Table S1. Moderate- to high-severity fires from 1850-1909 in the ponderosa pine and mixed-conifer forests of the southern San Juan Mountains from multiple sources. Fires can include many patches of atlas woodlands and/or fires.

Year and Side/Sources	Type of source	GIS map	Quote and discussion
1900-San Juan side			
[34] (The Daily Journal, Telluride 7-28-1900)	Early report		"The hazy appearance of the atmosphere yesterday and again today is due to terrific fires raging in the timber south and east of Rico, where a heavy growth covers the mountains. Fires started yesterday afternoon at the head of Remine creek in Deep creek basin, but it is thought this fire has been put out. Over the hill south of town smoke was discovered this afternoon...The month just closing has been the dryest July in the memory of the oldest inhabitants, and the danger from forest fires increases daily. It is said that over a million dollars worth of timber has been consumed near Bear creek on the Dolores below Rico, where on Thursday there was only two or three small fires that could have been easily controlled..."
[16] (p. 21)	Early report		"It is safe to say that 50 per cent of the area classified as woodland has been run over and seriously damaged by fire...These burns are in all stages, from areas covered with dead standing trees and down timber with no re-growth what so ever on the ground, such as the area at the head of Burnt Timber Creek in the La Plata, to large areas covered by stands of aspen of varying ages with a few scattering groups of conifers in mixture, such as are found on the hills on each side of the main Dolores along which runs the railroad."
[20] (Forest Atlas-Montezuma NF 1908 p. 13)	Early maps	Fire1 Woodland and Fire	The area described by Dubois on the Dolores matches the 54,631 ha woodland and fire patches from Rico to Dolores, which contain 32,828 ha of the ponderosa and mixed-conifer zones. The fire year is unknown, but likely includes 1900 and 1878. The Telluride paper quote likely represents at least part of a 1900 fire.
[34] (The Durango Democrat 7-20-1900)	Early report		"North East of Durango in the section east of Baker's bridge is raging the most destructive fire our people have ever known of. The distance from Durango is some fifteen miles, but the flames can almost be detected at mid-day and the volume of smoke is dense and expansive, lays like a huge bank of clouds in the north east. It is in the heavy spruce forests that abound in that section and the loss of such an enormous expanse of red and white spruce is one of millions to the mining industry and railroads. All such visitations can be traced directly to campers who are purposely negligent and the only regret is that they cannot share the heat as a partial reward for cussedness."
[20] (Forest Atlas-San Juan NF 1909 p. 7)	Early maps	Fire2 Fire only	T36N-T38N R7W shows a large area, possibly of woodland, but the shading switches suddenly at the western township boundary of T37N R7W, so I left this out of the digital map of fires based on woodlands, because of its ambiguity. This patch was about 13,000 ha (32,000 acres) within which was mapped a fire covering 2,296 ha, which could also have been the fire. Only 66 ha of this fire was in the ponderosa and mixed-conifer zones. This fire was reported to have been in 1900.

[34] (The Durango Democrat 7-22-1900)	Early report		"The forest fire up the Animas began near the old Lambert ranch about three miles north of the Steinegar-Thompson ranches, and is sweeping the forests in a northwest direction on north side of range between Junction and Hermosa creeks. It is a destructive blaze and will destroy thousands of pine and spruce trees. Capt. Dudley says it is the worst La Plata has experienced in point of destruction and is now raging in the heavy spruce forests near Oro Fino."
[20] (Forest Atlas-San Juan NF 1909 p. 6)	Early maps	Fire3 Woodland only	T36N R9W-R10W shows the Oro Fino Mine NW of Monument Hill and a narrow stretch of woodland and grassland extending down to the Tripp Gulch area on the west side of the Animas Valley, where there are also old cuttings mapped, that could have been fires, but no actual fires are mapped. The woodland patch itself was 265 ha, with 211 ha in the ponderosa and mixed-conifer zones, and it burned in 1900.
[49] (p. 23)	Early report		"...a sheepherder supposedly set a fire that burned over 500 acres in the Vallecito area."
[50] (p. 117, 124)	Early report		"The Vallecito Country had five hundred acres burned over in 1900, from a fire supposed to have been incendiary and set by one of the sheep herders of that time. Over one thousand dollars worth of damage was the result."
[20] (Forest Atlas-San Juan NF 1909 p. 8)	Early maps	Fire4 Fire only	T37N-T38N R6W shows a 205 ha fire near Vallecito Creek, but only 95 ha was in the ponderosa pine and mixed-conifer zones, and the fire burned in 1900.
[34] (The Pagosa Springs News 8-17-1900)	Early report		"In the western part of the county [Archuleta County] several forest fires are reported, which is burning some of the finest timber in this section."
[49] (p. 23)	Early report		"One fire started near the Piedra River, it was believed by lightning, traveled up Sand Creek and Weminuche Creek" This likely is reporting the same fire(s) as the previous reference.
[50] (p. 117)	Early report		"1900 proved to be another bad fire year. The summer was hot and dry when a fire started down the Piedra River and travelled up Sand Creek and Weminuche Creek. This fire was uncontrolled for over three weeks and is believed to have been started by lightning"
[20] (Forest Atlas-San Juan NF 1909 p. 9, 13)	Early maps	Fire5 Woodland and Fire	The entire length of the Piedra River, from where Highway 160 crosses it at the lower end upstream to the Hinsdale-Archuleta County line is part of a large woodland patch and four smaller fires. There is also a woodland patch on Weminuche Creek, but no woodland patch or fire on Little Sand Creek. Much of this may have burned in 1900, but part of this may have burned in 1898, 1879, or 1861. Total burned area is 38,805 ha, with 13,872 ha in the ponderosa and mixed-conifer zones.

[17] (p. 59)	Early report		"August 30th, the woods fringing the entire northern boundary of Archuleta County were found to be ignited. A large fire was burning near the head of Four Mile Creek, the smoke resembling a huge cloud as it passed over Pagosa Springs. Some forty square miles [10,400 ha, 25,600 ac] of Yellow Pine forest were burnt over. It was asserted that sheep herders who fired the grass in order to improve the pasture for next year are responsible in this case." The table on p. 60 also lists 40 square miles burned in Archuleta County and the map on p. 57 shows the burn area along the northern boundary. This mapped (p. 57) Michelsen fire patch, which I roughly digitized to have been 151,647 ha, extended into southwestern Rio Grande and southern Hinsdale and Mineral Counties. Hinsdale was reported in the table on p. 60 to have had 6 square miles [1,555 ha, 3,840 ac] burned, Mineral to have had 10 square miles [2,591 ha; 6,400 ac] burned. Thus, the area within Archuleta, Hinsdale, and Mineral Counties would have totaled 56 square miles [14,510 ha, 35,840 ac.]. Rio Grande county burned area is discussed later in this table.
[49] (p. 23)	Early report		"Another fire raged between Middle Fork and the East Piedra Rivers" This is likely also this fire, which burned part of the area between the Middle Fork and East Piedra Rivers.
[50] (p. 117, 124)	Early report		"During the same summer [1900] another fire burned over the country between Middle Fork and the East Piedra Rivers. This fire burned for ten days with only four men to fight it."
[34] (The Pagosa Springs News 8-17-1900)	Early report		"Several forest fires are raging in the vicinity of Pagosa Springs. Last Sunday a large fire was doing a great deal of damage near Mrs. Cade's ranch, and another area near the top of the range northeast of town, both of which could easily be seen in Pagosa."
[34] (The Pagosa Springs News 8-31-1900)	Early maps		"If the forest fire above Mrs. Cade's ranch burns much longer there won't be any timber left in that part of the country. It has been burning the last two months." "A big forest fire is reported in Laughlin Park."
[20] (Forest Atlas-San Juan NF 1909 p. 11, 13)		Fire6 Woodland and Fire	Mrs. Cade's ranch east of Pagosa Peak in S35 T37N R2W is within a woodland patch with two associated fires. This 14,145 ha total area, with 13,088 ha in the ponderosa and mixed-conifer zones, matches the 14,510 ha fire reported by Michelsen and matches the locations described in the above sources. This patch goes down to within 0.7 km of Laughlin Park. Most of this burned in 1900, but part could have burned in 1898.
[49] (p. 23)	Early report		"...Several large fires burned over the Pagosa area, particularly one started by campers (from either their camp fire or from smoking) around Borne Lake, Beaver Creek, and a portion of West Fork."
[50] (p. 117)	Early report		"Sometime during the period 1899-1905, the exact year being unknown, several large fires burned in the transitional and spruce types in the Pagosa Country. Apparently no efforts were made to extinguish these fires and many of them burned nearly all summer. Some of them threatened to get down into the lower altitudes. Henry Born father of the James Born now residing near Pagosa Springs, fought fire off-an-on all one summer to save the timber around the Borns Lake. This fire burned out Beaver Creek and part of West Fork and was believed to have been started by campers either from their camp fires or from smoking."
[20] (Forest Atlas-San Juan NF 1909 p. 11, 13)	Early maps	Fire7 Woodland and Fire	Borne Lake may be Borns Lake, and Beaver Creek is just upstream from it on the West Fork of the San Juan. This area has a woodland patch with fires on the two sides of the West Fork. The total is 2,324 ha burned, 845 ha in the ponderosa and mixed-conifer zone, likely all in 1900.

1900-Rio Grande side	Type of source	GIS map	Quote and discussion
[51] (p. 2, 7)	Early report		"Tie Hill...Extensive area of Decker, Goodrich, and Lake Fork Creeks" SW of South Fork on the Rio Grande. "Started from Bengards Mill on the South Fork just below Park Creek."
[17] (p. 59)	Early report	Michelsen	"August 16, two fires originated on the South Fork of the Rio Grande, one east and the other west of the river, within three miles of each other. The one on the west side burned up the mountain and stopped after reaching timber line..."
[20] (Forest Atlas-Rio Grande NF 1909 p. 8)	Early maps	Fire8 Woodland only	The west side of the South Fork of the Rio Grande is covered by a fire patch and a woodland patch. Total burned area is 2,439 ha, with 1,145 ha in the ponderosa and mixed-conifer zones. Some of the area in a fire patch for Fire17 in 1881, on Goodrich Creek, likely burned in this 1900 fire.
[17] (p. 59)	Early report	Michelsen	"August 16, two fires originated on the South Fork of the Rio Grande...that on the east side burned a swath from five to twenty miles wide, taking everything in its way driving several hundred thousands of cattle and sheep into the valley, and destroying mine buildings, machinery and shaft houses in the whole region at the headwaters of the Alamosa and Conejos rivers. The length of the path burned over was about forty-five miles. All of this devastation can be traced to sheep herders who, either carelessly or maliciously, left their logs burning on breaking camp." The table on p. 60 lists 205 square miles (53,117 ha, 131,200 ac) burned in Rio Grande County, but data appear missing for Conejos County. The map on p. 57 shows a large fire down the west side of both counties.
[15] (p. 9)	Early report		"The effect of denudation [by fire] is shown by the Conejos River...For the past six years [1897-1903] fires have occurred repeatedly in the timber on its headwaters."
[34] (The San Juan Prospector, Del Norte, Colorado 9-1-1900)	Early report		"The great devastation of timber continues in the country south and west of Del Norte and it is the general belief that the fires are being started intentionally. The State authorities evidently do not think enough of this part of Colorado to make an effort to apprehend the men who are guilty of such work. In the meantime, the loss entailed upon the people of this section is very great. Never within our recollection has the destruction of timber been as great as this season, a destruction that will be felt in a higher price for lumber, a scarcity of mining timber and fuel, and an earlier melting of the snow upon which the farmer relies for water for his crops."
[20] (Forest Atlas-Rio Grande NF 1909 p. 8, 9)	Early maps	Fire9 Woodland and Fire	The fire start may have been in T39N R3E S21-S22 (p. 9), in a woodland. It is possible to connect up (there are some large gaps, though, where fire either spotted or burned at low severity) along a set of patches to the southeast from the South Fork of the Rio Grande across the headwaters of the Alamosa and Conejos Rivers, which would stretch 77 km (48 miles), if so, going from p. 9 to p. 12-13 to p. 14-15. The resulting set of fire patches would total 55,975 ha, with 21,585 ha in the ponderosa and mixed-conifer zones. Some of this area burned in 1900 may have burned earlier, in 1875 or 1873.
1899-San Juan side			
[10] [20] (Forest Atlas-San Juan NF 1909 p. 15).	Tree-rings Early maps	Fire22 Woodland and Fire	Squaretop study area This area contains a fire patch that encloses much of Tepley and Veblen's study area, which also partly overlaps a very large woodland patch. Tepley and Veblen (2015) showed that the fire patch and nearby woodland patch burned in 1899, 1879/1878, and 1861/1860. Their maps show which parts of the atlas fire and adjoining woodland patch burned in these years, but not the whole woodland patch. The total fire area is 73,925 ha, with 62,135 ha in the ponderosa and mixed-conifer zones.

1898-San Juan side	Source	GIS map	Quote and discussion
[49] (p. 23)	Early report		"In 1898, a fire, started from an unknown source, near Bayfield burned approximately 5,000 acres..."
[50] (p. 116)	Early report		"Near Bayfield there was an area of approximately five thousand acres which had been burned over years before. This area burned over for the second time in 1898, the fire starting from an unknown cause. It burned during the month of August for fourteen days.
[20] (Forest Atlas–San Juan NF 1909 p. 12)	Early maps	Fire5 Woodland and Fire	There is a large woodland patch of 35,143 ha that is in part only about 3 km east of Bayfield; it is likely that part of this large patch burned in 1898, rather than 1900.
[49] (p. 23)	Early report		"...another fire started by a hunter's camp fire burned along the west side of middle Fork Creek and up Oak Brush Hill in the Piedra area"
[50] (p. 116-117, 124)	Early report		"...a forest fire started by a hunter's camp fire burned uncontrolled along the west side of Middle Fork Creek and up Oak Brush Hill in the Piedra country. It burned until extinguished by heavy rains."
[20] (Forest Atlas–San Juan NF 1909 p. 9-10)	Early maps	Fire6 Woodland and Fire	This is part of a large patch of 14,145 ha, reported to have burned in 1900, that terminates on its western end right in this area; it is likely that part of this area burned in 1898, not 1900.
[49] (p. 23)	Early report		"That same year also witnessed a fire that began on Horse Creek when Pat Murphy built a smudge fire to keep flies away from his horses and burned east to Gold Run Creek and north to the Hogback, northeast of Mancos"
[50] (p. 124)	Early report		"Also in 1898 a fire started on Horse Creek and burned East to Gold Run Creek and north to the Hogback which is northeast of Mancos. Messrs. William Young and Herbert Shackley fought this fire to save Mr. Young's cabin and fencing. This fire was started by Pat Murphy who built a "smudge fire" to keep flies away from his horses."
[20] (Forest Atlas–Montezuma NF 1908 p. 17)	Early maps	Fire10 Woodland only	This is a large woodland patch of 28,381 ha, that at its southeastern extent, runs across this specific area; it seems likely that about 1,000 ha (2,500 ac) of this large patch burned in 1898, and another 2,000 ha in 1892, but the Romme et al. study suggests fires in or before 1879, in the period from about 1880-1850, in a larger area near this.
1898-Rio Grande side	**Source**	**GIS map**	**Quote and discussion**
[51] (p. 2) [20] (Forest Atlas-Rio Grande NF 1909 p. 12)	Early report Early maps	Fire11 Fire only	"Klondike Mountain Adams Fork, and Globe Creek" in upper Conejos and Alamosa River drainages T36N R4E has a 1,464 ha fire, with only 23 ha in the ponderosa and mixed-conifer zones. This 1898 fire area may be in the same area as reported by Spero to have burned in 1875.
1896/1891-San Juan side			
[10] [20] (Forest Atlas-San Juan NF 1909 p. 9)	Tree-rings Early maps	No fire detected	Williams Creek study area The small high-severity fire area and medium moderate-severity fire area were not detected here by atlas fires or woodlands, as the area is mapped as forest with 2,000-5,000 b.f. It is possible that fire in the moderate-severity area reduced timber volume somewhat, leaving this level of b.f., but not enough to produce a woodland.

1895-San Juan side			
[50] (p. 116, 123)	Early report		"In 1895 campers were the cause of a thousand acre fire in the Vallecito country. Five million board feet of timber was destroyed with a value of over five thousand dollars. Most of the early fires, including this one, were allowed to burn until rain put them out."
[20] (Forest Atlas–San Juan NF 1909 p. 4, 8)	Early map	No fire detected	No fires or woodlands are mapped in the Vallecito drainage except a 1900 fire patch. This same description was attributed to 1879 by Romme and Bunting [49] (p. 23).
1893-Rio Grande side	**Source**	**GIS map**	**Quote and discussion**
[51] (p. 2)	Early report		"Dry Gulch...Entire Gulch," and "Farmers Creek...Upper part of watershed" just east of Creede "Mammoth Mountain South and east exposures" N of Creede. Likely the same fire.
[20] (Forest Atlas-Rio Grande NF 1909 p. 3)	Early maps	Fire12 Fire only	This burned area is 2,059 ha in total, with 136 ha in the ponderosa and mixed-conifer zones.
[51] (p. 2)	Early report		"Willow Creeks East and West Willow, Shallow, Sunnyside Creeks, Dry Gulch and the vicinity of the town of Bachelor" north and west of Creede. Quotes from Nolie Mumey: "The town of Bachelor was threatened by fire on June 23, 1893 when the forest fire which had been burning moved toward town. The people of Jimtown rushed up to Bachelor and helped save the town. The forest fire burned up to the edge of Bachelor devastating East Willow and West Willow Creeks. Shallow Creek and Sunnyside Creek were also burned in the same fire."
[20] (Forest Atlas-Rio Grande NF 1909 p. 2)	Early maps	Fire13 Woodland only	T42N R1W-R2W–this area has a woodland and two fire patches over 6,841 ha with 2,375 ha of the ponderosa and mixed-conifer zones. Other parts of this area are shown as a grassland of 2,500 ha + (6,000 ac +), which could also be part of the fire area, as there are sharp boundaries with forests. This area burned in 1893.
[51] (p. 2, 4, 6)	Early report		"Douglas Mountain Lime, McCall, Credit & Deep Creeks. Also the N and NE exposure of Snowshoe Mountain" large circular mountain south of Creede. On p. 4 from LaFont (1922)–"During the summer of 1893 the town [Spar City] was threatened by forest fires. A large forest fire was burning south of Spar City and another to the north. The one to the north burned till the snow fell and its area extended from the Point of Rocks over the Deep Creek Hills, and Snowshoe Mountain...This fire swept Lime Creek and continued in a N/NE direction until snow fell."
[20] (Forest Atlas-Rio Grande NF 1909 p. 2, 7, 8)	Early maps	Fire14 Woodland and Fire	This 1893 fire area has nine patches of fire and six patches of woodland over 8,488 ha, with 2,635 ha of the ponderosa and mixed-conifer zones.
[51] (p. 2, 3, 7)	Early report		"Rock Creek" NE of Alamosa River drainage.."In June 1893 in a single day fire swept the entire watershed of North Rock Creek"
[20] (Forest Atlas-Rio Grande NF 1909 p. 13)	Early maps	Fire15 Woodland and Fire	This area has a total burn area of 10,493 ha, with 6,892 ha of the ponderosa and mixed-conifer zones. It is likely part of this total area burned in 1893 and part in 1892 (see below).

1892-San Juan side			
[50] (p. 123) [20] (Forest Atlas–Montezuma NF 1900 p. 17)	Early report Early maps	 Fire10 Woodland only	"In 1892 the Townsend Basin fire started along the East Mancos Creek and burned to timber line. Cause of fire unknown." T36N R12W About 2,000 ha burned in 1892, with about 770 ha of ponderosa pine and mixed-conifer forest, within a large woodland patch of 28,381 ha, that likely also burned in 1898 and 1880-1850.
1892-Rio Grande side	**Source**	**GIS map**	**Quote and discussion**
[51] (p. 2) [20] (Forest Atlas-Rio Grande NF 1909 p. 2)	Early report Early maps	 Fire15 Woodland and Fire	"South Rock Creek" Likely part of the Fire15 area, which may also have burned in 1893.
1887-San Juan side	**Source**	**GIS map**	**Quote and discussion**
[49] (p. 23) [20] (Forest Atlas–San Juan NF 1909 p. 4, 8)	Early report Early maps	 No fire detected	"...campers ignited a 1,000 acre fire in the Vallecito country that destroyed 5 million board feet of timber, valued at over $5,000" No fires or woodlands are mapped in the Vallecito drainage except a 1900 fire patch
1887-Rio Grande side	**Source**	**GIS map**	**Quote and discussion**
[51] (p. 2) [20] (Forest Atlas-Rio Grande NF 1909 p. 13)	Early report Early maps	 Fire16 Fire only	"Cat Creek Entire upper reaches of Cat Creek" in Alamosa drainage. A single fire patch of 316 ha, with 234 ha in the ponderosa and mixed-conifer zones. Could have burned some of the adjoining woodland patch which I assigned to a 1900 fire.
1884-San Juan side	**Source**	**GIS map**	**Quote and discussion**
[49] (p. 23) [50] (p. 123) [20] (Forest Atlas–San Juan NF 1909 p. 4, 8)	Early report Early report Early maps	 Fire 10 Woodland & cutting	"The next large fire occurred in 1884. Reportedly set by Indians, the fire burned most of the summer." Lacking locational information, it is impossible to validate this fire, but it seems likely it is the same as in York: "In the year 1884 a large fire burned over sections 25, 26, 35 and 36, T. 37 N, R. 14 W, and burned all summer. The Indians are credited as having set it. The area which was covered by this fire now has a stand of Ponderosa Pine." This fire area is partly identified in the atlas by the large woodland patch of 28,381 ha., but is likely also represented on the atlas by an "old cutting," suggesting it was logged after the fire. Based on the locational description it likely covered about 1,035 ha in four sections, all in ponderosa pine and dry mixed conifer with associated grasslands and shrublands.

1881-Rio Grande side	Source	GIS map	Quote and discussion
[51] (p. 2) [20] (Forest Atlas-Rio Grande NF 1909 p. 8)	Early report Early maps	Fire17 Woodland and Fire	"Elk Creek, Raspberry, Trout Soda, Leopard, Roaring Fork and Goose Creeks" This 1881 fire area has 14,912 ha of total burn area, with 4,252 ha of ponderosa and mixed conifer. Some of this area, on Goodrich Creek, likely burned in fire9 in 1900.
1880-1850-San Juan side			
[2]	Tree-rings		The Romme et al. study area included all of T37N R12W, the northeastern corner of T37N R13W, the southernmost portion of T38N R12W, and the southeastern corner of T38N R13W (William Romme, Pers. Comm., 1-5-2016). Only 18 of the 57 dated stands in this area (32%) had "last fires" in the 1850s-1870s, which are potentially detectable with atlas fires and woodlands.
[20] (Forest Atlas-San Juan NF 1909 p. 13, 16, 17)	Early maps	Fire10 Woodland only	The study area is half or more occupied by part of a woodland patch of 28,381 ha, with 18,167 ha in the ponderosa pine and mixed-conifer zones. About 1,000 ha of this patch to the south may have burned in 1898. The Romme et al. study suggests fires in or before 1879. A substantial part of the study area had older forests.
1879-San Juan side	**Source**	**GIS map**	**Quote and discussion**
[49] (p. 23)	Early report		"The century's most significant fire, however, occurred in June, 1879. The subsequently labeled, Lime Creek Burn, fired over 26,000 acres. More significantly, the fire burned not only trees and litter, but the soil itself."
[52] (p. 258-263)	Early report		Nossaman has an extensive report on the origins of this fire, the direction it burned, a map of the fire, and details of its impacts, too lengthy to quote here.
[50] (p. 116, 123)	Early report		"...in some way a great conflagration was started. Although many old-timers claimed the Indians started the fire, the true cause of the fire has never been definitely ascertained. This horrible fire burned over twenty-six thousand acres of timberland is even to this spoken of as the "Lime Creek Burn." Although over a half a century has passed this ruined forest still bears witness to the deadly effect of fire. The fire burned the needles, leaves, timber, the very soil itself. Each windy day a few more of the scarred snags would fall until now they are on the ground forming a part of the vast waste. Another coating of soil is gradually covering the mass and although timber is still missing, some grazing is available now."
[20] (Forest Atlas-San Juan NF 1909 p. 3)	Early maps	Fire18 Fire only	This 1879 burn has a single large fire patch of 8,155 ha, with 1,814 ha in the ponderosa and mixed-conifer zones. The full boundary of this fire is truncated on the western margin of the fire apparently by private land, so this is not the entire extent of the fire. This is the Lime Creek burn, as it is still called today.
[49] (p. 23)	Early report		"That same year [1879] fire swept through the Cave Basin area, along the Piedra Divide, and in the upper Pine River country."
[50] (p. 116, 123)	Early report		"In the same year as the disastrous Lime Creek burn a fire raged unchecked throughout most of the summer in the Cave Basin country. Also along the Piedra Divide and along the upper Pine River country fires burned. The large area burned over in Cave Basin even now shows but a stand of brush and aspen were one where once stood good timber."
[20] (Forest Atlas-San Juan NF 1909 p. 3)	Early maps	Fire19 Woodland and Fire	This area contains a total fire area of 10,672 ha, with 1,132 ha in the ponderosa and mixed-conifer zones. The upper Pine River area burned extensively, but the Cave Basin creek area itself is not shown to have burned, but perhaps burned at low severity. This 1879 fire also could have been in 1860.

[49] (p. 23) [20] (Forest Atlas–San Juan NF 1909 p. 4, 8)	Early report Early map	 No fire detected	"Campers started a 1,000 acre blaze in the Vallecito area that destroyed 5 million board feet of timber." No fires or woodlands are mapped in the Vallecito drainage except a 1900 fire patch
[3] [20] (Forest Atlas-San Juan NF 1909 p. 16).	Tree-rings Early maps	Fire22 Woodland and Fire	Navajo River study area-western part The western part of Aoki's study area overlaps the eastern edge of a large woodland patch of 72,848 ha, which contains 61,768 ha of ponderosa and mixed conifer. At their Squaretop site further north, Tepley and Veblen (2015) showed that parts of this woodland patch burned in 1899, 1879/1878, and 1861/1860. Aoki found evidence of much high-severity fire in 1879 on the eastern side of the Navajo River, but not on this western side, which may have burned in earlier fires. Aoki did find 1861 and 1851 fire dates.
[30-31] [20] (Forest Atlas-San Juan NF 1909 p. 8)	Tree-rings Early maps	No fire detected	MAR2 study area. The atlas does not show either fires or woodlands at this location. Failure to detect this fire may be because it was only medium in size.
[10] [20] (Forest Atlas-San Juan NF 1909 p. 9)	Tree-rings Early maps	Fire5 Woodland only	Williams Creek study area The fire area in part intersects a woodland patch, that is in part in the ponderosa and mixed-conifer zones, which may, in part, have also burned in 1900 or in 1861.
[26] [20] (Forest Atlas-San Juan NF 1909 p. 9)	Tree-rings Early maps	No fire detected	BPK1 study site A woodland patch was located on the Piedra River about 2 km southeast of the site, but no fire or woodland was mapped in the study site itself. Failure to detect this high-severity fire patch may be because it was small.
1879/1878-San Juan side			
[10] [20] (Forest Atlas-San Juan NF 1909 p. 15).	Tree-rings Early maps	Fire22 Woodland and Fire	Squaretop study area This area contains a fire patch that encloses much of Tepley and Veblen's study area, which also partly overlaps a very large woodland patch. Tepley and Veblen (2015) showed that the fire patch and nearby woodland patch burned in 1899, 1879/1878, and 1861/1860. Their maps show which parts of the atlas fire and adjoining woodland patch burned in these years. The total fire area is 73,925 ha, with 62,135 ha in the ponderosa and mixed-conifer zones.
1879-Rio Grande side	**Source**	**GIS map**	**Quote and discussion**
[51] (p. 2) [20] (Forest Atlas-Rio Grande NF 1909 p. 3)	Early report Early maps	No fire detected	"Dry Gulch...Rather small in lower watershed" just east of Creede T42N R2E S31 shows an "Old cutting" of about 120 ha that could have been the fire and was subsequently logged.

[51] (p. 2) [20] (Forest Atlas-Rio Grande NF 1909 p. 7)	Early report Early maps	Fire20 Woodland and Fire	"Middle Mountain, Red and Middle Mountains, and portions of Trout Creek" N of Piedra Peak SW of Creede Total burn area is 1,941 ha with 373 ha in the ponderosa and mixed-conifer zones.
[51] (p. 2, 7)	Early report		"Osier Burn," 12,000 ha (30,000 ac) on NM border. "This fire was the most extensive and intensive that occurred locally in the 19th century. Its boundaries were Grouse Creek on the west, the Rio Conejos on the north, the limits of timber on the east, and points far south of the state line on the south. All evidence points to the conclusion that it was started on the railroad. Intensity is still evident: very few snags standing or down were left. Aspen did not come in."..."Most of the burn was in Engelmann spruce-white fir mixture. There were some ponderosa pine, bristlecone pine, and Douglas fir at the lower elevations on the Los Pinos and Conejos Rivers. The fire was believed to have been started by railroad crews."
[20] (Forest Atlas-Rio Grande NF 1909 p. 12)	Early maps	No fire detected or Fire9	T32N R6E, no fire shown, but a large grassland that might approach the 12,000 ha scale could be it? A substantial patch of woodland to the east possibly part of this fire but instead or also fire9 in 1900. One small patch to the south on the Los Pinos River. Most of this fire likely above the ponderosa and mixed-conifer zones.
1878-San Juan side	**Source**	**GIS map**	**Quote and discussion**
[49] (p. 23)	Early report		"An Indian party was supposedly responsible for setting a fire that consumed a large body of spruce timber on Bear Creek, a tributary of the Dolores River, during the fall of 1878"
[50] (p. 123)	Early report		"In the fall of 1878 an Indian party supposedally [sic] set fire to a large body of spruce on bear creek, a trubutary of the Dolores River. The fire did considerable damage to the timber of the region. At present the area is covered with a dense stand of aspen."
[20] (Forest Atlas-Montezuma NF 1909 p. 13)	Early maps	Fire1 Woodland and Fire	Bear Creek adjoins a large woodland patch that extends from Rico to Dolores, which contains 32,828 ha of the ponderosa and mixed-conifer zones. Part of this patch may have also burned in 1900.
[49] (p. 22-23)	Early report		"In 1878, a fire for more than forty days burned over 18,000 acres between Rockwood and Silverton. Such fires in the San Juans no doubt resulted from whites. Certainly the indictment of two men by a Silverton grand jury in October, 1877, for setting public land forests on fire indicate as much."
[50] (p. 115, 123)	Early report		"A fire which burned for forty days and covered over eighteen thousand acres burned in the year 1878 between Rockwood and Silverton, over four hundred and fifty millions of board feet of timber were destroyed with an estimated loss in timber of nine hundred thousand dollars. The area burned over was partly in San Juan and partly within La Plata County. M.A. Hubbard, later resident of Aztec, New Mexico, witnessed the fire and supplied the information included here"
[20] (Forest Atlas-San Juan NF 1909 p. 3)	Early maps	No fire detected	No fire or woodland patch of this size is visible on the San Juan [12] (Forest Atlas, but this description seems to fit the Lime Creek Burn of 1879, suggesting a possibly unreliable date in this historical report.

1876-Rio Grande side	Source	GIS map	Quote and discussion
[51] (p. 6)	Early report		"Lieutenant C.C. Morrison said in 1876 that 'we crossed the Sangre de Cristo Pass June 15, 1876. From the summit the San Juan range was seen enveloped in smoke of burning forests..."
[22]	Tree-rings		SQW study area
[20] (Forest Atlas-Rio Grande NF 1909 p. 6)	Early maps	Fire23 Fire only	This area contains two fire patches, likely parts of the same fire, that span Little Squaw Creek and Squaw Creek. Total burn area is 1,066 ha, with 169 ha in the ponderosa and mixed-conifer zones.
1875-Rio Grande side	**Source**	**GIS map**	**Quote and discussion**
[51] (p. 2, 7)	Early report		"Hayden Expedition topographer Franklin Rhoda stated that great volumes of smoke were coming from the head of the Alamosa River reaching Fort Garland 70 miles away. One week later he reported that in a rough canyon on the Alamosa a great fire was raging in the spruce. This fire accounts for most of the extensive burns within the canon between Stunner and the Worrel Ranch especially around Jasper."
[20] (Forest Atlas-Rio Grande NF 1909 p. 12)	Early maps	Fire9-part Woodland and Fire	A woodland patch of 26,842 ha covers this area and a large area to the south, with 7,950 ha of ponderosa and mixed conifer. This patch was attributed to the 1900 fire, Fire9, which may have burned over this same area.
1874-San Juan side	**Source**	**GIS map**	**Quote and discussion**
[49] (p. 22)	Early report		"In 1874, a 18,000 acre burn consumed over 450 million board feet of timber between Rockwood and Silverton."
[52] (p. 257)	Early report		"The second was in 1874, when a fire in the Animas Canyon straddling what is now the San Juan-La Plata county line burned more than 18,000 acres over a period of 40 days. This fire has been traced from ground signs, and M.A. Hubbard claims to have been an eye-witness to this incident, which was apparently from natural causes."
[20] (Forest Atlas-San Juan NF 1909 p. 3, 6, 7)	Early maps	No fire detected	No fire or woodland patch of this size is visible on the San Juan [12] (Forest Atlas on p. 3, 6, or 7, but p. 2 is missing from the folio and could possibly have evidence. Also, parts of this area were not mapped as they were in private claims, particularly just north of Rockwood.
1873-San Juan side	**Source**	**GIS map**	**Quote and discussion**
[26]	Tree-rings		JAK1, JAK4
[20] (Forest Atlas-San Juan NF 1909 p. 10)	Early maps	No fire detected	A woodland patch was located about 1 km northeast of the site, but no fire or woodland was mapped in the study sites. Failure to detect this high-severity fire patch may be because it was small.

1873-Rio Grande side	Source	GIS map	Quote and discussion
[51] (p. 2) [20] (Forest Atlas-Rio Grande NF 1909 p. 12)	Early report Early maps	Fire9-part Woodland and Fire	Jasper/Burnt Creeks, 1,619 ha (4,000 ac) in Alamosa drainage Part of a large woodland patch of 26,842 ha may have burned in 1873 in the Jasper/Burnt Creek area, and possibly burned again in 1875 or 1900.
1872-Rio Grande side	**Source**	**GIS map**	**Quote and discussion**
[51] (p. 3, 6) [20] (Forest Atlas-Rio Grande NF 1909 p. 4)	Early report Early maps	Fire21 Woodland only	"La Garita Creek" W of La Garita. "A sheepherder stated that he had to leave the Mesa Peak country with his sheep because of the dense smoke from forest fires burning in the La Garita country." This area has burned area totaling 2,653 ha, with one patch of woodland containing 508 ha in the ponderosa and mixed-conifer zones.
1870-San Juan side	**Source**	**GIS map**	**Quote and discussion**
[30-31] [20] (Forest Atlas-San Juan NF 1909 p. 8)	Tree-rings Early maps	No fire detected	SC4 The atlas does not show either fires or woodlands at this location. Failure to detect this fire may be because it was small.
1861-San Juan side	**Source**	**GIS map**	**Quote and discussion**
[10] [20] (Forest Atlas-San Juan NF 1909 p. 9)	Tree-rings Early maps	Fire5 Woodland only	Williams Creek study area The fire area in part intersects a woodland patch of 1,461 ha, with 1,379 ha of the ponderosa and mixed-conifer zones, which may, in part, have also burned in 1900, 1898, or 1879.
[27] [20] (Forest Atlas-San Juan NF 1909 p. 13)	Tree-rings Early maps	Fire5 Woodland only	Archuleta Mesa study area This study area is within a very large woodland patch of 35,143 ha, with 10,405 ha of ponderosa and mixed conifer, that extends up the Piedra River and west almost to Bayfield. It would be surprising if this large patch originated from a single fire year. Parts of the patch burned in 1900, 1898, 1879 as well as this date of 1861.
[29] [20] (Forest Atlas-San Juan NF 1909 p. 13)	Tree-rings Early maps	No fire detected	Lower Middle Mountain study area No fire or woodland patch was mapped in this area. The closest woodland patch is about 1.5 km southeast. The failure of the atlas to record this fire could be because it was medium in size and moderate in severity.

1861/1860-San Juan side			
[10] [20] (Forest Atlas-San Juan NF 1909 p. 15).	Tree-rings Early maps	Fire22 Woodland and Fire	Squaretop study area This area contains a fire patch that encloses much of Tepley and Veblen's study area, which also partly overlaps a very large woodland patch. Tepley and Veblen (2015) showed that the fire patch and nearby woodland patch burned in 1899, 1879/1878, and 1861/1860. Their maps show which parts of the atlas fire and adjoining woodland patch burned in these years. The total fire area is 73,925 ha, with 62,135 ha in the ponderosa and mixed-conifer zones.
1860-San Juan side	**Source**	**GIS map**	**Quote and discussion**
[49] (p. 22)	Early report		"In 1860, a fire attributed to northern Utes burned about 20,000 acres and an estimated 25 million board feet of timber in Hinsdale and La Plata counties at the head of the Pine and Vallecito Rivers above Durango. Supposedly the Northern Utes had set the fire in order to prevent pursuing Southern Utes, with whom they were at war, from overtaking them."
[50] (p. 115, 122)	Early report		"In the year 1860 a very disastrous fire burned over about twenty-thousand acres in Hinsdale and La Plata Counties at the head of Pine and Vallecito Rivers above Durango. The fire burned up a large amount of timber, estimated to be twenty-five million board feet with a value of over fifty thousand dollars. It is believed the Northern Utes set this fire to stop pursuit by the Southern Utes with whom they were at war at the time. This information was supplied by Chief Buckskin Charlie.
[20] (Forest Atlas-San Juan NF 1909 p. 3)	Early maps	Fire19 Woodland and Fire	This area contains a total fire area of 10,672 ha, with 1,132 ha in the ponderosa and mixed-conifer zones. This area may have burned in 1879 or in 1860. This fire is all in the current Hinsdale county, not in the current La Plata county.
1851-San Juan side	**Source**	**GIS map**	**Quote and discussion**
[30-31]	Tree-rings		MAR2 study area.
[20] (Forest Atlas-San Juan NF 1909 p. 8)	Early maps	No fire detected	The atlas does not show either fires or woodlands at this location. Failure to detect this fire may be because it was only medium in size.
[22] [20] (Forest Atlas-Rio Grande NF 1909 p. 14)	Tree-rings Early maps	Fire24 Woodland only	The Chama River, CHA, study area in mixed conifer Margolis does not show a detailed location for this site, which I estimated based on elevation and a location near the Chama River. The atlas does not quite extend to this estimated site, but a large woodland patch on the atlas border appears to have extended to the site. The woodland patch is 1,308 ha, with 89 ha in ponderosa and mixed conifer, but was likely larger due to truncation by the mapping.
[10] [20] (Forest Atlas-San Juan NF 1909 p. 9)	Tree-rings Early maps	No fire detected	Williams Creek study area This 1851 high-severity fire at the Williams Creek study area was not detected by atlas fires or woodlands, likely because it is a small fire area.

[26] [20] (Forest Atlas-San Juan NF 1909 p. 9)	Tree-rings Early maps	No fire detected	CRL1 study area This study site is only 0.5 km from a woodland patch of 1,061 ha, that contains the companion CRL2 study site. Possibly the failure to detect this fire at this site reflects the known mapping error in the atlases.
[26] [20] (Forest Atlas-San Juan NF 1909 p. 9)	Tree-rings Early maps	Fire5 Woodland only	CRL2 study area This study site is within a woodland patch of 1,061 ha, with 988 ha of ponderosa and mixed conifer, that is part of a larger fire patch extending along the full length of the Piedra River. Wu (1999) dated the stand origin at this site to high-severity fire in 1851.