Bornova Flysch Zone
A large melange – olistostrome belt

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Bornova Flysch Zone
Debris flows - olistostromes
Matrix of the olistostrome

A large block of limestone
KARABURUN STRATIGRAPHY
A SEMI-INTACT CARBONATE PLATFORM

Ma
60
60
Eocene

Palaeocene

Kimmeridgian

115 m > 1000 m

Maastricht. Campanian

115 m 100 m

Albian Aptian

120 m

Barremian Hauterivian Valanginian Berriasian

U Cretaceous

140

160

180

Jurrasic

200

220

Triassic

Karaburun

Sandstone

Deep marine red limestone

Dolomite

Bauxite

Shallow marine limestone

Foraminifera Aulotortus Cladocoropsis Calpionella Favusella Rotalipora Algs Coral Belemnite Radiolaria Rudists Ammonoid Aptychus Globotruncanida Thin-shelled pelacypod

Unconformity
Menderes Massif
Shallow marine Upper Triassic limestone
Upper Norian – Rhaetian
Tithonian – Valanginian
Middle Albian
Upper Cenomanian
Lower-Middle Turonian
Ophiolitic melange, Balıkesir
Radiolaria ages from the chert blocks in the Bornova Flysch Zone (Tekin & Göncüoğlu, 2007, 2009)
The termination of the carbonate deposition gets younger towards southwest.
Conclusions

1. The Bornova Flysch Zone (BFZ) is a regional olistostrome-melange belt of sedimentary and tectonic origin.

2. The blocks in the BFZ are mainly of Mesozoic carbonate and ophiolite, which lie in a latest Cretaceous-Paleocene clastic matrix. The blocks are of two types:
   a) Carbonate platform type
   b) Carbonate platform margin type

3. The BFZ was formed and deformed in a dynamic basin in a lithospheric scale shear zone.