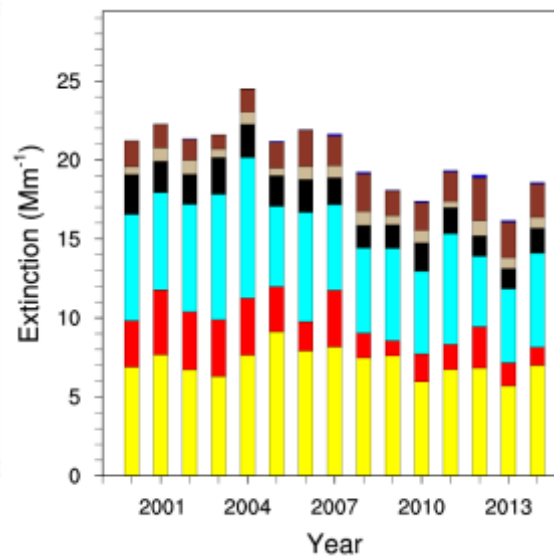
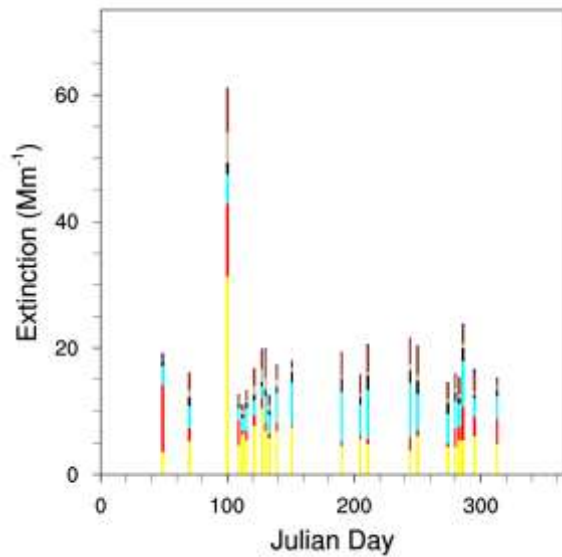
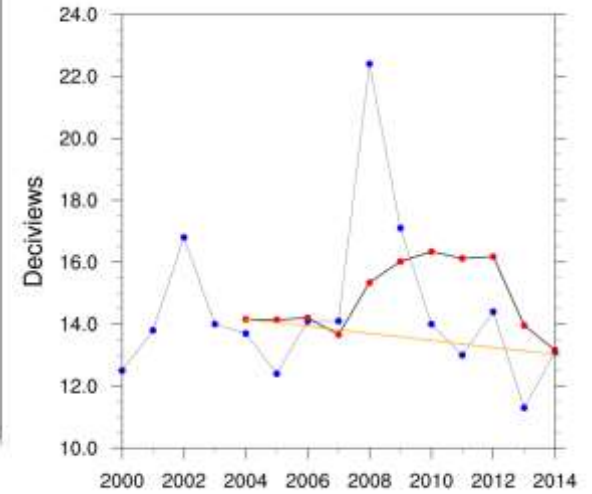
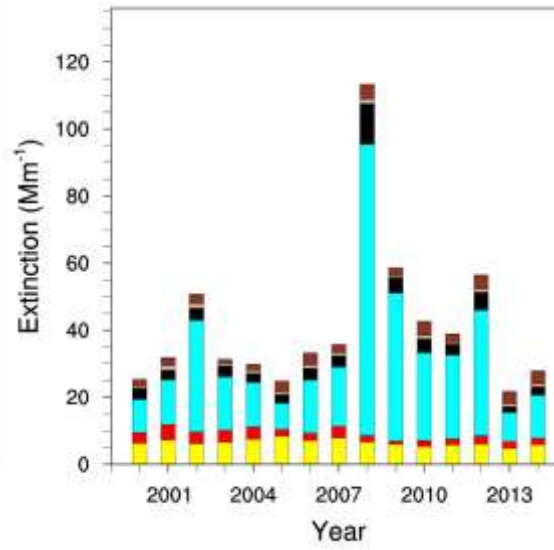
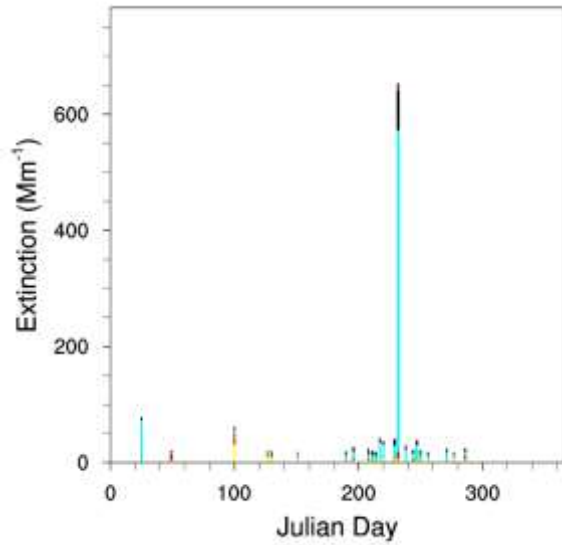
Kalmiopsis, OR



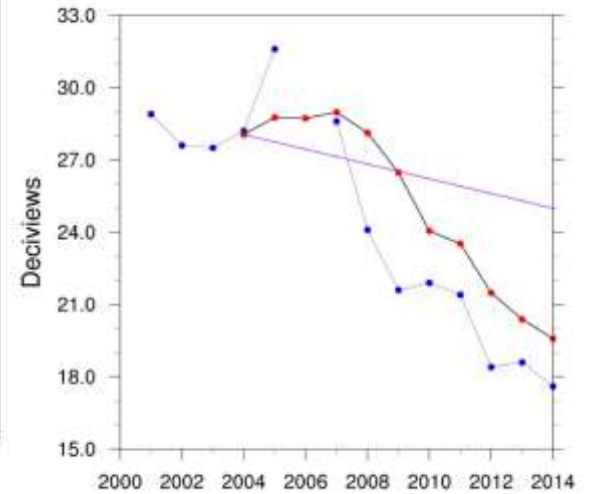
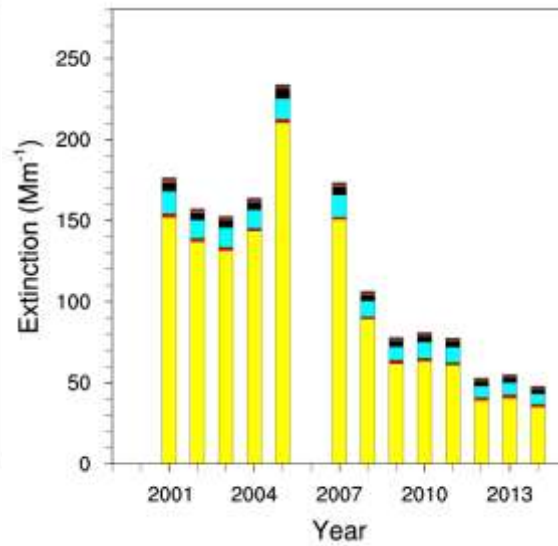
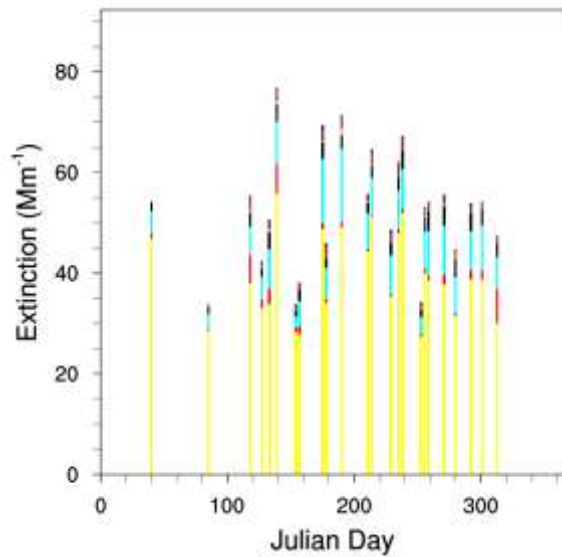
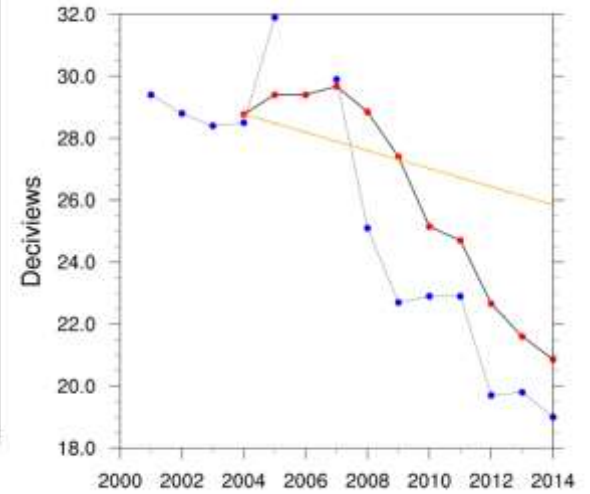
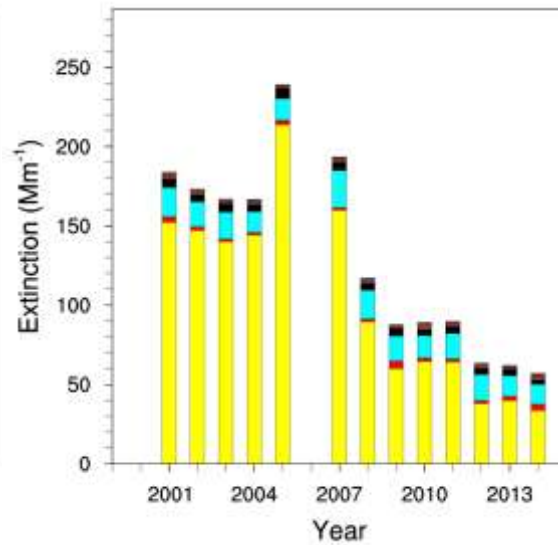
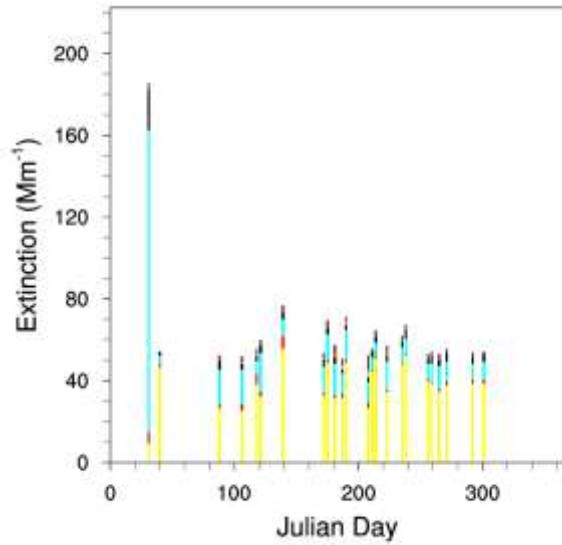
Lava Beds National Monument, CA



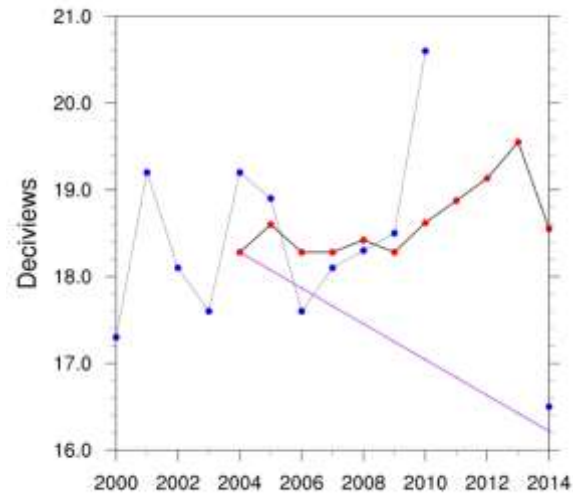
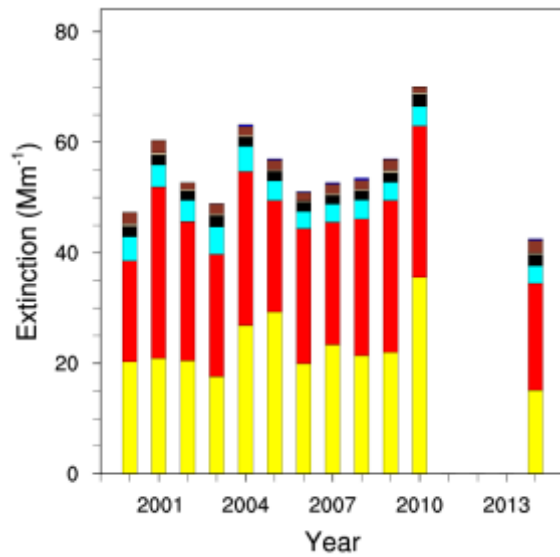
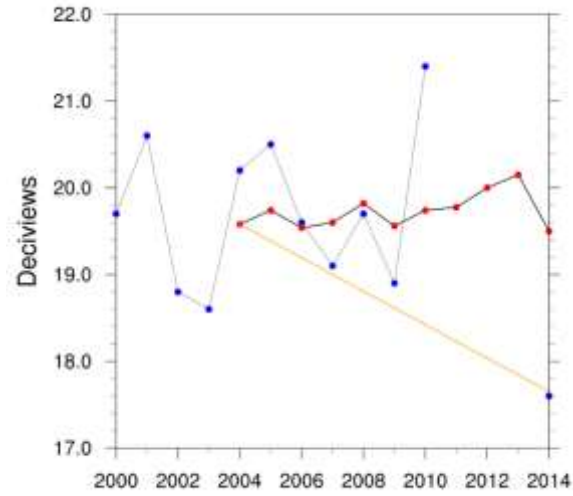
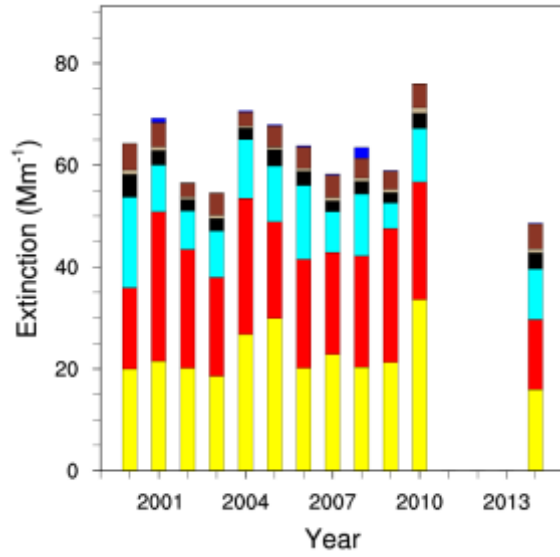
Lassen Volcanic National Park, CA



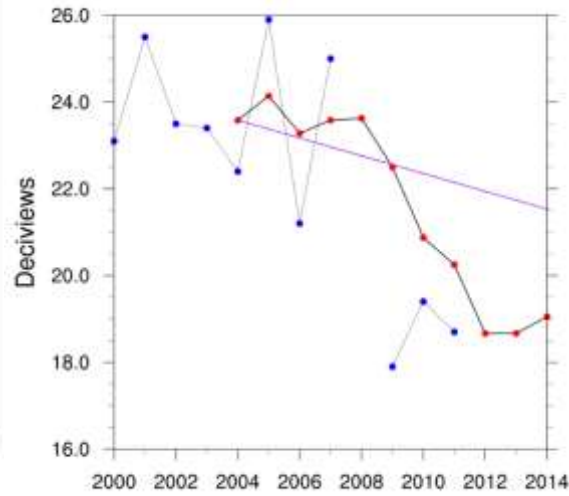
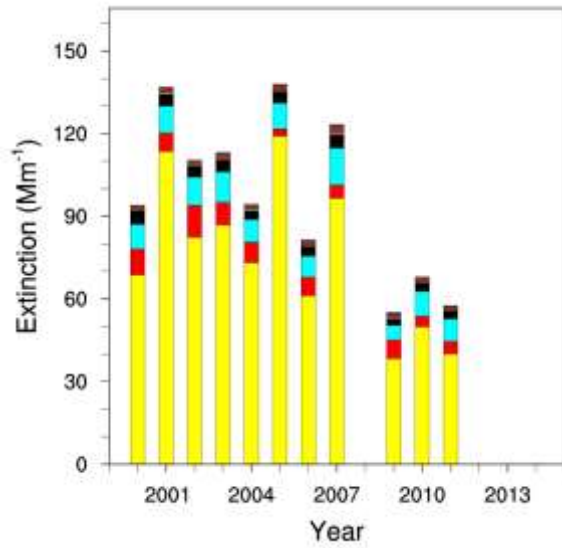
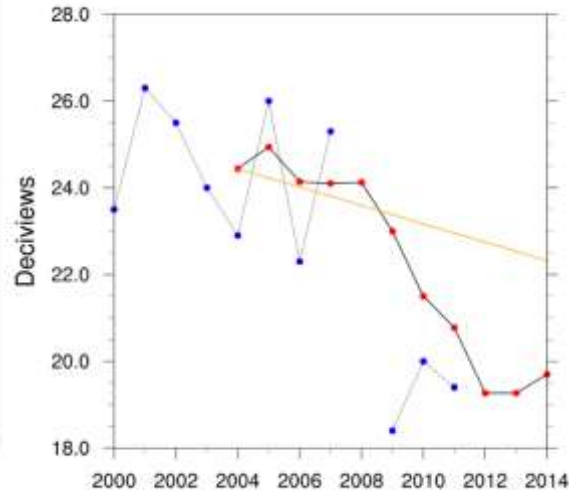
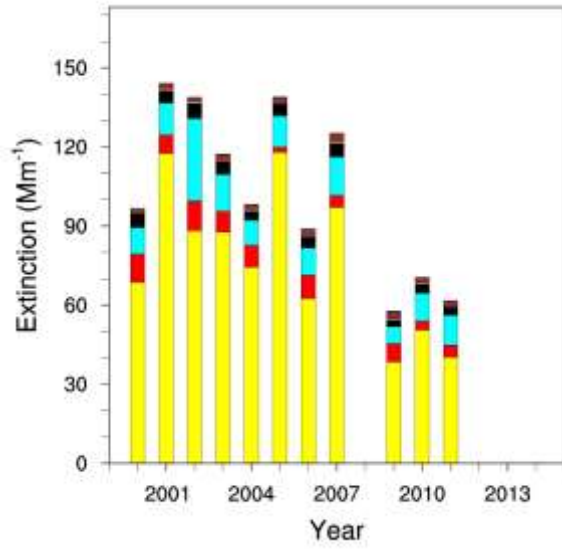
Linville Gorge, NC



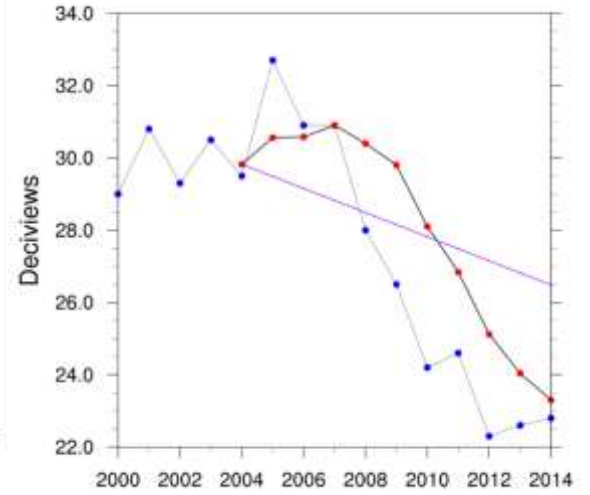
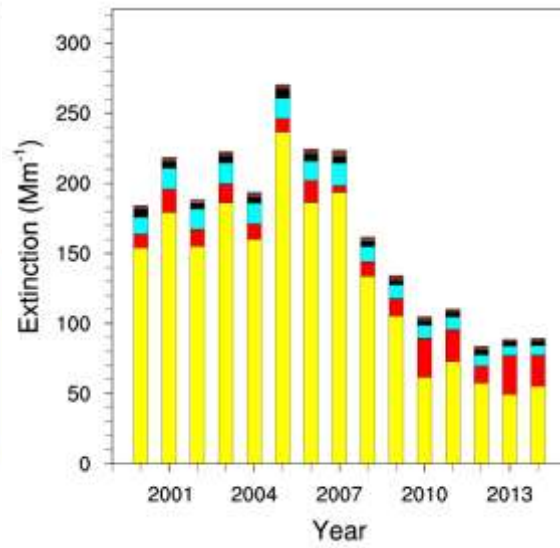
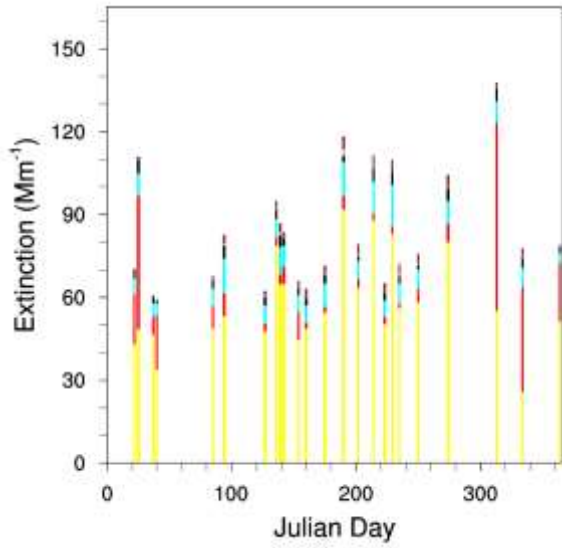
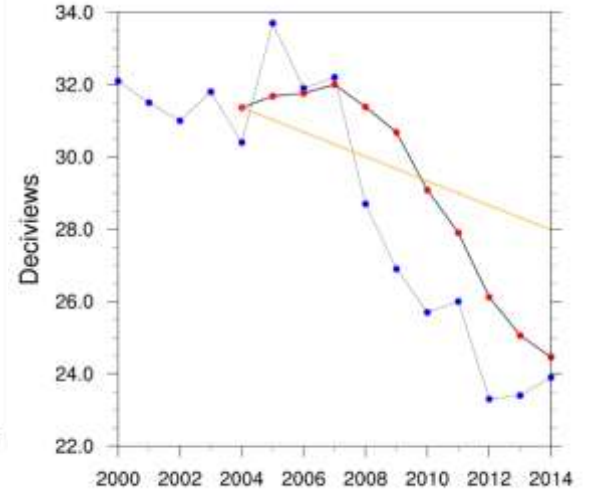
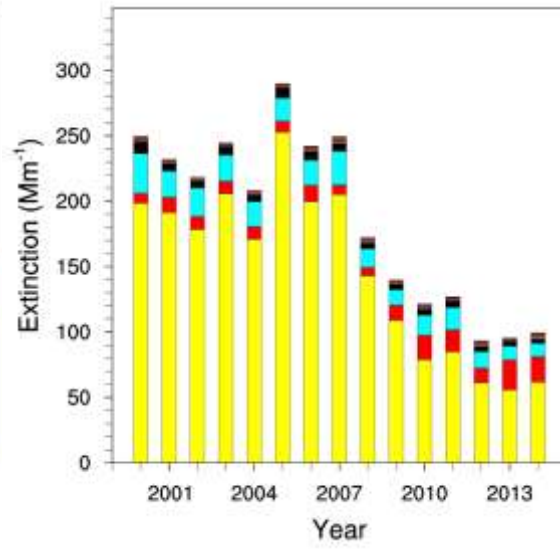
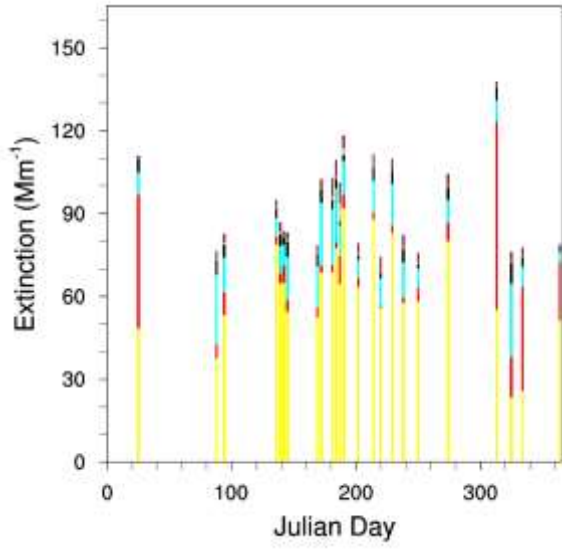
Lostwood, ND



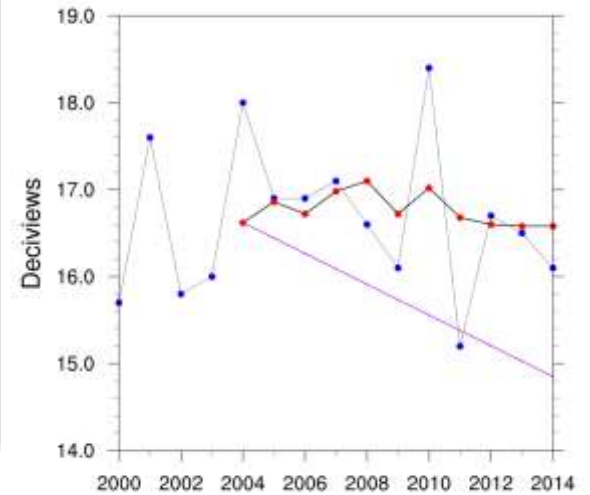
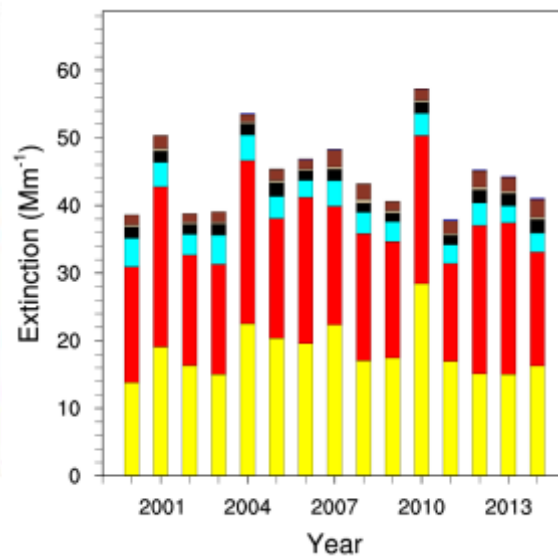
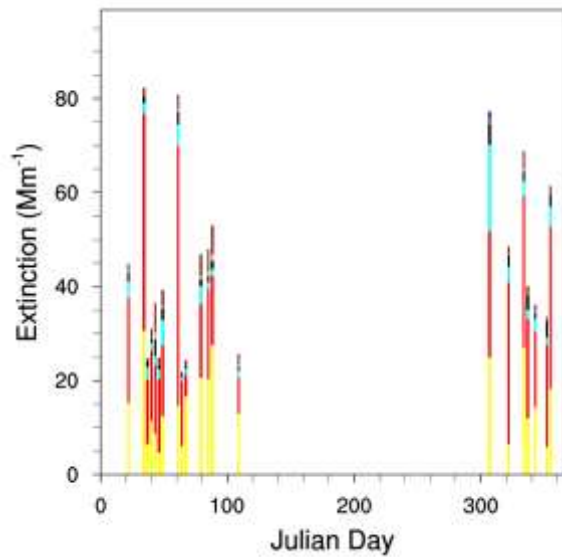
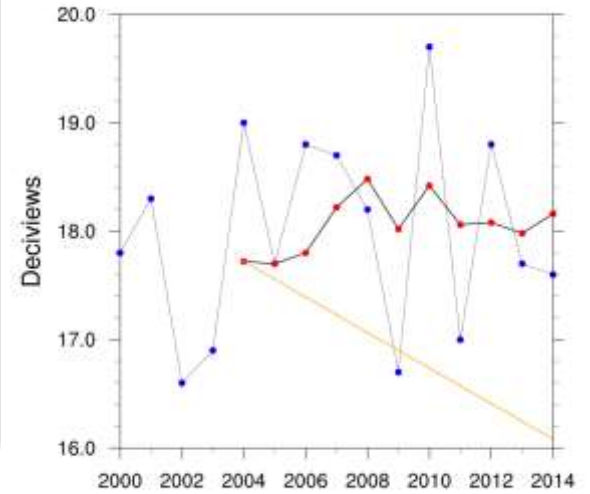
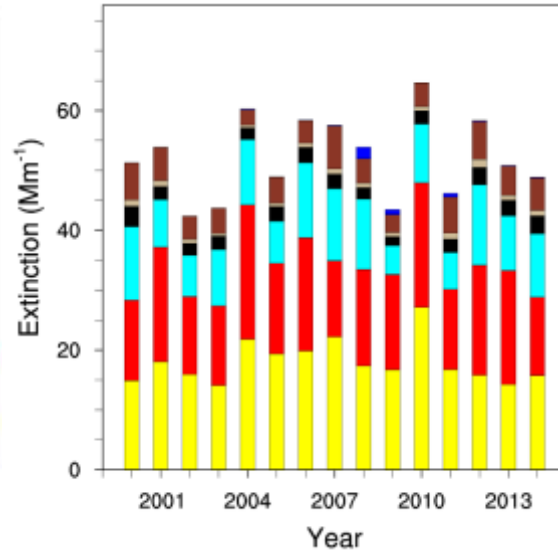
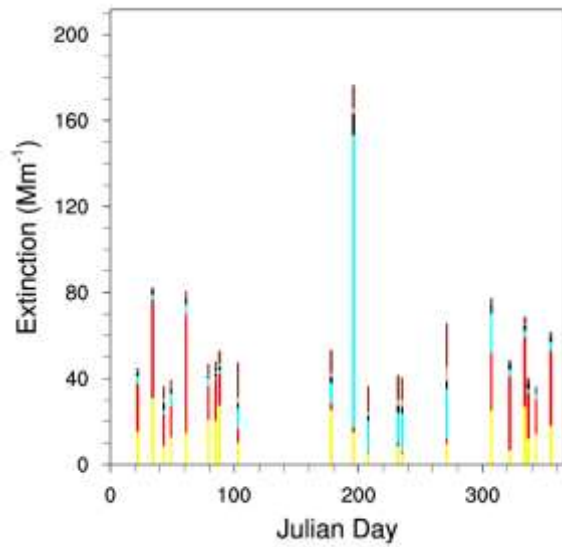
Lye Brook Wilderness, VT



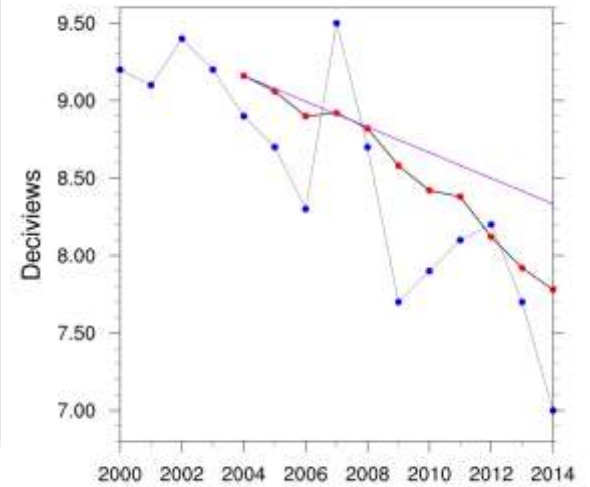
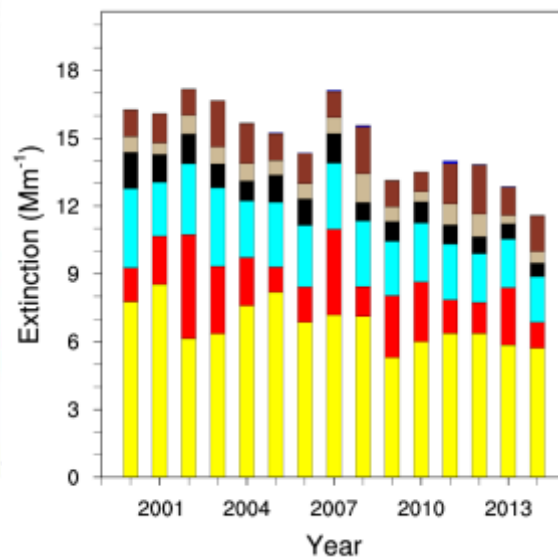
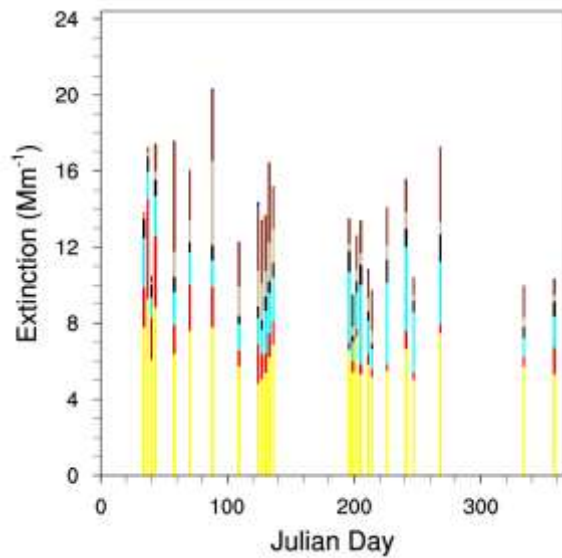
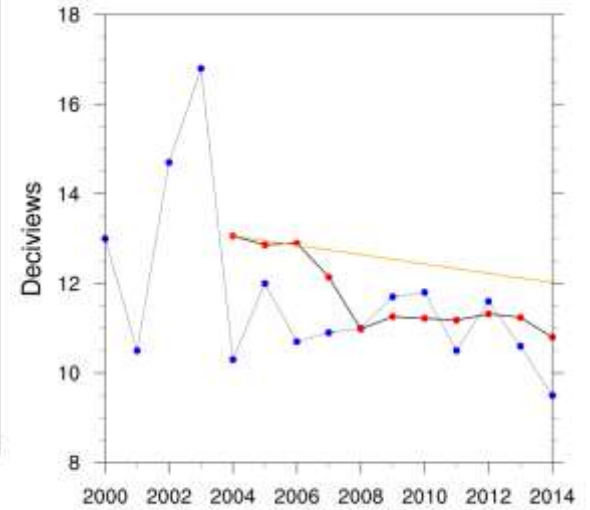
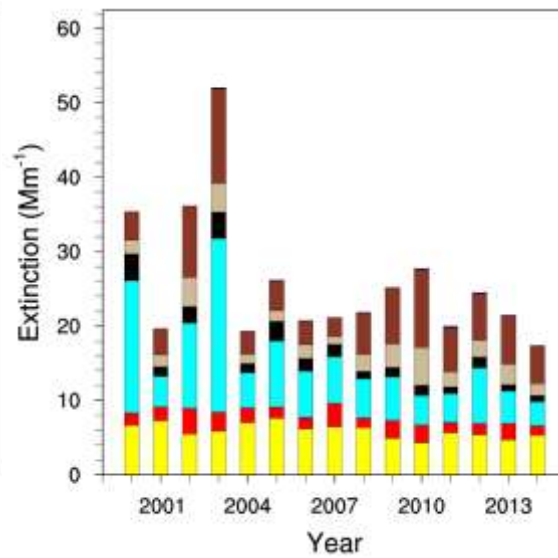
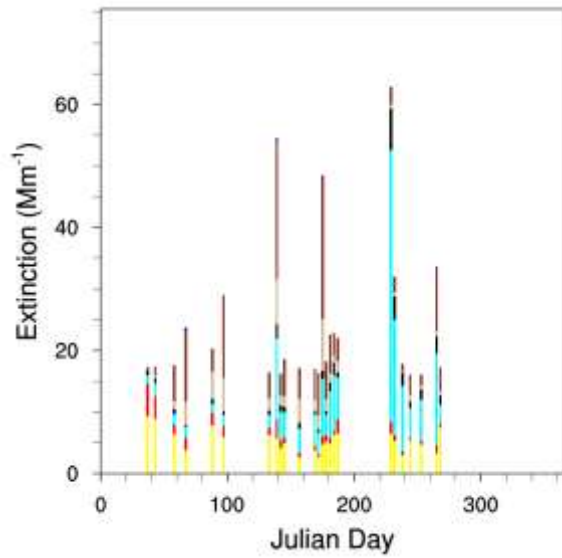
Mammoth Cave National Park, KY



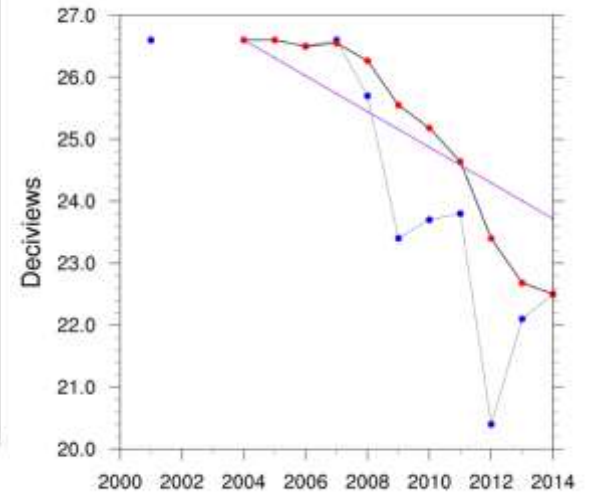
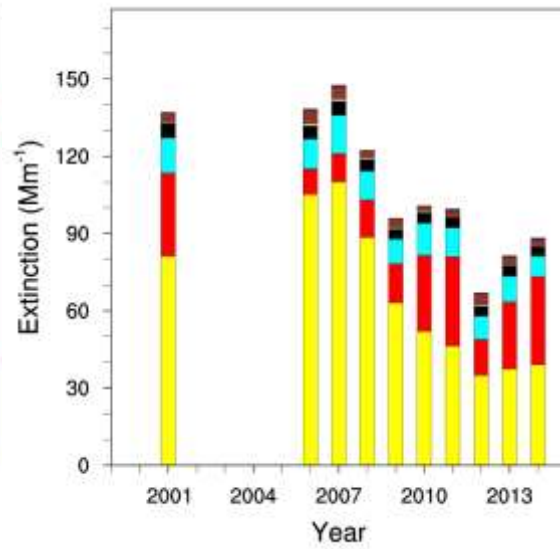
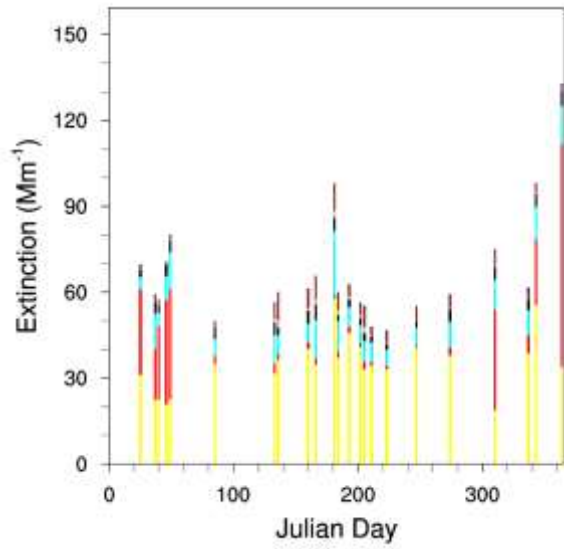
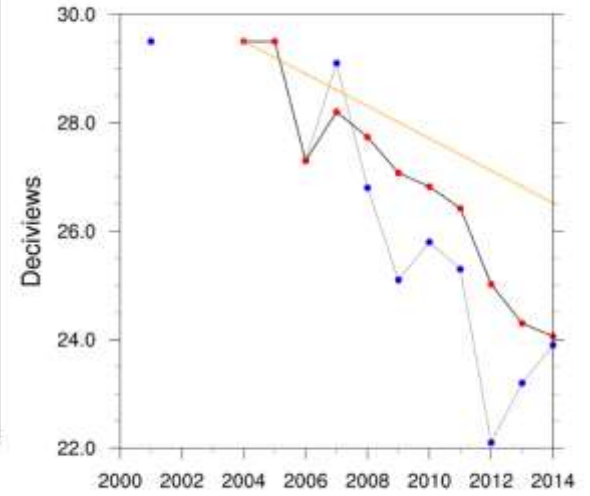
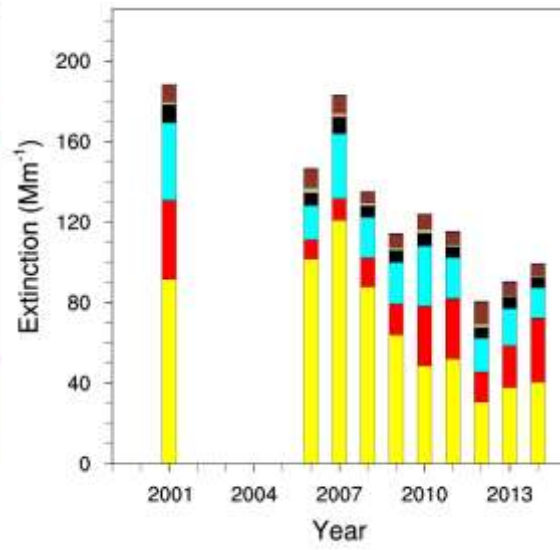
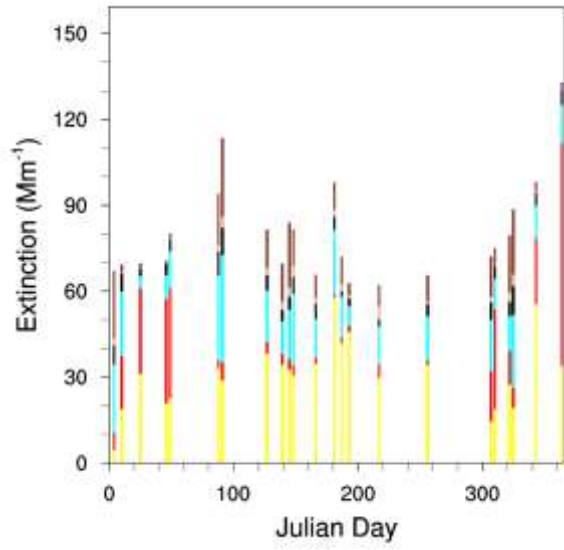
Medicine Lake, MT



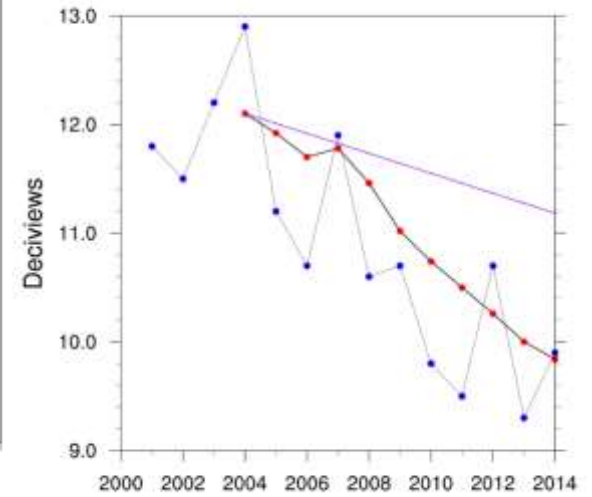
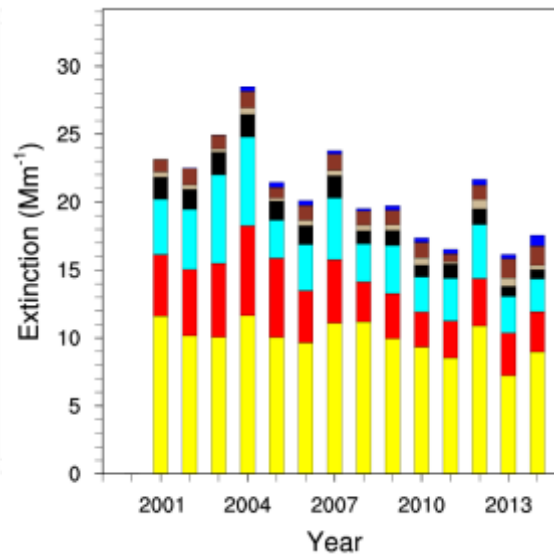
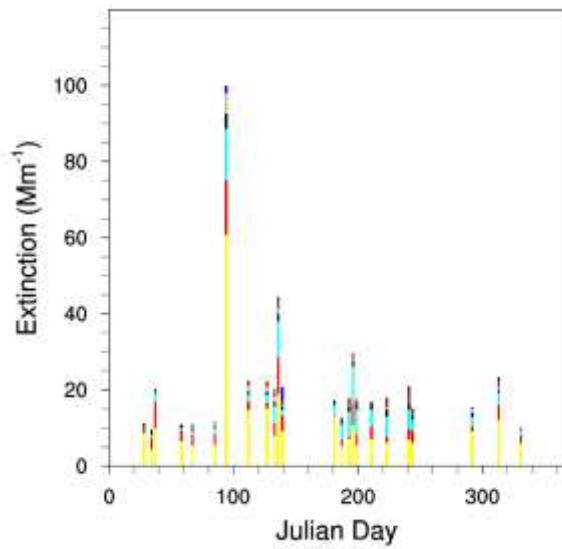
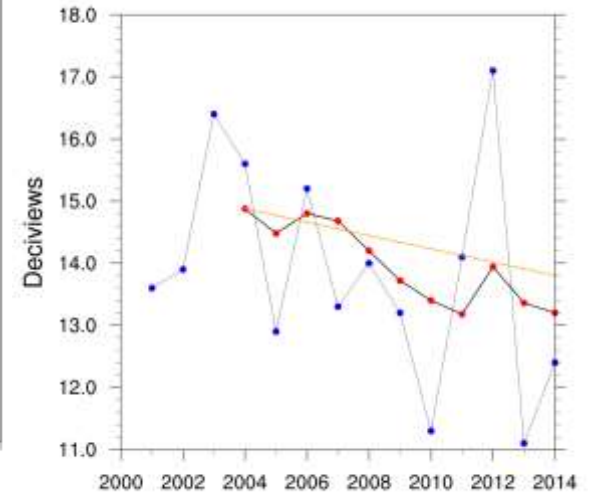
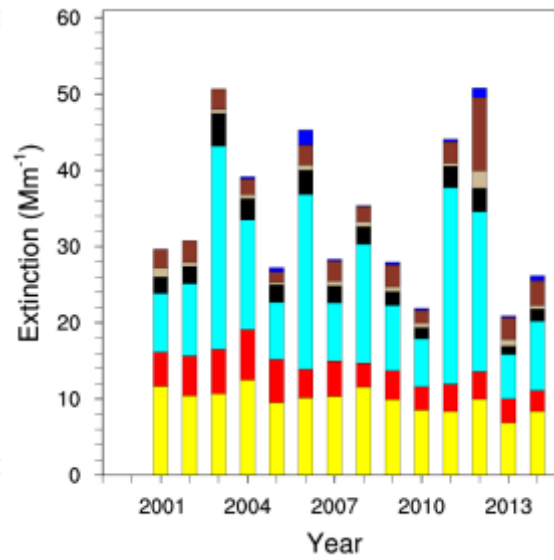
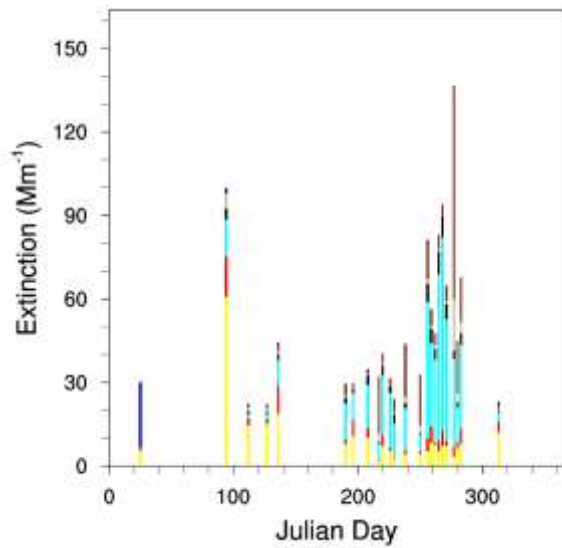
Mesa Verde National Park, CO



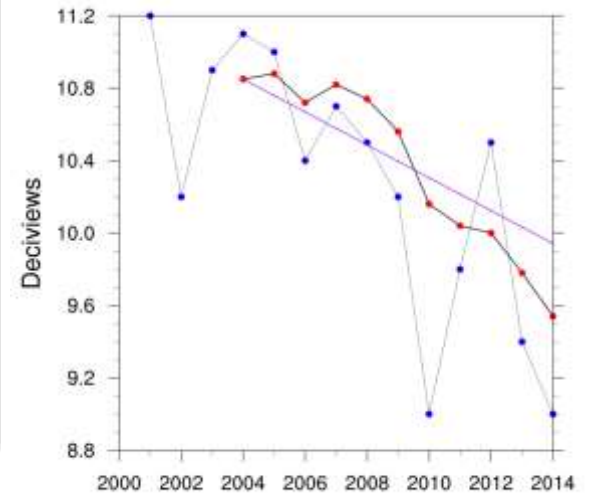
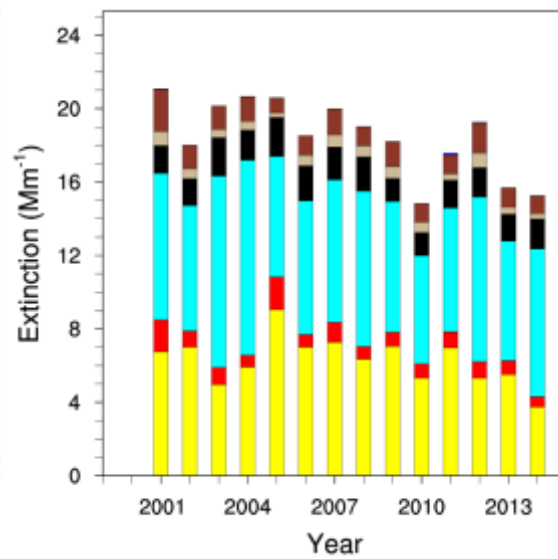
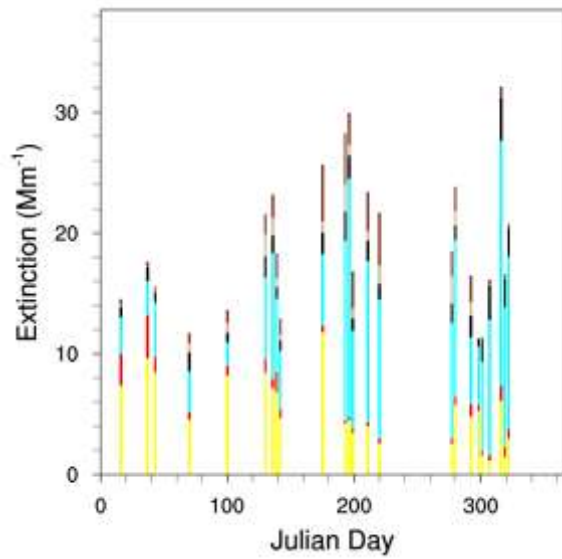
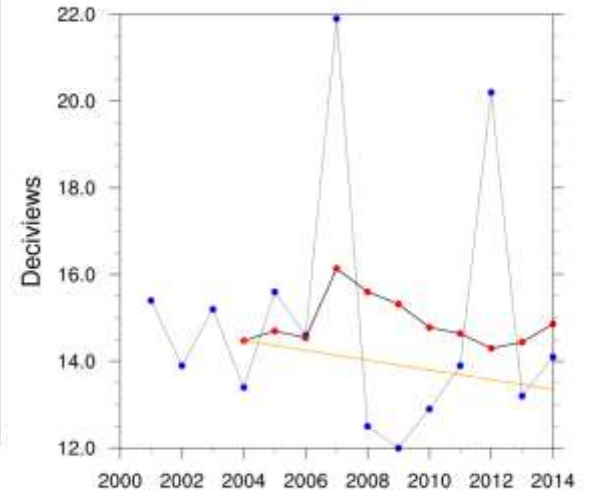
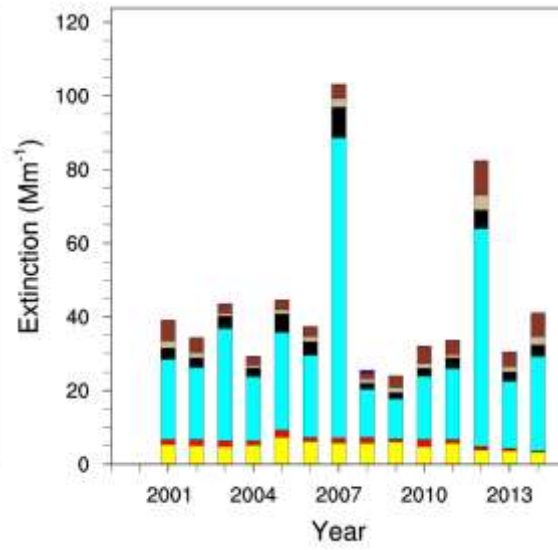
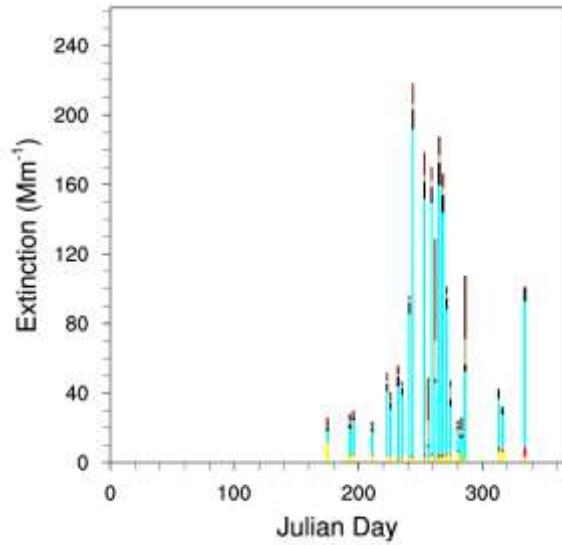
Mingo, MO



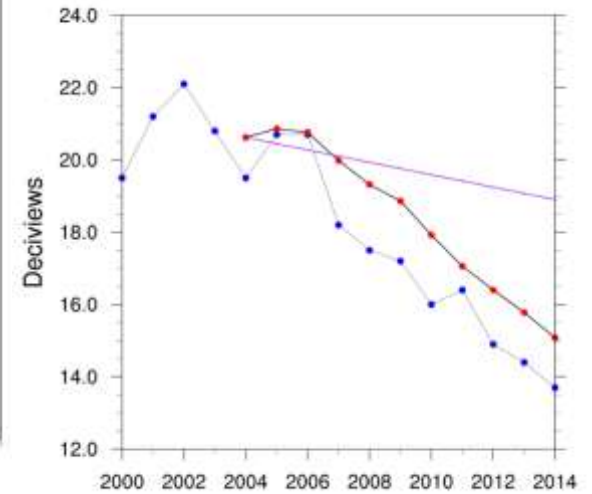
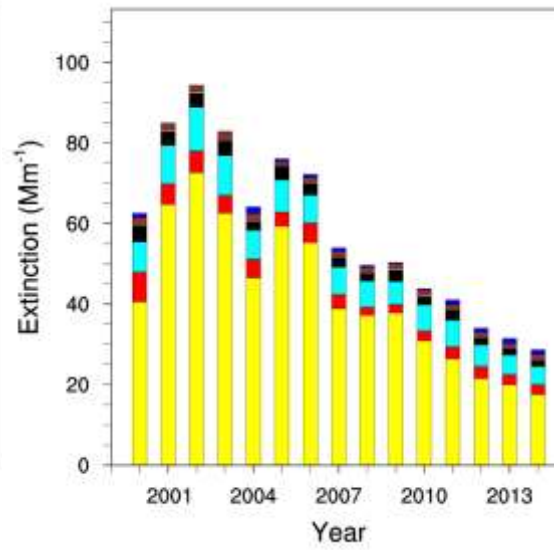
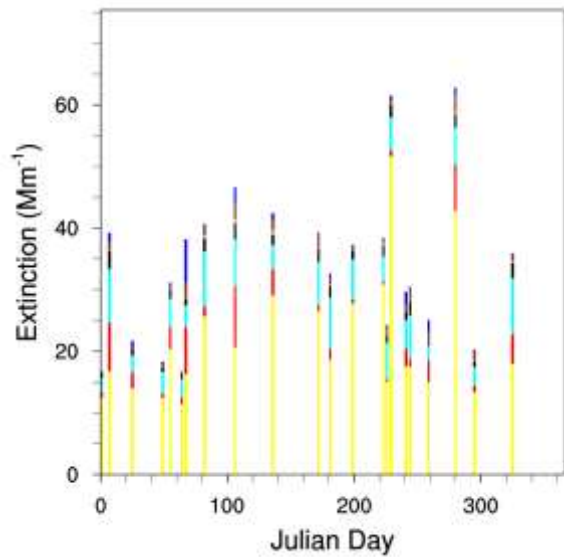
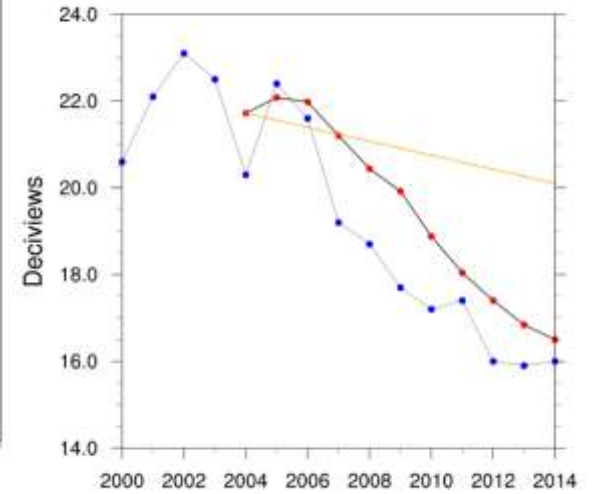
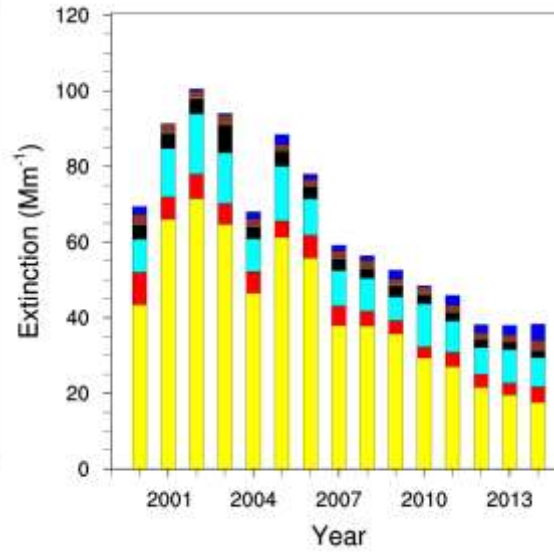
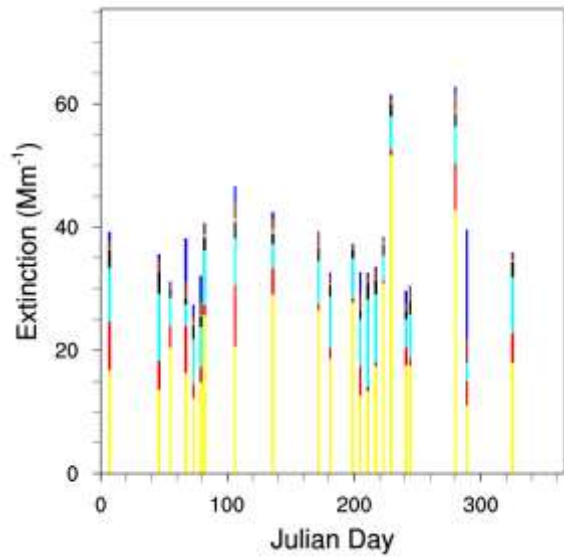
Mount Hood, OR



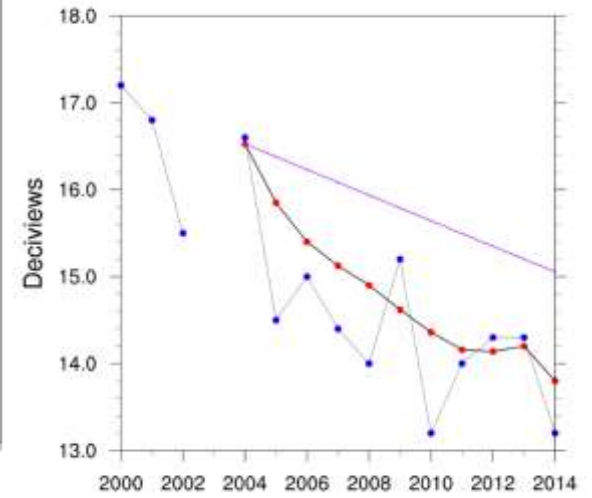
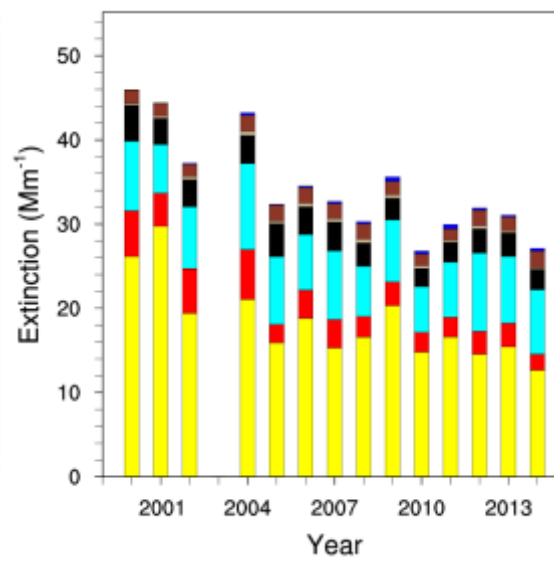
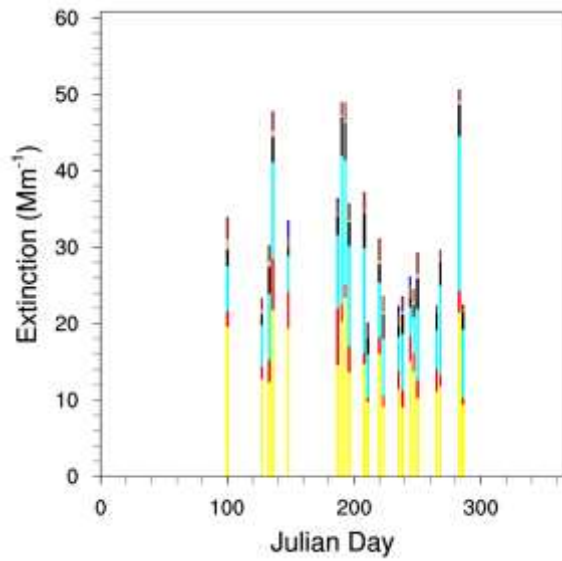
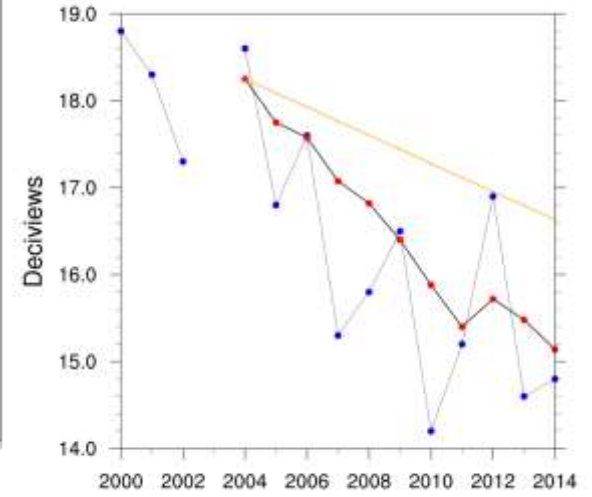
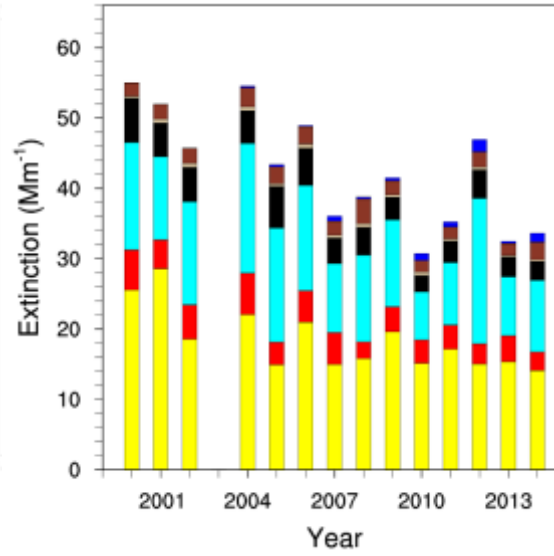
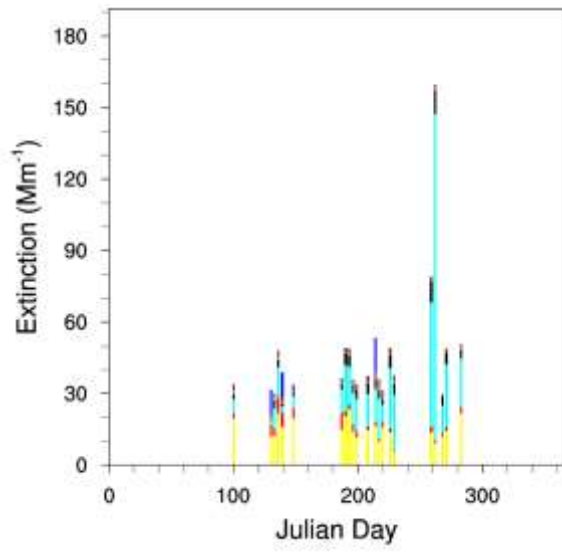
Monture, MT



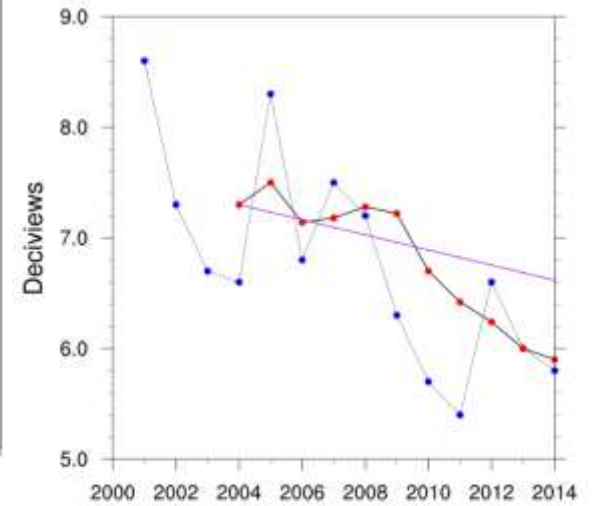
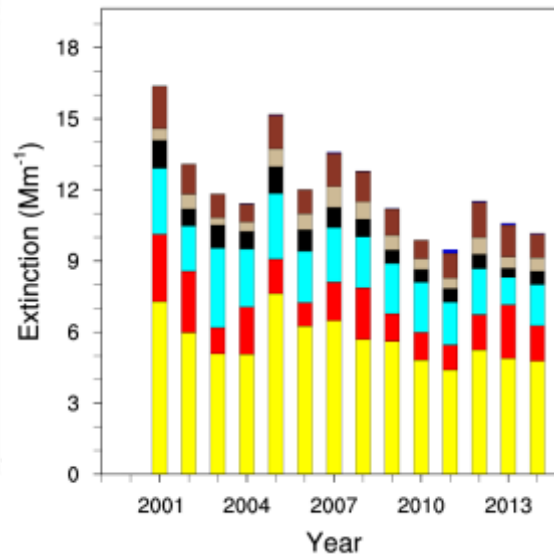
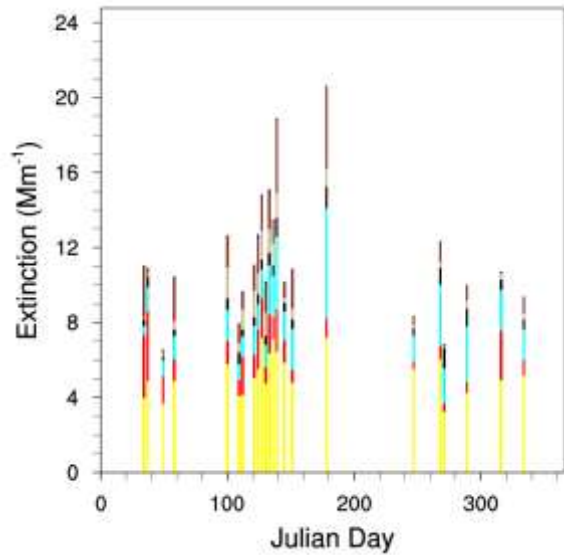
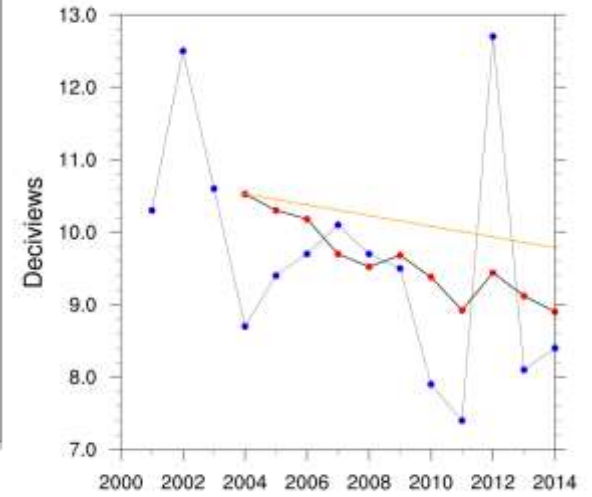
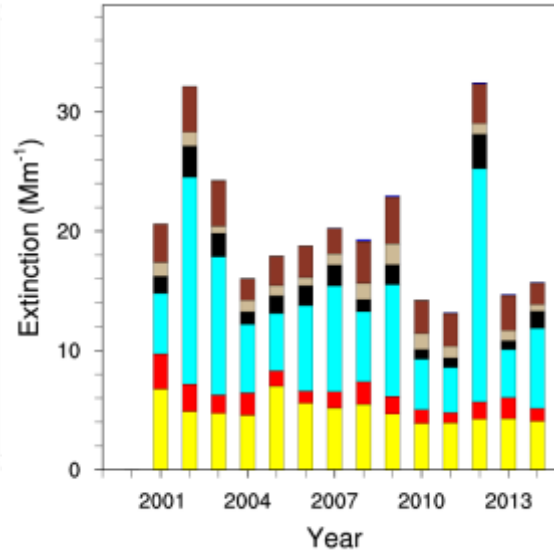
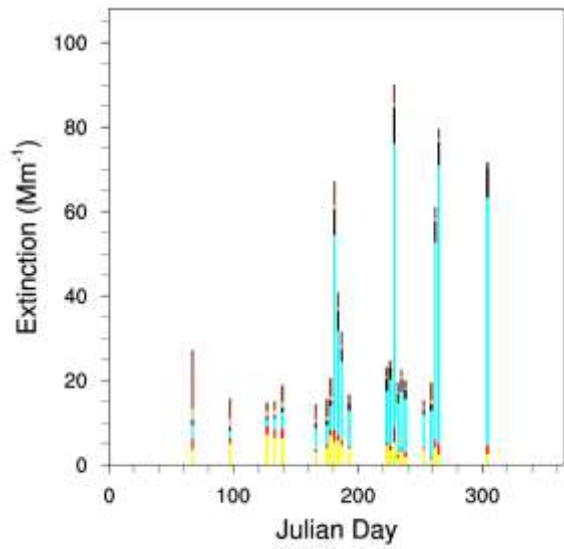
Moosehorn National Wildlife Refuge, ME



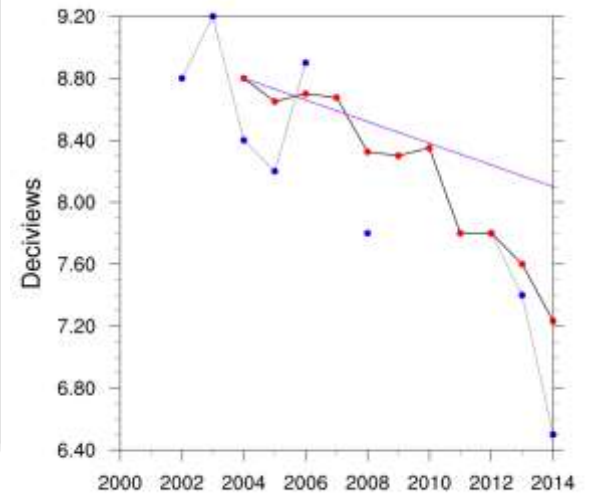
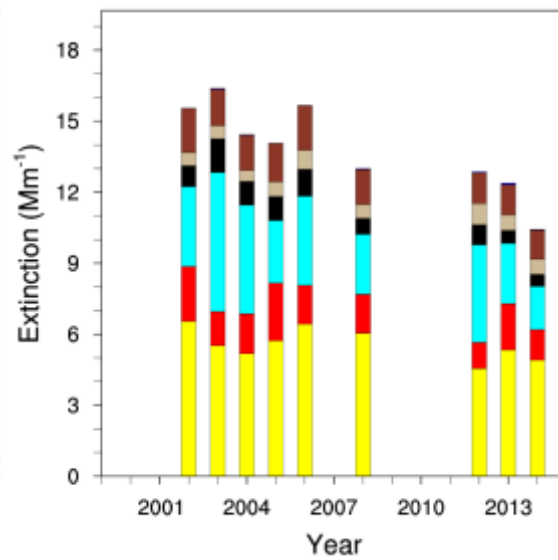
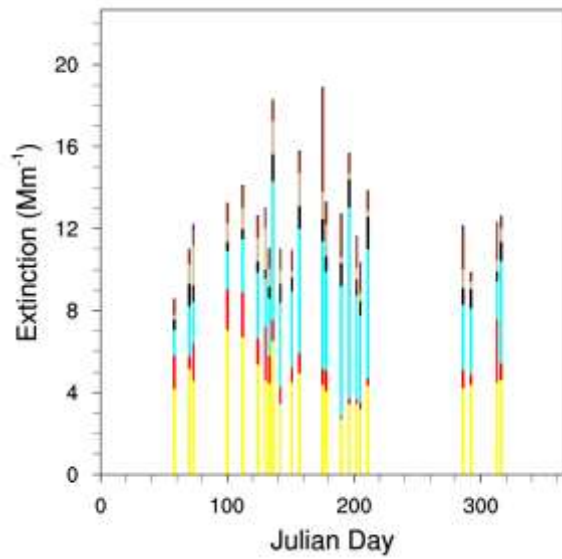
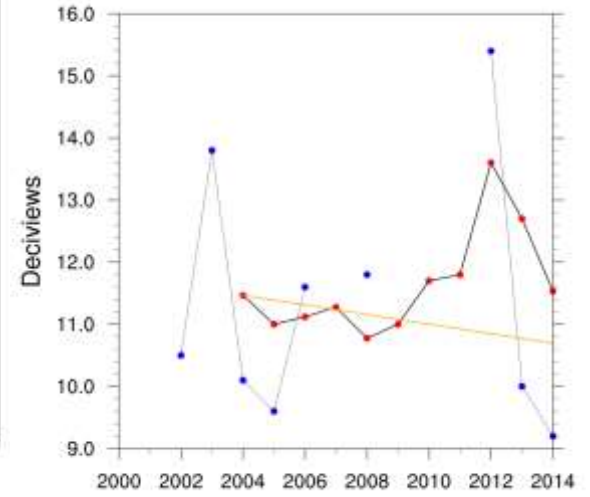
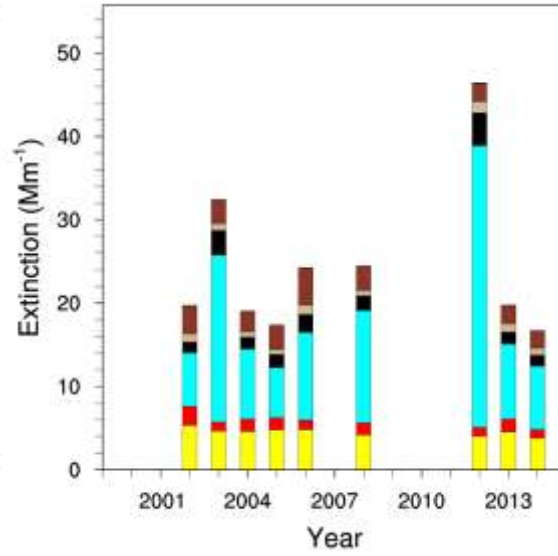
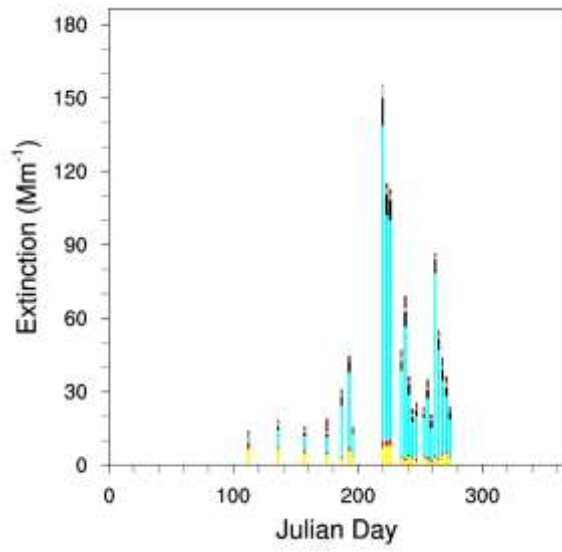
Mount Rainier National Park, WA



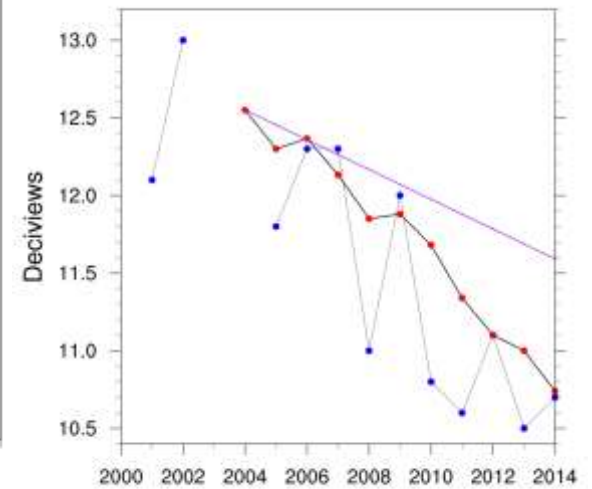
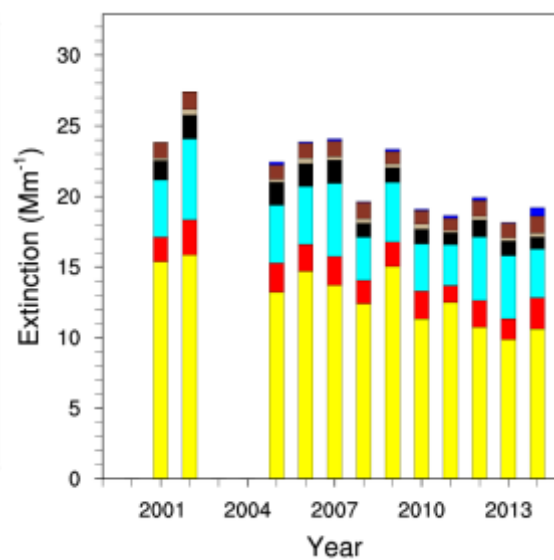
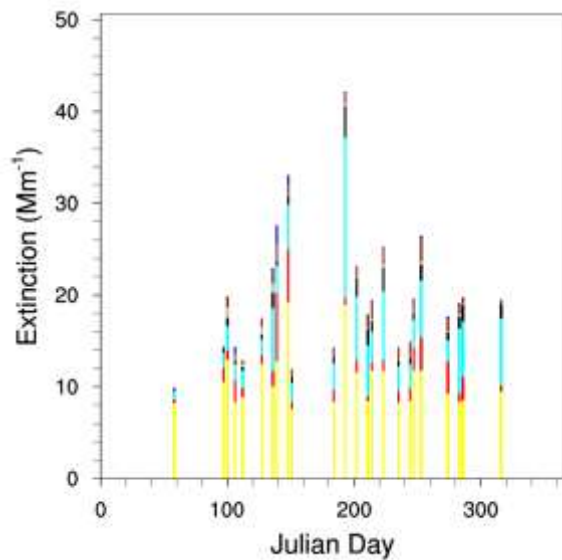
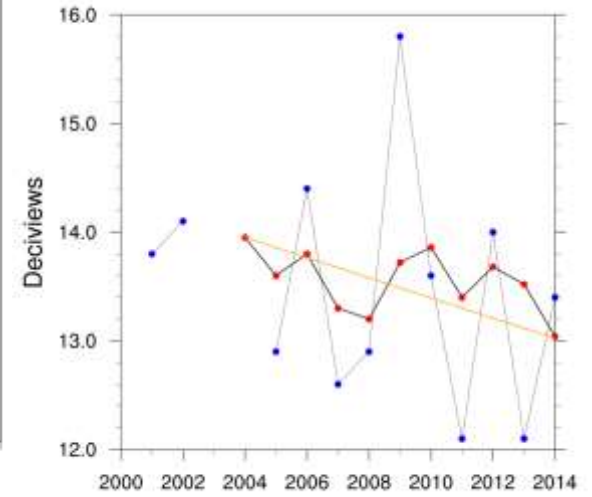
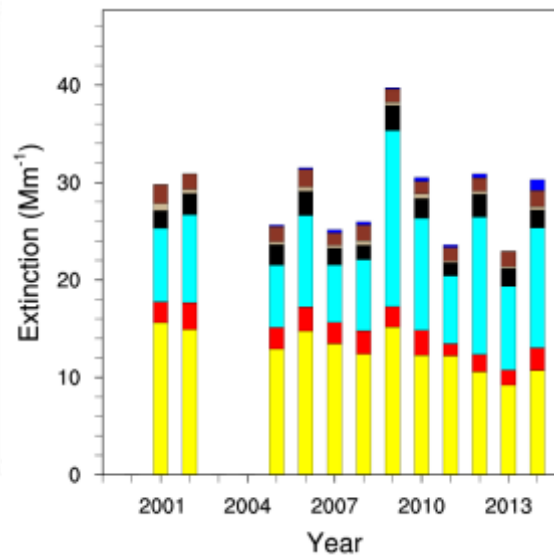
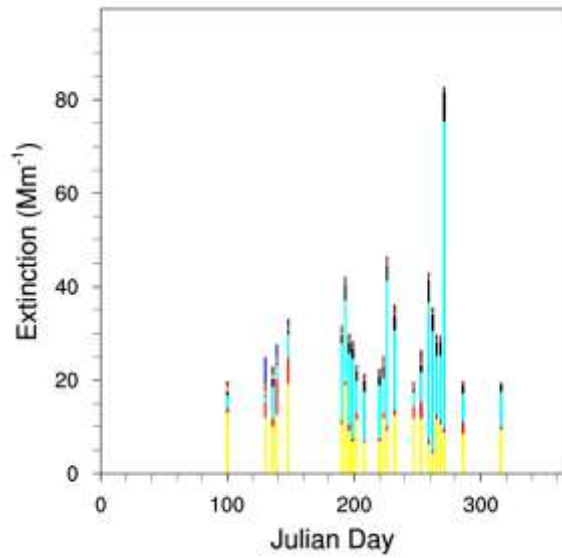
Mount Zirkel Wilderness, CO



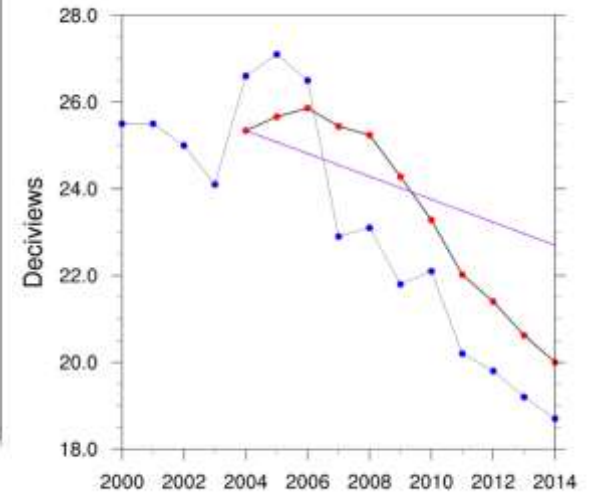
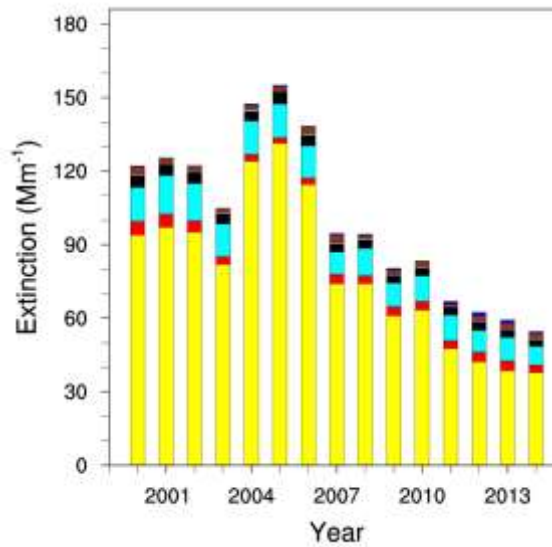
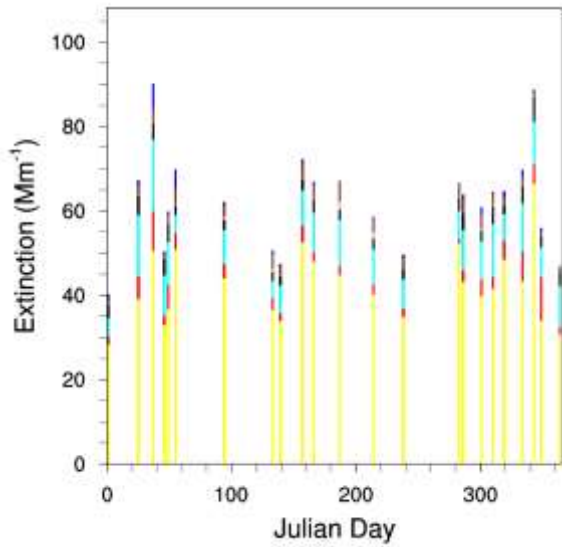
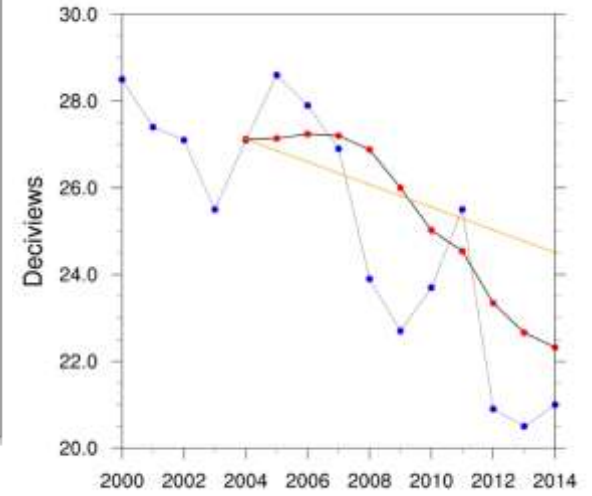
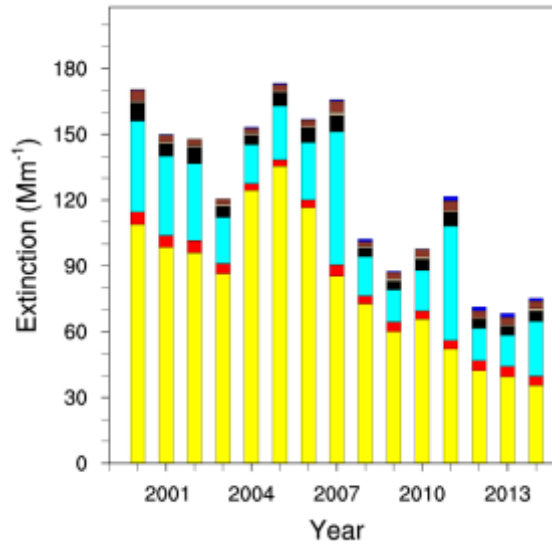
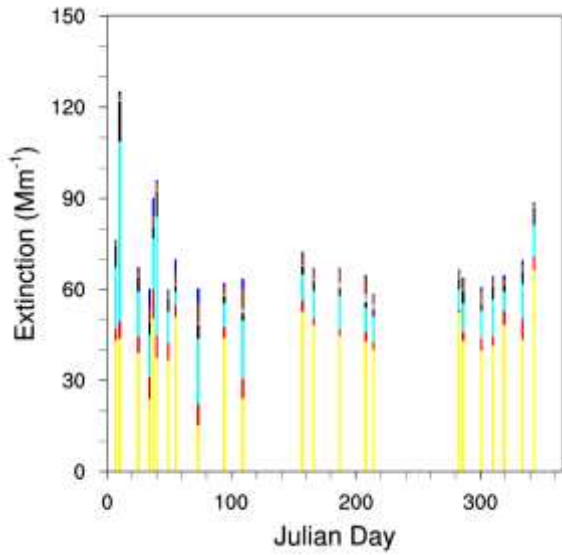
North Absaroka, WY



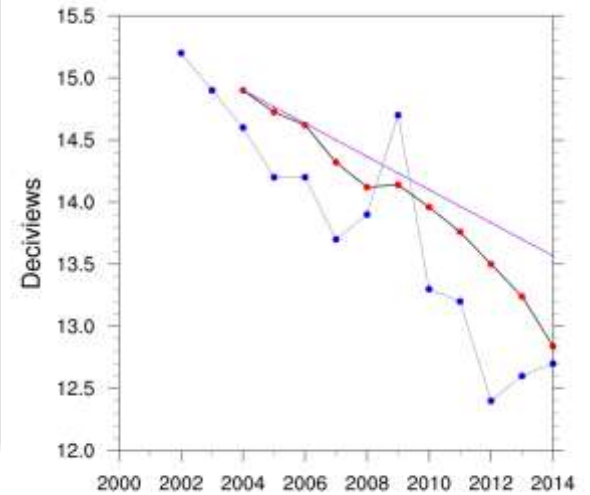
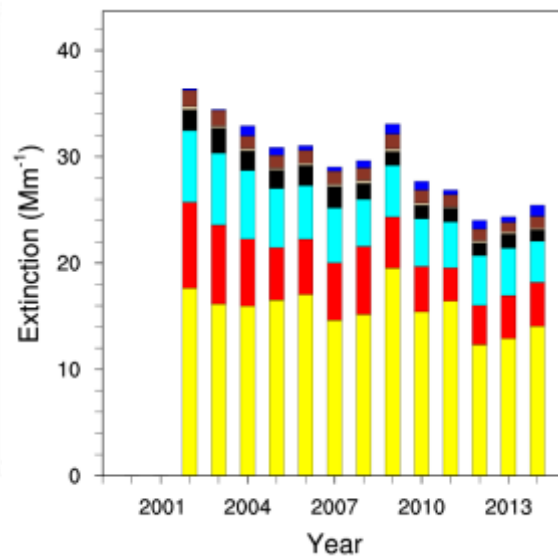
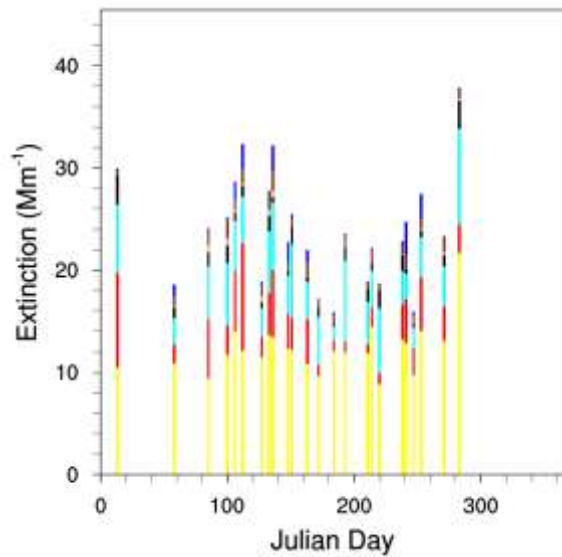
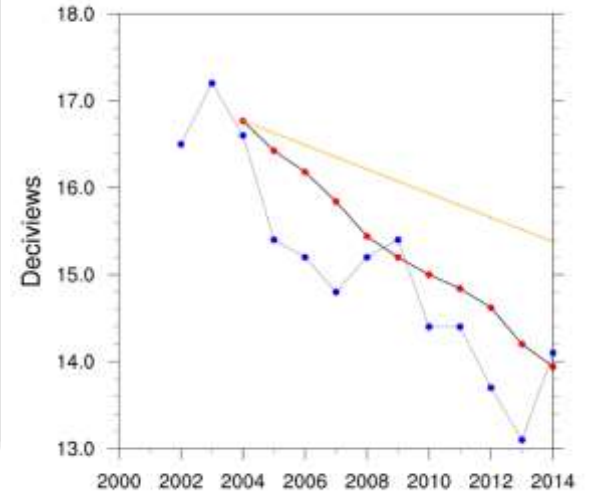
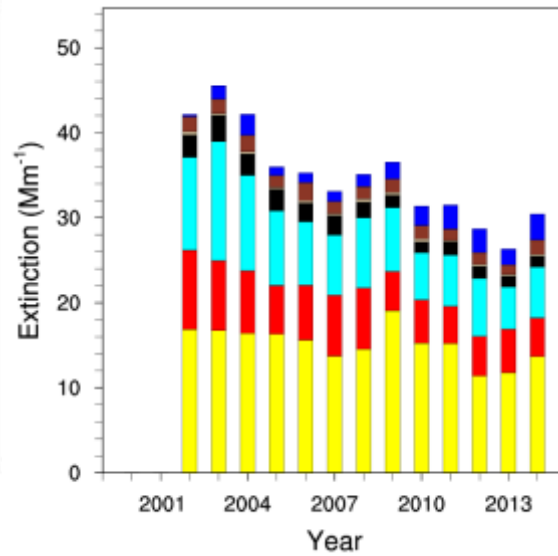
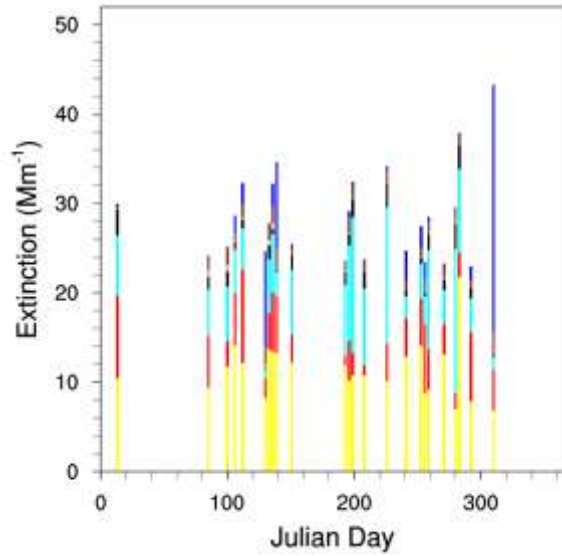
North Cascades National Park, WA



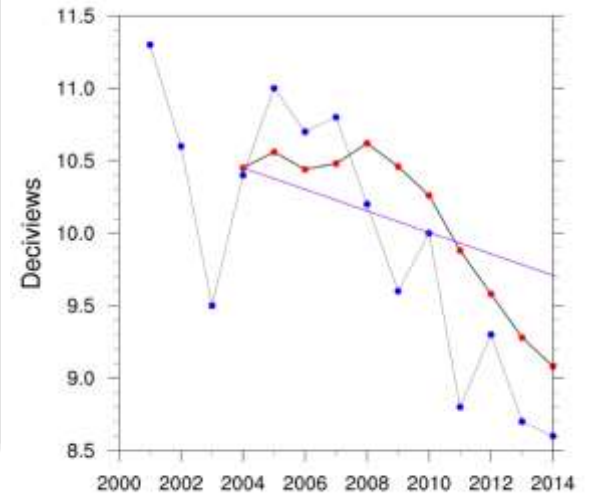
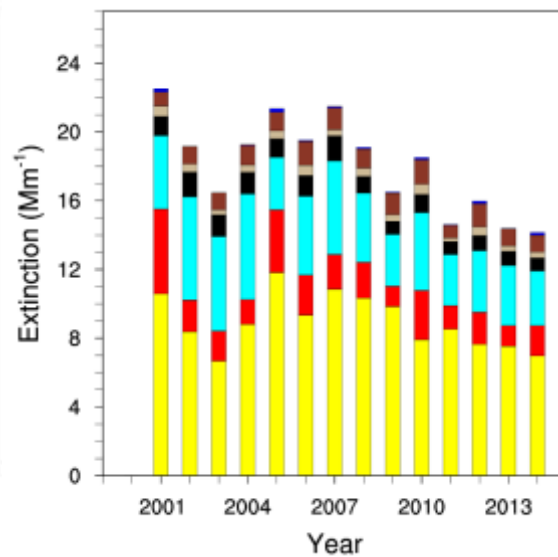
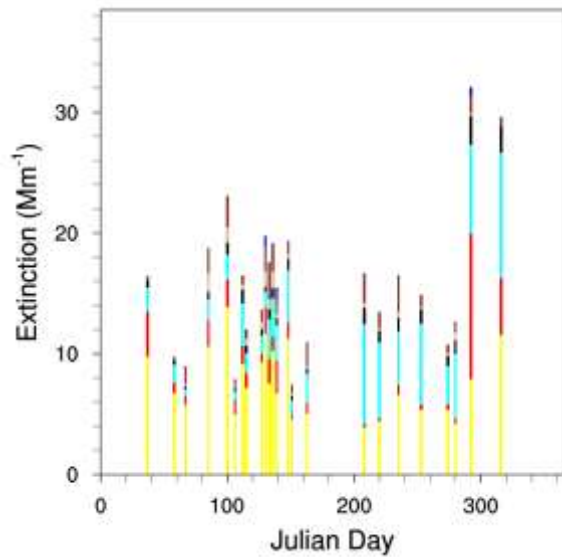
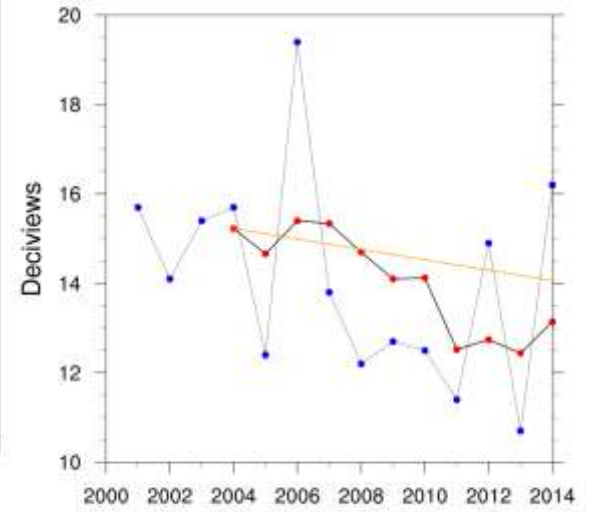
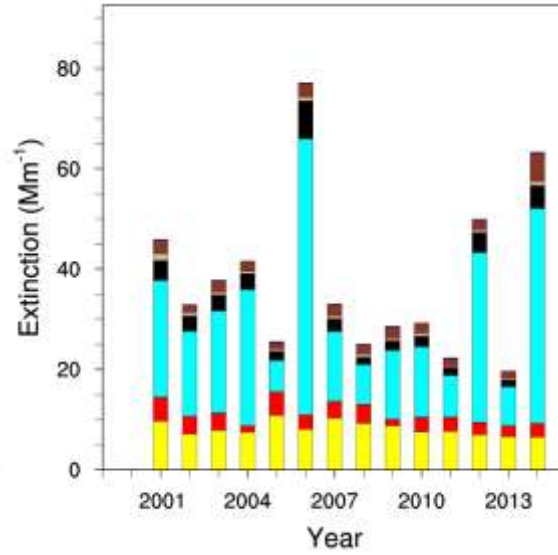
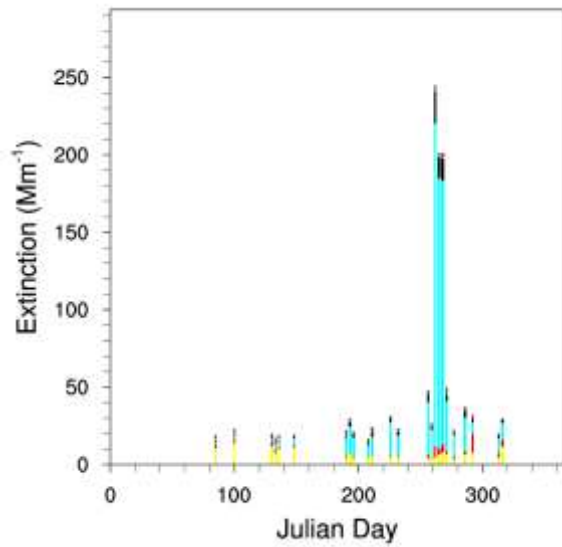
Okefenokee National Wildlife Refuge, GA



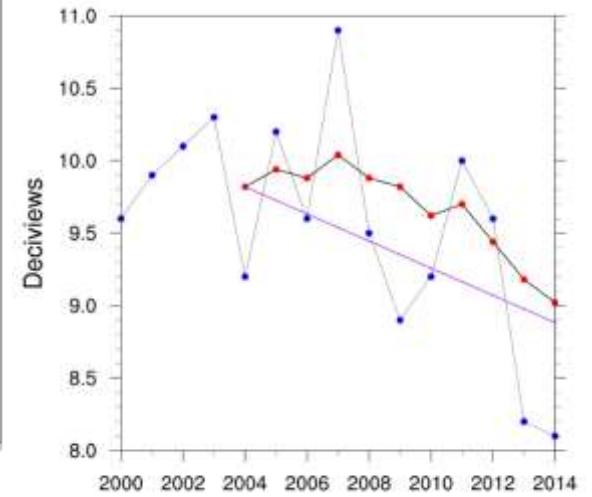
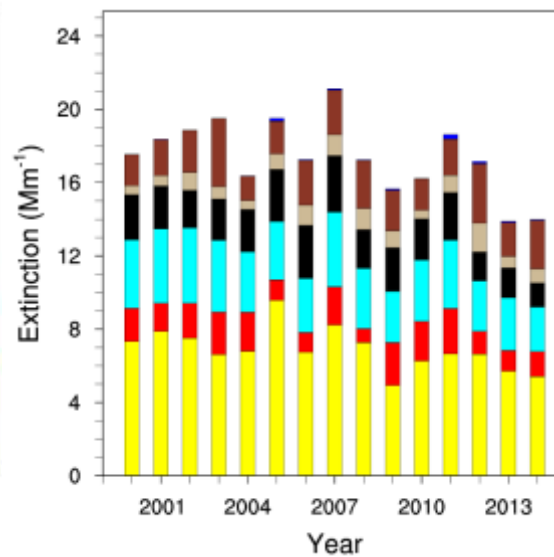
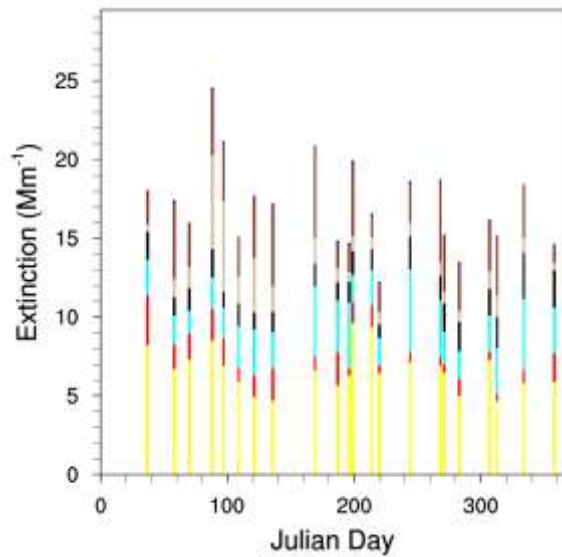
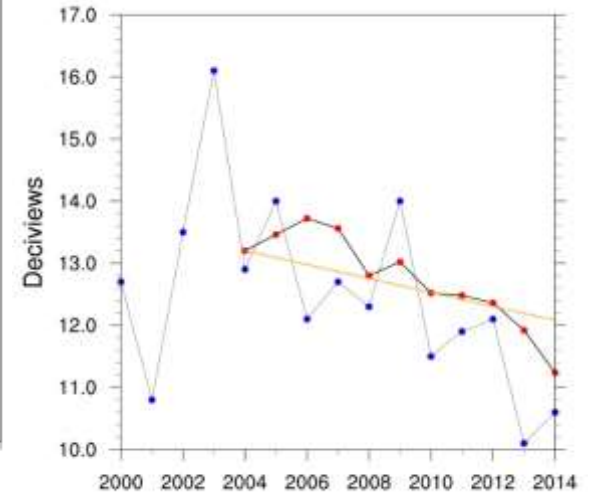
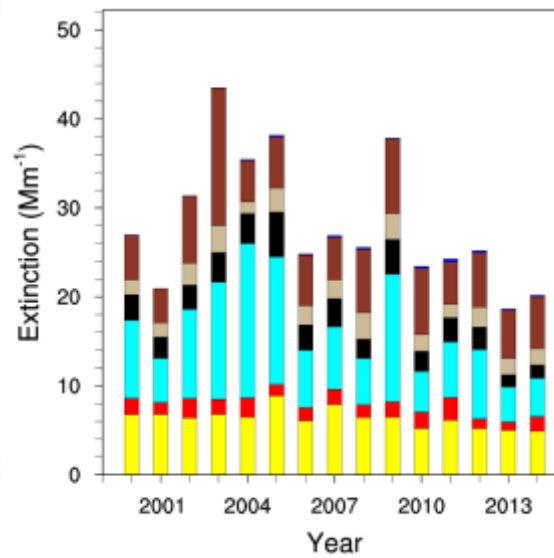
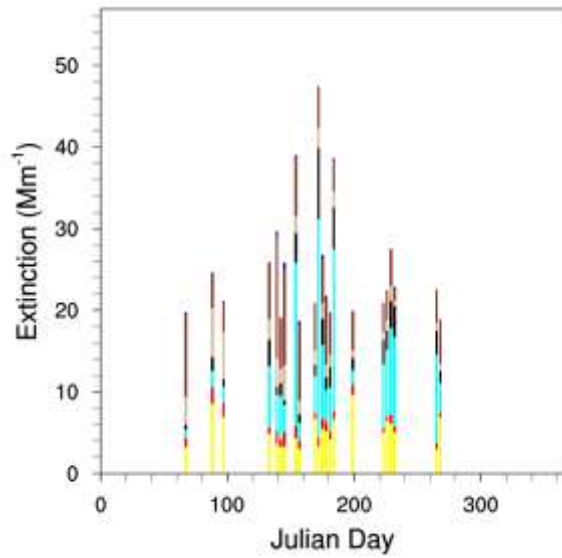
Olympic National Park, WA



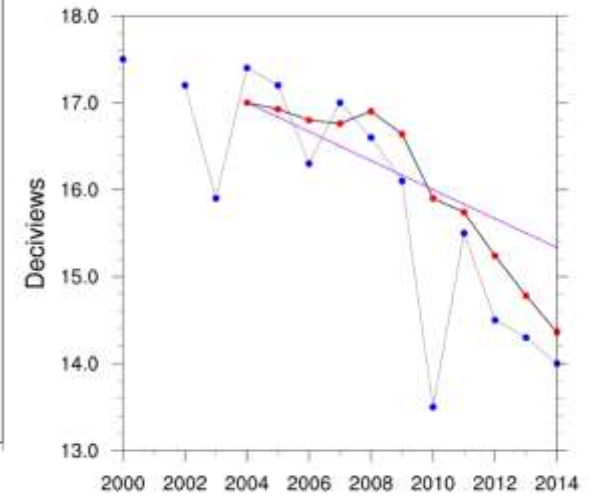
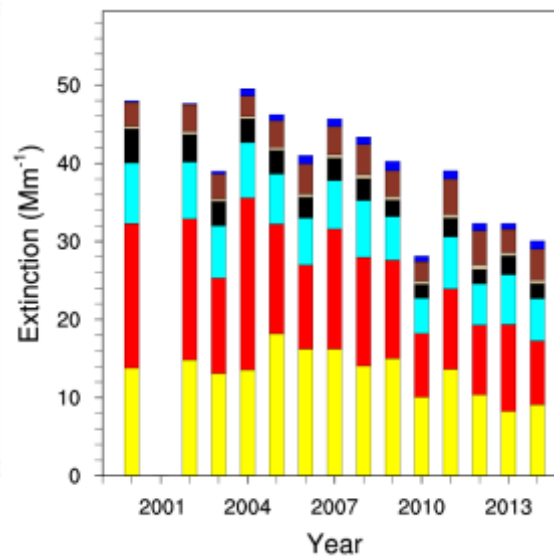
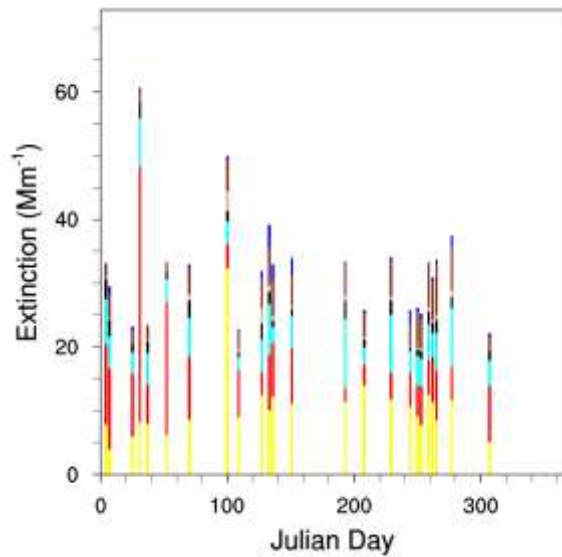
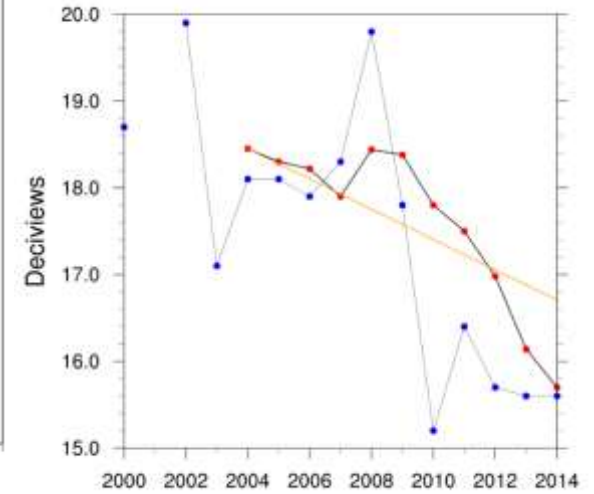
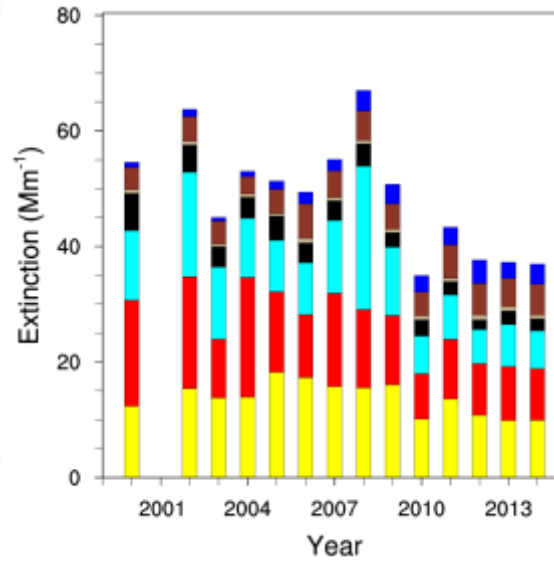
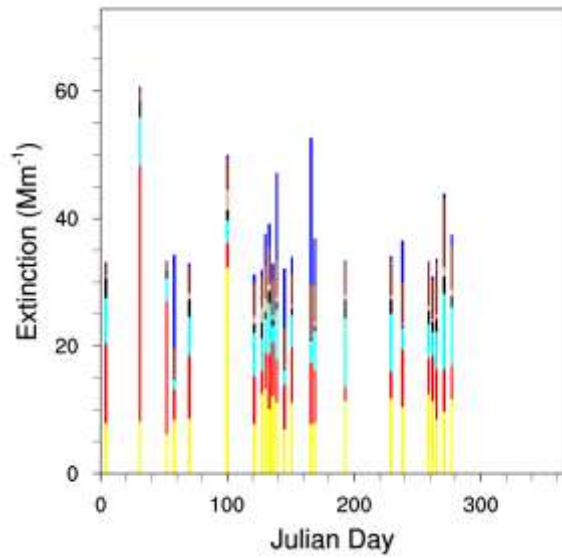
Pasayten, WA



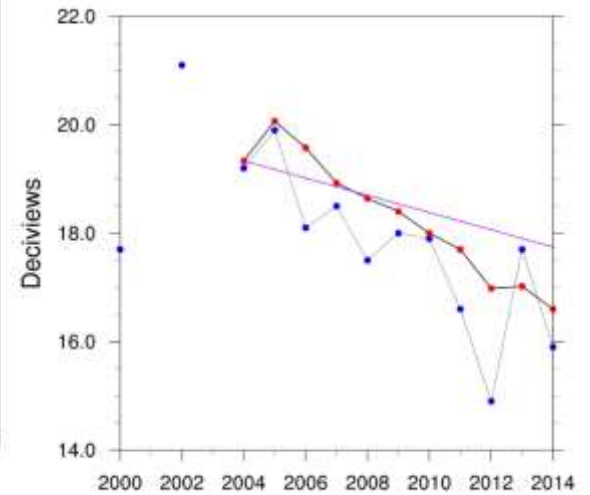
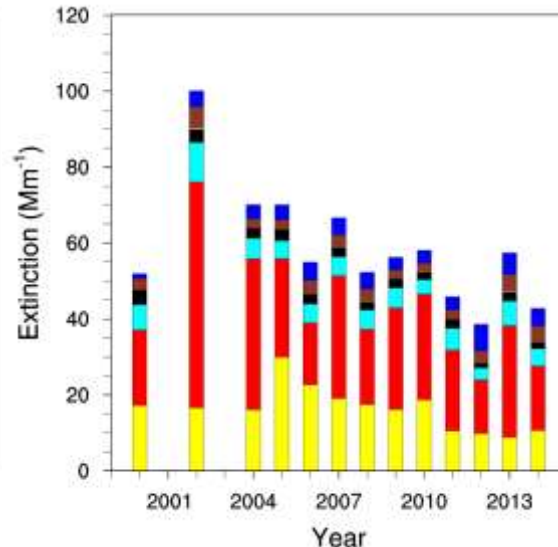
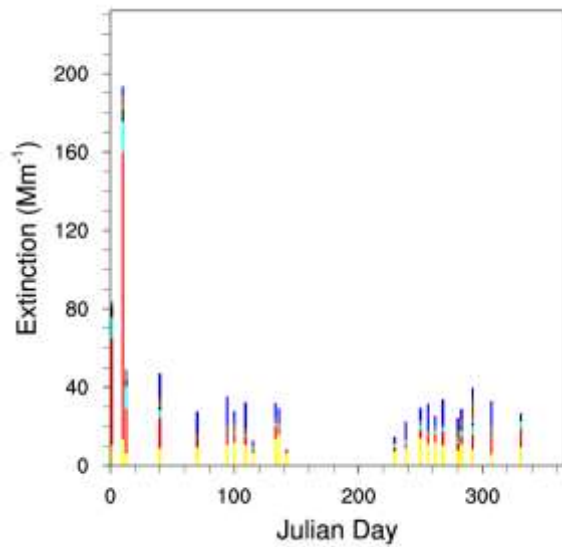
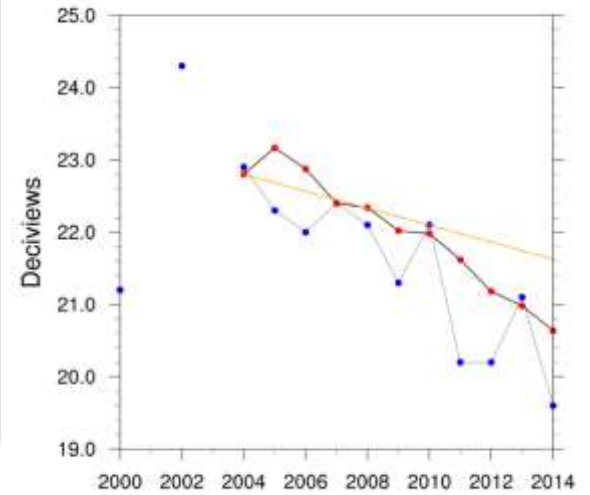
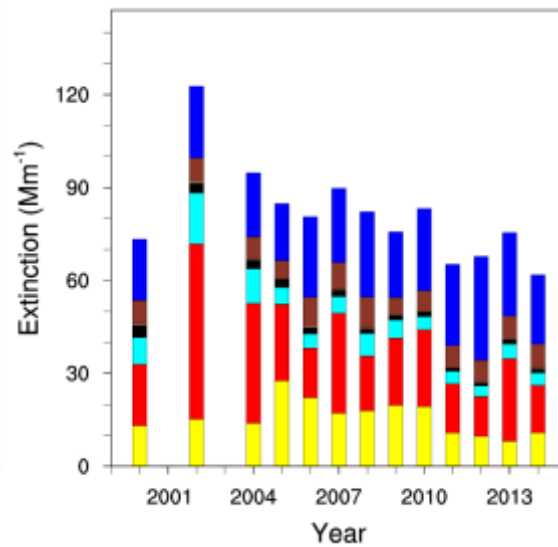
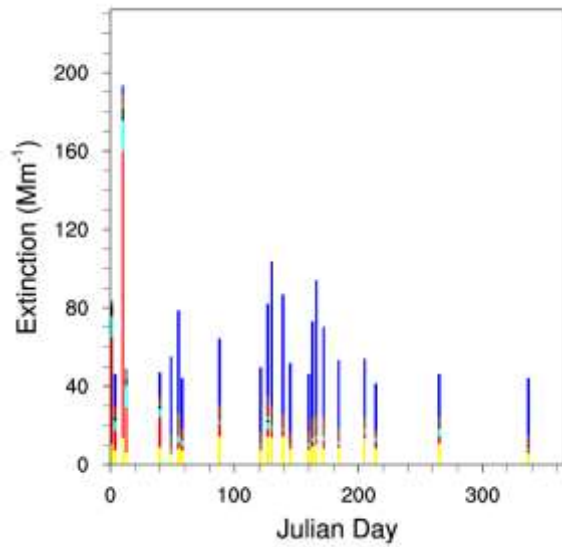
Petrified Forest National Park, AZ



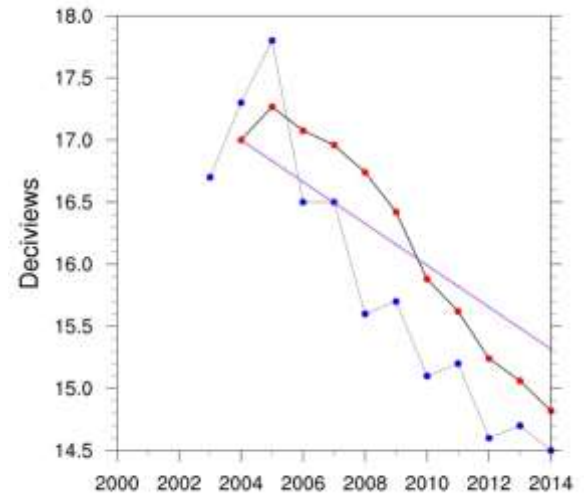
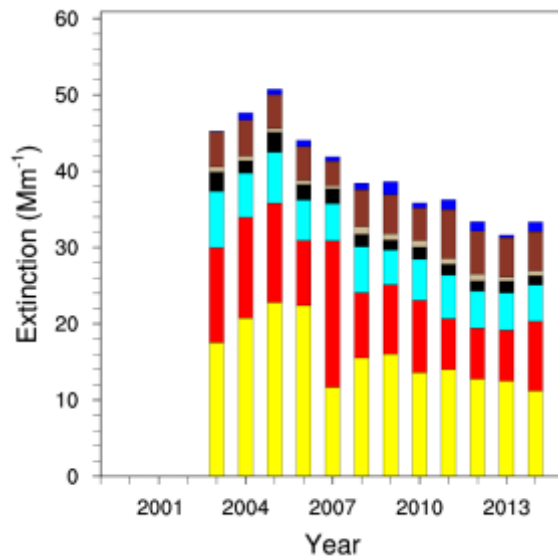
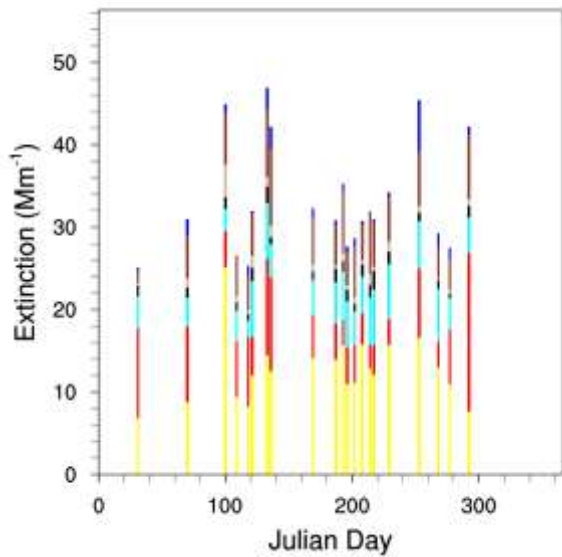
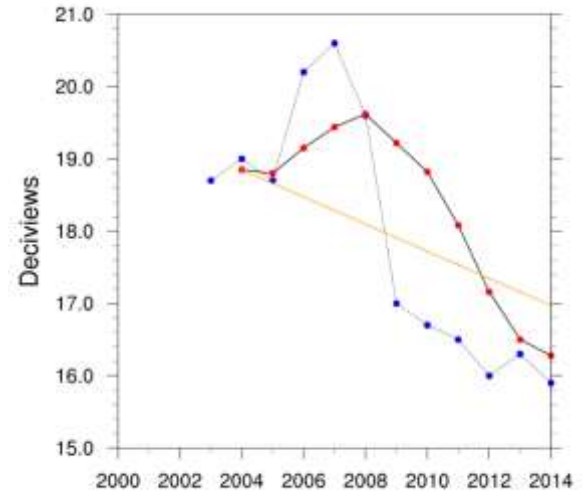
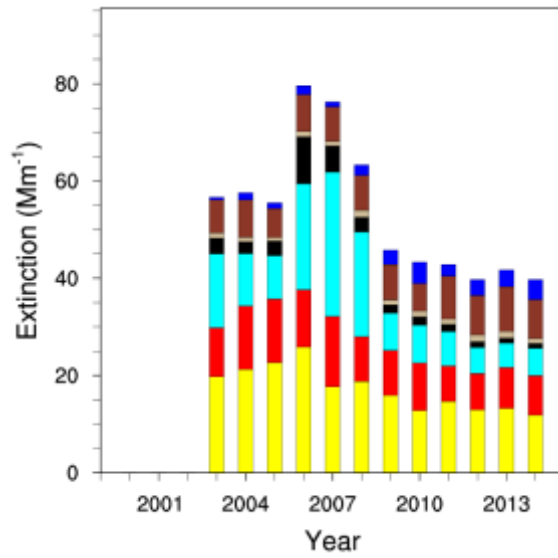
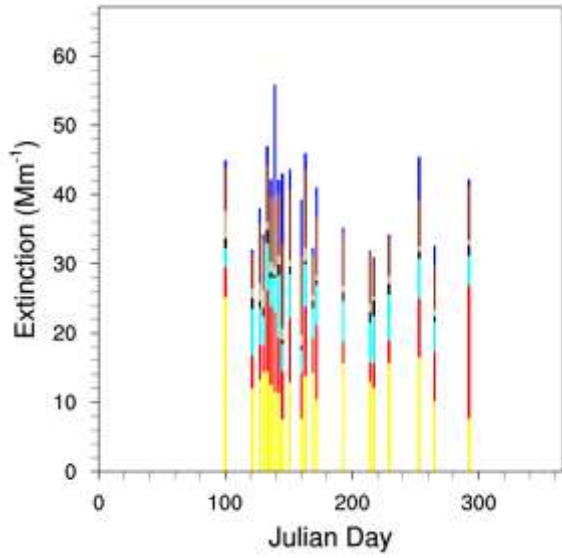
Pinnacles National Monument, CA



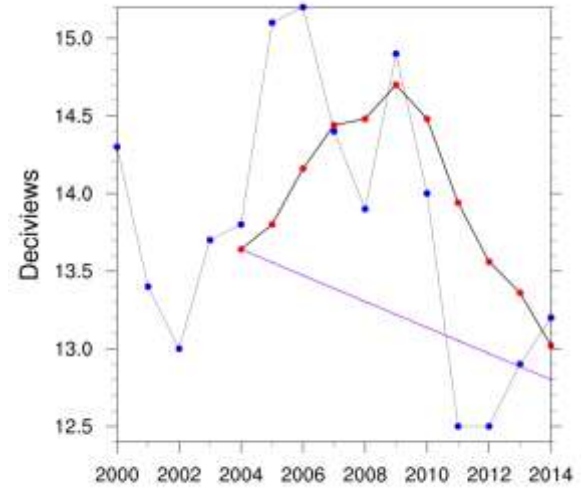
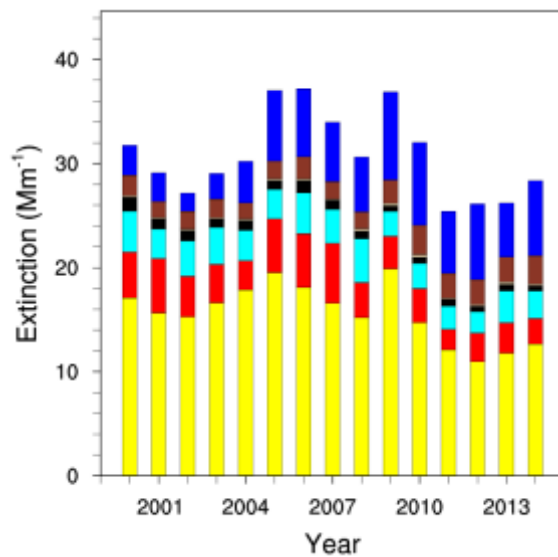
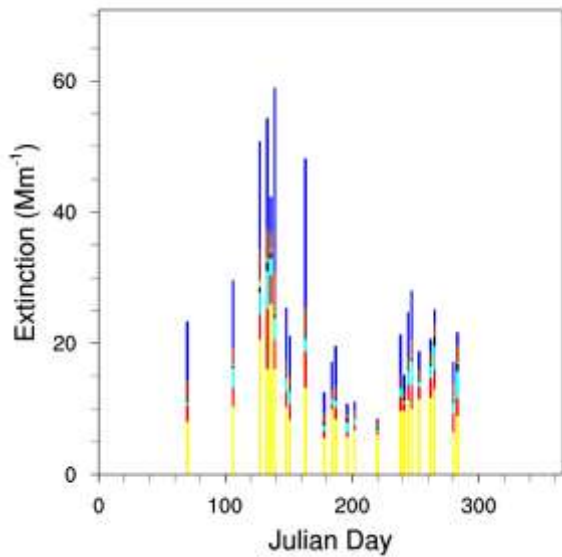
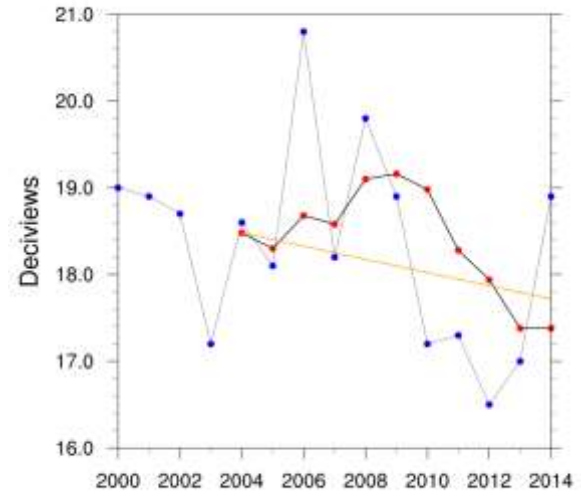
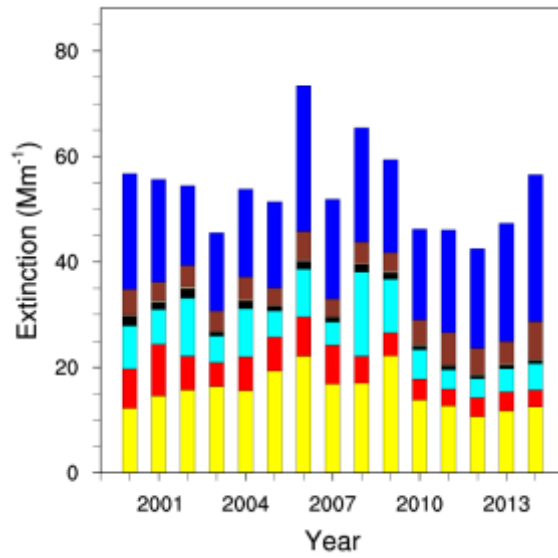
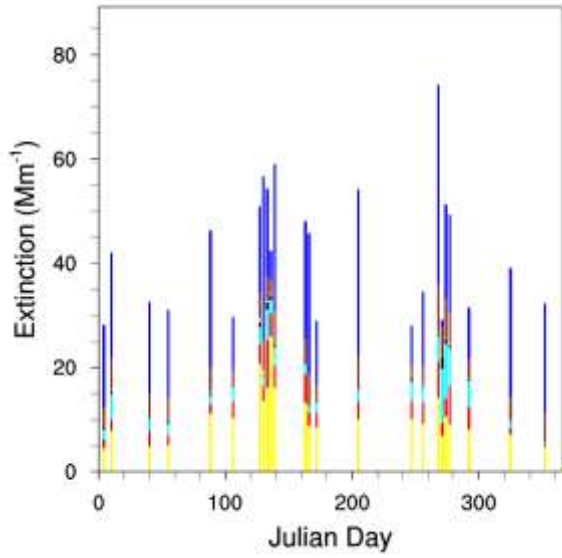
Point Reyes National Seashore, CA



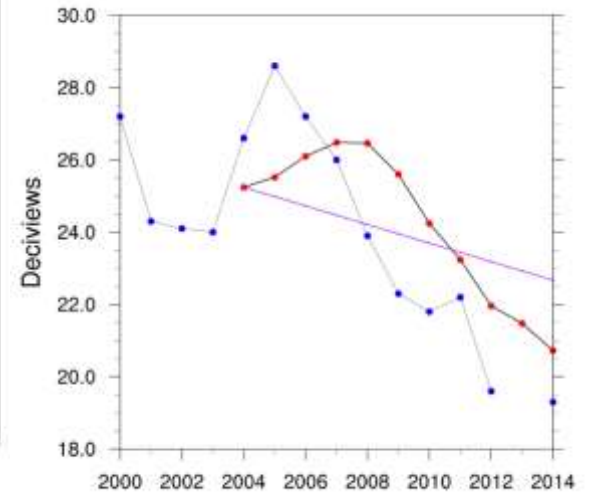
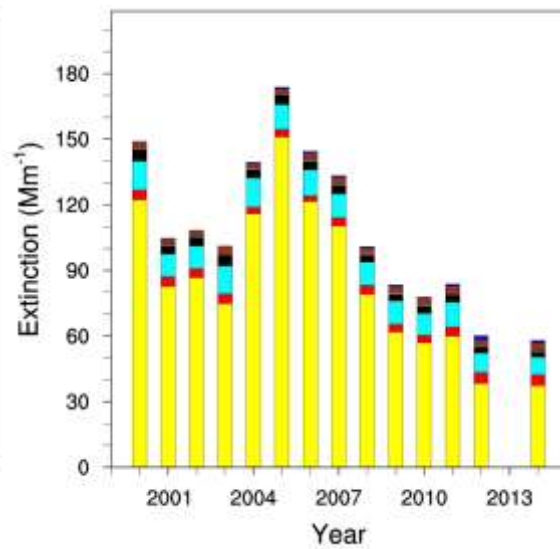
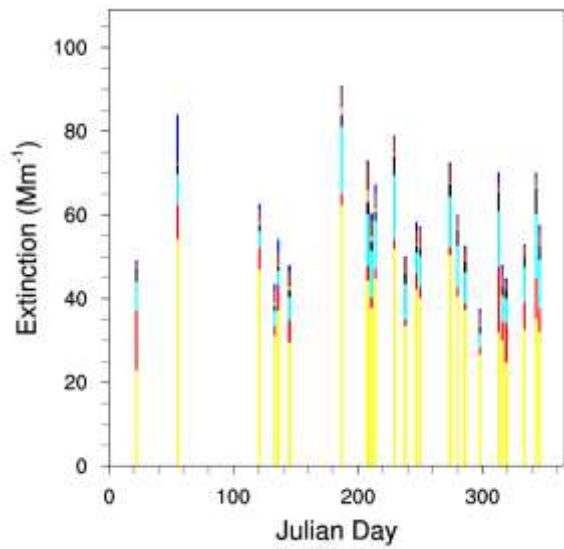
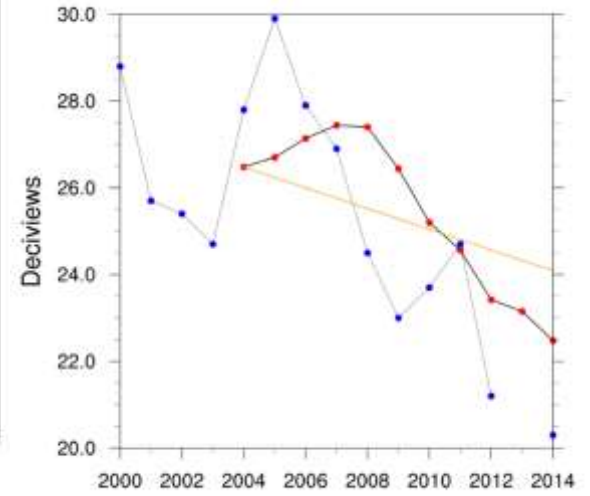
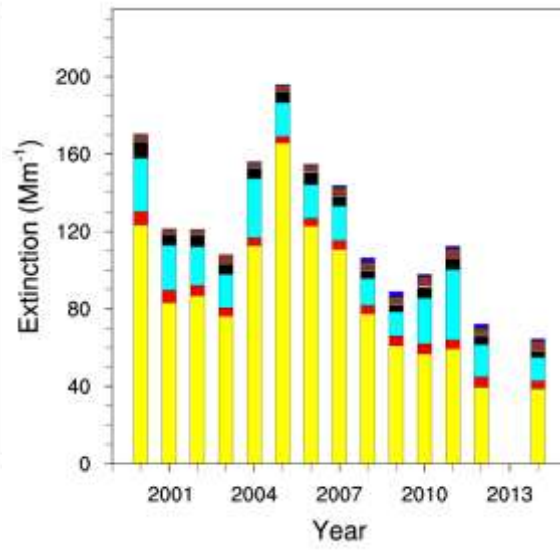
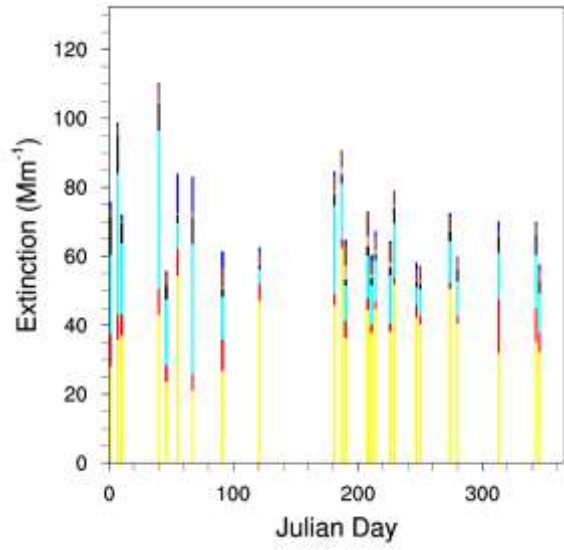
San Rafael, CA



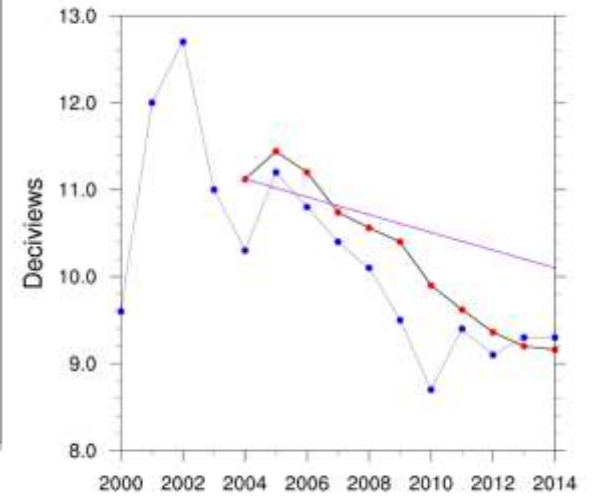
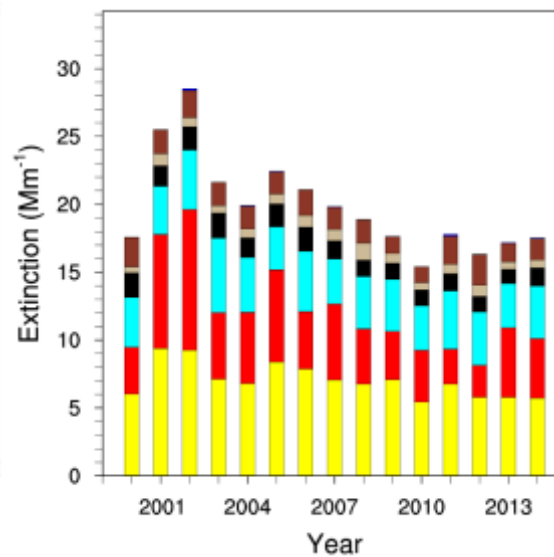
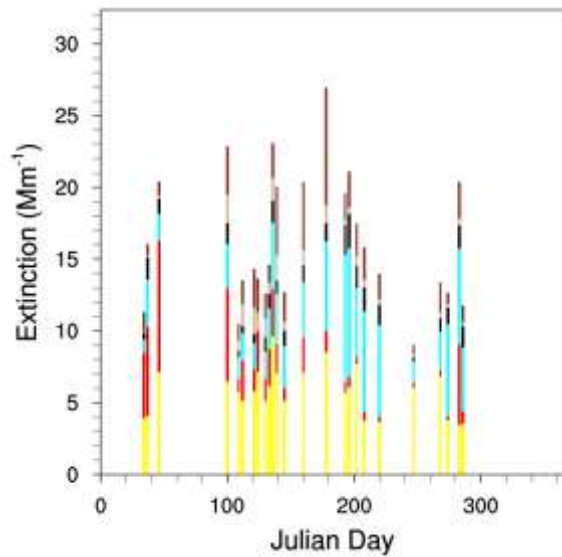
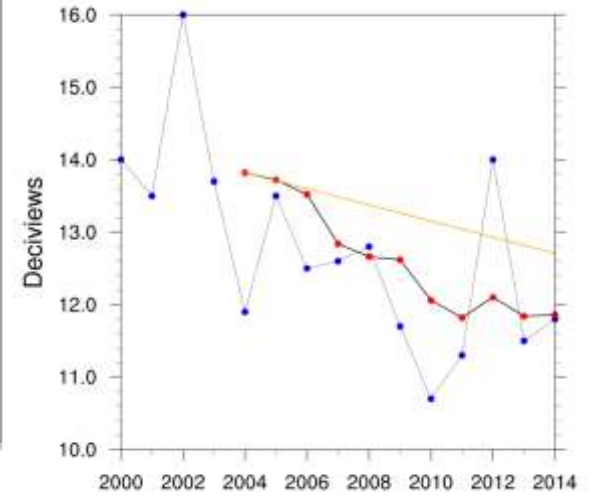
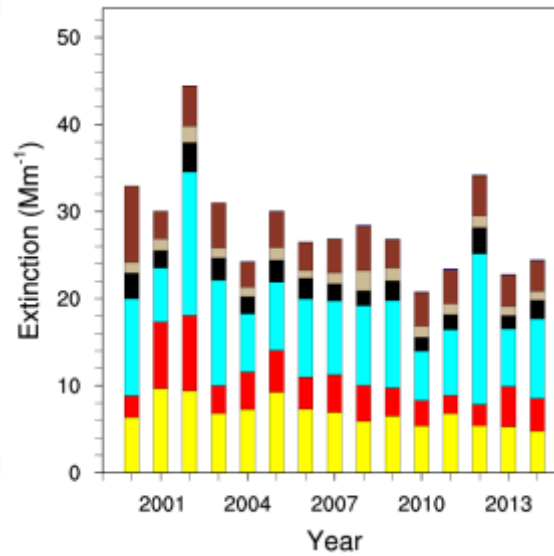
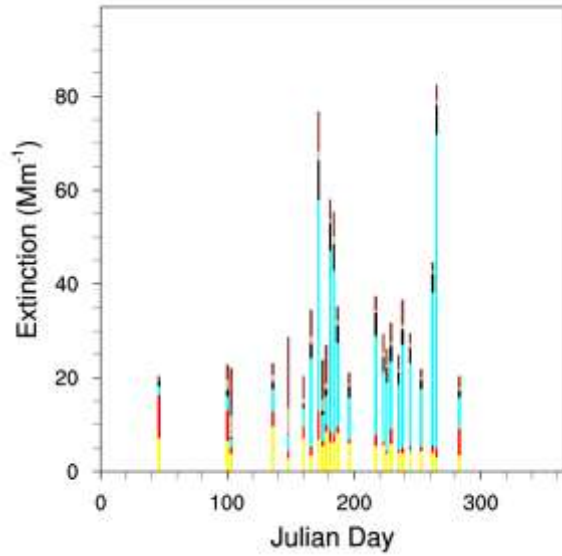
Redwood National Park, CA



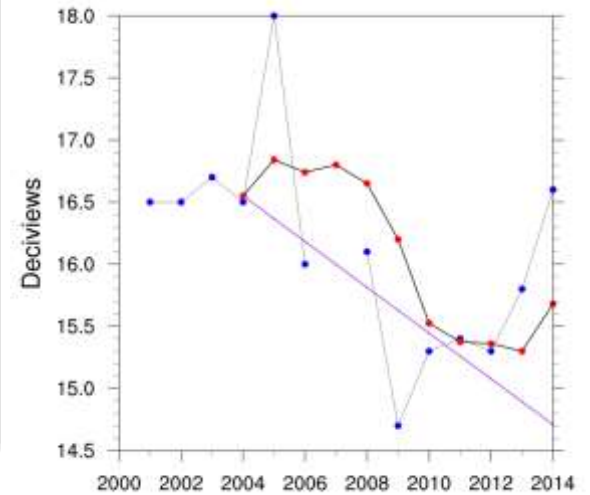
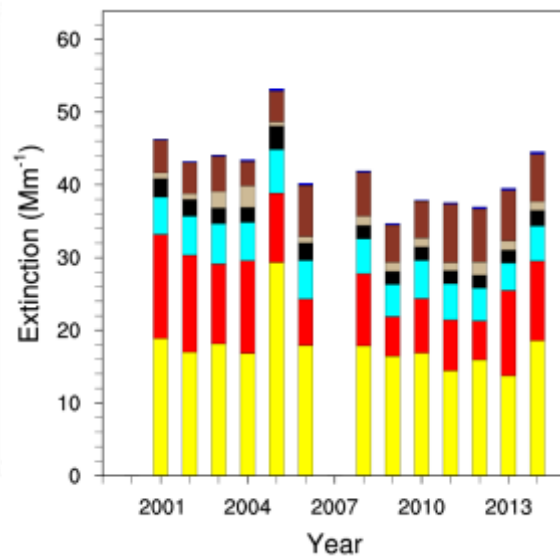
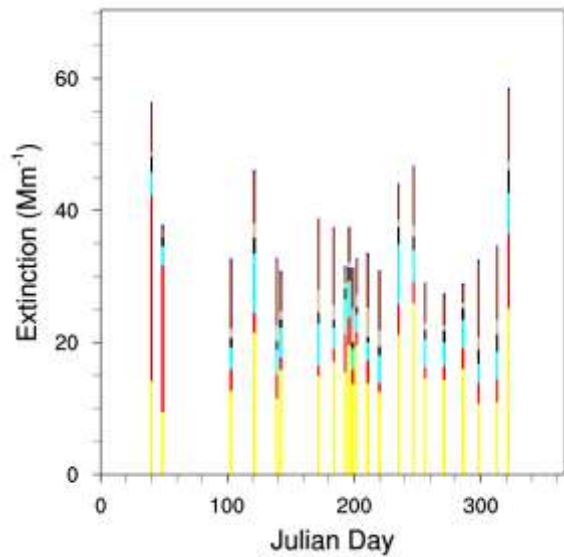
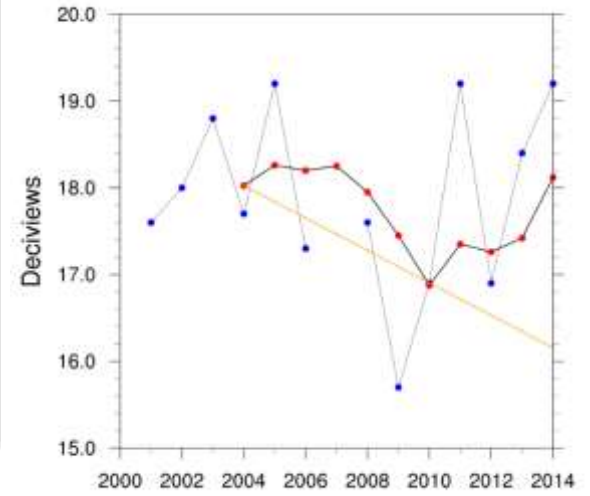
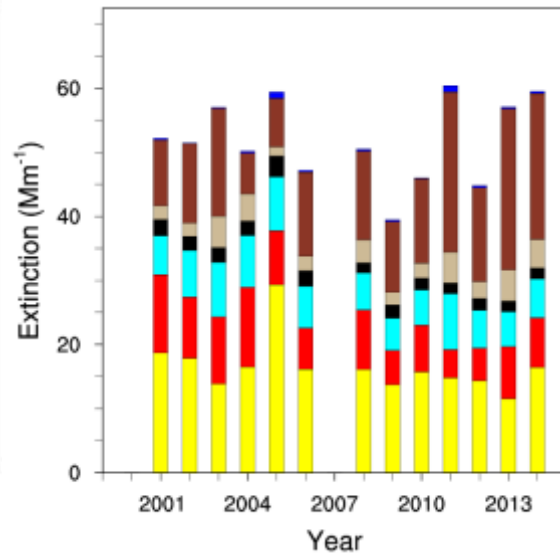
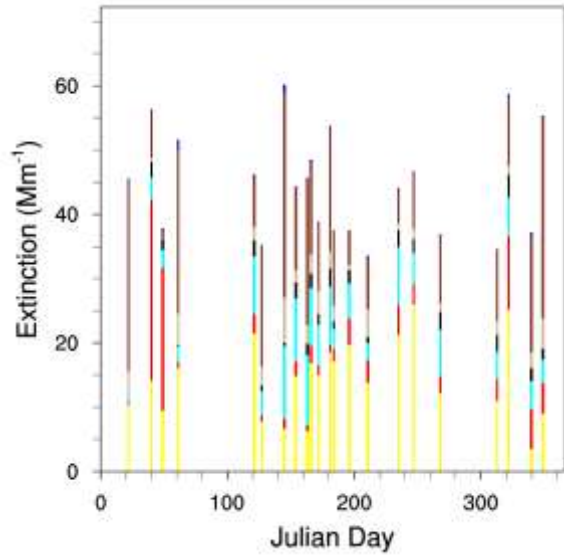
Cape Romain National Wildlife Refuge, SC



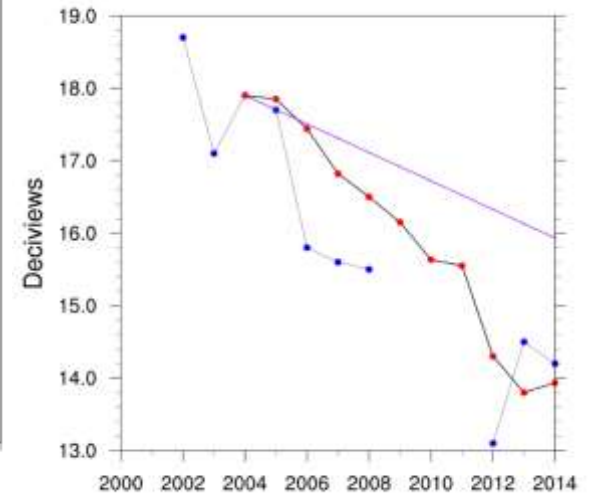
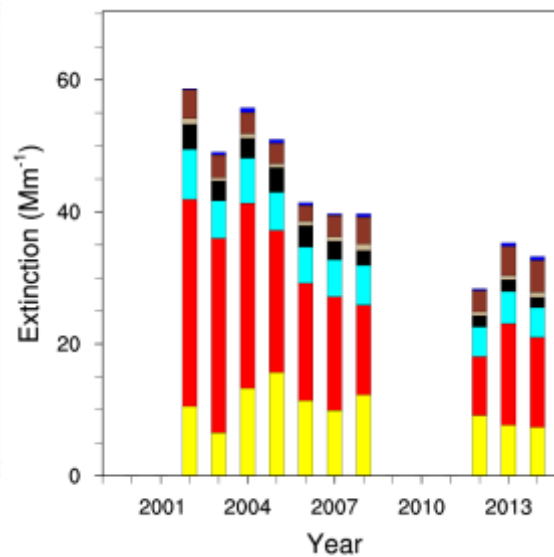
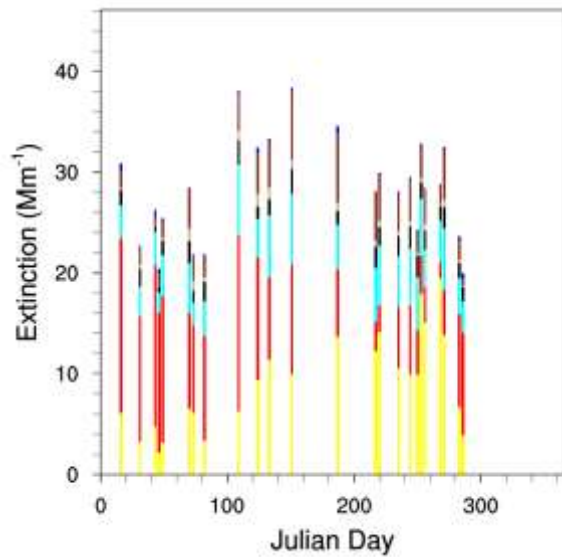
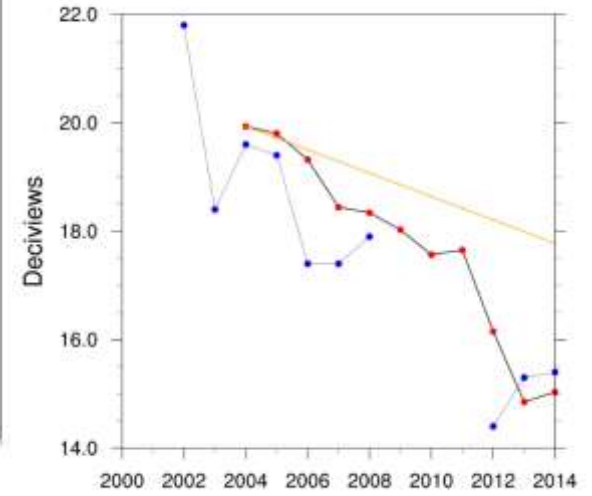
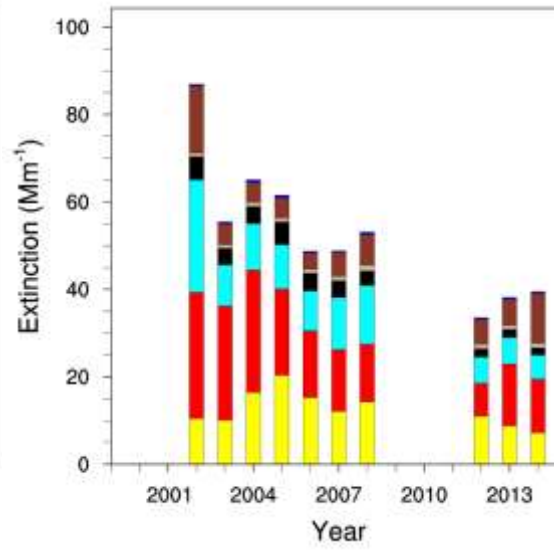
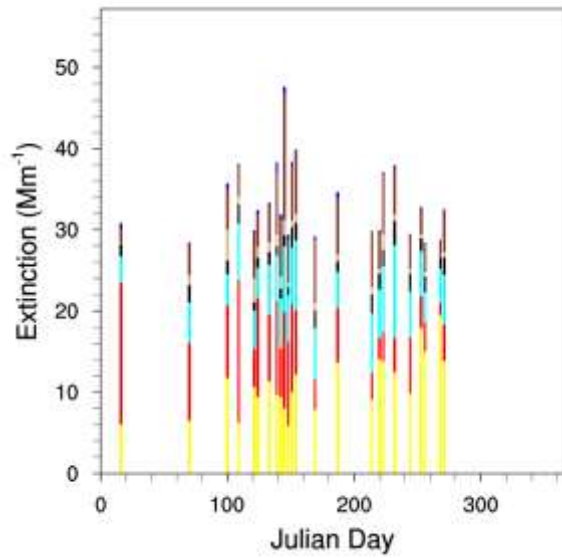
Rocky Mountain National Park, CO



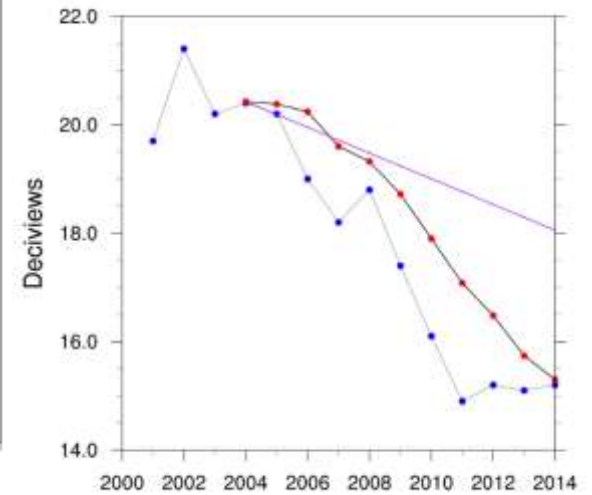
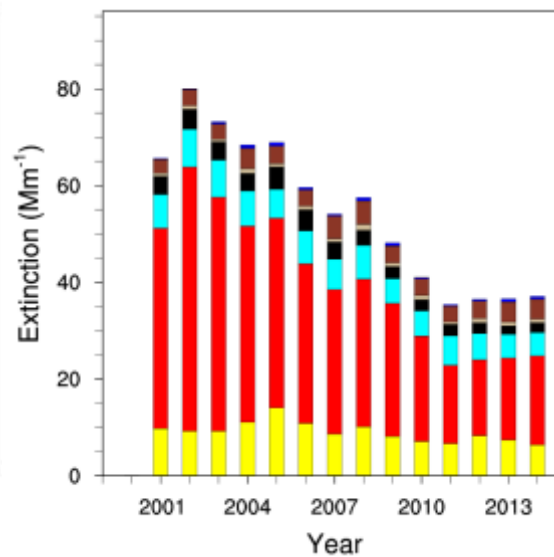
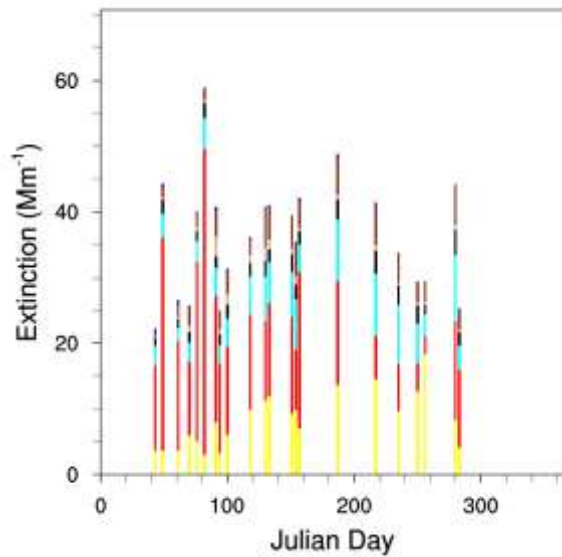
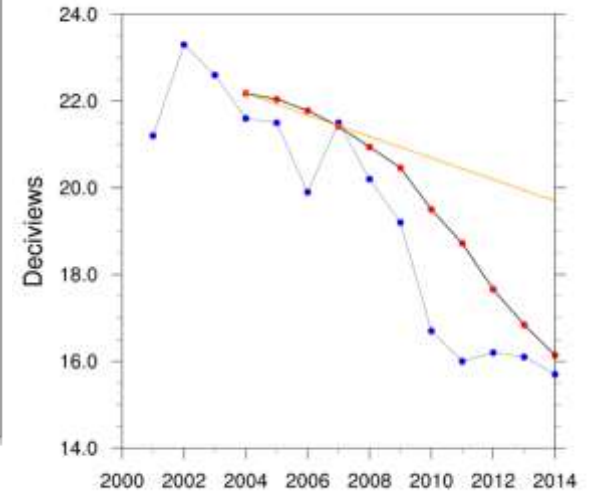
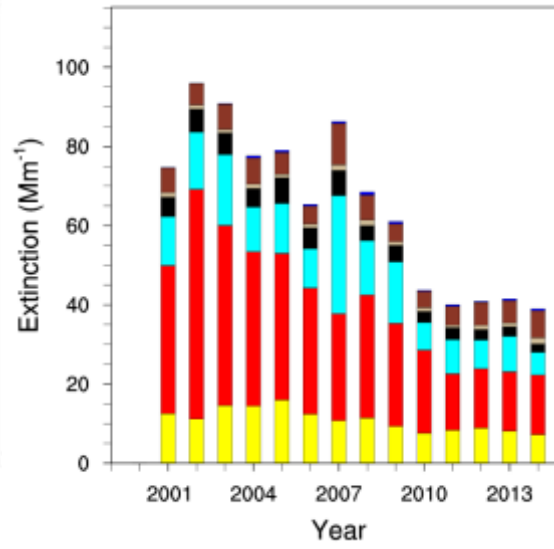
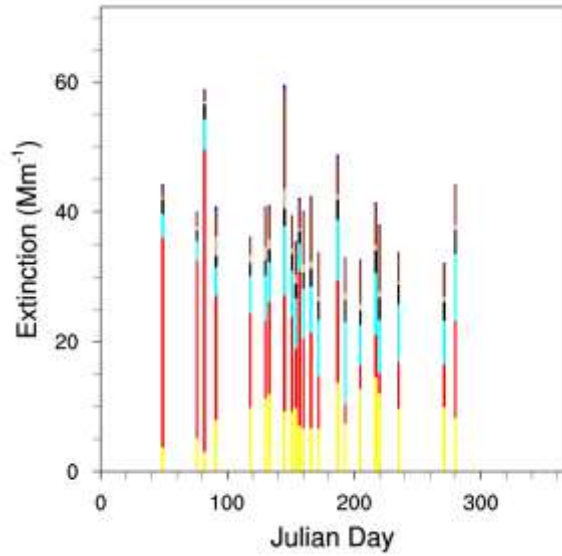
Salt Creek, NM



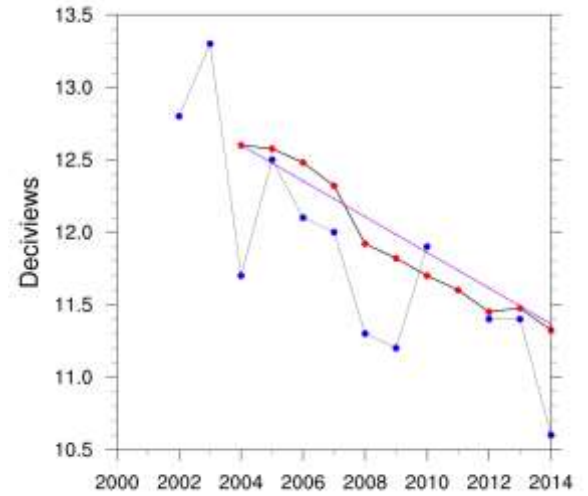
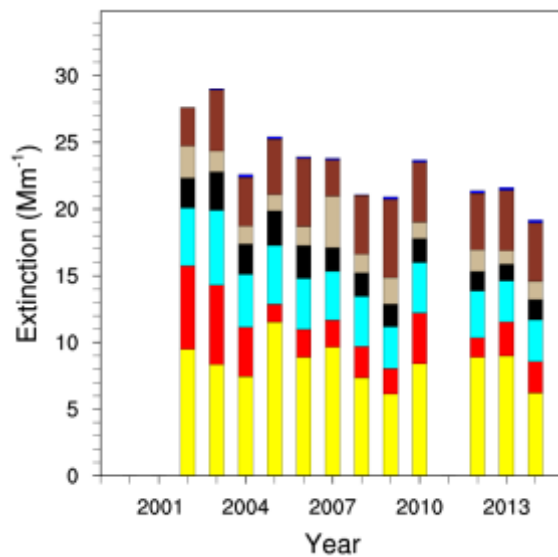
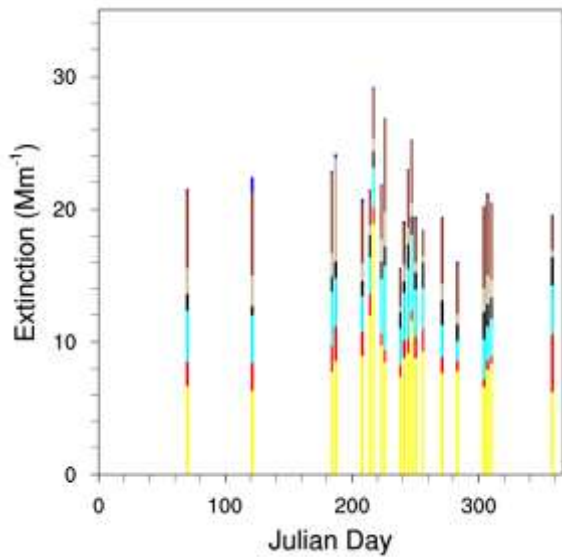
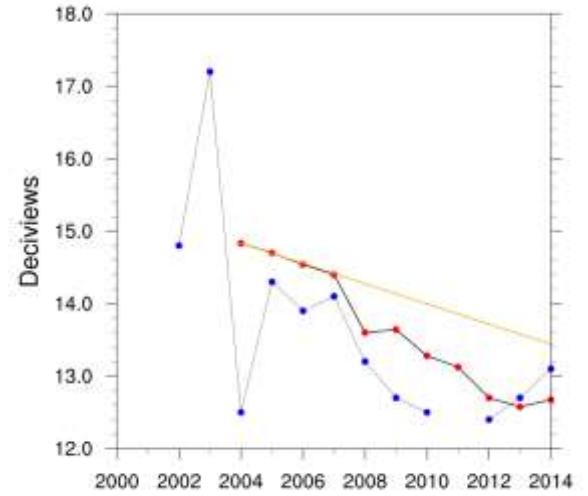
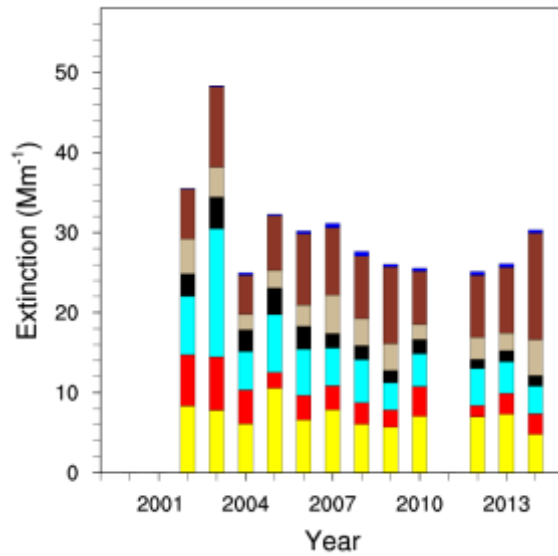
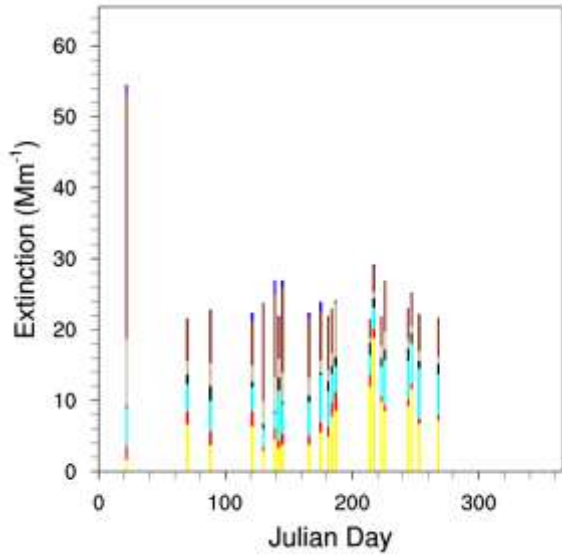
San Gabriel, CA



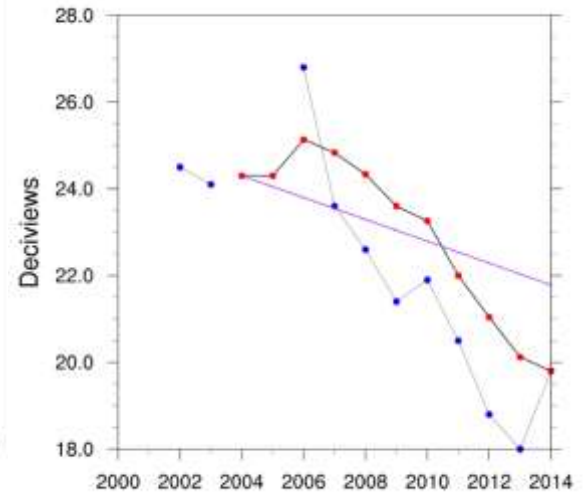
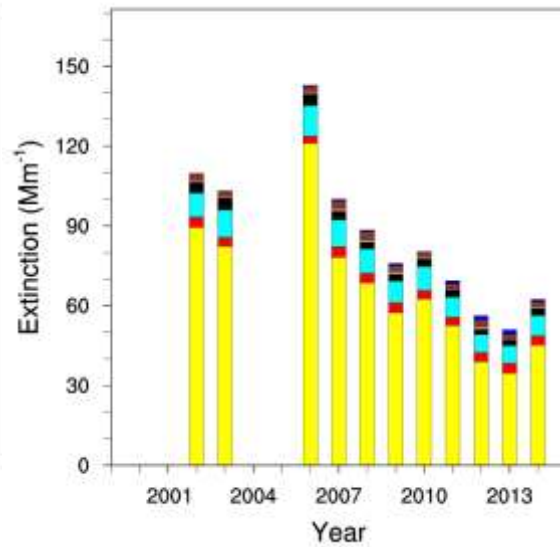
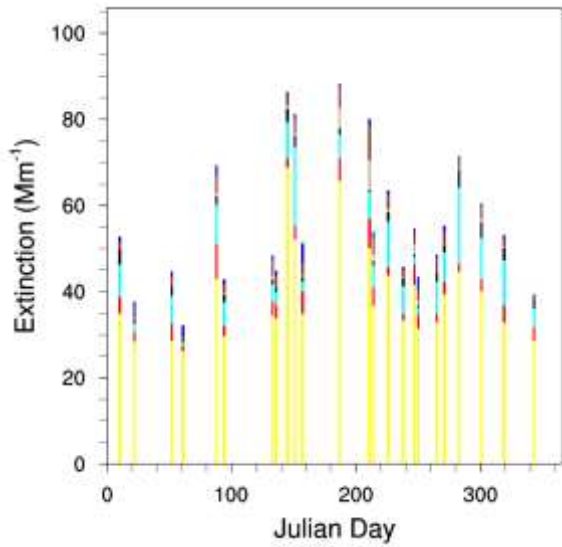
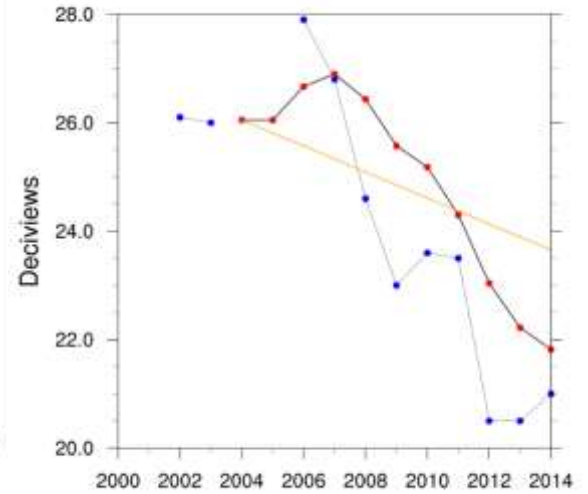
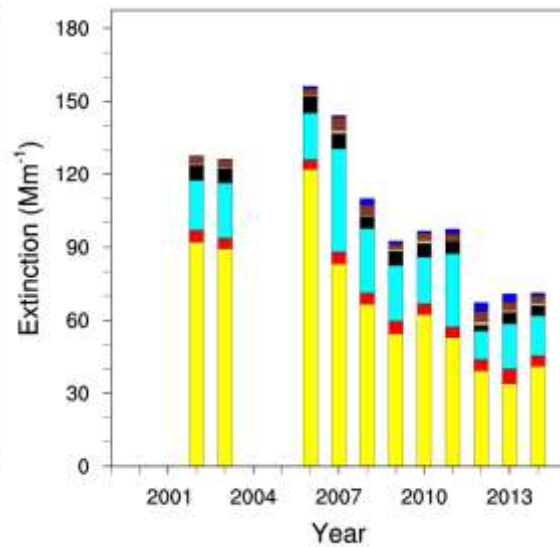
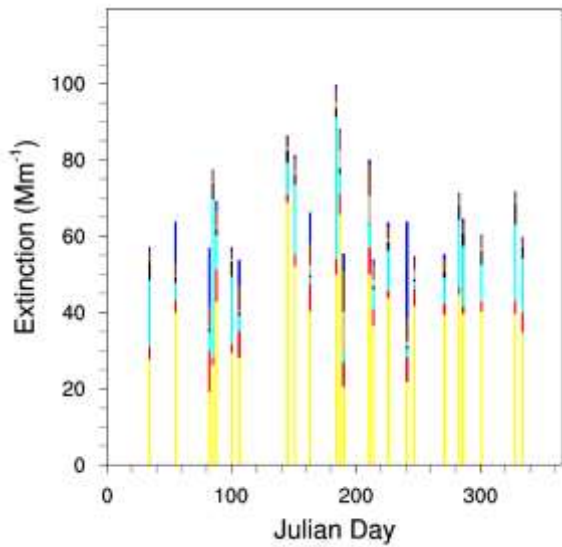
San Geronio Wilderness, CA



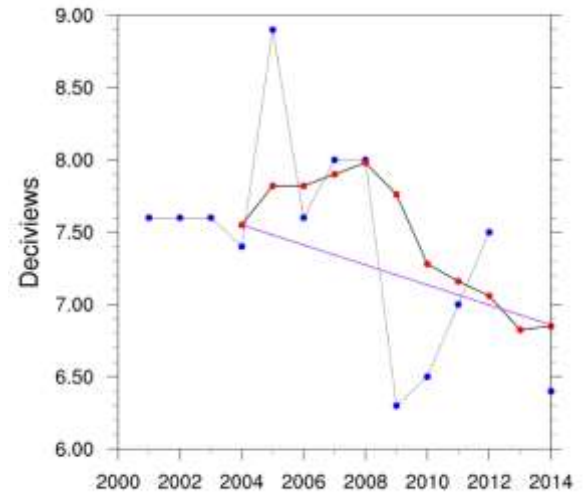
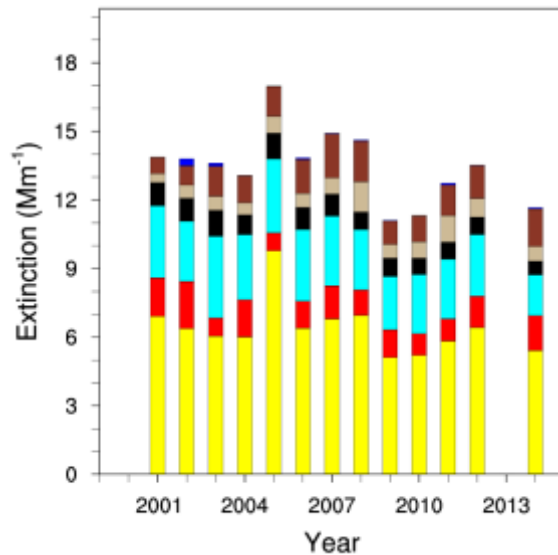
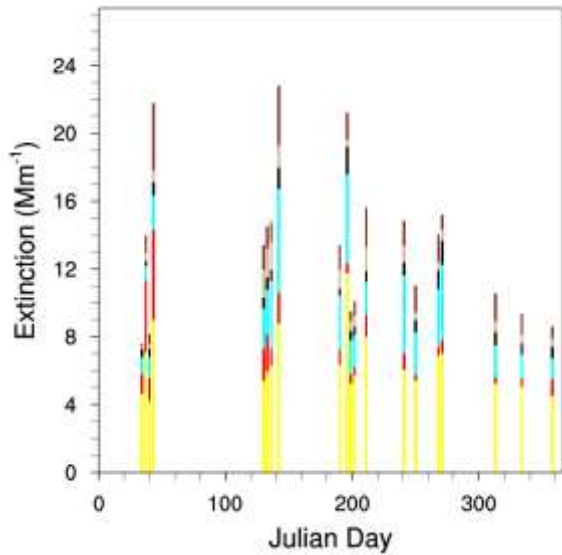
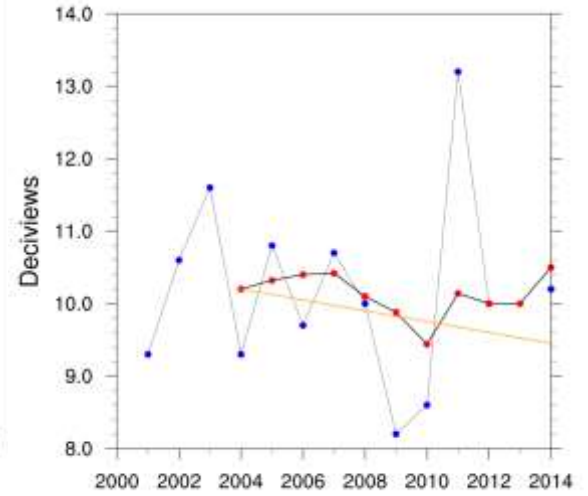
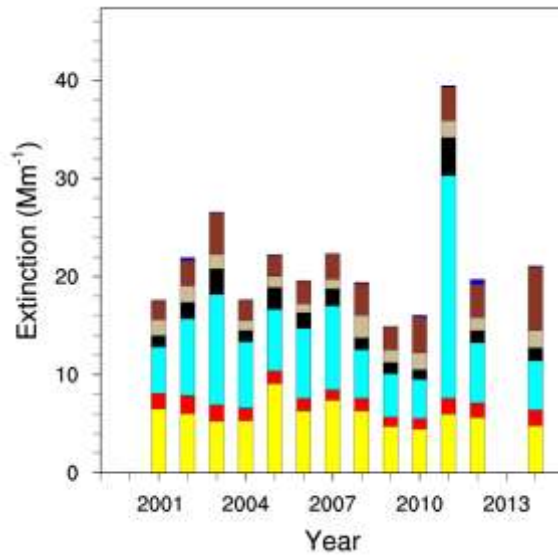
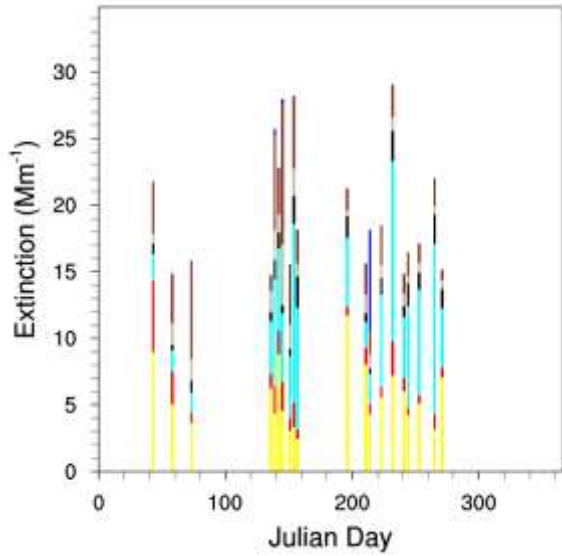
Saguaro National Monument, AZ



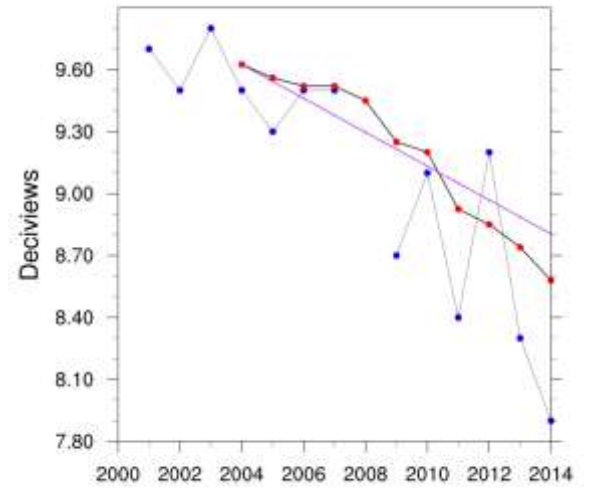
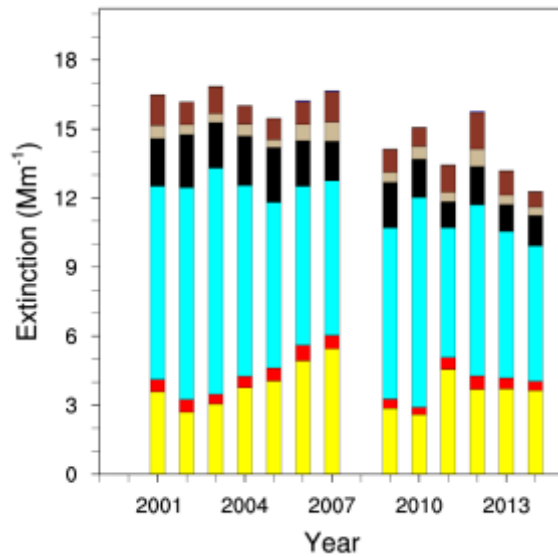
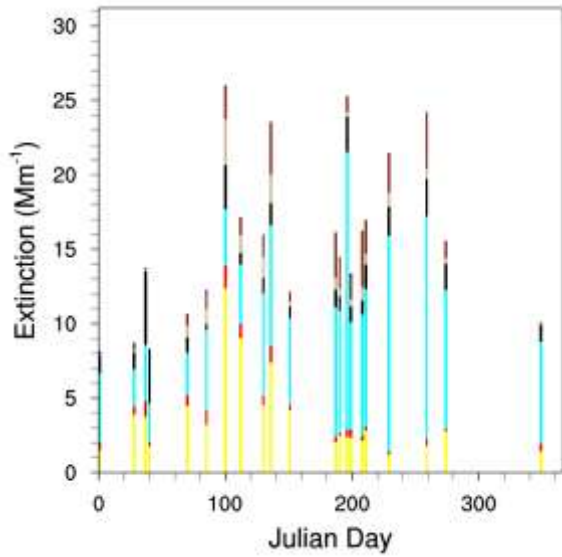
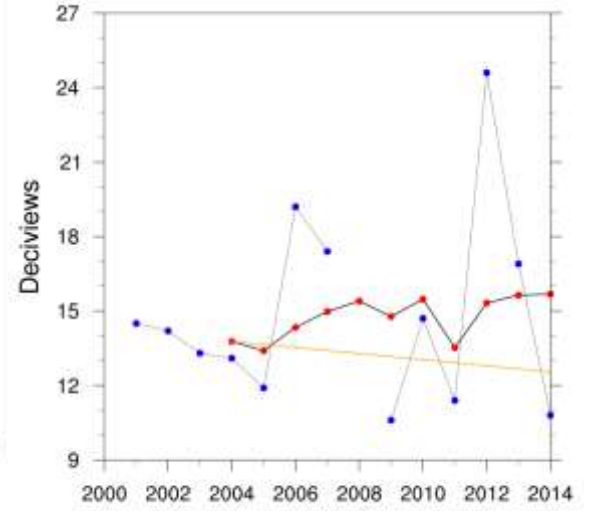
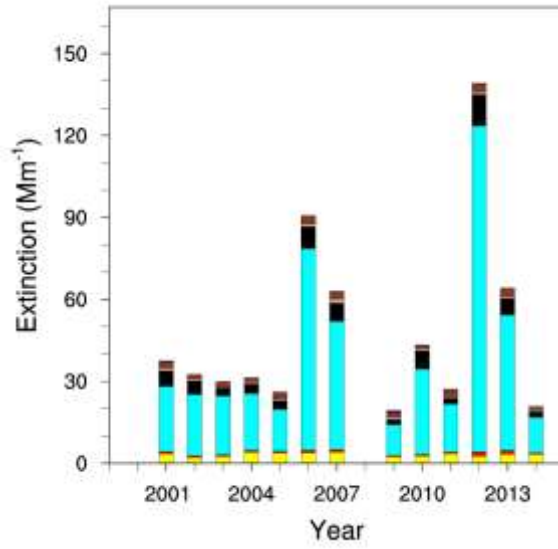
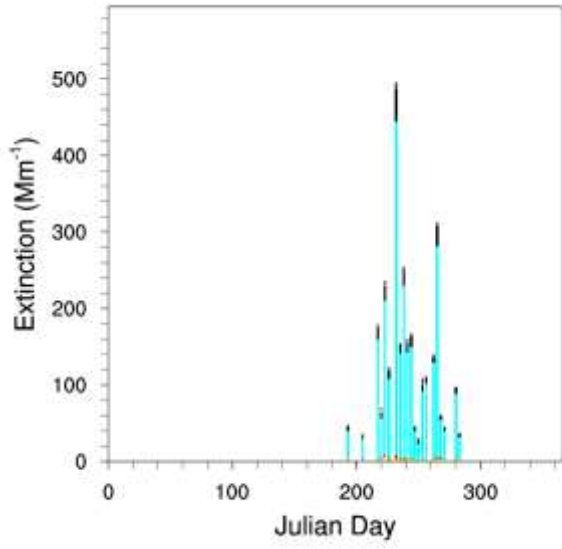
St. Marks, FL



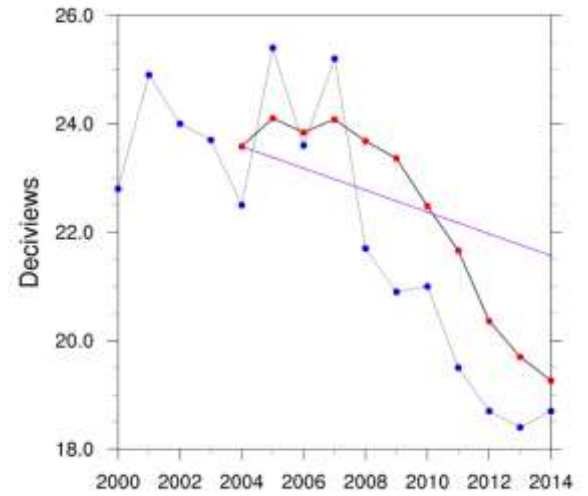
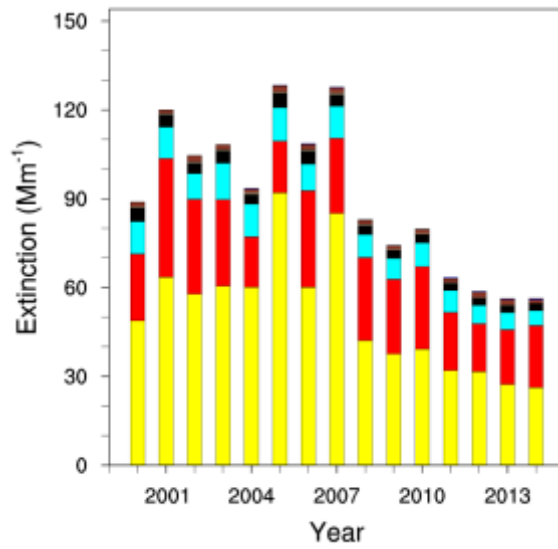
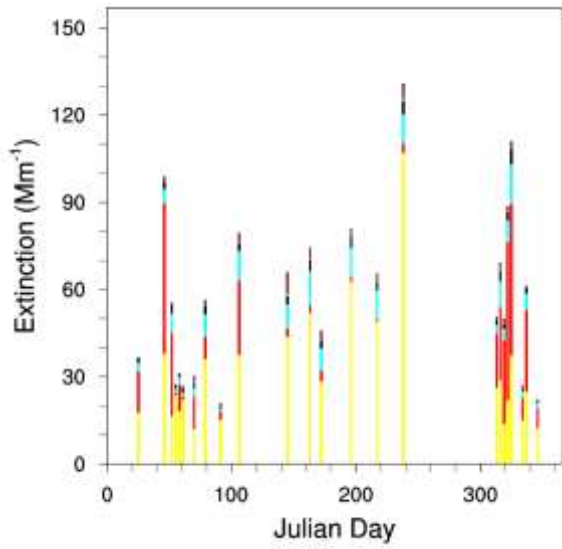
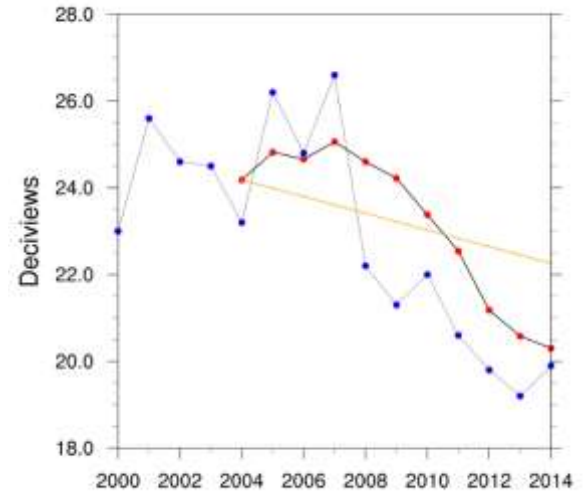
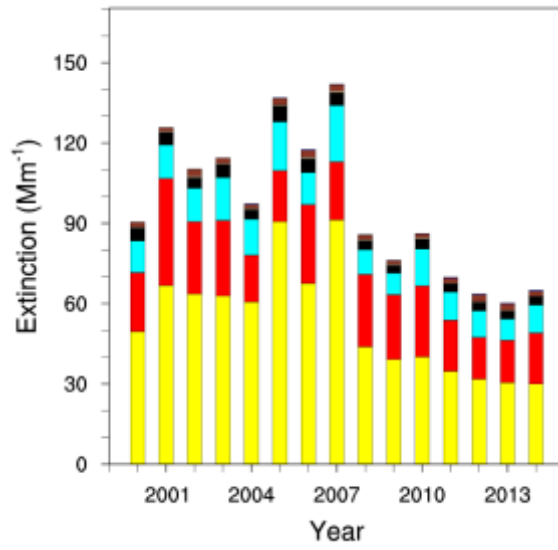
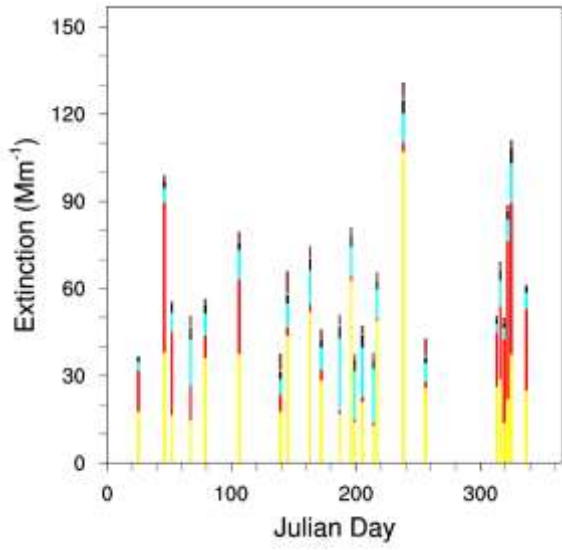
San Pedro Parks, NM



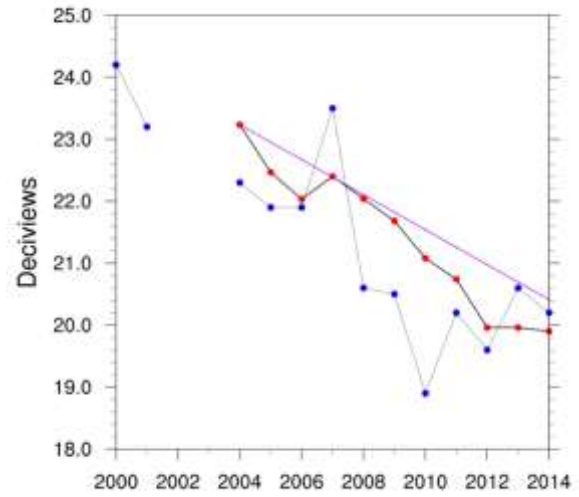
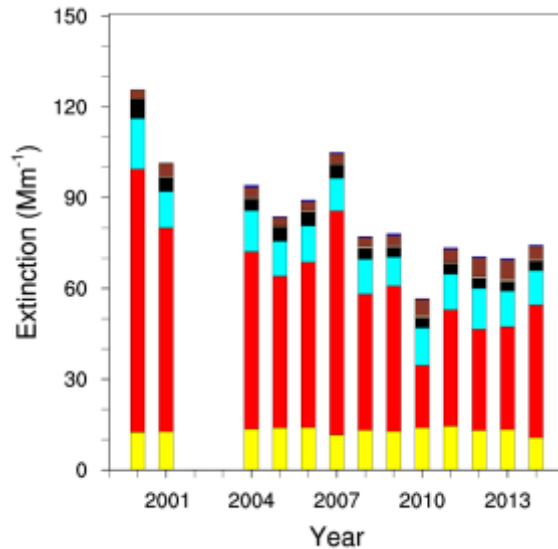
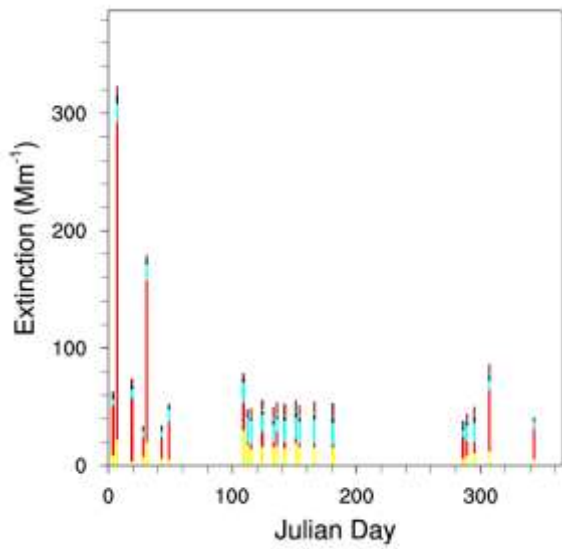
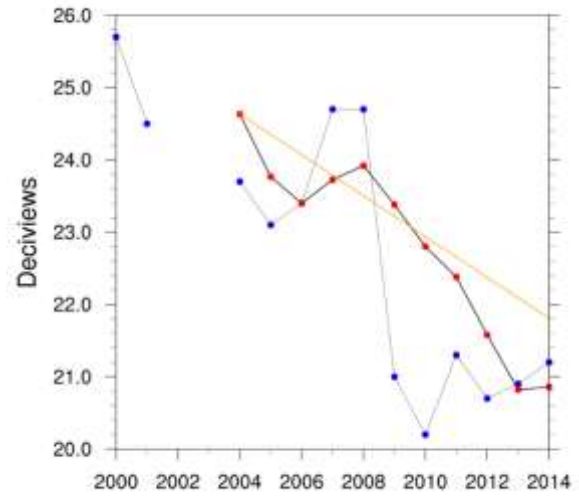
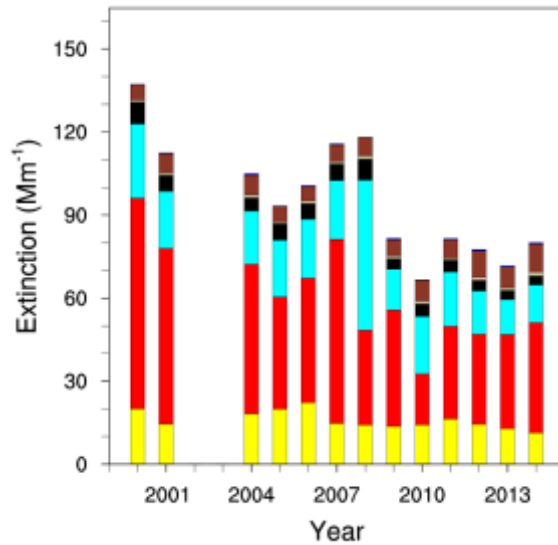
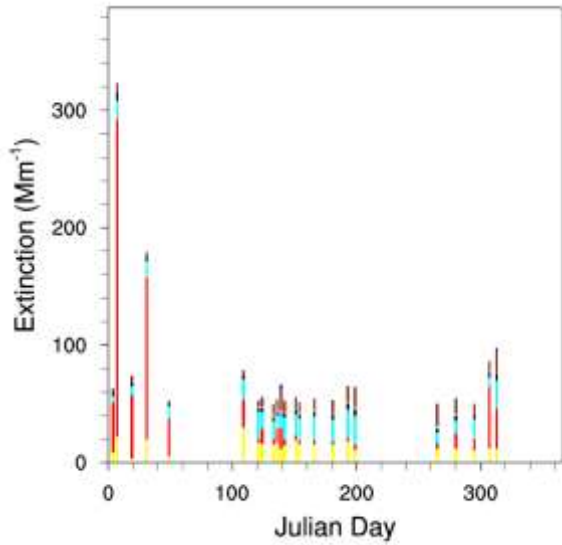
Sawtooth National Forest, ID



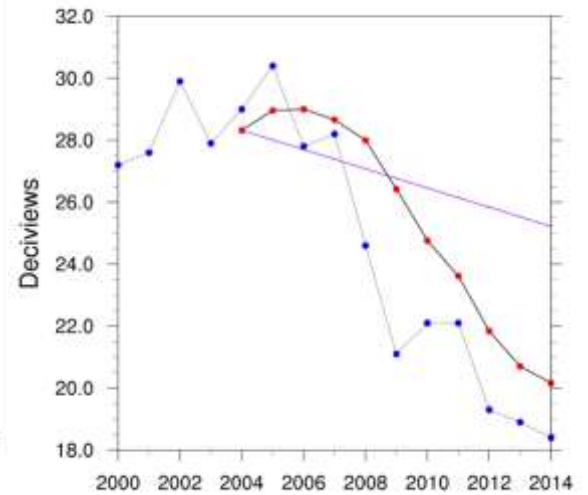
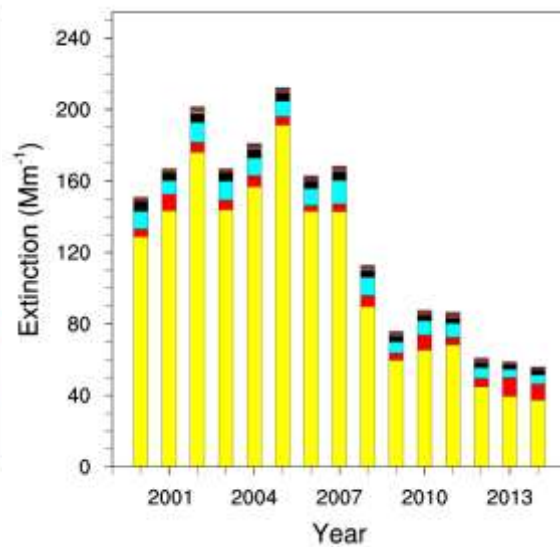
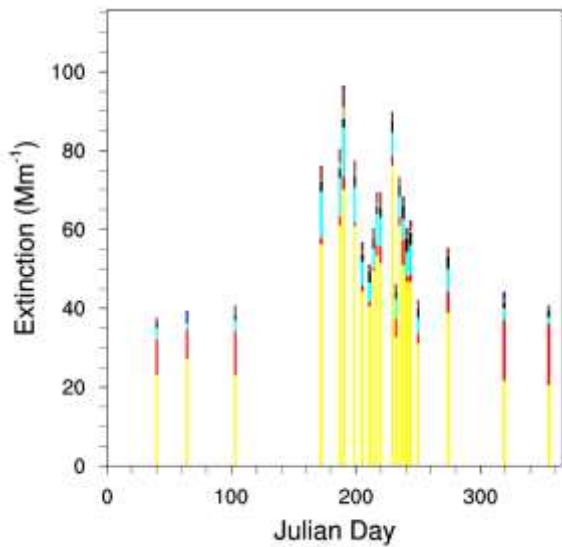
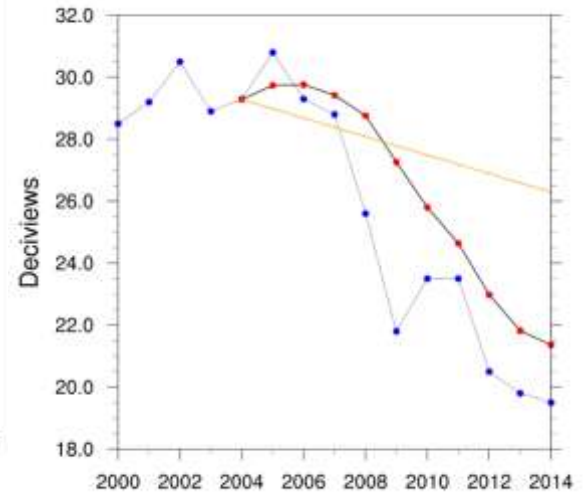
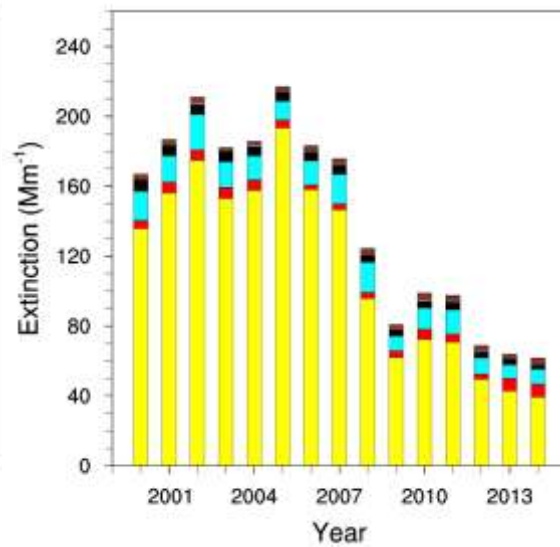
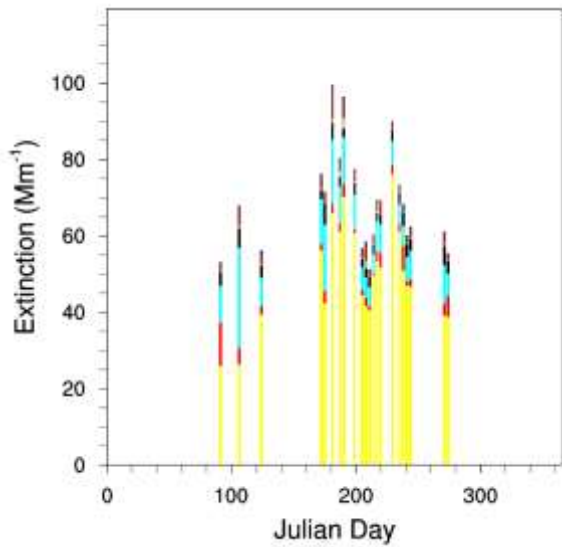
Seney, MI



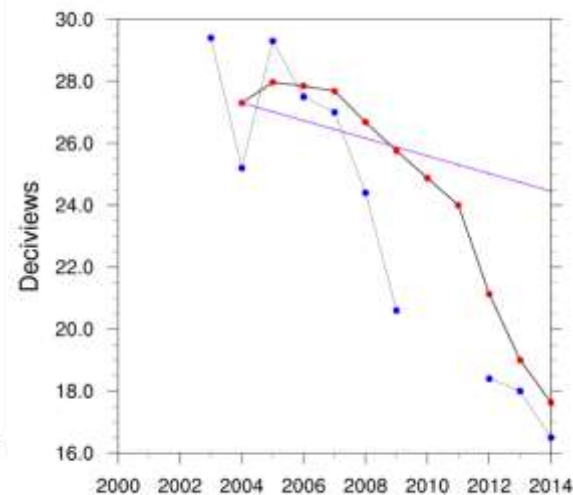
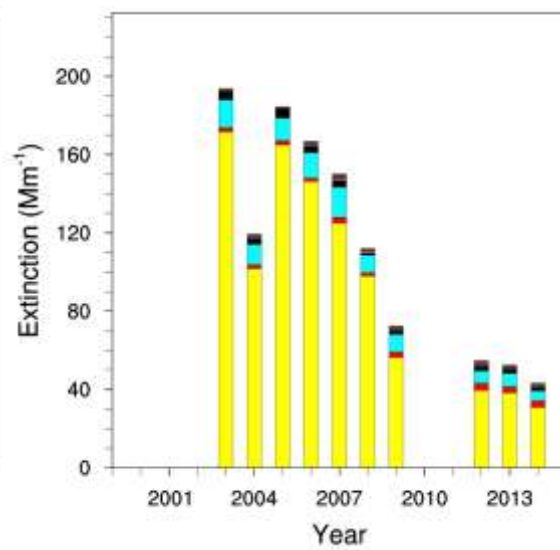
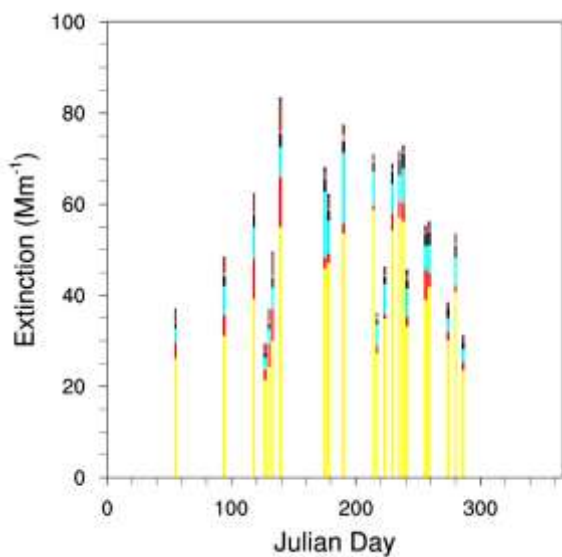
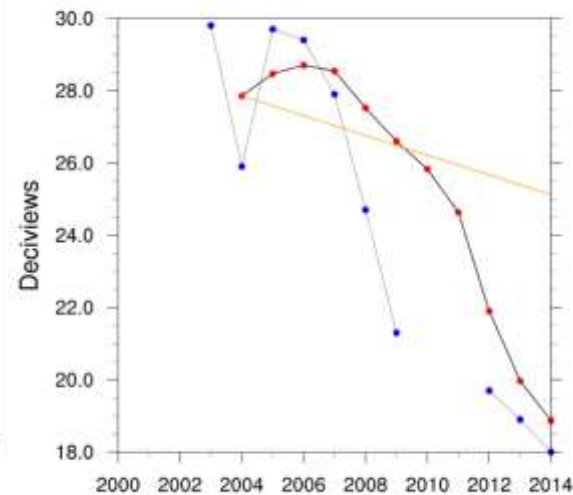
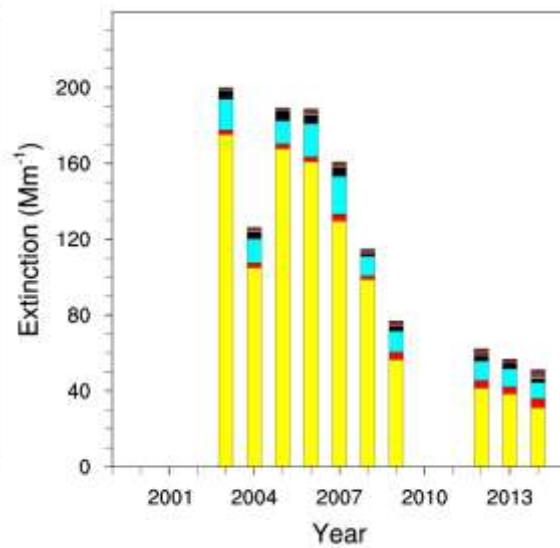
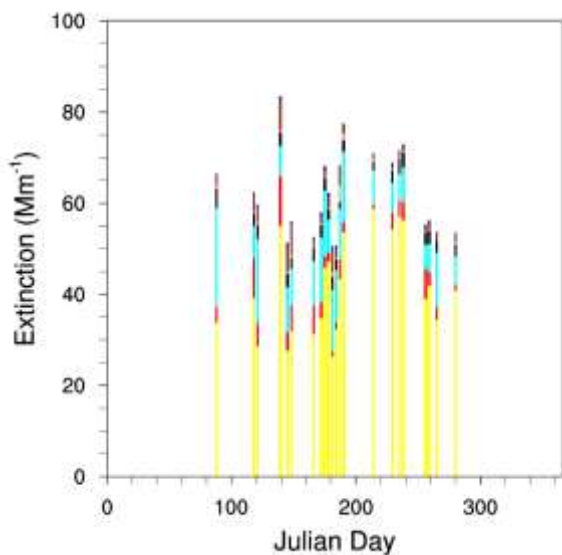
Sequoia National Park, CA



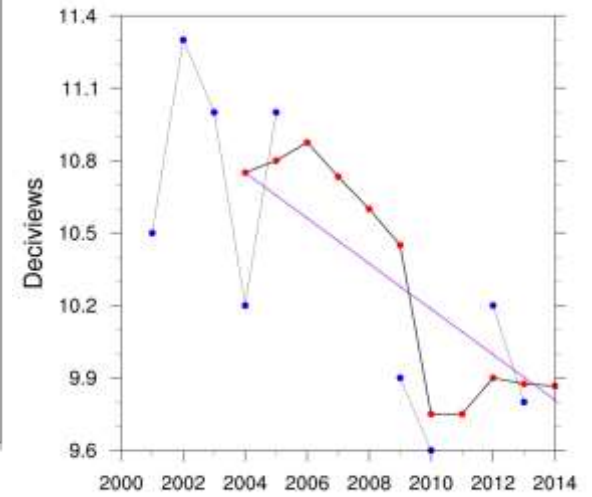
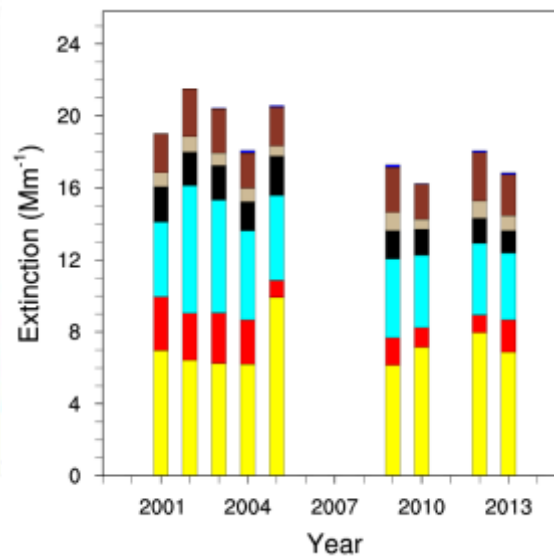
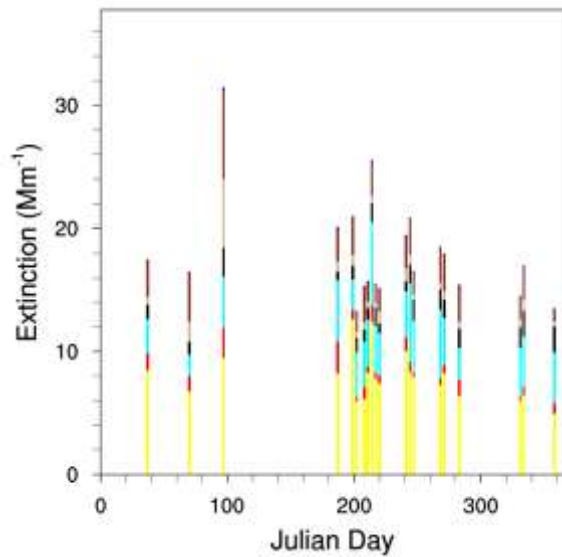
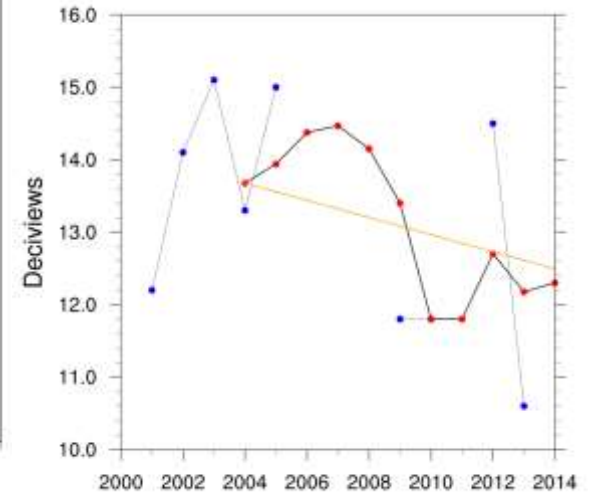
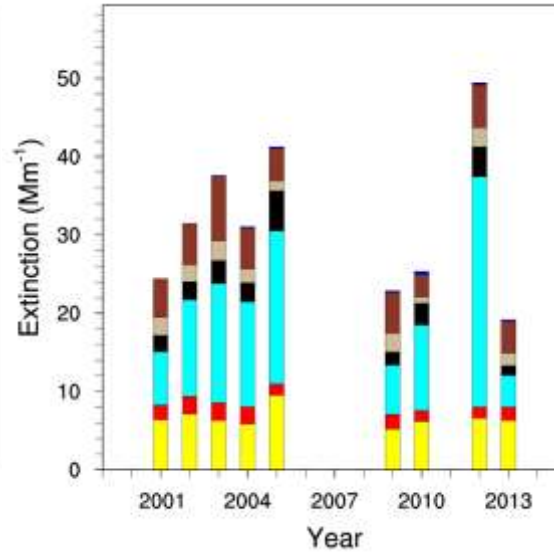
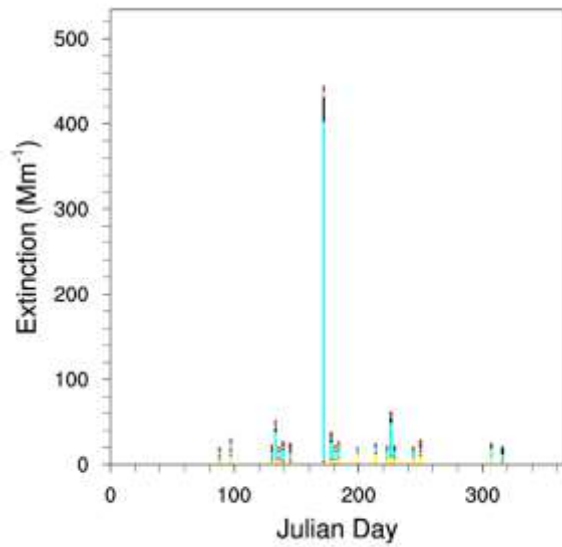
Shenandoah National Park, VA



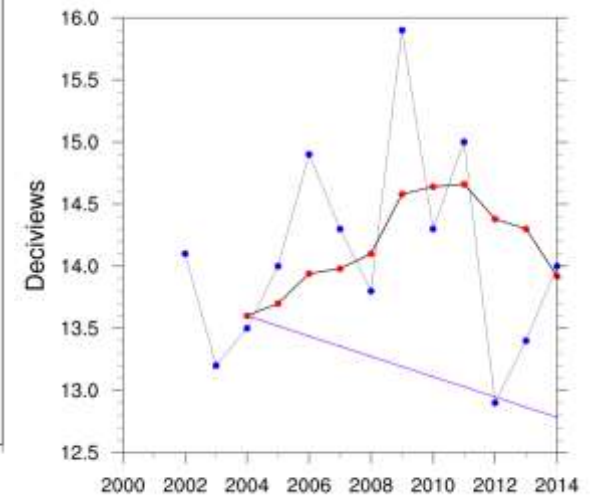
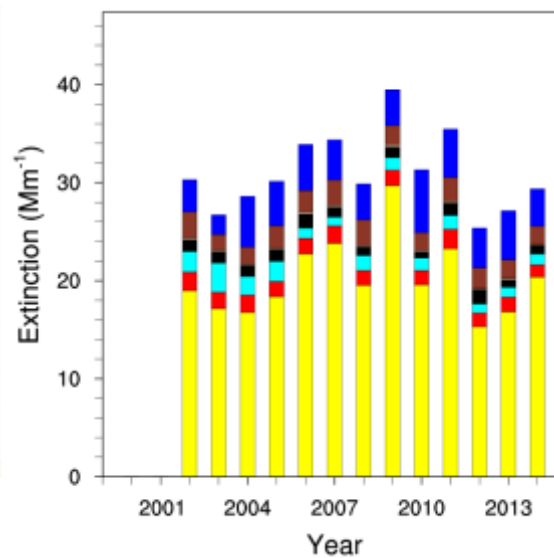
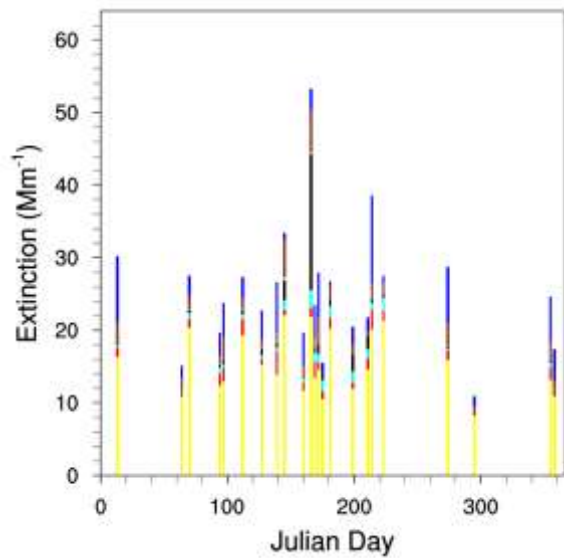
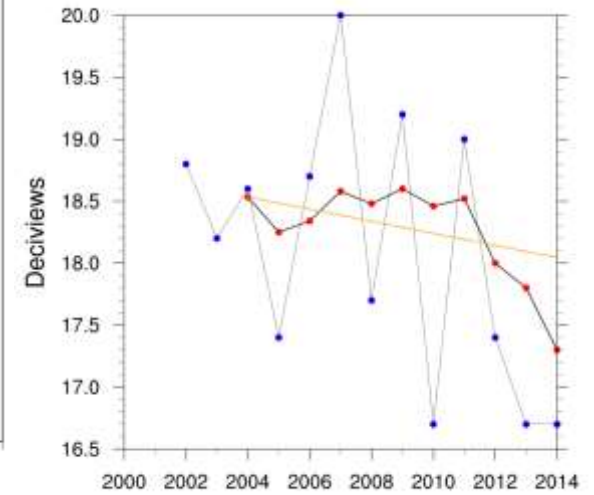
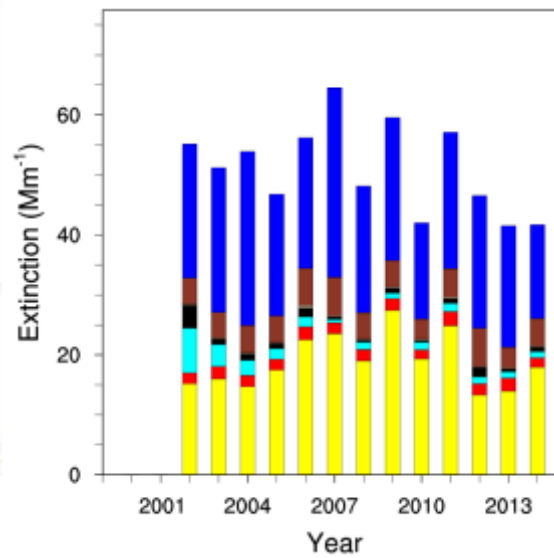
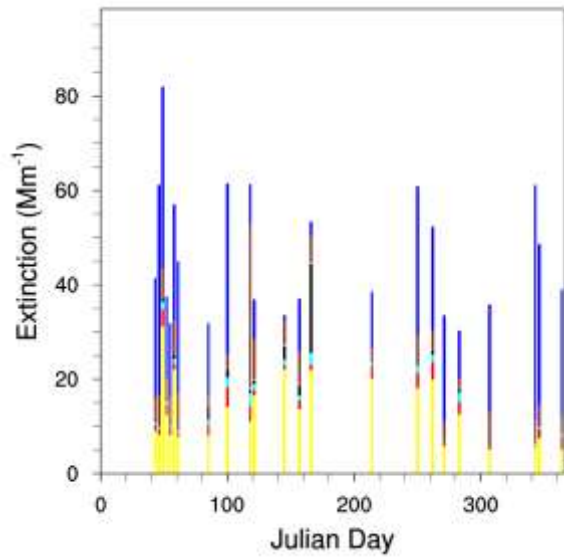
Shining Rock Wilderness, NC



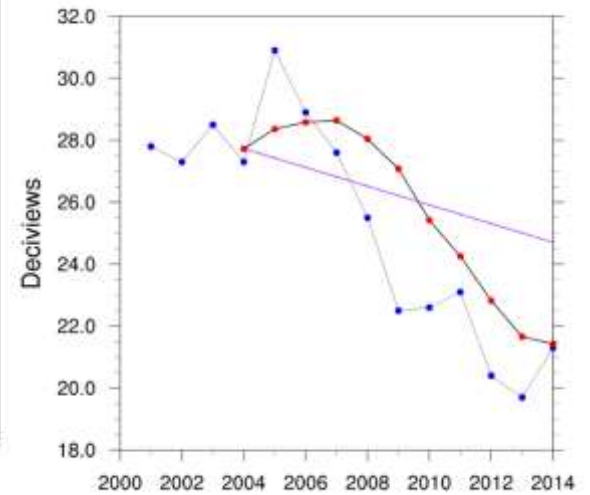
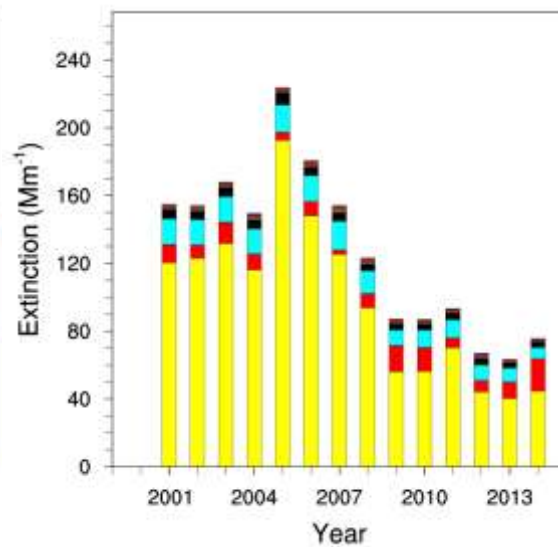
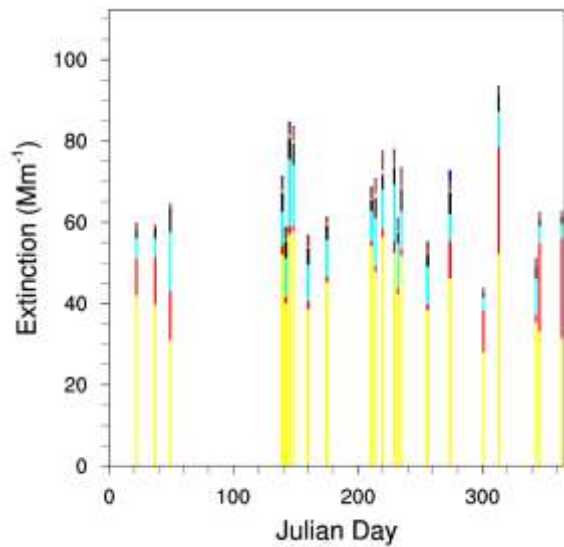
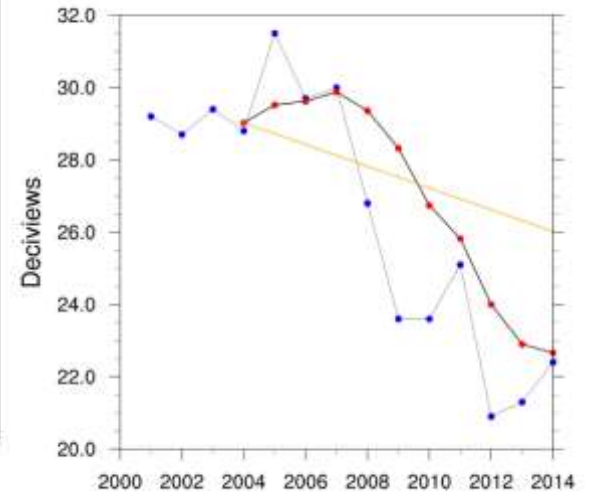
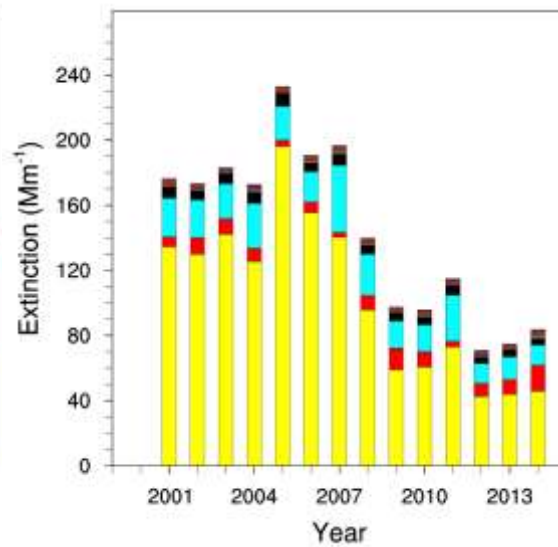
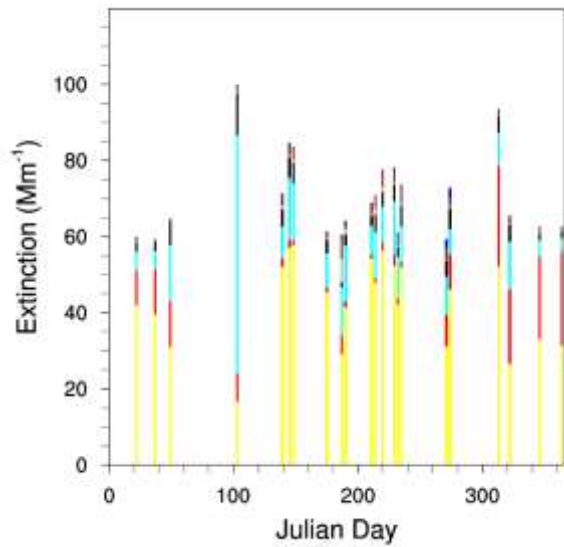
Sierra Ancha, AZ



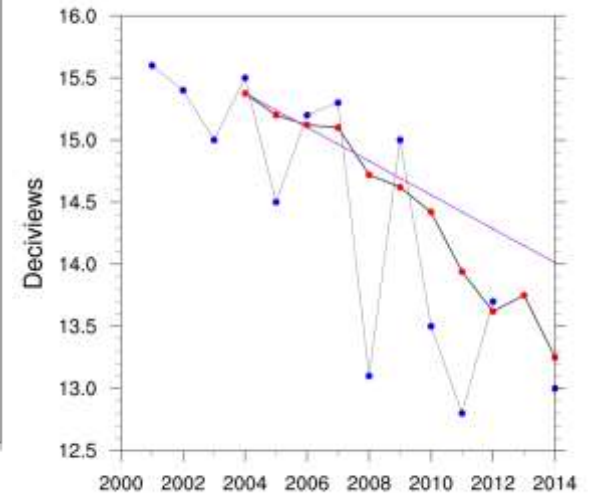
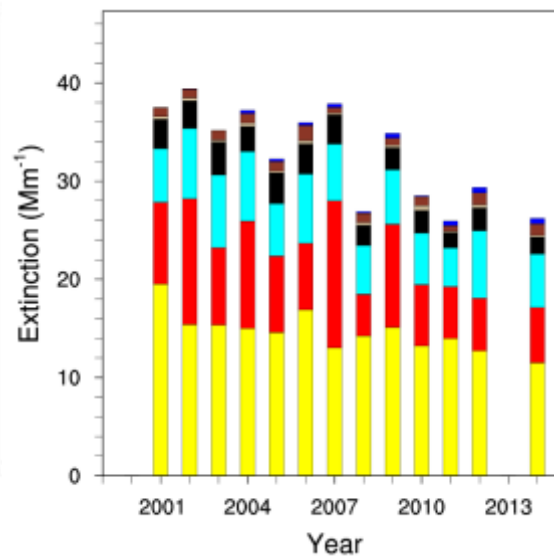
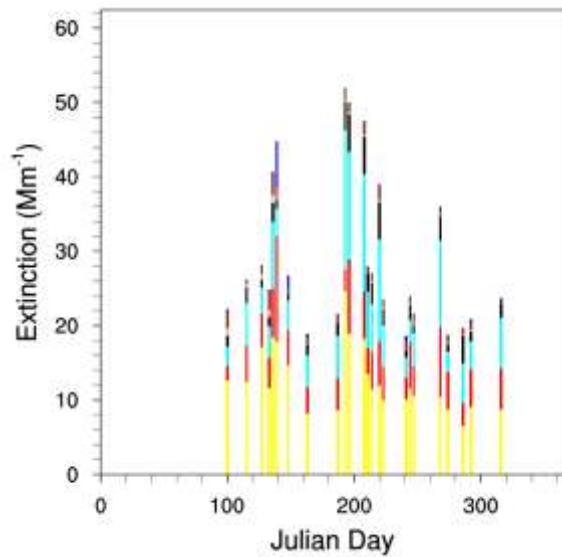
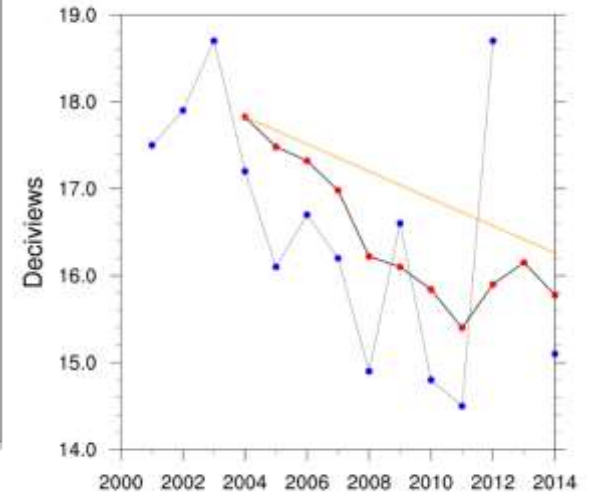
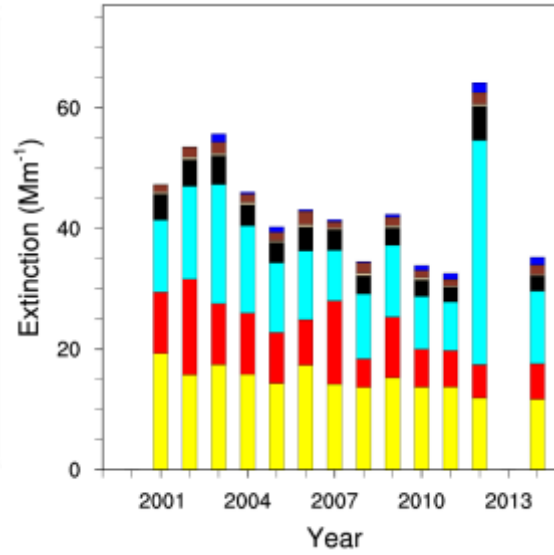
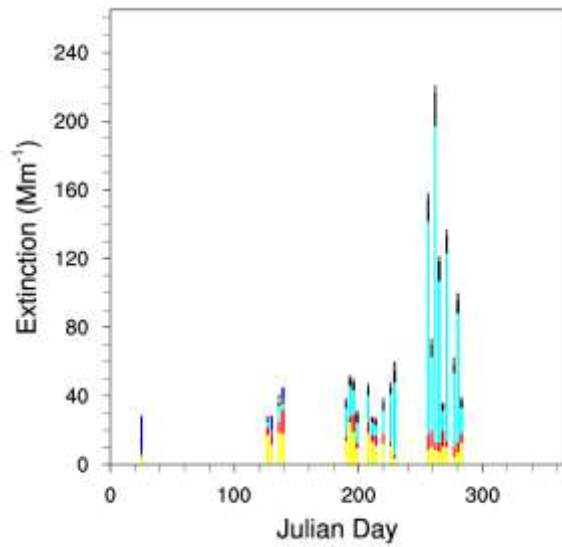
Simeonof, AK



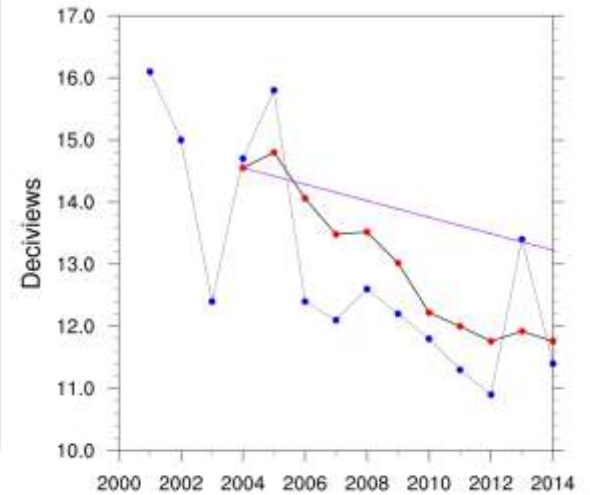
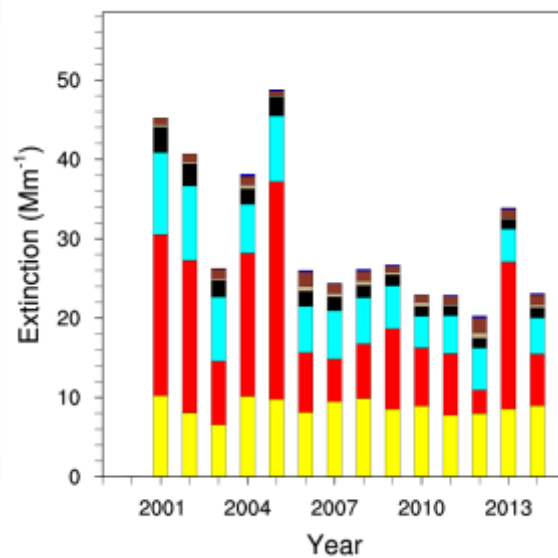
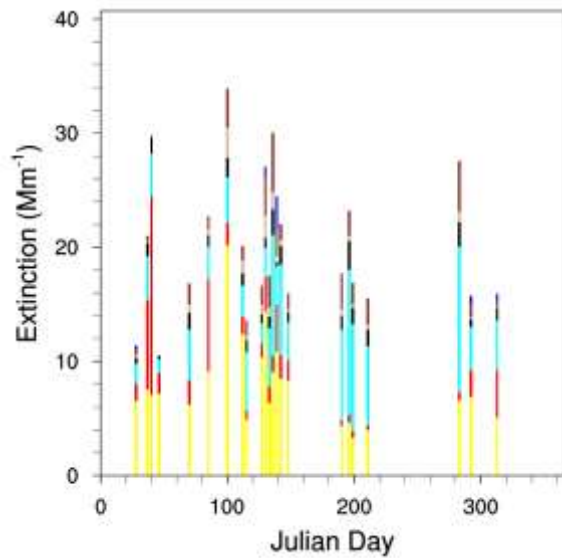
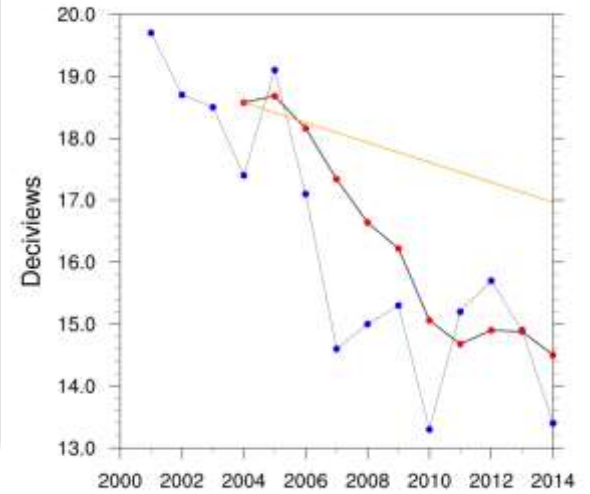
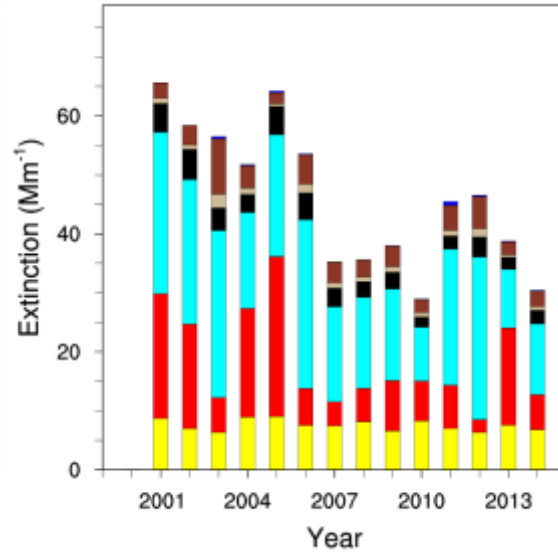
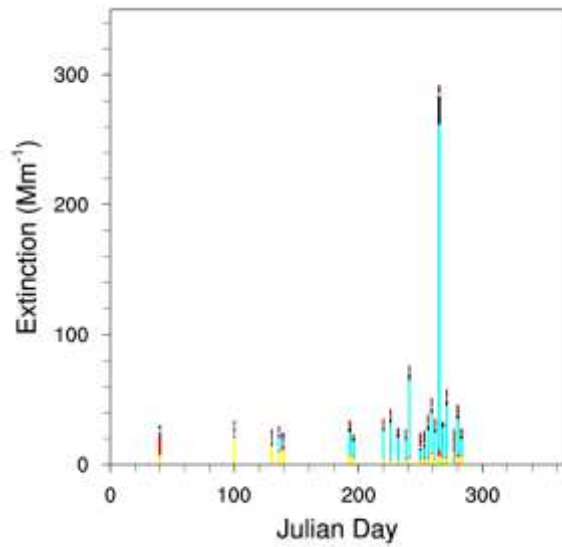
Sipsey Wilderness, AL



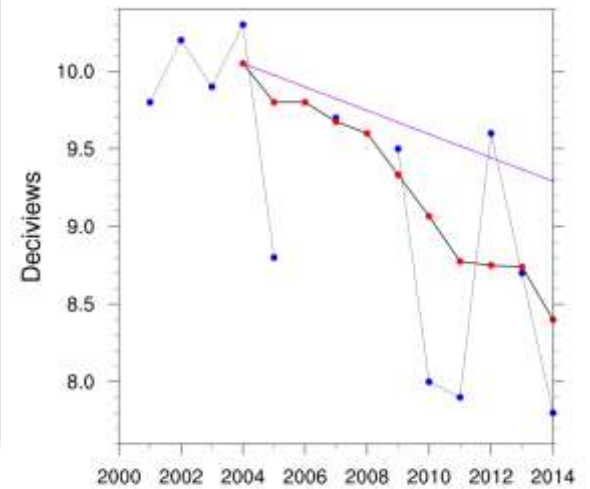
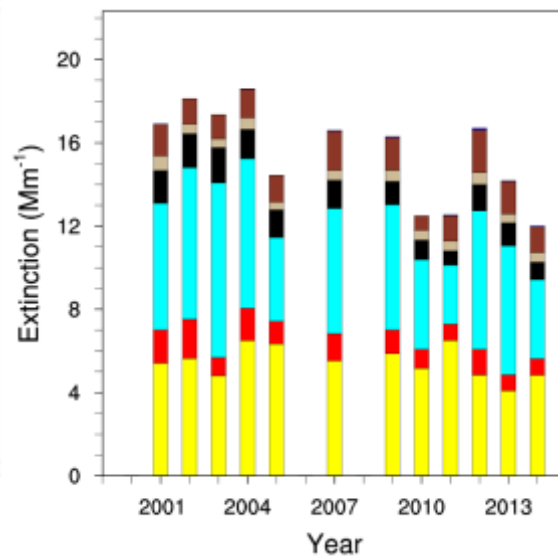
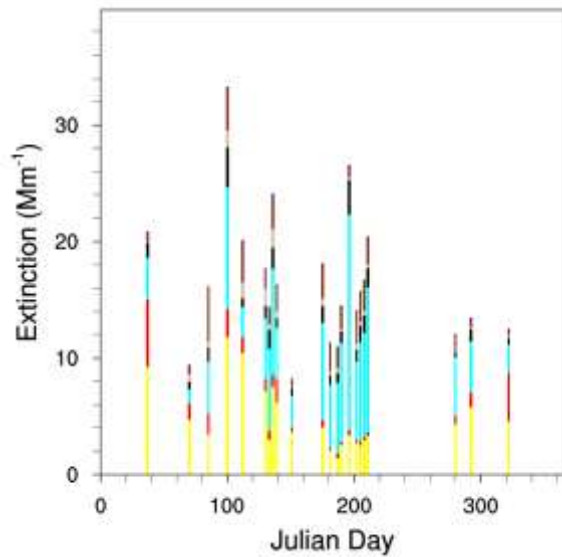
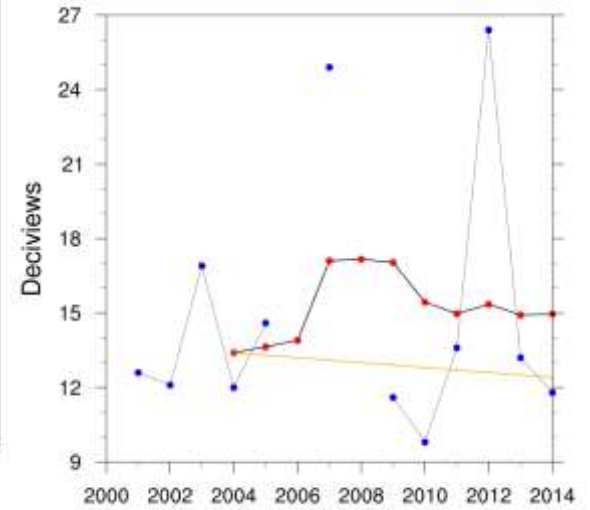
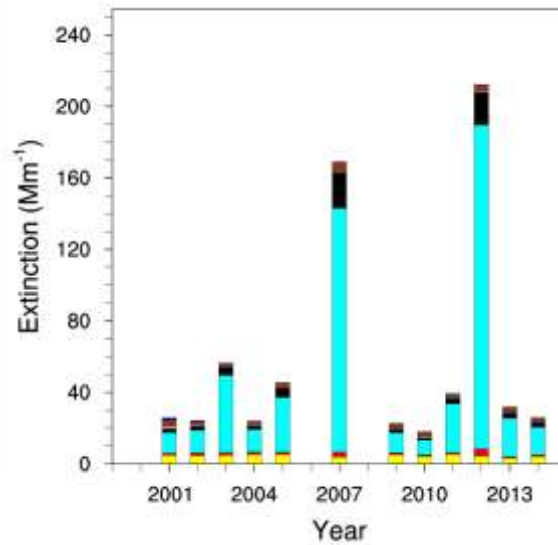
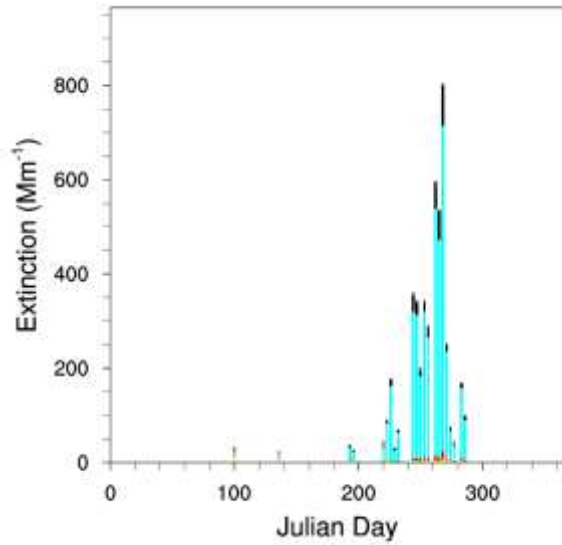
Snoqualmie Pass, WA



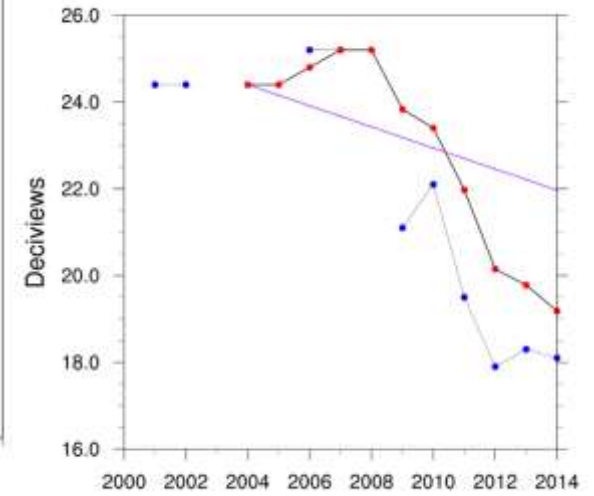
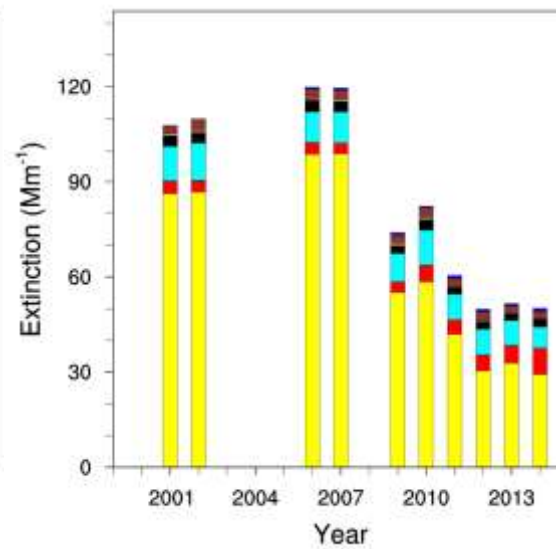
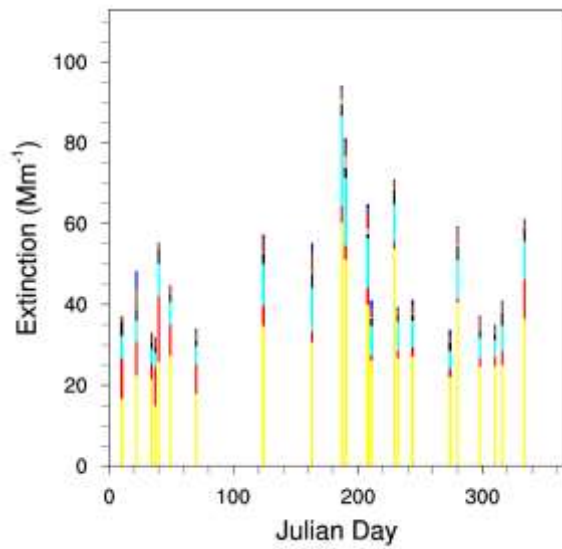
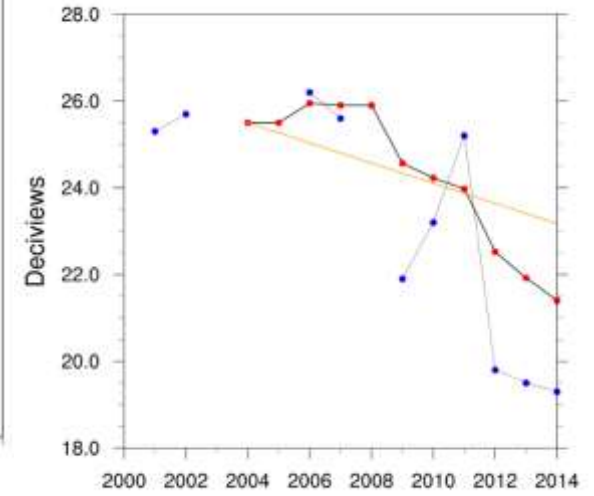
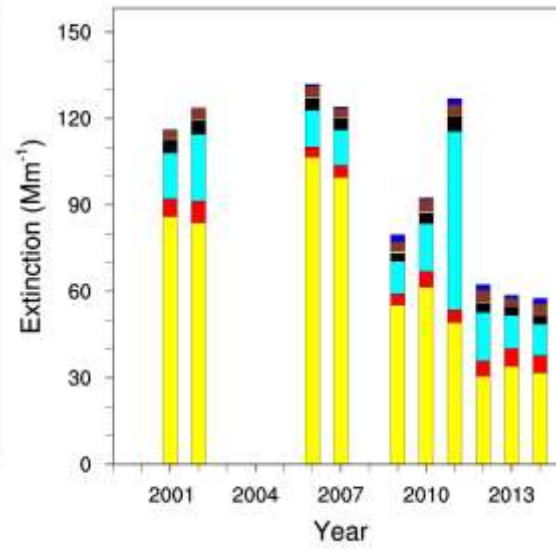
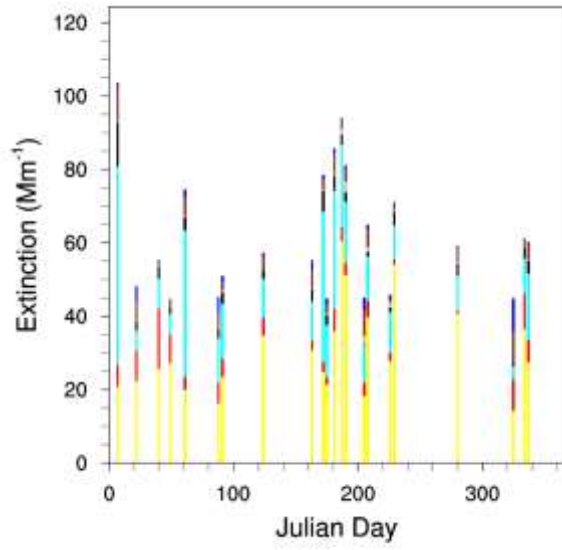
Starkey, OR



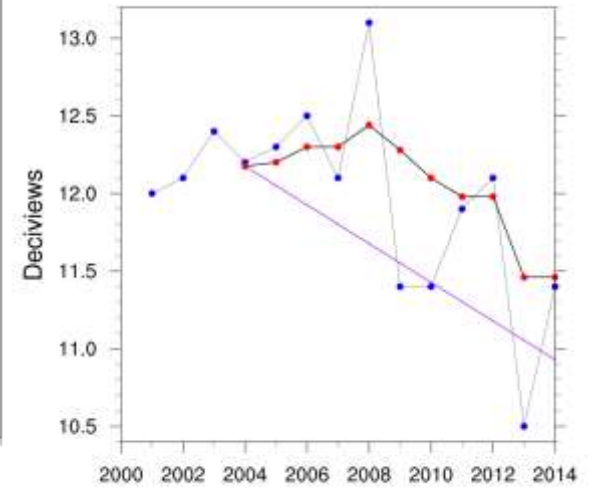
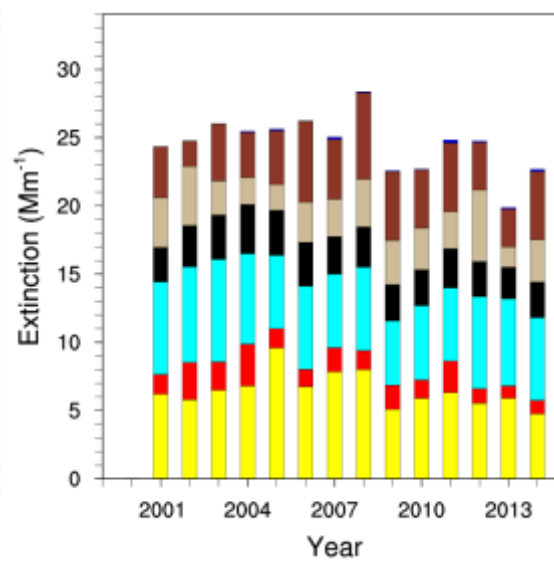
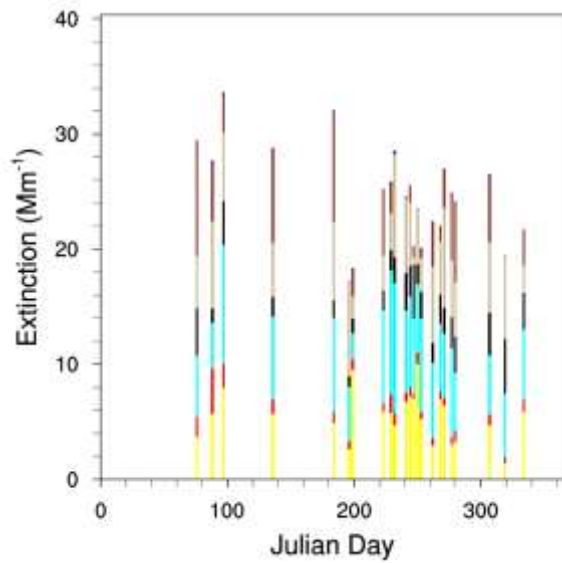
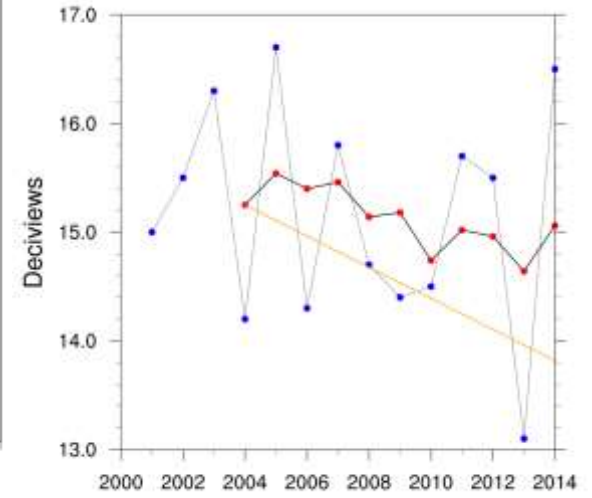
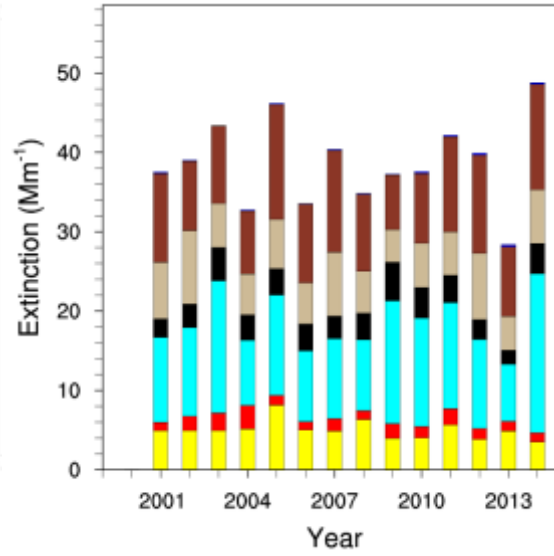
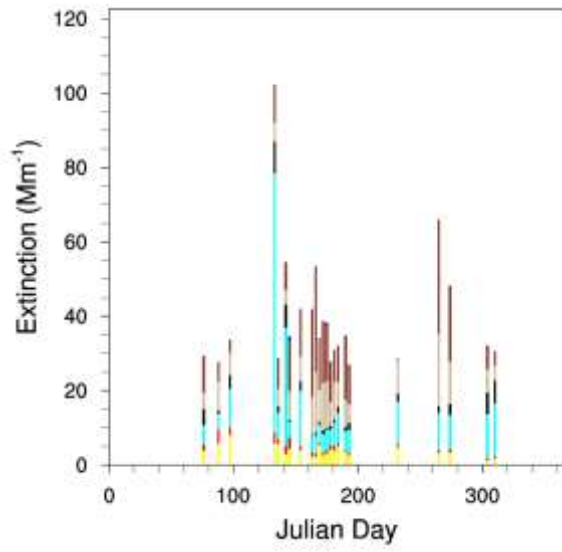
Sula Peak, MT



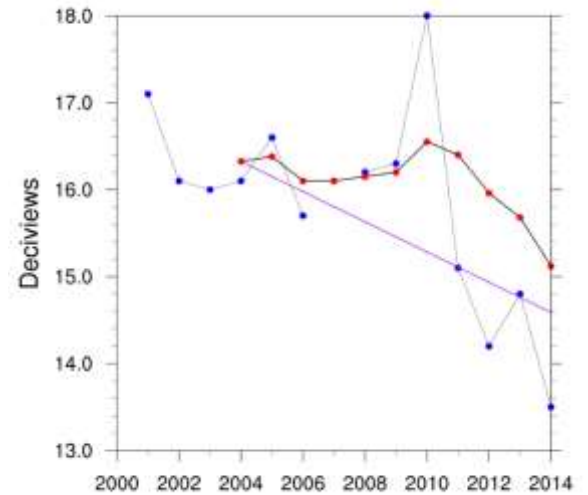
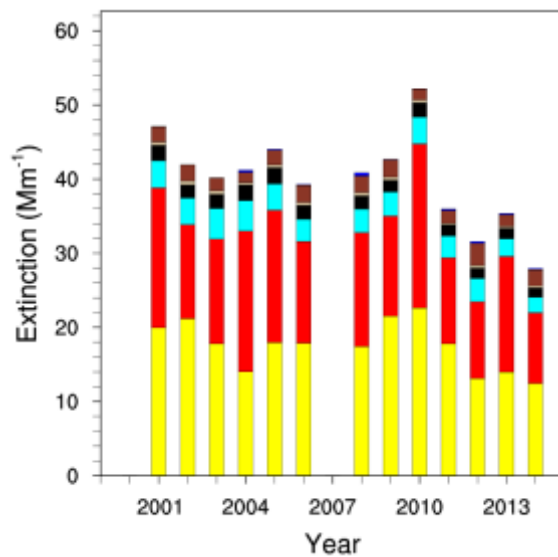
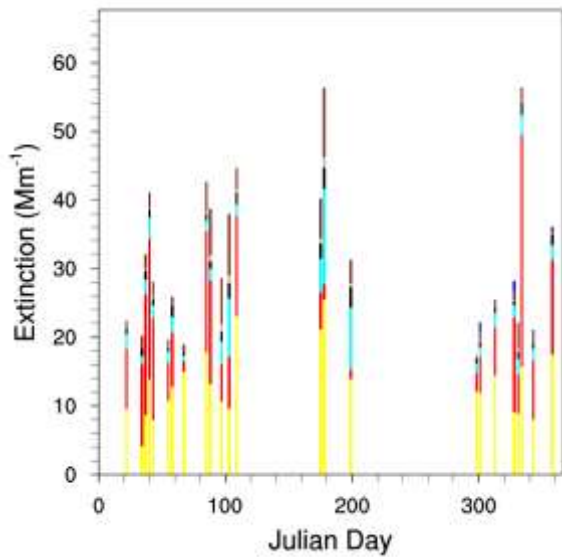
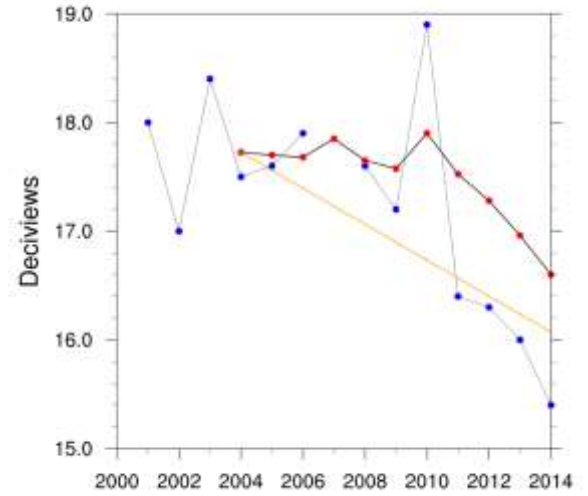
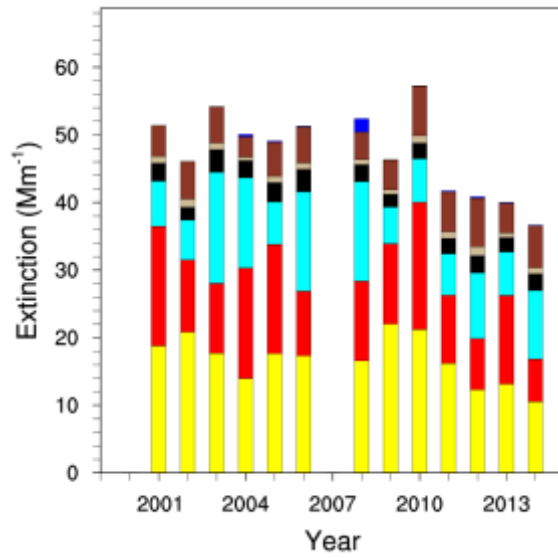
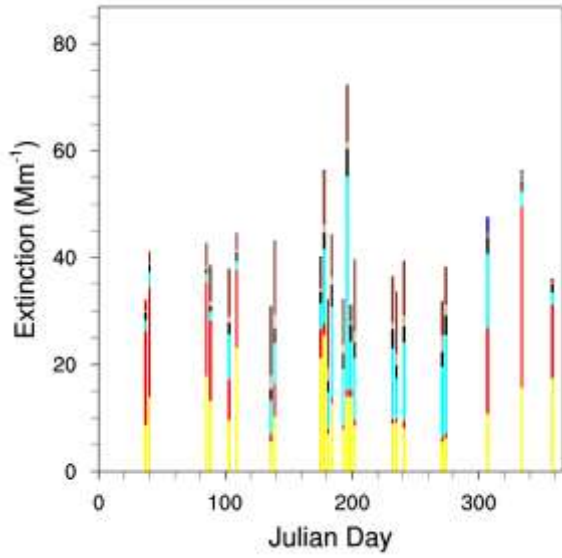
Swanquarter, NC



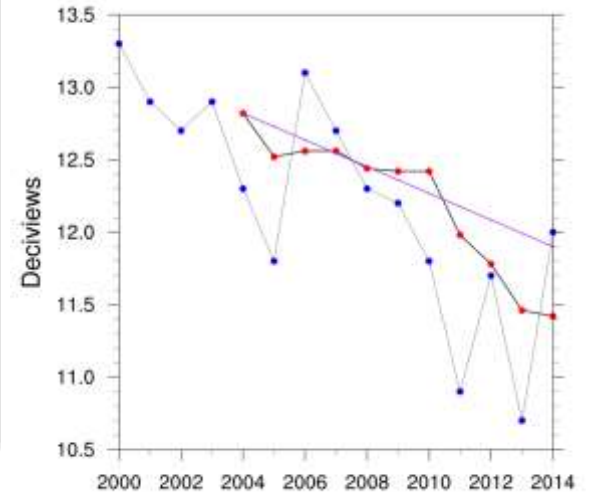
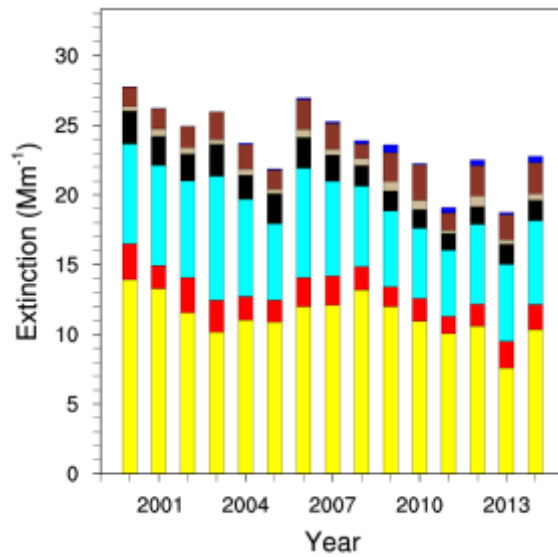
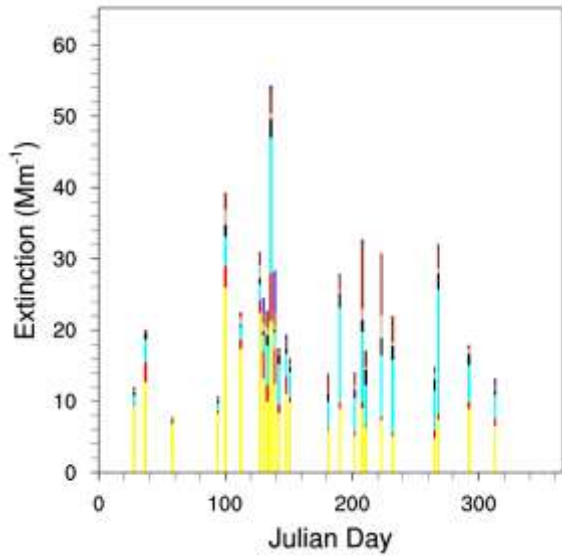
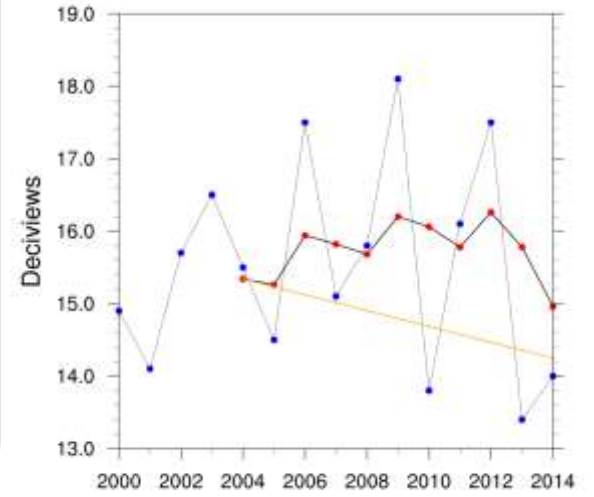
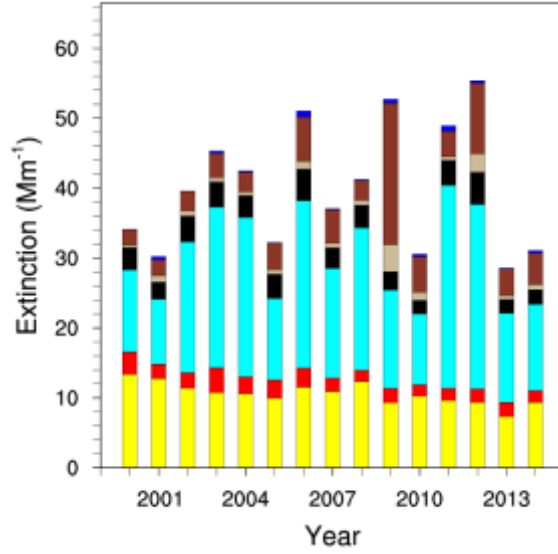
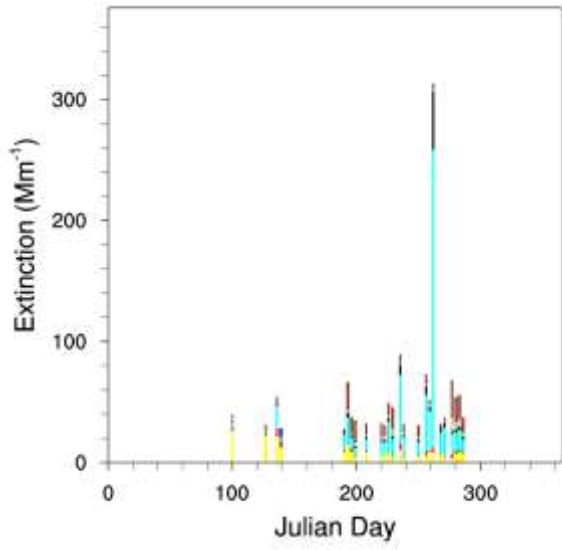
Sycamore Canyon, AZ



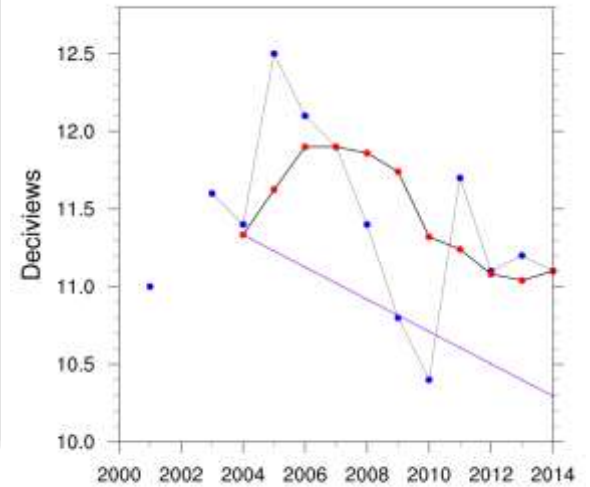
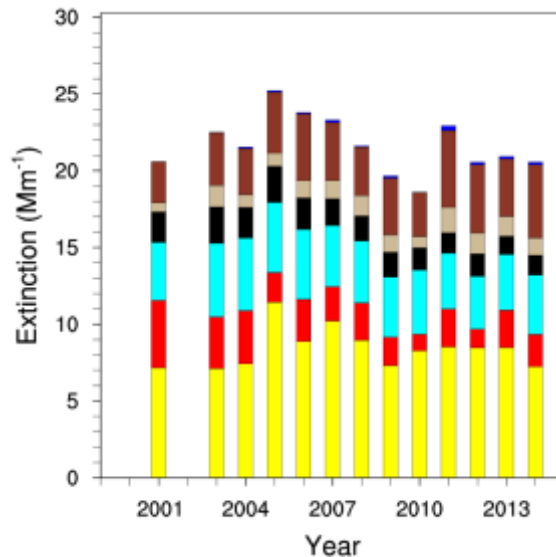
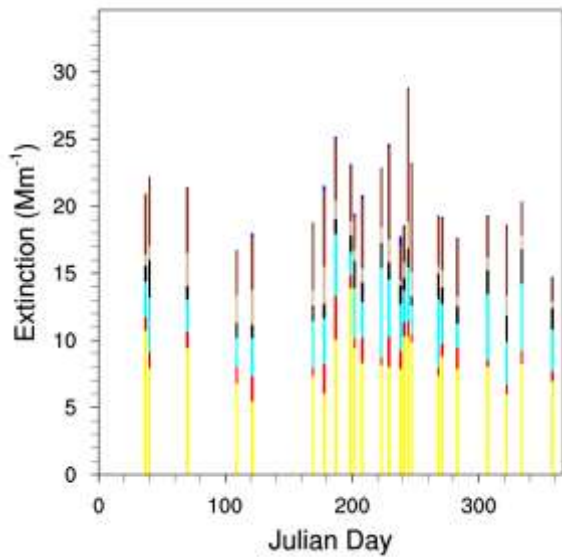
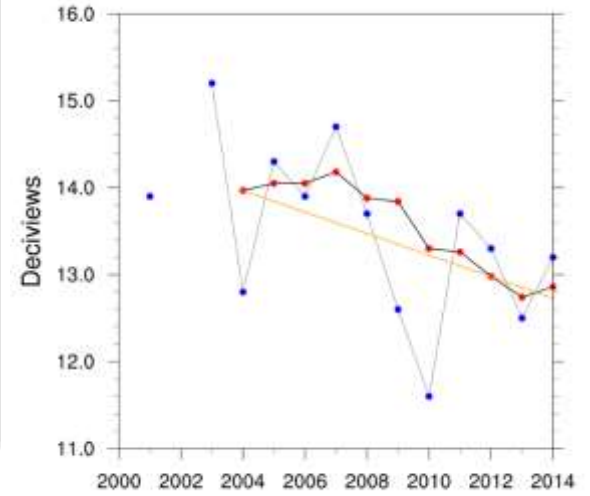
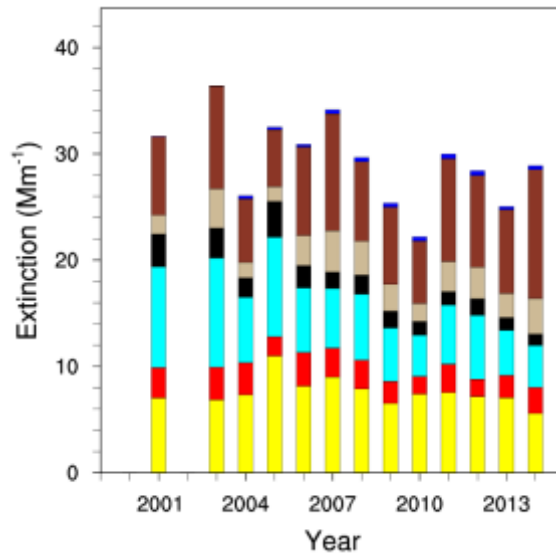
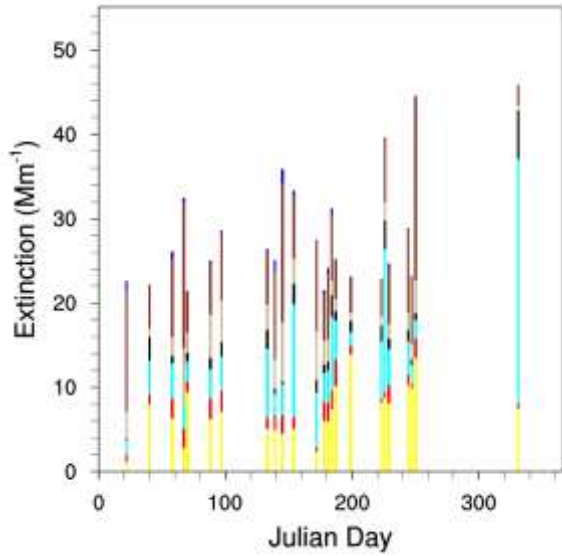
Theodore Roosevelt, ND



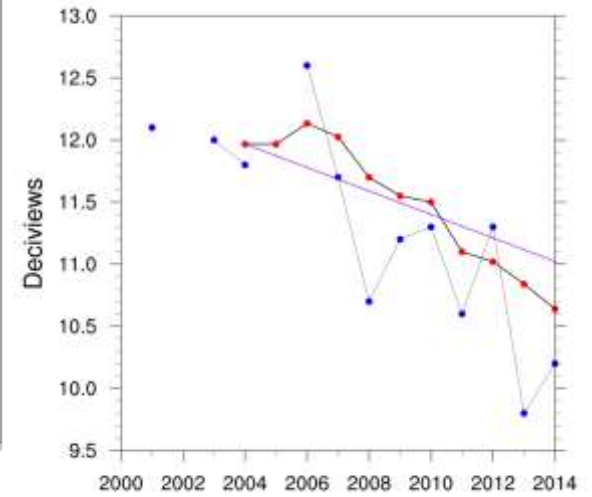
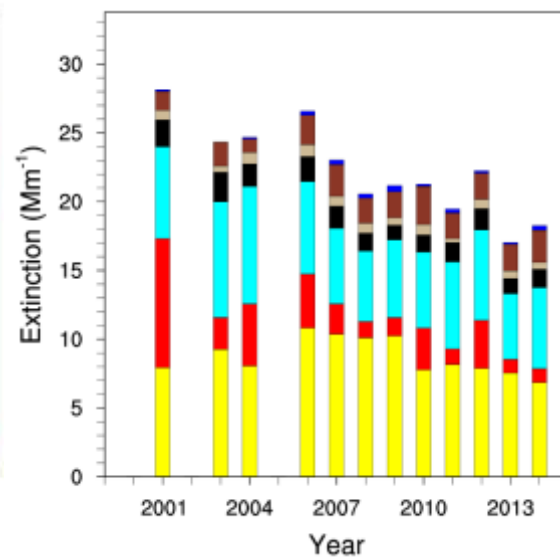
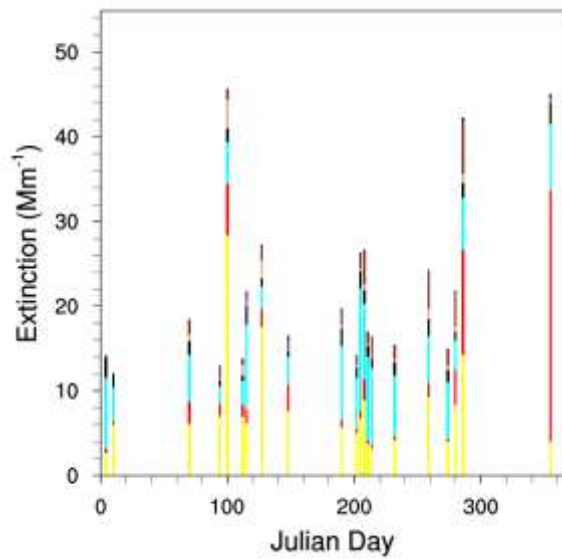
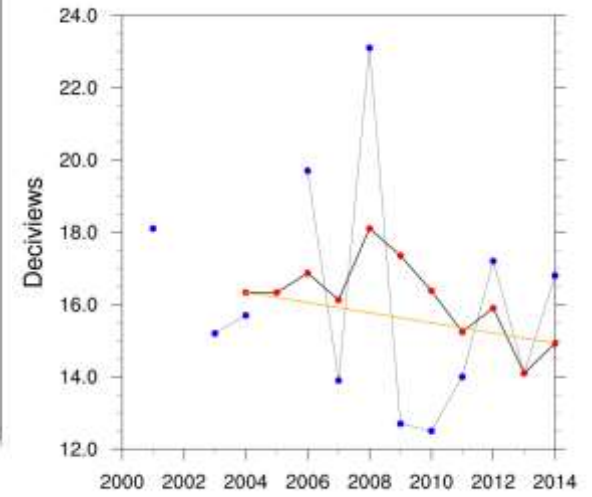
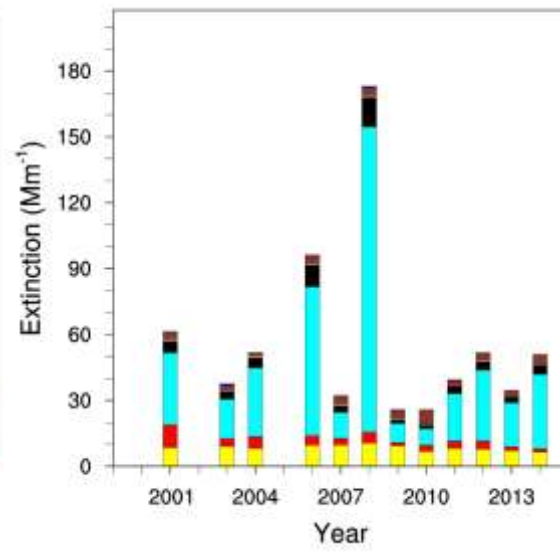
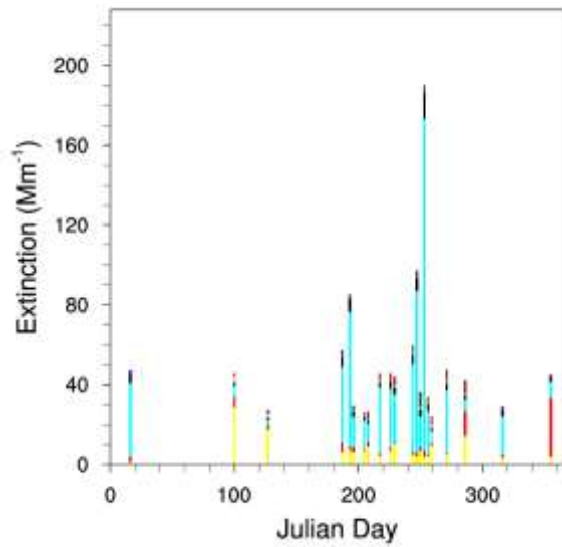
Three Sisters Wilderness, OR



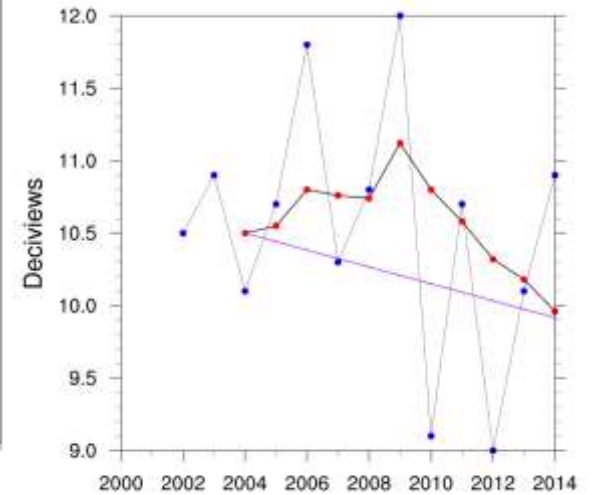
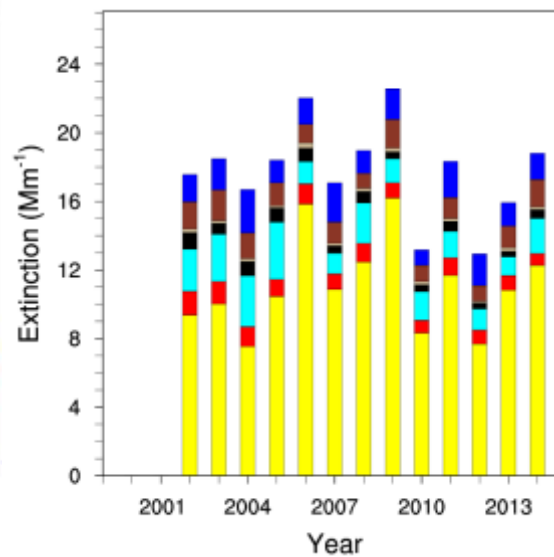
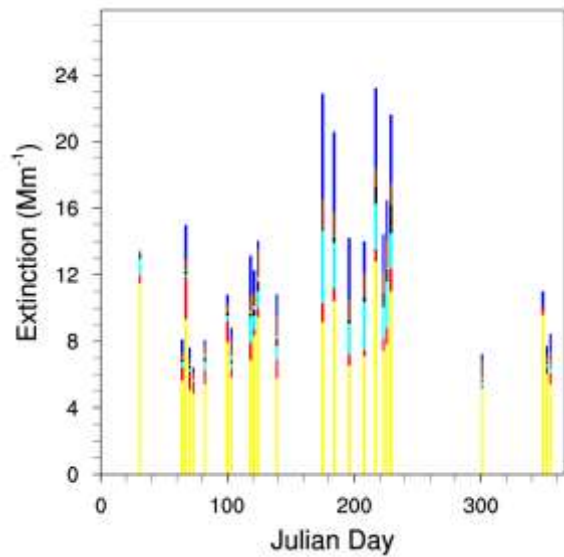
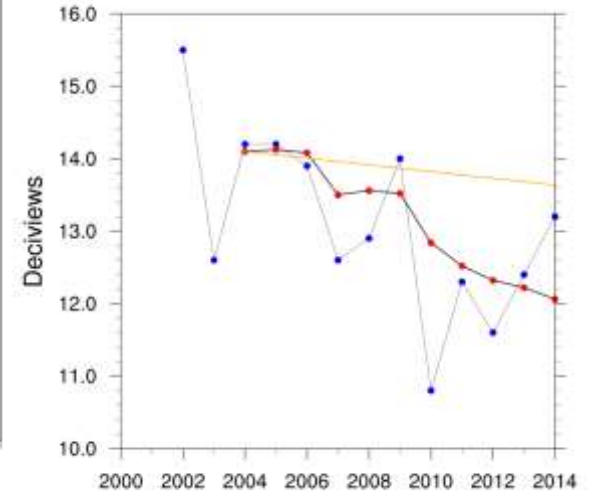
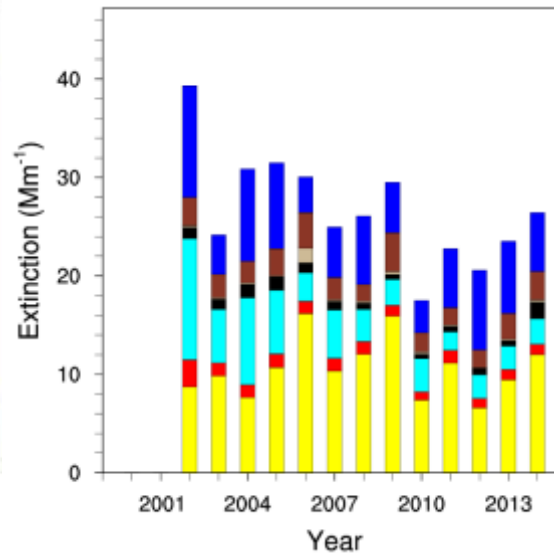
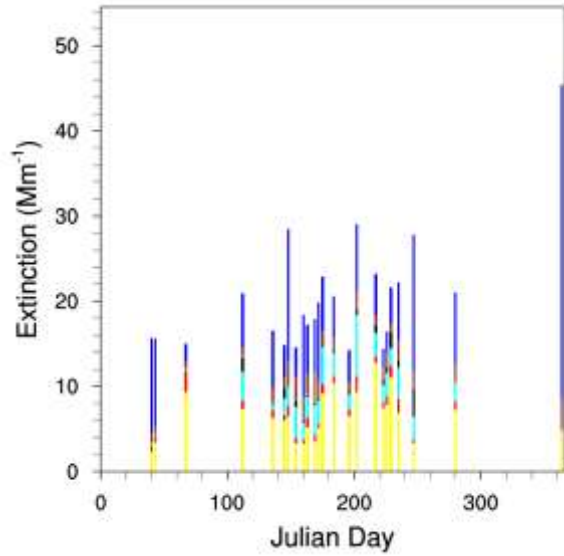
Tonto National Monument, AZ



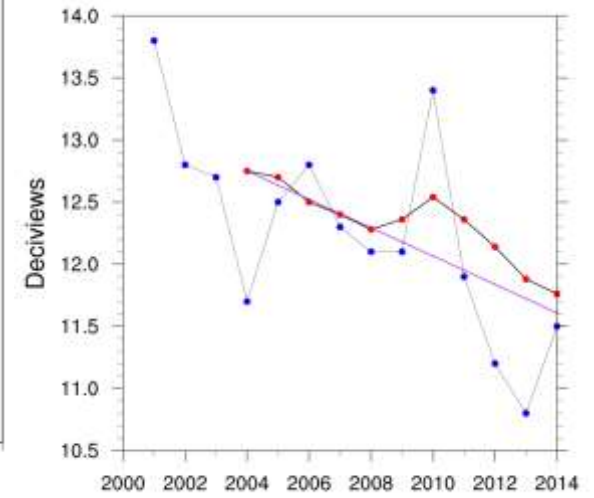
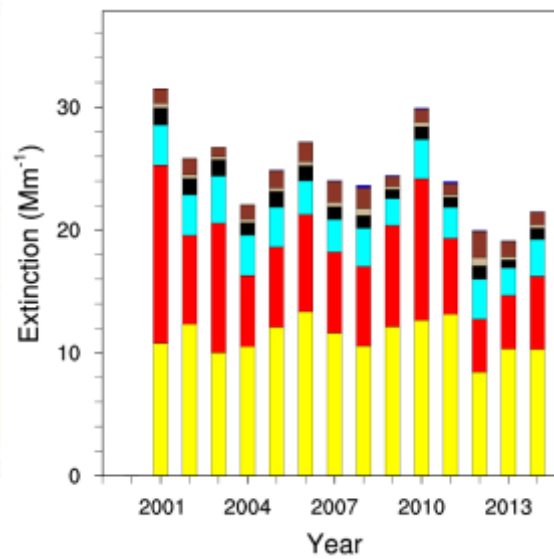
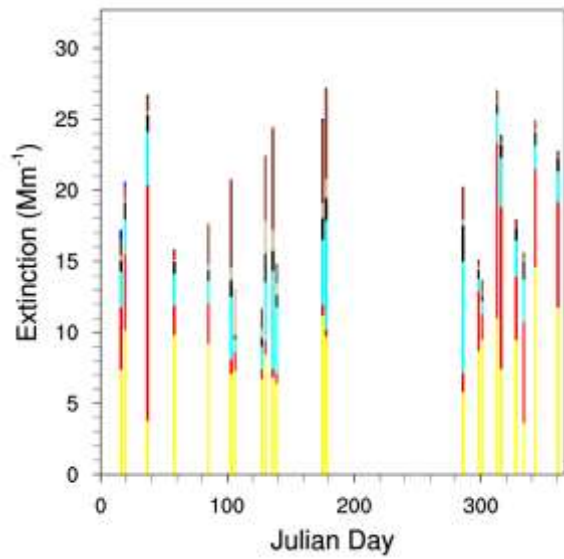
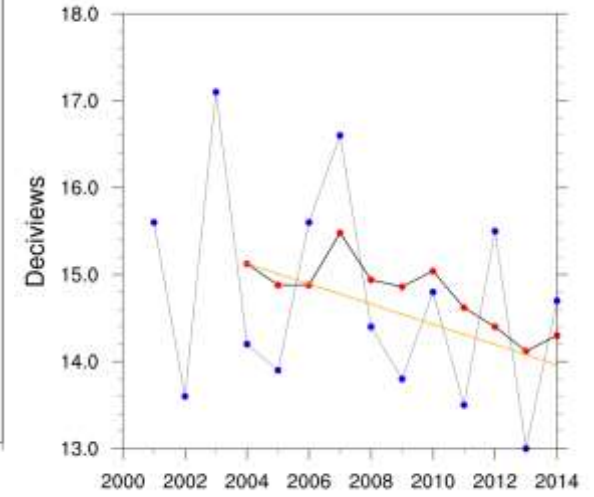
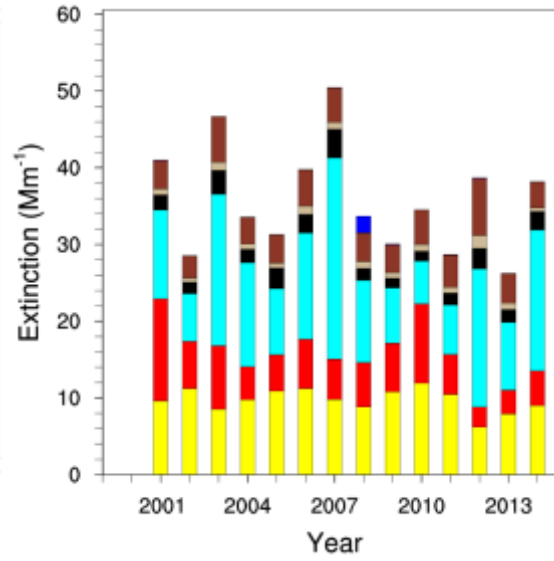
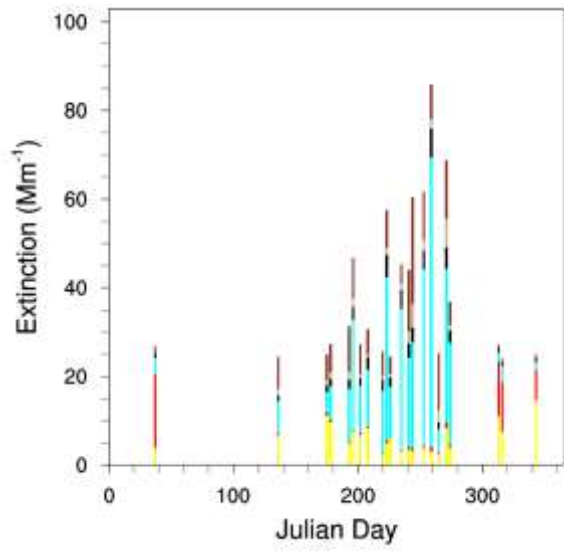
Trinity, CA



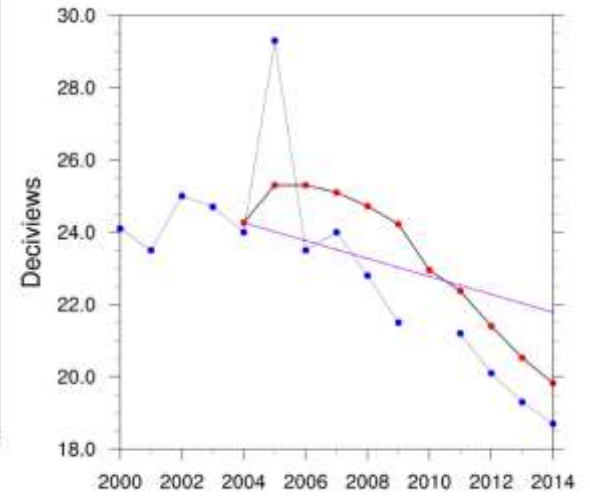
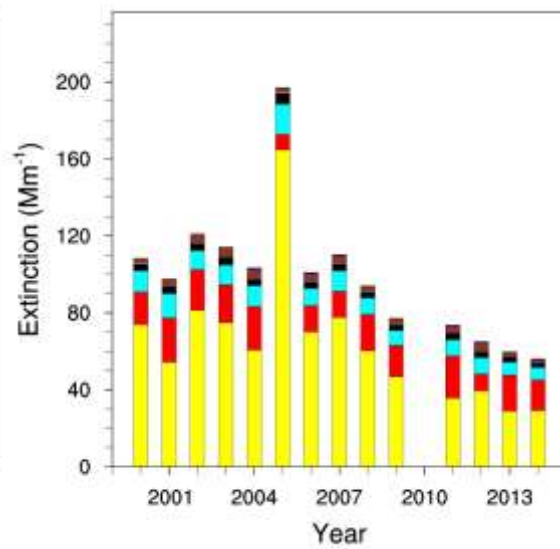
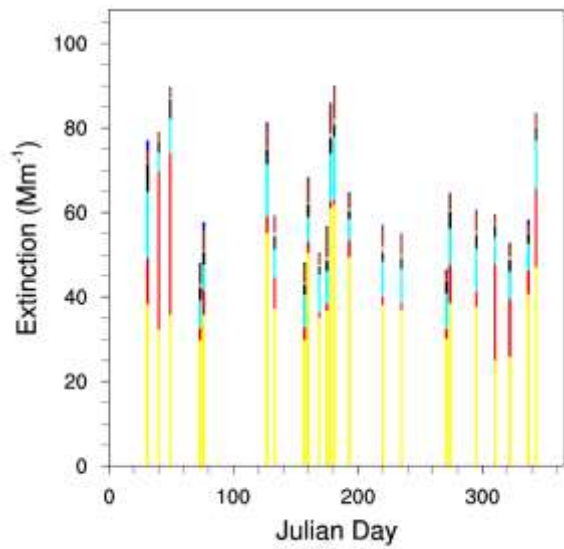
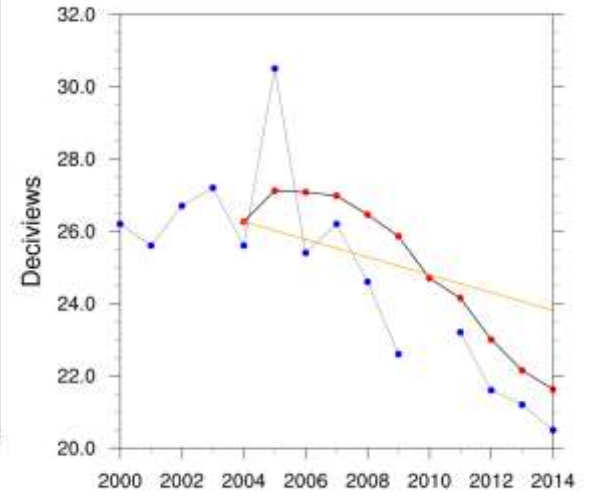
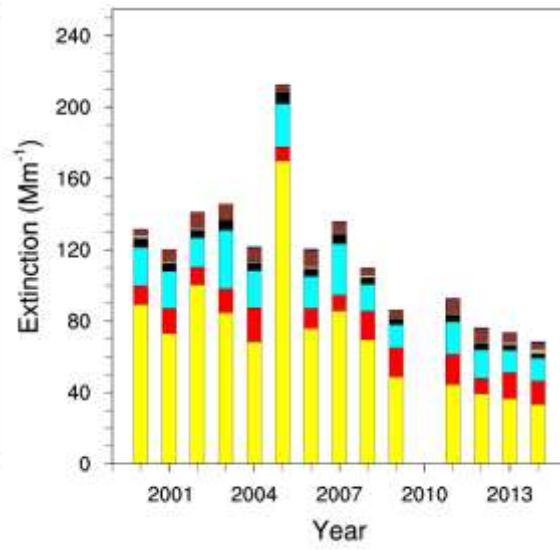
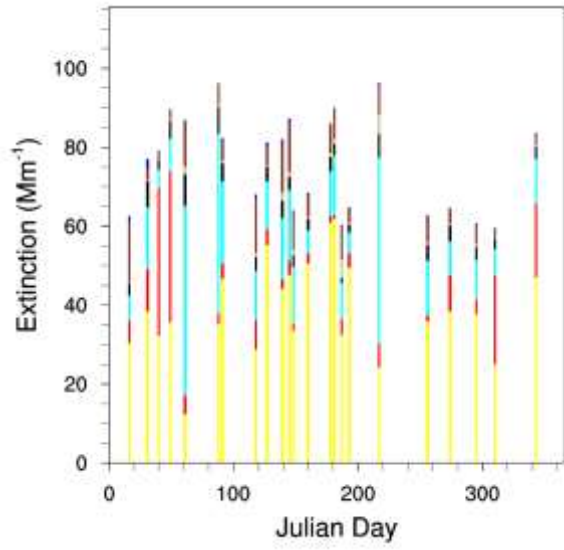
Tuxedni, AK



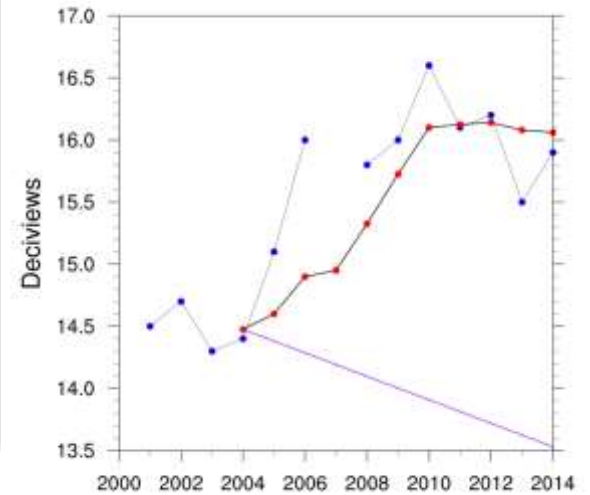
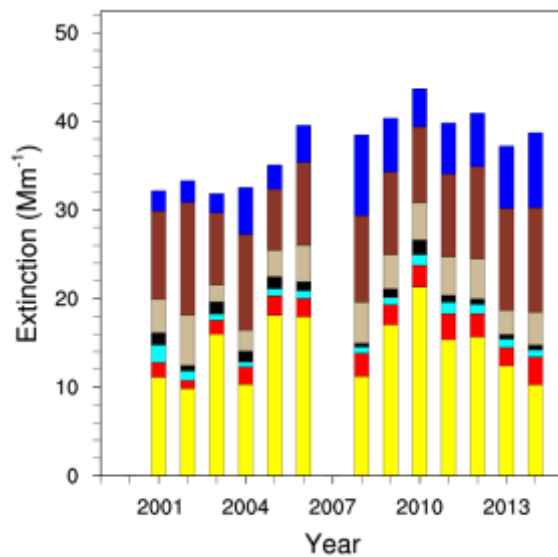
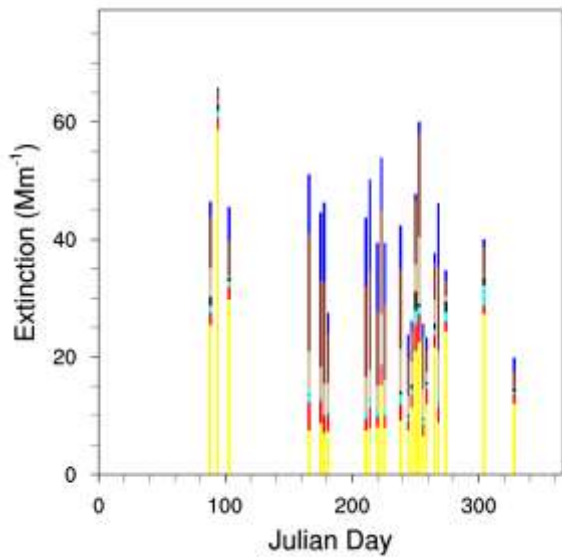
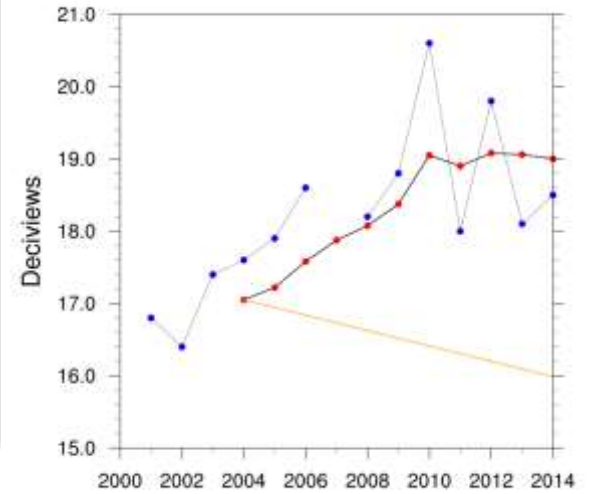
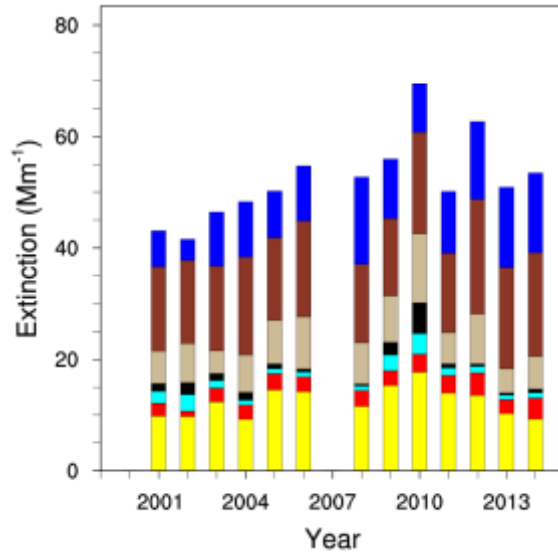
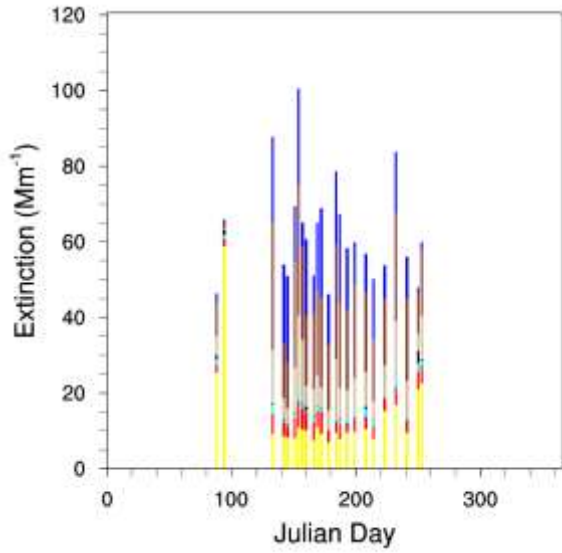
UL Bend, MT



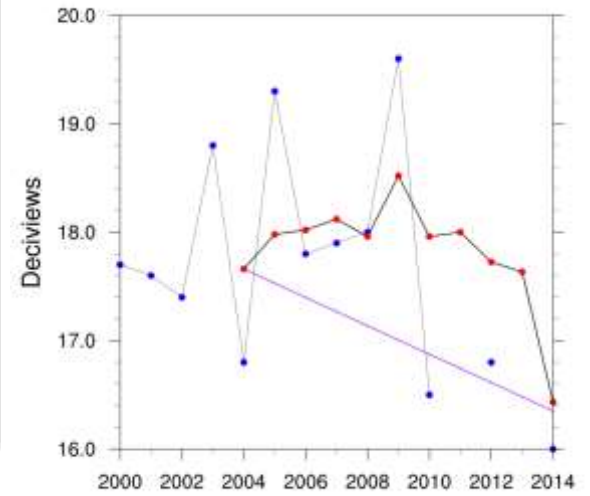
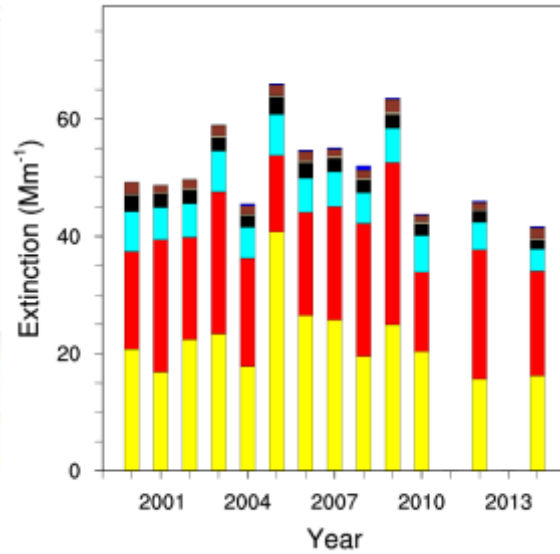
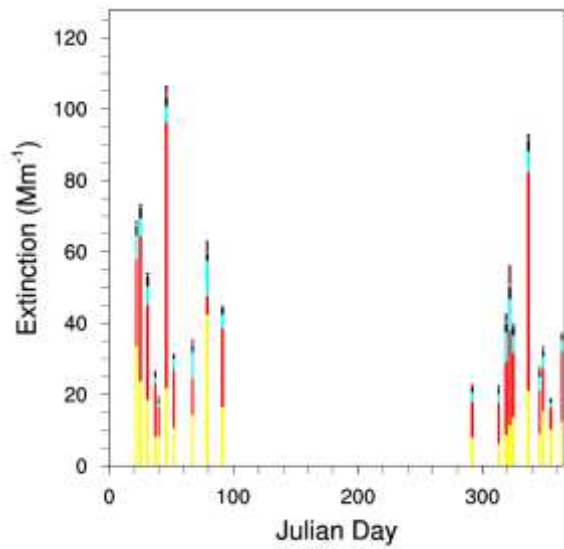
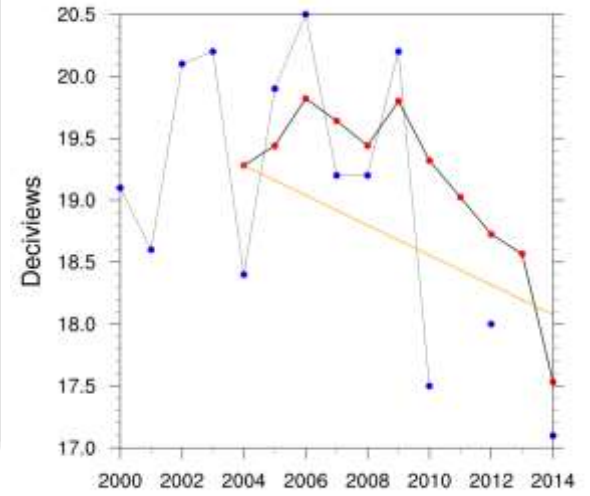
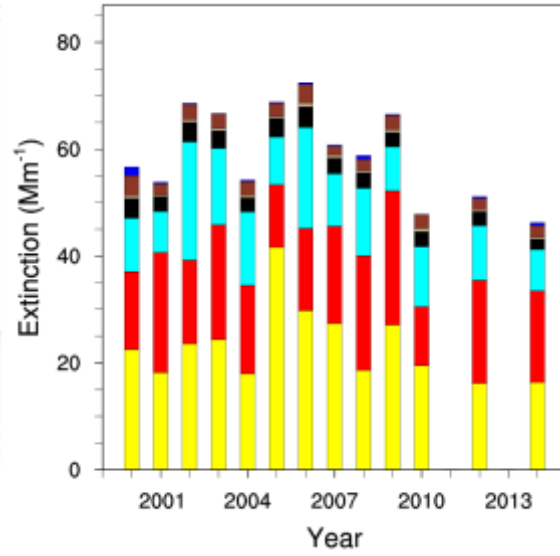
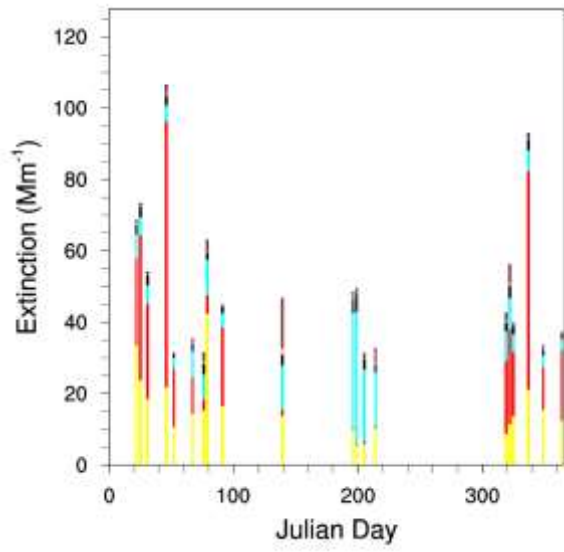
Upper Buffalo Wilderness, AR



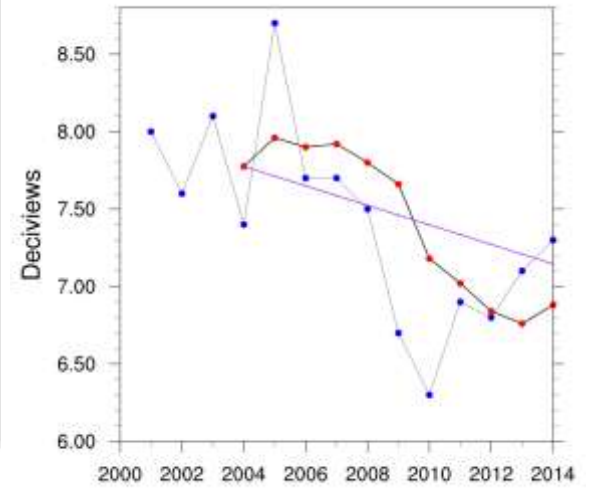
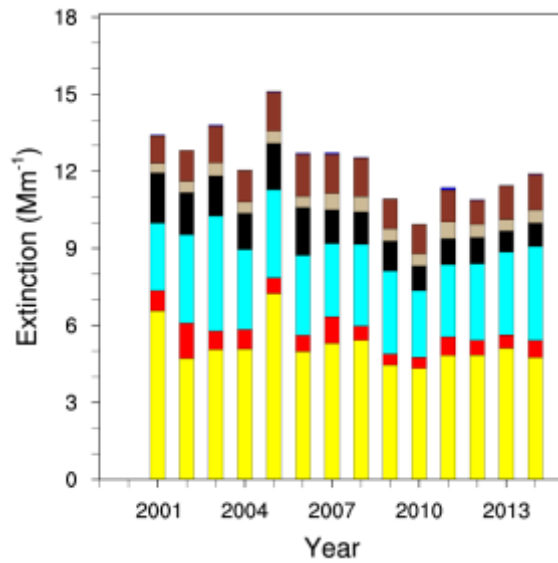
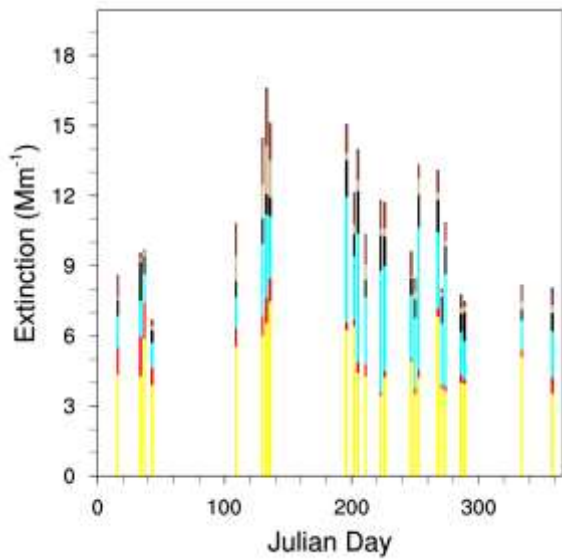
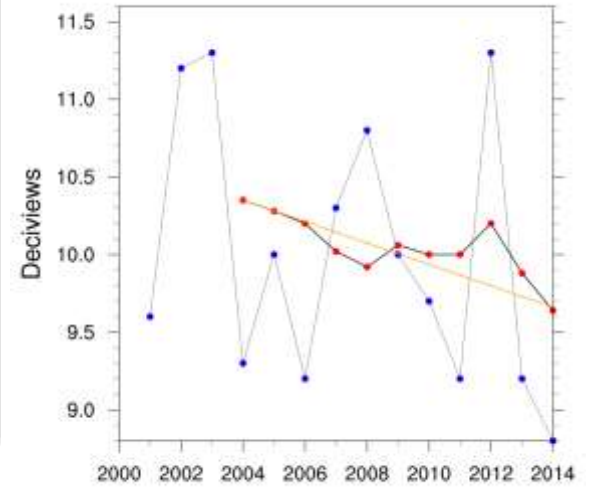
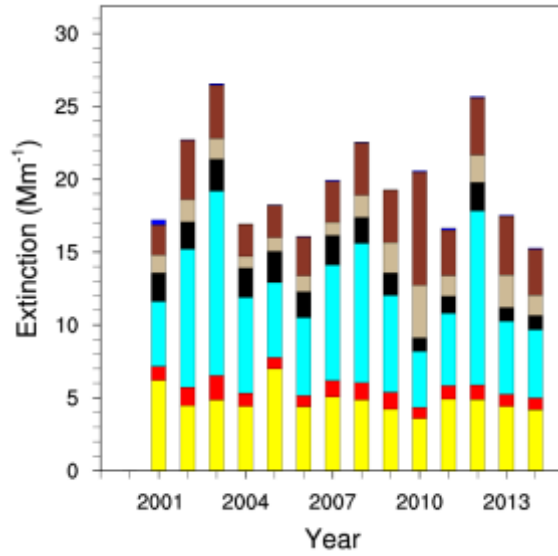
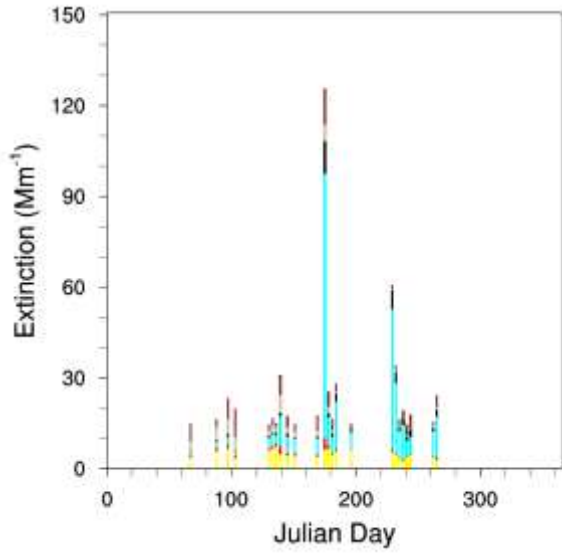
Virgin Islands National Park, VI



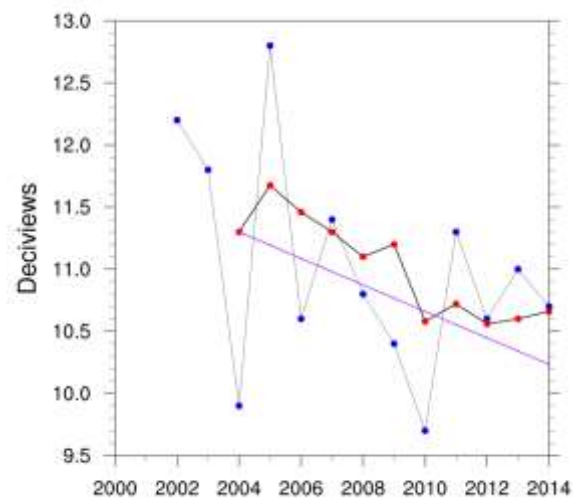
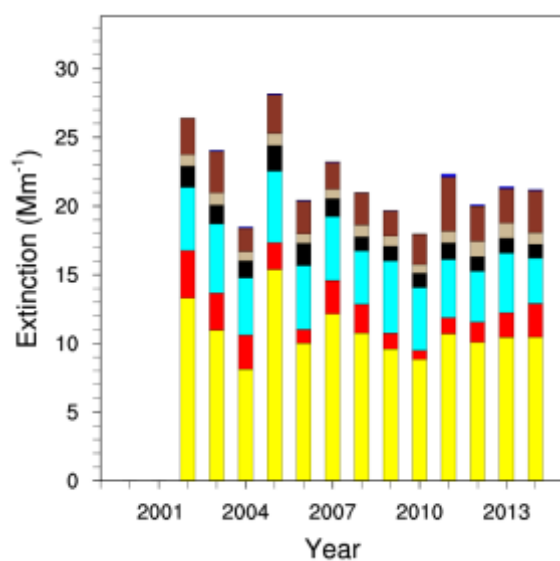
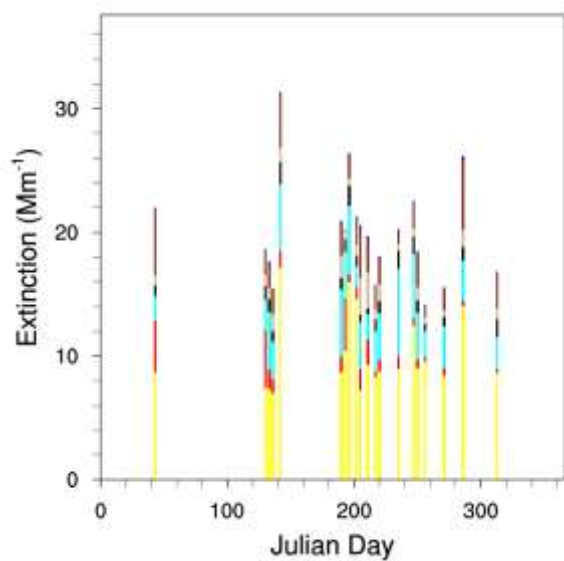
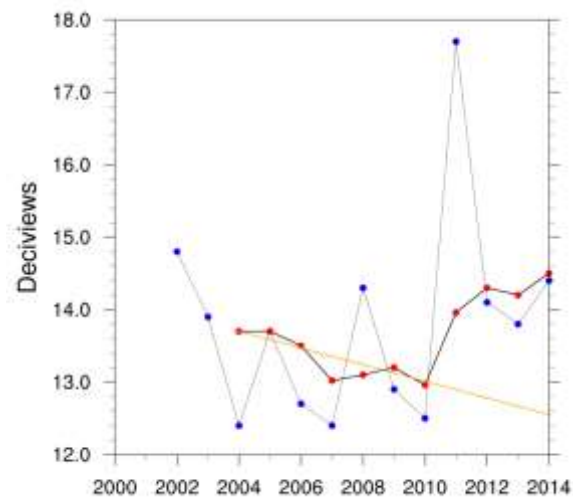
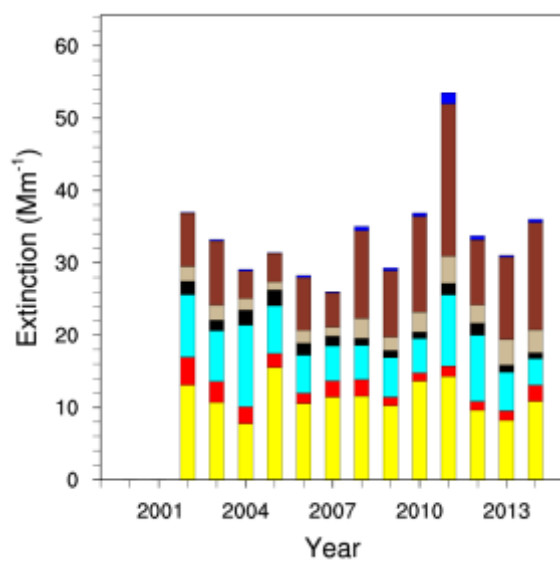
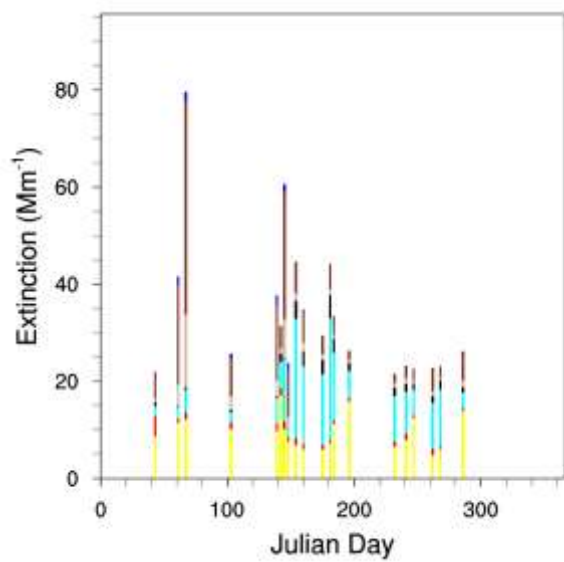
Voyageurs National Park, MN



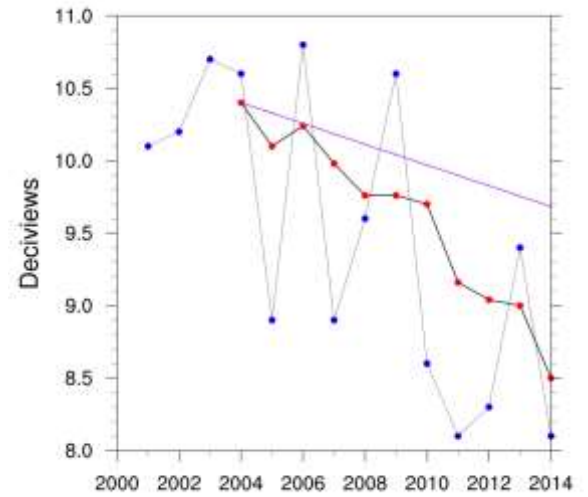
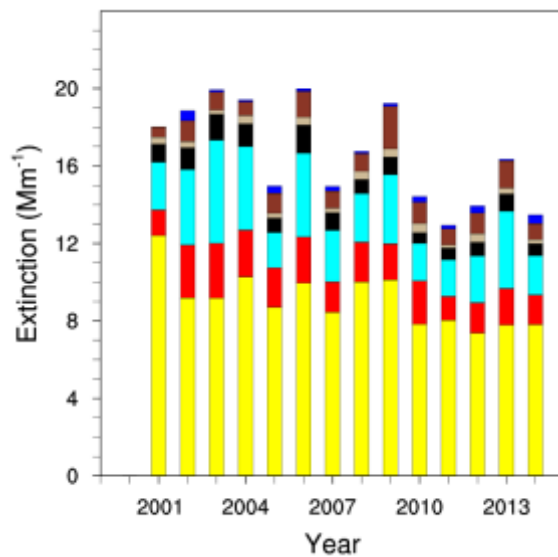
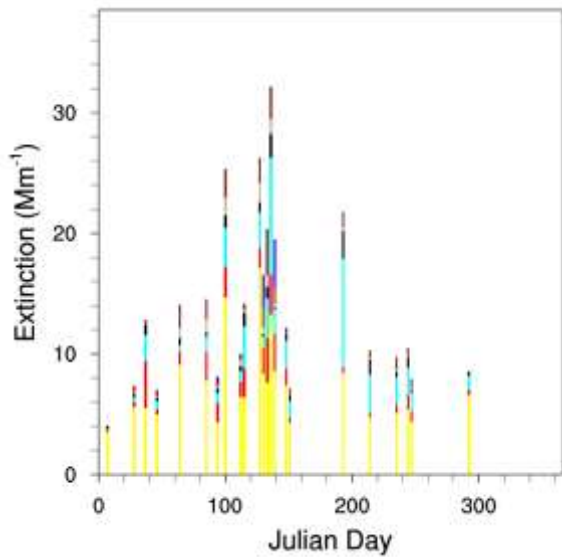
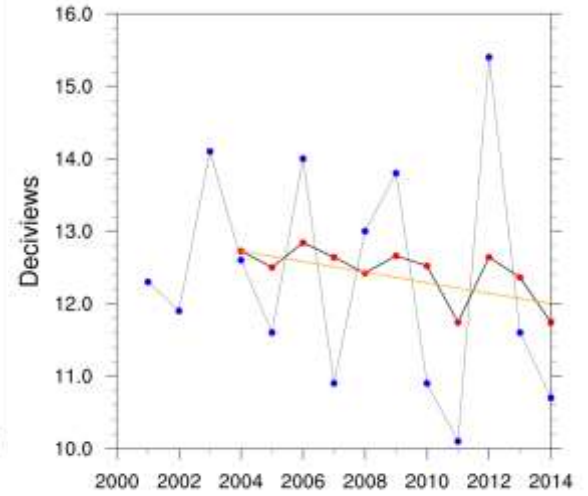
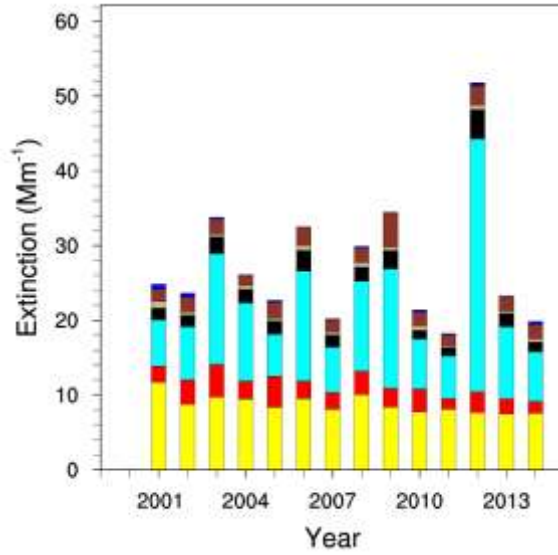
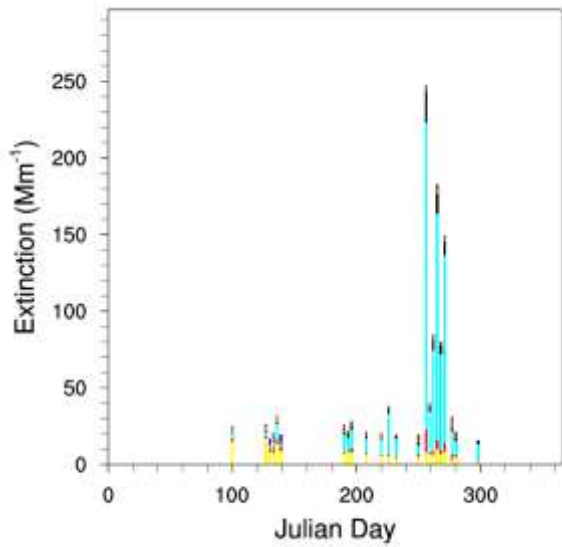
Weminuche Wilderness, CO



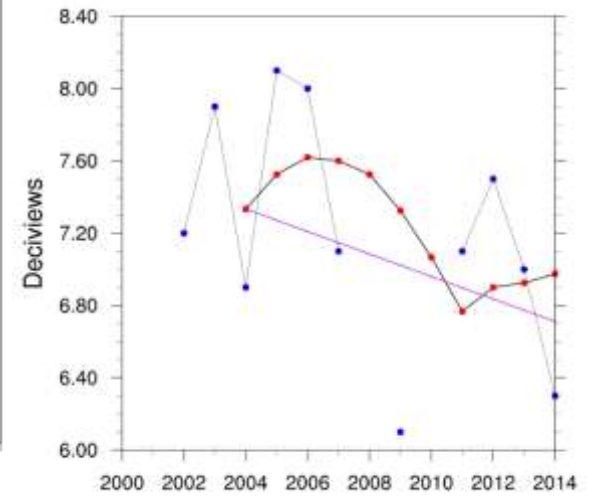
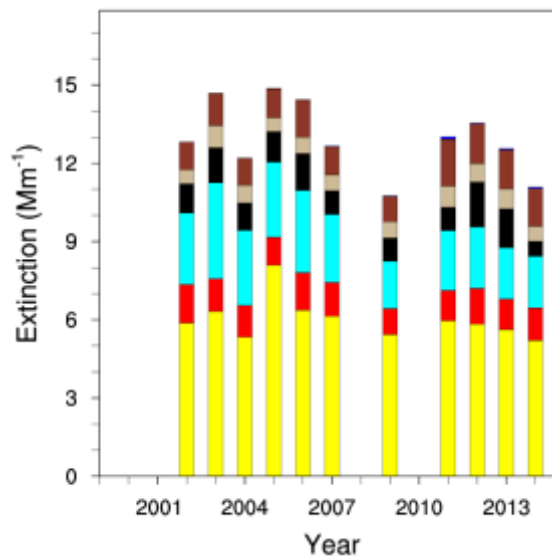
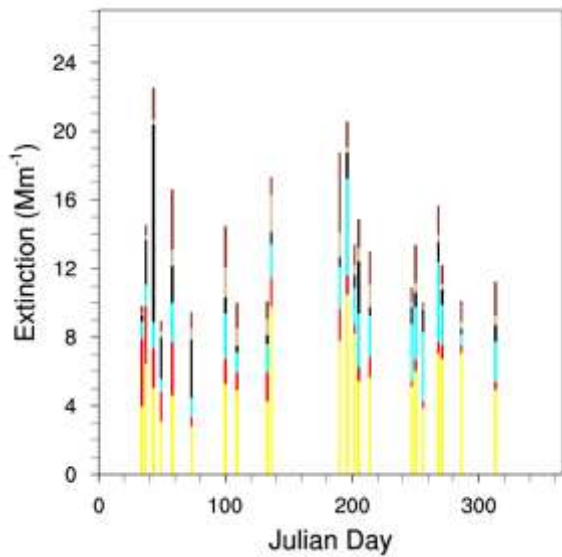
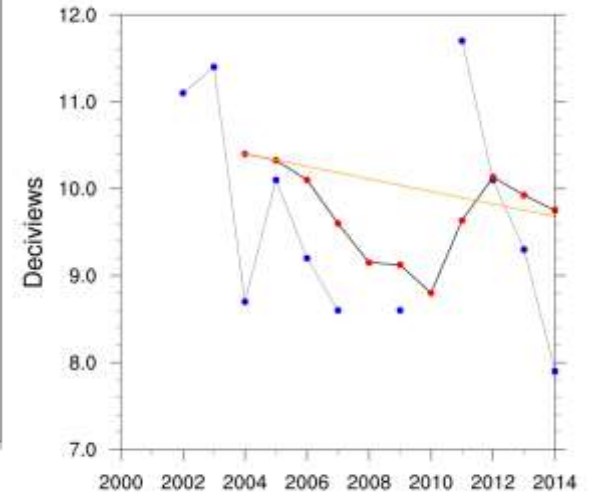
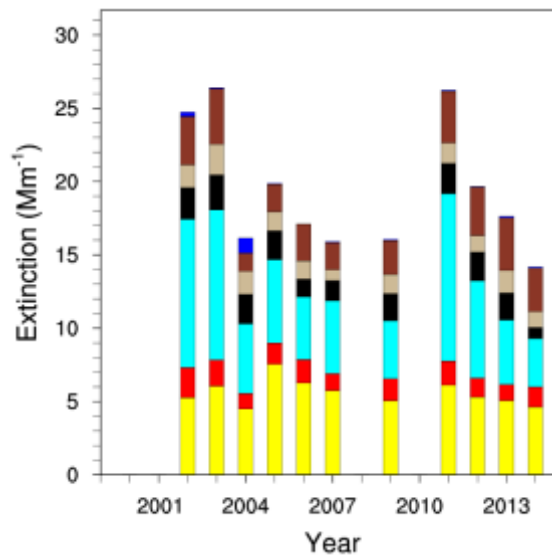
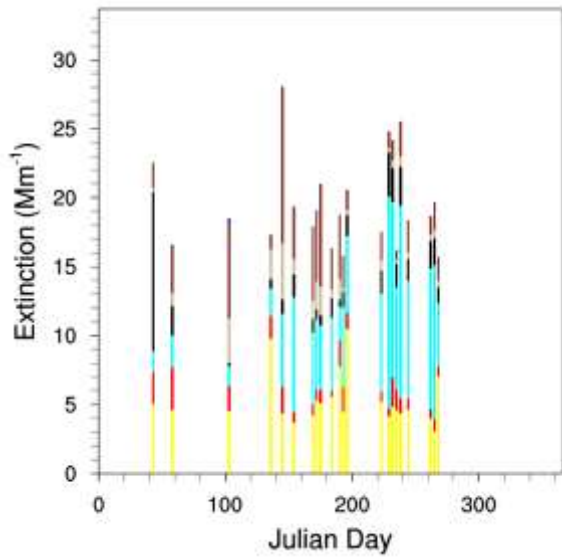
White Mountain, NM



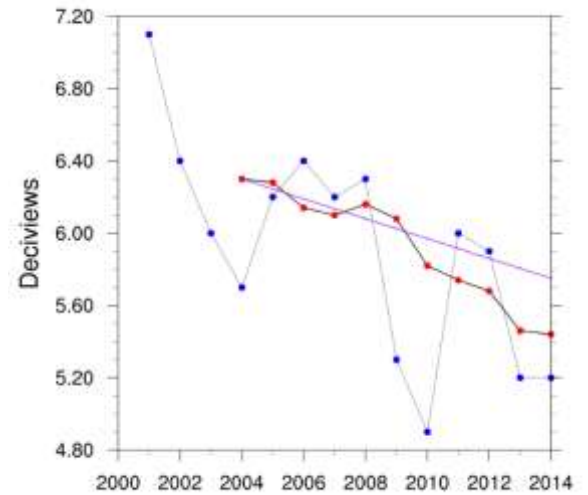
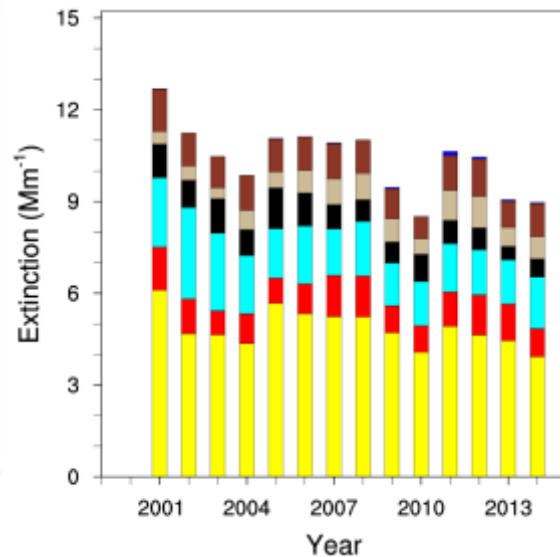
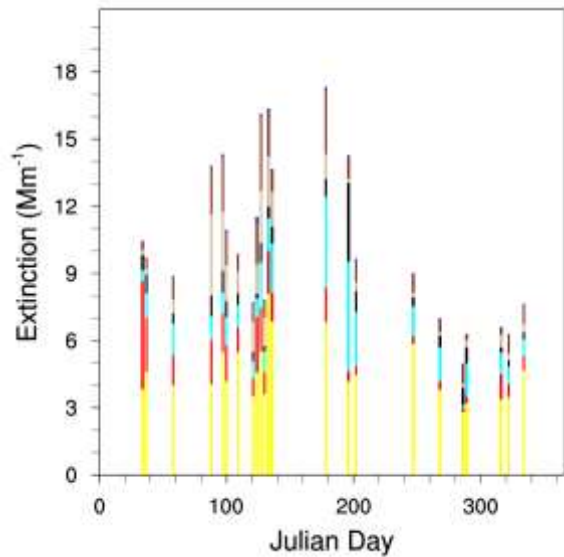
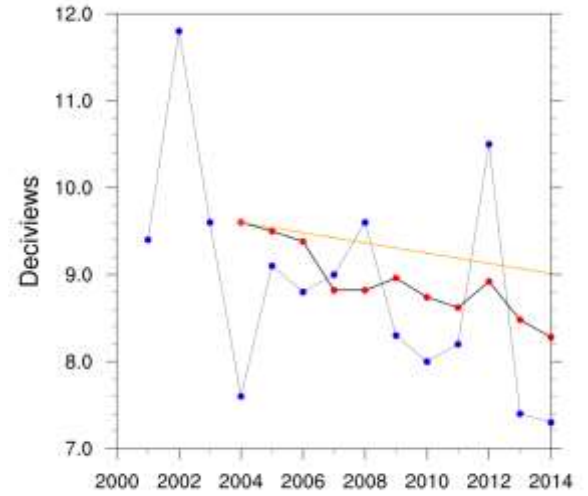
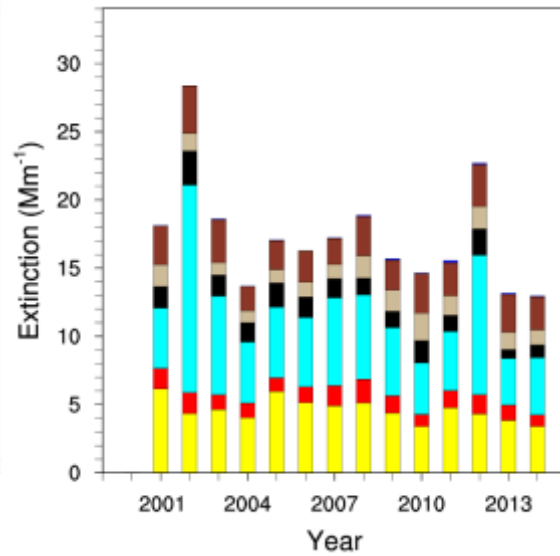
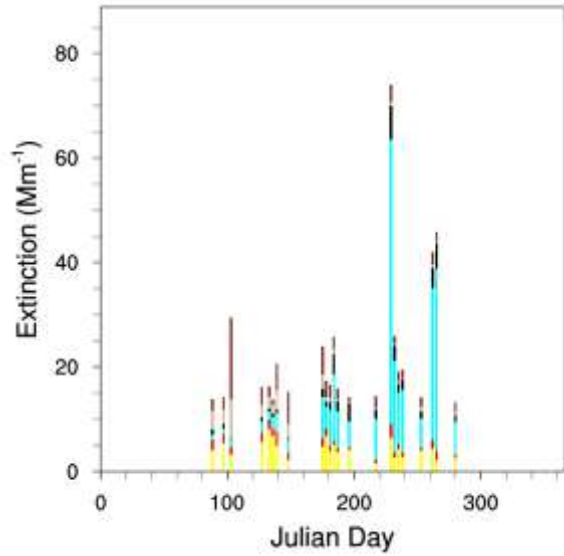
White Pass, WA



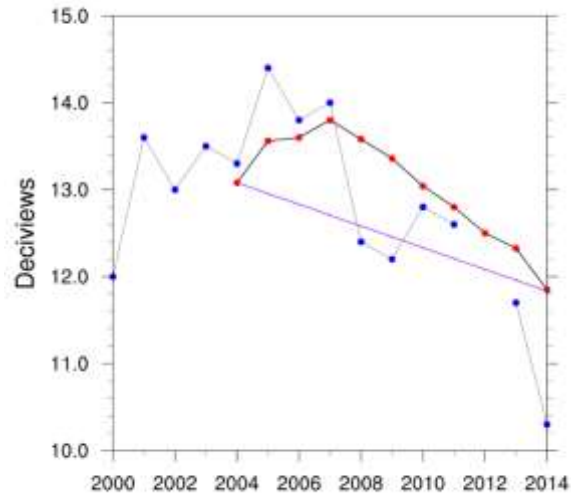
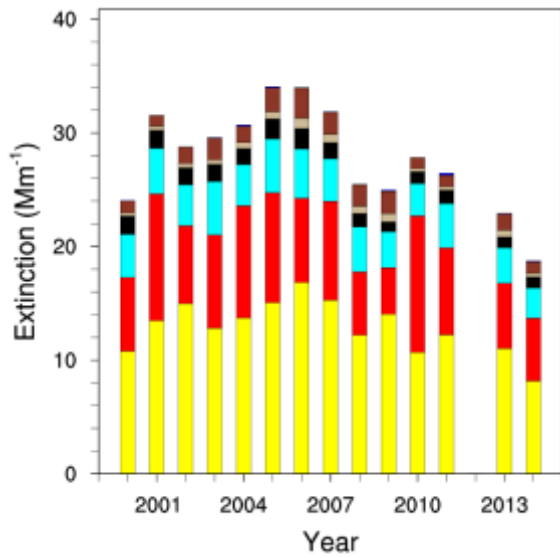
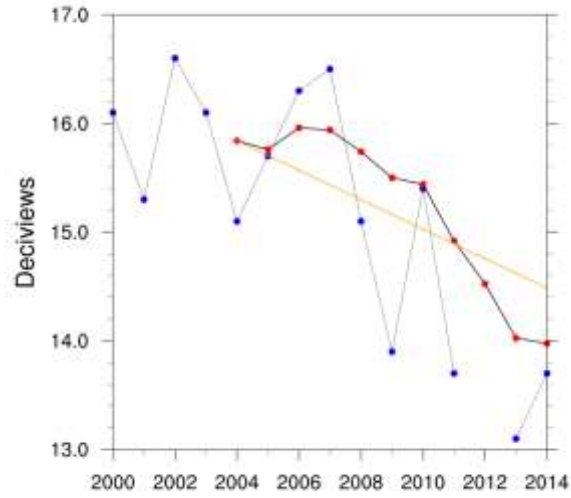
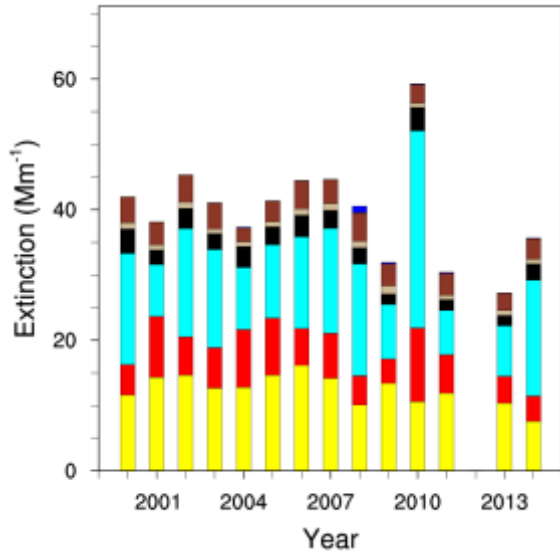
Wheeler Peak, NM



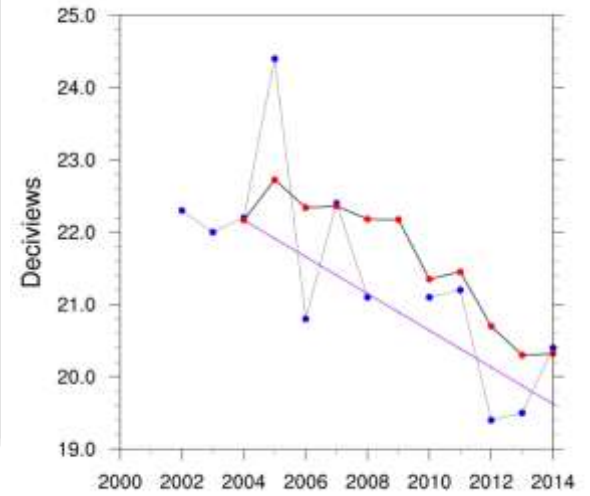
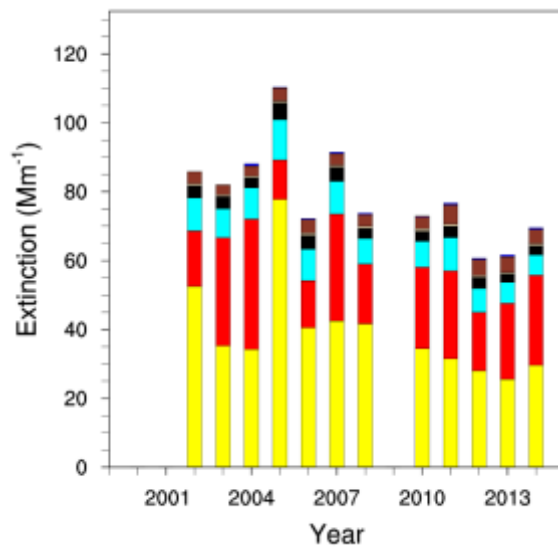
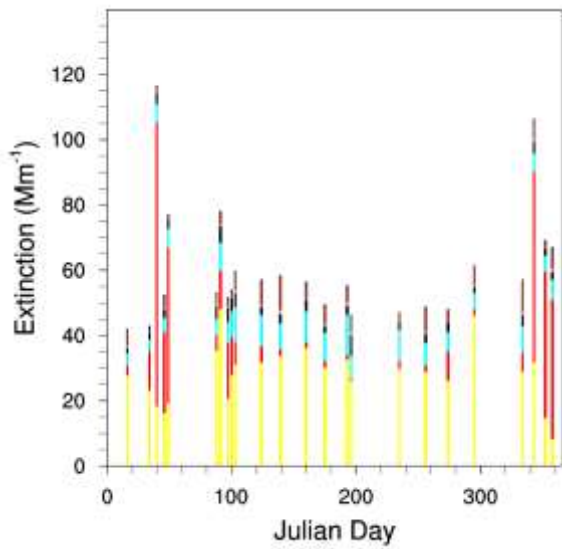
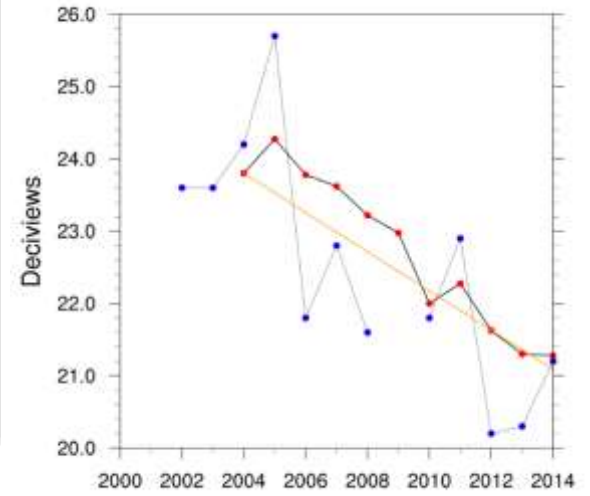
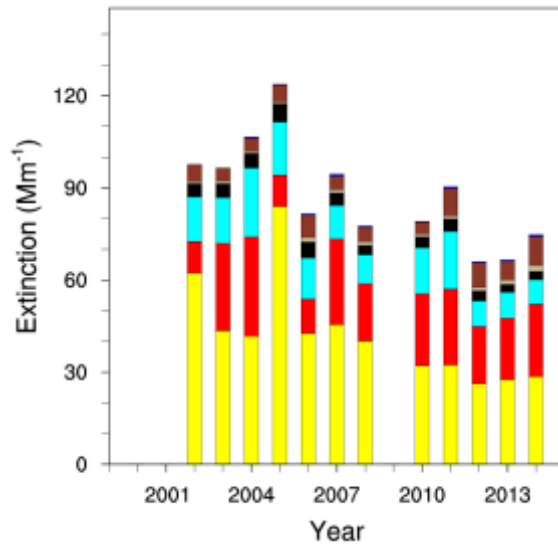
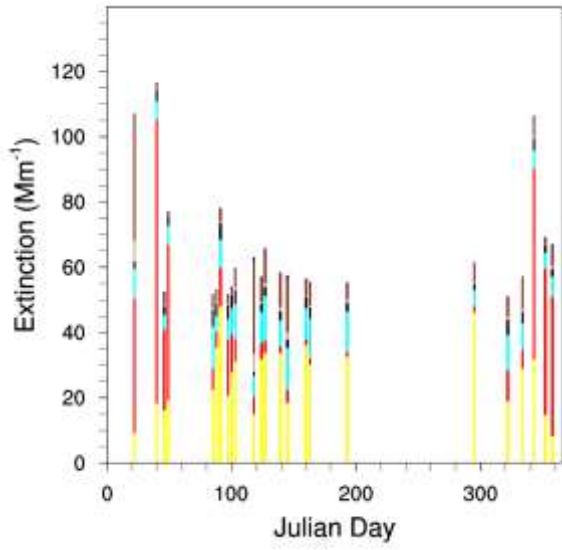
White River National Forest, CO



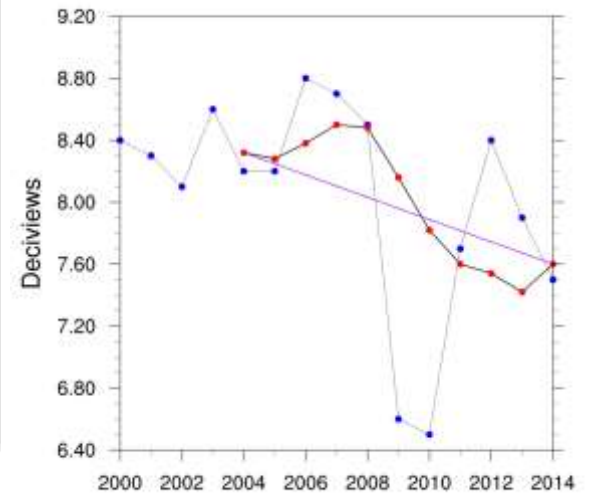
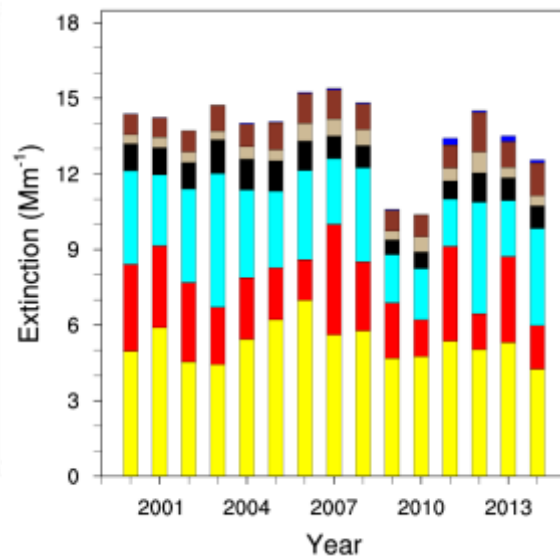
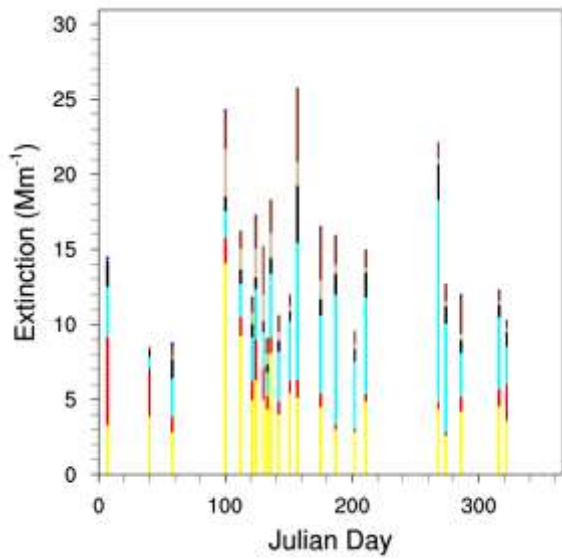
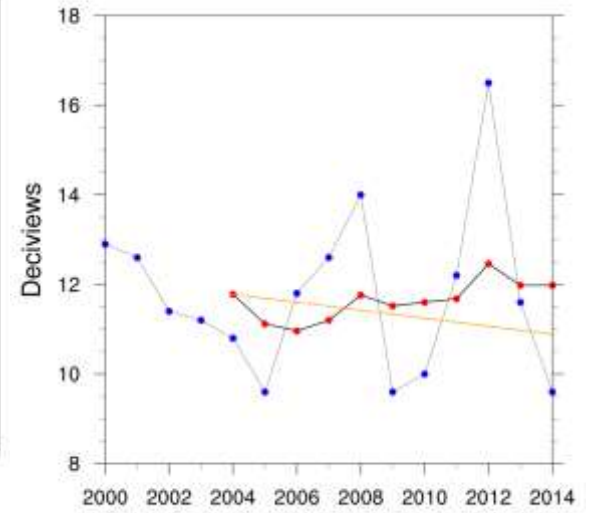
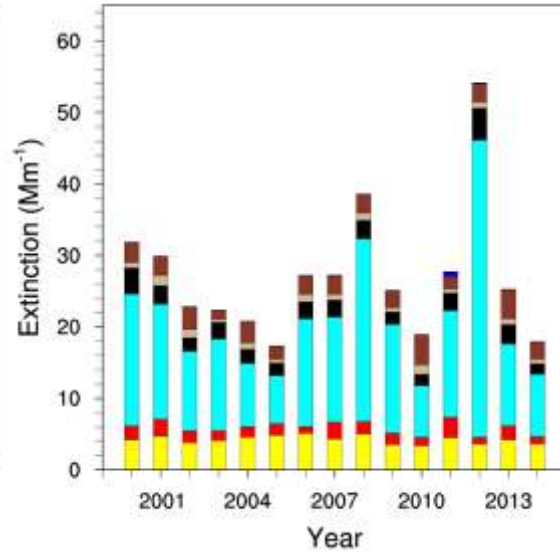
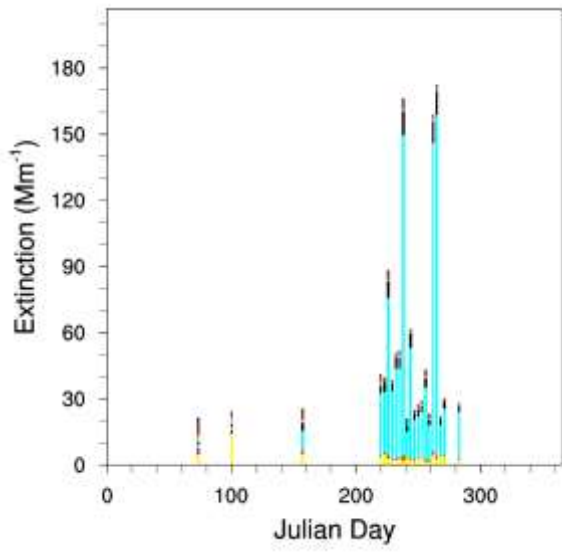
Wind Cave, SD



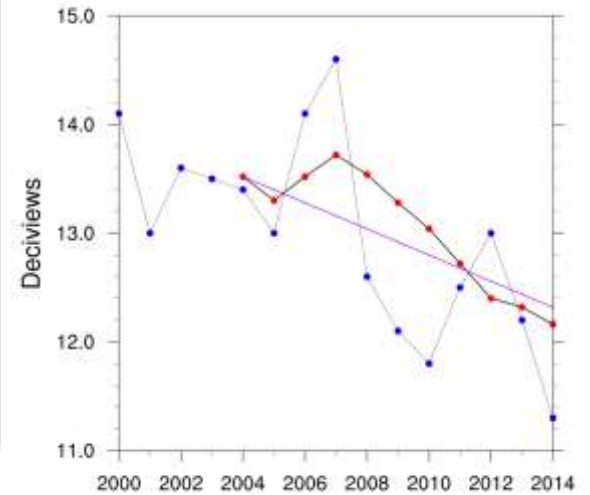
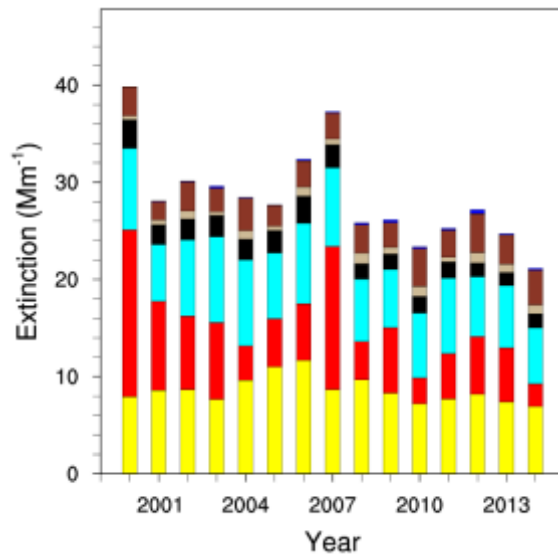
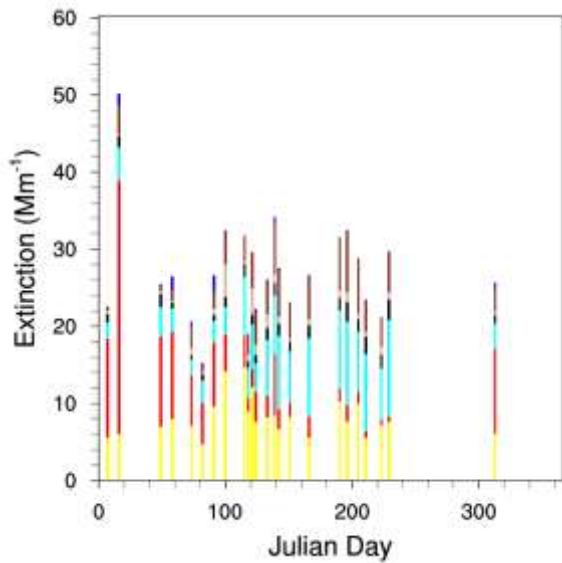
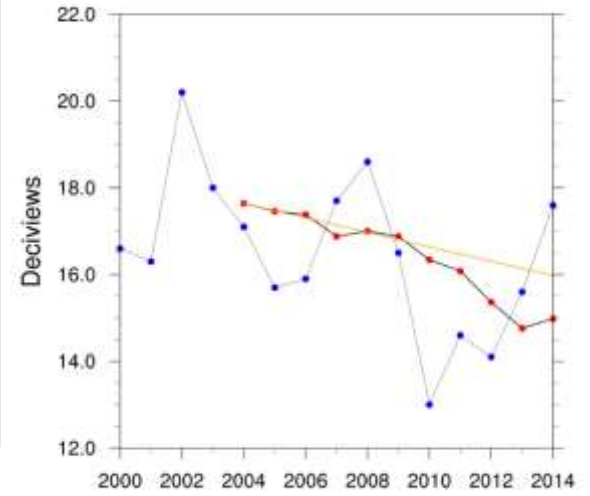
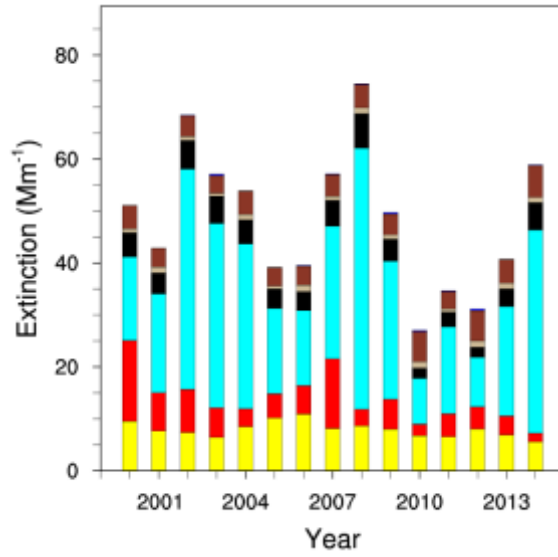
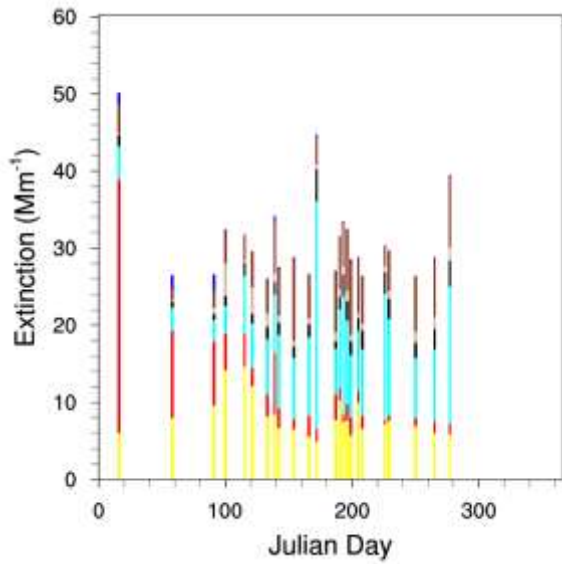
Wichita Mountains, OK



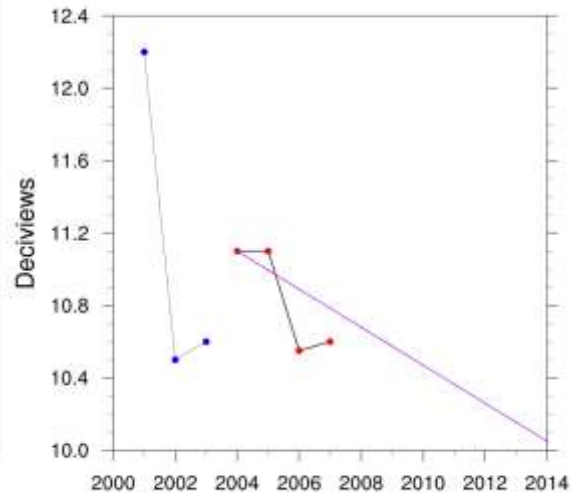
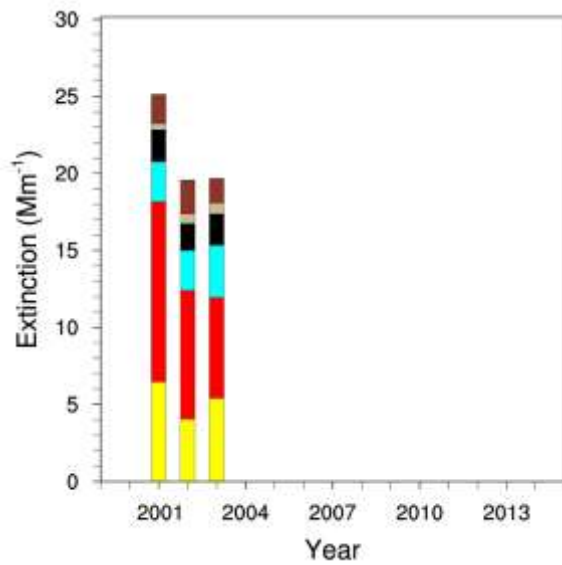
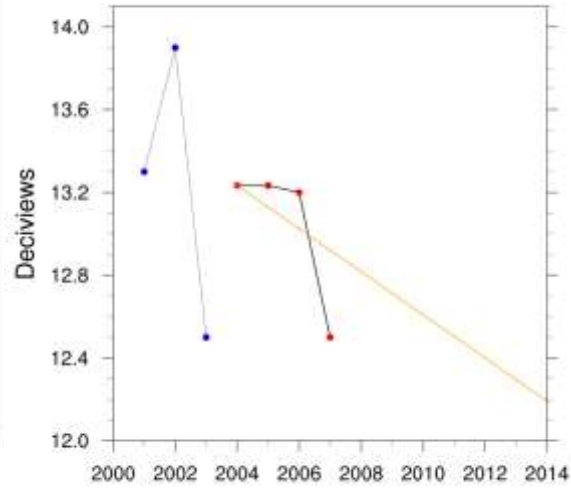
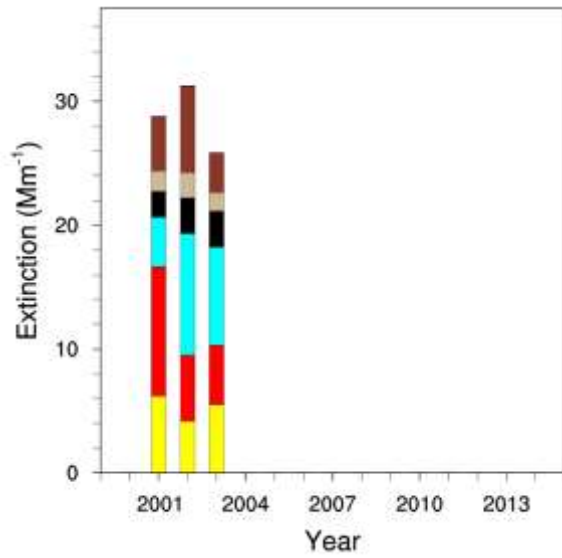
Yellowstone National Park, WY



Yosemite National Park, CA



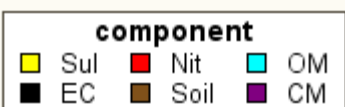
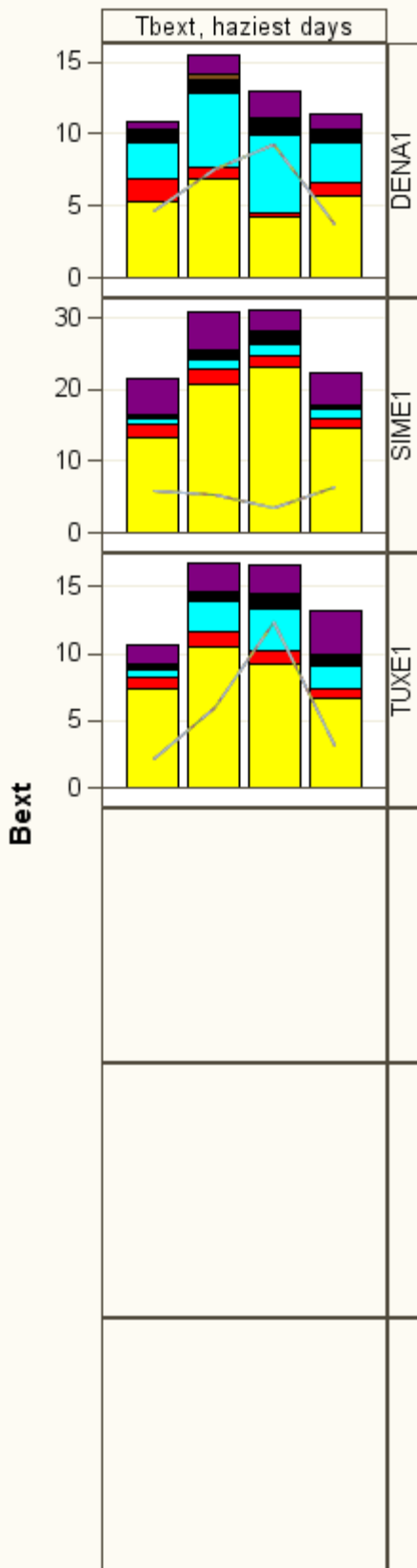
Zion National Park, UT



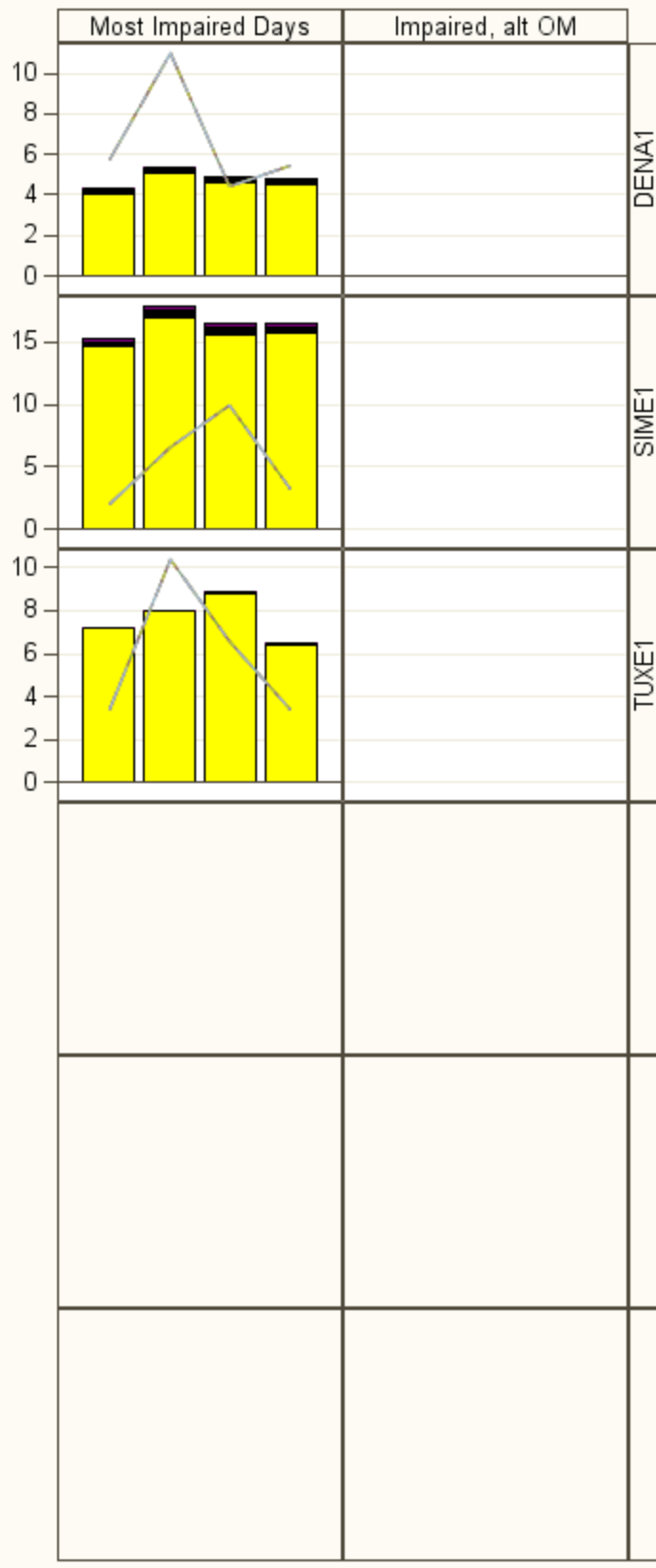
Appendix H: Seasonal anthropogenic extinction budgets for each site

Appendix H provides site-specific graphics which are organized according to 25 geographic groupings described in Figure 65. The graphics show the total extinction budget for the haziest days and the estimated anthropogenic portion of the average extinction budget for the most impaired days, by season, for 2010-2014. Included are the budgets for the most impaired days presented in two ways: based on the estimates of natural conditions described in Section 3 and using the alternative approach to estimate the natural contribution to OM described in Section 5. The average number of included days per season for each approach are shown by the gray line in the graphics for each site. Note that the scales are different for the total extinction and the anthropogenic portions. As previously shown in Section 3.1, there is a shift in the seasons which typically include the most impaired days compared to the haziest days for many regional grouping of sites, particularly in the Western U.S. The extinction budget charts show that estimated anthropogenic extinction for the most impaired days (with either approach to estimate natural contribution) has significantly less carbon or dust than the total extinction for the haziest days for most but not all regional groupings.

Alaska Budgets

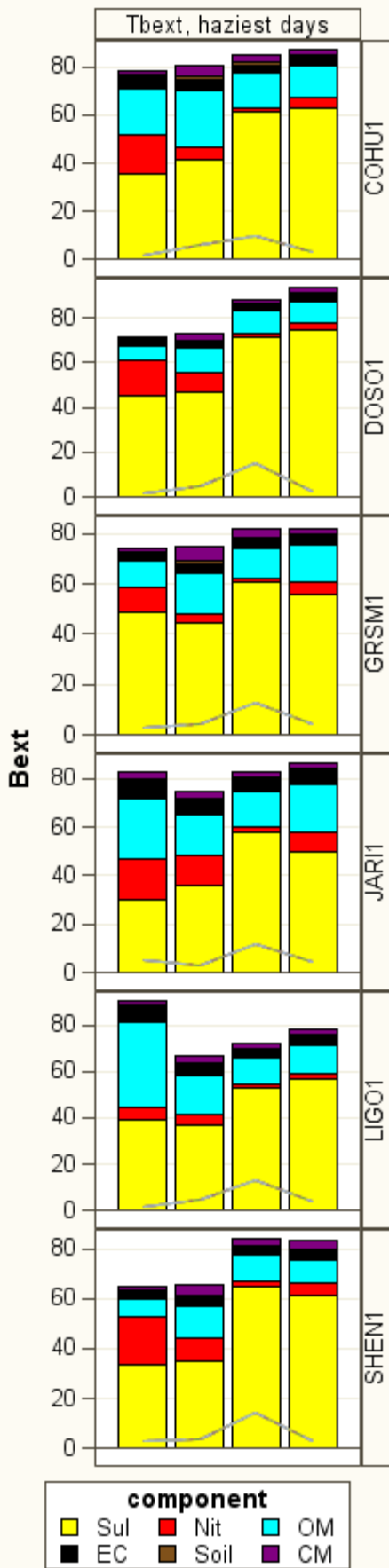


Alaska Budgets

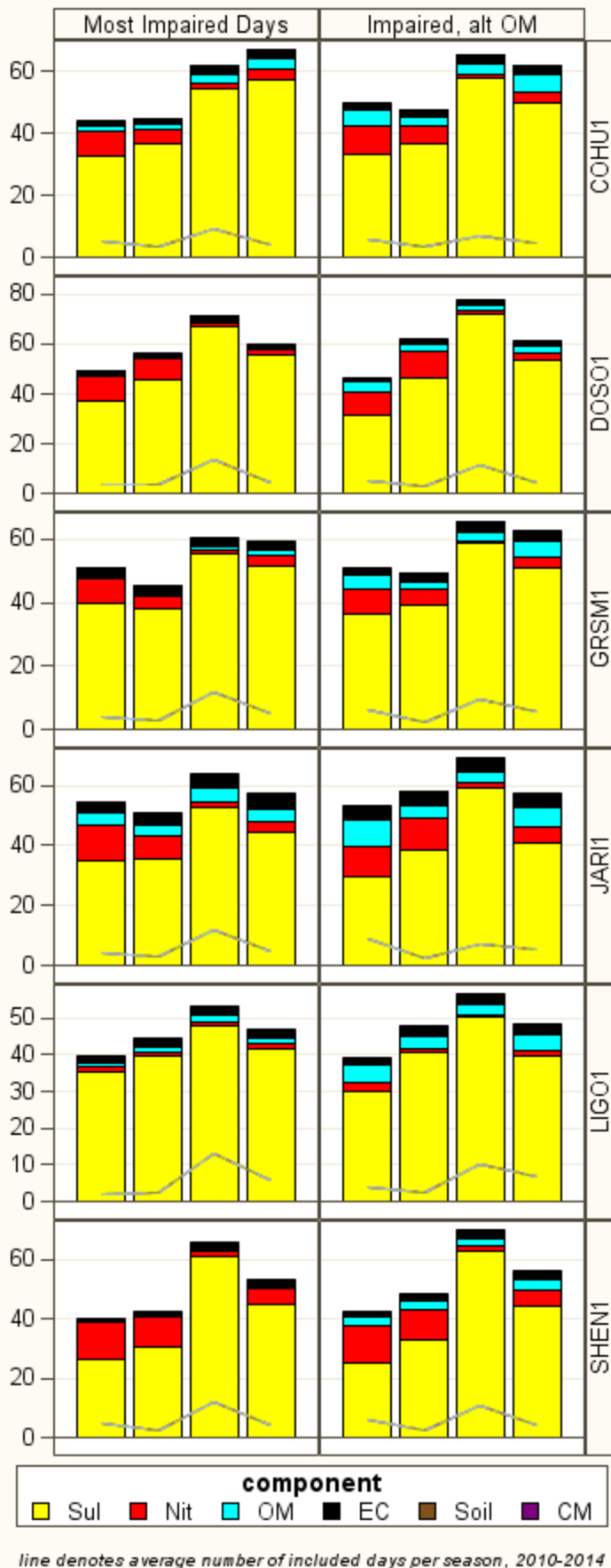


line denotes average number of included days per season, 2010-2014

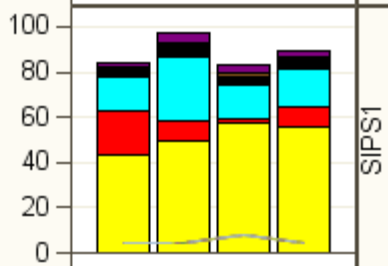
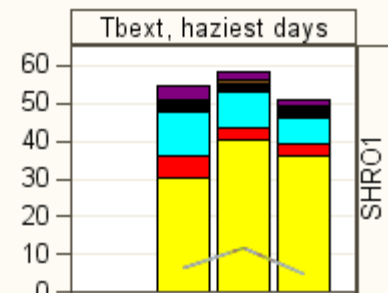
Appalachia Budgets



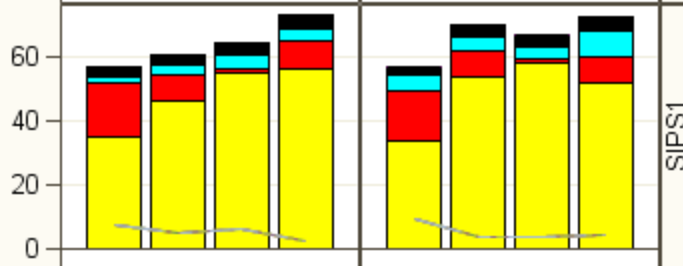
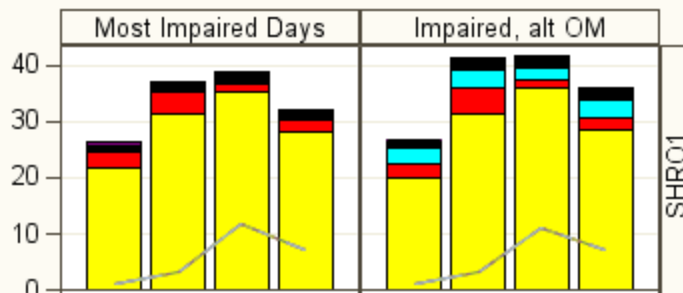
Appalachia Budgets



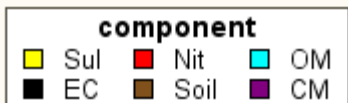
Appalachia Budgets



Appalachia Budgets

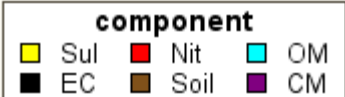
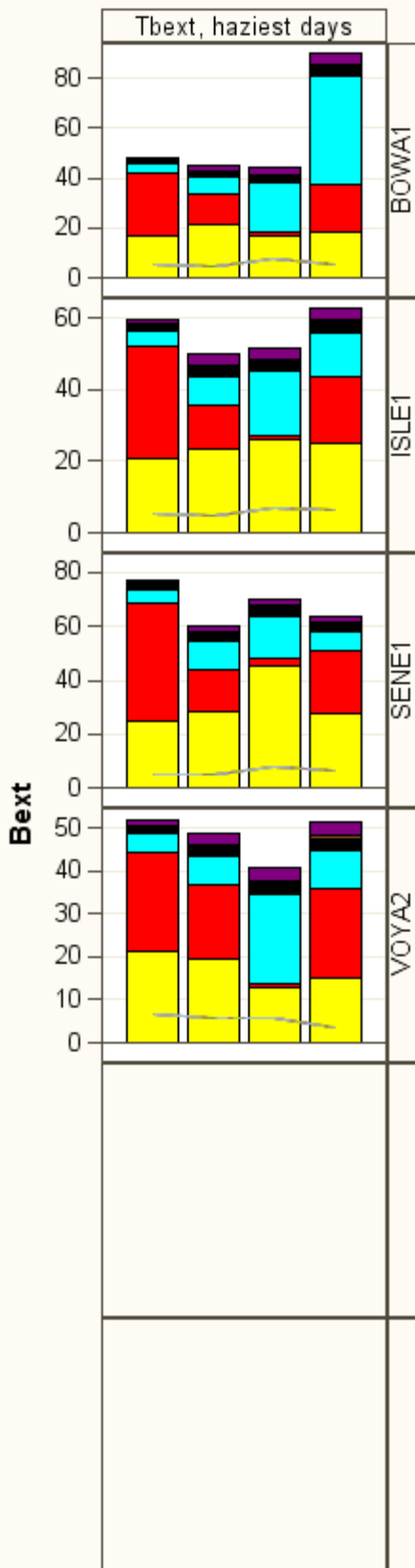


Bext

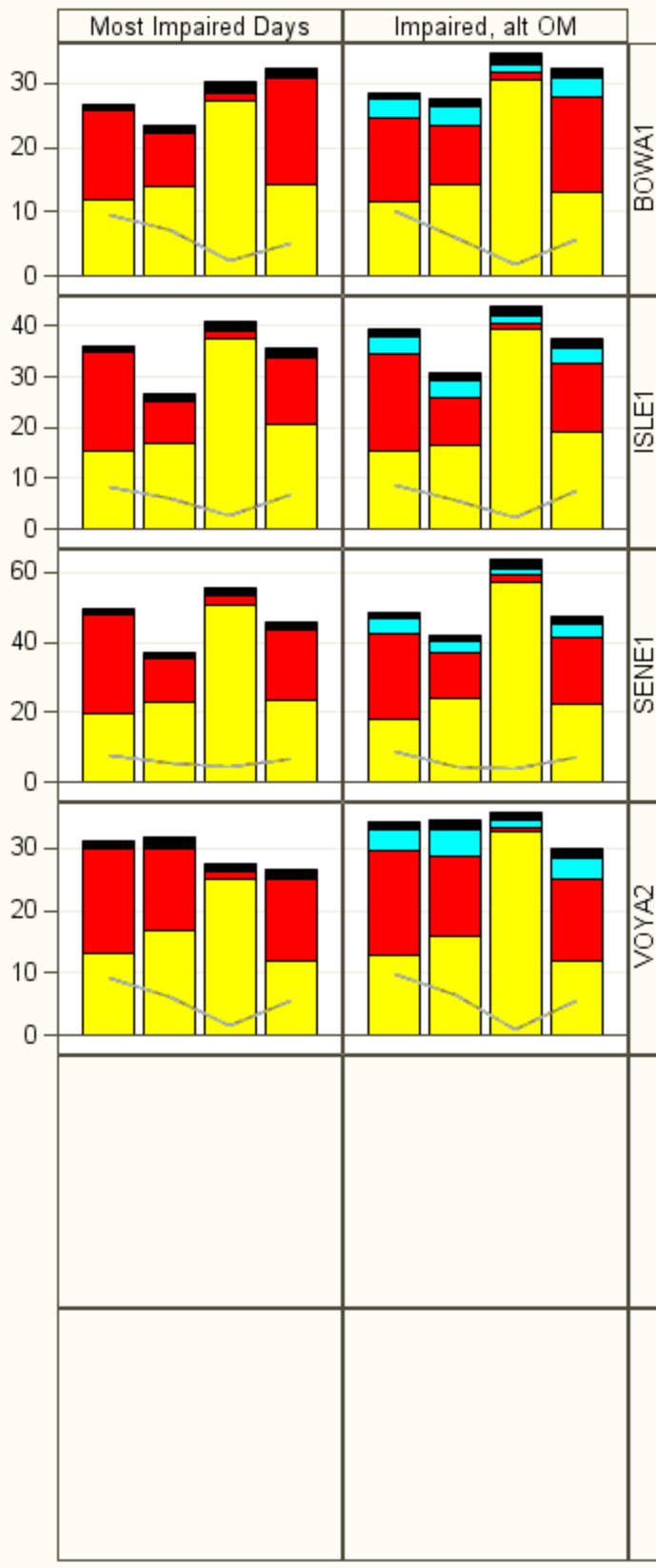


line denotes average number of included days per season, 2010-2014

Boundary Waters Budgets

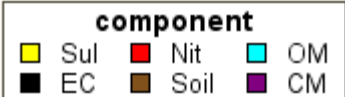
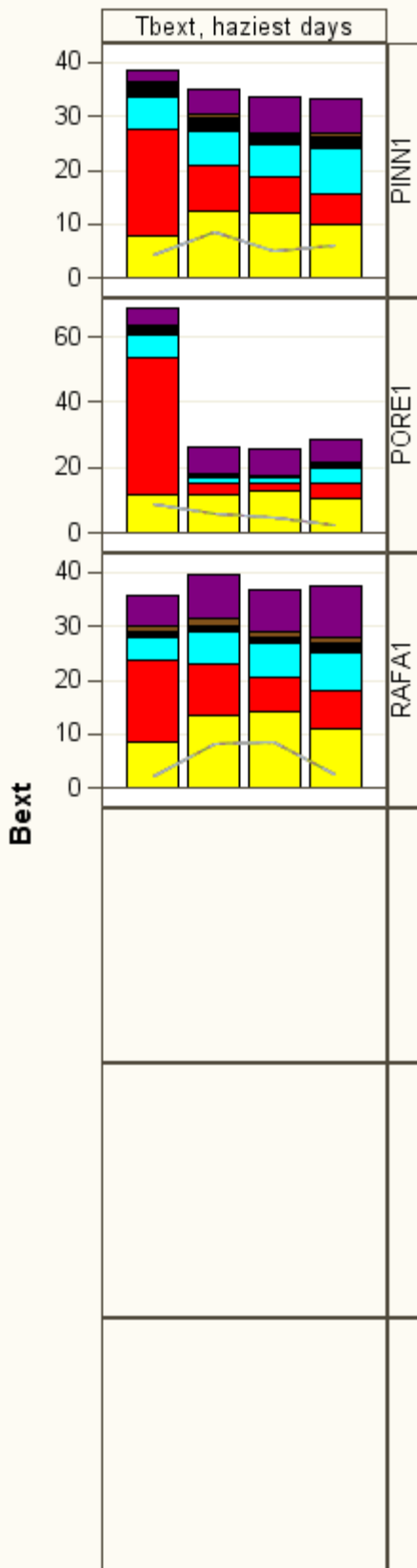


Boundary Waters Budgets

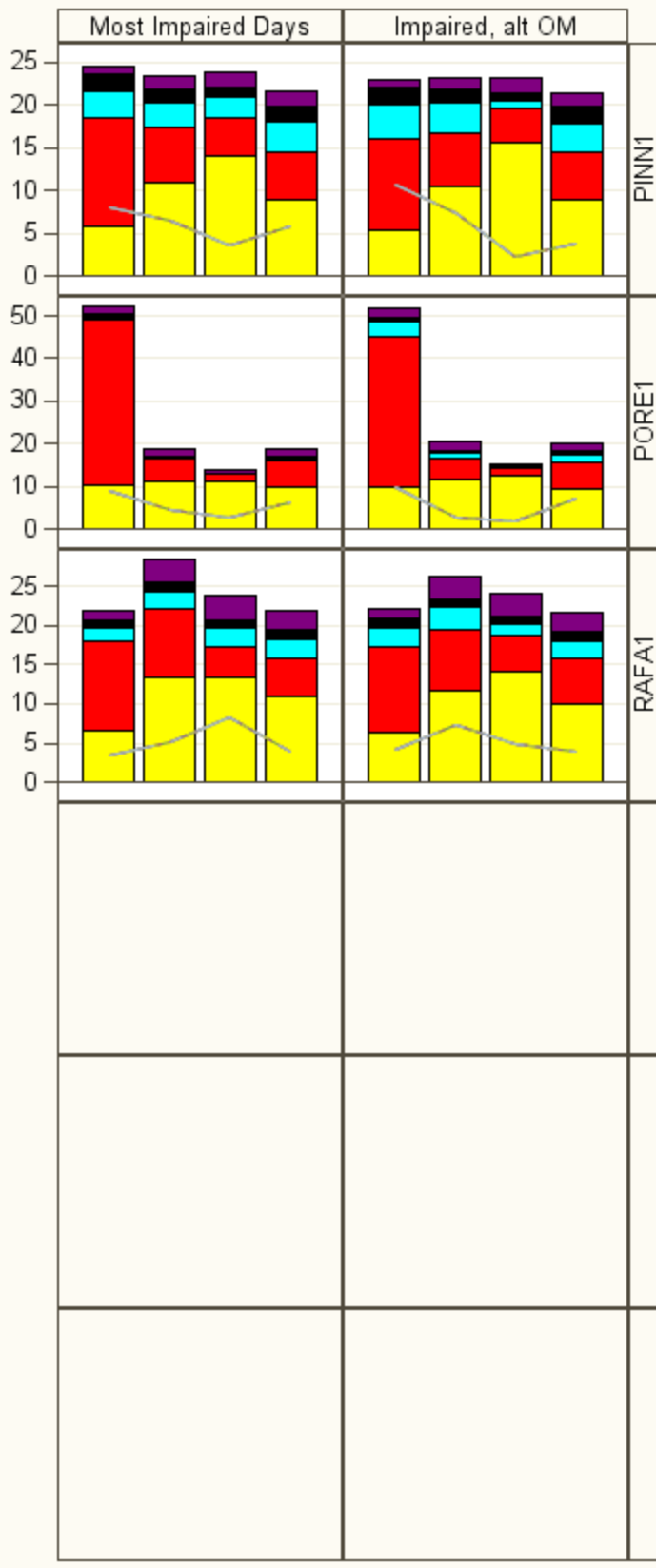


line denotes average number of included days per season, 2010-2014

California Coast Budgets

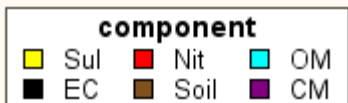
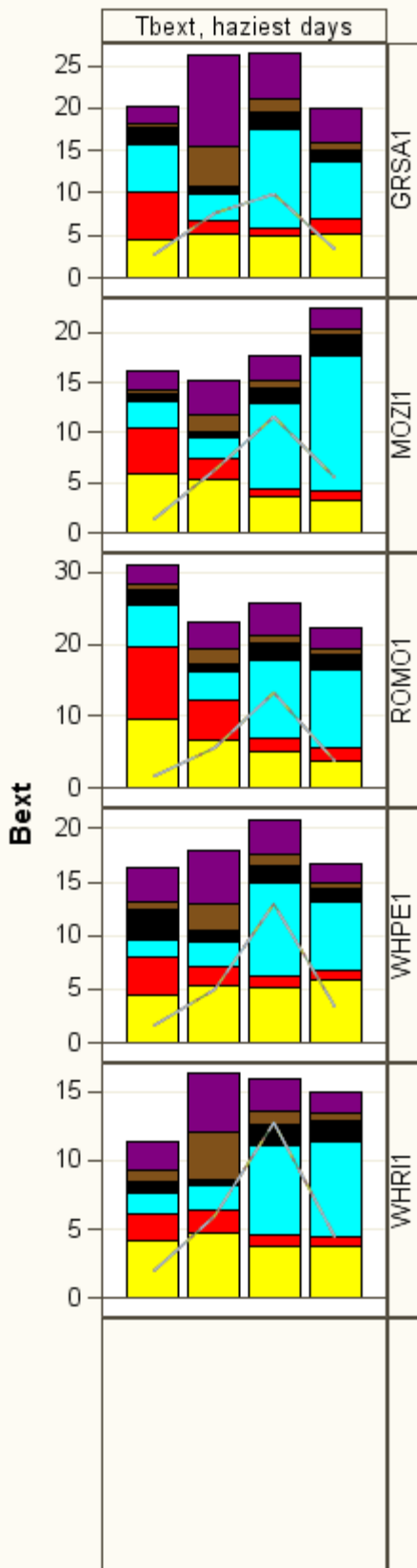


California Coast Budgets

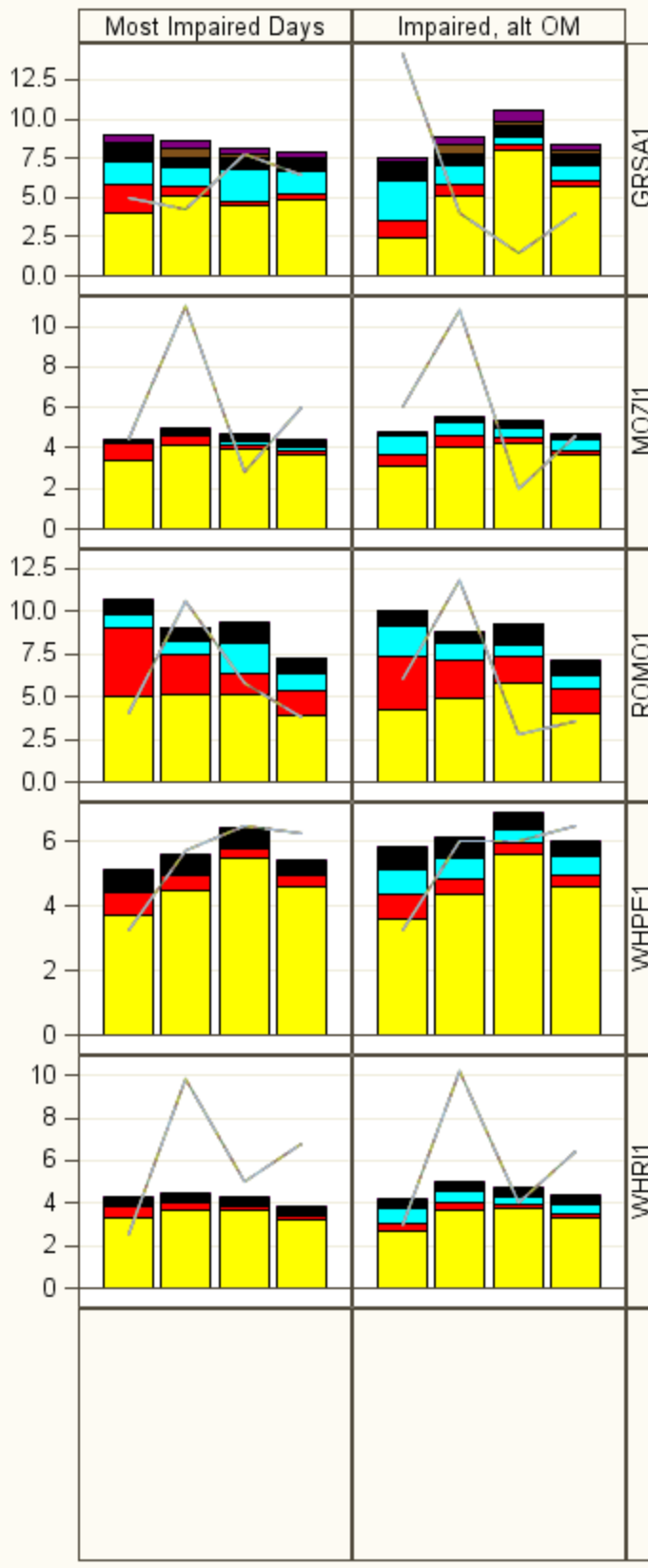


line denotes average number of included days per season, 2010-2014

Central Rockies Budgets

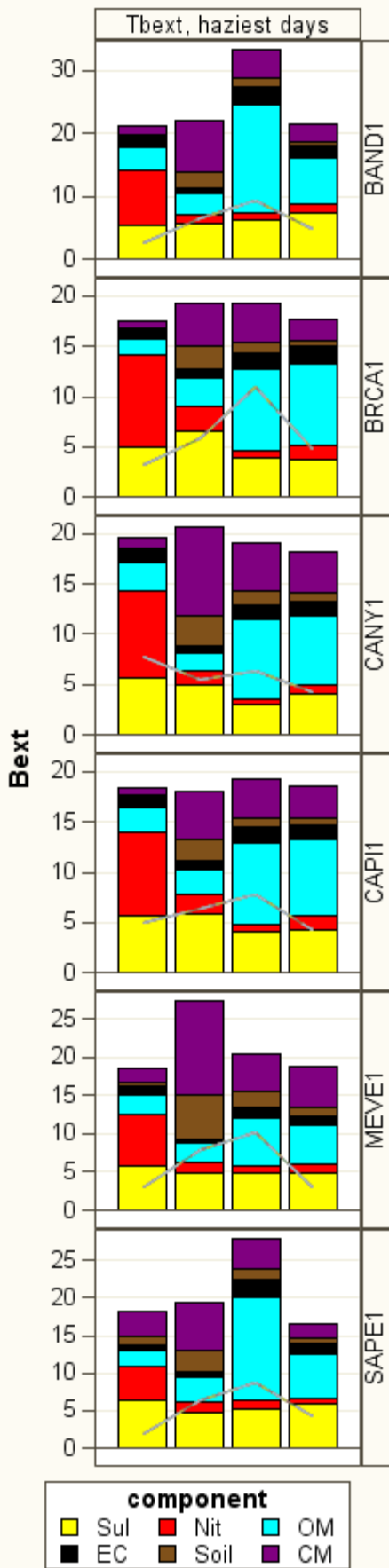


Central Rockies Budgets

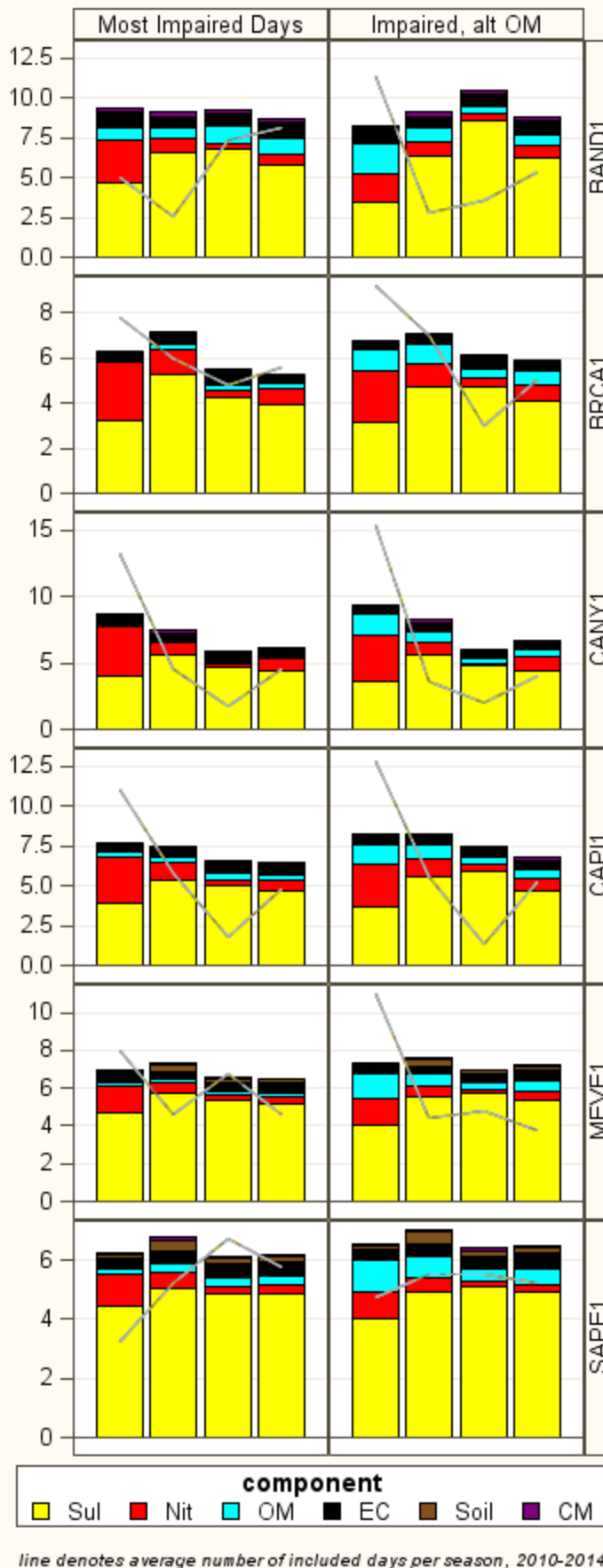


line denotes average number of included days per season, 2010-2014

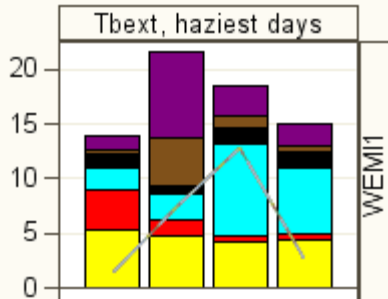
Colorado Plateau Budgets



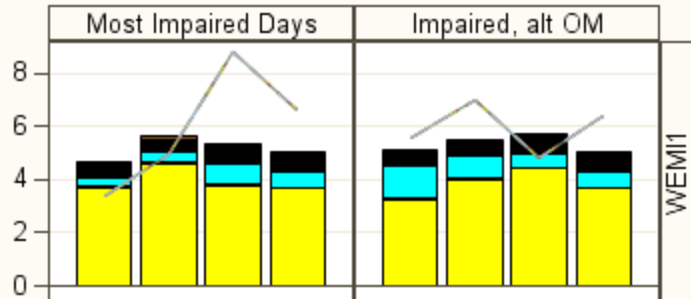
Colorado Plateau Budgets



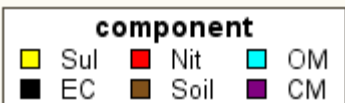
Colorado Plateau Budgets



Colorado Plateau Budgets

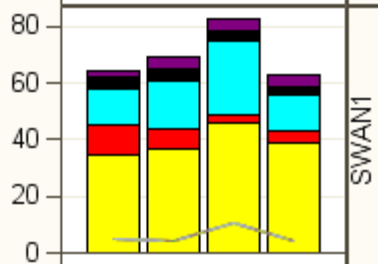
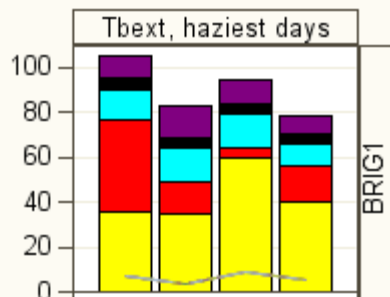


Bext

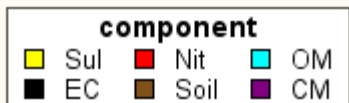


line denotes average number of included days per season, 2010-2014

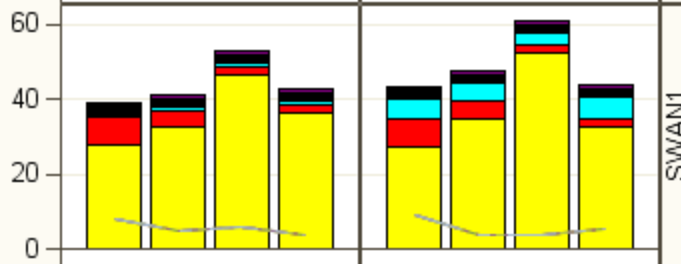
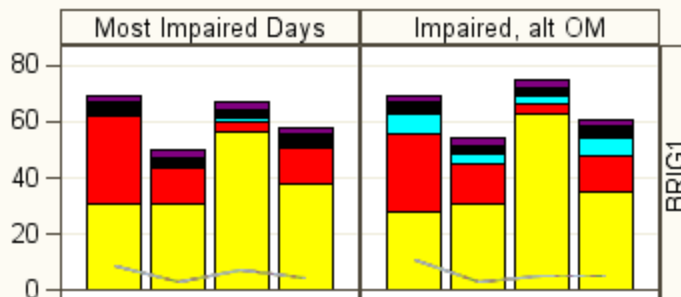
East Coast Budgets



Bext

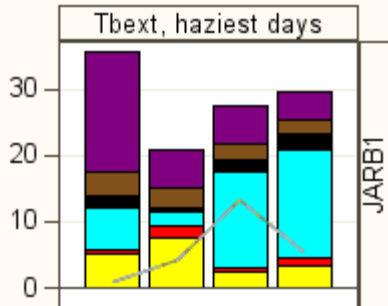


East Coast Budgets

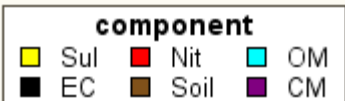


line denotes average number of included days per season, 2010-2014

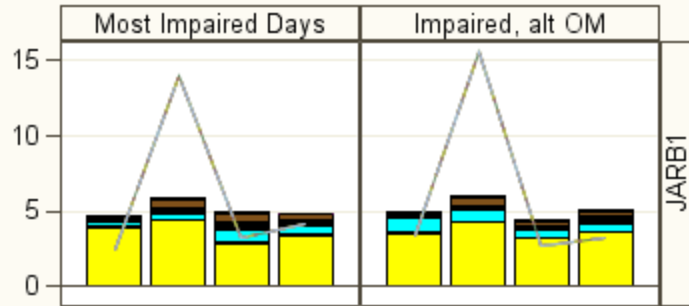
Great Basin Budgets



Bext

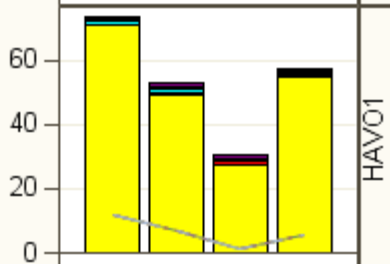
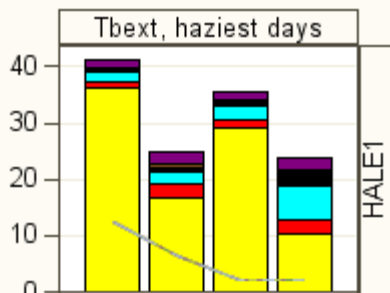


Great Basin Budgets

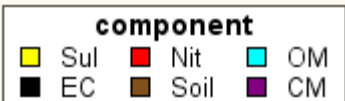


line denotes average number of included days per season, 2010-2014

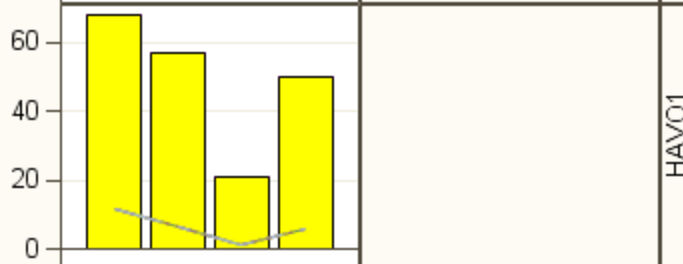
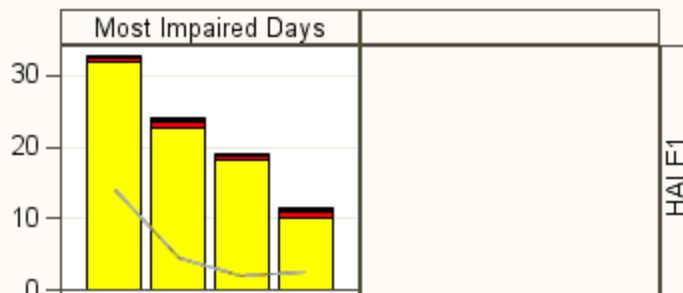
Hawaii Budgets



Bext

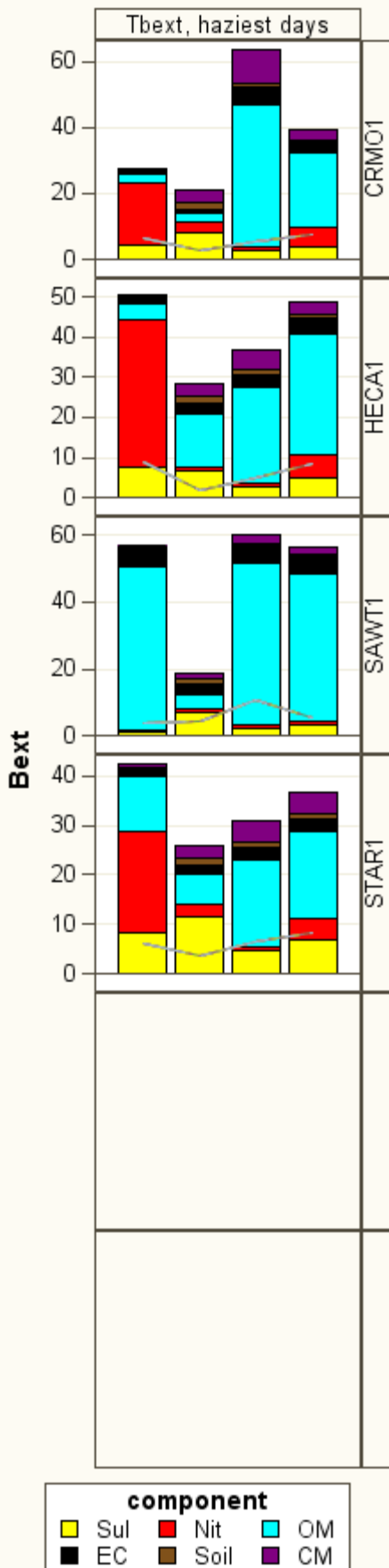


Hawaii Budgets

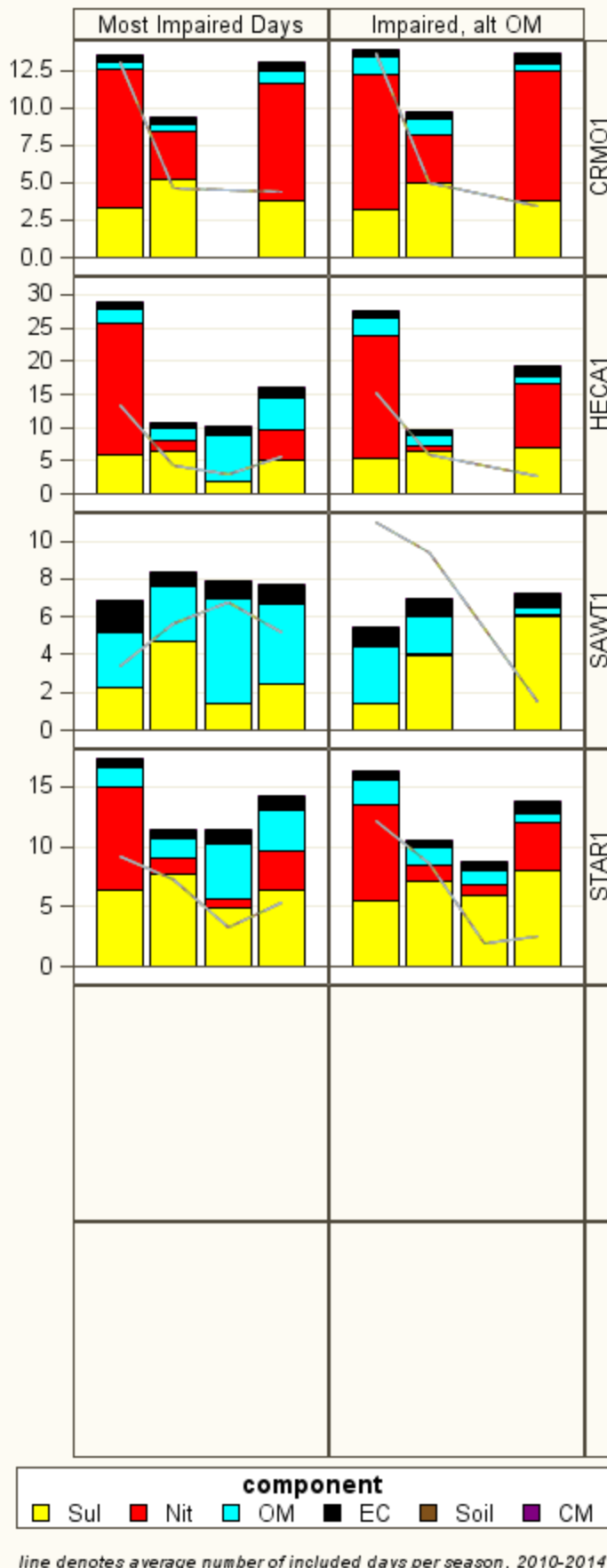


line denotes average number of included days per season, 2010-2014

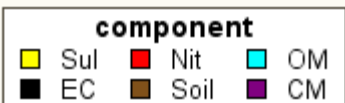
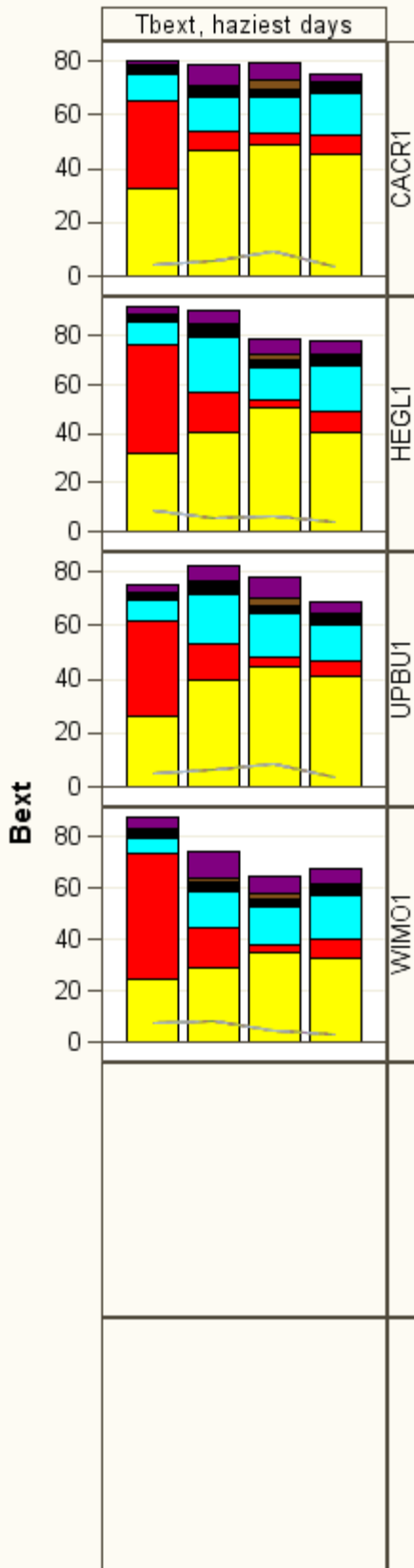
Hells Canyon Budgets



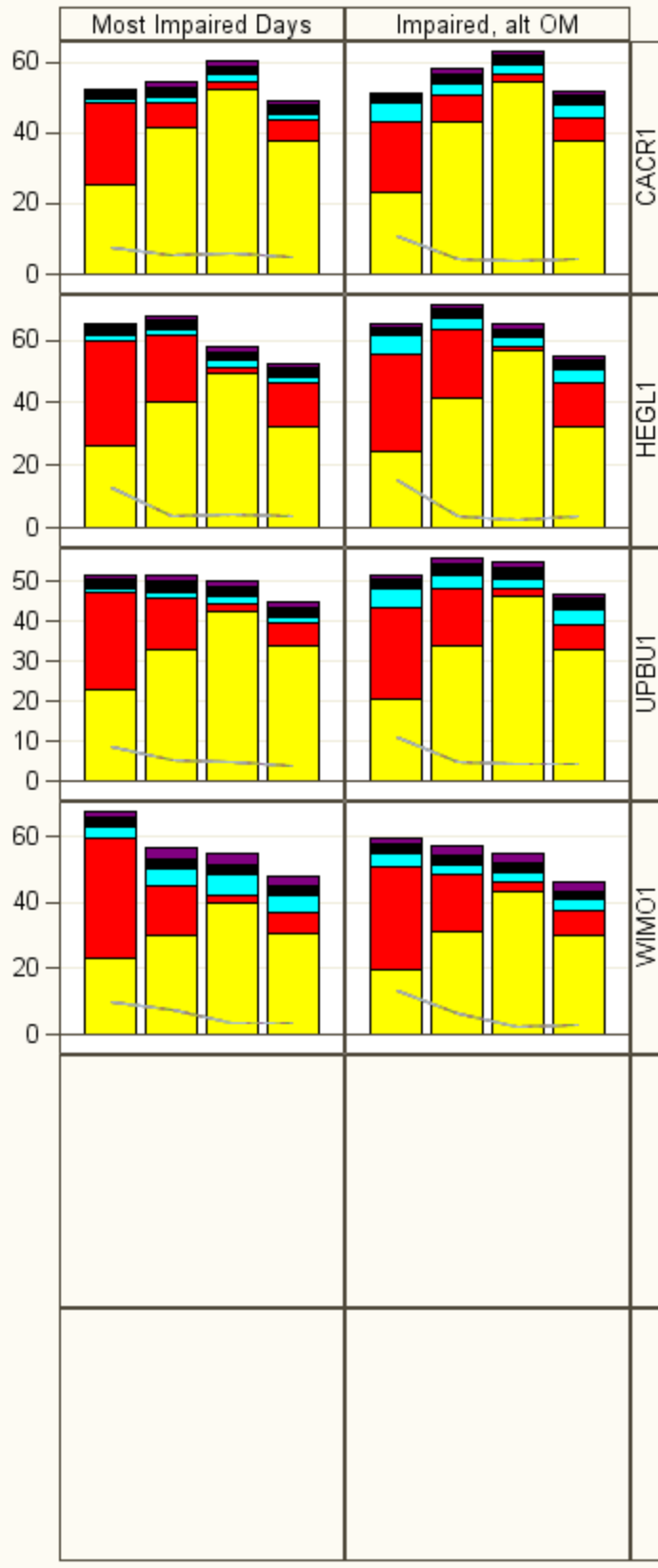
Hells Canyon Budgets



Mid South Budgets

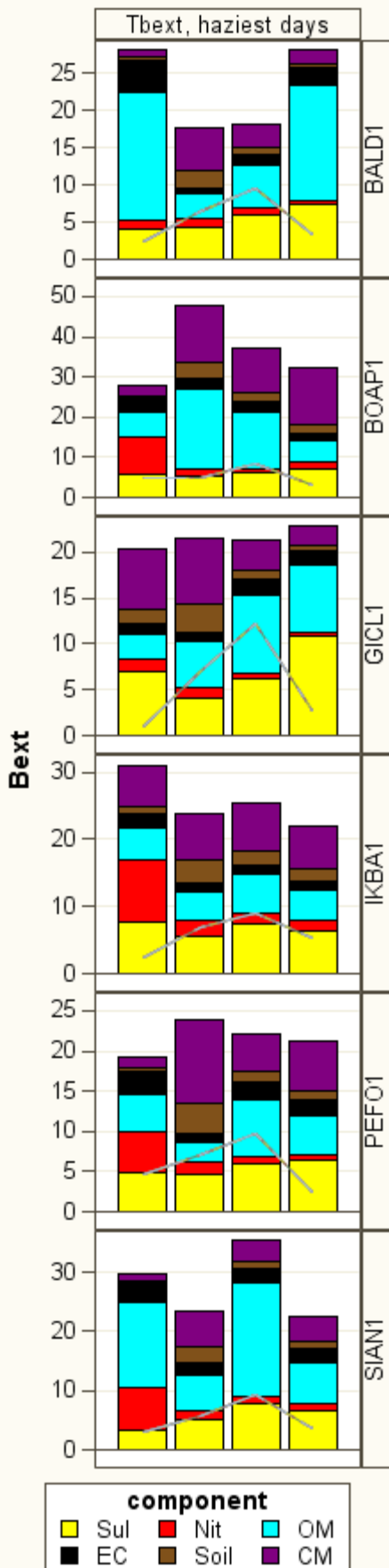


Mid South Budgets

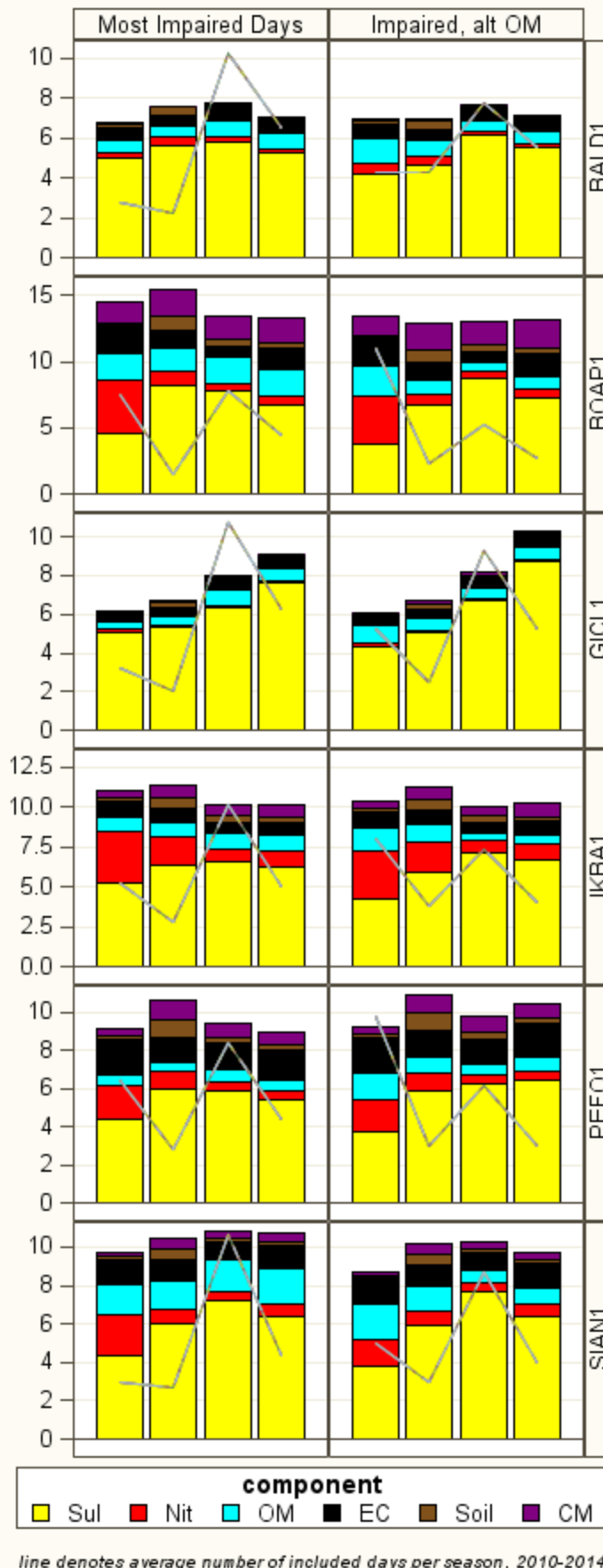


line denotes average number of included days per season, 2010-2014

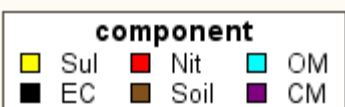
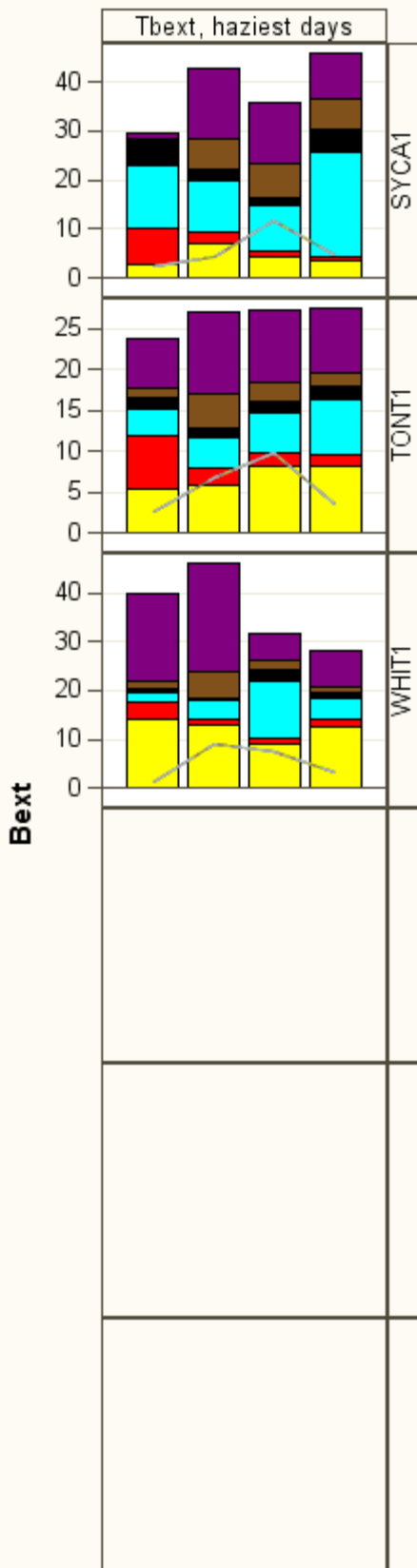
Mogollon Plateau Budgets



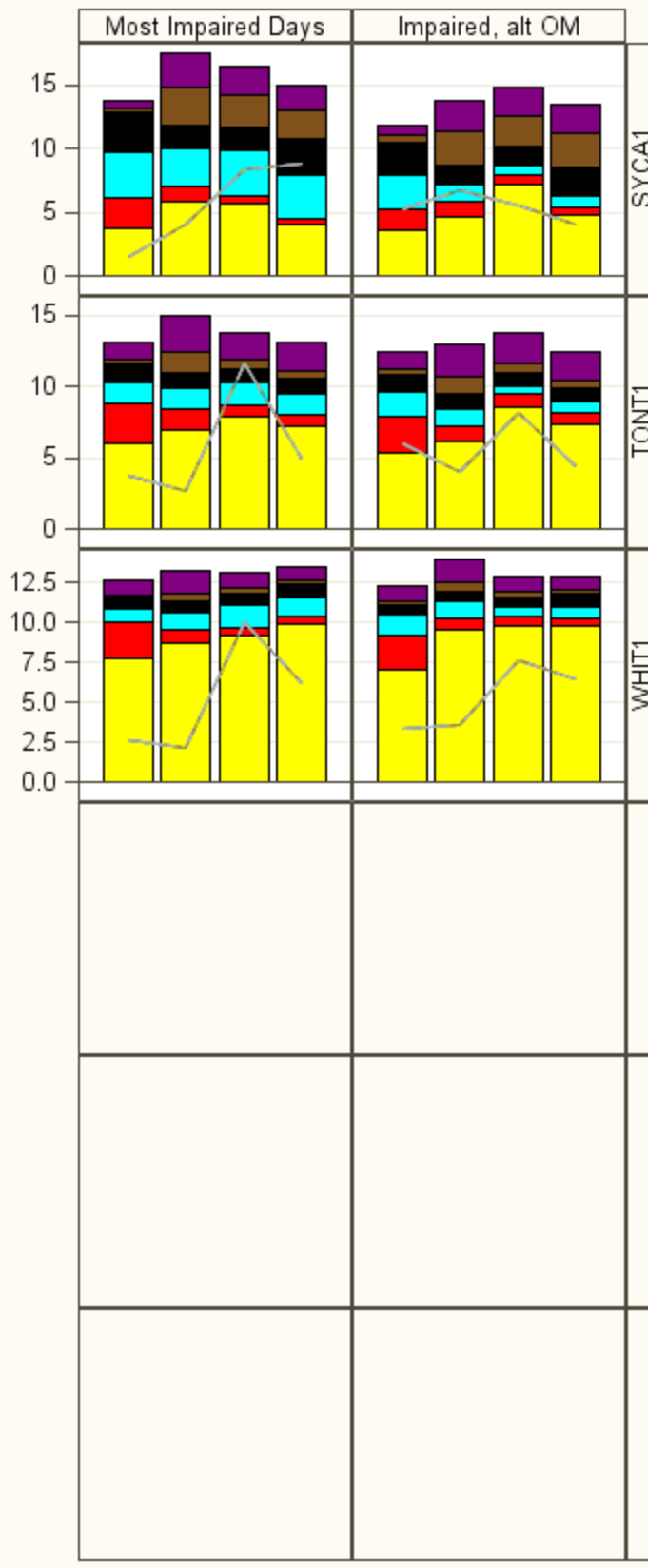
Mogollon Plateau Budgets



Mogollon Plateau Budgets

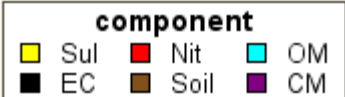
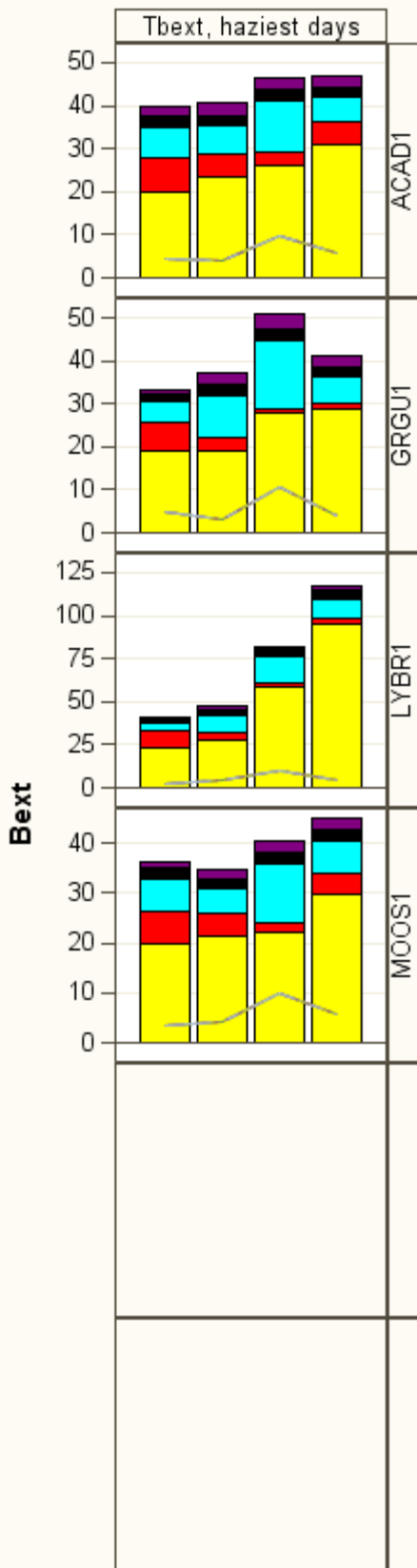


Mogollon Plateau Budgets

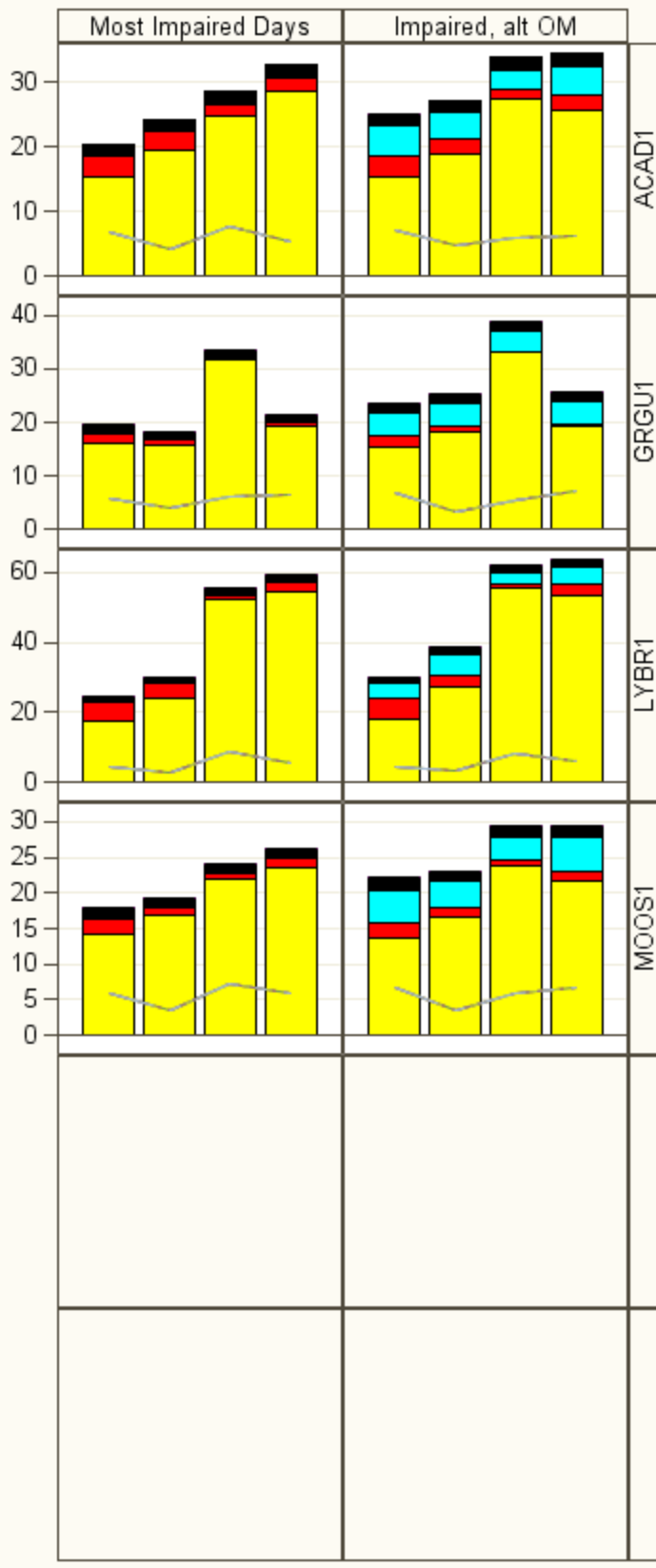


line denotes average number of included days per season, 2010-2014

Northeast Budgets

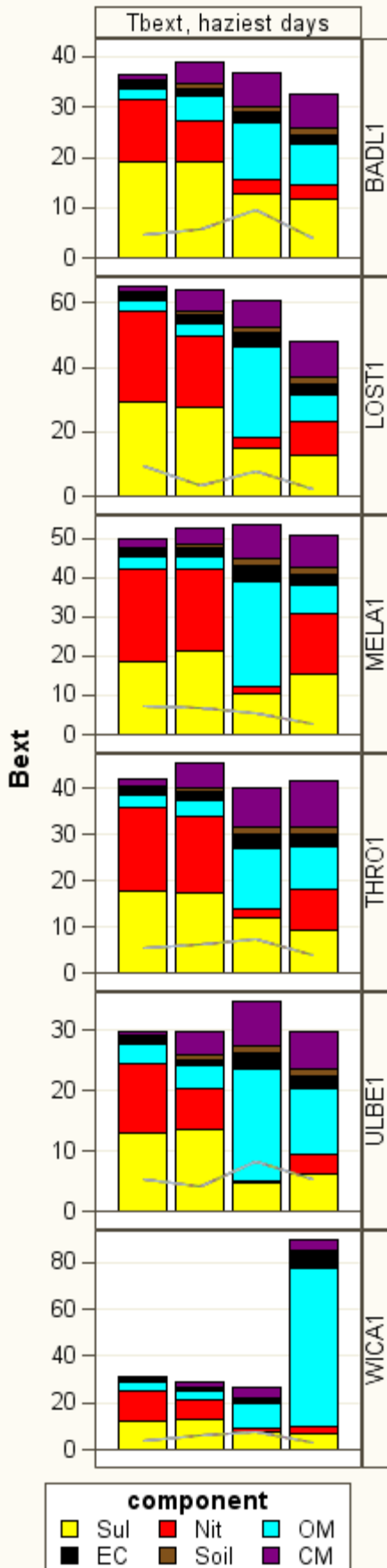


Northeast Budgets

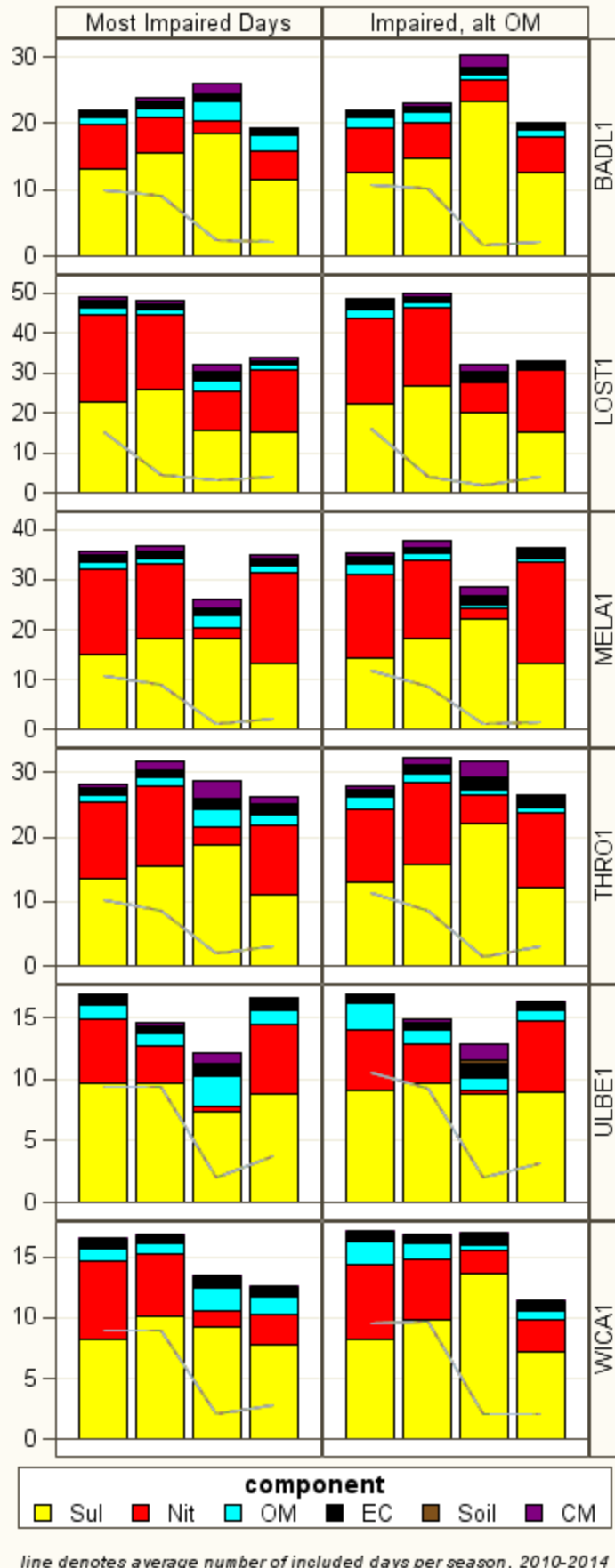


line denotes average number of included days per season, 2010-2014

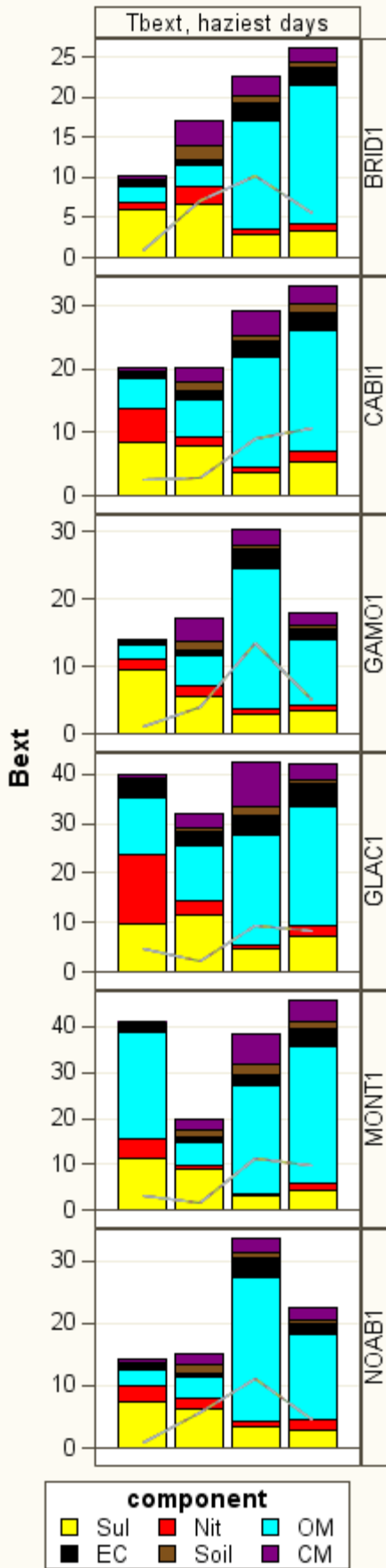
Northern Great Plains Budgets



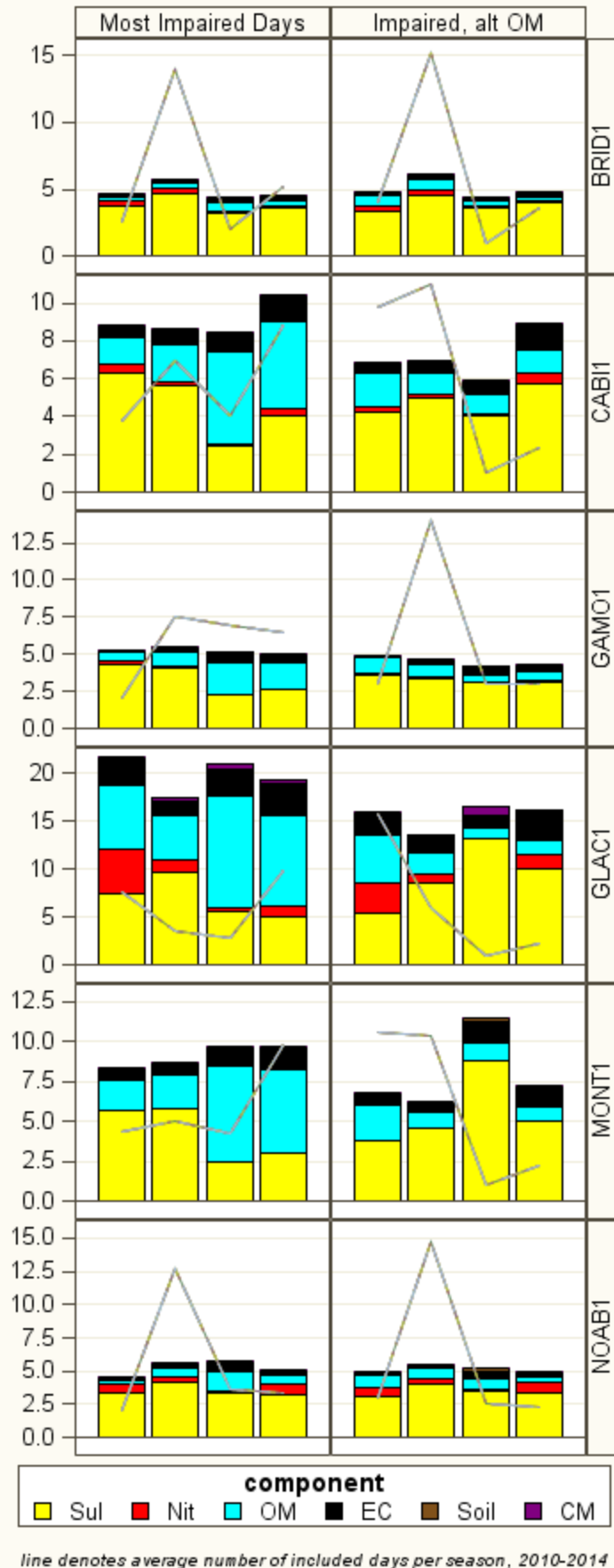
Northern Great Plains Budgets



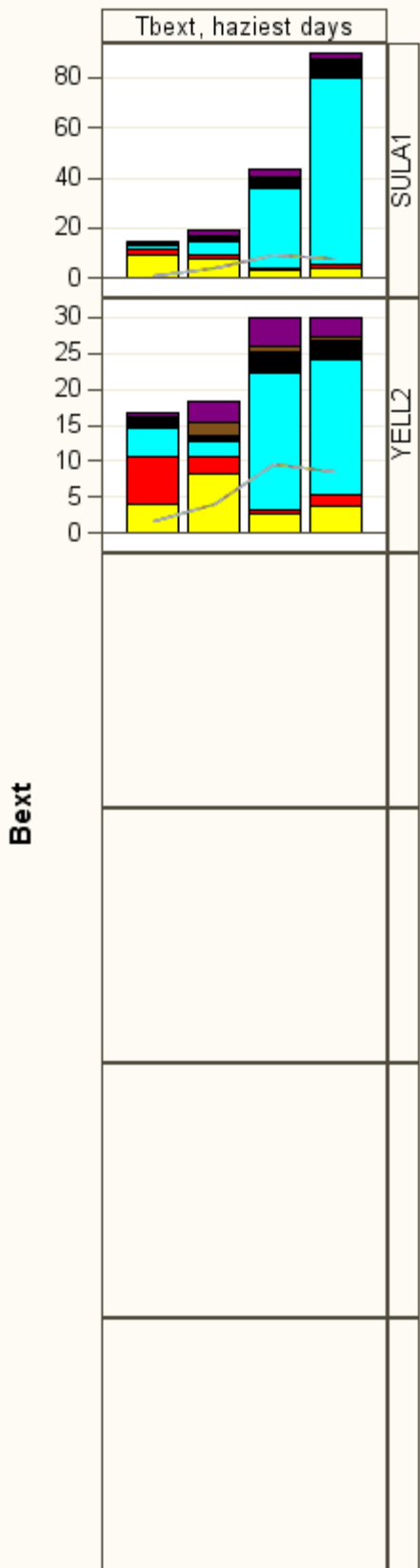
Northern Rockies Budgets



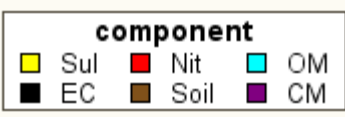
Northern Rockies Budgets



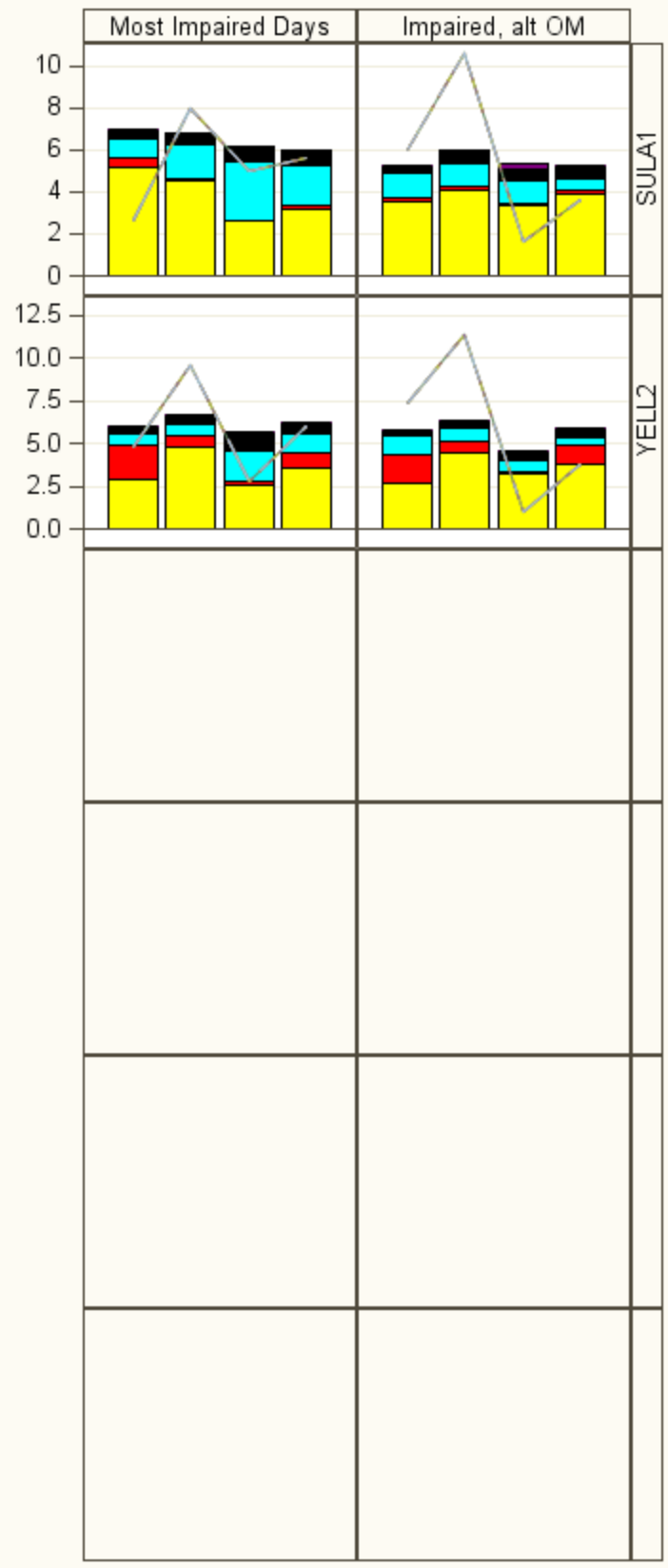
Northern Rockies Budgets



Bext

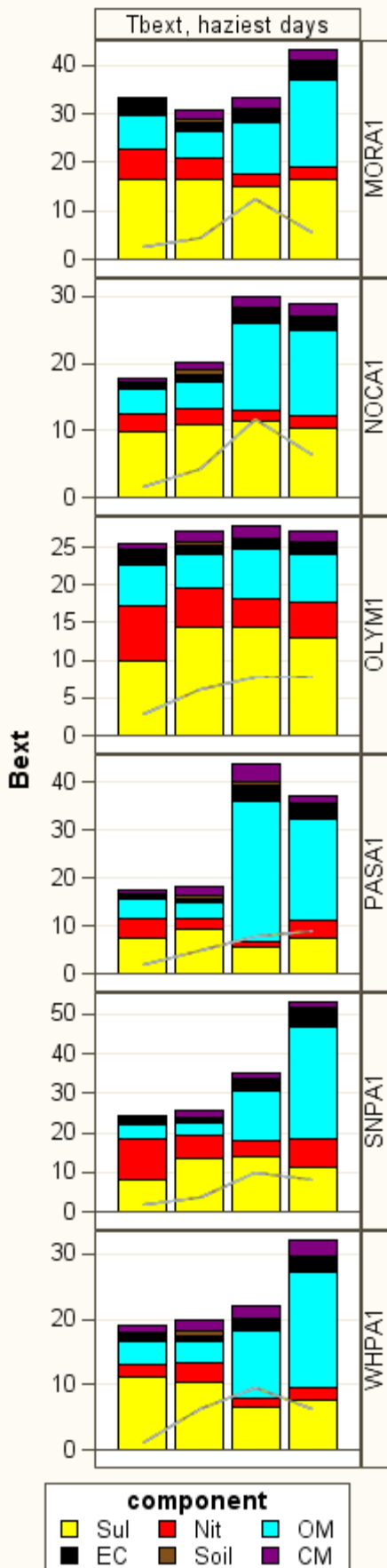


Northern Rockies Budgets

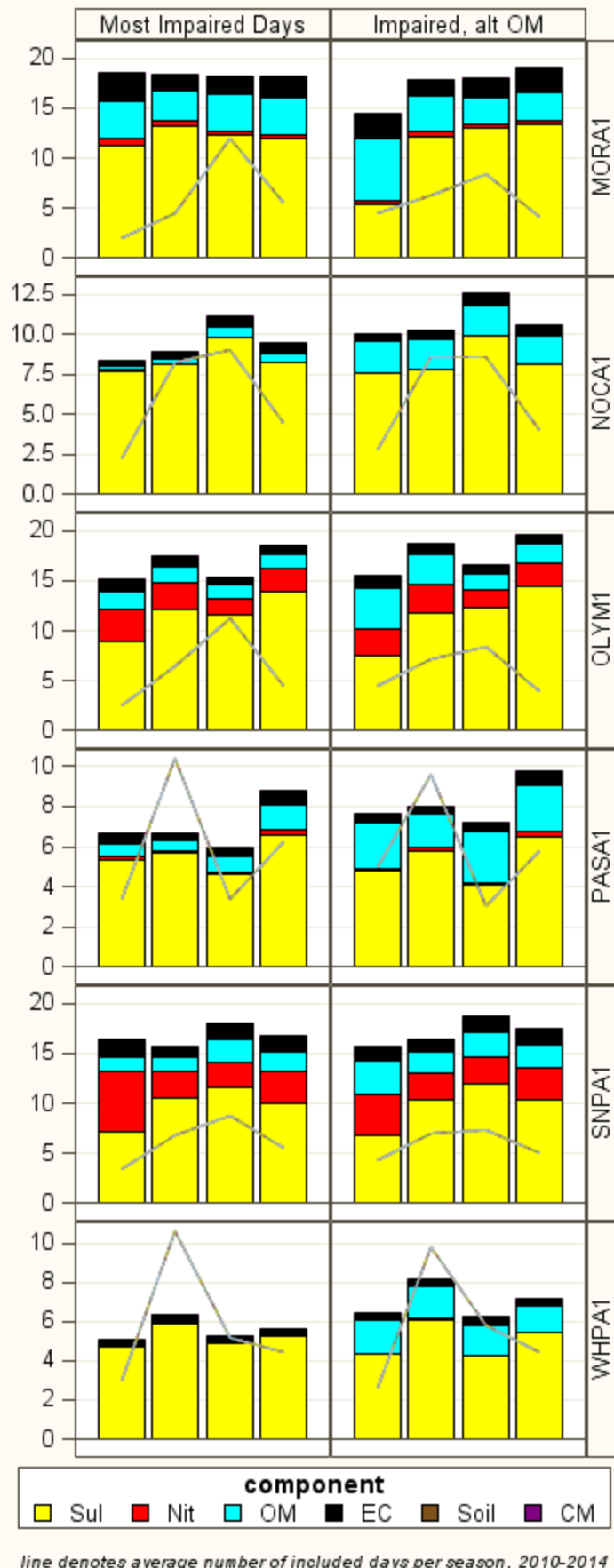


line denotes average number of included days per season, 2010-2014

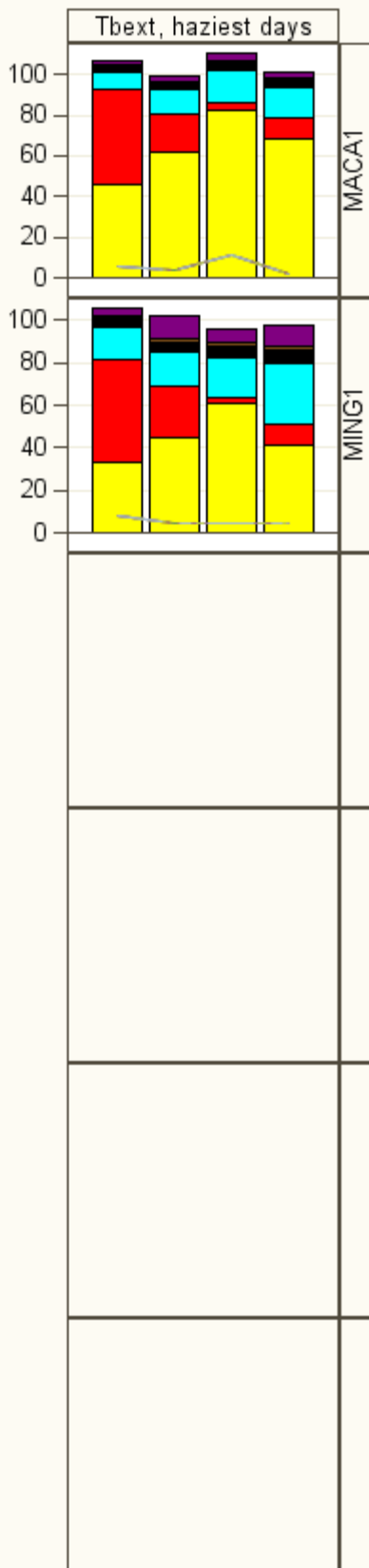
Northwest Budgets



Northwest Budgets

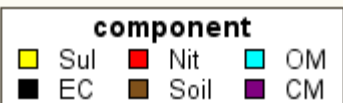
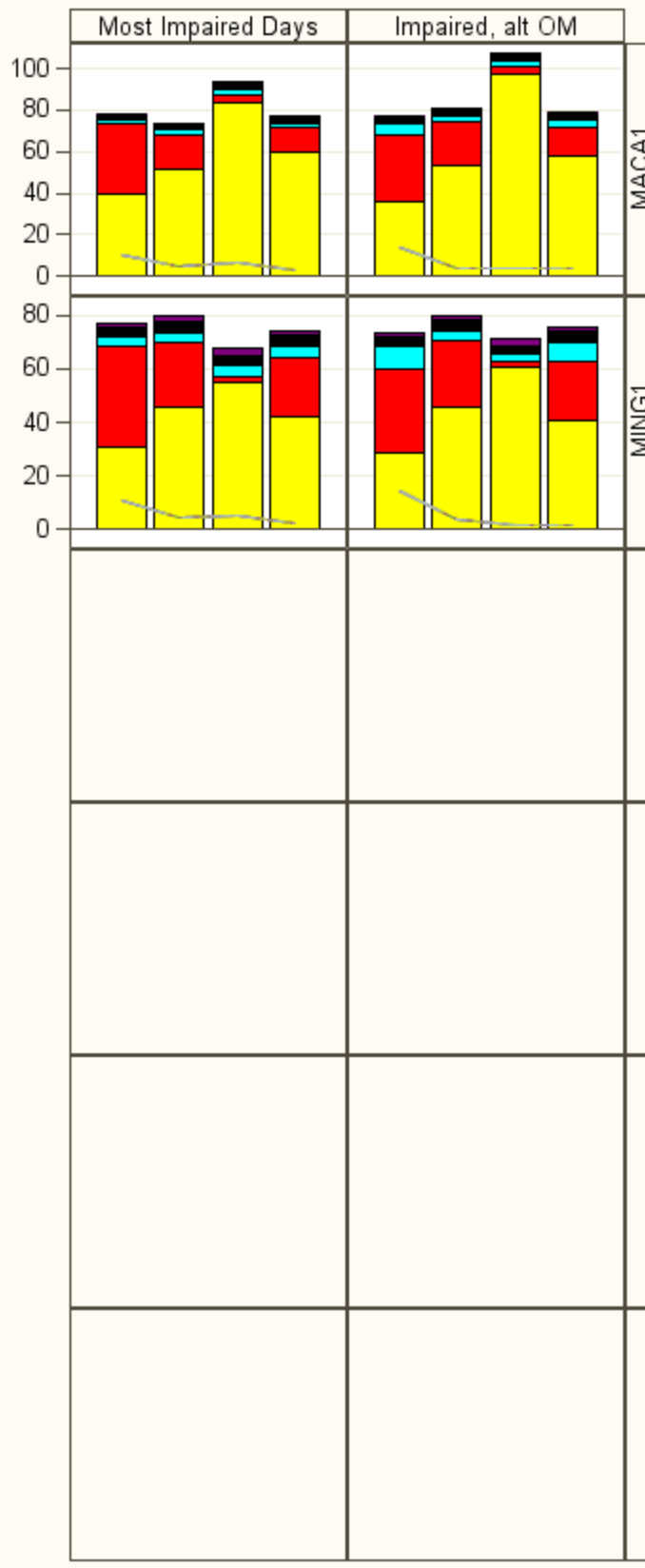


Ohio River Valley Budgets



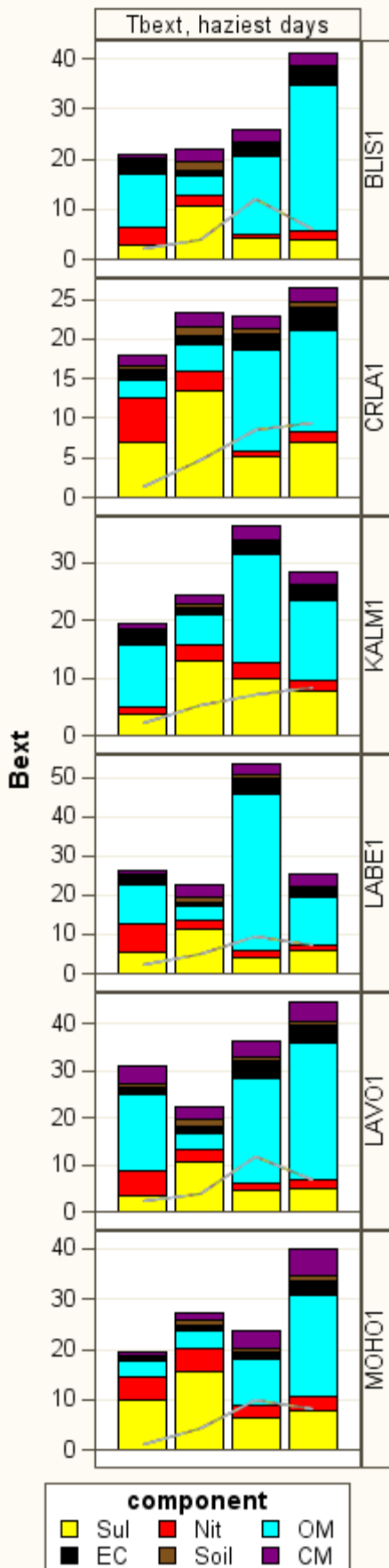
Bext

Ohio River Valley Budgets

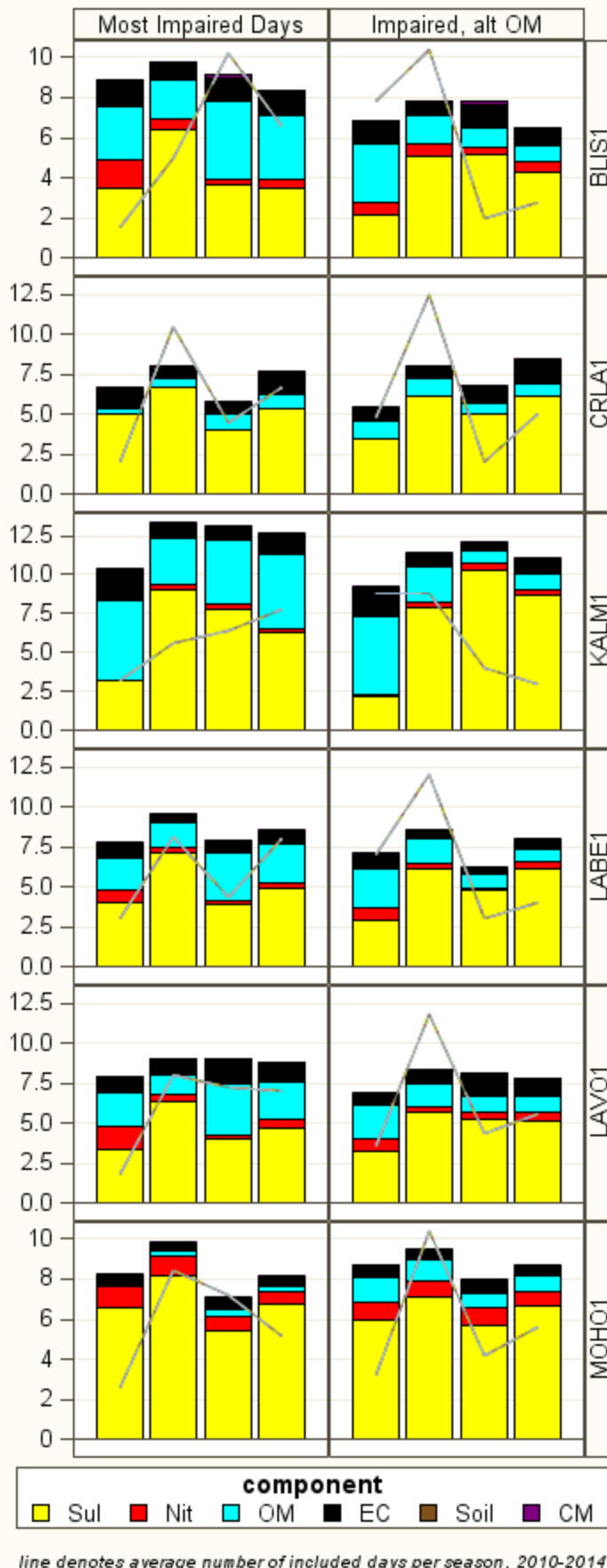


line denotes average number of included days per season, 2010-2014

Oregon and Northern C Budgets

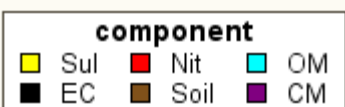
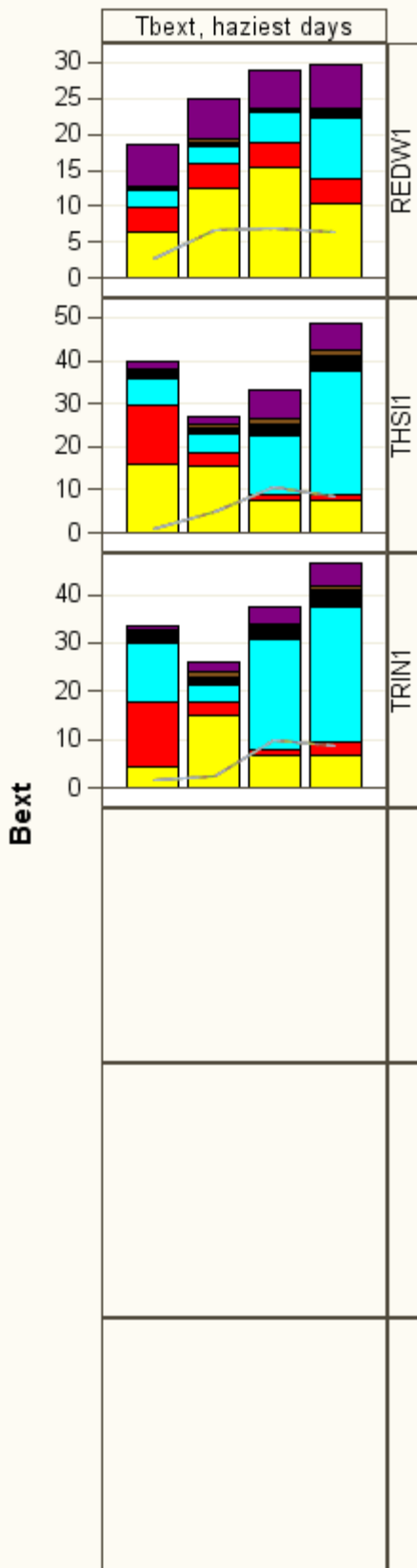


Oregon and Northern C Budgets

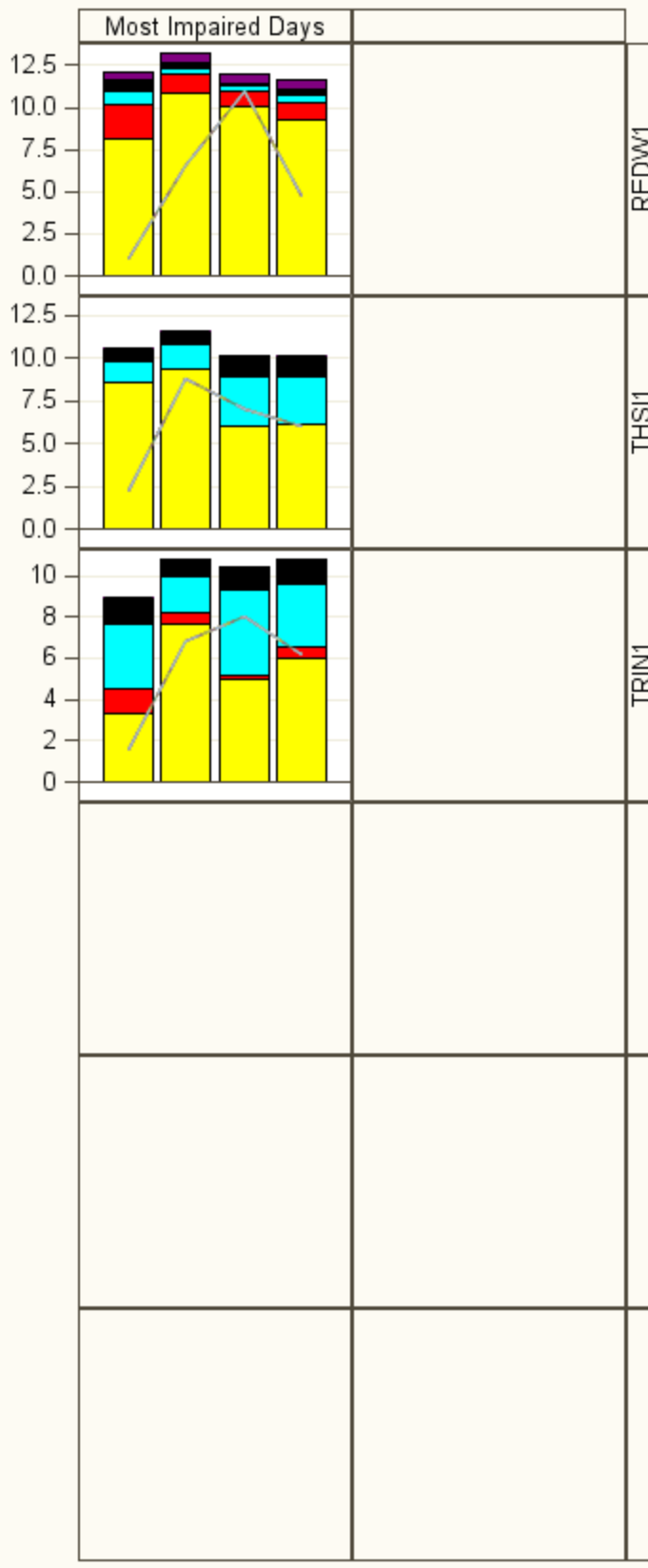


line denotes average number of included days per season, 2010-2014

Puget Sound Budgets

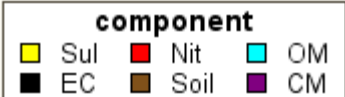
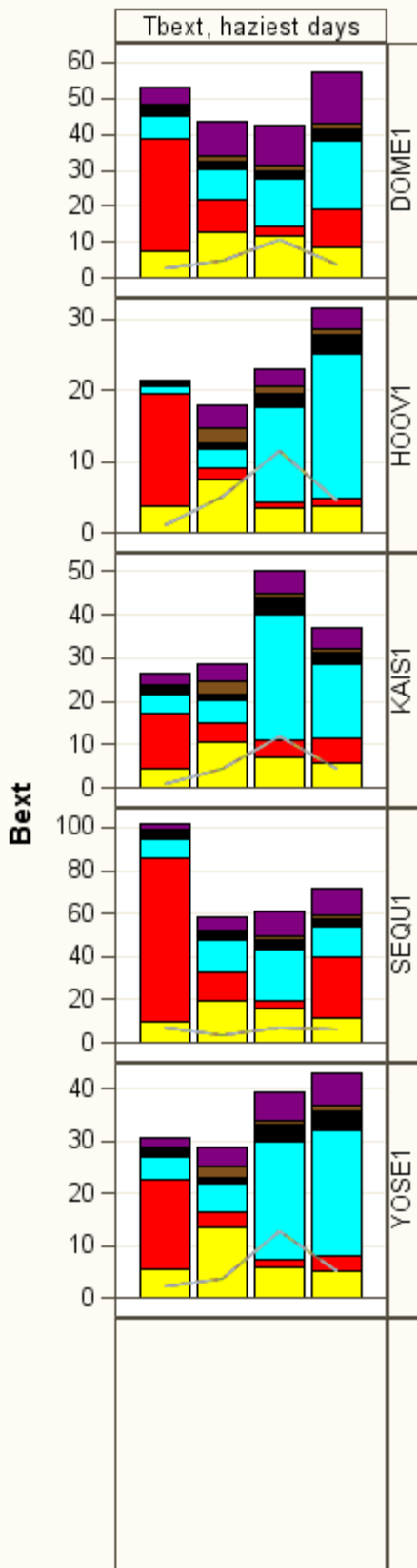


Puget Sound Budgets

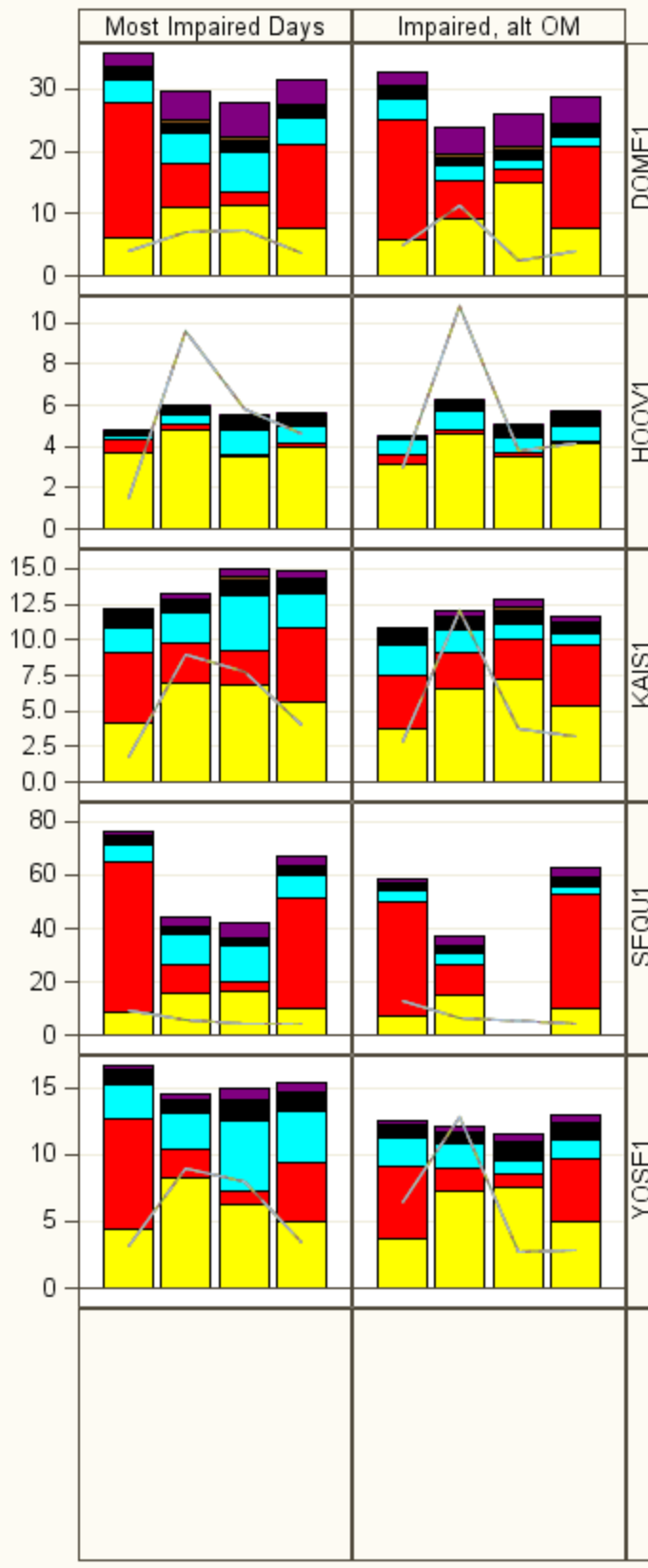


line denotes average number of included days per season, 2010-2014

Sierra Nevadas Budgets

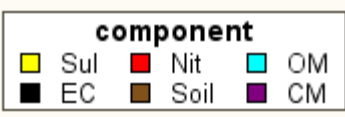
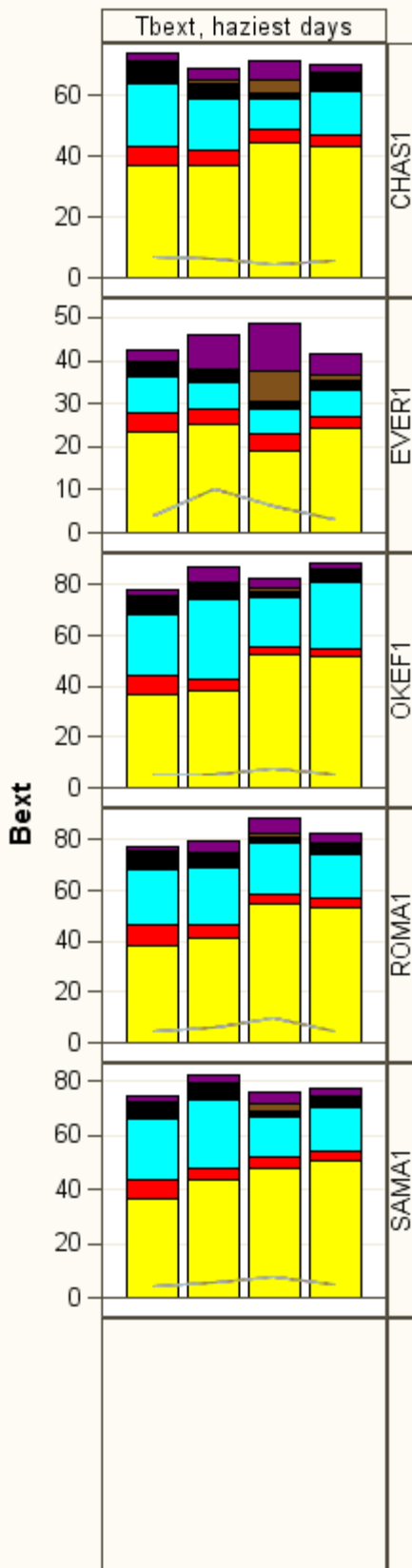


Sierra Nevadas Budgets

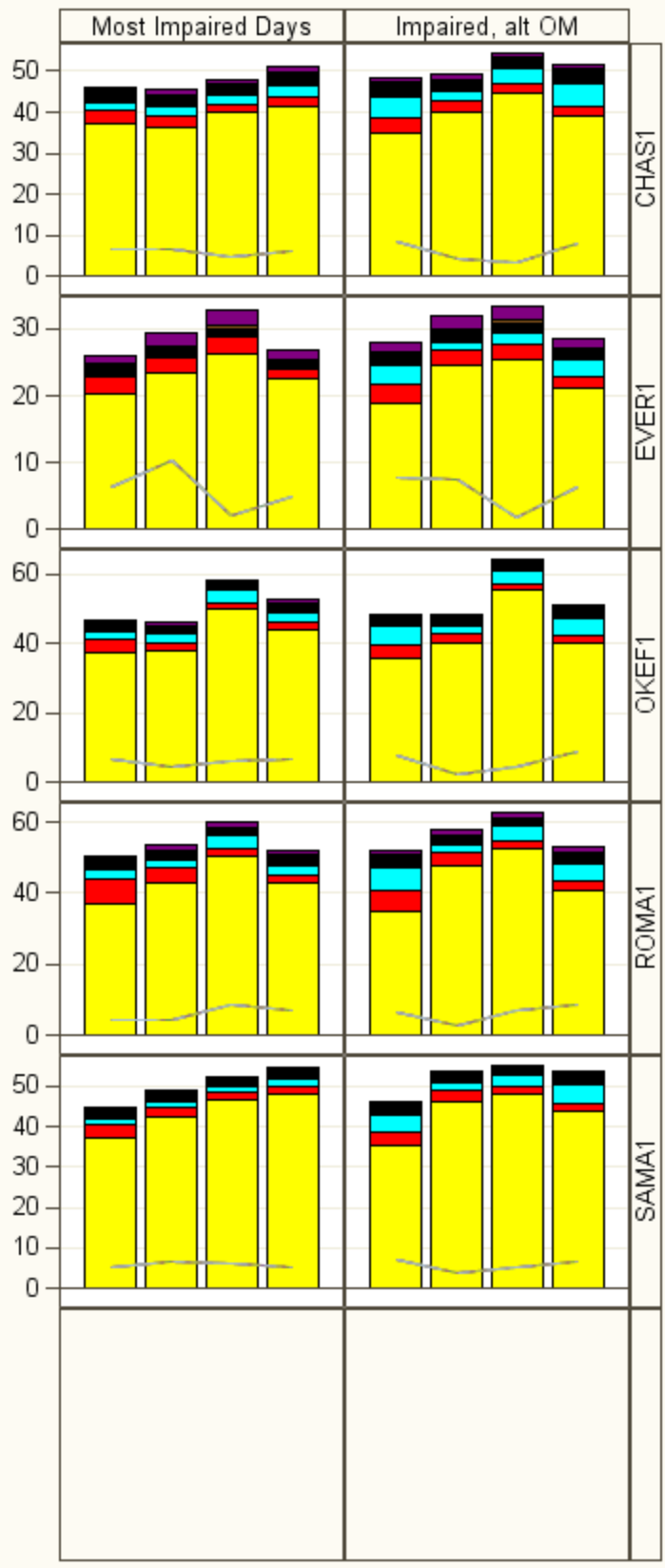


line denotes average number of included days per season, 2010-2014

Southeast Budgets

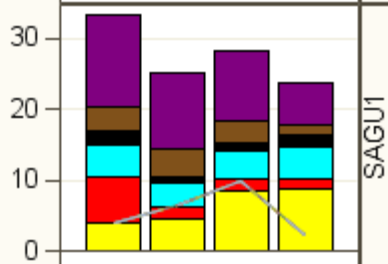
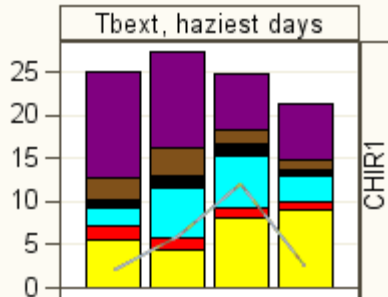


Southeast Budgets

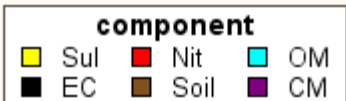


line denotes average number of included days per season, 2010-2014

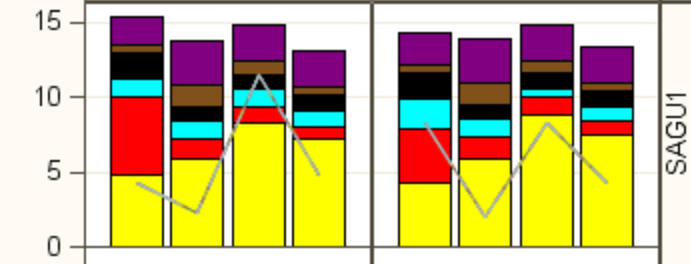
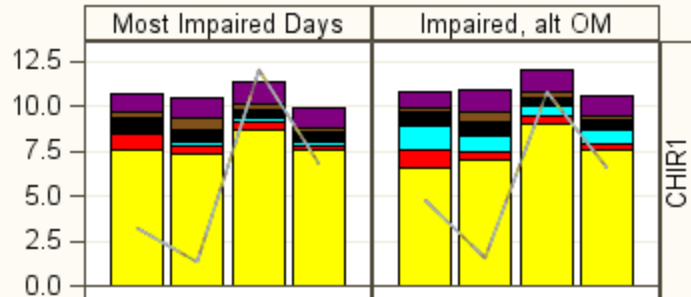
Southern Arizona Budgets



Bext

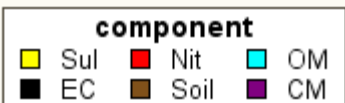
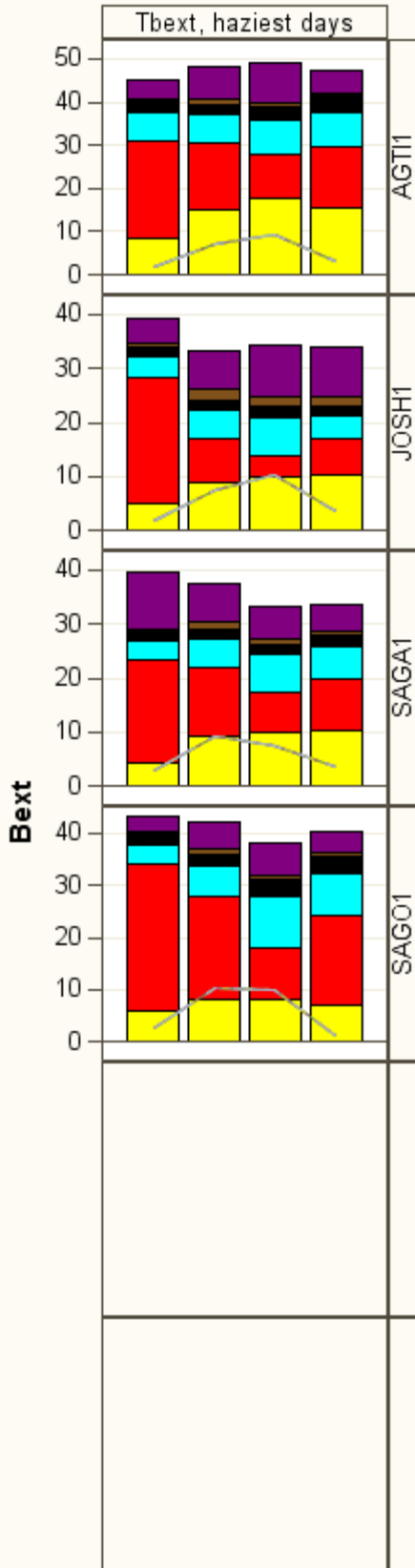


Southern Arizona Budgets

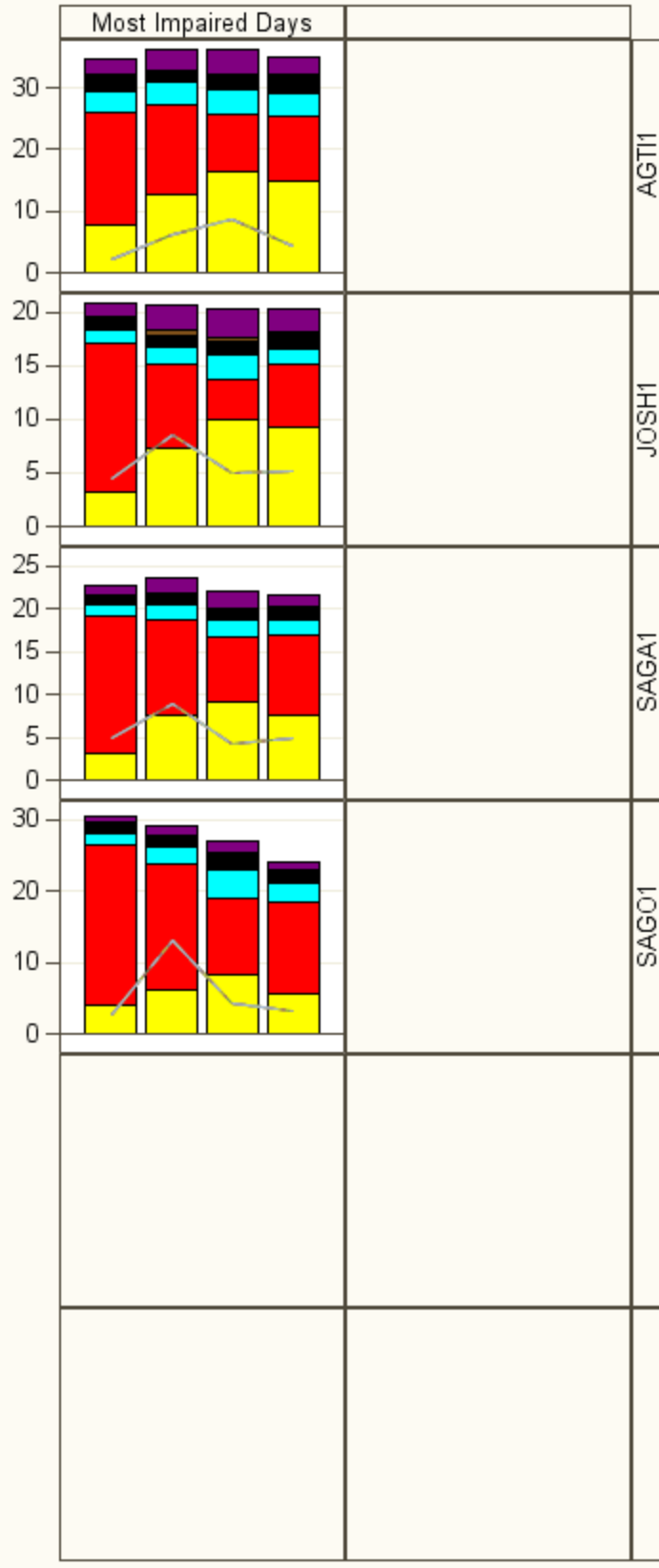


line denotes average number of included days per season, 2010-2014

Southern California Budgets

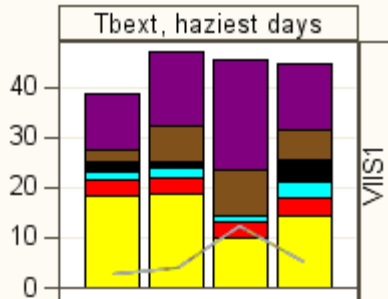


Southern California Budgets

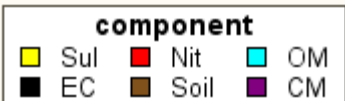


line denotes average number of included days per season, 2010-2014

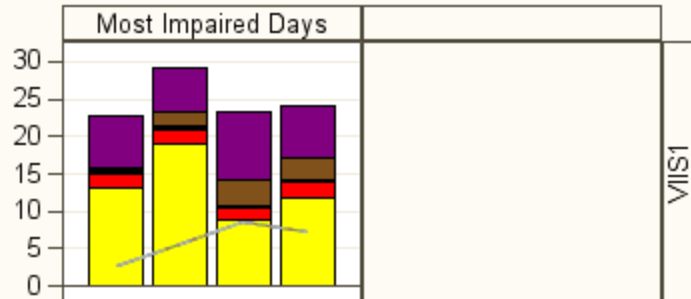
Virgin Islands Budgets



Bext

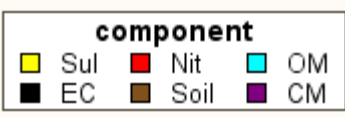
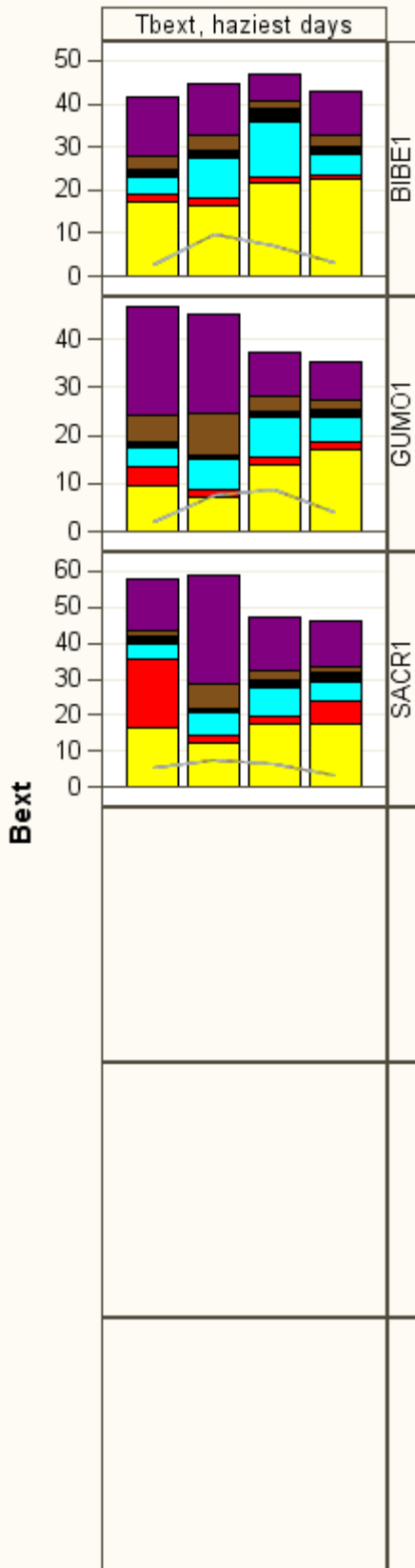


Virgin Islands Budgets

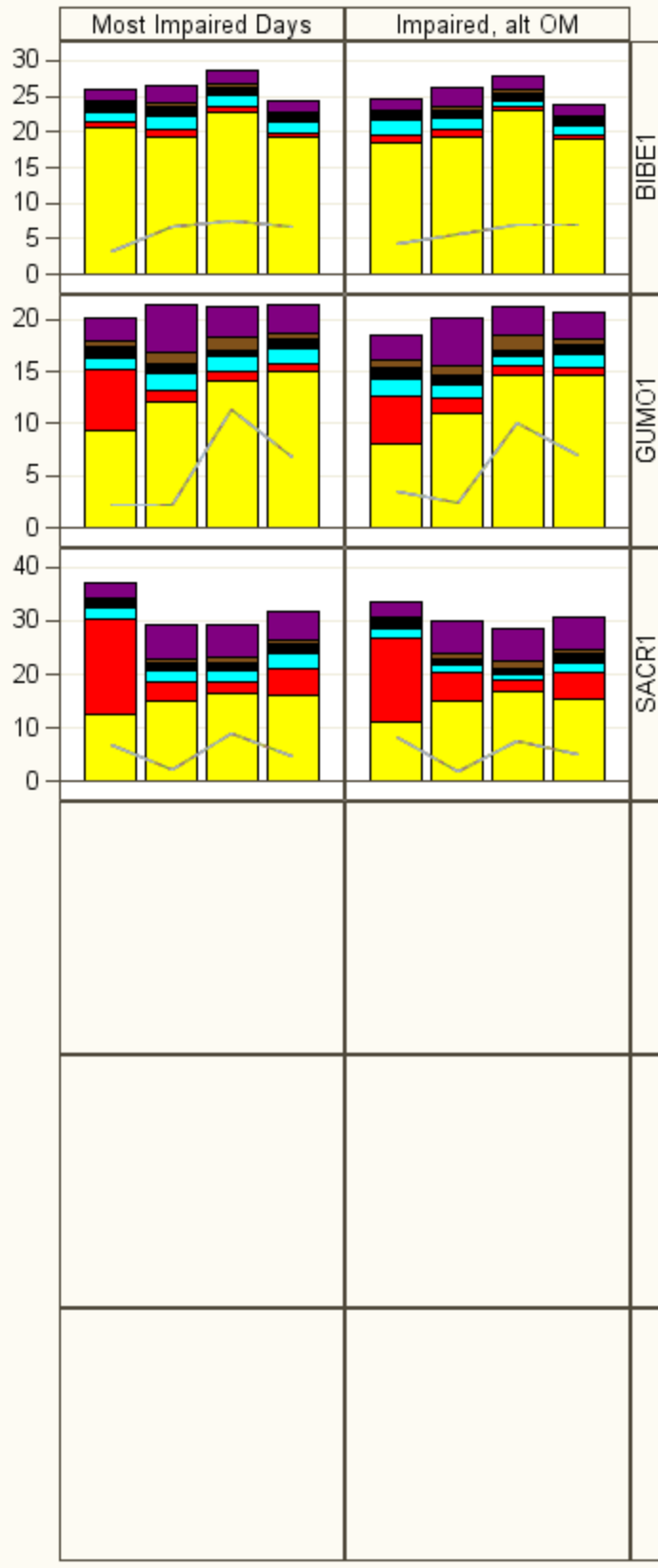


line denotes average number of included days per season, 2010-2014

West Texas Budgets



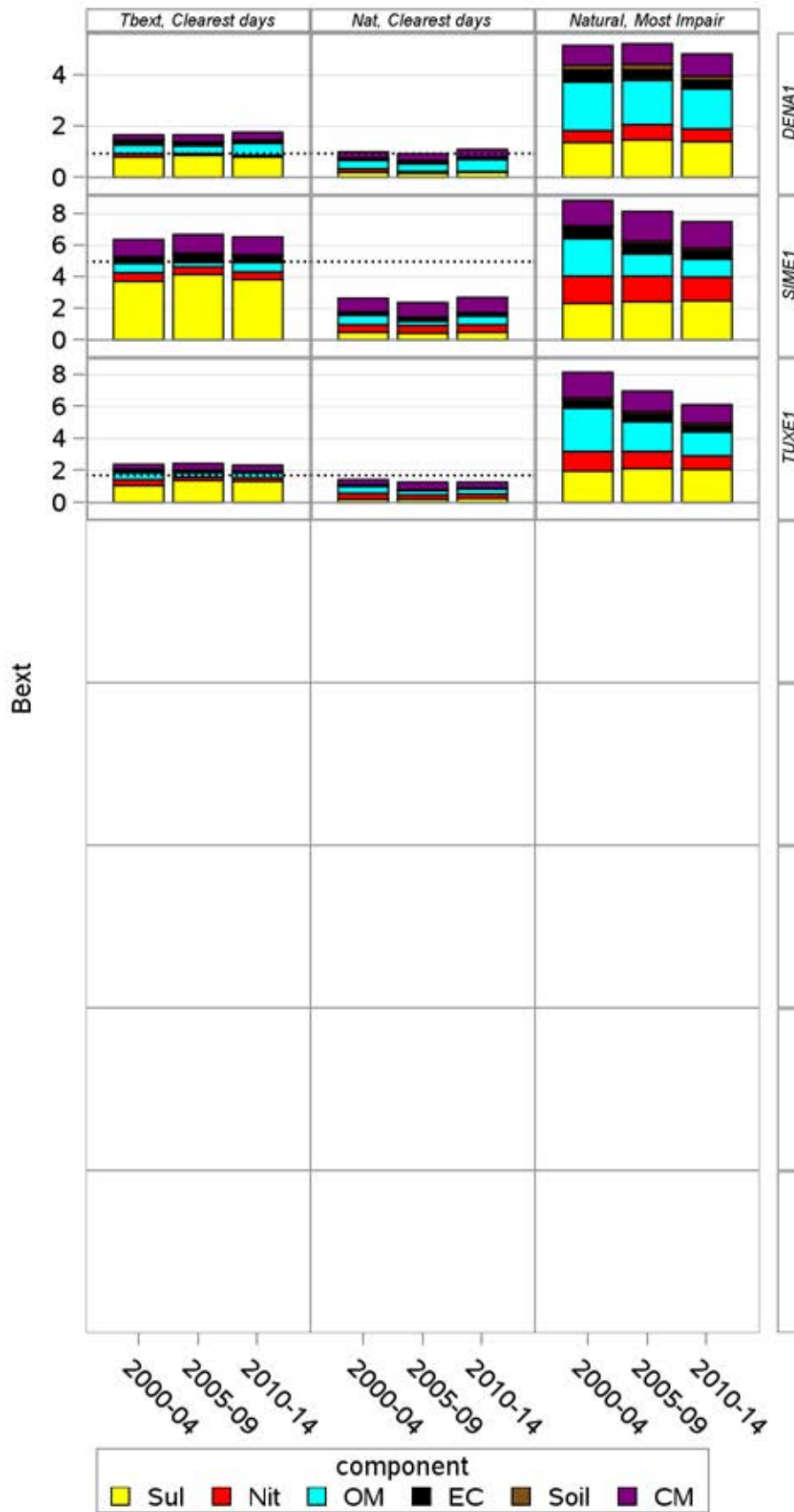
West Texas Budgets



line denotes average number of included days per season, 2010-2014

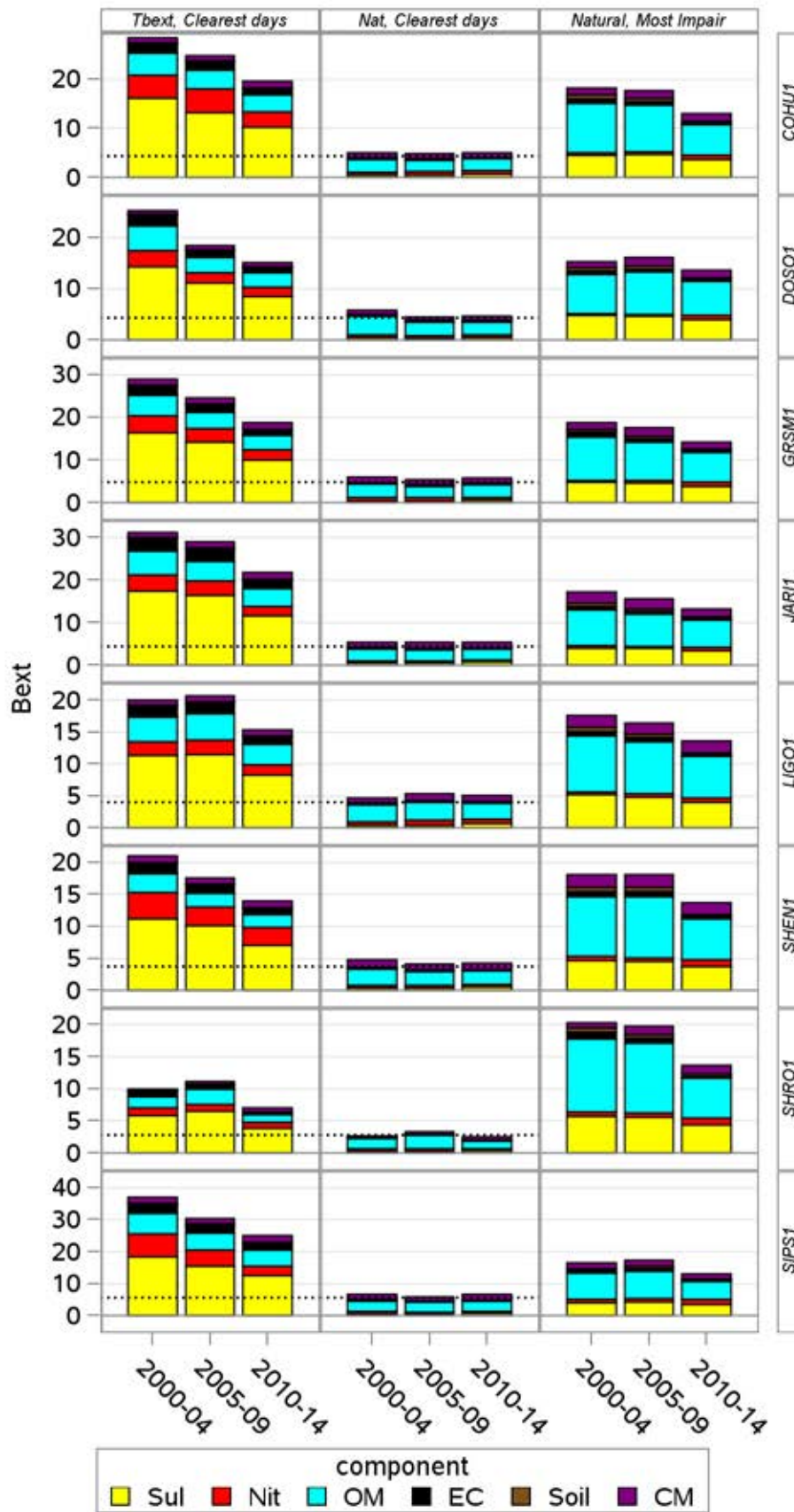
Appendix I: Trends in clearest days and estimated natural conditions by site, 5-year average extinction budgets

Alaska Budgets - 2000-2004, 2005-2009, 2010-2014



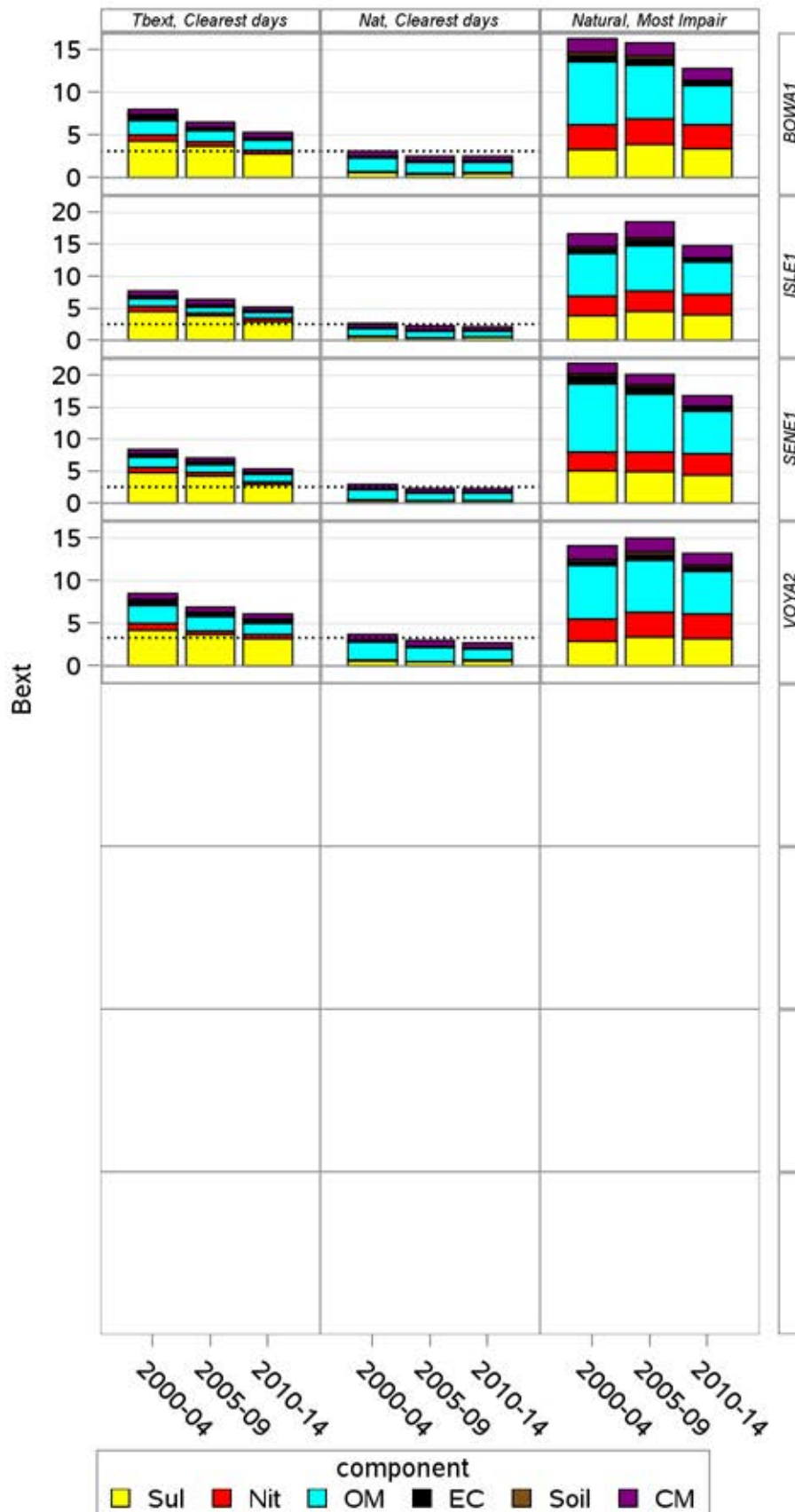
The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

Appalachia Budgets - 2000-2004, 2005-2009, 2010-2014



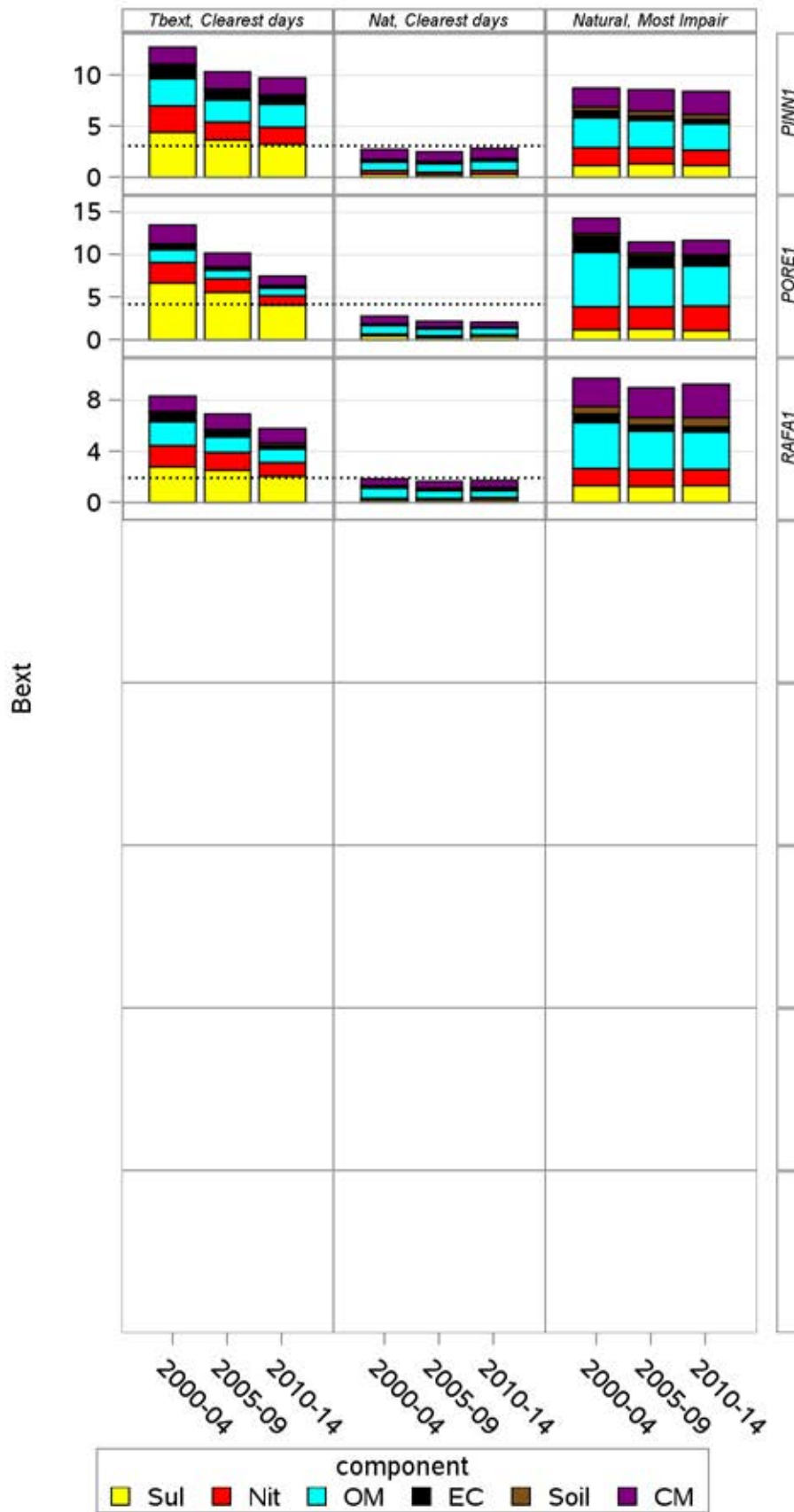
The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

Boundary Waters Budgets - 2000-2004, 2005-2009, 2010-2014



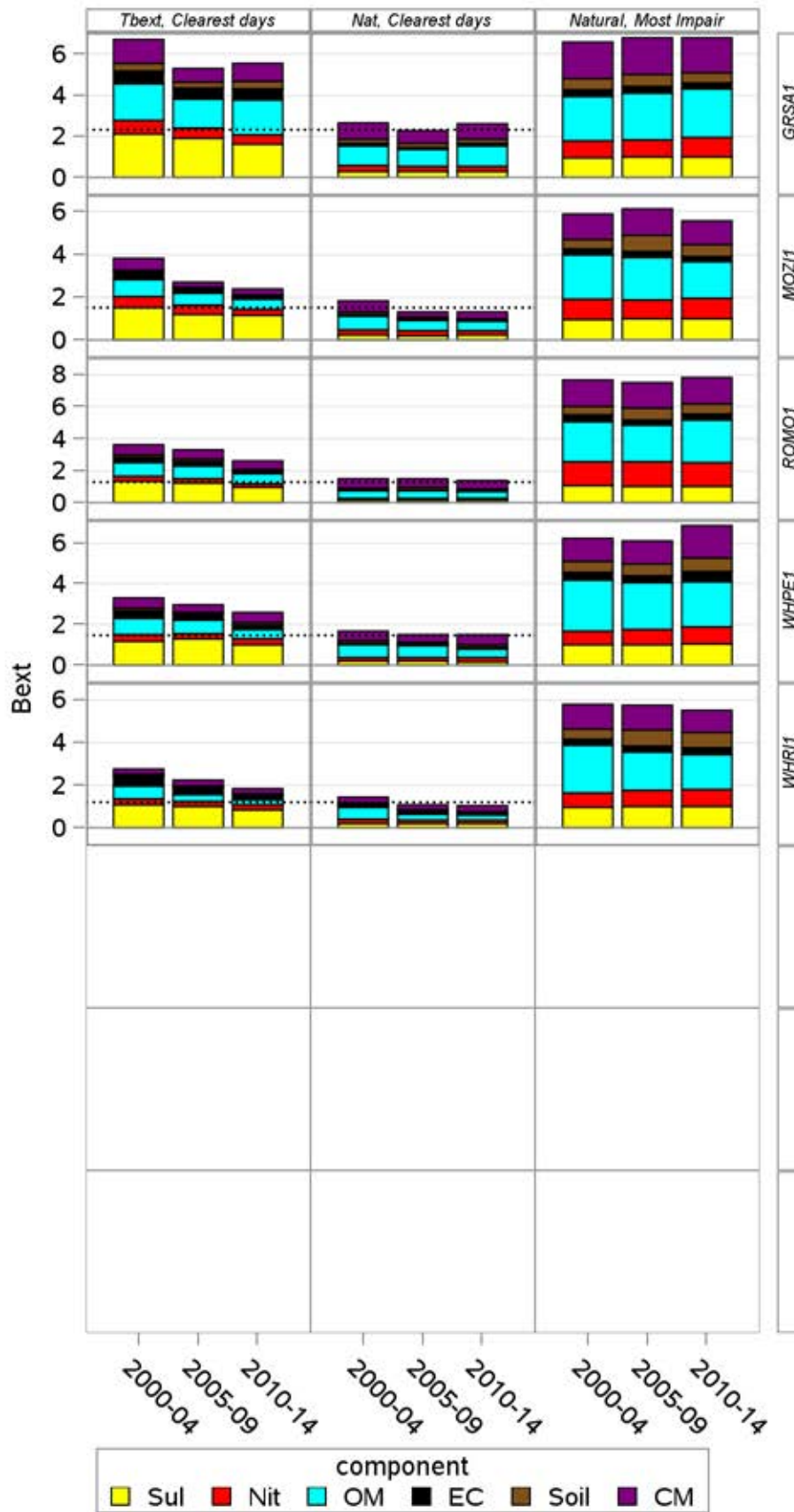
The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

California Coast Budgets - 2000-2004, 2005-2009, 2010-2014



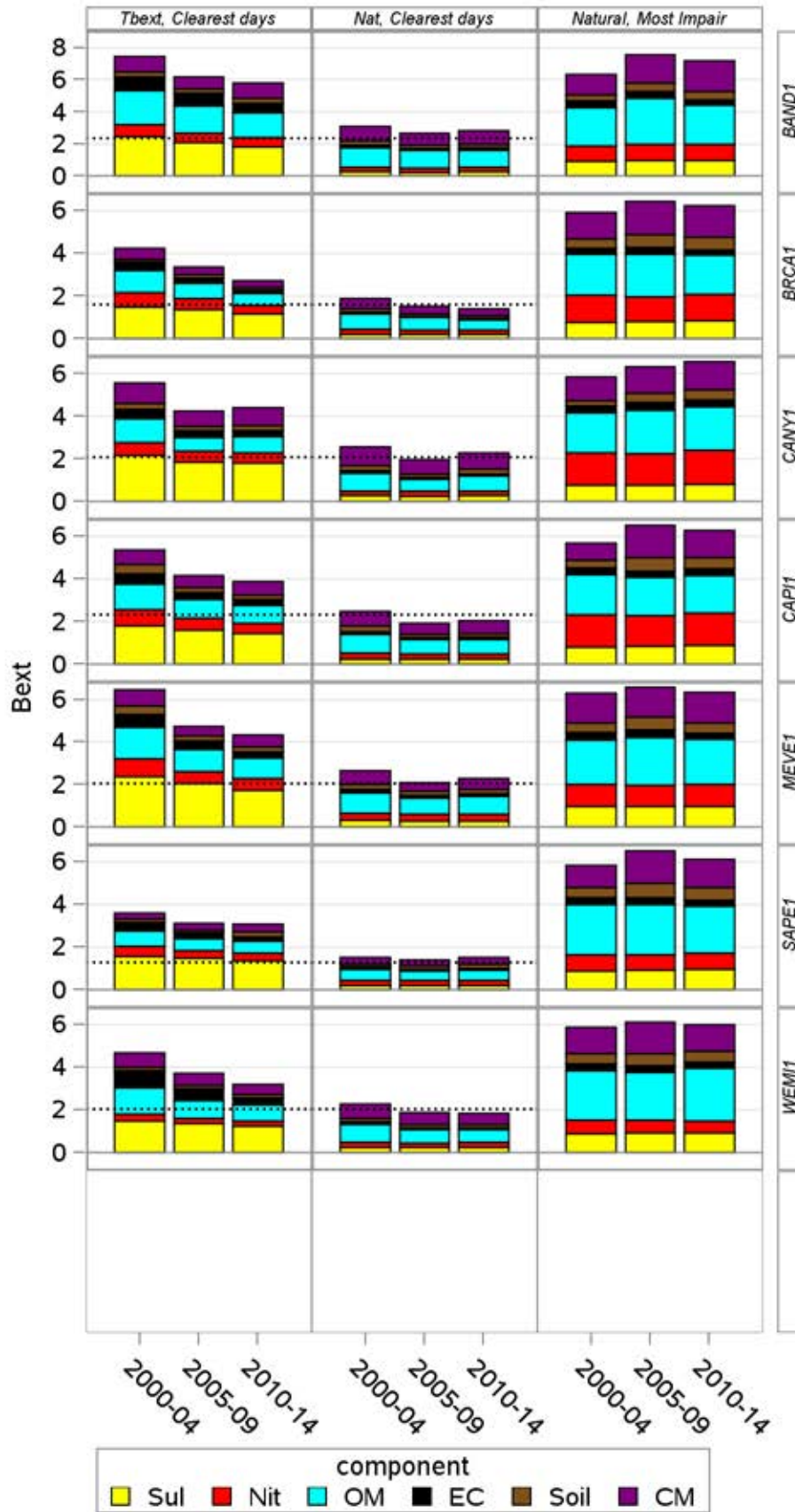
The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

Central Rockies Budgets - 2000-2004, 2005-2009, 2010-2014



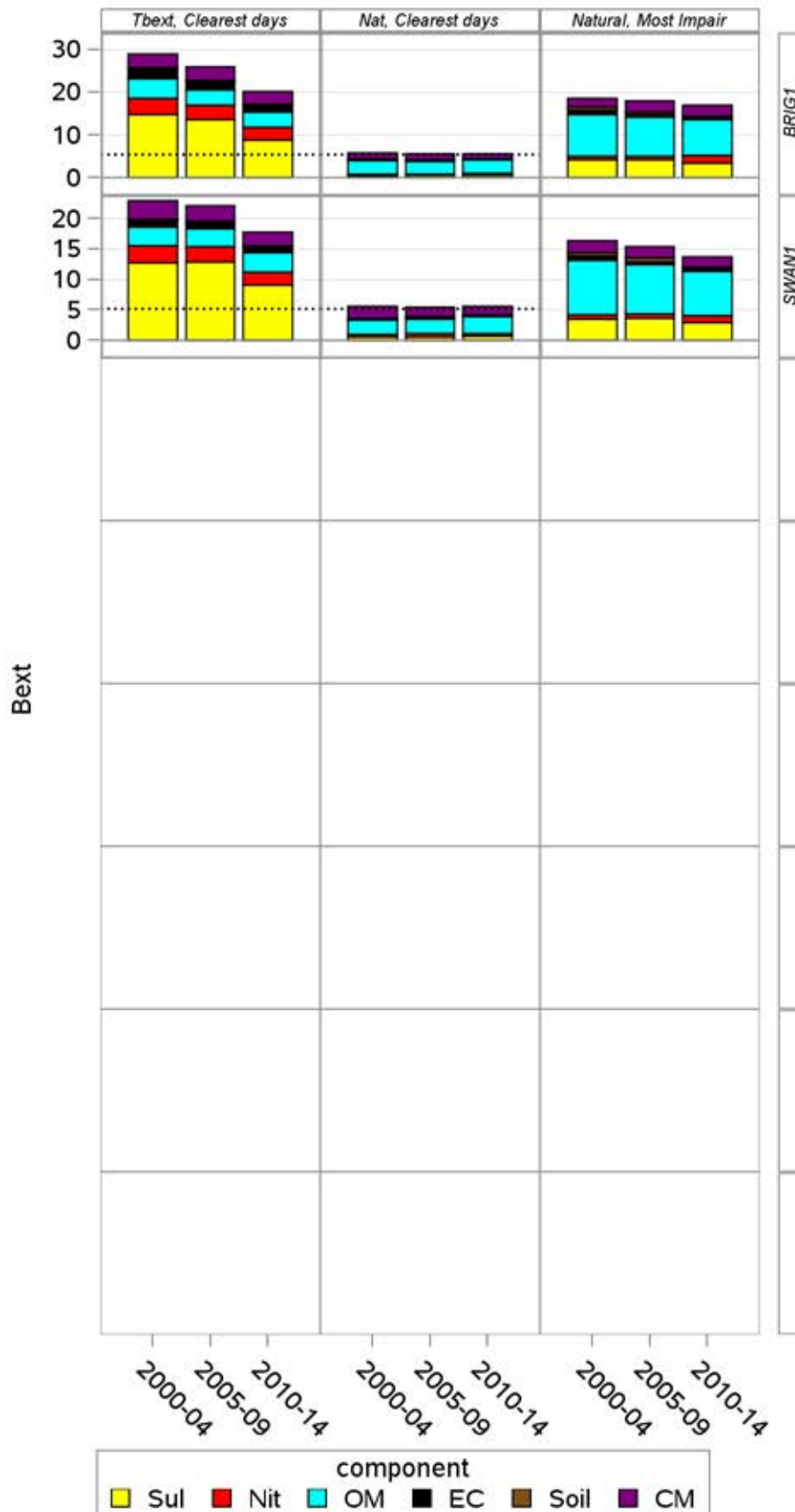
The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

Colorado Plateau Budgets - 2000-2004, 2005-2009, 2010-2014



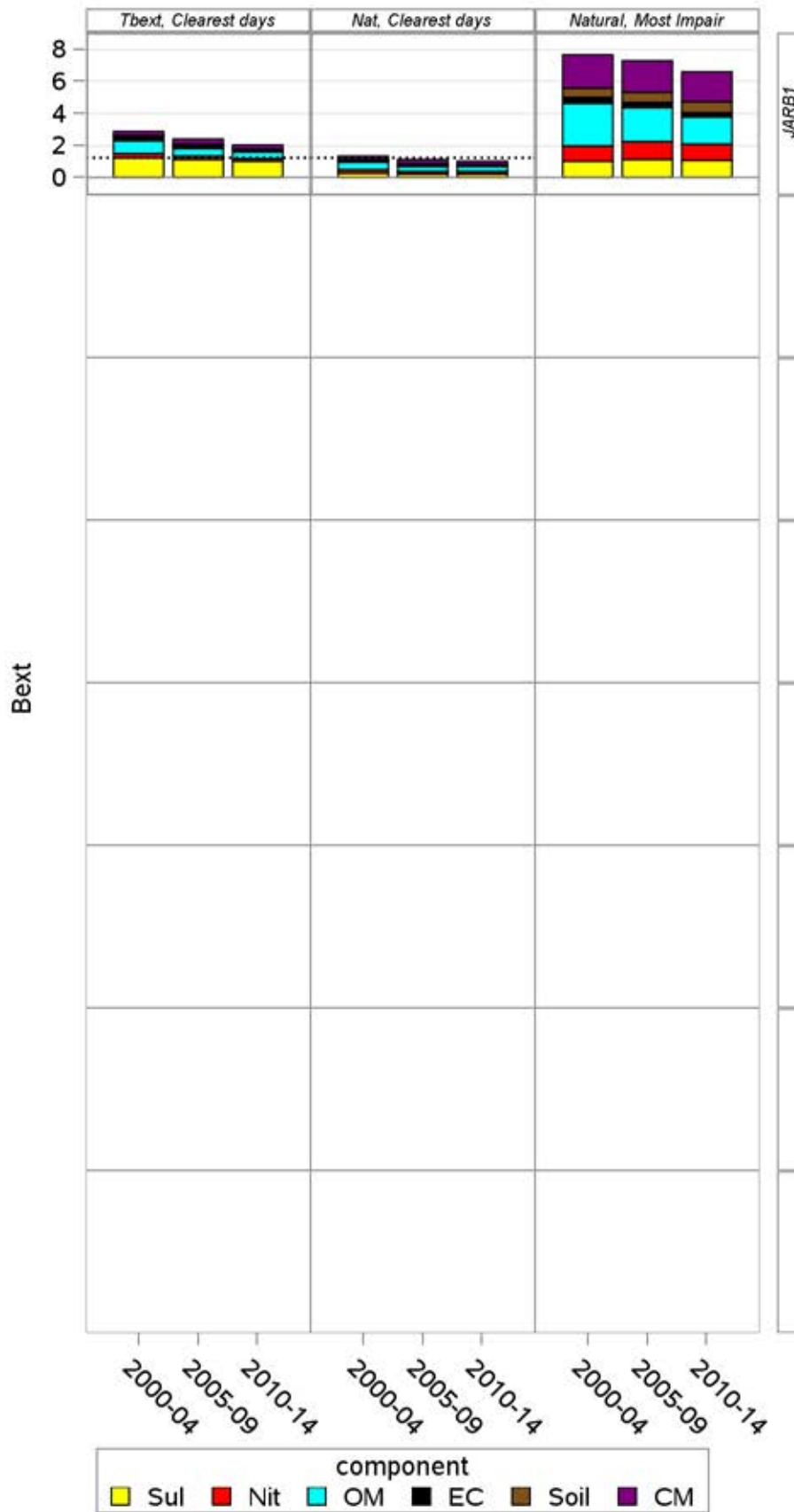
The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

East Coast Budgets - 2000-2004, 2005-2009, 2010-2014



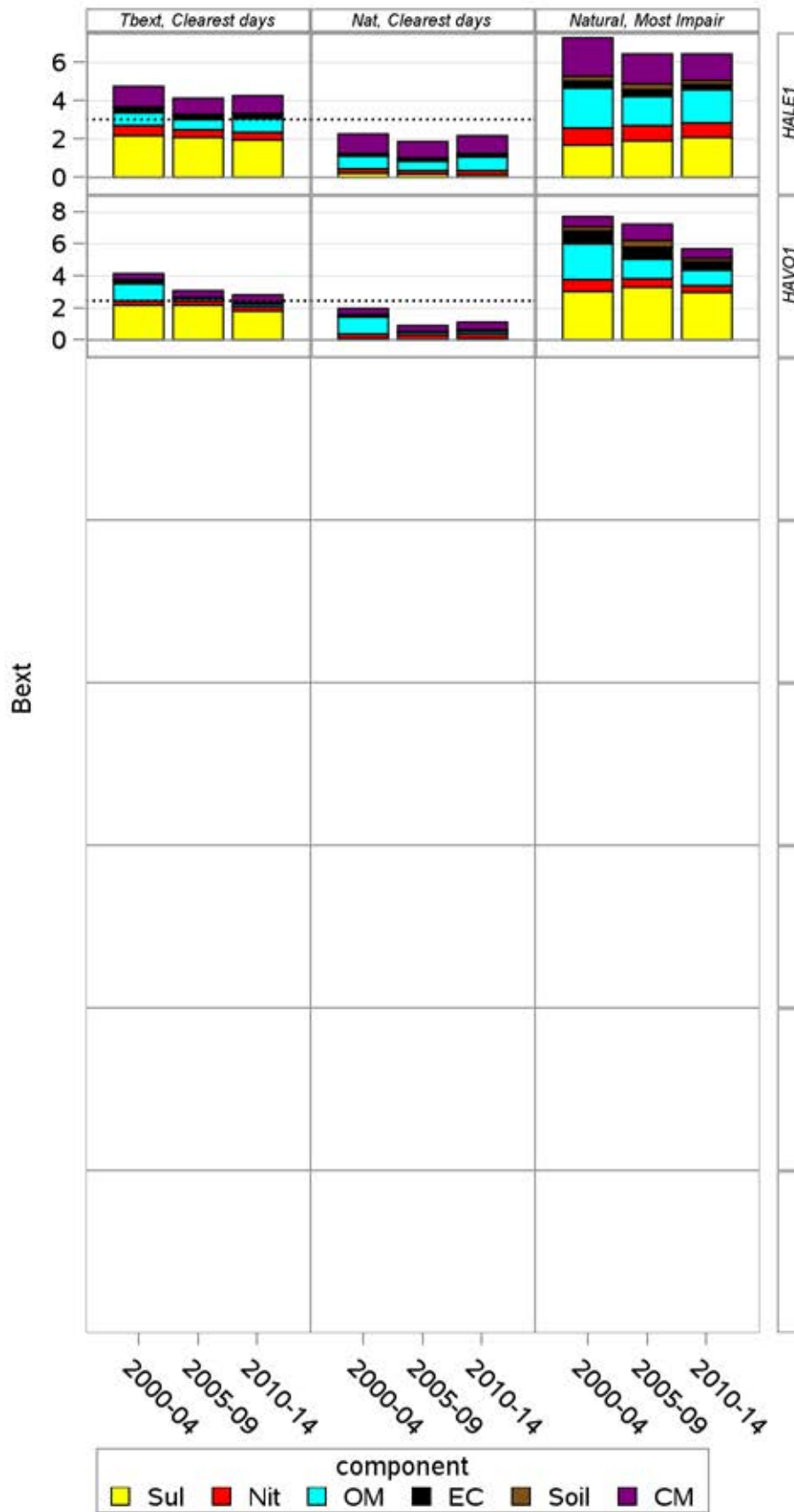
The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

Great Basin Budgets - 2000-2004, 2005-2009, 2010-2014



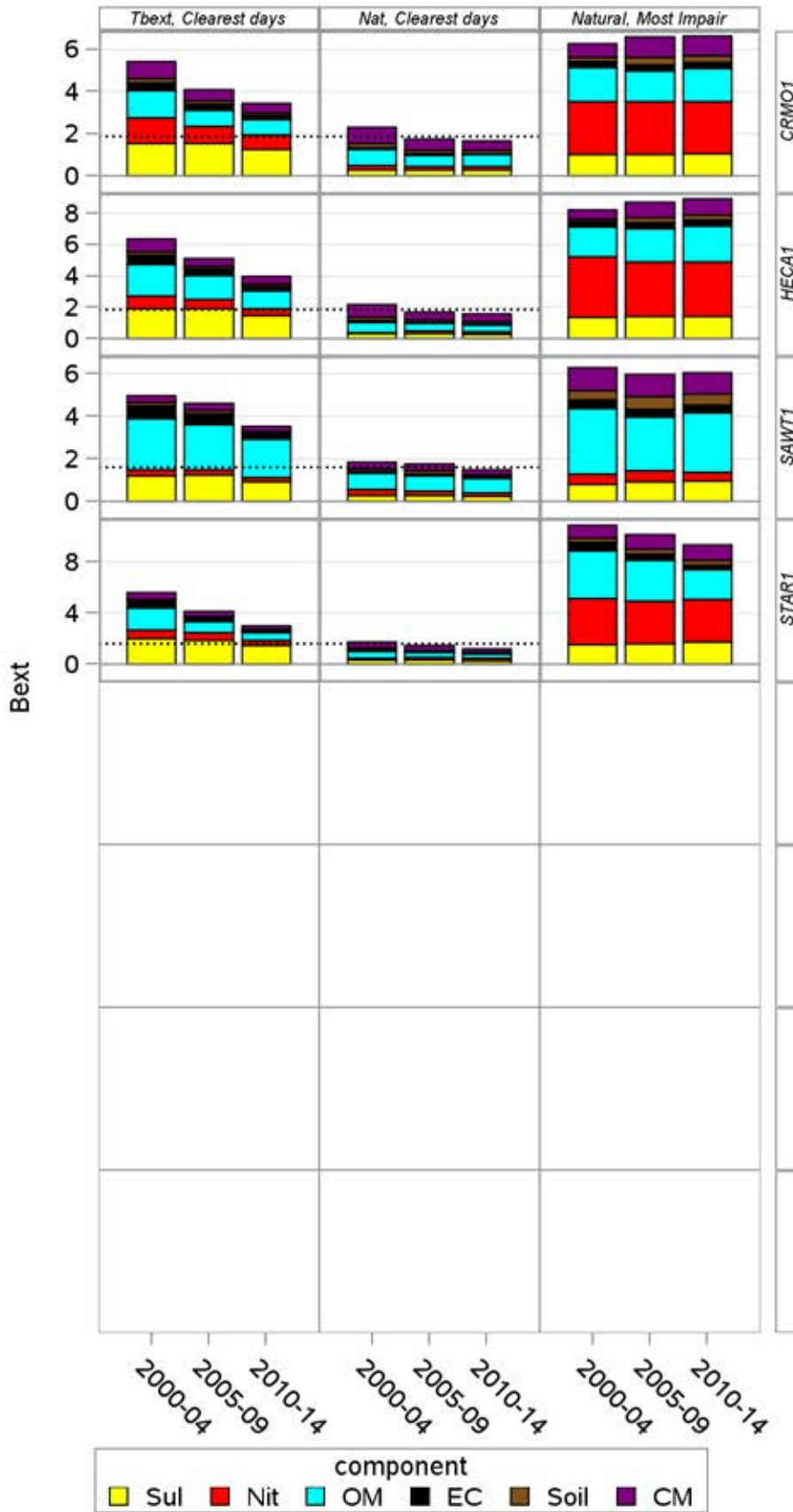
The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

Hawaii Budgets - 2000-2004, 2005-2009, 2010-2014



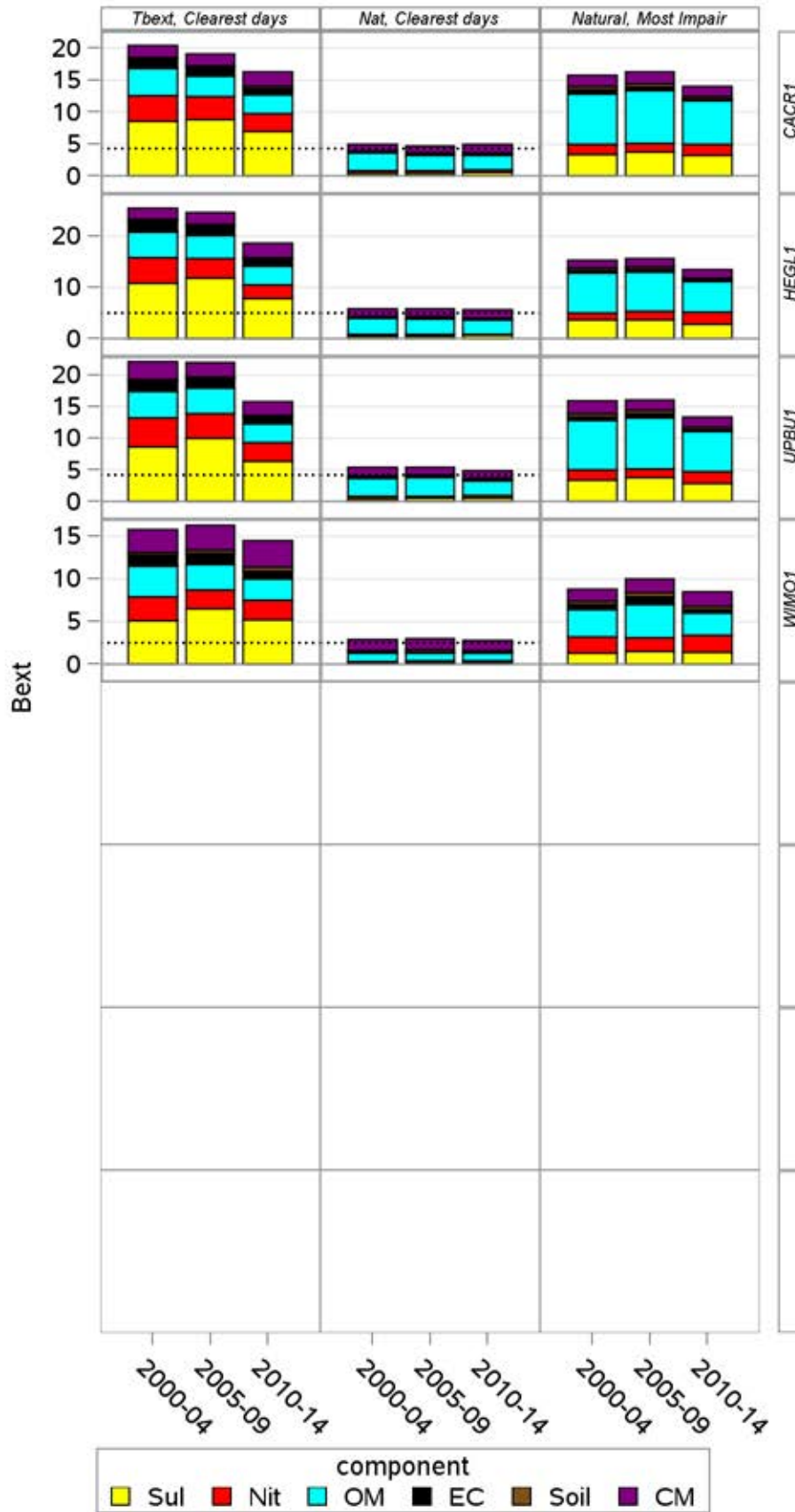
The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

Hells Canyon Budgets - 2000-2004, 2005-2009, 2010-2014



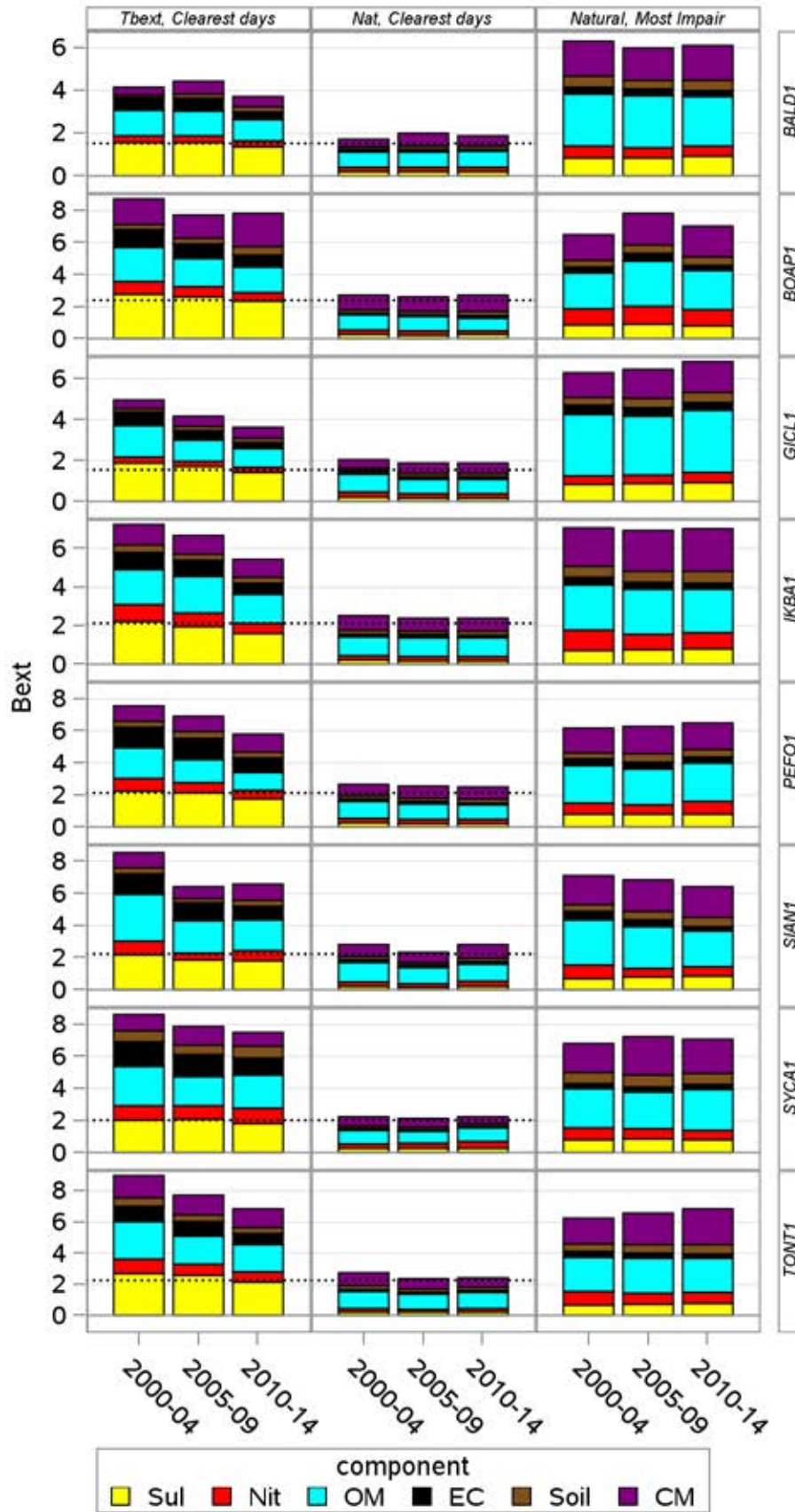
The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

Mid South Budgets - 2000-2004, 2005-2009, 2010-2014

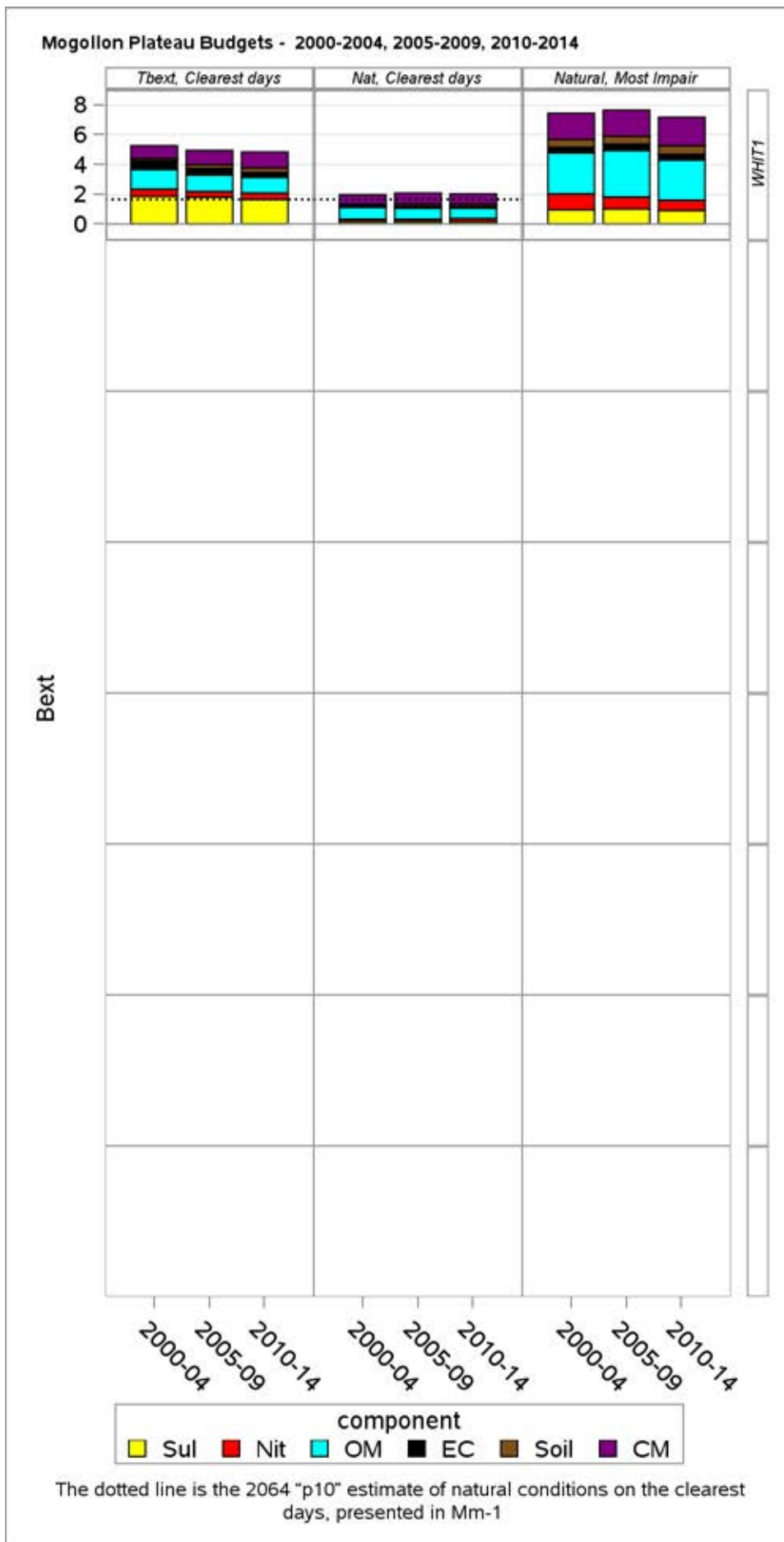


The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

Mogollon Plateau Budgets - 2000-2004, 2005-2009, 2010-2014

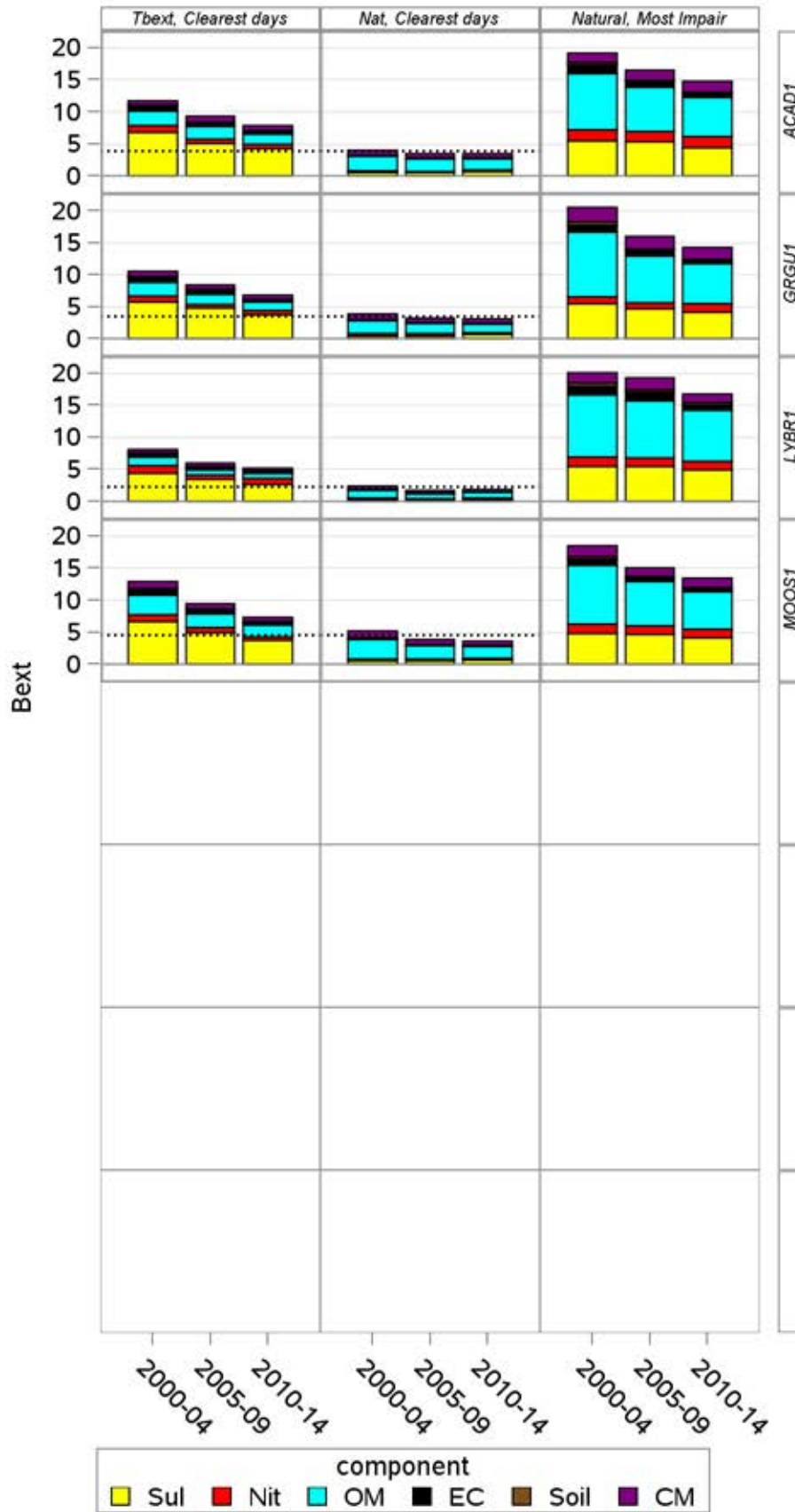


The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1



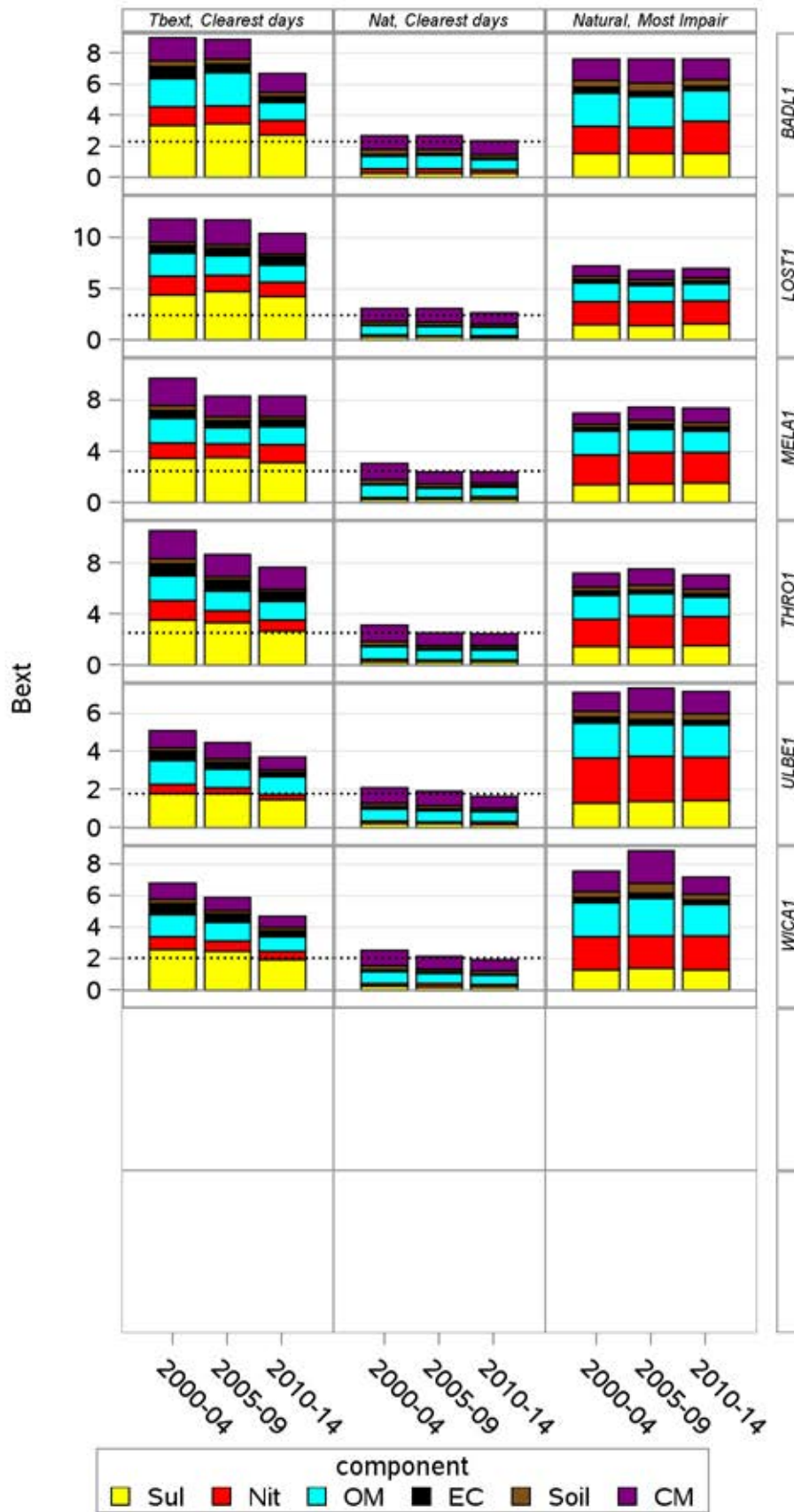
The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

Northeast Budgets - 2000-2004, 2005-2009, 2010-2014



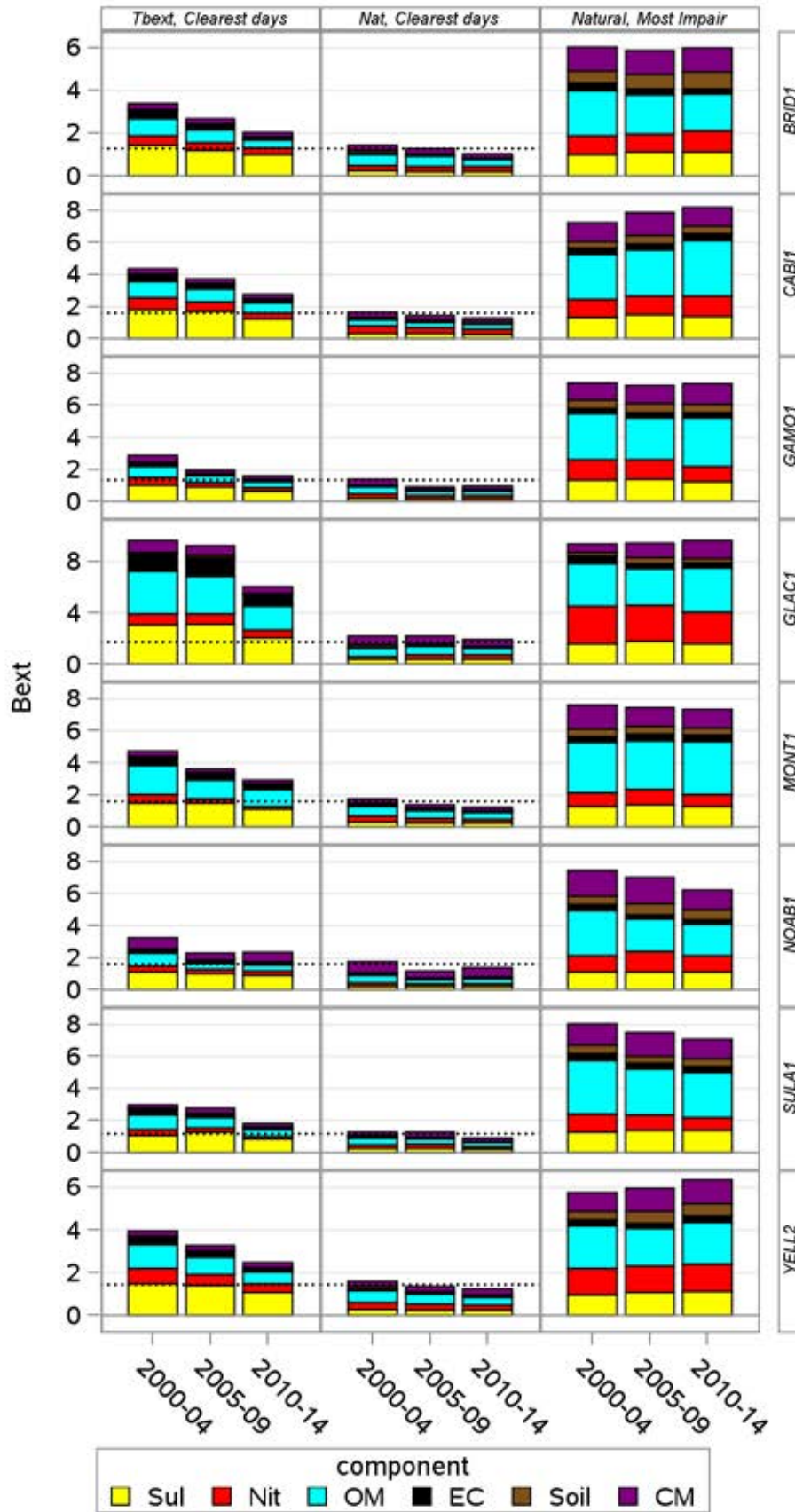
The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

Northern Great Plains Budgets - 2000-2004, 2005-2009, 2010-2014



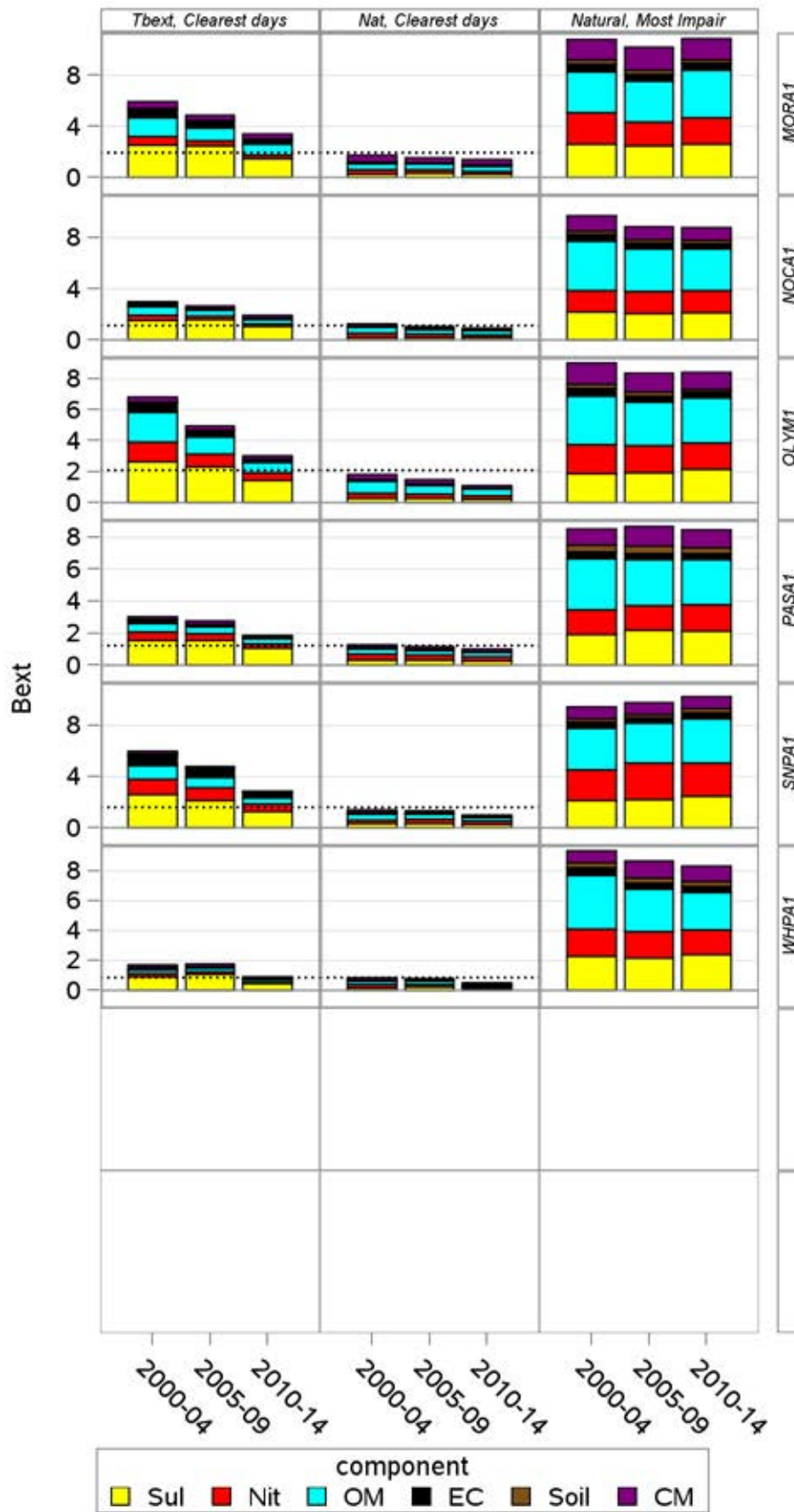
The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

Northern Rockies Budgets - 2000-2004, 2005-2009, 2010-2014



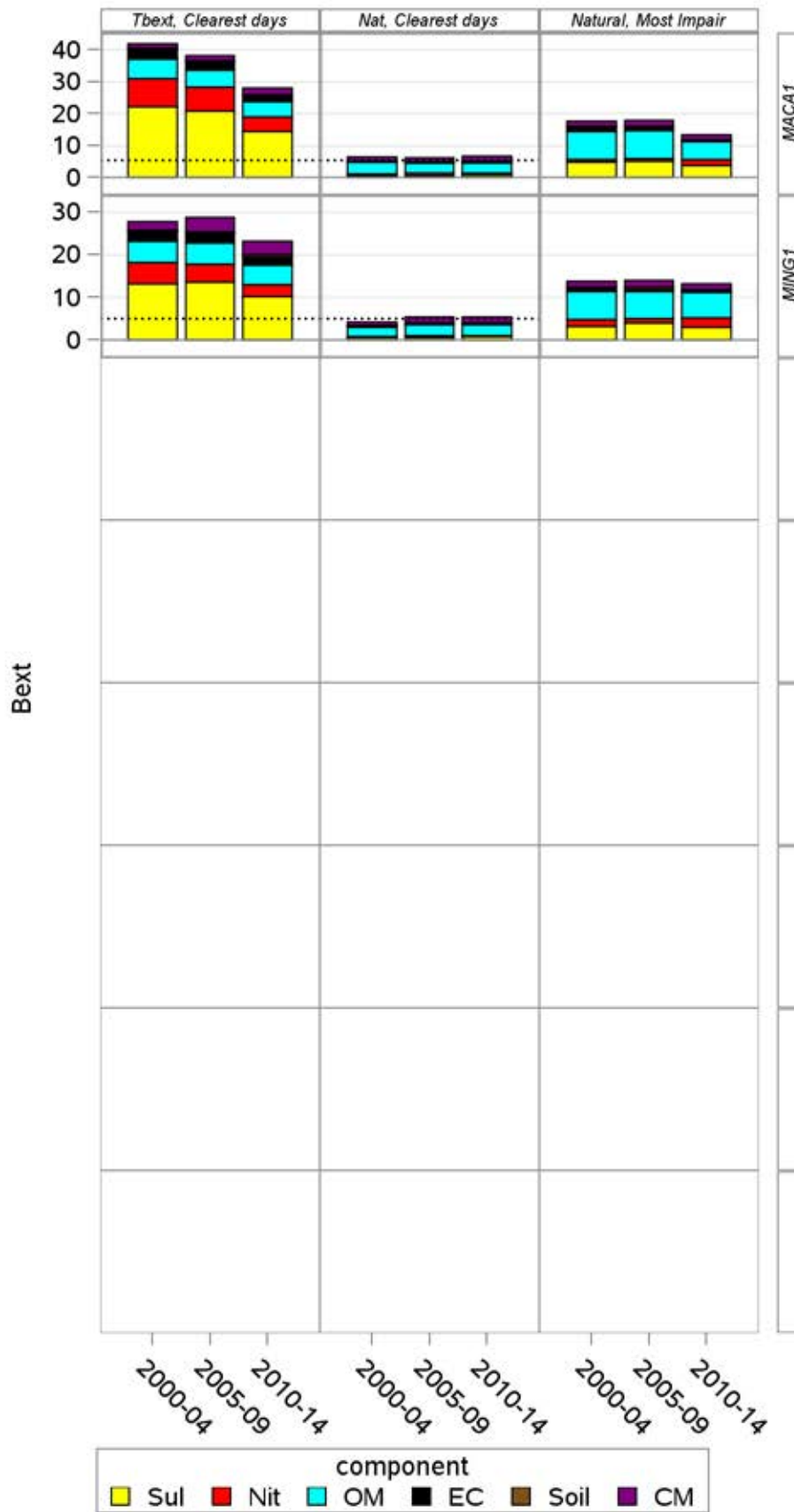
The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

Northwest Budgets - 2000-2004, 2005-2009, 2010-2014



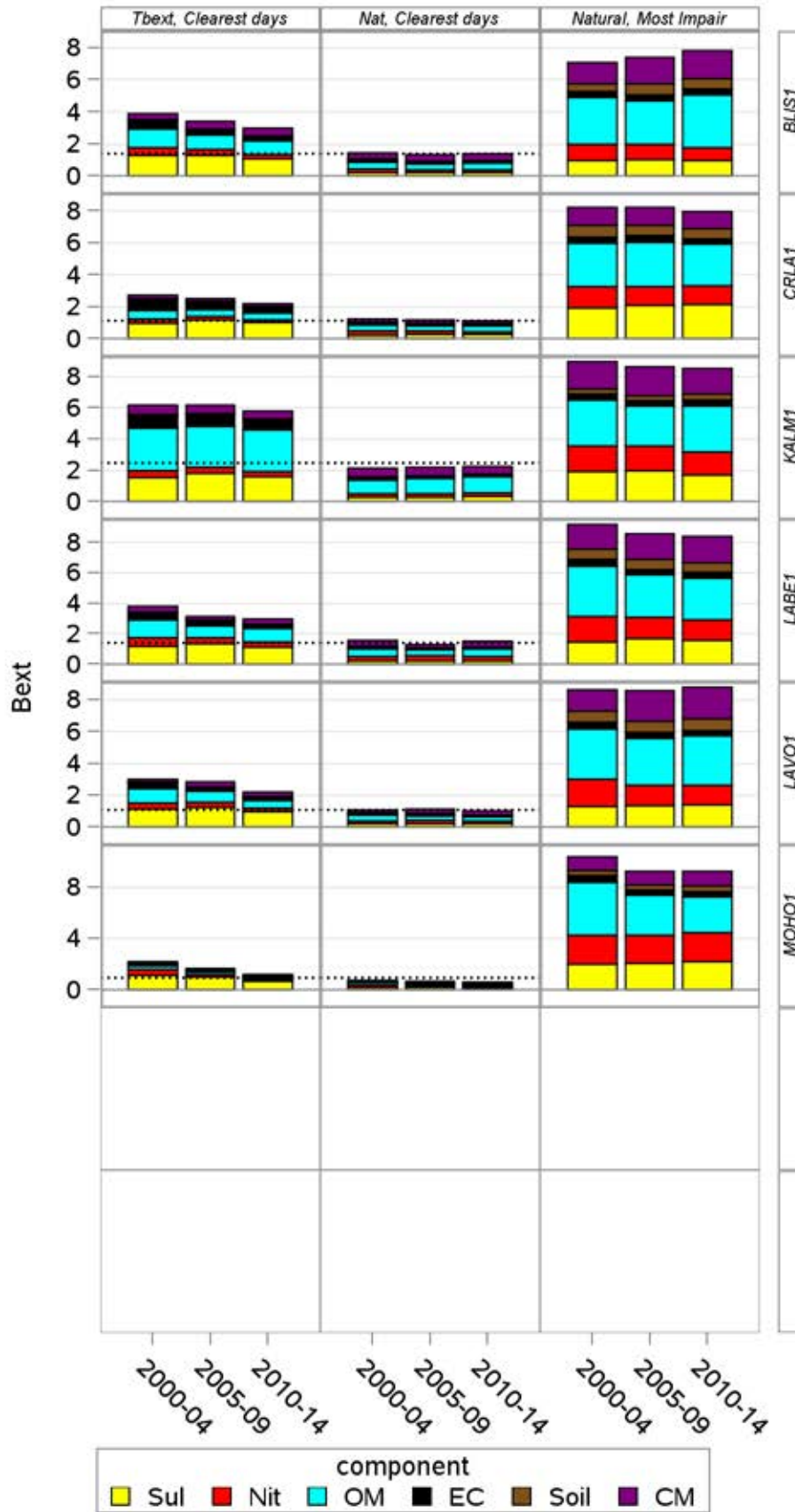
The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

Ohio River Valley Budgets - 2000-2004, 2005-2009, 2010-2014



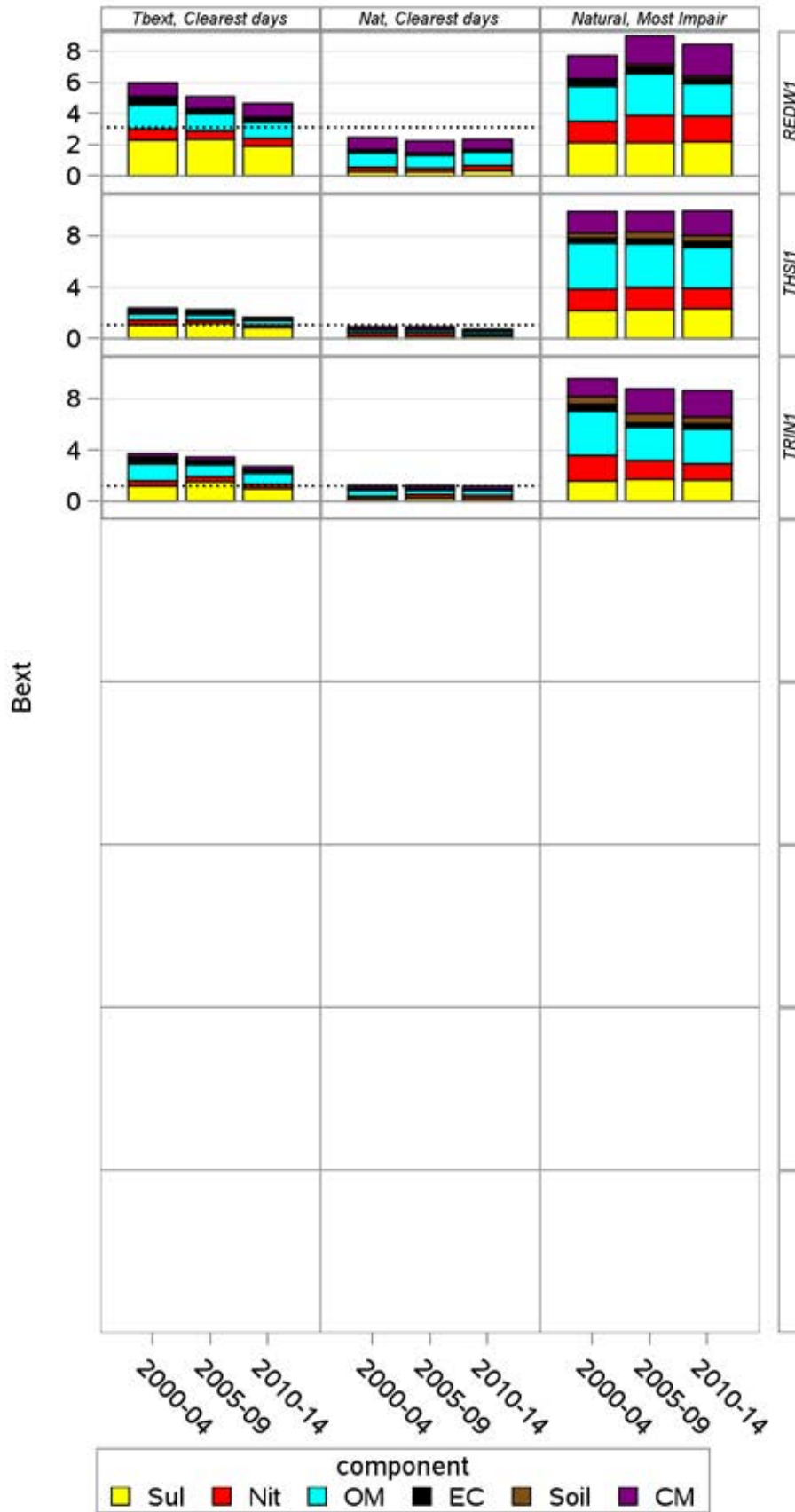
The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

Oregon and Northern C Budgets - 2000-2004, 2005-2009, 2010-2014



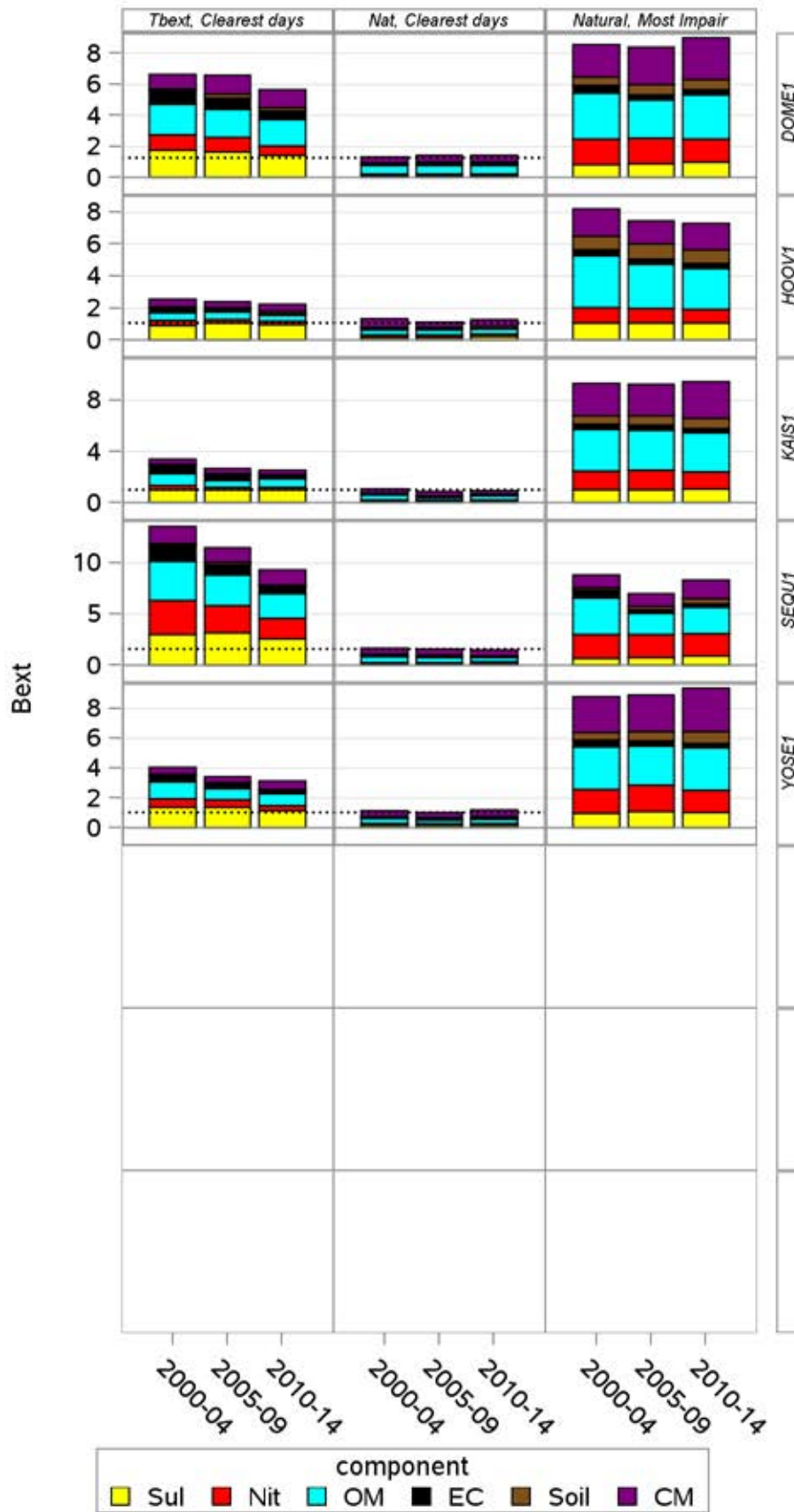
The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

Puget Sound Budgets - 2000-2004, 2005-2009, 2010-2014



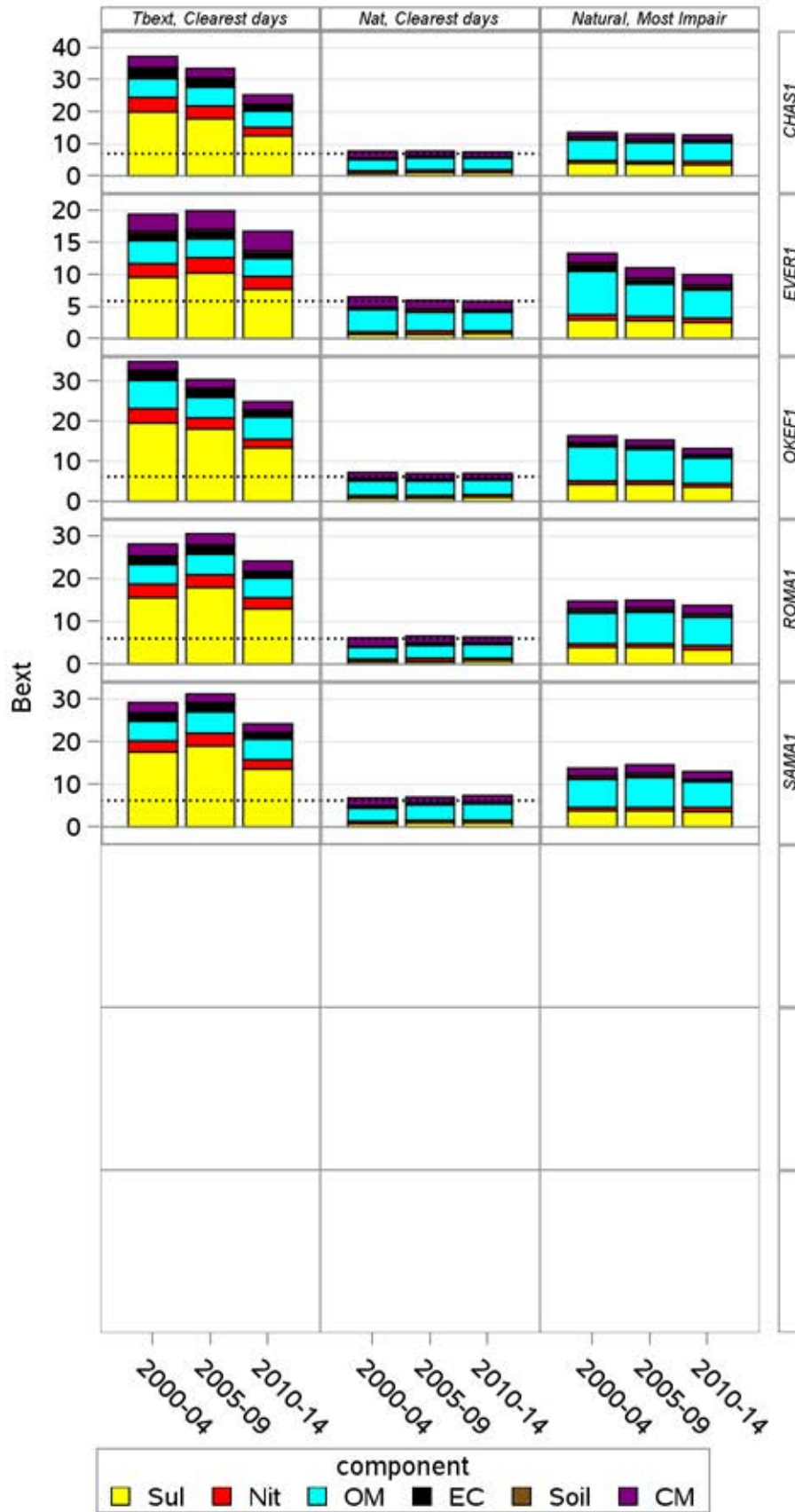
The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

Sierra Nevadas Budgets - 2000-2004, 2005-2009, 2010-2014



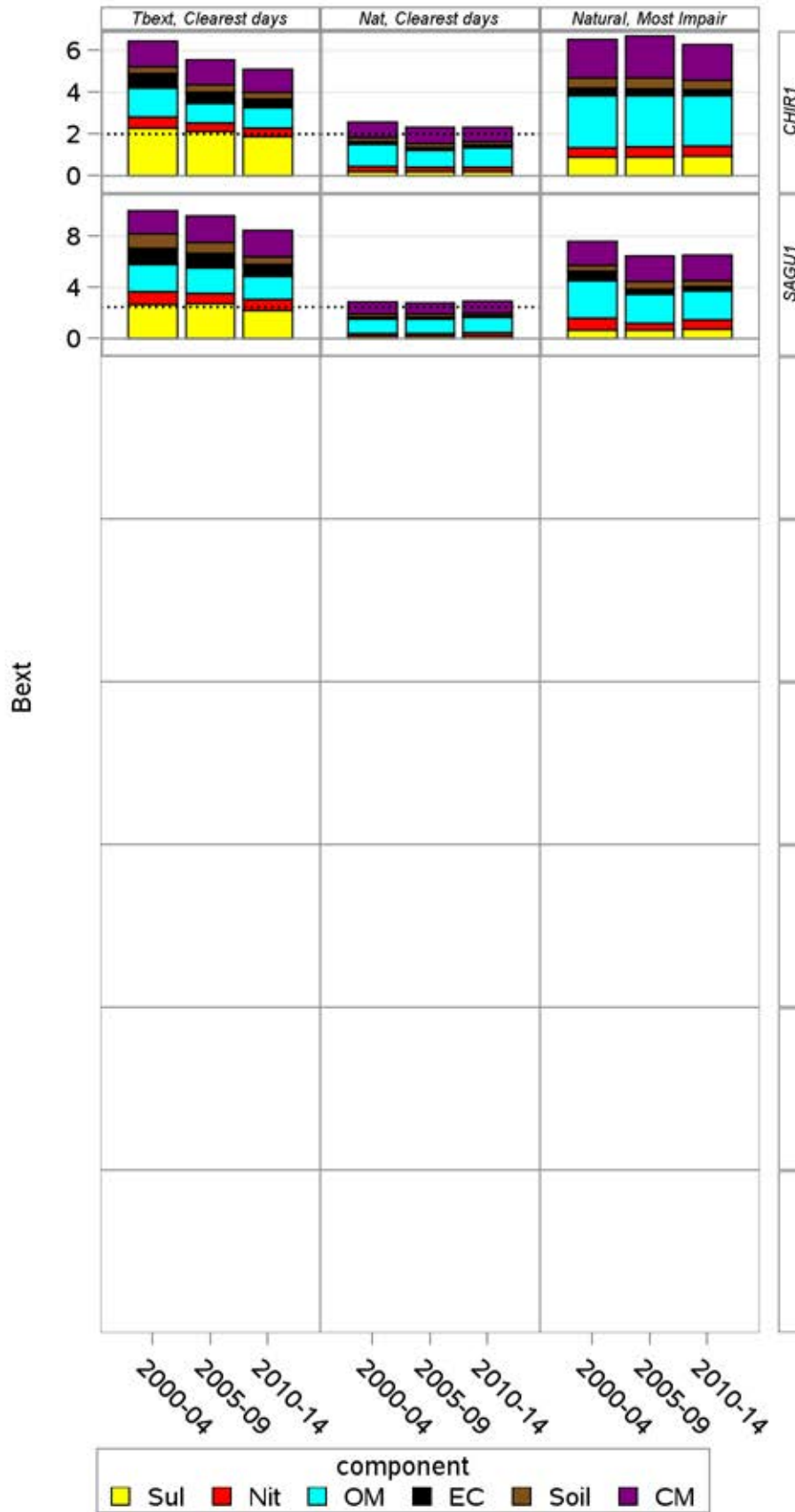
The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

Southeast Budgets - 2000-2004, 2005-2009, 2010-2014



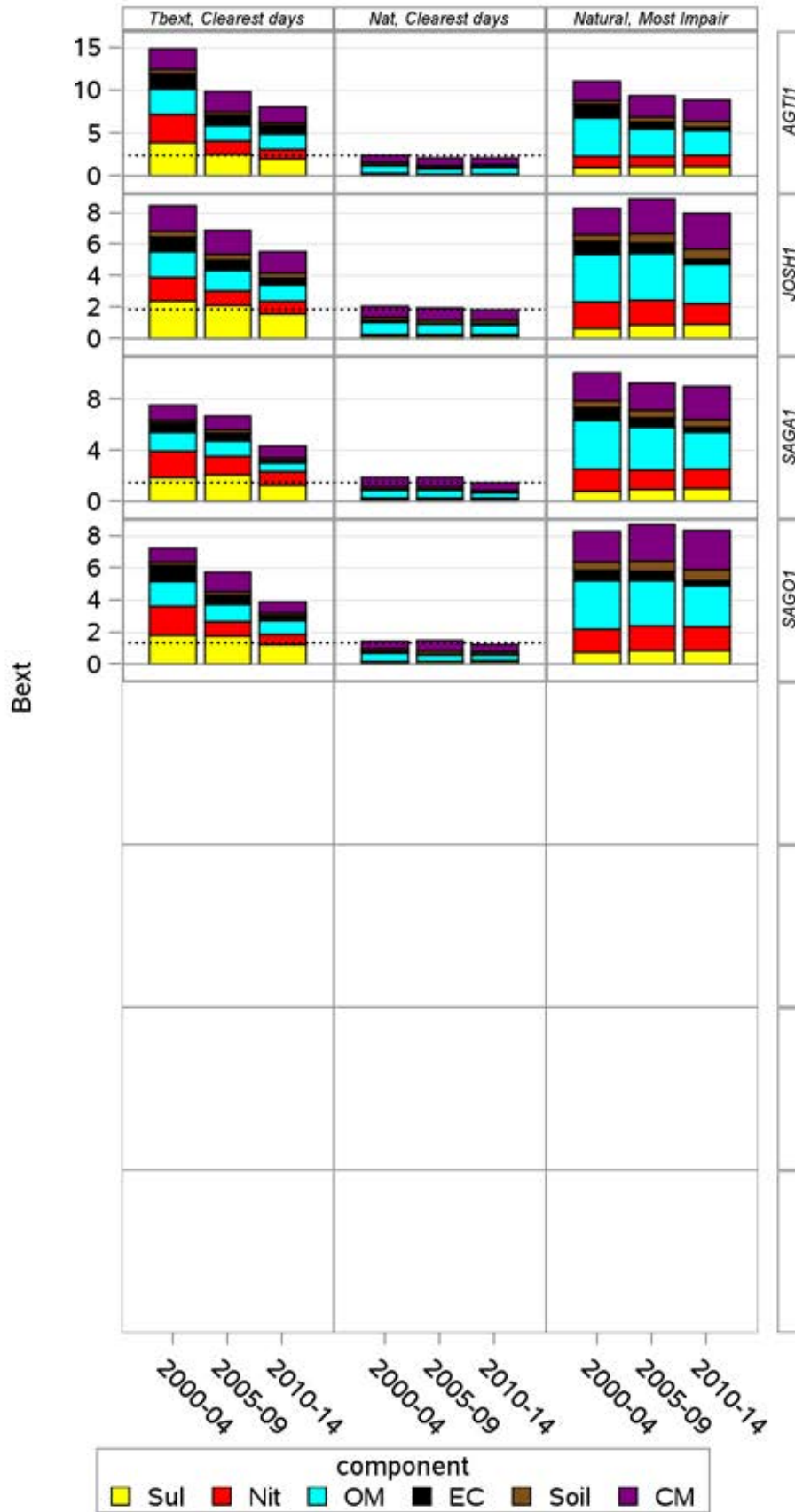
The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

Southern Arizona Budgets - 2000-2004, 2005-2009, 2010-2014



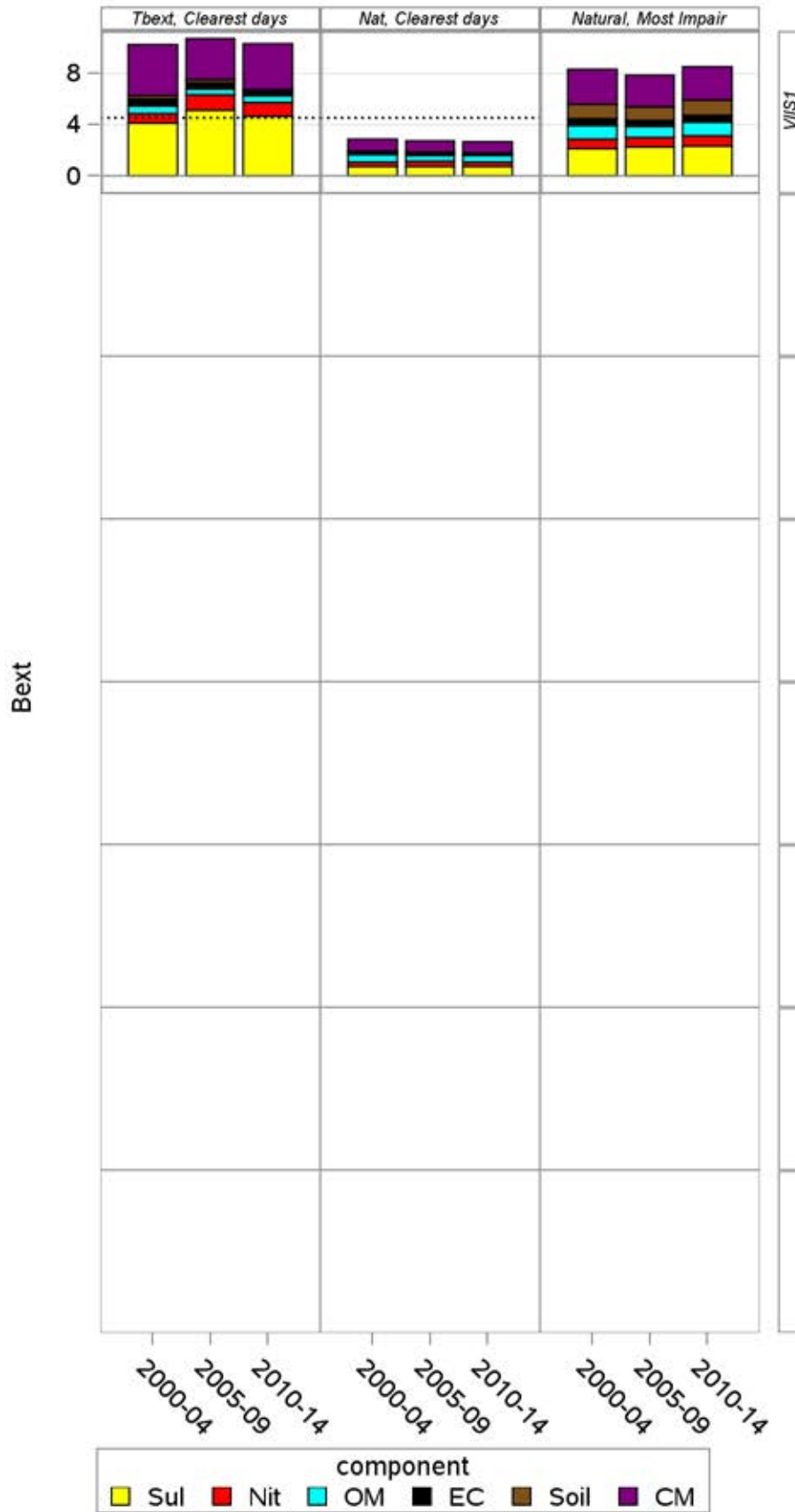
The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

Southern California Budgets - 2000-2004, 2005-2009, 2010-2014



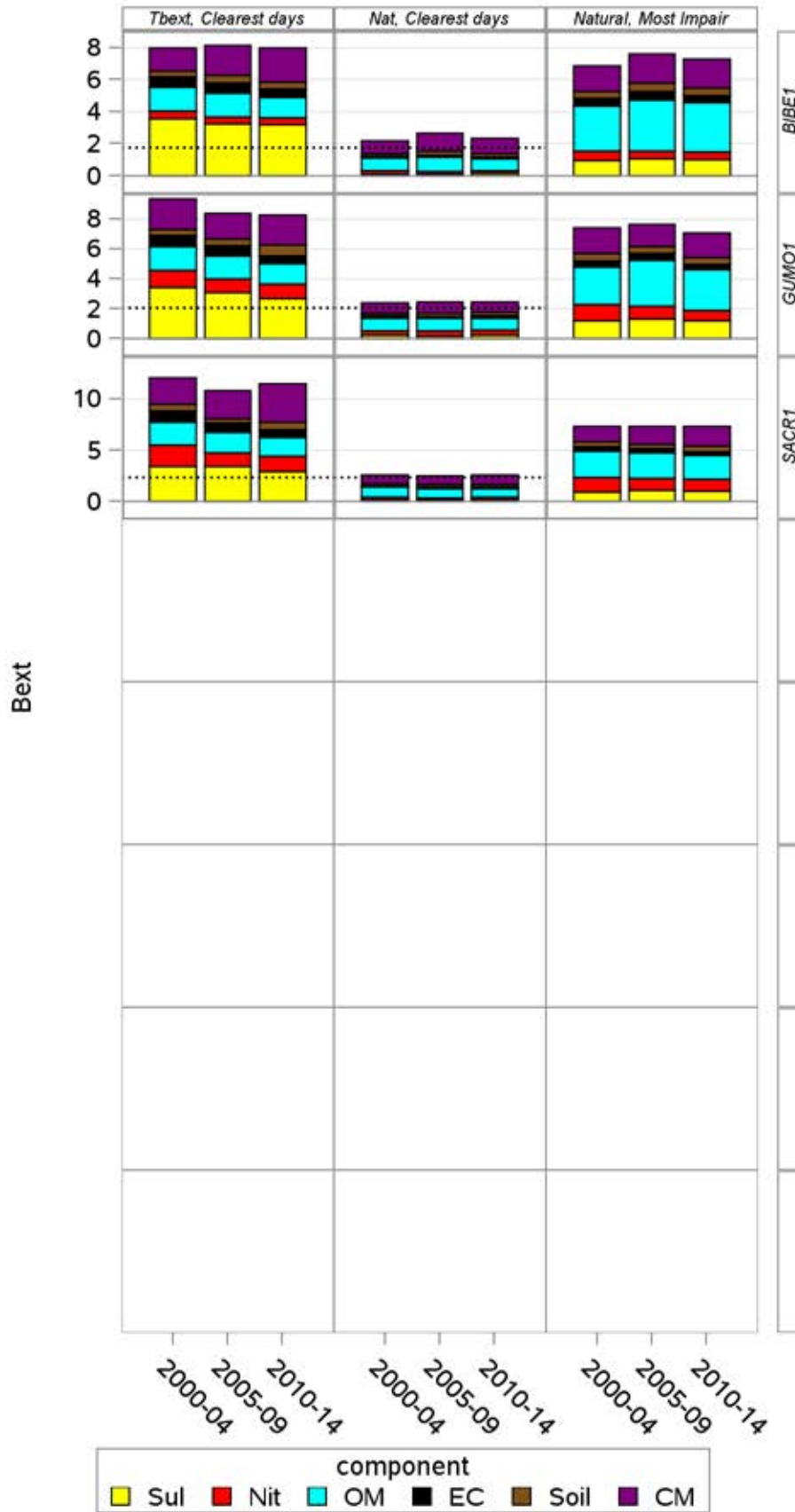
The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

Virgin Islands Budgets - 2000-2004, 2005-2009, 2010-2014



The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

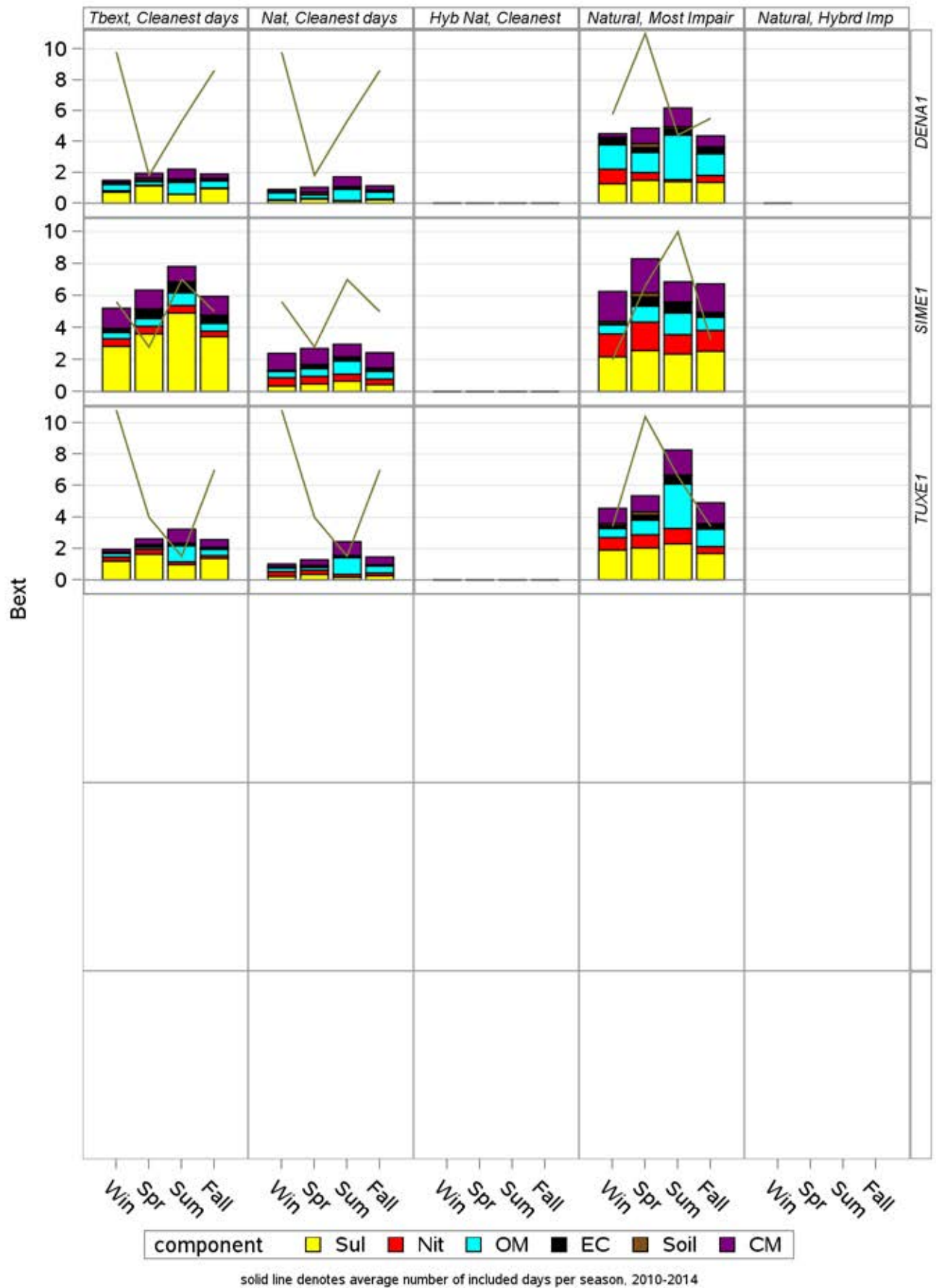
West Texas Budgets - 2000-2004, 2005-2009, 2010-2014



The dotted line is the 2064 "p10" estimate of natural conditions on the clearest days, presented in Mm-1

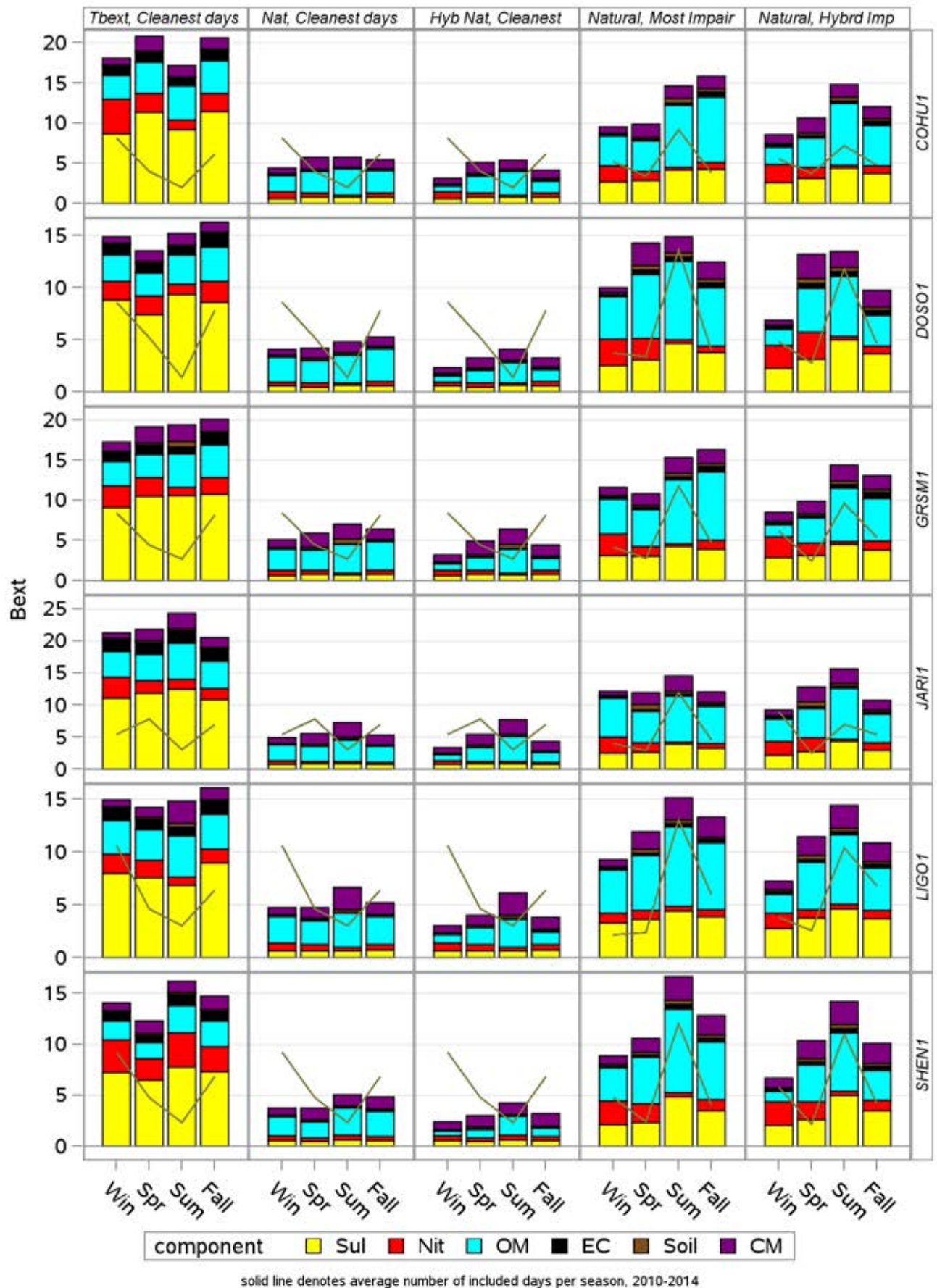
Appendix J: Seasonality in clearest days and estimated natural conditions by site, 5-year average extinction budgets (2010-2014)

Alaska Budgets - Winter, Spring, Summer, Fall, 2010-2014

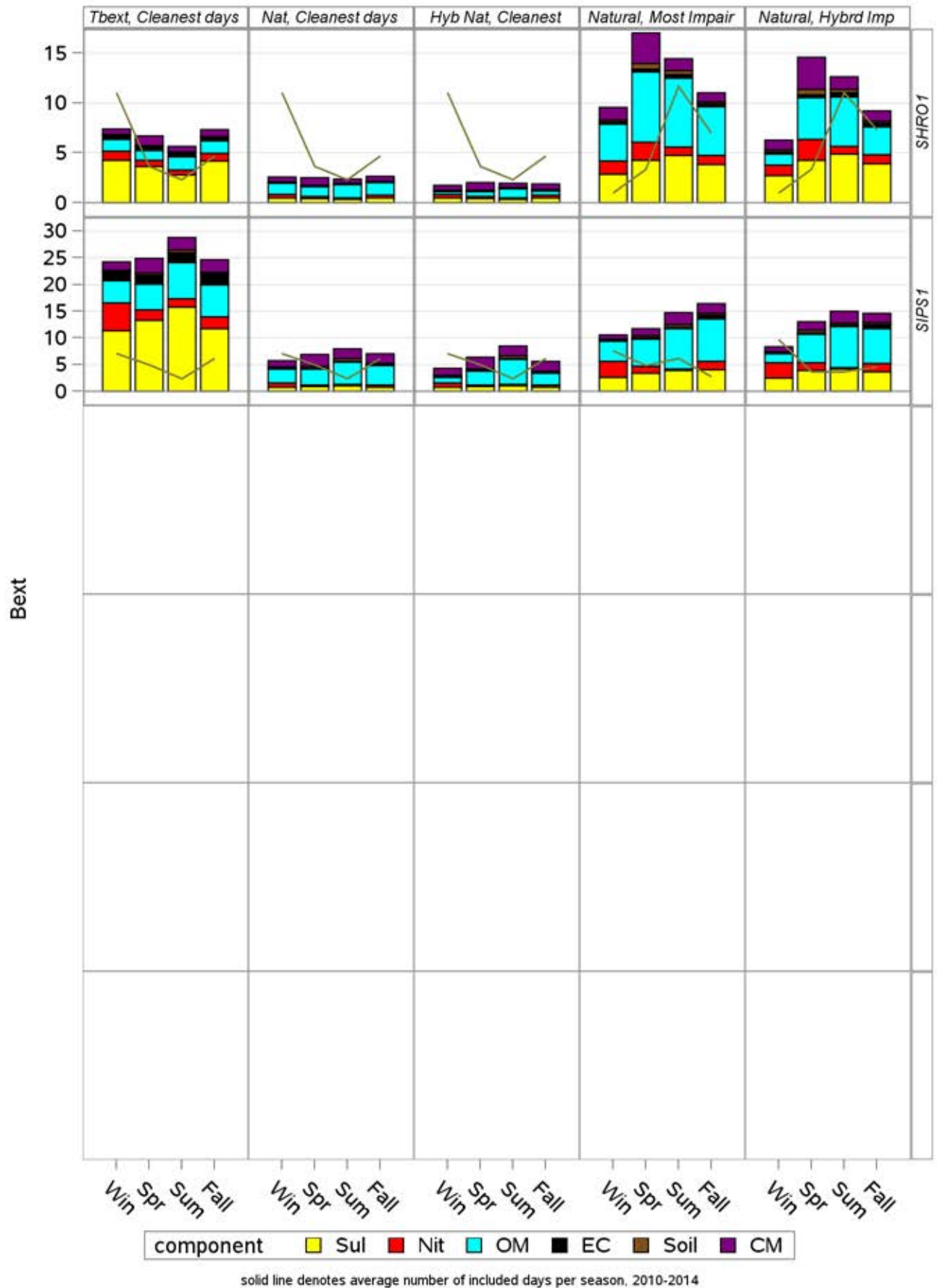


solid line denotes average number of included days per season, 2010-2014

Appalachia Budgets - Winter, Spring, Summer, Fall, 2010-2014

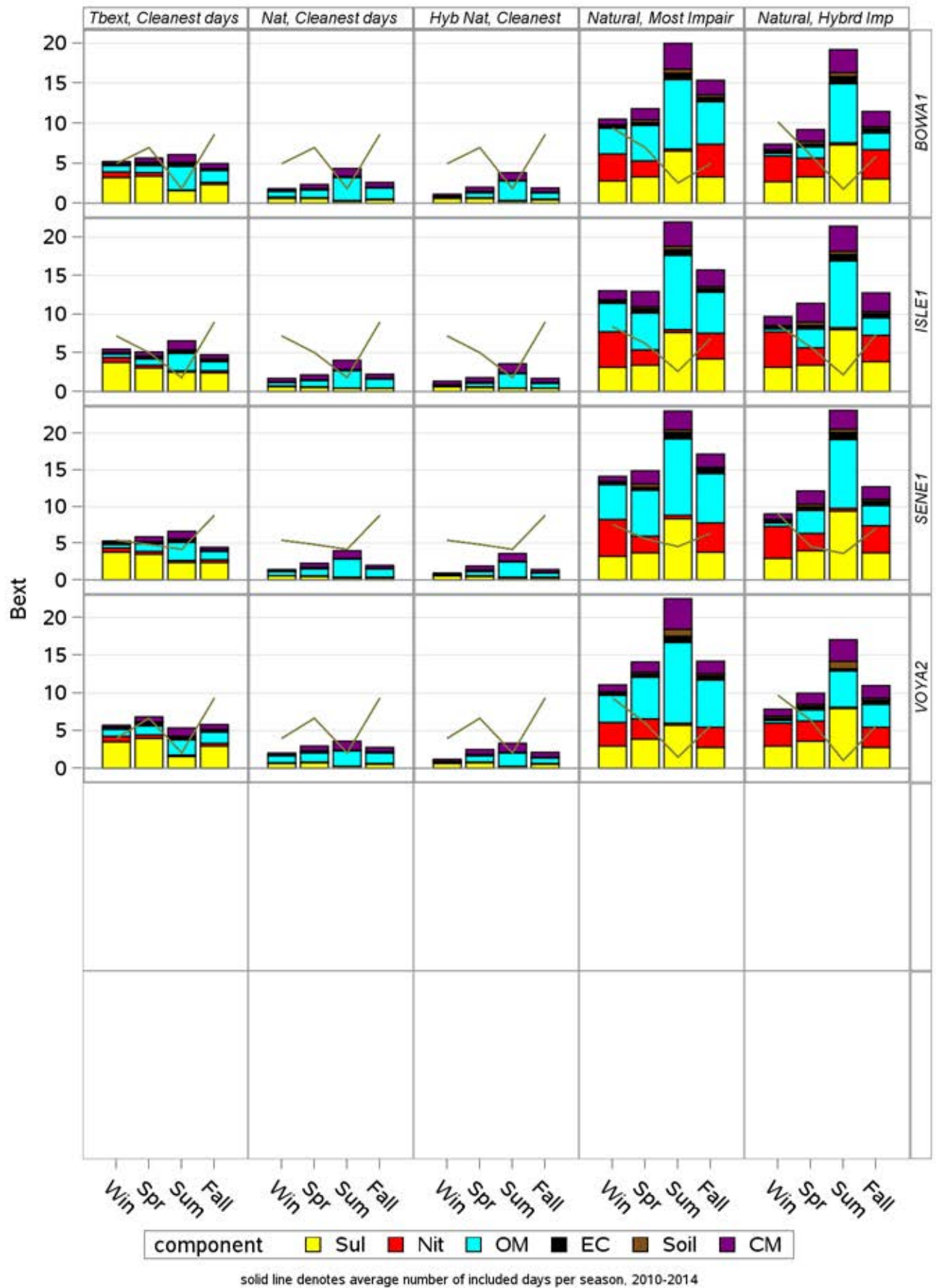


Appalachia Budgets - Winter, Spring, Summer, Fall, 2010-2014



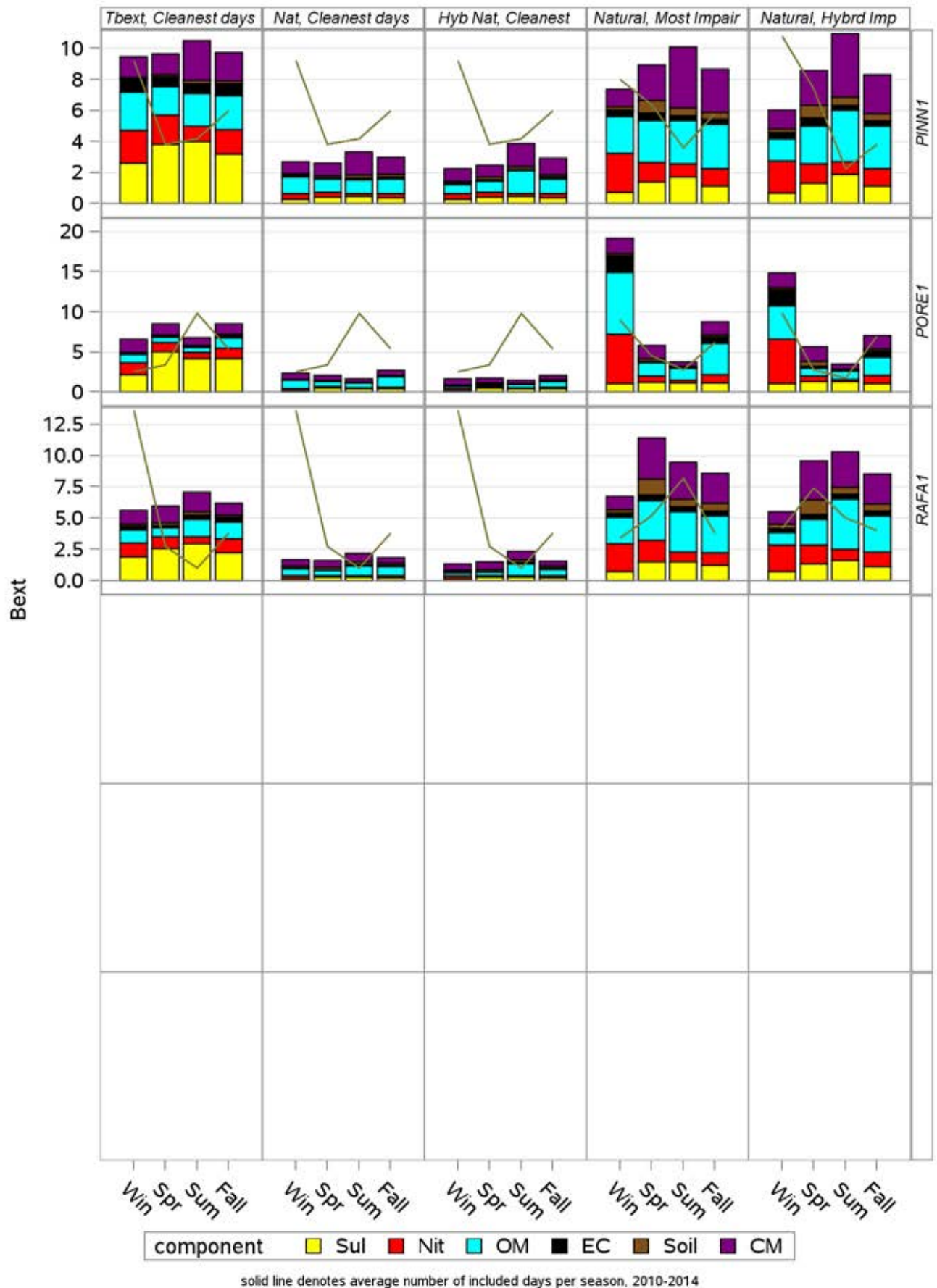
solid line denotes average number of included days per season, 2010-2014

Boundary Waters Budgets - Winter, Spring, Summer, Fall, 2010-2014

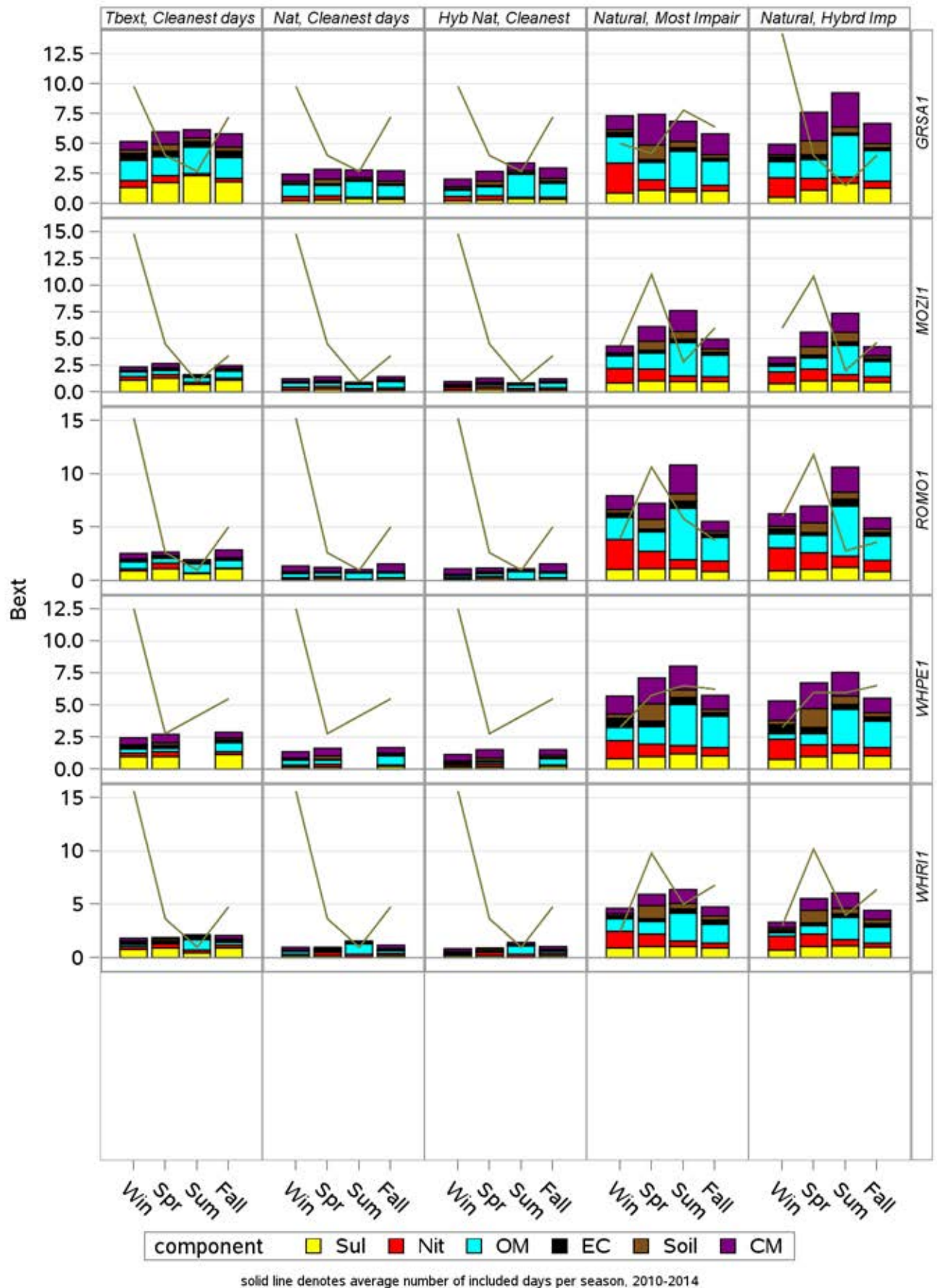


solid line denotes average number of included days per season, 2010-2014

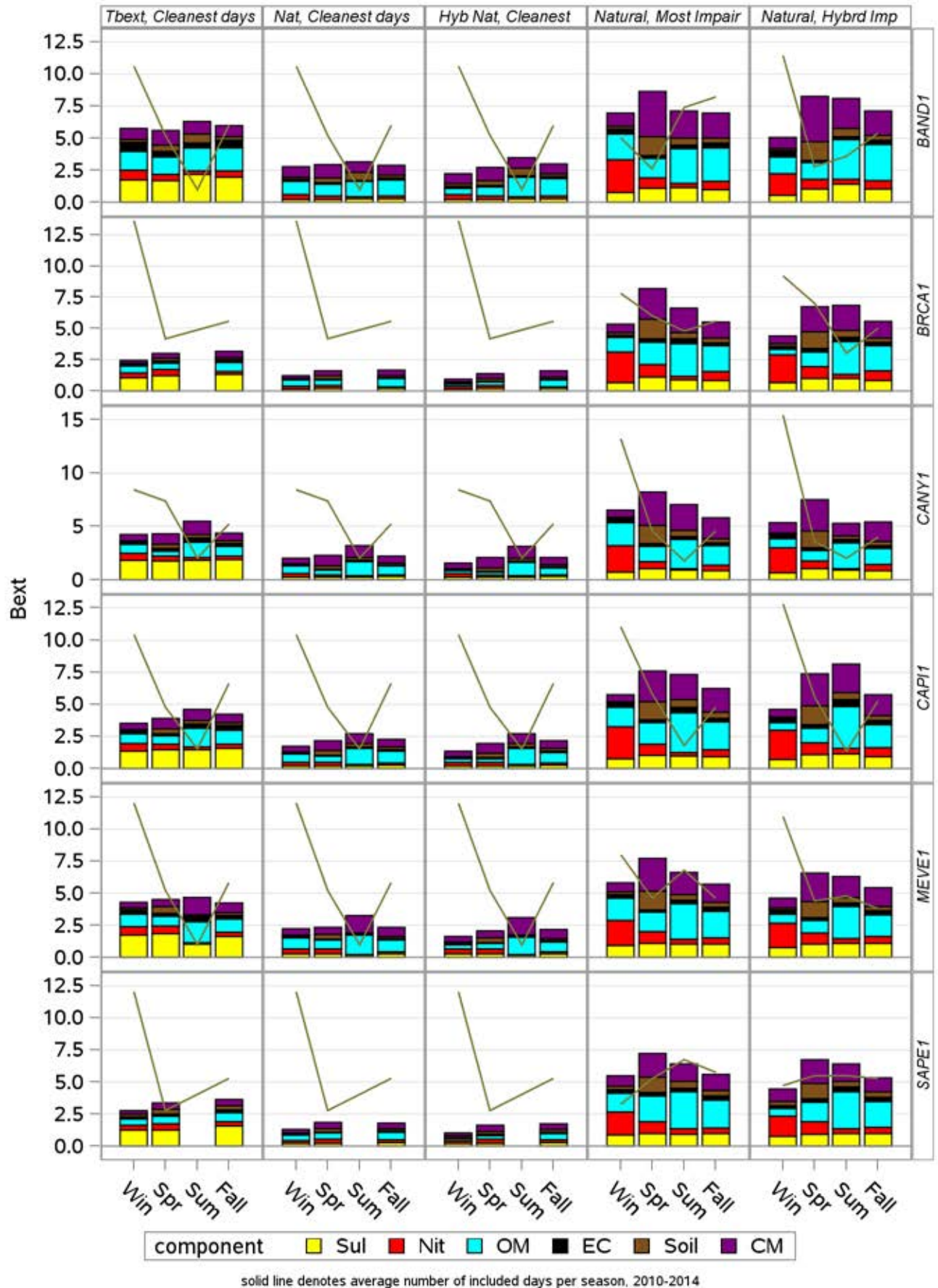
California Coast Budgets - Winter, Spring, Summer, Fall, 2010-2014



Central Rockies Budgets - Winter, Spring, Summer, Fall, 2010-2014

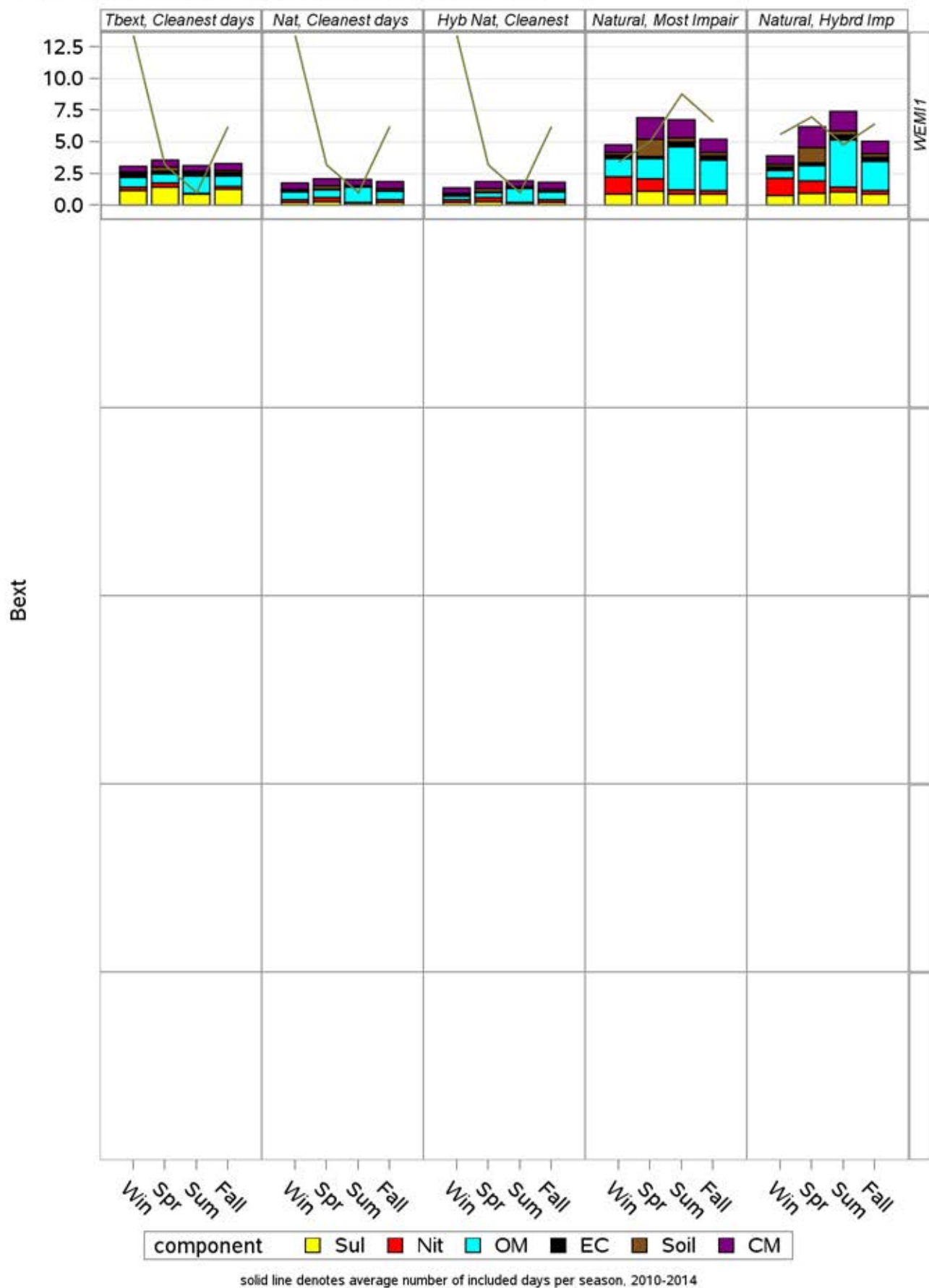


Colorado Plateau Budgets - Winter, Spring, Summer, Fall, 2010-2014



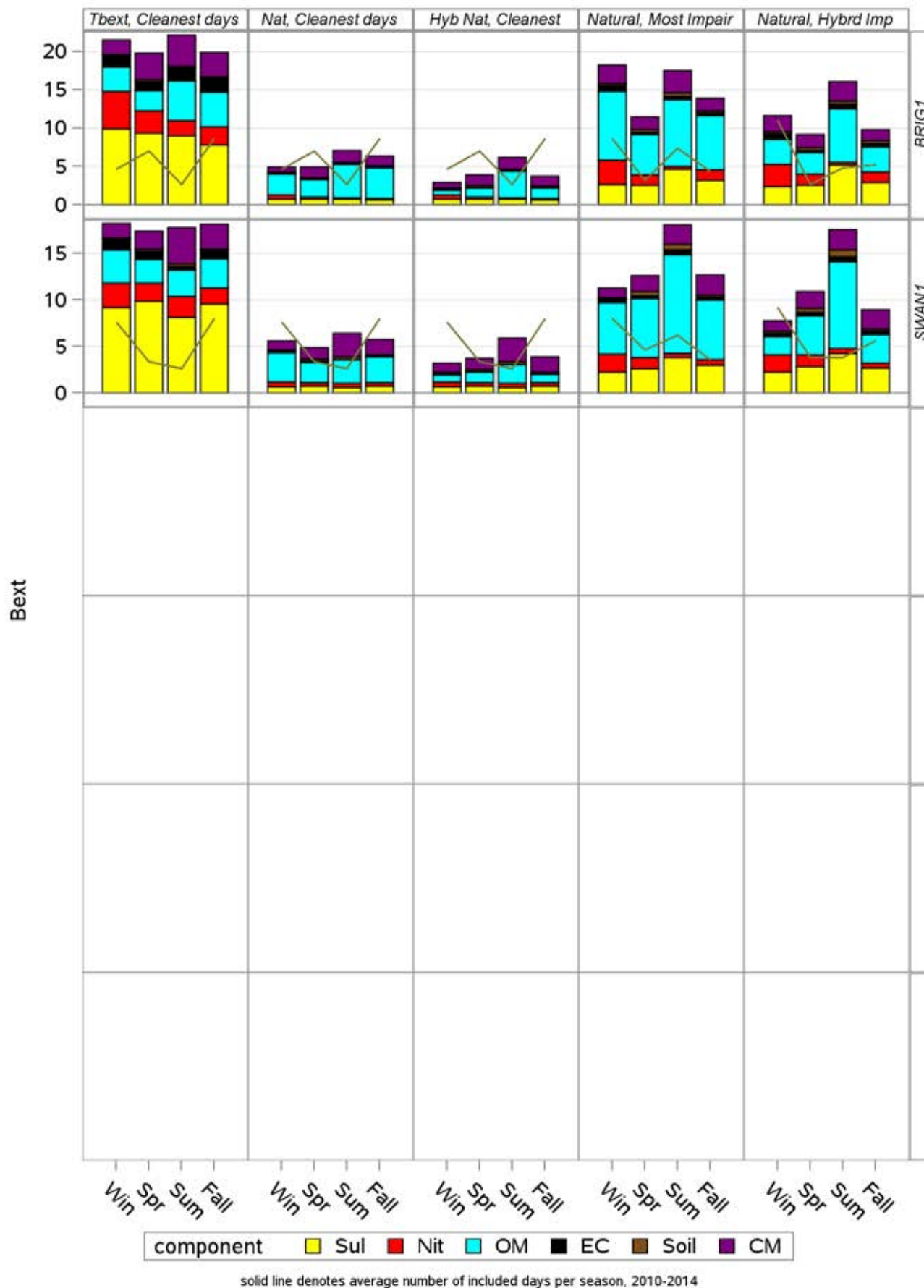
solid line denotes average number of included days per season, 2010-2014

Colorado Plateau Budgets - Winter, Spring, Summer, Fall, 2010-2014



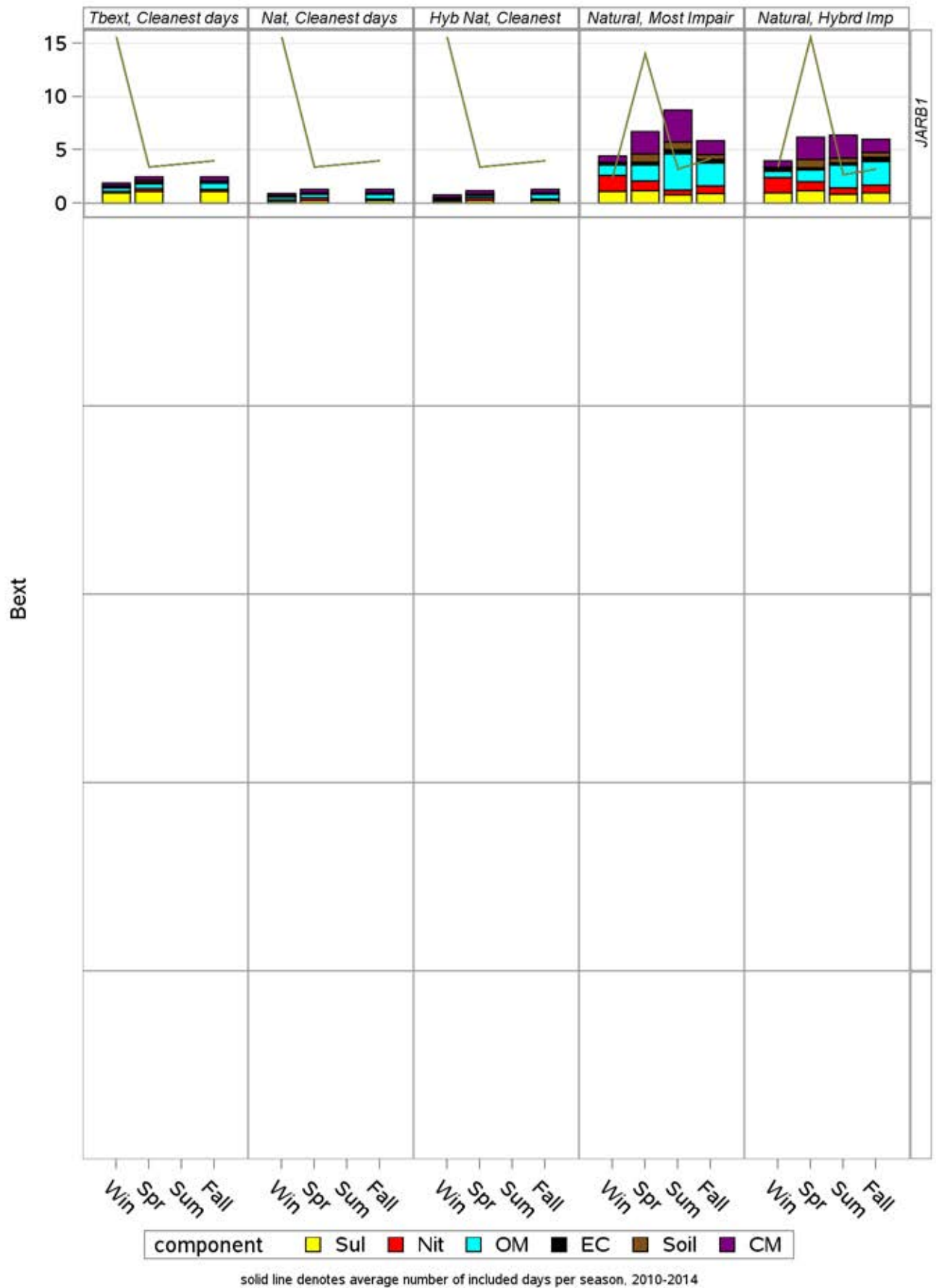
solid line denotes average number of included days per season, 2010-2014

East Coast Budgets - Winter, Spring, Summer, Fall, 2010-2014



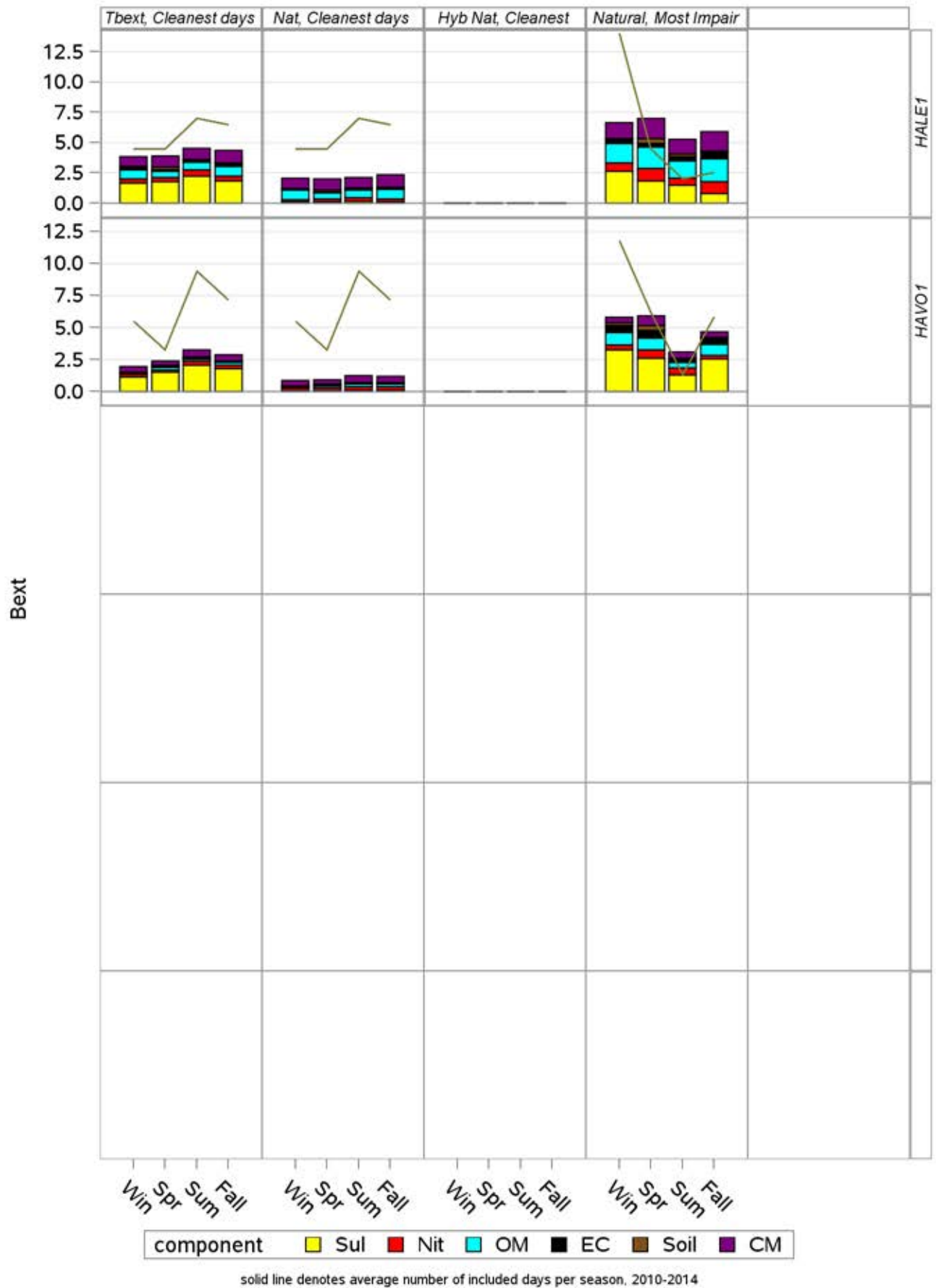
solid line denotes average number of included days per season, 2010-2014

Great Basin Budgets - Winter, Spring, Summer, Fall, 2010-2014



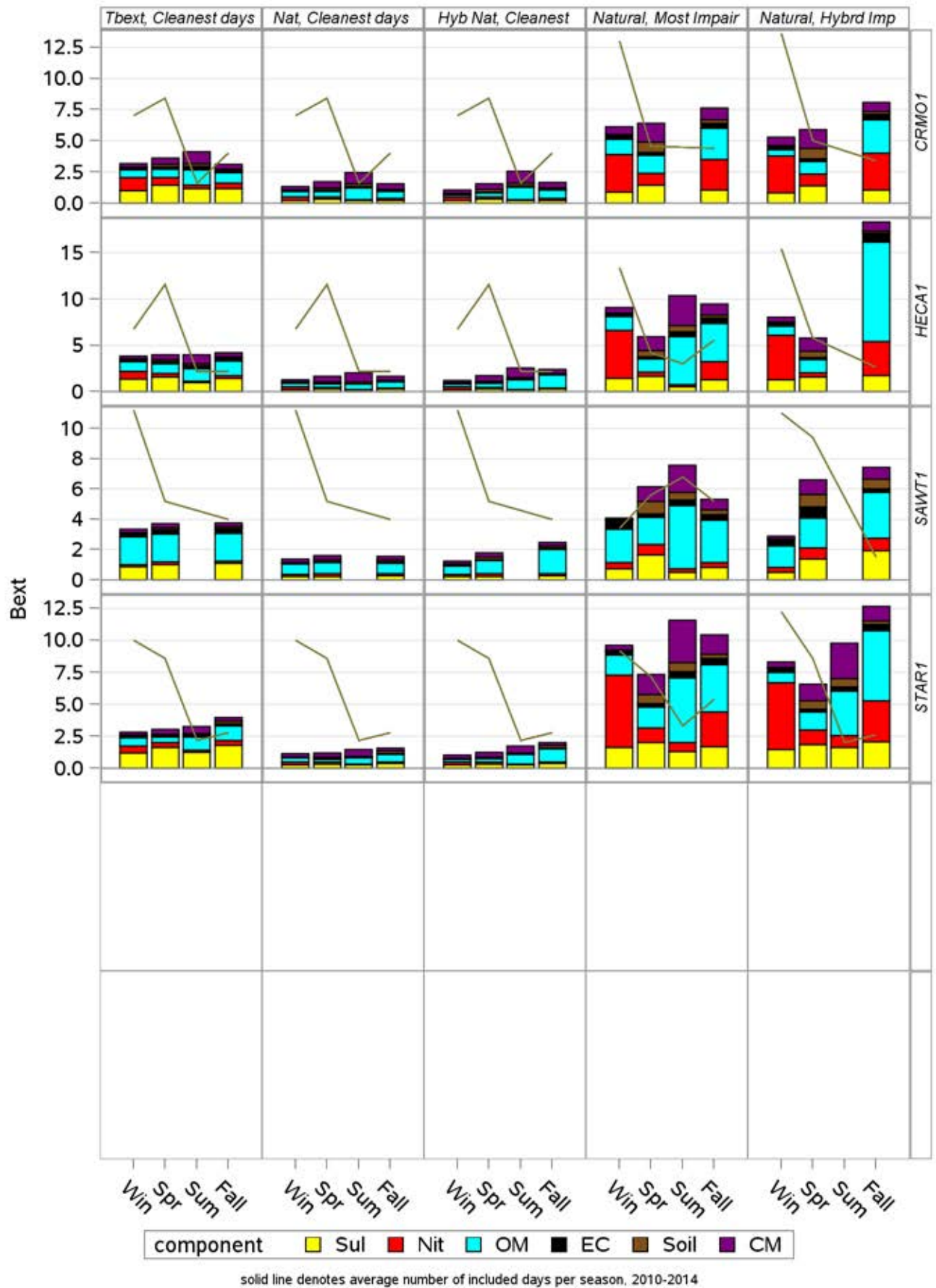
solid line denotes average number of included days per season, 2010-2014

Hawaii Budgets - Winter, Spring, Summer, Fall, 2010-2014



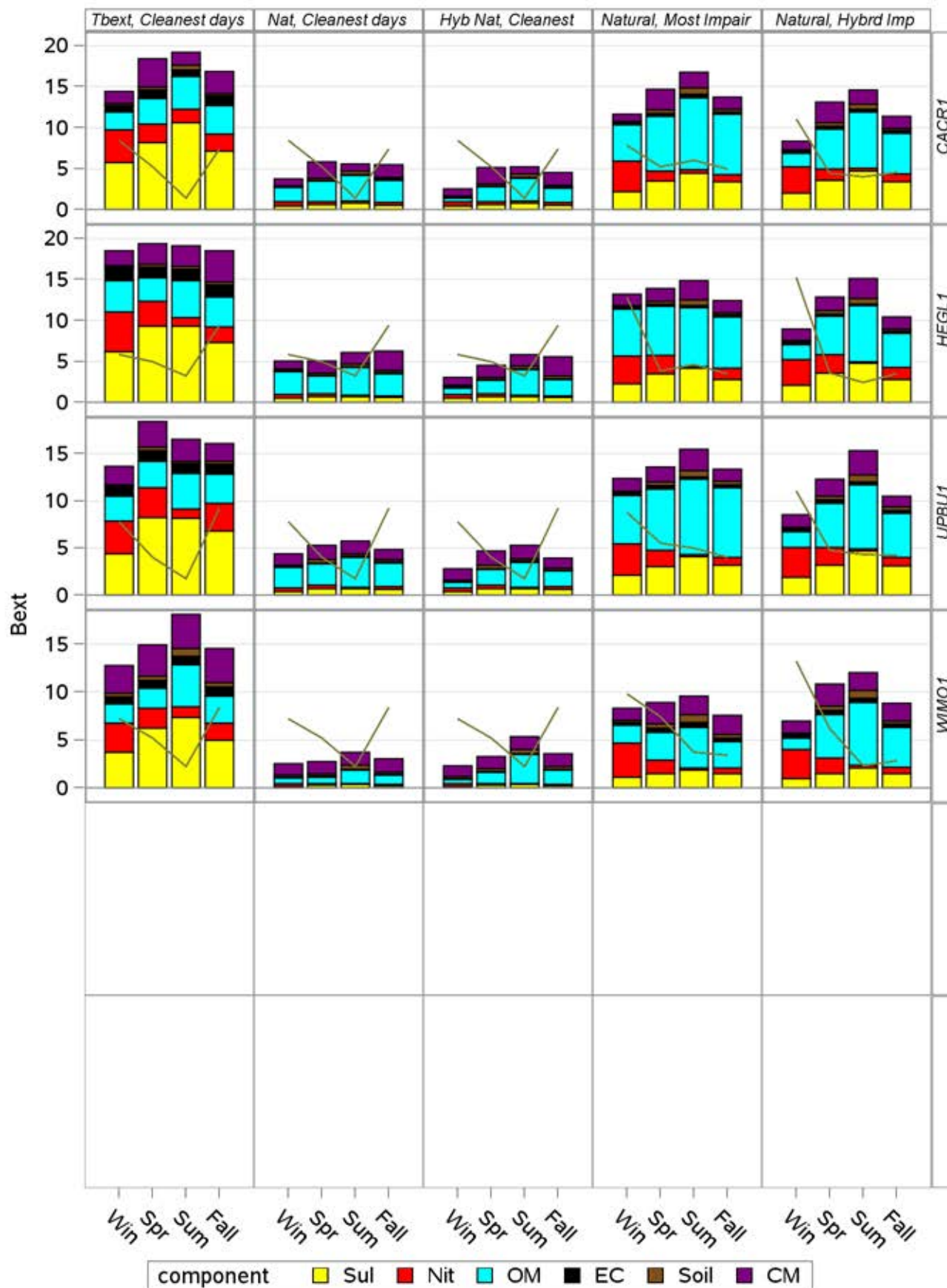
solid line denotes average number of included days per season, 2010-2014

Hells Canyon Budgets - Winter, Spring, Summer, Fall, 2010-2014



solid line denotes average number of included days per season, 2010-2014

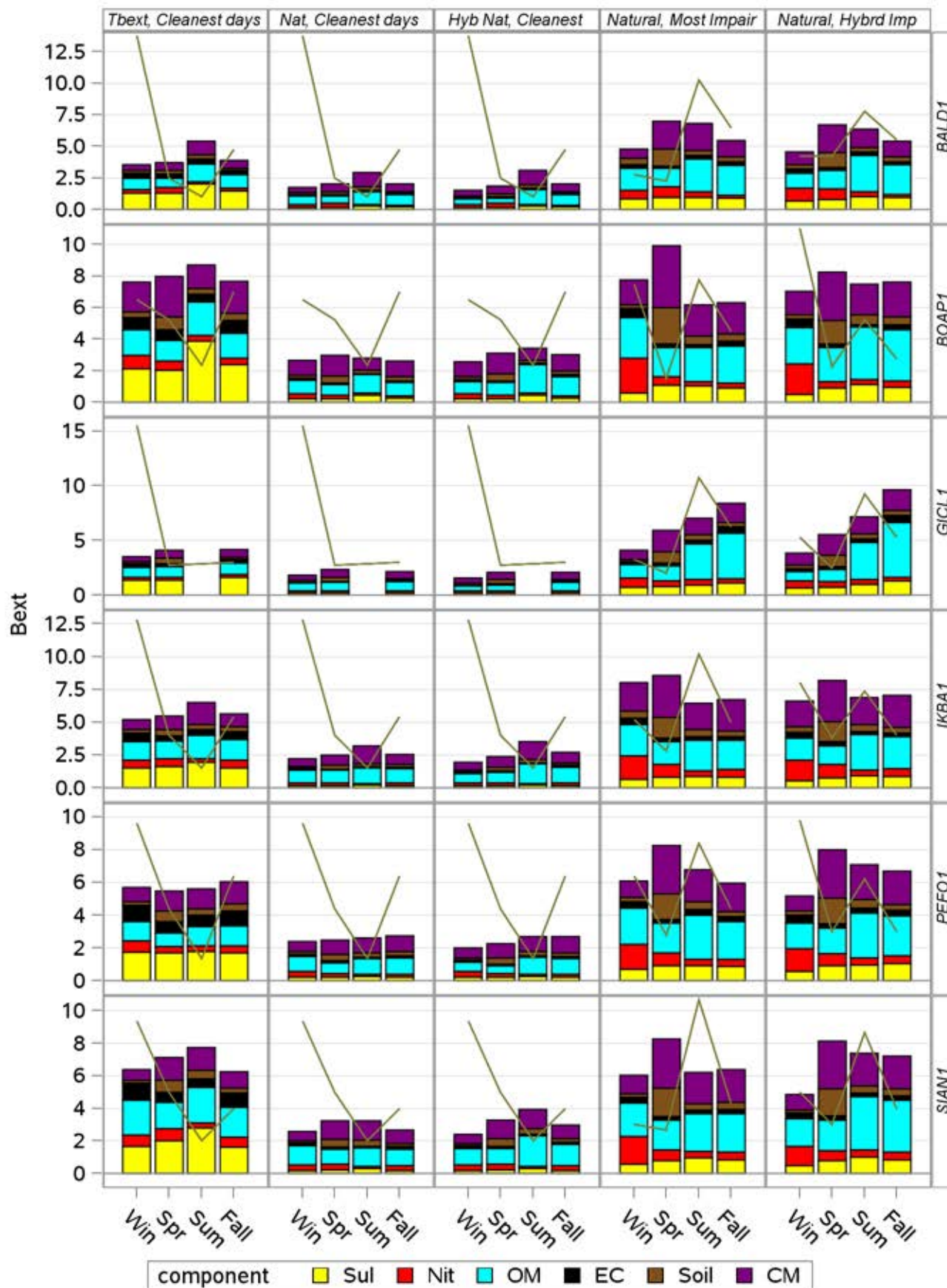
Mid South Budgets - Winter, Spring, Summer, Fall, 2010-2014



component Sul Nit OM EC Soil CM

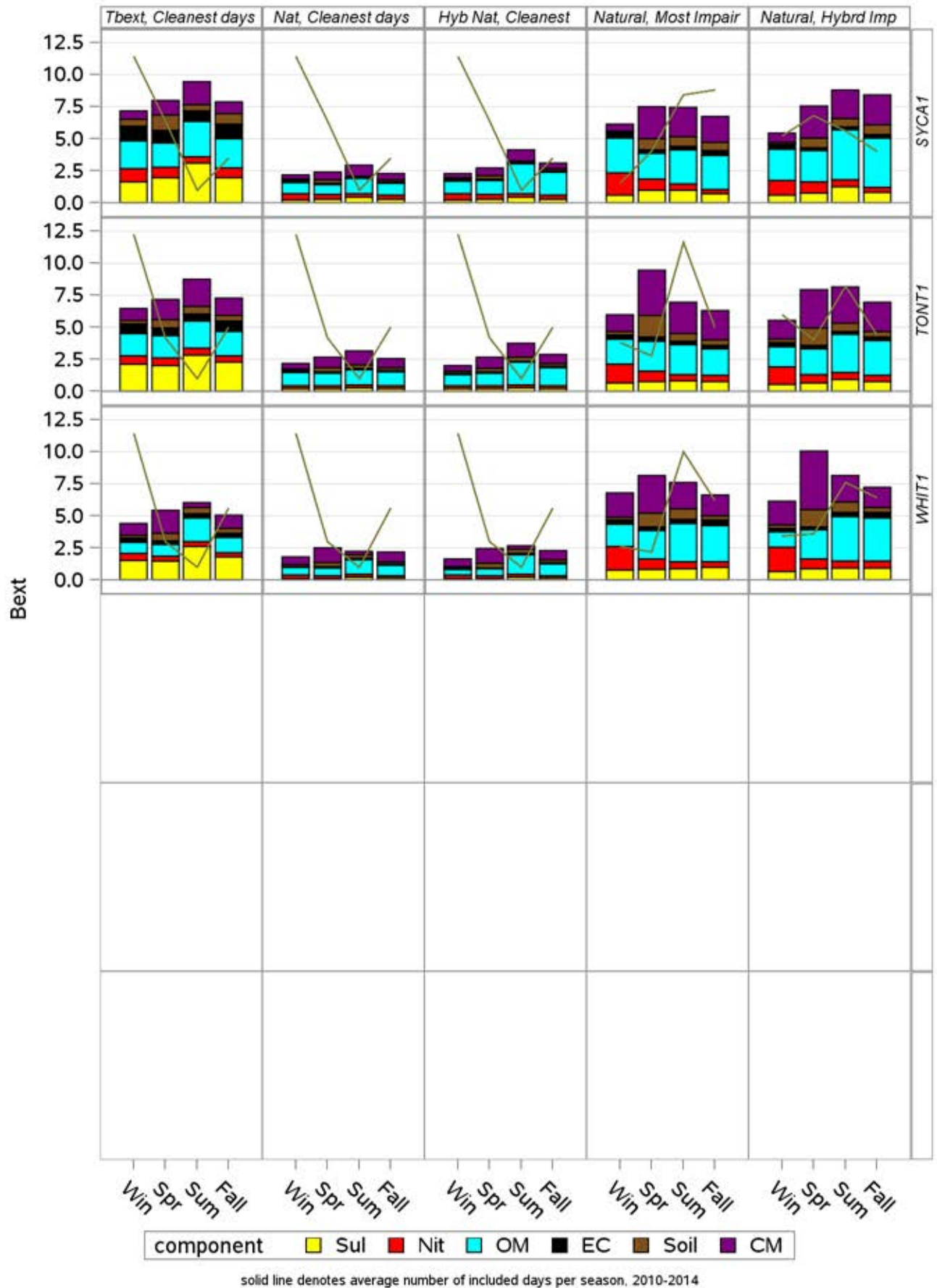
solid line denotes average number of included days per season, 2010-2014

Mogollon Plateau Budgets - Winter, Spring, Summer, Fall, 2010-2014



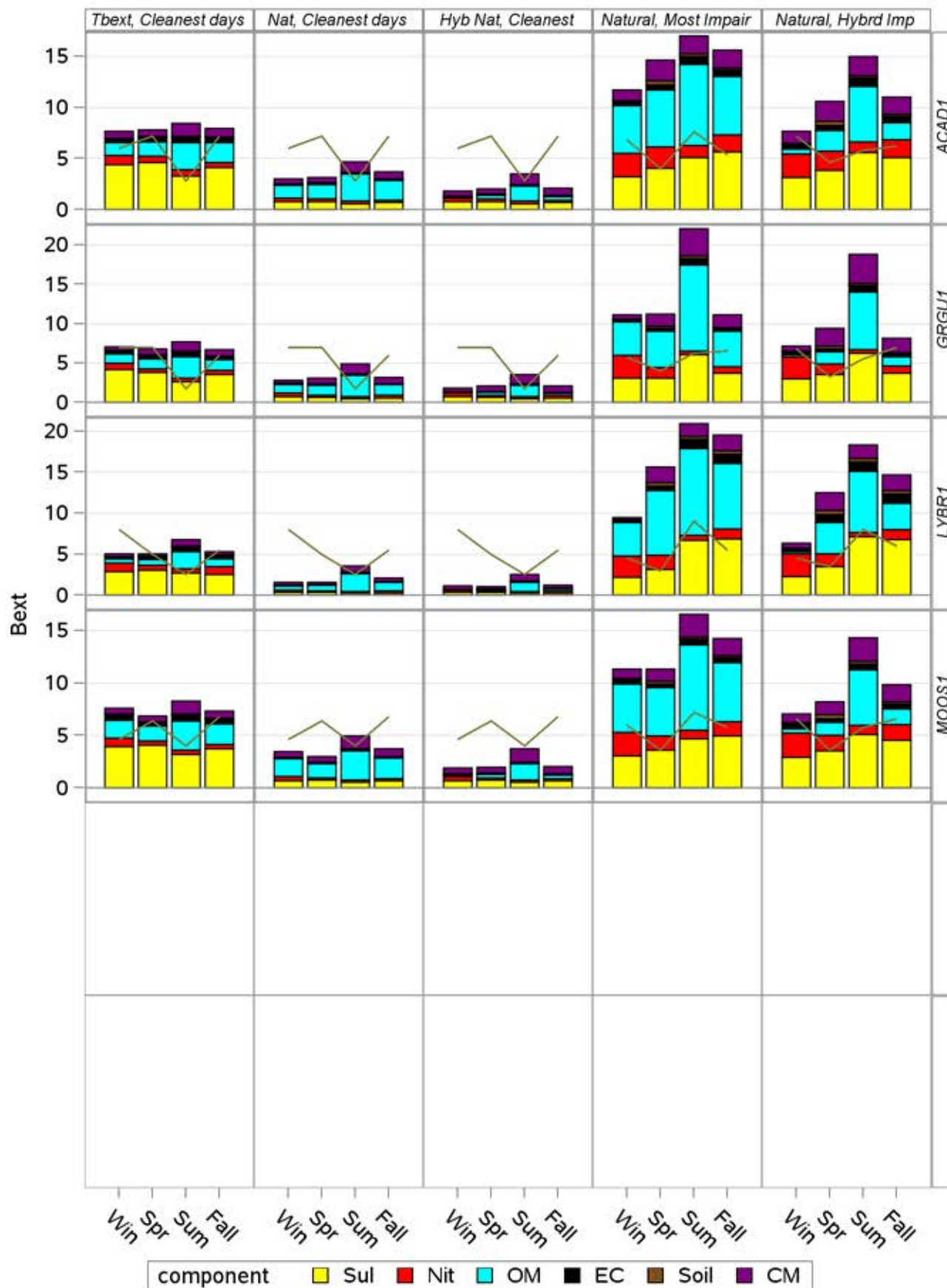
solid line denotes average number of included days per season, 2010-2014

Mogollon Plateau Budgets - Winter, Spring, Summer, Fall, 2010-2014



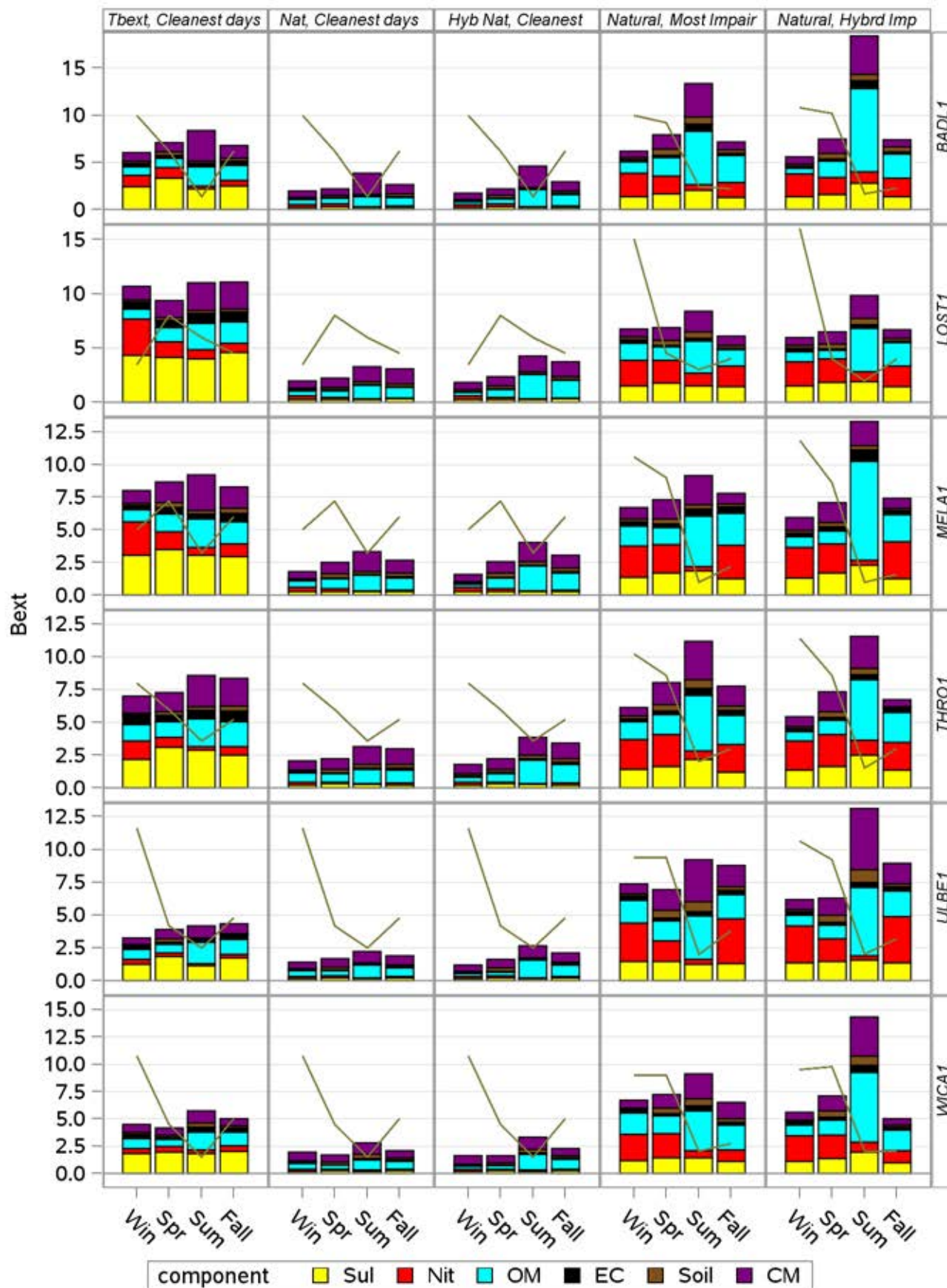
solid line denotes average number of included days per season, 2010-2014

Northeast Budgets - Winter, Spring, Summer, Fall, 2010-2014



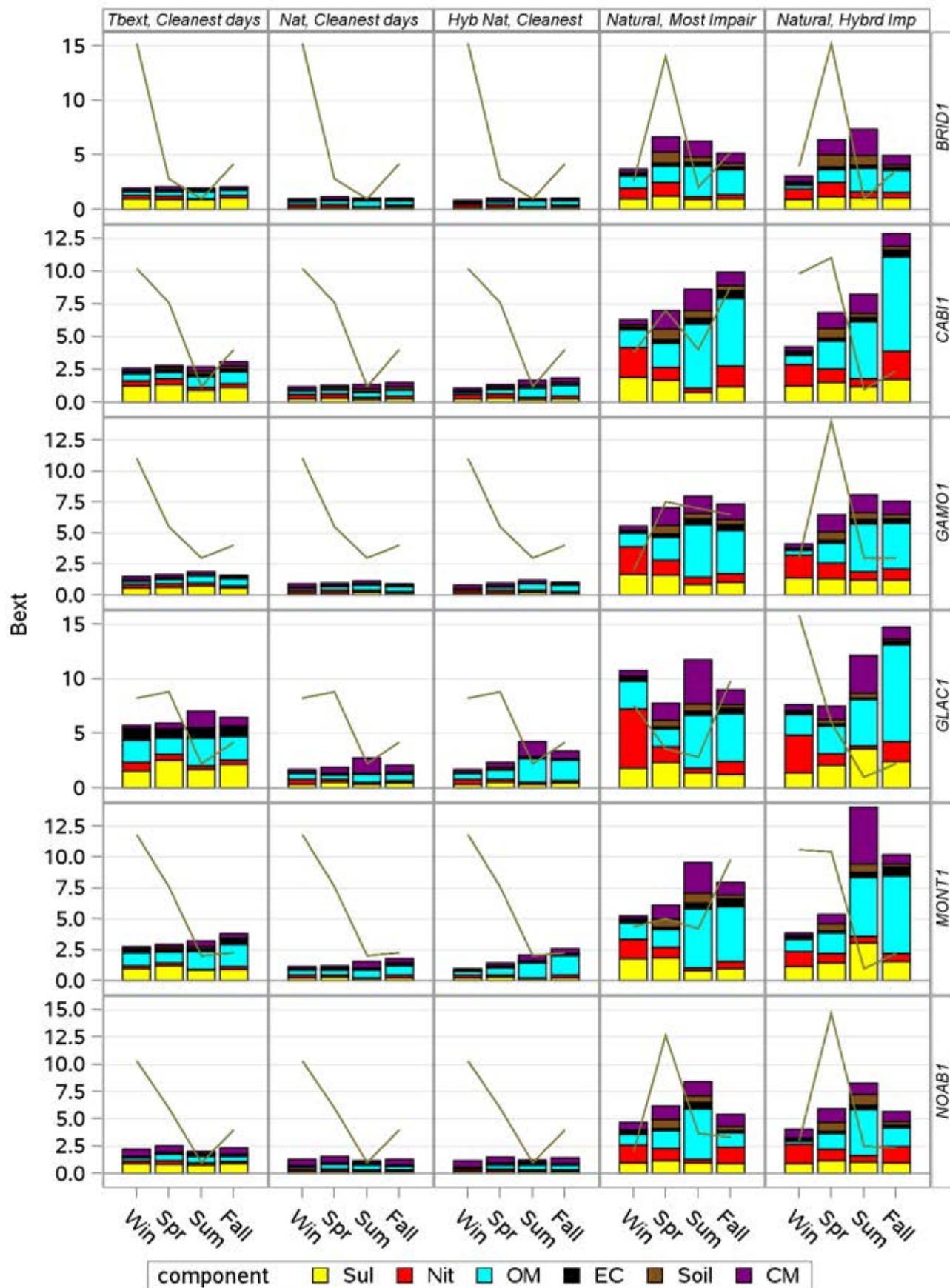
solid line denotes average number of included days per season, 2010-2014

Northern Great Plains Budgets - Winter, Spring, Summer, Fall, 2010-2014



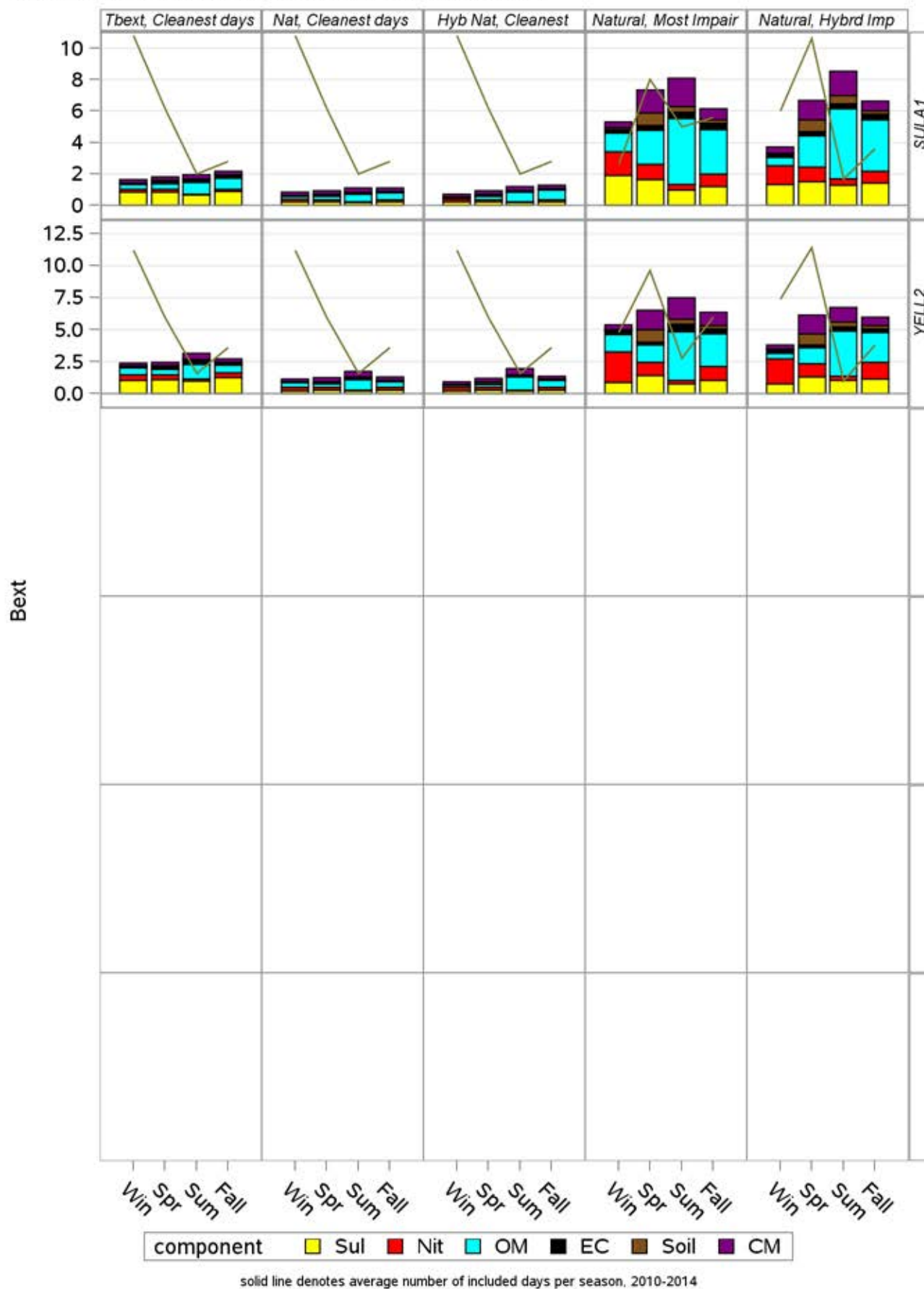
solid line denotes average number of included days per season, 2010-2014

Northern Rockies Budgets - Winter, Spring, Summer, Fall, 2010-2014



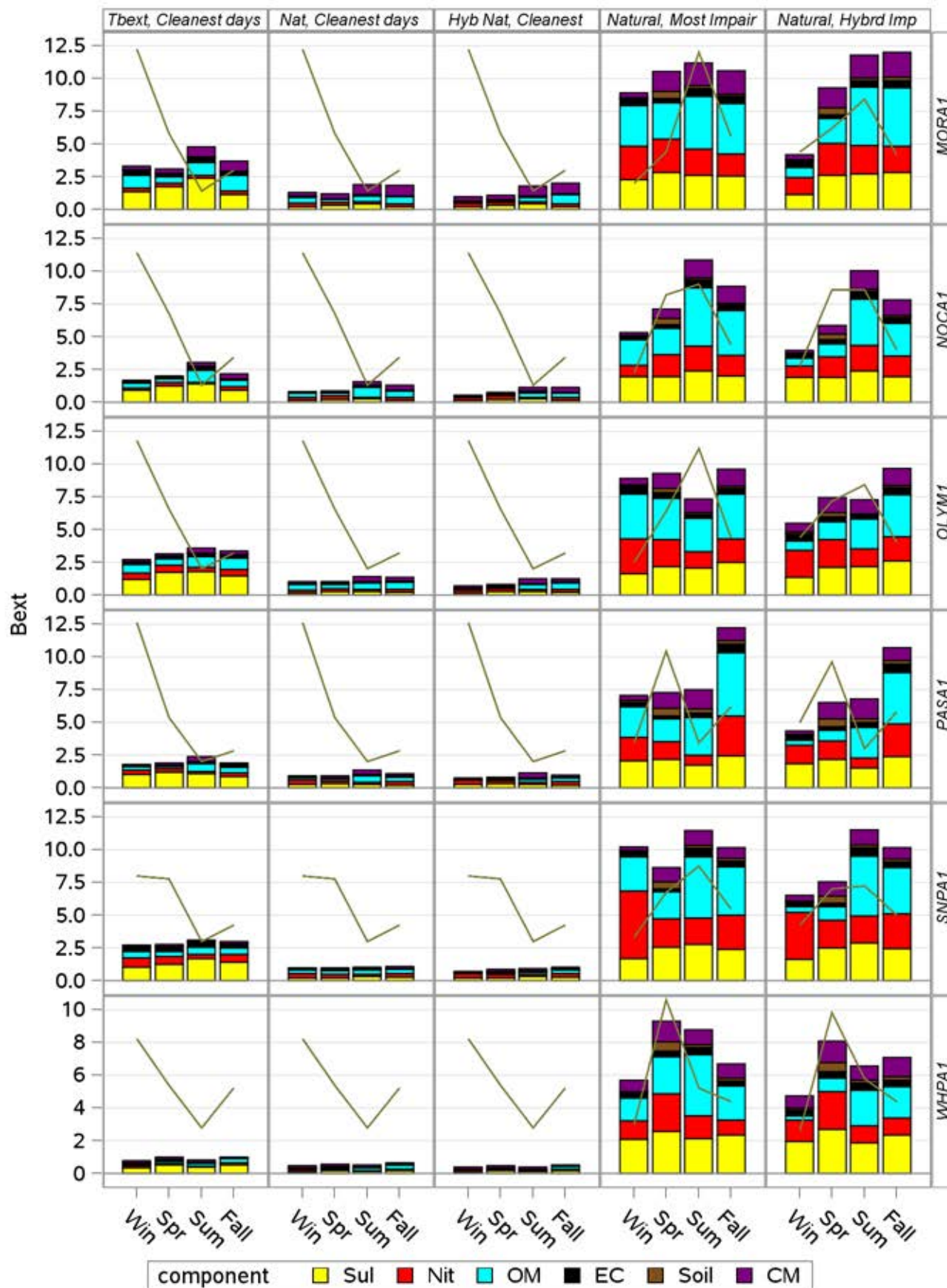
solid line denotes average number of included days per season, 2010-2014

Northern Rockies Budgets - Winter, Spring, Summer, Fall, 2010-2014



solid line denotes average number of included days per season, 2010-2014

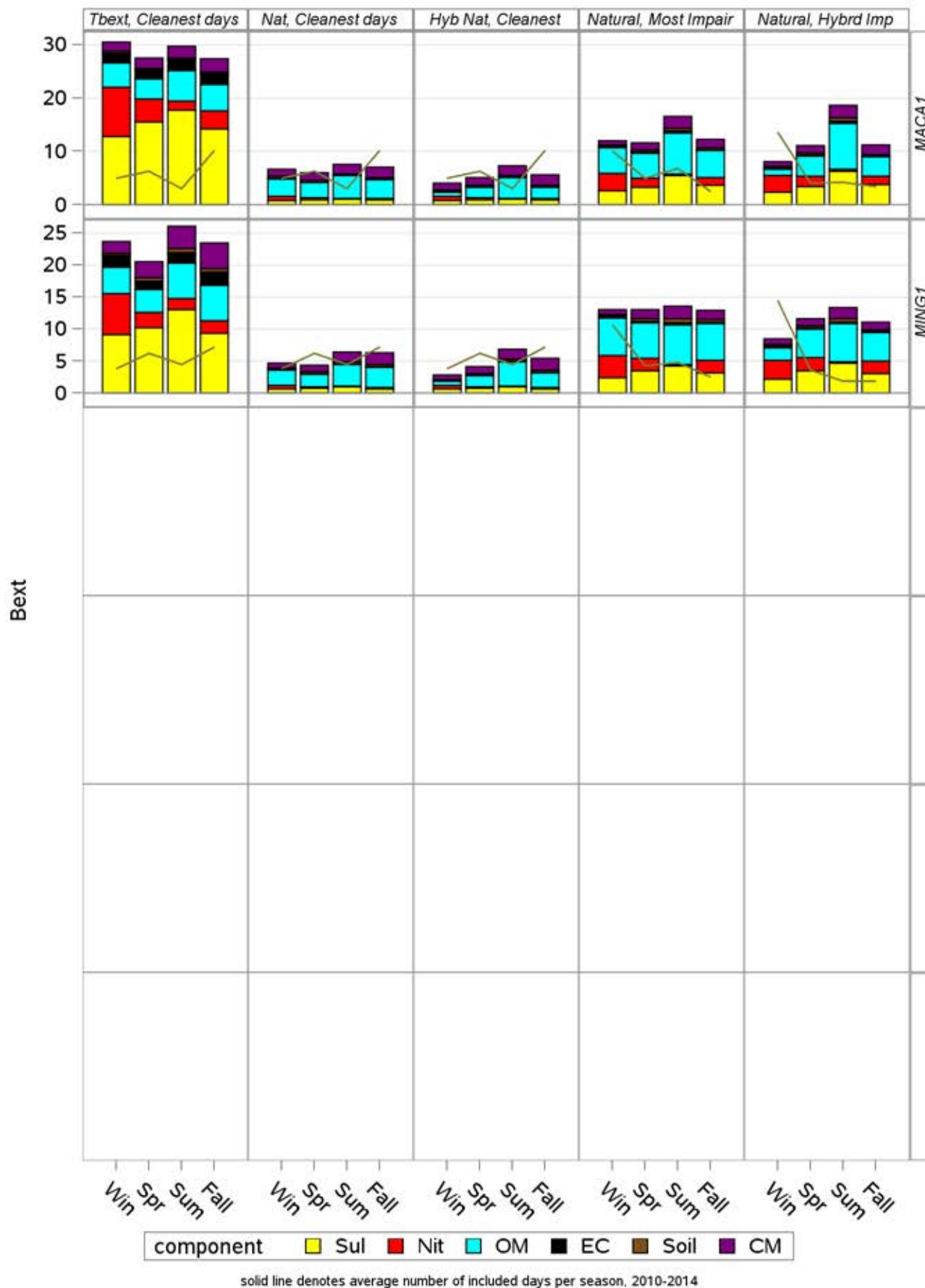
Northwest Budgets - Winter, Spring, Summer, Fall, 2010-2014



component Sul Nit OM EC Soil CM

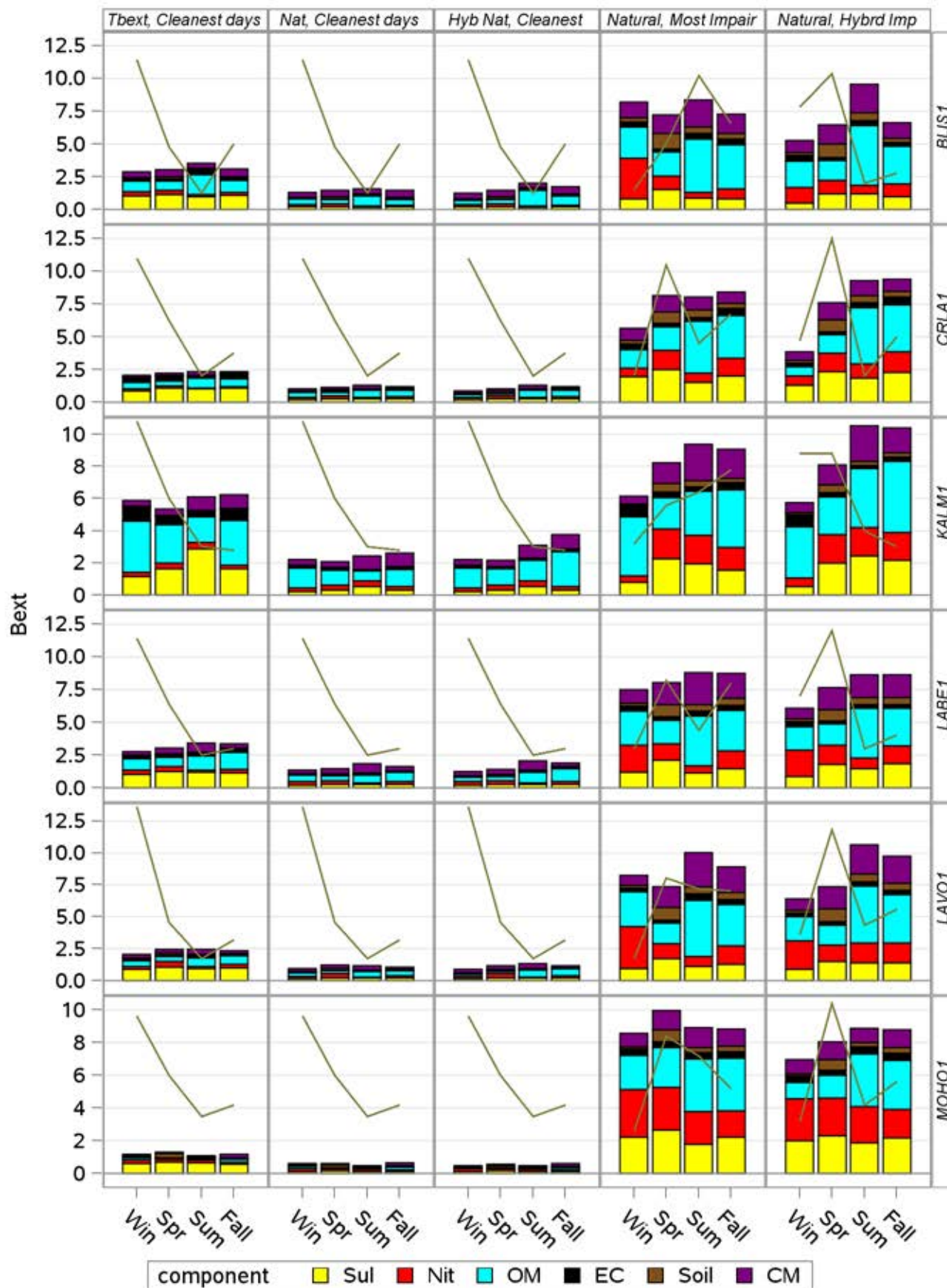
solid line denotes average number of included days per season, 2010-2014

Ohio River Valley Budgets - Winter, Spring, Summer, Fall, 2010-2014



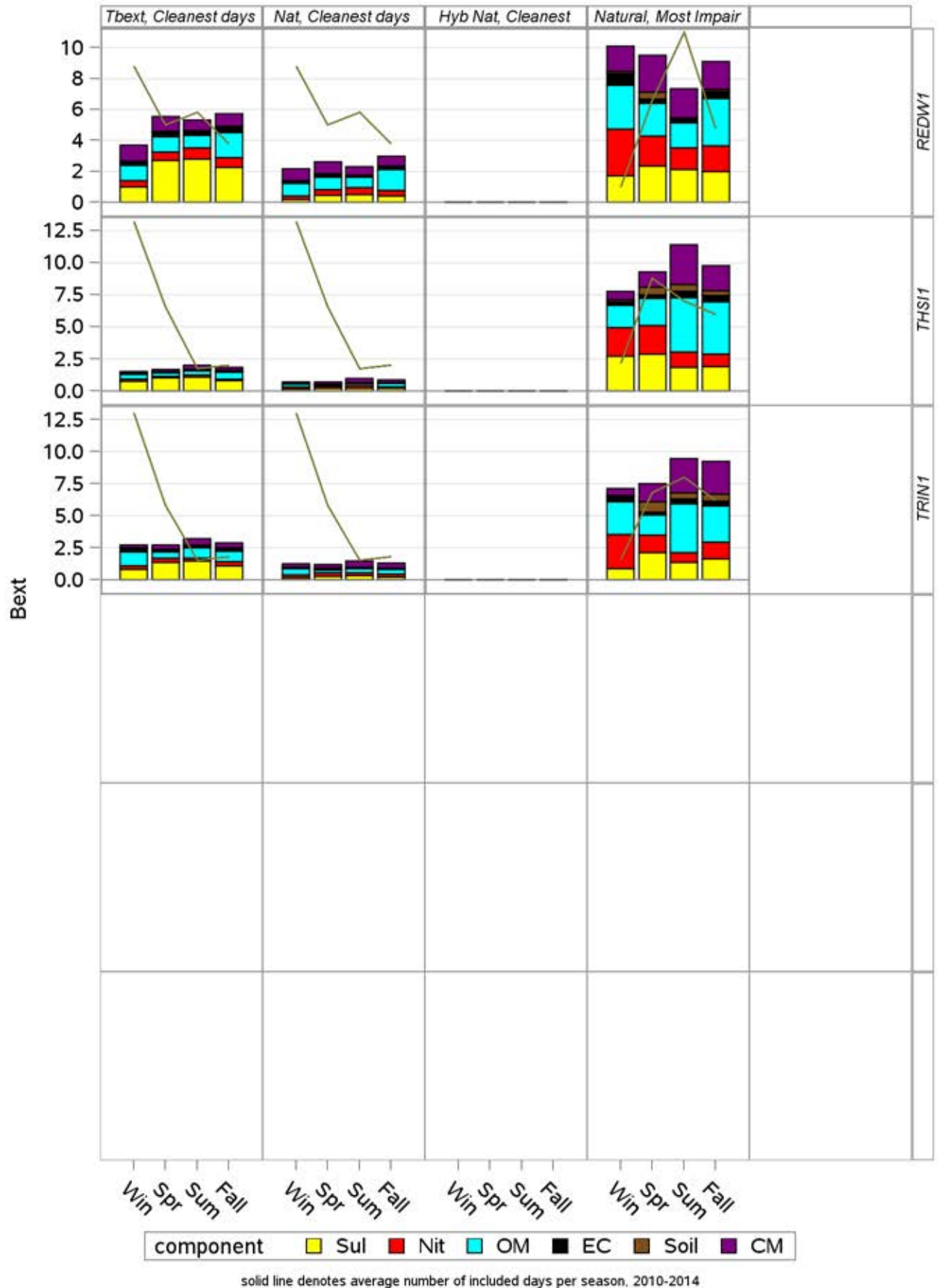
solid line denotes average number of included days per season, 2010-2014

Oregon and Northern C Budgets - Winter, Spring, Summer, Fall, 2010-2014



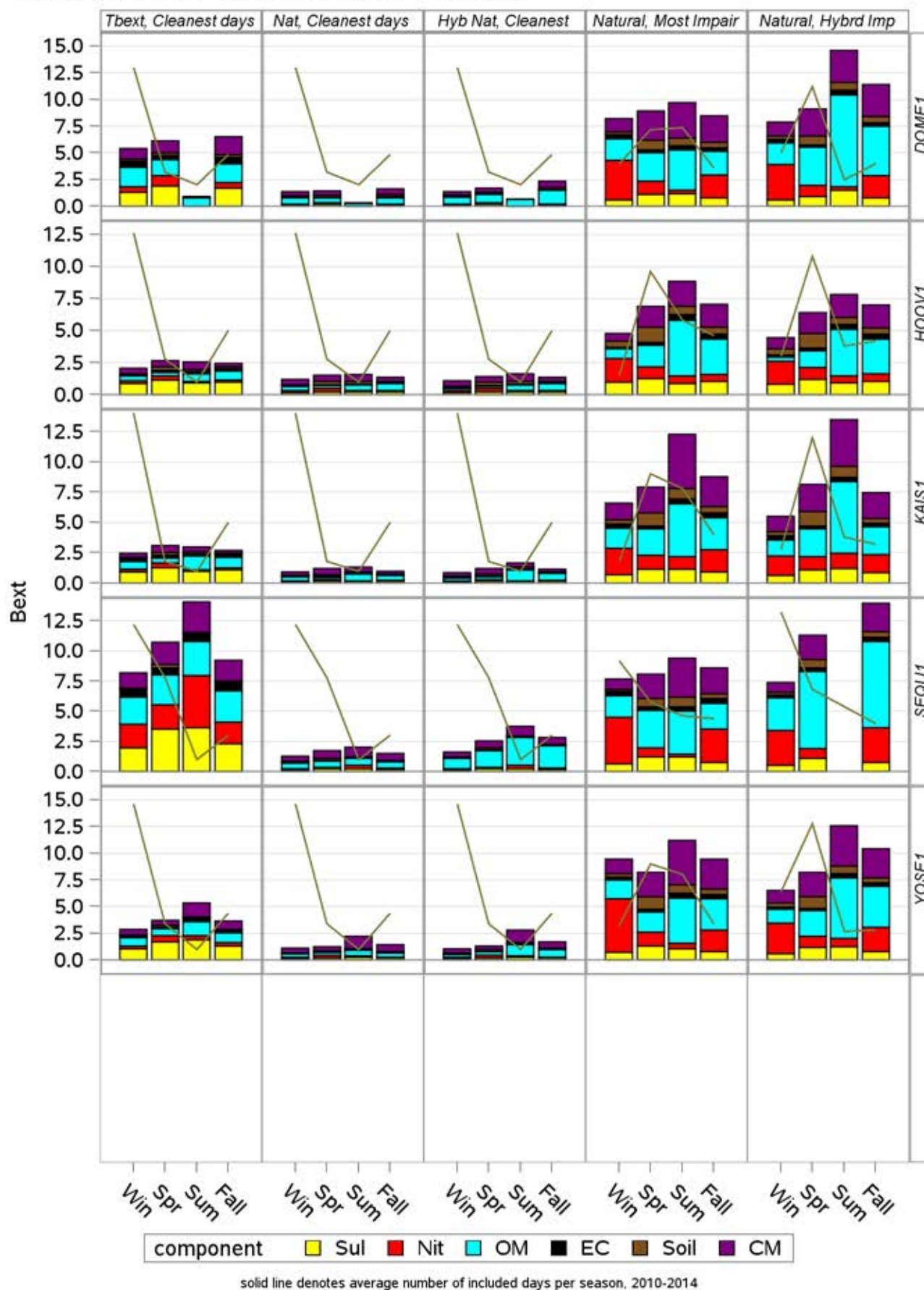
solid line denotes average number of included days per season, 2010-2014

Puget Sound Budgets - Winter, Spring, Summer, Fall, 2010-2014

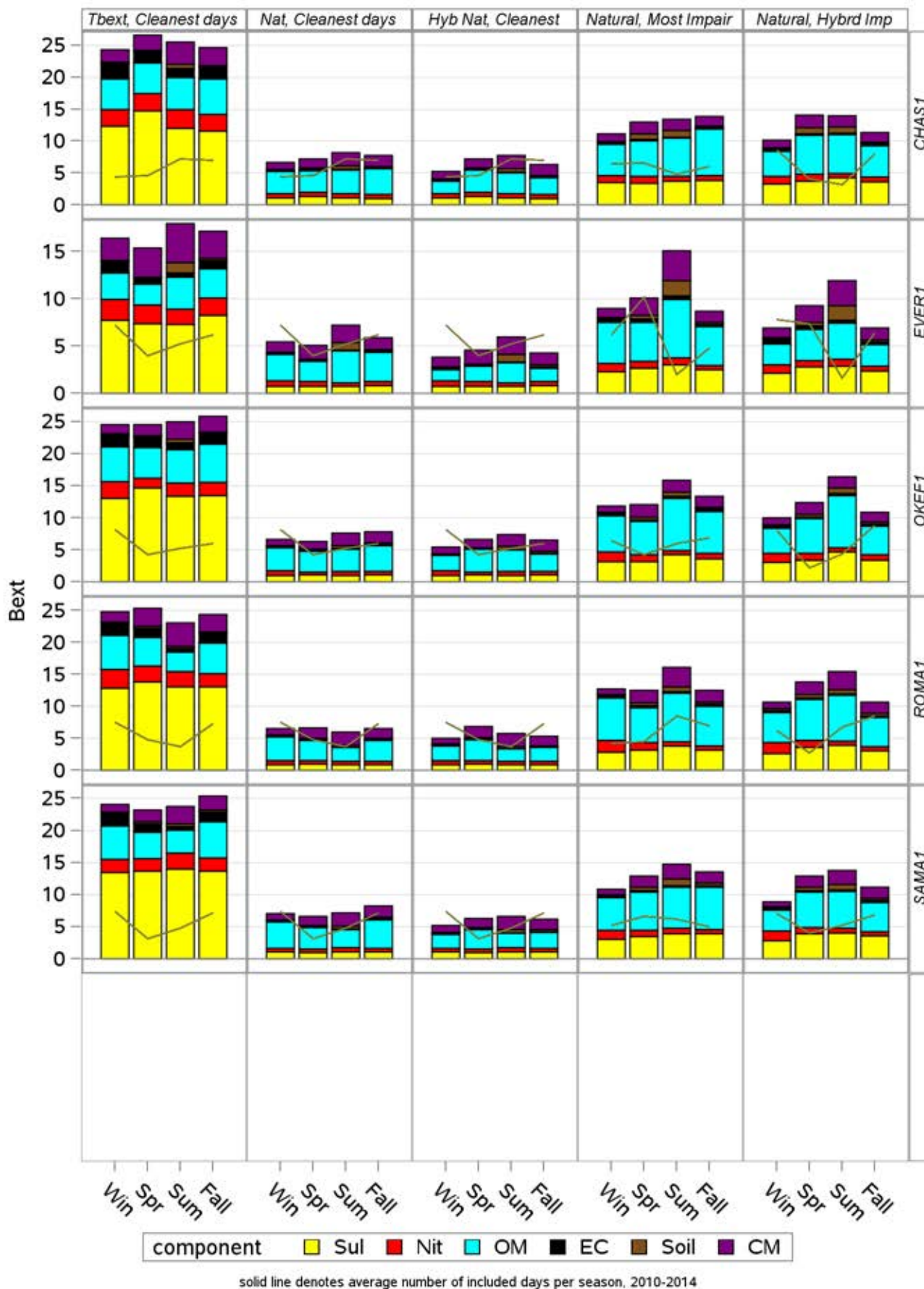


solid line denotes average number of included days per season, 2010-2014

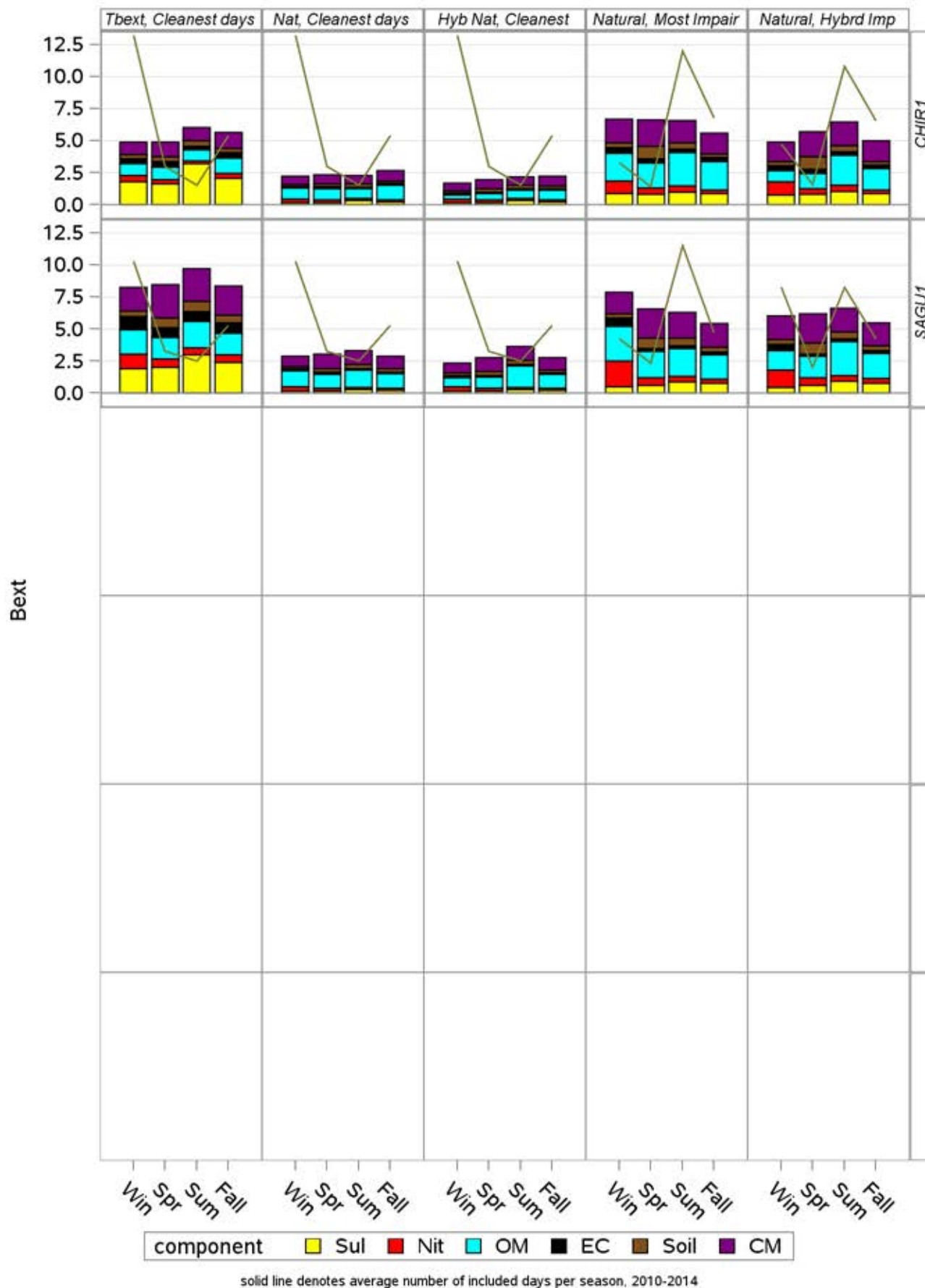
Sierra Nevadas Budgets - Winter, Spring, Summer, Fall, 2010-2014



Southeast Budgets - Winter, Spring, Summer, Fall, 2010-2014

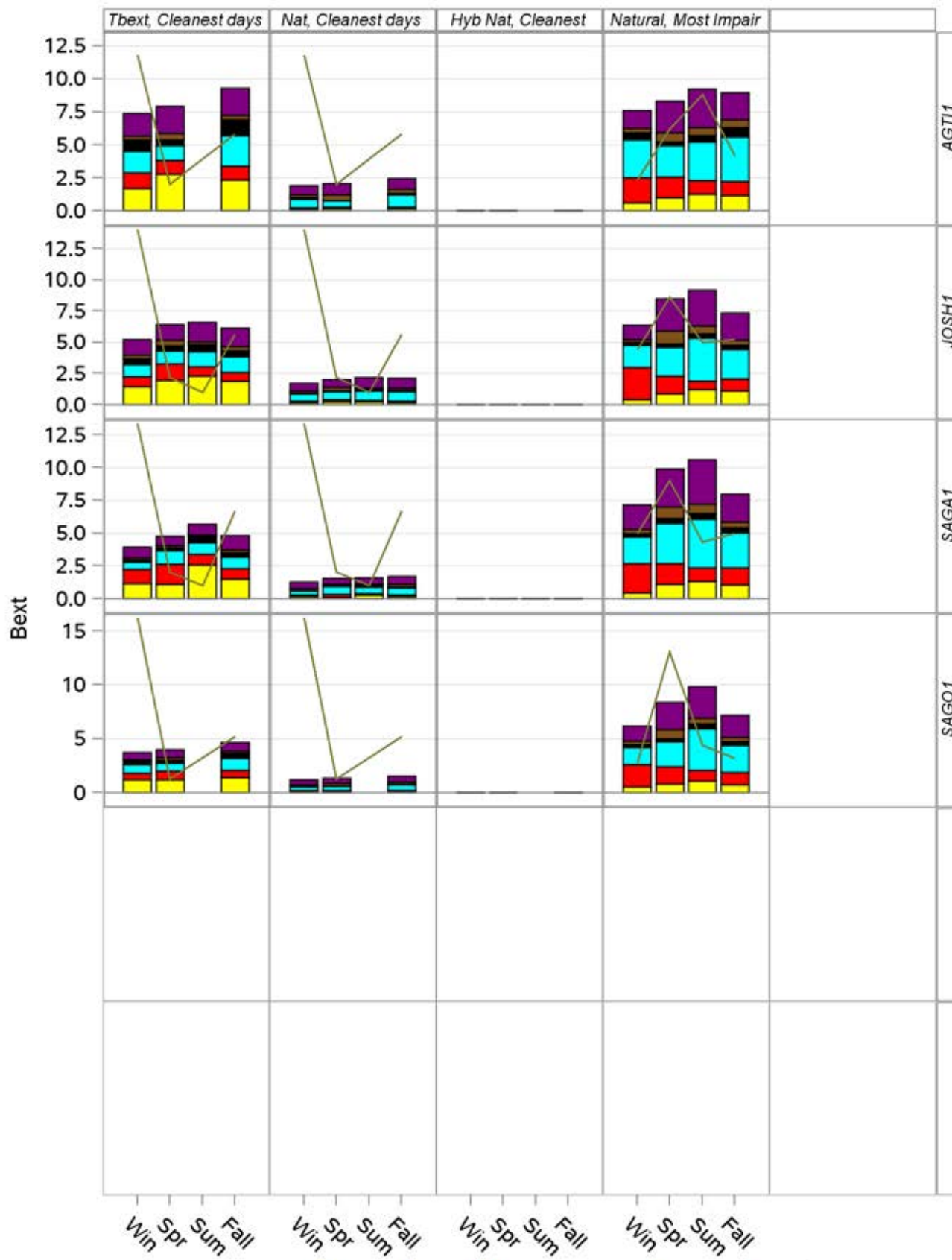


Southern Arizona Budgets - Winter, Spring, Summer, Fall, 2010-2014



solid line denotes average number of included days per season, 2010-2014

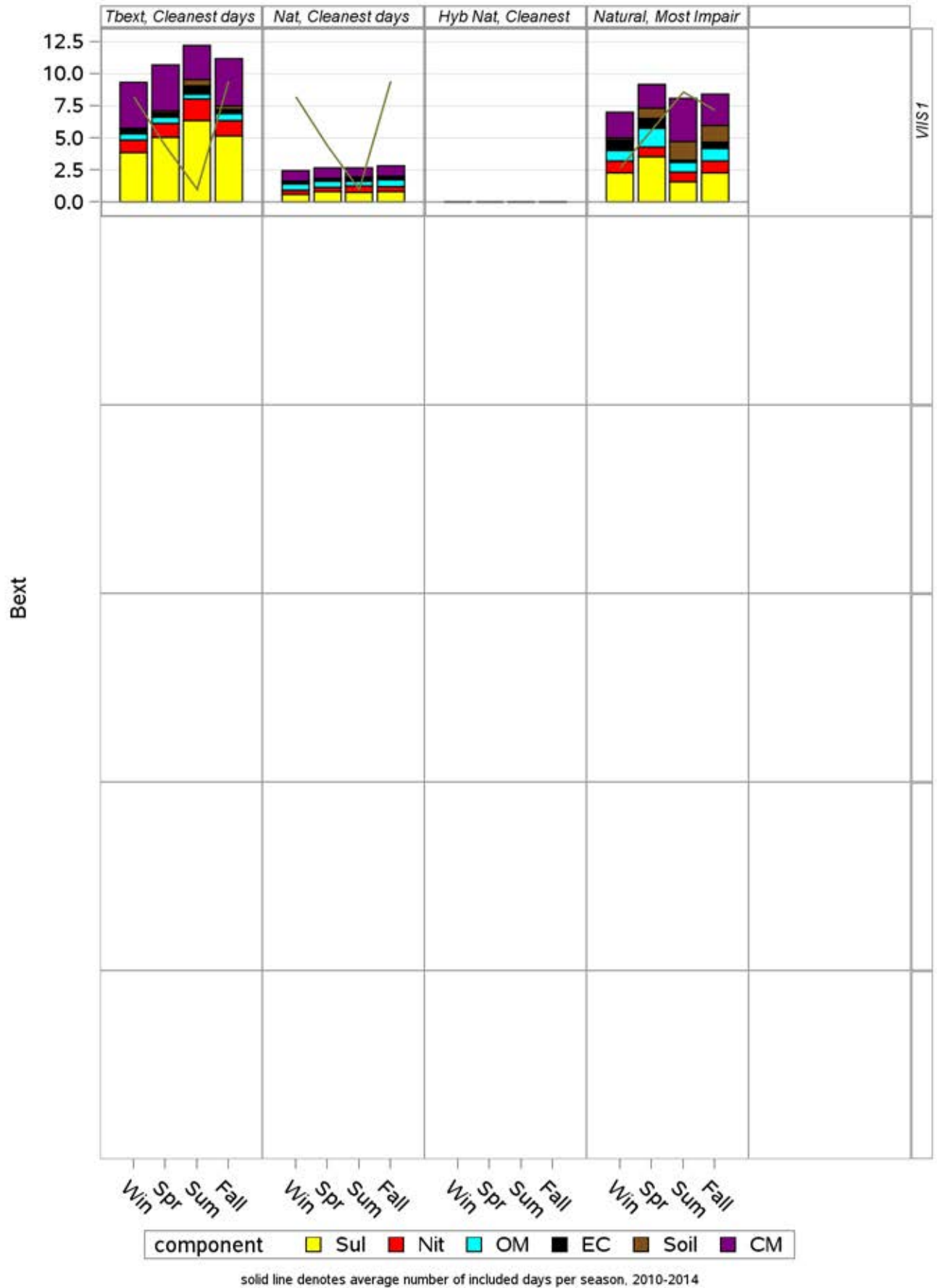
Southern California Budgets - Winter, Spring, Summer, Fall, 2010-2014



component Sul Nit OM EC Soil CM

solid line denotes average number of included days per season, 2010-2014

Virgin Islands Budgets - Winter, Spring, Summer, Fall, 2010-2014



solid line denotes average number of included days per season, 2010-2014

West Texas Budgets - Winter, Spring, Summer, Fall, 2010-2014

