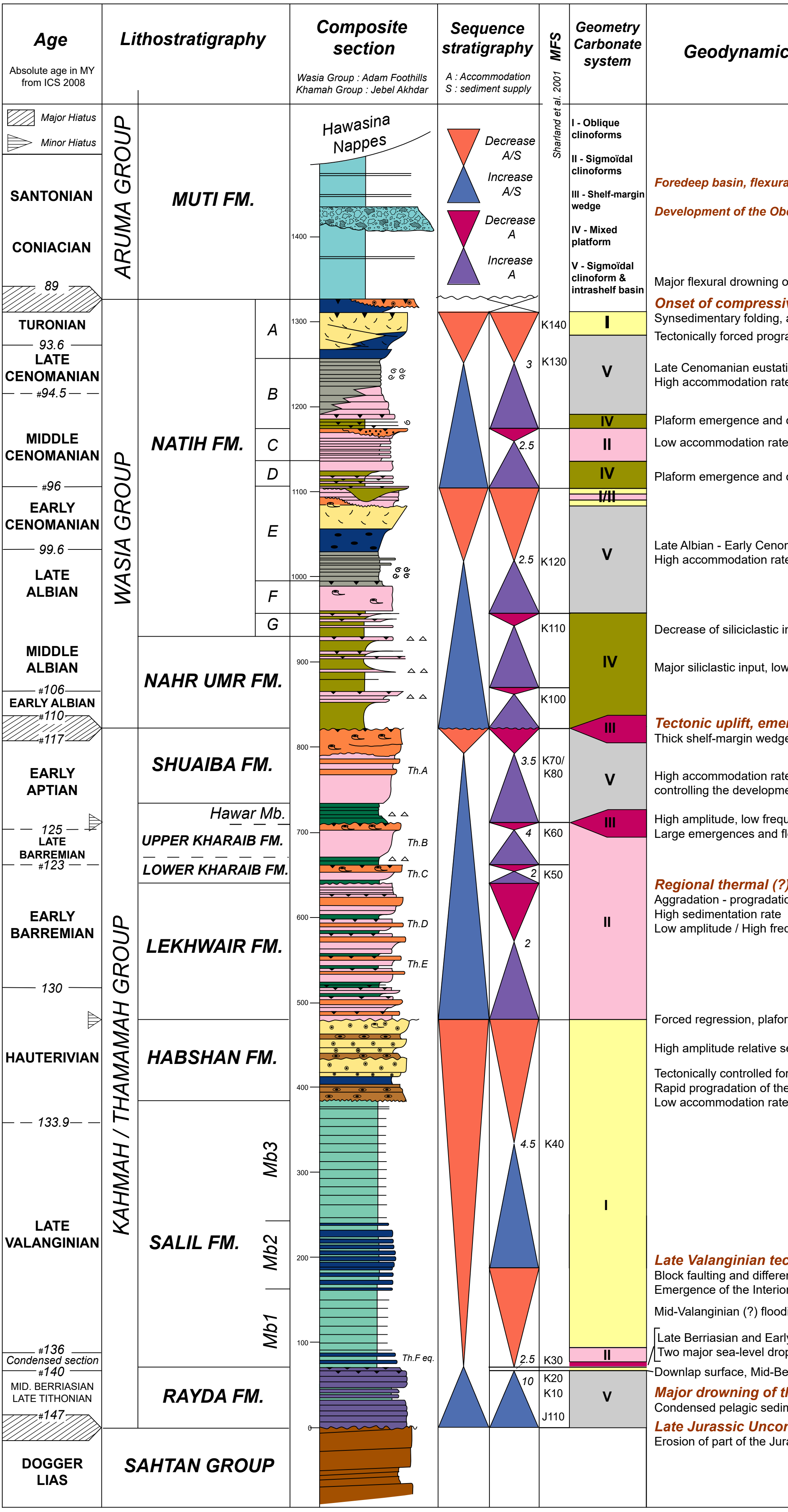
Age
Absolute age in MY from ICS 2008
Lithostratigraphy
Composite section
Wasia Group : Adam Foothills
Khamah Group : Jebel Akhdar
Sequence stratigraphy
A : Accommodation
S : sediment supply
MFS
Sharland et al. 2001
Geometry Carbonate system
Geodynamic
Major Hiatus
Minor Hiatus
SANTONIAN
CONIACIAN
89
TURONIAN
93.6
LATE CENOMANIAN
#94.5
MIDDLE CENOMANIAN
#96
EARLY CENOMANIAN
99.6
LATE ALBIAN
MIDDLE ALBIAN
#106
EARLY ALBIAN
#110
#117
EARLY APTIAN
125
LATE BARREMIAN
#123
EARLY BARREMIAN
130
HAUTERIVIAN
133.9
LATE VALANGINIAN
#136
Condensed section
#140
MID. BERRIASIAN
LATE TITHONIAN
#147
DOGGER
LIAS
ARUMA GROUP
WASIA GROUP
KAHMAH / THAMAMAH GROUP
SAHTAN GROUP
MUTI FM.
NATIH FM.
NAHR UMR FM.
SHUAIBA FM.
Hawar Mb.
UPPER KHARAIB FM.
LOWER KHARAIB FM.
LEKHWAIR FM.
HABSHAN FM.
SALIL FM.
RAYDA FM.
A
B
C
D
E
F
G
Mb3
Mb2
Mb1
Hawasina Nappes
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
Th.A
Th.B
Th.C
Th.D
Th.E
Th.F eq.
Decrease A/S
Increase A/S
Decrease A
Increase A
3
2.5
2.5
3.5
4
2
2
4.5
2.5
10
K140
K130
K120
K110
K100
K70/ K80
K60
K50
K40
K30
K20
K10
J110
I - Oblique clinoforms
II - Sigmoïdal clinoforms
III - Shelf-margin wedge
IV - Mixed platform
V - Sigmoïdal clinoform & intrashelf basin
Foredeep basin, flexura
Development of the Obc
Major flexural drowning o
Onset of compressiv
Synsedimentary folding, a
Tectonically forced progra
Late Cenomanian eustati
High accommodation rate
Plaform emergence and c
Low accommodation rate
Plaform emergence and c
Late Albian - Early Cenor
High accommodation rate
Decrease of siliciclastic in
Major siliclastic input, low
Tectonic uplift, emer
Thick shelf-margin wedge
High accommodation rate
controlling the developme
High amplitude, low frequ
Large emergences and fl
Regional thermal (?)
Aggradation - progradatio
High sedimentation rate
Low amplitude / High freq
Forced regression, plafor
High amplitude relative se
Tectonically controlled for
Rapid progradation of the
Low accommodation rate
Late Valanginian tec
Block faulting and differen
Emergence of the Interior
Mid-Valanginian (?) floodi
Late Berriasian and Early
Two major sea-level drop
Downlap surface, Mid-Be
Major drowning of th
Condensed pelagic sedim
Late Jurassic Uncon
Erosion of part of the Jura