



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

2025

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

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PLATE 3

INTRODUCTION

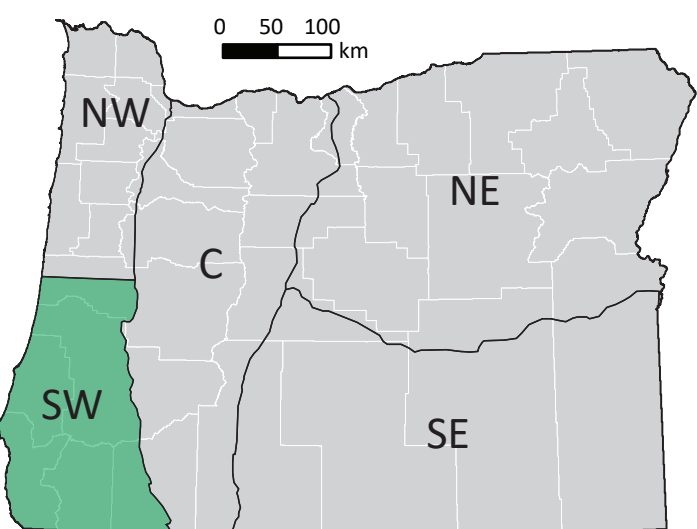
This time-rock chart illustrates the absolute ages, relative stratigraphic relations, and correlations of significant bedrock geologic map units found at the surface and in the subsurface in the Southwest region of the state of Oregon. As defined here, the Southwest region includes the area bounded by 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

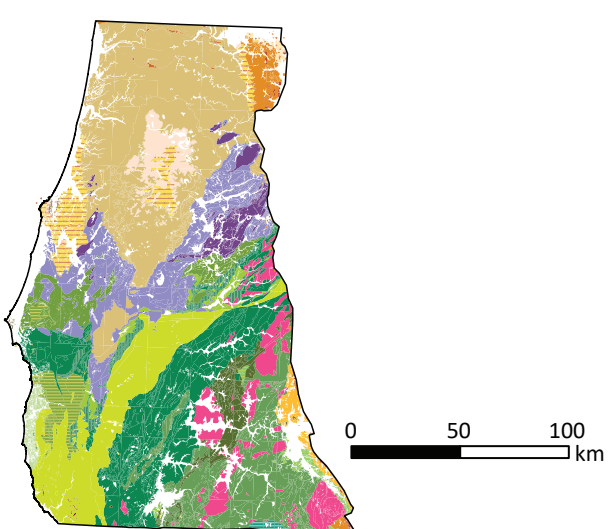
names of eruptive centers. Some informal names used here have wide currency and a form (geographic name combined with rank or descriptive term) reserved for formal names; their informal status is denoted by a lowercase rank or descriptive term followed by an asterisk, e.g., Lorane shale*.

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.

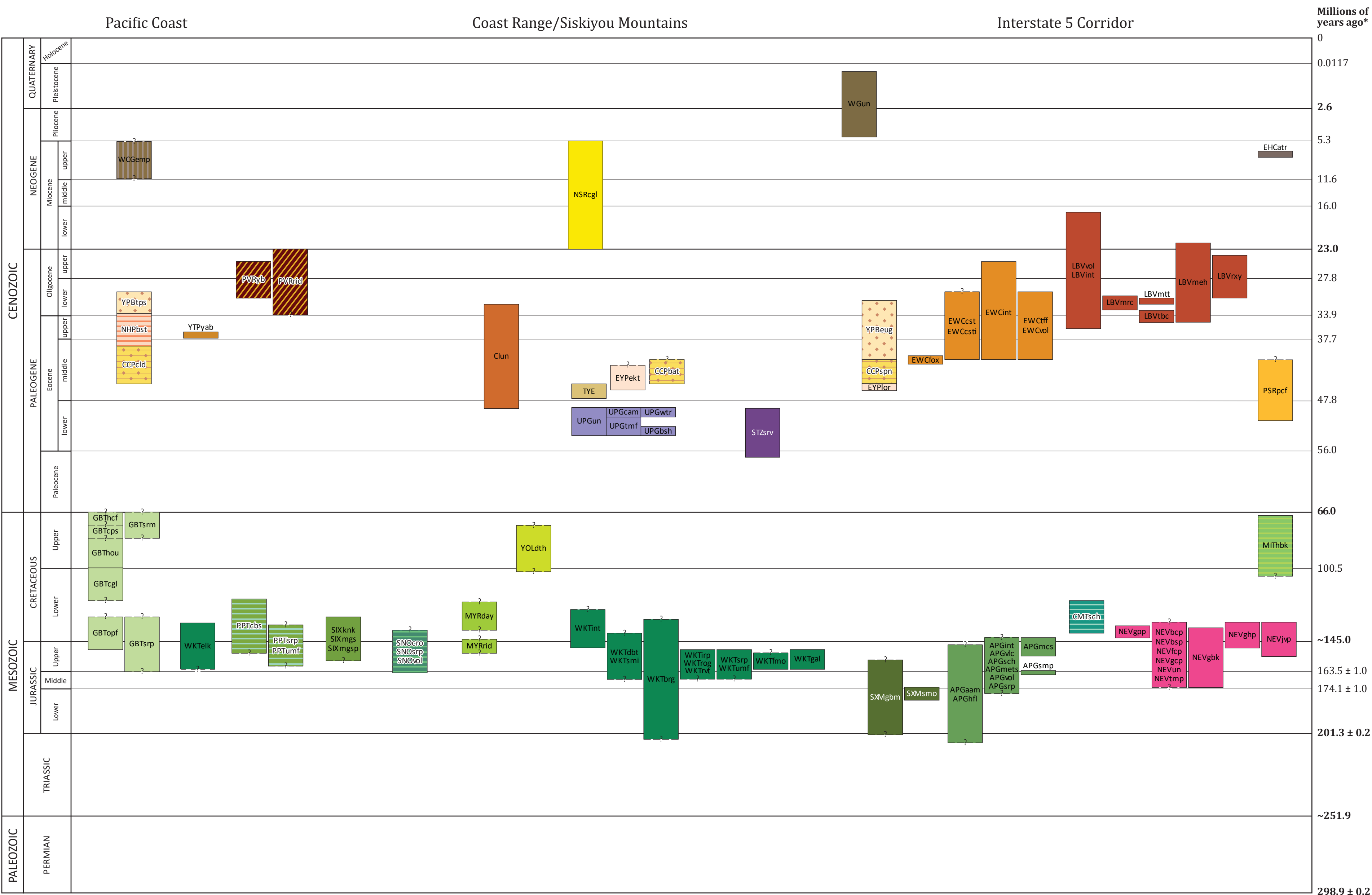
REGION LOCATION MAP



REGIONAL GEOLOGIC MAP



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



(arranged alphabetically by Compilation Unit Label)			
Compilation Unit Label	Compilation Unit Name	Terrane/Group	Bedrock Areal Coverage in Region (%)
APGaam	amphibolite of Applegate Group	Applegate Group	10.4
APGhfi	hornfels of Applegate Group		
APGint	intrusive rocks of Applegate Group		
APGims	May Creek Schist		
APGimets	metasedimentary rocks of Applegate Group		
APGsch	schist of Applegate Group		
APGsmpl	Acorn Woman Mountain pluton		
APGsrp	Applegate serpentinite		
APGvc	metavolcanic rocks of Applegate Group		
APGvol	metavolcanic rocks of Applegate Group		
CCPbat	Bateman Formation	Coaledo-Cowlitz package	3.2
CCPcid	Coaledo Formation		
CCPspn	Spencer Formation		
Clun	Coastal intrusions*, undifferentiated	Coastal intrusions*	0.2
GMsch	Condrey Mountain Schist	Condrey Mountain terrane	0.2
EHcatr	andesite of Table Rock	early High Cascade Volcanics	< 0.1
EWCast	Colettin Formation	early Western Cascade Volcanics	1.7
EWCasti	intrusive rocks of Colettin Formation		
EWClav	tuff of Fox Hollow		
EWClnt	intrusive rocks of early Western Cascade volcanics		
EWClff	tuffs of early Western Cascade volcanics		
EWCoal	lavas of early Western Cascade volcanics		
EYPekt	Elkton formation*	Elkton-Yamhill package	2.4
EYflor	Lorane shale*		
GBTcgl	chert conglomerate of Gold Beach terrane	Gold Beach terrane	0.6
GBTcps	Cape Sebastian Sandstone		
GBTcfc	Hunters Cove Formation		
GBThou	Houstonaden Creek Formation		
GBTopf	Otter Point Formation		
GBTsm	marine sedimentary rocks of Gold Beach terrane		
GBTsrp	serpentinite melange of Gold Beach terrane		
LBVint	intrusive rocks of Little Butte Volcanics	Little Butte Volcanics	0.2
LBVmeh	Mohama Formation		
LBVmc	Mohawk River caldera		
LBVmt	basalt of Mount Tom		
LBVrx	Roxy Formation		
LBVtbc	tuff of Bond Creek		
LBVvol	lavas of Little Butte Volcanics		
LBVvol	lavas of Little Butte Volcanics		
MTHbk	Hornbrook Formation	Mitchell package	0.5
MYRday	Days Creek Formation	Myrtle Group	1.2
MYRid	Riddle Formation		
NSRcgl	Neogene conglomerate	Neogene sedimentary rocks	< 0.1
NHRbs1	Bastendorff Formation	Nestucca-Hamlet Group	< 0.1
NEVbcp	Birdseye Creek pluton	Nevadan intrusions	5.3
NEVbsp	Bucks Peak pluton		
NEVfcp	Foots Creek pluton		
NEVgk	Grayback plutons		
NEVgcp	Grays Creek pluton		
NEVgpp	Gold Hill plutons		
NEVgpp	Grants Pass plutons		
NEVun	Nevadan intrusions, undifferentiated		
NEVjop	Jacksonville plutons		
NEVtmp	Timber Mountain pluton		

(arranged alphabetically by Compilation Unit Label)			
Compilation Unit Label	Compilation Unit Name	Terrane/Group	Bedrock Areal Coverage in Region (%)
PSRpcf	Payne Cliffs Formation	Paleogene sedimentary rocks	0.9
PRVdb	intrusive rocks of Pickett Peak	Paleogene volcanic rocks	< 0.1
PRVdb	intrusive rocks of Pickett Peak		
PRVdb	intrusive rocks of Pickett Peak		
PPTbs	Colebrook Schist	Pickett Peak terrane	2.3
PPTbs	serpentinite of Pickett Peak terrane		
PPTumf	ultramafics of Pickett Peak terrane		
SMGbm	Greenback melange*	Sexton Mountain terrane	2.5
SMGsmo	Sexton Mountain ophiolite*		
STZrv	Siletz River Volcanics	Siletz terrane	2.4
Slknk	knockers of Sixes River terrane	Sixes River terrane	3.4
Slmgs	sedimentary melange of Sixes River terrane		
Slmgs	serpentinite melange of Sixes River terrane		
SNVop	Basal Range ophiolite*	Snow Camp terrane	2.6
SNVop	serpentinite melange of Snow Camp terrane		
SNVop	volcanic melange of Snow Camp terrane		
TYE	Tyee Formation	Tyee package	24.6
UPGbsb	Bushnell Rock Formation	Umpqua Group	10.0
UPGcam	Camas Valley Formation		
UPGtmf	Tennille Formation		
UPGun	Umpqua Group, undivided		
UPGwtr	White Tail Ridge Formation		
WKTbrg	Briggs Creek subterrane	western Klamath terrane	14.9
WKTdbt	Dry Butte subterrane		
WKTek	Elk subterrane		
WKTfmo	Fiddler Mountain olistostrome*		
WKTgal	Galice Formation		
WKTint	intrusive rocks of western Klamath terrane		
WKTint	Illinois River plutonic complex*		
WKTrog	Rogue Formation		
WKTvtr	Rogue Valley subterrane, undivided		
WKTsmi	Smith River subterrane		
WKTsrp	serpentinite melange of western Klamath terrane		
WKTumf	ultramafic rocks of western Klamath terrane		
WCGemp	Empire Formation	Whale Cove-Gnat Creek package	< 0.1
WGun	Willamette package, undivided	Willamette package	< 0.1
YBBeug	Eugene Formation	Yaquina-Pittsburg Bluff package	0.2
YBtds	Tunnel Point Sandstone*		
YTPyab	Yachats Basalt	Yachats-Tillamook package	< 0.1
YOLDth	Dothan Formation	Yolla Bolly terrane	10.9

REFERENCES

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