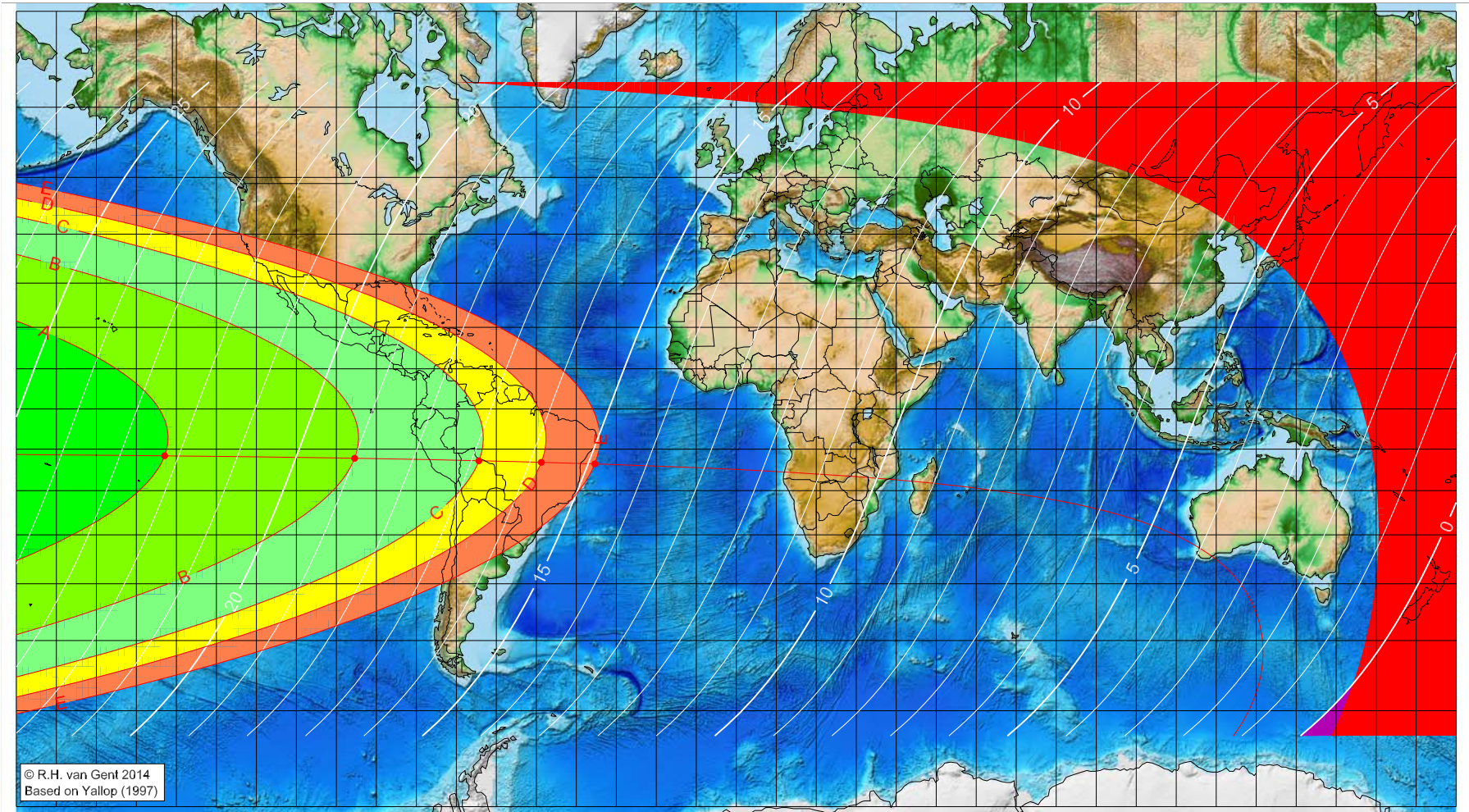


First visibility lunar crescent for Muḥarram 1 AH (proleptic)

Global visibility map for 14 July 622 [Wednesday]
Day of luni-solar conjunction



Astronomical New Moon: 14 July 622, 5h 27.1m (UTC)

First visibility (●)

Astronomical (Brown) Lunation Number = -16084
Islamic Lunation Number = 1
TT - UT [= ΔT] = 1.27 h

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

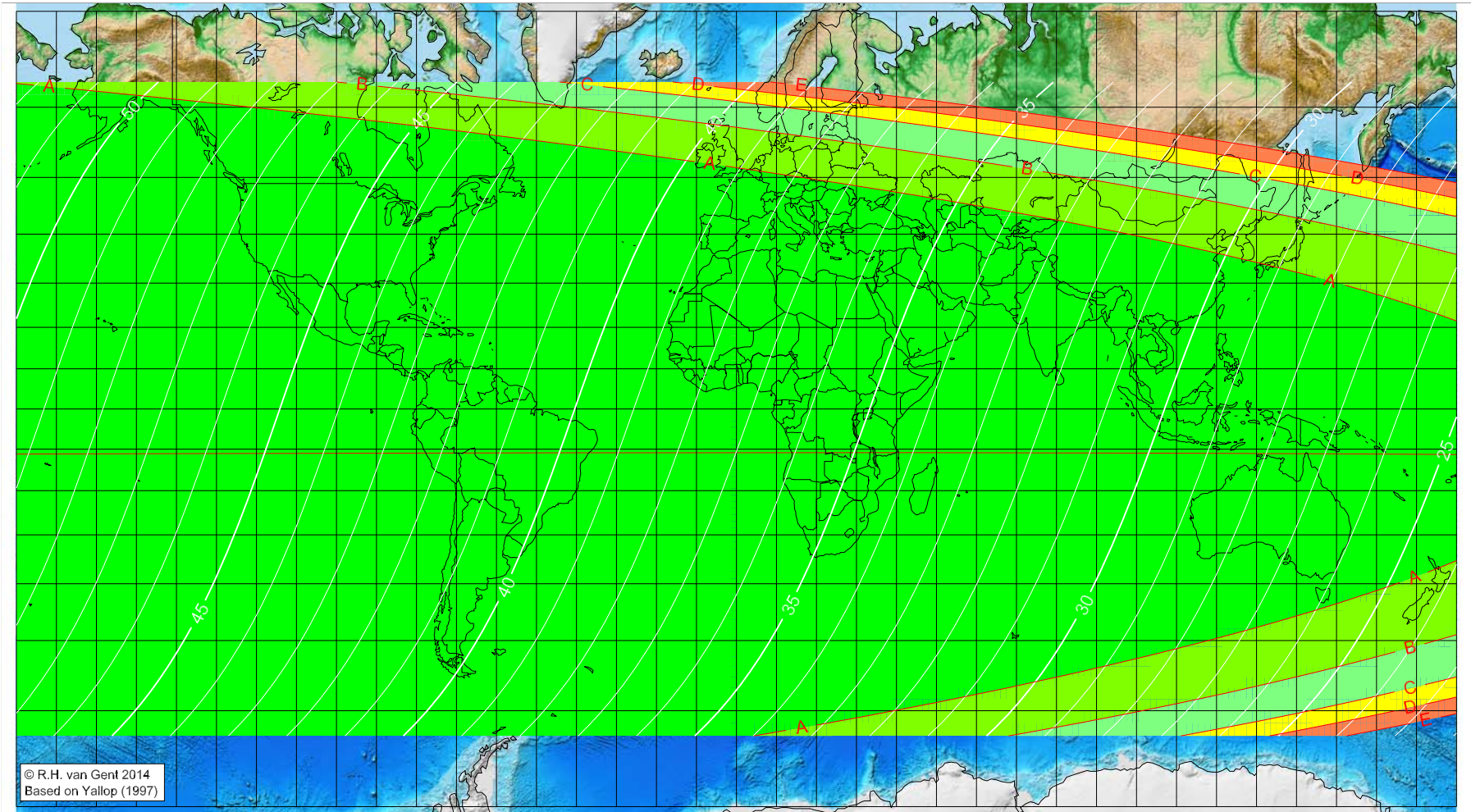
Longitude (°)	Latitude (°)	Lunar age (h)
-142.92	-11.62	22.24
-95.43	-12.24	19.00
-64.37	-12.84	16.87
-48.76	-13.22	15.80
-35.38	-13.60	14.89

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Muḥarram 1 AH (proleptic)

Global visibility map for 15 July 622 [Thursday]
Day after luni-solar conjunction



© R.H. van Gent 2014
Based on Yallop (1997)

Astronomical New Moon: 14 July 622, 5h 27.1m (UTC)

First visibility (•)

Longitude (°)	Latitude (°)	Lunar age (h)
		visible on the previous evening
		visible on the previous evening
		visible on the previous evening
		visible on the previous evening

Astronomical (Brown) Lunation Number = -16084
Islamic Lunation Number = 1
TT - UT [= ΔT] = 1.27 h

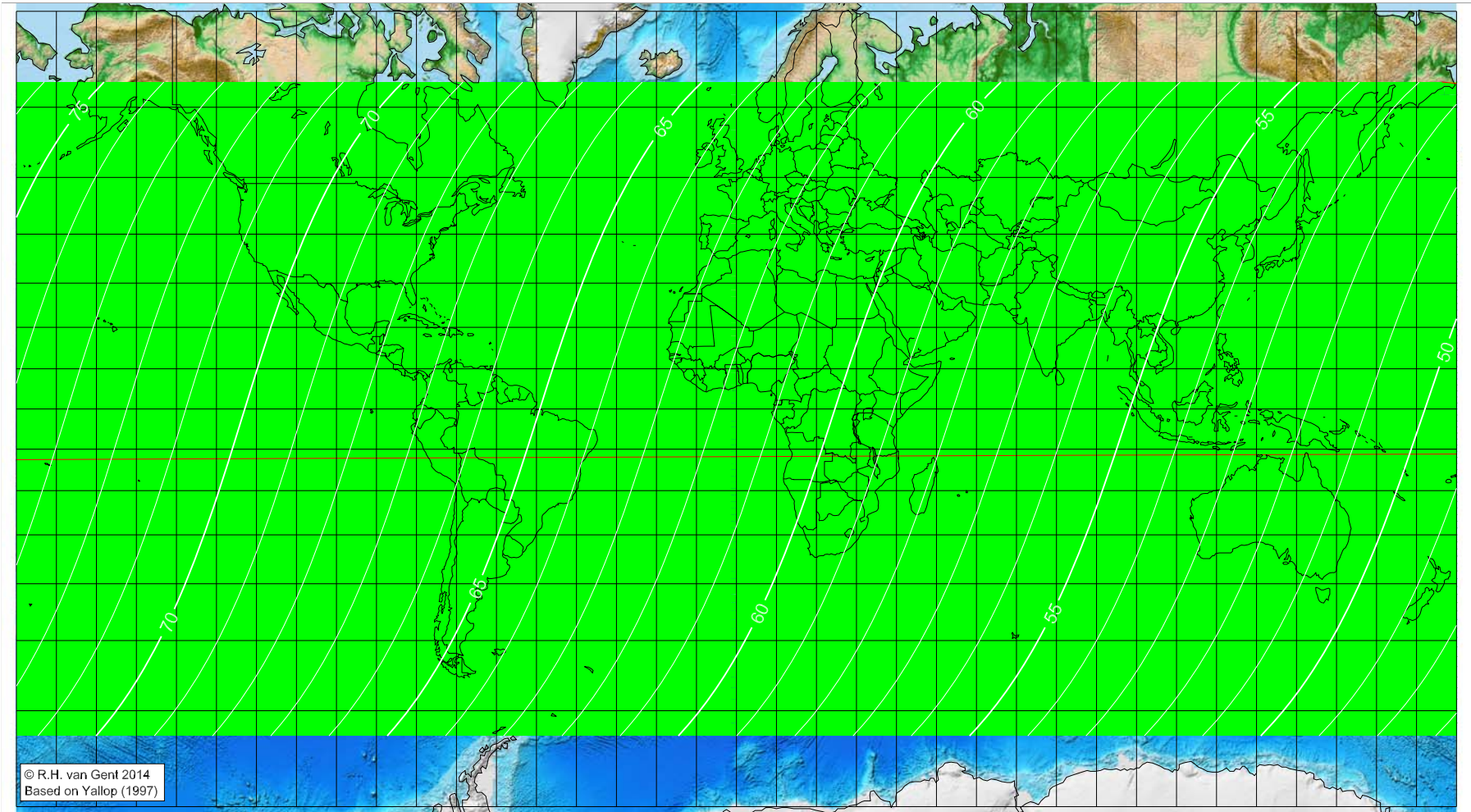
Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Muḥarram 1 AH (proleptic)

Global visibility map for 16 July 622 [Friday]
Second day after luni-solar conjunction



Astronomical New Moon: 14 July 622, 5h 27.1m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

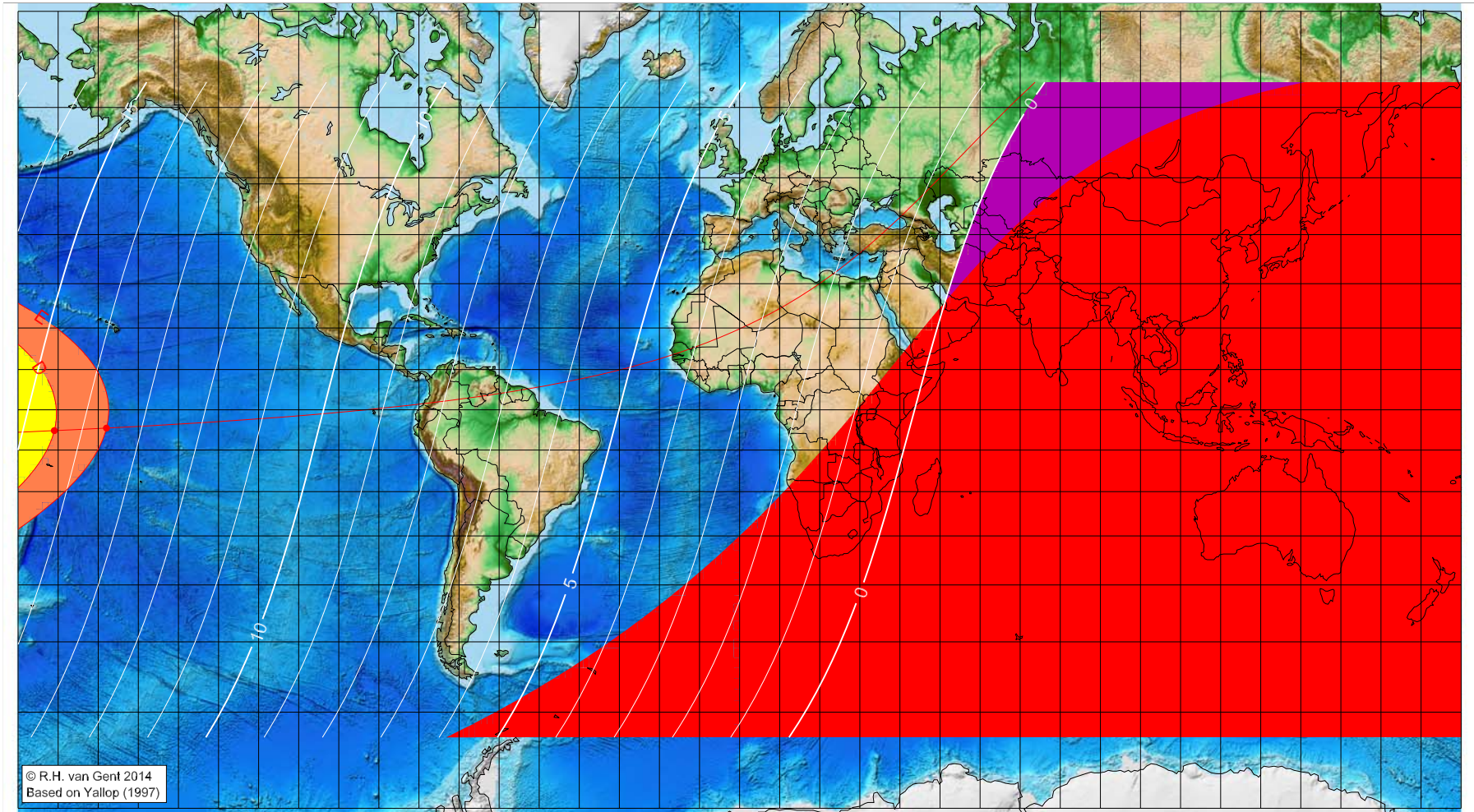
Astronomical (Brown) Lunation Number = -16084
Islamic Lunation Number = 1
 $TT - UT [= \Delta T] = 1.27 \text{ h}$

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Şafar 1 AH (proleptic)

Global visibility map for 12 August 622 [Thursday]
Day of luni-solar conjunction



© R.H. van Gent 2014
Based on Yallop (1997)

Astronomical New Moon: 12 August 622, 15h 10.4m (UTC)

First visibility (•)

Longitude (°)	Latitude (°)	Lunar age (h)
-170.96	-5.19	14.47
-157.95	-4.56	13.60

Astronomical (Brown) Lunation Number = -16083
Islamic Lunation Number = 2
TT - UT [= ΔT] = 1.27 h

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)

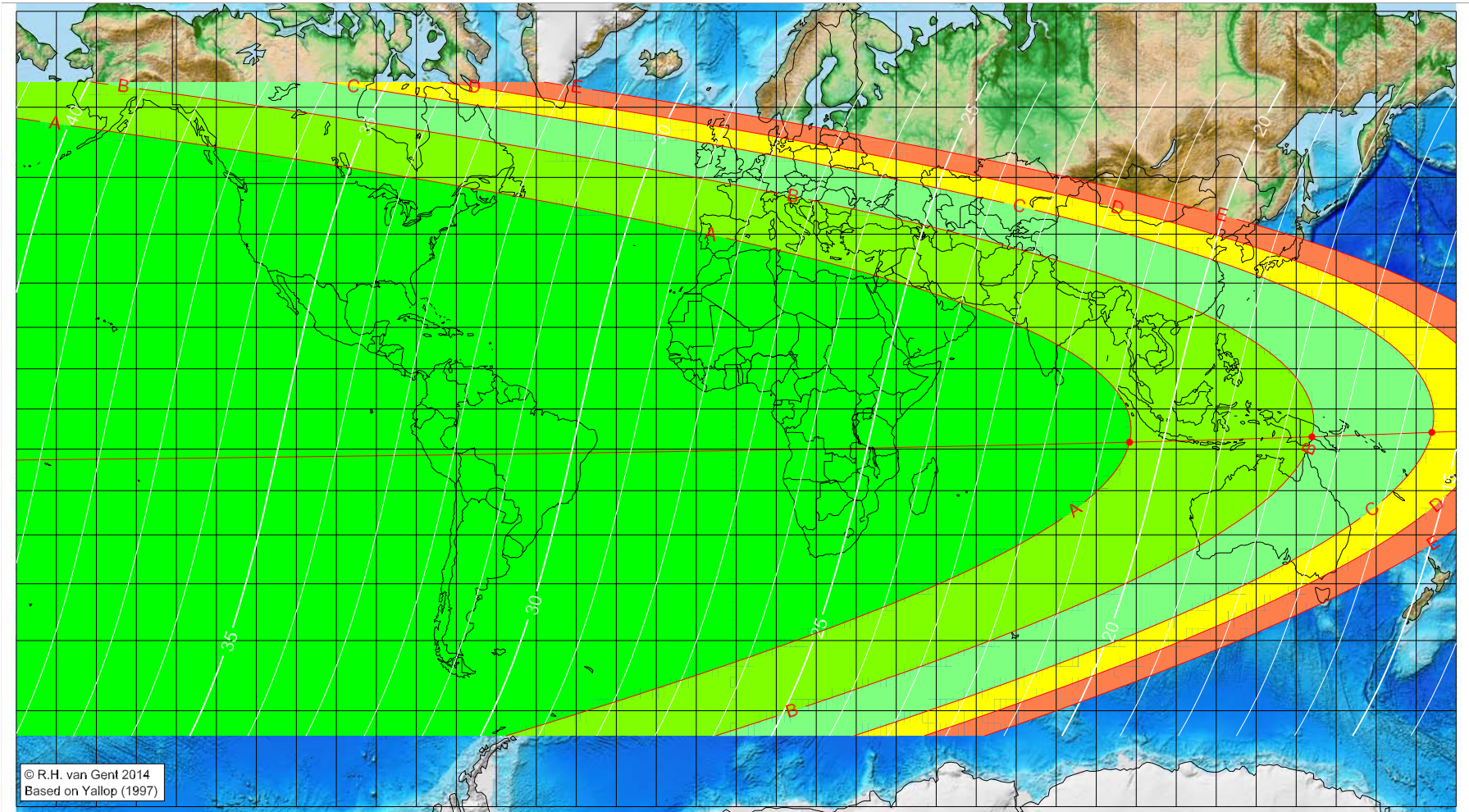
Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

- moonset before sunset
- before conjunction (astronomical new moon)

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Şafar 1 AH (proleptic)

Global visibility map for 13 August 622 [Friday]
Day after luni-solar conjunction



Astronomical New Moon: 12 August 622, 15h 10.4m (UTC)

First visibility (•)

Astronomical (Brown) Lunation Number = -16083
Islamic Lunation Number = 2
TT - UT [= ΔT] = 1.27 h

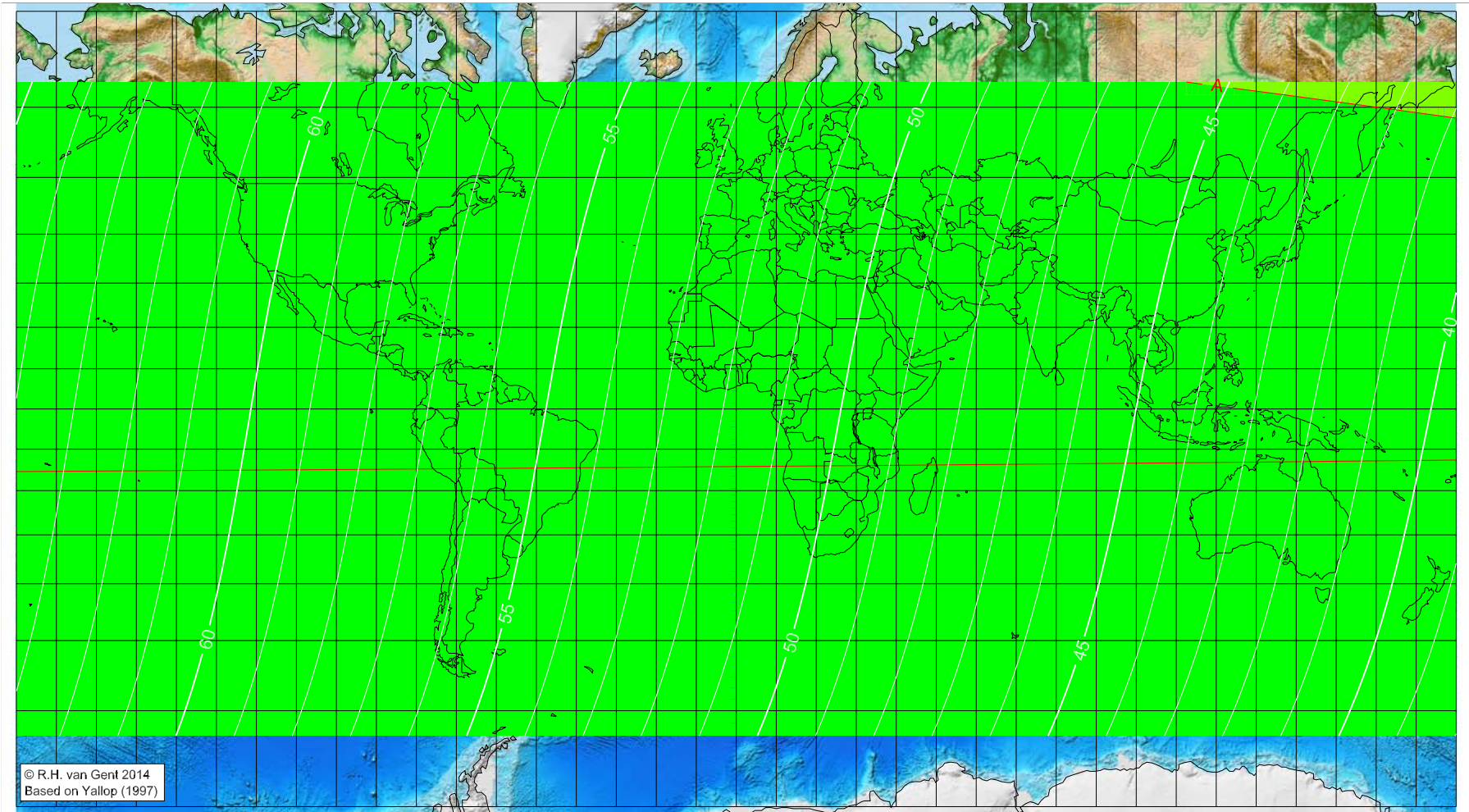
- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

Longitude (°)	Latitude (°)	Lunar age (h)
98.33	-8.29	20.57
143.94	-6.95	17.50
173.92	-5.85	15.48
visible on the previous evening		
visible on the previous evening		

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

First visibility lunar crescent for Şafar 1 AH (proleptic)

Global visibility map for 14 August 622 [Saturday]
Second day after luni-solar conjunction



Astronomical New Moon: 12 August 622, 15h 10.4m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

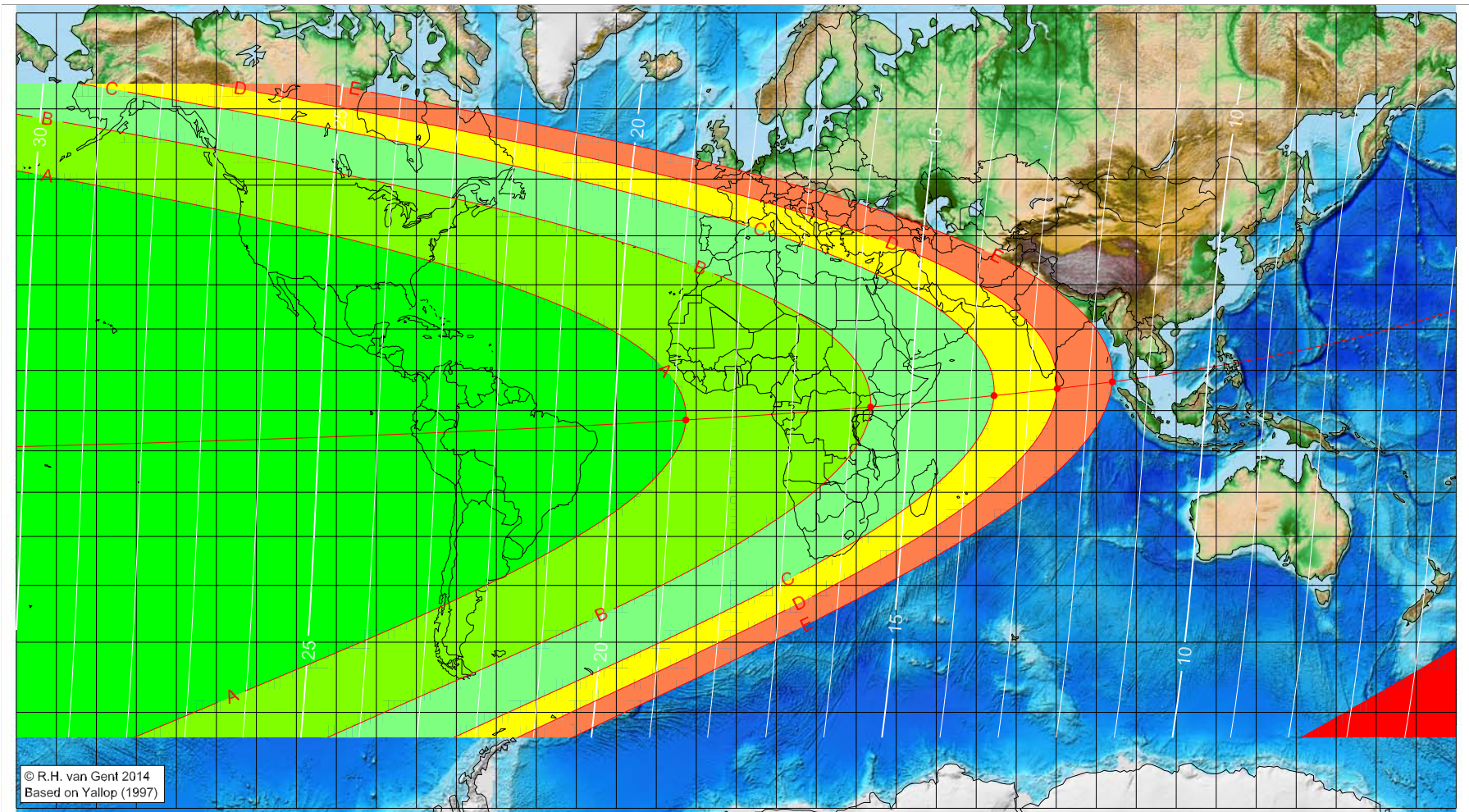
Astronomical (Brown) Lunation Number = -16083
Islamic Lunation Number = 2
 $TT - UT [= \Delta T] = 1.27 \text{ h}$

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Rabīʿ al-Awwal 1 AH (proleptic)

Global visibility map for 11 September 622 [Saturday]
Day of luni-solar conjunction



© R.H. van Gent 2014
Based on Yallop (1997)

Astronomical New Moon: 11 September 622, 0h 20.7m (UTC)

First visibility (•)

	Longitude (°)	Latitude (°)	Lunar age (h)
A	-12.61	-2.35	18.79
B	33.58	0.90	15.67
C	64.44	3.74	13.59
D	80.24	5.48	12.53
E	94.01	7.19	11.61

Astronomical (Brown) Lunation Number = -16082
Islamic Lunation Number = 3
TT - UT [= ΔT] = 1.27 h

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)

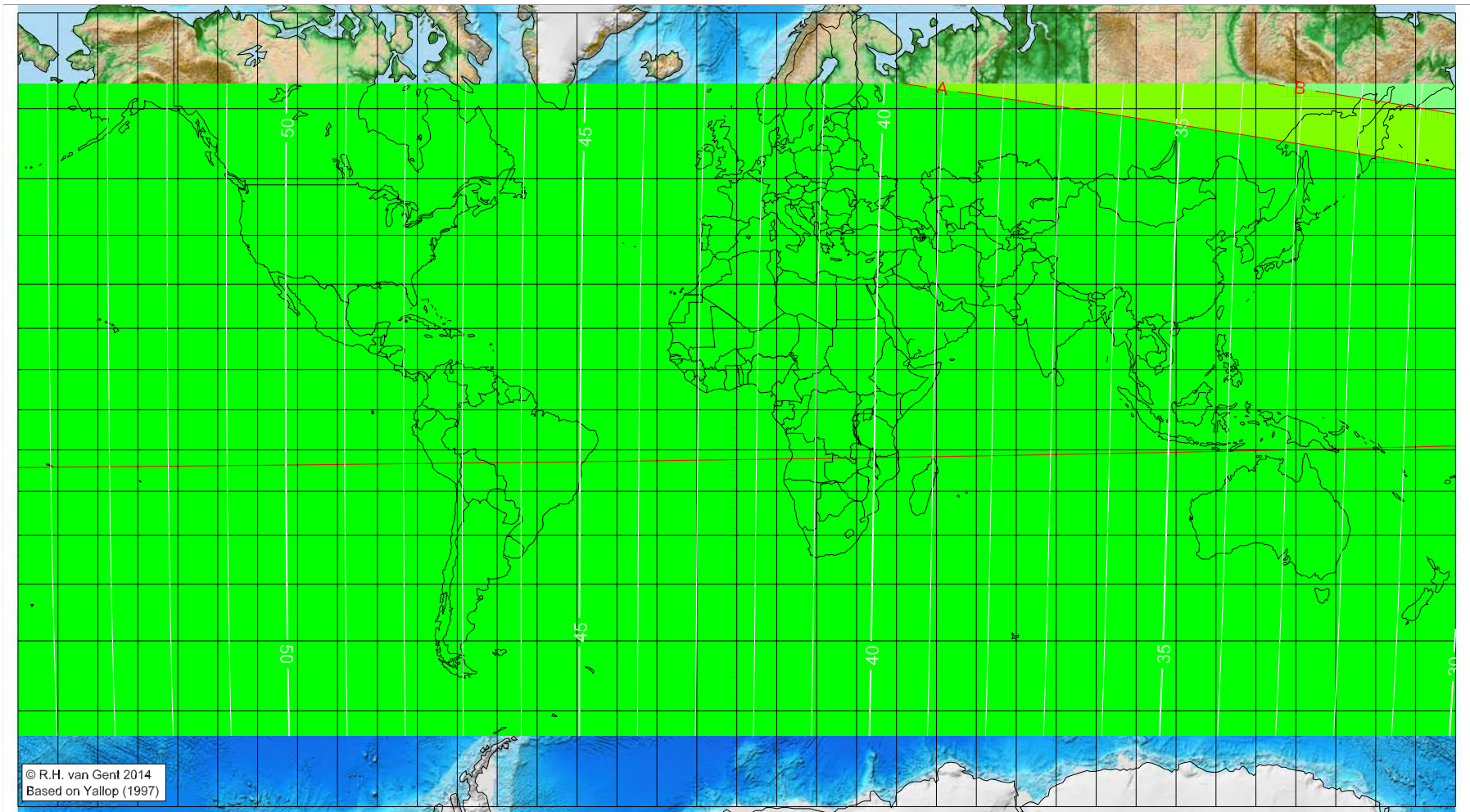
Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

- moonset before sunset
- before conjunction (astronomical new moon)

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Rabīʿ al-Awwal 1 AH (proleptic)

Global visibility map for 12 September 622 [Sunday]
Day after luni-solar conjunction



© R.H. van Gent 2014
Based on Yallop (1997)

Astronomical New Moon: 11 September 622, 0h 20.7m (UTC)

First visibility (•)

Longitude (°)	Latitude (°)	Lunar age (h)
		visible on the previous evening
		visible on the previous evening
		visible on the previous evening
		visible on the previous evening

Astronomical (Brown) Lunation Number = -16082
Islamic Lunation Number = 3
TT - UT [= ΔT] = 1.27 h

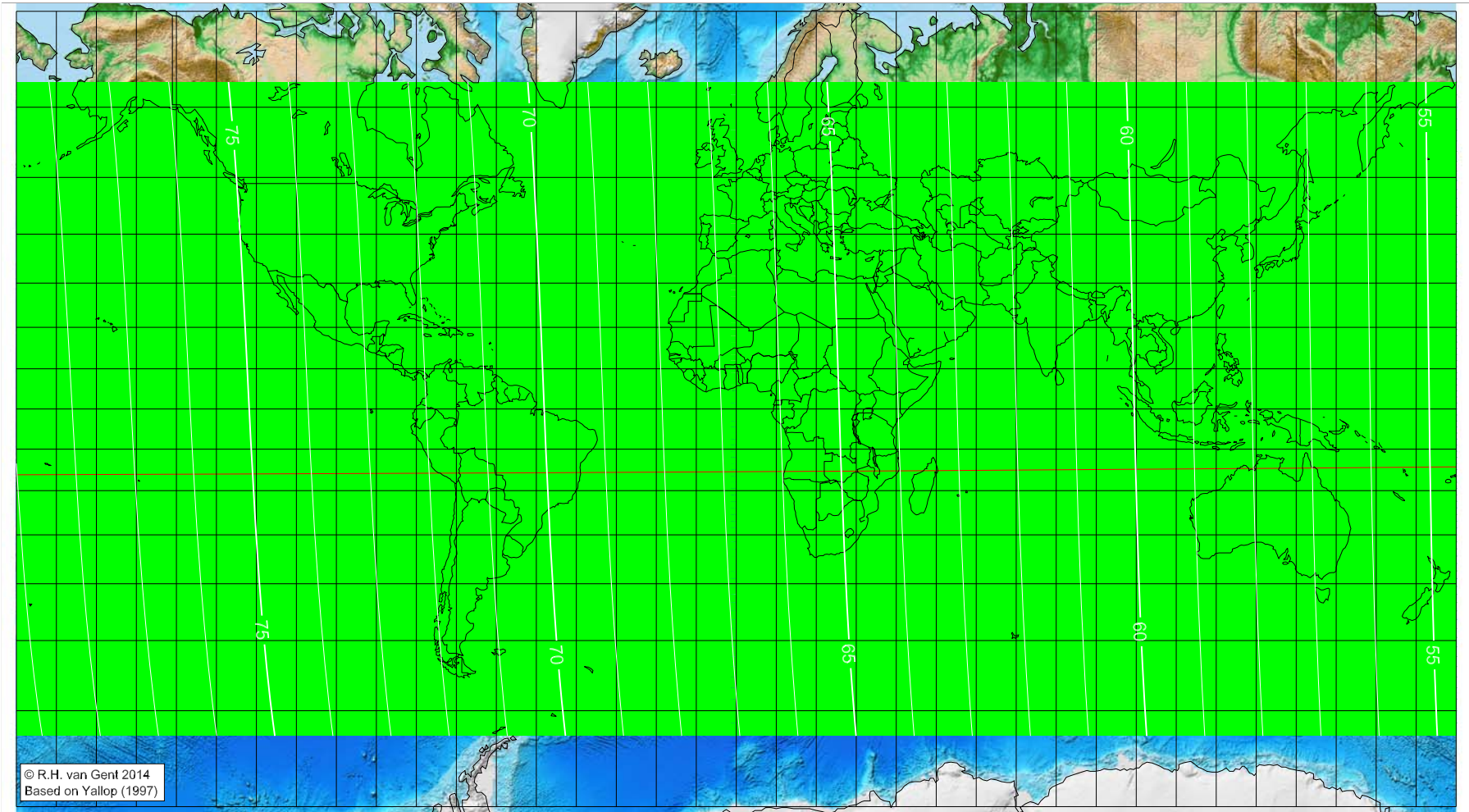
- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Rabīʿ al-Awwal 1 AH (proleptic)

Global visibility map for 13 September 622 [Monday]
Second day after luni-solar conjunction



Astronomical New Moon: 11 September 622, 0h 20.7m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

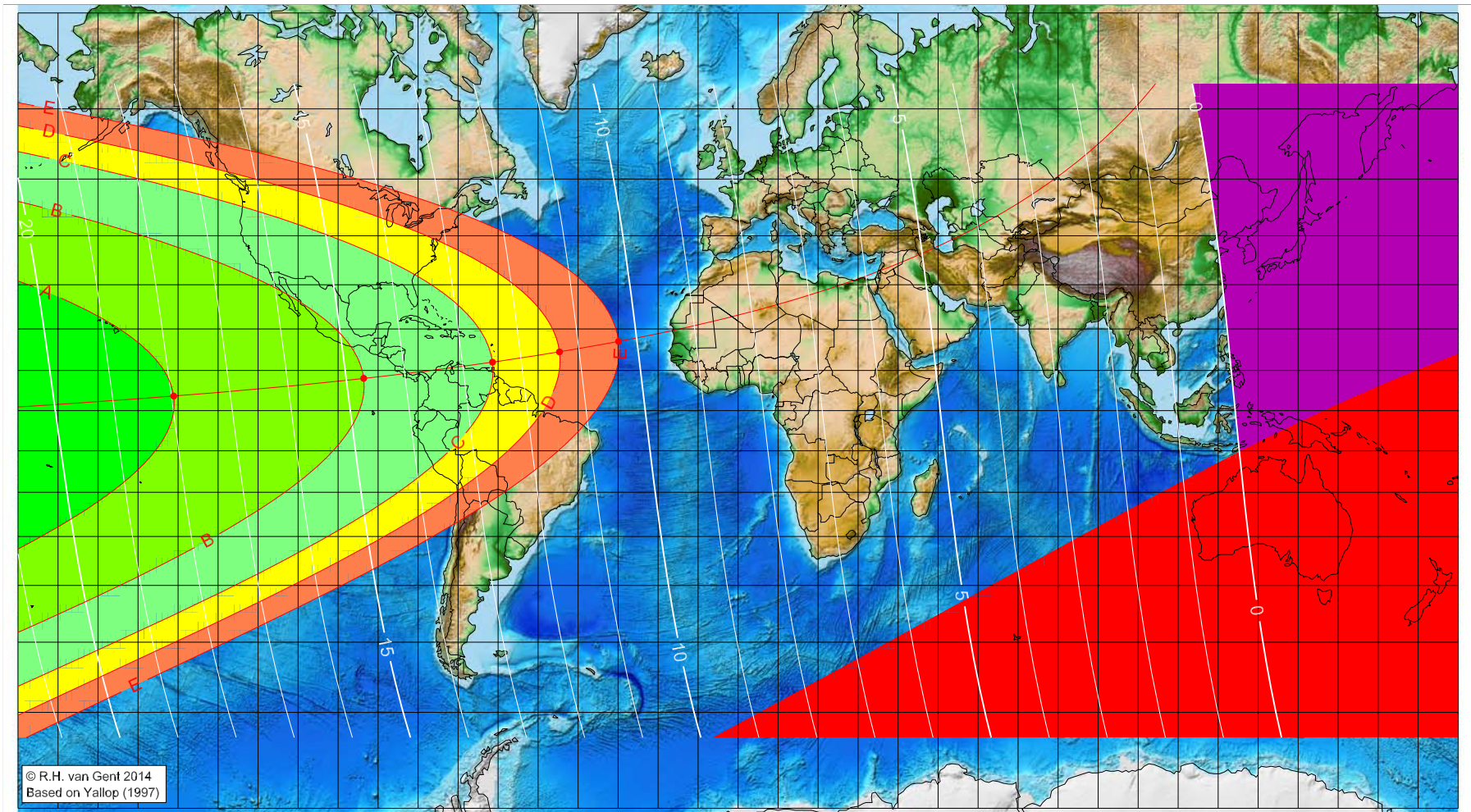
Astronomical (Brown) Lunation Number = -16082
Islamic Lunation Number = 3
 $TT - UT [= \Delta T] = 1.27 \text{ h}$

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Rabī al-Ākhir 1 AH (proleptic)

Global visibility map for 10 October 622 [Sunday]
Day of luni-solar conjunction



Astronomical New Moon: 10 October 622, 9h 34.9m (UTC)

First visibility (●)

Astronomical (Brown) Lunation Number = -16081
Islamic Lunation Number = 4
TT - UT [= ΔT] = 1.27 h

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

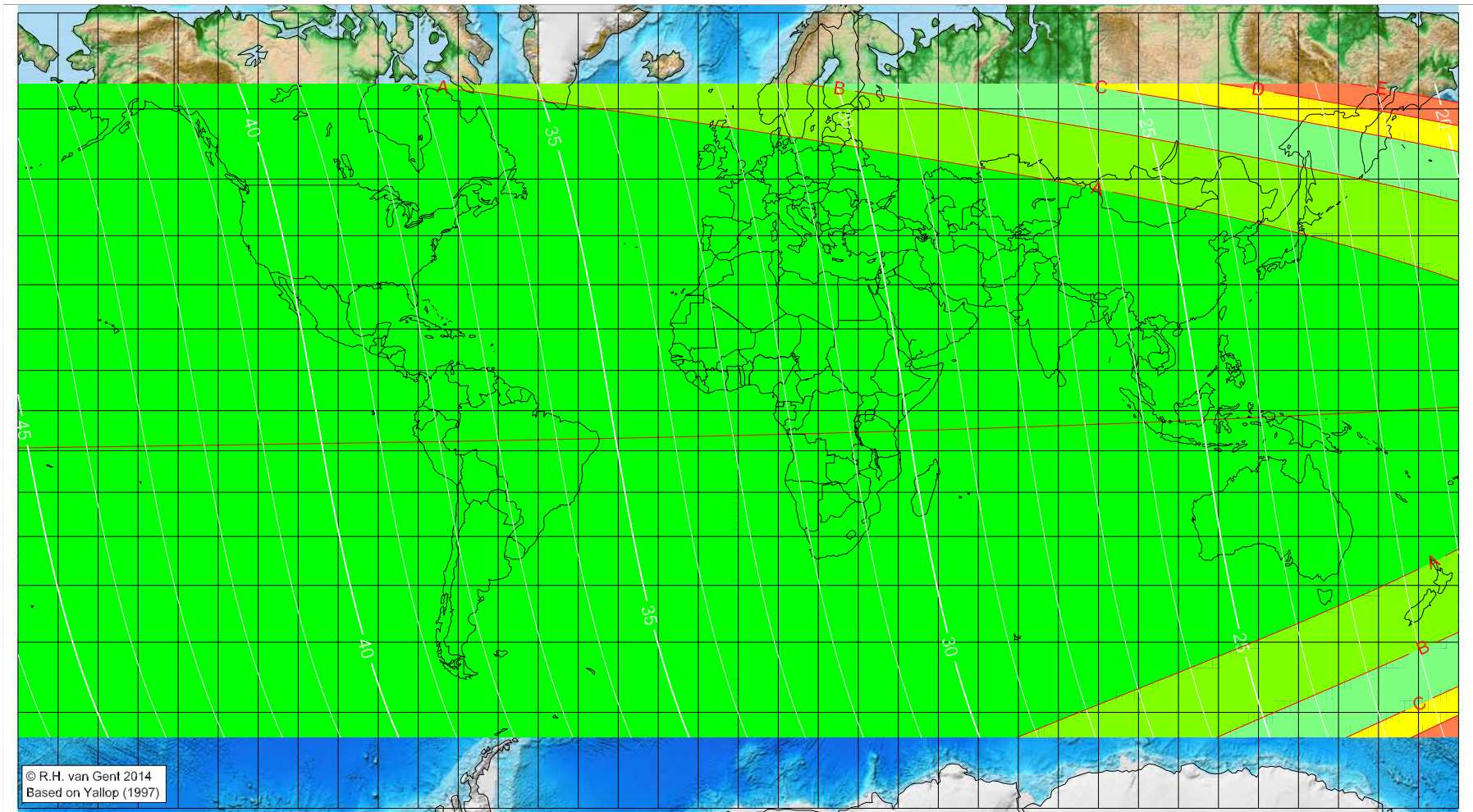
Longitude (°)	Latitude (°)	Lunar age (h)
-141.08	3.63	17.96
-93.60	8.04	14.70
-61.39	12.02	12.49
-44.66	14.52	11.33
-29.89	17.04	10.31

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Rabīʿ al-Ākhir 1 AH (proleptic)

Global visibility map for 11 October 622 [Monday]
Day after luni-solar conjunction



© R.H. van Gent 2014
Based on Yallop (1997)

Astronomical New Moon: 10 October 622, 9h 34.9m (UTC)

First visibility (•)

Longitude (°)	Latitude (°)	Lunar age (h)
		visible on the previous evening
		visible on the previous evening
		visible on the previous evening
		visible on the previous evening

Astronomical (Brown) Lunation Number = -16081
Islamic Lunation Number = 4
TT - UT [= ΔT] = 1.27 h

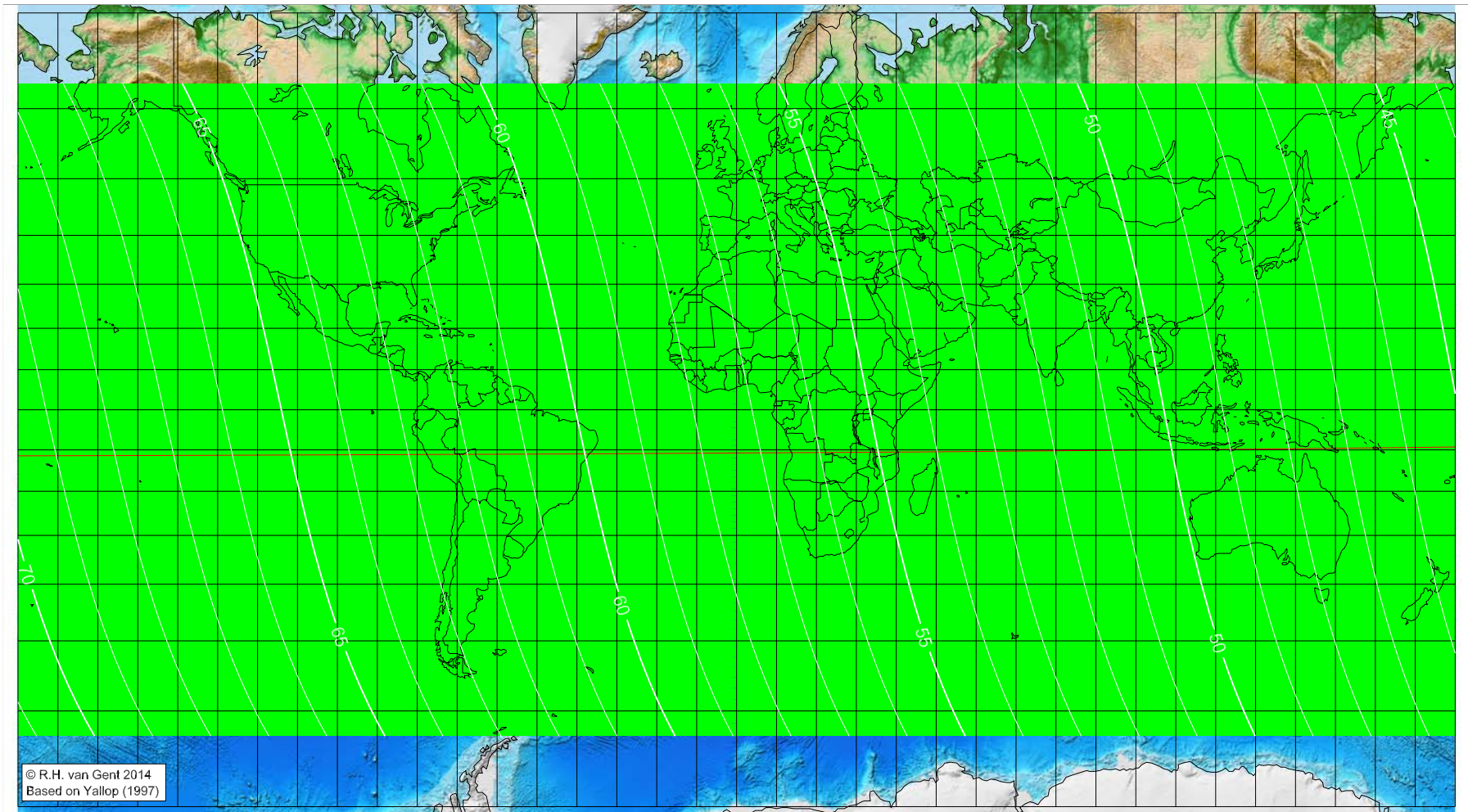
Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Rabīʿ al-Ākhir 1 AH (proleptic)

Global visibility map for 12 October 622 [Tuesday]
 Second day after luni-solar conjunction



Astronomical New Moon: 10 October 622, 9h 34.9m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

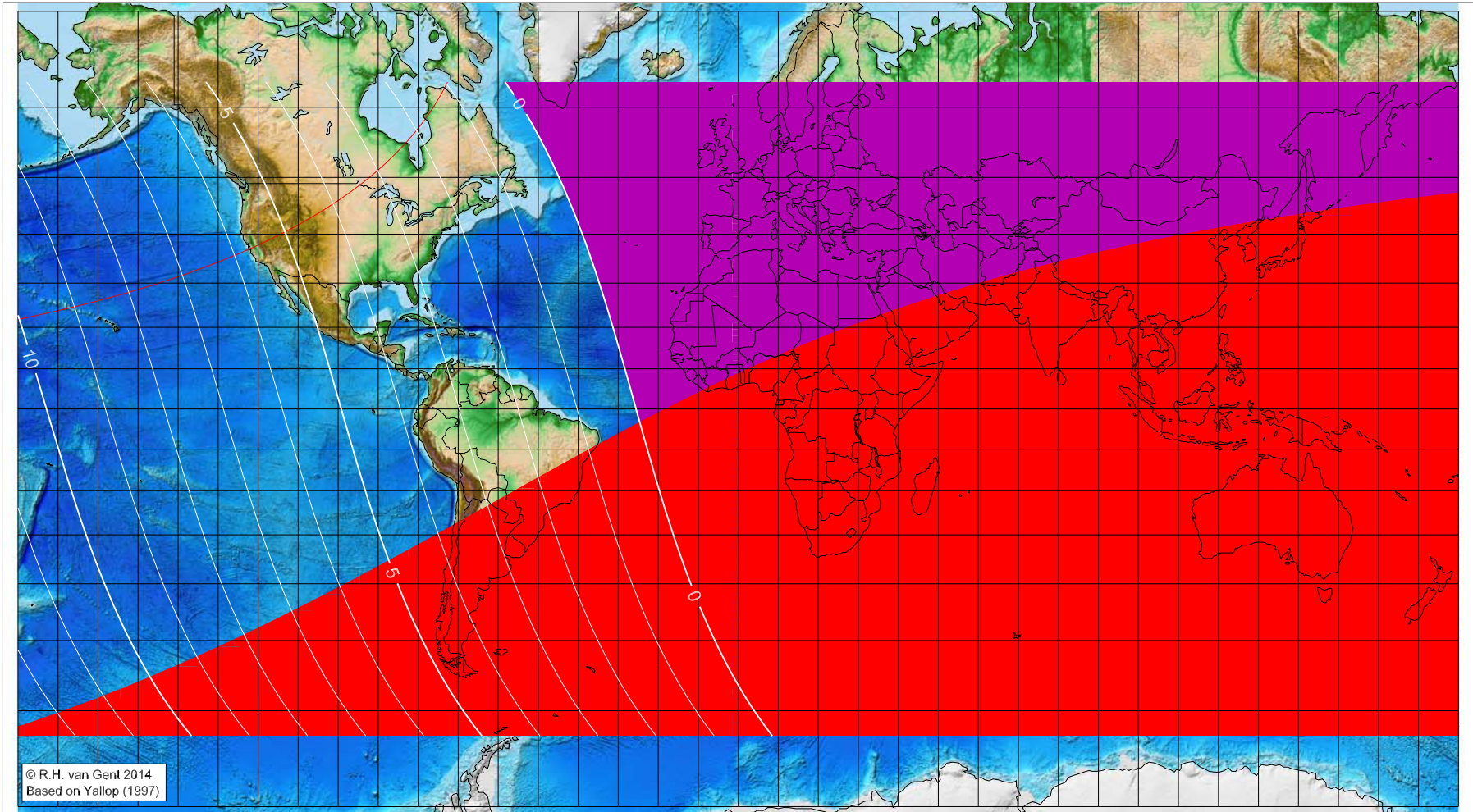
Astronomical (Brown) Lunation Number = -16081
 Islamic Lunation Number = 4
 TT – UT [= ΔT] = 1.27 h

Lunar age (in hours) is given for the 'best time',
 defined as the moment 4/9ths between sunset
 and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Jumādā 'l-Ūlā 1 AH (proleptic)

Global visibility map for 8 November 622 [Monday]
Day of luni-solar conjunction



Astronomical New Moon: 8 November 622, 19h 32.2m (UTC)

First visibility (•)

Astronomical (Brown) Lunation Number = -16080
Islamic Lunation Number = 5
TT - UT [= ΔT] = 1.27 h

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

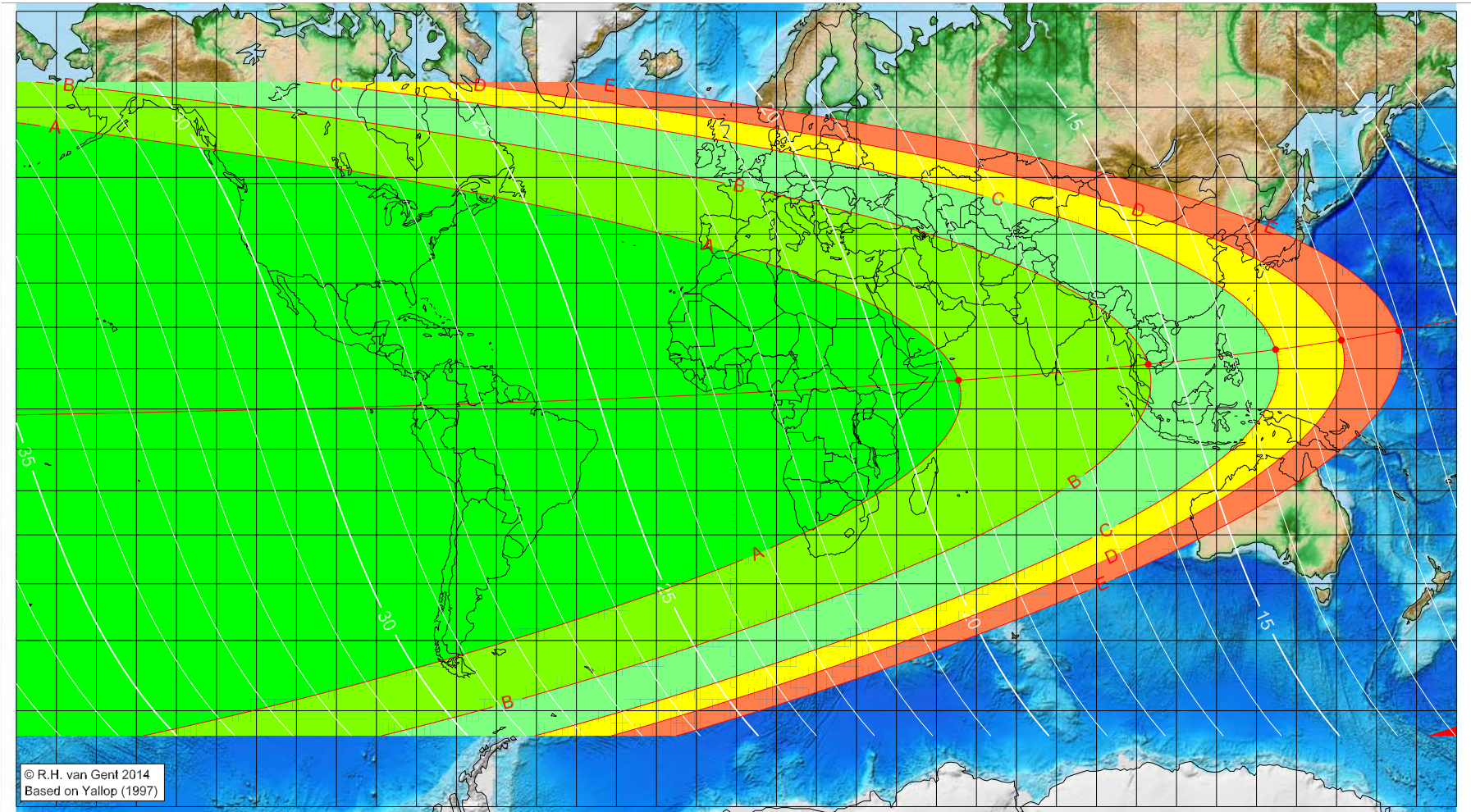
Longitude (°) Latitude (°) Lunar age (h)
not visible until the next evening
not visible until the next evening
not visible until the next evening
not visible until the next evening
not visible until the next evening

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Jumādā 'l-Ūlā 1 AH (proleptic)

Global visibility map for 9 November 622 [Tuesday]
Day after luni-solar conjunction



Astronomical New Moon: 8 November 622, 19h 32.2m (UTC)

First visibility (●)

Astronomical (Brown) Lunation Number = -16080
Islamic Lunation Number = 5
TT - UT [= ΔT] = 1.27 h

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

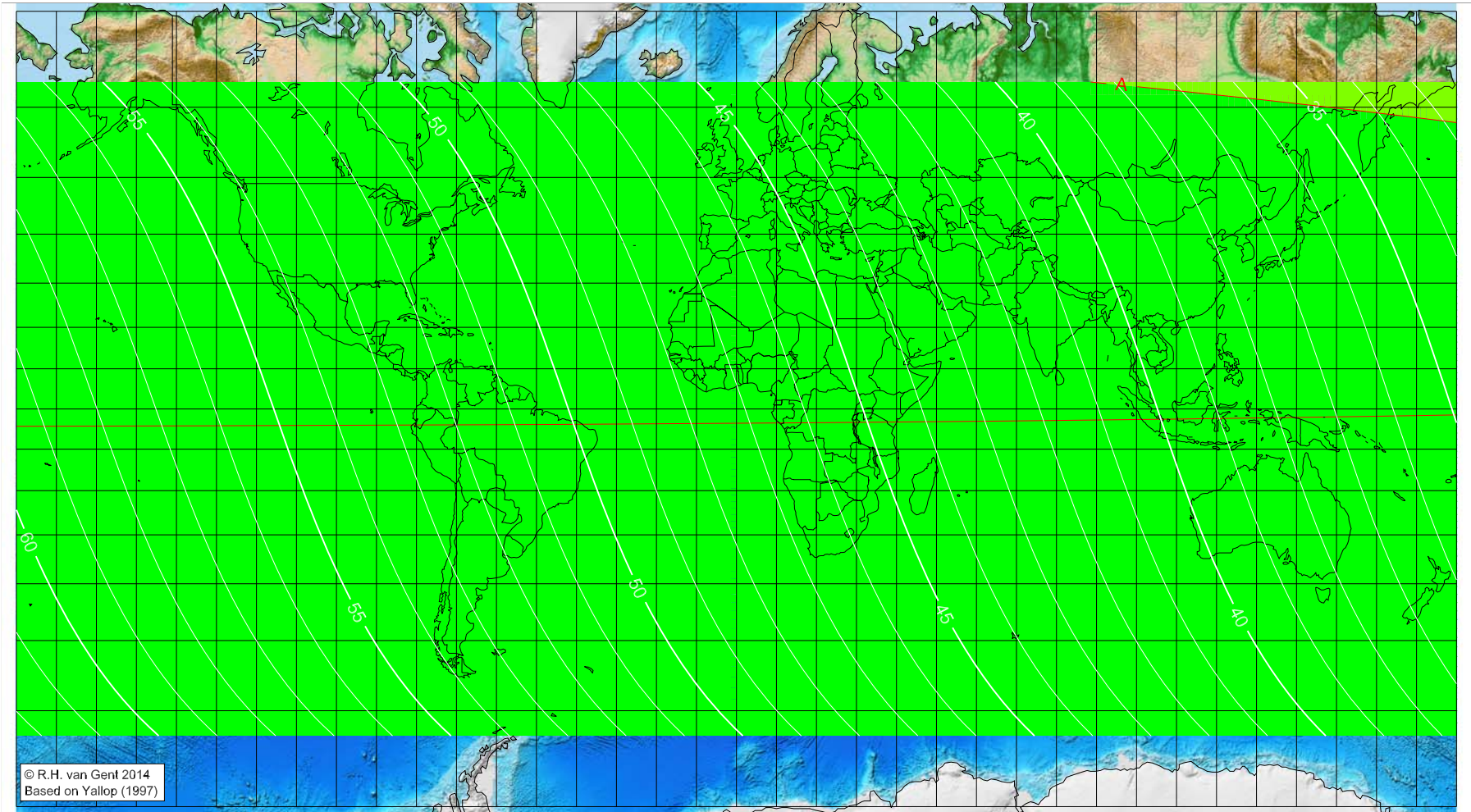
Longitude (°)	Latitude (°)	Lunar age (h)
55.51	7.16	18.78
102.94	11.10	15.48
134.77	14.69	13.25
151.17	16.94	12.09
165.53	19.21	11.06

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Jumādā 'l-Ūlā 1 AH (proleptic)

Global visibility map for 10 November 622 [Wednesday]
 Second day after luni-solar conjunction



Astronomical New Moon: 8 November 622, 19h 32.2m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

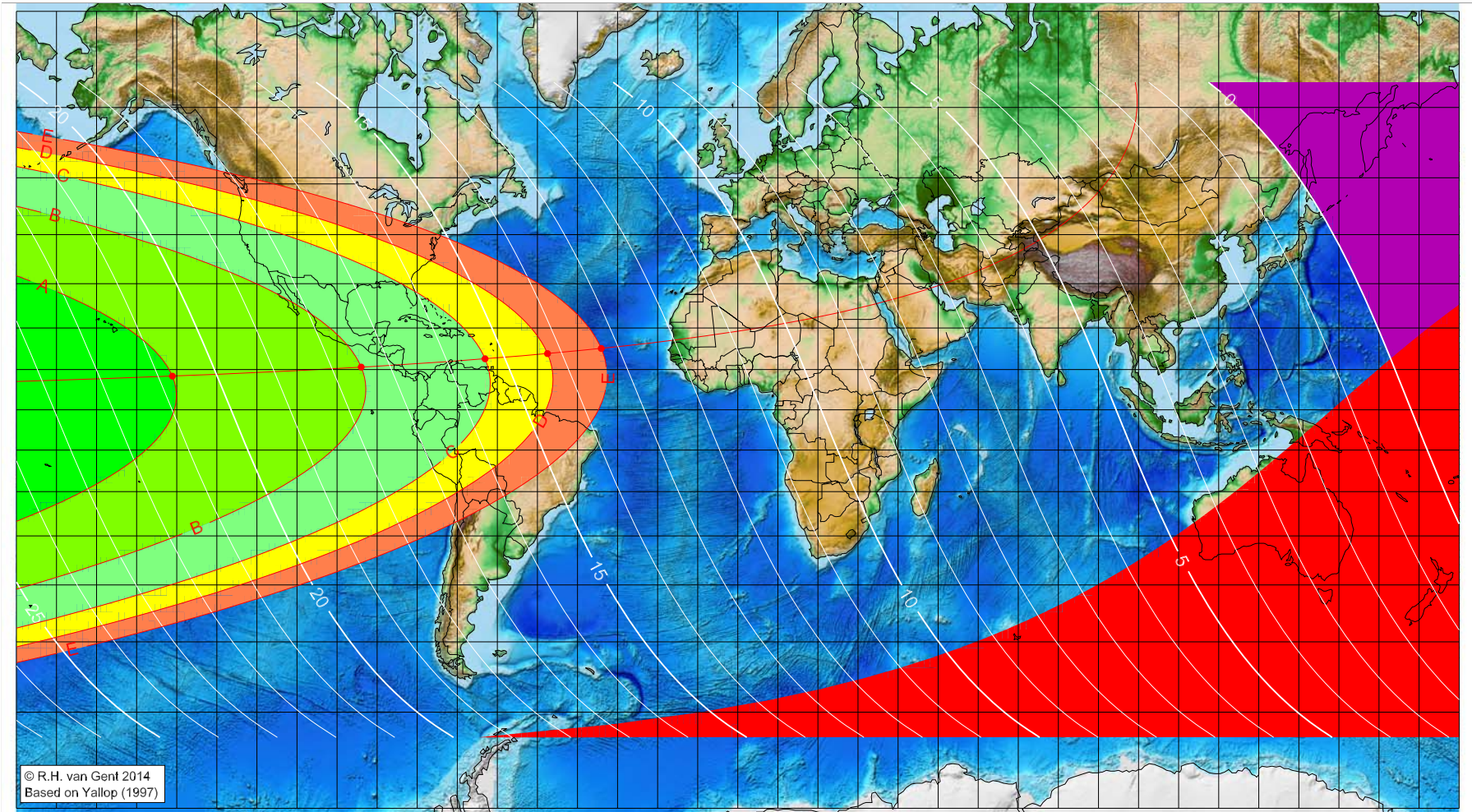
Astronomical (Brown) Lunation Number = -16080
 Islamic Lunation Number = 5
 $TT - UT [= \Delta T] = 1.27 \text{ h}$

Lunar age (in hours) is given for the 'best time',
 defined as the moment 4/9ths between sunset
 and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Jumādā 'l-Ākhira 1 AH (proleptic)

Global visibility map for 8 December 622 [Wednesday]
Day of luni-solar conjunction



© R.H. van Gent 2014
Based on Yallop (1997)

Astronomical New Moon: 8 December 622, 6h 46.1m (UTC)

First visibility (•)

Astronomical (Brown) Lunation Number = -16079
Islamic Lunation Number = 6
TT - UT [= ΔT] = 1.27 h

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

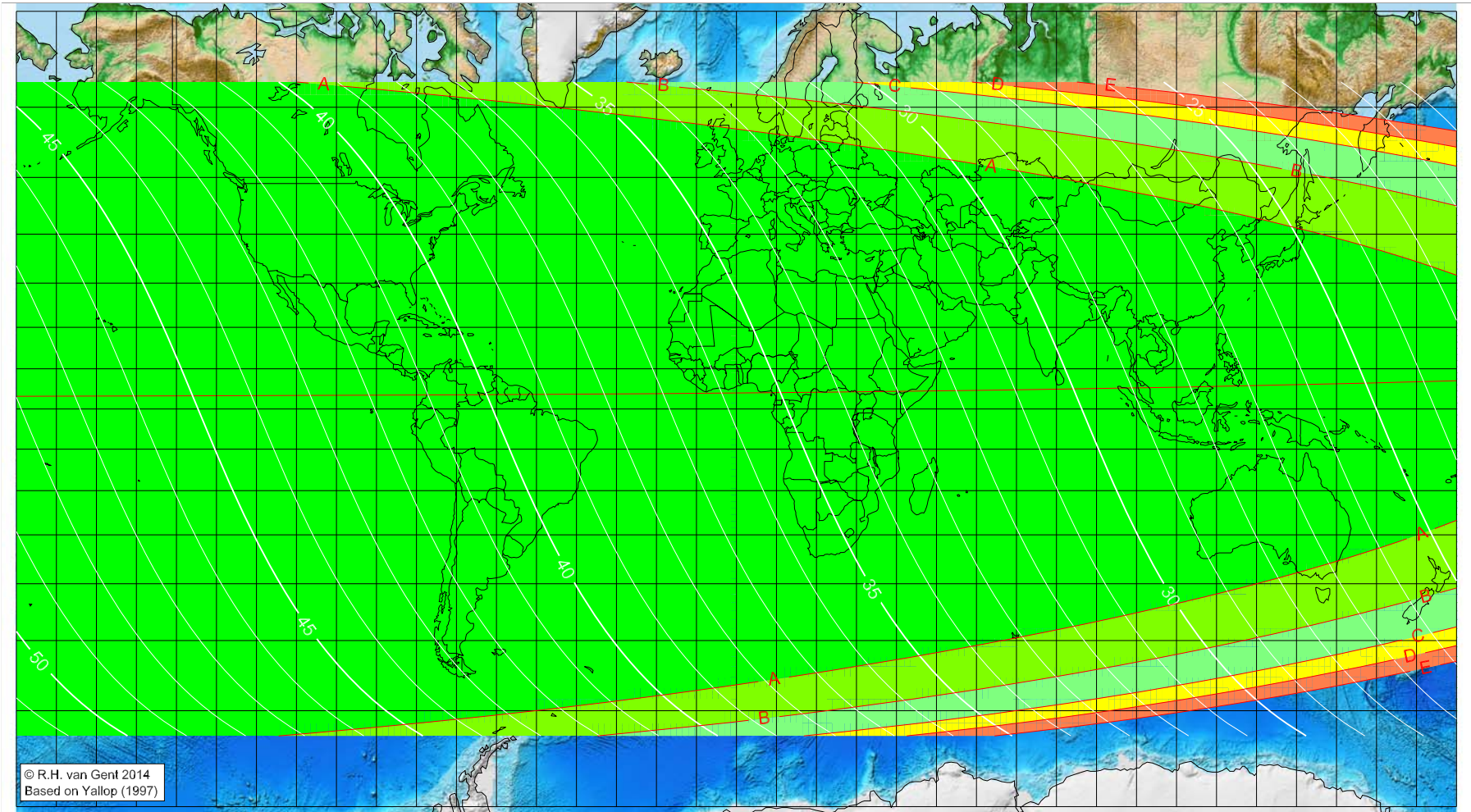
Longitude (°)	Latitude (°)	Lunar age (h)
-141.08	8.37	20.76
-93.97	10.60	17.50
-63.07	12.62	15.34
-47.48	13.88	14.24
-34.07	15.13	13.30

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Jumādā 'l-Ākhira 1 AH (proleptic)

Global visibility map for 9 December 622 [Thursday]
Day after luni-solar conjunction



© R.H. van Gent 2014
Based on Yallop (1997)

Astronomical New Moon: 8 December 622, 6h 46.1m (UTC)

First visibility (•)

Longitude (°)	Latitude (°)	Lunar age (h)
		visible on the previous evening
		visible on the previous evening
		visible on the previous evening
		visible on the previous evening

Astronomical (Brown) Lunation Number = -16079
Islamic Lunation Number = 6
TT - UT [= ΔT] = 1.27 h

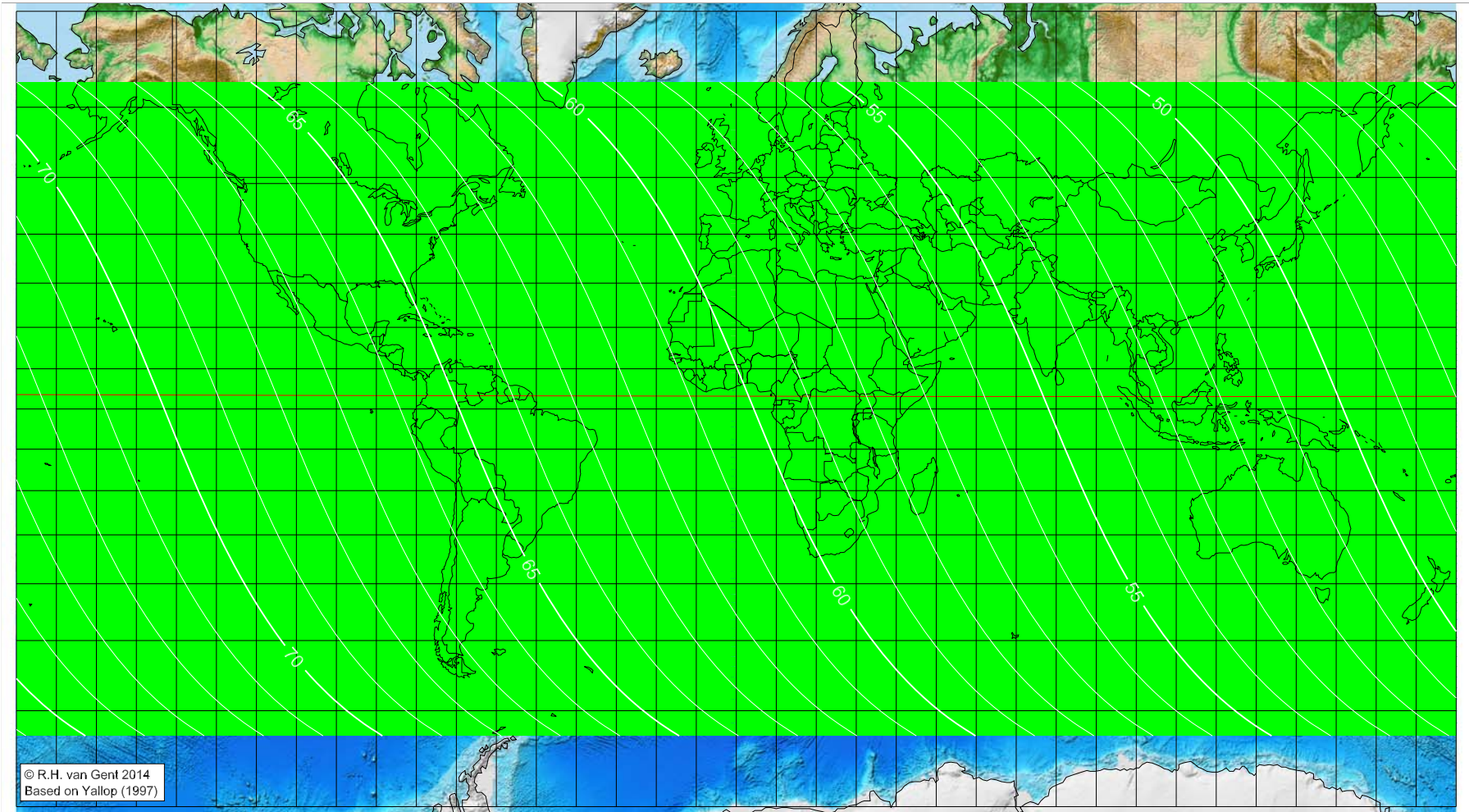
- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Jumādā 'l-Ākhira 1 AH (proleptic)

Global visibility map for 10 December 622 [Friday]
Second day after luni-solar conjunction



Astronomical New Moon: 8 December 622, 6h 46.1m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

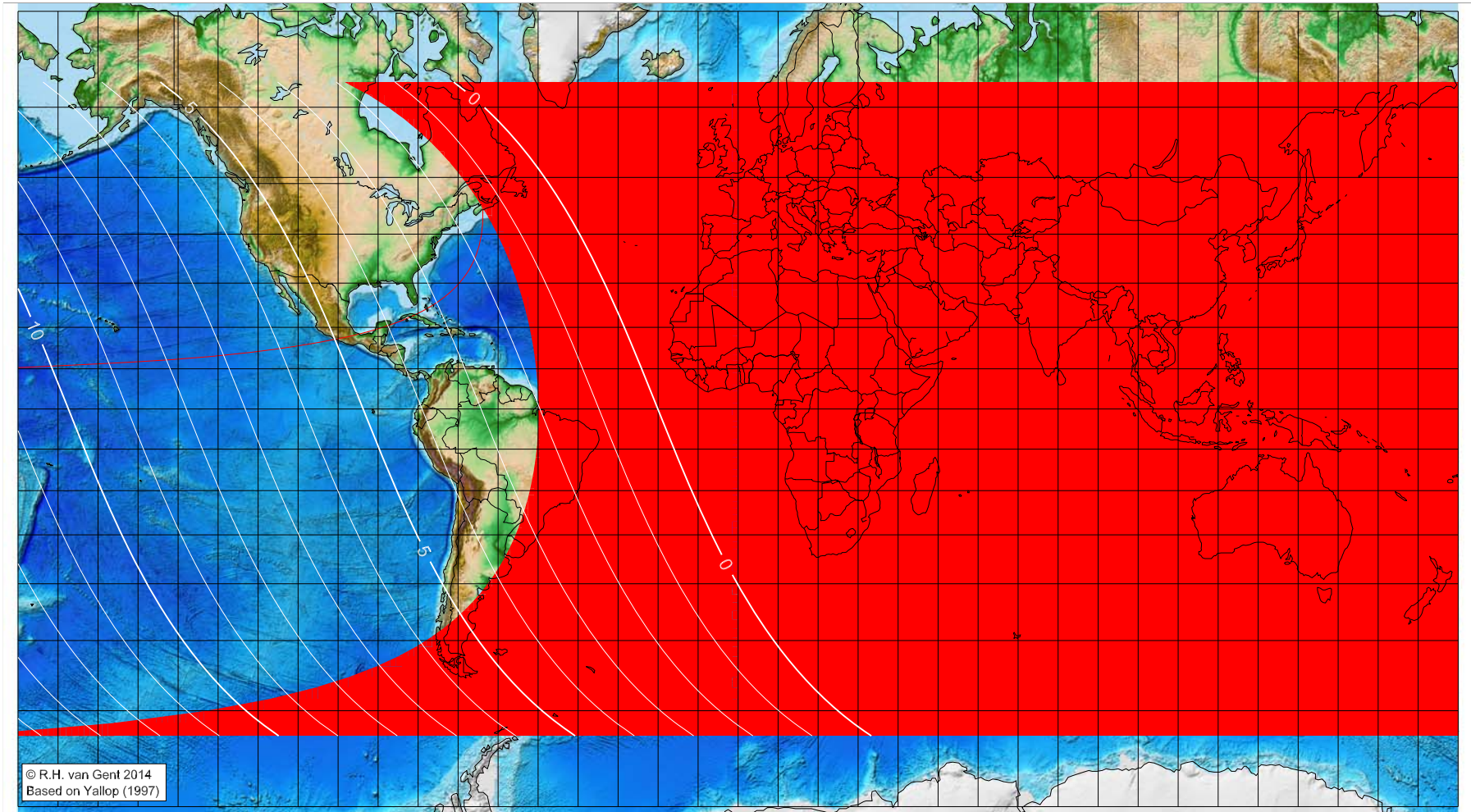
Astronomical (Brown) Lunation Number = -16079
Islamic Lunation Number = 6
TT – UT [= ΔT] = 1.27 h

Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Rajab 1 AH (proleptic)

Global visibility map for 6 January 623 [Thursday]
Day of luni-solar conjunction



Astronomical New Moon: 6 January 623, 19h 32.0m (UTC)

First visibility (•)

Longitude (°)	Latitude (°)	Lunar age (h)
		not visible until the next evening
		not visible until the next evening
		not visible until the next evening
		not visible until the next evening

Astronomical (Brown) Lunation Number = -16078
Islamic Lunation Number = 7
TT - UT [= ΔT] = 1.27 h

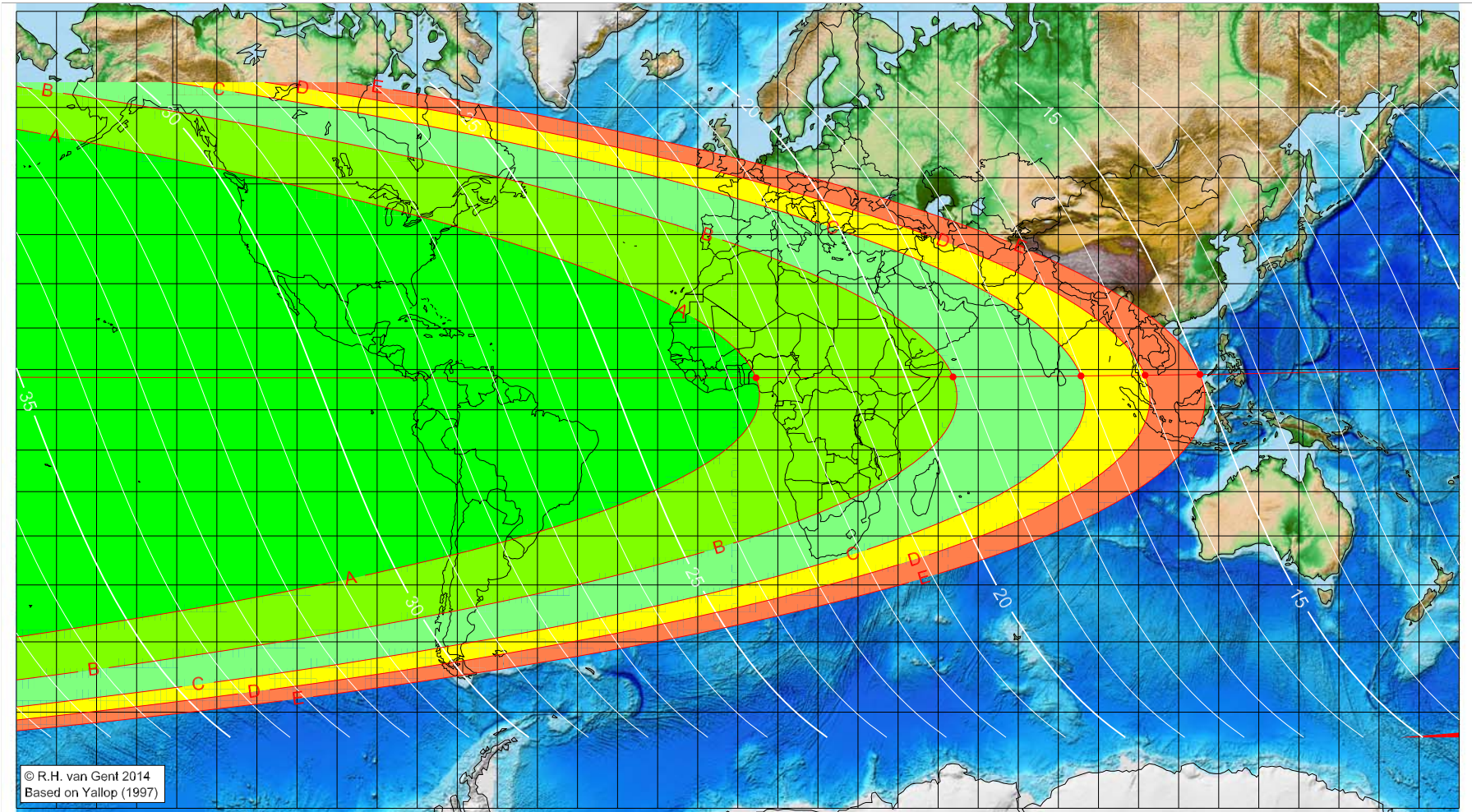
Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Rajab 1 AH (proleptic)

Global visibility map for 7 January 623 [Friday]
Day after luni-solar conjunction



Astronomical New Moon: 6 January 623, 19h 32.0m (UTC)

First visibility (●)

Astronomical (Brown) Lunation Number = -16078
Islamic Lunation Number = 7
TT - UT [= ΔT] = 1.27 h

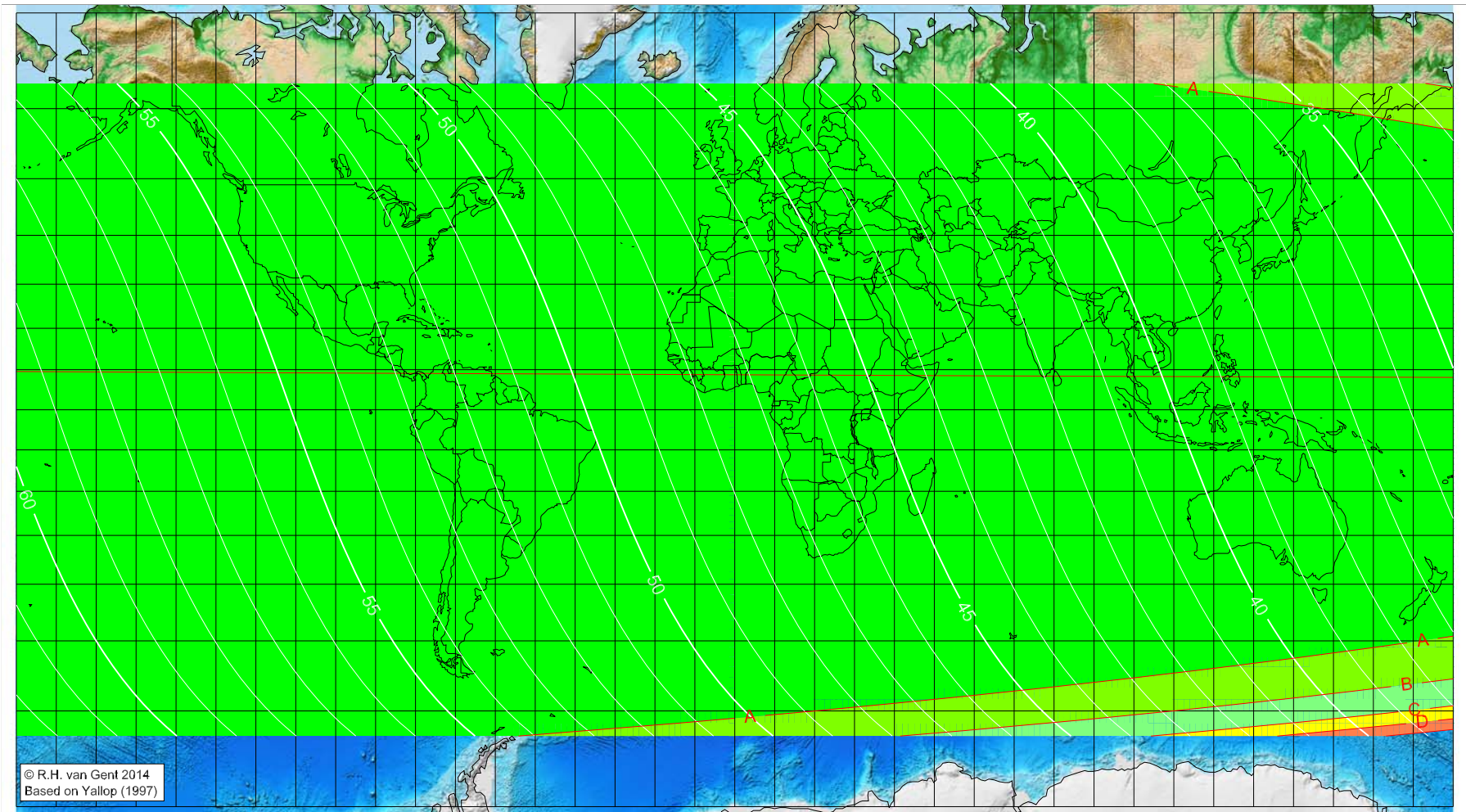
- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

Longitude (°)	Latitude (°)	Lunar age (h)
4.56	7.96	22.54
53.71	8.17	19.20
85.65	8.42	17.03
101.64	8.60	15.94
115.32	8.78	15.00

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

First visibility lunar crescent for Rajab 1 AH (proleptic)

Global visibility map for 8 January 623 [Saturday]
Second day after luni-solar conjunction



Astronomical New Moon: 6 January 623, 19h 32.0m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

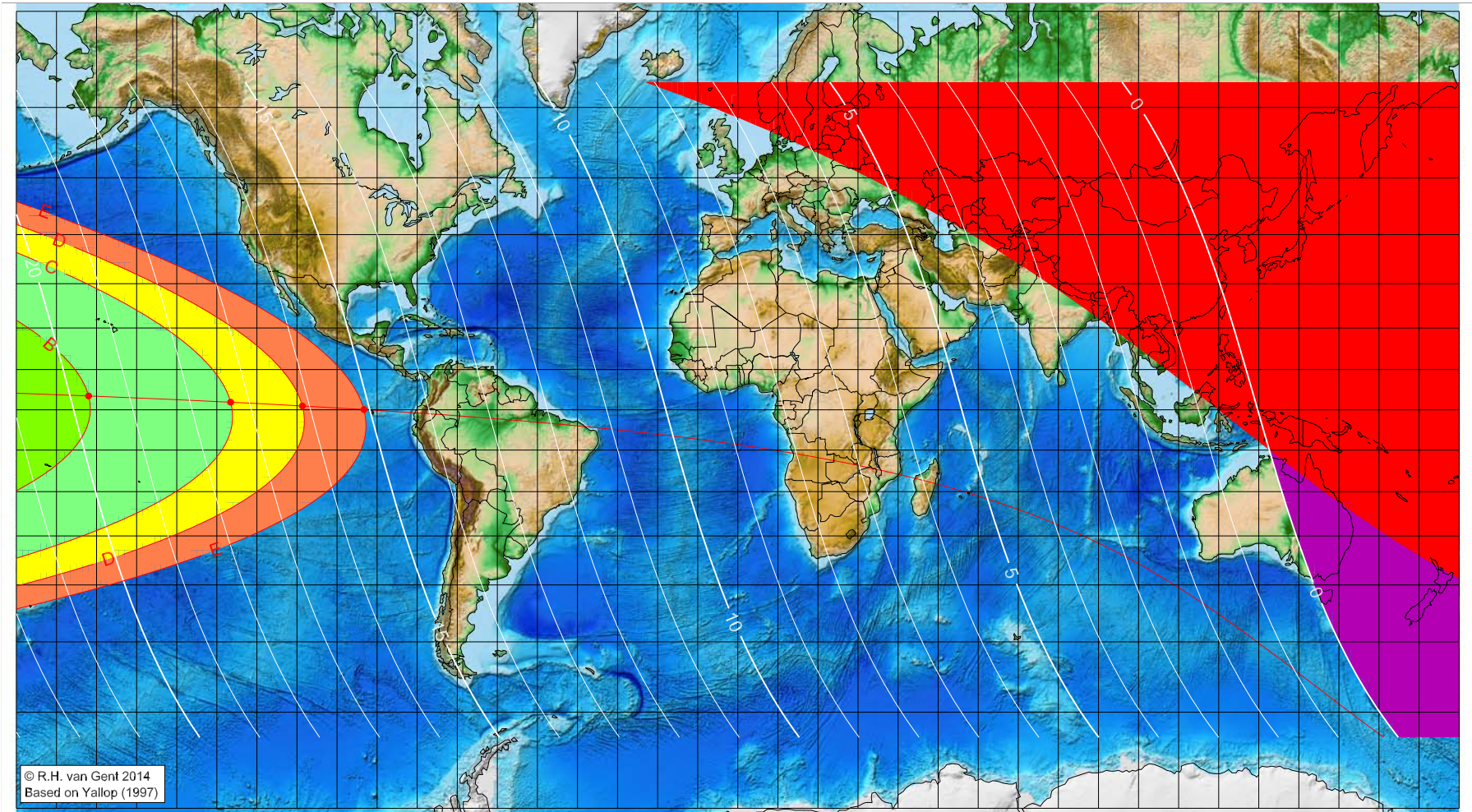
Astronomical (Brown) Lunation Number = -16078
Islamic Lunation Number = 7
 $TT - UT [= \Delta T] = 1.27 \text{ h}$

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Shaʿbān 1 AH (proleptic)

Global visibility map for 5 February 623 [Saturday]
Day of luni-solar conjunction



Astronomical New Moon: 5 February 623, 9h 40.5m (UTC)

First visibility (●)

Astronomical (Brown) Lunation Number = -16077
Islamic Lunation Number = 8
TT - UT [= ΔT] = 1.27 h

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)

Longitude (°)	Latitude (°)	Lunar age (h)
-162.00	3.45	19.69
-126.54	1.89	17.31
-108.67	0.96	16.12
-93.28	0.07	15.10

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

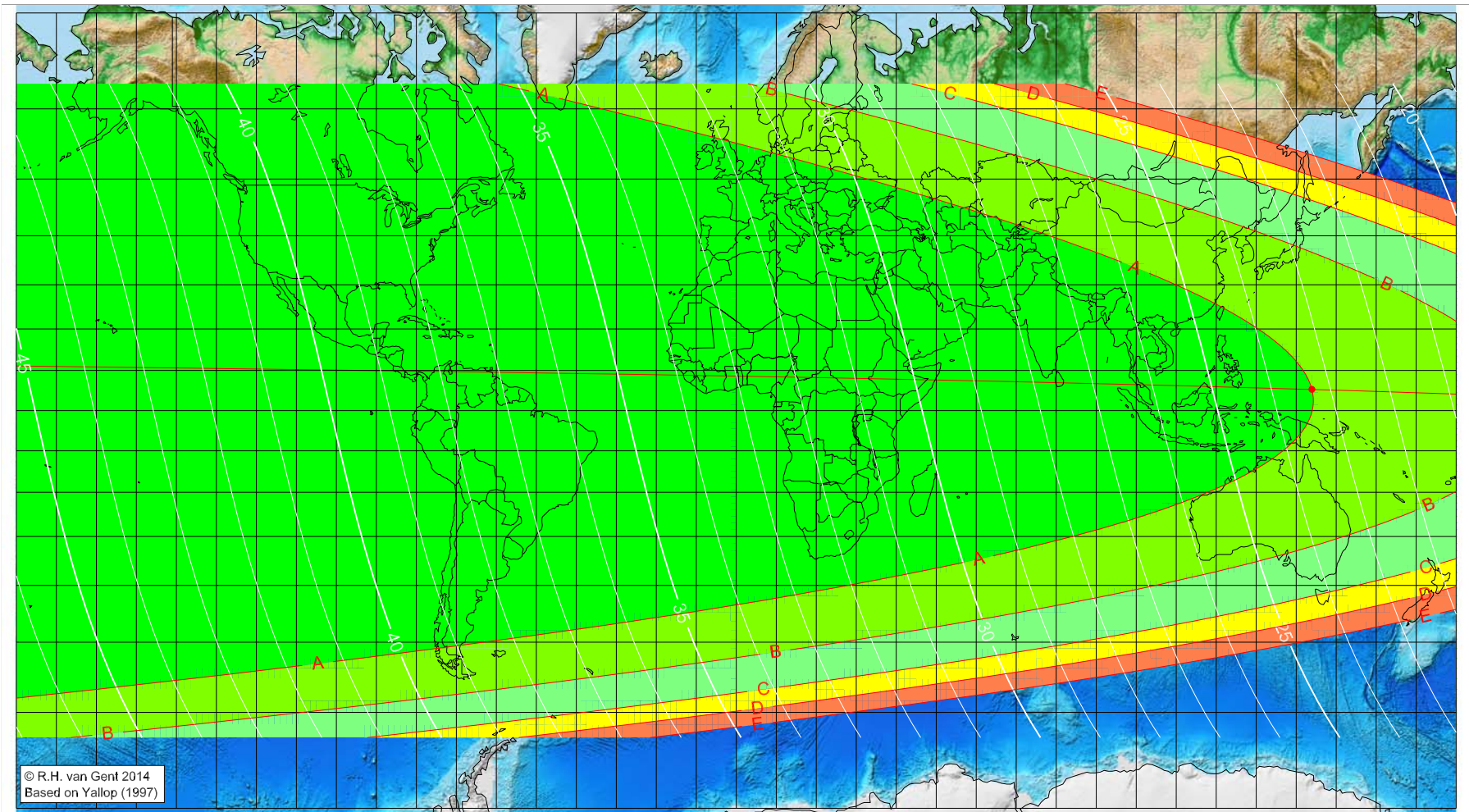
■ moonset before sunset

■ before conjunction (astronomical new moon)

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Shaʿbān 1 AH (proleptic)

Global visibility map for 6 February 623 [Sunday]
Day after luni-solar conjunction



Astronomical New Moon: 5 February 623, 9h 40.5m (UTC)

First visibility (•)

Longitude (°)	Latitude (°)	Lunar age (h)
143.93	5.31	23.31

visible on the previous evening
visible on the previous evening
visible on the previous evening

Astronomical (Brown) Lunation Number = -16077
Islamic Lunation Number = 8
TT - UT [= ΔT] = 1.27 h

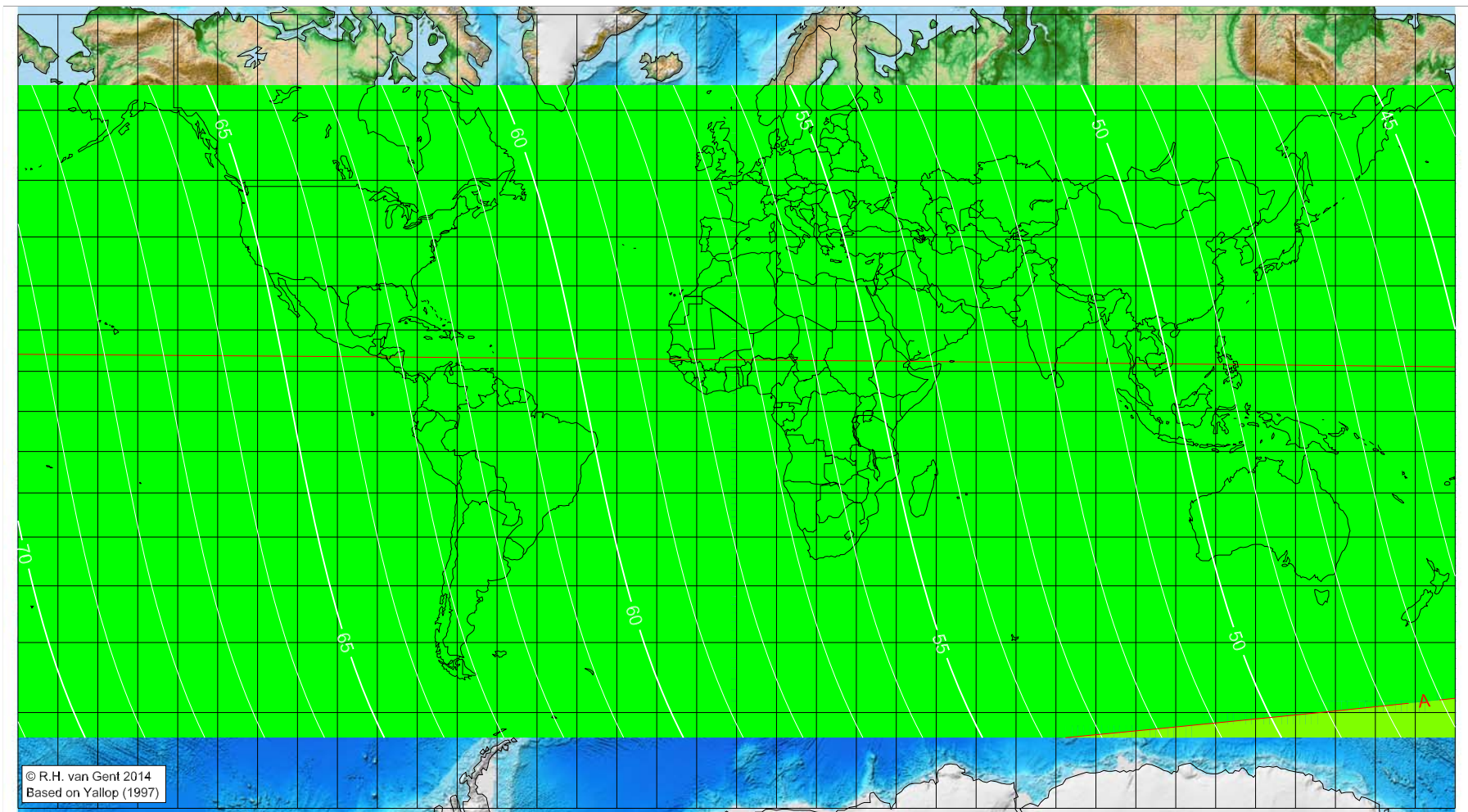
- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Shaʿbān 1 AH (proleptic)

Global visibility map for 7 February 623 [Monday]
Second day after luni-solar conjunction



© R.H. van Gent 2014
Based on Yallop (1997)

Astronomical New Moon: 5 February 623, 9h 40.5m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

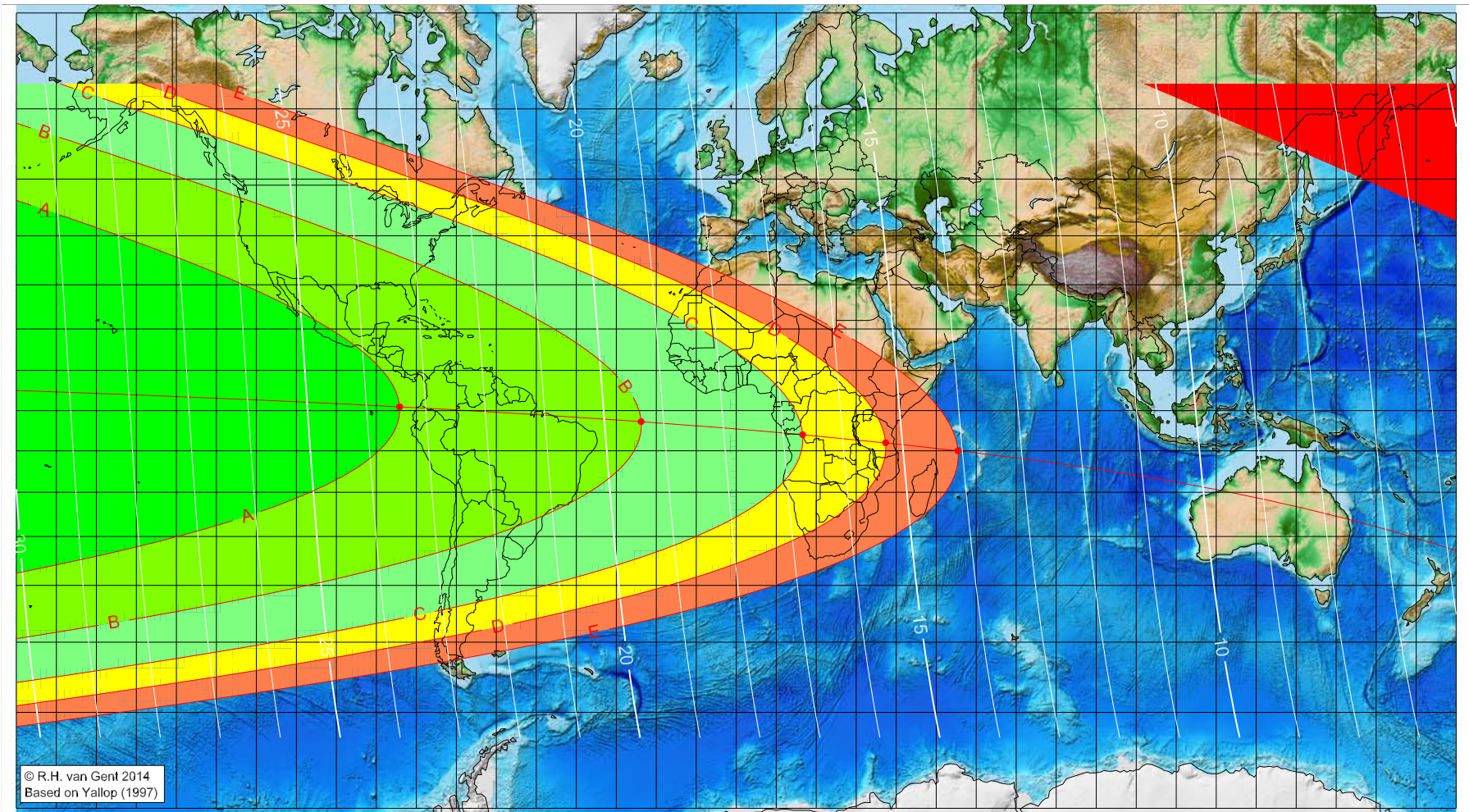
Astronomical (Brown) Lunation Number = -16077
Islamic Lunation Number = 8
TT – UT [= ΔT] = 1.27 h

Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Ramaḍān 1 AH (proleptic)

Global visibility map for 7 March 623 [Monday]
Day of luni-solar conjunction



© R.H. van Gent 2014
Based on Yallop (1997)

Astronomical New Moon: 7 March 623, 0h 44.7m (UTC)

First visibility (●)

Astronomical (Brown) Lunation Number = -16076
Islamic Lunation Number = 9
TT - UT [= ΔT] = 1.27 h

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)

Longitude (°)	Latitude (°)	Lunar age (h)
-84.17	0.94	23.44
-23.80	-2.76	19.38
16.60	-6.01	16.67
37.33	-8.01	15.28
55.44	-9.98	14.07

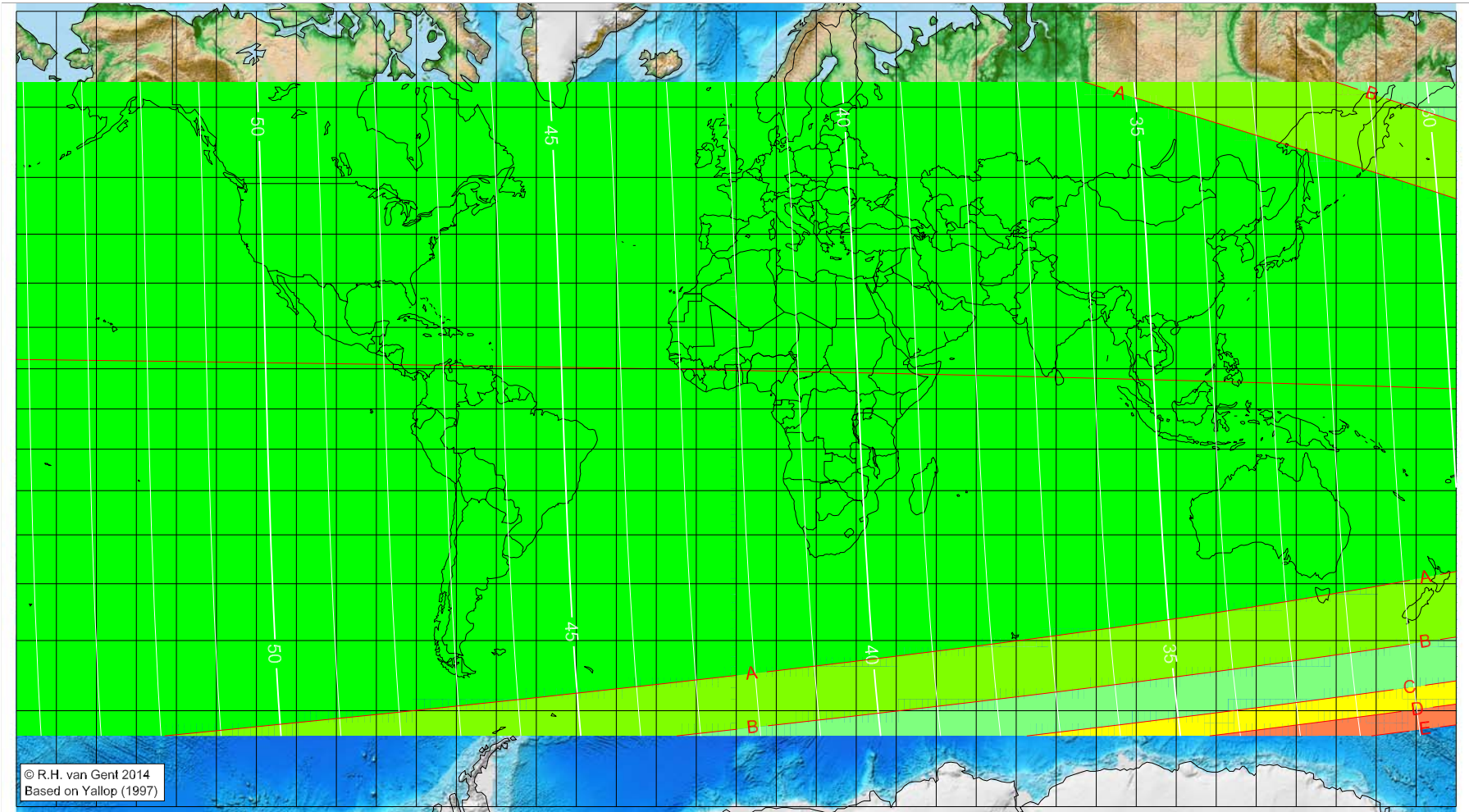
Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

- moonset before sunset
- before conjunction (astronomical new moon)

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Ramaḍān 1 AH (proleptic)

Global visibility map for 8 March 623 [Tuesday]
Day after luni-solar conjunction



Astronomical New Moon: 7 March 623, 0h 44.7m (UTC)

First visibility (•)

Longitude (°)	Latitude (°)	Lunar age (h)
		visible on the previous evening
		visible on the previous evening
		visible on the previous evening
		visible on the previous evening

Astronomical (Brown) Lunation Number = -16076
Islamic Lunation Number = 9
TT - UT [= ΔT] = 1.27 h

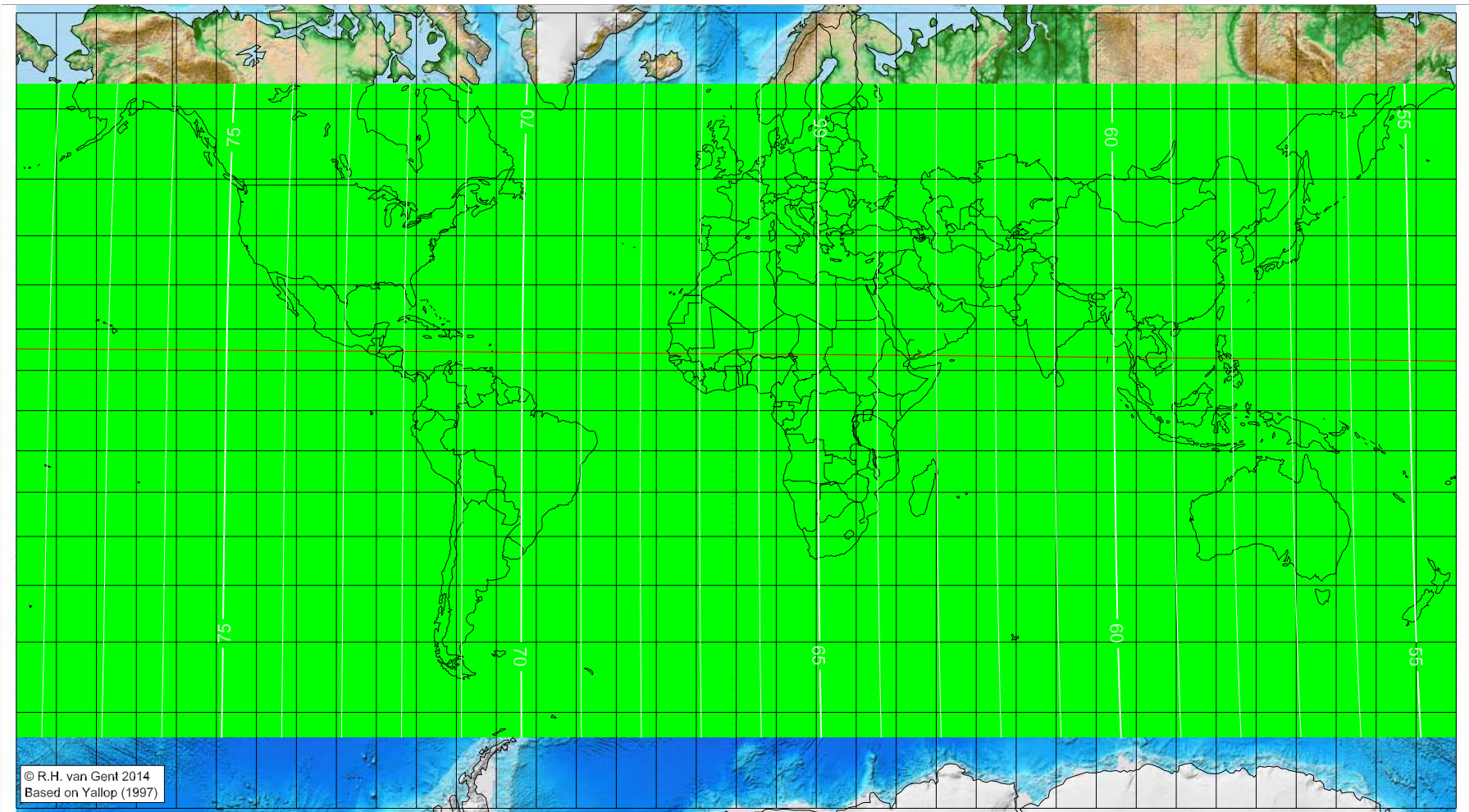
- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Ramaḍān 1 AH (proleptic)

Global visibility map for 9 March 623 [Wednesday]
 Second day after luni-solar conjunction



Astronomical New Moon: 7 March 623, 0h 44.7m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

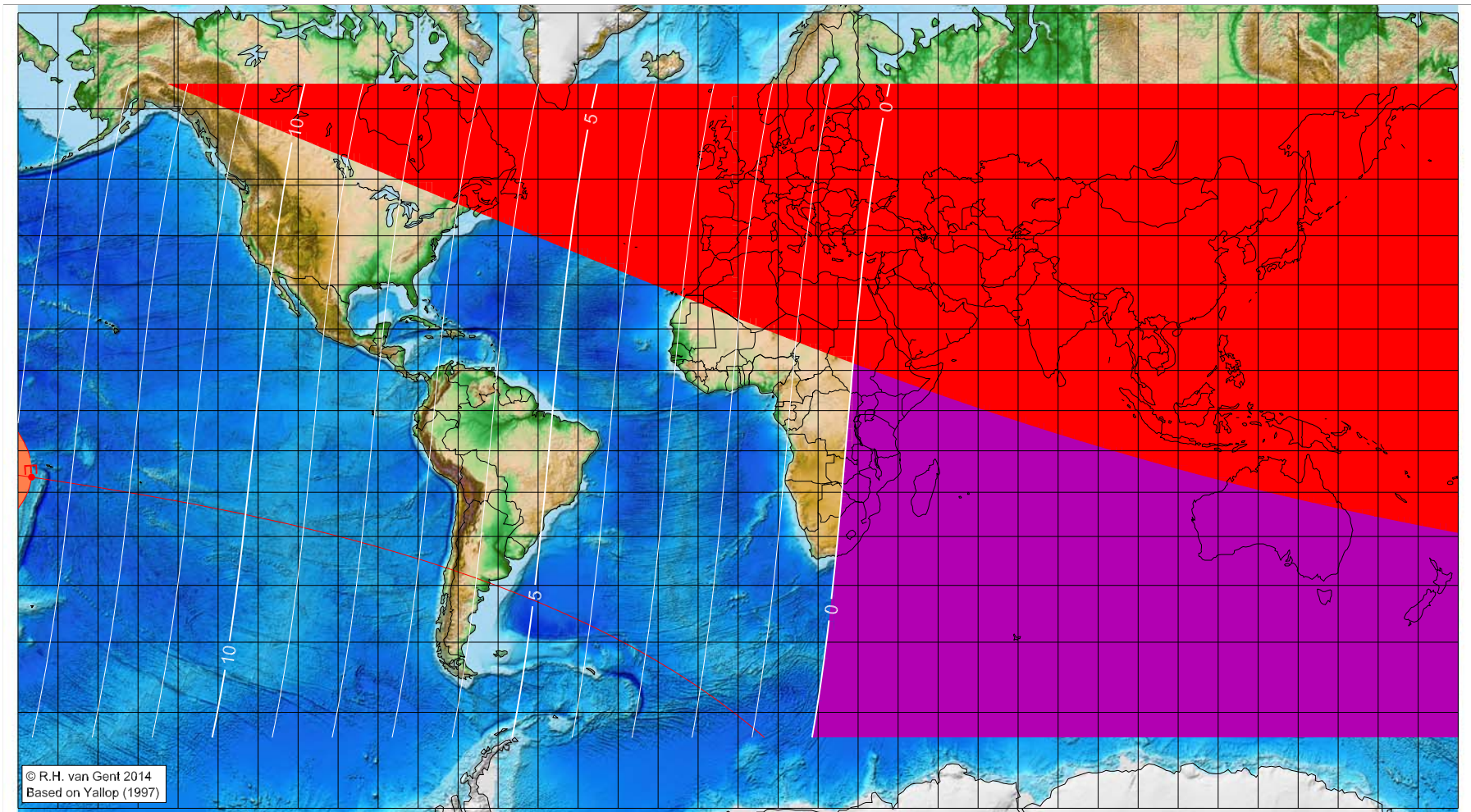
Astronomical (Brown) Lunation Number = -16076
 Islamic Lunation Number = 9
 $TT - UT [= \Delta T] = 1.27 \text{ h}$

Lunar age (in hours) is given for the 'best time',
 defined as the moment 4/9ths between sunset
 and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Shawwāl 1 AH (proleptic)

Global visibility map for 5 April 623 [Tuesday]
Day of luni-solar conjunction



© R.H. van Gent 2014
Based on Yallop (1997)

Astronomical New Moon: 5 April 623, 16h 15.7m (UTC)

First visibility (•)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)

■ moonset before sunset

■ before conjunction (astronomical new moon)

Longitude (°)	Latitude (°)	Lunar age (h)
-176.62	-16.41	13.67

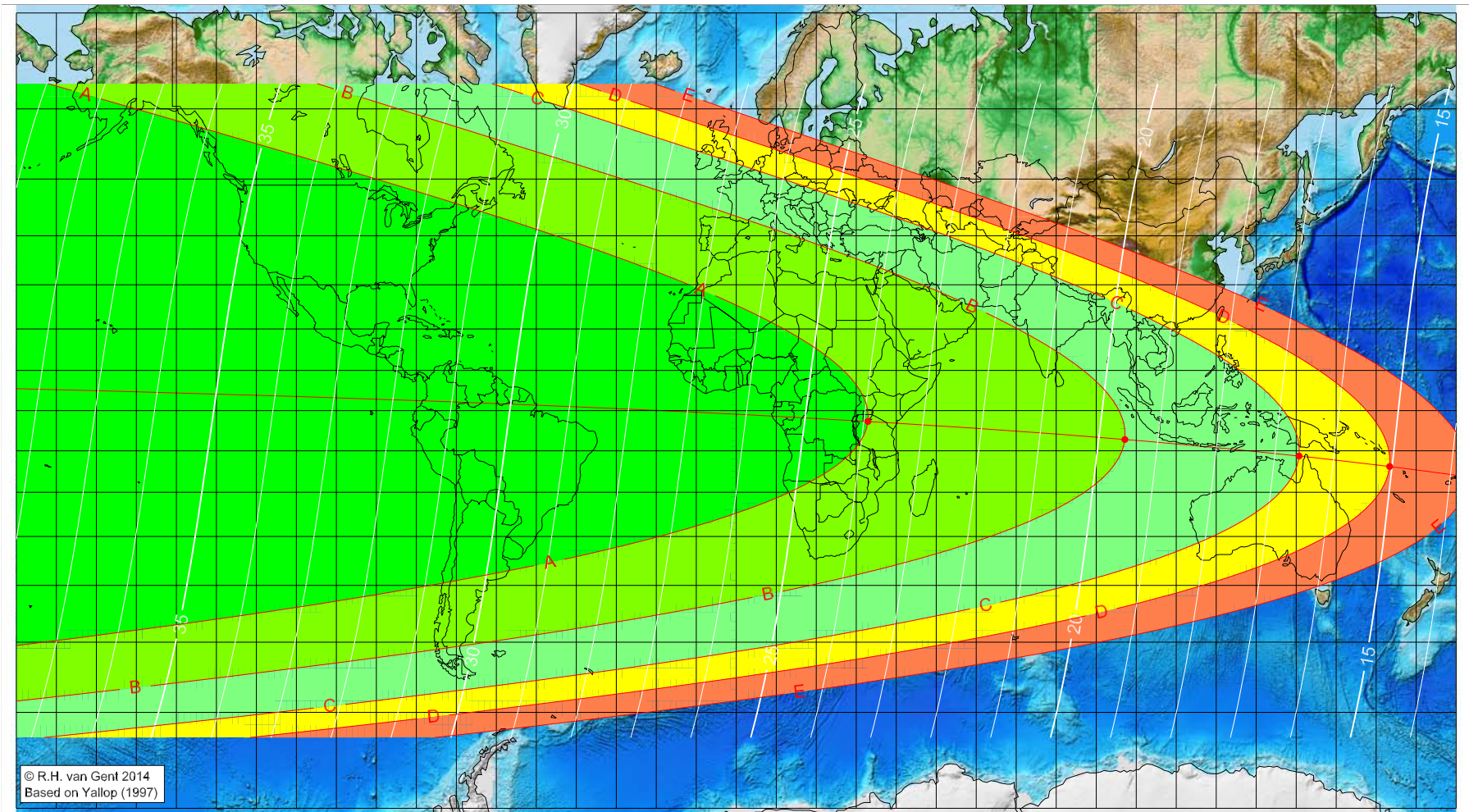
Astronomical (Brown) Lunation Number = -16075
Islamic Lunation Number = 10
TT – UT [= ΔT] = 1.27 h

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Shawwāl 1 AH (proleptic)

Global visibility map for 6 April 623 [Wednesday]
Day after luni-solar conjunction



© R.H. van Gent 2014
Based on Yallop (1997)

Astronomical New Moon: 5 April 623, 16h 15.7m (UTC)

First visibility (•)

Astronomical (Brown) Lunation Number = -16075
Islamic Lunation Number = 10
TT - UT [= ΔT] = 1.27 h

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

Longitude (°)	Latitude (°)	Lunar age (h)
32.92	-2.71	23.93
97.16	-7.21	19.56
140.72	-11.28	16.59
163.37	-13.84	15.04

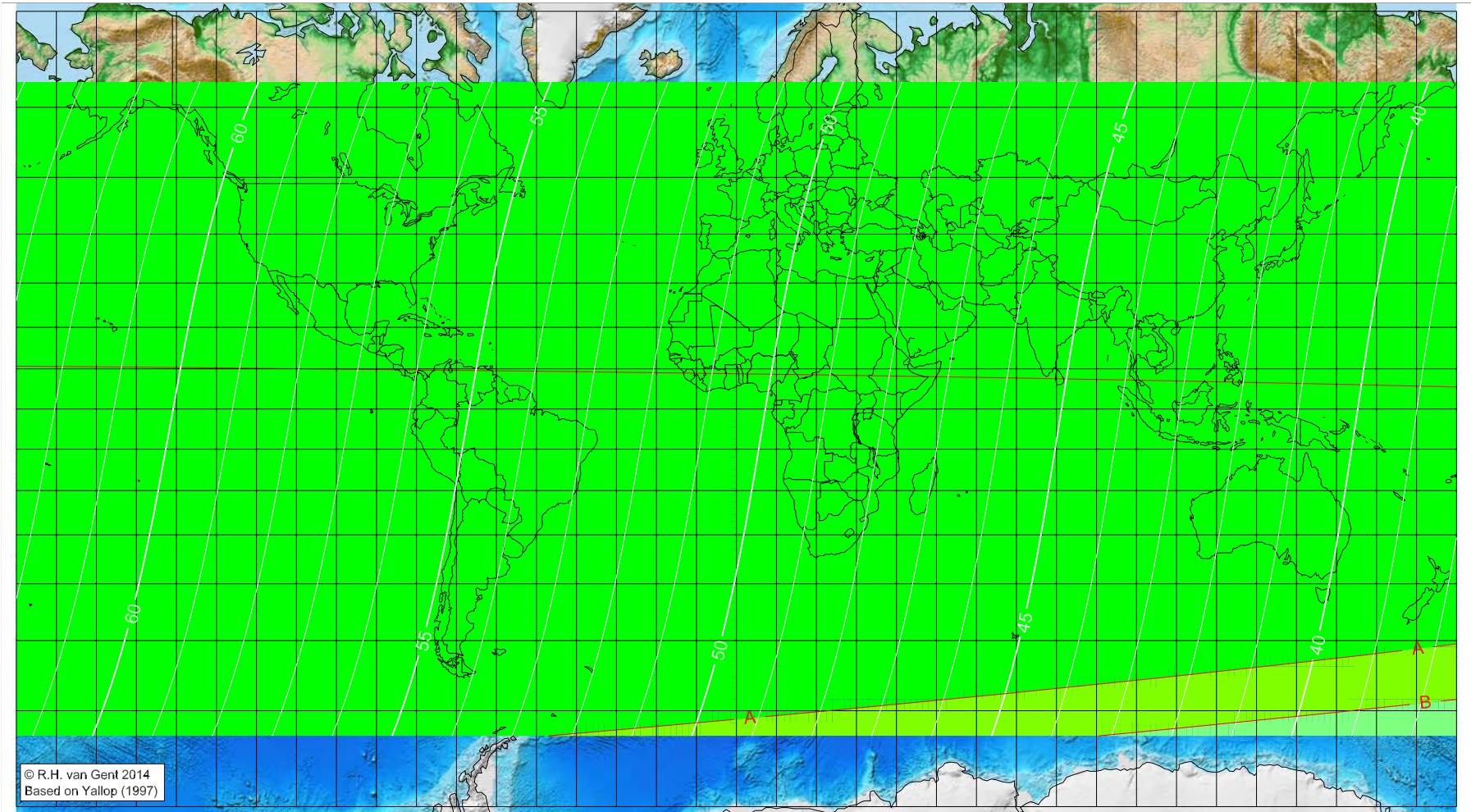
visible on the previous evening

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Shawwāl 1 AH (proleptic)

Global visibility map for 7 April 623 [Thursday]
Second day after luni-solar conjunction



Astronomical New Moon: 5 April 623, 16h 15.7m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

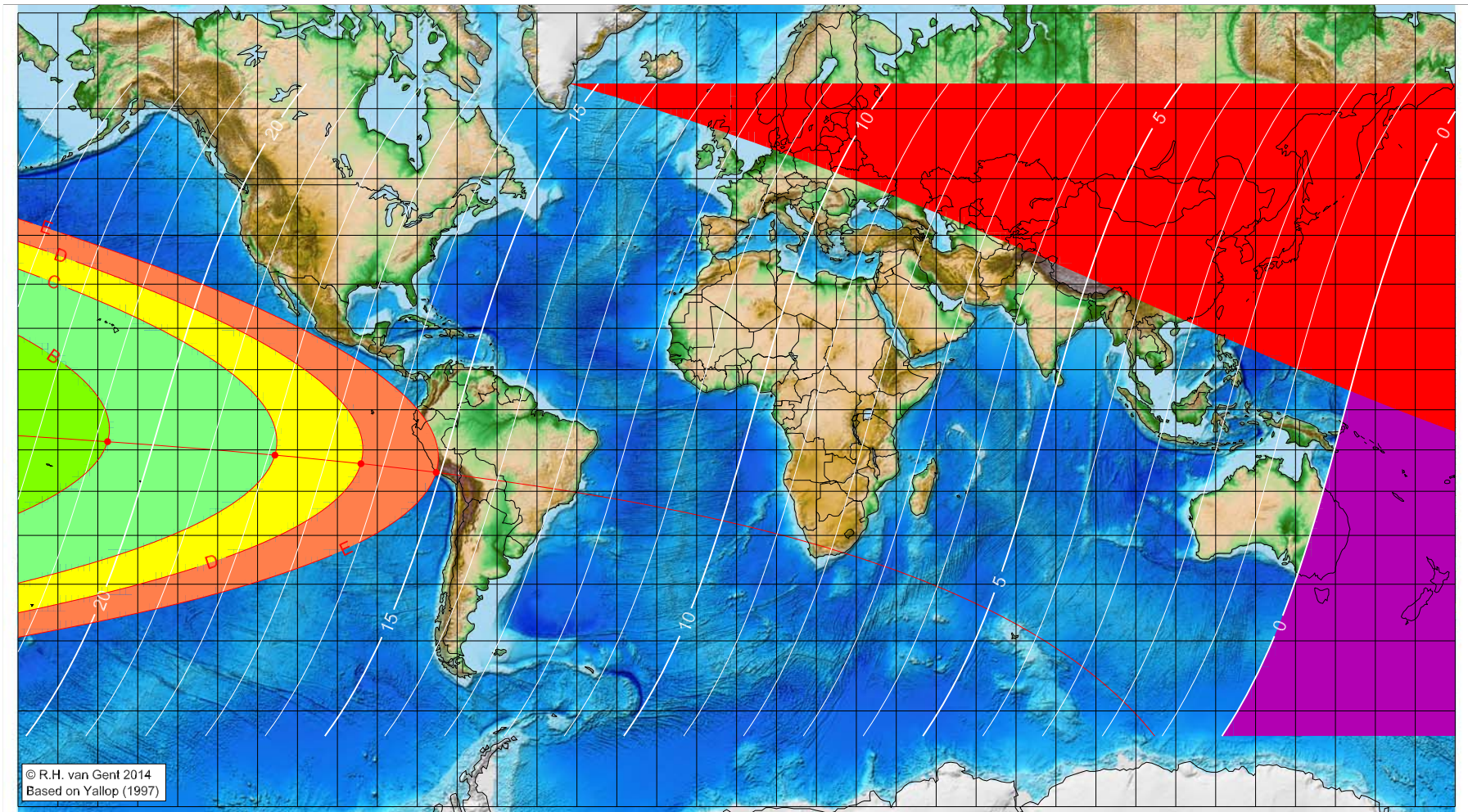
Astronomical (Brown) Lunation Number = -16075
Islamic Lunation Number = 10
 $TT - UT [= \Delta T] = 1.27 \text{ h}$

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Dhū 'l-Qa'da 1 AH (proleptic)

Global visibility map for 5 May 623 [Thursday]
Day of luni-solar conjunction



Astronomical New Moon: 5 May 623, 7h 48.8m (UTC)

First visibility (●)

Astronomical (Brown) Lunation Number = -16074
Islamic Lunation Number = 11
TT - UT [= ΔT] = 1.27 h

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)

Longitude (°)	Latitude (°)	Lunar age (h)
-157.56	-7.95	20.78
-115.65	-11.29	17.89
-94.10	-13.39	16.39
-75.25	-15.49	15.07

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

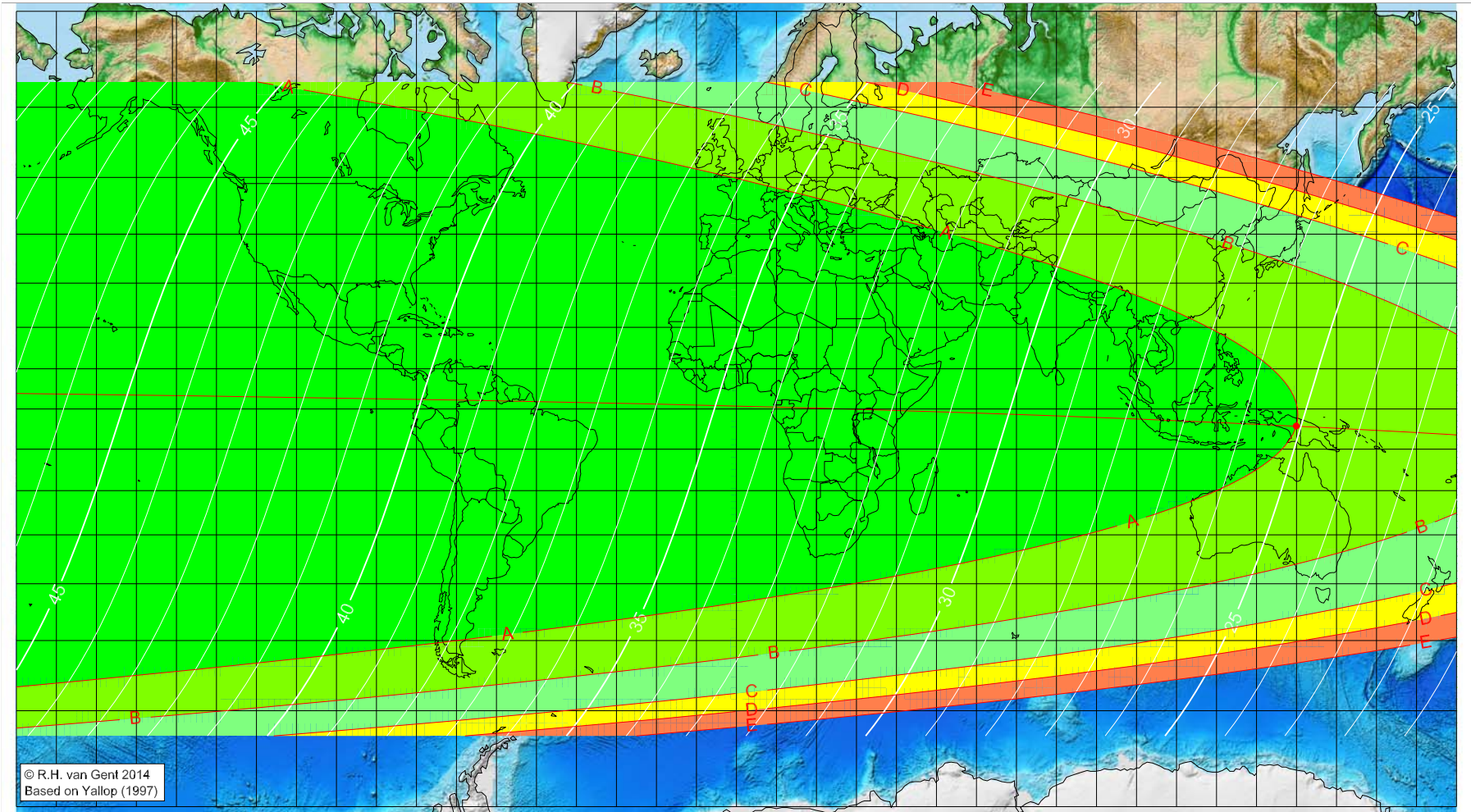
■ moonset before sunset

■ before conjunction (astronomical new moon)

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Dhū 'l-Qa'da 1 AH (proleptic)

Global visibility map for 6 May 623 [Friday]
Day after luni-solar conjunction



Astronomical New Moon: 5 May 623, 7h 48.8m (UTC)

First visibility (•)

Longitude (°)	Latitude (°)	Lunar age (h)
139.94	-4.27	25.08
visible on the previous evening		
visible on the previous evening		
visible on the previous evening		

Astronomical (Brown) Lunation Number = -16074
Islamic Lunation Number = 11
TT - UT [= ΔT] = 1.27 h

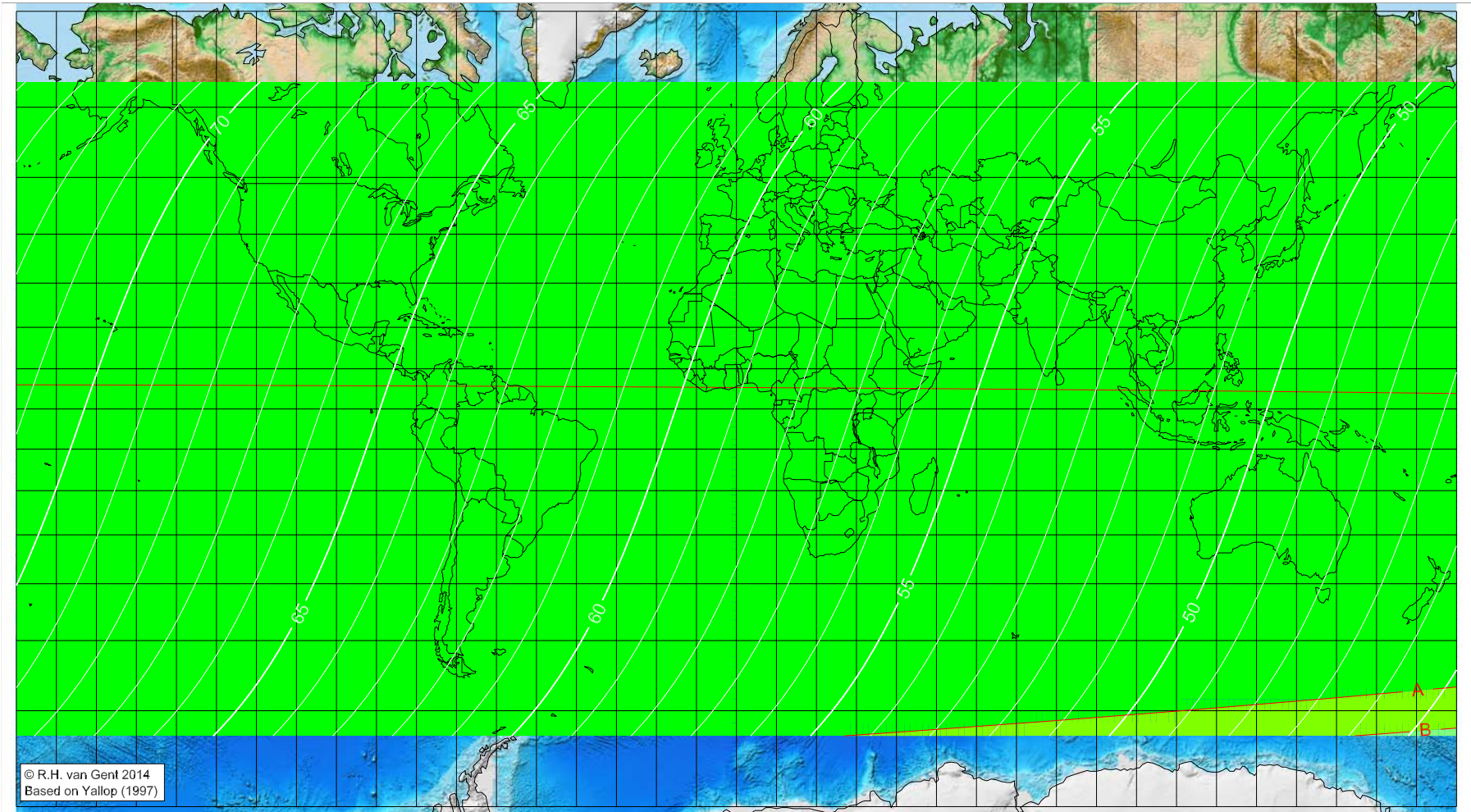
- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Dhū 'l-Qa'da 1 AH (proleptic)

Global visibility map for 7 May 623 [Saturday]
Second day after luni-solar conjunction



Astronomical New Moon: 5 May 623, 7h 48.8m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

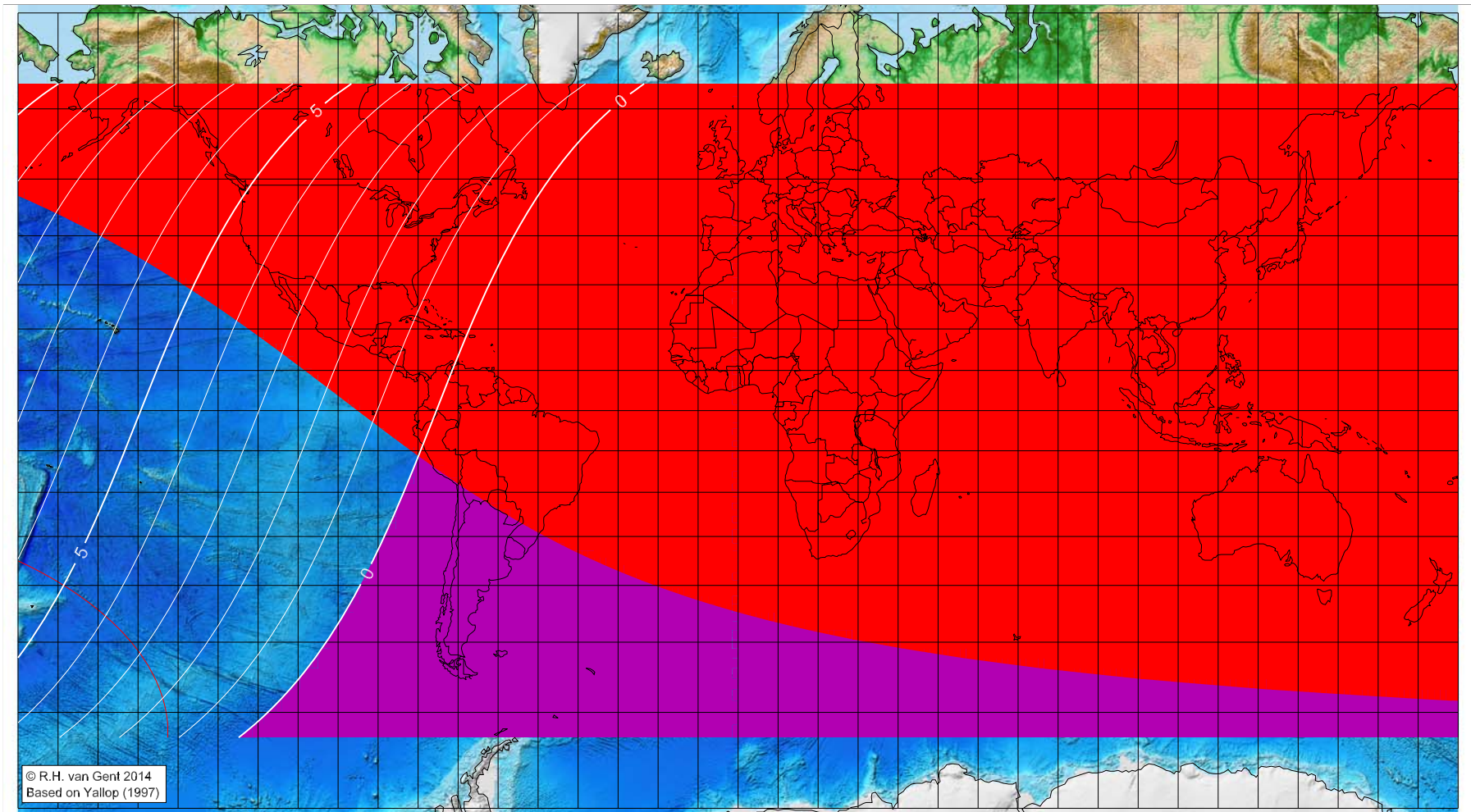
Astronomical (Brown) Lunation Number = -16074
Islamic Lunation Number = 11
TT – UT [= ΔT] = 1.27 h

Lunar age (in hours) is given for the 'best time',
defined as the moment 4/9ths between sunset
and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Dhū 'l-Hijja 1 AH (proleptic)

Global visibility map for 3 June 623 [Friday]
Day of luni-solar conjunction



Astronomical New Moon: 3 June 623, 22h 59.4m (UTC)

First visibility (•)

Astronomical (Brown) Lunation Number = -16073
Islamic Lunation Number = 12
TT - UT [= ΔT] = 1.27 h

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

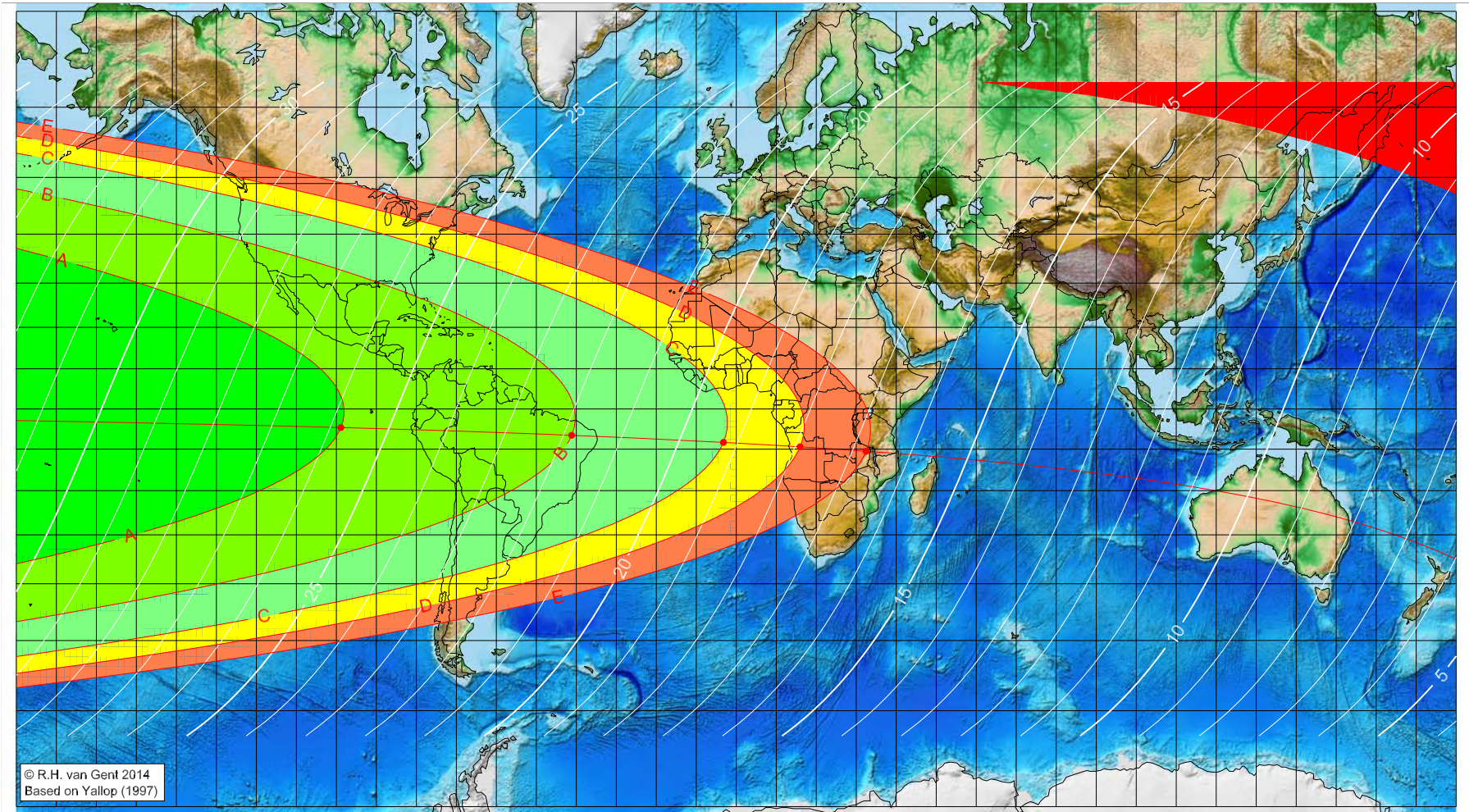
Longitude (°) Latitude (°) Lunar age (h)
not visible until the next evening
not visible until the next evening
not visible until the next evening
not visible until the next evening
not visible until the next evening

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Dhū 'l-Hijja 1 AH (proleptic)

Global visibility map for 4 June 623 [Saturday]
Day after luni-solar conjunction



Astronomical New Moon: 3 June 623, 22h 59.4m (UTC)

First visibility (•)

Astronomical (Brown) Lunation Number = -16073
Islamic Lunation Number = 12
TT - UT [= ΔT] = 1.27 h

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

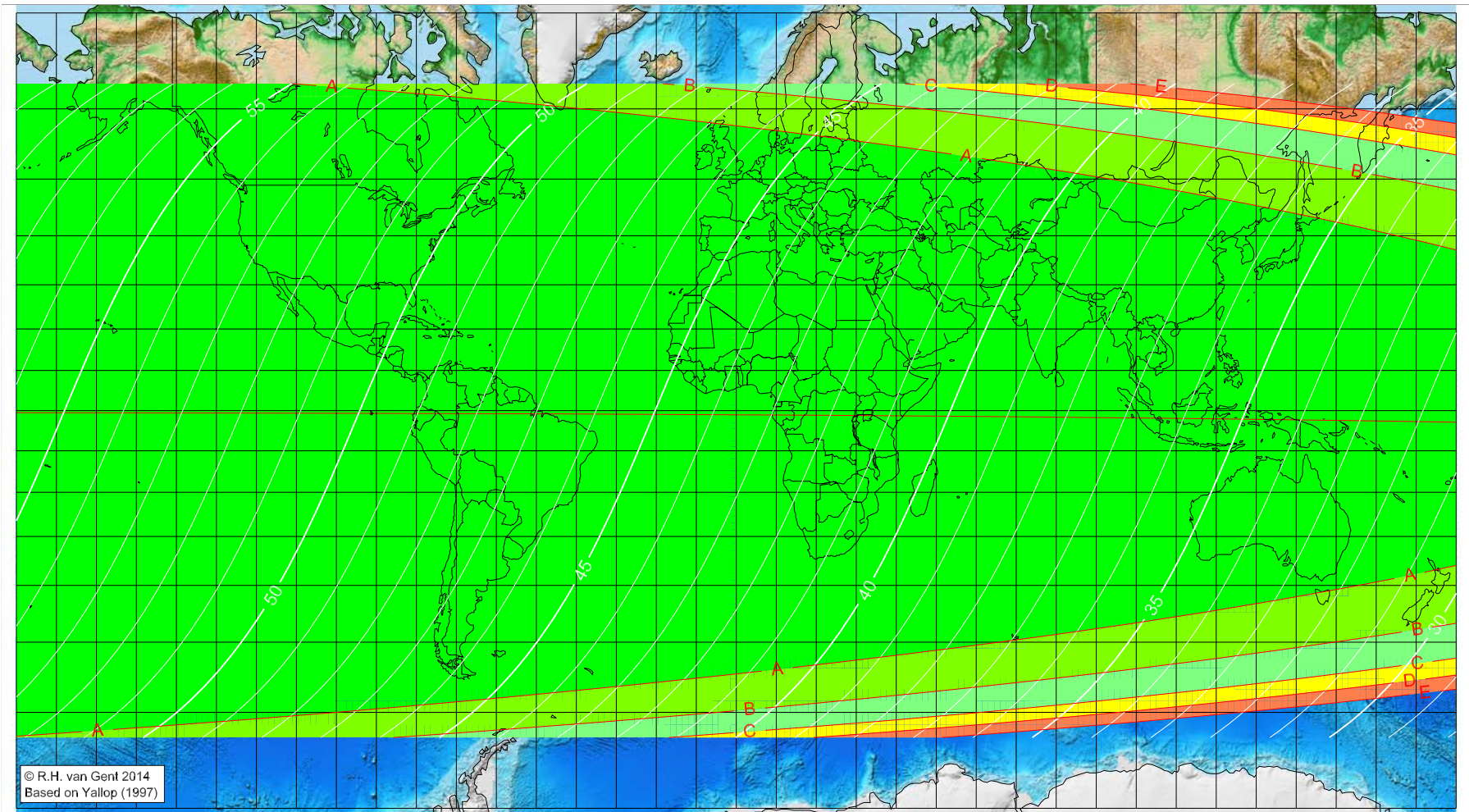
Longitude (°)	Latitude (°)	Lunar age (h)
-98.86	-4.65	25.82
-41.16	-6.57	21.86
-3.21	-8.32	19.24
15.95	-9.42	17.91
32.45	-10.51	16.77

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>

First visibility lunar crescent for Dhū 'l-Hijja 1 AH (proleptic)

Global visibility map for 5 June 623 [Sunday]
Second day after luni-solar conjunction



Astronomical New Moon: 3 June 623, 22h 59.4m (UTC)

- A – easily visible to the unaided eye
- B – visible under perfect atmospheric conditions
- C – visible to the unaided eye after found with optical aid
- D – only visible with binoculars or conventional telescopes
- E – not visible with conventional telescopes
- F – below Danjon limit (7°)
- moonset before sunset
- before conjunction (astronomical new moon)

Astronomical (Brown) Lunation Number = -16073
Islamic Lunation Number = 12
 $TT - UT [= \Delta T] = 1.27 \text{ h}$

Lunar age (in hours) is given for the 'best time', defined as the moment 4/9ths between sunset and moonset

More info: <http://www.staff.science.uu.nl/~gent0113/>