6154 Silverado Trail
Napa CA 94558
June 26, 1986

Mr. Jim Ficaretta
Bureau of Alcohol, Tobacco & Firearms
Department of the Treasury
1200 Pennsylvania Avenue
Washington, D.C. 20226

Re: Second Amendment and Supplement to Petition of the Stags Leap District Appellation Committee

Dear Mr. Ficaretta:

Enclosed is our Committee's Second Amendment to our original petition for a viticultural area. Also included are Attachment A (Research Document) and Attachment B (U.S.G.S. map with Revised Boundary outlined).

As chairman of our committee, I will be happy to respond to any questions you may have regarding this revision of our boundaries.

Sincerely,

John R. Shafer

JRS:mks

cc: Richard Mendelson

SECOND AMENDMENT AND SUPPLEMENT TO PETITION OF THE STAGS LEAP DISTRICT APPELLATION COMMITTEE FOR ESTABLISHMENT OF A VITICULTURAL AREA UNDER TITLE 27, CFR, PART 9

Submitted to the Director
Bureau of Alcohol, Tobacco & Firearms
U.S. Department of the Treasury
Washington, D.C. 20225

By the Stags Leap District Appellation Committee
Mr. John Shafer, Chairman
6154 Silverado Trail
Napa, California 94558

June 26, 1986

The Stags Leap District Appellation Committee, including its newest petitioning members, Silverado Vineyards, Ron Spicer, Diane Wilsey, Robert Egan, and Elmer Freethy, hereby supplements and amends its viticultural area petition, submitted and filed on August 22, 1985 and subsequently amended on December 18, 1985.

Having reviewed and considered the research document prepared by Silverado Vineyards in support of a modification of the boundaries of Stags Leap District (Attachment A), the Committee amends the boundaries of the proposed viticultural area as set forth below and as highlighted on the enclosed 7.5' U.S.G.S. topographic map (Attachment B).

Beginning near the southern end of the viticultural area, at the intersection of the Silverado Trail and the drainage creek which crosses it at the 60 foot elevation, the boundary runs:

1. Southwesterly in a straight line along the drainage creek and then to the main channel of the Napa River;

2. Then following the main channel of the Napa River in a northwesterly and then a northerly direction past its confluence with the old main channel of Conn Creek and past the two reservoirs located between the Napa River and Conn Creek to the point at which the Napa River meets a side channel connecting it with Conn Creek, said point being approximately three-tenths of a mile south of the Yountville Bridge;

3. Then in a straight line northeast to the summit of a hill approximately 330 feet in elevation;

4. Then in a straight line northeast to the summit of a hill approximately 310 feet in elevation;

5. Then in a straight line east northeast to the summit of a hill approximately 210 feet in elevation;

6. Then in a straight line southeast across the Silverado Trail to the summit of a hill approximately 290 feet in elevation;

7. Then in a straight line east to the summit of a hill approximately 270 feet in elevation;

8. Then in a straight line northeast along a small ridge line to the 400 foot contour line;

9. Then following the 400 foot contour line in an easterly and southeasterly direction through section numbers 29, 32, 33, 4 and 3 to the intersection of that contour line and the creek near the southwestern corner of section number 3;

10. Then proceeding south and west along the creek to the beginning point.

The Committee believes that the Napa River and the ring of hills to the north constitute natural and easily administered western and northern boundaries, respectively, for the viticultural area. As pointed out in Silverado's attached research document, these revised boundaries are historically justified, having been used to define the area's agricultural community in the late 1800's and its school district in the 1870's. The revised boundaries also are geographically appropriate insofar as the added acreage shares similar soil types and climate to the rest of the viticultural area. In all other respects, the Committee stands by its original boundaries.

The Committee's revision of the boundaries of Stags Leap District adds approximately 350 acres to the area for a total size of around 2550 acres. About 150 of the added acres are presently planted to vineyards; those vineyards are owned by Disney (Silverado), Egan, Freethy, Mondavi, Spicer and Wilsey. There are now a total of approximately 1250 planted acres within the viticultural area.

In conclusion, the Committee believes that the current evidence, historical documentation and unique geographical features of the proposed Stags Leap District viticultural area compel a decision in favor of these revised boundaries.

Respectfully submitted,
STAGS LEAP DISTRICT APPELLATION COMMITTEE

By _____
John Shafer, Chairman

ATTACHMENT A

RESEARCH DOCUMENT IN SUPPORT OF A MODIFICATION OF THE BOUNDARIES OF THE PROPOSED STAGS LEAP DISTRICT VITICULTURAL AREA

Prepared by Silverado Vineyards
John Stuart, General Manager
6121 Silverado Trail
Napa, California 94558

May 1986

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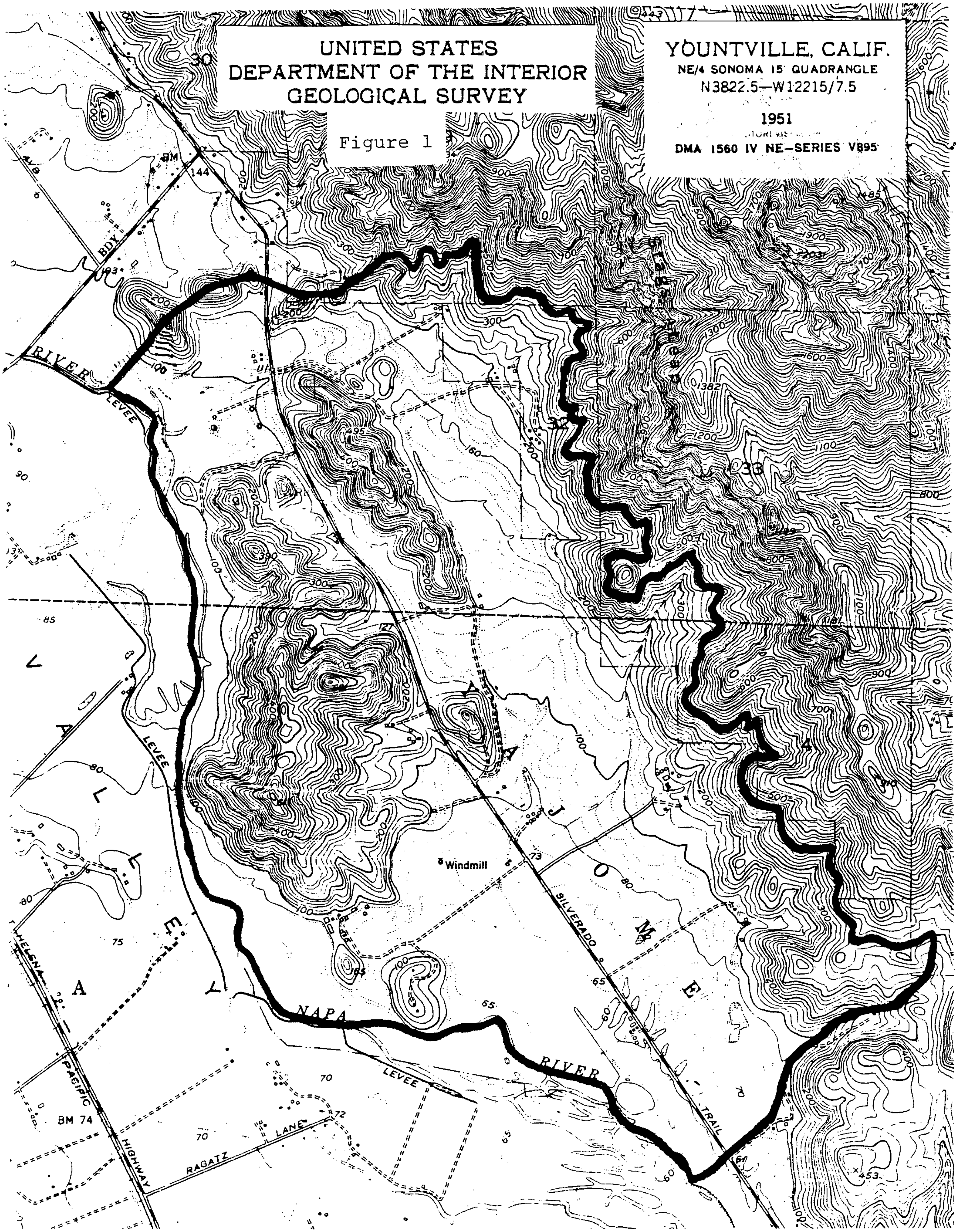
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DEPARTMENT OF THE INTERIOR
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SILVERADO
TRAIL
NAPA
RIVER
LEVEE
PACIFIC
HIGHWAY
RAGATZ
LANE
BM 74
BM 144
BDY
HELENA

Figure 1

INTRODUCTION

Silverado Vineyards is a prominent vineyard and winery in the Napa Valley. In the petition of the Stags Leap District Appellation Committee submitted to the Bureau of Alcohol, Tobacco and Firearms on August 22, 1985, all but approximately 15 acres of Silverado Vineyards' proposed Stags Leap District acreage is excluded. Since 1969, however, this acreage has contributed to the reputation of the Stags Leap District viticultural area.

In support of the inclusion of these vineyards and of the modification of the proposed boundaries of Stags Leap District, Silverado Vineyards has compiled thorough documentation from historical records, testimony of local winemakers, recent wine trade and consumer journals, scientific soils and climate surveys, and other evidence, all of which is presented in this document.

CURRENT EVIDENCE

Establishment of Silverado Vineyards. The Silverado Vineyards winery was established in 1981 by Mrs. Walter E. Disney and Mr. and Mrs. Ronald W. Miller to produce estate

bottled wines from their vineyards in Yountville and Stags Leap District. The Disney vineyard, approximately 100 acres of vines east of the Napa River, was first planted by former owner Charles B. See in 1969, and was one of the first of the new generation of vineyards in the area. The See ranch, which he named Silverado Vineyards, predated Stag's Leap Wine Cellars (vineyards planted 1970), Stags' Leap Winery (new planting begun 1970), Clos du Val (1972), Shafer Vineyards (1972), and Pine Ridge Winery (1979) [1].

By the early 1970s, See was already selling high quality Cabernet Sauvignon, Merlot, and Chardonnay grapes to the best wineries in the Napa Valley. These grapes, particularly the Cabernet and Merlot, earned a reputation for superior character and quality that contributed to the growing local and national recognition of the Stags Leap District. Significantly, other wineries in the Stags Leap District, such as Stag's Leap Wine Cellars and Clos du Val, were among those purchasing grapes from Silverado Vineyards. Other buyers included Conn Creek Winery, Newton Vineyard, Cassayre-Forni Cellars, Rutherford Hill Winery, Joseph Phelps Vineyards, Chateau Montelena Winery, Grgich Hills Cellar, Duckhorn Vineyards, and Chappellet Vineyard [2].

Several of these wineries won gold medals for wines made in part from Silverado grapes. The wineries referred to Stags Leap District in their promotion of these wines [3], thus helping to establish the growing reputation of the area

and the vineyard. For example, William D. Collins, Jr., Managing General Partner of Conn Creek, states that his winery "purchased Cabernet Sauvignon, Merlot, and Chardonnay from [Silverado Vineyards] in 1976 through 1982 and considered it the premium vineyard of the Stag's Leap area." Says Collins, "We always referred to the grapes . . . as Stag's Leap Grapes" [4].

Michael J. Forni, winemaker for Cassayre-Forni Cellars, who purchased Silverado grapes from 1977 to 1981, confirms that "the wine produced from Silverado Vineyards grapes was similar to wines produced from other vineyards in the Stags Leap area" [5].

Wine Press. Wine writers and journals have documented the inclusion of Silverado Vineyards in the Stags Leap District. When Mrs. Disney and the Millers began the design and construction of the Silverado Vineyards winery in 1980 and 1981, they quickly attracted the attention and interest of the wine trade and the wine press. The Wine Spectator featured a front-page picture of the building under construction, captioned in part, "located . . . in the Stag's Leap area" [6]. Richard Paul Hinckle, in a Vintage Magazine article entitled "How Many Stags in a Stag's Leap?" refers to Silverado in connection with the appellation:

> A significant chunk of acreage may be disputed when the western boundaries come up for discussion. Involved are the Disney vineyards (Walt Disney's widow, whose winery will crush this fall), Pine Ridge's vines in a narrow draw across from Steltzner, and Mondavi's 400 acre Oak Knoll Vineyards, across the trail from Winiarski, Fay,

and Clos du Val [7].

As Silverado Vineyards began releasing its first wines, more stories appeared in the wine press. In a 1983 column in The Wine Spectator, Norman S. Roby wrote: "Owned by members of the Disney family, this winery located close to Stag's Leap has created much intrigue since it was built" [8]. In the San Francisco Examiner, Harvey Steiman listed the principal growers and vintners of the appellation. Among them, "you should also be hearing about Silverado Cellars [sic] in coming years" [9]. The San Francisco Chronicle carried a story by wine writer Anthony Dias Blue in which the following paragraph appeared:

> For the past two years, the Napa Valley has been buzzing about the imposing new winery being built on a hilltop on the eastern side of the valley. Overlooking the Stag's Leap area, the functional and unpretentious building has been outfitted with the finest winemaking equipment money can buy. Surrounding the winery are 120 acres of meticulously maintained grape vines [10].

Awards. In 1984 Silverado Vineyards released its first Cabernet Sauvignon, from the 1981 vintage, and immediately began collecting awards. By the end of that year's wine competition season, the 1981 Silverado Cabernet had won more medals than any other Cabernet that year. In fact, in its first two years of wine competitons, Silverado collected a total of 32 medals for its three wines, including four golds and 16 silvers.

Concurrent with these awards, Silverado collected favorable notice in the trade and the press. The April-May

1984 issue of Friends of Wine carried a story on Napa Valley grape growing regions, including Stags Leap District. "East of Yountville," it said, "at the Silverado Trail, . . . is the small (1000 acre) Stag's Leap viticultural area noted for outstanding Cabernet Sauvignon and Zinfandel." Among the new wineries and vineyards "dedicated to the . . . philosophy of making well-structured Cabernets of finesse . . . in the Stags' Leap area" is "Silverado Vineyards [which] has planted 180 acres . . . of Cabernet Sauvignon, Merlot, Sauvignon Blanc, and Chardonnay. Their first wines, the 1981 vintage, were celebrated for their excellent balance, their rich, clean, fresh varietal fruit, their elegance that spares too much oak, and overall as exceptional food wines" [11].

In a favorable review of our 1981 Cabernet, the California Grapevine noted that the "grapes were estate-grown in the Stag's Leap area" [12]. The 1986 Great American Vineyards Datebook, a collection of striking photographs of vineyards and wineries across the country, describes Silverado Vineyards as spanning "the breadth of the Napa Valley from Stag's Leap to Yountville" [13]. Both the 1984 and 1985 Napa Valley Wine Auction catalogues cite Stags Leap District in their descriptions of Silverado Vineyards [14].

Wine retailers also described the location of Silverado Vineyards in their newsletters. For example, The Wine Association of the Duke of Bourbon in Canoga Park, California, in its announcement of its "Super Seminar 1985" wrote that "Silverado, located in the Stag's Leap area of

Napa Valley and owned by the Disney family, is one of the newer wineries dedicated to making fine Chardonnay, Cabernet Sauvignon, and Sauvignon Blanc" [15].

The evidence demonstrates not only that Silverado Vineyards is commonly and consistently regarded by the industry and the trade as part of the Stags Leap District viticultural area, but also that the grapes and wine it produced beginning in the early seventies were instrumental in establishing the fine reputation of the district.

HISTORICAL DOCUMENTATION

Long before the first recorded use of the term Stags Leap, the area east of Yountville between the Napa River and the eastern hills was well known as an agricultural and viticultural district. Early accounts of the area refer to it as a self-contained community, sometimes called "McFarlandsburg", after its largest landowner, Abel McFarland [16].

Napa River. A very important characteristic is shared by these early accounts and the official records of the time: the western boundary of any political, agricultural, or social district was without exception the Napa River. The river was the natural dividing line between the east and west sides of the valley. During the rainy season the Napa River was frequently impassable because of flooding, and even during the dry months one had to drive a team a considerable

distance over rough roads to cross one of the few bridges. It was therefore quite natural for an independent social and agricultural community to develop on the east side of the valley.

Official Boundaries: Yajome Landgrant. The earliest evidence of the political importance of the Napa River is found in the boundary lines of the original Rancho Yajome landgrant, which lay between the river and the eastern hills. Ceded in 1841 to Damaso Antonio Rodriguez, Rancho Yajome was successfully claimed in 1852 by Salvador Vallejo. Soon afterward, Vallejo sold the northernmost 1900 acres of Yajome, which closely corresponds to Stags Leap District, for 4000 pesos [17]. Over the next twenty years the land continued to be subdivided, but the importance of the Napa River as its western boundary never diminished.

Official Boundaries: Yount School District. As early as the 1850s, there was a school district that closely corresponded with the revised boundaries of the Stags Leap District viticultural area. It was known originally as the Grigsby School House, but by the 1870s it had become the Yount School District, distinct from the Yountville School District on the west side of the river, and one of over two dozen public school districts established in Napa County [18].

According to Slocum and Bowen's History of Napa and Lake Counties, the Yount School District had 141 pupils in 1858,

36 pupils in 1865, and 47 in 1881 [19]. Historian John Wichels, writing in the Napa County Historical Society's publication Gleanings, states that the Yount School operated until 1947, when it was abandoned [20]. The so-called "Grigsby School House Lot" was on the present Colant property at 5765 Silverado Trail [21], within the proposed Stags Leap District.

The most striking document pertaining to relation between the Yount School District and the Stags Leap District viticultural area is the 1876 Official Map of the County of Napa, California, which shows the boundaries of district no. 17, the Yount District [Fig. 2]. The western boundary is the Napa River, and the northern boundary is the north line of the 100-acre Norton tract, now the north line of the 22-acre Traina vineyard. This north line corresponds very closely with the revised northern boundary of the viticultural area.

From the times of earliest settlement in the Napa Valley, political boundaries similar or identical to those of the proposed Stags Leap District were officially established. These official boundaries are convincing precedent for the delineation of the viticultural area.

Informal Boundaries: McFarlandsburg. In addition to official political boundaries, the Stags Leap District viticultural area had informal boundaries as an agricultural community that was well known over a hundred years ago. References to property owners whose land can be identified on

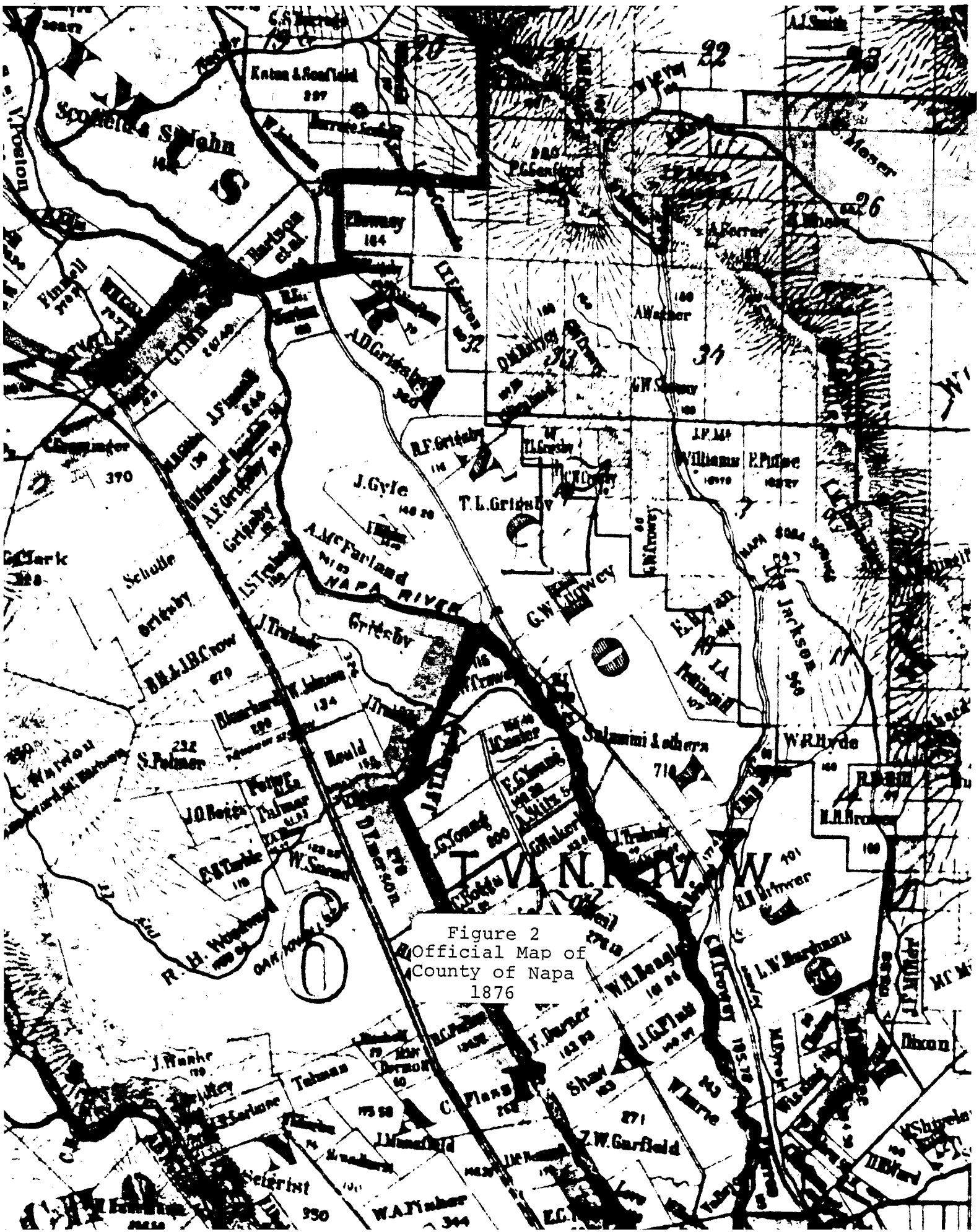


Figure 2
Official Map of
County of Napa
1876

old maps confirm that these boundaries were very close to those of the revised Stags Leap District. The community seems to have been a close and friendly one. The children went to school together, the ranchers sold grapes to the same cellars, and the families socialized with each other. The following item appeared in the Napa Register of October 29, 1886:

> The young ladies and young men and some older heads have formed a club or society to hold weekly gatherings during the winter for the purpose of mutual improvement. A small party gathered at Mrs A. McFarland's last Saturday night and greatly enjoyed themselves. Wm. Staggs and Wm. Grigsby furnished the violin music, while several young ladies presided at the piano [22].

This item appeared under the heading "McFarlandsburg." The district was named after Abel McFarland, who owned 620 acres devoted to dairy cattle, hay, alfalfa, and vineyard [23]. The article was signed by one R. E. Porter, who made frequent contributions to the newspaper about the activities of the people living and working in the district. A comparison of the names cited in these newspaper articles and those listed on parcel maps of the period indicates that McFarlandsburg had substantially the same boundaries as the revised Stags Leap District appellation [24]. Furthermore, Porter's items and those of other contributors clearly and indisputably establish the fact that the area east of Yountville was an important grape growing region well before the term Stags Leap had ever been used in print.

For example, R. E. Porter's story in the August 13,

1886, Napa Register, entitled "A Thrifty Community" [25], mentions Frank Salmina, W. K. Staggs, Mrs. Crowey, Tom Grigsby, Jim Grigsby, Cecil Grigsby, Terrill Grigsby, E. W. Wilkins, Jas. Salmina, Joe Tocani, and Mr. Lasalle. A look at the Official Maps of 1876, 1895, and 1915 [Fig. 2, Fig. 3, Fig. 4] shows that the members of this community farmed land that very closely corresponds to the amended Stags Leap District proposal.

Early Viticulture. A hundred years ago the property that would become Silverado Vineyards was not only producing wine grapes, but was also preparing to make wine. From the 1880s until some time before 1915, James Salmina (spelled Salimini on the 1895 map) owned the 52 acre parcel that is now the section of Mrs. Disney's vineyard north of the main ranch road [26]. This section is now planted to Chardonnay and Cabernet Sauvignon and comprises about one third of Mrs. Disney's total acreage. It was originally the southern part of the 100 acre Norton tract, which is shown on the Official Map of 1876 [Fig. 2]. It included the property presently owned by Spicer, Traina, and others. Salmina's property was producing wine grapes at least a century ago. In 1886, R. E. Porter wrote that "Jas. Salmina has a small vineyard on land recently purchased of A. McFarland" [27]. Two months later, Porter reported from McFarlandsburg that

> The grapes are all gathered and delivered; the vineyardists are well satisfied with the prices received, and talk of enlarging their vineyards. Mr. Jas. Salmina is excavating for a cellar 50

Map of Napa County, California
January 21, 1895
O. H. Buckman, C. E.

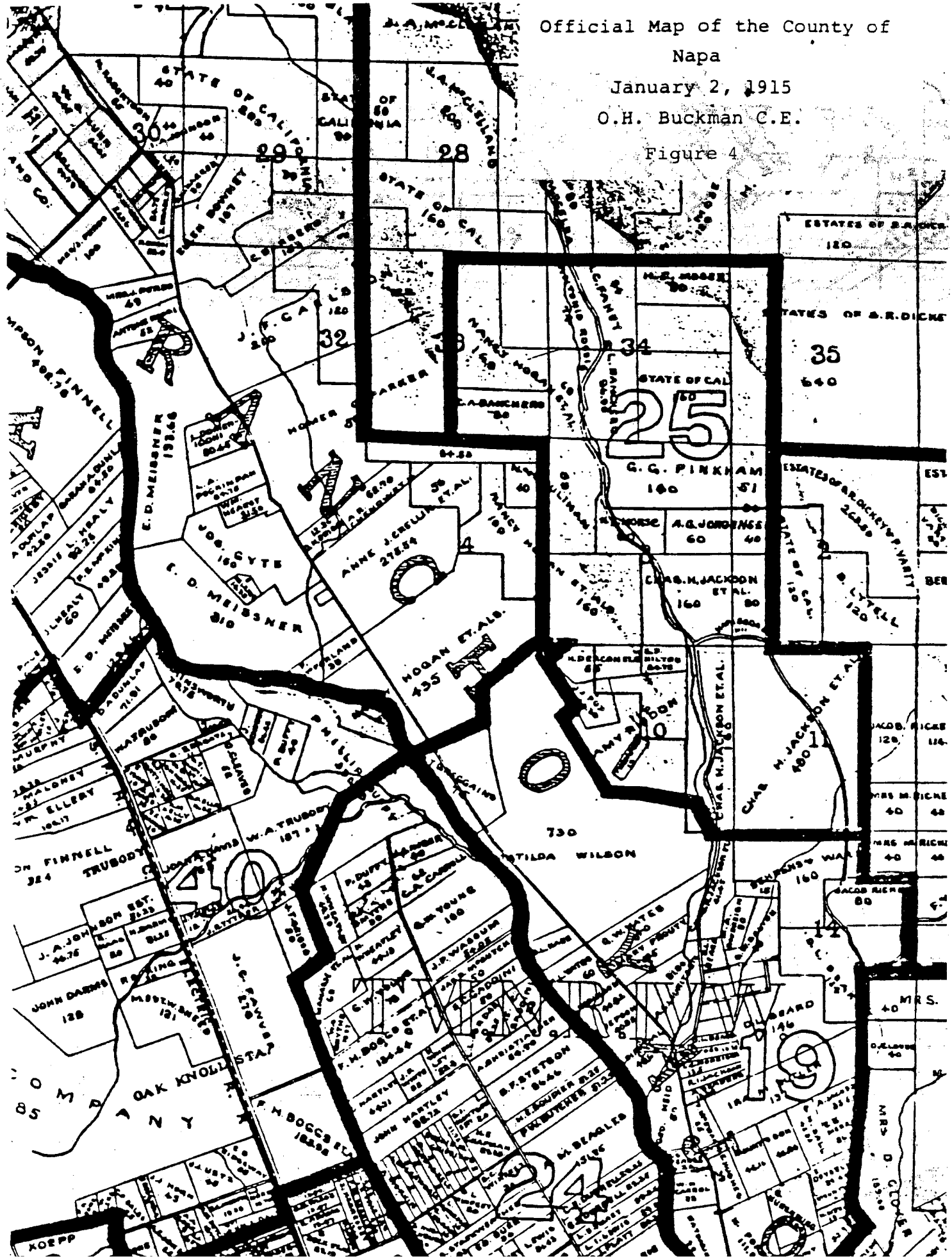
Figure 3

Official Map of the County of Napa

January 2, 1915

O.H. Buckman C.E.

Figure 4



> x 50 feet, Mr. Wilkins is doing the same for a cellar 40 x 50 feet. Mr. Lacell [Lasalle] has a small cellar and makes about 2,500 gallons this year. He will enlarge next year [28].

Some years later, the Napa Register's correspondent, in a piece headed "East of Yountville," provided more detail on the farming activities of the region:

> Jas. Salmina has a place of 52 acres, 15 of which are in vines. He has 7 milch cows and makes cheese. He intends to plant out a lot of fruit trees in the near future.
>
> Frank Morris, near by, owns 25 acres of land, 8 acres of it in corn, 3 in resistant vines and 300 olive trees. Mr. Morris also rents 48 acres from Mr. Slobach of S. F.
>
> Manuel Pedro has 25 acres--at one time all in vines. He now raises corn and hay, has 35 olive trees, a few peach and is planting out resistant vines [29].

Comparing the Official Map of 1895 with current county parcel maps [30], the property of Morris, Slobach (spelled Schlobeck on the 1895 map), and Pedro corresponds almost completely with the present vineyard acreage of Spicer, Traina, Freethy, and Egan.

Therefore substantially all of the newly added acreage within the Stags Leap District viticultural area was actively involved in grape growing and winemaking at the very beginning of viticulture in Napa County.

Historical Definition. Before the 1970s, Stags Leap referred only to the resort, the vineyards immediately surrounding it, and the rocky ridge overlooking the area [31]. The term was apparently not used in print until 1893 [32], and then only in reference to the Horace Chase estate. Stags Leap probably did not appear on any maps until about

1932 [33]. When it did appear on maps, it designated either the resort (which at one time had its own post office) or the ridge, but apparently not the viticultural area.

Thus when old timers talk about the boundaries of Stags Leap District [34], they are more likely to be referring to the old Chase place and its immediate vicinity than they are to the broader viticultural area, which did not begin to be called Stags Leap until some time in the 1970s [35].

The first recorded public reference to Stags Leap's being a "geographical term referring to a general area in Napa County" may be in court documents dating from 1972 [36]. The earliest recorded use of the term as a winegrowing area is closely associated with the notoriety gained by the 1973 Cabernet Sauvignon of Stag's Leap Wine Cellars in 1976. Bob Thompson alluded to the growing reputation of the area in a 1976 book, California Wine [37], written before the famous Paris tasting. At about the same time, Stag's Leap Wine Cellars stated in its promotional material that "Stag's Leap is a regional designation which should in time become as familiar to wine buyers as certain domaines in European wine-growing regions" [38]. Presumably the wine press picked up the term and began using it by extension to refer to the grape growing region.

Therefore the boundaries of the proposed viticultural area cannot solely be determined or supported by historical use of the term Stags Leap, which until the 1970s had very

specific, limited meaning. Nevertheless, the history of the Stags Leap District strongly supports the use of the revised boundaries of the viticultural area, between the Napa River on the west and the ridge on the east, and between the two points north and south where the river and the ridge come within several hundred yards of each other and effectively pinch off the rest of the valley.

As we have shown, vineyards have always been planted throughout this area. Vineyards were planted to the west, as well as to the east, of the Silverado Trail in the post-prohibition era. Based on aerial photographs taken fifteen years after the end of prohibition (1948), the U.S.G.S. topographical map [Fig. 1] shows vineyards on the present Disney property west of Silverado Trail. It is possible that this property has supported almost continuous viticulture for a century.

GEOGRAPHICAL FEATURES

Stags Leap District is distinguished by its landscape, its weather, and its geology. Each of these factors contributes to the character and quality of the grapes grown in the area, and thereby lends support to the establishment of a viticultural area. These three factors--topography, climate, and soil--support the modification of the Stags Leap District boundaries.

Topography. Topographically, Stags Leap District

includes gently sloping, hilly, and mountainous terrain, with exposures generally to the west and southwest and drainage running west, southwest, and south to the Napa River. Most vineyards are planted on gentle to steep slopes between 80 and 200 feet of elevation, with some low-lying areas at 65 feet and terraces approaching 400 feet.

This combination of low hills and mountains, west- or southwest-facing slopes, and the resulting westerly to southerly air and water drainage creates a climatic zone that is different from the surrounding areas of the Napa Valley. As we demonstrate below, this zone includes within its limits additional acreage to the west and north of the originally proposed viticultural area.

Climate. To scientifically evaluate the climate of Stags Leap District, Silverado Vineyards commissioned a weather study by Weather Network, Inc., a division of Oceanroutes, the world's largest private marine meteorological organization. Weather Network's certified consulting meteorologists provide operational weather forecasts and environmental consulting services for California agriculture. Specifically, the goal of the study was to determine whether any significant differences in climate exist between (1) the area within the appellation committee's original boundaries and (2) the area outside those boundaries but within the revised appellation boundaries. [For the complete report, see Appendix 1.]

Weather Network gathered, compared, and statistically

analyzed current data from sites within Stags Leap District as originally proposed, within the modified boundaries, and entirely outside the area [see map, Figure 5]. Weather Network installed automatic meteorological observing stations at Napa 1, outside the committee's original western boundary east of the Napa River, and at Napa 2, inside the appellation's southeastern boundary [Fig. 5]. Weather observations from stations outside Stags Leap District, at Gamble Ranch in Oakville and at Big Ranch Road in Napa, were evaluated. Daily temperature records were also gathered from three thermographs. Thermograph C1 is located within the original boundaries of the viticultural area, thermograph C7 is located in the proposed addition, and thermograph C4 is located outside Stags Leap District west of the Napa River.

During the period of the study, Weather Network found only small differences in average daily maximum and minimim temperatures, wind speed and direction, and humidity between Napa 1 and Napa 2. Daily maximum and minimum temperatures at thermographs C1 and C7 were so similar as to be effectively identical. Weather Network concluded that

> There appear to be no significant variations in the weather and climate between the area within the original Stags Leap District boundaries and the area that encompasses the revised boundaries. The general topography of Stags Leap District does, however, create a climatic zone different from the other areas of the Napa Valley [39].

Geology and Soils. The soils of Stags Leap District differ dramatically from those outside the area, and together

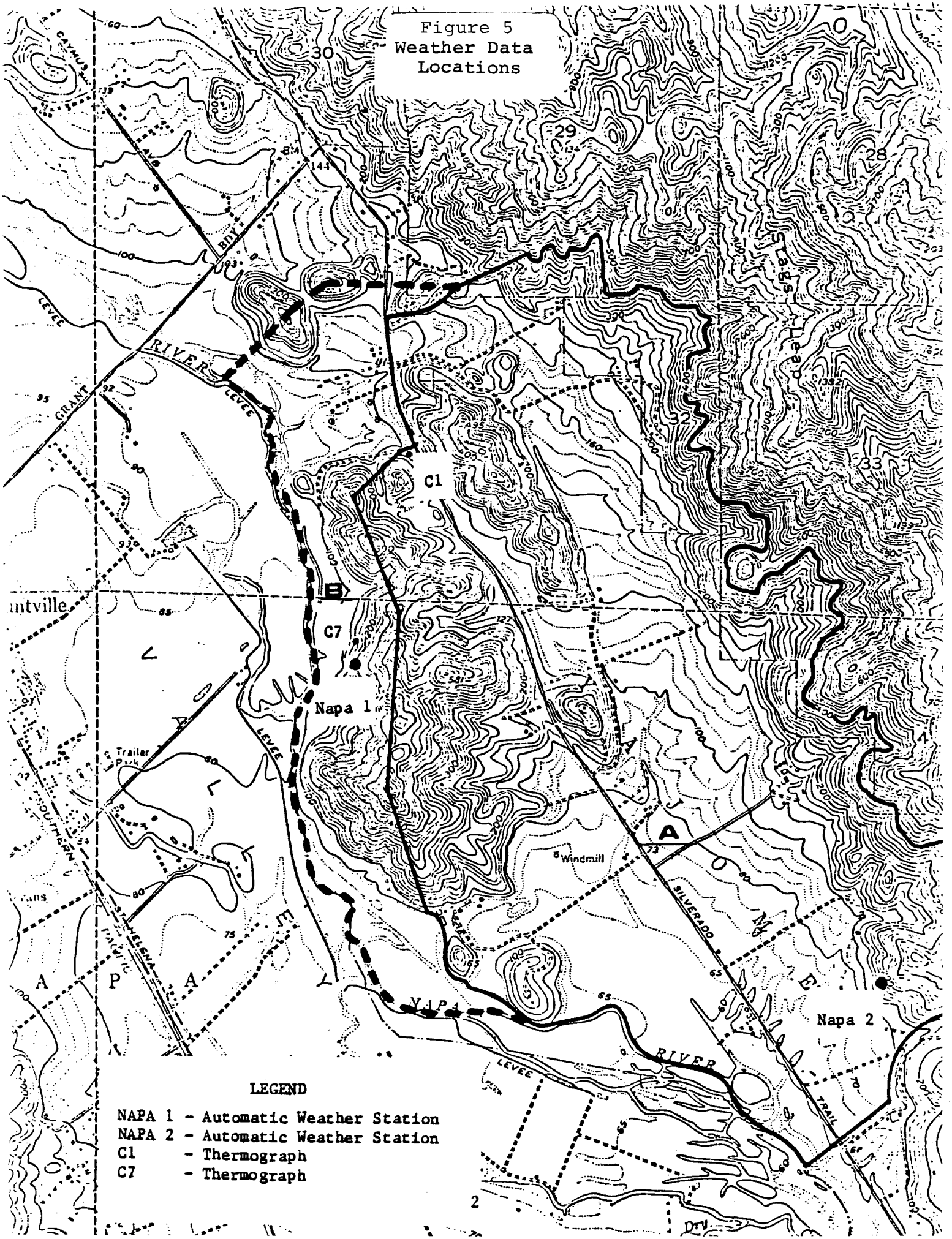


Figure 5
Weather Data
Locations
C1
C7
Napa 1
Napa 2
LEGEND
NAPA 1 - Automatic Weather Station
NAPA 2 - Automatic Weather Station
C1 - Thermograph
C7 - Thermograph

with topography and climate are the most important geographical feature distinguishing the region. However, such distinctions can only be drawn if the Napa River is used as the western boundary. As stated by the committee's viticultural expert, Richard Nagaoka, "Most of the Stags Leap soils are of volcanic origin while most of the soils west of the river are of sedimentary origin." [40]. Also, "the soils of these divergent parentages impart different viticultural characteristics to the vineyards growing on opposite sides of the river" [41].

The most recent and best source of soils information is the 1978 Soil Survey of Napa County [42]. This survey, based on fieldwork conducted between 1965 and 1973, contains detailed maps of all soil types in the county, along with extensive information on the formation, morphology, properties, and management of the soils. We have prepared a color-keyed soils map of the Stags Leap District based on the U.S.D.A. survey and superimposed on the U.S.G.S. topographical map [Fig. 6]. The amended appellation boundaries are shown as a bold black line.

It is plain from the map that the soils of the revised Stags Leap District appellation are distinct from those of the surrounding area. The Bale, Perkins, Kidd, and Boomer soils of Stags Leap District, coded in beiges and reds, stand out from the Yolo, Cole, and Clear Lake soils on the west side of the Napa River, coded in yellows and greens. The north end of the appellation is effectively closed off by a

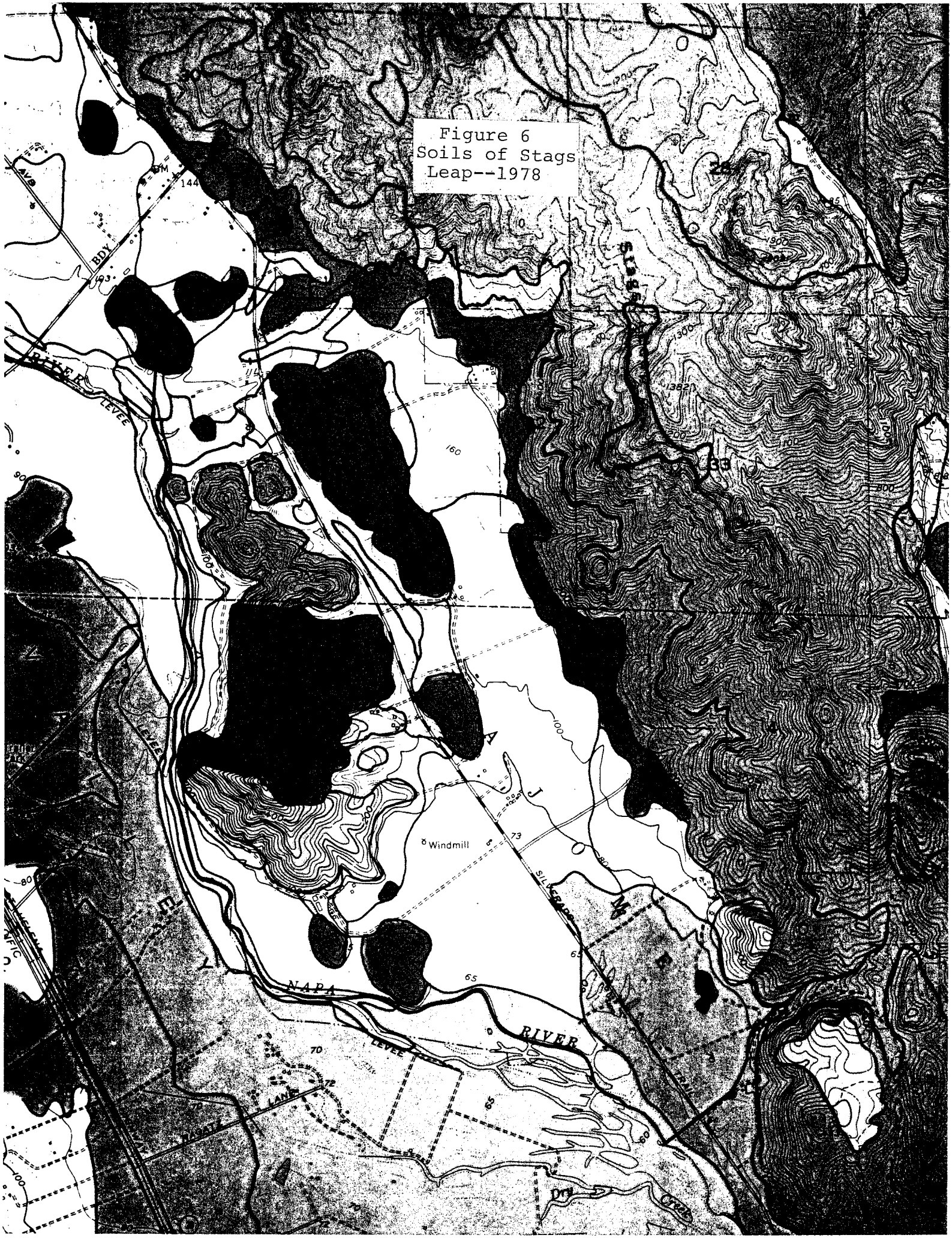


Figure 6
Soils of Stags Leap--1978

formation of low hills, composed of Bressa-Dibble Complex and coded in dark blue, running east to west. To the east, the olive-coded area marks uncultivated rock outcrops. To the south, the appellation ends where the Cole soils on the opposite side of the Napa River nearly meet the rocky outcrops, in effect pinching off the district from the rest of the valley.

According to the U.S.D.A. Soil Survey, the principal soils on which grapes are planted in Stags Leap District are somewhat poorly to well-drained; located in flood plains, alluvial fans, old terraces and uplands; and weathered from rhyolite, igneous rock, and volcanic rock. By contrast, the principal vineyard soils outside the district and across the river are poorly to somewhat poorly drained; located on flood plains, old alluvial fans, and in basins; and are alluvium from sedimentary rock, sandstone, and shale. Stags Leap District soils are on slopes of 0-75%, while those on the west side of the river are nearly flat with slopes of 0-2%.

Until 1978, the best published source of soils information for Napa Valley was the 1938 Soil Survey of the Napa Area, California [43]. While this survey is less detailed and uses fewer soil classifications than the 1978 survey, it is still widely used and confirms the similarity of principal vineyard soils within the revised viticultural area. Figure 7 reproduces the 1938 soil survey's map of the Stags Leap District area, showing Bale loam (Bl), Konokti

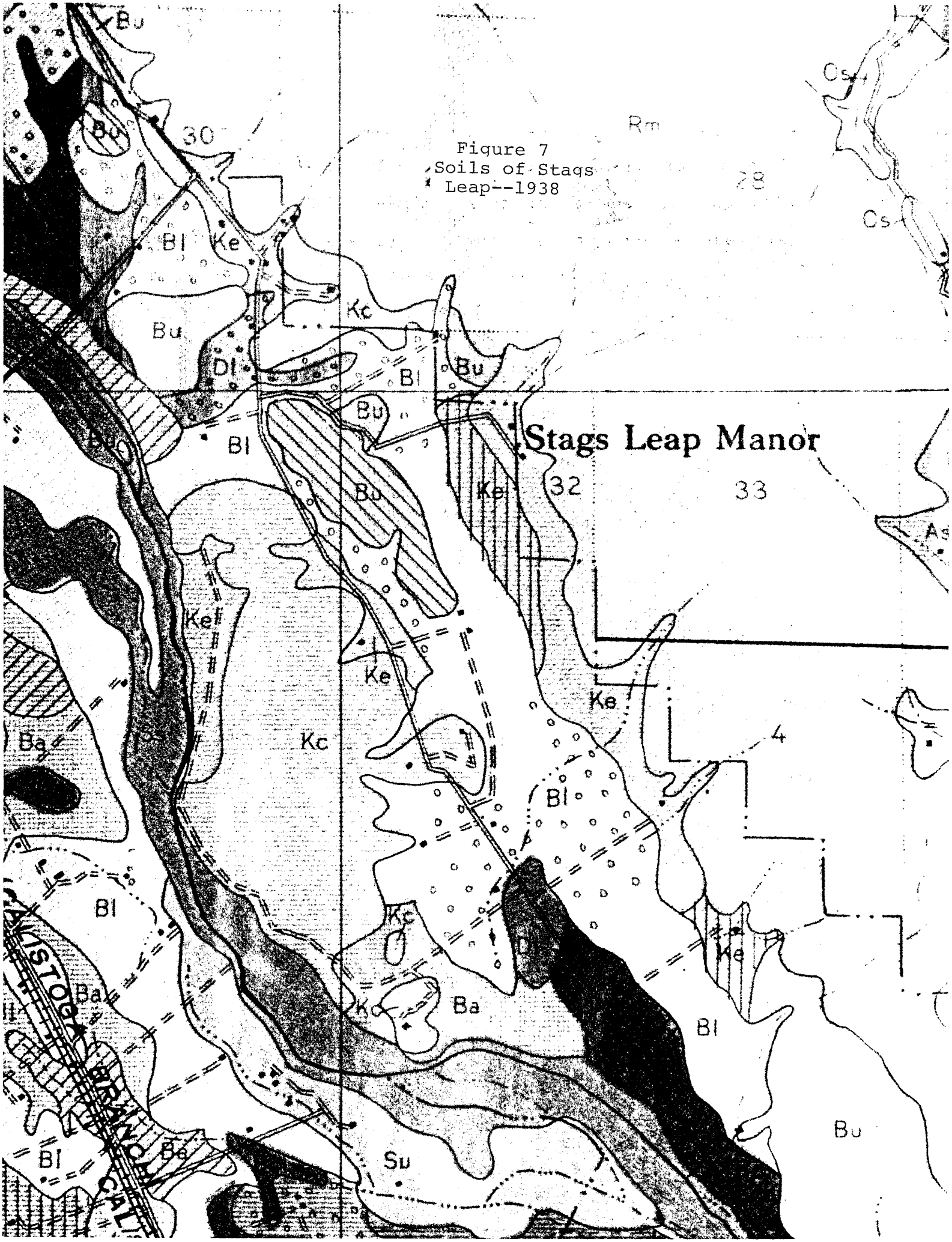


Figure 7
Soils of Stags
Leap--1938

stony clay loam (Kc), Keefers gravelly clay loam (Ke), and Butte stony loam (Bu) throughout the viticultural area. Konokti, Keefers, and Butte are not found on the other side of the river. Thus, the soil types, drainage, terrain, and parent materials of soils in the newly added acreage are much the same as those in the rest of the viticultural area, but substantially different from those across the river to the west.

Viticultural Characteristics. The combination of its topography, climate, and soils creates a unique setting for grape growing that distinguishes Stags Leap District from the rest of the Napa Valley. The low hills and west-facing exposure contribute to air flow patterns and temperature profiles that result in days that are warmer earlier and nights that are cooler than the surrounding area. The proximity of the area to San Pablo Bay and its prevailing winds, moderated by the hills, also influences the climate and the performance of the vineyards in Stags Leap District. Finally, the drainage, water capacity, fertility, and structure of the soils profoundly affect the management and performance of vineyards in the area.

The three major geographical features used to describe a viticultural appellation--topography, climate, and soils--are substantially the same throughout the revised viticultural area. It would therefore be reasonable to expect that the viticultural characteristics in the area would also be similar. In fact, remarkable similarity does exist.

Assuming similar management, a prime indicator of viticultural comparability is the date of harvest for a single variety. Table 1 shows harvest dates for Cabernet Sauvignon, the principal variety of Stags Leap District, for two vintages, 1982 and 1985. Vintage 1982 was considered a late harvest, while 1985 was considered early to normal. The wineries listed represent vineyards located in all parts of the appellation. For both vintages, the beginning and ending dates of harvest are remarkably similar. Naturally, the two larger wineries, Clos du Val and Silverado, have a longer harvest period than the smaller wineries.

TABLE 1

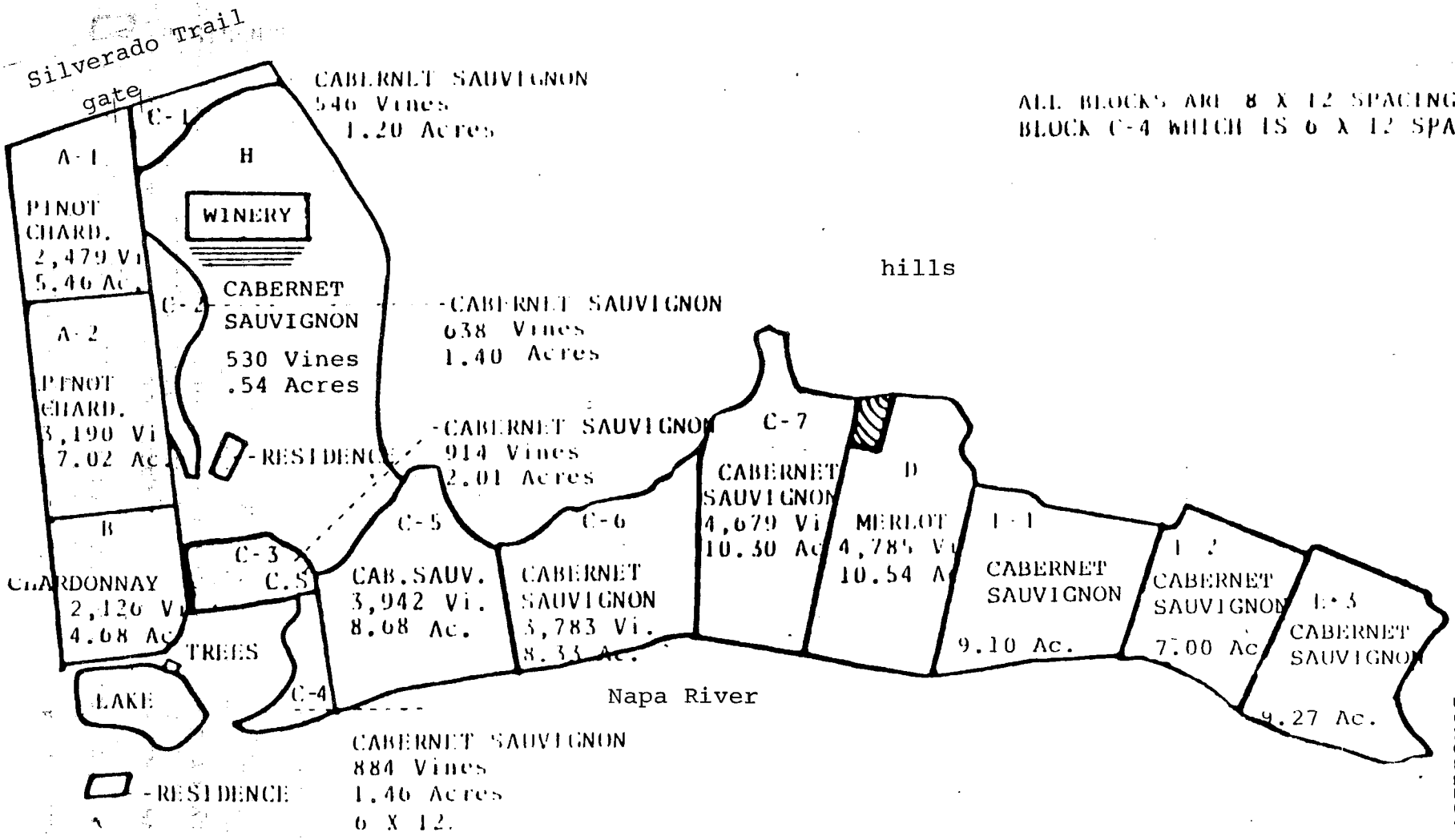
Cabernet Sauvignon Harvest Dates for Two Vintages [44]

	1982	1985
Clos du Val	Oct 5-14	Sept 24 - Oct 4
Pine Ridge Winery	N/A	Sept 25-26
Shafer Vineyards	Oct 2-12	Sept 2, 17-25
Steltzner Vineyards	N/A	Sept 25-26
Silverado Vineyards	Sept 28, Oct 2, Oct 12-15	Sept 26-28, 30, Oct 2-5, 7

Further evidence in support of the amended boundaries of Stags Leap District is found by comparing harvest dates for two different blocks of Cabernet Sauvignon grown at Silverado Vineyards. Table 2 shows harvest dates and sugars for the two blocks, shown in Figure 8, during vintage 1985.

Figure 8
DISNEY VINEYARD

Revised: 10/28/83



Section: V
Schedule: C-1

TABLE 2

Cabernet Harvest Dates and Sugars for Two Blocks, 1985 [45]

	Harvest Dates	Ave Sugar
C1	Oct 2-3	23.4
C7	Oct 2, 4, 5, 7	23.4

Block C1 is located within the committee's original appellation boundaries, just below the winery and alongside the Silverado Trail [Fig. 8]. Block C7 is located just outside the original area but inside the committee's revised boundaries. The two blocks are the same age, are planted in similar soils, have identical trellises, and are farmed similarly. Blocks C1 and C7 were picked at identical weighted average sugars during a six-day period.

The similarity in harvest characteristics is echoed in the winery. The winemaker at Silverado Vineyards, John Stuart, has always considered grapes from the two blocks comparable and treats them similarly in the winery. In fact, the grapes are picked as they ripen and are not always kept separate according to block, but are often blended in the fermenter. Thus all of the 1985 Cabernet picked from C1 and C7 on October 2 was crushed into the same tank. With five vintages of experience working with these grapes, Stuart believes that there is no difference in quality or character between the two blocks and that wines from both blocks

demonstrate the characteristics of the vineyard and the region.

In addition to its 100 acres within Stags Leap District, Silverado Vineyards also owns 80 acres of vineyard on the west side of the river in Yountville. The differences between the two vineyards further illustrates how the proposed additional acreage belongs in the Stags Leap District appellation.

First of all, only early to mid-season white varieties (Chardonnay and Sauvignon Blanc) are planted in Yountville. Mid to late-season red varieties (Merlot and Cabernet) are planted only in Stags Leap District. Also planted in Stags Leap District is a small proportion of Chardonnay, which ripens one to two weeks before Chardonnay of similar age planted in Yountville. Such planting decisions were based on years of experience in determining the suitability of the grape varieties to the areas, and are perhaps the best indication of the existence of two separate growing regions which deserve separate appellations.

Routine vineyard management operations also reflect the differences between the two regions. Silverado's deep, flat Yountville soils (Cole, Clear Lake) seldom need summer irrigation, but require frequent frost protection in the spring. By contrast, our well-drained, sloping Stags Leap District soils (Perkins, Kidd, Boomer) often need summer irrigation, but require less frost protection than Yountville.

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Our own thermograph records, already cited in the discussion on climate, confirm these viticultural differences. Temperature profiles from Blocks C1 and C7 on the Stags Leap District side are very similar. The profile from Block C4 on the Yountville side is distinctly different from C1 and C7 [Fig. 9].

Wine Quality. The reputation of the Stags Leap District appellation is based on Cabernet Sauvignon, the principal wine grown in the area. Stags Leap District Cabernets "have velvety texture--a lushness that is nicely balanced by a firm acidity. They are big without being clumsy and awkward" [46]. They are "softer, more generous of fruit and less herbaceous than the Rutherford wines. The dominant aroma is often black currants with hints of cherry" [47].

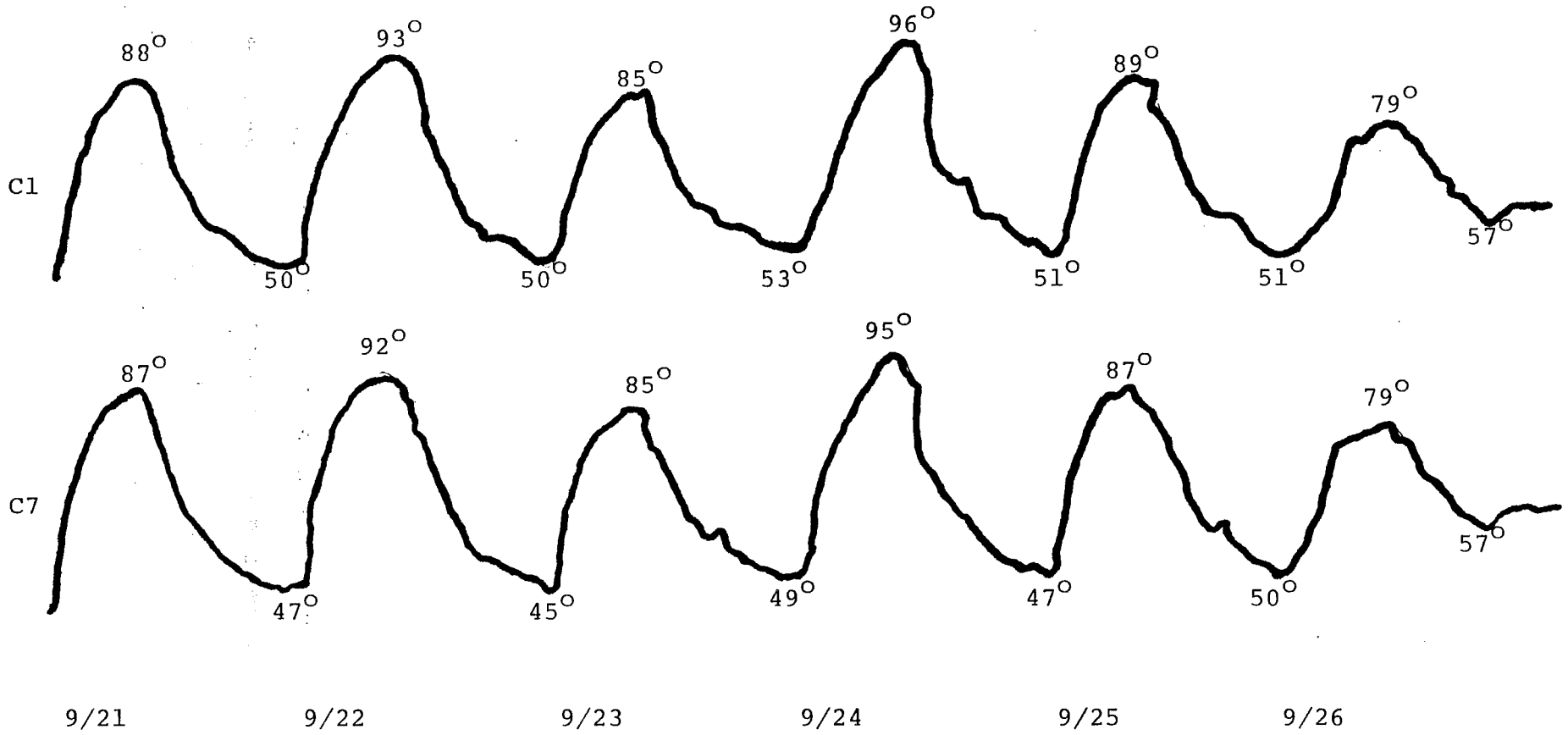
The wines have been likened to "an iron fist clothed in a velvet glove. The iron is that sturdy core of fruit extract, about which is arrayed velvety strains of exquisite herbal, violet, and pepperish fruitiness" [48]. These Cabernets are "deeply pigmented yet early-maturing, with good tannin and color and soft, silky-chocolatey character" [49].

Silverado Vineyards has produced five vintages of Cabernet Sauvignon since its founding in 1981. Two vintages have been released. Reviews of these wines confirm both their excellent quality and the presence of the Stags Leap District regional character described above [a summary of

Figure 9

Temperature Profiles
Blocks C1 and C7

(from thermograph records 9/85)



reviews is found in Appendix 2].

The 1981 Silverado Cabernet is an "attractively styled, very fruity, dark ruby colored wine with light to moderate tannins [and] a supple appealing blackcurrant fruitiness" [50]. "Stressing elegance over power," it has a "perfumed, berry-like nose" [51]. Its aroma suggests "fragrant yet intense jam and ripe currants [with] lots of concentrated fruit and extract on the palate [and] excellent structure and balance" [52]. In all, it is "one of the best of the new releases" [53].

Our 1982 Cabernet is similarly praised. "A rich, lush wine" [54], it has an "attractive, rich, spicey, herbal, black currant aroma [and] attractive, broad flavors on the palate with good structure" [55]. The wine is "perfumed with berries, cedar, vanilla, and spice" [56] and has "soft, ripe cherry flavors" [57]. It has "tight aromas of currants, cloves, and oak," and is in all "a many faceted Cabernet" [58].

Silverado Cabernet Sauvignon is considered by consumers and producers alike to belong to the Stags Leap District viticultural area. It is frequently put in tastings with other wines from the district and just as frequently places first or second. For example, in a recent professional tasting, Silverado's 1982 Cabernet took first place in a field of eight wines from the district [59]. A similar consumer tasting rating wines from Stags Leap District scored the same Silverado wine second out of six [60].

Thus from the standpoint of the criterion that viticultural appellations are supposed to address first and foremost--wine quality and character--Silverado Vineyards cannot be rightly excluded from the Stags Leap District appellation.

CONCLUSION

Although the use of the term Stags Leap District to refer to the viticultural area is a relatively recent phenomenon, we support its use because of its current standing in the wine trade. In the last ten to fifteen years the name has taken on an importance that did not exist when grape growing was established in the area at least a century ago.

Even before anyone called the region Stags Leap, the property that is now Silverado Vineyards was producing grapes and wine. As early as 1885, wine was probably being made at this location, and grapes continued to be grown here in the post-prohibition era. Early newspaper accounts document the existence of a thriving agricultural community--McFarlandsburg--in the area that included the present-day Silverado Vineyards.

Under the ownership of Charles B. See, Silverado Vineyards was among the first of the new Cabernet and Chardonnay plantings in the region in the 1960s and was instrumental in the establishment of the modern reputation of

the district. Now producing its own wine under Disney family ownership, the property continues to contribute to the growing fame of this classic grapegrowing region.

The principal geographical features of the region--topography, climate, and soils--prove that Silverado's Stags Leap District vineyards are indistinguishable from those of the rest of the appellation. These similarities are borne out in the characteristics of the vineyards and the quality of the wines.

In sum, the revised northern and western boundaries of Stags Leap District are not arbitrary lines, but are a clear and unambiguous representation of the facts of geography, history, and viticulture.

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N O W C A S T I N G
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APPENDIX 1

WEATHER STUDY OF STAGS LEAP DISTRICT IN THE NAPA VALLEY

PREPARED FOR:
SILVERADO VINEYARDS

JUNE 12, 1986

PREPARED BY: Donald F. Schukraft
Weather Network, Inc.
Donald F. Schukraft
Certified Consulting Meteorologist

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List of Figures and Tables

Executive Summary

In evaluating the weather in the Stags Leap District of the Napa Valley, Automatic Meteorological Observing Stations were installed. One station was installed within the originally proposed boundaries of Stags Leap District. The second station was installed outside of that boundary, but within the revised boundaries of the Appellation.

Half-hourly observations of wind, temperature and humidity, along with daily maximum and minimum temperatures, were collected at each station. The data from each station were compared against one another and also compared against other weather data collected inside and outside of the Stags Leap region. The comparison of data from the various sources is presented in tabular and graphical form in this report.

Variations in half-hourly observations and daily maximum and minimum temperatures were detected between the two automatic weather stations. However, the variations between the two stations were small and did not indicate two distinct meteorological regions.

Data from the weather stations in Stags Leap District were also compared to data from a weather station near the center of the Napa Valley, approximately 2.5 miles

south of the region. It was found that the daily maximum and minimum temperatures recorded by the stations in Stags Leap District were generally several degrees higher than those recorded by the weather station to the west of the Napa River and near the center of the Valley floor. On some days the differences between the two stations were over ten degrees.

It has been reported that the soils of Stags Leap District differ from those outside of the area, particularly those soils west of the Napa River. Further, it has been mentioned that the Napa River is a natural division when referring to Stags Leap District. Such distinct boundaries can not be drawn meteorologically. There appears to be no significant variations in the weather and climate between the area within the original Stags Leap District boundaries and the area that encompasses the revised boundaries. The general topography of Stags Leap District does, however, create a climatic zone different from the other areas of the Napa Valley.

I. INTRODUCTION

This weather study was prepared by Weather Network, Inc. at the request of Silverado Vineyards.

The purpose of this study was to evaluate the weather and climate in the area of the Napa Valley of California known as Stags Leap District. More specifically, to determine if there are any significant differences in the weather and climate within the original Stags Leap District boundaries when compared to the area encompassed by the revised boundary change. Figure 1 shows the original Stags Leap District appellation boundary as a solid line and marked as area A. The boundary revision is shown with a dashed line and marked as area B.

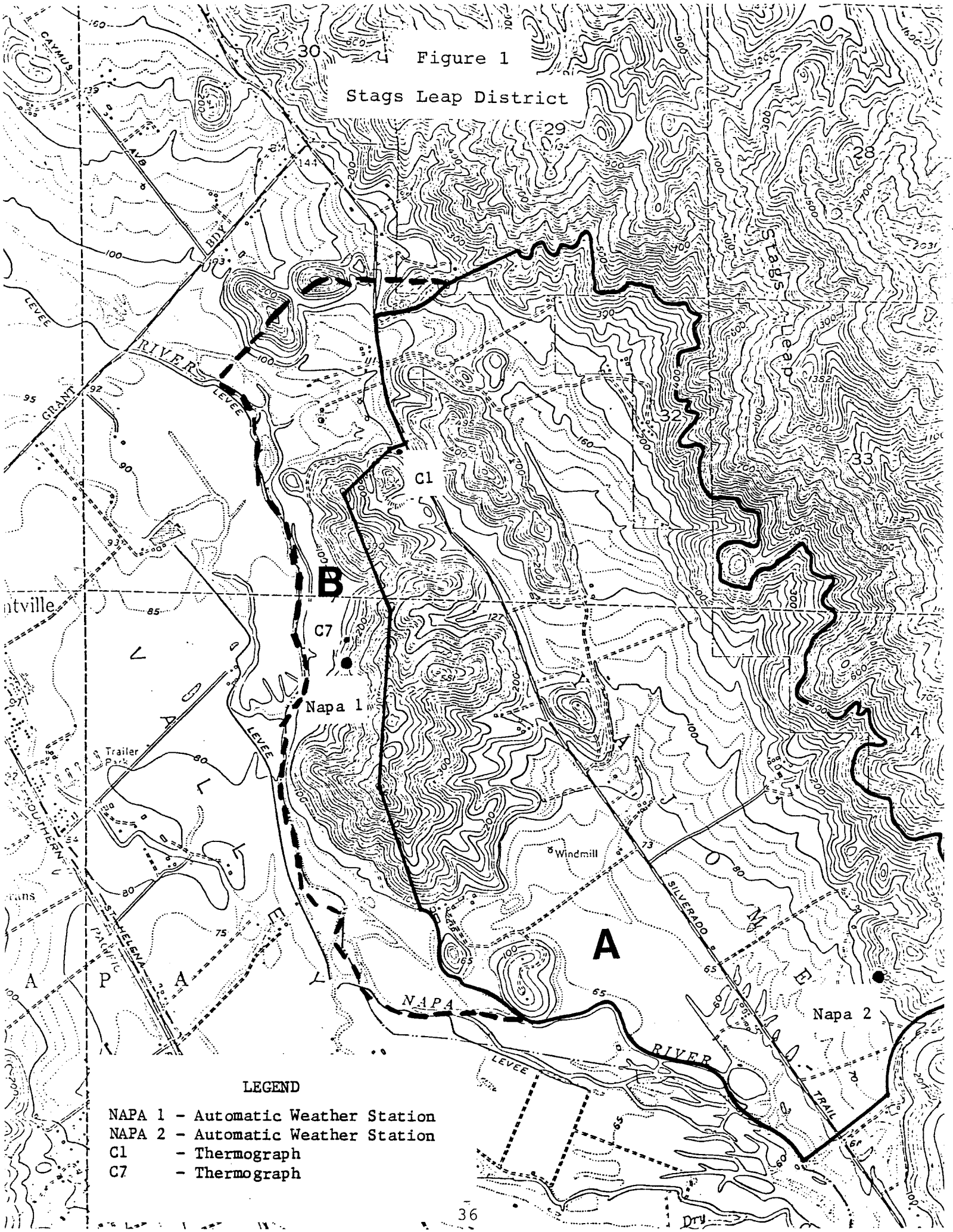
Automatic Meteorological Observing Stations (AMOS) were set up within area A and area B (see Figure 1). Weather data from these stations, and from thermographs that were located within the two areas have been evaluated. Weather observations from other stations to the south and west of the Napa River were also evaluated and compared to the weather observations taken within Stags Leap District.

II. DATA COLLECTION

Automatic weather stations were installed at two locations in Stags Leap District. One station, Napa 1, was positioned outside of the originally appellation area and another station, Napa 2, was positioned inside the area. Both stations were set up within a vineyard at an elevation

Figure 1

Stags Leap District



of approximately 180 feet above sea level. Each station was programmed and installed with instruments to measure temperature and humidity at the two meter height and wind speed and direction at a height of three meters. The observations were averaged over half-hour intervals and stored on magnetic tape. The tapes were then read into a microcomputer for processing. Data contained in this report were gathered from the stations between September 26 and November 9, 1985.

Daily temperature records from three thermographs were gathered. One thermograph, C1, was located within area A of Figure 1 and another thermograph, C7, was positioned in area B.

Additional weather information from outside of areas A and B was obtained from thermograph, C4, located on the opposite side of the Napa River approximately three-quarters of a mile west of Napa 1. Observations from an automatic weather station (BRR) located approximately three miles south of Napa 2 were also reviewed.

III. DATA SET

The maximum and minimum temperatures at the automatic weather stations Napa 1 and Napa 2 for Julian Days 269 to 313 (September 26 to November 9) are shown in Table 1. The cassette recorder storing data at Napa 1 from day 291 to 300 was inoperative. From day 311 to 319, equipment problems with recording devices at Napa 1 and Napa 2 resulted in some data loss. During the period in which data were gathered, the temperature probes at the weather stations were checked with an independent thermometer to ensure accuracy. Similar checks were made with the thermographs to ensure

Table 1

Maximum and Minimum Temperatures for Napa 1 and Napa 2

Station :	Napa1						Napa2					
	Temperature				Wind		Temperature				Wind	
Day	Max	Time	Min	Time	Max	Time	Max	Time	Min	Time	Max	Time
269	80.1	1500	52.6	554	10.3	1248	85.3	1516	52.0	506	11.9	1148
270	74.1	1621	56.0	2359	7.2	1618	81.3	1646	56.5	2357	9.3	1914
271	76.4	1602	53.3	2400	10.5	1358	79.2	1508	53.9	2400	12.2	2037
272	70.8	1628	49.7	313	9.0	1631	78.3	1544	50.0	316	11.4	1630
273	74.0	1514	44.5	485	11.5	1557	78.1	1406	44.8	409	11.9	1558
274	82.4	1532	45.8	636	9.3	1723	87.2	1504	45.5	903	9.1	1559
275	98.9	1738	47.8	738	8.8	1913	101.1	1630	48.1	717	10.2	1622
276	101.2	1621	66.9	848	13.5	1151	107.0	1521	64.4	805	15.1	1053
277	97.7	1533	56.7	823	10.7	1415	100.4	1314	56.8	756	15.8	1530
278	91.6	1505	53.0	636	10.7	1620	96.4	1439	53.1	754	11.7	1642
279	78.7	1226	56.2	745	11.4	1657	79.0	1236	56.8	733	14.9	1317
280	78.1	1423	54.8	808	8.9	1319	84.7	1419	54.7	2400	13.5	1438
281	74.2	1435	49.4	711	11.7	2354	81.3	1449	48.6	720	16.0	2340
282	73.1	1632	50.5	708	17.0	121	77.3	1543	48.8	724	20.3	210
283	81.2	1349	46.4	821	9.2	1718	87.2	1526	46.1	814	12.3	1557
284	76.7	1608	42.1	805	8.8	1306	78.9	1457	41.4	610	11.1	1542
285	79.9	1531	42.2	642	10.3	1552	----	----	----	----	11.1	1617
286	80.6	1529	40.3	643	13.3	1100	79.2	1510	40.1	708	17.5	1119
287	88.3	1458	43.1	748	8.0	1518	86.1	1430	44.8	803	8.8	1443
288	86.2	1608	40.2	603	10.2	1454	84.8	1519	40.3	701	10.5	1554
289	78.4	1619	40.4	608	9.2	1126	78.5	1558	41.2	641	9.6	1148
290	72.5	1540	41.7	635	8.9	1612	71.4	1515	43.9	718	9.2	1658
291							69.9	1439	48.6	2400	11.6	1537
292							63.5	1654	46.0	214	8.5	1702
293							61.8	1253	49.4	101	16.1	2114
294							63.0	1410	46.3	2303	13.5	935
295							58.5	1424	44.8	131	14.5	1330
296							73.2	1622	53.7	515	7.4	1502
297							76.8	1616	51.3	834	8.2	1654
298							77.8	1604	46.6	736	7.1	1732
299							77.3	1510	46.3	820	7.9	1645
300							79.7	1512	48.2	736	9.8	1549
301	72.2	1426	45.1	830	9.4	1450	72.7	1454	45.3	659	11.2	1710
302	60.7	1627	46.8	124	8.2	1303	60.1	1520	49.2	619	7.6	1206
303	68.4	1611	49.6	2400	6.7	1633	68.1	1505	46.7	2353	9.1	1616
304	76.0	1535	44.9	759	7.2	2335	75.5	1536	41.0	710	9.2	2249
305	86.6	1536	55.1	21	9.6	1229	85.8	1458	48.7	645	16.4	1419
306	85.8	1446	48.7	745	7.9	1317	85.4	1426	51.2	754	12.2	316
307	82.5	1332	49.6	527	6.9	1459	80.0	1520	47.7	725	6.0	1351
308	72.9	1431	53.1	2400	8.6	1549	72.6	1433	53.3	2356	9.9	1445
309	81.7	1557	45.7	743	7.4	941	81.3	1611	43.9	747	13.6	1212
310	80.3	1457	51.5	56	8.6	607	78.5	1512	49.2	25	8.4	623
311							78.0	1525	45.2	756	11.2	1649
312							67.2	1527	36.6	639	12.8	1703
313							61.3	1343	36.3	849	13.3	1800
Ave	79.9		48.9		9.7		78.4		47.9		11.5	
Std Dev	8.8		5.9		2.1		10.5		5.5		3.0	

accurate calibration. On October 11, the temperature probe at Napa 2 was found to be reading 2 to 4 degrees higher than the independent thermometer. The temperature probe was changed on October 12 and the base plate for the instrument, which had been missing, was installed. No correction has been applied to the Napa 2 temperatures recorded prior to October 12 since any correction factor did not appear to be linear.

For the period of record, the data displayed only small differences in the average maximum and minimum temperatures between the Napa 2 site and the Napa 1 site. For the period of record, the Napa 1 station had an average maximum temperature of 79.9°F and an average minimum of 48.9°F while Napa 2 measured 78.4°F and 47.9°F for an average maximum and minimum respectively.

When comparing temperatures at two different locations, hourly and daily maximum and minimum can be expected to differ whether the stations are several hundred yards apart or a few miles owing to ground cover, height of temperature measurement, radiational heating and cooling and mixing of the surrounding air. The installation of instruments from which measurements were taken at Napa 1 and Napa 2 were set-up to be as identical as was possible. The daily maximum and minimum temperatures at Napa 1 and Napa 2 are shown in graphical form in the Appendix.

Each half-hourly observations of temperature, humidity, wind speed and direction at Napa 1 and Napa 2 have been

compared. Limits were established for each parameter in checking for differences between the observations. The results are shown in Table 2. From a total of 6,506 comparisons, the total percentage of differences based on the limits set, amounted to only 6.9 percent.

The largest number of differences were noted on day 305 (November 1). During this day, temperature spread between the two stations was greater than 3°F on almost every half-hourly observation from 0500L to 1000L. During the remainder of the day, there was a very good correlation between the temperatures reported at both stations. A total of 22 differences in wind speed were also noted on this day. However, had the limit on the wind speed been increased by only 1.5 MPH, the number of differences drops to only nine.

In Table 3, daily maximum and minimum temperatures at Napa 1 and C7 which are located in area B are compared to those temperatures recorded at C1 which is in area A. While some differences can be expected, there is a considerable similarity between the three sites.

Graphs located in the Appendix show the maximum and minimum temperature comparisons between Napa 1 and Napa 2 which are in the revised Stags Leap District and BRR which is located to the south of the region. The maximum temperature is generally lower at BRR than those recorded at Napa 1 and Napa 2. The minimum temperature at BRR was generally much lower than those recorded by the stations in Stags Leap District. On some days, the minimum temperature was over 10 degrees warmer in Stags Leap District.

Table 2

Comparison of Half-Hourly Weather Observations at Napa 1 and Napa 2

Number of observations in which the difference between the half-hourly readings of a parameter at the Napa1 and Napa2 sites were exceeded by the defined limits.

Limits :		
	Temperature different by more than	3.0 degrees
	Humidity different by more than	15.0 percent
*	Wind Speed different by more than	3.0 mph
*	Wind Direction different by more than	60.0 degrees

* For observations in which the wind speed, at one or both stations, was less than 5mph the comparison for wind direction was omitted.

	Parameters						
		Wind		Rel	Total # of	Total # of	Percent of
Day	Temp	Spd	Dir	Hum	Differences	Comparisons	Differences
269	10	5	1	0	16	192	8.3
270	8	7	0	0	10	192	5.2
271	3	8	0	0	11	192	5.7
272	6	4	0	0	10	192	5.2
273	7	8	0	0	15	192	7.8
274	9	1	0	0	10	192	5.2
275	7	0	1	1	9	192	4.7
276	16	6	7	3	32	192	16.7
277	9	5	0	0	14	192	7.3
278	12	1	0	0	13	192	6.8
279	6	8	1	0	15	180	8.3
280	12	5	1	0	18	192	9.4
281	15	7	2	0	24	192	12.5
282	6	13	7	0	26	191	13.6
283	20	0	0	0	20	192	10.4
284	8	5	0	0	13	131	9.9
285	10	4	0	1	15	192	7.8
286	3	5	8	3	19	180	10.6
287	13	2	0	2	17	191	8.9
288	8	3	0	0	11	156	7.1
289	5	1	0	0	6	144	4.2
290	0	0	0	0	0	156	0.0
291	0	0	0	0	0	128	0.0
301	4	4	0	0	8	159	5.0
302	3	4	0	0	7	192	3.6
303	0	1	0	0	1	192	0.5
304	8	2	0	0	10	141	7.1
305	12	22	1	8	43	192	22.4
306	12	9	0	2	23	192	12.0
307	3	0	0	0	3	192	1.6
308	0	2	0	0	2	192	1.0
309	1	7	0	0	8	157	5.1
310	4	2	0	1	7	192	3.6
311	4	4	0	0	8	150	5.3
312	0	3	0	0	3	87	3.4
313	0	0	1	0	1	90	1.1
314	0	0	0	0	0	50	0.0
315	0	1	0	0	1	30	3.3
316	0	0	0	0	0	42	0.0
317	0	0	0	0	0	45	0.0
318	0	0	0	0	0	48	0.0
319	0	0	0	0	0	18	0.0

Table 3

Comparison of Maximum and Minimum Temperatures at Napa 1, C7, and C1.

Julian Day	NAPA 1		C7		C1	
	Max	Min	Max	Min	Max	Min
269	80.1	52.6	79	50	79	51
270	74.1	56.0	71	57	72	57
271	76.4	53.3	73	49	75	52
272	70.8	49.7	68	45	69	48
273	74.0	44.5	71	39	73	42
274	82.4	45.8	80	41	83	44
275	98.9	47.8	95	43	96	47
276	101.2	66.9	98	67	98	64
277	97.7	56.7	97	50	97	54
278	91.6	53.0	92	49	92	50
279	73.7	56.2	74	57	71	56
280	78.1	54.8	79	54	77	54
281	74.2	49.4	76	49	74	49
282	73.1	50.5	73	51	70	51
283	81.2	46.4	81	41	78	41
284	76.7	42.1	77	37	77	39
285	79.9	42.2	80	40	79	42
286	80.6	40.3	81	37	78	38
287	88.3	43.1	89	37	85	39
288	86.2	40.2	87	35	86	37
289	78.4	40.4	79	36	78	36
290	72.5	41.7	74	39	73	41
291	--	--	71	51	70	51
292	--	--	65	42	63	44
293	--	--	64	49	63	49
294	--	--	65	47	60	46
295	--	--	60	46	56	42

Table 3 (cont.)

Comparison of Maximum and Minimum Temperatures
at Napa 1, C7, and C1

Julian Day	NAPA 1		C7		C1	
	Max	Min	Max	Min	Max	Min
296	--	--	70	56	71	52
297	--	--	79	53	75	49
298	--	--	80	48	74	45
299	--	--	81	47	78	46
300	--	--	83	48	80	46
301	72.2	45.1	75	46	73	45
302	60.7	46.8	60	44	61	46
303	68.4	49.6	67	49	68	51
304	76.0	44.9	76	41	76	40
305	86.6	55.1	85	48	84	50
306	85.8	48.7	84	43	83	45
307	82.5	49.6	80	44	80	44
308	72.9	53.1	72	52	72	53
309	81.7	45.7	81	44	79	44
310	80.3	51.5	79	46	79	47
311	--	--	78	41	78	42
312	--	--	65	33	65	34
313	--	--	59	30	59	31

The daily maximum wind speed at the Napa 2 station was generally 2 to 3 MPH higher than the wind speeds measured at Napa 1. During the period in which data was gathered at the two sites, the average daily maximum wind speed at Napa 1 and Napa 2 was 9.7 MPH and 11.5 MPH respectively. The wind directions recorded at each station on half-hourly intervals were generally within 60 degrees of each other as shown in Table 2.

IV. CLIMATE

Long term weather records for area A and B of Stags Leap District are unavailable. Variations in daily maximum and minimum temperatures and their time of occurrence throughout the region, although they are small, can be expected and have been observed. These daily variations will undoubtedly be observed when comparing weather data from sites at the northern and southern end of area A in the same way as those actually measured at a site in area A and a site in area B. Similar small variations in the climate throughout the region can also be expected.

The air flow through the southern end of the Napa Valley is generally from a southerly direction. Owing to the orientation of Stags Leap District with the surrounding hills, variations in wind speed and direction can also be expected within the district. Air entering the southern end of the district will be accelerated as it passes through the narrow gap in the hills along the Silverado Trail and the gap at the northern most end of area A. This increase in air flow through

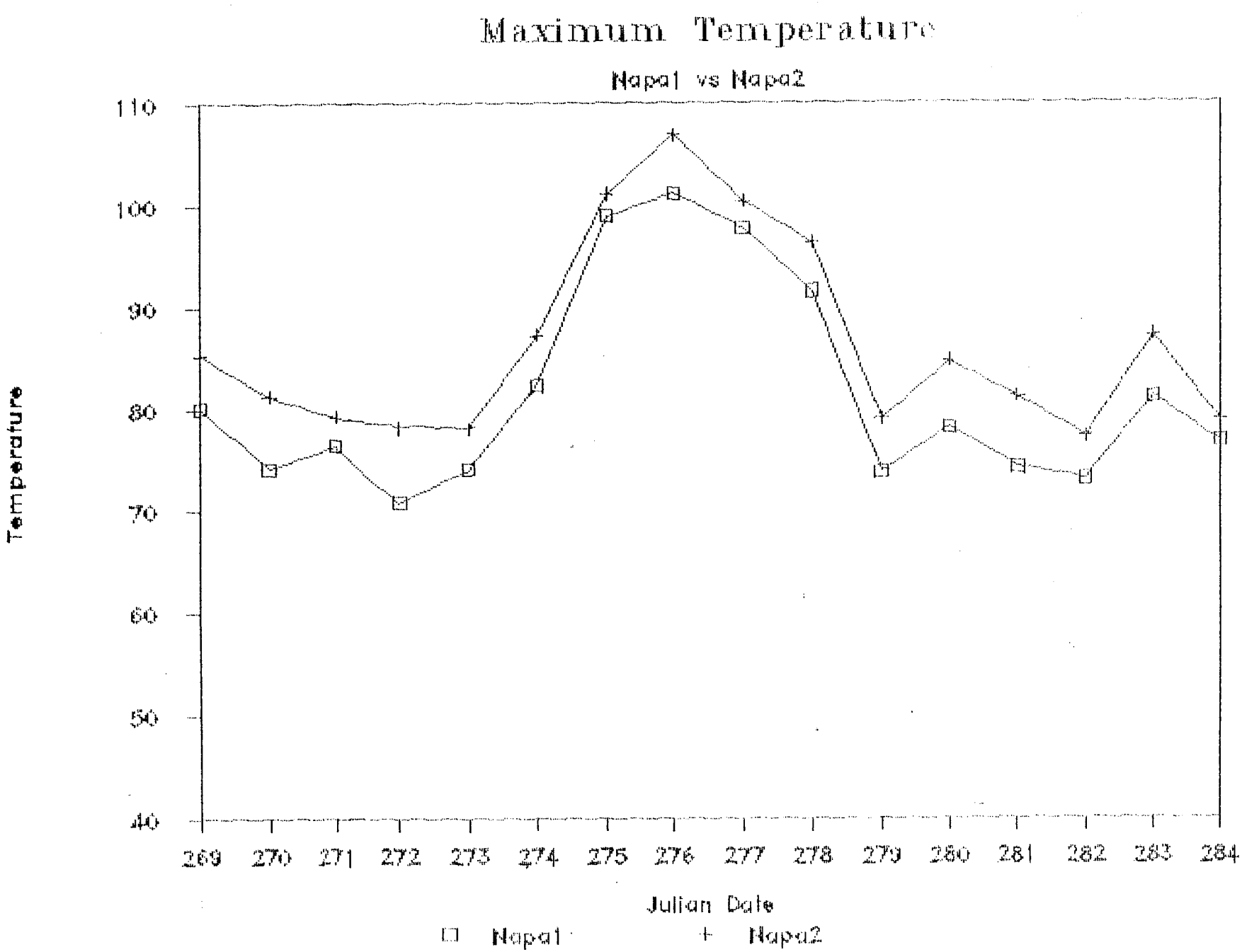
the gaps will also be experienced in the northern portion of area B before fanning out and weakening in the center of the Napa Valley west of the Napa River.

The marine air that pushes through the Napa Valley during the summer growing season occassionally brings fog and low clouds to the area. Due to the Hilliness of Stags Leap District, fog and low clouds may likely clear earlier in this area when compared to the lower elevations to the west of the Napa River. The difference in time that the fog and low clouds may dissipate in area A versus area B of Stags Leap District would be insignificant in distinguishing the two as separate meteorological zones.

In conclusion, the limited period in which data has been gathered in area A and B and compared against each other, does not indicate two distinct weather regions. Additional data over a longer period of time would have to be gathered to ascertain any climatic differences between the two areas should they exist.

Appendix

List of Graphs


Maximum Temperature
Napa1 vs Napa2
110
100
90
80
70
60
50
40
Temperature
269
270
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274
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276
277
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279
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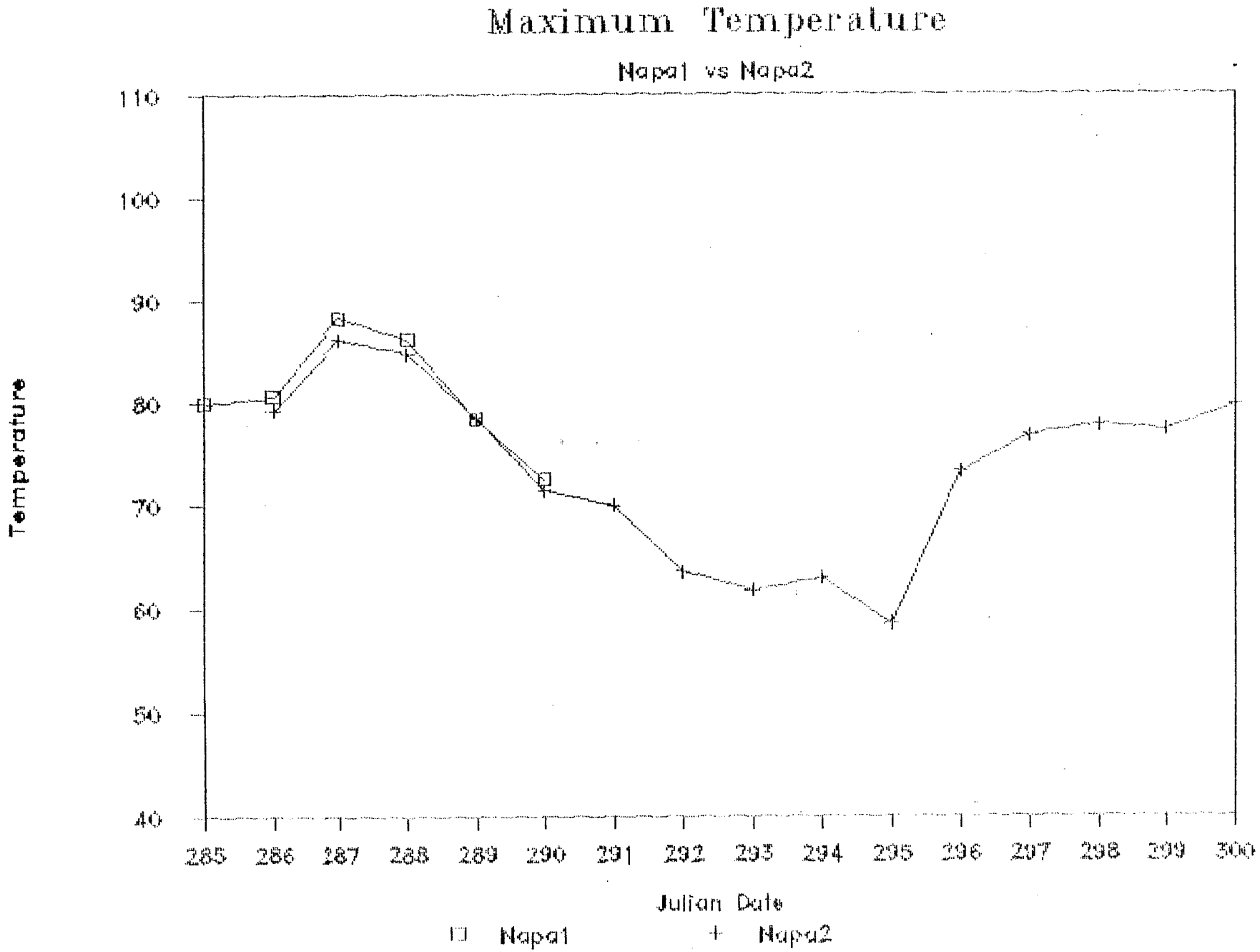
281
282
283
284
Julian Date
Napa1
Napa2


Maximum Temperature
Napa1 vs Napa2
110
100
90
80
70
60
50
40
Temperature
285
286
287
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297
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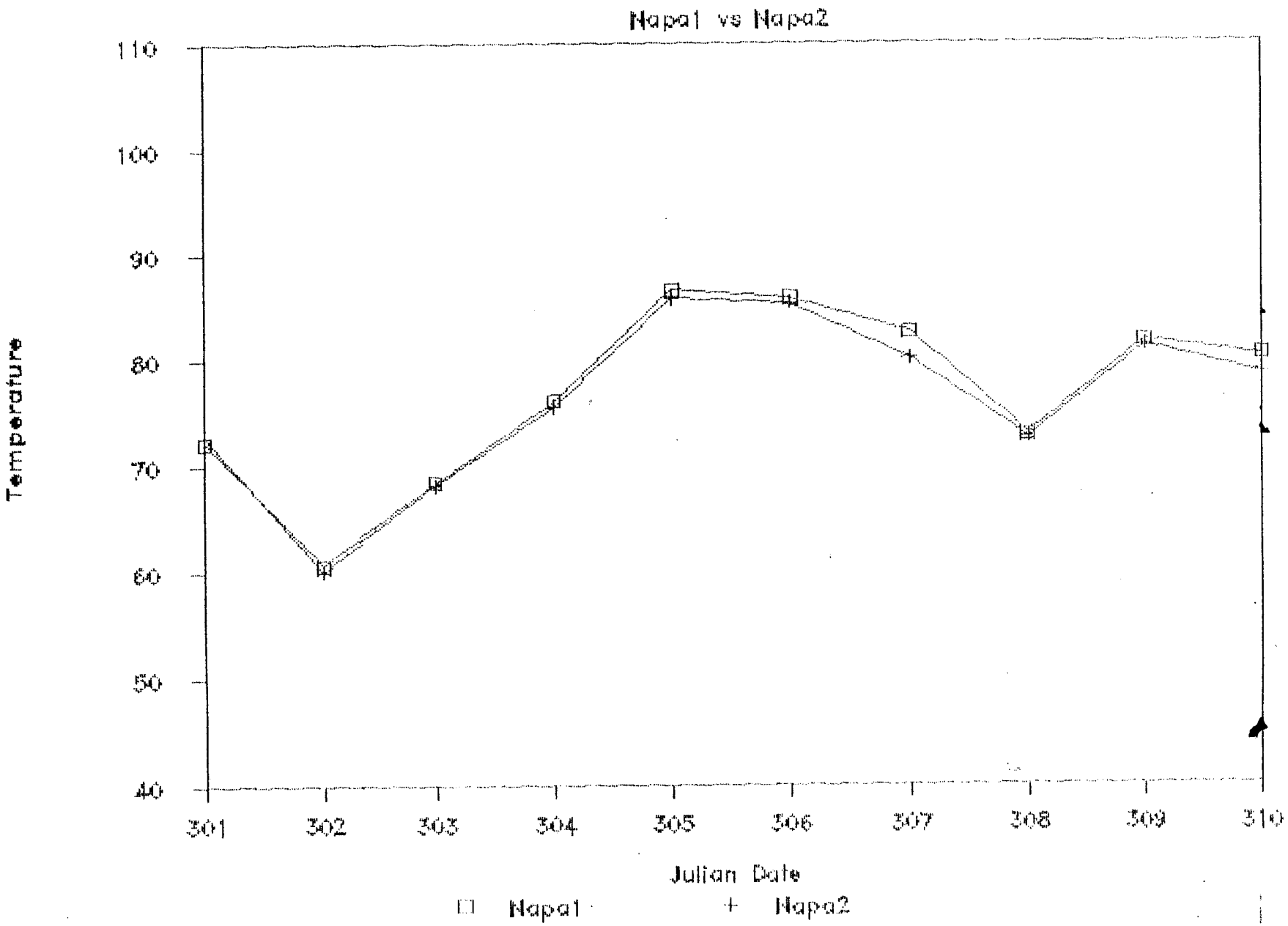
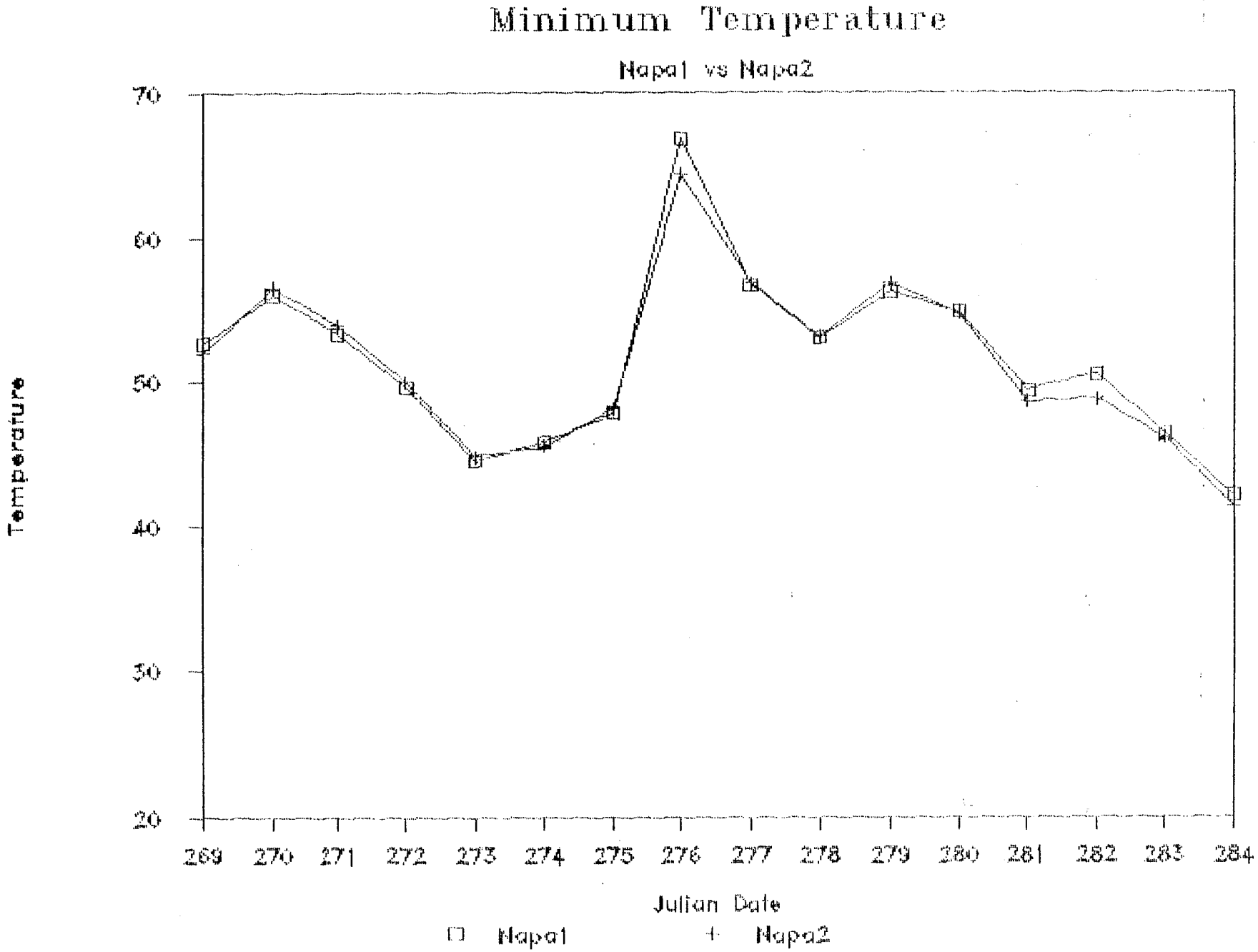
299
300
Julian Date
Napa1
Napa2

Maximum Temperature




Minimum Temperature
Napa1 vs Napa2
Temperature
70
60
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269
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279
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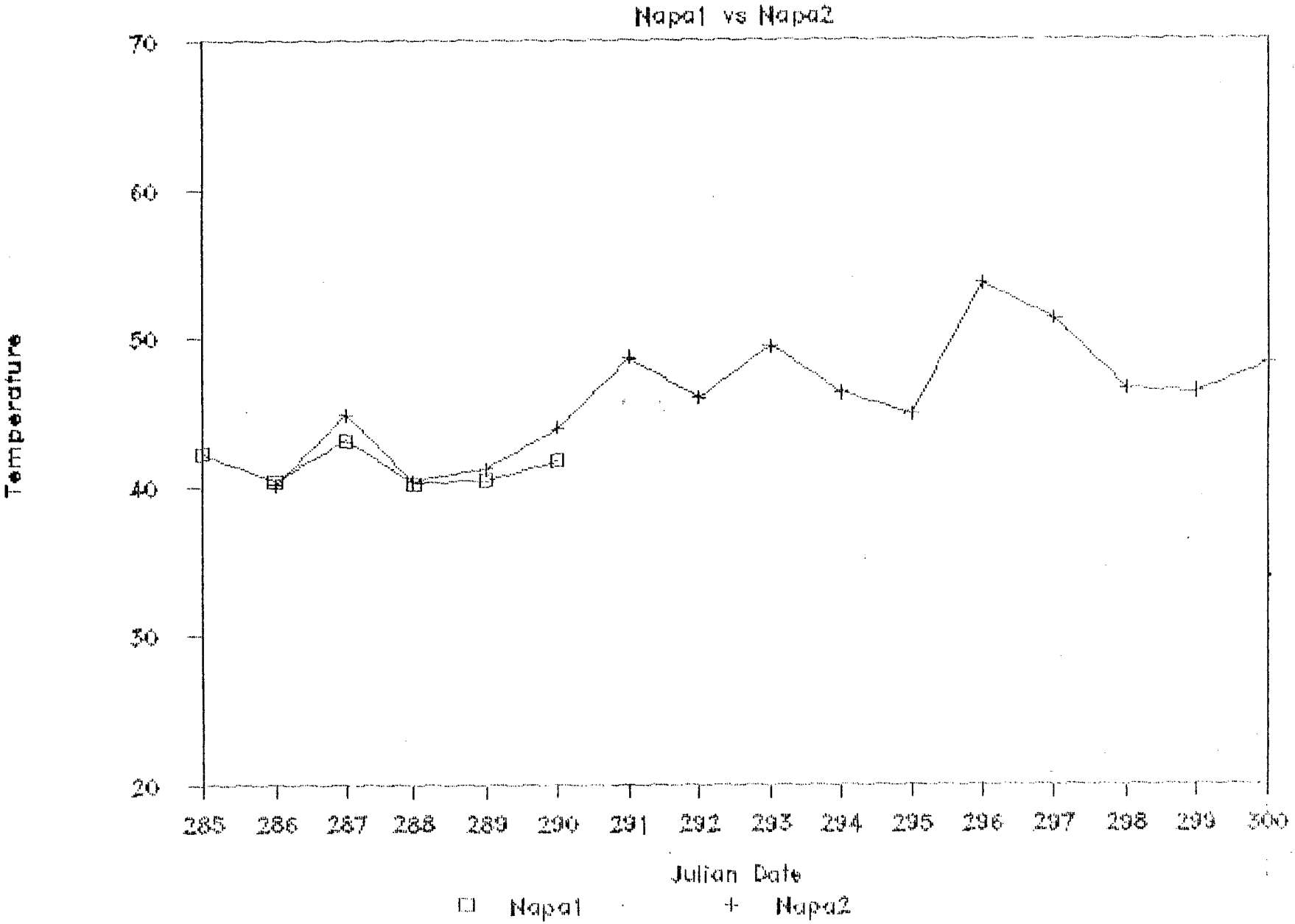
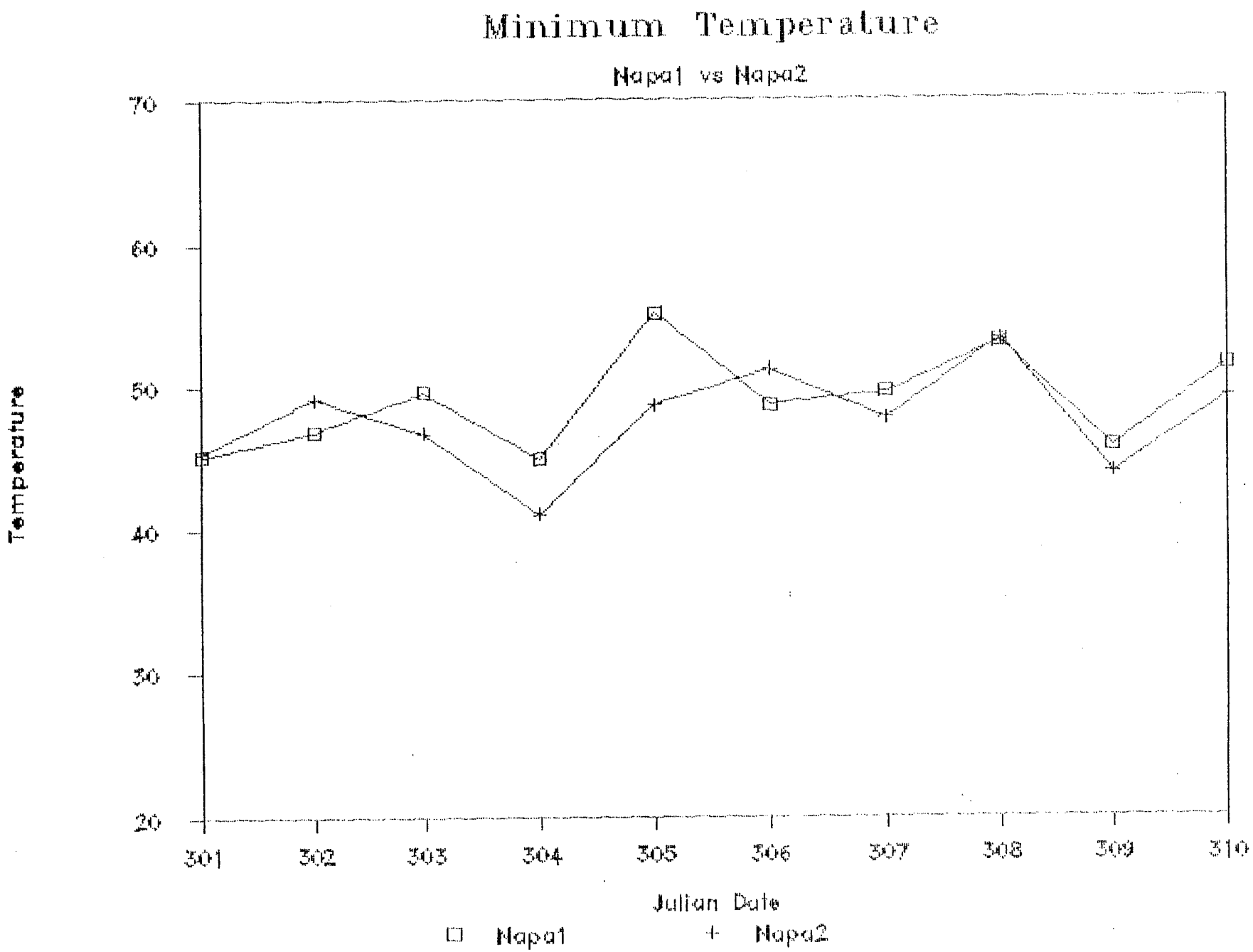
281
282
283
284
Julian Date
Napa1
Napa2

Minimum Temperature




Minimum Temperature
Napa1 vs Napa2
Temperature
70
60
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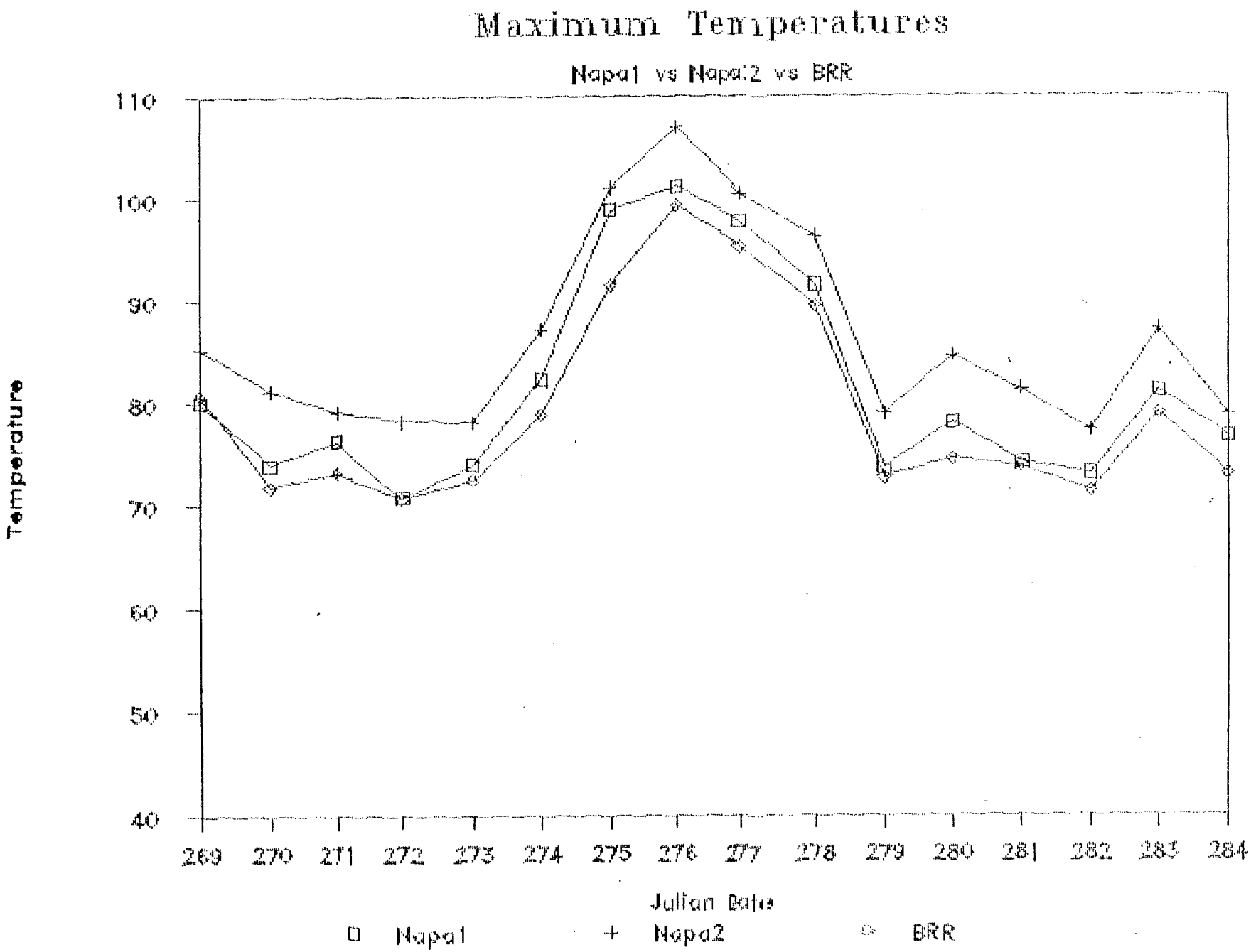
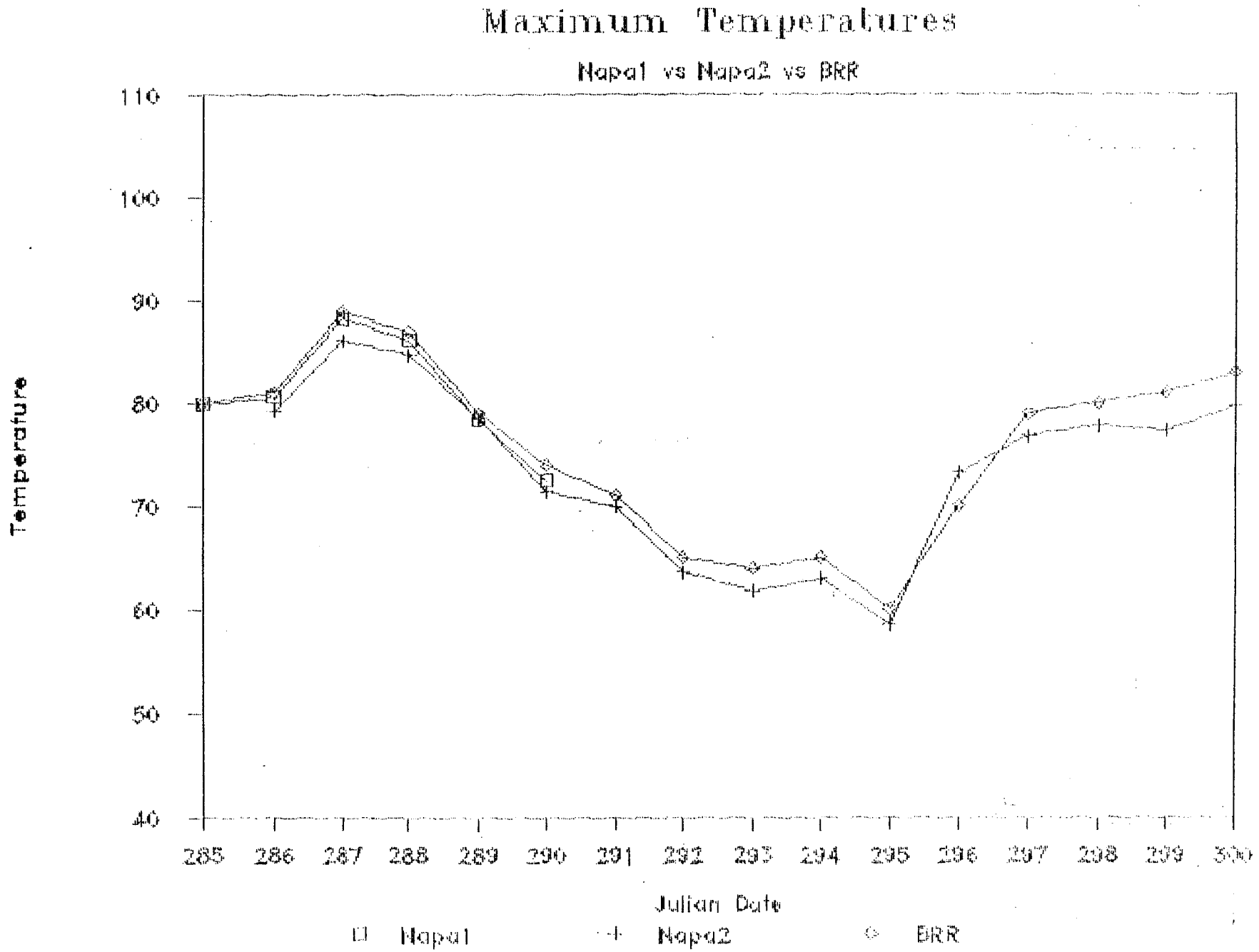
310
Julian Date
Napa1
Napa2



The BRR Weather Station is located approximately 3 miles south of the Napa 2 Weather Station on the west side of Big Ranch Road between Salvador Avenue and El Centro Avenue.


Maximum Temperatures
Napa1 vs Napa2 vs BRR
110
100
90
80
70
60
50
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Temperature
285
286
287
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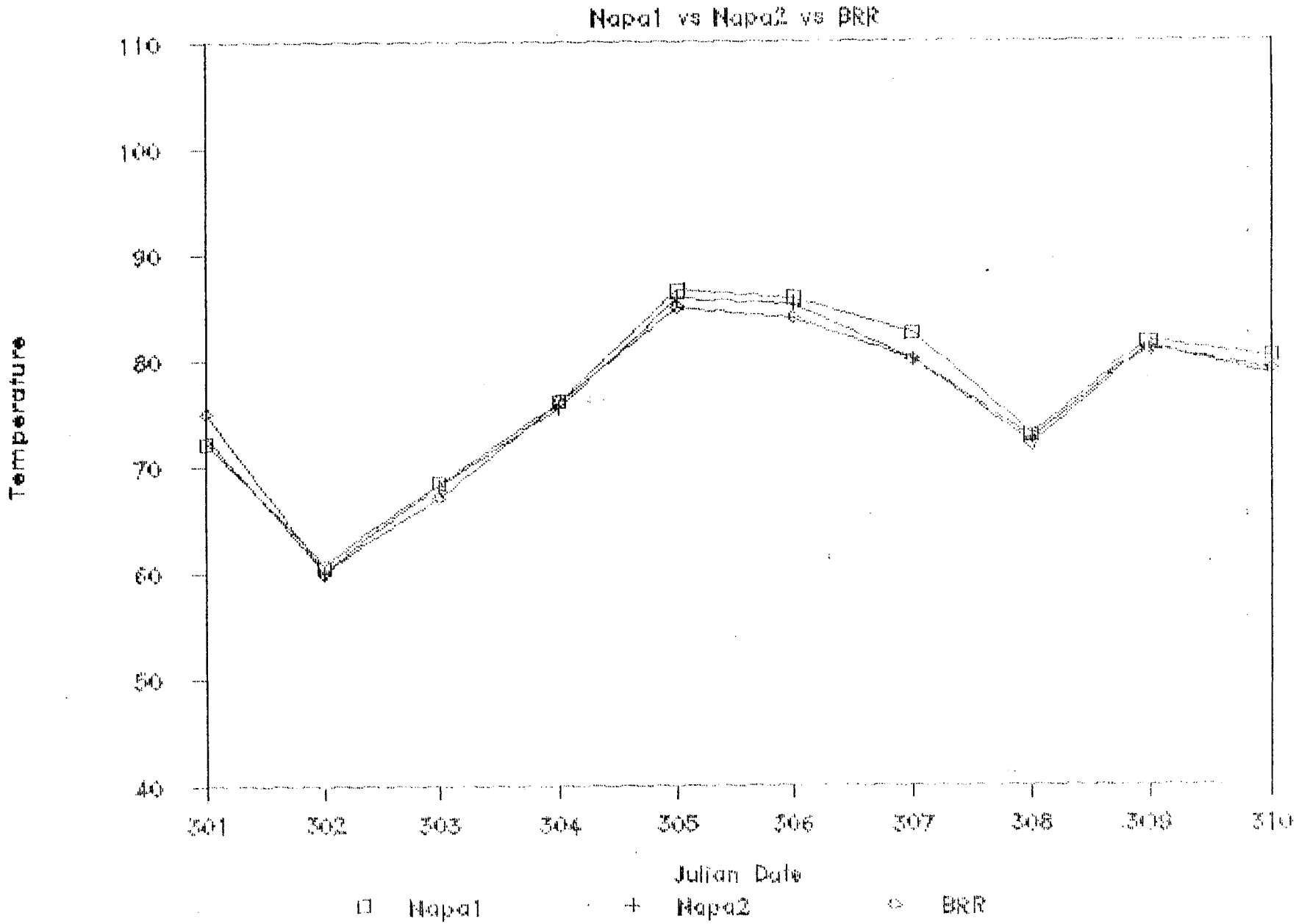
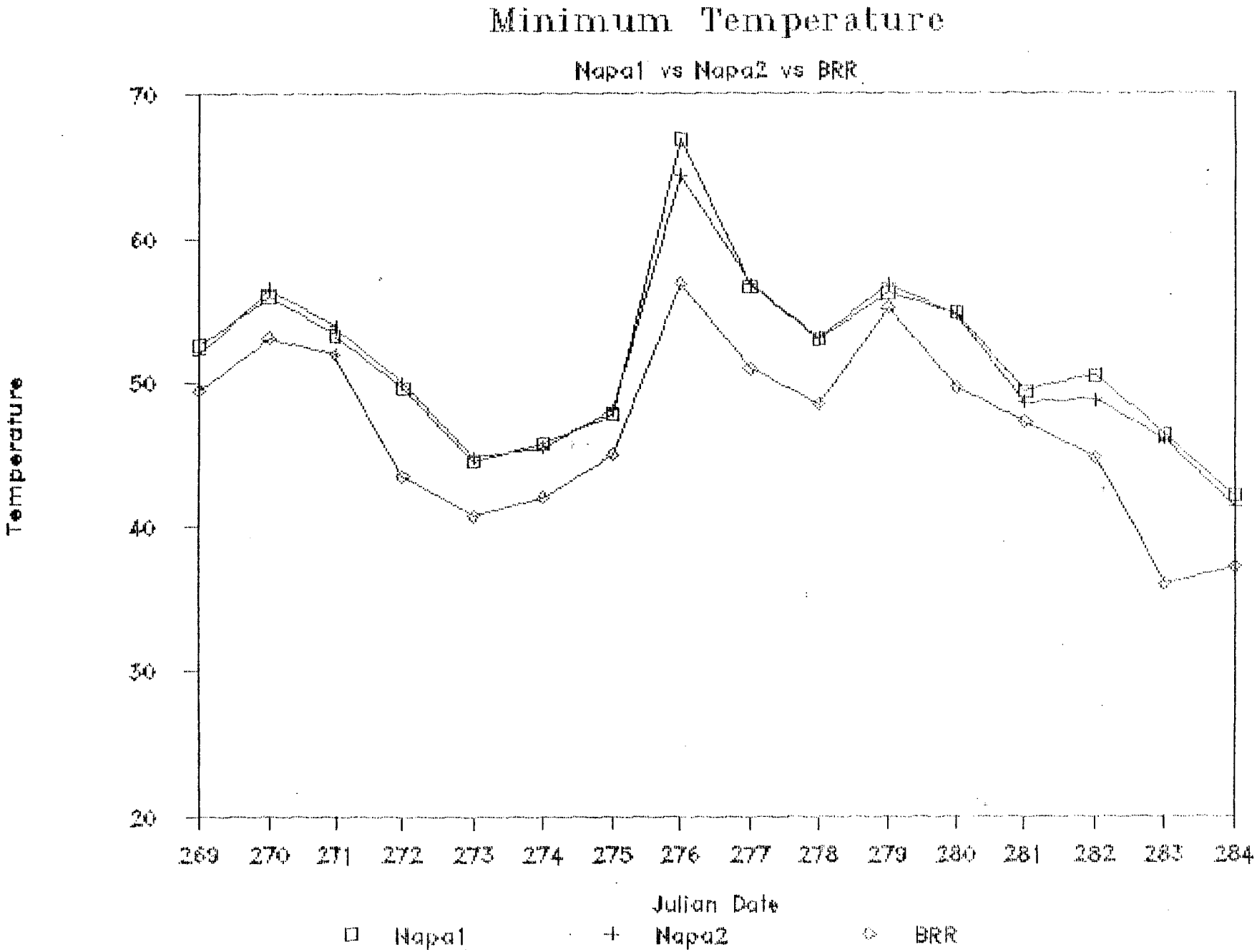
300
Julian Date
Napa1
Napa2
BRR

Maximum Temperatures




Minimum Temperature
Napa1 vs Napa2 vs BRR
Temperature
70
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281
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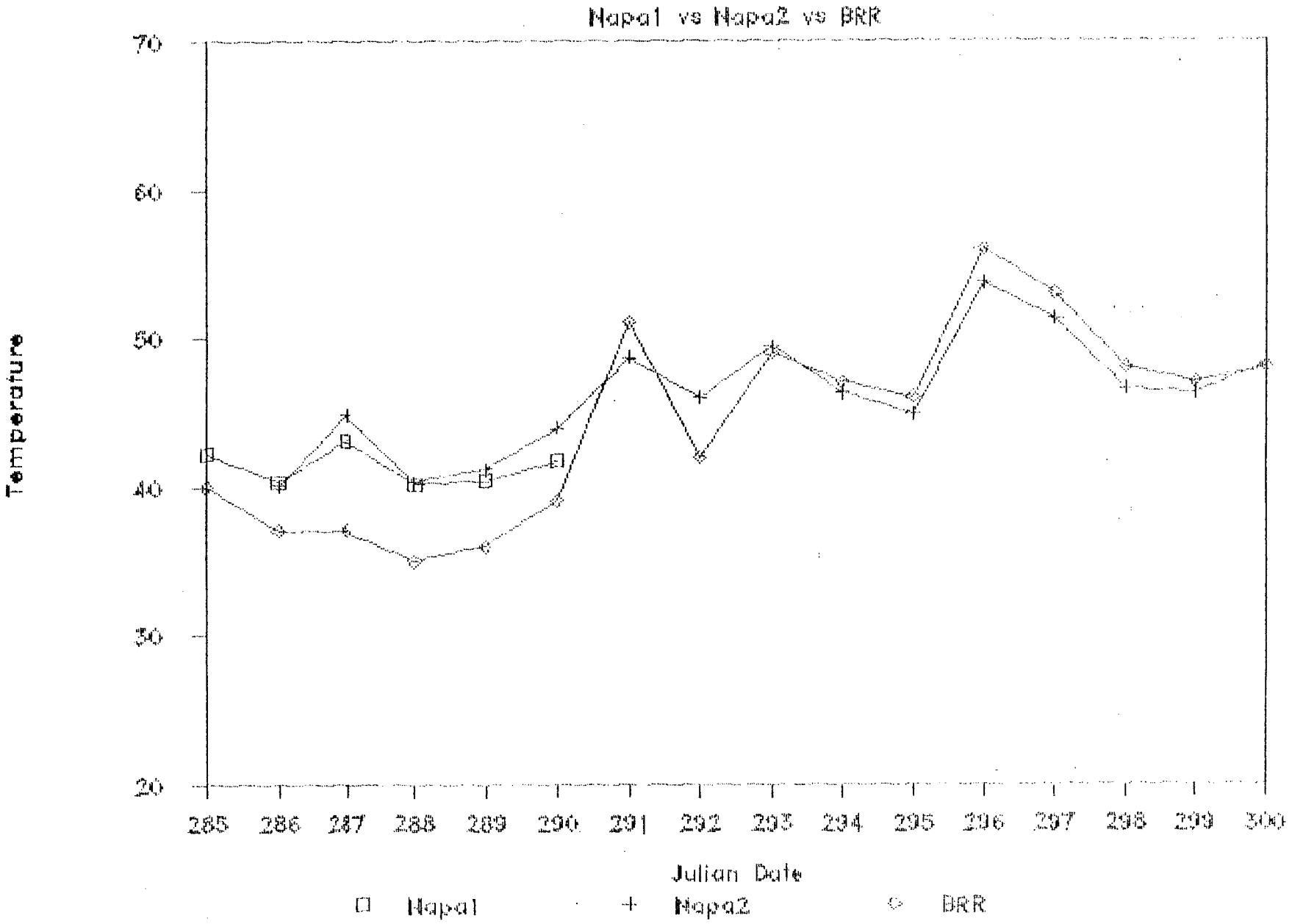
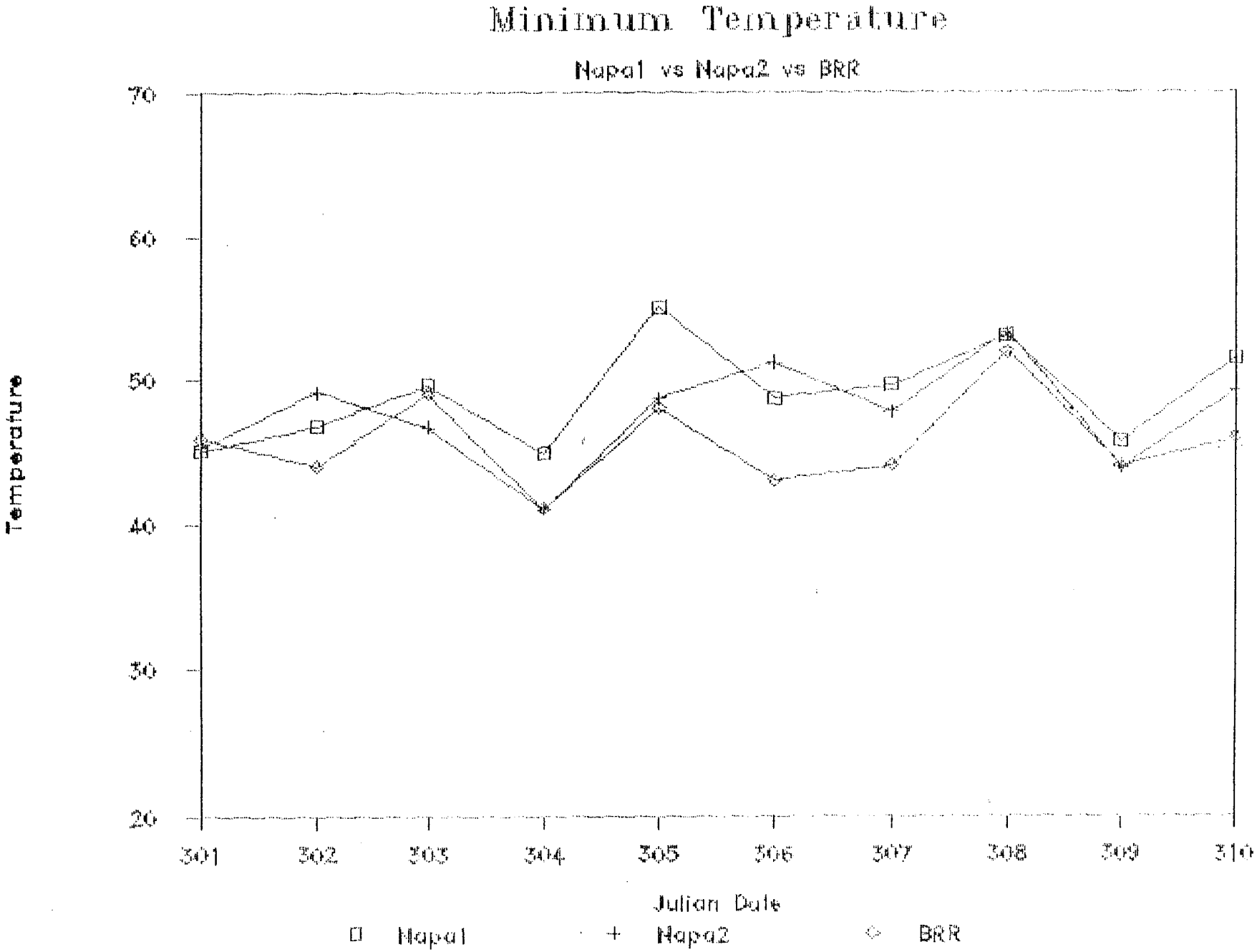
283
284
Julian Date
Napa1
Napa2
BRR

Minimum Temperature




Minimum Temperature
Napa1 vs Napa2 vs BRR
Temperature
70
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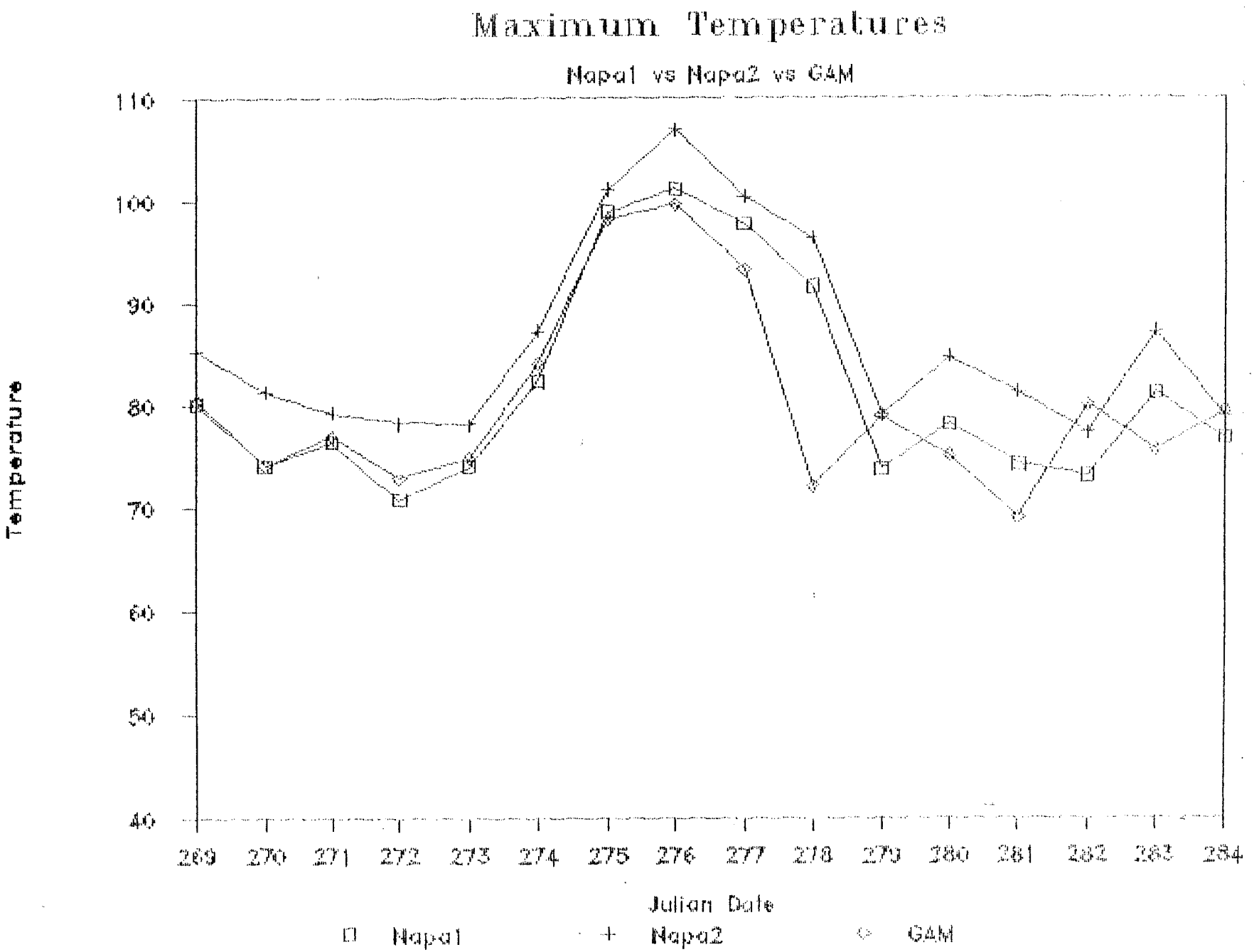
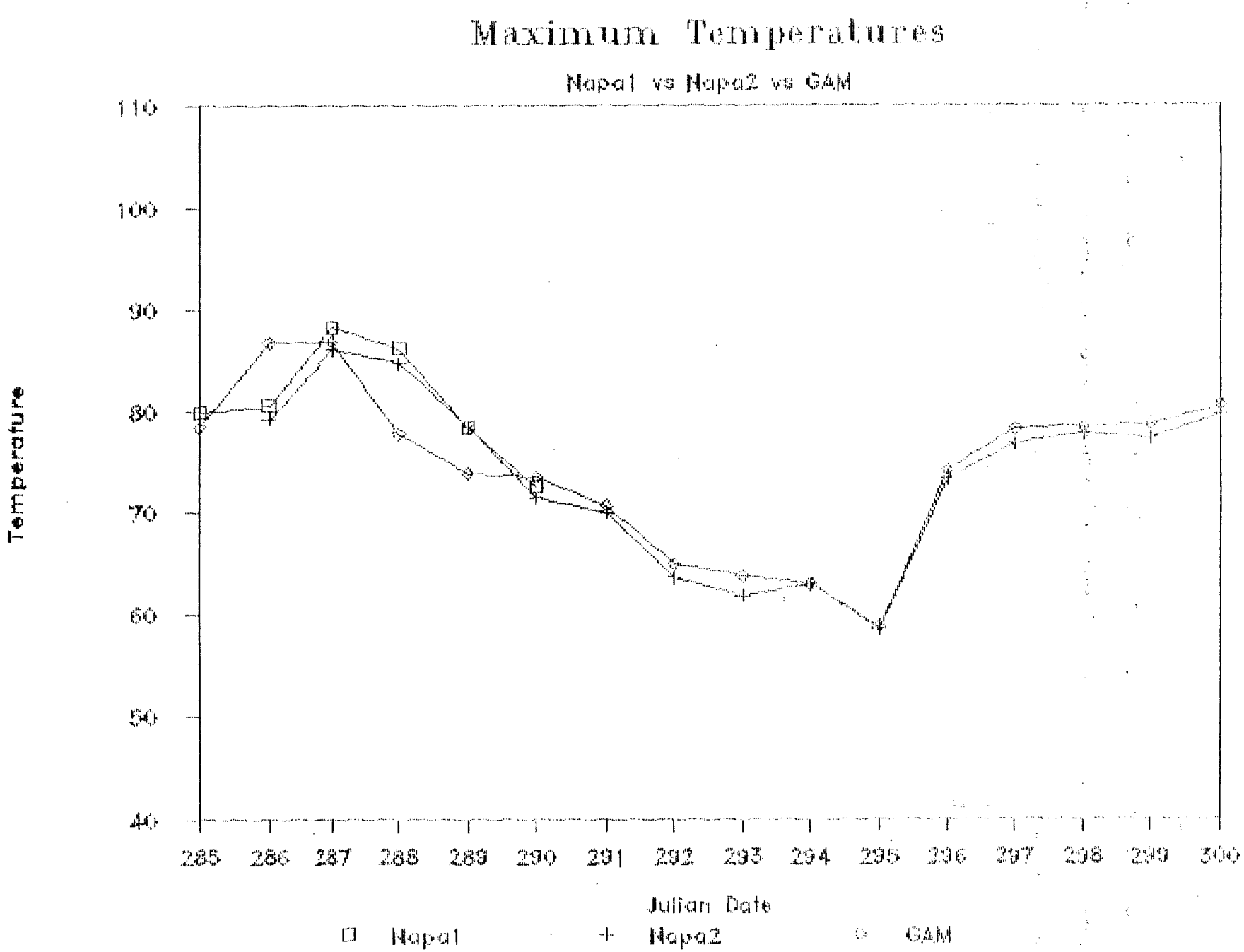
310
Julian Date
Napa1
Napa2
BRR



The GAM Weather Station is located approximately 3.5 miles north-northeast of the Napa 1 Weather Station on the east side of the Silverado Trail and south of Oakville Cross Road.


Maximum Temperatures
Napa1 vs Napa2 vs GAM
Temperature
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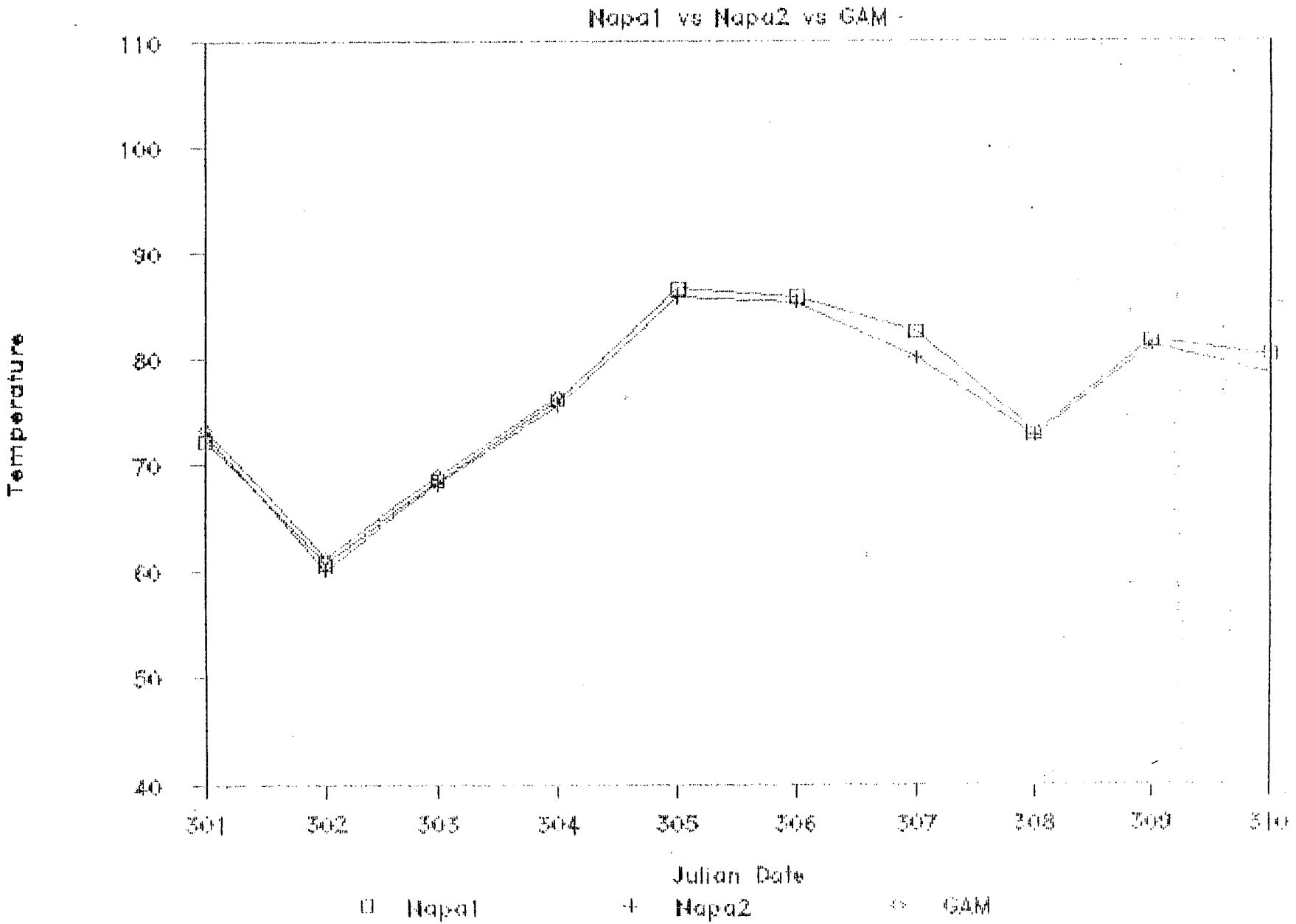
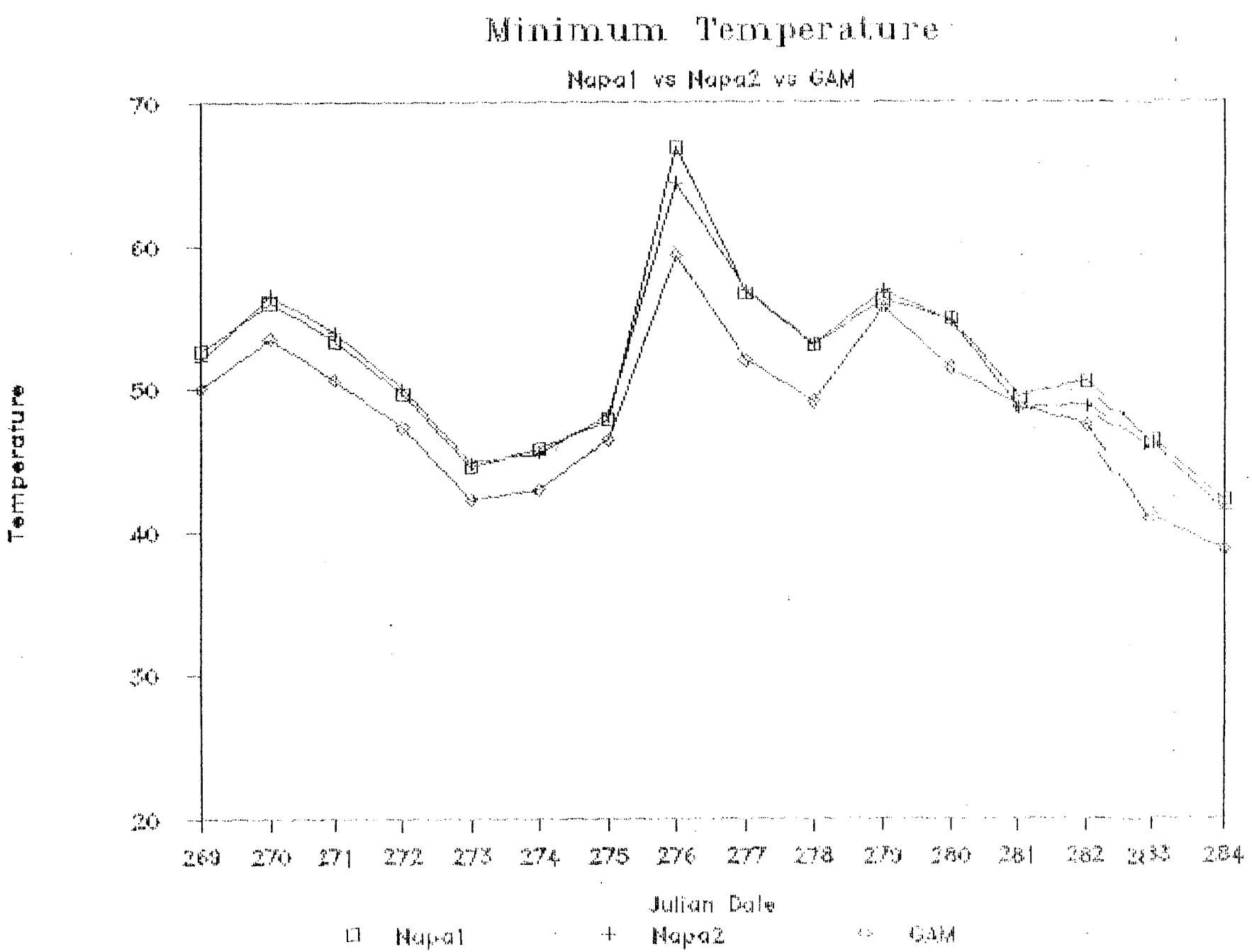
299
300
Julian Date
Napa1
Napa2
GAM

Maximum Temperatures




Minimum Temperature
Napa1 vs Napa2 vs GAM
Temperature
70
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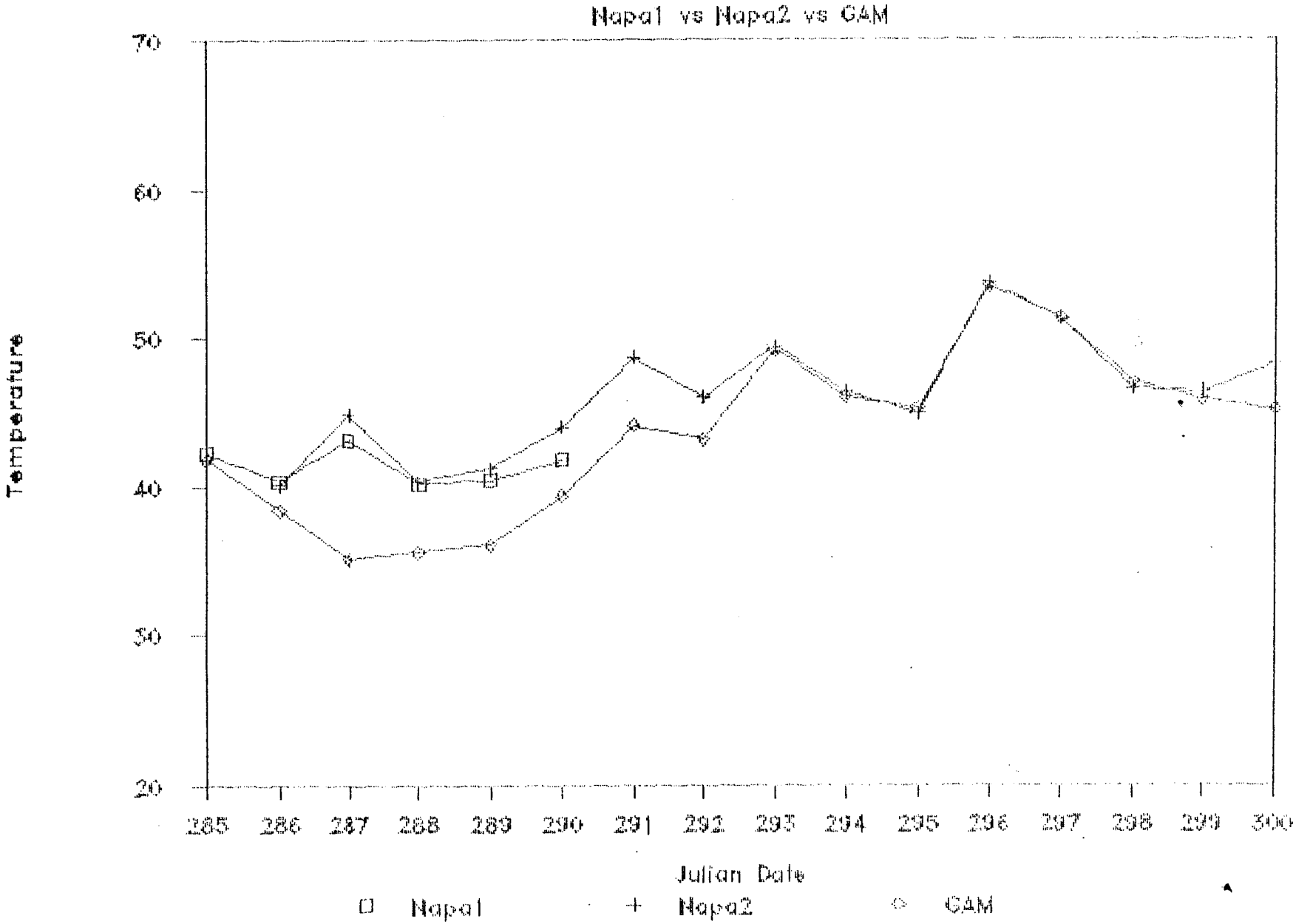
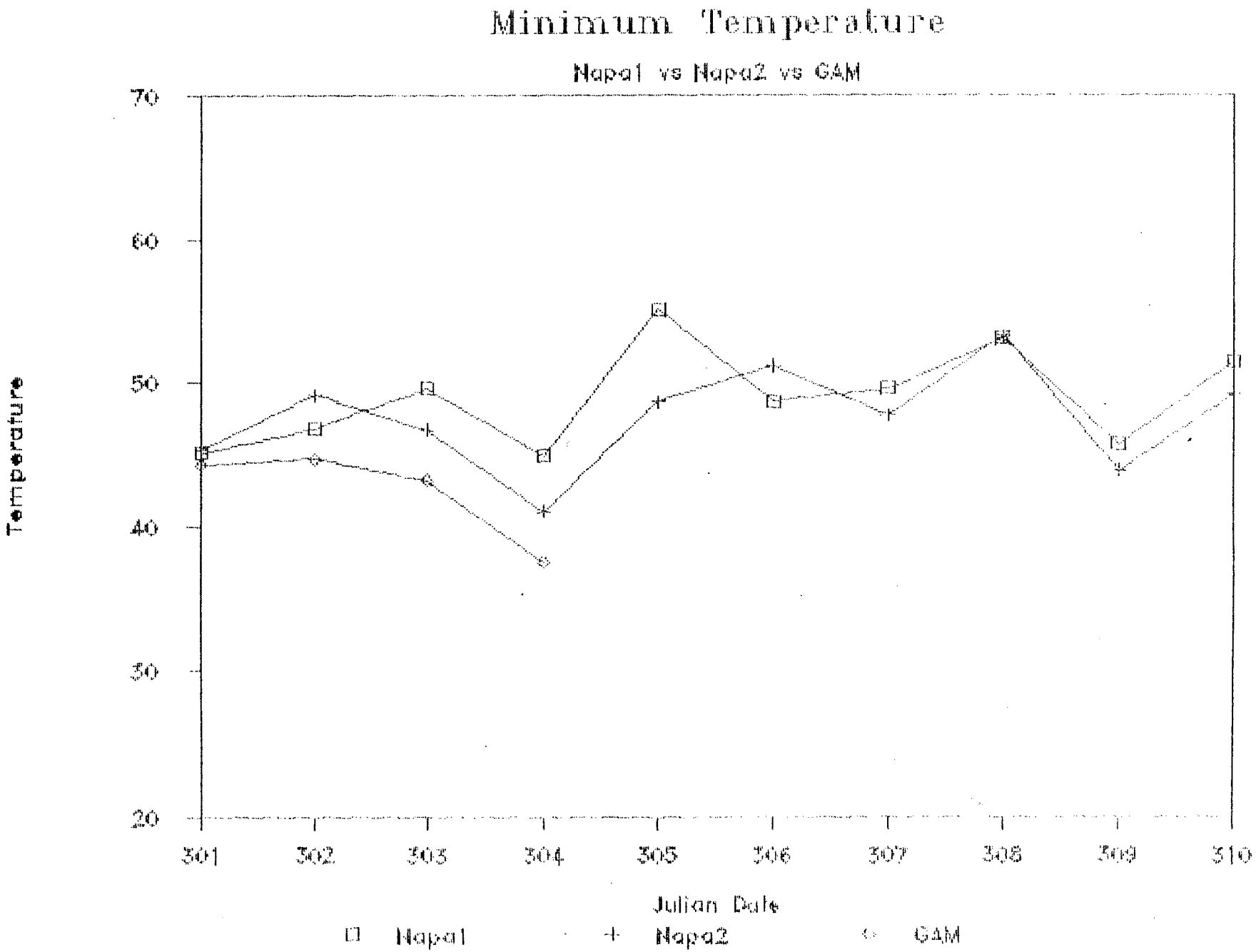
Julian Date
Napa1
Napa2
GAM

Minimum Temperature




Minimum Temperature
Napa1 vs Napa2 vs GAM
70
60
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40
30
20
Temperature
301
302
303
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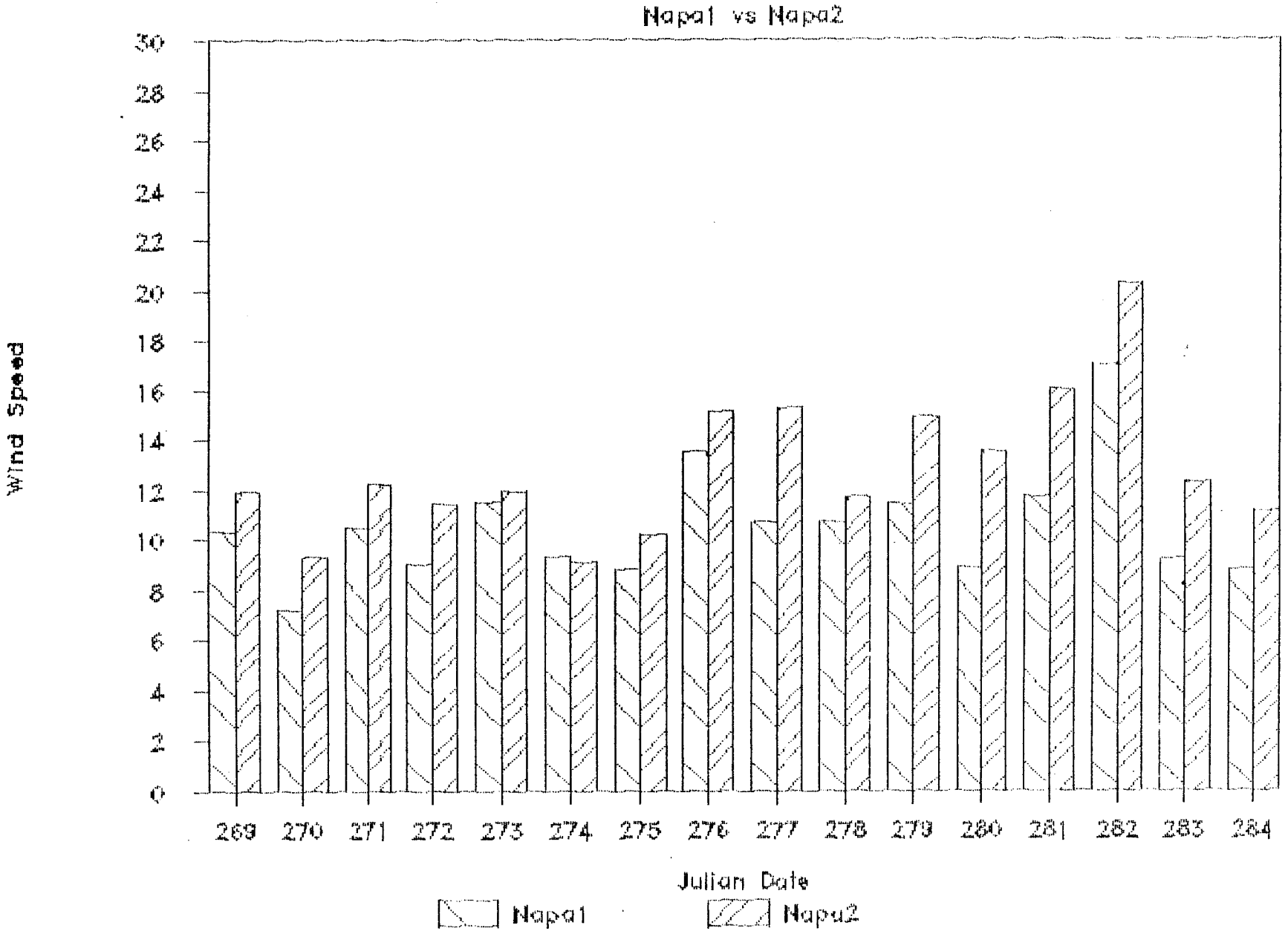
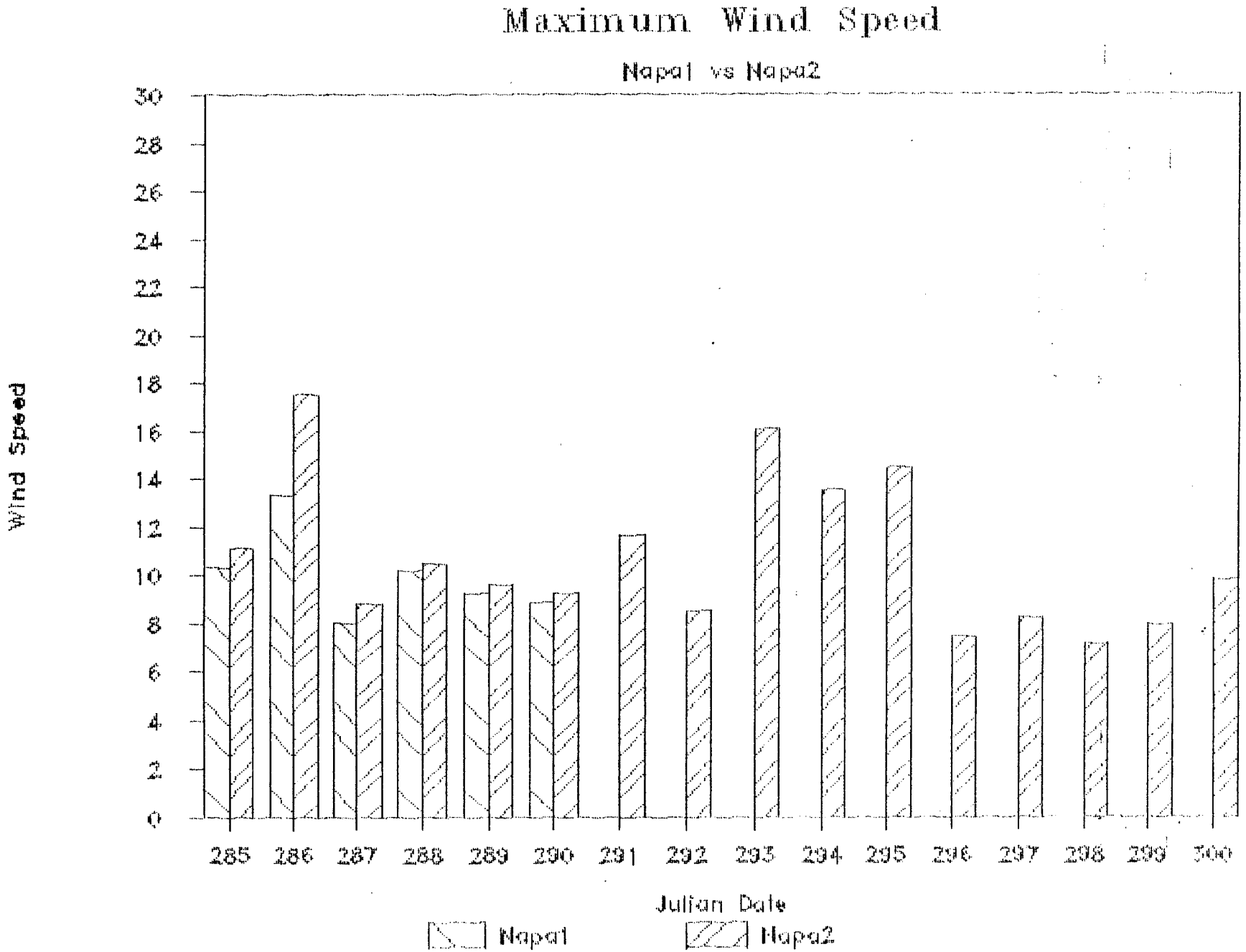
305
306
307
308
309
310
Julian Date
Napa1
Napa2
GAM

Maximum Wind Speed




Maximum Wind Speed
Napa1 vs Napa2
Wind Speed
30
28
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6
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285
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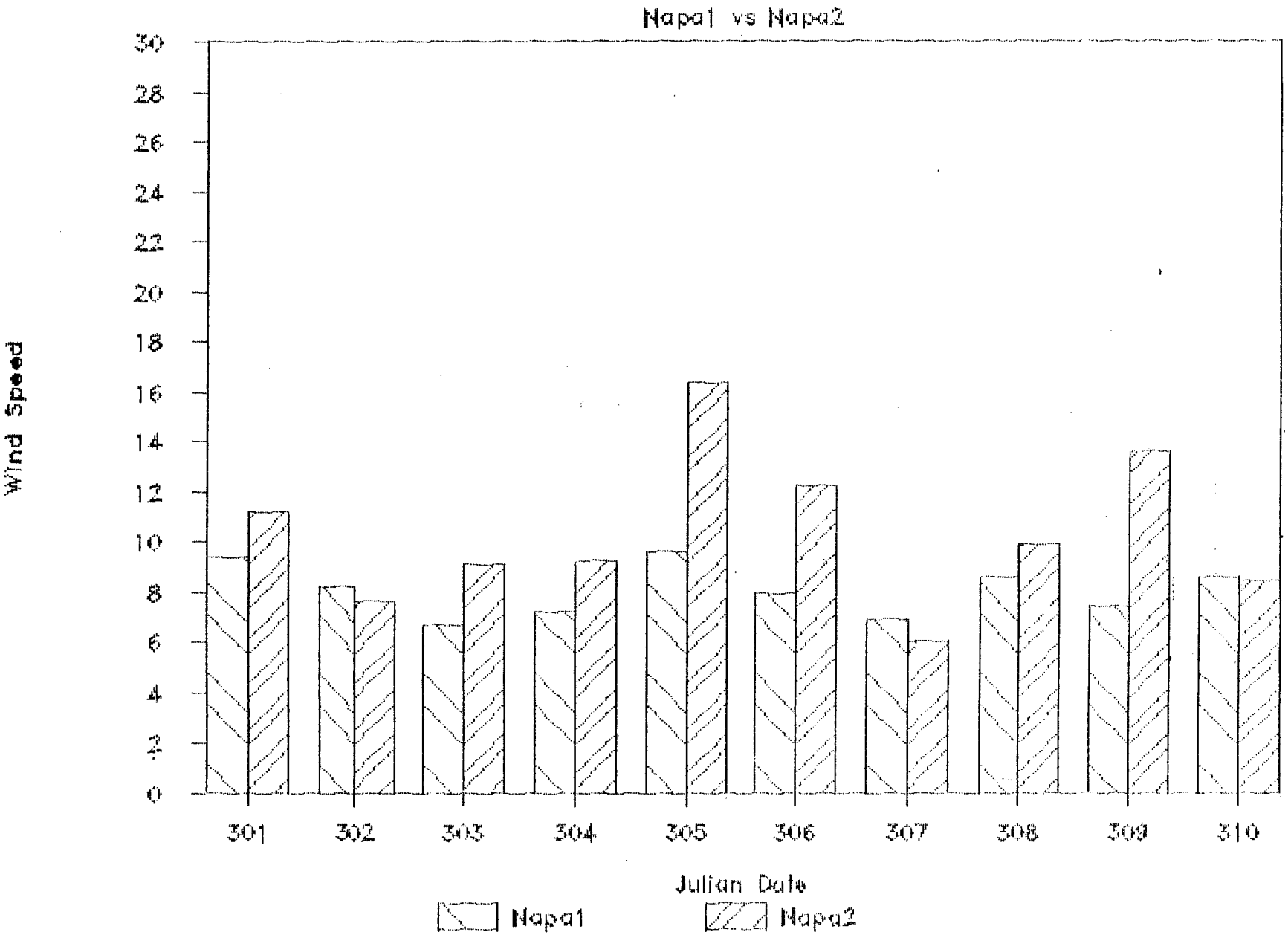
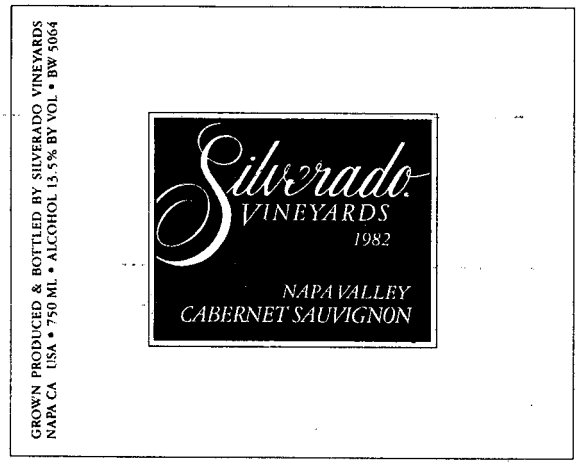
Julian Date
Napa1
Napa2

Maximum Wind Speed





APPENDIX 2: Summary of Reviews

The hallmark of a great Cabernet vineyard is that it produces fine wine year after year, maintaining consistent high quality and asserting its unique character over different vintages. In 1982 the harvest began a month later than the previous year, yields were up significantly, and the weather was cool and moist. Despite these contrasts, Silverado's 1982 Cabernet Sauvignon bears the unmistakable stamp of its excellent vineyard heritage, one that has produced more than its share of gold-medal wines. Made in the traditional Bordeaux manner and aged in French oak, the wine has ripe, curranty aromas and an elegant, silky flavor. Beneath its appealing youthfulness is a firm, balanced structure that suggests a long life and continued improvement.

California GRAPEVINE

"[First place.] . . . attractive, rich, spicey, herbal, black currant aroma . . . well balanced . . . attractive, broad flavors on the palate with good structure . . . [Grapevine Recommendation.]" *August-September 1985.*

San Francisco Chronicle

". . . a rich, lush wine, plenty of fruit with an appealing fresh nose." *May 22, 1985.*

THE UNDERGROUND
Wineletter™

"Very good . . . perfumed with berries, cedar, vanilla and spice . . . very good balance and flavor with berry-like fruit . . . a nice stylistic Cabernet . . . (16)." *October 1985.*

WINE COUNTRY™

"Rich grapey/cherry fruitiness. Soft, ripe cherry flavors, moderately tannic, medium-long persistence. Good value. Rating: four stars." *July 1985.*

Just Released
A Review of New Wines

"Clean, moderately concentrated, tight aromas of currants, cloves and oak . . . A many-faceted Cabernet . . ." *March 1985.*

living up to its name a little more each year and, in 1976, promises to continue to do so.

The label dates from 1968 when a Los Angeles property management specialist named Michael Robbins bought an elegant Victorian home just north of St. Helena, bonded the basement as a wine cellar, and contracted with established wineries in the valley to crush and ferment several small lots of wine for him.

In 1970 Robbins hired as winemaker Chuck Ortman, a one-time commercial artist who had spent several years in a winemaking apprenticeship to Joe Heitz. Since then Spring Mountain has conducted its crushing and fermenting operations under Ortman's direction in leased tanks, and has aged its wines in leased cellars.

In 1975 Robbins purchased the old Tiburcio Parrott property well up one flank of the peak named Spring Mountain. Parrott was a vineyardist, winemaker, and social lion of the 1880s whose property still reflects the golden age of most crafts. In the old barn fancy wrought iron grilles separate the horse stalls. The house, for its part, has inlaid oak woodwork outside the front door as well as inside.

Two hand-hewn tunnels exist as the core of the future Spring Mountain winery. One of these already has been renovated and is serving as the main aging cellar for Robbins' wines. An elegantly designed building is under construction in front of the tunnels.

Parrott's vineyards died long ago, but they were prized in their day. The main slope lies just below a famous independent vineyard of today, that of Jerome Draper. Robbins began the replanting early in spring 1976. Meantime, he has another vineyard on the east side of the valley near Oakville. It approached maturity with the harvest of 1975. Spring Mountain has title to the grapes of yet a third vineyard. Robbins is one owner in a partnership that holds almost 100 acres slightly higher up Spring Mountain than the home property.

Ortman's Spring Mountain wines to date have been remarkably consistent considering the extemporaneous conditions surrounding their birth and aging. The Chardonnay and Sauvignon Blanc in particular have been singled out by critics. Both are aged in oak barrels, as is Cabernet Sauvignon, the lone red. Fermentation is in steel.

Stag's Leap Wine Cellars

Napa's new wave of winemakers has come from every source, but I can think of none who made a longer professional jump than Warren Winiarski. The proprietor of Stag's Leap Wine Cellars came to winemaking from an academic post at the University of Chicago.

His first stop was at Lee Stewart's old Souverain Cellars, where he learned the trade from the lowly end up.

Winiarski founded Stag's Leap Wine Cellars in 1973. The winery and a vineyard of cabernet sauvignon are on the east edge of the valley, beneath a high, steep wall of rock called Stag's Leap. Clos du Val is a near neighbor in a sub-region that begins to show signs of developing an identity of its own.

The winery, nestled into a grove of oaks on a slope just above the Silverado Trail, shows the sort of thoughtful touches one might expect from a reasoning man, but is essentially a typical small cellar in this valley. The twin rows of fermentors are

temperature-controlled stainless steel, and stand outdoors behind the cellar proper. Inside is a mixture of upright oak tanks, oak oval casks, and oak barrels. The tanks are mainly for fermenting and aging whites, a legacy of Winiarski's apprenticeship with Lee Stewart who used similar vessels in the same way. Reds ferment in steel then go into the small cooperage for aging.

Winiarski grows cabernet sauvignon on his gently sloping vineyard a few hundred yards east of the winery, with a patch of merlot in one corner. He purchases gamay from one vineyard in the Napa Valley, and two separate lots of white riesling, one from high in the hills east of his winery, the other lot from a grower in Mendocino County. Thus far the label has appeared only on Johannisberg Riesling, Cabernet Sauvignon, and Gamay. Other varietals will follow as the proprietor finds grapes that meet his standards.

Sterling Vineyards

The main cellar of Sterling Vineyards, erected in 1973, was designed and built as a vinous sensorium, a trip for the eye and ear as well as the palate.

The winery occupies a lofty knoll just south of Calistoga town. Visitors get from the parking lot up to it by means of a tramway, which rises 250 vertical feet and costs $2 to ride. Once inside the snowy white building, designed by one of the proprietors to resemble the ancient churches of the Greek Isles, Sterling does indeed provide a show. More accurately, it provides two interwoven shows, one arty, the other an instructive tour of a superbly equipped wine cellar.

The arty part includes a series of tile mosaics, an interplay of pastel light filtered onto the casks and barrels by stained glass windows, a roof garden of fountains, and a collection of fine antique furniture and wall hangings. For the ear there is a carillon rescued from St. Dunstan's church in London.

The working part of the winery contains superior collections of equipment ranging from temperature-controlled stainless steel fermenting tanks to whole galleries full of oak tanks and barrels from the length and breadth of Europe. All is on view from an elevated walkway that takes visitors through the entire sequence of making and aging table wines. Capacity approaches 100,000 cases.

Sterling was designed as it is because one of the business assumptions was to sell wine only in the winery in California, though people in other parts of the nation may buy through regular retail outlets.

Sterling wines are made entirely from winery-owned vineyards or ones owned by the proprietors. Sterling's directing partners are Peter Newton and Michael Stone, who also are owners of a San Francisco-based paper company named Sterling International. (The use of the symbol for Pound Sterling on the foil capsules of their wine bottles reflects a prevalence of English ancestry in the ownership.) The winemaker is a formidably skillful young graduate of U.C.-Davis named Rick Forman.

The earliest Sterling wines came from the vintage of 1969, and were made in a small building down at the foot of the hill below what is now the winery. The vineyards from which they came were planted beginning in 1964. The prime varieties are cabernet sauvignon, zinfandel, chardonnay, gewürztraminer, and sauvignon blanc. All go into vintage-dated varietal wines with Napa Valley as the appellation of

The tiny chip bud on the knife blade will grow into a whole fruiting vine—in this case grignolino. The rootstock foliage is trimmed away after the bud "takes." (HAROLYN THOMPSON)

drinking; Chardonnay for use as a long-aged white; Zinfandel as a frisky young red, and, finally, Cabernet Sauvignon as the age-worthy red.

Grgich, an enology graduate of the university in his native Yugoslavia, learned his California winemaking first with Lee Stewart at Souverain, then with Robert Mondavi. Somehow Grgich developed a harmonious sense of style out of his diverse education. His Chateau Montelena whites won instant praise as being sound and distinctive. The first reds, released in 1976, followed suit.

The winery-owned vineyards grow in the last few hundred feet of Napa Valley floor before the slopes of Mount St. Helena start their steep climb toward a 4,300-foot summit just to the north. Most of the 100-acre block is in the red varieties, especially cabernet sauvignon. These vines are supplemented with outside purchases, most of them, as the labels indicate, from a grower in the Alexander Valley, due north of Calistoga in Sonoma County.

Clos du Val Wine Company

It is axiomatic in the wine trade that small wineries survive the world over by offering distinctive wines to a loyal clientele. In part the distinction may come from a vineyard of uncommon quality, but in California a great proportion of it comes from a winemaker with an individual sense of style.

The coming of Clos du Val and Bernard Portet to the Napa Valley is a convincing demonstration, if one still is needed, that such is the case.

A rubber band holds chip bud in place on rootstock until it takes hold. (HAROLYN THOMPSON)

The only curious aspect of a winery building erected in 1973–1974 is that it nestles into one corner of a golf course east of Yountville, near the great rocky wall called Stag's Leap. Gracefully proportioned masonry walls shelter two rows of temperature-controlled stainless steel fermentors, a number of 3,000-gallon oak upright tanks for intermediate aging, and a growing collection of oak barrels coopered in Bordeaux. In short, the cellar looks much like its neighbors in the valley.

Clos du Val's own 120 acres of vineyards, adjoining the winery just to the north, were planted to cabernet sauvignon and zinfandel after 1973, in a sub-region which long has grown both varieties in volume.

While these vines are too young to have yielded fruit through the vintage of 1975, the winery has bought the same two varieties from independent growers near its own property, and coaxed from their grapes wines with pronounced French accents. One must assume that Portet is responsible, since the same vineyards in other seasons have yielded wines typical of the Napa Valley.

Portet came to the Napa Valley with an untrammeled Bordeaux palate to make Cabernet Sauvignon and Zinfandel, beginning in leased cellars in the vintage of 1972. The eldest son of the long-time winemaker at Château Lafite, he comes of a family with old roots in the Médoc. He was schooled in winemaking at the universities of Toulouse and Montpellier. What seems more important, somehow, is the fact that he grew up drinking French wines with food cooked for a French table.

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