Gulf of Mexico datapack of biostratigraphy and regional stratigraphy -- *current contents (Dec, 2009)*

Gulf of Mexico Biostrat	
Global (mirror of Cenozoic; summary only)	
International Chronostratigraphy (partial)	
Epoch (global)	
Subepoch (global)	Special set (not official) as used by Exxon, etc.
Stage (global)	
Sub-stage (global); or Pre-GSSP age	
Planktonic Foraminifers (global)	
Foram Zonation (Berggren et al.'95; Berggren and Pearson,'05)	
Foram Subzone	
Foram Subzone Name	
Major Planktonic Foram markers (global)	
Calcareous Nannofossils (global)	
Nanno Zone (Martini'71)	
Nanno Zonation (Okada & Bukry'80)	
Nanno Subzone (OB'80)	
Major Calc. Nanno markers (global)	
SHELL (2008) Oligocene-Recent	SHELL Late Cenozoic Gulf of Mexico Stratigraphic Chart; compiled by Michael Styzen & Charlotte Jolley (Shell International Exploration & Production), GCSSEPM 2008
Sequences (Gulf of Mexico, SHELL)	
Sequence cycle	
Sequences (SHELL)	
Foraminifers (Gulf of Mexico, SHELL)	Industry Foraminifera Markers
Foram Zone (Shell, 2005)	
Foram Subzone (Shell, 2005)	
Shell GoM Foraminifer Markers	
Foram Datum (Shell GoM)	
Industry Foraminifera Markers	
Nannofossils (Gulf of Mexico, SHELL)	Industry Nannofossil Markers
Nanno Zone (Shell, 2005)	
Nanno Subzone (Shell, 2005)	
Shell GoM Nannofossil Markers	
Nanno Datum (Shell GoM)	
Industry Nannofossil Markers	
Palynology (Gulf of Mexico, SHELL)	
Paly Code	

Gulf of Mexico datapack of biostratigraphy and regional stratigraphy -- *current contents (Dec, 2009)*

Shell GoM Palynology Markers	
FILLON (2003) Cenozoic	Gulf of Mexico and Tropical-Subtropical Atlantic (Richard H. Fillon, compiler; with contributions by R.G. Lytton III, P.N. Lawless, J.E. Boudreaux, J.T. Christian and B.A. Jenkins; 2003). This is an update of the Lawless et al. (1997) charts.
Sequences and Facies (Gulf of Mexico, Fillon'03)	Ages and magnitudes of sequence boundaries (solid lines) and surfaces of maximum transgression and flooding (dashed) are after Lawless et al. (1997) and Hardenbol et al. (1998). Sequence boundary nomenclature is from Hardenbol et al. (1998), "ME 2", etc., and from Lawless et al. (1997), "(DQB*[3])", etc. Numbers in brackets [ ] refers to sequence order. *= TGS industry designations; ** = this chart. Flooding surface nomenclature is from Lawless et al. (1997).
Sequences (Gulf of Mexico, Fillon'03)	
Second-order trends (GoM; Fillon'03)	
Schematic Onlap curve (GoM; Fillon'03)	
GoM sequences (Fillon'03)	
Gulf of Mexico Lithostrat Units (Paleogene)	
Formation (GoM)	
Member (GoM)	
Schematic offshore facies	
Planktonic Foraminifers (Gulf of Mexico, Fillon'03)	
WHCZ Codes (Plank. Forams)	
GoM Plank. Foraminifer Markers (Fillon'03)	A= abundant; C= common; R= rare; VR = very rare; RHC = Righthand coiling variety; LHC = Lefthand coiling variety; Updip = inner to middle neritic; Downdip = middle neritic to bathyal
Globorotalia menardii Abundance Zones (high-resolution)	After Ericson & Sollin (1968); Kennett & Huddleston (1972); Briskin & Berggren (1975). Adapted for the Pliocene by R.H. Fillon
Coiling changes (Gt. truncatulinoides)	After Lawless et al. (1997)
Coiling changes (Gt. crassaformis)	After Lawless et al. (1997)
Benthic Foraminifers (Gulf of Mexico, Fillon'03)	
GoM Benthic Foraminifer Zones (Fillon'03)	
WHCZ Codes (Benthic. Forams)	
GoM Benthic Foraminifer Markers (Fillon'03)	
Calcareous Nannofossils (Gulf of Mexico, Fillon'03)	
GoM NN-NP Zones (Fillon'03)	
GoM CC-CP Zones (Fillon'03)	
GoM Nannofossil Zones (Fillon'03)	
WHCZ Codes (Nannos)	
GoM Nannofossil Markers (Fillon'03)	
Petroleum Industry Biochronozones *(DASHED ages are midway between labels)*	
Plank. Foram (Blue)	

Gulf of Mexico datapack of biostratigraphy and regional stratigraphy -- *current contents (Dec, 2009)*						
				Benthic Foram (Green)		
				Nannos (Red)		
	MMS (2003) Callovian to Recent					Biostratigraphic Chart of the Gulf of Mexico Offshore Regions (US Dept. Interior; Minerals Management Service). [MMS Gulf of Mexico Resource Evaluation Paleontological Group -- For public release May 1, 2003 -- Robert B. Witrock (504) 736-2718, Tony Friedmann (504) 736-2713, or 1-800-200-GULF [http://www.gomr.mms.gov/homepg/whatsnew/speeches/PPDM-2002.html]]
		MMS Chronozone				
			Cretaceous regional stage			
			Proposed MMS zone			
			Current MMS zone			
		MMS Biostratigraphy				
			Planktic and benthic foraminifera and ostracod (O) regional and local markers			[Marker age based on even-divisions within stage listing (dual foram/nanno)]
			Calcareous nannoplanktic regional and local markers			[Marker age based on even-divisions within stage listing (dual foram/nanno)]
	PaleoData - Neogene (v.2008); Paleogene (v.2004)					Biostratigraphic Chart of the Gulf Basin, USA [QUAT-NEOGENE version 0809 (2008); compiled by: A. S. Waterman, M.W. Center, R.A. George, A.F. Porter, Jr., T.M. Reilly, R.V. Roederer, N.S. Vallette, R.D. Weber; PALEOGENE version 0410 (2004); compiled by M.W. Center and A.S. Waterman]. Downloaded from www.paleodata.com
		PaleoData sequence summaries				
			PDI and Fillon (2008; 2004) Map Sequences			Usually (but not always) begin with GoM MFS levels => tried to align
			GoM Basin Margin Sequences from Biostratigraphic Signatures			MFS "name" (mainly Nanno events) used to FIX position within GTS04 stages
			Univ. TX GBDS Deposodes			
		PaleoData biostrat summaries				
			Planktonic Foraminifers (PaleoData)			
				Plank Forams (PaleoData)		
			Benthic Foraminifers (PaleoData)			
				Benthic Foram datums (PaleoData)		
				Benthic Foram Paleoenvironmental Range		
			Calcareous Nannofossils (PaleoData)			
				Nannos (Paleodata)		
			Secondary or Important Local Markers (PaleoData)			
				Other markers (PaleoData)		
Gulf of Mexico Lithostratigraphy (DNAG; linked to on-line USGS Lexicon)						Mainly from (1) Salvador, A. & Quezada Muneton, J.M. (1989) Stratigraphic correlation chart Gulf of Mexico Basin, Vol. Journal of the Geology of North America, Geological Society of America
	Gulf of Mexico "deep-water standard"					

Gulf of Mexico datapack of biostratigraphy and regional stratigraphy -- *current contents (Dec, 2009)*

		S Louisiana - deep ("GoM deep-water standard")				*South Louisiana - offshore (DNAG column 14) would be the closest to deep water GOM, as the industry is still using lithostratigraphy for chronostratigraphy -- this is not the best practice, but it is the common practice. (Chengjie Liu (ExxonMobil); 3Aug09 e-mail advice to J.Ogg)*
	Mexico (preliminary)					Mainly from (1) Salvador, A. & Quezada Muneton, J.M. (1989) Stratigraphic correlation chart Gulf of Mexico Basin, Vol. Journal of the Geology of North America, Geological Society of America, (2) Moran-Zenteno, D. (1984; translated 1994) Geology of the Mexican Republic. AAPG Studies in Geology #39, 160 pp., and (3) Mex. Geol. Map (on-line access; using legends of rock succession in different regions). However, none of these contain useful biostrat and facies diagrams summarizing the generalized stratigraphic column.
		Yucatan Platform				
				Yucatan - shallow		
				Yucatan - deep		
		Macuspana Basin - Gulf of Campeche and Villahermosa uplift				
				Macuspana and Campeche - shallow		
				Macuspana and Campeche - deep		
		Sierra de Chiapas				
				Chiapas - shallow		
				Chiapas - shallow to intermediate		
				Chiapas - intermediate		
				Chiapas - intermediate to deep		
				Chipas - deep		
		Comalcalco Basin & Isthmus Saline Basin				
				Comalcalco & Isthmus - general		
		Veracruz Basin				
				Veracruz - shallow		
				Veracruz - deep		
		Tampico-Misantala Basin				
				Tampico - shallow		
				Tampico - intermediate		
				Tampico - deep		
		Sierra Madre Oriental				
				Sierra Madre Oriental - shallow		
				Sierra Madre Oriental - shallow to intermediate		
				Sierra Madre Oriental - intermediate to deep		
				Sierra Madre Oriental - deep		
		Burgos Basin				
				Burgos - shallow		
				Burgos - deep		

Gulf of Mexico datapack of biostratigraphy and regional stratigraphy -- *current contents (Dec, 2009)*						
		Sabinas Basin				
				Sabinas - shallow		
				Sabinas - intermediate		
				Sabinas - deep		
	Texas to Alabama					Salvador, A. & Quezada Muneton, J.M. (1989) Stratigraphic correlation chart Gulf of Mexico Basin, Vol. Journal of the Geology of North America, Geological Society of America.
		Rio Grande (South Texas)				
				South Texas - shallow		
				South Texas - intermediate		
				South Texas - deep		
		San Marcos Arch - Central Texas				
				Central Texas - shallow		
				Central Texas - shallow to intermediate		
				Central Texas - intermediate to deep		
				Central Texas - deep		
		East Texas Basin				
				East Texas - shallow		
				East Texas - intermediate		
				East Texas - deep		
		Southeast Texas, Southwest Louisiana & offshore				
				SE Texas, SW Louisiana - shallow		
				SE Texas, SW Louisiana - Intermediate		
				SE Texas, SW Louisiana - deep		
		South Louisiana and offshore				
				S Louisiana - shallow		
				S Louisiana - deep ("GoM deep-water standard")		
		South Arkansas, North Louisiana & West-central Mississippi				
				S Arkansas to central Mississippi - shallow		
				S Arkansas to central Mississippi - intermediate		
				S Arkansas to central Mississippi - deep		
	Florida to Mississippi					Salvador, A. & Quezada Muneton, J.M. (1989) Stratigraphic correlation chart Gulf of Mexico Basin, Vol. Journal of the Geology of North America, Geological Society of America.
		Southeast Mississippi, Southwest Alabama, W. Florida panhandle & offshore				
				SE Mississippi, SW Alabama, W. Florida panhandle - offshore		
				SE Mississippi, SW Alabama, W. Florida panhandle - intermediate		
				SE Mississippi, SW Alabama, W. Florida panhandle - deep		
		Southeast Alabama, Central Florida panhandle & Southwest Georgia				

Gulf of Mexico datapack of biostratigraphy and regional stratigraphy -- *current contents (Dec, 2009)*						
				SE Alabama, Florida panhandle & SW Georgia - shallow		
				SE Alabama, Florida panhandle & SW Georgia - deep		
		South Georgia & North Florida				
				S Georgia & N Florida - shallow		
				S Georgia & N Florida - intermediate		
				S Georgia & N Florida - deep		
		Central and South Florida				
				S Florida - shallow		
				S Florida - intermediate		
				S Florida - deep		