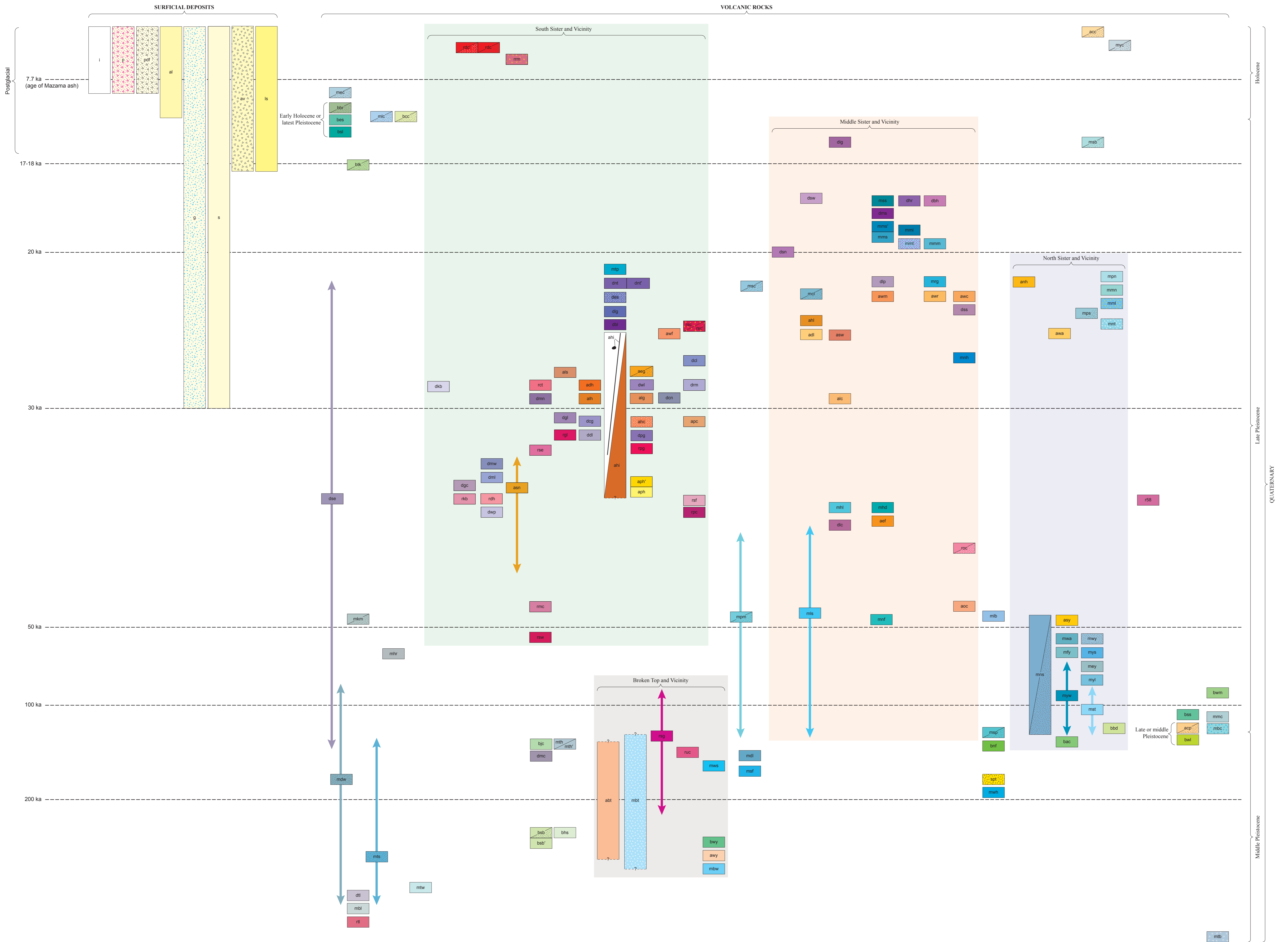


CORRELATION OF MAP UNITS
[Vertical arrows indicate age uncertainties of a few units, extended boxes indicate known age ranges for long-lived units. Stipple indicates units that are partly or wholly pyroclastic. See Description of Map Units (in pamphlet) for specific unit age assignments]



LIST OF MAP UNITS

[Stipple indicates units that are partly or wholly pyroclastic. See Description of Map Units (in pamphlet) for complete unit descriptions]

- SURFICIAL DEPOSITS**
- i Glacial ice (late Holocene)
 - p Pumice deposits (late Holocene)
 - gpf Pumiceous debris-flow deposits (late Holocene)
 - al Alluvium (Holocene)
 - u Glacial deposits, undivided (Holocene and late Pleistocene)
 - s Surficial deposits, undivided (Holocene and late Pleistocene)
 - av Debris-avalanche deposit (Holocene or latest Pleistocene)
 - ls Landslide deposit (Holocene or latest Pleistocene)
- VOLCANIC ROCKS**
- SILICIC FOCUS**
- South Sister and Vicinity**
- and Andesite dome of Lewis Glacier headwall (late Pleistocene)
 - ang Andesite of Eugene Glacier (late Pleistocene)
 - apc Andesite tephra fall of Hodge Crest (late Pleistocene)
 - ahc Andesite intrusive complex of Hodge Crest (late Pleistocene)
 - ahs Andesite west of Lost Creek Glacier (late Pleistocene)
 - ahf Andesite of Lewis Glacier headwall (late Pleistocene)
 - ahb Andesite south of Lewis Glacier (late Pleistocene)
 - apc Andesite of Park Creek (late Pleistocene)
 - apn Andesite of Prouty Glacier headwall (late Pleistocene)
 - apf Andesite tephra fall near base of Prouty Glacier headwall (late Pleistocene)
 - ahf Andesite south of Newberry flow (late Pleistocene)
 - ahf Andesite of West Fork Park Creek (late Pleistocene)
 - ahf Dacite breccia of Lewis Glacier headwall (late Pleistocene)
 - ahf Dacite southwest of Clark Glacier (late Pleistocene)
 - ahf Dacite of Chambers Lakes (late Pleistocene)
 - ahf Dacite north of Carver Lake (late Pleistocene)
 - ahf Dacite of Dew Lake (late Pleistocene)
 - ahf Dacite ejecta of South Sister summit (late Pleistocene)
 - ahf Dacite of Goose Creek (late Pleistocene)
 - ahf Dacite of Green Lakes (late Pleistocene)
 - ahf Dacite of Kokostick Butte (late Pleistocene)
 - ahf Dacite of Lewis Glacier headwall (late Pleistocene)
 - ahf Dacite southeast of Moraine Lake (late Pleistocene)
 - ahf Dacite north of Moraine Lake (late Pleistocene)
 - ahf Dacite coulee west of Moraine Lake (late Pleistocene)
 - ahf Dacite north of Teardrop Pool (late Pleistocene)
 - ahf Silicic dacite north of Teardrop Pool (late Pleistocene)
 - ahf Dacite pumice fall of Prouty Glacier headwall (late Pleistocene)
 - ahf Dacite of Red Meadow (late Pleistocene)
 - ahf Dacite west of Lost Creek Glacier (late Pleistocene)
 - ahf Dacite of Wickiup Plain (late Pleistocene)
- Middle Sister and Vicinity**
- adl Andesite of Demaris Lake (late Pleistocene)
 - adl Andesite tephra fall at base of east face of Middle Sister (late Pleistocene)
 - adl Andesite of headwaters of Linton Creek (late Pleistocene)
 - adl Andesite of Linton Creek (late Pleistocene)
 - adl Andesite of Obsidian Creek (late Pleistocene)
 - adl Andesite of southwest slope of Middle Sister (late Pleistocene)
 - adl Andesite west of Collier Glacier (late Pleistocene)
 - adl Andesite west of Middle Sister (late Pleistocene)
 - adl Andesite west of Renfrew Glacier (late Pleistocene)
 - adl Dacite of "Black Hump" (late Pleistocene)
 - adl Dacite of Hayden Glacier-Renfrew Glacier col (late Pleistocene)
 - adl Dacite of Irving Glacier (latest Pleistocene)
 - adl Dacite of Linton Creek (late Pleistocene)
 - adl Dacite of Lane Plateau (late Pleistocene)
 - adl Dacite of Middle Sister summit (late Pleistocene)
 - adl Dacite north of Separation Creek (late Pleistocene)
 - adl Dacite of Sister Spring (late Pleistocene)
 - adl Dacite domes southwest of Middle Sister (late Pleistocene)
 - adl Basaltic andesite of Camp Lake (late Pleistocene)
 - adl Basaltic andesite of Hayden Glacier-Diller Glacier cleaver (late Pleistocene)
 - adl Basaltic andesite of headwaters of Linton Creek (late Pleistocene)
 - adl Basaltic andesite of Linton Spring (late or middle Pleistocene)
 - adl Basaltic andesite intrusion of Middle Sister (late Pleistocene)
 - adl Basaltic andesite of Montague Memorial (late Pleistocene)
 - adl Basaltic andesite of Middle Sister (late Pleistocene)
 - adl Pyroxene-bearing variant of the basaltic andesite of Middle Sister (late Pleistocene)
 - adl Basaltic andesite tuff of Middle Sister (late Pleistocene)
 - adl Basaltic andesite of North Fork Whychus Creek (late Pleistocene)
 - adl Basaltic andesite north of Hayden Glacier (late Pleistocene)
 - adl Basaltic andesite of Renfrew Glacier (late Pleistocene)
- MAFIC PERIPHERY**
- North Sister and Vicinity**
- ash Andesite agglutinate north of Hayden Glacier (late Pleistocene)
 - ash Hornblende-bearing andesite southeast of Yapoah Crater (late Pleistocene)
 - ash Andesite west of upper Alder Creek (late Pleistocene)
 - ash Basalt of Alder Creek (late or middle Pleistocene)
 - ash Basalt of Brush Draw (late or middle Pleistocene)
 - ash Basaltic andesite east of Yapoah Lake (late Pleistocene)
 - ash Basaltic andesite of fissure vent south of Yapoah Lake (late Pleistocene)
 - ash Basaltic andesite of South Matthew Lake (late Pleistocene)
 - ash Basaltic andesite of North Matthew Lake (late Pleistocene)
 - ash Basaltic andesite of North Sister (late and middle Pleistocene)
 - ash Basaltic andesite north of Scott Pass (late Pleistocene)
 - ash Basaltic andesite south of Scott Pass (late Pleistocene)
 - ash Basaltic andesite south of Trout Creek (late or middle Pleistocene)
 - ash Basaltic andesite west of upper Alder Creek (late Pleistocene)
 - ash Basaltic andesite scoria cone west of Yapoah Lake (late Pleistocene)
 - ash Basaltic andesite of Yapoah Lake (late Pleistocene)
 - ash Basaltic andesite southwest of Yapoah Lake (late Pleistocene)
 - ash Basaltic andesite window west of Yapoah Lake (late or middle Pleistocene)
 - ash Andesite and dacite of Broken Top (middle Pleistocene)
 - ash Andesite of Whychus Creek (middle Pleistocene)
 - ash Basalt of Whychus Creek (middle Pleistocene)
 - ash Basaltic andesite of Broken Top (middle Pleistocene)
 - ash Basalt of Whychus Creek bridge (middle Pleistocene)
 - ash Basaltic andesite west of Snow Creek (middle Pleistocene)
 - ash Rhyolite southwest of Golden Lake (late or middle Pleistocene)
 - ash Rhyolite of Upper Chus Falls (middle Pleistocene)
- Peripheral Centers and Other Lavas**
- ash Andesite of Collier Cone (Holocene)
 - ash Andesite of Pole Creek scoria cone (late or middle Pleistocene)
 - ash Basalt of Sparks Lake boat ramp (early Holocene or latest Pleistocene)
 - ash Basalt of Cayuse Crater (early Holocene or latest Pleistocene)
 - ash Basalt east of Sparks Lake (early Holocene or latest Pleistocene)
 - ash Basalt south of The Husband (middle Pleistocene)
 - ash Basalt of James Creek (middle Pleistocene)
 - ash Basalt of North Fork Whychus Creek (middle Pleistocene)
 - ash Pyroxene-bearing variant of the basaltic andesite of Middle Sister (late Pleistocene)
 - ash Basalt of Sphinx Butte (middle Pleistocene)
 - ash Basalt southeast of Sparks Lake (early Holocene or latest Pleistocene)
 - ash Basalt of Spruce Spring (late Pleistocene)
 - ash Basalt and basaltic andesite of Talapus and Katsuk Buttes (latest Pleistocene)
 - ash Basalt of lower Whychus Creek (late or middle Pleistocene)
- Basalt west of Millican Crater (late Pleistocene)**
- ahf Dacite of Mesa Creek (middle Pleistocene)
 - ahf Dacite east of Sink Creek (late or middle Pleistocene)
 - ahf Dacite of Todd Lake (middle Pleistocene)
 - ahf Basaltic andesite of Black Crater (late or middle Pleistocene)
 - ahf Basaltic andesite of Bare Lake (middle Pleistocene)
 - ahf Basaltic andesite north and south of Demaris Lake (middle Pleistocene)
 - ahf Basaltic andesite west of Dutchman Flat (late or middle Pleistocene)
 - ahf Basaltic andesite and basalt of "Egan Cone" (early Holocene)
 - ahf Basaltic andesite and basalt of The House Rock (late Pleistocene)
 - ahf Basaltic andesite of Kosah Mountain (late Pleistocene)
 - ahf Basaltic andesite of Little Brother (late Pleistocene)
 - ahf Basaltic andesite of Le Conte Crater (early Holocene or latest Pleistocene)
 - ahf Basaltic andesite of Millican Crater (late Pleistocene)
 - ahf Basaltic andesite of Trout Creek (late Pleistocene)
 - ahf Basaltic andesite of Sims Butte (latest Pleistocene)
 - ahf Basaltic andesite of Separation Creek (late Pleistocene)
 - ahf Basaltic andesite of South Fork Whychus Creek (middle Pleistocene)
 - ahf Basaltic andesite of Soap Creek-North Fork Whychus Creek confluence (late or middle Pleistocene)
 - ahf Basaltic andesite and basalt of Trout Creek Butte (middle Pleistocene)
 - ahf Basaltic andesite of The Husband (middle Pleistocene)
 - ahf Basaltic andesite southeast of "Todd Creek" (middle Pleistocene)

- Basaltic andesite of Teardrop Pool (late Pleistocene)**
- ahf Rhyolite of South Sister climbers trail (late Pleistocene)
 - ahf Rhyolite of "Devils chain" (late Holocene)
 - ahf Rhyolite of Devils Hill (late Pleistocene)
 - ahf Rhyolite of Green Lakes (late Pleistocene)
 - ahf Rhyolite of Kaletan Butte (late Pleistocene)
 - ahf Rhyolite of Mesa Creek (late Pleistocene)
 - ahf Rhyolite of Park Creek (late Pleistocene)
 - ahf Rhyolite of Prouty Glacier (late Pleistocene)
 - ahf Rhyolite of Rock Mesa (late Holocene)
 - ahf Rhyolite of Separation Creek (late Pleistocene)
 - ahf Rhyolite southeast of Lewis Glacier (late Pleistocene)
 - ahf Rhyolite of South Fork Whychus Creek (late Pleistocene)
 - ahf Rhyolite southwest of Lewis Glacier (late Pleistocene)
- Middle Sister and Vicinity**
- ahf Andesite of Demaris Lake (late Pleistocene)
 - ahf Andesite tephra fall at base of east face of Middle Sister (late Pleistocene)
 - ahf Andesite of headwaters of Linton Creek (late Pleistocene)
 - ahf Andesite of Linton Creek (late Pleistocene)
 - ahf Andesite of Obsidian Creek (late Pleistocene)
 - ahf Andesite of southwest slope of Middle Sister (late Pleistocene)
 - ahf Andesite west of Collier Glacier (late Pleistocene)
 - ahf Andesite west of Middle Sister (late Pleistocene)
 - ahf Andesite west of Renfrew Glacier (late Pleistocene)
 - ahf Dacite of "Black Hump" (late Pleistocene)
 - ahf Dacite of Hayden Glacier-Renfrew Glacier col (late Pleistocene)
 - ahf Dacite of Irving Glacier (latest Pleistocene)
 - ahf Dacite of Linton Creek (late Pleistocene)
 - ahf Dacite of Lane Plateau (late Pleistocene)
 - ahf Dacite of Middle Sister summit (late Pleistocene)
 - ahf Dacite north of Separation Creek (late Pleistocene)
 - ahf Dacite of Sister Spring (late Pleistocene)
 - ahf Dacite domes southwest of Middle Sister (late Pleistocene)
 - ahf Basaltic andesite of Camp Lake (late Pleistocene)
 - ahf Basaltic andesite of Hayden Glacier-Diller Glacier cleaver (late Pleistocene)
 - ahf Basaltic andesite of headwaters of Linton Creek (late Pleistocene)
 - ahf Basaltic andesite of Linton Spring (late or middle Pleistocene)
 - ahf Basaltic andesite intrusion of Middle Sister (late Pleistocene)
 - ahf Basaltic andesite of Montague Memorial (late Pleistocene)
 - ahf Basaltic andesite of Middle Sister (late Pleistocene)
 - ahf Pyroxene-bearing variant of the basaltic andesite of Middle Sister (late Pleistocene)
 - ahf Basaltic andesite tuff of Middle Sister (late Pleistocene)
 - ahf Basaltic andesite of North Fork Whychus Creek (late Pleistocene)
 - ahf Basaltic andesite north of Hayden Glacier (late Pleistocene)
 - ahf Basaltic andesite of Renfrew Glacier (late Pleistocene)
- MAFIC PERIPHERY**
- North Sister and Vicinity**
- ahf Andesite agglutinate north of Hayden Glacier (late Pleistocene)
 - ahf Hornblende-bearing andesite southeast of Yapoah Crater (late Pleistocene)
 - ahf Andesite west of upper Alder Creek (late Pleistocene)
 - ahf Basalt of Alder Creek (late or middle Pleistocene)
 - ahf Basalt of Brush Draw (late or middle Pleistocene)
 - ahf Basaltic andesite east of Yapoah Lake (late Pleistocene)
 - ahf Basaltic andesite of fissure vent south of Yapoah Lake (late Pleistocene)
 - ahf Basaltic andesite of South Matthew Lake (late Pleistocene)
 - ahf Basaltic andesite of North Matthew Lake (late Pleistocene)
 - ahf Basaltic andesite of North Sister (late and middle Pleistocene)
 - ahf Basaltic andesite north of Scott Pass (late Pleistocene)
 - ahf Basaltic andesite south of Scott Pass (late Pleistocene)
 - ahf Basaltic andesite south of Trout Creek (late or middle Pleistocene)
 - ahf Basaltic andesite west of upper Alder Creek (late Pleistocene)
 - ahf Basaltic andesite scoria cone west of Yapoah Lake (late Pleistocene)
 - ahf Basaltic andesite of Yapoah Lake (late Pleistocene)
 - ahf Basaltic andesite southwest of Yapoah Lake (late Pleistocene)
 - ahf Basaltic andesite window west of Yapoah Lake (late or middle Pleistocene)
 - ahf Andesite and dacite of Broken Top (middle Pleistocene)
 - ahf Andesite of Whychus Creek (middle Pleistocene)
 - ahf Basalt of Whychus Creek (middle Pleistocene)
 - ahf Basaltic andesite of Broken Top (middle Pleistocene)
 - ahf Basalt of Whychus Creek bridge (middle Pleistocene)
 - ahf Basaltic andesite west of Snow Creek (middle Pleistocene)
 - ahf Rhyolite southwest of Golden Lake (late or middle Pleistocene)
 - ahf Rhyolite of Upper Chus Falls (middle Pleistocene)
- Peripheral Centers and Other Lavas**
- ahf Andesite of Collier Cone (Holocene)
 - ahf Andesite of Pole Creek scoria cone (late or middle Pleistocene)
 - ahf Basalt of Sparks Lake boat ramp (early Holocene or latest Pleistocene)
 - ahf Basalt of Cayuse Crater (early Holocene or latest Pleistocene)
 - ahf Basalt east of Sparks Lake (early Holocene or latest Pleistocene)
 - ahf Basalt south of The Husband (middle Pleistocene)
 - ahf Basalt of James Creek (middle Pleistocene)
 - ahf Basalt of North Fork Whychus Creek (middle Pleistocene)
 - ahf Pyroxene-bearing variant of the basaltic andesite of Middle Sister (late Pleistocene)
 - ahf Basalt of Sphinx Butte (middle Pleistocene)
 - ahf Basalt southeast of Sparks Lake (early Holocene or latest Pleistocene)
 - ahf Basalt of Spruce Spring (late Pleistocene)
 - ahf Basalt and basaltic andesite of Talapus and Katsuk Buttes (latest Pleistocene)
 - ahf Basalt of lower Whychus Creek (late or middle Pleistocene)

- Basalt west of Millican Crater (late Pleistocene)**
- ahf Dacite of Mesa Creek (middle Pleistocene)
 - ahf Dacite east of Sink Creek (late or middle Pleistocene)
 - ahf Dacite of Todd Lake (middle Pleistocene)
 - ahf Basaltic andesite of Black Crater (late or middle Pleistocene)
 - ahf Basaltic andesite of Bare Lake (middle Pleistocene)
 - ahf Basaltic andesite north and south of Demaris Lake (middle Pleistocene)
 - ahf Basaltic andesite west of Dutchman Flat (late or middle Pleistocene)
 - ahf Basaltic andesite and basalt of "Egan Cone" (early Holocene)
 - ahf Basaltic andesite and basalt of The House Rock (late Pleistocene)
 - ahf Basaltic andesite of Kosah Mountain (late Pleistocene)
 - ahf Basaltic andesite of Little Brother (late Pleistocene)
 - ahf Basaltic andesite of Le Conte Crater (early Holocene or latest Pleistocene)
 - ahf Basaltic andesite of Millican Crater (late Pleistocene)
 - ahf Basaltic andesite of Trout Creek (late Pleistocene)
 - ahf Basaltic andesite of Sims Butte (latest Pleistocene)
 - ahf Basaltic andesite of Separation Creek (late Pleistocene)
 - ahf Basaltic andesite of South Fork Whychus Creek (middle Pleistocene)
 - ahf Basaltic andesite of Soap Creek-North Fork Whychus Creek confluence (late or middle Pleistocene)
 - ahf Basaltic andesite and basalt of Trout Creek Butte (middle Pleistocene)
 - ahf Basaltic andesite of The Husband (middle Pleistocene)
 - ahf Basaltic andesite southeast of "Todd Creek" (middle Pleistocene)

- Basaltic andesite of The Wife (middle Pleistocene)**
- ahf Basaltic andesite of Whychus Creek (middle Pleistocene)
 - ahf Basaltic andesite of Yapoah Crater (Holocene)
 - ahf Rhyolite southwest of Todd Lake (middle Pleistocene)
 - ahf Rhyolite of Dome 5803 (late Pleistocene)
 - ahf Shervin Park Tuff (middle Pleistocene)

- EXPLANATION OF MAP SYMBOLS**
- Contact—Long-dashed where approximately located, short-dashed where inferred, dotted where concealed. Internal contacts in volcanic units indicate individual emplacement lobes, in surficial units, deposits of different depositional intervals
 - Dikes
 - Moraine crests
 - Little Ice Age
 - Early Neoglacial
 - Younger Dryas
 - Basaltic andesite of Park Meadow (late or middle Pleistocene)
 - Last Glacial Maximum
 - Ejecta rim
 - Lava-levee crest
 - Lava-flow direction
 - Strike and dip of ejecta and stacks of thin lava flows
 - Volcanic craters and partial crater rims—Hachures point inward
 - Volcanic vent (other than craters and fissures)
 - Volcanic fissure vent



Three Sisters volcanic cluster forms 20-km-long reach along crest of the Cascade Range. Aerial view northward along east side of edifices. Photograph by Don Graham, helicopter pilot.

Geologic Map of Three Sisters Volcanic Cluster, Cascade Range, Oregon

By
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2012

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