



Time-Rock Chart and Correlation of Map Units for Southwest Oregon

2025

INTRODUCTION

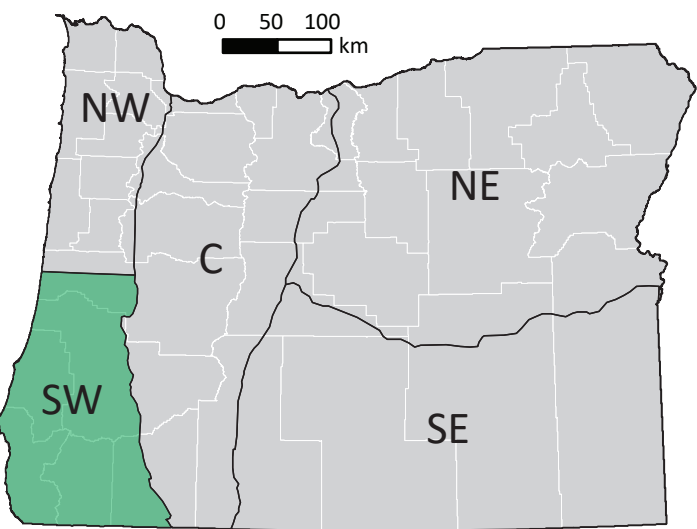
This time-rock chart illustrates the absolute ages, relative stratigraphic relations, and correlations of significant bedrock geologic map units found at the surface and in the subsurface in the Southwest region of the state of Oregon. As defined here, the Southwest region includes the area bounded by the southern end of the Willamette Valley (latitude 44.1°N) on the north, Interstate 5 on the northeast, the western edge of Cascades volcanic arc rocks on the southeast, the California state border on the south, and the Pacific Ocean on the west.

Geologic map units are derived from the statewide Oregon Geologic Data Compilation (OGDC-8) and include formally recognized geologic groups, formations, and members, as well as some informal rock units. Each unit in OGDC-8 is assigned a unique "Compilation Unit Name" and abbreviated "Compilation Unit Label" that combines its higher-order "Terrane/Group" classification (in uppercase letters) with its lower-order formation classification (in lowercase letters). The terms used here for Compilation Unit Name and Terrane/Group are a mixture of formal stratigraphic names, informal stratigraphic names, and—especially for many young volcanic units—geographic

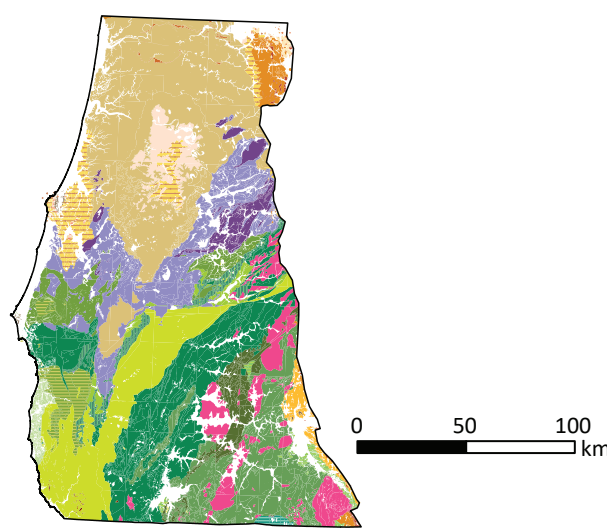
names of eruptive centers. Some informal names used here have wide currency and a form (geographic name combined with rank or descriptive term) reserved for formal names; their informal status is denoted by a lowercase rank or descriptive term followed by an asterisk, e.g., Lorane shale*.

In the legend, map units are arranged alphabetically by their Compilation Unit Label for ease of reference with the chart. Colors correspond with each unit's Terrane/Group. On the chart, map units are arranged vertically by their age of deposition or emplacement, and horizontally from west to east within the Southwest region; because many units extend laterally over significant portions of the region, their horizontal positions in the chart are relative approximations. Although spatial and lateral stratigraphic relations among units are not easily represented in this format, the main purpose of this chart is to illustrate the absolute age spans and temporal relations among various map units in the Southwest region.

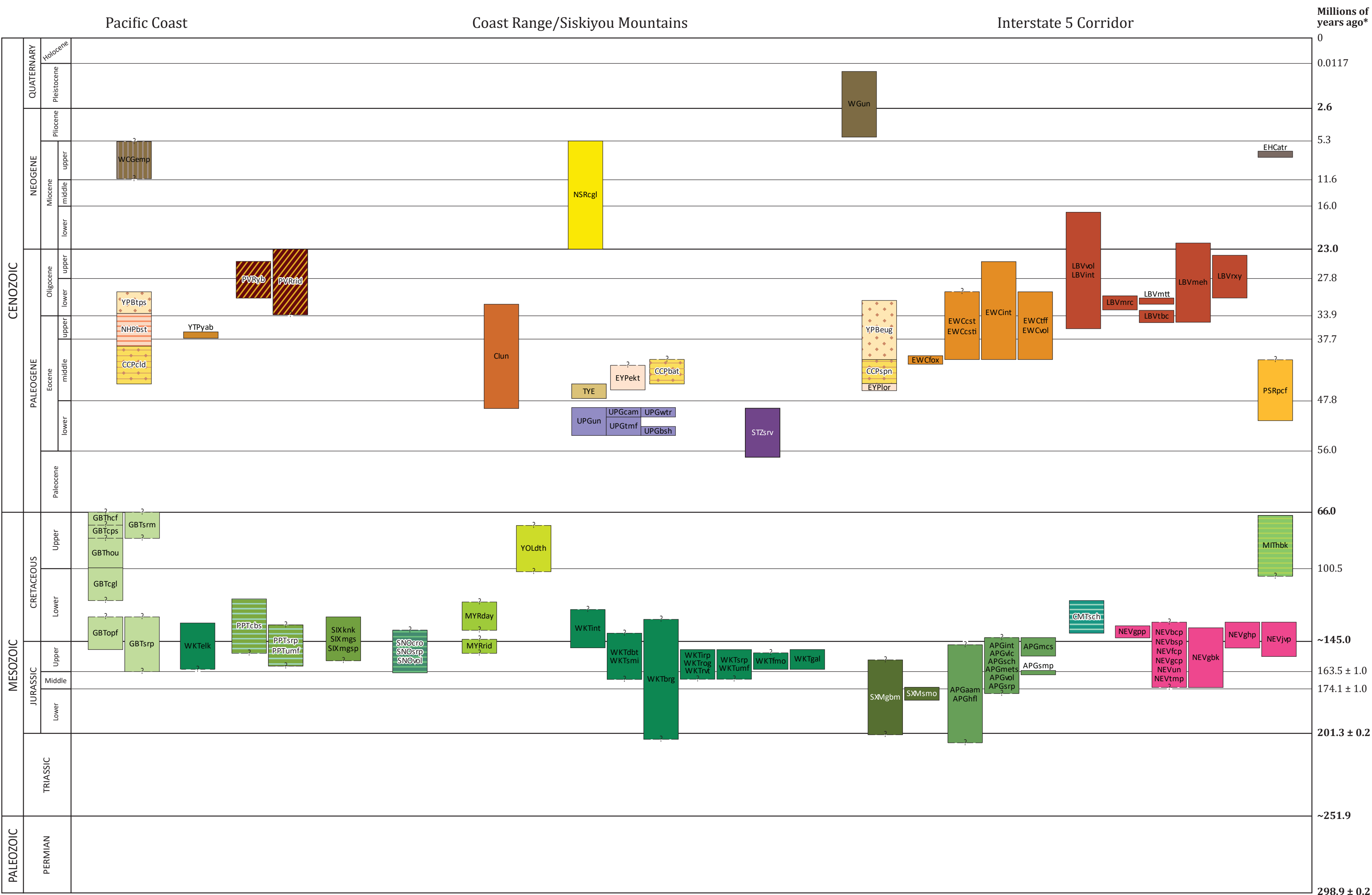
REGION LOCATION MAP



REGIONAL GEOLOGIC MAP



Note that Quaternary surficial deposits shown in white are not included on the time-rock chart below.



*International Chronostratigraphic Chart, International Stratigraphic Commission, v.2022/02, Time scale after Gradstein and others (2012) and Cohen and others (2013).
https://stratigraphy.org/ICSChart/ChronostratChart2022-02.pdf

REFERENCES

Cohen, K. M., Finney, S. C., Gibbard, P. L., and Fan, J.-X., 2013, The ICS International Chronostratigraphic Chart: Episodes 36, p. 199-204.
Gradstein, F.M., Ogg, J.G., Schmitz, M.D., and Ogg, G.M., eds., 2012, The Geologic Time Scale 2012: Boston, Elsevier, 1176 p.

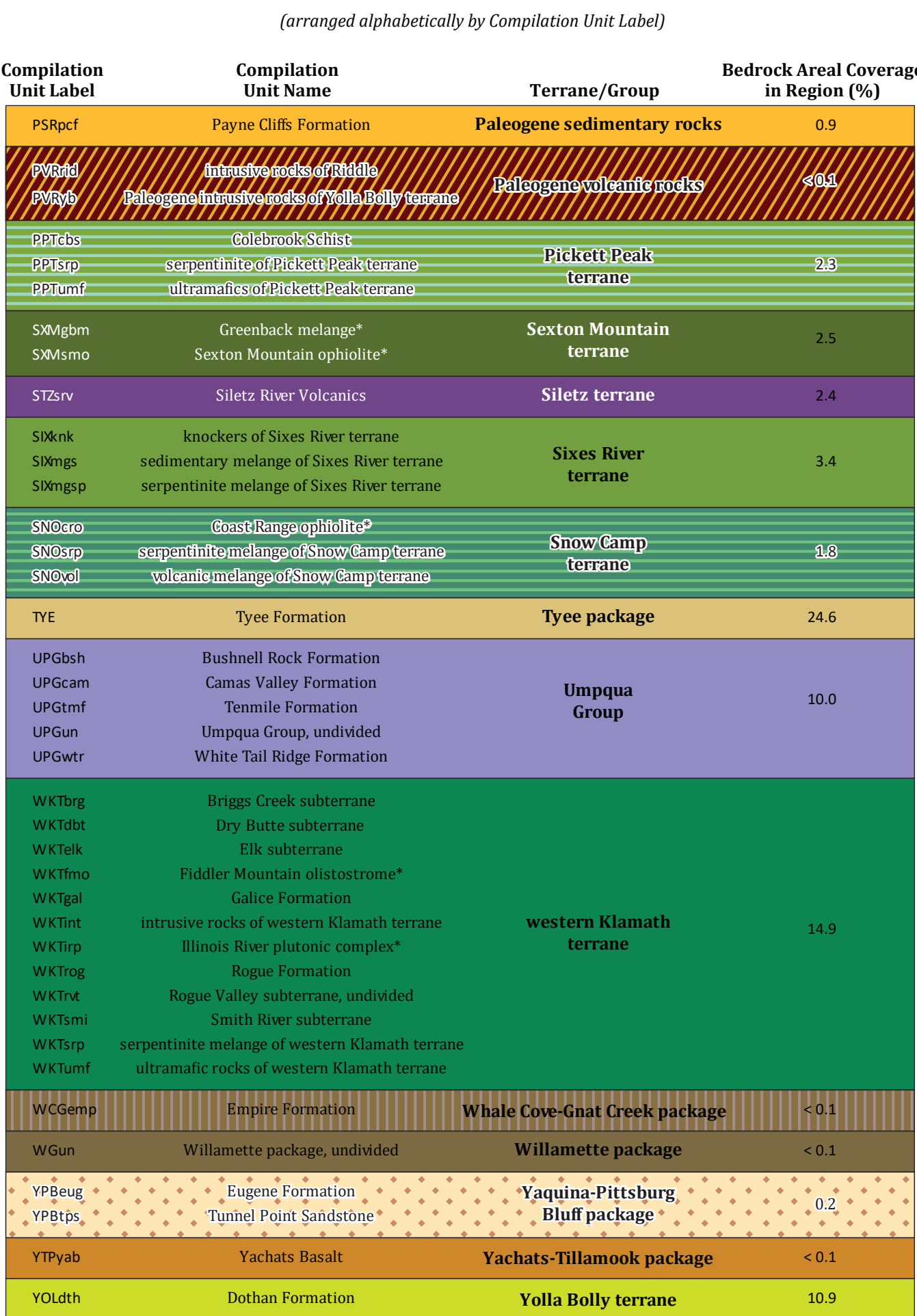
DOGAMI Digital Data Series Oregon Geologic Data Compilation, Release 8 (OGDC-8)

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PLATE 3



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