400-year cycle with leap week only allowed in Gregorian leap years

Year has a leap week if $\text{floor}(\text{PriorLeapDays}(\text{Year} + 1) \times \frac{71}{97}) > \text{floor}(\text{PriorLeapDays}(\text{Year}) \times \frac{71}{97})$

where $\text{PriorLeapDays} = \text{floor}(\text{Year} / 4) - \text{floor}(\text{Year} / 100) + \text{floor}(\text{Year} / 400)$

Jitter vs. Mean Year

- Jitter range = $16 + \frac{19}{400} = 16.0475$ days

Year (mean year of $365\frac{97}{400}$ days = 365d 5h 49m 12s = 365.2425 days, almost 12 seconds longer than mean northward equinoctial year)
400-year cycle with leap week only allowed in Gregorian leap years

Year has a leap week if floor(PriorLeapDays(Year+1) \times \frac{71}{97}) > floor(PriorLeapDays(Year) \times \frac{71}{97})

where PriorLeapDays = floor(Year / 4) – floor(Year / 100) + floor(Year / 400)

Jitter vs. Gregorian

- Jitter range = 14 days

Year (mean year of $365\frac{97}{400}$ days = 365d 5h 49m 12s = 365.2425 days, almost 12 seconds longer than mean northward equinoctial year)